UNCLASSIFIED

AD NUMBER

ADB010056

LIMITATION CHANGES

TO:

Approved for public release; distribution is unlimited. Document partially illegible.

FROM:

Distribution authorized to U.S. Gov't. agencies only; Test and Evaluation; MAR 1976. Other requests shall be referred to Air Force Armament Laboratory, ATTN: AFATL/DLMA, Eglin AFB, FL 32543. Document partially illegible.

AUTHORITY

USADTC ltr dtd 10 Dec 1979

THIS PAGE IS UNCLASSIFIED

AEDC-TR-75-125
AFATL-TR-76-23

Cy. 1

A COMPILATION OF STATIC STABILITY AND FIN LOADS DATA FOR SLENDER BODY MISSILE MODELS WITH AND WITHOUT TAIL FINS AND WINGS

VOLUME IV

(APPENDIX G)
(TEST NUMBER 7, PARTS 2 THROUGH 105)

PROPULSION WIND TUNNEL FACILITY
ARNOLD ENGINEERING DEVELOPMENT CENTER
AIR FORCE SYSTEMS COMMAND
ARNOLD AF STATION, TENNESSEE 37389

March 1976

Final Report for Period March 1968 — March 1973

AEDC TECHNICAL LIBRARY
5 0720 00036 6684

Distribution limited to U.S. Government agencies only; this report contains information on test and evaluation of military hardware; March 1976; other requests for this document must be referred to Air Force Armament Laboratory (AFATL/DLMA), Eglin Air Force Base, Florida 32543.

Prepared for

AIR FORCE ARMAMENT LABORATORY (AFATL/DLMA)
EGLIN AIR FORCE BASE, FLORIDA 32543

NOTICES

When U. S. Government drawings specifications, or other data are used for any purpose other than a definitely related Government procurement operation, the Government thereby incurs no responsibility nor any obligation whatsoever, and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise, or in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Qualified users may obtain copies of this report from the Defense Documentation Center.

References to named commercial products in this report are not to be considered in any sense as an endorsement of the product by the United States Air Force or the Government.

APPROVAL STATEMENT

This technical report has been reviewed and is approved for publication.

FOR THE COMMANDER



JOHN R. TAYLOR
Analysis & Evaluation
Division
Directorate of Test



CRAIG E. MAHAFFY
Colonel, USAF
Director of Test

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1 REPORT NUMBER AEDC-TR-75-125 AFATL-TR-76-23	2 GOVT ACCESSION NO.	3 RECIPIENT'S CATALOG NUMBER
4 TITLE (and Subtitle) A COMPILATION OF STATIC STABILITY AND FIN LOADS DATA FOR SLENDER BODY MISSILE MODELS WITH AND WITHOUT TAIL FINS AND WINGS - VOLUME IV (APPENDIX G) (TEST (Continued)		5 TYPE OF REPORT & PERIOD COVERED Final Report - March 1968 - 1973 6 PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) G. R. Gomillion, ARO, Inc.		8. CONTRACT OR GRANT NUMBER(s)
9 PERFORMING ORGANIZATION NAME AND ADDRESS Arnold Engineering Development Center (XO) Air Force Systems Command Arnold Air Force Station, Tennessee 37389		10 PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS Program Element 62201F
11 CONTROLLING OFFICE NAME AND ADDRESS Air Force Armament Laboratory (AFATL/DLMA) Eglin Air Force Base, Florida 32543		12. REPORT DATE March 1976 13. NUMBER OF PAGES 1014
14 MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASSIFIED 15a DECLASSIFICATION/DOWNGRADING SCHEDULE N/A

16 DISTRIBUTION STATEMENT (of this Report) Distribution limited to U.S. Government agencies only; this report contains information on test and evaluation of military hardware; March 1976; other requests for this document must be referred to Air Force Armament Laboratory (AFATL/DLMA), Eglin Air Force Base, Florida 32543.

17 DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18 SUPPLEMENTARY NOTES

Available in DDC; complete report consists of five volumes.

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Martin Generalized Research Model	slender bodies
tables (data)	static stability
guided missiles	fins
models	aerodynamic loading
wing body configurations	control surfaces (Continued)

20 ABSTRACT (Continue on reverse side if necessary and identify by block number)

This document contains a compilation of aerodynamic data for the Martin Generalized Research Model, which is a composite of several body, wing, and tail fin configurations typical of missile applications. The model variations included five body configurations, three wing configurations at various body locations, and 15 tail fin configurations. Static stability and tail fin loads data are presented in tabulated and plotted form for a Mach number range

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

4. TITLE (Continued)

NUMBER 7, PARTS 2 THROUGH 105)

19. KEY WORDS (Continued)

deflection
transonic flow
supersonic flow
wind tunnel tests

20. ABSTRACT (Continued)

from 0.20 to 4.63 over an angle-of-attack range from -6 to 60 deg and a sideslip angle range from -20 to 20 deg for the body-alone configurations, body-wing configurations, and the body-wing-tail fin configurations. In addition, the tail fin configurations were tested using the reflection plane technique, and the resulting fin loads data are presented for a Mach number range of 0.80 to 2.16 over an angle-of-attack range from 0 to 210 deg. Volume IV contains the tabulated data obtained during Test Number 7, Parts 2 through 105, at the Naval Ship Research and Development Center.

AFSC
Arnold AFS Tenn

PREFACE

The data presented herein were compiled by the Arnold Engineering Development Center (AEDC), Air Force Systems Command (AFSC), under the sponsorship of the Air Force Armament Laboratory (AFATL), Eglin Air Force Base, Florida. Seven different tests were conducted by three organizations: ARO, Inc. (a subsidiary of Sverdrup & Parcel and Associates, Inc.), contract operator of the AEDC, AFSC, Arnold Air Force Station, Tennessee; Naval Ship Research and Development Center (NSRDC), Bethesda, Maryland; and Langley Research Center (LRC), National Aeronautics and Space Administration (NASA), Langley Air Force Base, Virginia. The data were compiled under ARO Project No. P34A-37A. The author of this report was G. R. Gomillion, ARO, Inc. The manuscript (ARO Control No. ARO-PWT-TR-75-88) was submitted for publication on June 20, 1975.

This volume contains the tabulated data that were obtained during Test Number 7, Parts 2 through 105, that was conducted in the 7 x 10 Foot Transonic Wind Tunnel at NSRDC during March 1973. As an aid in the use of these data, the table which lists the part numbers for the tabulated data from Test Number 7 and the general list of nomenclature are repeated from Volume I at the end of this volume.

APPENDIX G

TEST 7

(PARTS 2 THROUGH 105)

MANTIN MISSILE TAILS EFFECTS DATA

TEST RUN1 MACH RATIO-6 RM1 CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2.0400 1.7 0.0 B1=0F24 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAM	CAF	XCP
1	-5.89	-0.02	-0.4187	1.0019	-0.0013	0.0016	-0.0012	0.2408	0.0999	0.1410	-1.6193
2	-5.89	-0.02	-0.4021	1.0355	0.0367	-0.0277	-0.0013	0.2404	0.1004	0.1441	-1.5638
3	-5.89	-0.01	-0.4327	1.0122	0.1009	-0.0476	-0.0012	0.2407	0.0991	0.1417	-1.5997
4	-5.89	-0.01	-0.4334	1.0124	0.0999	-0.0653	-0.0011	0.2443	0.1004	0.1440	-1.5999
5	-5.72	0.00	-0.4017	1.0353	0.0946	-0.0633	-0.0012	0.2375	0.0991	0.1385	-1.5640
6	-5.88	-0.02	-0.4265	0.9888	0.1049	-0.0634	-0.0011	0.2458	0.1009	0.1450	-1.5612
7	-5.74	-0.02	-0.4211	0.9519	0.0555	-0.0518	-0.0011	0.2470	0.0985	0.1486	-1.5326
8	-5.50	-0.02	-0.5777	0.9003	0.0425	-0.0144	-0.0011	0.2438	0.0972	0.1467	-1.5585
9	-5.39	-0.01	-0.5785	0.8437	0.0451	-0.0176	-0.0011	0.2443	0.0972	0.1472	-1.5276
10	-5.26	-0.01	-0.5791	0.8005	0.0435	0.0047	-0.0012	0.2439	0.0969	0.1460	-1.4966
11	-5.07	-0.01	-0.5725	0.7561	0.0425	-0.0145	-0.0010	0.2421	0.0953	0.1468	-1.5084
12	-4.95	-0.01	-0.5046	0.7004	0.0270	-0.0251	-0.0008	0.2442	0.0953	0.1469	-1.4944
13	-4.79	-0.01	-0.4960	0.7307	0.0269	-0.0251	-0.0008	0.2408	0.0951	0.1457	-1.4792
14	-4.62	-0.01	-0.4934	0.7297	0.0560	-0.0398	-0.0008	0.2413	0.0933	0.1480	-1.4791
15	-4.50	-0.01	-0.4953	0.6904	0.0560	-0.0398	-0.0007	0.2413	0.0936	0.1475	-1.4846
16	-4.35	-0.01	-0.4923	0.6486	0.0138	0.0124	-0.0008	0.2406	0.0924	0.1482	-1.4285
17	-4.22	-0.01	-0.4920	0.6035	0.0134	0.0124	-0.0008	0.2422	0.0928	0.1494	-1.4286
18	-4.08	-0.01	-0.4248	0.6002	0.2423	-0.0144	-0.0007	0.2417	0.0915	0.1502	-1.4309
19	-3.94	-0.00	-0.4185	0.5612	0.1166	-0.0571	-0.0006	0.2427	0.0919	0.1508	-1.3671
20	-3.81	-0.01	-0.3825	0.5224	0.0841	-0.0556	-0.0004	0.2409	0.0915	0.1494	-1.3657
21	-3.68	-0.01	-0.3824	0.5224	0.0410	-0.0364	-0.0004	0.2462	0.0924	0.1538	-1.3660
22	-3.55	-0.01	-0.3677	0.4933	0.0409	-0.0364	-0.0004	0.2437	0.0908	0.1529	-1.3410
23	-3.43	-0.01	-0.3552	0.4691	0.0278	-0.0013	-0.0005	0.2474	0.0909	0.1565	-1.2645
24	-3.26	-0.01	-0.3255	0.4256	-0.0016	0.0014	-0.0004	0.2427	0.0893	0.1534	-1.3078
25	-3.14	-0.01	-0.3129	0.3816	-0.0014	0.0017	-0.0003	0.2458	0.0898	0.1560	-1.2196
26	-3.01	-0.01	-0.2979	0.3694	0.0148	0.0362	-0.0004	0.2457	0.0898	0.1559	-1.2481
27	-2.88	-0.01	-0.2979	0.3695	0.0130	0.0063	-0.0003	0.2455	0.0897	0.1558	-1.2404
28	-2.74	-0.01	-0.2841	0.3416	0.0272	-0.0131	-0.0002	0.2451	0.0898	0.1553	-1.2021
29	-2.61	-0.01	-0.2705	0.4138	0.0272	-0.0131	-0.0002	0.2466	0.0907	0.1559	-1.1500
30	-2.47	-0.01	-0.2703	0.3134	0.0271	-0.0129	-0.0002	0.2480	0.0907	0.1573	-1.1594
31	-2.36	-0.01	-0.2549	0.2961	-0.0014	0.0016	-0.0001	0.2482	0.0925	0.1557	-1.1134
32	-2.22	-0.01	-0.2433	0.2583	-0.0016	0.0016	-0.0001	0.2442	0.0893	0.1549	-1.0616
33	-2.09	-0.01	-0.2426	0.2574	0.0264	-0.0249	0.0	0.2472	0.0910	0.1562	-1.0610
34	-1.95	-0.01	-0.2275	0.2458	0.0277	-0.0011	-0.0001	0.2485	0.0905	0.1580	-1.0778
35	-1.82	-0.01	-0.2010	0.1905	0.0265	-0.0250	0.0001	0.2431	0.0896	0.1535	-0.9490
36	-1.70	-0.00	-0.2037	0.1901	0.0419	-0.0144	0.0	0.2466	0.0901	0.1565	-0.9474
37	-1.57	-0.01	-0.1896	0.1791	0.0265	-0.0250	0.0001	0.2447	0.0896	0.1551	-0.9009
38	-1.45	-0.01	-0.1727	0.1516	0.0123	-0.0117	0.0002	0.2466	0.0891	0.1575	-0.8769
39	-1.32	-0.01	-0.1438	0.1263	0.0431	0.0095	0.0001	0.2445	0.0891	0.1556	-0.8934
40	-1.19	-0.01	-0.1435	0.1260	0.0431	0.0094	0.0001	0.2462	0.0896	0.1568	-0.8923
41	-1.07	-0.01	-0.1303	0.1004	-0.0147	0.0386	0.0002	0.2500	0.0905	0.1595	-0.7768
42	-0.96	-0.00	-0.1259	0.1004	0.0282	0.0106	0.0002	0.2461	0.0894	0.1562	-0.7732
43	-0.83	-0.01	-0.1159	0.0893	-0.0005	0.0252	0.0002	0.2460	0.0871	0.1589	-0.7735
44	-0.71	-0.02	-0.0882	0.0662	-0.0276	0.0276	0.0004	0.2446	0.0876	0.1570	-0.7723
45	-0.58	-0.00	-0.0930	0.0430	0.0425	-0.0026	0.0004	0.2461	0.0899	0.1562	-0.9386
46	-0.40	-0.01	-0.0854	0.0028	-0.0576	0.0539	0.0004	0.2464	0.0876	0.1588	-0.9691

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/L×10⁻⁶	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	2	0.80	1.17	0.0	41.0123	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	-0.36	-0.01	-0.0056	0.0024	-0.0574	0.0539	0.0004	0.2466	0.0890	0.1576	-0.9691
48	-0.26	-0.01	-0.0170	0.0187	-0.0144	0.0353	0.0015	0.2501	0.0899	0.1602	-1.2486
49	-0.10	-0.01	-0.0095	0.0071	0.0144	0.0238	0.0005	0.2484	0.0894	0.1585	-1.2467
50	0.01	-0.06	-0.0198	0.0343	0.0436	0.0326	0.0025	0.2434	0.0890	0.1544	-1.5748
51	0.15	-0.00	-0.0049	0.0066	0.0292	0.0223	0.0005	0.2466	0.0877	0.1589	-1.5730
52	0.27	-0.01	-0.0012	0.0069	-0.0016	0.0012	0.0007	0.2469	0.0877	0.1591	-1.5748
53	0.37	-0.01	-0.0012	0.0068	-0.0004	0.0130	0.0007	0.2476	0.0880	0.1594	-1.5723
54	0.50	-0.00	-0.0028	0.0032	0.0022	-0.0149	0.0007	0.2470	0.0908	0.1562	-1.9977
55	0.61	-0.00	-0.0066	0.0032	0.0428	-0.0029	0.0007	0.2475	0.0881	0.1594	-1.9977
56	0.73	-0.01	-0.0289	0.0530	-0.0574	0.0537	0.0007	0.2497	0.0899	0.1598	-2.0007
57	0.86	-0.01	0.0035	0.0466	0.0009	0.0490	0.0007	0.2476	0.0899	0.1577	13.2571
58	0.97	-0.01	0.0022	0.0340	0.0003	0.0370	0.0007	0.2479	0.0877	0.1602	13.9182
59	1.09	-0.00	0.0022	0.0305	0.0293	-0.0032	0.0009	0.2440	0.0903	0.1577	13.9182
60	1.21	-0.00	0.0319	0.0079	0.0303	0.0463	0.0008	0.2498	0.0899	0.1599	0.2369
61	1.30	-0.01	0.0297	-0.0078	-0.0144	0.0382	0.0009	0.2516	0.0904	0.1612	-0.2620
62	1.43	-0.01	0.0441	-0.0190	-0.0420	0.0745	0.0008	0.2499	0.0909	0.1590	-0.4317
63	1.55	-0.00	0.0576	-0.0406	0.0149	0.0356	0.0009	0.2497	0.0904	0.1593	-0.8115
64	1.68	-0.01	0.0718	-0.0570	-0.0006	0.0251	0.0011	0.2503	0.0927	0.1576	-0.8025
65	1.79	-0.01	0.0573	-0.0463	0.0002	0.0369	0.0010	0.2519	0.0904	0.1615	-0.8084
66	1.89	-0.01	0.0715	-0.0573	-0.0286	0.0516	0.0010	0.2525	0.0918	0.1607	-0.8016
67	2.00	-0.01	0.1002	-0.0973	-0.0267	0.0990	0.0009	0.2495	0.0909	0.1586	-0.9714
68	2.12	-0.01	0.0999	-0.0969	-0.0139	0.0501	0.0011	0.2513	0.0918	0.1595	-0.9691
69	2.24	-0.01	0.1133	-0.1234	-0.0294	0.0275	-0.0057	0.2479	0.0918	0.1561	-1.0943
70	2.34	-0.00	0.1285	-0.1389	0.0722	0.0056	0.0012	0.2506	0.0913	0.1567	-1.0659
71	2.47	0.0	0.1283	-0.1379	0.0734	0.0306	0.0011	0.2517	0.0918	0.1599	-1.0667
72	2.58	-0.01	0.1417	-0.1648	0.0001	0.0359	0.0013	0.2522	0.0931	0.1591	-1.1578
73	2.68	-0.01	0.1559	-0.1749	-0.0011	0.0131	0.0014	0.2476	0.0927	0.1549	-1.1221
74	2.81	-0.01	0.1695	-0.2191	-0.0429	0.0525	-0.0056	0.2510	0.0940	0.1570	-1.2988
75	2.92	-0.01	0.1834	-0.2308	-0.0156	0.0142	0.0015	0.2513	0.0932	0.1581	-1.2587
76	3.03	-0.01	0.1842	-0.2307	-0.0287	0.0515	0.0014	0.2499	0.0931	0.1568	-1.2591
77	3.15	-0.01	0.1831	-0.2305	-0.0296	0.0274	0.0015	0.2520	0.0941	0.1579	-1.2590
78	3.26	-0.00	0.2105	-0.2596	-0.0436	0.0405	0.0015	0.2522	0.0945	0.1577	-1.3597
79	3.36	-0.00	0.2206	-0.3149	-0.0598	0.0141	0.0016	0.2529	0.0964	0.1566	-1.4009
80	3.49	-0.01	0.2341	-0.3425	-0.0287	0.0513	0.0015	0.2528	0.0940	0.1588	-1.4382
81	3.60	-0.01	0.2526	-0.3581	0.0006	0.0487	0.0015	0.2512	0.0945	0.1567	-1.4016
82	3.71	-0.01	0.2535	-0.3787	0.0007	0.0485	0.0015	0.2499	0.0945	0.1554	-1.5005
83	3.83	-0.01	0.2659	-0.3941	-0.0287	0.0513	0.0016	0.2501	0.0969	0.1533	-1.5003
84	3.94	-0.01	0.2652	-0.3979	-0.0701	0.1026	0.0015	0.2506	0.0958	0.1548	-1.5003
85	4.04	-0.01	0.3219	-0.4769	-0.0418	0.0850	0.0016	0.2458	0.0969	0.1509	-1.4818
86	4.17	-0.01	0.3065	-0.4819	-0.0156	0.0139	-0.0018	0.2510	0.0977	0.1534	-1.5724
87	4.28	-0.01	0.3346	-0.5209	-0.0156	0.0139	0.0019	0.2479	0.0977	0.1503	-1.5570
88	4.38	-0.01	0.3221	-0.5078	0.0276	-0.0017	0.0018	0.2483	0.0977	0.1507	-1.5929
89	4.49	-0.01	0.3627	-0.5601	-0.0304	0.0157	0.0020	0.2488	0.0969	0.1520	-1.5443
90	4.58	-0.01	0.3797	-0.5898	0.0710	-0.0177	0.0020	0.2459	0.0977	0.1483	-1.5631
91	4.70	-0.01	0.4039	-0.6341	-0.0145	0.0376	0.0020	0.2465	0.0987	0.1479	-1.5947
92	4.82	-0.01	0.4035	-0.6436	-0.0156	0.0137	0.0021	0.2519	0.1005	0.1515	-1.5949

PAGE 1 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO=F PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 .2 0.600 1.07 0.00 0.0=0F2S. 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
93	4.96	-0.01	0.6017	-0.0=634	-0.0154	0.0137	0.0021	0.2=41	0.1004	0.1447	-1.5950
94	5.02	-0.01	0.6311	-0.0=995	-0.0044	0.0481	0.0020	0.2=42	0.1009	0.1470	-1.6233
95	5.13	-0.01	0.6599	-0.0=225	0.0=96	0.0337	0.0021	0.2=43	0.1023	0.1490	-1.5708
96	5.22	-0.01	0.6591	-0.0=556	-0.0017	0.0006	0.0022	0.2=45	0.1006	0.1488	-1.6079
97	5.32	-0.01	0.6541	-0.0=552	0.0=74	-0.0020	0.0022	0.2=47	0.1013	0.1485	-1.6483
98	5.43	-0.01	0.6485	-0.0=987	0.0=16	-0.0179	0.0023	0.2=51	0.1023	0.1478	-1.6336
99	5.56	-0.01	0.6093	-0.0=229	0.1=04	-0.0705	0.0022	0.2=54	0.1031	0.1474	-1.6458
100	5.63	-0.01	0.6139	-0.0=683	-0.0=16	0.0376	0.0023	0.2=56	0.1029	0.1458	-1.6497
101	5.75	-0.01	0.6137	-0.0=502	-0.0241	0.0740	-0.0007	0.2=57	0.1047	0.1441	-1.6552
102	5.83	-0.01	0.5=16	-0.0=06=	-0.0=17	0.1005	0.0025	0.2=59	0.1052	0.1446	-1.6745
103	5.92	-0.01	0.5=09	-0.0=237	-0.0=15	0.0742	0.0024	0.2=65	0.1052	0.1494	-1.7078
104	6.02	-0.01	0.5551	-0.0=3=6	-0.0611	0.0123	0.0025	0.2=67	0.1056	0.1442	-1.6837
105	6.13	-0.01	0.5=94	-0.0=7=6	0.0=1=	0.0367	0.0023	0.2=71	0.1057	0.1469	-1.7239
106	6.22	-0.01	0.5=25	-0.0=7=0	0.041=	-0.0156	0.0028	0.2=74	0.1070	0.1459	-1.7086
107	6.32	-0.01	0.5=50	-1.0=3=2	-0.0=15	0.0003	-0.0004	0.2=17	0.1069	0.1449	-1.7382
108	6.44	-0.01	0.6=96	-1.0=461	0.0=13=	0.0109	0.0026	0.2=21	0.10=8	0.1433	-1.7159
109	6.53	-0.02	0.6=42	-1.0=455	-0.0=297	0.0506	0.0025	0.2=11	0.1074	0.1438	-1.7161
110	6.62	-0.01	0.6373	-1.0=947	-0.0=17	0.0063	0.0027	0.2=37	0.1105	0.1453	-1.7019
111	6.73	-0.01	0.6510	-1.1127	0.0134	0.0106	0.0027	0.2=26	0.1068	0.1437	-1.7090
112	6.83	-0.01	0.6=49	-1.11=1	0.0=71	-0.0051	0.0027	0.2=21	0.1097	0.1434	-1.7894
113	6.93	-0.00	0.6936	-1.1=01	0.0=65	-0.0171	0.0028	0.2=37	0.1126	0.1410	-1.7029
114	7.04	-0.01	0.6=43	-1.1=0=	0.0=62	0.0187	0.0026	0.2=42	0.1106	0.1437	-1.7166
115	7.14	-0.01	0.6914	-1.1=5=	-0.0157	0.0133	0.0028	0.2=14	0.1119	0.1398	-1.7289
116	7.22	-0.02	0.7196	-1.2=97	-0.=427	0.0635	0.0028	0.2=2=	0.1128	0.1417	-1.7159
117	7.32	-0.01	0.7=3=	-1.2=0=	-0.027=	0.0862	0.0027	0.2=53	0.1126	0.1426	-1.6977
118	7.41	-0.01	0.7334	-1.245=	-0.02=7	0.0256	0.0030	0.2=5=	0.1164	0.1383	-1.6977
119	7.51	-0.01	0.7367	-1.2=77	-0.0126	0.0731	0.0028	0.2=55	0.1157	0.1399	-1.6982
120	7.60	-0.01	0.7=65	-1.275=	0.0=3=	0.0200	0.0023	0.2=61	0.1175	0.1428	-1.7045
121	7.71	-0.01	0.7912	-1.3265	0.0=2=	0.0053	0.0030	0.2=44	0.1171	0.1399	-1.6766
122	7.80	-0.01	0.77=4	-1.2=79	0.0=05	0.0306	0.0029	0.2=5=	0.1161	0.1399	-1.6706
123	7.=0	-0.01	0.7911	-1.30=7	0.0=41	0.0320	0.0030	0.2=43	0.1180	0.1414	-1.6545
124	7.98	-0.01	0.=046	-1.3305	0.0=41	0.0320	0.0031	0.2=51	0.1212	0.1369	-1.6610
125	8.06	-0.01	0.=0=3	-1.33=2	0.0=41	0.0320	0.0031	0.2=12	0.1221	0.1392	-1.6612
126	8.16	-0.01	0.=035	-1.3357	0.0=41	0.0320	0.0031	0.2=23	0.1221	0.1400	-1.6615
127	8.24	-0.01	0.8319	-1.3746	0.0=2=	0.0213	0.0032	0.2=1=	0.1221	0.1394	-1.6523
128	8.34	-0.01	0.8452	-1.4=1=	0.0=2=	0.0333	-0.0036	0.2=1=	0.1239	0.1366	-1.6585
129	8.41	-0.02	0.8=50	-1.4=17	-0.0149	0.0611	0.0032	0.2=3=	0.1266	0.1373	-1.6587
130	8.50	-0.02	0.=506	-1.4=25	-0.0=41	0.0359	0.0033	0.2=4=	0.1257	0.1408	-1.6649
131	8.59	-0.02	0.8546	-1.4=2=	-0.0159	0.0133	0.0034	0.2=23	0.1252	0.1372	-1.6649
132	8.67	-0.02	0.9026	-1.4=67	-0.013=	0.0730	0.0033	0.2=22	0.1273	0.1350	-1.6429
133	8.76	-0.02	0.=0=3	-1.4=20	-0.0=37	0.0240	0.0035	0.2=44	0.12=2	0.13=?	-1.6425
134	8.85	-0.02	0.=01=	-1.4=12	-0.0=1=	0.0001	0.0036	0.2=42	0.1272	0.1371	-1.6425
135	8.95	-0.02	0.9145	-1.5=93	0.027=	-0.0026	0.0036	0.2=49	0.1286	0.1364	-1.6486
136	9.03	-0.02	0.9=44	-1.53=3	0.0=1=	0.0347	0.0036	0.2=5=	0.1295	0.1350	-1.6222
137	9.12	-0.02	0.9586	-1.5=9=	0.0152	0.0465	0.0036	0.2=53	0.1314	0.1340	-1.6282
138	9.21	-0.01	0.9266	-1.5367	0.0577	0.0066	0.0036	0.2=2=	0.1300	0.1381	-1.6549

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	RUN	ALPHA	MACH	RN/10**6	PHI	CONE	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
2	2	2.66	1.67		0.0	0.1823	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	ACP
139	[illegible]	[illegible]	0.0573	-1.5584	0.0029	0.0090	0.0037	0.2625	0.1300	0.1326	-1.6265
140	[illegible]	[illegible]	0.0705	-1.5866	-0.0019	-0.0040	0.0036	0.2692	0.1319	0.1374	-1.6342
141	[illegible]	[illegible]	0.0953	-1.5862	-0.0007	0.0056	0.0034	0.2662	0.1318	0.1345	-1.6038
142	[illegible]	[illegible]	0.0942	-1.6184	0.0069	0.0026	0.0036	0.2708	0.1345	0.1364	-1.6403
143	[illegible]	[illegible]	0.0949	-1.6083	0.0059	-0.0199	0.0034	0.2685	0.1336	0.1350	-1.6188
144	[illegible]	[illegible]	1.0116	-1.6525	0.0287	0.0212	0.0036	0.2672	0.1345	0.1328	-1.6335
145	[illegible]	[illegible]	1.0117	-1.6359	0.0281	0.0196	0.0039	0.2705	0.1350	0.1356	-1.6161
146	[illegible]	[illegible]	1.0259	-1.6949	0.1025	-0.0146	0.0038	0.2715	0.1362	0.1334	-1.6220
147	[illegible]	[illegible]	1.0093	-1.6576	0.0005	-0.0170	0.0040	0.2703	0.1362	0.1322	-1.5931
148	[illegible]	[illegible]	1.0388	-1.6905	0.1607	-0.0213	0.0039	0.2698	0.1372	0.1327	-1.6276
149	[illegible]	[illegible]	1.0041	-1.7154	0.0365	-0.0173	0.0041	0.2696	0.1379	0.1318	-1.6046
150	[illegible]	[illegible]	1.0250	-1.7381	0.0726	0.0053	0.0041	0.2742	0.1394	0.1309	-1.5838
151	[illegible]	[illegible]	1.0428	-1.7254	0.0700	-0.0075	0.0043	0.2734	0.1402	0.1333	-1.5939
152	[illegible]	[illegible]	1.1107	-1.7040	0.0269	-0.0147	0.0043	0.2729	0.1421	0.1309	-1.5887
153	[illegible]	[illegible]	1.0953	-1.7357	0.0127	-0.0113	0.0043	0.2724	0.1402	0.1323	-1.5833
154	[illegible]	[illegible]	1.1101	-1.7639	0.0706	-0.0317	0.0043	0.2718	0.1421	0.1298	-1.5899
155	[illegible]	[illegible]	1.1416	-1.7721	0.0139	0.0224	0.0044	0.2731	0.1432	0.1300	-1.5528
156	[illegible]	[illegible]	1.1906	-1.7882	-0.0293	0.0307	0.0043	0.2744	0.1437	0.1308	-1.5866
157	[illegible]	[illegible]	1.1257	-1.7596	0.0275	-0.0126	0.0044	0.2756	0.1450	0.1307	-1.5631
158	[illegible]	[illegible]	1.1549	-1.7791	0.0293	0.0336	0.0043	0.2726	0.1441	0.1286	-1.5598
159	[illegible]	[illegible]	1.1563	-1.7819	0.0440	0.0322	0.0043	0.2741	0.1445	0.1297	-1.5436
160	[illegible]	[illegible]	1.1970	-1.8095	0.0712	-0.0145	0.0045	0.2787	0.1464	0.1324	-1.5495
161	[illegible]	[illegible]	1.1460	-1.8236	0.0571	-0.0052	0.0046	0.2768	0.1476	0.1293	-1.5402
162	[illegible]	[illegible]	1.1832	-1.8444	0.0725	0.0255	0.0045	0.2800	0.1494	0.1307	-1.5556
163	[illegible]	[illegible]	1.2117	-1.8622	0.0829	0.0120	0.0046	0.2811	0.1503	0.1309	-1.5368
164	[illegible]	[illegible]	1.2049	-1.8239	0.0279	0.0296	0.0047	0.2800	0.1505	0.1296	-1.5074
165	[illegible]	[illegible]	1.2239	-1.8365	0.0137	0.0229	0.0047	0.2792	0.1523	0.1270	-1.4988
166	[illegible]	[illegible]	1.2236	-1.8342	0.0421	-0.0037	0.0048	0.2788	0.1536	0.1253	-1.4989
167	[illegible]	[illegible]	1.2567	-1.8594	0.0791	0.0337	0.0048	0.2822	0.1544	0.1279	-1.4824
168	[illegible]	[illegible]	1.2396	-1.8657	0.0490	0.0360	0.0117	0.2813	0.1548	0.1266	-1.5053
169	[illegible]	[illegible]	1.2877	-1.8989	0.0150	0.0212	0.0049	0.2831	0.1562	0.1270	-1.4845
170	[illegible]	[illegible]	1.2964	-1.8988	0.0427	0.0181	0.0120	0.2840	0.1576	0.1265	-1.4807
171	[illegible]	[illegible]	1.2950	-1.8929	-0.0153	0.0372	0.0120	0.2813	0.1575	0.1239	-1.5036
172	[illegible]	[illegible]	1.2953	-1.8987	0.0006	0.0502	0.0119	0.2901	0.1617	0.1284	-1.4867
173	[illegible]	[illegible]	1.2994	-1.9365	0.0279	0.0373	0.0121	0.2840	0.1594	0.1247	-1.4789
174	[illegible]	[illegible]	1.3237	-1.9476	0.0575	0.0497	0.0121	0.2846	0.1603	0.1246	-1.4716
175	[illegible]	[illegible]	1.2921	-1.9873	0.0451	0.0551	0.0120	0.2827	0.1608	0.1220	-1.4698
176	[illegible]	[illegible]	1.3346	-1.9911	0.0143	0.0396	0.0122	0.2809	0.1615	0.1195	-1.4939
177	[illegible]	[illegible]	1.3531	-1.9864	0.0273	-0.0026	0.0124	0.2858	0.1624	0.1235	-1.4698
178	[illegible]	[illegible]	1.3419	-2.0457	0.0576	0.0067	0.0123	0.2896	0.1647	0.1243	-1.4813
179	[illegible]	[illegible]	1.3303	-1.9967	0.0403	-0.0060	0.0125	0.2881	0.1647	0.1235	-1.4626
180	[illegible]	[illegible]	1.3951	-2.0385	0.0570	-0.0054	0.0126	0.2877	0.1651	0.1227	-1.4612
181	[illegible]	[illegible]	1.3800	-2.0284	0.0724	0.0053	0.0123	0.2903	0.1674	0.1229	-1.4687
182	[illegible]	[illegible]	1.4113	-2.0567	0.0725	0.0056	0.0125	0.2903	0.1687	0.1216	-1.4544
183	[illegible]	[illegible]	1.4250	-2.0807	0.0767	-0.0150	0.0197	0.2938	0.1714	0.1224	-1.4601
184	[illegible]	[illegible]	1.4294	-2.0618	0.0118	-0.0133	0.0127	0.2874	0.1695	0.1180	-1.4475

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH MACH-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
2 2 0.80 1.7 0.0 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAN	CAF	XCP
185	13.28	-0.02	1.4359	-2.0690	0.0518	-0.0159	0.0127	0.2902	0.1706	0.1196	-1.4408
186	13.33	-0.01	1.4350	-2.0721	0.0761	-0.0629	0.0128	0.2900	0.1718	0.1182	-1.4409
187	13.41	-0.02	1.4448	-2.0942	0.0809	-0.0291	0.0129	0.2895	0.1728	0.1167	-1.4278
188	13.50	-0.01	1.4524	-2.0658	0.0712	-0.0186	0.0126	0.2887	0.1713	0.1174	-1.4221
189	13.57	-0.02	1.4654	-2.0930	0.0618	-0.0159	0.0129	0.2921	0.1745	0.1176	-1.4279
190	13.67	-0.02	1.4705	-2.1156	0.0628	-0.0038	0.0128	0.2911	0.1750	0.1161	-1.4153
191	13.75	-0.02	1.4773	-2.1013	0.0559	-0.0293	0.0130	0.2894	0.1772	0.1122	-1.4034
192	13.83	-0.02	1.5119	-2.1128	0.0615	-0.0161	0.0202	0.2927	0.1772	0.1155	-1.3975
193	13.76	-0.01	1.5113	-2.1171	0.0696	-0.0078	0.0130	0.2922	0.1762	0.1160	-1.3975
194	14.00	-0.01	1.5258	-2.1055	0.0561	-0.0198	0.0131	0.2931	0.1793	0.1161	-1.3799
195	14.08	-0.02	1.5263	-2.1078	0.0564	-0.0050	0.0131	0.2911	0.1789	0.1122	-1.3565
196	14.16	-0.01	1.5556	-2.0978	0.0542	-0.0194	0.0203	0.2930	0.1802	0.1128	-1.3458
197	14.25	-0.02	1.5275	-2.0725	0.0468	0.0086	0.0132	0.2940	0.1830	0.1110	-1.3565
198	14.32	-0.02	1.5277	-2.0725	0.0486	0.0352	0.0202	0.2921	0.1817	0.1104	-1.3506
199	14.40	-0.02	1.5424	-2.0880	-0.0017	0.0250	0.0133	0.2953	0.1852	0.1101	-1.3278
200	14.50	-0.02	1.5425	-2.0885	0.0038	-0.0326	0.0203	0.2907	0.1830	0.1077	-1.3281
201	14.57	-0.01	1.5543	-2.0588	0.0262	0.0196	0.0133	0.2976	0.1880	0.1096	-1.3229
202	14.67	-0.01	1.5744	-2.0784	0.0282	-0.0154	0.0135	0.2972	0.1876	0.1102	-1.2950
203	14.75	-0.01	1.5801	-1.9421	0.0712	-0.0180	0.0135	0.2969	0.1879	0.1090	-1.2769
204	14.88	-0.01	1.5731	-2.0373	0.1060	-0.0450	0.0136	0.2961	0.1865	0.1096	-1.2951
205	14.93	-0.02	1.5739	-1.9644	0.0612	-0.0151	0.0137	0.2976	0.1897	0.1077	-1.2608
206	15.01	-0.01	1.5736	-1.9843	0.0583	0.0321	0.0135	0.3022	0.1939	0.1083	-1.2609
207	15.09	-0.02	1.6324	-2.0121	0.0561	-0.0163	0.0139	0.2945	0.1939	0.1006	-1.2326
208	15.16	-0.02	1.6057	-1.9786	0.0569	0.0043	0.0138	0.3034	0.1956	0.1078	-1.2297
209	15.24	-0.02	1.6194	-2.0026	0.0636	-0.0272	0.0140	0.3035	0.1983	0.1052	-1.2366
210	15.34	-0.02	1.6340	-1.9981	0.0584	-0.0419	0.0140	0.2989	0.1965	0.1024	-1.2216
211	15.43	-0.02	1.6193	-1.9867	0.0711	-0.0175	0.0139	0.2983	0.1975	0.1008	-1.2145
212	15.51	-0.02	1.6960	-1.9885	0.0665	-0.0270	0.0141	0.3034	0.2035	0.0999	-1.2066
213	15.61	-0.02	1.6327	-1.9588	0.0644	-0.0415	0.0070	0.3042	0.2007	0.1035	-1.1994
214	15.68	-0.02	1.6461	-1.9868	0.0553	-0.0161	0.0141	0.3051	0.2035	0.1016	-1.1958
215	15.76	-0.02	1.6449	-1.9131	0.0639	-0.0547	0.0072	0.3047	0.2026	0.1021	-1.1631
216	15.84	-0.02	1.6567	-1.9815	0.0649	-0.0146	0.0142	0.3043	0.2058	0.0985	-1.1705
217	15.92	-0.02	1.6663	-1.9145	0.0541	-0.0521	0.0073	0.3063	0.2062	0.1001	-1.1629
218	16.02	-0.03	1.6867	-1.8791	0.0121	0.0129	0.0071	0.3055	0.2071	0.0986	-1.1412
219	16.09	-0.02	1.6780	-1.9021	0.0362	0.0102	0.0072	0.3090	0.2113	0.0977	-1.1349
220	16.18	-0.02	1.6911	-1.8782	0.0418	-0.0019	0.0070	0.3120	0.2136	0.0984	-1.1186
221	16.26	-0.02	1.6757	-1.9940	0.0704	-0.0170	0.0144	0.3077	0.2154	0.0922	-1.1243
222	16.33	-0.03	1.6763	-1.8307	0.0695	-0.0409	0.0075	0.3114	0.2140	0.0974	-1.0921
223	16.41	-0.02	1.6758	-1.8307	0.0663	-0.0317	0.0074	0.3181	0.2163	0.1018	-1.0922
224	16.50	-0.02	1.6925	-1.8817	0.1161	-0.0572	0.0075	0.3197	0.2227	0.0970	-1.1000
225	16.58	-0.03	1.7071	-1.8569	0.0966	-0.0679	0.0077	0.3197	0.2213	0.0984	-1.0866
226	16.66	-0.03	1.7223	-1.8311	0.0781	-0.0288	0.0077	0.3153	0.2232	0.0920	-1.0632
227	16.75	-0.03	1.7071	-1.9009	0.0682	-0.0650	0.0078	0.3184	0.2250	0.0933	-1.0550
228	16.82	-0.03	1.7037	-1.7794	0.0543	-0.0392	0.0078	0.3231	0.2301	0.0929	-1.0465
229	16.91	-0.03	1.7326	-1.8018	0.0642	-0.0404	0.0078	0.3186	0.2278	0.0907	-1.0399
230	15.99	-0.03	1.7184	-1.7552	0.0506	-0.0096	0.0077	0.3200	0.2305	0.0894	-1.0214

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 6 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2 .484 1.7 0.0 0.0223 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
231	17.07	-0.03	1.7451	-1.7414	0.0527	-0.0627	0.0081	0.3259	0.2347	0.0911	-1.0152
232	17.15	-0.02	1.7356	-1.7684	0.0279	-0.0367	0.0077	0.3199	0.2342	0.0856	-1.0192
233	17.24	-0.03	1.7537	-1.7401	0.0404	-0.0133	0.0080	0.3282	0.2383	0.0898	-1.0150
234	17.32	-0.03	1.7345	-1.7316	0.0404	-0.0133	0.0080	0.3297	0.2384	0.0912	-0.9983
235	17.39	-0.03	1.7344	-1.6956	0.0103	-0.0103	0.0081	0.3280	0.2402	0.0877	-0.9776
236	17.48	-0.03	1.7634	-1.7361	0.0277	-0.0379	0.0079	0.3252	0.2397	0.0856	-0.9845
237	17.58	-0.03	1.7631	-1.7177	0.0553	-0.0144	0.0081	0.3298	0.2402	0.0835	-0.9742
238	17.64	-0.02	1.7655	-1.7251	0.0127	-0.0394	0.0080	0.3214	0.2446	0.0769	-0.9741
239	17.72	-0.04	1.7947	-1.7422	0.0542	-0.0345	0.0083	0.3301	0.2471	0.0829	-0.9707
240	17.81	-0.04	1.7956	-1.6895	0.0264	-0.0129	0.0083	0.3296	0.2498	0.0795	-0.9409
241	17.89	-0.04	1.7960	-1.7063	0.0559	-0.0371	0.0083	0.3291	0.2513	0.0777	-0.9508
242	17.97	-0.04	1.7945	-1.6882	0.1137	-0.0552	0.0084	0.3302	0.2540	0.0761	-0.9488
243	18.05	-0.03	1.8274	-1.6988	0.0692	-0.0359	0.0086	0.3342	0.2559	0.0782	-0.9282
244	18.14	-0.03	1.8266	-1.6956	0.0704	-0.0155	0.0085	0.3355	0.2633	0.0721	-0.9281
245	18.23	-0.04	1.8265	-1.6944	0.0245	-0.0234	0.0087	0.3349	0.2637	0.0711	-0.9082
246	18.31	-0.04	1.8227	-1.6815	0.0412	-0.0120	0.0085	0.3374	0.2646	0.0727	-0.8985
247	18.38	-0.04	1.8225	-1.6797	0.0544	-0.0259	0.0087	0.3392	0.2665	0.0726	-0.8886
248	18.46	-0.04	1.8174	-1.6762	0.0676	-0.0038	0.0089	0.3423	0.2748	0.0674	-0.8778
249	18.54	-0.04	1.8240	-1.6944	0.0460	0.1097	0.0092	0.3399	0.2766	0.0632	-0.8691
250	18.63	-0.03	1.8381	-1.6861	0.0579	0.0476	0.0085	0.3395	0.2730	0.0666	-0.8688
251	18.72	-0.04	1.8383	-1.6283	0.0422	0.0348	0.0087	0.3499	0.2854	0.0644	-0.8292
252	18.78	-0.04	1.8321	-1.6536	0.0322	0.0595	0.0087	0.3402	0.2797	0.0604	-0.8460
253	18.87	-0.05	1.8456	-1.6956	-0.0462	0.0815	0.0088	0.3525	0.2882	0.0643	-0.8091
254	18.95	-0.05	1.8443	-1.6772	0.0121	0.0378	0.0086	0.3500	0.2916	0.0582	-0.7992
255	19.02	-0.04	1.8405	-1.6950	0.0217	-0.0544	-0.0262	0.3754	0.3042	0.0712	-0.7036
256	19.09	-0.04	1.8776	-1.6823	0.0467	0.0127	0.0091	0.3534	0.2988	0.0546	-0.7895
257	19.17	-0.04	1.8690	-1.6789	-0.0305	0.0927	-0.0052	0.3544	0.3079	0.0465	-0.7607
258	19.25	-0.04	1.8508	-1.6969	-0.0134	0.1397	0.0088	0.3601	0.3124	0.0537	-0.7239
259	19.33	-0.04	1.8885	-1.6809	-0.0007	0.0848	0.0019	0.3565	0.3100	0.0465	-0.7425
260	19.41	-0.04	1.8882	-1.6878	-0.0445	0.1162	0.0091	0.3653	0.3189	0.0464	-0.7262
261	19.48	-0.04	1.8777	-1.6940	-0.0046	0.0934	-0.0188	0.3723	0.3197	0.0526	-0.6678
262	19.57	-0.04	1.8760	-1.6874	-0.0105	0.0310	-0.0117	0.3756	0.3266	0.0490	-0.6587
263	19.64	-0.04	1.8882	-1.6925	-0.0470	0.0575	-0.0047	0.3693	0.3250	0.0443	-0.6687
264	19.72	-0.05	1.8938	-1.6832	-0.0045	0.0355	-0.0114	0.3852	0.3326	0.0524	-0.6142
265	19.79	-0.05	1.8950	-1.6923	-0.0633	0.0354	-0.0045	0.3746	0.3301	0.0445	-0.6422
266	19.86	-0.05	1.8934	-1.6910	-0.0430	0.0340	-0.0187	0.3776	0.3296	0.0480	-0.6416
267	19.95	-0.04	1.8925	-1.6934	-0.0343	0.0566	-0.0043	0.3854	0.3399	0.0455	-0.6176
268	20.02	-0.04	1.8960	-1.6879	-0.0322	0.0566	-0.0114	0.3871	0.3436	0.0435	-0.5982
269	20.10	-0.04	1.8999	-1.6870	0.0237	-0.0211	-0.0110	0.3903	0.3445	0.0458	-0.5833
270	20.17	-0.04	1.8969	-1.6803	0.0107	-0.0104	-0.0182	0.3868	0.3404	0.0464	-0.5814
271	20.26	-0.04	1.8910	-1.6816	-0.0031	0.0419	-0.0112	0.3864	0.3441	0.0423	-0.5829
272	20.33	-0.04	1.8889	-1.6844	-0.0803	0.0432	-0.0182	0.3863	0.3446	0.0417	-0.6024
273	20.40	-0.04	1.8931	-1.6872	-0.0310	0.0406	-0.0113	0.3897	0.3478	0.0419	-0.5925
274	20.49	-0.04	1.8945	-1.6859	-0.0582	0.1312	-0.0112	0.3849	0.3484	0.0365	-0.5745
275	20.56	-0.04	1.8918	-1.6813	-0.0355	-0.0673	-0.0108	0.3995	0.3566	0.0429	-0.5608
276	20.63	-0.04	1.8887	-1.6885	-0.0621	0.0470	-0.0039	0.3931	0.3514	0.0417	-0.5876

TEST PART M&LH RA10=4 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2 0.80 1.7 -5.0 SIDE23 0.0 0 0 0 0. UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
277	20.44	-0.04	2.0147	-1.2220	-0.0428	0.1417	-0.0117	0.3929	0.3509	0.0420	-0.6268
278	20.70	-0.04	2.0172	-1.1905	-0.0587	0.1196	-0.0109	0.3926	0.3561	0.0363	-0.5868
279	20.96	-0.05	2.0310	-1.1634	-0.1114	0.2543	-0.0114	0.3917	0.3546	0.0371	-0.5927
280	20.93	-0.04	2.0322	-1.1495	-0.0667	0.0578	-0.0107	0.3916	0.3569	0.0347	-0.5667
281	21.09	-0.04	2.0700	-1.1966	-0.0439	0.1175	-0.0108	0.3851	0.3539	0.0312	-0.5742
282	21.10	-0.05	2.0466	-1.1738	-0.1170	0.1233	-0.0036	0.3836	0.3503	0.0331	-0.5754
283	21.17	-0.04	2.0403	-1.1556	-0.0457	0.0817	-0.0107	0.3919	0.3557	0.0362	-0.5894
284	21.25	-0.04	2.0701	-1.1626	-0.0865	0.1574	-0.0038	0.3898	0.3588	0.0310	-0.5613
285	21.32	-0.03	2.0941	-1.1727	-0.1169	0.0670	-0.0035	0.3915	0.3598	0.0317	-0.5627
286	21.41	-0.04	2.1097	-1.2280	-0.1503	0.2837	-0.0110	0.3911	0.3575	0.0336	-0.5611
287	21.49	-0.04	2.0946	-1.2137	-0.0724	0.1441	-0.0037	0.3884	0.3571	0.0317	-0.5736
288	21.56	-0.04	2.1126	-1.2291	-0.1137	0.2684	-0.0178	0.3893	0.3604	0.0289	-0.5723
289	21.64	-0.04	2.1292	-1.1865	-0.0547	0.2911	-0.0181	0.3671	0.3631	0.0240	-0.5342
290	21.72	-0.04	2.1418	-1.2194	-0.1226	0.3298	-0.0182	0.3650	0.3618	0.0232	-0.5672
291	21.79	-0.04	2.1535	-1.2575	-0.1668	0.4176	-0.0184	0.3903	0.3614	0.0289	-0.5681
292	21.88	-0.03	2.1554	-1.2285	-0.0451	0.2978	-0.0181	0.3956	0.3700	0.0256	-0.5645
293	21.96	-0.03	2.1677	-1.2516	-0.0381	0.2780	-0.0178	0.3969	0.3736	0.0233	-0.5772
294	22.01	-0.04	2.1498	-1.2631	-0.0322	0.0505	-0.0101	0.3842	0.3629	0.0213	-0.5536
295	22.09	-0.03	2.1799	-1.2393	-0.1605	0.1344	-0.0031	0.3944	0.3715	0.0229	-0.5568
296	22.17	-0.03	2.1934	-1.2194	-0.0053	0.0661	-0.0028	0.3956	0.3715	0.0241	-0.5586
297	22.24	-0.03	2.2208	-1.2588	0.0112	0.0406	-0.0029	0.3955	0.3765	0.0190	-0.5545
298	22.33	-0.04	2.2051	-1.2284	-0.1350	0.3544	-0.0178	0.3897	0.3715	0.0182	-0.5571
299	22.34	-0.03	2.2058	-1.2284	-0.0529	0.2388	-0.0105	0.3914	0.3760	0.0154	-0.5571
300	22.47	-0.03	2.2333	-1.2588	-0.2095	0.3609	-0.0178	0.3898	0.3729	0.0167	-0.5552
301	22.54	-0.04	2.2473	-1.2594	-0.2517	0.4005	-0.0178	0.3933	0.3751	0.0182	-0.5606
302	22.60	-0.05	2.2607	-1.2892	-0.3185	0.5992	-0.0252	0.3880	0.3743	0.0137	-0.5617
303	22.66	-0.04	2.3010	-1.3524	-0.2053	0.6324	-0.0183	0.3947	0.3809	0.0138	-0.5878
304	22.76	-0.03	2.3043	-1.3537	-0.1462	0.4185	-0.0178	0.3950	0.3776	0.0174	-0.5875
305	22.81	-0.04	2.2894	-1.3240	-0.1421	0.2352	-0.0171	0.4026	0.3803	0.0223	-0.5743
306	22.90	-0.04	2.3329	-1.3582	-0.1765	0.4431	-0.0177	0.3994	0.3767	0.0127	-0.5622
307	22.97	-0.04	2.3453	-1.3583	-0.2554	0.6430	-0.0323	0.3912	0.3767	0.0145	-0.5672
308	23.04	-0.03	2.3616	-1.3933	-0.3059	0.8159	-0.0333	0.3963	0.3785	0.0178	-0.6219
309	23.12	-0.04	2.4034	-1.4132	-0.2237	0.6893	-0.0256	0.3967	0.3803	0.0164	-0.5679
310	23.19	-0.04	2.3784	-1.3569	-0.2218	0.7244	-0.0325	0.3959	0.3821	0.0138	-0.5711
311	23.27	-0.04	2.3725	-1.3874	-0.2310	0.5444	-0.0178	0.4049	0.3894	0.0155	-0.5967
312	23.34	-0.05	2.4243	-1.4553	-0.3120	0.9473	-0.0476	0.3937	0.3831	0.0106	-0.5733
313	23.39	-0.04	2.5166	-1.5171	-0.0392	0.5152	-0.0317	0.3960	0.3889	0.0051	-0.6429
314	23.81	-0.04	2.5036	-1.4912	-0.2659	0.7156	-0.0599	0.4021	0.3919	0.0102	-0.5994
315	24.21	-0.03	2.5475	-1.4336	-0.1467	0.4402	-0.0306	0.4045	0.4005	0.0040	-0.5581
316	24.29	-0.02	2.7168	-1.4415	0.0565	-0.1905	0.0068	0.4049	0.4141	-0.0092	-0.5315
317	24.46	-0.04	2.7979	-1.4660	-0.1340	0.2972	-0.0269	0.3924	0.4146	-0.0222	-0.6042
318	26.95	-0.04	2.9105	-1.4901	-0.2545	0.3295	-0.0423	0.3861	0.4166	-0.0307	-0.6425
319	27.46	-0.04	3.0808	-1.6341	-0.1063	0.0659	-0.0268	0.3883	0.4303	-0.0420	-0.6746
320	29.44	-0.03	3.2546	-1.7737	-0.0858	-0.0646	-0.0115	0.3779	0.4312	-0.0533	-0.7342
321	29.47	-0.03	3.4906	-1.9520	-0.0329	-0.3833	0.0110	0.3765	0.4343	-0.0578	-0.7678
322	30.52	-0.04	3.7282	-2.0813	0.0615	-0.5329	0.0197	0.3709	0.4471	-0.0762	-0.8913

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 8 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7. PART 2 MACH NUMBER 1.67 PHI 0.0 CONF 23 L 0.0 DEL1 0 DEL2 6 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
323	31.98	-.01	9.0904	-0.3183	-0.1176	-0.0939	0.0059	0.3480	0.4471	-0.0992	-0.0777
324	32.89	-.01	9.5866	-0.2981	-0.5241	-0.5681	0.0230	0.3593	0.4623	-0.1031	-0.0851
325	33.92	-.01	9.1197	-0.0379	-0.7139	-1.1315	0.0345	0.3614	0.4733	-0.1120	-0.0855
326	35.03	-.01	9.6822	-0.0491	-0.9346	-1.2716	0.0338	0.3310	0.4701	-0.1392	-0.0819
327	36.24	-.01	9.4517	-0.0782	-0.9171	-1.8710	0.0366	0.3187	0.4750	-0.1564	-0.0888
328	37.61	-.01	8.8825	-0.0732	-0.9307	-2.2709	0.0527	0.3077	0.4768	-0.1692	-0.0895
329	39.57	-.01	7.0958	-0.0887	-0.9296	-2.8966	0.0700	0.2897	0.4750	-0.1834	-0.1253
330	39.75	-.01	7.2875	-0.0760	-1.0784	-2.1453	0.0702	0.2810	0.4708	-0.1898	-0.1024
331	41.01	-.01	7.4517	-0.1141	-0.9059	-0.7731	0.0421	0.2429	0.4721	-0.2292	-0.0153
332	42.21	-.01	7.0809	0.0693	-0.7795	0.6908	0.0210	0.1861	0.4500	-0.2639	0.0031
333	43.07	-.01	6.0815	0.5056	-0.7471	0.0733	0.0375	0.1585	0.4366	-0.2781	0.0626
334	44.92	-.01	5.5522	0.0315	-0.9299	-0.3867	0.0410	0.1056	0.4115	-0.3060	0.0738
335	46.96	-.01	5.0963	0.7116	0.2560	-1.2791	0.0516	0.0751	0.3969	-0.3218	0.0791
336	45.27	-.01	5.3736	0.6514	0.0827	-0.9706	0.0529	0.0309	0.3743	-0.3434	0.0909
337	50.13	-.01	10.1264	0.3414	0.2865	1.5747	0.0263	0.0630	0.4266	-0.3658	0.0376
338	52.15	-.01	10.7632	-0.6987	1.3529	1.0442	0.0421	0.0425	0.4634	-0.4209	-0.0833
339	54.38	-.01	12.4797	-2.4911	1.6301	2.4156	0.0777	0.0267	0.5062	-0.4875	-0.2397
340	56.92	-.01	13.2151	-3.2033	1.2079	2.8562	0.0797	-0.0348	0.4402	-0.4750	-0.2424
341	57.96	-.01	13.1156	-3.0926	0.9564	2.7361	0.0904	-0.0561	0.4162	-0.4703	-0.2350
342	57.91	-.01	13.1804	-3.0861	1.2769	2.8156	0.0801	-0.0420	0.4208	-0.4628	-0.2348
343	57.91	-.01	13.2332	-3.1426	1.3341	2.9598	0.0797	-0.0444	0.4192	-0.4636	-0.2367
344	57.92	-.01	13.2762	-3.2626	1.2237	2.8695	0.0805	-0.0484	0.4224	-0.4708	-0.2457
345	57.91	-.01	13.1179	-3.0969	1.1117	2.7957	0.0732	-0.0519	0.4199	-0.4718	-0.2353
346	57.91	-.01	13.1537	-3.1308	1.2452	2.8479	0.0730	-0.0374	0.4381	-0.4755	-0.2401
347	57.92	-.01	13.2701	-3.2066	1.3395	3.0377	0.0801	-0.0474	0.4356	-0.4831	-0.2415
348	57.96	-.01	13.0100	-3.1616	1.2264	2.6585	0.0809	-0.0301	0.4364	-0.4665	-0.2430
349	57.91	-.01	13.1303	-3.2777	1.2058	2.8425	0.0805	-0.0419	0.4340	-0.4759	-0.2496

PAGE 2 OF 3
SHEET 1 OF 8

MANTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RA10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2 0.80 1.67 0.0 BINOM23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CBETA	CN1	CM1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
1	-5.49	-0.02	0.0118	0.0066	-0.0033	0.5574	-0.2787	-0.3102	-0.0534	-0.1818	0.1720	0.5869
2	-5.59	-0.02	0.0175	0.0077	-0.0026	0.4530	-0.1692	-0.3167	-0.0534	-0.1810	0.1685	0.5718
3	-5.49	-0.01	0.0148	0.0074	-0.0041	0.5033	-0.2810	-0.3103	-0.0528	-0.1818	0.1701	0.5859
4	-5.89	-0.01	0.0203	0.0092	-0.0021	0.4524	-0.1068	-0.3166	-0.0534	-0.1836	0.1685	0.5808
5	-5.72	0.00	0.0118	0.0066	-0.0033	0.5574	-0.2787	-0.3165	-0.0536	-0.1849	0.1695	0.5841
6	-5.88	-0.02	0.0165	0.0074	-0.0010	0.5133	-0.1133	-0.3103	-0.0528	-0.1818	0.1701	0.5858
7	-5.74	-0.02	0.0118	0.0065	-0.0033	0.5574	-0.2787	-0.2914	-0.0514	-0.1775	0.1765	0.5921
8	-5.50	-0.02	0.0175	0.0074	-0.0026	0.4238	-0.1692	-0.2820	-0.0508	-0.1680	0.1803	0.5956
9	-5.34	-0.01	0.0148	0.0063	-0.0028	0.5595	-0.1921	-0.2567	-0.0496	-0.1640	0.1863	0.6162
10	-5.20	-0.01	0.0087	0.0060	-0.0023	0.7536	-0.2667	-0.2601	-0.0480	-0.1572	0.1843	0.6042
11	-5.07	-0.01	0.0165	0.0068	-0.0025	0.6067	-0.1933	-0.2676	-0.0467	-0.1524	0.1886	0.6154
12	-4.95	-0.01	0.0117	0.0064	-0.0042	0.5950	-0.2727	-0.2356	-0.0452	-0.1474	0.1921	0.6273
13	-4.79	-0.01	0.0174	0.0067	-0.0025	0.5090	-0.1444	-0.2168	-0.0438	-0.1420	0.2002	0.6490
14	-4.62	-0.01	0.0176	0.0063	-0.0038	0.4725	-0.2143	-0.2221	-0.0438	-0.1411	0.1972	0.6351
15	-4.50	-0.01	0.0174	0.0067	-0.0025	0.5000	-0.1444	-0.2045	-0.0425	-0.1374	0.2027	0.6559
16	-4.35	-0.01	0.0117	0.0073	-0.0032	0.6694	-0.2727	-0.1972	-0.0406	-0.1287	0.2060	0.6526
17	-4.22	-0.01	0.0165	0.0063	-0.0028	0.5733	-0.1933	-0.1816	-0.0390	-0.1249	0.2149	0.6803
18	-4.03	-0.01	0.0174	0.0062	-0.0025	0.5278	-0.1444	-0.1752	-0.0380	-0.1205	0.2170	0.6878
19	-3.90	-0.00	0.0174	0.0062	-0.0025	0.5278	-0.1444	-0.1569	-0.0362	-0.1146	0.2180	0.6907
20	-3.81	-0.01	0.0167	0.0073	-0.0041	0.5329	-0.2763	-0.1409	-0.0343	-0.1036	0.2232	0.7356
21	-3.68	-0.01	0.0203	0.0100	-0.0033	0.4552	-0.1619	-0.1410	-0.0333	-0.1036	0.2361	0.7351
22	-3.55	-0.01	0.0201	0.0104	-0.0020	0.5142	-0.1818	-0.1376	-0.0329	-0.1019	0.2391	0.7405
23	-3.43	-0.01	0.0201	0.0100	-0.0021	0.5030	-0.1058	-0.1189	-0.0301	-0.0927	0.2532	0.7800
24	-3.28	-0.01	0.0167	0.0078	-0.0041	0.5329	-0.2763	-0.1156	-0.0296	-0.0910	0.2546	0.7871
25	-3.14	-0.01	0.0174	0.0092	-0.0037	0.5278	-0.2111	-0.1036	-0.0272	-0.0811	0.2631	0.7845
26	-3.01	-0.01	0.0199	0.0118	-0.0008	0.5922	-0.0388	-0.1036	-0.0265	-0.0773	0.2561	0.7458
27	-2.86	-0.01	0.0166	0.0083	-0.0041	0.5695	-0.2781	-0.0910	-0.0259	-0.0737	0.2842	0.8102
28	-2.74	-0.01	0.0166	0.0083	-0.0041	0.5695	-0.2781	-0.0816	-0.0246	-0.0717	0.3014	0.8783
29	-2.61	-0.01	0.0174	0.0095	-0.0037	0.5560	-0.2111	-0.0662	-0.0221	-0.0615	0.3338	0.9286
30	-2.47	-0.01	0.0166	0.0083	-0.0041	0.5695	-0.2781	-0.0604	-0.0215	-0.0585	0.3585	0.9763
31	-2.36	-0.01	0.0167	0.0078	-0.0041	0.5329	-0.2763	-0.0569	-0.0208	-0.0557	0.3661	0.9780
32	-2.22	-0.01	0.0166	0.0083	-0.0041	0.5695	-0.2781	-0.0477	-0.0193	-0.0498	0.4069	1.0065
33	-2.09	-0.01	0.0166	0.0087	-0.0040	0.5960	-0.2715	-0.0415	-0.0183	-0.0442	0.4419	1.0051
34	-1.95	-0.01	0.0174	0.0091	-0.0037	0.5222	-0.2111	-0.0355	-0.0170	-0.0386	0.4783	1.0078
35	-1.82	-0.01	0.0176	0.0091	-0.0049	0.5165	-0.2802	-0.0293	-0.0157	-0.0343	0.5362	1.1678
36	-1.70	-0.00	0.0202	0.0104	-0.0033	0.5167	-0.1627	-0.0200	-0.0149	-0.0310	0.7440	1.5587
37	-1.57	-0.01	0.0176	0.0091	-0.0049	0.5165	-0.2802	-0.0107	-0.0136	-0.0251	1.2703	2.3423
38	-1.45	-0.01	0.0117	0.0062	-0.0043	0.7025	-0.3719	0.0019	-0.0123	-0.0240	-0.3500	-12.4588
39	-1.32	-0.01	0.0176	0.0091	-0.0049	0.5165	-0.2802	0.0112	-0.0110	-0.0195	-0.9828	-1.7414
40	-1.19	-0.01	0.0119	0.0062	-0.0055	0.6911	-0.4634	0.0144	-0.0107	-0.0205	-0.7450	-1.4228
41	-1.07	-0.01	0.0175	0.0096	-0.0048	0.5470	-0.2762	0.0206	-0.0089	-0.0136	-0.4360	-0.6682
42	-0.96	-0.01	0.0173	0.0094	-0.0036	0.5734	-0.2667	0.0297	-0.0069	-0.0115	-0.2338	-0.3864
43	-0.83	-0.01	0.0174	0.0096	-0.0037	0.5500	-0.2111	0.0295	-0.0063	-0.0090	-0.2124	-0.3039
44	-0.71	-0.02	0.0189	0.0078	-0.0046	0.8604	-0.5217	0.0324	-0.0032	-0.0074	-0.0982	-0.2292
45	-0.58	-0.00	0.0200	0.0108	-0.0020	0.5411	-0.1014	0.0355	-0.0015	-0.0043	-0.0435	-0.2337
46	-0.46	-0.01	0.0175	0.0091	-0.0049	0.5193	-0.2818	0.0417	-0.0015	-0.0077	0.0378	-0.1852

TEST	PART	MACH	MAIO-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	2	6.80	1.07	0.0	0123	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	-0.36	-0.01	0.0096	0.0075	-0.0059	0.8710	-0.6559	0.0446	0.0035	-0.0037	0.0779	-0.0823
48	-0.22	-0.01	0.0115	0.0087	-0.0031	0.7563	-0.2689	0.0474	0.0053	0.0016	0.1120	0.0346
49	-0.10	-0.01	0.0173	0.0099	-0.0036	0.5754	-0.2067	0.0536	0.0072	0.0035	0.1351	0.0649
50	0.01	-0.00	0.0066	0.0078	-0.0049	1.3065	-0.8226	0.0535	0.0075	0.0047	0.1406	0.0884
51	0.15	-0.00	0.0165	0.0096	-0.0040	0.6606	-0.2733	0.0547	0.0092	0.0053	0.1535	0.0889
52	0.27	-0.01	0.0119	0.0082	-0.0055	0.6911	-0.4636	0.0627	0.0117	0.0056	0.1662	0.0892
53	0.37	-0.01	0.0173	0.0094	-0.0036	0.5754	-0.2067	0.0719	0.0154	0.0090	0.2148	0.1248
54	0.50	-0.00	0.0173	0.0099	-0.0036	0.5754	-0.2067	0.0750	0.0167	0.0093	0.2227	0.1236
55	0.61	-0.00	0.0119	0.0073	-0.0056	0.6179	-0.4715	0.0778	0.0185	0.0133	0.2382	0.1712
56	0.73	-0.01	0.0090	0.0082	-0.0056	0.9140	-0.6452	0.0839	0.0199	0.0104	0.2368	0.1954
57	0.86	-0.01	0.0173	0.0094	-0.0036	0.5754	-0.2067	0.0901	0.0214	0.0194	0.2377	0.2152
58	0.97	-0.01	0.0165	0.0091	-0.0040	0.6267	-0.2733	0.1027	0.0230	0.0218	0.2237	0.2124
59	1.09	-0.00	0.0149	0.0082	-0.0065	0.5519	-0.4351	0.1057	0.0236	0.0233	0.2235	0.2208
60	1.21	-0.00	0.0119	0.0082	-0.0055	0.6911	-0.4636	0.1087	0.0245	0.0269	0.2254	0.2289
61	1.30	-0.01	0.0200	0.0117	-0.0032	0.5845	-0.1594	0.1176	0.0261	0.0293	0.2215	0.2494
62	1.43	-0.01	0.0146	0.0086	-0.0052	0.5694	-0.3576	0.1237	0.0273	0.0323	0.2207	0.2613
63	1.55	-0.00	0.0146	0.0086	-0.0064	0.5817	-0.4314	0.1392	0.0291	0.0374	0.2093	0.2689
64	1.68	-0.01	0.0165	0.0091	-0.0040	0.6267	-0.2733	0.1424	0.0295	0.0377	0.2073	0.2649
65	1.79	-0.01	0.0120	0.0082	-0.0068	0.6655	-0.5045	0.1454	0.0298	0.0405	0.2050	0.2787
66	1.89	-0.01	0.0120	0.0082	-0.0068	0.6655	-0.5045	0.1610	0.0304	0.0455	0.1887	0.2828
67	2.00	-0.01	0.0118	0.0082	-0.0055	0.6967	-0.4672	0.1641	0.0311	0.0471	0.1893	0.2869
68	2.12	-0.01	0.0201	0.0103	-0.0033	0.5295	-0.1635	0.1702	0.0316	0.0526	0.1859	0.3090
69	2.24	-0.01	0.0086	0.0069	-0.0074	1.0969	-1.1667	0.1827	0.0330	0.0537	0.1837	0.2941
70	2.34	-0.00	0.0094	0.0077	-0.0059	0.8632	-0.6559	0.1952	0.0348	0.0573	0.1784	0.2936
71	2.47	0.0	0.0174	0.0103	-0.0047	0.5944	-0.2722	0.2013	0.0361	0.0603	0.1793	0.2996
72	2.58	-0.01	0.0174	0.0095	-0.0048	0.5444	-0.2778	0.2136	0.0373	0.0664	0.1748	0.3107
73	2.68	-0.01	0.0118	0.0077	-0.0055	0.6557	-0.4672	0.2138	0.0376	0.0664	0.1762	0.3107
74	2.81	-0.01	0.0174	0.0097	-0.0048	0.5722	-0.2778	0.2260	0.0398	0.0725	0.1763	0.3207
75	2.92	-0.01	0.0165	0.0091	-0.0040	0.6267	-0.2733	0.2259	0.0398	0.0737	0.1764	0.3264
76	3.03	-0.01	0.0086	0.0082	-0.0066	0.9341	-0.5275	0.2413	0.0417	0.0801	0.1727	0.3319
77	3.15	-0.01	0.0117	0.0086	-0.0043	0.7025	-0.3719	0.2506	0.0429	0.0846	0.1716	0.3377
78	3.26	-0.00	0.0116	0.0085	-0.0042	0.7417	-0.3667	0.2600	0.0436	0.0866	0.1677	0.3332
79	3.36	-0.00	0.0145	0.0090	-0.0040	0.5933	-0.2733	0.2698	0.0449	0.0996	0.1796	0.3986
80	3.49	-0.01	0.0145	0.0090	-0.0040	0.5933	-0.2733	0.2592	0.0458	0.1017	0.1768	0.3924
81	3.60	-0.01	0.0140	0.0091	-0.0051	0.6225	-0.3510	0.2684	0.0467	0.1062	0.1740	0.3958
82	3.71	-0.01	0.0145	0.0090	-0.0040	0.5933	-0.2733	0.2808	0.0486	0.1123	0.1732	0.4000
83	3.83	-0.01	0.0175	0.0091	-0.0048	0.5193	-0.2782	0.2840	0.0489	0.1113	0.1723	0.3921
84	3.94	-0.01	0.0116	0.0082	-0.0055	0.6967	-0.4672	0.2931	0.0505	0.1164	0.1722	0.4039
85	4.04	-0.01	0.0119	0.0086	-0.0031	0.7479	-0.2689	0.2993	0.0511	0.1214	0.1709	0.4055
86	4.17	-0.01	0.0115	0.0082	-0.0031	0.7143	-0.2689	0.3055	0.0521	0.1245	0.1706	0.4075
87	4.28	-0.01	0.0089	0.0073	-0.0046	0.6281	-0.5217	0.3209	0.0536	0.1320	0.1672	0.4113
88	4.36	-0.00	0.0095	0.0077	-0.0046	0.8656	-0.5217	0.3178	0.0530	0.1305	0.1667	0.4104
89	4.49	-0.01	0.0060	0.0073	-0.0049	1.2258	-1.0226	0.3304	0.0542	0.1329	0.1641	0.4022
90	4.58	-0.01	0.0118	0.0077	-0.0055	0.8557	-0.4672	0.3427	0.0555	0.1377	0.1619	0.4017
91	4.70	-0.01	0.0088	0.0082	-0.0046	0.9341	-0.5275	0.3612	0.0577	0.1488	0.1597	0.4062
92	4.82	-0.01	0.0062	0.0073	-0.0062	1.1875	-1.0000	0.3550	0.0574	0.1462	0.1617	0.4118

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
2 0.8U 1.07 0.0 BLKOF23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPE1	YCPE1	CNF2	CM2	CH2	XCPF2	YCPF2
93	4.92	-0.01	0.0084	0.0077	-0.0048	0.6666	-1.5217	0.0736	0.0587	0.1528	0.1570	0.4091
94	5.02	-0.01	0.0082	0.0064	-0.0062	1.1250	-1.0000	0.0747	0.0596	0.1583	0.1571	0.4170
95	5.13	-0.00	0.0092	0.0064	-0.0071	0.7579	-0.7789	0.0659	0.0599	0.1589	0.1552	0.4117
96	5.22	-0.01	0.0088	0.0073	-0.0068	0.8761	-0.5217	0.0722	0.0599	0.1607	0.1528	0.4096
97	5.32	-0.01	0.0092	0.0065	-0.0071	0.7053	-0.7789	0.0747	0.0617	0.1667	0.1512	0.4120
98	5.44	-0.01	0.0120	0.0084	-0.0089	0.5806	-0.5126	0.0738	0.0612	0.1647	0.1489	0.4131
99	5.54	-0.00	0.0148	0.0073	-0.0041	0.5033	-0.2781	0.0765	0.0624	0.1736	0.1464	0.4070
100	5.63	-0.01	0.0082	0.0083	-0.0063	1.0469	-1.0156	0.0765	0.0632	0.1809	0.1498	0.4165
101	5.75	-0.01	0.0086	0.0065	-0.0067	0.9853	-1.3235	0.0796	0.0632	0.1825	0.1438	0.4151
102	5.83	-0.01	0.0092	0.0073	-0.0071	0.8000	-0.7789	0.0552	0.0650	0.1863	0.1429	0.4093
103	5.92	-0.01	0.0091	0.0069	-0.0059	0.7660	-0.6489	0.0551	0.0650	0.1888	0.1429	0.4149
104	6.02	-0.01	0.0084	0.0065	-0.0076	1.0152	-1.1667	0.0818	0.0650	0.1906	0.1409	0.4130
105	6.13	-0.00	0.0066	0.0065	-0.0067	0.9853	-1.3235	0.0735	0.0663	0.1966	0.1399	0.4150
106	6.22	-0.01	0.0092	0.0065	-0.0071	0.7053	-0.7789	0.0800	0.0670	0.1985	0.1395	0.4135
107	6.32	-0.01	0.0086	0.0065	-0.0067	0.9853	-1.3235	0.0925	0.0685	0.2033	0.1391	0.4129
108	6.44	-0.01	0.0005	0.0081	-0.0093	7.0000	-10.6667	0.0967	0.0685	0.2051	0.1374	0.4113
109	6.53	-0.02	0.0092	0.0065	-0.0071	0.7053	-0.7789	0.0846	0.0695	0.2094	0.1376	0.4148
110	6.62	-0.01	0.0086	0.0065	-0.0095	0.6768	-1.0000	0.0869	0.0695	0.2081	0.1376	0.4122
111	6.73	-0.01	0.0151	0.0065	-0.0077	0.4295	-0.5128	0.0812	0.0695	0.2111	0.1359	0.4130
112	6.83	-0.01	0.0096	0.0081	-0.0096	0.8366	-1.0000	0.0838	0.0703	0.2118	0.1343	0.4028
113	6.93	-0.00	0.0012	0.0065	-0.0117	5.5833	-10.0833	0.0799	0.0713	0.2165	0.1346	0.4086
114	7.04	-0.01	0.0126	0.0065	-0.0081	0.5317	-0.6667	0.0862	0.0713	0.2171	0.1330	0.4049
115	7.14	-0.01	0.0096	0.0065	-0.0095	0.6768	-1.0000	0.0825	0.0720	0.2176	0.1327	0.4010
116	7.22	-0.02	0.0089	0.0061	-0.0124	0.8750	-1.7778	0.0928	0.0720	0.2213	0.1327	0.4041
117	7.32	-0.01	0.0093	0.0056	-0.0072	0.6042	-0.7412	0.0550	0.0723	0.2224	0.1302	0.4007
118	7.41	-0.01	-0.0015	0.0061	-0.0132	-3.9375	0.5625	0.0551	0.0720	0.2224	0.1297	0.4007
119	7.51	-0.01	0.0041	0.0056	-0.0126	1.3448	-3.0465	0.0824	0.0724	0.2246	0.1287	0.3994
120	7.60	-0.01	0.0095	0.0061	-0.0098	0.6304	-1.0101	0.0823	0.0721	0.2271	0.1282	0.4039
121	7.71	-0.01	-0.0040	0.0065	-0.0172	-1.6341	4.3415	0.0719	0.0724	0.2279	0.1265	0.3985
122	7.80	-0.01	0.0016	0.0056	-0.0124	4.1429	-9.5714	0.0751	0.0715	0.2282	0.1263	0.3968
123	7.88	-0.01	0.0096	0.0061	-0.0106	0.6300	-1.1200	0.0813	0.0718	0.2312	0.1235	0.3977
124	7.94	-0.01	0.0012	0.0056	-0.0118	4.8333	-10.1667	0.0813	0.0715	0.2312	0.1230	0.3977
125	8.06	-0.01	0.0071	0.0065	-0.0135	0.9054	-1.8919	0.0876	0.0719	0.2330	0.1217	0.3966
126	8.16	-0.01	0.0071	0.0056	-0.0130	0.7838	-1.9054	0.0946	0.0711	0.2335	0.1197	0.3931
127	8.26	-0.01	0.0041	0.0056	-0.0126	1.3448	-3.0465	0.0802	0.0715	0.2353	0.1191	0.3921
128	8.36	-0.01	-0.0042	0.0056	-0.0138	-1.3182	3.6773	0.0832	0.0715	0.2418	0.1185	0.4008
129	8.41	-0.02	0.0014	0.0052	-0.0142	3.8000	-9.8000	0.0828	0.0708	0.2413	0.1156	0.3938
130	8.50	-0.02	0.0041	0.0061	-0.0126	1.4651	-3.0465	0.0827	0.0708	0.2438	0.1156	0.3980
131	8.59	-0.02	0.0014	0.0056	-0.0129	4.1429	-9.5714	0.0859	0.0705	0.2441	0.1145	0.3964
132	8.67	-0.02	0.0010	0.0056	-0.0142	5.6667	-9.9000	0.0866	0.0706	0.2479	0.1121	0.3956
133	8.76	-0.02	-0.0013	0.0056	-0.0157	-4.4615	12.5385	0.0866	0.0703	0.2479	0.1123	0.3956
134	8.85	-0.02	-0.0014	0.0047	-0.0146	-3.5000	10.7857	0.0831	0.0698	0.2464	0.1102	0.3923
135	8.95	-0.02	-0.0010	0.0056	-0.0145	-4.1429	10.7143	0.0861	0.0698	0.2499	0.1097	0.3928
136	9.03	-0.02	-0.0010	0.0052	-0.0130	3.8571	-9.6429	0.0892	0.0703	0.2516	0.1100	0.3936
137	9.12	-0.02	-0.0010	0.0052	-0.0146	-3.8571	10.7857	0.0551	0.0698	0.2528	0.1065	0.3859
138	9.21	-0.01	0.0014	0.0047	-0.0138	3.5000	-9.6429	0.0521	0.0698	0.2513	0.1070	0.3853

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 8

RAMIS MISSILE TAILS EFFECTS DATA

TEST PART MACH REIOM PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2 0.80 1.7 0.0 BLADE23 3.0 0. 0. 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	ACPF1	YCPF1	CNF2	CM2	CN2	ACPF2	YCPF2
139	9.28	-0.02	0.0013	0.0007	-0.0114	3.7892	-0.4815	0.6586	0.0694	0.2530	0.1054	0.3842
140	9.37	-0.02	-0.0042	0.0058	-0.0145	-1.3182	3.5241	0.6668	0.0691	0.2536	0.1039	0.3814
141	9.47	-0.02	-0.0042	0.0052	-0.0145	-1.2273	3.5410	0.6712	0.0684	0.2541	0.1019	0.3765
142	9.55	-0.01	-0.0041	0.0057	-0.0161	-1.1667	3.5782	0.6712	0.0678	0.2566	0.1311	0.3823
143	9.63	-0.01	-0.0048	0.0064	-0.0155	-0.4412	1.5796	0.6807	0.0684	0.2562	0.1005	0.3763
144	9.76	-0.02	0.0016	0.0038	-0.0154	3.4116	-0.4116	0.6808	0.0672	0.2561	0.0986	0.3761
145	9.82	-0.02	-0.0014	0.0063	-0.0166	-3.2143	11.7857	0.6872	0.0666	0.2567	0.0969	0.3735
146	9.90	-0.01	0.0072	0.0065	-0.0148	0.6933	-2.1634	0.6904	0.0656	0.2594	0.0950	0.3757
147	10.01	-0.01	-0.0042	0.0067	-0.0169	-1.1139	3.5110	0.6872	0.0656	0.2578	0.0955	0.3752
148	10.08	-0.01	-0.0041	0.0062	-0.0161	-1.2637	3.5762	0.6904	0.0653	0.2594	0.0948	0.3757
149	10.16	-0.01	-0.0013	0.0056	-0.0154	-0.1534	12.6154	0.7014	0.0642	0.2581	0.0915	0.3680
150	10.28	-0.01	-0.0012	0.0060	-0.0152	-0.1497	12.4767	0.7045	0.0642	0.2609	0.0897	0.3703
151	10.36	-0.01	-0.0013	0.0061	-0.0157	-0.5462	12.5385	0.7045	0.0632	0.2596	0.0897	0.3685
152	10.44	-0.02	0.0017	0.0061	-0.0167	3.5000	-0.4111	0.7143	0.0617	0.2592	0.0863	0.3628
153	10.52	-0.01	0.0043	0.0061	-0.0137	1.4000	-3.2000	0.7112	0.0617	0.2576	0.0867	0.3622
154	10.60	-0.01	-0.0013	0.0061	-0.0157	-0.6662	12.5385	0.7112	0.0613	0.2576	0.0861	0.3622
155	10.71	-0.01	0.0017	0.0060	-0.0167	3.7778	-0.4111	0.7221	0.0605	0.2601	0.0838	0.3602
156	10.79	-0.02	0.0047	0.0059	-0.0175	1.5714	-3.4539	0.7253	0.0601	0.2603	0.0829	0.3589
157	10.87	-0.01	0.0071	0.0064	-0.0135	0.9730	-2.9730	0.7254	0.0598	0.2591	0.0825	0.3571
158	10.97	-0.01	0.0046	0.0060	-0.0163	1.4167	-3.5238	0.7320	0.0585	0.2571	0.0806	0.3513
159	11.04	-0.01	0.0015	0.0060	-0.0154	4.2500	-11.9000	0.7319	0.0592	0.2596	0.0809	0.3548
160	11.14	-0.01	0.0071	0.0059	-0.0136	0.9733	-2.9459	0.7320	0.0586	0.2584	0.0800	0.3530
161	11.22	-0.01	-0.0039	0.0057	-0.0165	-1.4750	4.6750	0.7398	0.0584	0.2561	0.0789	0.3480
162	11.29	-0.01	0.0071	0.0056	-0.0136	1.0845	-1.9154	0.7398	0.0574	0.2561	0.0776	0.3489
163	11.39	-0.01	0.0045	0.0060	-0.0163	1.5319	-3.5957	0.7463	0.0571	0.2561	0.0765	0.3431
164	11.47	-0.01	0.0071	0.0057	-0.0135	1.0845	-1.9819	0.7384	0.0581	0.2575	0.0759	0.3488
165	11.56	-0.01	0.0071	0.0057	-0.0135	1.0845	-1.9819	0.7481	0.0566	0.2571	0.0757	0.3437
166	11.64	-0.01	0.0072	0.0058	-0.0146	1.0267	-2.0694	0.7480	0.0570	0.2571	0.0762	0.3438
167	11.73	-0.02	0.0071	0.0060	-0.0136	0.9730	-1.9730	0.7592	0.0571	0.2566	0.0752	0.3356
168	11.82	-0.02	0.0049	0.0057	-0.0121	0.7541	-1.2235	0.7591	0.0567	0.2571	0.0747	0.3388
169	11.89	-0.01	0.0071	0.0060	-0.0136	0.9149	-1.9459	0.7590	0.0571	0.2571	0.0753	0.3380
170	11.98	-0.02	0.0071	0.0059	-0.0136	0.9730	-1.9730	0.7591	0.0567	0.2571	0.0747	0.3388
171	12.08	-0.01	0.0071	0.0057	-0.0135	1.0945	-1.9459	0.7718	0.0577	0.2582	0.0748	0.3365
172	12.15	-0.02	0.0125	0.0063	-0.0104	0.8015	-1.6216	0.7782	0.0577	0.2588	0.0741	0.3325
173	12.23	-0.02	0.0041	0.0064	-0.0127	1.5414	-3.4769	0.7814	0.0580	0.2590	0.0742	0.3314
174	12.33	-0.01	-0.0041	0.0057	-0.0161	-1.3721	3.5447	0.7814	0.0580	0.2590	0.0742	0.3314
175	12.40	-0.01	0.0069	0.0057	-0.0124	1.1250	-1.7778	0.7909	0.0584	0.2598	0.0738	0.3285
176	12.49	-0.02	0.0125	0.0059	-0.0105	0.5923	-1.0395	0.7923	0.0585	0.2628	0.0738	0.3317
177	12.57	-0.02	0.0069	0.0059	-0.0111	1.1549	-1.8197	0.7923	0.0585	0.2628	0.0738	0.3317
178	12.65	-0.01	0.0071	0.0057	-0.0135	1.0951	-1.9054	0.8050	0.0594	0.2639	0.0738	0.3278
179	12.74	-0.02	0.0014	0.0057	-0.0142	5.5000	-11.5571	0.8042	0.0594	0.2654	0.0735	0.3284
180	12.81	-0.02	0.0069	0.0057	-0.0112	1.0845	-1.9459	0.8051	0.0588	0.2628	0.0730	0.3262
181	12.91	-0.01	0.0013	0.0060	-0.0130	5.2308	-11.3000	0.8115	0.0600	0.2632	0.0740	0.3244
182	13.00	-0.01	0.0098	0.0059	-0.0121	0.6039	-1.2255	0.8160	0.0598	0.2665	0.0733	0.3266
183	13.07	-0.02	0.0069	0.0063	-0.0111	1.2113	-1.8197	0.8195	0.0595	0.2629	0.0726	0.3209
184	13.17	-0.02	0.0041	0.0060	-0.0127	1.5814	-3.4936	0.8194	0.0595	0.2654	0.0727	0.3240

TEST PART MACH NO10-5 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2 0.800 1.67 0.0 BLADF23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN#1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
185	13.24	-0.02	0.0041	0.0064	-0.0127	1.6744	-3.0698	0.0241	0.0547	0.2655	0.0725	0.3222
186	13.33	-0.01	0.0064	0.0056	-0.0112	0.9577	-1.8338	0.0224	0.0545	0.2632	0.0724	0.3208
187	13.41	-0.02	0.0070	0.0074	-0.0124	1.0568	-1.7534	0.0224	0.0595	0.2657	0.0724	0.3231
188	13.50	-0.01	0.0064	0.0064	-0.0088	0.9275	-1.3188	0.0226	0.0591	0.2632	0.0719	0.3208
189	13.57	-0.02	0.0041	0.0078	-0.0127	1.6977	-3.0698	0.0230	0.0589	0.2637	0.0710	0.3181
190	13.67	-0.02	0.0041	0.0078	-0.0127	1.7907	-3.0698	0.0230	0.0598	0.2665	0.0719	0.3203
191	13.75	-0.02	0.0041	0.0074	-0.0127	1.7907	-3.0698	0.0304	0.0587	0.2629	0.0706	0.3166
192	13.83	-0.02	0.0012	0.0066	-0.0119	5.6667	-10.2500	0.0273	0.0587	0.2639	0.0709	0.3190
193	13.90	-0.01	-0.0046	0.0066	-0.0124	-1.0167	2.6875	0.0275	0.0570	0.2626	0.0689	0.3174
194	14.00	-0.01	-0.0153	0.0063	-0.0260	-0.2830	1.3019	0.0214	0.0552	0.2569	0.0672	0.3128
195	14.08	-0.02	-0.0019	0.0066	-0.0109	-3.4700	5.6500	0.0277	0.0564	0.2600	0.0682	0.3142
196	14.16	-0.01	0.0012	0.0057	-0.0120	4.9167	-10.3333	0.0292	0.0559	0.2593	0.0676	0.3127
197	14.25	-0.02	-0.0100	0.0064	-0.0156	-0.4936	1.5577	0.0295	0.0563	0.2567	0.0655	0.3094
198	14.32	-0.02	-0.0156	0.0065	-0.0176	-0.3096	1.1235	0.0262	0.0546	0.2577	0.0661	0.3119
199	14.40	-0.02	-0.0211	0.0060	-0.0204	-0.2100	0.9772	0.0169	0.0524	0.2531	0.0641	0.3098
200	14.50	-0.02	-0.0208	0.0066	-0.0181	-0.2700	1.1000	0.0296	0.0536	0.2554	0.0647	0.3079
201	14.57	-0.01	-0.0156	0.0064	-0.0176	-0.2940	1.1235	0.0234	0.0514	0.2523	0.0625	0.3064
202	14.67	-0.01	-0.0072	0.0057	-0.0154	-0.7867	2.1200	0.0251	0.0512	0.2502	0.0621	0.3032
203	14.75	-0.01	0.0012	0.0070	-0.0119	5.6833	-10.2500	0.0345	0.0515	0.2548	0.0617	0.3054
204	14.84	-0.01	0.0004	0.0057	-0.0095	0.5556	-10.8889	0.0378	0.0515	0.2551	0.0615	0.3045
205	14.93	-0.02	-0.0208	0.0035	-0.0232	-0.1867	1.1111	0.0253	0.0503	0.2464	0.0609	0.2986
206	15.01	-0.01	0.0004	0.0053	-0.0083	0.8750	-10.7500	0.0252	0.0503	0.2489	0.0609	0.3017
207	15.09	-0.02	-0.0206	0.0048	-0.0256	-0.2347	1.2441	0.0253	0.0496	0.2463	0.0601	0.2985
208	15.18	-0.02	-0.0075	0.0053	-0.0129	-0.7051	1.7179	0.0301	0.0497	0.2464	0.0599	0.2992
209	15.24	-0.02	-0.0154	0.0048	-0.0201	-0.3175	1.3000	0.0302	0.0490	0.2471	0.0590	0.2977
210	15.34	-0.02	-0.0103	0.0048	-0.0132	-0.4573	1.2804	0.0296	0.0496	0.2517	0.0598	0.2998
211	15.43	-0.02	-0.0150	0.0040	-0.0151	-0.2470	0.9958	0.0334	0.0490	0.2474	0.0588	0.2969
212	15.51	-0.02	-0.0102	0.0053	-0.0145	-0.5189	1.4151	0.0271	0.0486	0.2443	0.0586	0.2954
213	15.61	-0.02	-0.0234	0.0048	-0.0223	-0.1653	0.9315	0.0335	0.0481	0.2473	0.0577	0.2967
214	15.68	-0.02	-0.0058	0.0075	-0.0100	1.1143	-1.4857	0.0265	0.0477	0.2479	0.0575	0.2992
215	15.76	-0.02	-0.0132	0.0039	-0.0136	-0.2928	1.0292	0.0319	0.0477	0.2456	0.0573	0.2952
216	15.84	-0.02	-0.0212	0.0057	-0.0206	-0.2682	0.9682	0.0226	0.0467	0.2422	0.0568	0.2945
217	15.92	-0.02	-0.0154	0.0044	-0.0191	-0.2618	1.0346	0.0335	0.0469	0.2460	0.0561	0.2952
218	16.02	-0.03	-0.0020	0.0062	-0.0097	-3.0476	4.8095	0.0237	0.0468	0.2452	0.0566	0.2976
219	16.09	-0.02	-0.0045	0.0044	-0.0101	-1.0000	2.1000	0.0306	0.0465	0.2475	0.0556	0.2958
220	16.18	-0.02	-0.0134	0.0053	-0.0135	-0.3986	1.0145	0.0335	0.0461	0.2459	0.0553	0.2951
221	16.26	-0.02	-0.0195	0.0053	-0.0120	-0.5046	1.1378	0.0271	0.0458	0.2455	0.0554	0.2968
222	16.33	-0.03	-0.0100	0.0062	-0.0120	-0.5818	1.1273	0.0287	0.0469	0.2436	0.0547	0.2968
223	16.41	-0.02	0.0002	0.0074	-0.0034	25.0000	-17.5000	0.0367	0.0457	0.2487	0.0540	0.2973
224	16.50	-0.02	-0.0131	0.0053	-0.0108	-0.4044	1.1250	0.0287	0.0453	0.2446	0.0546	0.2951
225	16.58	-0.03	-0.0135	0.0040	-0.0112	-0.2929	0.8286	0.0287	0.0450	0.2433	0.0543	0.2936
226	16.66	-0.03	-0.0108	0.0058	-0.0120	-0.5455	1.1273	0.0224	0.0447	0.2415	0.0543	0.2937
227	16.75	-0.03	-0.0151	0.0062	-0.0151	-0.3832	0.9341	0.0159	0.0443	0.2409	0.0543	0.2953
228	16.82	-0.03	-0.0137	0.0044	-0.0094	-0.3521	0.7183	0.0208	0.0446	0.2401	0.0541	0.2913
229	16.91	-0.03	-0.0166	0.0044	-0.0101	-0.2907	0.6105	0.0304	0.0439	0.2431	0.0529	0.2927
230	16.99	-0.03	-0.0224	0.0044	-0.0104	-0.2155	0.4828	0.0287	0.0439	0.2410	0.0535	0.2937

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 6 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RA10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	2	0.60	1.7	0.0	B1&DF23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
231	17.07	-0.03	-0.0293	0.0067	-0.0277	-0.2270	0.9441	0.8095	0.0440	0.2352	0.0544	0.2906
232	17.15	-0.02	-0.0197	0.0036	-0.0094	-0.1814	0.4725	0.8255	0.0440	0.2404	0.0533	0.2913
233	17.24	-0.03	-0.0219	0.0066	-0.0157	-0.2203	0.7181	0.8225	0.0440	0.2394	0.0535	0.2874
234	17.32	-0.03	-0.0325	0.0046	-0.0265	-0.1217	0.7537	0.8160	0.0440	0.2371	0.0539	0.2905
235	17.39	-0.03	-0.0220	0.0067	-0.0156	-0.3026	0.7105	0.8160	0.0440	0.2358	0.0539	0.2890
236	17.48	-0.03	-0.0229	0.0036	-0.0104	-0.1595	0.4871	0.8160	0.0437	0.2371	0.0536	0.2905
237	17.56	-0.03	-0.0272	0.0053	-0.0201	-0.1950	0.7376	0.8161	0.0433	0.2358	0.0531	0.2890
238	17.64	-0.04	-0.0229	0.0022	-0.0072	-0.0975	0.3178	0.8303	0.0441	0.2425	0.0531	0.2920
239	17.72	-0.04	-0.0330	0.0054	-0.0219	-0.1756	0.6637	0.8112	0.0441	0.2331	0.0544	0.2874
240	17.81	-0.04	-0.0171	0.0058	-0.0077	-0.3390	0.4520	0.8240	0.0441	0.2368	0.0535	0.2874
241	17.89	-0.04	-0.0282	0.0044	-0.0127	-0.1475	0.4521	0.8144	0.0437	0.2360	0.0537	0.2898
242	17.97	-0.02	-0.0253	0.0048	-0.0115	-0.1570	0.4061	0.8175	0.0441	0.2362	0.0539	0.2889
243	18.06	-0.01	-0.0288	0.0031	-0.0041	-0.1041	0.3178	0.8158	0.0442	0.2364	0.0542	0.2898
244	18.14	-0.03	-0.0258	0.0049	-0.0102	-0.1723	0.3581	0.8159	0.0442	0.2351	0.0542	0.2882
245	18.23	-0.04	-0.0229	0.0064	-0.0184	-0.2152	0.3671	0.8321	0.0442	0.2377	0.0531	0.2857
246	18.31	-0.04	-0.0343	0.0053	-0.0188	-0.1351	0.4791	0.8112	0.0441	0.2336	0.0544	0.2843
247	18.38	-0.04	-0.0227	0.0066	-0.0096	-0.2128	0.4213	0.8112	0.0441	0.2306	0.0544	0.2843
248	18.46	-0.03	-0.0332	0.0070	-0.0206	-0.2122	0.6192	0.8048	0.0441	0.2275	0.0548	0.2827
249	18.54	-0.04	-0.0300	-0.0005	0.0043	0.0161	-0.1447	0.8367	0.0441	0.2403	0.0527	0.2872
250	18.63	-0.03	-0.0232	0.0036	-0.0047	-0.1562	0.2042	0.8174	0.0441	0.2369	0.0539	0.2874
251	18.72	-0.04	-0.0336	0.0067	-0.0194	-0.1944	0.5809	0.8113	0.0441	0.2280	0.0544	0.2810
252	18.78	-0.04	-0.0269	0.0005	0.0035	-0.0179	-0.1290	0.8352	0.0436	0.2374	0.0522	0.2842
253	18.87	-0.05	-0.0342	0.0057	-0.0120	-0.1647	0.3503	0.7872	0.0446	0.2181	0.0566	0.2770
254	18.95	-0.04	-0.0295	0.0009	0.0007	-0.0294	-0.0229	0.8288	0.0446	0.2343	0.0538	0.2827
255	19.02	-0.04	-0.0088	-0.0014	0.0240	0.1534	-2.7363	0.8350	0.0440	0.2425	0.0527	0.2904
256	19.09	-0.04	-0.0453	0.0044	-0.0170	-0.0981	0.3753	0.7839	0.0450	0.2203	0.0574	0.2818
257	19.17	-0.04	-0.0277	-0.0005	0.0104	0.0174	-0.3902	0.8110	0.0446	0.2350	0.0550	0.2898
258	19.25	-0.05	-0.0358	0.0009	0.0050	-0.0243	-0.1402	0.7933	0.0448	0.2307	0.0564	0.2908
259	19.33	-0.04	-0.0362	-0.0014	0.0086	0.0373	-0.2373	0.8124	0.0445	0.2374	0.0548	0.2922
260	19.41	-0.04	-0.0278	-0.0014	0.0120	0.0456	-0.4306	0.7967	0.0451	0.2325	0.0563	0.2908
261	19.48	-0.04	-0.0203	-0.0022	0.0227	0.1095	-1.1190	0.8315	0.0438	0.2446	0.0527	0.2958
262	19.57	-0.04	-0.0252	-0.0014	0.0147	0.0536	-0.5624	0.8156	0.0445	0.2369	0.0545	0.2929
263	19.64	-0.04	-0.0349	-0.0008	0.0266	0.1381	-0.7044	0.8268	0.0430	0.2446	0.0520	0.2958
264	19.72	-0.05	-0.0338	0.0009	0.0126	-0.0257	-0.3743	0.7981	0.0450	0.2308	0.0563	0.2892
265	19.79	-0.05	-0.0369	-0.0014	0.0167	0.0366	-0.3979	0.8044	0.0447	0.2364	0.0555	0.2939
266	19.88	-0.05	-0.0453	0.0	0.0114	0.0	-0.2516	0.8108	0.0447	0.2381	0.0551	0.2937
267	19.95	-0.04	-0.0488	-0.0022	0.0146	0.0458	-0.3506	0.7965	0.0446	0.2354	0.0560	0.2956
268	20.02	-0.04	-0.0468	-0.0052	0.0270	0.1113	-0.5773	0.8155	0.0443	0.2433	0.0543	0.2984
269	20.10	-0.04	-0.0564	-0.0029	0.0164	0.0479	-0.3614	0.8091	0.0443	0.2415	0.0547	0.2985
270	20.17	-0.04	-0.0484	-0.0035	0.0245	0.0748	-0.5281	0.8252	0.0435	0.2459	0.0527	0.2981
271	20.26	-0.04	-0.0363	-0.0031	0.0176	0.0568	-0.3733	0.8061	0.0435	0.2393	0.0540	0.2968
272	20.33	-0.04	-0.0457	-0.0052	0.0182	0.0793	-0.2467	0.8155	0.0435	0.2452	0.0534	0.3006
273	20.40	-0.04	-0.0545	-0.0031	0.0188	0.0466	-0.3451	0.8253	0.0435	0.2472	0.0527	0.2935
274	20.49	-0.04	-0.0601	-0.0035	0.0181	0.0578	-0.3018	0.8234	0.0439	0.2467	0.0527	0.2996
275	20.56	-0.04	-0.0569	0.0009	0.0138	-0.0153	-0.2426	0.8046	0.0440	0.2351	0.0547	0.2922
276	20.63	-0.04	-0.0643	0.0031	0.0031	-0.0480	-0.0511	0.7905	0.0446	0.2311	0.0564	0.2923

TEST PART MACH NX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2 0.600 1.7 0.6 0.000123 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPE1	YCPE1	CNF2	CM2	CA2	XCPE2	YCPE2
277	20.69	-0.00	-0.0718	-0.0048	0.0265	0.0672	-0.2849	0.6221	0.0436	0.2438	0.0531	0.2966
278	20.78	-0.00	-0.0713	-0.0043	0.0256	0.0595	-0.2142	0.6283	0.0433	0.2456	0.0523	0.2964
279	20.88	-0.05	-0.0467	-0.0139	0.0344	0.1640	-0.4046	0.6409	0.0426	0.2529	0.0567	0.3007
280	20.95	-0.00	-0.0631	-0.0016	0.0191	0.0216	-0.3028	0.6315	0.0436	0.2458	0.0528	0.2957
281	21.03	-0.00	-0.0805	-0.0073	0.0230	0.0910	-0.2850	0.6331	0.0432	0.2469	0.0519	0.2964
282	21.10	-0.00	-0.0691	-0.0087	0.0220	0.1275	-0.2470	0.6331	0.0429	0.2468	0.0515	0.2963
283	21.17	-0.00	-0.0809	-0.0078	0.0254	0.0967	-0.3138	0.6457	0.0429	0.2504	0.0508	0.2961
284	21.25	-0.00	-0.0717	-0.0028	0.0193	0.0353	-0.2692	0.6300	0.0435	0.2481	0.0524	0.2961
285	21.32	-0.00	-0.0711	-0.0013	0.0146	0.0176	-0.2049	0.6269	0.0438	0.2413	0.0530	0.2918
286	21.41	-0.00	-0.1004	-0.0117	0.0181	0.1188	-0.1815	0.6458	0.0429	0.2492	0.0508	0.2967
287	21.49	-0.00	-0.0826	-0.0035	0.0144	0.0421	-0.1741	0.6331	0.0432	0.2467	0.0519	0.2949
288	21.56	-0.00	-0.1003	-0.0104	0.0206	0.1084	-0.2054	0.6536	0.0426	0.2527	0.0500	0.2960
289	21.64	-0.00	-0.1091	-0.0139	0.0207	0.1273	-0.1901	0.6472	0.0424	0.2534	0.0500	0.2991
290	21.72	-0.00	-0.1061	-0.0130	0.0199	0.1227	-0.1873	0.6462	0.0424	0.2525	0.0489	0.2973
291	21.79	-0.00	-0.1120	-0.0148	0.0216	0.1318	-0.1929	0.6631	0.0424	0.2560	0.0491	0.2966
292	21.88	-0.00	-0.1031	-0.0095	0.0168	0.0928	-0.1749	0.6599	0.0429	0.2544	0.0489	0.2959
293	21.96	-0.00	-0.1057	-0.0087	0.0161	0.0877	-0.1333	0.6594	0.0433	0.2537	0.0504	0.2944
294	22.04	-0.00	-0.0998	-0.0056	0.0126	0.0562	-0.1250	0.6469	0.0432	0.2469	0.0509	0.2909
295	22.09	-0.00	-0.0621	-0.0004	0.0097	0.0047	-0.1187	0.6484	0.0434	0.2469	0.0516	0.2909
296	22.17	-0.00	-0.0688	-0.0052	0.0127	0.0536	-0.1316	0.6520	0.0432	0.2485	0.0507	0.2916
297	22.24	-0.00	-0.0913	-0.0043	0.0147	0.0478	-0.1607	0.6646	0.0432	0.2520	0.0500	0.2915
298	22.33	-0.00	-0.1221	-0.0117	0.0196	0.0937	-0.0791	0.6710	0.0426	0.2548	0.0489	0.2913
299	22.39	-0.00	-0.1367	-0.0160	0.0127	0.1171	-0.0932	0.6646	0.0426	0.2545	0.0492	0.2944
300	22.47	-0.00	-0.1336	-0.0160	0.0163	0.1336	-0.0879	0.6637	0.0423	0.2561	0.0478	0.2898
301	22.56	-0.00	-0.1390	-0.0178	0.0166	0.1277	-0.0616	0.6836	0.0423	0.2586	0.0478	0.2926
302	22.63	-0.00	-0.1505	-0.0200	0.0185	0.1327	-0.0564	0.6803	0.0420	0.2596	0.0477	0.2948
303	22.68	-0.00	-0.1505	-0.0191	0.0168	0.1269	-0.0571	0.6900	0.0420	0.2591	0.0472	0.2911
304	22.78	-0.00	-0.1591	-0.0220	0.0182	0.1419	-0.0386	0.9105	0.0411	0.2667	0.0451	0.2951
305	22.81	-0.00	-0.1501	-0.0217	0.0136	0.1446	-0.0238	0.9105	0.0414	0.2662	0.0455	0.2924
306	22.91	-0.00	-0.1571	-0.0252	0.0176	0.1507	-0.0067	0.9105	0.0414	0.2662	0.0455	0.2924
307	22.97	-0.00	-0.2096	-0.0334	-0.0356	0.1841	0.0781	0.9296	0.0401	0.2725	0.0433	0.2941
308	23.06	-0.00	-0.2061	-0.0362	-0.0361	0.1856	0.0295	0.9454	0.0398	0.2779	0.0422	0.2939
309	23.16	-0.00	-0.2196	-0.0367	-0.0368	0.1836	0.0775	0.9296	0.0401	0.2728	0.0432	0.2934
310	23.19	-0.00	-0.2368	-0.0408	-0.0220	0.1709	0.0921	0.9422	0.0398	0.2776	0.0423	0.2946
311	23.27	-0.00	-0.1918	-0.0201	-0.0110	0.1360	0.0574	0.9169	0.0407	0.2642	0.0444	0.2936
312	23.36	-0.00	-0.2550	-0.0434	-0.0313	0.1703	0.1226	0.9580	0.0395	0.2827	0.0412	0.2951
313	23.39	-0.00	-0.2377	-0.0339	-0.0336	0.1475	0.1420	0.9549	0.0398	0.2824	0.0417	0.2958
314	23.51	-0.00	-0.2432	-0.0365	-0.0296	0.1268	0.2106	0.9877	0.0388	0.2949	0.0393	0.2985
315	23.21	-0.00	-0.1859	-0.0169	-0.0355	0.0794	0.1910	0.9687	0.0400	0.2896	0.0413	0.2989
316	24.85	-0.00	-0.0134	-0.0099	-0.0350	-0.7410	-2.6115	0.9486	0.0400	0.2816	0.0423	0.2972
317	25.00	-0.00	-0.2356	-0.0182	-0.0791	0.0775	0.3361	0.9908	0.0386	0.2976	0.0391	0.3003
318	26.00	-0.00	-0.2436	-0.0178	-0.0812	0.0748	0.3332	0.9876	0.0382	0.2974	0.0387	0.3011
319	27.00	-0.00	-0.1990	-0.0122	-0.0616	0.0643	0.3257	0.9984	0.0372	0.3036	0.0373	0.3040
320	28.46	-0.00	-0.1051	-0.0040	-0.0163	0.0378	0.1552	0.9986	0.0367	0.3099	0.0367	0.3103
321	29.47	-0.00	-0.0409	-0.0009	0.0030	0.0212	-0.0731	1.0112	0.0357	0.3185	0.0353	0.3150
322	30.52	-0.00	0.0021	0.0061	0.0276	2.6636	13.0909	1.0102	0.0338	0.3263	0.0328	0.3168

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 8 OF 8

HARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 2 [illegible] 1.1 0.0 [illegible] 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	[illegible]	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
323	31.66	-0.04	-0.0973	-0.0252	[illegible]	0.0536	0.3043	1.0553	0.0319	0.3410	0.0303	0.3231
324	32.84	-0.08	-0.0347	0.0060	[illegible]	-0.1139	0.0611	1.0560	0.0311	0.3425	0.0295	0.3250
325	33.42	-0.10	-0.0239	0.0274	[illegible]	-1.1452	0.1815	1.0540	0.0296	0.3450	0.0279	0.3274
326	35.05	-0.12	-0.0044	0.0318	[illegible]	-7.1739	+0.1304	1.0593	0.0279	0.3484	0.0263	0.3289
327	36.24	-0.13	-0.0102	0.0306	[illegible]	-2.9906	-0.1038	1.0867	0.0256	0.3600	0.0237	0.3313
328	37.40	-0.15	0.0606	0.0398	[illegible]	0.8557	0.6061	1.1014	0.0245	0.3640	0.0223	0.3341
329	38.57	-0.16	0.1208	0.0498	[illegible]	0.3918	0.5564	1.1226	0.0227	0.3766	0.0202	0.3355
330	39.75	-0.19	0.0714	0.0373	[illegible]	0.5176	0.7016	1.1506	0.0207	0.3846	0.0180	0.3363
331	41.10	-0.11	-0.0340	0.0075	[illegible]	-0.2216	-0.3153	1.2042	0.0170	0.4023	0.0141	0.3341
332	42.21	-0.09	-0.1458	-0.0097	[illegible]	0.0586	0.2138	1.2322	0.0138	0.4127	0.0112	0.3349
333	43.47	-0.12	-0.0998	-0.0031	[illegible]	0.0709	0.0203	1.2640	0.0119	0.4121	0.0094	0.3260
334	44.92	0.10	-0.0217	0.0053	[illegible]	-0.2444	-1.4178	1.3347	0.0068	0.4236	0.0051	0.3174
335	46.56	0.06	0.0326	0.0136	[illegible]	0.4291	1.3343	1.3349	0.0044	0.4290	0.0036	0.3202
336	48.27	0.01	0.0371	0.0126	[illegible]	1.3331	1.5247	1.3555	0.0036	0.4334	0.0026	0.3197
337	50.13	0.01	-0.1444	-0.0143	[illegible]	0.1547	0.2648	1.3766	-0.0003	0.4448	-0.0002	0.3231
338	52.15	0.09	-0.0828	0.0005	[illegible]	-0.0039	0.1678	1.4186	-0.0069	0.4519	-0.0048	0.3186
339	54.36	0.13	0.0631	0.0254	[illegible]	0.5844	1.3378	1.4607	-0.0135	0.4678	-0.0093	0.3203
340	56.92	0.09	-0.0121	0.0156	[illegible]	-1.2930	-3.0106	1.4740	-0.0172	0.4687	-0.0117	0.3182
341	57.90	0.07	-0.0369	0.0109	[illegible]	-0.3172	-0.9533	1.4675	-0.0173	0.4627	-0.0118	0.3163
342	57.91	0.09	-0.0244	0.0142	[illegible]	-0.5910	-1.8458	1.4790	-0.0176	0.4621	-0.0121	0.3124
343	57.91	0.09	-0.0212	0.0126	[illegible]	-0.5816	-2.0418	1.4862	-0.0183	0.4695	-0.0123	0.3155
344	57.92	0.08	-0.0277	0.0129	[illegible]	-0.6869	-1.6725	1.4945	-0.0180	0.4646	-0.0121	0.3110
345	57.91	0.07	-0.0289	0.0136	[illegible]	-0.5388	-1.9302	1.4807	-0.0171	0.4576	-0.0115	0.3091
346	57.91	0.05	-0.0306	0.0138	[illegible]	-0.3534	-1.2042	1.4937	-0.0179	0.4601	-0.0120	0.3081
347	57.92	0.07	-0.0436	0.0116	[illegible]	-0.2655	-1.1217	1.4901	-0.0165	0.4551	-0.0111	0.3054
348	57.96	0.05	-0.0232	0.0142	[illegible]	-0.6042	-2.5042	1.5135	-0.0176	0.4618	-0.0116	0.3051
349	57.91	0.08	-0.0765	0.0145	[illegible]	-0.5455	-2.2255	1.5169	-0.0173	0.4615	-0.0114	0.3042

MANTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 2 .600 1.7 0.00 dla0123 0.0 0 0. .0 .0 UNKNOWN

POINT	ALPHA	BETA	CAF3	CM3	CN3	XCPF3	YCPF3	CNFA	CMA	CNA	XCPFA	YCPFA
1	-5.69	-[illegible]	-0.0190	9.9999	0.0261	9.9999	-1.3706	-0.4334	-0.0539	-0.1725	0.1244	0.3980
2	-5.49	-[illegible]	-0.0188	9.9999	0.0237	9.9999	-1.2615	-0.4063	-0.0552	-0.1797	0.1237	0.4026
3	-5.49	-[illegible]	-0.0188	9.9999	0.0237	9.9999	-1.2615	-0.4368	-0.0539	-0.1764	0.1235	0.4038
4	-5.69	-[illegible]	-0.0191	9.9999	0.0273	9.9999	-1.3706	-0.4463	-0.0549	-0.1786	0.1236	0.3997
5	-5.72	[illegible]	-0.0197	9.9999	0.0264	9.9999	-1.3163	-0.4334	-0.0539	-0.1725	0.1244	0.3980
6	-5.68	-[illegible]	-0.0196	9.9999	0.0261	9.9999	-1.3706	-0.4334	-0.0534	-0.1725	0.1244	0.3980
7	-5.74	-[illegible]	-0.0198	9.9999	0.0237	9.9999	-1.2615	-0.4206	-0.0527	-0.1686	0.1253	0.3962
8	-5.50	-[illegible]	-0.0190	9.9999	0.0261	9.9999	-1.3706	-0.4141	-0.0520	-0.1624	0.1256	0.3921
9	-5.34	-[illegible]	-0.0181	9.9999	0.0275	9.9999	-1.7066	-0.4011	-0.0514	-0.1565	0.1282	0.3902
10	-5.26	-[illegible]	-0.0189	9.9999	0.0264	9.9999	-1.3163	-0.3818	-0.0494	-0.1469	0.1300	0.3899
11	-5.07	-[illegible]	-0.0190	9.9999	0.0261	9.9999	-1.3706	-0.3721	-0.0495	-0.1469	0.1330	0.3950
12	-4.95	-[illegible]	-0.0209	9.9999	0.0256	9.9999	-1.6271	-0.3591	-0.0482	-0.1366	0.1363	0.3858
13	-4.79	-[illegible]	-0.0188	9.9999	0.0237	9.9999	-1.2615	-0.3468	-0.0475	-0.1363	0.1361	0.3989
14	-4.62	-[illegible]	-0.0194	9.9999	0.0261	9.9999	-1.3776	-0.3456	-0.0469	-0.1325	0.1357	0.3833
15	-4.50	-[illegible]	-0.0194	9.9999	0.0261	9.9999	-1.3776	-0.3263	-0.0454	-0.1285	0.1407	0.3938
16	-4.35	-[illegible]	-0.0188	9.9999	0.0237	9.9999	-1.2615	-0.3070	-0.0443	-0.1196	0.1442	0.3897
17	-4.22	-[illegible]	-0.0189	9.9999	0.0249	9.9999	-1.3163	-0.3038	-0.0437	-0.1182	0.1439	0.3890
18	-4.08	-[illegible]	-0.0196	9.9999	0.0263	9.9999	-1.4073	-0.2962	-0.0427	-0.1138	0.1453	0.3867
19	-3.99	-[illegible]	-0.0189	9.9999	0.0264	9.9999	-1.3163	-0.2750	-0.0412	-0.1085	0.1498	0.3947
20	-3.81	-[illegible]	-0.0217	9.9999	0.0224	9.9999	-1.0311	-0.2623	-0.0396	-0.1014	0.1508	0.3867
21	-3.68	-[illegible]	-0.0199	9.9999	0.0249	9.9999	-1.3163	-0.2623	-0.0393	-0.0990	0.1497	0.3775
22	-3.55	-[illegible]	-0.0189	9.9999	0.0260	9.9999	-1.3726	-0.2488	-0.0386	-0.0966	0.1551	0.3881
23	-3.43	-[illegible]	-0.0189	9.9999	0.0261	9.9999	-1.3726	-0.2363	-0.0366	-0.0893	0.1539	0.3781
24	-3.26	-[illegible]	-0.0197	9.9999	0.0236	9.9999	-1.2525	-0.2233	-0.0343	-0.0833	0.1538	0.3729
25	-3.14	-[illegible]	-0.0217	9.9999	0.0244	9.9999	-1.1333	-0.2169	-0.0335	-0.0804	0.1544	0.3706
26	-3.01	-[illegible]	-0.0199	9.9999	0.0261	9.9999	-1.3726	-0.2073	-0.0331	-0.0784	0.1597	0.3785
27	-2.88	-[illegible]	-0.0207	9.9999	0.0255	9.9999	-1.3313	-0.1967	-0.0309	-0.0725	0.1586	0.3722
28	-2.74	-[illegible]	-0.0197	9.9999	0.0236	9.9999	-1.2629	-0.1787	-0.0296	-0.0688	0.1658	0.3858
29	-2.61	-[illegible]	-0.0186	9.9999	0.0260	9.9999	-1.3795	-0.1661	-0.0284	-0.0666	0.1708	0.4009
30	-2.47	-[illegible]	-0.0197	9.9999	0.0236	9.9999	-1.2629	-0.1546	-0.0278	-0.0623	0.1741	0.3986
31	-2.36	-[illegible]	-0.0196	9.9999	0.0261	9.9999	-1.3795	-0.1469	-0.0265	-0.0577	0.1807	0.3929
32	-2.22	-[illegible]	-0.0188	9.9999	0.0245	9.9999	-1.3179	-0.1406	-0.0253	-0.0536	0.1798	0.3809
33	-2.09	-[illegible]	-0.0196	9.9999	0.0259	9.9999	-1.3744	-0.1341	-0.0242	-0.0505	0.1806	0.3763
34	-1.95	-[illegible]	-0.0188	9.9999	0.0259	9.9999	-1.3744	-0.1246	-0.0233	-0.0473	0.1867	0.3796
35	-1.82	-[illegible]	-0.0199	9.9999	0.0270	9.9999	-1.4286	-0.1150	-0.0220	-0.0428	0.1913	0.3725
36	-1.70	-[illegible]	-0.0188	9.9999	0.0259	9.9999	-1.3744	-0.1088	-0.0207	-0.0398	0.1906	0.3661
37	-1.57	-[illegible]	-0.0199	9.9999	0.0272	9.9999	-1.7091	-0.0962	-0.0189	-0.0340	0.1966	0.3531
38	-1.45	-[illegible]	-0.0189	9.9999	0.0270	9.9999	-1.4286	-0.0900	-0.0177	-0.0310	0.1961	0.3441
39	-1.32	-[illegible]	-0.0197	9.9999	0.0236	9.9999	-1.2629	-0.0776	-0.0151	-0.0226	0.1953	0.2910
40	-1.19	-[illegible]	-0.0199	9.9999	0.0270	9.9999	-1.4286	-0.0712	-0.0145	-0.0233	0.2033	0.3279
41	-1.07	-[illegible]	-0.0199	9.9999	0.0270	9.9999	-1.4286	-0.0649	-0.0132	-0.0167	0.2036	0.2571
42	-0.96	-[illegible]	-0.0186	9.9999	0.0259	9.9999	-1.3744	-0.0522	-0.0123	-0.0180	0.2368	0.3457
43	-0.83	-[illegible]	-0.0159	9.9999	0.0272	9.9999	-1.7091	-0.0493	-0.0103	-0.0117	0.2094	0.2368
44	-0.71	-[illegible]	-0.0186	9.9999	0.0259	9.9999	-1.3744	-0.0368	-0.0086	-0.0106	0.2388	0.2887
45	-0.58	-[illegible]	-0.0159	9.9999	0.0272	9.9999	-1.7091	-0.0368	-0.0088	-0.0106	0.2388	0.2887
46	-0.46	-[illegible]	-0.0159	9.9999	0.0261	9.9999	-1.6364	-0.0279	-0.0053	-0.0085	0.1903	0.3045

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PM1	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	2	0.60	1.67	0.0	0123	0.0	6	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CAF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	-0.36	-0.01	-0.0216	0.0000	0.0245	0.0000	-1.1339	-0.0220	-0.0032	-0.0079	0.1447	0.3596
48	-0.22	-0.01	-0.0157	0.0000	0.0235	0.0000	-1.2577	-0.0191	-0.0015	-0.0075	0.0608	0.3939
49	-0.10	-0.01	-0.0186	0.0000	0.0270	0.0000	-1.4356	-0.0162	-0.0003	-0.0061	0.0179	0.3750
50	0.01	-0.01	-0.0186	0.0000	0.0259	0.0000	-1.3744	-0.0106	-0.0010	-0.0062	-0.0096	0.4231
51	0.15	-0.00	-0.0139	0.0000	0.0241	0.0000	-1.4847	-0.0040	0.0025	-0.0025	-0.0341	0.4341
52	0.27	-0.01	-0.0187	0.0000	0.0267	0.0000	-1.3196	0.0053	0.0067	0.0019	0.0906	0.3636
53	0.37	-0.01	-0.0188	0.0000	0.0259	0.0000	-1.3744	0.0082	0.0060	0.0035	0.1294	0.4235
54	0.50	-0.01	-0.0159	0.0000	0.0272	0.0000	-1.2791	0.0146	0.0066	0.0065	0.1503	0.4437
55	0.61	-0.00	-0.0148	0.0000	0.0270	0.0000	-1.4359	0.0237	0.0091	0.0065	0.3821	0.3577
56	0.73	-0.01	-0.0157	0.0000	0.0235	0.0000	-1.2577	0.0296	0.0117	0.0127	0.3941	0.4308
57	0.86	-0.01	-0.0158	0.0000	0.0270	0.0000	-1.4359	0.0295	0.0123	0.0140	0.4150	0.4739
58	0.97	-0.01	-0.0158	0.0000	0.0259	0.0000	-1.3744	0.0296	0.0129	0.0165	0.4393	0.5087
59	1.09	-0.00	-0.0148	0.0000	0.0270	0.0000	-1.4359	0.0355	0.0148	0.0219	0.4158	0.6168
60	1.21	-0.01	-0.0157	0.0000	0.0247	0.0000	-1.3196	0.0450	0.0157	0.0227	0.3498	0.5063
61	1.30	-0.01	-0.0156	0.0000	0.0271	0.0000	-1.7134	0.0481	0.0160	0.0264	0.3333	0.5502
62	1.43	-0.01	-0.0157	0.0000	0.0256	0.0000	-1.3763	0.0562	0.0172	0.0306	0.3167	0.5661
63	1.55	-0.00	-0.0215	0.0000	0.0233	0.0000	-1.0807	0.0604	0.0184	0.0335	0.3051	0.5559
64	1.66	-0.01	-0.0167	0.0000	0.0256	0.0000	-1.3763	0.0699	0.0194	0.0368	0.2776	0.5262
65	1.79	-0.01	-0.0167	0.0000	0.0255	0.0000	-1.3763	0.0793	0.0206	0.0424	0.2603	0.5341
66	1.89	-0.01	-0.0156	0.0000	0.0234	0.0000	-1.2591	0.0856	0.0216	0.0441	0.2525	0.5152
67	2.00	-0.01	-0.0156	0.0000	0.0234	0.0000	-1.2591	0.0919	0.0226	0.0482	0.2458	0.5252
68	2.12	-0.01	-0.0157	0.0000	0.0248	0.0000	-1.5767	0.0981	0.0238	0.0536	0.2429	0.5467
69	2.24	-0.01	-0.0146	0.0000	0.0234	0.0000	-1.2591	0.1074	0.0257	0.0581	0.2390	0.5409
70	2.36	-0.00	-0.0145	0.0000	0.0212	0.0000	-1.1459	0.1106	0.0260	0.0607	0.2347	0.5489
71	2.47	0.0	-0.0157	0.0000	0.0248	0.0000	-1.5767	0.1168	0.0269	0.0624	0.2306	0.5363
72	2.58	-0.01	-0.0157	0.0000	0.0248	0.0000	-1.5767	0.1294	0.0282	0.0659	0.2177	0.5093
73	2.68	-0.01	-0.0157	0.0000	0.0248	0.0000	-1.5767	0.1293	0.0291	0.0707	0.2254	0.5478
74	2.81	-0.01	-0.0157	0.0000	0.0248	0.0000	-1.5767	0.1387	0.0304	0.0752	0.2191	0.5417
75	2.92	-0.01	-0.0158	0.0000	0.0251	0.0000	-1.9549	0.1418	0.0310	0.0760	0.2184	0.5571
76	3.03	-0.01	-0.0156	0.0000	0.0226	0.0000	-1.4444	0.1505	0.0329	0.0873	0.2130	0.5653
77	3.15	-0.01	-0.0156	0.0000	0.0224	0.0000	-1.4444	0.1607	0.0338	0.0879	0.2102	0.5471
78	3.26	-0.00	-0.0157	0.0000	0.0248	0.0000	-1.5767	0.1669	0.0350	0.0932	0.2098	0.5584
79	3.36	-0.00	-0.0157	0.0000	0.0248	0.0000	-1.5767	0.1737	0.0360	0.0986	0.2078	0.5694
80	3.49	-0.01	-0.0156	0.0000	0.0234	0.0000	-1.2591	0.1766	0.0357	0.1001	0.2022	0.5667
81	3.60	-0.01	-0.0178	0.0000	0.0239	0.0000	-1.8647	0.1869	0.0382	0.1047	0.2022	0.5541
82	3.71	-0.01	-0.0156	0.0000	0.0234	0.0000	-1.2591	0.1919	0.0395	0.1099	0.2056	0.5726
83	3.83	-0.01	-0.0157	0.0000	0.0237	0.0000	-1.5042	0.1969	0.0404	0.1113	0.2074	0.5713
84	3.94	-0.01	-0.0156	0.0000	0.0226	0.0000	-1.4444	0.2106	0.0423	0.1175	0.2006	0.5579
85	4.04	-0.01	-0.0157	0.0000	0.0248	0.0000	-1.5767	0.2107	0.0423	0.1149	0.2005	0.5691
86	4.17	-0.01	-0.0157	0.0000	0.0248	0.0000	-1.5767	0.2201	0.0438	0.1255	0.1998	0.5704
87	4.28	-0.01	-0.0157	0.0000	0.0248	0.0000	-1.5767	0.2294	0.0454	0.1324	0.1981	0.5770
88	4.38	-0.00	-0.0128	0.0000	0.0251	0.0000	-1.9549	0.2293	0.0460	0.1336	0.2007	0.5827
89	4.49	-0.01	-0.0157	0.0000	0.0248	0.0000	-1.5767	0.2387	0.0476	0.1360	0.1993	0.5780
90	4.58	-0.01	-0.0157	0.0000	0.0248	0.0000	-1.5767	0.2355	0.0473	0.1378	0.2007	0.5858
91	4.70	-0.01	-0.0156	0.0000	0.0228	0.0000	-1.4444	0.2543	0.0498	0.1442	0.1958	0.5668
92	4.82	-0.01	-0.0098	0.0000	0.0231	0.0000	-2.3931	0.2606	0.0510	0.1507	0.1959	0.5783

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2 0.60 1.7 60.0 MISSILE23 -0.0 0 0 0 0. UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNFA	CMA	CAA	XCPFA	YCPFA
93	4.92	-0.01	-0.0126	9.9999	0.0235	9.9999	-1.8647	0.2607	0.0510	0.1520	0.1958	0.5829
94	5.02	-0.01	-0.0126	9.9999	0.0234	9.9999	-1.8647	0.2732	0.0533	0.1603	0.1950	0.5867
95	5.13	-0.00	-0.0157	9.9999	0.0237	9.9999	-1.5092	0.2794	0.0541	0.1632	0.1937	0.5839
96	5.22	-0.01	-0.0129	9.9999	0.0262	9.9999	-2.0249	0.2857	0.0565	0.1636	0.1918	0.5728
97	5.32	-0.01	-0.0126	9.9999	0.0234	9.9999	-1.8647	0.2921	0.0558	0.1690	0.1909	0.5788
98	5.43	-0.01	-0.0128	9.9999	0.0251	9.9999	-1.9569	0.2983	0.0586	0.1732	0.1898	0.5805
99	5.53	-0.00	-0.0099	9.9999	0.0241	9.9999	-2.4272	0.3079	0.0573	0.1764	0.1861	0.5729
100	5.63	-0.01	-0.0099	9.9999	0.0262	9.9999	-2.4369	0.3211	0.0596	0.1826	0.1836	0.5685
101	5.75	-0.01	-0.0098	9.9999	0.0231	9.9999	-2.3431	0.3178	0.0593	0.1835	0.1867	0.5774
102	5.83	-0.01	-0.0099	9.9999	0.0262	9.9999	-2.4369	0.3275	0.0599	0.1880	0.1830	0.5748
103	5.92	-0.01	-0.0098	9.9999	0.0231	9.9999	-2.3431	0.3401	0.0612	0.1937	0.1799	0.5696
104	6.02	-0.01	-0.0099	9.9999	0.0262	9.9999	-2.4369	0.3369	0.0606	0.1923	0.1807	0.5707
105	6.13	-0.00	-0.0098	9.9999	0.0231	9.9999	-2.3431	0.3497	0.0626	0.2006	0.1785	0.5737
106	6.22	-0.01	-0.0099	9.9999	0.0262	9.9999	-2.4369	0.3495	0.0631	0.2008	0.1806	0.5748
107	6.32	-0.01	-0.0089	9.9999	0.0237	9.9999	-3.3611	0.3655	0.0644	0.2079	0.1761	0.5689
108	6.44	-0.01	-0.0089	9.9999	0.0222	9.9999	-3.1944	0.3687	0.0646	0.2118	0.1753	0.5745
109	6.53	-0.02	-0.0089	9.9999	0.0222	9.9999	-3.1944	0.3666	0.0649	0.2118	0.1762	0.5746
110	6.62	-0.01	-0.0089	9.9999	0.0222	9.9999	-3.1944	0.3813	0.0659	0.2164	0.1728	0.5676
111	6.73	-0.01	-0.0081	9.9999	0.0235	9.9999	-5.8095	0.3814	0.0659	0.2177	0.1728	0.5707
112	6.83	-0.01	-0.0085	9.9999	0.0222	9.9999	-4.1944	0.3813	0.0665	0.2201	0.1743	0.5772
113	6.93	-0.00	-0.0089	9.9999	0.0222	9.9999	-3.1944	0.3940	0.0677	0.2247	0.1719	0.5704
114	7.04	-0.01	-0.0098	9.9999	0.0231	9.9999	-2.3431	0.3941	0.0674	0.2247	0.1712	0.5703
115	7.14	-0.01	-0.0080	9.9999	0.0213	9.9999	-5.3902	0.4002	0.0687	0.2290	0.1716	0.5721
116	7.24	-0.02	-0.0039	9.9999	0.0202	9.9999	-5.2250	0.4068	0.0687	0.2306	0.1689	0.5669
117	7.34	-0.01	-0.0086	9.9999	0.0199	9.9999	-2.9429	0.4131	0.0694	0.2323	0.1680	0.5625
118	7.41	-0.01	-0.0039	9.9999	0.0190	9.9999	-4.9250	0.4132	0.0698	0.2348	0.1679	0.5682
119	7.51	-0.01	-0.0089	9.9999	0.0211	9.9999	-3.0845	0.4171	0.0701	0.2378	0.1682	0.5702
120	7.60	-0.01	-0.0098	9.9999	0.0232	9.9999	-2.3529	0.4203	0.0701	0.2381	0.1669	0.5666
121	7.71	-0.01	-0.0097	9.9999	0.0197	9.9999	-2.0198	0.4235	0.0704	0.2396	0.1663	0.5657
122	7.80	-0.01	-0.0039	9.9999	0.0190	9.9999	-4.9250	0.4268	0.0701	0.2398	0.1646	0.5618
123	7.88	-0.01	-0.0089	9.9999	0.0200	9.9999	-2.9155	0.4268	0.0704	0.2434	0.1650	0.5704
124	7.98	-0.01	-0.0089	9.9999	0.0211	9.9999	-3.0845	0.4301	0.0701	0.2449	0.1631	0.5693
125	8.08	-0.01	-0.0036	9.9999	0.0174	9.9999	-4.7692	0.4301	0.0701	0.2449	0.1631	0.5693
126	8.18	-0.01	-0.0039	9.9999	0.0190	9.9999	-4.9250	0.4335	0.0698	0.2463	0.1609	0.5682
127	8.28	-0.01	-0.0039	9.9999	0.0190	9.9999	-4.9250	0.4368	0.0695	0.2478	0.1590	0.5673
128	8.38	-0.01	-0.0126	9.9999	0.0138	9.9999	-1.1172	0.4466	0.0686	0.2472	0.1568	0.5535
129	8.41	-0.02	-0.0096	9.9999	0.0154	9.9999	-2.3529	0.4500	0.0696	0.2523	0.1529	0.5607
130	8.50	-0.02	0.0019	9.9999	0.0206	9.9999	13.7000	0.4533	0.0686	0.2538	0.1518	0.5598
131	8.59	-0.02	0.0020	9.9999	0.0195	9.9999	9.8190	0.4470	0.0662	0.2544	0.1526	0.5692
132	8.67	-0.02	-0.0085	9.9999	0.0121	9.9999	-1.8657	0.4565	0.0683	0.2578	0.1503	0.5673
133	8.78	-0.02	0.0022	9.9999	0.0151	9.9999	6.7826	0.4608	0.0687	0.2583	0.1491	0.5605
134	8.85	-0.02	0.0080	9.9999	0.0166	9.9999	2.0723	0.4640	0.0696	0.2622	0.1487	0.5650
135	8.95	-0.02	0.0168	9.9999	0.0173	9.9999	1.0287	0.4706	0.0690	0.2651	0.1466	0.5635
136	9.03	-0.02	0.0081	9.9999	0.0154	9.9999	1.9048	0.4738	0.0698	0.2661	0.1456	0.5573
137	9.12	-0.02	-0.0086	9.9999	0.0097	9.9999	-1.5303	0.4771	0.0690	0.2680	0.1446	0.5618
138	9.21	-0.01	0.0255	9.9999	0.0203	9.9999	0.7955	0.4806	0.0683	0.2706	0.1421	0.5631

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REIN-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	2	3.00	1.17	0.0	B1A0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
139	9.28	-0.02	0.0314	9.9999	0.0196	9.9999	0.6246	0.4906	0.0443	0.2706	0.1421	0.5631
140	9.37	-0.02	0.0140	9.9999	0.0137	9.9999	0.5793	0.4873	0.0677	0.2734	0.1390	0.5612
141	9.47	-0.02	0.0053	9.9999	0.0114	9.9999	2.2364	0.4875	0.0671	0.2747	0.1376	0.5635
142	9.55	-0.01	0.0025	9.9999	0.0094	9.9999	3.7308	0.4940	0.0671	0.2776	0.1357	0.5619
143	9.63	-0.01	0.0104	9.9999	0.0151	9.9999	0.6914	0.4908	0.0671	0.2796	0.1366	0.5675
144	9.74	-0.02	0.0161	9.9999	0.0125	9.9999	0.8404	0.4973	0.0671	0.2790	0.1368	0.5611
145	9.82	-0.02	0.0257	9.9999	0.0146	9.9999	0.5677	0.5004	0.0665	0.2828	0.1328	0.5647
146	9.90	-0.01	0.0355	9.9999	0.0172	9.9999	1.3158	0.5072	0.0665	0.2833	0.1311	0.5585
147	10.01	-0.01	0.0225	9.9999	0.0201	9.9999	0.8927	0.5075	0.0658	0.2870	0.1297	0.5654
148	10.08	-0.01	0.0373	9.9999	0.0167	9.9999	0.6470	0.5140	0.0658	0.2873	0.1280	0.5590
149	10.18	-0.01	0.0344	9.9999	0.0194	9.9999	0.6762	0.5119	0.0650	0.2876	0.1270	0.5619
150	10.28	-0.01	0.0172	9.9999	0.0105	9.9999	0.8124	0.5183	0.0653	0.2905	0.1260	0.5605
151	10.36	-0.01	0.0372	9.9999	0.0201	9.9999	0.5389	0.5153	0.0644	0.2915	0.1249	0.5656
152	10.44	-0.02	0.0085	9.9999	0.0086	9.9999	0.7500	0.5153	0.0644	0.2915	0.1249	0.5656
153	10.52	-0.01	0.0200	9.9999	0.0119	9.9999	0.5942	0.5188	0.0638	0.2928	0.1229	0.5644
154	10.60	-0.01	0.0371	9.9999	0.0224	9.9999	0.6026	0.5220	0.0641	0.2946	0.1227	0.5648
155	10.71	-0.01	0.0261	9.9999	0.0100	9.9999	0.3857	0.5201	0.0629	0.2957	0.1210	0.5686
156	10.79	-0.02	0.0053	9.9999	0.0119	9.9999	2.2364	0.5138	0.0622	0.2949	0.1211	0.5818
157	10.87	-0.01	0.0293	9.9999	0.0240	9.9999	0.8498	0.5236	0.0617	0.2972	0.1177	0.5675
158	10.97	-0.01	0.0231	9.9999	0.0110	9.9999	0.4770	0.5237	0.0614	0.2983	0.1172	0.5696
159	11.04	-0.01	-0.0036	9.9999	0.0120	9.9999	-3.4595	0.5239	0.0610	0.3007	0.1164	0.5740
160	11.14	-0.01	0.0462	9.9999	0.0197	9.9999	0.4259	0.5306	0.0604	0.3012	0.1138	0.5677
161	11.22	-0.01	0.0290	9.9999	0.0192	9.9999	0.3156	0.5285	0.0598	0.3014	0.1132	0.5704
162	11.29	-0.01	0.0139	9.9999	0.0183	9.9999	1.3194	0.5285	0.0598	0.3039	0.1132	0.5751
163	11.39	-0.01	0.0024	9.9999	0.0105	9.9999	4.3600	0.5321	0.0593	0.3053	0.1095	0.5737
164	11.47	-0.01	0.0317	9.9999	0.0128	9.9999	0.4043	0.5247	0.0578	0.3041	0.1102	0.5796
165	11.56	-0.01	0.0200	9.9999	0.0138	9.9999	0.6522	0.5250	0.0569	0.3053	0.1084	0.5815
166	11.64	-0.01	0.0257	9.9999	0.0180	9.9999	0.7030	0.5283	0.0569	0.3067	0.1078	0.5806
167	11.73	-0.02	0.0025	9.9999	0.0094	9.9999	3.7308	0.5261	0.0563	0.3083	0.1071	0.5859
168	11.82	-0.02	0.0085	9.9999	0.0075	9.9999	0.8864	0.5325	0.0570	0.3100	0.1071	0.5822
169	11.89	-0.01	0.0297	9.9999	0.0181	9.9999	0.7068	0.5327	0.0566	0.3137	0.1063	0.5888
170	11.98	-0.02	0.0374	9.9999	0.0194	9.9999	0.5077	0.5327	0.0566	0.3148	0.1063	0.5918
171	12.08	-0.01	0.0261	9.9999	0.0112	9.9999	0.4296	0.5359	0.0570	0.3164	0.1064	0.5904
172	12.15	-0.02	0.0322	9.9999	0.0048	9.9999	0.1497	0.5393	0.0566	0.3178	0.1050	0.5894
173	12.23	-0.02	0.0262	9.9999	0.0055	9.9999	0.2098	0.5392	0.0573	0.3202	0.1063	0.5940
174	12.33	-0.01	0.0232	9.9999	0.0087	9.9999	0.3750	0.5362	0.0561	0.3187	0.1048	0.5944
175	12.40	-0.01	0.0205	9.9999	0.0040	9.9999	0.1934	0.5458	0.0570	0.3231	0.1045	0.5920
176	12.49	-0.02	0.0205	9.9999	0.0040	9.9999	0.1934	0.5403	0.0567	0.3232	0.1050	0.5982
177	12.57	-0.02	0.0372	9.9999	0.0060	9.9999	0.1456	0.5469	0.0567	0.3250	0.1037	0.5942
178	12.65	-0.01	0.0284	9.9999	0.0033	9.9999	0.1241	0.5534	0.0567	0.3266	0.1025	0.5901
179	12.74	-0.02	0.0263	9.9999	0.0055	9.9999	0.2088	0.5533	0.0577	0.3267	0.1043	0.5905
180	12.81	-0.02	0.0263	9.9999	0.0055	9.9999	0.2088	0.5532	0.0561	0.3291	0.1050	0.5950
181	12.91	-0.01	0.0265	9.9999	0.0010	9.9999	0.0384	0.5534	0.0574	0.3291	0.1037	0.5948
182	13.00	-0.01	0.0266	9.9999	-0.0002	9.9999	-0.0072	0.5575	0.0582	0.3312	0.1044	0.5962
183	13.07	-0.02	0.0355	9.9999	0.0005	9.9999	0.0136	0.5675	0.0575	0.3332	0.1013	0.5870
184	13.17	-0.02	0.0264	9.9999	0.0019	9.9999	0.0503	0.5641	0.0582	0.3329	0.1031	0.5901

TEST 7 PART MACH MAIN-6 PHI 2.6E0 1.67 CONF 0.0 81 MAY 23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
185	13.29	-0.02	0.0444	9.9999	-0.0022	9.9999	-0.0530	0.5662	0.0581	0.3375	0.1026	0.5873
186	13.33	-0.01	0.0445	9.9999	-0.0022	9.9999	-0.0494	0.5660	0.0582	0.3378	0.1032	0.5880
187	13.41	-0.02	0.0446	9.9999	-0.0045	9.9999	-0.1017	0.5672	0.0582	0.3331	0.1026	0.5872
188	13.50	-0.01	0.0533	9.9999	-0.0004	9.9999	-0.0072	0.5673	0.0582	0.3356	0.1026	0.5915
189	13.57	-0.02	0.0535	9.9999	-0.0039	9.9999	-0.0722	0.5676	0.0585	0.3318	0.0996	0.5866
190	13.67	-0.02	0.0534	9.9999	-0.0027	9.9999	-0.0506	0.5675	0.0572	0.3331	0.1004	0.5869
191	13.75	-0.02	0.0536	9.9999	-0.0039	9.9999	-0.0721	0.5686	0.0570	0.3337	0.1003	0.5868
192	13.83	-0.02	0.0536	9.9999	-0.0050	9.9999	-0.0935	0.5687	0.0563	0.3311	0.0991	0.5823
193	13.90	-0.01	0.0546	9.9999	-0.0100	9.9999	-0.2043	0.5688	0.0561	0.3299	0.0986	0.5800
194	14.00	-0.01	0.0546	9.9999	-0.0059	9.9999	-0.1039	0.5689	0.0557	0.3311	0.0979	0.5821
195	14.08	-0.02	0.0556	9.9999	-0.0070	9.9999	-0.1244	0.5696	0.0557	0.3296	0.0984	0.5827
196	14.16	-0.01	0.0567	9.9999	-0.0059	9.9999	-0.1037	0.5699	0.0556	0.3305	0.0978	0.5798
197	14.25	-0.02	0.0656	9.9999	-0.0052	9.9999	-0.0734	0.5701	0.0546	0.3280	0.0961	0.5752
198	14.32	-0.02	0.0657	9.9999	-0.0064	9.9999	-0.1147	0.5700	0.0552	0.3292	0.0966	0.5775
199	14.40	-0.02	0.0656	9.9999	-0.0066	9.9999	-0.0971	0.5670	0.0542	0.3277	0.0956	0.5779
200	14.50	-0.02	0.0627	9.9999	-0.0066	9.9999	-0.1046	0.5667	0.0558	0.3303	0.0980	0.5828
201	14.57	-0.01	0.0656	9.9999	-0.0067	9.9999	-0.1320	0.5670	0.0542	0.3277	0.0956	0.5779
202	14.67	-0.01	0.0688	9.9999	-0.0072	9.9999	-0.1052	0.5552	0.0531	0.3268	0.0956	0.5850
203	14.75	-0.01	0.0689	9.9999	-0.0084	9.9999	-0.1218	0.5457	0.0536	0.3217	0.0979	0.5901
204	14.84	-0.01	0.0707	9.9999	-0.0057	9.9999	-0.0762	0.5420	0.0527	0.3214	0.0972	0.5930
205	14.93	-0.02	0.0644	9.9999	-0.0084	9.9999	-0.1218	0.5520	0.0527	0.3257	0.0956	0.5901
206	15.01	-0.01	0.0659	9.9999	-0.0096	9.9999	-0.1387	0.5356	0.0521	0.3197	0.0973	0.5968
207	15.09	-0.02	0.0630	9.9999	-0.0100	9.9999	-0.1593	0.5455	0.0521	0.3227	0.0955	0.5916
208	15.18	-0.02	0.0681	9.9999	-0.0110	9.9999	-0.1664	0.5335	0.0515	0.3212	0.0966	0.6021
209	15.26	-0.02	0.0681	9.9999	-0.0098	9.9999	-0.1409	0.5434	0.0512	0.3231	0.0963	0.5966
210	15.34	-0.02	0.0774	9.9999	-0.0066	9.9999	-0.0843	0.5270	0.0508	0.3194	0.0965	0.6060
211	15.43	-0.02	0.0750	9.9999	-0.0092	9.9999	-0.1223	0.5270	0.0512	0.3219	0.0972	0.6108
212	15.51	-0.02	0.0698	9.9999	-0.0096	9.9999	-0.1398	0.5305	0.0506	0.3233	0.0953	0.6095
213	15.61	-0.02	0.0774	9.9999	-0.0077	9.9999	-0.0991	0.5272	0.0503	0.3219	0.0954	0.6105
214	15.68	-0.02	0.0826	9.9999	-0.0114	9.9999	-0.1720	0.5098	0.0492	0.3163	0.0965	0.6204
215	15.76	-0.02	0.0665	9.9999	-0.0047	9.9999	-0.0546	0.5000	0.0492	0.3163	0.0984	0.6285
216	15.84	-0.02	0.0693	9.9999	-0.0114	9.9999	-0.1720	0.5198	0.0495	0.3219	0.0952	0.6193
217	15.92	-0.02	0.0688	9.9999	-0.0084	9.9999	-0.0789	0.5143	0.0489	0.3195	0.0951	0.6212
218	16.02	-0.03	0.0741	9.9999	-0.0124	9.9999	-0.1582	0.4980	0.0481	0.3158	0.0965	0.6342
219	16.09	-0.02	0.0810	9.9999	-0.0098	9.9999	-0.1216	0.4967	0.0477	0.3143	0.0964	0.6353
220	16.18	-0.02	0.0838	9.9999	-0.0086	9.9999	-0.1001	0.5015	0.0471	0.3172	0.0939	0.6328
221	16.26	-0.02	0.0751	9.9999	-0.0115	9.9999	-0.1530	0.5081	0.0474	0.3201	0.0932	0.6301
222	16.34	-0.03	0.0810	9.9999	-0.0110	9.9999	-0.1357	0.4984	0.0467	0.3182	0.0937	0.6385
223	16.41	-0.02	0.0769	9.9999	-0.0094	9.9999	-0.1077	0.4852	0.0464	0.3147	0.0956	0.6486
224	16.50	-0.02	0.0811	9.9999	-0.0110	9.9999	-0.1356	0.4962	0.0462	0.3209	0.0931	0.6467
225	16.58	-0.03	0.0771	9.9999	-0.0105	9.9999	-0.1207	0.4896	0.0458	0.3155	0.0936	0.6445
226	16.66	-0.03	0.0812	9.9999	-0.0133	9.9999	-0.1639	0.4897	0.0458	0.3192	0.0936	0.6518
227	16.75	-0.03	0.0871	9.9999	-0.0117	9.9999	-0.1340	0.4898	0.0455	0.3192	0.0930	0.6517
228	16.82	-0.03	0.0811	9.9999	-0.0133	9.9999	-0.1641	0.4740	0.0448	0.3129	0.0935	0.6533
229	16.91	-0.03	0.0898	9.9999	-0.0091	9.9999	-0.1010	0.4758	0.0445	0.3150	0.0935	0.6621
230	16.99	-0.03	0.0870	9.9999	-0.0117	9.9999	-0.1341	0.4791	0.0445	0.3166	0.0928	0.6608

TEST T. PART 2. MACH 1.7 RN10-6 0.0 PHI 81.0OF23 CONF 0.0 L 0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF4	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CN4	XCPF4	YCPF4
231	17.07	-0.03	0.0872	9.9999	-0.0128	9.9999	-0.1471	0.4966	0.0446	0.3257	0.0898	0.6559
232	17.15	-0.02	0.0892	9.9999	-0.0140	9.9999	-0.1546	0.4734	0.0446	0.3167	0.0942	0.6698
233	17.24	-0.03	0.0813	9.9999	-0.0154	9.9999	-0.1922	0.4835	0.0439	0.3166	0.0908	0.6590
234	17.32	-0.03	0.1020	9.9999	-0.0099	9.9999	-0.0918	0.4802	0.0439	0.3221	0.0914	0.6707
235	17.39	-0.03	0.0873	9.9999	-0.0151	9.9999	-0.1735	0.4870	0.0436	0.3225	0.0896	0.6622
236	17.48	-0.04	0.0902	9.9999	-0.0137	9.9999	-0.1519	0.4769	0.0434	0.3196	0.0920	0.6696
237	17.58	-0.03	0.0873	9.9999	-0.0163	9.9999	-0.1967	0.4838	0.0433	0.3234	0.0895	0.6605
238	17.69	-0.04	0.1052	9.9999	-0.0091	9.9999	-0.0862	0.4712	0.0437	0.3182	0.0928	0.6753
239	17.72	-0.04	0.0969	9.9999	-0.0133	9.9999	-0.1381	0.4847	0.0433	0.3265	0.0894	0.6737
240	17.81	-0.04	0.0875	9.9999	-0.0163	9.9999	-0.1863	0.4847	0.0430	0.3152	0.0926	0.6784
241	17.89	-0.04	0.0900	9.9999	-0.0133	9.9999	-0.1381	0.4681	0.0433	0.3197	0.0926	0.6819
242	17.97	-0.02	0.0999	9.9999	-0.0142	9.9999	-0.1427	0.4780	0.0433	0.3224	0.0906	0.6744
243	18.06	-0.03	0.1025	9.9999	-0.0128	9.9999	-0.1257	0.4689	0.0431	0.3185	0.0920	0.6792
244	18.14	-0.03	0.0937	9.9999	-0.0159	9.9999	-0.1699	0.4790	0.0431	0.3242	0.0900	0.6769
245	18.23	-0.04	0.1024	9.9999	-0.0105	9.9999	-0.1027	0.4657	0.0428	0.3207	0.0920	0.6886
246	18.31	-0.04	0.0966	9.9999	-0.0145	9.9999	-0.1502	0.4782	0.0424	0.3235	0.0906	0.6768
247	18.38	-0.04	0.0964	9.9999	-0.0145	9.9999	-0.1502	0.4714	0.0427	0.3193	0.0907	0.6772
248	18.46	-0.03	0.0943	9.9999	-0.0130	9.9999	-0.1312	0.4782	0.0424	0.3210	0.0906	0.6713
249	18.54	-0.04	0.0965	9.9999	-0.0156	9.9999	-0.1620	0.4546	0.0423	0.3157	0.0953	0.6944
250	18.63	-0.03	0.0994	9.9999	-0.0142	9.9999	-0.1427	0.4668	0.0427	0.3176	0.0928	0.6834
251	18.72	-0.04	0.0953	9.9999	-0.0119	9.9999	-0.1195	0.4784	0.0421	0.3259	0.0879	0.6813
252	18.78	-0.04	0.1113	9.9999	-0.0109	9.9999	-0.0983	0.4539	0.0426	0.3138	0.0940	0.6913
253	18.87	-0.05	0.0963	9.9999	-0.0156	9.9999	-0.1623	0.4705	0.0420	0.3248	0.0892	0.6899
254	18.95	-0.04	0.1022	9.9999	-0.0151	9.9999	-0.1483	0.4639	0.0423	0.3170	0.0911	0.6832
255	19.02	-0.04	0.1050	9.9999	-0.0100	9.9999	-0.0929	0.3640	0.0436	0.2839	0.1198	0.7798
256	19.09	-0.04	0.1038	9.9999	-0.0100	9.9999	-0.0929	0.4543	0.0413	0.3149	0.0909	0.6933
257	19.17	-0.04	0.1020	9.9999	-0.0139	9.9999	-0.1362	0.4102	0.0419	0.2977	0.1021	0.7257
258	19.25	-0.04	0.0959	9.9999	-0.0164	9.9999	-0.1659	0.4390	0.0422	0.3079	0.0960	0.7013
259	19.33	-0.04	0.1136	9.9999	-0.0104	9.9999	-0.0986	0.4260	0.0412	0.3019	0.0967	0.7087
260	19.41	-0.04	0.1017	9.9999	-0.0127	9.9999	-0.1252	0.3761	0.0425	0.2852	0.1129	0.7609
261	19.48	-0.04	0.1104	9.9999	-0.0086	9.9999	-0.0778	0.3961	0.0427	0.2774	0.1200	0.7789
262	19.57	-0.04	0.1165	9.9999	-0.0104	9.9999	-0.0895	0.3595	0.0425	0.2788	0.1181	0.7756
263	19.64	-0.04	0.1074	9.9999	-0.0111	9.9999	-0.1033	0.3688	0.0421	0.2789	0.1141	0.7564
264	19.72	-0.05	0.1143	9.9999	-0.0109	9.9999	-0.0989	0.3617	0.0433	0.2749	0.1198	0.7599
265	19.79	-0.05	0.1151	9.9999	-0.0081	9.9999	-0.0638	0.3818	0.0424	0.2799	0.1109	0.7331
266	19.86	-0.05	0.1142	9.9999	-0.0093	9.9999	-0.0797	0.3816	0.0430	0.2759	0.1128	0.7335
267	19.95	-0.04	0.1150	9.9999	-0.0093	9.9999	-0.0799	0.3808	0.0429	0.2778	0.1127	0.7274
268	20.02	-0.04	0.1162	9.9999	-0.0126	9.9999	-0.1066	0.3706	0.0442	0.2727	0.1192	0.7357
269	20.10	-0.04	0.1145	9.9999	-0.0101	9.9999	-0.0852	0.3773	0.0442	0.2756	0.1171	0.7304
270	20.17	-0.04	0.1210	9.9999	-0.0076	9.9999	-0.0628	0.3724	0.0444	0.2719	0.1192	0.7301
271	20.26	-0.04	0.1156	9.9999	-0.0103	9.9999	-0.0893	0.3789	0.0444	0.2735	0.1171	0.7219
272	20.33	-0.04	0.1146	9.9999	-0.0113	9.9999	-0.0952	0.3953	0.0440	0.2768	0.1113	0.6981
273	20.40	-0.04	0.1039	9.9999	-0.0136	9.9999	-0.1309	0.3953	0.0444	0.2760	0.1123	0.6985
274	20.49	-0.04	0.1142	9.9999	-0.0078	9.9999	-0.0661	0.3845	0.0449	0.2735	0.1167	0.7114
275	20.56	-0.04	0.1212	9.9999	-0.0098	9.9999	-0.0812	0.4042	0.0446	0.2776	0.1103	0.6863
276	20.63	-0.04	0.1192	9.9999	-0.0090	9.9999	-0.0760	0.4233	0.0435	0.2807	0.1028	0.6631

TEST PART MACH RN/0-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2 0.60 1.2 0.0 =0.23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF 3	CM3	CN3	XCPF3	YCPF3	CNFA	CMA	CDA	XCPFA	YCPFA
277	20.49	-0.04	0.1123	9.9999	-0.0128	9.9999	-0.1143	0.4036	0.0465	0.2745	0.1103	0.6805
278	20.78	-0.04	0.1124	9.9999	-0.0140	9.9999	-0.1265	0.4100	0.0465	0.2761	0.1085	0.6736
279	20.84	-0.05	0.1095	9.9999	-0.0153	9.9999	-0.1401	0.4033	0.0452	0.2769	0.1120	0.6866
280	20.95	-0.04	0.1264	9.9999	-0.0094	9.9999	-0.0738	0.4033	0.0452	0.2769	0.1120	0.6866
281	21.03	-0.04	0.1267	9.9999	-0.0117	9.9999	-0.0922	0.4090	0.0451	0.2768	0.1102	0.6768
282	21.14	-0.05	0.1174	9.9999	-0.0112	9.9999	-0.0949	0.4157	0.0464	0.2765	0.1068	0.6699
283	21.17	-0.04	0.1208	9.9999	-0.0110	9.9999	-0.0911	0.4156	0.0468	0.2773	0.1077	0.6673
284	21.25	-0.04	0.1121	9.9999	-0.0128	9.9999	-0.1145	0.4221	0.0464	0.2802	0.1051	0.6638
285	21.32	-0.03	0.1205	9.9999	-0.0075	9.9999	-0.0624	0.4220	0.0451	0.2802	0.1068	0.6639
286	21.41	-0.04	0.1151	9.9999	-0.0149	9.9999	-0.1291	0.4256	0.0464	0.2804	0.1043	0.6591
287	21.49	-0.04	0.1267	9.9999	-0.0117	9.9999	-0.0922	0.4451	0.0438	0.2854	0.0984	0.6412
288	21.58	-0.04	0.1182	9.9999	-0.0145	9.9999	-0.1163	0.4295	0.0465	0.2812	0.1036	0.6547
289	21.66	-0.04	0.1210	9.9999	-0.0110	9.9999	-0.0909	0.4327	0.0465	0.2826	0.1028	0.6531
290	21.72	-0.04	0.1154	9.9999	-0.0137	9.9999	-0.1148	0.4359	0.0465	0.2816	0.1020	0.6461
291	21.79	-0.04	0.1095	9.9999	-0.0165	9.9999	-0.1507	0.4392	0.0465	0.2843	0.1013	0.6474
292	21.86	-0.03	0.1125	9.9999	-0.0176	9.9999	-0.1506	0.4491	0.0462	0.2876	0.0984	0.6400
293	21.94	-0.03	0.1213	9.9999	-0.0155	9.9999	-0.1281	0.4458	0.0465	0.2872	0.0998	0.6444
294	22.01	-0.04	0.1267	9.9999	-0.0117	9.9999	-0.0922	0.4548	0.0438	0.2898	0.0963	0.6378
295	22.09	-0.05	0.1236	9.9999	-0.0130	9.9999	-0.1052	0.4581	0.0436	0.2899	0.0956	0.6329
296	22.17	-0.03	0.1296	9.9999	-0.0114	9.9999	-0.0879	0.4581	0.0438	0.2899	0.0956	0.6329
297	22.24	-0.03	0.1181	9.9999	-0.0157	9.9999	-0.1332	0.4613	0.0438	0.2902	0.0950	0.6292
298	22.33	-0.04	0.1297	9.9999	-0.0125	9.9999	-0.0967	0.4613	0.0438	0.2902	0.0950	0.6292
299	22.39	-0.03	0.1152	9.9999	-0.0171	9.9999	-0.1402	0.4612	0.0438	0.2866	0.0950	0.6213
300	22.47	-0.03	0.1210	9.9999	-0.0155	9.9999	-0.1286	0.4613	0.0438	0.2878	0.0950	0.6239
301	22.54	-0.04	0.1153	9.9999	-0.0194	9.9999	-0.1502	0.4679	0.0431	0.2882	0.0922	0.6160
302	22.60	-0.05	0.1151	9.9999	-0.0149	9.9999	-0.1291	0.4646	0.0436	0.2880	0.0935	0.6199
303	22.66	-0.04	0.1124	9.9999	-0.0196	9.9999	-0.1702	0.4744	0.0431	0.2911	0.0909	0.6136
304	22.76	-0.03	0.1155	9.9999	-0.0194	9.9999	-0.1679	0.4818	0.0432	0.2909	0.0897	0.6038
305	22.81	-0.04	0.1243	9.9999	-0.0176	9.9999	-0.1613	0.4818	0.0432	0.2922	0.0897	0.6064
306	22.90	-0.04	0.1156	9.9999	-0.0172	9.9999	-0.1488	0.4786	0.0432	0.2907	0.0903	0.6075
307	22.97	-0.04	0.1154	9.9999	-0.0160	9.9999	-0.1388	0.4820	0.0426	0.2909	0.0883	0.6036
308	23.04	-0.05	0.1060	9.9999	-0.0264	9.9999	-0.2393	0.4915	0.0432	0.2916	0.0879	0.5932
309	23.12	-0.04	0.1096	9.9999	-0.0187	9.9999	-0.1708	0.4948	0.0432	0.2930	0.0874	0.5922
310	23.19	-0.04	0.1156	9.9999	-0.0217	9.9999	-0.1878	0.4948	0.0432	0.2930	0.0874	0.5922
311	23.27	-0.04	0.1196	9.9999	-0.0180	9.9999	-0.1524	0.5047	0.0426	0.2950	0.0863	0.5844
312	23.34	-0.04	0.1034	9.9999	-0.0215	9.9999	-0.2071	0.5045	0.0432	0.2950	0.0857	0.5846
313	23.39	-0.02	0.1097	9.9999	-0.0210	9.9999	-0.1917	0.5145	0.0429	0.2993	0.0835	0.5818
314	23.61	-0.04	0.1154	9.9999	-0.0216	9.9999	-0.1873	0.5298	0.0426	0.3011	0.0803	0.5684
315	24.21	-0.03	0.1298	9.9999	-0.0148	9.9999	-0.1138	0.5527	0.0422	0.3052	0.0763	0.5522
316	24.48	-0.02	0.1503	9.9999	-0.0097	9.9999	-0.0650	0.5855	0.0413	0.3160	0.0705	0.5397
317	25.66	-0.04	0.1329	9.9999	-0.0191	9.9999	-0.1438	0.5849	0.0431	0.3113	0.0737	0.5322
318	26.46	-0.04	0.1358	9.9999	-0.0166	9.9999	-0.1222	0.6166	0.0466	0.3211	0.0756	0.5207
319	27.40	-0.04	0.1475	9.9999	-0.0124	9.9999	-0.0837	0.6373	0.0464	0.3263	0.0728	0.5089
320	28.40	-0.03	0.1503	9.9999	-0.0098	9.9999	-0.0655	0.6440	0.0460	0.3272	0.0715	0.5081
321	29.47	-0.03	0.1386	9.9999	-0.0096	9.9999	-0.0689	0.6436	0.0439	0.3360	0.0642	0.4915
322	30.52	-0.03	0.1442	9.9999	-0.0065	9.9999	-0.0316	0.7108	0.0432	0.3451	0.0609	0.4861

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 8 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RA10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2 0.86 1.7 0.0 DIA0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
323	31.66	-0.14	0.1356	9.9999	-0.0075	9.9999	-0.0555	0.7235	0.0413	0.3508	[illegible]	0.4849
324	32.84	-0.06	0.1212	9.9999	-0.0110	9.9999	-0.0938	0.7716	0.0379	0.3692	[illegible]	0.4784
325	33.92	-0.10	0.1095	9.9999	-0.0130	9.9999	-0.1189	0.8180	0.0354	0.3845	[illegible]	0.4700
326	35.05	-0.12	0.1152	9.9999	-0.0092	9.9999	-0.0796	0.8332	0.0339	0.3866	[illegible]	0.4666
327	36.24	-0.13	0.1244	9.9999	-0.0063	9.9999	-0.0504	0.8680	0.0317	0.3976	[illegible]	0.4581
328	37.40	-0.14	0.1275	9.9999	-0.0037	9.9999	-0.0268	0.8801	0.0295	0.4025	[illegible]	0.4574
329	38.57	-0.14	0.1269	9.9999	-0.0063	9.9999	-0.0502	0.9022	0.0267	0.4062	[illegible]	0.4525
330	39.75	-0.15	0.1191	9.9999	-0.0033	9.9999	-0.0276	0.9345	0.0239	0.4145	[illegible]	0.4478
331	41.00	-0.11	0.1163	9.9999	-0.0035	9.9999	-0.0299	0.9630	0.0221	0.4247	[illegible]	0.4410
332	42.21	-0.09	0.1107	9.9999	-0.0063	9.9999	-0.0567	0.9752	0.0202	0.4236	[illegible]	0.4344
333	43.47	-0.10	0.1167	9.9999	-0.0013	9.9999	-0.0108	1.0004	0.0193	0.4272	[illegible]	0.4271
334	44.72	0.00	0.1521	9.9999	0.0144	9.9999	0.0945	1.0093	0.0177	0.4322	[illegible]	0.4282
335	46.56	0.00	0.1584	9.9999	0.0196	9.9999	0.1236	1.0170	0.0165	0.4315	[illegible]	0.4243
336	48.27	0.01	0.1587	9.9999	0.0184	9.9999	0.1161	1.0364	0.0136	0.4383	[illegible]	0.4230
337	50.13	0.01	0.1383	9.9999	-0.0003	9.9999	-0.0022	1.1112	0.0065	0.4681	[illegible]	0.4212
338	52.15	0.09	0.1685	9.9999	0.0151	9.9999	0.0938	1.1339	0.0029	0.4795	[illegible]	0.4229
339	54.38	0.13	0.1614	9.9999	0.0151	9.9999	0.0938	1.1994	-0.0014	0.4977	[illegible]	0.4149
340	56.92	0.05	0.1438	9.9999	0.0131	9.9999	0.0876	1.2535	-0.0072	0.5142	[illegible]	0.4102
341	57.96	0.07	0.1505	9.9999	0.0131	9.9999	0.0872	1.2587	-0.0083	0.5123	[illegible]	0.4071
342	57.91	0.09	0.1477	9.9999	0.0129	9.9999	0.0875	1.2543	-0.0080	0.5156	[illegible]	0.4109
343	57.91	0.09	0.1422	9.9999	0.0113	9.9999	0.0796	1.2492	-0.0080	0.5155	[illegible]	0.4127
344	57.92	0.08	0.1426	9.9999	0.0137	9.9999	0.0961	1.2576	-0.0080	0.5166	[illegible]	0.4108
345	57.91	0.07	0.1398	9.9999	0.0135	9.9999	0.0966	1.2391	-0.0073	0.5096	[illegible]	0.4113
346	57.91	0.08	0.1434	9.9999	0.0162	9.9999	0.1131	1.2585	-0.0081	0.5193	[illegible]	0.4126
347	57.92	0.09	0.1504	9.9999	0.0147	9.9999	0.1062	1.2609	-0.0081	0.5164	[illegible]	0.4096
348	57.90	0.08	0.1448	9.9999	0.0176	9.9999	0.1220	1.2598	-0.0071	0.5212	[illegible]	0.4137
349	57.91	0.08	0.1369	9.9999	0.0144	9.9999	0.1068	1.2592	-0.0078	0.5194	[illegible]	0.4125

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NO.=0.60 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 0.600 45.0 BIASF23 0.0 0 0 0 2 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAH	CAF	XCP
1	-5.90	0.00	-0.6137	0.6704	0.1200	-0.1931	-0.0054	0.2643	0.1100	0.1544	-1.4189
2	-5.90	0.00	-0.6247	0.6753	0.1202	-0.1942	-0.0056	0.2642	0.1114	0.1529	-1.3968
3	-5.90	0.00	-0.6255	0.6911	0.1194	-0.1954	-0.0055	0.2642	0.1114	0.1529	-1.3960
4	-5.90	0.00	-0.6353	0.6805	0.1211	-0.1962	-0.0056	0.2644	0.1114	0.1547	-1.3858
5	-5.90	0.00	-0.6160	0.6626	0.1316	-0.1947	-0.0054	0.2673	0.1114	0.1510	-1.4039
6	-5.92	0.00	-0.6357	0.6734	0.1202	-0.1706	-0.0056	0.2647	0.1125	0.1563	-1.3747
7	-5.90	0.00	-0.6240	0.6750	0.1193	-0.2079	-0.0054	0.2641	0.1090	0.1552	-1.4022
8	-5.78	0.00	-0.6144	0.6697	0.1211	-0.1973	-0.0054	0.2675	0.1086	0.1590	-1.3829
9	-5.53	0.00	-0.5922	0.6116	0.1214	-0.2306	-0.0053	0.2662	0.1105	0.1556	-1.3936
10	-5.42	0.00	-0.5931	0.6105	0.1229	-0.1903	-0.0055	0.2665	0.1086	0.1580	-1.3767
11	-5.27	0.00	-0.5933	0.7578	0.1136	-0.1821	-0.0054	0.2643	0.1072	0.1569	-1.3448
12	-5.04	0.00	-0.5924	0.7344	0.1229	-0.1934	-0.0054	0.2641	0.1084	0.1574	-1.3514
13	-4.97	0.00	-0.5316	0.7127	0.1314	-0.2040	-0.0054	0.2644	0.1077	0.1568	-1.3407
14	-4.82	0.00	-0.5249	0.7093	0.1299	-0.1846	-0.0055	0.2655	0.1063	0.1593	-1.3631
15	-4.65	0.00	-0.5060	0.6981	0.1317	-0.1319	-0.0056	0.2659	0.1067	0.1593	-1.3071
16	-4.53	0.00	-0.5112	0.6858	0.1352	-0.1900	-0.0053	0.2655	0.1067	0.1593	-1.3098
17	-4.37	0.00	-0.4803	0.6315	0.1295	-0.1607	-0.0054	0.2652	0.1072	0.1581	-1.3146
18	-4.29	0.00	-0.4902	0.6301	0.1293	-0.1736	-0.0055	0.2655	0.1072	0.1614	-1.2966
19	-4.11	0.00	-0.4595	0.5780	0.1181	-0.2053	-0.0055	0.2642	0.1072	0.1611	-1.2596
20	-3.95	0.00	-0.4158	0.5403	0.1236	-0.1347	-0.0055	0.2675	0.1049	0.1627	-1.2913
21	-3.83	0.00	-0.4245	0.5405	0.1215	-0.1678	-0.0055	0.2670	0.1044	0.1631	-1.2613
22	-3.76	0.00	-0.4152	0.5143	0.1226	-0.1592	-0.0055	0.2668	0.1042	0.1627	-1.2297
23	-3.57	0.00	-0.3770	0.4683	0.1267	-0.1301	-0.0055	0.2655	0.1046	0.1640	-1.2421
24	-3.45	0.00	-0.3981	0.4760	0.1234	-0.1667	-0.0053	0.2667	0.1062	0.1626	-1.2022
25	-3.31	0.00	-0.3677	0.4526	0.1222	-0.1648	-0.0055	0.2658	0.1042	0.1657	-1.1675
26	-3.17	0.00	-0.3671	0.4367	0.1173	-0.1439	-0.0053	0.2696	0.1042	0.1653	-1.1898
27	-3.04	0.00	-0.3455	0.4104	0.1256	-0.1499	-0.0053	0.2655	0.1042	0.1614	-1.1880
28	-2.91	0.00	-0.3381	0.4001	0.1261	-0.1305	-0.0053	0.2716	0.1032	0.1679	-1.1904
29	-2.78	0.00	-0.3067	0.3630	0.1232	-0.1646	-0.0054	0.2682	0.1026	0.1655	-1.1258
30	-2.66	0.00	-0.3240	0.3685	0.1211	-0.2015	-0.0051	0.2716	0.1035	0.1682	-1.1352
31	-2.56	0.00	-0.2934	0.3233	0.1277	-0.2036	-0.0053	0.2685	0.1038	0.1651	-1.1004
32	-2.37	0.00	-0.2956	0.3208	0.1262	-0.1868	-0.0056	0.2712	0.1022	0.1691	-1.1078
33	-2.25	0.00	-0.2566	0.2674	0.1232	-0.0753	-0.0056	0.2675	0.1007	0.1669	-1.0503
34	-2.12	0.00	-0.2437	0.2547	0.1215	-0.1294	-0.0053	0.2674	0.1012	0.1663	-1.0449
35	-1.98	0.00	-0.2369	0.2269	0.1264	-0.0832	-0.0055	0.2632	0.0963	0.1640	-0.9660
36	-1.85	0.00	-0.2443	0.2454	0.1211	-0.0956	-0.0053	0.2674	0.1007	0.1666	-1.0228
37	-1.73	0.00	-0.2237	0.2156	0.1222	-0.1115	-0.0053	0.2706	0.0996	0.1709	-0.9814
38	-1.60	0.00	-0.2236	0.2176	0.1227	-0.1249	-0.0054	0.2663	0.0994	0.1675	-0.9729
39	-1.48	0.00	-0.2133	0.2191	0.1214	-0.0534	-0.0054	0.2669	0.0994	0.1676	-1.0271
40	-1.35	0.00	-0.2018	0.2037	0.1262	-0.0716	-0.0053	0.2655	0.0989	0.1670	-1.0033
41	-1.22	0.00	-0.1822	0.1693	0.1214	-0.1031	-0.0053	0.2647	0.0998	0.1650	-0.9294
42	-1.10	0.00	-0.1647	0.1704	0.1253	-0.0570	-0.0053	0.2685	0.1026	0.1660	-1.0856
43	-0.98	0.00	-0.1719	0.1747	0.1223	-0.0378	-0.0053	0.2644	0.0998	0.1652	-1.0455
44	-0.85	0.00	-0.1513	0.1508	0.1254	-0.0365	-0.0125	0.2667	0.1002	0.1666	-1.0362
45	-0.74	0.00	-0.1604	0.1667	0.1215	-0.0442	-0.0124	0.2678	0.0993	0.1678	-1.1642
46	-0.61	0.00	-0.1408	0.1556	0.1253	-0.0366	-0.0197	0.2632	0.0989	0.1644	-1.1068

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NRIO=5 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
I 4 0.6EV.1.7 55.0 91=0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
47	-0.49	0.07	-0.1275	0.1678	0.0468	-0.0464	-0.0196	0.2644	0.1001	0.1644	-1.3168
48	-0.37	0.07	-0.1378	0.1721	0.0351	-0.1026	-0.0196	0.2683	0.1001	0.1683	-1.2489
49	-0.25	0.07	-0.1283	0.1560	0.0716	-0.0736	-0.0123	0.2666	0.0992	0.1675	-1.2159
50	-0.13	0.07	-0.1078	0.1560	0.0927	-0.0549	-0.0193	0.2632	0.0997	0.1636	-1.4531
51	-0.02	0.07	-0.0978	0.1274	0.0391	-0.0422	-0.0195	0.2672	0.1001	0.1672	-1.3038
52	0.11	0.08	-0.0858	0.1371	0.0693	-0.0850	-0.0196	0.2632	0.0992	0.1641	-1.6009
53	0.24	0.07	-0.0760	0.1134	0.0377	-0.0697	-0.0195	0.2669	0.0995	0.1674	-1.4974
54	0.35	0.07	-0.0654	0.1178	0.0487	-0.0657	-0.0196	0.2673	0.1001	0.1673	-1.8108
55	0.47	0.07	-0.0561	0.1274	0.0469	-0.0919	-0.0193	0.2674	0.1006	0.1669	-1.9866
56	0.58	0.08	-0.0433	0.1092	0.1337	-0.1157	-0.0190	0.2660	0.0997	0.1664	-2.5201
57	0.70	0.07	-0.0342	0.0867	0.0177	-0.0365	-0.0194	0.2675	0.1004	0.1672	-2.5930
58	0.83	0.07	-0.0223	0.0653	0.0703	-0.0794	-0.0192	0.2654	0.1004	0.1656	-28.3565
59	0.94	0.07	-0.0121	0.0614	0.0693	-0.1001	-0.0192	0.2660	0.0999	0.1662	-29.2095
60	1.06	0.09	-0.0071	0.0369	0.0182	-0.0685	-0.0193	0.2678	0.1008	0.1671	5.1916
61	1.17	0.06	0.0175	0.0035	0.0080	-0.0241	-0.0193	0.2683	0.1013	0.1671	2.4857
62	1.28	0.06	0.0274	-0.0535	-0.0022	-0.0035	-0.0193	0.2719	0.1015	0.1705	8.6135
63	1.41	0.06	0.0374	0.0175	0.0093	-0.0166	-0.0192	0.2681	0.0997	0.1685	0.4690
64	1.53	0.07	0.0478	0.0037	0.0615	-0.0305	-0.0191	0.2681	0.0997	0.1685	0.0770
65	1.64	0.07	0.0576	0.0285	0.0413	-0.0439	-0.0191	0.2685	0.1001	0.1685	1.0380
66	1.75	0.07	0.0697	-0.0025	-0.0698	-0.0657	-0.0190	0.2690	0.1025	0.1666	0.0362
67	1.86	0.06	0.0784	-0.0103	-0.0373	-0.0677	-0.0193	0.2712	0.1021	0.1692	-0.1742
68	1.97	0.07	0.0773	-0.0440	-0.1163	-0.0586	-0.0188	0.2699	0.1029	0.1671	-0.5695
69	2.09	0.07	0.0743	-0.0322	0.0269	-0.0826	-0.0191	0.2675	0.1023	0.1653	-0.4115
70	2.21	0.07	0.0885	-0.0352	0.0612	-0.0663	-0.0189	0.2677	0.1014	0.1664	-0.3966
71	2.31	0.08	0.0987	-0.0513	0.0083	-0.0433	-0.0191	0.2703	0.1032	0.1672	-0.5197
72	2.43	0.07	0.1193	-0.0933	0.0260	-0.0927	-0.0190	0.2684	0.1032	0.1653	-0.7003
73	2.55	0.06	0.1257	-0.1012	0.0184	-0.0749	-0.0190	0.2668	0.1041	0.1628	-0.7865
74	2.65	0.07	0.1187	-0.0902	0.0506	-0.1041	-0.0189	0.2675	0.1014	0.1662	-0.7600
75	2.78	0.07	0.1394	-0.1069	0.0732	-0.0897	-0.0188	0.2672	0.1027	0.1646	-0.7724
76	2.90	0.07	0.1375	-0.1017	0.0524	-0.0918	-0.0189	0.2675	0.1050	0.1626	-0.7824
77	3.00	0.07	0.1781	-0.1491	0.0314	-0.0557	-0.0189	0.2681	0.1046	0.1636	-0.9494
78	3.12	0.07	0.1674	-0.1606	0.0209	-0.0476	-0.0190	0.2648	0.1032	0.1617	-0.9595
79	3.23	0.07	0.1983	-0.1972	0.0521	-0.0646	-0.0189	0.2650	0.1064	0.1587	-0.9943
80	3.34	0.06	0.1784	-0.1694	0.0079	-0.0871	-0.0190	0.2619	0.1051	0.1569	-0.9496
81	3.46	0.07	0.2174	-0.2260	0.0312	-0.0776	-0.0189	0.2621	0.1065	0.1557	-1.0465
82	3.56	0.07	0.2381	-0.2525	0.0530	-0.0860	-0.0188	0.2605	0.1051	0.1555	-1.0605
83	3.68	0.06	0.2296	-0.2506	0.0240	-0.0729	-0.0190	0.2611	0.1064	0.1544	-1.1437
84	3.80	0.07	0.2571	-0.2863	0.0546	-0.0463	-0.0188	0.2595	0.1051	0.1545	-1.1136
85	3.91	0.08	0.2367	-0.2606	-0.0074	-0.0977	-0.0191	0.2633	0.1083	0.1551	-1.1954
86	4.01	0.08	0.2661	-0.3141	0.0013	-0.0556	-0.0190	0.2621	0.1069	0.1553	-1.1801
87	4.14	0.07	0.2868	-0.3364	0.0465	-0.0326	-0.0188	0.2598	0.1072	0.1527	-1.1826
88	4.25	0.07	0.2695	-0.3267	0.0440	-0.0796	-0.0188	0.2602	0.1076	0.1527	-1.2354
89	4.36	0.06	0.3063	-0.3587	-0.0417	-0.0540	-0.0191	0.2553	0.1081	0.1473	-1.1713
90	4.47	0.08	0.3143	-0.3925	-0.0499	-0.0239	-0.0191	0.2594	0.1072	0.1523	-1.2494
91	4.58	0.07	0.3369	-0.4209	0.0564	-0.0968	-0.0187	0.2585	0.1100	0.1486	-1.2542
92	4.66	0.08	0.3464	-0.4236	0.0930	-0.0582	-0.0189	0.2556	0.1077	0.1480	-1.2283

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
I 4 0.800 1.7 45.0 Blank23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	4.78	0.07	0.3639	-0.0371	0.0457	-0.0775	-0.0186	0.2593	0.1100	0.1494	-1.2711
94	4.88	0.06	0.3615	-0.0452	-0.0168	0.0066	-0.0190	0.2619	0.1106	0.1516	-1.3017
95	4.99	0.06	0.3721	-0.0442	-0.0251	0.0034	-0.0190	0.2552	0.1095	0.1458	-1.3013
96	5.10	0.06	0.3936	-0.0242	-0.0066	-0.0881	-0.0189	0.2573	0.1123	0.1451	-1.3338
97	5.19	0.07	0.4031	-0.0179	0.1115	-0.0962	-0.0185	0.2565	0.1104	0.1462	-1.2848
98	5.29	0.06	0.4326	-0.0702	0.0161	-0.0651	-0.0188	0.2555	0.1118	0.1438	-1.3179
99	5.39	0.06	0.4111	-0.0531	-0.0051	-0.0691	-0.0190	0.2578	0.1128	0.1451	-1.3455
100	5.51	0.06	0.4418	-0.0671	-0.0169	-0.0755	-0.0189	0.2554	0.1121	0.1439	-1.3293
101	5.60	0.06	0.4496	-0.0102	-0.0051	-0.0702	-0.0188	0.2563	0.1128	0.1436	-1.3571
102	5.70	0.06	0.4655	-0.0626	0.0171	-0.0762	-0.0187	0.2569	0.1132	0.1438	-1.3703
103	5.80	0.07	0.4836	-0.0446	0.0610	-0.0796	-0.0186	0.2594	0.1137	0.1458	-1.3768
104	5.89	0.06	0.4943	-0.0787	-0.0126	-0.0833	-0.0188	0.2587	0.1141	0.1447	-1.3820
105	5.99	0.06	0.5061	-0.0940	-0.0027	-0.0838	-0.0188	0.2595	0.1151	0.1445	-1.3752
106	6.10	0.06	0.5177	-0.0985	0.0094	-0.0813	-0.0187	0.2563	0.1150	0.1414	-1.3496
107	6.20	0.06	0.5341	-0.1003	0.0096	-0.0836	-0.0188	0.2553	0.1150	0.1404	-1.4183
108	6.29	0.06	0.5482	-0.1136	-0.0016	-0.0852	-0.0188	0.2579	0.1173	0.1407	-1.4159
109	6.41	0.07	0.5600	-0.1114	0.0316	-0.0845	-0.0188	0.2582	0.1178	0.1405	-1.3883
110	6.50	0.06	0.5466	-0.1106	-0.0010	-0.0810	-0.0186	0.2591	0.1178	0.1414	-1.4329
111	6.59	0.07	0.5762	-0.1193	0.0737	-0.0820	-0.0184	0.2566	0.1173	0.1394	-1.3854
112	6.70	0.07	0.5566	-0.1122	0.0721	-0.1065	-0.0185	0.2569	0.1166	0.1406	-1.4280
113	6.81	0.07	0.5731	-0.0566	0.0333	-0.0816	-0.0186	0.2575	0.1178	0.1398	-1.4405
114	6.89	0.07	0.6033	-0.0821	0.0413	-0.1029	-0.0186	0.2587	0.1192	0.1396	-1.4620
115	7.01	0.06	0.6150	-0.0716	0.0075	-0.1205	-0.0187	0.2552	0.1201	0.1352	-1.4176
116	7.10	0.07	0.6029	-0.0720	0.0030	-0.0717	-0.0186	0.2562	0.1215	0.1348	-1.4324
117	7.19	0.06	0.6023	-0.0265	-0.0024	-0.0317	-0.0149	0.2574	0.1206	0.1369	-1.4428
118	7.28	0.06	0.6413	-0.0739	0.0019	-0.0906	-0.0187	0.2600	0.1224	0.1377	-1.4577
119	7.39	0.07	0.6705	-0.0874	0.0362	-0.0688	-0.0186	0.2571	0.1206	0.1366	-1.4725
120	7.49	0.06	0.6806	-0.0771	-0.0193	-0.0536	-0.0188	0.2559	0.1224	0.1335	-1.4803
121	7.57	0.07	0.6905	-1.0039	-0.0242	-0.0426	-0.0188	0.2590	0.1229	0.1362	-1.4539
122	7.68	0.07	0.7004	-1.0046	0.0608	-0.1179	-0.0185	0.2559	0.1238	0.1322	-1.4783
123	7.77	0.07	0.7065	-1.0602	0.0559	-0.0920	-0.0185	0.2569	0.1238	0.1332	-1.4965
124	7.85	0.07	0.7044	-1.0637	0.0569	-0.1124	-0.0185	0.2563	0.1256	0.1308	-1.5016
125	7.96	0.07	0.7184	-1.0792	0.0433	-0.1615	-0.0185	0.2590	0.1256	0.1335	-1.5012
126	8.06	0.06	0.7075	-1.1003	0.0577	-0.0838	-0.0185	0.2581	0.1261	0.1321	-1.4858
127	8.15	0.05	0.7060	-1.1356	0.0560	-0.1124	-0.0185	0.2592	0.1256	0.1337	-1.4787
128	8.21	0.06	0.7034	-1.1345	0.0130	-0.1054	-0.0186	0.2604	0.1270	0.1335	-1.4761
129	8.30	0.06	0.7001	-1.1407	0.1004	-0.0909	-0.0183	0.2613	0.1263	0.1331	-1.4889
130	8.39	0.06	0.7035	-1.1810	0.0365	-0.0898	-0.0185	0.2589	0.1298	0.1292	-1.5064
131	8.47	0.06	0.7044	-1.1850	0.0281	-0.0511	-0.0186	0.2602	0.1279	0.1324	-1.5043
132	8.58	0.06	0.6151	-1.2201	0.0263	-0.0935	-0.0185	0.2613	0.1293	0.1321	-1.4968
133	8.64	0.06	0.8055	-1.2468	0.0184	-0.0795	-0.0185	0.2607	0.1298	0.1310	-1.4765
134	8.74	0.06	0.8346	-1.2384	0.0695	-0.0966	-0.0183	0.2615	0.1307	0.1309	-1.4838
135	8.83	0.06	0.8744	-1.2935	0.0704	-0.0974	-0.0183	0.2608	0.1312	0.1297	-1.4794
136	8.93	0.06	0.8733	-1.3116	0.0277	-0.0965	-0.0185	0.2579	0.1316	0.1264	-1.5022
137	9.01	0.06	0.8817	-1.3376	0.0824	-0.0934	-0.0183	0.2628	0.1325	0.1304	-1.5169
138	9.09	0.06	0.8713	-1.3166	0.0723	-0.0736	-0.0183	0.2622	0.1311	0.1312	-1.5112

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO= RNI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 4 0.60 1.7 42.0 BLMUF23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAH	CAF	ACP
139	9.20	0.06	0.9225	-1.3791	0.0173	-0.1067	-0.0185	0.2627	0.1329	0.1299	-1.4950
140	9.25	0.07	0.9216	-1.3927	0.0599	-0.1259	-0.0184	0.2631	0.1339	0.1293	-1.5112
141	9.35	0.06	0.9176	-1.4136	0.0411	-0.0835	-0.0184	0.2632	0.1345	0.1288	-1.5432
142	9.40	0.06	0.9375	-1.4253	0.0201	-0.0725	-0.0185	0.2639	0.1350	0.1289	-1.5204
143	9.53	0.07	0.9463	-1.4446	0.0315	-0.0644	-0.0184	0.2637	0.1354	0.1284	-1.5317
144	9.61	0.07	0.9556	-1.4556	0.0625	-0.0903	-0.0183	0.2614	0.1354	0.1261	-1.5218
145	9.73	0.06	0.9653	-1.4740	0.0110	-0.0692	-0.0185	0.2633	0.1355	0.1279	-1.5315
146	9.79	0.07	0.9788	-1.4919	0.0436	-0.0658	-0.0184	0.2616	0.1355	0.1262	-1.5278
147	9.88	0.07	0.9946	-1.5230	0.0427	-0.0860	-0.0184	0.2625	0.1377	0.1249	-1.5313
148	9.96	0.06	1.0146	-1.5452	0.0214	-0.0974	-0.0184	0.2633	0.1387	0.1247	-1.5238
149	10.07	0.06	1.0267	-1.5621	0.0115	-0.0656	-0.0184	0.2627	0.1391	0.1237	-1.5049
150	10.16	0.07	1.0330	-1.5782	0.0223	-0.0779	-0.0184	0.2619	0.1391	0.1229	-1.5189
151	10.26	0.07	1.0524	-1.6003	-0.0395	-0.0755	-0.0186	0.2645	0.1391	0.1255	-1.5231
152	10.34	0.06	1.0637	-1.6199	0.0114	-0.0873	-0.0184	0.2642	0.1410	0.1231	-1.5648
153	10.42	0.07	1.0709	-1.6161	0.0154	-0.0722	-0.0184	0.2652	0.1410	0.1243	-1.5234
154	10.51	0.07	1.0822	-1.6237	0.0359	-0.0471	-0.0112	0.2629	0.1419	0.1211	-1.5806
155	10.59	0.06	1.1013	-1.6593	-0.0067	-0.0423	-0.0184	0.2623	0.1418	0.1206	-1.5067
156	10.69	0.06	1.0824	-1.6151	0.0117	-0.0860	-0.0183	0.2611	0.1414	0.1199	-1.4922
157	10.76	0.06	1.1103	-1.6656	-0.0163	-0.0854	-0.0184	0.2662	0.1441	0.1222	-1.5163
158	10.90	0.07	1.1198	-1.6972	0.0134	-0.0832	-0.0183	0.2654	0.1438	0.1217	-1.5162
159	10.95	0.07	1.1299	-1.6967	0.0467	-0.0689	-0.0111	0.2664	0.1456	0.1209	-1.5017
160	11.03	0.07	1.1402	-1.7036	0.0778	-0.0950	-0.0109	0.2679	0.1465	0.1215	-1.4936
161	11.12	0.07	1.1281	-1.7111	0.0661	-0.0693	-0.0182	0.2668	0.1460	0.1209	-1.5108
162	11.19	0.07	1.1435	-1.7299	0.0263	-0.0824	-0.0111	0.2695	0.1470	0.1216	-1.5261
163	11.28	0.07	1.1641	-1.7558	0.0259	-0.0729	-0.0111	0.2679	0.1483	0.1197	-1.5026
164	11.37	0.07	1.1783	-1.7499	0.0572	-0.0861	-0.0181	0.2671	0.1474	0.1198	-1.4861
165	11.45	0.07	1.1882	-1.7693	0.0674	-0.1070	-0.0109	0.2665	0.1483	0.1183	-1.4887
166	11.54	0.07	1.1872	-1.7712	0.0202	-0.0716	-0.0111	0.2696	0.1483	0.1214	-1.4918
167	11.63	0.07	1.2180	-1.8201	0.0371	-0.0824	-0.0111	0.2692	0.1508	0.1185	-1.4931
168	11.72	0.07	1.2182	-1.8263	0.0155	-0.0851	-0.0111	0.2686	0.1505	0.1182	-1.4975
169	11.80	0.07	1.2377	-1.8434	-0.0255	-0.0682	-0.0112	0.2699	0.1513	0.1187	-1.4897
170	11.87	0.07	1.2469	-1.8627	0.0665	-0.1070	-0.0109	0.2714	0.1527	0.1188	-1.4755
171	11.97	0.06	1.2396	-1.8575	0.0167	-0.0665	-0.0111	0.2723	0.1536	0.1188	-1.5020
172	12.06	0.07	1.2449	-1.8625	0.0262	-0.0693	-0.0109	0.2679	0.1528	0.1152	-1.4613
173	12.14	0.07	1.2776	-1.8741	0.0164	-0.0811	-0.0110	0.2694	0.1541	0.1154	-1.4670
174	12.22	0.07	1.2857	-1.8963	0.0263	-0.1052	-0.0111	0.2686	0.1532	0.1155	-1.4987
175	12.31	0.06	1.2988	-1.9151	0.0161	-0.1048	-0.0039	0.2733	0.1554	0.1148	-1.4770
176	12.38	0.07	1.2982	-1.9080	0.0383	-0.0897	-0.0110	0.2713	0.1550	0.1164	-1.4705
177	12.47	0.07	1.3108	-1.9367	0.1017	-0.1161	-0.0037	0.2707	0.1569	0.1138	-1.4710
178	12.55	0.07	1.3300	-1.9372	0.0892	-0.1134	-0.0107	0.2702	0.1564	0.1139	-1.4692
179	12.63	0.07	1.3356	-1.9571	0.0400	-0.0615	-0.0039	0.2715	0.1577	0.1139	-1.4656
180	12.72	0.07	1.3498	-1.9551	0.1123	-0.1313	-0.0107	0.2694	0.1590	0.1105	-1.4497
181	12.81	0.07	1.3478	-1.9517	0.0892	-0.1247	-0.0107	0.2706	0.1594	0.1113	-1.4480
182	12.90	0.07	1.3779	-2.0053	0.1014	-0.1448	-0.0107	0.2698	0.1603	0.1096	-1.4556
183	12.98	0.07	1.3877	-1.9951	0.1319	-0.1811	-0.0036	0.2694	0.1608	0.1087	-1.4514
184	13.06	0.07	1.3809	-2.0045	0.0906	-0.1437	-0.0106	0.2707	0.1645	0.1063	-1.4453

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REY=E	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	4	1.60	1.7	45.0	81.0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CA	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
185	13.15	0.07	1.4066	-2.0286	0.0717	-0.0958	-0.0036	0.2718	0.1645	0.1074	-1.4420
186	13.22	0.07	1.4295	-2.0663	0.0286	-0.1067	-0.0037	0.2718	0.1645	0.1072	-1.4366
187	13.31	0.07	1.3940	-2.0107	0.1017	-0.1525	-0.0036	0.2726	0.1654	0.1073	-1.4404
188	13.40	0.07	1.4253	-2.0465	0.0481	-0.1469	-0.0106	0.2719	0.1649	0.1071	-1.4358
189	13.48	0.07	1.4556	-2.0883	0.0407	-0.1551	-0.0035	0.2735	0.1682	0.1054	-1.4345
190	13.56	0.07	1.4245	-2.0461	0.0711	-0.1152	-0.0035	0.2747	0.1668	0.1080	-1.4363
191	13.65	0.07	1.4665	-2.0819	0.1134	-0.1486	-0.0033	0.2728	0.1676	0.1053	-1.4177
192	13.75	0.07	1.4868	-2.1271	0.0736	-0.0838	-0.0036	0.2719	0.1703	0.1016	-1.4311
193	13.80	0.07	1.4744	-2.1011	0.0619	-0.0960	-0.0107	0.2738	0.1717	0.1027	-1.4232
194	13.89	0.07	1.4863	-2.1163	0.0519	-0.0850	-0.0035	0.2732	0.1735	0.0998	-1.4199
195	13.99	0.07	1.4956	-2.1253	0.0398	-0.1165	-0.0106	0.2739	0.1731	0.1008	-1.4213
196	14.06	0.07	1.5109	-2.1315	0.0612	-0.1598	-0.0033	0.2740	0.1750	0.0991	-1.4052
197	14.15	0.07	1.5170	-2.1134	0.1033	-0.1447	-0.0032	0.2751	0.1768	0.0996	-1.3935
198	14.23	0.07	1.5351	-2.1519	0.0421	-0.0722	-0.0106	0.2762	0.1773	0.0990	-1.4018
199	14.30	0.07	1.5447	-2.1717	0.0527	-0.0926	-0.0105	0.2761	0.1773	0.0989	-1.4059
200	14.38	0.07	1.5653	-2.1675	0.0734	-0.1097	-0.0033	0.2773	0.1805	0.0969	-1.3975
201	14.49	0.07	1.5779	-2.2006	0.1054	-0.1275	-0.0032	0.2760	0.1817	0.0951	-1.3983
202	14.57	0.07	1.5969	-2.1951	0.0843	-0.1130	-0.0032	0.2783	0.1840	0.0943	-1.3728
203	14.68	0.07	1.5980	-2.2032	0.1253	-0.1605	-0.0102	0.2775	0.1836	0.0939	-1.3787
204	14.79	0.07	1.6072	-2.2334	0.1133	-0.1552	-0.0031	0.2784	0.1855	0.0934	-1.3896
205	14.82	0.07	1.6166	-2.2396	0.0621	-0.1341	-0.0032	0.2801	0.1868	0.0933	-1.3853
206	14.92	0.07	1.6291	-2.2413	0.0536	-0.0879	-0.0033	0.2776	0.1891	0.0883	-1.3783
207	15.00	0.07	1.6391	-2.2563	0.0956	-0.1035	-0.0037	0.2825	0.1891	0.0934	-1.3791
208	15.09	0.07	1.6468	-2.2686	0.1379	-0.1372	-0.0029	0.2799	0.1905	0.0894	-1.3655
209	15.18	0.06	1.6951	-2.3256	0.0772	-0.0676	-0.0033	0.2742	0.1928	0.0864	-1.3802
210	15.24	0.07	1.6857	-2.2722	0.0925	-0.1916	-0.0106	0.2829	0.1946	0.0863	-1.3641
211	15.34	0.07	1.6858	-2.2973	0.1373	-0.1677	-0.0029	0.2782	0.1956	0.0826	-1.3627
212	15.42	0.07	1.6959	-2.3072	0.1497	-0.1960	-0.0033	0.2776	0.1937	0.0839	-1.3613
213	15.50	0.07	1.7150	-2.3342	0.1490	-0.1573	-0.0029	0.2792	0.1960	0.0832	-1.3639
214	15.59	0.07	1.7132	-2.3414	0.0835	-0.1356	-0.0102	0.2823	0.2007	0.0813	-1.3667
215	15.68	0.07	1.7131	-2.3395	0.0544	-0.1539	-0.0029	0.2851	0.2011	0.0840	-1.3657
216	15.75	0.07	1.7241	-2.3263	0.1157	-0.1763	-0.0028	0.2775	0.1974	0.0801	-1.3484
217	15.84	0.07	1.7442	-2.3383	0.1169	-0.1542	-0.0027	0.2826	0.2021	0.0805	-1.3406
218	15.92	0.06	1.7661	-2.3632	0.0734	-0.1211	-0.0029	0.2806	0.2047	0.0759	-1.3494
219	16.01	0.06	1.7666	-2.3987	0.0479	-0.1375	-0.0028	0.2800	0.2076	0.0724	-1.3628
220	16.08	0.07	1.7861	-2.3905	0.1163	-0.1844	-0.0098	0.2852	0.2071	0.0781	-1.3386
221	16.17	0.07	1.7856	-2.3957	0.1177	-0.1556	-0.0027	0.2843	0.2089	0.0774	-1.3418
222	16.26	0.07	1.7964	-2.3816	0.1056	-0.1927	-0.0026	0.2840	0.2098	0.0742	-1.3268
223	16.32	0.07	1.8102	-2.3993	0.1265	-0.1585	-0.0025	0.2821	0.2103	0.0718	-1.3210
224	16.41	0.07	1.8053	-2.3988	0.1367	-0.1682	-0.0025	0.2889	0.2103	0.0785	-1.3232
225	16.50	0.07	1.8356	-2.4117	0.1297	-0.1344	-0.0025	0.2809	0.2117	0.0692	-1.3139
226	16.57	0.07	1.8343	-2.4286	0.1308	-0.1193	-0.0026	0.2899	0.2163	0.0736	-1.3248
227	16.66	0.07	1.8452	-2.4101	0.1628	-0.1209	-0.0024	0.2836	0.2164	0.0672	-1.3062
228	16.75	0.07	1.8390	-2.3894	0.1491	-0.1151	-0.0025	0.2829	0.2163	0.0666	-1.3029
229	16.83	0.07	1.8540	-2.4174	0.1298	-0.1440	-0.0024	0.2863	0.2168	0.0695	-1.3039
230	16.91	0.07	1.8638	-2.4228	0.1209	-0.1139	-0.0025	0.2841	0.2191	0.0650	-1.3008

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 6 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
I 4 0.80 1.7 95.0 RUN023 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
231	16.99	0.07	1.8736	-2.6249	0.1309	-0.1217	-0.0026	0.2891	0.2200	0.0690	-1.2971
232	17.06	0.06	1.8860	-2.6562	0.0797	-0.0679	-0.0026	0.2890	0.2219	0.0670	-1.3019
233	17.15	0.07	1.8819	-2.6430	0.1216	-0.0824	-0.0024	0.2936	0.2237	0.0698	-1.2982
234	17.24	0.06	1.9136	-2.6411	0.0915	-0.0598	0.0047	0.2895	0.2265	0.0629	-1.2761
235	17.33	0.07	1.9023	-2.6275	0.1024	-0.0683	0.0048	0.2924	0.2260	0.0663	-1.2761
236	17.40	0.06	1.9380	-2.6782	0.0569	0.0398	0.0046	0.2917	0.2297	0.0619	-1.2787
237	17.48	0.06	1.9370	-2.6724	0.0628	(.0268	-0.0026	0.2913	0.2293	0.0619	-1.2767
238	17.56	0.06	1.9173	-2.6126	0.0629	0.0339	0.0047	0.2903	0.2279	0.0623	-1.2583
239	17.65	0.07	1.9572	-2.6797	0.1064	0.0356	0.0047	0.2885	0.2283	0.0601	-1.2669
240	17.73	0.07	1.9371	-2.6355	0.1273	0.0412	0.0049	0.2972	0.2302	0.0669	-1.2573
241	17.81	0.06	1.9571	-2.6299	0.0648	0.0696	0.0048	0.2931	0.2348	0.0582	-1.2416
242	17.89	0.06	1.9563	-2.6312	0.0666	0.1202	0.0047	0.2984	0.2372	0.0611	-1.2427
243	17.98	0.07	1.9676	-2.6242	0.1195	0.0873	0.0193	0.2994	0.2394	0.0549	-1.2320
244	18.07	0.07	1.9969	-2.6605	0.1298	0.0695	0.0050	0.3006	0.2436	0.0569	-1.2322
245	18.14	0.07	1.9952	-2.6705	0.1098	0.0944	0.0197	0.3041	0.2445	0.0595	-1.2376
246	18.24	0.06	2.0209	-2.6571	0.0586	0.1485	0.0120	0.3015	0.2468	0.0546	-1.2123
247	18.31	0.07	2.0205	-2.6604	0.1220	0.1335	0.0122	0.2995	0.2469	0.0525	-1.2171
248	18.38	0.07	2.0195	-2.6766	0.0915	0.1763	0.0191	0.3065	0.2487	0.0577	-1.2293
249	18.47	0.06	2.0138	-2.6604	0.0494	0.1950	0.0119	0.3041	0.2464	0.0576	-1.2219
250	18.55	0.07	2.0340	-2.6633	0.0706	0.1915	0.0049	0.3076	0.2519	0.0554	-1.2111
251	18.64	0.07	2.0332	-2.6754	0.0929	0.2113	0.0120	0.3104	0.2542	0.0561	-1.2175
252	18.72	0.07	2.0640	-2.6976	0.1050	0.2246	0.0192	0.3064	0.2551	0.0512	-1.2100
253	18.79	0.06	2.0441	-2.6598	0.0736	0.2233	0.0192	0.3152	0.2616	0.0535	-1.2033
254	18.87	0.06	2.0437	-2.6596	0.1146	0.1886	0.0123	0.3131	0.2626	0.0504	-1.2016
255	18.96	0.06	2.0963	-2.6172	0.0629	0.2327	0.0120	0.3112	0.2583	0.0528	-1.2019
256	19.02	0.06	2.1149	-2.6268	0.1077	0.2907	0.0121	0.3151	0.2647	0.0503	-1.1948
257	19.09	0.06	2.1043	-2.6201	0.1173	0.2598	0.0193	0.3203	0.2671	0.0531	-1.1976
258	19.18	0.06	2.1449	-2.6531	0.0735	0.1967	0.0194	0.3180	0.2675	0.0504	-1.1905
259	19.25	0.06	2.1333	-2.6441	0.1028	0.1501	0.0053	0.3214	0.2703	0.0510	-1.1926
260	19.34	0.05	2.1525	-2.6525	0.0420	0.2184	0.0051	0.3207	0.2717	0.0490	-1.1858
261	19.41	0.06	2.1633	-2.6651	0.0939	0.1852	0.0053	0.3189	0.2730	0.0458	-1.1765
262	19.49	0.06	2.1486	-2.6349	0.0629	0.1714	0.0124	0.3197	0.2726	0.0470	-1.1799
263	19.57	0.06	2.1691	-2.6613	0.1454	0.1434	-0.0015	0.3268	0.2762	0.0485	-1.1700
264	19.64	0.06	2.1848	-2.6677	0.1235	0.1229	-0.0015	0.3264	0.2830	0.0433	-1.1640
265	19.73	0.06	2.2060	-2.6797	0.1229	0.0909	-0.0015	0.3241	0.2808	0.0432	-1.1683
266	19.81	0.07	2.1973	-2.6787	0.1734	0.0342	-0.0013	0.3328	0.2831	0.0496	-1.1736
267	19.88	0.06	2.2476	-2.6204	0.1446	0.0644	-0.0014	0.3272	0.2854	0.0417	-1.1659
268	19.95	0.06	2.2384	-2.5921	0.2147	-0.0159	-0.0010	0.3288	0.2891	0.0397	-1.1588
269	20.03	0.06	2.2547	-2.6639	0.1941	-0.0128	-0.0011	0.3339	0.2914	0.0425	-1.1712
270	20.10	0.06	2.2527	-2.6005	0.1727	-0.0069	-0.0010	0.3369	0.2927	0.0442	-1.1542
271	20.18	0.06	2.2528	-2.6896	0.2151	-0.0026	-0.0009	0.3310	0.2913	0.0397	-1.1496
272	20.27	0.06	2.2581	-2.6640	0.1617	-0.0126	-0.0079	0.3280	0.2894	0.0386	-1.1355
273	20.33	0.06	2.2776	-2.6009	0.2046	0.0000	-0.0079	0.3353	0.2954	0.0399	-1.1420
274	20.41	0.06	2.2873	-2.6077	0.2328	-0.0960	-0.0147	0.3331	0.2949	0.0382	-1.1401
275	20.50	0.07	2.3078	-2.6257	0.2951	-0.1177	-0.0145	0.3362	0.2981	0.0381	-1.1378
276	20.56	0.07	2.3067	-2.6295	0.2738	-0.1209	-0.0146	0.3362	0.3004	0.0358	-1.1399

TEST 7 PART 4 RCH 0.80 RX10-6 1.7 PHI 45.0 CONF B1=0F23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
277	20.63	0.06	2.3260	-2.6400	0.2337	-0.0937	-0.0147	0.3362	0.3009	0.0353	-1.1350
278	20.71	0.07	2.3259	-2.6239	0.2748	-0.1161	-0.0215	0.3357	0.3017	0.0340	-1.1281
279	20.79	0.07	2.3261	-2.6134	0.3173	-0.1103	-0.0143	0.3371	0.3013	0.0358	-1.1237
280	20.87	0.06	2.3650	-2.6505	0.2543	-0.1045	-0.0145	0.3350	0.3027	0.0323	-1.1202
281	20.95	0.06	2.3336	-2.6194	0.2447	-0.0770	-0.0216	0.3346	0.3022	0.0324	-1.1225
282	21.04	0.07	2.3648	-2.6791	0.3345	-0.2255	-0.0354	0.3376	0.3054	0.0322	-1.1234
283	21.10	0.07	2.3952	-2.6567	0.2849	-0.1450	-0.0284	0.3323	0.3040	0.0283	-1.1083
284	21.19	0.07	2.4133	-2.6687	0.2659	-0.1697	-0.0285	0.3337	0.3063	0.0274	-1.1141
285	21.26	0.07	2.3938	-2.6564	0.2866	-0.1445	-0.0284	0.3371	0.3065	0.0306	-1.1097
286	21.32	0.06	2.3956	-2.6771	0.2023	-0.1077	-0.0288	0.3377	0.3083	0.0294	-1.1177
287	21.41	0.06	2.4587	-2.7035	0.2626	-0.1445	-0.0286	0.3355	0.3097	0.0258	-1.0996
288	21.48	0.06	2.4376	-2.6634	0.2217	-0.1628	-0.0428	0.3335	0.3083	0.0252	-1.0928
289	21.56	0.06	2.4151	-2.6804	0.1903	-0.1256	-0.0289	0.3332	0.3078	0.0254	-1.1101
290	21.64	0.07	2.4507	-2.6929	0.3366	-0.2144	-0.0424	0.3351	0.3134	0.0217	-1.0988
291	21.72	0.07	2.4920	-2.7210	0.2937	-0.2343	-0.0425	0.3349	0.3107	0.0242	-1.0919
292	21.78	0.05	2.4904	-2.7277	0.3139	-0.2736	-0.0425	0.3392	0.3173	0.0219	-1.0926
293	21.86	0.06	2.5073	-2.7296	0.3834	-0.3827	-0.0565	0.3351	0.3158	0.0193	-1.0887
294	21.94	0.05	2.5150	-2.7561	0.3130	-0.3046	-0.0425	0.3383	0.3181	0.0202	-1.0971
295	22.01	0.05	2.5044	-2.7156	0.2831	-0.2421	-0.0426	0.3384	0.3144	0.0240	-1.0839
296	22.10	0.06	2.5466	-2.7552	0.3403	-0.4022	-0.0637	0.3304	0.3168	0.0118	-1.0819
297	22.16	0.04	2.5432	-2.7602	0.2574	-0.3315	-0.0569	0.3343	0.3191	0.0152	-1.0845
298	22.24	0.05	2.5342	-2.7408	0.2906	-0.3186	-0.0496	0.3376	0.3191	0.0185	-1.0814
299	22.31	0.05	2.5910	-2.8099	0.3174	-0.4058	-0.0569	0.3342	0.3210	0.0132	-1.0845
300	22.38	0.05	2.5648	-2.7825	0.3420	-0.3939	-0.0567	0.3323	0.3210	0.0113	-1.0833
301	22.46	0.04	2.5949	-2.7795	0.2909	-0.3317	-0.0496	0.3306	0.3248	0.0058	-1.0691
302	22.53	0.05	2.5898	-2.7757	0.2742	-0.4628	-0.0711	0.3355	0.3234	0.0121	-1.0718
303	22.59	0.05	2.5337	-2.7442	0.2293	-0.2656	-0.0571	0.3303	0.3205	0.0098	-1.0831
304	22.67	0.05	2.6431	-2.8222	0.3367	-0.3570	-0.0566	0.3327	0.3290	0.0037	-1.0677
305	22.74	0.05	2.5903	-2.8025	0.2995	-0.4076	-0.0569	0.3361	0.3267	0.0094	-1.0819
306	22.81	0.05	2.6408	-2.8531	0.2705	-0.3698	-0.0426	0.3361	0.3332	0.0029	-1.0886
307	22.89	0.05	2.6311	-2.8404	0.3033	-0.3404	-0.0426	0.3341	0.3314	0.0027	-1.0659
308	22.96	0.05	2.6620	-2.8837	0.2903	-0.3994	-0.0498	0.3357	0.3300	0.0057	-1.0665
309	23.04	0.05	2.6619	-2.8547	0.4162	-0.4667	-0.0563	0.3300	0.3327	-0.0027	-1.0644
310	23.11	0.06	2.7005	-2.9137	0.5205	-0.5537	-0.0559	0.3334	0.3322	0.0012	-1.0789
311	23.19	0.06	2.7027	-2.8858	0.4761	-0.5683	-0.0560	0.3295	0.3295	0.0	-1.0603
312	23.26	0.05	2.7241	-2.8955	0.3668	-0.6300	-0.0564	0.3276	0.3313	-0.0039	-1.0627
313	23.33	0.06	2.7516	-2.9243	0.5304	-0.5644	-0.0558	0.3275	0.3341	-0.0066	-1.0648
314	23.37	0.05	2.7495	-2.9533	0.4044	-0.5103	-0.0563	0.3301	0.3345	-0.0044	-1.0741
315	23.38	0.05	2.7268	-2.9006	0.3238	-0.3838	-0.0494	0.3282	0.3322	-0.0040	-1.0629
316	23.37	0.05	2.7132	-2.9007	0.2895	-0.4695	-0.0498	0.3282	0.3323	-0.0041	-1.0668
317	23.37	0.05	2.6941	-2.8898	0.3709	-0.5333	-0.0564	0.3281	0.3314	-0.0033	-1.0708
318	23.38	0.05	2.7507	-2.9681	0.4004	-0.6227	-0.0564	0.3280	0.3309	-0.0029	-1.0775
319	23.37	0.04	2.6980	-2.8857	0.2499	-0.3616	-0.0497	0.3319	0.3308	0.0011	-1.0622
320	23.37	0.05	2.7071	-2.8998	0.3022	-0.4004	-0.0567	0.3282	0.3304	-0.0022	-1.0711
321	23.38	0.01	2.7271	-2.9255	0.3041	-0.3907	-0.0567	0.3314	0.3360	-0.0042	-1.0727
322	23.37	0.05	2.7059	-2.9161	0.3032	-0.3837	-0.0567	0.3320	0.3346	-0.0026	-1.0777

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RA10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
2 4.960V 1.7 45.0 .91a0923 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
323	23.48	0.03	7.7481	-2.9425	0.4277	-0.4876	-0.0561	0.3442	0.3387	0.0055	-1.5707
324	24.50	0.05	8.0278	-3.2202	0.4436	-0.7357	-0.0559	0.3273	0.3471	-0.0198	-1.3635
325	25.52	0.07	8.2615	-3.3213	0.6410	-0.9675	-0.0261	0.3217	0.3503	-0.0286	-1.0183
326	26.71	0.08	8.4207	-3.3338	0.7305	-0.9241	-0.0036	0.3193	0.3573	-0.0380	-0.9656
327	27.84	0.09	8.6918	-3.6947	0.8510	-0.6302	0.0122	0.3113	0.3697	-0.0584	-0.8382
328	29.00	0.10	8.9856	-2.9866	0.6503	0.0850	0.0206	0.3016	0.3799	-0.0783	-0.7191
329	30.15	0.09	9.3294	-2.6958	0.7703	0.4021	0.0213	0.2771	0.3955	-0.1084	-0.6226
330	31.33	0.10	9.5908	-2.7688	0.8248	0.4816	0.0293	0.2720	0.3915	-0.1195	-0.6031
331	32.55	0.12	9.7326	-3.1751	0.9954	1.4867	0.0235	0.2754	0.4197	-0.1443	-0.6060
332	33.61	0.13	9.7236	-3.3674	0.9948	1.7722	0.0172	0.2866	0.4445	-0.1579	-0.5918
333	34.86	0.14	9.8192	-3.3301	1.1411	2.1330	0.0123	0.2749	0.4663	-0.1914	-0.5279
334	35.10	0.14	9.7422	-3.2412	1.0762	2.0471	-0.0080	0.2727	0.4854	-0.2126	-0.4779
335	37.36	0.16	9.4483	-3.3445	1.1968	3.3805	-0.0426	0.2733	0.5034	-0.2308	-0.4490
336	38.76	0.17	9.1019	-3.4583	1.1779	4.6600	-0.0858	0.2494	0.5104	-0.2609	-0.4264
337	40.43	0.19	8.9211	-4.0816	0.8974	5.4818	-0.1302	0.2173	0.5072	-0.2899	-0.4575
338	42.46	0.21	9.4954	-4.3468	0.3576	5.1919	-0.1728	0.1821	0.5026	-0.3205	-0.4789
339	44.45	0.21	10.1515	-4.2484	0.0090	4.8036	-0.1965	0.1471	0.5146	-0.3675	-0.4183
340	47.14	0.17	9.9214	-1.9813	0.4755	2.6794	-0.0944	0.0986	0.5091	-0.4105	-0.1876
341	49.59	0.08	10.2587	-0.5697	0.3766	0.7574	-0.0055	0.0504	0.5012	-0.4507	-0.0575
342	52.21	0.03	11.0727	-0.7591	0.1518	-0.6087	0.0246	0.0476	0.5532	-0.5056	-0.0043
343	55.25	-0.07	13.2892	-4.0124	-0.7564	-2.7528	0.0294	0.1049	0.6173	-0.5125	-0.3020
344	57.92	-0.03	13.4589	-3.3159	-0.4210	-1.7418	0.0249	0.0101	0.5487	-0.5386	-0.2465
345	57.95	-0.04	13.5548	-3.5399	-0.5611	-1.6831	0.0243	-0.0018	0.5587	-0.5603	-0.2611
346	57.96	-0.06	13.5949	-3.5766	-0.2616	-2.0341	0.0256	0.0205	0.5693	-0.5488	-0.2625
347	57.95	-0.08	13.5337	-3.4236	-0.3761	-1.8405	0.0251	0.0113	0.5789	-0.5676	-0.2529

TEST PART MACH RA10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 0.0400 1.7 45.0 BLADE23 8.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CAF1	CN1	CM1	XCPF1	YCPF1	CN2	CM2	CA2	XCPF2	YCPF2
1	-5.90	0.00	0.2383	0.0534	0.1750	0.2258	0.7407	-0.1279	-0.0261	-0.0757	0.9343	2.7163
2	-5.90	0.00	0.2278	0.0525	0.1725	0.2306	0.7592	-0.1240	-0.0255	-0.0755	1.0588	3.0667
3	-5.90	0.00	0.2303	0.0529	0.1756	0.2296	0.7625	-0.1240	-0.0254	-0.0757	0.9207	2.7069
4	-5.90	0.00	0.2306	0.0534	0.1757	0.2318	0.7632	-0.1246	-0.0256	-0.0767	1.0471	3.1176
5	-5.90	0.00	0.2383	0.0534	0.1750	0.2258	0.7407	-0.1278	-0.0261	-0.0763	0.9375	2.6160
6	-5.92	0.00	0.2383	0.0534	0.1750	0.2258	0.7407	-0.1278	-0.0261	-0.0767	1.0588	3.1176
7	-5.90	0.00	0.2273	0.0525	0.1753	0.2309	0.7712	-0.1215	-0.0254	-0.0726	1.1794	3.3722
8	-5.76	0.00	0.2136	0.0511	0.1674	0.2396	0.7844	-0.1142	-0.0254	-0.0710	1.3915	3.8962
9	-5.53	0.00	0.2020	0.0498	0.1635	0.2484	0.8095	-0.1150	-0.0254	-0.0720	1.6968	4.8129
10	-5.42	0.00	0.2020	0.0498	0.1635	0.2484	0.8095	-0.1143	-0.0238	-0.0637	2.7143	7.2527
11	-5.27	0.00	0.1991	0.0480	0.1555	0.2549	0.8267	-0.1127	-0.0238	-0.0631	10.7391	28.4367
12	-5.09	0.00	0.1912	0.0480	0.1567	0.2508	0.8089	-0.1141	-0.0228	-0.0599	-5.4886	-16.4419
13	-4.97	0.00	0.1712	0.0493	0.1685	0.2644	0.8675	-0.1196	-0.0222	-0.0581	-2.0909	-5.4727
14	-4.82	0.00	0.1656	0.0444	0.1453	0.2710	0.8778	-0.1136	-0.0222	-0.0552	-1.6086	-4.0008
15	-4.65	0.00	0.1503	0.0435	0.1402	0.2821	0.9067	-0.1204	-0.0212	-0.0547	-1.0427	-2.6872
16	-4.53	0.00	0.1571	0.0444	0.1418	0.2828	0.9029	-0.1233	-0.0202	-0.0479	-0.8672	-2.0581
17	-4.37	0.00	0.1373	0.0412	0.1332	0.3001	0.9698	-0.1283	-0.0196	-0.0437	-0.7436	-1.6593
18	-4.24	0.00	0.1415	0.0417	0.1310	0.2965	0.9321	-0.1327	-0.0186	-0.0393	-0.5693	-1.2006
19	-4.11	0.00	0.1342	0.0403	0.1272	0.3172	0.9843	-0.1342	-0.0182	-0.0374	-0.4655	-0.9557
20	-3.95	0.00	0.1233	0.0390	0.1215	0.3146	0.9805	-0.1357	-0.0176	-0.0369	-0.3840	-0.8059
21	-3.83	0.00	0.1143	0.0390	0.1183	0.3295	1.0000	-0.1368	-0.0170	-0.0340	-0.3478	-0.6957
22	-3.70	0.00	0.1067	0.0375	0.1142	0.3517	1.0705	-0.1519	-0.0163	-0.0311	-0.3161	-0.5985
23	-3.57	0.00	0.0994	0.0369	0.1072	0.3698	1.1933	-0.1563	-0.0156	-0.0279	-0.2682	-0.4785
24	-3.45	0.00	0.0931	0.0348	0.1046	0.3822	1.1600	-0.1617	-0.0156	-0.0269	-0.2535	-0.4695
25	-3.31	0.00	0.0876	0.0344	0.1056	0.3956	1.2129	-0.1712	-0.0143	-0.0242	-0.2005	-0.3401
26	-3.17	0.00	0.0787	0.0331	0.0987	0.4342	1.2886	-0.1711	-0.0140	-0.0229	-0.1967	-0.3216
27	-3.04	0.00	0.0758	0.0336	0.0996	0.4259	1.2632	-0.1776	-0.0130	-0.0210	-0.1679	-0.2711
28	-2.91	0.00	0.0692	0.0314	0.0913	0.5054	1.4712	-0.1840	-0.0126	-0.0179	-0.1504	-0.2135
29	-2.76	0.00	0.0619	0.0313	0.0911	0.5047	1.4704	-0.1904	-0.0124	-0.0173	-0.1366	-0.1910
30	-2.64	0.00	0.0567	0.0294	0.0858	0.5272	1.5051	-0.1981	-0.0110	-0.0151	-0.1099	-0.1514
31	-2.50	0.00	0.0510	0.0294	0.0836	0.5860	1.6370	-0.1932	-0.0107	-0.0136	-0.1037	-0.1318
32	-2.37	0.00	0.0461	0.0277	0.0759	0.6839	1.8918	-0.2138	-0.0100	-0.0130	-0.0914	-0.1186
33	-2.25	0.00	0.0393	0.0272	0.0757	0.7944	2.1972	-0.2193	-0.0095	-0.0112	-0.0813	-0.0963
34	-2.12	0.00	0.0332	0.0259	0.0669	1.1167	2.9754	-0.2161	-0.0091	-0.0086	-0.0781	-0.0748
35	-1.98	0.00	0.0274	0.0255	0.0667	1.4667	3.9276	-0.2254	-0.0076	-0.0065	-0.0621	-0.0514
36	-1.86	0.00	0.0215	0.0255	0.0676	2.2165	5.8904	-0.2244	-0.0069	-0.0023	-0.0532	-0.0180
37	-1.73	0.00	0.0091	0.0241	0.0635	2.6596	7.0000	-0.2365	-0.0065	-0.0043	-0.0477	-0.0321
38	-1.60	0.01	0.0122	0.0240	0.0625	2.0238	5.1429	-0.2418	-0.0055	-0.0012	-0.0388	-0.0082
39	-1.48	0.01	0.0069	0.0228	0.0587	29.5000	76.0000	-0.2345	-0.0055	-0.0002	-0.0397	-0.0014
40	-1.35	0.00	-0.0010	0.0219	0.0546	-13.3529	-33.2941	-0.2469	-0.0033	0.0005	-0.0226	0.0033
41	-1.22	0.00	-0.0103	0.0210	0.0523	-2.0376	-5.0654	-0.2413	-0.0007	0.0041	-0.0048	0.0287
42	-1.10	0.00	-0.0128	0.0201	0.0495	-1.5639	-3.8571	-0.2426	0.0007	0.0060	0.0048	0.0405
43	-0.98	0.00	-0.0167	0.0192	0.0488	-1.0758	-2.6082	-0.2474	0.0019	0.0046	0.0131	0.0582
44	-0.85	0.01	-0.0102	0.0183	0.0450	-1.0053	-2.4656	-0.2538	0.0039	0.0104	0.0251	0.0678
45	-0.70	0.00	-0.0212	0.0170	0.0454	-0.8000	-2.1591	-0.2536	0.0048	0.0130	0.0314	0.0848
46	-0.61	0.01	-0.0206	0.0133	0.0426	-0.5181	-1.5974	-0.2589	0.0059	0.0121	0.0375	0.0769

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	4	0.80	1.07	45.0	B1=0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	ACPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
47	-0.49	0.07	-0.0273	0.0124	0.0460	-0.4243	-1.3914	0.1597	0.0069	0.0162	0.0429	0.1015
48	-0.31	0.07	-0.0351	0.0121	0.0461	-0.3434	-1.1429	0.1661	0.0081	0.0167	0.0486	0.1005
49	-0.25	0.07	-0.0408	0.0107	0.0382	-0.2624	-0.9362	0.1659	0.0091	0.0206	0.0547	0.1245
50	-0.13	0.07	-0.0377	0.0107	0.0372	-0.2839	-0.9872	0.1754	0.0110	0.0240	0.0627	0.1370
51	-0.02	0.07	-0.0402	0.0094	0.0343	-0.2326	-0.8537	0.1753	0.0120	0.0241	0.0682	0.1376
52	0.11	0.08	-0.0457	0.0085	0.0312	-0.1857	-0.6814	0.1786	0.0126	0.0231	0.0708	0.1291
53	0.24	0.07	-0.0515	0.0071	0.0304	-0.1366	-0.5918	0.1782	0.0155	0.0283	0.0872	0.1586
54	0.35	0.07	-0.0570	0.0058	0.0272	-0.1015	-0.4772	0.1847	0.0172	0.0276	0.0930	0.1494
55	0.47	0.07	-0.0546	0.0053	0.0257	-0.0867	-0.4290	0.1846	0.0175	0.0288	0.0946	0.1563
56	0.58	0.08	-0.0604	0.0041	0.0233	-0.0592	-0.3413	0.1909	0.0198	0.0308	0.1036	0.1612
57	0.70	0.07	-0.0650	0.0040	0.0211	-0.0606	-0.3249	0.1970	0.0204	0.0325	0.1033	0.1650
58	0.83	0.07	-0.0736	0.0031	0.0189	-0.0419	-0.2569	0.2000	0.0217	0.0354	0.1085	0.1778
59	0.94	0.07	-0.0734	0.0022	0.0177	-0.0302	-0.2405	0.2065	0.0230	0.0377	0.1112	0.1804
60	1.06	0.06	-0.0789	0.0005	0.0144	-0.0061	-0.1822	0.2096	0.0236	0.0389	0.1128	0.1855
61	1.17	0.06	-0.0784	-0.0014	0.0118	0.0172	-0.1501	0.2095	0.0242	0.0414	0.1156	0.1976
62	1.28	0.06	-0.0844	-0.0027	0.0135	0.0320	-0.1600	0.2154	0.0249	0.0445	0.1156	0.2065
63	1.41	0.06	-0.0814	-0.0014	0.0127	0.0156	-0.1564	0.2250	0.0261	0.0466	0.1162	0.2071
64	1.53	0.07	-0.0870	-0.0042	0.0119	0.0565	-0.1356	0.2283	0.0269	0.0455	0.1158	0.1995
65	1.64	0.07	-0.0861	-0.0044	0.0122	0.0529	-0.1445	0.2378	0.0278	0.0503	0.1166	0.2114
66	1.75	0.07	-0.0895	-0.0071	0.0089	0.0747	-0.0991	0.2409	0.0281	0.0532	0.1165	0.2207
67	1.86	0.06	-0.0897	-0.0057	0.0102	0.0742	-0.1140	0.2409	0.0281	0.0544	0.1165	0.2259
68	1.97	0.07	-0.0899	-0.0080	0.0092	0.0614	-0.0931	0.2539	0.0288	0.0568	0.1133	0.2239
69	2.09	0.07	-0.1009	-0.0089	0.0075	0.0860	-0.0766	0.2597	0.0293	0.0585	0.1129	0.2251
70	2.21	0.07	-0.1035	-0.0097	0.0067	0.0941	-0.0657	0.2596	0.0293	0.0598	0.1130	0.2306
71	2.31	0.06	-0.1091	-0.0106	0.0028	0.0973	-0.0256	0.2725	0.0303	0.0647	0.1112	0.2376
72	2.43	0.07	-0.1176	-0.0115	-0.0007	0.0976	0.0057	0.2788	0.0306	0.0678	0.1097	0.2433
73	2.55	0.06	-0.1177	-0.0115	0.0006	0.0975	-0.0049	0.2787	0.0313	0.0717	0.1122	0.2573
74	2.65	0.07	-0.1206	-0.0124	-0.0011	0.1036	0.0088	0.2913	0.0325	0.0792	0.1116	0.2719
75	2.78	0.07	-0.1288	-0.0133	-0.0045	0.1034	0.0352	0.2943	0.0332	0.0834	0.1128	0.2833
76	2.90	0.07	-0.1257	-0.0137	-0.0058	0.1064	0.0450	0.2974	0.0339	0.0862	0.1139	0.2897
77	3.00	0.07	-0.1290	-0.0133	-0.0033	0.1032	0.0254	0.3036	0.0348	0.0919	0.1147	0.3025
78	3.12	0.07	-0.1345	-0.0142	-0.0065	0.1055	0.0481	0.3133	0.0356	0.0940	0.1143	0.3008
79	3.23	0.07	-0.1457	-0.0106	-0.0103	0.1126	0.0709	0.3100	0.0356	0.0937	0.1155	0.3022
80	3.34	0.06	-0.1398	-0.0159	-0.0109	0.1139	0.0780	0.3228	0.0368	0.0974	0.1139	0.3016
81	3.46	0.07	-0.1445	-0.0166	-0.0119	0.1105	0.0799	0.3196	0.0364	0.0983	0.1138	0.3077
82	3.58	0.07	-0.1511	-0.0174	-0.0147	0.1163	0.0971	0.3290	0.0377	0.1030	0.1147	0.3132
83	3.68	0.06	-0.1557	-0.0181	-0.0166	0.1158	0.1059	0.3354	0.0387	0.1049	0.1156	0.3127
84	3.80	0.07	-0.1567	-0.0181	-0.0166	0.1158	0.1059	0.3449	0.0397	0.1095	0.1150	0.3175
85	3.91	0.06	-0.1683	-0.0195	-0.0179	0.1158	0.1067	0.3545	0.0406	0.1130	0.1166	0.3187
86	4.01	0.06	-0.1711	-0.0200	-0.0195	0.1168	0.1139	0.3610	0.0412	0.1148	0.1161	0.3181
87	4.14	0.07	-0.1847	-0.0221	-0.0249	0.1196	0.1348	0.3537	0.0408	0.1153	0.1154	0.3260
88	4.25	0.07	-0.1769	-0.0212	-0.0242	0.1187	0.1356	0.3666	0.0422	0.1190	0.1158	0.3246
89	4.36	0.06	-0.1754	-0.0212	-0.0242	0.1187	0.1354	0.3792	0.0437	0.1239	0.1153	0.3267
90	4.47	0.06	-0.1875	-0.0221	-0.0264	0.1179	0.1410	0.3855	0.0447	0.1283	0.1159	0.3329
91	4.58	0.07	-0.1875	-0.0221	-0.0264	0.1179	0.1410	0.3918	0.0453	0.1314	0.1157	0.3354
92	4.66	0.06	-0.1957	-0.0239	-0.0312	0.1223	0.1593	0.3919	0.0453	0.1289	0.1157	0.3289

TEST PAR1 MACH REIC-6 PH1 CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 .8 0.80 1.7 45.0 B1.0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
93	4.78	0.07	-0.1957	-0.0230	-0.0312	0.1174	0.1593	0.3981	0.0463	0.1345	0.1163	0.3379
94	4.88	0.06	-0.2070	-0.0246	-0.0349	0.1198	0.1688	0.3981	0.0463	0.1359	0.1163	0.3413
95	4.99	0.06	-0.2070	-0.0244	-0.0349	0.1198	0.1688	0.4141	0.0476	0.1397	0.1169	0.3376
96	5.10	0.06	-0.2043	-0.0234	-0.0336	0.1171	0.1634	0.4235	0.0492	0.1469	0.1162	0.3470
97	5.19	0.07	-0.2184	-0.0255	-0.0384	0.1216	0.1777	0.4236	0.0492	0.1444	0.1162	0.3410
98	5.29	0.06	-0.2240	-0.0265	-0.0419	0.1186	0.1871	0.4298	0.0502	0.1475	0.1167	0.3432
99	5.39	0.06	-0.2234	-0.0261	-0.0406	0.1163	0.1814	0.4362	0.0505	0.1506	0.1157	0.3453
100	5.51	0.06	-0.2282	-0.0274	-0.0422	0.1212	0.1864	0.4417	0.0510	0.1535	0.1156	0.3475
101	5.60	0.06	-0.2285	-0.0269	-0.0436	0.1178	0.1909	0.4472	0.0516	0.1550	0.1154	0.3465
102	5.70	0.06	-0.2311	-0.0273	-0.0448	0.1182	0.2008	0.4568	0.0532	0.1564	0.1164	0.3469
103	5.80	0.07	-0.2338	-0.0273	-0.0480	0.1168	0.2051	0.4662	0.0541	0.1631	0.1161	0.3498
104	5.89	0.06	-0.2451	-0.0290	-0.0517	0.1155	0.2110	0.4662	0.0548	0.1618	0.1155	0.3471
105	5.99	0.06	-0.2473	-0.0273	-0.0504	0.1113	0.2054	0.4790	0.0556	0.1647	0.1156	0.3481
106	6.10	0.06	-0.2482	-0.0282	-0.0508	0.1135	0.2065	0.4788	0.0558	0.1642	0.1165	0.3535
107	6.20	0.06	-0.2591	-0.0295	-0.0570	0.1140	0.2201	0.4850	0.0567	0.1723	0.1170	0.3553
108	6.29	0.06	-0.2615	-0.0300	-0.0611	0.1146	0.2336	0.4882	0.0573	0.1739	0.1174	0.3561
109	6.41	0.07	-0.2678	-0.0300	-0.0592	0.1122	0.2214	0.4913	0.0583	0.1768	0.1186	0.3598
110	6.50	0.06	-0.2617	-0.0295	-0.0594	0.1128	0.2286	0.5040	0.0592	0.1791	0.1175	0.3553
111	6.59	0.07	-0.2702	-0.0300	-0.0619	0.1111	0.2293	0.5073	0.0596	0.1781	0.1175	0.3511
112	6.70	0.07	-0.2673	-0.0303	-0.0617	0.1123	0.2307	0.5168	0.0606	0.1827	0.1173	0.3536
113	6.81	0.07	-0.2843	-0.0309	-0.0660	0.1086	0.2321	0.5103	0.0606	0.1823	0.1167	0.3572
114	6.89	0.07	-0.2901	-0.0317	-0.0667	0.1094	0.2298	0.5230	0.0616	0.1864	0.1183	0.3603
115	7.01	0.06	-0.2841	-0.0309	-0.0665	0.1087	0.2412	0.5231	0.0612	0.1871	0.1170	0.3577
116	7.10	0.07	-0.2925	-0.0313	-0.0711	0.1064	0.2458	0.5357	0.0628	0.1921	0.1173	0.3586
117	7.19	0.06	-0.2991	-0.0321	-0.0725	0.1078	0.2434	0.5359	0.0625	0.1895	0.1167	0.3538
118	7.28	0.06	-0.2980	-0.0313	-0.0738	0.1049	0.2477	0.5485	0.0634	0.1957	0.1156	0.3567
119	7.39	0.07	-0.3036	-0.0321	-0.0756	0.1058	0.2491	0.5548	0.0638	0.2001	0.1150	0.3607
120	7.49	0.06	-0.3063	-0.0317	-0.0784	0.1036	0.2501	0.5643	0.0641	0.2047	0.1135	0.3629
121	7.57	0.07	-0.3175	-0.0326	-0.0822	0.1027	0.2589	0.5644	0.0644	0.2036	0.1140	0.3604
122	7.68	0.07	-0.3161	-0.0313	-0.0818	0.0993	0.2600	0.5738	0.0647	0.2096	0.1128	0.3649
123	7.77	0.07	-0.3172	-0.0320	-0.0853	0.1028	0.2708	0.5770	0.0650	0.2097	0.1127	0.3634
124	7.85	0.07	-0.3259	-0.0328	-0.0856	0.1001	0.2626	0.5835	0.0653	0.2101	0.1120	0.3602
125	7.96	0.07	-0.3174	-0.0317	-0.0848	0.1000	0.2666	0.5993	0.0660	0.2179	0.1101	0.3635
126	8.04	0.06	-0.3343	-0.0331	-0.0890	0.0990	0.2661	0.5994	0.0660	0.2156	0.1101	0.3593
127	8.13	0.06	-0.3246	-0.0317	-0.0883	0.0966	0.2686	0.6057	0.0663	0.2184	0.1094	0.3606
128	8.21	0.06	-0.3400	-0.0331	-0.0904	0.0973	0.2673	0.6056	0.0667	0.2210	0.1101	0.3648
129	8.30	0.06	-0.3420	-0.0326	-0.0936	0.0952	0.2732	0.6151	0.0673	0.2256	0.1093	0.3667
130	8.39	0.06	-0.3399	-0.0317	-0.0926	0.0934	0.2705	0.6247	0.0676	0.2302	0.1083	0.3686
131	8.47	0.06	-0.3452	-0.0326	-0.0964	0.0945	0.2792	0.6247	0.0676	0.2302	0.1083	0.3686
132	8.56	0.06	-0.3509	-0.0326	-0.0982	0.0929	0.2799	0.6374	0.0682	0.2339	0.1070	0.3669
133	8.64	0.06	-0.3557	-0.0326	-0.0988	0.0914	0.2770	0.6310	0.0679	0.2321	0.1076	0.3677
134	8.74	0.06	-0.3651	-0.0309	-0.0975	0.0895	0.2824	0.6437	0.0689	0.2382	0.1070	0.3701
135	8.83	0.06	-0.3593	-0.0321	-0.1016	0.0894	0.2828	0.6501	0.0689	0.2376	0.1060	0.3654
136	8.93	0.06	-0.3704	-0.0333	-0.1066	0.0904	0.2878	0.6533	0.0689	0.2403	0.1056	0.3679
137	9.01	0.06	-0.3675	-0.0335	-0.1063	0.0911	0.2893	0.6565	0.0696	0.2406	0.1060	0.3665
138	9.09	0.06	-0.3705	-0.0317	-0.1065	0.0857	0.2875	0.6628	0.0696	0.2462	0.1050	0.3715

TEST PART MACH REIC-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 4 0.60 1.67 45.0 BLADE23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
134	9.20	0.06	-0.3675	-0.0321	-0.1062	0.0874	0.2941	0.6725	0.0699	0.2464	0.1039	0.3694
140	9.25	0.07	-0.3724	-0.0321	-0.1105	0.0862	0.2962	0.6753	0.0708	0.2525	0.1049	0.3739
141	9.35	0.06	-0.3808	-0.0334	-0.1132	0.0864	0.2929	0.6739	0.0706	0.2545	0.1048	0.3777
142	9.46	0.06	-0.3859	-0.0336	-0.1131	0.0854	0.2926	0.6803	0.0706	0.2550	0.1036	0.3748
143	9.53	0.07	-0.3837	-0.0325	-0.1115	0.0847	0.2907	0.6901	0.0706	0.2545	0.1023	0.3688
144	9.61	0.07	-0.3908	-0.0334	-0.1177	0.0846	0.2963	0.6933	0.0713	0.2562	0.1029	0.3695
145	9.73	0.06	-0.3977	-0.0339	-0.1168	0.0852	0.2938	0.6963	0.0713	0.2577	0.1024	0.3701
146	9.79	0.07	-0.4055	-0.0347	-0.1216	0.0856	0.2996	0.6995	0.0706	0.2604	0.1010	0.3723
147	9.88	0.07	-0.4042	-0.0339	-0.1196	0.0846	0.2969	0.7054	0.0713	0.2636	0.1010	0.3734
148	9.96	0.06	-0.4041	-0.0339	-0.1208	0.0836	0.3019	0.7058	0.0716	0.2649	0.1014	0.3753
149	10.07	0.06	-0.4032	-0.0325	-0.1196	0.0806	0.2972	0.7090	0.0713	0.2650	0.1006	0.3738
150	10.16	0.07	-0.4172	-0.0343	-0.1252	0.0823	0.3002	0.7122	0.0713	0.2679	0.1001	0.3762
151	10.26	0.07	-0.4175	-0.0334	-0.1226	0.0806	0.2937	0.7122	0.0713	0.2679	0.1001	0.3762
152	10.34	0.06	-0.4193	-0.0334	-0.1236	0.0805	0.2982	0.7282	0.0706	0.2718	0.0970	0.3733
153	10.42	0.07	-0.4194	-0.0336	-0.1279	0.0795	0.3048	0.7282	0.0716	0.2718	0.0983	0.3739
154	10.51	0.07	-0.4257	-0.0339	-0.1274	0.0798	0.2992	0.7269	0.0713	0.2728	0.0984	0.3763
155	10.59	0.06	-0.4253	-0.0339	-0.1301	0.0791	0.3037	0.7314	0.0706	0.2746	0.0966	0.3755
156	10.69	0.06	-0.4227	-0.0334	-0.1282	0.0790	0.3034	0.7377	0.0706	0.2764	0.0957	0.3747
157	10.76	0.06	-0.4253	-0.0334	-0.1301	0.0779	0.3037	0.7441	0.0706	0.2794	0.0949	0.3755
158	10.96	0.07	-0.4288	-0.0339	-0.1326	0.0791	0.3097	0.7441	0.0706	0.2794	0.0949	0.3755
159	10.95	0.07	-0.4338	-0.0339	-0.1332	0.0781	0.3069	0.7440	0.0703	0.2808	0.0945	0.3774
160	11.03	0.07	-0.4334	-0.0330	-0.1332	0.0761	0.3069	0.7539	0.0700	0.2803	0.0929	0.3718
161	11.12	0.07	-0.4453	-0.0339	-0.1357	0.0741	0.3047	0.7569	0.0700	0.2818	0.0925	0.3723
162	11.19	0.07	-0.4395	-0.0330	-0.1354	0.0756	0.3112	0.7636	0.0700	0.2823	0.0918	0.3698
163	11.28	0.07	-0.4379	-0.0325	-0.1349	0.0740	0.3069	0.7633	0.0697	0.2848	0.0913	0.3732
164	11.37	0.07	-0.4506	-0.0343	-0.1400	0.0762	0.3107	0.7633	0.0694	0.2862	0.0909	0.3749
165	11.45	0.07	-0.4459	-0.0334	-0.1381	0.0750	0.3103	0.7731	0.0694	0.2870	0.0885	0.3712
166	11.54	0.07	-0.4452	-0.0325	-0.1369	0.0730	0.3073	0.7794	0.0691	0.2900	0.0874	0.3721
167	11.63	0.07	-0.4446	-0.0326	-0.1398	0.0727	0.3117	0.7874	0.0682	0.2885	0.0866	0.3664
168	11.72	0.07	-0.4571	-0.0335	-0.1426	0.0733	0.3107	0.7874	0.0682	0.2885	0.0866	0.3664
169	11.80	0.07	-0.4572	-0.0325	-0.1419	0.0713	0.3105	0.7939	0.0679	0.2916	0.0856	0.3673
170	11.87	0.07	-0.4572	-0.0326	-0.1419	0.0713	0.3105	0.7978	0.0682	0.2919	0.0856	0.3662
171	11.97	0.06	-0.4574	-0.0321	-0.1432	0.0703	0.3133	0.8034	0.0676	0.2962	0.0842	0.3687
172	12.06	0.07	-0.4563	-0.0333	-0.1469	0.0715	0.3138	0.8035	0.0676	0.2925	0.0842	0.3648
173	12.14	0.07	-0.4555	-0.0326	-0.1447	0.0700	0.3096	0.8099	0.0670	0.2968	0.0827	0.3665
174	12.22	0.07	-0.4582	-0.0326	-0.1481	0.0697	0.3164	0.8132	0.0667	0.2970	0.0820	0.3652
175	12.31	0.06	-0.4710	-0.0326	-0.1484	0.0697	0.3150	0.8229	0.0663	0.2966	0.0805	0.3604
176	12.38	0.07	-0.4793	-0.0333	-0.1519	0.0698	0.3168	0.8229	0.0657	0.2979	0.0798	0.3619
177	12.47	0.07	-0.4693	-0.0313	-0.1480	0.0668	0.3161	0.8294	0.0653	0.2983	0.0788	0.3597
178	12.55	0.07	-0.4794	-0.0317	-0.1518	0.0662	0.3166	0.8294	0.0650	0.2996	0.0784	0.3612
179	12.63	0.07	-0.4736	-0.0304	-0.1524	0.0652	0.3217	0.8294	0.0644	0.3008	0.0776	0.3627
180	12.72	0.07	-0.4809	-0.0305	-0.1545	0.0650	0.3187	0.8359	0.0651	0.3014	0.0784	0.3628
181	12.81	0.07	-0.4831	-0.0317	-0.1536	0.0657	0.3180	0.8439	0.0642	0.3012	0.0760	0.3570
182	12.90	0.07	-0.4915	-0.0331	-0.1571	0.0673	0.3196	0.8439	0.0645	0.3025	0.0765	0.3584
183	12.98	0.07	-0.4862	-0.0304	-0.1537	0.0643	0.3191	0.8439	0.0626	0.3050	0.0742	0.3614
184	13.06	0.07	-0.5027	-0.0327	-0.1620	0.0651	0.3223	0.8438	0.0636	0.3050	0.0754	0.3615

TEST PART MACH REYNO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 4 0.80 1.67 45.0 NI=0123 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	Cm1	Cn1	XCPF1	YCPF1	CNF2	Cn2	C82	XCPF2	YCPF2
185	13.15	0.07	-0.5458	-0.0300	-0.1562	0.0614	0.3215	0.8536	0.0626	0.3045	0.0734	0.3567
186	13.22	0.07	-0.5414	-0.0309	-0.1581	0.0628	0.3218	0.8537	0.0619	0.3033	0.0726	0.3552
187	13.31	0.07	-0.5498	-0.0317	-0.1616	0.0595	0.3234	0.8602	0.0613	0.3051	0.0712	0.3547
188	13.46	0.07	-0.5053	-0.0317	-0.1647	0.0628	0.3259	0.8635	0.0613	0.3066	0.0706	0.3551
189	13.48	0.07	-0.4967	-0.0305	-0.1636	0.0614	0.3294	0.8635	0.0620	0.3065	0.0695	0.3550
190	13.56	0.07	-0.5023	-0.0304	-0.1656	0.0615	0.3236	0.8667	0.0600	0.3068	0.0692	0.3548
191	13.65	0.07	-0.5034	-0.0305	-0.1646	0.0604	0.3270	0.8748	0.0601	0.3067	0.0687	0.3546
192	13.75	0.07	-0.5033	-0.0301	-0.1659	0.0598	0.3296	0.8716	0.0596	0.3077	0.0682	0.3538
193	13.80	0.07	-0.5144	-0.0314	-0.1709	0.0619	0.3322	0.8780	0.0594	0.3108	0.0677	0.3540
194	13.85	0.07	-0.5094	-0.0305	-0.1677	0.0599	0.3295	0.8748	0.0589	0.3092	0.0673	0.3535
195	13.94	0.07	-0.5201	-0.0310	-0.1727	0.0596	0.3321	0.8780	0.0589	0.3108	0.0670	0.3540
196	14.06	0.07	-0.5114	-0.0295	-0.1691	0.0579	0.3335	0.8779	0.0582	0.3103	0.0655	0.3495
197	14.15	0.07	-0.5040	-0.0296	-0.1676	0.0582	0.3293	0.8846	0.0582	0.3113	0.0658	0.3519
198	14.23	0.07	-0.5238	-0.0313	-0.1730	0.0592	0.3348	0.8844	0.0582	0.3151	0.0658	0.3563
199	14.30	0.07	-0.5309	-0.0327	-0.1802	0.0614	0.3395	0.8912	0.0575	0.3118	0.0645	0.3499
200	14.39	0.07	-0.5226	-0.0301	-0.1754	0.0576	0.3355	0.8910	0.0575	0.3156	0.0645	0.3542
201	14.49	0.07	-0.5350	-0.0310	-0.1795	0.0579	0.3354	0.8960	0.0570	0.3152	0.0636	0.3518
202	14.57	0.07	-0.5322	-0.0310	-0.1779	0.0582	0.3343	0.8992	0.0570	0.3155	0.0634	0.3509
203	14.66	0.07	-0.5364	-0.0310	-0.1807	0.0579	0.3378	0.8993	0.0567	0.3142	0.0631	0.3494
204	14.74	0.07	-0.5369	-0.0310	-0.1807	0.0579	0.3378	0.9057	0.0563	0.3160	0.0622	0.3489
205	14.82	0.07	-0.5377	-0.0301	-0.1823	0.0560	0.3390	0.9048	0.0563	0.3201	0.0620	0.3523
206	14.92	0.07	-0.5404	-0.0301	-0.1838	0.0557	0.3401	0.9121	0.0561	0.3150	0.0617	0.3465
207	15.00	0.07	-0.5406	-0.0301	-0.1826	0.0557	0.3377	0.9187	0.0556	0.3171	0.0607	0.3451
208	15.09	0.07	-0.5468	-0.0310	-0.1873	0.0566	0.3412	0.9157	0.0551	0.3155	0.0602	0.3446
209	15.18	0.06	-0.5519	-0.0306	-0.1863	0.0554	0.3376	0.9157	0.0551	0.3155	0.0602	0.3446
210	15.24	0.07	-0.5466	-0.0319	-0.1918	0.0550	0.3386	0.9222	0.0546	0.3161	0.0590	0.3427
211	15.34	0.07	-0.5469	-0.0301	-0.1872	0.0548	0.3410	0.9221	0.0538	0.3186	0.0584	0.3455
212	15.42	0.07	-0.5488	-0.0319	-0.1932	0.0561	0.3396	0.9252	0.0543	0.3201	0.0592	0.3468
213	15.50	0.07	-0.5658	-0.0310	-0.1940	0.0547	0.3429	0.9320	0.0538	0.3181	0.0578	0.3413
214	15.54	0.07	-0.5657	-0.0319	-0.2000	0.0565	0.3415	0.9320	0.0535	0.3181	0.0574	0.3413
215	15.66	0.07	-0.5801	-0.0297	-0.1921	0.0531	0.3430	0.9320	0.0532	0.3181	0.0570	0.3413
216	15.75	0.07	-0.5808	-0.0301	-0.1934	0.0536	0.3453	0.9257	0.0518	0.3150	0.0560	0.3403
217	15.84	0.07	-0.5713	-0.0331	-0.1971	0.0527	0.3450	0.9353	0.0526	0.3172	0.0564	0.3391
218	15.92	0.06	-0.5809	-0.0306	-0.2005	0.0527	0.3458	0.9339	0.0519	0.3161	0.0556	0.3385
219	16.01	0.06	-0.5980	-0.0319	-0.2051	0.0534	0.3433	0.9339	0.0519	0.3161	0.0556	0.3385
220	16.08	0.07	-0.5950	-0.0319	-0.2051	0.0534	0.3433	0.9341	0.0519	0.3110	0.0556	0.3329
221	16.17	0.07	-0.5808	-0.0297	-0.2021	0.0512	0.3481	0.9341	0.0519	0.3110	0.0556	0.3329
222	16.26	0.07	-0.5891	-0.0302	-0.2055	0.0513	0.3488	0.9405	0.0516	0.3167	0.0569	0.3367
223	16.32	0.07	-0.6065	-0.0316	-0.2087	0.0520	0.3441	0.9340	0.0519	0.3136	0.0556	0.3357
224	16.41	0.07	-0.5978	-0.0302	-0.2090	0.0505	0.3497	0.9342	0.0516	0.3110	0.0553	0.3329
225	16.50	0.07	-0.6270	-0.0319	-0.2124	0.0514	0.3427	0.9340	0.0519	0.3136	0.0556	0.3357
226	16.57	0.07	-0.6234	-0.0316	-0.2158	0.0506	0.3458	0.9279	0.0513	0.3104	0.0553	0.3366
227	16.66	0.07	-0.6269	-0.0316	-0.2146	0.0502	0.3477	0.9309	0.0519	0.3094	0.0558	0.3326
228	16.75	0.07	-0.6235	-0.0302	-0.2155	0.0480	0.3456	0.9343	0.0519	0.3085	0.0556	0.3302
229	16.83	0.07	-0.6436	-0.0319	-0.2203	0.0498	0.3423	0.9213	0.0519	0.3061	0.0563	0.3322
230	16.91	0.07	-0.6907	-0.0311	-0.2199	0.0485	0.3432	0.9215	0.0519	0.3022	0.0563	0.3288

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 6 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE/10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 4 0.60 1.7 45.0 .81 OF 23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
231	16.49	0.07	-0.8263	-0.0293	-0.2170	0.0468	0.3465	0.9343	0.0519	0.3085	0.0556	0.3302
232	17.06	0.06	-0.6459	-0.0311	-0.2255	0.0481	0.3491	0.9183	0.0519	0.3007	0.0565	0.3274
233	17.15	0.07	-0.6605	-0.0328	-0.2314	0.0482	0.3406	0.8998	0.0519	0.2916	0.0577	0.3241
234	17.24	0.06	-0.6577	-0.0302	-0.2266	0.0459	0.3446	0.8990	0.0519	0.2914	0.0577	0.3241
235	17.33	0.07	-0.6546	-0.0297	-0.2275	0.0454	0.3476	0.8990	0.0519	0.2914	0.0577	0.3241
236	17.40	0.06	-0.6616	-0.0310	-0.2293	0.0468	0.3466	0.8960	0.0518	0.2879	0.0580	0.3220
237	17.48	0.06	-0.6619	-0.0297	-0.2293	0.0469	0.3464	0.9004	0.0518	0.2974	0.0575	0.3247
238	17.58	0.06	-0.6591	-0.0297	-0.2277	0.0451	0.3455	0.8941	0.0515	0.2867	0.0576	0.3206
239	17.65	0.07	-0.6702	-0.0297	-0.2339	0.0463	0.3490	0.8780	0.0512	0.2815	0.0546	0.3205
240	17.73	0.07	-0.7017	-0.0315	-0.2411	0.0468	0.3434	0.8638	0.0499	0.2664	0.0592	0.3136
241	17.81	0.06	-0.6990	-0.0315	-0.2396	0.0490	0.3478	0.8494	0.0499	0.2687	0.0587	0.3164
242	17.89	0.06	-0.7191	-0.0319	-0.2431	0.0488	0.3380	0.8302	0.0486	0.2607	0.0586	0.3168
243	17.98	0.07	-0.6876	-0.0292	-0.2370	0.0485	0.3447	0.8496	0.0489	0.2650	0.0576	0.3119
244	18.07	0.07	-0.7421	-0.0328	-0.2481	0.0492	0.3343	0.8336	0.0483	0.2597	0.0580	0.3116
245	18.14	0.07	-0.6873	-0.0279	-0.2346	0.0486	0.3443	0.8499	0.0480	0.2611	0.0564	0.3072
246	18.24	0.06	-0.7138	-0.0297	-0.2466	0.0493	0.3431	0.8371	0.0474	0.2536	0.0566	0.3029
247	18.31	0.07	-0.7186	-0.0297	-0.2479	0.0494	0.3449	0.8498	0.0480	0.2623	0.0564	0.3087
248	18.38	0.07	-0.7417	-0.0301	-0.2528	0.0506	0.3408	0.8178	0.0467	0.2493	0.0571	0.3049
249	18.47	0.06	-0.7298	-0.0301	-0.2528	0.0512	0.3464	0.8306	0.0467	0.2568	0.0562	0.3092
250	18.55	0.07	-0.7702	-0.0319	-0.2610	0.0515	0.3389	0.8017	0.0464	0.2455	0.0579	0.3062
251	18.64	0.07	-0.7569	-0.0301	-0.2571	0.0497	0.3388	0.8145	0.0460	0.2490	0.0565	0.3057
252	18.72	0.07	-0.7506	-0.0292	-0.2570	0.0490	0.3432	0.8177	0.0460	0.2519	0.0563	0.3081
253	18.79	0.06	-0.7644	-0.0297	-0.2602	0.0499	0.3404	0.8180	0.0457	0.2468	0.0559	0.3017
254	18.87	0.06	-0.7643	-0.0298	-0.2614	0.0506	0.3420	0.8180	0.0456	0.2468	0.0556	0.3017
255	18.96	0.06	-0.7759	-0.0300	-0.2621	0.0507	0.3378	0.8116	0.0453	0.2463	0.0558	0.3010
256	19.02	0.06	-0.7815	-0.0308	-0.2665	0.0524	0.3350	0.7991	0.0450	0.2355	0.0563	0.2947
257	19.09	0.06	-0.7899	-0.0295	-0.2673	0.0524	0.3383	0.8053	0.0450	0.2412	0.0558	0.2995
258	19.18	0.06	-0.7729	-0.0283	-0.2626	0.0506	0.3401	0.8212	0.0450	0.2489	0.0548	0.3031
259	19.25	0.06	-0.8157	-0.0300	-0.2725	0.0508	0.3340	0.7989	0.0446	0.2406	0.0558	0.3012
260	19.34	0.05	-0.7955	-0.0283	-0.2703	0.0555	0.3397	0.8108	0.0446	0.2484	0.0547	0.3048
261	19.41	0.06	-0.8013	-0.0283	-0.2708	0.0553	0.3380	0.8085	0.0446	0.2453	0.0551	0.3034
262	19.49	0.06	-0.7961	-0.0273	-0.2697	0.0544	0.3396	0.8136	0.0445	0.2466	0.0547	0.3032
263	19.57	0.06	-0.8425	-0.0299	-0.2813	0.0555	0.3338	0.8006	0.0445	0.2392	0.0556	0.2987
264	19.64	0.06	-0.8312	-0.0287	-0.2775	0.0545	0.3338	0.8101	0.0445	0.2463	0.0549	0.3041
265	19.73	0.06	-0.8482	-0.0290	-0.2839	0.0567	0.3336	0.8038	0.0445	0.2420	0.0553	0.3010
266	19.81	0.07	-0.8397	-0.0282	-0.2809	0.0536	0.3345	0.8133	0.0445	0.2479	0.0547	0.3048
267	19.88	0.06	-0.8241	-0.0284	-0.2807	0.0519	0.3390	0.8198	0.0445	0.2485	0.0543	0.3031
268	19.95	0.06	-0.8338	-0.0284	-0.2814	0.0517	0.3374	0.8229	0.0445	0.2500	0.0541	0.3038
269	20.03	0.06	-0.8568	-0.0273	-0.2851	0.0519	0.3328	0.8199	0.0445	0.2459	0.0543	0.3000
270	20.10	0.06	-0.8409	-0.0255	-0.2853	0.0503	0.3395	0.8308	0.0444	0.2528	0.0534	0.3043
271	20.18	0.06	-0.8177	-0.0287	-0.2803	0.0490	0.3428	0.8308	0.0438	0.2541	0.0527	0.3058
272	20.27	0.06	-0.8560	-0.0283	-0.2879	0.0508	0.3363	0.8230	0.0440	0.2506	0.0535	0.3045
273	20.33	0.06	-0.8467	-0.0281	-0.2924	0.0517	0.3305	0.8135	0.0444	0.2459	0.0546	0.3023
274	20.41	0.06	-0.8844	-0.0272	-0.2948	0.0536	0.3333	0.8229	0.0444	0.2506	0.0539	0.3045
275	20.50	0.07	-0.8931	-0.0272	-0.2956	0.0505	0.3310	0.8230	0.0440	0.2493	0.0535	0.3029
276	20.56	0.07	-0.9102	-0.0289	-0.2988	0.0518	0.3283	0.8188	0.0444	0.2437	0.0543	0.2989

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	6	0.60	1.7	45.0	81a0f23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
277	20.63	0.04	-0.8930	-0.0263	-0.2968	0.0295	0.3324	0.8358	0.0437	0.2541	0.0523	0.3041
278	20.71	0.07	-0.8965	-0.0272	-0.2981	0.0301	0.3298	0.8360	0.0440	0.2504	0.0526	0.2995
279	20.79	0.07	-0.9015	-0.0257	-0.2990	0.0296	0.3317	0.8358	0.0440	0.2529	0.0526	0.3026
280	20.87	0.06	-0.9101	-0.0263	-0.3011	0.0299	0.3309	0.8295	0.0437	0.2498	0.0527	0.3012
281	20.95	0.06	-0.9156	-0.0272	-0.3033	0.0297	0.3309	0.8263	0.0437	0.2495	0.0529	0.3020
282	21.04	0.07	-0.9212	-0.0281	-0.3063	0.0298	0.3275	0.8295	0.0440	0.2498	0.0530	0.3012
283	21.10	0.07	-0.9300	-0.0272	-0.3065	0.0293	0.3274	0.8326	0.0437	0.2526	0.0525	0.3034
284	21.14	0.07	-0.9327	-0.0272	-0.3061	0.0292	0.3281	0.8295	0.0437	0.2511	0.0527	0.3027
285	21.26	0.07	-0.9441	-0.0281	-0.3106	0.0297	0.3269	0.8295	0.0437	0.2498	0.0527	0.3012
286	21.32	0.06	-0.9317	-0.0263	-0.3062	0.0293	0.3287	0.8373	0.0438	0.2546	0.0523	0.3041
287	21.41	0.06	-0.9400	-0.0272	-0.3097	0.0289	0.3295	0.8373	0.0439	0.2546	0.0523	0.3041
288	21.48	0.06	-0.9441	-0.0290	-0.3119	0.0302	0.3289	0.8266	0.0438	0.2485	0.0531	0.3013
289	21.56	0.06	-0.9468	-0.0272	-0.3094	0.0297	0.3261	0.8309	0.0438	0.2515	0.0527	0.3027
290	21.64	0.07	-0.9508	-0.0281	-0.3110	0.0295	0.3253	0.8324	0.0439	0.2533	0.0527	0.3043
291	21.72	0.07	-0.9533	-0.0264	-0.3115	0.0281	0.3267	0.8419	0.0435	0.2579	0.0517	0.3043
292	21.78	0.05	-0.9610	-0.0284	-0.3161	0.0288	0.3222	0.8403	0.0436	0.2568	0.0519	0.3057
293	21.86	0.06	-0.9697	-0.0291	-0.3172	0.0294	0.3205	0.8403	0.0434	0.2581	0.0522	0.3072
294	21.94	0.05	-0.9806	-0.0291	-0.3186	0.0295	0.3223	0.8468	0.0439	0.2567	0.0518	0.3055
295	22.01	0.05	-0.9908	-0.0291	-0.3187	0.0297	0.3250	0.8436	0.0436	0.2571	0.0517	0.3048
296	22.10	0.06	-1.0007	-0.0304	-0.3222	0.0309	0.3220	0.8468	0.0439	0.2574	0.0518	0.3060
297	22.16	0.04	-0.9933	-0.0273	-0.3219	0.0278	0.3268	0.8465	0.0433	0.2450	0.0512	0.3130
298	22.24	0.05	-1.0067	-0.0291	-0.3233	0.0291	0.3231	0.8467	0.0436	0.2612	0.0515	0.3085
299	22.31	0.05	-1.0084	-0.0305	-0.3233	0.0302	0.3206	0.8546	0.0437	0.2648	0.0511	0.3098
300	22.38	0.05	-1.0057	-0.0300	-0.3218	0.0298	0.3200	0.8548	0.0438	0.2623	0.0508	0.3069
301	22.46	0.04	-0.9765	-0.0257	-0.3209	0.0243	0.3286	0.8560	0.0434	0.2638	0.0506	0.3075
302	22.53	0.05	-1.0196	-0.0314	-0.3283	0.0308	0.3220	0.8644	0.0437	0.2643	0.0506	0.3057
303	22.59	0.05	-1.0242	-0.0314	-0.3302	0.0306	0.3221	0.8651	0.0434	0.2575	0.0514	0.3047
304	22.67	0.05	-0.9984	-0.0275	-0.3250	0.0275	0.3255	0.8692	0.0434	0.2653	0.0508	0.3064
305	22.74	0.05	-1.0219	-0.0296	-0.3268	0.0290	0.3219	0.8627	0.0434	0.2671	0.0503	0.3096
306	22.81	0.05	-0.9897	-0.0253	-0.3252	0.0255	0.3288	0.8755	0.0431	0.2720	0.0493	0.3187
307	22.89	0.05	-0.9926	-0.0257	-0.3255	0.0259	0.3279	0.8755	0.0434	0.2720	0.0496	0.3187
308	22.96	0.04	-1.0098	-0.0263	-0.3256	0.0263	0.3256	0.8721	0.0434	0.2730	0.0498	0.3138
309	23.04	0.05	-1.0241	-0.0275	-0.3267	0.0269	0.3249	0.8690	0.0434	0.2714	0.0500	0.3123
310	23.11	0.06	-1.0150	-0.0263	-0.3317	0.0261	0.3267	0.8755	0.0434	0.2720	0.0496	0.3187
311	23.19	0.06	-1.0241	-0.0275	-0.3327	0.0269	0.3249	0.8755	0.0434	0.2720	0.0496	0.3187
312	23.26	0.05	-1.0205	-0.0270	-0.3349	0.0265	0.3280	0.8755	0.0434	0.2720	0.0496	0.3187
313	23.33	0.06	-1.0146	-0.0257	-0.3366	0.0253	0.3317	0.8819	0.0431	0.2751	0.0489	0.3119
314	23.37	0.05	-1.0267	-0.0275	-0.3355	0.0268	0.3268	0.8883	0.0434	0.2782	0.0489	0.3132
315	23.38	0.05	-1.0151	-0.0261	-0.3342	0.0258	0.3292	0.8786	0.0431	0.2760	0.0491	0.3142
316	23.37	0.06	-1.0123	-0.0257	-0.3326	0.0254	0.3285	0.8819	0.0434	0.2751	0.0492	0.3119
317	23.37	0.05	-1.0154	-0.0265	-0.3317	0.0261	0.3267	0.8755	0.0434	0.2720	0.0496	0.3187
318	23.38	0.05	-1.0325	-0.0284	-0.3362	0.0275	0.3256	0.8786	0.0431	0.2768	0.0491	0.3142
319	23.37	0.04	-1.0063	-0.0257	-0.3345	0.0255	0.3324	0.8820	0.0428	0.2738	0.0486	0.3105
320	23.37	0.05	-1.0265	-0.0284	-0.3368	0.0280	0.3281	0.8754	0.0431	0.2745	0.0493	0.3136
321	23.38	0.01	-1.0180	-0.0257	-0.3345	0.0252	0.3286	0.8754	0.0428	0.2745	0.0489	0.3136
322	23.37	0.05	-1.0150	-0.0253	-0.3354	0.0249	0.3304	0.8753	0.0431	0.2759	0.0493	0.3151

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 8 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 4 0.60 1.7 45.0 BLAIR3 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPE1	YCPE1	CNF2	CM2	CA2	XCPE2	YCPE2
323	23.46	0.05	-1.0297	-0.0234	[illegible]	0.0733	0.3364	0.8913	0.0431	0.2823	0.0484	0.3167
324	24.50	0.05	-1.0534	-0.0253	[illegible]	0.0240	0.3425	0.9268	0.0422	0.2954	0.0455	0.3188
325	25.62	0.07	-0.9695	-0.0196	[illegible]	0.0196	0.3587	0.9846	0.0405	0.3157	0.0412	0.3206
326	26.71	0.08	-0.9664	-0.0111	[illegible]	0.0128	0.3750	1.0361	0.0380	0.3392	0.0367	0.3273
327	27.84	0.09	-0.7605	-0.0044	[illegible]	0.0058	0.3899	1.0768	0.0367	0.3501	0.0341	0.3257
328	29.00	0.10	-0.7609	-0.0018	[illegible]	0.0018	0.3816	1.1037	0.0357	0.3627	0.0323	0.3286
329	30.15	0.09	-0.8118	-0.0017	[illegible]	0.0021	0.3897	1.1263	0.0351	0.3684	0.0312	0.3271
330	31.33	0.10	-0.7751	0.0022	[illegible]	-0.0029	0.3925	1.1047	0.0332	0.3883	0.0285	0.3334
331	32.55	0.12	-0.7869	-0.0009	[illegible]	0.0011	0.3854	1.2098	0.0313	0.4048	0.0258	0.3346
332	33.67	0.13	-0.7606	-0.0036	[illegible]	0.0046	0.3824	1.2443	0.0293	0.4197	0.0236	0.3373
333	34.86	0.14	-0.7663	-0.0116	[illegible]	0.0144	0.3767	1.2701	0.0274	0.4308	0.0216	0.3392
334	36.10	0.16	-0.7356	-0.0155	[illegible]	0.0210	0.3664	1.3188	0.0255	0.4463	0.0195	0.3395
335	37.36	0.18	-0.7196	-0.0249	[illegible]	0.0346	0.3659	1.3663	0.0230	0.4651	0.0168	0.3404
336	38.76	0.17	-0.7363	-0.0311	[illegible]	0.0422	0.3657	1.4018	0.0197	0.4808	0.0140	0.3438
337	40.43	0.16	-0.8342	-0.0382	[illegible]	0.0455	0.3540	1.4405	0.0172	0.4982	0.0119	0.3458
338	42.40	0.11	-0.9697	-0.0347	[illegible]	0.0418	0.3469	1.4891	0.0143	0.5102	0.0097	0.3473
339	44.65	0.11	-0.9056	-0.0250	[illegible]	0.0276	0.3552	1.4849	0.0114	0.5196	0.0077	0.3493
340	47.14	0.09	-0.7069	-0.0197	[illegible]	0.0278	0.3643	1.4389	0.0117	0.5065	0.0081	0.3528
341	49.59	0.06	-0.3419	0.0016	[illegible]	-0.0040	0.2809	1.4116	0.0111	0.5069	0.0079	0.3591
342	52.21	0.03	-0.1063	0.0138	[illegible]	-0.0891	0.0646	1.4697	0.0059	0.5371	0.0060	0.3655
343	55.25	-0.07	0.1139	0.0403	[illegible]	0.3517	0.9729	1.6037	-0.0030	0.5880	-0.0019	0.3664
344	57.92	-0.03	0.0399	0.0235	[illegible]	0.5694	2.1063	1.5440	-0.0026	0.5717	-0.0017	0.3703
345	57.95	-0.04	0.0397	0.0259	[illegible]	0.6521	2.1946	1.5503	-0.0030	0.5744	-0.0019	0.3709
346	57.96	-0.02	0.0458	0.0283	[illegible]	0.5772	1.9239	1.5586	-0.0040	0.5823	-0.0025	0.3741
347	57.95	-0.03	0.0578	0.0278	[illegible]	0.4908	1.5262	1.5662	-0.0040	0.5827	-0.0025	0.3720

PAGE 3 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 .6 0.60 1.7 45.0 mixed23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CA3	CM3	XCPF3	YCPF3	CNF4	CA4	CM4	XCPF4	YCPF4
1	-5.90	0.04	0.3320	9.9999	0.0923	9.9999	0.2781	-0.3112	-0.0495	-0.1268	0.1591	0.4074
2	-5.96	0.08	0.3321	9.9999	0.0912	9.9999	0.2745	-0.3016	-0.0481	-0.1222	0.1597	0.4052
3	-5.90	0.04	0.3320	9.9999	0.0923	9.9999	0.2781	-0.3047	-0.0484	-0.1237	0.1590	0.4060
4	-5.90	0.04	0.3320	9.9999	0.0923	9.9999	0.2781	-0.3046	-0.0488	-0.1237	0.1603	0.4061
5	-5.90	0.04	0.3340	9.9999	0.0940	9.9999	0.2780	-0.3079	-0.0491	-0.1227	0.1595	0.3986
6	-5.96	0.08	0.3360	9.9999	0.0940	9.9999	0.2780	-0.3080	-0.0488	-0.1227	0.1585	0.3985
7	-5.90	0.04	0.3320	9.9999	0.0923	9.9999	0.2781	-0.3013	-0.0484	-0.1234	0.1607	0.4095
8	-5.76	0.04	0.3261	9.9999	0.0895	9.9999	0.2746	-0.2915	-0.0469	-0.1139	0.1609	0.3906
9	-5.83	0.06	0.3263	9.9999	0.0843	9.9999	0.2633	-0.2915	-0.0465	-0.1131	0.1652	0.4016
10	-5.82	0.08	0.3144	9.9999	0.0827	9.9999	0.2630	-0.2816	-0.0462	-0.1118	0.1641	0.3971
11	-5.27	0.04	0.3054	9.9999	0.0749	9.9999	0.2591	-0.2752	-0.0449	-0.1062	0.1630	0.3860
12	-5.03	0.04	0.3005	9.9999	0.0746	9.9999	0.2569	-0.2652	-0.0436	-0.0979	0.1644	0.3692
13	-4.97	0.04	0.2965	9.9999	0.0742	9.9999	0.2502	-0.2521	-0.0420	-0.0919	0.1665	0.3643
14	-4.82	0.08	0.2906	9.9999	0.0714	9.9999	0.2457	-0.2521	-0.0423	-0.0919	0.1676	0.3643
15	-4.65	0.08	0.2748	9.9999	0.0657	9.9999	0.2357	-0.2456	-0.0413	-0.0888	0.1682	0.3515
16	-4.53	0.05	0.2748	9.9999	0.0657	9.9999	0.2357	-0.2357	-0.0403	-0.0842	0.1711	0.3573
17	-4.37	0.04	0.2758	9.9999	0.0643	9.9999	0.2330	-0.2259	-0.0391	-0.0797	0.1730	0.3528
18	-4.29	0.08	0.2729	9.9999	0.0629	9.9999	0.2306	-0.2160	-0.0377	-0.0726	0.1746	0.3358
19	-4.11	0.08	0.2639	9.9999	0.0587	9.9999	0.2223	-0.2093	-0.0377	-0.0721	0.1803	0.3444
20	-3.95	0.08	0.2491	9.9999	0.0515	9.9999	0.2068	-0.2095	-0.0371	-0.0708	0.1766	0.3381
21	-3.63	0.08	0.2550	9.9999	0.0544	9.9999	0.2134	-0.1930	-0.0355	-0.0645	0.1840	0.3348
22	-3.76	0.08	0.2487	9.9999	0.0503	9.9999	0.2021	-0.1826	-0.0351	-0.0623	0.1923	0.3413
23	-3.57	0.08	0.2369	9.9999	0.0435	9.9999	0.1837	-0.1762	-0.0338	-0.0567	0.1917	0.3220
24	-3.45	0.04	0.2308	9.9999	0.0442	9.9999	0.1915	-0.1729	-0.0338	-0.0565	0.1953	0.3270
25	-3.31	0.08	0.2308	9.9999	0.0453	9.9999	0.1965	-0.1599	-0.0318	-0.0505	0.1992	0.3156
26	-3.17	0.04	0.2149	9.9999	0.0348	9.9999	0.1816	-0.1499	-0.0312	-0.0472	0.2079	0.3147
27	-3.04	0.03	0.2219	9.9999	0.0379	9.9999	0.1800	-0.1468	-0.0305	-0.0444	0.2078	0.3024
28	-2.91	0.08	0.2072	9.9999	0.0341	9.9999	0.1644	-0.1435	-0.0299	-0.0416	0.2085	0.2898
29	-2.76	0.04	0.2007	9.9999	0.0335	9.9999	0.1668	-0.1333	-0.0291	-0.0395	0.2185	0.2959
30	-2.64	0.08	0.1868	9.9999	0.0290	9.9999	0.1538	-0.1270	-0.0279	-0.0364	0.2196	0.2865
31	-2.50	0.08	0.1838	9.9999	0.0298	9.9999	0.1538	-0.1171	-0.0269	-0.0318	0.2298	0.2718
32	-2.37	0.07	0.1769	9.9999	0.0283	9.9999	0.1522	-0.1171	-0.0266	-0.0293	0.2273	0.2504
33	-2.25	0.08	0.1828	9.9999	0.0274	9.9999	0.1499	-0.1042	-0.0246	-0.0233	0.2361	0.2231
34	-2.12	0.08	0.1832	9.9999	0.0180	9.9999	0.1151	-0.0976	-0.0268	-0.0203	0.2460	0.2075
35	-1.98	0.08	0.1598	9.9999	0.0208	9.9999	0.1311	-0.0912	-0.0227	-0.0172	0.2487	0.1884
36	-1.86	0.08	0.1582	9.9999	0.0171	9.9999	0.1043	-0.0946	-0.0227	-0.0162	0.2398	0.1716
37	-1.73	0.08	0.1531	9.9999	0.0180	9.9999	0.1178	-0.0815	-0.0207	-0.0101	0.2544	0.1243
38	-1.60	0.07	0.1503	9.9999	0.0131	9.9999	0.0873	-0.0815	-0.0205	-0.0076	0.2509	0.0935
39	-1.48	0.07	0.1395	9.9999	0.0084	9.9999	0.0620	-0.0783	-0.0201	-0.0061	0.2565	0.0777
40	-1.35	0.08	0.1355	9.9999	0.0096	9.9999	0.0705	-0.0652	-0.0188	-0.0025	0.2885	0.0385
41	-1.22	0.08	0.1295	9.9999	0.0079	9.9999	0.0611	-0.0523	-0.0175	-0.0040	0.3339	0.0756
42	-1.10	0.08	0.1295	9.9999	0.0065	9.9999	0.0511	-0.0495	-0.0152	-0.0023	0.3080	0.0468
43	-0.98	0.08	0.1175	9.9999	0.0046	9.9999	0.0394	-0.0466	-0.0143	-0.0020	0.3077	0.0437
44	-0.85	0.07	0.1178	9.9999	0.0035	9.9999	0.0295	-0.0432	-0.0136	-0.0030	0.3147	0.0692
45	-0.74	0.08	0.1115	9.9999	0.0030	9.9999	0.0268	-0.0404	-0.0114	-0.0014	0.2816	0.0334
46	-0.61	0.07	0.1115	9.9999	0.0030	9.9999	0.0268	-0.0393	-0.0094	0.0017	0.2732	-0.0507

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 4 MACH 0.80 RN/FT=6 1.7 PHI 45.0 CONF 1=CF23 B.B L 0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	-0.49	0.07	0.1055	9.9999	0.0214	9.9999	0.0128	-0.0311	-0.0046	0.0033	0.2702	-0.1056
48	-0.37	0.07	0.0994	9.9999	0.0669	9.9999	0.0087	-0.0342	-0.0091	0.0030	0.2655	-0.0876
49	-0.25	0.07	0.0935	9.9999	-0.0664	9.9999	-0.0063	-0.0215	-0.0067	0.0067	0.2870	-0.3094
50	-0.13	0.07	0.0904	9.9999	0.0126	9.9999	0.0060	-0.0151	-0.0048	0.0097	0.3185	-0.6433
51	-0.02	0.07	0.0874	9.9999	-0.0713	9.9999	-0.0143	-0.0087	-0.0042	0.0102	0.4689	-1.1778
52	0.11	0.08	0.0814	9.9999	-0.0217	9.9999	-0.0213	-0.0055	-0.0036	0.0105	0.6491	-1.9123
53	0.24	0.07	0.0756	9.9999	-0.0769	9.9999	-0.0906	-0.0022	-0.0036	0.0107	1.0087	-4.8261
54	0.35	0.07	0.0699	9.9999	-0.0159	9.9999	-0.1561	0.0075	-0.0022	0.0128	-0.2949	1.7851
55	0.47	0.07	0.0698	9.9999	-0.0697	9.9999	-0.1397	0.0075	-0.0022	0.0141	-0.2949	1.8718
56	0.58	0.08	0.0579	9.9999	-0.1162	9.9999	-0.2450	0.0073	-0.0010	0.0191	-0.1316	2.0053
57	0.70	0.07	0.0578	9.9999	-0.1161	9.9999	-0.2437	0.0105	-0.0003	0.0206	-0.0275	1.9633
58	0.83	0.07	0.0518	9.9999	-0.1169	9.9999	-0.2812	0.0199	0.0019	0.0215	0.0471	1.0825
59	0.94	0.07	0.0459	9.9999	-0.0174	9.9999	-0.3782	0.0197	0.0032	0.0253	0.1618	1.2843
60	1.06	0.06	0.0371	9.9999	-0.0193	9.9999	-0.5208	0.0195	0.0039	0.0254	0.1980	1.3028
61	1.17	0.06	0.0262	9.9999	-0.0224	9.9999	-0.7945	0.0226	0.0048	0.0269	0.2137	1.1923
62	1.28	0.06	0.0252	9.9999	-0.0226	9.9999	-0.8733	0.0256	0.0061	0.0284	0.2377	1.1096
63	1.41	0.06	0.0243	9.9999	-0.0258	9.9999	-0.9113	0.0319	0.0074	0.0327	0.2326	1.0242
64	1.53	0.07	0.0183	9.9999	-0.0279	9.9999	-1.7191	0.0319	0.0076	0.0327	0.2326	1.0242
65	1.64	0.07	0.0134	9.9999	-0.0335	9.9999	-2.2734	0.0386	0.0077	0.0357	0.2008	0.9250
66	1.75	0.07	0.0106	9.9999	-0.0331	9.9999	-3.1091	0.0385	0.0081	0.0378	0.2105	0.9599
67	1.86	0.06	0.0079	9.9999	-0.0321	9.9999	-4.2692	0.0385	0.0081	0.0357	0.2105	0.9273
68	1.97	0.07	0.0010	9.9999	-0.0369	9.9999	-21.2941	0.0514	0.0100	0.0429	0.1951	0.8349
69	2.09	0.07	-0.0013	9.9999	-0.0373	9.9999	29.7692	0.0513	0.0099	0.0429	0.1936	0.8365
70	2.21	0.07	-0.0013	9.9999	-0.0373	9.9999	29.7692	0.0577	0.0109	0.0447	0.1890	0.7762
71	2.31	0.06	-0.0101	9.9999	-0.0395	9.9999	2.4671	0.0577	0.0109	0.0459	0.1890	0.7960
72	2.43	0.07	-0.0159	9.9999	-0.0432	9.9999	2.7152	0.0640	0.0125	0.0490	0.1961	0.7662
73	2.55	0.06	-0.0216	9.9999	-0.0488	9.9999	2.1136	0.0702	0.0145	0.0520	0.2060	0.7484
74	2.65	0.07	-0.0266	9.9999	-0.0497	9.9999	2.0196	0.0770	0.0138	0.0525	0.1792	0.6817
75	2.78	0.07	-0.0396	9.9999	-0.0544	9.9999	1.3824	0.0768	0.0151	0.0575	0.1972	0.7487
76	2.90	0.07	-0.0369	9.9999	-0.0541	9.9999	1.4881	0.0833	0.0157	0.0593	0.1889	0.7126
77	3.00	0.07	-0.0453	9.9999	-0.0561	9.9999	1.2398	0.0833	0.0157	0.0605	0.1889	0.7265
78	3.12	0.07	-0.0540	9.9999	-0.0592	9.9999	1.1143	0.0897	0.0167	0.0623	0.1868	0.6946
79	3.23	0.07	-0.0569	9.9999	-0.0624	9.9999	1.1036	0.0929	0.0171	0.0638	0.1838	0.6864
80	3.34	0.06	-0.0589	9.9999	-0.0625	9.9999	1.1036	0.0962	0.0174	0.0641	0.1805	0.6668
81	3.46	0.07	-0.0687	9.9999	-0.0673	9.9999	0.9789	0.0995	0.0177	0.0668	0.1775	0.6712
82	3.58	0.07	-0.0775	9.9999	-0.0716	9.9999	0.9215	0.1058	0.0190	0.0699	0.1796	0.6688
83	3.68	0.06	-0.0775	9.9999	-0.0716	9.9999	0.9215	0.1090	0.0196	0.0751	0.1796	0.6885
84	3.80	0.07	-0.0805	9.9999	-0.0732	9.9999	0.8471	0.1122	0.0203	0.0741	0.1806	0.6804
85	3.91	0.06	-0.1040	9.9999	-0.0816	9.9999	0.7868	0.1155	0.0206	0.0782	0.1779	0.6767
86	4.01	0.06	-0.1009	9.9999	-0.0826	9.9999	0.8184	0.1220	0.0215	0.0811	0.1764	0.6653
87	4.14	0.07	-0.1184	9.9999	-0.0885	9.9999	0.7474	0.1186	0.0208	0.0795	0.1758	0.6705
88	4.25	0.07	-0.1125	9.9999	-0.0863	9.9999	0.7719	0.1347	0.0228	0.0865	0.1691	0.6275
89	4.36	0.06	-0.1154	9.9999	-0.0894	9.9999	0.7751	0.1345	0.0237	0.0883	0.1765	0.6564
90	4.47	0.06	-0.1332	9.9999	-0.0951	9.9999	0.6993	0.1378	0.0241	0.0897	0.1751	0.6513
91	4.56	0.07	-0.1360	9.9999	-0.0960	9.9999	0.7211	0.1378	0.0241	0.0910	0.1751	0.6604
92	4.66	0.06	-0.1447	9.9999	-0.1010	9.9999	0.6980	0.1442	0.0254	0.0952	0.1760	0.6606

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 4 0.60 1.7 45.0 ALL OF 23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	4.78	0.07	-0.1387	9.9999	-0.1005	9.9999	0.7246	0.1441	0.0257	0.0965	0.1782	0.6698
94	4.86	0.08	-0.1564	9.9999	-0.1066	9.9999	0.6817	0.1441	0.0261	0.0964	0.1808	0.6705
95	4.99	0.06	-0.1823	9.9999	-0.1096	9.9999	0.6762	0.1505	0.0266	0.1008	0.1769	0.6699
96	5.16	0.08	-0.1593	9.9999	-0.1104	9.9999	0.6924	0.1570	0.0276	0.1038	0.1758	0.6613
97	5.19	0.07	-0.1711	9.9999	-0.1136	9.9999	0.6638	0.1537	0.0273	0.1035	0.1777	0.6736
98	5.24	0.08	-0.1739	9.9999	-0.1173	9.9999	0.6748	0.1601	0.0286	0.1068	0.1784	0.6661
99	5.39	0.05	-0.1769	9.9999	-0.1187	9.9999	0.6710	0.1665	0.0295	0.1096	0.1773	0.6582
100	5.51	0.08	-0.1736	9.9999	-0.1206	9.9999	0.6956	0.1728	0.0298	0.1136	0.1725	0.6572
101	5.66	0.06	-0.1819	9.9999	-0.1237	9.9999	0.6780	0.1723	0.0304	0.1146	0.1764	0.6652
102	5.76	0.08	-0.1907	9.9999	-0.1252	9.9999	0.6569	0.1788	0.0311	0.1176	0.1738	0.6579
103	5.80	0.07	-0.1964	9.9999	-0.1303	9.9999	0.6631	0.1756	0.0311	0.1211	0.1769	0.6696
104	5.89	0.08	-0.2041	9.9999	-0.1354	9.9999	0.6528	0.1789	0.0311	0.1201	0.1737	0.6715
105	5.99	0.06	-0.2110	9.9999	-0.1360	9.9999	0.6447	0.1917	0.0326	0.1236	0.1701	0.6647
106	6.10	0.08	-0.2134	9.9999	-0.1387	9.9999	0.6432	0.1917	0.0326	0.1261	0.1701	0.6578
107	6.20	0.06	-0.2316	9.9999	-0.1464	9.9999	0.6351	0.1918	0.0323	0.1249	0.1685	0.6589
108	6.24	0.08	-0.2285	9.9999	-0.1456	9.9999	0.6372	0.1982	0.0333	0.1291	0.1688	0.6514
109	6.41	0.07	-0.2295	9.9999	-0.1456	9.9999	0.6372	0.2046	0.0343	0.1332	0.1674	0.6511
110	6.56	0.08	-0.2313	9.9999	-0.1493	9.9999	0.6454	0.2112	0.0345	0.1350	0.1635	0.6391
111	6.59	0.07	-0.2312	9.9999	-0.1516	9.9999	0.6557	0.2111	0.0348	0.1375	0.1650	0.6513
112	6.70	0.07	-0.2401	9.9999	-0.1536	9.9999	0.6331	0.2111	0.0352	0.1387	0.1668	0.6572
113	6.81	0.07	-0.2516	9.9999	-0.1590	9.9999	0.6319	0.2176	0.0355	0.1405	0.1632	0.6457
114	6.89	0.07	-0.2606	9.9999	-0.1642	9.9999	0.6265	0.2174	0.0368	0.1429	0.1599	0.6559
115	7.01	0.06	-0.2546	9.9999	-0.1604	9.9999	0.6298	0.2241	0.0362	0.1471	0.1614	0.6565
116	7.14	0.07	-0.2722	9.9999	-0.1664	9.9999	0.6115	0.2306	0.0368	0.1489	0.1599	0.6456
117	7.19	0.06	-0.2720	9.9999	-0.1711	9.9999	0.6289	0.2242	0.0359	0.1471	0.1596	0.6562
118	7.26	0.08	-0.2749	9.9999	-0.1713	9.9999	0.6238	0.2307	0.0368	0.1514	0.1593	0.6562
119	7.34	0.07	-0.2807	9.9999	-0.1752	9.9999	0.6243	0.2374	0.0368	0.1543	0.1549	0.6580
120	7.49	0.06	-0.2856	9.9999	-0.1769	9.9999	0.6172	0.2438	0.0374	0.1573	0.1535	0.6450
121	7.57	0.07	-0.2925	9.9999	-0.1797	9.9999	0.6143	0.2407	0.0368	0.1582	0.1527	0.6573
122	7.64	0.07	-0.2869	9.9999	-0.1803	9.9999	0.6297	0.2535	0.0387	0.1643	0.1526	0.6483
123	7.77	0.07	-0.2952	9.9999	-0.1845	9.9999	0.6250	0.2537	0.0391	0.1642	0.1502	0.6474
124	7.85	0.07	-0.2980	9.9999	-0.1858	9.9999	0.6235	0.2537	0.0381	0.1667	0.1502	0.6573
125	7.94	0.07	-0.3070	9.9999	-0.1854	9.9999	0.6040	0.2569	0.0384	0.1658	0.1495	0.6454
126	8.04	0.06	-0.3155	9.9999	-0.1942	9.9999	0.6156	0.2570	0.0381	0.1669	0.1483	0.6494
127	8.13	0.06	-0.3156	9.9999	-0.1931	9.9999	0.6117	0.2635	0.0387	0.1712	0.1468	0.6496
128	8.21	0.08	-0.3242	9.9999	-0.1995	9.9999	0.6155	0.2669	0.0384	0.1726	0.1439	0.6468
129	8.30	0.06	-0.3360	9.9999	-0.2039	9.9999	0.6068	0.2670	0.0381	0.1726	0.1428	0.6465
130	8.39	0.06	-0.3300	9.9999	-0.2035	9.9999	0.6167	0.2701	0.0390	0.1753	0.1443	0.6492
131	8.47	0.06	-0.3418	9.9999	-0.2067	9.9999	0.6047	0.2735	0.0387	0.1768	0.1414	0.6462
132	8.56	0.06	-0.3418	9.9999	-0.2078	9.9999	0.6081	0.2767	0.0394	0.1808	0.1423	0.6536
133	8.64	0.06	-0.3474	9.9999	-0.2118	9.9999	0.6096	0.2768	0.0387	0.1795	0.1398	0.6483
134	8.74	0.06	-0.3474	9.9999	-0.2118	9.9999	0.6096	0.2833	0.0394	0.1825	0.1398	0.6441
135	8.83	0.06	-0.3620	9.9999	-0.2187	9.9999	0.6042	0.2867	0.0394	0.1852	0.1373	0.6459
136	8.93	0.06	-0.3709	9.9999	-0.2217	9.9999	0.5978	0.2870	0.0384	0.1852	0.1338	0.6453
137	9.01	0.06	-0.3708	9.9999	-0.2229	9.9999	0.6011	0.2837	0.0381	0.1849	0.1344	0.6517
138	9.09	0.06	-0.3826	9.9999	-0.2262	9.9999	0.5912	0.2933	0.0394	0.1881	0.1362	0.6416

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 6

MANTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH WAIB-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 4 0.80 1.1 45.0 WING23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	ACPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
139	9.20	0.06	-0.3764	9.9999	-0.2337	9.9999	0.4119	0.2934	0.0390	0.1881	0.1329	0.6412
140	9.25	0.07	-0.3883	9.9999	-0.2313	9.9999	0.5957	0.2968	0.0387	0.1908	0.1304	0.6427
141	9.35	0.06	-0.3992	9.9999	-0.2363	9.9999	0.5920	0.2964	0.0380	0.1904	0.1283	0.6423
142	9.40	0.06	-0.3952	9.9999	-0.2359	9.9999	0.6010	0.2997	0.0380	0.1918	0.1269	0.6401
143	9.53	0.07	-0.3991	9.9999	-0.2346	9.9999	0.5974	0.3024	0.0386	0.1946	0.1274	0.6426
144	9.61	0.07	-0.4107	9.9999	-0.2419	9.9999	0.5849	0.3031	0.0380	0.1958	0.1256	0.6468
145	9.73	0.06	-0.4076	9.9999	-0.2429	9.9999	0.5954	0.3033	0.0373	0.1958	0.1231	0.6456
146	9.79	0.07	-0.4154	9.9999	-0.2479	9.9999	0.5931	0.3036	0.0361	0.1981	0.1188	0.6524
147	9.88	0.07	-0.4223	9.9999	-0.2466	9.9999	0.5885	0.3066	0.0371	0.1964	0.1208	0.6469
148	9.98	0.06	-0.4229	9.9999	-0.2474	9.9999	0.5857	0.3130	0.0380	0.2014	0.1215	0.6433
149	10.07	0.06	-0.4252	9.9999	-0.2560	9.9999	0.5879	0.3291	0.0393	0.2027	0.1193	0.6159
150	10.16	0.07	-0.4332	9.9999	-0.2553	9.9999	0.5884	0.3167	0.0368	0.2041	0.1161	0.6444
151	10.26	0.07	-0.4399	9.9999	-0.2558	9.9999	0.5815	0.3199	0.0371	0.2031	0.1158	0.6358
152	10.34	0.06	-0.4457	9.9999	-0.2585	9.9999	0.5800	0.3297	0.0373	0.2038	0.1133	0.6181
153	10.42	0.07	-0.4515	9.9999	-0.2613	9.9999	0.5788	0.3233	0.0366	0.2070	0.1137	0.6401
154	10.51	0.07	-0.4518	9.9999	-0.2590	9.9999	0.5735	0.3299	0.0371	0.2100	0.1123	0.6364
155	10.59	0.06	-0.4515	9.9999	-0.2624	9.9999	0.5813	0.3300	0.0366	0.2099	0.1114	0.6360
156	10.66	0.06	-0.4495	9.9999	-0.2631	9.9999	0.5906	0.3365	0.0371	0.2116	0.1101	0.6289
157	10.74	0.06	-0.4572	9.9999	-0.2664	9.9999	0.5827	0.3301	0.0364	0.2111	0.1102	0.6396
158	10.86	0.07	-0.4600	9.9999	-0.2678	9.9999	0.5820	0.3301	0.0364	0.2124	0.1102	0.6436
159	10.95	0.07	-0.4684	9.9999	-0.2696	9.9999	0.5749	0.3368	0.0361	0.2153	0.1071	0.6391
160	11.03	0.07	-0.4718	9.9999	-0.2710	9.9999	0.5744	0.3432	0.0371	0.2183	0.1088	0.6359
161	11.12	0.07	-0.4707	9.9999	-0.2724	9.9999	0.5738	0.3403	0.0354	0.2191	0.1041	0.6439
162	11.19	0.07	-0.4716	9.9999	-0.2710	9.9999	0.5744	0.3433	0.0368	0.2195	0.1071	0.6394
163	11.26	0.07	-0.4806	9.9999	-0.2752	9.9999	0.5726	0.3434	0.0364	0.2183	0.1059	0.6356
164	11.37	0.07	-0.4836	9.9999	-0.2777	9.9999	0.5745	0.3372	0.0348	0.2213	0.1033	0.6564
165	11.45	0.07	-0.4804	9.9999	-0.2775	9.9999	0.5776	0.3438	0.0351	0.2218	0.1022	0.6452
166	11.54	0.07	-0.4963	9.9999	-0.2791	9.9999	0.5740	0.3502	0.0361	0.2248	0.1031	0.6421
167	11.63	0.07	-0.4930	9.9999	-0.2824	9.9999	0.5728	0.3509	0.0355	0.2265	0.1012	0.6453
168	11.72	0.07	-0.4958	9.9999	-0.2849	9.9999	0.5746	0.3447	0.0345	0.2284	0.1002	0.6627
169	11.80	0.07	-0.4959	9.9999	-0.2840	9.9999	0.5691	0.3512	0.0348	0.2301	0.0992	0.6552
170	11.87	0.07	-0.4953	9.9999	-0.2838	9.9999	0.5722	0.3479	0.0348	0.2311	0.1001	0.6642
171	11.97	0.06	-0.5047	9.9999	-0.2868	9.9999	0.5682	0.3546	0.0348	0.2328	0.0982	0.6566
172	12.06	0.07	-0.5106	9.9999	-0.2884	9.9999	0.5648	0.3482	0.0339	0.2335	0.0973	0.6705
173	12.14	0.07	-0.5076	9.9999	-0.2882	9.9999	0.5678	0.3547	0.0348	0.2345	0.0982	0.6668
174	12.22	0.07	-0.5135	9.9999	-0.2903	9.9999	0.5665	0.3485	0.0333	0.2372	0.0955	0.6805
175	12.31	0.06	-0.5106	9.9999	-0.2896	9.9999	0.5671	0.3550	0.0339	0.2389	0.0954	0.6730
176	12.38	0.07	-0.5222	9.9999	-0.2952	9.9999	0.5652	0.3423	0.0319	0.2390	0.0933	0.6981
177	12.47	0.07	-0.5222	9.9999	-0.2952	9.9999	0.5652	0.3583	0.0343	0.2416	0.0958	0.6744
178	12.55	0.07	-0.5192	9.9999	-0.2960	9.9999	0.5702	0.3520	0.0329	0.2410	0.0935	0.6848
179	12.63	0.07	-0.5281	9.9999	-0.2968	9.9999	0.5620	0.3552	0.0333	0.2426	0.0937	0.6830
180	12.72	0.07	-0.5171	9.9999	-0.2975	9.9999	0.5753	0.3655	0.0348	0.2462	0.0948	0.6737
181	12.81	0.07	-0.5260	9.9999	-0.2994	9.9999	0.5693	0.3527	0.0330	0.2464	0.0936	0.6988
182	12.90	0.07	-0.5268	9.9999	-0.3019	9.9999	0.5709	0.3499	0.0317	0.2498	0.0907	0.7168
183	12.98	0.07	-0.5349	9.9999	-0.3001	9.9999	0.5618	0.3659	0.0330	0.2474	0.0902	0.6762
184	13.06	0.07	-0.5408	9.9999	-0.3017	9.9999	0.5579	0.3667	0.0311	0.2508	0.0896	0.7234

MANIN.MISSILE TAILS.EFFECTS DATA

TEST 7 PART 4 MACH 0.80 RN10-6 1.7 PHI 45.0 CONF B1+W23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	Cm3	Cb3	XCPF3	YCPF3	CNF4	Cm4	Cb4	XCPF4	YCPF4
185	13.15	0.07	-0.5497	9.9999	-0.3029	9.9999	0.5601	0.3694	0.0330	0.2526	0.0893	0.6839
186	13.22	0.07	-0.5436	9.9999	-0.3051	9.9999	0.5618	0.3660	0.0330	0.2523	0.0902	0.6896
187	13.31	0.07	-0.5407	9.9999	-0.3029	9.9999	0.5601	0.3596	0.0323	0.2542	0.0899	0.7078
188	13.40	0.07	-0.5405	9.9999	-0.3068	9.9999	0.5614	0.3598	0.0317	0.2542	0.0882	0.7068
189	13.48	0.07	-0.5525	9.9999	-0.3073	9.9999	0.5562	0.3663	0.0323	0.2572	0.0883	0.7023
190	13.56	0.07	-0.5465	9.9999	-0.3080	9.9999	0.5636	0.3631	0.0317	0.2557	0.0874	0.7042
191	13.65	0.07	-0.5534	9.9999	-0.3101	9.9999	0.5604	0.3669	0.0324	0.2590	0.0884	0.7058
192	13.75	0.07	-0.5503	9.9999	-0.3116	9.9999	0.5620	0.3736	0.0324	0.2606	0.0868	0.6976
193	13.90	0.07	-0.5503	9.9999	-0.3116	9.9999	0.5600	0.3673	0.0312	0.2601	0.0848	0.7082
194	13.89	0.07	-0.5591	9.9999	-0.3161	9.9999	0.5617	0.3770	0.0324	0.2622	0.0860	0.6954
195	13.99	0.07	-0.5592	9.9999	-0.3129	9.9999	0.5595	0.3674	0.0312	0.2638	0.0848	0.7180
196	14.06	0.07	-0.5561	9.9999	-0.3173	9.9999	0.5707	0.3836	0.0324	0.2663	0.0845	0.6962
197	14.15	0.07	-0.5620	9.9999	-0.3167	9.9999	0.5634	0.3868	0.0327	0.2666	0.0846	0.6892
198	14.23	0.07	-0.5620	9.9999	-0.3167	9.9999	0.5634	0.3761	0.0312	0.2655	0.0833	0.7098
199	14.30	0.07	-0.5644	9.9999	-0.3192	9.9999	0.5650	0.3678	0.0295	0.2637	0.0803	0.7160
200	14.39	0.07	-0.5707	9.9999	-0.3220	9.9999	0.5642	0.3822	0.0317	0.2703	0.0828	0.6980
201	14.49	0.07	-0.5719	9.9999	-0.3214	9.9999	0.5620	0.3749	0.0306	0.2697	0.0816	0.7192
202	14.57	0.07	-0.5718	9.9999	-0.3237	9.9999	0.5661	0.3815	0.0312	0.2727	0.0817	0.7147
203	14.66	0.07	-0.5768	9.9999	-0.3240	9.9999	0.5637	0.3816	0.0306	0.2714	0.0802	0.7113
204	14.74	0.07	-0.5717	9.9999	-0.3264	9.9999	0.5683	0.3882	0.0312	0.2744	0.0803	0.7069
205	14.82	0.07	-0.5776	9.9999	-0.3265	9.9999	0.5653	0.3862	0.0312	0.2769	0.0803	0.7134
206	14.92	0.07	-0.5776	9.9999	-0.3265	9.9999	0.5653	0.3884	0.0306	0.2768	0.0788	0.7128
207	15.00	0.07	-0.5776	9.9999	-0.3277	9.9999	0.5673	0.3949	0.0309	0.2773	0.0782	0.7022
208	15.09	0.07	-0.5845	9.9999	-0.3291	9.9999	0.5670	0.3949	0.0312	0.2798	0.0789	0.7085
209	15.18	0.06	-0.5835	9.9999	-0.3305	9.9999	0.5664	0.3951	0.0306	0.2811	0.0774	0.7114
210	15.24	0.07	-0.5835	9.9999	-0.3303	9.9999	0.5690	0.3820	0.0296	0.2775	0.0775	0.7264
211	15.34	0.07	-0.5834	9.9999	-0.3318	9.9999	0.5685	0.4016	0.0309	0.2815	0.0769	0.7011
212	15.42	0.07	-0.5835	9.9999	-0.3293	9.9999	0.5644	0.3855	0.0292	0.2802	0.0758	0.7269
213	15.50	0.07	-0.5892	9.9999	-0.3344	9.9999	0.5675	0.4019	0.0302	0.2852	0.0752	0.7097
214	15.59	0.07	-0.5952	9.9999	-0.3369	9.9999	0.5627	0.3857	0.0287	0.2827	0.0743	0.7330
215	15.68	0.07	-0.5921	9.9999	-0.3359	9.9999	0.5672	0.4004	0.0306	0.2857	0.0749	0.6995
216	15.75	0.07	-0.5921	9.9999	-0.3359	9.9999	0.5672	0.4020	0.0299	0.2852	0.0744	0.7096
217	15.84	0.07	-0.5921	9.9999	-0.3359	9.9999	0.5672	0.4021	0.0299	0.2869	0.0744	0.7185
218	15.92	0.06	-0.6022	9.9999	-0.3372	9.9999	0.5600	0.4028	0.0308	0.2907	0.0765	0.7217
219	16.01	0.06	-0.6022	9.9999	-0.3364	9.9999	0.5619	0.3945	0.0287	0.2876	0.0723	0.7255
220	16.08	0.07	-0.6050	9.9999	-0.3428	9.9999	0.5656	0.3947	0.0290	0.2892	0.0727	0.7236
221	16.17	0.07	-0.6020	9.9999	-0.3419	9.9999	0.5679	0.4193	0.0306	0.2956	0.0729	0.7050
222	16.26	0.07	-0.6113	9.9999	-0.3425	9.9999	0.5606	0.4130	0.0293	0.2926	0.0710	0.7088
223	16.32	0.07	-0.6040	9.9999	-0.3423	9.9999	0.5631	0.4162	0.0293	0.2941	0.0705	0.7065
224	16.41	0.07	-0.6081	9.9999	-0.3412	9.9999	0.5611	0.4196	0.0293	0.2955	0.0699	0.7043
225	16.50	0.07	-0.6104	9.9999	-0.3430	9.9999	0.5560	0.4065	0.0287	0.2921	0.0705	0.7185
226	16.57	0.07	-0.6228	9.9999	-0.3458	9.9999	0.5552	0.4198	0.0287	0.2968	0.0683	0.7078
227	16.66	0.07	-0.6168	9.9999	-0.3453	9.9999	0.5598	0.4065	0.0287	0.2946	0.0705	0.7247
228	16.75	0.07	-0.6168	9.9999	-0.3453	9.9999	0.5598	0.4198	0.0287	0.2980	0.0683	0.7188
229	16.83	0.07	-0.6197	9.9999	-0.3468	9.9999	0.5596	0.4037	0.0267	0.2929	0.0662	0.7256
230	16.91	0.07	-0.6256	9.9999	-0.3496	9.9999	0.5588	0.4102	0.0276	0.2960	0.0668	0.7217

TEST [illegible] MACH 9X10-6 [illegible] CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 [illegible] 0.00 [illegible] 23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF4	CN3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
231	16.99	0.07	-0.6228	[illegible]	-0.3458	9.9999	0.5552	0.4364	0.0290	0.3017	0.0665	0.6914
232	17.00	[illegible]	-0.6288	[illegible]	-0.3509	9.9999	0.5543	0.4201	0.0277	0.2942	0.0659	0.7122
233	17.15	0.07	-0.6316	[illegible]	-0.3501	9.9999	0.5542	0.3907	0.0255	0.2907	0.0652	0.7441
234	17.20	0.06	-0.6316	[illegible]	-0.3512	9.9999	0.5561	0.4301	0.0277	0.3011	0.0646	0.7001
235	17.33	0.07	-0.6316	[illegible]	-0.3512	9.9999	0.5561	0.4398	0.0287	0.3020	0.0652	0.6867
236	17.40	[illegible]	-0.6362	[illegible]	-0.3521	9.9999	0.5534	0.4294	0.0273	0.3042	0.0636	0.7085
237	17.48	0.06	-0.6351	[illegible]	-0.3544	9.9999	0.5571	0.4343	0.0277	0.3062	0.0630	0.6971
238	17.58	[illegible]	-0.6351	[illegible]	-0.3544	9.9999	0.5571	0.4343	0.0273	0.3035	0.0626	0.6962
239	17.65	0.07	-0.6351	[illegible]	-0.3544	9.9999	0.5571	0.4393	0.0273	0.3062	0.0622	0.6971
240	17.73	0.07	-0.6426	[illegible]	-0.3560	9.9999	0.5566	0.4166	0.0254	0.3007	0.0609	0.7219
241	17.81	0.05	-0.6361	[illegible]	-0.3544	9.9999	0.5571	0.4233	0.0254	0.3036	0.0599	0.7173
242	17.89	[illegible]	-0.6359	[illegible]	-0.3567	9.9999	0.5609	0.4168	0.0244	0.3019	0.0586	0.7243
243	17.98	0.07	-0.6359	[illegible]	-0.3567	9.9999	0.5609	0.4562	0.0267	0.3123	0.0588	0.6846
244	18.07	[illegible]	-0.6389	[illegible]	-0.3570	9.9999	0.5587	0.4073	0.0232	0.3010	0.0569	0.7392
245	18.14	0.07	-0.6390	[illegible]	-0.3558	9.9999	0.5568	0.4095	0.0267	0.3171	0.0569	0.6753
246	18.24	[illegible]	-0.6418	[illegible]	-0.3595	9.9999	0.5601	0.4581	0.0248	0.3143	0.0551	0.6982
247	18.31	0.07	-0.6419	[illegible]	-0.3572	9.9999	0.5564	0.4568	0.0248	0.3184	0.0543	0.6971
248	18.38	[illegible]	-0.6447	[illegible]	-0.3610	9.9999	0.5599	0.4305	0.0236	0.3115	0.0545	0.7234
249	18.47	0.06	-0.6418	[illegible]	-0.3595	9.9999	0.5601	0.4436	0.0241	0.3149	0.0544	0.7099
250	18.55	0.07	-0.6476	[illegible]	-0.3635	9.9999	0.5612	0.4145	0.0212	0.3076	0.0517	0.7421
251	18.64	0.07	-0.6476	[illegible]	-0.3635	9.9999	0.5612	0.4308	0.0225	0.3139	0.0522	0.7286
252	18.72	0.07	-0.6476	[illegible]	-0.3635	9.9999	0.5612	0.4604	0.0234	0.3199	0.0509	0.6967
253	18.79	0.08	-0.6477	[illegible]	-0.3623	9.9999	0.5594	0.4510	0.0215	0.3177	0.0477	0.7045
254	18.87	0.08	-0.6399	[illegible]	-0.3582	9.9999	0.5606	0.4642	0.0222	0.3237	0.0478	0.6976
255	18.95	0.08	-0.6362	[illegible]	-0.3614	9.9999	0.5681	0.4429	0.0205	0.3147	0.0462	0.7107
256	19.02	0.08	-0.6509	[illegible]	-0.3672	9.9999	0.5642	0.4298	0.0202	0.3138	0.0469	0.7381
257	19.09	0.08	-0.6341	[illegible]	-0.3628	9.9999	0.5676	0.4463	0.0202	0.3199	0.0452	0.7160
258	19.18	0.08	-0.6216	[illegible]	-0.3567	9.9999	0.5739	0.4759	0.0214	0.3283	0.0450	0.6988
259	19.25	0.08	-0.6274	[illegible]	-0.3595	9.9999	0.5731	0.4301	0.0189	0.3162	0.0440	0.7351
260	19.34	0.05	-0.6639	[illegible]	-0.3507	9.9999	0.5868	0.4696	0.0199	0.3265	0.0423	0.6953
261	19.41	0.08	-0.6155	[illegible]	-0.3585	9.9999	0.5825	0.4697	0.0196	0.3265	0.0417	0.6952
262	19.49	0.08	-0.6028	[illegible]	-0.3524	9.9999	0.5846	0.4820	0.0202	0.3331	0.0418	0.6911
263	19.57	0.08	-0.6261	[illegible]	-0.3612	9.9999	0.5768	0.4166	0.0170	0.3133	0.0408	0.7520
264	19.69	0.08	-0.5986	[illegible]	-0.3519	9.9999	0.5897	0.4562	0.0176	0.3260	0.0385	0.7147
265	19.73	0.08	-0.6044	[illegible]	-0.3563	9.9999	0.5856	0.4234	0.0166	0.3149	0.0392	0.7438
266	19.81	0.07	-0.5850	[illegible]	-0.3487	9.9999	0.5961	0.4563	0.0173	0.3260	0.0379	0.7145
267	19.88	0.08	-0.5732	[illegible]	-0.3454	9.9999	0.6026	0.4956	0.0189	0.3389	0.0382	0.6838
268	19.95	0.08	-0.5815	[illegible]	-0.3433	9.9999	0.6114	0.4958	0.0182	0.3413	0.0368	0.6883
269	20.03	0.08	-0.5843	[illegible]	-0.3459	9.9999	0.6130	0.4795	0.0170	0.3338	0.0354	0.6962
270	20.10	0.08	-0.5857	[illegible]	-0.3368	9.9999	0.6172	0.5049	0.0176	0.3425	0.0348	0.6784
271	20.18	0.08	-0.5282	[illegible]	-0.3309	9.9999	0.6264	0.5375	0.0188	0.3524	0.0350	0.6555
272	20.27	0.09	-0.5448	[illegible]	-0.3383	9.9999	0.6173	0.4748	0.0156	0.3347	0.0329	0.7049
273	20.33	0.08	-0.4593	[illegible]	-0.3420	9.9999	0.6115	0.4455	0.0144	0.3239	0.0323	0.7271
274	20.41	0.08	-0.5593	[illegible]	-0.3420	9.9999	0.6115	0.4487	0.0147	0.3266	0.0327	0.7248
275	20.50	0.07	-0.5652	[illegible]	-0.3424	9.9999	0.6058	0.4424	0.0137	0.3260	0.0310	0.7370
276	20.56	0.07	-0.5730	[illegible]	-0.3489	9.9999	0.6008	0.4097	0.0124	0.3138	0.0304	0.7659

AEDC-TR-75-125

TEST 7 PART 4 MACH .60 RN10-6 1.7 PHI 45.0 CONF 61 OF 23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CN4	XCPF4	YCPF4
277	20.63	0.06	-0.5477	9.9999	-0.3376	9.9999	0.6165	0.4687	0.0140	0.3365	0.0298	0.7180
278	20.71	0.07	-0.5476	9.9999	-0.3349	9.9999	0.6208	0.4525	0.0127	0.3304	0.0281	0.7301
279	20.79	0.07	-0.5543	9.9999	-0.3409	9.9999	0.6095	0.4525	0.0130	0.3316	0.0288	0.7328
280	20.87	0.06	-0.5593	9.9999	-0.3409	9.9999	0.6095	0.4557	0.0134	0.3319	0.0294	0.7284
281	20.95	0.06	-0.5740	9.9999	-0.3455	9.9999	0.6019	0.4460	0.0127	0.3275	0.0286	0.7343
282	21.04	0.07	-0.5776	9.9999	-0.3434	9.9999	0.5952	0.3970	0.0105	0.3127	0.0265	0.7876
283	21.10	0.07	-0.5654	9.9999	-0.3391	9.9999	0.5997	0.4234	0.0108	0.3220	0.0255	0.7605
284	21.19	0.07	-0.5713	9.9999	-0.3395	9.9999	0.5943	0.4233	0.0112	0.3196	0.0260	0.7558
285	21.28	0.07	-0.5771	9.9999	-0.3422	9.9999	0.5930	0.4036	0.0105	0.3119	0.0261	0.7729
286	21.32	0.06	-0.5807	9.9999	-0.3346	9.9999	0.5968	0.4635	0.0118	0.3353	0.0256	0.7234
287	21.41	0.06	-0.5660	9.9999	-0.3362	9.9999	0.5933	0.4375	0.0105	0.3259	0.0240	0.7450
288	21.48	0.08	-0.5813	9.9999	-0.3436	9.9999	0.5853	0.3482	0.0093	0.3075	0.0239	0.7922
289	21.56	0.06	-0.5725	9.9999	-0.3366	9.9999	0.5881	0.4308	0.0105	0.3230	0.0244	0.7498
290	21.64	0.07	-0.5735	9.9999	-0.3385	9.9999	0.5902	0.3991	0.0083	0.3137	0.0208	0.7868
291	21.72	0.07	-0.5736	9.9999	-0.3350	9.9999	0.5840	0.4384	0.0099	0.3290	0.0227	0.7504
292	21.78	0.05	-0.5884	9.9999	-0.3412	9.9999	0.5819	0.3997	0.0087	0.3155	0.0217	0.7893
293	21.86	0.06	-0.5982	9.9999	-0.3421	9.9999	0.5719	0.3832	0.0080	0.3057	0.0209	0.7976
294	21.94	0.05	-0.5895	9.9999	-0.3379	9.9999	0.5732	0.3935	0.0073	0.3138	0.0186	0.7974
295	22.01	0.05	-0.5986	9.9999	-0.3398	9.9999	0.5679	0.4061	0.0093	0.3123	0.0228	0.7691
296	22.10	0.06	-0.6072	9.9999	-0.3428	9.9999	0.5646	0.3668	0.0073	0.2995	0.0200	0.8164
297	22.16	0.04	-0.5857	9.9999	-0.3331	9.9999	0.5677	0.4295	0.0093	0.3263	0.0216	0.7598
298	22.24	0.05	-0.6016	9.9999	-0.3354	9.9999	0.5575	0.3934	0.0077	0.3113	0.0196	0.7913
299	22.31	0.05	-0.6027	9.9999	-0.3360	9.9999	0.5575	0.3808	0.0073	0.3060	0.0193	0.8034
300	22.38	0.05	-0.5996	9.9999	-0.3366	9.9999	0.5579	0.3873	0.0080	0.3090	0.0207	0.7977
301	22.46	0.04	-0.5853	9.9999	-0.3254	9.9999	0.5559	0.4832	0.0102	0.3445	0.0212	0.7129
302	22.53	0.05	-0.6004	9.9999	-0.3311	9.9999	0.5519	0.3776	0.0073	0.3069	0.0194	0.8129
303	22.59	0.05	-0.6048	9.9999	-0.3318	9.9999	0.5450	0.3643	0.0068	0.2985	0.0185	0.8194
304	22.67	0.05	-0.5923	9.9999	-0.3253	9.9999	0.5491	0.4643	0.0096	0.3387	0.0208	0.7296
305	22.74	0.05	-0.6131	9.9999	-0.3292	9.9999	0.5378	0.4110	0.0094	0.3174	0.0228	0.7723
306	22.81	0.05	-0.6016	9.9999	-0.3236	9.9999	0.5381	0.4942	0.0099	0.3520	0.0201	0.7122
307	22.89	0.05	-0.5995	9.9999	-0.3220	9.9999	0.5407	0.4941	0.0103	0.3520	0.0209	0.7124
308	22.96	0.04	-0.5955	9.9999	-0.3220	9.9999	0.5407	0.4662	0.0099	0.3412	0.0214	0.7350
309	23.04	0.05	-0.6074	9.9999	-0.3241	9.9999	0.5336	0.4411	0.0094	0.3369	0.0212	0.7638
310	23.11	0.06	-0.6074	9.9999	-0.3229	9.9999	0.5317	0.4676	0.0099	0.3451	0.0213	0.7381
311	23.19	0.06	-0.6163	9.9999	-0.3265	9.9999	0.5290	0.4408	0.0106	0.3334	0.0241	0.7563
312	23.26	0.05	-0.6104	9.9999	-0.3244	9.9999	0.5315	0.4743	0.0099	0.3505	0.0218	0.7390
313	23.33	0.06	-0.6075	9.9999	-0.3218	9.9999	0.5297	0.4875	0.0106	0.3553	0.0218	0.7287
314	23.37	0.05	-0.6135	9.9999	-0.3223	9.9999	0.5253	0.4644	0.0099	0.3474	0.0216	0.7480
315	23.38	0.05	-0.6106	9.9999	-0.3209	9.9999	0.5256	0.4842	0.0106	0.3538	0.0219	0.7308
316	23.37	0.04	-0.6135	9.9999	-0.3211	9.9999	0.5234	0.4975	0.0106	0.3597	0.0213	0.7238
317	23.37	0.05	-0.6135	9.9999	-0.3223	9.9999	0.5253	0.4809	0.0106	0.3459	0.0230	0.7505
318	23.36	0.05	-0.6134	9.9999	-0.3227	9.9999	0.5210	0.4410	0.0099	0.3396	0.0225	0.7696
319	23.37	0.04	-0.6077	9.9999	-0.3183	9.9999	0.5238	0.5073	0.0113	0.3630	0.0223	0.7155
320	23.37	0.05	-0.6135	9.9999	-0.3211	9.9999	0.5234	0.4677	0.0099	0.3412	0.0222	0.7621
321	23.38	0.01	-0.6136	9.9999	-0.3200	9.9999	0.5215	0.4740	0.0113	0.3531	0.0238	0.7450
322	23.37	0.05	-0.6135	9.9999	-0.3223	9.9999	0.5253	0.4909	0.0106	0.3592	0.0216	0.7317

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 8 OF 8

MANTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 4 0.800 1.7 45.0 81.0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	C84	XCPF4	YCPF4
323	23.48	0.05	-0.6252	9.9999	-0.3255	9.9999	0.5207	0.5138	0.0125	0.3697	0.0244	0.7196
324	24.54	0.05	-0.6312	9.9999	-0.3272	9.9999	0.5183	0.5529	0.0157	0.3814	0.0284	0.6899
325	25.62	0.07	-0.6311	9.9999	-0.3295	9.9999	0.5221	0.7049	0.0171	0.4050	0.0242	0.5745
326	26.71	0.06	-0.6426	9.9999	-0.3386	9.9999	0.5269	0.7524	0.0119	0.3981	0.0156	0.5291
327	27.84	0.09	-0.6532	9.9999	-0.3463	9.9999	0.5252	0.7787	0.0116	0.3901	0.0149	0.5009
328	29.00	0.10	-0.7072	9.9999	-0.3669	9.9999	0.5189	0.7919	0.0125	0.3966	0.0158	0.5034
329	30.15	0.09	-0.7455	9.9999	-0.3793	9.9999	0.5088	0.8000	0.0099	0.4348	0.0124	0.5435
330	31.33	0.10	-0.7896	9.9999	-0.3979	9.9999	0.5040	0.7960	0.0109	0.4173	0.0137	0.5242
331	32.55	0.12	-0.7937	9.9999	-0.3960	9.9999	0.5027	0.8161	0.0099	0.4174	0.0122	0.5115
332	33.67	0.13	-0.7438	9.9999	-0.3809	9.9999	0.5121	0.7868	0.0094	0.4244	0.0119	0.5408
333	34.46	0.14	-0.7615	9.9999	-0.3882	9.9999	0.5098	0.7093	0.0061	0.4125	0.0086	0.5816
334	36.14	0.16	-0.7939	9.9999	-0.4012	9.9999	0.5053	0.6170	0.0026	0.3907	0.0042	0.6332
335	37.36	0.15	-0.8396	9.9999	-0.4184	9.9999	0.4983	0.4193	0.0094	0.3266	0.0223	0.7789
336	38.78	0.17	-0.8750	9.9999	-0.4328	9.9999	0.4947	0.2676	0.0151	0.2775	0.0568	1.0371
337	40.43	0.19	-0.9045	9.9999	-0.4445	9.9999	0.4915	0.1210	0.0125	0.2146	0.1037	1.7735
338	42.46	0.11	-0.9239	9.9999	-0.4536	9.9999	0.4912	0.1071	0.0123	0.1741	0.1144	1.6252
339	44.55	0.11	-0.9561	9.9999	-0.4689	9.9999	0.4894	0.0273	0.0081	0.1210	0.2968	4.4311
340	47.14	0.09	-1.0042	9.9999	-0.4898	9.9999	0.4877	0.1929	0.0069	0.2063	0.0355	1.0598
341	49.59	0.06	-1.0618	9.9999	-0.5137	9.9999	0.4838	0.1236	0.0026	0.1683	0.0211	1.3614
342	52.21	0.03	-1.1831	9.9999	-0.5631	9.9999	0.4759	0.0043	0.0049	0.0986	1.1333	22.7111
343	55.29	-0.07	-1.3229	9.9999	-0.6166	9.9999	0.4660	-0.1194	-0.0036	0.0288	0.0299	-0.2409
344	57.92	-0.03	-1.2819	9.9999	-0.5958	9.9999	0.4722	-0.1161	-0.0052	0.0298	0.0449	-0.2582
345	57.95	-0.04	-1.2582	9.9999	-0.5965	9.9999	0.4741	-0.1334	-0.0046	0.0228	0.0347	-0.1706
346	57.96	-0.02	-1.2766	9.9999	-0.6062	9.9999	0.4741	-0.1203	-0.0037	0.0289	0.0305	-0.2406
347	57.95	-0.03	-1.2871	9.9999	-0.6103	9.9999	0.4741	-0.1409	-0.0042	0.0236	0.0301	-0.1678

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5.0&5W 1.7 0.0 81=0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.87	0.01	-0.6128	1.0065	0.1067	-0.1475	-0.0008	0.2509	0.1030	0.1480	-1.6424
2	-5.87	-0.01	-0.5934	1.0114	0.1138	-0.1325	-0.0070	0.2477	0.1030	0.1448	-1.6873
3	-5.87	-0.02	-0.6382	1.0205	0.0168	-0.0743	-0.0010	0.2511	0.1035	0.1477	-1.6003
4	-5.87	-0.02	-0.6129	1.0064	0.0548	-0.1042	-0.0009	0.2477	0.1026	0.1452	-1.6426
5	-5.86	-0.01	-0.5877	0.9878	0.0795	-0.1492	-0.0069	0.2477	0.1035	0.1443	-1.6808
6	-5.71	-0.01	-0.5842	0.9585	0.1099	-0.0796	-0.0132	0.2484	0.1018	0.1467	-1.6267
7	-5.87	-0.02	-0.5895	0.9434	0.0468	-0.0316	-0.0071	0.2472	0.1007	0.1466	-1.6003
8	-5.36	-0.02	-0.5907	0.9138	0.0304	-0.0705	-0.0009	0.2510	0.1006	0.1505	-1.5478
9	-5.23	-0.01	-0.5106	0.8104	0.1702	-0.1695	-0.0005	0.2503	0.0994	0.1510	-1.5693
10	-5.09	-0.02	-0.5175	0.7967	0.0456	-0.0522	-0.0069	0.2488	0.0991	0.1498	-1.5396
11	-4.93	-0.01	-0.4863	0.7371	0.1097	-0.1023	-0.0006	0.2490	0.0979	0.1512	-1.5346
12	-4.77	-0.02	-0.4868	0.7133	0.0333	-0.0520	-0.0068	0.2452	0.0967	0.1486	-1.5221
13	-4.61	-0.01	-0.4560	0.6678	0.1227	-0.0869	-0.0068	0.2470	0.0971	0.1500	-1.5082
14	-4.47	-0.01	-0.4321	0.6341	0.1577	-0.1576	-0.0065	0.2467	0.0969	0.1518	-1.4798
15	-4.33	-0.01	-0.4064	0.6201	0.1575	-0.1575	-0.0066	0.2461	0.0938	0.1523	-1.3890
16	-4.24	-0.02	-0.4008	0.6210	0.0203	-0.0285	-0.0129	0.2492	0.0949	0.1543	-1.3697
17	-4.06	-0.01	-0.3969	0.5514	0.0834	-0.0772	-0.0066	0.2488	0.0945	0.1543	-1.3892
18	-3.91	-0.01	-0.4092	0.5605	0.1343	-0.1028	-0.0066	0.2512	0.0937	0.1575	-1.3697
19	-3.76	-0.01	-0.3681	0.4674	0.0470	-0.0679	-0.0065	0.2513	0.0938	0.1575	-1.3442
20	-3.66	-0.01	-0.3742	0.4733	0.0149	-0.0266	-0.0006	0.2544	0.0937	0.1607	-1.2642
21	-3.52	-0.01	-0.3352	0.4421	0.1705	-0.1569	-0.0062	0.2487	0.0924	0.1563	-1.3191
22	-3.40	0.01	-0.3490	0.4222	0.2098	-0.1746	-0.0001	0.2535	0.0932	0.1603	-1.2899
23	-3.26	-0.01	-0.2979	0.3981	0.0709	-0.0656	-0.0063	0.2534	0.0932	0.1602	-1.3365
24	-3.11	-0.02	-0.2959	0.3734	0.0335	-0.0304	-0.0063	0.2512	0.0928	0.1586	-1.3873
25	-2.98	-0.01	-0.2742	0.3360	0.1445	-0.1341	-0.0062	0.2523	0.0928	0.1595	-1.2179
26	-2.86	-0.02	-0.2581	0.3304	0.0255	-0.0805	-0.0063	0.2541	0.0916	0.1625	-1.1665
27	-2.71	-0.00	-0.2503	0.2852	0.1460	-0.2341	-0.0059	0.2502	0.0921	0.1581	-1.1394
28	-2.58	-0.02	-0.2759	0.3055	0.1072	-0.1104	-0.0061	0.2580	0.0920	0.1660	-1.1078
29	-2.45	-0.01	-0.2120	0.2553	0.1343	-0.1030	-0.0060	0.2532	0.0933	0.1599	-1.2842
30	-2.32	-0.01	-0.2257	0.2512	0.0713	-0.0550	-0.0061	0.2546	0.0924	0.1622	-1.1128
31	-2.19	-0.01	-0.2135	0.2263	0.1341	-0.1030	-0.0060	0.2542	0.0920	0.1622	-1.0598
32	-2.06	0.00	-0.1884	0.1911	0.2240	-0.1547	-0.0059	0.2556	0.0920	0.1636	-1.0144
33	-1.93	-0.01	-0.1897	0.1777	0.0847	-0.0656	-0.0061	0.2509	0.0920	0.1589	-0.9369
34	-1.79	-0.01	-0.1782	0.1822	0.0575	-0.0638	-0.0059	0.2538	0.0908	0.1630	-1.0343
35	-1.67	-0.01	-0.1513	0.1475	0.0854	-0.0353	-0.0060	0.2538	0.0900	0.1638	-0.9767
36	-1.54	-0.01	-0.1614	0.1573	0.1042	-0.1020	-0.0058	0.2566	0.0902	0.1662	-0.9802
37	-1.42	-0.00	-0.1392	0.1230	0.1166	-0.1023	-0.0056	0.2549	0.0911	0.1638	-0.9838
38	-1.29	-0.01	-0.1259	0.1279	0.1095	-0.1021	-0.0118	0.2531	0.0903	0.1628	-1.0161
39	-1.15	-0.01	-0.1393	0.1231	0.0426	-0.0827	-0.0057	0.2561	0.0903	0.1658	-0.8842
40	-1.04	0.01	-0.0877	0.0822	0.2229	-0.1758	-0.0055	0.2513	0.0895	0.1618	-0.9371
41	-0.93	0.00	-0.1346	0.1219	0.1549	-0.1053	-0.0058	0.2531	0.0891	0.1640	-0.8794
42	-0.80	-0.00	-0.1047	0.0925	0.1361	-0.1031	-0.0056	0.2548	0.0891	0.1657	-0.9169
43	-0.68	-0.01	-0.0883	0.0833	0.0211	-0.0189	-0.0056	0.2568	0.0903	0.1665	-0.9425
44	-0.55	-0.00	-0.0305	0.0576	0.1552	-0.1876	-0.0113	0.2532	0.0903	0.1629	-1.5781
45	-0.43	-0.01	-0.0747	0.0869	0.0180	-0.0809	-0.0055	0.2533	0.0906	0.1627	-1.1709
46	-0.32	-0.01	-0.0484	0.0819	0.0923	-0.1505	-0.0114	0.2534	0.0906	0.1628	-1.6913

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MANTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	5	0.60	1.07	0.0	HIWUP23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	-0.20	-0.01	-0.0044	0.0018	0.0935	-0.1190	-0.0114	0.2534	0.0897	0.1637	-1.4893
48	-0.01	0.00	-0.0038	0.0016	0.1716	-0.1603	-0.0113	0.2530	0.0904	0.1626	-2.0158
49	0.04	-0.01	-0.0347	0.0578	0.0325	-0.0620	-0.0115	0.2550	0.0900	0.1650	-1.5744
50	0.17	-0.01	-0.0444	0.0818	0.0596	-0.0556	-0.0115	0.2547	0.0904	0.1643	-1.6893
51	0.29	-0.00	-0.0342	0.0659	0.0546	-0.1036	-0.0113	0.2548	0.0908	0.1640	-7.1689
52	0.40	-0.01	-0.0043	0.0081	0.0509	-0.0656	-0.0113	0.2537	0.0908	0.1629	-7.0989
53	0.54	-0.01	-0.0041	0.0056	0.1093	-0.1019	-0.0112	0.2565	0.0897	0.1668	-7.2022
54	0.84	-0.03	0.0155	0.0318	-0.0918	0.0589	-0.0115	0.2557	0.0908	0.1649	2.0516
55	0.78	-0.01	0.0037	0.0553	0.0853	-0.0351	-0.0114	0.2587	0.0912	0.1675	14.9514
56	0.88	-0.03	0.0157	0.0318	-0.0458	-0.0533	-0.0113	0.2557	0.0918	0.1641	2.0813
57	1.01	-0.00	0.0021	0.0253	0.1731	-0.1181	-0.0111	0.2566	0.0923	0.1643	0.5929
58	1.11	-0.01	0.0102	0.0455	0.1339	-0.1251	-0.0110	0.2603	0.0918	0.1685	2.8099
59	1.24	-0.00	0.0154	0.0153	0.1241	-0.0611	-0.0111	0.2586	0.0926	0.1660	0.2795
60	1.33	-0.01	0.0213	0.0282	0.0459	-0.0421	-0.0111	0.2595	0.0922	0.1673	0.6339
61	1.47	-0.02	0.0238	-0.0007	0.1961	-0.1502	-0.0107	0.2605	0.0931	0.1674	-0.0077
62	1.59	-0.04	0.0215	-0.0203	0.1095	-0.0869	-0.0109	0.2577	0.0930	0.1647	-0.3093
63	1.70	0.00	0.0063	-0.0043	0.1974	-0.1188	-0.0110	0.2625	0.0939	0.1686	-0.1360
64	1.81	-0.00	0.0124	-0.0216	0.0986	-0.0900	-0.0107	0.2615	0.0943	0.1672	-0.5598
65	1.92	0.00	0.0113	-0.0020	0.1701	-0.1698	-0.0105	0.2586	0.0942	0.1644	-0.5806
66	2.03	-0.01	0.0160	-0.0020	-0.0572	-0.0313	-0.0109	0.2625	0.0942	0.1683	-0.5366
67	2.16	-0.02	0.0201	-0.0094	-0.0181	-0.0142	-0.0109	0.2623	0.0954	0.1669	-0.7881
68	2.27	-0.04	0.0198	-0.0198	0.1078	-0.1001	-0.0106	0.2623	0.0958	0.1665	-0.7888
69	2.37	-0.01	0.0162	-0.0194	0.0965	-0.0965	-0.0105	0.2660	0.0967	0.1694	-0.7882
70	2.50	-0.01	0.0167	-0.0192	0.0565	-0.0651	-0.0105	0.2646	0.0972	0.1675	-0.7867
71	2.61	-0.01	0.0162	-0.0185	0.0194	-0.0501	-0.0106	0.2679	0.0971	0.1709	-0.9734
72	2.72	-0.01	0.0218	-0.0143	0.1594	-0.1272	-0.0104	0.2604	0.0976	0.1629	-0.8636
73	2.84	-0.00	0.0216	-0.0140	0.1098	-0.0582	-0.0106	0.2619	0.0975	0.1645	-0.8630
74	2.96	-0.01	0.0177	-0.0177	0.0085	-0.0070	-0.0106	0.2669	0.0995	0.1675	-0.9469
75	3.08	-0.00	0.0342	-0.0180	0.1356	-0.0606	-0.0105	0.2563	0.0979	0.1585	-0.9144
76	3.19	-0.01	0.0212	-0.0220	0.0152	-0.0930	-0.0106	0.2642	0.0987	0.1656	-1.0717
77	3.30	-0.01	0.0237	-0.0201	0.0834	-0.0665	-0.0104	0.2614	0.0988	0.1627	-1.1058
78	3.39	-0.01	0.0201	-0.0214	0.0325	-0.0403	-0.0103	0.2607	0.1002	0.1606	-1.0737
79	3.52	-0.00	0.0219	-0.0170	0.0871	-0.0157	-0.0105	0.2619	0.0999	0.1621	-1.1338
80	3.64	-0.01	0.0202	-0.0305	-0.0033	0.0148	-0.0104	0.2593	0.0995	0.1599	-1.1546
81	3.74	-0.01	0.0252	-0.0263	0.0681	-0.0953	-0.0102	0.2626	0.1011	0.1616	-1.2632
82	3.86	-0.01	0.0273	-0.0287	0.0829	-0.0772	-0.0102	0.2660	0.1011	0.1650	-1.2943
83	3.96	-0.03	0.0267	-0.0185	-0.0045	0.0144	-0.0105	0.2632	0.1011	0.1622	-1.3973
84	4.08	0.00	0.0304	-0.0492	0.1578	-0.1365	-0.0099	0.2571	0.1018	0.1554	-1.2473
85	4.20	0.00	0.0349	-0.0297	0.1593	-0.1050	-0.0101	0.2633	0.1023	0.1611	-1.2832
86	4.32	-0.00	0.0330	-0.0287	0.1459	-0.1144	-0.0100	0.2621	0.1027	0.1595	-1.3336
87	4.42	-0.01	0.0307	-0.0026	0.0591	-0.0540	-0.0100	0.2611	0.1027	0.1585	-1.3557
88	4.52	-0.01	0.0348	-0.0288	0.0839	-0.0565	-0.0099	0.2620	0.1044	0.1577	-1.3778
89	4.63	-0.01	0.0320	-0.0272	0.0194	-0.0392	-0.0101	0.2626	0.1044	0.1583	-1.4587
90	4.72	-0.01	0.0301	-0.0273	0.0846	-0.0462	-0.0101	0.2647	0.1056	0.1592	-1.4932
91	4.84	-0.02	0.0329	-0.0272	0.0117	0.0553	-0.0102	0.2588	0.1044	0.1545	-1.3794
92	4.95	0.00	0.0305	-0.0272	0.1903	-0.1510	-0.0099	0.2635	0.1056	0.1580	-1.4938

TEST PART MACH REIG-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5 0.90 1.7 0.0 81e0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
93	5.06	0.01	0.4651	-0.7320	0.2058	-0.1803	-0.0099	0.2635	0.1068	0.1549	-1.5637
94	5.17	-0.01	0.4628	-0.6909	0.0613	-0.0896	-0.0102	0.2645	0.1076	0.1570	-1.5381
95	5.26	-0.01	0.4541	-0.7043	-0.0038	0.0039	-0.0100	0.2655	0.1076	0.1580	-1.5509
96	5.35	0.00	0.4290	-0.7588	0.1710	-0.1383	-0.0097	0.2659	0.1084	0.1576	-1.5756
97	5.47	-0.01	0.5026	-0.8184	0.0599	-0.0732	-0.0099	0.2631	0.1092	0.1540	-1.6285
98	5.58	-0.00	0.5406	-0.8633	0.1369	-0.0805	-0.0099	0.2644	0.1099	0.1550	-1.5988
99	5.68	0.00	0.5150	-0.8282	0.0451	-0.0359	-0.0099	0.2692	0.1096	0.1597	-1.6083
100	5.77	-0.01	0.5635	-0.9265	0.0182	-0.0599	-0.0097	0.2650	0.1104	0.1547	-1.6441
101	5.88	0.01	0.5463	-0.9243	0.2005	-0.0475	-0.0099	0.2654	0.1120	0.1535	-1.6458
102	5.98	-0.01	0.5756	-0.9514	0.0666	-0.1163	-0.0036	0.2680	0.1128	0.1553	-1.6529
103	6.08	0.00	0.5743	-0.9807	0.1215	-0.0921	-0.0098	0.2684	0.1128	0.1557	-1.7077
104	6.18	-0.01	0.5945	-1.0297	0.0038	-0.0768	-0.0096	0.2706	0.1147	0.1568	-1.7205
105	6.28	0.01	0.6372	-1.0609	0.2362	-0.1341	-0.0095	0.2678	0.1139	0.1548	-1.6649
106	6.38	0.01	0.6231	-1.0661	0.2116	-0.1169	-0.0096	0.2762	0.1156	0.1607	-1.7331
107	6.47	-0.00	0.6469	-1.1128	0.0459	-0.0433	-0.0095	0.2722	0.1179	0.1544	-1.7201
108	6.58	0.01	0.6598	-1.1342	0.1628	-0.0613	-0.0097	0.2695	0.1183	0.1513	-1.7262
109	6.68	-0.01	0.6834	-1.1864	-0.0005	0.0660	-0.0098	0.2721	0.1191	0.1531	-1.7369
110	6.77	-0.01	0.6825	-1.2013	0.0366	-0.0108	-0.0095	0.2726	0.1207	0.1518	-1.7602
111	6.88	-0.00	0.7201	-1.2459	0.1321	-0.1351	-0.0092	0.2712	0.1227	0.1486	-1.7303
112	6.97	-0.01	0.7317	-1.2853	0.0517	-0.1455	-0.0092	0.2784	0.1223	0.1562	-1.7566
113	7.08	-0.00	0.7823	-1.3407	0.0894	0.0473	-0.0098	0.2706	0.1230	0.1477	-1.7137
114	7.17	-0.01	0.7636	-1.2931	-0.0035	0.0031	-0.0155	0.2734	0.1255	0.1480	-1.7406
115	7.28	0.01	0.7925	-1.3937	0.0963	-0.0379	-0.0093	0.2740	0.1255	0.1486	-1.7584
116	7.38	0.01	0.7674	-1.4595	0.1368	-0.0099	-0.0095	0.2776	0.1262	0.1515	-1.7706
117	7.48	-0.01	0.7915	-1.3920	0.0067	-0.0087	-0.0092	0.2788	0.1270	0.1519	-1.7586
118	7.55	-0.01	0.8161	-1.4418	-0.0518	0.0536	-0.0093	0.2765	0.1278	0.1488	-1.7662
119	7.64	-0.00	0.8273	-1.4807	0.0480	-0.0438	-0.0091	0.2708	0.1310	0.1399	-1.7898
120	7.75	-0.01	0.8152	-1.4906	-0.0439	-0.0127	-0.0153	0.2838	0.1326	0.1513	-1.7668
121	7.84	0.01	0.8534	-1.4706	0.2094	-0.1741	-0.0149	0.2780	0.1329	0.1452	-1.7233
122	7.92	-0.00	0.8357	-1.4592	0.0328	-0.0518	-0.0151	0.2795	0.1321	0.1475	-1.7377
123	8.01	-0.00	0.8525	-1.4695	0.0459	-0.0437	-0.0089	0.2835	0.1338	0.1498	-1.7237
124	8.11	-0.01	0.8891	-1.5278	-0.0036	0.0029	-0.0150	0.2811	0.1338	0.1474	-1.7185
125	8.19	-0.01	0.8891	-1.5280	0.0595	-0.0344	-0.0150	0.2803	0.1349	0.1455	-1.7187
126	8.28	-0.00	0.8878	-1.5574	0.0956	-0.0903	-0.0149	0.2814	0.1362	0.1452	-1.7562
127	8.37	-0.01	0.8883	-1.5270	0.0684	-0.0968	-0.0148	0.2837	0.1369	0.1489	-1.7191
128	8.46	-0.01	0.9127	-1.5767	0.0987	-0.0693	-0.0149	0.2877	0.1377	0.1501	-1.7276
129	8.55	-0.00	0.9503	-1.6214	0.1809	-0.1917	-0.0145	0.2837	0.1385	0.1453	-1.7062
130	8.62	-0.00	0.9249	-1.6017	0.1980	-0.1206	-0.0148	0.2865	0.1381	0.1485	-1.7318
131	8.71	-0.01	0.9351	-1.6248	0.0552	-0.0952	-0.0147	0.2860	0.1401	0.1460	-1.7357
132	8.81	-0.01	0.9612	-1.6862	0.0584	-0.0554	-0.0147	0.2868	0.1417	0.1452	-1.7106
133	8.90	-0.01	0.9866	-1.6660	-0.0071	-0.0475	-0.0146	0.2895	0.1413	0.1482	-1.6866
134	9.00	0.00	0.9457	-1.6363	0.1687	-0.1105	-0.0147	0.2865	0.1417	0.1449	-1.7188
135	9.07	0.01	1.0111	-1.7142	0.2211	-0.1754	-0.0083	0.2894	0.1437	0.1457	-1.6954
136	9.17	-0.01	1.0299	-1.7122	0.0792	-0.1265	-0.0146	0.2856	0.1417	0.1440	-1.6954
137	9.26	-0.01	1.0469	-1.7716	0.0442	-0.0578	-0.0145	0.2880	0.1449	0.1432	-1.6921
138	9.33	-0.00	1.0344	-1.7465	0.1197	-0.1237	-0.0143	0.2911	0.1449	0.1462	-1.6883

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNLV-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5 0.90 1.7 0.0 ALL OF 23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAN	CAF	XCP
139	9.41	-0.00	1.0462	-1.7865	0.1619	-0.0873	-0.0145	0.2887	0.1476	0.1411	-1.7075
140	9.51	0.02	1.0482	-1.7590	0.3881	-0.2116	-0.0083	0.2906	0.1478	0.1430	-1.6788
141	9.60	-0.01	1.0581	-1.7956	0.0866	-0.0475	-0.0083	0.2969	0.1500	0.1469	-1.6967
142	9.66	-0.02	1.0936	-1.8393	0.0025	-0.0996	-0.0163	0.2983	0.1488	0.1415	-1.6788
143	9.79	-0.01	1.0700	-1.8041	0.0422	-0.0868	-0.0081	0.2999	0.1512	0.1487	-1.6881
144	9.87	-0.01	1.0944	-1.8231	0.0297	-0.0821	-0.0162	0.2969	0.1524	0.1425	-1.6651
145	9.95	-0.00	1.0947	-1.8224	0.1328	-0.1253	-0.0141	0.2975	0.1520	0.1455	-1.6852
146	10.05	-0.00	1.1044	-1.8470	0.1064	-0.1220	-0.0141	0.2982	0.1548	0.1482	-1.6694
147	10.13	-0.01	1.1065	-1.8316	0.0841	-0.0801	-0.0141	0.2993	0.1560	0.1433	-1.6554
148	10.23	-0.02	1.1455	-1.8625	-0.0254	-0.1383	-0.0079	0.2986	0.1556	0.1430	-1.6268
149	10.31	-0.01	1.1441	-1.8610	0.1143	-0.2048	-0.0138	0.3041	0.1583	0.1458	-1.6266
150	10.40	0.01	1.1559	-1.8870	0.2230	-0.1334	-0.0079	0.3015	0.1591	0.1424	-1.6311
151	10.48	0.00	1.1552	-1.9155	0.1606	-0.1043	-0.0079	0.3044	0.1608	0.1436	-1.6582
152	10.57	-0.01	1.1815	-1.9038	0.0798	-0.1165	-0.0138	0.3009	0.1615	0.1394	-1.6127
153	10.65	0.00	1.1676	-1.9095	0.1951	-0.1731	-0.0076	0.3049	0.1619	0.1430	-1.6355
154	10.75	-0.02	1.1808	-1.9463	-0.0020	-0.1599	-0.0077	0.3059	0.1631	0.1428	-1.6127
155	10.83	-0.00	1.2294	-1.9728	0.1310	-0.1453	-0.0075	0.3005	0.1647	0.1358	-1.6041
156	10.93	0.00	1.2169	-1.9629	0.1853	-0.1314	-0.0076	0.3076	0.1671	0.1403	-1.6138
157	11.03	0.00	1.2249	-1.9726	0.2592	-0.2117	-0.0074	0.3048	0.1675	0.1373	-1.6045
158	11.10	-0.00	1.2203	-1.9713	0.1173	-0.1651	-0.0076	0.3095	0.1687	0.1408	-1.6046
159	11.19	0.01	1.2536	-2.0059	0.2204	-0.2062	-0.0072	0.3103	0.1695	0.1408	-1.6004
160	11.27	0.01	1.2664	-2.0008	0.2198	-0.1963	-0.0072	0.3100	0.1715	0.1385	-1.5888
161	11.34	-0.00	1.2760	-2.0267	0.1293	-0.1652	-0.0072	0.3099	0.1715	0.1384	-1.5863
162	11.43	0.00	1.2900	-2.0494	0.1842	-0.1523	-0.0072	0.3137	0.1727	0.1410	-1.5886
163	11.52	-0.02	1.2697	-2.0486	0.0123	-0.1412	-0.0073	0.3149	0.1746	0.1403	-1.5884
164	11.61	-0.01	1.3148	-2.0527	0.0943	-0.1002	-0.0072	0.3111	0.1738	0.1373	-1.5612
165	11.69	-0.01	1.3139	-2.0671	0.1161	-0.1635	-0.0071	0.3105	0.1762	0.1343	-1.5732
166	11.78	-0.01	1.3135	-2.0688	0.1425	-0.1669	-0.0071	0.3114	0.1756	0.1360	-1.5736
167	11.86	-0.00	1.3360	-2.1165	0.2089	-0.1533	-0.0071	0.3139	0.1781	0.1358	-1.5819
168	11.94	-0.01	1.3516	-2.0956	0.1453	-0.1263	-0.0070	0.3138	0.1766	0.1372	-1.5511
169	12.03	-0.01	1.3739	-2.1148	0.0837	-0.0576	-0.0071	0.3168	0.1790	0.1358	-1.5378
170	12.12	-0.02	1.3743	-2.1436	0.0416	-0.0937	-0.0070	0.3173	0.1814	0.1359	-1.5597
171	12.20	-0.01	1.3745	-2.1285	0.1192	-0.1236	-0.0069	0.3168	0.1805	0.1363	-1.5486
172	12.29	-0.01	1.3995	-2.1624	0.0695	-0.0770	-0.0069	0.3163	0.1829	0.1334	-1.5458
173	12.38	-0.00	1.4250	-2.1680	0.2083	-0.1437	-0.0067	0.3170	0.1838	0.1332	-1.5214
174	12.45	-0.01	1.3982	-2.1616	0.1210	-0.1149	-0.0068	0.3185	0.1837	0.1348	-1.5468
175	12.54	-0.02	1.4104	-2.1704	0.0788	-0.1264	-0.0068	0.3209	0.1853	0.1356	-1.5392
176	12.62	-0.01	1.4025	-2.1814	0.2202	-0.2050	-0.0066	0.3157	0.1865	0.1292	-1.4918
177	12.70	-0.00	1.4462	-2.2003	0.2067	-0.1950	-0.0065	0.3232	0.1873	0.1359	-1.5194
178	12.79	-0.01	1.4313	-2.1797	0.1571	-0.1484	-0.0065	0.3178	0.1857	0.1321	-1.4917
179	12.87	-0.01	1.4738	-2.1895	0.1835	-0.1626	-0.0064	0.3221	0.1869	0.1352	-1.4857
180	12.96	-0.02	1.4470	-2.2529	0.1159	-0.1634	-0.0064	0.3246	0.1889	0.1357	-1.5049
181	13.05	-0.01	1.4942	-2.2044	0.2009	-0.0645	-0.0006	0.3239	0.1925	0.1314	-1.4741
182	13.12	-0.01	1.4850	-2.2133	0.1244	-0.0815	-0.0006	0.3223	0.1897	0.1326	-1.4985
183	13.21	-0.02	1.4959	-2.2359	0.0698	-0.0882	-0.0065	0.3264	0.1925	0.1339	-1.4947
184	13.29	-0.01	1.5358	-2.2219	0.1906	-0.0972	-0.0064	0.3259	0.1932	0.1327	-1.4967

PARTIAL MISSILE TAILS EFFECTS DATA

TEST PART EACH MEIGHS PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
X 5 0.990 1.07 0.0 0.0 0 0 0 0 UNKNOWN

POINT	A	BETA	CA	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
185	13.97	-0.02	1.5472	-2.2453	0.0848	-0.0589	-0.0063	0.3241	0.1946	0.1297	-1.4512
186	13.97	-0.02	1.5335	-2.2497	0.0970	-0.0491	-0.0065	0.3279	0.1952	0.1327	-1.4471
187	13.98	-0.01	1.5406	-2.2453	0.1481	-0.0896	-0.0002	0.3242	0.1945	0.1297	-1.4516
188	13.93	-0.01	1.5844	-2.2720	0.1469	-0.1483	0.0001	0.3260	0.1975	0.1285	-1.4560
189	13.93	-0.03	1.5736	-2.2663	-0.0076	-0.0548	-0.0001	0.3302	0.1971	0.1331	-1.4406
190	13.94	-0.01	1.5830	-2.2786	0.1612	-0.0809	-0.0001	0.3279	0.1982	0.1297	-1.4356
191	13.97	-0.01	1.6049	-2.3409	0.1747	-0.0777	-0.0001	0.3292	0.1949	0.1293	-1.4543
192	13.97	-0.03	1.6143	-2.2967	-0.0623	-0.0931	-0.0061	0.3306	0.2015	0.1291	-1.4268
193	14.00	-0.02	1.6341	-2.3281	0.1010	-0.1816	-0.0059	0.3295	0.2031	0.1264	-1.4247
194	14.03	-0.01	1.6211	-2.3435	0.2254	-0.1036	0.0	0.3322	0.2018	0.1304	-1.4493
195	14.01	-0.02	1.6500	-2.3623	0.0435	-0.1216	0.0004	0.3307	0.2054	0.1253	-1.4243
196	14.04	-0.01	1.6578	-2.3760	0.1422	-0.1668	0.0004	0.3314	0.2046	0.1268	-1.4338
197	14.07	-0.03	1.6703	-2.3706	0.0034	-0.0905	-0.0058	0.3299	0.2050	0.1249	-1.4193
198	14.08	-0.01	1.6957	-2.3910	0.1839	-0.1522	0.0005	0.3337	0.2062	0.1275	-1.4188
199	14.09	-0.01	1.6815	-2.3950	0.1947	-0.1729	0.0005	0.3345	0.2074	0.1271	-1.4241
200	14.03	-0.01	1.7222	-2.4098	0.2228	-0.1556	-0.0056	0.3248	0.2098	0.1150	-1.4008
201	14.07	-0.02	1.7141	-2.4370	0.1429	-0.1701	-0.0055	0.3305	0.2082	0.1223	-1.4188
202	14.08	-0.01	1.7132	-2.4388	0.2665	-0.2001	0.0007	0.3286	0.2102	0.1182	-1.4009
203	14.09	-0.03	1.7034	-2.4273	0.0469	-0.1068	0.0068	0.3297	0.2106	0.1191	-1.3919
204	14.07	-0.01	1.7044	-2.4378	0.2967	-0.2360	0.0009	0.3302	0.2138	0.1164	-1.3742
205	15.07	-0.02	1.7947	-2.4359	0.1291	-0.1763	0.0010	0.3301	0.2154	0.1147	-1.3572
206	15.10	-0.01	1.7827	-2.4276	0.2762	-0.1478	0.0068	0.3292	0.2142	0.1150	-1.3617
207	15.08	-0.02	1.7812	-2.4252	0.1530	-0.2097	0.0072	0.3337	0.2166	0.1171	-1.3615
208	15.10	-0.02	1.7542	-2.4034	0.1260	-0.2102	-0.0051	0.3353	0.2181	0.1172	-1.3698
209	15.01	-0.02	1.8167	-2.4385	0.2075	-0.1962	0.0012	0.3265	0.2198	0.1067	-1.3408
210	15.08	-0.02	1.7926	-2.4024	0.1092	-0.1596	-0.0050	0.3356	0.2216	0.1142	-1.3608
211	15.09	-0.02	1.7932	-2.3878	0.2117	-0.3177	0.0014	0.3321	0.2246	0.1075	-1.3315
212	15.09	-0.01	1.8192	-2.3920	0.2458	-0.1876	-0.0049	0.3327	0.2261	0.1066	-1.3153
213	15.08	-0.03	1.8165	-2.4200	0.1283	-0.1861	-0.0049	0.3373	0.2274	0.1099	-1.3322
214	15.12	-0.03	1.8427	-2.4044	0.0776	-0.1493	0.0013	0.3325	0.2269	0.1056	-1.3078
215	15.06	0.00	1.8097	-2.4319	0.4017	-0.2135	-0.0050	0.3327	0.2329	0.0998	-1.3011
216	15.08	-0.03	1.8556	-2.4238	0.0884	-0.1810	0.0014	0.3425	0.2369	0.1076	-1.2959
217	15.07	-0.03	1.8559	-2.3585	0.1327	-0.1757	0.0014	0.3389	0.2361	0.1028	-1.2788
218	15.13	-0.02	1.8877	-2.3864	0.1848	-0.1304	-0.0048	0.3368	0.2357	0.1011	-1.2758
219	15.22	-0.03	1.8962	-2.3805	0.1080	-0.1023	-0.0046	0.3414	0.2401	0.1013	-1.2608
220	15.21	-0.05	1.8841	-2.3772	-0.1249	-0.1156	-0.0049	0.3365	0.2405	0.0959	-1.2638
221	15.16	-0.03	1.8916	-2.3854	0.1677	-0.1906	-0.0044	0.3434	0.2421	0.1017	-1.2609
222	15.06	-0.03	1.8531	-2.3250	0.1327	-0.1256	-0.0044	0.3419	0.2448	0.0971	-1.2282
223	15.05	-0.03	1.9177	-2.3742	0.1211	-0.0929	0.0078	0.3431	0.2488	0.0962	-1.2306
224	15.03	-0.02	1.9313	-2.3536	0.2202	-0.1963	-0.0103	0.3408	0.2492	0.0915	-1.2193
225	15.02	-0.03	1.9439	-2.3334	0.0927	-0.1204	0.0081	0.3453	0.2532	0.0920	-1.2006
226	15.06	-0.04	1.9335	-2.3622	0.1077	-0.1018	-0.0042	0.3497	0.2572	0.0924	-1.1977
227	15.02	-0.03	1.9554	-2.2962	0.0828	-0.0783	-0.0103	0.3493	0.2564	0.0928	-1.1739
228	15.06	-0.04	1.9817	-2.3310	0.0534	-0.1052	0.0019	0.3489	0.2572	0.0916	-1.2085
229	17.15	-0.03	1.9692	-2.2920	0.1603	-0.0954	0.0019	0.3530	0.2652	0.0877	-1.1639
230	17.12	-0.04	1.9818	-2.2699	0.0826	-0.0782	-0.0048	0.3514	0.2659	0.0854	-1.1655

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 6 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7.	5	0.490	1.07	0.0	B1W0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
231	17.20	-0.05	1.9536	-2.3069	0.0265	-0.1223	-0.0041	0.3527	0.2628	0.0898	-1.1817
232	17.30	-0.05	1.9692	-2.2291	-0.0045	-0.1117	-0.0102	0.3535	0.2707	0.0827	-1.1319
233	17.38	-0.05	2.0067	-2.2582	-0.0475	-0.0525	-0.0040	0.3532	0.2707	0.0824	-1.1253
234	17.44	-0.03	1.9866	-2.2573	0.1342	-0.2053	-0.0038	0.3591	0.2730	0.0860	-1.1478
235	17.50	-0.03	2.0055	-2.2415	0.0425	-0.0779	-0.0038	0.3634	0.2790	0.0843	-1.1176
236	17.63	-0.03	2.0049	-2.2208	0.1003	-0.1312	-0.0036	0.3581	0.2794	0.0785	-1.1176
237	17.69	-0.03	1.9797	-2.1981	0.1540	-0.1878	-0.0097	0.3642	0.2782	0.0859	-1.1063
238	17.77	-0.02	2.0335	-2.2140	0.1945	-0.1626	-0.0157	0.3575	0.2822	0.0752	-1.0904
239	17.86	-0.03	2.0041	-2.1792	0.1591	-0.1046	-0.0098	0.3649	0.2866	0.0782	-1.0868
240	17.93	-0.02	2.0182	-2.1590	0.1099	-0.1458	-0.0035	0.3633	0.2674	0.0758	-1.0696
241	18.02	-0.04	2.0322	-2.1079	0.0361	-0.0606	-0.0034	0.3726	0.2915	0.0809	-1.0373
242	18.10	-0.03	2.0317	-2.1073	0.0699	-0.0658	-0.0036	0.3688	0.2951	0.0737	-1.0372
243	18.18	-0.03	2.0332	-2.0314	0.1653	-0.2065	-0.0153	0.3792	0.2993	0.0799	-0.9993
244	18.27	-0.02	2.0090	-1.9517	0.2697	-0.2306	-0.0214	0.3817	0.3073	0.0744	-0.9715
245	18.35	-0.02	2.0252	-1.8472	0.2034	-0.2778	-0.0150	0.3957	0.3175	0.0782	-0.9097
246	18.42	-0.04	1.9893	-1.7856	0.0648	-0.2394	-0.0519	0.4252	0.3224	0.0828	-0.8574
247	18.51	-0.03	1.9783	-1.6651	0.1306	-0.3141	-0.0394	0.4124	0.3216	0.0908	-0.8425
248	18.59	-0.04	1.9650	-1.5652	0.1927	-0.2891	-0.0394	0.4281	0.3279	0.0922	-0.7961
249	18.67	-0.02	2.0017	-1.6384	0.2055	-0.2016	-0.0394	0.4369	0.3264	0.0805	-0.8185
250	18.75	-0.03	1.9906	-1.6954	0.1715	-0.2985	-0.0516	0.4063	0.3267	0.0816	-0.8486
251	18.83	-0.05	2.0024	-1.6078	-0.0797	-0.1273	-0.0396	0.4194	0.3327	0.0867	-0.8029
252	18.91	-0.04	1.9902	-1.5524	0.0473	-0.1823	-0.0271	0.4173	0.3331	0.0842	-0.7802
253	19.00	-0.03	2.0167	-1.5274	0.2509	-0.2981	-0.0326	0.4227	0.3367	0.0860	-0.7576
254	19.08	-0.05	2.0364	-1.4953	0.0137	-0.0972	-0.0208	0.4219	0.3395	0.0824	-0.7357
255	19.14	-0.05	2.0442	-1.5041	0.1496	-0.2247	-0.0266	0.4228	0.3410	0.0818	-0.7350
256	19.22	-0.03	2.0437	-1.5034	0.0718	-0.2052	-0.0257	0.4304	0.3427	0.0877	-0.7357
257	19.29	-0.05	2.0710	-1.4950	0.0711	-0.2155	-0.0204	0.4256	0.3458	0.0798	-0.7219
258	19.38	-0.03	2.0423	-1.5018	0.0790	-0.1048	-0.0247	0.4299	0.3446	0.0853	-0.7353
259	19.45	-0.03	2.0575	-1.4686	0.2306	-0.2146	-0.0265	0.4309	0.3501	0.0808	-0.7139
260	19.54	-0.03	2.0545	-1.4318	0.0494	-0.2282	-0.0202	0.4293	0.3502	0.0791	-0.6862
261	19.61	-0.04	2.0763	-1.4844	-0.0199	-0.0118	-0.0206	0.4287	0.3512	0.0775	-0.7142
262	19.69	-0.05	2.1171	-1.5001	0.0047	-0.1128	-0.0141	0.4313	0.3533	0.0780	-0.7086
263	19.77	-0.06	2.1260	-1.5510	0.0354	0.0559	-0.0269	0.4215	0.3536	0.0679	-0.7295
264	19.84	-0.04	2.1050	-1.4458	0.0440	-0.0390	-0.0204	0.4318	0.3536	0.0774	-0.6864
265	19.92	-0.05	2.1153	-1.4978	0.1329	-0.0792	-0.0204	0.4304	0.3560	0.0744	-0.7081
266	19.99	-0.04	2.1208	-1.4814	0.0184	-0.0262	-0.0203	0.4306	0.3580	0.0726	-0.6858
267	20.07	-0.07	2.1092	-1.3886	-0.0357	-0.1498	-0.0141	0.4367	0.3616	0.0751	-0.6503
268	20.15	-0.05	2.1305	-1.4478	0.1015	0.0710	-0.0208	0.4250	0.3599	0.0651	-0.6685
269	20.22	-0.06	2.1555	-1.4532	0.0155	-0.0663	-0.0201	0.4330	0.3616	0.0714	-0.6742
270	20.30	-0.05	2.1648	-1.5047	0.0730	0.0211	-0.0206	0.4277	0.3608	0.0669	-0.6951
271	20.37	-0.06	2.1641	-1.4760	0.0443	-0.0290	-0.0148	0.4341	0.3636	0.0705	-0.6814
272	20.45	-0.06	2.1803	-1.4572	0.0387	0.0770	-0.0205	0.4290	0.3639	0.0651	-0.6684
273	20.53	-0.07	2.1866	-1.4327	-0.0502	-0.0692	-0.0139	0.4352	0.3667	0.0685	-0.6607
274	20.60	-0.07	2.2063	-1.4475	-0.1091	0.0289	-0.0148	0.4354	0.3687	0.0667	-0.6559
275	20.68	-0.06	2.2181	-1.4555	0.0320	-0.0177	-0.0199	0.4381	0.3679	0.0622	-0.6562
276	20.76	-0.05	2.2169	-1.4099	0.1680	-0.1558	-0.0196	0.4313	0.3702	0.0611	-0.6629

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 5 0.60 1.7 0.0 81=0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
277	20.86	-0.05	2.2176	-1.4395	-0.0171	0.0399	-0.0200	0.4359	0.3711	0.0648	-0.6491
278	20.92	-0.06	2.2708	-1.4521	0.0563	0.0725	-0.0201	0.4305	0.3706	0.0599	-0.6395
279	21.00	-0.05	2.2772	-1.5303	0.1124	0.0743	-0.0323	0.4236	0.3722	0.0514	-0.6720
280	21.06	-0.04	2.2689	-1.4496	0.1813	-0.1664	-0.0196	0.4391	0.3751	0.0640	-0.6388
281	21.15	-0.05	2.3032	-1.5701	0.0233	0.0679	-0.0260	0.4331	0.3758	0.0573	-0.6600
282	21.22	-0.03	2.2867	-1.4461	-0.0057	0.0875	-0.0258	0.4346	0.3759	0.0587	-0.6388
283	21.31	-0.04	2.3167	-1.5005	0.1399	-0.1772	-0.0192	0.4340	0.3782	0.0558	-0.6477
284	21.41	-0.06	2.3282	-1.5085	-0.0770	0.1402	-0.0259	0.4354	0.3810	0.0549	-0.6479
285	21.47	-0.05	2.3654	-1.5377	-0.0868	0.2042	-0.0261	0.4305	0.3794	0.0511	-0.6500
286	21.54	-0.06	2.3255	-1.5199	-0.1041	0.1000	-0.0319	0.4319	0.3814	0.0505	-0.6548
287	21.61	-0.07	2.3764	-1.5604	-0.0863	0.2147	-0.0261	0.4272	0.3810	0.0462	-0.6566
288	21.69	-0.05	2.3340	-1.5172	0.0670	-0.2648	-0.0129	0.4422	0.3874	0.0548	-0.6685
289	21.78	-0.05	2.3902	-1.5255	-0.0047	0.0245	-0.0254	0.4296	0.3862	0.0434	-0.6382
290	21.84	-0.05	2.3885	-1.5588	0.0327	0.2569	-0.0383	0.4339	0.3861	0.0478	-0.6509
291	21.91	-0.05	2.3904	-1.4957	0.0167	-0.0456	-0.0251	0.4420	0.3890	0.0530	-0.6256
292	22.06	-0.06	2.4388	-1.5560	-0.1115	0.2278	-0.0380	0.4278	0.3889	0.0387	-0.6605
293	22.07	-0.03	2.4100	-1.5157	0.1132	0.0495	-0.0256	0.4379	0.3893	0.0486	-0.6274
294	22.15	-0.04	2.4263	-1.5376	0.0852	0.0100	-0.0314	0.4343	0.3925	0.0468	-0.6336
295	22.23	-0.05	2.4696	-1.5706	-0.0561	0.0338	-0.0372	0.4301	0.3941	0.0360	-0.6309
296	22.31	-0.05	2.4738	-1.6030	-0.0925	0.0782	-0.0252	0.4338	0.3929	0.0401	-0.6480
297	22.38	-0.04	2.5119	-1.6177	0.0352	0.0462	-0.0373	0.4342	0.3973	0.0369	-0.6448
298	22.46	-0.05	2.5241	-1.6271	-0.0356	0.1895	-0.0377	0.4371	0.3964	0.0407	-0.6446
299	22.52	-0.07	2.5101	-1.6144	-0.2641	0.3792	-0.0503	0.4313	0.3973	0.0340	-0.6431
300	22.60	-0.07	2.5624	-1.6251	-0.2497	0.2812	-0.0498	0.4297	0.3976	0.0321	-0.6362
301	22.67	-0.06	2.5622	-1.6101	-0.1243	0.2293	-0.0497	0.4308	0.3992	0.0316	-0.6284
302	22.74	-0.04	2.5672	-1.5996	0.0626	0.0756	-0.0373	0.4413	0.4020	0.0393	-0.6231
303	22.81	-0.06	2.6136	-1.6749	-0.2099	0.3318	-0.0499	0.4315	0.4026	0.0289	-0.6423
304	22.89	-0.08	2.6402	-1.6854	-0.2616	0.6110	-0.0508	0.4296	0.4022	0.0274	-0.6384
305	22.97	-0.06	2.6235	-1.7164	-0.1944	0.5421	-0.0569	0.4321	0.4039	0.0283	-0.6543
306	23.03	-0.07	2.6361	-1.7097	-0.2963	0.3916	-0.0561	0.4288	0.4048	0.0234	-0.6480
307	23.11	-0.05	2.6241	-1.6965	-0.0815	0.3101	-0.0500	0.4394	0.4082	0.0316	-0.6427
308	23.19	-0.05	2.6815	-1.7200	-0.1111	0.2390	-0.0494	0.4303	0.4081	0.0222	-0.6488
309	23.27	-0.06	2.6664	-1.6850	0.0809	0.1796	-0.0496	0.4359	0.4113	0.0246	-0.6169
310	23.34	-0.01	2.7091	-1.6572	-0.2272	0.2163	-0.0491	0.4321	0.4117	0.0204	-0.6129
311	23.41	-0.06	2.7066	-1.7002	-0.1730	0.5612	-0.0628	0.4329	0.4114	0.0215	-0.6295
312	23.48	-0.06	2.7270	-1.7168	-0.1709	0.6030	-0.0629	0.4268	0.4125	0.0163	-0.6256
313	23.45	-0.06	2.7270	-1.7060	-0.1709	0.6030	-0.0629	0.4269	0.4134	0.0155	-0.6256
314	23.45	-0.06	2.7117	-1.7232	-0.2609	0.5237	-0.0564	0.4321	0.4109	0.0212	-0.6355
315	23.46	-0.06	2.7303	-1.7244	-0.1665	0.4221	-0.0497	0.4339	0.4109	0.0230	-0.6316
316	23.46	-0.05	2.7326	-1.6972	-0.0766	0.4036	-0.0498	0.4336	0.4121	0.0215	-0.6211
317	23.46	-0.05	2.6826	-1.6578	-0.0709	0.0152	-0.0178	0.4449	0.4137	0.0312	-0.6180
318	23.46	-0.05	2.7602	-1.6849	-0.0499	0.3103	-0.0378	0.4371	0.4137	0.0234	-0.6119
319	23.46	-0.06	2.7200	-1.6710	-0.2085	0.3570	-0.0493	0.4309	0.4129	0.0180	-0.6143
320	23.42	-0.06	2.7673	-1.6798	-0.2888	0.6537	-0.0623	0.4413	0.4125	0.0288	-0.6027
321	23.40	-0.06	2.8978	-1.6870	-0.0001	0.1235	-0.0357	0.4421	0.4156	0.0225	-0.5477
322	24.09	-0.02	2.9700	-1.6395	0.2601	-0.6882	-0.0029	0.4516	0.4272	0.0262	-0.6838

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	P4I	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	5	4.94	1.7	0.0	81=0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
323	25.24	-0.03	3.1527	-1.3957	0.2083	-0.4821	0.0036	0.4411	0.4300	0.0111	-9.4427
324	26.09	-0.04	3.3398	-1.2231	0.1833	-0.1197	-0.0326	0.4318	0.4379	-0.0061	-8.3663
325	26.93	-0.04	3.5122	-0.9551	0.0650	-0.2926	0.0053	0.4343	0.4438	-0.0095	-8.2719
326	27.87	-0.03	3.7701	-0.7517	0.2007	-0.4768	0.0193	0.4266	0.4482	-0.0218	-8.1994
327	28.87	-0.02	3.9961	-0.4455	0.2917	-0.5905	0.0208	0.4172	0.4495	-0.0323	-9.1117
328	29.97	-0.04	4.3190	-0.1356	0.2605	-0.8710	0.0227	0.4055	0.4567	-0.0492	-8.0314
329	31.04	-0.03	4.7039	0.2071	0.2079	-0.4634	0.0246	0.3933	0.4534	-0.0601	8.0448
330	32.27	-0.02	5.0292	0.5240	0.2626	-0.8256	0.0263	0.3761	0.4646	-0.0885	8.1042
331	33.45	-0.04	5.4905	0.6845	0.0200	-0.3751	0.0095	0.3519	0.4650	-0.1132	8.1611
332	34.77	-0.03	5.9898	1.1338	0.1564	-0.1173	0.0176	0.3265	0.4649	-0.1385	8.1893
333	36.31	-0.06	6.5363	1.0877	-0.1947	0.6299	-0.0197	0.3060	0.4669	-0.1610	8.1664
334	38.07	-0.04	7.1352	1.2367	-0.0757	0.6831	0.0076	0.2789	0.4640	-0.1851	8.1731
335	40.17	-0.05	7.9052	1.2765	-0.0580	-0.0033	0.0191	0.2344	0.4541	-0.2197	8.1615
336	42.72	-0.09	8.8398	1.1908	-0.2948	0.7244	0.0150	0.1887	0.4252	-0.2365	8.1367
337	45.80	-0.05	9.9654	1.3771	-0.1939	0.6527	0.0319	0.1225	0.3935	-0.2710	8.1382
338	49.51	0.03	12.2580	-2.0334	0.0638	2.1815	-0.0067	0.1726	0.4297	-0.2571	-8.1863
339	53.80	0.05	13.2816	-2.5760	0.8186	1.5975	0.0542	0.1525	0.3976	-0.2952	-8.1940
340	58.12	-0.08	13.7229	-2.6437	-0.1831	-1.0349	0.0467	0.0328	0.3930	-0.3602	-8.2029
341	58.25	-0.07	13.3704	-1.9325	-0.1400	-1.0359	0.0579	-0.0225	0.3600	-0.3825	-8.1465
342	58.27	-0.03	13.5808	-2.2357	-0.0345	-1.0256	0.0587	-0.0364	0.3778	-0.4122	-8.1645
343	58.26	-0.05	13.4157	-1.5304	0.1770	-0.7004	0.0587	-0.0070	0.3876	-0.3946	-8.1141
344	58.25	-0.08	13.3539	-1.5511	-0.2320	-0.7415	0.0581	-0.0081	0.3923	-0.3924	-8.1162
345	58.23	-0.08	13.2300	-1.4910	-0.1771	-0.5195	0.0575	-0.0134	0.3848	-0.3982	-8.1127
346	58.24	-0.04	13.5121	-2.0301	0.3153	-1.5155	0.0534	0.0046	0.3978	-0.3932	-8.1502
347	58.25	-0.07	13.6057	-1.8425	0.4314	-0.3160	0.0588	-0.0115	0.4070	-0.4185	-8.1354
348	57.89	0.05	13.8683	-3.3228	0.9339	1.5129	0.0567	0.0184	0.4157	-0.3973	-8.2396
349	57.04	0.03	13.7763	-3.3445	0.7190	1.5613	0.0567	0.0706	0.4333	-0.3627	-8.2428
350	56.18	0.06	13.7791	-3.3253	1.0029	1.7577	0.0619	0.0905	0.4326	-0.3422	-8.2414
351	55.32	0.06	13.8735	-3.4292	1.0824	1.6947	0.0672	0.1002	0.4439	-0.3438	-8.2472
352	54.44	0.05	13.7687	-3.4573	1.4356	1.3337	0.0555	0.1269	0.4810	-0.3541	-8.2668
353	53.56	0.10	13.5061	-3.5060	1.5447	1.3049	0.0486	0.1451	0.5037	-0.3586	-8.2644
354	52.64	0.10	13.1804	-3.1817	1.4911	1.0008	0.0265	0.1494	0.4961	-0.3467	-8.2414
355	51.69	0.07	12.8665	-2.7989	1.0209	2.4404	-0.0226	0.1086	0.4794	-0.3709	-8.2210
356	50.70	0.04	11.9823	-1.9284	1.3675	1.9695	-0.0426	0.1451	0.4688	-0.3238	-8.1609
357	49.75	-0.01	11.0492	0.1041	0.2895	1.7941	0.0038	0.1358	0.4601	-0.3244	8.0894
358	48.82	-0.01	10.5478	1.0296	0.2554	1.6066	0.0035	0.1127	0.4290	-0.3164	8.0972
359	47.86	-0.04	10.1781	1.1194	0.0985	0.9979	0.0176	0.1046	0.4131	-0.3086	8.1180
360	46.88	-0.03	9.8609	1.1579	0.3020	-0.1143	0.0461	0.1167	0.4132	-0.2966	8.1174
361	45.88	-0.04	9.5701	1.2302	0.2934	-0.4377	0.0459	0.1144	0.4143	-0.3000	8.1292
362	44.86	-0.06	9.2116	1.1536	0.0635	0.3042	0.0294	0.1324	0.4249	-0.2926	8.1252
363	43.84	-0.04	8.8382	1.0983	-0.1701	-0.4027	0.0423	0.1766	0.4363	-0.2597	8.1243
364	42.79	-0.07	8.4524	1.0515	-0.1154	0.5065	0.0061	0.1808	0.4456	-0.2648	8.1244
365	41.74	-0.06	8.0422	1.1495	-0.0086	-0.0379	0.0194	0.2102	0.4565	-0.2463	8.1478
366	40.65	-0.07	7.6588	1.2134	-0.0730	0.5445	0.0093	0.2216	0.4649	-0.2433	8.1585
367	39.52	-0.06	7.2509	1.2244	-0.0357	0.1898	0.0091	0.2363	0.4758	-0.2395	8.1689
368	38.38	-0.05	6.8233	1.2522	0.0203	0.2611	0.0070	0.2619	0.4789	-0.2170	8.1835

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 9 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART NO.= 7310-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5.0000 1.7 0.0 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
369	37.27	-0.07	4.4555	1.2172	-0.3451	0.0605	0.0031	0.2758	0.0777	-0.2019	0.1886
370	36.02	-0.05	5.9731	1.0724	0.4552	-0.1852	0.0112	0.3055	0.0796	-0.1742	0.1793
371	34.77	-0.06	5.5783	0.9471	0.4135	-0.5312	0.0038	0.3271	0.0763	-0.1493	0.1698
372	33.53	-0.05	5.0744	0.6844	0.2135	-0.5134	0.0134	0.3464	0.0722	-0.1259	0.1389
373	32.23	-0.06	4.7077	0.3311	0.1165	-0.7043	0.0163	0.3630	0.0674	-0.1049	0.0703
374	30.84	-0.04	4.2634	-0.1286	0.0410	-1.0967	0.0418	0.3865	0.0651	-0.0806	-0.0302
375	29.53	-0.01	3.9221	-0.0496	0.0771	-1.0693	0.0657	0.3896	0.0598	-0.0692	-0.1271
376	28.11	-0.05	3.5508	-0.0203	0.2755	-0.5497	-0.0065	0.4000	0.0659	-0.0659	-0.2318

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RA10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	5	0.50	1.7	0.0	81A0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-5.87	0.01	-0.0251	0.0142	0.0331	-0.5654	-1.3192	-0.2301	-0.0667	-0.1694	0.2897	0.7363
2	-5.87	-0.01	-0.0241	0.0155	0.0347	-0.7716	-1.7143	-0.2301	-0.0670	-0.1683	0.2910	0.7312
3	-5.87	-0.02	-0.0321	0.0096	0.0298	-0.2973	-0.9279	-0.2356	-0.0673	-0.1710	0.2854	0.7256
4	-5.87	-0.02	-0.0270	0.0136	0.0316	-0.4994	-1.1564	-0.2355	-0.0667	-0.1742	0.2831	0.7356
5	-5.86	-0.01	-0.0251	0.0142	0.0331	-0.5654	-1.3192	-0.2247	-0.0667	-0.1645	0.2967	0.7321
6	-5.71	-0.01	-0.0249	0.0142	0.0314	-0.5698	-1.2429	-0.2054	-0.0653	-0.1574	0.3180	0.7661
7	-5.67	-0.02	-0.0323	0.0114	0.0311	-0.3672	-0.9612	-0.2081	-0.0653	-0.1598	0.3139	0.7677
8	-5.38	-0.02	-0.0273	0.0123	0.0316	-0.4668	-1.1355	-0.1973	-0.0645	-0.1500	0.3267	0.7684
9	-5.23	-0.01	-0.0203	0.0164	0.0347	-0.7905	-1.7143	-0.1697	-0.0619	-0.1420	0.3650	0.8368
10	-5.09	-0.02	-0.0208	0.0164	0.0380	-0.7737	-1.8411	-0.1560	-0.0609	-0.1332	0.3902	0.8534
11	-4.93	-0.01	-0.0204	0.0156	0.0354	-0.7678	-1.7583	-0.1424	-0.0590	-0.1276	0.4140	0.8957
12	-4.77	-0.02	-0.0252	0.0142	0.0342	-0.5642	-1.3563	-0.1368	-0.0581	-0.1259	0.4265	0.9203
13	-4.61	-0.01	-0.0230	0.0150	0.0366	-0.6513	-1.5926	-0.1205	-0.0567	-0.1167	0.4708	0.9688
14	-4.47	-0.01	-0.0255	0.0142	0.0363	-0.5568	-1.4242	-0.1151	-0.0553	-0.1130	0.4803	0.9816
15	-4.33	-0.01	-0.0256	0.0142	0.0373	-0.5547	-1.4604	-0.1013	-0.0536	-0.1085	0.5295	1.0705
16	-4.20	-0.02	-0.0255	0.0142	0.0363	-0.5568	-1.4242	-0.0877	-0.0517	-0.1017	0.5497	1.1595
17	-4.06	-0.01	-0.0230	0.0146	0.0365	-0.6345	-1.5926	-0.0879	-0.0511	-0.0984	0.5818	1.1196
18	-3.91	-0.01	-0.0307	0.0134	0.0378	-0.4371	-1.2327	-0.0658	-0.0486	-0.0910	0.7398	1.3827
19	-3.78	-0.01	-0.0207	0.0150	0.0393	-0.7209	-1.8791	-0.0495	-0.0458	-0.0829	0.9259	1.6745
20	-3.66	-0.01	-0.0259	0.0148	0.0395	-0.5634	-1.5261	-0.0441	-0.0448	-0.0802	1.0153	1.8184
21	-3.52	-0.01	-0.0303	0.0119	0.0355	-0.3917	-1.1720	-0.0496	-0.0453	-0.0806	0.9125	1.6245
22	-3.40	0.01	-0.0112	0.0179	0.0434	-1.6034	-3.8793	-0.0222	-0.0411	-0.0704	1.8522	3.1739
23	-3.26	-0.01	-0.0304	0.0119	0.0366	-0.3905	-1.2032	-0.0250	-0.0405	-0.0706	1.6216	2.8263
24	-3.11	-0.02	-0.0242	0.0141	0.0381	-0.5000	-1.3527	-0.0005	-0.0367	-0.0585	76.0000	121.2000
25	-2.98	-0.00	-0.0208	0.0156	0.0400	-0.7500	-1.9213	0.0049	-0.0355	-0.0558	-7.2157	-11.3333
26	-2.86	-0.02	-0.0208	0.0164	0.0401	-0.7870	-1.9259	-0.0007	-0.0361	-0.0563	53.4286	83.2857
27	-2.71	-0.00	-0.0164	0.0191	0.0440	-1.1647	-2.6824	0.0212	-0.0327	-0.0478	-1.5409	-2.2500
28	-2.58	-0.00	-0.0185	0.0172	0.0415	-0.9271	-2.2396	0.0320	-0.0300	-0.0412	-0.9367	-1.2861
29	-2.45	-0.01	-0.0306	0.0133	0.0389	-0.4326	-1.2633	0.0346	-0.0288	-0.0389	-0.9329	-1.1198
30	-2.32	-0.01	-0.0356	0.0094	0.0361	-0.2741	-1.0705	0.0346	-0.0291	-0.0368	-0.8412	-1.1198
31	-2.14	-0.01	-0.0209	0.0156	0.0411	-0.7465	-1.9631	0.0509	-0.0261	-0.0307	-0.5114	-0.6023
32	-2.00	0.00	-0.0236	0.0156	0.0408	-0.6667	-1.7407	0.0618	-0.0244	-0.0253	-0.3947	-0.4087
33	-1.93	-0.01	-0.0234	0.0161	0.0407	-0.6818	-1.7366	0.0619	-0.0244	-0.0275	-0.3941	-0.4439
34	-1.79	-0.01	-0.0236	0.0156	0.0408	-0.6667	-1.7407	0.0728	-0.0228	-0.0221	-0.3126	-0.3033
35	-1.67	-0.01	-0.0160	0.0187	0.0468	-1.1667	-2.5482	0.0811	-0.0211	-0.0214	-0.2604	-0.2640
36	-1.54	-0.00	-0.0212	0.0174	0.0423	-0.8655	-1.9909	0.0967	-0.0183	-0.0169	-0.1937	-0.1786
37	-1.42	-0.00	-0.0258	0.0141	0.0396	-0.5464	-1.5781	0.1001	-0.0166	-0.0142	-0.1659	-0.1418
38	-1.29	-0.01	-0.0209	0.0164	0.0411	-0.7834	-1.9531	0.1054	-0.0150	-0.0114	-0.1419	-0.1081
39	-1.15	-0.01	-0.0257	0.0133	0.0394	-0.5148	-1.5338	0.1110	-0.0139	-0.0109	-0.1252	-0.0983
40	-1.04	-0.01	-0.0208	0.0152	0.0399	-0.7315	-1.9167	0.1135	-0.0127	-0.0078	-0.1122	-0.0655
41	-0.93	0.00	-0.0233	0.0145	0.0397	-0.6226	-1.7056	0.1135	-0.0122	-0.0073	-0.1071	-0.0646
42	-0.80	-0.00	-0.0280	0.0118	0.0379	-0.4207	-1.3552	0.1215	-0.0095	-0.0033	-0.0778	-0.0270
43	-0.68	-0.01	-0.0258	0.0141	0.0396	-0.5468	-1.5281	0.1269	-0.0077	-0.0006	-0.0608	-0.0046
44	-0.55	-0.00	-0.0257	0.0129	0.0393	-0.5038	-1.5301	0.1295	-0.0041	-0.0016	-0.0320	-0.0106
45	-0.43	-0.01	-0.0183	0.0184	0.0402	-0.8947	-2.1947	0.1369	0.0036	0.0039	0.0261	0.0282
46	-0.32	-0.01	-0.0207	0.0161	0.0398	-0.6791	-1.9209	0.1314	0.0019	0.0034	0.0147	0.0257

TEST 7 PART 5 MACH 0.90 RE10-6 1.7 PHI 0.0 CONF H1=OF23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
47	-0.20	-0.01	-0.0207	0.0152	0.0399	-0.7349	-1.9256	0.1368	0.0044	0.0061	0.0324	0.0444
48	-0.07	0.00	-0.0193	0.0163	0.0402	-0.8895	-2.1947	0.1445	0.0071	0.0112	0.0494	0.0774
49	0.06	-0.01	-0.0230	0.0125	0.0387	-0.5462	-1.6661	0.1472	0.0071	0.0125	0.0485	0.0852
50	0.17	-0.01	-0.0207	0.0159	0.0397	-0.7674	-1.9256	0.1581	0.0105	0.0157	0.0665	0.0995
51	0.29	-0.00	-0.0256	0.0125	0.0392	-0.4906	-1.5321	0.1578	0.0138	0.0180	0.0875	0.1144
52	0.40	-0.01	-0.0230	0.0129	0.0384	-0.5630	-1.6723	0.1631	0.0169	0.0197	0.1036	0.1287
53	0.54	-0.01	-0.0257	0.0133	0.0392	-0.5188	-1.5263	0.1629	0.0191	0.0208	0.1173	0.1288
54	0.64	-0.01	-0.0230	0.0133	0.0384	-0.5795	-1.6723	0.1681	0.0224	0.0235	0.1332	0.1401
55	0.76	-0.01	-0.0207	0.0155	0.0394	-0.7488	-1.9209	0.1735	0.0260	0.0262	0.1385	0.1513
56	0.88	-0.01	-0.0230	0.0133	0.0384	-0.5798	-1.6723	0.1735	0.0243	0.0262	0.1402	0.1513
57	1.01	-0.00	-0.0256	0.0125	0.0391	-0.4906	-1.5283	0.1783	0.0273	0.0333	0.1531	0.1867
58	1.11	-0.01	-0.0240	0.0155	0.0384	-0.7559	-1.8873	0.1866	0.0292	0.0318	0.1567	0.1706
59	1.24	-0.00	-0.0206	0.0151	0.0387	-0.7371	-1.8826	0.1920	0.0306	0.0335	0.1593	0.1744
60	1.33	-0.01	-0.0255	0.0118	0.0391	-0.4621	-1.5341	0.1892	0.0304	0.0332	0.1606	0.1754
61	1.47	-0.02	-0.0231	0.0155	0.0385	-0.6736	-1.4695	0.2027	0.0343	0.0388	0.1690	0.1913
62	1.56	-0.00	-0.0257	0.0141	0.0392	-0.5489	-1.5263	0.2136	0.0353	0.0430	0.1653	0.2014
63	1.70	0.00	-0.0256	0.0155	0.0393	-0.6030	-1.5283	0.2109	0.0350	0.0428	0.1661	0.2031
64	1.81	-0.00	-0.0257	0.0141	0.0392	-0.5489	-1.5263	0.2271	0.0375	0.0498	0.1653	0.2192
65	1.92	0.00	-0.0256	0.0125	0.0391	-0.4906	-1.5283	0.2353	0.0384	0.0527	0.1632	0.2239
66	2.03	-0.01	-0.0257	0.0141	0.0392	-0.5489	-1.5263	0.2380	0.0392	0.0548	0.1646	0.2278
67	2.16	-0.02	-0.0257	0.0144	0.0392	-0.5602	-1.5263	0.2434	0.0403	0.0567	0.1657	0.2331
68	2.27	-0.00	-0.0219	0.0118	0.0377	-0.4221	-1.3529	0.2432	0.0408	0.0600	0.1678	0.2467
69	2.37	-0.01	-0.0256	0.0129	0.0391	-0.5057	-1.5283	0.2650	0.0444	0.0685	0.1675	0.2585
70	2.50	-0.01	-0.0243	0.0141	0.0390	-0.5983	-1.4164	0.2650	0.0444	0.0685	0.1675	0.2585
71	2.61	-0.01	-0.0305	0.0110	0.0365	-0.3608	-1.2627	0.2758	0.0466	0.0750	0.1690	0.2719
72	2.72	0.01	-0.0256	0.0133	0.0392	-0.5208	-1.5321	0.2812	0.0481	0.0777	0.1709	0.2763
73	2.84	-0.00	-0.0257	0.0146	0.0393	-0.5752	-1.5301	0.2866	0.0488	0.0803	0.1704	0.2801
74	2.98	-0.01	-0.0282	0.0125	0.0398	-0.4452	-1.4194	0.2919	0.0500	0.0841	0.1712	0.2883
75	3.06	-0.00	-0.0256	0.0133	0.0371	-0.5247	-1.4601	0.2863	0.0505	0.0847	0.1763	0.2959
76	3.19	-0.01	-0.0257	0.0141	0.0392	-0.5689	-1.5263	0.3136	0.0561	0.0937	0.1726	0.2988
77	3.30	-0.01	-0.0256	0.0155	0.0393	-0.6030	-1.5283	0.3188	0.0561	0.0975	0.1758	0.3060
78	3.39	-0.01	-0.0208	0.0171	0.0399	-0.8194	-1.9167	0.3351	0.0591	0.1044	0.1762	0.3115
79	3.52	-0.00	-0.0208	0.0179	0.0399	-0.8585	-1.9167	0.3296	0.0582	0.1039	0.1765	0.3153
80	3.64	-0.01	-0.0326	0.0091	0.0364	-0.2781	-1.1035	0.3408	0.0593	0.1071	0.1762	0.3144
81	3.74	-0.01	-0.0256	0.0129	0.0391	-0.5057	-1.5283	0.3459	0.0610	0.1098	0.1763	0.3174
82	3.86	-0.01	-0.0230	0.0133	0.0383	-0.5748	-1.6661	0.3568	0.0623	0.1151	0.1747	0.3226
83	3.98	-0.03	-0.0231	0.0141	0.0384	-0.6109	-1.6653	0.3675	0.0648	0.1205	0.1764	0.3279
84	4.08	0.00	-0.0229	0.0118	0.0382	-0.5146	-1.6709	0.3628	0.0638	0.1200	0.1762	0.3316
85	4.20	0.00	-0.0229	0.0118	0.0382	-0.5148	-1.6709	0.3838	0.0671	0.1285	0.1747	0.3348
86	4.32	-0.00	-0.0229	0.0118	0.0382	-0.5148	-1.6709	0.3947	0.0687	0.1328	0.1740	0.3363
87	4.42	-0.01	-0.0206	0.0141	0.0376	-0.6919	-1.8493	0.4001	0.0696	0.1344	0.1739	0.3359
88	4.52	-0.01	-0.0205	0.0145	0.0377	-0.7075	-1.8493	0.4009	0.0696	0.1324	0.1730	0.3302
89	4.63	-0.01	-0.0205	0.0141	0.0376	-0.6887	-1.8396	0.4200	0.0716	0.1395	0.1705	0.3327
90	4.72	-0.01	-0.0204	0.0129	0.0376	-0.6351	-1.8483	0.4334	0.0738	0.1506	0.1703	0.3475
91	4.84	-0.02	-0.0202	0.0133	0.0355	-0.6603	-1.7608	0.4281	0.0727	0.1458	0.1697	0.3485
92	4.95	0.00	-0.0227	0.0114	0.0362	-0.5021	-1.5957	0.4337	0.0729	0.1451	0.1682	0.3346

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
I 5 0.90 1.7 0.0 81.0F23 6.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	5.06	0.01	-0.0203	0.0119	0.0374	-0.5429	-1.8476	0.4744	0.0774	0.1662	0.1631	0.3504
94	5.17	-0.01	-0.0178	0.0133	0.0366	-0.7500	-2.0761	0.4554	0.0760	0.1548	0.1669	0.3398
95	5.24	-0.01	-0.0202	0.0133	0.0355	-0.6403	-1.7608	0.4773	0.0776	0.1643	0.1621	0.3442
96	5.35	0.00	-0.0245	0.0095	0.0367	-0.3798	-1.3953	0.4881	0.0787	0.1718	0.1613	0.3520
97	5.47	-0.01	-0.0223	0.0095	0.0339	-0.4242	-1.5195	0.4991	0.0802	0.1740	0.1606	0.3485
98	5.58	-0.00	-0.0203	0.0102	0.0353	-0.5121	-1.7681	0.5018	0.0805	0.1764	0.1606	0.3515
99	5.66	0.00	-0.0220	0.0095	0.0317	-0.4298	-1.4430	0.4991	0.0799	0.1739	0.1601	0.3483
100	5.77	-0.01	-0.0198	0.0102	0.0343	-0.5171	-1.7317	0.5208	0.0821	0.1868	0.1571	0.3587
101	5.86	0.01	-0.0197	0.0106	0.0332	-0.5392	-1.6863	0.5318	0.0826	0.1900	0.1553	0.3572
102	5.96	-0.01	-0.0172	0.0095	0.0336	-0.5506	-1.9438	0.5291	0.0824	0.1886	0.1557	0.3565
103	6.06	0.00	-0.0146	0.0113	0.0327	-0.7550	-2.2450	0.5401	0.0832	0.1917	0.1540	0.3549
104	6.16	-0.01	-0.0171	0.0102	0.0323	-0.5969	-1.8927	0.5650	0.0802	0.2037	0.1419	0.3605
105	6.25	0.01	-0.0165	0.0102	0.0316	-0.7067	-2.1800	0.5762	0.0793	0.2068	0.1376	0.3588
106	6.36	0.01	-0.0163	0.0102	0.0305	-0.7162	-2.1351	0.5816	0.0790	0.2105	0.1459	0.3628
107	6.47	-0.00	-0.0168	0.0092	0.0301	-0.5460	-1.7931	0.5872	0.0790	0.2099	0.1346	0.3574
108	6.56	0.01	-0.0156	0.0086	0.0294	-0.5291	-1.7500	0.5982	0.0787	0.2152	0.1316	0.3597
109	6.66	-0.01	-0.0161	0.0084	0.0293	-0.5959	-2.0822	0.6120	0.0799	0.2197	0.1305	0.3590
110	6.77	-0.01	-0.0212	0.0092	0.0294	-0.4318	-1.1455	0.6185	0.0799	0.2256	0.1308	0.3668
111	6.88	-0.00	-0.0141	0.0088	0.0293	-0.6733	-2.0822	0.6317	0.0805	0.2279	0.1275	0.3611
112	6.97	-0.01	-0.0043	0.0092	0.0325	-2.1111	-7.6889	0.6366	0.0807	0.2317	0.1267	0.3639
113	7.06	-0.00	-0.0145	0.0080	0.0265	-0.6323	-1.3229	0.6393	0.0810	0.2330	0.1266	0.3645
114	7.17	-0.01	-0.0184	0.0080	0.0234	-0.4346	-1.2723	0.6419	0.0810	0.2365	0.1261	0.3684
115	7.26	0.00	-0.0143	0.0084	0.0269	-0.5148	-1.6509	0.6585	0.0818	0.2402	0.1242	0.3647
116	7.36	0.01	-0.0088	0.0080	0.0277	-0.9121	-3.1538	0.6530	0.0815	0.2386	0.1249	0.3654
117	7.45	-0.01	-0.0112	0.0084	0.0263	-0.7500	-2.3536	0.6585	0.0821	0.2412	0.1247	0.3663
118	7.55	-0.01	-0.0182	0.0080	0.0224	-0.4382	-1.2275	0.6640	0.0821	0.2428	0.1237	0.3656
119	7.64	-0.00	-0.0159	0.0084	0.0237	-0.5273	-1.4909	0.6806	0.0829	0.2454	0.1218	0.3605
120	7.75	-0.01	-0.0112	0.0069	0.0263	-0.7500	-2.3536	0.6805	0.0832	0.2486	0.1222	0.3656
121	7.84	0.01	-0.0206	0.0080	0.0210	-0.3879	-1.0187	0.6861	0.0832	0.2469	0.1212	0.3599
122	7.92	-0.00	-0.0231	0.0088	0.0197	-0.3473	-0.8536	0.6833	0.0826	0.2478	0.1209	0.3626
123	8.01	-0.00	-0.0182	0.0080	0.0224	-0.4392	-1.2275	0.6944	0.0829	0.2509	0.1194	0.3613
124	8.11	-0.01	-0.0158	0.0088	0.0227	-0.5549	-1.4329	0.6972	0.0826	0.2522	0.1185	0.3617
125	8.19	-0.01	-0.0141	0.0080	0.0213	-0.6415	-1.1755	0.7083	0.0826	0.2532	0.1166	0.3574
126	8.28	-0.00	-0.0193	0.0088	0.0224	-0.4579	-1.2211	0.7055	0.0826	0.2540	0.1171	0.3680
127	8.37	-0.01	-0.0232	0.0080	0.0207	-0.3458	-0.8958	0.7083	0.0824	0.2531	0.1163	0.3573
128	8.46	-0.01	-0.0192	0.0072	0.0223	-0.3948	-1.2222	0.7194	0.0826	0.2563	0.1148	0.3562
129	8.55	-0.00	-0.0230	0.0072	0.0197	-0.3151	-0.8571	0.7194	0.0821	0.2563	0.1141	0.3562
130	8.62	-0.00	-0.0240	0.0065	0.0191	-0.2310	-0.6828	0.7247	0.0826	0.2633	0.1140	0.3633
131	8.71	-0.01	-0.0253	0.0065	0.0182	-0.2557	-0.7214	0.7247	0.0818	0.2633	0.1129	0.3633
132	8.81	-0.01	-0.0260	0.0065	0.0191	-0.2310	-0.6828	0.7359	0.0824	0.2631	0.1120	0.3575
133	8.90	-0.01	-0.0255	0.0065	0.0193	-0.2538	-0.7576	0.7416	0.0815	0.2625	0.1099	0.3540
134	9.00	0.00	-0.0279	0.0072	0.0180	-0.2595	-0.8471	0.7471	0.0805	0.2674	0.1077	0.3579
135	9.07	0.01	-0.0206	0.0091	0.0209	-0.2954	-1.0188	0.7473	0.0799	0.2640	0.1069	0.3533
136	9.17	-0.01	-0.0132	0.0072	0.0229	-0.5674	-1.7299	0.7418	0.0793	0.2624	0.1069	0.3538
137	9.26	-0.01	-0.0260	0.0065	0.0191	-0.2310	-0.6828	0.7638	0.0802	0.2698	0.1050	0.3532
138	9.33	-0.00	-0.0229	0.0057	0.0196	-0.2689	-0.8565	0.7586	0.0783	0.2638	0.1032	0.3477

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	5	0.50	1.7	0.0	21	0.8	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
139	9.41	-0.00	-0.0277	0.0057	0.0169	-0.2056	-0.4098	0.7751	0.0793	0.2645	0.1023	0.3464
140	9.51	0.02	-0.0222	0.0045	0.0195	-0.1963	-1.8523	0.7671	0.0760	0.2645	0.0991	0.3448
141	9.60	-0.01	-0.0226	0.0053	0.0186	-0.2331	-0.4093	0.7728	0.0755	0.2638	0.0976	0.3414
142	9.68	-0.02	-0.0302	0.0041	0.0176	-0.1374	-1.5815	0.7864	0.0765	0.2705	0.0973	0.3448
143	9.79	-0.01	-0.0276	0.0041	0.0169	-0.1563	-0.6084	0.7761	0.0702	0.2596	0.0905	0.3344
144	9.87	-0.01	-0.0303	0.0053	0.0177	-0.1752	-1.5828	0.7920	0.0765	0.2710	0.0966	0.3422
145	9.95	-0.00	-0.0277	0.0041	0.0179	-0.1498	-0.6446	0.7815	0.0702	0.2645	0.0899	0.3384
146	10.05	-0.00	-0.0227	0.0045	0.0186	-0.2048	-0.8128	0.7816	0.0694	0.2633	0.0888	0.3369
147	10.13	-0.01	-0.0304	0.0045	0.0152	-0.1399	-0.4702	0.7928	0.0685	0.2643	0.0864	0.3333
148	10.23	-0.02	-0.0229	0.0049	0.0195	-0.2152	-1.8523	0.7928	0.0680	0.2642	0.0858	0.3332
149	10.31	-0.01	-0.0301	0.0041	0.0165	-0.1378	-1.5691	0.8013	0.0666	0.2660	0.0831	0.3320
150	10.40	0.01	-0.0301	0.0027	0.0175	-0.0657	-1.5301	0.8097	0.0666	0.2656	0.0822	0.3281
151	10.48	0.00	-0.0290	0.0049	0.0206	-0.2143	-0.4950	0.8096	0.0663	0.2678	0.0819	0.3307
152	10.57	-0.01	-0.0278	0.0038	0.0184	-0.1354	-1.6806	0.8097	0.0649	0.2678	0.0802	0.3307
153	10.65	0.00	-0.0276	0.0038	0.0189	-0.1354	-1.6806	0.8182	0.0644	0.2674	0.0787	0.3268
154	10.75	-0.02	-0.0367	0.0038	0.0173	-0.1032	-1.5280	0.8182	0.0639	0.2674	0.0781	0.3268
155	10.83	-0.00	-0.0302	0.0038	0.0176	-0.1114	-0.5815	0.8239	0.0630	0.2678	0.0765	0.3258
156	10.93	0.00	-0.0232	0.0053	0.0216	-0.2292	-1.9333	0.8322	0.0622	0.2706	0.0748	0.3252
157	11.03	0.00	-0.0304	0.0031	0.0197	-0.1019	-1.6476	0.8350	0.0622	0.2698	0.0745	0.3231
158	11.10	-0.00	-0.0281	0.0041	0.0210	-0.1678	-1.7491	0.8386	0.0605	0.2700	0.0722	0.3222
159	11.19	0.01	-0.0278	0.0031	0.0188	-0.1111	-1.6771	0.8379	0.0600	0.2710	0.0716	0.3235
160	11.27	0.01	-0.0256	0.0041	0.0224	-0.1618	-1.9869	0.8454	0.0594	0.2718	0.0702	0.3211
161	11.36	-0.00	-0.0281	0.0041	0.0210	-0.1678	-1.7491	0.8520	0.0589	0.2722	0.0691	0.3195
162	11.43	0.00	-0.0256	0.0034	0.0200	-0.1345	-0.7138	0.8521	0.0583	0.2711	0.0684	0.3182
163	11.52	-0.02	-0.0258	0.0049	0.0224	-0.1618	-0.8689	0.8604	0.0561	0.2740	0.0675	0.3185
164	11.61	-0.01	-0.0258	0.0041	0.0224	-0.1618	-1.8689	0.8548	0.0578	0.2746	0.0676	0.3213
165	11.69	-0.01	-0.0238	0.0053	0.0216	-0.2292	-0.9333	0.8632	0.0578	0.2732	0.0670	0.3165
166	11.78	-0.01	-0.0232	0.0053	0.0216	-0.2292	-1.9333	0.8660	0.0572	0.2744	0.0661	0.3169
167	11.86	-0.00	-0.0255	0.0049	0.0203	-0.1932	-0.7455	0.8744	0.0563	0.2762	0.0644	0.3159
168	11.96	-0.01	-0.0235	0.0057	0.0249	-0.2015	-1.0574	0.8744	0.0563	0.2762	0.0644	0.3159
169	12.03	-0.01	-0.0253	0.0045	0.0221	-0.1454	-0.7816	0.8655	0.0561	0.2793	0.0633	0.3155
170	12.12	-0.02	-0.0230	0.0065	0.0238	-0.2757	-1.0165	0.8885	0.0553	0.2762	0.0622	0.3109
171	12.20	-0.01	-0.0324	0.0038	0.0183	-0.1147	-0.5588	0.8829	0.0544	0.2769	0.0616	0.3137
172	12.29	-0.01	-0.0236	0.0057	0.0225	-0.2216	-1.8727	0.8940	0.0539	0.2800	0.0603	0.3132
173	12.38	-0.00	-0.0297	0.0053	0.0254	-0.1852	-0.8855	0.8913	0.0544	0.2776	0.0611	0.3115
174	12.45	-0.01	-0.0295	0.0057	0.0233	-0.2216	-1.8169	0.8940	0.0534	0.2811	0.0597	0.3144
175	12.54	-0.02	-0.0334	0.0041	0.0227	-0.1963	-0.6792	0.8940	0.0528	0.2800	0.0590	0.3132
176	12.62	-0.01	-0.0331	0.0041	0.0206	-0.1354	-1.6210	0.9053	0.0522	0.2788	0.0577	0.3079
177	12.70	-0.00	-0.0236	0.0065	0.0270	-0.2713	-1.1336	0.9053	0.0517	0.2809	0.0571	0.3102
178	12.79	-0.01	-0.0329	0.0038	0.0194	-0.1144	-1.5899	0.8961	0.0511	0.2799	0.0572	0.3138
179	12.87	-0.01	-0.0332	0.0041	0.0216	-0.1354	-1.6512	0.8961	0.0511	0.2799	0.0572	0.3130
180	12.96	-0.02	-0.0297	0.0053	0.0254	-0.1552	-1.8855	0.9108	0.0519	0.2836	0.0565	0.3113
181	13.05	-0.01	-0.0345	0.0038	0.0237	-0.0977	-1.6015	0.9110	0.0503	0.2802	0.0552	0.3076
182	13.14	-0.01	-0.0338	0.0045	0.0222	-0.1121	-1.5779	0.9110	0.0506	0.2791	0.0555	0.3064
183	13.21	-0.02	-0.0362	0.0034	0.0210	-0.0844	-0.5505	0.9194	0.0500	0.2798	0.0544	0.3043
184	13.29	-0.01	-0.0334	0.0045	0.0222	-0.1121	-1.5779	0.9195	0.0492	0.2798	0.0535	0.3063

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 9

... MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REY**-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 5 1.7 0.0 81=OF23 0.0 0. 0. 0. 0. UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
185	13.37	-0.02	-0.0354	0.0041	0.0221	-0.1040	-0.5754	0.9279	0.0486	0.2816	0.0524	0.3035
186	13.47	-0.02	-0.0384	0.0041	0.0221	-0.1080	-0.5754	0.9336	0.0489	0.2820	0.0526	0.3022
187	13.56	-0.01	-0.0411	0.0036	0.0239	-0.0915	-0.5822	0.9362	0.0489	0.2834	0.0523	0.3027
188	13.63	-0.01	-0.0456	0.0027	0.0212	-0.0589	-0.4632	0.9431	0.0487	0.2843	0.0517	0.3014
189	13.73	-0.03	-0.0364	0.0035	0.0243	-0.0963	-0.6774	0.9321	0.0474	0.2811	0.0508	0.3016
190	13.80	-0.01	-0.0438	0.0035	0.0237	-0.0798	-0.5442	0.9514	0.0484	0.2882	0.0509	0.3029
191	13.87	-0.01	-0.0384	0.0041	0.0264	-0.1067	-0.6799	0.9597	0.0487	0.2900	0.0508	0.3022
192	13.97	-0.03	-0.0505	0.0019	0.0175	-0.0382	-0.3661	0.9626	0.0486	0.2870	0.0503	0.2981
193	14.06	-0.02	-0.0454	0.0019	0.0223	-0.0420	-0.4853	0.9681	0.0479	0.2907	0.0494	0.3003
194	14.13	-0.01	-0.0388	0.0035	0.0242	-0.0900	-0.6275	0.9791	0.0486	0.2928	0.0495	0.2991
195	14.21	-0.02	-0.0260	0.0053	0.0336	-0.2157	-1.3569	0.9764	0.0481	0.2915	0.0493	0.2985
196	14.30	-0.01	-0.0388	0.0031	0.0242	-0.0800	-0.6275	0.9904	0.0490	0.2916	0.0495	0.2944
197	14.37	-0.03	-0.0435	0.0019	0.0236	-0.0463	-0.5437	0.9875	0.0484	0.2935	0.0490	0.2972
198	14.46	-0.01	-0.0435	0.0019	0.0236	-0.0463	-0.5432	0.9903	0.0486	0.2937	0.0489	0.2966
199	14.56	-0.01	-0.0437	0.0019	0.0247	-0.0442	-0.5651	0.9931	0.0486	0.2940	0.0488	0.2960
200	14.63	-0.01	-0.0486	0.0012	0.0220	-0.0239	-0.4562	0.9953	0.0484	0.2942	0.0486	0.2954
201	14.72	-0.02	-0.0438	0.0019	0.0258	-0.0441	-0.5881	1.0067	0.0495	0.3007	0.0492	0.2986
202	14.80	-0.01	-0.0363	0.0023	0.0311	-0.0674	-0.9065	1.0068	0.0490	0.2995	0.0487	0.2975
203	14.90	-0.03	-0.0390	0.0019	0.0305	-0.0630	-0.7745	1.0069	0.0490	0.2974	0.0487	0.2953
204	14.99	-0.01	-0.0388	0.0019	0.0262	-0.0438	-0.6766	1.0069	0.0490	0.2974	0.0487	0.2953
205	15.07	-0.02	-0.0460	0.0012	0.0233	-0.0252	-0.5052	1.0124	0.0501	0.2979	0.0495	0.2942
206	15.16	-0.01	-0.0463	0.0012	0.0256	-0.0250	-0.5479	1.0162	0.0490	0.2972	0.0481	0.2919
207	15.24	-0.02	-0.0435	0.0019	0.0236	-0.0463	-0.5432	1.0154	0.0501	0.2968	0.0493	0.2903
208	15.30	-0.02	-0.0486	0.0	0.0290	0.0	-0.6940	1.0236	0.0486	0.3009	0.0473	0.2948
209	15.41	-0.02	-0.0414	0.0012	0.0270	-0.0260	-0.6527	1.0237	0.0498	0.2966	0.0486	0.2897
210	15.48	-0.02	-0.0440	0.0012	0.0278	-0.0263	-0.6316	1.0293	0.0490	0.2992	0.0478	0.2907
211	15.56	-0.02	-0.0438	0.0023	0.0258	-0.0529	-0.5481	1.0183	0.0501	0.2917	0.0492	0.2864
212	15.66	-0.01	-0.0582	0.0012	0.0187	-0.0199	-0.3217	1.0267	0.0490	0.2935	0.0477	0.2859
213	15.74	-0.03	-0.0418	0.0012	0.0302	-0.0277	-0.7229	1.0351	0.0471	0.2965	0.0455	0.2884
214	15.82	-0.04	-0.0560	0.0015	0.0212	-0.0276	-0.3743	1.0295	0.0490	0.2937	0.0476	0.2853
215	15.90	0.00	-0.0538	0.0012	0.0246	-0.0215	-0.4570	1.0353	0.0474	0.2930	0.0458	0.2830
216	15.98	-0.03	-0.0487	0.0019	0.0241	-0.0348	-0.4950	1.0298	0.0474	0.2904	0.0460	0.2820
217	16.07	-0.03	-0.0467	0.0012	0.0267	-0.0268	-0.6136	1.0352	0.0474	0.2953	0.0458	0.2852
218	16.15	-0.02	-0.0509	0.0027	0.0218	-0.0530	-0.4280	1.0353	0.0474	0.2930	0.0458	0.2830
219	16.22	-0.03	-0.0444	0.0004	0.0310	-0.0087	-0.6978	1.0492	0.0456	0.2997	0.0435	0.2856
220	16.31	-0.05	-0.0747	0.0012	0.0084	-0.0155	-0.1124	1.0326	0.0462	0.2928	0.0448	0.2836
221	16.38	-0.03	-0.0559	0.0065	0.0193	-0.0812	-0.3454	1.0263	0.0459	0.2899	0.0448	0.2831
222	16.46	-0.04	-0.0540	0.0	0.0267	0.0	-0.4946	1.0409	0.0446	0.2979	0.0428	0.2862
223	16.55	-0.03	-0.0605	0.0035	0.0165	-0.0574	-0.2727	1.0272	0.0446	0.2901	0.0434	0.2825
224	16.63	-0.02	-0.0703	0.0	0.0152	0.0	-0.2167	1.0355	0.0443	0.2930	0.0428	0.2830
225	16.72	-0.03	-0.0607	0.0041	0.0177	-0.0684	-0.2909	1.0190	0.0440	0.2871	0.0432	0.2818
226	16.80	-0.03	-0.0660	0.0035	0.0157	-0.0511	-0.2312	1.0301	0.0440	0.2903	0.0427	0.2818
227	16.88	-0.03	-0.0470	-0.0008	0.0316	0.0164	-0.6735	1.0355	0.0424	0.2974	0.0409	0.2872
228	16.96	-0.04	-0.0538	0.0027	0.0247	-0.0502	-0.4588	1.0191	0.0429	0.2889	0.0421	0.2796
229	17.05	-0.03	-0.0587	0.0038	0.0221	-0.0641	-0.3766	1.0163	0.0429	0.2870	0.0422	0.2824
230	17.12	-0.04	-0.0447	-0.0008	0.0361	0.0173	-0.7624	1.0300	0.0415	0.2947	0.0403	0.2861

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NO.= .7 .5 .6 .8 1.7 PHI = 0.0 CONF = M1=OF23 L = 0.0 DEL1 = 0 DEL2 = 0 DEL3 = 0 DEL4 = 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
231	17.20	-0.05	-0.0565	0.0027	0.0256	-0.0476	-0.4527	1.0135	0.0426	0.2856	0.0421	0.2818
232	17.30	-0.05	-0.0543	-0.0031	0.0305	0.0568	-0.5666	1.0329	0.0410	0.2938	0.0397	0.2844
233	17.36	-0.05	-0.0639	0.0015	0.0235	-0.0242	-0.3686	1.0136	0.0412	0.2867	0.0406	0.2828
234	17.44	-0.05	-0.0683	0.0035	0.0174	-0.0508	-0.2613	1.0136	0.0415	0.2867	0.0409	0.2828
235	17.54	-0.05	-0.0539	-0.0012	0.0266	0.0215	-0.4937	1.0274	0.0407	0.2933	0.0396	0.2855
236	17.63	-0.05	-0.0826	0.0024	0.0164	-0.0240	-0.1308	1.0079	0.0410	0.2846	0.0407	0.2861
237	17.69	-0.05	-0.0642	0.0019	0.0178	-0.0263	-0.2663	1.0329	0.0412	0.2938	0.0399	0.2844
238	17.77	-0.06	-0.0730	0.0006	0.0161	-0.0106	-0.2206	1.0246	0.0404	0.2920	0.0395	0.2858
239	17.86	-0.05	-0.0591	0.0004	0.0261	-0.0065	-0.4428	1.0246	0.0407	0.2920	0.0397	0.2858
240	17.93	-0.06	-0.0732	0.0	0.0161	0.0	-0.2472	1.0163	0.0404	0.2901	0.0398	0.2855
241	18.02	-0.06	-0.0542	0.0004	0.0269	-0.0055	-0.4772	1.0079	0.0393	0.2927	0.0390	0.2904
242	18.10	-0.04	-0.0735	0.0006	0.0106	-0.0052	-0.2769	1.0079	0.0396	0.2905	0.0392	0.2882
243	18.18	-0.03	-0.0669	-0.0017	0.0265	0.0173	-0.4757	1.0079	0.0390	0.2927	0.0387	0.2904
244	18.27	-0.02	-0.0550	-0.0008	0.0351	0.0140	-0.6386	1.0308	0.0382	0.3023	0.0371	0.2935
245	18.35	-0.02	-0.0736	0.0015	0.0225	-0.0209	-0.3046	0.9915	0.0396	0.2804	0.0399	0.2828
246	18.42	-0.04	-0.0508	0.0012	0.0423	-0.0228	-0.8311	1.0218	0.0379	0.2972	0.0371	0.2908
247	18.51	-0.03	-0.0607	0.0019	0.0391	-0.0318	-0.6439	1.0192	0.0379	0.2925	0.0372	0.2870
248	18.59	-0.03	-0.0701	0.0015	0.0334	-0.0275	-0.4816	0.9889	0.0385	0.2798	0.0389	0.2822
249	18.67	-0.02	-0.0714	-0.0006	0.0481	0.1174	-0.6730	1.0165	0.0373	0.2912	0.0367	0.2865
250	18.75	-0.03	-0.0687	0.0000	0.0435	-0.0056	-0.6334	1.0302	0.0373	0.2989	0.0362	0.2902
251	18.83	-0.05	-0.0759	-0.0006	0.0404	0.0051	-0.5337	0.9806	0.0388	0.2750	0.0396	0.2804
252	18.91	-0.04	-0.0788	-0.0027	0.0444	0.0343	-0.5630	0.9918	0.0385	0.2778	0.0398	0.2793
253	19.00	-0.03	-0.0809	0.0004	0.0390	-0.0046	-0.4871	0.9806	0.0385	0.2750	0.0393	0.2804
254	19.08	-0.05	-0.0891	-0.0041	0.0453	0.0466	-0.5092	0.9531	0.0393	0.2628	0.0412	0.2758
255	19.14	-0.05	-0.0979	0.0012	0.0329	-0.0118	-0.3360	0.9949	0.0398	0.2555	0.0422	0.2704
256	19.22	-0.05	-0.1077	-0.0012	0.0387	0.0108	-0.2849	0.9311	0.0404	0.2511	0.0434	0.2696
257	19.29	-0.05	-0.0963	-0.0031	0.0414	0.0321	-0.4299	0.9504	0.0396	0.2593	0.0416	0.2728
258	19.38	-0.05	-0.0965	-0.0015	0.0426	0.0160	-0.4420	0.9476	0.0393	0.2601	0.0414	0.2745
259	19.45	-0.03	-0.0949	-0.0023	0.0423	0.0234	-0.4273	0.9366	0.0401	0.2538	0.0429	0.2709
260	19.54	-0.05	-0.1062	-0.0038	0.0483	0.0356	-0.3747	0.9311	0.0404	0.2511	0.0438	0.2696
261	19.61	-0.06	-0.1040	-0.0072	0.0456	0.0696	-0.4389	0.9406	0.0396	0.2582	0.0421	0.2745
262	19.69	-0.05	-0.1108	-0.0019	0.0347	-0.0174	-0.3136	0.9183	0.0412	0.2509	0.0449	0.2732
263	19.77	-0.06	-0.1166	-0.0106	0.0462	0.0911	-0.3965	0.9516	0.0396	0.2613	0.0416	0.2748
264	19.84	-0.06	-0.1139	-0.0053	0.0428	0.0466	-0.3737	0.9295	0.0398	0.2550	0.0428	0.2744
265	19.92	-0.05	-0.1162	-0.0080	0.0466	0.0701	-0.4079	0.9599	0.0390	0.2652	0.0406	0.2763
266	19.99	-0.06	-0.1163	-0.0008	0.0394	0.0066	-0.3386	0.9294	0.0403	0.2550	0.0434	0.2744
267	20.07	-0.07	-0.1114	-0.0023	0.0420	0.0208	-0.3766	0.9294	0.0406	0.2551	0.0437	0.2745
268	20.15	-0.05	-0.1176	-0.0129	0.0557	0.1049	-0.4733	0.9682	0.0387	0.2681	0.0400	0.2778
269	20.22	-0.06	-0.1216	-0.0084	0.0448	0.0690	-0.3683	0.9459	0.0396	0.2630	0.0418	0.2781
270	20.30	-0.05	-0.1208	-0.0137	0.0481	0.1031	-0.3796	0.9681	0.0387	0.2693	0.0400	0.2782
271	20.37	-0.06	-0.1216	-0.0036	0.0429	0.0310	-0.3532	0.9459	0.0400	0.2630	0.0423	0.2781
272	20.45	-0.06	-0.1270	-0.0123	0.0493	0.0958	-0.3843	0.9516	0.0390	0.2623	0.0418	0.2757
273	20.53	-0.07	-0.1218	-0.0031	0.0440	0.0254	-0.3613	0.9405	0.0398	0.2593	0.0423	0.2757
274	20.60	-0.07	-0.1247	-0.0088	0.0487	0.0673	-0.3909	0.9654	0.0390	0.2679	0.0404	0.2776
275	20.68	-0.06	-0.1266	-0.0053	0.0433	0.0419	-0.3622	0.9515	0.0398	0.2624	0.0418	0.2758
276	20.74	-0.05	-0.1265	-0.0049	0.0424	0.0389	-0.3349	0.9514	0.0398	0.2657	0.0418	0.2793

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 7 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
2 5 0.950 1.7 0.0 BL=0F23 0.0 0 0 0 0. UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
277	20.84	-0.05	-0.1341	-0.0106	0.0444	0.0791	-0.3309	0.9570	0.0390	0.2661	0.0407	0.2781
278	20.92	-0.04	-0.1318	-0.0110	0.0467	0.0835	-0.3543	0.9569	0.0390	0.2694	0.0407	0.2815
279	21.00	-0.05	-0.1519	-0.0200	0.0482	0.1353	-0.3177	0.9846	0.0381	0.2761	0.0387	0.2805
280	21.08	-0.04	-0.1222	-0.0034	0.0472	0.0276	-0.3863	0.9561	0.0396	0.2692	0.0415	0.2822
281	21.15	-0.05	-0.1414	-0.0122	0.0424	0.0859	-0.2945	0.9734	0.0387	0.2774	0.0398	0.2850
282	21.22	-0.05	-0.1415	-0.0122	0.0434	0.0859	-0.3007	0.9680	0.0387	0.2726	0.0400	0.2816
283	21.31	-0.04	-0.1242	0.0	0.0419	0.0	-0.3372	0.9596	0.0396	0.2707	0.0412	0.2822
284	21.37	-0.04	-0.1504	-0.0194	0.0434	0.1215	-0.2782	0.9873	0.0378	0.2808	0.0383	0.2844
285	21.47	-0.06	-0.1442	-0.0106	0.0437	0.0736	-0.3005	0.9789	0.0384	0.2769	0.0392	0.2850
286	21.54	-0.06	-0.1565	-0.0198	0.0446	0.1264	-0.2868	0.9929	0.0378	0.2812	0.0381	0.2832
287	21.61	-0.07	-0.1341	-0.0053	0.0426	0.0396	-0.3173	0.9846	0.0390	0.2772	0.0396	0.2816
288	21.69	-0.05	-0.1126	0.0069	0.0436	-0.0577	-0.3893	0.9595	0.0398	0.2730	0.0414	0.2845
289	21.76	-0.05	-0.1340	-0.0027	0.0406	0.0202	-0.3131	0.9789	0.0387	0.2769	0.0395	0.2850
290	21.84	-0.05	-0.1490	-0.0125	0.0426	0.0862	-0.2863	0.9956	0.0378	0.2837	0.0380	0.2869
291	21.91	-0.05	-0.1396	-0.0092	0.0460	0.0657	-0.3301	0.9844	0.0384	0.2816	0.0390	0.2861
292	22.00	-0.06	-0.1763	-0.0267	0.0422	0.1461	-0.2392	1.0286	0.0362	0.2984	0.0352	0.2902
293	22.07	-0.03	-0.1541	-0.0159	0.0440	0.1058	-0.2855	0.9983	0.0378	0.2849	0.0379	0.2854
294	22.15	-0.04	-0.1662	-0.0198	0.0443	0.1190	-0.2627	1.0066	0.0373	0.2933	0.0371	0.2915
295	22.23	-0.05	-0.1591	-0.0137	0.0386	0.0874	-0.2672	1.0046	0.0378	0.2878	0.0376	0.2859
296	22.31	-0.05	-0.1612	-0.0159	0.0400	0.0987	-0.2684	1.0231	0.0368	0.2947	0.0359	0.2888
297	22.38	-0.04	-0.1641	-0.0167	0.0339	0.0993	-0.2015	1.0397	0.0359	0.3005	0.0345	0.2890
298	22.46	-0.05	-0.2038	-0.0285	0.0307	0.1442	-0.1536	1.0479	0.0359	0.3034	0.0343	0.2895
299	22.52	-0.07	-0.2141	-0.0342	0.0234	0.1595	-0.1095	1.0591	0.0356	0.3054	0.0336	0.2883
300	22.60	-0.07	-0.2238	-0.0372	0.0211	0.1666	-0.0966	1.0673	0.0351	0.3105	0.0329	0.2909
301	22.67	-0.06	-0.2137	-0.0312	0.0196	0.1458	-0.0937	1.0591	0.0354	0.3054	0.0334	0.2883
302	22.74	-0.04	-0.1965	-0.0236	0.0231	0.1215	-0.1186	1.0524	0.0363	0.3007	0.0345	0.2858
303	22.81	-0.06	-0.2336	-0.0376	0.0137	0.1612	-0.0587	1.0856	0.0348	0.3123	0.0321	0.2877
304	22.89	-0.06	-0.2258	-0.0343	0.0125	0.1517	-0.0556	1.0662	0.0351	0.3062	0.0329	0.2872
305	22.97	-0.06	-0.2383	-0.0386	0.0130	0.1628	-0.0547	1.0911	0.0351	0.3149	0.0322	0.2886
306	23.03	-0.07	-0.2453	-0.0396	0.0074	0.1613	-0.0323	1.0911	0.0348	0.3149	0.0319	0.2886
307	23.11	-0.05	-0.2436	-0.0386	0.0094	0.1597	-0.0385	1.0911	0.0345	0.3149	0.0317	0.2886
308	23.19	-0.05	-0.2404	-0.0407	0.0105	0.1693	-0.0437	1.1050	0.0361	0.3183	0.0308	0.2881
309	23.27	-0.04	-0.1944	-0.0263	0.0220	0.1251	-0.1132	1.0746	0.0368	0.3070	0.0324	0.2857
310	23.34	-0.07	-0.2139	-0.0284	0.0175	0.1353	-0.0816	1.0801	0.0368	0.3096	0.0322	0.2867
311	23.41	-0.06	-0.2716	-0.0444	-0.0028	0.1652	0.0103	1.1050	0.0341	0.3194	0.0308	0.2890
312	23.48	-0.08	-0.2394	-0.0340	0.0035	0.1464	-0.0165	1.0885	0.0365	0.3115	0.0317	0.2861
313	23.45	-0.05	-0.2764	-0.0434	-0.0086	0.1573	0.0311	1.0967	0.0343	0.3154	0.0313	0.2876
314	23.45	-0.06	-0.2326	-0.0327	0.0055	0.1406	-0.0236	1.0856	0.0345	0.3123	0.0318	0.2877
315	23.46	-0.06	-0.2422	-0.0349	0.0074	0.1442	-0.0307	1.0935	0.0344	0.3123	0.0315	0.2858
316	23.46	-0.05	-0.2513	-0.0365	0.0	0.1376	0.0	1.0770	0.0347	0.3065	0.0323	0.2848
317	23.46	-0.05	-0.1609	-0.0122	0.0381	0.0755	-0.2368	1.0714	0.0350	0.3061	0.0327	0.2857
318	23.46	-0.05	-0.2611	-0.0379	-0.0023	0.1652	0.0089	1.0936	0.0340	0.3123	0.0311	0.2856
319	23.46	-0.06	-0.2299	-0.0318	0.0100	0.1385	-0.0436	1.0990	0.0340	0.3149	0.0309	0.2866
320	23.46	-0.06	-0.3478	-0.0591	-0.0367	0.1705	0.1057	1.1073	0.0336	0.3189	0.0301	0.2888
321	23.90	-0.04	-0.1744	-0.0151	0.0246	0.0869	-0.1411	1.0825	0.0344	0.3091	0.0318	0.2856
322	24.48	-0.02	-0.0453	0.0116	0.0779	-0.2511	-1.7170	1.0686	0.0347	0.3069	0.0325	0.2872

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5 0.60 1.7 0.0 81=0F23 0.0 0. 0. 0. 0. UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
323	25.24	-0.03	-0.0358	0.0102	0.0631	-0.2857	-2.3208	1.0442	0.0344	0.3158	0.0305	0.2881
324	26.09	-0.03	-0.1823	-0.0137	0.0077	0.0751	-0.0423	1.1237	0.0320	0.3290	0.0285	0.2928
325	26.93	-0.04	-0.0458	0.0015	0.0599	-0.3190	-0.6985	1.1229	0.0312	0.3321	0.0278	0.2963
326	27.82	-0.03	-0.0360	0.0114	0.0842	-0.3164	-2.3405	1.1375	0.0301	0.3378	0.0265	0.2978
327	28.87	-0.02	0.0325	0.0254	0.1181	0.7404	3.6320	1.1524	0.0278	0.3464	0.0241	0.3006
328	29.97	-0.01	0.0241	0.0264	0.1108	1.1577	4.7635	1.1324	0.0257	0.3598	0.0217	0.3042
329	31.04	-0.03	-0.0220	0.0171	0.0914	-0.7763	-4.1535	1.2219	0.0239	0.3691	0.0199	0.3071
330	32.27	-0.02	0.0279	0.0234	0.1153	0.8408	4.1349	1.2166	0.0218	0.3748	0.0179	0.3075
331	33.45	-0.04	-0.0414	0.0057	0.0639	-0.0423	-0.6940	1.2044	0.0193	0.3893	0.0155	0.3118
332	34.77	-0.03	-0.0972	0.0061	0.0687	-0.0626	-0.7071	1.2219	0.0168	0.3929	0.0133	0.3114
333	36.31	-0.06	-0.2735	-0.0186	-0.0109	0.0641	0.0349	1.2922	0.0138	0.4075	0.0107	0.3153
334	38.07	-0.04	-0.2217	-0.0060	0.0137	0.0361	-0.0618	1.3272	0.0108	0.4195	0.0081	0.3161
335	40.17	-0.05	-0.1511	0.0012	0.0337	-0.0677	-0.2229	1.3537	0.0069	0.4426	0.0050	0.3176
336	42.72	-0.06	-0.2007	-0.0019	0.0035	0.0096	-0.0173	1.4284	0.0031	0.4500	0.0022	0.3155
337	45.80	-0.05	-0.2645	-0.0179	-0.0114	0.0646	0.0422	1.4525	-0.0011	0.4579	-0.0007	0.3156
338	49.51	0.05	-0.2357	-0.0183	-0.0208	0.0778	0.0884	1.5171	-0.0127	0.4869	-0.0084	0.3209
339	53.80	0.05	-0.0956	0.0072	0.0586	-0.0749	-0.6064	1.4974	-0.0173	0.4790	-0.0115	0.3199
340	58.12	-0.08	-0.0926	0.0054	0.0657	-0.0583	-0.7094	1.5068	-0.0248	0.4957	-0.0160	0.3208
341	58.25	-0.07	-0.1059	0.0058	0.0638	-0.0546	-0.6020	1.5772	-0.0253	0.5007	-0.0160	0.3174
342	58.27	-0.05	-0.1161	0.0039	0.0564	-0.0333	-0.4863	1.5534	-0.0261	0.5017	-0.0165	0.3169
343	58.26	-0.05	-0.0950	0.0054	0.0694	-0.0619	-0.7299	1.6355	-0.0268	0.5168	-0.0164	0.3160
344	58.25	-0.08	-0.0829	0.0083	0.0734	-0.1001	-0.8859	1.6315	-0.0269	0.5102	-0.0165	0.3127
345	58.23	-0.08	-0.1067	0.0051	0.0665	-0.0470	-0.6114	1.6123	-0.0260	0.5029	-0.0161	0.3118
346	58.24	-0.09	-0.0941	0.0043	0.0650	-0.0466	-0.6984	1.6253	-0.0284	0.5185	-0.0171	0.3132
347	58.25	-0.02	-0.1148	0.0032	0.0566	-0.0273	-0.4996	1.4494	-0.0265	0.5135	-0.0161	0.3115
348	57.89	0.05	-0.1401	0.0024	0.0525	-0.0172	-0.3747	1.5932	-0.0233	0.4869	-0.0147	0.3056
349	57.04	0.03	-0.1156	0.0076	0.0637	-0.0661	-0.5518	1.5129	-0.0222	0.4956	-0.0138	0.3073
350	56.18	0.06	-0.0920	0.0096	0.0697	-0.1048	-0.7568	1.6171	-0.0199	0.4881	-0.0124	0.3037
351	55.32	0.06	-0.0426	0.0149	0.0799	-0.3492	-1.8776	1.6123	-0.0179	0.4922	-0.0123	0.3052
352	54.49	0.09	-0.0149	0.0165	0.0809	-1.5833	-7.6759	1.6322	-0.0196	0.4994	-0.0128	0.3063
353	53.56	0.10	-0.0494	0.0085	0.0567	-0.1702	-1.0967	1.5979	-0.0164	0.4875	-0.0103	0.3051
354	52.64	0.10	-0.1407	-0.0044	0.0132	0.0343	-0.3940	1.4155	-0.0154	0.5024	-0.0096	0.3110
355	51.69	0.07	-0.4215	-0.0489	-0.1004	0.1161	0.2383	1.5616	-0.0111	0.4765	-0.0071	0.3053
356	50.70	0.09	-0.4347	-0.0473	-0.1017	0.1088	0.2340	1.5779	-0.0111	0.4860	-0.0070	0.3080
357	49.75	-0.01	-0.3787	-0.0404	-0.0740	0.1225	0.1954	1.5248	-0.0067	0.4641	-0.0044	0.3036
358	48.82	-0.01	-0.4051	-0.0498	-0.0722	0.1145	0.1782	1.5129	-0.0026	0.4551	-0.0017	0.3016
359	47.86	-0.04	-0.2939	-0.0263	-0.0208	0.0596	0.0699	1.4923	0.0	0.4492	0.0	0.3010
360	46.88	-0.03	-0.1629	-0.0032	0.0300	0.0195	-0.1842	1.4884	0.0012	0.4476	0.0008	0.3011
361	45.88	-0.04	-0.0131	0.0163	0.0799	-1.2426	-6.0882	1.5271	0.0006	0.4581	0.0004	0.3040
362	44.86	-0.06	-0.1608	-0.0040	0.0177	0.0246	-0.1098	1.4787	0.0032	0.4484	0.0022	0.3032
363	43.84	-0.09	-0.0651	0.0075	0.0555	-0.1156	-0.8519	1.4534	0.0038	0.4452	0.0026	0.3063
364	42.79	-0.07	-0.2270	-0.0098	-0.0157	0.0433	0.0693	1.4318	0.0071	0.4372	0.0050	0.3055
365	41.74	-0.06	-0.1563	-0.0026	0.0138	0.0156	-0.0894	1.4173	0.0077	0.4356	0.0054	0.3074
366	40.65	-0.07	-0.1734	-0.0055	0.0014	0.0317	-0.0078	1.3779	0.0095	0.4273	0.0069	0.3102
367	39.52	-0.06	-0.1468	-0.0004	0.0224	0.0076	-0.1525	1.3531	0.0120	0.4195	0.0089	0.3107
368	38.38	-0.05	-0.1507	-0.0015	0.0151	0.0102	-0.0999	1.3175	0.0140	0.4103	0.0106	0.3114

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 9 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE/L-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5 0.90 1.7 0.0 81=0F23 0.0 0 0 0 3 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPE1	YCPE1	CNF2	CM2	CH2	XCPE2	YCPE2
369	37.27	-0.07	-0.1377	-0.0023	0.0175	0.0168	-0.1268	1.3013	0.0151	0.4051	0.0116	0.3113
370	36.02	-0.05	-0.1038	0.0019	0.0393	-0.0186	-0.3762	1.2688	0.0173	0.3925	0.0136	0.3094
371	34.77	-0.06	-0.0347	0.0097	0.0514	-0.2488	-1.5768	1.2517	0.0193	0.3866	0.0154	0.3089
372	33.53	-0.05	-0.0258	0.0059	0.0554	-0.1030	-0.9344	1.2128	0.0220	0.3751	0.0185	0.3093
373	32.23	-0.06	0.0409	0.0222	0.1033	0.5425	2.5189	1.1863	0.0246	0.3660	0.0207	0.3080
374	30.89	-0.04	0.1027	0.0330	0.1442	0.3214	1.4051	1.1637	0.0271	0.3557	0.0233	0.3056
375	29.53	-0.01	0.2163	0.0504	0.2160	0.2325	0.9639	1.1169	0.0305	0.3369	0.0273	0.3017
376	28.11	-0.05	-0.0407	0.0015	0.0476	-0.0191	-0.5897	1.1012	0.0324	0.3297	0.0294	0.2994

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5 0.96 1.7 0.0 H1=UF23 0.0 0 0 0 0. UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
1	-5.87	0.01	0.0361	9.9999	0.0018	9.9999	0.0506	-0.4836	-0.0744	-0.1575	0.1538	0.3256
2	-5.87	-0.01	0.0336	9.9999	-0.0004	9.9999	-0.0115	-0.4665	-0.0744	-0.1599	0.1529	0.3286
3	-5.87	-0.02	0.0296	9.9999	-0.0017	9.9999	-0.0608	-0.4778	-0.0744	-0.1539	0.1557	0.3221
4	-5.87	-0.02	0.0336	9.9999	-0.0004	9.9999	-0.0115	-0.4835	-0.0744	-0.1563	0.1539	0.3213
5	-5.86	-0.01	0.0310	9.9999	0.0005	9.9999	0.0156	-0.4777	-0.0747	-0.1528	0.1563	0.3199
6	-5.71	-0.01	0.0336	9.9999	0.0007	9.9999	0.0201	-0.4632	-0.0750	-0.1465	0.1618	0.3162
7	-5.67	-0.02	0.0285	9.9999	-0.0004	9.9999	-0.0271	-0.4546	-0.0747	-0.1426	0.1643	0.3137
8	-5.38	-0.02	0.0311	9.9999	-0.0006	9.9999	-0.0186	-0.4373	-0.0750	-0.1350	0.1714	0.3087
9	-5.23	-0.01	0.0348	9.9999	0.0001	9.9999	0.0025	-0.4260	-0.0738	-0.1277	0.1733	0.2997
10	-5.04	-0.02	0.0336	9.9999	0.0007	9.9999	0.0201	-0.4119	-0.0726	-0.1212	0.1766	0.2962
11	-4.93	-0.01	0.0336	9.9999	-0.0004	9.9999	-0.0115	-0.4034	-0.0722	-0.1195	0.1789	0.2961
12	-4.77	-0.02	0.0286	9.9999	-0.0017	9.9999	-0.0608	-0.4021	-0.0710	-0.1122	0.1811	0.2862
13	-4.61	-0.01	0.0337	9.9999	-0.0023	9.9999	-0.0688	-0.3781	-0.0697	-0.1048	0.1842	0.2825
14	-4.47	-0.01	0.0312	9.9999	-0.0036	9.9999	-0.1146	-0.3697	-0.0685	-0.1029	0.1853	0.2782
15	-4.33	-0.01	0.0337	9.9999	-0.0023	9.9999	-0.0688	-0.3586	-0.0672	-0.0949	0.1872	0.2785
16	-4.20	-0.02	0.0337	9.9999	-0.0014	9.9999	-0.0401	-0.3474	-0.0660	-0.0957	0.1899	0.2755
17	-4.06	-0.01	0.0336	9.9999	-0.0043	9.9999	-0.1286	-0.3367	-0.0649	-0.0905	0.1932	0.2692
18	-3.91	-0.01	0.0337	9.9999	-0.0023	9.9999	-0.0688	-0.3280	-0.0630	-0.0844	0.1921	0.2574
19	-3.78	-0.01	0.0285	9.9999	-0.0006	9.9999	-0.0271	-0.3058	-0.0599	-0.0773	0.1960	0.2528
20	-3.66	-0.01	0.0337	9.9999	-0.0023	9.9999	-0.0688	-0.2975	-0.0589	-0.0723	0.1979	0.2429
21	-3.52	-0.01	0.0311	9.9999	-0.0025	9.9999	-0.0807	-0.2915	-0.0582	-0.0739	0.1996	0.2536
22	-3.40	0.01	0.0347	9.9999	0.0001	9.9999	0.0025	-0.2807	-0.0556	-0.0665	0.1973	0.2369
23	-3.26	-0.01	0.0286	9.9999	-0.0028	9.9999	-0.0960	-0.2723	-0.0546	-0.0637	0.2006	0.2339
24	-3.11	-0.02	0.0311	9.9999	-0.0025	9.9999	-0.0807	-0.2566	-0.0521	-0.0603	0.2015	0.2332
25	-2.96	-0.00	0.0337	9.9999	-0.0063	9.9999	-0.0688	-0.2531	-0.0509	-0.0577	0.2013	0.2280
26	-2.86	-0.02	0.0307	9.9999	0.0001	9.9999	0.0025	-0.2419	-0.0499	-0.0547	0.2062	0.2262
27	-2.71	-0.00	0.0348	9.9999	-0.0010	9.9999	-0.0269	-0.2365	-0.0487	-0.0520	0.2060	0.2199
28	-2.56	-0.00	0.0335	9.9999	0.0016	9.9999	0.0490	-0.2171	-0.0460	-0.0451	0.2120	0.2076
29	-2.45	-0.01	0.0311	9.9999	-0.0015	9.9999	-0.0497	-0.2034	-0.0435	-0.0397	0.2139	0.1950
30	-2.32	-0.01	0.0259	9.9999	-0.0019	9.9999	-0.0746	-0.1976	-0.0435	-0.0381	0.2202	0.1929
31	-2.19	-0.01	0.0336	9.9999	-0.0004	9.9999	-0.0115	-0.1895	-0.0416	-0.0364	0.2195	0.1920
32	-2.06	0.00	0.0336	9.9999	-0.0004	9.9999	-0.0115	-0.1729	-0.0396	-0.0296	0.2277	0.1713
33	-1.93	-0.01	0.0336	9.9999	-0.0004	9.9999	-0.0115	-0.1702	-0.0388	-0.0293	0.2279	0.1723
34	-1.79	-0.01	0.0336	9.9999	-0.0004	9.9999	-0.0115	-0.1590	-0.0377	-0.0263	0.2373	0.1657
35	-1.67	-0.01	0.0347	9.9999	0.0011	9.9999	0.0276	-0.1508	-0.0360	-0.0224	0.2386	0.1684
36	-1.54	-0.00	0.0346	9.9999	0.0016	9.9999	0.0491	-0.1421	-0.0354	-0.0206	0.2492	0.1653
37	-1.42	-0.00	0.0335	9.9999	-0.0004	9.9999	-0.0115	-0.1312	-0.0326	-0.0111	0.2485	0.0846
38	-1.29	-0.01	0.0346	9.9999	0.0011	9.9999	0.0275	-0.1286	-0.0321	-0.0120	0.2498	0.0930
39	-1.15	-0.01	0.0335	9.9999	-0.0004	9.9999	-0.0115	-0.1094	-0.0288	-0.0060	0.2628	0.0547
40	-1.04	0.01	0.0335	9.9999	-0.0004	9.9999	-0.0115	-0.1094	-0.0285	-0.0049	0.2601	0.0650
41	-0.93	0.00	0.0347	9.9999	0.0001	9.9999	0.0025	-0.1040	-0.0271	-0.0023	0.2607	0.0223
42	-0.80	-0.00	0.0336	9.9999	-0.0014	9.9999	-0.0402	-0.0934	-0.0236	0.0030	0.2552	-0.0328
43	-0.68	-0.01	0.0336	9.9999	0.0016	9.9999	0.0491	-0.0881	-0.0221	0.0045	0.2508	-0.0515
44	-0.55	-0.00	0.0347	9.9999	0.0001	9.9999	0.0025	-0.0722	-0.0175	0.0071	0.2420	-0.0989
45	-0.43	-0.01	0.0366	9.9999	0.0001	9.9999	0.0025	-0.0645	-0.0163	0.0074	0.2347	-0.1069
46	-0.32	-0.01	0.0411	9.9999	0.0013	9.9999	0.0305	-0.0646	-0.0132	0.0059	0.2045	-0.0918

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 9

MARTIN MISSILE JAILS EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5 0.90 1.7 0.0 81-0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CN4	XCPF4	YCPF4
47	-0.20	-0.01	0.0396	9.9999	0.0001	9.9999	0.0025	-0.0622	-0.0116	0.0073	0.1860	-0.1178
48	-0.07	0.00	0.0437	9.9999	0.0005	9.9999	0.0110	-0.0567	-0.0102	0.0078	0.1803	-0.1378
49	0.06	-0.01	0.0385	9.9999	0.0001	9.9999	0.0025	-0.0514	-0.0083	0.0125	0.1614	-0.2439
50	0.17	-0.01	0.0395	9.9999	0.0001	9.9999	0.0025	-0.0461	-0.0071	0.0120	0.1548	-0.2590
51	0.29	-0.00	0.0334	9.9999	0.0007	9.9999	0.0202	-0.0324	-0.0036	0.0153	0.1088	-0.4676
52	0.40	-0.01	0.0385	9.9999	0.0001	9.9999	0.0025	-0.0272	-0.0030	0.0158	0.1099	-0.5816
53	0.50	-0.01	0.0386	9.9999	-0.0019	9.9999	-0.0500	-0.0164	-0.0009	0.0189	0.0529	-1.1529
54	0.60	-0.03	0.0395	9.9999	0.0001	9.9999	0.0025	-0.0137	-0.0003	0.0224	-0.0211	-1.6338
55	0.70	-0.01	0.0411	9.9999	0.0003	9.9999	0.0070	-0.0056	0.0019	0.0241	-0.3448	-4.3103
56	0.80	-0.03	0.0411	9.9999	0.0013	9.9999	0.0305	-0.0033	0.0041	0.0277	-1.2647	-8.4612
57	1.01	-0.00	0.0334	9.9999	-0.0004	9.9999	-0.0116	0.0042	0.0080	0.0795	1.8864	0.9545
58	1.11	-0.01	0.0410	9.9999	0.0013	9.9999	0.0306	0.0041	0.0086	0.0296	2.0698	1.1395
59	1.24	-0.00	0.0410	9.9999	0.0013	9.9999	0.0306	0.0064	0.0113	0.0343	1.7727	5.3788
60	1.33	-0.01	0.0384	9.9999	0.0011	9.9999	0.0276	0.0062	0.0124	0.0385	2.0008	6.2344
61	1.47	-0.02	0.0384	9.9999	0.0011	9.9999	0.0276	0.0200	0.0141	0.0397	0.7053	1.9855
62	1.59	-0.00	0.0410	9.9999	0.0013	9.9999	0.0306	0.0310	0.0160	0.0459	0.5171	1.4829
63	1.70	0.00	0.0385	9.9999	0.0001	9.9999	0.0025	0.0254	0.0154	0.0444	0.6084	1.7490
64	1.81	-0.00	0.0410	9.9999	0.0003	9.9999	0.0071	0.0419	0.0161	0.0543	0.4332	1.2972
65	1.92	0.00	0.0385	9.9999	0.0001	9.9999	0.0025	0.0474	0.0190	0.0548	0.4012	1.1568
66	2.03	-0.01	0.0410	9.9999	0.0003	9.9999	0.0071	0.0554	0.0212	0.0609	0.3833	1.0993
67	2.16	-0.02	0.0435	9.9999	0.0005	9.9999	0.0111	0.0583	0.0212	0.0643	0.3642	1.1026
68	2.27	-0.00	0.0435	9.9999	-0.0006	9.9999	-0.0133	0.0664	0.0232	0.0671	0.3488	1.0102
69	2.37	-0.01	0.0436	9.9999	0.0005	9.9999	0.0111	0.0773	0.0254	0.0733	0.3283	0.9488
70	2.50	-0.01	0.0452	9.9999	-0.0003	9.9999	-0.0063	0.0749	0.0261	0.0747	0.3273	0.9348
71	2.61	-0.01	0.0437	9.9999	-0.0015	9.9999	-0.0353	0.0907	0.0289	0.0810	0.3191	0.8926
72	2.72	0.01	0.0482	9.9999	-0.0003	9.9999	-0.0063	0.0935	0.0289	0.0811	0.3096	0.8679
73	2.84	-0.00	0.0488	9.9999	-0.0012	9.9999	-0.0237	0.0962	0.0297	0.0846	0.3089	0.8796
74	2.96	-0.01	0.0437	9.9999	-0.0025	9.9999	-0.0574	0.1040	0.0328	0.0886	0.3154	0.8516
75	3.06	-0.00	0.0463	9.9999	-0.0023	9.9999	-0.0500	0.1072	0.0316	0.0888	0.2952	0.8281
76	3.19	-0.01	0.0489	9.9999	-0.0031	9.9999	-0.0631	0.1262	0.0355	0.0978	0.2813	0.7752
77	3.30	-0.01	0.0463	9.9999	-0.0033	9.9999	-0.0708	0.1262	0.0355	0.0978	0.2813	0.7752
78	3.39	-0.01	0.0463	9.9999	-0.0031	9.9999	-0.0631	0.1344	0.0374	0.1050	0.2785	0.7818
79	3.52	-0.00	0.0489	9.9999	-0.0031	9.9999	-0.0631	0.1343	0.0377	0.1050	0.2809	0.7816
80	3.64	-0.01	0.0387	9.9999	-0.0049	9.9999	-0.1272	0.1478	0.0408	0.1094	0.2761	0.7402
81	3.74	-0.01	0.0464	9.9999	-0.0043	9.9999	-0.0936	0.1559	0.0425	0.1133	0.2723	0.7265
82	3.86	-0.01	0.0463	9.9999	-0.0033	9.9999	-0.0708	0.1668	0.0449	0.1206	0.2689	0.7210
83	3.96	-0.03	0.0438	9.9999	-0.0035	9.9999	-0.0793	0.1646	0.0454	0.1207	0.2727	0.7244
84	4.08	0.00	0.0489	9.9999	-0.0031	9.9999	-0.0631	0.1720	0.0468	0.1254	0.2720	0.7291
85	4.20	0.00	0.0437	9.9999	-0.0025	9.9999	-0.0574	0.1830	0.0485	0.1306	0.2652	0.7138
86	4.32	-0.00	0.0436	9.9999	-0.0035	9.9999	-0.0793	0.1940	0.0502	0.1347	0.2586	0.6942
87	4.42	-0.01	0.0436	9.9999	-0.0035	9.9999	-0.0793	0.1940	0.0505	0.1368	0.2601	0.7051
88	4.52	-0.01	0.0489	9.9999	-0.0023	9.9999	-0.0449	0.2054	0.0522	0.1433	0.2541	0.6975
89	4.63	-0.01	0.0439	9.9999	-0.0035	9.9999	-0.0791	0.2108	0.0538	0.1481	0.2554	0.7025
90	4.72	-0.01	0.0434	9.9999	-0.0045	9.9999	-0.1033	0.2275	0.0555	0.1537	0.2439	0.6756
91	4.84	-0.02	0.0439	9.9999	-0.0045	9.9999	-0.1033	0.2161	0.0555	0.1518	0.2567	0.7022
92	4.95	0.00	0.0414	9.9999	-0.0057	9.9999	-0.1375	0.2246	0.0558	0.1567	0.2483	0.6976

MANLIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
1	5	0.90	1.17	0.0	dim0f23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	5.06	0.01	0.0440	9.9999	-0.0065	9.9999	-0.1469	0.2496	0.0591	0.1683	0.2366	0.6741
94	5.17	-0.01	0.0468	9.9999	-0.0063	9.9999	-0.1346	0.2384	0.0582	0.1653	0.2440	0.6932
95	5.26	-0.01	0.0413	9.9999	-0.0036	9.9999	-0.0911	0.2552	0.0596	0.1719	0.2336	0.6737
96	5.35	0.00	0.0441	9.9999	-0.0075	9.9999	-0.1707	0.2634	0.0616	0.1791	0.2337	0.6709
97	5.47	-0.01	0.0466	9.9999	-0.0073	9.9999	-0.1573	0.2775	0.0621	0.1812	0.2239	0.6539
98	5.58	-0.00	0.0466	9.9999	-0.0073	9.9999	-0.1573	0.2773	0.0632	0.1845	0.2279	0.6653
99	5.66	0.00	0.0440	9.9999	-0.0065	9.9999	-0.1469	0.2773	0.0632	0.1855	0.2279	0.6691
100	5.77	-0.01	0.0467	9.9999	-0.0083	9.9999	-0.1777	0.2970	0.0648	0.1908	0.2183	0.6693
101	5.86	0.01	0.0441	9.9999	-0.0075	9.9999	-0.1707	0.2998	0.0651	0.2000	0.2173	0.6672
102	5.96	-0.01	0.0465	9.9999	-0.0053	9.9999	-0.1161	0.3053	0.0668	0.2028	0.2162	0.6637
103	6.06	0.00	0.0441	9.9999	-0.0075	9.9999	-0.1707	0.3053	0.0662	0.2026	0.2168	0.6637
104	6.16	-0.01	0.0467	9.9999	-0.0083	9.9999	-0.1777	0.3223	0.0671	0.2125	0.2081	0.6593
105	6.25	0.01	0.0467	9.9999	-0.0094	9.9999	-0.1983	0.3223	0.0673	0.2135	0.2090	0.6626
106	6.36	0.01	0.0441	9.9999	-0.0075	9.9999	-0.1707	0.3392	0.0687	0.2244	0.2026	0.6617
107	6.47	-0.00	0.0467	9.9999	-0.0093	9.9999	-0.1983	0.3364	0.0687	0.2253	0.2042	0.6698
108	6.56	0.01	0.0467	9.9999	-0.0093	9.9999	-0.1983	0.3503	0.0699	0.2317	0.1994	0.6613
109	6.66	-0.01	0.0467	9.9999	-0.0083	9.9999	-0.1777	0.3672	0.0709	0.2394	0.1931	0.6519
110	6.77	-0.01	0.0464	9.9999	-0.0115	9.9999	-0.2593	0.3646	0.0703	0.2403	0.1929	0.6589
111	6.88	-0.00	0.0492	9.9999	-0.0091	9.9999	-0.1647	0.3787	0.0712	0.2467	0.1880	0.6568
112	6.97	-0.01	0.0493	9.9999	-0.0091	9.9999	-0.1843	0.3844	0.0715	0.2513	0.1860	0.6536
113	7.08	-0.00	0.0493	9.9999	-0.0101	9.9999	-0.2055	0.3957	0.0720	0.2564	0.1819	0.6479
114	7.17	-0.01	0.0493	9.9999	-0.0091	9.9999	-0.1840	0.3900	0.0720	0.2560	0.1846	0.6564
115	7.26	0.00	0.0494	9.9999	-0.0121	9.9999	-0.2441	0.4043	0.0726	0.2634	0.1795	0.6518
116	7.36	0.01	0.0549	9.9999	-0.0096	9.9999	-0.1773	0.4015	0.0723	0.2653	0.1800	0.6609
117	7.45	-0.01	0.0544	9.9999	-0.0087	9.9999	-0.1596	0.4129	0.0726	0.2705	0.1757	0.6551
118	7.55	-0.01	0.0545	9.9999	-0.0107	9.9999	-0.1985	0.4185	0.0731	0.2730	0.1748	0.6523
119	7.64	-0.00	0.0546	9.9999	-0.0102	9.9999	-0.1715	0.4299	0.0734	0.2791	0.1708	0.6492
120	7.75	-0.01	0.0647	9.9999	-0.0109	9.9999	-0.1686	0.4022	0.0636	0.2609	0.1730	0.6488
121	7.84	0.01	0.0647	9.9999	-0.0096	9.9999	-0.1520	0.4078	0.0699	0.2635	0.1713	0.6482
122	7.92	-0.00	0.0623	9.9999	-0.0130	9.9999	-0.2090	0.4079	0.0696	0.2655	0.1705	0.6509
123	8.01	-0.00	0.0649	9.9999	-0.0104	9.9999	-0.1492	0.4191	0.0703	0.2686	0.1678	0.6409
124	8.11	-0.01	0.0827	9.9999	-0.0095	9.9999	-0.1144	0.4248	0.0703	0.2733	0.1656	0.6432
125	8.19	-0.01	0.0852	9.9999	-0.0082	9.9999	-0.0963	0.4248	0.0706	0.2743	0.1663	0.6457
126	8.28	-0.00	0.0853	9.9999	-0.0093	9.9999	-0.1086	0.4249	0.0703	0.2756	0.1655	0.6480
127	8.37	-0.01	0.0904	9.9999	-0.0089	9.9999	-0.0982	0.4336	0.0699	0.2781	0.1611	0.6413
128	8.46	-0.01	0.0981	9.9999	-0.0102	9.9999	-0.1062	0.4338	0.0700	0.2813	0.1615	0.6486
129	8.55	-0.00	0.0905	9.9999	-0.0095	9.9999	-0.0990	0.4365	0.0700	0.2815	0.1605	0.6448
130	8.62	-0.00	0.0951	9.9999	-0.0102	9.9999	-0.1042	0.4460	0.0699	0.2846	0.1559	0.6369
131	8.71	-0.01	0.1032	9.9999	-0.0088	9.9999	-0.0850	0.4454	0.0690	0.2863	0.1549	0.6428
132	8.81	-0.01	0.1036	9.9999	-0.0096	9.9999	-0.0912	0.4482	0.0696	0.2898	0.1552	0.6465
133	8.90	-0.01	0.1085	9.9999	-0.0094	9.9999	-0.0863	0.4513	0.0694	0.2909	0.1516	0.6446
134	9.00	0.00	0.0983	9.9999	-0.0102	9.9999	-0.1043	0.4561	0.0687	0.2923	0.1513	0.6436
135	9.07	0.01	0.1136	9.9999	-0.0100	9.9999	-0.0864	0.4600	0.0676	0.2947	0.1470	0.6405
136	9.17	-0.01	0.1110	9.9999	-0.0082	9.9999	-0.0736	0.4565	0.0673	0.2922	0.1482	0.6429
137	9.26	-0.01	0.1102	9.9999	-0.0104	9.9999	-0.0930	0.4659	0.0671	0.2972	0.1439	0.6378
138	9.33	-0.00	0.1184	9.9999	-0.0100	9.9999	-0.0896	0.4602	0.0671	0.2968	0.1457	0.6449

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE/D-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	5	0.90	1.7	0.0	01a0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
139	9.91	-0.00	0.1164	9.9999	-0.0138	9.9999	-0.1186	0.4691	0.0660	0.2984	0.1407	0.6362
140	9.91	0.02	0.1169	9.9999	-0.0116	9.9999	-0.0975	0.4721	0.0656	0.3017	0.1366	0.6391
141	9.60	-0.01	0.1169	9.9999	-0.0134	9.9999	-0.1144	0.4727	0.0651	0.3028	0.1379	0.6412
142	9.68	-0.02	0.1218	9.9999	-0.0116	9.9999	-0.0938	0.4783	0.0638	0.3032	0.1333	0.6339
143	9.79	-0.01	0.1215	9.9999	-0.0134	9.9999	-0.1104	0.4785	0.0632	0.3041	0.1321	0.6356
144	9.87	-0.01	0.1240	9.9999	-0.0131	9.9999	-0.1058	0.4703	0.0618	0.3026	0.1315	0.6430
145	9.95	-0.00	0.1246	9.9999	-0.0129	9.9999	-0.1021	0.4732	0.0618	0.3058	0.1307	0.6462
146	10.03	-0.00	0.1293	9.9999	-0.0120	9.9999	-0.0946	0.4793	0.0604	0.3063	0.1260	0.6432
147	10.13	-0.01	0.1241	9.9999	-0.0142	9.9999	-0.1143	0.4766	0.0593	0.3069	0.1245	0.6439
148	10.23	-0.02	0.1291	9.9999	-0.0127	9.9999	-0.0987	0.4794	0.0599	0.3103	0.1250	0.6472
149	10.31	-0.01	0.1215	9.9999	-0.0144	9.9999	-0.1163	0.4798	0.0582	0.3113	0.1213	0.6487
150	10.40	0.01	0.1206	9.9999	-0.0129	9.9999	-0.1021	0.4856	0.0580	0.3127	0.1196	0.6439
151	10.48	0.00	0.1317	9.9999	-0.0125	9.9999	-0.0952	0.4887	0.0571	0.3140	0.1169	0.6424
152	10.57	-0.01	0.1291	9.9999	-0.0127	9.9999	-0.0987	0.4832	0.0565	0.3156	0.1170	0.6532
153	10.65	0.00	0.1265	9.9999	-0.0120	9.9999	-0.0946	0.4805	0.0561	0.3165	0.1167	0.6586
154	10.75	-0.02	0.1316	9.9999	-0.0146	9.9999	-0.1105	0.4836	0.0549	0.3155	0.1135	0.6524
155	10.83	-0.00	0.1317	9.9999	-0.0135	9.9999	-0.1026	0.4898	0.0533	0.3191	0.1087	0.6515
156	10.93	0.00	0.1344	9.9999	-0.0153	9.9999	-0.1141	0.4930	0.0524	0.3213	0.1063	0.6518
157	11.03	0.00	0.1318	9.9999	-0.0146	9.9999	-0.1105	0.4928	0.0533	0.3235	0.1081	0.6565
158	11.10	-0.00	0.1343	9.9999	-0.0133	9.9999	-0.0991	0.5018	0.0513	0.3272	0.1023	0.6520
159	11.19	0.01	0.1318	9.9999	-0.0155	9.9999	-0.1179	0.4990	0.0513	0.3270	0.1029	0.6553
160	11.27	0.01	0.1343	9.9999	-0.0144	9.9999	-0.1070	0.5106	0.0505	0.3288	0.0988	0.6448
161	11.34	-0.00	0.1269	9.9999	-0.0129	9.9999	-0.1090	0.5106	0.0505	0.3299	0.0988	0.6461
162	11.43	0.00	0.1344	9.9999	-0.0163	9.9999	-0.1213	0.5052	0.0494	0.3315	0.0978	0.6562
163	11.52	-0.02	0.1321	9.9999	-0.0206	9.9999	-0.1556	0.5111	0.0488	0.3340	0.0955	0.6536
164	11.61	-0.01	0.1420	9.9999	-0.0168	9.9999	-0.1039	0.5111	0.0491	0.3340	0.0961	0.6536
165	11.69	-0.01	0.1370	9.9999	-0.0161	9.9999	-0.1176	0.5142	0.0483	0.3374	0.0940	0.6562
166	11.78	-0.01	0.1370	9.9999	-0.0161	9.9999	-0.1176	0.5144	0.0478	0.3384	0.0929	0.6579
167	11.86	-0.00	0.1371	9.9999	-0.0191	9.9999	-0.1393	0.5174	0.0472	0.3418	0.0912	0.6606
168	11.94	-0.01	0.1370	9.9999	-0.0171	9.9999	-0.1246	0.5173	0.0478	0.3419	0.0923	0.6609
169	12.03	-0.01	0.1372	9.9999	-0.0201	9.9999	-0.1463	0.5233	0.0466	0.3464	0.0890	0.6619
170	12.12	-0.02	0.1422	9.9999	-0.0179	9.9999	-0.1248	0.5205	0.0461	0.3451	0.0886	0.6638
171	12.20	-0.01	0.1371	9.9999	-0.0191	9.9999	-0.1393	0.5207	0.0453	0.3458	0.0869	0.6626
172	12.29	-0.01	0.1373	9.9999	-0.0221	9.9999	-0.1609	0.5294	0.0450	0.3489	0.0849	0.6598
173	12.36	-0.00	0.1500	9.9999	-0.0191	9.9999	-0.1273	0.5266	0.0450	0.3497	0.0854	0.6640
174	12.45	-0.01	0.1474	9.9999	-0.0193	9.9999	-0.1309	0.5268	0.0444	0.3497	0.0842	0.6637
175	12.54	-0.02	0.1423	9.9999	-0.0207	9.9999	-0.1458	0.5298	0.0439	0.3530	0.0829	0.6664
176	12.62	-0.01	0.1423	9.9999	-0.0207	9.9999	-0.1458	0.5299	0.0433	0.3520	0.0818	0.6642
177	12.70	-0.00	0.1367	9.9999	-0.0213	9.9999	-0.1583	0.5329	0.0427	0.3531	0.0802	0.6627
178	12.79	-0.01	0.1423	9.9999	-0.0207	9.9999	-0.1458	0.5330	0.0427	0.3542	0.0802	0.6646
179	12.87	-0.01	0.1447	9.9999	-0.0175	9.9999	-0.1207	0.5330	0.0427	0.3542	0.0802	0.6646
180	12.96	-0.02	0.1423	9.9999	-0.0217	9.9999	-0.1524	0.5363	0.0416	0.3576	0.0772	0.6668
181	13.05	-0.01	0.1274	9.9999	-0.0268	9.9999	-0.2765	0.5362	0.0414	0.3555	0.0772	0.6629
182	13.12	-0.01	0.1274	9.9999	-0.0268	9.9999	-0.2265	0.5335	0.0411	0.3562	0.0770	0.6678
183	13.21	-0.02	0.1298	9.9999	-0.0257	9.9999	-0.1978	0.5365	0.0403	0.3554	0.0752	0.6624
184	13.29	-0.01	0.1325	9.9999	-0.0285	9.9999	-0.2149	0.5367	0.0395	0.3531	0.0735	0.6589

PAGE 3 OF 3
SHEET 9 OF 9

MANTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIC-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5 0.60 1.67 0.0 BLOUT23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
185	13.37	-0.02	0.1351	9.9999	-0.0292	9.9999	-0.2164	0.5397	0.0359	0.3565	0.0721	0.6606
186	13.42	-0.02	0.1302	9.9999	-0.0337	9.9999	-0.2587	0.5426	0.0364	0.3567	0.0708	0.6574
187	13.56	-0.01	0.1379	9.9999	-0.0341	9.9999	-0.2670	0.5426	0.0364	0.3557	0.0708	0.6554
188	13.63	-0.01	0.1357	9.9999	-0.0325	9.9999	-0.2232	0.5520	0.0364	0.3589	0.0696	0.6502
189	13.73	-0.03	0.1533	9.9999	-0.0309	9.9999	-0.2014	0.5491	0.0364	0.3586	0.0699	0.6531
190	13.80	-0.01	0.1438	9.9999	-0.0355	9.9999	-0.2435	0.5523	0.0371	0.3578	0.0671	0.6478
191	13.87	-0.01	0.1434	9.9999	-0.0387	9.9999	-0.2699	0.5495	0.0366	0.3585	0.0669	0.6525
192	13.97	-0.03	0.1535	9.9999	-0.0339	9.9999	-0.2206	0.5496	0.0368	0.3596	0.0669	0.6563
193	14.06	-0.02	0.1537	9.9999	-0.0378	9.9999	-0.2461	0.5553	0.0366	0.3601	0.0662	0.6485
194	14.13	-0.01	0.1487	9.9999	-0.0423	9.9999	-0.2882	0.5550	0.0356	0.3632	0.0661	0.6537
195	14.21	-0.02	0.1512	9.9999	-0.0400	9.9999	-0.2668	0.5583	0.0362	0.3624	0.0648	0.6492
196	14.30	-0.01	0.1586	9.9999	-0.0385	9.9999	-0.2424	0.5583	0.0362	0.3635	0.0668	0.6511
197	14.37	-0.03	0.1544	9.9999	-0.0404	9.9999	-0.2544	0.5585	0.0356	0.3623	0.0638	0.6488
198	14.46	-0.01	0.1588	9.9999	-0.0345	9.9999	-0.2083	0.5613	0.0356	0.3636	0.0636	0.6478
199	14.56	-0.01	0.1615	9.9999	-0.0402	9.9999	-0.2491	0.5698	0.0362	0.3674	0.0635	0.6449
200	14.63	-0.01	0.1614	9.9999	-0.0393	9.9999	-0.2433	0.5727	0.0359	0.3666	0.0627	0.6401
201	14.72	-0.02	0.1615	9.9999	-0.0402	9.9999	-0.2491	0.5755	0.0359	0.3710	0.0624	0.6446
202	14.80	-0.01	0.1591	9.9999	-0.0436	9.9999	-0.2729	0.5727	0.0362	0.3708	0.0632	0.6475
203	14.90	-0.03	0.1615	9.9999	-0.0402	9.9999	-0.2491	0.5727	0.0359	0.3708	0.0627	0.6474
204	14.99	-0.01	0.1616	9.9999	-0.0432	9.9999	-0.2675	0.5644	0.0368	0.3691	0.0617	0.6538
205	15.07	-0.02	0.1717	9.9999	-0.0386	9.9999	-0.2236	0.5757	0.0356	0.3742	0.0618	0.6499
206	15.16	-0.01	0.1641	9.9999	-0.0410	9.9999	-0.2499	0.5727	0.0359	0.3729	0.0627	0.6511
207	15.24	-0.02	0.1693	9.9999	-0.0426	9.9999	-0.2519	0.5732	0.0363	0.3728	0.0598	0.6504
208	15.30	-0.02	0.1743	9.9999	-0.0372	9.9999	-0.2137	0.5727	0.0365	0.3730	0.0637	0.6514
209	15.41	-0.02	0.1693	9.9999	-0.0417	9.9999	-0.2462	0.5729	0.0356	0.3750	0.0621	0.6546
210	15.48	-0.02	0.1693	9.9999	-0.0417	9.9999	-0.2462	0.5601	0.0366	0.3713	0.0652	0.6582
211	15.56	-0.02	0.1718	9.9999	-0.0416	9.9999	-0.2409	0.5647	0.0363	0.3744	0.0607	0.6629
212	15.66	-0.01	0.1693	9.9999	-0.0417	9.9999	-0.2462	0.5646	0.0365	0.3733	0.0612	0.6611
213	15.74	-0.03	0.1744	9.9999	-0.0393	9.9999	-0.2252	0.5585	0.0362	0.3709	0.0648	0.6641
214	15.82	-0.03	0.1693	9.9999	-0.0417	9.9999	-0.2462	0.5646	0.0365	0.3756	0.0612	0.6649
215	15.90	0.00	0.1693	9.9999	-0.0436	9.9999	-0.2575	0.5616	0.0356	0.3764	0.0634	0.6703
216	15.98	-0.03	0.1746	9.9999	-0.0412	9.9999	-0.2362	0.5644	0.0351	0.3733	0.0622	0.6614
217	16.07	-0.03	0.1744	9.9999	-0.0393	9.9999	-0.2252	0.5530	0.0356	0.3725	0.0644	0.6737
218	16.15	-0.02	0.1744	9.9999	-0.0393	9.9999	-0.2252	0.5559	0.0356	0.3738	0.0641	0.6725
219	16.22	-0.03	0.1744	9.9999	-0.0412	9.9999	-0.2362	0.5358	0.0356	0.3649	0.0665	0.6811
220	16.31	-0.05	0.1769	9.9999	-0.0360	9.9999	-0.2149	0.5648	0.0365	0.3818	0.0612	0.6759
221	16.38	-0.03	0.1745	9.9999	-0.0409	9.9999	-0.2273	0.5621	0.0337	0.3805	0.0599	0.6770
222	16.46	-0.03	0.1745	9.9999	-0.0432	9.9999	-0.2477	0.5360	0.0351	0.3670	0.0655	0.6848
223	16.55	-0.03	0.1771	9.9999	-0.0421	9.9999	-0.2376	0.5561	0.0340	0.3779	0.0610	0.6793
224	16.63	-0.02	0.1820	9.9999	-0.0376	9.9999	-0.2068	0.5448	0.0345	0.3729	0.0634	0.6846
225	16.72	-0.03	0.1771	9.9999	-0.0421	9.9999	-0.2376	0.5565	0.0335	0.3801	0.0602	0.6829
226	16.80	-0.03	0.1744	9.9999	-0.0402	9.9999	-0.2308	0.5508	0.0335	0.3776	0.0608	0.6856
227	16.88	-0.03	0.1795	9.9999	-0.0388	9.9999	-0.2161	0.5184	0.0335	0.3644	0.0648	0.7057
228	16.96	-0.04	0.1720	9.9999	-0.0444	9.9999	-0.2560	0.5623	0.0332	0.3737	0.0612	0.6891
229	17.05	-0.03	0.1719	9.9999	-0.0425	9.9999	-0.2469	0.5510	0.0329	0.3796	0.0597	0.6888
230	17.12	-0.04	0.1795	9.9999	-0.0388	9.9999	-0.2161	0.5166	0.0329	0.3643	0.0637	0.7053

TEST PART MACH MX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5.0.6u 1.7 0.0 BLAUFZ3 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
231	17.20	-0.05	0.1796	9.9999	-0.0378	9.9999	-0.2109	0.5396	0.0329	0.3746	0.0618	0.6942
232	17.30	-0.05	0.1846	9.9999	-0.0386	9.9999	-0.2081	0.5440	0.0316	0.3562	0.0639	0.7211
233	17.38	-0.05	0.1796	9.9999	-0.0408	9.9999	-0.2273	0.5313	0.0320	0.3749	0.0603	0.7058
234	17.44	-0.04	0.1795	9.9999	-0.0396	9.9999	-0.2220	0.5314	0.0316	0.3727	0.0596	0.7015
235	17.54	-0.03	0.1771	9.9999	-0.0421	9.9999	-0.2376	0.5170	0.0316	0.3686	0.0610	0.7130
236	17.63	-0.04	0.1845	9.9999	-0.0374	9.9999	-0.2029	0.5362	0.0313	0.3748	0.0585	0.7088
237	17.69	-0.03	0.1795	9.9999	-0.0388	9.9999	-0.2161	0.5315	0.0313	0.3749	0.0588	0.7053
238	17.77	-0.02	0.1845	9.9999	-0.0365	9.9999	-0.1977	0.5228	0.0313	0.3700	0.0598	0.7078
239	17.86	-0.03	0.1795	9.9999	-0.0344	9.9999	-0.2161	0.5057	0.0313	0.3677	0.0618	0.7277
240	17.93	-0.02	0.1796	9.9999	-0.0369	9.9999	-0.2055	0.5230	0.0307	0.3710	0.0587	0.7094
241	18.02	-0.04	0.1795	9.9999	-0.0384	9.9999	-0.2161	0.4915	0.0307	0.3613	0.0624	0.7352
242	18.10	-0.03	0.1794	9.9999	-0.0402	9.9999	-0.2308	0.5088	0.0301	0.3667	0.0592	0.7208
243	18.18	-0.03	0.1845	9.9999	-0.0365	9.9999	-0.1977	0.4987	0.0304	0.3532	0.0648	0.7536
244	18.27	-0.02	0.1845	9.9999	-0.0365	9.9999	-0.1977	0.3563	0.0335	0.3145	0.0948	0.8825
245	18.35	-0.02	0.1770	9.9999	-0.0400	9.9999	-0.2263	0.4773	0.0301	0.3549	0.0631	0.7435
246	18.42	-0.04	0.1871	9.9999	-0.0372	9.9999	-0.1991	0.3332	0.0340	0.3033	0.1018	0.9102
247	18.51	-0.03	0.1819	9.9999	-0.0367	9.9999	-0.2016	0.3330	0.0345	0.3002	0.1037	0.9015
248	18.59	-0.04	0.1871	9.9999	-0.0372	9.9999	-0.1991	0.3447	0.0337	0.3041	0.0977	0.8824
249	18.67	-0.02	0.1870	9.9999	-0.0352	9.9999	-0.1883	0.3387	0.0345	0.3006	0.1020	0.8875
250	18.75	-0.03	0.1845	9.9999	-0.0365	9.9999	-0.1977	0.3387	0.0343	0.2986	0.1011	0.8812
251	18.83	-0.05	0.1821	9.9999	-0.0397	9.9999	-0.2178	0.3703	0.0335	0.3061	0.0904	0.8319
252	18.91	-0.04	0.1845	9.9999	-0.0374	9.9999	-0.2029	0.3588	0.0337	0.3019	0.0938	0.8416
253	19.00	-0.03	0.1846	9.9999	-0.0395	9.9999	-0.2138	0.3703	0.0335	0.3060	0.0904	0.8262
254	19.08	-0.05	0.1795	9.9999	-0.0394	9.9999	-0.2220	0.3847	0.0332	0.3101	0.0863	0.8061
255	19.14	-0.05	0.1846	9.9999	-0.0394	9.9999	-0.2081	0.4021	0.0320	0.3124	0.0797	0.7771
256	19.22	-0.05	0.1847	9.9999	-0.0371	9.9999	-0.1953	0.4108	0.0316	0.3143	0.0768	0.7748
257	19.29	-0.05	0.1847	9.9999	-0.0380	9.9999	-0.2004	0.3846	0.0332	0.3059	0.0863	0.7953
258	19.38	-0.05	0.1922	9.9999	-0.0369	9.9999	-0.1918	0.3962	0.0323	0.3088	0.0816	0.7793
259	19.45	-0.03	0.1873	9.9999	-0.0412	9.9999	-0.2200	0.3932	0.0329	0.3065	0.0837	0.7796
260	19.54	-0.05	0.1873	9.9999	-0.0412	9.9999	-0.2200	0.4019	0.0324	0.3071	0.0804	0.7662
261	19.61	-0.06	0.1870	9.9999	-0.0411	9.9999	-0.2198	0.4010	0.0328	0.3045	0.0818	0.7594
262	19.69	-0.05	0.1796	9.9999	-0.0437	9.9999	-0.2437	0.4243	0.0315	0.3135	0.0741	0.7389
263	19.77	-0.06	0.1845	9.9999	-0.0433	9.9999	-0.2348	0.4069	0.0323	0.3081	0.0796	0.7572
264	19.84	-0.06	0.1893	9.9999	-0.0409	9.9999	-0.2159	0.4068	0.0328	0.3070	0.0806	0.7547
265	19.92	-0.05	0.1838	9.9999	-0.0420	9.9999	-0.2214	0.4126	0.0323	0.3074	0.0783	0.7451
266	19.99	-0.06	0.1947	9.9999	-0.0405	9.9999	-0.2081	0.4298	0.0315	0.3108	0.0732	0.7230
267	20.07	-0.07	0.1895	9.9999	-0.0420	9.9999	-0.2214	0.4240	0.0320	0.3083	0.0756	0.7271
268	20.15	-0.05	0.1821	9.9999	-0.0455	9.9999	-0.2501	0.4297	0.0320	0.3076	0.0746	0.7159
269	20.22	-0.06	0.1871	9.9999	-0.0431	9.9999	-0.2305	0.4268	0.0323	0.3074	0.0757	0.7203
270	20.30	-0.05	0.1922	9.9999	-0.0407	9.9999	-0.2224	0.4353	0.0320	0.3080	0.0730	0.7074
271	20.37	-0.06	0.1896	9.9999	-0.0459	9.9999	-0.2420	0.4469	0.0315	0.3119	0.0704	0.6980
272	20.45	-0.06	0.1845	9.9999	-0.0420	9.9999	-0.2214	0.4410	0.0320	0.3094	0.0726	0.7016
273	20.53	-0.07	0.1947	9.9999	-0.0415	9.9999	-0.2131	0.4469	0.0315	0.3109	0.0704	0.6956
274	20.60	-0.07	0.1871	9.9999	-0.0431	9.9999	-0.2305	0.4553	0.0317	0.3116	0.0697	0.6843
275	20.68	-0.06	0.1795	9.9999	-0.0467	9.9999	-0.2601	0.4527	0.0312	0.3135	0.0688	0.6925
276	20.74	-0.05	0.1973	9.9999	-0.0424	9.9999	-0.2147	0.4609	0.0312	0.3155	0.0667	0.6758

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH MACH-8 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5 0.50 1.07 0.0 81e0123 0.0 0. 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CAFA	CMA	CBA	XCPFA	YCPFA
277	20.44	-0.03	0.1872	9.9999	-0.0457	9.9999	-0.2412	0.4582	0.0317	0.3117	0.0693	0.6804
278	20.32	-0.04	0.1872	9.9999	-0.0452	9.9999	-0.2612	0.4636	0.0320	0.3133	0.0691	0.6755
279	21.00	-0.03	0.1973	9.9999	-0.0424	9.9999	-0.2147	0.4697	0.0315	0.3158	0.0670	0.6723
280	21.08	-0.04	0.1966	9.9999	-0.0435	9.9999	-0.2236	0.4667	0.0317	0.3145	0.0680	0.6748
281	21.15	-0.03	0.1967	9.9999	-0.0463	9.9999	-0.2508	0.4810	0.0315	0.3166	0.0654	0.6582
282	21.22	-0.03	0.1922	9.9999	-0.0437	9.9999	-0.2274	0.4723	0.0323	0.3149	0.0684	0.6668
283	21.31	-0.04	0.1947	9.9999	-0.0415	9.9999	-0.2131	0.4927	0.0306	0.3216	0.0621	0.6528
284	21.37	-0.04	0.1898	9.9999	-0.0459	9.9999	-0.2620	0.4826	0.0317	0.3196	0.0665	0.6698
285	21.47	-0.04	0.1947	9.9999	-0.0467	9.9999	-0.2508	0.4782	0.0312	0.3200	0.0626	0.6423
286	21.54	-0.04	0.1973	9.9999	-0.0424	9.9999	-0.2147	0.4926	0.0317	0.3165	0.0665	0.6469
287	21.61	-0.07	0.1898	9.9999	-0.0420	9.9999	-0.2216	0.5060	0.0309	0.3225	0.0613	0.6399
288	21.69	-0.05	0.1978	9.9999	-0.0463	9.9999	-0.2283	0.5271	0.0298	0.3293	0.0566	0.6247
289	21.76	-0.05	0.1896	9.9999	-0.0429	9.9999	-0.2265	0.5355	0.0298	0.3310	0.0557	0.6181
290	21.84	-0.05	0.1973	9.9999	-0.0424	9.9999	-0.2147	0.5181	0.0312	0.3246	0.0601	0.6264
291	21.91	-0.05	0.1968	9.9999	-0.0435	9.9999	-0.2234	0.5180	0.0315	0.3235	0.0607	0.6245
292	22.00	-0.05	0.1967	9.9999	-0.0473	9.9999	-0.2560	0.5209	0.0315	0.3248	0.0606	0.6236
293	22.07	-0.03	0.1923	9.9999	-0.0447	9.9999	-0.2323	0.5236	0.0312	0.3250	0.0595	0.6204
294	22.15	-0.04	0.1898	9.9999	-0.0453	9.9999	-0.2420	0.5238	0.0312	0.3239	0.0595	0.6183
295	22.23	-0.05	0.1999	9.9999	-0.0471	9.9999	-0.2157	0.5323	0.0312	0.3246	0.0585	0.6098
296	22.31	-0.05	0.1944	9.9999	-0.0455	9.9999	-0.2337	0.5436	0.0309	0.3246	0.0568	0.6061
297	22.39	-0.04	0.1950	9.9999	-0.0475	9.9999	-0.2434	0.5410	0.0309	0.3283	0.0571	0.6069
298	22.46	-0.03	0.1849	9.9999	-0.0480	9.9999	-0.2525	0.5434	0.0315	0.3301	0.0573	0.6008
299	22.54	-0.01	0.1949	9.9999	-0.0503	9.9999	-0.2719	0.5492	0.0317	0.3269	0.0578	0.5952
300	22.60	-0.01	0.1900	9.9999	-0.0459	9.9999	-0.2626	0.5550	0.0315	0.3283	0.0567	0.5916
301	22.67	-0.00	0.1900	9.9999	-0.0508	9.9999	-0.2676	0.5549	0.0317	0.3262	0.0572	0.5879
302	22.74	-0.00	0.1978	9.9999	-0.0464	9.9999	-0.2346	0.5666	0.0315	0.3305	0.0557	0.5856
303	22.81	-0.00	0.1953	9.9999	-0.0476	9.9999	-0.2436	0.5726	0.0326	0.3301	0.0570	0.5765
304	22.89	-0.00	0.1852	9.9999	-0.0524	9.9999	-0.2830	0.5809	0.0332	0.3297	0.0571	0.5675
305	22.97	-0.00	0.1956	9.9999	-0.0495	9.9999	-0.2536	0.5892	0.0340	0.3293	0.0576	0.5589
306	23.03	-0.01	0.1959	9.9999	-0.0496	9.9999	-0.2538	0.5963	0.0340	0.3286	0.0571	0.5525
307	23.11	-0.05	0.1943	9.9999	-0.0485	9.9999	-0.2485	0.5950	0.0334	0.3297	0.0561	0.5541
308	23.19	-0.03	0.2006	9.9999	-0.0455	9.9999	-0.2189	0.6008	0.0348	0.3265	0.0572	0.5363
309	23.27	-0.04	0.2031	9.9999	-0.0500	9.9999	-0.2461	0.6117	0.0345	0.3288	0.0565	0.5375
310	23.34	-0.07	0.1960	9.9999	-0.0513	9.9999	-0.2593	0.6202	0.0345	0.3274	0.0557	0.5278
311	23.41	-0.06	0.2005	9.9999	-0.0491	9.9999	-0.2449	0.6259	0.0345	0.3256	0.0552	0.5203
312	23.48	-0.08	0.1956	9.9999	-0.0536	9.9999	-0.2738	0.6287	0.0345	0.3237	0.0549	0.5149
313	23.45	-0.06	0.2006	9.9999	-0.0511	9.9999	-0.2549	0.6287	0.0345	0.3237	0.0549	0.5149
314	23.45	-0.06	0.2006	9.9999	-0.0511	9.9999	-0.2549	0.6372	0.0345	0.3232	0.0542	0.5073
315	23.46	-0.06	0.2010	9.9999	-0.0520	9.9999	-0.2600	0.6354	0.0339	0.3201	0.0533	0.5039
316	23.46	-0.05	0.1975	9.9999	-0.0522	9.9999	-0.2643	0.6325	0.0342	0.3218	0.0540	0.5076
317	23.46	-0.05	0.2001	9.9999	-0.0530	9.9999	-0.2647	0.6383	0.0339	0.3203	0.0531	0.5019
318	23.46	-0.05	0.1980	9.9999	-0.0507	9.9999	-0.2486	0.6438	0.0339	0.3198	0.0526	0.4966
319	23.46	-0.06	0.1975	9.9999	-0.0522	9.9999	-0.2643	0.6353	0.0342	0.3170	0.0538	0.4989
320	23.42	-0.06	0.1926	9.9999	-0.0565	9.9999	-0.2936	0.6438	0.0339	0.3223	0.0521	0.4961
321	23.40	-0.04	0.2075	9.9999	-0.0474	9.9999	-0.2283	0.6640	0.0333	0.3285	0.0501	0.4948
322	23.49	-0.02	0.2251	9.9999	-0.0400	9.9999	-0.1779	0.6843	0.0319	0.3341	0.0467	0.4863

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 8 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REID=6 PHI CUM$ L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5 0.9x 1.7 0.0 nla0F23 3.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
323	25.24	-0.03	[illegible]	9.9999	-0.x362	9.9999	-0.1624	0.6902	0.0316	0.3368	0.0459	0.4908
324	26.09	-0.03	0.2152	9.9999	-0.[illegible]	9.9999	-0.2130	0.7075	0.0309	0.3453	0.0436	0.4881
325	26.93	-0.04	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.1881	0.7278	0.0294	0.3530	0.0404	0.4851
326	27.87	-0.03	0.23[illegible]	9.9999	-0.[illegible]	9.9999	-0.1506	0.7426	0.0278	0.3603	0.0374	0.4852
327	28.87	-0.02	0.2269	9.9999	-0.[illegible]	9.9999	-0.1607	0.7619	0.0264	0.3665	0.0347	0.4818
328	29.97	-0.03	0.2372	9.9999	-0.[illegible]	9.9999	-0.1306	0.7822	0.0245	0.3721	0.0313	0.4756
329	31.06	-0.03	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.1508	0.8053	0.0233	0.3810	0.0290	0.4732
330	32.27	-0.02	0.23[illegible]	9.9999	-0.[illegible]	9.9999	-0.1328	0.8285	0.0217	0.3900	0.0262	0.4707
331	33.45	-0.04	0.2367	9.9999	-0.[illegible]	9.9999	-0.1244	0.8491	0.0195	0.3997	0.0230	0.4700
332	34.77	-0.03	0.2224	9.9999	-0.[illegible]	9.9999	-0.1631	0.8713	0.0157	0.4146	0.0178	0.4652
333	36.31	-0.06	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.2106	0.9468	0.0102	0.4352	0.010[illegible]	0.4596
334	38.01	-0.04	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.1961	1.0037	0.0058	0.4597	0.00[illegible]	0.4588
335	40.17	-0.05	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.1487	1.0560	0.0025	0.4791	0.0024	0.4537
336	42.72	-0.06	0.2049	9.9999	-0.[illegible]	9.9999	-0.1747	1.1157	-0.0016	0.4996	-0.0015	0.4478
337	45.80	-0.05	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.1813	1.1667	-0.0050	0.5132	-0.0043	0.4399
338	49.51	0.05	0.2226	9.9999	-0.[illegible]	9.9999	-0.1029	1.1642	-0.0111	0.5152	-0.0095	0.4426
339	53.80	0.05	0.2254	9.9999	-0.[illegible]	9.9999	-0.0967	1.2308	-0.0183	0.5340	-0.0149	0.4338
340	58.12	-0.06	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.1581	1.2306	-0.0211	0.5206	-0.0172	0.4231
341	58.25	-0.07	0.2053	9.9999	-0.[illegible]	9.9999	-0.1485	1.2723	-0.0238	0.5352	-0.0197	0.4207
342	59.27	-0.05	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.1465	1.2848	-0.0243	0.5405	-0.0189	0.4287
343	54.26	-0.05	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.1605	1.3124	-0.0254	0.5503	-0.0193	0.4193
344	58.25	-0.06	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.1617	1.2885	-0.0246	0.5440	-0.0191	0.4222
345	56.23	-0.08	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.1514	1.2872	-0.0239	0.5391	-0.0188	0.4188
346	58.29	-0.06	0.2137	9.9999	-0.[illegible]	9.9999	-0.0876	1.3128	-0.0255	0.5478	-0.0196	0.4205
347	54.25	-0.06	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.1302	1.3049	-0.0250	0.5485	-0.0192	0.4204
348	57.89	-0.05	0.1956	9.9999	-0.[illegible]	9.9999	-0.1248	1.3168	-0.0241	0.5562	-0.0183	0.4224
349	57.04	0.03	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.0909	1.3057	-0.0222	0.5582	-0.0170	0.4275
350	56.18	0.06	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.0863	1.2965	-0.0216	0.5576	-0.0167	0.4301
351	55.32	0.06	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.0927	1.2655	-0.0187	0.5488	-0.0148	0.4337
352	54.44	0.07	0.22[illegible]	9.9999	-0.[illegible]	9.9999	-0.0310	1.2373	-0.0146	0.5415	-0.0118	0.4377
353	53.56	0.10	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.0267	1.2158	-0.0131	0.5367	-0.0108	0.4414
354	52.64	0.10	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.0337	1.2139	-0.0128	0.5370	-0.0106	0.4423
355	51.64	0.07	0.2[illegible]	9.9999	-0.[illegible]	9.9999	-0.0383	1.1876	-0.0123	0.5277	-0.0103	0.4443
356	50.70	0.09	0.2311	9.9999	-0.[illegible]	9.9999	-0.0413	1.1817	-0.0120	0.5273	-0.0101	0.4462
357	49.75	-0.01	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.1737	1.1730	-0.0087	0.5229	-0.0074	0.4454
358	48.82	-0.01	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.1758	1.1771	-0.0081	0.5292	-0.0069	0.4496
359	47.86	-0.04	0.17[illegible]	9.9999	-0.[illegible]	9.9999	-0.1232	1.1514	-0.0046	0.5194	-0.0040	0.4503
360	45.88	-0.03	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.0781	1.1242	-0.0035	0.5122	-0.0031	0.4556
361	45.48	-0.04	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.0502	1.0920	-0.0014	0.5004	-0.0013	0.4582
362	44.86	-0.06	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.1056	1.1230	-0.0006	0.5098	-0.0005	0.4548
363	43.94	-0.09	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.0889	1.0595	0.0009	0.4885	0.0008	0.4611
364	42.79	-0.07	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.1226	1.0695	0.0023	0.4931	0.0022	0.4611
365	41.74	-0.06	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.1167	1.0291	0.0029	0.4797	0.0028	0.4662
366	40.65	-0.07	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.1454	1.0038	0.0041	0.4685	0.0040	0.4669
367	39.52	-0.06	0.1[illegible]	9.9999	-0.[illegible]	9.9999	-0.1537	0.9697	0.0043	0.4552	0.0086	0.4695
368	38.38	-0.05	0.1971	9.9999	-0.[illegible]	9.9999	-0.1092	0.9278	0.0105	0.4359	0.0113	0.4698

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 9 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7. PART 5 MACH 0.90 RN10-6 1.87 PHI 0.0 CONF 81=9F23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CLF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
369	37.27	-0.07	0.1917	9.9999	-0.0260	9.9999	-0.1354	0.6933	0.0139	0.6233	0.0156	0.4739
370	36.62	-0.05	0.2062	9.9999	-0.0218	9.9999	-0.1068	0.6722	0.0161	0.6133	0.0185	0.4738
371	34.77	-0.06	0.2084	9.9999	-0.0245	9.9999	-0.1189	0.6419	0.0195	0.3994	0.0231	0.4743
372	33.53	-0.05	0.2081	9.9999	-0.0256	9.9999	-0.1237	0.6137	0.0218	0.3650	0.0268	0.4731
373	32.23	-0.06	0.2143	9.9999	-0.0215	9.9999	-0.0981	0.7973	0.0234	0.3726	0.0294	0.4674
374	30.84	-0.03	0.2283	9.9999	-0.0196	9.9999	-0.0854	0.7720	0.0257	0.3629	0.0332	0.4701
375	29.53	-0.01	0.2525	9.9999	-0.0167	9.9999	-0.0661	0.7469	0.0279	0.3500	0.0373	0.4685
376	28.11	-0.05	0.2166	9.9999	-0.0285	9.9999	-0.1302	0.7191	0.0295	0.3368	0.0411	0.4684

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RALD-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	6	0.90	1.7	45.0	21R0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.90	0.08	-0.6142	0.7900	0.0911	-0.1693	-0.0047	0.2550	0.1026	0.1525	-1.2861
2	-5.96	0.08	-0.6214	0.8183	0.0801	-0.1834	-0.0047	0.2549	0.1045	0.1505	-1.3168
3	-5.91	0.08	-0.6321	0.8037	0.0729	-0.1550	-0.0048	0.2550	0.1042	0.1509	-1.2718
4	-5.96	0.09	-0.6390	0.8193	0.1093	-0.2554	-0.0044	0.2595	0.1030	0.1566	-1.2818
5	-5.85	0.09	-0.6056	0.7704	0.1372	-0.1931	-0.0046	0.2567	0.1022	0.1546	-1.2728
6	-5.82	0.08	-0.5776	0.7410	0.0695	-0.2130	-0.0047	0.2542	0.1026	0.1517	-1.2829
7	-5.84	0.09	-0.5607	0.7148	0.1106	-0.1776	-0.0046	0.2529	0.1026	0.1504	-1.2828
8	-5.85	0.09	-0.5429	0.6758	0.1034	-0.2330	-0.0047	0.2552	0.1010	0.1543	-1.2641
9	-5.16	0.09	-0.5362	0.6580	0.1001	-0.1544	-0.0045	0.2556	0.1006	0.1551	-1.2283
10	-5.91	0.09	-0.4978	0.6217	0.1053	-0.2170	-0.0043	0.2515	0.0994	0.1522	-1.2695
11	-4.99	0.08	-0.5351	0.6324	0.0829	-0.1998	-0.0048	0.2577	0.0998	0.1580	-1.1828
12	-4.76	0.09	-0.4912	0.6019	0.1147	-0.1611	-0.0046	0.2582	0.0994	0.1589	-1.2254
13	-4.56	0.09	-0.4554	0.5431	0.1127	-0.1953	-0.0046	0.2543	0.0987	0.1562	-1.1924
14	-4.99	0.08	-0.4378	0.5217	0.0761	-0.1809	-0.0047	0.2559	0.0994	0.1566	-1.1922
15	-4.79	0.09	-0.4195	0.5100	0.2058	-0.2207	-0.0042	0.2521	0.0978	0.1544	-1.2156
16	-4.17	0.08	-0.4041	0.5014	0.0831	-0.0842	-0.0048	0.2585	0.0978	0.1608	-1.1393
17	-4.02	0.08	-0.4468	0.5092	0.0719	-0.0925	-0.0047	0.2611	0.0978	0.1634	-1.1351
18	-3.86	0.08	-0.4123	0.4759	0.1498	-0.1446	-0.0045	0.2575	0.0970	0.1606	-1.1542
19	-3.75	0.09	-0.4042	0.4322	0.1692	-0.2074	-0.0044	0.2605	0.0962	0.1644	-1.0693
20	-3.63	0.07	-0.3774	0.4250	-0.0009	-0.0720	-0.0049	0.2607	0.0966	0.1642	-1.1261
21	-3.49	0.08	-0.3688	0.4006	0.0830	-0.1215	-0.0047	0.2572	0.0966	0.1607	-1.0869
22	-3.37	0.08	-0.3774	0.4035	0.1267	-0.1515	-0.0045	0.2630	0.0973	0.1658	-1.0704
23	-3.25	0.08	-0.3590	0.3831	0.1633	-0.1741	-0.0044	0.2610	0.0952	0.1658	-1.0672
24	-3.08	0.08	-0.3266	0.3452	0.0584	-0.0793	-0.0047	0.2590	0.0944	0.1646	-1.0637
25	-2.97	0.07	-0.3156	0.3183	0.0289	-0.1033	-0.0048	0.2607	0.0939	0.1668	-1.0080
26	-2.83	0.07	-0.3159	0.3238	0.1194	-0.1362	-0.0045	0.2588	0.0948	0.1640	-1.0260
27	-2.69	0.08	-0.2885	0.2917	0.1463	-0.1681	-0.0044	0.2602	0.0944	0.1658	-1.0112
28	-2.55	0.07	-0.2965	0.2920	0.0477	-0.0840	-0.0047	0.2598	0.0928	0.1670	-0.9803
29	-2.42	0.07	-0.2636	0.2549	0.0867	-0.0453	-0.0045	0.2581	0.0936	0.1645	-0.9851
30	-2.30	0.08	-0.2718	0.2524	0.0024	-0.0814	-0.0048	0.2612	0.0920	0.1692	-0.9672
31	-2.17	0.07	-0.2751	0.2611	0.0268	-0.0778	-0.0047	0.2617	0.0928	0.1684	-0.9451
32	-2.03	0.08	-0.2169	0.2130	0.1103	-0.1609	-0.0044	0.2608	0.0920	0.1688	-0.9821
33	-1.90	0.08	-0.2275	0.2290	-0.0220	-0.0000	-0.0048	0.2575	0.0909	0.1666	-1.0064
34	-1.78	0.07	-0.2169	0.1929	0.0327	-0.0415	-0.0047	0.2576	0.0904	0.1672	-0.9145
35	-1.66	0.08	-0.2099	0.1921	-0.0224	-0.0201	-0.0048	0.2604	0.0915	0.1689	-0.9153
36	-1.52	0.07	-0.1598	0.1596	0.0672	-0.1005	-0.0044	0.2569	0.0906	0.1663	-1.0285
37	-1.40	0.08	-0.1427	0.1787	-0.0306	-0.0001	-0.0048	0.2617	0.0895	0.1722	-0.9783
38	-1.27	0.08	-0.1639	0.1694	0.0039	-0.0543	-0.0046	0.2569	0.0903	0.1666	-1.0355
39	-1.14	0.08	-0.1628	0.1767	0.1865	-0.1411	-0.0040	0.2583	0.0885	0.1688	-1.0853
40	-1.02	0.07	-0.1913	0.1907	0.1072	-0.0491	-0.0043	0.2569	0.0914	0.1655	-0.9968
41	-0.90	0.08	-0.1116	0.1282	-0.0090	0.0421	-0.0046	0.2552	0.0894	0.1658	-1.1511
42	-0.78	0.07	-0.1428	0.1471	0.0935	-0.1150	-0.0042	0.2600	0.0898	0.1702	-1.3103
43	-0.66	0.08	-0.0919	0.1327	-0.0263	0.0375	-0.0046	0.2540	0.0902	0.1638	-1.4435
44	-0.53	0.08	-0.1355	0.1774	0.1241	-0.0709	-0.0102	0.2567	0.0901	0.1666	-1.3092
45	-0.41	0.07	-0.0811	0.1227	0.0450	-0.1143	-0.0103	0.2538	0.0898	0.1640	-1.5122
46	-0.29	0.07	-0.0737	0.1229	0.0066	0.0255	-0.0044	0.2556	0.0897	0.1659	-1.6673

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 6 0.60 1.7 45.0 H1=0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	-0.17	0.06	-0.1106	0.1582	-0.0056	-0.0715	-0.0106	0.2600	0.0905	0.1695	-1.3571
48	-0.06	0.06	-0.0991	0.1524	0.0513	-0.0396	-0.0062	0.2589	0.0901	0.1688	-1.5386
49	0.06	0.06	-0.0906	0.1506	0.0443	0.0001	-0.0047	0.2606	0.0901	0.1705	-1.6638
50	0.21	0.06	-0.0357	0.1183	0.1183	-0.0106	-0.0039	0.2571	0.0913	0.1658	-3.1684
51	0.31	0.06	-0.0061	0.1011	0.0504	-0.0524	-0.0041	0.2639	0.0914	0.1725	-1.8856
52	0.43	0.06	-0.0610	0.1576	0.1584	-0.1168	-0.0038	0.2576	0.0922	0.1654	-2.5721
53	0.55	0.07	-0.0203	0.1396	0.0495	-0.0731	-0.0102	0.2608	0.0926	0.1682	-4.1567
54	0.65	0.06	-0.0496	0.1134	0.0537	-0.0007	-0.0041	0.2643	0.0921	0.1722	-2.6543
55	0.79	0.07	-0.0255	0.1161	0.1039	-0.1014	-0.0099	0.2597	0.0912	0.1640	-4.4969
56	0.91	0.06	0.0009	0.1021	0.0229	-0.0447	-0.0102	0.2596	0.0920	0.1676	113.3777
57	1.02	0.06	-0.0348	0.1211	-0.0235	0.1327	-0.0104	0.2644	0.0932	0.1712	-3.1191
58	1.14	0.07	0.0020	0.1054	0.1298	-0.1365	-0.0159	0.2547	0.0920	0.1677	56.6699
59	1.25	0.07	0.0080	0.1095	0.0556	0.0458	-0.0161	0.2619	0.0944	0.1675	13.7125
60	1.37	0.06	0.0444	0.0852	-0.0573	0.0206	-0.0165	0.2620	0.0932	0.1688	1.6896
61	1.50	0.06	0.0807	0.0349	0.1244	-0.0812	-0.0158	0.2586	0.0944	0.1642	0.6947
62	1.60	0.07	0.0536	0.0584	0.0235	-0.0408	-0.0162	0.2653	0.0936	0.1717	1.0608
63	1.72	0.07	0.0712	0.0493	0.0434	-0.0199	-0.0161	0.2625	0.0952	0.1673	0.6955
64	1.83	0.07	0.0514	0.0577	-0.0089	0.0496	-0.0162	0.2691	0.0952	0.1739	1.1106
65	1.93	0.06	0.0534	0.0551	0.1157	-0.0688	-0.0097	0.2696	0.0965	0.1732	1.0307
66	2.06	0.06	0.1331	-0.0173	0.1070	-0.0729	-0.0158	0.2603	0.0961	0.1643	-0.1278
67	2.17	0.07	0.0813	0.0410	0.0006	0.0448	-0.0162	0.2756	0.0964	0.1793	1.0068
68	2.28	0.06	0.1309	-0.0255	0.1467	-0.0297	-0.0156	0.2636	0.0967	0.1670	-0.1951
69	2.40	0.07	0.1415	-0.0419	0.0409	-0.0868	-0.0159	0.2668	0.0975	0.1694	-0.2953
70	2.52	0.06	0.1212	-0.0622	0.0811	-0.0359	-0.0159	0.2700	0.0988	0.1713	-0.3680
71	2.63	0.06	0.1091	-0.0511	-0.1267	0.0970	-0.0165	0.2644	0.0987	0.1658	-0.3078
72	2.76	0.08	0.1883	-0.0442	0.0879	-0.0798	-0.0157	0.2661	0.0987	0.1675	-0.2627
73	2.86	0.07	0.1846	-0.0729	-0.0204	-0.0218	-0.0161	0.2643	0.0991	0.1653	-0.3940
74	2.97	0.06	0.1651	-0.0582	-0.0150	0.0549	-0.0160	0.2712	0.0995	0.1718	-0.3527
75	3.09	0.06	0.2006	-0.1090	-0.0195	0.0005	-0.0161	0.2636	0.0995	0.1642	-0.5431
76	3.21	0.06	0.2021	-0.0955	-0.0397	-0.0405	-0.0161	0.2652	0.0999	0.1656	-0.4722
77	3.31	0.07	0.2091	-0.1172	0.0276	-0.0127	-0.0159	0.2691	0.1011	0.1681	-0.5603
78	3.42	0.07	0.1969	-0.1321	0.0269	-0.0328	-0.0158	0.2663	0.1012	0.1652	-0.6641
79	3.55	0.06	0.2250	-0.1305	-0.0813	0.0342	-0.0162	0.2631	0.1015	0.1617	-0.6129
80	3.66	0.05	0.2525	-0.1606	-0.1269	0.0536	-0.0163	0.2665	0.1023	0.1643	-0.6349
81	3.77	0.06	0.2509	-0.1778	0.0582	0.0124	-0.0096	0.2624	0.1015	0.1610	-0.7086
82	3.89	0.06	0.2710	-0.2063	-0.0917	0.0568	-0.0049	0.2640	0.1027	0.1614	-0.7453
83	4.00	0.07	0.2859	-0.2188	-0.0167	-0.0011	-0.0098	0.2674	0.1046	0.1629	-0.7640
84	4.10	0.07	0.3118	-0.2583	0.0478	-0.0316	-0.0157	0.2585	0.1038	0.1548	-0.8284
85	4.23	0.07	0.2772	-0.2193	-0.0446	-0.0152	-0.0099	0.2647	0.1043	0.1605	-0.7908
86	4.34	0.07	0.3303	-0.2821	0.0491	-0.0787	-0.0097	0.2620	0.1038	0.1583	-0.8541
87	4.44	0.06	0.3376	-0.3184	0.1100	-0.1272	-0.0096	0.2593	0.1058	0.1536	-0.9433
88	4.56	0.07	0.3263	-0.3254	0.0308	-0.0468	-0.0047	0.2615	0.1070	0.1546	-1.0112
89	4.64	0.07	0.3802	-0.3717	-0.0446	-0.0712	-0.0099	0.2584	0.1073	0.1516	-0.9776
90	4.75	0.06	0.3550	-0.3491	0.1033	-0.1718	-0.0092	0.2590	0.1061	0.1530	-0.9271
91	4.87	0.06	0.4035	-0.4033	-0.0659	0.0448	-0.0100	0.2567	0.1077	0.1471	-0.9996
92	4.97	0.07	0.3991	-0.3962	-0.0133	-0.1772	-0.0097	0.2629	0.1081	0.1549	-0.9776

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	E	0.90	1.7	45.0	BINDER23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	5.07	0.08	0.3807	-0.3562	0.0667	-0.0730	-0.0335	0.2635	0.1041	0.1555	-0.9875
94	5.18	0.07	0.4389	-0.4558	0.0032	-0.0701	-0.0097	0.2577	0.1085	0.1493	-1.0385
95	5.26	0.07	0.3929	-0.4425	-0.0603	-0.0406	-0.0100	0.2603	0.1085	0.1519	-1.1263
96	5.37	0.06	0.4366	-0.4659	0.0002	-0.0336	-0.0033	0.2624	0.1096	0.1529	-1.0665
97	5.49	0.07	0.4550	-0.5151	-0.1083	-0.0864	-0.0040	0.2607	0.1108	0.1500	-1.1320
98	5.59	0.07	0.4722	-0.5316	-0.0710	-0.0911	-0.0036	0.2586	0.1104	0.1481	-1.1252
99	5.68	0.07	0.4818	-0.5255	-0.0954	-0.0748	-0.0039	0.2623	0.1109	0.1515	-1.1379
100	5.79	0.08	0.4783	-0.5634	0.1055	-0.1166	-0.0033	0.2628	0.1113	0.1516	-1.1779
101	5.48	0.09	0.5082	-0.5441	0.1304	-0.1809	-0.0031	0.2620	0.1120	0.1501	-1.1539
102	5.97	0.08	0.4711	-0.5495	0.1242	-0.2068	-0.0031	0.2660	0.1120	0.1541	-1.1664
103	6.06	0.09	0.5205	-0.6284	0.0971	-0.1291	-0.0033	0.2618	0.1124	0.1495	-1.2083
104	6.17	0.08	0.5113	-0.6432	0.0672	-0.1609	-0.0034	0.2655	0.1140	0.1516	-1.2581
105	6.27	0.08	0.4370	-0.6777	-0.0082	-0.0742	-0.0038	0.2636	0.1146	0.1491	-1.2621
106	6.38	0.09	0.5099	-0.6479	0.1268	-0.1157	-0.0032	0.2704	0.1158	0.1547	-1.2787
107	6.49	0.08	0.5619	-0.7147	0.0886	-0.1477	-0.0033	0.2581	0.1167	0.1420	-1.2282
108	6.57	0.07	0.5498	-0.7336	0.0464	-0.2311	-0.0035	0.2698	0.1161	0.1538	-1.3462
109	6.68	0.08	0.6182	-0.7657	0.1233	-0.2077	-0.0031	0.2597	0.1170	0.1428	-1.2425
110	6.79	0.07	0.5739	-0.7739	0.0243	-0.0130	-0.0036	0.2648	0.1182	0.1467	-1.3686
111	6.88	0.08	0.6126	-0.8123	0.0329	-0.1733	-0.0035	0.2624	0.1182	0.1443	-1.3256
112	6.98	0.09	0.5556	-0.8108	0.1328	-0.2363	-0.0032	0.2676	0.1197	0.1480	-1.3868
113	7.10	0.08	0.6536	-0.8717	0.1286	-0.0992	-0.0035	0.2587	0.1190	0.1398	-1.3331
114	7.17	0.08	0.6440	-0.8713	0.0201	-0.0651	-0.0035	0.2661	0.1197	0.1465	-1.3529
115	7.27	0.10	0.6352	-0.8625	0.2655	-0.1934	-0.0027	0.2638	0.1210	0.1429	-1.3578
116	7.38	0.08	0.6523	-0.9089	0.0621	-0.1711	-0.0034	0.2643	0.1217	0.1427	-1.3956
117	7.48	0.07	0.6678	-0.9378	-0.0256	-0.0471	-0.0037	0.2651	0.1217	0.1435	-1.4043
118	7.58	0.08	0.6969	-0.9667	0.0715	-0.1758	-0.0033	0.2674	0.1233	0.1442	-1.3603
119	7.65	0.09	0.6764	-0.9389	0.1841	-0.1706	-0.0030	0.2635	0.1241	0.1395	-1.3882
120	7.76	0.09	0.7306	-1.0035	0.1927	-0.2274	-0.0030	0.2609	0.1241	0.1369	-1.4167
121	7.84	0.08	0.7298	-1.0294	0.1976	-0.2322	-0.0033	0.2649	0.1257	0.1393	-1.4133
122	7.93	0.07	0.7451	-1.0474	-0.0005	-0.1637	-0.0036	0.2660	0.1257	0.1404	-1.4058
123	8.02	0.07	0.7525	-1.0653	0.0059	-0.1610	-0.0034	0.2685	0.1261	0.1425	-1.4156
124	8.10	0.08	0.7705	-1.1097	0.0215	-0.1241	-0.0035	0.2714	0.1274	0.1441	-1.4256
125	8.20	0.07	0.7946	-1.1450	0.0908	-0.1391	-0.0033	0.2659	0.1275	0.1385	-1.4409
126	8.29	0.08	0.8125	-1.1577	0.1671	-0.1894	-0.0030	0.2701	0.1295	0.1407	-1.4249
127	8.38	0.08	0.8306	-1.1821	0.0202	-0.1773	-0.0035	0.2678	0.1287	0.1392	-1.4231
128	8.48	0.07	0.8190	-1.1905	0.1064	-1.1414	-0.0033	0.2698	0.1294	0.1395	-1.4539
129	8.55	0.08	0.8750	-1.2424	-0.0296	-0.2409	-0.0037	0.2664	0.1310	0.1355	-1.4200
130	8.62	0.07	0.8206	-1.2006	0.1363	-0.2841	-0.0031	0.2740	0.1318	0.1423	-1.4633
131	8.73	0.09	0.8631	-1.2373	0.1481	-0.2197	-0.0030	0.2684	0.1322	0.1363	-1.4335
132	8.80	0.07	0.8518	-1.2566	0.0695	-0.1574	-0.0034	0.2727	0.1342	0.1386	-1.4752
133	8.91	0.08	0.8687	-1.3065	0.0881	-0.2059	0.0027	0.2779	0.1346	0.1434	-1.5048
134	8.97	0.07	0.8553	-1.3241	0.1511	-0.2310	0.0031	0.2758	0.1354	0.1405	-1.4790
135	9.08	0.07	0.8879	-1.2939	0.1173	-0.3134	0.0030	0.2730	0.1352	0.1379	-1.4574
136	9.18	0.07	0.8954	-1.3529	0.0556	-0.1071	0.0027	0.2725	0.1356	0.1370	-1.5053
137	9.26	0.08	0.9175	-1.3791	0.1424	-0.2278	0.0030	0.2766	0.1364	0.1403	-1.5032
138	9.33	0.07	0.9175	-1.3771	0.0504	-0.2005	0.0027	0.2765	0.1376	0.1390	-1.5018

TEST PART =ALM RX10-6 PHI COMP L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 6 0.50 1.7 45.0 BlmGE23 3.0 .0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	9.43	0.06	0.9612	-1.4244	0.0051	-0.1946	0.0026	0.2771	0.1392	0.1380	-1.4819
140	9.52	0.06	0.9627	-1.4123	0.0208	-0.2419	0.0088	0.2764	0.1400	0.1365	-1.4670
141	9.59	0.05	0.9554	-1.4746	0.0713	-0.1939	0.0069	0.2779	0.1416	0.1364	-1.4965
142	9.70	0.05	0.9532	-1.4797	-0.0042	-0.1315	0.0087	0.2752	0.1411	0.1342	-1.4899
143	9.79	0.06	1.0011	-1.4854	0.0200	-0.1118	0.0068	0.2776	0.1419	0.1358	-1.4837
144	9.87	0.07	1.0190	-1.5074	0.0736	-0.1673	0.0090	0.2772	0.1427	0.1346	-1.4792
145	9.96	0.07	0.9994	-1.4944	0.0966	-0.1167	0.0091	0.2812	0.1431	0.1382	-1.4953
146	10.06	0.07	1.0174	-1.5099	0.0747	-0.1425	0.0090	0.2803	0.1435	0.1369	-1.4861
147	10.14	0.07	1.0437	-1.5411	0.1015	-0.1741	0.0091	0.2784	0.1439	0.1346	-1.4765
148	10.23	0.07	1.0429	-1.5513	0.1560	-0.2060	0.0093	0.2760	0.1440	0.1321	-1.4674
149	10.32	0.06	1.0513	-1.5588	0.0926	-0.1746	0.0091	0.2786	0.1439	0.1348	-1.4827
150	10.40	0.07	1.0770	-1.6157	0.1569	-0.2531	0.0093	0.2795	0.1459	0.1337	-1.5002
151	10.49	0.07	1.0640	-1.6009	0.1762	-0.1638	0.0092	0.2806	0.1464	0.1343	-1.5132
152	10.57	0.06	1.0908	-1.6587	0.0642	-0.1108	0.0088	0.2755	0.1471	0.1285	-1.5205
153	10.67	0.06	1.0914	-1.6651	0.0857	-0.1587	0.0090	0.2747	0.1479	0.1269	-1.5074
154	10.75	0.06	1.1273	-1.6828	0.1130	-0.2348	0.0092	0.2806	0.1483	0.1322	-1.4926
155	10.84	0.05	1.1350	-1.6938	0.1119	-0.2068	0.0092	0.2763	0.1491	0.1293	-1.4924
156	10.94	0.06	1.1186	-1.6957	0.1703	-0.1585	0.0153	0.2823	0.1489	0.1335	-1.5162
157	11.01	0.05	1.1496	-1.7380	0.0685	-0.0648	0.0148	0.2771	0.1495	0.1277	-1.5118
158	11.09	0.05	1.1588	-1.7432	0.0679	-0.1625	0.0090	0.2813	0.1515	0.1299	-1.5046
159	11.19	0.06	1.1608	-1.7569	0.1446	-0.2306	0.0093	0.2762	0.1509	0.1254	-1.5135
160	11.27	0.06	1.2006	-1.8052	0.0058	-0.1271	0.0088	0.2772	0.1527	0.1246	-1.5036
161	11.36	0.06	1.1746	-1.7925	-0.0555	-0.0396	0.0085	0.2819	0.1525	0.1295	-1.5178
162	11.44	0.05	1.2104	-1.8261	0.0887	-0.1361	0.0049	0.2765	0.1537	0.1229	-1.5082
163	11.52	0.04	1.2067	-1.8268	-0.0185	-0.0725	0.0148	0.2872	0.1560	0.1263	-1.5082
164	11.61	0.05	1.2172	-1.8580	0.0458	-0.0772	0.0087	0.2815	0.1549	0.1267	-1.5264
165	11.69	0.05	1.2523	-1.9033	0.0620	-0.1363	0.0088	0.2843	0.1569	0.1275	-1.5199
166	11.79	0.05	1.2425	-1.9113	0.0865	-0.1631	0.0089	0.2834	0.1565	0.1278	-1.5382
167	11.86	0.04	1.2774	-1.9305	0.0549	-0.1022	0.0149	0.2816	0.1576	0.1241	-1.5107
168	11.93	0.05	1.2592	-1.9215	0.0369	-0.1232	0.0087	0.2829	0.1580	0.1250	-1.5260
169	12.04	0.05	1.3132	-1.9573	0.1059	-0.2062	0.0091	0.2789	0.1589	0.1201	-1.4905
170	12.12	0.04	1.3208	-1.9726	0.0822	-0.1143	0.0089	0.2801	0.1601	0.1201	-1.4933
171	12.19	0.06	1.3114	-1.9762	0.1296	-0.0956	0.0069	0.2814	0.1600	0.1215	-1.5085
172	12.29	0.04	1.3290	-1.9884	0.0569	-0.1233	0.0090	0.2822	0.1608	0.1215	-1.4812
173	12.37	0.04	1.3812	-2.0322	0.0746	-0.0952	0.0089	0.2817	0.1616	0.1202	-1.4713
174	12.45	0.05	1.3700	-2.0516	0.0184	-0.0803	0.0026	0.2828	0.1620	0.1209	-1.4975
175	12.54	0.04	1.3696	-2.0445	0.0345	0.0433	0.0085	0.2791	0.1648	0.1144	-1.4928
176	12.60	0.04	1.3773	-2.0603	-0.0117	0.0471	0.0023	0.2855	0.1646	0.1208	-1.4959
177	12.71	0.05	1.3955	-2.0797	0.0357	-0.1553	0.0028	0.2829	0.1648	0.1182	-1.4903
178	12.79	0.05	1.4049	-2.0860	0.0666	-0.1133	0.0029	0.2871	0.1666	0.1208	-1.4705
179	12.88	0.04	1.4290	-2.1204	0.0306	-0.1075	0.0026	0.2817	0.1672	0.1146	-1.4880
180	12.96	0.04	1.4108	-2.1120	0.0594	-0.0256	0.0025	0.2859	0.1675	0.1185	-1.4978
181	13.04	0.04	1.4502	-2.1579	-0.0054	-0.0477	0.0025	0.2857	0.1696	0.1162	-1.4839
182	13.13	0.04	1.4275	-2.1383	0.0767	-0.0881	0.0027	0.2916	0.1691	0.1223	-1.4979
183	13.22	0.03	1.4920	-2.1716	0.0963	-0.0559	0.0027	0.2860	0.1704	0.1157	-1.4848
184	13.30	0.04	1.4796	-2.1970	-0.0336	-0.0692	0.0025	0.2872	0.1711	0.1162	-1.4859

TEST	PART	MACH	REIC-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	6	0.60M	1.67	.45.0	81.0F23	0.0	0.	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
185	13.36	0.04	1.4854	-2.1938	0.0254	-0.1905	0.0029	0.2882	0.1715	0.1168	-1.4739
186	13.47	0.05	1.5144	-2.2192	0.1312	-0.1188	0.0030	0.2876	0.1731	0.1146	-1.4649
187	13.55	0.04	1.5133	-2.2146	0.0047	-0.0438	0.0026	0.2889	0.1739	0.1150	-1.4634
188	13.63	0.05	1.5144	-2.2151	0.1471	-0.1773	0.0031	0.2863	0.1755	0.1129	-1.4627
189	13.73	0.04	1.5345	-2.2366	0.0687	-0.0707	0.0028	0.2860	0.1803	0.1058	-1.4528
190	13.80	0.04	1.5027	-2.2136	0.0731	0.0362	0.0026	0.2956	0.1811	0.1143	-1.4738
191	13.87	0.04	1.5050	-2.2578	0.0627	-0.0002	0.0028	0.2922	0.1827	0.1095	-1.4426
192	13.97	0.04	1.5370	-2.2923	-0.0035	-0.0271	0.0027	0.2975	0.1823	0.1152	-1.4589
193	14.06	0.04	1.5491	-2.3192	0.0731	0.0131	0.0027	0.2970	0.1894	0.1076	-1.4594
194	14.12	0.03	1.5379	-2.3220	0.0439	-0.0327	0.0029	0.2966	0.1882	0.1104	-1.4532
195	14.23	0.03	1.6145	-2.3373	0.0260	-0.0155	0.0027	0.2992	0.1902	0.1090	-1.4477
196	14.30	0.04	1.5068	-2.3102	0.0873	-0.0841	0.0030	0.3004	0.1910	0.1094	-1.4377
197	14.37	0.04	1.6139	-2.3176	-0.0090	0.0363	0.0027	0.3019	0.1921	0.1098	-1.4360
198	14.47	0.04	1.6222	-2.3477	0.0711	-0.0460	0.0029	0.3010	0.1942	0.1068	-1.4472
199	14.55	0.04	1.6662	-2.3625	0.0436	-0.0451	0.0029	0.3037	0.1977	0.1060	-1.4299
200	14.64	0.03	1.6741	-2.3805	0.0326	-0.0866	-0.0031	0.3001	0.1965	0.1036	-1.4216
201	14.73	0.03	1.6757	-2.3910	0.0374	0.0246	-0.0033	0.3047	0.1992	0.1055	-1.4269
202	14.81	0.04	1.6753	-2.3984	0.0728	-0.0166	-0.0032	0.3058	0.2000	0.1058	-1.4317
203	14.90	0.04	1.6867	-2.3663	0.0625	-0.0315	-0.0031	0.3052	0.2000	0.1052	-1.4208
204	14.99	0.04	1.7143	-2.4232	0.0706	-0.0754	-0.0031	0.3060	0.2032	0.1028	-1.4204
205	15.07	0.05	1.7382	-2.4599	0.0975	-0.1070	-0.0029	0.3058	0.2044	0.1014	-1.4168
206	15.16	0.04	1.7274	-2.4168	0.0357	-0.0302	-0.0031	0.3035	0.2048	0.0987	-1.3991
207	15.23	0.04	1.7264	-2.4200	0.0167	-0.0718	-0.0031	0.3066	0.2056	0.1010	-1.4017
208	15.32	0.04	1.7538	-2.4367	0.0793	-0.0915	-0.0028	0.3045	0.2071	0.0974	-1.3860
209	15.40	0.04	1.7519	-2.4536	0.0624	-0.0540	-0.0030	0.3052	0.2058	0.0964	-1.4005
210	15.49	0.04	1.7598	-2.4780	0.0714	-0.0538	-0.0030	0.3097	0.2095	0.1002	-1.4081
211	15.58	0.04	1.7740	-2.4612	0.0321	-0.1493	-0.0028	0.3044	0.2103	0.0940	-1.3842
212	15.67	0.03	1.7741	-2.4892	0.0524	-0.0879	-0.0029	0.3049	0.2108	0.0940	-1.3918
213	15.74	0.04	1.8035	-2.4856	0.0631	-0.0580	-0.0028	0.3062	0.2147	0.0914	-1.3802
214	15.82	0.04	1.8121	-2.4988	0.0713	-0.0907	-0.0027	0.3095	0.2136	0.0955	-1.3765
215	15.91	0.05	1.8373	-2.5366	0.0832	-0.0308	-0.0028	0.3073	0.2159	0.0913	-1.3807
216	16.00	0.04	1.8204	-2.5221	0.0679	-0.1977	-0.0026	0.3098	0.2163	0.0934	-1.3796
217	16.07	0.05	1.8548	-2.5419	0.1010	-0.0524	-0.0027	0.3066	0.2170	0.0895	-1.3706
218	16.16	0.05	1.8475	-2.5314	0.1277	-0.0762	-0.0026	0.3093	0.2191	0.0901	-1.3719
219	16.24	0.04	1.8704	-2.5373	0.0103	-0.0411	-0.0028	0.3105	0.2206	0.0898	-1.3560
220	16.32	0.04	1.8647	-2.5414	-0.0258	-0.0246	-0.0029	0.3116	0.2218	0.0897	-1.3593
221	16.40	0.05	1.8743	-2.5465	0.0755	-0.0068	-0.0027	0.3066	0.2238	0.0827	-1.3530
222	16.49	0.04	1.8754	-2.5382	-0.0345	-0.0173	-0.0029	0.3107	0.2242	0.0864	-1.3473
223	16.57	0.05	1.9056	-2.5542	0.0831	-0.0639	-0.0025	0.3089	0.2262	0.0826	-1.3405
224	16.64	0.06	1.9058	-2.5472	0.1371	-0.0916	-0.0023	0.3071	0.2246	0.0824	-1.3366
225	16.73	0.05	1.9220	-2.5743	0.1024	-0.0457	0.0037	0.3080	0.2266	0.0813	-1.3420
226	16.81	0.06	1.9204	-2.5112	0.1575	-0.0349	0.0040	0.3130	0.2290	0.0839	-1.3155
227	16.89	0.05	1.9266	-2.5117	0.0398	-0.0160	0.0037	0.3141	0.2301	0.0839	-1.3150
228	16.98	0.05	1.9492	-2.5072	0.1130	-0.0258	-0.0024	0.3150	0.2336	0.0813	-1.3176
229	17.06	0.05	1.9676	-2.5766	0.0243	-0.0423	0.0036	0.3117	0.2345	0.0771	-1.3098
230	17.13	0.04	1.9927	-2.6236	0.0493	-0.0356	-0.0026	0.3146	0.2345	0.0800	-1.3166

MARTIN MISSILE TAILS EFFECTS DATA

TEST 2 PART 6 MACH 0.90 RADIO=6.7 P=1 CONF 45.0 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
231	17.23	0.04	2.0012	-2.5146	0.0422	0.0142	-0.0025	0.3155	0.2345	0.0809	-1.3065
232	17.32	-0.04	1.9714	-2.4827	-0.0237	-0.0223	-0.0027	0.3163	0.2356	0.0806	-1.3324
233	17.39	0.05	2.0183	-2.5199	0.0047	0.0738	0.0037	0.3163	0.2388	0.0774	-1.2980
234	17.47	0.04	1.9946	-2.5256	0.0061	0.0392	0.0036	0.3189	0.2408	0.0780	-1.3135
235	17.56	0.05	2.0443	-2.5562	0.1050	-0.0472	-0.0022	0.3184	0.2416	0.0767	-1.2996
236	17.64	0.05	2.0521	-2.6402	0.0649	0.0640	-0.0024	0.3182	0.2425	0.0756	-1.2860
237	17.72	0.05	2.0867	-2.6863	0.0435	0.0252	-0.0023	0.3183	0.2440	0.0722	-1.2674
238	17.79	0.05	2.0612	-2.6398	0.1082	0.0335	-0.0040	0.3208	0.2456	0.0751	-1.2807
239	17.86	0.04	2.0787	-2.6355	0.0589	0.0100	-0.0020	0.3189	0.2472	0.0716	-1.2679
240	17.96	0.04	2.0853	-2.6736	0.0438	0.0357	-0.0023	0.3216	0.2496	0.0719	-1.2821
241	18.06	0.04	2.1440	-2.6982	0.0555	0.0629	-0.0021	0.3209	0.2519	0.0689	-1.2543
242	18.13	0.03	2.1288	-2.6898	0.0215	0.1034	-0.0023	0.3226	0.2536	0.0687	-1.2635
243	18.21	0.04	2.1106	-2.6960	0.0926	0.0962	-0.0021	0.3250	0.2528	0.0721	-1.2717
244	18.34	0.04	2.1454	-2.7078	0.0808	0.1868	-0.0039	0.3229	0.2555	0.0673	-1.2628
245	18.37	0.04	2.1544	-2.7068	0.0627	0.0016	-0.0020	0.3229	0.2569	0.0660	-1.2564
246	18.45	0.03	2.2078	-2.7199	0.0300	0.0850	-0.0020	0.3211	0.2603	0.0607	-1.2319
247	18.53	0.04	2.1719	-2.6913	0.0849	0.1062	-0.0019	0.3316	0.2623	0.0692	-1.2391
248	18.62	0.04	2.1483	-2.7511	0.1003	0.2769	0.0041	0.3328	0.2663	0.0666	-1.2291
249	18.71	0.04	2.2232	-2.7343	0.0360	0.2605	0.0040	0.3370	0.2687	0.0682	-1.2322
250	18.78	0.03	2.2051	-2.6923	0.0	0.2780	-0.0022	0.3352	0.2687	0.0664	-1.2209
251	18.85	0.03	2.2311	-2.7105	-0.0248	0.3386	-0.0023	0.3368	0.2727	0.0640	-1.2149
252	18.94	0.03	2.2271	-2.6997	-0.0599	0.3711	0.0038	0.3360	0.2722	0.0617	-1.2077
253	19.03	0.03	2.2347	-2.7201	-0.0342	0.3170	0.0038	0.3414	0.2754	0.0659	-1.2199
254	19.09	0.04	2.2539	-2.7286	0.0565	0.2947	-0.0019	0.3396	0.2736	0.0660	-1.2015
255	19.17	0.04	2.2564	-2.7159	0.0577	0.3250	0.0042	0.3433	0.2762	0.0670	-1.2037
256	19.25	0.03	2.2480	-2.7026	-0.0220	0.4036	0.0039	0.3461	0.2789	0.0671	-1.2031
257	19.33	0.03	2.2932	-2.7274	-0.0594	0.3534	0.0040	0.3412	0.2802	0.0609	-1.1865
258	19.41	0.03	2.2906	-2.7273	-0.0573	0.4326	-0.0022	0.3440	0.2825	0.0614	-1.1872
259	19.48	0.04	2.2943	-2.7434	0.1022	0.2639	0.0045	0.3438	0.2838	0.0599	-1.1931
260	19.56	0.04	2.3264	-2.7142	0.0535	0.2907	0.0046	0.3434	0.2824	0.0610	-1.1686
261	19.64	0.04	2.3326	-2.7035	0.0518	0.3447	-0.0019	0.3400	0.2828	0.0573	-1.1847
262	19.72	0.04	2.3469	-2.7394	0.0165	0.4157	-0.0041	0.3444	0.2861	0.0582	-1.1834
263	19.79	0.04	2.3462	-2.7672	0.0437	0.4106	-0.0019	0.3490	0.2877	0.0612	-1.1825
264	19.87	0.04	2.3588	-2.7484	0.0420	0.3566	-0.0017	0.3473	0.2894	0.0579	-1.1845
265	19.95	0.05	2.3764	-2.7746	0.1135	0.2934	-0.0014	0.3469	0.2902	0.0567	-1.1676
266	20.02	0.03	2.3747	-2.7785	0.0423	0.3546	-0.0017	0.3499	0.2937	0.0562	-1.1700
267	20.10	0.04	2.4101	-2.7914	0.0254	0.3749	-0.0017	0.3482	0.2950	0.0532	-1.1582
268	20.17	0.05	2.3831	-2.7595	0.0336	0.3582	-0.0016	0.3527	0.2950	0.0577	-1.1579
269	20.25	0.05	2.4531	-2.8391	0.0673	0.2501	-0.0136	0.3538	0.2993	0.0545	-1.1574
270	20.33	0.05	2.4284	-2.7914	0.1492	0.2436	-0.0011	0.3536	0.3006	0.0530	-1.1497
271	20.39	0.04	2.4293	-2.7910	0.1098	0.1603	-0.0072	0.3566	0.3041	0.0525	-1.1583
272	20.48	0.05	2.4624	-2.8131	0.0754	0.2270	-0.0135	0.3546	0.3025	0.0521	-1.1516
273	20.56	0.05	2.4612	-2.8154	0.1157	0.3123	-0.0012	0.3499	0.3029	0.0470	-1.1441
274	20.62	0.05	2.4574	-2.8075	0.0439	0.3606	-0.0138	0.3565	0.3041	0.0506	-1.1585
275	20.70	0.04	(2.5036	-2.8394	0.0151	0.2974	-0.0074	0.3560	0.3093	0.0467	-1.1343
276	20.74	0.05	2.4611	-2.8142	0.0848	0.2241	-0.0133	0.3600	0.3089	0.0511	-1.1483

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/L	PHI	INF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	6	0.920	1.7	45.0	61.0	F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
277	20.98	0.05	2.4980	-2.8342	0.1121	0.2028	-0.0132	0.3548	0.3088	0.0460	-1.1364
278	20.95	0.05	2.5329	-2.8157	0.0804	0.2547	-0.0371	0.3564	0.3132	0.0432	-1.1258
279	21.04	0.05	2.5213	-2.8199	0.1758	0.1826	-0.0128	0.3620	0.3141	0.0479	-1.1184
280	21.11	0.05	2.5373	-2.8591	0.1093	-0.0038	-0.0310	0.3617	0.3165	0.0452	-1.1252
281	21.18	0.05	2.5748	-2.8458	0.1557	0.1276	-0.0251	0.3602	0.3164	0.0438	-1.1218
282	21.27	0.05	2.5963	-2.9258	0.1069	0.0697	-0.0375	0.3565	0.3188	0.0377	-1.1267
283	21.32	0.06	2.5541	-2.8445	0.1912	0.0908	-0.0249	0.3602	0.3197	0.0465	-1.1156
284	21.40	0.06	2.5512	-2.8834	0.2367	0.0838	-0.0372	0.3565	0.3196	0.0369	-1.1256
285	21.50	0.06	2.6173	-2.8702	0.2712	0.0229	-0.0244	0.3576	0.3236	0.0340	-1.0967
286	21.57	0.06	2.5971	-2.8774	0.2355	0.0302	-0.0307	0.3621	0.3228	0.0393	-1.1078
287	21.65	0.06	2.6475	-2.9975	0.2514	-0.0590	-0.0491	0.3552	0.3228	0.0324	-1.1209
288	21.72	0.06	2.5930	-2.8881	0.2498	-0.0766	-0.0424	0.3631	0.3248	0.0383	-1.1129
289	21.80	0.06	2.6657	-2.9571	0.2651	-0.2012	-0.0426	0.3611	0.3284	0.0327	-1.1093
290	21.87	0.06	2.6395	-2.9066	0.2946	-0.1248	-0.0425	0.3674	0.3276	0.0398	-1.1012
291	21.96	0.06	2.7016	-2.9414	0.3026	-0.1668	-0.0485	0.3623	0.3296	0.0327	-1.0888
292	22.03	0.07	2.7110	-2.9466	0.3047	-0.1670	-0.0483	0.3607	0.3312	0.0295	-1.0869
293	22.10	0.07	2.6944	-2.9727	0.3377	-0.2226	-0.0607	0.3635	0.3332	0.0303	-1.1015
294	22.16	0.07	2.7190	-2.9080	0.3573	-0.1883	-0.0604	0.3586	0.3335	0.0251	-1.0695
295	22.25	0.06	2.6975	-2.9560	0.3016	-0.2071	-0.0608	0.3630	0.3335	0.0295	-1.0966
296	22.34	0.07	2.7893	-3.0023	0.3353	-0.3038	-0.0605	0.3579	0.3363	0.0216	-1.0764
297	22.40	0.07	2.7603	-2.9788	0.3476	-0.2277	-0.0605	0.3644	0.3379	0.0265	-1.0791
298	22.48	0.06	2.7695	-2.9529	0.2487	-0.1614	-0.0608	0.3641	0.3383	0.0258	-1.0662
299	22.56	0.07	2.7465	-2.9708	0.3114	-0.2132	-0.0605	0.3624	0.3407	0.0217	-1.0624
300	22.62	0.07	2.7956	-2.9604	0.3447	-0.2856	-0.0727	0.3609	0.3403	0.0206	-1.0608
301	22.70	0.07	2.8164	-2.9785	0.3767	-0.4010	-0.0564	0.3619	0.3415	0.0204	-1.0576
302	22.78	0.06	2.8240	-3.0184	0.4560	-0.4932	-0.0723	0.3604	0.3419	0.0185	-1.0688
303	22.84	0.06	2.8709	-3.0233	0.5174	-0.5726	-0.0720	0.3619	0.3443	0.0176	-1.0531
304	22.92	0.07	2.8753	-3.0609	0.5129	-0.4858	-0.0720	0.3554	0.3446	0.0108	-1.0665
305	22.99	0.07	2.8776	-3.0207	0.4389	-0.4756	-0.0660	0.3648	0.3463	0.0185	-1.0497
306	23.06	0.06	2.8948	-3.0604	0.5814	-0.6030	-0.0717	0.3629	0.3482	0.0147	-1.0573
307	23.13	0.06	2.8936	-3.0493	0.5243	-0.5289	-0.0718	0.3677	0.3499	0.0178	-1.0539
308	23.20	0.07	2.9132	-3.0235	0.4916	-0.5406	-0.0719	0.3629	0.3503	0.0126	-1.0378
309	23.29	0.07	2.9443	-3.0261	0.3661	-0.4655	-0.0600	0.3595	0.3518	0.0077	-1.0260
310	23.35	0.07	2.9268	-3.0760	0.4542	-0.5503	-0.0720	0.3650	0.3508	0.0142	-1.0526
311	23.42	0.07	2.9444	-2.9944	0.4390	-0.4669	-0.0596	0.3606	0.3516	0.0090	-1.0171
312	23.48	0.07	2.9868	-2.9764	0.4394	-0.4343	-0.0596	0.3633	0.3525	0.0108	-1.0305
313	23.44	0.07	2.9715	-3.0252	0.4095	-0.5146	-0.0597	0.3571	0.3508	0.0063	-1.0188
314	23.43	0.07	2.9341	-3.0329	0.4066	-0.5432	-0.0721	0.3601	0.3520	0.0081	-1.0337
315	23.44	0.07	2.9415	-3.0206	0.4782	-0.4239	-0.0594	0.3603	0.3525	0.0078	-1.0269
316	23.44	0.07	2.9522	-3.0559	0.4612	-0.5999	-0.0657	0.3599	0.3516	0.0083	-1.0348
317	23.47	0.06	3.0136	-3.0503	0.5426	-0.6242	-0.0590	0.3669	0.3540	0.0129	-1.0122
318	24.06	0.07	3.1052	-3.0769	0.4437	-0.6213	-0.0345	0.3643	0.3572	0.0071	-0.9721
319	24.77	0.07	3.2231	-3.0793	0.3077	-0.6468	-0.0280	0.3548	0.3587	-0.0039	-0.9553
320	25.50	0.06	3.4478	-3.0703	0.5915	-0.6813	0.0036	0.3607	0.3595	-0.0188	-0.8963
321	26.34	0.09	3.5839	-2.9862	0.6592	-0.5985	0.0106	0.3353	0.3616	-0.0263	-0.8267
322	27.20	0.10	3.8229	-2.9514	0.9212	-0.5328	0.0303	0.3336	0.3675	-0.0339	-0.7720

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 8 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 6 MACH 0.90 RE10-6 1.7 PHI 45.0 CONF BLADE23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CM	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
323	28.24	0.12	4.1506	-2.7272	0.9672	-0.2734	0.0382	0.3246	0.3743	-0.0497	-0.6508
324	29.29	0.13	4.6107	-2.8332	1.1528	0.1772	0.0586	0.3205	0.3856	-0.0653	-0.5751
325	30.39	0.14	5.0146	-2.7795	1.0718	0.8150	0.0649	0.3217	0.3973	-0.0756	-0.5543
326	31.62	0.12	5.4151	-2.6637	0.8020	1.1167	0.0653	0.3143	0.4087	-0.0944	-0.4919
327	32.96	0.12	5.8945	-2.1134	0.7744	1.0125	0.0794	0.2983	0.4158	-0.1176	-0.3583
328	34.34	0.13	6.5218	-2.0096	0.6610	1.1783	0.0876	0.2908	0.4302	-0.1395	-0.3035
329	36.03	0.13	7.1506	-1.3697	0.8479	0.8400	0.0958	0.2605	0.4297	-0.1692	-0.1913
330	37.98	0.11	7.6507	-0.7566	0.6868	0.8312	0.0740	0.2251	0.4230	-0.1979	-0.0981
331	40.20	0.04	8.3367	-0.1573	-0.0571	1.1154	0.0172	0.1841	0.4167	-0.2326	-0.0189
332	42.75	0.00	9.2931	-0.4620	-0.4656	1.5967	-0.0496	0.1553	0.4157	-0.2604	0.0045
333	45.91	-0.02	10.3525	0.1615	-0.6992	1.7503	-0.1155	0.1256	0.4219	-0.2963	0.0156
334	49.87	-0.02	11.5258	-0.3612	-0.5453	-0.0751	0.0601	0.1464	0.4431	-0.2968	-0.0313
335	53.50	-0.01	13.4552	-3.3617	-1.1164	0.4326	-0.0281	0.1018	0.4652	-0.3635	-0.2498
336	57.78	-0.02	13.9776	-4.1838	-1.3057	1.3436	-0.0097	0.0551	0.4329	-0.3778	-0.2922
337	58.25	-0.05	13.7949	-3.3605	-0.9699	0.8117	-0.0141	0.0543	0.4445	-0.3802	-0.2651
338	58.21	-0.04	14.2592	-5.2307	-1.5702	2.2120	-0.0304	0.0428	0.4570	-0.4142	-0.3668
339	58.26	-0.07	14.1026	-3.8999	-1.2070	1.0060	-0.0157	0.0199	0.4643	-0.4444	-0.2765
340	58.27	-0.08	14.2020	-3.7437	-0.9561	0.3099	-0.0019	0.0292	0.4672	-0.4380	-0.2636
341	58.25	0.02	14.0361	-3.3940	-0.1416	0.1758	0.0010	0.0494	0.4752	-0.4258	-0.2419
342	58.25	-0.01	14.1044	-3.2789	-0.5587	0.6356	-0.0136	0.0397	0.4741	-0.4344	-0.2669
343	58.24	-0.04	14.0671	-3.7675	-0.7490	0.1812	-0.0018	0.0535	0.4823	-0.4287	-0.2674
344	58.25	-0.09	14.2338	-3.5538	-0.6564	0.0835	-0.0072	0.0475	0.4864	-0.4388	-0.2497
345	58.29	-0.04	14.6113	-4.3234	-0.8160	0.8585	-0.0017	0.0436	0.4796	-0.4559	-0.2959
346	58.26	-0.04	14.3047	-3.5371	-0.6876	-0.0631	-0.0007	0.0574	0.4954	-0.4379	-0.2672
347	58.27	-0.04	14.2940	-3.4142	-0.6704	-0.3367	-0.0004	0.0816	0.4979	-0.4162	-0.2388
348	57.93	-0.03	14.2251	-3.9541	-0.6983	0.7309	-0.0018	0.0563	0.4929	-0.4385	-0.2779
349	57.08	-0.06	14.3507	-4.1323	-1.1778	-0.1760	-0.0032	0.0729	0.5104	-0.4374	-0.2888
350	56.20	-0.07	14.1734	-3.5095	-0.8739	-0.6071	-0.0027	0.0932	0.5138	-0.4205	-0.2758
351	55.30	-0.09	13.9716	-3.4435	-1.2274	-0.6747	0.0151	0.1025	0.5171	-0.4146	-0.2858
352	54.35	-0.07	13.6858	-2.3240	-0.9434	-0.6456	-0.0028	0.0878	0.5205	-0.4326	-0.1775

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIJ-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
Z 6 0.90 1.7 45.0 B1&DF23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	Cm1	Cd1	xCPF1	YCPF1	CNF2	Cm2	Cd2	XCPF2	YCPF2
1	-5.90	0.06	0.2316	0.0631	0.1874	0.2723	0.8045	-0.0621	-0.0389	-0.0627	0.6258	1.0093
2	-5.90	0.06	0.2511	0.0665	0.1950	0.2648	0.7787	-0.0540	-0.0367	-0.0587	0.6788	1.0857
3	-5.91	0.06	0.2511	0.0661	0.1950	0.2633	0.7767	-0.0567	-0.0367	-0.0611	0.6463	1.0765
4	-5.90	0.07	0.2469	0.0646	0.1880	0.2618	0.7612	-0.0456	-0.0364	-0.0568	0.7970	1.2052
5	-5.85	0.07	0.2295	0.0631	0.1850	0.2749	0.8058	-0.0458	-0.0356	-0.0536	0.7768	1.1684
6	-5.92	0.08	0.2274	0.0623	0.1814	0.2741	0.7976	-0.0376	-0.0347	-0.0506	0.9231	1.3436
7	-5.44	0.09	0.2202	0.0619	0.1764	0.2613	0.8103	-0.0293	-0.0334	-0.0477	1.1382	1.6250
8	-5.35	0.08	0.2041	0.0596	0.1732	0.2936	0.8527	-0.0265	-0.0328	-0.0485	1.2364	1.8291
9	-5.16	0.09	0.1914	0.0569	0.1653	0.2974	0.8634	-0.0266	-0.0337	-0.0463	1.2645	1.7391
10	-5.01	0.09	0.1887	0.0573	0.1662	0.3037	0.8804	-0.0128	-0.0322	-0.0418	2.5113	3.2556
11	-4.99	0.08	0.1963	0.0562	0.1612	0.3047	0.8749	-0.0016	-0.0312	-0.0408	19.0000	24.6824
12	-4.72	0.09	0.1720	0.0547	0.1577	0.3160	0.9166	-0.0073	-0.0314	-0.0402	4.2763	5.6868
13	-4.56	0.10	0.1625	0.0536	0.1533	0.3296	0.9436	0.0009	-0.0306	-0.0362	-35.2222	-41.6667
14	-4.44	0.08	0.1603	0.0526	0.1504	0.3269	0.9410	0.0037	-0.0303	-0.0359	-8.2632	-9.7895
15	-4.29	0.09	0.1961	0.0501	0.1405	0.3678	1.0319	0.0147	-0.0284	-0.0316	-1.9342	-2.1579
16	-4.17	0.08	0.1313	0.0485	0.1388	0.3696	1.0573	0.0036	-0.0300	-0.0338	-8.4054	-9.4595
17	-4.02	0.08	0.1361	0.0501	0.1405	0.3678	1.0319	0.0203	-0.0281	-0.0312	-1.3697	-1.5381
18	-3.98	0.06	0.1267	0.0478	0.1350	0.3770	1.0655	0.0201	-0.0272	-0.0300	-1.3558	-1.4952
19	-3.75	0.09	0.1119	0.0456	0.1311	0.4095	1.1716	0.0282	-0.0256	-0.0249	-0.9075	-0.8836
20	-3.63	0.07	0.1073	0.0448	0.1284	0.4173	1.1969	0.0282	-0.0256	-0.0238	-0.9075	-0.8459
21	-3.49	0.08	0.1028	0.0440	0.1235	0.4242	1.2019	0.0392	-0.0236	-0.0206	-0.6034	-0.52 1
22	-3.37	0.08	0.0976	0.0427	0.1227	0.4377	1.2569	0.0420	-0.0233	-0.0214	-0.5561	-0.5183
23	-3.23	0.08	0.0840	0.0424	0.1185	0.4614	1.3465	0.0446	-0.0222	-0.0190	-0.4978	-0.4264
24	-3.08	0.08	0.0787	0.0400	0.1119	0.5086	1.4216	0.0555	-0.0200	-0.0167	-0.3608	-0.2643
25	-2.97	0.07	0.0811	0.0403	0.1132	0.4935	1.3948	0.0445	-0.0216	-0.0179	-0.4859	-0.4 13
26	-2.83	0.07	0.0738	0.0390	0.1112	0.5281	1.5072	0.0555	-0.0200	-0.0167	-0.3608	-0. 63
27	-2.69	0.08	0.0670	0.0378	0.1051	0.5648	1.5692	0.0610	-0.0183	-0.0142	-0.3006	-0.2
28	-2.55	0.07	0.0575	0.0371	0.0997	0.6443	1.7332	0.0637	-0.0178	-0.0139	-0.2788	-0.2182
29	-2.42	0.07	0.0553	0.0355	0.0972	0.6422	1.7574	0.0664	-0.0172	-0.0125	-0.2587	-0.1890
30	-2.30	0.06	0.0526	0.0351	0.0969	0.6656	1.8355	0.0716	-0.0162	-0.0076	-0.1981	-0.1065
31	-2.17	0.07	0.0349	0.0324	0.0865	0.8337	2.2256	0.0772	-0.0139	-0.0071	-0.1800	-0.0925
32	-2.03	0.08	0.0356	0.0318	0.0852	0.8654	2.3298	0.0797	-0.0117	-0.0036	-0.1465	-0.0448
33	-1.90	0.06	0.0268	0.0302	0.0819	1.1259	3.0540	0.0714	-0.0130	-0.0054	-0.1824	-0.0757
34	-1.78	0.07	0.0272	0.0298	0.0797	1.0816	2.9291	0.0881	-0.0105	-0.0040	-0.1194	-0.0449
35	-1.66	0.06	0.0224	0.0282	0.0768	1.2566	3.4310	0.0822	-0.0105	-0.0072	-0.1279	-0.0270
36	-1.52	0.07	0.0132	0.0270	0.0738	1.7722	4.8418	0.0959	-0.0067	0.0023	-0.0695	0.0242
37	-1.40	0.08	0.0080	0.0256	0.0704	3.1928	8.8434	0.0930	-0.0061	0.0021	-0.0654	0.0228
38	-1.27	0.08	0.0037	0.0233	0.0658	6.3421	17.9474	0.0926	-0.0025	0.0033	-0.0271	0.0354
39	-1.14	0.08	0.0036	0.0233	0.0647	6.1795	17.2051	0.0953	-0.0006	0.0036	-0.0061	0.0374
40	-1.02	0.07	0.0065	0.0240	0.0674	2.8295	7.9432	0.0951	0.0003	0.0069	0.0030	0.0720
41	-0.90	0.08	-0.0037	0.0209	0.0605	-6.5758	-19.0000	0.0975	0.0031	0.0093	0.0317	0.0851
42	-0.78	0.07	-0.0056	0.0202	0.0591	-3.6034	-10.5690	0.0977	0.0014	0.0061	0.0138	0.0622
43	-0.66	0.06	-0.0077	0.0174	0.0566	-2.3175	-7.3375	0.1057	0.0053	0.0101	0.0502	0.0958
44	-0.53	0.08	-0.0099	0.0152	0.0551	-1.5340	-5.5437	0.1138	0.0074	0.0142	0.0653	0.1247
45	-0.41	0.07	-0.0123	0.0141	0.0537	-1.1496	-4.3858	0.1138	0.0074	0.0142	0.0653	0.1247
46	-0.29	0.07	-0.0096	0.0133	0.0534	-1.3800	-5.5900	0.1165	0.0086	0.0155	0.0737	0.1334

TEST 7 PART 6 MACH 0.90 RX10-6 1.7 PHI 45.0 CONF B1=0F23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
47	-0.17	0.06	-0.0167	0.0044	0.0507	-0.5260	-3.0347	0.1247	0.0102	0.0174	0.0820	0.1393
48	-0.08	0.06	-0.0164	0.0103	0.0521	-0.7181	-3.6242	0.1218	0.0108	0.0182	0.0887	0.1498
49	0.06	0.06	-0.0161	0.0096	0.0500	-0.6781	-3.5479	0.1297	0.0163	0.0212	0.1257	0.1637
50	0.21	0.06	-0.0261	0.0053	0.0452	-0.2037	-1.7333	0.1323	0.0191	0.0215	0.1444	0.1627
51	0.31	0.06	-0.0261	0.0057	0.0462	-0.2177	-1.7675	0.1344	0.0207	0.0229	0.1538	0.1695
52	0.43	0.06	-0.0265	0.0063	0.0463	-0.1593	-1.5763	0.1349	0.0207	0.0229	0.1538	0.1695
53	0.55	0.07	-0.0305	0.0031	0.0413	-0.1013	-1.3544	0.1404	0.0219	0.0234	0.1560	0.1678
54	0.65	0.06	-0.0305	0.0036	0.0412	-0.1108	-1.3513	0.1427	0.0234	0.0249	0.1643	0.1886
55	0.79	0.07	-0.0350	0.0019	0.0374	-0.0551	-1.0669	0.1454	0.0243	0.0283	0.1672	0.1944
56	0.91	0.06	-0.0397	0.0006	0.0369	-0.0097	-0.9203	0.1479	0.0268	0.0318	0.1813	0.2153
57	1.02	0.06	-0.0445	-0.0019	0.0324	0.0390	-0.6550	0.1562	0.0274	0.0326	0.1754	0.2088
58	1.16	0.07	-0.0494	-0.0015	0.0316	0.0329	-0.6749	0.1561	0.0279	0.0337	0.1786	0.2157
59	1.25	0.07	-0.0494	-0.0031	0.0281	0.0931	-0.5740	0.1641	0.0307	0.0377	0.1869	0.2299
60	1.32	0.06	-0.0542	-0.0069	0.0270	0.1220	-0.4811	0.1613	0.0307	0.0375	0.1902	0.2327
61	1.50	0.06	-0.0589	-0.0076	0.0248	0.1364	-0.4439	0.1750	0.0329	0.0409	0.1880	0.2337
62	1.60	0.07	-0.0589	-0.0076	0.0248	0.1364	-0.4439	0.1750	0.0332	0.0409	0.1896	0.2337
63	1.72	0.07	-0.0589	-0.0096	0.0244	0.1593	-0.4439	0.1860	0.0345	0.0441	0.1857	0.2370
64	1.83	0.07	-0.0683	-0.0102	0.0246	0.1755	-0.4149	0.1962	0.0351	0.0481	0.1808	0.2474
65	1.93	0.07	-0.0629	-0.0145	0.0225	0.2301	-0.3574	0.1962	0.0368	0.0491	0.1793	0.2474
66	2.06	0.06	-0.0629	-0.0144	0.0225	0.2362	-0.3574	0.2024	0.0351	0.0521	0.1735	0.2574
67	2.17	0.07	-0.0677	-0.0165	0.0219	0.2407	-0.3219	0.2103	0.0350	0.0560	0.1665	0.2661
68	2.28	0.08	-0.0730	-0.0179	0.0199	0.2381	-0.2651	0.2158	0.0362	0.0564	0.1676	0.2615
69	2.40	0.07	-0.0775	-0.0187	0.0207	0.2471	-0.3071	0.2211	0.0372	0.0614	0.1684	0.2775
70	2.52	0.06	-0.0780	-0.0196	0.0171	0.2436	-0.2145	0.2265	0.0378	0.0673	0.1670	0.2978
71	2.63	0.06	-0.0843	-0.0205	0.0144	0.2426	-0.1705	0.2345	0.0400	0.0725	0.1708	0.3091
72	2.74	0.08	-0.0771	-0.0186	0.0184	0.2416	-0.2128	0.2318	0.0389	0.0711	0.1678	0.3068
73	2.88	0.07	-0.0843	-0.0205	0.0144	0.2471	-0.1705	0.2460	0.0423	0.0791	0.1704	0.3191
74	2.97	0.06	-0.0941	-0.0226	0.0122	0.2421	-0.1292	0.2453	0.0411	0.0788	0.1676	0.3214
75	3.09	0.06	-0.0939	-0.0235	0.0110	0.2508	-0.1172	0.2587	0.0442	0.0877	0.1708	0.3391
76	3.21	0.08	-0.0984	-0.0244	0.0107	0.2523	-0.1111	0.2562	0.0433	0.0831	0.1691	0.3243
77	4.31	0.07	-0.1036	-0.0259	0.0068	0.2645	-0.0847	0.2724	0.0455	0.0912	0.1672	0.3347
78	3.42	0.07	-0.1059	-0.0261	0.0074	0.2658	-0.0701	0.2724	0.0458	0.0912	0.1683	0.3347
79	3.55	0.06	-0.1058	-0.0265	0.0063	0.2507	-0.0593	0.2750	0.0466	0.0936	0.1695	0.3404
80	3.66	0.05	-0.1110	-0.0273	0.0068	0.2681	-0.0609	0.2724	0.0464	0.0912	0.1706	0.3347
81	3.77	0.08	-0.1137	-0.0281	0.0046	0.2537	-0.0418	0.2912	0.0494	0.1027	0.1696	0.3526
82	3.89	0.08	-0.1203	-0.0296	0.0014	0.2662	-0.0112	0.2913	0.0488	0.1027	0.1676	0.3524
83	4.00	0.07	-0.1246	-0.0316	-0.0020	0.2679	0.0156	0.2946	0.0503	0.1054	0.1695	0.3552
84	4.10	0.07	-0.1250	-0.0316	-0.0014	0.2525	0.0116	0.2996	0.0500	0.1067	0.1669	0.3564
85	4.23	0.07	-0.1249	-0.0312	-0.0025	0.2496	0.0201	0.3124	0.0536	0.1145	0.1712	0.3661
86	4.36	0.07	-0.1245	-0.0326	-0.0052	0.2519	0.0402	0.3101	0.0527	0.1121	0.1699	0.3615
87	4.44	0.06	-0.1298	-0.0322	-0.0041	0.2487	0.0320	0.3346	0.0565	0.1220	0.1690	0.3665
88	4.54	0.07	-0.1359	-0.0334	-0.0061	0.2438	0.0444	0.3346	0.0568	0.1220	0.1698	0.3665
89	4.64	0.07	-0.1416	-0.0342	-0.0067	0.2411	0.0470	0.3367	0.0576	0.1253	0.1711	0.3722
90	4.75	0.06	-0.1387	-0.0334	-0.0061	0.2414	0.0445	0.3503	0.0598	0.1298	0.1708	0.3704
91	4.87	0.06	-0.1511	-0.0355	-0.0121	0.2356	0.0798	0.3531	0.0598	0.1289	0.1694	0.3650
92	4.97	0.07	-0.1511	-0.0348	-0.0121	0.2305	0.0798	0.3558	0.0598	0.1303	0.1681	0.3661

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYN-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 B 0.90 1.7 45.0 CONF.23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
93	5.07	0.00	-0.1534	-0.0364	-0.0134	0.2371	0.0874	0.3667	0.0620	0.1357	0.1692	0.3700
94	5.18	0.07	-0.1531	-0.0360	-0.0155	0.2350	0.1014	0.3722	0.0625	0.1372	0.1680	0.3687
95	5.28	0.07	-0.1507	-0.0364	-0.0163	0.2764	0.1015	0.3776	0.0637	0.1387	0.1687	0.3675
96	5.37	0.08	-0.1624	-0.0366	-0.0188	0.2257	0.1155	0.3831	0.0665	0.1404	0.1683	0.3665
97	5.47	0.07	-0.1455	-0.0371	-0.0179	0.2745	0.1085	0.3994	0.0652	0.1472	0.1657	0.3687
98	5.57	0.07	-0.1721	-0.0374	-0.0206	0.2229	0.1214	0.4048	0.0673	0.1499	0.1662	0.3704
99	5.68	0.07	-0.1726	-0.0387	-0.0221	0.2244	0.1281	0.4076	0.0675	0.1491	0.1657	0.3658
100	5.79	0.09	-0.1820	-0.0395	-0.0263	0.2169	0.1648	0.4102	0.0681	0.1526	0.1661	0.3721
101	5.88	0.09	-0.1771	-0.0387	-0.0258	0.2155	0.1455	0.4292	0.0702	0.1619	0.1637	0.3772
102	5.91	0.08	-0.1806	-0.0401	-0.0280	0.2149	0.1498	0.4183	0.0692	0.1577	0.1654	0.3769
103	6.06	0.09	-0.1915	-0.0405	-0.0307	0.2116	0.1602	0.4292	0.0702	0.1608	0.1637	0.3748
104	6.17	0.08	-0.1937	-0.0405	-0.0331	0.2092	0.1708	0.4428	0.0720	0.1675	0.1626	0.3783
105	6.27	0.08	-0.1918	-0.0396	-0.0317	0.2077	0.1655	0.4489	0.0728	0.1705	0.1623	0.3798
106	6.38	0.09	-0.1930	-0.0406	-0.0347	0.2042	0.1746	0.4489	0.0731	0.1716	0.1629	0.3822
107	6.49	0.08	-0.2014	-0.0410	-0.0361	0.2036	0.1792	0.4600	0.0734	0.1725	0.1596	0.3751
108	6.57	0.07	-0.2011	-0.0410	-0.0362	0.2039	0.1900	0.4816	0.0754	0.1831	0.1564	0.3801
109	6.68	0.08	-0.2110	-0.0410	-0.0393	0.1943	0.1861	0.4736	0.0748	0.1781	0.1579	0.3761
110	6.79	0.07	-0.2206	-0.0422	-0.0436	0.1912	0.1977	0.4763	0.0754	0.1805	0.1582	0.3791
111	6.88	0.08	-0.2230	-0.0426	-0.0450	0.1908	0.2016	0.4954	0.0770	0.1887	0.1554	0.3810
112	6.98	0.09	-0.2156	-0.0410	-0.0440	0.1902	0.2041	0.5118	0.0782	0.1945	0.1527	0.3801
113	7.10	0.08	-0.2252	-0.0418	-0.0473	0.1855	0.2099	0.5146	0.0782	0.1959	0.1519	0.3806
114	7.17	0.08	-0.2300	-0.0426	-0.0489	0.1830	0.2127	0.5173	0.0786	0.1962	0.1528	0.3792
115	7.27	0.10	-0.2252	-0.0418	-0.0473	0.1855	0.2099	0.5200	0.0786	0.1974	0.1512	0.3797
116	7.36	0.08	-0.2376	-0.0422	-0.0518	0.1776	0.2183	0.5365	0.0792	0.2044	0.1477	0.3809
117	7.46	0.07	-0.2446	-0.0437	-0.0537	0.1767	0.2197	0.5364	0.0795	0.2054	0.1482	0.3830
118	7.56	0.08	-0.2397	-0.0422	-0.0532	0.1759	0.2218	0.5529	0.0809	0.2091	0.1462	0.3782
119	7.65	0.09	-0.2387	-0.0426	-0.0532	0.1775	0.2218	0.5475	0.0798	0.2064	0.1458	0.3778
120	7.76	0.09	-0.2496	-0.0431	-0.0563	0.1737	0.2259	0.5584	0.0804	0.2139	0.1439	0.3831
121	7.84	0.08	-0.2505	-0.0429	-0.0604	0.1674	0.2355	0.5694	0.0809	0.2159	0.1420	0.3793
122	7.93	0.07	-0.2495	-0.0426	-0.0553	0.1705	0.2216	0.5777	0.0811	0.2188	0.1405	0.3788
123	8.02	0.07	-0.2616	-0.0440	-0.0599	0.1642	0.2291	0.5832	0.0814	0.2193	0.1396	0.3761
124	8.14	0.08	-0.2544	-0.0407	-0.0611	0.1630	0.2400	0.5976	0.0827	0.2286	0.1384	0.3825
125	8.20	0.07	-0.2644	-0.0427	-0.0622	0.1595	0.2354	0.6032	0.0824	0.2290	0.1366	0.3796
126	8.29	0.08	-0.2714	-0.0428	-0.0663	0.1568	0.2442	0.6141	0.0833	0.2365	0.1350	0.3851
127	8.38	0.08	-0.2691	-0.0419	-0.0649	0.1556	0.2413	0.6141	0.0833	0.2356	0.1356	0.3833
128	8.46	0.07	-0.2766	-0.0433	-0.0703	0.1555	0.2525	0.6224	0.0833	0.2373	0.1338	0.3812
129	8.55	0.08	-0.2747	-0.0419	-0.0707	0.1503	0.2521	0.6415	0.0840	0.2477	0.1310	0.3861
130	8.62	0.07	-0.2737	-0.0411	-0.0686	0.1502	0.2506	0.6471	0.0840	0.2482	0.1299	0.3835
131	8.73	0.08	-0.2836	-0.0426	-0.0708	0.1501	0.2497	0.6417	0.0833	0.2444	0.1298	0.3808
132	8.80	0.07	-0.2843	-0.0422	-0.0734	0.1493	0.2547	0.6582	0.0833	0.2513	0.1265	0.3817
133	8.91	0.08	-0.2906	-0.0415	-0.0757	0.1428	0.2606	0.6662	0.0793	0.2494	0.1194	0.3755
134	8.99	0.07	-0.2882	-0.0407	-0.0755	0.1413	0.2618	0.6701	0.0772	0.2477	0.1152	0.3696
135	9.08	0.07	-0.2877	-0.0410	-0.0756	0.1425	0.2619	0.6634	0.0782	0.2460	0.1178	0.3738
136	9.18	0.07	-0.2939	-0.0420	-0.0789	0.1419	0.2632	0.6717	0.0770	0.2509	0.1146	0.3735
137	9.26	0.08	-0.2973	-0.0402	-0.0807	0.1353	0.2713	0.6855	0.0782	0.2553	0.1140	0.3724
138	9.33	0.07	-0.3025	-0.0400	-0.0791	0.1343	0.2616	0.6854	0.0784	0.2553	0.1144	0.3725

PAGE 2 OF 3
SHEET 4 OF 8

MARTIN MISSILE TAILS.EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 .6 0.60 1.7 45.0 BL=0.23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	9.03	0.06	-0.3074	-0.0410	-0.0807	0.1334	0.2624	0.6945	0.0787	0.2585	0.1130	0.3711
140	9.52	-0.08	-0.3080	-0.0391	-0.0796	0.1303	0.2660	0.6964	0.0789	0.2606	0.1133	0.3742
141	9.49	0.06	-0.3217	-0.0410	-0.0876	0.1275	0.2723	0.7019	0.0792	0.2611	0.1129	0.3720
142	9.74	0.05	-0.3170	-0.0410	-0.0869	0.1294	0.2679	0.7101	0.0798	0.2640	0.1124	0.3717
143	9.79	0.06	-0.3262	-0.0410	-0.0879	0.1265	0.2711	0.7047	0.0787	0.2624	0.1117	0.3724
144	9.87	0.07	-0.3219	-0.0402	-0.0865	0.1250	0.2686	0.7156	0.0798	0.2667	0.1115	0.3727
145	9.96	0.07	-0.3219	-0.0387	-0.0874	0.1202	0.2716	0.7238	0.0798	0.2706	0.1102	0.3739
146	10.00	0.07	-0.3266	-0.0387	-0.0901	0.1185	0.2759	0.7238	0.0801	0.2718	0.1106	0.3755
147	10.14	0.07	-0.3268	-0.0377	-0.0896	0.1140	0.2722	0.7403	0.0804	0.2776	0.1086	0.3750
148	10.23	0.07	-0.3246	-0.0372	-0.0965	0.1147	0.2666	0.7402	0.0810	0.2797	0.1094	0.3779
149	10.32	0.06	-0.3316	-0.0360	-0.0906	0.1146	0.2732	0.7405	0.0804	0.2732	0.1085	0.3689
150	10.40	0.07	-0.3412	-0.0387	-0.0964	0.1134	0.2780	0.7513	0.0810	0.2807	0.1077	0.3736
151	10.49	0.07	-0.3438	-0.0376	-0.0953	0.1095	0.2765	0.7513	0.0804	0.2807	0.1070	0.3736
152	10.57	0.06	-0.3538	-0.0388	-0.0963	0.1076	0.2762	0.7512	0.0804	0.2840	0.1070	0.3780
153	10.67	0.06	-0.3534	-0.0384	-0.0983	0.1087	0.2782	0.7596	0.0804	0.2846	0.1058	0.3747
154	10.75	0.08	-0.3598	-0.0384	-0.0999	0.1061	0.2787	0.7623	0.0801	0.2860	0.1050	0.3751
155	10.84	0.05	-0.3562	-0.0357	-0.0974	0.1002	0.2733	0.7733	0.0804	0.2913	0.1039	0.3767
156	10.96	0.06	-0.3646	-0.0349	-0.0981	0.0983	0.2791	0.7801	0.0805	0.2923	0.1032	0.3746
157	11.01	0.05	-0.3632	-0.0365	-0.1025	0.1004	0.2821	0.7761	0.0804	0.2904	0.1036	0.3742
158	11.09	0.05	-0.3681	-0.0357	-0.1040	0.0970	0.2826	0.7849	0.0801	0.2960	0.1014	0.3747
159	11.19	0.06	-0.3638	-0.0343	-0.1035	0.0962	0.2846	0.7856	0.0799	0.2940	0.1017	0.3768
160	11.27	0.04	-0.3705	-0.0349	-0.1053	0.0963	0.2841	0.7953	0.0798	0.2998	0.1003	0.3769
161	11.36	0.04	-0.3831	-0.0362	-0.1100	0.0944	0.2871	0.7939	0.0797	0.2989	0.1004	0.3765
162	11.44	0.05	-0.3757	-0.0350	-0.1091	0.0932	0.2906	0.8022	0.0797	0.3018	0.0996	0.3762
163	11.52	0.04	-0.3759	-0.0327	-0.1080	0.0870	0.2872	0.8076	0.0797	0.3066	0.0987	0.3797
164	11.61	0.05	-0.3756	-0.0335	-0.1101	0.0891	0.2931	0.8132	0.0796	0.3060	0.0977	0.3762
165	11.69	0.05	-0.3856	-0.0331	-0.1122	0.0858	0.2910	0.8133	0.0791	0.3060	0.0973	0.3762
166	11.79	0.05	-0.3856	-0.0331	-0.1122	0.0858	0.2910	0.8243	0.0791	0.3091	0.0966	0.3758
167	11.88	0.04	-0.3807	-0.0312	-0.1105	0.0819	0.2902	0.8243	0.0785	0.3102	0.0953	0.3763
168	11.93	0.05	-0.3855	-0.0323	-0.1133	0.0839	0.2939	0.8242	0.0785	0.3124	0.0953	0.3791
169	12.04	0.05	-0.3853	-0.0312	-0.1153	0.0809	0.2993	0.8325	0.0790	0.3153	0.0936	0.3788
170	12.12	0.04	-0.3926	-0.0316	-0.1172	0.0804	0.2986	0.8353	0.0783	0.3167	0.0937	0.3791
171	12.19	0.06	-0.3947	-0.0319	-0.1212	0.0799	0.3032	0.8352	0.0777	0.3188	0.0930	0.3817
172	12.29	0.04	-0.3969	-0.0304	-0.1195	0.0770	0.3027	0.8436	0.0777	0.3184	0.0921	0.3774
173	12.37	0.04	-0.3973	-0.0298	-0.1208	0.0748	0.3040	0.8464	0.0772	0.3208	0.0912	0.3790
174	12.45	0.04	-0.4046	-0.0306	-0.1238	0.0751	0.3060	0.8519	0.0772	0.3235	0.0906	0.3798
175	12.54	0.04	-0.4023	-0.0296	-0.1223	0.0736	0.3041	0.8575	0.0772	0.3240	0.0900	0.3779
176	12.60	0.04	-0.4143	-0.0304	-0.1270	0.0734	0.3065	0.8576	0.0772	0.3218	0.0900	0.3752
177	12.71	0.05	-0.4141	-0.0300	-0.1291	0.0725	0.3117	0.8631	0.0766	0.3244	0.0888	0.3759
178	12.79	0.04	-0.4043	-0.0286	-0.1269	0.0706	0.3138	0.8686	0.0763	0.3271	0.0879	0.3766
179	12.88	0.04	-0.4163	-0.0295	-0.1314	0.0711	0.3156	0.8714	0.0757	0.3283	0.0869	0.3768
180	12.96	0.04	-0.4092	-0.0282	-0.1288	0.0669	0.3138	0.8741	0.0755	0.3297	0.0864	0.3772
181	13.04	0.04	-0.4213	-0.0286	-0.1330	0.0678	0.3156	0.8770	0.0755	0.3288	0.0861	0.3750
182	13.13	0.04	-0.4187	-0.0285	-0.1337	0.0682	0.3194	0.8799	0.0744	0.3298	0.0845	0.3739
183	13.22	0.03	-0.4237	-0.0278	-0.1342	0.0656	0.3168	0.8854	0.0741	0.3317	0.0837	0.3747
184	13.30	0.03	-0.4181	-0.0266	-0.1344	0.0640	0.3230	0.8910	0.0735	0.3322	0.0825	0.3729

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PH1	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	6	0.60	1.17	45.0	81.0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
185	13.38	0.04	-0.4286	-0.0782	-0.1359	0.0457	0.3170	0.8910	0.0735	0.3322	0.0825	0.3729
186	13.47	0.05	-0.4212	-0.0262	-0.1350	0.0623	0.3205	0.8966	0.0722	0.3337	0.0805	0.3721
187	13.55	0.04	-0.4293	-0.0262	-0.1369	0.0613	0.3194	0.8995	0.0719	0.3329	0.0799	0.3701
188	13.63	0.05	-0.4356	-0.0270	-0.1405	0.0620	0.3236	0.8969	0.0696	0.3306	0.0773	0.3683
189	13.73	0.04	-0.4307	-0.0255	-0.1402	0.0591	0.3255	0.8916	0.0673	0.3277	0.0754	0.3675
190	13.80	0.04	-0.4425	-0.0274	-0.1469	0.0619	0.3321	0.8868	0.0622	0.3161	0.0702	0.3564
191	13.87	0.04	-0.4573	-0.0266	-0.1506	0.0582	0.3294	0.8788	0.0591	0.3120	0.0673	0.3551
192	13.97	0.04	-0.4472	-0.0266	-0.1498	0.0595	0.3344	0.8869	0.0611	0.3161	0.0689	0.3564
193	14.06	0.04	-0.4572	-0.0247	-0.1526	0.0540	0.3339	0.8817	0.0581	0.3134	0.0659	0.3554
194	14.12	0.03	-0.4546	-0.0251	-0.1524	0.0552	0.3354	0.8874	0.0572	0.3117	0.0645	0.3512
195	14.23	0.03	-0.4570	-0.0235	-0.1548	0.0515	0.3387	0.8901	0.0567	0.3151	0.0637	0.3540
196	14.30	0.04	-0.4570	-0.0229	-0.1547	0.0500	0.3385	0.8928	0.0567	0.3165	0.0635	0.3545
197	14.37	0.04	-0.4712	-0.0251	-0.1617	0.0532	0.3432	0.8929	0.0567	0.3143	0.0635	0.3520
198	14.47	0.04	-0.4665	-0.0235	-0.1598	0.0505	0.3408	0.8929	0.0564	0.3165	0.0632	0.3544
199	14.55	0.04	-0.4665	-0.0217	-0.1599	0.0465	0.3427	0.9069	0.0556	0.3176	0.0613	0.3502
200	14.64	0.03	-0.4664	-0.0213	-0.1609	0.0457	0.3451	0.9098	0.0556	0.3156	0.0611	0.3469
201	14.73	0.03	-0.4689	-0.0236	-0.1690	0.0494	0.3458	0.9165	0.0557	0.3187	0.0607	0.3477
202	14.81	0.04	-0.4687	-0.0236	-0.1701	0.0498	0.3481	0.9108	0.0557	0.3194	0.0611	0.3506
203	14.90	0.04	-0.4937	-0.0236	-0.1707	0.0479	0.3457	0.9165	0.0554	0.3176	0.0604	0.3466
204	14.99	0.04	-0.4765	-0.0205	-0.1675	0.0431	0.3516	0.9277	0.0551	0.3197	0.0596	0.3444
205	15.07	0.05	-0.4854	-0.0213	-0.1721	0.0436	0.3523	0.9221	0.0545	0.3202	0.0591	0.3473
206	15.16	0.04	-0.4813	-0.0199	-0.1701	0.0411	0.3534	0.9278	0.0540	0.3197	0.0582	0.3445
207	15.23	0.04	-0.4959	-0.0217	-0.1748	0.0439	0.3508	0.9332	0.0545	0.3224	0.0584	0.3454
208	15.32	0.04	-0.4955	-0.0194	-0.1760	0.0399	0.3549	0.9417	0.0540	0.3219	0.0574	0.3418
209	15.42	0.04	-0.4983	-0.0229	-0.1786	0.0460	0.3516	0.9390	0.0535	0.3205	0.0569	0.3413
210	15.48	0.04	-0.5009	-0.0196	-0.1786	0.0395	0.3525	0.9390	0.0524	0.3227	0.0558	0.3437
211	15.58	0.04	-0.5053	-0.0194	-0.1813	0.0391	0.3588	0.9418	0.0529	0.3219	0.0561	0.3418
212	15.67	0.05	-0.5022	-0.0186	-0.1797	0.0371	0.3577	0.9404	0.0517	0.3213	0.0550	0.3417
213	15.74	0.04	-0.5116	-0.0182	-0.1860	0.0356	0.3636	0.9488	0.0514	0.3231	0.0542	0.3406
214	15.82	0.04	-0.5098	-0.0208	-0.1883	0.0368	0.3555	0.9477	0.0496	0.3200	0.0523	0.3377
215	15.91	0.05	-0.5119	-0.0206	-0.1914	0.0366	0.3606	0.9478	0.0490	0.3200	0.0517	0.3377
216	16.00	0.04	-0.5208	-0.0194	-0.1887	0.0370	0.3596	0.9535	0.0464	0.3183	0.0508	0.3338
217	16.07	0.05	-0.5173	-0.0186	-0.1879	0.0353	0.3632	0.9533	0.0484	0.3227	0.0508	0.3386
218	16.16	0.05	-0.5270	-0.0182	-0.1911	0.0346	0.3627	0.9590	0.0484	0.3221	0.0505	0.3358
219	16.24	0.04	-0.5295	-0.0184	-0.1923	0.0317	0.3632	0.9565	0.0462	0.3174	0.0483	0.3319
220	16.32	0.04	-0.5306	-0.0182	-0.1944	0.0340	0.3661	0.9674	0.0474	0.3227	0.0490	0.3336
221	16.40	0.05	-0.5243	-0.0155	-0.1938	0.0298	0.3697	0.9649	0.0457	0.3192	0.0474	0.3308
222	16.49	0.03	-0.5440	-0.0182	-0.1963	0.0335	0.3645	0.9823	0.0446	0.3156	0.0463	0.3280
223	16.57	0.05	-0.5485	-0.0166	-0.2030	0.0306	0.3701	0.9626	0.0438	0.3113	0.0455	0.3234
224	16.64	0.06	-0.5438	-0.0168	-0.2003	0.0309	0.3683	0.9515	0.0440	0.3081	0.0462	0.3238
225	16.73	0.05	-0.5339	-0.0161	-0.1991	0.0284	0.3729	0.9656	0.0435	0.3115	0.0451	0.3226
226	16.81	0.06	-0.5393	-0.0145	-0.2031	0.0268	0.3766	0.9751	0.0435	0.3126	0.0446	0.3206
227	16.89	0.05	-0.5540	-0.0145	-0.2069	0.0261	0.3734	0.9696	0.0435	0.3099	0.0449	0.3198
228	16.98	0.05	-0.5485	-0.0164	-0.2129	0.0289	0.3744	0.9696	0.0435	0.3099	0.0449	0.3196
229	17.06	0.05	-0.5562	-0.0129	-0.2113	0.0232	0.3799	0.9752	0.0435	0.3093	0.0446	0.3172
230	17.13	0.04	-0.5578	-0.0170	-0.2225	0.0294	0.3722	0.9753	0.0435	0.3082	0.0446	0.3160

TEST PART MACH NA10-6 PH1 CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
2 6 0.90 1.17 45.0 B1B0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
231	17.23	0.04	-0.6759	-0.0141	-0.2156	0.0245	0.3744	0.9753	0.0438	0.3071	0.0449	0.3149
232	17.32	0.04	-0.6879	-0.0164	-0.2203	0.0279	0.3747	0.9837	0.0438	0.3090	0.0445	0.3141
233	17.39	0.05	-0.6755	-0.0115	-0.2147	0.0199	0.3817	0.9865	0.0435	0.3091	0.0441	0.3134
234	17.47	0.04	-0.6533	-0.0096	-0.2151	0.0173	0.3847	0.9866	0.0435	0.3069	0.0441	0.3111
235	17.56	0.05	-0.6927	-0.0115	-0.2244	0.0194	0.3793	0.9921	0.0447	0.3074	0.0450	0.3099
236	17.64	0.05	-0.6902	-0.0115	-0.2245	0.0195	0.3804	0.9911	0.0444	0.3021	0.0452	0.3079
237	17.72	0.05	-0.6994	-0.0123	-0.2289	0.0204	0.3816	0.9950	0.0453	0.3055	0.0455	0.3078
238	17.79	0.05	-0.6738	-0.0092	-0.2206	0.0160	0.3846	0.9950	0.0441	0.3065	0.0443	0.3081
239	17.88	0.04	-0.6220	-0.0119	-0.2355	0.0191	0.3787	0.9756	0.0460	0.2973	0.0472	0.3047
240	17.96	0.04	-0.5995	-0.0092	-0.2329	0.0153	0.3835	0.9612	0.0457	0.2988	0.0466	0.3046
241	18.06	0.04	-0.6019	-0.0080	-0.2342	0.0133	0.3891	0.9668	0.0463	0.2982	0.0469	0.3022
242	18.13	0.03	-0.6316	-0.0103	-0.2397	0.0163	0.3795	0.9788	0.0463	0.2964	0.0473	0.3038
243	18.21	0.04	-0.6291	-0.0107	-0.2394	0.0170	0.3805	0.9860	0.0463	0.2980	0.0471	0.3028
244	18.30	0.04	-0.6462	-0.0084	-0.2511	0.0130	0.3873	0.9620	0.0469	0.2851	0.0487	0.2984
245	18.37	0.04	-0.6341	-0.0084	-0.2455	0.0132	0.3859	0.9756	0.0472	0.2951	0.0484	0.3024
246	18.45	0.03	-0.6780	-0.0092	-0.2564	0.0135	0.3781	0.9702	0.0469	0.2913	0.0483	0.3002
247	18.53	0.04	-0.6652	-0.0065	-0.2561	0.0097	0.3880	0.9318	0.0460	0.2705	0.0494	0.2903
248	18.62	0.04	-0.6997	-0.0092	-0.2663	0.0131	0.3806	0.9368	0.0467	0.2650	0.0493	0.2922
249	18.71	0.04	-0.6947	-0.0057	-0.2660	0.0083	0.3857	0.9153	0.0464	0.2656	0.0485	0.2902
250	18.78	0.03	-0.7021	-0.0064	-0.2675	0.0088	0.3809	0.8930	0.0461	0.2616	0.0496	0.2929
251	18.85	0.03	-0.7293	-0.0065	-0.2746	0.0089	0.3765	0.8847	0.0435	0.2597	0.0492	0.2936
252	18.94	0.03	-0.7049	-0.0054	-0.2691	0.0076	0.3839	0.9026	0.0460	0.2687	0.0488	0.2978
253	19.03	0.03	-0.7042	-0.0038	-0.2719	0.0053	0.3839	0.8776	0.0429	0.2589	0.0489	0.2950
254	19.09	0.04	-0.7328	-0.0053	-0.2779	0.0072	0.3792	0.8768	0.0432	0.2597	0.0494	0.2969
255	19.17	0.04	-0.7412	-0.0053	-0.2801	0.0072	0.3779	0.8704	0.0432	0.2596	0.0497	0.2983
256	19.25	0.03	-0.7535	-0.0045	-0.2845	0.0060	0.3776	0.8649	0.0429	0.2592	0.0496	0.2996
257	19.33	0.03	-0.7536	-0.0053	-0.2846	0.0070	0.3778	0.8703	0.0425	0.2640	0.0480	0.3033
258	19.41	0.03	-0.7580	-0.0031	-0.2893	0.0041	0.3816	0.8675	0.0425	0.2626	0.0489	0.3027
259	19.48	0.04	-0.7386	-0.0019	-0.2807	0.0026	0.3799	0.8813	0.0422	0.2693	0.0478	0.3056
260	19.56	0.04	-0.7187	-0.0004	-0.2785	0.0011	0.3874	0.8868	0.0425	0.2732	0.0479	0.3080
261	19.64	0.04	-0.7829	-0.0041	-0.2931	0.0053	0.3744	0.8702	0.0425	0.2662	0.0488	0.3059
262	19.72	0.04	-0.7916	-0.0049	-0.2980	0.0062	0.3736	0.8646	0.0422	0.2657	0.0488	0.3073
263	19.79	0.04	-0.7976	-0.0041	-0.2979	0.0052	0.3735	0.8618	0.0419	0.2666	0.0486	0.3093
264	19.87	0.04	-0.7926	-0.0031	-0.2973	0.0039	0.3750	0.8701	0.0419	0.2684	0.0481	0.3085
265	19.95	0.05	-0.7948	-0.0012	-0.3017	0.0015	0.3746	0.8646	0.0416	0.2668	0.0481	0.3086
266	20.02	0.05	-0.7830	-0.0015	-0.2968	-0.0020	0.3831	0.8756	0.0413	0.2733	0.0472	0.3121
267	20.10	0.04	-0.7971	0.0005	-0.3039	-0.0010	0.3813	0.8645	0.0416	0.2690	0.0481	0.3112
268	20.17	0.05	-0.8123	-0.0004	-0.3035	0.0005	0.3737	0.8701	0.0413	0.2705	0.0475	0.3109
269	20.25	0.05	-0.8305	-0.0012	-0.3137	0.0014	0.3750	0.8755	0.0413	0.2755	0.0472	0.3148
270	20.33	0.05	-0.8187	-0.0012	-0.3103	-0.0014	0.3800	0.8701	0.0410	0.2717	0.0471	0.3123
271	20.39	0.04	-0.8394	-0.0012	-0.3108	0.0014	0.3702	0.8757	0.0410	0.2710	0.0468	0.3095
272	20.48	0.05	-0.8313	0.0004	-0.3152	-0.0005	0.3792	0.8700	0.0407	0.2728	0.0466	0.3135
273	20.56	0.05	-0.8356	0.0008	-0.3136	-0.0009	0.3768	0.8672	0.0410	0.2726	0.0473	0.3143
274	20.62	0.05	-0.8604	-0.0008	-0.3227	0.0004	0.3749	0.8673	0.0407	0.2714	0.0469	0.3129
275	20.70	0.04	-0.8413	0.0015	-0.3172	-0.0018	0.3771	0.8711	0.0407	0.2760	0.0462	0.3132
276	20.79	0.05	-0.8611	0.0008	-0.3216	-0.0009	0.3735	0.8699	0.0407	0.2750	0.0468	0.3161

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 0.850 1.7 45.0 Alt0r23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
277	20.88	0.05	-0.8781	0.0004	-0.3279	-0.0004	0.3733	0.8811	0.0405	0.2781	0.0460	0.3156
278	20.95	0.05	-0.8818	0.0027	-0.3236	-0.0031	0.3759	0.8755	0.0405	0.2785	0.0463	0.3158
279	21.04	0.06	-0.8859	0.0035	-0.3252	-0.0040	0.3755	0.8755	0.0405	0.2776	0.0463	0.3171
280	21.11	0.05	-0.9056	-0.0004	-0.3328	0.0004	0.3675	0.8865	0.0402	0.2830	0.0454	0.3192
281	21.18	0.05	-0.9045	0.0013	-0.3322	-0.0017	0.3689	0.8864	0.0402	0.2841	0.0454	0.3205
282	21.27	0.05	-0.9254	-0.0023	-0.3399	0.0025	0.3655	0.8810	0.0405	0.2803	0.0460	0.3181
283	21.36	0.06	-0.9176	-0.0008	-0.3374	0.0008	0.3677	0.8865	0.0399	0.2841	0.0451	0.3204
284	21.40	0.06	-0.9225	-0.0012	-0.3379	0.0013	0.3663	0.8809	0.0397	0.2836	0.0450	0.3219
285	21.50	0.06	-0.9246	0.0027	-0.3431	-0.0029	0.3713	0.8947	0.0391	0.2892	0.0437	0.3232
286	21.57	0.06	-0.9230	0.0027	-0.3395	-0.0029	0.3691	0.8920	0.0397	0.2856	0.0445	0.3202
287	21.65	0.06	-0.9243	-0.0061	-0.3407	0.0063	0.3597	0.8948	0.0394	0.2870	0.0440	0.3207
288	21.72	0.06	-0.9241	0.0008	-0.3408	-0.0008	0.3625	0.8976	0.0391	0.2883	0.0435	0.3212
289	21.80	0.05	-0.9445	0.0008	-0.3456	-0.0004	0.3659	0.9067	0.0385	0.2916	0.0424	0.3207
290	21.87	0.06	-0.9715	-0.0008	-0.3539	0.0004	0.3643	0.9031	0.0388	0.2909	0.0429	0.3221
291	21.96	0.06	-0.9666	-0.0012	-0.3524	0.0017	0.3645	0.9086	0.0385	0.2936	0.0424	0.3231
292	22.03	0.07	-0.9888	-0.0023	-0.3569	0.0023	0.3609	0.9141	0.0380	0.2984	0.0416	0.3265
293	22.10	0.07	-0.9969	-0.0041	-0.3571	0.0042	0.3575	0.9253	0.0380	0.2994	0.0411	0.3236
294	22.16	0.07	-1.0016	-0.0049	-0.3587	0.0049	0.3574	0.9225	0.0377	0.2991	0.0409	0.3242
295	22.25	0.06	-0.9960	-0.0045	-0.3560	0.0045	0.3564	0.9226	0.0377	0.2958	0.0409	0.3206
296	22.34	0.07	-1.0039	-0.0045	-0.3578	0.0045	0.3562	0.9310	0.0369	0.2999	0.0396	0.3221
297	22.40	0.07	-1.0067	-0.0027	-0.3612	0.0027	0.3581	0.9365	0.0369	0.3014	0.0394	0.3219
298	22.48	0.06	-1.0034	-0.0031	-0.3629	0.0031	0.3617	0.9310	0.0371	0.2967	0.0399	0.3209
299	22.56	0.07	-1.0256	-0.0031	-0.3685	0.0030	0.3593	0.9337	0.0374	0.3001	0.0401	0.3214
300	22.62	0.07	-1.0231	-0.0065	-0.3672	0.0064	0.3590	0.9366	0.0369	0.3003	0.0396	0.3206
301	22.70	0.07	-1.0130	-0.0008	-0.3661	0.0008	0.3634	0.9476	0.0369	0.3045	0.0389	0.3214
302	22.78	0.08	-1.0258	-0.0031	-0.3664	0.0030	0.3571	0.9421	0.0369	0.3019	0.0391	0.3205
303	22.84	0.08	-1.0278	-0.0012	-0.3718	0.0011	0.3617	0.9504	0.0366	0.3059	0.0385	0.3218
304	22.92	0.07	-1.0226	0.0008	-0.3733	-0.0008	0.3651	0.9476	0.0366	0.3057	0.0386	0.3226
305	22.99	0.07	-1.0227	0.0027	-0.3731	-0.0026	0.3648	0.9448	0.0369	0.3043	0.0390	0.3221
306	23.06	0.07	-1.0324	0.0012	-0.3765	-0.0011	0.3647	0.9531	0.0363	0.3083	0.0381	0.3234
307	23.13	0.08	-1.0423	0.0	-0.3776	0.0	0.3622	0.9475	0.0366	0.3067	0.0386	0.3237
308	23.20	0.07	-1.0347	0.0027	-0.3788	-0.0026	0.3661	0.9530	0.0363	0.3105	0.0381	0.3258
309	23.29	0.07	-1.0176	0.0004	-0.3747	-0.0048	0.3682	0.9531	0.0363	0.3083	0.0381	0.3234
310	23.35	0.07	-1.0555	-0.0012	-0.3808	0.0011	0.3608	0.9515	0.0363	0.3100	0.0381	0.3258
311	23.42	0.07	-1.0230	0.0065	-0.3740	-0.0063	0.3705	0.9543	0.0363	0.3114	0.0380	0.3263
312	23.49	0.07	-1.0309	0.0041	-0.3801	-0.0040	0.3688	0.9516	0.0363	0.3122	0.0381	0.3282
313	23.56	0.07	-1.0255	0.0053	-0.3793	-0.0052	0.3699	0.9515	0.0363	0.3100	0.0381	0.3258
314	23.63	0.07	-1.0502	-0.0004	-0.3824	0.0004	0.3641	0.9599	0.0357	0.3117	0.0372	0.3248
315	23.66	0.07	-1.0305	0.0049	-0.3759	-0.0048	0.3686	0.9543	0.0363	0.3114	0.0380	0.3263
316	23.69	0.07	-1.0425	0.0027	-0.3834	-0.0026	0.3678	0.9526	0.0357	0.3143	0.0371	0.3265
317	23.67	0.08	-1.0350	0.0070	-0.3845	-0.0074	0.3751	0.9669	0.0357	0.3132	0.0369	0.3239
318	24.08	0.07	-0.9785	0.0187	-0.3929	-0.0171	0.3913	0.9861	0.0351	0.3225	0.0356	0.3278
319	24.77	0.07	-0.9734	0.0196	-0.3977	-0.0200	0.3990	1.0055	0.0348	0.3284	0.0346	0.3266
320	25.56	0.08	-0.9181	0.0255	-0.3824	-0.0277	0.4165	1.0442	0.0329	0.3438	0.0315	0.3292
321	26.38	0.09	-0.8402	0.0255	-0.3557	-0.0303	0.4234	1.0717	0.0317	0.3571	0.0296	0.3332
322	27.26	0.10	-0.7528	0.0282	-0.3268	-0.0374	0.4314	1.1131	0.0304	0.3726	0.0273	0.3348

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 8 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7. 0 0.90 1.7 45.0 M1e0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
323	28.24	0.12	-0.7192	0.0434	-0.3111	-0.0471	0.4325	1.1353	0.0296	0.3800	0.0261	0.3347
324	29.29	0.13	-0.7050	0.0376	-0.3039	-0.0534	0.4311	1.1603	0.0279	0.3866	0.0240	0.3331
325	30.39	0.14	-0.6960	0.0353	-0.2965	-0.0507	0.4231	1.1878	0.0265	0.3996	0.0223	0.3364
326	31.62	0.12	-0.6877	0.0370	-0.2944	-0.0537	0.4194	1.2172	0.0246	0.4113	0.0202	0.3379
327	32.96	0.12	-0.5959	0.0420	-0.2436	-0.0715	0.4085	1.2562	0.0224	0.4211	0.0178	0.3352
328	34.34	0.13	-0.5373	0.0434	-0.2076	-0.0630	0.3868	1.2810	0.0207	0.4330	0.0162	0.3381
329	34.03	0.13	-0.5543	0.0217	-0.2095	-0.0392	0.3779	1.2728	0.0197	0.4312	0.0155	0.3388
330	37.98	0.11	-0.5526	0.0111	-0.2055	-0.0201	0.3726	1.2768	0.0188	0.4274	0.0148	0.3393
331	40.20	0.04	-0.5519	0.0019	-0.2075	-0.0035	0.3760	1.3245	0.0155	0.4514	0.0117	0.3408
332	42.79	0.08	-0.5741	-0.0092	-0.2169	0.0158	0.3765	1.3845	0.0102	0.4810	0.0076	0.3476
333	45.91	-0.02	-0.5863	-0.0134	-0.2303	0.0228	0.3915	1.3835	0.0081	0.4891	0.0059	0.3535
334	49.47	-0.02	-0.1984	0.0296	-0.0569	-0.1493	0.2870	1.4275	0.0041	0.5204	0.0022	0.3645
335	53.50	-0.07	-0.0274	0.0119	0.0539	-0.5302	-2.4095	1.4596	-0.0027	0.5351	-0.0015	0.3666
336	57.78	-0.08	-0.0255	0.0062	0.0609	-0.1667	-2.3902	1.4831	-0.0069	0.5548	-0.0047	0.3761
337	58.25	-0.05	-0.0233	0.0046	0.0625	-0.1942	-2.6988	1.4865	-0.0070	0.5603	-0.0047	0.3769
338	58.27	-0.04	-0.0334	0.0062	0.0597	-0.1272	-1.7490	1.5033	-0.0073	0.5649	-0.0049	0.3758
339	58.26	-0.01	-0.0194	0.0051	0.0634	-0.2775	-3.4660	1.5037	-0.0069	0.5665	-0.0046	0.3767
340	58.27	-0.00	-0.0110	0.0055	0.0673	-0.5000	-6.1140	1.5076	-0.0069	0.5676	-0.0045	0.3765
341	58.25	0.02	-0.0142	0.0040	0.0622	-0.2149	-3.4127	1.5088	-0.0069	0.5721	-0.0045	0.3792
342	58.25	-0.01	-0.0236	0.0043	0.0633	-0.1837	-2.6653	1.5045	-0.0069	0.5742	-0.0046	0.3816
343	58.24	-0.04	-0.0208	0.0037	0.0613	-0.1528	-2.9398	1.5118	-0.0069	0.5747	-0.0046	0.3801
344	58.25	-0.03	-0.0082	0.0060	0.0651	-0.7294	-7.9412	1.5256	-0.0069	0.5811	-0.0046	0.3809
345	58.29	-0.04	-0.0186	0.0052	0.0641	-0.2798	-3.4404	1.5249	-0.0069	0.5852	-0.0046	0.3838
346	58.26	-0.04	-0.0186	0.0043	0.0641	-0.2124	-3.4404	1.5301	-0.0075	0.5875	-0.0049	0.3840
347	58.27	-0.04	-0.0212	0.0032	0.0637	-0.1500	-3.0045	1.5300	-0.0075	0.5898	-0.0049	0.3855
348	57.93	-0.04	-0.0180	0.0036	0.0565	-0.1979	-3.3048	1.5095	-0.0058	0.5846	-0.0038	0.3873
349	57.08	-0.06	-0.0127	0.0084	0.0583	-0.6541	-4.5758	1.5124	-0.0052	0.5837	-0.0034	0.3860
350	56.20	-0.07	-0.0205	0.0088	0.0552	-0.4292	-2.6981	1.5009	-0.0041	0.5782	-0.0027	0.3852
351	55.30	-0.09	0.0151	0.0177	0.0674	1.1410	4.4808	1.5037	-0.0038	0.5773	-0.0025	0.3839
352	54.35	-0.07	-0.0614	0.0184	0.0217	-0.2363	-0.3505	1.4921	-0.0012	0.5706	-0.0008	0.3824

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	PXIO-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	6	0.499	1.07	45.0	B1.0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.90	0.06	0.1077	9.9999	0.0525	9.9999	0.1706	-0.3457	-0.0621	-0.1006	0.1797	0.2911
2	-5.90	0.06	0.3203	9.9999	0.0586	9.9999	0.1829	-0.3457	-0.0621	-0.1017	0.1797	0.2962
3	-5.91	0.06	0.3228	9.9999	0.0588	9.9999	0.1820	-0.3429	-0.0616	-0.0993	0.1795	0.2895
4	-5.90	0.07	0.3209	9.9999	0.0565	9.9999	0.1765	-0.3263	-0.0591	-0.0925	0.1813	0.2836
5	-5.85	0.07	0.3127	9.9999	0.0560	9.9999	0.1790	-0.3208	-0.0563	-0.0910	0.1817	0.2836
6	-5.82	0.08	0.3052	9.9999	0.0513	9.9999	0.1682	-0.3150	-0.0583	-0.0876	0.1850	0.2775
7	-5.44	0.07	0.3074	9.9999	0.0536	9.9999	0.1741	-0.3039	-0.0563	-0.0810	0.1854	0.2667
8	-5.35	0.05	0.3000	9.9999	0.0509	9.9999	0.1698	-0.2872	-0.0544	-0.0755	0.1895	0.2627
9	-5.18	0.07	0.2848	9.9999	0.0437	9.9999	0.1535	-0.2927	-0.0549	-0.0737	0.1875	0.2518
10	-5.01	0.07	0.2899	9.9999	0.0441	9.9999	0.1521	-0.2761	-0.0527	-0.0702	0.1908	0.2564
11	-4.89	0.06	0.2799	9.9999	0.0393	9.9999	0.1403	-0.2650	-0.0516	-0.0661	0.1948	0.2495
12	-4.72	0.07	0.2722	9.9999	0.0376	9.9999	0.1382	-0.2650	-0.0513	-0.0661	0.1937	0.2495
13	-4.56	0.08	0.2697	9.9999	0.0365	9.9999	0.1352	-0.2510	-0.0497	-0.0598	0.1980	0.2378
14	-4.44	0.08	0.2596	9.9999	0.0316	9.9999	0.1219	-0.2510	-0.0497	-0.0596	0.1980	0.2378
15	-4.29	0.07	0.2469	9.9999	0.0256	9.9999	0.1036	-0.2260	-0.0463	-0.0490	0.2050	0.2169
16	-4.17	0.08	0.2441	9.9999	0.0264	9.9999	0.1082	-0.2344	-0.0472	-0.0529	0.2013	0.2256
17	-4.02	0.06	0.2494	9.9999	0.0268	9.9999	0.1075	-0.2262	-0.0455	-0.0489	0.2014	0.2163
18	-3.98	0.08	0.2342	9.9999	0.0226	9.9999	0.0964	-0.2177	-0.0450	-0.0461	0.2068	0.2119
19	-3.75	0.09	0.2292	9.9999	0.0192	9.9999	0.0838	-0.1984	-0.0416	-0.0381	0.2096	0.1921
20	-3.63	0.07	0.2234	9.9999	0.0198	9.9999	0.0883	-0.1956	-0.0416	-0.0400	0.2126	0.2047
21	-3.49	0.06	0.2137	9.9999	0.0170	9.9999	0.0795	-0.1816	-0.0405	-0.0368	0.2232	0.2024
22	-3.37	0.08	0.2134	9.9999	0.0169	9.9999	0.0791	-0.1787	-0.0394	-0.0332	0.2203	0.1857
23	-3.24	0.06	0.2084	9.9999	0.0145	9.9999	0.0694	-0.1646	-0.0379	-0.0267	0.2304	0.1624
24	-3.08	0.04	0.1956	9.9999	0.0115	9.9999	0.0587	-0.1534	-0.0371	-0.0268	0.2421	0.1616
25	-2.97	0.07	0.1931	9.9999	0.0103	9.9999	0.0535	-0.1617	-0.0382	-0.0276	0.2363	0.1706
26	-2.83	0.07	0.1803	9.9999	0.0072	9.9999	0.0401	-0.1505	-0.0371	-0.0235	0.2468	0.1566
27	-2.69	0.06	0.1828	9.9999	0.0085	9.9999	0.0464	-0.1338	-0.0349	-0.0179	0.2610	0.1334
28	-2.55	0.07	0.1727	9.9999	0.0057	9.9999	0.0330	-0.1311	-0.0343	-0.0145	0.2620	0.1104
29	-2.42	0.07	0.1626	9.9999	0.0009	9.9999	0.0053	-0.1310	-0.0343	-0.0134	0.2622	0.1024
30	-2.30	0.06	0.1625	9.9999	0.0018	9.9999	0.0113	-0.1200	-0.0324	-0.0082	0.2701	0.0683
31	-2.17	0.07	0.1497	9.9999	-0.0012	9.9999	-0.0077	-0.1090	-0.0305	-0.0008	0.2796	0.0071
32	-2.03	0.08	0.1420	9.9999	-0.0018	9.9999	-0.0129	-0.1009	-0.0286	0.0010	0.2830	-0.0096
33	-1.90	0.06	0.1371	9.9999	-0.0062	9.9999	-0.0450	-0.1034	-0.0299	-0.0004	0.2892	0.0037
34	-1.78	0.07	0.1370	9.9999	-0.0041	9.9999	-0.0303	-0.0925	-0.0271	0.0049	0.2927	-0.0531
35	-1.66	0.06	0.1316	9.9999	-0.0066	9.9999	-0.0498	-0.0898	-0.0271	0.0041	0.3025	-0.0452
36	-1.52	0.07	0.1265	9.9999	-0.0056	9.9999	-0.0397	-0.0763	-0.0233	0.0106	0.3047	-0.1391
37	-1.40	0.06	0.1215	9.9999	-0.0074	9.9999	-0.0612	-0.0709	-0.0221	0.0100	0.3116	-0.1415
38	-1.27	0.06	0.1039	9.9999	-0.0134	9.9999	-0.1231	-0.0656	-0.0205	0.0127	0.3118	-0.1941
39	-1.14	0.08	0.1062	9.9999	-0.0124	9.9999	-0.1190	-0.0628	-0.0202	0.0129	0.3210	-0.2058
40	-1.02	0.07	0.1113	9.9999	-0.0112	9.9999	-0.1005	-0.0555	-0.0152	0.0139	0.2748	-0.2506
41	-0.90	0.06	0.1010	9.9999	-0.0130	9.9999	-0.1289	-0.0527	-0.0150	0.0130	0.2839	-0.2473
42	-0.78	0.07	0.0960	9.9999	-0.0156	9.9999	-0.1608	-0.0501	-0.0141	0.0123	0.2813	-0.2447
43	-0.66	0.06	0.0908	9.9999	-0.0158	9.9999	-0.1743	-0.0448	-0.0127	0.0117	0.2845	-0.2608
44	-0.53	0.08	0.0857	9.9999	-0.0162	9.9999	-0.1892	-0.0399	-0.0092	0.0166	0.2295	-0.4155
45	-0.41	0.07	0.0805	9.9999	-0.0147	9.9999	-0.1823	-0.0398	-0.0096	0.0154	0.2427	-0.3883
46	-0.29	0.07	0.0805	9.9999	-0.0147	9.9999	-0.1823	-0.0318	-0.0071	0.0194	0.2242	-0.6091

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	6	0.96	1.7	45.0	B1A0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
47	-0.17	0.06	0.0755	9.9999	-0.0160	9.9999	-0.2123	-0.0290	-0.0069	0.0197	0.2392	-0.6777
48	-0.06	0.06	0.0743	9.9999	-0.0175	9.9999	-0.2483	-0.0282	-0.0067	0.0188	0.2537	-0.7169
49	0.06	0.06	0.0703	9.9999	-0.0175	9.9999	-0.2483	-0.0128	-0.0033	0.0233	0.2556	-1.8120
50	0.21	0.06	0.0551	9.9999	-0.0227	9.9999	-0.4116	-0.0072	-0.0031	0.0226	0.4267	-3.1208
51	0.31	0.06	0.0526	9.9999	-0.0229	9.9999	-0.4369	-0.0045	-0.0025	0.0239	0.5532	-5.2766
52	0.43	0.06	0.0556	9.9999	-0.0266	9.9999	-0.3758	-0.0019	-0.0016	0.0253	0.7008	-13.1088
53	0.55	0.07	0.0475	9.9999	-0.0233	9.9999	-0.4898	0.0036	-0.0003	0.0279	-0.0811	7.8108
54	0.65	0.06	0.0469	9.9999	-0.0246	9.9999	-0.5461	0.0033	0.0004	0.0289	0.2647	8.8235
55	0.79	0.07	0.0423	9.9999	-0.0264	9.9999	-0.5822	0.0056	0.0039	0.0315	0.7143	5.8214
56	0.91	0.06	0.0386	9.9999	-0.0282	9.9999	-0.7577	0.0077	0.0058	0.0329	0.7500	4.2625
57	1.02	0.06	0.0346	9.9999	-0.0300	9.9999	-1.2196	0.0075	0.0067	0.0329	0.8846	4.3718
58	1.16	0.07	0.0266	9.9999	-0.0311	9.9999	-1.2627	0.0098	0.0089	0.0343	0.9020	3.4902
59	1.25	0.07	0.0170	9.9999	-0.0337	9.9999	-1.9830	0.0151	0.0108	0.0348	0.7179	2.3141
60	1.37	0.06	0.0098	9.9999	-0.0362	9.9999	-4.0000	0.0095	0.0105	0.0366	1.1122	3.8673
61	1.50	0.06	0.0096	9.9999	-0.0393	9.9999	-4.1111	0.0231	0.0135	0.0421	0.5858	1.8243
62	1.60	0.07	0.0070	9.9999	-0.0404	9.9999	-5.7347	0.0202	0.0135	0.0418	0.6699	2.0718
63	1.72	0.07	-0.0006	9.9999	-0.0410	9.9999	70.8334	0.0313	0.0149	0.0449	0.4753	1.4352
64	1.83	0.07	-0.0005	9.9999	-0.0440	9.9999	91.2000	0.0312	0.0149	0.0438	0.4768	1.4056
65	1.93	0.06	-0.0061	9.9999	-0.0466	9.9999	5.7500	0.0310	0.0163	0.0471	0.5265	1.5202
66	2.06	0.06	-0.0106	9.9999	-0.0468	9.9999	6.6041	0.0366	0.0168	0.0497	0.4591	1.3588
67	2.17	0.07	-0.0130	9.9999	-0.0500	9.9999	3.8370	0.0420	0.0177	0.0511	0.4207	1.2184
68	2.28	0.06	-0.0160	9.9999	-0.0523	9.9999	2.8906	0.0476	0.0190	0.0537	0.4012	1.1366
69	2.40	0.07	-0.0174	9.9999	-0.0543	9.9999	3.0264	0.0502	0.0193	0.0561	0.3846	1.1173
70	2.52	0.06	-0.0305	9.9999	-0.0603	9.9999	1.9778	0.0472	0.0196	0.0568	0.4151	1.1616
71	2.63	0.06	-0.0382	9.9999	-0.0609	9.9999	1.5934	0.0581	0.0218	0.0600	0.3754	1.0332
72	2.76	0.06	-0.0356	9.9999	-0.0618	9.9999	1.7344	0.0554	0.0209	0.0576	0.3780	1.0401
73	2.86	0.07	-0.0405	9.9999	-0.0651	9.9999	1.6071	0.0690	0.0237	0.0631	0.3441	0.9147
74	2.97	0.06	-0.0533	9.9999	-0.0681	9.9999	1.2740	0.0580	0.0223	0.0601	0.3844	1.0366
75	3.09	0.06	-0.0706	9.9999	-0.0755	9.9999	1.0654	0.0687	0.0248	0.0643	0.3610	0.9356
76	3.21	0.06	-0.0656	9.9999	-0.0761	9.9999	1.1261	0.0660	0.0245	0.0640	0.3713	0.9693
77	3.31	0.07	-0.0793	9.9999	-0.0791	9.9999	1.0099	0.0797	0.0267	0.0694	0.3354	0.8705
78	3.42	0.07	-0.0804	9.9999	-0.0803	9.9999	0.9928	0.0769	0.0267	0.0692	0.3476	0.8996
79	3.55	0.06	-0.0836	9.9999	-0.0814	9.9999	0.9769	0.0795	0.0273	0.0684	0.3436	0.8604
80	3.66	0.05	-0.0884	9.9999	-0.0838	9.9999	0.9487	0.0794	0.0278	0.0705	0.3699	0.8882
81	3.77	0.06	-0.0909	9.9999	-0.0851	9.9999	0.9353	0.0986	0.0312	0.0775	0.3160	0.7857
82	3.89	0.06	-0.1045	9.9999	-0.0915	9.9999	0.8927	0.0903	0.0300	0.0757	0.3323	0.8387
83	4.00	0.07	-0.1136	9.9999	-0.0919	9.9999	0.8875	0.0983	0.0322	0.0797	0.3278	0.8106
84	4.10	0.07	-0.1187	9.9999	-0.0952	9.9999	0.8624	0.0930	0.0306	0.0771	0.3288	0.8288
85	4.23	0.07	-0.1162	9.9999	-0.0950	9.9999	0.8181	0.1121	0.0342	0.0840	0.3046	0.7496
86	4.34	0.07	-0.1287	9.9999	-0.1001	9.9999	0.7774	0.1009	0.0334	0.0810	0.3306	0.8031
87	4.44	0.06	-0.1362	9.9999	-0.1036	9.9999	0.7606	0.1175	0.0359	0.0848	0.3021	0.7553
88	4.56	0.07	-0.1388	9.9999	-0.1038	9.9999	0.7477	0.1231	0.0358	0.0903	0.2908	0.7335
89	4.66	0.07	-0.1461	9.9999	-0.1083	9.9999	0.7411	0.1229	0.0361	0.0912	0.2936	0.7418
90	4.75	0.06	-0.1486	9.9999	-0.1105	9.9999	0.7435	0.1284	0.0371	0.0959	0.2893	0.7468
91	4.87	0.06	-0.1606	9.9999	-0.1161	9.9999	0.6878	0.1283	0.0374	0.0939	0.2917	0.7316
92	4.97	0.07	-0.1636	9.9999	-0.1157	9.9999	0.7070	0.1311	0.0377	0.0951	0.2877	0.7255

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 6 0.90 1.7 45.0 81=0E23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	ACPF3	YCPF3	CNF4	CM4	C64	XCPF4	YCPF4
93	5.07	0.08	-0.1736	9.9999	-0.1224	9.9999	0.7054	0.1394	0.0385	0.0990	0.2761	0.7100
94	5.18	0.07	-0.1736	9.9999	-0.1224	9.9999	0.7054	0.1448	0.0399	0.1027	0.2758	0.7089
95	5.26	0.07	-0.1887	9.9999	-0.1277	9.9999	0.6764	0.1394	0.0388	0.1011	0.2782	0.7253
96	5.37	0.06	-0.1881	9.9999	-0.1286	9.9999	0.6900	0.1447	0.0404	0.1037	0.2743	0.7167
97	5.49	0.07	-0.1936	9.9999	-0.1320	9.9999	0.6816	0.1414	0.0421	0.1114	0.2606	0.6904
98	5.59	0.07	-0.1987	9.9999	-0.1366	9.9999	0.6765	0.1414	0.0421	0.1114	0.2606	0.6904
99	5.68	0.07	-0.2037	9.9999	-0.1367	9.9999	0.6712	0.1414	0.0421	0.1093	0.2606	0.6772
100	5.79	0.09	-0.2138	9.9999	-0.1406	9.9999	0.6575	0.1441	0.0426	0.1107	0.2598	0.6763
101	5.88	0.09	-0.2212	9.9999	-0.1451	9.9999	0.6559	0.1752	0.0438	0.1158	0.2500	0.6608
102	5.97	0.08	-0.2191	9.9999	-0.1440	9.9999	0.6581	0.1752	0.0438	0.1158	0.2500	0.6608
103	6.06	0.09	-0.2313	9.9999	-0.1499	9.9999	0.6483	0.1780	0.0440	0.1170	0.2472	0.6575
104	6.17	0.08	-0.2262	9.9999	-0.1496	9.9999	0.6613	0.1947	0.0459	0.1248	0.2359	0.6407
105	6.27	0.06	-0.2341	9.9999	-0.1533	9.9999	0.6550	0.1893	0.0460	0.1246	0.2431	0.6580
106	6.38	0.09	-0.2408	9.9999	-0.1593	9.9999	0.6459	0.1893	0.0460	0.1246	0.2431	0.6580
107	6.49	0.08	-0.2542	9.9999	-0.1609	9.9999	0.6330	0.1867	0.0450	0.1232	0.2408	0.6599
108	6.57	0.07	-0.2643	9.9999	-0.1647	9.9999	0.6232	0.2034	0.0472	0.1320	0.2320	0.6498
109	6.68	0.08	-0.2567	9.9999	-0.1632	9.9999	0.6357	0.2006	0.0466	0.1297	0.2323	0.6465
110	6.79	0.07	-0.2646	9.9999	-0.1701	9.9999	0.6319	0.2062	0.0474	0.1355	0.2298	0.6570
111	6.88	0.08	-0.2643	9.9999	-0.1753	9.9999	0.6166	0.2065	0.0466	0.1364	0.2257	0.6607
112	6.98	0.09	-0.2817	9.9999	-0.1761	9.9999	0.6250	0.2119	0.0477	0.1401	0.2250	0.6612
113	7.10	0.08	-0.2962	9.9999	-0.1841	9.9999	0.6256	0.2148	0.0477	0.1403	0.2219	0.6532
114	7.17	0.09	-0.2987	9.9999	-0.1853	9.9999	0.6244	0.2148	0.0477	0.1424	0.2219	0.6631
115	7.27	0.10	-0.2990	9.9999	-0.1856	9.9999	0.6424	0.2231	0.0488	0.1463	0.2189	0.6557
116	7.38	0.08	-0.3060	9.9999	-0.1929	9.9999	0.6346	0.2269	0.0488	0.1499	0.2133	0.6551
117	7.48	0.07	-0.3062	9.9999	-0.2006	9.9999	0.6192	0.2235	0.0472	0.1451	0.2111	0.6494
118	7.58	0.08	-0.3161	9.9999	-0.1976	9.9999	0.6292	0.2345	0.0493	0.1556	0.2103	0.6638
119	7.65	0.09	-0.3166	9.9999	-0.1989	9.9999	0.6282	0.2290	0.0485	0.1531	0.2120	0.6688
120	7.76	0.09	-0.3291	9.9999	-0.2069	9.9999	0.6293	0.2348	0.0477	0.1534	0.2030	0.6532
121	7.86	0.08	-0.3341	9.9999	-0.2124	9.9999	0.6269	0.2460	0.0491	0.1607	0.1996	0.6533
122	7.93	0.07	-0.3315	9.9999	-0.2108	9.9999	0.6333	0.2432	0.0488	0.1615	0.2007	0.6668
123	8.08	0.07	-0.3465	9.9999	-0.2182	9.9999	0.6296	0.2379	0.0472	0.1589	0.1983	0.6679
124	8.10	0.08	-0.3419	9.9999	-0.2171	9.9999	0.6349	0.2577	0.0500	0.1704	0.1939	0.6612
125	8.20	0.07	-0.3545	9.9999	-0.2251	9.9999	0.6350	0.2523	0.0488	0.1689	0.1935	0.6692
126	8.29	0.06	-0.3696	9.9999	-0.2313	9.9999	0.6257	0.2610	0.0483	0.1716	0.1852	0.6573
127	8.38	0.08	-0.3665	9.9999	-0.2299	9.9999	0.6308	0.2639	0.0483	0.1739	0.1832	0.6589
128	8.48	0.07	-0.3721	9.9999	-0.2335	9.9999	0.6276	0.2614	0.0472	0.1736	0.1805	0.6661
129	8.55	0.08	-0.3872	9.9999	-0.2397	9.9999	0.6190	0.2700	0.0472	0.1785	0.1748	0.6612
130	8.62	0.07	-0.3795	9.9999	-0.2391	9.9999	0.6301	0.2811	0.0483	0.1783	0.1720	0.6344
131	8.73	0.06	-0.3865	9.9999	-0.2415	9.9999	0.6281	0.2702	0.0467	0.1784	0.1729	0.6604
132	8.84	0.07	-0.3948	9.9999	-0.2453	9.9999	0.6215	0.2732	0.0461	0.1807	0.1688	0.6616
133	8.91	0.08	-0.4047	9.9999	-0.2511	9.9999	0.6204	0.2816	0.0461	0.1814	0.1638	0.6441
134	8.99	0.07	-0.4156	9.9999	-0.2539	9.9999	0.6120	0.2844	0.0467	0.1858	0.1642	0.6533
135	9.08	0.07	-0.3992	9.9999	-0.2474	9.9999	0.6198	0.2813	0.0466	0.1843	0.1657	0.6552
136	9.18	0.07	-0.4217	9.9999	-0.2571	9.9999	0.6097	0.2818	0.0438	0.1821	0.1554	0.6460
137	9.26	0.08	-0.4216	9.9999	-0.2592	9.9999	0.6146	0.2928	0.0457	0.1842	0.1562	0.6420
138	9.33	0.07	-0.4241	9.9999	-0.2623	9.9999	0.6107	0.2931	0.0450	0.1893	0.1534	0.6458

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 .6 0.900 1.7 45.0 BLADE23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNFA	CMA	CHA	XCPFA	YCPFA
139	9.43	0.00	-0.4291	9.9999	-0.2644	9.9999	0.6170	0.2962	0.0441	0.1926	0.1489	0.6502
140	9.52	0.00	-0.4316	9.9999	-0.2659	9.9999	0.6161	0.2987	0.0454	0.1939	0.1521	0.6492
141	9.59	0.00	-0.4442	9.9999	-0.2763	9.9999	0.6099	0.3024	0.0425	0.1951	0.1404	0.6452
142	9.70	0.00	-0.4500	9.9999	-0.2767	9.9999	0.6046	0.3051	0.0427	0.1964	0.1401	0.6436
143	9.79	0.00	-0.4493	9.9999	-0.2723	9.9999	0.6060	0.3053	0.0422	0.1953	0.1361	0.6397
144	9.87	0.01	-0.4563	9.9999	-0.2757	9.9999	0.6068	0.3110	0.0422	0.1978	0.1356	0.6361
145	9.96	0.01	-0.4593	9.9999	-0.2781	9.9999	0.6055	0.3134	0.0425	0.2001	0.1353	0.6378
146	10.06	0.01	-0.4669	9.9999	-0.2807	9.9999	0.6012	0.3170	0.0416	0.2014	0.1306	0.6353
147	10.14	0.01	-0.4719	9.9999	-0.2831	9.9999	0.5999	0.3224	0.0427	0.2061	0.1326	0.6393
148	10.23	0.01	-0.4668	9.9999	-0.2827	9.9999	0.6056	0.3281	0.0427	0.2086	0.1303	0.6359
149	10.32	0.00	-0.4642	9.9999	-0.2859	9.9999	0.6093	0.3255	0.0414	0.2073	0.1271	0.6366
150	10.44	0.01	-0.4928	9.9999	-0.2926	9.9999	0.5948	0.3236	0.0389	0.2079	0.1202	0.6429
151	10.49	0.01	-0.4920	9.9999	-0.2937	9.9999	0.5970	0.3289	0.0395	0.2084	0.1208	0.6336
152	10.57	0.00	-0.5038	9.9999	-0.2977	9.9999	0.5899	0.3265	0.0377	0.2092	0.1155	0.6407
153	10.67	0.00	-0.5020	9.9999	-0.2966	9.9999	0.5945	0.3266	0.0377	0.2113	0.1155	0.6470
154	10.75	0.00	-0.5088	9.9999	-0.3007	9.9999	0.5960	0.3239	0.0372	0.2121	0.1158	0.6568
155	10.84	0.00	-0.5045	9.9999	-0.3020	9.9999	0.5927	0.3379	0.0383	0.2164	0.1134	0.6405
156	10.94	0.00	-0.5102	9.9999	-0.3065	9.9999	0.5968	0.3468	0.0382	0.2195	0.1130	0.6330
157	11.01	0.00	-0.5145	9.9999	-0.3078	9.9999	0.5925	0.3358	0.0358	0.2192	0.1066	0.6529
158	11.09	0.00	-0.5361	9.9999	-0.3118	9.9999	0.5860	0.3388	0.0358	0.2205	0.1057	0.6512
159	11.19	0.00	-0.5177	9.9999	-0.3101	9.9999	0.5991	0.3474	0.0371	0.2237	0.1066	0.6437
160	11.27	0.00	-0.5397	9.9999	-0.3154	9.9999	0.5865	0.3445	0.0356	0.2251	0.1036	0.6535
161	11.36	0.00	-0.5436	9.9999	-0.3163	9.9999	0.5834	0.3341	0.0334	0.2245	0.0999	0.6720
162	11.44	0.00	-0.5456	9.9999	-0.3183	9.9999	0.5838	0.3424	0.0345	0.2273	0.1009	0.6638
163	11.52	0.00	-0.5407	9.9999	-0.3255	9.9999	0.5806	0.3482	0.0345	0.2310	0.0992	0.6633
164	11.61	0.00	-0.5582	9.9999	-0.3243	9.9999	0.5810	0.3482	0.0345	0.2310	0.0992	0.6633
165	11.69	0.00	-0.5606	9.9999	-0.3265	9.9999	0.5824	0.3429	0.0331	0.2326	0.0965	0.6704
166	11.79	0.00	-0.5631	9.9999	-0.3287	9.9999	0.5838	0.3429	0.0331	0.2326	0.0965	0.6704
167	11.86	0.00	-0.5631	9.9999	-0.3287	9.9999	0.5838	0.3540	0.0345	0.2356	0.0976	0.6656
168	11.93	0.00	-0.5732	9.9999	-0.3315	9.9999	0.5786	0.3459	0.0329	0.2360	0.0951	0.6823
169	12.04	0.00	-0.5757	9.9999	-0.3327	9.9999	0.5778	0.3517	0.0329	0.2385	0.0936	0.6782
170	12.12	0.00	-0.5792	9.9999	-0.3334	9.9999	0.5775	0.3517	0.0329	0.2396	0.0936	0.6812
171	12.19	0.00	-0.5859	9.9999	-0.3365	9.9999	0.5744	0.3465	0.0312	0.2402	0.0899	0.6931
172	12.29	0.00	-0.5834	9.9999	-0.3384	9.9999	0.5766	0.3520	0.0317	0.2427	0.0902	0.6894
173	12.37	0.00	-0.5935	9.9999	-0.3392	9.9999	0.5715	0.3520	0.0317	0.2427	0.0902	0.6894
174	12.45	0.00	-0.6011	9.9999	-0.3437	9.9999	0.5652	0.3467	0.0307	0.2443	0.0885	0.7047
175	12.54	0.00	-0.6036	9.9999	-0.3429	9.9999	0.5681	0.3496	0.0307	0.2467	0.0878	0.7058
176	12.60	0.00	-0.5982	9.9999	-0.3416	9.9999	0.5707	0.3470	0.0295	0.2464	0.0851	0.7102
177	12.71	0.00	-0.6040	9.9999	-0.3444	9.9999	0.5658	0.3416	0.0288	0.2481	0.0842	0.7263
178	12.79	0.00	-0.6060	9.9999	-0.3461	9.9999	0.5711	0.3555	0.0304	0.2524	0.0855	0.7181
179	12.88	0.00	-0.6103	9.9999	-0.3459	9.9999	0.5613	0.3474	0.0285	0.2516	0.0819	0.7242
180	12.96	0.00	-0.6103	9.9999	-0.3470	9.9999	0.5630	0.3557	0.0295	0.2523	0.0830	0.7094
181	13.04	0.00	-0.6147	9.9999	-0.3491	9.9999	0.5643	0.3502	0.0285	0.2540	0.0813	0.7251
182	13.13	0.00	-0.6188	9.9999	-0.3472	9.9999	0.5610	0.3502	0.0285	0.2529	0.0813	0.7220
183	13.22	0.00	-0.6143	9.9999	-0.3459	9.9999	0.5613	0.3532	0.0282	0.2541	0.0798	0.7195
184	13.30	0.00	-0.6213	9.9999	-0.3494	9.9999	0.5624	0.3589	0.0282	0.2578	0.0785	0.7183

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 B 0.90 1.67 45.0 0.1250 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
185	13.38	0.04	-0.6148	9.9999	-0.3681	9.9999	0.5626	0.3562	0.0276	0.2575	0.0775	0.7229
186	13.47	0.02	-0.6264	9.9999	-0.3507	9.9999	0.5599	0.3617	0.0285	0.2591	0.0787	0.7162
187	13.55	0.04	-0.6148	9.9999	-0.3672	9.9999	0.5610	0.3620	0.0273	0.2600	0.0754	0.7183
188	13.63	0.02	-0.6214	9.9999	-0.3493	9.9999	0.5606	0.3594	0.0268	0.2630	0.0746	0.7318
189	13.73	0.04	-0.6214	9.9999	-0.3683	9.9999	0.5606	0.3650	0.0273	0.2634	0.0748	0.7216
190	13.80	0.04	-0.6263	9.9999	-0.3517	9.9999	0.5615	0.3569	0.0260	0.2659	0.0727	0.7451
191	13.87	0.04	-0.6214	9.9999	-0.3674	9.9999	0.5590	0.3628	0.0251	0.2674	0.0691	0.7370
192	13.97	0.04	-0.6264	9.9999	-0.3507	9.9999	0.5599	0.3627	0.0257	0.2674	0.0708	0.7372
193	14.06	0.04	-0.6215	9.9999	-0.3653	9.9999	0.5557	0.3684	0.0257	0.2710	0.0697	0.7357
194	14.12	0.04	-0.6264	9.9999	-0.3498	9.9999	0.5584	0.3685	0.0256	0.2721	0.0689	0.7384
195	14.23	0.03	-0.6215	9.9999	-0.3653	9.9999	0.5557	0.3744	0.0249	0.2757	0.0665	0.7363
196	14.30	0.04	-0.6241	9.9999	-0.3655	9.9999	0.5536	0.3828	0.0256	0.2773	0.0663	0.7245
197	14.37	0.04	-0.6291	9.9999	-0.3679	9.9999	0.5531	0.3834	0.0234	0.2758	0.0645	0.7589
198	14.47	0.04	-0.6240	9.9999	-0.3675	9.9999	0.5570	0.3747	0.0237	0.2766	0.0634	0.7383
199	14.55	0.04	-0.6291	9.9999	-0.3679	9.9999	0.5531	0.3833	0.0237	0.2815	0.0619	0.7342
200	14.64	0.03	-0.6291	9.9999	-0.3679	9.9999	0.5531	0.3862	0.0237	0.2839	0.0615	0.7369
201	14.73	0.03	-0.6400	9.9999	-0.3532	9.9999	0.5519	0.3674	0.0213	0.2815	0.0580	0.7663
202	14.81	0.04	-0.6369	9.9999	-0.3518	9.9999	0.5541	0.3702	0.0213	0.2807	0.0576	0.7581
203	14.90	0.04	-0.6370	9.9999	-0.3530	9.9999	0.5539	0.3674	0.0213	0.2815	0.0580	0.7663
204	14.98	0.04	-0.6425	9.9999	-0.3555	9.9999	0.5532	0.3900	0.0220	0.2875	0.0574	0.7373
205	15.07	0.05	-0.6425	9.9999	-0.3555	9.9999	0.5532	0.3819	0.0207	0.2879	0.0543	0.7539
206	15.16	0.04	-0.6429	9.9999	-0.3564	9.9999	0.5548	0.3958	0.0221	0.2890	0.0558	0.7381
207	15.23	0.04	-0.6526	9.9999	-0.3592	9.9999	0.5504	0.3822	0.0199	0.2884	0.0520	0.7559
208	15.32	0.04	-0.6474	9.9999	-0.3598	9.9999	0.5557	0.3907	0.0202	0.2906	0.0516	0.7439
209	15.42	0.04	-0.6500	9.9999	-0.3600	9.9999	0.5538	0.3884	0.0179	0.2896	0.0487	0.7753
210	15.49	0.04	-0.6524	9.9999	-0.3622	9.9999	0.5552	0.3881	0.0191	0.2914	0.0492	0.7509
211	15.58	0.04	-0.6551	9.9999	-0.3624	9.9999	0.5532	0.3882	0.0191	0.2935	0.0492	0.7562
212	15.67	0.05	-0.6539	9.9999	-0.3639	9.9999	0.5564	0.3989	0.0190	0.2958	0.0477	0.7395
213	15.76	0.04	-0.6615	9.9999	-0.3655	9.9999	0.5525	0.3878	0.0179	0.2929	0.0463	0.7554
214	15.82	0.04	-0.6677	9.9999	-0.3665	9.9999	0.5468	0.3803	0.0163	0.2917	0.0429	0.7671
215	15.91	0.05	-0.6676	9.9999	-0.3685	9.9999	0.5520	0.3803	0.0163	0.2917	0.0429	0.7671
216	16.00	0.05	-0.6677	9.9999	-0.3674	9.9999	0.5503	0.3860	0.0163	0.2931	0.0422	0.7593
217	16.07	0.05	-0.6727	9.9999	-0.3698	9.9999	0.5498	0.3974	0.0163	0.2972	0.0410	0.7478
218	16.16	0.05	-0.6752	9.9999	-0.3721	9.9999	0.5510	0.4006	0.0152	0.2973	0.0381	0.7421
219	16.24	0.04	-0.6802	9.9999	-0.3745	9.9999	0.5505	0.4064	0.0152	0.3020	0.0375	0.7431
220	16.32	0.04	-0.6802	9.9999	-0.3745	9.9999	0.5505	0.3925	0.0138	0.2998	0.0352	0.7638
221	16.40	0.05	-0.6853	9.9999	-0.3758	9.9999	0.5484	0.4123	0.0147	0.3045	0.0356	0.7386
222	16.49	0.03	-0.6852	9.9999	-0.3776	9.9999	0.5515	0.3843	0.0122	0.2960	0.0316	0.7753
223	16.57	0.05	-0.6929	9.9999	-0.3784	9.9999	0.5462	0.4014	0.0127	0.3035	0.0317	0.7562
224	16.64	0.06	-0.6823	9.9999	-0.3786	9.9999	0.5547	0.3925	0.0136	0.2998	0.0352	0.7638
225	16.73	0.05	-0.6902	9.9999	-0.3812	9.9999	0.5524	0.4211	0.0141	0.3093	0.0335	0.7346
226	16.81	0.06	-0.6936	9.9999	-0.3840	9.9999	0.5536	0.4189	0.0130	0.3073	0.0311	0.7315
227	16.89	0.05	-0.7012	9.9999	-0.3876	9.9999	0.5528	0.4107	0.0119	0.3046	0.0289	0.7465
228	16.98	0.05	-0.7038	9.9999	-0.3878	9.9999	0.5510	0.3996	0.0108	0.3047	0.0270	0.7626
229	17.06	0.05	-0.6980	9.9999	-0.3894	9.9999	0.5575	0.4195	0.0114	0.3115	0.0271	0.7424
230	17.13	0.04	-0.7113	9.9999	-0.3924	9.9999	0.5517	0.3803	0.0080	0.2999	0.0211	0.7886

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIU-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
2 6 6.90 1.7 45.0 BLeOF23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNFA	CMA	CAA	XCPFA	YCPFA
231	17.23	0.04	-0.7091	9.9999	-0.3920	9.9999	0.5552	0.4084	0.0096	0.3074	0.0230	0.7527
232	17.32	0.04	-0.7086	9.9999	-0.3942	9.9999	0.5564	0.4031	0.0083	0.3011	0.0217	0.7861
233	17.39	0.05	-0.7112	9.9999	-0.3934	9.9999	0.5531	0.4259	0.0092	0.3161	0.0215	0.7422
234	17.47	0.04	-0.7111	9.9999	-0.3964	9.9999	0.5574	0.4309	0.0102	0.3193	0.0233	0.7258
235	17.56	0.05	-0.7111	9.9999	-0.3954	9.9999	0.5560	0.4121	0.0072	0.3127	0.0176	0.7588
236	17.64	0.05	-0.7086	9.9999	-0.3952	9.9999	0.5577	0.4175	0.0083	0.3132	0.0199	0.7502
237	17.72	0.05	-0.7136	9.9999	-0.3976	9.9999	0.5572	0.4122	0.0067	0.3134	0.0162	0.7612
238	17.79	0.05	-0.7034	9.9999	-0.3958	9.9999	0.5627	0.4388	0.0092	0.3241	0.0204	0.7222
239	17.88	0.04	-0.7135	9.9999	-0.3986	9.9999	0.5586	0.4010	0.0058	0.3108	0.0144	0.7750
240	17.96	0.04	-0.7110	9.9999	-0.3974	9.9999	0.5590	0.4325	0.0058	0.3205	0.0134	0.7412
241	18.06	0.04	-0.7145	9.9999	-0.4030	9.9999	0.5609	0.4440	0.0058	0.3256	0.0130	0.7334
242	18.13	0.03	-0.7166	9.9999	-0.4010	9.9999	0.5580	0.4216	0.0047	0.3137	0.0112	0.7586
243	18.21	0.04	-0.7108	9.9999	-0.4014	9.9999	0.5647	0.4185	0.0047	0.3162	0.0113	0.7556
244	18.30	0.04	-0.7280	9.9999	-0.4086	9.9999	0.5629	0.4161	0.0031	0.3170	0.0074	0.7618
245	18.37	0.04	-0.7145	9.9999	-0.4030	9.9999	0.5609	0.4218	0.0031	0.3196	0.0073	0.7575
246	18.45	0.03	-0.7245	9.9999	-0.4074	9.9999	0.5631	0.4026	0.0006	0.3116	0.0014	0.7743
247	18.53	0.04	-0.7295	9.9999	-0.4104	9.9999	0.5640	0.4335	0.0019	0.3225	0.0045	0.7438
248	18.62	0.04	-0.7335	9.9999	-0.4133	9.9999	0.5636	0.4110	-0.0003	0.3110	-0.0007	0.7566
249	18.71	0.04	-0.7288	9.9999	-0.4079	9.9999	0.5598	0.4398	0.0	0.3249	0.0	0.7387
250	18.78	0.03	-0.7295	9.9999	-0.4108	9.9999	0.5640	0.4200	-0.0011	0.3180	-0.0025	0.7572
251	18.85	0.03	-0.7282	9.9999	-0.4102	9.9999	0.5578	0.4148	-0.0031	0.3174	-0.0074	0.7653
252	18.94	0.03	-0.7324	9.9999	-0.4146	9.9999	0.5592	0.4334	-0.0022	0.3238	-0.0051	0.7463
253	19.03	0.03	-0.7276	9.9999	-0.4072	9.9999	0.5598	0.4340	-0.0027	0.3259	-0.0051	0.7510
254	19.09	0.04	-0.7251	9.9999	-0.4146	9.9999	0.5565	0.4168	-0.0025	0.3161	-0.0060	0.7583
255	19.17	0.04	-0.7306	9.9999	-0.4115	9.9999	0.5572	0.4320	-0.0033	0.3239	-0.0076	0.7498
256	19.25	0.03	-0.7257	9.9999	-0.4156	9.9999	0.5568	0.4208	-0.0044	0.3199	-0.0105	0.7601
257	19.33	0.03	-0.7462	9.9999	-0.4127	9.9999	0.5524	0.4181	-0.0053	0.3165	-0.0127	0.7618
258	19.41	0.03	-0.7408	9.9999	-0.4136	9.9999	0.5520	0.4243	-0.0069	0.3231	-0.0164	0.7615
259	19.48	0.04	-0.7246	9.9999	-0.4048	9.9999	0.5556	0.4667	-0.0050	0.3337	-0.0108	0.7151
260	19.56	0.04	-0.7261	9.9999	-0.4025	9.9999	0.5566	0.4723	-0.0041	0.3385	-0.0088	0.7164
261	19.64	0.04	-0.7435	9.9999	-0.4100	9.9999	0.5512	0.4246	-0.0093	0.3230	-0.0195	0.7607
262	19.72	0.04	-0.7591	9.9999	-0.4162	9.9999	0.5457	0.4135	-0.0096	0.3200	-0.0233	0.7737
263	19.79	0.04	-0.7490	9.9999	-0.4083	9.9999	0.5491	0.4244	-0.0089	0.3219	-0.0209	0.7577
264	19.87	0.04	-0.7345	9.9999	-0.4065	9.9999	0.5502	0.4337	-0.0098	0.3267	-0.0229	0.7533
265	19.95	0.05	-0.7464	9.9999	-0.4091	9.9999	0.5468	0.4537	-0.0095	0.3336	-0.0208	0.7352
266	20.02	0.05	-0.7396	9.9999	-0.4025	9.9999	0.5467	0.4734	-0.0096	0.3414	-0.0204	0.7204
267	20.10	0.04	-0.7439	9.9999	-0.4070	9.9999	0.5471	0.4653	-0.0099	0.3366	-0.0214	0.7277
268	20.17	0.05	-0.7389	9.9999	-0.4068	9.9999	0.5475	0.4545	-0.0120	0.3355	-0.0274	0.7382
269	20.25	0.05	-0.7516	9.9999	-0.4076	9.9999	0.5422	0.4405	-0.0138	0.3311	-0.0313	0.7518
270	20.33	0.05	-0.7415	9.9999	-0.4036	9.9999	0.5446	0.4685	-0.0117	0.3397	-0.0249	0.7251
271	20.39	0.04	-0.7239	9.9999	-0.3963	9.9999	0.5447	0.4491	-0.0141	0.3339	-0.0314	0.7435
272	20.48	0.05	-0.7394	9.9999	-0.3992	9.9999	0.5438	0.4607	-0.0144	0.3379	-0.0312	0.7334
273	20.56	0.05	-0.7542	9.9999	-0.4078	9.9999	0.5406	0.4577	-0.0138	0.3366	-0.0301	0.7355
274	20.62	0.05	-0.7493	9.9999	-0.4034	9.9999	0.5384	0.4638	-0.0155	0.3323	-0.0350	0.7687
275	20.70	0.04	-0.7342	9.9999	-0.3962	9.9999	0.5396	0.4754	-0.0155	0.3464	-0.0327	0.7286
276	20.79	0.05	-0.7469	9.9999	-0.3982	9.9999	0.5331	0.4525	-0.0158	0.3362	-0.0350	0.7429

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	6	0.50	1.7	45.0	01=0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
277	20.48	0.05	-0.7308	9.9999	-0.3953	9.9999	0.5365	0.0558	-0.0178	0.3373	-0.0390	0.7401
278	20.95	0.05	-0.7242	9.9999	-0.3917	9.9999	0.5373	0.0756	-0.0172	0.3441	-0.0361	0.7232
279	21.04	0.06	-0.7216	9.9999	-0.3882	9.9999	0.5379	0.0769	-0.0178	0.3474	-0.0371	0.7256
280	21.11	0.05	-0.7210	9.9999	-0.3882	9.9999	0.5379	0.0650	-0.0200	0.3342	-0.0449	0.7511
281	21.18	0.05	-0.7267	9.9999	-0.3886	9.9999	0.5347	0.0533	-0.0188	0.3381	-0.0415	0.7458
282	21.27	0.05	-0.7322	9.9999	-0.3906	9.9999	0.5272	0.0379	-0.0218	0.3218	-0.0516	0.7888
283	21.32	0.06	-0.7370	9.9999	-0.3904	9.9999	0.5297	0.0312	-0.0222	0.3298	-0.0515	0.7648
284	21.40	0.06	-0.7391	9.9999	-0.3886	9.9999	0.5253	0.0225	-0.0219	0.3271	-0.0518	0.7741
285	21.50	0.06	-0.7289	9.9999	-0.3856	9.9999	0.5306	0.0373	-0.0227	0.3413	-0.0496	0.7644
286	21.57	0.06	-0.7346	9.9999	-0.3872	9.9999	0.5271	0.0268	-0.0218	0.3392	-0.0460	0.7627
287	21.65	0.06	-0.7344	9.9999	-0.3882	9.9999	0.5241	0.0328	-0.0235	0.3113	-0.0615	0.8132
288	21.72	0.06	-0.7345	9.9999	-0.3789	9.9999	0.5266	0.0515	-0.0227	0.3387	-0.0502	0.7582
289	21.80	0.06	-0.7219	9.9999	-0.3822	9.9999	0.5296	0.0371	-0.0227	0.3323	-0.0519	0.7603
290	21.87	0.06	-0.7447	9.9999	-0.3910	9.9999	0.5250	0.0202	-0.0238	0.3268	-0.0567	0.7777
291	21.96	0.06	-0.7372	9.9999	-0.3874	9.9999	0.5255	0.0234	-0.0255	0.3258	-0.0602	0.7696
292	22.03	0.07	-0.7473	9.9999	-0.3902	9.9999	0.5221	0.0149	-0.0263	0.3151	-0.0667	0.7979
293	22.10	0.07	-0.7423	9.9999	-0.3878	9.9999	0.5224	0.0120	-0.0261	0.3128	-0.0665	0.7979
294	22.18	0.07	-0.7414	9.9999	-0.3891	9.9999	0.5207	0.0121	-0.0265	0.3128	-0.0677	0.7977
295	22.25	0.06	-0.7525	9.9999	-0.3906	9.9999	0.5190	0.0190	-0.0261	0.3064	-0.0670	0.7927
296	22.34	0.07	-0.7525	9.9999	-0.3906	9.9999	0.5190	0.0081	-0.0263	0.3136	-0.0668	0.7837
297	22.40	0.07	-0.7424	9.9999	-0.3868	9.9999	0.5211	0.0139	-0.0274	0.3189	-0.0678	0.7895
298	22.48	0.06	-0.7551	9.9999	-0.3898	9.9999	0.5182	0.0062	-0.0255	0.3171	-0.0627	0.7805
299	22.56	0.07	-0.7368	9.9999	-0.3822	9.9999	0.5201	0.0196	-0.0243	0.3150	-0.0715	0.7967
300	22.62	0.07	-0.7425	9.9999	-0.3837	9.9999	0.5168	0.0137	-0.0271	0.3111	-0.0707	0.8187
301	22.70	0.07	-0.7247	9.9999	-0.3807	9.9999	0.5218	0.0263	-0.0255	0.3271	-0.0598	0.7673
302	22.78	0.08	-0.7406	9.9999	-0.3826	9.9999	0.5170	0.0063	-0.0261	0.3181	-0.0641	0.7829
303	22.84	0.08	-0.7296	9.9999	-0.3787	9.9999	0.5189	0.0181	-0.0271	0.3221	-0.0649	0.7784
304	22.92	0.07	-0.7400	9.9999	-0.3826	9.9999	0.5170	0.0181	-0.0265	0.3266	-0.0635	0.7808
305	22.99	0.07	-0.7222	9.9999	-0.3751	9.9999	0.5194	0.0382	-0.0268	0.3364	-0.0612	0.7675
306	23.06	0.07	-0.7253	9.9999	-0.3787	9.9999	0.5189	0.0352	-0.0261	0.3330	-0.0599	0.7652
307	23.13	0.08	-0.7326	9.9999	-0.3779	9.9999	0.5160	0.0179	-0.0261	0.3275	-0.0623	0.7837
308	23.20	0.07	-0.7274	9.9999	-0.3755	9.9999	0.5162	0.0408	-0.0255	0.3327	-0.0578	0.7662
309	23.29	0.07	-0.7226	9.9999	-0.3772	9.9999	0.5152	0.0066	-0.0255	0.3492	-0.0546	0.7483
310	23.35	0.07	-0.7440	9.9999	-0.3794	9.9999	0.5099	0.0398	-0.0255	0.3162	-0.0637	0.7988
311	23.42	0.07	-0.7146	9.9999	-0.3714	9.9999	0.5168	0.0634	-0.0268	0.3494	-0.0579	0.7539
312	23.49	0.07	-0.7315	9.9999	-0.3734	9.9999	0.5105	0.0490	-0.0265	0.3619	-0.0591	0.7617
313	23.44	0.07	-0.7299	9.9999	-0.3722	9.9999	0.5105	0.0601	-0.0255	0.3461	-0.0554	0.7521
314	23.43	0.07	-0.7341	9.9999	-0.3719	9.9999	0.5062	0.0228	-0.0255	0.3295	-0.0602	0.7793
315	23.44	0.07	-0.7315	9.9999	-0.3723	9.9999	0.5098	0.0573	-0.0257	0.3469	-0.0561	0.7584
316	23.44	0.07	-0.7291	9.9999	-0.3692	9.9999	0.5064	0.0401	-0.0252	0.3393	-0.0572	0.7711
317	23.47	0.08	-0.7180	9.9999	-0.3659	9.9999	0.5096	0.0896	-0.0193	0.3567	-0.0394	0.7289
318	24.08	0.07	-0.7180	9.9999	-0.3698	9.9999	0.5041	0.0812	-0.0199	0.4041	-0.0331	0.6721
319	24.77	0.07	-0.7205	9.9999	-0.3681	9.9999	0.5081	0.0317	-0.0163	0.4130	-0.0258	0.6537
320	25.56	0.08	-0.7258	9.9999	-0.3674	9.9999	0.5066	0.0400	-0.0149	0.4496	-0.0201	0.6076
321	26.38	0.09	-0.7357	9.9999	-0.3703	9.9999	0.5033	0.0180	-0.0089	0.4579	-0.0109	0.5598
322	27.26	0.14	-0.7667	9.9999	-0.3799	9.9999	0.4942	0.0434	0.0003	0.4287	0.0003	0.5883

TEST 7 PART 6 MACH 4X10-6 0.65U 1.17 PHI 45.0 CONF 81 OF 23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	Cm3	Ch3	XCPF3	YCPF3	CNFA	CmA	ChA	XCPFA	YCPFA
323	28.24	0.12	-0.8040	9.9999	-0.3937	9.9999	0.4496	0.0572	0.0019	0.0298	0.0023	0.5015
324	29.29	0.13	-0.8641	9.9999	-0.4145	9.9999	0.4736	0.0598	-0.0025	0.0267	0.0029	0.4988
325	30.34	0.14	-0.8900	9.9999	-0.4235	9.9999	0.4758	0.0434	0.0006	0.0308	0.0007	0.5108
326	31.62	0.12	-0.8913	9.9999	-0.4261	9.9999	0.4758	0.0577	-0.0050	0.0498	-0.0058	0.5235
327	32.96	0.12	-0.9065	9.9999	-0.4283	9.9999	0.4725	0.0255	-0.0111	0.0642	-0.0134	0.5623
328	34.34	0.13	-0.9267	9.9999	-0.4369	9.9999	0.4715	0.0637	-0.0138	0.0616	-0.0181	0.6044
329	36.03	0.13	-0.9570	9.9999	-0.4493	9.9999	0.4696	0.7272	-0.0203	0.4910	-0.0336	0.6752
330	37.98	0.11	-0.9766	9.9999	-0.4566	9.9999	0.4666	0.6349	-0.0150	0.4668	-0.0234	0.7263
331	40.20	0.09	-0.9431	9.9999	-0.4447	9.9999	0.4716	0.4124	-0.0221	0.3816	-0.0536	0.9254
332	42.79	0.00	-0.9621	9.9999	-0.4538	9.9999	0.4717	0.1709	-0.0333	0.2570	-0.1948	1.5042
333	45.91	-0.06	-1.0216	9.9999	-0.4812	9.9999	0.4710	-0.0454	-0.0228	0.1293	0.5011	-2.8450
334	49.47	-0.06	-1.1449	9.9999	-0.5365	9.9999	0.4662	0.1917	-0.0152	0.2388	-0.0795	1.2245
335	53.56	-0.07	-1.1923	9.9999	-0.5512	9.9999	0.4623	-0.1155	-0.0025	0.0513	0.0217	-0.4464
336	57.78	-0.08	-1.2104	9.9999	-0.5657	9.9999	0.4603	-0.1689	-0.0097	0.0281	0.0455	-0.1886
337	58.25	-0.05	-1.2440	9.9999	-0.5749	9.9999	0.4661	-0.1642	-0.0073	0.0342	0.0508	-0.2368
338	58.27	-0.04	-1.2428	9.9999	-0.5824	9.9999	0.4666	-0.1536	-0.0096	0.0271	0.0628	-0.1765
339	58.26	-0.07	-1.2465	9.9999	-0.5853	9.9999	0.4711	-0.1572	-0.0106	0.0281	0.0688	-0.1786
340	58.27	-0.08	-1.2453	9.9999	-0.5877	9.9999	0.4720	-0.1435	-0.0097	0.0293	0.0679	-0.2044
341	58.25	0.02	-1.2328	9.9999	-0.5854	9.9999	0.4753	-0.1585	-0.0115	0.0239	0.0724	-0.1509
342	58.25	-0.01	-1.2389	9.9999	-0.5899	9.9999	0.4762	-0.1533	-0.0106	0.0278	0.0692	-0.1812
343	58.24	-0.04	-1.2342	9.9999	-0.5897	9.9999	0.4778	-0.1562	-0.0104	0.0246	0.0676	-0.1596
344	58.25	-0.04	-1.2349	9.9999	-0.5874	9.9999	0.4761	-0.1543	-0.0110	0.0246	0.0713	-0.1595
345	58.29	-0.04	-1.2724	9.9999	-0.6058	9.9999	0.4762	-0.1547	-0.0098	0.0291	0.0636	-0.1884
346	58.26	-0.04	-1.2648	9.9999	-0.6018	9.9999	0.4779	-0.1577	-0.0113	0.0246	0.0716	-0.1568
347	58.27	-0.04	-1.2690	9.9999	-0.6042	9.9999	0.4761	-0.1606	-0.0113	0.0287	0.0703	-0.1785
348	57.93	-0.03	-1.2371	9.9999	-0.5956	9.9999	0.4805	-0.1496	-0.0069	0.0354	0.0465	-0.2368
349	57.08	-0.04	-1.2503	9.9999	-0.5996	9.9999	0.4795	-0.1386	-0.0032	0.0366	0.0230	-0.2639
350	56.20	-0.01	-1.2371	9.9999	-0.5933	9.9999	0.4798	-0.1264	-0.0038	0.0396	0.0298	-0.3138
351	55.30	-0.04	-1.2238	9.9999	-0.5870	9.9999	0.4797	-0.1025	-0.0032	0.0514	0.0311	-0.5019
352	54.35	-0.07	-1.1976	9.9999	-0.5756	9.9999	0.4806	-0.0651	-0.0067	0.0795	0.1022	-1.2287

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	8	1.60	1.7	0.0	81101 23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAH	CAF	XCP
1	-2.46	-0.02	-0.2467	0.5906	0.0601	-0.1455	0.0006	0.3635	0.1054	0.2581	-2.0391
2	-2.48	-0.02	-0.2966	0.5698	0.0332	-0.1762	0.0006	0.3576	0.1031	0.2545	-1.9887
3	-2.46	-0.02	-0.2455	0.5674	0.1300	-0.1608	0.0007	0.3574	0.1023	0.2551	-1.9869
4	-2.46	-0.01	-0.2909	0.5859	0.1765	-0.2425	0.0007	0.3604	0.1038	0.2566	-1.9888
5	-2.46	-0.01	-0.2961	0.5832	0.1506	-0.2300	0.0007	0.3662	0.1061	0.2601	-1.8894
6	-2.38	-0.02	-0.2510	0.5263	0.1143	-0.1609	0.0007	0.3582	0.1035	0.2547	-2.0975
7	-2.17	-0.02	-0.2742	0.5446	0.1031	-0.2255	0.0008	0.3680	0.1064	0.2616	-1.9852
8	-2.07	-0.01	-0.2292	0.4820	0.1049	-0.1859	-0.0049	0.3541	0.1020	0.2521	-2.1027
9	-1.96	-0.01	-0.2524	0.4998	0.0972	-0.1405	0.0007	0.3602	0.1049	0.2553	-1.9799
10	-1.78	-0.01	-0.2303	0.4565	0.0904	-0.2335	-0.0048	0.3661	0.1079	0.2582	-1.9767
11	-1.68	-0.01	-0.2088	0.4106	0.1065	-0.1790	-0.0048	0.3681	0.1100	0.2581	-1.9664
12	-1.56	-0.01	-0.1975	0.3875	0.1272	-0.2284	0.0010	0.3683	0.1068	0.2615	-1.9618
13	-1.42	-0.01	-0.1866	0.3658	0.0791	-0.2026	-0.0047	0.3693	0.1087	0.2606	-1.9582
14	-1.30	-0.01	-0.1641	0.3341	0.0716	-0.1560	-0.0047	0.3724	0.1088	0.2638	-2.0360
15	-1.17	-0.02	-0.1612	0.3264	0.0150	-0.0931	-0.0048	0.3666	0.1071	0.2595	-2.1420
16	-1.03	-0.01	-0.1530	0.3114	0.0703	-0.1546	-0.0047	0.3645	0.1046	0.2599	-2.0357
17	-0.92	-0.01	-0.1056	0.2742	0.0928	-0.1960	-0.0045	0.3692	0.1082	0.2610	-2.5981
18	-0.84	-0.00	-0.0940	0.2514	0.1072	-0.1697	-0.0045	0.3605	0.1013	0.2592	-2.6611
19	-0.66	-0.00	-0.1045	0.2224	0.1433	-0.1836	-0.0102	0.3577	0.0994	0.2583	-2.0316
20	-0.51	-0.00	-0.0875	0.1778	0.1303	-0.1913	-0.0102	0.3543	0.0990	0.2603	-2.0286
21	-0.43	-0.01	-0.0524	0.1365	0.0486	-0.1346	-0.0102	0.3576	0.0998	0.2578	-2.5853
22	-0.32	0.01	-0.0535	0.1239	0.1364	-0.2285	-0.0043	0.3606	0.1005	0.2601	-2.2972
23	-0.19	0.01	-0.0310	0.0918	0.1777	-0.2160	-0.0100	0.3504	0.0968	0.2536	-2.9613
24	-0.06	0.00	-0.0039	0.0208	0.0941	-0.1773	-0.0099	0.3620	0.1005	0.2615	-7.1857
25	0.04	-0.00	-0.0201	0.0695	0.0696	-0.1638	-0.0100	0.3654	0.1020	0.2634	-3.4547
26	0.17	0.01	0.0136	0.0154	0.1733	-0.2715	-0.0098	0.3520	0.0942	0.2577	1.1294
27	0.31	0.00	0.0261	0.0196	0.0969	-0.1681	-0.0099	0.3505	0.0975	0.2530	0.7494
28	0.40	0.00	0.0230	-0.0190	0.0823	-0.1558	-0.0156	0.3627	0.0972	0.2655	-0.8261
29	0.54	-0.00	0.0468	-0.0376	0.0378	-0.1144	-0.0156	0.3537	0.0986	0.2551	-0.8038
30	0.65	0.01	0.0353	-0.0292	0.1531	-0.2128	-0.0097	0.3611	0.1009	0.2602	-0.8278
31	0.75	0.00	0.0496	-0.0376	0.0762	-0.0908	-0.0156	0.3631	0.1008	0.2623	-0.8056
32	0.89	-0.01	0.0585	-0.0512	-0.0187	-0.0516	-0.0100	0.3631	0.1028	0.2607	-1.0462
33	1.00	0.01	0.0544	-0.0615	0.1515	-0.2317	-0.0096	0.3716	0.1057	0.2659	-1.0524
34	1.12	0.01	0.1051	-0.1265	0.2281	-0.3426	-0.0093	0.3630	0.1056	0.2574	-1.2038
35	1.25	0.00	0.0922	-0.1301	0.1071	-0.1698	-0.0096	0.3674	0.1075	0.2599	-1.4108
36	1.39	-0.00	0.0799	-0.1340	0.0748	-0.1653	-0.0098	0.3696	0.1053	0.2643	-1.6841
37	1.47	0.00	0.1150	-0.1763	0.1266	-0.2099	-0.0095	0.3709	0.1101	0.2608	-1.5332
38	1.60	0.00	0.1386	-0.1997	0.1150	-0.2269	-0.0094	0.3694	0.1097	0.2597	-1.4051
39	1.70	0.01	0.1613	-0.2307	0.1344	-0.1758	-0.0095	0.3698	0.1105	0.2593	-1.4924
40	1.82	0.00	0.1593	-0.2721	0.0440	-0.1775	-0.0094	0.3642	0.1064	0.2578	-1.4798
41	1.93	-0.01	0.1490	-0.2650	0.0124	-0.1104	-0.0097	0.3734	0.1098	0.2636	-1.6445
42	2.03	0.00	0.1834	-0.3084	0.0941	-0.1777	-0.0094	0.3684	0.1049	0.2585	-1.6379
43	2.16	0.01	0.2071	-0.3190	0.1324	-0.1639	-0.0094	0.3653	0.1106	0.2547	-1.5401
44	2.28	0.00	0.2179	-0.3558	0.1062	-0.1688	-0.0094	0.3596	0.1069	0.2527	-1.6319
45	2.38	-0.00	0.2166	-0.3626	0.0342	-0.0762	-0.0095	0.3675	0.1091	0.2584	-1.7663
46	2.51	-0.00	0.2524	-0.4110	0.0726	-0.1378	-0.0093	0.3720	0.1115	0.2605	-1.6283

TEST	PART	MACH	RN/D*6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
1	B	1.60	1.7	0.0	B1W6F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	2.61	-0.00	0.2398	-0.4295	0.0010	-0.1957	-0.0093	0.3580	0.1111	0.2469	-1.7909
48	2.72	-0.00	0.2621	-0.4744	0.0295	-0.0576	-0.0095	0.3744	0.1163	0.2581	-1.8118
49	2.85	-0.01	0.2979	-0.5030	0.0367	-0.1138	-0.0093	0.3669	0.1151	0.2518	-1.6889
50	2.97	-0.01	0.2859	-0.4940	0.0868	-0.1397	-0.0035	0.3728	0.1148	0.2580	-1.7275
51	3.07	-0.01	0.3044	-0.5345	0.0957	-0.1568	-0.0091	0.3761	0.1192	0.2569	-1.7498
52	3.19	-0.00	0.3429	-0.5948	0.0727	-0.1362	-0.0091	0.3734	0.1173	0.2561	-1.7367
53	3.31	-0.00	0.3191	-0.5762	0.1059	-0.1892	-0.0091	0.3735	0.1185	0.2550	-1.8058
54	3.40	-0.01	0.3420	-0.6224	0.0161	-0.0753	-0.0036	0.3759	0.1178	0.2581	-1.8201
55	3.53	0.00	0.3655	-0.6469	0.1657	-0.2156	-0.0089	0.3697	0.1174	0.2523	-1.7534
56	3.65	-0.00	0.3761	-0.6772	0.1088	-0.1522	-0.0090	0.3713	0.1192	0.2521	-1.8006
57	3.75	-0.00	0.3877	-0.6862	0.0956	-0.1492	-0.0090	0.3675	0.1156	0.2519	-1.7698
58	3.87	-0.01	0.3985	-0.7228	0.0704	-0.1557	-0.0090	0.3691	0.1207	0.2484	-1.8138
59	3.98	0.01	0.4103	-0.7464	0.1406	-0.2220	-0.0088	0.3696	0.1208	0.2488	-1.8201
60	4.09	0.00	0.4097	-0.7605	0.1659	-0.2159	-0.0086	0.3712	0.1219	0.2493	-1.8562
61	4.21	-0.01	0.4206	-0.7971	0.0245	-0.1332	-0.0090	0.3688	0.1205	0.2483	-1.8950
62	4.33	-0.01	0.4316	-0.8056	0.0526	-0.0798	-0.0090	0.3718	0.1230	0.2468	-1.8655
63	4.42	-0.00	0.4645	-0.8612	0.0607	-0.1373	-0.0089	0.3711	0.1242	0.2469	-1.8458
64	4.53	-0.01	0.4657	-0.8747	0.0843	-0.1495	-0.0088	0.3741	0.1264	0.2477	-1.8788
65	4.64	-0.01	0.4848	-0.9066	0.0912	-0.0965	-0.0088	0.3775	0.1275	0.2500	-1.8549
66	4.74	0.00	0.5125	-0.9252	0.0975	-0.1619	-0.0087	0.3678	0.1235	0.2443	-1.8053
67	4.86	-0.00	0.5226	-0.9754	0.0617	-0.1040	-0.0088	0.3738	0.1293	0.2445	-1.9666
68	4.96	0.00	0.5111	-0.9522	0.1090	-0.1527	-0.0087	0.3671	0.1224	0.2447	-1.8632
69	5.07	-0.01	0.5570	-1.0305	0.0277	-0.0865	-0.0087	0.3741	0.1316	0.2445	-1.8502
70	5.17	-0.00	0.5333	-1.0269	0.1016	-0.2135	-0.0086	0.3769	0.1306	0.2463	-1.9257
71	5.26	0.00	0.5676	-1.0814	0.0744	-0.1006	-0.0087	0.3806	0.1365	0.2441	-1.9061
72	5.36	-0.00	0.5913	-1.1306	0.1408	-0.2228	-0.0084	0.3840	0.1369	0.2471	-1.8612
73	5.47	-0.00	0.5901	-1.1278	0.1322	-0.1748	-0.0085	0.3785	0.1357	0.2428	-1.9112
74	5.58	-0.00	0.6124	-1.1543	0.0477	-0.1320	-0.0142	0.3817	0.1380	0.2437	-1.8915
75	5.68	0.00	0.6245	-1.1844	0.1178	-0.2011	-0.0141	0.3795	0.1365	0.2430	-1.8708
76	5.78	0.01	0.6242	-1.1827	0.1038	-0.1750	-0.0084	0.3901	0.1420	0.2481	-1.8946
77	5.88	-0.00	0.6467	-1.2137	0.0388	-0.0867	-0.0142	0.3850	0.1398	0.2452	-1.8766
78	5.97	-0.00	0.6698	-1.2602	0.0632	-0.0696	-0.0084	0.3814	0.1372	0.2442	-1.8818
79	6.07	0.00	0.6926	-1.2921	0.1097	-0.1333	-0.0140	0.3761	0.1387	0.2374	-1.8656
80	6.17	-0.00	0.6917	-1.3052	0.0913	-0.0596	-0.0141	0.3810	0.1401	0.2409	-1.8871
81	6.28	0.00	0.6919	-1.3205	0.1079	-0.1721	-0.0140	0.3759	0.1392	0.2367	-1.9086
82	6.37	0.01	0.7033	-1.3438	0.1777	-0.2173	-0.0139	0.3839	0.1426	0.2413	-1.9107
83	6.49	-0.00	0.7374	-1.3983	0.0616	-0.0698	-0.0140	0.3857	0.1440	0.2417	-1.8963
84	6.59	-0.01	0.7256	-1.3887	-0.0043	0.0098	-0.0143	0.3879	0.1458	0.2421	-1.9162
85	6.67	0.00	0.7466	-1.4066	0.0761	-0.1022	-0.0196	0.3863	0.1463	0.2380	-1.8790
86	6.78	0.00	0.7601	-1.4331	0.1096	-0.1536	-0.0138	0.3830	0.1455	0.2375	-1.8815
87	6.89	0.01	0.7826	-1.4763	0.1437	-0.1754	-0.0137	0.3864	0.1470	0.2394	-1.8859
88	6.97	0.01	0.7822	-1.4753	0.1102	-0.1442	-0.0195	0.3859	0.1462	0.2397	-1.8861
89	7.08	0.01	0.8150	-1.5440	0.0756	-0.1117	-0.0195	0.3920	0.1517	0.2403	-1.8921
90	7.19	-0.01	0.8160	-1.5542	0.0772	-0.0732	-0.0138	0.3852	0.1503	0.2349	-1.8926
91	7.27	-0.01	0.8520	-1.6079	0.0262	-0.0954	-0.0137	0.3838	0.1512	0.2376	-1.8631
92	7.36	-0.00	0.8274	-1.5686	0.0975	-0.1322	-0.0137	0.3946	0.1534	0.2412	-1.8946

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/L-E PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 B 1.06 1.7 0.0 Blauf23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAN	CAF	XCP
93	7.47	0.00	0.8891	-1.6105	0.1779	-0.2177	-0.0135	0.3818	0.1475	0.2343	-1.8659
94	7.56	0.00	0.8852	-1.6554	0.0853	-0.1308	-0.0193	0.3827	0.1515	0.2312	-1.8782
95	7.66	-0.01	0.8965	-1.6784	-0.0050	-0.0182	-0.0137	0.3893	0.1567	0.2326	-1.8722
96	7.76	-0.00	0.8957	-1.6791	0.1016	-0.0757	-0.0079	0.3883	0.1574	0.2305	-1.8725
97	7.85	-0.00	0.9190	-1.7265	0.0010	-0.1386	-0.0135	0.3964	0.1602	0.2362	-1.8765
98	7.96	-0.00	0.9182	-1.7232	0.0299	-0.0952	-0.0193	0.3886	0.1582	0.2304	-1.8767
99	8.03	-0.00	0.9022	-1.7424	0.1237	-0.1170	-0.0134	0.3892	0.1564	0.2328	-1.8493
100	8.12	-0.00	0.9034	-1.7814	0.0774	-0.0935	-0.0191	0.3943	0.1634	0.2309	-1.8689
101	8.21	-0.00	0.9045	-1.7880	0.1100	-0.1248	-0.0133	0.3937	0.1586	0.2351	-1.8530
102	8.36	0.01	0.9251	-1.8245	0.1795	-0.1994	-0.0189	0.3962	0.1630	0.2312	-1.8711
103	8.39	0.01	0.9256	-1.8564	0.1432	-0.1957	-0.0189	0.3995	0.1667	0.2328	-1.8608
104	8.47	-0.01	1.0043	-1.8744	0.0848	-0.1511	-0.0132	0.3905	0.1664	0.2241	-1.8628
105	8.55	-0.00	1.0216	-1.8842	0.1324	-0.1652	-0.0188	0.4031	0.1649	0.2382	-1.8497
106	8.64	-0.00	1.0316	-1.9250	0.0965	-0.1421	-0.0132	0.3953	0.1679	0.2274	-1.8668
107	8.73	-0.01	1.0312	-1.9246	0.0813	-0.1167	-0.0132	0.4006	0.1708	0.2298	-1.8663
108	8.82	-0.01	1.0360	-1.9518	0.0486	-0.1266	-0.0188	0.3985	0.1701	0.2284	-1.8388
109	8.92	-0.01	1.0467	-2.0114	0.0395	-0.0782	-0.0131	0.4123	0.1764	0.2359	-1.8479
110	9.01	-0.00	1.0565	-2.0116	0.0788	-0.1421	-0.0130	0.4026	0.1789	0.2237	-1.8681
111	9.16	-0.00	1.1110	-2.0574	0.0721	-0.1390	-0.0129	0.4080	0.1783	0.2297	-1.8519
112	9.19	-0.01	1.1231	-2.0568	0.0723	-0.1296	-0.0129	0.4087	0.1808	0.2279	-1.8276
113	9.28	-0.00	1.1230	-2.0525	0.0514	-0.1001	-0.0072	0.4010	0.1734	0.2276	-1.8277
114	9.34	-0.00	1.1219	-2.0801	0.1496	-0.1545	-0.0071	0.4022	0.1756	0.2266	-1.8541
115	9.43	0.01	1.1546	-2.1215	0.1663	-0.2074	-0.0127	0.4059	0.1775	0.2284	-1.8339
116	9.54	0.00	1.1577	-2.1434	0.1319	-0.1855	-0.0127	0.4035	0.1801	0.2234	-1.8368
117	9.61	0.00	1.1936	-2.1552	0.1310	-0.1844	-0.0126	0.4080	0.1777	0.2303	-1.8255
118	9.69	-0.00	1.2034	-2.2016	0.1095	-0.1547	-0.0069	0.4033	0.1807	0.2226	-1.8294
119	9.82	0.01	1.2169	-2.2104	0.1324	-0.1764	-0.0068	0.4106	0.1843	0.2263	-1.8193
120	9.89	0.00	1.2143	-2.2093	0.1172	-0.2015	-0.0125	0.4016	0.1829	0.2187	-1.8195
121	9.96	0.00	1.2268	-2.2606	0.1196	-0.1844	-0.0068	0.4086	0.1851	0.2235	-1.8456
122	10.06	-0.01	1.2364	-2.2547	0.0863	-0.1330	-0.0126	0.4084	0.1862	0.2226	-1.8236
123	10.17	0.00	1.2933	-2.3207	0.1664	-0.2079	-0.0066	0.4126	0.1880	0.2246	-1.8081
124	10.24	0.00	1.2976	-2.2778	0.1882	-0.2683	-0.0124	0.4034	0.1847	0.2187	-1.8258
125	10.34	0.00	1.3043	-2.3378	0.1203	-0.1760	-0.0064	0.4057	0.1877	0.2180	-1.7896
126	10.44	-0.01	1.3053	-2.3950	0.0813	-0.1195	-0.0067	0.4098	0.1923	0.2175	-1.8348
127	10.51	0.00	1.3106	-2.3674	0.1564	-0.1766	-0.0066	0.4197	0.1961	0.2236	-1.8125
128	10.60	0.00	1.3259	-2.4135	0.2014	-0.2409	-0.0064	0.4116	0.1946	0.2170	-1.8163
129	10.67	0.00	1.3255	-2.4098	0.1540	-0.2064	-0.0065	0.4153	0.1925	0.2228	-1.8164
130	10.78	0.00	1.3351	-2.4165	0.1775	-0.2389	-0.0064	0.4128	0.1996	0.2132	-1.8074
131	10.86	-0.00	1.3446	-2.4534	0.1281	-0.2325	-0.0064	0.4226	0.1988	0.2238	-1.8203
132	10.95	-0.01	1.3718	-2.4726	0.1650	-0.2280	-0.0120	0.4175	0.1973	0.2202	-1.8024
133	11.04	-0.00	1.3595	-2.4627	0.1662	-0.1949	-0.0121	0.4066	0.1984	0.2082	-1.8115
134	11.12	-0.01	1.4139	-2.5370	0.1442	-0.1878	-0.0062	0.4180	0.2019	0.2166	-1.7891
135	11.21	-0.01	1.4196	-2.5041	0.1197	-0.1738	-0.0063	0.4175	0.2017	0.2158	-1.8100
136	11.30	0.00	1.4280	-2.5124	0.1875	-0.2683	-0.0118	0.4239	0.2058	0.2181	-1.8017
137	11.38	-0.01	1.4522	-2.5774	0.1402	-0.2236	-0.0061	0.4165	0.2024	0.2141	-1.7749
138	11.46	-0.02	1.4447	-2.5736	0.1268	-0.1721	-0.0061	0.4097	0.1993	0.2104	-1.7758

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1. PART B 1.00 1.7 RX10-6 0.0 PHI CONF 81a0F23. L 0.0 DEL1 0 DEL2 0. DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	11.58	-0.02	1.4597	-2.6233	0.0719	-0.1394	-0.0062	0.4207	0.2055	0.2152	-1.7972
140	11.64	-0.02	1.4707	-2.6454	0.0730	-0.1409	-0.0062	0.4202	0.2078	0.2124	-1.7991
141	11.72	-0.02	1.4940	-2.6908	0.0681	-0.1959	-0.0060	0.4183	0.2026	0.2157	-1.7731
142	11.84	-0.01	1.5172	-2.6986	0.1400	-0.2234	-0.0059	0.4131	0.2078	0.2053	-1.7772
143	11.90	-0.01	1.5154	-2.7097	0.1555	-0.1984	-0.0059	0.4184	0.2077	0.2107	-1.7878
144	11.98	-0.01	1.5063	-2.7002	0.2004	-0.2606	-0.0059	0.4081	0.2011	0.2070	-1.7450
145	12.06	-0.01	1.5421	-2.7175	0.1540	-0.2173	0.0057	0.4153	0.2058	0.2095	-1.7622
146	12.15	-0.02	1.5203	-2.7344	0.0774	-0.0853	-0.0006	0.4191	0.2036	0.2155	-1.7892
147	12.23	-0.02	1.6104	-2.8269	0.0283	-0.0793	-0.0001	0.4203	0.2139	0.2064	-1.7554
148	12.32	-0.02	1.6102	-2.8268	0.0627	-0.1117	0.0057	0.4212	0.2128	0.2084	-1.7555
149	12.41	-0.01	1.6092	-2.8400	0.1440	-0.1879	0.0001	0.4168	0.2139	0.2049	-1.7648
150	12.48	-0.02	1.6129	-2.8586	0.1091	-0.1553	0.0056	0.4209	0.2165	0.2124	-1.7506
151	12.57	-0.01	1.6325	-2.8582	0.1650	-0.1585	0.0059	0.4282	0.2161	0.2121	-1.7507
152	12.66	-0.02	1.6573	-2.8992	0.0975	-0.1483	0.0059	0.4279	0.2176	0.2103	-1.7389
153	12.74	-0.02	1.6637	-2.9224	0.1308	-0.1954	0.0060	0.4296	0.2164	0.2112	-1.7566
154	12.83	-0.02	1.7047	-2.9865	0.0756	-0.0934	0.0059	0.4305	0.2243	0.2062	-1.7468
155	12.90	-0.02	1.6920	-2.9213	0.1217	-0.1367	0.0059	0.4215	0.2191	0.2024	-1.7569
156	13.00	-0.01	1.7205	-3.0084	0.1335	-0.1582	0.0061	0.4411	0.2255	0.2156	-1.7489
157	13.08	-0.02	1.7067	-2.9953	0.1579	-0.1508	0.0060	0.4306	0.2251	0.2055	-1.7471
158	13.16	-0.02	1.7216	-2.9522	0.0832	-0.1506	0.0061	0.4188	0.2180	0.2008	-1.7158
159	13.26	-0.02	1.7411	-3.0080	0.1796	-0.2015	0.0063	0.4274	0.2215	0.2059	-1.7277
160	13.32	-0.01	1.7238	-2.9706	0.1807	-0.1721	0.0062	0.4258	0.2222	0.2036	-1.7173
161	13.40	-0.02	1.7529	-2.9883	0.0969	-0.1333	0.0062	0.4262	0.2248	0.1994	-1.7047
162	13.50	-0.03	1.7522	-3.0454	0.0398	-0.0700	0.0061	0.4371	0.2332	0.2039	-1.7383
163	13.58	-0.03	1.7675	-3.0733	0.0566	-0.0543	0.0062	0.4382	0.2343	0.2039	-1.7193
164	13.66	-0.02	1.7992	-3.0828	0.1432	-0.1769	0.0064	0.4462	0.2372	0.2090	-1.7133
165	13.76	-0.02	1.8031	-3.1575	0.1416	-0.1527	0.0065	0.4536	0.2429	0.2107	-1.7132
166	13.83	-0.02	1.8008	-3.1385	0.1421	-0.1858	0.0066	0.4515	0.2455	0.2060	-1.7054
167	13.92	-0.02	1.8150	-3.0882	0.1311	-0.1654	0.0065	0.4520	0.2394	0.2126	-1.7015
168	13.99	-0.02	1.8360	-3.1022	0.1417	-0.1852	0.0066	0.4643	0.2456	0.2027	-1.6897
169	14.10	-0.03	1.8677	-3.1530	0.0825	-0.1697	0.0066	0.4556	0.2498	0.2058	-1.6882
170	14.16	-0.02	1.8686	-3.1254	0.1340	-0.1386	0.0067	0.4512	0.2480	0.2032	-1.6727
171	14.24	-0.03	1.9018	-3.1933	0.0516	-0.0710	0.0066	0.4610	0.2549	0.2061	-1.6791
172	14.34	-0.02	1.9113	-3.1866	0.1106	-0.1062	0.0011	0.4669	0.2554	0.2115	-1.6661
173	14.42	-0.03	1.8958	-3.1982	0.0932	-0.1798	0.0066	0.4631	0.2514	0.2117	-1.6878
174	14.49	-0.03	1.9198	-3.1885	0.0876	-0.0951	0.0068	0.4562	0.2506	0.2036	-1.6608
175	14.59	-0.02	1.9568	-3.2156	0.1210	-0.1750	0.0070	0.4650	0.2558	0.2092	-1.6451
176	14.66	-0.02	1.9543	-3.2152	0.1388	-0.1214	0.0012	0.4589	0.2564	0.2045	-1.6452
177	14.76	-0.03	1.9844	-3.2365	0.1452	-0.1688	-0.0063	0.4668	0.2580	0.2088	-1.6474
178	14.84	-0.03	1.9736	-3.2549	0.1213	-0.1365	0.0014	0.4601	0.2529	0.2072	-1.6497
179	14.94	-0.02	1.9956	-3.2381	0.2480	-0.2453	-0.0060	0.4577	0.2558	0.2019	-1.6381
180	15.01	-0.02	1.9737	-3.1985	0.1783	-0.1796	-0.0062	0.4475	0.2555	0.1920	-1.6206
181	15.10	-0.03	1.9945	-3.2063	0.1086	-0.1439	-0.0398	0.4457	0.2555	0.1902	-1.6158
182	15.18	-0.03	2.0101	-3.2282	0.0532	-0.0825	0.0014	0.4474	0.2553	0.1921	-1.6060
183	15.28	-0.03	2.0219	-3.2065	0.1098	-0.1148	-0.0097	0.4466	0.2557	0.1909	-1.5869
184	15.34	-0.03	1.9871	-3.1387	0.1080	-0.1529	-0.0154	0.4393	0.2558	0.1835	-1.5795

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 5 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	B	1.60	1.7	0.0	B1C0F23	B.B.	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
185	15.43	-0.03	2.0046	-3.0696	0.1443	-0.1293	-0.0040	0.4423	0.2545	0.1878	-1.5317
186	15.53	-0.03	2.0170	-3.0807	0.1465	-0.1333	-0.0096	0.4369	0.2571	0.1778	-1.5273
187	15.60	-0.03	2.0365	-3.1392	0.0825	-0.1486	-0.0152	0.4447	0.2633	0.1814	-1.5408
188	15.69	-0.04	2.0548	-3.1492	0.1772	-0.1950	-0.0037	0.4512	0.2644	0.1868	-1.5358
189	15.76	-0.04	2.0725	-3.1795	0.1295	-0.1931	-0.0150	0.4493	0.2680	0.1813	-1.5342
190	15.86	-0.02	2.0880	-3.2030	0.2544	-0.2658	-0.0092	0.4589	0.2729	0.1859	-1.5378
191	15.95	-0.04	2.0615	-3.1280	0.1176	-0.1823	-0.0036	0.4486	0.2732	0.1754	-1.5176
192	16.03	-0.03	2.0729	-3.1376	0.1534	-0.1855	-0.0038	0.4540	0.2733	0.1807	-1.5136
193	16.12	-0.04	2.0973	-3.1134	0.2619	-0.2169	-0.0148	0.4561	0.2773	0.1788	-1.4867
194	16.19	-0.03	2.1072	-3.1491	0.1938	-0.1666	-0.0148	0.4634	0.2795	0.1839	-1.4946
195	16.27	-0.04	2.1143	-3.1227	0.0534	-0.0317	-0.0093	0.4650	0.2803	0.1847	-1.4769
196	16.35	-0.04	2.0915	-3.0630	0.0978	-0.1124	-0.0034	0.4588	0.2773	0.1815	-1.4662
197	16.43	-0.03	2.1364	-3.1539	0.0663	-0.0725	-0.0034	0.4745	0.2832	0.1913	-1.4761
198	16.51	-0.04	2.1498	-3.1075	0.1185	-0.0950	-0.0089	0.4655	0.2854	0.1801	-1.4458
199	16.60	-0.03	2.1277	-3.0342	0.1557	-0.1477	-0.0032	0.4635	0.2862	0.1773	-1.4268
200	16.68	-0.03	2.1497	-3.0792	0.2102	-0.2364	-0.0086	0.4615	0.2865	0.1750	-1.4328
201	16.76	-0.03	2.1741	-3.1277	0.2294	-0.2138	-0.0066	0.4731	0.2920	0.1812	-1.4386
202	16.84	-0.03	2.1621	-3.1036	0.1753	-0.2169	-0.0086	0.4662	0.2906	0.1737	-1.4355
203	16.92	-0.04	2.1366	-3.0347	0.1295	-0.1997	-0.0030	0.4634	0.2935	0.1700	-1.4227
204	17.01	-0.04	2.2145	-3.0616	0.0756	-0.0823	-0.0086	0.4644	0.2942	0.1703	-1.3794
205	17.09	-0.05	2.1931	-3.1107	-0.0025	0.0272	-0.0089	0.4687	0.2987	0.1701	-1.4184
206	17.16	-0.04	2.2046	-3.1201	0.0055	-0.0922	-0.0030	0.4754	0.2979	0.1776	-1.4152
207	17.24	-0.04	2.2094	-3.0364	0.1103	-0.0944	-0.0142	0.4650	0.2987	0.1664	-1.3761
208	17.35	-0.04	2.2433	-3.1091	0.0295	-0.0659	-0.0086	0.4716	0.3027	0.1690	-1.3734
209	17.43	-0.04	2.2518	-3.0852	0.0508	-0.1394	-0.0139	0.4725	0.2998	0.1728	-1.3781
210	17.49	-0.04	2.2393	-3.0895	0.0761	-0.1364	-0.0083	0.4783	0.3085	0.1699	-1.3797
211	17.56	-0.04	2.2632	-3.0749	0.0422	-0.1670	-0.0082	0.4779	0.3053	0.1727	-1.3609
212	17.60	-0.03	2.2843	-3.0667	0.1300	-0.2113	-0.0023	0.4720	0.3023	0.1698	-1.3425
213	17.75	-0.03	2.2713	-3.0760	0.1521	-0.2113	-0.0080	0.4762	0.3091	0.1682	-1.3517
214	17.83	-0.03	2.3304	-3.0744	0.1965	-0.2172	-0.0136	0.4774	0.3104	0.1671	-1.3189
215	17.91	-0.03	2.3093	-3.0541	0.1444	-0.1371	-0.0192	0.4771	0.3100	0.1672	-1.3243
216	17.99	-0.04	2.3426	-3.0403	0.1054	-0.1693	-0.0134	0.4698	0.3074	0.1625	-1.2978
217	18.08	-0.04	2.2947	-3.0026	0.0495	-0.0972	-0.0136	0.4692	0.3089	0.1604	-1.3084
218	18.17	-0.04	2.2954	-3.0191	0.0959	-0.1299	-0.0079	0.4734	0.3114	0.1621	-1.3147
219	18.24	-0.03	2.3563	-3.0091	0.1557	-0.1570	-0.0149	0.4718	0.3173	0.1546	-1.2778
220	18.32	-0.03	2.3570	-3.0108	0.2295	-0.3063	0.0040	0.4643	0.3093	0.1551	-1.2776
221	18.41	-0.04	2.3557	-2.9748	0.0669	-0.0685	-0.0190	0.4683	0.3166	0.1518	-1.2649
222	18.48	-0.04	2.3329	-2.9338	0.0503	-0.1095	-0.0134	0.4611	0.3155	0.1457	-1.2576
223	18.56	-0.03	2.3697	-2.9882	0.1692	-0.1969	-0.0187	0.4733	0.3191	0.1543	-1.2626
224	18.66	-0.04	2.3871	-2.9578	0.0967	-0.2421	-0.0016	0.4745	0.3195	0.1551	-1.2424
225	18.74	-0.04	2.4114	-2.9504	0.0979	-0.0922	-0.0187	0.4663	0.3183	0.1481	-1.2235
226	18.83	-0.03	2.4335	-3.0101	0.1402	-0.1589	-0.0129	0.4785	0.3227	0.1559	-1.2378
227	18.90	-0.04	2.4221	-2.9584	0.0535	-0.0705	-0.0130	0.4745	0.3242	0.1504	-1.2214
228	18.97	-0.04	2.3994	-2.9264	0.1183	-0.1414	-0.0073	0.4698	0.3234	0.1465	-1.2199
229	19.06	-0.03	2.4552	-3.0116	0.1201	-0.0071	-0.0302	0.4879	0.3323	0.1556	-1.2267
230	19.13	-0.04	2.4662	-3.0350	0.1548	-0.1551	-0.0070	0.4836	0.3278	0.1558	-1.2305

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 8 MACH 1.44 RE10-6 1.7 PHI 0.0 CONF 81=OF23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CM	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
231	19.21	-0.04	2.4777	-3.0290	0.0938	-0.1380	-0.0176	0.4965	0.3319	0.1646	-1.2225
232	19.29	-0.02	2.4923	-2.9710	0.2495	-0.1639	-0.0070	0.4785	0.3318	0.1468	-1.1921
233	19.36	-0.03	2.5111	-2.9834	0.1279	-0.1699	-0.0067	0.4834	0.3304	0.1535	-1.1881
234	19.45	-0.04	2.4872	-2.9356	0.0959	-0.1100	-0.0181	0.4877	0.3317	0.1560	-1.1803
235	19.52	-0.04	2.5225	-2.9741	0.1215	-0.2529	-0.0009	0.4805	0.3355	0.1450	-1.1806
236	19.60	-0.02	2.4996	-2.9177	0.2477	-0.1924	-0.0123	0.4842	0.3376	0.1466	-1.1673
237	19.66	-0.03	2.5364	-2.9166	0.1963	-0.2416	-0.0170	0.4812	0.3340	0.1472	-1.1586
238	19.76	-0.03	2.5575	-2.9339	0.1624	-0.1343	-0.0121	0.4956	0.3395	0.1559	-1.1472
239	19.83	-0.03	2.5747	-2.9938	0.1962	-0.2342	-0.0006	0.4980	0.3460	0.1520	-1.1605
240	19.91	-0.03	2.5882	-2.9852	0.1587	-0.3497	0.0108	0.4907	0.3428	0.1479	-1.1624
241	19.99	-0.03	2.6078	-2.9986	0.2285	-0.2838	-0.0060	0.4977	0.3427	0.1550	-1.1499
242	20.06	-0.03	2.5713	-2.9698	0.1960	-0.2333	-0.0175	0.4918	0.3444	0.1469	-1.1567
243	20.15	-0.03	2.6313	-2.9600	0.1454	-0.2650	-0.0115	0.4973	0.3496	0.1477	-1.1249
244	20.23	-0.04	2.6527	-3.0180	0.1330	-0.2531	-0.0115	0.5113	0.3486	0.1629	-1.1379
245	20.30	-0.04	2.6774	-2.9961	0.1131	-0.2054	-0.0001	0.5158	0.3514	0.1644	-1.1190
246	20.38	-0.04	2.6693	-3.0006	0.1143	-0.1120	-0.0115	0.5113	0.3516	0.1597	-1.1241
247	20.45	-0.03	2.6942	-2.9805	0.1575	-0.4030	0.0003	0.5084	0.3507	0.1577	-1.1042
248	20.53	-0.03	2.6871	-2.9285	0.2446	-0.3636	-0.0109	0.5010	0.3500	0.1510	-1.0897
249	20.61	-0.03	2.7177	-2.9506	0.1611	-0.1903	-0.0110	0.5072	0.3524	0.1548	-1.0857
250	20.68	-0.04	2.7175	-2.9361	0.1165	-0.1385	-0.0111	0.5015	0.3506	0.1509	-1.0804
251	20.76	-0.04	2.7411	-2.9266	0.1627	-0.1822	-0.0109	0.5155	0.3564	0.1591	-1.0677
252	20.83	-0.02	2.7298	-2.9188	0.2591	-0.3315	0.0005	0.5109	0.3585	0.1524	-1.0691
253	20.92	-0.03	2.7178	-2.8803	0.2078	-0.2144	-0.0053	0.5076	0.3574	0.1502	-1.0598
254	21.00	-0.03	2.7682	-2.9170	0.1311	-0.0926	-0.0165	0.5187	0.3552	0.1555	-1.0538
255	21.09	-0.05	2.8375	-2.9425	-0.0370	0.0953	-0.0222	0.5219	0.3602	0.1617	-1.0378
256	21.17	-0.04	2.8038	-2.8858	0.1032	-0.1454	-0.0050	0.5087	0.3588	0.1499	-1.0304
257	21.23	-0.05	2.7796	-2.8693	-0.0147	-0.1222	-0.0220	0.5046	0.3581	0.1465	-1.0322
258	21.33	-0.03	2.8390	-2.8891	0.2299	-0.3817	0.0012	0.5109	0.3595	0.1514	-1.0177
259	21.39	-0.03	2.8516	-2.8285	0.2044	-0.1950	-0.0102	0.5039	0.3599	0.1448	-0.9919
260	21.46	-0.04	2.8718	-2.9132	0.1313	-0.2447	-0.0101	0.5224	0.3617	0.1607	-1.0144
261	21.55	-0.04	2.8708	-2.8823	0.0960	-0.2256	0.0011	0.5145	0.3616	0.1529	-0.9902
262	21.62	-0.03	2.8812	-2.8388	0.1877	-0.4591	0.0125	0.5198	0.3655	0.1563	-0.9970
263	21.71	-0.03	2.9241	-2.8169	0.1965	-0.1540	-0.0210	0.5123	0.3673	0.1450	-0.9619
264	21.78	-0.04	2.9046	-2.8123	0.1161	-0.2936	-0.0098	0.5086	0.3655	0.1411	-0.9682
265	21.85	-0.03	2.8315	-2.8523	0.1752	-0.3009	0.0011	0.5234	0.3645	0.1589	-1.0073
266	21.93	-0.03	2.9363	-2.7861	0.1441	-0.4561	-0.0267	0.5163	0.3673	0.1478	-0.9620
267	22.00	-0.05	2.9438	-2.7756	0.1321	-0.2301	-0.0094	0.5101	0.3662	0.1439	-0.9303
268	22.08	-0.04	2.9947	-2.7841	0.1515	-0.3072	-0.0092	0.5084	0.3659	0.1425	-0.9297
269	22.15	-0.04	2.9883	-2.7626	0.1278	-0.2857	0.0129	0.5183	0.3669	0.1514	-0.9370
270	22.24	-0.05	3.0420	-2.7511	0.0821	-0.2609	-0.0146	0.5194	0.3669	0.1525	-0.9346
271	22.31	-0.03	2.9977	-2.8665	0.3010	-0.7014	0.0417	0.5340	0.3680	0.1660	-0.8889
272	22.39	-0.04	3.0056	-2.8284	0.0164	-0.5148	0.0134	0.5127	0.3661	0.1466	-0.8748
273	22.47	-0.03	3.0021	-2.8655	0.3388	-0.6775	0.0194	0.5202	0.3683	0.1519	-0.8879
274	22.54	-0.04	3.0701	-2.7836	0.2491	-0.4177	0.0082	0.5233	0.3686	0.1547	-0.8806
275	22.62	-0.05	3.1496	-2.8524	0.0467	-0.0910	-0.0141	0.5132	0.3657	0.1475	-0.8423
276	22.68	-0.04	3.1138	-2.8817	0.2052	-0.3569	0.0139	0.5200	0.3635	0.1565	-0.8612

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 7 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	A	1.06	1.7	0.0	M1=0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
277	22.76	-0.07	3.1921	-2.6574	-0.0797	-0.0207	-0.0197	0.5156	0.3657	0.1499	-0.8325
278	22.84	-0.07	3.1545	-2.6044	-0.1082	-0.2652	-0.0196	0.4976	0.3539	0.1331	-0.8245
279	22.90	-0.05	3.1355	-2.5876	0.2469	-0.4344	0.0142	0.5151	0.3672	0.1479	-0.8253
280	22.96	-0.05	3.1579	-2.5781	0.1499	-0.2943	-0.0026	0.5055	0.3685	0.1370	-0.8157
281	23.04	-0.06	3.1842	-2.5433	0.0721	-0.2318	0.0086	0.5117	0.3697	0.1420	-0.7982
282	23.11	-0.07	3.2043	-2.5314	-0.0522	-0.1332	-0.0192	0.5062	0.3685	0.1377	-0.7804
283	23.19	-0.06	3.2411	-2.5556	0.0013	-0.0472	-0.0304	0.5044	0.3718	0.1326	-0.7885
284	23.26	-0.06	3.2378	-2.5319	0.3339	-0.0139	0.0023	0.5027	0.3732	0.1295	-0.7727
285	23.34	-0.03	3.2606	-2.4765	0.2274	-0.0123	-0.0196	0.4901	0.3747	0.1154	-0.7595
286	23.41	-0.02	3.2934	-2.4384	0.1809	-0.5383	0.0262	0.5052	0.3755	0.1297	-0.7398
287	23.47	-0.03	3.3517	-2.4404	0.2651	0.1726	-0.0312	0.4933	0.3769	0.1164	-0.7281
288	23.51	-0.06	3.2683	-2.3779	-0.0835	-0.5838	0.0538	0.5237	0.3773	0.1464	-0.7276
289	23.50	-0.06	3.3520	-2.4652	0.0674	-0.2965	-0.0184	0.5312	0.3784	0.1228	-0.7354
290	23.48	-0.05	3.3518	-2.4655	0.1456	-0.2027	-0.0073	0.5029	0.3758	0.1271	-0.7355
291	23.49	-0.04	3.3393	-2.4512	0.2799	-0.4950	0.0041	0.5031	0.3764	0.1267	-0.7640
292	23.49	-0.03	3.3136	-2.4104	0.3519	-0.5045	0.0209	0.5031	0.3749	0.1282	-0.7274
293	23.47	-0.04	3.3066	-2.4541	0.1508	-0.1397	-0.0021	0.4980	0.3781	0.1099	-0.7513
294	23.48	-0.04	3.3340	-2.4287	0.1680	-0.0357	-0.0080	0.4955	0.3775	0.1180	-0.7274
295	23.47	-0.09	3.2744	-2.3504	-0.3075	-0.3873	-0.0303	0.4778	0.3804	0.0975	-0.7178
296	23.47	-0.04	3.3374	-2.4547	0.1064	-0.0782	0.0091	0.5074	0.3789	0.1285	-0.7355
297	23.47	-0.02	3.3590	-2.4988	0.3025	-0.1819	-0.0076	0.5069	0.3804	0.1264	-0.7439
298	23.47	-0.03	3.3517	-2.4822	0.3564	0.0900	-0.0417	0.5312	0.3778	0.1234	-0.7392
299	23.47	-0.06	3.3500	-2.4787	0.0036	-0.3532	0.0093	0.5047	0.3778	0.1269	-0.7399
300	23.85	-0.08	3.5582	-2.1920	-0.1802	-0.4417	-0.0398	0.5128	0.3760	0.1268	-0.6168
301	24.76	-0.05	3.7644	-1.9461	0.1195	-0.0679	-0.0443	0.5013	0.3807	0.1206	-0.5163
302	25.77	-0.09	4.0118	-1.6647	-0.4070	0.0658	-0.0715	0.4892	0.3865	0.1027	-0.4162
303	26.68	-0.05	4.2747	-1.4184	0.0529	-0.3266	0.0089	0.4812	0.3843	0.0969	-0.3316
304	27.84	-0.03	4.7197	-1.0549	0.2694	-0.6383	0.0229	0.4866	0.3825	0.1043	-0.2238
305	29.03	-0.03	4.9629	-0.7355	0.2547	-1.1984	0.0636	0.4686	0.3849	0.0837	-0.1488
306	30.65	-0.08	5.5447	-0.6307	-0.1586	-0.4682	0.0262	0.4621	0.3882	0.0539	-0.1126
307	32.09	-0.03	6.1267	-0.2681	0.3917	-0.2803	-0.0156	0.4252	0.3925	0.0327	-0.0348
308	33.96	-0.08	6.7055	0.2552	-0.2456	0.6376	-0.0263	0.3969	0.3885	0.0084	0.0381
309	36.36	-0.09	7.6784	0.5350	-0.3764	0.3142	-0.0099	0.3168	0.3812	-0.0644	0.0698
310	39.18	-0.11	8.9986	0.1740	-0.6598	0.7678	-0.0172	0.2253	0.3552	-0.1259	0.0195
311	42.60	-0.03	9.8571	0.8145	0.1006	-0.6155	0.0166	0.1298	0.3309	-0.2011	0.0826
312	46.56	0.02	11.2148	-0.1566	0.6519	0.3946	0.0293	0.2789	0.3421	-0.0631	-0.0673
313	51.15	-0.06	12.5072	-1.0617	-0.0504	0.5262	0.0399	0.1773	0.3264	-0.1491	-0.1353
314	56.02	-0.13	13.8948	-3.4914	-0.5352	-0.7469	0.0511	0.0853	0.2650	-0.1797	-0.2522
315	58.44	-0.08	14.0939	-3.7699	-0.0657	-0.3546	0.0464	0.0405	0.2510	-0.2105	-0.2677
316	58.41	-0.09	13.7316	-3.2017	0.2231	0.0291	0.0617	0.0758	0.2455	-0.1697	-0.2332
317	58.42	-0.02	13.7457	-3.1712	0.4151	-0.1918	0.0509	0.0339	0.2520	-0.2181	-0.2307
318	58.44	-0.01	13.9446	-3.4479	0.4028	0.0419	0.0561	0.0394	0.2418	-0.2024	-0.2486
319	58.43	-0.03	13.8457	-3.3492	0.2903	-0.2949	0.0517	0.0242	0.2446	-0.2204	-0.2419
320	58.33	-0.08	13.9361	-3.4134	-0.2479	-0.2045	0.0571	0.0538	0.2530	-0.1992	-0.2449
321	57.58	-0.06	14.2940	-3.8780	0.0322	-0.1619	0.0583	0.0529	0.2601	-0.2073	-0.2712
322	56.76	-0.05	13.8675	-3.3775	0.0372	-0.0567	0.0459	0.0848	0.2572	-0.1724	-0.2291

MANTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	8	1.400	1.7	0.0	B1W0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
323	55.46	-0.03	13.2031	-2.1327	0.1611	-0.0318	0.0441	0.1190	0.2646	-0.1457	-0.1615
324	55.02	-0.05	12.9698	-1.9950	0.0035	-0.0447	0.0436	0.1546	0.2698	-0.1153	-0.1538
325	54.16	0.01	12.7346	-1.5559	0.5608	0.5530	0.0510	0.1697	0.2739	-0.1043	-0.1221
326	53.30	0.00	12.5036	-1.2901	0.3970	0.8668	0.0383	0.1732	0.2868	-0.1166	-0.1027
327	52.43	0.00	13.0703	-2.1358	0.3537	1.2020	0.0494	0.1896	0.3045	-0.1149	-0.1634
328	51.59	0.03	13.0036	-2.1446	0.6443	0.7874	0.0558	0.1894	0.3247	-0.1353	-0.1658
329	50.68	0.07	12.8476	-2.1752	1.0680	1.1178	0.0361	0.1936	0.3350	-0.1414	-0.1693
330	49.78	0.11	12.3926	-1.8177	1.3561	1.1951	0.0340	0.2153	0.3408	-0.1255	-0.1385
331	48.87	0.03	11.8619	-1.9308	0.7221	0.4707	0.0079	0.2195	0.3529	-0.1334	-0.1128
332	47.95	0.04	11.3185	-0.7456	0.7867	0.5323	0.0289	0.2596	0.3643	-0.1047	-0.0650
333	46.91	-0.06	10.8910	0.7782	0.0100	0.5447	0.0242	0.1790	0.3643	-0.1853	0.0715
334	45.97	0.04	10.4878	0.4120	0.8366	-0.1308	0.0357	0.1558	0.3340	-0.1832	0.0853
335	45.03	-0.02	10.1202	1.1495	0.2459	-0.6624	0.0134	0.1643	0.3283	-0.1640	0.1136
336	44.06	-0.07	9.8735	1.0903	-0.1108	0.0418	0.0111	0.1674	0.3316	-0.1842	0.1104
337	43.07	-0.06	9.4936	0.9331	-0.3138	0.0771	-0.0020	0.1919	0.3466	-0.1547	0.0983
338	42.08	-0.04	9.3928	0.6830	0.0291	-0.2262	0.0081	0.2218	0.3561	-0.1343	0.0727
339	41.08	0.00	8.8973	0.6523	0.3376	0.8934	0.0256	0.2153	0.3613	-0.1460	0.0969
340	39.99	-0.02	8.5306	0.7542	-0.4092	0.4980	-0.0067	0.2453	0.3642	-0.1189	0.0898
341	38.90	-0.03	7.9912	0.8652	0.0304	0.5047	0.0018	0.2824	0.3741	-0.0916	0.1128
342	37.86	-0.05	7.5041	0.8810	-0.0411	0.2683	0.0191	0.3101	0.3855	-0.0754	0.1128
343	36.69	-0.06	7.2956	0.8002	-0.2124	0.4110	-0.0232	0.3688	0.4005	-0.0317	0.1097
344	35.51	-0.05	6.9584	0.6234	-0.0548	0.2219	-0.0186	0.3930	0.4076	-0.0146	0.0896
345	34.29	-0.01	6.5621	0.3983	0.3056	0.0536	-0.0091	0.4192	0.4109	0.0083	0.0687
346	33.07	-0.05	6.0417	0.6638	-0.0417	-0.3355	-0.0329	0.4351	0.4071	0.0280	0.0876
347	31.80	-0.02	5.7195	-0.2979	0.2560	-0.5171	-0.0058	0.4393	0.4032	0.0361	-0.0521
348	30.50	-0.01	5.3485	-0.7306	0.5715	-1.6580	0.1000	0.4360	0.3966	0.0394	-0.1367
349	29.16	0.01	4.9072	-0.9804	0.7101	-0.7309	0.0408	0.4533	0.3892	0.0641	-0.1998
350	27.81	-0.01	4.4019	-1.3215	0.1986	-0.1224	0.0037	0.4677	0.3844	0.0833	-0.3082
351	26.40	-0.08	4.0794	-1.5444	-0.2149	-0.2691	-0.0647	0.4758	0.3799	0.0959	-0.4031
352	24.91	-0.02	3.6565	-2.2125	0.4469	-0.8070	0.0509	0.5018	0.3726	0.1292	-0.6027
353	23.44	-0.02	3.4842	-2.5322	0.2826	-0.2924	-0.0010	0.5081	0.3665	0.1416	-0.7181
354	23.60	0.00	3.4497	-2.4783	0.4828	-0.2726	-0.0068	0.5038	0.3642	0.1396	-0.7076
355	23.48	-0.05	3.4351	-2.5457	-0.0007	-0.4135	-0.0013	0.5149	0.3620	0.1529	-0.7411
356	23.57	-0.05	3.4448	-2.5527	-0.0072	-0.1667	-0.0070	0.4995	0.3576	0.1419	-0.7418
357	22.55	-0.01	3.3495	-2.5521	0.4923	-0.6445	0.0321	0.5392	0.3569	0.1823	-0.7622
358	23.53	-0.05	3.4406	-2.5421	0.0718	-0.5586	-0.0066	0.5110	0.3559	0.1551	-0.7386
359	23.43	0.01	3.4171	-2.5346	0.5253	-0.2945	0.0039	0.5071	0.3543	0.1528	-0.7418
360	23.32	-0.04	3.2935	-2.5444	0.0164	-0.3222	0.0146	0.5110	0.3532	0.1578	-0.7726
361	23.29	-0.02	3.2911	-2.5690	0.2385	-0.5199	-0.0070	0.5110	0.3554	0.1556	-0.7806
362	23.20	-0.02	3.3134	-2.5856	0.2912	-0.0719	-0.0579	0.5181	0.3550	0.1631	-0.7883
363	23.09	-0.01	3.2674	-2.6052	0.3801	-0.1771	-0.0410	0.5089	0.3551	0.1538	-0.7973
364	23.07	-0.04	3.2889	-2.6215	0.1400	-0.7555	0.0259	0.5240	0.3553	0.1687	-0.8089
365	22.97	-0.03	3.2670	-2.6403	0.1618	-0.1108	-0.0079	0.5092	0.3543	0.1549	-0.8143
366	22.88	-0.03	3.2008	-2.5826	0.1754	-0.2498	0.0087	0.5099	0.3556	0.1545	-0.8068
367	22.84	-0.04	3.1853	-2.6504	0.0564	-0.0991	-0.0192	0.5147	0.3564	0.1583	-0.8321
368	22.73	-0.02	3.1308	-2.6937	0.2187	-0.6375	0.0252	0.5333	0.3585	0.1748	-0.8686

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 9 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 8 MACH 1.60 RX10-6 1.7 PHI 0.0 CONF 81A0F23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
369	22.66	-0.02	3.1776	-2.7039	0.3144	-0.6123	0.0365	0.5292	0.3585	0.1707	-0.8509
370	22.62	-0.03	3.1056	-2.6725	0.1544	-0.2330	0.0026	0.5164	0.3579	0.1585	-0.8605
371	22.53	-0.04	3.0827	-2.7655	0.1601	-0.6398	0.0083	0.5305	0.3571	0.1734	-0.8971
372	22.45	-0.01	3.0826	-2.6532	0.2587	-0.0733	-0.0585	0.5246	0.3582	0.1664	-0.8607
373	22.41	-0.00	3.1402	-2.7833	0.4360	-0.2211	-0.0143	0.5197	0.3589	0.1608	-0.8863
374	22.31	-0.04	3.0133	-2.7526	0.1969	-0.4440	0.0134	0.5307	0.3592	0.1715	-0.9135
375	22.21	-0.05	3.0306	-2.8122	0.0379	-0.3817	0.0132	0.5301	0.3603	0.1698	-0.9261
376	22.14	-0.01	3.0184	-2.7444	0.3637	-0.1131	-0.0097	0.5118	0.3628	0.1498	-0.9092
377	22.05	-0.04	2.9829	-2.7712	0.1433	-0.3748	0.0131	0.5269	0.3646	0.1623	-0.9298
378	21.98	-0.01	2.9757	-2.8489	0.2909	-0.4752	0.0077	0.5165	0.3640	0.1525	-0.9574
379	21.49	-0.04	2.9323	-2.7881	0.1299	-0.4210	0.0128	0.5158	0.3626	0.1532	-0.9508
380	21.91	-0.01	2.9336	-2.8135	0.2934	-0.2940	-0.0038	0.5256	0.3647	0.1607	-0.9688
381	21.75	-0.02	2.9546	-2.8096	0.2520	-0.3618	0.0130	0.5191	0.3665	0.1526	-0.9496
382	21.66	-0.03	2.8749	-2.8295	0.1297	-0.2469	-0.0042	0.5272	0.3634	0.1638	-0.9828
383	21.59	-0.03	2.9136	-2.8847	0.1969	-0.4743	-0.0093	0.5256	0.3638	0.1618	-0.9900
384	21.52	-0.03	2.8910	-2.8671	0.1075	-0.2263	0.0013	0.5245	0.3623	0.1622	-0.9917
385	21.43	-0.02	2.8469	-2.8685	0.2252	-0.2595	-0.0044	0.5182	0.3630	0.1552	-1.0146
386	21.35	-0.02	2.8373	-2.8900	0.2112	-0.2850	-0.0044	0.5129	0.3588	0.1541	-1.0018
387	21.29	-0.03	2.8532	-2.9508	0.1927	-0.0117	-0.0164	0.5166	0.3618	0.1548	-1.0342
388	21.20	-0.03	2.8344	-2.8828	0.1643	-0.4936	0.0179	0.5202	0.3625	0.1577	-1.0171
389	21.12	-0.02	2.7852	-2.8983	0.1962	-0.3796	0.0009	0.5175	0.3589	0.1586	-1.0406
390	21.05	-0.05	2.8304	-2.9321	0.0053	-0.0043	-0.0217	0.5136	0.3585	0.1551	-1.0359
391	20.96	-0.03	2.7701	-2.8890	0.1609	-0.3262	0.0063	0.5076	0.3569	0.1507	-1.0429
392	20.89	-0.04	2.7494	-2.8725	0.0246	-0.0713	-0.0109	0.4960	0.3543	0.1417	-1.0448
393	20.81	-0.03	2.7062	-2.8395	0.1417	-0.1327	-0.0221	0.4994	0.3508	0.1486	-1.0493
394	20.74	-0.02	2.7474	-2.9309	0.1575	-0.0378	-0.0113	0.5005	0.3555	0.1450	-1.0666
395	20.65	-0.03	2.7363	-2.9219	0.0879	-0.1323	0.0002	0.5028	0.3519	0.1509	-1.0678
396	20.56	-0.04	2.6872	-2.9951	0.1880	-0.3038	0.0002	0.5042	0.3520	0.1522	-1.1146
397	20.50	-0.03	2.6970	-2.8929	0.2095	-0.1964	-0.0167	0.4882	0.3507	0.1375	-1.0726
398	20.40	-0.03	2.6254	-2.9447	0.1842	-0.3544	0.0056	0.5016	0.3485	0.1531	-1.1236
399	20.34	-0.04	2.6739	-2.9316	0.0994	-0.2012	-0.0001	0.4962	0.3495	0.1467	-1.0965
400	20.26	-0.04	2.6262	-2.9211	0.0291	-0.0073	-0.0118	0.4935	0.3503	0.1432	-1.1125

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	8	1.60	1.7	0.0	81=0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	ACPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
1	-2.46	-0.02	0.0090	0.0074	0.0585	0.8260	6.5161	-0.0652	-0.0097	-0.0985	0.1494	1.5104
2	-2.46	-0.02	0.0222	0.0074	0.0559	0.3368	2.9696	-0.0526	-0.0079	-0.0923	0.1505	1.7568
3	-2.46	-0.02	0.0067	0.0067	0.0541	1.0000	8.8841	-0.0578	-0.0082	-0.0918	0.1419	1.5876
4	-2.46	-0.01	0.0134	0.0077	0.0610	0.5755	4.5468	-0.0577	-0.0082	-0.0968	0.1421	1.6438
5	-2.46	-0.01	0.0179	0.0074	0.0634	0.4162	3.5513	-0.0476	-0.0071	-0.0898	0.1501	1.8884
6	-2.36	-0.02	0.0112	0.0074	0.0597	0.6638	5.3362	-0.0426	-0.0064	-0.0874	0.1497	2.0548
7	-2.17	-0.02	0.0222	0.0077	0.0659	0.3478	2.9696	-0.0324	-0.0054	-0.0835	0.1667	2.5744
8	-2.07	-0.01	0.0082	0.0078	0.0656	0.9059	7.9765	-0.0225	-0.0036	-0.0755	0.1588	3.3562
9	-1.96	-0.01	-0.0067	0.0056	0.0527	-0.8606	-7.9130	-0.0274	-0.0041	-0.0799	0.1479	2.9155
10	-1.76	-0.01	0.0152	0.0078	0.0651	0.4620	4.2721	-0.0073	-0.0015	-0.0880	0.2105	9.2763
11	-1.66	-0.01	0.0021	0.0064	0.0577	3.0000	27.1418	0.0078	0.0003	-0.0626	0.0370	-8.0123
12	-1.56	-0.01	-0.0002	0.0067	0.0574	-34.5000	-297.4998	0.0130	0.0005	-0.0621	0.0378	-4.7788
13	-1.42	-0.01	0.0105	0.0077	0.0656	0.7339	6.2385	0.0357	0.0028	-0.0509	0.0784	-1.4278
14	-1.30	-0.01	0.0064	0.0074	0.0612	1.1667	9.8861	0.0010	0.0028	-0.0536	0.0682	-1.3059
15	-1.17	-0.02	-0.0005	0.0067	0.0594	-13.8000	-123.2000	0.0511	0.0039	-0.0486	0.0755	-0.9509
16	-1.03	-0.01	-0.0024	0.0074	0.0602	-2.5667	-20.8000	0.0663	0.0054	-0.0423	0.0815	-0.8376
17	-0.92	-0.01	0.0062	0.0074	0.0621	1.2031	10.0625	0.0742	0.0059	-0.0446	0.0793	-0.6008
18	-0.80	-0.01	-0.0028	0.0070	0.0592	-2.5172	-21.1724	0.0842	0.0059	-0.0376	0.0699	-0.4667
19	-0.68	-0.00	-0.0074	0.0070	0.0567	-0.9461	-7.8961	0.1046	0.0046	-0.0268	0.0443	-0.2565
20	-0.57	-0.01	-0.0008	0.0074	0.0615	-9.6250	-79.6250	0.1069	0.0039	-0.0175	0.0361	-0.1634
21	-0.43	-0.01	-0.0029	0.0074	0.0602	-2.5667	-20.8000	0.1037	0.0043	-0.0055	0.0419	-0.0530
22	-0.32	0.01	-0.0006	0.0074	0.0605	-12.8333	-104.5000	0.1063	0.0043	-0.0042	0.0408	-0.0399
23	-0.19	0.01	0.0059	0.0077	0.0651	1.3115	11.0656	0.1267	0.0062	0.0016	0.0487	0.0129
24	-0.06	0.00	0.0015	0.0077	0.0618	5.0000	40.0000	0.1619	0.0074	0.0070	0.0523	0.0496
25	0.04	-0.00	0.0017	0.0074	0.0607	4.2778	34.9444	0.1393	0.0074	0.0068	0.0533	0.0485
26	0.17	0.01	0.0059	0.0077	0.0651	1.3115	11.0656	0.1523	0.0069	0.0150	0.0457	0.0984
27	0.31	0.00	-0.0005	0.0070	0.0594	-14.0000	-123.2000	0.1519	0.0069	0.0180	0.0457	0.1188
28	0.40	0.00	0.0061	0.0077	0.0632	1.2698	10.3968	0.1616	0.0059	0.0351	0.0364	0.2173
29	0.54	-0.00	0.0038	0.0081	0.0630	2.1538	16.7436	0.1665	0.0067	0.0407	0.0400	0.2445
30	0.65	0.01	0.0015	0.0074	0.0617	4.8125	39.9375	0.1666	0.0074	0.0367	0.0446	0.2208
31	0.75	0.00	0.0061	0.0074	0.0599	1.7907	14.4419	0.1716	0.0079	0.0461	0.0461	0.2396
32	0.87	-0.01	-0.0005	0.0074	0.0594	-15.4000	-123.2000	0.1844	0.0100	0.0412	0.0544	0.2234
33	1.00	0.01	0.0017	0.0074	0.0607	4.2778	34.9444	0.1870	0.0105	0.0404	0.0562	0.2162
34	1.12	0.01	0.0124	0.0077	0.0689	0.6202	5.5349	0.2045	0.0128	0.0532	0.0628	0.2608
35	1.25	0.01	0.0039	0.0074	0.0619	1.9250	16.0500	0.2094	0.0136	0.0577	0.0650	0.2756
36	1.34	-0.00	0.0016	0.0067	0.0596	3.6316	32.5263	0.2168	0.0146	0.0655	0.0672	0.3022
37	1.47	0.00	0.0063	0.0077	0.0612	1.2308	9.7538	0.2216	0.0156	0.0710	0.0705	0.3204
38	1.60	0.00	0.0147	0.0077	0.0701	0.5263	4.7829	0.2293	0.0167	0.0748	0.0728	0.3262
39	1.70	0.01	-0.0005	0.0070	0.0594	-14.0000	-123.2000	0.2394	0.0177	0.0777	0.0738	0.3245
40	1.82	0.00	0.0078	0.0074	0.0683	0.9506	8.7407	0.2519	0.0192	0.0849	0.0762	0.3378
41	1.93	-0.01	0.0018	0.0070	0.0597	3.8421	32.5789	0.2494	0.0192	0.0847	0.0770	0.3397
42	2.03	0.00	0.0082	0.0078	0.0656	0.9059	7.9765	0.2802	0.0223	0.0967	0.0795	0.3458
43	2.16	0.01	0.0063	0.0070	0.0672	1.1231	9.9231	0.2675	0.0213	0.0925	0.0797	0.3460
44	2.26	-0.00	-0.0002	0.0064	0.0575	-34.5000	-298.0000	0.2803	0.0223	0.0947	0.0795	0.3377
45	2.38	-0.00	0.0041	0.0064	0.0609	1.6279	14.4651	0.3005	0.0249	0.1056	0.0829	0.3513
46	2.51	-0.02	0.0041	0.0064	0.0609	1.6279	14.4651	0.3033	0.0252	0.1069	0.0830	0.3525

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH 4X10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
2 B.1600 1.7 0.0 B1&OF23 0.00 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
47	2.61	-0.00	0.0044	0.0064	0.0645	0.8046	7.6896	0.3133	0.0270	0.1129	0.0862	0.3603
48	2.72	-0.00	0.0028	0.0058	0.0645	0.8046	7.6896	0.3184	0.0280	0.1134	0.0879	0.3561
49	2.85	-0.01	0.0064	0.0068	0.0613	1.0604	9.6212	0.3310	0.0290	0.1195	0.0877	0.3611
50	2.97	-0.01	0.0043	0.0064	0.0591	1.4667	13.6000	0.3234	0.0286	0.1168	0.0883	0.3613
51	3.07	-0.01	0.0149	0.0064	0.0642	0.6246	6.6556	0.3511	0.0326	0.1316	0.0929	0.3748
52	3.19	-0.00	0.0083	0.0060	0.0656	0.7269	7.8837	0.3587	0.0337	0.1353	0.0939	0.3771
53	3.31	-0.00	0.0065	0.0060	0.0613	0.9254	9.6776	0.3587	0.0337	0.1353	0.0939	0.3771
54	3.40	-0.01	0.0067	0.0060	0.0592	0.8986	8.8986	0.3765	0.0352	0.1419	0.0935	0.3770
55	3.53	0.00	0.0059	0.0060	0.0605	0.8739	8.8152	0.3765	0.0357	0.1420	0.0948	0.3772
56	3.65	-0.00	0.0126	0.0060	0.0670	0.4662	5.2180	0.3841	0.0368	0.1447	0.0957	0.3768
57	3.75	-0.00	0.0088	0.0057	0.0615	0.6484	7.0000	0.3994	0.0383	0.1491	0.0959	0.3733
58	3.87	-0.01	0.0104	0.0060	0.0637	0.5536	5.8924	0.4095	0.0393	0.1541	0.0959	0.3763
59	3.98	0.01	0.0138	0.0060	0.0634	0.5536	5.9018	0.4203	0.0401	0.1561	0.0955	0.3714
60	4.09	0.00	0.0131	0.0057	0.0650	0.4338	4.9559	0.4355	0.0414	0.1626	0.0958	0.3733
61	4.21	-0.01	0.0065	0.0053	0.0581	1.1762	12.8085	0.4355	0.0414	0.1626	0.0950	0.3733
62	4.33	-0.01	0.0065	0.0053	0.0581	1.1762	12.8085	0.4456	0.0425	0.1698	0.0953	0.3807
63	4.42	-0.00	0.0001	0.0053	0.0556	55.0000	576.0000	0.4608	0.0440	0.1760	0.0955	0.3819
64	4.53	-0.01	0.0023	0.0049	0.0568	2.1250	24.5417	0.4660	0.0442	0.1756	0.0948	0.3764
65	4.64	-0.01	0.0022	0.0049	0.0579	2.2174	26.0435	0.4684	0.0445	0.1787	0.0950	0.3815
66	4.76	0.00	0.0023	0.0053	0.0568	2.2917	24.5417	0.4810	0.0460	0.1870	0.0957	0.3888
67	4.86	-0.00	0.0089	0.0053	0.0605	0.5978	6.8152	0.4913	0.0465	0.1899	0.0947	0.3865
68	4.96	0.00	0.0062	0.0049	0.0600	1.1591	14.1304	0.5048	0.0483	0.1951	0.0959	0.3871
69	5.07	-0.01	-0.0001	0.0046	0.0575	-48.0000	-596.0000	0.5092	0.0479	0.1956	0.0940	0.3841
70	5.17	-0.00	-0.0001	0.0043	0.0576	-51.0000	-597.0000	0.5199	0.0492	0.2018	0.0947	0.3881
71	5.28	0.00	-0.0112	0.0046	0.0514	-0.4138	-4.5948	0.5223	0.0497	0.2050	0.0942	0.3926
72	5.36	-0.00	0.0001	0.0046	0.0620	1.1429	15.3095	0.5378	0.0500	0.2066	0.0929	0.3837
73	5.47	-0.00	0.0020	0.0046	0.0598	2.2657	29.5238	0.5479	0.0515	0.2134	0.0940	0.3896
74	5.59	-0.00	-0.0048	0.0049	0.0571	-1.0200	-11.8400	0.5633	0.0520	0.2178	0.0923	0.3866
75	5.68	0.00	-0.0021	0.0053	0.0593	-1.9643	-21.9643	0.5659	0.0517	0.2180	0.0914	0.3852
76	5.78	0.01	-0.0028	0.0049	0.0588	-1.8869	-22.6074	0.5737	0.0525	0.2166	0.0915	0.3774
77	5.86	-0.00	-0.0026	0.0057	0.0590	-2.1852	-22.4074	0.5489	0.0538	0.2262	0.0914	0.3841
78	5.97	-0.00	-0.0028	0.0057	0.0588	-2.3600	-23.4000	0.5991	0.0543	0.2291	0.0907	0.3823
79	6.07	0.00	-0.0113	0.0046	0.0524	-0.4103	-4.6410	0.5990	0.0548	0.2311	0.0915	0.3858
80	6.17	-0.00	-0.0070	0.0053	0.0527	-0.5914	-5.8710	0.6118	0.0556	0.2343	0.0905	0.3829
81	6.28	0.00	-0.0112	0.0049	0.0514	-0.4397	-4.5948	0.6202	0.0560	0.2362	0.0902	0.3808
82	6.37	0.01	-0.0020	0.0057	0.0535	-2.8095	-26.3810	0.6304	0.0567	0.2402	0.0900	0.3809
83	6.49	-0.00	-0.0021	0.0053	0.0564	-2.5000	-25.6304	0.6407	0.0575	0.2441	0.0898	0.3810
84	6.59	-0.01	-0.0172	0.0049	0.0487	-0.2742	-2.7151	0.6562	0.0569	0.2495	0.0868	0.3802
85	6.67	0.00	-0.0109	0.0053	0.0485	-0.4911	-4.4911	0.6562	0.0575	0.2475	0.0876	0.3772
86	6.78	-0.00	-0.0158	0.0049	0.0509	-0.3110	-3.2195	0.6742	0.0585	0.2541	0.0867	0.3770
87	6.89	0.01	-0.0136	0.0046	0.0522	-0.3404	-3.8369	0.6767	0.0591	0.2554	0.0873	0.3774
88	6.97	0.01	-0.0111	0.0046	0.0505	-0.4176	-4.5478	0.6870	0.0595	0.2563	0.0867	0.3730
89	7.06	0.01	-0.0155	0.0034	0.0469	-0.2684	-3.1491	0.6920	0.0595	0.2608	0.0860	0.3769
90	7.19	-0.01	-0.0234	0.0034	0.0496	-0.1898	-2.4265	0.7024	0.0603	0.2617	0.0859	0.3725
91	7.27	-0.01	-0.0205	0.0036	0.0505	-0.1765	-2.4470	0.7185	0.0606	0.2684	0.0843	0.3736
92	7.38	-0.00	-0.0155	0.0034	0.0498	-0.2684	-3.1553	0.7237	0.0606	0.2688	0.0837	0.3716

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 ... A 1.00 1.7 0.0 A1=OF23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	7.47	0.00	-0.0157	0.0036	0.0500	-0.2270	-3.1779	0.7261	0.0619	0.2732	0.0853	0.3762
94	7.56	0.00	-0.0158	0.0034	0.0504	-0.2439	-3.2195	0.7364	0.0621	0.2760	0.0846	0.3769
95	7.66	-0.01	-0.0155	0.0039	0.0490	-0.2484	-3.1553	0.7415	0.0624	0.2786	0.0842	0.3757
96	7.76	-0.00	-0.0202	0.0025	0.0483	-0.1744	-2.3971	0.7544	0.0619	0.2838	0.0821	0.3761
97	7.85	-0.00	-0.0203	0.0025	0.0494	-0.1238	-2.4381	0.7674	0.0617	0.2869	0.0803	0.3738
98	7.94	-0.00	-0.0174	0.0025	0.0466	-0.1405	-2.7243	0.7698	0.0629	0.2841	0.0817	0.3743
99	8.03	-0.00	-0.0179	0.0028	0.0497	-0.1559	-2.7688	0.7749	0.0629	0.2906	0.0812	0.3750
100	8.12	0.00	-0.0155	0.0039	0.0490	-0.2484	-3.1553	0.7852	0.0627	0.2948	0.0799	0.3752
101	8.21	-0.00	-0.0180	0.0017	0.0506	-0.0963	-2.8021	0.7954	0.0632	0.2985	0.0795	0.3753
102	8.30	0.01	-0.0157	0.0025	0.0508	-0.1595	-3.2331	0.7980	0.0638	0.2998	0.0799	0.3756
103	8.39	0.01	-0.0157	0.0025	0.0508	-0.1595	-3.2331	0.8109	0.0638	0.3039	0.0787	0.3748
104	8.47	-0.01	-0.0153	0.0017	0.0479	-0.1132	-3.1195	0.8211	0.0643	0.3090	0.0783	0.3763
105	8.55	-0.00	-0.0155	0.0007	0.0498	-0.0435	-3.2050	0.8211	0.0635	0.3099	0.0773	0.3774
106	8.64	-0.00	-0.0201	0.0007	0.0482	-0.0337	-2.4038	0.8262	0.0640	0.3114	0.0776	0.3769
107	8.73	-0.01	-0.0179	0.0011	0.0495	-0.0595	-2.7730	0.8365	0.0643	0.3144	0.0768	0.3758
108	8.82	-0.01	-0.0154	0.0011	0.0488	-0.0687	-3.1625	0.8469	0.0643	0.3182	0.0759	0.3736
109	8.92	-0.01	-0.0155	0.0007	0.0498	-0.0435	-3.2050	0.8572	0.0635	0.3222	0.0741	0.3758
110	9.01	-0.00	-0.0200	-0.0011	0.0481	0.0531	-2.4106	0.8572	0.0638	0.3212	0.0744	0.3747
111	9.10	-0.00	-0.0202	.0.0	0.0492	0.0	-2.4407	0.8675	0.0636	0.3252	0.0735	0.3748
112	9.1	-0.01	-0.0155	-0.0011	0.0507	0.0683	-3.2609	0.8725	0.0643	0.3276	0.0736	0.3754
113	9.28	-0.00	-0.0200	-0.0011	0.0481	0.0531	-2.4106	0.8724	0.0647	0.3297	0.0742	0.3779
114	9.34	0.00	-0.0201	-0.0006	0.0482	0.0192	-2.4038	0.8880	0.0643	0.3330	0.0724	0.3758
115	9.43	0.01	-0.0155	-0.0007	0.0507	0.0435	-3.2609	0.8957	0.0638	0.3378	0.0712	0.3771
116	9.54	0.00	-0.0154	-0.0011	0.0496	0.0687	-3.2125	0.9008	0.0647	0.3392	0.0719	0.3766
117	9.61	0.00	-0.0203	-0.0007	0.0502	0.0333	-2.4762	0.9043	0.0644	0.3429	0.0712	0.3792
118	9.69	-0.00	-0.0155	0.0	0.0498	0.0	-3.2050	0.9146	0.0648	0.3458	0.0709	0.3781
119	9.82	0.01	-0.0200	-0.0017	0.0481	0.0870	-2.4106	0.9250	0.0648	0.3467	0.0701	0.3748
120	9.89	0.00	-0.0155	-0.0006	0.0497	0.0298	-3.1988	0.9249	0.0648	0.3487	0.0701	0.3779
121	9.96	0.00	-0.0200	-0.0006	0.0473	0.0193	-2.3672	0.9352	0.0645	0.3517	0.0690	0.3760
122	10.04	-0.01	-0.0201	-0.0006	0.0482	0.0192	-2.4038	0.9508	0.0636	0.3571	0.0669	0.3756
123	10.17	0.00	-0.0202	-0.0011	0.0492	0.0526	-2.4402	0.9595	0.0638	0.3608	0.0665	0.3764
124	10.24	0.00	-0.0200	-0.0011	0.0482	0.0531	-2.4155	0.9507	0.0648	0.3571	0.0682	0.3758
125	10.34	0.00	-0.0206	-0.0017	0.0477	0.0706	-1.9373	0.9688	0.0645	0.3627	0.0666	0.3744
126	10.44	-0.01	-0.0224	-0.0011	0.0481	0.0474	-2.1466	0.9776	0.0649	0.3658	0.0664	0.3742
127	10.51	0.00	-0.0225	-0.0014	0.0490	0.0644	-2.1803	0.9828	0.0628	0.3703	0.0639	0.3768
128	10.60	0.00	-0.0291	-0.0021	0.0452	0.0728	-1.5497	0.9427	0.0639	0.3703	0.0650	0.3768
129	10.67	0.00	-0.0249	-0.0017	0.0496	0.0498	-1.9922	0.9969	0.0627	0.3752	0.0629	0.3764
130	10.78	0.00	-0.0249	-0.0025	0.0452	0.0854	-1.5548	0.9968	0.0633	0.3752	0.0635	0.3764
131	10.86	-0.00	-0.0224	0.0006	0.0481	-0.0172	-2.1466	1.0022	0.0422	0.3736	0.0621	0.3728
132	10.95	-0.01	-0.0247	-0.0006	0.0478	0.0156	-1.9336	1.0122	0.0633	0.3816	0.0525	0.3770
133	11.04	-0.00	-0.0247	-0.0007	0.0478	0.0273	-1.9336	1.0227	0.0635	0.3835	0.0621	0.3750
134	11.12	-0.01	-0.0249	-0.0014	0.0497	0.0541	-1.9961	1.0305	0.0619	0.3852	0.0621	0.3738
135	11.21	-0.01	-0.0247	-0.0011	0.0477	0.0430	-1.9297	1.0408	0.0627	0.3882	0.0603	0.3729
136	11.30	0.00	-0.0242	-0.0011	0.0482	0.0363	-1.5809	1.0486	0.0618	0.3898	0.0589	0.3717
137	11.38	-0.01	-0.0248	-0.0014	0.0486	0.0584	-1.9611	1.0511	0.0622	0.3921	0.0592	0.3730
138	11.46	-0.02	-0.0269	0.0	0.0469	0.0	-1.7240	1.0522	0.0626	0.3928	0.0595	0.3733

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST I PART 8 MACH .LAI RX10-6 .LAI PHI 0.0 CONF 81=0.23 B=0.0 L 0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	11.56	-0.02	-0.0247	0.0004	0.0478	-0.0156	-1.9336	1.0703	0.0618	0.3984	0.0578	0.3722
140	11.64	-0.02	-0.0336	-0.0010	0.0436	0.0431	-1.2989	1.0730	0.0617	0.3966	0.0575	0.3696
141	11.72	-0.02	-0.0204	0.0011	0.0503	-0.0521	-2.4697	1.0807	0.0617	0.3993	0.0570	0.3694
142	11.82	-0.01	-0.0202	0.0004	0.0492	-0.0191	-2.4402	1.0729	0.0626	0.3966	0.0584	0.3698
143	11.90	-0.01	-0.0223	0.0004	0.0470	-0.0173	-2.1042	1.0884	0.0618	0.4030	0.0568	0.3703
144	11.98	-0.01	-0.0131	0.0004	0.0500	-0.0294	-3.4088	1.0807	0.0634	0.3983	0.0587	0.3686
145	12.06	-0.01	-0.0262	-0.0007	0.0437	0.0279	-1.8048	1.0973	0.0627	0.4031	0.0572	0.3674
146	12.15	-0.02	-0.0153	0.0	0.0487	0.0	-3.1761	1.1052	0.0612	0.4068	0.0556	0.3681
147	12.23	-0.02	-0.0245	-0.0004	0.0457	0.0157	-1.8661	1.1207	0.0612	0.4102	0.0546	0.3660
148	12.32	-0.02	-0.0178	0.0011	0.0485	-0.0598	-2.7337	1.1259	0.0612	0.4116	0.0563	0.3656
149	12.41	-0.01	-0.0177	0.0004	0.0476	-0.0219	-2.6940	1.1233	0.0617	0.4104	0.0549	0.3653
150	12.48	-0.02	-0.0221	0.0004	0.0451	-0.0175	-2.0393	1.1361	0.0601	0.4176	0.0529	0.3676
151	12.57	-0.01	-0.0151	0.0011	0.0468	-0.0701	-3.0892	1.1466	0.0601	0.4194	0.0524	0.3659
152	12.66	-0.02	-0.0063	0.0007	0.0528	-0.1045	-3.1642	1.1518	0.0591	0.4219	0.0514	0.3663
153	12.74	-0.02	-0.0216	0.0007	0.0430	-0.0310	-1.9735	1.1500	0.0595	0.4223	0.0518	0.3672
154	12.83	-0.02	-0.0175	0.0004	0.0465	-0.0221	-2.6630	1.1708	0.0583	0.4282	0.0498	0.3657
155	12.90	-0.02	-0.0154	0.0	0.0497	0.0	-3.2169	1.1604	0.0593	0.4232	0.0511	0.3647
156	13.00	-0.01	-0.0152	0.0017	0.0468	-0.1139	-3.0696	1.1810	0.0569	0.4352	0.0482	0.3685
157	13.08	-0.02	-0.0156	-0.0014	0.0515	0.0926	-3.2983	1.1710	0.0577	0.4261	0.0493	0.3639
158	13.16	-0.02	-0.0152	0.0025	0.0469	-0.1666	-3.0759	1.1632	0.0606	0.4184	0.0521	0.3597
159	13.26	-0.02	-0.0240	0.0	0.0426	0.0	-1.7751	1.1847	0.0585	0.4309	0.0494	0.3637
160	13.32	-0.01	-0.0174	0.0	0.0453	0.0	-2.6257	1.1642	0.0600	0.4180	0.0515	0.3598
161	13.40	-0.02	-0.0217	-0.0011	0.0428	0.0489	-1.9733	1.1875	0.0579	0.4281	0.0488	0.3605
162	13.50	-0.03	-0.0131	0.0034	0.0481	-0.2981	-3.6691	1.1963	0.0569	0.4363	0.0476	0.3667
163	13.58	-0.03	-0.0220	-0.0007	0.0449	0.0347	-2.0395	1.1964	0.0569	0.4332	0.0476	0.3621
164	13.66	-0.02	-0.0214	-0.0011	0.0449	0.0485	-2.0485	1.2119	0.0549	0.4417	0.0453	0.3645
165	13.76	-0.02	-0.0157	-0.0011	0.0525	0.0675	-3.3374	1.2209	0.0543	0.4421	0.0445	0.3621
166	13.83	-0.02	-0.0265	0.0007	0.0434	-0.0255	-1.6364	1.2218	0.0542	0.4427	0.0440	0.3623
167	13.92	-0.02	-0.0200	-0.0011	0.0489	0.0531	-2.4493	1.2282	0.0529	0.4469	0.0431	0.3639
168	13.98	-0.02	-0.0290	-0.0007	0.0409	0.0338	-2.4484	1.2420	0.0526	0.4486	0.0423	0.3612
169	14.10	-0.03	-0.0334	-0.0018	0.0433	0.0434	-1.7977	1.2510	0.0523	0.4490	0.0418	0.3589
170	14.16	-0.02	-0.0268	-0.0018	0.0460	0.0563	-1.7283	1.2536	0.0517	0.4522	0.0413	0.3608
171	14.24	-0.03	-0.0240	-0.0011	0.0503	0.0428	-2.0272	1.2766	0.0500	0.4602	0.0392	0.3605
172	14.34	-0.02	-0.0317	-0.0035	0.0503	0.1094	-1.5836	1.2755	0.0494	0.4567	0.0387	0.3588
173	14.42	-0.03	-0.0313	0.0021	0.0447	-0.0679	-1.4290	1.2710	0.0506	0.4548	0.0400	0.3579
174	14.49	-0.03	-0.0336	-0.0011	0.0453	0.0316	-1.3477	1.2981	0.0493	0.4639	0.0381	0.3585
175	14.59	-0.02	-0.0294	-0.0004	0.0497	0.0131	-1.6885	1.3044	0.0485	0.4647	0.0372	0.3562
176	14.66	-0.02	-0.0303	-0.0007	0.0457	0.0176	-1.1940	1.3045	0.0498	0.4617	0.0382	0.3539
177	14.76	-0.03	-0.0472	-0.0025	0.0426	0.0593	-0.9039	1.3225	0.0493	0.4653	0.0373	0.3518
178	14.84	-0.03	-0.0337	-0.0011	0.0481	0.0315	-1.3696	1.3155	0.0487	0.4662	0.0370	0.3544
179	14.94	-0.02	-0.0423	-0.0025	0.0431	0.0567	-1.0136	1.3181	0.0498	0.4634	0.0378	0.3516
180	15.01	-0.02	-0.0428	-0.0011	0.0423	0.0264	-0.9932	1.3232	0.0500	0.4638	0.0378	0.3505
181	15.10	-0.03	-0.0469	-0.0017	0.0398	0.0370	-0.8477	1.3258	0.0510	0.4610	0.0385	0.3477
182	15.18	-0.03	-0.0336	0.0	0.0453	0.0	-1.3477	1.3324	0.0493	0.4659	0.0370	0.3497
183	15.26	-0.03	-0.0405	-0.0028	0.0453	0.0690	-1.1190	1.3426	0.0498	0.4688	0.0371	0.3492
184	15.34	-0.03	-0.0459	-0.0028	0.0397	0.0597	-0.8457	1.3326	0.0513	0.4579	0.0385	0.3436

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	A	1.00	1.7	0.0	A1aOF23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
185	14.43	-0.03	-0.0445	-0.0021	0.0391	0.0477	-0.8785	1.3266	0.0499	0.4576	0.0376	0.3412
186	15.53	-0.03	-0.0333	-0.0011	0.0424	0.0319	-1.2725	1.3005	0.0499	0.4325	0.0384	0.3329
187	15.60	-0.03	-0.0402	0.0011	0.0406	-0.0264	-1.0144	1.3517	0.0507	0.4561	0.0375	0.3375
188	15.69	-0.03	-0.0375	0.0009	0.0360	-0.0103	-1.0129	1.3489	0.0496	0.4528	0.0366	0.3357
189	15.78	-0.04	-0.0466	-0.0011	0.0360	0.0228	-0.7723	1.3389	0.0481	0.4438	0.0360	0.3315
190	15.86	-0.02	-0.0382	-0.0009	0.0439	0.0101	-1.1490	1.3619	0.0489	0.4509	0.0359	0.3311
191	15.95	-0.04	-0.0421	0.0011	0.0366	-0.0252	-0.8693	1.3496	0.0474	0.4406	0.0351	0.3264
192	16.03	-0.03	-0.0378	-0.0009	0.0409	0.0102	-1.0816	1.3496	0.0466	0.4406	0.0345	0.3264
193	16.12	-0.02	-0.0401	-0.0006	0.0332	0.0931	-0.5522	1.3594	0.0461	0.4465	0.0339	0.3269
194	16.19	-0.03	-0.0470	-0.0035	0.0407	0.0739	-0.8665	1.3651	0.0461	0.4429	0.0338	0.3264
195	16.27	-0.04	-0.0444	-0.0028	0.0419	0.0625	-0.9353	1.3768	0.0453	0.4543	0.0329	0.3299
196	16.35	-0.04	-0.0531	-0.0035	0.0330	0.0655	-0.6218	1.3543	0.0437	0.4381	0.0323	0.3235
197	16.43	-0.03	-0.0446	-0.0011	0.0400	0.0738	-0.8983	1.3719	0.0429	0.4507	0.0313	0.3285
198	16.51	-0.04	-0.0491	-0.0021	0.0385	0.0432	-0.7839	1.3570	0.0422	0.4373	0.0311	0.3222
199	14.60	-0.03	-0.0379	0.0004	0.0419	-0.0102	-1.1043	1.3322	0.0383	0.4198	0.0288	0.3151
200	16.68	-0.03	-0.0463	-0.0021	0.0368	0.0458	-0.7521	1.3521	0.0401	0.4348	0.0297	0.3216
201	16.76	-0.03	-0.0402	-0.0025	0.0334	0.0417	-0.5545	1.3538	0.0386	0.4331	0.0285	0.3199
202	16.84	-0.03	-0.0533	-0.0049	0.0369	0.0424	-0.6558	1.3688	0.0406	0.4416	0.0297	0.3226
203	16.92	-0.04	-0.0403	-0.0004	0.0369	0.0083	-0.7562	1.3369	0.0368	0.4242	0.0275	0.3173
204	17.01	-0.04	-0.0426	-0.0042	0.0440	0.0995	-1.0317	1.3623	0.0372	0.4344	0.0273	0.3189
205	17.09	-0.05	-0.0404	-0.0011	0.0445	0.0263	-1.1002	1.3521	0.0371	0.4326	0.0274	0.3199
206	17.16	-0.04	-0.0641	-0.0014	0.0270	0.0226	-0.4217	1.3549	0.0357	0.4287	0.0263	0.3164
207	17.24	-0.04	-0.0513	-0.0035	0.0381	0.0677	-0.7425	1.3600	0.0355	0.4301	0.0261	0.3163
208	17.35	-0.04	-0.0557	-0.0032	0.0357	0.0572	-0.6412	1.3700	0.0347	0.4390	0.0254	0.3204
209	17.43	-0.04	-0.0515	-0.0028	0.0401	0.0543	-0.7790	1.3726	0.0344	0.4392	0.0251	0.3200
210	17.49	-0.04	-0.0511	-0.0004	0.0356	0.0075	-0.6925	1.3625	0.0343	0.4343	0.0251	0.3187
211	17.58	-0.04	-0.0536	-0.0004	0.0382	0.0072	-0.6757	1.3701	0.0344	0.4360	0.0251	0.3182
212	17.68	-0.03	-0.0466	0.0032	0.0361	-0.0663	-0.7743	1.3658	0.0329	0.4361	0.0241	0.3193
213	17.75	-0.03	-0.0419	0.0014	0.0284	-0.0234	-0.4579	1.3608	0.0324	0.4326	0.0238	0.3179
214	17.83	-0.03	-0.0506	-0.0028	0.0295	0.0420	-0.4435	1.3786	0.0326	0.4392	0.0235	0.3186
215	17.91	-0.03	-0.0668	-0.0049	0.0356	0.0759	-0.5491	1.3860	0.0329	0.4450	0.0237	0.3211
216	17.99	-0.04	-0.0644	0.0007	0.0290	-0.0105	-0.4513	1.3507	0.0309	0.4298	0.0229	0.3182
217	18.08	-0.04	-0.0536	-0.0007	0.0351	0.0127	-0.6582	1.3761	0.0309	0.4390	0.0224	0.3198
218	18.17	-0.04	-0.0469	0.0011	0.0390	-0.0226	-0.8313	1.3775	0.0319	0.4395	0.0232	0.3198
219	18.24	-0.03	-0.0668	-0.0014	0.0297	0.0217	-0.4451	1.3728	0.0301	0.4329	0.0219	0.3154
220	18.32	-0.03	-0.0448	0.0123	0.0350	-0.2749	-0.7857	1.3170	0.0293	0.4108	0.0223	0.3113
221	18.41	-0.04	-0.0603	-0.0024	0.0359	0.0400	-0.5856	1.3676	0.0299	0.4311	0.0220	0.3164
222	18.48	-0.04	-0.0689	-0.0011	0.0285	0.0154	-0.4132	1.3371	0.0288	0.4218	0.0216	0.3155
223	18.56	-0.03	-0.0698	-0.0014	0.0275	0.0210	-0.3997	1.3627	0.0288	0.4290	0.0212	0.3148
224	18.66	-0.04	-0.0560	0.0028	0.0361	-0.0500	-0.6448	1.3627	0.0288	0.4290	0.0212	0.3148
225	18.74	-0.04	-0.0673	-0.0014	0.0345	0.0215	-0.5136	1.3609	0.0283	0.4295	0.0208	0.3156
226	18.83	-0.03	-0.0674	-0.0039	0.0373	0.0572	-0.5536	1.3861	0.0298	0.4408	0.0210	0.3188
227	18.90	-0.04	-0.0611	-0.0056	0.0428	0.0916	-0.7014	1.3787	0.0283	0.4340	0.0205	0.3168
228	18.97	-0.04	-0.0647	-0.0018	0.0382	0.0238	-0.6296	1.3611	0.0273	0.4234	0.0201	0.3111
229	19.06	-0.03	-0.0791	-0.0096	0.0397	0.1744	-0.5012	1.4047	0.0283	0.4422	0.0201	0.3149
230	19.13	-0.04	-0.0649	0.0011	0.0340	-0.0163	-0.5230	1.3967	0.0265	0.4385	0.0198	0.3148

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 A 1.66 1.7 0.0 ALL0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	Cm1	CH1	XCPF1	YCPF1	CNF2	CH2	CA2	XCPF2	YCPF2
231	19.21	-0.04	-0.0607	0.0017	0.0374	-0.0286	-0.4169	1.3969	0.0262	0.4345	0.0188	0.3110
232	19.28	-0.02	-0.0512	0.0060	0.0387	-0.1157	-0.7481	1.3664	0.0258	0.4227	0.0189	0.3093
233	19.36	-0.03	-0.0698	0.0007	0.0392	0.0111	-0.6444	1.3747	0.0257	0.4281	0.0187	0.3114
234	19.45	-0.04	-0.0724	-0.0070	0.0415	0.0973	-0.5733	1.4101	0.0267	0.4433	0.0190	0.3144
235	19.52	-0.04	-0.0554	0.0032	0.0387	-0.0544	-0.6606	1.3747	0.0255	0.4271	0.0185	0.3106
236	19.60	-0.02	-0.0720	-0.0021	0.0369	0.0295	-0.4987	1.3799	0.0258	0.4285	0.0181	0.3105
237	19.66	-0.03	-0.0741	-0.0011	0.0338	0.0143	-0.4557	1.3977	0.0244	0.4330	0.0175	0.3098
238	19.76	-0.03	-0.0721	-0.0016	0.0370	0.0201	-0.5127	1.4053	0.0247	0.4367	0.0176	0.3107
239	19.83	-0.03	-0.0524	0.0060	0.0446	-0.1142	-0.8508	1.4004	0.0244	0.4302	0.0174	0.3072
240	19.91	-0.03	-0.0363	0.0147	0.0471	-0.4270	-1.3708	1.3598	0.0252	0.4147	0.0165	0.3050
241	19.99	-0.03	-0.0583	0.0073	0.0392	-0.1301	-0.6952	1.3970	0.0236	0.4312	0.0169	0.3087
242	20.06	-0.03	-0.0734	0.0032	0.0320	-0.0431	-0.6336	1.3868	0.0246	0.4273	0.0177	0.3081
243	20.15	-0.03	-0.0696	0.0104	0.0381	-0.2147	-0.7715	1.3819	0.0238	0.4228	0.0172	0.3060
244	20.23	-0.04	-0.0810	-0.0016	0.0346	0.0167	-0.4310	1.4323	0.0226	0.4502	0.0158	0.3143
245	20.30	-0.04	-0.0526	0.0060	0.0445	-0.1146	-0.8521	1.4224	0.0226	0.4413	0.0159	0.3103
246	20.38	-0.03	-0.0721	0.00	0.0388	0.0	-0.5382	1.4442	0.0228	0.4485	0.0158	0.3105
247	20.45	-0.03	-0.0429	0.0116	0.0436	-0.2742	-1.0157	1.4001	0.0225	0.4308	0.0161	0.3077
248	20.53	-0.03	-0.0826	0.0016	0.0368	-0.0184	-0.3727	1.4153	0.0220	0.4371	0.0155	0.3088
249	20.61	-0.03	-0.0456	-0.0021	0.0371	0.0249	-0.4339	1.4434	0.0219	0.4491	0.0152	0.3111
250	20.68	-0.04	-0.0718	0.0028	0.0379	-0.0390	-0.5262	1.4234	0.0222	0.4393	0.0156	0.3086
251	20.76	-0.04	-0.0696	0.0031	0.0381	-0.0444	-0.5479	1.4385	0.0217	0.4446	0.0151	0.3091
252	20.83	-0.02	-0.0698	0.0035	0.0401	-0.0498	-0.5756	1.4311	0.0212	0.4409	0.0148	0.3081
253	20.92	-0.03	-0.0736	0.0028	0.0357	-0.0379	-0.4637	1.4336	0.0209	0.4422	0.0146	0.3085
254	21.00	-0.03	-0.0464	-0.0028	0.0338	0.0291	-0.3507	1.4602	0.0204	0.4537	0.0139	0.3107
255	21.09	-0.05	-0.1010	-0.0035	0.0352	0.0304	-0.3486	1.4626	0.0211	0.4559	0.0144	0.3117
256	21.17	-0.04	-0.0656	0.0052	0.0445	-0.0794	-0.6779	1.4327	0.0206	0.4413	0.0142	0.3080
257	21.23	-0.05	-0.0878	-0.0026	0.0397	0.0319	-0.4516	1.4552	0.0202	0.4522	0.0139	0.3108
258	21.33	-0.04	-0.0805	0.0032	0.0377	-0.0298	-0.4666	1.4326	0.0196	0.4443	0.0137	0.3101
259	21.39	-0.03	-0.0569	0.0024	0.0334	-0.0784	-0.3932	1.4403	0.0199	0.4460	0.0138	0.3096
260	21.46	-0.06	-0.0763	0.0035	0.0405	-0.0408	-0.5455	1.4453	0.0196	0.4484	0.0136	0.3102
261	21.55	-0.04	-0.0478	0.0107	0.0477	-0.2262	-0.9980	1.4261	0.0194	0.4353	0.0136	0.3052
262	21.62	-0.03	-0.0456	0.0128	0.0481	-0.2812	-1.0529	1.4188	0.0196	0.4326	0.0138	0.3050
263	21.71	-0.03	-0.0960	-0.0011	0.0319	0.0111	-0.3327	1.4559	0.0194	0.4518	0.0133	0.3104
264	21.78	-0.04	-0.0874	0.0024	0.0360	-0.0276	-0.4117	1.4585	0.0188	0.4510	0.0129	0.3092
265	21.85	-0.03	-0.0366	0.0135	0.0541	-0.3678	-1.5540	1.4011	0.0199	0.4232	0.0142	0.3020
266	21.93	-0.04	-0.0827	0.0065	0.0366	-0.0568	-0.4189	1.4372	0.0191	0.4389	0.0133	0.3054
267	22.00	-0.05	-0.0893	0.0046	0.0320	-0.0541	-0.3589	1.4245	0.0193	0.4358	0.0135	0.3059
268	22.08	-0.04	-0.0826	0.0072	0.0329	-0.0876	-0.3984	1.4420	0.0183	0.4443	0.0127	0.3081
269	22.15	-0.04	-0.0437	0.0146	0.0512	-0.3745	-1.1722	1.4221	0.0193	0.4336	0.0136	0.3049
270	22.24	-0.05	-0.0696	0.0136	0.0418	-0.2733	-0.8652	1.4471	0.0179	0.4457	0.0123	0.3080
271	22.31	-0.03	-0.0720	0.0236	0.0598	-0.9254	-2.7193	1.3784	0.0193	0.4106	0.0140	0.2979
272	22.39	-0.06	-0.0852	0.0117	0.0408	-0.1790	-0.6257	1.3939	0.0188	0.4206	0.0135	0.3017
273	22.47	-0.03	-0.0082	0.0224	0.0593	-2.7294	-7.2353	1.3740	0.0190	0.4119	0.0138	0.2998
274	22.56	-0.04	-0.0759	0.0086	0.0356	-0.1131	-0.4689	1.4636	0.0173	0.4533	0.0118	0.3097
275	22.62	-0.05	-0.1264	-0.0020	0.0216	0.0160	-0.1710	1.4820	0.0168	0.4634	0.0113	0.3127
276	22.68	-0.04	0.0284	0.0265	0.0782	0.9354	2.7551	1.4275	0.0176	0.4329	0.0123	0.3033

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNIG-6 PM1 CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 8 1.00 1.7 0.0 91#0F23 0.8 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CH2	CA2	XCPF2	YCPF2
277	22.76	-0.07	-0.0981	0.0038	0.0328	-0.0363	-0.3343	1.4782	0.0170	0.4578	0.0115	0.3097
278	22.84	-0.07	-0.0804	0.0116	0.0402	-0.1885	-0.6681	1.4359	0.0173	0.4376	0.0120	0.3066
279	22.90	-0.05	-0.0521	0.0127	0.0471	-0.2444	-0.9037	1.4359	0.0175	0.4393	0.0122	0.3060
280	22.96	-0.05	-0.0798	0.0088	0.0312	-0.1076	-0.3906	1.4507	0.0165	0.4495	0.0114	0.3099
281	23.04	-0.06	-0.0997	0.0196	0.0661	-2.9420	-9.9275	1.4027	0.0178	0.4189	0.0127	0.2987
282	23.11	-0.07	-0.1259	0.0011	0.0188	-0.0084	-0.1272	1.4746	0.0170	0.4578	0.0115	0.3105
283	23.19	-0.06	-0.1145	0.0011	0.0205	-0.0089	-0.1727	1.4698	0.0168	0.4524	0.0114	0.3078
284	23.26	-0.02	-0.0234	0.0151	0.0563	-0.0408	-2.3798	1.3840	0.0185	0.4158	0.0136	0.3084
285	23.34	-0.03	-0.1222	-0.0011	0.0232	0.0087	-0.1894	1.4688	0.0165	0.4517	0.0112	0.3075
286	23.41	-0.05	-0.0153	0.0173	0.0632	-1.1258	-4.1195	1.4056	0.0176	0.4238	0.0125	0.3015
287	23.47	-0.03	-0.1217	-0.0011	0.0174	0.0087	-0.1427	1.4627	0.0163	0.4516	0.0111	0.3087
288	23.51	-0.08	-0.0116	0.0163	0.0716	-1.5574	-6.0820	1.3795	0.0183	0.4109	0.0133	0.2979
289	23.50	-0.06	-0.1393	-0.0017	0.0106	0.0175	-0.0762	1.4717	0.0163	0.4566	0.0111	0.3102
290	23.48	-0.02	-0.0456	0.0121	0.0484	-0.2693	-1.0719	1.4369	0.0166	0.4387	0.0115	0.3053
291	23.49	-0.04	-0.0929	0.0062	0.0348	-0.0745	-0.4203	1.4587	0.0166	0.4510	0.0114	0.3092
292	23.49	-0.03	-0.0216	0.0155	0.0596	-0.7124	-2.7345	1.3812	0.0186	0.4125	0.0135	0.2986
293	23.47	-0.04	-0.0627	0.0069	0.0329	-0.0340	-0.3979	1.4338	0.0171	0.4359	0.0119	0.3040
294	23.48	-0.04	-0.1222	0.0011	0.0176	-0.0087	-0.1438	1.4502	0.0166	0.4465	0.0116	0.3079
295	23.47	-0.04	-0.1047	0.0017	0.0210	-0.0160	-0.1934	1.4352	0.0169	0.4383	0.0118	0.3054
296	23.47	-0.04	-0.0218	0.0155	0.0596	-0.7124	-2.7345	1.4202	0.0171	0.4321	0.0120	0.3042
297	23.47	-0.02	-0.0790	0.0072	0.0316	-0.0928	-0.4047	1.4453	0.0169	0.4432	0.0117	0.3066
298	23.47	-0.05	-0.1593	-0.0046	0.0424	-0.0303	-0.0151	1.4853	0.0161	0.4615	0.0108	0.3107
299	23.47	-0.06	-0.0893	0.0052	0.0312	-0.0583	-0.3488	1.4627	0.0169	0.4517	0.0115	0.3088
300	23.85	-0.02	-0.1679	-0.0055	0.0055	0.0372	-0.0372	1.4986	0.0153	0.4703	0.0102	0.3138
301	24.76	-0.05	-0.2226	-0.0116	-0.0225	0.0529	0.1010	1.5163	0.0133	0.4787	0.0088	0.3157
302	25.77	-0.09	-0.3048	-0.0164	-0.0676	0.0498	0.2220	1.5513	0.0118	0.4957	0.0076	0.3195
303	26.68	-0.05	-0.0241	0.0059	0.0636	-0.2440	-2.6360	1.4766	0.0118	0.4553	0.0090	0.3084
304	27.94	-0.04	-0.1975	0.0166	0.1690	-0.0849	0.8559	1.4476	0.0111	0.4456	0.0077	0.3078
305	29.03	-0.03	-0.2744	0.0206	0.2135	0.0752	0.7781	1.4231	0.0110	0.4381	0.0077	0.3078
306	30.65	-0.08	-0.0432	0.0173	0.1177	0.1857	1.2656	1.4407	0.0100	0.4436	0.0070	0.3078
307	32.09	-0.03	-0.1799	-0.0011	-0.0132	0.0059	0.0735	1.4859	0.0066	0.4612	0.0044	0.3104
308	33.98	-0.06	-0.1332	-0.0035	0.0184	0.0261	-0.1420	1.4262	0.0053	0.4352	0.0037	0.3051
309	36.34	-0.09	-0.2519	-0.0059	-0.0037	0.0234	0.1735	1.4687	0.0022	0.4556	0.0015	0.3102
310	39.16	-0.11	-0.2574	-0.0124	-0.0130	0.0600	0.0628	1.5229	-0.0010	0.4784	-0.0006	0.3141
311	42.60	-0.03	-0.1005	-0.0035	0.0322	0.0345	-0.3205	1.4670	0.0005	0.4521	0.0003	0.3082
312	46.56	0.02	-0.1142	-0.0087	0.0162	0.0729	-0.1360	1.3958	-0.0105	0.4432	-0.0075	0.3175
313	51.15	-0.06	-0.0520	0.0024	0.0459	-0.0464	-0.8831	1.3659	-0.0139	0.4267	-0.0102	0.3124
314	56.02	-0.13	-0.0437	0.0039	0.0563	-0.0792	-1.1564	1.3990	-0.0162	0.4431	-0.0116	0.3167
315	58.44	-0.06	-0.0465	0.0017	0.0503	-0.0358	-1.1193	1.4508	-0.0206	0.4612	-0.0142	0.3179
316	58.91	-0.09	-0.0572	0.0008	0.0494	-0.0067	-0.8834	1.4144	-0.0180	0.4425	-0.0128	0.3128
317	58.42	-0.02	-0.0549	0.0004	0.0497	-0.0070	-0.9051	1.4145	-0.0182	0.4414	-0.0129	0.3121
318	58.44	-0.01	-0.0435	0.0017	0.0509	-0.0399	-1.1707	1.4095	-0.0182	0.4370	-0.0129	0.3100
319	58.43	-0.03	-0.0544	-0.0004	0.0457	0.0071	-0.8404	1.4238	-0.0183	0.4415	-0.0129	0.3101
320	58.33	-0.08	-0.0343	0.0042	0.0502	-0.0930	-1.4048	1.4177	-0.0168	0.4353	-0.0118	0.3071
321	57.58	-0.06	-0.0452	0.0017	0.0441	-0.0385	-0.9765	1.4516	-0.0179	0.4512	-0.0123	0.3108
322	56.76	-0.05	-0.0341	0.0032	0.0483	-0.0935	-1.4193	1.4133	-0.0148	0.4358	-0.0104	0.3084

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 8 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 8 1.60 1.7 0.0 81=0F23 8.8 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
323	55.86	-0.03	-0.0292	0.0035	0.0469	-0.1168	-1.6040	1.3879	-0.0127	0.4236	-0.0092	0.3052
324	55.02	-0.05	-0.0336	0.0028	0.0464	-0.0718	-1.3218	1.3904	-0.0132	0.4269	-0.0095	0.3078
325	54.16	0.01	-0.0291	0.0029	0.0468	-0.0828	-1.6060	1.3786	-0.0132	0.4245	-0.0096	0.3080
326	53.36	0.00	-0.0380	0.0029	0.0428	-0.6635	-1.1269	1.3887	-0.0143	0.4314	-0.0103	0.3106
327	52.43	0.00	-0.0446	0.0017	0.0421	-0.0387	-0.9376	1.4090	-0.0160	0.4422	-0.0114	0.3138
328	51.56	0.01	0.0266	0.0081	0.0660	0.3043	2.4783	1.4139	-0.0151	0.4457	-0.0106	0.3152
329	50.68	0.01	0.0027	-0.0017	0.0559	-0.6429	20.6786	1.4723	-0.0166	0.4708	-0.0113	0.3197
330	49.78	0.11	-0.0281	-0.0028	0.0406	0.0997	-1.4399	1.4153	-0.0137	0.4520	-0.0097	0.3194
331	48.82	0.03	-0.0743	-0.0066	0.0743	0.1130	-0.2727	1.3998	-0.0107	0.4448	-0.0077	0.3178
332	47.85	0.04	-0.0481	0.0039	0.0298	-0.0863	-0.6225	1.4046	-0.0076	0.4514	-0.0054	0.3214
333	46.91	-0.06	-0.0253	-0.0011	0.0548	0.0420	-2.1679	1.4906	-0.0051	0.4809	-0.0034	0.3226
334	45.97	0.08	-0.0008	0.0134	0.0447	-0.6667	-104.8333	1.4838	-0.0020	0.4733	-0.0014	0.3191
335	45.03	-0.02	-0.0499	-0.0014	0.0263	0.0271	-0.5667	1.4733	-0.0008	0.4710	-0.0005	0.3197
336	44.06	-0.07	-0.1008	-0.0112	0.0223	0.1120	-0.2230	1.4580	-0.0011	0.4656	-0.0007	0.3194
337	43.07	-0.06	-0.1040	-0.0114	0.0159	0.1141	-0.1531	1.4815	-0.0011	0.4744	-0.0007	0.3202
338	42.08	-0.08	-0.1096	-0.0087	0.0117	0.0794	-0.0158	1.4931	-0.0008	0.4799	-0.0005	0.3214
339	41.06	0.00	-0.0342	-0.0077	0.0535	0.2250	-1.5650	1.4678	0.0005	0.4686	0.0003	0.3193
340	39.99	-0.02	-0.1468	-0.0120	-0.0139	0.0851	0.1052	1.5193	0.0	0.4918	0.0	0.3237
341	38.90	-0.03	-0.1123	-0.0077	0.0064	0.0687	-0.0567	1.5167	-0.0003	0.4927	-0.0002	0.3248
342	37.84	-0.05	-0.0254	-0.0088	0.0553	0.3514	-2.2124	1.4711	0.0017	0.4696	0.0012	0.3192
343	36.89	-0.06	-0.1082	-0.0119	0.0124	0.1047	-0.1151	1.4339	0.0038	0.4601	0.0026	0.3209
344	35.51	-0.05	-0.1384	-0.0063	-0.0111	0.0455	0.0804	1.4217	0.0045	0.4536	0.0032	0.3198
345	34.29	-0.01	-0.0537	-0.0024	0.0229	0.0521	-0.4737	1.4454	0.0048	0.4643	0.0033	0.3212
346	33.07	-0.05	-0.0528	0.0	0.0142	0.0	-0.2687	1.4437	0.0066	0.4638	0.0045	0.3213
347	31.80	-0.06	-0.0545	0.0011	0.0297	-0.0195	-0.5451	1.4334	0.0066	0.4639	0.0060	0.3236
348	30.50	-0.01	0.3476	0.0253	0.2382	0.0769	0.6996	1.4118	0.0103	0.4518	0.0073	0.3208
349	29.18	0.01	0.1944	0.0155	0.1556	0.0779	0.7804	1.4334	0.0103	0.4637	0.0072	0.3235
350	27.81	-0.03	-0.0535	0.0026	0.0406	-0.0523	-0.7599	1.4612	0.0108	0.4768	0.0074	0.3248
351	26.40	-0.06	-0.1436	-0.0072	-0.0139	0.0443	0.0851	1.5032	0.0115	0.4933	0.0076	0.3282
352	24.91	-0.06	0.1346	0.0210	0.1364	0.1583	0.9728	1.4268	0.0145	0.4588	0.0101	0.3215
353	23.44	-0.06	-0.0588	0.0044	0.0360	-0.0645	-0.5231	1.4469	0.0152	0.4625	0.0105	0.3196
354	23.60	0.06	-0.0742	0.0035	0.0308	-0.0655	-0.4382	1.4741	0.0148	0.4799	0.0108	0.3245
355	23.58	-0.05	-0.1430	-0.0027	0.0109	0.0159	-0.0762	1.4960	0.0159	0.4642	0.0107	0.3241
356	23.57	-0.05	-0.0312	0.0069	0.0469	-0.3485	-1.5046	1.4619	0.0151	0.4694	0.0104	0.3211
357	22.55	-0.01	0.0535	0.0212	0.0964	0.3971	1.8032	1.4623	0.0151	0.4569	0.0105	0.3168
358	23.53	-0.05	-0.0537	0.0078	0.0386	-0.1309	-0.6496	1.4753	0.0151	0.4751	0.0103	0.3228
359	23.43	0.01	-0.0400	0.0096	0.0657	-0.2249	-1.1472	1.4537	0.0149	0.4649	0.0102	0.3198
360	23.32	-0.04	-0.0084	0.0153	0.0638	-1.8276	-7.5057	1.4426	0.0151	0.4547	0.0105	0.3152
361	23.29	-0.06	-0.0724	0.0065	0.0324	-0.0893	-0.4480	1.4623	0.0151	0.4643	0.0104	0.3175
362	23.20	-0.02	-0.1314	-0.0027	0.0023	0.0205	-0.0176	1.4917	0.0151	0.4786	0.0102	0.3208
363	23.09	-0.01	-0.1306	-0.0034	0.0111	0.0258	-0.0849	1.4819	0.0151	0.4738	0.0102	0.3197
364	23.01	-0.04	-0.0257	0.0140	0.0363	-0.5651	-2.1917	1.4401	0.0158	0.4536	0.0110	0.3158
365	22.97	-0.03	-0.0475	0.0024	0.0276	-0.0276	-0.3153	1.4721	0.0151	0.4671	0.0103	0.3173
366	22.86	-0.03	-0.0248	0.0150	0.0467	-0.9231	-1.9650	1.4328	0.0161	0.4461	0.0112	0.3113
367	22.84	-0.04	-0.1113	-0.0004	0.0191	0.0035	-0.1716	1.4623	0.0161	0.4614	0.0110	0.3155
368	22.73	-0.02	-0.0437	0.0192	0.0488	-5.2845	-16.3684	1.4352	0.0161	0.4473	0.0112	0.3117

TEST 7 PART # 1.00 1.67 MACH #X10-6 0.0 PHI 81=0F23 CONF 0.0 L 0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
369	22.66	-0.02	0.0637	0.0300	0.0578	0.4944	1.4467	1.3960	0.0166	0.4263	0.0119	0.3054
370	22.62	-0.03	-0.0039	0.0024	0.0284	-0.0268	-0.3155	1.4476	0.0161	0.4532	0.0111	0.3131
371	22.53	-0.04	0.0011	0.0194	0.0586	16.2727	55.1818	1.4132	0.0169	0.4326	0.0119	0.3061
372	22.45	-0.01	-0.1766	-0.0186	0.0013	-0.1044	-0.0071	1.5112	0.0188	0.4863	0.0125	0.3218
373	22.41	-0.00	-0.1026	-0.0017	0.0234	0.0169	-0.2319	1.4671	0.0166	0.4648	0.0113	0.3168
374	22.31	-0.04	-0.0253	0.0160	0.0526	-0.6336	-2.0802	1.4206	0.0166	0.4361	0.0117	0.3084
375	22.21	-0.05	-0.0273	0.0147	0.0513	-0.5371	-1.8799	1.4229	0.0176	0.4413	0.0123	0.3102
376	22.14	-0.01	-0.0742	0.0024	0.0336	-0.0305	-0.4214	1.4219	0.0181	0.4386	0.0128	0.3085
377	22.05	-0.04	-0.0543	0.0059	0.0400	-0.0901	-0.6231	1.4342	0.0171	0.4465	0.0119	0.3114
378	21.98	-0.01	-0.0537	0.0029	0.0330	-0.0267	-0.3931	1.4499	0.0179	0.4516	0.0128	0.3114
379	21.89	-0.04	-0.0206	0.0178	0.0565	-0.8598	-2.4439	1.3586	0.0191	0.4044	0.0141	0.2976
380	21.81	-0.01	-0.0817	0.0029	0.0392	-0.0295	-0.4179	1.4276	0.0177	0.4428	0.0124	0.3102
381	21.75	-0.02	-0.0906	-0.0011	0.0317	0.0117	-0.3447	1.4389	0.0177	0.4481	0.0123	0.3114
382	21.66	-0.03	-0.0896	-0.0011	0.0381	0.0133	-0.4765	1.4458	0.0177	0.4511	0.0122	0.3120
383	21.59	-0.03	-0.0575	0.0079	0.0382	-0.1376	-0.6644	1.4262	0.0182	0.4375	0.0128	0.3087
384	21.52	-0.03	-0.0894	0.0	0.0315	0.0	-0.3559	1.4457	0.0187	0.4520	0.0129	0.3127
385	21.43	-0.02	-0.0405	0.0051	0.0371	-0.0769	-0.5588	1.4076	0.0187	0.4343	0.0133	0.3085
386	21.35	-0.02	-0.0771	0.0024	0.0310	-0.0313	-0.4018	1.4199	0.0189	0.4383	0.0133	0.3087
387	21.29	-0.03	-0.1061	-0.0051	0.0266	0.0462	-0.2491	1.4455	0.0193	0.4521	0.0134	0.3128
388	21.20	-0.03	-0.0388	0.0103	0.0493	-0.2675	-1.2775	1.4010	0.0203	0.4266	0.0145	0.3045
389	21.12	-0.02	-0.0755	0.0028	0.0361	-0.0370	-0.4777	1.4109	0.0195	0.4324	0.0138	0.3064
390	21.05	-0.05	-0.1035	-0.0046	0.0267	0.0464	-0.2572	1.4432	0.0203	0.4470	0.0140	0.3098
391	20.98	-0.03	-0.0518	0.0069	0.0458	-0.1322	-0.8845	1.3942	0.0203	0.4247	0.0145	0.3046
392	20.89	-0.04	-0.0955	-0.0049	0.0307	0.0465	-0.3212	1.4131	0.0204	0.4356	0.0144	0.3083
393	20.81	-0.03	-0.1063	-0.0052	0.0266	0.0490	-0.2314	1.4119	0.0208	0.4369	0.0148	0.3094
394	20.74	-0.02	-0.0691	-0.0024	0.0307	0.0271	-0.3445	1.4153	0.0214	0.4369	0.0151	0.3087
395	20.65	-0.03	-0.0867	0.0059	0.0411	-0.0970	-0.6773	1.3853	0.0219	0.4224	0.0158	0.3049
396	20.56	-0.03	-0.0547	0.0052	0.0387	-0.0802	-0.5958	1.3951	0.0224	0.4293	0.0160	0.3077
397	20.50	-0.03	-0.1201	-0.0111	0.0219	0.0924	-0.1823	1.4211	0.0225	0.4412	0.0158	0.3105
398	20.40	-0.03	-0.0559	0.0057	0.0388	-0.1054	-0.6943	1.3732	0.0230	0.4232	0.0167	0.3082
399	20.34	-0.04	-0.0913	-0.0041	0.0294	0.0455	-0.3224	1.4236	0.0230	0.4414	0.0161	0.3101
400	20.26	-0.03	-0.1069	-0.0100	0.0348	0.0994	-0.3451	1.4135	0.0227	0.4366	0.0160	0.3089

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 8 MACH 1.80 RN10-6 1.7 PHI 0.0 CONF 23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-2.46	-0.02	0.0991	9.9999	-0.0283	9.9999	-0.2853	-0.2839	-0.0261	-0.0602	0.0918	0.2121
2	-2.48	-0.02	0.1013	9.9999	-0.0254	9.9999	-0.2505	-0.2864	-0.0268	-0.0623	0.0937	0.2177
3	-2.46	-0.02	0.0993	9.9999	-0.0278	9.9999	-0.2948	-0.2788	-0.0256	-0.0597	0.0917	0.2143
4	-2.46	-0.01	0.1013	9.9999	-0.0254	9.9999	-0.2505	-0.2814	-0.0256	-0.0590	0.0909	0.2095
5	-2.46	-0.01	0.1012	9.9999	-0.0226	9.9999	-0.2231	-0.2762	-0.0251	-0.0565	0.0908	0.2047
6	-2.36	-0.02	0.0942	9.9999	-0.0259	9.9999	-0.2746	-0.2657	-0.0246	-0.0538	0.0926	0.2026
7	-2.17	-0.02	0.1012	9.9999	-0.0234	9.9999	-0.2315	-0.2606	-0.0240	-0.0514	0.0922	0.1973
8	-2.07	-0.01	0.0960	9.9999	-0.0266	9.9999	-0.2757	-0.2501	-0.0228	-0.0466	0.0910	0.1862
9	-1.96	-0.01	0.0896	9.9999	-0.0300	9.9999	-0.3348	-0.2397	-0.0225	-0.0419	0.0938	0.1747
10	-1.76	-0.01	0.1033	9.9999	-0.0187	9.9999	-0.1811	-0.2215	-0.0209	-0.0336	0.0945	0.1518
11	-1.66	-0.01	0.0989	9.9999	-0.0206	9.9999	-0.2488	-0.2035	-0.0189	-0.0252	0.0929	0.1238
12	-1.56	-0.01	0.1013	9.9999	-0.0254	9.9999	-0.2505	-0.1982	-0.0184	-0.0208	0.0930	0.1052
13	-1.46	-0.01	0.1035	9.9999	-0.0224	9.9999	-0.2162	-0.1879	-0.0174	-0.0180	0.0924	0.0960
14	-1.36	-0.01	0.1036	9.9999	-0.0233	9.9999	-0.2244	-0.1801	-0.0164	-0.0134	0.0911	0.0765
15	-1.17	-0.02	0.1035	9.9999	-0.0224	9.9999	-0.2162	-0.1619	-0.0151	-0.0041	0.0930	0.0256
16	-1.03	-0.01	0.0984	9.9999	-0.0256	9.9999	-0.2585	-0.1463	-0.0141	-0.0010	0.0963	0.0066
17	-0.92	-0.01	0.1130	9.9999	-0.0198	9.9999	-0.1751	-0.1360	-0.0138	-0.0041	0.1015	0.0305
18	-0.80	-0.00	0.1010	9.9999	-0.0198	9.9999	-0.1958	-0.1307	-0.0133	-0.0017	0.1018	0.0133
19	-0.68	-0.00	0.0965	9.9999	-0.0238	9.9999	-0.2470	-0.1256	-0.0125	0.0007	0.0998	-0.0054
20	-0.57	-0.00	0.0989	9.9999	-0.0206	9.9999	-0.2488	-0.1202	-0.0123	0.0090	0.1019	-0.0746
21	-0.43	-0.01	0.0965	9.9999	-0.0248	9.9999	-0.2570	-0.1094	-0.0123	0.0226	0.1120	-0.2063
22	-0.32	-0.01	0.1013	9.9999	-0.0254	9.9999	-0.2505	-0.1119	-0.0123	0.0262	0.1095	-0.2365
23	-0.19	0.01	0.0966	9.9999	-0.0257	9.9999	-0.2657	-0.1067	-0.0121	0.0296	0.1130	-0.2776
24	-0.06	0.00	0.1034	9.9999	-0.0207	9.9999	-0.2953	-0.0983	-0.0097	0.0309	0.1244	-0.3941
25	0.04	-0.00	0.1004	9.9999	-0.0238	9.9999	-0.2199	-0.0785	-0.0087	0.0329	0.1106	-0.4189
26	0.17	0.01	0.1035	9.9999	-0.0224	9.9999	-0.2162	-0.0738	-0.0062	0.0404	0.0837	-0.5477
27	0.31	0.00	0.1014	9.9999	-0.0272	9.9999	-0.2683	-0.0686	-0.0056	0.0418	0.0816	-0.6090
28	0.40	0.00	0.1061	9.9999	-0.0259	9.9999	-0.2436	-0.0589	-0.0041	0.0478	0.0588	-0.6933
29	0.54	-0.00	0.1086	9.9999	-0.0294	9.9999	-0.2709	-0.0612	-0.0031	0.0494	0.0505	-0.8076
30	0.65	0.01	0.1085	9.9999	-0.0275	9.9999	-0.2533	-0.0529	-0.0028	0.0458	0.0652	-1.0674
31	0.75	0.00	0.1133	9.9999	-0.0272	9.9999	-0.2402	-0.0430	-0.0023	0.0488	0.0538	-1.1345
32	0.89	-0.01	0.1062	9.9999	-0.0296	9.9999	-0.2788	-0.0166	-0.0023	0.0537	0.1395	-3.2384
33	1.00	0.01	0.1226	9.9999	-0.0227	9.9999	-0.1849	-0.0034	-0.0023	0.0596	0.6857	-17.6571
34	1.12	0.01	0.1274	9.9999	-0.0224	9.9999	-0.1759	0.0073	-0.0023	0.0663	-0.3158	9.0395
35	1.25	0.00	0.1134	9.9999	-0.0281	9.9999	-0.2477	0.0178	-0.0015	0.0720	-0.0870	4.0543
36	1.34	-0.00	0.1181	9.9999	-0.0277	9.9999	-0.2345	0.0231	-0.0011	0.0793	-0.0460	3.4393
37	1.47	0.00	0.1161	9.9999	-0.0264	9.9999	-0.2271	0.0283	-0.0008	0.0808	-0.0273	2.8567
38	1.60	0.00	0.1275	9.9999	-0.0242	9.9999	-0.1900	0.0388	0.0	0.0884	0.0	2.2786
39	1.70	0.01	0.1135	9.9999	-0.0299	9.9999	-0.2636	0.0492	0.0013	0.0972	0.0255	1.6745
40	1.82	0.00	0.1279	9.9999	-0.0214	9.9999	-0.1682	0.0595	0.0023	0.1019	0.0389	1.7115
41	1.93	-0.01	0.1251	9.9999	-0.0293	9.9999	-0.2020	0.0648	0.0023	0.1023	0.0357	1.5774
42	2.03	0.01	0.1137	9.9999	-0.0318	9.9999	-0.2801	0.0805	0.0039	0.1096	0.0488	1.3621
43	2.16	0.01	0.1291	9.9999	-0.0292	9.9999	-0.2375	0.0806	0.0034	0.1096	0.0419	1.3605
44	2.28	0.00	0.1164	9.9999	-0.0305	9.9999	-0.2575	0.0961	0.0048	0.1148	0.0502	1.1948
45	2.38	-0.00	0.1113	9.9999	-0.0329	9.9999	-0.2955	0.1063	0.0067	0.1214	0.0626	1.1434
46	2.51	-0.00	0.1137	9.9999	-0.0290	9.9999	-0.2555	0.1141	0.0077	0.1253	0.0676	1.0981

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RA10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	8	1.64	1.67	0.0	BLM0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
47	2.61	-0.00	0.1279	9.9999	-0.0270	9.9999	-0.2112	0.1220	0.0095	0.1299	0.0696	1.0649
48	2.72	-0.00	0.1255	9.9999	-0.0272	9.9999	-0.2168	0.1270	0.0100	0.1333	0.0790	1.0582
49	2.85	-0.01	0.1232	9.9999	-0.0284	9.9999	-0.2302	0.1296	0.0102	0.1345	0.0789	1.0380
50	2.97	-0.01	0.1186	9.9999	-0.0278	9.9999	-0.2367	0.1373	0.0113	0.1401	0.0822	1.0206
51	3.07	-0.01	0.1277	9.9999	-0.0262	9.9999	-0.1896	0.1475	0.0131	0.1469	0.0889	0.9961
52	3.14	-0.00	0.1207	9.9999	-0.0266	9.9999	-0.2206	0.1605	0.0147	0.1529	0.0914	0.9531
53	3.31	-0.00	0.1326	9.9999	-0.0234	9.9999	-0.1798	0.1663	0.0154	0.1585	0.0917	0.9421
54	3.40	-0.01	0.1184	9.9999	-0.0268	9.9999	-0.2429	0.1787	0.0167	0.1653	0.0936	0.9249
55	3.53	0.00	0.1275	9.9999	-0.0252	9.9999	-0.1970	0.1766	0.0169	0.1662	0.0945	0.9308
56	3.65	-0.00	0.1349	9.9999	-0.0228	9.9999	-0.1688	0.1838	0.0177	0.1696	0.0961	0.9228
57	3.75	-0.00	0.1231	9.9999	-0.0274	9.9999	-0.2226	0.1890	0.0182	0.1730	0.0965	0.9153
58	3.87	-0.01	0.1328	9.9999	-0.0202	9.9999	-0.1523	0.2019	0.0194	0.1780	0.0979	0.8815
59	3.98	0.01	0.1279	9.9999	-0.0243	9.9999	-0.1900	0.2074	0.0203	0.1846	0.0977	0.8898
60	4.09	0.00	0.1232	9.9999	-0.0265	9.9999	-0.2153	0.2178	0.0213	0.1896	0.0979	0.8697
61	4.21	-0.01	0.1255	9.9999	-0.0254	9.9999	-0.2022	0.2281	0.0229	0.1962	0.1003	0.8600
62	4.33	-0.01	0.1233	9.9999	-0.0274	9.9999	-0.2222	0.2333	0.0233	0.1976	0.1001	0.8478
63	4.42	-0.00	0.1186	9.9999	-0.0296	9.9999	-0.2498	0.2437	0.0244	0.2044	0.1002	0.8385
64	4.53	-0.01	0.1255	9.9999	-0.0254	9.9999	-0.2022	0.2595	0.0256	0.2105	0.0978	0.8115
65	4.64	-0.01	0.1255	9.9999	-0.0254	9.9999	-0.2022	0.2568	0.0260	0.2124	0.1011	0.8271
66	4.76	0.00	0.1233	9.9999	-0.0274	9.9999	-0.2222	0.2671	0.0269	0.2182	0.1008	0.8028
67	4.86	-0.00	0.1232	9.9999	-0.0265	9.9999	-0.2153	0.2724	0.0275	0.2205	0.1010	0.8094
68	4.96	0.00	0.1187	9.9999	-0.0300	9.9999	-0.2577	0.2775	0.0285	0.2249	0.1026	0.8185
69	5.07	-0.01	0.1186	9.9999	-0.0296	9.9999	-0.2498	0.2880	0.0290	0.2296	0.1008	0.7973
70	5.17	-0.01	0.1245	9.9999	-0.0293	9.9999	-0.2375	0.2934	0.0301	0.2333	0.1026	0.7951
71	5.26	0.00	0.1145	9.9999	-0.0327	9.9999	-0.2809	0.3039	0.0306	0.2391	0.1006	0.7867
72	5.36	-0.01	0.1376	9.9999	-0.0235	9.9999	-0.1711	0.3066	0.0306	0.2403	0.0997	0.7835
73	5.47	-0.00	0.1423	9.9999	-0.0222	9.9999	-0.1559	0.3223	0.0321	0.2485	0.0997	0.7710
74	5.59	-0.00	0.1377	9.9999	-0.0245	9.9999	-0.1780	0.3300	0.0332	0.2531	0.1006	0.7670
75	5.68	0.00	0.1424	9.9999	-0.0232	9.9999	-0.1626	0.3354	0.0332	0.2554	0.0990	0.7615
76	5.78	0.01	0.1401	9.9999	-0.0252	9.9999	-0.1798	0.3460	0.0332	0.2601	0.0959	0.7518
77	5.88	-0.00	0.1378	9.9999	-0.0272	9.9999	-0.1975	0.3460	0.0337	0.2631	0.0973	0.7605
78	5.97	-0.00	0.1261	9.9999	-0.0328	9.9999	-0.2601	0.3563	0.0349	0.2679	0.0980	0.7528
79	6.07	0.00	0.1378	9.9999	-0.0272	9.9999	-0.1975	0.3615	0.0360	0.2754	0.0995	0.7617
80	6.17	-0.00	0.1378	9.9999	-0.0272	9.9999	-0.1975	0.3642	0.0357	0.2745	0.0980	0.7536
81	6.26	0.00	0.1332	9.9999	-0.0286	9.9999	-0.2145	0.3723	0.0366	0.2775	0.0982	0.7453
82	6.37	0.01	0.1403	9.9999	-0.0261	9.9999	-0.1864	0.3750	0.0371	0.2826	0.0988	0.7535
83	6.47	-0.00	0.1424	9.9999	-0.0251	9.9999	-0.1759	0.3884	0.0373	0.2896	0.0961	0.7456
84	6.57	-0.01	0.1284	9.9999	-0.0299	9.9999	-0.2329	0.3961	0.0383	0.2931	0.0967	0.7401
85	6.67	0.00	0.1379	9.9999	-0.0273	9.9999	-0.1980	0.3998	0.0383	0.2944	0.0961	0.7382
86	6.78	0.00	0.1403	9.9999	-0.0271	9.9999	-0.1933	0.4094	0.0389	0.3011	0.0950	0.7356
87	6.89	0.01	0.1357	9.9999	-0.0303	9.9999	-0.2233	0.4172	0.0397	0.3057	0.0951	0.7327
88	6.97	0.01	0.1427	9.9999	-0.0269	9.9999	-0.1886	0.4170	0.0401	0.3058	0.0963	0.7332
89	7.08	0.01	0.1404	9.9999	-0.0280	9.9999	-0.1993	0.4224	0.0401	0.3111	0.0950	0.7364
90	7.19	-0.01	0.1404	9.9999	-0.0280	9.9999	-0.1943	0.4276	0.0409	0.3135	0.0957	0.7331
91	7.27	-0.01	0.1246	9.9999	-0.0299	9.9999	-0.2326	0.4361	0.0410	0.3173	0.0940	0.7277
92	7.36	-0.00	0.1357	9.9999	-0.0265	9.9999	-0.1956	0.4442	0.0404	0.3209	0.0910	0.7224

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	6	1.00	1.7	0.0	B1B0T23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	7.47	0.00	0.1786	9.9999	-0.0304	9.9999	-0.2401	0.4491	0.0423	0.3254	0.0941	0.7244
94	7.58	0.00	0.1875	9.9999	-0.0247	9.9999	-0.1674	0.4519	0.0420	0.3285	0.0929	0.7269
95	7.66	-0.01	0.1265	9.9999	-0.0281	9.9999	-0.2185	0.4573	0.0420	0.3310	0.0918	0.7236
96	7.76	-0.00	0.1267	9.9999	-0.0317	9.9999	-0.2866	0.4708	0.0418	0.3368	0.0887	0.7155
97	7.85	-0.00	0.1335	9.9999	-0.0323	9.9999	-0.2421	0.4788	0.0420	0.3414	0.0877	0.7130
98	7.94	-0.00	0.1332	9.9999	-0.0259	9.9999	-0.1941	0.4786	0.0426	0.3428	0.0889	0.7155
99	8.03	-0.00	0.1341	9.9999	-0.0263	9.9999	-0.1908	0.4867	0.0426	0.3460	0.0874	0.7109
100	8.12	0.00	0.1405	9.9999	-0.0271	9.9999	-0.1930	0.4920	0.0426	0.3503	0.0865	0.7121
101	8.21	-0.00	0.1288	9.9999	-0.0337	9.9999	-0.2614	0.4947	0.0427	0.3535	0.0864	0.7146
102	8.30	0.01	0.1429	9.9999	-0.0269	9.9999	-0.1886	0.4972	0.0435	0.3567	0.0875	0.7134
103	8.39	0.01	0.1453	9.9999	-0.0277	9.9999	-0.1906	0.5105	0.0435	0.3607	0.0852	0.7065
104	8.47	-0.01	0.1382	9.9999	-0.0367	9.9999	-0.2840	0.5153	0.0435	0.3638	0.0843	0.7036
105	8.55	-0.00	0.1530	9.9999	-0.0273	9.9999	-0.1820	0.5184	0.0427	0.3681	0.0824	0.7095
106	8.64	-0.00	0.1384	9.9999	-0.0329	9.9999	-0.2378	0.5240	0.0435	0.3705	0.0830	0.7071
107	8.73	-0.01	0.1433	9.9999	-0.0353	9.9999	-0.2665	0.5243	0.0435	0.3720	0.0822	0.7027
108	8.82	-0.01	0.1455	9.9999	-0.0314	9.9999	-0.2155	0.5373	0.0435	0.3755	0.0810	0.6989
109	8.92	-0.01	0.1525	9.9999	-0.0284	9.9999	-0.1898	0.5536	0.0427	0.3835	0.0772	0.6928
110	9.01	-0.00	0.1456	9.9999	-0.0333	9.9999	-0.2286	0.5483	0.0427	0.3831	0.0780	0.6988
111	9.10	-0.00	0.1575	9.9999	-0.0323	9.9999	-0.2053	0.5589	0.0430	0.3859	0.0770	0.6906
112	9.19	-0.01	0.1526	9.9999	-0.0317	9.9999	-0.2040	0.5589	0.0430	0.3879	0.0770	0.6939
113	9.28	-0.00	0.1440	9.9999	-0.0349	9.9999	-0.2360	0.5695	0.0438	0.3937	0.0769	0.6913
114	9.36	0.00	0.1505	9.9999	-0.0366	9.9999	-0.2429	0.5722	0.0435	0.3959	0.0761	0.6919
115	9.43	0.01	0.1574	9.9999	-0.0295	9.9999	-0.1876	0.5855	0.0435	0.3998	0.0743	0.6829
116	9.54	0.00	0.1504	9.9999	-0.0347	9.9999	-0.2309	0.5829	0.0438	0.4006	0.0752	0.6873
117	9.61	0.00	0.1524	9.9999	-0.0327	9.9999	-0.2139	0.5916	0.0436	0.4056	0.0737	0.6857
118	9.69	-0.00	0.1577	9.9999	-0.0315	9.9999	-0.1995	0.6022	0.0438	0.4083	0.0727	0.6781
119	9.82	0.01	0.1506	9.9999	-0.0367	9.9999	-0.2306	0.6077	0.0436	0.4127	0.0718	0.6791
120	9.89	0.00	0.1577	9.9999	-0.0315	9.9999	-0.1995	0.6129	0.0441	0.4161	0.0719	0.6757
121	9.96	0.00	0.1531	9.9999	-0.0373	9.9999	-0.2439	0.6266	0.0426	0.4200	0.0679	0.6703
122	10.04	-0.01	0.1578	9.9999	-0.0351	9.9999	-0.2225	0.6320	0.0426	0.4233	0.0673	0.6698
123	10.17	0.00	0.1579	9.9999	-0.0379	9.9999	-0.2401	0.6401	0.0421	0.4248	0.0657	0.6637
124	10.24	0.00	0.1671	9.9999	-0.0279	9.9999	-0.1669	0.6397	0.0436	0.4248	0.0682	0.6627
125	10.34	0.00	0.1530	9.9999	-0.0359	9.9999	-0.2320	0.6453	0.0430	0.4303	0.0667	0.6669
126	10.44	-0.01	0.1609	9.9999	-0.0378	9.9999	-0.2356	0.6539	0.0436	0.4324	0.0667	0.6612
127	10.51	0.00	0.1607	9.9999	-0.0404	9.9999	-0.2529	0.6596	0.0424	0.4367	0.0642	0.6621
128	10.59	0.00	0.1651	9.9999	-0.0374	9.9999	-0.2265	0.6677	0.0421	0.4362	0.0630	0.6564
129	10.67	0.00	0.1671	9.9999	-0.0307	9.9999	-0.1836	0.6747	0.0421	0.4422	0.0623	0.6554
130	10.78	0.00	0.1721	9.9999	-0.0340	9.9999	-0.1973	0.6779	0.0423	0.4454	0.0624	0.6575
131	10.86	-0.00	0.1624	9.9999	-0.0403	9.9999	-0.2478	0.6830	0.0413	0.4457	0.0605	0.6525
132	10.95	-0.01	0.1675	9.9999	-0.0381	9.9999	-0.2275	0.6879	0.0430	0.4482	0.0626	0.6510
133	11.04	-0.00	0.1675	9.9999	-0.0381	9.9999	-0.2275	0.6878	0.0438	0.4491	0.0637	0.6531
134	11.12	-0.01	0.1746	9.9999	-0.0357	9.9999	-0.2044	0.7041	0.0423	0.4563	0.0600	0.6452
135	11.21	-0.01	0.1675	9.9999	-0.0381	9.9999	-0.2275	0.7040	0.0430	0.4563	0.0611	0.6482
136	11.30	0.00	0.1818	9.9999	-0.0351	9.9999	-0.1932	0.7095	0.0426	0.4606	0.0600	0.6493
137	11.38	-0.01	0.1746	9.9999	-0.0357	9.9999	-0.2044	0.7145	0.0438	0.4618	0.0613	0.6452
138	11.46	-0.00	0.1627	9.9999	-0.0412	9.9999	-0.2533	0.7187	0.0440	0.4628	0.0612	0.6438

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 .8 1.00 1.7 0.0 M1=0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNFA	CHA	CBA	XCPFA	YCPFA
139	11.56	-0.02	0.1556	9.9999	-0.0446	9.9999	-0.2864	0.7242	0.0435	0.4671	0.0601	0.6458
140	11.66	-0.02	0.1697	9.9999	-0.0384	9.9999	-0.2285	0.7298	0.0427	0.4705	0.0586	0.6446
141	11.72	-0.02	0.1675	9.9999	-0.0418	9.9999	-0.2496	0.7376	0.0435	0.4740	0.0590	0.6426
142	11.82	-0.01	0.1816	9.9999	-0.0369	9.9999	-0.2030	0.7320	0.0451	0.4728	0.0616	0.6458
143	11.90	-0.01	0.1674	9.9999	-0.0398	9.9999	-0.2380	0.7457	0.0438	0.4786	0.0587	0.6418
144	11.96	-0.01	0.1816	9.9999	-0.0369	9.9999	-0.2030	0.7370	0.0461	0.4762	0.0626	0.6435
145	12.06	-0.01	0.1723	9.9999	-0.0396	9.9999	-0.2296	0.7463	0.0443	0.4792	0.0593	0.6420
146	12.15	-0.02	0.1746	9.9999	-0.0384	9.9999	-0.2199	0.7571	0.0441	0.4839	0.0582	0.6391
147	12.23	-0.02	0.1747	9.9999	-0.0394	9.9999	-0.2253	0.7652	0.0438	0.4884	0.0572	0.6383
148	12.32	-0.02	0.1658	9.9999	-0.0408	9.9999	-0.2707	0.7732	0.0435	0.4920	0.0563	0.6363
149	12.41	-0.01	0.1676	9.9999	-0.0418	9.9999	-0.2493	0.7679	0.0438	0.4926	0.0570	0.6414
150	12.48	-0.02	0.1728	9.9999	-0.0418	9.9999	-0.2401	0.7870	0.0423	0.4998	0.0537	0.6350
151	12.57	-0.01	0.1650	9.9999	-0.0438	9.9999	-0.2649	0.7842	0.0430	0.5007	0.0549	0.6384
152	12.66	-0.02	0.1728	9.9999	-0.0418	9.9999	-0.2601	0.7896	0.0430	0.5020	0.0545	0.6358
153	12.74	-0.02	0.1793	9.9999	-0.0398	9.9999	-0.2223	0.7992	0.0425	0.5031	0.0531	0.6295
154	12.83	-0.02	0.1605	9.9999	-0.0470	9.9999	-0.2928	0.8020	0.0423	0.5042	0.0527	0.6348
155	12.90	-0.02	0.1746	9.9999	-0.0421	9.9999	-0.2609	0.7991	0.0435	0.5091	0.0545	0.6370
156	13.00	-0.01	0.1652	9.9999	-0.0456	9.9999	-0.2763	0.8158	0.0404	0.5170	0.0501	0.6337
157	13.08	-0.02	0.1722	9.9999	-0.0416	9.9999	-0.2403	0.8097	0.0435	0.5138	0.0537	0.6345
158	13.16	-0.02	0.1605	9.9999	-0.0470	9.9999	-0.2928	0.8063	0.0440	0.5124	0.0547	0.6371
159	13.26	-0.02	0.1696	9.9999	-0.0425	9.9999	-0.2503	0.8196	0.0425	0.5187	0.0518	0.6329
160	13.32	-0.01	0.1672	9.9999	-0.0426	9.9999	-0.2550	0.7921	0.0455	0.5021	0.0575	0.6338
161	13.40	-0.02	0.1720	9.9999	-0.0423	9.9999	-0.2457	0.8276	0.0425	0.5223	0.0513	0.6311
162	13.50	-0.03	0.1556	9.9999	-0.0486	9.9999	-0.2982	0.8365	0.0422	0.5264	0.0506	0.6293
163	13.58	-0.03	0.1698	9.9999	-0.0425	9.9999	-0.2500	0.8281	0.0435	0.5209	0.0525	0.6298
164	13.66	-0.02	0.1721	9.9999	-0.0416	9.9999	-0.2405	0.8581	0.0417	0.5339	0.0486	0.6222
165	13.76	-0.02	0.1720	9.9999	-0.0431	9.9999	-0.2507	0.8623	0.0427	0.5367	0.0489	0.6224
166	13.83	-0.02	0.1697	9.9999	-0.0446	9.9999	-0.2707	0.8616	0.0403	0.5368	0.0468	0.6238
167	13.92	-0.02	0.1666	9.9999	-0.0434	9.9999	-0.2603	0.8661	0.0402	0.5416	0.0465	0.6253
168	13.99	-0.02	0.1666	9.9999	-0.0433	9.9999	-0.2600	0.8533	0.0427	0.5234	0.0501	0.6134
169	14.10	-0.03	0.1665	9.9999	-0.0452	9.9999	-0.2711	0.8635	0.0414	0.5334	0.0479	0.6177
170	14.16	-0.02	0.1618	9.9999	-0.0455	9.9999	-0.2815	0.8662	0.0412	0.5366	0.0476	0.6195
171	14.24	-0.03	0.1617	9.9999	-0.0446	9.9999	-0.2757	0.8740	0.0414	0.5342	0.0474	0.6117
172	14.34	-0.02	0.1685	9.9999	-0.0412	9.9999	-0.2464	0.8865	0.0406	0.5433	0.0458	0.6129
173	14.42	-0.03	0.1613	9.9999	-0.0436	9.9999	-0.2703	0.8775	0.0400	0.5410	0.0456	0.6165
174	14.49	-0.03	0.1567	9.9999	-0.0458	9.9999	-0.2925	0.8796	0.0421	0.5356	0.0474	0.6087
175	14.59	-0.02	0.1614	9.9999	-0.0454	9.9999	-0.2815	0.8880	0.0405	0.5408	0.0456	0.6090
176	14.66	-0.02	0.1637	9.9999	-0.0443	9.9999	-0.2705	0.8826	0.0411	0.5395	0.0466	0.6112
177	14.76	-0.03	0.1637	9.9999	-0.0443	9.9999	-0.2705	0.8905	0.0408	0.5410	0.0458	0.6075
178	14.86	-0.03	0.1611	9.9999	-0.0445	9.9999	-0.2760	0.8968	0.0421	0.5439	0.0469	0.6065
179	14.94	-0.02	0.1658	9.9999	-0.0423	9.9999	-0.2549	0.8886	0.0433	0.5395	0.0488	0.6071
180	15.01	-0.02	0.1610	9.9999	-0.0435	9.9999	-0.2702	0.8806	0.0441	0.5361	0.0501	0.6066
181	15.10	-0.03	0.1610	9.9999	-0.0435	9.9999	-0.2702	0.8620	0.0436	0.5219	0.0506	0.6054
182	15.18	-0.03	0.1496	9.9999	-0.0463	9.9999	-0.3047	0.8894	0.0436	0.5381	0.0498	0.6050
183	15.28	-0.03	0.1566	9.9999	-0.0449	9.9999	-0.2865	0.8710	0.0431	0.5269	0.0495	0.6050
184	15.34	-0.03	0.1612	9.9999	-0.0426	9.9999	-0.2645	0.8398	0.0400	0.5067	0.0477	0.6034

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 9 OF 9

MANTIN MISSILE TAILS EFFECTS DATA

TEST T. PART 8 MACH 1.00 1.7 RXI3-6 PHI 0.0 CONF M1=OF23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
185	15.43	-0.03	0.1568	9.9999	-0.0458	9.9999	-0.2923	0.8490	0.0391	0.5107	0.0460	0.6015
186	15.53	-0.03	0.1570	9.9999	-0.0459	9.9999	-0.2926	0.8461	0.0381	0.4929	0.0442	0.6039
187	15.60	-0.03	0.1522	9.9999	-0.0453	9.9999	-0.2980	0.8448	0.0381	0.5089	0.0451	0.6023
188	15.69	-0.03	0.1592	9.9999	-0.0433	9.9999	-0.2758	0.8583	0.0373	0.5118	0.0435	0.5963
189	15.78	-0.04	0.1592	9.9999	-0.0429	9.9999	-0.2697	0.8583	0.0375	0.5138	0.0437	0.5987
190	15.86	-0.04	0.1522	9.9999	-0.0463	9.9999	-0.3066	0.8559	0.0361	0.5105	0.0422	0.5964
191	15.95	-0.04	0.1569	9.9999	-0.0441	9.9999	-0.2811	0.8587	0.0355	0.5126	0.0413	0.5970
192	16.03	-0.03	0.1522	9.9999	-0.0453	9.9999	-0.2980	0.8537	0.0360	0.5063	0.0398	0.5938
193	16.12	-0.04	0.1569	9.9999	-0.0450	9.9999	-0.2866	0.8748	0.0347	0.5177	0.0397	0.5918
194	16.19	-0.03	0.1639	9.9999	-0.0426	9.9999	-0.2596	0.8593	0.0330	0.5066	0.0386	0.5918
195	16.27	-0.04	0.1495	9.9999	-0.0454	9.9999	-0.3041	0.8733	0.0318	0.5133	0.0365	0.5878
196	16.35	-0.04	0.1565	9.9999	-0.0449	9.9999	-0.2807	0.8554	0.0318	0.5107	0.0368	0.5901
197	16.43	-0.03	0.1496	9.9999	-0.0473	9.9999	-0.3161	0.8890	0.0324	0.5204	0.0365	0.5853
198	16.51	-0.04	0.1542	9.9999	-0.0451	9.9999	-0.2922	0.8631	0.0304	0.5066	0.0352	0.5869
199	16.60	-0.03	0.1425	9.9999	-0.0497	9.9999	-0.3487	0.8556	0.0288	0.5029	0.0337	0.5878
200	16.68	-0.03	0.1569	9.9999	-0.0447	9.9999	-0.2811	0.8588	0.0296	0.5032	0.0345	0.5865
201	16.76	-0.03	0.1567	9.9999	-0.0458	9.9999	-0.2925	0.8826	0.0301	0.5133	0.0341	0.5816
202	16.84	-0.03	0.1642	9.9999	-0.0442	9.9999	-0.2660	0.8696	0.0286	0.5044	0.0328	0.5801
203	16.92	-0.04	0.1518	9.9999	-0.0453	9.9999	-0.2982	0.8789	0.0290	0.5104	0.0330	0.5807
204	17.01	-0.04	0.1495	9.9999	-0.0473	9.9999	-0.3163	0.8580	0.0278	0.4970	0.0320	0.5793
205	17.09	-0.05	0.1467	9.9999	-0.0465	9.9999	-0.3353	0.8688	0.0273	0.5037	0.0314	0.5797
206	17.16	-0.04	0.1566	9.9999	-0.0476	9.9999	-0.3038	0.8872	0.0275	0.5099	0.0310	0.5748
207	17.24	-0.04	0.1565	9.9999	-0.0457	9.9999	-0.2922	0.8761	0.0270	0.5030	0.0309	0.5754
208	17.35	-0.04	0.1519	9.9999	-0.0480	9.9999	-0.3158	0.8953	0.0262	0.5095	0.0293	0.5698
209	17.43	-0.04	0.1496	9.9999	-0.0481	9.9999	-0.3219	0.8874	0.0262	0.5049	0.0296	0.5690
210	17.49	-0.04	0.1495	9.9999	-0.0473	9.9999	-0.3163	0.8956	0.0260	0.5094	0.0290	0.5689
211	17.58	-0.04	0.1589	9.9999	-0.0455	9.9999	-0.2866	0.9006	0.0258	0.5068	0.0286	0.5628
212	17.68	-0.03	0.1516	9.9999	-0.0470	9.9999	-0.3100	0.9050	0.0252	0.5133	0.0278	0.5672
213	17.75	-0.03	0.1563	9.9999	-0.0466	9.9999	-0.2981	0.9129	0.0252	0.5159	0.0276	0.5652
214	17.83	-0.03	0.1564	9.9999	-0.0466	9.9999	-0.2981	0.9107	0.0252	0.5118	0.0277	0.5623
215	17.91	-0.03	0.1610	9.9999	-0.0453	9.9999	-0.2816	0.8916	0.0257	0.5016	0.0282	0.5626
216	17.99	-0.04	0.1564	9.9999	-0.0484	9.9999	-0.3097	0.8917	0.0247	0.5006	0.0277	0.5614
217	18.08	-0.04	0.1517	9.9999	-0.0488	9.9999	-0.3219	0.8865	0.0244	0.5002	0.0275	0.5642
218	18.17	-0.04	0.1570	9.9999	-0.0442	9.9999	-0.3095	0.9007	0.0245	0.5046	0.0272	0.5603
219	18.24	-0.03	0.1661	9.9999	-0.0478	9.9999	-0.2876	0.9007	0.0242	0.5016	0.0269	0.5569
220	18.32	-0.03	0.1566	9.9999	-0.0485	9.9999	-0.3049	0.9113	0.0242	0.5103	0.0266	0.5600
221	18.41	-0.04	0.1570	9.9999	-0.0442	9.9999	-0.3095	0.8949	0.0239	0.4936	0.0270	0.5578
222	18.48	-0.04	0.1613	9.9999	-0.0481	9.9999	-0.2984	0.8925	0.0232	0.4944	0.0262	0.5602
223	18.56	-0.03	0.1662	9.9999	-0.0487	9.9999	-0.2933	0.8956	0.0234	0.4983	0.0262	0.5563
224	18.66	-0.04	0.1591	9.9999	-0.0510	9.9999	-0.3208	0.9063	0.0227	0.5040	0.0250	0.5561
225	18.74	-0.04	0.1566	9.9999	-0.0521	9.9999	-0.3327	0.8944	0.0227	0.4936	0.0254	0.5519
226	18.83	-0.03	0.1636	9.9999	-0.0507	9.9999	-0.3096	0.8996	0.0232	0.4970	0.0257	0.5524
227	18.90	-0.04	0.1520	9.9999	-0.0543	9.9999	-0.3575	0.8888	0.0236	0.4894	0.0266	0.5506
228	18.97	-0.04	0.1567	9.9999	-0.0539	9.9999	-0.3442	0.8865	0.0227	0.4911	0.0256	0.5540
229	19.06	-0.03	0.1567	9.9999	-0.0558	9.9999	-0.3559	0.8991	0.0247	0.4882	0.0275	0.5430
230	19.13	-0.04	0.1570	9.9999	-0.0537	9.9999	-0.3380	0.9098	0.0227	0.5143	0.0239	0.5414

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 B 1.60 1.7 0.0 MissF23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
231	19.21	-0.04	0.1614	9.9999	-0.0536	9.9999	-0.3317	0.9623	0.0247	0.5115	0.0257	0.5315
232	19.29	-0.02	0.1613	9.9999	-0.0527	9.9999	-0.3266	0.9623	0.0244	0.5075	0.0254	0.5274
233	19.36	-0.03	0.1598	9.9999	-0.0530	9.9999	-0.3387	0.9479	0.0233	0.4951	0.0246	0.5223
234	19.45	-0.04	0.1658	9.9999	-0.0504	9.9999	-0.3038	0.9423	0.0244	0.4898	0.0259	0.5198
235	19.52	-0.04	0.1657	9.9999	-0.0495	9.9999	-0.2938	0.9634	0.0239	0.4953	0.0248	0.5141
236	19.60	-0.02	0.1584	9.9999	-0.0536	9.9999	-0.3442	0.9581	0.0239	0.4900	0.0250	0.5114
237	19.68	-0.03	0.1681	9.9999	-0.0502	9.9999	-0.2995	0.9768	0.0229	0.4961	0.0234	0.5079
238	19.76	-0.03	0.1611	9.9999	-0.0536	9.9999	-0.3323	0.9923	0.0236	0.4973	0.0238	0.5012
239	19.83	-0.03	0.1604	9.9999	-0.0530	9.9999	-0.3387	1.0186	0.0236	0.5070	0.0232	0.4978
240	19.91	-0.03	0.1636	9.9999	-0.0506	9.9999	-0.3095	1.0213	0.0232	0.5053	0.0227	0.4948
241	19.99	-0.03	0.1607	9.9999	-0.0515	9.9999	-0.3207	1.0345	0.0231	0.5062	0.0223	0.4893
242	20.06	-0.03	0.1700	9.9999	-0.0460	9.9999	-0.2883	1.0160	0.0231	0.4941	0.0227	0.4863
243	20.15	-0.03	0.1700	9.9999	-0.0490	9.9999	-0.2883	1.0450	0.0228	0.5049	0.0218	0.4832
244	20.23	-0.04	0.1653	9.9999	-0.0493	9.9999	-0.2983	1.0423	0.0226	0.4999	0.0217	0.4796
245	20.30	-0.04	0.1546	9.9999	-0.0545	9.9999	-0.3441	1.0584	0.0213	0.5029	0.0201	0.4752
246	20.38	-0.03	0.1653	9.9999	-0.0510	9.9999	-0.3094	1.0504	0.0215	0.4955	0.0205	0.4717
247	20.45	-0.03	0.1667	9.9999	-0.0460	9.9999	-0.2876	1.0737	0.0217	0.5077	0.0202	0.4729
248	20.53	-0.03	0.1737	9.9999	-0.0456	9.9999	-0.2828	1.0528	0.0216	0.4955	0.0203	0.4706
249	20.61	-0.03	0.1683	9.9999	-0.0500	9.9999	-0.3042	1.0567	0.0209	0.4971	0.0198	0.4704
250	20.68	-0.04	0.1642	9.9999	-0.0490	9.9999	-0.2945	1.0541	0.0209	0.4950	0.0199	0.4696
251	20.76	-0.04	0.1659	9.9999	-0.0466	9.9999	-0.2878	1.0751	0.0204	0.5012	0.0189	0.4663
252	20.83	-0.02	0.1713	9.9999	-0.0456	9.9999	-0.2885	1.0725	0.0204	0.4941	0.0190	0.4654
253	20.92	-0.03	0.1642	9.9999	-0.0481	9.9999	-0.2932	1.0725	0.0202	0.4982	0.0188	0.4645
254	21.00	-0.03	0.1638	9.9999	-0.0481	9.9999	-0.2933	1.0649	0.0191	0.4936	0.0179	0.4635
255	21.09	-0.05	0.1639	9.9999	-0.0504	9.9999	-0.3096	1.0698	0.0199	0.4930	0.0186	0.4609
256	21.17	-0.04	0.1588	9.9999	-0.0514	9.9999	-0.3327	1.0858	0.0191	0.5029	0.0176	0.4632
257	21.23	-0.05	0.1547	9.9999	-0.0533	9.9999	-0.3444	1.0543	0.0194	0.4951	0.0184	0.4601
258	21.33	-0.03	0.1638	9.9999	-0.0489	9.9999	-0.2986	1.0859	0.0186	0.5010	0.0171	0.4613
259	21.39	-0.03	0.1730	9.9999	-0.0454	9.9999	-0.2627	1.0884	0.0191	0.5021	0.0176	0.4613
260	21.46	-0.04	0.1648	9.9999	-0.0458	9.9999	-0.2722	1.0964	0.0181	0.5036	0.0165	0.4593
261	21.55	-0.04	0.1635	9.9999	-0.0470	9.9999	-0.2873	1.1156	0.0188	0.5141	0.0169	0.4608
262	21.62	-0.03	0.1612	9.9999	-0.0481	9.9999	-0.2986	1.1261	0.0185	0.5168	0.0165	0.4589
263	21.71	-0.03	0.1612	9.9999	-0.0472	9.9999	-0.2926	1.0871	0.0179	0.4956	0.0164	0.4558
264	21.78	-0.04	0.1727	9.9999	-0.0436	9.9999	-0.2525	1.1055	0.0173	0.5075	0.0156	0.4591
265	21.85	-0.03	0.1497	9.9999	-0.0508	9.9999	-0.3398	1.1261	0.0185	0.5177	0.0165	0.4598
266	21.93	-0.03	0.1633	9.9999	-0.0452	9.9999	-0.2766	1.0990	0.0176	0.4998	0.0160	0.4568
267	22.00	-0.05	0.1540	9.9999	-0.0459	9.9999	-0.2982	1.1095	0.0173	0.5064	0.0156	0.4564
268	22.08	-0.04	0.1701	9.9999	-0.0419	9.9999	-0.2462	1.1201	0.0165	0.5119	0.0147	0.4578
269	22.15	-0.04	0.1633	9.9999	-0.0452	9.9999	-0.2766	1.1329	0.0176	0.5197	0.0155	0.4587
270	22.24	-0.05	0.1701	9.9999	-0.0410	9.9999	-0.2411	1.1408	0.0173	0.5192	0.0151	0.4551
271	22.31	-0.03	0.1630	9.9999	-0.0415	9.9999	-0.2546	1.1552	0.0173	0.5294	0.0150	0.4583
272	22.39	-0.06	0.1559	9.9999	-0.0447	9.9999	-0.2865	1.1279	0.0162	0.5133	0.0144	0.4551
273	22.47	-0.03	0.1716	9.9999	-0.0380	9.9999	-0.2212	1.1485	0.0173	0.5255	0.0150	0.4575
274	22.54	-0.04	0.1716	9.9999	-0.0380	9.9999	-0.2212	1.1280	0.0157	0.5114	0.0139	0.4533
275	22.62	-0.05	0.1557	9.9999	-0.0455	9.9999	-0.2926	1.1087	0.0152	0.4989	0.0137	0.4508
276	22.68	-0.04	0.1579	9.9999	-0.0418	9.9999	-0.2645	1.1502	0.0160	0.5251	0.0139	0.4565

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 7 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 8 MACH 1.04 RX10-6 1.7 PHI 0.0 CONF H1=OF=23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CH4	C54	XCPF4	YCPF4
277	22.76	-0.07	0.1485	9.9999	-0.0425	9.9999	-0.2859	1.1156	0.0148	0.5047	0.0132	0.4524
278	22.84	-0.07	0.1600	9.9999	-0.0398	9.9999	-0.2485	1.1232	0.0152	0.5092	0.0136	0.4533
279	22.90	-0.05	0.1646	9.9999	-0.0385	9.9999	-0.2339	1.1257	0.0154	0.5113	0.0137	0.4502
280	22.96	-0.05	0.1645	9.9999	-0.0376	9.9999	-0.2287	1.1236	0.0148	0.5101	0.0131	0.4541
281	23.04	-0.06	0.1579	9.9999	-0.0409	9.9999	-0.2542	1.1476	0.0150	0.5187	0.0131	0.4540
282	23.11	-0.07	0.1646	9.9999	-0.0359	9.9999	-0.2175	1.1037	0.0150	0.5005	0.0136	0.4534
283	23.19	-0.06	0.1675	9.9999	-0.0397	9.9999	-0.2441	1.1011	0.0148	0.4974	0.0134	0.4517
284	23.26	-0.02	0.1533	9.9999	-0.0395	9.9999	-0.2574	1.1389	0.0145	0.5166	0.0128	0.4548
285	23.34	-0.03	0.1579	9.9999	-0.0400	9.9999	-0.2535	1.0867	0.0148	0.4930	0.0136	0.4536
286	23.41	-0.05	0.1695	9.9999	-0.0338	9.9999	-0.1992	1.1374	0.0143	0.5172	0.0126	0.4547
287	23.47	-0.03	0.1489	9.9999	-0.0417	9.9999	-0.2800	1.0958	0.0140	0.4969	0.0128	0.4516
288	23.51	-0.03	0.1608	9.9999	-0.0372	9.9999	-0.2320	1.1463	0.0148	0.5232	0.0129	0.4564
289	23.50	-0.06	0.1582	9.9999	-0.0392	9.9999	-0.2476	1.1073	0.0140	0.5008	0.0126	0.4516
290	23.48	-0.05	0.1720	9.9999	-0.0344	9.9999	-0.2002	1.1283	0.0133	0.5111	0.0118	0.4530
291	23.49	-0.04	0.1654	9.9999	-0.0360	9.9999	-0.2176	1.1272	0.0135	0.5078	0.0120	0.4505
292	23.49	-0.03	0.1634	9.9999	-0.0360	9.9999	-0.2176	1.1297	0.0141	0.5119	0.0125	0.4531
293	23.47	-0.04	0.1584	9.9999	-0.0374	9.9999	-0.2363	1.1139	0.0146	0.5050	0.0131	0.4534
294	23.48	-0.04	0.1548	9.9999	-0.0393	9.9999	-0.2476	1.0968	0.0149	0.4974	0.0135	0.4535
295	23.47	-0.04	0.1632	9.9999	-0.0362	9.9999	-0.2218	1.0653	0.0153	0.4826	0.0144	0.4530
296	23.47	-0.04	0.1564	9.9999	-0.0404	9.9999	-0.2585	1.1360	0.0143	0.5167	0.0128	0.4548
297	23.47	-0.02	0.1565	9.9999	-0.0374	9.9999	-0.2362	1.1126	0.0143	0.5063	0.0128	0.4550
298	23.47	-0.05	0.1633	9.9999	-0.0371	9.9999	-0.2275	1.0890	0.0143	0.4930	0.0131	0.4526
299	23.47	-0.06	0.1679	9.9999	-0.0341	9.9999	-0.2030	1.1335	0.0133	0.5096	0.0117	0.4496
300	23.45	-0.06	0.1721	9.9999	-0.0319	9.9999	-0.1850	1.0436	0.0143	0.4718	0.0137	0.4521
301	24.76	-0.05	0.1561	9.9999	-0.0376	9.9999	-0.2410	1.0100	0.0133	0.4587	0.0132	0.4541
302	25.77	-0.09	0.1628	9.9999	-0.0316	9.9999	-0.1944	0.9869	0.0128	0.4521	0.0130	0.4582
303	26.68	-0.05	0.1398	9.9999	-0.0389	9.9999	-0.2761	1.0999	0.0085	0.4977	0.0077	0.4525
304	27.84	-0.03	0.1654	9.9999	-0.0287	9.9999	-0.1119	1.0606	0.0083	0.4910	0.0077	0.4564
305	29.03	-0.03	0.1445	9.9999	-0.0200	9.9999	-0.1027	1.0378	0.0077	0.4777	0.0074	0.4603
306	30.45	-0.05	0.1574	9.9999	-0.0355	9.9999	-0.2248	1.0541	0.0052	0.4864	0.0049	0.4614
307	32.09	-0.03	0.1532	9.9999	-0.0342	9.9999	-0.2229	1.0180	0.0047	0.4779	0.0046	0.4604
308	33.96	-0.04	0.1417	9.9999	-0.0377	9.9999	-0.2662	1.0133	0.0028	0.4774	0.0028	0.4711
309	36.36	-0.04	0.1578	9.9999	-0.0319	9.9999	-0.2024	1.1136	-0.0028	0.5228	-0.0025	0.4695
310	39.16	-0.11	0.1994	9.9999	-0.0338	9.9999	-0.2307	1.1412	-0.0053	0.5308	-0.0046	0.4651
311	42.60	-0.03	0.1557	9.9999	-0.0304	9.9999	-0.1952	1.0874	-0.0035	0.5130	-0.0032	0.4718
312	46.56	0.02	0.1674	9.9999	-0.0186	9.9999	-0.1115	1.0521	-0.0138	0.4965	-0.0131	0.4719
313	51.15	-0.06	0.1749	9.9999	-0.0161	9.9999	-0.0911	1.0298	-0.0141	0.4915	-0.0137	0.4773
314	56.02	-0.13	0.1452	9.9999	-0.0351	9.9999	-0.2419	1.0853	-0.0187	0.5058	-0.0172	0.4660
315	59.44	-0.06	0.1455	9.9999	-0.0352	9.9999	-0.2620	1.1338	-0.0212	0.5169	-0.0187	0.4582
316	58.81	-0.04	0.1340	9.9999	-0.0390	9.9999	-0.2909	1.1022	-0.0193	0.5056	-0.0175	0.4587
317	58.42	-0.02	0.1339	9.9999	-0.0353	9.9999	-0.2637	1.0943	-0.0190	0.5001	-0.0174	0.4570
318	58.44	-0.01	0.1504	9.9999	-0.0276	9.9999	-0.1839	1.0943	-0.0193	0.5011	-0.0176	0.4579
319	58.43	-0.03	0.1362	9.9999	-0.0324	9.9999	-0.2360	1.0898	-0.0178	0.4974	-0.0163	0.4564
320	58.33	-0.08	0.1364	9.9999	-0.0324	9.9999	-0.2376	1.1150	-0.0193	0.5055	-0.0173	0.4534
321	57.58	-0.06	0.1273	9.9999	-0.0333	9.9999	-0.2616	1.1341	-0.0208	0.5195	-0.0184	0.4581
322	56.76	-0.05	0.1388	9.9999	-0.0277	9.9999	-0.1999	1.1121	-0.0178	0.5084	-0.0158	0.4571

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE|10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	8	1.60	1.7	0.0	61.0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
323	55.86	-0.03	0.1364	9.9999	-0.0270	9.9999	-0.1980	1.0795	-0.0138	0.4985	-0.0128	0.4617
324	55.02	-0.05	0.1316	9.9999	-0.0237	9.9999	-0.1804	1.0716	-0.0135	0.4988	-0.0126	0.4647
325	54.16	0.01	0.1360	9.9999	-0.0206	9.9999	-0.1511	1.0598	-0.0132	0.4947	-0.0125	0.4668
326	53.30	0.00	0.1359	9.9999	-0.0178	9.9999	-0.1307	1.0813	-0.0148	0.5049	-0.0137	0.4669
327	52.43	0.00	0.1265	9.9999	-0.0204	9.9999	-0.1609	1.1083	-0.0173	0.5155	-0.0156	0.4651
328	51.59	0.03	0.1311	9.9999	-0.0181	9.9999	-0.1383	1.1080	-0.0157	0.5147	-0.0142	0.4665
329	50.68	0.07	0.1358	9.9999	-0.0159	9.9999	-0.1173	1.0709	-0.0151	0.5003	-0.0141	0.4672
330	49.78	0.11	0.1401	9.9999	-0.0137	9.9999	-0.0978	1.0629	-0.0152	0.4978	-0.0143	0.4627
331	48.82	0.03	0.1569	9.9999	-0.0080	9.9999	-0.0520	1.0412	-0.0122	0.4855	-0.0117	0.4663
332	47.85	0.08	0.1401	9.9999	-0.0137	9.9999	-0.0978	1.1179	-0.0142	0.5136	-0.0127	0.4593
333	46.91	-0.06	0.1332	9.9999	-0.0188	9.9999	-0.1412	1.1084	-0.0073	0.5162	-0.0066	0.4657
334	45.97	0.04	0.1402	9.9999	-0.0165	9.9999	-0.1177	1.1394	-0.0058	0.5225	-0.0051	0.4585
335	45.03	-0.02	0.1378	9.9999	-0.0184	9.9999	-0.1338	1.1062	-0.0048	0.5137	-0.0044	0.4644
336	44.06	-0.07	0.1402	9.9999	-0.0210	9.9999	-0.1500	1.1082	-0.0051	0.5245	-0.0045	0.4568
337	43.07	-0.08	0.1405	9.9999	-0.0202	9.9999	-0.1435	1.1267	-0.0041	0.5162	-0.0036	0.4582
338	42.08	-0.04	0.1409	9.9999	-0.0247	9.9999	-0.1753	1.1387	-0.0048	0.5224	-0.0042	0.4587
339	41.06	0.00	0.1200	9.9999	-0.0346	9.9999	-0.2886	1.1304	-0.0039	0.5170	-0.0034	0.4573
340	39.99	-0.04	0.1351	9.9999	-0.0284	9.9999	-0.2112	1.1502	-0.0136	0.5238	-0.0031	0.4556
341	38.90	-0.03	0.1455	9.9999	-0.0261	9.9999	-0.1797	1.1420	-0.0028	0.5165	-0.0025	0.4523
342	37.84	-0.05	0.1502	9.9999	-0.0258	9.9999	-0.1715	1.0367	-0.0003	0.4687	-0.0003	0.4568
343	36.69	-0.06	0.1536	9.9999	-0.0223	9.9999	-0.1348	1.0742	0.0038	0.4918	0.0007	0.4578
344	35.51	-0.05	0.1427	9.9999	-0.0230	9.9999	-0.1536	1.0328	0.0028	0.4748	0.0027	0.4597
345	34.29	-0.01	0.1567	9.9999	-0.0304	9.9999	-0.1990	1.0366	0.0041	0.4738	0.0039	0.4570
346	33.07	-0.05	0.1643	9.9999	-0.0242	9.9999	-0.1439	1.0007	0.0066	0.4573	0.0066	0.4570
347	31.80	-0.02	0.1555	9.9999	-0.0303	9.9999	-0.1910	1.0231	0.0073	0.4615	0.0072	0.4511
348	30.58	-0.01	0.1424	9.9999	-0.0174	9.9999	-0.0849	1.0760	0.0073	0.4736	0.0068	0.4489
349	29.16	0.01	0.1926	9.9999	-0.0143	9.9999	-0.1002	1.1156	0.0075	0.4902	0.0067	0.4394
350	27.81	-0.03	0.1535	9.9999	-0.0350	9.9999	-0.2282	1.1272	0.0083	0.4926	0.0076	0.4378
351	26.40	-0.06	0.1623	9.9999	-0.0316	9.9999	-0.1944	1.0586	0.0118	0.4590	0.0111	0.4336
352	24.91	-0.02	0.1621	9.9999	-0.0316	9.9999	-0.1946	1.1300	0.0107	0.5161	0.0098	0.4337
353	23.64	-0.02	0.1622	9.9999	-0.0343	9.9999	-0.2112	1.1479	0.0130	0.4950	0.0113	0.4312
354	23.60	0.00	0.1479	9.9999	-0.0379	9.9999	-0.2564	1.1752	0.0122	0.5060	0.0103	0.4305
355	23.58	-0.05	0.1652	9.9999	-0.0328	9.9999	-0.1973	1.1386	0.0134	0.4872	0.0118	0.4278
356	23.57	-0.05	0.1657	9.9999	-0.0327	9.9999	-0.1974	1.1633	0.0129	0.5019	0.0111	0.4315
357	22.55	-0.01	0.1474	9.9999	-0.0298	9.9999	-0.1776	1.1738	0.0129	0.5103	0.0110	0.4348
358	21.53	-0.25	0.1741	9.9999	-0.0262	9.9999	-0.1466	1.1648	0.0126	0.5025	0.0109	0.4316
359	23.43	0.01	0.1407	9.9999	-0.0313	9.9999	-0.1946	1.1530	0.0128	0.5012	0.0111	0.4346
360	23.32	-0.04	0.1650	9.9999	-0.0290	9.9999	-0.1760	1.1621	0.0131	0.5071	0.0113	0.4364
361	23.29	-0.02	0.1628	9.9999	-0.0319	9.9999	-0.1962	1.1466	0.0133	0.4974	0.0116	0.4338
362	23.24	-0.02	0.1504	9.9999	-0.0351	9.9999	-0.2251	1.1311	0.0133	0.4877	0.0118	0.4312
363	23.09	-0.01	0.1606	9.9999	-0.0330	9.9999	-0.2055	1.0951	0.0141	0.4766	0.0129	0.4352
364	23.07	-0.04	0.1606	9.9999	-0.0330	9.9999	-0.2055	1.1620	0.0136	0.5091	0.0117	0.4381
365	22.97	-0.03	0.1607	9.9999	-0.0306	9.9999	-0.2275	1.1467	0.0133	0.4984	0.0116	0.4346
366	22.88	-0.03	0.1607	9.9999	-0.0306	9.9999	-0.2275	1.1490	0.0146	0.5036	0.0127	0.4381
367	22.84	-0.04	0.1516	9.9999	-0.0382	9.9999	-0.2521	1.1309	0.0146	0.4916	0.0129	0.4367
368	22.73	-0.02	0.1653	9.9999	-0.0353	9.9999	-0.2137	1.1669	0.0146	0.5123	0.0125	0.4391

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 9 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 8 MACH 1.00 RX10-6 1.7 PHI 0.0 CONF B1=0F23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
369	22.46	-0.02	0.1605	9.9999	-0.0330	9.9999	-0.2055	1.1770	0.0156	0.5148	0.0133	0.4408
370	22.62	-0.03	0.1625	9.9999	-0.0416	9.9999	-0.2918	1.1362	0.0141	0.4977	0.0124	0.4380
371	22.53	-0.04	0.1675	9.9999	-0.0333	9.9999	-0.1987	1.1666	0.0158	0.5133	0.0136	0.4400
372	22.45	-0.01	0.1630	9.9999	-0.0345	9.9999	-0.2120	1.0174	0.0171	0.4455	0.0168	0.4379
373	22.41	-0.00	0.1585	9.9999	-0.0376	9.9999	-0.2374	1.1308	0.0151	0.4955	0.0133	0.4381
374	22.31	-0.03	0.1699	9.9999	-0.0356	9.9999	-0.2107	1.1687	0.0161	0.5083	0.0140	0.4425
375	22.21	-0.05	0.1607	9.9999	-0.0374	9.9999	-0.2329	1.1458	0.0171	0.5043	0.0149	0.4402
376	22.14	-0.01	0.1674	9.9999	-0.0387	9.9999	-0.2305	1.1111	0.0163	0.4878	0.0147	0.4398
377	22.05	-0.04	0.1678	9.9999	-0.0370	9.9999	-0.2202	1.1319	0.0161	0.5017	0.0142	0.4433
378	21.98	-0.01	0.1613	9.9999	-0.0385	9.9999	-0.2386	1.1240	0.0166	0.4964	0.0148	0.4417
379	21.89	-0.04	0.1662	9.9999	-0.0417	9.9999	-0.2509	1.1470	0.0177	0.5096	0.0154	0.4443
380	21.81	-0.01	0.1638	9.9999	-0.0410	9.9999	-0.2503	1.1240	0.0166	0.4955	0.0148	0.4408
381	21.75	-0.02	0.1640	9.9999	-0.0428	9.9999	-0.2612	1.1252	0.0164	0.4969	0.0146	0.4416
382	21.66	-0.03	0.1528	9.9999	-0.0405	9.9999	-0.3043	1.1162	0.0172	0.4911	0.0150	0.4408
383	21.59	-0.03	0.1825	9.9999	-0.0360	9.9999	-0.1973	1.1367	0.0177	0.5023	0.0155	0.4419
384	21.52	-0.03	0.1734	9.9999	-0.0403	9.9999	-0.2326	1.1160	0.0179	0.4912	0.0161	0.4402
385	21.43	-0.02	0.1577	9.9999	-0.0461	9.9999	-0.2925	1.1043	0.0177	0.4878	0.0160	0.4418
386	21.35	-0.02	0.1688	9.9999	-0.0456	9.9999	-0.2724	1.1068	0.0181	0.4910	0.0164	0.4436
387	21.29	-0.03	0.1626	9.9999	-0.0459	9.9999	-0.2875	1.0861	0.0182	0.4798	0.0168	0.4418
388	21.20	-0.04	0.1649	9.9999	-0.0468	9.9999	-0.2715	1.1268	0.0187	0.4990	0.0166	0.4436
389	21.12	-0.02	0.1706	9.9999	-0.0401	9.9999	-0.2247	1.0913	0.0182	0.4831	0.0167	0.4427
390	21.05	-0.05	0.1604	9.9999	-0.0479	9.9999	-0.2984	1.0807	0.0187	0.4776	0.0173	0.4419
391	20.98	-0.03	0.1631	9.9999	-0.0469	9.9999	-0.2876	1.0754	0.0190	0.4753	0.0177	0.4420
392	20.89	-0.04	0.1547	9.9999	-0.0509	9.9999	-0.3149	1.0586	0.0188	0.4657	0.0178	0.4401
393	20.81	-0.03	0.1654	9.9999	-0.0478	9.9999	-0.2881	1.0462	0.0201	0.4625	0.0192	0.4420
394	20.74	-0.02	0.1638	9.9999	-0.0482	9.9999	-0.2986	1.0617	0.0201	0.4684	0.0189	0.4412
395	20.65	-0.03	0.1592	9.9999	-0.0502	9.9999	-0.3152	1.0697	0.0199	0.4748	0.0186	0.4439
396	20.56	-0.04	0.1732	9.9999	-0.0473	9.9999	-0.2730	1.0695	0.0208	0.4777	0.0195	0.4417
397	20.50	-0.03	0.1712	9.9999	-0.0467	9.9999	-0.2728	1.0247	0.0217	0.4562	0.0212	0.4432
398	20.40	-0.03	0.1692	9.9999	-0.0490	9.9999	-0.2985	1.0562	0.0214	0.4710	0.0203	0.4408
399	20.34	-0.04	0.1649	9.9999	-0.0496	9.9999	-0.2935	1.0454	0.0224	0.4664	0.0214	0.4461
400	20.28	-0.04	0.1547	9.9999	-0.0521	9.9999	-0.3263	1.0889	0.0224	0.4502	0.0222	0.4483

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	9	1.00	1.7	45.0	A1A0F23	0.8	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-2.39	0.07	-0.2990	0.5575	0.0466	-0.0903	-0.0034	0.3653	0.1048	0.2605	-1.8649
2	-2.34	0.06	-0.3155	0.5796	0.0114	-0.0534	-0.0035	0.3711	0.1059	0.2652	-1.8355
3	-2.36	0.07	-0.2944	0.5316	0.0162	-0.0349	-0.0091	0.3753	0.1074	0.2679	-1.8689
4	-2.38	0.06	-0.2761	0.5246	-0.0100	-0.0179	-0.0092	0.3738	0.1081	0.2657	-1.9178
5	-2.39	0.06	-0.2940	0.5797	0.0011	-0.0009	-0.0092	0.3658	0.1072	0.2586	-1.9375
6	-2.39	0.07	-0.2850	0.5254	0.0164	-0.0289	-0.0035	0.3745	0.1094	0.2651	-1.8433
7	-2.39	0.07	-0.2924	0.5476	0.0396	-0.0554	-0.0034	0.3715	0.1071	0.2644	-1.8490
8	-2.39	0.06	-0.3003	0.5665	0.0126	-0.0732	-0.0092	0.3716	0.1075	0.2639	-1.8202
9	-2.39	0.06	-0.2948	0.5747	0.0146	-0.0450	-0.0035	0.3730	0.1083	0.2647	-1.9238
10	-2.40	0.07	-0.3012	0.5665	0.0318	-0.0423	-0.0035	0.3746	0.1087	0.2659	-1.7967
11	-2.37	0.06	-0.2772	0.5062	0.0072	-0.0247	-0.0035	0.3826	0.1090	0.2736	-1.8331
12	-1.93	0.07	-0.2284	0.4446	0.0422	-0.0367	-0.0036	0.3825	0.1088	0.2757	-1.9579
13	-1.14	0.07	-0.1356	0.2526	0.0271	-0.0558	-0.0092	0.3743	0.0984	0.2759	-1.8606
14	-0.18	0.07	-0.0184	0.0625	0.0226	-0.0365	-0.0148	0.3780	0.0943	0.2836	-3.4722
15	0.73	0.07	0.0776	-0.0467	0.0404	-0.0837	-0.0034	0.3799	0.0991	0.2808	-1.2747
16	1.71	0.06	0.1789	-0.2936	-0.0131	-0.0238	-0.0036	0.3861	0.1054	0.2807	-1.6596
17	2.67	0.06	0.2853	-0.4644	0.0074	-0.0140	-0.0035	0.3839	0.1101	0.2738	-1.6219
18	3.66	0.06	0.3788	-0.6216	-0.0072	-0.0153	-0.0091	0.3837	0.1147	0.2690	-1.6489
19	4.60	0.07	0.4709	-0.8094	0.0349	-0.0413	-0.0033	0.3878	0.1257	0.2621	-1.6290
20	5.60	0.06	0.6055	-0.9717	0.0065	-0.0083	-0.0033	0.3864	0.1322	0.2542	-1.6047
21	6.61	0.06	0.7129	-1.1534	-0.0430	-0.0505	-0.0035	0.3819	0.1377	0.2442	-1.6185
22	7.50	0.06	0.8125	-1.3128	-0.0137	-0.0316	-0.0033	0.3904	0.1473	0.2431	-1.6147
23	8.46	0.07	0.9409	-1.4974	0.0763	-0.1218	-0.0030	0.3955	0.1581	0.2374	-1.5814
24	9.43	0.07	1.0512	-1.6648	0.0716	-0.1277	-0.0029	0.3980	0.1680	0.2308	-1.5258
25	10.41	0.07	1.2249	-1.8254	0.0242	-0.0884	-0.0030	0.4044	0.1782	0.2262	-1.5149
26	11.37	0.06	1.3142	-1.9343	-0.0063	-0.0391	-0.0030	0.4028	0.1841	0.2187	-1.4719
27	12.30	0.06	1.4555	-2.0950	-0.0038	-0.0285	-0.0029	0.4079	0.1917	0.2162	-1.4394
28	13.25	0.07	1.5737	-2.1256	0.0220	-0.0542	-0.0025	0.4183	0.2078	0.2105	-1.3958
29	14.25	0.06	1.7151	-2.3103	0.0099	-0.0024	-0.0024	0.4088	0.2143	0.1945	-1.3670
30	15.25	0.07	1.8389	-2.4267	0.0457	-0.0089	-0.0021	0.4046	0.2209	0.1887	-1.3198
31	16.22	0.06	2.0187	-2.6580	0.1477	-0.0550	-0.0068	0.4071	0.2268	0.1803	-1.2176
32	17.14	0.07	2.1308	-2.6988	0.0695	-0.1005	-0.0066	0.4003	0.2293	0.1710	-1.1675
33	18.18	0.07	2.2688	-2.5786	0.1290	-0.2043	-0.0173	0.4043	0.2361	0.1682	-1.1256
34	19.21	0.07	2.4773	-2.7004	0.0690	-0.0974	-0.0228	0.4037	0.2501	0.1536	-1.0901
35	20.23	0.06	2.6245	-2.8754	0.1524	-0.1402	-0.0277	0.3962	0.2578	0.1384	-1.0194
36	21.26	0.06	2.8216	-2.8980	0.1514	-0.1955	-0.0272	0.3968	0.2705	0.1283	-0.9536
37	22.26	0.06	2.9503	-2.9371	0.0799	0.5896	0.0188	0.4136	0.2922	0.1215	-0.7989
38	23.28	0.10	3.2143	-2.3142	0.2072	0.3532	0.0089	0.4139	0.3046	0.1094	-0.7208
39	24.30	0.10	3.4496	-1.8959	0.3852	-0.1225	-0.0176	0.4228	0.3312	0.0916	-0.5464
40	25.32	0.11	3.7811	-1.6588	0.4453	-0.2874	0.0006	0.4138	0.3352	0.0786	-0.4411
41	26.36	0.12	4.0317	-1.5502	0.5475	-0.5223	0.0074	0.4043	0.3343	0.0680	-0.3845
42	27.40	0.15	4.3697	-1.4352	0.6217	-0.7831	0.0150	0.3941	0.3393	0.0588	-0.3284
43	28.42	0.15	4.6947	-1.2269	0.6695	-0.8341	0.0275	0.3841	0.3360	0.0481	-0.2613
44	29.47	0.14	5.0283	-0.7650	0.8104	-0.5545	0.0457	0.3768	0.3419	0.0341	-0.1682
45	30.56	0.17	5.4372	-0.4730	1.0422	-0.6648	0.0761	0.3610	0.3489	0.0121	-0.0871
46	31.63	0.17	5.8026	-0.2984	1.1184	-1.1494	0.1001	0.3534	0.3532	0.0002	-0.0514

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	9	1.80	1.7	45.0	HINGE23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	31.91	0.18	5.7045	-0.2350	1.1908	-1.2149	0.1116	0.3577	0.3510	0.0067	-0.0412
48	31.91	0.17	5.7065	-0.2435	1.0936	-1.1276	0.1169	0.3547	0.3514	0.0033	-0.0462
49	31.92	0.16	5.7045	-0.1481	1.0221	-1.0294	0.0998	0.3548	0.3491	0.0057	-0.0268
50	31.91	0.15	5.6443	-0.0781	0.9346	-0.7851	0.0938	0.3554	0.3521	0.0033	-0.0138
51	31.93	0.18	5.7938	-0.3623	1.2245	-1.2733	0.1231	0.3548	0.3550	-0.0002	-0.0625
52	31.98	0.17	5.7466	-0.1276	1.0226	-1.0601	0.1113	0.3584	0.3503	0.0081	-0.0222
53	32.19	0.17	5.8327	-0.0892	1.0234	-1.0674	0.1003	0.3588	0.3594	-0.0006	-0.0153
54	32.32	0.17	5.8095	-0.0565	1.0801	-1.1258	0.1118	0.3677	0.3547	0.0130	-0.0097
55	32.42	0.18	5.9306	-0.0341	1.1367	-1.1810	0.1123	0.3537	0.3495	0.0037	-0.0064
56	32.58	0.18	5.9307	-0.1421	1.2022	-1.2668	0.1181	0.3627	0.3564	0.0063	-0.0248
57	32.70	0.18	6.0125	-0.0626	1.2101	-1.3009	0.1071	0.3663	0.3575	-0.0112	-0.0104
58	32.83	0.18	6.0722	0.0617	1.2110	-1.3179	0.1130	0.3665	0.3587	-0.0102	0.0102
59	32.97	0.17	6.1060	-0.0387	1.1193	-1.2876	0.1239	0.3527	0.3587	-0.0060	-0.0063
60	33.09	0.17	6.1144	-0.0390	1.0432	-1.0023	0.1125	0.3365	0.3539	-0.0174	0.0064
61	33.21	0.17	6.1716	-0.0554	1.0528	-0.9858	0.1122	0.3384	0.3495	-0.0111	-0.0414
62	33.36	0.18	6.2573	-0.1282	1.1993	-1.1781	0.1246	0.3433	0.3550	-0.0117	-0.0205
63	33.46	0.19	6.2995	-0.2724	1.3201	-1.3496	0.1363	0.3386	0.3577	-0.0191	-0.0432
64	33.59	0.17	6.3270	0.0507	1.1187	-1.1656	0.1249	0.3568	0.3628	-0.0088	0.0088
65	33.74	0.19	6.4424	-0.1793	1.2863	-1.3765	0.1594	0.3538	0.3698	-0.0160	-0.0278
66	33.85	0.18	6.4319	-0.0697	1.2273	-1.2536	0.1594	0.3620	0.3661	-0.0041	-0.0077
67	33.98	0.18	6.5467	0.0078	1.2255	-1.1866	0.1540	0.3542	0.3701	-0.0159	0.0012
68	34.11	0.19	6.5160	-0.1179	1.2420	-1.1867	0.1485	0.3533	0.3723	-0.0190	0.0181
69	34.22	0.19	6.5863	-0.0151	1.2987	-1.2681	0.1600	0.3511	0.3723	-0.0212	-0.0023
70	34.34	0.17	6.5702	0.2068	1.0727	-0.8899	0.1368	0.3407	0.3610	-0.0203	0.0315
71	34.50	0.21	6.8045	-0.3311	1.5046	-1.3639	0.1947	0.3504	0.3789	-0.0285	-0.0486
72	34.60	0.20	6.7923	-0.1119	1.3864	-1.1862	0.1776	0.3502	0.3745	-0.0243	-0.0165
73	34.72	0.17	6.6400	0.0405	1.0261	-0.8378	0.1536	0.3449	0.3635	-0.0186	0.0061
74	34.86	0.19	6.8396	0.0234	1.2416	-0.9129	0.1717	0.3430	0.3742	-0.0312	0.0034
75	34.97	0.19	6.9341	-0.1061	1.2726	-0.9981	0.1832	0.3554	0.3782	-0.0228	-0.0153
76	35.09	0.17	6.8810	0.0394	1.0658	-0.7026	0.1598	0.3416	0.3668	-0.0252	-0.0058
77	35.23	0.19	6.9877	-0.0051	1.1969	-0.8456	0.1662	0.3393	0.3770	-0.0377	-0.0007
78	35.33	0.19	7.0279	-0.1778	1.2931	-0.9745	0.1834	0.3457	0.3804	-0.0347	-0.0253
79	35.47	0.18	7.1451	-0.2649	1.1129	-0.7350	0.1829	0.3465	0.3833	-0.0368	-0.0369
80	35.58	0.19	7.1672	-0.2987	1.2657	-0.7844	0.1949	0.3475	0.3800	-0.0325	-0.0336
81	35.70	0.19	7.2876	-0.2303	1.2336	-0.7854	0.1950	0.3397	0.3807	-0.0410	-0.0316
82	35.83	0.18	7.2828	-0.2413	1.1441	-0.5627	0.1833	0.3276	0.3781	-0.0507	-0.0331
83	35.93	0.19	7.1846	-0.3882	1.2279	-0.5592	0.1833	0.3584	0.3829	-0.0245	-0.0540
84	36.07	0.19	7.3993	-0.1387	1.1798	-0.6017	0.1840	0.3351	0.3803	-0.0452	-0.0187
85	36.17	0.18	7.3594	-0.2903	1.0599	-0.4302	0.1720	0.3231	0.3734	-0.0503	-0.0381
86	36.28	0.18	7.4784	-0.2112	1.0704	-0.4436	0.1781	0.3344	0.3845	-0.0501	-0.0282
87	36.40	0.18	7.4290	-0.2227	1.0460	-0.3928	0.1609	0.3278	0.3775	-0.0497	-0.0300
88	36.54	0.18	7.5193	-0.2847	1.1206	-0.4742	0.1726	0.3283	0.3830	-0.0547	-0.0385
89	36.64	0.17	7.5168	-0.2726	0.9796	-0.3901	0.1610	0.3470	0.3834	-0.0364	-0.0363
90	36.77	0.16	7.5991	0.0084	0.8892	-0.3455	0.1442	0.3394	0.3830	-0.0436	0.0088
91	36.90	0.19	7.7417	-0.5005	1.1573	-0.3785	0.1674	0.3342	0.3812	-0.0470	-0.0647
92	36.99	0.17	7.6915	-0.0259	0.9348	-0.3139	0.1499	0.3206	0.3778	-0.0572	-0.0034

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 9 MACH 1.00 RX10-6 1.7 PHI +5.0 CONF BLOCF23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	37.11	0.16	7.6941	-0.0748	0.8446	-0.2557	0.1496	0.3714	0.3815	-0.0501	-0.0097
94	37.27	0.16	7.8508	-0.1910	0.6965	-0.1637	0.1508	0.3306	0.3808	-0.0502	-0.0243
95	37.34	0.16	7.8041	0.0370	0.8436	-0.2928	0.1273	0.3233	0.3697	-0.0464	0.0068
96	37.47	0.16	7.8254	0.0018	0.8447	-0.2603	0.1159	0.3281	0.3753	-0.0472	0.0002
97	37.60	0.16	7.8563	0.0326	0.8877	-0.0375	0.1155	0.3759	0.3698	-0.0439	0.0042
98	37.71	0.16	7.8823	0.2737	0.4338	-0.0869	0.1045	0.3055	0.3690	-0.0635	0.0347
99	37.81	0.13	7.8827	0.3321	0.5795	0.0235	0.0872	0.3138	0.3592	-0.0454	0.0421
100	37.95	0.12	7.9808	0.1496	0.4657	0.2187	0.1045	0.3145	0.3586	-0.0443	0.0187
101	38.06	0.12	7.9341	0.3496	0.4829	0.1081	0.0925	0.2991	0.3583	-0.0592	0.0440
102	38.12	0.10	7.9842	0.4058	0.2753	0.3515	0.0750	0.2932	0.3583	-0.0651	0.0507
103	38.30	0.13	8.0512	0.1639	0.5175	0.2187	0.0927	0.3267	0.3637	-0.0370	0.0204
104	38.41	0.12	8.1306	0.1586	0.4141	0.2761	0.0701	0.2906	0.3532	-0.0626	0.0441
105	38.51	0.09	8.0970	0.4402	0.1492	0.5011	0.0635	0.3087	0.3513	-0.0426	0.0544
106	38.66	0.12	8.1296	0.2801	0.3309	0.4922	0.0923	0.2948	0.3575	-0.0627	0.0345
107	38.76	0.12	8.2214	0.2567	0.3774	0.5251	0.0869	0.2988	0.3521	-0.0533	0.0312
108	38.86	0.10	8.2606	0.2541	0.1703	0.6418	0.0750	0.3043	0.3561	-0.0518	0.0308
109	38.98	0.11	8.3341	0.1939	0.3075	0.4742	0.0812	0.3008	0.3539	-0.0531	0.0233
110	39.07	0.09	8.2852	0.4398	0.0452	0.6285	0.0579	0.2967	0.3464	-0.0477	0.0530
111	39.19	0.10	8.3424	0.2674	0.2056	0.4902	0.0641	0.3026	0.3506	-0.0480	0.0319
112	39.32	0.10	8.4510	0.2746	0.1598	0.6826	0.0697	0.3036	0.3538	-0.0502	0.0330
113	39.42	0.07	8.4997	0.5499	-0.0750	0.6296	0.0355	0.2844	0.3483	-0.0638	0.0647
114	39.53	0.09	8.4971	0.2476	0.1389	0.6162	0.0753	0.2966	0.3505	-0.0539	0.0291
115	39.64	0.10	8.5264	0.3100	0.2393	0.5628	0.0702	0.3020	0.3516	-0.0496	0.0364
116	39.74	0.08	8.6772	0.4428	-0.0145	0.5837	0.0359	0.2817	0.3450	-0.0632	0.0518
117	39.85	0.08	8.7071	0.3847	0.0361	0.5000	0.0417	0.2913	0.3487	-0.0574	0.0448
118	39.97	0.08	8.6379	0.4681	-0.0456	0.5503	0.0359	0.2858	0.3413	-0.0554	0.0562
119	40.06	0.10	8.7910	0.1606	0.2616	0.4341	0.0705	0.2785	0.3515	-0.0729	0.0183
120	40.17	0.10	8.7647	0.2655	0.1445	0.3608	0.0424	0.2969	0.3497	-0.0528	0.0508
121	40.27	0.10	8.6929	0.5226	0.2235	0.2869	0.0369	0.2805	0.3438	-0.0632	0.0602
122	40.37	0.09	8.8128	0.4335	0.1565	0.2704	0.0368	0.2733	0.3428	-0.0696	0.0492
123	40.46	0.09	8.7689	0.3957	0.1729	0.3666	0.0442	0.2848	0.3493	-0.0644	0.0440
124	40.56	0.10	8.9367	0.1456	0.2470	0.4280	0.0708	0.2842	0.3543	-0.0698	0.0163
125	40.67	0.09	8.8497	0.2778	0.0702	0.6274	0.0478	0.2827	0.3526	-0.0698	0.0313
126	40.78	0.10	8.8703	0.2662	0.2270	0.2213	0.0487	0.2766	0.3556	-0.0787	0.0293
127	40.89	0.08	8.9643	0.2869	-0.0015	0.6752	0.0590	0.2834	0.3460	-0.0625	0.0320
128	41.00	0.09	9.0752	0.1726	0.0681	0.6687	0.0536	0.2717	0.3503	-0.0785	0.0198
129	41.09	0.08	9.1313	0.1660	-0.1270	0.9391	0.0531	0.2850	0.3540	-0.0699	0.0182
130	41.19	0.08	9.1365	0.1984	-0.0761	0.9243	0.0589	0.2845	0.3521	-0.0875	0.0217
131	41.30	0.09	9.1976	0.0327	0.0260	0.8043	0.0592	0.2812	0.3591	-0.0778	0.0036
132	41.40	0.10	9.2468	0.1061	-0.0936	0.9511	0.0540	0.2763	0.3558	-0.0814	0.0113
133	41.52	0.09	9.3364	0.0928	-0.0361	1.0969	0.0481	0.2756	0.3526	-0.0769	0.0099
134	41.61	0.09	9.2391	0.1293	0.0437	0.7858	0.0595	0.2760	0.3533	-0.0772	0.0140
135	41.71	0.08	9.3593	0.3540	-0.0762	0.8464	0.0540	0.2607	0.3493	-0.0885	0.0378
136	41.81	0.08	9.3380	0.1943	-0.0493	0.8819	0.0539	0.2760	0.3540	-0.0779	0.0214
137	41.91	0.08	9.4591	0.0427	-0.2574	1.3401	0.0419	0.2606	0.3518	-0.0911	0.0045
138	42.01	0.07	9.4639	-0.0120	-0.2031	1.3971	0.0421	0.2708	0.3584	-0.0875	-0.0013

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 9 MACH 1.60 RE10-6 1.71 PHI 90.0 CONF 81=0F23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
139	42.12	0.00	9.5144	0.0006	-0.1686	1.3973	0.0255	0.2692	0.3486	-0.0793	0.0001
140	42.20	0.00	9.4256	0.2078	-0.1379	1.3517	0.0369	0.2562	0.3504	-0.0941	0.0220
141	42.31	0.05	9.4503	0.0563	-0.4318	1.5209	0.0193	0.2634	0.3555	-0.0920	0.0058
142	42.39	0.07	9.5746	-0.1078	-0.3224	1.6652	0.0194	0.2838	0.3588	-0.0749	-0.0113
143	42.50	0.00	9.7070	0.2560	-0.3667	1.4511	0.0149	0.2560	0.3501	-0.0920	0.0262
144	42.59	0.07	9.6598	0.2284	-0.2199	1.4781	0.0258	0.2649	0.3497	-0.0847	0.0237
145	42.68	0.07	9.7691	0.2247	-0.2191	1.4773	0.0090	0.2636	0.3538	-0.0901	0.0030
146	42.78	0.01	9.7365	0.0059	-0.2912	1.5616	0.0199	0.2648	0.3577	-0.0928	0.0006
147	42.87	0.06	9.8557	0.0364	-0.3498	1.5910	0.0064	0.2649	0.3552	-0.0902	0.0039
148	42.96	0.00	9.9322	0.1805	-0.4175	1.6726	0.0087	0.2665	0.3520	-0.0854	0.0082
149	43.05	0.00	9.9274	-0.0671	-0.3359	1.6683	0.0088	0.2605	0.3562	-0.0956	-0.0068
150	43.13	0.00	9.8032	0.2382	-0.3015	1.3567	0.0204	0.2600	0.3463	-0.0862	0.0239
151	43.22	0.00	9.9910	0.2178	-0.3489	1.6345	0.0035	0.2634	0.3561	-0.0926	0.0018
152	43.32	0.00	9.9305	0.2372	-0.3551	1.6912	0.0090	0.2675	0.3499	-0.0813	0.0038
153	43.40	0.04	10.0011	0.1175	-0.5315	1.8502	-0.0027	0.2663	0.3537	-0.1074	0.0117
154	43.51	0.05	10.0576	0.1705	-0.3767	1.5737	0.0093	0.2531	0.3457	-0.0925	0.0178
155	43.60	0.05	10.0437	0.0270	-0.4298	1.8292	-0.0079	0.2660	0.3493	-0.0832	0.0028
156	43.68	0.00	10.0502	0.1967	-0.4015	1.7296	-0.0188	0.2417	0.3384	-0.0967	0.0194
157	43.78	0.05	10.0796	0.0892	-0.4529	1.7218	-0.0078	0.2544	0.3500	-0.0955	0.0087
158	43.87	0.05	10.1938	0.0228	-0.4537	1.6807	-0.0189	0.2602	0.3460	-0.0857	0.0022
159	43.95	0.04	10.2073	0.0903	-0.5438	1.8552	-0.0247	0.2435	0.3475	-0.1040	0.0088
160	44.05	0.04	10.1939	0.3331	-0.5012	1.7373	-0.0132	0.2302	0.3376	-0.1074	0.0328
161	44.14	0.06	10.2431	0.0202	-0.3663	1.8186	-0.0353	0.2490	0.3460	-0.0970	0.0020
162	44.22	0.04	10.3153	0.2414	-0.4049	1.5914	-0.0240	0.2376	0.3449	-0.1073	0.0234
163	44.33	0.05	10.3146	0.1971	-0.5016	1.8257	-0.0355	0.2389	0.3413	-0.1024	0.0191
164	44.43	0.05	10.4043	0.2965	-0.3640	1.5222	0.0047	0.2404	0.3478	-0.1074	0.0285
165	44.50	0.04	10.3915	0.2734	-0.4697	1.6208	-0.0238	0.2390	0.3326	-0.0935	0.0282
166	44.60	0.06	10.3937	0.2612	-0.2065	1.5376	-0.0006	0.2467	0.3441	-0.0953	0.0251
167	44.71	0.07	10.4518	0.4358	-0.2374	1.3149	0.0056	0.2482	0.3418	-0.0935	0.0417
168	44.79	0.08	10.4942	0.4428	-0.4355	1.1822	-0.0126	0.2364	0.3377	-0.1013	0.0462
169	44.87	0.07	10.2491	0.2566	-0.2337	1.4135	-0.0001	0.2282	0.3254	-0.0972	0.0638
170	44.97	0.04	10.4407	0.5961	-0.0464	1.0241	0.0015	0.2295	0.3388	-0.1093	0.0571
171	45.08	0.04	10.4502	0.7041	-0.0917	1.0443	0.0144	0.2272	0.3333	-0.1111	0.0674
172	45.14	0.07	10.4895	0.7703	-0.0431	0.9811	0.0011	0.2263	0.3322	-0.1059	0.0736
173	45.22	0.06	10.3996	0.7108	-0.0507	1.2758	0.0126	0.2242	0.3318	-0.1076	0.0684
174	45.33	0.07	10.5313	0.7967	-0.0870	0.7562	0.0076	0.2210	0.3262	-0.1072	0.0703
175	45.40	0.07	10.4747	0.7166	-0.0850	1.0635	0.0130	0.2231	0.3274	-0.1043	0.0779
176	45.51	0.07	10.5643	0.8793	-0.1598	1.3336	0.0014	0.2192	0.3351	-0.1159	0.0449
177	45.60	0.06	10.5997	0.8794	-0.1629	1.0122	0.0187	0.2116	0.3314	-0.1198	0.0831
178	45.68	0.06	10.5302	0.7726	-0.1674	1.1093	0.0016	0.2102	0.3274	-0.1172	0.0733
179	45.77	0.05	10.6791	0.7224	-0.2524	1.2150	-0.0098	0.2063	0.3296	-0.1233	0.0677
180	45.87	0.06	10.6142	0.8172	-0.1455	1.1297	-0.0094	0.2136	0.3325	-0.1189	0.0571
181	45.94	0.05	10.7267	0.8550	-0.2494	1.2438	-0.0039	0.2042	0.3281	-0.1239	0.0797
182	46.04	0.06	10.8489	0.9097	-0.2400	1.2360	-0.0096	0.2184	0.3405	-0.1221	0.0870
183	46.12	0.06	10.9206	0.9985	-0.2058	1.2341	-0.0093	0.2115	0.3343	-0.1228	0.0845
184	46.20	0.06	10.7337	0.8515	-0.2064	0.9798	-0.0036	0.2054	0.3237	-0.1183	0.0793

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 5 OF 5

MANTIS MISSILE TAILS EFFECTS DATA

TEST 7 PART 9 MACH 1.00 REID-6 1.7 PHI 45.0 CONF B1-0F23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
185	46.29	0.05	10.9604	0.6078	-0.2401	1.1137	-0.0040	0.2057	0.3328	-0.1271	0.0560
186	46.34	0.06	10.9212	0.6041	-0.2201	1.2499	-0.0092	0.2146	0.3350	-0.1204	0.0587
187	46.44	0.06	11.0170	0.5237	-0.1925	1.2647	-0.0146	0.2284	0.3339	-0.1050	0.0475
188	46.55	0.06	10.8480	0.4833	-0.2167	1.1278	-0.0316	0.1944	0.3244	-0.1300	0.0888
189	46.64	0.05	11.0109	0.4834	-0.2335	1.1403	-0.0203	0.2090	0.3393	-0.1303	0.0548
190	46.74	0.07	11.0823	0.6613	-0.0522	0.8667	0.0031	0.2204	0.3364	-0.1160	0.0625
191	46.82	0.05	11.0966	0.5518	-0.1921	0.9530	-0.0143	0.2019	0.3274	-0.1255	0.0567
192	46.90	0.05	11.1376	0.4337	-0.3586	1.4289	-0.0431	0.2209	0.3477	-0.1268	0.0369
193	47.00	0.06	11.1405	0.5283	-0.2101	0.7435	0.0039	0.1990	0.3360	-0.1370	0.0582
194	47.10	0.07	11.3257	0.6692	-0.0688	0.8866	-0.0026	0.2065	0.3381	-0.1316	0.0414
195	47.17	0.06	11.2465	0.6527	-0.1029	0.5361	0.0034	0.2103	0.3403	-0.1300	0.0579
196	47.26	0.06	11.2585	0.5328	-0.2016	1.4060	-0.0306	0.2239	0.3454	-0.1215	0.0473
197	47.34	0.06	11.2407	0.6832	-0.1214	0.6443	-0.0078	0.2047	0.3304	-0.1257	0.0608
198	47.43	0.06	11.2608	0.5677	0.0714	0.3218	-0.0204	0.2115	0.3384	-0.1269	0.0504
199	47.52	0.06	11.3462	0.6077	0.1645	-0.2176	0.0436	0.2208	0.3463	-0.1255	0.0359
200	47.59	0.06	11.1498	0.4525	0.1525	-0.0063	0.0269	0.1914	0.3224	-0.1310	0.0854
201	47.69	0.06	11.2642	0.5585	0.1966	-0.2719	0.0436	0.2038	0.3464	-0.1426	0.0496
202	47.77	0.06	11.4382	0.3211	-0.1338	0.8079	-0.0079	0.2255	0.3532	-0.1277	0.0281
203	47.87	0.07	11.5496	0.1852	-0.0114	0.5499	0.0039	0.2339	0.3469	-0.1150	0.0168
204	47.94	0.07	11.4976	0.1537	0.1166	-0.2365	0.0286	0.2313	0.3627	-0.1314	0.0178
205	48.02	0.07	11.3756	0.2305	0.0873	-0.2261	0.0152	0.2284	0.3578	-0.1294	0.0203
206	48.11	0.06	11.6089	-0.0103	-0.0077	0.0857	0.0369	0.2459	0.3683	-0.1224	-0.0353
207	48.21	0.06	11.5180	-0.0609	-0.0345	0.2037	0.0086	0.2418	0.3520	-0.1102	-0.0070
208	48.26	0.07	11.5076	0.0042	-0.0529	0.0507	0.0167	0.2308	0.3553	-0.1245	0.0008
209	48.25	0.06	11.4019	0.3383	-0.0510	0.2243	0.0235	0.2212	0.3553	-0.1341	0.0297
210	48.26	0.07	11.4462	0.2711	-0.0301	0.2780	0.0169	0.2241	0.3527	-0.1286	0.0237
211	48.16	0.07	11.4602	0.2585	0.0382	-0.1194	0.0258	0.2281	0.3618	-0.1337	0.0226
212	48.06	0.06	11.3861	0.2665	-0.0262	0.0599	0.0298	0.2111	0.3633	-0.1522	0.0236
213	47.99	0.07	11.4652	0.4276	-0.0359	0.1649	0.0263	0.2139	0.3437	-0.1298	0.0373
214	47.90	0.05	11.4112	0.5066	-0.1712	0.5875	0.0166	0.2128	0.3440	-0.1312	0.0444
215	47.83	0.05	11.4913	0.3726	-0.1496	0.9315	-0.0134	0.2048	0.3530	-0.1482	0.0324
216	47.34	0.05	11.0917	0.6611	-0.2021	1.1424	-0.0148	0.2100	0.3442	-0.1342	0.0596
217	46.40	0.05	10.9663	0.6394	-0.2737	1.2586	-0.0039	0.2324	0.3438	-0.1114	0.0218
218	45.37	0.06	10.3708	0.7764	-0.0842	1.0603	0.0248	0.2159	0.3359	-0.1200	0.0751
219	44.38	0.03	10.2331	0.1339	-0.0327	1.6100	-0.0182	0.2456	0.3420	-0.0964	0.0131

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 9 MACH 1.00 RE10-6 1.7 PHI 45.0 CONF BLOCK 24 L 0.8 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
1	-2.39	0.07	0.1341	0.0157	0.1161	0.1130	0.8343	0.0043	0.0015	-0.0452	0.3556	-10.4080
2	-2.35	0.06	0.1612	0.0166	0.1183	0.1162	0.8340	0.0170	0.0028	-0.0410	0.1648	-2.4148
3	-2.36	0.07	0.1371	0.0157	0.1139	0.1147	0.8304	0.0169	0.0028	-0.0390	0.1657	-2.3086
4	-2.38	0.06	0.1328	0.0151	0.1113	0.1134	0.8387	0.0169	0.0033	-0.0390	0.1963	-2.3086
5	-2.39	0.06	0.1412	0.0165	0.1195	0.1169	0.8402	-0.0109	0.0005	-0.0475	-0.0442	4.3548
6	-2.39	0.07	0.1352	0.0156	0.1117	0.1142	0.8266	0.0170	0.0028	-0.0411	0.1648	-2.4205
7	-2.39	0.07	0.1395	0.0157	0.1142	0.1127	0.8188	0.0170	0.0028	-0.0411	0.1648	-2.4205
8	-2.39	0.06	0.1418	0.0157	0.1186	0.1113	0.8375	0.0168	0.0033	-0.0371	0.1954	-2.2068
9	-2.39	0.06	0.1478	0.0168	0.1241	0.1137	0.8405	0.0120	0.0025	-0.0426	0.2097	-3.5565
10	-2.40	0.07	0.1330	0.0151	0.1106	0.1132	0.8316	0.0194	0.0033	-0.0378	0.1692	-1.9582
11	-2.37	0.06	0.1261	0.0144	0.1076	0.1159	0.8670	0.0423	0.0048	-0.0308	0.1142	-0.7283
12	-1.33	0.07	0.0978	0.0115	0.0975	0.1219	1.0020	0.0628	0.0059	-0.0311	0.0937	-0.6944
13	-1.14	0.07	0.0371	0.0070	0.0769	0.1901	2.0755	0.1001	0.0051	0.0035	0.0511	0.0347
14	-0.18	0.07	-0.0025	0.0024	0.0546	-0.9815	-23.3661	0.1552	0.0053	0.0416	0.0342	0.2688
15	0.73	0.07	-0.0446	-0.0039	0.0437	0.0862	-0.9763	0.1952	0.0120	0.0583	0.0613	0.2984
16	1.71	0.08	-0.1043	-0.0056	0.0122	0.0526	-0.1183	0.2552	0.0196	0.0909	0.0767	0.3561
17	2.67	0.06	-0.1342	-0.0091	-0.0035	0.0651	0.0269	0.3077	0.0258	0.1197	0.0837	0.3891
18	3.66	0.06	-0.1759	-0.0158	-0.0287	0.0678	0.1406	0.3648	0.0331	0.1490	0.0907	0.4084
19	4.66	0.07	-0.2034	-0.0203	-0.0419	0.0994	0.2054	0.4326	0.0397	0.1801	0.0917	0.4165
20	5.60	0.08	-0.2363	-0.0236	-0.0592	0.1017	0.2529	0.4904	0.0440	0.2066	0.0897	0.4288
21	6.41	0.06	-0.2583	-0.0234	-0.0727	0.0908	0.2813	0.5710	0.0481	0.2416	0.0842	0.4231
22	7.50	0.06	-0.2913	-0.0238	-0.0891	0.0818	0.3057	0.6191	0.0496	0.2608	0.0801	0.4213
23	8.46	0.07	-0.2997	-0.0206	-0.0977	0.0669	0.3261	0.7025	0.0541	0.2893	0.0770	0.4118
24	9.43	0.07	-0.3283	-0.0189	-0.1044	0.0613	0.3387	0.7658	0.0569	0.3098	0.0743	0.4046
25	10.41	0.07	-0.3363	-0.0172	-0.1166	0.0520	0.3529	0.8318	0.0577	0.3326	0.0694	0.3998
26	11.37	0.08	-0.3612	-0.0157	-0.1316	0.0435	0.3684	0.8869	0.0592	0.3543	0.0670	0.4004
27	12.30	0.06	-0.3679	-0.0116	-0.1351	0.0315	0.3672	0.9458	0.0592	0.3766	0.0626	0.3982
28	13.25	0.07	-0.3767	-0.0070	-0.1416	0.0187	0.3760	1.0040	0.0577	0.4007	0.0575	0.3991
29	14.25	0.06	-0.4032	-0.0056	-0.1543	0.0139	0.3826	1.0522	0.0563	0.4229	0.0535	0.4019
30	15.23	0.07	-0.4147	-0.0028	-0.1626	0.0067	0.3863	1.0979	0.0563	0.4379	0.0512	0.3988
31	16.22	0.06	-0.4253	0.0062	-0.1678	-0.0100	0.3965	1.1390	0.0536	0.4453	0.0471	0.3909
32	17.19	0.07	-0.4383	0.0070	-0.1770	-0.0161	0.4037	1.1743	0.0541	0.4606	0.0461	0.3921
33	18.18	0.07	-0.4446	0.0129	-0.1851	-0.0291	0.4162	1.2179	0.0541	0.4772	0.0445	0.3929
34	19.21	0.07	-0.4711	0.0175	-0.1985	-0.0371	0.4213	1.2604	0.0521	0.5000	0.0413	0.3967
35	20.23	0.06	-0.4932	0.0203	-0.2096	-0.0405	0.4269	1.2936	0.0501	0.5118	0.0387	0.3954
36	21.26	0.06	-0.5260	0.0234	-0.2265	-0.0447	0.4323	1.3372	0.0491	0.5185	0.0367	0.3862
37	22.26	0.06	-0.5775	0.0268	-0.2483	-0.0366	0.4255	0.9980	0.0308	0.3468	0.0308	0.3475
38	23.28	0.10	-0.7113	0.0259	-0.2987	-0.0364	0.4200	1.0158	0.0297	0.3533	0.0293	0.3478
39	24.30	0.10	-0.6866	0.0308	-0.2918	-0.0450	0.4261	1.0565	0.0283	0.3698	0.0268	0.3490
40	25.32	0.11	-0.6985	0.0340	-0.2785	-0.0525	0.4337	1.0668	0.0272	0.3707	0.0255	0.3475
41	26.36	0.12	-0.6329	0.0396	-0.2776	-0.0625	0.4386	1.0897	0.0264	0.3766	0.0243	0.3456
42	27.40	0.14	-0.6127	0.0384	-0.2745	-0.0633	0.4416	1.1153	0.0252	0.3868	0.0226	0.3458
43	28.42	0.15	-0.5882	0.0402	-0.2507	-0.0711	0.4427	1.1306	0.0239	0.3901	0.0212	0.3450
44	29.47	0.14	-0.6045	0.0428	-0.2140	-0.0826	0.4417	1.1485	0.0227	0.3967	0.0197	0.3454
45	30.56	0.17	-0.3722	0.0493	-0.1619	-0.1325	0.4351	1.1663	0.0213	0.4011	0.0183	0.3439
46	31.63	0.17	-0.2547	0.0596	-0.1100	-0.2103	0.4235	1.1994	0.0196	0.4150	0.0163	0.3468

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REID-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	9	1.60	1.7	45.0	MINOF23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
47	31.91	0.16	-0.2206	0.0546	-0.0899	-0.2440	0.4084	1.1995	0.0196	0.4120	0.0163	0.3435
48	31.91	0.17	-0.2356	0.0536	-0.0888	-0.2263	0.3752	1.1920	0.0196	0.4073	0.0166	0.3417
49	31.92	0.16	-0.2475	0.0514	-0.0960	-0.2078	0.3797	1.1965	0.0195	0.4085	0.0164	0.3420
50	31.91	0.15	-0.2736	0.0505	-0.1089	-0.1842	0.3977	1.1960	0.0196	0.4049	0.0166	0.3385
51	31.93	0.16	-0.2297	0.0563	-0.0909	-0.2453	0.3956	1.2062	0.0196	0.4078	0.0162	0.3381
52	31.98	0.17	-0.2282	0.0560	-0.0838	-0.2343	0.3674	1.2062	0.0196	0.4088	0.0161	0.3389
53	32.19	0.17	-0.2512	0.0578	-0.1004	-0.2301	0.4257	1.2112	0.0191	0.4112	0.0158	0.3395
54	32.32	0.17	-0.2212	0.0563	-0.0860	-0.2547	0.3799	1.2113	0.0191	0.4082	0.0158	0.3370
55	32.42	0.16	-0.2096	0.0535	-0.0709	-0.2567	0.3400	1.2215	0.0186	0.4141	0.0148	0.3390
56	32.58	0.15	-0.1861	0.0553	-0.0645	-0.2378	0.3463	1.2266	0.0180	0.4135	0.0147	0.3371
57	32.70	0.16	-0.1966	0.0591	-0.0775	-0.2976	0.3698	1.2318	0.0189	0.4139	0.0146	0.3360
58	32.83	0.15	-0.1972	0.0534	-0.0687	-0.2735	0.3483	1.2267	0.0180	0.4125	0.0147	0.3362
59	32.97	0.17	-0.1803	0.0550	-0.0686	-0.3432	0.2926	1.2292	0.0179	0.4147	0.0145	0.3374
60	33.09	0.17	-0.2205	0.0641	-0.0859	-0.2000	0.2989	1.2165	0.0180	0.4086	0.0148	0.3359
61	33.21	0.17	-0.2546	0.0343	-0.0752	-0.1353	0.2960	1.2191	0.0180	0.4099	0.0148	0.3362
62	33.36	0.16	-0.1972	0.0406	-0.0468	-0.2066	0.2373	1.2357	0.0176	0.4156	0.0142	0.3363
63	33.46	0.14	-0.1516	0.0474	-0.0227	-0.3175	0.1496	1.2373	0.0179	0.4161	0.0144	0.3363
64	33.54	0.17	-0.1767	0.0479	-0.0366	-0.2776	0.2261	1.2400	0.0171	0.4186	0.0138	0.3374
65	33.74	0.14	-0.1141	0.0540	-0.0117	-0.4575	0.0989	1.2348	0.0171	0.4149	0.0138	0.3360
66	33.85	0.16	-0.1865	0.0587	-0.0235	-0.5835	0.0345	1.2451	0.0171	0.4178	0.0137	0.3356
67	33.98	0.16	-0.1999	0.0607	-0.0100	-0.5677	0.0939	1.2247	0.0174	0.4110	0.0142	0.3356
68	34.11	0.15	-0.1068	0.0600	-0.0121	-0.5629	0.1131	1.2246	0.0177	0.4121	0.0144	0.3365
69	34.22	0.14	-0.0977	0.0597	-0.0081	-0.6111	0.0829	1.2373	0.0171	0.4182	0.0138	0.3380
70	34.34	0.17	-0.1335	0.0558	-0.0202	-0.4176	0.1510	1.2194	0.0177	0.4127	0.0145	0.3384
71	34.50	0.21	-0.0753	0.0603	0.0081	-0.7883	-0.1062	1.2348	0.0171	0.4149	0.0138	0.3360
72	34.66	0.20	-0.0919	0.0582	0.0032	-0.8113	-0.0347	1.2297	0.0169	0.4145	0.0137	0.3371
73	34.72	0.17	-0.1072	0.0558	-0.0056	-0.5203	0.0504	1.2298	0.0174	0.4125	0.0141	0.3354
74	34.86	0.14	-0.1053	0.0551	-0.0022	-0.5234	0.0211	1.2222	0.0169	0.4108	0.0138	0.3361
75	34.97	0.19	-0.0452	0.0567	0.0051	-0.6886	-0.0600	1.2298	0.0169	0.4125	0.0137	0.3354
76	35.09	0.17	-0.1243	0.0518	-0.0066	-0.4156	0.0516	1.2297	0.0163	0.4155	0.0133	0.3379
77	35.23	0.19	-0.1090	0.0630	-0.0113	-0.5504	0.1035	1.2298	0.0163	0.4145	0.0133	0.3370
78	35.33	0.19	-0.0967	0.0551	0.0006	-0.5699	-0.0479	1.2246	0.0166	0.4140	0.0136	0.3381
79	35.47	0.18	-0.0787	0.0572	0.0096	-0.7267	-0.1225	1.2475	0.0155	0.4261	0.0125	0.3416
80	35.58	0.19	-0.0511	0.0600	0.0096	-0.7396	-0.1189	1.2399	0.0155	0.4214	0.0125	0.3398
81	35.76	0.19	-0.0435	0.0572	0.0101	-0.6855	-0.1214	1.2347	0.0155	0.4199	0.0126	0.3401
82	35.83	0.18	-0.1507	0.0453	-0.0097	-0.3003	0.0647	1.2246	0.0155	0.4161	0.0127	0.3397
83	35.93	0.19	-0.1378	0.0481	-0.0013	-0.3667	0.0991	1.2347	0.0153	0.4210	0.0124	0.3409
84	36.07	0.19	-0.1198	0.0503	0.0018	-0.4202	-0.0153	1.2310	0.0156	0.4189	0.0127	0.3403
85	36.17	0.18	-0.1752	0.0418	-0.0196	-0.2384	0.1118	1.2259	0.0156	0.4175	0.0128	0.3406
86	36.28	0.16	-0.1599	0.0450	-0.0127	-0.2812	0.0737	1.2105	0.0156	0.4142	0.0129	0.3422
87	36.40	0.16	-0.1642	0.0426	-0.0174	-0.2561	0.1057	1.2463	0.0151	0.4253	0.0121	0.3413
88	36.58	0.15	-0.1546	0.0418	-0.0150	-0.2621	0.0938	1.2464	0.0151	0.4223	0.0121	0.3388
89	36.68	0.17	-0.1548	0.0447	-0.0169	-0.2796	0.0924	1.2605	0.0146	0.4289	0.0116	0.3402
90	36.77	0.16	-0.1967	0.0429	-0.0355	-0.2205	0.1824	1.2452	0.0149	0.4236	0.0119	0.3402
91	36.90	0.19	-0.1946	0.0426	-0.0331	-0.2131	0.1658	1.2477	0.0146	0.4268	0.0117	0.3420
92	36.99	0.17	-0.2101	0.0408	-0.0413	-0.1943	0.1966	1.2260	0.0156	0.4165	0.0127	0.3398

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 9.1.00 1.7 45.0 M1=0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	37.11	0.16	-0.2260	0.0390	-0.0473	-0.1710	0.2074	1.2208	0.0151	0.4161	0.0123	0.3408
94	37.27	0.16	-0.2414	0.0387	-0.0528	-0.1603	0.2186	1.2513	0.0143	0.4298	0.0114	0.3434
95	37.34	0.16	-0.2453	0.0376	-0.0572	-0.1533	0.2331	1.2387	0.0149	0.4226	0.0120	0.3412
96	37.42	0.16	-0.2692	0.0354	-0.0708	-0.1315	0.2631	1.2501	0.0146	0.4273	0.0117	0.3418
97	37.60	0.16	-0.2765	0.0356	-0.0684	-0.1281	0.2681	1.2398	0.0146	0.4256	0.0118	0.3431
98	37.71	0.16	-0.3020	0.0341	-0.0893	-0.1128	0.2954	1.2196	0.0151	0.4187	0.0123	0.3433
99	37.81	0.13	-0.3064	0.0341	-0.0918	-0.1111	0.2994	1.2244	0.0148	0.4211	0.0121	0.3439
100	37.95	0.12	-0.2873	0.0338	-0.0769	-0.1162	0.2806	1.2396	0.0140	0.4274	0.0113	0.3448
101	38.06	0.12	-0.2951	0.0340	-0.0855	-0.1151	0.2897	1.2331	0.0146	0.4214	0.0118	0.3417
102	38.17	0.14	-0.3041	0.0336	-0.1126	-0.0962	0.3282	1.2356	0.0146	0.4216	0.0118	0.3412
103	38.30	0.13	-0.3107	0.0322	-0.0994	-0.0975	0.3006	1.2357	0.0140	0.4216	0.0113	0.3411
104	38.41	0.12	-0.3213	0.0319	-0.0994	-0.0896	0.3093	1.2281	0.0146	0.4179	0.0119	0.3403
105	38.51	0.09	-0.3430	0.0305	-0.1097	-0.0889	0.3198	1.2266	0.0145	0.4195	0.0118	0.3420
106	38.66	0.12	-0.3150	0.0318	-0.0907	-0.1011	0.2879	1.2165	0.0148	0.4146	0.0121	0.3408
107	38.76	0.12	-0.3106	0.0322	-0.0882	-0.1038	0.2839	1.2318	0.0140	0.4229	0.0114	0.3433
108	38.88	0.14	-0.3165	0.0318	-0.0967	-0.1012	0.3009	1.2420	0.0135	0.4258	0.0109	0.3428
109	38.96	0.11	-0.3044	0.0308	-0.0871	-0.0998	0.2825	1.2471	0.0138	0.4263	0.0111	0.3418
110	39.07	0.09	-0.3053	0.0305	-0.0881	-0.0989	0.2858	1.2318	0.0140	0.4199	0.0114	0.3409
111	39.19	0.10	-0.3066	0.0316	-0.0847	-0.1074	0.2856	1.2606	0.0129	0.4320	0.0103	0.3427
112	39.32	0.14	-0.2983	0.0318	-0.0896	-0.1067	0.3011	1.2530	0.0129	0.4303	0.0103	0.3434
113	39.42	0.07	-0.3369	0.0321	-0.1125	-0.0959	0.3359	1.2490	0.0129	0.4297	0.0104	0.3440
114	39.53	0.09	-0.3073	0.0311	-0.0898	-0.1011	0.2923	1.2439	0.0129	0.4302	0.0104	0.3459
115	39.64	0.10	-0.3228	0.0304	-0.0956	-0.0941	0.2956	1.2414	0.0132	0.4280	0.0106	0.3448
116	39.74	0.08	-0.3196	0.0317	-0.1057	-0.0945	0.3315	1.2527	0.0126	0.4347	0.0099	0.3478
117	39.85	0.06	-0.3299	0.0315	-0.1119	-0.0953	0.3393	1.2704	0.0114	0.4411	0.0090	0.3472
118	39.97	0.08	-0.3234	0.0286	-0.1025	-0.0883	0.3168	1.2309	0.0129	0.4233	0.0105	0.3439
119	40.06	0.10	-0.3151	0.0286	-0.0967	-0.0906	0.3004	1.2384	0.0126	0.4280	0.0102	0.3456
120	40.17	0.10	-0.3048	0.0296	-0.1185	-0.0859	0.3636	1.2561	0.0119	0.4356	0.0094	0.3467
121	40.27	0.10	-0.3233	0.0284	-0.1039	-0.0895	0.3196	1.2308	0.0126	0.4263	0.0103	0.3463
122	40.37	0.09	-0.3226	0.0296	-0.1102	-0.0918	0.3416	1.2510	0.0119	0.4341	0.0095	0.3478
123	40.46	0.09	-0.3160	0.0283	-0.1066	-0.0895	0.3374	1.2459	0.0119	0.4326	0.0095	0.3472
124	40.56	0.10	-0.3262	0.0255	-0.1011	-0.0776	0.3081	1.2387	0.0129	0.4263	0.0105	0.3464
125	40.67	0.09	-0.3122	0.0237	-0.0976	-0.0760	0.3127	1.2484	0.0119	0.4349	0.0095	0.3483
126	40.78	0.10	-0.3273	0.0233	-0.1072	-0.0713	0.3275	1.2458	0.0119	0.4356	0.0095	0.3497
127	40.89	0.09	-0.2974	0.0220	-0.0853	-0.0740	0.2868	1.2382	0.0119	0.4320	0.0096	0.3489
128	41.00	0.09	-0.3017	0.0243	-0.0886	-0.0796	0.2936	1.2458	0.0117	0.4356	0.0094	0.3497
129	41.19	0.06	-0.3043	0.0171	-0.0835	-0.0561	0.2743	1.2611	0.0109	0.4409	0.0086	0.3497
130	41.19	0.08	-0.3020	0.0143	-0.0824	-0.0473	0.2728	1.2332	0.0126	0.4296	0.0101	0.3483
131	41.30	0.09	-0.2956	0.0212	-0.0805	-0.0736	0.2788	1.2510	0.0114	0.4371	0.0091	0.3494
132	41.40	0.10	-0.2862	0.0178	-0.0773	-0.0625	0.2720	1.2382	0.0119	0.4360	0.0096	0.3505
133	41.52	0.09	-0.3104	0.0184	-0.0885	-0.0348	0.2850	1.2509	0.0114	0.4390	0.0091	0.3510
134	41.61	0.09	-0.3104	0.0129	-0.0864	-0.0416	0.2779	1.2407	0.0117	0.4362	0.0094	0.3498
135	41.71	0.08	-0.2703	0.0181	-0.0778	-0.0471	0.2878	1.2493	0.0117	0.4388	0.0094	0.3499
136	41.81	0.08	-0.2379	0.0129	-0.0830	-0.0469	0.2882	1.2458	0.0114	0.4356	0.0091	0.3497
137	41.91	0.06	-0.3145	0.0150	-0.0946	-0.0475	0.3006	1.2509	0.0109	0.4401	0.0087	0.3518
138	42.01	0.07	-0.2929	0.0087	-0.0809	-0.0296	0.2760	1.2674	0.0104	0.4459	0.0082	0.3518

MANIIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	9	1.00	1.7	45.0	81=OF 23	8.8	0	0	0	8	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	42.12	0.08	-0.3019	0.0080	-0.0438	-0.0265	0.2777	1.2775	0.0099	0.4507	0.0078	0.3528
140	42.26	0.08	-0.2702	0.0052	-0.0208	-0.0192	0.2816	1.2472	0.0112	0.4361	0.0098	0.3497
141	42.31	0.05	-0.2674	0.0119	-0.0690	-0.0413	0.3095	1.2775	0.0049	0.4507	0.0078	0.3528
142	42.35	0.07	-0.3237	0.0028	-0.0465	-0.0086	0.2981	1.2868	0.0096	0.4526	0.0073	0.3525
143	42.50	0.06	-0.2618	0.0069	-0.0799	-0.0747	0.2837	1.2648	0.0104	0.4443	0.0082	0.3502
144	42.54	0.07	-0.2927	0.0035	-0.0433	-0.0132	0.2846	1.2763	0.0049	0.4490	0.0078	0.3518
145	42.68	0.07	-0.3097	0.0080	-0.0946	-0.0259	0.3184	1.2992	0.0099	0.4579	0.0068	0.3525
146	42.78	0.07	-0.2955	0.0041	-0.0905	-0.0180	0.3051	1.2789	0.0094	0.4491	0.0073	0.3512
147	42.87	0.06	-0.2875	0.0014	-0.0665	-0.0747	0.3070	1.2787	0.0094	0.4532	0.0073	0.3544
148	42.96	0.06	-0.2702	0.0028	-0.0770	-0.0104	0.2850	1.2941	0.0049	0.4565	0.0069	0.3527
149	43.05	0.06	-0.2916	0.0007	-0.0862	-0.0023	0.3024	1.2872	0.0089	0.4554	0.0069	0.3538
150	43.13	0.05	-0.2737	0.0035	-0.0632	-0.0127	0.3038	1.2721	0.0089	0.4501	0.0070	0.3538
151	43.22	0.06	-0.2759	0.0017	-0.0813	-0.0063	0.2969	1.3075	0.0081	0.4631	0.0062	0.3542
152	43.32	0.06	-0.3091	-0.0006	-0.0971	0.0012	0.3140	1.3008	0.0044	0.4595	0.0065	0.3534
153	43.40	0.04	-0.2828	0.0024	-0.0852	-0.0065	0.3013	1.3075	0.0078	0.4631	0.0060	0.3542
154	43.51	0.05	-0.2491	0.0069	-0.0755	-0.0178	0.3033	1.2872	0.0089	0.4554	0.0069	0.3538
155	43.60	0.05	-0.3346	-0.0041	-0.1124	0.0122	0.3310	1.3075	0.0078	0.4631	0.0060	0.3542
156	43.68	0.06	-0.2981	-0.0011	-0.0967	0.0037	0.3309	1.2974	0.0084	0.4603	0.0065	0.3548
157	43.78	0.05	-0.2690	0.0004	-0.0829	-0.0014	0.3081	1.3060	0.0078	0.4595	0.0060	0.3534
158	43.87	0.05	-0.2859	-0.0006	-0.0906	0.0013	0.3378	1.3126	0.0071	0.4655	0.0056	0.3547
159	43.95	0.04	-0.2965	-0.0028	-0.1016	0.0095	0.3450	1.3126	0.0073	0.4655	0.0056	0.3547
160	44.05	0.04	-0.2617	0.0032	-0.0788	-0.0132	0.3261	1.2872	0.0078	0.4564	0.0061	0.3545
161	44.14	0.06	-0.2946	-0.0028	-0.1060	0.0094	0.3551	1.3024	0.0076	0.4648	0.0059	0.3569
162	44.22	0.04	-0.2625	0.0011	-0.0979	-0.0060	0.3730	1.2721	0.0089	0.4501	0.0070	0.3538
163	44.33	0.05	-0.2943	-0.0017	-0.1069	0.0096	0.3496	1.2974	0.0076	0.4602	0.0059	0.3548
164	44.43	0.05	-0.2612	-0.0021	-0.0892	-0.0061	0.3413	1.2770	0.0084	0.4555	0.0066	0.3567
165	44.50	0.04	-0.2851	-0.0014	-0.1026	0.0047	0.3597	1.2922	0.0078	0.4619	0.0060	0.3575
166	44.60	0.04	-0.2387	0.0	-0.0806	-0.0	0.3375	1.2905	0.0076	0.4592	0.0059	0.3558
167	44.71	0.07	-0.2230	0.0045	-0.0755	-0.0203	0.3388	1.2685	0.0089	0.4519	0.0070	0.3563
168	44.79	0.06	-0.2138	-0.0028	-0.0892	0.0131	0.3236	1.2685	0.0091	0.4456	0.0073	0.3575
169	44.87	0.07	-0.2249	-0.0021	-0.0753	0.0094	0.3346	1.2631	0.0089	0.4503	0.0070	0.3565
170	44.97	0.04	-0.2184	-0.0014	-0.0775	0.0062	0.3555	1.2492	0.0091	0.4455	0.0073	0.3566
171	45.08	0.06	-0.2005	-0.0011	-0.0667	0.0053	0.3325	1.2425	0.0094	0.4425	0.0075	0.3561
172	45.14	0.07	-0.1926	0.0045	-0.0845	-0.0209	0.3529	1.2362	0.0098	0.4404	0.0080	0.3562
173	45.22	0.06	-0.2236	-0.0035	-0.0739	0.0157	0.3351	1.2438	0.0094	0.4439	0.0075	0.3569
174	45.33	0.07	-0.1987	0.0070	-0.0536	-0.0480	0.3392	1.2552	0.0089	0.4483	0.0071	0.3571
175	45.40	0.07	-0.1913	-0.0011	-0.0579	0.0059	0.3193	1.2616	0.0086	0.4522	0.0068	0.3585
176	45.51	0.07	-0.2121	-0.0035	-0.0712	0.0164	0.3358	1.2668	0.0084	0.4506	0.0066	0.3557
177	45.66	0.06	-0.1819	0.0011	-0.0497	-0.0086	0.3078	1.2413	0.0094	0.4445	0.0075	0.3581
178	45.68	0.06	-0.2153	-0.0039	-0.0746	0.0178	0.3448	1.2565	0.0089	0.4488	0.0071	0.3571
179	45.77	0.05	-0.1968	0.0014	-0.0647	-0.0074	0.3541	1.2718	0.0078	0.4561	0.0061	0.3584
180	45.87	0.06	-0.1787	0.0028	-0.0613	-0.0135	0.3629	1.2668	0.0084	0.4526	0.0066	0.3573
181	45.96	0.05	-0.1747	-0.0011	-0.0619	0.0059	0.3445	1.2655	0.0084	0.4529	0.0066	0.3579
182	46.04	0.06	-0.1652	0.0045	-0.0597	-0.0275	0.3616	1.2604	0.0086	0.4525	0.0068	0.3598
183	46.12	0.06	-0.1673	-0.0011	-0.0674	0.0057	0.3601	1.2578	0.0081	0.4533	0.0064	0.3604
184	46.20	0.06	-0.1960	0.0011	-0.0722	-0.0057	0.3864	1.2680	0.0079	0.4562	0.0062	0.3598

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 9 MACH 1.00 REIO-6 1.7 PHI 45.0 CONF B1.0F23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CN2	CM2	CA2	XCPF2	YCPF2
185	46.29	0.05	-0.1738	0.0024	-0.0647	-0.0139	0.3726	1.2680	0.0079	0.4562	0.0062	0.3598
186	46.34	0.06	-0.1492	0.0045	-0.0512	-0.0302	0.3417	1.2679	0.0073	0.4581	0.0058	0.3613
187	46.48	0.06	-0.1537	0.0024	-0.0557	-0.0157	0.3622	1.2891	0.0069	0.4655	0.0053	0.3611
188	46.55	0.06	-0.2254	-0.0052	-0.0906	0.0231	0.4011	1.2663	0.0078	0.4555	0.0062	0.3597
189	46.64	0.05	-0.1795	0.0041	-0.0741	-0.0231	0.4129	1.2713	0.0073	0.4579	0.0058	0.3602
190	46.74	0.07	-0.1423	0.0052	-0.0553	-0.0366	0.3685	1.2813	0.0069	0.4649	0.0053	0.3628
191	46.82	0.06	-0.1669	0.0024	-0.0620	-0.0165	0.3717	1.2762	0.0066	0.4654	0.0051	0.3646
192	46.96	0.05	-0.1457	0.0028	-0.0796	-0.0151	0.4296	1.2763	0.0069	0.4614	0.0054	0.3615
193	47.06	0.06	-0.1424	0.0052	-0.0563	-0.0366	0.3614	1.2662	0.0071	0.4596	0.0056	0.3630
194	47.10	0.07	-0.1336	0.0086	-0.0481	-0.0627	0.3598	1.2622	0.0069	0.4636	0.0053	0.3614
195	47.17	0.06	-0.0836	0.0163	-0.0174	-0.2564	0.2731	1.2655	0.0069	0.4616	0.0054	0.3647
196	47.26	0.08	-0.1659	0.0034	-0.0676	-0.0233	0.4078	1.2883	0.0058	0.4696	0.0045	0.3645
197	47.34	0.06	-0.1109	0.0063	-0.0437	-0.0768	0.3943	1.2664	0.0066	0.4622	0.0052	0.3650
198	47.43	0.08	-0.1411	0.0056	-0.0669	-0.0397	0.4316	1.2864	0.0053	0.4739	0.0041	0.3684
199	47.52	0.06	-0.0368	0.0143	-0.0078	-0.3845	0.2126	1.2688	0.0063	0.4655	0.0049	0.3668
200	47.59	0.08	-0.1222	0.0063	-0.0451	-0.0513	0.3689	1.2587	0.0069	0.4626	0.0054	0.3675
201	47.69	0.06	-0.0783	0.0115	-0.0272	-0.1467	0.3477	1.2537	0.0069	0.4601	0.0055	0.3670
202	47.77	0.08	-0.1412	0.0073	-0.0608	-0.0519	0.4306	1.2864	0.0058	0.4759	0.0038	0.3699
203	47.87	0.07	-0.1414	0.0080	-0.0589	-0.0566	0.4154	1.3065	0.0042	0.4836	0.0032	0.3701
204	47.94	0.02	-0.1552	0.0096	-0.0601	-0.0603	0.3872	1.3040	0.0036	0.4864	0.0027	0.3714
205	48.02	0.07	-0.1913	0.0045	-0.0829	-0.0237	0.4332	1.2997	0.0038	0.4825	0.0029	0.3713
206	48.11	0.08	-0.2056	0.0045	-0.0795	-0.0221	0.3867	1.3299	0.0028	0.4960	0.0021	0.3738
207	48.21	0.06	-0.1721	0.0078	-0.0708	-0.0443	0.4114	1.3046	0.0036	0.4890	0.0027	0.3748
208	48.26	0.07	-0.1748	0.0068	-0.0673	-0.0375	0.3867	1.2895	0.0038	0.4837	0.0029	0.3751
209	48.25	0.06	-0.1150	0.0097	-0.0469	-0.0847	0.4077	1.2844	0.0042	0.4813	0.0033	0.3747
210	48.26	0.07	-0.1294	0.0087	-0.0578	-0.0669	0.4621	1.2743	0.0048	0.4786	0.0038	0.3754
211	48.16	0.07	-0.1629	0.0072	-0.0708	-0.0444	0.4348	1.2965	0.0036	0.4861	0.0028	0.3755
212	48.06	0.06	-0.1317	0.0098	-0.0616	-0.0681	0.4674	1.2692	0.0048	0.4770	0.0038	0.3759
213	48.00	0.07	-0.1081	0.0080	-0.0463	-0.0741	0.4286	1.2768	0.0048	0.4796	0.0038	0.3757
214	47.90	0.05	-0.0974	0.0104	-0.0391	-0.1031	0.4014	1.2600	0.0058	0.4717	0.0046	0.3744
215	47.83	0.05	-0.1926	0.0011	-0.0901	-0.0055	0.4679	1.2841	0.0053	0.4771	0.0041	0.3716
216	47.34	0.05	-0.0870	0.0059	-0.0403	-0.0607	0.4159	1.2624	0.0068	0.4628	0.0054	0.3666
217	46.40	0.05	-0.1273	0.0045	-0.0554	-0.0356	0.4357	1.2758	0.0068	0.4684	0.0053	0.3672
218	45.37	0.06	-0.1627	0.0026	-0.0801	-0.0169	0.4212	1.2306	0.0088	0.4497	0.0071	0.3655
219	44.36	0.03	-0.2494	0.0024	-0.1095	-0.0097	0.4391	1.2896	0.0072	0.4693	0.0056	0.3639

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 9 1.00 1.7 85.0 H1=GF23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNFA	CMA	CHA	XCPFA	YCPFA
1	-2.39	0.07	0.2092	9.9999	0.0264	9.9999	0.1355	-0.1451	-0.0162	-0.0234	0.1117	0.1629
2	-2.36	0.06	0.2093	9.9999	0.0267	9.9999	0.1277	-0.1400	-0.0152	-0.0182	0.1389	0.1383
3	-2.36	0.07	0.1975	9.9999	0.0249	9.9999	0.1260	-0.1503	-0.0165	-0.0250	0.1038	0.1662
4	-2.38	0.06	0.2066	9.9999	0.0256	9.9999	0.1241	-0.1401	-0.0152	-0.0203	0.1088	0.1446
5	-2.39	0.06	0.2068	9.9999	0.0255	9.9999	0.1244	-0.1709	-0.0191	-0.0336	0.1118	0.1965
6	-2.39	0.07	0.2031	9.9999	0.0261	9.9999	0.1205	-0.1403	-0.0152	-0.0203	0.1067	0.1444
7	-2.39	0.07	0.2000	9.9999	0.0260	9.9999	0.1298	-0.1428	-0.0157	-0.0214	0.1101	0.1500
8	-2.39	0.06	0.2028	9.9999	0.0253	9.9999	0.1249	-0.1429	-0.0152	-0.0233	0.1067	0.1634
9	-2.39	0.06	0.2048	9.9999	0.0265	9.9999	0.1196	-0.1530	-0.0168	-0.0261	0.1097	0.1709
10	-2.40	0.07	0.2001	9.9999	0.0261	9.9999	0.1205	-0.1352	-0.0143	-0.0159	0.1056	0.1269
11	-2.37	0.06	0.1861	9.9999	0.0194	9.9999	0.1042	-0.1170	-0.0132	-0.0125	0.1129	0.1072
12	-1.93	0.07	0.1809	9.9999	0.0026	9.9999	0.0162	-0.0991	-0.0120	-0.0111	0.1207	0.1128
13	-1.14	0.07	0.1089	9.9999	-0.0371	9.9999	-0.0668	-0.0518	-0.0117	0.0219	0.1988	-0.3541
14	-0.18	0.07	0.0585	9.9999	-0.0369	9.9999	-0.5974	-0.0273	-0.0033	0.0388	0.1214	-1.4357
15	0.73	0.07	0.0194	9.9999	-0.0592	9.9999	-3.0547	0.2334	-0.0031	0.0560	-0.0925	1.6763
16	1.71	0.06	-0.0525	9.9999	-0.0917	9.9999	1.7463	0.0801	0.0013	0.0929	0.0157	1.1602
17	2.67	0.06	-0.1054	9.9999	-0.1126	9.9999	1.0342	0.1180	0.0081	0.1110	0.0067	0.9403
18	3.66	0.06	-0.1660	9.9999	-0.1419	9.9999	0.8552	0.1529	0.0157	0.1325	0.1328	0.8662
19	4.60	0.07	-0.2330	9.9999	-0.1730	9.9999	0.7424	0.1881	0.0226	0.1542	0.1200	0.8195
20	5.60	0.06	-0.3066	9.9999	-0.2063	9.9999	0.6768	0.2188	0.0286	0.1704	0.1217	0.7787
21	6.61	0.06	-0.3838	9.9999	-0.2392	9.9999	0.6235	0.2577	0.0292	0.1861	0.1134	0.7222
22	7.58	0.06	-0.4602	9.9999	-0.2710	9.9999	0.5869	0.2763	0.0289	0.1992	0.1067	0.7218
23	8.56	0.07	-0.5252	9.9999	-0.2962	9.9999	0.5679	0.3188	0.0280	0.2208	0.0978	0.6925
24	9.43	0.07	-0.5765	9.9999	-0.3200	9.9999	0.5530	0.3460	0.0252	0.2362	0.0728	0.6827
25	10.41	0.07	-0.6435	9.9999	-0.3473	9.9999	0.5397	0.3662	0.0185	0.2498	0.0506	0.6822
26	11.37	0.06	-0.6966	9.9999	-0.3726	9.9999	0.5369	0.3679	0.0124	0.2553	0.0338	0.6939
27	12.30	0.06	-0.7593	9.9999	-0.3987	9.9999	0.5251	0.3738	0.0107	0.2674	0.0267	0.7153
28	13.25	0.07	-0.8173	9.9999	-0.4226	9.9999	0.5171	0.3747	0.0079	0.2731	0.0211	0.7288
29	14.25	0.06	-0.8659	9.9999	-0.4458	9.9999	0.5148	0.3442	0.0043	0.2696	0.0126	0.7833
30	15.25	0.07	-0.9145	9.9999	-0.4672	9.9999	0.5109	0.3402	-0.0003	0.2728	-0.0109	0.8018
31	16.22	0.06	-0.9519	9.9999	-0.4756	9.9999	0.4996	0.3465	-0.0041	0.2817	-0.0117	0.8129
32	17.19	0.07	-0.9869	9.9999	-0.4885	9.9999	0.4950	0.3378	-0.0099	0.2806	-0.0296	0.8311
33	18.18	0.07	-1.0210	9.9999	-0.5033	9.9999	0.4926	0.3348	-0.0142	0.2833	-0.0419	0.8362
34	19.21	0.07	-1.0726	9.9999	-0.5257	9.9999	0.4901	0.3297	-0.0204	0.2733	-0.0618	0.8291
35	20.23	0.08	-1.1054	9.9999	-0.5333	9.9999	0.4829	0.3360	-0.0244	0.2764	-0.0727	0.8228
36	21.26	0.08	-1.1381	9.9999	-0.5428	9.9999	0.4770	0.3419	-0.0266	0.2786	-0.0779	0.8148
37	22.26	0.08	-1.1836	9.9999	-0.5570	9.9999	0.4683	0.2833	-0.0249	0.2471	-0.0879	0.8723
38	23.28	0.10	-1.2175	9.9999	-0.5629	9.9999	0.4624	0.3096	-0.0256	0.2539	-0.0928	0.8199
39	24.30	0.10	-0.9707	9.9999	-0.4302	9.9999	0.4432	0.4041	-0.0330	0.3041	-0.0817	0.7526
40	25.32	0.11	-0.9129	9.9999	-0.4017	9.9999	0.4400	0.4969	-0.0355	0.3448	-0.0715	0.6960
41	26.36	0.12	-0.9043	9.9999	-0.3976	9.9999	0.4378	0.5550	-0.0361	0.3676	-0.0650	0.6624
42	27.40	0.14	-0.9130	9.9999	-0.4008	9.9999	0.4390	0.6185	-0.0371	0.3956	-0.0599	0.6396
43	28.42	0.15	-0.9224	9.9999	-0.4016	9.9999	0.4354	0.6244	-0.0386	0.4076	-0.0618	0.6528
44	29.47	0.19	-0.9525	9.9999	-0.4160	9.9999	0.4347	0.6306	-0.0419	0.4165	-0.0664	0.6605
45	30.56	0.17	-0.9736	9.9999	-0.4203	9.9999	0.4317	0.5996	-0.0431	0.4123	-0.0719	0.6876
46	31.63	0.17	-0.9806	9.9999	-0.4217	9.9999	0.4301	0.6139	-0.0475	0.4246	-0.0773	0.6917

TEST	PART	MACH	REIOM	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	9	1.00	1.7	45.0	81a0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	Cm3	Cn3	XCPF3	YCPF3	CNF4	Cm4	Cn4	XCPF4	YCPF4
47	31.91	0.16	-0.9744	9.9999	-0.4170	9.9999	0.4262	0.6323	-0.0470	0.4338	-0.0743	0.6861
48	31.91	0.17	-0.9878	9.9999	-0.4178	9.9999	0.4229	0.6112	-0.0467	0.4264	-0.0766	0.7089
49	31.92	0.16	-0.9832	9.9999	-0.4156	9.9999	0.4227	0.6008	-0.0473	0.4238	-0.0787	0.7053
50	31.91	0.15	-0.9935	9.9999	-0.4204	9.9999	0.4231	0.5701	-0.0481	0.4168	-0.0863	0.7296
51	31.93	0.16	-0.9944	9.9999	-0.4189	9.9999	0.4196	0.6383	-0.0468	0.4346	-0.0733	0.6872
52	31.98	0.17	-0.9936	9.9999	-0.4169	9.9999	0.4175	0.6174	-0.0476	0.4331	-0.0770	0.7015
53	32.19	0.17	-0.9944	9.9999	-0.4189	9.9999	0.4196	0.5941	-0.0468	0.4295	-0.0822	0.7179
54	32.32	0.17	-0.9962	9.9999	-0.4162	9.9999	0.4158	0.5967	-0.0483	0.4297	-0.0810	0.7281
55	32.42	0.18	-0.9939	9.9999	-0.4131	9.9999	0.4156	0.5683	-0.0506	0.4205	-0.0890	0.7399
56	32.58	0.18	-1.0042	9.9999	-0.4175	9.9999	0.4162	0.5837	-0.0493	0.4267	-0.0845	0.7389
57	32.70	0.16	-1.0078	9.9999	-0.4185	9.9999	0.4155	0.5946	-0.0504	0.4323	-0.0847	0.7269
58	32.83	0.18	-1.0074	9.9999	-0.4181	9.9999	0.4128	0.5681	-0.0496	0.4225	-0.0876	0.7437
59	32.97	0.17	-1.0079	9.9999	-0.4181	9.9999	0.4128	0.6127	-0.0488	0.4395	-0.0797	0.7173
60	33.09	0.17	-1.0033	9.9999	-0.4138	9.9999	0.4125	0.5573	-0.0488	0.4168	-0.0876	0.7464
61	33.21	0.17	-0.9961	9.9999	-0.4076	9.9999	0.4100	0.5835	-0.0481	0.4267	-0.0824	0.7347
62	33.36	0.18	-1.0043	9.9999	-0.4152	9.9999	0.4134	0.5976	-0.0494	0.4359	-0.0827	0.7294
63	33.46	0.19	-1.0106	9.9999	-0.4170	9.9999	0.4127	0.6462	-0.0497	0.4575	-0.0769	0.7081
64	33.54	0.17	-1.0150	9.9999	-0.4192	9.9999	0.4130	0.5672	-0.0509	0.4272	-0.0898	0.7532
65	33.74	0.19	-1.0220	9.9999	-0.4226	9.9999	0.4135	0.6359	-0.0509	0.4538	-0.0801	0.7135
66	33.85	0.18	-1.0267	9.9999	-0.4239	9.9999	0.4128	0.6571	-0.0509	0.4612	-0.0775	0.7019
67	33.98	0.18	-1.0336	9.9999	-0.4253	9.9999	0.4114	0.6365	-0.0525	0.4605	-0.0825	0.7235
68	34.11	0.19	-1.0244	9.9999	-0.4218	9.9999	0.4118	0.6099	-0.0520	0.4469	-0.0853	0.7328
69	34.22	0.19	-1.0365	9.9999	-0.4264	9.9999	0.4091	0.6205	-0.0525	0.4467	-0.0846	0.7231
70	34.34	0.17	-1.0288	9.9999	-0.4218	9.9999	0.4118	0.5845	-0.0520	0.4372	-0.0891	0.7493
71	34.50	0.21	-1.0571	9.9999	-0.4337	9.9999	0.4103	0.7481	-0.0458	0.4918	-0.0613	0.6574
72	34.60	0.20	-1.0478	9.9999	-0.4311	9.9999	0.4115	0.6885	-0.0490	0.4803	-0.0717	0.6976
73	34.72	0.17	-1.0336	9.9999	-0.4264	9.9999	0.4106	0.6648	-0.0497	0.4707	-0.0747	0.7088
74	34.86	0.19	-1.0431	9.9999	-0.4271	9.9999	0.4094	0.6621	-0.0496	0.4766	-0.0746	0.7187
75	34.97	0.19	-1.0416	9.9999	-0.4278	9.9999	0.4123	0.7063	-0.0469	0.4827	-0.0664	0.6835
76	35.09	0.17	-1.0524	9.9999	-0.4333	9.9999	0.4118	0.6586	-0.0480	0.4663	-0.0731	0.7104
77	35.23	0.19	-1.0570	9.9999	-0.4346	9.9999	0.4111	0.6666	-0.0486	0.4738	-0.0732	0.7128
78	35.33	0.19	-1.0617	9.9999	-0.4359	9.9999	0.4106	0.6853	-0.0472	0.4812	-0.0688	0.7021
79	35.47	0.18	-1.0756	9.9999	-0.4425	9.9999	0.4114	0.7010	-0.0466	0.4853	-0.0665	0.6924
80	35.58	0.19	-1.0804	9.9999	-0.4438	9.9999	0.4108	0.7087	-0.0456	0.4889	-0.0644	0.6899
81	35.70	0.19	-1.0853	9.9999	-0.4447	9.9999	0.4117	0.7210	-0.0428	0.4941	-0.0594	0.6796
82	35.83	0.18	-1.0710	9.9999	-0.4403	9.9999	0.4111	0.7077	-0.0418	0.4881	-0.0598	0.6897
83	35.93	0.19	-1.0850	9.9999	-0.4469	9.9999	0.4119	0.7153	-0.0408	0.4878	-0.0571	0.6828
84	36.07	0.19	-1.0937	9.9999	-0.4462	9.9999	0.4136	0.6933	-0.0444	0.4854	-0.0640	0.7002
85	36.17	0.18	-1.0721	9.9999	-0.4427	9.9999	0.4129	0.6928	-0.0424	0.4836	-0.0611	0.6981
86	36.28	0.18	-1.0837	9.9999	-0.4472	9.9999	0.4127	0.6822	-0.0421	0.4869	-0.0617	0.7058
87	36.40	0.18	-1.0837	9.9999	-0.4482	9.9999	0.4136	0.6768	-0.0419	0.4745	-0.0619	0.7086
88	36.58	0.18	-1.0837	9.9999	-0.4472	9.9999	0.4127	0.6769	-0.0419	0.4805	-0.0619	0.7099
89	36.64	0.17	-1.0743	9.9999	-0.4521	9.9999	0.4132	0.6670	-0.0419	0.4763	-0.0628	0.7171
90	36.77	0.18	-1.0826	9.9999	-0.4486	9.9999	0.4126	0.5910	-0.0450	0.4499	-0.0781	0.7613
91	36.90	0.19	-1.1036	9.9999	-0.4557	9.9999	0.4129	0.6663	-0.0398	0.4745	-0.0598	0.7121
92	36.99	0.17	-1.0744	9.9999	-0.4447	9.9999	0.4139	0.6084	-0.0428	0.4568	-0.0704	0.7508

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/10**6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
L 9 1.00 1.7 45.0 H1W3F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CAF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	37.11	0.10	-1.0857	9.9999	-0.4472	9.9999	0.4127	0.5717	-0.0439	0.4433	-0.0768	0.7754
94	37.21	0.10	-1.1067	9.9999	-0.4563	9.9999	0.4130	0.6344	-0.0408	0.4697	-0.0643	0.7606
95	37.30	0.10	-1.0860	9.9999	-0.4502	9.9999	0.4146	0.5822	-0.0434	0.4519	-0.0746	0.7763
96	37.41	0.10	-1.0871	9.9999	-0.4506	9.9999	0.4147	0.5551	-0.0433	0.4397	-0.0780	0.7921
97	37.60	0.14	-1.0918	9.9999	-0.4517	9.9999	0.4132	0.5763	-0.0433	0.4520	-0.0752	0.7844
98	37.71	0.14	-1.0779	9.9999	-0.4466	9.9999	0.4142	0.4473	-0.0458	0.3935	-0.1025	0.8796
99	37.81	0.13	-1.0731	9.9999	-0.4469	9.9999	0.4165	0.4682	-0.0444	0.4020	-0.0948	0.8586
100	37.95	0.12	-1.0961	9.9999	-0.4553	9.9999	0.4159	0.5339	-0.0423	0.4373	-0.0792	0.8191
101	38.06	0.12	-1.0766	9.9999	-0.4488	9.9999	0.4160	0.4701	-0.0438	0.4096	-0.0932	0.8688
102	38.17	0.10	-1.0834	9.9999	-0.4491	9.9999	0.4146	0.3751	-0.0468	0.3613	-0.1193	0.9632
103	38.30	0.13	-1.0880	9.9999	-0.4506	9.9999	0.4140	0.4382	-0.0432	0.3925	-0.0986	0.8956
104	38.41	0.12	-1.0843	9.9999	-0.4503	9.9999	0.4156	0.4147	-0.0440	0.3829	-0.1061	0.9232
105	38.51	0.09	-1.0775	9.9999	-0.4473	9.9999	0.4152	0.4059	-0.0425	0.3771	-0.1046	0.9289
106	38.64	0.12	-1.0752	9.9999	-0.4463	9.9999	0.4151	0.4189	-0.0412	0.3859	-0.0984	0.9214
107	38.76	0.12	-1.0891	9.9999	-0.4516	9.9999	0.4141	0.4164	-0.0422	0.3837	-0.1013	0.9215
108	38.86	0.14	-1.0822	9.9999	-0.4487	9.9999	0.4146	0.3639	-0.0432	0.3612	-0.1148	0.9926
109	38.98	0.11	-1.0915	9.9999	-0.4521	9.9999	0.4143	0.3956	-0.0432	0.3753	-0.1093	0.9688
110	39.07	0.09	-1.0775	9.9999	-0.4473	9.9999	0.4152	0.3686	-0.0453	0.3531	-0.1298	1.0130
111	39.19	0.10	-1.0899	9.9999	-0.4533	9.9999	0.4159	0.3744	-0.0447	0.3643	-0.1193	0.9732
112	39.32	0.10	-1.0760	9.9999	-0.4476	9.9999	0.4160	0.3531	-0.0462	0.3570	-0.1251	1.0109
113	39.42	0.07	-1.0702	9.9999	-0.4450	9.9999	0.4158	0.2903	-0.0467	0.3324	-0.1609	1.1449
114	39.53	0.09	-1.0818	9.9999	-0.4505	9.9999	0.4164	0.3526	-0.0431	0.3557	-0.1223	1.0090
115	39.64	0.10	-1.0848	9.9999	-0.4520	9.9999	0.4159	0.3814	-0.0424	0.3735	-0.1111	0.9793
116	39.74	0.08	-1.0807	9.9999	-0.4491	9.9999	0.4155	0.3363	-0.0418	0.3572	-0.1262	1.0623
117	39.85	0.06	-1.0736	9.9999	-0.4476	9.9999	0.4169	0.3102	-0.0428	0.3436	-0.1381	1.1078
118	39.97	0.08	-1.0792	9.9999	-0.4485	9.9999	0.4156	0.3617	-0.0410	0.3616	-0.1134	0.9997
119	40.06	0.10	-1.0815	9.9999	-0.4495	9.9999	0.4156	0.3693	-0.0398	0.3662	-0.1077	0.9916
120	40.17	0.10	-1.0699	9.9999	-0.4450	9.9999	0.4159	0.2886	-0.0426	0.3318	-0.1470	1.1498
121	40.27	0.10	-1.0560	9.9999	-0.4393	9.9999	0.4160	0.3459	-0.0410	0.3536	-0.1185	1.0223
122	40.37	0.09	-1.0652	9.9999	-0.4446	9.9999	0.4174	0.3351	-0.0345	0.3529	-0.1178	1.0533
123	40.46	0.09	-1.0699	9.9999	-0.4450	9.9999	0.4159	0.3403	-0.0395	0.3514	-0.1160	1.0326
124	40.58	0.10	-1.0769	9.9999	-0.4483	9.9999	0.4163	0.3893	-0.0362	0.3708	-0.0929	0.9524
125	40.67	0.09	-1.0535	9.9999	-0.4405	9.9999	0.4176	0.3294	-0.0379	0.3449	-0.1151	1.0472
126	40.78	0.10	-1.0746	9.9999	-0.4472	9.9999	0.4162	0.3448	-0.0367	0.3539	-0.1063	1.0263
127	40.89	0.08	-1.0543	9.9999	-0.4422	9.9999	0.4179	0.3607	-0.0371	0.3570	-0.1030	0.9898
128	41.00	0.09	-1.0808	9.9999	-0.4493	9.9999	0.4180	0.3502	-0.0370	0.3543	-0.1055	1.0118
129	41.09	0.08	-1.0648	9.9999	-0.4477	9.9999	0.4165	0.3775	-0.0314	0.3606	-0.0831	0.9553
130	41.19	0.08	-1.0580	9.9999	-0.4411	9.9999	0.4178	0.3642	-0.0312	0.3538	-0.0856	0.9714
131	41.30	0.09	-1.0629	9.9999	-0.4454	9.9999	0.4190	0.3595	-0.0329	0.3572	-0.0915	0.9936
132	41.40	0.10	-1.0553	9.9999	-0.4422	9.9999	0.4179	0.3437	-0.0326	0.3464	-0.0969	1.0079
133	41.52	0.09	-1.0722	9.9999	-0.4479	9.9999	0.4177	0.3578	-0.0271	0.3430	-0.0758	0.9587
134	41.61	0.09	-1.0788	9.9999	-0.4501	9.9999	0.4180	0.3845	-0.0288	0.3574	-0.0750	0.9295
135	41.71	0.08	-1.0444	9.9999	-0.4375	9.9999	0.4169	0.3173	-0.0326	0.3337	-0.1028	1.0517
136	41.81	0.08	-1.0582	9.9999	-0.4430	9.9999	0.4205	0.3377	-0.0304	0.3373	-0.0908	0.9989
137	41.91	0.08	-1.0583	9.9999	-0.4432	9.9999	0.4188	0.2812	-0.0354	0.3105	-0.1259	1.1043
138	42.01	0.07	-1.0640	9.9999	-0.4458	9.9999	0.4190	0.2865	-0.0347	0.3122	-0.1213	1.0899

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 9 MACH 1.60 1.7 REID-6 PHI 45.0 81.0F23 CONF 0.0 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
139	42.12	0.08	-1.0683	9.9999	-0.4478	9.9999	0.4200	0.2716	-0.0385	0.3030	-0.1417	1.1155
140	42.20	0.08	-1.0453	9.9999	-0.4416	9.9999	0.4225	0.2556	-0.0374	0.2931	-0.1465	1.1668
141	42.31	0.05	-1.0478	9.9999	-0.4408	9.9999	0.4204	0.2303	-0.0413	0.2832	-0.1793	1.2296
142	42.39	0.07	-1.0720	9.9999	-0.4515	9.9999	0.4212	0.2578	-0.0358	0.2879	-0.1388	1.1168
143	42.50	0.06	-1.0628	9.9999	-0.4452	9.9999	0.4149	0.2320	-0.0371	0.2791	-0.1597	1.2034
144	42.59	0.07	-1.0803	9.9999	-0.4477	9.9999	0.4222	0.2341	-0.0395	0.2764	-0.1517	1.1810
145	42.68	0.07	-1.0650	9.9999	-0.4481	9.9999	0.4207	0.2090	-0.0403	0.2664	-0.1930	1.2747
146	42.78	0.07	-1.0590	9.9999	-0.4465	9.9999	0.4222	0.2344	-0.0368	0.2744	-0.1569	1.1789
147	42.87	0.06	-1.0581	9.9999	-0.4458	9.9999	0.4213	0.2029	-0.0375	0.2584	-0.1850	1.2734
148	42.96	0.06	-1.0627	9.9999	-0.4470	9.9999	0.4206	0.1795	-0.0385	0.2449	-0.2145	1.3645
149	43.05	0.06	-1.0682	9.9999	-0.4497	9.9999	0.4210	0.2226	-0.0347	0.2597	-0.1559	1.1659
150	43.13	0.06	-1.0613	9.9999	-0.4473	9.9999	0.4215	0.2176	-0.0364	0.2603	-0.1583	1.1965
151	43.22	0.06	-1.0681	9.9999	-0.4506	9.9999	0.4219	0.1864	-0.0362	0.2424	-0.1941	1.3002
152	43.32	0.06	-1.0730	9.9999	-0.4518	9.9999	0.4220	0.1815	-0.0380	0.2370	-0.2095	1.3057
153	43.40	0.04	-1.0589	9.9999	-0.4463	9.9999	0.4214	0.1477	-0.0395	0.2228	-0.2671	1.5082
154	43.51	0.05	-1.0659	9.9999	-0.4495	9.9999	0.4217	0.1713	-0.0387	0.2352	-0.2259	1.3735
155	43.60	0.05	-1.0641	9.9999	-0.4516	9.9999	0.4228	0.1598	-0.0360	0.2200	-0.2252	1.3768
156	43.68	0.06	-1.0515	9.9999	-0.4467	9.9999	0.4228	0.1249	-0.0385	0.2078	-0.2967	1.6123
157	43.78	0.05	-1.0546	9.9999	-0.4471	9.9999	0.4223	0.1447	-0.0387	0.2148	-0.2673	1.4840
158	43.87	0.05	-1.0635	9.9999	-0.4493	9.9999	0.4225	0.1136	-0.0395	0.1989	-0.3481	1.7540
159	43.95	0.04	-1.0613	9.9999	-0.4473	9.9999	0.4215	0.1048	-0.0370	0.1916	-0.3527	1.8287
160	44.05	0.04	-1.0450	9.9999	-0.4424	9.9999	0.4236	0.0977	-0.0402	0.1899	-0.4116	1.9427
161	44.14	0.06	-1.0612	9.9999	-0.4491	9.9999	0.4233	0.1100	-0.0370	0.1920	-0.3360	1.7456
162	44.22	0.04	-1.0598	9.9999	-0.4481	9.9999	0.4232	0.1285	-0.0370	0.2040	-0.2875	1.6029
163	44.33	0.05	-1.0450	9.9999	-0.4414	9.9999	0.4224	0.0736	-0.0390	0.1717	-0.5295	2.3316
164	44.43	0.05	-1.0420	9.9999	-0.4573	9.9999	0.4226	0.1253	-0.0354	0.1981	-0.2825	1.5804
165	44.50	0.04	-1.0542	9.9999	-0.4467	9.9999	0.4238	0.0762	-0.0390	0.1728	-0.5114	2.2671
166	44.60	0.06	-1.0762	9.9999	-0.4555	9.9999	0.4225	0.0992	-0.0362	0.1881	-0.3648	1.8959
167	44.71	0.07	-1.0629	9.9999	-0.4501	9.9999	0.4235	0.0917	-0.0379	0.1861	-0.4137	2.0305
168	44.79	0.08	-1.0779	9.9999	-0.4572	9.9999	0.4242	0.1268	-0.0326	0.1986	-0.2508	1.5662
169	44.87	0.07	-1.0646	9.9999	-0.4529	9.9999	0.4253	0.1058	-0.0326	0.1856	-0.3681	1.7539
170	44.97	0.07	-1.0753	9.9999	-0.4560	9.9999	0.4241	0.1220	-0.0334	0.1957	-0.2737	1.6044
171	45.06	0.06	-1.0622	9.9999	-0.4517	9.9999	0.4252	0.1143	-0.0345	0.1958	-0.3021	1.7122
172	45.14	0.07	-1.0657	9.9999	-0.4523	9.9999	0.4244	0.0963	-0.0354	0.1858	-0.3677	1.9299
173	45.22	0.06	-1.0655	9.9999	-0.4551	9.9999	0.4271	0.1165	-0.0328	0.1904	-0.2817	1.6346
174	45.33	0.07	-1.0644	9.9999	-0.4567	9.9999	0.4272	0.0869	-0.0370	0.1825	-0.4154	2.0532
175	45.40	0.07	-1.0771	9.9999	-0.4546	9.9999	0.4267	0.1031	-0.0314	0.1841	-0.3040	1.7848
176	45.51	0.07	-1.0794	9.9999	-0.4598	9.9999	0.4259	0.1003	-0.0309	0.1810	-0.3077	1.8038
177	45.60	0.06	-1.0585	9.9999	-0.4535	9.9999	0.4286	0.0956	-0.0319	0.1806	-0.3347	1.8928
178	45.68	0.08	-1.0678	9.9999	-0.4561	9.9999	0.4271	0.0794	-0.0312	0.1697	-0.3925	2.1373
179	45.77	0.05	-1.0641	9.9999	-0.4557	9.9999	0.4287	0.0585	-0.0319	0.1565	-0.5462	2.6766
180	45.87	0.06	-1.0725	9.9999	-0.4573	9.9999	0.4265	0.0537	-0.0340	0.1560	-0.6320	2.9031
181	45.94	0.05	-1.0597	9.9999	-0.4531	9.9999	0.4276	0.0584	-0.0315	0.1548	-0.5368	2.6512
182	46.04	0.08	-1.0736	9.9999	-0.4570	9.9999	0.4256	0.0540	-0.0347	0.1560	-0.6429	2.9258
183	46.12	0.06	-1.0643	9.9999	-0.4552	9.9999	0.4277	0.0321	-0.0316	0.1431	-0.9850	4.4535
184	46.20	0.09	-1.0542	9.9999	-0.4571	9.9999	0.4295	0.0476	-0.0309	0.1452	-0.6491	3.0527

TEST	PART	MACH	PX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	9	1.00	1.7	45.0	B1&F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	Cm1	Cm3	XCPF3	YCPF3	CNF4	Cm4	CB4	XCPF4	YCPF4
185	46.29	0.05	-1.0713	9.9999	-0.4576	9.9999	0.4272	0.0531	-0.0316	0.1495	-0.5964	2.0164
186	46.39	0.06	-1.0735	9.9999	-0.4606	9.9999	0.4291	0.0214	-0.0316	0.1326	-1.4775	6.1892
187	46.48	0.06	-1.0860	9.9999	-0.4647	9.9999	0.4279	0.0163	-0.0324	0.1271	-1.9882	7.7929
188	46.55	0.06	-1.0629	9.9999	-0.4538	9.9999	0.4269	0.0078	-0.0306	0.1208	-3.8889	15.4568
189	46.64	0.05	-1.0813	9.9999	-0.4626	9.9999	0.4278	0.0267	-0.0319	0.1357	-1.1949	5.0758
190	46.74	0.07	-1.0836	9.9999	-0.4628	9.9999	0.4278	0.0293	-0.0319	0.1359	-1.0888	4.6316
191	46.82	0.06	-1.0813	9.9999	-0.4626	9.9999	0.4278	0.0211	-0.0309	0.1295	-1.4612	6.1279
192	46.90	0.05	-1.0837	9.9999	-0.4618	9.9999	0.4261	-0.0124	-0.0336	0.1151	2.7031	-9.3283
193	47.00	0.06	-1.0767	9.9999	-0.4603	9.9999	0.4275	0.0216	-0.0324	0.1304	-1.5000	6.0312
194	47.10	0.07	-1.1030	9.9999	-0.4702	9.9999	0.4263	0.0372	-0.0314	0.1450	-0.8420	3.8938
195	47.17	0.06	-1.0972	9.9999	-0.4675	9.9999	0.4260	-0.0038	-0.0356	0.1211	9.4615	-32.1795
196	47.26	0.06	-1.0972	9.9999	-0.4683	9.9999	0.4269	0.0029	-0.0313	0.1248	-10.8000	41.4666
197	47.34	0.06	-1.0818	9.9999	-0.4629	9.9999	0.4279	0.0129	-0.0297	0.1226	-2.2985	9.4851
198	47.43	0.08	-1.1049	9.9999	-0.4762	9.9999	0.4292	0.1117	-0.0264	0.1747	-0.2366	1.5639
199	47.52	0.06	-1.1140	9.9999	-0.4765	9.9999	0.4277	0.1194	-0.0258	0.1763	-0.2158	1.4778
200	47.59	0.08	-1.0910	9.9999	-0.4674	9.9999	0.4284	0.0929	-0.0250	0.1608	-0.2690	1.7318
201	47.69	0.08	-1.0910	9.9999	-0.4674	9.9999	0.4284	0.1184	-0.0227	0.1707	-0.1915	1.4417
202	47.77	0.08	-1.1118	9.9999	-0.4758	9.9999	0.4276	0.0206	-0.0292	0.1222	-1.4225	5.9484
203	47.87	0.07	-1.1371	9.9999	-0.4856	9.9999	0.4271	0.1497	-0.0217	0.1856	-0.1451	1.2469
204	47.96	0.07	-1.1417	9.9999	-0.4878	9.9999	0.4273	0.1967	-0.0167	0.1963	-0.0753	1.0879
205	48.02	0.07	-1.1379	9.9999	-0.4861	9.9999	0.4272	0.1813	-0.0146	0.1842	-0.0804	1.0383
206	48.11	0.08	-1.1770	9.9999	-0.5019	9.9999	0.4264	0.1410	-0.0116	0.1555	-0.0821	1.1834
207	48.21	0.06	-1.1516	9.9999	-0.4908	9.9999	0.4242	0.1400	-0.0171	0.1637	-0.1220	1.1695
208	48.26	0.07	-1.1456	9.9999	-0.4869	9.9999	0.4271	0.1570	-0.0128	0.1663	-0.0817	1.0667
209	48.35	0.06	-1.1356	9.9999	-0.4868	9.9999	0.4287	0.1350	-0.0177	0.1642	-0.1308	1.2316
210	48.26	0.07	-1.1218	9.9999	-0.4793	9.9999	0.4273	0.0657	-0.0229	0.1317	-0.3660	2.0044
211	48.16	0.07	-1.1424	9.9999	-0.4892	9.9999	0.4282	0.1665	-0.0151	0.1847	-0.0812	0.9902
212	48.06	0.08	-1.1155	9.9999	-0.4782	9.9999	0.4271	0.1434	-0.0197	0.1696	-0.1373	1.1838
213	48.00	0.07	-1.1286	9.9999	-0.4835	9.9999	0.4284	0.1075	-0.0224	0.1552	-0.2083	1.4434
214	47.90	0.05	-1.1092	9.9999	-0.4729	9.9999	0.4283	0.1438	-0.0216	0.1741	-0.1503	1.2107
215	47.83	0.05	-1.1054	9.9999	-0.4724	9.9999	0.4274	0.0206	-0.0302	0.1113	-1.4695	5.4178
216	47.34	0.05	-1.0788	9.9999	-0.4616	9.9999	0.4279	0.0341	-0.0316	0.1237	-0.9292	3.6317
217	46.46	0.05	-1.0863	9.9999	-0.4644	9.9999	0.4275	0.0469	-0.0331	0.1280	-0.7376	2.8538
218	45.37	0.06	-1.0845	9.9999	-0.4645	9.9999	0.4273	0.1494	-0.0336	0.1858	-0.2235	1.2642
219	44.38	0.03	-1.0532	9.9999	-0.4496	9.9999	0.4269	0.1164	-0.0371	0.1694	-0.3192	1.4561

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 6

MANTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	10	1.10	1.17	0.0	BLOCK23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-2.42	0.00	-0.2443	0.4833	0.0827	-0.0673	0.0012	0.5607	0.1870	0.3737	-1.9782
2	-2.41	0.00	-0.2342	0.4627	0.0495	-0.0765	0.0012	0.5526	0.1830	0.3696	-1.9754
3	-2.41	0.02	-0.2440	0.4828	0.1680	-0.1673	0.0013	0.5524	0.1847	0.3677	-1.9785
4	-2.41	0.02	-0.2757	0.5201	0.2165	-0.2516	0.0014	0.5496	0.1838	0.3666	-1.8862
5	-2.41	0.02	-0.2441	0.4831	0.1695	-0.1876	0.0014	0.5554	0.1851	0.3703	-1.9787
6	-2.42	0.01	-0.2569	0.4747	0.1000	-0.1567	0.0013	0.5610	0.1865	0.3745	-1.8736
7	-2.41	0.01	-0.2602	0.5006	0.0941	-0.0688	0.0011	0.5543	0.1848	0.3695	-1.8803
8	-2.42	0.02	-0.2775	0.4963	0.1691	-0.1498	0.0012	0.5581	0.1865	0.3716	-1.7882
9	-2.41	0.02	-0.2558	0.4793	0.1880	-0.2066	0.0014	0.5621	0.1892	0.3729	-1.8736
10	-2.41	0.01	-0.2565	0.4675	0.1013	-0.1416	0.0012	0.5650	0.1889	0.3761	-1.8203
11	-2.41	0.01	-0.2575	0.4552	0.1099	-0.1773	0.0013	0.5663	0.1927	0.3736	-1.7675
12	-2.41	0.01	-0.2659	0.5001	0.1052	-0.0897	0.0011	0.5552	0.1895	0.3657	-1.8804
13	-2.41	0.01	-0.2556	0.4793	0.1013	-0.1415	0.0012	0.5619	0.1888	0.3731	-1.8736
14	-2.22	0.01	-0.1749	0.3139	0.0911	-0.1229	0.0014	0.5724	0.1860	0.3864	-1.7947
15	-1.19	0.00	-0.0867	0.2206	0.0287	-0.0459	0.0016	0.5718	0.1840	0.3878	-2.4857
16	-0.19	0.00	0.0051	0.0702	0.0246	-0.0459	0.0019	0.5674	0.1915	0.3759	13.7569
17	0.75	0.01	0.0953	-0.0927	0.0909	-0.1278	0.0023	0.5804	0.1938	0.3866	-0.9438
18	1.73	0.02	0.2201	-0.2977	0.1967	-0.2316	0.0029	0.5843	0.2013	0.3830	-1.3164
19	2.70	0.01	0.3203	-0.4754	0.1335	-0.1631	0.0030	0.5888	0.2065	0.3823	-1.4843
20	3.72	0.01	0.4574	-0.6997	0.0518	-0.0310	0.0031	0.5991	0.2153	0.3838	-1.5297
21	4.44	0.01	0.5626	-0.8731	0.0624	-0.0412	0.0034	0.6085	0.2249	0.3836	-1.5519
22	5.67	0.01	0.6772	-1.0795	0.1268	-0.0922	-0.0014	0.6235	0.2381	0.3854	-1.5941
23	6.70	0.01	0.8007	-1.3315	0.1455	-0.1565	-0.0062	0.6320	0.2518	0.3802	-1.6629
24	7.61	0.02	0.9209	-1.5204	0.1583	-0.1315	-0.0059	0.6473	0.2661	0.3812	-1.6408
25	8.59	0.02	1.0610	-1.7616	0.2131	-0.1567	-0.0161	0.6487	0.2763	0.3724	-1.6787
26	9.60	0.02	1.1852	-1.9808	0.2102	-0.2084	-0.0156	0.6485	0.2837	0.3648	-1.6712
27	10.62	0.01	1.3532	-2.2014	0.1474	-0.1309	-0.0205	0.6537	0.2917	0.3621	-1.6268
28	11.60	0.01	1.4988	-2.4313	0.1391	-0.0761	-0.0203	0.6555	0.3009	0.3547	-1.6222
29	12.59	0.01	1.6443	-2.6474	0.1356	-0.1389	-0.0144	0.6548	0.3070	0.3479	-1.6101
30	13.57	0.01	1.8147	-2.7767	0.1370	-0.1120	-0.0138	0.6637	0.3162	0.3476	-1.5312
31	14.62	0.01	1.9270	-2.9285	0.1449	-0.1457	-0.0238	0.6591	0.3207	0.3385	-1.5197
32	15.64	0.01	2.0936	-3.0573	0.1062	-0.0550	-0.0129	0.6581	0.3259	0.3323	-1.4589
33	16.61	0.02	2.2447	-3.1324	0.1427	-0.0797	-0.0124	0.6562	0.3329	0.3234	-1.3955
34	17.60	0.02	2.4369	-3.2139	0.1614	-0.0592	-0.0221	0.6628	0.3415	0.3214	-1.3189
35	18.62	0.01	2.5524	-3.2356	0.1052	-0.0436	-0.0163	0.6610	0.3453	0.3158	-1.2677
36	19.67	0.01	2.7095	-3.1888	0.0657	0.0447	-0.0165	0.6642	0.3517	0.3126	-1.1716
37	20.73	0.01	2.9705	-3.0203	0.1543	-0.1638	-0.0084	0.6542	0.3569	0.2974	-1.0167
38	21.76	0.02	3.1015	-2.8975	0.1704	-0.0660	-0.0080	0.6499	0.3565	0.2935	-0.9342
39	22.80	0.01	3.3405	-2.6536	0.0595	-0.0453	-0.0115	0.6332	0.3538	0.2794	-0.7850
40	23.85	0.00	3.7321	-2.5659	-0.0108	0.4232	-0.0598	0.6290	0.3562	0.2728	-0.6875
41	24.88	0.00	4.0030	-2.3394	-0.0171	0.1978	-0.0409	0.6127	0.3569	0.2558	-0.5844
42	25.90	-0.01	4.3149	-2.1467	-0.1722	0.6551	-0.0672	0.6091	0.3610	0.2481	-0.4973
43	27.01	-0.01	4.5964	-2.0550	-0.0641	0.3656	-0.0596	0.5955	0.3607	0.2348	-0.4471
44	28.07	0.00	4.9875	-2.0780	0.0446	-0.0431	-0.0198	0.5939	0.3642	0.2297	-0.4162
45	29.17	-0.01	5.3413	-2.1182	-0.0746	0.1681	-0.0137	0.5795	0.3655	0.2140	-0.3966
46	30.35	-0.00	5.7772	-2.0231	-0.0364	0.0383	0.0044	0.5689	0.3628	0.2069	-0.3502

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
Y 10 1.10 1.7 0.0 61.0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	31.63	-0.01	6.2822	-2.1300	-0.1766	0.2557	-0.0258	0.5664	0.3688	0.1976	-0.3390
48	31.80	-0.00	6.3053	-2.0963	-0.0609	0.2136	-0.0256	0.5664	0.3729	0.1935	-0.3325
49	31.85	-0.00	6.2856	-2.1470	-0.0453	0.3015	-0.0313	0.5736	0.3767	0.1969	-0.3416
50	31.94	-0.01	6.2122	-2.1289	-0.1176	0.1814	-0.0257	0.5748	0.3760	0.1988	-0.3427
51	31.85	-0.01	6.2929	-2.1299	-0.0816	0.2415	-0.0257	0.5680	0.3750	0.1930	-0.3383
52	31.96	-0.01	6.3295	-2.1714	-0.1075	0.3877	-0.0365	0.5774	0.3757	0.2017	-0.3431
53	32.10	-0.01	6.4053	-2.1913	-0.0960	0.1706	-0.0250	0.5646	0.3771	0.1875	-0.3421
54	32.27	-0.01	6.4052	-2.1919	-0.1077	0.3876	-0.0258	0.5707	0.3788	0.1919	-0.3422
55	32.39	-0.01	6.4701	-2.2290	-0.0554	0.0549	-0.0036	0.5743	0.3791	0.1952	-0.3445
56	32.56	-0.02	6.6274	-2.2773	-0.1428	0.4491	-0.0407	0.5784	0.3814	0.1970	-0.3438
57	32.47	0.00	6.5825	-2.1944	0.0334	0.1049	-0.0137	0.5682	0.3794	0.1888	-0.3334
58	32.79	-0.01	6.6626	-2.3322	-0.1024	0.2647	-0.0139	0.5715	0.3808	0.1907	-0.3508
59	32.95	-0.02	6.7737	-2.3416	-0.2655	0.5449	-0.0299	0.5690	0.3831	0.1859	-0.3457
60	33.07	-0.02	6.7945	-2.2969	-0.2632	0.5837	-0.0352	0.5670	0.3838	0.1832	-0.3379
61	33.19	-0.01	6.7966	-2.3077	-0.1672	0.5183	-0.0351	0.5699	0.3862	0.1837	-0.3395
62	33.36	-0.01	6.8745	-2.2453	-0.1673	0.5163	-0.0296	0.5782	0.3861	0.1921	-0.3264
63	33.45	-0.02	6.9000	-2.4253	-0.2317	0.5548	-0.0243	0.5736	0.3882	0.1854	-0.3515
64	33.58	-0.02	7.0285	-2.4514	-0.2518	0.5473	-0.0239	0.5817	0.3862	0.1955	-0.3488
65	33.71	-0.01	7.0528	-2.4063	-0.1607	0.6432	-0.0450	0.5686	0.3876	0.1810	-0.3412
66	33.83	-0.01	7.0569	-2.5213	-0.1664	0.5359	-0.0290	0.5771	0.3913	0.1858	-0.3574
67	33.96	-0.00	7.1435	-2.3863	-0.0677	0.5180	-0.0235	0.5722	0.3899	0.1823	-0.3343
68	34.08	-0.01	7.1529	-2.3805	-0.2039	0.6652	-0.0446	0.5809	0.3926	0.1883	-0.3328
69	34.21	-0.01	7.2046	-2.3724	-0.1027	0.4766	-0.0346	0.5601	0.3899	0.1702	-0.3292
70	34.34	-0.02	7.3177	-2.4327	-0.2166	0.6731	-0.0336	0.5716	0.3950	0.1766	-0.3324
71	34.46	-0.02	7.3719	-2.4489	-0.2223	0.7387	-0.0440	0.5734	0.3929	0.1805	-0.3322
72	34.60	-0.01	7.3971	-2.5701	-0.2025	0.7006	-0.0230	0.5749	0.3983	0.1766	-0.3474
73	34.72	-0.02	7.4414	-2.5521	-0.2223	0.7386	-0.0439	0.5688	0.3973	0.1715	-0.3438
74	34.82	0.01	7.4223	-2.5301	0.0429	0.3020	-0.0113	0.5815	0.3996	0.1821	-0.3368
75	34.97	-0.03	7.5475	-2.6277	-0.3655	0.7516	-0.0432	0.5770	0.4021	0.1749	-0.3477
76	35.08	-0.01	7.5527	-2.5364	-0.1652	0.5631	-0.0219	0.5909	0.4017	0.1892	-0.3358
77	35.20	-0.01	7.6506	-2.5568	-0.1811	0.6811	-0.0325	0.5675	0.4003	0.1672	-0.3381
78	35.34	-0.01	7.6759	-2.5166	-0.2011	0.7140	-0.0428	0.5652	0.4003	0.1649	-0.3279
79	35.46	0.00	7.7737	-2.5905	-0.0368	0.4709	-0.0262	0.5699	0.4017	0.1682	-0.3320
80	35.57	-0.02	7.7461	-2.6583	-0.2080	0.5937	-0.0108	0.5815	0.4034	0.1781	-0.3432
81	35.70	-0.01	7.8414	-2.6371	-0.1447	0.5159	-0.0414	0.5794	0.4012	0.1782	-0.3363
82	35.80	-0.02	7.8517	-2.6522	-0.2915	0.6722	-0.0365	0.5674	0.4006	0.1668	-0.3374
83	35.94	-0.00	7.9333	-2.6082	-0.0767	0.5562	-0.0205	0.5595	0.3982	0.1613	-0.3288
84	36.17	-0.00	7.9532	-2.6228	-0.0675	0.5176	-0.0203	0.5666	0.3989	0.1677	-0.3298
85	36.18	-0.01	7.9728	-2.6366	-0.2036	0.6642	-0.0310	0.5597	0.3948	0.1649	-0.3307
86	36.30	-0.01	8.0858	-2.6491	-0.0874	0.5365	-0.0149	0.5589	0.3965	0.1644	-0.3276
87	36.40	-0.00	8.0464	-2.5741	-0.1554	0.5756	-0.0196	0.5510	0.3965	0.1565	-0.3182
88	36.51	-0.01	8.0875	-2.7238	-0.2186	0.5869	-0.0251	0.5556	0.3932	0.1624	-0.3368
89	36.65	-0.01	8.1704	-2.6620	-0.2160	0.6384	-0.0197	0.5535	0.3946	0.1589	-0.3258
90	36.76	-0.00	8.1548	-2.6967	-0.1047	0.5208	-0.0092	0.5638	0.3904	0.1534	-0.3306
91	36.88	-0.01	8.2639	-2.6943	-0.2423	0.5521	-0.0346	0.5477	0.3905	0.1572	-0.3252
92	37.02	-0.00	8.3931	-2.7816	-0.1389	0.6408	-0.0087	0.5478	0.3959	0.1519	-0.3316

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART RUN REY10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 10 1a1a 1.7 0.0 H1a0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
93	37.13	0.01	0.3616	-2.7542	-0.0530	0.5845	-0.0191	0.5537	0.3908	0.1589	-0.3292
94	37.23	-0.06	0.3249	-2.7266	-0.1526	0.5883	-0.0087	0.5536	0.3928	0.1608	-0.3275
95	37.38	-0.00	0.3620	-2.8436	-0.1550	0.5351	-0.0233	0.5500	0.3939	0.1561	-0.3329
96	37.48	-0.01	0.3277	-2.8571	-0.1778	0.5194	-0.0288	0.5481	0.3912	0.1569	-0.3382
97	37.60	-0.00	0.3598	-2.9816	-0.1625	0.6066	-0.0080	0.5325	0.3934	0.1387	-0.3479
98	37.73	-0.01	0.3438	-2.7506	-0.2183	0.5960	-0.0075	0.5470	0.3872	0.1598	-0.3205
99	37.83	0.01	0.3451	-2.8967	0.0122	0.3406	-0.0227	0.5364	0.3891	0.1473	-0.3337
100	37.92	-0.00	0.3740	-2.8830	-0.1431	0.5515	-0.0180	0.5458	0.3912	0.1546	-0.3316
101	38.04	-0.01	0.3841	-2.9782	-0.0743	0.5990	-0.0232	0.5485	0.3981	0.1604	-0.3314
102	38.20	-0.01	0.3722	-2.9154	-0.0485	0.4535	-0.0171	0.5441	0.3878	0.1563	-0.3320
103	38.30	-0.02	0.3609	-2.9551	-0.2229	0.7198	-0.0178	0.5241	0.3814	0.1427	-0.3358
104	38.43	0.01	0.3533	-2.8496	0.0638	0.4506	-0.0170	0.5322	0.3801	0.1521	-0.3213
105	38.54	-0.01	0.3556	-2.8660	-0.1048	0.4321	-0.0166	0.5180	0.3814	0.1366	-0.3236
106	38.64	-0.01	0.3348	-2.9416	-0.1214	0.5500	-0.0067	0.5401	0.3865	0.1536	-0.3328
107	38.80	-0.02	0.3746	-3.0096	-0.1315	0.3532	-0.0201	0.5194	0.3820	0.1374	-0.3310
108	38.90	-0.04	0.3030	-2.8871	-0.2765	0.5008	-0.0258	0.5179	0.3807	0.1372	-0.3207
109	39.00	0.00	0.3779	-2.9469	0.0461	0.3730	-0.0156	0.5193	0.3794	0.1399	-0.3288
110	39.12	-0.03	0.3333	-2.8623	-0.0115	0.3245	-0.0151	0.5177	0.3756	0.1421	-0.3179
111	39.22	-0.02	0.3274	-2.9283	-0.1330	0.5508	-0.0158	0.5126	0.3746	0.1380	-0.3244
112	39.33	-0.00	0.3618	-2.9804	-0.0196	0.3798	-0.0254	0.5061	0.3781	0.1280	-0.3156
113	39.46	-0.03	0.3277	-2.8713	-0.2461	0.5042	-0.0094	0.5052	0.3763	0.1289	-0.3112
114	39.57	-0.01	0.3255	-2.8780	-0.0155	0.2450	-0.0140	0.5110	0.3760	0.1350	-0.3111
115	39.67	-0.00	0.2941	-3.0639	-0.0535	0.5984	-0.0049	0.5130	0.3854	0.1276	-0.3297
116	39.79	0.06	0.3562	-3.0346	0.0314	0.5192	-0.0201	0.5150	0.3808	0.1342	-0.3247
117	39.90	-0.01	0.3509	-3.0786	-0.0962	0.4492	0.0067	0.5191	0.3824	0.1367	-0.3282
118	39.99	-0.01	0.3525	-2.9869	-0.0806	0.4556	-0.0039	0.5096	0.3807	0.1289	-0.3172
119	40.11	0.06	0.3944	-3.0262	-0.0154	0.6937	0.0004	0.5126	0.3804	0.1322	-0.3221
120	40.23	0.01	0.3631	-3.0109	0.0776	0.3354	-0.0135	0.5044	0.3770	0.1274	-0.3156
121	40.32	-0.01	0.3417	-3.0422	-0.0968	0.8450	-0.0049	0.5228	0.3810	0.1418	-0.3208
122	40.45	-0.02	0.3262	-3.0508	-0.1536	0.5697	-0.0033	0.4985	0.3817	0.1171	-0.3169
123	40.54	-0.02	0.3646	-2.9801	-0.1021	0.5130	0.0073	0.5326	0.3767	0.1259	-0.3109
124	40.62	-0.02	0.3938	-3.0779	-0.0976	0.1435	0.0191	0.4894	0.3756	0.1138	-0.3207
125	40.74	-0.03	0.3138	-3.0965	-0.1822	0.6805	0.0386	0.5008	0.3797	0.1211	-0.3186
126	40.85	-0.01	0.3322	-3.0856	-0.0051	0.0104	0.0044	0.4967	0.3743	0.1224	-0.3150
127	40.96	-0.01	0.3590	-3.2290	-0.0587	0.9405	-0.0097	0.5236	0.3858	0.1378	-0.3309
128	41.05	-0.02	0.3234	-3.2262	-0.0871	0.3677	0.0138	0.5119	0.3864	0.1255	-0.3284
129	41.16	-0.01	0.3295	-3.0975	0.0171	0.2520	-0.0015	0.5154	0.3818	0.1336	-0.3159
130	41.25	-0.00	0.3222	-3.2263	-0.0191	0.8470	-0.0039	0.5266	0.3854	0.1412	-0.3285
131	41.36	-0.02	0.3410	-3.3187	-0.1369	0.4602	-0.0018	0.5068	0.3807	0.1261	-0.3338
132	41.48	-0.02	0.3141	-3.2966	-0.0711	0.9651	0.0036	0.5023	0.3818	0.1205	-0.3293
133	41.58	-0.04	0.3124	-3.2476	-0.3269	1.1077	-0.0140	0.5089	0.3902	0.1187	-0.3244
134	41.67	-0.01	0.3233	-3.2022	-0.0598	0.5712	0.0085	0.5072	0.3805	0.1267	-0.3201
135	41.78	-0.02	0.3277	-3.1299	-0.1113	0.3251	0.0097	0.4980	0.3763	0.1217	-0.3121
136	41.87	-0.02	0.3249	-3.3455	-0.0492	0.4812	-0.0014	0.4988	0.3791	0.1197	-0.3315
137	41.97	-0.01	0.3191	-3.2776	-0.0526	0.6163	-0.0017	0.5159	0.3730	0.1429	-0.3239
138	42.07	-0.02	0.3174	-3.2743	-0.1169	0.6580	-0.0015	0.5040	0.3764	0.1278	-0.3211

MARTIN MISSILE TAILS EFFECTS DATA

TEST Z PART MACH RNIG-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
10.1e1M 1e7. 0.0 81e0E23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAM	CAF	XCP
139	42.17	-0.01	10.2091	-3.2561	0.0731	0.2648	-0.0003	0.5023	0.3727	0.1296	-0.3190
140	42.26	-0.02	10.2412	-3.2625	-0.0120	0.3165	-0.0002	0.4929	0.3783	0.1228	-0.3166
141	42.37	-0.02	10.2376	-3.1263	-0.1072	0.6301	0.0041	0.4917	0.3744	0.1173	-0.3054
142	42.48	-0.01	10.3726	-3.2669	0.0051	0.8812	-0.0176	0.5123	0.3776	0.1347	-0.3140
143	42.58	-0.02	10.3106	-3.1126	0.0411	-0.1334	0.0121	0.4826	0.3733	0.1093	-0.3019
144	42.65	-0.02	10.3849	-3.2764	-0.0764	0.3543	0.0056	0.4905	0.3744	0.1161	-0.3153
145	42.75	-0.02	10.3796	-3.2414	-0.0667	0.3708	0.0004	0.4890	0.3750	0.1140	-0.3123
146	42.84	-0.02	10.4188	-3.1498	-0.0202	-0.0391	0.0175	0.4866	0.3791	0.1075	-0.3018
147	42.94	-0.01	10.5244	-3.2522	0.1142	-0.0453	0.0126	0.4929	0.3784	0.1145	-0.3098
148	43.02	-0.02	10.5069	-3.3400	0.0266	-0.2098	0.0232	0.4994	0.3777	0.1217	-0.3179
149	43.12	-0.01	10.4659	-3.2846	0.0202	0.2458	0.0063	0.4961	0.3757	0.1104	-0.3108
150	43.21	-0.02	10.6098	-3.2927	-0.0628	0.6268	-0.0104	0.4927	0.3831	0.1096	-0.3103
151	43.29	-0.02	10.5994	-3.4081	0.0933	-0.5127	0.0291	0.5101	0.3793	0.1308	-0.3215
152	43.38	-0.01	10.7006	-3.2052	0.0109	0.3242	-0.0089	0.4828	0.3743	0.1085	-0.2995
153	43.45	-0.02	10.5444	-3.2957	0.0096	0.7063	-0.0093	0.4865	0.3783	0.1082	-0.3112
154	43.57	-0.01	10.7308	-3.3479	0.1541	-0.6059	0.0267	0.5062	0.3841	0.1221	-0.3118
155	43.66	-0.01	10.7233	-3.3094	0.1506	-0.1612	0.0137	0.4890	0.3766	0.1124	-0.3086
156	43.75	-0.02	10.7138	-3.4424	-0.1378	0.9041	-0.0267	0.5031	0.3848	0.1183	-0.3213
157	43.84	-0.02	10.8426	-3.3637	-0.0142	0.2725	0.0022	0.4919	0.3788	0.1139	-0.3102
158	43.94	-0.02	10.8977	-3.2814	0.0733	-0.6491	0.0357	0.5023	0.3934	0.1189	-0.3011
159	44.03	-0.01	10.8567	-3.1454	0.1474	-0.5442	0.0147	0.4771	0.3770	0.1002	-0.2897
160	44.10	-0.01	10.8946	-3.2769	0.2149	-0.6937	0.0301	0.4957	0.3777	0.1180	-0.3008
161	44.20	-0.01	11.0028	-3.2154	0.1919	-0.6803	0.0313	0.4776	0.3787	0.0990	-0.2923
162	44.30	-0.02	10.9267	-3.1600	0.0201	0.3630	-0.0070	0.4783	0.3781	0.1003	-0.2892
163	44.38	-0.02	11.0442	-3.1913	0.0584	-0.0571	-0.0062	0.4867	0.3729	0.0938	-0.2888
164	44.48	-0.01	11.0853	-3.3368	0.0438	0.2295	-0.0126	0.4874	0.3914	0.1060	-0.3008
165	44.58	-0.01	11.1047	-3.2070	0.1454	-0.5805	0.0314	0.4864	0.3777	0.1087	-0.2888
166	44.65	-0.02	11.0597	-3.1175	0.0382	-0.1478	0.0044	0.4857	0.3784	0.0873	-0.2819
167	44.74	-0.02	11.1584	-3.3872	-0.0060	-0.3994	0.0258	0.4894	0.3851	0.1043	-0.3036
168	44.85	-0.01	11.1116	-3.2100	0.0940	-0.5604	0.0260	0.4756	0.3814	0.0962	-0.2889
169	44.93	-0.01	11.1943	-3.1197	-0.0117	-0.1381	0.0206	0.4671	0.3783	0.0888	-0.2787
170	45.02	-0.01	11.0725	-2.9258	0.1974	-0.7195	0.0474	0.4598	0.3783	0.0815	-0.2642
171	45.13	-0.01	11.2410	-3.1618	0.0079	-0.0531	0.0050	0.4779	0.3776	0.1004	-0.2813
172	45.20	-0.01	11.2772	-3.1150	-0.0302	0.0653	0.0101	0.4779	0.3827	0.0952	-0.2762
173	45.29	-0.01	11.2479	-3.1804	0.0297	-0.0654	0.0049	0.4683	0.3794	0.0889	-0.2828
174	45.38	-0.02	11.2821	-3.0290	0.0174	-0.2478	0.0159	0.4713	0.3753	0.0960	-0.2685
175	45.47	-0.01	11.2737	-3.1239	0.0914	-0.3041	0.0159	0.4762	0.3808	0.0954	-0.2771
176	45.57	-0.01	11.3451	-3.1799	0.0415	-0.2242	0.0215	0.4723	0.3807	0.0916	-0.2791
177	45.65	-0.01	11.4381	-3.1869	-0.0116	0.4157	-0.0171	0.4805	0.3811	0.0994	-0.2786
178	45.75	-0.01	11.4611	-3.2325	0.1431	-0.5601	0.0484	0.4720	0.3729	0.0992	-0.2820
179	45.84	-0.00	11.4264	-3.1384	0.1301	-0.2426	0.0165	0.4805	0.3804	0.1001	-0.2747
180	45.92	-0.01	11.4759	-3.1137	0.0872	-0.3779	0.0326	0.4752	0.3773	0.0980	-0.2713
181	46.01	-0.01	11.4154	-2.9771	0.2069	-0.6007	0.0381	0.4791	0.3739	0.1053	-0.2608
182	46.09	-0.02	11.4944	-2.9467	0.0195	-0.2310	0.0168	0.4599	0.3743	0.0856	-0.2564
183	46.18	-0.02	11.4088	-3.0555	-0.0033	-0.0714	0.0116	0.4539	0.3742	0.0797	-0.2632
184	46.27	-0.02	11.5676	-3.1113	-0.1254	0.3720	-0.0162	0.4711	0.3746	0.0966	-0.2698

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 5 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 10 MACH 1.10 RX10-6 1.7 PHI 0.0 CONF 81#0F23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CA	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
185	46.35	-0.02	11.5517	-2.9796	0.0471	-0.1558	0.0169	0.4676	0.3752	0.0924	-0.2579
186	46.44	-0.00	11.6382	-3.0736	0.1793	-0.5293	0.0282	0.4632	0.3708	0.0924	-0.2861
187	46.54	-0.02	11.7105	-2.9612	-0.0358	0.1557	0.0062	0.4574	0.3708	0.0866	-0.2529
188	46.63	-0.03	11.7146	-3.0400	-0.1501	0.3292	0.0004	0.4601	0.3721	0.0880	-0.2595
189	46.70	-0.04	11.6906	-2.9744	-0.0051	-0.0861	0.0173	0.4628	0.3690	0.0938	-0.2543
190	46.79	-0.04	11.8362	-3.0829	-0.1453	0.4003	-0.0048	0.4566	0.3595	0.0972	-0.2605
191	46.87	-0.02	11.7132	-3.0122	0.0149	0.2782	-0.0050	0.4574	0.3684	0.0890	-0.2572
192	46.97	-0.02	11.8200	-2.9104	0.0426	0.1581	-0.0041	0.4688	0.3670	0.0818	-0.2462
193	47.04	-0.04	11.8168	-2.9327	-0.0737	0.2745	-0.0044	0.4505	0.3696	0.0809	-0.2482
194	47.14	-0.03	11.7494	-2.8681	-0.0084	0.0167	0.0069	0.4378	0.3676	0.0698	-0.2426
195	47.23	-0.03	11.9559	-3.0021	-0.0361	0.3737	-0.0046	0.4665	0.3659	0.0806	-0.2678
196	47.32	-0.03	12.0248	-3.0251	0.0213	0.1778	0.0123	0.4484	0.3713	0.0771	-0.2516
197	47.40	-0.03	11.9375	-2.9171	0.0094	0.1511	0.0070	0.4620	0.3731	0.0889	-0.2444
198	47.48	-0.02	12.0034	-3.1663	-0.0062	0.2887	0.0065	0.4570	0.3721	0.0849	-0.2638
199	47.57	-0.03	12.0503	-3.1071	-0.0085	0.2537	0.0068	0.4576	0.3741	0.0835	-0.2578
200	47.67	-0.03	12.1153	-3.3242	-0.0193	0.2634	0.0121	0.4628	0.3731	0.0895	-0.2744
201	47.75	-0.04	12.1546	-3.1523	-0.0896	0.1872	0.0182	0.4663	0.3789	0.0874	-0.2592
202	47.84	-0.03	12.1576	-3.1454	0.0507	0.0937	0.0183	0.4596	0.3789	0.0807	-0.2587
203	47.94	-0.02	12.3563	-3.2885	0.0875	0.1534	0.0291	0.4368	0.3751	0.0617	-0.2661
204	48.02	-0.03	12.3222	-3.2339	0.0356	0.0130	0.0245	0.4574	0.3723	0.0851	-0.2624
205	48.10	-0.03	12.2455	-3.1260	-0.0211	0.2271	0.0234	0.4572	0.3762	0.0810	-0.2718
206	48.20	-0.02	12.4159	-3.0852	0.0954	0.3064	0.0540	0.4199	0.3494	0.0705	-0.2469
207	48.28	-0.03	12.2425	-3.1645	0.0391	0.2931	0.0337	0.4627	0.3597	0.0830	-0.2601
208	48.36	-0.03	12.2596	-2.8542	-0.0019	0.3600	0.0445	0.4032	0.3388	0.0644	-0.2166
209	48.45	-0.03	12.4412	-3.2690	0.0535	0.1277	0.0508	0.4341	0.3452	0.0889	-0.2628
210	48.53	-0.02	12.4710	-2.9970	0.0416	0.3478	0.0502	0.4050	0.3374	0.0676	-0.2483
211	48.64	-0.02	12.4943	-2.9626	0.0594	0.2553	0.0507	0.4225	0.3291	0.0934	-0.2371
212	48.71	-0.04	12.4742	-3.0615	0.0368	0.2120	0.0508	0.4213	0.3294	0.0919	-0.2454
213	48.78	-0.03	12.5548	-3.0603	-0.0152	0.3347	0.0560	0.4152	0.3288	0.0864	-0.2438
214	48.85	-0.03	12.5025	-2.9253	0.0211	0.3669	0.0556	0.3874	0.3168	0.0706	-0.2115
215	48.94	-0.02	12.5659	-2.9643	0.0608	0.4903	0.0607	0.4018	0.3188	0.0830	-0.2279
216	48.96	-0.02	12.4619	-2.9792	0.0395	0.5106	0.0606	0.3873	0.3226	0.0647	-0.2066
217	48.95	-0.03	12.4108	-2.9868	0.0220	0.3850	0.0555	0.3847	0.3199	0.0648	-0.2084
218	48.95	-0.02	12.4018	-2.9545	-0.0360	0.5722	0.0569	0.3868	0.3278	0.0590	-0.2868
219	48.96	-0.03	12.4888	-2.7835	0.0228	0.4034	0.0556	0.3955	0.3221	0.0734	-0.2229
220	48.95	-0.02	12.5004	-2.8282	0.0080	0.5095	0.0551	0.3877	0.3232	0.0645	-0.2101
221	48.95	-0.03	12.4994	-2.8500	-0.0265	0.5545	0.0553	0.3972	0.3232	0.0740	-0.2120
222	48.95	-0.03	12.5174	-2.8690	-0.0543	0.4476	0.0556	0.3970	0.3163	0.0807	-0.2293
223	44.79	-0.02	12.4400	-3.0297	0.0443	0.4024	0.0499	0.4121	0.3335	0.0786	-0.2435
224	47.94	-0.03	12.0597	-2.9673	-0.0280	0.3007	0.0120	0.4474	0.3778	0.0696	-0.2461
225	47.21	-0.03	11.9742	-2.9092	-0.0569	0.3947	-0.0049	0.4395	0.3822	0.0573	-0.2449
226	46.35	-0.03	11.4556	-3.0421	-0.0533	0.2488	-0.0112	0.4779	0.3925	0.0854	-0.2653
227	45.51	-0.03	11.2913	-3.1467	0.1445	-0.5451	0.0267	0.4829	0.4063	0.0765	-0.2787
228	44.64	-0.04	10.9905	-3.1049	-0.1366	0.3475	-0.0134	0.4892	0.4028	0.0863	-0.2828
229	43.74	-0.02	10.5974	-3.1707	0.0722	0.0914	0.0228	0.4963	0.4015	0.0947	-0.2992
230	42.83	-0.02	10.3432	-3.0166	0.0496	-0.1041	0.0225	0.4889	0.3977	0.0911	-0.2916

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 6 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIU-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 10 1.10 1.7 0.0 Alb0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
231	41.96	-0.03	10.0446	-3.1900	-0.1274	0.6017	-0.0023	0.5084	0.4038	0.1046	-0.3176
232	40.93	-0.03	9.7117	-2.9991	-0.1070	0.3357	0.0026	0.5128	0.3977	0.1151	-0.3088
233	39.95	-0.03	9.3099	-2.9274	-0.0910	0.4147	0.0064	0.5167	0.4058	0.1109	-0.3037
234	38.95	-0.04	8.9789	-2.6816	-0.1151	0.3993	0.0053	0.5296	0.4067	0.1229	-0.2987
235	37.92	-0.04	8.4709	-2.5027	-0.1769	0.4775	-0.0026	0.5397	0.4106	0.1291	-0.2952
236	36.88	-0.04	7.9581	-2.2638	-0.2070	0.5438	-0.0204	0.5412	0.4096	0.1316	-0.2829

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 10 1.16 1.7 0.0 61.6F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-2.42	0.00	-0.0459	0.0	0.0738	0.0	-1.6071	-0.0801	-0.0097	-0.0778	0.1217	0.9711
2	-2.41	0.00	-0.0459	0.0003	0.0736	-0.0063	-1.6071	-0.0732	-0.0083	-0.0725	0.1133	0.9895
3	-2.41	0.02	-0.0542	-0.0007	0.0710	0.0125	-1.3096	-0.0778	-0.0093	-0.0766	0.1191	0.9851
4	-2.41	0.02	-0.0356	0.0003	0.0768	-0.0062	-2.1689	-0.0824	-0.0098	-0.0799	0.1206	0.9696
5	-2.41	0.02	-0.0347	0.0007	0.0755	-0.0170	-1.9051	-0.0707	-0.0090	-0.0752	0.1269	1.0028
6	-2.42	0.01	-0.0337	0.0016	0.0739	-0.0487	-2.3725	-0.0780	-0.0098	-0.0729	0.1151	0.9356
7	-2.41	0.01	-0.0500	-0.0003	0.0715	0.0058	-1.4324	-0.0801	-0.0099	-0.0797	0.1241	0.9952
8	-2.42	0.02	-0.0440	0.0007	0.0751	-0.0154	-1.7061	-0.0780	-0.0098	-0.0778	0.1151	0.9592
9	-2.41	0.02	-0.0421	0.0007	0.0771	-0.0161	-1.8324	-0.0801	-0.0099	-0.0797	0.1241	0.9952
10	-2.41	0.01	-0.0481	0.0003	0.0728	-0.0060	-1.5141	-0.0708	-0.0093	-0.0726	0.1308	1.0218
11	-2.41	0.01	-0.0400	0.0010	0.0783	-0.0241	-1.9542	-0.0895	-0.0104	-0.0824	0.1164	0.9283
12	-2.41	0.01	-0.0542	-0.0007	0.0710	0.0125	-1.3096	-0.0871	-0.0102	-0.0803	0.1174	0.9214
13	-2.41	0.01	-0.0356	0.0010	0.0778	-0.0271	-2.1843	-0.0779	-0.0095	-0.0738	0.1214	0.9488
14	-2.22	0.01	-0.0439	0.0010	0.0751	-0.0220	-1.7039	-0.0075	-0.0038	-0.0423	0.5000	5.6154
15	-1.19	0.00	-0.0440	0.0010	0.0751	-0.0373	-1.7061	0.0484	0.0031	-0.0148	0.0637	-0.3048
16	-0.19	0.00	-0.0436	0.0023	0.0732	-0.0529	-1.6718	0.1282	0.0116	0.0158	0.0903	0.1234
17	0.75	0.01	-0.0351	0.0029	0.0733	-0.0824	-2.0879	0.2156	0.0173	0.0422	0.0801	0.1956
18	1.73	0.02	-0.0352	0.0029	0.0742	-0.0822	-2.1068	0.3029	0.0237	0.0695	0.0784	0.2298
19	2.70	0.01	-0.0355	0.0033	0.0760	-0.0924	-2.1413	0.3758	0.0291	0.0956	0.0775	0.2544
20	3.72	0.01	-0.0500	0.0003	0.0716	-0.0058	-1.4324	0.4551	0.0358	0.1212	0.0787	0.3102
21	4.64	0.01	-0.0490	0.0023	0.0682	-0.0472	-1.6358	0.5300	0.0397	0.1406	0.0748	0.3408
22	5.67	0.01	-0.0469	-0.0010	0.0678	0.0202	-1.0144	0.6197	0.0413	0.2156	0.0666	0.3678
23	6.76	0.01	-0.0473	0.0010	0.0741	-0.0110	-0.8486	0.6998	0.0425	0.2506	0.0607	0.3581
24	7.61	0.02	-0.0827	-0.0033	0.0736	0.0397	-0.8880	0.7826	0.0429	0.2659	0.0569	0.3656
25	8.59	0.02	-0.1204	-0.0059	0.0627	0.0489	-0.5208	0.8697	0.0434	0.3215	0.0499	0.3696
26	9.60	0.02	-0.1346	-0.0078	0.0584	0.0580	-0.4188	0.9358	0.0434	0.3678	0.0464	0.3717
27	10.62	0.01	-0.1326	-0.0097	0.0565	0.0735	-0.4265	1.0160	0.0425	0.3848	0.0416	0.3787
28	11.60	0.01	-0.1323	-0.0082	0.0539	0.0820	-0.4077	1.0776	0.0413	0.4087	0.0383	0.3793
29	12.59	0.01	-0.0997	-0.0015	0.0669	0.0145	-0.6912	1.1390	0.0397	0.4347	0.0348	0.3816
30	13.57	0.01	-0.1258	-0.0121	0.0553	0.0959	-0.4394	1.2126	0.0379	0.4606	0.0313	0.3798
31	14.62	0.01	-0.1320	-0.0124	0.0527	0.0936	-0.3991	1.2576	0.0358	0.4775	0.0285	0.3797
32	15.62	0.01	-0.1256	-0.0127	0.0552	0.1014	-0.4393	1.3017	0.0348	0.4903	0.0268	0.3767
33	14.61	0.02	-0.1442	-0.0124	0.0466	0.0857	-0.3246	1.3517	0.0348	0.5021	0.0258	0.3715
34	17.60	0.02	-0.1524	-0.0104	0.0424	0.0684	-0.2778	1.4182	0.0306	0.5245	0.0216	0.3698
35	18.62	0.01	-0.1401	-0.0059	0.0467	0.0420	-0.3333	1.4516	0.0287	0.5320	0.0197	0.3665
36	19.67	0.01	-0.1325	-0.0044	0.0541	0.0249	-0.4066	1.4430	0.0273	0.5123	0.0189	0.3551
37	20.73	0.01	-0.1911	-0.0071	0.0375	0.0376	-0.1964	1.4869	0.0230	0.5208	0.0157	0.3551
38	21.76	0.02	-0.1535	0.0003	0.0487	-0.0019	-0.3042	1.4887	0.0176	0.5263	0.0118	0.3536
39	22.80	0.01	-0.1036	0.0042	0.0643	-0.0410	-0.6201	1.5054	0.0154	0.5323	0.0103	0.3536
40	23.85	0.00	-0.3252	-0.0078	-0.0390	0.0240	0.1217	1.5291	0.0142	0.5399	0.0093	0.3531
41	24.88	0.00	-0.2478	-0.0045	-0.0129	0.0149	0.0483	1.5531	0.0102	0.5494	0.0066	0.3538
42	25.90	-0.01	-0.3779	-0.0071	-0.0710	0.0189	0.1879	1.5718	0.0107	0.5586	0.0068	0.3554
43	27.01	-0.01	-0.3339	-0.0040	-0.0560	0.0118	0.1676	1.5943	0.0104	0.5657	0.0065	0.3548
44	28.07	0.00	-0.2209	0.0007	0.0081	-0.0031	-0.0368	1.6083	0.0090	0.5744	0.0056	0.3571
45	29.17	-0.01	-0.2348	-0.0003	0.0028	0.0012	-0.0119	1.6203	0.0062	0.5801	0.0038	0.3580
46	30.35	-0.00	-0.0867	0.0005	0.0098	-0.0745	-0.7931	1.6354	0.0047	0.5780	0.0029	0.3534

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 10 1.61 1.7 0.0 31.0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	31.63	-0.01	-0.2578	0.0010	-0.0207	-0.0037	0.0805	1.6495	0.0016	0.5885	0.0010	0.3568
48	31.84	-0.00	-0.2804	0.0019	0.0162	-0.0096	-0.0787	1.6590	0.0016	0.5912	0.0018	0.3563
49	31.85	-0.00	-0.3196	-0.0003	-0.0458	0.0009	0.1434	1.6626	0.0002	0.5911	0.0001	0.3555
50	31.84	-0.01	-0.2502	0.0010	-0.0089	-0.0039	0.0355	1.6591	0.0016	0.5858	0.0009	0.3531
51	31.85	-0.01	-0.2053	0.0026	0.0135	-0.0127	-0.0658	1.6613	0.0005	0.5906	0.0003	0.3555
52	31.96	-0.01	-0.3275	0.0	-0.0476	0.0	0.1453	1.6651	-0.0005	0.5849	-0.0003	0.3513
53	32.18	-0.01	-0.2381	0.0023	-0.0002	-0.0097	0.0008	1.6672	0.0	0.5898	0.0	0.3538
54	32.27	-0.01	-0.2620	0.0013	-0.0175	-0.0048	0.0667	1.6746	-0.0026	0.5894	-0.0018	0.3528
55	32.39	-0.01	-0.1522	0.0042	0.0395	-0.0279	-0.2594	1.6816	-0.0021	0.5928	-0.0013	0.3525
56	32.58	-0.02	-0.2696	0.0013	-0.0220	-0.0046	0.0815	1.6822	-0.0038	0.5932	-0.0022	0.3526
57	32.67	0.00	-0.2405	0.0013	0.0459	-0.0052	-0.0265	1.6713	-0.0007	0.5883	-0.0004	0.3520
58	32.79	-0.01	-0.2343	-0.0003	0.0001	0.0012	-0.0004	1.6879	-0.0028	0.5934	-0.0017	0.3515
59	32.95	-0.02	-0.2211	-0.0003	0.0069	0.0013	-0.0314	1.6878	-0.0023	0.5944	-0.0014	0.3521
60	33.07	-0.02	-0.2600	-0.0010	-0.0145	0.0038	0.0544	1.6902	-0.0026	0.5955	-0.0015	0.3523
61	33.19	-0.01	-0.3022	-0.0010	-0.0367	0.0032	0.1213	1.6879	-0.0033	0.5924	-0.0019	0.3510
62	33.30	-0.01	-0.2612	-0.0013	-0.0056	0.0052	0.0224	1.6901	-0.0019	0.5976	-0.0011	0.3536
63	33.45	-0.02	-0.2301	-0.0007	0.0096	0.0029	-0.0419	1.7043	-0.0038	0.6004	-0.0022	0.3523
64	33.58	-0.02	-0.2576	-0.0003	-0.0117	0.0011	0.0453	1.7030	-0.0036	0.6018	-0.0022	0.3534
65	33.71	-0.01	-0.3612	-0.0022	-0.0642	0.0061	0.1776	1.6939	-0.0052	0.5965	-0.0031	0.3509
66	33.83	-0.01	-0.2662	-0.0016	-0.0108	0.0062	0.0406	1.7030	-0.0046	0.6046	-0.0026	0.3550
67	33.96	-0.00	-0.2076	-0.0026	0.0237	0.0125	-0.1142	1.6982	-0.0023	0.6024	-0.0014	0.3547
68	34.08	-0.01	-0.2989	-0.0026	-0.0356	0.0087	0.1187	1.7031	-0.0042	0.6018	-0.0025	0.3534
69	34.21	-0.01	-0.2936	-0.0022	-0.0358	0.0076	0.1220	1.7030	-0.0047	0.6046	-0.0028	0.3550
70	34.34	-0.02	-0.2808	-0.0039	-0.0218	0.0134	0.0749	1.7076	-0.0028	0.6061	-0.0016	0.3538
71	34.46	-0.02	-0.3256	-0.0016	-0.0575	0.0050	0.1767	1.7126	-0.0066	0.6044	-0.0038	0.3529
72	34.60	-0.01	-0.2547	-0.0026	-0.0077	0.0103	0.0304	1.7149	-0.0049	0.6056	-0.0029	0.3531
73	34.72	-0.02	-0.2750	-0.0022	-0.0274	0.0081	0.0996	1.7173	-0.0064	0.6067	-0.0037	0.3533
74	34.82	-0.01	-0.1320	0.0010	0.0559	-0.0073	-0.4232	1.7219	-0.0057	0.6089	-0.0033	0.3538
75	34.97	-0.03	-0.3065	-0.0010	-0.0527	0.0031	0.1719	1.7177	-0.0040	0.6020	-0.0052	0.3505
76	35.08	-0.01	-0.1462	-0.0010	0.0508	0.0067	-0.3518	1.7219	-0.0057	0.6089	-0.0033	0.3538
77	35.20	-0.01	-0.2244	-0.0010	0.0001	0.0043	-0.0004	1.7174	-0.0062	0.6076	-0.0048	0.3538
78	35.34	-0.01	-0.2804	-0.0016	-0.0376	0.0058	0.1322	1.7176	-0.0038	0.6066	-0.0057	0.3532
79	35.46	0.00	-0.2208	-0.0010	0.0050	0.0044	-0.0227	1.7268	-0.0085	0.6111	-0.0049	0.3539
80	35.57	-0.02	-0.1457	0.0003	0.0443	-0.0020	-0.3040	1.7317	-0.0095	0.6115	-0.0055	0.3532
81	35.70	-0.01	-0.2716	-0.0019	-0.0335	0.0071	0.1233	1.7239	-0.0113	0.6081	-0.0065	0.3527
82	35.80	-0.02	-0.2371	0.0003	-0.0168	-0.0012	0.0708	1.7192	-0.0120	0.6069	-0.0070	0.3518
83	35.94	-0.00	-0.1960	-0.0013	0.0177	0.0064	-0.0901	1.7331	-0.0096	0.6108	-0.0056	0.3524
84	36.07	-0.00	-0.1961	-0.0010	0.0185	0.0049	-0.0950	1.7189	-0.0090	0.6078	-0.0052	0.3536
85	36.18	-0.01	-0.2038	-0.0013	0.0113	0.0042	-0.0554	1.7237	-0.0098	0.6062	-0.0057	0.3517
86	36.30	-0.01	-0.1713	-0.0003	0.0267	0.0017	-0.1561	1.7284	-0.0098	0.6104	-0.0057	0.3532
87	36.40	-0.00	-0.2034	-0.0013	0.0077	0.0062	-0.0380	1.7215	-0.0106	0.6051	-0.0062	0.3515
88	36.51	-0.01	-0.1620	0.0003	0.0216	-0.0018	-0.1322	1.7215	-0.0118	0.6069	-0.0068	0.3525
89	36.65	-0.01	-0.1603	-0.0010	0.0252	0.0060	-0.1571	1.7142	-0.0098	0.6073	-0.0057	0.3543
90	36.76	-0.00	-0.1145	-0.0010	0.0557	0.0026	-0.4861	1.7202	-0.0092	0.6082	-0.0053	0.3535
91	36.88	-0.01	-0.2452	-0.0016	-0.0308	0.0067	0.1250	1.7139	-0.0146	0.5991	-0.0085	0.3496
92	37.02	-0.00	-0.1425	-0.0010	0.0360	0.0068	-0.2668	1.7203	-0.0108	0.6091	-0.0063	0.3541

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	10	1.10	1.7	0.0	B1=0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
93	37.13	0.01	-0.1450	-0.0019	0.0097	0.0100	-0.0505	1.7249	-0.0108	0.6123	-0.0063	0.3550
94	37.23	-0.00	-0.1598	-0.0019	0.0281	0.0061	-0.1770	1.7207	-0.0134	0.6053	-0.0078	0.3518
95	37.38	-0.00	-0.1910	-0.0019	0.0118	0.0101	-0.0616	1.7299	-0.0134	0.6108	-0.0078	0.3531
96	37.48	-0.01	-0.2526	-0.0030	-0.0323	0.0038	0.1280	1.7022	-0.0174	0.5971	-0.0102	0.3508
97	37.60	-0.00	-0.1659	-0.0013	0.0181	0.0076	-0.1094	1.7148	-0.0146	0.6016	-0.0085	0.3508
98	37.73	-0.01	-0.1530	0.0	0.0186	0.0	-0.1217	1.6986	-0.0160	0.5946	-0.0094	0.3501
99	37.83	0.01	-0.1416	-0.0010	0.0316	0.0068	-0.2234	1.7193	-0.0136	0.6057	-0.0079	0.3523
100	37.92	-0.00	-0.1616	-0.0013	0.0185	0.0078	-0.1146	1.7100	-0.0148	0.6012	-0.0086	0.3516
101	38.08	-0.01	-0.1863	-0.0016	0.0095	0.0088	-0.0508	1.7006	-0.0141	0.5986	-0.0083	0.3520
102	38.20	-0.01	-0.1530	-0.0010	0.0185	0.0063	-0.1211	1.7055	-0.0162	0.5989	-0.0095	0.3512
103	38.30	-0.02	-0.1252	-0.0010	0.0360	0.0077	-0.3035	1.7009	-0.0148	0.5948	-0.0087	0.3497
104	38.43	0.01	-0.1607	-0.0022	0.0122	0.0138	-0.0756	1.6914	-0.0160	0.5940	-0.0095	0.3512
105	38.54	-0.01	-0.2071	-0.0010	-0.0165	0.0047	0.0797	1.6603	-0.0190	0.5767	-0.0114	0.3473
106	38.64	-0.01	-0.0747	-0.0003	0.0645	0.0039	-0.8643	1.7136	-0.0136	0.6029	-0.0079	0.3518
107	38.90	-0.02	-0.1771	-0.0007	0.0023	0.0038	-0.0131	1.6839	-0.0196	0.5842	-0.0117	0.3470
108	38.90	-0.00	-0.2014	-0.0026	-0.0096	0.0129	0.0474	1.6743	-0.0183	0.5826	-0.0109	0.3480
109	39.00	0.00	-0.1224	-0.0010	0.0319	0.0079	-0.2608	1.6788	-0.0174	0.5876	-0.0103	0.3500
110	39.12	-0.00	-0.1595	-0.0014	0.0097	0.0061	-0.0615	1.6697	-0.0174	0.5775	-0.0104	0.3459
111	39.22	-0.02	-0.1413	-0.0010	0.0263	0.0058	-0.1865	1.6568	-0.0174	0.5749	-0.0105	0.3470
112	39.33	-0.00	-0.1758	-0.0023	-0.0023	0.0131	-0.0131	1.6681	-0.0177	0.5801	-0.0106	0.3478
113	39.46	-0.03	-0.1347	-0.0003	0.0234	0.0021	-0.1761	1.6600	-0.0184	0.5779	-0.0111	0.3481
114	39.57	-0.01	-0.1387	-0.0013	0.0211	0.0090	-0.1524	1.6740	-0.0184	0.5837	-0.0110	0.3487
115	39.67	-0.05	-0.1039	-0.0003	0.0369	0.0028	-0.3547	1.6740	-0.0184	0.5846	-0.0110	0.3492
116	39.79	0.01	-0.1326	-0.0019	0.0245	0.0146	-0.1849	1.6834	-0.0186	0.5891	-0.0111	0.3500
117	39.90	-0.01	-0.0915	0.0016	0.0410	-0.0179	-0.4483	1.6813	-0.0193	0.5824	-0.0115	0.3464
118	39.99	-0.01	-0.1154	0.0016	0.0237	-0.0142	-0.2057	1.6649	-0.0203	0.5763	-0.0122	0.3462
119	40.11	0.00	-0.0955	-0.0013	0.0477	0.0130	-0.4940	1.6647	-0.0175	0.5782	-0.0105	0.3474
120	40.23	0.01	-0.1058	-0.0010	0.0356	0.0091	-0.3364	1.6740	-0.0184	0.5846	-0.0110	0.3492
121	40.32	-0.01	-0.0965	-0.0019	0.0476	0.0208	-0.4930	1.6505	-0.0170	0.5724	-0.0103	0.3468
122	40.45	-0.02	-0.1156	0.0	0.0219	0.0	-0.1906	1.6509	-0.0203	0.5696	-0.0123	0.3450
123	40.54	-0.02	-0.0890	0.0023	0.0376	-0.0260	-0.4230	1.6412	-0.0198	0.5706	-0.0121	0.3477
124	40.62	-0.02	-0.0755	0.0048	0.0326	-0.0639	-0.4342	1.6273	-0.0207	0.5638	-0.0127	0.3465
125	40.74	-0.03	-0.1119	-0.0033	0.0330	0.0293	-0.2948	1.6506	-0.0186	0.5742	-0.0113	0.3479
126	40.85	-0.01	-0.0715	0.0023	0.0358	-0.0324	-0.5007	1.6414	-0.0217	0.5705	-0.0132	0.3476
127	40.94	-0.01	-0.1114	-0.0029	0.0285	0.0260	-0.2554	1.6506	-0.0193	0.5752	-0.0117	0.3485
128	41.05	-0.02	-0.0386	0.0062	0.0470	-0.1608	-1.2236	1.6275	-0.0231	0.5628	-0.0142	0.3458
129	41.16	-0.01	-0.0657	0.0013	0.0284	-0.0146	-0.3356	1.6461	-0.0217	0.5738	-0.0132	0.3486
130	41.25	-0.00	-0.1014	-0.0048	0.0358	0.0476	-0.3530	1.6270	-0.0188	0.5675	-0.0116	0.3488
131	41.36	-0.02	-0.0609	0.0029	0.0379	-0.0475	-0.6228	1.6496	-0.0240	0.5755	-0.0146	0.3489
132	41.48	-0.02	-0.0695	0.0023	0.0378	-0.0333	-0.5444	1.6402	-0.0231	0.5710	-0.0141	0.3481
133	41.58	-0.04	-0.1164	-0.0036	0.0189	0.0712	-0.1653	1.6260	-0.0209	0.5652	-0.0129	0.3476
134	41.67	-0.01	-0.0630	0.0010	0.0384	-0.0153	-0.6095	1.6119	-0.0207	0.5603	-0.0129	0.3476
135	41.76	-0.02	-0.0565	0.0029	0.0374	-0.0512	-0.6621	1.6191	-0.0231	0.5608	-0.0142	0.3463
136	41.87	-0.02	-0.0528	0.0029	0.0406	-0.0550	-0.7725	1.6285	-0.0235	0.5663	-0.0145	0.3477
137	41.97	-0.01	-0.0432	-0.0042	0.0720	0.0455	-0.2360	1.6167	-0.0221	0.5607	-0.0137	0.3468
138	42.07	-0.02	-0.0765	-0.0010	0.0259	0.0126	-0.3380	1.6191	-0.0226	0.5637	-0.0139	0.3482

MARTIA MISSILE TAILS EFFECTS DATA

TEST 7 PART 10 MACH 1.10 RE10-6 1.07 PHI 0.0 CONF 81 OF 23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	42.17	-0.01	-0.0702	-0.0010	0.0274	0.0137	-0.3901	1.6050	-0.0226	0.5588	-0.0141	0.3481
140	42.26	-0.02	-0.0369	-0.0036	0.0371	-0.1022	-1.0608	1.5934	-0.0224	0.5493	-0.0140	0.3442
141	42.37	-0.02	-0.0746	-0.0023	0.0296	0.0310	-0.3961	1.5884	-0.0207	0.5527	-0.0131	0.3480
142	42.46	-0.01	-0.0963	-0.0052	0.0326	0.0553	-0.1361	1.5850	-0.0207	0.5490	-0.0131	0.3464
143	42.56	-0.02	0.0124	0.0104	0.0536	0.8372	4.3023	1.5499	-0.0214	0.5319	-0.0138	0.3432
144	42.65	-0.02	-0.1010	-0.0042	0.0148	0.0420	-0.1461	1.5895	-0.0209	0.5540	-0.0132	0.3485
145	42.75	-0.02	-0.0601	-0.0007	0.0327	0.0112	-0.5361	1.5802	-0.0201	0.5486	-0.0127	0.3472
146	42.84	-0.02	0.0243	0.0107	0.0609	0.5286	3.0048	1.5520	-0.0207	0.5387	-0.0134	0.3471
147	42.94	-0.01	0.0045	0.0071	0.0511	0.8315	5.9551	1.5730	-0.0214	0.5507	-0.0136	0.3501
148	43.02	-0.02	-0.0376	0.0007	0.0429	-0.0179	-1.1410	1.5518	-0.0207	0.5424	-0.0134	0.3496
149	43.12	-0.01	0.0	0.0064	0.0510	0.0069	0.0510	1.5598	-0.0212	0.5458	-0.0136	0.3501
150	43.21	-0.02	-0.0038	0.0036	0.0410	-0.3737	-4.3535	1.5561	-0.0207	0.5436	-0.0133	0.3498
151	43.29	-0.02	-0.0664	-0.0042	0.0314	0.0640	-0.4724	1.5423	-0.0212	0.5492	-0.0136	0.3515
152	43.38	-0.01	-0.0504	-0.0014	0.0240	0.0383	-0.4770	1.5434	-0.0198	0.5421	-0.0128	0.3512
153	43.45	-0.02	-0.1001	-0.0091	0.0081	0.0906	-0.0810	1.5575	-0.0194	0.5479	-0.0125	0.3518
154	43.57	-0.01	0.0097	0.0054	0.0604	0.6040	6.1980	1.5316	-0.0215	0.5401	-0.0140	0.3527
155	43.66	-0.01	0.0099	0.0062	0.0586	0.6214	6.8932	1.5389	-0.0207	0.5397	-0.0135	0.3508
156	43.75	-0.02	-0.0231	-0.0257	-0.0279	0.1264	0.1373	1.5432	-0.0194	0.5449	-0.0126	0.3531
157	43.84	-0.02	0.0044	0.0036	0.0478	0.7400	9.9000	1.5245	-0.0207	0.5386	-0.0136	0.3533
158	43.94	-0.02	0.0659	0.0186	0.0908	0.1845	1.0097	1.5152	-0.0232	0.5359	-0.0153	0.3537
159	44.03	-0.01	0.0602	0.0120	0.0699	0.1987	1.1603	1.5103	-0.0207	0.5355	-0.0137	0.3546
160	44.10	-0.01	-0.0243	-0.0028	0.0466	0.0888	-1.5822	1.5291	-0.0206	0.5408	-0.0136	0.3537
161	44.20	-0.01	0.1206	0.0195	0.1056	0.1616	0.8736	1.4885	-0.0207	0.5266	-0.0139	0.3538
162	44.30	-0.02	-0.0389	-0.0045	0.0372	0.1230	-1.0105	1.5345	-0.0194	0.5402	-0.0126	0.3520
163	44.36	-0.02	-0.0591	-0.0078	0.0255	0.1324	-0.4314	1.5320	-0.0194	0.5420	-0.0127	0.3539
164	44.48	-0.01	-0.0915	-0.0124	0.0079	0.1350	-0.0865	1.5226	-0.0194	0.5393	-0.0127	0.3542
165	44.56	-0.01	0.0690	0.0111	0.0884	0.1608	1.2811	1.5050	-0.0210	0.5334	-0.0140	0.3544
166	44.65	-0.02	-0.0016	-0.0016	0.0478	0.6657	-33.0000	1.5120	-0.0192	0.5349	-0.0127	0.3538
167	44.74	-0.02	0.0184	0.0049	0.0605	0.2670	3.2827	1.5143	-0.0201	0.5389	-0.0133	0.3559
168	44.85	-0.01	0.0281	0.0062	0.0706	0.1512	2.5155	1.5080	-0.0194	0.5358	-0.0129	0.3572
169	44.93	-0.01	0.0550	0.0097	0.0794	0.1772	1.4439	1.4812	-0.0184	0.5258	-0.0124	0.3550
170	45.02	-0.01	0.0492	0.0101	0.0733	0.2059	1.4902	1.4869	-0.0175	0.5208	-0.0119	0.3551
171	45.13	-0.01	-0.1070	-0.0130	0.0099	0.1217	-0.0929	1.5010	-0.0178	0.5343	-0.0118	0.3560
172	45.24	-0.01	-0.0436	-0.0059	0.0394	0.1350	-0.9027	1.5039	-0.0180	0.5372	-0.0120	0.3572
173	45.29	-0.01	-0.0158	-0.0010	0.0408	0.0610	-2.5793	1.4921	-0.0171	0.5315	-0.0114	0.3562
174	45.38	-0.02	-0.0003	0.0003	0.0566	-1.0000	195.2001	1.5087	-0.0180	0.5396	-0.0120	0.3576
175	45.47	-0.01	0.0060	0.0018	0.0592	0.2048	7.3976	1.4708	-0.0166	0.5251	-0.0113	0.3570
176	45.57	-0.01	0.0167	0.0029	0.0566	0.1716	3.3543	1.4779	-0.0176	0.5285	-0.0119	0.3576
177	45.65	-0.01	-0.1783	-0.0241	-0.0271	0.1353	0.1521	1.4754	-0.0176	0.5312	-0.0119	0.3600
178	45.75	-0.01	0.0953	0.0173	0.1039	0.1812	1.0961	1.4707	-0.0173	0.5288	-0.0117	0.3596
179	45.84	-0.00	-0.0051	-0.0095	0.0207	0.1452	-0.3096	1.4706	-0.0166	0.5279	-0.0113	0.3590
180	45.92	-0.01	0.0159	0.0016	0.0657	0.1030	0.1273	1.4657	-0.0166	0.5285	-0.0113	0.3605
181	46.01	-0.01	0.0705	0.0127	0.0953	0.1806	1.3516	1.4619	-0.0166	0.5271	-0.0114	0.3608
182	46.09	-0.02	0.0079	0.0023	0.0593	0.2927	7.5000	1.4516	-0.0154	0.5198	-0.0106	0.3581
183	44.18	-0.02	-0.0283	-0.0045	0.0376	0.1606	-1.3262	1.4621	-0.0161	0.5285	-0.0110	0.3614
184	44.27	-0.02	-0.1181	-0.0172	-0.0052	0.1596	0.0449	1.4693	-0.0164	0.5290	-0.0112	0.3681

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 10 MACH 1.7 RX10-6 0.0 PHI 0.0 CONF HIMDF23 L 0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
185	46.35	-0.02	-0.0475	-0.0078	0.0352	0.1646	-0.7419	1.4727	-0.0152	0.5316	-0.0104	0.3610
186	46.44	-0.00	0.0060	0.0010	0.0582	0.1813	0.7258	1.4657	-0.0154	0.5263	-0.0105	0.3591
187	46.54	-0.02	-0.0479	-0.0163	0.0052	0.1665	-0.0532	1.4204	-0.0130	0.5141	-0.0092	0.3619
188	46.63	-0.03	-0.0634	-0.0098	0.0232	0.1553	-0.3653	1.4298	-0.0133	0.5186	-0.0093	0.3627
189	46.70	-0.04	-0.0284	-0.0059	0.0363	0.2075	-1.3503	1.4442	-0.0157	0.5235	-0.0109	0.3625
190	46.74	-0.04	-0.1222	-0.0204	-0.0009	0.1714	0.0727	1.4180	-0.0122	0.5120	-0.0086	0.3611
191	46.67	-0.02	-0.1359	-0.0229	-0.0205	0.1663	0.1520	1.4108	-0.0124	0.5104	-0.0088	0.3610
192	46.97	-0.02	-0.0822	-0.0151	0.0068	0.1816	-0.0722	1.4262	-0.0131	0.5168	-0.0092	0.3624
193	47.04	-0.04	-0.1032	-0.0196	-0.0040	0.1897	0.0383	1.4166	-0.0133	0.5159	-0.0094	0.3642
194	47.14	-0.03	-0.0814	-0.0141	0.0108	0.1740	-0.1327	1.4202	-0.0133	0.5156	-0.0096	0.3631
195	47.23	-0.03	-0.1293	-0.0246	-0.0219	0.1873	0.1696	1.4130	-0.0119	0.5131	-0.0084	0.3632
196	47.32	-0.03	-0.0754	-0.0147	0.0036	0.2592	-0.0470	1.4107	-0.0143	0.5129	-0.0101	0.3636
197	47.40	-0.03	-0.0750	-0.0150	0.0045	0.2500	-0.0596	1.4057	-0.0124	0.5144	-0.0088	0.3659
198	47.48	-0.02	-0.0980	-0.0223	-0.0120	0.2274	0.1220	1.4147	-0.0126	0.5147	-0.0089	0.3638
199	47.57	-0.03	-0.0793	-0.0190	-0.0060	0.2397	0.0754	1.3800	-0.0117	0.5055	-0.0085	0.3663
200	47.67	-0.03	-0.0716	-0.0183	0.0041	0.2556	-0.0578	1.4133	-0.0120	0.5168	-0.0091	0.3656
201	47.75	-0.04	-0.0464	-0.0164	0.0107	0.3534	-0.2308	1.4276	-0.0126	0.5208	-0.0089	0.3648
202	47.89	-0.03	-0.0273	-0.0139	0.0139	0.4912	-0.5088	1.4049	-0.0141	0.5154	-0.0100	0.3669
203	47.98	-0.02	-0.0466	-0.0079	0.0085	0.1698	-0.1822	1.3656	-0.0129	0.4933	-0.0096	0.3667
204	48.02	-0.03	-0.0214	-0.0096	0.0176	0.4459	-0.8198	1.3835	-0.0122	0.5051	-0.0088	0.3651
205	48.16	-0.03	-0.0210	-0.0134	0.0164	0.6376	-0.7798	1.4122	-0.0107	0.5114	-0.0076	0.3621
206	48.20	-0.02	-0.0100	-0.0019	0.0295	0.1923	-2.9423	1.3362	-0.0143	0.4840	-0.0107	0.3622
207	48.26	-0.03	-0.0466	-0.0094	0.0091	0.2016	-0.1858	1.3670	-0.0097	0.4905	-0.0071	0.3589
208	48.36	-0.03	-0.0372	-0.0062	0.0200	0.1160	-0.5363	1.3171	-0.0067	0.4655	-0.0051	0.3535
209	48.45	-0.03	0.0057	-0.0019	0.0371	-0.2227	4.2778	1.3753	-0.0131	0.4990	-0.0095	0.3628
210	48.53	-0.02	-0.0084	-0.0010	0.0326	0.1163	-3.9302	1.3087	-0.0091	0.4659	-0.0069	0.3560
211	48.64	-0.02	0.0095	0.0033	0.0469	0.3469	4.9592	1.3088	-0.0091	0.4631	-0.0069	0.3539
212	48.71	-0.03	0.0038	0.0016	0.0406	0.4359	10.7969	1.3084	-0.0105	0.4650	-0.0080	0.3553
213	48.78	-0.03	-0.0005	0.0023	0.0393	-4.0000	-81.4000	1.3065	-0.0091	0.4610	-0.0069	0.3529
214	48.85	-0.04	0.0045	0.0002	0.0470	0.4490	4.9694	1.2662	-0.0100	0.4463	-0.0079	0.3589
215	48.90	-0.02	0.0050	0.0042	0.0475	0.4462	9.4615	1.2948	-0.0062	0.4448	-0.0048	0.3466
216	48.96	-0.02	0.0032	0.0033	0.0444	1.0303	13.9394	1.2662	-0.0071	0.4397	-0.0056	0.3473
217	48.99	-0.03	0.0074	0.0042	0.0456	0.5714	6.1688	1.2517	-0.0076	0.4375	-0.0061	0.3495
218	48.92	-0.02	0.0035	0.0026	0.0425	0.7500	12.2222	1.2757	-0.0060	0.4414	-0.0047	0.3468
219	48.99	-0.03	0.0020	0.0014	0.0368	0.9524	18.1429	1.3029	-0.0098	0.4581	-0.0076	0.3516
220	48.65	-0.02	0.0179	0.0036	0.0497	0.1489	2.7688	1.2863	-0.0069	0.4463	-0.0054	0.3478
221	48.95	-0.03	0.0094	0.0033	0.0479	0.3505	5.1134	1.2863	-0.0067	0.4463	-0.0052	0.3478
222	48.95	-0.03	0.0099	0.0030	0.0432	0.3010	4.3495	1.3053	-0.0096	0.4593	-0.0073	0.3519
223	48.79	-0.02	-0.0044	-0.0042	0.0248	0.4536	-2.6445	1.3766	-0.0067	0.4844	-0.0048	0.3519
224	47.99	-0.03	-0.0628	-0.0197	0.0013	0.3134	-0.0200	1.4147	-0.0110	0.5074	-0.0078	0.3587
225	47.21	-0.03	-0.0950	-0.0191	-0.0040	0.2010	0.0416	1.4337	-0.0129	0.5176	-0.0090	0.3610
226	46.35	-0.04	-0.0669	-0.0195	0.0143	0.2165	-0.2136	1.4912	-0.0172	0.5394	-0.0115	0.3617
227	45.51	-0.03	0.0540	0.0072	0.0711	0.1227	1.2062	1.5199	-0.0191	0.5512	-0.0126	0.3627
228	44.59	-0.04	-0.0960	-0.0171	0.0029	0.1779	-0.0271	1.5484	-0.0186	0.5622	-0.0120	0.3631
229	43.74	-0.02	-0.0660	-0.0040	0.0705	0.0582	-0.3007	1.5864	-0.0191	0.5797	-0.0120	0.3654
230	42.83	-0.04	-0.0009	0.0049	0.0913	-5.6667	-47.5556	1.5963	-0.0196	0.5767	-0.0123	0.3613

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3 MANTIN MISSILE TAILS EFFECTS DATA
SHEET 6 OF 6

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	10	1.10	1.7	0.0	81a0f23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
231	41.88	-0.03	-0.0676	-0.0010	0.0161	0.0143	-0.2382	1.6438	-0.0191	0.5959	-0.0116	0.3625
232	40.93	-0.03	-0.0447	0.0026	0.0244	-0.0583	-0.5464	1.6582	-0.0186	0.5990	-0.0112	0.3612
233	34.95	-0.03	-0.0406	0.0067	0.0267	-0.1045	-0.6580	1.6704	-0.0186	0.6071	-0.0111	0.3634
234	38.95	+0.00	-0.0453	0.0023	0.0278	-0.0512	-0.6588	1.6888	-0.0172	0.6130	-0.0102	0.3631
235	37.92	-0.04	-0.0901	0.0023	0.0027	-0.0257	-0.0300	1.6788	-0.0172	0.6036	-0.0102	0.3590
236	36.88	+0.04	+0.0954	+0.0016	0.0122	0.0142	-0.1274	1.6971	-0.0115	0.6167	-0.0068	0.3634

MANTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 10 1.10 1.07 0.0 M1=0823 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-2.42	0.00	0.0806	9.9999	-0.0236	9.9999	-0.2936	-0.2403	-0.0270	-0.0625	0.1124	0.2601
2	-2.41	0.00	0.0783	9.9999	-0.0238	9.9999	-0.3042	-0.2382	-0.0259	-0.0622	0.1085	0.2612
3	-2.41	0.02	0.0718	9.9999	-0.0243	9.9999	-0.3387	-0.2403	-0.0270	-0.0625	0.1124	0.2601
4	-2.41	0.02	0.0869	9.9999	-0.0197	9.9999	-0.2264	-0.2451	-0.0277	-0.0665	0.1138	0.2713
5	-2.41	0.02	0.0850	9.9999	-0.0225	9.9999	-0.2645	-0.2382	-0.0265	-0.0632	0.1114	0.2653
6	-2.42	0.01	0.0915	9.9999	-0.0203	9.9999	-0.2215	-0.2404	-0.0273	-0.0644	0.1136	0.2677
7	-2.41	0.01	0.0718	9.9999	-0.0243	9.9999	-0.3387	-0.2428	-0.0280	-0.0645	0.1153	0.2659
8	-2.42	0.02	0.0828	9.9999	-0.0234	9.9999	-0.2832	-0.2454	-0.0275	-0.0666	0.1121	0.2713
9	-2.41	0.02	0.0870	9.9999	-0.0197	9.9999	-0.2262	-0.2404	-0.0273	-0.0625	0.1136	0.2600
10	-2.41	0.01	0.0828	9.9999	-0.0227	9.9999	-0.2739	-0.2355	-0.0273	-0.0621	0.1159	0.2638
11	-2.41	0.01	0.0871	9.9999	-0.0206	9.9999	-0.2359	-0.2474	-0.0291	-0.0677	0.1178	0.2738
12	-2.41	0.01	0.0762	9.9999	-0.0257	9.9999	-0.3367	-0.2378	-0.0272	-0.0650	0.1144	0.2734
13	-2.41	0.01	0.0870	9.9999	-0.0214	9.9999	-0.2461	-0.2424	-0.0285	-0.0637	0.1174	0.2627
14	-2.22	0.01	0.0783	9.9999	-0.0230	9.9999	-0.2931	-0.1658	-0.0213	-0.0366	0.1286	0.2286
15	-1.19	0.00	0.0781	9.9999	-0.0240	9.9999	-0.3156	-0.1107	-0.0156	-0.0139	0.1412	0.1255
16	-0.19	0.00	0.0784	9.9999	-0.0256	9.9999	-0.3280	-0.0310	-0.0104	0.0179	0.3364	-0.5763
17	0.75	0.01	0.0938	9.9999	-0.0234	9.9999	-0.2500	0.0317	-0.0047	0.0612	-0.1489	1.9271
18	1.73	0.02	0.1090	9.9999	-0.0147	9.9999	-0.1805	0.1279	0.0024	0.0906	0.0189	0.7881
19	2.70	0.01	0.1112	9.9999	-0.0204	9.9999	-0.1830	0.1760	0.0080	0.1255	0.0455	0.7133
20	3.72	0.01	0.1005	9.9999	-0.0272	9.9999	-0.2706	0.2729	0.0135	0.1666	0.0495	0.6107
21	4.64	0.01	0.1042	9.9999	-0.0231	9.9999	-0.2111	0.3385	0.0168	0.1999	0.0496	0.5907
22	5.67	0.01	0.1029	9.9999	-0.0288	9.9999	-0.2795	0.4313	0.0182	0.2332	0.0423	0.5687
23	6.70	0.01	0.1137	9.9999	-0.0244	9.9999	-0.2148	0.5025	0.0192	0.2685	0.0382	0.5344
24	7.61	0.02	0.1258	9.9999	-0.0217	9.9999	-0.1712	0.5785	0.0197	0.3033	0.0348	0.5242
25	8.59	0.02	0.1290	9.9999	-0.0224	9.9999	-0.1735	0.6546	0.0206	0.3371	0.0315	0.5150
26	9.60	0.02	0.1311	9.9999	-0.0213	9.9999	-0.1626	0.7185	0.0204	0.3664	0.0283	0.5099
27	10.62	0.01	0.1312	9.9999	-0.0231	9.9999	-0.1757	0.7945	0.0210	0.3983	0.0265	0.5013
28	11.60	0.01	0.1379	9.9999	-0.0226	9.9999	-0.1638	0.8657	0.0210	0.4263	0.0243	0.4924
29	12.59	0.01	0.1444	9.9999	-0.0220	9.9999	-0.1523	0.9415	0.0220	0.4546	0.0234	0.4829
30	13.57	0.01	0.1531	9.9999	-0.0196	9.9999	-0.1279	1.0275	0.0215	0.4854	0.0209	0.4724
31	14.62	0.01	0.1593	9.9999	-0.0222	9.9999	-0.1447	1.0569	0.0220	0.4995	0.0208	0.4726
32	15.62	0.01	0.1404	9.9999	-0.0326	9.9999	-0.2323	1.1103	0.0210	0.5203	0.0189	0.4686
33	16.61	0.02	0.1532	9.9999	-0.0230	9.9999	-0.1499	1.1642	0.0210	0.5378	0.0181	0.4620
34	17.60	0.02	0.1381	9.9999	-0.0346	9.9999	-0.2544	1.2087	0.0187	0.5454	0.0155	0.4513
35	18.62	0.01	0.1513	9.9999	-0.0291	9.9999	-0.1926	1.2535	0.0163	0.5613	0.0130	0.4478
36	19.67	0.01	0.1448	9.9999	-0.0322	9.9999	-0.2225	1.2659	0.0153	0.5606	0.0123	0.4339
37	20.73	0.01	0.1450	9.9999	-0.0357	9.9999	-0.2462	1.2542	0.0111	0.5354	0.0088	0.4269
38	21.76	0.02	0.1497	9.9999	-0.0377	9.9999	-0.2602	1.2596	0.0088	0.5347	0.0070	0.4265
39	22.80	0.01	0.1319	9.9999	-0.0343	9.9999	-0.2977	1.2703	0.0054	0.5361	0.0043	0.4220
40	23.85	0.00	0.1406	9.9999	-0.0395	9.9999	-0.2803	1.2959	0.0012	0.5449	0.0009	0.4204
41	24.88	0.00	0.1518	9.9999	-0.0394	9.9999	-0.2596	1.3111	-0.0007	0.5495	-0.0005	0.4191
42	25.94	-0.01	0.1470	9.9999	-0.0367	9.9999	-0.2080	1.3381	-0.0002	0.5661	-0.0001	0.4231
43	27.01	-0.01	0.1604	9.9999	-0.0374	9.9999	-0.2272	1.3444	-0.0002	0.5726	-0.0001	0.4259
44	28.07	0.00	0.1930	9.9999	-0.0239	9.9999	-0.1227	1.3667	-0.0012	0.5823	-0.0008	0.4261
45	29.17	-0.01	0.1713	9.9999	-0.0352	9.9999	-0.2056	1.3738	0.0007	0.5920	0.0005	0.4310
46	30.35	-0.00	0.1733	9.9999	-0.0359	9.9999	-0.2071	1.3652	-0.0023	0.5929	-0.0017	0.4288

MANTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE/D-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 10 1.10 1.7 0.0 BL=0.23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	31.63	-0.01	0.1665	9.9999	-0.0386	9.9999	-0.2223	1.3929	-0.0031	0.6034	-0.0022	0.4332
48	31.84	-0.00	0.1619	9.9999	-0.0301	9.9999	-0.1655	1.4154	-0.0047	0.6051	-0.0036	0.4305
49	31.85	-0.00	0.1710	9.9999	-0.0357	9.9999	-0.2060	1.4020	-0.0042	0.6090	-0.0030	0.4344
50	31.84	-0.01	0.1614	9.9999	-0.0266	9.9999	-0.1468	1.3958	-0.0038	0.6029	-0.0027	0.4319
51	31.85	-0.01	0.1794	9.9999	-0.0311	9.9999	-0.1732	1.4011	-0.0054	0.6057	-0.0039	0.4323
52	31.96	-0.01	0.1707	9.9999	-0.0351	9.9999	-0.2058	1.3972	-0.0041	0.6061	-0.0029	0.4338
53	32.16	-0.01	0.1793	9.9999	-0.0302	9.9999	-0.1685	1.4023	-0.0052	0.6046	-0.0037	0.4311
54	32.27	-0.01	0.1620	9.9999	-0.0375	9.9999	-0.2317	1.4000	-0.0052	0.6081	-0.0037	0.4343
55	32.39	-0.01	0.1664	9.9999	-0.0369	9.9999	-0.2336	1.4050	-0.0062	0.6075	-0.0044	0.4324
56	32.58	-0.02	0.1705	9.9999	-0.0359	9.9999	-0.2105	1.4160	-0.0080	0.6088	-0.0057	0.4297
57	32.67	0.00	0.1790	9.9999	-0.0327	9.9999	-0.1827	1.4024	-0.0066	0.6017	-0.0047	0.4290
58	32.79	-0.01	0.1668	9.9999	-0.0386	9.9999	-0.2292	1.4103	-0.0085	0.6088	-0.0060	0.4314
59	32.95	-0.02	0.1740	9.9999	-0.0339	9.9999	-0.1939	1.4041	-0.0098	0.6064	-0.0070	0.4307
60	33.07	-0.02	0.1662	9.9999	-0.0388	9.9999	-0.2336	1.4080	-0.0092	0.6066	-0.0065	0.4307
61	33.19	-0.01	0.1664	9.9999	-0.0395	9.9999	-0.2346	1.4051	-0.0075	0.6046	-0.0054	0.4303
62	33.34	-0.01	0.1704	9.9999	-0.0368	9.9999	-0.2157	1.4059	-0.0108	0.6034	-0.0077	0.4292
63	33.45	-0.02	0.1704	9.9999	-0.0359	9.9999	-0.2106	1.4146	-0.0118	0.6097	-0.0083	0.4299
64	33.58	-0.02	0.1634	9.9999	-0.0398	9.9999	-0.2425	1.4127	-0.0127	0.6070	-0.0090	0.4297
65	33.71	-0.01	0.1618	9.9999	-0.0426	9.9999	-0.2630	1.4121	-0.0103	0.6089	-0.0073	0.4312
66	33.83	-0.01	0.1725	9.9999	-0.0376	9.9999	-0.2170	1.4155	-0.0141	0.6080	-0.0100	0.4295
67	33.96	-0.00	0.1722	9.9999	-0.0306	9.9999	-0.1776	1.3913	-0.0152	0.5953	-0.0110	0.4279
68	34.08	-0.01	0.1722	9.9999	-0.0315	9.9999	-0.1826	1.4081	-0.0139	0.6048	-0.0099	0.4295
69	34.21	-0.01	0.1679	9.9999	-0.0326	9.9999	-0.1943	1.4033	-0.0141	0.6044	-0.0100	0.4307
70	34.34	-0.02	0.1731	9.9999	-0.0325	9.9999	-0.1912	1.3990	-0.0165	0.5965	-0.0118	0.4278
71	34.46	-0.02	0.1576	9.9999	-0.0403	9.9999	-0.2563	1.4108	-0.0146	0.6094	-0.0103	0.4320
72	34.60	-0.01	0.1614	9.9999	-0.0381	9.9999	-0.2110	1.3991	-0.0165	0.6021	-0.0118	0.4303
73	34.72	-0.02	0.1572	9.9999	-0.0370	9.9999	-0.2351	1.4067	-0.0179	0.6053	-0.0127	0.4303
74	34.82	-0.01	0.1721	9.9999	-0.0298	9.9999	-0.1732	1.3946	-0.0188	0.5944	-0.0135	0.4262
75	34.97	-0.03	0.1572	9.9999	-0.0370	9.9999	-0.2351	1.4135	-0.0160	0.6086	-0.0113	0.4306
76	35.08	-0.01	0.1572	9.9999	-0.0361	9.9999	-0.2296	1.3949	-0.0200	0.5952	-0.0143	0.4267
77	35.20	-0.01	0.1528	9.9999	-0.0381	9.9999	-0.2494	1.3995	-0.0183	0.6020	-0.0131	0.4301
78	35.34	-0.01	0.1528	9.9999	-0.0381	9.9999	-0.2494	1.4043	-0.0177	0.6051	-0.0126	0.4309
79	35.46	0.00	0.1656	9.9999	-0.0294	9.9999	-0.1777	1.4074	-0.0206	0.6005	-0.0147	0.4267
80	35.57	-0.02	0.1468	9.9999	-0.0403	9.9999	-0.2755	1.4075	-0.0211	0.6016	-0.0150	0.4273
81	35.76	-0.01	0.1567	9.9999	-0.0326	9.9999	-0.2081	1.4094	-0.0200	0.6043	-0.0142	0.4288
82	35.80	-0.02	0.1528	9.9999	-0.0345	9.9999	-0.2324	1.4118	-0.0197	0.6036	-0.0139	0.4276
83	35.94	-0.00	0.1524	9.9999	-0.0338	9.9999	-0.2217	1.4050	-0.0223	0.5984	-0.0159	0.4259
84	36.07	-0.00	0.1493	9.9999	-0.0332	9.9999	-0.1368	1.3880	-0.0223	0.5891	-0.0161	0.4244
85	36.18	-0.01	0.1544	9.9999	-0.0302	9.9999	-0.1956	1.3880	-0.0218	0.5918	-0.0157	0.4263
86	36.30	0.01	0.1479	9.9999	-0.0316	9.9999	-0.2160	1.3980	-0.0231	0.5943	-0.0166	0.4251
87	36.40	-0.00	0.1586	9.9999	-0.0282	9.9999	-0.1776	1.3860	-0.0223	0.5899	-0.0161	0.4250
88	36.51	-0.01	0.1521	9.9999	-0.0321	9.9999	-0.2110	1.3978	-0.0228	0.5933	-0.0163	0.4244
89	36.65	-0.01	0.1457	9.9999	-0.0310	9.9999	-0.2126	1.3831	-0.0225	0.5869	-0.0163	0.4243
90	36.76	-0.00	0.1396	9.9999	-0.0348	9.9999	-0.2498	1.3771	-0.0230	0.5867	-0.0167	0.4261
91	36.88	-0.01	0.1396	9.9999	-0.0348	9.9999	-0.2498	1.3937	-0.0211	0.5953	-0.0152	0.4272
92	37.02	-0.00	0.1342	9.9999	-0.0315	9.9999	-0.2259	1.3798	-0.0244	0.5861	-0.0177	0.4234

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 6

MANTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	10	1.1M	1.7	0.0	01=OF23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
93	37.13	0.01	0.1521	9.9999	-0.0245	9.9999	-0.1612	1.3821	-0.0239	0.5835	-0.0173	0.4222
94	37.23	-0.04	0.1342	9.9999	-0.0306	9.9999	-0.2197	1.3871	-0.0262	0.5883	-0.0175	0.4201
95	37.38	-0.00	0.1435	9.9999	-0.0260	9.9999	-0.1991	1.3944	-0.0246	0.5897	-0.0176	0.4229
96	37.48	-0.01	0.1457	9.9999	-0.0285	9.9999	-0.1954	1.4062	-0.0226	0.5986	-0.0161	0.4259
97	37.60	-0.00	0.1348	9.9999	-0.0310	9.9999	-0.2298	1.3908	-0.0239	0.5873	-0.0172	0.4223
98	37.73	-0.01	0.1326	9.9999	-0.0312	9.9999	-0.2351	1.3759	-0.0230	0.5818	-0.0167	0.4229
99	37.83	0.01	0.1478	9.9999	-0.0257	9.9999	-0.1739	1.3765	-0.0249	0.5844	-0.0181	0.4206
100	37.92	-0.00	0.1432	9.9999	-0.0252	9.9999	-0.1758	1.3689	-0.0235	0.5785	-0.0175	0.4226
101	38.08	-0.01	0.1426	9.9999	-0.0194	9.9999	-0.1193	1.3641	-0.0244	0.5765	-0.0179	0.4211
102	38.20	-0.01	0.1432	9.9999	-0.0234	9.9999	-0.1637	1.3788	-0.0249	0.5809	-0.0181	0.4213
103	38.30	-0.02	0.1174	9.9999	-0.0348	9.9999	-0.2966	1.3619	-0.0254	0.5752	-0.0186	0.4223
104	38.43	0.01	0.1475	9.9999	-0.0232	9.9999	-0.1570	1.3593	-0.0244	0.5759	-0.0180	0.4237
105	38.54	-0.01	0.1369	9.9999	-0.0203	9.9999	-0.2065	1.3669	-0.0216	0.5816	-0.0158	0.4255
106	38.64	-0.01	0.1348	9.9999	-0.0259	9.9999	-0.1921	1.3462	-0.0267	0.5662	-0.0199	0.4206
107	38.80	-0.02	0.1519	9.9999	-0.0211	9.9999	-0.1391	1.3676	-0.0244	0.5747	-0.0178	0.4239
108	38.90	-0.00	0.1392	9.9999	-0.0264	9.9999	-0.1901	1.3503	-0.0234	0.5722	-0.0174	0.4237
109	39.00	0.00	0.1340	9.9999	-0.0251	9.9999	-0.1864	1.3480	-0.0254	0.5717	-0.0189	0.4247
110	39.12	-0.00	0.1325	9.9999	-0.0269	9.9999	-0.2032	1.3382	-0.0234	0.5658	-0.0175	0.4228
111	39.22	-0.02	0.1341	9.9999	-0.0273	9.9999	-0.1963	1.3272	-0.0242	0.5626	-0.0182	0.4239
112	39.33	-0.00	0.1565	9.9999	-0.0164	9.9999	-0.1035	1.3286	-0.0240	0.5624	-0.0181	0.4213
113	39.46	-0.03	0.1351	9.9999	-0.0277	9.9999	-0.2050	1.3327	-0.0259	0.5674	-0.0194	0.4258
114	39.57	-0.01	0.1566	9.9999	-0.0191	9.9999	-0.1220	1.3302	-0.0259	0.5663	-0.0194	0.4257
115	39.67	-0.00	0.1305	9.9999	-0.0246	9.9999	-0.1885	1.3478	-0.0280	0.5720	-0.0208	0.4244
116	39.79	0.00	0.1448	9.9999	-0.0171	9.9999	-0.1062	1.3427	-0.0273	0.5680	-0.0203	0.4238
117	39.90	-0.01	0.1220	9.9999	-0.0295	9.9999	-0.2421	1.3501	-0.0280	0.5712	-0.0207	0.4231
118	39.99	-0.01	0.1479	9.9999	-0.0215	9.9999	-0.1455	1.3447	-0.0259	0.5692	-0.0192	0.4233
119	40.11	0.00	0.1372	9.9999	-0.0231	9.9999	-0.1656	1.3229	-0.0268	0.5558	-0.0203	0.4201
120	40.23	0.01	0.1631	9.9999	-0.0169	9.9999	-0.1036	1.3305	-0.0273	0.5617	-0.0205	0.4222
121	40.32	-0.01	0.1371	9.9999	-0.0249	9.9999	-0.1815	1.2961	-0.0268	0.5456	-0.0207	0.4210
122	40.45	-0.02	0.1459	9.9999	-0.0242	9.9999	-0.1660	1.3352	-0.0268	0.5630	-0.0201	0.4217
123	40.54	-0.02	0.1372	9.9999	-0.0266	9.9999	-0.1941	1.3255	-0.0271	0.5605	-0.0205	0.4228
124	40.62	-0.02	0.1434	9.9999	-0.0270	9.9999	-0.1879	1.3355	-0.0273	0.5684	-0.0209	0.4256
125	40.74	-0.03	0.1436	9.9999	-0.0219	9.9999	-0.1520	1.3160	-0.0283	0.5542	-0.0215	0.4211
126	40.85	-0.01	0.1566	9.9999	-0.0191	9.9999	-0.1220	1.3305	-0.0273	0.5626	-0.0205	0.4229
127	40.94	-0.01	0.1262	9.9999	-0.0321	9.9999	-0.2630	1.3113	-0.0288	0.5520	-0.0219	0.4210
128	41.05	-0.02	0.1371	9.9999	-0.0269	9.9999	-0.1816	1.3453	-0.0281	0.5663	-0.0210	0.4209
129	41.16	-0.01	0.1443	9.9999	-0.0113	9.9999	-0.0667	1.3329	-0.0278	0.5582	-0.0208	0.4188
130	41.25	-0.04	0.1391	9.9999	-0.0222	9.9999	-0.1595	1.2989	-0.0283	0.5449	-0.0218	0.4195
131	41.36	-0.02	0.1479	9.9999	-0.0233	9.9999	-0.1572	1.3420	-0.0291	0.5639	-0.0217	0.4202
132	41.48	-0.02	0.1436	9.9999	-0.0244	9.9999	-0.1700	1.3346	-0.0287	0.5589	-0.0215	0.4187
133	41.58	-0.04	0.1390	9.9999	-0.0222	9.9999	-0.1596	1.3222	-0.0283	0.5507	-0.0214	0.4166
134	41.67	-0.01	0.1343	9.9999	-0.0273	9.9999	-0.1960	1.3172	-0.0280	0.5504	-0.0212	0.4178
135	41.78	-0.02	0.1457	9.9999	-0.0242	9.9999	-0.1662	1.3224	-0.0283	0.5570	-0.0214	0.4212
136	41.87	-0.02	0.1435	9.9999	-0.0227	9.9999	-0.1580	1.3395	-0.0289	0.5610	-0.0216	0.4188
137	41.97	-0.01	0.1458	9.9999	-0.0251	9.9999	-0.1721	1.3173	-0.0263	0.5522	-0.0215	0.4192
138	42.07	-0.02	0.1393	9.9999	-0.0273	9.9999	-0.1960	1.3173	-0.0280	0.5549	-0.0212	0.4212

TEST PART MACH RN/D=6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 10 1.46 1.7 0.0 .01=0.23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNFA	CMA	CBA	XCPFA	YCPFA
139	42.17	-0.01	0.1543	9.9999	-0.0202	9.9999	-0.1307	1.3049	-0.0268	0.5496	-0.0206	0.4212
140	42.28	-0.02	0.1479	9.9999	-0.0233	9.9999	-0.1572	1.3097	-0.0265	0.5517	-0.0203	0.4212
141	42.37	-0.02	0.1350	9.9999	-0.0293	9.9999	-0.2173	1.3003	-0.0280	0.5446	-0.0215	0.4188
142	42.48	-0.01	0.1508	9.9999	-0.0200	9.9999	-0.1275	1.2915	-0.0278	0.5452	-0.0215	0.4222
143	42.56	-0.02	0.1630	9.9999	-0.0157	9.9999	-0.0935	1.2809	-0.0242	0.5439	-0.0189	0.4246
144	42.65	-0.02	0.1330	9.9999	-0.0295	9.9999	-0.2221	1.3083	-0.0268	0.5493	-0.0205	0.4199
145	42.75	-0.02	0.1479	9.9999	-0.0206	9.9999	-0.1396	1.2983	-0.0259	0.5468	-0.0199	0.4212
146	42.84	-0.02	0.1479	9.9999	-0.0206	9.9999	-0.1396	1.2758	-0.0235	0.5435	-0.0185	0.4268
147	42.94	-0.01	0.1542	9.9999	-0.0151	9.9999	-0.0976	1.2855	-0.0235	0.5433	-0.0183	0.4227
148	43.02	-0.02	0.1372	9.9999	-0.0266	9.9999	-0.1961	1.2813	-0.0257	0.5438	-0.0200	0.4246
149	43.12	-0.01	0.1458	9.9999	-0.0226	9.9999	-0.1549	1.2835	-0.0250	0.5422	-0.0195	0.4224
150	43.21	-0.02	0.1500	9.9999	-0.0197	9.9999	-0.1312	1.2712	-0.0250	0.5376	-0.0197	0.4229
151	43.29	-0.02	0.1395	9.9999	-0.0273	9.9999	-0.1957	1.2753	-0.0268	0.5426	-0.0210	0.4255
152	43.38	-0.01	0.1438	9.9999	-0.0235	9.9999	-0.1638	1.2672	-0.0260	0.5387	-0.0190	0.4251
153	43.45	-0.02	0.1440	9.9999	-0.0204	9.9999	-0.1395	1.2772	-0.0250	0.5429	-0.0196	0.4251
154	43.57	-0.01	0.1522	9.9999	-0.0161	9.9999	-0.1059	1.2619	-0.0226	0.5368	-0.0179	0.4238
155	43.66	-0.01	0.1479	9.9999	-0.0199	9.9999	-0.1344	1.2721	-0.0240	0.5409	-0.0189	0.4252
156	43.75	-0.02	0.1387	9.9999	-0.0281	9.9999	-0.2148	1.2631	-0.0273	0.5381	-0.0216	0.4268
157	43.84	-0.02	0.1350	9.9999	-0.0243	9.9999	-0.1801	1.2622	-0.0260	0.5347	-0.0190	0.4236
158	43.96	-0.02	0.1415	9.9999	-0.0229	9.9999	-0.1616	1.2574	-0.0260	0.5370	-0.0191	0.4271
159	44.03	-0.01	0.1522	9.9999	-0.0161	9.9999	-0.1059	1.2426	-0.0231	0.5315	-0.0186	0.4278
160	44.16	-0.01	0.1479	9.9999	-0.0199	9.9999	-0.1344	1.2526	-0.0242	0.5358	-0.0193	0.4277
161	44.20	-0.01	0.1501	9.9999	-0.0156	9.9999	-0.1028	1.2339	-0.0217	0.5279	-0.0176	0.4278
162	44.30	-0.02	0.1396	9.9999	-0.0232	9.9999	-0.1659	1.2447	-0.0224	0.5299	-0.0180	0.4257
163	44.38	-0.02	0.1438	9.9999	-0.0165	9.9999	-0.1249	1.2494	-0.0233	0.5311	-0.0187	0.4249
164	44.48	-0.01	0.1265	9.9999	-0.0312	9.9999	-0.2502	1.2426	-0.0236	0.5296	-0.0190	0.4262
165	44.56	-0.01	0.1440	9.9999	-0.0203	9.9999	-0.1408	1.2533	-0.0232	0.5344	-0.0185	0.4264
166	44.65	-0.02	0.1259	9.9999	-0.0278	9.9999	-0.2126	1.2285	-0.0222	0.5245	-0.0181	0.4278
167	44.74	-0.02	0.1224	9.9999	-0.0305	9.9999	-0.2490	1.2609	-0.0246	0.5367	-0.0195	0.4256
168	44.85	-0.01	0.1284	9.9999	-0.0258	9.9999	-0.2000	1.2433	-0.0227	0.5301	-0.0182	0.4264
169	44.93	-0.01	0.1266	9.9999	-0.0259	9.9999	-0.2043	1.2360	-0.0227	0.5287	-0.0183	0.4277
170	45.02	-0.00	0.1332	9.9999	-0.0236	9.9999	-0.1775	1.2208	-0.0207	0.5213	-0.0170	0.4278
171	45.13	-0.01	0.1353	9.9999	-0.0209	9.9999	-0.1548	1.2427	-0.0241	0.5275	-0.0194	0.4247
172	45.20	-0.01	0.1183	9.9999	-0.0292	9.9999	-0.2471	1.2469	-0.0236	0.5297	-0.0190	0.4248
173	45.29	-0.01	0.1292	9.9999	-0.0256	9.9999	-0.1996	1.2491	-0.0228	0.5290	-0.0182	0.4235
174	45.38	-0.02	0.1271	9.9999	-0.0286	9.9999	-0.2268	1.2419	-0.0233	0.5303	-0.0187	0.4278
175	45.47	-0.01	0.1355	9.9999	-0.0193	9.9999	-0.1425	1.2195	-0.0223	0.5177	-0.0183	0.4246
176	45.57	-0.01	0.1140	9.9999	-0.0321	9.9999	-0.2817	1.2392	-0.0225	0.5246	-0.0181	0.4233
177	45.65	-0.01	0.1119	9.9999	-0.0332	9.9999	-0.2966	1.2199	-0.0236	0.5146	-0.0194	0.4251
178	45.75	-0.01	0.1270	9.9999	-0.0251	9.9999	-0.1976	1.2393	-0.0230	0.5256	-0.0185	0.4241
179	45.84	-0.00	0.1205	9.9999	-0.0299	9.9999	-0.2482	1.2222	-0.0233	0.5178	-0.0190	0.4237
180	45.92	-0.01	0.1209	9.9999	-0.0282	9.9999	-0.1909	1.2293	-0.0225	0.5203	-0.0183	0.4232
181	46.01	-0.01	0.1378	9.9999	-0.0166	9.9999	-0.1206	1.2417	-0.0225	0.5266	-0.0181	0.4241
182	46.09	-0.02	0.1310	9.9999	-0.0179	9.9999	-0.1370	1.2094	-0.0210	0.5125	-0.0176	0.4238
183	46.18	-0.02	0.1209	9.9999	-0.0253	9.9999	-0.2025	1.2281	-0.0233	0.5232	-0.0189	0.4261
184	46.27	-0.02	0.1087	9.9999	-0.0325	9.9999	-0.2966	1.2157	-0.0233	0.5159	-0.0191	0.4244

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 5 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	10	1.10	1.7	0.0	Blk of 23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
185	46.35	-0.02	0.1270	9.9999	-0.0226	9.9999	-0.1778	1.2244	-0.0228	0.5199	-0.0186	0.4239
186	46.44	-0.04	0.1242	9.9999	-0.0224	9.9999	-0.1733	1.2315	-0.0233	0.5220	-0.0189	0.4239
187	46.54	-0.02	0.1183	9.9999	-0.0259	9.9999	-0.2186	1.1991	-0.0214	0.5088	-0.0182	0.4243
188	46.63	-0.03	0.1184	9.9999	-0.0267	9.9999	-0.2258	1.2091	-0.0226	0.5095	-0.0187	0.4214
189	46.70	-0.04	0.1314	9.9999	-0.0214	9.9999	-0.1630	1.2191	-0.0233	0.5138	-0.0191	0.4214
190	46.76	-0.04	0.1183	9.9999	-0.0241	9.9999	-0.2039	1.1915	-0.0211	0.5010	-0.0177	0.4206
191	46.97	-0.02	0.1161	9.9999	-0.0252	9.9999	-0.2170	1.1917	-0.0216	0.5028	-0.0183	0.4219
192	46.97	-0.02	0.1228	9.9999	-0.0256	9.9999	-0.2082	1.2025	-0.0218	0.5067	-0.0181	0.4213
193	47.04	-0.04	0.1312	9.9999	-0.0182	9.9999	-0.1235	1.1973	-0.0209	0.5045	-0.0175	0.4214
194	47.10	-0.03	0.1184	9.9999	-0.0225	9.9999	-0.1899	1.1937	-0.0223	0.5044	-0.0187	0.4226
195	47.23	-0.03	0.1154	9.9999	-0.0233	9.9999	-0.1972	1.2088	-0.0237	0.5054	-0.0196	0.4181
196	47.32	-0.03	0.1077	9.9999	-0.0302	9.9999	-0.2805	1.1982	-0.0209	0.5021	-0.0175	0.4191
197	47.40	-0.03	0.1357	9.9999	-0.0142	9.9999	-0.1046	1.1957	-0.0206	0.5020	-0.0173	0.4199
198	47.48	-0.02	0.1185	9.9999	-0.0225	9.9999	-0.1897	1.2074	-0.0226	0.5068	-0.0187	0.4198
199	47.57	-0.03	0.1360	9.9999	-0.0142	9.9999	-0.1043	1.2061	-0.0233	0.5042	-0.0194	0.4181
200	47.67	-0.03	0.1234	9.9999	-0.0222	9.9999	-0.1804	1.2059	-0.0229	0.5062	-0.0186	0.4197
201	47.75	-0.04	0.1166	9.9999	-0.0253	9.9999	-0.2169	1.2089	-0.0240	0.5141	-0.0202	0.4184
202	47.84	-0.03	0.1187	9.9999	-0.0225	9.9999	-0.1896	1.2245	-0.0235	0.5133	-0.0192	0.4192
203	47.94	-0.02	0.1166	9.9999	-0.0253	9.9999	-0.2169	1.2149	-0.0243	0.5116	-0.0200	0.4211
204	48.02	-0.03	0.1186	9.9999	-0.0208	9.9999	-0.1756	1.2245	-0.0238	0.5142	-0.0195	0.4199
205	48.10	-0.03	0.1163	9.9999	-0.0273	9.9999	-0.2431	1.2148	-0.0243	0.5097	-0.0200	0.4196
206	48.20	-0.02	0.1186	9.9999	-0.0208	9.9999	-0.1758	1.2172	-0.0236	0.5109	-0.0196	0.4197
207	48.26	-0.03	0.1101	9.9999	-0.0275	9.9999	-0.2498	1.2149	-0.0245	0.5107	-0.0202	0.4204
208	48.36	-0.03	0.1143	9.9999	-0.0237	9.9999	-0.2076	1.1972	-0.0229	0.5049	-0.0191	0.4217
209	48.45	-0.03	0.1166	9.9999	-0.0227	9.9999	-0.1945	1.2283	-0.0246	0.5184	-0.0200	0.4221
210	48.53	-0.02	0.1079	9.9999	-0.0268	9.9999	-0.2487	1.2204	-0.0229	0.5134	-0.0187	0.4207
211	48.64	-0.02	0.1274	9.9999	-0.0167	9.9999	-0.1311	1.2232	-0.0234	0.5153	-0.0195	0.4213
212	48.71	-0.03	0.1122	9.9999	-0.0239	9.9999	-0.2132	1.2233	-0.0243	0.5153	-0.0199	0.4213
213	48.78	-0.03	0.1187	9.9999	-0.0208	9.9999	-0.1756	1.2283	-0.0243	0.5193	-0.0198	0.4228
214	48.85	-0.03	0.1251	9.9999	-0.0160	9.9999	-0.1260	1.1982	-0.0224	0.5063	-0.0191	0.4225
215	48.96	-0.02	0.1036	9.9999	-0.0295	9.9999	-0.2877	1.2151	-0.0238	0.5151	-0.0196	0.4212
216	49.06	-0.02	0.1099	9.9999	-0.0233	9.9999	-0.2116	1.1930	-0.0219	0.5032	-0.0184	0.4218
217	48.95	-0.03	0.1273	9.9999	-0.0150	9.9999	-0.1175	1.1982	-0.0229	0.5044	-0.0191	0.4210
218	48.95	-0.02	0.1099	9.9999	-0.0229	9.9999	-0.2037	1.1782	-0.0219	0.4994	-0.0186	0.4239
219	48.96	-0.03	0.1256	9.9999	-0.0160	9.9999	-0.1274	1.2190	-0.0232	0.5126	-0.0190	0.4205
220	48.95	-0.02	0.1197	9.9999	-0.0191	9.9999	-0.1610	1.1915	-0.0226	0.5015	-0.0188	0.4209
221	48.95	-0.03	0.1145	9.9999	-0.0237	9.9999	-0.2072	1.1992	-0.0233	0.5048	-0.0195	0.4210
222	48.95	-0.03	0.1013	9.9999	-0.0274	9.9999	-0.2705	1.2242	-0.0243	0.5157	-0.0199	0.4213
223	48.79	-0.02	0.0970	9.9999	-0.0287	9.9999	-0.2955	1.2239	-0.0233	0.5140	-0.0191	0.4199
224	47.99	-0.03	0.1101	9.9999	-0.0250	9.9999	-0.2270	1.2013	-0.0215	0.5078	-0.0179	0.4227
225	47.21	-0.03	0.1079	9.9999	-0.0252	9.9999	-0.2335	1.2110	-0.0212	0.5095	-0.0175	0.4208
226	46.35	-0.03	0.1124	9.9999	-0.0257	9.9999	-0.2283	1.2486	-0.0232	0.5222	-0.0185	0.4182
227	45.51	-0.03	0.1254	9.9999	-0.0195	9.9999	-0.1554	1.2810	-0.0238	0.5364	-0.0186	0.4187
228	44.69	-0.04	0.1231	9.9999	-0.0179	9.9999	-0.1458	1.2934	-0.0243	0.5391	-0.0188	0.4168
229	43.74	-0.02	0.1059	9.9999	-0.0314	9.9999	-0.2960	1.3507	-0.0256	0.5624	-0.0191	0.4164
230	42.83	-0.02	0.1146	9.9999	-0.0263	9.9999	-0.2298	1.3552	-0.0238	0.5647	-0.0176	0.4167

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 6 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
Z 10 1.14 1.Z 0.0 BLKDF23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
231	41.88	-0.03	0.1042	0.0000	-0.0317	0.0000	-0.2881	1.3851	-0.0248	0.5742	-0.0179	0.4146
232	40.93	-0.03	0.1128	0.0000	-0.0278	0.0000	-0.2436	1.3975	-0.0248	0.5843	-0.0177	0.4181
233	39.95	-0.03	0.1157	0.0000	-0.0244	0.0000	-0.2093	1.4107	-0.0250	0.5856	-0.0177	0.4151
234	38.95	-0.06	0.1121	0.0000	-0.0257	0.0000	-0.2289	1.4134	-0.0248	0.5914	-0.0175	0.4164
235	37.92	-0.06	0.1033	0.0000	-0.0281	0.0000	-0.2717	1.4287	-0.0224	0.5940	-0.0157	0.4157
236	36.84	-0.06	0.1104	0.0000	-0.0218	0.0000	-0.1874	1.4182	-0.0200	0.5898	-0.0141	0.4159

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REIO-6	FMI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	11	1.10	1.47	45.0	B1=0.23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-2.60	0.07	-0.3316	0.5567	-0.0087	0.0298	-0.0080	0.5594	0.1951	0.3643	-1.6791
2	-2.59	0.08	-0.3287	0.5459	0.0349	-0.0178	-0.0026	0.5619	0.1951	0.3668	-1.7826
3	-2.58	0.09	-0.3156	0.5360	0.0401	-0.0458	-0.0025	0.5590	0.1968	0.3622	-1.6975
4	-2.58	0.10	-0.3137	0.5343	0.1693	-0.1747	-0.0021	0.5616	0.1955	0.3661	-1.7662
5	-2.59	0.09	-0.3276	0.5493	0.1557	-0.1529	-0.0074	0.5604	0.1962	0.3642	-1.7989
6	-2.59	0.07	-0.3377	0.5726	0.0289	-0.0432	-0.0027	0.5619	0.1965	0.3674	-1.6957
7	-2.59	0.08	-0.3362	0.5111	-0.0044	-0.0105	-0.0027	0.5646	0.1961	0.3685	-1.7374
8	-2.58	0.07	-0.3108	0.5284	-0.0463	0.0573	-0.0081	0.5693	0.1948	0.3745	-1.6979
9	-2.56	0.08	-0.2886	0.4803	-0.0309	0.0476	-0.0028	0.5720	0.1957	0.3768	-1.7116
10	-2.07	0.09	-0.2564	0.4592	0.0348	-0.0378	-0.0026	0.5734	0.1921	0.3813	-1.7906
11	-1.25	0.08	-0.1327	0.2710	-0.0280	0.0656	-0.0027	0.5721	0.1962	0.3759	-2.0425
12	-0.29	0.09	-0.0435	0.1390	0.0148	-0.0006	-0.0078	0.5754	0.1979	0.3775	-3.1931
13	0.69	0.09	0.0541	-0.0399	0.0464	-0.0919	-0.0075	0.5805	0.1979	0.3826	-0.6741
14	1.62	0.09	0.1888	-0.2884	0.0885	-0.1033	-0.0023	0.5864	0.2044	0.3820	-1.5171
15	2.60	0.10	0.2774	-0.4057	0.1329	-0.1466	-0.0021	0.5814	0.2132	0.3682	-1.4624
16	3.63	0.09	0.4136	-0.6537	0.0354	-0.1114	-0.0024	0.5993	0.2267	0.3726	-1.5805
17	4.56	0.09	0.4928	-0.7685	0.0930	-0.1034	-0.0021	0.6060	0.2375	0.3685	-1.5603
18	5.60	0.08	0.6305	-0.9461	-0.0174	0.0016	-0.0024	0.6080	0.2484	0.3596	-1.5039
19	6.63	0.09	0.7073	-1.0935	0.0552	-0.0252	-0.0021	0.6153	0.2588	0.3565	-1.5461
20	7.54	0.09	0.8612	-1.3163	0.0796	-0.0879	-0.0020	0.6253	0.2710	0.3543	-1.5284
21	8.53	0.10	0.9408	-1.5004	0.1355	-0.1174	-0.0019	0.6297	0.2814	0.3483	-1.5235
22	9.55	0.10	1.1223	-1.6964	0.1321	-0.0785	-0.0020	0.6335	0.2924	0.3412	-1.5133
23	10.57	0.10	1.2608	-1.8657	0.1093	-0.1096	-0.0019	0.6387	0.3022	0.3366	-1.4798
24	11.58	0.09	1.3842	-2.0256	0.0616	0.0094	-0.0031	0.6402	0.3102	0.3301	-1.4633
25	12.54	0.09	1.5161	-2.1469	0.0609	-0.0423	-0.0018	0.6447	0.3174	0.3274	-1.4161
26	13.53	0.09	1.6782	-2.2866	0.0835	-0.0472	-0.0016	0.6454	0.3210	0.3245	-1.3626
27	14.59	0.09	1.8478	-2.4040	0.0751	-0.0312	-0.0117	0.6371	0.3248	0.3124	-1.3012
28	15.59	0.09	1.9255	-2.4944	0.0241	-0.0012	-0.0064	0.6419	0.3319	0.3101	-1.2756
29	16.55	0.09	2.1333	-2.6316	0.0872	-0.0864	-0.0006	0.6450	0.3407	0.3044	-1.2337
30	17.56	0.09	2.2973	-2.8598	0.0810	-0.0573	-0.0105	0.6498	0.3506	0.2943	-1.1575
31	18.56	0.10	2.4470	-2.8566	0.1071	-0.0900	-0.0308	0.6454	0.3610	0.2844	-1.0865
32	19.62	0.09	2.5914	-2.8137	0.0838	-0.0977	-0.0199	0.6443	0.3688	0.2755	-1.0086
33	20.67	0.11	2.8493	-2.9556	0.2150	-0.1809	-0.0187	0.6318	0.3719	0.2599	-0.8969
34	21.70	0.10	3.0349	-2.9858	0.1256	-0.1966	-0.0338	0.6315	0.3746	0.2569	-0.8190
35	22.73	0.11	3.3202	-2.3049	0.2585	-0.2557	-0.0273	0.6249	0.3791	0.2458	-0.6942
36	23.77	0.14	3.5479	-2.2415	0.4063	-0.3954	-0.0051	0.6198	0.3848	0.2350	-0.6230
37	24.81	0.12	3.8039	-2.1487	0.3612	-0.4322	0.0006	0.6229	0.3937	0.2292	-0.5647
38	25.86	0.13	4.2077	-2.0157	0.4845	-0.4740	0.0283	0.6277	0.4062	0.2215	-0.4791
39	26.93	0.14	4.6322	-2.0615	0.5491	-0.5306	0.0555	0.6358	0.4193	0.2165	-0.4549
40	27.97	0.14	4.8497	-2.0804	0.5862	-0.4631	0.0775	0.6397	0.4397	0.2000	-0.4205
41	29.08	0.14	5.0317	-2.0045	0.6010	-0.1573	0.0579	0.6578	0.4675	0.1903	-0.3698
42	30.28	0.16	5.2935	-1.7391	0.6796	-0.0239	0.0490	0.6661	0.4800	0.1861	-0.2999
43	31.51	0.13	5.2208	-1.6673	0.4856	0.0849	0.0912	0.6954	0.5038	0.1916	-0.2712
44	31.56	0.15	5.2331	-1.5886	0.5620	0.0325	0.1069	0.6812	0.5047	0.1765	-0.3027
45	31.47	0.14	5.2470	-1.6805	0.4823	0.0916	0.0913	0.6947	0.5044	0.1903	-0.2698
46	31.47	0.14	5.1940	-1.7406	0.4868	0.0863	0.0910	0.6811	0.5041	0.1770	-0.2818

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE/10**6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	11	1.14	1.7	45.0	81.0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	31.54	0.12	6.2128	-1.7846	0.5737	0.0948	0.1122	0.6875	0.5040	0.1835	-0.2873
48	31.70	0.14	6.3114	-1.7165	0.6936	0.0645	0.0913	0.6965	0.5045	0.1840	-0.2713
49	31.84	0.15	6.3473	-1.8281	0.6625	-0.1019	0.1124	0.6937	0.5061	0.1876	-0.2880
50	32.00	0.15	6.4096	-1.8564	0.5886	-0.0124	0.1020	0.6991	0.5067	0.1924	-0.2893
51	32.11	0.15	6.4766	-2.0266	0.6447	-0.0903	0.1125	0.6924	0.5071	0.1853	-0.3132
52	32.25	0.15	6.5063	-1.9260	0.5635	0.0466	0.1021	0.6956	0.5085	0.1871	-0.2799
53	32.42	0.14	6.5157	-2.0072	0.5532	-0.0343	0.0966	0.6944	0.5070	0.1874	-0.3081
54	32.52	0.14	6.6018	-1.9396	0.5703	-0.0518	0.1022	0.6963	0.5076	0.1869	-0.2893
55	32.65	0.14	6.6751	-1.9766	0.5792	0.0430	0.1075	0.6896	0.5084	0.1812	-0.2964
56	32.81	0.14	6.7674	-2.2264	0.5751	-0.0276	0.1126	0.6934	0.5101	0.1833	-0.3298
57	32.92	0.17	6.8104	-2.1012	0.7944	-0.2024	0.1136	0.6862	0.5101	0.1761	-0.3082
58	33.06	0.14	6.8168	-2.0665	0.6456	0.0718	0.1022	0.6906	0.5096	0.1812	-0.3033
59	33.20	0.14	6.9343	-2.2134	0.5663	0.0119	0.1233	0.6868	0.5135	0.1733	-0.3190
60	33.31	0.15	6.9369	-2.0437	0.6377	-0.0338	0.1134	0.6864	0.5121	0.1743	-0.2947
61	33.45	0.14	7.0275	-2.1532	0.4914	0.1738	0.1233	0.6882	0.5138	0.1744	-0.3064
62	33.58	0.14	7.1098	-2.3405	0.5638	0.0456	0.1236	0.7044	0.5156	0.1846	-0.3292
63	33.69	0.17	7.2116	-2.3077	0.7721	-0.0813	0.1348	0.6761	0.5185	0.1576	-0.3283
64	33.83	0.14	7.1734	-2.0667	0.4996	0.1261	0.1083	0.6979	0.5175	0.1804	-0.2878
65	33.98	0.15	7.2770	-2.5068	0.6647	0.0928	0.1447	0.7026	0.5173	0.1853	-0.3437
66	34.07	0.14	7.2933	-2.3764	0.7578	-0.0740	0.1349	0.6902	0.5153	0.1749	-0.3258
67	34.21	0.14	7.3424	-2.4326	0.6127	-0.0135	0.1396	0.6982	0.5192	0.1790	-0.3313
68	34.33	0.15	7.4747	-2.7513	0.6031	0.1665	0.1549	0.7012	0.5199	0.1813	-0.3678
69	34.44	0.14	7.4952	-2.5920	0.5614	0.1372	0.1290	0.6888	0.5198	0.1690	-0.3459
70	34.56	0.14	7.4968	-2.4388	0.5226	0.1536	0.1136	0.7051	0.5162	0.1889	-0.3247
71	34.70	0.14	7.6019	-2.6230	0.5348	0.1788	0.1291	0.6820	0.5199	0.1621	-0.3458
72	34.83	0.15	7.7026	-2.7527	0.5721	0.2363	0.1345	0.6959	0.5243	0.1716	-0.3574
73	34.96	0.15	7.5884	-2.6535	0.5652	0.2858	0.1344	0.6962	0.5186	0.1776	-0.3497
74	35.05	0.16	7.5625	-2.6844	0.6731	0.1282	0.1399	0.6970	0.5209	0.1761	-0.3558
75	35.20	0.13	7.9145	-2.5568	0.3573	0.5509	0.1031	0.6851	0.5175	0.1676	-0.3272
76	35.33	0.15	7.8300	-2.9375	0.5887	0.3303	0.1346	0.6731	0.5188	0.1543	-0.3718
77	35.45	0.12	7.8853	-2.5308	0.3057	0.4749	0.0926	0.6729	0.5175	0.1554	-0.3217
78	35.57	0.13	7.9583	-2.9262	0.5494	0.4261	0.1296	0.6879	0.5192	0.1687	-0.3674
79	35.68	0.12	7.9396	-2.6842	0.3165	0.4978	0.0876	0.6705	0.5189	0.1517	-0.3136
80	35.80	0.12	8.0517	-2.6657	0.2854	0.7177	0.1133	0.6806	0.5330	0.1476	-0.3559
81	35.94	0.14	8.0804	-2.7972	0.4046	0.4731	0.1090	0.6834	0.5246	0.1588	-0.3462
82	36.05	0.11	8.1398	-3.1037	0.3276	0.7351	0.1133	0.6868	0.5242	0.1626	-0.3815
83	36.18	0.14	8.3079	-3.3500	0.4731	0.7320	0.1242	0.6744	0.5366	0.1378	-0.4032
84	36.30	0.13	8.2957	-2.9369	0.4117	0.6275	0.1142	0.6712	0.5282	0.1431	-0.3548
85	36.40	0.14	8.2706	-3.0439	0.4400	0.7083	0.1141	0.6629	0.5206	0.1424	-0.3677
86	36.53	0.15	8.4694	-3.4887	0.5662	0.6560	0.1247	0.6768	0.5296	0.1472	-0.4119
87	36.65	0.13	8.4018	-3.2703	0.3720	0.8392	0.1242	0.6653	0.5222	0.1432	-0.3892
88	36.77	0.12	8.4790	-2.9479	0.3064	0.7756	0.0987	0.6388	0.5188	0.1201	-0.3408
89	36.88	0.14	8.5040	-3.1340	0.4353	0.8072	0.1145	0.6553	0.9205	0.1349	-0.3685
90	37.01	0.11	8.5461	-3.1675	0.2505	0.9945	0.1087	0.6630	0.5182	0.1448	-0.3707
91	37.11	0.13	8.5605	-3.3879	0.4167	0.8761	0.1143	0.6652	0.5236	0.1417	-0.3950
92	37.25	0.12	8.7135	-3.3187	0.2764	0.9768	0.1089	0.6475	0.5252	0.1224	-0.3809

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	11	1.10	1.17	45.0	MIKOF23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	37.37	0.12	8.8428	-3.0382	0.2661	0.8742	0.1092	0.6518	0.5168	0.1351	-0.3511
94	37.48	0.12	8.7125	-3.1765	0.2778	0.8721	0.1040	0.6435	0.5081	0.1355	-0.3646
95	37.60	0.11	8.7461	-3.1083	0.1736	0.9462	0.0934	0.6419	0.5118	0.1302	-0.3535
96	37.73	0.11	8.8162	-3.2343	0.2485	0.8736	0.1040	0.6238	0.5151	0.1086	-0.3669
97	37.43	0.10	8.7779	-3.1701	0.1240	1.0450	0.0932	0.6645	0.5132	0.1514	-0.3611
98	37.94	0.11	8.9507	-3.1336	0.1753	0.9560	0.0935	0.6257	0.5085	0.1173	-0.3567
99	38.08	0.13	9.0653	-3.1406	0.3084	0.8033	0.0993	0.6419	0.5094	0.1326	-0.3542
100	38.16	0.09	8.8698	-2.8869	0.0449	0.7592	0.0779	0.6151	0.4937	0.1215	-0.3225
101	38.30	0.11	8.9915	-3.2219	0.1944	0.8430	0.0846	0.6306	0.5074	0.1233	-0.3583
102	38.43	0.10	8.9963	-2.9892	0.1247	0.6078	0.0834	0.6044	0.4923	0.1122	-0.3322
103	38.54	0.10	9.0163	-3.0442	0.1105	0.7492	0.0886	0.6252	0.4984	0.1269	-0.3376
104	38.65	0.11	8.9867	-2.8702	0.2712	0.6361	0.0738	0.6140	0.4920	0.1221	-0.3194
105	38.78	0.09	9.0733	-2.8668	0.1189	0.6125	0.0786	0.6068	0.4923	0.1146	-0.3160
106	38.88	0.10	9.0390	-3.1127	0.2273	0.8349	0.0942	0.6170	0.4872	0.1299	-0.3444
107	38.99	0.10	9.0438	-2.7840	0.2332	0.5603	0.0531	0.5903	0.4784	0.1119	-0.3065
108	39.11	0.08	9.1430	-2.8174	0.0743	0.5968	0.0631	0.5885	0.4727	0.1158	-0.3082
109	39.20	0.07	9.1405	-2.9599	-0.0162	0.8268	0.0730	0.6068	0.4787	0.1281	-0.3236
110	39.33	0.10	9.3392	-3.0489	0.2167	0.5866	0.0636	0.5853	0.4744	0.1109	-0.3265
111	39.45	0.07	9.3175	-2.8409	-0.0182	0.6361	0.0371	0.5715	0.4723	0.0992	-0.3049
112	39.53	0.08	9.2237	-2.7684	-0.0987	0.6498	0.0316	0.5950	0.4754	0.1196	-0.3023
113	39.66	0.07	9.3955	-2.8077	-0.0104	0.5044	0.0062	0.5654	0.4703	0.0950	-0.2988
114	39.77	0.06	9.4267	-2.9011	0.0316	0.5420	-0.0041	0.5770	0.4741	0.1029	-0.3078
115	39.96	0.06	9.4314	-2.9161	-0.1163	0.6106	0.0161	0.5693	0.4622	0.1071	-0.3092
116	39.97	0.07	9.5419	-2.9513	-0.0515	0.6690	0.0217	0.5517	0.4659	0.0857	-0.3091
117	40.09	0.08	9.5661	-3.1429	0.1095	0.7012	0.0429	0.5656	0.4639	0.1017	-0.3285
118	40.19	0.08	9.5278	-2.8637	0.1231	0.5524	0.0328	0.5456	0.4485	0.0971	-0.3027
119	40.28	0.07	9.4720	-2.8373	0.0350	0.6784	0.0325	0.5576	0.4531	0.1045	-0.2995
120	40.41	0.08	9.7095	-3.1551	0.0139	0.7764	0.0324	0.5552	0.4604	0.0945	-0.3258
121	40.50	0.07	9.7411	-3.2503	0.0010	0.9280	0.0427	0.5433	0.4555	0.0877	-0.3337
122	40.59	0.07	9.7316	-3.1491	-0.0895	0.7561	0.0374	0.5496	0.4548	0.0945	-0.3226
123	40.70	0.06	9.7562	-3.0579	0.0762	0.6956	0.0330	0.5474	0.4546	0.0927	-0.3122
124	40.80	0.07	9.7698	-3.0539	-0.0125	0.7154	0.0327	0.5433	0.4540	0.0892	-0.3126
125	40.90	0.06	9.8584	-3.0480	0.1804	0.3657	0.0231	0.5417	0.4452	0.0965	-0.3092
126	41.02	0.07	9.8974	-3.1351	0.0812	0.5362	0.0280	0.5452	0.4445	0.1007	-0.3168
127	41.11	0.07	9.7676	-3.1907	0.0445	0.6169	0.0328	0.5473	0.4449	0.1024	-0.3260
128	41.21	0.09	9.9453	-3.0406	0.2631	0.1667	0.0236	0.5234	0.4439	0.0794	-0.3060
129	41.33	0.07	10.1056	-3.3766	-0.0832	0.7656	0.0327	0.5249	0.4469	0.0779	-0.3341
130	41.44	0.09	10.0867	-3.3163	0.1530	0.3572	0.0336	0.5306	0.4388	0.0917	-0.3298
131	41.52	0.08	9.9994	-3.1796	0.1262	0.2200	0.0231	0.5331	0.4409	0.0921	-0.3180
132	41.64	0.07	10.1931	-3.3447	0.0324	0.4139	0.0385	0.5184	0.4388	0.0795	-0.3281
133	41.76	0.07	10.2459	-3.3560	-0.0519	0.6814	0.0330	0.5171	0.4473	0.0697	-0.3434
134	41.86	0.07	10.2600	-3.4095	-0.0226	0.5314	0.0331	0.5248	0.4365	0.0882	-0.3382
135	41.94	0.07	10.3043	-3.4383	-0.0227	0.7698	0.0278	0.5315	0.4385	0.0929	-0.3529
136	42.04	0.08	10.2776	-3.4381	0.0068	0.4722	0.0395	0.5374	0.4332	0.1042	-0.3548
137	42.15	0.09	10.4477	-3.6104	0.2068	-0.1760	0.0185	0.5080	0.4325	0.0760	-0.3456
138	42.25	0.08	10.3972	-3.4274	0.1638	-0.0457	0.0236	0.5044	0.4251	0.0792	-0.3312

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 11 1.10 1.7 45.0 dla0f23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	42.35	0.09	10.5097	-3.7330	0.2904	0.3564	0.0289	0.5260	0.4432	0.0827	-0.3553
140	42.45	0.09	10.5063	-3.6890	0.2421	0.0124	0.0241	0.5031	0.4218	0.0820	-0.3348
141	42.53	0.08	10.4756	-3.6659	0.1042	0.3311	0.0289	0.5020	0.4230	0.0789	-0.3289
142	42.62	0.08	10.4662	-3.6252	0.1657	0.1249	0.0186	0.4884	0.4119	0.0764	-0.3272
143	42.72	0.09	10.5323	-3.7369	0.2079	0.4600	0.0290	0.5073	0.4240	0.0832	-0.3546
144	42.82	0.08	10.6365	-3.8002	0.1763	0.1814	0.0188	0.5005	0.4126	0.0878	-0.3385
145	42.90	0.08	10.6350	-3.6956	0.1600	0.1662	0.0241	0.4902	0.4122	0.0779	-0.3287
146	43.00	0.08	10.6939	-3.6655	0.1787	0.1921	0.0243	0.4888	0.4105	0.0782	-0.3315
147	43.09	0.07	10.7930	-3.6361	0.1167	0.1852	0.0137	0.4769	0.4105	0.0664	-0.3339
148	43.17	0.08	10.7068	-3.5363	0.1360	0.2638	0.0189	0.4703	0.4098	0.0605	-0.3305
149	43.26	0.07	10.7796	-3.7107	0.0459	0.4501	0.0185	0.4878	0.4058	0.0819	-0.3442
150	43.36	0.08	10.8266	-3.6810	0.0665	0.3780	0.0169	0.4838	0.4108	0.0729	-0.3326
151	43.45	0.08	10.8381	-3.6855	0.2657	-0.2198	0.0195	0.4657	0.4014	0.0643	-0.3600
152	43.54	0.07	10.8339	-3.7526	0.0314	0.4301	0.0136	0.4651	0.4072	0.0579	-0.3443
153	43.63	0.08	10.8250	-3.6848	0.1274	0.2207	0.0190	0.4926	0.4078	0.0847	-0.3404
154	43.74	0.01	11.0579	-3.8418	0.0626	0.4983	0.0086	0.4691	0.3971	0.0720	-0.3474
155	43.83	0.07	11.0266	-3.6795	0.0594	0.3765	0.0087	0.4556	0.3923	0.0633	-0.3336
156	43.91	0.08	10.9578	-3.7638	0.1506	0.3563	0.0088	0.4595	0.3913	0.0682	-0.3435
157	44.01	0.08	11.0749	-3.6872	0.2097	0.1615	0.0145	0.4543	0.3940	0.0603	-0.3329
158	44.07	0.08	11.0736	-3.7205	0.2091	-0.3141	0.0147	0.4633	0.3856	0.0777	-0.3360
159	44.17	0.07	11.1251	-3.8469	0.1097	-0.0250	0.0089	0.4477	0.3843	0.0634	-0.3458
160	44.25	0.07	11.0127	-3.7678	0.0787	0.5139	0.0139	0.4580	0.3951	0.0629	-0.3421
161	44.35	0.07	11.2148	-3.7427	0.1257	0.0634	0.0145	0.4406	0.3789	0.0617	-0.3337
162	44.45	0.08	11.2408	-3.6983	0.0360	0.4005	-0.0018	0.4392	0.3836	0.0556	-0.3557
163	44.55	0.07	11.2018	-3.7641	0.1156	0.1628	0.0039	0.4379	0.3748	0.0631	-0.3360
164	44.63	0.08	11.3087	-3.6913	0.0579	0.3394	-0.0012	0.4266	0.3731	0.0535	-0.3264
165	44.73	0.08	11.2569	-3.7489	0.0993	0.0110	0.0093	0.4391	0.3781	0.0610	-0.3330
166	44.84	0.08	11.3951	-3.7687	-0.0003	0.3968	-0.0065	0.4209	0.3703	0.0506	-0.3307
167	44.91	0.08	11.3664	-3.7222	0.0691	0.2470	-0.0011	0.4170	0.3690	0.0480	-0.3275
168	45.02	0.08	11.4434	-3.8427	0.0130	0.4682	-0.0117	0.4277	0.3704	0.0573	-0.3349
169	45.10	0.08	11.4227	-3.6632	0.0965	0.3097	-0.0113	0.4130	0.3646	0.0484	-0.3207
170	45.20	0.08	11.4541	-3.7350	0.1133	0.0366	0.0045	0.4047	0.3660	0.0387	-0.3262
171	45.28	0.07	11.5387	-3.6201	0.1666	0.1011	-0.0004	0.4277	0.3623	0.0654	-0.3311
172	45.38	0.08	11.4688	-3.8509	0.0232	0.3717	-0.0116	0.4265	0.3630	0.0635	-0.3358
173	45.47	0.08	11.4214	-3.8278	-0.0051	0.5068	-0.0221	0.4146	0.3630	0.0516	-0.3466
174	45.55	0.07	11.5988	-3.7233	0.1425	-0.0533	0.0050	0.4186	0.3649	0.0537	-0.3218
175	45.65	0.08	11.7038	-3.9041	0.0924	0.0138	-0.0009	0.4054	0.3653	0.0401	-0.3336
176	45.75	0.08	11.6837	-3.8107	0.0567	0.1078	-0.0109	0.4119	0.3656	0.0463	-0.3262
177	45.83	0.08	11.6761	-3.8657	0.0877	0.0557	-0.0002	0.3949	0.3507	0.0442	-0.3157
178	45.91	0.07	11.7035	-3.8347	0.1388	0.2339	-0.0106	0.4191	0.3581	0.0610	-0.3277
179	46.01	0.08	11.8054	-3.7558	0.0896	0.0474	-0.0053	0.3968	0.3619	0.0349	-0.3181
180	46.08	0.05	11.7616	-3.8579	0.0184	-0.0663	0.0153	0.4116	0.3653	0.0461	-0.3276
181	46.17	0.08	11.8225	-3.9160	0.0182	0.1779	-0.0109	0.4157	0.3632	0.0525	-0.3311
182	46.28	0.05	11.9726	-3.8713	-0.0576	0.5650	-0.0475	0.4068	0.3591	0.0477	-0.3233
183	46.35	0.06	11.7707	-3.8832	-0.0043	0.3301	-0.0160	0.3999	0.3608	0.0391	-0.3129
184	46.45	0.05	11.9906	-3.8996	-0.0178	0.1744	-0.0106	0.4028	0.3558	0.0470	-0.3211

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 5 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 11 MACH 1.10 RN/F 1.7 PHI 45.0 CONF B1A6F23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	EPS	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
195	46.53	0.07	11.8744	-3.8285	0.0454	0.2430	-0.0209	0.3974	0.3612	0.0362	-0.3223
196	46.63	0.06	12.0454	-3.8826	0.0873	0.1831	-0.0205	0.3963	0.3557	0.0406	-0.3171
197	46.70	0.07	11.9851	-3.8156	0.2049	-0.0780	0.0007	0.4006	0.3563	0.0443	-0.3184
198	46.78	0.07	11.9364	-3.7619	0.1664	-0.0438	0.0006	0.4060	0.3584	0.0476	-0.3136
199	46.89	0.07	12.0461	-3.7740	0.1522	0.0526	-0.0045	0.3836	0.3533	0.0303	-0.3120
200	46.96	0.07	12.0657	-3.7408	0.1457	-0.0413	0.0008	0.3917	0.3557	0.0360	-0.3108
201	47.04	0.07	12.0725	-3.8381	0.0617	0.0416	-0.0047	0.3905	0.3543	0.0362	-0.3026
202	47.15	0.08	12.1042	-3.7240	0.1179	-0.1190	0.0060	0.3931	0.3581	0.0358	-0.3077
203	47.23	0.06	12.1209	-3.8563	0.0792	0.0140	0.0008	0.3885	0.3517	0.0348	-0.3017
204	47.32	0.07	12.2200	-3.7104	0.1311	-0.0467	0.0126	0.3926	0.3652	0.0274	-0.3036
205	47.40	0.07	12.1360	-3.8960	0.1494	-0.1391	0.0221	0.3850	0.3645	0.0205	-0.2964
206	47.49	0.08	12.3116	-3.7766	0.0749	-0.1040	0.0115	0.3967	0.3591	0.0396	-0.3068
207	47.58	0.05	12.3149	-3.8523	0.0785	-0.0236	0.0020	0.3774	0.3550	0.0224	-0.2965
208	47.66	0.05	12.2870	-3.8498	0.0319	0.0140	0.0017	0.3815	0.3584	0.0231	-0.2975
209	47.76	0.06	12.4416	-3.8201	0.1259	-0.0751	0.0127	0.3846	0.3635	0.0211	-0.3070
210	47.84	0.07	12.2918	-3.8451	0.2076	-0.1344	0.0183	0.3858	0.3573	0.0285	-0.2884
201	47.92	0.07	12.3150	-3.8561	0.1875	-0.2050	0.0234	0.3979	0.3614	0.0365	-0.2969
202	48.02	0.07	12.3866	-3.7569	0.1743	-0.2391	0.0267	0.3915	0.3546	0.0369	-0.3036
203	48.09	0.07	12.4449	-3.8580	0.1673	-0.3146	0.0236	0.3909	0.3668	0.0241	-0.2939
204	48.09	0.07	12.4018	-3.8819	0.1877	-0.1642	0.0131	0.3810	0.3610	0.0200	-0.2888
205	48.09	0.07	12.3709	-3.8678	0.2600	-0.2888	0.0241	0.3783	0.3621	0.0162	-0.2803
206	48.07	0.07	12.2627	-3.8238	0.2911	-0.2039	0.0183	0.3889	0.3648	0.0241	-0.2955
207	47.26	0.06	11.9401	-3.8765	0.1502	-0.0414	0.0060	0.3813	0.3661	0.0152	-0.2995
208	46.43	0.05	11.6646	-3.9829	0.0153	0.1876	-0.0003	0.3903	0.3681	0.0222	-0.2987
209	45.56	0.06	11.5534	-4.0262	0.0203	0.5861	-0.0119	0.4380	0.3927	0.0453	-0.3485
210	44.66	0.06	11.0475	-3.9418	0.0671	0.3386	0.0091	0.4642	0.4056	0.0586	-0.3115
211	43.77	0.05	10.7692	-3.8196	0.1434	0.2412	0.0195	0.4801	0.4383	0.0418	-0.3077
212	42.83	0.06	10.3778	-3.8519	0.0687	0.3283	0.0187	0.5075	0.4432	0.0642	-0.2941
213	41.95	0.08	9.9026	-2.8217	0.2430	0.3048	0.0450	0.5420	0.4653	0.0766	-0.2849
214	40.86	0.05	9.6652	-2.8766	-0.0267	0.6954	0.0225	0.5603	0.4855	0.0748	-0.2769
215	39.98	0.06	9.3130	-2.8231	0.0586	0.8770	0.0433	0.5667	0.4924	0.0743	-0.2817
216	38.85	0.07	8.9111	-2.8534	0.1421	0.3319	0.0063	0.5859	0.4917	0.0942	-0.2529
217	37.81	0.09	8.6247	-2.7716	0.3262	0.8979	0.0741	0.6204	0.5193	0.1012	-0.3214
218	36.76	0.11	8.2495	-2.7174	0.4454	0.6993	0.0896	0.6471	0.5327	0.1145	-0.3294
219	35.66	0.11	7.8141	-2.6352	0.5410	0.6079	0.1158	0.6607	0.5409	0.1199	-0.3115
220	34.53	0.12	7.2929	-2.8832	0.6810	0.2747	0.1160	0.6684	0.5375	0.1310	-0.2582
221	33.39	0.12	6.7696	-2.6714	0.7259	-0.0020	0.1156	0.6613	0.5314	0.1297	-0.2173
222	32.53	0.12	6.4898	-2.6400	0.6939	-0.1554	0.1046	0.6732	0.5276	0.1456	-0.1911
223	31.46	0.11	5.9412	-2.6400	0.7041	-0.3443	0.1145	0.6745	0.5209	0.1536	-0.1582
224	30.68	0.11	5.6145	-2.6227	0.6512	-0.3059	0.1083	0.6584	0.5109	0.1480	-0.1643
225	29.62	0.11	5.2846	-2.6166	0.6365	-0.0035	0.1545	0.6460	0.4876	0.1585	-0.2302
226	28.35	0.10	4.7985	-2.2271	0.4753	-0.0338	0.1265	0.6344	0.4652	0.1692	-0.2557
227	27.16	0.09	4.3258	-2.3508	0.3339	-0.0859	0.0717	0.6244	0.4467	0.1777	-0.3120
228	25.77	0.10	3.9685	-2.0022	0.5231	-0.4643	0.0447	0.6195	0.4221	0.1974	-0.4037
229	24.39	0.09	3.5455	-1.8613	0.4030	-0.5068	-0.0154	0.5966	0.3903	0.2063	-0.5250
230	23.04	0.07	3.1256	-1.9765	0.2932	-0.3085	-0.0275	0.6035	0.3760	0.2275	-0.6324

PAGE 2 OF 3
SHEET 1 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RA10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 11 1.10 1.7 45.0 NI=0F21 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
1	-2.60	0.07	0.1413	0.0195	0.1296	0.1400	0.9173	0.0163	0.0005	-0.0465	0.0296	-2.8521
2	-2.59	0.06	0.1579	0.0185	0.1359	0.1173	0.8601	0.0141	-0.0007	-0.0486	-0.0479	-3.4521
3	-2.58	0.09	0.1355	0.0195	0.1244	0.1439	0.9181	0.0185	0.0012	-0.0435	0.0625	-2.3498
4	-2.58	0.10	0.1414	0.0186	0.1295	0.1331	0.9160	0.0148	0.0	-0.0486	0.0	-3.4759
5	-2.59	0.06	0.1559	0.0195	0.1339	0.1250	0.8589	0.0163	0.0	-0.0465	0.0	-2.8521
6	-2.59	0.07	0.1434	0.0188	0.1318	0.1296	0.9064	0.0115	0.0005	-0.0459	0.0420	-4.0008
7	-2.59	0.08	0.1436	0.0191	0.1306	0.1332	0.9112	0.0279	0.0016	-0.0408	0.0588	-1.4637
8	-2.58	0.07	0.1290	0.0184	0.1246	0.1458	0.9056	0.0208	0.0012	-0.0433	0.0556	-2.0787
9	-2.58	0.08	0.1042	0.0179	0.1154	0.1713	1.1074	0.0277	0.0016	-0.0341	0.0592	-1.3031
10	-2.07	0.09	0.0959	0.0148	0.1134	0.1519	1.1821	0.0459	0.0026	-0.0167	0.0567	-0.3634
11	-1.25	0.08	0.0260	0.0089	0.0870	0.2639	3.3532	0.0347	0.0078	0.0091	0.0826	0.0950
12	-0.29	0.09	-0.0165	0.0007	0.0645	-0.0409	-3.9123	0.1533	0.0127	0.0285	0.0831	0.1598
13	0.65	0.09	-0.0578	-0.0013	0.0490	0.0217	-0.8441	0.2191	0.0168	0.0452	0.0766	0.2061
14	1.62	0.09	-0.1072	-0.0033	0.0289	0.0306	-0.2700	0.2942	0.0215	0.0703	0.0731	0.2391
15	2.60	0.10	-0.1546	-0.0065	0.0085	0.0408	-0.0535	0.3412	0.0238	0.0847	0.0699	0.2483
16	3.63	0.09	-0.2117	-0.0108	-0.0107	0.0492	0.0789	0.4208	0.0283	0.1150	0.0672	0.2733
17	4.56	0.09	-0.2663	-0.0114	-0.0356	0.0459	0.1426	0.4784	0.0333	0.1566	0.0696	0.3273
18	5.60	0.08	-0.2911	-0.0120	-0.0565	0.0411	0.1962	0.5180	0.0361	0.1750	0.0697	0.3379
19	6.63	0.09	-0.3199	-0.0116	-0.0697	0.0356	0.2178	0.5809	0.0380	0.2085	0.0654	0.3589
20	7.59	0.09	-0.3382	-0.0128	-0.0806	0.0231	0.2382	0.6678	0.0394	0.2631	0.0590	0.3660
21	8.53	0.10	-0.3731	-0.0069	-0.0961	0.0164	0.2576	0.7218	0.0387	0.2673	0.0536	0.3703
22	9.55	0.10	-0.4016	-0.0042	-0.1118	0.0106	0.2785	0.7994	0.0392	0.2963	0.0490	0.3787
23	10.57	0.10	-0.4095	-0.0026	-0.1191	0.0064	0.2908	0.8746	0.0387	0.3270	0.0442	0.3739
24	11.54	0.09	-0.4143	-0.0010	-0.1302	0.0023	0.3104	0.9412	0.0380	0.3506	0.0404	0.3725
25	12.56	0.09	-0.4361	0.0003	-0.1366	-0.0007	0.3119	1.0121	0.0371	0.3753	0.0366	0.3709
26	13.53	0.09	-0.4523	0.0013	-0.1445	-0.0028	0.3195	1.0731	0.0361	0.4011	0.0336	0.3738
27	14.59	0.09	-0.4619	0.0033	-0.1555	-0.0071	0.3367	1.1461	0.0328	0.4353	0.0286	0.3799
28	15.59	0.09	-0.4536	0.0036	-0.1528	-0.0079	0.3369	1.1956	0.0310	0.4545	0.0259	0.3881
29	16.55	0.09	-0.4655	0.0062	-0.1622	-0.0133	0.3484	1.2758	0.0281	0.4837	0.0220	0.3791
30	17.56	0.09	-0.4761	0.0081	-0.1670	-0.0170	0.3493	1.3230	0.0262	0.5026	0.0198	0.3799
31	18.58	0.10	-0.5190	0.0091	-0.1870	-0.0175	0.3603	1.3657	0.0253	0.5137	0.0185	0.3761
32	19.62	0.09	-0.5624	0.0120	-0.1021	-0.0238	0.3627	1.4023	0.0260	0.5240	0.0185	0.3737
33	20.67	0.11	-0.4751	0.0159	-0.1739	-0.0335	0.3652	1.4448	0.0248	0.5397	0.0172	0.3736
34	21.70	0.10	-0.4916	0.0150	-0.1799	-0.0364	0.3658	1.4779	0.0238	0.5491	0.0161	0.3715
35	22.73	0.11	-0.4963	0.0159	-0.1704	-0.0343	0.3670	1.5120	0.0227	0.5619	0.0150	0.3716
36	23.77	0.13	-0.5016	0.0174	-0.1593	-0.0343	0.3842	1.5570	0.0201	0.5759	0.0129	0.3699
37	24.81	0.12	-0.3638	0.0231	-0.1464	-0.0634	0.4024	1.5831	0.0181	0.5836	0.0115	0.3687
38	25.86	0.13	-0.2327	0.0269	-0.0871	-0.1157	0.3744	1.6187	0.0158	0.5941	0.0098	0.3670
39	26.93	0.14	-0.1054	0.0294	-0.0268	-0.2501	0.2330	1.6469	0.0134	0.6057	0.0081	0.3678
40	27.97	0.14	0.0109	0.0282	0.0243	2.5941	2.2301	1.6660	0.0111	0.6111	0.0067	0.3668
41	29.06	0.14	0.0330	0.0191	0.0504	0.3607	1.0346	1.6979	0.0078	0.6226	0.0046	0.3667
42	30.26	0.16	0.1252	0.0239	0.0892	0.1911	0.5902	1.7238	0.0059	0.6313	0.0036	0.3662
43	31.51	0.13	0.0597	0.0315	0.0481	0.5247	0.8045	1.4528	0.0014	0.5172	0.0010	0.3464
44	31.66	0.15	0.0557	0.0295	0.0456	0.5355	0.8198	1.4985	0.0005	0.5248	0.0003	0.3502
45	31.67	0.14	0.0316	0.0275	0.0319	0.8716	1.0122	1.4985	0.0005	0.5258	0.0003	0.3508
46	31.67	0.14	0.0542	0.0301	0.0400	0.5552	0.7384	1.4962	0.0007	0.5228	0.0005	0.3494

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 5

MANTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	11	1.1M	1.7	45.0	B1=OF23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	31.59	0.16	0.0766	0.0278	0.0532	0.3636	0.6957	1.4974	0.0005	0.5256	0.0003	0.3509
48	31.70	0.16	0.0559	0.0291	0.0538	0.5216	0.7841	1.5043	0.0	0.5306	0.0	0.3527
49	31.80	0.15	0.0739	0.0284	0.0547	0.3838	0.7402	1.5110	0.0	0.5304	0.0	0.3518
50	32.08	0.15	0.0516	0.0271	0.0444	0.5272	0.8724	1.5121	0.0	0.5312	0.0	0.3513
51	32.11	0.15	0.0572	0.0266	0.0501	0.4688	0.8752	1.5215	-0.0005	0.5356	-0.0003	0.3520
52	32.25	0.15	0.0541	0.0307	0.0390	0.5868	0.7201	1.5052	-0.0005	0.5277	-0.0003	0.3506
53	32.42	0.14	0.0411	0.0281	0.0410	0.6362	0.9977	1.5204	-0.0007	0.5342	-0.0004	0.3514
54	32.52	0.14	0.0477	0.0287	0.0491	0.6012	0.8198	1.5188	-0.0012	0.5359	-0.0008	0.3530
55	32.65	0.15	0.0266	0.0264	0.0366	0.9312	1.3737	1.5133	-0.0010	0.5337	-0.0006	0.3527
56	32.91	0.14	0.0382	0.0268	0.0479	0.6490	1.2525	1.5321	-0.0018	0.5408	-0.0012	0.3530
57	32.92	0.17	0.0485	0.0256	0.0508	0.5308	1.0477	1.5252	-0.0023	0.5374	-0.0015	0.3524
58	33.06	0.14	0.0366	0.0272	0.0417	0.7065	1.0766	1.5274	-0.0021	0.5414	-0.0014	0.3545
59	33.20	0.14	0.0315	0.0264	0.0399	0.7883	1.5659	1.5133	-0.0018	0.5355	-0.0012	0.3539
60	33.31	0.15	0.0325	0.0278	0.0401	0.8027	1.2366	1.5180	-0.0018	0.5359	-0.0012	0.3538
61	33.45	0.14	0.0580	0.0268	0.0418	0.4276	1.0656	1.5367	-0.0021	0.5431	-0.0014	0.3534
62	33.58	0.14	0.0333	0.0235	0.0536	0.7072	1.6116	1.5460	-0.0028	0.5513	-0.0018	0.3568
63	33.69	0.17	0.0792	0.0287	0.0716	0.3667	0.9160	1.5390	-0.0031	0.5479	-0.0020	0.3561
64	33.83	0.14	0.0551	0.0296	0.0681	0.5377	0.8734	1.5320	-0.0031	0.5445	-0.0020	0.3556
65	33.96	0.15	0.0795	0.0274	0.0737	0.3727	1.0026	1.5444	-0.0033	0.5479	-0.0021	0.3547
66	34.07	0.16	0.0655	0.0255	0.0740	0.3688	1.0677	1.5445	-0.0035	0.5470	-0.0022	0.3542
67	34.21	0.14	0.0735	0.0274	0.0737	0.3727	1.0026	1.5444	-0.0038	0.5488	-0.0024	0.3554
68	34.33	0.15	0.0690	0.0256	0.0757	0.3678	1.0979	1.5595	-0.0044	0.5572	-0.0028	0.3573
69	34.44	0.14	0.0373	0.0254	0.0561	0.6796	1.4496	1.5432	-0.0042	0.5503	-0.0028	0.3566
70	34.56	0.14	0.0661	0.0260	0.0626	0.4367	0.9776	1.5525	-0.0049	0.5547	-0.0032	0.3573
71	34.70	0.14	0.0466	0.0229	0.0679	0.4702	1.3968	1.5571	-0.0046	0.5570	-0.0030	0.3577
72	34.83	0.15	0.0308	0.0232	0.0594	0.6239	1.6168	1.5595	-0.0051	0.5582	-0.0033	0.3587
73	34.96	0.15	0.0401	0.0237	0.0671	0.5769	1.6707	1.5618	-0.0051	0.5583	-0.0033	0.3574
74	35.05	0.16	0.0375	0.0215	0.0712	0.5733	1.8972	1.5689	-0.0056	0.5598	-0.0036	0.3568
75	35.20	0.13	-0.0102	0.0215	0.0406	-2.1038	-3.9717	1.5477	-0.0046	0.5543	-0.0030	0.3581
76	35.33	0.15	0.0009	0.0225	0.0561	3.2361	8.3472	1.5502	-0.0059	0.5555	-0.0038	0.3583
77	35.45	0.16	0.0065	0.0254	0.0435	3.9254	6.7313	1.5501	-0.0061	0.5582	-0.0039	0.3601
78	35.57	0.15	-0.0069	0.0222	0.0463	-3.2394	-7.0563	1.5666	-0.0061	0.5615	-0.0039	0.3584
79	35.68	0.16	-0.0277	0.0277	0.0736	-1.0000	-0.8537	1.5385	-0.0054	0.5517	-0.0035	0.3586
80	35.80	0.12	-0.0259	0.0190	0.0470	-0.7351	-1.8172	1.5665	-0.0066	0.5643	-0.0042	0.3602
81	35.94	0.14	-0.0072	0.0206	0.0518	-2.8400	-7.1600	1.5758	-0.0068	0.5659	-0.0043	0.3591
82	36.05	0.13	-0.0149	0.0183	0.0504	-2.9268	-2.5463	1.5850	-0.0075	0.5741	-0.0047	0.3622
83	36.18	0.14	-0.0201	0.0196	0.0522	-0.9760	-2.6010	1.5758	-0.0075	0.5669	-0.0048	0.3597
84	36.30	0.13	-0.0303	0.0215	0.0467	-0.7102	-1.5414	1.5595	-0.0066	0.5599	-0.0042	0.3598
85	36.40	0.14	-0.0186	0.0222	0.0553	-1.2042	-3.0000	1.5524	-0.0070	0.5621	-0.0045	0.3621
86	36.53	0.15	-0.0450	0.0171	0.0458	-0.3927	-1.0193	1.5994	-0.0092	0.5784	-0.0057	0.3591
87	36.65	0.15	-0.0444	0.0203	0.0442	-0.4516	-0.9849	1.5735	-0.0079	0.5667	-0.0050	0.3601
88	36.77	0.12	-0.0710	0.0215	0.0267	-0.3630	-0.4035	1.5656	-0.0068	0.5568	-0.0044	0.3603
89	36.88	0.14	-0.0960	0.0171	0.0248	-0.1779	-0.2583	1.5523	-0.0072	0.5640	-0.0047	0.3633
90	37.01	0.14	-0.0758	0.0200	0.0336	-0.2634	-0.4427	1.5675	-0.0077	0.5683	-0.0049	0.3626
91	37.11	0.13	-0.0717	0.0174	0.0357	-0.2423	-0.4980	1.5746	-0.0089	0.5707	-0.0056	0.3625
92	37.25	0.14	-0.0780	0.0209	0.0334	-0.2586	-0.4282	1.5498	-0.0075	0.5584	-0.0049	0.3605

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RA10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	11	1.61	1.67	95.0	B1=0E23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
47	31.59	0.12	0.0760	0.0278	0.0532	0.3636	0.6957	1.4974	0.0005	0.5254	0.0003	0.3509
48	31.78	0.14	0.0559	0.0291	0.0448	0.5216	0.7841	1.5043	0.0	0.5306	0.0	0.3527
49	31.96	0.15	0.0739	0.0284	0.0547	0.3838	0.7402	1.5110	0.0	0.5304	0.0	0.3510
50	32.04	0.15	0.0514	0.0271	0.0449	0.5272	0.8226	1.5121	0.0	0.5312	0.0	0.3513
51	32.11	0.15	0.0572	0.0266	0.0501	0.4688	0.8752	1.5215	-0.0005	0.5356	-0.0003	0.3520
52	32.25	0.15	0.0561	0.0307	0.0390	0.5668	0.7201	1.5052	-0.0005	0.5277	-0.0003	0.3506
53	32.42	0.14	0.0411	0.0261	0.0410	0.6367	0.9977	1.5204	-0.0007	0.5342	-0.0004	0.3514
54	32.52	0.14	0.0477	0.0287	0.0391	0.6012	0.9198	1.5180	-0.0012	0.5359	-0.0008	0.3538
55	32.65	0.15	0.0266	0.0248	0.0364	0.9312	1.3732	1.5133	-0.0010	0.5337	-0.0006	0.3527
56	32.81	0.14	0.0336	0.0294	0.0479	0.8049	1.2525	1.5121	-0.0018	0.5348	-0.0012	0.3538
57	32.92	0.17	0.0695	0.0258	0.0508	0.5308	1.0477	1.5252	-0.0023	0.5374	-0.0015	0.3524
58	33.06	0.16	0.0348	0.0274	0.0417	0.7065	1.0746	1.5274	-0.0021	0.5414	-0.0014	0.3545
59	33.20	0.14	0.0315	0.0264	0.0499	0.7883	1.5859	1.5133	-0.0018	0.5355	-0.0012	0.3539
60	33.31	0.15	0.0325	0.0274	0.0401	0.6627	1.2344	1.5180	-0.0018	0.5359	-0.0012	0.3538
61	33.45	0.14	0.0366	0.0245	0.0614	0.4276	1.0666	1.5367	-0.0021	0.5431	-0.0014	0.3534
62	33.58	0.14	0.0343	0.0235	0.0536	0.7072	1.6116	1.5400	-0.0024	0.5513	-0.0018	0.3566
63	33.69	0.17	0.0742	0.0287	0.0716	0.3667	0.9160	1.5390	-0.0031	0.5479	-0.0020	0.3561
64	33.83	0.16	0.0551	0.0296	0.0661	0.5377	0.8739	1.5320	-0.0031	0.5445	-0.0020	0.3556
65	33.96	0.15	0.0735	0.0274	0.0737	0.3727	1.0026	1.5444	-0.0033	0.5479	-0.0021	0.3547
66	34.07	0.16	0.0653	0.0255	0.0700	0.3888	1.0617	1.5445	-0.0035	0.5470	-0.0022	0.3542
67	34.21	0.14	0.0735	0.0274	0.0737	0.3727	1.0026	1.5444	-0.0038	0.5488	-0.0024	0.3554
68	34.33	0.15	0.0638	0.0256	0.0757	0.3678	1.0979	1.5595	-0.0044	0.5572	-0.0028	0.3573
69	34.44	0.14	0.0373	0.0250	0.0541	0.6796	1.4496	1.5432	-0.0042	0.5503	-0.0028	0.3566
70	34.58	0.14	0.0641	0.0280	0.0626	0.4367	0.9776	1.5525	-0.0049	0.5547	-0.0032	0.3573
71	34.70	0.14	0.0446	0.0229	0.0679	0.4702	1.3968	1.5571	-0.0046	0.5570	-0.0030	0.3577
72	34.83	0.15	0.0388	0.0232	0.0594	0.6299	1.6168	1.5595	-0.0051	0.5562	-0.0033	0.3567
73	34.96	0.15	0.0461	0.0232	0.0671	0.5769	1.6707	1.5618	-0.0051	0.5583	-0.0033	0.3574
74	35.05	0.16	0.0375	0.0215	0.0712	0.5733	1.8972	1.5689	-0.0056	0.5598	-0.0034	0.3568
75	35.20	0.13	-0.0102	0.0215	0.0406	-2.1038	-3.9717	1.5477	-0.0046	0.5543	-0.0030	0.3581
76	35.33	0.15	0.0084	0.0225	0.0580	3.2361	6.3472	1.5502	-0.0059	0.5555	-0.0038	0.3583
77	35.45	0.12	0.0095	0.0256	0.0435	3.9254	6.7313	1.5501	-0.0061	0.5582	-0.0039	0.3601
78	35.57	0.13	-0.0005	0.0222	0.0483	-3.2394	-7.0563	1.5666	-0.0061	0.5615	-0.0039	0.3584
79	35.68	0.12	-0.0277	0.0277	0.0236	-1.0000	-0.8537	1.5385	-0.0056	0.5517	-0.0035	0.3586
80	35.80	0.12	-0.0259	0.0196	0.0470	-0.7351	-1.8172	1.5665	-0.0066	0.5643	-0.0042	0.3602
81	35.94	0.14	-0.0072	0.0206	0.0518	-2.8400	-7.1600	1.5758	-0.0068	0.5659	-0.0043	0.3591
82	36.05	0.14	-0.0196	0.0183	0.0504	-0.9268	-2.5483	1.5858	-0.0075	0.5741	-0.0047	0.3622
83	36.18	0.14	-0.0201	0.0196	0.0522	-0.9760	-2.6010	1.5758	-0.0075	0.5669	-0.0048	0.3597
84	36.30	0.13	-0.0303	0.0215	0.0467	-0.7102	-1.5414	1.5595	-0.0066	0.5599	-0.0042	0.3598
85	36.40	0.14	-0.0154	0.0222	0.0553	-1.2042	-3.0000	1.5524	-0.0070	0.5621	-0.0045	0.3621
86	36.53	0.15	-0.0450	0.0177	0.0458	-0.3927	-1.0143	1.5994	-0.0092	0.5744	-0.0057	0.3591
87	36.65	0.13	-0.0449	0.0203	0.0442	-0.4516	-0.9449	1.5735	-0.0079	0.5667	-0.0050	0.3601
88	36.77	0.12	-0.0710	0.0215	0.0287	-0.3030	-0.4035	1.5456	-0.0068	0.5568	-0.0044	0.3603
89	36.88	0.14	-0.0960	0.0171	0.0248	-0.1779	-0.2583	1.5523	-0.0072	0.5640	-0.0047	0.3633
90	37.01	0.11	-0.0758	0.0208	0.0336	-0.2634	-0.4427	1.5675	-0.0077	0.5683	-0.0049	0.3626
91	37.11	0.13	-0.0717	0.0174	0.0357	-0.2473	-0.4960	1.5746	-0.0089	0.5707	-0.0056	0.3625
92	37.25	0.12	-0.0780	0.0209	0.0334	-0.2666	-0.4282	1.5490	-0.0075	0.5584	-0.0049	0.3605

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7. 11 1.10 1.7 95.0 M1=0F23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
93	37.37	0.12	-0.0572	0.0256	0.0369	-0.4503	-0.6442	1.5512	-0.0082	0.5614	-0.0053	0.3619
94	37.46	0.12	-0.1025	0.0190	0.0233	-0.1855	-0.2279	1.5722	-0.0096	0.5733	-0.0060	0.3647
95	37.40	0.11	-0.0674	0.0265	0.0208	-0.2437	-0.2384	1.5488	-0.0080	0.5621	-0.0052	0.3629
96	37.73	0.11	-0.0715	0.0235	0.0315	-0.3293	-0.4413	1.5533	-0.0080	0.5680	-0.0052	0.3657
97	37.43	0.10	-0.1140	0.0209	0.0114	-0.1837	-0.0949	1.5652	-0.0089	0.5699	-0.0057	0.3641
98	37.94	0.11	-0.1015	0.0255	0.0157	-0.2502	-0.1545	1.5394	-0.0077	0.5594	-0.0050	0.3630
99	38.08	0.13	-0.0456	0.0254	0.0204	-0.3322	-0.2384	1.5370	-0.0077	0.5602	-0.0050	0.3645
100	38.10	0.09	-0.0742	0.0351	0.0148	-0.4243	-0.1990	1.5276	-0.0075	0.5594	-0.0049	0.3662
101	38.36	0.11	-0.0976	0.0274	0.0163	-0.2806	-0.1670	1.5347	-0.0082	0.5609	-0.0053	0.3655
102	38.43	0.10	-0.0640	0.0325	0.0225	-0.5418	-0.3746	1.5299	-0.0080	0.5623	-0.0052	0.3676
103	38.54	0.10	-0.0663	0.0335	0.0211	-0.5210	-0.3288	1.5204	-0.0080	0.5597	-0.0053	0.3681
104	38.52	0.11	-0.0742	0.0328	0.0154	-0.4421	-0.2081	1.5182	-0.0072	0.5559	-0.0046	0.3661
105	38.78	0.09	-0.0674	0.0338	0.0153	-0.4479	-0.2262	1.5135	-0.0075	0.5554	-0.0050	0.3670
106	38.89	0.10	-0.0800	0.0338	0.0218	-0.5627	-0.3601	1.5205	-0.0075	0.5569	-0.0049	0.3683
107	38.96	0.10	-0.1121	0.0347	-0.0094	-0.3096	0.0835	1.5317	-0.0075	0.5544	-0.0050	0.3692
108	39.11	0.08	-0.0720	0.0351	0.0141	-0.4879	-0.1957	1.5158	-0.0075	0.5575	-0.0050	0.3678
109	39.20	0.07	-0.0800	0.0344	0.0072	-0.4099	-0.0861	1.5133	-0.0080	0.5610	-0.0053	0.3707
110	39.33	0.10	-0.0902	0.0359	0.0104	-0.4416	-0.1300	1.5110	-0.0077	0.5589	-0.0051	0.3699
111	39.45	0.07	-0.1522	0.0402	-0.0352	-0.2644	0.2315	1.4969	-0.0075	0.5568	-0.0050	0.3720
112	39.53	0.06	-0.1319	0.0397	-0.0249	-0.3007	0.1687	1.4923	-0.0066	0.5518	-0.0044	0.3698
113	39.66	0.07	-0.1901	0.0397	-0.0585	-0.2046	0.3076	1.4900	-0.0066	0.5488	-0.0044	0.3683
114	39.77	0.06	-0.2046	0.0422	-0.0740	-0.2010	0.3528	1.4969	-0.0070	0.5540	-0.0047	0.3701
115	39.86	0.06	-0.1442	0.0436	-0.0563	-0.2158	0.2943	1.4923	-0.0070	0.5518	-0.0047	0.3698
116	39.97	0.07	-0.1492	0.0393	-0.0298	-0.2729	0.2098	1.4970	-0.0075	0.5540	-0.0050	0.3701
117	40.04	0.06	-0.1265	0.0378	-0.0153	-0.2975	0.1213	1.4970	-0.0075	0.5540	-0.0050	0.3701
118	40.19	0.08	-0.1324	0.0376	-0.0160	-0.2832	0.1206	1.4876	-0.0075	0.5505	-0.0051	0.3708
119	40.28	0.07	-0.1328	0.0377	-0.0178	-0.2842	0.1337	1.4841	-0.0066	0.5477	-0.0044	0.3690
120	40.41	0.08	-0.1446	0.0360	-0.0287	-0.2525	0.1926	1.4942	-0.0075	0.5549	-0.0050	0.3701
121	40.50	0.07	-0.1453	0.0356	-0.0211	-0.2663	0.1454	1.4805	-0.0068	0.5478	-0.0046	0.3700
122	40.54	0.07	-0.1372	0.0351	-0.0166	-0.2550	0.1210	1.4945	-0.0075	0.5545	-0.0050	0.3718
123	40.70	0.08	-0.1347	0.0404	-0.0265	-0.2915	0.1914	1.4927	-0.0077	0.5533	-0.0052	0.3707
124	40.80	0.07	-0.1332	0.0365	-0.0161	-0.2737	0.1209	1.4785	-0.0069	0.5493	-0.0046	0.3715
125	40.90	0.08	-0.1496	0.0417	-0.0433	-0.2467	0.2564	1.4808	-0.0070	0.5513	-0.0046	0.3723
126	41.02	0.07	-0.1514	0.0371	-0.0271	-0.2659	0.1791	1.4878	-0.0080	0.5547	-0.0054	0.3728
127	41.11	0.07	-0.1434	0.0364	-0.0217	-0.2571	0.1514	1.4878	-0.0072	0.5538	-0.0049	0.3722
128	41.21	0.09	-0.1121	0.0406	-0.0145	-0.3606	0.1291	1.4715	-0.0061	0.5450	-0.0041	0.3703
129	41.33	0.07	-0.1512	0.0398	-0.0353	-0.2645	0.2190	1.4856	-0.0072	0.5517	-0.0049	0.3714
130	41.44	0.09	-0.1472	0.0371	-0.0258	-0.2523	0.1750	1.4949	-0.0077	0.5581	-0.0052	0.3733
131	41.52	0.08	-0.1424	0.0404	-0.0315	-0.2839	0.2209	1.4844	-0.0061	0.5444	-0.0042	0.3717
132	41.66	0.07	-0.1594	0.0381	-0.0325	-0.2391	0.2040	1.4878	-0.0077	0.5557	-0.0052	0.3735
133	41.76	0.07	-0.1569	0.0391	-0.0347	-0.2523	0.2243	1.4926	-0.0077	0.5561	-0.0052	0.3719
134	41.84	0.07	-0.1504	0.0355	-0.0319	-0.2531	0.2091	1.4878	-0.0075	0.5557	-0.0051	0.3735
135	41.94	0.07	-0.1480	0.0365	-0.0506	-0.1793	0.2554	1.5019	-0.0094	0.5615	-0.0062	0.3738
136	42.04	0.08	-0.1331	0.0382	-0.0179	-0.2719	0.1349	1.5019	-0.0090	0.5615	-0.0060	0.3738
137	42.15	0.09	-0.1946	0.0394	-0.0597	-0.2139	0.3246	1.4608	-0.0066	0.5456	-0.0045	0.3735
138	42.25	0.06	-0.1597	0.0410	-0.0479	-0.2568	0.2997	1.4491	-0.0056	0.5391	-0.0039	0.3720

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	11	1.10	1.7	45.0	81=0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	42.35	0.09	-0.1402	0.0378	-0.0296	-0.2694	0.2113	1.4773	-0.0070	0.5498	-0.0048	0.3722
140	42.45	0.09	-0.1727	0.0376	-0.0958	-0.2186	0.2654	1.4726	-0.0070	0.5504	-0.0048	0.3737
141	42.53	0.08	-0.1462	0.0384	-0.0327	-0.2491	0.2269	1.4632	-0.0069	0.5498	-0.0047	0.3737
142	42.62	0.08	-0.1803	0.0374	-0.0960	-0.2076	0.2996	1.4668	-0.0056	0.5389	-0.0039	0.3725
143	42.72	0.09	-0.1466	0.0352	-0.0420	-0.2087	0.2487	1.4620	-0.0085	0.5539	-0.0057	0.3738
144	42.82	0.08	-0.1803	0.0386	-0.0539	-0.2129	0.2991	1.4539	-0.0061	0.5423	-0.0042	0.3730
145	42.90	0.08	-0.1463	0.0374	-0.0450	-0.2276	0.2736	1.4643	-0.0070	0.5480	-0.0048	0.3743
146	43.00	0.08	-0.1563	0.0379	-0.0496	-0.2424	0.2531	1.4623	-0.0066	0.5468	-0.0045	0.3735
147	43.09	0.07	-0.1481	0.0389	-0.0668	-0.1880	0.3406	1.4456	-0.0052	0.5391	-0.0036	0.3720
148	43.17	0.08	-0.1760	0.0376	-0.0542	-0.2174	0.3117	1.4479	-0.0066	0.5411	-0.0046	0.3737
149	43.26	0.07	-0.1864	0.0359	-0.0564	-0.1967	0.3061	1.4619	-0.0066	0.5498	-0.0045	0.3754
150	43.36	0.08	-0.1700	0.0359	-0.0543	-0.2111	0.2957	1.4455	-0.0056	0.5400	-0.0039	0.3736
151	43.45	0.06	-0.1893	0.0352	-0.0689	-0.1860	0.3639	1.4172	-0.0038	0.5302	-0.0027	0.3741
152	43.54	0.07	-0.1795	0.0362	-0.0616	-0.2016	0.3419	1.4408	-0.0056	0.5377	-0.0039	0.3732
153	43.63	0.06	-0.1714	0.0369	-0.0577	-0.2151	0.3367	1.4408	-0.0054	0.5377	-0.0038	0.3732
154	43.74	0.07	-0.2043	0.0365	-0.0918	-0.1637	0.3818	1.4545	-0.0066	0.5445	-0.0045	0.3742
155	43.83	0.07	-0.1873	0.0365	-0.0678	-0.1944	0.3627	1.4314	-0.0054	0.5360	-0.0038	0.3745
156	43.91	0.08	-0.2115	0.0333	-0.0806	-0.1578	0.3809	1.4455	-0.0059	0.5419	-0.0041	0.3749
157	44.01	0.06	-0.1914	0.0326	-0.0664	-0.1704	0.3574	1.4314	-0.0052	0.5360	-0.0036	0.3745
158	44.07	0.08	-0.1862	0.0304	-0.0732	-0.1650	0.3976	1.4078	-0.0038	0.5276	-0.0027	0.3748
159	44.17	0.07	-0.2103	0.0314	-0.0967	-0.1691	0.4312	1.4230	-0.0047	0.5347	-0.0033	0.3758
160	44.25	0.07	-0.2133	0.0327	-0.0984	-0.1533	0.4048	1.4411	-0.0057	0.5395	-0.0040	0.3743
161	44.35	0.07	-0.1863	0.0324	-0.0757	-0.1779	0.4156	1.4196	-0.0042	0.5321	-0.0030	0.3748
162	44.45	0.06	-0.2084	0.0308	-0.0859	-0.1491	0.4334	1.4198	-0.0052	0.5359	-0.0037	0.3774
163	44.55	0.07	-0.2083	0.0315	-0.0934	-0.1510	0.4484	1.4115	-0.0038	0.5299	-0.0027	0.3754
164	44.63	0.06	-0.2065	0.0269	-0.0889	-0.1304	0.4304	1.4045	-0.0036	0.5274	-0.0025	0.3755
165	44.73	0.06	-0.2041	0.0282	-0.0936	-0.1354	0.4497	1.4186	-0.0042	0.5323	-0.0030	0.3752
166	44.84	0.08	-0.2347	0.0265	-0.1057	-0.1131	0.4502	1.4162	-0.0041	0.5331	-0.0029	0.3764
167	44.91	0.06	-0.1896	0.0282	-0.0661	-0.1496	0.4539	1.4115	-0.0042	0.5304	-0.0030	0.3760
168	45.02	0.08	-0.2114	0.0269	-0.0877	-0.1270	0.4613	1.4068	-0.0036	0.5286	-0.0025	0.3757
169	45.10	0.06	-0.2220	0.0230	-0.1019	-0.1136	0.4549	1.3974	-0.0028	0.5240	-0.0020	0.3750
170	45.20	0.08	-0.1812	0.0260	-0.0626	-0.1432	0.4558	1.3974	-0.0033	0.5250	-0.0023	0.3757
171	45.28	0.07	-0.2134	0.0230	-0.1009	-0.1076	0.4729	1.4162	-0.0041	0.5321	-0.0029	0.3757
172	45.38	0.08	-0.2135	0.0227	-0.1041	-0.1062	0.4684	1.4114	-0.0042	0.5345	-0.0030	0.3782
173	45.47	0.06	-0.2043	0.0165	-0.1122	-0.0870	0.4555	1.4091	-0.0042	0.5315	-0.0030	0.3772
174	45.55	0.07	-0.1868	0.0191	-0.0981	-0.1045	0.4707	1.3984	-0.0036	0.5291	-0.0026	0.3786
175	45.65	0.06	-0.1944	0.0185	-0.0918	-0.0929	0.4591	1.3984	-0.0033	0.5272	-0.0023	0.3770
176	45.75	0.06	-0.2200	0.0162	-0.0994	-0.0737	0.4518	1.3937	-0.0038	0.5268	-0.0027	0.3780
177	45.83	0.06	-0.1867	0.0179	-0.0850	-0.0988	0.4704	1.3960	-0.0031	0.5270	-0.0022	0.3775
178	45.91	0.07	-0.2073	0.0179	-0.0974	-0.0861	0.4725	1.4125	-0.0042	0.5341	-0.0030	0.3781
179	46.01	0.06	-0.1810	0.0162	-0.0834	-0.0896	0.4606	1.3994	-0.0036	0.5286	-0.0026	0.3777
180	46.08	0.05	-0.1851	0.0166	-0.0858	-0.0847	0.4625	1.4065	-0.0042	0.5339	-0.0030	0.3796
181	46.17	0.06	-0.1972	0.0162	-0.0924	-0.0822	0.4687	1.3994	-0.0036	0.5305	-0.0026	0.3791
182	46.26	0.05	-0.2020	0.0095	-0.0981	-0.0468	0.4260	1.3900	-0.0031	0.5250	-0.0022	0.3777
183	46.35	0.06	-0.1727	0.0152	-0.0798	-0.0843	0.4620	1.3947	-0.0038	0.5282	-0.0027	0.3787
184	46.45	0.05	-0.1662	0.0136	-0.0770	-0.0839	0.4747	1.4042	-0.0038	0.5309	-0.0027	0.3781

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	MA10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	11	1.10	1.7	45.0	81e0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
185	46.53	0.07	-0.2047	0.0133	-0.0958	-0.0435	0.4570	1.3994	-0.0041	0.5323	-0.0029	0.3804
186	46.53	0.00	-0.1726	0.0120	-0.0800	-0.0732	0.4634	1.3994	-0.0036	0.5305	-0.0026	0.3791
187	46.70	0.07	-0.1443	0.0130	-0.0673	-0.0978	0.4535	1.4004	-0.0042	0.5327	-0.0030	0.3804
188	45.78	0.01	-0.1343	0.0114	-0.0599	-0.0923	0.4334	1.4003	-0.0042	0.5346	-0.0030	0.3818
189	46.89	0.07	-0.1072	0.0091	-0.0476	-0.0846	0.4437	1.3910	-0.0033	0.5301	-0.0024	0.3811
190	46.96	0.07	-0.1365	0.0110	-0.0569	-0.0806	0.4170	1.3980	-0.0036	0.5316	-0.0026	0.3803
191	47.04	0.07	-0.1529	0.0121	-0.0642	-0.0789	0.4196	1.3909	-0.0038	0.5319	-0.0027	0.3824
192	47.15	0.06	-0.1030	0.0104	-0.0470	-0.1011	0.4560	1.3909	-0.0038	0.5319	-0.0027	0.3824
193	47.23	0.06	-0.1033	0.0107	-0.0453	-0.1036	0.4379	1.3830	-0.0031	0.5271	-0.0022	0.3811
194	47.32	0.07	-0.0799	0.0104	-0.0325	-0.1360	0.4120	1.3925	-0.0038	0.5325	-0.0027	0.3824
195	47.40	0.07	-0.0598	0.0085	-0.0363	-0.0886	0.3787	1.3889	-0.0033	0.5288	-0.0024	0.3800
196	47.49	0.06	-0.0834	0.0084	-0.0313	-0.1053	0.3750	1.4006	-0.0042	0.5364	-0.0030	0.3830
197	47.58	0.06	-0.1056	0.0104	-0.0437	-0.0995	0.4129	1.3794	-0.0033	0.5269	-0.0024	0.3835
198	47.66	0.05	-0.1076	0.0101	-0.0467	-0.0942	0.4341	1.3899	-0.0024	0.5234	-0.0018	0.3821
199	47.76	0.06	-0.0857	0.0084	-0.0366	-0.1025	0.3570	1.3946	-0.0042	0.5352	-0.0030	0.3838
200	47.84	0.07	-0.0878	0.0084	-0.0309	-0.1000	0.3516	1.3708	-0.0033	0.5295	-0.0024	0.3863
201	47.92	0.07	-0.0791	0.0081	-0.0309	-0.1074	0.3902	1.3899	-0.0038	0.5330	-0.0027	0.3835
202	48.02	0.07	-0.0362	0.0095	-0.0053	-0.3131	0.1757	1.3933	-0.0042	0.5364	-0.0030	0.3858
203	48.09	0.07	-0.0234	0.0088	-0.0038	-0.3684	0.1579	1.3944	-0.0050	0.5369	-0.0036	0.3850
204	48.09	0.07	-0.0604	0.0101	-0.0224	-0.1664	0.3677	1.3829	-0.0033	0.5339	-0.0024	0.3861
205	48.09	0.07	-0.0156	0.0085	-0.0001	-0.5432	0.0062	1.3758	-0.0029	0.5276	-0.0021	0.3835
206	48.07	0.07	-0.0706	0.0092	-0.0318	-0.1298	0.4508	1.3995	-0.0042	0.5391	-0.0030	0.3852
207	47.26	0.06	-0.1202	0.0107	-0.0562	-0.1220	0.4671	1.3855	-0.0026	0.5275	-0.0019	0.3807
208	46.43	0.05	-0.1751	0.0126	-0.0804	-0.1118	0.5163	1.3926	-0.0033	0.5300	-0.0024	0.3806
209	45.56	0.06	-0.2141	0.0290	-0.1142	-0.1356	0.5336	1.4330	-0.0057	0.5456	-0.0040	0.3808
210	44.68	0.06	-0.1853	0.0350	-0.0883	-0.2119	0.5342	1.4436	-0.0062	0.5506	-0.0043	0.3814
211	43.77	0.06	-0.1305	0.0367	-0.0697	-0.2809	0.5336	1.4390	-0.0055	0.5446	-0.0038	0.3784
212	42.83	0.06	-0.1519	0.0396	-0.0791	-0.2613	0.5226	1.4626	-0.0071	0.5570	-0.0049	0.3814
213	41.85	0.06	-0.0682	0.0350	-0.0110	-0.7260	0.2280	1.5008	-0.0096	0.5724	-0.0064	0.3814
214	40.86	0.05	-0.1036	0.0360	-0.0421	-0.3410	0.3985	1.4961	-0.0083	0.5663	-0.0055	0.3785
215	39.86	0.06	-0.0832	0.0363	-0.0338	-0.4069	0.3788	1.4913	-0.0073	0.5641	-0.0049	0.3782
216	38.85	0.07	-0.1213	0.0366	-0.0557	-0.3015	0.4590	1.4805	-0.0071	0.5628	-0.0048	0.3801
217	37.81	0.09	-0.1167	0.0173	-0.0139	-0.1479	0.1190	1.5330	-0.0091	0.5766	-0.0059	0.3761
218	36.76	0.11	-0.0924	0.0172	-0.0008	-0.1942	-0.0044	1.5377	-0.0081	0.5760	-0.0053	0.3759
219	35.66	0.11	-0.0103	0.0232	0.0404	-2.2430	-3.9159	1.5258	-0.0067	0.5713	-0.0044	0.3744
220	34.54	0.12	0.0307	0.0276	0.0564	0.5496	1.1143	1.4998	-0.0041	0.5569	-0.0027	0.3713
221	33.39	0.12	0.1329	0.0367	0.0770	0.2760	0.5795	1.4678	-0.0024	0.5442	-0.0016	0.3700
222	32.53	0.12	0.1251	0.0442	0.0480	0.3531	0.3832	1.4535	-0.0010	0.5365	-0.0007	0.3691
223	31.96	0.11	0.1378	0.0476	0.0514	0.3666	0.3732	1.4356	0.0	0.5296	0.0	0.3689
224	30.96	0.11	0.1107	0.0493	0.0447	0.4268	0.3838	1.4048	0.0024	0.5157	0.0017	0.3671
225	29.42	0.11	0.0666	0.0379	0.0455	0.4272	0.5130	1.3786	0.0050	0.5012	0.0036	0.3636
226	28.35	0.10	-0.0117	0.0373	-0.0079	-3.1983	0.6777	1.3706	0.0086	0.4964	0.0063	0.3622
227	27.12	0.09	-0.2139	0.0301	-0.1032	-0.1407	0.4826	1.3849	0.0105	0.4986	0.0076	0.3601
228	25.77	0.10	-0.3201	0.0242	-0.1438	-0.0756	0.4491	1.4328	0.0126	0.5226	0.0088	0.3649
229	24.39	0.09	-0.3690	0.0177	-0.1531	-0.0479	0.4150	1.5138	0.0222	0.5686	0.0147	0.3756
230	23.04	0.07	-0.4199	0.0157	-0.1599	-0.0380	0.3862	1.4592	0.0253	0.5423	0.0173	0.3716

PAGE 3 OF 3
SHEET 1 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	MA10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
2	11	1.10	1.17	45.0	B1A0F23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-2.49	0.07	0.2162	9.9999	0.0214	9.9999	0.0941	-0.1722	-0.0217	-0.0487	0.1261	0.2829
2	-2.59	0.09	0.2206	9.9999	0.0226	9.9999	0.1024	-0.1866	-0.0229	-0.0526	0.1225	0.2818
3	-2.58	0.09	0.2194	9.9999	0.0207	9.9999	0.0950	-0.1627	-0.0209	-0.0453	0.1287	0.2782
4	-2.58	0.10	0.2206	9.9999	0.0226	9.9999	0.1024	-0.1769	-0.0226	-0.0482	0.1277	0.2728
5	-2.59	0.09	0.2374	9.9999	0.0265	9.9999	0.1115	-0.1694	-0.0217	-0.0477	0.1278	0.2807
6	-2.59	0.07	0.2207	9.9999	0.0201	9.9999	0.0909	-0.1721	-0.0221	-0.0479	0.1286	0.2788
7	-2.59	0.08	0.2204	9.9999	0.0217	9.9999	0.0984	-0.1579	-0.0203	-0.0430	0.1283	0.2724
8	-2.68	0.07	0.2077	9.9999	0.0156	9.9999	0.0752	-0.1676	-0.0209	-0.0465	0.1249	0.2775
9	-2.58	0.08	0.1947	9.9999	0.0112	9.9999	0.0575	-0.1437	-0.0186	-0.0365	0.1310	0.2539
10	-2.07	0.09	0.1735	9.9999	-0.0025	9.9999	-0.0145	-0.1321	-0.0165	-0.0327	0.1249	0.2476
11	-1.25	0.08	0.1303	9.9999	-0.0179	9.9999	-0.1370	-0.0621	-0.0129	-0.0079	0.2081	0.0466
12	-0.29	0.09	0.0748	9.9999	-0.0361	9.9999	-0.4847	-0.0134	-0.0103	0.0180	0.7431	-1.2986
13	0.65	0.09	0.0310	9.9999	-0.0522	9.9999	-1.6854	0.0222	-0.0061	0.0546	-0.2739	2.4609
14	1.62	0.09	-0.0402	9.9999	-0.0786	9.9999	1.9041	0.0941	-0.0018	0.0755	-0.0159	0.8031
15	2.60	0.10	-0.1137	9.9999	-0.1020	9.9999	0.8973	0.1178	0.0010	0.0838	0.0082	0.7117
16	3.63	0.09	-0.1957	9.9999	-0.1299	9.9999	0.6637	0.1716	0.0070	0.1149	0.0397	0.6476
17	4.56	0.09	-0.2688	9.9999	-0.1604	9.9999	0.5966	0.2233	0.0095	0.1338	0.0424	0.5994
18	5.60	0.08	-0.3337	9.9999	-0.1826	9.9999	0.5471	0.2728	0.0096	0.1510	0.0355	0.5552
19	6.63	0.09	-0.4110	9.9999	-0.2160	9.9999	0.5256	0.3009	0.0121	0.1705	0.0401	0.5665
20	7.54	0.09	-0.4885	9.9999	-0.2478	9.9999	0.5072	0.3642	0.0127	0.1961	0.0350	0.5383
21	8.53	0.10	-0.5530	9.9999	-0.2751	9.9999	0.4975	0.3921	0.0087	0.2077	0.0221	0.5298
22	9.55	0.10	-0.6393	9.9999	-0.3050	9.9999	0.4771	0.4007	0.0044	0.2188	0.0111	0.5061
23	10.57	0.10	-0.7062	9.9999	-0.3290	9.9999	0.4659	0.4234	0.0021	0.2303	0.0050	0.5440
24	11.59	0.09	-0.7823	9.9999	-0.3506	9.9999	0.4558	0.4298	-0.0021	0.2360	-0.0049	0.5492
25	12.54	0.09	-0.8356	9.9999	-0.3756	9.9999	0.4479	0.4285	-0.0062	0.2419	-0.0144	0.5645
26	13.53	0.09	-0.9055	9.9999	-0.3969	9.9999	0.4405	0.4192	-0.0078	0.2448	-0.0186	0.5839
27	14.59	0.09	-0.9681	9.9999	-0.4226	9.9999	0.4366	0.4195	-0.0085	0.2492	-0.0202	0.5941
28	15.59	0.09	-1.0244	9.9999	-0.4390	9.9999	0.4286	0.4420	-0.0099	0.2634	-0.0225	0.5959
29	16.55	0.09	-1.0933	9.9999	-0.4667	9.9999	0.4269	0.4330	-0.0124	0.2642	-0.0287	0.6148
30	17.56	0.09	-1.1652	9.9999	-0.4885	9.9999	0.4230	0.4220	-0.0163	0.2705	-0.0386	0.6411
31	18.58	0.10	-1.1775	9.9999	-0.4973	9.9999	0.4223	0.3788	-0.0188	0.2591	-0.0497	0.6839
32	19.62	0.09	-1.2305	9.9999	-0.5165	9.9999	0.4197	0.3600	-0.0217	0.2627	-0.0603	0.7298
33	20.67	0.11	-1.2652	9.9999	-0.5244	9.9999	0.4145	0.3335	-0.0226	0.2562	-0.0677	0.7682
34	21.70	0.10	-1.2977	9.9999	-0.5355	9.9999	0.4127	0.2919	-0.0224	0.2414	-0.0767	0.8271
35	22.73	0.11	-1.3247	9.9999	-0.5450	9.9999	0.4114	0.2968	-0.0231	0.2460	-0.0777	0.8298
36	23.77	0.13	-1.3570	9.9999	-0.5561	9.9999	0.4098	0.3316	-0.0254	0.2620	-0.0765	0.7899
37	24.91	0.12	-1.3830	9.9999	-0.5674	9.9999	0.4067	0.3153	-0.0283	0.2578	-0.0897	0.8176
38	25.86	0.13	-1.4154	9.9999	-0.5735	9.9999	0.4052	0.3248	-0.0363	0.2669	-0.1117	0.8217
39	26.93	0.14	-1.4457	9.9999	-0.5827	9.9999	0.4031	0.3278	-0.0471	0.2781	-0.1437	0.8484
40	27.97	0.14	-1.3650	9.9999	-0.5529	9.9999	0.3986	0.3203	-0.0563	0.2732	-0.1756	0.8527
41	29.08	0.14	-1.3567	9.9999	-0.5403	9.9999	0.3983	0.2893	-0.0510	0.2494	-0.1765	0.8622
42	30.26	0.14	-1.4402	9.9999	-0.5310	9.9999	0.3944	0.2227	-0.0569	0.2316	-0.2556	1.0390
43	31.51	0.13	-1.3784	9.9999	-0.5447	9.9999	0.3951	0.2074	-0.0538	0.2269	-0.2597	1.0945
44	31.66	0.15	-1.3988	9.9999	-0.5544	9.9999	0.3984	0.2270	-0.0550	0.2399	-0.2422	1.0565
45	31.67	0.14	-1.3966	9.9999	-0.5526	9.9999	0.3956	0.2293	-0.0540	0.2437	-0.2456	1.0627
46	31.67	0.14	-1.3837	9.9999	-0.5490	9.9999	0.3968	0.1976	-0.0540	0.2278	-0.2734	1.1528

TEST PART MACH R#10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 11 1.61 1.67 45.0 #1 OF 23 8.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNB3	CM3	CH3	XCPF3	YCPF3	CNB4	CMA	CBA	XCPB4	YCPB4
47	31.59	0.12	-1.6167	9.9999	-0.5647	9.9999	0.3992	0.2347	-0.0559	0.2501	-0.2381	1.0658
48	31.74	0.16	-1.6161	9.9999	-0.5579	9.9999	0.3973	0.1977	-0.0565	0.2330	-0.2757	1.1786
49	31.49	0.15	-1.6206	9.9999	-0.5660	9.9999	0.3984	0.2410	-0.0539	0.2530	-0.2238	1.0496
50	32.00	0.15	-1.6116	9.9999	-0.5618	9.9999	0.3980	0.2235	-0.0527	0.2426	-0.2358	1.0855
51	32.11	0.15	-1.6251	9.9999	-0.5697	9.9999	0.3989	0.2576	-0.0530	0.2613	-0.2056	1.0142
52	32.25	0.15	-1.6208	9.9999	-0.5643	9.9999	0.3982	0.1823	-0.0530	0.2296	-0.2806	1.2598
53	32.42	0.14	-1.6205	9.9999	-0.5678	9.9999	0.3997	0.2405	-0.0532	0.2580	-0.2210	1.0726
54	32.52	0.16	-1.6251	9.9999	-0.5590	9.9999	0.3977	0.1873	-0.0538	0.2325	-0.2875	1.2616
55	32.65	0.15	-1.6121	9.9999	-0.5621	9.9999	0.3981	0.2430	-0.0529	0.2600	-0.2176	1.0703
56	32.81	0.16	-1.6274	9.9999	-0.5693	9.9999	0.3989	0.2744	-0.0527	0.2722	-0.1920	0.9919
57	32.92	0.17	-1.6214	9.9999	-0.5704	9.9999	0.4016	0.2963	-0.0524	0.2838	-0.1768	0.9577
58	33.06	0.16	-1.6245	9.9999	-0.5678	9.9999	0.3997	0.2548	-0.0520	0.2654	-0.2041	1.0417
59	33.20	0.16	-1.6161	9.9999	-0.5675	9.9999	0.4008	0.2984	-0.0515	0.2848	-0.1726	0.9544
60	33.31	0.15	-1.6333	9.9999	-0.5622	9.9999	0.4006	0.2644	-0.0512	0.2680	-0.1938	1.0139
61	33.45	0.16	-1.6353	9.9999	-0.5707	9.9999	0.4018	0.2981	-0.0501	0.2868	-0.1680	0.9618
62	33.58	0.16	-1.6298	9.9999	-0.5727	9.9999	0.4008	0.2958	-0.0504	0.2874	-0.1703	0.9716
63	33.69	0.17	-1.6356	9.9999	-0.5756	9.9999	0.4012	0.3049	-0.0480	0.2893	-0.1573	0.9487
64	33.83	0.16	-1.6298	9.9999	-0.5727	9.9999	0.4008	0.2693	-0.0491	0.2635	-0.1978	1.0569
65	33.96	0.15	-1.6336	9.9999	-0.5743	9.9999	0.4005	0.3289	-0.0481	0.3033	-0.1464	0.9220
66	34.07	0.16	-1.6317	9.9999	-0.5742	9.9999	0.4011	0.3457	-0.0472	0.3117	-0.1365	0.9018
67	34.21	0.16	-1.6253	9.9999	-0.5711	9.9999	0.4007	0.3387	-0.0481	0.3093	-0.1422	0.9134
68	34.33	0.15	-1.6233	9.9999	-0.5798	9.9999	0.4017	0.3598	-0.0467	0.3198	-0.1298	0.8885
69	34.44	0.14	-1.6177	9.9999	-0.5710	9.9999	0.4028	0.3076	-0.0507	0.2959	-0.1647	0.9620
70	34.58	0.16	-1.6281	9.9999	-0.5715	9.9999	0.4013	0.2738	-0.0516	0.2790	-0.1878	1.0190
71	34.70	0.16	-1.6349	9.9999	-0.5766	9.9999	0.4019	0.3556	-0.0486	0.3193	-0.1368	0.8980
72	34.83	0.15	-1.6346	9.9999	-0.5783	9.9999	0.4031	0.3392	-0.0509	0.3117	-0.1502	0.9187
73	34.96	0.15	-1.6340	9.9999	-0.5804	9.9999	0.4033	0.3656	-0.0495	0.3254	-0.1354	0.8899
74	35.05	0.16	-1.6367	9.9999	-0.5800	9.9999	0.4043	0.4210	-0.0481	0.3520	-0.1144	0.8461
75	35.20	0.13	-1.6364	9.9999	-0.5817	9.9999	0.4023	0.2980	-0.0595	0.2989	-0.1998	1.0032
76	35.33	0.15	-1.6271	9.9999	-0.5860	9.9999	0.4022	0.3678	-0.0556	0.3218	-0.1598	0.9251
77	35.45	0.16	-1.6320	9.9999	-0.5816	9.9999	0.4033	0.2766	-0.0612	0.2927	-0.2211	1.0582
78	35.57	0.15	-1.6135	9.9999	-0.5873	9.9999	0.4014	0.3174	-0.0595	0.3129	-0.1875	0.9857
79	35.68	0.16	-1.6343	9.9999	-0.5836	9.9999	0.4014	0.2630	-0.0621	0.2794	-0.2558	1.1501
80	35.80	0.12	-1.6177	9.9999	-0.5791	9.9999	0.4022	0.3557	-0.0570	0.3321	-0.1603	0.9338
81	35.94	0.16	-1.6262	9.9999	-0.5751	9.9999	0.4032	0.3315	-0.0575	0.3231	-0.1735	0.9747
82	36.05	0.14	-1.6326	9.9999	-0.5786	9.9999	0.4023	0.3629	-0.0570	0.3363	-0.1571	0.9266
83	36.18	0.14	-1.6346	9.9999	-0.5783	9.9999	0.4031	0.3557	-0.0570	0.3375	-0.1603	0.9487
84	36.30	0.13	-1.6116	9.9999	-0.5892	9.9999	0.4037	0.3251	-0.0598	0.3287	-0.1848	1.0113
85	36.40	0.14	-1.6276	9.9999	-0.5868	9.9999	0.4028	0.3395	-0.0598	0.3308	-0.1762	0.9741
86	36.53	0.15	-1.6275	9.9999	-0.5838	9.9999	0.4031	0.3966	-0.0551	0.3586	-0.1389	0.9066
87	36.65	0.13	-1.6215	9.9999	-0.5730	9.9999	0.4030	0.3539	-0.0589	0.3399	-0.1663	0.9605
88	36.77	0.12	-1.6478	9.9999	-0.5627	9.9999	0.4055	0.3252	-0.0603	0.3260	-0.1855	1.0027
89	36.88	0.14	-1.6320	9.9999	-0.5805	9.9999	0.4039	0.3710	-0.0593	0.3474	-0.1599	0.9365
90	37.01	0.11	-1.6156	9.9999	-0.5760	9.9999	0.4046	0.3637	-0.0567	0.3391	-0.1613	0.9323
91	37.11	0.13	-1.6244	9.9999	-0.5774	9.9999	0.4039	0.3829	-0.0575	0.3496	-0.1502	0.9131
92	37.25	0.12	-1.6215	9.9999	-0.5684	9.9999	0.4056	0.3713	-0.0598	0.3449	-0.1611	0.9291

PAGE 3 OF 3
SHEET 3 OF 5

MANTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	11	1.10	1.7	45.0	81a0E23	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	Cn3	Cm3	XCPF3	YCPF3	CNF4	Cm4	Cm4	XCPF4	YCPF4
93	37.37	0.12	-1.3372	9.9999	-0.5655	9.9999	0.4047	0.3447	-0.0603	0.3295	-0.1750	0.9560
94	37.48	0.12	-1.3386	9.9999	-0.5740	9.9999	0.4046	0.3881	-0.0591	0.3514	-0.1524	0.9060
95	37.60	0.11	-1.3410	9.9999	-0.5608	9.9999	0.4032	0.3344	-0.0603	0.3225	-0.1801	0.9628
96	37.73	0.11	-1.3427	9.9999	-0.5689	9.9999	0.4041	0.3563	-0.0590	0.3322	-0.1656	0.9323
97	37.83	0.10	-1.4164	9.9999	-0.5729	9.9999	0.4045	0.3761	-0.0598	0.3435	-0.1591	0.9133
98	37.34	0.11	-1.3423	9.9999	-0.5488	9.9999	0.4040	0.3449	-0.0615	0.3265	-0.1782	0.9524
99	38.08	0.13	-1.3402	9.9999	-0.5565	9.9999	0.4032	0.3515	-0.0591	0.3274	-0.1683	0.9314
100	38.18	0.09	-1.3695	9.9999	-0.5532	9.9999	0.4039	0.2763	-0.0603	0.2841	-0.2182	1.0279
101	38.30	0.11	-1.3754	9.9999	-0.5554	9.9999	0.4036	0.3516	-0.0593	0.3282	-0.1688	0.9336
102	38.43	0.10	-1.3802	9.9999	-0.5565	9.9999	0.4032	0.3174	-0.0591	0.3061	-0.1863	0.9641
103	38.54	0.10	-1.3695	9.9999	-0.5523	9.9999	0.4033	0.3050	-0.0585	0.2962	-0.1917	0.9712
104	38.65	0.11	-1.3604	9.9999	-0.5500	9.9999	0.4041	0.3246	-0.0591	0.3038	-0.1822	0.9361
105	38.78	0.09	-1.3607	9.9999	-0.5491	9.9999	0.4035	0.3003	-0.0591	0.2930	-0.1970	0.9759
106	38.88	0.10	-1.3596	9.9999	-0.5507	9.9999	0.4020	0.3217	-0.0575	0.3029	-0.1788	0.9615
107	38.99	0.10	-1.3396	9.9999	-0.5406	9.9999	0.4036	0.2657	-0.0560	0.2664	-0.2182	1.0825
108	39.11	0.08	-1.3632	9.9999	-0.5484	9.9999	0.4023	0.2855	-0.0587	0.2831	-0.2055	0.9916
109	39.20	0.07	-1.3590	9.9999	-0.5455	9.9999	0.4014	0.2905	-0.0590	0.2879	-0.2029	0.9918
110	39.33	0.10	-1.3634	9.9999	-0.5459	9.9999	0.4004	0.2733	-0.0585	0.2777	-0.2139	1.0159
111	39.45	0.07	-1.3483	9.9999	-0.5406	9.9999	0.4008	0.1639	-0.0587	0.2167	-0.3579	1.3228
112	39.53	0.08	-1.3483	9.9999	-0.5386	9.9999	0.4001	0.2029	-0.0591	0.2366	-0.2915	1.1660
113	39.66	0.07	-1.3463	9.9999	-0.5386	9.9999	0.4001	0.1517	-0.0585	0.2095	-0.3855	1.3818
114	39.77	0.08	-1.3505	9.9999	-0.5408	9.9999	0.4003	0.1150	-0.0575	0.1898	-0.5000	1.6582
115	39.86	0.06	-1.3463	9.9999	-0.5377	9.9999	0.3994	0.1395	-0.0580	0.2060	-0.4156	1.4765
116	39.97	0.07	-1.3396	9.9999	-0.5368	9.9999	0.4003	0.1933	-0.0587	0.2386	-0.3035	1.2366
117	40.09	0.08	-1.3377	9.9999	-0.5354	9.9999	0.4002	0.2128	-0.0587	0.2489	-0.2757	1.1701
118	40.19	0.06	-1.3184	9.9999	-0.5279	9.9999	0.4004	0.2171	-0.0570	0.2477	-0.2627	1.1489
119	40.28	0.07	-1.3151	9.9999	-0.5263	9.9999	0.4002	0.2078	-0.0580	0.2395	-0.2859	1.1808
120	40.41	0.08	-1.3397	9.9999	-0.5353	9.9999	0.3998	0.2008	-0.0586	0.2413	-0.2917	1.2018
121	40.50	0.07	-1.3055	9.9999	-0.5225	9.9999	0.4002	0.2266	-0.0565	0.2561	-0.2406	1.1303
122	40.59	0.07	-1.3312	9.9999	-0.5296	9.9999	0.3978	0.2068	-0.0562	0.2475	-0.2257	1.0768
123	40.70	0.06	-1.3315	9.9999	-0.5321	9.9999	0.3996	0.1913	-0.0577	0.2287	-0.3183	1.2613
124	40.80	0.07	-1.3249	9.9999	-0.5281	9.9999	0.3983	0.2268	-0.0563	0.2509	-0.2502	1.1159
125	40.90	0.08	-1.3337	9.9999	-0.5363	9.9999	0.3991	0.1444	-0.0570	0.2035	-0.3948	1.4088
126	41.02	0.07	-1.3252	9.9999	-0.5274	9.9999	0.3980	0.2173	-0.0556	0.2468	-0.2549	1.1359
127	41.11	0.07	-1.3316	9.9999	-0.5304	9.9999	0.3983	0.1982	-0.0570	0.2360	-0.2877	1.2011
128	41.21	0.09	-1.3269	9.9999	-0.5253	9.9999	0.3977	0.1977	-0.0559	0.2291	-0.2826	1.1586
129	41.33	0.07	-1.3336	9.9999	-0.5297	9.9999	0.3971	0.2052	-0.0559	0.2404	-0.2722	1.1716
130	41.44	0.09	-1.3336	9.9999	-0.5297	9.9999	0.3971	0.2364	-0.0535	0.2582	-0.2261	1.0922
131	41.52	0.08	-1.3167	9.9999	-0.5232	9.9999	0.3974	0.1775	-0.0535	0.2152	-0.3011	1.2120
132	41.64	0.07	-1.3361	9.9999	-0.5299	9.9999	0.3966	0.2314	-0.0533	0.2534	-0.2302	1.0951
133	41.76	0.07	-1.3403	9.9999	-0.5311	9.9999	0.3962	0.2166	-0.0528	0.2469	-0.2437	1.1399
134	41.84	0.07	-1.3247	9.9999	-0.5260	9.9999	0.3956	0.2166	-0.0530	0.2451	-0.2445	1.1314
135	41.94	0.07	-1.3361	9.9999	-0.5290	9.9999	0.3960	0.2550	-0.0502	0.2671	-0.1967	1.0473
136	42.04	0.08	-1.3403	9.9999	-0.5311	9.9999	0.3962	0.2525	-0.0502	0.2623	-0.1987	1.0398
137	42.15	0.09	-1.3350	9.9999	-0.5304	9.9999	0.3973	0.1717	-0.0507	0.2094	-0.2949	1.2191
138	42.25	0.08	-1.3199	9.9999	-0.5249	9.9999	0.3977	0.1741	-0.0504	0.2096	-0.2894	1.2048

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 11 1.61 1.7 45.0 BLADE23 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
139	42.35	0.09	-1.3244	9.9999	-0.5244	9.9999	0.3960	0.2250	-0.0485	0.2441	-0.2157	1.0849
140	42.45	0.09	-1.3200	9.9999	-0.5242	9.9999	0.3964	0.2198	-0.0476	0.2403	-0.2155	1.0931
141	42.53	0.06	-1.3136	9.9999	-0.5202	9.9999	0.3960	0.2034	-0.0502	0.2316	-0.2467	1.1385
142	42.62	0.08	-1.3169	9.9999	-0.5145	9.9999	0.3981	0.1832	-0.0479	0.2150	-0.2612	1.1732
143	42.72	0.09	-1.3200	9.9999	-0.5232	9.9999	0.3964	0.2411	-0.0450	0.2519	-0.1865	1.0448
144	42.82	0.08	-1.3157	9.9999	-0.5229	9.9999	0.3974	0.1956	-0.0482	0.2239	-0.2467	1.1458
145	42.90	0.06	-1.3145	9.9999	-0.5214	9.9999	0.3967	0.2148	-0.0469	0.2328	-0.2183	1.0840
146	43.00	0.08	-1.3165	9.9999	-0.5196	9.9999	0.3959	0.2076	-0.0474	0.2314	-0.2282	1.1143
147	43.09	0.07	-1.3139	9.9999	-0.5163	9.9999	0.3960	0.1901	-0.0457	0.2167	-0.2406	1.1481
148	43.17	0.08	-1.2995	9.9999	-0.5188	9.9999	0.3977	0.1923	-0.0451	0.2179	-0.2363	1.1338
149	43.26	0.07	-1.3082	9.9999	-0.5192	9.9999	0.3969	0.2064	-0.0426	0.2263	-0.2066	1.0963
150	43.36	0.08	-1.3038	9.9999	-0.5172	9.9999	0.3967	0.2068	-0.0441	0.2270	-0.2133	1.0988
151	43.45	0.08	-1.2996	9.9999	-0.5160	9.9999	0.3971	0.1877	-0.0462	0.2111	-0.2463	1.1249
152	43.54	0.07	-1.2952	9.9999	-0.5148	9.9999	0.3976	0.1688	-0.0423	0.2160	-0.2126	1.0767
153	43.63	0.08	-1.3038	9.9999	-0.5172	9.9999	0.3967	0.2069	-0.0448	0.2262	-0.2164	1.0933
154	43.74	0.07	-1.3060	9.9999	-0.5181	9.9999	0.3967	0.1881	-0.0390	0.2108	-0.2072	1.1285
155	43.83	0.07	-1.2899	9.9999	-0.5109	9.9999	0.3964	0.1961	-0.0410	0.2148	-0.2092	1.0955
156	43.91	0.08	-1.2947	9.9999	-0.5134	9.9999	0.3958	0.1881	-0.0385	0.2090	-0.2047	1.1113
157	44.01	0.08	-1.2953	9.9999	-0.5131	9.9999	0.3961	0.1883	-0.0344	0.2117	-0.2098	1.1260
158	44.07	0.08	-1.2869	9.9999	-0.5109	9.9999	0.3964	0.1981	-0.0398	0.2115	-0.2012	1.0677
159	44.17	0.07	-1.3070	9.9999	-0.5186	9.9999	0.3968	0.1835	-0.0399	0.2024	-0.2177	1.1030
160	44.25	0.07	-1.2935	9.9999	-0.5121	9.9999	0.3959	0.1881	-0.0376	0.2049	-0.2001	1.0898
161	44.35	0.07	-1.2848	9.9999	-0.5096	9.9999	0.3967	0.1935	-0.0395	0.2098	-0.2040	1.0843
162	44.45	0.08	-1.2977	9.9999	-0.5141	9.9999	0.3961	0.1635	-0.0376	0.1887	-0.2301	1.1548
163	44.55	0.07	-1.2880	9.9999	-0.5111	9.9999	0.3968	0.1814	-0.0381	0.1896	-0.2361	1.1745
164	44.63	0.08	-1.2751	9.9999	-0.5049	9.9999	0.3980	0.1532	-0.0353	0.1820	-0.2305	1.1877
165	44.73	0.08	-1.2900	9.9999	-0.5129	9.9999	0.3976	0.1686	-0.0376	0.1929	-0.2232	1.1442
166	44.84	0.08	-1.2922	9.9999	-0.5131	9.9999	0.3971	0.1507	-0.0348	0.1809	-0.2311	1.2006
167	44.91	0.06	-1.2859	9.9999	-0.5092	9.9999	0.3960	0.1584	-0.0365	0.1850	-0.2302	1.1675
168	45.02	0.08	-1.2902	9.9999	-0.5106	9.9999	0.3956	0.1507	-0.0350	0.1791	-0.2328	1.1882
169	45.10	0.06	-1.2707	9.9999	-0.5054	9.9999	0.3977	0.1402	-0.0324	0.1722	-0.2312	1.2285
170	45.20	0.08	-1.2771	9.9999	-0.5085	9.9999	0.3982	0.1750	-0.0345	0.1927	-0.1974	1.1809
171	45.28	0.07	-1.2967	9.9999	-0.5153	9.9999	0.3968	0.1526	-0.0329	0.1812	-0.2156	1.1871
172	45.36	0.08	-1.2900	9.9999	-0.5138	9.9999	0.3983	0.1479	-0.0337	0.1772	-0.2277	1.1977
173	45.47	0.06	-1.2837	9.9999	-0.5098	9.9999	0.3972	0.0968	-0.0273	0.1431	-0.2882	1.5102
174	45.55	0.07	-1.2953	9.9999	-0.5153	9.9999	0.3978	0.1717	-0.0306	0.1883	-0.1742	1.0972
175	45.65	0.06	-1.2846	9.9999	-0.5102	9.9999	0.3972	0.1469	-0.0296	0.1721	-0.2017	1.1721
176	45.75	0.08	-1.2878	9.9999	-0.5080	9.9999	0.3969	0.1046	-0.0273	0.1467	-0.2611	1.4022
177	45.83	0.06	-1.2846	9.9999	-0.5102	9.9999	0.3972	0.1715	-0.0301	0.1848	-0.1756	1.0777
178	45.91	0.07	-1.2947	9.9999	-0.5166	9.9999	0.3975	0.1370	-0.0296	0.1660	-0.2148	1.2113
179	46.01	0.06	-1.2792	9.9999	-0.5075	9.9999	0.3967	0.1484	-0.0263	0.1672	-0.1775	1.1268
180	46.08	0.05	-1.3006	9.9999	-0.5170	9.9999	0.3975	0.1686	-0.0283	0.1812	-0.1677	1.0758
181	46.17	0.06	-1.2999	9.9999	-0.5127	9.9999	0.3975	0.1363	-0.0268	0.1635	-0.1967	1.1996
182	46.26	0.03	-1.2863	9.9999	-0.5023	9.9999	0.3967	0.0390	-0.0203	0.1063	-0.5198	2.7217
183	46.35	0.06	-1.2835	9.9999	-0.5105	9.9999	0.3978	0.1504	-0.0247	0.1648	-0.1642	1.0956
184	46.45	0.05	-1.3016	9.9999	-0.5170	9.9999	0.3975	0.1552	-0.0242	0.1697	-0.1568	1.0932

MAVIIa MISSILE TAILS EFFECTS DATA

TEST 7 PART 11 MACH .10 RX10-6 1.7 PHI 45.0 CONF M1=0F23 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CN4	XCPF4	YCPF4
185	46.53	0.07	-1.2835	9.9999	-0.5096	9.9999	0.3971	0.0812	-0.0226	0.1282	-0.2779	1.5784
186	46.53	0.06	-1.2835	9.9999	-0.5096	9.9999	0.3971	0.1253	-0.0226	0.1521	-0.1801	1.2148
187	46.70	0.07	-1.2930	9.9999	-0.5150	9.9999	0.3983	0.1598	-0.0231	0.1667	-0.1443	1.0368
188	46.78	0.07	-1.2886	9.9999	-0.5129	9.9999	0.3980	0.1565	-0.0214	0.1627	-0.1387	1.0531
189	46.89	0.07	-1.2862	9.9999	-0.5163	9.9999	0.4005	0.1362	-0.0193	0.1469	-0.1438	1.0949
190	46.96	0.07	-1.2886	9.9999	-0.5129	9.9999	0.3983	0.1169	-0.0203	0.1408	-0.1763	1.2183
191	47.04	0.07	-1.2844	9.9999	-0.5109	9.9999	0.3978	0.1100	-0.0206	0.1351	-0.1868	1.2281
192	47.15	0.06	-1.2929	9.9999	-0.5167	9.9999	0.3996	0.1686	-0.0186	0.1686	-0.1106	0.9897
193	47.23	0.06	-1.2915	9.9999	-0.5111	9.9999	0.3988	0.1343	-0.0194	0.1462	-0.1444	1.0884
194	47.32	0.07	-1.2902	9.9999	-0.5135	9.9999	0.3990	0.1536	-0.0184	0.1540	-0.1200	1.0025
195	47.40	0.07	-1.2866	9.9999	-0.5108	9.9999	0.3976	0.1045	-0.0179	0.1278	-0.1717	1.2235
196	47.49	0.06	-1.2928	9.9999	-0.5147	9.9999	0.3998	0.1168	-0.0179	0.1362	-0.1536	1.1686
197	47.56	0.06	-1.2884	9.9999	-0.5105	9.9999	0.3987	0.1146	-0.0189	0.1331	-0.1650	1.1608
198	47.66	0.05	-1.2898	9.9999	-0.5070	9.9999	0.3994	0.0899	-0.0184	0.1206	-0.2048	1.3391
199	47.76	0.06	-1.3008	9.9999	-0.5164	9.9999	0.3985	0.1388	-0.0175	0.1423	-0.1258	1.0258
200	47.44	0.07	-1.2771	9.9999	-0.5089	9.9999	0.3985	0.0921	-0.0175	0.1180	-0.1895	1.2806
201	47.92	0.07	-1.2900	9.9999	-0.5150	9.9999	0.3992	0.1242	-0.0178	0.1386	-0.1430	1.1158
202	48.02	0.07	-1.2910	9.9999	-0.5156	9.9999	0.3993	0.1555	-0.0156	0.1447	-0.1005	0.9305
203	48.09	0.07	-1.2942	9.9999	-0.5168	9.9999	0.3993	0.1454	-0.0145	0.1369	-0.0995	0.9416
204	48.09	0.07	-1.2903	9.9999	-0.5139	9.9999	0.3983	0.1119	-0.0171	0.1265	-0.1526	1.1121
205	48.09	0.07	-1.2773	9.9999	-0.5095	9.9999	0.3989	0.1630	-0.0147	0.1439	-0.0900	0.8828
206	48.07	0.07	-1.2904	9.9999	-0.5189	9.9999	0.3995	0.1540	-0.0173	0.1475	-0.1122	0.9588
207	47.26	0.06	-1.2774	9.9999	-0.5068	9.9999	0.3968	0.1803	-0.0234	0.1663	-0.1300	0.9224
208	46.43	0.05	-1.2818	9.9999	-0.5117	9.9999	0.3986	0.1863	-0.0289	0.1782	-0.1549	0.9535
209	45.56	0.06	-1.3165	9.9999	-0.5211	9.9999	0.3959	0.1740	-0.0353	0.1804	-0.2030	1.0372
210	44.66	0.06	-1.3285	9.9999	-0.5241	9.9999	0.3965	0.2208	-0.0437	0.2106	-0.1980	0.9541
211	43.77	0.06	-1.3307	9.9999	-0.5234	9.9999	0.3933	0.2345	-0.0469	0.2216	-0.2043	0.9255
212	42.83	0.06	-1.3699	9.9999	-0.5369	9.9999	0.3919	0.1739	-0.0536	0.1809	-0.3085	1.2485
213	41.45	0.06	-1.3747	9.9999	-0.5376	9.9999	0.3900	0.3024	-0.0536	0.2568	-0.1774	0.8494
214	40.88	0.05	-1.3946	9.9999	-0.5414	9.9999	0.3884	0.2516	-0.0579	0.2262	-0.2301	0.9068
215	39.88	0.06	-1.4028	9.9999	-0.5421	9.9999	0.3854	0.2500	-0.0588	0.2333	-0.2431	0.9332
216	38.85	0.07	-1.3931	9.9999	-0.5375	9.9999	0.3959	0.2698	-0.0591	0.2365	-0.2195	0.8791
217	37.81	0.09	-1.4356	9.9999	-0.5512	9.9999	0.3937	0.3936	-0.0661	0.3017	-0.1628	0.7668
218	36.76	0.11	-1.4542	9.9999	-0.5544	9.9999	0.3813	0.4274	-0.0615	0.3208	-0.1438	0.7685
219	35.66	0.11	-1.4433	9.9999	-0.5501	9.9999	0.3811	0.4424	-0.0617	0.3310	-0.1394	0.7483
220	34.53	0.12	-1.4325	9.9999	-0.5432	9.9999	0.3792	0.4129	-0.0621	0.3143	-0.1505	0.7612
221	33.39	0.12	-1.4295	9.9999	-0.5398	9.9999	0.3777	0.3184	-0.0563	0.2572	-0.1812	0.8287
222	32.53	0.12	-1.4295	9.9999	-0.5398	9.9999	0.3777	0.2557	-0.0541	0.2361	-0.2117	0.9234
223	31.46	0.11	-1.4262	9.9999	-0.5408	9.9999	0.3792	0.2439	-0.0546	0.2400	-0.2239	0.9838
224	30.46	0.11	-1.3957	9.9999	-0.5298	9.9999	0.3796	0.2278	-0.0554	0.2404	-0.2439	1.0591
225	29.66	0.11	-1.5106	9.9999	-0.5854	9.9999	0.3876	0.3435	-0.0484	0.2843	-0.1410	0.8275
226	28.35	0.16	-1.4891	9.9999	-0.5790	9.9999	0.3891	0.3428	-0.0440	0.2903	-0.1283	0.8469
227	27.12	0.09	-1.4576	9.9999	-0.5671	9.9999	0.3890	0.2880	-0.0328	0.2607	-0.1139	0.9052
228	25.77	0.10	-1.4140	9.9999	-0.5524	9.9999	0.3907	0.3043	-0.0292	0.2659	-0.0961	0.8738
229	24.39	0.09	-1.3693	9.9999	-0.5323	9.9999	0.3896	0.2615	-0.0260	0.2484	-0.0993	0.9498
230	23.09	0.07	-1.3271	9.9999	-0.5171	9.9999	0.3898	0.2195	-0.0252	0.2372	-0.1147	1.0804

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 8

MANTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
4	2M	0.60	1.7	0.0	81=0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-4.73	0.02	-0.4253	0.7541	-0.0003	0.0134	-0.0006	0.2260	0.0778	0.1482	-1.7731
2	-3.30	0.01	-0.2970	0.5301	0.0311	0.0616	-0.0065	0.2317	0.0777	0.1540	-1.7851
3	-3.24	0.02	-0.3110	0.5416	0.0444	0.0234	-0.0005	0.2265	0.0778	0.1487	-1.7373
4	-3.16	0.00	-0.3560	0.5943	-0.0403	0.1266	-0.0152	0.2290	0.0787	0.1503	-1.6695
5	-2.96	0.00	-0.2402	0.4332	-0.0423	0.1176	-0.0035	0.2293	0.0778	0.1515	-1.8032
6	-2.84	0.02	-0.2558	0.4276	0.0165	0.0449	-0.0003	0.2330	0.0782	0.1548	-1.6714
7	-2.73	0.01	-0.3002	0.4804	-0.0441	0.1696	-0.0151	0.2297	0.0788	0.1509	-1.6007
8	-2.51	0.00	-0.2126	0.3765	-0.0415	0.1037	-0.0075	0.2323	0.0773	0.1550	-1.7726
9	-2.44	0.02	-0.1943	0.3294	0.0153	0.0239	0.0071	0.2317	0.0781	0.1536	-1.6608
10	-2.32	0.01	-0.2416	0.3984	-0.0403	0.1283	-0.0148	0.2280	0.0781	0.1499	-1.6509
11	-2.18	0.01	-0.1859	0.2851	-0.0278	0.1039	-0.0075	0.2313	0.0781	0.1532	-1.5335
12	-2.04	0.03	-0.1278	0.2141	-0.0138	0.0512	0.0073	0.2327	0.0780	0.1547	-1.5973
13	-1.93	0.01	-0.2006	0.2968	-0.0265	0.1025	-0.0147	0.2311	0.0776	0.1535	-1.4782
14	-1.79	0.01	-0.1281	0.2046	-0.0113	0.1068	-0.0073	0.2303	0.0781	0.1562	-1.5977
15	-1.64	0.02	-0.0699	0.1235	0.0431	-0.0018	0.0075	0.2342	0.0781	0.1561	-1.7662
16	-1.54	0.00	-0.1582	0.2280	-0.0454	0.1716	-0.0147	0.2288	0.0781	0.1507	-1.4449
17	-1.42	0.00	-0.1014	0.1312	-0.0551	0.1418	-0.0073	0.2360	0.0790	0.1570	-1.2944
18	-1.28	0.02	-0.0284	0.0387	0.0133	0.0133	0.0076	0.2375	0.0795	0.1580	-1.3613
19	-1.17	0.01	-0.1165	0.1433	-0.0563	0.1175	-0.0144	0.2341	0.0795	0.1546	-1.2308
20	-1.04	0.00	-0.0429	0.0681	-0.0561	0.1170	-0.0070	0.2342	0.0781	0.1561	-1.5865
21	-0.91	0.02	0.0001	-0.0193	0.0284	0.0119	0.0077	0.2411	0.0781	0.1630	-192.4000
22	-0.79	0.01	-0.0726	0.0913	0.0020	0.0626	-0.0142	0.2339	0.0772	0.1567	-1.2567
23	-0.69	0.01	-0.0448	0.0344	-0.0292	0.0793	-0.0069	0.2398	0.0786	0.1612	-0.7683
24	-0.56	0.02	0.0295	-0.0603	0.0431	-0.0018	0.0078	0.2379	0.0785	0.1594	-2.0441
25	-0.44	0.02	-0.0303	0.0234	-0.0422	0.0912	-0.0140	0.2344	0.0790	0.1554	-0.7729
26	-0.36	0.01	0.0144	-0.0381	-0.0113	0.1006	-0.0068	0.2378	0.0785	0.1593	-2.0875
27	-0.19	0.02	0.0595	-0.0960	0.0164	0.0484	0.0078	0.2419	0.0781	0.1638	-1.4118
28	-0.07	0.02	-0.0007	-0.0180	-0.0284	0.0652	-0.0067	0.2384	0.0795	0.1589	25.7428
29	0.15	0.00	0.0595	-0.0824	-0.0549	0.1413	-0.0067	0.2381	0.0789	0.1592	-1.4085
30	0.18	0.02	0.0476	-0.1418	0.0126	0.0009	0.0281	0.2419	0.0784	0.1635	-1.6118
31	0.28	0.02	0.0290	-0.0763	-0.0291	0.0791	-0.0065	0.2385	0.0803	0.1562	-2.7250
32	0.41	0.00	0.0875	-0.1264	-0.0410	0.1418	-0.0138	0.2383	0.0803	0.1560	-1.4023
33	0.53	0.02	0.1322	-0.1943	0.0157	0.0359	0.0081	0.2420	0.0769	0.1631	-1.4704
34	0.65	0.02	0.0725	-0.1298	0.0018	0.0621	0.0007	0.2386	0.0789	0.1597	-1.7862
35	0.79	0.00	0.0856	-0.1397	-0.0554	0.1291	-0.0137	0.2371	0.0788	0.1583	-1.6125
36	0.87	0.02	0.1763	-0.2664	0.0156	0.0361	0.0843	0.2429	0.0784	0.1641	-1.4008
37	1.00	0.02	0.1167	-0.1635	-0.0284	0.0650	-0.0062	0.2411	0.0803	0.1608	-1.4017
38	1.11	0.00	0.1166	-0.1631	-0.0839	0.1687	-0.0137	0.2397	0.0789	0.1608	-1.4017
39	1.20	0.01	0.1902	-0.2752	-0.0152	0.0764	0.0084	0.2394	0.0788	0.1606	-1.4468
40	1.35	0.02	0.1654	-0.2366	-0.0272	0.0895	-0.0362	0.2415	0.0802	0.1613	-1.4014
41	1.44	-0.01	0.1305	-0.1917	-0.0873	0.1210	-0.0135	0.2389	0.0788	0.1600	-1.4690
42	1.56	0.01	0.2487	-0.3564	0.0150	0.0236	0.0086	0.2426	0.0798	0.1628	-1.4366
43	1.70	0.03	0.2049	-0.2870	0.0325	0.0717	0.0010	0.2366	0.0788	0.1578	-1.4005
44	1.78	-0.00	0.1848	-0.2729	-0.1000	0.1451	-0.0134	0.2396	0.0798	0.1598	-1.4456
45	1.91	0.02	0.2773	-0.4151	0.0161	0.0744	0.0084	0.2376	0.0789	0.1587	-1.4967
46	2.04	0.02	0.2480	-0.3560	0.0029	0.0846	0.0812	0.2360	0.0788	0.1552	-1.4355

PAGE 1 OF 3
SHEET 2 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	28	0.60	1.7	0.0	81=0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
47	2.13	0.00	0.2322	-0.3428	-0.0550	0.1414	-0.0133	0.2387	0.0789	0.1598	-1.4763
48	2.25	0.02	0.3355	-0.4960	0.0162	0.0668	0.0047	0.2424	0.0798	0.1626	-1.4784
49	2.38	0.02	0.2761	-0.4134	-0.0426	0.1169	0.0012	0.2387	0.0789	0.1598	-1.4971
50	2.47	0.04	0.2604	-0.4001	-0.0851	0.1639	-0.0132	0.2377	0.0798	0.1579	-1.5368
51	2.59	0.01	0.3634	-0.5534	0.0597	0.0071	0.0089	0.2396	0.0789	0.1605	-1.5221
52	2.72	0.02	0.3334	-0.5296	0.0452	0.0209	0.0016	0.2393	0.0798	0.1595	-1.5885
53	2.81	0.00	0.2866	-0.4381	-0.0550	0.1413	-0.0132	0.2330	0.0788	0.1542	-1.5864
54	2.92	0.01	0.4066	-0.6226	-0.0111	0.1123	0.0015	0.2408	0.0775	0.1633	-1.5307
55	3.06	0.02	0.3763	-0.5984	0.0003	0.0638	0.0016	0.2367	0.0798	0.1569	-1.5301
56	3.16	0.00	0.3859	-0.5732	-0.0706	0.1301	-0.0130	0.2381	0.0793	0.1588	-1.6596
57	3.27	-0.00	0.4193	-0.6673	-0.0155	0.0763	0.0019	0.2396	0.0790	0.1598	-1.5914
58	3.39	0.02	0.4053	-0.6391	0.0484	0.0458	0.0017	0.2360	0.0803	0.1557	-1.5767
59	3.49	0.00	0.3743	-0.6137	-0.0669	0.1669	-0.0130	0.2348	0.0803	0.1545	-1.6395
60	3.60	-0.01	0.4464	-0.7595	-0.0887	0.1960	0.0017	0.2391	0.0798	0.1593	-1.7012
61	3.73	0.03	0.4620	-0.7543	0.0597	0.0071	0.0019	0.2313	0.0790	0.1515	-1.6326
62	3.83	0.00	0.4169	-0.7004	-0.0342	0.1518	-0.0129	0.2328	0.0793	0.1527	-1.6801
63	3.94	0.00	0.5208	-0.8748	0.0173	0.0949	0.0018	0.2366	0.0791	0.1575	-1.6411
64	4.08	0.02	0.5051	-0.8417	-0.0147	0.0365	0.0021	0.2349	0.0790	0.1559	-1.6664
65	4.16	0.01	0.4480	-0.7596	-0.0049	0.1443	-0.0129	0.2316	0.0790	0.1526	-1.7030
66	4.27	0.00	0.5032	-0.8225	0.0018	0.0817	-0.0051	0.2343	0.0800	0.1543	-1.6381
67	4.40	0.02	0.5024	-0.8581	0.0290	-0.0030	0.0095	0.2358	0.0791	0.1567	-1.7037
68	4.50	0.01	0.5024	-0.8783	-0.0696	0.1547	-0.0127	0.2293	0.0799	0.1494	-1.7404
69	4.60	0.00	0.5458	-0.9023	-0.0115	0.0998	-0.0053	0.2316	0.0791	0.1525	-1.7632
70	4.73	0.02	0.5546	-0.9093	-0.0001	0.0243	0.0095	0.2315	0.0798	0.1525	-1.7272
71	4.81	0.00	0.5248	-0.9490	-0.0841	0.1681	-0.0127	0.2292	0.0799	0.1493	-1.7913
72	4.90	-0.01	0.5879	-1.0080	-0.0862	0.1183	-0.0051	0.2319	0.0799	0.1520	-1.7826
73	5.04	0.02	0.6470	-1.1308	-0.0016	0.0759	0.0096	0.2333	0.0799	0.1534	-1.7478
74	5.13	0.02	0.5874	-1.0277	0.0189	0.0971	-0.0126	0.2265	0.0804	0.1466	-1.7836
75	5.23	-0.00	0.6457	-1.1257	-0.0577	0.1178	-0.0050	0.2295	0.0804	0.1491	-1.7488
76	5.35	0.02	0.7049	-1.2113	-0.0001	0.0241	0.0098	0.2316	0.0804	0.1512	-1.7185
77	5.43	0.01	0.6165	-1.1070	-0.0698	0.1545	-0.0052	0.2294	0.0833	0.1461	-1.7955
78	5.52	-0.02	0.6894	-1.2173	-0.0152	0.0521	-0.0048	0.2269	0.0811	0.1458	-1.7659
79	5.64	0.02	0.7627	-1.3472	0.0435	0.0093	0.0099	0.2372	0.0824	0.1498	-1.7664
80	5.75	0.00	0.6721	-1.2569	-0.1312	0.1216	-0.0050	0.2294	0.0838	0.1456	-1.8699
81	5.83	-0.01	0.7021	-1.2862	-0.1499	0.1901	-0.0050	0.2308	0.0847	0.1461	-1.8235
82	5.95	0.00	0.7449	-1.3219	-0.0194	-0.0212	0.0100	0.2362	0.0868	0.1494	-1.7995
83	6.04	0.01	0.7243	-1.3353	-0.0139	0.0507	-0.0047	0.2295	0.0852	0.1443	-1.8584
84	6.13	-0.01	0.7802	-1.4190	-0.0703	0.1682	-0.0121	0.2290	0.0872	0.1418	-1.8002
85	6.23	0.01	0.8410	-1.5664	0.0018	0.0605	0.0099	0.2350	0.0871	0.1479	-1.8191
86	6.33	0.01	0.7887	-1.4538	-0.0127	0.0747	-0.0047	0.2320	0.0875	0.1445	-1.8477
87	6.42	-0.00	0.8326	-1.5092	0.0035	0.0680	-0.0119	0.2259	0.0877	0.1382	-1.8125
88	6.53	0.01	0.8054	-1.6368	0.0163	0.0733	0.0100	0.2340	0.0882	0.1458	-1.8091
89	6.63	0.01	0.8653	-1.5727	-0.0128	0.0746	0.0027	0.2328	0.0887	0.1441	-1.8604
90	6.73	-0.01	0.8592	-1.6012	-0.0076	0.1733	-0.0121	0.2279	0.0910	0.1369	-1.8634
91	6.82	-0.00	0.9186	-1.6940	-0.0275	0.1144	0.0100	0.2365	0.0915	0.1450	-1.8333
92	6.93	0.02	0.9020	-1.6882	0.0457	0.0460	-0.0044	0.2293	0.0943	0.1350	-1.8717

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PNI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 25 0.60 1.7 0.0 PLANAR 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	7.03	0.00	0.8714	-1.4664	0.0677	0.1417	-0.0122	0.2298	0.0943	0.1355	-1.9095
94	7.12	0.00	0.8742	-1.4862	-0.0115	0.0990	0.0029	0.2324	0.0957	0.1372	-1.8843
95	7.23	0.01	0.8765	-1.4744	-0.0581	0.0781	0.0029	0.2336	0.0957	0.1379	-1.9169
96	7.32	-0.01	0.8814	-1.4852	-0.1131	0.1951	-0.0264	0.2287	0.0967	0.1321	-1.9368
97	7.41	0.00	1.0178	-1.4237	0.0032	0.0852	0.0030	0.2322	0.0954	0.1368	-1.8908
98	7.51	0.01	0.9571	-1.4754	-0.0127	0.0782	0.0029	0.2348	0.0983	0.1366	-1.9599
99	7.59	-0.00	0.9561	-1.4559	-0.0264	0.1272	-0.0262	0.2322	0.0992	0.1331	-1.9408
100	7.69	-0.00	1.0469	-1.4796	-0.0284	0.0632	-0.0040	0.2369	0.1011	0.1359	-1.8944
101	7.80	0.01	1.0424	-2.0467	-0.0159	0.0345	0.0032	0.2354	0.1011	0.1344	-1.9660
102	7.88	-0.00	1.0272	-2.0191	-0.0232	0.1621	-0.0130	0.2309	0.1039	0.1271	-1.9656
103	7.98	-0.01	1.0861	-2.1011	-0.0431	0.1032	-0.0041	0.2355	0.1029	0.1327	-1.9346
104	8.08	0.01	1.1166	-2.1772	0.0154	0.0216	0.0034	0.2362	0.1058	0.1305	-1.9538
105	8.15	0.00	1.0536	-2.0923	-0.0674	0.1195	-0.0259	0.2305	0.1054	0.1252	-1.9855
106	8.24	0.00	1.1281	-2.2359	-0.0114	0.1250	-0.0362	0.2350	0.1058	0.1293	-1.9552
107	8.34	0.01	1.1415	-2.2702	0.0001	0.0470	0.0105	0.2430	0.1058	0.1373	-1.9888
108	8.41	0.00	1.1256	-2.2386	-0.0696	0.1534	-0.0115	0.2356	0.1046	0.1269	-1.9888
109	8.50	-0.01	1.1640	-2.3287	-0.0418	0.1276	-0.0041	0.2383	0.1072	0.1312	-1.9403
110	8.60	0.01	1.2419	-2.4558	-0.0157	0.0378	0.0108	0.2426	0.1030	0.1337	-1.9774
111	8.68	-0.00	1.1966	-2.3594	-0.0713	0.1161	-0.0113	0.2404	0.1090	0.1315	-2.0228
112	8.76	-0.01	1.2182	-2.4297	-0.0136	0.0753	-0.0111	0.2380	0.1095	0.1286	-2.0076
113	8.85	0.01	1.2867	-2.5430	0.0653	0.0321	0.0108	0.2445	0.1100	0.1346	-1.9795
114	8.94	-0.00	1.2235	-2.4739	-0.0562	0.1164	-0.0039	0.2366	0.1109	0.1256	-2.0235
115	9.01	-0.02	1.2696	-2.5449	-0.0595	0.0464	-0.0109	0.2416	0.1123	0.1294	-2.0090
116	9.13	-0.01	1.3548	-2.7096	-0.0137	0.0480	0.0110	0.2476	0.1123	0.1352	-1.9963
117	9.21	-0.00	1.2939	-2.6378	-0.0591	0.0747	-0.0037	0.2430	0.1133	0.1298	-2.0387
118	9.29	-0.02	1.2938	-2.6472	-0.0562	0.1409	-0.0111	0.2426	0.1151	0.1276	-2.0398
119	9.40	-0.00	1.3940	-2.8037	0.0739	-0.0042	0.0111	0.2460	0.1154	0.1307	-2.0112
120	9.47	0.00	1.3333	-2.7372	0.0029	0.0714	-0.0037	0.2438	0.1153	0.1286	-2.0529
121	9.52	-0.02	1.3141	-2.7067	-0.0560	0.1141	-0.0109	0.2443	0.1163	0.1281	-2.0535
122	9.64	-0.00	1.4210	-2.8554	0.0302	0.0067	0.0040	0.2447	0.1164	0.1284	-2.0122
123	9.73	-0.00	1.3698	-2.8523	-0.0427	0.0976	0.0037	0.2457	0.1168	0.1290	-2.0524
124	9.80	-0.02	1.3766	-2.8621	-0.0851	0.1414	-0.0109	0.2437	0.1182	0.1256	-2.0538
125	9.90	-0.01	1.4426	-2.9532	0.0035	0.0833	0.0038	0.2479	0.1177	0.1303	-2.0260
126	10.01	0.00	1.4316	-2.9363	-0.0003	0.0024	0.0040	0.2448	0.1182	0.1267	-2.0524
127	10.07	-0.02	1.4306	-2.9361	-0.0867	0.1304	-0.0179	0.2448	0.1200	0.1249	-2.0526
128	10.16	-0.02	1.5039	-3.0006	-0.0410	0.1356	0.0038	0.2513	0.1205	0.1309	-2.0390
129	10.27	0.00	1.5172	-3.1126	0.0022	0.0566	0.0040	0.2479	0.1219	0.1261	-2.0514
130	10.33	-0.02	1.4577	-3.0293	-0.0530	0.1754	-0.0109	0.2461	0.1238	0.1224	-2.0782
131	10.43	-0.02	1.5276	-3.1337	-0.0573	0.1150	-0.0033	0.2521	0.1231	0.1291	-2.0516
132	10.53	0.01	1.5582	-3.1923	0.0314	0.0309	0.0041	0.2508	0.1264	0.1245	-2.0513
133	10.61	-0.01	1.5112	-3.1291	-0.0867	0.1298	-0.0105	0.2484	0.1250	0.1239	-2.0647
134	10.70	-0.02	1.5836	-3.2404	-0.1022	0.1182	-0.0031	0.2534	0.1286	0.1249	-2.0512
135	10.79	-0.00	1.5946	-3.2460	-0.0305	0.0378	0.0116	0.2545	0.1277	0.1269	-2.0396
136	10.86	-0.01	1.5372	-3.2298	-0.0840	0.1658	-0.0106	0.2523	0.1306	0.1218	-2.1009
137	10.95	-0.03	1.6113	-3.3057	-0.0853	0.1666	0.0040	0.2571	0.1315	0.1257	-2.0515
138	11.04	-0.01	1.6409	-3.3471	0.0035	0.0824	0.0114	0.2599	0.1310	0.1290	-2.0399

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/D=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	28	6.80	1.67	0.0	81.0211	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	11.13	-0.02	1.5918	-3.2855	-0.0546	0.1375	-0.0104	0.2549	0.1336	0.1214	-2.0640
140	11.22	-0.02	1.6353	-3.3553	-0.0552	0.1269	-0.0030	0.2561	0.1340	0.1222	-2.0519
141	11.31	-0.00	1.6787	-3.4433	0.0288	0.0076	0.0117	0.2623	0.1359	0.1265	-2.0512
142	11.39	-0.01	1.6965	-3.4812	0.0186	0.0913	-0.0030	0.2618	0.1373	0.1246	-2.0633
143	11.47	-0.02	1.6915	-3.4701	-0.0268	0.1115	-0.0029	0.2615	0.1391	0.1225	-2.0515
144	11.55	-0.00	1.7358	-3.5614	0.0156	-0.0651	0.0190	0.2683	0.1396	0.1288	-2.0402
145	11.64	-0.01	1.6900	-3.4886	-0.0124	0.0980	-0.0029	0.2619	0.1415	0.1205	-2.0630
146	11.71	-0.02	1.7177	-3.5614	-0.0560	0.1368	-0.0029	0.2698	0.1424	0.1267	-2.0733
147	11.81	-0.01	1.7914	-3.6553	-0.0153	0.0354	0.0192	0.2698	0.1434	0.1265	-2.0404
148	11.89	-0.01	1.7463	-3.6015	-0.0257	0.1058	0.0044	0.2694	0.1461	0.1234	-2.0624
149	11.97	-0.02	1.7175	-3.5252	-0.0418	0.1251	0.0044	0.2726	0.1466	0.1261	-2.0525
150	12.07	-0.00	1.6336	-3.7549	0.0456	0.0420	0.0263	0.2785	0.1498	0.1288	-2.0506
151	12.13	-0.01	1.7734	-3.6584	-0.0269	0.0847	0.0118	0.2733	0.1490	0.1244	-2.0623
152	12.22	-0.02	1.8104	-3.7265	-0.0712	0.1399	0.0046	0.2764	0.1503	0.1262	-2.0516
153	12.31	-0.01	1.8604	-3.8154	-0.0247	0.0733	0.0244	0.2844	0.1526	0.1319	-2.0509
154	12.38	-0.01	1.8587	-3.8496	-0.0257	0.1087	0.0190	0.2768	0.1526	0.1243	-2.0718
155	12.47	-0.02	1.8240	-3.7881	-0.0712	0.1400	-0.0026	0.2781	0.1531	0.1251	-2.0723
156	12.57	-0.01	1.9044	-3.9064	-0.0153	0.0350	0.0195	0.2842	0.1536	0.1307	-2.0505
157	12.65	-0.01	1.8990	-3.9326	-0.0136	0.0464	0.0050	0.2819	0.1558	0.1262	-2.0709
158	12.73	-0.02	1.8833	-3.9196	-0.0705	0.1258	-0.0026	0.2798	0.1555	0.1244	-2.0813
159	12.81	-0.01	1.9703	-4.0776	0.0155	0.0186	0.0124	0.2881	0.1563	0.1319	-2.0695
160	12.89	0.00	1.9534	-4.0472	0.0003	0.0465	0.0051	0.2842	0.1582	0.1261	-2.0702
161	12.97	-0.02	1.9236	-4.0395	-0.0693	0.1504	-0.0096	0.2853	0.1601	0.1253	-2.1000
162	13.06	-0.01	2.0276	-4.1753	0.0319	0.0679	0.0123	0.2921	0.1592	0.1329	-2.0597
163	13.15	0.00	1.9965	-4.1333	0.0760	0.0396	0.0051	0.2836	0.1605	0.1232	-2.0698
164	13.22	-0.02	1.9699	-4.0941	-0.0712	0.1010	-0.0238	0.2853	0.1611	0.1243	-2.0996
165	13.30	-0.01	2.0525	-4.2466	0.0011	0.0325	-0.0018	0.2904	0.1619	0.1285	-2.0698
166	13.41	-0.00	2.0227	-4.2052	0.0307	0.0175	-0.0019	0.2872	0.1629	0.1244	-2.0791
167	13.47	-0.02	2.0207	-4.2385	-0.0413	0.1246	-0.0166	0.2855	0.1647	0.1209	-2.0976
168	13.56	-0.02	2.0941	-4.3321	0.0156	0.0449	-0.0018	0.2906	0.1657	0.1247	-2.0587
169	13.65	0.00	2.1065	-4.3947	-0.0007	0.0078	-0.0016	0.2895	0.1666	0.1229	-2.0863
170	13.72	-0.02	2.0326	-4.2641	-0.0289	0.0479	-0.0234	0.2854	0.1657	0.1198	-2.0979
171	13.80	-0.02	2.1051	-4.3427	-0.0303	0.0366	-0.0089	0.2924	0.1666	0.1258	-2.0867
172	13.90	-0.00	2.1624	-4.5092	0.0435	-0.0334	-0.0014	0.2913	0.1685	0.1228	-2.0852
173	13.97	-0.02	2.0869	-4.3743	-0.0412	0.0980	-0.0163	0.2892	0.1679	0.1213	-2.0965
174	14.06	-0.02	2.1613	-4.5076	-0.0435	0.0462	-0.0016	0.2910	0.1689	0.1221	-2.0856
175	14.14	-0.00	2.2045	-4.5772	0.0276	-0.0163	0.0058	0.2936	0.1712	0.1224	-2.0763
176	14.23	-0.02	2.1440	-4.4924	-0.0283	0.0474	-0.0232	0.2872	0.1718	0.1155	-2.0953
177	14.30	-0.02	2.2026	-4.5743	-0.0163	0.0104	-0.0085	0.2945	0.1712	0.1233	-2.0767
178	14.38	-0.00	2.2469	-4.6447	0.0284	-0.0325	0.0060	0.2922	0.1713	0.1209	-2.0676
179	14.47	-0.01	2.1715	-4.5309	-0.0290	0.0914	-0.0232	0.2895	0.1736	0.1159	-2.0865
180	14.55	-0.02	2.2592	-4.6394	-0.0191	0.0474	-0.0229	0.2911	0.1745	0.1166	-2.0515
181	14.63	-0.00	2.1030	-4.7236	0.0272	-0.0309	0.0062	0.2961	0.1745	0.1216	-2.0511
182	14.72	-0.01	2.2136	-4.6171	-0.0452	0.0375	-0.0086	0.2917	0.1745	0.1172	-2.0858
183	14.79	-0.02	2.2718	-4.6618	0.0155	0.0324	-0.0228	0.2949	0.1773	0.1176	-2.0520
184	14.89	-0.00	2.3447	-4.7912	0.0563	-0.0584	0.0063	0.2959	0.1773	0.1196	-2.0434

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 5 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NR*10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 28 0.60 1.7 0.0 H1a0F11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
185	14.97	-0.01	2.2631	-4.7127	0.0118	-0.0284	-0.0155	0.2970	0.1800	0.1170	-2.0769
186	15.08	-0.02	2.2698	-4.6584	-0.0592	0.0511	-0.0226	0.2936	0.1801	0.1135	-2.0526
187	15.15	-0.00	2.3502	-4.8346	0.0558	-0.0834	-0.0008	0.2993	0.1820	0.1173	-2.0518
188	15.23	-0.00	2.3117	-4.7651	0.0136	-0.0047	-0.0154	0.2953	0.1839	0.1114	-2.0526
189	15.30	-0.02	2.3116	-4.7264	-0.0607	0.0273	-0.0226	0.2970	0.1833	0.1137	-2.0446
190	15.41	-0.01	2.3240	-4.8456	0.0733	-0.0226	0.0063	0.2992	0.1834	0.1158	-2.0365
191	15.46	-0.01	2.3532	-4.8304	-0.0143	0.0207	-0.0082	0.2973	0.1852	0.1121	-2.0527
192	15.55	-0.02	2.3098	-4.7229	-0.0577	0.0493	-0.0298	0.2989	0.1852	0.1137	-2.0456
193	15.65	-0.01	2.4437	-4.8658	0.0322	0.0412	-0.0008	0.2980	0.1871	0.1109	-1.9913
194	15.73	-0.01	2.3816	-4.8339	-0.0143	0.0207	-0.0080	0.2977	0.1852	0.1125	-2.0298
195	15.81	-0.03	2.3398	-4.7619	-0.1012	0.0699	-0.0226	0.2953	0.1871	0.1082	-2.0378
196	15.90	-0.02	2.3638	-4.8236	-0.0173	-0.0272	-0.0078	0.3003	0.1902	0.1101	-2.0166
197	15.98	-0.01	2.3492	-4.8055	0.0001	0.0073	-0.0079	0.3019	0.1911	0.1108	-2.0147
198	16.05	-0.01	2.3640	-4.8368	0.0029	0.0566	-0.0226	0.2962	0.1906	0.1036	-2.0305
199	16.14	-0.01	2.4445	-4.9037	0.0249	-0.0079	-0.0076	0.2975	0.1911	0.1064	-1.9706
200	16.24	-0.00	2.4617	-4.9058	0.0551	-0.0952	-0.0075	0.2969	0.1957	0.1032	-1.9929
201	16.30	-0.02	2.4151	-4.8326	-0.0146	0.0068	-0.0294	0.3008	0.1967	0.1041	-2.0002
202	16.39	-0.02	2.3758	-4.8743	0.0003	0.0076	-0.0220	0.3039	0.1962	0.1077	-1.9709
203	16.48	0.01	2.4598	-4.9436	0.0716	-0.0852	-0.0146	0.3046	0.1989	0.1077	-1.9863
204	16.56	-0.02	2.4636	-4.8894	-0.0398	0.1226	-0.0226	0.3013	0.1994	0.1014	-2.0011
205	16.61	-0.02	2.5179	-4.9661	0.0146	-0.0063	-0.0075	0.3085	0.2027	0.1058	-1.9723
206	16.73	0.00	2.5046	-4.9882	0.0277	-0.0442	-0.0073	0.3036	0.2027	0.1007	-1.9585
207	16.78	-0.02	2.4559	-4.8911	-0.0430	0.0674	-0.0223	0.3055	0.2041	0.1014	-1.9867
208	16.86	-0.02	2.5053	-4.9862	-0.0158	-0.0031	-0.0146	0.3070	0.2045	0.1025	-1.9588
209	16.97	0.00	2.5741	-5.0464	0.0409	-0.0554	0.0	0.3075	0.2064	0.1011	-1.9598
210	17.03	-0.02	2.4898	-4.9317	-0.0578	0.0621	-0.0221	0.3077	0.2069	0.1008	-1.9727
211	17.10	-0.02	2.5549	-4.9428	0.0551	-0.0946	-0.0214	0.3074	0.2074	0.1000	-1.9308
212	17.21	-0.01	2.5867	-5.0539	0.0395	-0.0931	-0.0070	0.3134	0.2073	0.1061	-1.9536
213	17.27	-0.01	2.5620	-4.9634	-0.0289	0.0350	-0.0218	0.3063	0.2130	0.0932	-1.9525
214	17.35	-0.02	2.5800	-5.0155	-0.0179	-0.0130	-0.0216	0.3133	0.2116	0.1017	-1.9396
215	17.45	-0.00	2.6365	-5.0169	0.0593	-0.1056	0.0005	0.3087	0.2130	0.0956	-1.9058
216	17.53	-0.01	2.5098	-4.9854	0.0003	0.0077	-0.0208	0.3044	0.2153	0.0890	-1.9395
217	17.60	-0.02	2.6275	-5.0825	-0.0162	0.0105	-0.0215	0.3117	0.2162	0.0954	-1.9344
218	17.69	-0.01	2.6733	-5.1012	0.0836	-0.1098	-0.0066	0.3165	0.2190	0.0975	-1.9082
219	17.77	-0.01	2.5983	-4.9874	0.0118	-0.0252	-0.0214	0.3106	0.2195	0.0910	-1.9195
220	17.86	-0.02	2.6273	-5.0315	0.0170	0.0435	-0.0214	0.3153	0.2204	0.0948	-1.9010
221	17.94	-0.01	2.7113	-5.1264	0.0267	-0.0560	0.0151	0.3164	0.2218	0.0945	-1.8900
222	18.01	-0.03	2.6496	-5.0562	0.0285	-0.0318	-0.0211	0.3159	0.2242	0.0916	-1.9083
223	18.09	-0.02	2.6435	-5.0444	-0.0294	0.0415	-0.0140	0.3141	0.2256	0.0884	-1.8820
224	18.17	-0.01	2.7539	-5.1381	0.0542	-0.0811	-0.0063	0.3171	0.2264	0.0906	-1.8657
225	18.27	-0.01	2.6784	-5.0619	-0.0014	0.0097	-0.0211	0.3181	0.2312	0.0868	-1.8824
226	18.36	-0.02	2.7221	-5.0936	-0.0431	0.0613	-0.0211	0.3180	0.2312	0.0867	-1.8712
227	18.42	-0.00	2.7458	-5.2058	0.0426	-0.0196	0.0009	0.3211	0.2321	0.0889	-1.8620
228	18.51	-0.01	2.7389	-5.1208	-0.0153	0.0355	-0.0210	0.3203	0.2349	0.0853	-1.8724
229	18.58	-0.02	2.7356	-5.1040	-0.0575	0.1135	-0.0068	0.3204	0.2339	0.0864	-1.8658
230	18.66	-0.00	2.8041	-5.1695	0.0419	-0.0315	-0.0061	0.3268	0.2382	0.0885	-1.8436

MAKIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	28	0.60	1.7	0.0	M1=0811	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
231	18.75	-0.00	2.7390	-5.0583	0.0294	0.0193	-0.0208	0.3217	0.2386	0.0830	-1.8467
232	18.83	-0.02	2.7517	-5.0847	0.0139	0.0085	-0.0350	0.3196	0.2391	0.0802	-1.8478
233	18.92	-0.01	2.8402	-5.2085	0.0562	-0.0365	-0.0060	0.3279	0.2414	0.0864	-1.8339
234	19.00	-0.00	2.7962	-5.1015	0.0399	-0.0800	-0.0202	0.3220	0.2469	0.0750	-1.8245
235	19.06	-0.03	2.7697	-5.0772	-0.0741	0.0652	-0.0206	0.3204	0.2455	0.0748	-1.8357
236	19.15	-0.01	2.8526	-5.2166	-0.0018	0.0095	-0.0060	0.3286	0.2503	0.0784	-1.8288
237	19.23	-0.01	2.7494	-5.0904	-0.0006	0.0080	-0.0060	0.3240	0.2484	0.0795	-1.8249
238	19.28	-0.02	2.7596	-5.0118	-0.0598	0.0663	-0.0348	0.3246	0.2521	0.0724	-1.8162
239	19.37	-0.02	2.8916	-5.1466	-0.0780	0.0061	-0.0201	0.3332	0.2548	0.0783	-1.7938
240	19.45	-0.00	2.8188	-5.0590	0.0412	-0.0564	-0.0057	0.3309	0.2567	0.0741	-1.7948
241	19.51	-0.02	2.8141	-5.0397	-0.0427	0.0736	-0.0203	0.3275	0.2581	0.0693	-1.7883
242	19.60	-0.01	2.8916	-5.1145	0.0106	0.0439	-0.0200	0.3377	0.2585	0.0791	-1.7690
243	19.69	-0.01	2.8844	-5.1027	-0.0162	0.0237	-0.0199	0.3347	0.2650	0.0696	-1.7691
244	19.75	-0.03	2.8092	-5.0433	0.0021	0.0836	-0.0347	0.3291	0.2636	0.0654	-1.7953
245	19.83	-0.03	2.9396	-5.2360	-0.0305	0.0370	-0.0198	0.3345	0.2669	0.0675	-1.7805
246	19.92	-0.01	2.8823	-5.1000	-0.0191	-0.0239	-0.0198	0.3356	0.2687	0.0668	-1.7696
247	19.97	-0.03	2.8820	-5.0520	-0.1010	0.1030	-0.0274	0.3324	0.2683	0.0640	-1.7902
248	20.05	-0.03	2.9542	-5.2075	-0.0876	0.0653	-0.0269	0.3428	0.2793	0.0634	-1.7633
249	20.14	-0.02	2.9525	-5.2033	-0.0762	0.0162	-0.0054	0.3424	0.2789	0.0634	-1.7759
250	20.19	-0.03	2.8792	-5.0956	-0.0871	0.0773	-0.0271	0.3354	0.2761	0.0592	-1.7698
251	20.28	-0.03	2.9682	-5.1471	-0.0918	0.0069	-0.0338	0.3455	0.2849	0.0606	-1.7340
252	20.37	-0.02	2.9942	-5.2557	-0.0234	-0.0823	-0.0336	0.3504	0.2831	0.0672	-1.7553
253	20.43	-0.03	2.9224	-5.0738	-0.0976	-0.0613	-0.0624	0.3523	0.2906	0.0617	-1.7362
254	20.51	-0.04	2.9976	-5.1528	-0.0439	0.0875	-0.0019	0.3687	0.2868	0.0818	-1.7191
255	20.58	-0.01	3.0565	-5.2354	0.0295	0.0433	0.0235	0.3502	0.2933	0.0569	-1.7130
256	20.65	-0.02	2.9360	-5.0853	-0.0008	0.0349	-0.0195	0.3501	0.2929	0.0572	-1.7320
257	20.72	-0.03	3.0231	-5.2061	-0.0910	0.0437	-0.0193	0.3683	0.2943	0.0540	-1.7221
258	20.80	-0.02	3.0218	-5.2037	0.0098	-0.2749	-0.0546	0.3657	0.3040	0.0617	-1.7221
259	20.87	-0.03	2.9795	-5.0614	-0.0533	-0.1029	-0.0691	0.3583	0.2993	0.0590	-1.6994
260	20.95	-0.04	3.0357	-5.1787	0.0238	-0.0636	-0.0332	0.3682	0.3053	0.0529	-1.7068
261	21.03	-0.01	3.0958	-5.2653	0.0519	-0.0913	0.0099	0.3525	0.3044	0.0481	-1.6943
262	21.11	-0.02	3.0373	-5.1265	-0.0356	-0.0584	-0.0189	0.3558	0.3053	0.0505	-1.6888
263	21.19	-0.03	3.0611	-5.1799	-0.0247	0.1459	0.0021	0.3686	0.3073	0.0611	-1.6812
264	21.27	-0.01	3.1091	-5.1634	0.0716	-0.2579	-0.0468	0.3692	0.3113	0.0579	-1.6807
265	21.33	-0.02	3.0884	-5.1146	-0.0062	-0.1063	-0.0544	0.3627	0.3169	0.0453	-1.6779
266	21.41	-0.03	3.0454	-5.1164	-0.0172	0.0266	0.0027	0.3644	0.3183	0.0461	-1.6535
267	21.49	-0.01	3.1267	-5.1558	0.0864	-0.2597	-0.0324	0.3724	0.3308	0.0416	-1.6511
268	21.56	-0.02	3.0753	-5.1337	0.0247	-0.3007	-0.0826	0.3757	0.3275	0.0482	-1.6693
269	21.63	-0.03	3.0930	-5.0660	0.0738	-0.2722	-0.0468	0.3631	0.3248	0.0383	-1.6359
270	21.73	-0.01	3.1767	-5.2334	0.1135	-0.3100	-0.0322	0.3787	0.3331	0.0456	-1.6466
271	21.79	-0.01	3.1084	-5.0693	-0.0029	-0.2504	-0.0610	0.3771	0.3308	0.0463	-1.6319
272	21.87	-0.04	3.1192	-5.1143	-0.1373	0.0363	-0.0472	0.3734	0.3313	0.0421	-1.6396
273	21.95	-0.02	3.1939	-5.1733	0.0052	-0.3329	-0.0464	0.3818	0.3387	0.0431	-1.6198
274	22.02	-0.02	3.1653	-5.2068	0.0103	-0.2877	-0.0825	0.3857	0.3424	0.0433	-1.6449
275	22.08	-0.02	3.1373	-5.1146	0.0537	-0.0914	-0.0468	0.3734	0.3401	0.0333	-1.6302
276	22.18	-0.02	3.2130	-5.1566	0.0145	-0.1923	-0.0322	0.3839	0.3425	0.0414	-1.6049

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSROC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 28 MACH 1.07 PHI 0.0 CONF MinOFIL L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
277	22.24	-0.01	3.1691	-5.1363	0.0393	-0.3029	-0.0608	0.3873	0.3509	0.0364	-1.6222
278	22.31	-0.03	3.1645	-5.1329	-0.0805	-0.2770	-0.0969	0.3852	0.3559	0.0293	-1.6220
279	22.39	-0.02	3.2688	-5.2715	0.0057	-0.1103	-0.0035	0.3892	0.3555	0.0337	-1.6127
280	22.48	-0.01	3.2665	-5.2686	-0.0088	-0.3196	-0.0893	0.3932	0.3563	0.0369	-1.6329
281	22.54	-0.02	3.1635	-5.0784	0.0694	-0.3060	-0.0750	0.3863	0.3606	0.0257	-1.6053
282	22.61	-0.01	3.2704	-5.3256	0.0246	-0.3009	-0.0842	0.4007	0.3547	0.0410	-1.6255
283	22.70	-0.01	3.3072	-5.3164	0.0503	-0.3500	-0.0746	0.3912	0.3596	0.0316	-1.6078
284	22.76	-0.01	3.1956	-5.1083	0.1065	-0.2157	-0.0607	0.3866	0.3612	0.0254	-1.5981
285	22.82	-0.03	3.2974	-5.2744	-0.0501	-0.2556	-0.0966	0.4013	0.3681	0.0332	-1.5996
286	22.91	-0.04	3.3411	-5.3271	0.0675	-0.3421	-0.0746	0.3970	0.3695	0.0275	-1.5946
287	22.97	-0.02	3.2804	-5.2610	-0.0333	-0.0718	-0.0680	0.4031	0.3714	0.0317	-1.6038
288	23.03	-0.04	3.3670	-5.3804	-0.0839	-0.1864	-0.1036	0.4010	0.3686	0.0324	-1.5980
289	23.13	-0.02	3.3638	-5.3408	0.0201	-0.3468	-0.0888	0.4039	0.3700	0.0339	-1.5784
290	23.19	-0.02	3.3090	-5.2454	-0.0183	-0.2252	-0.0892	0.3987	0.3737	0.0250	-1.5853
291	23.25	-0.04	3.3678	-5.2912	-0.0174	-0.2235	-0.0961	0.4062	0.3770	0.0292	-1.5712
292	23.34	-0.01	3.4273	-5.3569	0.1611	-0.3607	-0.0598	0.4020	0.3752	0.0268	-1.5431
293	23.40	-0.03	3.3693	-5.2558	-0.0360	-0.3177	-0.0948	0.4022	0.3816	0.0206	-1.5604
294	23.48	-0.05	3.3952	-5.3110	-0.1193	-0.1658	-0.1035	0.4039	0.3807	0.0232	-1.5643
295	23.57	-0.04	3.4612	-5.2595	-0.1496	-0.1394	-0.0242	0.4133	0.3849	0.0284	-1.5196
296	23.62	-0.03	3.4269	-5.2988	-0.0572	-0.1493	-0.0816	0.3965	0.3835	0.0130	-1.5471
297	23.62	-0.05	3.3852	-5.1435	-0.1623	-0.1134	-0.0748	0.4042	0.3910	0.0132	-1.5194
298	23.69	-0.03	3.3700	-5.3369	0.0272	-0.2540	-0.0669	0.4088	0.3788	0.0300	-1.5376
299	23.64	-0.02	3.4197	-5.2465	0.0415	-0.2680	-0.0600	0.4041	0.3910	0.0231	-1.5347
300	23.56	-0.03	3.4464	-5.2644	0.0137	-0.2289	-0.0763	0.4137	0.3842	0.0295	-1.5288
301	24.23	-0.03	3.4439	-5.2062	0.0940	-0.3670	-0.0443	0.4180	0.4103	0.0077	-1.4287
302	25.13	-0.03	3.7898	-5.0078	-0.1507	-0.1601	-0.1157	0.4147	0.4187	-0.0040	-1.3216
303	26.09	-0.05	3.9146	-4.9641	-0.2363	-0.0535	-0.1167	0.4159	0.4434	-0.0275	-1.1659
304	27.08	-0.05	4.1732	-4.9805	-0.2339	0.0069	-0.0699	0.4388	0.4709	-0.0321	-1.0257
305	28.15	-0.04	4.4060	-4.9424	-0.2188	0.0176	-0.0400	0.4627	0.4876	-0.0448	-0.9638
306	29.23	-0.08	4.6067	-4.9107	-0.3558	0.2604	-0.0609	0.4284	0.5020	-0.0735	-0.8988
307	30.35	-0.07	4.9170	-4.8745	-0.3258	0.0834	-0.0231	0.4371	0.5136	-0.0764	-0.8287
308	31.50	-0.06	5.3366	-4.9317	-0.5217	0.3821	-0.0368	0.4189	0.5122	-0.0932	-0.7368
309	32.67	-0.07	5.5097	-3.7766	-0.5494	0.3941	-0.0640	0.4017	0.5220	-0.1203	-0.6854
310	33.76	-0.07	5.9271	-3.8503	-0.4389	0.4284	-0.0478	0.3849	0.5229	-0.1380	-0.6496
311	34.93	-0.06	6.3473	-3.9424	-0.4739	0.3859	-0.0244	0.3777	0.5342	-0.1565	-0.6258
312	36.12	-0.08	6.6826	-3.8068	-0.5227	0.5856	-0.0450	0.3649	0.5299	-0.1800	-0.5678
313	37.35	-0.06	7.1486	-3.7437	-0.5480	0.2165	-0.0137	0.3431	0.5323	-0.1892	-0.5237
314	38.66	-0.07	7.6879	-3.8134	-0.5874	0.5437	-0.0049	0.3215	0.5327	-0.2112	-0.5228
315	40.11	-0.05	8.1072	-3.9665	-0.3082	0.1168	0.0195	0.2799	0.5263	-0.2463	-0.4881
316	41.85	-0.04	8.8146	-4.3999	-0.0644	0.0762	0.0220	0.2345	0.5165	-0.2819	-0.4992
317	43.87	-0.04	9.6758	-4.9607	-0.1901	0.0440	0.0323	0.2108	0.5071	-0.2963	-0.5024
318	46.29	0.00	10.4608	-4.7864	0.4203	-0.4976	0.0296	0.1662	0.4931	-0.3269	-0.4628
319	48.99	-0.03	11.2437	-4.8511	0.0730	0.6481	0.0069	0.0797	0.4780	-0.3983	-0.4315
320	51.95	0.10	12.0096	-4.2375	1.2584	2.3461	0.0084	0.0971	0.5312	-0.4341	-0.5042
321	54.60	0.11	14.1258	-7.7523	1.1855	3.3257	0.0554	0.0489	0.5028	-0.4939	-0.5488
322	58.18	0.08	14.5273	-7.6847	1.1261	2.9732	0.0588	0.0121	0.5481	-0.5360	-0.5298

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 8 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE|0-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2B 0.60 1.7 0.0 PLANFIL 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
323	58.20	0.09	14.3443	-7.5590	1.1038	3.0427	0.0730	0.0094	0.5527	-0.5433	-0.5255
324	58.22	0.09	14.5330	-8.0601	0.7736	3.0295	0.0670	0.0270	0.5597	-0.5327	-0.5508
325	58.21	0.08	14.6324	-8.0035	0.9586	3.1472	0.0660	0.0325	0.5749	-0.5424	-0.5470
326	58.20	0.08	14.4918	-7.9513	1.1053	2.9657	0.0664	0.0243	0.5627	-0.5384	-0.5473
327	58.22	0.09	14.6110	-7.6362	1.0609	3.0264	0.0743	0.0150	0.5726	-0.5576	-0.5363
328	58.20	0.11	14.6271	-7.8109	1.0178	3.0007	0.0518	0.0266	0.5674	-0.5408	-0.5414
329	58.21	0.07	14.6703	-8.0013	1.1756	2.3291	0.0469	0.0266	0.5425	-0.5357	-0.5453
330	58.23	0.07	14.8474	-8.1127	0.8493	2.8226	0.0687	0.0291	0.5798	-0.5507	-0.5464
331	58.22	0.06	14.8207	-8.2367	1.2310	2.6732	0.0316	0.0113	0.5739	-0.5626	-0.5558
332	58.21	0.11	14.6574	-7.8223	1.0758	3.1687	0.0741	0.0209	0.5827	-0.5618	-0.5337
333	58.22	0.10	14.6756	-8.0567	1.3005	2.8762	0.0898	0.0410	0.5918	-0.5408	-0.5498

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE(10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 28 0.80 1.67 0.0 BLOWFIL 0.0 0 0 0 0. UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-4.03	0.02	0.0016	-0.0035	0.0001	-0.3124	0.0625	-0.1686	-0.0494	-0.0818	0.2929	0.4852
2	-3.36	0.01	0.0058	0.0008	0.0027	0.1379	0.4655	-0.1294	-0.0404	-0.0634	0.3121	0.4988
3	-3.24	0.02	0.0028	0.0005	0.0023	0.1785	0.8214	-0.1296	-0.0395	-0.0614	0.3047	0.4738
4	-3.14	0.00	0.0103	0.0016	0.0032	0.1553	0.3107	-0.1192	-0.0376	-0.0584	0.3148	0.4879
5	-2.96	0.00	0.0026	0.0002	0.0023	0.0714	0.8214	-0.1100	-0.0346	-0.0522	0.3145	0.4745
6	-2.84	0.02	0.0024	0.0004	0.0010	0.1036	0.3448	-0.1067	-0.0341	-0.0519	0.3195	0.4864
7	-2.73	0.01	0.0046	0.0	0.0005	0.0	0.1087	-0.1069	-0.0333	-0.0492	0.3114	0.4602
8	-2.57	0.00	0.0075	0.0009	0.0015	0.1200	0.2000	-0.0970	-0.0312	-0.0456	0.3216	0.4701
9	-2.44	0.02	0.0024	0.0002	0.0010	0.0689	0.3448	-0.0920	-0.0296	-0.0430	0.3217	0.4674
10	-2.32	0.01	0.0004	0.0002	0.0013	0.0345	0.2167	-0.0871	-0.0286	-0.0405	0.3260	0.4658
11	-2.18	0.01	0.0073	0.0013	0.0022	0.1780	0.3014	-0.0825	-0.0265	-0.0354	0.3211	0.4291
12	-2.08	0.03	0.0054	0.0013	0.0016	0.2203	0.2373	-0.0759	-0.0250	-0.0335	0.3293	0.4414
13	-1.93	0.01	0.0075	0.0006	0.0015	0.0800	0.2000	-0.0694	-0.0231	-0.0302	0.3328	0.4352
14	-1.79	0.01	0.0106	0.0016	0.0019	0.1538	0.1627	-0.0646	-0.0217	-0.0277	0.3358	0.4288
15	-1.66	0.02	0.0016	-0.0003	-0.0005	-0.1874	-0.3125	-0.0614	-0.0204	-0.0254	0.3322	0.4137
16	-1.54	0.00	0.0075	0.0004	0.0009	0.1200	0.1200	-0.0550	-0.0187	-0.0214	0.3399	0.3891
17	-1.42	0.00	0.0105	0.0016	0.0013	0.1523	0.1238	-0.0485	-0.0171	-0.0181	0.3525	0.3732
18	-1.26	0.02	0.0061	0.0005	0.0	0.0819	0.0	-0.0420	-0.0152	-0.0155	0.3618	0.3698
19	-1.17	0.01	0.0047	-0.0002	-0.0008	-0.0425	-0.1702	-0.0387	-0.0140	-0.0145	0.3617	0.3747
20	-1.04	0.00	0.0062	0.0	0.0	0.0	0.0	-0.0340	-0.0119	-0.0128	0.3499	0.3529
21	-0.91	0.02	0.0045	0.0002	-0.0001	0.0435	-0.0217	-0.0308	-0.0105	-0.0110	0.3408	0.3571
22	-0.79	0.01	0.0108	0.0006	-0.0007	0.0741	-0.0648	-0.0292	-0.0094	-0.0109	0.3218	0.3733
23	-0.66	0.01	0.0136	0.0016	0.0010	0.1176	0.0735	-0.0263	-0.0078	-0.0084	0.3209	0.3657
24	-0.54	0.02	0.0092	0.0002	-0.0006	0.0322	-0.0968	-0.0196	-0.0059	-0.0052	0.3009	0.2653
25	-0.44	0.02	0.0077	0.0003	-0.0005	0.0390	-0.0649	-0.0163	-0.0051	-0.0049	0.3128	0.3006
26	-0.34	0.01	0.0122	0.0013	0.0001	0.1065	0.0082	-0.0131	-0.0036	-0.0026	0.2747	0.1985
27	-0.19	0.02	0.0048	-0.0002	-0.0015	-0.0417	-0.3125	-0.0116	-0.0026	-0.0011	0.2241	0.0948
28	-0.07	0.02	0.0048	-0.0008	-0.0015	-0.1250	-0.3125	-0.0051	-0.0002	0.0016	0.0392	-0.3137
29	0.05	0.00	0.0137	0.0021	0.0003	0.1532	0.0219	-0.0018	0.0005	0.0019	-0.2777	-1.0556
30	0.18	0.02	0.0108	0.0011	-0.0007	0.1018	-0.0648	-0.0003	0.0018	0.0036	-5.9984	-11.3333
31	0.29	0.02	0.0063	-0.0002	-0.0013	-0.0317	-0.2063	-0.0003	0.0016	0.0027	-5.3319	-9.0000
32	0.41	0.00	0.0138	0.0016	-0.0003	0.1159	-0.0217	0.0076	0.0055	0.0082	0.7235	1.0789
33	0.53	0.02	0.0048	-0.0002	-0.0015	-0.0417	-0.3125	0.0079	0.0060	0.0089	0.7998	1.1867
34	0.65	0.02	0.0122	0.0010	-0.0005	0.1311	-0.0410	0.0074	0.0067	0.0102	0.9052	1.3784
35	0.78	0.00	0.0166	0.0024	0.0013	0.1445	0.0783	0.0171	0.0096	0.0138	0.5613	0.8070
36	0.87	0.02	0.0030	0.0	-0.0024	0.0	-0.3000	0.0185	0.0109	0.0173	0.5890	0.9351
37	1.00	0.02	0.0110	0.0003	-0.0021	0.0273	-0.1909	0.0217	0.0122	0.0190	0.5621	0.8756
38	1.11	0.00	0.0138	0.0011	-0.0004	0.0797	-0.0290	0.0233	0.0128	0.0198	0.5492	0.8498
39	1.24	0.01	0.0108	0.0009	-0.0007	0.0833	-0.0648	0.0249	0.0135	0.0200	0.5420	0.8032
40	1.35	0.02	0.0111	0.0003	-0.0027	0.0270	-0.2432	0.0295	0.0165	0.0232	0.5592	0.7864
41	1.44	-0.01	0.0168	0.0017	0.0	0.1012	0.0	0.0344	0.0178	0.0250	0.5173	0.7267
42	1.56	0.01	0.0108	0.0006	-0.0008	0.0555	-0.0741	0.0442	0.0204	0.0292	0.4614	0.6606
43	1.70	0.03	0.0124	0.0009	-0.0012	0.0726	-0.0968	0.0442	0.0204	0.0292	0.4614	0.6606
44	1.79	-0.00	0.0167	0.0024	0.0001	0.1437	0.0060	0.0441	0.0206	0.0292	0.4678	0.6621
45	1.91	0.02	0.0110	0.0005	-0.0021	0.0454	-0.1909	0.0539	0.0227	0.0335	0.4210	0.6215
46	2.04	0.02	0.0111	0.0003	-0.0027	0.0270	-0.2432	0.0571	0.0234	0.0358	0.4097	0.6278

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH MACH-A PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 26 0.60 1.07 0.0 81=OF11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
47	2.13	0.00	0.0140	0.0006	-0.0017	0.0428	-0.1214	0.0657	0.0256	0.0385	0.3919	0.5896
48	2.25	0.00	0.0118	0.0002	-0.0021	0.0182	-0.1909	0.0651	0.0261	0.0406	0.4008	0.6237
49	2.38	0.02	0.0110	0.0005	-0.0021	0.0454	-0.1909	0.0716	0.0283	0.0432	0.3951	0.6034
50	2.47	0.00	0.0140	0.0006	-0.0017	0.0571	-0.1214	0.0764	0.0296	0.0476	0.3873	0.6238
51	2.57	0.01	0.0168	0.0021	0.0	0.1250	0.0	0.0781	0.0296	0.0478	0.3789	0.6128
52	2.72	0.02	0.0098	-0.0002	-0.0029	-0.0208	-0.3021	0.0844	0.0318	0.0517	0.3767	0.6126
53	2.81	0.00	0.0170	0.0014	-0.0013	0.0823	-0.0765	0.0844	0.0322	0.0524	0.3814	0.6209
54	2.92	0.01	0.0125	0.0005	-0.0019	0.0480	-0.1520	0.0925	0.0344	0.0565	0.3718	0.6108
55	3.08	0.02	0.0110	0.0006	-0.0020	0.0545	-0.1818	0.0940	0.0341	0.0567	0.3733	0.6245
56	3.18	0.00	0.0170	0.0016	-0.0013	0.0941	-0.0765	0.0989	0.0360	0.0605	0.3639	0.6117
57	3.27	-0.00	0.0140	0.0006	-0.0017	0.0428	-0.1214	0.1037	0.0378	0.0636	0.3644	0.6133
58	3.38	0.02	0.0112	0.0	-0.0034	0.0	-0.3036	0.1037	0.0375	0.0629	0.3615	0.6066
59	3.49	0.00	0.0165	0.0016	-0.0012	0.0665	-0.0649	0.1101	0.0398	0.0669	0.3614	0.6076
60	3.58	-0.01	0.0112	0.0	-0.0034	0.0	-0.3036	0.1166	0.0413	0.0708	0.3541	0.6072
61	3.73	0.03	0.0125	0.0006	-0.0019	0.0480	-0.1520	0.1199	0.0417	0.0705	0.3477	0.5888
62	3.83	0.04	0.0206	0.0016	-0.0010	0.0800	-0.0500	0.1279	0.0444	0.0772	0.3471	0.6036
63	3.98	0.00	0.0171	0.0009	-0.0020	0.0526	-0.1170	0.1313	0.0456	0.0797	0.3472	0.6070
64	4.08	0.02	0.0140	0.0013	-0.0017	0.0428	-0.1214	0.1297	0.0449	0.0782	0.3461	0.6029
65	4.18	0.01	0.0201	0.0016	-0.0016	0.0796	-0.0796	0.1411	0.0478	0.0840	0.3387	0.5953
66	4.27	0.00	0.0157	0.0003	-0.0029	0.0191	-0.1847	0.1425	0.0489	0.0875	0.3431	0.6148
67	4.46	0.02	0.0126	0.0003	-0.0026	0.0238	-0.2063	0.1476	0.0497	0.0873	0.3366	0.5915
68	4.58	0.01	0.0170	0.0013	-0.0013	0.0765	-0.0765	0.1557	0.0512	0.0920	0.3287	0.5989
69	4.68	0.00	0.0112	-0.0005	-0.0034	-0.0446	-0.3036	0.1556	0.0518	0.0927	0.3328	0.5958
70	4.73	0.02	0.0112	0.0	-0.0034	0.0	-0.3036	0.1588	0.0526	0.0957	0.3311	0.6026
71	4.81	0.00	0.0157	0.0009	-0.0028	0.0573	-0.1783	0.1670	0.0547	0.0991	0.3275	0.5934
72	4.96	-0.01	0.0156	0.0008	-0.0022	0.0513	-0.1410	0.1735	0.0560	0.1024	0.3227	0.5902
73	5.04	0.02	0.0112	0.0002	-0.0034	0.0179	-0.3036	0.1751	0.0565	0.1032	0.3226	0.5894
74	5.13	0.02	0.0172	0.0011	-0.0027	0.0639	-0.1570	0.1816	0.0579	0.1058	0.3187	0.5826
75	5.23	-0.00	0.0158	0.0005	-0.0035	0.0316	-0.2215	0.1849	0.0595	0.1086	0.3132	0.5719
76	5.35	0.02	0.0126	0.0003	-0.0034	0.0234	-0.3047	0.1899	0.0596	0.1086	0.3127	0.5719
77	5.43	0.01	0.0159	0.0009	-0.0035	0.0569	-0.2215	0.1917	0.0605	0.1116	0.3155	0.5822
78	5.52	-0.00	0.0173	0.0006	-0.0027	0.0347	-0.1561	0.2001	0.0614	0.1137	0.3068	0.5682
79	5.68	0.02	0.0127	0.0005	-0.0032	0.0396	-0.2520	0.2115	0.0637	0.1198	0.3011	0.5617
80	5.75	0.01	0.0128	0.0003	-0.0034	0.0234	-0.3047	0.2180	0.0649	0.1227	0.2976	0.5628
81	5.83	-0.01	0.0159	0.0009	-0.0035	0.0569	-0.2215	0.2181	0.0649	0.1221	0.2975	0.5598
82	5.93	0.00	0.0143	0.0005	-0.0037	0.0419	-0.2587	0.2246	0.0661	0.1267	0.2942	0.5641
83	6.04	0.01	0.0143	0.0005	-0.0037	0.0350	-0.2587	0.2279	0.0665	0.1263	0.2917	0.5562
84	6.13	-0.01	0.0157	0.0004	-0.0042	0.0189	-0.2642	0.2377	0.0684	0.1332	0.2877	0.5604
85	6.23	0.01	0.0116	-0.0003	-0.0047	-0.0263	-0.4123	0.2459	0.0694	0.1373	0.2822	0.5584
86	6.33	0.01	0.0167	0.0010	-0.0025	0.0855	-0.1337	0.2410	0.0686	0.1342	0.2854	0.5568
87	6.42	-0.00	0.0219	0.0016	-0.0028	0.0730	-0.1279	0.2513	0.0704	0.1407	0.2801	0.5599
88	6.53	0.01	0.0128	0.0	-0.0034	0.0	-0.3047	0.2564	0.0709	0.1412	0.2764	0.5507
89	6.63	0.01	0.0159	0.0006	-0.0042	0.0377	-0.2642	0.2580	0.0713	0.1427	0.2763	0.5531
90	6.73	-0.01	0.0160	0.0002	-0.0049	0.0125	-0.3062	0.2678	0.0728	0.1482	0.2718	0.5534
91	6.82	-0.00	0.0160	0.0006	-0.0048	0.0375	-0.3000	0.2679	0.0724	0.1482	0.2702	0.5532
92	6.93	0.02	0.0119	0.0	-0.0047	0.0	-0.4123	0.2744	0.0737	0.1522	0.2669	0.5547

MARTIN MISSILE TAILS EFFECTS DATA

TEST	MACH	MACH RE/10-6	PM1	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	2.80	0.80	1.17	0.0	B1&OF11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	7.03	0.00	0.0219	0.0016	-0.0024	0.0730	-0.1279	0.2810	0.0745	0.1548	0.2651	0.5509
94	7.12	0.01	0.0130	0.00	-0.0052	0.0	-0.4000	0.2877	0.0750	0.1574	0.2606	0.5471
95	7.23	0.01	0.0128	0.0008	-0.0038	0.0625	-0.2969	0.2893	0.0754	0.1582	0.2606	0.5468
96	7.32	-0.01	0.0160	0.0003	-0.0068	0.0167	-0.3000	0.2976	0.0764	0.1630	0.2567	0.5477
97	7.41	0.00	0.0159	0.0010	-0.0041	0.0629	-0.2579	0.3048	0.0770	0.1659	0.2526	0.5443
98	7.51	0.01	0.0116	0.0002	-0.0047	0.0175	-0.4123	0.3081	0.0774	0.1675	0.2511	0.5437
99	7.59	-0.00	0.0140	0.0013	-0.0044	0.0684	-0.2316	0.3148	0.0779	0.1694	0.2474	0.5381
100	7.69	-0.00	0.0146	0.0003	-0.0046	0.0367	-0.3056	0.3181	0.0784	0.1724	0.2466	0.5428
101	7.80	0.01	0.0117	-0.0002	-0.0057	-0.0171	-0.5726	0.3202	0.0788	0.1746	0.2408	0.5328
102	7.88	-0.00	0.0190	0.0013	-0.0048	0.0684	-0.2316	0.3215	0.0799	0.1798	0.2339	0.5265
103	7.98	-0.01	0.0189	0.0019	-0.0038	0.0846	-0.2011	0.3299	0.0797	0.1797	0.2344	0.5287
104	8.08	0.01	0.0116	0.00	-0.0060	0.0	-0.5172	0.3449	0.0803	0.1801	0.2328	0.5222
105	8.15	0.00	0.0175	0.0011	-0.0046	0.0628	-0.2629	0.3515	0.0807	0.1847	0.2295	0.5255
106	8.24	0.00	0.0160	0.0008	-0.0048	0.0500	-0.3000	0.3582	0.0812	0.1873	0.2266	0.5229
107	8.34	0.01	0.0115	0.00	-0.0054	0.0	-0.4696	0.3616	0.0812	0.1869	0.2245	0.5169
108	8.41	0.00	0.0161	0.0008	-0.0055	0.0373	-0.3416	0.3750	0.0818	0.1928	0.2181	0.5141
109	8.50	-0.01	0.0206	0.0019	-0.0036	0.0931	-0.1765	0.3817	0.0823	0.1954	0.2156	0.5119
110	8.60	0.01	0.0116	0.0002	-0.0060	0.0172	-0.5172	0.3934	0.0822	0.1962	0.2163	0.5117
111	8.68	-0.00	0.0145	0.0008	-0.0050	0.0557	-0.3448	0.3884	0.0824	0.1980	0.2121	0.5098
112	8.76	-0.01	0.0222	0.0016	-0.0054	0.0721	-0.2432	0.3951	0.0827	0.2012	0.2093	0.5092
113	8.85	0.01	0.0115	0.00	-0.0054	0.0	-0.4696	0.3984	0.0830	0.2022	0.2083	0.5075
114	8.94	-0.00	0.0161	0.0009	-0.0055	0.0417	-0.3416	0.4035	0.0830	0.2046	0.2056	0.5071
115	9.01	-0.00	0.0207	0.0011	-0.0056	0.0531	-0.2705	0.4118	0.0834	0.2080	0.2025	0.5051
116	9.13	-0.00	0.0160	0.0008	-0.0048	0.0500	-0.3000	0.4185	0.0832	0.2120	0.1988	0.5066
117	9.21	-0.00	0.0160	0.0011	-0.0046	0.0647	-0.3000	0.4236	0.0834	0.2117	0.1968	0.4998
118	9.29	-0.02	0.0206	0.0013	-0.0049	0.0631	-0.2379	0.4253	0.0830	0.2139	0.1951	0.5029
119	9.40	-0.00	0.0176	0.0016	-0.0053	0.0454	-0.3011	0.4346	0.0824	0.2170	0.1895	0.4993
120	9.47	0.00	0.0176	0.0013	-0.0052	0.0738	-0.2355	0.4380	0.0824	0.2186	0.1881	0.4991
121	9.52	-0.02	0.0192	0.0010	-0.0054	0.0521	-0.3021	0.4414	0.0824	0.2189	0.1866	0.4959
122	9.60	-0.00	0.0196	0.0018	-0.0044	0.0642	-0.2316	0.4418	0.0821	0.2189	0.1859	0.4959
123	9.73	-0.00	0.0161	0.0009	-0.0055	0.0497	-0.3416	0.4515	0.0812	0.2244	0.1798	0.4970
124	9.80	-0.02	0.0237	0.0016	-0.0052	0.0675	-0.2194	0.4549	0.0807	0.2267	0.1774	0.4984
125	9.90	-0.01	0.0234	0.0022	-0.0037	0.0940	-0.1368	0.4600	0.0805	0.2284	0.1750	0.4965
126	10.01	0.00	0.0161	0.0002	-0.0058	0.0153	-0.4427	0.4617	0.0805	0.2279	0.1763	0.4936
127	10.07	-0.02	0.0207	0.0011	-0.0056	0.0531	-0.2705	0.4663	0.0807	0.2318	0.1723	0.4950
128	10.16	-0.02	0.0207	0.0011	-0.0056	0.0483	-0.2705	0.4752	0.0790	0.2357	0.1662	0.4968
129	10.27	0.00	0.0160	0.0003	-0.0048	0.0147	-0.3000	0.4786	0.0780	0.2373	0.1629	0.4958
130	10.33	-0.02	0.0219	0.0022	-0.0034	0.1004	-0.1553	0.4820	0.0785	0.2376	0.1628	0.4929
131	10.43	-0.02	0.0160	0.0006	-0.0055	0.0375	-0.3438	0.4812	0.0771	0.2371	0.1602	0.4927
132	10.53	0.01	0.0176	0.0006	-0.0053	0.0341	-0.3011	0.4916	0.0763	0.2406	0.1552	0.4896
133	10.61	-0.01	0.0205	0.0010	-0.0042	0.0780	-0.2049	0.4864	0.0758	0.2388	0.1558	0.4910
134	10.70	-0.02	0.0161	0.0005	-0.0055	0.0310	-0.3416	0.4965	0.0749	0.2436	0.1508	0.4906
135	10.79	-0.00	0.0175	0.0010	-0.0052	0.0914	-0.2971	0.4982	0.0753	0.2431	0.1511	0.4880
136	10.86	-0.01	0.0133	-0.0003	-0.0079	-0.0601	-0.5940	0.5051	0.0725	0.2476	0.1435	0.4902
137	10.95	-0.03	0.0206	0.0013	-0.0049	0.0631	-0.2379	0.5068	0.0726	0.2471	0.1432	0.4876
138	11.04	-0.01	0.0131	0.0	-0.0056	0.0	-0.4427	0.5019	0.0707	0.2466	0.1408	0.4913

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2H 0.80 1.7 0.0 DEG FIL 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	11.13	-0.02	0.0205	0.0011	-0.0043	0.0436	-0.2098	0.5110	0.0704	0.2503	0.1377	0.4898
140	11.22	-0.02	0.0179	0.0005	-0.0053	0.0284	-0.3011	0.5111	0.0701	0.2496	0.1371	0.4884
141	11.31	-0.00	0.0232	0.0025	-0.0019	0.1077	-0.0819	0.5210	0.0710	0.2538	0.1362	0.4871
142	11.39	-0.01	0.0203	0.0017	-0.0036	0.0837	-0.1773	0.5213	0.0681	0.2537	0.1306	0.4867
143	11.47	-0.02	0.0161	0.0	-0.0055	0.0	-0.3416	0.5233	0.0655	0.2538	0.1251	0.4858
144	11.55	-0.02	0.0144	0.0004	-0.0050	0.0208	-0.3472	0.5233	0.0657	0.2531	0.1255	0.4837
145	11.64	-0.01	0.0220	0.0013	-0.0041	0.0591	-0.1964	0.5316	0.0665	0.2572	0.1251	0.4838
146	11.71	-0.02	0.0219	0.0021	-0.0040	0.0959	-0.1826	0.5366	0.0656	0.2603	0.1222	0.4851
147	11.81	-0.01	0.0165	0.0005	-0.0056	0.0345	-0.3862	0.5351	0.0641	0.2588	0.1198	0.4836
148	11.85	-0.01	0.0190	0.0005	-0.0045	0.0263	-0.2368	0.5356	0.0598	0.2593	0.1116	0.4841
149	11.97	-0.02	0.0176	-0.0005	-0.0054	-0.0284	-0.3068	0.5228	0.0552	0.2513	0.1056	0.4807
150	12.07	-0.02	0.0136	-0.0013	-0.0067	-0.1000	-0.3615	0.5332	0.0515	0.2554	0.0966	0.4798
151	12.13	-0.01	0.0204	0.0005	-0.0037	0.0245	-0.1814	0.5331	0.0519	0.2554	0.0973	0.4791
152	12.22	-0.02	0.0179	-0.0002	-0.0054	-0.0114	-0.3068	0.5366	0.0510	0.2577	0.0950	0.4802
153	12.31	-0.01	0.0232	0.0022	-0.0019	0.0948	-0.0819	0.5434	0.0503	0.2589	0.0925	0.4784
154	12.38	-0.01	0.0175	0.0	-0.0047	0.0	-0.2666	0.5483	0.0502	0.2626	0.0915	0.4789
155	12.47	-0.02	0.0133	-0.0016	-0.0073	-0.1203	-0.5489	0.5534	0.0496	0.2637	0.0896	0.4785
156	12.57	-0.01	0.0179	0.0009	-0.0046	0.0517	-0.2299	0.5601	0.0495	0.2683	0.0884	0.4798
157	12.65	-0.01	0.0191	-0.0005	-0.0059	-0.0382	-0.4504	0.5634	0.0494	0.2705	0.0877	0.4801
158	12.73	-0.02	0.0234	0.0013	-0.0033	0.0555	-0.1410	0.5735	0.0494	0.2734	0.0861	0.4787
159	12.81	-0.01	0.0203	0.0016	-0.0036	0.0788	-0.1773	0.5735	0.0490	0.2747	0.0854	0.4790
160	12.89	-0.00	0.0214	0.0	-0.0053	0.0	-0.4649	0.5768	0.0486	0.2763	0.0842	0.4798
161	12.97	-0.02	0.0234	0.0022	-0.0038	0.0940	-0.1624	0.5869	0.0478	0.2811	0.0814	0.4798
162	13.06	-0.01	0.0245	0.0044	-0.0009	0.1795	-0.0367	0.5914	0.0480	0.2842	0.0811	0.4801
163	13.15	0.00	0.0129	0.0006	-0.0051	0.0465	-0.3953	0.5902	0.0477	0.2836	0.0808	0.4802
164	13.22	-0.02	0.0178	0.0000	-0.0059	0.0341	-0.3352	0.6003	0.0475	0.2878	0.0791	0.4791
165	13.30	-0.01	0.0159	0.0006	-0.0048	0.0377	-0.3019	0.6070	0.0484	0.2915	0.0784	0.4802
166	13.41	-0.01	0.0171	0.0029	-0.0031	0.1637	-0.1813	0.6053	0.0472	0.2900	0.0780	0.4791
167	13.47	-0.02	0.0131	0.0	-0.0065	0.0	-0.4962	0.6102	0.0473	0.2951	0.0775	0.4836
168	13.56	-0.02	0.0229	0.0036	-0.0005	0.1572	-0.0218	0.6203	0.0473	0.2973	0.0762	0.4793
169	13.65	0.00	0.0172	0.0017	-0.0032	0.0984	-0.1860	0.6286	0.0476	0.3027	0.0757	0.4815
170	13.72	-0.02	0.0119	-0.0006	-0.0087	-0.0672	-0.7311	0.6253	0.0472	0.2997	0.0755	0.4793
171	13.80	-0.02	0.0116	-0.0002	-0.0067	-0.0172	-0.5776	0.6303	0.0473	0.3028	0.0750	0.4804
172	13.90	-0.00	0.0143	0.0011	-0.0043	0.0769	-0.3007	0.6369	0.0478	0.3067	0.0750	0.4816
173	13.97	-0.02	0.0203	0.0017	-0.0036	0.0837	-0.1773	0.6369	0.0476	0.3054	0.0747	0.4795
174	14.06	-0.02	0.0175	0.0009	-0.0053	0.0514	-0.3029	0.6385	0.0478	0.3075	0.0748	0.4816
175	14.14	-0.00	0.0115	-0.0002	-0.0060	-0.0174	-0.5217	0.6435	0.0477	0.3100	0.0741	0.4817
176	14.23	-0.02	0.0173	0.0019	-0.0039	0.1098	-0.2254	0.6519	0.0484	0.3127	0.0742	0.4797
177	14.30	-0.02	0.0165	0.0003	-0.0056	0.0207	-0.3862	0.6586	0.0480	0.3159	0.0729	0.4797
178	14.38	-0.00	0.0144	0.0006	-0.0049	0.0555	-0.3403	0.6569	0.0480	0.3158	0.0731	0.4807
179	14.47	-0.01	0.0162	0.0019	-0.0042	0.1336	-0.2958	0.6535	0.0484	0.3135	0.0740	0.4797
180	14.55	-0.02	0.0175	0.0009	-0.0053	0.0514	-0.3029	0.6602	0.0487	0.3161	0.0737	0.4788
181	14.63	-0.00	0.0116	-0.0002	-0.0067	-0.0172	-0.5776	0.6618	0.0484	0.3189	0.0731	0.4819
182	14.72	-0.01	0.0114	0.0005	-0.0053	0.0438	-0.4649	0.6585	0.0480	0.3166	0.0729	0.4808
183	14.79	-0.02	0.0174	0.0011	-0.0048	0.0632	-0.2844	0.6617	0.0488	0.3189	0.0737	0.4819
184	14.89	-0.00	0.0115	0.0	-0.0060	0.0	-0.5217	0.6685	0.0492	0.3201	0.0736	0.4788

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH PR10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7. 22 0.80 1.2 0.0 81=0111 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
185	14.97	-0.01	0.0159	0.0006	-0.0046	0.0377	-0.3019	0.6801	0.0488	0.3264	0.0717	0.4799
186	15.04	-0.02	0.0117	-0.0008	-0.0073	-0.0513	-0.6239	0.6717	0.0495	0.3224	0.0737	0.4808
187	15.15	-0.00	0.0226	0.0030	0.0008	0.1315	0.0351	0.6901	0.0496	0.3307	0.0719	0.4792
188	15.23	0.00	0.0174	0.0009	-0.0046	0.0517	-0.2644	0.6851	0.0500	0.3276	0.0730	0.4782
189	15.30	-0.02	0.0233	0.0019	-0.0026	0.0815	-0.1116	0.6868	0.0496	0.3277	0.0722	0.4771
190	15.41	-0.01	0.0186	0.0014	-0.0018	0.1021	-0.0968	0.6834	0.0499	0.3261	0.0730	0.4772
191	15.48	-0.01	0.0044	0.0	-0.0057	0.0	-0.6796	0.6867	0.0501	0.3290	0.0729	0.4791
192	15.55	-0.02	0.0248	0.0022	-0.0009	0.1100	-0.0450	0.6935	0.0496	0.3303	0.0715	0.4763
193	15.65	-0.01	0.0201	0.0019	-0.0016	0.0965	-0.0796	0.6906	0.0504	0.3279	0.0732	0.4763
194	15.73	-0.01	0.0157	0.0013	-0.0034	0.0826	-0.2166	0.6901	0.0506	0.3287	0.0733	0.4763
195	15.81	-0.03	0.0202	0.0016	-0.0023	0.0792	-0.1139	0.6918	0.0502	0.3281	0.0725	0.4763
196	15.90	-0.02	0.0116	-0.0003	-0.0080	-0.0256	-0.6780	0.6930	0.0515	0.3288	0.0743	0.4765
197	15.98	-0.01	0.0148	0.0013	-0.0017	0.0928	-0.1214	0.6947	0.0507	0.3309	0.0730	0.4763
198	16.05	-0.01	0.0185	0.0016	-0.0012	0.0865	-0.0649	0.7030	0.0512	0.3336	0.0728	0.4765
199	16.14	-0.01	0.0159	0.0008	-0.0041	0.0503	-0.2579	0.6980	0.0511	0.3326	0.0732	0.4765
200	16.24	0.00	0.0150	0.0010	-0.0021	0.1025	-0.1346	0.7027	0.0508	0.3341	0.0723	0.4755
201	16.30	-0.02	0.0159	0.0008	-0.0042	0.0503	-0.2642	0.7094	0.0514	0.3354	0.0724	0.4728
202	16.39	-0.02	0.0116	0.0005	-0.0053	0.0438	-0.4649	0.7083	0.0520	0.3338	0.0738	0.4728
203	16.48	0.01	0.0187	0.0022	0.0013	0.1317	0.0778	0.7178	0.0516	0.3394	0.0719	0.4728
204	16.56	-0.02	0.0148	0.0025	0.0010	0.1262	0.0505	0.7094	0.0521	0.3341	0.0736	0.4710
205	16.61	-0.02	0.0116	0.0	-0.0050	0.0	-0.5172	0.7094	0.0526	0.3341	0.0741	0.4710
206	16.73	0.00	0.0112	0.0010	-0.0033	0.0843	-0.2946	0.7128	0.0528	0.3337	0.0741	0.4682
207	16.78	-0.02	0.0161	0.0025	0.0022	0.1361	0.1215	0.7127	0.0528	0.3344	0.0741	0.4692
208	16.86	-0.02	0.0171	0.0021	-0.0019	0.1228	-0.1111	0.7211	0.0532	0.3378	0.0738	0.4685
209	16.97	0.00	0.0126	0.0013	-0.0025	0.1031	-0.1984	0.7177	0.0535	0.3368	0.0745	0.4693
210	17.03	-0.02	0.0132	0.0010	-0.0010	0.1151	-0.0719	0.7244	0.0535	0.3367	0.0738	0.4676
211	17.10	-0.02	0.0138	0.0010	0.0003	0.1159	0.0217	0.7242	0.0535	0.3375	0.0737	0.4647
212	17.21	-0.00	0.0055	-0.0003	-0.0073	-0.0545	-1.3273	0.7277	0.0547	0.3364	0.0751	0.4658
213	17.27	-0.01	0.0083	0.0006	-0.0050	0.0964	-0.6024	0.7194	0.0544	0.3350	0.0756	0.4657
214	17.35	-0.02	0.0157	0.0022	0.0013	0.1317	0.0778	0.7380	0.0543	0.3399	0.0736	0.4606
215	17.45	-0.00	0.0123	0.0016	-0.0005	0.1300	-0.0407	0.7262	0.0544	0.3342	0.0749	0.4602
216	17.53	-0.01	0.0081	0.0002	-0.0031	0.0207	-0.3827	0.7380	0.0547	0.3386	0.0741	0.4588
217	17.60	-0.02	0.0138	0.0029	0.0014	0.1747	0.0843	0.7430	0.0549	0.3410	0.0739	0.4590
218	17.69	-0.00	0.0069	-0.0005	-0.0089	-0.1250	-1.7250	0.7396	0.0549	0.3394	0.0762	0.4589
219	17.77	-0.01	0.0179	0.0025	0.0041	0.1395	0.2291	0.7446	0.0551	0.3418	0.0740	0.4590
220	17.86	-0.02	0.0124	0.0013	-0.0012	0.1048	-0.0968	0.7397	0.0550	0.3381	0.0743	0.4571
221	17.94	-0.01	0.0010	-0.0014	-0.0073	-1.3996	-7.3000	0.7215	0.0557	0.3266	0.0772	0.4527
222	18.01	-0.00	0.0132	0.0032	0.0078	0.1693	0.6021	0.7516	0.0554	0.3419	0.0737	0.4549
223	18.09	-0.02	0.0091	0.0005	-0.0030	0.0417	-0.3704	0.7415	0.0565	0.3364	0.0762	0.4537
224	18.17	-0.00	0.0155	0.0033	0.0094	0.2115	0.6346	0.7583	0.0553	0.3444	0.0729	0.4542
225	18.27	-0.01	0.0078	0.0009	-0.0011	0.1025	-0.1410	0.7449	0.0561	0.3373	0.0753	0.4528
226	18.34	-0.02	0.0122	0.0016	0.0001	0.1311	0.0082	0.7548	0.0572	0.3409	0.0758	0.4516
227	18.42	-0.00	0.0075	0.0010	0.0010	0.2133	0.1333	0.7515	0.0567	0.3392	0.0754	0.4514
228	18.51	-0.01	0.0130	0.0025	-0.0062	0.1923	0.4769	0.7665	0.0572	0.3459	0.0746	0.4513
229	18.58	-0.02	0.0012	-0.0014	-0.0092	-1.1666	-7.6667	0.7382	0.0573	0.3308	0.0776	0.4481
230	18.66	-0.00	0.0071	0.0010	0.0042	0.2253	0.5915	0.7651	0.0572	0.3439	0.0747	0.4495

MAIN IN MISSILE TAILS EFFECTS DATA

TEST 7 PART 28 MACH 0.80 REID-6 1.7 PHI 0.0 CONF 0.0 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	MFIA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
231	18.75	-0.00	0.0021	-0.0006	-0.0044	-0.2856	-2.0952	0.7536	0.0582	0.3371	0.0772	0.4473
232	18.83	-0.02	0.0134	0.0013	0.0019	0.1250	0.1827	0.7687	0.0577	0.3423	0.0750	0.4453
233	18.92	-0.01	0.0016	0.0	-0.0005	0.0	-0.3125	0.7637	0.0570	0.3405	0.0746	0.4459
234	19.00	-0.00	0.0065	-0.0009	-0.0040	-1.7995	-8.0000	0.7653	0.0582	0.3401	0.0760	0.4444
235	19.08	-0.03	0.0006	0.0003	-0.0001	0.0452	-0.0217	0.7686	0.0582	0.3423	0.0757	0.4454
236	19.15	-0.01	0.0056	0.0011	0.0007	0.1833	0.1167	0.7736	0.0592	0.3428	0.0765	0.4431
237	19.23	-0.01	-0.0021	-0.0013	-0.0069	0.6189	3.2857	0.7506	0.0589	0.3310	0.0784	0.4418
238	19.28	-0.02	0.0071	0.0009	0.0041	0.1267	0.5775	0.7721	0.0588	0.3428	0.0761	0.4448
239	19.37	-0.02	0.0055	0.0011	0.0046	0.1999	0.8364	0.7839	0.0589	0.3458	0.0751	0.4411
240	19.45	-0.00	-0.0024	-0.0004	-0.0049	0.3749	2.0417	0.7623	0.0592	0.3353	0.0776	0.4399
241	19.51	-0.02	0.0023	-0.0003	-0.0020	-0.9997	-6.6657	0.7657	0.0581	0.3363	0.0759	0.4392
242	19.60	-0.01	-0.0017	-0.0002	0.0011	0.1176	-0.6471	0.7773	0.0588	0.3406	0.0756	0.4387
243	19.69	-0.01	0.0016	0.0016	0.0048	0.8419	4.6316	0.7857	0.0585	0.3460	0.0744	0.4404
244	19.75	-0.03	-0.0019	-0.0002	0.0030	0.1052	-1.5789	0.7841	0.0584	0.3426	0.0745	0.4369
245	19.83	-0.03	-0.0002	-0.0014	-0.0025	0.3337	0.5952	0.7824	0.0600	0.3405	0.0767	0.4352
246	19.92	-0.01	-0.0049	0.0	0.0027	0.0	-0.5510	0.7823	0.0596	0.3418	0.0762	0.4369
247	19.97	-0.03	-0.0032	-0.0006	0.0015	0.1874	-0.4687	0.7840	0.0595	0.3426	0.0759	0.4378
248	20.05	-0.04	0.0	0.0014	0.0119	0.0014	0.0119	0.8056	0.0592	0.3524	0.0735	0.4374
249	20.14	-0.02	-0.0032	0.0	0.0010	0.0	-0.3125	0.7858	0.0595	0.3408	0.0757	0.4337
250	20.19	-0.03	-0.0021	0.0	0.0043	0.0	-2.0476	0.7926	0.0601	0.3433	0.0758	0.4332
251	20.28	-0.03	0.0059	0.0019	0.0132	0.3219	2.2373	0.8156	0.0592	0.3559	0.0726	0.4364
252	20.37	-0.02	-0.0016	0.0003	0.0148	-0.1666	-8.2222	0.8273	0.0594	0.3595	0.0718	0.4365
253	20.43	-0.03	0.0033	0.0006	0.0128	0.1999	4.2667	0.8206	0.0591	0.3570	0.0720	0.4350
254	20.51	-0.04	-0.0034	-0.1024	-0.0065	0.2448	0.6633	0.7708	0.0613	0.3309	0.0795	0.4293
255	20.58	-0.01	-0.0152	-0.0034	-0.0111	0.2565	0.7393	0.7560	0.0603	0.3237	0.0797	0.4282
256	20.65	-0.04	-0.0113	-0.0035	-0.0061	0.3097	0.5398	0.7710	0.0549	0.3302	0.0777	0.4283
257	20.72	-0.03	-0.0159	-0.0014	0.0020	0.1784	-0.1835	0.7990	0.0610	0.3446	0.0763	0.4313
258	20.80	-0.02	0.0095	0.0008	0.0203	1.5996	40.6000	0.8604	0.0595	0.3756	0.0691	0.4365
259	20.87	-0.03	0.0017	0.0005	0.0190	9.7141	27.1429	0.8389	0.0596	0.3638	0.0710	0.4337
260	20.95	-0.03	-0.0041	-0.0003	0.0133	0.0967	-4.2903	0.8169	0.0602	0.3555	0.0735	0.4341
261	21.03	-0.01	-0.0115	-0.0027	-0.0047	0.2347	0.4087	0.7792	0.0615	0.3323	0.0789	0.4265
262	21.11	-0.04	-0.0073	-0.0027	-0.0017	0.3698	0.2329	0.7957	0.0612	0.3423	0.0769	0.4302
263	21.19	-0.03	-0.0154	-0.0027	0.0020	0.1753	-0.1299	0.7826	0.0605	0.3339	0.0773	0.4267
264	21.27	-0.01	-0.0025	-0.0005	0.0205	0.1999	-8.2000	0.8488	0.0599	0.3687	0.0706	0.4344
265	21.33	-0.04	-0.0095	-0.0013	0.0174	0.1969	-2.6364	0.8421	0.0610	0.3642	0.0724	0.4325
266	21.41	-0.03	-0.0116	-0.0036	-0.0036	0.3103	0.3103	0.7643	0.0608	0.3257	0.0795	0.4261
267	21.49	-0.01	-0.0064	-0.0014	0.0155	0.2187	-2.4219	0.8356	0.0608	0.3583	0.0727	0.4288
268	21.56	-0.04	0.0029	-0.0002	0.0204	-0.0689	9.1034	0.8753	0.0603	0.3802	0.0689	0.4344
269	21.63	-0.03	0.0040	-0.0013	0.0145	-0.1444	1.6111	0.8222	0.0610	0.3565	0.0742	0.4336
270	21.73	-0.01	-0.0024	-0.0009	0.0168	2.2494	-42.0000	0.8389	0.0612	0.3606	0.0729	0.4298
271	21.79	-0.01	0.0041	0.0004	0.0223	-0.0987	2.7531	0.8454	0.0607	0.3671	0.0718	0.4342
272	21.87	-0.04	-0.0072	-0.0025	0.0101	0.3471	-1.4028	0.8272	0.0612	0.3576	0.0760	0.4323
273	21.95	-0.04	0.0022	-0.0009	0.0203	-0.4040	9.2273	0.8504	0.0613	0.3669	0.0721	0.4314
274	22.04	-0.04	-0.0029	-0.0005	0.0313	-0.8887	34.7778	0.8886	0.0600	0.3865	0.0675	0.4358
275	22.08	-0.04	-0.0035	-0.0029	0.0164	0.2526	-1.7263	0.8387	0.0614	0.3618	0.0732	0.4314
276	22.18	-0.02	-0.0052	-0.0029	0.0141	0.3870	-2.2742	0.8203	0.0619	0.3556	0.0754	0.4335

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2M 0.60 1.7 0.0 MINIMUM 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
277	22.24	-0.01	-0.0009	-0.0020	0.0212	2.2216	-23.5555	0.8569	0.0416	0.3720	0.0719	0.4341
278	22.31	-0.03	-0.0016	-0.0014	0.0204	0.8748	-16.5000	0.8902	0.0408	0.3887	0.0683	0.4344
279	22.39	-0.02	-0.0102	-0.0019	0.0192	0.1867	-0.9020	0.8138	0.0519	0.3484	0.0760	0.4281
280	22.48	-0.01	-0.0125	-0.0019	0.0265	0.1520	-2.2800	0.9135	0.0608	0.3973	0.0665	0.4349
281	22.54	-0.02	0.0033	-0.0013	0.0237	-0.3936	7.1818	0.8718	0.0423	0.3779	0.0714	0.4335
282	22.61	-0.03	-0.0077	-0.0022	0.0270	0.3116	-3.5065	0.9067	0.0616	0.3961	0.0679	0.4369
283	22.70	-0.04	-0.0116	-0.0028	0.0226	0.2372	-1.9153	0.8903	0.0610	0.3947	0.0685	0.4321
284	22.76	-0.01	-0.0049	-0.0024	0.0151	0.2553	-1.6064	0.8552	0.0620	0.3698	0.0725	0.4315
285	22.82	-0.03	-0.0120	-0.0026	0.0246	0.1999	-2.0500	0.9216	0.0624	0.4020	0.0677	0.4367
286	22.91	-0.04	-0.0164	-0.0035	0.0234	0.2134	-1.4268	0.9067	0.0612	0.3967	0.0675	0.4375
287	22.97	-0.02	-0.0049	-0.0049	0.0125	0.1695	-0.4429	0.8835	0.0624	0.3801	0.0706	0.4302
288	23.03	-0.04	-0.0212	-0.0022	0.0237	0.1037	-1.1179	0.9415	0.0621	0.4143	0.0659	0.4408
289	23.13	-0.02	-0.0149	-0.0027	0.0251	0.1363	-1.2677	0.9317	0.0618	0.4061	0.0663	0.4359
290	23.19	-0.02	-0.0143	-0.0035	0.0218	0.1813	-1.1295	0.9151	0.0619	0.3961	0.0678	0.4328
291	23.25	-0.04	-0.0164	-0.0033	0.0234	0.2012	-1.4268	0.9250	0.0617	0.4042	0.0667	0.4370
292	23.34	-0.01	-0.0118	-0.0025	0.0227	0.2118	-1.9237	0.8967	0.0627	0.3892	0.0699	0.4348
293	23.40	-0.03	-0.0105	-0.0033	0.0253	0.3142	-2.4095	0.9152	0.0612	0.3974	0.0669	0.4342
294	23.48	-0.05	-0.0092	-0.0025	0.0262	0.2717	-2.8478	0.9317	0.0625	0.4048	0.0671	0.4365
295	23.57	-0.04	-0.0183	-0.0036	0.0134	0.1967	-0.7322	0.8553	0.0619	0.3677	0.0724	0.4299
296	23.62	-0.03	-0.0279	-0.0044	0.0169	0.1577	-0.6057	0.9133	0.0631	0.3960	0.0691	0.4336
297	23.62	-0.05	-0.0046	-0.0016	0.0262	0.3043	-5.6957	0.8898	0.0633	0.3907	0.0711	0.4391
298	23.64	-0.03	-0.0264	-0.0050	0.0176	0.1693	-0.6667	0.9086	0.0627	0.3922	0.0690	0.4317
299	23.64	-0.02	-0.0200	-0.0041	0.0151	0.2069	-0.7550	0.8736	0.0616	0.3751	0.0705	0.4294
300	23.56	-0.03	-0.0104	-0.0030	0.0291	0.2864	-2.3173	0.9068	0.0629	0.3913	0.0693	0.4315
301	24.23	-0.03	0.0196	0.0017	0.0403	0.0857	2.0561	0.9082	0.0634	0.3962	0.0698	0.4362
302	25.13	-0.04	-0.0835	-0.0216	-0.0224	0.2586	0.2743	0.9434	0.0636	0.4091	0.0674	0.4336
303	26.09	-0.05	-0.0418	-0.0291	-0.0348	0.3066	0.4254	0.9186	0.0611	0.3969	0.0665	0.4321
304	27.06	-0.05	-0.0587	-0.0273	-0.0384	0.3070	0.4319	0.8945	0.0583	0.3721	0.0652	0.4160
305	28.15	-0.04	-0.0729	-0.0223	-0.0212	0.3058	0.2908	0.9162	0.0572	0.3832	0.0624	0.4182
306	29.23	-0.06	-0.0818	-0.0273	-0.0338	0.3337	0.4132	0.9280	0.0556	0.3915	0.0599	0.4219
307	30.35	-0.07	-0.0950	-0.0215	-0.0172	0.3908	0.3127	0.9278	0.0549	0.3961	0.0592	0.4269
308	31.58	-0.06	-0.1318	-0.0381	-0.0586	0.3507	0.4460	0.9379	0.0540	0.4023	0.0576	0.4288
309	32.67	-0.07	-0.1204	-0.0427	-0.0519	0.3546	0.4311	0.9798	0.0525	0.4231	0.0536	0.4318
310	33.76	-0.07	-0.1151	-0.0372	-0.0475	0.3231	0.4127	1.0068	0.0509	0.4326	0.0505	0.4297
311	34.93	-0.06	-0.1283	-0.0315	-0.0312	0.2558	0.4119	1.0204	0.0495	0.4370	0.0485	0.4283
312	36.12	-0.06	-0.1314	-0.0451	-0.0543	0.2671	0.4132	1.0372	0.0487	0.4444	0.0469	0.4285
313	37.35	-0.08	-0.0742	-0.0233	-0.0304	0.2479	0.3887	1.0662	0.0468	0.4562	0.0439	0.4279
314	38.64	-0.07	-0.0930	-0.0240	-0.0360	0.2484	0.3636	1.0998	0.0447	0.4723	0.0406	0.4294
315	40.11	-0.05	-0.0114	-0.0019	0.0058	0.1666	-0.5048	1.1258	0.0429	0.4805	0.0381	0.4268
316	41.85	-0.04	0.0021	0.0041	0.0185	1.9519	9.8095	1.1821	0.0394	0.5036	0.0337	0.4259
317	43.87	-0.04	-0.0204	-0.0044	0.0033	0.1418	-0.1250	1.2058	0.0375	0.5160	0.0311	0.4279
318	46.29	-0.04	0.0630	0.0132	0.0497	0.2045	0.7489	1.2523	0.0341	0.5347	0.0272	0.4278
319	48.99	-0.03	-0.0723	-0.0142	-0.0138	0.1964	0.1909	1.2394	0.0296	0.5243	0.0239	0.4230
320	51.94	0.10	-0.1148	-0.0285	-0.0351	0.2486	0.3063	1.2522	0.0241	0.5290	0.0192	0.4225
321	55.40	0.11	-0.0205	0.0035	0.0116	-0.1707	-0.5659	1.2984	0.0164	0.5468	0.0126	0.4218
322	58.18	0.08	-0.0341	0.0024	0.0054	-0.0850	-0.1586	1.3187	0.0112	0.5504	0.0085	0.4174

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
1	28	0.60	1.7	0.0	BLSDFIL	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
323	58.20	0.09	-0.0571	-0.0008	0.0	0.0140	0.0	1.2997	0.0124	0.5423	0.0095	0.4173
324	58.22	0.08	-0.0408	-0.0007	0.0078	0.0172	-0.1912	1.3360	0.0107	0.5595	0.0080	0.4188
325	58.21	0.06	-0.0304	0.0008	0.0124	-0.0263	-0.4145	1.3512	0.0110	0.5649	0.0081	0.4181
326	58.20	0.08	-0.0388	0.0046	0.0102	-0.1250	-0.2772	1.3355	0.0122	0.5567	0.0091	0.4168
327	58.22	0.09	-0.0582	0.0007	0.0068	-0.0170	-0.0481	1.3224	0.0130	0.5509	0.0098	0.4164
328	58.20	0.07	-0.0283	0.0048	0.0134	-0.1825	-0.5627	1.3427	0.0115	0.5604	0.0086	0.4174
329	58.21	0.07	0.0529	0.0165	0.0464	0.3118	0.8771	1.4058	0.0074	0.5921	0.0053	0.4212
330	58.23	0.07	-0.0207	0.0084	0.0200	-0.4057	-0.9662	1.3596	0.0108	0.5697	0.0079	0.4191
331	58.22	0.06	0.0373	0.0176	0.0422	0.4717	1.1314	1.4225	0.0070	0.6022	0.0049	0.4239
332	58.21	0.07	-0.0559	0.0023	0.0074	-0.0411	-0.1324	1.3332	0.0118	0.5549	0.0088	0.4162
333	58.22	0.10	-0.0301	0.0060	0.0186	-0.1574	-0.4882	1.3506	0.0113	0.5641	0.0084	0.4177

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 2B 0.60 1.7 0.0 61.0F11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-4.03	0.02	-0.0277	9.9999	0.0061	9.9999	-0.2746	-0.1787	-0.0488	-0.0846	0.2730	0.4734
2	-3.36	0.01	-0.0256	9.9999	0.0063	9.9999	-0.3268	-0.1468	-0.0409	-0.0678	0.2785	0.4619
3	-3.20	0.02	-0.0191	9.9999	0.0076	9.9999	-0.1979	-0.1436	-0.0400	-0.0655	0.2785	0.4561
4	-3.10	0.00	-0.0223	9.9999	0.0086	9.9999	-0.3857	-0.1389	-0.0386	-0.0631	0.2778	0.4543
5	-2.96	0.00	-0.0285	9.9999	0.0069	9.9999	-0.2421	-0.1246	-0.0348	-0.0558	0.2792	0.4478
6	-2.84	0.02	-0.0423	9.9999	0.0080	9.9999	-0.3547	-0.1214	-0.0340	-0.0548	0.2800	0.4514
7	-2.73	0.01	-0.0256	9.9999	0.0077	9.9999	-0.3031	-0.1167	-0.0328	-0.0518	0.2810	0.4439
8	-2.57	0.00	-0.0223	9.9999	0.0086	9.9999	-0.3857	-0.1151	-0.0324	-0.0509	0.2816	0.4422
9	-2.44	0.02	-0.0266	9.9999	0.0069	9.9999	-0.3350	-0.1054	-0.0298	-0.0466	0.2827	0.4421
10	-2.32	0.01	-0.0238	9.9999	0.0072	9.9999	-0.3025	-0.0987	-0.0291	-0.0441	0.2868	0.4468
11	-2.18	0.01	-0.0270	9.9999	0.0088	9.9999	-0.3259	-0.0921	-0.0260	-0.0397	0.3039	0.4311
12	-2.06	0.01	-0.0287	9.9999	0.0081	9.9999	-0.3913	-0.0873	-0.0270	-0.0372	0.3092	0.4261
13	-1.93	0.01	-0.0238	9.9999	0.0078	9.9999	-0.3277	-0.0794	-0.0247	-0.0332	0.3110	0.4181
14	-1.79	0.01	-0.0239	9.9999	0.0080	9.9999	-0.3766	-0.0762	-0.0239	-0.0322	0.3136	0.4226
15	-1.66	0.02	-0.0237	9.9999	0.0060	9.9999	-0.2532	-0.0699	-0.0223	-0.0290	0.3189	0.4149
16	-1.54	0.01	-0.0238	9.9999	0.0072	9.9999	-0.3025	-0.0670	-0.0205	-0.0266	0.3059	0.3978
17	-1.42	0.00	-0.0270	9.9999	0.0088	9.9999	-0.3259	-0.0655	-0.0200	-0.0265	0.3053	0.4046
18	-1.28	0.02	-0.0222	9.9999	0.0067	9.9999	-0.3018	-0.0578	-0.0172	-0.0230	0.2975	0.3979
19	-1.17	0.01	-0.0206	9.9999	0.0064	9.9999	-0.2388	-0.0516	-0.0154	-0.0197	0.2984	0.3818
20	-1.04	0.02	-0.0285	9.9999	0.0087	9.9999	-0.3053	-0.0453	-0.0135	-0.0171	0.2979	0.3775
21	-0.91	0.02	-0.0253	9.9999	0.0059	9.9999	-0.2332	-0.0422	-0.0126	-0.0148	0.2938	0.3507
22	-0.79	0.01	-0.0222	9.9999	0.0080	9.9999	-0.3604	-0.0374	-0.0115	-0.0144	0.3074	0.3850
23	-0.68	0.01	-0.0239	9.9999	0.0090	9.9999	-0.3766	-0.0326	-0.0103	-0.0126	0.3159	0.3865
24	-0.56	0.02	-0.0236	9.9999	0.0072	9.9999	-0.3025	-0.0263	-0.0086	-0.0096	0.3209	0.3574
25	-0.44	0.02	-0.0238	9.9999	0.0078	9.9999	-0.3277	-0.0232	-0.0075	-0.0077	0.3232	0.3319
26	-0.30	0.01	-0.0270	9.9999	0.0088	9.9999	-0.3259	-0.0185	-0.0061	-0.0059	0.3296	0.3189
27	-0.19	0.02	-0.0222	9.9999	0.0073	9.9999	-0.3288	-0.0138	-0.0049	-0.0048	0.3550	0.3678
28	-0.07	0.02	-0.0284	9.9999	0.0062	9.9999	-0.2183	-0.0108	-0.0036	-0.0025	0.3332	0.2315
29	0.05	0.00	-0.0265	9.9999	0.0087	9.9999	-0.3053	-0.0076	-0.0027	-0.0015	0.3552	0.1974
30	0.18	0.02	-0.0238	9.9999	0.0078	9.9999	-0.3277	-0.0063	-0.0015	0.0	0.2380	0.0
31	0.28	0.02	-0.0222	9.9999	0.0073	9.9999	-0.3288	-0.0017	-0.0001	0.0005	0.0588	-0.2941
32	0.41	0.00	-0.0253	9.9999	0.0083	9.9999	-0.3281	0.0044	0.0024	0.0051	0.5453	1.1591
33	0.53	0.02	-0.0269	9.9999	0.0064	9.9999	-0.2388	0.0090	0.0040	0.0063	0.4463	0.7000
34	0.65	0.02	-0.0222	9.9999	0.0073	9.9999	-0.3288	0.0091	0.0035	0.0049	0.3845	0.5385
35	0.76	0.00	-0.0253	9.9999	0.0083	9.9999	-0.3281	0.0152	0.0057	0.0082	0.3749	0.5395
36	0.87	0.02	-0.0284	9.9999	0.0062	9.9999	-0.2183	0.0209	0.0093	0.0110	0.4449	0.5263
37	1.00	0.02	-0.0237	9.9999	0.0060	9.9999	-0.2532	0.0224	0.0100	0.0125	0.4463	0.5580
38	1.11	0.00	-0.0284	9.9999	0.0074	9.9999	-0.2606	0.0269	0.0116	0.0136	0.4311	0.5056
39	1.24	0.01	-0.0253	9.9999	0.0071	9.9999	-0.2806	0.0301	0.0125	0.0146	0.4152	0.4850
40	1.35	0.02	-0.0190	9.9999	0.0070	9.9999	-0.3684	0.0366	0.0141	0.0165	0.3873	0.4533
41	1.44	-0.01	-0.0269	9.9999	0.0062	9.9999	-0.3048	0.0379	0.0145	0.0167	0.3825	0.4406
42	1.58	0.01	-0.0284	9.9999	0.0062	9.9999	-0.2183	0.0456	0.0172	0.0201	0.3771	0.4408
43	1.70	0.03	-0.0266	9.9999	0.0067	9.9999	-0.3010	0.0488	0.0180	0.0211	0.3688	0.4324
44	1.79	-0.00	-0.0222	9.9999	0.0073	9.9999	-0.3559	0.0521	0.0183	0.0208	0.3512	0.3992
45	1.91	0.02	-0.0221	9.9999	0.0067	9.9999	-0.3032	0.0632	0.0212	0.0251	0.3354	0.3972
46	2.04	0.02	-0.0221	9.9999	0.0069	9.9999	-0.2217	0.0664	0.0219	0.0261	0.3297	0.3991

TEST T 28 0.80 1.7 | PART 0.0 Mid0f11 | MACH | RX10-6 0.0 | PHI | CONF | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
87	2.13	0.00	-0.0253	9.9999	0.0077	9.9999	-0.3043	0.0727	0.0235	0.0293	0.3232	0.4030
88	2.25	0.02	-0.0237	9.9999	0.0066	9.9999	-0.2785	0.0775	0.0245	0.0298	0.3160	0.3845
89	2.38	0.02	-0.0221	9.9999	0.0055	9.9999	-0.2489	0.0838	0.0262	0.0324	0.3126	0.3866
90	2.47	0.00	-0.0253	9.9999	0.0071	9.9999	-0.2806	0.0870	0.0269	0.0340	0.3091	0.3908
91	2.59	0.01	-0.0236	9.9999	0.0064	9.9999	-0.3350	0.0903	0.0276	0.0348	0.3056	0.4075
92	2.72	0.02	-0.0169	9.9999	0.0052	9.9999	-0.2751	0.0998	0.0298	0.0391	0.2995	0.3918
93	2.81	0.00	-0.0237	9.9999	0.0066	9.9999	-0.2785	0.0998	0.0299	0.0404	0.2995	0.4048
94	2.92	0.01	-0.0252	9.9999	0.0053	9.9999	-0.2103	0.1109	0.0326	0.0447	0.2939	0.4031
95	3.06	0.02	-0.0169	9.9999	0.0052	9.9999	-0.2751	0.1125	0.0331	0.0462	0.2941	0.4107
96	3.16	0.00	-0.0237	9.9999	0.0066	9.9999	-0.2785	0.1158	0.0336	0.0465	0.2886	0.4016
97	3.27	-0.00	-0.0221	9.9999	0.0067	9.9999	-0.3332	0.1221	0.0354	0.0504	0.2898	0.4128
98	3.39	0.02	-0.0179	9.9999	0.0059	9.9999	-0.3391	0.1253	0.0359	0.0520	0.2864	0.4150
99	3.49	0.00	-0.0221	9.9999	0.0067	9.9999	-0.3032	0.1316	0.0377	0.0546	0.2864	0.4149
80	3.58	-0.01	-0.0207	9.9999	0.0052	9.9999	-0.1948	0.1347	0.0388	0.0575	0.2880	0.4269
81	3.73	0.03	-0.0158	9.9999	0.0054	9.9999	-0.3418	0.1411	0.0402	0.0601	0.2848	0.4259
82	3.83	0.00	-0.0206	9.9999	0.0062	9.9999	-0.3010	0.1458	0.0417	0.0651	0.2859	0.4465
83	3.94	0.00	-0.0206	9.9999	0.0057	9.9999	-0.2767	0.1492	0.0429	0.0669	0.2875	0.4484
84	4.06	0.02	-0.0159	9.9999	0.0065	9.9999	-0.4151	0.1576	0.0436	0.0669	0.2766	0.4245
85	4.18	0.01	-0.0206	9.9999	0.0057	9.9999	-0.2767	0.1604	0.0454	0.0725	0.2830	0.4520
86	4.27	0.00	-0.0206	9.9999	0.0063	9.9999	-0.3058	0.1653	0.0465	0.0749	0.2812	0.4531
87	4.40	0.02	-0.0158	9.9999	0.0049	9.9999	-0.3038	0.1734	0.0481	0.0789	0.2773	0.4550
88	4.50	0.01	-0.0206	9.9999	0.0057	9.9999	-0.2767	0.1732	0.0485	0.0802	0.2799	0.4638
89	4.60	0.00	-0.0237	9.9999	0.0060	9.9999	-0.2532	0.1796	0.0500	0.0835	0.2783	0.4649
70	4.73	0.02	-0.0158	9.9999	0.0048	9.9999	-0.3038	0.1844	0.0512	0.0859	0.2776	0.4658
71	4.81	0.00	-0.0190	9.9999	0.0052	9.9999	-0.2737	0.1893	0.0523	0.0896	0.2762	0.4733
72	4.90	-0.01	-0.0221	9.9999	0.0055	9.9999	-0.2489	0.1926	0.0533	0.0912	0.2770	0.4748
73	5.04	0.02	-0.0158	9.9999	0.0048	9.9999	-0.3038	0.1987	0.0549	0.0951	0.2762	0.4786
74	5.13	0.02	-0.0190	9.9999	0.0052	9.9999	-0.2737	0.2005	0.0551	0.0965	0.2747	0.4813
75	5.23	-0.00	-0.0221	9.9999	0.0055	9.9999	-0.2489	0.2052	0.0563	0.0990	0.2743	0.4825
76	5.35	0.02	-0.0168	9.9999	0.0057	9.9999	-0.4453	0.2101	0.0572	0.1013	0.2722	0.4822
77	5.43	0.01	-0.0174	9.9999	0.0047	9.9999	-0.2701	0.2136	0.0585	0.1051	0.2738	0.4920
78	5.52	-0.00	-0.0207	9.9999	0.0069	9.9999	-0.3333	0.2184	0.0596	0.1098	0.2728	0.4982
79	5.64	0.02	-0.0174	9.9999	0.0047	9.9999	-0.2701	0.2231	0.0613	0.1133	0.2747	0.5078
80	5.75	0.00	-0.0190	9.9999	0.0040	9.9999	-0.2105	0.2279	0.0625	0.1163	0.2742	0.5103
81	5.83	-0.01	-0.0190	9.9999	0.0046	9.9999	-0.2421	0.2279	0.0628	0.1189	0.2755	0.5217
82	5.95	0.00	-0.0159	9.9999	0.0044	9.9999	-0.3019	0.2327	0.0638	0.1207	0.2741	0.5187
83	6.04	0.01	-0.0127	9.9999	0.0045	9.9999	-0.3543	0.2376	0.0646	0.1237	0.2718	0.5206
84	6.13	-0.01	-0.0206	9.9999	0.0051	9.9999	-0.2476	0.2441	0.0659	0.1270	0.2699	0.5203
85	6.23	0.01	-0.0221	9.9999	0.0037	9.9999	-0.1674	0.2506	0.0672	0.1321	0.2681	0.5271
86	6.33	0.01	-0.0063	9.9999	0.0044	9.9999	-0.6769	0.2474	0.0665	0.1311	0.2687	0.5299
87	6.42	-0.00	-0.0190	9.9999	0.0073	9.9999	-0.4562	0.2562	0.0678	0.1356	0.2646	0.5285
88	6.53	0.01	-0.0190	9.9999	0.0040	9.9999	-0.2105	0.2610	0.0691	0.1385	0.2647	0.5307
89	6.63	0.01	-0.0063	9.9999	0.0038	9.9999	-0.5846	0.2661	0.0698	0.1428	0.2622	0.5366
90	6.73	-0.01	-0.0158	9.9999	0.0042	9.9999	-0.2642	0.2763	0.0711	0.1462	0.2591	0.5338
91	6.82	-0.00	-0.0159	9.9999	0.0042	9.9999	-0.2642	0.2710	0.0706	0.1446	0.2604	0.5336
92	6.93	0.02	-0.0063	9.9999	0.0031	9.9999	-0.4844	0.2776	0.0717	0.1504	0.2582	0.5418

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	28	0.60	1.7	0.0	minus11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	ACPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
93	7.03	0.00	-0.0065	9.9999	0.0056	9.9999	-0.4615	0.2793	0.0720	0.1524	0.2577	0.5456
94	7.12	0.00	-0.0154	9.9999	0.0062	9.9999	-0.2662	0.2875	0.0736	0.1591	0.2559	0.5534
95	7.23	0.01	-0.0033	9.9999	0.0034	9.9999	-1.0303	0.2910	0.0736	0.1606	0.2529	0.5519
96	7.32	-0.01	-0.0127	9.9999	0.0033	9.9999	-0.2598	0.2926	0.0739	0.1614	0.2525	0.5516
97	7.41	0.00	-0.0046	9.9999	0.0035	9.9999	-0.3646	0.2999	0.0749	0.1662	0.2497	0.5542
98	7.51	0.01	-0.0068	9.9999	0.0027	9.9999	-0.5625	0.3066	0.0757	0.1700	0.2486	0.5545
99	7.59	-0.00	-0.0080	9.9999	0.0036	9.9999	-0.4500	0.3066	0.0756	0.1694	0.2465	0.5525
100	7.69	-0.00	-0.0084	9.9999	0.0036	9.9999	-0.4500	0.3099	0.0763	0.1729	0.2461	0.5529
101	7.80	0.01	-0.0063	9.9999	0.0013	9.9999	-0.2063	0.3183	0.0773	0.1788	0.2428	0.5617
102	7.88	-0.00	-0.0080	9.9999	0.0024	9.9999	-0.3000	0.3252	0.0777	0.1820	0.2389	0.5597
103	7.98	-0.01	-0.0080	9.9999	0.0030	9.9999	-0.3750	0.3252	0.0778	0.1826	0.2392	0.5615
104	8.08	0.01	-0.0017	9.9999	0.0017	9.9999	-1.0000	0.3353	0.0788	0.1880	0.2358	0.5607
105	8.15	0.00	-0.0063	9.9999	0.0013	9.9999	-0.2063	0.3353	0.0788	0.1880	0.2359	0.5607
106	8.24	-0.00	-0.0111	9.9999	0.0028	9.9999	-0.2523	0.3420	0.0796	0.1919	0.2327	0.5611
107	8.34	0.01	-0.0063	9.9999	0.0007	9.9999	-0.1111	0.3471	0.0802	0.1949	0.2310	0.5615
108	8.41	0.00	-0.0079	9.9999	0.0006	9.9999	-0.0759	0.3521	0.0807	0.1973	0.2291	0.5604
109	8.50	-0.01	-0.0079	9.9999	0.0018	9.9999	-0.2278	0.3573	0.0810	0.2003	0.2266	0.5608
110	8.60	0.01	-0.0063	9.9999	0.0001	9.9999	-0.0159	0.3657	0.0819	0.2049	0.2239	0.5603
111	8.66	-0.00	-0.0031	9.9999	-0.0002	9.9999	0.0645	0.3691	0.0822	0.2071	0.2226	0.5611
112	8.76	-0.01	-0.0033	9.9999	0.0028	9.9999	-0.8485	0.3726	0.0823	0.2093	0.2208	0.5617
113	8.85	0.01	-0.0047	9.9999	0.0002	9.9999	-0.0426	0.3742	0.0828	0.2121	0.2212	0.5668
114	8.94	-0.00	-0.0016	9.9999	-0.0001	9.9999	0.0625	0.3796	0.0831	0.2151	0.2198	0.5669
115	9.01	-0.00	-0.0017	9.9999	0.0023	9.9999	-1.3529	0.3828	0.0833	0.2167	0.2175	0.5661
116	9.13	-0.00	-0.0062	9.9999	-0.0011	9.9999	0.1774	0.3897	0.0835	0.2198	0.2142	0.5668
117	9.21	-0.00	-0.0001	9.9999	0.0012	9.9999	-12.0000	0.3933	0.0835	0.2239	0.2122	0.5693
118	9.29	-0.00	-0.0032	9.9999	0.0004	9.9999	-0.1250	0.3967	0.0837	0.2268	0.2109	0.5717
119	9.40	-0.00	-0.0016	9.9999	-0.0001	9.9999	0.0625	0.4012	0.0836	0.2307	0.2083	0.5750
120	9.47	0.00	-0.0015	9.9999	-0.0013	9.9999	0.8667	0.3995	0.0837	0.2305	0.2095	0.5779
121	9.52	-0.02	0.0	9.9999	0.0006	9.9999	0.0006	0.4064	0.0840	0.2330	0.2066	0.5733
122	9.60	-0.00	0.0015	9.9999	0.0013	9.9999	0.8667	0.4066	0.0835	0.2356	0.2053	0.5794
123	9.73	-0.00	0.0001	9.9999	-0.0018	9.9999	-14.0000	0.4134	0.0841	0.2407	0.2034	0.5822
124	9.80	-0.02	-0.0062	9.9999	-0.0005	9.9999	0.0806	0.4135	0.0837	0.2408	0.2024	0.5804
125	9.90	-0.01	0.0	9.9999	-0.0006	9.9999	-0.0006	0.4169	0.0842	0.2435	0.2016	0.5841
126	10.01	0.00	0.0047	9.9999	-0.0002	9.9999	-0.0426	0.4241	0.0837	0.2479	0.1973	0.5865
127	10.07	-0.02	0.0016	9.9999	-0.0005	9.9999	-0.3125	0.4260	0.0833	0.2493	0.1955	0.5852
128	10.16	-0.02	-0.0033	9.9999	-0.0026	9.9999	0.2796	0.4277	0.0835	0.2507	0.1952	0.5862
129	10.27	0.00	-0.0014	9.9999	-0.0038	9.9999	2.7143	0.4348	0.0830	0.2538	0.1908	0.5837
130	10.33	-0.02	0.0016	9.9999	-0.0011	9.9999	-0.6875	0.4368	0.0826	0.2558	0.1891	0.5856
131	10.43	-0.02	0.0001	9.9999	-0.0012	9.9999	-12.0000	0.4415	0.0815	0.2575	0.1865	0.5832
132	10.53	0.01	0.0048	9.9999	-0.0021	9.9999	-0.4375	0.4413	0.0822	0.2602	0.1862	0.5896
133	10.61	-0.01	0.0063	9.9999	-0.0007	9.9999	-0.1111	0.4469	0.0813	0.2631	0.1819	0.5887
134	10.70	-0.02	0.0001	9.9999	-0.0030	9.9999	-30.0000	0.4489	0.0806	0.2644	0.1795	0.5898
135	10.79	-0.00	0.0064	9.9999	-0.0019	9.9999	-0.2969	0.4513	0.0790	0.2657	0.1750	0.5887
136	10.86	-0.01	-0.0059	9.9999	-0.0072	9.9999	1.2203	0.4530	0.0792	0.2684	0.1768	0.5925
137	10.95	-0.03	-0.0044	9.9999	-0.0052	9.9999	1.1818	0.4547	0.0793	0.2692	0.1744	0.5920
138	11.04	-0.01	0.0018	9.9999	-0.0047	9.9999	-2.6111	0.4601	0.0787	0.2702	0.1718	0.5873

TEST 7 PART 28 MACH 0.64 RX10-6 1.7 PHI 0.0 CONF MINUFIN L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNFA	CMA	CHA	XCPFA	YCPFA
139	11.13	-0.02	0.0002	9.9999	-0.0048	9.9999	-24.0000	0.4567	0.0761	0.2692	0.1666	0.5894
140	11.22	-0.02	0.0002	9.9999	-0.0042	9.9999	-21.0000	0.4635	0.0768	0.2763	0.1657	0.5918
141	11.31	-0.00	0.0034	9.9999	-0.0058	9.9999	-1.7059	0.4607	0.0748	0.2726	0.1623	0.5917
142	11.39	-0.01	0.0069	9.9999	-0.0033	9.9999	-0.7959	0.4698	0.0738	0.2763	0.1570	0.5881
143	11.47	-0.02	0.0002	9.9999	-0.0048	9.9999	-24.0000	0.4669	0.0716	0.2754	0.1527	0.5873
144	11.55	-0.00	0.0065	9.9999	-0.0050	9.9999	-0.7692	0.4712	0.0747	0.2785	0.1585	0.5910
145	11.64	-0.01	0.0065	9.9999	-0.0050	9.9999	-0.7692	0.4791	0.0722	0.2794	0.1507	0.5832
146	11.71	-0.02	0.0002	9.9999	-0.0048	9.9999	-24.0000	0.4781	0.0703	0.2806	0.1470	0.5865
147	11.81	-0.01	0.0034	9.9999	-0.0058	9.9999	-1.7059	0.4819	0.0694	0.2812	0.1440	0.5835
148	11.89	-0.01	0.0065	9.9999	-0.0062	9.9999	-0.9538	0.4904	0.0699	0.2858	0.1425	0.5828
149	11.97	-0.02	0.0033	9.9999	-0.0060	9.9999	-1.2121	0.4904	0.0699	0.2864	0.1425	0.5840
150	12.07	-0.00	0.0019	9.9999	-0.0065	9.9999	-3.4211	0.5012	0.0691	0.2903	0.1378	0.5792
151	12.13	-0.01	0.0062	9.9999	-0.0073	9.9999	-0.8902	0.4978	0.0687	0.2894	0.1380	0.5814
152	12.22	-0.02	0.0050	9.9999	-0.0057	9.9999	-1.1400	0.4993	0.0648	0.2910	0.1297	0.5828
153	12.31	-0.01	0.0061	9.9999	-0.0066	9.9999	-0.8148	0.5005	0.0615	0.2900	0.1228	0.5794
154	12.38	-0.01	0.0066	9.9999	-0.0060	9.9999	-1.2121	0.5164	0.0656	0.2988	0.1270	0.5786
155	12.47	-0.02	0.0050	9.9999	-0.0075	9.9999	-1.5000	0.5116	0.0646	0.2983	0.1262	0.5831
156	12.57	-0.01	0.0066	9.9999	-0.0074	9.9999	-1.1212	0.5081	0.0600	0.2956	0.1181	0.5818
157	12.65	-0.01	0.0062	9.9999	-0.0091	9.9999	-1.1098	0.5148	0.0606	0.2974	0.1177	0.5777
158	12.73	-0.02	0.0005	9.9999	-0.0103	9.9999	-20.6000	0.5151	0.0600	0.2980	0.1165	0.5785
159	12.81	-0.01	0.0051	9.9999	-0.0081	9.9999	-1.5882	0.5133	0.0555	0.2967	0.1081	0.5780
160	12.99	0.00	0.0128	9.9999	-0.0069	9.9999	-0.5391	0.5219	0.0556	0.3019	0.1065	0.5785
161	12.97	-0.02	0.0081	9.9999	-0.0066	9.9999	-0.8148	0.5163	0.0520	0.2978	0.1007	0.5768
162	13.06	-0.01	0.0097	9.9999	-0.0071	9.9999	-0.7320	0.5213	0.0525	0.3008	0.1007	0.5778
163	13.15	0.00	0.0129	9.9999	-0.0061	9.9999	-0.6279	0.5233	0.0521	0.3015	0.0995	0.5762
164	13.22	-0.02	0.0062	9.9999	-0.0079	9.9999	-0.9634	0.5218	0.0515	0.3020	0.0987	0.5788
165	13.30	-0.01	0.0098	9.9999	-0.0083	9.9999	-0.8469	0.5272	0.0509	0.3030	0.0965	0.5747
166	13.41	-0.00	0.0190	9.9999	-0.0064	9.9999	-0.3368	0.5252	0.0515	0.3023	0.0980	0.5756
167	13.47	-0.02	0.0113	9.9999	-0.0076	9.9999	-0.6726	0.5441	0.0523	0.3108	0.0961	0.5712
168	13.56	-0.02	0.0113	9.9999	-0.0076	9.9999	-0.6726	0.5339	0.0515	0.3074	0.0964	0.5758
169	13.65	0.00	0.0129	9.9999	-0.0097	9.9999	-0.7209	0.5425	0.0519	0.3094	0.0956	0.5703
170	13.72	-0.02	0.0129	9.9999	-0.0081	9.9999	-0.6279	0.5428	0.0511	0.3086	0.0941	0.5685
171	13.80	-0.02	0.0129	9.9999	-0.0075	9.9999	-0.5814	0.5461	0.0514	0.3109	0.0941	0.5693
172	13.90	-0.00	0.0178	9.9999	-0.0095	9.9999	-0.5398	0.5512	0.0516	0.3125	0.0936	0.5669
173	13.97	-0.02	0.0114	9.9999	-0.0090	9.9999	-0.8246	0.5497	0.0513	0.3137	0.0933	0.5707
174	14.04	-0.02	0.0082	9.9999	-0.0085	9.9999	-1.0366	0.5597	0.0522	0.3165	0.0932	0.5655
175	14.14	-0.00	0.0130	9.9999	-0.0111	9.9999	-0.8538	0.5594	0.0520	0.3164	0.0929	0.5652
176	14.23	-0.02	0.0190	9.9999	-0.0064	9.9999	-0.3368	0.5598	0.0520	0.3151	0.0929	0.5629
177	14.30	-0.02	0.0098	9.9999	-0.0095	9.9999	-0.9694	0.5598	0.0520	0.3171	0.0929	0.5665
178	14.39	-0.00	0.0146	9.9999	-0.0110	9.9999	-0.7534	0.5667	0.0521	0.3189	0.0919	0.5627
179	14.47	-0.01	0.0175	9.9999	-0.0071	9.9999	-0.4057	0.5650	0.0521	0.3201	0.0922	0.5665
180	14.55	-0.02	0.0145	9.9999	-0.0086	9.9999	-0.5931	0.5668	0.0519	0.3195	0.0915	0.5637
181	14.63	-0.00	0.0101	9.9999	-0.0097	9.9999	-0.6025	0.5770	0.0525	0.3242	0.0910	0.5619
182	14.72	-0.01	0.0207	9.9999	-0.0075	9.9999	-0.3623	0.5804	0.0528	0.3251	0.0909	0.5681
183	14.79	-0.02	0.0206	9.9999	-0.0057	9.9999	-0.2767	0.5754	0.0522	0.3215	0.0907	0.5587
184	14.89	-0.00	0.0178	9.9999	-0.0095	9.9999	-0.5398	0.5821	0.0529	0.3253	0.0909	0.5588

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 28 0.80 1.0 0.0 blkOFil 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CN3	CH3	XCPF3	YCPF3	CNF4	CH4	CH4	XCPF4	YCPF4
185	14.97	-0.01	0.0167	9.9999	-0.0115	9.9999	-0.7099	0.5786	0.0527	0.3211	0.0911	0.5550
186	15.04	-0.02	0.0114	9.9999	-0.0098	9.9999	-0.8246	0.5806	0.0528	0.3232	0.0909	0.5569
187	15.15	-0.00	0.0146	9.9999	-0.0104	9.9999	-0.7123	0.5802	0.0531	0.3213	0.0915	0.5538
188	15.23	0.00	0.0177	9.9999	-0.0101	9.9999	-0.5706	0.5871	0.0534	0.3250	0.0909	0.5536
189	15.30	-0.02	0.0145	9.9999	-0.0086	9.9999	-0.5931	0.5818	0.0534	0.3214	0.0918	0.5524
190	15.41	-0.01	0.0176	9.9999	-0.0095	9.9999	-0.5398	0.5941	0.0532	0.3281	0.0895	0.5523
191	15.48	-0.01	0.0208	9.9999	-0.0105	9.9999	-0.5048	0.5955	0.0539	0.3283	0.0905	0.5513
192	15.55	-0.02	0.0222	9.9999	-0.0081	9.9999	-0.2748	0.5800	0.0536	0.3207	0.0926	0.5529
193	15.65	-0.01	0.0166	9.9999	-0.0122	9.9999	-0.8356	0.5819	0.0534	0.3227	0.0917	0.5546
194	15.73	-0.01	0.0208	9.9999	-0.0105	9.9999	-0.5048	0.5955	0.0539	0.3276	0.0905	0.5501
195	15.81	-0.03	0.0177	9.9999	-0.0107	9.9999	-0.6045	0.5954	0.0543	0.3277	0.0912	0.5504
196	15.90	-0.02	0.0177	9.9999	-0.0106	9.9999	-0.6102	0.5967	0.0539	0.3283	0.0903	0.5502
197	15.98	-0.01	0.0239	9.9999	-0.0091	9.9999	-0.3638	0.5947	0.0545	0.3282	0.0916	0.5519
198	16.05	-0.01	0.0238	9.9999	-0.0060	9.9999	-0.2521	0.6000	0.0546	0.3312	0.0910	0.5528
199	16.14	-0.01	0.0177	9.9999	-0.0102	9.9999	-0.5763	0.5965	0.0544	0.3289	0.0912	0.5514
200	16.24	0.00	0.0270	9.9999	-0.0082	9.9999	-0.3037	0.5959	0.0545	0.3294	0.0914	0.5528
201	16.30	-0.02	0.0220	9.9999	-0.0088	9.9999	-0.3839	0.5960	0.0549	0.3274	0.0924	0.5512
202	16.39	-0.02	0.0208	9.9999	-0.0087	9.9999	-0.4183	0.5926	0.0546	0.3279	0.0921	0.5535
203	16.48	0.01	0.0240	9.9999	-0.0097	9.9999	-0.4042	0.5937	0.0556	0.3275	0.0936	0.5516
204	16.56	-0.02	0.0178	9.9999	-0.0114	9.9999	-0.6404	0.6096	0.0553	0.3357	0.0907	0.5507
205	16.61	-0.02	0.0223	9.9999	-0.0074	9.9999	-0.3318	0.6094	0.0556	0.3344	0.0912	0.5487
206	16.73	0.00	0.0280	9.9999	-0.0103	9.9999	-0.4292	0.6075	0.0560	0.3324	0.0922	0.5472
207	16.78	-0.02	0.0208	9.9999	-0.0081	9.9999	-0.3894	0.6076	0.0559	0.3324	0.0920	0.5471
208	16.88	-0.02	0.0208	9.9999	-0.0081	9.9999	-0.3894	0.6126	0.0565	0.3348	0.0922	0.5465
209	16.97	0.00	0.0239	9.9999	-0.0091	9.9999	-0.3808	0.6161	0.0564	0.3363	0.0915	0.5459
210	17.03	-0.02	0.0177	9.9999	-0.0102	9.9999	-0.5763	0.6069	0.0570	0.3346	0.0936	0.5495
211	17.10	-0.02	0.0238	9.9999	-0.0054	9.9999	-0.2269	0.5969	0.0565	0.3284	0.0946	0.5502
212	17.21	-0.00	0.0255	9.9999	-0.0083	9.9999	-0.3255	0.6161	0.0563	0.3363	0.0914	0.5459
213	17.27	-0.01	0.0235	9.9999	-0.0057	9.9999	-0.2000	0.6230	0.0566	0.3407	0.0911	0.5469
214	17.35	-0.02	0.0176	9.9999	-0.0077	9.9999	-0.4375	0.6087	0.0575	0.3333	0.0944	0.5476
215	17.45	-0.00	0.0224	9.9999	-0.0092	9.9999	-0.4107	0.6105	0.0576	0.3354	0.0943	0.5494
216	17.53	-0.01	0.0234	9.9999	-0.0079	9.9999	-0.3305	0.6156	0.0578	0.3377	0.0939	0.5486
217	17.60	-0.02	0.0207	9.9999	-0.0069	9.9999	-0.3333	0.6225	0.0580	0.3363	0.0931	0.5435
218	17.69	-0.00	0.0239	9.9999	-0.0091	9.9999	-0.3808	0.6122	0.0575	0.3369	0.0939	0.5478
219	17.77	-0.01	0.0208	9.9999	-0.0087	9.9999	-0.4183	0.6086	0.0579	0.3333	0.0951	0.5477
220	17.86	-0.02	0.0176	9.9999	-0.0077	9.9999	-0.4375	0.6225	0.0582	0.3402	0.0935	0.5465
221	17.94	-0.01	0.0177	9.9999	-0.0102	9.9999	-0.5763	0.6352	0.0580	0.3463	0.0913	0.5452
222	18.01	-0.00	0.0254	9.9999	-0.0083	9.9999	-0.3268	0.6155	0.0582	0.3373	0.0962	0.5480
223	18.09	-0.02	0.0206	9.9999	-0.0063	9.9999	-0.3058	0.6279	0.0588	0.3433	0.0936	0.5467
224	18.17	-0.00	0.0238	9.9999	-0.0066	9.9999	-0.2773	0.6069	0.0591	0.3341	0.0976	0.5505
225	18.27	-0.01	0.0239	9.9999	-0.0091	9.9999	-0.3808	0.6207	0.0594	0.3409	0.0957	0.5492
226	18.34	-0.02	0.0195	9.9999	-0.0086	9.9999	-0.5931	0.6241	0.0598	0.3412	0.0955	0.5467
227	18.42	-0.00	0.0238	9.9999	-0.0078	9.9999	-0.3277	0.6310	0.0598	0.3456	0.0947	0.5477
228	18.51	-0.01	0.0256	9.9999	-0.0077	9.9999	-0.3031	0.6204	0.0601	0.3404	0.0968	0.5487
229	18.58	-0.02	0.0237	9.9999	-0.0054	9.9999	-0.2278	0.6483	0.0603	0.3527	0.0930	0.5440
230	18.66	-0.00	0.0237	9.9999	-0.0086	9.9999	-0.2785	0.6195	0.0595	0.3403	0.0960	0.5493

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	28	0.800	1.7	0.0	NIMBELL	0.8	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
231	19.75	-0.00	0.0223	9.9999	-0.0097	9.9999	-0.4350	0.6282	0.0607	0.3463	0.0966	0.5513
232	19.83	-0.02	0.0237	9.9999	-0.0066	9.9999	-0.2785	0.6215	0.0599	0.3419	0.0964	0.5501
233	19.92	-0.01	0.0234	9.9999	-0.0068	9.9999	-0.2394	0.6281	0.0610	0.3450	0.0971	0.5493
234	19.00	-0.00	0.0254	9.9999	-0.0062	9.9999	-0.3048	0.6300	0.0606	0.3464	0.0962	0.5498
235	19.06	-0.03	0.0222	9.9999	-0.0073	9.9999	-0.3288	0.6316	0.0609	0.3479	0.0964	0.5508
236	19.15	-0.01	0.0250	9.9999	-0.0061	9.9999	-0.3932	0.6316	0.0614	0.3479	0.0972	0.5510
237	19.23	-0.01	0.0250	9.9999	-0.0070	9.9999	-0.2612	0.6373	0.0610	0.3490	0.0957	0.5476
238	19.28	-0.02	0.0200	9.9999	-0.0074	9.9999	-0.3592	0.6164	0.0611	0.3411	0.0991	0.5534
239	19.37	-0.02	0.0221	9.9999	-0.0073	9.9999	-0.3303	0.6196	0.0621	0.3427	0.1002	0.5531
240	19.45	-0.00	0.0258	9.9999	-0.0076	9.9999	-0.2836	0.6371	0.0616	0.3516	0.0967	0.5519
241	19.51	-0.02	0.0200	9.9999	-0.0060	9.9999	-0.3893	0.6285	0.0614	0.3478	0.0977	0.5534
242	19.60	-0.01	0.0267	9.9999	-0.0051	9.9999	-0.1910	0.6252	0.0609	0.3462	0.0976	0.5537
243	19.69	-0.01	0.0223	9.9999	-0.0109	9.9999	-0.4888	0.6219	0.0617	0.3448	0.0992	0.5544
244	19.75	-0.03	0.0292	9.9999	-0.0056	9.9999	-0.1996	0.6255	0.0615	0.3476	0.0983	0.5557
245	19.83	-0.03	0.0236	9.9999	-0.0072	9.9999	-0.3051	0.6357	0.0619	0.3523	0.0973	0.5542
246	19.92	-0.01	0.0260	9.9999	-0.0063	9.9999	-0.3470	0.6251	0.0626	0.3483	0.0998	0.5572
247	19.97	-0.03	0.0267	9.9999	-0.0069	9.9999	-0.2584	0.6374	0.0620	0.3537	0.0972	0.5549
248	20.05	-0.03	0.0171	9.9999	-0.0099	9.9999	-0.4921	0.6131	0.0622	0.3436	0.1019	0.5604
249	20.14	-0.02	0.0284	9.9999	-0.0081	9.9999	-0.3022	0.6406	0.0626	0.3559	0.0977	0.5556
250	20.19	-0.03	0.0250	9.9999	-0.0075	9.9999	-0.2799	0.6319	0.0627	0.3521	0.0992	0.5572
251	20.28	-0.03	0.0221	9.9999	-0.0073	9.9999	-0.3303	0.5993	0.0622	0.3388	0.1038	0.5653
252	20.37	-0.02	0.0269	9.9999	-0.0070	9.9999	-0.2128	0.6094	0.0631	0.3434	0.1035	0.5635
253	20.43	-0.03	0.0266	9.9999	-0.0075	9.9999	-0.2799	0.5941	0.0624	0.3378	0.1050	0.5686
254	20.51	-0.04	0.0200	9.9999	-0.0080	9.9999	-0.3883	0.6545	0.0628	0.3646	0.0959	0.5571
255	20.58	-0.01	0.0237	9.9999	-0.0095	9.9999	-0.4051	0.6649	0.0627	0.3705	0.0943	0.5572
256	20.65	-0.02	0.0267	9.9999	-0.0063	9.9999	-0.2360	0.6494	0.0626	0.3636	0.0964	0.5599
257	20.72	-0.03	0.0237	9.9999	-0.0078	9.9999	-0.3291	0.6354	0.0631	0.3575	0.0993	0.5628
258	20.80	-0.02	0.0296	9.9999	-0.0067	9.9999	-0.2248	0.5699	0.0623	0.3251	0.1093	0.5705
259	20.87	-0.03	0.0343	9.9999	-0.0039	9.9999	-0.1137	0.5803	0.0622	0.3329	0.1072	0.5737
260	20.95	-0.03	0.0260	9.9999	-0.0080	9.9999	-0.3883	0.6147	0.0627	0.3463	0.1020	0.5634
261	21.03	-0.01	0.0346	9.9999	-0.0057	9.9999	-0.1657	0.6562	0.0631	0.3680	0.0961	0.5608
262	21.11	-0.02	0.0296	9.9999	-0.0073	9.9999	-0.2450	0.6426	0.0623	0.3599	0.0969	0.5601
263	21.19	-0.03	0.0260	9.9999	-0.0080	9.9999	-0.3883	0.6524	0.0636	0.3646	0.0975	0.5589
264	21.27	-0.01	0.0350	9.9999	-0.0062	9.9999	-0.1722	0.5717	0.0619	0.3265	0.1082	0.5711
265	21.33	-0.02	0.0359	9.9999	-0.0044	9.9999	-0.1226	0.5905	0.0626	0.3362	0.1060	0.5693
266	21.41	-0.03	0.0237	9.9999	-0.0078	9.9999	-0.3291	0.6546	0.0631	0.3689	0.0956	0.5593
267	21.49	-0.01	0.0243	9.9999	-0.0074	9.9999	-0.2615	0.5688	0.0626	0.3376	0.1063	0.5730
268	21.56	-0.02	0.0349	9.9999	-0.0042	9.9999	-0.1077	0.5665	0.0623	0.3268	0.1099	0.5769
269	21.63	-0.03	0.0295	9.9999	-0.0055	9.9999	-0.1845	0.5993	0.0624	0.3401	0.1041	0.5675
270	21.73	-0.01	0.0344	9.9999	-0.0057	9.9999	-0.1657	0.5962	0.0622	0.3384	0.1047	0.5695
271	21.79	-0.01	0.0375	9.9999	-0.0049	9.9999	-0.1307	0.5752	0.0619	0.3280	0.1076	0.5702
272	21.87	-0.03	0.0292	9.9999	-0.0055	9.9999	-0.1846	0.6146	0.0631	0.3470	0.1028	0.5646
273	21.95	-0.02	0.0359	9.9999	-0.0039	9.9999	-0.1058	0.5805	0.0617	0.3316	0.1063	0.5712
274	22.02	-0.02	0.0361	9.9999	-0.0062	9.9999	-0.1717	0.5638	0.0628	0.3233	0.1114	0.5734
275	22.08	-0.02	0.0359	9.9999	-0.0020	9.9999	-0.0557	0.6121	0.0636	0.3475	0.1039	0.5677
276	22.18	-0.02	0.0360	9.9999	-0.0044	9.9999	-0.1222	0.6039	0.0625	0.3429	0.1035	0.5678

TEST 7 PART 26 MACH .80 RX10-6 1.0 PHI 0.0 CONF 81 DF 11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
277	22.24	-0.01	0.0330	9.9999	-0.0077	9.9999	-0.2333	0.5898	0.0630	0.3348	0.1068	0.5676
278	22.31	-0.03	0.0298	9.9999	-0.0043	9.9999	-0.1443	0.5673	0.0627	0.3255	0.1105	0.5738
279	22.39	-0.02	0.0310	9.9999	-0.0090	9.9999	-0.3782	0.6417	0.0634	0.3611	0.0988	0.5627
280	22.46	-0.01	0.0341	9.9999	-0.0056	9.9999	-0.1381	0.5673	0.0627	0.3229	0.1105	0.5692
281	22.54	-0.02	0.0329	9.9999	-0.0053	9.9999	-0.1611	0.5745	0.0622	0.3291	0.1082	0.5728
282	22.61	-0.03	0.0334	9.9999	-0.0026	9.9999	-0.0726	0.5742	0.0632	0.3305	0.1108	0.5756
283	22.70	-0.01	0.0340	9.9999	-0.0024	9.9999	-0.0615	0.5844	0.0635	0.3339	0.1086	0.5714
284	22.76	-0.01	0.0345	9.9999	-0.0039	9.9999	-0.1130	0.6049	0.0626	0.3409	0.1035	0.5636
285	22.82	-0.03	0.0353	9.9999	-0.0053	9.9999	-0.1767	0.5719	0.0626	0.3263	0.1094	0.5706
286	22.91	-0.00	0.0376	9.9999	-0.0043	9.9999	-0.1144	0.5751	0.0633	0.3279	0.1108	0.5702
287	22.97	-0.02	0.0299	9.9999	-0.0067	9.9999	-0.2241	0.6132	0.0639	0.3468	0.1042	0.5656
288	23.03	-0.04	0.0329	9.9999	-0.0024	9.9999	-0.0851	0.5855	0.0634	0.3332	0.1083	0.5691
289	23.13	-0.02	0.0345	9.9999	-0.0045	9.9999	-0.1304	0.5736	0.0628	0.3277	0.1095	0.5713
290	23.19	-0.02	0.0329	9.9999	-0.0041	9.9999	-0.1246	0.5857	0.0628	0.3331	0.1072	0.5687
291	23.25	-0.04	0.0298	9.9999	-0.0037	9.9999	-0.1242	0.5823	0.0627	0.3309	0.1076	0.5683
292	23.34	-0.01	0.0360	9.9999	-0.0032	9.9999	-0.0899	0.6032	0.0626	0.3408	0.1038	0.5650
293	23.40	-0.03	0.0391	9.9999	-0.0024	9.9999	-0.0614	0.5825	0.0622	0.3322	0.1068	0.5703
294	23.46	-0.03	0.0282	9.9999	-0.0036	9.9999	-0.1348	0.5857	0.0628	0.3331	0.1072	0.5687
295	23.57	-0.04	0.0299	9.9999	-0.0055	9.9999	-0.1839	0.6257	0.0628	0.3508	0.1003	0.5607
296	23.62	-0.03	0.0391	9.9999	-0.0030	9.9999	-0.0767	0.6015	0.0625	0.3400	0.1039	0.5653
297	23.62	-0.05	0.0267	9.9999	-0.0052	9.9999	-0.1948	0.6015	0.0624	0.3387	0.1037	0.5631
298	23.69	-0.03	0.0365	9.9999	-0.0039	9.9999	-0.1130	0.5979	0.0628	0.3385	0.1050	0.5661
299	23.84	-0.02	0.0393	9.9999	-0.0048	9.9999	-0.1221	0.6285	0.0634	0.3542	0.1008	0.5636
300	23.58	-0.01	0.0300	9.9999	-0.0020	9.9999	-0.0556	0.6183	0.0633	0.3477	0.1024	0.5626
301	24.23	-0.03	0.0360	9.9999	-0.0020	9.9999	-0.0556	0.6188	0.0619	0.3468	0.1003	0.5623
302	25.13	-0.03	0.0407	9.9999	-0.0016	9.9999	-0.0393	0.6094	0.0630	0.3431	0.1034	0.5630
303	26.09	-0.05	0.0329	9.9999	-0.0016	9.9999	-0.0486	0.6424	0.0631	0.3546	0.0982	0.5520
304	27.06	-0.05	0.0343	9.9999	-0.0003	9.9999	-0.0087	0.6819	0.0641	0.3666	0.0948	0.5376
305	28.15	-0.04	0.0266	9.9999	-0.0052	9.9999	-0.1940	0.7186	0.0634	0.3795	0.0882	0.5281
306	29.23	-0.06	0.0235	9.9999	-0.0024	9.9999	-0.1021	0.7537	0.0626	0.3982	0.0830	0.5230
307	30.35	-0.07	0.0292	9.9999	-0.0014	9.9999	-0.0496	0.7867	0.0625	0.4056	0.0794	0.5156
308	31.50	-0.06	0.0145	9.9999	-0.0104	9.9999	-0.7172	0.8060	0.0620	0.4134	0.0769	0.5129
309	32.67	-0.07	0.0222	9.9999	-0.0061	9.9999	-0.2748	0.8321	0.0612	0.4197	0.0735	0.5044
310	33.78	-0.07	0.0178	9.9999	-0.0089	9.9999	-0.5057	0.8711	0.0593	0.4327	0.0681	0.4967
311	34.93	-0.06	0.0270	9.9999	-0.0076	9.9999	-0.2815	0.9173	0.0566	0.4493	0.0617	0.4898
312	36.12	-0.06	0.0224	9.9999	-0.0098	9.9999	-0.4375	0.9348	0.0564	0.4538	0.0603	0.4855
313	37.35	-0.06	0.0145	9.9999	-0.0092	9.9999	-0.6345	0.9616	0.0547	0.4627	0.0569	0.4812
314	38.64	-0.07	0.0209	9.9999	-0.0111	9.9999	-0.5311	0.9958	0.0520	0.4778	0.0522	0.4798
315	40.11	-0.05	0.0332	9.9999	-0.0053	9.9999	-0.1596	1.0280	0.0504	0.4904	0.0490	0.4770
316	41.85	-0.04	0.0285	9.9999	-0.0039	9.9999	-0.1368	1.0768	0.0477	0.5105	0.0446	0.4758
317	43.87	-0.04	0.0300	9.9999	-0.0031	9.9999	-0.1033	1.1059	0.0440	0.5241	0.0398	0.4739
318	46.24	0.00	0.0563	9.9999	0.0041	9.9999	0.1439	1.1064	0.0396	0.5289	0.0356	0.4788
319	48.99	-0.03	0.0301	9.9999	-0.0007	9.9999	-0.0233	1.1532	0.0349	0.5545	0.0303	0.4808
320	51.94	0.10	0.0426	9.9999	0.0077	9.9999	0.1808	1.1758	0.0305	0.5675	0.0259	0.4827
321	55.40	0.11	0.0458	9.9999	0.0092	9.9999	0.2009	1.2752	0.0234	0.5876	0.0191	0.4796
322	58.18	0.06	0.0384	9.9999	0.0097	9.9999	0.2665	1.2930	0.0189	0.6043	0.0148	0.4874

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHUC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 8 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYU-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 28 0.60 1.7 0.0 FLAP 11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF4	CM3	CM3	XCPF3	YCPF3	CNF4	CM4	CM4	XCPF4	YCPF4
323	58.20	0.04	0.0346	9.9999	0.0085	9.9999	0.2322	1.2927	0.0189	0.6069	0.0146	0.4695
324	58.22	0.05	0.0368	9.9999	0.0079	9.9999	0.2147	1.2944	0.0185	0.6077	0.0143	0.4695
325	58.21	0.06	0.0385	9.9999	0.0081	9.9999	0.2656	1.3339	0.0192	0.6103	0.0147	0.4681
326	58.20	0.08	0.0352	9.9999	0.0129	9.9999	0.3665	1.3061	0.0183	0.6096	0.0140	0.4667
327	58.22	0.04	0.0356	9.9999	0.0091	9.9999	0.2571	1.3123	0.0186	0.6159	0.0142	0.4693
328	58.20	0.07	0.0305	9.9999	0.0113	9.9999	0.3705	1.2999	0.0198	0.6108	0.0152	0.4699
329	58.21	0.07	0.0352	9.9999	0.0155	9.9999	0.4403	1.2415	0.0206	0.5986	0.0166	0.4739
330	58.23	0.07	0.0355	9.9999	0.0111	9.9999	0.3127	1.2918	0.0194	0.6084	0.0150	0.4710
331	58.22	0.06	0.0317	9.9999	0.0166	9.9999	0.4460	1.2751	0.0203	0.6026	0.0159	0.4726
332	58.21	0.07	0.0193	9.9999	0.0079	9.9999	0.4093	1.3137	0.0194	0.6175	0.0148	0.4700
333	58.22	0.10	0.0305	9.9999	0.0126	9.9999	0.4131	1.3174	0.0191	0.6191	0.0145	0.4699

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DELA	TRANSITION
7	29	0.80	1.7	45.0	B1=0E11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-4.63	0.10	-0.4553	0.7437	0.1096	-0.1615	-0.0052	0.2326	0.0906	0.1520	-1.6334
2	-3.55	0.10	-0.3594	0.5346	-0.0089	-0.0299	-0.0199	0.2301	0.0796	0.1505	-1.6874
3	-3.30	0.11	-0.2963	0.4357	0.1371	-0.1716	-0.0051	0.2315	0.0781	0.1534	-1.4706
4	-3.02	0.08	-0.2574	0.3829	-0.0067	-0.0951	-0.0198	0.2307	0.0787	0.1520	-1.4846
5	-2.77	0.11	-0.2666	0.3777	0.0436	-0.1139	-0.0054	0.2358	0.0786	0.1572	-1.4165
6	-2.50	0.09	-0.1876	0.2659	0.0478	-0.0670	-0.0125	0.2335	0.0781	0.1554	-1.4187
7	-2.24	0.10	-0.1875	0.2606	0.0260	-0.0592	-0.0196	0.2312	0.0791	0.1521	-1.3899
8	-1.98	0.10	-0.1663	0.2093	0.0473	-0.1569	-0.0052	0.2363	0.0772	0.1591	-1.2586
9	-1.72	0.08	-0.1148	0.1331	-0.0212	0.0149	-0.0198	0.2342	0.0777	0.1565	-1.1118
10	-1.46	0.11	-0.0873	0.0944	0.0501	-0.0763	-0.0124	0.2373	0.0780	0.1593	-1.0804
11	-1.22	0.09	-0.0657	0.0330	0.0902	-0.1544	-0.0051	0.2447	0.0776	0.1671	-0.7217
12	-0.97	0.08	-0.0293	0.0085	-0.0710	0.0593	-0.0199	0.2373	0.0780	0.1593	-0.3018
13	-0.71	0.11	-0.0304	0.0174	0.0597	-0.0968	-0.0052	0.2425	0.0793	0.1632	-0.4769
14	-0.49	0.09	0.0332	-0.0693	0.0535	-0.0598	-0.0123	0.2398	0.0785	0.1614	-2.0867
15	-0.23	0.10	0.0128	-0.0390	-0.0101	-0.0298	-0.0195	0.2389	0.0774	0.1615	-3.0484
16	0.01	0.11	0.0559	-0.0938	0.1314	-0.1891	-0.0048	0.2428	0.0783	0.1645	-1.6773
17	0.23	0.09	0.1147	-0.1570	0.0323	-0.0666	-0.0193	0.2419	0.0779	0.1640	-1.3695
18	0.48	0.16	0.0941	-0.1411	0.0116	-0.0528	-0.0122	0.2418	0.0774	0.1644	-1.4988
19	0.71	0.10	0.1256	-0.1838	0.0634	-0.1160	-0.0049	0.2446	0.0757	0.1689	-1.4662
20	0.93	0.09	0.1537	-0.2129	-0.0276	0.0034	-0.0194	0.2400	0.0776	0.1624	-1.3850
21	1.16	0.11	0.1559	-0.2177	0.0313	-0.0902	-0.0050	0.2439	0.0758	0.1681	-1.3968
22	1.40	0.09	0.1942	-0.2671	-0.0188	-0.0652	-0.0194	0.2411	0.0773	0.1638	-1.4500
23	1.65	0.11	0.1865	-0.2642	0.0238	-0.0292	-0.0192	0.2394	0.0781	0.1613	-1.3235
24	1.87	0.11	0.2266	-0.3316	0.1060	-0.1649	-0.0047	0.2461	0.0784	0.1677	-1.4640
25	2.08	0.09	0.2727	-0.4056	-0.0234	0.0241	-0.0195	0.2403	0.0780	0.1623	-1.4869
26	2.33	0.11	0.2867	-0.4078	0.0270	-0.0490	-0.0121	0.2387	0.0780	0.1607	-1.4292
27	2.54	0.09	0.3455	-0.5107	0.0068	-0.1029	-0.0049	0.2437	0.0777	0.1660	-1.4950
28	2.77	0.09	0.3321	-0.5137	-0.0446	0.0277	-0.0268	0.2393	0.0788	0.1605	-1.5478
29	3.01	0.11	0.3659	-0.5526	0.0401	-0.1430	-0.0048	0.2397	0.0806	0.1591	-1.5107
30	3.22	0.09	0.3980	-0.6144	-0.0026	-0.0528	-0.0123	0.2393	0.0812	0.1581	-1.5595
31	3.46	0.10	0.4122	-0.6453	-0.0218	0.0024	-0.0195	0.2377	0.0840	0.1537	-1.5659
32	3.67	0.10	0.4355	-0.6834	0.0995	-0.1998	-0.0047	0.2425	0.0831	0.1594	-1.5691
33	3.89	0.09	0.4604	-0.7323	0.0134	-0.0016	-0.0194	0.2390	0.0835	0.1545	-1.5891
34	4.13	0.11	0.5121	-0.8045	0.0220	-0.0518	-0.0122	0.2364	0.0848	0.1524	-1.5705
35	4.35	0.08	0.5517	-0.8955	-0.0207	-0.0848	-0.0052	0.2374	0.0864	0.1510	-1.6232
36	4.56	0.08	0.5747	-0.9507	-0.0276	-0.0189	-0.0196	0.2311	0.0872	0.1439	-1.6427
37	4.77	0.10	0.5709	-0.9408	0.0410	-0.1526	-0.0049	0.2394	0.0873	0.1521	-1.6488
38	4.98	0.08	0.6293	-1.0384	-0.0167	-0.0537	-0.0123	0.2370	0.0887	0.1483	-1.6533
39	5.19	0.09	0.6149	-1.0320	-0.0257	-0.0161	-0.0195	0.2357	0.0908	0.1449	-1.6782
40	5.39	0.09	0.6572	-1.1071	0.0547	-0.1640	-0.0023	0.2409	0.0899	0.1510	-1.6845
41	5.58	0.08	0.6837	-1.1376	-0.0121	0.0004	-0.0196	0.2372	0.0917	0.1455	-1.6640
42	5.80	0.10	0.7145	-1.2071	0.0908	-0.1286	-0.0048	0.2408	0.0931	0.1469	-1.6895
43	6.00	0.09	0.7648	-1.2720	0.0713	-0.1201	-0.0048	0.2398	0.0927	0.1471	-1.6637
44	6.17	0.08	0.7588	-1.2982	-0.0103	-0.0227	-0.0196	0.2359	0.0948	0.1411	-1.7108
45	6.40	0.10	0.8016	-1.3596	0.0919	-0.1768	0.0024	0.2401	0.0963	0.1439	-1.6961
46	6.59	0.08	0.8376	-1.4388	0.0322	-0.0772	-0.0121	0.2365	0.0981	0.1385	-1.7177

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 29 0.60 1.7 45.0 BLADE11 8.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	6.76	0.09	0.8242	-1.6269	0.0012	-0.1548	-0.0120	0.2362	0.0972	0.1391	-1.7228
48	6.96	0.09	0.8605	-1.6939	0.1470	-0.2125	0.0026	0.2429	0.0982	0.1448	-1.7202
49	7.16	0.08	0.9055	-1.5049	0.0014	-0.0739	-0.0194	0.2358	0.0991	0.1368	-1.7062
50	7.36	0.10	0.9156	-1.5822	0.0748	-0.1534	-0.0068	0.2427	0.1019	0.1408	-1.7288
51	7.56	0.08	0.9634	-1.5801	-0.0197	-0.1150	-0.0123	0.2411	0.1014	0.1398	-1.7440
52	7.75	0.09	0.9724	-1.7303	0.0363	-0.0736	-0.0195	0.2334	0.1032	0.1303	-1.7486
53	7.95	0.10	1.0040	-1.7522	0.1279	-0.2196	0.0023	0.2405	0.1037	0.1369	-1.7452
54	8.11	0.08	1.0407	-1.8216	-0.0158	-0.0645	-0.0197	0.2395	0.1064	0.1332	-1.7583
55	8.29	0.09	1.0617	-1.8765	0.0243	-0.1577	-0.0053	0.2414	0.1078	0.1337	-1.7692
56	8.47	0.08	1.1116	-1.9436	0.0984	-0.2120	-0.0051	0.2419	0.1070	0.1350	-1.7498
57	8.63	0.08	1.1185	-1.9765	0.0281	-0.0803	-0.0198	0.2389	0.1102	0.1287	-1.7669
58	8.81	0.09	1.1398	-2.0302	0.0847	-0.1922	0.0019	0.2483	0.1106	0.1378	-1.7825
59	8.98	0.07	1.1760	-2.1183	0.0108	-0.0322	-0.0129	0.2470	0.1138	0.1333	-1.7918
60	9.17	0.08	1.1961	-2.1337	0.0086	-0.0939	-0.0057	0.2414	0.1143	0.1272	-1.7839
61	9.36	0.08	1.2266	-2.2133	0.1217	-0.2523	0.0018	0.2473	0.1148	0.1326	-1.8049
62	9.56	0.07	1.2535	-2.2456	-0.0105	-0.0612	-0.0202	0.2428	0.1161	0.1268	-1.7918
63	9.70	0.08	1.2623	-2.2466	0.0200	-0.1168	-0.0059	0.2444	0.1165	0.1260	-1.8195
64	9.90	0.08	1.3253	-2.3774	0.0205	-0.1374	-0.0058	0.2439	0.1192	0.1298	-1.7962
65	10.13	0.07	1.3220	-2.3714	-0.0192	-0.0539	-0.0205	0.2423	0.1187	0.1237	-1.8165
66	10.22	0.08	1.3545	-2.4389	0.0744	-0.1722	0.0045	0.2476	0.1201	0.1276	-1.8167
67	10.39	0.08	1.4318	-2.5441	-0.0076	-0.0917	-0.0134	0.2465	0.1224	0.1242	-1.8050
68	10.57	0.08	1.4312	-2.5888	0.0116	-0.1519	-0.0081	0.2468	0.1243	0.1226	-1.8088
69	10.73	0.08	1.4720	-2.6553	0.1175	-0.2265	0.0014	0.2476	0.1243	0.1234	-1.8039
70	10.92	0.08	1.4901	-2.7251	0.0035	-0.1193	-0.0207	0.2422	0.1252	0.1171	-1.8195
71	11.09	0.09	1.4916	-2.7379	0.1393	-0.2545	0.0013	0.2466	0.1273	0.1194	-1.8353
72	11.25	0.08	1.5401	-2.8093	0.0248	-0.1557	-0.0063	0.2460	0.1250	0.1211	-1.8241
73	11.43	0.07	1.5406	-2.8073	0.0061	-0.1012	-0.0137	0.2429	0.1285	0.1145	-1.8373
74	11.60	0.09	1.6126	-2.9553	0.1407	-0.2863	0.0012	0.2491	0.1281	0.1211	-1.8326
75	11.77	0.06	1.6106	-2.9761	-0.0120	-0.0491	-0.0140	0.2479	0.1299	0.1181	-1.8386
76	11.96	0.08	1.6248	-3.0121	0.0380	-0.1599	-0.0066	0.2465	0.1306	0.1162	-1.8501
77	12.09	0.07	1.6967	-3.1267	0.0736	-0.1313	0.0008	0.2496	0.1303	0.1194	-1.8395
78	12.27	0.07	1.7092	-3.1639	0.0412	-0.1272	-0.0140	0.2490	0.1315	0.1096	-1.8511
79	12.44	0.09	1.7402	-3.2115	0.0960	-0.1978	0.0078	0.2471	0.1329	0.1143	-1.8455
80	12.64	0.07	1.7762	-3.2933	0.0539	-0.1222	-0.0069	0.2444	0.1329	0.1116	-1.8464
81	12.77	0.08	1.8009	-3.3237	0.0329	-0.1365	-0.0069	0.2437	0.1355	0.1083	-1.8456
82	12.95	0.08	1.8447	-3.4264	0.0744	-0.2012	0.0076	0.2463	0.1353	0.1111	-1.8476
83	13.10	0.07	1.8767	-3.4731	-0.0567	-0.0018	-0.0148	0.2437	0.1377	0.1061	-1.8550
84	13.27	0.09	1.9119	-3.5513	0.0452	-0.1627	0.0001	0.2443	0.1366	0.1058	-1.8575
85	13.44	0.07	1.9426	-3.6409	0.0591	-0.1309	0.0073	0.2468	0.1361	0.1088	-1.8490
86	13.61	0.07	1.9681	-3.6750	0.0074	-0.0520	-0.0149	0.2418	0.1404	0.1015	-1.8673
87	13.77	0.09	1.9730	-3.6871	0.0591	-0.1406	0.0071	0.2426	0.1400	0.1027	-1.8631
88	13.94	0.08	2.0474	-3.8254	0.0276	-0.1298	-0.0076	0.2415	0.1419	0.0997	-1.8687
89	14.10	0.08	2.0384	-3.7900	0.0390	-0.1159	-0.0075	0.2370	0.1395	0.0976	-1.8608
90	14.27	0.08	2.0872	-3.8854	0.0927	-0.1792	0.0071	0.2430	0.1418	0.1013	-1.8615
91	14.44	0.07	2.1240	-3.9421	-0.0083	0.0946	-0.0080	0.2385	0.1423	0.0963	-1.8553
92	14.58	0.09	2.1448	-3.9941	0.0498	-0.1646	-0.0076	0.2374	0.1437	0.0937	-1.8576

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 29 0.600 1.7 45.0 BLADE11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	14.77	0.00	2.1839	-0.0760	0.0003	-0.1906	-0.0004	0.2417	0.1442	0.0976	-1.8664
94	14.90	0.01	2.2024	-0.0734	-0.0106	-0.0711	-0.0151	0.2350	0.1437	0.0913	-1.8697
95	15.12	0.00	2.2229	-0.1240	0.0032	-0.2198	-0.0003	0.2370	0.1446	0.0924	-1.8555
96	15.27	0.00	2.2711	-0.1093	0.0029	-0.0644	-0.0152	0.2329	0.1437	0.0892	-1.8467
97	15.44	0.00	2.2949	-0.1031	0.0017	-0.0734	-0.0151	0.2279	0.1442	0.0837	-1.8415
98	15.62	0.00	2.3108	-0.2724	0.1066	-0.2276	0.0069	0.2376	0.1461	0.0915	-1.8489
99	15.76	0.01	2.3543	-0.3475	-0.0044	-0.0255	-0.0082	0.2295	0.1460	0.0835	-1.8435
100	15.91	-0.15	2.3850	-0.3625	0.0456	-0.1372	-0.0007	0.2329	0.1461	0.0868	-1.8418
101	16.10	0.01	2.4042	-0.4171	0.0678	-0.1529	0.0139	0.2329	0.1464	0.0845	-1.8334
102	16.28	0.01	2.4377	-0.4316	-0.0053	-0.0765	-0.0080	0.2300	0.1503	0.0797	-1.8188
103	16.44	0.00	2.4472	-0.4631	0.1095	-0.2246	0.0048	0.2343	0.1503	0.0840	-1.8319
104	16.58	0.01	2.4961	-0.5534	0.0829	-0.0955	-0.0007	0.2360	0.1545	0.0815	-1.8248
105	16.75	0.00	2.5035	-0.5859	-0.0144	-0.0640	-0.0010	0.2348	0.1568	0.0780	-1.8318
106	16.93	0.00	2.5197	-0.5805	0.0894	-0.1665	-0.0005	0.2422	0.1584	0.0838	-1.8179
107	17.07	0.00	2.5692	-0.6661	0.0812	-0.1227	-0.0295	0.2399	0.1672	0.0727	-1.8091
108	17.25	0.00	2.5716	-0.6873	0.1262	-0.3805	-0.0362	0.2451	0.1697	0.0754	-1.8226
109	17.41	0.01	2.6329	-0.7347	0.0706	-0.1467	-0.0150	0.2446	0.1739	0.0727	-1.7983
110	17.57	0.01	2.6307	-0.7207	0.0582	-0.1874	-0.0364	0.2427	0.1761	0.0666	-1.7965
111	17.75	0.00	2.6616	-0.7367	0.1316	-0.2639	-0.0074	0.2489	0.1784	0.0705	-1.7933
112	17.90	0.00	2.6900	-0.8358	0.0856	-0.2647	-0.0363	0.2463	0.1825	0.0638	-1.7920
113	18.07	0.00	2.6980	-0.8142	0.0705	-0.1648	-0.0220	0.2473	0.1797	0.0676	-1.7801
114	18.24	0.00	2.7405	-0.8054	0.1864	-0.2950	-0.0145	0.2480	0.1821	0.0659	-1.7869
115	18.38	0.00	2.7797	-0.8417	0.0209	-0.0942	-0.0366	0.2436	0.1840	0.0596	-1.7777
116	18.55	0.00	2.7845	-0.8324	0.1535	-0.2740	-0.0360	0.2440	0.1877	0.0563	-1.7809
117	18.71	0.01	2.8504	-5.0587	0.1464	-0.2788	-0.0218	0.2432	0.1851	0.0581	-1.7723
118	18.88	0.01	2.8860	-5.1379	0.0841	-0.1362	-0.0437	0.2414	0.1883	0.0531	-1.7815
119	19.03	0.00	2.9106	-5.1755	0.1979	-0.3356	-0.0165	0.2441	0.1898	0.0543	-1.7782
120	19.16	0.00	2.9327	-5.1963	0.1472	-0.2578	-0.0360	0.2396	0.1872	0.0522	-1.7725
121	19.33	0.00	2.9150	-5.1665	0.0921	-0.2482	-0.0431	0.2367	0.1873	0.0494	-1.7724
122	19.48	0.01	2.9861	-5.2985	0.1653	-0.3298	-0.0359	0.2433	0.1892	0.0541	-1.7769
123	19.64	0.00	3.0227	-5.2956	0.0817	-0.2667	-0.0643	0.2317	0.1891	0.0426	-1.7519
124	19.79	0.00	3.0350	-5.3756	0.1030	-0.3060	-0.0360	0.2344	0.1870	0.0474	-1.7713
125	19.95	0.01	3.0759	-5.4076	0.2477	-0.4198	-0.0496	0.2404	0.1911	0.0497	-1.7583
126	20.10	0.01	3.1019	-5.4447	0.0926	-0.3244	-0.0643	0.2312	0.1911	0.0401	-1.7553
127	20.26	0.00	3.1250	-5.5150	0.1647	-0.4292	-0.0357	0.2336	0.1907	0.0429	-1.7648
128	20.40	0.00	3.1729	-5.5929	0.2182	-0.4028	-0.0569	0.2333	0.1907	0.0426	-1.7627
129	20.56	0.00	3.1700	-5.5816	0.1603	-0.2641	-0.0502	0.2221	0.1884	0.0337	-1.7603
130	20.72	0.01	3.2315	-5.6625	0.1534	-0.4459	-0.0427	0.2250	0.1888	0.0362	-1.7461
131	20.85	0.01	3.2284	-5.6501	0.1955	-0.4413	-0.0740	0.2211	0.1911	0.0300	-1.7501
132	21.02	0.00	3.2478	-5.6886	0.3008	-0.5276	-0.0636	0.2220	0.1889	0.0331	-1.7515
133	21.17	0.00	3.2904	-5.7383	0.2648	-0.5438	-0.0847	0.2196	0.1921	0.0275	-1.7402
134	21.32	0.00	3.2930	-5.7417	0.2075	-0.4112	-0.0921	0.2173	0.1916	0.0257	-1.7436
135	21.48	0.00	3.3354	-5.7710	0.3656	-0.7313	-0.0891	0.2183	0.1944	0.0239	-1.7302
136	21.62	0.01	3.3631	-5.8432	0.1782	-0.6084	-0.0781	0.2076	0.1907	0.0169	-1.7398
137	21.78	0.00	3.3846	-5.8873	0.2599	-0.5018	-0.0921	0.2107	0.1938	0.0169	-1.7393
138	21.94	0.00	3.4165	-5.8914	0.3687	-0.7050	-0.0914	0.2154	0.1942	0.0212	-1.7248

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	29	0.60	1.7	45.0	81=0t11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	22.07	0.07	3.4731	-5.4412	0.3748	-0.6097	-0.1060	0.2081	0.1933	0.0148	-1.7306
140	22.24	0.09	3.4657	-5.4925	0.3680	-0.7675	-0.1060	0.2134	0.2014	0.0120	-1.7291
141	22.39	0.08	3.5337	-5.1071	0.3838	-0.6534	-0.0993	0.2077	0.1955	0.0122	-1.7282
142	22.53	0.08	3.5588	-5.0924	0.3635	-0.6204	-0.1207	0.2023	0.2014	0.0009	-1.7116
143	22.68	0.08	3.5743	-5.0785	0.4618	-0.8503	-0.1130	0.2164	0.1999	0.0165	-1.7174
144	22.81	0.08	3.5751	-5.1678	0.3873	-0.5666	-0.1067	0.2094	0.2027	0.0067	-1.7252
145	22.96	0.07	3.6130	-6.2455	0.3215	-0.4342	-0.0716	0.2041	0.2040	0.0001	-1.7301
146	23.11	0.05	3.6586	-6.3041	0.2882	-0.4770	-0.0787	0.2130	0.2051	0.0080	-1.7231
147	23.24	0.05	3.6661	-6.2674	0.2763	-0.4724	-0.1071	0.2076	0.2100	-0.0024	-1.7086
148	23.34	0.06	3.6643	-6.2849	0.4026	-0.5560	-0.0782	0.2071	0.2100	-0.0029	-1.7133
149	23.53	0.06	3.7349	-6.3705	0.5402	-0.6321	-0.0920	0.2179	0.2137	0.0042	-1.7038
150	23.63	0.07	3.7451	-6.3925	0.3857	-0.4122	-0.0857	0.2045	0.2155	-0.0110	-1.7069
151	23.63	0.06	3.7363	-6.3893	0.2687	-0.4574	-0.0797	0.2171	0.2156	0.0015	-1.7111
152	23.64	0.05	3.7073	-6.3696	0.3443	-0.4771	-0.0925	0.2085	0.2146	-0.0061	-1.6908
153	23.63	0.07	3.7574	-6.3490	0.3095	-0.4455	-0.0925	0.2136	0.2169	-0.0033	-1.6897
154	23.62	0.06	3.7461	-6.4734	0.3492	-0.3688	-0.0574	0.2104	0.2137	-0.0033	-1.7098
155	23.61	0.07	3.7352	-6.3844	0.4018	-0.3574	-0.0857	0.2049	0.2132	-0.0083	-1.7092
156	23.63	0.05	3.7303	-6.3963	0.3553	-0.4400	-0.0713	0.2064	0.2160	-0.0096	-1.7039
157	23.75	0.07	3.6644	-6.5574	0.3596	-0.2092	-0.0433	0.2146	0.2211	-0.0065	-1.6960
158	25.11	0.06	4.1313	-6.9091	0.3030	-0.3092	-0.0718	0.2200	0.2437	-0.0237	-1.6865
159	26.66	0.11	4.5749	-7.4963	0.7699	-0.6824	0.0083	0.2196	0.2668	-0.0472	-1.6372
160	28.51	0.12	5.0787	-7.3412	1.1207	-0.5402	0.0403	0.2338	0.3029	-0.0690	-1.4460
161	30.55	0.13	5.4544	-6.7705	0.9984	-0.1154	0.0147	0.2555	0.3602	-0.1047	-1.2404
162	32.64	0.15	6.2545	-6.4362	1.2068	1.1214	0.0019	0.2674	0.3957	-0.1283	-1.1072
163	35.25	0.14	7.6424	-7.5153	0.9324	3.2469	-0.0487	0.2329	0.4260	-0.1932	-0.9834
164	38.37	0.17	8.7801	-6.7077	1.1815	2.7453	-0.3332	0.2161	0.4560	-0.2399	-0.7648
165	42.23	0.08	9.5812	-5.6773	0.3771	1.9166	-0.0364	0.1668	0.4847	-0.3179	-0.5925
166	46.87	0.02	10.6893	-4.6101	-0.3706	1.1305	-0.0997	0.0842	0.4920	-0.4077	-0.4313
167	52.38	-0.01	11.9041	-3.0714	-0.4639	-1.3034	0.0919	0.0640	0.5300	-0.4659	-0.3420
168	58.12	-0.10	13.7749	-4.8431	-1.2742	-2.6002	-0.0086	0.0153	0.5515	-0.5362	-0.3516
169	58.16	-0.06	13.7903	-4.9915	-1.2556	-2.7408	0.0132	0.0482	0.5671	-0.5189	-0.3618

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST ? PART 29 MACH 0.60 RX10-6 1.7 \ PHI 45.0 CONF B1=0F11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CY1	CD1	XCPF1	YCPF1	CNF2	CM2	CY2	XCPF2	YCPF2
1	-4.63	0.10	0.1571	0.0385	0.0797	0.2450	0.5073	-0.0920	-0.0361	-0.0469	0.3923	0.5098
2	-3.55	0.10	0.1160	0.0282	0.0593	0.2430	0.5112	-0.0631	-0.0277	-0.0329	0.4389	0.5214
3	-3.30	0.11	0.1045	0.0252	0.0532	0.2411	0.5091	-0.0634	-0.0262	-0.0275	0.4131	0.4338
4	-3.02	0.08	0.1033	0.0248	0.0510	0.2361	0.4937	-0.0535	-0.0243	-0.0266	0.4541	0.4972
5	-2.77	0.11	0.0890	0.0211	0.0453	0.2370	0.5090	-0.0470	-0.0226	-0.0247	0.4807	0.5255
6	-2.50	0.09	0.0814	0.0195	0.0418	0.2380	0.5104	-0.0390	-0.0202	-0.0213	0.5178	0.5462
7	-2.24	0.10	0.0703	0.0183	0.0365	0.2396	0.5046	-0.0327	-0.0180	-0.0174	0.5503	0.5321
8	-1.98	0.10	0.0634	0.0163	0.0330	0.2570	0.5205	-0.0264	-0.0156	-0.0161	0.5908	0.5361
9	-1.72	0.08	0.0566	0.0139	0.0292	0.2455	0.4982	-0.0216	-0.0132	-0.0129	0.6109	0.5972
10	-1.46	0.11	0.0492	0.0125	0.0259	0.2540	0.5264	-0.0154	-0.0093	-0.0096	0.6037	0.6234
11	-1.22	0.09	0.0393	0.0094	0.0213	0.2391	0.5420	-0.0090	-0.0074	-0.0077	0.8220	0.8556
12	-0.97	0.08	0.0310	0.0086	0.0169	0.2064	0.5652	-0.0058	-0.0062	-0.0073	1.0687	1.2586
13	-0.71	0.11	0.0264	0.0059	0.0170	0.2196	0.6439	0.0005	-0.0035	-0.0027	-6.9981	-5.4000
14	-0.49	0.09	0.0241	0.0025	0.0132	0.1037	0.5477	0.0036	-0.0022	-0.0011	-0.6109	-0.3056
15	-0.23	0.10	0.0199	0.0009	0.0106	0.0452	0.5327	0.0083	0.0	0.0007	0.0	0.0843
16	0.01	0.11	0.0199	0.0011	0.0106	0.0553	0.5327	0.0146	0.0026	0.0040	0.1780	0.2740
17	0.23	0.09	0.0191	-0.0030	0.0059	-0.2970	0.5862	0.0178	0.0038	0.0056	0.2134	0.3146
18	0.48	0.10	0.0206	-0.0084	0.0026	-1.0632	0.5652	0.0208	0.0059	0.0079	0.2836	0.3798
19	0.71	0.10	0.0017	-0.0061	0.0015	-3.5873	0.8824	0.0254	0.0086	0.0124	0.3385	0.4882
20	0.93	0.09	0.0020	-0.0081	-0.0008	-13.4966	-1.3333	0.0285	0.0100	0.0153	0.3508	0.5368
21	1.18	0.11	-0.0044	-0.0117	-0.0035	1.2443	0.3723	0.0301	0.0109	0.0162	0.3620	0.5382
22	1.40	0.09	-0.0108	-0.0131	-0.0044	1.2126	0.4076	0.0397	0.0141	0.0198	0.3551	0.4987
23	1.65	0.11	-0.0120	-0.0138	-0.0066	1.1497	0.5500	0.0444	0.0162	0.0242	0.3648	0.5458
24	1.87	0.11	-0.0237	-0.0180	-0.0096	0.7002	0.3960	0.0459	0.0173	0.0271	0.3768	0.5904
25	2.08	0.09	-0.0243	-0.0185	-0.0125	0.7032	0.4753	0.0558	0.0195	0.0307	0.3494	0.5502
26	2.33	0.11	-0.0351	-0.0202	-0.0143	0.5753	0.4076	0.0638	0.0213	0.0348	0.3338	0.5455
27	2.54	0.09	-0.0439	-0.0226	-0.0170	0.5426	0.4156	0.0703	0.0230	0.0401	0.3271	0.5704
28	2.77	0.09	-0.0435	-0.0236	-0.0195	0.5611	0.4472	0.0753	0.0243	0.0433	0.3226	0.5750
29	3.01	0.11	-0.0496	-0.0247	-0.0202	0.4979	0.4073	0.0817	0.0261	0.0486	0.3194	0.5949
30	3.22	0.09	-0.0558	-0.0267	-0.0230	0.4818	0.4152	0.0883	0.0276	0.0513	0.3125	0.5810
31	3.46	0.10	-0.0570	-0.0290	-0.0271	0.4327	0.4045	0.0947	0.0296	0.0559	0.3125	0.5903
32	3.67	0.10	-0.0645	-0.0293	-0.0273	0.4276	0.3985	0.1012	0.0313	0.0598	0.3092	0.5909
33	3.89	0.09	-0.0670	-0.0292	-0.0271	0.4357	0.4045	0.1075	0.0336	0.0651	0.3125	0.6056
34	4.13	0.11	-0.0730	-0.0330	-0.0325	0.3975	0.3916	0.1107	0.0345	0.0674	0.3116	0.6089
35	4.35	0.09	-0.0847	-0.0344	-0.0352	0.3877	0.3960	0.1202	0.0374	0.0757	0.3127	0.6298
36	4.56	0.08	-0.0946	-0.0358	-0.0374	0.3848	0.4065	0.1283	0.0397	0.0805	0.3093	0.6276
37	4.77	0.10	-0.1003	-0.0371	-0.0400	0.3698	0.3948	0.1265	0.0399	0.0810	0.3153	0.6403
38	4.98	0.08	-0.1031	-0.0379	-0.0417	0.3675	0.4045	0.1363	0.0421	0.0852	0.3088	0.6251
39	5.19	0.09	-0.1115	-0.0394	-0.0453	0.3569	0.4063	0.1408	0.0437	0.0889	0.3103	0.6314
40	5.39	0.09	-0.1198	-0.0405	-0.0483	0.3534	0.4057	0.1488	0.0459	0.0941	0.3084	0.6337
41	5.58	0.08	-0.1136	-0.0413	-0.0492	0.3572	0.4256	0.1553	0.0474	0.0989	0.3051	0.6368
42	5.80	0.10	-0.1229	-0.0427	-0.0514	0.3473	0.4182	0.1667	0.0495	0.1033	0.2969	0.6197
43	6.00	0.09	-0.1314	-0.0452	-0.0558	0.3439	0.4247	0.1715	0.0507	0.1071	0.2955	0.6245
44	6.17	0.08	-0.1309	-0.0454	-0.0577	0.3460	0.4408	0.1778	0.0515	0.1088	0.2896	0.6119
45	6.40	0.10	-0.1426	-0.0475	-0.0611	0.3330	0.4265	0.1876	0.0533	0.1123	0.2840	0.5986
46	6.59	0.08	-0.1416	-0.0484	-0.0633	0.3365	0.4402	0.2006	0.0555	0.1202	0.2766	0.5992

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 29 MACH 8.8U 1.7 PHI 45.0 CONF B1&OF11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	6.78	0.09	-0.1456	-0.0484	-0.0678	0.3328	0.4319	0.2055	0.0565	0.1226	0.2749	0.5966
48	6.99	0.09	-0.1540	-0.0498	-0.0664	0.3233	0.4312	0.2119	0.0576	0.1265	0.2718	0.5978
49	7.18	0.08	-0.1530	-0.0501	-0.0664	0.3257	0.4447	0.2266	0.0599	0.1332	0.2643	0.5878
50	7.38	0.10	-0.1711	-0.0533	-0.0751	0.3114	0.4389	0.2283	0.0599	0.1346	0.2623	0.5896
51	7.58	0.08	-0.1696	-0.0531	-0.0756	0.3130	0.4458	0.2397	0.0617	0.1410	0.2573	0.5882
52	7.75	0.09	-0.1881	-0.0530	-0.0754	0.3152	0.4485	0.2496	0.0627	0.1432	0.2511	0.5737
53	7.95	0.10	-0.1812	-0.0552	-0.0796	0.3046	0.4393	0.2545	0.0631	0.1456	0.2479	0.5721
54	8.11	0.08	-0.1839	-0.0552	-0.0816	0.3051	0.4511	0.2611	0.0638	0.1488	0.2443	0.5699
55	8.29	0.09	-0.1910	-0.0571	-0.0861	0.2989	0.4508	0.2759	0.0656	0.1555	0.2377	0.5636
56	8.47	0.08	-0.1912	-0.0564	-0.0847	0.2949	0.4430	0.2808	0.0661	0.1586	0.2353	0.5648
57	8.63	0.08	-0.1969	-0.0574	-0.0881	0.2914	0.4474	0.2923	0.0672	0.1629	0.2298	0.5573
58	8.81	0.09	-0.2070	-0.0594	-0.0919	0.2869	0.4440	0.2939	0.0672	0.1650	0.2286	0.5614
59	8.98	0.07	-0.2048	-0.0594	-0.0932	0.2872	0.4507	0.3053	0.0683	0.1714	0.2237	0.5614
60	9.17	0.08	-0.2113	-0.0593	-0.0943	0.2806	0.4463	0.3135	0.0695	0.1748	0.2216	0.5576
61	9.34	0.08	-0.2084	-0.0580	-0.0933	0.2782	0.4477	0.3217	0.0702	0.1801	0.2182	0.5598
62	9.54	0.07	-0.2167	-0.0610	-0.0990	0.2814	0.4569	0.3267	0.0702	0.1825	0.2168	0.5586
63	9.70	0.06	-0.2302	-0.0621	-0.1012	0.2697	0.4396	0.3366	0.0709	0.1861	0.2106	0.5529
64	9.86	0.06	-0.2254	-0.0613	-0.1021	0.2712	0.4518	0.3488	0.0717	0.1921	0.2055	0.5507
65	10.03	0.07	-0.2315	-0.0632	-0.1041	0.2729	0.4583	0.3553	0.0719	0.1973	0.2023	0.5553
66	10.22	0.08	-0.2371	-0.0633	-0.1070	0.2655	0.4475	0.3621	0.0720	0.1972	0.1988	0.5446
67	10.39	0.08	-0.2417	-0.0644	-0.1109	0.2664	0.4551	0.3769	0.0724	0.2071	0.1920	0.5495
68	10.57	0.08	-0.2481	-0.0644	-0.1117	0.2616	0.4539	0.3852	0.0726	0.2091	0.1884	0.5428
69	10.73	0.06	-0.2496	-0.0644	-0.1124	0.2617	0.4569	0.3985	0.0725	0.2156	0.1819	0.5410
70	10.92	0.09	-0.2597	-0.0664	-0.1161	0.2541	0.4558	0.4046	0.0724	0.2191	0.1771	0.5362
71	11.09	0.07	-0.2611	-0.0664	-0.1177	0.2562	0.4508	0.4161	0.0727	0.2221	0.1747	0.5338
72	11.25	0.06	-0.2618	-0.0666	-0.1189	0.2559	0.4556	0.4228	0.0730	0.2240	0.1726	0.5298
73	11.43	0.07	-0.2791	-0.0681	-0.1235	0.2521	0.4572	0.4369	0.0733	0.2296	0.1677	0.5255
74	11.60	0.09	-0.2716	-0.0678	-0.1243	0.2496	0.4577	0.4469	0.0736	0.2344	0.1646	0.5245
75	11.77	0.06	-0.2787	-0.0697	-0.1278	0.2500	0.4586	0.4535	0.0737	0.2377	0.1625	0.5241
76	11.94	0.08	-0.2868	-0.0694	-0.1299	0.2455	0.4561	0.4569	0.0733	0.2393	0.1604	0.5237
77	12.09	0.07	-0.2905	-0.0705	-0.1319	0.2426	0.4537	0.4670	0.0730	0.2434	0.1563	0.5212
78	12.27	0.07	-0.2869	-0.0697	-0.1326	0.2446	0.4634	0.4811	0.0732	0.2524	0.1521	0.5246
79	12.44	0.09	-0.2952	-0.0711	-0.1361	0.2384	0.4564	0.4912	0.0728	0.2559	0.1482	0.5218
80	12.60	0.07	-0.2990	-0.0719	-0.1378	0.2383	0.4573	0.4963	0.0727	0.2583	0.1464	0.5205
81	12.77	0.06	-0.3041	-0.0724	-0.1403	0.2362	0.4539	0.5090	0.0725	0.2645	0.1424	0.5196
82	12.95	0.08	-0.3142	-0.0730	-0.1417	0.2323	0.4510	0.5133	0.0721	0.2693	0.1404	0.5246
83	13.10	0.07	-0.3158	-0.0730	-0.1453	0.2304	0.4596	0.5217	0.0721	0.2720	0.1382	0.5214
84	13.27	0.09	-0.3301	-0.0746	-0.1501	0.2254	0.4597	0.5335	0.0712	0.2790	0.1334	0.5230
85	13.44	0.07	-0.3259	-0.0736	-0.1494	0.2280	0.4595	0.5335	0.0719	0.2784	0.1347	0.5218
86	13.61	0.07	-0.3376	-0.0755	-0.1535	0.2246	0.4571	0.5536	0.0710	0.2895	0.1282	0.5229
87	13.77	0.09	-0.3491	-0.0771	-0.1584	0.2208	0.4537	0.5536	0.0710	0.2908	0.1282	0.5253
88	13.94	0.08	-0.3569	-0.0769	-0.1605	0.2223	0.4522	0.5689	0.0698	0.2961	0.1227	0.5205
89	14.10	0.08	-0.3567	-0.0781	-0.1623	0.2201	0.4576	0.5739	0.0691	0.2998	0.1204	0.5224
90	14.27	0.08	-0.3635	-0.0793	-0.1660	0.2181	0.4567	0.5941	0.0684	0.3040	0.1171	0.5205
91	14.44	0.07	-0.3631	-0.0776	-0.1634	0.2197	0.4628	0.5942	0.0671	0.3109	0.1129	0.5232
92	14.60	0.09	-0.3737	-0.0804	-0.1706	0.2164	0.4565	0.6009	0.0672	0.3141	0.1118	0.5227

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 29 0.80 1.7 45.0 Mia0F11 0.0 0 0 0 0. UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
93	14.77	0.08	-0.3765	-0.0816	-0.1721	0.2167	0.4576	0.6109	0.0664	0.3210	0.1093	0.5255
94	14.94	0.07	-0.3780	-0.0822	-0.1725	0.2176	0.4563	0.6215	0.0629	0.3237	0.1012	0.5208
95	15.12	0.09	-0.3972	-0.0857	-0.1782	0.2157	0.4486	0.6266	0.0620	0.3268	0.0989	0.5215
96	15.27	0.06	-0.3956	-0.0851	-0.1806	0.2152	0.4568	0.6312	0.0645	0.3313	0.1022	0.5249
97	15.44	0.08	-0.3969	-0.0854	-0.1808	0.2151	0.4555	0.6365	0.0620	0.3337	0.0974	0.5243
98	15.62	0.06	-0.4072	-0.0871	-0.1847	0.2138	0.4536	0.6418	0.0593	0.3361	0.0924	0.5237
99	15.78	0.07	-0.4010	-0.0863	-0.1852	0.2152	0.4618	0.6536	0.0587	0.3431	0.0898	0.5249
100	15.91	-0.13	-0.4143	-0.0888	-0.1889	0.2138	0.4559	0.6621	0.0564	0.3458	0.0882	0.5223
101	16.10	0.07	-0.4052	-0.0863	-0.1872	0.2179	0.4620	0.6611	0.0515	0.3448	0.0779	0.5216
102	16.26	0.07	-0.4183	-0.0914	-0.1923	0.2196	0.4597	0.6601	0.0456	0.3424	0.0691	0.5187
103	16.44	0.08	-0.4330	-0.0933	-0.1984	0.2154	0.4587	0.6726	0.0513	0.3525	0.0762	0.5230
104	16.58	0.07	-0.4483	-0.0963	-0.2035	0.2177	0.4578	0.6620	0.0435	0.3438	0.0657	0.5193
105	16.75	0.08	-0.4445	-0.0967	-0.2035	0.2175	0.4578	0.6706	0.0424	0.3499	0.0632	0.5219
106	16.93	0.08	-0.4582	-0.0989	-0.2088	0.2158	0.4557	0.6658	0.0419	0.3468	0.0629	0.5209
107	17.07	0.06	-0.4550	-0.0982	-0.2103	0.2158	0.4672	0.6841	0.0423	0.3558	0.0618	0.5281
108	17.25	0.08	-0.4666	-0.0999	-0.2139	0.2151	0.4606	0.6977	0.0425	0.3664	0.0609	0.5252
109	17.41	0.07	-0.4672	-0.1003	-0.2155	0.2146	0.4613	0.6781	0.0396	0.3533	0.0584	0.5210
110	17.57	0.07	-0.4824	-0.1034	-0.2208	0.2139	0.4572	0.6822	0.0390	0.3551	0.0572	0.5205
111	17.75	0.09	-0.4713	-0.1005	-0.2167	0.2132	0.4598	0.6886	0.0388	0.3583	0.0563	0.5202
112	17.90	0.08	-0.4776	-0.1011	-0.2199	0.2119	0.4610	0.7069	0.0395	0.3699	0.0559	0.5233
113	18.07	0.08	-0.5000	-0.1060	-0.2301	0.2119	0.4602	0.6923	0.0379	0.3599	0.0547	0.5199
114	18.24	0.05	-0.5004	-0.1064	-0.2280	0.2096	0.4556	0.7038	0.0383	0.3663	0.0544	0.5205
115	18.38	0.06	-0.5120	-0.1079	-0.2351	0.2099	0.4592	0.7010	0.0373	0.3620	0.0532	0.5164
116	18.55	0.04	-0.5200	-0.1090	-0.2386	0.2080	0.4533	0.7143	0.0371	0.3678	0.0519	0.5169
117	18.71	0.07	-0.5094	-0.1066	-0.2364	0.2092	0.4641	0.7328	0.0374	0.3781	0.0510	0.5168
118	18.90	0.07	-0.5271	-0.1095	-0.2438	0.2077	0.4618	0.7380	0.0372	0.3799	0.0504	0.5168
119	19.03	0.06	-0.5159	-0.1072	-0.2410	0.2077	0.4671	0.7530	0.0376	0.3879	0.0499	0.5151
120	19.18	0.06	-0.5293	-0.1092	-0.2462	0.2063	0.4651	0.7586	0.0370	0.3895	0.0489	0.5148
121	19.33	0.06	-0.5340	-0.1098	-0.2483	0.2056	0.4650	0.7666	0.0372	0.3950	0.0485	0.5153
122	19.48	0.07	-0.5486	-0.1118	-0.2526	0.2038	0.4604	0.7798	0.0372	0.3994	0.0477	0.5122
123	19.64	0.05	-0.5511	-0.1120	-0.2562	0.2032	0.4649	0.7962	0.0374	0.4087	0.0470	0.5133
124	19.79	0.06	-0.5486	-0.1107	-0.2548	0.2017	0.4643	0.7965	0.0371	0.4074	0.0466	0.5115
125	19.95	0.07	-0.5572	-0.1119	-0.2597	0.2008	0.4661	0.8146	0.0370	0.4162	0.0454	0.5109
126	20.10	0.07	-0.5588	-0.1112	-0.2611	0.1990	0.4674	0.8265	0.0374	0.4190	0.0453	0.5082
127	20.26	0.06	-0.5634	-0.1104	-0.2624	0.1963	0.4657	0.8296	0.0369	0.4227	0.0445	0.5096
128	20.40	0.06	-0.5674	-0.1111	-0.2661	0.1958	0.4690	0.8409	0.0369	0.4263	0.0439	0.5078
129	20.56	0.06	-0.5775	-0.1117	-0.2699	0.1934	0.4674	0.8443	0.0369	0.4259	0.0437	0.5044
130	20.72	0.07	-0.5674	-0.1102	-0.2667	0.1946	0.4700	0.8505	0.0369	0.4386	0.0426	0.5038
131	20.85	0.07	-0.5759	-0.1108	-0.2715	0.1920	0.4714	0.8787	0.0374	0.4419	0.0426	0.5029
132	21.02	0.09	-0.5690	-0.1117	-0.2749	0.1898	0.4667	0.8318	0.0373	0.4470	0.0418	0.5012
133	21.17	0.06	-0.5914	-0.1111	-0.2765	0.1877	0.4671	0.9050	0.0377	0.4514	0.0416	0.4988
134	21.32	0.04	-0.5975	-0.1111	-0.2803	0.1859	0.4691	0.9116	0.0374	0.4566	0.0410	0.4987
135	21.48	0.09	-0.6107	-0.1111	-0.2836	0.1819	0.4664	0.9246	0.0382	0.4596	0.0413	0.4971
136	21.62	0.01	-0.5972	-0.1105	-0.2834	0.1858	0.4745	0.9214	0.0375	0.4593	0.0407	0.4985
137	21.78	0.09	-0.6173	-0.1105	-0.2898	0.1790	0.4695	0.9413	0.0376	0.4643	0.0399	0.4933
138	21.94	0.09	-0.6233	-0.1104	-0.2904	0.1771	0.4659	0.9461	0.0383	0.4687	0.0405	0.4954

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 29 0.60 1.7 45.0 BL=0.11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
139	22.07	0.07	-0.6701	-0.1086	-0.2925	0.1754	0.4717	0.9560	0.0392	0.4702	0.0410	0.4918
140	22.24	0.07	-0.6342	-0.1089	-0.2974	0.1717	0.4689	0.9745	0.0402	0.4766	0.0412	0.4891
141	22.39	0.06	-0.6356	-0.1077	-0.2994	0.1694	0.4711	0.9811	0.0406	0.4765	0.0414	0.4877
142	22.53	0.06	-0.6439	-0.1083	-0.3033	0.1681	0.4710	0.9966	0.0415	0.4824	0.0417	0.4851
143	22.66	0.06	-0.6530	-0.1095	-0.3053	0.1615	0.4675	0.9894	0.0429	0.4800	0.0433	0.4851
144	22.81	0.06	-0.6511	-0.1072	-0.3079	0.1666	0.4729	0.9910	0.0445	0.4769	0.0449	0.4812
145	22.96	0.07	-0.6518	-0.1096	-0.3112	0.1691	0.4774	0.9895	0.0463	0.4736	0.0468	0.4786
146	23.11	0.05	-0.6667	-0.1077	-0.3152	0.1615	0.4728	0.9860	0.0480	0.4714	0.0487	0.4781
147	23.24	0.05	-0.6665	-0.1056	-0.3170	0.1599	0.4756	0.9926	0.0495	0.4713	0.0499	0.4748
148	23.39	0.06	-0.6693	-0.1074	-0.3187	0.1604	0.4762	0.9982	0.0510	0.4689	0.0513	0.4716
149	23.53	0.06	-0.6825	-0.1044	-0.3250	0.1535	0.4762	0.9726	0.0545	0.4533	0.0560	0.4661
150	23.63	0.07	-0.6836	-0.1070	-0.3260	0.1566	0.4767	0.9759	0.0536	0.4555	0.0551	0.4667
151	23.43	0.06	-0.6772	-0.1055	-0.3293	0.1513	0.4723	0.9693	0.0563	0.4523	0.0560	0.4666
152	23.62	0.05	-0.6841	-0.1049	-0.3246	0.1533	0.4745	0.9759	0.0537	0.4555	0.0550	0.4667
153	23.43	0.07	-0.6900	-0.1044	-0.3265	0.1520	0.4732	0.9742	0.0563	0.4554	0.0557	0.4675
154	23.62	0.06	-0.6820	-0.1085	-0.3273	0.1590	0.4799	0.9792	0.0536	0.4584	0.0547	0.4681
155	23.61	0.07	-0.6838	-0.1071	-0.3260	0.1566	0.4767	0.9693	0.0538	0.4523	0.0555	0.4666
156	23.63	0.08	-0.6887	-0.1068	-0.3252	0.1578	0.4777	0.9859	0.0520	0.4629	0.0527	0.4695
157	23.75	0.07	-0.6933	-0.1096	-0.3345	0.1580	0.4825	0.9743	0.0551	0.4521	0.0565	0.4640
158	25.11	0.08	-0.7310	-0.1098	-0.3580	0.1485	0.4852	0.9822	0.0616	0.4686	0.0627	0.4565
159	26.68	0.11	-0.7067	-0.1110	-0.3690	0.1570	0.4938	1.0316	0.0648	0.4686	0.0628	0.4542
160	28.51	0.12	-0.6283	-0.1015	-0.3236	0.1628	0.5192	1.0780	0.0642	0.4897	0.0595	0.4543
161	30.55	0.13	-0.5758	-0.0914	-0.3055	0.1579	0.5278	1.1446	0.0604	0.5217	0.0528	0.4558
162	32.89	0.15	-0.5744	-0.0910	-0.3047	0.1573	0.5337	1.2013	0.0567	0.5462	0.0472	0.4567
163	35.25	0.14	-0.5822	-0.0971	-0.3088	0.1667	0.5304	1.2468	0.0531	0.5719	0.0426	0.4587
164	38.37	0.17	-0.5152	-0.0955	-0.2772	0.1853	0.5380	1.2827	0.0496	0.5910	0.0387	0.4607
165	42.23	0.08	-0.4935	-0.1085	-0.2675	0.2198	0.5420	1.2925	0.0424	0.5944	0.0328	0.4599
166	46.87	0.02	-0.4284	-0.1011	-0.2346	0.2342	0.5528	1.3286	0.0308	0.6115	0.0232	0.4603
167	52.38	-0.01	-0.2045	-0.0422	-0.1248	0.2023	0.5986	1.3672	0.0201	0.6346	0.0147	0.4642
168	58.12	-0.10	0.0512	-0.0027	0.0045	-0.0527	0.0879	1.4602	0.0117	0.6766	0.0080	0.4628
169	59.16	-0.08	0.0650	-0.0006	0.0122	-0.0092	0.1877	1.4824	0.0123	0.6685	0.0083	0.4644

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 4

MANTIS MISSILE TAILS EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 29 0.60 1.7 45.0 BLADE11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CMF3	CM3	CH3	XCPF3	YCPF3	CAFA	CHA	CBA	XCPFA	YCPFA
1	-4.63	0.10	0.1414	9.9999	0.0527	9.9999	0.3727	-0.1331	-0.0344	-0.0689	0.2734	0.5177
2	-3.55	0.10	0.1110	9.9999	0.0401	9.9999	0.3613	-0.0898	-0.0262	-0.0475	0.3146	0.5381
3	-3.30	0.11	0.0987	9.9999	0.0360	9.9999	0.3647	-0.0796	-0.0267	-0.0421	0.3353	0.5289
4	-3.02	0.08	0.0946	9.9999	0.0369	9.9999	0.3926	-0.0718	-0.0245	-0.0368	0.3411	0.5125
5	-2.77	0.11	0.0866	9.9999	0.0309	9.9999	0.3566	-0.0672	-0.0227	-0.0324	0.3377	0.4821
6	-2.50	0.03	0.0727	9.9999	0.0242	9.9999	0.4017	-0.0579	-0.0200	-0.0276	0.3453	0.4767
7	-2.24	0.10	0.0682	9.9999	0.0270	9.9999	0.3959	-0.0535	-0.0179	-0.0239	0.3345	0.4467
8	-1.98	0.10	0.0652	9.9999	0.0250	9.9999	0.3834	-0.0441	-0.0154	-0.0191	0.3491	0.4331
9	-1.72	0.08	0.0494	9.9999	0.0219	9.9999	0.4525	-0.0332	-0.0125	-0.0147	0.3764	0.4428
10	-1.46	0.11	0.0500	9.9999	0.0189	9.9999	0.3780	-0.0252	-0.0105	-0.0101	0.4186	0.4008
11	-1.22	0.09	0.0316	9.9999	0.0169	9.9999	0.5158	-0.0220	-0.0099	-0.0091	0.4499	0.4136
12	-0.97	0.08	0.0286	9.9999	0.0155	9.9999	0.5420	-0.0126	-0.0077	-0.0063	0.6109	0.5088
13	-0.71	0.11	0.0271	9.9999	0.0129	9.9999	0.4760	-0.0065	-0.0057	-0.0037	0.8767	0.5692
14	-0.49	0.09	0.0163	9.9999	0.0133	9.9999	0.8160	-0.0003	-0.0038	-0.0011	12.6833	3.6667
15	-0.23	0.10	0.0163	9.9999	0.0098	9.9999	0.9515	0.0009	-0.0023	0.0004	-2.5549	0.4444
16	0.01	0.11	0.0103	9.9999	0.0098	9.9999	0.9515	0.0101	0.0006	0.0040	0.0594	0.3960
17	0.23	0.09	-0.0016	9.9999	0.0064	9.9999	-3.5556	0.0179	0.0025	0.0060	0.1396	0.3352
18	0.46	0.10	-0.0033	9.9999	0.0033	9.9999	-1.1818	0.0208	0.0037	0.0077	0.1778	0.3702
19	0.71	0.10	-0.0156	9.9999	0.0030	9.9999	-0.1923	0.0269	0.0060	0.0090	0.2230	0.3346
20	0.93	0.09	-0.0247	9.9999	0.0004	9.9999	-0.0162	0.0315	0.0074	0.0095	0.2369	0.3016
21	1.18	0.11	-0.0246	9.9999	-0.0014	9.9999	0.0569	0.0374	0.0103	0.0141	0.2753	0.3778
22	1.40	0.09	-0.0371	9.9999	-0.0023	9.9999	0.0622	0.0417	0.0125	0.0153	0.2997	0.3669
23	1.65	0.11	-0.0353	9.9999	-0.0052	9.9999	0.1473	0.0478	0.0146	0.0173	0.3054	0.3619
24	1.87	0.11	-0.0462	9.9999	-0.0047	9.9999	0.2109	0.0541	0.0164	0.0186	0.3031	0.3438
25	2.08	0.09	-0.0614	9.9999	-0.0133	9.9999	0.2166	0.0622	0.0179	0.0194	0.2877	0.3119
26	2.33	0.11	-0.0612	9.9999	-0.0163	9.9999	0.2663	0.0651	0.0195	0.0211	0.2995	0.3241
27	2.54	0.09	-0.0720	9.9999	-0.0207	9.9999	0.2806	0.0747	0.0217	0.0234	0.2904	0.3133
28	2.77	0.09	-0.0813	9.9999	-0.0296	9.9999	0.3026	0.0796	0.0234	0.0272	0.2946	0.3026
29	3.01	0.11	-0.0747	9.9999	-0.0263	9.9999	0.3300	0.0874	0.0252	0.0293	0.2883	0.3352
30	3.22	0.09	-0.0937	9.9999	-0.0249	9.9999	0.3191	0.0955	0.0274	0.0321	0.2868	0.3341
31	3.46	0.10	-0.1075	9.9999	-0.0354	9.9999	0.3330	0.1035	0.0291	0.0354	0.2811	0.3420
32	3.67	0.10	-0.1059	9.9999	-0.0383	9.9999	0.3428	0.1101	0.0299	0.0379	0.2715	0.3442
33	3.89	0.09	-0.1146	9.9999	-0.0397	9.9999	0.3359	0.1132	0.0309	0.0389	0.2729	0.3436
34	4.13	0.11	-0.1288	9.9999	-0.0460	9.9999	0.3571	0.1196	0.0326	0.0435	0.2725	0.3637
35	4.35	0.08	-0.1412	9.9999	-0.0482	9.9999	0.3414	0.1292	0.0347	0.0470	0.2665	0.3638
36	4.56	0.08	-0.1550	9.9999	-0.0529	9.9999	0.3413	0.1338	0.0364	0.0507	0.2720	0.3789
37	4.77	0.10	-0.1472	9.9999	-0.0529	9.9999	0.3594	0.1417	0.0384	0.0541	0.2709	0.3818
38	4.98	0.08	-0.1557	9.9999	-0.0562	9.9999	0.3392	0.1468	0.0396	0.0571	0.2736	0.3943
39	5.19	0.09	-0.1644	9.9999	-0.0600	9.9999	0.3563	0.1509	0.0413	0.0602	0.2738	0.3992
40	5.39	0.09	-0.1776	9.9999	-0.0625	9.9999	0.3519	0.1571	0.0429	0.0628	0.2730	0.3997
41	5.58	0.09	-0.1837	9.9999	-0.0644	9.9999	0.3527	0.1618	0.0445	0.0665	0.2750	0.4110
42	5.80	0.10	-0.1935	9.9999	-0.0700	9.9999	0.3573	0.1668	0.0456	0.0688	0.2766	0.4175
43	6.00	0.09	-0.2007	9.9999	-0.0721	9.9999	0.3488	0.1694	0.0474	0.0732	0.2797	0.4321
44	6.17	0.08	-0.2154	9.9999	-0.0769	9.9999	0.3570	0.1737	0.0490	0.0761	0.2820	0.4381
45	6.40	0.10	-0.2199	9.9999	-0.0797	9.9999	0.3624	0.1833	0.0511	0.0803	0.2787	0.4381
46	6.59	0.08	-0.2414	9.9999	-0.0856	9.9999	0.3546	0.1832	0.0514	0.0822	0.2805	0.4487

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/D-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 29 0.60 1.7 45.0 MIMOFIL 0.0 0 0 0 0. UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	6.78	0.09	-0.2321	9.9999	-0.0855	9.9999	0.3664	0.1681	0.0523	0.0827	0.2780	0.4397
48	6.89	0.09	-0.2474	9.9999	-0.0909	9.9999	0.3674	0.1911	0.0536	0.0869	0.2804	0.4567
49	7.18	0.08	-0.2535	9.9999	-0.0932	9.9999	0.3677	0.2006	0.0558	0.0917	0.2781	0.4571
50	7.38	0.10	-0.2655	9.9999	-0.1014	9.9999	0.3819	0.2039	0.0563	0.0927	0.2768	0.4566
51	7.56	0.08	-0.2778	9.9999	-0.1068	9.9999	0.3772	0.2054	0.0569	0.0948	0.2769	0.4615
52	7.75	0.09	-0.2776	9.9999	-0.1064	9.9999	0.3905	0.2119	0.0582	0.0973	0.2746	0.4592
53	7.95	0.10	-0.2851	9.9999	-0.1136	9.9999	0.3942	0.2157	0.0585	0.0995	0.2718	0.4624
54	8.11	0.08	-0.2943	9.9999	-0.1176	9.9999	0.3996	0.2216	0.0601	0.1034	0.2711	0.4666
55	8.29	0.09	-0.2970	9.9999	-0.1200	9.9999	0.4189	0.2247	0.0611	0.1044	0.2718	0.4666
56	8.47	0.08	-0.3016	9.9999	-0.1260	9.9999	0.4178	0.2313	0.0621	0.1095	0.2684	0.4736
57	8.63	0.08	-0.3107	9.9999	-0.1316	9.9999	0.4236	0.2361	0.0630	0.1112	0.2668	0.4710
58	8.81	0.09	-0.3165	9.9999	-0.1393	9.9999	0.4401	0.2393	0.0637	0.1136	0.2661	0.4739
59	8.98	0.07	-0.3256	9.9999	-0.1451	9.9999	0.4313	0.2392	0.0640	0.1148	0.2675	0.4799
60	9.17	0.08	-0.3332	9.9999	-0.1473	9.9999	0.4439	0.2471	0.0661	0.1188	0.2674	0.4808
61	9.34	0.08	-0.3346	9.9999	-0.1480	9.9999	0.4421	0.2553	0.0673	0.1221	0.2635	0.4783
62	9.50	0.07	-0.3530	9.9999	-0.1567	9.9999	0.4439	0.2556	0.0685	0.1227	0.2601	0.4808
63	9.70	0.08	-0.3558	9.9999	-0.1629	9.9999	0.4578	0.2621	0.0676	0.1245	0.2578	0.4758
64	9.86	0.06	-0.3654	9.9999	-0.1634	9.9999	0.4467	0.2683	0.0696	0.1312	0.2588	0.4879
65	10.03	0.07	-0.3717	9.9999	-0.1705	9.9999	0.4587	0.2691	0.0691	0.1318	0.2567	0.4898
66	10.22	0.08	-0.3777	9.9999	-0.1746	9.9999	0.4623	0.2724	0.0696	0.1361	0.2556	0.4923
67	10.39	0.06	-0.3930	9.9999	-0.1807	9.9999	0.4598	0.2791	0.0704	0.1379	0.2522	0.4941
68	10.57	0.06	-0.3898	9.9999	-0.1828	9.9999	0.4690	0.2887	0.0724	0.1414	0.2507	0.4898
69	10.73	0.06	-0.3990	9.9999	-0.1860	9.9999	0.4662	0.2887	0.0726	0.1427	0.2514	0.4943
70	10.92	0.06	-0.4112	9.9999	-0.1912	9.9999	0.4650	0.2921	0.0726	0.1442	0.2485	0.4937
71	11.06	0.09	-0.4133	9.9999	-0.1965	9.9999	0.4754	0.2977	0.0734	0.1452	0.2465	0.4978
72	11.25	0.06	-0.4272	9.9999	-0.2001	9.9999	0.4684	0.2978	0.0733	0.1488	0.2461	0.4997
73	11.43	0.07	-0.4355	9.9999	-0.2071	9.9999	0.4755	0.3049	0.0745	0.1529	0.2443	0.5015
74	11.60	0.09	-0.4409	9.9999	-0.2105	9.9999	0.4784	0.3099	0.0752	0.1546	0.2426	0.4999
75	11.77	0.06	-0.4585	9.9999	-0.2156	9.9999	0.4702	0.3100	0.0747	0.1539	0.2409	0.4965
76	11.94	0.08	-0.4552	9.9999	-0.2190	9.9999	0.4811	0.3167	0.0755	0.1571	0.2383	0.4961
77	12.09	0.07	-0.4720	9.9999	-0.2270	9.9999	0.4809	0.3234	0.0761	0.1602	0.2352	0.4954
78	12.27	0.07	-0.4713	9.9999	-0.2265	9.9999	0.4848	0.3305	0.0775	0.1631	0.2344	0.4935
79	12.44	0.09	-0.4849	9.9999	-0.2381	9.9999	0.4910	0.3339	0.0781	0.1666	0.2338	0.4990
80	12.60	0.07	-0.4897	9.9999	-0.2373	9.9999	0.4846	0.3373	0.0783	0.1682	0.2321	0.4987
81	12.77	0.08	-0.4936	9.9999	-0.2417	9.9999	0.4897	0.3447	0.0792	0.1711	0.2297	0.4964
82	12.95	0.08	-0.5065	9.9999	-0.2490	9.9999	0.4893	0.3454	0.0791	0.1733	0.2289	0.5017
83	13.10	0.07	-0.5130	9.9999	-0.2503	9.9999	0.4879	0.3537	0.0802	0.1760	0.2267	0.4978
84	13.27	0.09	-0.5199	9.9999	-0.2561	9.9999	0.4974	0.3619	0.0820	0.1813	0.2265	0.5010
85	13.44	0.07	-0.5267	9.9999	-0.2606	9.9999	0.4948	0.3686	0.0827	0.1832	0.2243	0.4970
86	13.61	0.07	-0.5464	9.9999	-0.2684	9.9999	0.4957	0.3720	0.0831	0.1855	0.2233	0.4987
87	13.77	0.09	-0.5449	9.9999	-0.2736	9.9999	0.5021	0.3796	0.0842	0.1887	0.2223	0.4984
88	13.94	0.06	-0.5645	9.9999	-0.2794	9.9999	0.4958	0.3755	0.0830	0.1876	0.2210	0.4996
89	14.10	0.08	-0.5567	9.9999	-0.2808	9.9999	0.5026	0.3836	0.0848	0.1917	0.2210	0.4997
90	14.27	0.06	-0.5679	9.9999	-0.2858	9.9999	0.5033	0.3903	0.0857	0.1949	0.2195	0.4994
91	14.44	0.07	-0.5834	9.9999	-0.2907	9.9999	0.4983	0.4000	0.0877	0.1984	0.2192	0.4960
92	14.60	0.09	-0.5900	9.9999	-0.2953	9.9999	0.5091	0.3985	0.0870	0.1989	0.2183	0.4991

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RA10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	29	0.60	1.7	45.0	B1a0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	14.77	0.08	-0.6[illegible]3	9.9999	-0.2991	9.9999	0.5076	0.4035	0.0878	0.2006	0.2175	0.4971
94	14.94	0.07	-0.5956	9.9999	-0.3033	9.9999	0.5094	0.4102	0.0885	0.2038	0.2157	0.4968
95	15.12	0.09	-0.6045	9.9999	-0.3089	9.9999	0.5110	0.4072	0.0873	0.2028	0.2143	0.4980
96	15.27	0.08	-0.6166	9.9999	-0.3148	9.9999	0.5104	0.4102	0.0885	0.2045	0.2157	0.4985
97	15.44	0.08	-0.6137	9.9999	-0.3165	9.9999	0.5125	0.4135	0.0891	0.2061	0.2156	0.4984
98	15.62	0.08	-0.6229	9.9999	-0.3184	9.9999	0.5120	0.4220	0.0899	0.2107	0.2130	0.4993
99	15.78	0.07	-0.6343	9.9999	-0.3262	9.9999	0.5110	0.4302	0.0914	0.2140	0.2124	0.4974
100	15.91	-0.15	-0.6386	9.9999	-0.3311	9.9999	0.5100	0.4335	0.0919	0.2150	0.2119	0.4968
101	16.10	0.07	-0.6474	9.9999	-0.3325	9.9999	0.5136	0.4450	0.0939	0.2186	0.2110	0.4982
102	16.28	0.07	-0.6504	9.9999	-0.3351	9.9999	0.5152	0.4385	0.0927	0.2180	0.2113	0.4971
103	16.44	0.08	-0.6533	9.9999	-0.3397	9.9999	0.5200	0.4434	0.0936	0.2211	0.2110	0.4986
104	16.58	0.07	-0.6657	9.9999	-0.3437	9.9999	0.5163	0.4401	0.0932	0.2208	0.2117	0.5017
105	16.75	0.08	-0.6656	9.9999	-0.3467	9.9999	0.5209	0.4497	0.0954	0.2237	0.2121	0.4974
106	16.93	0.08	-0.6550	9.9999	-0.3423	9.9999	0.5226	0.4453	0.0953	0.2243	0.2140	0.5037
107	17.07	0.08	-0.6366	9.9999	-0.3329	9.9999	0.5229	0.4615	0.0987	0.2317	0.2138	0.5021
108	17.25	0.08	-0.6108	9.9999	-0.3242	9.9999	0.5308	0.4736	0.1012	0.2384	0.2136	0.5034
109	17.41	0.07	-0.6309	9.9999	-0.3294	9.9999	0.5221	0.4769	0.1018	0.2393	0.2134	0.5018
110	17.57	0.07	-0.6208	9.9999	-0.3286	9.9999	0.5263	0.4867	0.1007	0.2370	0.2157	0.5078
111	17.75	0.09	-0.6299	9.9999	-0.3307	9.9999	0.5250	0.4881	0.1037	0.2454	0.2124	0.5028
112	17.96	0.08	-0.6316	9.9999	-0.3272	9.9999	0.5180	0.4895	0.1047	0.2475	0.2138	0.5056
113	18.07	0.08	-0.6497	9.9999	-0.3390	9.9999	0.5218	0.4766	0.1022	0.2444	0.2144	0.5128
114	18.24	0.08	-0.6543	9.9999	-0.3411	9.9999	0.5213	0.4884	0.1032	0.2479	0.2112	0.5076
115	18.38	0.06	-0.6648	9.9999	-0.3435	9.9999	0.5139	0.4822	0.1030	0.2464	0.2135	0.5110
116	18.55	0.08	-0.6714	9.9999	-0.3492	9.9999	0.5202	0.4758	0.1019	0.2466	0.2141	0.5179
117	18.71	0.07	-0.6743	9.9999	-0.3492	9.9999	0.5141	0.5077	0.1060	0.2553	0.2087	0.5029
118	18.88	0.07	-0.6901	9.9999	-0.3543	9.9999	0.5134	0.4920	0.1037	0.2509	0.2107	0.5108
119	19.03	0.06	-0.6932	9.9999	-0.3576	9.9999	0.5159	0.5156	0.1072	0.2603	0.2079	0.5048
120	19.18	0.06	-0.6997	9.9999	-0.3570	9.9999	0.5102	0.4983	0.1048	0.2565	0.2103	0.5148
121	19.33	0.08	-0.7056	9.9999	-0.3617	9.9999	0.5125	0.5023	0.1050	0.2570	0.2090	0.5116
122	19.48	0.07	-0.7148	9.9999	-0.3670	9.9999	0.5101	0.5039	0.1056	0.2585	0.2091	0.5138
123	19.64	0.05	-0.7270	9.9999	-0.3694	9.9999	0.5081	0.4959	0.1037	0.2552	0.2091	0.5146
124	19.79	0.08	-0.7360	9.9999	-0.3767	9.9999	0.5118	0.5131	0.1057	0.2613	0.2059	0.5093
125	19.95	0.07	-0.7452	9.9999	-0.3792	9.9999	0.5089	0.5068	0.1050	0.2607	0.2079	0.5164
126	20.10	0.07	-0.7552	9.9999	-0.3823	9.9999	0.5069	0.5066	0.1048	0.2627	0.2068	0.5186
127	20.26	0.06	-0.7561	9.9999	-0.3867	9.9999	0.5101	0.5157	0.1050	0.2655	0.2036	0.5148
128	20.40	0.08	-0.7723	9.9999	-0.3897	9.9999	0.5066	0.5075	0.1041	0.2635	0.2051	0.5192
129	20.56	0.08	-0.7872	9.9999	-0.4006	9.9999	0.5086	0.5094	0.1039	0.2655	0.2039	0.5212
130	20.72	0.07	-0.7812	9.9999	-0.3969	9.9999	0.5081	0.5158	0.1048	0.2680	0.2031	0.5196
131	20.85	0.07	-0.7902	9.9999	-0.4007	9.9999	0.5071	0.5110	0.1041	0.2669	0.2037	0.5223
132	21.02	0.09	-0.8035	9.9999	-0.4113	9.9999	0.5119	0.4998	0.1023	0.2646	0.2046	0.5294
133	21.17	0.08	-0.8067	9.9999	-0.4047	9.9999	0.5079	0.4786	0.0996	0.2564	0.2081	0.5357
134	21.32	0.08	-0.8292	9.9999	-0.4217	9.9999	0.5086	0.4784	0.1001	0.2590	0.2092	0.5414
135	21.46	0.09	-0.8245	9.9999	-0.4219	9.9999	0.5117	0.4657	0.0976	0.2540	0.2095	0.5454
136	21.62	0.07	-0.8413	9.9999	-0.4238	9.9999	0.5037	0.5002	0.1014	0.2684	0.2027	0.5366
137	21.78	0.09	-0.8518	9.9999	-0.4307	9.9999	0.5056	0.4712	0.0991	0.2588	0.2103	0.5492
138	21.94	0.09	-0.8576	9.9999	-0.4330	9.9999	0.5048	0.4585	0.0966	0.2531	0.2102	0.5528

TEST	PART	MACH	RE10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	29	0.60	1.7	45.0	81=0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
139	22.07	0.07	-0.4664	9.9999	-0.4374	9.9999	0.5037	0.4620	0.0964	0.2546	0.2086	0.5511
140	22.29	0.09	-0.4746	9.9999	-0.4435	9.9999	0.5071	0.4588	0.0963	0.2539	0.2098	0.5534
141	22.39	0.05	-0.4974	9.9999	-0.4507	9.9999	0.5022	0.4539	0.0956	0.2522	0.2106	0.5556
142	22.53	0.08	-0.4990	9.9999	-0.4533	9.9999	0.5042	0.4566	0.0959	0.2528	0.2101	0.5539
143	22.66	0.08	-0.4989	9.9999	-0.4551	9.9999	0.5063	0.4235	0.0916	0.2364	0.2162	0.5582
144	22.81	0.06	-0.5218	9.9999	-0.4617	9.9999	0.5025	0.4533	0.0950	0.2531	0.2095	0.5583
145	22.96	0.07	-0.4355	9.9999	-0.4714	9.9999	0.5039	0.4992	0.0994	0.2727	0.1991	0.5463
146	23.11	0.02	-0.4901	9.9999	-0.4723	9.9999	0.5026	0.4658	0.0962	0.2583	0.2065	0.5545
147	23.24	0.05	-0.4947	9.9999	-0.4733	9.9999	0.5010	0.4594	0.0948	0.2558	0.2063	0.5568
148	23.39	0.08	-0.4960	9.9999	-0.4776	9.9999	0.5049	0.4743	0.0964	0.2609	0.2032	0.5501
149	23.53	0.06	-0.4969	9.9999	-0.4861	9.9999	0.5017	0.4443	0.0937	0.2462	0.2108	0.5541
150	23.63	0.07	-0.4985	9.9999	-0.4867	9.9999	0.5026	0.4678	0.0955	0.2571	0.2061	0.5496
151	23.83	0.06	-0.4749	9.9999	-0.4902	9.9999	0.5028	0.4411	0.0928	0.2446	0.2103	0.5545
152	23.82	0.05	-0.4989	9.9999	-0.4849	9.9999	0.5035	0.4446	0.0928	0.2476	0.2087	0.5565
153	23.83	0.07	-0.4957	9.9999	-0.4882	9.9999	0.5055	0.4429	0.0929	0.2473	0.2097	0.5584
154	23.62	0.06	-0.4764	9.9999	-0.4897	9.9999	0.5015	0.4911	0.0977	0.2687	0.1989	0.5471
155	23.61	0.07	-0.4719	9.9999	-0.4881	9.9999	0.5022	0.4709	0.0963	0.2587	0.2044	0.5494
156	23.83	0.08	-0.4926	9.9999	-0.4860	9.9999	0.5070	0.4829	0.0967	0.2648	0.2002	0.5484
157	23.75	0.07	-1.0055	9.9999	-0.4986	9.9999	0.4959	0.5095	0.0994	0.2760	0.1950	0.5417
158	25.11	0.08	-1.0147	9.9999	-0.4984	9.9999	0.4891	0.5261	0.1009	0.2780	0.1917	0.5284
159	26.68	0.11	-0.9986	9.9999	-0.4806	9.9999	0.4813	0.7040	0.1139	0.3437	0.1617	0.4882
160	28.51	0.16	-1.0205	9.9999	-0.4769	9.9999	0.4673	0.7581	0.0846	0.3666	0.1116	0.4836
161	30.55	0.13	-1.0310	9.9999	-0.4944	9.9999	0.4696	0.7031	0.0517	0.3401	0.0735	0.4837
162	32.49	0.15	-1.0403	9.9999	-0.4939	9.9999	0.4652	0.6595	0.0490	0.3315	0.0743	0.5027
163	35.25	0.14	-1.0789	9.9999	-0.4968	9.9999	0.4605	0.5749	0.0495	0.3323	0.0861	0.5788
164	38.37	0.17	-1.1524	9.9999	-0.5318	9.9999	0.4615	0.4548	0.0453	0.2934	0.0996	0.6451
165	42.23	0.08	-1.1425	9.9999	-0.5298	9.9999	0.4557	0.4545	0.0717	0.2970	0.1577	0.6535
166	46.67	0.02	-1.1754	9.9999	-0.5373	9.9999	0.4569	0.3119	0.0839	0.2193	0.2089	0.7031
167	52.38	-0.01	-1.4014	9.9999	-0.6379	9.9999	0.4552	0.3194	0.0819	0.2200	0.2560	0.6879
168	58.12	-0.14	-1.4232	9.9999	-0.6480	9.9999	0.4553	-0.0327	-0.0002	0.0198	0.0061	-0.6055
169	54.16	-0.08	-1.4320	9.9999	-0.6557	9.9999	0.4579	0.0002	0.0016	0.0346	7.9979	173.0080

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYNO PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 30 0.90 1.7 0.0 81 0F 11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.68	0.02	-0.6305	1.2515	0.0653	-0.0036	-0.0011	0.2296	0.0747	0.1549	-1.9849
2	-5.04	0.00	-0.6229	1.1538	-0.0512	0.0838	-0.0266	0.2240	0.0714	0.1526	-1.8523
3	-4.72	0.02	-0.5093	0.9552	0.0659	-0.0905	-0.0066	0.2303	0.0706	0.1597	-1.8756
4	-4.43	0.00	-0.4848	0.9056	0.0020	0.0787	-0.0137	0.2228	0.0707	0.1521	-1.8677
5	-4.43	0.01	-0.5096	0.9232	-0.0744	0.1615	-0.0139	0.2238	0.0704	0.1534	-1.8117
6	-4.14	0.01	-0.4076	0.7813	-0.0131	0.0670	-0.0006	0.2275	0.0692	0.1583	-1.9167
7	-3.93	0.00	-0.4361	0.7736	-0.0481	0.1484	-0.0263	0.2281	0.0692	0.1589	-1.7737
8	-3.61	0.02	-0.3677	0.6262	0.0401	0.0424	-0.0089	0.2327	0.0695	0.1632	-1.8011
9	-3.34	-0.06	-0.3114	0.5521	-0.0622	0.1386	-0.0133	0.2324	0.0692	0.1632	-1.7731
10	-3.11	0.01	-0.3390	0.5426	-0.0196	0.1894	-0.0263	0.2308	0.0709	0.1599	-1.6087
11	-2.81	0.02	-0.2805	0.3260	0.0224	-0.0317	0.0001	0.2359	0.0694	0.1665	-1.6260
12	-2.56	0.06	-0.2346	0.3566	0.0609	0.0678	-0.0130	0.2357	0.0699	0.1658	-1.6881
13	-2.29	0.02	-0.1889	0.2660	0.0020	0.0693	-0.0129	0.2366	0.0699	0.1667	-1.5139
14	-2.03	0.00	-0.0938	0.1699	-0.0519	0.1060	0.0	0.2382	0.0699	0.1683	-1.7029
15	-1.78	0.01	-0.1901	0.2719	0.0128	0.0343	-0.0253	0.2376	0.0699	0.1677	-1.4305
16	-1.52	0.02	-0.0889	0.1151	-0.0285	0.0160	0.0003	0.2409	0.0703	0.1706	-1.2943
17	-1.28	-0.02	-0.0896	0.1157	-0.1802	0.1587	-0.0126	0.2393	0.0701	0.1692	-1.3028
18	-1.01	0.01	-0.0890	0.1153	-0.0252	0.0807	-0.0125	0.2460	0.0718	0.1682	-1.2944
19	-0.77	0.02	0.0005	-0.0018	0.0652	0.0190	0.0005	0.2417	0.0710	0.1707	-3.6000
20	-0.55	-0.06	-0.0258	0.0353	-0.0122	0.0686	-0.0185	0.2388	0.0697	0.1691	-1.3698
21	-0.28	0.01	0.0126	-0.0261	-0.1397	0.1765	-0.0060	0.2435	0.0717	0.1718	-2.0667
22	-0.06	0.01	0.0837	-0.0975	-0.0165	0.0252	-0.0055	0.2471	0.0713	0.1758	-1.5303
23	0.17	-0.00	0.0242	-0.0503	-0.0992	0.1953	-0.0250	0.2444	0.0726	0.1718	-2.0777
24	0.44	0.04	0.1302	-0.1668	0.1552	-0.0212	0.0009	0.2436	0.0725	0.1709	-1.2816
25	0.66	-0.01	0.1024	-0.1433	-0.0754	0.1281	-0.0119	0.2415	0.0717	0.1698	-1.4000
26	0.88	0.03	0.1154	-0.1546	0.0550	0.0838	-0.0119	0.2429	0.0716	0.1713	-1.3344
27	1.14	0.02	0.1748	-0.2516	0.0483	-0.0224	0.0013	0.2476	0.0712	0.1764	-1.3994
28	1.36	-0.00	0.1604	-0.1884	-0.1125	0.1963	-0.0182	0.2437	0.0720	0.1717	-1.3423
29	1.59	0.02	0.2043	-0.3016	-0.0247	0.0909	-0.0052	0.2425	0.0720	0.1705	-1.4764
30	1.81	0.01	0.2178	-0.2986	0.0152	0.0874	-0.0115	0.2466	0.0724	0.1722	-1.3619
31	2.05	0.01	0.2037	-0.2865	-0.0401	0.0382	-0.0175	0.2418	0.0720	0.1698	-1.3966
32	2.21	0.02	0.3201	-0.4392	0.0509	0.0082	-0.0016	0.2452	0.0723	0.1729	-1.3722
33	2.49	-0.02	0.2805	-0.3915	-0.1909	0.2248	-0.0115	0.2447	0.0723	0.1724	-1.3954
34	2.73	0.01	0.2788	-0.4219	-0.0251	0.0693	-0.0111	0.2445	0.0732	0.1713	-1.5112
35	2.94	-0.01	0.3564	-0.5292	-0.1294	0.1329	0.0015	0.2457	0.0731	0.1726	-1.4848
36	3.18	-0.01	0.3165	-0.4812	-0.1657	0.1676	-0.0175	0.2395	0.0722	0.1673	-1.5205
37	3.41	0.01	0.4188	-0.6405	-0.0751	0.1488	0.0016	0.2431	0.0735	0.1696	-1.5292
38	3.61	0.01	0.4299	-0.6936	0.1096	-0.1361	-0.0040	0.2622	0.0744	0.1878	-1.6181
39	3.85	0.01	0.4154	-0.6869	-0.0253	0.1076	-0.0047	0.2363	0.0727	0.1636	-1.6448
40	4.09	0.01	0.5314	-0.8691	0.0128	0.0662	-0.0082	0.2413	0.0735	0.1678	-1.6355
41	4.28	-0.01	0.4911	-0.8204	-0.0383	0.0807	-0.0107	0.2396	0.0736	0.1660	-1.6708
42	4.52	0.01	0.5668	-0.9579	-0.0014	0.0461	-0.0082	0.2363	0.0739	0.1624	-1.6908
43	4.72	0.01	0.6056	-1.0197	0.1148	-0.0091	-0.0041	0.2389	0.0735	0.1654	-1.6848
44	4.93	0.02	0.5904	-1.0384	0.1081	0.0779	-0.0170	0.2382	0.0756	0.1626	-1.7596
45	5.16	0.02	0.6801	-1.1718	0.0526	0.0393	0.0086	0.2421	0.0740	0.1681	-1.7231
46	5.35	0.00	0.6902	-1.2253	-0.0090	0.1313	-0.0105	0.2371	0.0767	0.1604	-1.7753

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIG-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 30 0.92 1.7 0.0 BIS0E11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	5.65	0.01	0.7008	-1.2635	-0.0857	0.1917	-0.0043	0.2352	0.0763	0.1589	-1.8031
48	5.71	0.02	0.8291	-1.4567	0.1796	0.0297	0.0024	0.2352	0.0782	0.1570	-1.7594
49	5.95	0.00	0.7237	-1.3432	0.0153	0.0857	-0.0103	0.2404	0.0779	0.1625	-1.8561
50	6.15	0.02	0.8129	-1.4417	0.0791	0.0365	0.0025	0.2401	0.0799	0.1602	-1.8358
51	6.36	-0.01	0.8352	-1.5694	-0.1153	0.1059	-0.0100	0.2431	0.0749	0.1632	-1.8798
52	6.53	0.01	0.8606	-1.5485	0.0167	0.1069	-0.0228	0.2412	0.0811	0.1601	-1.9155
53	6.77	0.01	0.9030	-1.7674	-0.0432	0.0864	0.0030	0.2403	0.0823	0.1580	-1.8631
54	6.99	0.00	0.9342	-1.7878	0.0826	0.1005	-0.0101	0.2370	0.0844	0.1526	-1.9135
55	7.14	0.00	0.9444	-1.8413	-0.0636	0.2730	-0.0103	0.2401	0.0860	0.1541	-1.9497
56	7.34	-0.00	1.0344	-1.9733	0.0353	-0.0235	0.0033	0.2429	0.0868	0.1561	-1.9096
57	7.52	0.01	0.9961	-1.9427	0.2757	0.0229	-0.0225	0.2374	0.0876	0.1498	-1.9562
58	7.73	0.02	1.0813	-2.1354	0.1572	-0.0060	0.0030	0.2453	0.0908	0.1545	-1.9753
59	7.91	-0.02	1.1037	-2.1476	-0.1162	0.1074	-0.0095	0.2444	0.0921	0.1523	-1.9911
60	8.08	0.00	1.0902	-2.1874	0.0179	0.1272	-0.0161	0.2426	0.0920	0.1506	-2.0065
61	8.27	0.01	1.2291	-2.4366	0.0662	-0.0059	0.0036	0.2443	0.0961	0.1502	-1.9823
62	8.44	-0.02	1.2139	-2.4225	-0.0765	0.0811	-0.0218	0.2432	0.0957	0.1475	-1.9956
63	8.62	0.01	1.2046	-2.5256	0.0796	0.0348	-0.0092	0.2415	0.0967	0.1449	-1.9972
64	8.79	-0.01	1.3137	-2.6256	0.0259	0.0160	-0.0089	0.2456	0.0966	0.1489	-1.9986
65	8.95	-0.01	1.2810	-2.5842	0.0572	0.1175	-0.0221	0.2409	0.0991	0.1419	-2.0494
66	9.15	0.00	1.3357	-2.8372	0.0386	-0.0050	-0.0025	0.2471	0.1011	0.1461	-2.0474
67	9.31	-0.03	1.3718	-2.8091	-0.1035	0.0728	-0.0215	0.2433	0.1015	0.1419	-2.0477
68	9.49	-0.01	1.3952	-2.8894	-0.0788	0.0610	-0.0214	0.2434	0.1023	0.1412	-2.0709
69	9.66	-0.01	1.4987	-3.0624	-0.0791	0.0391	-0.0024	0.2471	0.1036	0.1436	-2.0464
70	9.82	-0.02	1.4824	-3.0346	-0.1137	0.1294	-0.0214	0.2414	0.1047	0.1368	-2.0471
71	10.02	-0.01	1.5450	-3.1617	-0.1161	0.0837	-0.0086	0.2474	0.1060	0.1415	-2.0464
72	10.18	-0.01	1.5560	-3.2175	-0.0336	0.1519	-0.0049	0.2494	0.1072	0.1423	-2.0678
73	10.36	-0.02	1.6790	-3.0625	-0.0618	0.1226	-0.0213	0.2737	0.1258	0.1480	-2.0707
74	10.55	-0.00	1.5887	-3.1400	-0.0387	0.0552	0.0042	0.2788	0.1283	0.1506	-2.0271
75	10.71	-0.02	1.5865	-3.2065	-0.0498	0.0997	-0.0085	0.2809	0.1328	0.1482	-2.0482
76	10.90	-0.00	1.5743	-3.2351	0.0017	0.0769	-0.0026	0.2790	0.1363	0.1448	-2.0484
77	11.06	-0.02	1.6011	-3.3444	-0.0163	0.0010	0.0045	0.2912	0.1396	0.1516	-2.0380
78	11.23	-0.03	1.6019	-3.2822	-0.0340	0.1520	-0.0086	0.2900	0.1457	0.1443	-2.0489
79	11.41	-0.01	1.6518	-3.3515	0.0617	-0.0613	-0.0078	0.2968	0.1494	0.1454	-2.0290
80	11.56	-0.02	1.7153	-3.4683	0.0134	0.0627	-0.0018	0.3040	0.1518	0.1522	-2.0103
81	11.73	-0.02	1.6598	-3.4345	-0.0658	0.0367	-0.0205	0.3013	0.1551	0.1462	-2.0391
82	11.92	-0.01	1.7638	-3.5478	0.0312	0.0623	0.0047	0.3109	0.1595	0.1514	-2.0114
83	12.07	-0.03	1.7491	-3.5350	0.0545	0.0577	-0.0205	0.3100	0.1623	0.1477	-2.0210
84	12.25	-0.01	1.7667	-3.5794	-0.0256	0.0560	-0.0079	0.3153	0.1660	0.1493	-2.0492
85	12.41	-0.02	1.8749	-3.7723	-0.0563	-0.0170	-0.0011	0.3176	0.1668	0.1508	-2.0130
86	12.58	-0.04	1.8460	-3.7491	-0.1375	0.1927	-0.0142	0.3149	0.1698	0.1461	-2.0310
87	12.76	-0.01	1.8911	-3.8737	0.0127	0.0178	-0.0137	0.3208	0.1734	0.1474	-2.0484
88	12.91	-0.03	1.9420	-3.9597	-0.2696	0.1832	-0.0077	0.3239	0.1751	0.1488	-2.0389
89	13.07	-0.04	1.9256	-3.9925	-0.1692	0.1960	-0.0203	0.3263	0.1787	0.1456	-2.0734
90	13.25	-0.01	1.9883	-4.0721	0.0609	-0.0722	-0.0133	0.3306	0.1804	0.1502	-2.0483
91	13.42	-0.03	2.0424	-4.2233	0.0023	0.0721	-0.0198	0.3343	0.1815	0.1528	-2.0478
92	13.57	-0.01	2.0353	-4.1716	0.0524	0.0370	-0.0261	0.3318	0.1836	0.1482	-2.0485

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/D-M	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	30	0.60	1.07	0.0	81=OF11	3.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	13.76	-0.00	2.1360	-0.3737	0.1349	-0.0896	-0.0130	0.3334	0.1968	0.1466	-2.0476
94	13.91	-0.03	2.1095	-0.3050	-0.0358	0.1155	-0.0260	0.3299	0.1866	0.1435	-2.0408
95	14.07	-0.01	2.1497	-0.3012	0.0764	-0.0422	-0.0256	0.3357	0.1899	0.1458	-2.0483
96	14.25	-0.01	2.2368	-0.5800	0.0677	0.0549	-0.0070	0.3409	0.1915	0.1494	-2.0476
97	14.39	-0.03	2.2091	-0.5246	-0.0786	0.0369	-0.0319	0.3310	0.1939	0.1371	-2.0481
98	14.57	0.00	2.2715	-0.6619	0.1675	-0.0831	-0.0254	0.3357	0.1964	0.1393	-2.0488
99	14.73	-0.02	2.2957	-0.6598	0.0407	0.0360	-0.0318	0.3400	0.1989	0.1411	-2.0341
100	14.90	-0.02	2.2682	-0.6466	-0.0388	0.0322	-0.0317	0.3374	0.2001	0.1373	-2.0487
101	15.07	-0.03	2.3573	-0.8104	-0.2669	0.0305	-0.0191	0.3399	0.2049	0.1350	-2.0406
102	15.23	-0.03	2.3929	-0.8368	-0.3344	-0.0580	-0.0376	0.3418	0.2066	0.1352	-2.0212
103	15.41	-0.00	2.3855	-0.8305	0.0624	-0.0630	-0.0312	0.3451	0.2097	0.1354	-2.0420
104	15.57	-0.01	2.4582	-0.9584	0.1125	-0.1212	-0.0246	0.3481	0.2128	0.1352	-2.0153
105	15.73	-0.03	2.4433	-0.9408	-0.1016	0.1251	-0.0378	0.3444	0.2141	0.1303	-2.0222
106	15.91	0.00	2.4813	-0.9703	0.0983	-0.1296	-0.0371	0.3493	0.2174	0.1319	-2.0031
107	16.06	-0.02	2.5310	-1.0555	0.0354	-0.0598	-0.0308	0.3519	0.2198	0.1321	-1.9974
108	16.23	-0.01	2.5031	-1.0485	-0.1580	-0.0606	-0.0499	0.3521	0.2243	0.1278	-2.0169
109	16.39	0.01	2.5936	-1.1675	0.2195	-0.1100	-0.0182	0.3593	0.2251	0.1342	-1.9924
110	16.56	-0.00	2.5567	-1.1024	-0.0270	0.0323	-0.0309	0.3577	0.2291	0.1286	-2.0051
111	16.73	-0.01	2.6050	-1.1275	0.0665	0.0226	-0.0246	0.3546	0.2308	0.1238	-1.9684
112	16.88	-0.02	2.6927	-1.2735	0.0384	-0.0075	-0.0179	0.3574	0.2324	0.1250	-1.9584
113	17.03	-0.05	2.6532	-1.1943	-0.0999	0.1453	-0.0309	0.3522	0.2360	0.1162	-1.9578
114	17.22	-0.03	2.7012	-1.2247	-0.0799	0.0377	-0.0305	0.3603	0.2405	0.1198	-1.9712
115	17.36	-0.05	2.6957	-1.2394	-0.1293	0.0836	-0.0241	0.3693	0.2414	0.1279	-1.9415
116	17.55	-0.02	2.6833	-1.2268	0.1434	-0.0377	-0.0492	0.3590	0.2462	0.1168	-1.9477
117	17.70	-0.03	2.7796	-1.3903	-0.0421	0.0023	-0.0300	0.3696	0.2479	0.1217	-1.9390
118	17.86	-0.04	2.7527	-1.3525	-0.0565	0.0141	-0.0363	0.3689	0.2462	0.1227	-1.9444
119	18.03	-0.01	2.7813	-1.2986	0.1310	0.0182	-0.0239	0.3677	0.2536	0.1141	-1.9058
120	18.19	-0.03	2.8289	-1.4425	-0.0603	0.0156	-0.0173	0.3722	0.2552	0.1170	-1.9242
121	18.36	-0.03	2.7908	-1.3926	0.0785	0.0004	-0.0424	0.3628	0.2556	0.1072	-1.9003
122	18.53	-0.02	2.8527	-1.4374	-0.0039	-0.0225	-0.0295	0.3701	0.2617	0.1084	-1.8928
123	18.67	-0.04	2.9168	-1.5468	-0.0313	-0.0517	-0.0355	0.3747	0.2649	0.1098	-1.8674
124	18.84	-0.04	2.8537	-1.3562	-0.0767	0.1016	-0.0298	0.3697	0.2669	0.1028	-1.8756
125	19.01	-0.03	2.9465	-1.4880	-0.0603	0.0378	-0.0166	0.3817	0.2742	0.1075	-1.8638
126	19.16	-0.04	2.9396	-1.4155	-0.0535	0.0351	-0.0292	0.3726	0.2746	0.0980	-1.8422
127	19.31	-0.01	2.9519	-1.4254	0.1040	0.0102	-0.0293	0.3747	0.2795	0.0951	-1.8379
128	19.46	-0.03	3.0271	-1.5302	-0.0013	0.0076	-0.0166	0.3842	0.2831	0.1011	-1.8268
129	19.61	-0.05	2.9739	-1.4340	-0.1777	0.1520	-0.0563	0.3807	0.2897	0.0910	-1.8289
130	19.78	-0.01	3.0399	-1.4610	0.0842	-0.0160	-0.0289	0.3827	0.2958	0.0869	-1.7964
131	19.93	-0.03	3.0034	-1.4933	-0.0041	-0.0220	-0.0348	0.3873	0.2990	0.0883	-1.7932
132	20.07	-0.03	3.0118	-1.4900	-0.0491	0.1673	-0.0416	0.3855	0.3059	0.0796	-1.7896
133	20.23	-0.06	3.1138	-1.6327	0.0234	0.0068	-0.0159	0.3912	0.3079	0.0833	-1.7768
134	20.37	-0.04	3.0876	-1.6324	0.0110	-0.0163	-0.0408	0.3834	0.3112	0.0782	-1.7596
135	20.54	-0.02	3.0921	-1.6089	0.0095	-0.0178	-0.0283	0.3939	0.3197	0.0742	-1.7493
136	20.69	-0.03	3.1548	-1.6200	-0.0440	-0.0290	-0.0219	0.3970	0.3217	0.0753	-1.7497
137	20.82	-0.02	3.1306	-1.6081	0.1742	0.0081	-0.0413	0.3915	0.3270	0.0645	-1.7274
138	20.94	-0.01	3.2054	-1.6955	0.0751	-0.0522	-0.0341	0.4006	0.3319	0.0687	-1.7165

PAGE 1 OF 3
SHEET 4 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
I.	30	0.90	1.7	0.0	81e0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	21.15	-0.03	3.2563	-5.5024	0.0066	-0.0754	-0.0526	0.4034	0.3392	0.0642	-1.6898
140	21.30	-0.04	3.2036	-5.4453	-0.0891	0.1023	-0.0406	0.4015	0.3404	0.0611	-1.6998
141	21.47	-0.02	3.2802	-5.5202	-0.0358	-0.0901	-0.0463	0.4085	0.3456	0.0629	-1.6829
142	21.59	-0.04	3.2911	-5.5277	0.1135	-0.0565	-0.0588	0.4084	0.3517	0.0567	-1.6796
143	21.76	-0.04	3.2900	-5.5293	0.0556	-0.1428	-0.0648	0.4077	0.3582	0.0495	-1.6651
144	21.92	-0.05	3.3656	-5.6151	-0.0716	-0.0457	-0.0586	0.4153	0.3595	0.0558	-1.6684
145	22.06	-0.05	3.3272	-5.5343	0.0159	0.0935	-0.0402	0.4119	0.3631	0.0488	-1.6648
146	22.22	-0.04	3.3536	-5.5120	-0.1178	-0.0311	-0.0271	0.4212	0.3725	0.0487	-1.6438
147	22.37	-0.06	3.4171	-5.5788	-0.0940	-0.0014	-0.0332	0.4276	0.3741	0.0533	-1.6328
148	22.51	-0.06	3.3913	-5.5256	-0.1306	-0.0853	-0.0146	0.4242	0.3782	0.0460	-1.6294
149	22.67	-0.01	3.4809	-5.6117	0.2292	-0.1610	-0.0140	0.4292	0.3813	0.0479	-1.6121
150	22.80	-0.05	3.4955	-5.6611	0.0470	-0.0691	-0.0577	0.4240	0.3831	0.0409	-1.6195
151	22.96	-0.04	3.4845	-5.5589	-0.0183	-0.0406	-0.0514	0.4269	0.3868	0.0401	-1.5953
152	23.10	-0.05	3.5986	-5.7257	-0.0575	-0.0262	-0.0387	0.4302	0.3945	0.0357	-1.5911
153	23.23	-0.06	3.5354	-5.5671	-0.0394	0.0449	-0.0326	0.4255	0.3962	0.0293	-1.5747
154	23.39	-0.03	3.5583	-5.6147	0.0206	-0.0555	-0.0448	0.4343	0.3969	0.0374	-1.5779
155	23.53	-0.03	3.6248	-5.6550	0.1269	-0.0456	0.0116	0.4422	0.4046	0.0376	-1.5597
156	23.65	-0.04	3.6252	-5.5581	0.0356	-0.0259	-0.0257	0.4347	0.4078	0.0269	-1.5332
157	23.67	-0.02	3.6635	-5.6356	0.1372	-0.1104	-0.0130	0.4437	0.4103	0.0334	-1.5303
158	23.66	-0.06	3.6463	-5.6090	-0.1040	0.0829	-0.0260	0.4347	0.4070	0.0277	-1.5539
159	23.66	-0.05	3.6479	-5.5631	-0.0935	0.0403	-0.0260	0.4379	0.4075	0.0304	-1.5518
160	23.66	-0.04	3.6905	-5.6734	0.0526	0.0580	0.0116	0.4458	0.4103	0.0355	-1.5374
161	23.66	-0.05	3.6197	-5.6442	-0.0881	0.1252	-0.0762	0.4295	0.4082	0.0213	-1.5593
162	23.67	-0.04	3.6373	-5.6146	-0.0303	-0.0064	-0.0132	0.4394	0.4082	0.0312	-1.5436
163	23.67	-0.06	3.6766	-5.6450	-0.1043	0.0429	-0.0133	0.4444	0.4091	0.0353	-1.5355
164	23.66	-0.04	3.5846	-5.6032	0.0885	-0.0307	-0.0323	0.4375	0.4087	0.0288	-1.5636
165	23.67	-0.04	3.6606	-5.6624	0.0583	-0.0907	-0.0443	0.4405	0.4087	0.0318	-1.5469
166	23.66	-0.05	3.6379	-5.5674	0.0268	0.0612	-0.0385	0.4440	0.4087	0.0353	-1.5305
167	23.67	-0.04	3.6263	-5.5280	-0.0119	0.0860	-0.0260	0.4362	0.4099	0.0263	-1.5244
168	23.67	-0.04	3.6730	-5.7196	0.0572	-0.1012	-0.0255	0.4421	0.4090	0.0331	-1.5572
169	23.67	-0.06	3.6387	-5.6692	-0.0764	0.1238	-0.0135	0.4443	0.4074	0.0369	-1.5306
170	23.67	-0.03	3.6634	-5.6514	0.0120	0.0403	-0.0008	0.4377	0.4087	0.0290	-1.5427
171	23.67	-0.04	3.6807	-5.7378	0.0347	-0.0372	-0.0006	0.4465	0.4075	0.0390	-1.5589
172	23.66	-0.04	3.6426	-5.6286	0.0391	0.0364	-0.0446	0.4352	0.4101	0.0251	-1.5452
173	23.67	-0.03	3.6807	-5.7057	0.0956	-0.1265	-0.0254	0.4414	0.4072	0.0342	-1.5502
174	23.67	-0.05	3.6814	-5.6637	-0.0142	0.0324	-0.0381	0.4370	0.4084	0.0286	-1.5328
175	23.67	-0.05	3.6067	-5.5231	-0.0804	0.0268	-0.0320	0.4386	0.4080	0.0306	-1.5314
176	23.67	-0.03	3.6838	-5.6462	-0.1597	0.0477	-0.0195	0.4436	0.4084	0.0352	-1.5327
177	23.66	-0.06	3.6148	-5.6065	-0.1168	0.0943	-0.0386	0.4355	0.4080	0.0275	-1.5681
178	23.67	-0.04	3.6316	-5.5562	-0.0042	-0.0213	-0.0318	0.4417	0.4100	0.0317	-1.5304
179	23.66	-0.03	3.6927	-5.7456	-0.0326	-0.0495	-0.0318	0.4370	0.4088	0.0282	-1.5559
180	23.65	-0.05	3.6922	-5.6109	-0.0953	-0.0473	-0.0695	0.4369	0.4092	0.0277	-1.5577
181	24.55	-0.01	3.8691	-5.6594	0.2374	-0.1960	0.0695	0.4546	0.4238	0.0308	-1.4378
182	25.19	-0.04	4.2202	-5.2355	0.1783	-0.2592	0.0593	0.4658	0.4542	0.0116	-1.2986
183	27.98	-0.01	4.6140	-4.7896	0.3383	-0.4515	0.0621	0.4771	0.4806	-0.0034	-1.0381
184	30.09	0.01	5.2076	-4.5586	0.5961	-0.3697	0.0334	0.4599	0.4975	-0.0375	-0.8754

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 5 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 30 0.40 1.7 0.0 MIXED 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
185	32.50	-0.06	6.0263	-3.6544	-0.0453	0.0649	0.0248	0.4531	0.5214	-0.0682	-0.6562
186	35.54	-0.00	7.2757	-3.6874	0.3660	0.0736	0.0356	0.4199	0.5383	-0.1184	-0.5068
187	40.00	-0.05	8.9945	-3.9366	-0.0998	0.5357	0.0040	0.3532	0.5444	-0.1912	-0.4374
188	44.31	-0.08	11.3237	-4.3710	0.1215	-0.0748	0.0219	0.2393	0.5236	-0.2842	-0.3860
189	54.93	0.05	14.3005	-7.3366	0.7364	1.3019	0.0432	0.1635	0.5213	-0.3578	-0.5138
190	58.47	-0.12	14.6234	-8.4436	-0.7498	-0.7477	0.0449	0.0600	0.5239	-0.4638	-0.4774
191	59.43	-0.16	14.4343	-8.7029	-0.8168	-0.3567	0.0311	0.0743	0.5258	-0.4514	-0.4644

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 30 MACH 6X10-6 0.90 1.7 PHI 0.0 CONF NIN.OF 11. L 0.8 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
1	-5.68	0.02	0.0067	0.0025	0.0052	0.2873	0.5977	-0.2649	-0.0780	-0.1253	0.3184	0.5116
2	-5.08	0.00	0.0099	0.0029	0.0066	0.2929	0.6667	-0.2075	-0.0636	-0.1058	0.3353	0.5098
3	-4.72	0.02	0.0084	0.0031	0.0076	0.3689	0.9048	-0.1903	-0.0654	-0.0971	0.3436	0.5102
4	-4.43	0.00	0.0037	0.0008	0.0028	0.2162	0.7568	-0.1817	-0.0630	-0.0928	0.3466	0.5107
5	-4.43	0.01	0.0086	0.0033	0.0053	0.3836	0.6163	-0.1783	-0.0624	-0.0905	0.3499	0.5076
6	-4.18	0.01	0.0010	0.0008	0.0025	0.7998	2.5000	-0.1755	-0.0612	-0.0884	0.3486	0.5037
7	-3.93	0.00	0.0049	0.0025	0.0030	0.3145	0.3371	-0.1556	-0.0558	-0.0765	0.3585	0.4916
8	-3.61	0.02	0.0067	0.0028	0.0042	0.5956	0.8936	-0.1361	-0.0512	-0.0651	0.3817	0.4855
9	-3.34	-0.00	0.0063	0.0025	0.0027	0.3967	0.4286	-0.1229	-0.0473	-0.0576	0.3648	0.4687
10	-3.11	0.01	0.0064	0.0031	0.0030	0.3482	0.3371	-0.1129	-0.0450	-0.0513	0.3985	0.4564
11	-2.91	0.02	0.0063	0.0028	0.0027	0.4443	0.4286	-0.0962	-0.0406	-0.0419	0.4309	0.4448
12	-2.58	0.00	0.0108	0.0025	0.0019	0.2403	0.1827	-0.0927	-0.0405	-0.0417	0.4368	0.4498
13	-2.29	0.02	0.0115	0.0044	0.0034	0.3825	0.2957	-0.0729	-0.0326	-0.0333	0.4471	0.4568
14	-2.03	0.06	0.0090	0.0033	0.0019	0.3666	0.2111	-0.0666	-0.0278	-0.0295	0.4302	0.4567
15	-1.78	0.01	0.0117	0.0026	0.0021	0.2393	0.1795	-0.0632	-0.0274	-0.0299	0.4334	0.4731
16	-1.54	0.02	0.0067	0.0017	-0.0003	0.2537	-0.0448	-0.0506	-0.0215	-0.0239	0.4268	0.4723
17	-1.28	-0.02	0.0067	0.0012	-0.0003	0.1791	-0.0448	-0.0392	-0.0169	-0.0186	0.4310	0.4745
18	-1.01	0.01	0.0132	0.0032	0.0006	0.2424	0.0455	-0.0293	-0.0136	-0.0147	0.4640	0.5017
19	-0.77	0.02	0.0105	0.0028	0.0014	0.2666	0.1333	-0.0237	-0.0112	-0.0124	0.4724	0.5232
20	-0.55	-0.00	0.0170	0.0037	0.0022	0.2176	0.1294	-0.0151	-0.0067	-0.0092	0.5760	0.6093
21	-0.28	0.01	0.0017	-0.0006	-0.0027	-0.3528	-1.5882	-0.0053	-0.0048	-0.0047	0.9054	0.8868
22	-0.06	0.01	0.0134	0.0022	-0.0006	0.1641	-0.0448	-0.0011	-0.0027	-0.0020	2.4539	1.8182
23	0.17	-0.00	0.0122	0.0021	-0.0019	0.1721	-0.1557	0.0115	0.0028	0.0040	0.2434	0.3478
24	0.44	0.03	0.0167	0.0028	-0.0005	0.1904	-0.0360	0.0186	0.0052	0.0065	0.2795	0.3495
25	0.66	-0.01	0.0175	0.0029	-0.0013	0.1657	-0.0743	0.0213	0.0064	0.0079	0.3004	0.3709
26	0.86	0.03	0.0175	0.0033	-0.0018	0.1895	-0.1029	0.0269	0.0088	0.0108	0.3271	0.4015
27	1.14	0.02	0.0184	0.0033	-0.0011	0.1755	-0.0585	0.0396	0.0132	0.0156	0.3332	0.3939
28	1.36	-0.00	0.0202	0.0032	-0.0021	0.1732	-0.1040	0.0481	0.0163	0.0193	0.3388	0.4012
29	1.59	0.02	0.0176	0.0030	-0.0024	0.1706	-0.1364	0.0608	0.0209	0.0247	0.3437	0.4062
30	1.81	0.01	0.0203	0.0032	-0.0021	0.1576	-0.1338	0.0622	0.0215	0.0254	0.3456	0.4084
31	2.05	0.01	0.0203	0.0028	-0.0027	0.1379	-0.1084	0.0778	0.0269	0.0304	0.3457	0.3907
32	2.27	0.02	0.0185	0.0019	-0.0038	0.1151	-0.2303	0.0828	0.0321	0.0363	0.3878	0.4384
33	2.49	-0.02	0.0191	0.0025	-0.0034	0.1309	-0.1780	0.0941	0.0363	0.0397	0.3857	0.4219
34	2.73	0.01	0.0177	0.0021	-0.0031	0.1186	-0.1751	0.0997	0.0384	0.0415	0.3851	0.4162
35	2.94	-0.01	0.0152	0.0017	-0.0039	0.1118	-0.2566	0.1039	0.0403	0.0442	0.3878	0.4254
36	3.18	-0.01	0.0227	0.0040	-0.0012	0.1762	-0.0529	0.1166	0.0444	0.0501	0.3807	0.4297
37	3.41	0.01	0.0189	0.0030	-0.0023	0.1587	-0.1217	0.1278	0.0478	0.0565	0.3739	0.4421
38	3.61	0.01	0.0267	0.0039	-0.0002	0.1460	-0.0075	0.1334	0.0496	0.0617	0.3717	0.4625
39	3.85	0.01	0.0178	0.0018	-0.0037	0.1011	-0.2079	0.1391	0.0503	0.0639	0.3615	0.4594
40	4.09	0.01	0.0202	0.0026	-0.0018	0.1287	-0.0792	0.1568	0.0553	0.0703	0.3557	0.4763
41	4.28	-0.01	0.0254	0.0037	-0.0008	0.1456	-0.0157	0.1644	0.0581	0.0804	0.3533	0.4891
42	4.52	0.03	0.0189	0.0025	-0.0023	0.1322	-0.1217	0.1784	0.0605	0.0843	0.3468	0.4834
43	4.72	0.01	0.0240	0.0041	0.0	0.1464	0.0	0.1841	0.0636	0.0916	0.3454	0.4976
44	4.93	0.02	0.0262	0.0028	-0.0017	0.1157	-0.0702	0.1925	0.0666	0.0971	0.3459	0.5044
45	5.16	0.02	0.0165	0.0014	-0.0038	0.0448	-0.2303	0.1996	0.0681	0.1007	0.3411	0.5045
46	5.35	0.00	0.0240	0.0026	-0.0029	0.1130	-0.1043	0.2138	0.0718	0.1079	0.3357	0.5047

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	32	0.90	1.7	0.0	81 OF 11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	5.55	0.01	0.0190	0.0022	-0.0029	0.1158	-0.1526	0.2220	0.0736	0.1120	0.3314	0.5045
48	5.77	0.02	0.0191	0.0019	-0.0035	0.0733	-0.1832	0.2360	0.0774	0.1215	0.3279	0.5148
49	5.95	0.00	0.0230	0.0022	-0.0025	0.0956	-0.1067	0.2417	0.0788	0.1238	0.3259	0.5122
50	6.15	0.02	0.0203	0.0022	-0.0022	0.1053	-0.1060	0.2560	0.0819	0.1292	0.3198	0.5047
51	6.36	-0.01	0.0179	0.0014	-0.0043	0.0787	-0.2402	0.2629	0.0842	0.1351	0.3202	0.5139
52	6.53	0.01	0.0156	0.0001	-0.0052	0.0065	-0.3377	0.2715	0.0854	0.1400	0.3145	0.5157
53	6.77	0.01	0.0196	0.0010	-0.0044	0.0602	-0.2651	0.2885	0.0893	0.1486	0.3094	0.5151
54	6.99	0.06	0.0230	0.0019	-0.0025	0.0526	-0.1057	0.2970	0.0916	0.1536	0.3043	0.5165
55	7.14	0.00	0.0153	0.0008	-0.0046	0.0523	-0.3007	0.3071	0.0928	0.1573	0.3021	0.5122
56	7.34	-0.00	0.0216	0.0017	-0.0021	0.0747	-0.0972	0.3170	0.0949	0.1636	0.2993	0.5155
57	7.52	0.01	0.0220	0.0007	-0.0045	0.0315	-0.2045	0.3299	0.0967	0.1687	0.2930	0.5114
58	7.73	0.02	0.0167	0.0007	-0.0050	0.0419	-0.2998	0.3390	0.0985	0.1737	0.2897	0.5118
59	7.91	-0.02	0.0167	0.0004	-0.0050	0.0239	-0.2998	0.3614	0.1017	0.1855	0.2813	0.5133
60	8.08	0.06	0.0181	0.0005	-0.0055	0.0331	-0.3039	0.3657	0.1026	0.1859	0.2805	0.5083
61	8.27	0.01	0.0156	0.0003	-0.0052	0.0195	-0.3377	0.3824	0.1053	0.1956	0.2750	0.5110
62	8.44	-0.02	0.0236	0.0011	-0.0054	0.0470	-0.2306	0.3914	0.1065	0.1993	0.2720	0.5092
63	8.62	0.01	0.0156	0.0	-0.0069	0.0	-0.4423	0.4029	0.1079	0.2061	0.2677	0.5115
64	8.79	-0.01	0.0195	0.0007	-0.0059	0.0359	-0.3026	0.4129	0.1091	0.2105	0.2642	0.5098
65	8.95	-0.01	0.0182	0.0004	-0.0060	0.0270	-0.3297	0.4173	0.1097	0.2109	0.2628	0.5054
66	9.15	0.00	0.0156	0.0004	-0.0052	0.0260	-0.3377	0.4431	0.1129	0.2249	0.2547	0.5076
67	9.31	-0.03	0.0156	0.0003	-0.0069	0.0192	-0.4423	0.4461	0.1128	0.2240	0.2528	0.5021
68	9.49	-0.01	0.0118	-0.0004	-0.0065	-0.0339	-0.7203	0.4605	0.1143	0.2311	0.2481	0.5018
69	9.66	-0.01	0.0102	0.0	-0.0069	0.0	-0.6765	0.4720	0.1157	0.2362	0.2451	0.5004
70	9.82	-0.02	0.0156	0.0007	-0.0057	0.0459	-0.3701	0.4793	0.1161	0.2380	0.2422	0.4966
71	10.02	-0.01	0.0064	-0.0004	-0.0085	-0.0625	-1.3281	0.4923	0.1173	0.2444	0.2382	0.4964
72	10.18	-0.01	0.0103	0.0	-0.0075	0.0	-0.7282	0.4980	0.1180	0.2478	0.2369	0.4976
73	10.36	-0.02	0.0077	-0.0012	-0.0073	-0.1558	-0.9491	0.4817	0.0833	0.2281	0.1729	0.4735
74	10.55	-0.04	0.0051	-0.0015	-0.0074	-0.2940	-1.4902	0.4834	0.0814	0.2276	0.1693	0.4708
75	10.71	-0.02	0.0101	-0.0006	-0.0058	-0.0396	-0.5743	0.4892	0.0805	0.2315	0.1645	0.4732
76	10.90	-0.00	0.0101	-0.0003	-0.0053	-0.0297	-0.5248	0.4980	0.0804	0.2346	0.1614	0.4711
77	11.06	-0.02	0.0101	-0.0003	-0.0053	-0.0297	-0.5248	0.5056	0.0773	0.2386	0.1528	0.4719
78	11.23	-0.03	0.0026	-0.0026	-0.0086	-0.9997	-3.3077	0.4973	0.0734	0.2342	0.1478	0.4789
79	11.41	-0.01	0.0098	-0.0001	-0.0035	-0.0102	-0.3571	0.5089	0.0732	0.2399	0.1438	0.4714
80	11.56	-0.02	0.0151	0.0013	-0.0034	0.0662	-0.2252	0.5132	0.0726	0.2443	0.1414	0.4768
81	11.73	-0.02	0.0150	0.0015	-0.0028	0.1000	-0.1867	0.5208	0.0706	0.2466	0.1355	0.4735
82	11.92	-0.01	0.0098	-0.0011	-0.0059	-0.2291	-1.2292	0.5096	0.0656	0.2425	0.1287	0.4759
83	12.07	-0.03	0.0148	0.0006	-0.0016	0.1756	-0.1081	0.5227	0.0655	0.2483	0.1253	0.4750
84	12.25	-0.01	0.0123	0.0021	-0.0025	0.1707	-0.2033	0.5259	0.0619	0.2513	0.1177	0.4778
85	12.41	-0.02	0.0084	0.0007	-0.0030	0.0833	-0.3571	0.5405	0.0611	0.2583	0.1130	0.4779
86	12.58	-0.04	0.0099	0.0014	-0.0045	0.1414	-0.4545	0.5391	0.0601	0.2588	0.1115	0.4801
87	12.76	-0.01	0.0048	0.0011	-0.0051	0.2391	-1.1087	0.5484	0.0594	0.2633	0.1090	0.4801
88	12.91	-0.05	0.0036	0.0030	-0.0037	0.5326	-0.6667	0.5588	0.0583	0.2681	0.1043	0.4798
89	13.07	-0.04	0.0145	0.0050	-0.0007	0.3661	-0.0483	0.5703	0.0583	0.2744	0.1022	0.4812
90	13.25	-0.01	0.0041	0.0030	-0.0027	0.7315	-0.6585	0.5806	0.0582	0.2775	0.1002	0.4780
91	13.42	-0.03	0.0046	0.0018	-0.0039	0.4090	-0.8864	0.5966	0.0570	0.2864	0.0955	0.4801
92	13.57	-0.01	0.0044	0.0021	-0.0039	0.4771	-0.8864	0.5996	0.0570	0.2867	0.0950	0.4782

MAN1N MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	30	0.90	1.67	0.0	B1W0P11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
93	13.76	-0.00	0.0065	0.0050	-0.0011	0.7690	-0.1692	0.6112	0.0568	0.2923	0.0929	0.4782
94	13.91	-0.03	0.0042	0.0025	-0.0027	0.6189	-0.6429	0.6157	0.0565	0.2932	0.0917	0.4762
95	14.07	-0.01	-0.0010	0.0014	-0.0034	-1.3996	3.4000	0.6269	0.0561	0.2957	0.0895	0.4717
96	14.25	-0.01	0.0015	0.0017	-0.0020	1.1330	-1.3333	0.6400	0.0563	0.3008	0.0879	0.4708
97	14.39	-0.03	0.0041	0.0019	-0.0017	0.4633	-0.4146	0.6502	0.0559	0.3063	0.0860	0.4711
98	14.57	0.00	-0.0004	0.0003	-0.0035	-0.3332	3.8889	0.6603	0.0565	0.3107	0.0855	0.4705
99	14.73	-0.02	-0.0012	0.0004	-0.0014	-0.3332	1.5000	0.6677	0.0565	0.3119	0.0846	0.4671
100	14.90	-0.02	0.0052	0.0018	0.0007	0.3461	0.1366	0.6736	0.0559	0.3130	0.0830	0.4647
101	15.07	-0.03	-0.0048	-0.0004	-0.0045	0.0625	0.9375	0.6751	0.0565	0.3125	0.0837	0.4629
102	15.23	-0.03	0.0006	-0.0008	-0.0029	-1.9995	-1.2500	0.6998	0.0568	0.3222	0.0811	0.4604
103	15.41	-0.00	0.0012	0.0	0.0013	0.0	1.0833	0.7057	0.0566	0.3244	0.0802	0.4597
104	15.57	-0.01	-0.0045	-0.0024	-0.0087	0.3052	0.9158	0.7068	0.0568	0.3220	0.0803	0.4556
105	15.73	-0.03	-0.0058	-0.0025	-0.0060	0.4309	1.0345	0.7201	0.0570	0.3225	0.0791	0.4479
106	15.91	0.00	-0.0086	-0.0032	-0.0052	0.3720	0.6047	0.7274	0.0569	0.3261	0.0782	0.4483
107	16.06	-0.02	-0.0013	-0.0010	0.0003	0.7690	-0.2308	0.7363	0.0572	0.3262	0.0777	0.4430
108	16.23	-0.01	-0.0037	-0.0030	-0.0007	0.8106	0.1892	0.7582	0.0576	0.3334	0.0759	0.4404
109	16.39	0.01	0.0046	0.0	0.0062	0.0	1.3478	0.7656	0.0573	0.3351	0.0748	0.4377
110	16.56	-0.04	-0.0039	-0.0015	-0.0006	0.3845	0.1538	0.7570	0.0572	0.3297	0.0755	0.4355
111	16.73	-0.01	-0.0125	-0.0030	-0.0062	0.2389	0.4960	0.7571	0.0574	0.3257	0.0758	0.4302
112	16.88	-0.02	-0.0066	-0.0019	-0.0003	0.2878	0.0455	0.7703	0.0578	0.3308	0.0740	0.4294
113	17.03	-0.05	-0.0167	-0.0023	-0.0104	0.1564	0.7075	0.7601	0.0579	0.3242	0.0762	0.4265
114	17.22	-0.03	-0.0053	-0.0021	0.0004	0.3961	-0.0755	0.7952	0.0576	0.3388	0.0722	0.4261
115	17.36	-0.05	-0.0175	-0.0034	-0.0091	0.1942	0.5200	0.7793	0.0580	0.3300	0.0744	0.4235
116	17.55	-0.02	-0.0078	-0.0037	-0.0001	0.4742	0.0128	0.7996	0.0584	0.3399	0.0730	0.4251
117	17.70	-0.03	-0.0054	-0.0025	0.0043	0.4309	-0.8276	0.8072	0.0578	0.3460	0.0716	0.4286
118	17.88	-0.04	-0.0139	-0.0034	-0.0053	0.2805	0.3813	0.8044	0.0581	0.3411	0.0722	0.4268
119	18.03	-0.01	-0.0068	-0.0015	0.0020	0.2705	-0.2941	0.8016	0.0577	0.3373	0.0720	0.4288
120	19.14	-0.03	-0.0180	-0.0028	-0.0050	0.1444	0.2778	0.8015	0.0582	0.3385	0.0726	0.4223
121	18.36	-0.03	-0.0152	-0.0037	-0.0054	0.2434	0.3553	0.8072	0.0582	0.3431	0.0721	0.4250
122	18.53	-0.02	-0.0157	-0.0037	-0.0004	0.2356	0.0573	0.8132	0.0581	0.3430	0.0716	0.4218
123	18.67	-0.04	-0.0048	-0.0022	0.0073	0.4582	-1.5208	0.8291	0.0582	0.3501	0.0702	0.4223
124	18.84	-0.04	-0.0106	-0.0026	-0.0055	0.1566	0.3313	0.8143	0.0589	0.3423	0.0723	0.4204
125	19.01	-0.03	-0.0140	-0.0026	-0.0050	0.1444	0.2778	0.8230	0.0593	0.3460	0.0720	0.4204
126	19.18	-0.04	-0.0145	-0.0021	-0.0008	0.1999	0.0762	0.8217	0.0591	0.3454	0.0719	0.4203
127	19.31	-0.01	-0.0277	-0.0045	-0.0125	0.1624	0.4513	0.8165	0.0590	0.3402	0.0724	0.4177
128	19.46	-0.03	-0.0264	-0.0043	-0.0118	0.1704	0.4470	0.8160	0.0588	0.3409	0.0720	0.4178
129	19.61	-0.05	-0.0115	-0.0037	0.0067	0.3217	-0.7565	0.8479	0.0588	0.3569	0.0693	0.4209
130	19.78	-0.01	-0.0231	-0.0043	-0.0057	0.1861	0.2468	0.8261	0.0592	0.3464	0.0716	0.4193
131	19.93	-0.03	-0.0172	-0.0047	0.0011	-0.2732	-0.0640	0.8390	0.0591	0.3544	0.0704	0.4224
132	20.07	-0.03	-0.0145	-0.0040	-0.0025	0.2051	0.1282	0.8304	0.0592	0.3479	0.0713	0.4198
133	20.23	-0.02	-0.0207	-0.0037	-0.0037	0.1767	0.1787	0.8304	0.0590	0.3496	0.0710	0.4210
134	20.37	-0.04	-0.0227	-0.0052	-0.0042	0.2240	0.4053	0.8304	0.0588	0.3479	0.0720	0.4198
135	20.54	-0.02	-0.0260	-0.0058	-0.0148	0.2230	0.5692	0.8229	0.0589	0.3447	0.0716	0.4189
136	20.69	-0.03	-0.0169	-0.0045	-0.0023	0.2662	0.1361	0.8461	0.0596	0.3566	0.0704	0.4215
137	20.82	-0.02	-0.0204	-0.0058	-0.0056	0.2842	0.2745	0.8374	0.0593	0.3518	0.0708	0.4201
138	20.99	-0.01	-0.0252	-0.0066	-0.0096	0.2618	0.3810	0.8460	0.0605	0.3555	0.0715	0.4202

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART .30 MACH 0.90 RX10-6 1.7 PHI 0.0 CONF BLNDFIL L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	Cm1	C61	XCPF1	YCPF1	CNF2	Cm2	C62	XCPF2	YCPF2
139	21.15	-0.03	-0.0200	-0.0080	-0.0024	0.3862	0.1165	0.8634	0.0596	0.3668	0.0690	0.4248
140	21.30	-0.04	-0.0241	-0.0066	-0.0078	0.2738	0.3237	0.8417	0.0594	0.3551	0.0706	0.4219
141	21.47	-0.02	-0.0185	-0.0074	0.0018	0.3949	-0.0973	0.8750	0.0593	0.3730	0.0678	0.4263
142	21.59	-0.04	-0.0108	-0.0077	0.0043	0.7128	-0.3981	0.8853	0.0592	0.3762	0.0669	0.4249
143	21.76	-0.0-	-0.0158	-0.0087	0.0026	0.5505	-0.1646	0.8824	0.0592	0.3748	0.0671	0.4268
144	21.92	-0.05	-0.0147	-0.0098	0.0050	0.5239	-0.2674	0.9026	0.0597	0.3876	0.0661	0.4296
145	22.06	-0.05	-0.0242	-0.0081	-0.0063	0.3346	0.2603	0.8636	0.0587	0.3639	0.0680	0.4214
146	22.22	-0.04	-0.0162	-0.0092	-0.0069	0.3826	0.4259	0.8549	0.0589	0.3597	0.0689	0.4208
147	22.37	-0.06	-0.0182	-0.0066	-0.0009	0.3625	0.0495	0.8751	0.0595	0.3713	0.0680	0.4243
148	22.51	-0.06	-0.0225	-0.0054	-0.0104	0.2622	0.4622	0.8506	0.0591	0.3543	0.0695	0.4225
149	22.67	-0.01	-0.0202	-0.0066	-0.0068	0.3266	0.3366	0.8648	0.0607	0.3652	0.0702	0.4223
150	22.80	-0.03	-0.0271	-0.0102	-0.0023	0.4021	0.0849	0.9028	0.0587	0.3841	0.0650	0.4255
151	22.96	-0.04	-0.0242	-0.0103	-0.0066	0.3652	0.1631	0.8940	0.0587	0.3811	0.0656	0.4263
152	23.10	-0.05	-0.0336	-0.0111	-0.0041	0.3301	0.1220	0.9085	0.0587	0.3893	0.0646	0.4285
153	23.23	-0.06	-0.0219	-0.0063	-0.0035	0.2876	0.1598	0.8852	0.0596	0.3780	0.0673	0.4270
154	23.39	-0.04	-0.0268	-0.0084	-0.0001	0.3602	0.0035	0.9027	0.0594	0.3847	0.0658	0.4262
155	23.53	-0.03	-0.0174	-0.0034	-0.0062	0.1910	0.3443	0.8583	0.0592	0.3616	0.0691	0.4223
156	23.65	-0.04	-0.0116	-0.0056	0.0010	0.4764	-0.0867	0.8897	0.0580	0.3789	0.0652	0.4259
157	23.67	-0.02	-0.0198	-0.0072	0.0017	0.3635	-0.0606	0.8940	0.0584	0.3811	0.0658	0.4283
158	23.66	-0.06	-0.0226	-0.0081	0.0030	0.3563	-0.1327	0.9057	0.0586	0.3861	0.0647	0.4263
159	23.66	-0.05	-0.0185	-0.0058	0.0009	0.3134	-0.0486	0.8981	0.0604	0.3844	0.0672	0.4280
160	23.66	-0.03	-0.0311	-0.0048	-0.0061	0.1543	0.1961	0.8651	0.0583	0.3653	0.0674	0.4223
161	23.66	-0.05	-0.0368	-0.0149	0.0020	0.4048	-0.0543	0.9418	0.0590	0.4066	0.0626	0.4317
162	23.67	-0.04	-0.0198	-0.0061	0.0007	0.4080	-0.0354	0.8853	0.0588	0.3769	0.0664	0.4257
163	23.67	-0.06	-0.0246	-0.0066	-0.0010	0.2650	0.0402	0.8882	0.0590	0.3771	0.0664	0.4246
164	23.66	-0.04	-0.0133	-0.0065	-0.0031	0.4856	-0.2331	0.8940	0.0588	0.3822	0.0658	0.4275
165	23.67	-0.04	-0.0366	-0.0122	-0.0011	0.3332	0.0301	0.9214	0.0598	0.3968	0.0649	0.4306
166	23.66	-0.05	-0.0336	-0.0093	-0.0034	0.2810	0.1006	0.8939	0.0595	0.3828	0.0665	0.4282
167	23.67	-0.04	-0.0325	-0.0094	-0.0033	0.2892	0.1015	0.8926	0.0582	0.3804	0.0652	0.4262
168	23.67	-0.04	-0.0239	-0.0081	0.0023	0.3388	-0.0962	0.9026	0.0591	0.3876	0.0655	0.4296
169	23.67	-0.06	-0.0273	-0.0091	-0.0040	0.1868	0.1665	0.8709	0.0585	0.3687	0.0672	0.4234
170	23.67	-0.03	-0.0222	-0.0041	-0.0028	0.1846	0.1261	0.8751	0.0592	0.3714	0.0678	0.4244
171	23.67	-0.04	-0.0232	-0.0059	-0.0036	0.2542	0.1552	0.8839	0.0587	0.3762	0.0664	0.4256
172	23.66	-0.04	-0.0236	-0.0097	0.0011	0.4109	-0.0466	0.9069	0.0586	0.3910	0.0646	0.4311
173	23.67	-0.03	-0.0276	-0.0076	-0.0003	0.2753	0.0109	0.8967	0.0593	0.3849	0.0661	0.4292
174	23.67	-0.05	-0.0248	-0.0097	0.0027	0.4075	-0.1136	0.9055	0.0586	0.3897	0.0647	0.4306
175	23.67	-0.05	-0.0180	-0.0059	0.0029	0.3437	-0.1812	0.8852	0.0587	0.3798	0.0663	0.4291
176	23.67	-0.05	-0.0274	-0.0092	-0.0004	0.3357	0.0146	0.8968	0.0580	0.3854	0.0647	0.4298
177	23.66	-0.06	-0.0171	-0.0084	0.0019	0.4911	-0.1111	0.9055	0.0585	0.3902	0.0646	0.4309
178	23.67	-0.04	-0.0211	-0.0085	0.0025	0.4170	-0.1185	0.9069	0.0583	0.3909	0.0643	0.4318
179	23.66	-0.05	-0.0236	-0.0103	0.0016	0.4363	-0.0678	0.9113	0.0584	0.3919	0.0641	0.4308
180	23.65	-0.05	-0.0212	-0.0117	0.0045	0.5517	-0.2123	0.9271	0.0591	0.4014	0.0637	0.4330
181	24.55	-0.01	0.0572	0.0146	0.0383	0.2567	0.6696	0.8612	0.0573	0.3563	0.0665	0.4137
182	26.19	-0.04	0.0782	0.0207	0.0497	0.2646	0.6355	0.8917	0.0556	0.3721	0.0623	0.4173
183	27.98	-0.01	0.1237	0.0400	0.0643	0.3233	0.6734	0.9150	0.0535	0.3874	0.0585	0.4234
184	30.09	0.01	0.0678	0.0283	0.0540	0.4173	0.7965	0.9747	0.0497	0.4166	0.0510	0.4274

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3 . MARTIN MISSILE TAILS EFFECTS DATA
SHEET 5 OF 5

TEST	PART	MACH	RE10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	30	0.60	1.7	0.0	planform	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CAF2	CM2	CH2	XCPF2	YCPF2
185	32.50	-0.06	0.0354	0.0110	0.0334	0.3107	0.9435	1.0228	0.0478	0.4362	0.0467	0.4265
186	35.53	-0.00	0.0508	0.0239	0.0437	0.4722	0.8636	1.0888	0.0429	0.4607	0.0396	0.4231
187	40.00	-0.05	-0.0553	-0.0097	-0.0136	0.1663	0.2459	1.2025	0.0161	0.5147	0.0300	0.4280
188	46.31	-0.04	0.0044	0.0016	-0.0183	-0.3181	-0.1591	1.3162	0.0266	0.5627	0.0202	0.4282
189	54.93	0.05	0.0169	0.0102	0.0217	0.6034	1.2840	1.3340	0.0110	0.5613	0.0062	0.4195
190	58.47	-0.12	-0.0243	0.0015	0.0052	-0.0512	-0.1775	1.3573	0.0056	0.5692	0.0041	0.4194
191	58.43	-0.12	-0.0432	0.0006	-0.0092	-0.0139	0.2130	1.3620	0.0056	0.5652	0.0041	0.4150

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NR10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 30 0.90 1.7 0.0 BIASOF11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNFA	CMA	CBA	XCPFA	YCPFA
1	-5.66	0.02	-0.0355	9.9999	0.0224	9.9999	-0.6310	-0.2524	-0.0786	-0.1449	0.3113	0.5741
2	-5.04	0.02	-0.0336	9.9999	0.0215	9.9999	-0.5629	-0.2183	-0.0708	-0.1250	0.3242	0.5726
3	-4.72	0.02	-0.0355	9.9999	0.0219	9.9999	-0.6169	-0.2087	-0.0676	-0.1160	0.3238	0.5558
4	-4.43	0.00	-0.0438	9.9999	0.0217	9.9999	-0.4956	-0.1932	-0.0636	-0.1058	0.3291	0.5476
5	-4.43	0.01	-0.0381	9.9999	0.0210	9.9999	-0.5512	-0.1982	-0.0646	-0.1066	0.3258	0.5378
6	-4.14	0.01	-0.0345	9.9999	0.0209	9.9999	-0.5291	-0.1785	-0.0600	-0.0967	0.3368	0.5417
7	-3.93	0.00	-0.0423	9.9999	0.0223	9.9999	-0.5272	-0.1676	-0.0561	-0.0881	0.3346	0.5257
8	-3.61	0.02	-0.0396	9.9999	0.0199	9.9999	-0.5051	-0.1510	-0.0516	-0.0784	0.3403	0.5192
9	-3.34	-0.00	-0.0450	9.9999	0.0210	9.9999	-0.4667	-0.1371	-0.0477	-0.0724	0.3478	0.5281
10	-3.11	0.01	-0.0449	9.9999	0.0200	9.9999	-0.4454	-0.1286	-0.0456	-0.0675	0.3545	0.5249
11	-2.81	0.02	-0.0394	9.9999	0.0199	9.9999	-0.5025	-0.1067	-0.0424	-0.0564	0.3973	0.5286
12	-2.56	0.20	-0.0381	9.9999	0.0226	9.9999	-0.5932	-0.0968	-0.0401	-0.0515	0.4141	0.5320
13	-2.29	0.02	-0.0380	9.9999	0.0199	9.9999	-0.5237	-0.0846	-0.0359	-0.0455	0.4242	0.5378
14	-2.04	0.00	-0.0396	9.9999	0.0198	9.9999	-0.5025	-0.0669	-0.0301	-0.0390	0.4498	0.5438
15	-1.78	0.01	-0.0381	9.9999	0.0210	9.9999	-0.5512	-0.0617	-0.0278	-0.0389	0.4504	0.6305
16	-1.52	0.02	-0.0360	9.9999	0.0184	9.9999	-0.4976	-0.0513	-0.0228	-0.0336	0.4443	0.6558
17	-1.28	-0.02	-0.0475	9.9999	0.0186	9.9999	-0.3916	-0.0405	-0.0189	-0.0284	0.4665	0.7012
18	-1.01	0.01	-0.0366	9.9999	0.0206	9.9999	-0.5628	-0.0324	-0.0161	-0.0252	0.4968	0.7778
19	-0.77	0.02	-0.0421	9.9999	0.0201	9.9999	-0.4774	-0.0213	-0.0132	-0.0218	0.6196	1.0235
20	-0.55	-0.00	-0.0393	9.9999	0.0208	9.9999	-0.5293	-0.0146	-0.0107	-0.0187	0.7327	1.2888
21	-0.28	0.01	-0.0473	9.9999	0.0165	9.9999	-0.3488	-0.0039	-0.0065	-0.0135	1.6662	3.4615
22	-0.06	0.01	-0.0393	9.9999	0.0203	9.9999	-0.5165	0.0028	-0.0041	-0.0105	-1.4639	-3.7508
23	0.17	-0.00	-0.0447	9.9999	0.0188	9.9999	-0.4206	0.0122	-0.0007	-0.0060	-0.0574	-0.4918
24	0.44	0.01	-0.0395	9.9999	0.0200	9.9999	-0.5479	0.0203	0.0020	-0.0036	0.0985	-0.1675
25	0.66	-0.01	-0.0393	9.9999	0.0203	9.9999	-0.5165	0.0300	0.0046	-0.0007	0.1533	-0.0233
26	0.88	0.03	-0.0324	9.9999	0.0213	9.9999	-0.6574	0.0414	0.0092	0.0041	0.2195	0.0979
27	1.14	0.02	-0.0338	9.9999	0.0212	9.9999	-0.6272	0.0501	0.0117	0.0073	0.2335	0.1457
28	1.36	-0.00	-0.0419	9.9999	0.0190	9.9999	-0.4535	0.0581	0.0148	0.0105	0.2567	0.1807
29	1.59	0.02	-0.0337	9.9999	0.0191	9.9999	-0.5668	0.0686	0.0190	0.0146	0.2769	0.2128
30	1.81	0.21	-0.0338	9.9999	0.0212	9.9999	-0.6272	0.0761	0.0206	0.0152	0.2779	0.2051
31	2.05	0.01	-0.0365	9.9999	0.0205	9.9999	-0.5616	0.0838	0.0232	0.0200	0.3245	0.2387
32	2.27	0.02	-0.0350	9.9999	0.0190	9.9999	-0.5429	0.0941	0.0317	0.0241	0.3368	0.2561
33	2.49	-0.02	-0.0419	9.9999	0.0203	9.9999	-0.4773	0.1005	0.0350	0.0278	0.3482	0.2766
34	2.73	0.01	-0.0337	9.9999	0.0196	9.9999	-0.5816	0.1072	0.0374	0.0314	0.3688	0.2929
35	2.94	-0.01	-0.0419	9.9999	0.0184	9.9999	-0.4402	0.1182	0.0403	0.0353	0.3409	0.2986
36	3.18	-0.01	-0.0364	9.9999	0.0194	9.9999	-0.5330	0.1281	0.0425	0.0397	0.3317	0.3099
37	3.41	0.01	-0.0336	9.9999	0.0186	9.9999	-0.5536	0.1435	0.0458	0.0446	0.3191	0.3108
38	3.61	0.01	-0.0338	9.9999	0.0212	9.9999	-0.6272	0.1493	0.0466	0.0485	0.3120	0.3248
39	3.85	0.01	-0.0350	9.9999	0.0195	9.9999	-0.5571	0.1604	0.0495	0.0541	0.3085	0.3373
40	4.04	0.01	-0.0338	9.9999	0.0212	9.9999	-0.6272	0.1743	0.0531	0.0612	0.3048	0.3511
41	4.28	-0.01	-0.0378	9.9999	0.0193	9.9999	-0.5106	0.1838	0.0560	0.0667	0.3046	0.3629
42	4.52	0.03	-0.0323	9.9999	0.0197	9.9999	-0.6049	0.1961	0.0600	0.0754	0.3059	0.3845
43	4.72	0.01	-0.0364	9.9999	0.0199	9.9999	-0.5467	0.2017	0.0612	0.0771	0.3033	0.3823
44	4.93	0.02	-0.0338	9.9999	0.0212	9.9999	-0.6272	0.2161	0.0648	0.0858	0.3026	0.4007
45	5.16	0.02	-0.0336	9.9999	0.0186	9.9999	-0.5536	0.2238	0.0674	0.0918	0.3011	0.4102
46	5.35	0.00	-0.0337	9.9999	0.0207	9.9999	-0.6142	0.2363	0.0707	0.0999	0.2991	0.4228

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PH1 CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
I 30. 0.94 1.7 3.0 BlaGP.11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	5.45	0.01	-0.0337	9.9999	0.0212	9.9999	-0.6291	0.2414	0.0726	0.1054	0.3007	0.4366
48	5.77	0.02	-0.0336	9.9999	0.0180	9.9999	-0.5357	0.2525	0.0757	0.1105	0.2997	0.4535
49	5.45	0.00	-0.0337	9.9999	0.0206	9.9999	-0.6113	0.2607	0.0781	0.1193	0.2995	0.4576
50	5.15	0.02	-0.0265	9.9999	0.0195	9.9999	-0.7313	0.2691	0.0801	0.1252	0.2976	0.4653
51	5.36	-0.01	-0.0336	9.9999	0.0185	9.9999	-0.5506	0.2803	0.0828	0.1320	0.2953	0.4709
52	6.53	0.01	-0.0335	9.9999	0.0164	9.9999	-0.4896	0.2844	0.0842	0.1364	0.2960	0.4796
53	6.77	0.01	-0.0308	9.9999	0.0172	9.9999	-0.5564	0.2971	0.0868	0.1438	0.2921	0.4840
54	6.94	0.00	-0.0282	9.9999	0.0190	9.9999	-0.6738	0.3097	0.0896	0.1512	0.2892	0.4882
55	7.14	0.00	-0.0266	9.9999	0.0168	9.9999	-0.5564	0.3111	0.0901	0.1542	0.2895	0.4957
56	7.36	-0.00	-0.0213	9.9999	0.0179	9.9999	-0.8404	0.3239	0.0926	0.1622	0.2858	0.5008
57	7.52	0.01	-0.0199	9.9999	0.0170	9.9999	-0.8563	0.3308	0.0944	0.1643	0.2853	0.5027
58	7.73	0.02	-0.0212	9.9999	0.0153	9.9999	-0.7217	0.3465	0.0971	0.1745	0.2802	0.5036
59	7.91	-0.02	-0.0279	9.9999	0.0132	9.9999	-0.4731	0.3564	0.0992	0.1805	0.2783	0.5065
60	8.08	0.00	-0.0198	9.9999	0.0143	9.9999	-0.7222	0.3635	0.1007	0.1868	0.2770	0.5139
61	8.27	0.01	-0.0196	9.9999	0.0139	9.9999	-0.7556	0.3764	0.1030	0.1956	0.2736	0.5191
62	8.44	-0.02	-0.0212	9.9999	0.0163	9.9999	-0.7689	0.3865	0.1043	0.1996	0.2698	0.5164
63	8.62	0.01	-0.0163	9.9999	0.0168	9.9999	-1.0350	0.3965	0.1061	0.2073	0.2675	0.5228
64	8.79	-0.01	-0.0170	9.9999	0.0140	9.9999	-0.8235	0.4023	0.1070	0.2107	0.2659	0.5237
65	8.95	-0.01	-0.0102	9.9999	0.0146	9.9999	-1.4314	0.4096	0.1083	0.2158	0.2645	0.5271
66	9.15	0.00	-0.0106	9.9999	0.0103	9.9999	-1.0300	0.4268	0.1107	0.2252	0.2593	0.5276
67	9.31	-0.03	-0.0142	9.9999	0.0126	9.9999	-0.8873	0.4326	0.1115	0.2291	0.2577	0.5296
68	9.49	-0.01	-0.0086	9.9999	0.0099	9.9999	-1.1512	0.4426	0.1132	0.2363	0.2557	0.5339
69	9.66	-0.01	-0.0100	9.9999	0.0103	9.9999	-1.0300	0.4528	0.1144	0.2405	0.2526	0.5311
70	9.82	-0.02	-0.0086	9.9999	0.0099	9.9999	-1.1512	0.4601	0.1153	0.2462	0.2505	0.5351
71	10.02	-0.01	-0.0096	9.9999	0.0075	9.9999	-1.2431	0.4732	0.1168	0.2535	0.2468	0.5357
72	10.18	-0.01	-0.0082	9.9999	0.0093	9.9999	-2.9062	0.4791	0.1176	0.2591	0.2456	0.5408
73	10.36	-0.02	-0.0044	9.9999	0.0065	9.9999	-1.4773	0.4506	0.0882	0.2440	0.1957	0.5415
74	10.55	-0.00	-0.0016	9.9999	0.0057	9.9999	-3.5625	0.4510	0.0874	0.2486	0.1937	0.5508
75	10.71	-0.02	-0.0030	9.9999	0.0061	9.9999	-2.0333	0.4529	0.0864	0.2507	0.1907	0.5535
76	10.90	-0.00	0.0010	9.9999	0.0070	9.9999	7.0000	0.4562	0.0860	0.2556	0.1895	0.5598
77	11.06	-0.02	-0.0007	9.9999	0.0042	9.9999	-21.0000	0.4545	0.0826	0.2560	0.1817	0.5633
78	11.23	-0.03	-0.0025	9.9999	0.0035	9.9999	-1.2069	0.4619	0.0831	0.2611	0.1799	0.5653
79	11.41	-0.01	0.0093	9.9999	0.0060	9.9999	0.6452	0.4501	0.0781	0.2563	0.1735	0.5694
80	11.56	-0.02	0.0025	9.9999	0.0044	9.9999	1.7800	0.4538	0.0765	0.2597	0.1685	0.5723
81	11.73	-0.02	0.0079	9.9999	0.0049	9.9999	0.6203	0.4564	0.0737	0.2624	0.1614	0.5749
82	11.92	-0.01	0.0059	9.9999	0.0015	9.9999	0.2778	0.4623	0.0744	0.2669	0.1609	0.5773
83	12.07	-0.03	0.0093	9.9999	0.0055	9.9999	0.5914	0.4549	0.0700	0.2647	0.1538	0.5819
84	12.25	-0.01	0.0107	9.9999	0.0021	9.9999	0.3134	0.4621	0.0668	0.2692	0.1445	0.5804
85	12.41	-0.02	0.0044	9.9999	0.0023	9.9999	0.7447	0.4737	0.0685	0.2743	0.1446	0.5791
86	12.58	-0.04	0.0006	9.9999	0.0037	9.9999	0.5606	0.4855	0.0652	0.2798	0.1343	0.5763
87	12.76	-0.01	0.0108	9.9999	0.0014	9.9999	0.1296	0.4816	0.0615	0.2799	0.1277	0.5812
88	12.91	-0.05	0.0138	9.9999	0.0019	9.9999	0.1754	0.4821	0.0603	0.2803	0.1250	0.5814
89	13.07	-0.04	0.0045	9.9999	0.0008	9.9999	0.0842	0.4957	0.0603	0.2852	0.1210	0.5753
90	13.25	-0.01	0.0202	9.9999	0.0048	9.9999	0.2376	0.4977	0.0589	0.2869	0.1183	0.5765
91	13.42	-0.03	0.0041	9.9999	0.0022	9.9999	0.2716	0.5098	0.0591	0.2912	0.1159	0.5712
92	13.57	-0.01	0.0121	9.9999	0.0020	9.9999	0.1653	0.5070	0.0585	0.2909	0.1154	0.5738

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 5

MARTIN MISSILE TAILS &FEECTS DATA

TEST PART MALH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 30 0.40 1.7 0.0 ml=0F11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
93	13.76	-0.00	0.0174	9.9999	0.0051	9.9999	0.2931	0.5192	0.0583	0.2957	0.1123	0.5695
94	13.91	-0.03	0.0167	9.9999	0.0054	9.9999	0.3673	0.5223	0.0580	0.2953	0.1118	0.5656
95	14.07	-0.01	0.0229	9.9999	0.0045	9.9999	0.1965	0.5290	0.0583	0.2979	0.1102	0.5631
96	14.25	-0.01	0.0168	9.9999	0.0019	9.9999	0.1759	0.5485	0.0586	0.3050	0.1068	0.5561
97	14.39	-0.03	0.0148	9.9999	0.0033	9.9999	0.2230	0.5501	0.0583	0.3045	0.1060	0.5535
98	14.57	0.00	0.0256	9.9999	0.0063	9.9999	0.2461	0.5562	0.0583	0.3061	0.1048	0.5503
99	14.73	-0.02	0.0161	9.9999	0.0045	9.9999	0.2745	0.5575	0.0589	0.3057	0.1056	0.5483
100	14.96	-0.02	0.0188	9.9999	0.0047	9.9999	0.2500	0.5682	0.0585	0.3092	0.1029	0.5442
101	15.07	-0.03	0.0176	9.9999	0.0019	9.9999	0.1060	0.5773	0.0585	0.3144	0.1013	0.5446
102	15.23	-0.03	0.0188	9.9999	0.0052	9.9999	0.2766	0.5742	0.0587	0.3116	0.1022	0.5423
103	15.41	-0.00	0.0257	9.9999	0.0047	9.9999	0.1829	0.5773	0.0583	0.3115	0.1010	0.5396
104	15.57	-0.01	0.0203	9.9999	0.0043	9.9999	0.2118	0.5903	0.0584	0.3174	0.0989	0.5377
105	15.73	-0.03	0.0179	9.9999	0.0051	9.9999	0.2914	0.6025	0.0584	0.3216	0.0969	0.5338
106	15.91	0.00	0.0237	9.9999	0.0071	9.9999	0.2331	0.5902	0.0588	0.3191	0.0996	0.5407
107	16.06	-0.02	0.0202	9.9999	0.0048	9.9999	0.2376	0.6040	0.0586	0.3251	0.0970	0.5382
108	16.23	-0.01	0.0256	9.9999	0.0068	9.9999	0.2656	0.6022	0.0593	0.3268	0.0986	0.5427
109	16.39	0.01	0.0204	9.9999	0.0021	9.9999	0.1079	0.6038	0.0590	0.3263	0.0977	0.5404
110	16.56	-0.00	0.0196	9.9999	0.0052	9.9999	0.2751	0.6160	0.0591	0.3317	0.0959	0.5385
111	16.73	-0.01	0.0203	9.9999	0.0032	9.9999	0.1576	0.6237	0.0590	0.3373	0.0946	0.5408
112	16.88	-0.02	0.0202	9.9999	0.0048	9.9999	0.2376	0.6280	0.0595	0.3396	0.0947	0.5404
113	17.03	-0.05	0.0203	9.9999	0.0043	9.9999	0.2118	0.6358	0.0592	0.3450	0.0931	0.5426
114	17.22	-0.03	0.0244	9.9999	0.0036	9.9999	0.1230	0.6249	0.0600	0.3409	0.0960	0.5455
115	17.36	-0.05	0.0189	9.9999	0.0041	9.9999	0.2169	0.6332	0.0592	0.3455	0.0935	0.5456
116	17.55	-0.02	0.0230	9.9999	0.0060	9.9999	0.2679	0.6224	0.0598	0.3425	0.0961	0.5503
117	17.70	-0.05	0.0257	9.9999	0.0036	9.9999	0.1401	0.6216	0.0595	0.3420	0.0957	0.5502
118	17.88	-0.04	0.0229	9.9999	0.0045	9.9999	0.1965	0.6381	0.0599	0.3494	0.0938	0.5478
119	18.03	-0.01	0.0256	9.9999	0.0052	9.9999	0.2031	0.6366	0.0601	0.3510	0.0944	0.5514
120	18.19	-0.03	0.0229	9.9999	0.0034	9.9999	0.1703	0.6457	0.0601	0.3550	0.0931	0.5498
121	18.36	-0.03	0.0254	9.9999	0.0089	9.9999	0.3504	0.6396	0.0603	0.3535	0.0943	0.5527
122	18.53	-0.02	0.0263	9.9999	0.0059	9.9999	0.2085	0.6411	0.0604	0.3542	0.0942	0.5525
123	18.67	-0.04	0.0255	9.9999	0.0073	9.9999	0.2863	0.6306	0.0601	0.3494	0.0953	0.5541
124	18.84	-0.04	0.0243	9.9999	0.0060	9.9999	0.1666	0.6556	0.0606	0.3619	0.0926	0.5520
125	19.01	-0.03	0.0230	9.9999	0.0034	9.9999	0.1478	0.6497	0.0603	0.3608	0.0928	0.5553
126	19.18	-0.04	0.0229	9.9999	0.0055	9.9999	0.2402	0.6499	0.0609	0.3615	0.0937	0.5562
127	19.31	-0.01	0.0255	9.9999	0.0063	9.9999	0.2471	0.6576	0.0608	0.3666	0.0926	0.5575
128	19.48	-0.04	0.0229	9.9999	0.0045	9.9999	0.1965	0.6606	0.0608	0.3679	0.0920	0.5569
129	19.61	-0.05	0.0255	9.9999	0.0069	9.9999	0.2667	0.6382	0.0600	0.3595	0.0940	0.5633
130	19.78	-0.01	0.0257	9.9999	0.0036	9.9999	0.1401	0.6531	0.0606	0.3662	0.0928	0.5607
131	19.93	-0.03	0.0228	9.9999	0.0060	9.9999	0.2632	0.6454	0.0609	0.3607	0.0943	0.5589
132	20.07	-0.03	0.0242	9.9999	0.0061	9.9999	0.2521	0.6500	0.0608	0.3649	0.0935	0.5614
133	20.23	-0.02	0.0229	9.9999	0.0045	9.9999	0.1965	0.6606	0.0608	0.3702	0.0920	0.5604
134	20.37	-0.04	0.0254	9.9999	0.0084	9.9999	0.3307	0.6518	0.0602	0.3672	0.0923	0.5634
135	20.54	-0.02	0.0255	9.9999	0.0068	9.9999	0.2667	0.6664	0.0603	0.3760	0.0905	0.5642
136	20.69	-0.03	0.0188	9.9999	0.0047	9.9999	0.2500	0.6698	0.0602	0.3681	0.0926	0.5665
137	20.82	-0.02	0.0241	9.9999	0.0067	9.9999	0.3444	0.6572	0.0605	0.3703	0.0920	0.5635
138	20.99	-0.01	0.0230	9.9999	0.0071	9.9999	0.2399	0.6619	0.0603	0.3735	0.0911	0.5643

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 30 MACH 0.90 1.7 PHI 0.0 CONF B1A0F11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
139	21.15	-0.03	0.0254	9.9999	0.0089	9.9999	0.3504	0.6407	0.0600	0.3640	0.0936	0.5681
140	21.36	-0.04	0.0201	9.9999	0.0066	9.9999	0.3186	0.6722	0.0618	0.3782	0.0907	0.5626
141	21.47	-0.02	0.0336	9.9999	0.0095	9.9999	0.2827	0.6378	0.0596	0.3615	0.0934	0.5668
142	21.59	-0.04	0.0228	9.9999	0.0082	9.9999	0.3596	0.6636	0.0623	0.3643	0.0937	0.5668
143	21.76	-0.04	0.0308	9.9999	0.0099	9.9999	0.3214	0.6479	0.0611	0.3680	0.0943	0.5690
144	21.92	-0.05	0.0228	9.9999	0.0066	9.9999	0.2695	0.6360	0.0603	0.3609	0.0948	0.5675
145	22.06	-0.05	0.0308	9.9999	0.0114	9.9999	0.3701	0.6884	0.0624	0.3858	0.0906	0.5604
146	22.22	-0.04	0.0310	9.9999	0.0072	9.9999	0.2323	0.6889	0.0610	0.3862	0.0885	0.5606
147	22.37	-0.06	0.0202	9.9999	0.0053	9.9999	0.2624	0.6813	0.0611	0.3834	0.0897	0.5627
148	22.51	-0.06	0.0255	9.9999	0.0068	9.9999	0.2667	0.7236	0.0622	0.4023	0.0860	0.5561
149	22.67	-0.01	0.0323	9.9999	0.0084	9.9999	0.2601	0.6994	0.0615	0.3926	0.0879	0.5613
150	22.84	-0.05	0.0244	9.9999	0.0097	9.9999	0.3249	0.6815	0.0615	0.3846	0.0902	0.5663
151	22.96	-0.04	0.0242	9.9999	0.0080	9.9999	0.2837	0.6874	0.0620	0.3885	0.0902	0.5652
152	23.10	-0.05	0.0255	9.9999	0.0063	9.9999	0.2471	0.6962	0.0616	0.3920	0.0882	0.5614
153	23.23	-0.06	0.0262	9.9999	0.0067	9.9999	0.2769	0.7157	0.0633	0.4002	0.0884	0.5592
154	23.39	-0.04	0.0363	9.9999	0.0092	9.9999	0.2534	0.6908	0.0610	0.3886	0.0883	0.5625
155	23.53	-0.03	0.0309	9.9999	0.0083	9.9999	0.2686	0.7553	0.0628	0.4171	0.0831	0.5522
156	23.65	-0.04	0.0309	9.9999	0.0063	9.9999	0.2686	0.7300	0.0615	0.4061	0.0862	0.5563
157	23.67	-0.02	0.0324	9.9999	0.0057	9.9999	0.1759	0.7266	0.0625	0.4032	0.0860	0.5549
158	23.66	-0.06	0.0256	9.9999	0.0067	9.9999	0.1836	0.7251	0.0624	0.4025	0.0860	0.5551
159	23.66	-0.05	0.0243	9.9999	0.0044	9.9999	0.1555	0.7224	0.0615	0.4022	0.0851	0.5568
160	23.66	-0.03	0.0310	9.9999	0.0062	9.9999	0.2000	0.7527	0.0614	0.4150	0.0816	0.5513
161	23.66	-0.05	0.0255	9.9999	0.0068	9.9999	0.2667	0.6948	0.0624	0.3885	0.0898	0.5592
162	23.67	-0.04	0.0257	9.9999	0.0031	9.9999	0.1206	0.7316	0.0617	0.4051	0.0843	0.5539
163	23.67	-0.06	0.0310	9.9999	0.0056	9.9999	0.1806	0.7360	0.0614	0.4060	0.0834	0.5516
164	23.66	-0.04	0.0336	9.9999	0.0074	9.9999	0.2202	0.7196	0.0608	0.3991	0.0845	0.5546
165	23.67	-0.04	0.0378	9.9999	0.0062	9.9999	0.1640	0.7014	0.0610	0.3911	0.0869	0.5576
166	23.66	-0.05	0.0309	9.9999	0.0072	9.9999	0.2330	0.7119	0.0611	0.3963	0.0858	0.5567
167	23.67	-0.04	0.0297	9.9999	0.0039	9.9999	0.1313	0.7253	0.0619	0.4036	0.0853	0.5565
168	23.67	-0.04	0.0377	9.9999	0.0043	9.9999	0.2202	0.7151	0.0606	0.3971	0.0847	0.5553
169	23.67	-0.06	0.0304	9.9999	0.0067	9.9999	0.2168	0.7526	0.0618	0.4140	0.0821	0.5501
170	23.67	-0.03	0.0304	9.9999	0.0055	9.9999	0.1511	0.7615	0.0622	0.4191	0.0817	0.5504
171	23.67	-0.04	0.0363	9.9999	0.0071	9.9999	0.1956	0.7510	0.0628	0.4145	0.0836	0.5519
172	23.66	-0.04	0.0284	9.9999	0.0028	9.9999	0.0986	0.7238	0.0627	0.4019	0.0866	0.5553
173	23.67	-0.03	0.0317	9.9999	0.0081	9.9999	0.1942	0.7278	0.0602	0.4047	0.0827	0.5561
174	23.67	-0.05	0.0258	9.9999	0.0067	9.9999	0.1836	0.7250	0.0616	0.4004	0.0876	0.5523
175	23.67	-0.05	0.0310	9.9999	0.0060	9.9999	0.1290	0.7127	0.0598	0.3957	0.0839	0.5552
176	23.67	-0.05	0.0311	9.9999	0.0030	9.9999	0.0965	0.7191	0.0631	0.4016	0.0877	0.5585
177	23.66	-0.06	0.0310	9.9999	0.0051	9.9999	0.1645	0.7170	0.0605	0.3994	0.0844	0.5570
178	23.67	-0.04	0.0324	9.9999	0.0026	9.9999	0.0802	0.7137	0.0613	0.3959	0.0859	0.5567
179	23.66	-0.05	0.0337	9.9999	0.0056	9.9999	0.1721	0.7163	0.0624	0.3968	0.0871	0.5540
180	23.65	-0.05	0.0354	9.9999	0.0070	9.9999	0.2030	0.7019	0.0605	0.3905	0.0862	0.5563
181	24.55	-0.01	0.0377	9.9999	0.0067	9.9999	0.1645	0.8184	0.0641	0.4386	0.0783	0.5359
182	26.19	-0.04	0.0362	9.9999	0.0097	9.9999	0.2680	0.8266	0.0619	0.4356	0.0749	0.5270
183	27.98	-0.01	0.0415	9.9999	0.0117	9.9999	0.2819	0.8356	0.0579	0.4363	0.0693	0.5221
184	30.09	0.01	0.0468	9.9999	0.0137	9.9999	0.2927	0.8323	0.0582	0.4255	0.0699	0.5112

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSROC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 5 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 30 0.60 1.7 0.0 81=DF11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNFA	CMA	CHA	XCPFA	YCPFA
185	32.50	-0.06	0.0202	9.9999	0.0027	9.9999	0.1337	0.9073	0.0554	0.4519	0.0610	0.4981
186	35.53	-0.04	0.0496	9.9999	0.0125	9.9999	0.2601	0.9766	0.0517	0.4761	0.0529	0.4875
187	40.00	-0.05	0.0389	9.9999	0.0089	9.9999	0.2288	1.1068	0.0430	0.5300	0.0388	0.4789
188	45.31	-0.04	0.0443	9.9999	0.0125	9.9999	0.2822	1.2056	0.0343	0.5800	0.0284	0.4811
189	54.43	0.05	0.0603	9.9999	0.0234	9.9999	0.3881	1.2411	0.0186	0.5952	0.0150	0.4796
190	58.47	-0.12	0.0488	9.9999	0.0105	9.9999	0.4303	1.2881	0.0142	0.6086	0.0110	0.4725
191	54.43	-0.12	0.0705	9.9999	0.0104	9.9999	0.5073	1.3051	0.0137	0.6159	0.0105	0.4719

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	PX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	32	0.60	1.7	45.0	B1A0E11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.06	0.11	-0.5154	0.4261	0.1957	-0.2533	-0.0042	0.2256	0.0748	0.1508	-1.6013
2	-4.57	0.09	-0.4594	0.3824	0.1755	-0.2278	-0.0299	0.2228	0.0727	0.1499	-1.5289
3	-4.20	0.11	-0.4383	0.3718	0.1624	-0.2154	-0.0047	0.2307	0.0731	0.1571	-1.5326
4	-4.02	0.09	-0.3819	0.3267	0.1547	-0.1867	-0.0173	0.2276	0.0719	0.1557	-1.4598
5	-3.73	0.10	-0.3622	0.3200	-0.0158	-0.0131	-0.0112	0.2251	0.0711	0.1540	-1.4373
6	-3.45	0.09	-0.3080	0.2750	0.0573	-0.1058	0.0016	0.2308	0.0707	0.1601	-1.4516
7	-3.22	0.09	-0.2810	0.2538	0.0481	-0.0977	-0.0235	0.2262	0.0710	0.1552	-1.4367
8	-2.93	0.11	-0.2828	0.2754	0.0332	-0.0359	-0.0110	0.2334	0.0703	0.1631	-1.3289
9	-2.66	0.09	-0.1932	0.2546	0.0692	-0.0944	-0.0171	0.2313	0.0703	0.1610	-1.3177
10	-2.40	0.08	-0.2221	0.2602	-0.0669	0.0419	-0.0302	0.2326	0.0707	0.1617	-1.2887
11	-2.14	0.10	-0.1734	0.2303	0.0865	-0.1265	-0.0045	0.2370	0.0691	0.1679	-1.3284
12	-1.85	0.09	-0.1108	0.1588	0.0415	-0.1146	-0.0172	0.2337	0.0711	0.1626	-1.4334
13	-1.62	0.10	-0.1038	0.1306	0.0168	-0.0505	-0.0173	0.2332	0.0690	0.1642	-1.2592
14	-1.38	0.10	-0.1026	0.1083	0.0702	-0.1384	-0.0045	0.2413	0.0699	0.1716	-1.0543
15	-1.13	0.08	-0.0520	0.0628	0.0011	-0.0127	-0.0236	0.2334	0.0707	0.1627	-0.8231
16	-0.86	0.11	-0.0411	0.0206	0.0624	-0.1144	-0.0108	0.2356	0.0705	0.1649	-0.4998
17	-0.64	0.08	0.0025	-0.0342	-0.0189	-0.0511	-0.0173	0.2360	0.0697	0.1663	-13.6800
18	-0.40	0.09	0.0043	-0.0344	-0.0142	0.0355	-0.0235	0.2346	0.0700	0.1646	-114.7334
19	-0.15	0.10	0.0486	-0.0867	0.0641	-0.1237	-0.0044	0.2394	0.0709	0.1685	-1.7750
20	0.09	0.08	0.0744	-0.1210	0.0571	-0.0942	-0.0169	0.2382	0.0721	0.1661	-1.6338
21	0.33	0.10	0.0976	-0.1293	0.0567	-0.0861	-0.0168	0.2379	0.0719	0.1660	-1.3957
22	0.56	0.09	0.1304	-0.1859	0.1095	-0.1889	-0.0041	0.2399	0.0707	0.1692	-1.4308
23	0.79	0.07	0.1726	-0.2286	-0.0605	0.0090	-0.0298	0.2403	0.0716	0.1687	-1.7218
24	1.05	0.10	0.1736	-0.2481	0.1201	-0.1767	-0.0103	0.2387	0.0704	0.1683	-1.3701
25	1.26	0.08	0.1960	-0.2708	-0.0155	-0.0519	-0.0170	0.2411	0.0707	0.1704	-1.3980
26	1.48	0.08	0.2048	-0.2932	-0.0969	0.0459	-0.0235	0.2387	0.0720	0.1667	-1.4318
27	1.74	0.04	0.2262	-0.3202	0.0653	-0.1609	-0.0042	0.2417	0.0715	0.1702	-1.4155
28	1.95	0.09	0.2415	-0.3374	0.1227	-0.1697	-0.0165	0.2425	0.0724	0.1701	-1.5218
29	2.17	0.09	0.2541	-0.3787	-0.0418	-0.0422	-0.0170	0.2386	0.0724	0.1662	-1.4671
30	2.42	0.09	0.3040	-0.4449	0.0397	-0.1426	-0.0042	0.2403	0.0732	0.1671	-1.4635
31	2.63	0.06	0.3539	-0.5014	-0.0091	0.0027	-0.0231	0.2380	0.0740	0.1640	-1.4178
32	2.85	0.10	0.3169	-0.4609	0.0263	-0.0387	-0.0167	0.2434	0.0735	0.1699	-1.4455
33	3.10	0.10	0.4102	-0.5625	0.1539	-0.1748	-0.0099	0.2387	0.0744	0.1643	-1.3712
34	3.31	0.09	0.3972	-0.5656	0.0185	-0.0316	-0.0292	0.2334	0.0764	0.1570	-1.4264
35	3.53	0.11	0.3977	-0.5611	0.1297	-0.1054	-0.0101	0.2420	0.0776	0.1644	-1.4611
36	3.76	0.06	0.4606	-0.6304	0.0381	-0.0646	-0.0166	0.2409	0.0777	0.1632	-1.4806
37	3.99	0.09	0.4940	-0.7453	0.0063	0.0342	-0.0230	0.2321	0.0741	0.1540	-1.4936
38	4.22	0.11	0.5203	-0.7802	0.2024	-0.2124	-0.0036	0.2369	0.0789	0.1600	-1.4996
39	4.44	0.08	0.5677	-0.8406	0.0244	-0.0083	-0.0167	0.2348	0.0793	0.1555	-1.5512
40	4.65	0.10	0.5895	-0.8788	0.0948	-0.1327	-0.0165	0.2308	0.0804	0.1504	-1.5428
41	4.85	0.10	0.5939	-0.9486	0.1631	-0.1963	-0.0037	0.2403	0.0825	0.1578	-1.5973
42	5.07	0.08	0.6518	-1.0482	-0.0854	0.0059	-0.0296	0.2329	0.0833	0.1496	-1.6081
43	5.29	0.10	0.6450	-1.0414	0.0129	-0.1160	-0.0105	0.2370	0.0833	0.1537	-1.6145
44	5.48	0.08	0.6877	-1.1271	0.0605	-0.1468	-0.0104	0.2405	0.0857	0.1548	-1.6398
45	5.69	0.08	0.6737	-1.1353	-0.0205	-0.0912	-0.0294	0.2324	0.0863	0.1461	-1.6853
46	5.88	0.10	0.7202	-1.1941	0.0469	-0.1930	-0.0040	0.2374	0.0872	0.1502	-1.6651

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 32 0.90 1.7 45.0 ALL OF 11 8.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	6.07	0.08	0.8067	-1.3162	0.0821	-0.1529	-0.0165	0.2357	0.0876	0.1481	-1.6315
48	6.27	0.09	0.7661	-1.2487	-0.0118	-0.1308	-0.0169	0.2334	0.0887	0.1447	-1.6987
49	6.47	0.10	0.8197	-1.3896	0.0837	-0.1559	-0.0041	0.2380	0.0887	0.1493	-1.6952
50	6.68	0.08	0.8637	-1.4289	0.1500	-0.1362	-0.0227	0.2310	0.0907	0.1403	-1.6543
51	6.87	0.10	0.8615	-1.4778	0.0941	-0.1517	-0.0104	0.2355	0.0919	0.1436	-1.7153
52	7.07	0.08	0.9231	-1.5801	0.1214	-0.2067	-0.0041	0.2387	0.0936	0.1451	-1.7117
53	7.28	0.07	0.9031	-1.5535	-0.0501	-0.0499	-0.0235	0.2331	0.0955	0.1376	-1.7172
54	7.46	0.09	0.9548	-1.6658	0.0503	-0.1335	-0.0045	0.2366	0.0951	0.1415	-1.7446
55	7.64	0.07	0.9968	-1.7330	-0.0123	-0.0705	-0.0173	0.2383	0.0973	0.1411	-1.7386
56	7.84	0.08	0.9956	-1.7623	0.0425	-0.1058	-0.0172	0.2379	0.0993	0.1387	-1.7708
57	8.03	0.06	1.0488	-1.8614	0.0957	-0.2227	0.0017	0.2396	0.1013	0.1384	-1.7747
58	8.20	0.05	1.0846	-1.9382	-0.0914	-0.0058	-0.0178	0.2349	0.1009	0.1391	-1.7805
59	8.38	0.06	1.0792	-1.9066	0.0265	-0.1074	-0.0113	0.2401	0.1017	0.1385	-1.8223
60	8.56	0.04	1.1508	-2.0696	0.1181	-0.1989	0.0016	0.2420	0.1029	0.1392	-1.7984
61	8.72	0.06	1.1732	-2.1305	0.0034	-0.0705	-0.0179	0.2363	0.1041	0.1323	-1.8163
62	8.90	0.04	1.1908	-2.1738	0.0375	-0.1268	-0.0115	0.2429	0.1058	0.1372	-1.8258
63	9.07	0.07	1.2700	-2.3347	0.1221	-0.1686	-0.0052	0.2417	0.1074	0.1344	-1.8148
64	9.25	0.07	1.2345	-2.2916	-0.0152	-0.0708	-0.0181	0.2387	0.1090	0.1298	-1.8688
65	9.44	0.07	1.2928	-2.3833	0.0572	-0.1657	-0.0054	0.2433	0.1106	0.1328	-1.8435
66	9.60	0.08	1.3708	-2.5065	0.0138	-0.1123	-0.0119	0.2411	0.1110	0.1302	-1.8298
67	9.76	0.06	1.3507	-2.4960	-0.0243	-0.1182	-0.0183	0.2400	0.1118	0.1283	-1.8494
68	9.98	0.08	1.4211	-2.6383	0.0855	-0.2315	-0.0056	0.2440	0.1130	0.1311	-1.8551
69	10.12	0.06	1.4270	-2.6718	0.0453	-0.0817	-0.0123	0.2421	0.1134	0.1288	-1.8723
70	10.30	0.07	1.4341	-2.6976	-0.0218	-0.1171	-0.0124	0.2390	0.1170	0.1221	-1.8818
71	10.50	0.07	1.4776	-2.7952	0.0834	-0.1159	0.0001	0.2405	0.1174	0.1232	-1.8917
72	10.66	0.05	1.5370	-2.8893	0.0177	-0.1238	-0.0187	0.2427	0.1178	0.1250	-1.8798
73	10.82	0.08	1.5546	-2.9299	0.0722	-0.1843	-0.0061	0.2402	0.1194	0.1209	-1.8847
74	11.00	0.07	1.5883	-3.0142	0.1115	-0.1806	0.0	0.2467	0.1198	0.1270	-1.8977
75	11.19	0.06	1.6139	-3.0691	0.0139	-0.0426	-0.0192	0.2421	0.1206	0.1216	-1.9052
76	11.36	0.08	1.6475	-3.1053	0.0867	-0.1423	-0.0066	0.2425	0.1226	0.1200	-1.8849
77	11.50	0.06	1.6749	-3.2316	0.0488	-0.1443	-0.0128	0.2453	0.1243	0.1211	-1.9058
78	11.69	0.07	1.6864	-3.2233	0.0251	-0.0430	-0.0193	0.2485	0.1291	0.1195	-1.9114
79	11.86	0.06	1.7408	-3.2909	0.1145	-0.1759	-0.0069	0.2474	0.1275	0.1200	-1.8904
80	12.03	0.07	1.7820	-3.3967	0.1479	-0.0852	-0.0130	0.2465	0.1311	0.1155	-1.9061
81	12.19	0.07	1.7957	-3.4499	-0.0354	0.0145	-0.0136	0.2503	0.1307	0.1197	-1.9212
82	12.36	0.08	1.8230	-3.5065	0.0949	-0.1446	-0.0007	0.2540	0.1331	0.1210	-1.9234
83	12.53	0.05	1.8832	-3.5707	-0.0210	-0.1178	-0.0134	0.2530	0.1347	0.1184	-1.8961
84	12.70	0.08	1.8723	-3.5924	0.0098	-0.0888	-0.0073	0.2486	0.1364	0.1123	-1.9187
85	12.85	0.07	1.9266	-3.6635	0.1188	-0.1921	0.0056	0.2575	0.1367	0.1209	-1.9013
86	13.02	0.05	1.9692	-3.7037	-0.0332	-0.0048	-0.0137	0.2503	0.1368	0.1136	-1.9001
87	13.20	0.08	1.9686	-3.7847	0.0552	-0.1453	-0.0010	0.2571	0.1406	0.1166	-1.9225
88	13.36	0.06	2.0340	-3.8740	0.0358	-0.2026	-0.0010	0.2580	0.1414	0.1167	-1.9088
89	13.52	0.06	2.0368	-3.8897	-0.0693	-0.0121	-0.0203	0.2525	0.1430	0.1096	-1.9116
90	13.71	0.07	2.0702	-3.9880	0.0535	-0.2575	-0.0011	0.2555	0.1426	0.1130	-1.9264
91	13.85	0.05	2.1027	-4.0323	-0.0500	-0.0475	-0.0079	0.2536	0.1450	0.1087	-1.9177
92	14.01	0.05	2.0998	-4.0738	-0.0463	0.0137	-0.0082	0.2544	0.1446	0.1099	-1.9481

PAGE 1 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	32	0.90	1.7	45.0	W1#0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	14.20	0.07	2.1644	-4.1277	0.1045	-0.2327	0.0051	0.2560	0.1466	0.1095	-1.9067
94	14.34	0.03	2.2321	-4.2079	-0.0946	-0.0463	-0.0205	0.2511	0.1482	0.1030	-1.8852
95	14.52	0.07	2.2036	-4.2424	0.0425	-0.1411	-0.0078	0.2548	0.1507	0.1040	-1.9252
96	14.69	-0.05	2.2488	-4.2717	0.0329	-0.1847	0.0048	0.2599	0.1531	0.1069	-1.8996
97	14.84	0.06	2.2490	-4.3644	0.0769	-0.0325	-0.0142	0.2530	0.1556	0.0975	-1.8984
98	15.03	0.08	2.3196	-4.3679	0.1835	-0.1929	0.0052	0.2564	0.1572	0.0993	-1.8744
99	15.20	0.04	2.3678	-4.4476	-0.0516	-0.0178	0.0043	0.2602	0.1615	0.0988	-1.8783
100	15.36	0.05	2.3823	-4.4958	-0.0650	0.0959	-0.0023	0.2593	0.1620	0.0974	-1.8871
101	15.53	0.06	2.4278	-4.5764	0.0726	-0.0301	0.0231	0.2630	0.1665	0.0966	-1.8850
102	15.69	0.05	2.4867	-4.6784	0.0271	-0.0021	0.0041	0.2607	0.1692	0.0915	-1.8814
103	15.88	0.05	2.4982	-4.6367	-0.0603	0.1644	0.0037	0.2624	0.1712	0.0912	-1.8939
104	16.06	0.08	2.5215	-4.6934	0.0485	0.0582	0.0167	0.2617	0.1753	0.0864	-1.8615
105	16.20	0.04	2.5655	-4.7892	-0.0462	0.2558	0.0036	0.2664	0.1808	0.0856	-1.8667
106	16.36	0.06	2.5295	-4.7586	0.0099	0.2300	0.0224	0.2702	0.1832	0.0870	-1.8813
107	16.54	0.04	2.6436	-4.9104	-0.0551	0.2135	0.0223	0.2723	0.1840	0.0883	-1.8577
108	16.66	0.05	2.6615	-4.9119	-0.0709	0.2718	0.0097	0.2700	0.1869	0.0837	-1.8595
109	16.85	0.07	2.6769	-5.0184	0.1225	-0.0622	0.0167	0.2851	0.1958	0.0893	-1.8747
110	17.02	0.04	2.7169	-5.1014	-0.0167	-0.0084	-0.0025	0.2858	0.1990	0.0868	-1.8776
111	17.18	0.05	2.6916	-5.0027	0.0432	-0.1331	-0.0206	0.2881	0.2047	0.0834	-1.8586
112	17.33	0.08	2.7808	-5.1316	0.1001	-0.1860	0.0045	0.2925	0.2115	0.0809	-1.8453
113	17.51	0.05	2.7929	-5.2085	0.0328	0.0017	-0.0212	0.2899	0.2116	0.0782	-1.8652
114	17.66	0.05	2.7730	-5.2154	-0.0116	-0.1469	-0.0210	0.2891	0.2160	0.0730	-1.8772
115	17.84	0.05	2.8711	-5.3133	0.0406	-0.0701	-0.0085	0.2946	0.2172	0.0773	-1.8506
116	17.99	0.05	2.8855	-5.3627	0.0393	-0.0709	-0.0336	0.2859	0.2193	0.0666	-1.8585
117	18.15	0.07	2.8792	-5.3130	0.1217	-0.1378	-0.0019	0.2917	0.2197	0.0719	-1.8453
118	18.32	0.05	2.9428	-5.4137	0.0954	-0.1363	-0.0208	0.2959	0.2224	0.0734	-1.8397
119	18.50	0.05	2.9828	-5.5153	0.0141	-0.0435	-0.0276	0.2900	0.2276	0.0623	-1.8491
120	18.64	0.05	3.0015	-5.5408	0.0837	-0.1975	-0.0086	0.2928	0.2280	0.0647	-1.8468
121	18.80	0.04	3.0328	-5.6171	0.0510	-0.1199	-0.0337	0.2937	0.2309	0.0627	-1.8521
122	18.97	0.06	3.0314	-5.6321	0.0369	-0.0161	-0.0214	0.2928	0.2301	0.0626	-1.8477
123	19.13	0.07	3.1041	-5.7037	0.1781	-0.2766	-0.0144	0.2970	0.2313	0.0656	-1.8375
124	19.29	0.05	3.1365	-5.7379	0.0703	-0.1137	-0.0336	0.2948	0.2346	0.0601	-1.8294
125	19.44	0.07	3.1528	-5.7765	0.0671	-0.1960	-0.0335	0.2910	0.2357	0.0552	-1.8315
126	19.60	0.06	3.2075	-5.8142	0.1437	-0.1938	-0.0208	0.2922	0.2345	0.0576	-1.8127
127	19.75	0.06	3.2305	-5.8837	0.0960	-0.2130	-0.0335	0.2882	0.2370	0.0512	-1.8213
128	19.91	0.06	3.2685	-5.9158	0.2613	-0.3702	-0.0330	0.2892	0.2370	0.0521	-1.8211
129	20.05	0.05	3.3162	-6.0081	0.0423	-0.1679	-0.0337	0.2875	0.2374	0.0501	-1.8117
130	20.20	0.07	3.3221	-6.0472	0.1124	-0.1343	-0.0463	0.2821	0.2398	0.0423	-1.8202
131	20.36	0.06	3.3131	-6.0386	0.1141	-0.3118	-0.0334	0.2926	0.2406	0.0519	-1.8226
132	20.51	0.05	3.3744	-6.0964	0.1702	-0.1268	-0.0398	0.2909	0.2410	0.0498	-1.8067
133	20.69	0.07	3.3909	-6.1544	0.2387	-0.2642	-0.0396	0.2807	0.2406	0.0401	-1.8150
134	20.81	0.05	3.4508	-6.2499	0.1524	-0.3744	-0.0333	0.2819	0.2410	0.0409	-1.8059
135	20.96	0.04	3.4466	-6.2703	0.1345	-0.2896	-0.0648	0.2798	0.2427	0.0371	-1.7994
136	21.13	0.06	3.4734	-6.3007	0.1650	-0.2994	-0.0461	0.2757	0.2430	0.0327	-1.8140
137	21.29	0.05	3.5725	-6.3814	0.2253	-0.4051	-0.0581	0.2815	0.2447	0.0368	-1.7863
138	21.43	0.05	3.5507	-6.3804	0.1738	-0.2814	-0.0710	0.2796	0.2455	0.0341	-1.7971

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	32	0.90	1.7	45.0	mle0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	21.56	0.06	3.5619	-6.3634	0.3624	-0.5443	-0.0701	0.2808	0.2483	0.0325	-1.7865
140	21.73	0.05	3.6478	-6.5093	0.2174	-0.3961	-0.0582	0.2789	0.2454	0.0335	-1.7866
141	21.90	0.06	3.6366	-6.4735	0.2988	-0.4589	-0.1018	0.2730	0.2459	0.0271	-1.7801
142	22.05	0.06	3.6016	-6.5625	0.4017	-0.5615	-0.0828	0.2758	0.2471	0.0287	-1.7922
143	22.14	0.05	3.6461	-6.5536	0.3074	-0.5419	-0.1079	0.2724	0.2470	0.0254	-1.7731
144	22.34	0.07	3.7126	-6.6750	0.3061	-0.5290	-0.1142	0.2735	0.2475	0.0260	-1.7711
145	22.50	0.06	3.7466	-6.6345	0.4464	-0.8028	-0.0944	0.2698	0.2502	0.0196	-1.7520
146	22.64	0.07	3.8173	-6.7392	0.4538	-0.6708	-0.1138	0.2679	0.2495	0.0184	-1.7654
147	22.80	0.08	3.8427	-6.7627	0.4076	-0.6738	-0.1200	0.2675	0.2515	0.0160	-1.7547
148	22.93	0.06	3.8877	-6.7988	0.5050	-0.7928	-0.1196	0.2707	0.2515	0.0192	-1.7487
149	23.06	0.07	3.9194	-6.8608	0.4389	-0.6391	-0.1203	0.2583	0.2519	0.0064	-1.7585
150	23.22	0.06	3.9626	-6.9381	0.4288	-0.6317	-0.1139	0.2592	0.2527	0.0065	-1.7584
151	23.36	0.07	4.0084	-6.9491	0.4911	-0.7240	-0.1135	0.2592	0.2528	0.0064	-1.7336
152	23.52	0.08	4.0501	-6.9858	0.2891	-0.3548	-0.1080	0.2528	0.2523	0.0005	-1.7197
153	23.65	0.08	4.0082	-6.9522	0.4287	-0.6442	-0.0822	0.2506	0.2523	-0.0017	-1.7345
154	23.93	0.07	4.2152	-7.2270	0.4765	-0.6825	-0.0969	0.2539	0.2531	0.0008	-1.7133
155	25.53	0.08	4.5236	-7.3804	0.4041	-0.2033	-0.0320	0.2367	0.2624	-0.0237	-1.6316
156	27.29	0.11	5.0074	-7.5452	0.7453	-0.4578	0.0398	0.2367	0.2820	-0.0473	-1.5067
157	29.35	0.12	5.7793	-7.3373	0.9948	-0.1811	0.0561	0.2723	0.3170	-0.0446	-1.2644
158	31.89	0.14	6.8550	-7.0508	0.9153	0.4908	0.0594	0.2633	0.3433	-0.0799	-1.0595
159	35.20	0.15	7.6823	-6.1606	0.7814	0.4857	0.1663	0.2326	0.3598	-0.1272	-0.7816
160	39.02	0.09	9.3470	-4.9268	-0.0087	0.6065	0.0563	0.1616	0.3610	-0.1994	-0.5271
161	45.97	0.04	11.2937	-3.9229	-0.1786	0.7651	-0.0630	0.1226	0.3959	-0.2733	-0.3473
162	53.76	-0.04	13.7148	-4.6285	-0.4255	-2.2862	-0.0523	0.1427	0.4450	-0.3024	-0.3375
163	58.45	-0.02	14.5735	-5.1836	-0.3769	-1.2597	-0.0260	0.1103	0.4608	-0.3506	-0.3557

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 32 MACH MX10-6 1.7 PHI 45.0 CONF MIDFIL L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CH2	CB2	XCPF2	YCPF2
1	-5.00	0.11	0.1836	0.0512	0.0489	0.2788	0.4842	-0.0470	-0.0436	-0.0494	0.5010	0.5678
2	-4.97	0.09	0.1573	0.0434	0.0757	0.2863	0.4812	-0.0772	-0.0393	-0.0449	0.5089	0.5816
3	-4.24	0.11	0.1409	0.0423	0.0665	0.2940	0.4862	-0.0745	-0.0370	-0.0434	0.4965	0.5826
4	-4.02	0.09	0.1337	0.0395	0.0629	0.2954	0.4705	-0.0647	-0.0334	-0.0383	0.5161	0.5928
5	-3.73	0.10	0.1268	0.0387	0.0607	0.3105	0.4872	-0.0619	-0.0318	-0.0366	0.5136	0.6236
6	-3.45	0.09	0.1132	0.0363	0.0558	0.3206	0.4929	-0.0552	-0.0278	-0.0326	0.5035	0.5906
7	-3.22	0.09	0.1109	0.0352	0.0532	0.3173	0.4797	-0.0438	-0.0245	-0.0286	0.5592	0.6530
8	-2.93	0.11	0.0930	0.0311	0.0466	0.3533	0.5068	-0.0410	-0.0230	-0.0277	0.5608	0.6756
9	-2.66	0.09	0.0845	0.0291	0.0412	0.3443	0.4876	-0.0354	-0.0211	-0.0249	0.5959	0.7036
10	-2.48	0.08	0.0772	0.0284	0.0381	0.3695	0.4935	-0.0326	-0.0200	-0.0240	0.6133	0.7362
11	-2.14	0.10	0.0669	0.0210	0.0356	0.3138	0.5321	-0.0213	-0.0159	-0.0200	0.7463	0.9398
12	-1.89	0.09	0.0661	0.0193	0.0319	0.2919	0.4826	-0.0171	-0.0142	-0.0178	0.8302	1.0489
13	-1.62	0.10	0.0536	0.0157	0.0268	0.2928	0.5000	-0.0101	-0.0115	-0.0147	1.1383	1.4554
14	-1.36	0.10	0.0511	0.0146	0.0258	0.2656	0.5049	-0.0130	-0.0119	-0.0156	0.9151	1.2000
15	-1.13	0.06	0.0476	0.0127	0.0216	0.2667	0.4560	0.0012	-0.0071	-0.0101	-5.9151	-8.4167
16	-0.86	0.11	0.0389	0.0091	0.0172	0.2607	0.4928	0.0080	-0.0033	-0.0053	-0.4124	-0.6625
17	-0.64	0.08	0.0339	0.0077	0.0152	0.2271	0.4484	0.0080	-0.0035	-0.0053	-0.4374	-0.6625
18	-0.48	0.05	0.0263	0.0055	0.0125	0.2341	0.4753	0.0149	-0.0001	-0.0017	-0.0067	-0.1161
19	-0.15	0.10	0.0188	0.0025	0.0097	0.1329	0.5160	0.0163	0.0003	-0.0009	0.0184	-0.0552
20	0.04	0.06	0.0205	0.0008	0.0076	0.0370	0.3610	0.0262	0.0036	0.0029	0.1376	0.1107
21	0.33	0.10	0.0130	-0.0012	0.0035	-0.0963	0.2692	0.0303	0.0056	0.0045	0.1782	0.1485
22	0.58	0.09	0.0093	-0.0033	0.0024	-0.3547	0.2581	0.0358	0.0077	0.0080	0.2150	0.2235
23	0.79	0.07	-0.0004	-0.0077	-0.0031	19.2449	7.7500	0.0457	0.0107	0.0113	0.2341	0.2473
24	1.05	0.10	-0.0041	-0.0078	-0.0029	2.5155	0.9355	0.0541	0.0138	0.0156	0.2550	0.2884
25	1.26	0.08	-0.0041	-0.0095	-0.0054	2.3165	1.3171	0.0584	0.0150	0.0160	0.2568	0.2740
26	1.48	0.08	-0.0090	-0.0117	-0.0079	1.2947	0.8778	0.0613	0.0156	0.0174	0.2512	0.2838
27	1.74	0.09	-0.0168	-0.0135	-0.0089	0.8034	0.5298	0.0695	0.0196	0.0229	0.2819	0.3295
28	1.95	0.09	-0.0176	-0.0151	-0.0103	0.8491	0.5787	0.0751	0.0216	0.0258	0.2875	0.3435
29	2.17	0.09	-0.0241	-0.0166	-0.0128	0.6806	0.5311	0.0778	0.0229	0.0267	0.2963	0.3432
30	2.42	0.09	-0.0303	-0.0194	-0.0154	0.5808	0.4430	0.0832	0.0268	0.0313	0.3220	0.3762
31	2.63	0.08	-0.0379	-0.0214	-0.0177	0.5777	0.4679	0.0916	0.0301	0.0345	0.3285	0.3766
32	2.85	0.10	-0.0456	-0.0238	-0.0198	0.5218	0.4342	0.0941	0.0323	0.0389	0.3432	0.4134
33	3.10	0.10	-0.0506	-0.0254	-0.0211	0.5097	0.4170	0.1024	0.0352	0.0449	0.3437	0.4385
34	3.31	0.09	-0.0492	-0.0257	-0.0215	0.5222	0.4348	0.1052	0.0360	0.0463	0.3421	0.4401
35	3.53	0.11	-0.0494	-0.0279	-0.0245	0.4646	0.4141	0.1136	0.0386	0.0530	0.3397	0.4665
36	3.76	0.08	-0.0655	-0.0313	-0.0274	0.4777	0.4244	0.1163	0.0392	0.0555	0.3370	0.4772
37	3.99	0.09	-0.0717	-0.0335	-0.0310	0.4671	0.4324	0.1247	0.0418	0.0622	0.3351	0.4988
38	4.22	0.11	-0.0797	-0.0353	-0.0329	0.4641	0.4269	0.1303	0.0430	0.0662	0.3299	0.5081
39	4.44	0.05	-0.0815	-0.0383	-0.0360	0.4699	0.4417	0.1330	0.0443	0.0699	0.3330	0.5256
40	4.65	0.10	-0.0940	-0.0392	-0.0369	0.4665	0.4393	0.1472	0.0476	0.0748	0.3293	0.5082
41	4.85	0.10	-0.0867	-0.0393	-0.0366	0.4532	0.4221	0.1527	0.0502	0.0788	0.3287	0.5160
42	5.07	0.08	-0.0952	-0.0434	-0.0414	0.4620	0.4349	0.1611	0.0521	0.0848	0.3233	0.5264
43	5.29	0.10	-0.1004	-0.0443	-0.0426	0.4611	0.4243	0.1639	0.0528	0.0868	0.3221	0.5296
44	5.46	0.08	-0.1005	-0.0466	-0.0457	0.4374	0.4291	0.1751	0.0558	0.0943	0.3186	0.5385
45	5.69	0.08	-0.1049	-0.0471	-0.0466	0.4324	0.4279	0.1834	0.0573	0.0978	0.3123	0.5333
46	5.88	0.10	-0.1165	-0.0493	-0.0487	0.4231	0.4180	0.1889	0.0591	0.1018	0.3128	0.5389

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	32	0.90	1.7	45.0	81=0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	6.07	0.08	-0.1188	-0.0504	-0.0514	0.4241	0.4327	0.2002	0.0613	0.1075	0.3061	0.5378
48	6.27	0.09	-0.1256	-0.0514	-0.0515	0.4104	0.4113	0.2070	0.0632	0.1109	0.3052	0.5357
49	6.47	0.10	-0.1363	-0.0533	-0.0560	0.3909	0.4255	0.2139	0.0651	0.1168	0.3043	0.5468
50	6.68	0.08	-0.1302	-0.0540	-0.0581	0.3966	0.4266	0.2139	0.0650	0.1180	0.3038	0.5517
51	6.87	0.10	-0.1440	-0.0550	-0.0596	0.3816	0.4139	0.2251	0.0677	0.1248	0.3007	0.5544
52	7.07	0.08	-0.1502	-0.0563	-0.0626	0.3747	0.4168	0.2335	0.0693	0.1308	0.2967	0.5602
53	7.26	0.07	-0.1551	-0.0574	-0.0656	0.3700	0.4230	0.2447	0.0717	0.1382	0.2929	0.5640
54	7.46	0.09	-0.1652	-0.0593	-0.0697	0.3589	0.4219	0.2462	0.0718	0.1389	0.2916	0.5662
55	7.66	0.07	-0.1640	-0.0582	-0.0668	0.3548	0.4195	0.2559	0.0744	0.1462	0.2907	0.5713
56	7.86	0.08	-0.1701	-0.0599	-0.0731	0.3521	0.4297	0.2672	0.0764	0.1531	0.2859	0.5738
57	8.03	0.06	-0.1778	-0.0603	-0.0751	0.3391	0.4224	0.2729	0.0771	0.1559	0.2824	0.5713
58	8.20	0.05	-0.1838	-0.0628	-0.0793	0.3344	0.4316	0.2757	0.0779	0.1565	0.2825	0.5749
59	8.38	0.08	-0.1914	-0.0634	-0.0820	0.3338	0.4284	0.2857	0.0791	0.1634	0.2768	0.5719
60	8.56	0.09	-0.1980	-0.0629	-0.0833	0.3241	0.4296	0.2984	0.0814	0.1698	0.2727	0.5698
61	8.72	0.06	-0.1989	-0.0645	-0.0863	0.3242	0.4339	0.3070	0.0825	0.1740	0.2687	0.5668
62	8.90	0.09	-0.2078	-0.0643	-0.0895	0.3093	0.4307	0.3183	0.0843	0.1803	0.2648	0.5664
63	9.07	0.07	-0.2113	-0.0654	-0.0928	0.3118	0.4342	0.3211	0.0848	0.1834	0.2640	0.5712
64	9.25	0.07	-0.2138	-0.0658	-0.0942	0.3077	0.4406	0.3299	0.0855	0.1862	0.2591	0.5686
65	9.44	0.07	-0.2207	-0.0677	-0.0975	0.2986	0.4301	0.3383	0.0869	0.1896	0.2568	0.5684
66	9.60	0.06	-0.2301	-0.0682	-0.1019	0.2863	0.4429	0.3498	0.0882	0.1981	0.2522	0.5666
67	9.76	0.06	-0.2264	-0.0667	-0.1002	0.2945	0.4426	0.3626	0.0895	0.2010	0.2468	0.5543
68	9.98	0.06	-0.2441	-0.0708	-0.1064	0.2891	0.4359	0.3756	0.0910	0.2091	0.2423	0.5570
69	10.12	0.06	-0.2388	-0.0692	-0.1069	0.2997	0.4477	0.3769	0.0908	0.2086	0.2408	0.5535
70	10.30	0.07	-0.2489	-0.0702	-0.1109	0.2820	0.4456	0.3927	0.0925	0.2158	0.2355	0.5495
71	10.50	0.07	-0.2603	-0.0719	-0.1151	0.2761	0.4422	0.3957	0.0923	0.2155	0.2332	0.5446
72	10.68	0.05	-0.2569	-0.0711	-0.1160	0.2765	0.4480	0.4128	0.0961	0.2240	0.2279	0.5426
73	10.82	0.08	-0.2640	-0.0711	-0.1183	0.2692	0.4481	0.4243	0.0947	0.2296	0.2231	0.5411
74	11.00	0.07	-0.2704	-0.0722	-0.1202	0.2669	0.4485	0.4300	0.0951	0.2324	0.2211	0.5405
75	11.19	0.06	-0.2753	-0.0725	-0.1230	0.2633	0.4468	0.4401	0.0960	0.2373	0.2181	0.5392
76	11.36	0.04	-0.2842	-0.0731	-0.1249	0.2538	0.4410	0.4501	0.0967	0.2423	0.2148	0.5383
77	11.50	0.06	-0.2843	-0.0719	-0.1268	0.2528	0.4460	0.4617	0.0973	0.2444	0.2107	0.5293
78	11.69	0.07	-0.2892	-0.0722	-0.1296	0.2496	0.4481	0.4703	0.0980	0.2498	0.2083	0.5312
79	11.86	0.08	-0.2970	-0.0740	-0.1306	0.2491	0.4397	0.4833	0.0987	0.2550	0.2042	0.5276
80	12.03	0.07	-0.3043	-0.0750	-0.1343	0.2462	0.4411	0.4934	0.0990	0.2587	0.2006	0.5243
81	12.19	0.07	-0.3097	-0.0755	-0.1355	0.2437	0.4375	0.4991	0.0996	0.2616	0.1995	0.5241
82	12.36	0.06	-0.3196	-0.0782	-0.1395	0.2362	0.4382	0.5135	0.1006	0.2686	0.1959	0.5231
83	12.53	0.05	-0.3221	-0.0793	-0.1406	0.2461	0.4365	0.5222	0.0705	0.2665	0.1426	0.5103
84	12.70	0.08	-0.3272	-0.0802	-0.1429	0.2458	0.4367	0.5323	0.0744	0.2709	0.1397	0.5089
85	12.85	0.07	-0.3310	-0.0796	-0.1444	0.2404	0.4363	0.5411	0.0737	0.2739	0.1362	0.5062
86	13.02	0.05	-0.3371	-0.0806	-0.1491	0.2390	0.4423	0.5513	0.0734	0.2762	0.1331	0.5046
87	13.20	0.08	-0.3477	-0.0811	-0.1533	0.2332	0.4409	0.5608	0.0722	0.2845	0.1287	0.5073
88	13.36	0.06	-0.3625	-0.0796	-0.1532	0.2323	0.4473	0.5710	0.0723	0.2888	0.1266	0.5058
89	13.52	0.06	-0.3474	-0.0799	-0.1566	0.2299	0.4508	0.5811	0.0722	0.2949	0.1242	0.5075
90	13.71	0.07	-0.3613	-0.0803	-0.1606	0.2333	0.4451	0.5884	0.0709	0.2984	0.1205	0.5071
91	13.85	0.05	-0.3600	-0.0821	-0.1621	0.2280	0.4503	0.5927	0.0705	0.3022	0.1189	0.5099
92	14.01	0.05	-0.3647	-0.0830	-0.1667	0.2275	0.4571	0.6015	0.0699	0.3052	0.1162	0.5074

TEST 7 PART 32 MACH .90 RE10-6 1.7 PHI 45.0 CONF DIAGF11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	14.20	0.07	-0.3725	-0.0833	-0.1681	0.2236	0.4513	0.6071	0.0696	0.3103	0.1146	0.5110
94	14.39	0.03	-0.3771	-0.0845	-0.1722	0.2239	0.4564	0.6131	0.0683	0.3143	0.1114	0.5126
95	14.52	0.07	-0.3773	-0.0847	-0.1722	0.2244	0.4564	0.6192	0.0660	0.3153	0.1066	0.5092
96	14.69	0.05	-0.3754	-0.0841	-0.1726	0.2237	0.4592	0.6208	0.0633	0.3188	0.1019	0.5135
97	14.84	0.06	-0.3967	-0.0885	-0.1807	0.2242	0.4578	0.6149	0.0586	0.3168	0.0945	0.5111
98	15.03	0.08	-0.3944	-0.0867	-0.1805	0.2195	0.4571	0.6229	0.0576	0.3193	0.0924	0.5126
99	15.20	0.04	-0.3973	-0.0863	-0.1824	0.2172	0.4591	0.6237	0.0545	0.3203	0.0874	0.5140
100	15.36	0.05	-0.4152	-0.0895	-0.1881	0.2155	0.4530	0.6232	0.0506	0.3198	0.0873	0.5132
101	15.53	0.06	-0.4226	-0.0900	-0.1912	0.2128	0.4522	0.6235	0.0511	0.3208	0.0819	0.5145
102	15.69	0.05	-0.4202	-0.0885	-0.1908	0.2106	0.4541	0.6435	0.0530	0.3324	0.0823	0.5166
103	15.86	0.05	-0.4405	-0.0948	-0.1970	0.2152	0.4472	0.6323	0.0501	0.3246	0.0792	0.5130
104	16.04	0.06	-0.4425	-0.0944	-0.1969	0.2131	0.4491	0.6295	0.0485	0.3241	0.0770	0.5149
105	16.20	0.04	-0.4536	-0.0968	-0.2045	0.2133	0.4508	0.6236	0.0464	0.3211	0.0744	0.5149
106	16.36	0.06	-0.4578	-0.0958	-0.2032	0.2092	0.4439	0.6193	0.0458	0.3172	0.0739	0.5122
107	16.54	0.04	-0.4705	-0.0983	-0.2076	0.2089	0.4412	0.6267	0.0448	0.3207	0.0715	0.5117
108	16.68	0.02	-0.4806	-0.1005	-0.2118	0.2091	0.4407	0.6296	0.0448	0.3209	0.0711	0.5097
109	16.85	0.07	-0.4861	-0.0986	-0.2130	0.1993	0.4382	0.6486	0.0441	0.3308	0.0680	0.5068
110	17.02	0.04	-0.4944	-0.0964	-0.2164	0.1957	0.4383	0.6457	0.0438	0.3292	0.0674	0.5098
111	17.18	0.05	-0.4900	-0.0946	-0.2150	0.1930	0.4388	0.6747	0.0437	0.3433	0.0648	0.5088
112	17.33	0.06	-0.5130	-0.0986	-0.2213	0.1922	0.4316	0.6690	0.0432	0.3393	0.0646	0.5072
113	17.51	0.05	-0.5231	-0.1006	-0.2260	0.1923	0.4320	0.6603	0.0430	0.3356	0.0651	0.5083
114	17.66	0.05	-0.5295	-0.1010	-0.2273	0.1918	0.4293	0.6748	0.0426	0.3426	0.0631	0.5077
115	17.90	0.05	-0.5422	-0.1047	-0.2313	0.1931	0.4266	0.6735	0.0421	0.3396	0.0625	0.5042
116	17.99	0.05	-0.5435	-0.1034	-0.2319	0.1911	0.4267	0.6880	0.0418	0.3472	0.0607	0.5047
117	18.15	0.07	-0.5346	-0.1010	-0.2284	0.1898	0.4271	0.6968	0.0418	0.3491	0.0600	0.5010
118	18.32	0.05	-0.5595	-0.1059	-0.2386	0.1892	0.4265	0.6936	0.0414	0.3457	0.0597	0.4986
119	18.50	0.05	-0.5645	-0.1063	-0.2414	0.1863	0.4276	0.7052	0.0412	0.3519	0.0584	0.4990
120	18.68	0.06	-0.5634	-0.1039	-0.2405	0.1844	0.4269	0.7168	0.0410	0.3578	0.0572	0.4989
121	18.80	0.04	-0.5697	-0.1043	-0.2441	0.1830	0.4285	0.7271	0.0405	0.3602	0.0557	0.4954
122	18.97	0.06	-0.5772	-0.1074	-0.2479	0.1853	0.4288	0.7228	0.0403	0.3575	0.0557	0.4946
123	19.13	0.07	-0.5810	-0.1072	-0.2484	0.1845	0.4275	0.7432	0.0397	0.3679	0.0534	0.4950
124	19.29	0.05	-0.5748	-0.1061	-0.2470	0.1846	0.4299	0.7578	0.0396	0.3720	0.0522	0.4909
125	19.44	0.07	-0.5898	-0.1094	-0.2525	0.1861	0.4281	0.7606	0.0392	0.3728	0.0515	0.4908
126	19.60	0.06	-0.5910	-0.1066	-0.2542	0.1837	0.4301	0.7725	0.0392	0.3773	0.0507	0.4884
127	19.75	0.06	-0.5984	-0.1076	-0.2538	0.1832	0.4313	0.7856	0.0386	0.3825	0.0491	0.4869
128	19.91	0.08	-0.6101	-0.1113	-0.2610	0.1825	0.4278	0.7960	0.0381	0.3839	0.0479	0.4823
129	20.05	0.05	-0.6050	-0.1093	-0.2597	0.1806	0.4293	0.8018	0.0378	0.3867	0.0471	0.4823
130	20.20	0.07	-0.6174	-0.1131	-0.2660	0.1831	0.4308	0.8165	0.0371	0.3925	0.0454	0.4807
131	20.36	0.06	-0.6201	-0.1126	-0.2662	0.1815	0.4293	0.8224	0.0365	0.3936	0.0444	0.4786
132	20.51	0.05	-0.6236	-0.1137	-0.2695	0.1823	0.4323	0.8283	0.0366	0.3941	0.0442	0.4758
133	20.65	0.07	-0.6171	-0.1100	-0.2702	0.1782	0.4379	0.8487	0.0361	0.4034	0.0425	0.4753
134	20.81	0.05	-0.6250	-0.1120	-0.2707	0.1792	0.4331	0.8662	0.0356	0.4118	0.0409	0.4756
135	20.96	0.06	-0.6346	-0.1145	-0.2744	0.1789	0.4367	0.8721	0.0353	0.4134	0.0405	0.4740
136	21.13	0.06	-0.6374	-0.1107	-0.2743	0.1736	0.4382	0.8896	0.0348	0.4201	0.0391	0.4722
137	21.29	0.05	-0.6376	-0.1177	-0.2756	0.1739	0.4343	0.8954	0.0348	0.4235	0.0389	0.4730
138	21.43	0.05	-0.6523	-0.1137	-0.2775	0.1763	0.4407	0.9091	0.0351	0.4266	0.0388	0.4719

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 32 0.50 1.7 45.0 BLNOF11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CAF1	CN1	CM1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	21.54	0.06	-0.4652	-0.1188	-0.2844	0.1785	0.4342	0.9174	0.0346	0.4294	0.0377	0.4681
140	21.73	0.05	-0.4627	-0.1180	-0.2903	0.1720	0.4381	0.9275	0.0350	0.4350	0.0377	0.4698
141	21.90	0.06	-0.4650	-0.1206	-0.3013	0.1760	0.4349	0.9478	0.0354	0.4437	0.0373	0.4681
142	22.05	0.08	-0.4616	-0.1182	-0.3026	0.1748	0.4371	0.9596	0.0361	0.4482	0.0376	0.4672
143	22.19	0.05	-0.4653	-0.1215	-0.3049	0.1751	0.4384	0.9709	0.0363	0.4550	0.0374	0.4686
144	22.36	0.07	-0.4601	-0.1224	-0.3088	0.1748	0.4411	0.9738	0.0371	0.4547	0.0381	0.4669
145	22.50	0.05	-0.4631	-0.1194	-0.3077	0.1705	0.4376	0.9825	0.0371	0.4606	0.0378	0.4680
146	22.68	0.07	-0.4679	-0.1196	-0.3126	0.1689	0.4419	0.9955	0.0378	0.4652	0.0380	0.4673
147	22.80	0.08	-0.4734	-0.1189	-0.3178	0.1663	0.4393	1.0114	0.0388	0.4724	0.0384	0.4671
148	22.93	0.06	-0.4734	-0.1218	-0.3220	0.1660	0.4391	1.0171	0.0396	0.4759	0.0389	0.4679
149	23.06	0.07	-0.4744	-0.1184	-0.3207	0.1641	0.4427	1.0243	0.0399	0.4794	0.0389	0.4680
150	23.22	0.08	-0.4723	-0.1177	-0.3248	0.1585	0.4429	1.0346	0.0413	0.4820	0.0399	0.4668
151	23.36	0.07	-0.4732	-0.1174	-0.3265	0.1592	0.4429	1.0345	0.0406	0.4820	0.0392	0.4659
152	23.52	0.06	-0.4733	-0.1144	-0.3275	0.1560	0.4466	1.0378	0.0406	0.4834	0.0391	0.4668
153	23.65	0.08	-0.4783	-0.1119	-0.3263	0.1536	0.4480	1.0385	0.0417	0.4852	0.0401	0.4672
154	23.93	0.07	-0.4744	-0.1101	-0.3375	0.1479	0.4534	1.0670	0.0466	0.4977	0.0437	0.4666
155	25.53	0.06	-0.4735	-0.1065	-0.3453	0.1472	0.4644	1.0521	0.0554	0.4794	0.0526	0.4557
156	27.29	0.11	-0.4705	-0.0978	-0.3320	0.1392	0.4713	1.1087	0.0537	0.5073	0.0484	0.4578
157	29.35	0.12	-0.4716	-0.0882	-0.3238	0.1313	0.4821	1.1436	0.0557	0.5144	0.0487	0.4498
158	31.89	0.14	-0.4727	-0.0759	-0.2926	0.1259	0.4852	1.2260	0.0505	0.5453	0.0412	0.4459
159	35.20	0.13	-0.5731	-0.0866	-0.2876	0.1511	0.5018	1.1879	0.0472	0.5334	0.0397	0.4498
160	39.82	0.09	-0.5015	-0.1079	-0.2594	0.2151	0.5172	1.2435	0.0406	0.5628	0.0326	0.4528
161	45.97	0.04	-0.4054	-0.1014	-0.2118	0.2501	0.5224	1.3193	0.0266	0.5965	0.0203	0.4521
162	53.76	-0.04	-0.0062	-0.0121	-0.0345	0.1827	0.5211	1.4218	0.0105	0.6507	0.0076	0.4577
163	58.45	-0.02	0.0492	0.0020	0.0163	0.0815	0.3382	1.4934	0.0062	0.6870	0.0042	0.4600

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 32 0.60 1.7 45.0 #1=DEL1 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.06	0.11	0.1445	9.9999	0.0672	9.9999	0.4256	-0.1387	-0.0446	-0.0779	0.3215	0.5616
2	-4.57	0.09	0.1451	9.9999	0.0579	9.9999	0.4286	-0.1203	-0.0407	-0.0659	0.3382	0.5478
3	-4.24	0.11	0.1217	9.9999	0.0521	9.9999	0.4281	-0.1069	-0.0398	-0.0542	0.3722	0.5538
4	-4.02	0.09	0.1109	9.9999	0.0507	9.9999	0.4572	-0.0943	-0.0360	-0.0518	0.3901	0.5493
5	-3.73	0.10	0.1110	9.9999	0.0475	9.9999	0.4279	-0.0902	-0.0357	-0.0496	0.3957	0.5499
6	-3.45	0.09	0.0944	9.9999	0.0445	9.9999	0.4499	-0.0778	-0.0321	-0.0427	0.4125	0.5488
7	-3.22	0.09	0.0948	9.9999	0.0441	9.9999	0.4652	-0.0707	-0.0279	-0.0366	0.3973	0.5214
8	-2.93	0.11	0.0814	9.9999	0.0388	9.9999	0.4767	-0.0649	-0.0259	-0.0337	0.3998	0.5193
9	-2.66	0.09	0.0732	9.9999	0.0397	9.9999	0.5355	-0.0554	-0.0229	-0.0287	0.4132	0.5181
10	-2.40	0.08	0.0706	9.9999	0.0369	9.9999	0.5227	-0.0528	-0.0215	-0.0267	0.4071	0.5057
11	-2.14	0.10	0.0598	9.9999	0.0334	9.9999	0.5585	-0.0404	-0.0161	-0.0225	0.4479	0.5569
12	-1.89	0.09	0.0516	9.9999	0.0338	9.9999	0.6550	-0.0308	-0.0153	-0.0181	0.4966	0.5877
13	-1.62	0.10	0.0490	9.9999	0.0315	9.9999	0.6625	-0.0213	-0.0124	-0.0148	0.5820	0.6968
14	-1.38	0.10	0.0369	9.9999	0.0284	9.9999	0.7698	-0.0238	-0.0138	-0.0169	0.5797	0.7101
15	-1.13	0.08	0.0287	9.9999	0.0277	9.9999	0.9652	-0.0104	-0.0090	-0.0108	0.8652	1.0385
16	-0.89	0.11	0.0220	9.9999	0.0234	9.9999	1.0636	-0.0023	-0.0066	-0.0077	2.7819	3.3478
17	-0.64	0.08	0.0112	9.9999	0.0226	9.9999	2.0179	0.0017	-0.0049	-0.0055	-2.8816	-3.2353
18	-0.40	0.09	0.0058	9.9999	0.0206	9.9999	3.5517	0.0067	-0.0020	-0.0020	-0.2984	-0.2985
19	-0.15	0.10	0.0035	9.9999	0.0175	9.9999	35.0000	0.0097	-0.0019	-0.0018	-0.1958	-0.1856
20	0.09	0.08	-0.0062	9.9999	0.0164	9.9999	-2.8452	0.0219	0.0019	0.0024	0.0867	0.1096
21	0.33	0.10	-0.0114	9.9999	0.0118	9.9999	-1.0351	0.0258	0.0033	0.0034	0.1279	0.1318
22	0.56	0.09	-0.0142	9.9999	0.0126	9.9999	-0.8873	0.0368	0.0063	0.0068	0.1711	0.1848
23	0.79	0.07	-0.0357	9.9999	0.0072	9.9999	-0.2017	0.0406	0.0083	0.0084	0.2044	0.2069
24	1.05	0.10	-0.0283	9.9999	0.0072	9.9999	-0.2491	0.0472	0.0109	0.0116	0.2309	0.2415
25	1.26	0.08	-0.0424	9.9999	0.0061	9.9999	-0.1439	0.0553	0.0133	0.0134	0.2404	0.2423
26	1.48	0.08	-0.0490	9.9999	0.0030	9.9999	-0.0612	0.0578	0.0147	0.0143	0.2543	0.2474
27	1.74	0.09	-0.0544	9.9999	0.0020	9.9999	-0.0368	0.0686	0.0182	0.0172	0.2652	0.2507
28	1.95	0.09	-0.0625	9.9999	-0.0002	9.9999	0.0032	0.0710	0.0197	0.0193	0.2774	0.2718
29	2.17	0.09	-0.0678	9.9999	-0.0027	9.9999	0.0398	0.0746	0.0222	0.0204	0.2975	0.2735
30	2.42	0.09	-0.0839	9.9999	-0.0061	9.9999	0.0727	0.0799	0.0242	0.0227	0.3028	0.2841
31	2.63	0.08	-0.0920	9.9999	-0.0069	9.9999	0.0967	0.0864	0.0270	0.0241	0.3124	0.2789
32	2.85	0.10	-0.0932	9.9999	-0.0116	9.9999	0.1245	0.0886	0.0292	0.0262	0.3295	0.2957
33	3.10	0.10	-0.1026	9.9999	-0.0134	9.9999	0.1355	0.0964	0.0326	0.0294	0.3381	0.3050
34	3.31	0.09	-0.1052	9.9999	-0.0157	9.9999	0.1492	0.0977	0.0333	0.0307	0.3407	0.3142
35	3.53	0.11	-0.1051	9.9999	-0.0189	9.9999	0.1798	0.1065	0.0361	0.0347	0.3577	0.3258
36	3.78	0.08	-0.1295	9.9999	-0.0243	9.9999	0.1921	0.1073	0.0362	0.0356	0.3539	0.3281
37	3.99	0.09	-0.1358	9.9999	-0.0298	9.9999	0.2194	0.1145	0.0409	0.0378	0.3571	0.3301
38	4.22	0.11	-0.1357	9.9999	-0.0319	9.9999	0.2351	0.1243	0.0431	0.0416	0.3466	0.3347
39	4.44	0.08	-0.1572	9.9999	-0.0373	9.9999	0.2373	0.1283	0.0444	0.0426	0.3460	0.3320
40	4.65	0.10	-0.1543	9.9999	-0.0402	9.9999	0.2605	0.1380	0.0469	0.0475	0.3398	0.3442
41	4.65	0.10	-0.1563	9.9999	-0.0411	9.9999	0.2596	0.1474	0.0502	0.0537	0.3405	0.3643
42	5.07	0.08	-0.1838	9.9999	-0.0499	9.9999	0.2688	0.1446	0.0496	0.0534	0.3429	0.3693
43	5.29	0.10	-0.1823	9.9999	-0.0509	9.9999	0.2742	0.1502	0.0508	0.0551	0.3381	0.3668
44	5.50	0.08	-0.1949	9.9999	-0.0559	9.9999	0.2818	0.1568	0.0534	0.0598	0.3405	0.3814
45	5.69	0.08	-0.2007	9.9999	-0.0576	9.9999	0.2870	0.1607	0.0544	0.0623	0.3384	0.3877
46	5.88	0.10	-0.2099	9.9999	-0.0631	9.9999	0.3006	0.1633	0.0556	0.0644	0.3404	0.3944

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 32 0.90 1.7 45.0 B1B0F11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
47	6.07	0.08	-0.2720	9.9999	-0.0656	9.9999	0.2955	0.1757	0.0587	0.0701	0.3340	0.3990
48	6.27	0.04	-0.2762	9.9999	-0.0656	9.9999	0.3095	0.1752	0.0593	0.0712	0.3384	0.4066
49	6.47	0.10	-0.2803	9.9999	-0.0738	9.9999	0.3071	0.1876	0.0628	0.0781	0.3336	0.4163
50	6.68	0.08	-0.2856	9.9999	-0.0753	9.9999	0.3066	0.1890	0.0631	0.0799	0.3338	0.4228
51	6.87	0.10	-0.2921	9.9999	-0.0821	9.9999	0.3257	0.1988	0.0637	0.0822	0.3373	0.4354
52	7.07	0.08	-0.2968	9.9999	-0.0859	9.9999	0.3220	0.1986	0.0663	0.0866	0.3341	0.4365
53	7.28	0.07	-0.2928	9.9999	-0.0919	9.9999	0.3250	0.1998	0.0666	0.0878	0.3332	0.4394
54	7.48	0.09	-0.2865	9.9999	-0.0980	9.9999	0.3421	0.2013	0.0667	0.0896	0.3313	0.4451
55	7.64	0.07	-0.2980	9.9999	-0.0966	9.9999	0.3354	0.2108	0.0696	0.0946	0.3301	0.4488
56	7.84	0.08	-0.2964	9.9999	-0.1042	9.9999	0.3492	0.2150	0.0705	0.0967	0.3278	0.4498
57	8.03	0.08	-0.3023	9.9999	-0.1072	9.9999	0.3546	0.2219	0.0721	0.1007	0.3248	0.4538
58	8.24	0.05	-0.3147	9.9999	-0.1133	9.9999	0.3544	0.2191	0.0716	0.0993	0.3267	0.4532
59	8.38	0.08	-0.3258	9.9999	-0.1214	9.9999	0.3692	0.2268	0.0725	0.1021	0.3224	0.4542
60	8.58	0.09	-0.3341	9.9999	-0.1229	9.9999	0.3679	0.2373	0.0754	0.1089	0.3177	0.4589
61	8.72	0.06	-0.3447	9.9999	-0.1274	9.9999	0.3696	0.2432	0.0757	0.1099	0.3112	0.4519
62	8.90	0.09	-0.3471	9.9999	-0.1344	9.9999	0.3872	0.2485	0.0778	0.1150	0.3130	0.4628
63	9.07	0.07	-0.3577	9.9999	-0.1395	9.9999	0.3900	0.2533	0.0771	0.1181	0.3043	0.4662
64	9.25	0.07	-0.3602	9.9999	-0.1429	9.9999	0.3967	0.2558	0.0787	0.1196	0.3076	0.4676
65	9.44	0.07	-0.3733	9.9999	-0.1523	9.9999	0.4080	0.2617	0.0790	0.1223	0.3018	0.4673
66	9.60	0.06	-0.3867	9.9999	-0.1571	9.9999	0.4063	0.2689	0.0800	0.1263	0.2974	0.4697
67	9.76	0.06	-0.3840	9.9999	-0.1568	9.9999	0.4083	0.2732	0.0807	0.1295	0.2953	0.4740
68	9.98	0.06	-0.4090	9.9999	-0.1709	9.9999	0.4178	0.2765	0.0749	0.1307	0.2889	0.4727
69	10.12	0.06	-0.4131	9.9999	-0.1707	9.9999	0.4132	0.2764	0.0801	0.1302	0.2897	0.4711
70	10.30	0.07	-0.4135	9.9999	-0.1729	9.9999	0.4184	0.2877	0.0823	0.1380	0.2860	0.4797
71	10.50	0.07	-0.4275	9.9999	-0.1814	9.9999	0.4243	0.2894	0.0819	0.1403	0.2829	0.4848
72	10.66	0.05	-0.4421	9.9999	-0.1867	9.9999	0.4223	0.2965	0.0831	0.1438	0.2802	0.4858
73	10.82	0.08	-0.4406	9.9999	-0.1908	9.9999	0.4330	0.3037	0.0841	0.1483	0.2768	0.4883
74	11.00	0.07	-0.4539	9.9999	-0.1956	9.9999	0.4309	0.3038	0.0839	0.1496	0.2761	0.4918
75	11.19	0.06	-0.4645	9.9999	-0.2001	9.9999	0.4308	0.3097	0.0843	0.1533	0.2721	0.4950
76	11.36	0.08	-0.4618	9.9999	-0.2036	9.9999	0.4411	0.3181	0.0863	0.1586	0.2712	0.4986
77	11.50	0.06	-0.4710	9.9999	-0.2069	9.9999	0.4393	0.3211	0.0862	0.1599	0.2684	0.4980
78	11.69	0.07	-0.4721	9.9999	-0.2118	9.9999	0.4486	0.3246	0.0889	0.1599	0.2738	0.4926
79	11.86	0.08	-0.4756	9.9999	-0.2179	9.9999	0.4579	0.3295	0.0877	0.1618	0.2661	0.4918
80	12.03	0.07	-0.4958	9.9999	-0.2252	9.9999	0.4562	0.3339	0.0881	0.1639	0.2638	0.4909
81	12.19	0.07	-0.5010	9.9999	-0.2309	9.9999	0.4609	0.3354	0.0882	0.1651	0.2629	0.4922
82	12.36	0.08	-0.5088	9.9999	-0.2368	9.9999	0.4656	0.3410	0.0896	0.1696	0.2621	0.4976
83	12.53	0.05	-0.5168	9.9999	-0.2406	9.9999	0.4656	0.3485	0.0896	0.1712	0.2570	0.4912
84	12.70	0.08	-0.5205	9.9999	-0.2467	9.9999	0.4740	0.3498	0.0901	0.1742	0.2575	0.4988
85	12.85	0.07	-0.5245	9.9999	-0.2486	9.9999	0.4740	0.3583	0.0917	0.1784	0.2559	0.4979
86	13.02	0.03	-0.5378	9.9999	-0.2549	9.9999	0.4760	0.3629	0.0916	0.1787	0.2518	0.4924
87	13.20	0.06	-0.5436	9.9999	-0.2630	9.9999	0.4838	0.3677	0.0923	0.1827	0.2510	0.4969
88	13.36	0.06	-0.5503	9.9999	-0.2636	9.9999	0.4790	0.3746	0.0939	0.1856	0.2506	0.4955
89	13.52	0.06	-0.5582	9.9999	-0.2669	9.9999	0.4817	0.3775	0.0945	0.1861	0.2503	0.4983
90	13.71	0.07	-0.5620	9.9999	-0.2748	9.9999	0.4875	0.3772	0.0912	0.1883	0.2417	0.4992
91	13.85	0.05	-0.5753	9.9999	-0.2793	9.9999	0.4855	0.3840	0.0933	0.1918	0.2429	0.4995
92	14.01	0.05	-0.5793	9.9999	-0.2822	9.9999	0.4871	0.3925	0.0947	0.1960	0.2412	0.4996

TEST	PART	MACH	RN10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	32	0.90	1.7	45.0	BLADE11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
93	14.20	0.07	-0.5945	9.9999	-0.2844	9.9999	0.4899	0.3943	0.0941	0.1946	0.2386	0.4986
94	14.34	0.03	-0.5966	9.9999	-0.2894	9.9999	0.4851	0.3959	0.0937	0.1983	0.2366	0.5009
95	14.52	0.07	-0.5963	9.9999	-0.2941	9.9999	0.4932	0.4018	0.0943	0.2016	0.2346	0.5017
96	14.69	0.05	-0.6043	9.9999	-0.2976	9.9999	0.4921	0.4039	0.0967	0.2032	0.2394	0.5031
97	14.84	0.06	-0.6123	9.9999	-0.3012	9.9999	0.4919	0.4109	0.0963	0.2062	0.2294	0.5018
98	15.03	0.04	-0.6122	9.9999	-0.3038	9.9999	0.4962	0.4113	0.0973	0.2083	0.2365	0.5064
99	15.20	0.04	-0.6295	9.9999	-0.3094	9.9999	0.4915	0.4184	0.0984	0.2112	0.2351	0.5048
100	15.36	0.02	-0.6361	9.9999	-0.3147	9.9999	0.4947	0.4196	0.0959	0.2137	0.2286	0.5095
101	15.53	0.06	-0.6492	9.9999	-0.3241	9.9999	0.4992	0.4219	0.0975	0.2163	0.2310	0.5127
102	15.69	0.05	-0.6546	9.9999	-0.3246	9.9999	0.4959	0.4289	0.0990	0.2198	0.2308	0.5125
103	15.88	0.05	-0.6571	9.9999	-0.3279	9.9999	0.4990	0.4212	0.0954	0.2183	0.2264	0.5183
104	16.04	0.06	-0.6598	9.9999	-0.3292	9.9999	0.4984	0.4269	0.0965	0.2228	0.2260	0.5219
105	16.20	0.04	-0.6755	9.9999	-0.3357	9.9999	0.4970	0.4307	0.0965	0.2256	0.2240	0.5238
106	16.36	0.06	-0.6766	9.9999	-0.3405	9.9999	0.5033	0.4332	0.0979	0.2259	0.2259	0.5215
107	16.54	0.04	-0.6847	9.9999	-0.3427	9.9999	0.5005	0.4394	0.0977	0.2319	0.2223	0.5278
108	16.68	0.05	-0.6886	9.9999	-0.3462	9.9999	0.5028	0.4383	0.0967	0.2317	0.2206	0.5286
109	16.85	0.07	-0.6900	9.9999	-0.3494	9.9999	0.5068	0.4619	0.1023	0.2442	0.2214	0.5287
110	17.02	0.04	-0.6944	9.9999	-0.3243	9.9999	0.5029	0.4672	0.1005	0.2494	0.2151	0.5338
111	17.18	0.05	-0.6749	9.9999	-0.3153	9.9999	0.5046	0.4719	0.1044	0.2547	0.2212	0.5397
112	17.33	0.06	-0.6621	9.9999	-0.3240	9.9999	0.5046	0.4713	0.1020	0.2546	0.2164	0.5398
113	17.51	0.05	-0.6502	9.9999	-0.3257	9.9999	0.5009	0.4692	0.0995	0.2534	0.2120	0.5401
114	17.66	0.05	-0.6421	9.9999	-0.3251	9.9999	0.5063	0.4726	0.0985	0.2558	0.2084	0.5413
115	17.84	0.03	-0.6635	9.9999	-0.3315	9.9999	0.4996	0.4640	0.0973	0.2528	0.2096	0.5448
116	17.99	0.05	-0.6647	9.9999	-0.3338	9.9999	0.5022	0.4696	0.0986	0.2578	0.2099	0.5490
117	18.15	0.07	-0.6646	9.9999	-0.3372	9.9999	0.5043	0.4771	0.1028	0.2628	0.2154	0.5508
118	18.32	0.05	-0.6750	9.9999	-0.3381	9.9999	0.5009	0.4752	0.0978	0.2618	0.2058	0.5509
119	18.50	0.05	-0.6830	9.9999	-0.3425	9.9999	0.5015	0.4840	0.0986	0.2659	0.2037	0.5494
120	18.66	0.06	-0.6776	9.9999	-0.3405	9.9999	0.5025	0.4921	0.1012	0.2713	0.2056	0.5513
121	18.80	0.04	-0.6844	9.9999	-0.3434	9.9999	0.4988	0.4940	0.1003	0.2713	0.2030	0.5492
122	18.97	0.06	-0.7002	9.9999	-0.3513	9.9999	0.5017	0.4857	0.0982	0.2705	0.2021	0.5569
123	19.13	0.07	-0.7029	9.9999	-0.3525	9.9999	0.5015	0.4944	0.0995	0.2746	0.2012	0.5554
124	19.29	0.05	-0.7096	9.9999	-0.3546	9.9999	0.4997	0.5043	0.1013	0.2795	0.2008	0.5562
125	19.44	0.07	-0.7174	9.9999	-0.3621	9.9999	0.5047	0.4902	0.0986	0.2748	0.2011	0.5606
126	19.60	0.06	-0.7242	9.9999	-0.3632	9.9999	0.5015	0.5001	0.1004	0.2795	0.2007	0.5569
127	19.75	0.06	-0.7262	9.9999	-0.3651	9.9999	0.5014	0.5075	0.1009	0.2830	0.1988	0.5576
128	19.91	0.06	-0.7360	9.9999	-0.3710	9.9999	0.5041	0.5036	0.0995	0.2832	0.1975	0.5624
129	20.05	0.05	-0.7467	9.9999	-0.3750	9.9999	0.5022	0.5094	0.1002	0.2865	0.1966	0.5624
130	20.20	0.07	-0.7587	9.9999	-0.3806	9.9999	0.5019	0.4951	0.0979	0.2824	0.1977	0.5704
131	20.36	0.06	-0.7626	9.9999	-0.3853	9.9999	0.5052	0.4981	0.0981	0.2832	0.1969	0.5686
132	20.51	0.05	-0.7760	9.9999	-0.3895	9.9999	0.5019	0.4982	0.0978	0.2859	0.1963	0.5729
133	20.65	0.07	-0.7758	9.9999	-0.3927	9.9999	0.5062	0.5137	0.1011	0.2919	0.1968	0.5682
134	20.81	0.05	-0.7878	9.9999	-0.3979	9.9999	0.5051	0.5155	0.1003	0.2942	0.1945	0.5707
135	20.96	0.04	-0.7932	9.9999	-0.3994	9.9999	0.5035	0.4997	0.0960	0.2878	0.1961	0.5759
136	21.11	0.06	-0.7984	9.9999	-0.4051	9.9999	0.5074	0.5138	0.1008	0.2953	0.1961	0.5747
137	21.29	0.05	-0.8116	9.9999	-0.4119	9.9999	0.5075	0.4910	0.0971	0.2848	0.1977	0.5800
138	21.44	0.05	-0.8157	9.9999	-0.4123	9.9999	0.5055	0.5013	0.0980	0.2912	0.1954	0.5809

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 32 MACH 1.47 RE10-6 .45.0 CONF B1#OF11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CH3	ACPF3	YCPF3	CNF4	CH4	CB4	XCPF4	YCPF4
139	21.56	0.06	-0.8208	9.9999	-0.4190	9.9999	0.5105	0.4871	0.0953	0.2848	0.1956	0.5847
140	21.73	0.05	-0.8316	9.9999	-0.4220	9.9999	0.5075	0.5072	0.0985	0.2934	0.1982	0.5785
141	21.90	0.06	-0.8395	9.9999	-0.4274	9.9999	0.5091	0.4698	0.0936	0.2777	0.1993	0.5914
142	22.05	0.06	-0.8460	9.9999	-0.4332	9.9999	0.5121	0.4816	0.0939	0.2826	0.1969	0.5868
143	22.19	0.05	-0.8567	9.9999	-0.4361	9.9999	0.5090	0.4540	0.0909	0.2718	0.2002	0.5987
144	22.36	0.07	-0.8560	9.9999	-0.4393	9.9999	0.5128	0.4697	0.0902	0.2708	0.2005	0.6022
145	22.50	0.08	-0.8579	9.9999	-0.4405	9.9999	0.5135	0.4727	0.0934	0.2796	0.1975	0.5915
146	22.64	0.07	-0.8734	9.9999	-0.4465	9.9999	0.5109	0.4671	0.0924	0.2780	0.1978	0.5952
147	22.80	0.08	-0.8791	9.9999	-0.4522	9.9999	0.5144	0.4683	0.0932	0.2782	0.1990	0.5941
148	22.93	0.08	-0.8898	9.9999	-0.4557	9.9999	0.5121	0.4483	0.0900	0.2696	0.2007	0.6014
149	23.06	0.07	-0.8977	9.9999	-0.4606	9.9999	0.5131	0.4570	0.0910	0.2748	0.1991	0.6013
150	23.22	0.08	-0.9136	9.9999	-0.4648	9.9999	0.5153	0.4628	0.0918	0.2758	0.1983	0.6046
151	23.36	0.07	-0.9190	9.9999	-0.4723	9.9999	0.5139	0.4714	0.0932	0.2823	0.1977	0.5989
152	23.52	0.06	-0.9369	9.9999	-0.4756	9.9999	0.5128	0.4687	0.0956	0.2923	0.1956	0.5981
153	23.65	0.08	-0.9319	9.9999	-0.4811	9.9999	0.5163	0.5039	0.0971	0.2976	0.1926	0.5906
154	23.93	0.07	-0.9465	9.9999	-0.5045	9.9999	0.5114	0.5007	0.0977	0.2980	0.1951	0.5952
155	25.53	0.08	-1.0703	9.9999	-0.5417	9.9999	0.5061	0.5547	0.1066	0.3171	0.1921	0.5717
156	27.29	0.11	-1.0904	9.9999	-0.5381	9.9999	0.4933	0.6839	0.1176	0.3782	0.1719	0.5538
157	29.35	0.12	-1.0850	9.9999	-0.5145	9.9999	0.4745	0.7656	0.1021	0.4088	0.1333	0.5340
158	31.89	0.14	-1.1168	9.9999	-0.5151	9.9999	0.4621	0.7161	0.0815	0.3968	0.0858	0.5513
159	35.20	0.13	-1.1973	9.9999	-0.5480	9.9999	0.4577	0.7682	0.1105	0.4626	0.1438	0.6022
160	39.82	0.04	-1.2002	9.9999	-0.5445	9.9999	0.4537	0.5768	0.1221	0.3946	0.2116	0.6841
161	45.97	0.04	-1.2018	9.9999	-0.5474	9.9999	0.4555	0.2377	0.0833	0.2245	0.3503	0.9445
162	53.78	-0.04	-1.3681	9.9999	-0.6175	9.9999	0.4514	-0.0873	0.0018	0.0220	-0.0206	-0.2520
163	58.65	-0.02	-1.4747	9.9999	-0.6652	9.9999	0.4511	-0.1201	-0.0084	-0.0018	0.0699	0.0150

PAGE 1 OF 3
SHEET 1 OF 2

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	33	1.06	1.7	0.0	MINUF11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.30	0.03	-0.7329	1.6125	0.1141	-0.0241	-0.0233	0.3078	0.0906	0.2171	-2.2003
2	-5.30	0.01	-0.6396	1.5107	0.0441	-0.1162	-0.0058	0.3162	0.0893	0.2268	-2.3611
3	-5.30	0.01	-0.7440	1.6202	0.0215	0.0325	-0.0234	0.3133	0.0911	0.2221	-2.1777
4	-5.28	0.03	-0.6611	1.5543	0.1003	-0.0518	-0.0061	0.3101	0.0882	0.2218	-2.3518
5	-5.18	-0.00	-0.6671	1.4781	-0.0038	0.0057	-0.0118	0.3136	0.0897	0.2238	-2.2155
6	-4.82	0.02	-0.6359	1.4401	0.0873	-0.0796	-0.0228	0.3096	0.0887	0.2208	-2.2016
7	-4.46	0.04	-0.5700	1.2510	0.0787	-0.0019	-0.0005	0.3271	0.0876	0.2394	-2.1948
8	-4.33	-0.02	-0.5146	1.1080	-0.2057	0.2252	-0.0120	0.3118	0.0887	0.2238	-2.2699
9	-4.02	0.02	-0.5328	1.1063	-0.0588	0.0973	-0.0114	0.3169	0.0891	0.2277	-2.0397
10	-3.75	0.02	-0.3956	0.9098	0.0421	-0.0179	0.0001	0.3235	0.0912	0.2322	-2.2998
11	-3.52	0.00	-0.4527	0.9875	-0.0006	0.0729	-0.0228	0.3230	0.0907	0.2322	-2.1378
12	-3.22	0.01	-0.3900	0.7955	-0.0060	-0.0221	-0.0112	0.3261	0.0888	0.2372	-2.0398
13	-2.96	-0.00	-0.2647	0.6427	-0.0161	0.0068	-0.0053	0.3203	0.0921	0.2281	-2.4276
14	-2.70	-0.00	-0.3361	0.6855	-0.0275	0.0064	-0.0223	0.3239	0.0931	0.2307	-2.0198
15	-2.42	0.01	-0.2593	0.5288	0.0768	-0.0691	0.0005	0.3346	0.0954	0.2391	-2.0389
16	-2.17	-0.02	-0.2489	0.4938	-0.0857	0.0426	-0.0054	0.3416	0.0961	0.2455	-1.9828
17	-1.91	0.01	-0.1948	0.3968	-0.0040	0.0152	-0.0107	0.3438	0.0983	0.2455	-2.0369
18	-1.65	0.00	-0.1091	0.2708	-0.0597	0.0870	-0.0061	0.3395	0.0975	0.2420	-2.5998
19	-1.41	-0.01	-0.1412	0.2873	-0.0818	0.1046	-0.0220	0.3410	0.0982	0.2428	-2.0358
20	-1.15	0.02	-0.1084	0.2064	0.0511	-0.0564	-0.0103	0.3495	0.1009	0.2486	-1.8977
21	-0.91	0.00	0.0055	0.0754	0.0089	0.0427	0.0009	0.3585	0.1045	0.2540	13.7891
22	-0.69	0.01	-0.0767	0.1408	0.0538	-0.0089	-0.0216	0.3544	0.1059	0.2485	-1.8342
23	-0.42	0.02	0.0125	0.0024	0.0834	-0.1065	-0.0043	0.3554	0.1052	0.2502	0.1928
24	-0.19	-0.03	0.0229	-0.0465	-0.2333	0.1516	-0.0105	0.3592	0.1081	0.2511	-2.0288
25	0.04	0.03	0.0001	-0.0017	0.1989	-0.1755	-0.0098	0.3669	0.1105	0.2564	-17.4008
26	0.29	0.01	0.0555	-0.1283	-0.0176	-0.0023	0.0012	0.3788	0.1117	0.2671	-2.3099
27	0.53	0.00	0.1251	-0.1827	0.0789	0.0267	-0.0100	0.3563	0.1137	0.2446	-1.4608
28	0.75	0.02	0.1227	-0.2214	0.0597	-0.1031	-0.0151	0.3711	0.1174	0.2537	-1.8048
29	1.00	0.01	0.1797	-0.3224	0.0419	0.0010	0.0015	0.3812	0.1154	0.2658	-1.7942
30	1.21	-0.02	0.1435	-0.2925	-0.1025	0.1669	-0.0212	0.3788	0.1152	0.2636	-2.0388
31	1.47	0.03	0.2224	-0.4379	0.1312	-0.1025	-0.0093	0.3811	0.1163	0.2648	-1.9698
32	1.68	-0.01	0.3012	-0.5537	-0.1604	0.1611	-0.0097	0.3706	0.1175	0.2531	-1.8385
33	1.90	0.01	0.2780	-0.5364	0.2034	-0.0708	-0.0206	0.3618	0.1190	0.2428	-1.9293
34	2.15	0.02	0.3457	-0.6448	0.1659	-0.1060	0.0320	0.3758	0.1196	0.2562	-1.8654
35	2.35	-0.01	0.3661	-0.7006	-0.0258	0.0544	-0.0093	0.3885	0.1196	0.2689	-1.9143
36	2.60	-0.01	0.3421	-0.6952	-0.0603	0.0571	-0.0149	0.3829	0.1221	0.2608	-2.0323
37	2.84	-0.01	0.4779	-0.9127	-0.0958	0.0608	0.0021	0.3860	0.1210	0.2650	-1.9095
38	3.04	0.01	0.4763	-0.9141	0.1658	0.0540	-0.0095	0.3761	0.1239	0.2524	-1.9118
39	3.28	0.01	0.4865	-0.9283	0.1226	-0.0356	-0.0090	0.3864	0.1235	0.2629	-2.0316
40	3.50	-0.03	0.5997	-1.1586	-0.1734	-0.0411	-0.0043	0.3733	0.1219	0.2514	-1.9319
41	3.71	-0.01	0.5408	-1.0984	-0.0048	0.2327	-0.0208	0.3805	0.1256	0.2549	-2.0319
42	3.96	-0.01	0.5455	-1.1234	-0.1215	0.0265	-0.0088	0.3908	0.1278	0.2630	-2.0548
43	4.17	-0.02	0.6391	-1.3121	-0.0947	0.0691	-0.0089	0.3860	0.1270	0.2590	-2.0529
44	4.38	0.00	0.6371	-1.3511	0.1066	-0.0821	-0.0196	0.3891	0.1303	0.2588	-2.1216
45	4.61	0.00	0.7497	-1.5369	0.0215	0.0785	-0.0032	0.3883	0.1309	0.2574	-2.0501
46	4.80	-0.01	0.7028	-1.4850	-0.0070	-0.0324	-0.0195	0.3938	0.1306	0.2632	-2.1131

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 2

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	33	1.00	1.7	0.0	B1=0F11	0.0	0.	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	5.02	0.01	0.7002	-1.5799	0.0534	-0.0012	-0.0142	0.3982	0.1334	0.2648	-2.2565
48	5.22	-0.00	0.8020	-1.7152	0.0623	-0.0506	-0.0028	0.3892	0.1320	0.2577	-2.1386
49	5.41	-0.01	0.7664	-1.6669	0.0686	0.0639	-0.0199	0.3978	0.1356	0.2622	-2.2000
50	5.63	-0.01	0.8327	-1.8208	-0.0430	0.0414	-0.0084	0.4100	0.1377	0.2723	-2.1865
51	5.83	-0.01	0.9580	-2.0135	-0.0213	0.1378	-0.0085	0.3968	0.1399	0.2569	-2.1062
52	6.01	-0.02	0.8937	-1.9808	0.0210	0.0488	-0.0195	0.3983	0.1428	0.2555	-2.2073
53	6.23	-0.00	0.9522	-2.1063	0.0624	-0.0600	-0.0079	0.4060	0.1450	0.2610	-2.2120
54	6.42	-0.01	1.0190	-2.2620	0.0968	0.1558	-0.0196	0.4096	0.1460	0.2636	-2.2081
55	6.60	-0.01	1.0056	-2.2434	-0.0134	0.0611	-0.0192	0.4030	0.1482	0.2548	-2.2313
56	6.82	0.00	1.0952	-2.3468	0.1066	-0.1116	-0.0020	0.4121	0.1493	0.2628	-2.1885
57	7.01	-0.01	1.1270	-2.4754	0.0460	0.0059	-0.0189	0.4021	0.1522	0.2499	-2.1970
58	7.20	-0.01	1.1545	-2.5568	-0.0264	0.0805	-0.0079	0.4049	0.1550	0.2499	-2.2047
59	7.40	0.00	1.2487	-2.7231	0.1764	-0.1284	-0.0018	0.4100	0.1568	0.2532	-2.1808
60	7.58	-0.02	1.2457	-2.7749	-0.0107	0.1172	-0.0190	0.4059	0.1590	0.2469	-2.2272
61	7.76	-0.00	1.2336	-2.7784	0.0525	-0.0218	-0.0076	0.4070	0.1590	0.2480	-2.2526
62	7.96	-0.03	1.2937	-2.9398	-0.0079	0.1507	-0.0135	0.4077	0.1611	0.2466	-2.2634
63	8.13	-0.02	1.3435	-3.0455	-0.0419	-0.0212	-0.0185	0.4079	0.1623	0.2456	-2.2664
64	8.33	-0.01	1.4000	-3.1315	0.0868	-0.0623	-0.0016	0.4105	0.1627	0.2478	-2.2368
65	8.48	-0.04	1.4530	-3.2818	-0.0615	0.1036	-0.0186	0.4038	0.1645	0.2385	-2.2587
66	8.65	-0.02	1.4524	-3.2947	-0.0258	0.0514	-0.0186	0.4087	0.1663	0.2424	-2.2691
67	8.83	-0.02	1.5189	-3.4305	0.0002	0.1060	-0.0075	0.4117	0.1664	0.2453	-2.2586
68	9.01	-0.03	1.4933	-3.4018	-0.0505	0.0536	-0.0292	0.3989	0.1674	0.2315	-2.2934
69	9.20	-0.04	1.5959	-3.5861	-0.1570	0.0276	-0.0072	0.4008	0.1689	0.2319	-2.2470
70	9.39	-0.04	1.6038	-3.6604	0.0546	0.0152	-0.0182	0.4097	0.1692	0.2405	-2.2826
71	9.53	-0.03	1.6039	-3.7193	-0.0321	0.1652	-0.0197	0.4046	0.1698	0.2348	-2.3188
72	9.71	-0.01	1.6813	-3.8787	0.1426	-0.1077	-0.0867	0.4059	0.1719	0.2340	-2.3055
73	9.88	-0.05	1.7486	-3.9413	-0.1365	0.1745	-0.0183	0.3999	0.1741	0.2258	-2.2540
74	10.08	-0.04	1.7247	-3.9982	-0.1147	0.1539	-0.0184	0.4040	0.1750	0.2290	-2.3159
75	10.25	-0.02	1.8142	-4.1475	0.0419	-0.0225	-0.0066	0.4126	0.1768	0.2358	-2.2861
76	10.42	-0.03	1.8015	-4.1367	0.0764	-0.0255	-0.0234	0.4016	0.1790	0.2226	-2.2962
77	10.59	-0.02	1.8440	-4.2602	-0.0130	0.0760	-0.0180	0.4175	0.1800	0.2375	-2.3212
78	10.78	-0.00	1.9471	-4.4321	0.2667	-0.0140	-0.0078	0.4098	0.1846	0.2256	-2.2763
79	10.95	-0.03	1.8691	-4.3773	0.1335	-0.0543	-0.0289	0.4076	0.1847	0.2229	-2.3495
80	11.13	-0.01	1.9870	-4.5716	0.1251	-0.0078	-0.0178	0.4093	0.1876	0.2217	-2.3006
81	11.26	-0.03	1.9507	-4.5557	0.0849	-0.0639	-0.0174	0.4201	0.1865	0.2336	-2.3354
82	11.44	-0.02	1.9721	-4.6138	0.1118	-0.0196	-0.0232	0.4121	0.1912	0.2209	-2.3395

TEST 1 PART 33 MACH 1.00 RX10-6 1.7 PHI 0.0 CONF M1=0F11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-5.30	0.03	0.3096	0.0026	0.0085	0.2708	0.8854	-0.2402	-0.0562	-0.1233	0.2339	0.5133
2	-5.30	0.01	0.0141	0.0033	0.0105	0.2340	0.7447	-0.2412	-0.0566	-0.1233	0.2346	0.5112
3	-5.30	0.01	0.0086	0.0023	0.0073	0.2674	0.8486	-0.2412	-0.0564	-0.1243	0.2338	0.5153
4	-5.28	0.03	0.0093	0.0016	0.0068	5.3319	22.6667	-0.2475	-0.0577	-0.1275	0.2331	0.5152
5	-5.18	-0.00	0.0153	0.0041	0.0107	0.2679	0.6993	-0.2296	-0.0548	-0.1184	0.2386	0.5166
6	-4.82	0.02	0.0139	0.0042	0.0122	0.3021	0.8777	-0.2107	-0.0514	-0.1086	0.2439	0.5154
7	-4.46	0.04	0.0050	0.0023	0.0069	0.4599	1.3800	-0.1992	-0.0488	-0.1039	0.2449	0.5216
8	-4.33	-0.02	0.0018	0.0017	0.0045	0.4662	2.5000	-0.1877	-0.0470	-0.0992	0.2503	0.5285
9	-4.02	0.02	0.0029	0.0019	0.0051	0.6550	1.7586	-0.1711	-0.0437	-0.0903	0.2524	0.5278
10	-3.75	0.02	0.0083	0.0035	0.0089	0.4216	1.0723	-0.1533	-0.0396	-0.0819	0.2582	0.5302
11	-3.52	0.00	0.0132	0.0042	0.0080	0.3181	0.6061	-0.1466	-0.0376	-0.0785	0.2564	0.5355
12	-3.22	0.01	0.0073	0.0031	0.0072	0.4245	0.9863	-0.1262	-0.0334	-0.0693	0.2646	0.5491
13	-2.96	-0.00	0.0110	0.0033	0.0066	0.2999	0.6000	-0.1097	-0.0295	-0.0610	0.2688	0.5561
14	-2.70	-0.00	0.0111	0.0030	0.0061	0.2702	0.5495	-0.1022	-0.0275	-0.0561	0.2698	0.5589
15	-2.42	0.01	0.0143	0.0042	0.0081	0.2936	0.5664	-0.0883	-0.0236	-0.0501	0.2672	0.5674
16	-2.17	-0.02	0.0100	0.0028	0.0049	0.2739	0.4900	-0.0780	-0.0212	-0.0459	0.2717	0.5885
17	-1.91	0.01	0.0122	0.0035	0.0063	0.2950	0.5164	-0.0578	-0.0157	-0.0357	0.2716	0.6176
18	-1.65	0.00	0.0098	0.0033	0.0048	0.3749	0.5455	-0.0553	-0.0149	-0.0344	0.2694	0.6221
19	-1.41	-0.01	0.0148	0.0036	0.0045	0.2432	0.3041	-0.0348	-0.0127	-0.0237	0.3648	0.6818
20	-1.15	0.02	0.0135	0.0034	0.0053	0.2518	0.3926	-0.0219	-0.0110	-0.0179	0.5021	0.8174
21	-0.91	0.00	0.0102	0.0029	0.0029	0.2642	0.2843	-0.0129	-0.0096	-0.0165	0.7285	1.2791
22	-0.69	0.01	0.0169	0.0033	0.0040	0.2216	0.2685	-0.0015	-0.0066	-0.0097	4.3968	6.4667
23	-0.42	0.02	0.0101	0.0029	0.0039	0.2871	0.3861	0.0096	-0.0021	-0.0029	-0.2187	-0.3021
24	-0.19	-0.01	0.0103	0.0034	0.0020	0.3300	0.1942	0.0183	0.0011	0.0016	0.0601	0.0874
25	0.04	0.03	0.0238	0.0061	0.0077	0.2562	0.3235	0.0235	0.0021	0.0021	0.0893	0.0894
26	0.29	0.01	0.0091	0.0038	0.0023	0.3735	0.2527	0.0323	0.0046	0.0055	0.1424	0.1703
27	0.53	0.00	0.0159	0.0042	0.0042	0.2641	0.2642	0.0437	0.0064	0.0117	0.1464	0.2677
28	0.75	0.02	0.0159	0.0043	0.0042	0.2704	0.2642	0.0522	0.0087	0.0203	0.1666	0.3889
29	1.00	0.01	0.0080	0.0026	0.0016	0.3749	0.2000	0.0598	0.0107	0.0246	0.1789	0.4114
30	1.21	-0.02	0.0208	0.0056	0.0054	0.3234	0.2647	0.0684	0.0132	0.0295	0.1929	0.4313
31	1.47	0.03	0.0146	0.0049	0.0046	0.3355	0.3151	0.0872	0.0169	0.0421	0.1938	0.4628
32	1.68	-0.01	0.0050	0.0034	0.0012	0.4269	0.1500	0.0973	0.0185	0.0456	0.1901	0.4687
33	1.90	0.01	0.0191	0.0056	0.0061	0.2931	0.3194	0.1046	0.0206	0.0489	0.1965	0.4666
34	2.15	0.02	0.0191	0.0065	0.0057	0.3402	0.2984	0.1121	0.0236	0.0537	0.2105	0.4798
35	2.35	-0.01	0.0146	0.0050	0.0046	0.3624	0.3151	0.1246	0.0268	0.0606	0.2150	0.4864
36	2.60	-0.01	0.0081	0.0026	0.0006	0.3209	0.0741	0.1297	0.0277	0.0615	0.2135	0.4742
37	2.84	-0.01	0.0125	0.0041	0.0023	0.3279	0.1640	0.1421	0.0317	0.0700	0.2230	0.4926
38	3.04	0.01	0.0172	0.0040	0.0027	0.2325	0.1570	0.1495	0.0339	0.0743	0.2267	0.4970
39	3.28	0.01	0.0149	0.0038	0.0025	0.2550	0.1678	0.1660	0.0373	0.0805	0.2246	0.4849
40	3.50	-0.03	0.0128	0.0022	0.0006	0.1718	0.0469	0.1821	0.0410	0.0896	0.2251	0.4920
41	3.71	-0.01	0.0207	0.0049	0.0027	0.2367	0.1304	0.1896	0.0429	0.0929	0.2262	0.4980
42	3.96	-0.01	0.0127	0.0029	0.0011	0.2293	0.0866	0.1984	0.0450	0.0963	0.2268	0.4854
43	4.17	-0.02	0.0152	0.0023	0.0003	0.1513	0.0197	0.2123	0.0477	0.1032	0.2246	0.4861
44	4.36	0.00	0.0230	0.0044	0.0034	0.1913	0.1478	0.2247	0.0509	0.1111	0.2265	0.4944
45	4.61	0.00	0.0130	0.0019	-0.0005	0.1384	-0.0385	0.2335	0.0524	0.1160	0.2244	0.4968
46	4.80	-0.01	0.0177	0.0017	0.0	0.0960	0.0	0.2398	0.0526	0.1156	0.2240	0.4923

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 2

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	33	1.00	1.7	0.0	BISOP11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	5.92	0.01	0.0220	0.0044	0.0023	0.1999	0.1045	0.2549	0.0571	0.1263	0.2239	0.4955
48	5.22	-0.00	0.0164	0.0019	0.0008	0.1158	0.0246	0.2703	0.0586	0.1302	0.2167	0.4817
49	5.41	-0.01	0.0253	0.0037	0.0019	0.1488	0.0773	0.2740	0.0600	0.1331	0.2189	0.4858
50	5.63	-0.01	0.0165	0.0015	-0.0001	0.0909	-0.0061	0.2876	0.0629	0.1442	0.2186	0.5014
51	5.83	-0.01	0.0143	0.0002	-0.0005	0.0140	-0.0350	0.3017	0.0646	0.1480	0.2141	0.4906
52	6.01	-0.02	0.0233	0.0028	0.0022	0.1030	0.0944	0.3079	0.0662	0.1533	0.2149	0.4979
53	6.23	-0.00	0.0168	0.0012	0.0011	0.0638	0.0585	0.3205	0.0682	0.1596	0.2127	0.4988
54	6.42	-0.01	0.0155	0.0	-0.0009	0.0	-0.0581	0.3381	0.0711	0.1714	0.2102	0.5078
55	6.60	-0.01	0.0155	-0.0004	-0.0009	-0.0256	-0.0577	0.3381	0.0711	0.1704	0.2102	0.5048
56	6.82	0.00	0.0154	-0.0004	0.0001	-0.0260	0.0065	0.3508	0.0727	0.1762	0.2072	0.5023
57	7.01	-0.01	0.0180	-0.0004	-0.0007	-0.0500	-0.0389	0.3660	0.0747	0.1837	0.2040	0.5019
58	7.20	-0.01	0.0141	-0.0022	-0.0032	-0.2149	-0.3200	0.3784	0.0757	0.1856	0.1997	0.4928
59	7.40	0.00	0.0167	-0.0017	0.0006	-0.1018	0.0359	0.4006	0.0781	0.1950	0.1949	0.4868
60	7.58	-0.02	0.0140	-0.0013	0.0000	-0.0638	0.0211	0.4170	0.0803	0.2042	0.1925	0.4897
61	7.78	-0.00	0.0134	-0.0022	-0.0013	-0.1641	-0.0970	0.4121	0.0793	0.1996	0.1924	0.4843
62	7.94	-0.03	0.0145	-0.0028	-0.0005	-0.1931	-0.0552	0.4349	0.0819	0.2115	0.1883	0.4863
63	8.13	-0.02	0.0169	-0.0031	-0.0005	-0.1834	-0.0296	0.4571	0.0841	0.2229	0.1839	0.4876
64	8.33	-0.01	0.0136	-0.0033	-0.0009	-0.2462	-0.0672	0.4532	0.0840	0.2231	0.1853	0.4923
65	8.48	-0.04	0.0157	-0.0023	-0.0011	-0.1485	-0.0701	0.4851	0.0866	0.2372	0.1785	0.4890
66	8.65	-0.02	0.0055	-0.0023	-0.0007	-0.4181	-0.8565	0.4864	0.0864	0.2384	0.1776	0.4981
67	8.83	-0.02	0.0090	-0.0023	-0.0043	-0.2555	-0.4778	0.4966	0.0876	0.2434	0.1764	0.4981
68	9.01	-0.03	0.0101	-0.0028	-0.0043	-0.2772	-0.3267	0.5093	0.0887	0.2497	0.1741	0.4983
69	9.20	-0.04	0.0031	-0.0022	-0.0050	-0.7095	-1.6129	0.5144	0.0891	0.2537	0.1732	0.4932
70	9.39	-0.03	0.0043	-0.0020	-0.0048	-0.6650	-1.1163	0.5234	0.0900	0.2566	0.1719	0.4903
71	9.53	-0.03	0.0076	-0.0015	-0.0029	-0.2366	-0.3816	0.5496	0.0916	0.2700	0.1666	0.4913
72	9.71	-0.01	0.0052	-0.0023	-0.0022	-0.4422	-0.4231	0.5586	0.0923	0.2739	0.1652	0.4983
73	9.88	-0.05	0.0063	-0.0020	-0.0021	-0.3174	-0.3333	0.5713	0.0932	0.2817	0.1631	0.4931
74	10.08	-0.04	0.0007	-0.0018	-0.0047	-2.5707	-6.7143	0.5796	0.0936	0.2852	0.1614	0.4921
75	10.25	-0.02	0.0017	-0.0027	-0.0026	-1.5878	-1.5294	0.5925	0.0945	0.2910	0.1595	0.4911
76	10.42	-0.03	0.0007	-0.0023	-0.0047	-3.2848	-6.7143	0.5950	0.0946	0.2938	0.1589	0.4938
77	10.59	-0.02	-0.0017	-0.0031	-0.0040	1.8230	2.3529	0.6207	0.0964	0.3033	0.1553	0.4886
78	10.78	-0.00	0.0061	-0.0020	-0.0001	-0.3278	-0.0164	0.6283	0.0972	0.3076	0.1547	0.4896
79	10.95	-0.03	0.0046	-0.0023	-0.0009	-0.2674	-0.1047	0.6411	0.0982	0.3133	0.1531	0.4887
80	11.13	-0.01	-0.0029	-0.0038	-0.0037	1.3100	1.2759	0.6593	0.0983	0.3200	0.1491	0.4856
81	11.28	-0.03	0.0017	-0.0034	-0.0027	-1.4945	-1.5882	0.6592	0.0987	0.3206	0.1497	0.4863
82	11.44	-0.02	0.0052	-0.0028	-0.0017	-0.6949	-0.3269	0.6811	0.0996	0.3302	0.1459	0.4868

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 33 MACH 1.60 RX10-6 1.7 PHI 0.0 CONF 81=OF11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
1	-5.30	0.03	-0.0182	9.9999	0.0228	9.9999	-1.2527	-0.2765	-0.0547	-0.1405	0.1978	0.5081
2	-5.30	0.01	-0.0156	9.9999	0.0232	9.9999	-1.5127	-0.2745	-0.0552	-0.1403	0.2010	0.5111
3	-5.30	0.01	-0.0194	9.9999	0.0227	9.9999	-1.1701	-0.2721	-0.0545	-0.1345	0.2002	0.5090
4	-5.28	0.03	-0.0157	9.9999	0.0225	9.9999	-1.4331	-0.2747	-0.0546	-0.1387	0.1987	0.5049
5	-5.18	-0.00	-0.0170	9.9999	0.0238	9.9999	-1.4000	-0.2671	-0.0531	-0.1340	0.1987	0.5017
6	-4.82	0.02	-0.0146	9.9999	0.0243	9.9999	-1.6438	-0.2520	-0.0505	-0.1246	0.2003	0.4944
7	-4.46	0.04	-0.0193	9.9999	0.0217	9.9999	-1.1244	-0.2379	-0.0460	-0.1162	0.2017	0.4884
8	-4.33	-0.02	-0.0230	9.9999	0.0212	9.9999	-0.9522	-0.2163	-0.0439	-0.1036	0.2029	0.4790
9	-4.07	0.02	-0.0217	9.9999	0.0201	9.9999	-0.9263	-0.2008	-0.0417	-0.0992	0.2076	0.4940
10	-3.75	0.02	-0.0142	9.9999	0.0232	9.9999	-1.2747	-0.1868	-0.0392	-0.0923	0.2098	0.4961
11	-3.52	0.00	-0.0144	9.9999	0.0231	9.9999	-1.1907	-0.1763	-0.0370	-0.0886	0.2098	0.5026
12	-3.22	0.01	-0.0143	9.9999	0.0207	9.9999	-1.0725	-0.1562	-0.0326	-0.0771	0.2087	0.4936
13	-2.96	-0.00	-0.0217	9.9999	0.0215	9.9999	-0.9908	-0.1372	-0.0290	-0.0697	0.2113	0.5080
14	-2.70	-0.00	-0.0193	9.9999	0.0226	9.9999	-1.1710	-0.1245	-0.0268	-0.0665	0.2152	0.5341
15	-2.42	0.01	-0.0161	9.9999	0.0222	9.9999	-1.2265	-0.1167	-0.0258	-0.0598	0.2210	0.5124
16	-2.17	-0.02	-0.0266	9.9999	0.0216	9.9999	-0.8120	-0.0920	-0.0226	-0.0511	0.2456	0.5556
17	-1.91	0.01	-0.0230	9.9999	0.0228	9.9999	-0.9913	-0.0726	-0.0202	-0.0438	0.2782	0.6033
18	-1.65	0.00	-0.0256	9.9999	0.0221	9.9999	-0.8701	-0.0637	-0.0186	-0.0385	0.2919	0.6046
19	-1.41	-0.01	-0.0278	9.9999	0.0215	9.9999	-0.7734	-0.0524	-0.0163	-0.0339	0.3110	0.6469
20	-1.15	0.02	-0.0229	9.9999	0.0218	9.9999	-0.9520	-0.0425	-0.0136	-0.0297	0.3199	0.6988
21	-0.91	0.00	-0.0266	9.9999	0.0224	9.9999	-0.8421	-0.0303	-0.0101	-0.0239	0.3332	0.7888
22	-0.69	0.01	-0.0253	9.9999	0.0225	9.9999	-0.8893	-0.0214	-0.0080	-0.0201	0.3703	0.9306
23	-0.42	0.02	-0.0205	9.9999	0.0234	9.9999	-1.1415	-0.0029	-0.0037	-0.0122	1.2755	4.2069
24	-0.19	-0.03	-0.0316	9.9999	0.0216	9.9999	-0.6879	0.0031	-0.0017	-0.0085	-0.5482	-2.7419
25	0.04	0.03	-0.0146	9.9999	0.0257	9.9999	-1.7603	0.0080	-0.0002	-0.0054	-0.0250	-0.6750
26	0.29	0.01	-0.0241	9.9999	0.0221	9.9999	-0.9170	0.0216	0.0030	-0.0016	0.1389	-0.0741
27	0.53	0.00	-0.0230	9.9999	0.0246	9.9999	-1.0646	0.0313	0.0057	0.0030	0.1821	0.0950
28	0.75	0.02	-0.0145	9.9999	0.0257	9.9999	-1.7724	0.0400	0.0077	0.0058	0.1926	0.1458
29	1.00	0.01	-0.0228	9.9999	0.0226	9.9999	-0.9912	0.0552	0.0103	0.0132	0.1865	0.2391
30	1.21	-0.02	-0.0205	9.9999	0.0247	9.9999	-1.2049	0.0590	0.0107	0.0140	0.1813	0.2373
31	1.47	0.03	-0.0180	9.9999	0.0225	9.9999	-1.2500	0.0816	0.0151	0.0252	0.1850	0.3088
32	1.68	-0.01	-0.0227	9.9999	0.0207	9.9999	-0.9119	0.0889	0.0168	0.0284	0.1889	0.3195
33	1.90	0.01	-0.0145	9.9999	0.0251	9.9999	-1.7310	0.1000	0.0192	0.0315	0.1919	0.3150
34	2.15	0.02	-0.0120	9.9999	0.0239	9.9999	-1.9917	0.1021	0.0206	0.0348	0.2017	0.3408
35	2.35	-0.01	-0.0192	9.9999	0.0229	9.9999	-1.1927	0.1201	0.0266	0.0442	0.2216	0.3680
36	2.60	-0.01	-0.0203	9.9999	0.0218	9.9999	-1.0739	0.1286	0.0289	0.0476	0.2247	0.3701
37	2.84	-0.01	-0.0167	9.9999	0.0221	9.9999	-1.3234	0.1358	0.0313	0.0524	0.2304	0.3859
38	3.04	0.01	-0.0192	9.9999	0.0233	9.9999	-1.2135	0.1517	0.0354	0.0605	0.2333	0.3988
39	3.28	0.01	-0.0164	9.9999	0.0232	9.9999	-1.6111	0.1590	0.0378	0.0663	0.2377	0.4170
40	3.50	-0.03	-0.0251	9.9999	0.0205	9.9999	-0.8167	0.1725	0.0406	0.0740	0.2353	0.4290
41	3.71	-0.01	-0.0192	9.9999	0.0233	9.9999	-1.2135	0.1747	0.0424	0.0804	0.2426	0.4602
42	3.96	-0.01	-0.0193	9.9999	0.0223	9.9999	-1.5596	0.1882	0.0459	0.0892	0.2438	0.4748
43	4.17	-0.02	-0.0227	9.9999	0.0216	9.9999	-0.9515	0.1993	0.0484	0.0963	0.2428	0.4832
44	4.38	0.00	-0.0144	9.9999	0.0241	9.9999	-1.6736	0.2041	0.0502	0.1013	0.2459	0.4963
45	4.61	0.00	-0.0178	9.9999	0.0201	9.9999	-1.1292	0.2218	0.0530	0.1084	0.2389	0.4887
46	4.80	-0.01	-0.0179	9.9999	0.0229	9.9999	-1.2793	0.2241	0.0541	0.1122	0.2413	0.5007

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 2

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	33	1.60	1.7	0.0	M1.0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	5.02	0.01	-0.0143	9.9999	0.0218	9.9999	-1.5245	0.2366	0.0568	0.1189	0.2400	0.5025
48	5.22	-0.00	-0.0178	9.9999	0.0197	9.9999	-1.1067	0.2506	0.0586	0.1251	0.2338	0.4992
49	5.41	-0.01	-0.0108	9.9999	0.0235	9.9999	-2.1759	0.2543	0.0596	0.1275	0.2343	0.5014
50	5.63	-0.01	-0.0134	9.9999	0.0196	9.9999	-1.5077	0.2641	0.0624	0.1340	0.2362	0.5074
51	5.83	-0.01	-0.0130	9.9999	0.0205	9.9999	-1.5769	0.2619	0.0649	0.1435	0.2302	0.5090
52	6.01	-0.02	-0.0034	9.9999	0.0204	9.9999	-6.1176	0.2670	0.0658	0.1470	0.2292	0.5122
53	6.23	-0.00	-0.0033	9.9999	0.0194	9.9999	-5.8788	0.2997	0.0678	0.1546	0.2262	0.5158
54	6.42	-0.01	-0.0092	9.9999	0.0186	9.9999	-1.8043	0.3198	0.0700	0.1637	0.2196	0.5132
55	6.60	-0.01	-0.0009	9.9999	0.0187	9.9999	-20.7778	0.3280	0.0712	0.1695	0.2170	0.5168
56	6.82	0.00	-0.0034	9.9999	0.0187	9.9999	-20.7778	0.3332	0.0718	0.1734	0.2156	0.5204
57	7.01	-0.01	-0.0009	9.9999	0.0187	9.9999	-20.7778	0.3485	0.0738	0.1802	0.2117	0.5171
58	7.20	-0.01	-0.0008	9.9999	0.0154	9.9999	-19.8750	0.3614	0.0755	0.1888	0.2089	0.5224
59	7.40	0.00	0.0052	9.9999	0.0162	9.9999	3.5000	0.3743	0.0769	0.1959	0.2054	0.5234
60	7.58	-0.02	0.0029	9.9999	0.0157	9.9999	5.4138	0.3865	0.0785	0.2038	0.2041	0.5308
61	7.78	-0.00	0.0077	9.9999	0.0147	9.9999	1.9091	0.3807	0.0780	0.2040	0.2048	0.5359
62	7.96	-0.03	0.0077	9.9999	0.0147	9.9999	1.9091	0.4002	0.0799	0.2140	0.1996	0.5347
63	8.13	-0.02	0.0103	9.9999	0.0125	9.9999	1.2136	0.4136	0.0816	0.2239	0.1972	0.5413
64	8.33	-0.01	0.0174	9.9999	0.0135	9.9999	0.7816	0.4163	0.0818	0.2271	0.1964	0.5455
65	8.48	-0.04	0.0079	9.9999	0.0105	9.9999	1.3291	0.4344	0.0837	0.2376	0.1926	0.5470
66	8.65	-0.02	0.0128	9.9999	0.0093	9.9999	0.7031	0.4410	0.0842	0.2417	0.1909	0.5481
67	8.83	-0.02	0.0184	9.9999	0.0097	9.9999	0.5915	0.4527	0.0851	0.2481	0.1879	0.5488
68	9.01	-0.03	0.0152	9.9999	0.0096	9.9999	0.6316	0.4581	0.0853	0.2515	0.1862	0.5490
69	9.20	-0.04	0.0201	9.9999	0.0086	9.9999	0.4279	0.4736	0.0870	0.2608	0.1837	0.5507
70	9.36	-0.03	0.0204	9.9999	0.0105	9.9999	0.5250	0.4860	0.0880	0.2666	0.1818	0.5508
71	9.53	-0.03	0.0185	9.9999	0.0096	9.9999	0.5333	0.4979	0.0888	0.2745	0.1783	0.5513
72	9.71	-0.01	0.0225	9.9999	0.0098	9.9999	0.4356	0.5057	0.0896	0.2807	0.1771	0.5551
73	9.86	-0.05	0.0198	9.9999	0.0109	9.9999	0.5798	0.5189	0.0904	0.2867	0.1742	0.5525
74	10.08	-0.04	0.0177	9.9999	0.0094	9.9999	0.5311	0.5298	0.0917	0.2929	0.1730	0.5529
75	10.25	-0.02	0.0248	9.9999	0.0114	9.9999	0.4597	0.5378	0.0919	0.2985	0.1708	0.5550
76	10.42	-0.03	0.0212	9.9999	0.0125	9.9999	0.5896	0.5456	0.0926	0.3011	0.1697	0.5519
77	10.59	-0.02	0.0249	9.9999	0.0109	9.9999	0.4378	0.5615	0.0935	0.3104	0.1665	0.5528
78	10.78	-0.00	0.0268	9.9999	0.0131	9.9999	0.4613	0.5694	0.0939	0.3150	0.1649	0.5532
79	10.95	-0.03	0.0295	9.9999	0.0141	9.9999	0.4780	0.5826	0.0947	0.3220	0.1625	0.5527
80	11.13	-0.01	0.0269	9.9999	0.0095	9.9999	0.3815	0.5945	0.0956	0.3285	0.1604	0.5526
81	11.28	-0.03	0.0296	9.9999	0.0132	9.9999	0.4459	0.5985	0.0956	0.3323	0.1597	0.5552
82	11.44	-0.02	0.0269	9.9999	0.0100	9.9999	0.4016	0.6143	0.0968	0.3401	0.1575	0.5536

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 34 ALM 1.40 RX10-6 1.7 PHI 0.0 CONF B1&DF11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	11.43	-0.04	2.0843	-4.8258	-0.1373	-0.0219	-0.0063	0.4155	0.1930	0.2225	-2.3153
2	12.24	-0.03	2.1910	-5.0490	0.0342	0.1774	-0.0179	0.4213	0.2020	0.2193	-2.3028
3	12.45	-0.01	2.2503	-5.1236	0.1027	0.0281	-0.0062	0.4096	0.2036	0.2060	-2.2769
4	12.62	-0.03	2.3051	-5.2352	-0.0121	0.0955	0.0051	0.4198	0.2072	0.2118	-2.2711
5	12.79	-0.04	2.2353	-5.1519	0.0031	0.1615	-0.0177	0.4149	0.2087	0.2062	-2.3048
6	12.96	-0.01	2.3363	-5.3140	0.0994	-0.0296	-0.0002	0.4181	0.2113	0.2068	-2.2765
7	13.11	-0.05	2.3912	-5.4110	-0.1665	0.0946	-0.0001	0.4265	0.2170	0.2095	-2.2628
8	13.26	-0.04	2.3674	-5.3641	-0.0774	0.1972	-0.0173	0.4183	0.2203	0.1980	-2.2658
9	13.47	-0.02	2.4685	-5.5264	0.0427	0.0040	0.0002	0.4295	0.2206	0.2089	-2.2388
10	13.64	-0.05	2.4869	-5.5373	-0.0840	0.0539	-0.0110	0.4255	0.2278	0.1977	-2.2447
11	13.78	-0.02	2.4192	-5.5138	0.0086	0.0363	-0.0167	0.4296	0.2340	0.1956	-2.2792
12	13.93	-0.02	2.4816	-5.5006	0.1960	-0.3926	-0.0489	0.4580	0.2555	0.2025	-2.1533
13	14.08	-0.05	2.4647	-5.2901	-0.0743	-0.1679	-0.0607	0.4579	0.2613	0.1966	-2.1595
14	14.28	-0.01	2.5257	-5.4321	0.1434	-0.2943	-0.0601	0.4657	0.2685	0.1972	-2.1587
15	14.43	-0.03	2.5595	-5.4963	0.0755	-0.2407	-0.0490	0.4613	0.2704	0.1909	-2.1435
16	14.58	-0.05	2.4045	-5.0676	0.0134	-0.0121	-0.0383	0.4697	0.2791	0.1906	-2.1159
17	14.78	-0.02	2.5210	-5.2238	-0.0172	-0.0273	-0.0213	0.4647	0.2830	0.1817	-2.0721
18	14.94	-0.05	2.5345	-5.2626	-0.0641	0.0319	-0.0270	0.4737	0.2862	0.1875	-2.1116
19	15.10	-0.02	2.5650	-5.3579	0.0009	0.0848	-0.0328	0.4662	0.2862	0.1800	-2.0888
20	15.28	-0.01	2.6884	-5.5060	0.0456	0.0322	-0.0157	0.4709	0.2913	0.1797	-2.0780
21	15.45	-0.03	2.6200	-5.4419	0.0495	0.1091	-0.0329	0.4727	0.2910	0.1818	-2.0771
22	15.62	-0.01	2.6526	-5.5571	0.1480	-0.0533	-0.0379	0.4800	0.2975	0.1826	-2.0873
23	15.78	-0.04	2.7982	-5.7466	-0.0693	0.0899	-0.0154	0.4742	0.2993	0.1750	-2.0536
24	15.94	-0.05	2.7164	-5.5666	-0.1496	0.1261	-0.0381	0.4648	0.3003	0.1646	-2.0864
25	16.12	-0.02	2.8059	-5.6212	0.0481	0.0798	-0.0268	0.4805	0.3019	0.1787	-2.0747
26	16.28	-0.05	2.8732	-5.8299	-0.1313	0.0402	-0.0320	0.4759	0.3022	0.1738	-2.0536
27	16.43	-0.03	2.8253	-5.6907	0.0093	0.2466	-0.0441	0.4777	0.3065	0.1713	-2.0850
28	16.61	-0.03	2.9478	-6.0904	-0.0041	-0.0013	-0.0205	0.4756	0.3120	0.1637	-2.0681
29	16.76	-0.04	2.9234	-6.0480	0.0071	-0.0310	-0.0478	0.4805	0.3127	0.1678	-2.0688
30	16.93	-0.03	2.9773	-6.2297	-0.0093	0.1134	-0.0321	0.4824	0.3156	0.1668	-2.0924
31	17.10	-0.01	3.0351	-6.2611	0.1286	0.0238	-0.0262	0.4783	0.3152	0.1632	-2.0629
32	17.26	-0.05	3.0578	-6.3223	-0.1019	0.1404	-0.0374	0.4759	0.3188	0.1572	-2.0676
33	17.43	-0.02	3.0670	-6.3851	-0.0445	0.1164	-0.0319	0.4805	0.3180	0.1625	-2.0819
34	17.59	-0.03	3.1572	-6.5110	0.0472	0.0501	-0.0315	0.4939	0.3221	0.1718	-2.0623
35	17.74	-0.06	3.1704	-6.5083	-0.2045	0.1965	-0.0374	0.4739	0.3246	0.1494	-2.0857
36	17.92	-0.01	3.2042	-6.5746	0.1420	0.0416	-0.0372	0.4756	0.3271	0.1484	-2.0533
37	18.09	-0.04	3.2820	-6.7066	0.0416	0.1656	-0.0374	0.4749	0.3297	0.1453	-2.0441
38	18.25	-0.04	3.2459	-6.6306	-0.0429	0.1353	-0.0483	0.4901	0.3315	0.1586	-2.0446
39	18.41	-0.02	3.3579	-6.8860	0.0475	0.0495	-0.0255	0.4849	0.3321	0.1528	-2.0441
40	18.58	-0.03	3.3654	-6.8376	0.0170	0.1486	-0.0371	0.4844	0.3343	0.1501	-2.0445
41	18.74	-0.04	3.3772	-6.9046	-0.0716	0.0321	-0.0365	0.4837	0.3351	0.1486	-2.0445
42	18.91	-0.01	3.4452	-6.9732	0.0160	0.1291	-0.0255	0.4855	0.3408	0.1447	-2.0234
43	19.05	-0.04	3.4318	-6.9596	-0.0455	0.0773	-0.0476	0.4796	0.3396	0.1403	-2.0279
44	19.21	-0.03	3.4990	-7.0819	-0.0157	0.1995	-0.0480	0.4903	0.3445	0.1458	-2.0240
45	19.36	-0.05	3.5428	-7.1707	-0.1052	0.0632	-0.0361	0.4861	0.3431	0.1430	-2.0240
46	19.51	-0.04	3.5004	-7.0865	0.0311	0.1860	-0.0537	0.4942	0.3463	0.1479	-2.0245

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 2

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
I 36 1.00 1.7 0.0 WING11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
47	19.49	-0.03	3.6024	-7.2069	-0.0763	0.1741	-0.0419	0.4893	0.3500	0.1393	-2.0006
48	19.92	-0.04	3.5811	-7.1210	0.0161	0.1294	-0.0363	0.4863	0.3492	0.1371	-1.9885
49	19.98	-0.03	3.6101	-7.2533	0.0284	0.1763	-0.0587	0.4868	0.3568	0.1300	-2.0092
50	20.16	-0.03	3.6787	-7.3350	0.0567	-0.0272	-0.0299	0.5022	0.3565	0.1457	-1.9939
51	20.28	-0.05	3.7031	-7.2963	0.0759	0.0499	-0.0302	0.4906	0.3590	0.1316	-1.9708
52	20.46	-0.04	3.7236	-7.3696	0.0179	-0.0534	-0.0128	0.5045	0.3622	0.1423	-1.9791
53	20.40	-0.03	3.6944	-7.4613	0.1706	-0.0971	-0.0014	0.5008	0.3637	0.1371	-1.9612
54	20.73	-0.05	3.8027	-7.4156	-0.0332	0.0951	-0.0297	0.4968	0.3677	0.1291	-1.9501
55	20.91	-0.02	3.6886	-7.4741	0.1127	-0.0723	-0.0123	0.4920	0.3728	0.1192	-1.9220
56	21.08	-0.05	3.8981	-7.4982	-0.0253	0.0170	-0.0123	0.4892	0.3725	0.1167	-1.9225
57	21.21	-0.07	3.8872	-7.4431	-0.2610	0.2584	-0.0129	0.4920	0.3761	0.1159	-1.9148
58	21.37	-0.00	3.9655	-7.4905	0.2455	0.0175	-0.0240	0.4929	0.3772	0.1157	-1.8985
59	21.51	-0.06	4.0019	-7.4754	-0.0219	0.0850	-0.0345	0.4937	0.3804	0.1133	-1.8688
60	21.67	-0.04	4.0106	-7.5386	-0.0231	0.0363	-0.0456	0.4945	0.3830	0.1115	-1.8722
61	21.84	-0.06	4.1000	-7.5863	-0.1600	-0.0146	0.0221	0.5021	0.3878	0.1143	-1.8583
62	21.97	-0.05	4.1152	-7.5051	0.0086	0.2178	-0.0570	0.4993	0.3861	0.1132	-1.8237
63	22.13	-0.03	4.1150	-7.5056	0.0867	0.1237	-0.0344	0.4960	0.3898	0.1062	-1.8239
64	22.28	-0.04	4.2004	-7.5467	0.0467	0.0438	-0.0561	0.5062	0.3905	0.1137	-1.7961
65	22.43	-0.06	4.1960	-7.5260	-0.0265	0.0095	0.0003	0.4945	0.3948	0.0997	-1.7936
66	22.59	-0.05	4.1925	-7.3591	-0.0957	0.0520	0.0621	0.5128	0.3963	0.1165	-1.7553
67	22.72	-0.05	4.1240	-7.5950	-0.0153	-0.0019	0.0008	0.5022	0.3984	0.1038	-1.7548
68	22.88	-0.04	4.2062	-7.6129	-0.0868	0.1521	-0.0556	0.4985	0.3998	0.0987	-1.7278
69	23.05	-0.03	4.2053	-7.6363	0.1228	-0.0614	0.0184	0.4997	0.4005	0.0992	-1.6949
70	23.17	-0.05	4.2996	-7.5343	0.1049	0.1224	-0.0438	0.4919	0.4018	0.0900	-1.6759
71	23.31	-0.03	4.2691	-7.6602	0.0833	0.0667	-0.0322	0.4976	0.4028	0.0947	-1.6788
72	23.48	-0.04	4.2637	-7.6469	0.0135	0.0926	-0.0428	0.4993	0.4034	0.0958	-1.6397
73	23.53	-0.05	4.2058	-7.6164	0.0869	0.1434	-0.0378	0.4980	0.4055	0.0924	-1.6537
74	25.37	0.00	5.0163	-8.0080	0.4551	-0.4674	0.2185	0.5421	0.4219	0.1202	-1.3572
75	27.46	-0.00	5.7333	-8.5013	0.6250	-0.7741	0.2841	0.5546	0.4581	0.0965	-1.1340
76	30.04	-0.00	6.6944	-9.2196	0.5697	-0.5106	0.2217	0.5058	0.4834	0.0224	-0.8544
77	35.19	0.01	8.3964	-9.2387	0.4211	-0.6853	0.0956	0.4968	0.5085	-0.0117	-0.6240
78	42.69	-0.03	10.9611	-9.0697	0.1719	-0.0552	-0.0069	0.3626	0.5086	-0.1460	-0.4625
79	51.72	-0.01	13.8058	-8.5491	0.1766	0.8822	0.0444	0.2880	0.4609	-0.1729	-0.4845
80	58.58	0.02	14.5800	-7.5714	0.5947	-0.3247	0.0466	0.1315	0.4333	-0.3019	-0.5052
81	58.64	-0.07	14.4555	-7.4637	-0.1036	-0.3375	0.0352	0.1260	0.4325	-0.3066	-0.4991
82	58.63	-0.07	14.9139	-7.3236	-0.2383	-0.2971	0.0388	0.1203	0.4476	-0.3274	-0.4911
83	57.41	-0.04	14.8522	-6.6142	0.1744	-0.4441	0.0531	0.1309	0.4488	-0.3180	-0.4453

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 34 1.00 1.7 0.0 BlaDF11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	11.63	-0.04	0.0027	-0.0026	-0.0010	-0.9627	-0.3704	0.8965	0.1005	0.3362	0.1443	0.4827
2	12.29	-0.03	0.0137	-0.0035	0.0023	-0.3270	0.2150	0.7441	0.1030	0.3558	0.1384	0.4782
3	12.45	-0.01	0.0082	-0.0033	0.0031	-0.4023	0.3780	0.7476	0.1031	0.3559	0.1379	0.4761
4	12.62	-0.03	0.0127	-0.0033	0.0056	-0.2598	0.4409	0.7579	0.1041	0.3588	0.1373	0.4736
5	12.79	-0.04	0.0135	-0.0009	0.0069	-0.0466	0.5111	0.7631	0.1042	0.3583	0.1365	0.4695
6	12.96	-0.01	0.0115	-0.0033	0.0059	-0.3390	0.5130	0.7839	0.1048	0.3636	0.1337	0.4638
7	13.11	-0.05	0.0128	-0.0047	0.0049	-0.3671	0.3828	0.8047	0.1052	0.3701	0.1307	0.4599
8	13.28	-0.04	0.0134	-0.0054	0.0070	-0.4243	0.5036	0.8150	0.1062	0.3730	0.1303	0.4577
9	13.47	-0.02	0.0081	-0.0070	0.0062	-0.8640	0.7654	0.8280	0.1066	0.3773	0.1287	0.4557
10	13.66	-0.05	0.0150	-0.0055	0.0076	-0.3732	0.5067	0.8408	0.1075	0.3825	0.1278	0.4549
11	13.78	-0.07	0.0117	-0.0060	0.0065	-0.6836	0.5556	0.8514	0.1074	0.3824	0.1261	0.4491
12	13.93	-0.02	0.0403	-0.0136	0.0156	-0.3376	0.4866	0.8656	0.1078	0.3870	0.1236	0.4471
13	14.08	-0.05	0.0494	-0.0116	0.0228	-0.2348	0.4615	0.8760	0.1082	0.3926	0.1212	0.4482
14	14.28	-0.01	0.0405	-0.0134	0.0166	-0.3431	0.4593	0.8941	0.1072	0.3977	0.1199	0.4448
15	14.43	-0.03	0.0436	-0.0126	0.0201	-0.2876	0.4539	0.8940	0.1078	0.3968	0.1205	0.4461
16	14.58	-0.04	-0.0049	-0.0036	-0.0033	0.4044	0.3708	0.8053	0.0719	0.3391	0.0893	0.4211
17	14.76	-0.02	-0.0041	-0.0023	-0.0027	0.2527	0.2967	0.8211	0.0667	0.3420	0.0812	0.4165
18	14.94	-0.04	-0.0004	-0.0004	0.0035	0.9997	-6.7500	0.8388	0.0701	0.3540	0.0835	0.4228
19	15.10	-0.02	-0.0058	-0.0011	-0.0007	0.1896	0.1207	0.8466	0.0661	0.3553	0.0781	0.4197
20	15.28	-0.01	-0.0073	-0.0006	0.0017	0.0822	-0.2329	0.8611	0.0637	0.3627	0.0740	0.4212
21	15.45	-0.03	-0.0103	-0.0041	-0.0062	0.2019	0.4039	0.8483	0.0627	0.3548	0.0739	0.4182
22	15.62	-0.01	-0.0172	-0.0034	-0.0043	0.2267	0.2500	0.8768	0.0632	0.3692	0.0721	0.4211
23	15.78	-0.04	-0.0054	0.0002	0.0029	-0.0312	-0.4531	0.8834	0.0616	0.3728	0.0697	0.4228
24	15.94	-0.05	-0.0161	-0.0122	-0.0045	0.1366	0.2795	0.8839	0.0580	0.3696	0.0656	0.4181
25	16.12	-0.02	-0.0106	-0.0021	-0.0004	0.1265	0.0241	0.9096	0.0596	0.3832	0.0655	0.4213
26	16.28	-0.05	-0.0206	-0.0038	-0.0056	0.1844	0.2718	0.9099	0.0572	0.3821	0.0628	0.4199
27	16.43	-0.03	-0.0206	-0.0034	-0.0041	0.1650	0.2961	0.9177	0.0566	0.3869	0.0617	0.4216
28	16.61	-0.03	-0.0186	-0.0027	-0.0028	0.1451	0.1505	0.9368	0.0548	0.3940	0.0586	0.4215
29	16.76	-0.04	-0.0242	-0.0049	-0.0051	0.2024	0.2107	0.9358	0.0564	0.3957	0.0603	0.4228
30	16.93	-0.03	-0.0186	-0.0031	-0.0028	0.1666	0.1505	0.9556	0.0539	0.4040	0.0566	0.4228
31	17.10	-0.01	-0.0234	-0.0042	-0.0024	0.1794	0.1026	0.9554	0.0558	0.4035	0.0584	0.4223
32	17.26	-0.05	-0.0200	-0.0032	-0.0014	0.1600	0.0780	0.9682	0.0542	0.4111	0.0560	0.4246
33	17.43	-0.02	-0.0170	-0.0026	-0.0030	0.1529	-0.1765	0.9813	0.0533	0.4158	0.0543	0.4237
34	17.59	-0.03	-0.0277	-0.0050	-0.0050	0.2093	0.2022	0.9929	0.0530	0.4230	0.0534	0.4260
35	17.74	-0.06	-0.0187	-0.0027	-0.0028	0.1443	0.1497	0.9906	0.0513	0.4207	0.0518	0.4247
36	17.92	-0.21	-0.0322	-0.0074	-0.0072	0.2266	0.2236	1.0058	0.0523	0.4291	0.0520	0.4266
37	18.09	-0.04	-0.0255	-0.0053	-0.0049	0.2078	0.1882	1.0149	0.0516	0.4335	0.0508	0.4271
38	18.25	-0.04	-0.0258	-0.0059	-0.0010	0.2286	0.0698	1.0214	0.0519	0.4367	0.0508	0.4276
39	18.41	-0.02	-0.0258	-0.0050	-0.0017	0.1937	0.0659	1.0384	0.0507	0.4448	0.0488	0.4284
40	18.56	-0.03	-0.0232	-0.0034	-0.0044	0.1661	0.1897	1.0411	0.0499	0.4468	0.0479	0.4284
41	18.74	-0.04	-0.0245	-0.0052	-0.0042	0.1940	0.1647	1.0475	0.0504	0.4487	0.0481	0.4284
42	18.91	-0.01	-0.0302	-0.0054	-0.0053	0.1768	0.1755	1.0528	0.0496	0.4517	0.0471	0.4298
43	19.05	-0.04	-0.0253	-0.0053	-0.0063	0.2094	0.2490	1.0645	0.0490	0.4573	0.0460	0.4296
44	19.21	-0.03	-0.0384	-0.0092	-0.0050	0.2395	0.1302	1.0851	0.0505	0.4680	0.0465	0.4313
45	19.36	-0.05	-0.0243	-0.0043	-0.0046	0.1769	0.1893	1.0841	0.0485	0.4662	0.0447	0.4300
46	19.51	-0.04	-0.0357	-0.0080	-0.0082	0.2240	0.2297	1.0955	0.0495	0.4713	0.0452	0.4302

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 2

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	3A	1.40	1.7	0.0	W1=0.11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	19.69	-0.03	-0.0320	-0.0073	0.0005	0.2281	-0.0156	1.1124	0.0495	0.4795	0.0465	0.4311
48	19.82	-0.04	-0.0245	-0.0059	-0.0031	0.1877	0.1265	1.0983	0.0484	0.4717	0.0442	0.4311
49	19.98	-0.03	-0.0400	-0.0092	-0.0118	0.2299	0.2950	1.1243	0.0487	0.4841	0.0433	0.4306
50	20.14	-0.03	-0.0308	-0.0066	-0.0100	0.1948	0.3247	1.1191	0.0478	0.4821	0.0427	0.4308
51	20.28	-0.05	-0.0249	-0.0046	-0.0098	0.1847	0.3938	1.1165	0.0477	0.4824	0.0427	0.4321
52	20.44	-0.04	-0.0179	-0.0018	-0.0098	0.1005	0.5475	1.1140	0.0470	0.4800	0.0422	0.4309
53	20.56	-0.03	-0.0199	-0.0021	-0.0131	0.1055	0.6583	1.1114	0.0471	0.4788	0.0424	0.4308
54	20.73	-0.05	-0.0167	-0.0023	-0.0092	0.1377	0.5509	1.1295	0.0473	0.4886	0.0419	0.4326
55	20.91	-0.02	-0.0200	-0.0034	-0.0112	0.1899	0.4600	1.1360	0.0473	0.4906	0.0416	0.4319
56	21.06	-0.05	-0.0235	-0.0037	-0.0121	0.1574	0.5149	1.1307	0.0473	0.4886	0.0418	0.4321
57	21.21	-0.07	-0.0180	-0.0014	-0.0097	0.0778	0.5389	1.1309	0.0472	0.4850	0.0417	0.4289
58	21.37	-0.08	-0.0368	-0.0073	-0.0133	0.2005	0.3654	1.1503	0.0478	0.4955	0.0415	0.4308
59	21.51	-0.06	-0.0296	-0.0050	-0.0119	0.1904	0.4048	1.1646	0.0474	0.5040	0.0407	0.4328
60	21.67	-0.04	-0.0302	-0.0037	-0.0144	0.2182	0.3978	1.1802	0.0479	0.5116	0.0406	0.4335
61	21.84	-0.06	-0.0045	0.0022	-0.0038	-0.4668	0.8444	1.1414	0.0472	0.4868	0.0413	0.4265
62	21.97	-0.05	-0.0028	-0.0008	-0.0183	0.2196	0.4276	1.1878	0.0473	0.5131	0.0398	0.4320
63	22.13	-0.03	-0.0380	-0.0065	-0.0163	0.1805	0.4528	1.1776	0.0470	0.5034	0.0399	0.4275
64	22.28	-0.04	-0.0407	-0.0107	-0.0153	0.2291	0.3276	1.2128	0.0472	0.5230	0.0389	0.4313
65	22.43	-0.06	-0.0140	0.0012	-0.0069	-0.2999	1.7250	1.1541	0.0470	0.4931	0.0407	0.4273
66	22.59	-0.05	0.0171	0.0095	0.0023	0.5554	0.1345	1.0905	0.0469	0.4544	0.0448	0.4167
67	22.72	-0.05	-0.0119	0.0	-0.0105	0.0	0.8824	1.1787	0.0464	0.5040	0.0394	0.4276
68	22.86	-0.04	-0.0400	-0.0064	-0.0233	0.1575	0.5825	1.2254	0.0460	0.5270	0.0374	0.4287
69	23.05	-0.03	0.0011	0.0026	-0.0006	2.3630	-0.5455	1.1892	0.0464	0.5049	0.0390	0.4246
70	23.17	-0.05	-0.0348	-0.0075	-0.0239	0.1866	0.6005	1.2278	0.0460	0.5262	0.0375	0.4269
71	23.31	-0.03	-0.0387	-0.0064	-0.0231	0.1653	0.5969	1.2409	0.0457	0.5289	0.0368	0.4262
72	23.48	-0.06	-0.0344	-0.0061	-0.0236	0.1687	0.6458	1.2534	0.0459	0.5361	0.0366	0.4277
73	23.53	-0.05	-0.0272	-0.0044	-0.0196	0.1617	0.7206	1.2407	0.0454	0.5257	0.0366	0.4237
74	25.02	0.00	0.2116	0.0530	0.1110	0.2532	0.5246	1.0410	0.0472	0.4290	0.0453	0.4121
75	27.46	-0.00	0.3206	0.0851	0.1717	0.2605	0.5257	1.0641	0.0468	0.4476	0.0448	0.4206
76	30.80	-0.00	0.2437	0.0627	0.1465	0.2518	0.5867	1.1348	0.0417	0.4688	0.0367	0.4131
77	35.19	0.01	0.1598	0.0317	0.0967	0.1983	0.6051	1.3127	0.0361	0.5592	0.0275	0.4260
78	42.09	-0.03	-0.0246	-0.0038	-0.0081	0.1764	0.3971	1.3853	0.0274	0.5878	0.0198	0.4243
79	51.72	-0.01	0.0121	0.0120	0.0225	1.0410	1.8595	1.3186	0.0136	0.5466	0.0103	0.4145
80	58.66	0.02	-0.0007	0.0006	0.0169	-1.2854	-21.2857	1.3978	0.0013	0.5840	0.0009	0.4178
81	59.96	-0.07	-0.0225	-0.0006	0.0036	0.0267	-0.1699	1.3640	0.0028	0.5679	0.0020	0.4151
82	58.63	-0.07	-0.0193	-0.0022	-0.0012	0.0449	0.0243	1.3632	0.0039	0.5618	0.0029	0.4121
83	57.41	-0.04	-0.0065	0.0039	0.0205	-0.5998	-3.1538	1.4006	0.0049	0.5792	0.0035	0.4135

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 36 MACH 1.00 RE10-6 1.7 PHI 0.0 CONF MISOF11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
1	11.63	-0.04	0.0226	9.9999	0.0070	9.9999	0.3097	0.6249	0.0973	0.3464	0.1557	0.5543
2	12.29	-0.03	0.0190	9.9999	0.0061	9.9999	0.4263	0.6622	0.0987	0.3702	0.1490	0.5598
3	12.45	-0.01	0.0286	9.9999	0.0064	9.9999	0.2937	0.6640	0.0995	0.3723	0.1498	0.5607
4	12.62	-0.03	0.0250	9.9999	0.0086	9.9999	0.3440	0.6733	0.1000	0.3785	0.1485	0.5622
5	12.79	-0.04	0.0333	9.9999	0.0121	9.9999	0.3634	0.6750	0.0992	0.3810	0.1469	0.5644
6	12.96	-0.01	0.0310	9.9999	0.0090	9.9999	0.2903	0.6862	0.1000	0.3873	0.1461	0.5661
7	13.11	-0.05	0.0226	9.9999	0.0084	9.9999	0.3717	0.6961	0.1008	0.3947	0.1448	0.5670
8	13.28	-0.04	0.0227	9.9999	0.0070	9.9999	0.3084	0.6947	0.1009	0.3961	0.1452	0.5702
9	13.47	-0.02	0.0310	9.9999	0.0090	9.9999	0.2903	0.7028	0.1010	0.4007	0.1437	0.5701
10	13.60	-0.05	0.0202	9.9999	0.0068	9.9999	0.3366	0.7056	0.1006	0.4004	0.1425	0.5675
11	13.78	-0.02	0.0240	9.9999	0.0081	9.9999	0.3240	0.7058	0.1003	0.4029	0.1421	0.5708
12	13.93	-0.06	0.0345	9.9999	0.0136	9.9999	0.3942	0.6009	0.0958	0.3415	0.1081	0.5683
13	14.08	-0.05	0.0274	9.9999	0.0106	9.9999	0.3869	0.6124	0.0968	0.3481	0.1090	0.5684
14	14.28	-0.01	0.0298	9.9999	0.0099	9.9999	0.3322	0.6214	0.0965	0.3514	0.1038	0.5655
15	14.43	-0.03	0.0266	9.9999	0.0103	9.9999	0.3601	0.6259	0.0934	0.3551	0.1013	0.5673
16	14.56	-0.04	0.0367	9.9999	0.0138	9.9999	0.3740	0.6384	0.0961	0.3634	0.1035	0.5692
17	14.78	-0.02	0.0310	9.9999	0.0105	9.9999	0.3387	0.6412	0.0603	0.3617	0.0940	0.5641
18	14.94	-0.04	0.0298	9.9999	0.0113	9.9999	0.3792	0.6540	0.0800	0.3720	0.0910	0.5645
19	15.10	-0.02	0.0310	9.9999	0.0114	9.9999	0.3677	0.6643	0.0587	0.3751	0.0883	0.5647
20	15.28	-0.01	0.0263	9.9999	0.0087	9.9999	0.3338	0.6809	0.0575	0.3832	0.0844	0.5628
21	15.45	-0.03	0.0298	9.9999	0.0109	9.9999	0.3658	0.6751	0.0587	0.3814	0.0869	0.5650
22	15.62	-0.01	0.0370	9.9999	0.0124	9.9999	0.3486	0.6825	0.0572	0.3877	0.0838	0.5681
23	15.78	-0.04	0.0298	9.9999	0.0113	9.9999	0.3792	0.6951	0.0561	0.3930	0.0807	0.5654
24	15.94	-0.03	0.0298	9.9999	0.0113	9.9999	0.3792	0.6978	0.0562	0.3952	0.0805	0.5664
25	16.12	-0.02	0.0335	9.9999	0.0107	9.9999	0.3196	0.7116	0.0556	0.4042	0.0781	0.5680
26	16.28	-0.05	0.0299	9.9999	0.0104	9.9999	0.3478	0.7141	0.0561	0.4065	0.0785	0.5692
27	16.43	-0.03	0.0334	9.9999	0.0126	9.9999	0.3772	0.7200	0.0549	0.4118	0.0762	0.5719
28	16.61	-0.03	0.0275	9.9999	0.0083	9.9999	0.3018	0.7323	0.0548	0.4176	0.0748	0.5703
29	16.76	-0.04	0.0358	9.9999	0.0132	9.9999	0.3687	0.7311	0.0543	0.4185	0.0743	0.5724
30	16.93	-0.03	0.0297	9.9999	0.0089	9.9999	0.3101	0.7611	0.0539	0.4362	0.0708	0.5705
31	17.10	-0.01	0.0371	9.9999	0.0119	9.9999	0.3208	0.7478	0.0532	0.4284	0.0711	0.5731
32	17.28	-0.05	0.0298	9.9999	0.0118	9.9999	0.3960	0.7732	0.0528	0.4403	0.0683	0.5695
33	17.43	-0.02	0.0298	9.9999	0.0080	9.9999	0.2778	0.7732	0.0529	0.4419	0.0684	0.5715
34	17.59	-0.03	0.0295	9.9999	0.0095	9.9999	0.3177	0.7881	0.0529	0.4485	0.0671	0.5691
35	17.74	-0.06	0.0227	9.9999	0.0079	9.9999	0.3680	0.7949	0.0529	0.4525	0.0665	0.5693
36	17.92	-0.01	0.0384	9.9999	0.0116	9.9999	0.3021	0.7959	0.0524	0.4524	0.0658	0.5684
37	18.05	-0.04	0.0267	9.9999	0.0108	9.9999	0.3763	0.8150	0.0521	0.4623	0.0639	0.5672
38	18.25	-0.04	0.0347	9.9999	0.0127	9.9999	0.3660	0.8205	0.0520	0.4647	0.0634	0.5664
39	18.41	-0.02	0.0276	9.9999	0.0083	9.9999	0.3007	0.8368	0.0520	0.4719	0.0621	0.5639
40	18.56	-0.03	0.0227	9.9999	0.0094	9.9999	0.4141	0.8503	0.0521	0.4779	0.0613	0.5620
41	18.74	-0.04	0.0371	9.9999	0.0124	9.9999	0.3342	0.8534	0.0512	0.4815	0.0600	0.5642
42	18.91	-0.01	0.0275	9.9999	0.0093	9.9999	0.3382	0.8519	0.0515	0.4805	0.0604	0.5640
43	19.05	-0.04	0.0275	9.9999	0.0107	9.9999	0.3691	0.8643	0.0509	0.4858	0.0589	0.5621
44	19.21	-0.03	0.0334	9.9999	0.0118	9.9999	0.3287	0.8739	0.0506	0.4880	0.0579	0.5584
45	19.36	-0.05	0.0251	9.9999	0.0086	9.9999	0.3426	0.8865	0.0512	0.4928	0.0579	0.5572
46	19.51	-0.04	0.0340	9.9999	0.0104	9.9999	0.3467	0.8912	0.0505	0.4947	0.0567	0.5551

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSROC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 2

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 34.1aOH MACH 1.7 RX10-6 PHI 0.0 CONF BlwOFIl L 0.0 DEL1 6 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNFA	CMA	CHA	XCPFA	YCPFA
47	19.69	-0.03	0.0300	9.9999	0.0085	9.9999	0.2833	0.8484	0.0505	0.4915	0.0568	0.5532
48	19.82	-0.0e	0.0228	9.9999	0.0080	9.9999	0.3509	0.8978	0.0508	0.4952	0.0566	0.5518
49	19.98	-0.03	0.0347	9.9999	0.0122	9.9999	0.3516	0.9141	0.0506	0.5019	0.0553	0.5491
50	20.14	-0.03	0.0372	9.9999	0.0119	9.9999	0.3199	0.9330	0.0506	0.5068	0.0562	0.5432
51	20.28	-0.05	0.0340	9.9999	0.0100	9.9999	0.3333	0.9506	0.0509	0.5167	0.0535	0.5436
52	20.46	-0.0e	0.0313	9.9999	0.0066	9.9999	0.2748	0.9642	0.0510	0.5252	0.0535	0.5419
53	20.60	-0.03	0.0335	9.9999	0.0117	9.9999	0.3493	0.9733	0.0518	0.5260	0.0532	0.5404
54	20.73	-0.05	0.0311	9.9999	0.0115	9.9999	0.3698	0.9735	0.0512	0.5229	0.0526	0.5371
55	20.91	-0.02	0.0349	9.9999	0.0104	9.9999	0.2980	0.9896	0.0508	0.5305	0.0513	0.5361
56	21.06	-0.05	0.0300	9.9999	0.0095	9.9999	0.3167	0.9815	0.0505	0.5249	0.0514	0.5348
57	21.21	-0.07	0.0252	9.9999	0.0082	9.9999	0.3254	0.9896	0.0508	0.5285	0.0513	0.5341
58	21.37	-0.00	0.0347	9.9999	0.0122	9.9999	0.3073	0.9762	0.0502	0.5204	0.0516	0.5331
59	21.51	-0.03	0.0266	9.9999	0.0097	9.9999	0.3674	0.9910	0.0505	0.5261	0.0509	0.5309
60	21.67	-0.04	0.0348	9.9999	0.0118	9.9999	0.3391	0.9841	0.0507	0.5231	0.0515	0.5316
61	21.84	-0.06	0.0289	9.9999	0.0080	9.9999	0.2768	1.0259	0.0513	0.5433	0.0500	0.5290
62	21.97	-0.05	0.0300	9.9999	0.0109	9.9999	0.3633	0.9824	0.0508	0.5203	0.0517	0.5296
63	22.13	-0.03	0.0337	9.9999	0.0094	9.9999	0.2908	0.9988	0.0505	0.5280	0.0505	0.5286
64	22.28	-0.04	0.0284	9.9999	0.0089	9.9999	0.3098	0.9844	0.0516	0.5090	0.0535	0.5278
65	22.43	-0.06	0.0276	9.9999	0.0094	9.9999	0.3551	1.0421	0.0509	0.5488	0.0488	0.5266
66	22.54	-0.05	0.0336	9.9999	0.0103	9.9999	0.3065	1.0617	0.0533	0.5596	0.0502	0.5271
67	22.72	-0.05	0.0298	9.9999	0.0094	9.9999	0.3264	1.0518	0.0502	0.5519	0.0477	0.5247
68	22.86	-0.0e	0.0383	9.9999	0.0135	9.9999	0.3525	1.0462	0.0507	0.5485	0.0484	0.5243
69	23.05	-0.03	0.0372	9.9999	0.0110	9.9999	0.2957	1.0677	0.0512	0.5587	0.0479	0.5233
70	23.17	-0.05	0.0244	9.9999	0.0113	9.9999	0.3779	1.0350	0.0512	0.5416	0.0495	0.5233
71	23.31	-0.03	0.0335	9.9999	0.0107	9.9999	0.3194	1.0666	0.0502	0.5553	0.0471	0.5206
72	23.48	-0.0e	0.0251	9.9999	0.0081	9.9999	0.3227	1.0514	0.0506	0.5476	0.0481	0.5208
73	23.53	-0.05	0.0246	9.9999	0.0112	9.9999	0.3916	1.0718	0.0502	0.5576	0.0468	0.5202
74	25.02	0.0e	0.0461	9.9999	0.0172	9.9999	0.3900	1.1688	0.0554	0.6073	0.0474	0.5196
75	27.46	-0.00	0.0511	9.9999	0.0225	9.9999	0.4403	1.2355	0.0539	0.6290	0.0436	0.5091
76	30.60	-0.00	0.0452	9.9999	0.0196	9.9999	0.4336	1.2517	0.0582	0.6206	0.0385	0.4956
77	35.19	0.01	0.0525	9.9999	0.0202	9.9999	0.3848	1.2026	0.0452	0.5894	0.0376	0.4981
78	42.09	-0.04	0.0486	9.9999	0.0165	9.9999	0.3541	1.2346	0.0349	0.5961	0.0283	0.4812
79	51.72	-0.01	0.0480	9.9999	0.0171	9.9999	0.3562	1.2030	0.0714	0.5827	0.0178	0.4844
80	58.66	0.02	0.0421	9.9999	0.0176	9.9999	0.4161	1.2355	0.0105	0.5936	0.0085	0.4885
81	56.66	-0.07	0.0291	9.9999	0.0154	9.9999	0.5292	1.2735	0.0109	0.6101	0.0086	0.4791
82	59.63	-0.07	0.0355	9.9999	0.0199	9.9999	0.5606	1.2889	0.0112	0.6139	0.0087	0.4763
83	57.41	-0.06	0.0259	9.9999	0.0156	9.9999	0.5946	1.2680	0.0137	0.6046	0.0108	0.4768

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	35	1.60	1.7	45.0	81.0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.36	0.10	-0.6367	1.3065	0.0676	-0.0495	-0.0263	0.2993	0.0935	0.2057	-2.0488
2	-5.35	0.11	-0.6393	1.2897	0.1181	-0.2346	-0.0089	0.3036	0.0969	0.2067	-2.1164
3	-5.36	0.06	-0.6356	1.3216	-0.0427	-0.1165	-0.0266	0.3079	0.0953	0.2125	-2.0792
4	-5.34	0.09	-0.6453	1.3124	-0.0943	-0.0644	-0.0156	0.3150	0.0953	0.2196	-2.0336
5	-4.95	0.09	-0.5152	1.1296	0.0402	-0.1063	-0.0091	0.3060	0.0935	0.2124	-2.1908
6	-4.71	0.10	-0.5069	1.1100	0.1485	-0.2188	-0.0260	0.3032	0.0921	0.2110	-2.1988
7	-4.41	0.10	-0.5110	1.0548	0.0160	-0.0972	-0.0150	0.3210	0.0938	0.2271	-2.0644
8	-4.12	0.11	-0.4106	0.9307	0.2828	-0.3194	-0.0141	0.2950	0.0897	0.2052	-2.2656
9	-3.86	0.10	-0.4048	0.9247	0.0888	-0.1056	-0.0284	0.3112	0.0919	0.2197	-1.9106
10	-3.61	0.11	-0.3697	0.8561	0.1823	-0.2174	-0.0031	0.3093	0.0927	0.2165	-2.0452
11	-3.34	0.06	-0.3417	0.6853	-0.0109	0.0029	-0.0152	0.3115	0.0936	0.2178	-2.0056
12	-3.07	0.14	-0.3071	0.6607	0.0171	-0.1005	-0.0150	0.3212	0.0937	0.2274	-2.1517
13	-2.81	0.09	-0.2591	0.5551	-0.0008	-0.1599	-0.0037	0.3311	0.0948	0.2362	-2.1421
14	-2.55	0.08	-0.2058	0.4534	-0.0213	-0.0628	-0.0152	0.3159	0.1007	0.2152	-2.2055
15	-2.29	0.10	-0.1726	0.3976	0.0115	-0.1147	-0.0094	0.3302	0.1014	0.2288	-2.3038
16	-2.03	0.10	-0.1273	0.2984	0.1380	-0.0962	-0.0049	0.3474	0.0999	0.2475	-2.3489
17	-1.78	0.10	-0.1756	0.3276	0.1645	-0.2073	-0.0203	0.3405	0.0978	0.2427	-1.8655
18	-1.51	0.11	-0.0704	0.2062	0.0947	-0.0945	-0.0036	0.3389	0.1004	0.2385	-2.9278
19	-1.27	0.07	-0.0546	0.1383	-0.0130	-0.1738	-0.0152	0.3373	0.1034	0.2339	-2.5319
20	-1.02	0.09	-0.0088	0.1221	-0.0317	-0.0646	-0.0153	0.3418	0.1019	0.2399	-2.5084
21	-0.80	0.09	-0.0253	0.0743	-0.0219	-0.0469	-0.0038	0.3464	0.1062	0.2402	-2.9338
22	-0.55	0.09	0.0205	-0.0291	0.0299	-0.0991	-0.0265	0.3477	0.1036	0.2441	-1.4195
23	-0.31	0.09	-0.0124	-0.0155	-0.0078	-0.0354	-0.0098	0.3634	0.1102	0.2532	1.2047
24	-0.08	0.11	0.0672	-0.1147	0.2808	-0.2765	-0.0086	0.3607	0.1096	0.2511	-1.3725
25	0.17	0.08	0.1001	-0.1467	0.3148	-0.0713	-0.0264	0.3519	0.1075	0.2444	-1.4660
26	0.41	0.11	0.0922	-0.1880	0.1690	-0.2424	-0.0031	0.3665	0.1119	0.2546	-2.0377
27	0.63	0.09	0.2032	-0.3095	0.0458	-0.0547	-0.0149	0.3588	0.1097	0.2491	-1.5231
28	0.88	0.08	0.1223	-0.2976	-0.0503	-0.1959	-0.0267	0.3597	0.1130	0.2467	-2.1889
29	1.11	0.09	0.2431	-0.3660	-0.0147	-0.0639	-0.0038	0.3546	0.1136	0.2410	-1.5794
30	1.34	0.09	0.2634	-0.4513	0.0636	-0.0724	-0.0263	0.3520	0.1126	0.2394	-1.7129
31	1.58	0.11	0.3065	-0.5575	0.2370	-0.2755	-0.0144	0.3671	0.1160	0.2511	-1.8312
32	1.79	0.09	0.3535	-0.6346	0.0823	-0.2750	-0.0092	0.3649	0.1130	0.2519	-1.7954
33	2.02	0.07	0.3374	-0.6352	-0.1136	0.0916	-0.0213	0.3614	0.1138	0.2476	-1.8804
34	2.25	0.10	0.4007	-0.7219	0.0641	-0.3292	-0.0150	0.3665	0.1125	0.2340	-1.8015
35	2.48	0.09	0.4358	-0.7848	0.1175	-0.1558	-0.0148	0.3589	0.1159	0.2430	-1.8088
36	2.71	0.09	0.4600	-0.8204	-0.0095	-0.1194	-0.0266	0.3524	0.1186	0.2338	-1.7834
37	2.93	0.09	0.4507	-0.8819	-0.0227	-0.2209	-0.0097	0.3615	0.1193	0.2422	-1.9565
38	3.16	0.07	0.4962	-0.9217	-0.0312	-0.0691	-0.0153	0.3606	0.1207	0.2399	-1.8578
39	3.38	0.10	0.5281	-0.9929	0.1523	-0.2267	-0.0148	0.3681	0.1207	0.2274	-1.8803
40	3.61	0.09	0.6203	-1.1163	0.1393	-0.3485	-0.0034	0.3591	0.1219	0.2372	-1.7963
41	3.83	0.07	0.6034	-1.1966	-0.0671	0.0939	-0.0215	0.3483	0.1253	0.2230	-1.8596
42	4.05	0.08	0.5991	-1.1580	-0.0053	0.0165	-0.0157	0.3634	0.1271	0.2363	-1.9492
43	4.27	0.10	0.6457	-1.2021	0.2323	-0.2755	-0.0036	0.3760	0.1269	0.2491	-1.9545
44	4.47	0.08	0.7157	-1.3715	0.1264	-0.1758	-0.0267	0.3568	0.1310	0.2258	-1.9164
45	4.69	0.09	0.6741	-1.3506	0.1003	-0.1649	-0.0097	0.3575	0.1313	0.2262	-2.0037
46	4.90	0.08	0.7401	-1.4208	0.0997	-0.2063	-0.0153	0.3648	0.1341	0.2307	-1.9198

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 35 MACH 1.04 1.7 RX10-6 PHI 45.0 81.0E11 CONF L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
47	5.11	0.07	0.7442	-1.5337	-0.0292	-0.0266	-0.0275	0.3527	0.1330	0.2197	-1.9558
48	5.31	0.07	0.8267	-1.5962	-0.0769	-0.1632	-0.0046	0.3515	0.1339	0.2176	-1.9292
49	5.51	0.09	0.9014	-1.6916	0.1458	-0.2911	-0.0153	0.3480	0.1353	0.2127	-1.8767
50	5.73	0.09	0.8918	-1.7081	0.1778	-0.2808	-0.0154	0.3516	0.1353	0.2163	-1.9159
51	5.90	0.09	0.9480	-1.8663	0.2147	-0.4790	-0.0039	0.3640	0.1408	0.2232	-1.9683
52	6.10	0.07	0.9193	-1.8552	0.0759	-0.2770	-0.0274	0.3650	0.1418	0.2232	-2.0181
53	6.30	0.09	0.9005	-1.8610	0.1000	-0.1354	-0.0163	0.3674	0.1443	0.2231	-2.0667
54	6.49	0.09	0.9923	-2.0020	0.2564	-0.3517	-0.0130	0.3664	0.1441	0.2223	-2.0175
55	6.69	0.06	1.0036	-2.0330	-0.0767	-0.1058	-0.0282	0.3748	0.1494	0.2254	-2.0252
56	6.89	0.06	1.0213	-2.0600	0.0567	-0.2376	-0.0106	0.3666	0.1506	0.2182	-2.0178
57	7.08	0.07	1.1094	-2.2303	0.1461	-0.3680	-0.0162	0.3772	0.1515	0.2257	-2.0104
58	7.28	0.08	1.0906	-2.2212	0.0992	-0.2450	-0.0280	0.3711	0.1523	0.2188	-2.0367
59	7.47	0.06	1.1127	-2.3055	0.0441	-0.1549	-0.0055	0.3784	0.1564	0.2220	-2.0721
60	7.66	0.06	1.1766	-2.4047	0.0053	-0.2780	-0.0169	0.3754	0.1556	0.2198	-2.0438
61	7.84	0.08	1.1937	-2.4337	0.1393	-0.3862	-0.0107	0.3872	0.1608	0.2264	-2.0388
62	8.02	0.06	1.2403	-2.5377	0.1654	-0.4178	-0.0051	0.3806	0.1628	0.2178	-2.0559
63	8.19	0.06	1.2898	-2.5986	0.0462	-0.1845	-0.0229	0.3825	0.1632	0.2193	-2.0165
64	8.37	0.08	1.3121	-2.6994	0.1569	-0.3091	-0.0056	0.3826	0.1640	0.2186	-2.0577
65	8.54	0.06	1.3795	-2.7846	0.1222	-0.2685	-0.0114	0.3890	0.1658	0.2232	-2.0232
66	8.72	0.07	1.3902	-2.8177	0.0582	-0.1750	-0.0175	0.3702	0.1651	0.2051	-2.0268
67	8.91	0.07	1.4207	-2.9138	0.0243	-0.1985	-0.0005	0.3803	0.1706	0.2097	-2.0509
68	9.07	0.05	1.4526	-2.9870	-0.0798	-0.2064	-0.0121	0.3839	0.1676	0.2163	-2.0297
69	9.23	0.07	1.4465	-2.9623	-0.0177	-0.1729	-0.0121	0.3861	0.1706	0.2155	-2.0537
70	9.42	0.08	1.4750	-3.0485	0.1518	-0.2869	-0.0003	0.4049	0.1758	0.2291	-2.0668
71	9.58	0.07	1.5292	-3.1744	0.2043	-0.2539	-0.0176	0.3922	0.1788	0.2134	-2.0791
72	9.77	0.08	1.5191	-3.1691	0.1736	-0.2184	-0.0065	0.3939	0.1803	0.2136	-2.0993
73	9.96	0.06	1.6009	-3.2796	0.1533	-0.3154	-0.0063	0.3924	0.1791	0.2133	-2.0486
74	10.12	0.04	1.6047	-3.3227	-0.0405	-0.2022	-0.0184	0.3871	0.1825	0.2046	-2.0706
75	10.32	0.05	1.6697	-3.4305	-0.0063	-0.2535	-0.0011	0.3971	0.1855	0.2116	-2.0566
76	10.66	0.08	1.7089	-3.5437	0.0541	-0.1520	-0.0127	0.3980	0.1866	0.2114	-2.0444
77	10.65	0.06	1.7259	-3.5306	0.0585	-0.1809	-0.0070	0.3910	0.1874	0.2036	-2.0514
78	10.83	0.06	1.7556	-3.6418	0.1559	-0.3683	-0.0048	0.3983	0.1874	0.2109	-2.0685
79	11.00	0.04	1.8249	-3.7223	-0.0290	-0.0437	-0.0191	0.3967	0.1936	0.2026	-2.0397
80	11.17	0.05	1.7916	-3.7001	-0.0328	-0.1387	-0.0075	0.3966	0.1896	0.2070	-2.0652
81	11.33	0.05	1.8972	-3.8655	0.0597	-0.2490	-0.0073	0.4030	0.1932	0.2098	-2.0375
82	11.50	0.06	1.8714	-3.8308	0.1236	-0.1529	-0.0188	0.4019	0.1966	0.2053	-2.0671
83	11.69	0.06	1.9048	-3.9536	0.0479	-0.1405	-0.0020	0.4035	0.1981	0.2054	-2.0711
84	11.84	0.06	1.9824	-4.0448	0.1552	-0.2928	-0.0073	0.4001	0.2010	0.1991	-2.0394
85	12.01	0.05	1.9871	-4.0588	-0.0689	-0.0831	-0.0138	0.4049	0.2029	0.2020	-2.0426
86	12.18	0.07	2.0274	-4.1641	0.1182	-0.2087	-0.0019	0.3980	0.2036	0.1944	-2.0628
87	12.34	0.03	2.0681	-4.1734	-0.0052	-0.2709	-0.0134	0.4032	0.2026	0.2006	-2.0182
88	12.52	0.06	2.0902	-4.2581	0.0567	-0.1869	-0.0079	0.4035	0.2059	0.1976	-2.0372
89	12.69	0.06	2.1271	-4.3313	0.1608	-0.2341	-0.0019	0.4141	0.2084	0.2057	-2.0410
90	12.85	0.03	2.1182	-4.3271	-0.0771	-0.1299	-0.0198	0.3988	0.2111	0.1877	-2.0628
91	13.03	0.06	2.1906	-4.4815	0.0878	-0.1457	-0.0024	0.4107	0.2122	0.1985	-2.0458
92	13.18	0.05	2.1976	-4.4840	0.0469	-0.2120	-0.0138	0.4173	0.2125	0.2048	-2.0404

MANTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	35	1.60	1.7	45.0	BINOFIL	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	13.35	0.05	2.2202	-4.5205	0.0024	-0.1604	-0.0198	0.4004	0.2155	0.1849	-2.0361
94	13.52	0.08	2.2865	-4.6280	0.1540	-0.3060	0.0036	0.4053	0.2103	0.1950	-2.0241
95	13.49	0.03	2.3401	-4.7435	-0.0657	-0.0021	-0.0147	0.4078	0.2172	0.1906	-2.0270
96	13.84	0.05	2.3492	-4.7468	-0.0138	-0.2066	-0.0085	0.4012	0.2164	0.1848	-2.0286
97	14.01	0.06	2.4226	-4.8650	0.0636	-0.2033	0.0031	0.4150	0.2187	0.1963	-2.0085
98	14.18	0.05	2.4283	-4.8626	0.0415	-0.1550	-0.0200	0.4141	0.2198	0.1943	-2.0025
99	14.34	0.07	2.4037	-4.8542	0.1458	-0.3247	-0.0138	0.4147	0.2187	0.1960	-2.0194
100	14.51	0.09	2.5054	-5.0126	0.0296	-0.0766	-0.0203	0.4088	0.2213	0.1867	-2.0083
101	14.69	0.05	2.5799	-5.0363	0.0484	-0.2430	-0.0315	0.3940	0.2243	0.1737	-1.9915
102	14.86	0.06	2.4870	-5.0140	0.0270	-0.1381	-0.0148	0.4043	0.2239	0.1804	-2.0161
103	15.01	0.05	2.5765	-5.1322	0.1075	-0.2268	-0.0200	0.4039	0.2243	0.1796	-1.9918
104	15.19	0.05	2.5914	-5.1878	-0.0108	-0.0548	-0.0207	0.4004	0.2328	0.1684	-2.0015
105	15.37	0.08	2.6526	-5.2442	0.2638	-0.3471	-0.0081	0.4079	0.2304	0.1775	-1.9778
106	15.51	0.09	2.6973	-5.3167	0.0843	-0.0965	-0.0319	0.4017	0.2341	0.1678	-1.9674
107	15.70	0.06	2.7214	-5.3361	0.0745	-0.1387	-0.0203	0.3975	0.2364	0.1611	-1.9608
108	15.86	0.04	2.7535	-5.3732	0.0422	-0.1017	-0.0089	0.4088	0.2397	0.1691	-1.9514
109	16.02	0.03	2.7715	-5.4573	-0.1507	0.0417	-0.0384	0.4107	0.2402	0.1705	-1.9698
110	16.19	0.06	2.7387	-5.3007	0.1536	-0.3064	-0.0080	0.4275	0.2554	0.1721	-1.9355
111	16.33	0.05	2.7904	-5.4407	0.0686	-0.1020	-0.0203	0.4286	0.2561	0.1725	-1.9498
112	16.51	0.08	2.8166	-5.4367	0.1988	-0.1087	-0.0085	0.4205	0.2613	0.1592	-1.9302
113	16.68	0.06	2.8401	-5.4555	0.1357	-0.1772	-0.0141	0.4282	0.2635	0.1647	-1.9209
114	16.83	0.04	2.9022	-5.5398	-0.0152	-0.0619	-0.0318	0.4365	0.2676	0.1689	-1.9088
115	17.01	0.06	2.9272	-5.5610	0.0055	-0.1967	-0.0200	0.4237	0.2669	0.1568	-1.8997
116	17.18	0.06	3.0116	-5.6346	0.2214	-0.4340	-0.0191	0.4230	0.2750	0.1480	-1.8709
117	17.34	0.04	2.9620	-5.5760	-0.0347	-0.1308	-0.0258	0.4306	0.2740	0.1566	-1.8825
118	17.51	0.07	2.9901	-5.6451	0.2168	-0.3474	-0.0078	0.4397	0.2780	0.1617	-1.8862
119	17.65	0.05	3.0676	-5.7213	0.1957	-0.2486	-0.0309	0.4322	0.2814	0.1508	-1.8651
120	17.84	0.05	3.0342	-5.7070	0.0534	-0.1278	-0.0372	0.4339	0.2843	0.1496	-1.8778
121	18.00	0.07	3.1076	-5.7320	0.1709	-0.2784	-0.0251	0.4436	0.2889	0.1548	-1.8445
122	18.15	0.09	3.1549	-5.7890	0.0175	-0.1856	-0.0369	0.4285	0.2862	0.1423	-1.8355
123	18.33	0.07	3.1542	-5.8006	0.1848	-0.3257	-0.0306	0.4376	0.2865	0.1511	-1.8398
124	18.48	0.05	3.2094	-5.8455	0.1265	-0.2377	-0.0365	0.4343	0.2896	0.1448	-1.8214
125	18.64	0.03	3.2469	-5.8856	-0.0797	-0.0621	-0.0429	0.4234	0.2909	0.1326	-1.8127
126	18.80	0.07	3.2229	-5.8674	0.1971	-0.2700	-0.0307	0.4343	0.2928	0.1416	-1.8299
127	19.96	0.05	3.3044	-5.9606	0.1795	-0.2529	-0.0421	0.4338	0.2966	0.1373	-1.8039
128	19.12	0.05	3.2662	-5.9351	0.1360	-0.2479	-0.0364	0.4352	0.2969	0.1384	-1.8079
129	19.27	0.06	3.3337	-5.9634	0.2370	-0.3848	-0.0129	0.4408	0.2973	0.1436	-1.7888
130	19.43	0.04	3.3647	-5.9920	-0.0254	-0.2334	-0.0595	0.4430	0.3013	0.1418	-1.7782
131	19.59	0.07	3.3469	-6.0010	0.2664	-0.3108	-0.0301	0.4367	0.3014	0.1354	-1.7708
132	19.73	0.06	3.4152	-6.0273	0.2118	-0.1854	-0.0304	0.4340	0.3042	0.1299	-1.7647
133	19.88	0.06	3.4407	-6.0189	0.2421	-0.3047	-0.0529	0.4482	0.3072	0.1411	-1.7493
134	20.04	0.07	3.4822	-6.0644	0.3448	-0.4521	-0.0296	0.4389	0.3076	0.1314	-1.7415
135	20.19	0.05	3.5524	-6.1523	0.1547	-0.0985	-0.0305	0.4316	0.3106	0.1211	-1.7319
136	20.34	0.06	3.5013	-6.0913	0.1204	-0.1136	-0.0362	0.4354	0.3098	0.1257	-1.7397
137	20.51	0.06	3.5921	-6.1775	0.2095	-0.2876	-0.0241	0.4433	0.3127	0.1307	-1.7198
138	20.69	0.04	3.6404	-6.2052	0.1389	-0.3198	-0.0413	0.4317	0.3131	0.1187	-1.7045

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 35 MACH 1.00 RX10-6 1.7 PHI 95.0 CONF MARTIN L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	20.81	0.07	3.6178	-0.1434	0.2850	-0.3470	-0.0179	0.4324	0.3153	0.1172	-1.6974
140	20.97	0.06	3.6726	-0.2496	0.2569	-0.3722	-0.0180	0.4621	0.3186	0.1236	-1.7017
141	21.12	0.04	3.7567	-0.2489	0.1613	-0.2201	-0.0411	0.4319	0.3194	0.1125	-1.6643
142	21.28	0.06	3.7726	-0.2218	0.2047	-0.2362	-0.0292	0.4298	0.3205	0.1094	-1.6508
143	21.42	0.07	3.8008	-0.2417	0.3575	-0.4247	-0.0457	0.4493	0.3208	0.1286	-1.6422
144	21.58	0.06	3.8035	-0.2437	0.2232	-0.1861	-0.0484	0.4373	0.3211	0.1163	-1.6407
145	21.75	0.07	3.8670	-0.2944	0.3638	-0.5475	-0.0568	0.4416	0.3207	0.1210	-1.6277
146	21.88	0.06	3.9086	-0.2651	0.2926	-0.4122	-0.0569	0.4434	0.3230	0.1205	-1.6029
147	22.03	0.06	3.8919	-0.2127	0.3215	-0.5325	-0.0737	0.4471	0.3238	0.1234	-1.5961
148	22.20	0.09	3.9796	-0.2631	0.5750	-0.8682	-0.0555	0.4526	0.3255	0.1272	-1.5692
149	22.35	0.06	3.9938	-0.2554	0.4504	-0.5523	-0.0788	0.4464	0.3267	0.1198	-1.5639
150	22.49	0.08	4.0114	-0.2104	0.4341	-0.6604	-0.0729	0.4429	0.3281	0.1149	-1.5498
151	22.63	0.05	4.1015	-0.2987	0.4779	-0.5448	-0.0669	0.4458	0.3273	0.1186	-1.5357
152	22.77	0.08	4.1223	-0.3304	0.3832	-0.5028	-0.0958	0.4527	0.3263	0.1265	-1.5376
153	22.94	0.09	4.1462	-0.2432	0.4635	-0.5129	-0.0607	0.4351	0.3273	0.1079	-1.4914
154	23.07	0.07	4.2304	-0.2631	0.4875	-0.5675	-0.0604	0.4436	0.3258	0.1179	-1.4777
155	23.23	0.06	4.2619	-0.2527	0.3899	-0.6159	-0.0718	0.4415	0.3269	0.1147	-1.4671
156	23.34	0.08	4.3234	-0.2279	0.4876	-0.6280	-0.0370	0.4299	0.3256	0.1046	-1.4406
157	23.46	0.05	4.3536	-0.2554	0.4363	-0.6214	-0.0713	0.4427	0.3269	0.1159	-1.4368
158	24.57	0.07	4.7338	-0.1824	0.4480	-0.4920	-0.0239	0.4087	0.3257	0.0838	-1.3018
159	26.64	0.11	5.4500	-0.2403	0.9101	-1.0078	0.0034	0.4020	0.3264	0.0736	-1.1511
160	29.30	0.10	6.5272	-0.1704	0.8812	-0.2992	0.0297	0.3748	0.3406	0.0342	-0.9453
161	33.36	0.15	7.9472	-0.6278	1.0014	-0.1443	0.1090	0.3682	0.3573	0.0109	-0.7165
162	39.19	0.05	10.2240	-0.1971	0.8422	0.7417	0.1002	0.2869	0.3677	-0.0827	-0.5085
163	47.49	0.05	12.3524	-0.2934	0.8654	-0.2439	-0.0058	0.2199	0.3707	-0.1508	-0.2624
164	57.72	0.04	15.4463	-0.8735	0.8874	-0.2634	0.0233	0.1869	0.4184	-0.2315	-0.3155
165	58.62	0.04	14.9316	-0.2107	0.0786	0.2924	0.0054	0.0820	0.3908	-0.3098	-0.2820
166	58.60	0.08	14.8738	-0.3353	0.0607	1.2844	0.0031	0.0529	0.4137	-0.3608	-0.3567
167	58.60	0.01	14.9286	-0.3514	-0.0949	-0.0749	0.0161	0.1488	0.4299	-0.2811	-0.2915
168	57.68	0.02	14.8149	-0.5672	0.1292	-0.6166	-0.0143	0.1111	0.4564	-0.3454	-0.3125

TEST 7 PART 35 MACH 1.00 RX10-6 1.7 PHI 45.0 CONF B1&OF11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CA1	CN1	XCPF1	YCPF1	CNF2	CN2	CA2	XCPF2	YCPF2
1	-5.36	0.10	0.1881	0.0399	0.0993	0.2121	0.5279	-0.1020	-0.0357	-0.0676	0.3499	0.6627
2	-5.45	0.11	0.1925	0.0412	0.1026	0.2140	0.5330	-0.1020	-0.0359	-0.0676	0.3519	0.6627
3	-5.36	0.08	0.1916	0.0407	0.1003	0.2124	0.5235	-0.1046	-0.0360	-0.0684	0.3441	0.6539
4	-5.34	0.09	0.1833	0.0394	0.0963	0.2176	0.5363	-0.1099	-0.0368	-0.0710	0.3348	0.6468
5	-4.95	0.09	0.1768	0.0372	0.0921	0.2104	0.5209	-0.0931	-0.0323	-0.0625	0.3468	0.6713
6	-4.71	0.10	0.1761	0.0362	0.0888	0.2055	0.5043	-0.0800	-0.0298	-0.0565	0.3726	0.7043
7	-4.41	0.10	0.1566	0.0320	0.0795	0.2043	0.5077	-0.0814	-0.0290	-0.0576	0.3562	0.7076
8	-4.12	0.11	0.1506	0.0309	0.0763	0.1973	0.5000	-0.0681	-0.0278	-0.0527	0.3681	0.7739
9	-3.99	0.10	0.1349	0.0260	0.0676	0.1927	0.5011	-0.0631	-0.0250	-0.0489	0.3961	0.7750
10	-3.61	0.11	0.1256	0.0234	0.0624	0.1902	0.5167	-0.0556	-0.0226	-0.0450	0.4116	0.8123
11	-3.34	0.08	0.1201	0.0219	0.0593	0.1823	0.4938	-0.0515	-0.0211	-0.0435	0.4096	0.8047
12	-3.07	0.10	0.1061	0.0214	0.0536	0.2016	0.5052	-0.0450	-0.0193	-0.0402	0.4288	0.8933
13	-2.81	0.09	0.0958	0.0194	0.0482	0.2077	0.5031	-0.0320	-0.0166	-0.0358	0.5186	1.1187
14	-2.55	0.08	0.0878	0.0173	0.0439	0.1970	0.5000	-0.0262	-0.0148	-0.0313	0.6116	1.2934
15	-2.29	0.10	0.0763	0.0148	0.0393	0.1939	0.5151	-0.0110	-0.0134	-0.0254	1.2179	2.3091
16	-2.03	0.10	0.0697	0.0126	0.0347	0.1807	0.4978	-0.0033	-0.0114	-0.0220	3.4536	6.6667
17	-1.78	0.10	0.0627	0.0103	0.0311	0.1642	0.4960	0.0043	-0.0093	-0.0143	-2.1622	-3.3256
18	-1.51	0.11	0.0512	0.0085	0.0266	0.1660	0.5195	0.0082	-0.0087	-0.0135	-1.0607	-1.6463
19	-1.27	0.07	0.0470	0.0079	0.0209	0.1680	0.4447	0.0184	-0.0053	-0.0082	-0.2880	-0.4457
20	-1.02	0.09	0.0426	0.0078	0.0178	0.1737	0.4178	0.0210	-0.0045	-0.0088	-0.2142	-0.3810
21	-0.80	0.09	0.0321	0.0055	0.0144	0.1713	0.4486	0.0248	-0.0027	-0.0065	-0.1088	-0.2621
22	-0.55	0.09	0.0267	0.0029	0.0099	0.1086	0.3708	0.0364	-0.0006	-0.0012	-0.0165	-0.0330
23	-0.31	0.09	0.0153	0.0	0.0047	0.0	0.3072	0.0375	0.0020	0.0006	0.0533	0.0160
24	-0.08	0.11	0.0153	-0.0006	0.0047	-0.0392	0.3072	0.0504	0.0047	0.0050	0.0932	0.0992
25	0.17	0.08	0.0121	-0.0019	0.0016	-0.1570	0.1322	0.0569	0.0055	0.0092	0.0966	0.1441
26	0.41	0.11	0.0069	-0.0042	-0.0012	-1.4479	-0.4138	0.0633	0.0070	0.0135	0.1106	0.2133
27	0.63	0.09	-0.0040	-0.0061	-0.0037	1.5746	0.9250	0.0683	0.0080	0.0193	0.1171	0.2826
28	0.88	0.08	-0.0139	-0.0069	-0.0065	0.6324	0.5963	0.0722	0.0089	0.0202	0.1232	0.2798
29	1.11	0.09	-0.0249	-0.0081	-0.0112	0.3252	0.4498	0.0824	0.0115	0.0253	0.1395	0.3070
30	1.34	0.09	-0.0229	-0.0083	-0.0115	0.3570	0.5134	0.0899	0.0136	0.0324	0.1512	0.3604
31	1.58	0.11	-0.0394	-0.0120	-0.0195	0.3197	0.4949	0.1004	0.0146	0.0392	0.1454	0.3904
32	1.79	0.09	-0.0431	-0.0129	-0.0194	0.2992	0.4501	0.1070	0.0152	0.0413	0.1420	0.3868
33	2.02	0.07	-0.0494	-0.0143	-0.0223	0.2865	0.4469	0.1057	0.0149	0.0402	0.1409	0.3803
34	2.25	0.10	-0.0616	-0.0171	-0.0244	0.2775	0.3961	0.1237	0.0183	0.0492	0.1479	0.3977
35	2.48	0.09	-0.0673	-0.0186	-0.0272	0.2753	0.4042	0.1262	0.0196	0.0515	0.1553	0.4081
36	2.71	0.09	-0.0661	-0.0184	-0.0276	0.2783	0.4175	0.1420	0.0230	0.0586	0.1619	0.3845
37	2.93	0.09	-0.0670	-0.0226	-0.0339	0.2597	0.3897	0.1539	0.0244	0.0568	0.1585	0.3691
38	3.16	0.07	-0.0893	-0.0239	-0.0341	0.2575	0.3819	0.1550	0.0249	0.0563	0.1606	0.3632
39	3.38	0.10	-0.0937	-0.0234	-0.0378	0.2550	0.4034	0.1732	0.0283	0.0643	0.1634	0.3718
40	3.61	0.09	-0.0963	-0.0236	-0.0370	0.2450	0.3842	0.1877	0.0316	0.0673	0.1683	0.3586
41	3.83	0.07	-0.1167	-0.0274	-0.0479	0.2347	0.4105	0.1942	0.0331	0.0690	0.1704	0.3553
42	4.05	0.08	-0.1224	-0.0286	-0.0502	0.2336	0.4101	0.1968	0.0339	0.0703	0.1722	0.3572
43	4.27	0.10	-0.1271	-0.0296	-0.0524	0.2328	0.4162	0.2073	0.0366	0.0772	0.1765	0.3724
44	4.47	0.08	-0.1261	-0.0297	-0.0546	0.2318	0.4262	0.2229	0.0401	0.0829	0.1799	0.3719
45	4.69	0.09	-0.1331	-0.0296	-0.0540	0.2223	0.4057	0.2229	0.0398	0.0839	0.1785	0.3764
46	4.90	0.08	-0.1387	-0.0310	-0.0585	0.2234	0.4218	0.2321	0.0425	0.0846	0.1831	0.3817

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE/10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	35	1.04	1.7	45.0	81.0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	5.11	0.07	-0.1514	-0.0332	-0.0637	0.2192	0.4207	0.2412	0.0448	0.0932	0.1857	0.3864
48	5.31	0.07	-0.1644	-0.0353	-0.0679	0.2147	0.4130	0.2389	0.0443	0.0920	0.1856	0.3851
49	5.51	0.09	-0.1566	-0.0332	-0.0632	0.2119	0.4036	0.2571	0.0478	0.1016	0.1859	0.3952
50	5.73	0.09	-0.1671	-0.0345	-0.0671	0.2065	0.4018	0.2661	0.0493	0.1067	0.1852	0.4018
51	5.90	0.09	-0.1766	-0.0352	-0.0709	0.1993	0.4015	0.2807	0.0529	0.1140	0.1884	0.4061
52	6.10	0.07	-0.1623	-0.0384	-0.0737	0.1996	0.4043	0.2807	0.0527	0.1151	0.1877	0.4108
53	6.30	0.09	-0.1936	-0.0368	-0.0775	0.1897	0.3997	0.2908	0.0554	0.1191	0.1905	0.4096
54	6.49	0.09	-0.1930	-0.0370	-0.0776	0.1859	0.3899	0.3015	0.0571	0.1272	0.1893	0.4218
55	6.69	0.06	-0.2078	-0.0386	-0.0850	0.1867	0.4090	0.3015	0.0577	0.1245	0.1913	0.4129
56	6.89	0.08	-0.2152	-0.0384	-0.0852	0.1784	0.3959	0.3106	0.0592	0.1301	0.1905	0.4189
57	7.08	0.07	-0.2197	-0.0380	-0.0882	0.1729	0.4015	0.3302	0.0619	0.1399	0.1874	0.4237
58	7.28	0.08	-0.2245	-0.0378	-0.0887	0.1674	0.3949	0.3368	0.0629	0.1431	0.1867	0.4248
59	7.47	0.08	-0.2334	-0.0394	-0.0951	0.1661	0.3989	0.3367	0.0635	0.1431	0.1885	0.4250
60	7.66	0.08	-0.2384	-0.0389	-0.0955	0.1631	0.4006	0.3511	0.0656	0.1508	0.1868	0.4295
61	7.84	0.08	-0.2478	-0.0460	-0.1003	0.1615	0.4051	0.3615	0.0673	0.1555	0.1861	0.4302
62	8.02	0.08	-0.2454	-0.0386	-0.0960	0.1562	0.4003	0.3685	0.0683	0.1600	0.1853	0.4342
63	8.19	0.06	-0.2551	-0.0384	-0.1049	0.1519	0.4073	0.3828	0.0704	0.1688	0.1839	0.4410
64	8.37	0.08	-0.2672	-0.0387	-0.1092	0.1485	0.4078	0.3959	0.0721	0.1758	0.1821	0.4441
65	8.54	0.06	-0.2679	-0.0382	-0.1086	0.1426	0.4054	0.4013	0.0726	0.1763	0.1809	0.4393
66	8.72	0.07	-0.2749	-0.0390	-0.1105	0.1440	0.4020	0.4065	0.0730	0.1810	0.1795	0.4453
67	8.91	0.07	-0.2865	-0.0401	-0.1160	0.1399	0.4049	0.4168	0.0748	0.1889	0.1794	0.4532
68	9.07	0.05	-0.2830	-0.0392	-0.1155	0.1365	0.4081	0.4196	0.0749	0.1901	0.1785	0.4533
69	9.23	0.07	-0.2901	-0.0384	-0.1178	0.1323	0.4061	0.4299	0.0762	0.1959	0.1772	0.4557
70	9.42	0.08	-0.2971	-0.0392	-0.1207	0.1319	0.4063	0.4418	0.0771	0.2006	0.1765	0.4561
71	9.58	0.07	-0.2947	-0.0372	-0.1207	0.1262	0.4096	0.4562	0.0782	0.2099	0.1714	0.4601
72	9.77	0.06	-0.3029	-0.0393	-0.1234	0.1237	0.4074	0.4616	0.0784	0.2103	0.1698	0.4556
73	9.96	0.06	-0.3110	-0.0391	-0.1274	0.1257	0.4096	0.4641	0.0786	0.2143	0.1693	0.4618
74	10.12	0.06	-0.3136	-0.0373	-0.1269	0.1189	0.4047	0.4825	0.0799	0.2260	0.1656	0.4684
75	10.32	0.05	-0.3229	-0.0375	-0.1311	0.1161	0.4060	0.4904	0.0806	0.2299	0.1643	0.4688
76	10.48	0.06	-0.3252	-0.0372	-0.1329	0.1144	0.4087	0.5022	0.0818	0.2363	0.1628	0.4705
77	10.65	0.06	-0.3346	-0.0382	-0.1355	0.1141	0.4050	0.5128	0.0822	0.2404	0.1603	0.4689
78	10.83	0.06	-0.3395	-0.0386	-0.1369	0.1072	0.4032	0.5233	0.0828	0.2471	0.1582	0.4722
79	11.00	0.04	-0.3492	-0.0384	-0.1407	0.1066	0.4076	0.5338	0.0837	0.2529	0.1568	0.4738
80	11.17	0.05	-0.3511	-0.0377	-0.1414	0.1073	0.4027	0.5338	0.0839	0.2523	0.1571	0.4726
81	11.33	0.05	-0.3570	-0.0384	-0.1445	0.1031	0.4048	0.5510	0.0848	0.2618	0.1539	0.4751
82	11.50	0.06	-0.3559	-0.0380	-0.1438	0.1011	0.4060	0.5642	0.0854	0.2688	0.1513	0.4766
83	11.69	0.06	-0.3745	-0.0389	-0.1508	0.1038	0.4027	0.5774	0.0861	0.2747	0.1491	0.4758
84	11.84	0.06	-0.3741	-0.0383	-0.1480	0.0981	0.3999	0.5827	0.0862	0.2779	0.1479	0.4769
85	12.01	0.05	-0.3764	-0.0387	-0.1526	0.0960	0.4076	0.5933	0.0869	0.2814	0.1464	0.4743
86	12.18	0.07	-0.3910	-0.0383	-0.1567	0.0979	0.4008	0.5932	0.0865	0.2857	0.1458	0.4816
87	12.34	0.03	-0.3748	-0.0338	-0.1513	0.0902	0.4037	0.6010	0.0869	0.2933	0.1446	0.4888
88	12.52	0.06	-0.3829	-0.0354	-0.1568	0.0918	0.4022	0.6169	0.0876	0.2996	0.1416	0.4853
89	12.69	0.06	-0.4006	-0.0357	-0.1616	0.0891	0.4036	0.6208	0.0871	0.3051	0.1403	0.4915
90	12.85	0.03	-0.3971	-0.0357	-0.1586	0.0869	0.3994	0.6234	0.0872	0.3069	0.1398	0.4923
91	13.03	0.06	-0.4122	-0.0352	-0.1659	0.0854	0.4025	0.6486	0.0875	0.3202	0.1349	0.4937
92	13.18	0.05	-0.4156	-0.0363	-0.1674	0.0873	0.4028	0.6513	0.0878	0.3194	0.1348	0.4904

TEST 7 PART 35 MALM 1.00 RX10-6 1.7 PHI 45.0 CONF 11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	13.35	0.05	-0.4191	-0.0360	-0.1693	0.0859	0.4040	0.6566	0.0876	0.3219	0.1334	0.4903
94	13.52	0.06	-0.4239	-0.0338	-0.1712	0.0792	0.4039	0.6672	0.0874	0.3262	0.1310	0.4919
95	13.69	0.03	-0.4278	-0.0346	-0.1734	0.0809	0.4053	0.6799	0.0879	0.3333	0.1292	0.4902
96	13.84	0.05	-0.4302	-0.0341	-0.1741	0.0792	0.4047	0.6892	0.0879	0.3368	0.1275	0.4916
97	14.01	0.06	-0.4335	-0.0330	-0.1775	0.0761	0.4095	0.6972	0.0879	0.3427	0.1260	0.4915
98	14.18	0.05	-0.4360	-0.0324	-0.1777	0.0756	0.4076	0.7132	0.0879	0.3496	0.1232	0.4899
99	14.34	0.07	-0.4477	-0.0359	-0.1803	0.0799	0.4027	0.7158	0.0878	0.3528	0.1226	0.4929
100	14.51	0.06	-0.4569	-0.0367	-0.1856	0.0803	0.4062	0.7265	0.0879	0.3558	0.1210	0.4897
101	14.69	0.05	-0.4625	-0.0365	-0.1898	0.0789	0.4104	0.7411	0.0877	0.3640	0.1183	0.4912
102	14.86	0.06	-0.4699	-0.0382	-0.1887	0.0813	0.4016	0.7343	0.0876	0.3634	0.1193	0.4949
103	15.01	0.05	-0.4567	-0.0339	-0.1884	0.0742	0.4125	0.7530	0.0873	0.3725	0.1159	0.4947
104	15.19	0.05	-0.4669	-0.0364	-0.1922	0.0776	0.4099	0.7658	0.0870	0.3781	0.1136	0.4937
105	15.37	0.06	-0.4633	-0.0332	-0.1897	0.0716	0.4095	0.7792	0.0867	0.3856	0.1112	0.4949
106	15.51	0.04	-0.4733	-0.0358	-0.1968	0.0752	0.4158	0.7832	0.0864	0.3881	0.1103	0.4955
107	15.70	0.06	-0.4638	-0.0374	-0.2012	0.0773	0.4159	0.7886	0.0861	0.3896	0.1092	0.4940
108	15.86	0.04	-0.4733	-0.0336	-0.1966	0.0710	0.4196	0.8047	0.0855	0.3957	0.1062	0.4917
109	16.02	0.03	-0.4687	-0.0408	-0.2083	0.0818	0.4177	0.8155	0.0863	0.4009	0.1033	0.4916
110	16.19	0.06	-0.5002	-0.0485	-0.2015	0.0969	0.4028	0.8052	0.0585	0.3851	0.0726	0.4783
111	16.33	0.05	-0.5035	-0.0496	-0.2045	0.0985	0.4062	0.8214	0.0571	0.3906	0.0695	0.4755
112	16.51	0.04	-0.4843	-0.0432	-0.2035	0.0908	0.4202	0.8375	0.0562	0.3996	0.0671	0.4769
113	16.68	0.06	-0.5197	-0.0509	-0.2121	0.0979	0.4081	0.8348	0.0567	0.3960	0.0679	0.4764
114	16.83	0.04	-0.5205	-0.0496	-0.2164	0.0942	0.4109	0.8496	0.0552	0.4031	0.0650	0.4745
115	17.01	0.06	-0.5229	-0.0496	-0.2171	0.0948	0.4152	0.8536	0.0547	0.4066	0.0641	0.4763
116	17.18	0.06	-0.5240	-0.0499	-0.2172	0.0952	0.4145	0.8671	0.0535	0.4125	0.0617	0.4757
117	17.34	0.04	-0.5174	-0.0468	-0.2170	0.0904	0.4194	0.8686	0.0539	0.4106	0.0620	0.4727
118	17.51	0.07	-0.5197	-0.0468	-0.2163	0.0900	0.4200	0.8674	0.0519	0.4201	0.0585	0.4734
119	17.65	0.05	-0.5308	-0.0526	-0.2259	0.0990	0.4208	0.8955	0.0511	0.4234	0.0570	0.4728
120	17.84	0.05	-0.5474	-0.0528	-0.2292	0.0984	0.4187	0.8942	0.0511	0.4227	0.0571	0.4727
121	18.00	0.07	-0.5422	-0.0511	-0.2311	0.0925	0.4185	0.9036	0.0504	0.4256	0.0558	0.4710
122	18.15	0.04	-0.5474	-0.0527	-0.2297	0.0962	0.4196	0.9145	0.0496	0.4307	0.0529	0.4718
123	18.33	0.07	-0.5473	-0.0518	-0.2312	0.0946	0.4224	0.9250	0.0486	0.4380	0.0523	0.4735
124	18.48	0.05	-0.5469	-0.0536	-0.2378	0.0981	0.4195	0.9224	0.0466	0.4369	0.0505	0.4715
125	18.64	0.03	-0.5467	-0.0550	-0.2398	0.0970	0.4232	0.9304	0.0460	0.4383	0.0494	0.4711
126	18.80	0.07	-0.5713	-0.0566	-0.2420	0.0990	0.4236	0.9371	0.0454	0.4415	0.0484	0.4711
127	18.96	0.05	-0.5746	-0.0595	-0.2432	0.1035	0.4233	0.9506	0.0437	0.4473	0.0460	0.4705
128	19.12	0.05	-0.5741	-0.0596	-0.2423	0.1036	0.4221	0.9530	0.0433	0.4479	0.0456	0.4708
129	19.27	0.06	-0.5612	-0.0552	-0.2399	0.0983	0.4275	0.9611	0.0426	0.4528	0.0443	0.4711
130	19.43	0.02	-0.5960	-0.0660	-0.2510	0.1107	0.4211	0.9650	0.0429	0.4548	0.0444	0.4713
131	19.59	0.07	-0.5820	-0.0605	-0.2479	0.1039	0.4259	0.9665	0.0415	0.4554	0.0429	0.4712
132	19.73	0.06	-0.5896	-0.0618	-0.2511	0.1048	0.4259	0.9677	0.0408	0.4568	0.0422	0.4708
133	19.88	0.06	-0.5976	-0.0651	-0.2544	0.1069	0.4257	0.9810	0.0404	0.4633	0.0412	0.4723
134	20.04	0.07	-0.5907	-0.0625	-0.2527	0.1024	0.4278	0.9918	0.0388	0.4674	0.0391	0.4713
135	20.19	0.05	-0.5990	-0.0596	-0.2561	0.0995	0.4275	0.9973	0.0375	0.4699	0.0376	0.4712
136	20.34	0.06	-0.5927	-0.0644	-0.2539	0.1095	0.4284	0.9973	0.0377	0.4699	0.0378	0.4712
137	20.51	0.06	-0.6021	-0.0625	-0.2577	0.1038	0.4280	1.0077	0.0362	0.4760	0.0359	0.4724
138	20.64	0.04	-0.6043	-0.0663	-0.2573	0.1097	0.4258	1.0117	0.0367	0.4774	0.0363	0.4719

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
I 35 1.00 1.7 45.0 BIMOBIL 8.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	20.81	0.07	-0.5907	-0.0628	-0.2539	0.1064	0.4302	0.9946	0.0354	0.4674	0.0356	0.4699
140	20.97	0.06	-0.5956	-0.0618	-0.2552	0.1025	0.4262	1.0240	0.0349	0.4816	0.0341	0.4703
141	21.12	0.04	-0.6068	-0.0626	-0.2596	0.1031	0.4241	1.0333	0.0340	0.4871	0.0329	0.4714
142	21.26	0.06	-0.6138	-0.0626	-0.2626	0.1020	0.4278	1.0427	0.0334	0.4914	0.0320	0.4715
143	21.42	0.07	-0.6197	-0.0696	-0.2632	0.1123	0.4247	1.0533	0.0330	0.4957	0.0313	0.4706
144	21.58	0.06	-0.6105	-0.0633	-0.2621	0.1037	0.4293	1.0520	0.0326	0.4961	0.0310	0.4716
145	21.75	0.07	-0.6444	-0.0748	-0.2718	0.1160	0.4218	1.0652	0.0326	0.5014	0.0306	0.4707
146	21.88	0.06	-0.6293	-0.0696	-0.2661	0.1103	0.4260	1.0706	0.0322	0.5029	0.0301	0.4697
147	22.03	0.06	-0.6397	-0.0739	-0.2707	0.1155	0.4232	1.0777	0.0322	0.5062	0.0299	0.4699
148	22.20	0.09	-0.6636	-0.0717	-0.2706	0.1116	0.4201	1.0874	0.0321	0.5113	0.0295	0.4708
149	22.35	0.06	-0.6444	-0.0737	-0.2728	0.1163	0.4233	1.0959	0.0314	0.5146	0.0286	0.4696
150	22.49	0.08	-0.6505	-0.0748	-0.2743	0.1150	0.4217	1.0932	0.0318	0.5101	0.0291	0.4686
151	22.63	0.06	-0.6507	-0.0726	-0.2746	0.1115	0.4220	1.1078	0.0313	0.5177	0.0282	0.4673
152	22.77	0.06	-0.6610	-0.0751	-0.2791	0.1136	0.4222	1.1171	0.0312	0.5227	0.0279	0.4679
153	22.94	0.09	-0.6428	-0.0686	-0.2713	0.1067	0.4221	1.1238	0.0299	0.5264	0.0266	0.4686
154	23.07	0.07	-0.6354	-0.0663	-0.2766	0.1052	0.4255	1.1329	0.0300	0.5303	0.0265	0.4681
155	23.23	0.06	-0.6440	-0.0645	-0.2733	0.1079	0.4244	1.1329	0.0303	0.5298	0.0267	0.4676
156	23.39	0.08	-0.6324	-0.0634	-0.2674	0.1010	0.4226	1.1355	0.0298	0.5332	0.0262	0.4696
157	23.46	0.05	-0.6456	-0.0676	-0.2758	0.1048	0.4276	1.1435	0.0298	0.5360	0.0261	0.4687
158	24.57	0.07	-0.5979	-0.0566	-0.2664	0.0913	0.4355	1.1937	0.0272	0.5612	0.0228	0.4701
159	26.64	0.11	-0.5718	-0.0391	-0.2529	0.0684	0.4423	1.2844	0.0244	0.5947	0.0190	0.4630
160	29.30	0.10	-0.5457	-0.0300	-0.2539	0.0512	0.4335	1.3148	0.0216	0.5928	0.0240	0.4509
161	33.76	0.15	-0.4987	-0.0079	-0.2723	0.0158	0.4458	1.3316	0.0401	0.5913	0.0301	0.4441
162	39.19	0.05	-0.4848	-0.0214	-0.2532	0.0441	0.5223	1.2698	0.0360	0.5621	0.0283	0.4427
163	47.49	0.05	-0.1318	-0.0414	-0.0846	0.3140	0.6419	1.3165	0.0217	0.5872	0.0165	0.4468
164	57.72	0.09	-0.0708	0.0013	0.0564	0.0154	0.7966	1.4812	0.0052	0.6725	0.0035	0.4548
165	54.62	0.04	0.0802	0.0033	0.0554	0.0411	0.6908	1.4406	0.0071	0.6602	0.0049	0.4583
166	58.66	0.06	0.0549	0.0027	0.0436	0.0432	0.7942	1.4539	0.0071	0.6648	0.0049	0.4567
167	58.60	0.01	0.0496	0.0022	0.0366	0.0447	0.7952	1.4647	0.0076	0.6711	0.0052	0.4582
168	57.68	0.02	0.0560	0.0038	0.0337	0.0678	0.8018	1.4836	0.0084	0.6794	0.0057	0.4579

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	35	1.60	1.7	45.0	BLKOFIL	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
1	-5.36	0.10	0.1915	9.9999	0.0884	9.9999	0.4616	-0.1388	-0.0355	-0.0961	0.2557	0.6924
2	-5.35	0.11	0.1976	9.9999	0.0903	9.9999	0.4570	-0.1359	-0.0361	-0.0991	0.2656	0.7292
3	-5.36	0.08	0.1948	9.9999	0.0915	9.9999	0.4721	-0.1320	-0.0352	-0.0966	0.2666	0.7318
4	-5.39	0.09	0.1866	9.9999	0.0861	9.9999	0.4614	-0.1368	-0.0357	-0.0985	0.2624	0.7243
5	-4.65	0.09	0.1756	9.9999	0.0827	9.9999	0.4710	-0.1263	-0.0317	-0.0875	0.2509	0.6928
6	-4.71	0.10	0.1731	9.9999	0.0821	9.9999	0.4743	-0.1214	-0.0295	-0.0802	0.2429	0.6686
7	-4.41	0.10	0.1672	9.9999	0.0755	9.9999	0.4803	-0.1160	-0.0273	-0.0761	0.2313	0.6449
8	-4.12	0.11	0.1520	9.9999	0.0755	9.9999	0.4967	-0.1089	-0.0252	-0.0674	0.2313	0.6189
9	-3.89	0.10	0.1348	9.9999	0.0696	9.9999	0.5072	-0.0969	-0.0225	-0.0580	0.2346	0.6068
10	-3.61	0.11	0.1290	9.9999	0.0661	9.9999	0.5169	-0.0877	-0.0221	-0.0562	0.2519	0.6188
11	-3.34	0.06	0.1103	9.9999	0.0605	9.9999	0.5485	-0.0826	-0.0206	-0.0511	0.2493	0.6186
12	-3.07	0.14	0.1074	9.9999	0.0593	9.9999	0.5446	-0.0695	-0.0187	-0.0468	0.2690	0.6736
13	-2.81	0.09	0.0958	9.9999	0.0555	9.9999	0.5805	-0.0523	-0.0168	-0.0402	0.3211	0.7686
14	-2.55	0.08	0.0833	9.9999	0.0515	9.9999	0.6182	-0.0417	-0.0154	-0.0361	0.3692	0.8657
15	-2.29	0.10	0.0751	9.9999	0.0486	9.9999	0.6124	-0.0300	-0.0132	-0.0314	0.4399	1.0467
16	-2.03	0.10	0.0539	9.9999	0.0424	9.9999	0.7199	-0.0210	-0.0115	-0.0280	0.5475	1.3333
17	-1.78	0.10	0.0502	9.9999	0.0392	9.9999	0.7809	-0.0119	-0.0099	-0.0235	0.8317	1.9748
18	-1.51	0.11	0.0445	9.9999	0.0350	9.9999	0.8042	-0.0080	-0.0091	-0.0221	1.1372	2.7625
19	-1.27	0.07	0.0234	9.9999	0.0327	9.9999	1.1122	0.0033	-0.0061	-0.0158	-1.8480	-4.7879
20	-1.02	0.09	0.0259	9.9999	0.0295	9.9999	1.1390	0.0070	-0.0049	-0.0144	-0.6998	-2.0571
21	-0.80	0.09	0.0209	9.9999	0.0286	9.9999	1.3684	0.0158	-0.0026	-0.0109	-0.1645	-0.6899
22	-0.55	0.09	0.0053	9.9999	0.0240	9.9999	4.8000	0.0221	-0.0013	-0.0082	-0.0588	-0.3718
23	-0.31	0.09	-0.0021	9.9999	0.0186	9.9999	-6.8571	0.0270	0.0005	-0.0072	0.0185	-0.2667
24	-0.04	0.11	-0.0098	9.9999	0.0184	9.9999	-4.0000	0.0397	0.0030	-0.0019	0.0755	-0.0479
25	0.17	0.08	-0.0131	9.9999	0.0153	9.9999	-1.1679	0.0434	0.0042	-0.0009	0.0967	-0.0207
26	0.41	0.11	-0.0179	9.9999	0.0130	9.9999	-0.7263	0.0534	0.0068	0.0042	0.1273	0.0787
27	0.63	0.09	-0.0375	9.9999	0.0090	9.9999	-0.2400	0.0571	0.0078	0.0041	0.1366	0.0718
28	0.86	0.08	-0.0378	9.9999	0.0076	9.9999	-0.2032	0.0663	0.0091	0.0079	0.1372	0.1192
29	1.11	0.09	-0.0434	9.9999	0.0052	9.9999	-0.1198	0.0737	0.0111	0.0113	0.1506	0.1533
30	1.34	0.09	-0.0520	9.9999	0.0040	9.9999	-0.0769	0.0828	0.0126	0.0157	0.1521	0.1896
31	1.58	0.11	-0.0652	9.9999	-0.0061	9.9999	0.0936	0.0956	0.0154	0.0226	0.1610	0.2364
32	1.79	0.09	-0.0713	9.9999	-0.0071	9.9999	0.0996	0.0998	0.0165	0.0240	0.1660	0.2414
33	2.02	0.07	-0.0860	9.9999	-0.0107	9.9999	0.1244	0.1031	0.0175	0.0249	0.1697	0.2415
34	2.25	0.10	-0.0908	9.9999	-0.0153	9.9999	0.1689	0.1155	0.0208	0.0312	0.1808	0.2701
35	2.48	0.09	-0.1004	9.9999	-0.0160	9.9999	0.1793	0.1204	0.0224	0.0338	0.1860	0.2807
36	2.71	0.09	-0.1009	9.9999	-0.0209	9.9999	0.2092	0.1283	0.0239	0.0351	0.1862	0.2736
37	2.93	0.09	-0.1165	9.9999	-0.0286	9.9999	0.2414	0.1306	0.0251	0.0390	0.1921	0.2986
38	3.16	0.07	-0.1271	9.9999	-0.0283	9.9999	0.2227	0.1368	0.0265	0.0411	0.1937	0.3004
39	3.38	0.10	-0.1276	9.9999	-0.0307	9.9999	0.2417	0.1471	0.0286	0.0472	0.1944	0.3209
40	3.61	0.09	-0.1389	9.9999	-0.0304	9.9999	0.2259	0.1507	0.0311	0.0509	0.1959	0.3207
41	3.83	0.07	-0.1504	9.9999	-0.0398	9.9999	0.2545	0.1640	0.0319	0.0550	0.1945	0.3354
42	4.05	0.08	-0.1553	9.9999	-0.0422	9.9999	0.2700	0.1652	0.0322	0.0572	0.1949	0.3462
43	4.27	0.10	-0.1638	9.9999	-0.0452	9.9999	0.2759	0.1837	0.0351	0.0640	0.1910	0.3484
44	4.47	0.08	-0.1722	9.9999	-0.0493	9.9999	0.2843	0.1876	0.0358	0.0675	0.1908	0.3598
45	4.69	0.09	-0.1758	9.9999	-0.0525	9.9999	0.2986	0.1826	0.0345	0.0644	0.1889	0.3527
46	4.90	0.05	-0.1810	9.9999	-0.0534	9.9999	0.2958	0.1969	0.0374	0.0720	0.1899	0.3657

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	RAPT	MACH	RX1u-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	35.1	1.96	1.7	45.0	B1A0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
87	5.11	0.07	-0.1980	9.9999	-0.0605	9.9999	0.3056	0.2033	0.0388	0.0736	0.1908	0.3620
88	5.31	0.07	-0.2080	9.9999	-0.0644	9.9999	0.3115	0.2023	0.0386	0.0746	0.1908	0.3688
89	5.51	0.04	-0.2056	9.9999	-0.0631	9.9999	0.3069	0.2167	0.0409	0.0821	0.1887	0.3789
90	5.73	0.05	-0.2227	9.9999	-0.0693	9.9999	0.3112	0.2195	0.0409	0.0833	0.1863	0.3795
91	5.90	0.04	-0.2327	9.9999	-0.0731	9.9999	0.3141	0.2274	0.0431	0.0909	0.1895	0.3907
92	6.10	0.07	-0.2451	9.9999	-0.0750	9.9999	0.3060	0.2329	0.0429	0.0903	0.1862	0.3877
93	6.30	0.09	-0.2472	9.9999	-0.0776	9.9999	0.3139	0.2377	0.0444	0.0964	0.1867	0.4056
94	6.49	0.05	-0.2647	9.9999	-0.0834	9.9999	0.3151	0.2436	0.0445	0.0979	0.1826	0.4019
95	6.69	0.06	-0.2819	9.9999	-0.0876	9.9999	0.3107	0.2410	0.0460	0.0998	0.1825	0.4141
96	6.89	0.08	-0.2781	9.9999	-0.0883	9.9999	0.3175	0.2488	0.0457	0.1051	0.1836	0.4224
97	7.08	0.07	-0.3002	9.9999	-0.0944	9.9999	0.3145	0.2607	0.0473	0.1134	0.1814	0.4350
98	7.28	0.06	-0.2984	9.9999	-0.0944	9.9999	0.3172	0.2646	0.0481	0.1158	0.1817	0.4376
99	7.47	0.06	-0.3111	9.9999	-0.1014	9.9999	0.3266	0.2635	0.0472	0.1161	0.1791	0.4406
100	7.66	0.06	-0.3262	9.9999	-0.1074	9.9999	0.3285	0.2728	0.0484	0.1205	0.1774	0.4417
101	7.86	0.08	-0.3317	9.9999	-0.1119	9.9999	0.3376	0.2753	0.0492	0.1265	0.1787	0.4595
102	8.02	0.08	-0.3432	9.9999	-0.1158	9.9999	0.3376	0.2786	0.0490	0.1268	0.1758	0.4551
103	8.19	0.06	-0.3529	9.9999	-0.1205	9.9999	0.3415	0.2880	0.0500	0.1328	0.1736	0.4611
104	8.37	0.08	-0.3613	9.9999	-0.1276	9.9999	0.3526	0.2999	0.0515	0.1340	0.1717	0.4635
105	8.54	0.06	-0.3650	9.9999	-0.1276	9.9999	0.3507	0.3024	0.0524	0.1423	0.1732	0.4706
106	8.72	0.07	-0.3790	9.9999	-0.1362	9.9999	0.3588	0.3004	0.0502	0.1368	0.1671	0.4621
107	8.91	0.07	-0.3940	9.9999	-0.1470	9.9999	0.3731	0.3044	0.0508	0.1438	0.1668	0.4724
108	9.07	0.05	-0.3953	9.9999	-0.1496	9.9999	0.3683	0.3057	0.0510	0.1455	0.1668	0.4768
109	9.23	0.07	-0.4012	9.9999	-0.1524	9.9999	0.3749	0.3148	0.0528	0.1520	0.1677	0.4828
110	9.42	0.05	-0.4156	9.9999	-0.1576	9.9999	0.3785	0.3141	0.0512	0.1533	0.1630	0.4881
111	9.56	0.07	-0.4195	9.9999	-0.1611	9.9999	0.3840	0.3245	0.0531	0.1615	0.1636	0.4977
112	9.77	0.08	-0.4327	9.9999	-0.1716	9.9999	0.3961	0.3146	0.0504	0.1548	0.1603	0.4924
113	9.96	0.06	-0.4364	9.9999	-0.1721	9.9999	0.3944	0.3238	0.0514	0.1618	0.1587	0.4997
114	10.12	0.04	-0.4448	9.9999	-0.1786	9.9999	0.4015	0.3302	0.0531	0.1681	0.1608	0.5091
115	10.32	0.05	-0.4521	9.9999	-0.1831	9.9999	0.4050	0.3305	0.0522	0.1690	0.1579	0.5113
116	10.48	0.04	-0.4563	9.9999	-0.1866	9.9999	0.4058	0.3362	0.0521	0.1730	0.1569	0.5146
117	10.65	0.06	-0.4736	9.9999	-0.1979	9.9999	0.4177	0.3381	0.0509	0.1751	0.1505	0.5179
118	10.83	0.06	-0.4811	9.9999	-0.2023	9.9999	0.4205	0.3472	0.0524	0.1808	0.1509	0.5184
119	11.00	0.04	-0.4904	9.9999	-0.2069	9.9999	0.4204	0.3475	0.0519	0.1826	0.1493	0.5255
120	11.17	0.03	-0.4958	9.9999	-0.2117	9.9999	0.4272	0.3465	0.0508	0.1829	0.1466	0.5278
121	11.33	0.05	-0.5126	9.9999	-0.2196	9.9999	0.4296	0.3534	0.0510	0.1875	0.1443	0.5306
122	11.50	0.04	-0.5077	9.9999	-0.2160	9.9999	0.4294	0.3602	0.0515	0.1922	0.1429	0.5338
123	11.69	0.06	-0.5356	9.9999	-0.2348	9.9999	0.4374	0.3537	0.0467	0.1891	0.1320	0.5346
124	11.84	0.04	-0.5369	9.9999	-0.2319	9.9999	0.4319	0.3626	0.0490	0.1962	0.1351	0.5411
125	12.01	0.05	-0.5453	9.9999	-0.2394	9.9999	0.4390	0.3617	0.0478	0.1980	0.1321	0.5474
126	12.18	0.07	-0.5586	9.9999	-0.2477	9.9999	0.4434	0.3637	0.0462	0.1975	0.1270	0.5430
127	12.34	0.03	-0.5426	9.9999	-0.2429	9.9999	0.4396	0.3705	0.0502	0.2031	0.1355	0.5482
128	12.52	0.05	-0.5642	9.9999	-0.2557	9.9999	0.4500	0.3690	0.0470	0.2052	0.1273	0.5561
129	12.69	0.06	-0.5816	9.9999	-0.2611	9.9999	0.4489	0.3775	0.0466	0.2078	0.1234	0.5505
130	12.85	0.04	-0.5780	9.9999	-0.2594	9.9999	0.4488	0.3781	0.0466	0.2092	0.1239	0.5562
131	13.03	0.06	-0.6021	9.9999	-0.2758	9.9999	0.4591	0.3822	0.0454	0.2126	0.1188	0.5563
132	13.18	0.05	-0.6058	9.9999	-0.2757	9.9999	0.4551	0.3786	0.0438	0.2137	0.1157	0.5644

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 35 MACH 1.00 RX10-6 1.7 PHI 45.0 CONF BIMDELL L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CB3	XCPF3	YCPF3	CNF4	CH4	CB4	XCPF4	YCPF4
93	13.35	0.05	-0.6143	9.9999	-0.2602	9.9999	0.4561	0.3824	0.0448	0.2146	0.1171	0.5612
94	13.52	0.06	-0.6240	9.9999	-0.2673	9.9999	0.4604	0.3929	0.0463	0.2186	0.1178	0.5564
95	13.69	0.03	-0.6418	9.9999	-0.2947	9.9999	0.4592	0.3872	0.0443	0.2187	0.1144	0.5648
96	13.86	0.02	-0.6454	9.9999	-0.2962	9.9999	0.4662	0.3918	0.0457	0.2238	0.1168	0.5724
97	14.01	0.06	-0.6513	9.9999	-0.3028	9.9999	0.4649	0.3940	0.0451	0.2244	0.1144	0.5695
98	14.18	0.05	-0.6550	9.9999	-0.3060	9.9999	0.4641	0.4024	0.0450	0.2297	0.1118	0.5708
99	14.34	0.07	-0.6585	9.9999	-0.3096	9.9999	0.4702	0.3909	0.0425	0.2275	0.1087	0.5820
100	14.51	0.04	-0.6731	9.9999	-0.3176	9.9999	0.4718	0.3898	0.0417	0.2289	0.1069	0.5872
101	14.69	0.05	-0.6815	9.9999	-0.3236	9.9999	0.4748	0.3925	0.0421	0.2312	0.1072	0.5890
102	14.86	0.06	-0.6864	9.9999	-0.3269	9.9999	0.4763	0.3859	0.0411	0.2301	0.1065	0.5963
103	15.01	0.05	-0.6913	9.9999	-0.3273	9.9999	0.4735	0.4050	0.0457	0.2371	0.1128	0.5854
104	15.19	0.05	-0.7041	9.9999	-0.3364	9.9999	0.4778	0.3971	0.0459	0.2368	0.1156	0.5963
105	15.37	0.06	-0.7028	9.9999	-0.3372	9.9999	0.4798	0.4186	0.0477	0.2432	0.1139	0.5810
106	15.51	0.04	-0.7225	9.9999	-0.3446	9.9999	0.4770	0.4011	0.0467	0.2408	0.1164	0.6003
107	15.70	0.06	-0.7222	9.9999	-0.3494	9.9999	0.4838	0.4014	0.0457	0.2423	0.1138	0.6030
108	15.86	0.04	-0.7283	9.9999	-0.3528	9.9999	0.4844	0.4182	0.0491	0.2478	0.1174	0.5986
109	16.02	0.03	-0.7469	9.9999	-0.3637	9.9999	0.4856	0.3924	0.0443	0.2435	0.1129	0.6205
110	16.19	0.06	-0.7193	9.9999	-0.3594	9.9999	0.4937	0.4130	0.0519	0.2468	0.1256	0.5966
111	16.33	0.03	-0.7401	9.9999	-0.3674	9.9999	0.4964	0.4022	0.0514	0.2476	0.1278	0.6156
112	16.51	0.08	-0.7484	9.9999	-0.3758	9.9999	0.5021	0.4279	0.0567	0.2537	0.1325	0.5929
113	16.68	0.06	-0.7467	9.9999	-0.3750	9.9999	0.5036	0.4020	0.0483	0.2493	0.1201	0.6201
114	16.83	0.04	-0.7655	9.9999	-0.3854	9.9999	0.5035	0.3997	0.0509	0.2520	0.1273	0.6385
115	17.01	0.06	-0.7628	9.9999	-0.3866	9.9999	0.5094	0.4080	0.0510	0.2547	0.1250	0.6243
116	17.18	0.06	-0.7725	9.9999	-0.3937	9.9999	0.5096	0.4133	0.0518	0.2577	0.1253	0.6235
117	17.34	0.04	-0.7752	9.9999	-0.3939	9.9999	0.5081	0.4191	0.0531	0.2596	0.1267	0.6194
118	17.51	0.07	-0.7823	9.9999	-0.4023	9.9999	0.5143	0.4287	0.0534	0.2629	0.1265	0.6132
119	17.69	0.05	-0.7982	9.9999	-0.4089	9.9999	0.5123	0.4095	0.0493	0.2584	0.1204	0.6310
120	17.84	0.05	-0.7981	9.9999	-0.4103	9.9999	0.5161	0.4003	0.0482	0.2592	0.1204	0.6475
121	18.00	0.07	-0.8005	9.9999	-0.4129	9.9999	0.5158	0.4177	0.0499	0.2637	0.1196	0.6313
122	18.15	0.05	-0.8116	9.9999	-0.4181	9.9999	0.5153	0.4171	0.0479	0.2650	0.1168	0.6353
123	18.33	0.07	-0.8101	9.9999	-0.4243	9.9999	0.5199	0.4278	0.0490	0.2690	0.1145	0.6288
124	18.48	0.05	-0.8306	9.9999	-0.4283	9.9999	0.5157	0.4003	0.0481	0.2627	0.1201	0.6563
125	18.64	0.03	-0.8355	9.9999	-0.4316	9.9999	0.5146	0.4102	0.0476	0.2669	0.1160	0.6507
126	18.80	0.07	-0.8378	9.9999	-0.4337	9.9999	0.5177	0.4147	0.0469	0.2692	0.1131	0.6491
127	18.96	0.05	-0.8600	9.9999	-0.4399	9.9999	0.5114	0.4069	0.0455	0.2670	0.1110	0.6562
128	19.12	0.05	-0.8621	9.9999	-0.4414	9.9999	0.5120	0.4182	0.0481	0.2717	0.1102	0.6497
129	19.27	0.06	-0.8638	9.9999	-0.4417	9.9999	0.5131	0.4425	0.0480	0.2799	0.1084	0.6325
130	19.43	0.02	-0.8769	9.9999	-0.4445	9.9999	0.5089	0.4004	0.0383	0.2669	0.0956	0.6668
131	19.59	0.07	-0.8817	9.9999	-0.4497	9.9999	0.5100	0.4202	0.0446	0.2748	0.1061	0.6540
132	19.73	0.05	-0.8926	9.9999	-0.4510	9.9999	0.5053	0.4106	0.0458	0.2719	0.1115	0.6622
133	19.88	0.06	-0.9048	9.9999	-0.4558	9.9999	0.5038	0.4051	0.0381	0.2696	0.0940	0.6655
134	20.04	0.07	-0.9059	9.9999	-0.4588	9.9999	0.5065	0.4344	0.0450	0.2808	0.1036	0.6466
135	20.19	0.05	-0.9257	9.9999	-0.4643	9.9999	0.5016	0.4266	0.0476	0.2790	0.1116	0.6548
136	20.34	0.06	-0.9193	9.9999	-0.4619	9.9999	0.5023	0.4282	0.0433	0.2786	0.1011	0.6586
137	20.51	0.06	-0.9339	9.9999	-0.4687	9.9999	0.5019	0.4347	0.0441	0.2832	0.1014	0.6515
138	20.64	0.03	-0.9364	9.9999	-0.4694	9.9999	0.5013	0.4273	0.0415	0.2798	0.0971	0.6548

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 35 1.60 1.7 45.0 BI=DF11 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
139	20.81	0.07	-0.9314	9.9999	-0.4685	9.9999	0.5030	0.4447	0.0470	0.2848	0.1057	0.6404
140	20.97	0.06	-0.9510	9.9999	-0.4763	9.9999	0.5015	0.4463	0.0463	0.2839	0.0997	0.6398
141	21.12	0.06	-0.9633	9.9999	-0.4803	9.9999	0.4986	0.4342	0.0419	0.2829	0.0965	0.6515
142	21.28	0.08	-0.9705	9.9999	-0.4871	9.9999	0.5019	0.4315	0.0416	0.2811	0.0964	0.6514
143	21.42	0.07	-0.9802	9.9999	-0.4893	9.9999	0.4992	0.4140	0.0349	0.2741	0.0843	0.6621
144	21.58	0.06	-0.9827	9.9999	-0.4904	9.9999	0.4990	0.4303	0.0346	0.2835	0.0920	0.6588
145	21.75	0.07	-0.9873	9.9999	-0.4961	9.9999	0.5005	0.3920	0.0326	0.2636	0.0831	0.6724
146	21.88	0.06	-1.0021	9.9999	-0.4982	9.9999	0.4972	0.4060	0.0325	0.2708	0.0808	0.6678
147	22.03	0.06	-1.0020	9.9999	-0.4996	9.9999	0.4986	0.3787	0.0310	0.2568	0.0818	0.6781
148	22.20	0.09	-1.0105	9.9999	-0.5062	9.9999	0.4990	0.3950	0.0321	0.2638	0.0812	0.6678
149	22.35	0.06	-1.0167	9.9999	-0.5047	9.9999	0.4964	0.3864	0.0325	0.2581	0.0841	0.6680
150	22.49	0.08	-1.0176	9.9999	-0.5075	9.9999	0.4987	0.3791	0.0321	0.2561	0.0847	0.6703
151	22.63	0.06	-1.0311	9.9999	-0.5120	9.9999	0.4966	0.3779	0.0317	0.2550	0.0839	0.6748
152	22.77	0.08	-1.0359	9.9999	-0.5148	9.9999	0.4970	0.3618	0.0308	0.2456	0.0829	0.6783
153	22.94	0.09	-1.0456	9.9999	-0.5209	9.9999	0.4982	0.3690	0.0352	0.2588	0.0905	0.6653
154	23.07	0.07	-1.0503	9.9999	-0.5207	9.9999	0.4958	0.3950	0.0361	0.2590	0.0914	0.6557
155	23.23	0.08	-1.0502	9.9999	-0.5231	9.9999	0.4981	0.3932	0.0370	0.2570	0.0941	0.6536
156	23.39	0.08	-1.0551	9.9999	-0.5264	9.9999	0.4970	0.3778	0.0315	0.2680	0.0993	0.6615
157	23.46	0.05	-1.0649	9.9999	-0.5266	9.9999	0.4945	0.3914	0.0392	0.2575	0.0976	0.6579
158	24.57	0.07	-1.1036	9.9999	-0.5469	9.9999	0.4957	0.4541	0.0500	0.2841	0.1101	0.6256
159	24.44	0.11	-1.1446	9.9999	-0.5627	9.9999	0.4915	0.5129	0.0656	0.3046	0.1283	0.5939
160	29.30	0.14	-1.2361	9.9999	-0.5964	9.9999	0.4841	0.5304	0.0638	0.3179	0.1203	0.5994
161	33.36	0.15	-1.3241	9.9999	-0.6231	9.9999	0.4692	0.5461	0.0665	0.3373	0.0851	0.6177
162	39.19	0.05	-1.3877	9.9999	-0.5868	9.9999	0.4487	0.5021	0.0573	0.3608	0.1141	0.7186
163	47.69	0.05	-1.2532	9.9999	-0.5627	9.9999	0.4490	0.0450	0.0456	0.1305	1.0131	2.9000
164	57.72	0.04	-1.6038	9.9999	-0.6560	9.9999	0.4553	-0.1353	-0.0047	-0.0187	0.0367	0.1382
165	58.62	0.04	-1.6161	9.9999	-0.6600	9.9999	0.4519	-0.1403	-0.0060	-0.0229	0.0428	0.1632
166	58.60	0.06	-1.6190	9.9999	-0.6615	9.9999	0.4524	-0.1113	-0.0042	-0.0123	0.0377	0.1105
167	58.60	0.01	-1.6429	9.9999	-0.6520	9.9999	0.4519	-0.1082	-0.0047	-0.0138	0.0434	0.1275
168	57.68	0.02	-1.6435	9.9999	-0.6508	9.9999	0.4508	-0.1149	-0.0051	-0.0176	0.0444	0.1532

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 36 MACH 1.10 RN10-6 1.7 PHI 45.0 CONF Missile 0.0 CL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-4.37	0.10	-0.4150	0.4346	-0.0122	-0.0310	-0.0240	0.4677	0.1829	0.2848	-2.0189
2	-4.38	0.11	-0.4595	0.4516	-0.1564	-0.2026	-0.0024	0.4786	0.1847	0.2948	-1.8531
3	-4.29	0.07	-0.4769	0.4789	-0.0779	-0.0491	-0.0243	0.4860	0.1991	0.2969	-1.8428
4	-3.96	0.10	-0.4063	0.4218	-0.0260	-0.0099	-0.0084	0.4697	0.1837	0.2860	-1.8358
5	-3.69	0.11	-0.3659	0.3853	0.2271	-0.2393	-0.0127	0.4717	0.1807	0.2911	-1.9798
6	-3.47	0.09	-0.3706	0.3808	-0.0773	0.0679	-0.0243	0.4832	0.1804	0.3023	-1.7836
7	-3.16	0.11	-0.3169	0.3559	0.1113	-0.1647	-0.0026	0.4846	0.1827	0.3019	-1.7543
8	-2.91	0.09	-0.2812	0.2964	0.0763	-0.1058	-0.0133	0.4803	0.1816	0.2988	-1.7658
9	-2.65	0.11	-0.2449	0.2594	0.0644	-0.0929	-0.0133	0.4815	0.1836	0.2979	-1.7574
10	-2.38	0.10	-0.1921	0.2354	0.0287	-0.1254	-0.0029	0.4893	0.1810	0.3083	-1.7453
11	-2.13	0.07	-0.1664	0.2701	-0.0596	0.0065	-0.0191	0.4914	0.1845	0.3069	-1.6231
12	-1.87	0.10	-0.1785	0.2853	0.0306	-0.1253	-0.0082	0.4938	0.1819	0.3119	-1.5986
13	-1.62	0.08	-0.0928	0.1439	-0.0402	0.0240	-0.0095	0.4887	0.1839	0.3048	-1.5498
14	-1.37	0.09	-0.0945	0.1206	-0.0407	0.0131	-0.0243	0.4885	0.1843	0.3042	-1.2751
15	-1.11	0.11	-0.0180	0.0101	0.0843	-0.0917	-0.0028	0.4965	0.1852	0.3113	-0.5611
16	-0.89	0.09	-0.0118	-0.0006	0.0829	-0.0896	-0.0134	0.4872	0.1854	0.3018	0.0492
17	-0.63	0.10	0.0107	-0.0568	0.0491	-0.1321	-0.0133	0.4962	0.1961	0.3101	-5.3065
18	-0.39	0.11	0.0341	-0.1116	0.1465	-0.2419	-0.0025	0.5018	0.1868	0.3158	-3.2710
19	-0.16	0.08	0.1110	-0.2241	-0.0183	0.0171	-0.0137	0.4916	0.1868	0.3048	-2.0646
20	0.10	0.09	0.0975	-0.2130	-0.0217	-0.0418	-0.0084	0.5021	0.1882	0.3139	-2.1854
21	0.33	0.08	0.1565	-0.3094	-0.0521	-0.0418	-0.0033	0.4973	0.1906	0.3067	-1.9774
22	0.59	0.08	0.1321	-0.2822	0.0680	-0.0322	-0.0186	0.5002	0.1887	0.3115	-2.1371
23	0.81	0.12	0.2021	-0.4020	0.2409	-0.2884	-0.0076	0.4983	0.1900	0.3083	-1.9891
24	1.03	0.08	0.2643	-0.4953	0.0614	-0.2163	-0.0134	0.4976	0.1918	0.3066	-1.8459
25	1.25	0.10	0.2707	-0.5021	0.0812	-0.0050	-0.0133	0.5032	0.1912	0.3120	-1.8545
26	1.50	0.11	0.3099	-0.5825	0.1307	-0.1612	0.0026	0.4991	0.1922	0.3069	-1.8798
27	1.72	0.07	0.3479	-0.6020	-0.0192	-0.1078	-0.0136	0.5011	0.1946	0.3065	-1.7305
28	1.93	0.10	0.3284	-0.6266	0.0	-0.0646	-0.0136	0.5015	0.1972	0.3043	-1.9053
29	2.18	0.09	0.3979	-0.7149	0.0051	-0.1455	-0.0030	0.5016	0.1961	0.3055	-1.7965
30	2.40	0.08	0.4095	-0.7478	0.0249	-0.0811	-0.0187	0.5033	0.1978	0.3055	-1.8251
31	2.62	0.11	0.3814	-0.7072	0.0992	-0.1764	-0.0132	0.5039	0.1982	0.3057	-1.8544
32	2.86	0.08	0.4842	-0.8448	0.0113	-0.0700	-0.0030	0.5070	0.1982	0.3088	-1.7433
33	3.08	0.09	0.4511	-0.8243	0.0917	-0.0518	-0.0237	0.5061	0.2019	0.3042	-1.8271
34	3.29	0.06	0.4606	-0.8511	0.0307	-0.1697	-0.0082	0.4998	0.2018	0.2980	-1.8477
35	3.53	0.08	0.5211	-0.9085	0.1407	-0.2086	-0.0077	0.5109	0.2025	0.3084	-1.7435
36	3.76	0.07	0.5595	-1.0042	-0.0549	-0.0063	-0.0242	0.5060	0.2055	0.3005	-1.7948
37	3.97	0.10	0.5623	-1.0341	0.1862	-0.2631	-0.0024	0.5107	0.2052	0.3055	-1.8391
38	4.19	0.08	0.5811	-1.0708	0.0043	-0.0335	-0.0083	0.5047	0.2079	0.2968	-1.8427
39	4.42	0.09	0.6415	-1.1419	0.0750	-0.1642	-0.0133	0.5038	0.2112	0.2926	-1.7799
40	4.61	0.08	0.7083	-1.2387	-0.0102	-0.1451	-0.0031	0.5011	0.2133	0.2877	-1.7489
41	4.83	0.07	0.6920	-1.2461	0.0645	-0.2373	-0.0238	0.5095	0.2150	0.2945	-1.8008
42	5.05	0.07	0.7212	-1.2902	-0.0273	-0.1817	-0.0084	0.5063	0.2153	0.2910	-1.7898
43	5.23	0.07	0.7572	-1.3731	0.0269	-0.2434	-0.0030	0.5077	0.2190	0.2887	-1.8134
44	5.45	0.07	0.7962	-1.4081	0.0657	-0.2665	-0.0186	0.5084	0.2208	0.2875	-1.7729
45	5.65	0.10	0.7800	-1.4194	0.2323	-0.4468	-0.0023	0.5116	0.2220	0.2896	-1.8197
46	5.82	0.06	0.8288	-1.4865	0.0306	-0.1877	-0.0084	0.5161	0.2244	0.2917	-1.7935

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
1	36	1.10	1.2	65.0	B1=OF11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	6.03	0.04	0.8124	-1.5030	0.0755	-0.2485	-0.0135	0.5168	0.2267	0.2901	-1.8500
48	6.22	0.08	0.8630	-1.5993	0.0082	-0.1954	0.0019	0.5207	0.2764	0.2943	-1.8538
49	6.44	0.07	0.9073	-1.6771	0.0832	-0.3020	-0.0046	0.5214	0.2294	0.2920	-1.8485
50	6.64	0.07	0.9195	-1.7235	-0.0073	-0.2124	-0.0088	0.5171	0.2315	0.2855	-1.8744
51	6.83	0.06	0.9578	-1.7856	0.0914	-0.3320	0.0021	0.5237	0.2332	0.2905	-1.8643
52	7.03	0.06	0.9996	-1.8601	0.0171	-0.2348	-0.0141	0.5221	0.2352	0.2868	-1.8608
53	7.22	0.09	0.9842	-1.8900	0.1405	-0.3149	-0.0066	0.5258	0.2368	0.2890	-1.9101
54	7.41	0.07	1.0903	-1.9765	0.1401	-0.3539	-0.0032	0.5234	0.2379	0.2854	-1.8147
55	7.59	0.07	1.1004	-2.0611	0.0858	-0.1633	-0.0144	0.5154	0.2409	0.2744	-1.8731
56	7.75	0.09	1.0931	-2.0683	0.1052	-0.2754	0.0016	0.5259	0.2413	0.2845	-1.8922
57	7.96	0.07	1.1295	-2.1344	0.1271	-0.3290	-0.0036	0.5236	0.2423	0.2812	-1.8897
58	8.14	0.08	1.1563	-2.1874	0.0833	-0.2433	-0.0143	0.5271	0.2434	0.2836	-1.8744
59	8.31	0.08	1.1703	-2.2351	0.1290	-0.3154	0.0015	0.5275	0.2440	0.2834	-1.9099
60	8.48	0.07	1.2591	-2.3567	0.1598	-0.3580	-0.0089	0.5253	0.2492	0.2760	-1.8734
61	8.65	0.06	1.2495	-2.3770	0.1069	-0.3095	-0.0040	0.5322	0.2495	0.2826	-1.9023
62	8.84	0.09	1.3108	-2.4701	0.2593	-0.4762	0.0070	0.5335	0.2512	0.2822	-1.8848
63	9.01	0.07	1.3366	-2.5326	0.1565	-0.2969	-0.0093	0.5246	0.2542	0.2703	-1.8948
64	9.20	0.09	1.3671	-2.5626	0.2008	-0.3611	-0.0038	0.5314	0.2562	0.2771	-1.8765
65	9.36	0.07	1.4414	-2.6991	0.1876	-0.3684	0.0012	0.5365	0.2555	0.2809	-1.8725
66	9.52	0.05	1.4230	-2.6780	-0.0122	-0.2167	-0.0099	0.5331	0.2579	0.2751	-1.8819
67	9.74	0.08	1.4454	-2.7535	0.1348	-0.3309	0.0062	0.5378	0.2576	0.2801	-1.9051
68	9.90	0.06	1.4868	-2.8228	0.1029	-0.3426	-0.0044	0.5398	0.2613	0.2784	-1.8963
69	10.07	0.06	1.5297	-2.9069	-0.0165	-0.1966	-0.0102	0.5327	0.2624	0.2697	-1.9003
70	10.28	0.06	1.5536	-2.9296	0.0383	-0.2367	-0.0110	0.5411	0.2647	0.2763	-1.8861
71	10.42	0.06	1.5952	-3.0490	0.0992	-0.3072	-0.0048	0.5380	0.2651	0.2728	-1.9114
72	10.60	0.07	1.6103	-3.0260	0.0069	-0.2338	0.0004	0.5424	0.2688	0.2735	-1.8778
73	10.77	0.07	1.6614	-3.1427	0.0916	-0.3329	0.0057	0.5453	0.2715	0.2737	-1.8917
74	10.95	0.06	1.6664	-3.1482	0.0255	-0.2047	-0.0103	0.5443	0.2721	0.2721	-1.8893
75	11.13	0.09	1.7405	-3.2831	0.0848	-0.3402	0.0003	0.5445	0.2749	0.2695	-1.8863
76	11.27	0.07	1.7568	-3.3297	0.1805	-0.3440	-0.0056	0.5440	0.2742	0.2697	-1.8975
77	11.45	0.07	1.8148	-3.4372	0.0995	-0.2723	-0.0053	0.5470	0.2789	0.2680	-1.8898
78	11.60	0.09	1.8685	-3.4956	0.1406	-0.3971	0.0056	0.5484	0.2793	0.2690	-1.8749
79	11.79	0.05	1.8447	-3.4739	0.0063	-0.2038	0.0050	0.5486	0.2806	0.2679	-1.8832
80	11.96	0.08	1.8810	-3.5474	0.1049	-0.3084	-0.0052	0.5396	0.2810	0.2585	-1.8857
81	12.13	0.07	1.9396	-3.6265	0.0781	-0.2883	0.0051	0.5495	0.2841	0.2653	-1.8697
82	12.31	0.07	1.9800	-3.6923	0.1330	-0.2474	-0.0054	0.5498	0.2846	0.2653	-1.8838
83	12.47	0.08	1.9812	-3.7287	0.1082	-0.2808	-0.0054	0.5504	0.2847	0.2656	-1.8820
84	12.63	0.08	2.0378	-3.8435	0.1246	-0.3177	0.0102	0.5456	0.2844	0.2611	-1.8843
85	12.80	0.06	2.0908	-3.8740	0.0733	-0.2114	-0.0109	0.5463	0.2881	0.2581	-1.8529
86	12.98	0.08	2.0501	-3.8772	0.0063	-0.1248	-0.0109	0.5490	0.2885	0.2605	-1.8913
87	13.14	0.07	2.0846	-3.9605	0.2420	-0.3673	0.0051	0.5562	0.2881	0.2680	-1.8962
88	13.30	0.08	2.2128	-4.1131	0.0997	-0.2165	-0.0112	0.5438	0.2898	0.2539	-1.8598
89	13.47	0.06	2.1369	-4.0420	0.0796	-0.3049	0.0046	0.5480	0.2913	0.2567	-1.8915
90	13.65	0.05	2.2485	-4.1760	0.0867	-0.3544	-0.0005	0.5458	0.2926	0.2532	-1.8573
91	13.81	0.05	2.2829	-4.2466	0.0660	-0.2933	-0.0164	0.5464	0.2936	0.2528	-1.8602
92	13.98	0.07	2.2624	-4.2204	0.2104	-0.4364	0.0051	0.5533	0.2953	0.2588	-1.8655

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 36 MACH 1.10 RE10-6 1.7 PHI 45.0 CONF HIWOF11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	14.13	0.06	2.3077	-4.3026	0.1979	-0.3876	-0.0004	0.5470	0.2953	0.2517	-1.8645
94	14.29	0.05	2.3181	-4.3285	-0.0309	-0.1839	-0.0117	0.5476	0.2970	0.2506	-1.8673
95	14.48	0.06	2.3638	-4.3936	0.0764	-0.2948	0.0044	0.5492	0.2984	0.2508	-1.8587
96	14.59	0.05	2.4343	-4.4611	0.0779	-0.2670	-0.0060	0.5499	0.2987	0.2512	-1.8298
97	14.81	0.07	2.4282	-4.4942	0.0744	-0.1878	0.0042	0.5529	0.3004	0.2525	-1.8509
98	15.00	0.06	2.4947	-4.5986	0.1410	-0.3171	-0.0008	0.5491	0.3004	0.2487	-1.8626
99	15.17	0.06	2.5451	-4.6666	0.1340	-0.2782	-0.0167	0.5363	0.3004	0.2359	-1.8336
100	15.33	0.07	2.5524	-4.6526	0.0799	-0.2753	-0.0062	0.5423	0.3021	0.2402	-1.8228
101	15.49	0.05	2.6178	-4.7851	0.1001	-0.3975	-0.0061	0.5457	0.3014	0.2443	-1.8280
102	15.66	0.06	2.6313	-4.7914	0.1161	-0.3365	-0.0218	0.5433	0.3021	0.2412	-1.8209
103	15.82	0.07	2.6646	-4.8418	0.1597	-0.3122	-0.0061	0.5455	0.3042	0.2413	-1.8144
104	16.00	0.04	2.7181	-4.9498	-0.0156	-0.1729	-0.0066	0.5461	0.3041	0.2420	-1.8027
105	16.15	0.06	2.6711	-4.8708	0.0769	-0.1799	-0.0275	0.5426	0.3044	0.2382	-1.8235
106	16.32	0.07	2.7391	-4.9367	0.1002	-0.2440	-0.0168	0.5472	0.3068	0.2404	-1.8016
107	16.48	0.06	2.7891	-5.0171	0.0762	-0.2192	-0.0274	0.5439	0.3078	0.2361	-1.7989
108	16.65	0.07	2.8193	-5.0349	0.0985	-0.1820	-0.0275	0.5485	0.3086	0.2319	-1.7865
109	16.81	0.07	2.8405	-5.0751	0.0532	-0.2734	-0.0116	0.5519	0.3078	0.2441	-1.7867
110	16.98	0.05	2.8689	-5.0881	0.0686	-0.2731	-0.0429	0.5443	0.3099	0.2344	-1.7736
111	17.13	0.07	2.8835	-5.1171	0.1157	-0.2935	-0.0323	0.5452	0.3109	0.2343	-1.7746
112	17.32	0.06	2.9932	-5.2039	0.1648	-0.3812	-0.0164	0.5469	0.3129	0.2340	-1.7681
113	17.46	0.05	2.9691	-5.2432	0.0575	-0.2055	-0.0432	0.5372	0.3160	0.2212	-1.7659
114	17.65	0.07	2.9774	-5.2506	0.1238	-0.3257	-0.0323	0.5481	0.3177	0.2304	-1.7658
115	17.80	0.05	3.0222	-5.2784	0.1389	-0.3460	-0.0374	0.5451	0.3171	0.2280	-1.7466
116	17.95	0.05	3.0421	-5.2905	0.0110	-0.1950	-0.0431	0.5406	0.3187	0.2219	-1.7391
117	18.14	0.06	3.0587	-5.2956	0.1504	-0.2765	-0.0268	0.5516	0.3214	0.2302	-1.7313
118	18.30	0.05	3.1341	-5.3854	0.0764	-0.3539	-0.0478	0.5429	0.3231	0.2198	-1.7156
119	18.45	0.07	3.1077	-5.3630	0.1404	-0.3281	-0.0530	0.5397	0.3251	0.2146	-1.7257
120	18.63	0.07	3.1627	-5.3672	0.1774	-0.3960	-0.0368	0.5577	0.3286	0.2291	-1.6978
121	18.77	0.06	3.1924	-5.3749	0.1631	-0.3626	-0.0420	0.5469	0.3309	0.2160	-1.6837
122	18.95	0.07	3.2304	-5.3760	0.2158	-0.4305	-0.0469	0.5553	0.3316	0.2237	-1.6642
123	19.09	0.05	3.2734	-5.4504	0.1408	-0.3696	-0.0367	0.5579	0.3326	0.2253	-1.6651
124	19.24	0.05	3.2812	-5.4111	0.2069	-0.4629	-0.0677	0.5559	0.3336	0.2223	-1.6491
125	19.41	0.06	3.2960	-5.4156	0.1633	-0.4006	-0.0416	0.5488	0.3350	0.2138	-1.6430
126	19.57	0.05	3.3478	-5.4704	0.1842	-0.4933	-0.0466	0.5576	0.3364	0.2212	-1.6348
127	19.72	0.05	3.3544	-5.4355	0.1486	-0.3369	-0.0625	0.5560	0.3367	0.2193	-1.6284
128	19.87	0.06	3.3728	-5.4192	0.3130	-0.5514	-0.0512	0.5545	0.3367	0.2228	-1.6068
129	20.01	0.05	3.4368	-5.5064	0.2022	-0.4085	-0.0569	0.5542	0.3381	0.2161	-1.6022
130	20.18	0.07	3.4680	-5.4781	0.2622	-0.4710	-0.0776	0.5468	0.3380	0.2088	-1.5790
131	20.34	0.06	3.5104	-5.5712	0.2114	-0.4191	-0.0303	0.5485	0.3376	0.2109	-1.5586
132	20.48	0.05	3.5238	-5.5753	0.2405	-0.4637	-0.0616	0.5508	0.3400	0.2108	-1.5538
133	20.63	0.07	3.5456	-5.5756	0.2173	-0.4614	-0.0668	0.5531	0.3397	0.2134	-1.5443
134	20.79	0.07	3.6041	-5.6826	0.2633	-0.5206	-0.0559	0.5475	0.3396	0.2081	-1.5195
135	20.95	0.04	3.6427	-5.5183	0.1247	-0.2749	-0.0460	0.5433	0.3401	0.2032	-1.5149
136	21.13	0.08	3.7304	-5.5122	0.2499	-0.4348	-0.0450	0.5492	0.3407	0.2085	-1.4776
137	21.26	0.07	3.7630	-5.5780	0.3747	-0.5294	-0.0497	0.5519	0.3414	0.2105	-1.4558
138	21.41	0.02	3.7546	-5.4542	0.1618	-0.3080	-0.0504	0.5425	0.3421	0.2004	-1.4507

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) . 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MANTIS MISSILE TAILS EFFECTS DATA

TEST 7 PART 36 MACH 1.10 RX10-6 1.7 PHI +5.0 CONF B1=OFF1 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
139	21.54	0.08	3.7949	-5.4344	0.2776	-0.4143	-0.0445	0.5511	0.3428	0.2083	-1.4381
140	21.72	0.05	3.8383	-5.4103	0.2568	-0.4124	-0.0496	0.5538	0.3424	0.2114	-1.4096
141	21.80	0.06	3.4466	-5.3340	0.2186	-0.3561	-0.0440	0.5377	0.3427	0.1950	-1.3697
142	22.04	0.08	3.9556	-5.4265	0.3672	-0.6117	-0.0329	0.5397	0.3427	0.1970	-1.3719
143	22.16	0.06	4.0150	-5.4848	0.3465	-0.5366	-0.0645	0.5490	0.3438	0.2052	-1.3695
144	22.35	0.06	4.0477	-5.4163	0.2139	-0.3503	-0.0436	0.5408	0.3431	0.1977	-1.3318
145	22.49	0.06	4.0480	-5.3673	0.4021	-0.5338	-0.0375	0.5420	0.3448	0.1972	-1.3247
146	22.63	0.05	4.1390	-5.4190	0.2530	-0.3770	-0.0488	0.5412	0.3457	0.1955	-1.3091
147	22.79	0.09	4.1874	-5.4144	0.3879	-0.5608	-0.0476	0.5474	0.3489	0.1985	-1.2930
148	22.93	0.07	4.2318	-5.4584	0.3726	-0.5760	-0.0423	0.5515	0.3491	0.2024	-1.2898
149	23.08	0.20	4.2647	-5.4234	0.3811	-0.5524	-0.0683	0.5498	0.3502	0.1996	-1.2782
150	23.24	0.08	4.2962	-5.3548	0.4066	-0.5245	-0.0312	0.5445	0.3516	0.1929	-1.2478
151	23.38	0.08	4.3605	-5.4207	0.5023	-0.7043	-0.0516	0.5492	0.3516	0.1976	-1.2431
152	23.69	0.07	4.3048	-5.3478	0.3523	-0.4907	-0.0734	0.5496	0.3530	0.1966	-1.2524
153	24.53	0.10	4.7016	-5.2806	0.4913	-0.7255	-0.0182	0.5482	0.3561	0.1921	-1.1231
154	26.84	0.10	5.5013	-5.1833	0.7218	-1.0169	0.0536	0.5524	0.3769	0.1755	-0.9422
155	30.25	0.12	6.8448	-4.9848	0.7796	-0.6257	0.1310	0.5637	0.3953	0.1684	-0.7283
156	35.84	0.04	9.0196	-4.1695	0.3940	0.0249	0.1015	0.5703	0.4114	0.1589	-0.6848
157	44.43	0.00	12.4508	-3.2371	-0.2786	0.2408	-0.0331	0.4058	0.4195	-0.0137	-0.6616
158	55.57	0.06	16.0543	-5.6703	0.2986	-1.0271	-0.0065	0.2948	0.4095	-0.1147	-0.3891
159	58.73	0.10	14.9811	-5.8144	0.5576	0.3607	0.0225	0.2063	0.4160	-0.2097	-0.3907
160	58.66	-0.01	14.7021	-5.6724	-0.2056	-0.1268	-0.0076	0.2609	0.4406	-0.1997	-0.3858
161	57.09	0.01	14.4973	-5.4589	-0.1712	-0.6070	-0.0137	0.2315	0.4621	-0.2306	-0.3785
162	55.47	0.05	14.2033	-4.9224	0.2691	-0.4015	0.0101	0.2641	0.4767	-0.2126	-0.3651
163	53.90	0.00	14.6255	-4.9324	0.0221	-1.2596	-0.0015	0.2391	0.4750	-0.2359	-0.3372
164	52.19	0.00	14.1694	-5.0251	-0.2593	-1.1190	-0.0160	0.2459	0.4630	-0.2171	-0.3546
165	50.39	0.01	13.6144	-5.1022	0.1626	-0.9923	-0.0103	0.2682	0.4432	-0.1950	-0.3748
166	48.49	0.02	13.0133	-4.3225	-0.0844	0.0508	-0.0228	0.2395	0.4497	-0.2102	-0.3322
167	46.46	0.06	12.4397	-5.0255	0.2234	-0.2545	0.0320	0.2876	0.4446	-0.1570	-0.4040
168	44.32	0.02	12.0822	-5.4910	-0.0870	0.1364	0.0117	0.3201	0.4507	-0.1307	-0.4959
169	42.20	0.06	11.4479	-6.5416	0.2591	0.6938	0.0609	0.3364	0.4542	-0.1179	-0.5714
170	40.15	0.05	10.8387	-6.6198	0.0401	0.4583	0.0805	0.4537	0.4663	-0.0126	-0.6225
171	37.92	0.05	9.7170	-6.3525	0.0441	0.5753	0.0618	0.4844	0.4717	0.0126	-0.6537
172	35.65	0.09	8.7866	-6.1744	0.2919	0.2435	0.1322	0.5031	0.4696	0.0334	-0.7033
173	33.23	0.13	7.7479	-5.9926	0.7499	-0.4629	0.2135	0.5441	0.4673	0.0968	-0.7734

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	36	1.10	1.7	45.0	MIWOF11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-4.37	0.10	0.1243	0.0380	0.0724	0.3056	0.5825	-0.0762	-0.0270	-0.0507	0.3542	0.6654
2	-4.38	0.11	0.1220	0.0376	0.0726	0.3081	0.5951	-0.0798	-0.0277	-0.0515	0.3470	0.6458
3	-4.29	0.07	0.1253	0.0385	0.0730	0.3072	0.5826	-0.0788	-0.0260	-0.0494	0.3299	0.6269
4	-3.96	0.10	0.0962	0.0333	0.0646	0.3461	0.6715	-0.0691	-0.0255	-0.0446	0.3689	0.6454
5	-3.69	0.11	0.0931	0.0319	0.0622	0.3426	0.6681	-0.0559	-0.0227	-0.0375	0.4060	0.6708
6	-3.47	0.08	0.0836	0.0301	0.0577	0.3600	0.6902	-0.0511	-0.0212	-0.0375	0.4148	0.7339
7	-3.16	0.11	0.0719	0.0275	0.0537	0.3824	0.7469	-0.0367	-0.0184	-0.0303	0.5012	0.8256
8	-2.91	0.09	0.0657	0.0254	0.0495	0.3865	0.7534	-0.0367	-0.0188	-0.0294	0.5121	0.8811
9	-2.65	0.11	0.0595	0.0245	0.0459	0.4117	0.7714	-0.0187	-0.0145	-0.0237	0.7752	1.2674
10	-2.38	0.10	0.0477	0.0232	0.0411	0.4862	0.8616	-0.0163	-0.0146	-0.0221	0.8955	1.3558
11	-2.13	0.07	0.0416	0.0210	0.0364	0.5047	0.8750	-0.0067	-0.0119	-0.0182	1.7756	2.7164
12	-1.87	0.10	0.0393	0.0210	0.0371	0.5342	0.9460	0.0018	-0.0113	-0.0180	-6.2761	-7.7778
13	-1.62	0.08	0.0237	0.0155	0.0291	0.6538	1.2278	0.0039	-0.0087	-0.0123	-2.2302	-3.1538
14	-1.37	0.09	0.0237	0.0162	0.0262	0.6834	1.1849	0.0148	-0.0078	-0.0049	-0.5269	-0.4682
15	-1.11	0.11	0.0065	0.0123	0.0236	1.8918	3.6308	0.0243	-0.0045	-0.0030	-0.1851	-0.1235
16	-0.89	0.09	0.0007	0.0111	0.0220	1.6563	3.2836	0.0315	-0.0021	-0.0019	-0.0666	-0.0603
17	-0.63	0.10	-0.0031	0.0081	0.0207	-2.6122	-6.6774	0.0425	-0.0024	0.0020	-0.0565	0.0471
18	-0.39	0.11	-0.0063	0.0072	0.0198	-1.1426	-3.1429	0.0497	-0.0005	0.0037	-0.0101	0.0744
19	-0.16	0.08	-0.0176	0.0037	0.0129	-0.2102	-0.7330	0.0556	0.0023	0.0057	0.0414	0.1025
20	0.10	0.09	-0.0231	0.0020	0.0126	-0.0866	-0.5455	0.0606	0.0019	0.0066	0.0313	0.1089
21	0.33	0.08	-0.0307	0.0007	0.0112	-0.0228	-0.3648	0.0677	0.0051	0.0074	0.0753	0.1093
22	0.54	0.08	-0.0263	0.0001	0.0121	-0.0038	-0.4601	0.0798	0.0063	0.0109	0.0789	0.1366
23	0.81	0.12	-0.0436	-0.0037	0.0080	0.0848	-0.1835	0.0941	0.0101	0.0171	0.1073	0.1817
24	1.03	0.08	-0.0448	-0.0054	0.0057	0.1209	-0.1168	0.0977	0.0110	0.0179	0.1126	0.1832
25	1.25	0.10	-0.0571	-0.0082	0.0017	0.1436	-0.0298	0.0987	0.0119	0.0185	0.1205	0.1874
26	1.50	0.11	-0.0679	-0.0101	-0.0010	0.1487	0.0147	0.1070	0.0144	0.0218	0.1345	0.2837
27	1.72	0.07	-0.0623	-0.0096	-0.0009	0.1541	0.0144	0.1153	0.0166	0.0270	0.1439	0.2342
28	1.93	0.10	-0.0740	-0.0118	-0.0052	0.1594	0.0703	0.1198	0.0191	0.0299	0.1594	0.2496
29	2.18	0.09	-0.0826	-0.0134	-0.0091	0.1626	0.1104	0.1234	0.0201	0.0302	0.1628	0.2447
30	2.40	0.08	-0.0836	-0.0147	-0.0127	0.1771	0.1530	0.1317	0.0216	0.0344	0.1648	0.2612
31	2.62	0.11	-0.0811	-0.0137	-0.0105	0.1689	0.1295	0.1387	0.0245	0.0385	0.1766	0.2776
32	2.86	0.08	-0.0955	-0.0179	-0.0191	0.1874	0.2000	0.1433	0.0271	0.0419	0.1891	0.2924
33	3.08	0.09	-0.0977	-0.0179	-0.0194	0.1932	0.1986	0.1553	0.0296	0.0460	0.1905	0.2902
34	3.29	0.08	-0.0988	-0.0177	-0.0195	0.1791	0.1976	0.1623	0.0312	0.0491	0.1922	0.3025
35	3.53	0.06	-0.1019	-0.0184	-0.0204	0.1854	0.2002	0.1694	0.0337	0.0517	0.1989	0.3052
36	3.76	0.07	-0.1243	-0.0213	-0.0297	0.1713	0.2389	0.1740	0.0355	0.0551	0.2048	0.3167
37	3.97	0.10	-0.1295	-0.0225	-0.0312	0.1751	0.2428	0.1836	0.0370	0.0584	0.2015	0.3181
38	4.19	0.08	-0.1294	-0.0228	-0.0326	0.1713	0.2539	0.1884	0.0381	0.0603	0.2022	0.3281
39	4.42	0.09	-0.1401	-0.0235	-0.0359	0.1677	0.2634	0.2002	0.0414	0.0663	0.2067	0.3312
40	4.61	0.08	-0.1487	-0.0247	-0.0398	0.1661	0.2677	0.2062	0.0424	0.0683	0.2058	0.3312
41	4.83	0.07	-0.1442	-0.0244	-0.0394	0.1719	0.2732	0.2169	0.0449	0.0737	0.2070	0.3398
42	5.05	0.07	-0.1507	-0.0253	-0.0411	0.1678	0.2727	0.2217	0.0458	0.0751	0.2065	0.3387
43	5.23	0.07	-0.1635	-0.0282	-0.0463	0.1662	0.2832	0.2337	0.0478	0.0806	0.2045	0.3449
44	5.45	0.07	-0.1645	-0.0287	-0.0470	0.1623	0.2857	0.2457	0.0499	0.0861	0.2030	0.3504
45	5.65	0.10	-0.1678	-0.0270	-0.0466	0.1609	0.2789	0.2539	0.0510	0.0892	0.2008	0.3513
46	5.82	0.06	-0.1761	-0.0281	-0.0517	0.1595	0.2936	0.2575	0.0518	0.0915	0.2011	0.3553

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 3a ALM 1.14 RX10-6 1.7 PHI 45.0 CONF M14DE11 L 0.8 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPE1	YCPE1	CNF2	CM2	CH2	XCPE2	YCPE2
47	6.03	0.06	-0.1734	-0.0277	-0.0514	0.1592	0.2956	0.2696	0.0526	0.0950	0.1951	0.3524
48	6.22	0.08	-0.1963	-0.0301	-0.0581	0.1569	0.2990	0.2790	0.0557	0.1003	0.1996	0.3595
49	6.44	0.07	-0.1864	-0.0287	-0.0586	0.1539	0.3144	0.2971	0.0567	0.1097	0.1908	0.3692
50	6.64	0.07	-0.1917	-0.0288	-0.0615	0.1492	0.3208	0.3007	0.0576	0.1110	0.1915	0.3691
51	6.83	0.08	-0.1926	-0.0285	-0.0635	0.1479	0.3297	0.3102	0.0588	0.1177	0.1895	0.3784
52	7.03	0.06	-0.2025	-0.0314	-0.0692	0.1547	0.3411	0.3176	0.0593	0.1188	0.1867	0.3741
53	7.22	0.09	-0.2115	-0.0303	-0.0733	0.1432	0.3466	0.3283	0.0608	0.1246	0.1851	0.3795
54	7.41	0.07	-0.2067	-0.0307	-0.0736	0.1449	0.3596	0.3452	0.0619	0.1344	0.1793	0.3893
55	7.59	0.07	-0.2153	-0.0303	-0.0790	0.1407	0.3669	0.3511	0.0632	0.1374	0.1800	0.3913
56	7.79	0.09	-0.2214	-0.0315	-0.0798	0.1414	0.3596	0.3559	0.0632	0.1417	0.1775	0.3981
57	7.98	0.07	-0.2217	-0.0317	-0.0812	0.1429	0.3663	0.3691	0.0643	0.1492	0.1742	0.4042
58	8.14	0.08	-0.2214	-0.0314	-0.0816	0.1418	0.3666	0.3771	0.0646	0.1531	0.1713	0.4080
59	8.31	0.06	-0.2322	-0.0324	-0.0847	0.1395	0.3648	0.3795	0.0651	0.1553	0.1715	0.4092
60	8.48	0.07	-0.2256	-0.0302	-0.0848	0.1338	0.3759	0.4035	0.0664	0.1690	0.1645	0.4188
61	8.65	0.06	-0.2361	-0.0324	-0.0890	0.1372	0.3770	0.4036	0.0666	0.1681	0.1650	0.4165
62	8.84	0.05	-0.2417	-0.0313	-0.0899	0.1295	0.3714	0.4179	0.0672	0.1781	0.1608	0.4262
63	9.01	0.07	-0.2436	-0.0310	-0.0930	0.1272	0.3818	0.4228	0.0678	0.1790	0.1603	0.4234
64	9.20	0.04	-0.2466	-0.0310	-0.0903	0.1288	0.3753	0.4421	0.0685	0.1909	0.1569	0.4318
65	9.36	0.07	-0.2514	-0.0305	-0.0962	0.1213	0.3827	0.4473	0.0691	0.1964	0.1544	0.4348
66	9.52	0.05	-0.2481	-0.0312	-0.0955	0.1257	0.3849	0.4548	0.0692	0.1994	0.1522	0.4386
67	9.74	0.08	-0.2662	-0.0324	-0.1006	0.1226	0.3808	0.4618	0.0696	0.2035	0.1507	0.4407
68	9.90	0.06	-0.2630	-0.0317	-0.1014	0.1205	0.3956	0.4739	0.0699	0.2103	0.1475	0.4438
69	10.07	0.06	-0.2791	-0.0316	-0.1079	0.1132	0.3866	0.4800	0.0702	0.2109	0.1462	0.4394
70	10.28	0.06	-0.2791	-0.0329	-0.1075	0.1178	0.3852	0.4909	0.0703	0.2172	0.1432	0.4425
71	10.42	0.06	-0.2747	-0.0302	-0.1077	0.1099	0.3921	0.5128	0.0707	0.2258	0.1378	0.4403
72	10.60	0.07	-0.2822	-0.0319	-0.1101	0.1130	0.3901	0.5152	0.0711	0.2270	0.1380	0.4406
73	10.77	0.07	-0.2812	-0.0317	-0.1091	0.1127	0.3880	0.5361	0.0711	0.2322	0.1326	0.4331
74	10.95	0.06	-0.2886	-0.0317	-0.1132	0.1098	0.3922	0.5396	0.0713	0.2364	0.1321	0.4381
75	11.13	0.08	-0.3004	-0.0317	-0.1178	0.1055	0.3921	0.5591	0.0715	0.2449	0.1278	0.4380
76	11.27	0.07	-0.2939	-0.0294	-0.1169	0.1000	0.3978	0.5615	0.0717	0.2456	0.1277	0.4374
77	11.45	0.07	-0.3045	-0.0311	-0.1210	0.1021	0.3974	0.5833	0.0719	0.2572	0.1232	0.4409
78	11.64	0.04	-0.3144	-0.0320	-0.1226	0.1018	0.3899	0.5834	0.0718	0.2567	0.1230	0.4400
79	11.79	0.05	-0.3105	-0.0309	-0.1239	0.0995	0.3990	0.5874	0.0723	0.2607	0.1231	0.4438
80	11.96	0.08	-0.3164	-0.0304	-0.1258	0.0965	0.3996	0.6032	0.0722	0.2688	0.1197	0.4456
81	12.13	0.07	-0.3235	-0.0294	-0.1285	0.0921	0.3972	0.6117	0.0721	0.2734	0.1178	0.4470
82	12.31	0.07	-0.3257	-0.0302	-0.1293	0.0927	0.3970	0.6202	0.0723	0.2776	0.1165	0.4476
83	12.47	0.08	-0.3267	-0.0305	-0.1294	0.0933	0.3961	0.6311	0.0718	0.2838	0.1137	0.4497
84	12.63	0.05	-0.3319	-0.0284	-0.1341	0.0855	0.4040	0.6432	0.0721	0.2902	0.1121	0.4512
85	12.80	0.05	-0.3329	-0.0297	-0.1368	0.0892	0.4049	0.6566	0.0718	0.2957	0.1093	0.4504
86	12.98	0.08	-0.3426	-0.0304	-0.1373	0.0867	0.4008	0.6541	0.0717	0.2965	0.1098	0.4533
87	13.14	0.07	-0.3362	-0.0296	-0.1356	0.0874	0.4033	0.6711	0.0715	0.3061	0.1065	0.4561
88	13.30	0.08	-0.3447	-0.0296	-0.1410	0.0868	0.4067	0.6892	0.0713	0.3179	0.1036	0.4613
89	13.47	0.06	-0.3469	-0.0296	-0.1412	0.0862	0.4047	0.6868	0.0714	0.3157	0.1039	0.4597
90	13.65	0.05	-0.3511	-0.0288	-0.1427	0.0797	0.4084	0.7014	0.0712	0.3218	0.1015	0.4588
91	13.81	0.05	-0.3636	-0.0307	-0.1477	0.0844	0.4060	0.7209	0.0710	0.3308	0.0985	0.4589
92	13.98	0.07	-0.3659	-0.0298	-0.1488	0.0814	0.4067	0.7257	0.0709	0.3336	0.0977	0.4597

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 36 1.1W 1.7 PHI 45.0 B1=2F11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPE1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
93	14.13	0.08	-0.3524	-0.0270	-0.1453	0.0766	0.4123	0.7364	0.0705	0.3372	0.0957	0.4579
94	14.29	0.05	-0.3818	-0.0309	-0.1540	0.0810	0.4038	0.7424	0.0709	0.3416	0.0955	0.4601
95	14.48	0.06	-0.3835	-0.0305	-0.1552	0.0795	0.4047	0.7445	0.0707	0.3446	0.0944	0.4604
96	14.64	0.05	-0.3868	-0.0278	-0.1518	0.0744	0.4121	0.7455	0.0701	0.3533	0.0915	0.4615
97	14.81	0.07	-0.3834	-0.0287	-0.1573	0.0768	0.4103	0.7704	0.0701	0.3547	0.0910	0.4604
98	15.00	0.06	-0.3929	-0.0301	-0.1614	0.0766	0.4108	0.7801	0.0697	0.3609	0.0893	0.4626
99	15.17	0.06	-0.3994	-0.0291	-0.1639	0.0728	0.4104	0.7923	0.0699	0.3668	0.0882	0.4638
100	15.33	0.07	-0.4037	-0.0297	-0.1653	0.0735	0.4095	0.7947	0.0697	0.3684	0.0877	0.4636
101	15.49	0.05	-0.3944	-0.0271	-0.1654	0.0678	0.4146	0.8167	0.0689	0.3795	0.0843	0.4647
102	15.66	0.06	-0.4023	-0.0284	-0.1684	0.0716	0.4186	0.8265	0.0682	0.3842	0.0825	0.4649
103	15.82	0.07	-0.4173	-0.0291	-0.1743	0.0697	0.4177	0.8363	0.0681	0.3874	0.0814	0.4632
104	16.00	0.04	-0.4153	-0.0280	-0.1726	0.0674	0.4156	0.8423	0.0677	0.3918	0.0804	0.4652
105	16.15	0.06	-0.4208	-0.0293	-0.1771	0.0690	0.4169	0.8497	0.0676	0.3934	0.0795	0.4630
106	16.32	0.07	-0.4249	-0.0305	-0.1827	0.0692	0.4144	0.8582	0.0675	0.3985	0.0786	0.4643
107	16.48	0.06	-0.4430	-0.0294	-0.1843	0.0663	0.4160	0.8655	0.0671	0.4025	0.0775	0.4650
108	16.65	0.07	-0.4429	-0.0289	-0.1852	0.0652	0.4192	0.8753	0.0666	0.4063	0.0761	0.4642
109	16.81	0.07	-0.4483	-0.0287	-0.1872	0.0640	0.4176	0.8802	0.0662	0.4081	0.0752	0.4636
110	16.98	0.05	-0.4621	-0.0310	-0.1922	0.0671	0.4158	0.8887	0.0663	0.4132	0.0746	0.4649
111	17.13	0.07	-0.4649	-0.0310	-0.1954	0.0660	0.4161	0.9034	0.0655	0.4203	0.0725	0.4652
112	17.32	0.06	-0.4536	-0.0264	-0.1908	0.0582	0.4206	0.9119	0.0650	0.4244	0.0713	0.4656
113	17.46	0.05	-0.4728	-0.0287	-0.1984	0.0607	0.4196	0.9143	0.0654	0.4261	0.0715	0.4660
114	17.65	0.07	-0.4762	-0.0297	-0.1997	0.0624	0.4156	0.9326	0.0647	0.4344	0.0694	0.4658
115	17.80	0.05	-0.4845	-0.0287	-0.2034	0.0592	0.4198	0.9265	0.0646	0.4324	0.0697	0.4667
116	17.95	0.05	-0.4812	-0.0273	-0.2039	0.0567	0.4237	0.9461	0.0640	0.4409	0.0676	0.4660
117	18.14	0.06	-0.4834	-0.0270	-0.2046	0.0558	0.4233	0.9533	0.0639	0.4458	0.0670	0.4676
118	18.30	0.05	-0.5026	-0.0298	-0.2110	0.0585	0.4210	0.9632	0.0634	0.4491	0.0658	0.4663
119	18.45	0.07	-0.5026	-0.0294	-0.2116	0.0585	0.4210	0.9668	0.0629	0.4513	0.0650	0.4668
120	18.63	0.07	-0.5134	-0.0350	-0.2178	0.0674	0.4193	0.9628	0.0456	0.4434	0.0473	0.4605
121	18.77	0.06	-0.5066	-0.0333	-0.2148	0.0657	0.4202	0.9664	0.0453	0.4467	0.0469	0.4622
122	18.95	0.07	-0.5257	-0.0345	-0.2222	0.0656	0.4227	0.9799	0.0447	0.4526	0.0456	0.4619
123	19.09	0.05	-0.5320	-0.0345	-0.2258	0.0648	0.4244	0.9848	0.0437	0.4559	0.0444	0.4629
124	19.26	0.05	-0.5345	-0.0352	-0.2275	0.0653	0.4225	0.9921	0.0433	0.4600	0.0436	0.4637
125	19.41	0.06	-0.5321	-0.0331	-0.2256	0.0622	0.4240	1.0007	0.0430	0.4626	0.0438	0.4623
126	19.57	0.02	-0.5297	-0.0324	-0.2272	0.0612	0.4269	1.0092	0.0431	0.4677	0.0427	0.4634
127	19.72	0.05	-0.5391	-0.0332	-0.2326	0.0616	0.4315	1.0215	0.0421	0.4726	0.0412	0.4627
128	19.87	0.04	-0.5481	-0.0326	-0.2325	0.0595	0.4242	1.0239	0.0422	0.4743	0.0412	0.4632
129	20.01	0.05	-0.5481	-0.0329	-0.2330	0.0600	0.4251	1.0248	0.0411	0.4781	0.0399	0.4647
130	20.18	0.07	-0.5640	-0.0340	-0.2386	0.0603	0.4248	1.0349	0.0411	0.4795	0.0397	0.4633
131	20.34	0.06	-0.5500	-0.0290	-0.2299	0.0547	0.4338	1.0418	0.0409	0.4843	0.0392	0.4649
132	20.48	0.05	-0.5450	-0.0301	-0.2354	0.0552	0.4319	1.0455	0.0403	0.4861	0.0385	0.4648
133	20.63	0.07	-0.5515	-0.0299	-0.2387	0.0542	0.4316	1.0589	0.0399	0.4916	0.0377	0.4643
134	20.79	0.07	-0.5634	-0.0288	-0.2381	0.0529	0.4341	1.0639	0.0393	0.4929	0.0369	0.4633
135	20.95	0.04	-0.5611	-0.0287	-0.2310	0.0493	0.4433	1.0688	0.0394	0.4953	0.0369	0.4634
136	21.13	0.06	-0.5267	-0.0250	-0.2315	0.0475	0.4395	1.0834	0.0392	0.5014	0.0362	0.4628
137	21.28	0.07	-0.5342	-0.0264	-0.2344	0.0494	0.4388	1.0873	0.0383	0.4997	0.0352	0.4596
138	21.41	0.05	-0.5149	-0.0243	-0.2279	0.0472	0.4424	1.0910	0.0377	0.5015	0.0345	0.4597

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RE10-6 PHI CONF . L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 16 1.10 1.7 45.0 Hi=Off 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	Cm1	Cn1	XCPF1	YCPF1	CNF2	Cm2	Cn2	XCPF2	YCPF2
139	21.59	0.08	-0.5141	-0.0242	-0.2291	0.0467	0.4422	1.1032	0.0379	0.5064	0.0343	0.4590
140	21.72	0.05	-0.5161	-0.0240	-0.2274	0.0465	0.4406	1.1070	0.0372	0.5072	0.0336	0.4582
141	21.46	0.08	-0.5043	-0.0237	-0.2228	0.0470	0.4418	1.1084	0.0359	0.5053	0.0324	0.4559
142	22.04	0.08	-0.5088	-0.0243	-0.2263	0.0478	0.4410	1.1220	0.0350	0.5103	0.0312	0.4548
143	22.18	0.06	-0.5319	-0.0253	-0.2355	0.0476	0.4428	1.1318	0.0341	0.5145	0.0301	0.4546
144	22.35	0.08	-0.5128	-0.0240	-0.2261	0.0468	0.4408	1.1356	0.0341	0.5134	0.0300	0.4521
145	22.49	0.06	-0.5129	-0.0241	-0.2257	0.0470	0.4400	1.1358	0.0329	0.5129	0.0290	0.4518
146	22.63	0.05	-0.5047	-0.0244	-0.2270	0.0488	0.4456	1.1465	0.0320	0.5164	0.0279	0.4522
147	22.79	0.09	-0.5152	-0.0241	-0.2269	0.0468	0.4443	1.1587	0.0319	0.5234	0.0275	0.4517
148	22.93	0.07	-0.5196	-0.0241	-0.2313	0.0464	0.4453	1.1637	0.0311	0.5267	0.0267	0.4509
149	23.06	0.20	-0.5234	-0.0244	-0.2351	0.0466	0.4492	1.1661	0.0304	0.5269	0.0261	0.4518
150	23.24	0.08	-0.5011	-0.0236	-0.2250	0.0471	0.4440	1.1749	0.0297	0.5276	0.0253	0.4491
151	23.38	0.08	-0.5177	-0.0238	-0.2324	0.0460	0.4489	1.1812	0.0292	0.5331	0.0247	0.4513
152	23.49	0.07	-0.5093	-0.0255	-0.2402	0.0472	0.4466	1.1716	0.0297	0.5255	0.0253	0.4485
153	24.53	0.10	-0.4690	-0.0157	-0.2211	0.0335	0.4714	1.2302	0.0236	0.5614	0.0193	0.4563
154	26.26	0.10	-0.2870	0.0048	-0.1481	-0.0160	0.5160	1.3169	0.0161	0.6119	0.0137	0.4667
155	30.25	0.12	-0.0395	0.0319	-0.0259	-0.8074	0.6532	1.4426	0.0118	0.6753	0.0082	0.4681
156	34.86	0.09	-0.2881	-0.0006	-0.1584	0.0026	0.5414	1.5213	0.0069	0.7071	0.0045	0.4668
157	44.43	0.00	-0.3904	-0.0287	-0.2056	0.0735	0.5266	1.4729	0.0202	0.6687	0.0137	0.4548
158	55.57	0.08	0.0393	-0.0066	0.0465	-0.1679	1.1323	1.5070	0.0010	0.6876	0.0007	0.4561
159	54.73	0.10	0.0040	0.0002	0.0596	0.0031	0.9313	1.5352	-0.0013	0.7019	-0.0008	0.4572
160	56.66	-0.01	0.0655	0.0016	0.0547	0.0275	0.8351	1.5383	-0.0063	0.7054	-0.0002	0.4586
161	57.09	0.01	0.0070	-0.0001	0.0203	-0.0143	2.9000	1.4825	0.0061	0.6773	0.0041	0.4569
162	55.67	0.05	-0.0120	-0.0006	0.0108	0.0333	-0.9000	1.4252	0.0092	0.6500	0.0065	0.4561
163	53.96	0.00	0.0626	0.0017	0.0450	0.0271	0.7189	1.4566	0.0114	0.6719	0.0078	0.4600
164	52.19	0.00	-0.0019	-0.0063	0.0094	3.3149	-0.9478	1.3996	0.0163	0.6424	0.0116	0.4591
165	50.39	0.01	-0.1164	-0.0237	-0.0534	0.2071	0.4668	1.3580	0.0168	0.6207	0.0124	0.4571
166	48.49	0.02	-0.1142	-0.0277	-0.0773	0.3300	0.6769	1.3159	0.0217	0.6007	0.0165	0.4565
167	46.45	0.06	-0.2168	-0.0486	-0.1266	0.2250	0.5939	1.3055	0.0231	0.5905	0.0177	0.4523
168	44.32	0.02	-0.3734	-0.0565	-0.2139	0.1513	0.5728	1.3192	0.0276	0.5997	0.0209	0.4546
169	42.20	0.08	-0.4270	-0.0436	-0.2265	0.1021	0.5304	1.3216	0.0297	0.5995	0.0225	0.4536
170	40.15	0.05	-0.4252	-0.0317	-0.2423	0.0322	0.5698	1.4091	0.0310	0.6433	0.0220	0.4565
171	37.92	0.05	-0.3392	-0.0027	-0.1967	0.0080	0.5725	1.4688	0.0228	0.6724	0.0155	0.4578
172	35.65	0.09	-0.2460	0.0087	-0.1353	-0.0272	0.5500	1.4705	0.0192	0.6767	0.0131	0.4682
173	33.23	0.13	-0.0778	0.0401	-0.0391	-0.5153	0.5026	1.4833	0.0170	0.6907	0.0115	0.4657

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 36 MACH 1.10 1.7 PHI 45.0 CONF BINDELL L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
1	-4.37	0.10	0.1541	9.9999	0.0408	9.9999	0.3945	-0.1339	-0.0377	-0.0587	0.2815	0.4384
2	-4.36	0.11	0.1518	9.9999	0.0411	9.9999	0.4025	-0.1327	-0.0375	-0.0576	0.2825	0.4361
3	-4.29	0.07	0.1516	9.9999	0.0411	9.9999	0.4025	-0.1281	-0.0362	-0.0552	0.2825	0.4389
4	-3.96	0.10	0.1385	9.9999	0.0515	9.9999	0.3718	-0.1168	-0.0318	-0.0505	0.2846	0.4251
5	-3.69	0.11	0.1340	9.9999	0.0496	9.9999	0.3716	-0.1049	-0.0298	-0.0424	0.2840	0.4042
6	-3.47	0.08	0.1253	9.9999	0.0430	9.9999	0.3605	-0.1068	-0.0281	-0.0409	0.2630	0.3830
7	-3.16	0.11	0.1185	9.9999	0.0388	9.9999	0.3274	-0.0939	-0.0249	-0.0344	0.2651	0.3663
8	-2.91	0.09	0.1082	9.9999	0.0360	9.9999	0.3512	-0.0887	-0.0238	-0.0323	0.2744	0.3725
9	-2.65	0.11	0.1039	9.9999	0.0332	9.9999	0.3195	-0.0765	-0.0203	-0.0274	0.2653	0.3582
10	-2.38	0.10	0.0960	9.9999	0.0295	9.9999	0.3073	-0.0662	-0.0170	-0.0229	0.2567	0.3459
11	-2.13	0.07	0.0802	9.9999	0.0237	9.9999	0.2955	-0.0603	-0.0156	-0.0209	0.2586	0.3466
12	-1.87	0.10	0.0837	9.9999	0.0227	9.9999	0.2712	-0.0513	-0.0124	-0.0170	0.2417	0.3314
13	-1.62	0.08	0.0667	9.9999	0.0191	9.9999	0.2864	-0.0454	-0.0114	-0.0141	0.2510	0.3106
14	-1.37	0.09	0.0667	9.9999	0.0182	9.9999	0.2729	-0.0385	-0.0092	-0.0115	0.2389	0.2987
15	-1.11	0.11	0.0555	9.9999	0.0129	9.9999	0.2324	-0.0221	-0.0056	-0.0065	0.2533	0.2941
16	-0.89	0.09	0.0486	9.9999	0.0132	9.9999	0.2716	-0.0175	-0.0041	-0.0036	0.2342	0.2857
17	-0.63	0.10	0.0396	9.9999	0.0089	9.9999	0.2247	-0.0105	-0.0022	-0.0001	0.2095	0.0095
18	-0.39	0.11	0.0328	9.9999	0.0075	9.9999	0.2287	-0.0071	-0.0005	0.0022	0.0685	-0.3016
19	-0.16	0.08	0.0193	9.9999	0.0038	9.9999	0.1969	-0.0004	0.0013	0.0058	-3.2491	-14.5000
20	0.10	0.09	0.0265	9.9999	0.0016	9.9999	0.0780	0.0055	0.0026	0.0083	0.4726	1.5091
21	0.33	0.08	0.0035	9.9999	-0.0004	9.9999	-0.1714	0.0081	0.0024	0.0089	0.2962	1.0988
22	0.59	0.08	0.0091	9.9999	-0.0012	9.9999	0.1319	0.0253	0.0072	0.0126	0.2865	0.4988
23	0.81	0.12	-0.0066	9.9999	-0.0045	9.9999	0.6818	0.0361	0.0090	0.0169	0.2492	0.4681
24	1.03	0.08	-0.0136	9.9999	-0.0047	9.9999	0.3219	0.0406	0.0108	0.0198	0.2659	0.4877
25	1.25	0.10	-0.0237	9.9999	-0.0068	9.9999	0.2669	0.0463	0.0122	0.0213	0.2634	0.4600
26	1.50	0.11	-0.0337	9.9999	-0.0111	9.9999	0.3294	0.0542	0.0150	0.0268	0.2767	0.4797
27	1.72	0.07	-0.0361	9.9999	-0.0095	9.9999	0.2632	0.0601	0.0160	0.0270	0.2662	0.4493
28	1.93	0.10	-0.0393	9.9999	-0.0129	9.9999	0.3282	0.0682	0.0183	0.0316	0.2683	0.4633
29	2.16	0.09	-0.0516	9.9999	-0.0179	9.9999	0.3469	0.0719	0.0184	0.0319	0.2558	0.4437
30	2.40	0.08	-0.0596	9.9999	-0.0185	9.9999	0.3104	0.0775	0.0204	0.0358	0.2628	0.4613
31	2.62	0.11	-0.0529	9.9999	-0.0184	9.9999	0.3485	0.0796	0.0217	0.0385	0.2725	0.4837
32	2.86	0.06	-0.0719	9.9999	-0.0239	9.9999	0.3324	0.0929	0.0235	0.0406	0.2529	0.4370
33	3.08	0.09	-0.0741	9.9999	-0.0250	9.9999	0.3374	0.1047	0.0257	0.0460	0.2454	0.4394
34	3.29	0.08	-0.0740	9.9999	-0.0259	9.9999	0.3486	0.1104	0.0273	0.0478	0.2472	0.4257
35	3.53	0.08	-0.0853	9.9999	-0.0285	9.9999	0.3341	0.1188	0.0284	0.0492	0.2390	0.4141
36	3.76	0.07	-0.1067	9.9999	-0.0346	9.9999	0.3243	0.1250	0.0287	0.0516	0.2295	0.4128
37	3.97	0.10	-0.1123	9.9999	-0.0360	9.9999	0.3206	0.1311	0.0297	0.0554	0.2285	0.4226
38	4.19	0.08	-0.1191	9.9999	-0.0374	9.9999	0.3140	0.1383	0.0307	0.0579	0.2219	0.4187
39	4.42	0.09	-0.1281	9.9999	-0.0407	9.9999	0.3177	0.1381	0.0317	0.0665	0.2295	0.4815
40	4.61	0.06	-0.1414	9.9999	-0.0471	9.9999	0.3331	0.1406	0.0320	0.0686	0.2275	0.4879
41	4.83	0.07	-0.1426	9.9999	-0.0468	9.9999	0.3282	0.1469	0.0336	0.0706	0.2256	0.5010
42	5.05	0.07	-0.1503	9.9999	-0.0532	9.9999	0.3540	0.1501	0.0338	0.0752	0.2251	0.5010
43	5.23	0.07	-0.1664	9.9999	-0.0565	9.9999	0.3426	0.1601	0.0344	0.0811	0.2148	0.5066
44	5.45	0.07	-0.1643	9.9999	-0.0577	9.9999	0.3428	0.1733	0.0363	0.0866	0.2094	0.4997
45	5.65	0.10	-0.1748	9.9999	-0.0613	9.9999	0.3507	0.1731	0.0365	0.0870	0.2108	0.5026
46	5.82	0.08	-0.1919	9.9999	-0.0644	9.9999	0.3358	0.1792	0.0372	0.0889	0.2075	0.4961

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 3B 1.1U 1.7 45.0 HIGHFIL 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNFA	CMA	CBA	XCPFA	YCPFA
47	6.03	0.06	-0.2018	9.9999	-0.0701	9.9999	0.3474	0.1783	0.0362	0.0887	0.2030	0.4975
48	6.22	0.06	-0.2175	9.9999	-0.0753	9.9999	0.3462	0.1903	0.0379	0.0931	0.1991	0.4892
49	6.44	0.07	-0.2265	9.9999	-0.0769	9.9999	0.3395	0.2037	0.0395	0.0999	0.1939	0.4904
50	6.64	0.07	-0.2331	9.9999	-0.0815	9.9999	0.3509	0.2012	0.0396	0.1002	0.1958	0.4980
51	6.83	0.06	-0.2320	9.9999	-0.0817	9.9999	0.3522	0.2108	0.0411	0.1049	0.1949	0.4978
52	7.03	0.06	-0.2555	9.9999	-0.0898	9.9999	0.3515	0.2148	0.0405	0.1060	0.1885	0.4935
53	7.22	0.06	-0.2565	9.9999	-0.0934	9.9999	0.3641	0.2226	0.0402	0.1108	0.1805	0.4978
54	7.41	0.07	-0.2688	9.9999	-0.0980	9.9999	0.3646	0.2271	0.0418	0.1132	0.1840	0.4985
55	7.59	0.07	-0.2844	9.9999	-0.1050	9.9999	0.3692	0.2287	0.0408	0.1146	0.1784	0.5011
56	7.79	0.09	-0.2834	9.9999	-0.1077	9.9999	0.3774	0.2323	0.0415	0.1182	0.1786	0.5088
57	7.99	0.07	-0.3033	9.9999	-0.1144	9.9999	0.3772	0.2400	0.0411	0.1206	0.1712	0.5025
58	8.14	0.06	-0.3051	9.9999	-0.1176	9.9999	0.3856	0.2392	0.0425	0.1220	0.1776	0.5100
59	8.31	0.06	-0.3140	9.9999	-0.1246	9.9999	0.3907	0.2388	0.0434	0.1213	0.1691	0.5080
60	8.48	0.07	-0.3251	9.9999	-0.1267	9.9999	0.3897	0.2542	0.0433	0.1303	0.1703	0.5126
61	8.65	0.06	-0.3345	9.9999	-0.1362	9.9999	0.4012	0.2469	0.0425	0.1287	0.1721	0.5213
62	8.86	0.05	-0.3462	9.9999	-0.1394	9.9999	0.4027	0.2598	0.0426	0.1353	0.1641	0.5212
63	9.01	0.07	-0.3546	9.9999	-0.1449	9.9999	0.4079	0.2586	0.0419	0.1361	0.1620	0.5263
64	9.20	0.07	-0.3561	9.9999	-0.1468	9.9999	0.4122	0.2655	0.0441	0.1415	0.1661	0.5330
65	9.36	0.07	-0.3800	9.9999	-0.1546	9.9999	0.4068	0.2723	0.0436	0.1449	0.1601	0.5321
66	9.52	0.05	-0.3833	9.9999	-0.1580	9.9999	0.4122	0.2647	0.0439	0.1452	0.1627	0.5384
67	9.70	0.06	-0.3977	9.9999	-0.1658	9.9999	0.4169	0.2715	0.0426	0.1480	0.1569	0.5451
68	9.90	0.06	-0.4044	9.9999	-0.1685	9.9999	0.4120	0.2789	0.0431	0.1514	0.1565	0.5428
69	10.07	0.06	-0.4192	9.9999	-0.1746	9.9999	0.4167	0.2816	0.0430	0.1545	0.1527	0.5487
70	10.28	0.06	-0.4357	9.9999	-0.1825	9.9999	0.4189	0.2790	0.0432	0.1543	0.1568	0.5530
71	10.42	0.06	-0.4402	9.9999	-0.1842	9.9999	0.4184	0.2928	0.0436	0.1605	0.1489	0.5482
72	10.60	0.07	-0.4468	9.9999	-0.1883	9.9999	0.4214	0.2892	0.0429	0.1597	0.1483	0.5522
73	10.77	0.07	-0.4594	9.9999	-0.1923	9.9999	0.4199	0.2944	0.0427	0.1615	0.1450	0.5486
74	10.95	0.06	-0.4631	9.9999	-0.1985	9.9999	0.4232	0.2982	0.0428	0.1655	0.1435	0.5550
75	11.13	0.06	-0.4890	9.9999	-0.2120	9.9999	0.4335	0.2999	0.0418	0.1688	0.1393	0.5629
76	11.27	0.07	-0.4824	9.9999	-0.2071	9.9999	0.4293	0.3134	0.0429	0.1732	0.1368	0.5526
77	11.45	0.07	-0.5106	9.9999	-0.2239	9.9999	0.4339	0.3086	0.0423	0.1728	0.1370	0.5599
78	11.64	0.05	-0.5112	9.9999	-0.2284	9.9999	0.4390	0.3094	0.0403	0.1745	0.1302	0.5640
79	11.79	0.05	-0.5240	9.9999	-0.2283	9.9999	0.4357	0.3124	0.0415	0.1761	0.1328	0.5637
80	11.98	0.06	-0.5283	9.9999	-0.2335	9.9999	0.4428	0.3167	0.0401	0.1791	0.1266	0.5655
81	12.13	0.07	-0.5405	9.9999	-0.2407	9.9999	0.4444	0.3204	0.0405	0.1813	0.1264	0.5659
82	12.31	0.07	-0.5472	9.9999	-0.2430	9.9999	0.4481	0.3234	0.0396	0.1828	0.1218	0.5652
83	12.47	0.06	-0.5515	9.9999	-0.2492	9.9999	0.4500	0.3283	0.0397	0.1855	0.1209	0.5650
84	12.63	0.06	-0.5715	9.9999	-0.2586	9.9999	0.4525	0.3333	0.0400	0.1887	0.1200	0.5662
85	12.80	0.06	-0.5793	9.9999	-0.2619	9.9999	0.4521	0.3333	0.0400	0.1897	0.1200	0.5692
86	12.96	0.06	-0.5859	9.9999	-0.2662	9.9999	0.4578	0.3294	0.0370	0.1886	0.1123	0.5726
87	13.14	0.07	-0.5906	9.9999	-0.2694	9.9999	0.4563	0.3375	0.0392	0.1932	0.1161	0.5724
88	13.34	0.05	-0.6148	9.9999	-0.2820	9.9999	0.4587	0.3415	0.0388	0.1958	0.1136	0.5736
89	13.47	0.06	-0.6056	9.9999	-0.2795	9.9999	0.4614	0.3418	0.0379	0.1966	0.1109	0.5752
90	13.65	0.05	-0.6170	9.9999	-0.2835	9.9999	0.4595	0.3505	0.0385	0.2006	0.1098	0.5723
91	13.81	0.05	-0.6369	9.9999	-0.2944	9.9999	0.4657	0.3462	0.0367	0.2020	0.1060	0.5835
92	13.96	0.07	-0.6331	9.9999	-0.2960	9.9999	0.4698	0.3547	0.0375	0.2046	0.1057	0.5768

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RA10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	3E	1.14	1.7	45.0	M1=0F11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
93	14.13	0.06	-0.6376	9.9999	-0.2978	9.9999	0.4671	0.3636	0.0387	0.2079	0.1064	0.5718
94	14.29	0.05	-0.6574	9.9999	-0.3109	9.9999	0.4729	0.3510	0.0352	0.2061	0.1003	0.5872
95	14.48	0.06	-0.6618	9.9999	-0.3148	9.9999	0.4757	0.3489	0.0340	0.2058	0.0974	0.5899
96	14.59	0.05	-0.6663	9.9999	-0.3156	9.9999	0.4737	0.3702	0.0381	0.2139	0.1029	0.5778
97	14.81	0.07	-0.6795	9.9999	-0.3255	9.9999	0.4790	0.3682	0.0367	0.2146	0.0996	0.5828
98	15.00	0.06	-0.6918	9.9999	-0.3304	9.9999	0.4776	0.3581	0.0336	0.2135	0.0932	0.5962
99	15.17	0.06	-0.6985	9.9999	-0.3332	9.9999	0.4770	0.3694	0.0337	0.2171	0.0912	0.5877
100	15.33	0.07	-0.7028	9.9999	-0.3388	9.9999	0.4821	0.3695	0.0336	0.2190	0.0906	0.5927
101	15.49	0.05	-0.7174	9.9999	-0.3449	9.9999	0.4808	0.3818	0.0344	0.2238	0.0901	0.5862
102	15.66	0.06	-0.7218	9.9999	-0.3478	9.9999	0.4813	0.3761	0.0328	0.2236	0.0872	0.5945
103	15.82	0.07	-0.7362	9.9999	-0.3561	9.9999	0.4937	0.3749	0.0327	0.2245	0.0872	0.5988
104	16.00	0.06	-0.7519	9.9999	-0.3604	9.9999	0.4800	0.3798	0.0332	0.2263	0.0876	0.5958
105	16.15	0.06	-0.7440	9.9999	-0.3590	9.9999	0.4825	0.3730	0.0313	0.2246	0.0839	0.6021
106	16.32	0.07	-0.7652	9.9999	-0.3695	9.9999	0.4829	0.3733	0.0305	0.2260	0.0817	0.6056
107	16.48	0.06	-0.7731	9.9999	-0.3706	9.9999	0.4794	0.3756	0.0305	0.2280	0.0811	0.6067
108	16.65	0.07	-0.7830	9.9999	-0.3771	9.9999	0.4816	0.3771	0.0305	0.2281	0.0809	0.6069
109	16.81	0.07	-0.7986	9.9999	-0.3793	9.9999	0.4810	0.3849	0.0300	0.2310	0.0779	0.6002
110	16.98	0.05	-0.7909	9.9999	-0.3791	9.9999	0.4793	0.3756	0.0278	0.2277	0.0740	0.6062
111	17.13	0.07	-0.7998	9.9999	-0.3866	9.9999	0.4809	0.3842	0.0284	0.2298	0.0739	0.5981
112	17.32	0.06	-0.8110	9.9999	-0.3891	9.9999	0.4798	0.4056	0.0328	0.2370	0.0809	0.5846
113	17.46	0.05	-0.8211	9.9999	-0.3912	9.9999	0.4764	0.3903	0.0292	0.2332	0.0748	0.5975
114	17.65	0.07	-0.8375	9.9999	-0.4001	9.9999	0.4776	0.3868	0.0284	0.2333	0.0734	0.6032
115	17.80	0.05	-0.8301	9.9999	-0.3946	9.9999	0.4754	0.3928	0.0292	0.2338	0.0743	0.5952
116	17.95	0.05	-0.8412	9.9999	-0.3999	9.9999	0.4754	0.4046	0.0310	0.2404	0.0758	0.5884
117	18.14	0.06	-0.8512	9.9999	-0.4056	9.9999	0.4765	0.4065	0.0298	0.2401	0.0733	0.5907
118	18.34	0.05	-0.8647	9.9999	-0.4080	9.9999	0.4718	0.3922	0.0275	0.2345	0.0701	0.5979
119	18.45	0.07	-0.8614	9.9999	-0.4072	9.9999	0.4727	0.3946	0.0279	0.2357	0.0707	0.5973
120	18.63	0.07	-0.8779	9.9999	-0.4138	9.9999	0.4719	0.3925	0.0268	0.2340	0.0683	0.5962
121	18.77	0.06	-0.8805	9.9999	-0.4123	9.9999	0.4683	0.4066	0.0295	0.2401	0.0725	0.5905
122	18.95	0.07	-0.8938	9.9999	-0.4204	9.9999	0.4704	0.3953	0.0262	0.2374	0.0663	0.6006
123	19.09	0.05	-0.9072	9.9999	-0.4255	9.9999	0.4690	0.3891	0.0256	0.2341	0.0658	0.6016
124	19.24	0.05	-0.9026	9.9999	-0.4221	9.9999	0.4675	0.3843	0.0250	0.2340	0.0642	0.6011
125	19.41	0.06	-0.9048	9.9999	-0.4269	9.9999	0.4740	0.4099	0.0275	0.2410	0.0671	0.5879
126	19.57	0.05	-0.9094	9.9999	-0.4283	9.9999	0.4710	0.4067	0.0262	0.2420	0.0644	0.5950
127	19.72	0.05	-0.9272	9.9999	-0.4364	9.9999	0.4707	0.3956	0.0252	0.2378	0.0637	0.6011
128	19.87	0.06	-0.9201	9.9999	-0.4359	9.9999	0.4707	0.3970	0.0249	0.2383	0.0627	0.6003
129	20.01	0.05	-0.9441	9.9999	-0.4413	9.9999	0.4674	0.3874	0.0235	0.2356	0.0606	0.6082
130	20.18	0.07	-0.9416	9.9999	-0.4411	9.9999	0.4694	0.3737	0.0228	0.2298	0.0610	0.6149
131	20.34	0.06	-0.9537	9.9999	-0.4463	9.9999	0.4680	0.4057	0.0267	0.2426	0.0646	0.5980
132	20.48	0.05	-0.9539	9.9999	-0.4459	9.9999	0.4648	0.3892	0.0245	0.2360	0.0628	0.6053
133	20.63	0.07	-0.9694	9.9999	-0.4529	9.9999	0.4663	0.3785	0.0245	0.2319	0.0647	0.6127
134	20.79	0.07	-0.9750	9.9999	-0.4533	9.9999	0.4649	0.3782	0.0250	0.2310	0.0661	0.6108
135	20.95	0.06	-0.9824	9.9999	-0.4553	9.9999	0.4632	0.3983	0.0259	0.2411	0.0650	0.6053
136	21.13	0.06	-0.9973	9.9999	-0.4635	9.9999	0.4648	0.3788	0.0259	0.2335	0.0685	0.6177
137	21.26	0.07	-0.9997	9.9999	-0.4619	9.9999	0.4620	0.3729	0.0259	0.2307	0.0694	0.6187
138	21.41	0.05	-1.0004	9.9999	-0.4651	9.9999	0.4621	0.3854	0.0264	0.2359	0.0685	0.6121

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MANUM MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	36	1.16	1.7	45.0	BLOCK11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
139	21.59	0.00	-1.0119	9.9999	-0.4687	9.9999	0.4632	0.3781	0.0257	0.2339	0.0680	0.6186
140	21.72	0.05	-1.0199	9.9999	-0.4693	9.9999	0.4601	0.3730	0.0256	0.2326	0.0686	0.6236
141	21.88	0.06	-1.0221	9.9999	-0.4699	9.9999	0.4597	0.3826	0.0273	0.2363	0.0713	0.6176
142	22.04	0.08	-1.0263	9.9999	-0.4727	9.9999	0.4615	0.3809	0.0266	0.2349	0.0745	0.6167
143	22.18	0.06	-1.0456	9.9999	-0.4793	9.9999	0.4584	0.3522	0.0269	0.2237	0.0764	0.6352
144	22.35	0.06	-1.0511	9.9999	-0.4817	9.9999	0.4602	0.3698	0.0275	0.2335	0.0743	0.6314
145	22.49	0.08	-1.0490	9.9999	-0.4809	9.9999	0.4584	0.3716	0.0294	0.2311	0.0791	0.6219
146	22.63	0.05	-1.0621	9.9999	-0.4856	9.9999	0.4570	0.3721	0.0288	0.2317	0.0776	0.6227
147	22.79	0.09	-1.0643	9.9999	-0.4862	9.9999	0.4587	0.3630	0.0296	0.2292	0.0815	0.6314
148	22.93	0.07	-1.0706	9.9999	-0.4927	9.9999	0.4576	0.3555	0.0293	0.2258	0.0824	0.6352
149	23.08	0.20	-1.0812	9.9999	-0.4918	9.9999	0.4549	0.3513	0.0303	0.2256	0.0862	0.6422
150	23.24	0.08	-1.0800	9.9999	-0.4944	9.9999	0.4581	0.3777	0.0311	0.2361	0.0823	0.6251
151	23.38	0.06	-1.0870	9.9999	-0.4959	9.9999	0.4562	0.3622	0.0307	0.2291	0.0847	0.6325
152	23.49	0.07	-1.0806	9.9999	-0.4940	9.9999	0.4569	0.3672	0.0302	0.2314	0.0870	0.6277
153	24.53	0.10	-1.1315	9.9999	-0.5207	9.9999	0.4602	0.3957	0.0376	0.2436	0.0951	0.6164
154	26.08	0.10	-1.2163	9.9999	-0.5560	9.9999	0.4588	0.3908	0.0403	0.2562	0.1031	0.6087
155	30.25	0.10	-1.3823	9.9999	-0.6285	9.9999	0.4614	0.2949	0.0092	0.2261	0.0312	0.7667
156	35.86	0.09	-1.6456	9.9999	-0.6967	9.9999	0.4667	0.3704	0.0168	0.2899	0.0453	0.7827
157	44.43	0.00	-1.4308	9.9999	-0.4281	9.9999	0.4390	0.2651	0.0201	0.2252	0.0758	0.8495
158	55.57	0.00	-1.6876	9.9999	-0.6607	9.9999	0.4462	-0.1120	-0.0002	-0.0191	-0.0018	0.1705
159	58.73	0.10	-1.5041	9.9999	-0.6718	9.9999	0.4466	-0.1084	-0.0001	-0.0228	0.0009	0.2103
160	58.64	-0.01	-1.4924	9.9999	-0.6637	9.9999	0.4467	-0.0984	0.0004	-0.0208	-0.0041	0.2114
161	57.09	0.01	-1.4757	9.9999	-0.6546	9.9999	0.4436	-0.0962	0.0003	-0.0207	-0.0032	0.2197
162	55.67	0.05	-1.4528	9.9999	-0.6428	9.9999	0.4425	-0.0862	0.0038	-0.0131	-0.0051	0.1556
163	53.90	0.00	-1.4374	9.9999	-0.6313	9.9999	0.4392	-0.0786	0.0024	-0.0059	-0.0305	0.0751
164	52.19	0.00	-1.3648	9.9999	-0.5984	9.9999	0.4385	-0.0523	0.0075	0.0071	-0.1434	-0.1358
165	50.39	0.01	-1.3448	9.9999	-0.5865	9.9999	0.4361	0.0378	0.0252	0.0661	0.6665	1.7487
166	48.49	0.02	-1.2960	9.9999	-0.5641	9.9999	0.4353	0.0530	0.0366	0.0932	0.6984	1.7585
167	46.45	0.00	-1.2852	9.9999	-0.5595	9.9999	0.4353	0.2166	0.0575	0.1865	0.2654	0.8610
168	44.32	0.02	-1.3056	9.9999	-0.5619	9.9999	0.4319	0.3687	0.0560	0.2590	0.1606	0.7628
169	42.20	0.00	-1.3563	9.9999	-0.5897	9.9999	0.4348	0.4764	0.0443	0.3290	0.1349	0.6906
170	40.15	0.05	-1.4336	9.9999	-0.6296	9.9999	0.4392	0.4482	0.0408	0.3439	0.0825	0.6959
171	37.92	0.05	-1.4472	9.9999	-0.6355	9.9999	0.4445	0.3930	0.0095	0.2840	0.0242	0.7226
172	35.65	0.09	-1.4913	9.9999	-0.6743	9.9999	0.4522	0.4422	0.0187	0.3076	0.0423	0.6956
173	33.23	0.13	-1.4774	9.9999	-0.6602	9.9999	0.4604	0.4353	0.0122	0.2843	0.0280	0.6531

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 37 MACH 1.10 1.07 PHI 0.0 CONF 11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.07	0.02	-0.0356	1.3730	0.1119	-0.1315	0.0001	0.4048	0.1874	0.2774	-2.1466
2	-5.06	0.01	-0.0356	1.3667	-0.0139	0.1334	-0.0417	0.4533	0.1880	0.2695	-2.1680
3	-5.07	0.02	-0.0276	1.3665	0.0736	0.0267	-0.0003	0.4620	0.1871	0.2749	-2.1051
4	-5.09	0.00	-0.0035	1.3655	0.0356	0.0540	-0.0112	0.4582	0.1856	0.2726	-2.0183
5	-4.85	0.03	-0.0343	1.2723	0.1373	-0.0496	-0.0107	0.4533	0.1880	0.2670	-2.0167
6	-4.57	0.04	-0.5512	1.1434	0.1307	-0.1114	0.0001	0.4575	0.1823	0.2752	-2.0382
7	-4.23	-0.01	-0.5515	1.0032	-0.0753	0.1302	-0.0109	0.4574	0.1788	0.2786	-2.0382
8	-3.99	0.01	-0.5020	0.9833	-0.0709	0.0124	-0.0100	0.4522	0.1800	0.2716	-1.9570
9	-3.70	0.02	-0.4690	0.8150	0.0502	-0.1115	0.0005	0.4523	0.1788	0.2735	-2.0040
10	-3.45	-0.01	-0.4410	0.6907	-0.0043	0.1040	-0.0214	0.4610	0.1795	0.2817	-1.9444
11	-3.18	0.04	-0.3378	0.7148	0.1301	-0.1380	-0.0048	0.4009	0.1785	0.2824	-1.9590
12	-2.91	0.00	-0.2857	0.5819	0.0490	0.0397	-0.0048	0.4580	0.1792	0.2788	-2.0366
13	-2.66	-0.00	-0.3265	0.3835	-0.0556	0.0021	-0.0208	0.4661	0.1804	0.2877	-1.8221
14	-2.38	0.03	-0.2139	0.2610	0.1708	-0.0747	0.0038	0.4545	0.1794	0.2851	-1.9711
15	-2.12	-0.00	-0.1941	0.1613	0.0120	0.1069	-0.0101	0.4709	0.1810	0.2900	-1.9629
16	-1.88	0.01	-0.2279	0.0950	0.0734	-0.0019	-0.0205	0.4675	0.1803	0.2872	-1.7332
17	-1.59	0.01	-0.1119	0.0132	0.0618	0.0048	0.0002	0.4734	0.1837	0.2918	-1.9063
18	-1.33	-0.01	-0.1251	0.1991	-0.0705	0.0397	-0.0096	0.4740	0.1845	0.2896	-1.5920
19	-1.09	-0.00	-0.0719	0.1314	-0.0068	0.1007	-0.0045	0.4732	0.1857	0.2875	-1.8270
20	-0.84	0.00	0.00	-0.0015	0.0089	0.0013	0.0013	0.4796	0.1867	0.2930	-0.0019
21	-0.62	-0.01	-0.0219	0.0293	-0.0776	0.0833	-0.0159	0.4735	0.1864	0.2871	-1.3361
22	-0.35	0.02	0.0269	-0.0570	0.0984	-0.0796	-0.0037	0.4811	0.1867	0.2944	-2.7805
23	-0.13	0.01	0.0465	-0.0666	0.0075	0.1065	-0.0043	0.4825	0.1876	0.2949	-2.0682
24	0.11	0.02	0.0416	-0.0598	0.1279	0.0019	-0.0158	0.4756	0.1862	0.2895	2.3976
25	0.37	0.00	0.1169	-0.2374	-0.0377	-0.0462	0.0016	0.4815	0.1934	0.2911	-2.0318
26	0.58	-0.02	0.1171	-0.2407	-0.1585	0.0480	-0.0141	0.4823	0.1920	0.2903	-1.8400
27	0.82	0.00	0.1576	-0.2522	-0.0259	0.1456	-0.0066	0.4777	0.1902	0.2875	-1.8412
28	1.08	0.01	0.2142	-0.3890	0.0982	-0.0855	0.0019	0.4808	0.1899	0.2909	-1.8420
29	1.28	-0.01	0.1571	-0.3204	-0.0993	0.0057	-0.0088	0.4866	0.1917	0.2969	-2.0376
30	1.51	0.02	0.2469	-0.4459	0.0741	0.0152	-0.0067	0.4896	0.1896	0.2950	-1.8110
31	1.77	0.00	0.2742	-0.5108	0.0201	-0.1292	0.0022	0.4887	0.1910	0.2977	-1.8840
32	1.98	-0.01	0.2210	-0.4083	-0.0259	0.0718	-0.0142	0.4796	0.1894	0.2903	-1.9277
33	2.20	0.02	0.3509	-0.6306	0.1004	-0.2424	-0.0026	0.4865	0.1938	0.2957	-1.8719
34	2.44	0.01	0.3938	-0.7401	0.1209	-0.2870	-0.0031	0.4808	0.1928	0.2940	-1.8063
35	2.67	-0.00	0.3951	-0.7489	-0.0046	-0.0046	-0.0187	0.4833	0.1933	0.2877	-1.8773
36	2.88	0.03	0.4636	-0.8334	0.1532	-0.1530	0.0026	0.4849	0.1954	0.2854	-1.7979
37	3.12	-0.02	0.3778	-0.7302	-0.0751	-0.0239	-0.0134	0.4894	0.1944	0.2950	-1.8534
38	3.39	0.01	0.4393	-0.8547	0.0790	-0.1527	-0.0078	0.4883	0.1967	0.2916	-1.9409
39	3.67	0.04	0.5145	-0.9519	0.1699	-0.2063	0.0026	0.4903	0.1962	0.2921	-1.8482
40	3.79	-0.01	0.5017	-0.9653	-0.0004	0.0759	-0.0107	0.4788	0.1965	0.2821	-1.9253
41	4.03	0.02	0.5862	-1.0559	0.0332	-0.1048	-0.0075	0.4857	0.1995	0.2861	-1.8019
42	4.29	-0.00	0.6179	-1.1245	-0.0060	-0.0311	-0.0023	0.4945	0.2008	0.2937	-1.8134
43	4.48	-0.00	0.5956	-1.1297	-0.0057	-0.0223	-0.0181	0.4865	0.2025	0.2839	-1.8967
44	4.70	0.01	0.6200	-1.1759	0.0020	-0.0153	0.0030	0.4953	0.2029	0.2924	-1.9057
45	4.87	0.00	0.6305	-1.2003	0.0759	-0.1360	-0.0073	0.4942	0.2042	0.2950	-1.9486
46	5.11	0.01	0.6774	-1.3233	-0.0003	-0.0054	-0.0180	0.4918	0.2078	0.2839	-1.9536

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 3/ MACH 1.10 RADIO-C 1.0 PHI 0.0 CONF dimless L 0.0 DELI 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CM	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	5.53	0.01	0.7007	-1.5526	0.0000	-0.1163	0.0033	0.4933	0.2000	0.2806	-2.0150
48	5.50	-0.02	0.7111	-1.5421	0.0000	-0.0134	-0.0175	0.5031	0.2033	0.2948	-1.9963
49	5.73	0.00	0.7125	-1.5014	0.0172	-0.0350	-0.0172	0.4954	0.2110	0.2843	-1.9832
50	5.93	-0.02	0.6958	-1.5054	-0.0105	-0.0743	-0.0018	0.5046	0.2124	0.2922	-1.9699
51	6.40	-0.01	0.6506	-1.5029	0.0051	-0.1157	-0.0175	0.4958	0.2138	0.2799	-2.0501
52	6.52	0.02	0.7163	-1.5359	0.1049	-0.2625	-0.0014	0.4997	0.2131	0.2865	-2.0036
53	6.50	-0.01	0.7250	-1.5225	0.0142	-0.0508	-0.0069	0.5054	0.2161	0.2933	-2.0362
54	6.72	-0.00	0.9349	-1.4183	0.0393	-0.0195	-0.0175	0.5086	0.2192	0.2894	-2.0485
55	6.92	0.01	1.0240	-2.5004	0.1132	-0.0986	0.0034	0.5110	0.2212	0.2898	-2.0201
56	7.10	-0.00	1.0173	-2.5020	0.1130	-0.0895	-0.0119	0.5095	0.2236	0.2858	-2.0471
57	7.32	-0.00	1.0143	-2.4524	0.0083	-0.1168	-0.0171	0.5155	0.2234	0.2903	-2.1008
58	7.50	-0.01	1.1232	-2.4581	-0.0064	-0.0617	0.0040	0.5105	0.2256	0.2919	-2.0448
59	7.69	-0.01	1.1193	-2.4515	-0.0150	0.0300	-0.0175	0.5104	0.2287	0.2816	-2.0817
60	7.89	-0.01	1.1094	-2.4018	-0.0896	0.0345	-0.0066	0.5090	0.2307	0.2782	-2.0445
61	8.30	-0.01	1.2449	-2.5443	0.0862	-0.1565	-0.0061	0.5178	0.2322	0.2855	-2.0446
62	8.49	-0.00	1.2310	-2.5805	0.0484	-0.0006	-0.0170	0.5112	0.2339	0.2772	-2.0999
63	8.69	-0.00	1.2021	-2.5396	-0.0113	-0.0924	-0.0010	0.5127	0.2366	0.2760	-2.0953
64	8.89	-0.01	1.2240	-2.5617	0.0074	-0.0040	-0.0166	0.5171	0.2370	0.2800	-2.0849
65	8.77	-0.01	1.2221	-2.5531	-0.0056	-0.0245	-0.0167	0.5225	0.2407	0.2817	-2.1252
66	8.94	0.00	1.2177	-2.5413	-0.1343	-0.1140	-0.0037	0.5199	0.2407	0.2791	-2.1099
67	9.14	-0.01	1.2056	-2.5068	0.1147	-0.0727	-0.0165	0.5226	0.2415	0.2817	-2.1206
68	9.30	-0.01	1.2070	-2.5000	0.0574	-0.0845	-0.0163	0.5176	0.2451	0.2724	-2.1169
69	9.48	-0.01	1.2041	-2.4926	0.0921	-0.0802	-0.0057	0.5191	0.2454	0.2736	-2.1040
70	9.63	-0.02	1.2103	-2.4873	-0.0015	0.0455	-0.0219	0.5132	0.2466	0.2663	-2.1677
71	9.82	0.00	1.2701	-2.5242	0.1109	-0.1346	-0.0108	0.5171	0.2468	0.2704	-2.1288
72	10.01	-0.02	1.2614	-2.4734	0.0232	-0.0175	-0.0104	0.5221	0.2501	0.2719	-2.1424
73	10.18	-0.02	1.2603	-2.4584	-0.0032	0.0093	-0.0162	0.5176	0.2512	0.2663	-2.1345
74	10.36	0.01	1.2935	-2.4833	0.1194	-0.0826	-0.0003	0.5207	0.2534	0.2734	-2.1458
75	10.55	-0.03	1.2539	-2.4030	0.0183	-0.0826	-0.0160	0.5203	0.2526	0.2676	-2.1357
76	10.70	-0.02	1.2610	-2.4447	-0.0078	-0.0008	-0.0161	0.5221	0.2532	0.2688	-2.1759
77	10.88	-0.01	1.2107	-2.3883	0.0491	-0.0502	0.0	0.5292	0.2536	0.2735	-2.1385
78	11.05	-0.03	1.2147	-2.3954	0.0204	-0.0557	-0.0158	0.5173	0.2547	0.2607	-2.1463
79	11.24	-0.01	1.2300	-2.4029	0.0109	-0.1056	-0.0051	0.5226	0.2570	0.2655	-2.1586
80	11.41	-0.02	1.2403	-2.4104	0.0208	-0.0969	0.0025	0.5272	0.2577	0.2694	-2.1389
81	11.55	-0.03	1.2407	-2.4011	-0.0184	0.0512	-0.0158	0.5177	0.2580	0.2596	-2.1454
82	11.73	-0.00	1.2504	-2.4191	0.0013	-0.0714	-0.0021	0.5206	0.2606	0.2665	-2.1666
83	11.90	-0.02	2.0032	-2.4034	0.0269	-0.0681	-0.0148	0.5259	0.2596	0.2662	-2.1328
84	12.07	-0.03	2.0070	-2.3895	-0.0114	0.0719	-0.0158	0.5223	0.2614	0.2608	-2.1764
85	12.24	-0.01	2.0042	-2.3962	0.0190	-0.1004	-0.0047	0.5205	0.2624	0.2640	-2.1641
86	12.40	-0.03	2.1034	-2.3840	0.0013	-0.0023	0.0004	0.5275	0.2645	0.2629	-2.1490
87	12.58	-0.03	2.1302	-2.3877	-0.0083	0.0320	-0.0049	0.5170	0.2637	0.2532	-2.1365
88	12.75	-0.01	2.0203	-2.3951	0.0071	-0.1036	0.0112	0.5253	0.2655	0.2597	-2.1515
89	12.89	-0.05	2.1932	-2.3740	-0.0184	0.0504	-0.0146	0.5278	0.2651	0.2626	-2.1585
90	13.07	-0.02	2.2052	-2.3600	0.0074	-0.0027	0.0006	0.5199	0.2668	0.2530	-2.1498
91	13.25	-0.02	2.3292	-2.3704	0.0001	-0.0113	0.0114	0.5260	0.2678	0.2601	-2.1339
92	13.40	-0.05	2.3055	-2.3766	-0.0072	0.0408	-0.0146	0.5236	0.2685	0.2550	-2.1586

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 37 MACH 1.10 RATIO-0 1.0 PHI 0.0 CONF 81 AUFIL 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
93	13.97	-0.03	2.5385	-5.0358	-0.0084	0.0313	0.0007	0.5279	0.2736	0.2570	-2.1570
94	13.93	-0.02	2.5314	-5.1700	-0.0136	-0.0183	0.0003	0.5343	0.2738	0.2614	-2.1300
95	13.91	-0.04	2.4303	-5.1041	-0.0037	0.1200	-0.0045	0.5250	0.2719	0.2530	-2.1249
96	14.07	-0.01	2.4612	-5.2490	0.0015	-0.0354	0.0004	0.5200	0.2719	0.2480	-2.1243
97	14.24	-0.04	2.5233	-5.3530	0.0085	0.0143	0.0004	0.5332	0.2726	0.2625	-2.1216
98	14.38	-0.04	2.4692	-5.2711	-0.1187	0.1153	-0.0043	0.5298	0.2738	0.2561	-2.1348
99	14.57	-0.01	2.5740	-5.4527	0.0070	0.0000	0.0004	0.5308	0.2740	0.2567	-2.1202
100	14.74	-0.04	2.6469	-5.4960	-0.0320	0.0717	0.0013	0.5249	0.2746	0.2502	-2.0930
101	14.90	-0.03	2.6357	-5.5433	-0.0312	0.0965	-0.0040	0.5281	0.2760	0.2520	-2.1032
102	15.08	-0.02	2.6876	-5.6458	-0.0121	-0.0008	0.0004	0.5311	0.2763	0.2547	-2.0969
103	15.23	-0.03	2.7131	-5.6844	-0.0067	0.1035	-0.0036	0.5242	0.2717	0.2444	-2.0913
104	15.42	-0.03	2.7160	-5.6950	-0.0065	0.0845	0.0016	0.5240	0.2793	0.2446	-2.0817
105	15.58	-0.02	2.7693	-5.7764	0.0214	0.0394	0.0016	0.5325	0.2794	0.2530	-2.0858
106	15.75	-0.03	2.8014	-5.7737	-0.0081	0.1021	-0.0141	0.5304	0.2834	0.2499	-2.0814
107	15.93	-0.01	2.8103	-5.8338	0.0357	0.1008	0.0015	0.5291	0.2815	0.2475	-2.0759
108	16.09	-0.02	2.8039	-5.8102	0.0131	0.0847	-0.0005	0.5283	0.2814	0.2418	-2.0515
109	16.26	-0.03	2.8743	-5.8802	-0.0274	0.1605	-0.0141	0.5305	0.2835	0.2469	-2.0472
110	16.42	-0.02	2.8345	-5.8433	-0.0520	0.0595	-0.0032	0.5287	0.2838	0.2446	-2.0423
111	16.58	-0.05	2.9304	-5.9163	-0.1377	0.1003	0.0020	0.5353	0.2914	0.2436	-2.0148
112	16.73	-0.02	2.8733	-5.7993	0.0150	0.1212	-0.0191	0.5281	0.2900	0.2393	-2.0009
113	16.91	-0.02	2.8950	-5.8967	-0.0122	0.0245	-0.0026	0.5441	0.3020	0.2421	-1.9706
114	17.07	-0.05	2.9300	-5.9707	-0.0050	0.0603	-0.0236	0.5502	0.3060	0.2442	-1.9651
115	17.23	-0.04	2.9080	-5.7628	-0.1335	0.1952	-0.0239	0.5542	0.3101	0.2421	-1.9478
116	17.39	-0.03	2.9215	-5.9306	0.0059	-0.0290	-0.0127	0.5555	0.3108	0.2447	-1.9499
117	17.57	-0.05	3.0094	-5.9254	-0.0568	0.0860	-0.0336	0.5506	0.3129	0.2377	-1.9358
118	17.74	-0.03	3.0145	-5.9941	-0.0579	0.1893	-0.0184	0.5607	0.3149	0.2458	-1.9160
119	17.91	-0.04	3.1571	-6.0317	-0.0440	0.0453	-0.0229	0.5597	0.3158	0.2441	-1.9105
120	18.04	-0.04	3.0941	-5.9830	-0.0735	0.1296	-0.0265	0.5603	0.3172	0.2428	-1.9171
121	18.22	-0.02	3.1000	-6.0522	0.0015	-0.0069	-0.0122	0.5709	0.3189	0.2520	-1.9032
122	18.39	-0.04	3.0600	-6.0363	-0.0223	0.0459	-0.0227	0.5649	0.3196	0.2493	-1.8958
123	18.55	-0.02	3.1594	-6.0661	0.0255	0.1207	-0.0283	0.5719	0.3219	0.2500	-1.8980
124	18.71	-0.03	3.0734	-6.0458	0.0404	-0.0704	-0.0170	0.5755	0.3223	0.2532	-1.8917
125	18.87	-0.05	3.0810	-6.1457	-0.0556	0.0361	-0.0277	0.5726	0.3227	0.2499	-1.8781
126	19.04	-0.03	3.1380	-6.2234	-0.0207	0.0767	-0.0172	0.5765	0.3253	0.2470	-1.8655
127	19.20	-0.05	3.1063	-6.2035	-0.0529	0.1005	-0.0171	0.5739	0.3240	0.2499	-1.8671
128	19.34	-0.04	3.1052	-6.2023	-0.0181	0.1248	-0.0437	0.5800	0.3268	0.2532	-1.8893
129	19.51	-0.03	3.1284	-6.3585	-0.0007	0.0326	-0.0220	0.5767	0.3267	0.2500	-1.8547
130	19.69	-0.04	3.1367	-6.2707	0.0096	0.0649	-0.0219	0.5711	0.3270	0.2441	-1.8564
131	19.81	-0.04	3.1482	-6.2983	-0.0323	0.0628	-0.0325	0.5667	0.3288	0.2379	-1.8600
132	19.98	-0.03	3.2431	-6.3140	0.0214	0.0499	-0.0216	0.5696	0.3285	0.2361	-1.8379
133	20.11	-0.05	3.1934	-6.3344	-0.0441	0.0438	-0.0322	0.5619	0.3284	0.2335	-1.8457
134	20.28	-0.04	3.1939	-6.3237	-0.0100	0.0696	-0.0268	0.5700	0.3312	0.2434	-1.8148
135	20.44	-0.04	3.2701	-6.3358	0.0321	-0.1362	-0.0157	0.5741	0.3298	0.2443	-1.8081
136	20.59	-0.05	3.2707	-6.3425	-0.0291	0.0731	-0.0317	0.5711	0.3306	0.2403	-1.7826
137	20.74	-0.03	3.2736	-6.3238	0.0219	0.0401	-0.0315	0.5680	0.3305	0.2375	-1.7790
138	20.88	-0.04	3.2871	-6.3953	0.0176	-0.1238	-0.0204	0.5692	0.3305	0.2387	-1.7690

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(INSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 37 MACH 1.10 RNI0-6 1.7 PHI 0.0 CONF 6 LAUFIL L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	21.04	-0.03	3.8169	-0.3861	-0.0456	0.2359	-0.0560	0.5594	0.3309	0.2285	-1.7282
140	21.22	-0.03	3.8593	-0.7953	0.0697	-0.0902	-0.0655	0.5664	0.3342	0.2342	-1.7602
141	21.37	-0.04	3.8900	-0.7990	0.0245	-0.1014	-0.0306	0.5587	0.3300	0.2287	-1.7348
142	21.24	-0.04	3.8289	-0.7185	-0.0328	0.0736	-0.0413	0.5532	0.3314	0.2216	-1.7100
143	21.07	-0.03	3.8700	-0.8099	0.0773	-0.1423	-0.0089	0.5622	0.3317	0.2305	-1.6877
144	21.03	-0.04	3.8469	-0.8100	0.0452	0.1960	-0.0571	0.5546	0.3317	0.2229	-1.6628
145	21.19	-0.04	3.8694	-0.8427	0.0275	-0.0493	-0.0295	0.5566	0.3321	0.2265	-1.6733
146	22.15	-0.05	4.2524	-0.9830	-0.0290	0.1401	-0.0246	0.5810	0.3310	0.2500	-1.6422
147	22.29	-0.05	4.2098	-0.9707	0.0340	0.0757	-0.0351	0.5941	0.3314	0.2627	-1.6322
148	22.06	-0.05	4.2424	-0.9758	0.0073	-0.1233	-0.0133	0.5865	0.3311	0.2172	-1.6171
149	22.01	-0.05	4.2430	-0.9930	0.0074	-0.1233	-0.0077	0.5938	0.3324	0.2184	-1.5955
150	22.15	-0.04	4.2159	-0.9367	0.0005	0.1778	-0.0504	0.5866	0.3317	0.2149	-1.5713
151	22.41	-0.02	4.2600	-1.0151	0.0425	-0.0945	-0.0178	0.5956	0.3317	0.2239	-1.5659
152	23.09	-0.05	4.3818	-1.0343	0.0709	-0.1317	-0.0122	0.5963	0.3336	0.2145	-1.5470
153	23.19	-0.04	4.3155	-0.9178	0.0190	-0.0769	-0.0261	0.5930	0.3336	0.2092	-1.5307
154	23.35	-0.02	4.3603	-1.0174	0.1734	-0.3216	0.0146	0.5984	0.3336	0.2246	-1.5304
155	23.49	-0.04	4.3714	-1.0372	0.1420	-0.2657	-0.0062	0.5946	0.3349	0.2197	-1.5064
156	23.05	-0.03	4.3149	-1.0446	0.1004	-0.3939	-0.0058	0.5880	0.3362	0.2218	-1.4941
157	23.78	-0.03	4.4010	-1.1353	0.1712	-0.3957	0.0207	0.5983	0.3365	0.2216	-1.4869
158	24.57	-0.03	5.0440	-1.0930	0.2443	-0.7243	0.0328	0.6046	0.3427	0.2219	-1.4060
159	27.25	0.04	6.0101	-1.3827	0.3963	-2.0967	0.1546	0.5713	0.3631	0.2112	-1.2267
160	31.65	0.04	7.0411	-1.7172	1.0478	-1.6102	0.1330	0.5565	0.3706	0.1819	-0.9842
161	36.56	-0.03	10.4957	-0.3712	0.0481	0.4036	-0.0478	0.5401	0.4011	0.1390	-0.7982
162	49.36	-0.03	13.7394	-1.4249	-0.1029	1.4709	0.0503	0.5093	0.3739	-0.0646	-0.5262
163	58.74	-0.01	15.0911	-0.3327	0.1226	0.6014	0.0540	0.1378	0.3400	-0.2022	-0.5522

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NAIO-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 37 1.10 1.7 0.0 BINOFIL 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	ALPF1	YCPF1	CNF2	CM2	CA2	ACPF2	YCPF2
1	-5.07	0.02	-0.0168	0.0027	0.0195	-5.1093	-1.0050	-0.2171	-0.0035	-0.1258	0.2786	0.5795
2	-5.08	0.01	-0.0203	0.0013	0.0177	-5.0849	-0.8719	-0.2111	-0.0599	-0.1218	0.2837	0.5770
3	-5.07	0.02	-0.0225	0.0012	0.0170	-5.0533	-0.7556	-0.2068	-0.0588	-0.1201	0.2815	0.5752
4	-5.07	0.00	-0.0223	0.0005	0.0166	-5.0324	-0.7175	-0.2100	-0.0592	-0.1207	0.2816	0.5748
5	-4.85	0.03	-0.0140	0.0023	0.0205	-5.1642	-1.4429	-0.1942	-0.0575	-0.1130	0.2960	0.5819
6	-4.87	0.04	-0.0129	0.0028	0.0211	-5.2170	-1.6357	-0.1823	-0.0552	-0.1050	0.3027	0.5760
7	-4.23	-0.01	-0.0182	0.0015	0.0185	-5.1044	-1.0165	-0.1704	-0.0530	-0.0956	0.3109	0.5816
8	-3.59	0.01	-0.0235	0.0	0.0203	0.0	-0.6936	-0.1585	-0.0503	-0.0861	0.3204	0.5858
9	-3.70	0.02	-0.0180	0.0010	0.0192	-5.1030	-1.2000	-0.1417	-0.0475	-0.0762	0.3351	0.5819
10	-3.49	-0.01	-0.0181	0.0021	0.0176	-5.1103	-0.9764	-0.1340	-0.0454	-0.0736	0.3409	0.5468
11	-3.18	0.04	-0.0151	0.0030	0.0204	-5.1988	-1.3510	-0.1204	-0.0421	-0.0649	0.3496	0.5398
12	-2.91	0.00	-0.0213	0.0017	0.0177	-5.0749	-0.8233	-0.1071	-0.0398	-0.0592	0.3696	0.5528
13	-2.65	-0.00	-0.0154	0.0031	0.0180	-5.1598	-0.9278	-0.0867	-0.0348	-0.0499	0.4013	0.5755
14	-2.38	0.03	-0.0130	0.0035	0.0190	-5.2589	-1.2667	-0.0673	-0.0339	-0.0447	0.4590	0.6042
15	-2.12	-0.00	-0.0225	0.0025	0.0182	-5.1535	-0.7200	-0.0588	-0.0296	-0.0415	0.5033	0.7058
16	-1.88	0.01	-0.0220	0.0031	0.0187	-5.1371	-0.7389	-0.0493	-0.0288	-0.0371	0.5394	0.7525
17	-1.59	0.01	-0.0218	0.0030	0.0184	-5.2129	-0.7824	-0.0397	-0.0247	-0.0326	0.6220	0.8262
18	-1.35	-0.01	-0.0151	0.0028	0.0187	-5.3864	-1.2384	-0.0218	-0.0200	-0.0252	0.9172	1.1560
19	-1.09	-0.00	-0.0225	0.0038	0.0184	-5.1704	-0.6457	-0.0147	-0.0178	-0.0220	1.2106	1.4986
20	-0.84	0.00	-0.0190	0.0041	0.0193	-5.4330	-1.3788	-0.0003	-0.0169	-0.0153	49.6534	51.0000
21	-0.62	-0.01	-0.0202	0.0041	0.0156	-5.2029	-0.7125	0.0054	-0.0114	-0.0122	-2.1105	-2.2593
22	-0.33	0.02	-0.0143	0.0040	0.0189	-5.4068	-1.4786	0.0175	-0.0093	-0.0072	-0.5513	-0.4114
23	-0.13	0.01	-0.0180	0.0031	0.0159	-5.2833	-0.8833	0.0248	-0.0079	-0.0041	-0.3211	-0.1667
24	0.11	0.02	-0.0120	0.0057	0.0175	-5.4572	-1.3869	0.0364	-0.0032	0.0	-0.0879	0.0
25	0.37	0.00	-0.0203	0.0053	0.0157	-5.2610	-0.7734	0.0473	-0.0013	0.0034	-0.0275	0.0719
26	0.58	-0.02	-0.0109	0.0077	0.0186	-5.4106	-1.2143	0.0546	-0.0004	0.0051	-0.0073	0.0934
27	0.82	0.00	-0.0099	0.0070	0.0179	-5.3445	-1.0943	0.0702	0.0034	0.0085	0.0484	0.1211
28	1.08	0.01	-0.0130	0.0055	0.0159	-5.4337	-1.1691	0.0795	0.0088	0.0120	0.0855	0.1610
29	1.28	-0.01	-0.0081	0.0074	0.0188	-5.2128	-1.0820	0.0844	0.0070	0.0157	0.0625	0.1623
30	1.51	0.02	-0.0091	0.0059	0.0184	-5.0494	-1.0022	0.0982	0.0104	0.0202	0.1081	0.2100
31	1.77	0.00	-0.0112	0.0052	0.0156	-5.4642	-1.3925	0.1057	0.0133	0.0241	0.1258	0.2280
32	1.96	-0.01	-0.0099	0.0070	0.0179	-5.4284	-1.0531	0.1138	0.0138	0.0262	0.1368	0.2478
33	2.23	0.02	-0.0080	0.0060	0.0186	-5.9997	-3.1000	0.1305	0.0195	0.0256	0.1494	0.2728
34	2.44	0.01	-0.0112	0.0067	0.0150	-5.4195	-1.3969	0.1288	0.0195	0.0344	0.1537	0.2713
35	2.67	-0.00	-0.0059	0.0062	0.0177	-5.0500	-3.0000	0.1424	0.0222	0.0407	0.1559	0.2858
36	2.88	0.03	-0.0060	0.0069	0.0169	-5.2998	-2.1125	0.1541	0.0228	0.0357	0.1674	0.2966
37	3.12	-0.02	-0.0017	0.0058	0.0205	-5.4139	-12.0588	0.1551	0.0280	0.0463	0.1805	0.2985
38	3.34	0.01	-0.0008	0.0060	0.0169	-5.5081	-2.4353	0.1720	0.0300	0.0537	0.1744	0.3122
39	3.57	0.01	-0.0027	0.0053	0.0199	-5.9624	-7.1652	0.1769	0.0325	0.0587	0.1816	0.3281
40	3.79	-0.01	-0.0108	0.0032	0.0151	-5.4352	-1.2130	0.1801	0.0335	0.0616	0.1800	0.3321
41	4.03	0.02	-0.0068	0.0028	0.0175	-5.4117	-2.5441	0.2013	0.0399	0.0702	0.1937	0.3487
42	4.24	-0.00	-0.0005	0.0039	0.0204	-5.7979	-40.8000	0.2120	0.0414	0.0750	0.1952	0.3538
43	4.48	-0.00	-0.0015	0.0036	0.0193	-5.5999	-12.8007	0.2156	0.0416	0.0776	0.1929	0.3609
44	4.70	0.01	-0.0015	0.0032	0.0202	-5.6328	-13.4007	0.2335	0.0433	0.0838	0.1940	0.3675
45	4.87	0.00	-0.0008	0.0041	0.0220	0.6832	5.7067	0.2357	0.0464	0.0885	0.1968	0.3755
46	5.11	0.01	-0.0030	0.0018	0.0194	-5.4999	-5.3685	0.2599	0.0499	0.0975	0.1918	0.3825

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 4 OF 8
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 37 MACH 1.10 ALPHA 0.0 CONFIG 11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	5.33	0.001	-0.0014	0.0003	0.0193	-2.1423	-13.7657	0.2662	0.0496	0.1050	0.1856	0.3915
48	5.30	-0.002	0.0005	0.0025	0.0218	0.9999	4.3000	0.2692	0.0516	0.1061	0.1924	0.3941
49	5.73	0.000	-0.0022	0.0006	0.0180	-0.2727	-0.1818	0.2683	0.0542	0.1101	0.1879	0.4027
50	5.93	-0.002	-0.0012	0.0007	0.0180	-0.5832	-15.5000	0.2930	0.0561	0.1165	0.1914	0.4044
51	6.13	-0.001	0.0011	0.0013	0.0184	1.1845	16.7273	0.3003	0.0550	0.1230	0.1851	0.4096
52	6.32	0.002	-0.0001	0.0006	0.0187	-7.9979	-167.0000	0.3184	0.0585	0.1314	0.1838	0.4145
53	6.50	-0.001	-0.0009	0.0002	0.0182	-0.2222	-10.0000	0.3215	0.0610	0.1352	0.1897	0.4205
54	6.72	-0.000	0.0009	0.0017	0.0177	0.3540	5.2059	0.3409	0.0620	0.1420	0.1818	0.4189
55	6.92	0.001	-0.0007	0.0001	0.0180	-0.0357	-0.8571	0.3445	0.0634	0.1441	0.1840	0.4183
56	7.10	-0.000	0.0002	0.0005	0.0137	0.1705	4.8969	0.3500	0.0636	0.1519	0.1772	0.4200
57	7.32	-0.000	0.0000	0.0001	0.0183	0.1666	22.5000	0.3722	0.0652	0.1592	0.1751	0.4277
58	7.50	-0.001	-0.0004	0.00	0.0183	0.0	-4.2917	0.3843	0.0655	0.1655	0.1704	0.4307
59	7.69	-0.001	-0.0002	0.0001	0.0110	-0.4999	-55.0000	0.3998	0.0674	0.1742	0.1685	0.4357
60	7.89	-0.001	-0.0003	-0.0001	0.0095	0.0222	-2.1111	0.4058	0.0682	0.1784	0.1660	0.4342
61	8.08	-0.001	0.0010	0.0001	0.0134	0.0555	7.2778	0.4175	0.0697	0.1825	0.1689	0.4371
62	8.29	-0.000	-0.0002	0.0002	0.0085	-0.0999	-4.0455	0.4333	0.0693	0.1911	0.1549	0.4410
63	8.49	-0.000	-0.0010	0.0003	0.0069	-0.0345	-0.9074	0.4384	0.0695	0.1924	0.1540	0.4404
64	8.69	-0.001	0.0001	0.0001	0.0124	0.0299	3.0299	0.4537	0.0706	0.2027	0.1560	0.4408
65	8.77	-0.001	-0.0003	0.0005	0.0066	-0.0999	-1.2653	0.4691	0.0733	0.2125	0.1562	0.4526
66	8.94	0.000	-0.0005	0.0013	0.0074	-0.4997	-1.3333	0.4888	0.0727	0.2127	0.1553	0.4545
67	9.12	-0.001	0.0010	0.0005	0.0102	0.4999	10.2000	0.4823	0.0738	0.2212	0.1530	0.4586
68	9.30	-0.001	-0.0003	0.0000	0.0087	-0.1999	-1.9333	0.4884	0.0735	0.2247	0.1505	0.4601
69	9.48	-0.001	-0.0004	0.0003	0.0092	-0.4470	-2.7059	0.5016	0.0743	0.2351	0.1481	0.4647
70	9.65	-0.002	-0.0003	-0.0001	0.0077	0.0252	-1.7407	0.5100	0.0743	0.2428	0.1432	0.4682
71	9.82	0.000	-0.0003	-0.0000	0.0081	0.1395	-1.8037	0.5258	0.0752	0.2449	0.1430	0.4658
72	10.01	-0.002	-0.0013	0.00	0.0104	0.0	-8.0000	0.5379	0.0734	0.2518	0.1398	0.4681
73	10.16	-0.002	-0.0013	-0.0001	0.0058	0.4997	-0.7143	0.5492	0.0760	0.2589	0.1396	0.4657
74	10.36	0.001	-0.0000	-0.0001	0.0071	0.1027	-0.8250	0.5596	0.0767	0.2591	0.1382	0.4678
75	10.55	-0.003	-0.0003	-0.0006	0.0081	0.1395	-1.8037	0.5718	0.0774	0.2664	0.1350	0.4659
76	10.74	-0.002	-0.0006	-0.0004	0.0073	0.1400	-1.1400	0.5814	0.0776	0.2720	0.1331	0.4689
77	10.88	-0.001	-0.0003	-0.0003	0.0074	0.1320	-0.7551	0.5802	0.0776	0.2756	0.1323	0.4698
78	11.05	-0.003	-0.0004	0.0005	0.0103	-0.4983	-9.4917	0.5917	0.0779	0.2778	0.1304	0.4652
79	11.24	-0.001	-0.0003	0.00	0.0093	0.00	-2.1111	0.6142	0.0787	0.2861	0.1281	0.4658
80	11.41	-0.002	-0.0002	-0.0000	0.0084	0.1434	-1.5273	0.6225	0.0791	0.2922	0.1270	0.4694
81	11.55	-0.003	-0.0003	-0.0003	0.0095	0.0000	-2.1111	0.6444	0.0797	0.3008	0.1236	0.4668
82	11.73	-0.000	-0.0005	-0.0000	0.0089	0.0999	-1.6666	0.6594	0.0800	0.3036	0.1223	0.4641
83	11.90	-0.002	-0.0003	-0.0003	0.0085	0.0545	-1.5455	0.6711	0.0810	0.3119	0.1207	0.4668
84	12.07	-0.003	-0.0015	0.0014	0.0114	-0.7998	-7.9333	0.6772	0.0810	0.3144	0.1196	0.4643
85	12.24	-0.001	-0.0011	-0.0003	0.0082	0.0649	-1.0649	0.6905	0.0814	0.3204	0.1179	0.4640
86	12.40	-0.003	-0.0026	0.0016	0.0113	-0.9019	-9.3902	0.6990	0.0815	0.3265	0.1166	0.4628
87	12.58	-0.003	0.0023	0.0026	0.0159	1.5648	8.9130	0.7051	0.0817	0.3265	0.1158	0.4631
88	12.75	-0.001	-0.0030	0.0016	0.0125	-0.3199	-2.5000	0.7197	0.0824	0.3316	0.1145	0.4607
89	12.89	-0.003	-0.0006	0.0024	0.0120	-3.9969	-21.0000	0.7270	0.0826	0.3342	0.1133	0.4597
90	13.07	-0.002	-0.0007	0.0024	0.0140	-3.4271	-20.0000	0.7439	0.0831	0.3420	0.1117	0.4597
91	13.25	-0.002	-0.0037	0.0016	0.0131	-0.9101	-3.3990	0.7610	0.0832	0.3478	0.1093	0.4570
92	13.40	-0.003	-0.0027	0.0013	0.0123	-0.4814	-4.2500	0.7709	0.0839	0.3525	0.1080	0.4537

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PAN 37 MACH 1.10 1.07 RNLD-6 PHI 0.0 CONF DIHEDRAL L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
93	13.57	-0.03	-0.0047	0.0030	0.0105	-0.1270	-2.2340	0.7910	0.0839	0.3546	0.1060	0.4482
94	13.73	-0.03	-0.0060	-0.0003	0.0096	0.0441	-1.4916	0.8163	0.0842	0.3626	0.1036	0.4466
95	13.91	-0.04	-0.0047	0.0003	0.0110	-0.0038	-2.3404	0.8173	0.0842	0.3633	0.1030	0.4445
96	14.07	-0.01	-0.0049	0.0002	0.0124	-0.0048	-2.5306	0.8197	0.0847	0.3650	0.1033	0.4428
97	14.24	-0.04	-0.0050	0.0002	0.0139	-0.0400	-2.6000	0.8342	0.0849	0.3714	0.1011	0.4426
98	14.38	-0.04	-0.0077	-0.0013	0.0060	0.1080	-1.1109	0.8416	0.0849	0.3721	0.1009	0.4421
99	14.57	-0.01	-0.0164	-0.0005	0.0101	0.0726	-0.8495	0.8566	0.0857	0.3794	0.0998	0.4419
100	14.74	-0.04	-0.0102	-0.0006	0.0108	0.0548	-1.0508	0.8665	0.0861	0.3857	0.0991	0.4419
101	14.93	-0.03	-0.0084	0.0003	0.0135	-0.0357	-1.2071	0.8835	0.0865	0.3901	0.0982	0.4431
102	15.08	-0.02	-0.0100	-0.0017	0.0060	0.1049	-0.9101	0.8828	0.0862	0.3903	0.0976	0.4421
103	15.25	-0.03	-0.0145	-0.0012	0.0089	0.0627	-0.8138	0.8889	0.0870	0.3923	0.0978	0.4413
104	15.42	-0.03	-0.0073	0.0012	0.0151	-0.1000	-2.0433	0.8973	0.0871	0.3909	0.0970	0.4423
105	15.58	-0.04	-0.0241	-0.0022	0.0053	0.1913	-0.2195	0.9082	0.0872	0.4027	0.0960	0.4434
106	15.75	-0.03	-0.0231	-0.0026	0.0089	0.0992	-0.4771	0.9143	0.0873	0.4001	0.0955	0.4442
107	15.93	-0.01	-0.0100	-0.0005	0.0096	0.0298	-0.5714	0.9203	0.0876	0.4086	0.0952	0.4440
108	16.09	-0.04	-0.0230	-0.0022	0.0080	0.0839	-0.4009	0.9263	0.0884	0.4120	0.0954	0.4448
109	16.26	-0.03	-0.0221	-0.0008	0.0071	0.1362	-0.3215	0.9305	0.0882	0.4179	0.0940	0.4453
110	16.42	-0.02	-0.0254	-0.0010	0.0087	0.0830	-0.4038	0.9506	0.0882	0.4243	0.0928	0.4463
111	16.58	-0.03	-0.0345	-0.0029	-0.0006	0.1869	0.0174	0.9276	0.0770	0.4092	0.0830	0.4411
112	16.73	-0.02	-0.0274	-0.0036	0.0056	0.1300	-0.2117	0.9529	0.0782	0.4100	0.0838	0.4404
113	16.91	-0.02	-0.0247	-0.0037	0.0113	0.1490	-0.4575	0.9471	0.0777	0.4158	0.0820	0.4390
114	17.07	-0.03	-0.0171	-0.0028	0.0159	0.2030	-0.8129	0.9495	0.0774	0.4169	0.0815	0.4391
115	17.23	-0.04	-0.0176	-0.0056	0.0186	0.3101	-1.0568	0.9607	0.0760	0.4212	0.0791	0.4384
116	17.39	-0.03	-0.0317	-0.0004	0.0004	0.2143	-0.1693	0.9634	0.0753	0.4204	0.0761	0.4364
117	17.57	-0.05	-0.0253	-0.0056	0.0091	0.2008	-0.3597	0.9696	0.0729	0.4228	0.0752	0.4361
118	17.72	-0.03	-0.0155	-0.0050	0.0062	0.3612	-1.3332	0.9815	0.0752	0.4293	0.0766	0.4374
119	17.91	-0.04	-0.0230	-0.0077	0.0116	0.3007	-0.8009	0.9865	0.0736	0.4336	0.0748	0.4365
120	18.09	-0.04	-0.0233	-0.0056	0.0117	0.2302	-0.9479	0.9899	0.0712	0.4330	0.0719	0.4374
121	18.22	-0.02	-0.0249	-0.0068	0.0143	0.2730	-0.5763	1.0022	0.0737	0.4369	0.0705	0.4359
122	18.39	-0.04	-0.0253	-0.0054	0.0112	0.1612	-0.9838	1.0055	0.0698	0.4325	0.0684	0.4331
123	18.55	-0.02	-0.0323	-0.0084	0.0115	0.2000	-0.3560	1.0241	0.0737	0.4480	0.0690	0.4375
124	18.71	-0.03	-0.0421	-0.0075	-0.0004	0.1701	-0.0214	1.0298	0.0634	0.4477	0.0614	0.4347
125	18.87	-0.03	-0.0249	-0.0055	0.0067	0.1659	-0.2910	1.0345	0.0651	0.4511	0.0629	0.4361
126	19.04	-0.03	-0.0304	-0.0064	0.0076	0.1703	-0.1723	1.0396	0.0621	0.4534	0.0597	0.4361
127	19.20	-0.03	-0.0252	-0.0059	0.0062	0.1676	-0.1701	1.0447	0.0612	0.4537	0.0586	0.4343
128	19.36	-0.04	-0.0223	-0.0035	0.0018	0.2009	-0.3426	1.0519	0.0593	0.4610	0.0558	0.4341
129	19.51	-0.03	-0.0217	-0.0033	0.0055	0.1750	-0.1271	1.0631	0.0583	0.4639	0.0546	0.4343
130	19.69	-0.04	-0.0342	-0.0052	0.0068	0.1520	-0.1938	1.0744	0.0564	0.4658	0.0525	0.4335
131	19.81	-0.04	-0.0300	-0.0047	0.0072	0.1735	-0.1365	1.0767	0.0576	0.4660	0.0535	0.4347
132	19.98	-0.03	-0.0290	-0.0041	0.0059	0.1750	-0.0348	1.0842	0.0565	0.4695	0.0521	0.4330
133	20.11	-0.03	-0.0302	-0.0030	0.0035	0.1570	-0.0916	1.0900	0.0550	0.4719	0.0483	0.4303
134	20.28	-0.04	-0.0340	-0.0045	0.0021	0.1521	-0.1250	1.1114	0.0545	0.4700	0.0490	0.4288
135	20.44	-0.04	-0.0295	-0.0025	0.0038	0.0847	-0.1288	1.1129	0.0515	0.4701	0.0463	0.4278
136	20.59	-0.03	-0.0329	-0.0024	0.0024	0.1446	-0.0869	1.1203	0.0521	0.4612	0.0462	0.4272
137	20.74	-0.03	-0.0316	-0.0035	-0.0035	0.1718	0.0076	1.1348	0.0526	0.4639	0.0465	0.4264
138	20.88	-0.04	-0.0231	-0.0010	0.0065	0.0692	-0.2814	1.1430	0.0493	0.4670	0.0430	0.4253

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(INSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST T | PART M | MACH 1.10 | RATIO-B 1.7 | PHI 0.0 | CONF BIANFIL | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	C31	XCPF1	YCPF1	CNF2	CM2	C02	XCPF2	YCPF2
139	21.04	-0.03	-0.0780	-0.0104	-0.0128	0.2137	0.1058	1.1454	0.0566	0.4869	0.0494	0.4251
140	21.22	-0.03	-0.0904	-0.0177	-0.0029	0.1859	0.0917	1.1638	0.0509	0.4904	0.0438	0.4225
141	21.37	-0.04	-0.0763	-0.0033	0.0034	0.1166	-0.1201	1.1643	0.0481	0.4932	0.0411	0.4218
142	21.52	-0.04	-0.0924	-0.0060	-0.0043	0.1538	0.1002	1.1741	0.0496	0.4946	0.0422	0.4213
143	21.67	-0.03	-0.0742	-0.0015	0.0054	0.0820	-0.2201	1.1676	0.0476	0.5030	0.0401	0.4235
144	21.83	-0.04	-0.0815	-0.0158	-0.0037	0.1938	0.2408	1.1883	0.0522	0.5026	0.0439	0.4231
145	21.99	-0.04	-0.0974	-0.0050	-0.0040	0.1055	0.0970	1.1960	0.0495	0.5043	0.0412	0.4217
146	22.15	-0.05	-0.0811	-0.0061	-0.0114	0.0998	0.1866	1.2050	0.0506	0.5100	0.0420	0.4230
147	22.29	-0.05	-0.0933	-0.0049	-0.0019	0.0501	0.0571	1.2118	0.0492	0.5120	0.0406	0.4225
148	22.44	-0.05	-0.0970	0.0	0.0102	0.0	-0.0000	1.2157	0.0473	0.5137	0.0389	0.4220
149	22.61	-0.05	-0.0955	0.0005	0.0172	-0.0909	-0.1273	1.2243	0.0482	0.5178	0.0377	0.4229
150	22.75	-0.04	-0.0963	-0.0067	-0.0101	0.1149	0.2744	1.2325	0.0488	0.5234	0.0396	0.4247
151	22.91	-0.02	-0.0750	-0.0018	0.0039	0.0720	-0.1300	1.2400	0.0476	0.5260	0.0384	0.4242
152	23.05	-0.05	-0.0985	0.0009	0.0157	-0.1584	-2.9154	1.2469	0.0460	0.5296	0.0368	0.4241
153	23.19	-0.04	-0.0710	-0.0017	0.0119	0.0787	-0.5509	1.2501	0.0460	0.5311	0.0368	0.4248
154	23.33	-0.02	0.0305	0.0055	0.0344	0.1506	1.0795	1.2504	0.0448	0.5338	0.0356	0.4241
155	23.49	-0.04	0.0153	0.0045	0.0280	0.2183	2.1053	1.2603	0.0446	0.5368	0.0354	0.4256
156	23.63	-0.03	0.0337	0.0036	0.0256	0.1157	1.0584	1.2709	0.0448	0.5421	0.0352	0.4265
157	23.78	-0.03	0.0392	0.0040	0.0253	0.1173	1.1556	1.2759	0.0433	0.5454	0.0339	0.4275
158	24.57	-0.03	0.1143	0.0105	0.0033	0.1363	0.9762	1.3108	0.0412	0.5636	0.0312	0.4274
159	27.45	0.04	0.3903	0.0450	0.0142	0.1135	0.5405	1.3846	0.0408	0.5959	0.0295	0.4304
160	31.03	0.04	0.4071	0.0497	0.0208	0.1098	0.5817	1.4041	0.0351	0.6303	0.0236	0.4287
161	30.98	-0.03	-0.0537	0.0051	0.0152	-0.1513	-0.4510	1.6038	0.0222	0.6697	0.0138	0.4308
162	49.98	-0.03	-0.0980	0.0042	-0.0143	-0.0428	0.1459	1.2205	0.0179	0.4996	0.0162	0.4095
163	58.79	-0.01	-0.0915	0.0023	-0.0089	-0.0306	0.0973	1.2845	0.0056	0.5303	0.0044	0.4128

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 37 MACH 1.10 RAID-6 1.7 PHI 0.0 CONF 81=OFF11 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PLANT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.07	0.02	0.0002	9.9999	0.0197	9.9999	98.5300	-0.2585	-0.0533	-0.1300	0.2255	0.5029
2	-5.08	0.01	-0.0006	9.9999	0.0189	9.9999	-21.1250	-0.2583	-0.0586	-0.1281	0.2276	0.4959
3	-5.07	0.02	-0.0001	9.9999	0.0190	9.9999	-22.2857	-0.2582	-0.0576	-0.1269	0.2248	0.4953
4	-5.07	0.00	-0.0002	9.9999	0.0181	9.9999	-9.0500	-0.2521	-0.0568	-0.1260	0.2247	0.4986
5	-4.85	0.03	0.0003	9.9999	0.0183	9.9999	81.0000	-0.2413	-0.0558	-0.1208	0.2310	0.5002
6	-4.87	0.04	0.0004	9.9999	0.0187	9.9999	9.8163	-0.2429	-0.0550	-0.1134	0.2346	0.5011
7	-4.23	-0.01	-0.0010	9.9999	0.0141	9.9999	-7.8333	-0.2147	-0.0523	-0.1071	0.2435	0.4988
8	-3.99	0.01	0.0000	9.9999	0.0141	9.9999	9.0154	-0.1933	-0.0477	-0.0950	0.2467	0.4915
9	-3.70	0.02	0.0028	9.9999	0.0145	9.9999	5.1780	-0.1812	-0.0460	-0.0867	0.2538	0.4895
10	-3.45	-0.01	0.0010	9.9999	0.0144	9.9999	9.0000	-0.1739	-0.0449	-0.0838	0.2581	0.4819
11	-3.18	0.04	0.0103	9.9999	0.0142	9.9999	1.9140	-0.1623	-0.0413	-0.0750	0.2544	0.4621
12	-2.91	0.00	0.0026	9.9999	0.0120	9.9999	2.0377	-0.1484	-0.0369	-0.0639	0.2618	0.4535
13	-2.66	-0.00	0.0041	9.9999	0.0097	9.9999	2.3659	-0.1315	-0.0345	-0.0581	0.2623	0.4418
14	-2.38	0.00	0.0121	9.9999	0.0103	9.9999	3.0212	-0.1148	-0.0312	-0.0528	0.2717	0.4399
15	-2.12	-0.00	0.0092	9.9999	0.0084	9.9999	2.0000	-0.1023	-0.0303	-0.0486	0.2961	0.4731
16	-1.88	0.01	0.0121	9.9999	0.0103	9.9999	3.0512	-0.0936	-0.0260	-0.0392	0.2777	0.4188
17	-1.59	0.01	0.0099	9.9999	0.0079	9.9999	0.7930	-0.0817	-0.0237	-0.0324	0.2900	0.3966
18	-1.35	-0.01	0.0098	9.9999	0.0097	9.9999	0.9498	-0.0734	-0.0215	-0.0273	0.2928	0.3719
19	-1.09	-0.00	0.0122	9.9999	0.0081	9.9999	0.6035	-0.0632	-0.0180	-0.0223	0.2847	0.3520
20	-0.84	0.00	0.0140	9.9999	0.0100	9.9999	0.5263	-0.0512	-0.0161	-0.0170	0.3144	0.3520
21	-0.62	-0.01	0.0145	9.9999	0.0083	9.9999	0.5724	-0.0426	-0.0116	-0.0120	0.2722	0.2817
22	-0.35	0.02	0.0232	9.9999	0.0078	9.9999	0.3801	-0.0353	-0.0106	-0.0086	0.3059	0.2436
23	-0.13	0.01	0.0100	9.9999	0.0080	9.9999	0.4702	-0.0247	-0.0083	-0.0033	0.3359	0.1336
24	0.11	0.02	0.0243	9.9999	0.0062	9.9999	0.4319	-0.0170	-0.0050	0.0024	0.2940	-0.1412
25	0.37	0.00	0.0240	9.9999	0.0075	9.9999	0.3505	-0.0033	-0.0017	0.0086	0.5665	-2.8667
26	0.58	-0.02	0.0230	9.9999	0.0094	9.9999	0.3983	-0.0030	-0.0017	0.0081	0.5665	-2.7000
27	0.82	0.00	0.0230	9.9999	0.0085	9.9999	0.3002	0.0134	0.0021	0.0125	0.1567	0.9328
28	1.08	0.01	0.0242	9.9999	0.0065	9.9999	0.3418	0.0279	0.0038	0.0158	0.1659	0.6900
29	1.28	-0.01	0.0258	9.9999	0.0091	9.9999	0.3527	0.0259	0.0058	0.0181	0.2239	0.6588
30	1.51	0.02	0.0270	9.9999	0.0075	9.9999	0.2770	0.0423	0.0090	0.0249	0.2269	0.5887
31	1.77	0.00	0.0230	9.9999	0.0072	9.9999	0.3051	0.0585	0.0137	0.0294	0.2341	0.5026
32	1.98	-0.01	0.0213	9.9999	0.0079	9.9999	0.3709	0.0592	0.0131	0.0306	0.2550	0.5169
33	2.20	0.02	0.0270	9.9999	0.0079	9.9999	0.2920	0.0741	0.0195	0.0387	0.2631	0.5223
34	2.44	0.01	0.0242	9.9999	0.0092	9.9999	0.2990	0.0807	0.0222	0.0424	0.2750	0.5254
35	2.67	-0.00	0.0260	9.9999	0.0098	9.9999	0.3500	0.0893	0.0230	0.0450	0.2651	0.5056
36	2.88	0.03	0.0305	9.9999	0.0095	9.9999	0.2607	0.1000	0.0280	0.0498	0.2573	0.4577
37	3.12	-0.02	0.0240	9.9999	0.0095	9.9999	0.4024	0.1035	0.0284	0.0457	0.2743	0.4415
38	3.34	0.01	0.0269	9.9999	0.0086	9.9999	0.3271	0.1249	0.0343	0.0561	0.2501	0.4319
39	3.57	0.01	0.0246	9.9999	0.0090	9.9999	0.3659	0.1345	0.0337	0.0580	0.2505	0.4312
40	3.79	-0.01	0.0214	9.9999	0.0088	9.9999	0.4151	0.1490	0.0360	0.0687	0.2415	0.4011
41	4.03	0.02	0.0269	9.9999	0.0092	9.9999	0.3620	0.1551	0.0401	0.0729	0.2585	0.4700
42	4.24	-0.00	0.0240	9.9999	0.0099	9.9999	0.4029	0.1619	0.0423	0.0770	0.2612	0.4756
43	4.48	-0.00	0.0275	9.9999	0.0111	9.9999	0.3978	0.1719	0.0428	0.0853	0.2489	0.4962
44	4.70	0.01	0.0260	9.9999	0.0096	9.9999	0.3530	0.1787	0.0431	0.0893	0.2523	0.4997
45	4.87	0.00	0.0324	9.9999	0.0120	9.9999	0.3951	0.1838	0.0474	0.0951	0.2589	0.5197
46	5.11	0.01	0.0269	9.9999	0.0096	9.9999	0.3920	0.1977	0.0489	0.1048	0.2473	0.5301

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	3/	1.10	1.7	0.0	BLKOF11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	Cm3	CB3	XCPF3	YCPF3	CNF4	Cm4	CB4	XCPF4	YCPF4
93	13.57	-0.03	0.0339	9.9999	0.0058	9.9999	0.1711	0.6748	0.0823	0.3882	0.1219	0.5753
94	13.75	-0.03	0.0350	9.9999	0.0059	9.9999	0.1686	0.6849	0.0827	0.3951	0.1207	0.5769
95	13.91	-0.04	0.0361	9.9999	0.0077	9.9999	0.2133	0.6900	0.0825	0.3978	0.1195	0.5765
96	14.07	-0.01	0.0418	9.9999	0.0073	9.9999	0.1746	0.6963	0.0829	0.4034	0.1190	0.5793
97	14.24	-0.04	0.0372	9.9999	0.0069	9.9999	0.1855	0.7063	0.0833	0.4099	0.1179	0.5803
98	14.38	-0.04	0.0350	9.9999	0.0070	9.9999	0.1429	0.7064	0.0836	0.4117	0.1179	0.5828
99	14.57	-0.01	0.0441	9.9999	0.0086	9.9999	0.1497	0.7217	0.0832	0.4218	0.1153	0.5845
100	14.74	-0.04	0.0417	9.9999	0.0082	9.9999	0.1906	0.7293	0.0833	0.4266	0.1142	0.5849
101	14.90	-0.03	0.0416	9.9999	0.0073	9.9999	0.1746	0.7407	0.0835	0.4340	0.1127	0.5859
102	15.08	-0.02	0.0384	9.9999	0.0063	9.9999	0.1360	0.7381	0.0836	0.4334	0.1135	0.5872
103	15.25	-0.05	0.0394	9.9999	0.0064	9.9999	0.2132	0.7570	0.0840	0.4423	0.1109	0.5843
104	15.42	-0.03	0.0390	9.9999	0.0054	9.9999	0.1564	0.7609	0.0840	0.4466	0.1104	0.5872
105	15.58	-0.02	0.0395	9.9999	0.0071	9.9999	0.1797	0.7644	0.0847	0.4481	0.1108	0.5862
106	15.75	-0.03	0.0395	9.9999	0.0076	9.9999	0.1924	0.7746	0.0846	0.4544	0.1092	0.5866
107	15.93	-0.01	0.0373	9.9999	0.0052	9.9999	0.1394	0.7783	0.0849	0.4562	0.1091	0.5861
108	16.09	-0.02	0.0417	9.9999	0.0091	9.9999	0.2182	0.7846	0.0846	0.4608	0.1078	0.5872
109	16.26	-0.03	0.0394	9.9999	0.0093	9.9999	0.2360	0.8011	0.0852	0.4682	0.1063	0.5844
110	16.42	-0.02	0.0395	9.9999	0.0080	9.9999	0.2025	0.8047	0.0859	0.4713	0.1067	0.5857
111	16.58	-0.03	0.0328	9.9999	0.0075	9.9999	0.2301	0.8071	0.0860	0.4711	0.1065	0.5837
112	16.73	-0.02	0.0393	9.9999	0.0102	9.9999	0.2595	0.7866	0.0727	0.4549	0.0924	0.5785
113	16.91	-0.02	0.0405	9.9999	0.0094	9.9999	0.2321	0.7959	0.0702	0.4570	0.0884	0.5756
114	17.07	-0.03	0.0359	9.9999	0.0104	9.9999	0.2697	0.7691	0.0614	0.4396	0.0798	0.5716
115	17.23	-0.04	0.0328	9.9999	0.0075	9.9999	0.2301	0.7751	0.0574	0.4360	0.0742	0.5666
116	17.39	-0.03	0.0328	9.9999	0.0088	9.9999	0.2699	0.7951	0.0636	0.4492	0.0792	0.5656
117	17.57	-0.03	0.0348	9.9999	0.0098	9.9999	0.2816	0.7948	0.0602	0.4465	0.0757	0.5618
118	17.72	-0.03	0.0327	9.9999	0.0066	9.9999	0.2018	0.8014	0.0568	0.4470	0.0709	0.5579
119	17.91	-0.04	0.0371	9.9999	0.0105	9.9999	0.2830	0.8140	0.0563	0.4512	0.0691	0.5543
120	18.04	-0.04	0.0328	9.9999	0.0088	9.9999	0.2699	0.8231	0.0588	0.4568	0.0712	0.5536
121	18.22	-0.02	0.0394	9.9999	0.0093	9.9999	0.2360	0.8291	0.0550	0.4560	0.0663	0.5524
122	18.39	-0.04	0.0359	9.9999	0.0113	9.9999	0.3148	0.8468	0.0618	0.4658	0.0730	0.5501
123	18.53	-0.02	0.0337	9.9999	0.0093	9.9999	0.2760	0.8550	0.0568	0.4667	0.0664	0.5458
124	18.71	-0.03	0.0359	9.9999	0.0100	9.9999	0.3006	0.8671	0.0616	0.4700	0.0710	0.5420
125	18.87	-0.05	0.0280	9.9999	0.0093	9.9999	0.3321	0.8706	0.0568	0.4700	0.0675	0.5399
126	19.04	-0.03	0.0315	9.9999	0.0083	9.9999	0.2635	0.8823	0.0582	0.4759	0.0659	0.5394
127	19.20	-0.03	0.0303	9.9999	0.0090	9.9999	0.2970	0.8849	0.0575	0.4742	0.0654	0.5359
128	19.37	-0.04	0.0348	9.9999	0.0112	9.9999	0.3218	0.8943	0.0565	0.4780	0.0632	0.5345
129	19.51	-0.03	0.0360	9.9999	0.0099	9.9999	0.2750	0.9048	0.0555	0.4815	0.0613	0.5322
130	19.65	-0.04	0.0303	9.9999	0.0095	9.9999	0.3135	0.9134	0.0563	0.4846	0.0616	0.5305
131	19.81	-0.04	0.0348	9.9999	0.0103	9.9999	0.2860	0.9206	0.0537	0.4843	0.0583	0.5281
132	19.98	-0.03	0.0382	9.9999	0.0119	9.9999	0.3115	0.9232	0.0535	0.4854	0.0579	0.5258
133	20.11	-0.03	0.0369	9.9999	0.0140	9.9999	0.3794	0.9373	0.0532	0.4902	0.0567	0.5230
134	20.28	-0.04	0.0315	9.9999	0.0091	9.9999	0.2869	0.9419	0.0545	0.4925	0.0578	0.5229
135	20.44	-0.04	0.0325	9.9999	0.0106	9.9999	0.3282	0.9537	0.0568	0.4969	0.0595	0.5210
136	20.59	-0.05	0.0280	9.9999	0.0102	9.9999	0.3543	0.9659	0.0545	0.5018	0.0564	0.5195
137	20.74	-0.03	0.0371	9.9999	0.0105	9.9999	0.2830	0.9677	0.0551	0.5013	0.0549	0.5180
138	20.88	-0.04	0.0314	9.9999	0.0100	9.9999	0.3183	0.9758	0.0551	0.5054	0.0565	0.5179

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	37	1.10	1.7	0.0	6 1NOF11	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	5.33	0.01	0.0258	9.9999	0.0087	9.9999	0.3372	0.2101	0.0498	0.1119	0.2370	0.5326
48	5.50	-0.02	0.0268	9.9999	0.0114	9.9999	0.4254	0.2108	0.0543	0.1112	0.2433	0.5275
49	5.73	0.00	0.0303	9.9999	0.0095	9.9999	0.3135	0.2250	0.0536	0.1227	0.2340	0.5358
50	5.93	-0.02	0.0279	9.9999	0.0111	9.9999	0.3978	0.2398	0.0555	0.1298	0.2314	0.5413
51	6.13	-0.01	0.0314	9.9999	0.0113	9.9999	0.3999	0.2489	0.0550	0.1356	0.2269	0.5448
52	6.32	0.02	0.0325	9.9999	0.0110	9.9999	0.3885	0.2006	0.0578	0.1424	0.2217	0.5464
53	6.50	-0.01	0.0279	9.9999	0.0120	9.9999	0.4301	0.2700	0.0598	0.1480	0.2214	0.5481
54	6.72	-0.00	0.0291	9.9999	0.0107	9.9999	0.3877	0.2775	0.0602	0.1526	0.2169	0.5506
55	6.92	0.01	0.0280	9.9999	0.0102	9.9999	0.3643	0.2884	0.0618	0.1590	0.2142	0.5513
56	7.10	-0.00	0.0313	9.9999	0.0127	9.9999	0.4356	0.2998	0.0618	0.1664	0.2061	0.5550
57	7.32	-0.00	0.0341	9.9999	0.0121	9.9999	0.4187	0.3095	0.0633	0.1720	0.2045	0.5557
58	7.50	-0.01	0.0291	9.9999	0.0103	9.9999	0.3540	0.3244	0.0643	0.1812	0.1982	0.5586
59	7.69	-0.01	0.0288	9.9999	0.0110	9.9999	0.4104	0.3342	0.0653	0.1863	0.1953	0.5575
60	7.89	-0.01	0.0314	9.9999	0.0105	9.9999	0.3944	0.3378	0.0658	0.1899	0.1947	0.5622
61	8.08	-0.01	0.0324	9.9999	0.0123	9.9999	0.4790	0.3526	0.0665	0.1979	0.1865	0.5613
62	8.24	-0.00	0.0279	9.9999	0.0106	9.9999	0.3799	0.3612	0.0673	0.2038	0.1863	0.5642
63	8.43	-0.00	0.0313	9.9999	0.0109	9.9999	0.3982	0.3710	0.0681	0.2103	0.1835	0.5668
64	8.59	-0.01	0.0335	9.9999	0.0142	9.9999	0.4239	0.3799	0.0681	0.2147	0.1792	0.5651
65	8.77	-0.01	0.0268	9.9999	0.0105	9.9999	0.3918	0.3930	0.0706	0.2239	0.1796	0.5697
66	8.94	0.00	0.0313	9.9999	0.0127	9.9999	0.4058	0.4007	0.0706	0.2272	0.1761	0.5720
67	9.12	-0.01	0.0312	9.9999	0.0140	9.9999	0.4487	0.4107	0.0710	0.2356	0.1728	0.5737
68	9.30	-0.01	0.0340	9.9999	0.0138	9.9999	0.3988	0.4206	0.0716	0.2411	0.1702	0.5732
69	9.45	-0.01	0.0302	9.9999	0.0121	9.9999	0.4007	0.4294	0.0721	0.2479	0.1679	0.5773
70	9.63	-0.02	0.0256	9.9999	0.0118	9.9999	0.4005	0.4404	0.0722	0.2573	0.1610	0.5738
71	9.82	0.00	0.0329	9.9999	0.0127	9.9999	0.3920	0.4520	0.0730	0.2609	0.1615	0.5772
72	10.01	-0.02	0.0290	9.9999	0.0129	9.9999	0.4448	0.4632	0.0736	0.2670	0.1589	0.5764
73	10.18	-0.02	0.0256	9.9999	0.0118	9.9999	0.4009	0.4695	0.0738	0.2712	0.1571	0.5776
74	10.36	0.01	0.0313	9.9999	0.0113	9.9999	0.3810	0.4833	0.0741	0.2784	0.1533	0.5760
75	10.55	-0.03	0.0261	9.9999	0.0119	9.9999	0.4457	0.4981	0.0752	0.2847	0.1509	0.5716
76	10.70	-0.02	0.0257	9.9999	0.0100	9.9999	0.3891	0.5069	0.0756	0.2897	0.1491	0.5715
77	10.88	-0.01	0.0268	9.9999	0.0105	9.9999	0.3918	0.5158	0.0757	0.2955	0.1467	0.5729
78	11.05	-0.03	0.0340	9.9999	0.0147	9.9999	0.4249	0.5234	0.0755	0.2974	0.1442	0.5682
79	11.24	-0.01	0.0309	9.9999	0.0131	9.9999	0.3956	0.5432	0.0770	0.3060	0.1417	0.5670
80	11.41	-0.02	0.0302	9.9999	0.0108	9.9999	0.3376	0.5536	0.0778	0.3146	0.1400	0.5662
81	11.59	-0.03	0.0280	9.9999	0.0097	9.9999	0.3464	0.5606	0.0776	0.3184	0.1387	0.5644
82	11.73	-0.00	0.0326	9.9999	0.0092	9.9999	0.2822	0.5731	0.0785	0.3230	0.1369	0.5636
83	11.90	-0.02	0.0325	9.9999	0.0097	9.9999	0.2985	0.5836	0.0790	0.3291	0.1349	0.5620
84	12.07	-0.03	0.0370	9.9999	0.0113	9.9999	0.3054	0.5932	0.0792	0.3344	0.1335	0.5637
85	12.24	-0.01	0.0393	9.9999	0.0106	9.9999	0.2697	0.6069	0.0799	0.3416	0.1316	0.5629
86	12.40	-0.03	0.0314	9.9999	0.0091	9.9999	0.2398	0.6131	0.0803	0.3463	0.1309	0.5648
87	12.56	-0.03	0.0371	9.9999	0.0096	9.9999	0.2586	0.6196	0.0800	0.3515	0.1291	0.5673
88	12.73	-0.01	0.0405	9.9999	0.0094	9.9999	0.2321	0.6332	0.0810	0.3592	0.1279	0.5673
89	12.89	-0.03	0.0393	9.9999	0.0113	9.9999	0.2926	0.6336	0.0804	0.3632	0.1259	0.5667
90	13.07	-0.02	0.0371	9.9999	0.0087	9.9999	0.2345	0.6533	0.0818	0.3729	0.1252	0.5708
91	13.25	-0.02	0.0327	9.9999	0.0088	9.9999	0.2318	0.6571	0.0821	0.3761	0.1249	0.5724
92	13.40	-0.03	0.0360	9.9999	0.0090	9.9999	0.2300	0.6664	0.0823	0.3826	0.1231	0.5724

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 37 MACH 1.10 RADIO 1.7 PHI 0.0 CONF 81 BUOFII L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSATICAN UNKNOWN

PCINT	ALPHA	BETA	CNF3	CM3	CB3	ACPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
139	21.04	-0.03	0.0392	9.9999	0.0146	9.9999	0.3724	0.5767	0.0538	0.5056	0.0519	0.5166
140	21.22	-0.03	0.0438	9.9999	0.0137	9.9999	0.3814	0.5944	0.0529	0.5117	0.0532	0.5146
141	21.37	-0.04	0.0425	9.9999	0.0120	9.9999	0.3865	1.0001	0.0532	0.5129	0.0532	0.5128
142	21.72	-0.04	0.0382	9.9999	0.0119	9.9999	0.3115	1.0042	0.0529	0.5155	0.0522	0.5133
143	21.67	-0.03	0.0282	9.9999	0.0067	9.9999	0.2376	1.0102	0.0543	0.5208	0.0534	0.5125
144	21.83	-0.04	0.0393	9.9999	0.0139	9.9999	0.3384	1.0202	0.0535	0.5211	0.0495	0.5108
145	21.99	-0.04	0.0346	9.9999	0.0103	9.9999	0.2980	1.0297	0.0522	0.5244	0.0507	0.5093
146	22.15	-0.05	0.0328	9.9999	0.0092	9.9999	0.2822	1.0450	0.0520	0.5316	0.0497	0.5087
147	22.29	-0.05	0.0326	9.9999	0.0101	9.9999	0.3098	1.0447	0.0526	0.5317	0.0505	0.5090
148	22.46	-0.03	0.0405	9.9999	0.0112	9.9999	0.2785	1.0533	0.0538	0.5357	0.0509	0.5086
149	22.61	-0.05	0.0371	9.9999	0.0109	9.9999	0.2938	1.0597	0.0545	0.5375	0.0505	0.5072
150	22.75	-0.04	0.0349	9.9999	0.0099	9.9999	0.2887	1.0694	0.0511	0.5413	0.0478	0.5062
151	22.91	-0.02	0.0352	9.9999	0.0089	9.9999	0.2225	1.0705	0.0530	0.5398	0.0492	0.5062
152	23.05	-0.05	0.0360	9.9999	0.0100	9.9999	0.2778	1.0891	0.0533	0.5496	0.0487	0.5048
153	23.19	-0.04	0.0350	9.9999	0.0085	9.9999	0.2649	1.0908	0.0521	0.5482	0.0478	0.5027
154	23.35	-0.04	0.0347	9.9999	0.0100	9.9999	0.2598	1.0997	0.0549	0.5529	0.0499	0.5028
155	23.49	-0.04	0.0383	9.9999	0.0110	9.9999	0.2872	1.1092	0.0535	0.5572	0.0480	0.5023
156	23.65	-0.03	0.0362	9.9999	0.0121	9.9999	0.2819	1.1128	0.0541	0.5594	0.0486	0.5027
157	23.78	-0.03	0.0345	9.9999	0.0089	9.9999	0.2253	1.1180	0.0536	0.5607	0.0479	0.5015
158	24.07	-0.03	0.0350	9.9999	0.0133	9.9999	0.2956	1.1804	0.0536	0.5640	0.0459	0.5007
159	27.25	0.04	0.0418	9.9999	0.0113	9.9999	0.3026	1.2671	0.0558	0.6302	0.0472	0.4974
160	31.05	0.04	0.0421	9.9999	0.0095	9.9999	0.3928	1.3547	0.0434	0.6254	0.0333	0.4824
161	38.98	-0.03	0.0371	9.9999	0.0179	9.9999	0.5800	1.4088	0.0326	0.6575	0.0231	0.4668
162	44.38	-0.03	0.0340	9.9999	0.0110	9.9999	0.2358	1.2347	0.0221	0.5886	0.0179	0.4767
163	56.74	-0.01	0.0210	9.9999	0.0065	9.9999	0.3935	1.3003	0.0067	0.6160	0.0052	0.4737

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 39 MACH 0.80 RATIO-0.7 PHI 0.0 CONF BLOUT 39 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-3.76	-0.02	-1.0053	5.9150	0.0497	-0.0502	-0.0395	0.2402	0.0828	0.1574	-3.1707
2	-3.75	-0.01	-1.0704	6.0100	-0.0746	0.0390	-0.0343	0.2399	0.0838	0.1506	-3.1011
3	-3.74	0.00	-1.0453	5.9554	0.0145	-0.0230	-0.0163	0.2400	0.0835	0.1567	-3.2274
4	-3.80	-0.02	-1.0455	5.9770	-0.0141	-0.0005	-0.0320	0.2431	0.0838	0.1599	-3.1533
5	-3.89	-0.01	-1.0813	5.9744	-0.0277	0.0051	-0.0321	0.2482	0.0825	0.1659	-3.0865
6	-4.91	0.01	-1.3047	6.4023	0.0607	-0.1721	-0.0081	0.2566	0.0767	0.1819	-3.1232
7	-3.11	-0.02	-0.8153	2.4293	0.0846	-0.0806	-0.0155	0.2767	0.0742	0.2025	-2.9669
8	-1.91	-0.01	-0.2509	0.3941	-0.0274	0.0039	-0.0229	0.2870	0.0747	0.2123	-2.3886
9	0.07	0.00	0.1023	-0.4492	0.0068	-0.1077	0.0013	0.2978	0.0749	0.2228	-2.6638
10	2.01	-0.01	0.7006	-2.2874	0.0402	-0.0093	-0.0066	0.2926	0.0728	0.2197	-2.9638
11	4.20	-0.01	1.2577	-4.1377	-0.0353	-0.0130	-0.0367	0.2768	0.0739	0.2029	-3.1885
12	6.17	0.01	2.1623	-6.7024	0.0022	-0.2171	-0.0127	0.2667	0.0778	0.1889	-3.1874
13	8.13	-0.02	2.8011	-8.8547	0.0324	-0.1510	-0.0120	0.2644	0.0923	0.1921	-3.1612
14	9.98	-0.02	3.2850	-10.4366	-0.0715	-0.0233	-0.0118	0.3094	0.1114	0.1980	-3.1765
15	11.92	0.00	3.7915	-11.7471	0.0492	-0.1248	0.0047	0.3554	0.1326	0.2026	-3.0983
16	13.77	-0.02	4.0892	-12.6318	0.0370	-0.1030	0.0287	0.3840	0.1008	0.2232	-2.9991
17	15.68	-0.02	4.3071	-13.4999	-0.0955	0.1322	0.0291	0.4595	0.2291	0.2304	-2.8698
18	17.61	0.00	4.4249	-13.9454	-0.0054	-0.0249	0.0384	0.5289	0.3005	0.2286	-2.7532
19	19.43	-0.02	4.4792	-13.9326	0.0080	-0.1013	0.0353	0.6194	0.3983	0.2161	-2.5371
20	21.36	-0.01	4.4796	-13.8981	0.0243	-0.3724	0.0095	0.8447	0.6496	0.2003	-2.4885
21	23.23	0.00	4.3959	-13.6381	0.0966	-0.5215	0.0113	0.8556	0.6789	0.1787	-2.4277
22	25.10	-0.01	4.3040	-13.3758	0.0146	-0.3402	-0.0265	0.8565	0.6951	0.1615	-2.3155
23	27.01	-0.01	4.1931	-13.1799	-0.0239	-0.2100	-0.0954	0.8471	0.6846	0.1626	-2.2318
24	28.84	0.01	4.0844	-12.9720	0.0209	-0.0883	-0.0700	0.8371	0.6141	0.1231	-2.1656
25	28.82	-0.00	4.0918	-12.9938	0.0328	-0.0731	-0.1323	0.8477	0.6162	0.1316	-2.1601
26	28.89	-0.00	4.0319	-12.8343	0.1091	-0.2084	-0.0954	0.8316	0.6187	0.1130	-2.1514
27	28.84	0.03	3.9999	-12.7569	0.0556	-0.7001	-0.0771	0.8393	0.5233	0.1161	-2.1345
28	29.15	0.03	3.8005	-12.1343	0.0378	-0.9097	-0.0063	0.8905	0.5233	0.1173	-2.1262
29	29.47	0.02	3.7250	-11.8620	0.0414	-0.9820	0.0018	0.8830	0.5324	0.1027	-2.1103
30	29.79	0.03	3.7998	-11.8053	0.1125	-1.1594	0.0330	0.8931	0.5370	0.1062	-2.0891
31	30.03	0.04	3.8314	-11.8584	0.1002	-1.1295	0.0574	0.8930	0.5430	0.1001	-2.0844
32	30.31	0.04	3.8034	-11.7994	0.1004	-1.0028	0.1044	0.8978	0.5491	0.0807	-2.0475
33	30.57	0.06	3.8349	-11.8053	0.0958	-1.0318	0.1510	0.8906	0.5485	0.0821	-2.0420
34	30.84	0.05	3.8162	-11.8758	0.0946	-1.0713	0.2402	0.8988	0.5510	0.0878	-1.9923
35	31.12	0.04	3.8014	-11.8054	0.0951	-1.0108	0.2021	0.8296	0.5510	0.0786	-1.9657
36	31.39	0.06	3.8950	-11.8549	0.1020	-1.0999	0.4334	0.8200	0.5474	0.0726	-1.9292
37	31.67	0.06	3.8742	-11.7453	0.0774	-1.0481	0.4257	0.8324	0.5503	0.0821	-1.9214
38	31.93	0.06	3.8150	-11.8307	0.1042	-1.0866	0.4809	0.8136	0.5493	0.0643	-1.8806
39	32.20	0.07	3.8389	-11.8824	0.0973	-1.0784	0.5049	0.8118	0.5549	0.0569	-1.8730
40	32.48	0.07	3.8254	-11.8432	0.2412	-1.0256	0.5286	0.8227	0.5534	0.0653	-1.8619
41	32.71	0.07	3.8140	-11.8344	0.3328	-1.0105	0.5262	0.8488	0.5628	0.0440	-1.8409
42	32.98	0.09	3.8961	-11.9777	0.3232	-1.0965	0.5205	0.8037	0.5648	0.0389	-1.8273
43	33.24	0.09	3.9315	-11.1771	0.4427	-2.3316	0.4336	0.8206	0.5743	0.0463	-1.8001
44	33.47	0.08	3.9033	-11.2931	0.4220	-1.8944	0.4741	0.8136	0.5776	0.0360	-1.8023
45	33.74	0.09	3.7665	-11.7128	0.4972	-1.9560	0.2904	0.8124	0.5854	0.0270	-1.7924
46	33.98	0.10	3.7379	-11.4755	1.4031	-2.1953	0.5598	0.8066	0.5809	0.0257	-1.7610

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 2

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 39 0.60 1.7 0.0 0.INUP.34 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.22	0.04	8.9534	-15.7772	0.8260	-1.0159	0.3037	0.5975	0.5898	0.0077	-1.7627
48	34.50	-0.01	9.2040	-16.2602	-0.0930	-0.0962	0.0242	0.6051	0.5967	0.0084	-1.7665
49	34.73	0.04	9.2089	-16.2467	0.3737	-1.2403	0.3494	0.5912	0.5926	-0.0014	-1.7497
50	34.98	-0.04	9.4432	-16.2154	-0.3581	0.2883	-0.0526	0.6039	0.6026	0.0013	-1.7469
51	35.21	-0.02	9.6027	-16.5449	-0.3613	0.2117	-0.1145	0.5995	0.6052	-0.0057	-1.7383
52	35.46	-0.02	9.8099	-16.8744	-0.4190	0.7162	-0.1240	0.5960	0.6035	-0.0075	-1.7215
53	35.68	-0.06	9.8781	-16.9149	-0.7330	1.2073	-0.1918	0.5940	0.6055	-0.0109	-1.7068
54	35.96	-0.02	9.7634	-16.7139	-0.3481	0.4852	-0.0976	0.5943	0.6080	-0.0137	-1.7085
55	36.18	-0.00	9.9526	-16.7211	-0.1496	-0.1203	0.0209	0.5969	0.6020	-0.0041	-1.6835
56	36.04	-0.05	9.8774	-16.8399	-0.8816	0.9750	-0.1914	0.5966	0.6054	-0.0148	-1.7298
57	33.94	0.04	8.5053	-15.3796	1.2530	-1.7441	0.5403	0.5949	0.5856	0.0093	-1.7915
58	31.70	0.00	7.0815	-13.0037	0.4951	-1.4882	0.2018	0.6231	0.5728	0.0503	-1.9518

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 3Y 0.00 MACH NRIO-8 0.7 PHI 0.0 CONF BIMOF3Y L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION

POINT	ALPHA	BETA	CNF1	CM1	LB1	XCPF1	YCPF1	CNF2	CM2	LB2	XCPF2	YCPF2
1	-5.73	-0.02	0.0324	0.0068	0.0079	0.2083	0.2430	-0.3651	-0.0595	-0.1599	0.1629	0.4379
2	-5.75	-0.01	0.0324	0.0072	0.0080	0.2150	0.2580	-0.3776	-0.0632	-0.1683	0.1594	0.4404
3	-5.74	0.00	0.0273	0.0068	0.0078	0.2057	0.2654	-0.3737	-0.0631	-0.1640	0.1608	0.4388
4	-5.80	-0.02	0.0330	0.0069	0.0072	0.2130	0.2520	-0.3670	-0.0601	-0.1608	0.1637	0.4381
5	-5.84	-0.01	0.0324	0.0073	0.0078	0.2288	0.2445	-0.3505	-0.0536	-0.1542	0.1673	0.4398
6	-4.91	0.01	0.0418	0.0067	0.0122	0.2100	0.2943	-0.2038	-0.0526	-0.1153	0.1920	0.4366
7	-5.11	-0.02	0.0304	0.0064	0.0065	0.2314	0.2538	-0.1970	-0.0535	-0.0837	0.2277	0.4332
8	-4.91	-0.01	0.0314	0.0074	0.0067	0.2391	0.2147	-0.0248	-0.0145	-0.0138	0.5556	0.5671
9	0.37	0.00	0.0301	0.0080	0.0077	0.2342	0.2128	0.0590	0.0126	0.0167	0.2134	0.3167
10	2.41	-0.01	0.0418	0.0093	0.0081	0.2223	0.1940	0.1800	0.0420	0.0699	0.1722	0.3759
11	4.26	-0.01	0.0399	0.0075	0.0050	0.1901	0.1903	0.3106	0.0514	0.1268	0.1614	0.3984
12	6.17	0.01	0.0453	0.0078	0.0030	0.1712	0.1754	0.4077	0.0653	0.1666	0.1354	0.4033
13	8.10	-0.02	0.0498	0.0069	0.0096	0.1584	0.1745	0.5084	0.0848	0.2342	0.1097	0.3981
14	9.98	-0.02	0.0455	0.0064	0.0101	0.1503	0.2033	0.6126	0.0809	0.2827	0.0906	0.3905
15	11.92	0.00	0.0498	0.0069	0.0110	0.1578	0.2438	0.7304	0.0526	0.2825	0.0720	0.3667
16	13.77	-0.02	0.0493	0.0059	0.0090	0.1284	0.2017	0.7255	0.0434	0.2759	0.0598	0.3803
17	15.68	-0.02	0.0376	0.0050	0.0057	0.1348	0.1547	0.6751	0.0345	0.2553	0.0482	0.3782
18	17.61	0.00	0.0431	0.0059	0.0081	0.1477	0.2010	0.8004	0.0311	0.2501	0.0453	0.3731
19	19.45	-0.02	0.0507	0.0063	0.0062	0.1080	0.3443	0.8013	0.0322	0.2474	0.0387	0.3741
20	21.31	-0.01	0.0466	0.0062	0.0023	0.0285	0.4210	0.7116	0.0313	0.2090	0.0440	0.3780
21	23.23	0.00	0.0737	0.0085	0.0041	0.0071	0.4650	0.7004	0.0292	0.2911	0.0360	0.3788
22	25.10	-0.01	0.0506	-0.0015	0.0037	-0.1818	0.4665	0.7255	0.0276	0.3015	0.0346	0.3791
23	27.01	-0.01	0.0067	-0.0073	0.0040	-1.4039	0.8047	0.6549	0.0243	0.3273	0.0285	0.3829
24	28.41	0.01	-0.0005	0.0014	-0.0098	-2.0000	18.7572	0.8704	0.0238	0.3332	0.0274	0.3828
25	28.22	-0.00	-0.0241	-0.0020	-0.0171	0.3819	0.7096	0.5720	0.0241	0.3343	0.0277	0.3834
26	28.32	-0.00	0.0123	0.0071	-0.0100	0.2763	-0.0117	0.6790	0.0230	0.3356	0.0271	0.3818
27	28.84	0.03	0.0333	0.0117	-0.0094	0.3477	-0.1289	0.8965	0.0236	0.3418	0.0266	0.3821
28	29.15	0.03	0.0345	0.0220	0.0050	0.3500	0.0772	0.9012	0.0239	0.3444	0.0265	0.3821
29	29.47	0.02	0.0420	0.0200	0.0047	0.2873	0.1590	0.9106	0.0225	0.3519	0.0245	0.3836
30	29.78	0.03	0.1004	0.0227	0.0041	0.2782	0.2087	0.9195	0.0223	0.3515	0.0242	0.3822
31	30.03	0.04	0.1032	0.0314	0.0229	0.3041	0.2221	0.9325	0.0230	0.3576	0.0223	0.3834
32	30.31	0.04	0.1101	0.0342	0.0325	0.2690	0.2749	0.9355	0.0234	0.3580	0.0218	0.3827
33	30.57	0.04	0.1019	0.0401	0.0370	0.2078	0.3094	0.9369	0.0199	0.3590	0.0212	0.3832
34	30.84	0.05	0.1030	0.0455	0.0401	0.2281	0.3040	0.9457	0.0197	0.3626	0.0208	0.3834
35	31.12	0.04	0.1105	0.0473	0.0404	0.2435	0.4063	0.9514	0.0189	0.3658	0.0199	0.3846
36	31.39	0.08	0.2704	0.0507	0.1743	0.2053	0.4002	0.9337	0.0187	0.3560	0.0210	0.3834
37	31.67	0.06	0.2519	0.0531	0.1106	0.2117	0.4408	0.9501	0.0185	0.3640	0.0195	0.3831
38	31.93	0.06	0.3044	0.0581	0.1410	0.1964	0.4696	0.9440	0.0184	0.3630	0.0195	0.3845
39	32.20	0.07	0.3191	0.0565	0.1459	0.1893	0.4063	0.9541	0.0181	0.3679	0.0190	0.3856
40	32.46	0.07	0.3240	0.0616	0.1390	0.2010	0.4594	0.9584	0.0172	0.3677	0.0179	0.3837
41	32.71	0.07	0.3279	0.0621	0.1533	0.1882	0.4665	0.9699	0.0168	0.3733	0.0174	0.3849
42	32.98	0.07	0.3120	0.0601	0.1434	0.1920	0.4674	0.9720	0.0164	0.3749	0.0169	0.3855
43	33.24	0.09	0.3241	0.0614	0.1576	0.1839	0.4696	1.0018	0.0165	0.3675	0.0164	0.3868
44	33.47	0.08	0.3161	0.0600	0.1496	0.1922	0.4640	1.0016	0.0158	0.3681	0.0158	0.3875
45	33.74	0.05	0.2510	0.0427	0.1193	0.1698	0.4741	1.0528	0.0111	0.4102	0.0106	0.3896
46	33.98	0.10	0.3291	0.0618	0.1601	0.1649	0.4791	1.0084	0.0151	0.3908	0.0130	0.3875

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 2

MARTIN MISSILE TABLS EFFECTS DATA

TEST 7 | PART BY 0.00 1.0 | MACH NAIL-0 | PHI 0.0 | CONF BIRDS 5 | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION OFF/ON

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	34.22	0.04	0.2438	0.0343	0.1127	0.1012	0.4021	1.0E44	0.0095	0.4146	0.0089	0.3898
48	34.54	-0.04	0.0330	0.0051	0.1157	0.1040	0.3564	1.0988	0.0042	0.4242	0.0075	0.3914
49	34.73	0.04	0.2482	0.0355	0.1058	0.1040	0.3577	1.0831	0.0084	0.4231	0.0078	0.3907
50	34.96	-0.04	-0.0021	-0.0145	0.0142	0.1018	-12.4204	1.1234	0.0083	0.4413	0.0056	0.3921
51	35.21	-0.02	-0.0430	-0.0173	-0.0070	0.3634	0.1064	1.1103	0.0001	0.4377	0.0055	0.3914
52	35.40	-0.02	-0.0610	-0.0215	-0.0261	0.2630	0.3155	1.1104	0.0004	0.4364	0.0058	0.3910
53	35.66	-0.00	-0.1103	-0.0272	-0.0612	0.2285	0.3401	1.1203	0.0057	0.4377	0.0051	0.3907
54	35.92	-0.02	-0.0912	-0.0143	0.0003	0.4000	-0.0100	1.1442	0.0048	0.4478	0.0046	0.3931
55	36.16	-0.00	0.0471	-0.0333	0.0117	-0.0817	0.6740	1.1482	0.0047	0.4517	0.0041	0.3934
56	36.34	-0.05	-0.0870	-0.0240	-0.0287	0.2032	0.3302	1.1416	0.0048	0.4474	0.0042	0.3924
57	33.94	0.08	0.3288	0.0838	0.1523	0.1947	0.4080	1.0987	0.0137	0.3859	0.0136	0.3833
58	31.70	0.08	0.1407	0.0490	0.0790	0.2490	0.3978	0.9782	0.0174	0.3736	0.0178	0.3827

PAGE 3 OF 3
SHEET 1 OF 2

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 39 MACH 0.80 ALT 0.0 CONF 39 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	ALPF3	YCPF3	CNF4	CM4	CA4	ALPF4	YCPF4
1	-5.76	-0.02	0.0177	0.9999	0.0025	0.9999	0.1409	-0.4035	-0.0598	-0.1787	0.1493	0.4463
2	-5.75	-0.01	0.0220	0.9999	0.0033	0.9999	0.1506	-0.4053	-0.0602	-0.1807	0.1485	0.4459
3	-5.74	0.00	0.0178	0.9999	0.0016	0.9999	0.1403	-0.4021	-0.0598	-0.1800	0.1485	0.4470
4	-5.80	-0.02	0.0134	0.9999	0.0011	0.9999	0.0319	-0.4004	-0.0603	-0.1783	0.1504	0.4448
5	-5.89	-0.01	0.0165	0.9999	0.0027	0.9999	0.1425	-0.3998	-0.0591	-0.1693	0.1551	0.4446
6	-5.91	0.01	0.0220	0.9999	0.0042	0.9999	0.1429	-0.3994	-0.0589	-0.1768	0.1724	0.4406
7	-3.11	-0.02	0.0177	0.9999	0.0017	0.9999	0.0939	-0.1803	-0.0344	-0.0775	0.1902	0.4263
8	-1.91	-0.01	0.0176	0.9999	0.0024	0.9999	0.1320	-0.0524	-0.0141	-0.0205	0.2658	0.3920
9	0.57	0.00	0.0227	0.9999	0.0033	0.9999	0.1405	0.0491	0.0111	0.0127	0.3821	0.4347
10	2.41	-0.01	0.0163	0.9999	0.0020	0.9999	0.1509	0.1405	0.0309	0.0030	0.2108	0.4298
11	4.20	-0.01	0.0190	0.9999	0.0030	0.9999	0.0707	0.2073	0.0496	0.0171	0.1803	0.4381
12	8.17	0.01	0.0250	0.9999	0.0025	0.9999	0.2370	0.4103	0.0829	0.1076	0.1511	0.4505
13	8.10	-0.02	0.0262	0.9999	0.0065	0.9999	0.2494	0.5339	0.0855	0.2363	0.1227	0.4426
14	9.98	-0.02	0.0278	0.9999	0.0078	0.9999	0.2536	0.6224	0.0831	0.2696	0.0976	0.4335
15	11.92	0.00	0.0330	0.9999	0.0066	0.9999	0.2504	0.6758	0.0518	0.2923	0.0766	0.4326
16	13.77	-0.02	0.0321	0.9999	0.0079	0.9999	0.2304	0.6953	0.0405	0.2965	0.0668	0.4264
17	15.66	-0.02	0.0314	0.9999	0.0096	0.9999	0.2577	0.6893	0.0360	0.2815	0.0542	0.4236
18	17.61	0.00	0.0318	0.9999	0.0131	0.9999	0.2524	0.6877	0.0358	0.2828	0.0506	0.4235
19	19.43	-0.02	0.0431	0.9999	0.0131	0.9999	0.2332	0.6250	0.0329	0.2678	0.0526	0.4282
20	21.34	-0.01	0.0438	0.9999	0.0131	0.9999	0.2692	0.6257	0.0344	0.2713	0.0550	0.4335
21	23.23	0.00	0.0573	0.9999	0.0157	0.9999	0.2739	0.6810	0.0338	0.2940	0.0496	0.4317
22	25.19	-0.01	0.0491	0.9999	0.0112	0.9999	0.2596	0.7311	0.0313	0.3156	0.0428	0.4316
23	27.01	-0.01	0.0570	0.9999	0.0075	0.9999	0.2130	0.7551	0.0314	0.3263	0.0416	0.4321
24	28.21	0.01	0.0402	0.9999	0.0034	0.9999	0.2088	0.7859	0.0234	0.3401	0.0374	0.4327
25	28.22	-0.03	0.0405	0.9999	0.0100	0.9999	0.2321	0.7970	0.0294	0.3441	0.0369	0.4318
26	28.29	-0.00	0.0349	0.9999	0.0150	0.9999	0.2766	0.8027	0.0263	0.3488	0.0352	0.4320
27	28.09	0.03	0.0302	0.9999	0.0102	0.9999	0.2688	0.8015	0.0283	0.3463	0.0353	0.4320
28	29.23	0.03	0.0358	0.9999	0.0104	0.9999	0.2676	0.8248	0.0270	0.3561	0.0328	0.4318
29	29.47	0.02	0.0283	0.9999	0.0178	0.9999	0.3032	0.8326	0.0268	0.3598	0.0322	0.4321
30	29.78	0.05	0.0341	0.9999	0.0101	0.9999	0.2763	0.8350	0.0263	0.3611	0.0315	0.4325
31	30.03	0.04	0.0277	0.9999	0.0176	0.9999	0.2943	0.8662	0.0255	0.3745	0.0294	0.4323
32	30.31	0.04	0.0265	0.9999	0.0160	0.9999	0.2830	0.8741	0.0249	0.3782	0.0280	0.4327
33	30.57	0.06	0.0301	0.9999	0.0105	0.9999	0.2745	0.8744	0.0245	0.3783	0.0281	0.4327
34	30.84	0.05	0.0243	0.9999	0.0173	0.9999	0.2824	0.8765	0.0246	0.3786	0.0281	0.4320
35	31.12	0.04	0.0295	0.9999	0.0204	0.9999	0.3120	0.8886	0.0240	0.3837	0.0270	0.4318
36	31.39	0.06	0.0261	0.9999	0.0182	0.9999	0.2902	0.8997	0.0242	0.3884	0.0269	0.4317
37	31.67	0.06	0.0260	0.9999	0.0168	0.9999	0.2866	0.9213	0.0234	0.3987	0.0254	0.4327
38	31.93	0.06	0.0263	0.9999	0.0171	0.9999	0.3005	0.9104	0.0233	0.3929	0.0256	0.4315
39	32.20	0.09	0.0273	0.9999	0.0196	0.9999	0.2859	0.9172	0.0230	0.3959	0.0251	0.4316
40	32.48	0.07	0.0248	0.9999	0.0190	0.9999	0.3047	0.9342	0.0224	0.4036	0.0239	0.4321
41	32.71	0.07	0.0269	0.9999	0.0214	0.9999	0.3040	0.9408	0.0215	0.4058	0.0229	0.4314
42	32.98	0.09	0.0266	0.9999	0.0197	0.9999	0.2957	0.9457	0.0213	0.4077	0.0228	0.4320
43	33.24	0.09	0.0295	0.9999	0.0239	0.9999	0.3201	0.9292	0.0216	0.4006	0.0231	0.4309
44	33.49	0.08	0.0270	0.9999	0.0214	0.9999	0.3191	0.9317	0.0203	0.4038	0.0213	0.4306
45	33.74	0.05	0.0250	0.9999	0.0227	0.9999	0.3113	0.9540	0.0207	0.4115	0.0217	0.4314
46	33.98	0.10	0.0256	0.9999	0.0174	0.9999	0.2965	0.9531	0.0207	0.4107	0.0217	0.4309

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 8
SHEET 2 OF 2

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 3Y 0.80U 1.0 MACH NAIJ-6 PHI 0.0 CONF STANDARD L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	34.42	0.04	0.3423	9.9999	0.0107	9.9999	0.2525	0.9548	0.0239	0.4110	0.0219	0.4305
48	34.54	-0.01	0.0239	9.9999	0.0031	9.9999	0.1939	1.0000	0.0186	0.4320	0.0186	0.4320
49	34.73	0.04	0.0163	9.9999	-0.0002	9.9999	-0.0112	0.9691	0.0170	0.4254	0.0192	0.4301
50	34.90	-0.04	0.0288	9.9999	0.0045	9.9999	0.1593	1.0122	0.0171	0.4303	0.0189	0.4311
51	35.21	-0.02	0.0289	9.9999	0.0035	9.9999	0.1220	1.0105	0.0182	0.4361	0.0180	0.4316
52	35.40	-0.02	0.0211	9.9999	-0.0005	9.9999	-0.0442	1.0232	0.0176	0.4416	0.0172	0.4316
53	35.68	-0.00	0.0180	9.9999	-0.0008	9.9999	-0.0518	1.0257	0.0133	0.4425	0.0178	0.4315
54	35.92	-0.02	0.0293	9.9999	0.0036	9.9999	0.1489	1.0364	0.0171	0.4478	0.0165	0.4319
55	36.18	-0.00	0.0214	9.9999	0.0037	9.9999	0.1189	1.0351	0.0169	0.4464	0.0164	0.4313
56	36.44	-0.03	0.0190	9.9999	0.0003	9.9999	0.0104	1.0274	0.0179	0.4434	0.0174	0.4307
57	33.94	0.08	0.0459	9.9999	0.0101	9.9999	0.2195	0.9627	0.0203	0.4127	0.0211	0.4287
58	31.70	0.00	0.0381	9.9999	0.0143	9.9999	0.2903	0.9113	0.0239	0.3925	0.0262	0.4307

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 90 0.00 1.7 MACH NO. 0.6 PHI 90.0 CONF 34 BLOCK 0.0 L DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.11	0.00	-1.5790	0.0350	0.1990	-0.0000	-0.0255	0.2507	0.0707	0.1740	-3.0608
2	-5.12	0.00	-1.5818	0.0354	0.2019	-0.0205	-0.0172	0.2537	0.0775	0.1762	-3.0645
3	-5.12	0.01	-1.5530	0.0374	0.2029	-0.0000	-0.0330	0.2497	0.0769	0.1728	-3.0965
4	-5.11	0.01	-1.5855	0.0401	0.2000	-0.0130	-0.0330	0.2499	0.0791	0.1703	-3.0330
5	-5.23	0.00	-1.5940	0.0395	0.1910	-0.0393	-0.0173	0.2717	0.0765	0.1932	-3.0305
6	-3.18	0.01	-0.9081	0.0119	0.0934	-0.0531	-0.0268	0.2330	0.0764	0.2066	-3.0481
7	-1.96	0.00	-0.4793	0.0243	0.1034	-0.0118	-0.0203	0.2953	0.0761	0.2191	-2.7732
8	-0.00	0.00	0.0038	-0.0134	0.0230	-0.0249	-0.0051	0.3111	0.0781	0.2349	-4.1568
9	1.79	0.00	0.3151	-0.0512	0.1152	-0.0441	-0.0302	0.3024	0.0740	0.2283	-2.6234
10	3.70	0.00	1.0710	-0.1501	0.1429	-0.0230	-0.0412	0.2831	0.0760	0.2065	-2.9398
11	5.61	0.00	1.7287	-0.2345	0.3371	-0.1339	-0.0291	0.2714	0.0636	0.1908	-3.0280
12	7.50	0.01	2.4510	-0.3046	0.1054	-0.0371	-0.0260	0.2514	0.0821	0.1693	-3.0448
13	9.47	0.01	3.1854	-0.3784	0.1551	-0.0063	-0.0354	0.2447	0.0838	0.1559	-3.0663
14	11.43	0.00	3.8907	-0.4492	0.2417	-0.0039	-0.0351	0.2583	0.1015	0.1569	-3.0396
15	13.37	0.00	4.6045	-0.5351	0.1918	-0.0853	-0.0306	0.2769	0.1140	0.1630	-3.0317
16	15.30	0.01	5.3240	-0.6073	0.1869	-0.0930	-0.0334	0.2947	0.1338	0.1569	-2.9743
17	17.29	0.00	5.1812	-0.8301	0.1509	-0.5201	0.0007	0.3316	0.1643	0.1673	-2.5021
18	19.23	0.01	5.5001	-0.9941	0.2060	-0.5078	0.0311	0.3526	0.1917	0.1635	-2.8073
19	21.17	0.01	5.8022	-1.1840	0.2081	-0.6507	0.0307	0.3675	0.2149	0.1526	-2.7515
20	23.10	0.10	6.2015	-1.3965	0.4007	-0.8490	0.0145	0.3784	0.2517	0.1267	-2.6998
21	25.00	0.09	6.6022	-1.7241	0.3427	-0.6010	0.0300	0.3800	0.2665	0.0934	-2.6056
22	26.90	0.10	7.0594	-1.8594	0.5347	-0.5355	-0.0346	0.3758	0.3060	0.0658	-2.5219
23	28.81	0.14	7.4534	-1.9594	0.8673	-0.6020	-0.0342	0.3692	0.3335	0.0307	-2.4337
24	28.71	0.13	8.0220	-1.9809	0.9161	-0.6019	-0.0179	0.3632	0.3427	0.0205	-2.4143
25	29.22	0.12	8.1003	-1.9880	0.8369	-0.5259	-0.0503	0.3710	0.3449	0.0261	-2.3935
26	29.47	0.14	8.1735	-1.9904	0.9103	-0.4634	-0.0658	0.3770	0.3545	0.0225	-2.3730
27	29.80	0.14	8.3023	-1.9359	1.0223	-0.5414	-0.0736	0.3852	0.3559	0.0293	-2.3531
28	30.07	0.13	8.4004	-1.9078	0.9770	-0.5054	-0.1146	0.3776	0.3637	0.0139	-2.3316
29	30.33	0.13	8.4227	-1.9407	0.9533	-0.1578	-0.1144	0.3746	0.3695	0.0051	-2.3150
30	30.60	0.15	8.4524	-1.9434	1.0305	-0.4274	-0.1458	0.3655	0.3774	0.0061	-2.2862
31	30.85	0.13	8.5020	-1.9277	1.0045	0.0744	-0.1862	0.3698	0.3924	-0.0026	-2.2457
32	31.13	0.13	8.5794	-1.9213?	1.0134	0.1492	-0.2100	0.3982	0.3992	-0.0010	-2.2398
33	31.41	0.10	8.7555	-1.9.2469	1.1384	0.2042	-0.2460	0.4136	0.4146	-0.0042	-2.1988
34	31.67	0.13	8.9177	-1.9.3423	1.0300	0.4307	-0.1775	0.4019	0.4148	-0.0129	-2.1667
35	31.94	0.10	9.0039	-1.9.4024	1.0790	0.3577	-0.1778	0.4069	0.4180	-0.0111	-2.1617
36	32.21	0.17	9.1345	-1.9.4404	1.2123	0.4746	-0.1504	0.4061	0.4204	-0.0103	-2.1282
37	32.46	0.15	9.2731	-1.9.0317	1.1982	0.0388	-0.1443	0.4077	0.4307	-0.0230	-2.1125
38	32.72	0.17	9.4096	-1.9.9160	1.1744	0.9138	-0.1603	0.4073	0.4300	-0.0207	-2.0760
39	32.97	0.18	9.5653	-1.9.2219	1.3497	0.8345	-0.1349	0.4146	0.4449	-0.0305	-2.0647
40	33.24	0.16	9.6933	-1.9.4459	1.2067	0.6067	-0.1511	0.4143	0.4449	-0.0306	-2.0356
41	33.48	0.18	9.7810	-1.9.5740	1.2000	0.7769	-0.1589	0.4100	0.4496	-0.0396	-2.0177
42	33.74	0.19	9.8521	-1.9.3008	1.3031	0.8640	-0.1335	0.4157	0.4507	-0.0350	-1.9901
43	33.21	0.16	9.9507	-1.9.6908	1.2318	0.7217	-0.1193	0.4019	0.4396	-0.0377	-2.0761
44	30.99	0.14	8.5790	-1.9.7179	0.8512	0.3034	-0.1720	0.3749	0.3901	-0.0212	-2.2984
45	28.45	0.12	7.8083	-1.9.3250	0.6902	-0.0714	0.0221	0.3736	0.3472	0.0264	-2.4750

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 90 MACH 0.80 RATIO-0 1.7 PHI -90.0 CONF BINDF34 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CNF1	CM1	CO1	XLPF1	YCPF1	CNF2	CM2	CO2	XLPF2	YCPF2
1	-5.11	0.00	0.3025	0.0460	0.1256	0.1547	0.4100	-0.1546	-0.0395	-0.0710	0.2555	0.4589
2	-5.12	0.00	0.3075	0.0471	0.1273	0.1532	0.4140	-0.1528	-0.0395	-0.0704	0.2585	0.4609
3	-5.12	0.00	0.3041	0.0465	0.1251	0.1542	0.4114	-0.1495	-0.0387	-0.0692	0.2587	0.4628
4	-5.11	0.00	0.3016	0.0458	0.1248	0.1551	0.4137	-0.1483	-0.0385	-0.0677	0.2595	0.4569
5	-5.23	0.00	0.2878	0.0444	0.1188	0.1561	0.4127	-0.1380	-0.0363	-0.0628	0.2668	0.4615
6	-3.78	0.01	0.2084	0.0335	0.0851	0.1607	0.4003	-0.0781	-0.0264	-0.0376	0.3382	0.4809
7	-1.98	0.00	0.1098	0.0194	0.0468	0.1742	0.4062	0.0003	-0.0122	-0.0061	-39.0000	-19.6219
8	-0.00	0.00	0.0203	0.0048	0.0099	0.1902	0.3796	0.0522	0.0046	0.0144	0.1653	0.2842
9	1.79	0.00	-0.0219	-0.0050	-0.0098	0.0025	0.4445	0.1406	0.0216	0.0509	0.1553	0.3623
10	3.76	0.00	-0.1033	-0.0241	-0.0444	0.2018	0.4207	0.2349	0.0350	0.0942	0.1492	0.3926
11	5.81	0.00	-0.1957	-0.0453	-0.0803	0.2221	0.4103	0.3409	0.0497	0.1373	0.1458	0.4029
12	7.80	0.01	-0.2932	-0.0562	-0.1221	0.1848	0.4104	0.4386	0.0592	0.1768	0.1355	0.4049
13	9.87	0.01	-0.3803	-0.0595	-0.1632	0.1540	0.4225	0.5474	0.0635	0.2240	0.1160	0.4091
14	11.93	0.00	-0.4651	-0.0627	-0.1973	0.1334	0.4153	0.6430	0.0632	0.2592	0.0983	0.4032
15	13.87	0.00	-0.5235	-0.0593	-0.2115	0.1132	0.4340	0.7146	0.0602	0.2852	0.0842	0.3991
16	15.80	0.01	-0.5818	-0.0578	-0.2201	0.0990	0.3921	0.7749	0.0538	0.3068	0.0694	0.3959
17	17.79	0.00	-0.6324	-0.0568	-0.2271	0.0873	0.3706	0.7462	0.0367	0.2967	0.0479	0.3898
18	19.23	0.01	-0.6291	-0.0539	-0.2334	0.0674	0.3741	0.7919	0.0522	0.3090	0.0407	0.3903
19	21.17	0.01	-0.6419	-0.0452	-0.2388	0.0705	0.3720	0.8484	0.0297	0.3316	0.0350	0.3910
20	23.10	0.10	-0.6056	-0.0403	-0.2492	0.0609	0.3743	0.9038	0.0285	0.3547	0.0315	0.3925
21	25.00	0.09	-0.6004	-0.0413	-0.2604	0.0610	0.3827	0.9383	0.0296	0.3666	0.0318	0.3907
22	26.90	0.10	-0.7305	-0.0434	-0.2806	0.0593	0.3940	0.9700	0.0287	0.3790	0.0296	0.3907
23	28.81	0.14	-0.7593	-0.0460	-0.3115	0.0527	0.4103	1.0072	0.0271	0.3964	0.0269	0.3935
24	29.91	0.13	-0.7554	-0.0365	-0.3086	0.0563	0.4086	1.0073	0.0266	0.3960	0.0264	0.3931
25	29.22	0.12	-0.7550	-0.0400	-0.3126	0.0550	0.4123	1.0129	0.0261	0.3986	0.0258	0.3935
26	29.47	0.14	-0.7515	-0.0404	-0.3117	0.0544	0.4148	1.0307	0.0254	0.4057	0.0246	0.3936
27	29.80	0.14	-0.7670	-0.0391	-0.3208	0.0510	0.4182	1.0408	0.0247	0.4135	0.0236	0.3944
28	30.07	0.13	-0.7764	-0.0393	-0.3261	0.0514	0.4235	1.0444	0.0243	0.4117	0.0233	0.3942
29	30.33	0.13	-0.7823	-0.0408	-0.3295	0.0534	0.4253	1.0509	0.0239	0.4143	0.0228	0.3943
30	30.60	0.15	-0.7560	-0.0430	-0.3277	0.0569	0.4335	1.0055	0.0234	0.4218	0.0220	0.3959
31	30.85	0.13	-0.7535	-0.0441	-0.3291	0.0591	0.4350	1.0821	0.0223	0.4288	0.0206	0.3963
32	31.13	0.13	-0.7609	-0.0465	-0.3409	0.0634	0.4402	1.0903	0.0218	0.4337	0.0199	0.3956
33	31.41	0.10	-0.7134	-0.0477	-0.3437	0.0669	0.4397	1.1159	0.0230	0.4429	0.0184	0.3966
34	31.67	0.13	-0.7009	-0.0481	-0.3502	0.0681	0.4366	1.1147	0.0205	0.4403	0.0184	0.3950
35	31.94	0.10	-0.6975	-0.0470	-0.3508	0.0683	0.4425	1.1215	0.0194	0.4400	0.0172	0.3963
36	32.21	0.17	-0.6893	-0.0474	-0.3505	0.0666	0.4447	1.1169	0.0190	0.4512	0.0167	0.3961
37	32.48	0.15	-0.6844	-0.0473	-0.3538	0.0693	0.4454	1.1417	0.0184	0.4526	0.0161	0.3964
38	32.74	0.17	-0.6888	-0.0478	-0.3594	0.0714	0.4490	1.1540	0.0178	0.4574	0.0154	0.3961
39	32.99	0.16	-0.6694	-0.0477	-0.3617	0.0713	0.4507	1.1633	0.0175	0.4602	0.0150	0.3956
40	33.24	0.18	-0.6543	-0.0475	-0.3663	0.0726	0.4526	1.1734	0.0167	0.4645	0.0143	0.3945
41	33.49	0.18	-0.6533	-0.0479	-0.3708	0.0729	0.4542	1.1803	0.0165	0.4660	0.0140	0.3947
42	33.74	0.17	-0.6451	-0.0480	-0.3734	0.0745	0.4548	1.1855	0.0161	0.4665	0.0136	0.3952
43	33.71	0.18	-0.6679	-0.0479	-0.3723	0.0711	0.4526	1.1835	0.0176	0.4577	0.0151	0.3934
44	30.99	0.14	-0.7643	-0.0421	-0.3350	0.0547	0.4354	1.0828	0.0230	0.4226	0.0212	0.3903
45	28.45	0.12	-0.7430	-0.0410	-0.2968	0.0561	0.3984	1.0210	0.0273	0.3940	0.0268	0.3859

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 4J MACH 0.60 RN/D-6 1.7 PHI 45.0 CONF 31NUM34 L 6.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	ALPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.11	0.00	0.2771	9.9999	0.0994	9.9999	0.3342	-0.2164	-0.0388	-0.0963	0.1775	0.4607
2	-5.14	0.00	0.2778	9.9999	0.0991	9.9999	0.3327	-0.2210	-0.0391	-0.0980	0.1769	0.4635
3	-5.12	0.01	0.2765	9.9999	0.0988	9.9999	0.3323	-0.2149	-0.0380	-0.0946	0.1766	0.4602
4	-5.11	0.00	0.2784	9.9999	0.0988	9.9999	0.3329	-0.2190	-0.0388	-0.0973	0.1771	0.4644
5	-5.23	0.00	0.2832	9.9999	0.0992	9.9999	0.3269	-0.2018	-0.0381	-0.0888	0.1788	0.4600
6	-3.70	0.01	0.2642	9.9999	0.0650	9.9999	0.3165	-0.1311	-0.0258	-0.0548	0.1967	0.4178
7	-1.98	0.00	0.1172	9.9999	0.0333	9.9999	0.2842	-0.0392	-0.0127	-0.0147	0.3236	0.3758
8	-0.98	0.00	0.0333	9.9999	0.0021	9.9999	0.1928	0.0178	0.0032	0.0111	0.1813	0.6243
9	1.79	0.00	-0.0419	9.9999	-0.0171	9.9999	0.4085	0.0867	0.0204	0.0379	0.2350	0.4367
10	3.78	0.00	-0.1491	9.9999	-0.0364	9.9999	0.3785	0.1674	0.0341	0.0730	0.2037	0.4363
11	5.81	0.00	-0.2602	9.9999	-0.0573	9.9999	0.3739	0.2574	0.0476	0.1141	0.1850	0.4433
12	7.80	0.01	-0.3787	9.9999	-0.1416	9.9999	0.3723	0.3446	0.0560	0.1553	0.1625	0.4503
13	9.47	0.01	-0.4934	9.9999	-0.1048	9.9999	0.3816	0.4300	0.0619	0.1950	0.1439	0.4535
14	11.43	0.00	-0.5962	9.9999	-0.2490	9.9999	0.3784	0.4884	0.0603	0.2191	0.1235	0.4488
15	13.37	0.00	-0.6805	9.9999	-0.2548	9.9999	0.3744	0.5410	0.0570	0.2413	0.1053	0.4460
16	15.30	0.01	-0.7672	9.9999	-0.2808	9.9999	0.3739	0.5899	0.0553	0.2597	0.0977	0.4460
17	17.29	0.00	-0.8118	9.9999	-0.3041	9.9999	0.3745	0.6231	0.0526	0.2577	0.0902	0.4419
18	19.23	0.01	-0.8006	9.9999	-0.3010	9.9999	0.3738	0.6011	0.0513	0.2656	0.0853	0.4385
19	21.17	0.01	-0.9428	9.9999	-0.3163	9.9999	0.3776	0.6233	0.0502	0.2816	0.0806	0.4521
20	23.10	0.10	-1.0014	9.9999	-0.3300	9.9999	0.3819	0.6348	0.0434	0.2692	0.0770	0.4558
21	25.00	0.09	-1.0414	9.9999	-0.3620	9.9999	0.3647	0.6445	0.0452	0.2900	0.0702	0.4500
22	26.90	0.10	-1.0790	9.9999	-0.3720	9.9999	0.3637	0.6681	0.0314	0.2995	0.0470	0.4482
23	28.81	0.14	-1.0924	9.9999	-0.3965	9.9999	0.3636	0.6914	0.0262	0.3088	0.0379	0.4467
24	28.91	0.13	-1.0916	9.9999	-0.3940	9.9999	0.3625	0.6916	0.0266	0.3093	0.0385	0.4475
25	27.22	0.12	-1.0900	9.9999	-0.3976	9.9999	0.3623	0.6817	0.0250	0.3050	0.0366	0.4474
26	29.47	0.14	-1.0939	9.9999	-0.4007	9.9999	0.3634	0.6860	0.0257	0.2978	0.0380	0.4472
27	29.80	0.14	-1.0923	9.9999	-0.4028	9.9999	0.3626	0.6737	0.0203	0.3035	0.0301	0.4505
28	30.07	0.13	-1.0821	9.9999	-0.4056	9.9999	0.3621	0.6692	0.0204	0.3026	0.0305	0.4516
29	30.33	0.15	-1.0871	9.9999	-0.4095	9.9999	0.3637	0.6536	0.0210	0.2942	0.0321	0.4501
30	30.60	0.15	-1.0764	9.9999	-0.4145	9.9999	0.3630	0.6322	0.0240	0.2829	0.0332	0.4475
31	30.85	0.13	-1.0961	9.9999	-0.4172	9.9999	0.3626	0.6038	0.0223	0.2695	0.0309	0.4464
32	31.13	0.15	-1.0978	9.9999	-0.4214	9.9999	0.3636	0.5880	0.0194	0.2649	0.0331	0.4506
33	31.41	0.16	-1.1183	9.9999	-0.4265	9.9999	0.3630	0.5708	0.0194	0.2579	0.0348	0.4518
34	31.67	0.15	-1.1142	9.9999	-0.4285	9.9999	0.3629	0.5812	0.0205	0.2624	0.0352	0.4512
35	31.94	0.16	-1.1249	9.9999	-0.4321	9.9999	0.3641	0.5789	0.0192	0.2631	0.0332	0.4546
36	32.21	0.17	-1.1296	9.9999	-0.4339	9.9999	0.3642	0.5748	0.0179	0.2627	0.0302	0.4570
37	32.48	0.15	-1.1396	9.9999	-0.4373	9.9999	0.3636	0.5647	0.0186	0.2665	0.0318	0.4558
38	32.72	0.17	-1.1453	9.9999	-0.4414	9.9999	0.3652	0.5650	0.0171	0.2594	0.0302	0.4592
39	32.99	0.15	-1.1539	9.9999	-0.4445	9.9999	0.3652	0.5725	0.0168	0.2639	0.0258	0.4610
40	33.24	0.16	-1.1540	9.9999	-0.4436	9.9999	0.3646	0.5623	0.0154	0.2600	0.0274	0.4623
41	33.48	0.16	-1.1611	9.9999	-0.4475	9.9999	0.3656	0.5624	0.0152	0.2607	0.0270	0.4635
42	33.74	0.17	-1.1629	9.9999	-0.4489	9.9999	0.3660	0.5552	0.0148	0.2607	0.0266	0.4695
43	33.21	0.16	-1.1547	9.9999	-0.4432	9.9999	0.3636	0.5654	0.0150	0.2669	0.0258	0.4593
44	30.99	0.14	-1.0878	9.9999	-0.4144	9.9999	0.3614	0.6467	0.0230	0.2943	0.0309	0.4591
45	28.45	0.12	-1.0265	9.9999	-0.3900	9.9999	0.3605	0.6858	0.0267	0.3174	0.0390	0.4629

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 01 MACH 0.800 RE/FT 1.0E7 PHI 0.0 CONF 0.1 ALPHA 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.11	-0.01	-1.7282	5.3083	0.0300	-0.0120	-0.0295	0.2461	0.0618	0.1863	-3.1063
2	-5.10	-0.01	-1.6928	5.2736	0.0265	-0.0834	-0.0148	0.2451	0.0609	0.1872	-3.2223
3	-5.11	-0.02	-1.6880	5.2689	0.0263	-0.0403	-0.0272	0.2448	0.0608	0.1840	-3.1203
4	-5.11	-0.01	-1.7132	5.3416	-0.0106	0.0417	-0.0305	0.2464	0.0599	0.1865	-3.1143
5	-4.73	-0.01	-1.5555	4.8734	0.0291	-0.0724	-0.0378	0.2724	0.0590	0.2134	-3.1247
6	-4.77	-0.02	-1.5356	4.8153	0.0293	0.0220	-0.0215	0.2623	0.0575	0.2347	-2.9246
7	-0.04	0.00	-0.1790	0.5277	0.0265	-0.1003	-0.0135	0.3041	0.0575	0.2465	-1.8310
8	0.96	-0.01	0.0910	-0.1000	0.0767	-0.0906	0.0014	0.3109	0.0579	0.2529	-2.5020
9	2.03	-0.02	0.0839	-2.0363	0.0220	0.0212	-0.0197	0.3006	0.0584	0.2423	-3.0771
10	4.76	-0.00	1.0764	-2.9473	0.0284	-0.1007	-0.0260	0.2771	0.0594	0.2177	-3.1464
11	6.73	-0.00	2.4600	-2.7281	0.1104	-0.1933	-0.0340	0.2081	0.0635	0.2026	-3.1410
12	8.72	-0.02	3.0030	-3.7849	-0.0004	-0.0177	-0.0342	0.3125	0.0626	0.2298	-3.2544
13	10.65	-0.00	3.0350	-11.3271	0.0091	-0.2230	-0.0026	0.3540	0.1147	0.2399	-3.1976
14	12.61	-0.01	4.0735	-12.0821	0.0270	-0.1691	0.0398	0.4077	0.1449	0.2628	-3.1133
15	14.57	-0.03	4.1670	-12.3267	-0.0038	-0.2079	0.0304	0.4061	0.2134	0.2726	-3.0043
16	16.55	-0.01	4.3430	-12.3063	-0.0030	0.1159	0.0341	0.3705	0.2479	0.2700	-2.8963
17	18.55	-0.03	4.0104	-12.2791	-0.0210	0.1490	0.1822	0.3308	0.2734	0.2634	-2.7293
18	20.47	-0.03	4.0730	-12.0816	-0.0097	0.0301	0.0313	0.0000	0.4315	0.2371	-2.5843
19	22.40	-0.00	5.1729	-13.1661	-0.0372	0.1748	0.3109	0.0677	0.4611	0.2265	-2.5461
20	24.38	-0.00	5.7730	-13.7609	0.0304	-0.2709	0.1329	0.0623	0.4800	0.1957	-2.3837
21	26.26	-0.02	6.2000	-14.3831	-0.0481	0.0824	0.0150	0.0700	0.5040	0.1720	-2.2978
22	28.25	0.01	6.6422	-14.8196	0.0496	-0.2817	-0.0094	0.0809	0.5250	0.1354	-2.1659
23	28.98	-0.00	7.0524	-14.9753	0.0278	-0.3438	-0.1042	0.0625	0.5283	0.1343	-2.1240
24	29.10	0.01	7.1526	-15.1005	0.0301	-0.2762	-0.0031	0.0544	0.5252	0.1193	-2.1258
25	29.45	0.01	7.3004	-15.2529	0.0170	-0.3909	-0.1533	0.0038	0.5384	0.1235	-2.0865
26	29.78	-0.00	7.4412	-15.3556	0.0304	-0.2809	-0.1249	0.0754	0.5443	0.1311	-2.0637
27	30.01	-0.03	7.5574	-15.4451	-0.0109	0.1284	-0.1423	0.0507	0.5400	0.1102	-2.0172
28	30.32	-0.02	7.6401	-15.4955	-0.0190	0.1032	-0.2300	0.0471	0.5475	0.0997	-1.9672
29	30.60	-0.02	7.6410	-15.4790	-0.0221	0.2303	-0.2454	0.0569	0.5508	0.1062	-1.9406
30	30.89	-0.03	7.6732	-15.4793	-0.0021	-0.0974	-0.1733	0.0655	0.5544	0.1112	-1.9346
31	31.19	-0.00	8.0287	-15.8865	0.0036	-0.4132	-0.1083	0.0565	0.5639	0.0956	-1.9157
32	31.40	0.01	8.1383	-15.9135	0.0230	-0.3011	0.0210	0.0576	0.5655	0.1042	-1.9068
33	31.68	0.02	8.2687	-15.9033	0.0300	-0.0814	0.1289	0.0017	0.5664	0.1014	-1.8960
34	31.94	0.00	8.2304	-15.9515	1.2210	-1.0103	0.3593	0.0295	0.5530	0.0765	-1.8697
35	32.21	0.00	8.4910	-15.9918	1.2150	-1.5037	0.4456	0.0444	0.5630	0.0844	-1.8545
36	32.47	0.00	8.4734	-15.9893	1.2091	-1.5919	0.4888	0.0420	0.5632	0.0788	-1.8416
37	30.49	-0.01	7.6301	-15.1926	-0.0145	-0.0206	-0.2361	0.6445	0.5627	0.0818	-1.9411
38	28.93	0.01	6.8625	-13.8814	0.0244	-0.4043	-0.0556	0.0003	0.5447	0.1237	-2.2122
39	25.95	-0.02	6.0033	-12.6758	0.0090	-0.0591	0.0414	0.0848	0.5174	0.1674	-2.3467
40	23.29	-0.01	5.2414	-13.2704	0.0335	-0.4565	0.0896	0.0700	0.4930	0.1656	-2.5079

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 41 MACH 0.90 RATIO-0 1.7 PHI 0.0 CONF 81A0F34 L 0.0 DEL1 .0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	DELTA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
1	-5.11	-0.01	0.0320	0.0126	0.0110	0.3994	0.3434	-0.3200	-0.0690	-0.1417	0.2118	0.4347
2	-5.10	-0.01	0.0287	0.0126	0.0105	0.4457	0.3051	-0.3354	-0.0735	-0.1474	0.2102	0.4395
3	-5.11	-0.02	0.0283	0.0122	0.0096	0.4270	0.3306	-0.3260	-0.0686	-0.1426	0.2112	0.4376
4	-5.11	-0.01	0.0289	0.0122	0.0098	0.4217	0.3274	-0.3270	-0.0730	-0.1427	0.2140	0.4365
5	-4.13	-0.01	0.0192	0.0107	0.0100	0.5208	0.3128	-0.2726	-0.0618	-0.1173	0.2265	0.4304
6	-2.77	-0.02	0.0239	0.0116	0.0073	0.4870	0.3037	-0.1278	-0.0370	-0.0554	0.2697	0.4335
7	-0.59	0.00	0.0354	0.0126	0.0107	0.3912	0.3081	-0.0016	-0.0157	-0.0043	10.0667	2.7271
8	0.98	-0.01	0.0317	0.0130	0.0077	0.4295	0.2421	0.0744	0.0213	0.0255	0.2719	0.3229
9	2.80	-0.02	0.0355	0.0116	0.0075	0.3284	0.2107	0.2144	0.0431	0.0803	0.2013	0.3745
10	4.76	-0.00	0.0303	0.0093	0.0083	0.2473	0.2109	0.3683	0.0638	0.1451	0.1787	0.3941
11	6.73	-0.00	0.0390	0.0080	0.0080	0.2213	0.2049	0.5219	0.0882	0.2153	0.1536	0.4086
12	8.72	-0.02	0.0401	0.0091	0.0080	0.2280	0.1990	0.6358	0.0732	0.2516	0.1104	0.3957
13	10.65	-0.00	0.0492	0.0082	0.0131	0.1870	0.2058	0.7213	0.0636	0.2807	0.0832	0.3692
14	12.67	-0.01	0.0520	0.0015	0.0177	0.0280	0.3412	0.7397	0.0439	0.2861	0.0552	0.3868
15	14.57	-0.03	0.0676	-0.0021	0.0236	-0.0308	0.3099	0.7304	0.0330	0.2835	0.0415	0.3850
16	16.55	-0.01	0.0562	-0.0021	0.0130	-0.0575	0.3750	0.7338	0.0274	0.2750	0.0374	0.3756
17	18.55	-0.03	0.0640	0.0015	0.0210	0.3004	0.4404	0.6840	0.0279	0.2538	0.0407	0.3748
18	20.47	-0.03	0.0516	0.0021	0.0259	0.0602	0.5305	0.7323	0.0270	0.2707	0.0369	0.3806
19	22.40	-0.00	0.0240	0.0034	0.0098	0.1392	0.3957	0.7564	0.0240	0.3054	0.0309	0.3835
20	24.38	-0.00	0.0240	-0.0005	0.0510	-0.0063	0.0230	0.0451	0.0211	0.3201	0.0250	0.3659
21	26.28	-0.02	0.0307	-0.0019	0.0212	-0.0610	0.0900	0.0948	0.0133	0.3405	0.0205	0.3872
22	28.25	0.01	0.0241	0.0025	0.0047	0.1127	0.1312	0.0557	0.0147	0.3749	0.0153	0.3902
23	30.96	-0.00	0.0049	-0.0002	-0.0000	-0.0420	-1.4011	0.5672	0.0138	0.3757	0.0143	0.3885
24	29.10	0.01	0.0158	0.0030	-0.0027	0.2032	-0.1250	0.9848	0.0147	0.3637	0.0129	0.3896
25	27.05	0.01	0.0176	-0.0021	-0.0074	-0.2740	-0.9734	1.0099	0.0114	0.3951	0.0113	0.3916
26	25.18	-0.00	-0.0007	0.0010	-0.0147	-0.2222	0.1484	1.0070	0.0141	0.3920	0.0111	0.3902
27	30.01	-0.03	-0.0033	-0.0169	-0.0108	0.3694	0.7152	1.0254	0.0070	0.4026	0.0095	0.3926
28	30.32	-0.02	-0.0579	-0.0178	-0.0268	0.3070	0.5571	1.0293	0.0070	0.4022	0.0093	0.3907
29	30.00	-0.02	-0.0766	-0.0214	-0.0425	0.2708	0.5335	1.0320	0.0069	0.4026	0.0087	0.3901
30	30.04	-0.03	-0.0134	-0.0110	-0.0131	0.8019	0.7055	1.0444	0.0077	0.4091	0.0074	0.3917
31	31.14	-0.00	0.0330	-0.0005	0.0053	-0.0155	0.1575	1.0494	0.0075	0.4114	0.0071	0.3921
32	31.40	0.01	0.0424	0.0044	0.0144	0.1903	0.3510	1.0522	0.0060	0.4130	0.0070	0.3925
33	31.06	0.02	0.1233	0.0323	0.0330	0.2052	0.4342	1.0372	0.0090	0.4062	0.0087	0.3916
34	31.04	0.00	0.0313	0.0037	0.0134	0.2755	0.4471	1.0060	0.0104	0.3923	0.0108	0.3898
35	31.21	0.00	0.0443	0.0057	0.0143	0.2009	0.4079	1.0176	0.0099	0.3951	0.0097	0.3883
36	31.47	0.00	0.0200	0.0021	0.0107	0.2477	0.4736	1.0305	0.0070	0.4029	0.0088	0.3910
37	30.90	-0.01	-0.0010	-0.0157	-0.0207	0.2551	0.4066	1.0369	0.0066	0.4034	0.0083	0.3883
38	28.93	0.01	0.0003	-0.0012	0.0001	-0.1500	0.9760	0.9078	0.0140	0.3716	0.0150	0.3843
39	29.93	-0.02	0.0270	-0.0021	0.0312	-0.0769	1.1251	0.0695	0.0178	0.3372	0.0222	0.3791
40	29.29	-0.01	0.0220	0.0048	0.0171	0.0516	0.6155	0.6340	0.0237	0.3122	0.0264	0.3744

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 41 MACH 0.90 ALT 0.7 PHI 0.0 CONF 34 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.11	-0.01	0.0104	9.9999	0.0003	9.9999	0.0104	-0.3692	-0.0735	-0.1014	0.1921	0.4372
2	-5.10	-0.01	0.0200	9.9999	0.0034	9.9999	0.1317	-0.3694	-0.0734	-0.1015	0.1921	0.4375
3	-5.11	-0.02	0.0194	9.9999	0.0016	9.9999	0.0809	-0.3618	-0.0698	-0.1578	0.1928	0.4361
4	-5.11	-0.01	0.0193	9.9999	0.0003	9.9999	0.0101	-0.3696	-0.0712	-0.1013	0.1927	0.4364
5	-4.13	-0.01	0.0232	9.9999	0.0023	9.9999	0.1074	-0.4994	-0.0016	-0.1268	0.2056	0.4233
6	-2.77	-0.02	0.0120	9.9999	0.0003	9.9999	0.0346	-0.1021	-0.0370	-0.0653	0.2242	0.3952
7	-1.94	0.00	0.0259	9.9999	0.0037	9.9999	0.1269	-0.0409	-0.0160	-0.0110	0.3919	0.2691
8	0.98	-0.01	0.0226	9.9999	0.0024	9.9999	0.0788	0.0299	0.0194	0.0183	0.4670	0.4573
9	2.00	-0.02	0.0173	9.9999	0.0012	9.9999	0.0713	0.1039	0.0423	0.0758	0.2550	0.4445
10	4.10	-0.00	0.0140	9.9999	-0.0001	9.9999	-0.0074	0.3002	0.0655	0.1305	0.2139	0.4458
11	6.13	-0.00	0.0173	9.9999	0.0024	9.9999	0.1382	0.4615	0.0816	0.2117	0.1768	0.4587
12	8.14	-0.02	0.0240	9.9999	0.0040	9.9999	0.1652	0.5037	0.0716	0.2513	0.1259	0.4441
13	10.05	-0.00	0.0243	9.9999	0.0060	9.9999	0.2526	0.6552	0.0636	0.2691	0.0971	0.4412
14	12.07	-0.01	0.0237	9.9999	0.0073	9.9999	0.2217	0.7173	0.0497	0.3142	0.0691	0.4368
15	14.07	-0.03	0.0276	9.9999	0.0080	9.9999	0.2496	0.8009	0.0344	0.2992	0.0501	0.4356
16	16.02	-0.01	0.0243	9.9999	0.0059	9.9999	0.1713	0.7121	0.0318	0.3092	0.0447	0.4343
17	18.05	-0.03	0.0224	9.9999	0.0046	9.9999	0.1375	0.7308	0.0264	0.3240	0.0381	0.4393
18	20.07	-0.03	0.0277	9.9999	0.0062	9.9999	0.2171	0.8740	0.0284	0.2967	0.0421	0.4398
19	22.08	-0.00	0.0250	9.9999	0.0066	9.9999	0.1887	0.7303	0.0276	0.3247	0.0373	0.4411
20	24.08	-0.00	0.0303	9.9999	0.0068	9.9999	0.1887	0.7892	0.0276	0.3403	0.0358	0.4424
21	26.08	-0.02	0.0292	9.9999	0.0104	9.9999	0.2361	0.8239	0.0247	0.3038	0.0300	0.4418
22	28.09	0.01	0.0282	9.9999	0.0107	9.9999	0.2215	0.8534	0.0233	0.3748	0.0273	0.4393
23	28.98	-0.00	0.0503	9.9999	0.0134	9.9999	0.2618	0.8615	0.0226	0.3776	0.0262	0.4383
24	29.13	0.01	0.0238	9.9999	0.0098	9.9999	0.2088	0.8811	0.0223	0.3656	0.0253	0.4376
25	29.43	0.01	0.0240	9.9999	0.0132	9.9999	0.2441	0.8807	0.0218	0.3851	0.0248	0.4373
26	29.78	-0.00	0.0201	9.9999	0.0115	9.9999	0.2300	0.8971	0.0213	0.3914	0.0238	0.4368
27	30.01	-0.03	0.0210	9.9999	0.0092	9.9999	0.2254	0.8954	0.0220	0.3901	0.0246	0.4356
28	30.32	-0.02	0.0213	9.9999	0.0100	9.9999	0.2297	0.9000	0.0216	0.3920	0.0242	0.4352
29	30.80	-0.02	0.0250	9.9999	0.0095	9.9999	0.2351	0.9104	0.0215	0.3953	0.0236	0.4345
30	30.99	-0.03	0.0257	9.9999	0.0092	9.9999	0.2310	0.9134	0.0213	0.3900	0.0233	0.4342
31	31.19	-0.00	0.0271	9.9999	0.0139	9.9999	0.2435	0.9203	0.0230	0.3993	0.0221	0.4339
32	31.49	0.01	0.0334	9.9999	0.0095	9.9999	0.1101	0.9420	0.0191	0.4088	0.0203	0.4340
33	31.88	0.02	0.0286	9.9999	0.0107	9.9999	0.2201	0.9502	0.0175	0.4157	0.0182	0.4338
34	31.99	0.38	0.0090	9.9999	0.0192	9.9999	0.2759	0.9734	0.0100	0.4220	0.0173	0.4342
35	32.21	0.00	0.0022	9.9999	0.0162	9.9999	0.2003	0.9941	0.0156	0.4327	0.0159	0.4353
36	32.47	0.00	0.0233	9.9999	0.0170	9.9999	0.2087	0.9905	0.0151	0.4249	0.0164	0.4334
37	30.90	-0.01	0.0276	9.9999	0.0140	9.9999	0.2539	0.9155	0.0219	0.3965	0.0240	0.4331
38	28.45	0.01	0.0247	9.9999	0.0126	9.9999	0.2215	0.8852	0.0237	0.3765	0.0274	0.4351
39	25.93	-0.02	0.0214	9.9999	0.0122	9.9999	0.2383	0.8180	0.0264	0.3574	0.0323	0.4375
40	23.47	-0.01	0.0200	9.9999	0.0096	9.9999	0.1803	0.7340	0.0276	0.3207	0.0407	0.4369

PAGE 1 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 4& ALPH 0.00 MACH 0.7 PHI 45.0 CONF 34 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	DELTA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.12	0.00	-1.0444	0.0937	0.2005	-1.0948	-0.0286	0.2606	0.0675	0.1991	-3.0293
2	-5.14	0.00	-1.0502	0.0867	0.1887	-0.9930	-0.0150	0.2725	0.0661	0.2064	-3.0118
3	-5.14	0.00	-1.0465	0.0865	0.1138	-0.0265	-0.0362	0.2654	0.0661	0.1993	-3.0394
4	-5.13	0.00	-1.0507	0.0864	0.2154	-0.9009	-0.0217	0.2671	0.0675	0.1996	-3.0625
5	-5.13	0.00	-1.0117	0.0814	0.1334	-0.0749	-0.0222	0.2707	0.0661	0.2046	-3.0505
6	-5.13	0.00	-1.0005	0.0852	0.1104	-0.0703	-0.0361	0.2641	0.0660	0.1981	-3.0674
7	-5.10	0.00	-1.0717	0.0220	0.3009	-1.1089	-0.0265	0.2683	0.0676	0.2007	-3.1406
8	-4.99	0.07	-1.1002	0.0007	0.3003	-1.1930	-0.0242	0.2727	0.0594	0.2332	-3.0221
9	-4.52	0.00	-0.9462	1.0344	0.1501	-0.6309	-0.0309	0.3015	0.0549	0.2465	-2.9840
10	-0.05	0.00	-0.1150	0.0594	0.1524	-0.0526	0.0049	0.3101	0.0554	0.2606	-3.1100
11	1.23	0.07	0.3400	-0.7375	0.2405	-0.5913	-0.0326	0.3131	0.0545	0.2585	-2.1693
12	3.16	0.00	0.8000	-2.0346	0.1305	-0.4707	-0.0421	0.2976	0.0544	0.2433	-2.8589
13	5.10	0.00	1.2502	-3.2450	0.2622	-1.0199	-0.0182	0.2815	0.0597	0.2218	-2.9598
14	7.08	0.07	2.3241	-5.9429	0.2737	-1.2346	-0.0231	0.2659	0.0671	0.1988	-2.9917
15	9.07	0.07	3.0352	-7.9859	0.2982	-1.2642	-0.0492	0.2518	0.0761	0.1757	-3.0430
16	11.07	0.00	3.8431	-12.1709	0.2990	-1.0047	-0.0027	0.2487	0.0887	0.1600	-3.1153
17	13.12	0.00	4.0429	-14.2163	0.1279	-0.7547	0.0307	0.2742	0.1042	0.1701	-3.0623
18	15.11	0.00	5.0923	-15.4035	0.1006	-0.5072	-0.0206	0.3305	0.1378	0.1927	-3.0248
19	17.20	0.00	5.5503	-16.4591	0.1557	-0.5375	0.0550	0.3658	0.1736	0.1950	-2.9656
20	19.21	0.07	5.6017	-16.7196	0.1799	-0.3346	0.0274	0.4101	0.2184	0.1917	-2.8522
21	21.17	0.07	6.1003	-17.0716	0.2478	-0.4802	-0.0279	0.4172	0.2475	0.1699	-2.7711
22	23.12	0.11	6.2234	-17.7889	0.5613	-0.9124	0.0309	0.4270	0.2854	0.1416	-2.6940
23	24.13	0.08	6.9265	-18.4991	0.3018	-0.5350	-0.0357	0.4273	0.3108	0.1166	-2.6412
24	23.21	0.00	6.9333	-17.2033	0.2634	-0.3296	-0.0210	0.4173	0.2872	0.1301	-2.7247
25	20.92	0.07	5.9037	-16.0050	0.3435	-0.6402	0.0294	0.3969	0.2482	0.1507	-2.7858
26	18.92	0.00	5.0524	-14.3764	0.1454	-0.3543	0.0420	0.3812	0.2075	0.1737	-2.8971
27	16.85	0.00	5.1614	-15.2060	0.0687	-0.0728	-0.0344	0.3522	0.1528	0.1794	-3.0042
28	15.32	0.00	4.4578	-13.3791	0.2337	-0.8457	-0.0449	0.2741	0.1132	0.1610	-3.0824
29	10.92	0.07	3.0457	-11.1170	0.3131	-1.0067	-0.0363	0.2486	0.0930	0.1556	-3.0510
30	8.27	0.00	2.5163	-7.8176	0.2076	-0.9091	-0.0342	0.2330	0.0747	0.1583	-3.0321
31	5.27	0.00	1.4054	-4.8892	0.2390	-0.9621	-0.0317	0.2630	0.0625	0.2005	-2.9655
32	2.99	0.00	0.4543	-1.2740	0.2085	-1.0310	-0.0261	0.2880	0.0521	0.2309	-2.5766
33	-0.55	0.07	-0.2482	0.5302	0.1201	-0.8302	-0.0041	0.2938	0.0500	0.2347	-2.5387

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(INSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 42 MACH 0.90 AXIS-B PHI 45.0 CONF STANDARD L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	ALPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
1	-5.12	0.00	0.0095	0.0577	0.1300	0.1658	0.4199	-0.1372	-0.0467	-0.0612	0.3402	0.4460
2	-5.14	0.00	0.0114	0.0578	0.1315	0.1656	0.4224	-0.1403	-0.0471	-0.0621	0.3358	0.4430
3	-5.14	0.00	0.0095	0.0574	0.1302	0.1654	0.4236	-0.1455	-0.0482	-0.0648	0.3317	0.4457
4	-5.13	0.00	0.0149	0.0580	0.1330	0.1662	0.4223	-0.1419	-0.0478	-0.0631	0.3370	0.4464
5	-5.13	0.00	0.0074	0.0564	0.1277	0.1664	0.4224	-0.1403	-0.0471	-0.0616	0.3358	0.4393
6	-5.13	0.00	0.0149	0.0584	0.1346	0.1662	0.4213	-0.1510	-0.0495	-0.0673	0.3278	0.4460
7	-5.10	0.00	0.0078	0.0561	0.1302	0.1669	0.4230	-0.1315	-0.0457	-0.0567	0.3478	0.4464
8	-4.99	0.07	0.0492	0.0493	0.1063	0.1698	0.4272	-0.0917	-0.0306	-0.0404	0.3991	0.4400
9	-2.52	0.00	0.1343	0.0249	0.0624	0.1941	0.4047	-0.0267	-0.0232	-0.0136	0.8677	0.5086
10	-0.65	0.08	0.0494	0.0124	0.0190	0.3053	0.3844	0.0262	0.0051	0.0046	0.9095	0.1742
11	1.23	0.07	0.0134	-0.0128	0.0056	-0.4147	0.4177	0.1140	0.0233	0.0409	0.2044	0.3587
12	3.16	0.00	-0.0705	-0.0360	-0.0280	0.4322	0.3973	0.2112	0.0375	0.0802	0.1777	0.3797
13	5.10	0.00	-0.1593	-0.0493	-0.0645	0.2905	0.4036	0.3096	0.0540	0.1236	0.1743	0.3990
14	7.08	0.07	-0.2474	-0.0551	-0.1044	0.2228	0.4131	0.4378	0.0717	0.1648	0.1639	0.4130
15	9.07	0.07	-0.3342	-0.0583	-0.1410	0.1760	0.4157	0.5597	0.0820	0.2376	0.1466	0.4244
16	11.07	0.08	-0.4251	-0.0543	-0.1720	0.1193	0.4219	0.6870	0.0875	0.2983	0.1474	0.4343
17	13.12	0.08	-0.5222	-0.0546	-0.2150	0.1045	0.4232	0.7971	0.0891	0.3684	0.0913	0.4073
18	15.11	0.09	-0.5981	-0.0513	-0.2437	0.0918	0.4007	0.8173	0.0526	0.3265	0.0644	0.3994
19	17.20	0.08	-0.6816	-0.0522	-0.2357	0.0668	0.3916	0.8366	0.0304	0.3361	0.0425	0.3947
20	19.21	0.07	-0.7604	-0.0545	-0.2496	0.0674	0.3823	0.9308	0.0261	0.3560	0.0290	0.3952
21	21.17	0.07	-0.8082	-0.0402	-0.2295	0.0793	0.3773	0.9469	0.0215	0.3785	0.0231	0.3989
22	23.15	0.11	-0.8269	-0.0442	-0.2349	0.0703	0.3734	0.9382	0.0207	0.3999	0.0208	0.4027
23	24.75	0.08	-0.8597	-0.0360	-0.2337	0.0585	0.3648	1.0145	0.0195	0.4104	0.0193	0.4045
24	23.27	0.08	-0.8248	-0.0453	-0.2349	0.0726	0.3754	0.9797	0.0208	0.3919	0.0212	0.4000
25	20.92	0.09	-0.7904	-0.0529	-0.2196	0.0898	0.3716	0.9306	0.0237	0.3659	0.0255	0.3932
26	18.52	0.08	-0.7374	-0.0566	-0.2276	0.0967	0.3813	0.8705	0.0249	0.3426	0.0341	0.3900
27	16.05	0.06	-0.6687	-0.0564	-0.2227	0.0921	0.3916	0.8342	0.0524	0.3296	0.0628	0.3951
28	13.52	0.06	-0.5934	-0.0568	-0.2047	0.1106	0.3980	0.7540	0.0485	0.3039	0.0709	0.4031
29	10.92	0.07	-0.4988	-0.0629	-0.1804	0.1474	0.3945	0.6502	0.0727	0.2580	0.1139	0.4043
30	8.27	0.06	-0.4075	-0.0577	-0.1574	0.1980	0.3724	0.4702	0.0731	0.1889	0.1529	0.3951
31	5.37	0.08	-0.2509	-0.0436	-0.0926	0.2755	0.3524	0.3125	0.0519	0.1126	0.1660	0.3801
32	2.99	0.08	-0.1210	-0.0166	-0.0000	0.0001	0.0246	0.1578	0.0272	0.0460	0.1726	0.2912
33	-0.55	0.07	0.0719	0.0190	0.0318	0.2645	0.4426	0.0356	-0.0045	-0.0005	-0.1523	-0.0153

MARTIN MISSILE TAILS-EFFECTS DATA

TEST PART MACH RALD-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 42 0.90 1.7 45.0 slaof34 0.0 0 0 0 0 UNKNOWN

PLANT	ALPHA	BETA	CAF3	CM3	CB3	ACPF3	YCPF3	CAF4	CM4	CB4	XCPF4	YCPF4
1	-3.12	0.00	0.3021	9.9999	0.0963	9.9999	0.3255	-0.2149	-0.0430	-0.0915	0.2003	0.4257
2	-3.19	0.00	0.2927	9.9999	0.0945	9.9999	0.3243	-0.2208	-0.0441	-0.0942	0.1996	0.4265
3	-3.14	0.00	0.2910	9.9999	0.0943	9.9999	0.3247	-0.2272	-0.0435	-0.0967	0.2005	0.4256
4	-3.13	0.00	0.2933	9.9999	0.0944	9.9999	0.3230	-0.2303	-0.0454	-0.0983	0.1991	0.4270
5	-3.13	0.00	0.2948	9.9999	0.0926	9.9999	0.3233	-0.2229	-0.0450	-0.0951	0.2020	0.4267
6	-3.13	0.00	0.3013	9.9999	0.0980	9.9999	0.3275	-0.2207	-0.0454	-0.0970	0.2005	0.4268
7	-3.10	0.00	0.3044	9.9999	0.0990	9.9999	0.3251	-0.2058	-0.0425	-0.0891	0.2029	0.4251
8	-3.09	0.01	0.2990	9.9999	0.0970	9.9999	0.3194	-0.1596	-0.0333	-0.0654	0.2085	0.4095
9	-2.52	0.00	0.1539	9.9999	0.0995	9.9999	0.2892	-0.0821	-0.0213	-0.0293	0.2595	0.3501
10	-0.69	0.00	0.0935	9.9999	0.0196	9.9999	0.2815	-0.0021	-0.0004	0.0052	0.2000	-2.4943
11	4.23	0.01	-0.0986	9.9999	-0.0016	9.9999	0.1663	0.0594	0.0217	0.0277	0.3660	0.4665
12	5.16	0.00	-0.1187	9.9999	-0.0410	9.9999	0.1393	0.1382	0.0384	0.0622	0.2761	0.4504
13	5.19	0.00	-0.2316	9.9999	-0.0643	9.9999	0.3639	0.2229	0.0537	0.0598	0.2407	0.4477
14	7.08	0.01	-0.2966	9.9999	-0.1316	9.9999	0.3691	0.3183	0.0848	0.1440	0.2034	0.4521
15	9.07	0.01	-0.4065	9.9999	-0.1033	9.9999	0.3765	0.4320	0.0860	0.1854	0.1643	0.4612
16	11.07	0.00	-0.4992	9.9999	-0.2511	9.9999	0.3891	0.4780	0.0559	0.2193	0.1175	0.4607
17	13.12	0.00	-0.7701	9.9999	-0.3006	9.9999	0.3904	0.5609	0.0480	0.2403	0.0912	0.4559
18	15.11	0.00	-0.8100	9.9999	-0.3003	9.9999	0.3784	0.5973	0.0481	0.2468	0.0880	0.4565
19	17.20	0.00	-0.9958	9.9999	-0.3405	9.9999	0.3305	0.5719	0.0452	0.2602	0.0791	0.4550
20	19.21	0.01	-0.9359	9.9999	-0.3509	9.9999	0.3813	0.5565	0.0508	0.2428	0.0920	0.4395
21	21.17	0.01	-0.9515	9.9999	-0.3009	9.9999	0.3850	0.5604	0.0481	0.2498	0.0859	0.4457
22	23.19	0.11	-0.9980	9.9999	-0.3077	9.9999	0.3009	0.5709	0.0491	0.2652	0.0756	0.4649
23	24.73	0.00	-1.0364	9.9999	-0.4034	9.9999	0.3993	0.5898	0.0435	0.2613	0.0712	0.4586
24	23.27	0.00	-0.9873	9.9999	-0.3609	9.9999	0.3859	0.5830	0.0459	0.2608	0.0779	0.4632
25	23.72	0.00	-0.9562	9.9999	-0.3395	9.9999	0.3864	0.5502	0.0496	0.2474	0.0898	0.4497
26	18.32	0.00	-0.9112	9.9999	-0.3470	9.9999	0.3830	0.5904	0.0500	0.2452	0.0937	0.4538
27	16.05	0.00	-0.8032	9.9999	-0.3037	9.9999	0.3702	0.5427	0.0479	0.2516	0.0910	0.4635
28	13.04	0.00	-0.7075	9.9999	-0.2701	9.9999	0.3316	0.5014	0.0534	0.2525	0.1066	0.4637
29	10.92	0.01	-0.5757	9.9999	-0.2195	9.9999	0.3613	0.4459	0.0434	0.2016	0.1498	0.4760
30	8.27	0.00	-0.3913	9.9999	-0.1455	9.9999	0.3718	0.3222	0.0454	0.1533	0.2030	0.4758
31	5.31	0.00	-0.2023	9.9999	-0.0732	9.9999	0.3507	0.1959	0.0511	0.0919	0.2606	0.4692
32	2.49	0.00	-0.0412	9.9999	-0.0130	9.9999	0.3149	0.0735	0.0265	0.0303	0.3007	0.4939
33	-0.55	0.01	0.0810	9.9999	0.0174	9.9999	0.2152	-0.0141	-0.0104	0.0017	0.7353	-0.1174

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 1

MARTIN MISSILE FAILS EFFECTS DATA

TEST PART MACH RAIJ-0 PHI COMP L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 93 1.00J 1.7 42.0 6.18UE-04 0.0 0 0 0 0 UNKNOWN

PCINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.15	0.09	-1.7702	5.0304	0.2693	-1.0300	0.0017	0.4600	0.1136	0.3495	-3.2823
2	-5.15	0.07	-1.7350	5.0760	0.2672	-0.0869	-0.0116	0.4690	0.1145	0.3496	-3.3294
3	-5.15	0.08	-1.7091	5.0410	0.2509	-0.0808	-0.0051	0.4509	0.1111	0.3399	-3.3016
4	-5.15	0.09	-1.7100	5.0403	0.2500	-1.0053	0.0018	0.4476	0.1103	0.3374	-3.3078
5	-4.03	0.08	-1.5082	4.7016	0.1631	-0.0333	-0.0121	0.4005	0.1002	0.3024	-3.3074
6	-2.94	0.07	-0.9193	3.0273	0.1505	-0.0407	-0.0201	0.4710	0.0968	0.3743	-3.3111
7	-1.08	0.08	-0.2557	0.7800	0.1755	-0.7343	-0.0024	0.4750	0.0873	0.3877	-3.2741
8	0.80	0.07	0.3085	-0.9939	0.2300	-0.9210	-0.0294	0.4738	0.0893	0.3935	-2.8951
9	2.81	0.08	0.9371	-2.9281	0.1473	-0.9898	-0.0327	0.4819	0.1002	0.3817	-3.1246
10	4.77	0.09	1.6050	-5.0104	0.2650	-1.1104	-0.0249	0.4774	0.1146	0.3629	-3.1704
11	6.76	0.07	2.2594	-7.0300	0.2776	-1.1107	-0.0431	0.4851	0.1281	0.3571	-3.1745
12	8.84	0.08	3.2602	-10.0312	0.2139	-1.0831	-0.0488	0.4554	0.1490	0.3065	-3.1842
13	10.93	0.09	4.0455	-12.6468	0.3534	-1.2280	-0.0389	0.4801	0.1841	0.2961	-3.1742
14	12.94	0.07	4.8128	-14.7072	0.3432	-1.2803	-0.0253	0.4849	0.2137	0.2705	-3.1335
15	14.84	0.08	5.4059	-16.5854	0.2635	-1.2350	-0.0411	0.4793	0.2372	0.2421	-3.0889
16	14.84	0.09	5.4060	-16.7415	0.3574	-1.2570	-0.0079	0.4795	0.2351	0.2504	-3.1079
17	12.79	0.07	4.8068	-15.1928	0.2701	-1.1552	-0.0097	0.4671	0.2038	0.2633	-3.1496
18	9.47	0.08	3.8578	-11.8503	0.2625	-1.1000	-0.0352	0.4454	0.1585	0.2869	-3.1629
19	6.38	0.10	2.0441	-6.4743	0.3363	-1.2101	-0.0209	0.4567	0.1248	0.3320	-3.1771
20	3.47	0.07	1.0027	-3.1264	0.2434	-1.0303	-0.0207	0.4485	0.1042	0.3044	-3.1498
21	0.49	0.07	0.0001	0.0091	0.0300	-0.0010	-0.0227	0.4591	0.0836	0.3765	1.4652
22	-2.04	0.08	-0.9780	3.2290	0.2507	-0.9775	-0.0003	0.4004	0.0971	0.3094	-3.3084

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/D-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 03 1.00 1.0 45.0 ELEVONS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
1	-5.15	0.09	0.0432	0.0374	0.1439	0.1091	0.4192	-0.1083	-0.0240	-0.0892	0.1276	0.4738
2	-5.15	0.01	0.0440	0.0372	0.1424	0.1083	0.4177	-0.1084	-0.0239	-0.0887	0.1279	0.4744
3	-5.15	0.08	0.0423	0.0380	0.1471	0.1096	0.4180	-0.1070	-0.0236	-0.0879	0.1273	0.4697
4	-5.15	0.09	0.0424	0.0387	0.1471	0.1099	0.4180	-0.1069	-0.0237	-0.0884	0.1282	0.4674
5	-4.03	0.08	0.0298	0.0342	0.1216	0.1090	0.4116	-0.1067	-0.0208	-0.0741	0.1327	0.4727
6	-2.94	0.07	0.0214	0.0187	0.0819	0.0969	0.4043	-0.0884	-0.0158	-0.0551	0.1635	0.5302
7	-1.06	0.08	0.0078	0.0002	0.0555	0.0712	0.4095	0.0186	-0.0019	0.0007	-0.1006	0.0390
8	0.00	0.01	0.0043	-0.0096	0.0011	-0.9750	0.2077	0.1131	0.0089	0.0044	0.0790	0.3604
9	2.81	0.08	-0.0021	-0.0124	-0.0330	0.1506	0.4016	0.2101	0.0223	0.0038	0.1030	0.3880
10	4.11	0.09	-0.0111	-0.0231	-0.0703	0.1230	0.4060	0.2208	0.0377	0.0334	0.1159	0.4082
11	6.78	0.07	-0.0259	-0.0265	-0.1194	0.0990	0.4104	0.2542	0.0499	0.1925	0.1099	0.4239
12	8.89	0.08	-0.0365	-0.0291	-0.1505	0.0796	0.4270	0.2819	0.0545	0.2859	0.0905	0.4417
13	10.85	0.09	-0.0445	-0.0273	-0.1736	0.0617	0.4375	0.3110	0.0550	0.3546	0.0742	0.4515
14	12.94	0.01	-0.0497	-0.0243	-0.1843	0.0469	0.4508	0.3513	0.0618	0.3826	0.0725	0.4494
15	14.84	0.08	-0.0547	-0.0232	-0.2002	0.0348	0.4582	0.3838	0.0612	0.4251	0.0649	0.4504
16	14.90	0.09	-0.0547	-0.0229	-0.2000	0.0430	0.4511	0.4021	0.0625	0.4031	0.0690	0.4469
17	11.79	0.07	-0.0520	-0.0201	-0.1950	0.0577	0.4304	0.3647	0.0540	0.3569	0.0716	0.4445
18	9.17	0.08	-0.0382	-0.0250	-0.1451	0.0810	0.4052	0.2930	0.0360	0.2550	0.0910	0.4267
19	6.33	0.10	-0.0304	-0.0248	-0.0956	0.1051	0.3791	0.2049	0.0442	0.1604	0.1091	0.3961
20	3.47	0.07	-0.0132	-0.0135	-0.0350	0.1489	0.3300	0.1321	0.0225	0.0623	0.0968	0.3545
21	0.49	0.07	0.0028	0.0012	0.0107	0.0404	0.0477	0.0061	0.0027	0.0129	0.0409	0.1945
22	-2.04	0.08	0.0167	0.0201	0.0365	0.0969	0.4205	-0.0766	-0.0133	-0.0463	0.1737	0.6038

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNBD-6 PHS CONF 1 DEL1 DEL2 DEL3 DEL4 TRANSITION
7 45 1.00 1.7 45.0 0 BOUNDS 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CB3	ACPF3	YCPF3	CNF4	CM4	CB4	ACPF4	YCPF4
1	-5.15	0.00	0.3260	9.9999	0.1148	9.9999	0.3514	-0.2581	-0.0316	-0.1084	0.1225	0.4201
2	-5.15	0.01	0.3260	9.9999	0.1170	9.9999	0.3517	-0.2601	-0.0317	-0.1101	0.1219	0.4231
3	-5.15	0.00	0.3260	9.9999	0.1151	9.9999	0.3505	-0.2607	-0.0318	-0.1093	0.1221	0.4195
4	-5.15	0.00	0.3260	9.9999	0.1140	9.9999	0.3495	-0.2609	-0.0324	-0.1111	0.1229	0.4210
5	-4.03	0.00	0.2648	9.9999	0.0903	9.9999	0.3435	-0.2198	-0.0239	-0.0890	0.1178	0.4049
6	-2.94	0.01	0.2029	9.9999	0.0634	9.9999	0.3222	-0.1672	-0.0124	-0.0630	0.0973	0.3541
7	-1.08	0.00	0.0874	9.9999	0.0218	9.9999	0.2491	-0.0556	-0.0016	-0.0059	0.0439	0.1663
8	0.00	0.01	0.0010	9.9999	-0.0096	9.9999	-0.2708	0.0020	0.0003	0.0390	0.1600	0.6545
9	2.01	0.00	-0.1035	9.9999	-0.0494	9.9999	0.4754	0.1440	0.0163	0.0722	0.1271	0.5014
10	4.77	0.00	-0.2038	9.9999	-0.0961	9.9999	0.4102	0.2351	0.0277	0.1160	0.1176	0.4933
11	8.78	0.01	-0.3041	9.9999	-0.1486	9.9999	0.4006	0.3267	0.0342	0.1612	0.1047	0.4935
12	8.84	0.00	-0.3233	9.9999	-0.1583	9.9999	0.4133	0.3045	0.0343	0.2012	0.0848	0.4976
13	10.83	0.00	-0.3838	9.9999	-0.2084	9.9999	0.4219	0.4781	0.0324	0.2632	0.0679	0.5086
14	12.94	0.01	-0.4266	9.9999	-0.2314	9.9999	0.4158	0.5307	0.0290	0.2771	0.0547	0.5221
15	14.84	0.00	-0.3972	9.9999	-0.2115	9.9999	0.4141	0.5069	0.0246	0.2647	0.0435	0.5355
16	14.90	0.00	-0.3809	9.9999	-0.2030	9.9999	0.4133	0.5503	0.0267	0.2930	0.0486	0.5323
17	11.79	0.01	-0.3027	9.9999	-0.1733	9.9999	0.4174	0.4053	0.0325	0.2469	0.0671	0.5128
18	9.17	0.00	-0.2636	9.9999	-0.1393	9.9999	0.4040	0.3422	0.0347	0.1953	0.0885	0.4991
19	0.98	0.00	-0.2536	9.9999	-0.1153	9.9999	0.3807	0.2779	0.0316	0.1331	0.1137	0.4968
20	3.47	0.01	-0.1175	9.9999	-0.0496	9.9999	0.4167	0.1464	0.0168	0.0744	0.1266	0.5013
21	0.49	0.01	0.0303	9.9999	0.0082	9.9999	0.1715	0.0034	0.0033	0.0111	0.9697	3.2350
22	-2.04	0.00	0.0734	9.9999	0.0084	9.9999	0.3332	-0.1309	-0.0146	-0.0516	0.1040	0.3765

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 44 1.00 1.7 0.0 DEGREES 0.0 0 0 0 0 UNKNOWN

PLANT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.11	-0.03	-1.0243	0.1700	0.0283	-0.3010	-0.0246	0.4661	0.1209	0.3393	-3.3918
2	-5.12	-0.01	-1.0052	0.2572	0.1784	-0.5098	-0.0246	0.4543	0.1436	0.3290	-3.3192
3	-5.11	-0.01	-1.0318	0.2133	-0.0042	-0.2273	-0.0123	0.4562	0.1207	0.3376	-3.3932
4	-5.12	-0.03	-1.0023	0.2303	0.0513	-0.4179	-0.0057	0.4490	0.1191	0.3300	-3.4036
5	-5.20	-0.02	-1.0094	0.0024	0.1137	-0.5091	-0.0311	0.4554	0.1212	0.3343	-3.3194
6	-4.83	0.00	-1.0251	0.2367	0.1310	-0.4990	-0.0025	0.4476	0.1136	0.3473	-3.3674
7	-3.10	-0.02	-0.9302	0.1231	0.1063	-0.4048	-0.0115	0.4039	0.1032	0.3608	-3.3575
8	-1.29	-0.01	-0.8452	1.0573	0.4093	-0.3233	-0.0117	0.4018	0.0854	0.3784	-3.4583
9	0.72	0.00	0.3122	-0.7941	0.1774	-0.5420	-0.0104	0.4054	0.0760	0.3874	-3.0244
10	2.07	-0.02	0.9775	-3.1933	0.1804	-0.7352	-0.0227	0.4000	0.0912	0.3808	-3.2159
11	4.67	-0.00	1.7361	-5.7406	0.1209	-0.9444	-0.0416	0.4833	0.1144	0.3689	-3.3100
12	6.72	-0.01	2.0313	-6.7417	0.0598	-0.9013	-0.0347	0.5014	0.1428	0.3586	-3.3222
13	8.81	-0.02	3.4050	-11.3491	0.0549	-0.3457	-0.0151	0.5170	0.1694	0.3476	-3.3286
14	10.84	-0.01	4.1951	-14.0012	0.0323	-0.3453	-0.0484	0.5217	0.1878	0.3341	-3.3544
15	12.99	-0.00	5.0191	-16.8388	0.1157	-0.9691	-0.0134	0.5357	0.2136	0.3221	-3.2823
16	13.96	-0.02	5.3471	-17.9258	0.0220	-0.2301	-0.0305	0.5278	0.2213	0.3063	-3.2295
17	12.04	-0.01	4.3050	-14.0218	0.0422	-0.3004	-0.0279	0.5123	0.2042	0.3081	-3.3341
18	9.42	-0.00	3.2007	-11.0774	0.1366	-0.5246	-0.0211	0.5120	0.1824	0.3304	-3.3357
19	6.85	-0.02	2.0171	-7.7056	0.1149	-0.3908	-0.0348	0.4908	0.1458	0.3410	-3.3255
20	3.73	-0.00	1.1107	-3.7005	0.1522	-0.4758	-0.0334	0.4749	0.1088	0.3604	-3.3194
21	0.73	-0.03	0.1522	-0.3907	0.1362	-0.5055	0.0022	0.4620	0.0838	0.3788	-2.5077
22	-2.41	-0.02	-0.8520	2.8719	0.1253	-0.5109	-0.0350	0.4584	0.1000	0.3585	-3.3471
23	-5.11	-0.03	-1.0126	0.1953	0.2003	-0.6220	-0.0245	0.4663	0.1230	0.3388	-3.3084

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(TRANSDOCT) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 99 MACH 1.000 RATIO-0 1.7 PHI 0.0 CONF Biconvex L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-5.11	-0.03	0.0456	0.0046	0.0203	0.0956	0.4849	-0.3647	-0.0433	-0.1654	0.1097	0.4534
2	-5.12	-0.01	0.0501	0.0048	0.0235	0.0913	0.4899	-0.3669	-0.0400	-0.1662	0.1091	0.4529
3	-5.11	-0.01	0.0534	0.0049	0.0171	0.0872	0.5126	-0.3687	-0.0409	-0.1665	0.1105	0.4503
4	-5.12	-0.03	0.0480	0.0047	0.0226	0.1000	0.4833	-0.3707	-0.0403	-0.1661	0.1088	0.4534
5	-5.26	-0.02	0.0507	0.0057	0.0201	0.1009	0.4013	-0.3483	-0.0392	-0.1575	0.1125	0.4521
6	-4.85	0.00	0.0470	0.0046	0.0219	0.0973	0.4056	-0.3107	-0.0301	-0.1391	0.1161	0.4478
7	-3.10	-0.02	0.0421	0.0040	0.0205	0.1165	0.5077	-0.1763	-0.0223	-0.0806	0.1262	0.4571
8	-1.49	-0.01	0.0369	0.0036	0.0169	0.1101	0.4840	-0.0942	-0.0078	-0.0247	0.1718	0.5587
9	0.72	0.00	0.0453	0.0046	0.0200	0.1035	0.4554	0.0960	0.0075	0.0318	0.0760	0.3319
10	2.87	-0.02	0.0456	0.0048	0.0199	0.1082	0.4424	0.2329	0.0231	0.0697	0.0991	0.3853
11	4.87	-0.00	0.0393	0.0041	0.0181	0.1032	0.4393	0.4006	0.0395	0.1625	0.0986	0.4055
12	6.72	-0.01	0.0356	0.0036	0.0166	0.1076	0.4407	0.5733	0.0499	0.2459	0.0774	0.4254
13	8.61	-0.02	0.0298	0.0043	0.0215	0.0336	0.4312	0.7218	0.0451	0.3157	0.0625	0.4373
14	10.89	-0.01	0.0440	0.0030	0.0200	0.0870	0.4485	0.8718	0.0437	0.3894	0.0501	0.4467
15	12.99	-0.00	0.0477	0.0026	0.0220	0.0545	0.4608	1.0156	0.0433	0.4572	0.0397	0.4500
16	14.90	-0.02	0.0415	0.0020	0.0200	0.0410	0.4345	1.0464	0.0365	0.4667	0.0367	0.4452
17	12.04	-0.01	0.0490	0.0029	0.0209	0.0537	0.4121	0.9161	0.0433	0.4032	0.0474	0.4416
18	9.42	-0.00	0.0341	0.0038	0.0210	0.0673	0.3876	0.7457	0.0447	0.3413	0.0600	0.4308
19	6.83	-0.02	0.0374	0.0030	0.0158	0.0636	0.3866	0.5187	0.0425	0.2661	0.0620	0.4012
20	3.73	-0.00	0.0288	0.0025	0.0190	0.0917	0.3693	0.2859	0.0271	0.1020	0.0951	0.3574
21	0.73	-0.00	0.0305	0.0048	0.0196	0.0967	0.3921	0.0628	0.0052	0.0104	0.0513	0.1652
22	-2.41	-0.02	0.0521	0.0056	0.0216	0.0938	0.4182	-0.1574	-0.0214	-0.0804	0.1361	0.5107
23	-5.11	-0.00	0.0392	0.0052	0.0242	0.0879	0.4366	-0.3567	-0.0396	-0.1642	0.1104	0.4578

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NRLD-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 99 1.000 1.7 0.0 dimless 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.14	-0.03	0.0044	9.9999	0.0091	9.9999	0.2056	-0.4123	-0.0402	-0.1807	0.0576	0.4363
2	-5.12	-0.01	0.0104	9.9999	0.0119	9.9999	0.2308	-0.4099	-0.0403	-0.1791	0.0584	0.4369
3	-5.11	-0.01	0.0010	9.9999	0.0083	9.9999	0.1980	-0.4069	-0.0404	-0.1781	0.0590	0.4360
4	-5.12	-0.03	0.0023	9.9999	0.0090	9.9999	0.2133	-0.4142	-0.0408	-0.1806	0.0584	0.4360
5	-5.26	-0.02	0.0003	9.9999	0.0117	9.9999	0.2425	-0.4009	-0.0399	-0.1740	0.0596	0.4339
6	-4.83	0.00	0.0009	9.9999	0.0095	9.9999	0.2194	-0.3504	-0.0329	-0.1515	0.1006	0.4249
7	-3.10	-0.02	0.0023	9.9999	0.0090	9.9999	0.2280	-0.2283	-0.0221	-0.0897	0.0973	0.3930
8	-1.29	-0.01	0.0013	9.9999	0.0090	9.9999	0.2180	-0.0004	-0.0002	-0.0207	0.0766	0.3017
9	0.72	0.00	0.0010	9.9999	0.0093	9.9999	0.2234	0.0322	0.0014	0.0234	0.2270	0.7885
10	2.67	-0.02	0.0049	9.9999	0.0126	9.9999	0.2513	0.1774	0.0232	0.0881	0.1307	0.4965
11	4.67	-0.00	0.0043	9.9999	0.0121	9.9999	0.2510	0.3326	0.0398	0.1632	0.1197	0.4906
12	6.72	-0.01	0.0020	9.9999	0.0122	9.9999	0.2527	0.4980	0.0474	0.2467	0.0952	0.4953
13	8.81	-0.02	0.0003	9.9999	0.0100	9.9999	0.2143	0.6377	0.0508	0.3214	0.0797	0.5040
14	10.89	-0.01	0.0024	9.9999	0.0157	9.9999	0.2498	0.7896	0.0523	0.3980	0.0662	0.5048
15	12.99	-0.00	0.0013	9.9999	0.0108	9.9999	0.1893	0.9257	0.0496	0.4639	0.0536	0.5012
16	13.98	-0.02	0.0039	9.9999	0.0091	9.9999	0.1895	0.9899	0.0487	0.4794	0.0504	0.4988
17	12.99	-0.01	0.0024	9.9999	0.0105	9.9999	0.1933	0.8157	0.0521	0.4139	0.0639	0.5074
18	9.92	-0.00	0.0039	9.9999	0.0135	9.9999	0.2120	0.6909	0.0515	0.3280	0.0803	0.5118
19	8.85	-0.02	0.0024	9.9999	0.0105	9.9999	0.1859	0.4261	0.0498	0.2157	0.1052	0.5062
20	9.73	-0.00	0.0024	9.9999	0.0098	9.9999	0.1715	0.1992	0.0270	0.1031	0.1357	0.5176
21	0.73	-0.00	0.0077	9.9999	0.0073	9.9999	0.1522	-0.0133	0.0038	0.0091	-0.2891	-0.6859
22	-2.41	-0.02	0.0011	9.9999	0.0101	9.9999	0.1971	-0.2230	-0.0234	-0.0842	0.0900	0.3777
23	-5.11	-0.00	0.0067	9.9999	0.0121	9.9999	0.2142	-0.4141	-0.0403	-0.1776	0.0963	0.4237

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 45 | MACH 1.10 | RATIO-0 1.7 | PHI 0.0 | CONF 61WOF34 | L 0.0 | DELT 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.15	-0.03	-1.0592	0.0228	-0.0412	-0.2184	-0.0332	0.6301	0.2228	0.4073	-3.2916
2	-5.14	-0.00	-1.0437	0.1710	0.1125	-0.4425	-0.0270	0.6228	0.2217	0.4021	-3.3471
3	-5.14	-0.01	-1.0188	0.1649	0.1337	-0.4823	-0.0212	0.6383	0.2242	0.4141	-3.3694
4	-5.14	-0.02	-1.0822	0.2731	0.0909	-0.4960	-0.0303	0.6326	0.2233	0.4073	-3.3258
5	-5.20	-0.01	-1.1454	0.0323	0.0125	-0.3295	-0.0272	0.6410	0.2253	0.4157	-3.3457
6	-5.26	-0.01	-1.0796	0.1200	0.1501	-0.5504	-0.0342	0.6589	0.2313	0.4276	-3.4459
7	-1.39	-0.01	-0.0837	1.2615	0.1200	-0.0093	-0.0202	0.2754	0.2213	0.4340	-3.2699
8	0.56	-0.01	0.1792	-0.4004	0.0331	-0.3338	-0.0091	0.6843	0.2184	0.4653	-2.6808
9	2.52	0.00	0.9024	-2.7553	0.2742	-0.8716	-0.0152	0.6675	0.2244	0.4630	-3.0564
10	4.53	-0.04	1.5944	-5.0137	0.0316	-0.5091	-0.0193	0.6884	0.2327	0.4556	-3.2511
11	6.56	0.01	2.4011	-7.8744	0.1036	-0.4004	-0.0241	0.7067	0.2533	0.4513	-3.2794
12	8.69	-0.00	3.2139	-10.2306	0.2009	-0.4304	-0.0141	0.7445	0.2828	0.4416	-3.2746
13	10.79	-0.04	4.0702	-13.2349	0.0507	-0.2980	-0.0345	0.7276	0.3071	0.4205	-3.2514
14	9.84	0.00	3.2981	-10.3374	0.1010	-0.4791	-0.0123	0.7106	0.2472	0.4134	-3.2679
15	6.45	0.04	2.3207	-7.3343	0.3083	-0.8479	-0.0406	0.6927	0.2036	0.4268	-3.2464
16	4.45	-0.01	1.1574	-3.7520	0.0544	-0.4502	-0.0419	0.6793	0.2384	0.4408	-3.2424
17	1.34	0.02	0.4450	-0.9203	0.3379	-0.8104	-0.0023	0.6853	0.2215	0.4559	-2.9404
18	-2.09	-0.02	-0.8884	3.0316	0.0440	-0.3809	0.0018	0.6475	0.2202	0.4273	-3.4107

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RALD-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 02 1.60 1.7 0.0 DIMENSN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
1	-5.13	-0.03	0.0303	0.0043	0.0172	0.1453	0.5595	-0.3685	-0.0377	-0.1646	0.1024	0.4468
2	-5.13	-0.00	0.0324	0.0047	0.0100	0.1471	0.5440	-0.3600	-0.0378	-0.1636	0.1034	0.4470
3	-5.14	-0.01	0.0470	0.0066	0.0142	0.1344	0.5143	-0.3669	-0.0381	-0.1640	0.1037	0.4478
4	-5.14	-0.02	0.0417	0.0058	0.0221	0.1397	0.5300	-0.3734	-0.0382	-0.1663	0.1030	0.4490
5	-5.20	-0.01	0.0321	0.0055	0.0192	0.1508	0.5401	-0.3437	-0.0369	-0.1538	0.1068	0.4458
6	-5.20	-0.01	0.0470	0.0059	0.0240	0.1245	0.5032	-0.2142	-0.0256	-0.0917	0.1194	0.4281
7	-1.39	-0.01	0.0324	0.0029	0.0253	0.1230	0.4805	-0.3664	-0.0397	-0.0315	0.1413	0.4610
8	0.50	-0.01	0.0327	0.0046	0.0178	0.1350	0.5111	0.0677	0.0044	0.0204	0.0722	0.3019
9	2.52	0.00	0.0340	0.0044	0.0142	0.1120	0.4922	0.2170	0.0211	0.0765	0.0973	0.3619
10	4.53	-0.02	0.0299	0.0027	0.0136	0.0903	0.5200	0.3609	0.0325	0.1416	0.0902	0.3924
11	0.53	0.01	0.0265	0.0003	0.0137	0.0231	0.0057	0.2290	0.0303	0.0211	0.0674	0.4174
12	0.04	-0.00	0.0304	0.0003	0.0225	0.0136	0.5307	0.0609	0.0303	0.2962	0.0528	0.4342
13	10.75	-0.02	0.0214	0.0003	0.0192	0.1100	0.0112	0.6335	0.0342	0.3711	0.0410	0.4452
14	7.04	0.00	0.0213	0.0003	0.0191	0.0114	0.0900	0.7004	0.0329	0.3009	0.0512	0.4297
15	0.03	0.01	0.0199	0.0021	0.0192	0.0302	0.0439	0.5148	0.0328	0.2083	0.0695	0.4047
16	4.05	-0.01	0.0340	0.0035	0.0192	0.1013	0.5210	0.2884	0.0274	0.1024	0.0952	0.3550
17	1.04	0.02	0.0317	0.0027	0.0232	0.1190	0.4869	0.0704	0.0031	0.0159	0.0443	0.2255
18	-2.04	-0.02	0.0337	0.0054	0.0170	0.1512	0.5297	-0.1720	-0.0223	-0.0803	0.1289	0.4652

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 9
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 45 MACH 1.10 RATIO 1.7 PHI 0.0 CONF 0.0 L 0.0 DELI 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.15	-0.03	0.0008	9.9999	0.0080	9.9999	0.2113	-0.4080	-0.0370	-0.1793	0.0907	0.4394
2	-5.13	-0.00	0.0403	9.9999	0.0104	9.9999	0.2197	-0.4108	-0.0377	-0.1806	0.0919	0.4386
3	-5.14	-0.01	0.0016	9.9999	0.0124	9.9999	0.2414	-0.4152	-0.0386	-0.1827	0.0924	0.4400
4	-5.14	-0.02	0.0403	9.9999	0.0115	9.9999	0.2377	-0.4106	-0.0377	-0.1839	0.0906	0.4415
5	-5.23	-0.01	0.0403	9.9999	0.0090	9.9999	0.2028	-0.3909	-0.0371	-0.1780	0.0951	0.4355
6	-5.20	-0.01	0.0316	9.9999	0.0131	9.9999	0.2535	-0.2603	-0.0256	-0.1050	0.0986	0.4032
7	-5.19	-0.01	0.0201	9.9999	0.0142	9.9999	0.2531	-0.1238	-0.0101	-0.0411	0.0814	0.3317
8	0.50	-0.01	0.0413	9.9999	0.0086	9.9999	0.1435	0.0124	0.0046	0.0171	0.3697	1.3834
9	2.02	0.00	0.0499	9.9999	0.0110	9.9999	0.2226	0.1558	0.0219	0.1771	0.1409	0.4969
10	0.03	-0.02	0.0040	9.9999	0.0090	9.9999	0.2032	0.0000	0.0344	0.1447	0.1147	0.4824
11	0.50	0.01	0.0406	9.9999	0.0101	9.9999	0.2072	0.0590	0.0291	0.2267	0.0652	0.4938
12	0.69	-0.00	0.0400	9.9999	0.0091	9.9999	0.1951	0.0001	0.0418	0.3017	0.0696	0.5027
13	10.75	-0.02	0.0408	9.9999	0.0102	9.9999	0.2099	0.7485	0.0424	0.3763	0.0567	0.5027
14	5.04	0.00	0.0433	9.9999	0.0070	9.9999	0.1007	0.0008	0.0417	0.3074	0.0665	0.5049
15	6.95	0.01	0.0402	9.9999	0.0101	9.9999	0.2399	0.3000	0.0392	0.2140	0.0912	0.4963
16	4.00	-0.01	0.0303	9.9999	0.0120	9.9999	0.2100	0.2108	0.0203	0.1029	0.1250	0.4883
17	1.00	0.02	0.0000	9.9999	0.0124	9.9999	0.2023	0.0000	0.0023	0.0136	0.7546	4.5070
18	-2.09	-0.02	0.0400	9.9999	0.0102	9.9999	0.1783	-0.2141	-0.0206	-0.0830	0.0962	0.3877

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-6 PRE COMP L DELI DEL2 DEL3 DEL4 TRANSITION
7 90 1.10 1.7 90.0 DEGREES 90.0 0 0 0 UNKNOWN

PLANT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.17	0.09	-1.8100	5.9845	0.2516	-0.9937	0.0328	0.8380	0.2197	0.4103	-3.3052
2	-5.17	0.07	-1.7881	5.8716	0.1211	-0.0174	-0.0090	0.8207	0.2164	0.4103	-3.3208
3	-5.18	0.08	-1.7982	5.9221	0.1158	-0.1491	-0.0034	0.8278	0.2175	0.4103	-3.2955
4	-5.18	0.10	-1.8330	6.0860	0.3194	-0.9935	0.0031	0.8472	0.2186	0.4106	-3.2799
5	-5.12	0.07	-1.8436	5.4965	0.1932	-0.0498	-0.0146	0.8432	0.2177	0.4255	-3.3137
6	-3.43	0.09	-1.1973	3.9311	0.1231	-0.7409	-0.0103	0.8529	0.2139	0.4390	-3.5250
7	-1.39	0.08	-0.5323	1.8915	0.2261	-0.8891	-0.0003	0.8747	0.2161	0.4565	-3.4584
8	0.34	0.08	0.0375	0.0279	0.0415	-0.4003	-0.0060	0.8879	0.2179	0.4699	0.3983
9	2.02	0.09	0.6663	-1.9933	0.1793	-0.7118	-0.0272	0.8697	0.2256	0.4640	-2.9816
10	4.39	0.10	1.4777	-4.3528	0.3822	-1.0907	-0.0375	0.8755	0.2377	0.4377	-3.0811
11	5.74	0.07	2.0364	-6.3179	0.1525	-0.7099	-0.0367	0.8752	0.2483	0.4268	-3.1025
12	7.06	0.08	2.6238	-7.7775	0.1396	-0.7910	-0.0174	0.8781	0.2596	0.4184	-3.1696
13	9.17	0.09	3.5963	-10.7160	0.3191	-1.0851	-0.0114	0.8912	0.2966	0.3966	-3.1555
14	11.25	0.08	4.5824	-13.6990	0.2265	-0.9471	-0.0169	0.8971	0.3180	0.3791	-3.1559
15	12.56	0.08	5.2081	-15.0817	0.1444	-0.8201	0.0208	0.8938	0.3301	0.3537	-3.1236
16	10.09	0.09	3.9357	-11.2239	0.4087	-1.1008	-0.0122	0.8778	0.3122	0.3656	-3.1564
17	7.49	0.08	2.6537	-7.8061	0.1530	-0.8446	-0.0220	0.8641	0.2738	0.3933	-3.1325
18	4.92	0.09	1.3213	-4.1511	0.1075	-0.7834	-0.0206	0.8748	0.2475	0.4270	-3.1417
19	1.53	0.07	0.0223	-0.0734	0.1805	-0.7077	-0.0140	0.8807	0.2267	0.4539	-2.5841
20	-1.57	0.09	-0.4269	1.4877	0.3038	-0.9653	-0.0221	0.8563	0.2172	0.4411	-3.4150

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 OF 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DELA DEL2 DEL3 DEL4 TRANSITION
1 40 1.10 1.1 45.0 BLAUFAN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
1	-5.17	0.09	0.3647	0.0375	0.1537	0.1037	0.4248	-0.1678	-0.0218	-0.0051	0.1164	0.4535
2	-5.17	0.07	0.3535	0.0370	0.1487	0.1009	0.4204	-0.1877	-0.0214	-0.0049	0.1141	0.4522
3	-5.16	0.08	0.3574	0.0378	0.1516	0.1059	0.4241	-0.1887	-0.0216	-0.0042	0.1136	0.4511
4	-5.16	0.10	0.3600	0.0387	0.1551	0.1057	0.4237	-0.1990	-0.0221	-0.0071	0.1141	0.4491
5	-5.12	0.07	0.3520	0.0382	0.1500	0.1062	0.4175	-0.1880	-0.0232	-0.0753	0.1200	0.4482
6	-3.45	0.09	0.2395	0.0239	0.0792	0.0997	0.4134	-0.1118	-0.0126	-0.0495	0.1395	0.4427
7	-1.59	0.08	0.1245	0.0097	0.0524	0.0777	0.4209	-0.0171	-0.0050	-0.0114	0.2927	0.6692
8	0.34	0.06	0.0245	-0.0001	0.0126	-0.0347	0.5722	0.0587	0.0030	0.0166	0.0513	0.2825
9	2.32	0.09	-0.0845	-0.0061	-0.0214	0.1256	0.3315	0.1736	0.0150	0.0613	0.0862	0.3531
10	4.39	0.10	-0.1701	-0.0136	-0.0441	0.0925	0.3769	0.3047	0.0314	0.1154	0.1044	0.3785
11	5.74	0.07	-0.2353	-0.0198	-0.0719	0.0638	0.3548	0.3906	0.0401	0.1563	0.1012	0.3942
12	7.06	0.08	-0.2935	-0.0267	-0.1043	0.0772	0.3502	0.4709	0.0426	0.1917	0.0905	0.4071
13	9.17	0.09	-0.3833	-0.0426	-0.1553	0.0594	0.3086	0.6334	0.0437	0.2736	0.0689	0.4319
14	11.23	0.08	-0.4643	-0.0604	-0.1950	0.0448	0.4305	0.7695	0.0421	0.3415	0.0547	0.4438
15	12.58	0.08	-0.4767	-0.0760	-0.2300	0.0376	0.4353	0.8127	0.0422	0.3634	0.0519	0.4435
16	10.09	0.09	-0.3980	-0.0623	-0.1642	0.0388	0.4004	0.6579	0.0428	0.2838	0.0651	0.4311
17	7.90	0.08	-0.2897	-0.0421	-0.1087	0.0775	0.3805	0.4724	0.0426	0.1671	0.0909	0.3962
18	4.52	0.09	-0.1573	-0.0166	-0.0556	0.1009	0.3365	0.2089	0.0261	0.1033	0.0972	0.3672
19	1.50	0.07	-0.0054	-0.0025	0.0063	0.4015	-1.2083	0.1164	0.0076	0.0304	0.0606	0.2567
20	-1.97	0.09	0.1506	0.0135	0.0393	0.0867	0.4993	-0.0297	-0.0069	-0.0259	0.3007	0.8721

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 5 OF 5
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-G PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 46 1.60 1.7 90.0 DIMENSION 0.0 0 0 0 0 UNKNOWN

PLANT	ALPHA	BETA	CNF3	CM3	CD3	ACPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
1	-5.17	0.09	0.3257	9.9999	0.1116	9.9999	0.3427	-0.2846	-0.0322	-0.1159	0.1135	0.4072
2	-5.17	0.01	0.3290	9.9999	0.1094	9.9999	0.3461	-0.2882	-0.0333	-0.1179	0.1154	0.4092
3	-5.16	0.08	0.3263	9.9999	0.1091	9.9999	0.3407	-0.2855	-0.0324	-0.1159	0.1136	0.4058
4	-5.16	0.10	0.3234	9.9999	0.1112	9.9999	0.3434	-0.2949	-0.0338	-0.1203	0.1146	0.4088
5	-5.12	0.07	0.3050	9.9999	0.1063	9.9999	0.3201	-0.2561	-0.0278	-0.1015	0.1076	0.3902
6	-5.03	0.09	0.2891	9.9999	0.0952	9.9999	0.3113	-0.2423	-0.0257	-0.0958	0.0961	0.3808
7	-1.59	0.08	0.1313	9.9999	0.0356	9.9999	0.2710	-0.0808	-0.0037	-0.0201	0.0463	0.2491
8	0.39	0.06	0.0284	9.9999	-0.0019	9.9999	-0.0056	-0.0033	0.0034	0.0134	-1.0313	-3.9567
9	4.32	0.09	-0.1058	9.9999	-0.0070	9.9999	0.0027	0.0014	0.0125	0.0507	0.1427	0.5801
10	4.34	0.10	-0.1084	9.9999	-0.0067	9.9999	0.4277	0.1577	0.0201	0.0800	0.1015	0.4960
11	5.74	0.07	-0.1992	9.9999	-0.0124	9.9999	0.4056	0.2537	0.0255	0.1003	0.0966	0.4941
12	7.06	0.05	-0.3913	9.9999	-0.0298	9.9999	0.4083	0.3078	0.0200	0.1263	0.0865	0.4955
13	9.17	0.07	-0.3568	9.9999	-0.0329	9.9999	0.4166	0.4070	0.0260	0.2019	0.0687	0.4961
14	11.43	0.06	-0.7100	9.9999	-0.0644	9.9999	0.4218	0.4719	0.0243	0.2390	0.0520	0.5064
15	12.56	0.06	-0.7725	9.9999	-0.0721	9.9999	0.4206	0.4959	0.0240	0.2535	0.0484	0.5113
16	10.04	0.09	-0.5983	9.9999	-0.0499	9.9999	0.4080	0.4165	0.0271	0.2065	0.0655	0.4982
17	7.93	0.06	-0.3883	9.9999	-0.0316	9.9999	0.3981	0.3396	0.0264	0.1527	0.0917	0.4932
18	4.32	0.09	-0.1909	9.9999	-0.0192	9.9999	0.3931	0.1764	0.0250	0.0900	0.1302	0.4874
19	1.90	0.07	-0.0938	9.9999	-0.0076	9.9999	0.3224	0.0385	0.0065	0.0295	0.2216	0.6364
20	-1.57	0.09	0.1203	9.9999	0.0028	9.9999	0.3193	-0.0992	-0.0063	-0.0342	0.0639	0.3451

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-G PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 47 0.60 1.7 0.0 BASELINE 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.07	0.01	-0.0420	1.1013	0.1085	-0.2302	-0.0311	0.1903	0.0832	0.1071	-1.7153
2	-5.08	0.01	-0.0234	1.0886	0.0504	-0.1696	0.0000	0.1906	0.0818	0.1088	-1.7396
3	-5.08	-0.00	-0.0391	1.1166	0.0406	-0.1508	0.0007	0.1904	0.0800	0.1104	-1.7471
4	-5.08	0.01	-0.0370	1.1141	0.1099	-0.2070	0.0000	0.1919	0.0819	0.1100	-1.7467
5	-5.08	-0.00	-0.0377	1.1140	0.0931	-0.2077	0.0008	0.1899	0.0824	0.1075	-1.7469
6	-5.08	0.00	-0.0427	1.0982	0.1089	-0.2097	0.0008	0.1898	0.0809	0.1089	-1.7365
7	-5.08	-0.00	-0.0439	1.0843	0.0950	-0.1693	0.0146	0.1917	0.0809	0.1108	-1.7072
8	-5.09	0.00	-0.0002	1.0760	0.1430	-0.2098	0.0009	0.1917	0.0799	0.1118	-1.7652
9	-5.08	-0.00	-0.0424	1.0830	0.0456	-0.1634	0.0007	0.1938	0.0814	0.1124	-1.7400
10	-5.08	-0.00	-0.0015	1.0823	0.0825	-0.1653	0.0008	0.1918	0.0809	0.1109	-1.7322
11	-5.08	-0.00	-0.0070	1.0514	0.0782	-0.1803	0.0147	0.1938	0.0834	0.1104	-1.7321
12	-5.08	-0.00	-0.0080	1.0496	0.0798	-0.1821	0.0146	0.1933	0.0817	0.1116	-1.7320
13	-5.08	0.00	-0.0191	1.0775	0.0133	-0.1403	0.0145	0.1910	0.0810	0.1100	-1.7403
14	-5.07	-0.00	-0.0002	1.0599	0.0625	-0.1649	0.0146	0.1908	0.0815	0.1093	-1.7586
15	-5.08	-0.00	-0.0197	1.0760	0.0797	-0.1539	0.0146	0.1929	0.0820	0.1109	-1.7395
16	-5.08	-0.00	-0.0042	1.0967	0.0604	-0.1906	0.0146	0.1929	0.0820	0.1109	-1.7323
17	-5.08	-0.00	-0.0194	1.0778	0.0465	-0.1504	0.0145	0.1910	0.0795	0.1115	-1.7400
18	-5.08	0.00	-0.0045	1.0970	0.1094	-0.2090	0.0147	0.1928	0.0810	0.1118	-1.7320
19	-5.08	0.00	-0.0045	1.0969	0.1411	-0.2330	0.0147	0.1908	0.0811	0.1097	-1.7318
20	-5.08	0.00	-0.0042	1.0968	0.0947	-0.1750	0.0146	0.1929	0.0805	0.1124	-1.7325
21	-5.78	-0.00	-0.5742	0.9855	0.0116	-0.1726	0.0146	0.2004	0.0795	0.1209	-1.7163
22	-5.81	0.01	-0.5593	0.9546	0.0554	-0.1601	0.0148	0.1968	0.0811	0.1497	-1.7068
23	-4.59	0.00	-0.4058	0.8647	0.0770	-0.1795	0.0152	0.2056	0.0759	0.1537	-1.5637
24	-2.81	-0.00	-0.1983	0.7811	0.0742	-0.1539	0.0150	0.2142	0.0759	0.1403	-1.3867
25	-0.99	0.01	0.0022	0.7155	0.0790	-0.1535	0.0184	0.2184	0.0726	0.1458	-1.0545
26	0.86	0.01	0.1453	-0.1742	0.0797	-0.1407	0.0170	0.2204	0.0726	0.1478	-1.1989
27	2.73	0.00	0.3496	-0.4889	0.0742	-0.1203	0.0175	0.2222	0.0742	0.1480	-1.3977
28	4.54	0.00	0.5970	-0.7921	0.0743	-0.1411	0.0182	0.2196	0.0767	0.1429	-1.5947
29	6.38	0.00	0.8249	-1.0974	0.0641	-0.1526	0.0188	0.2179	0.0658	0.1521	-1.7636
30	8.24	0.00	1.0567	-1.3963	0.0814	-0.0693	0.0193	0.2241	0.0953	0.1288	-1.8186
31	10.05	0.00	1.2984	-1.6722	0.0493	-0.1013	0.0202	0.2245	0.1061	0.1185	-1.8134
32	11.92	0.00	1.7498	-2.2710	0.0210	-0.0349	0.0287	0.2243	0.1422	0.1022	-1.8697
33	13.72	0.00	2.0784	-2.7006	0.0333	-0.1060	0.0294	0.2208	0.1327	0.0941	-1.9278
34	15.60	0.00	2.4540	-3.1578	0.0170	-0.1009	0.0225	0.2277	0.1504	0.0773	-1.9307
35	17.32	-0.00	2.8134	-3.5979	-0.0201	-0.0970	0.0310	0.2203	0.1426	0.0577	-1.9185
36	19.07	0.00	3.1907	-4.0537	-0.0190	-0.1399	0.0313	0.2152	0.1761	0.0371	-1.9084
37	21.23	0.00	3.5010	-4.4900	-0.1144	-0.2008	0.0246	0.2032	0.1974	0.0058	-1.8556
38	23.09	0.01	3.8444	-4.9406	-0.0231	-0.1010	0.0109	0.1935	0.2151	-0.0216	-1.8069
39	24.94	0.01	4.2071	-5.3768	-0.0044	-0.1106	-0.0041	0.1721	0.2343	-0.0622	-1.6807
40	26.82	0.01	4.5847	-5.8470	-0.0378	-0.1016	0.0138	0.1803	0.2651	-0.0846	-1.5458
41	28.23	0.01	4.8594	-6.2524	-0.0138	-0.0965	0.0074	0.1723	0.2848	-0.1126	-1.4818
42	28.29	0.01	4.8573	-6.0905	0.0739	-0.2110	0.0060	0.1625	0.2666	-0.1044	-1.4596
43	28.70	0.03	4.9432	-6.2217	0.2980	-0.0208	0.0402	0.1567	0.2886	-0.1299	-1.4609
44	28.99	0.03	5.0235	-6.2451	0.3917	-0.8479	0.0487	0.1506	0.2896	-0.1390	-1.4383
45	29.28	0.04	5.0839	-6.2741	0.3142	-1.0072	0.0650	0.1586	0.2912	-0.1326	-1.4301
46	29.59	0.06	5.1507	-6.2862	0.7844	-1.5910	0.1152	0.1586	0.2967	-0.1381	-1.4146

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAID-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 97 0.60 1.7 0.0 3.1800F14 0.0 0 0 0 0 UNANumb

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	29.05	0.07	5.2074	-7.2360	0.9207	-1.7399	0.0784	0.1607	0.3033	-0.1426	-1.3897
48	30.15	0.01	5.2845	-7.2910	0.9041	-1.9205	0.1447	0.1651	0.3090	-0.1439	-1.3692
49	30.42	0.06	5.4150	-7.3753	1.0753	-2.0170	0.1153	0.1635	0.3120	-0.1485	-1.3625
50	30.69	0.07	5.5241	-7.4201	1.0259	-2.1700	0.1454	0.1545	0.3090	-0.1545	-1.3433
51	30.97	0.08	5.6024	-7.4409	1.0004	-1.6974	0.1160	0.1607	0.3110	-0.1503	-1.3282
52	31.23	0.07	5.6820	-7.4447	0.9614	-1.7315	0.1161	0.1600	0.3105	-0.1505	-1.3064
53	31.51	0.09	5.7641	-7.2763	1.1067	-1.5770	0.0850	0.1682	0.3219	-0.1537	-1.2583
54	31.79	0.06	5.8447	-7.1024	1.0098	-1.3342	0.0341	0.1794	0.3401	-0.1607	-1.2109
55	32.06	0.09	5.9254	-7.1066	1.0390	-1.2264	0.0344	0.1744	0.3493	-0.1749	-1.1853
56	32.32	0.09	6.0072	-7.1130	1.0751	-1.1014	0.0545	0.1613	0.3503	-0.1750	-1.1744
57	32.59	0.09	6.0879	-7.0930	1.0402	-1.0369	0.0550	0.1700	0.3634	-0.1868	-1.1406
58	32.85	0.08	6.1640	-7.0537	1.0008	-0.8827	0.0332	0.1778	0.3635	-0.1977	-1.1136
59	33.10	0.08	6.2495	-7.0203	0.9582	-0.7893	0.0351	0.1769	0.3692	-0.1903	-1.1056
60	33.30	0.09	6.3405	-7.0768	1.0522	-0.8914	0.0328	0.1880	0.3834	-0.1772	-1.0930
61	33.61	0.09	6.4098	-6.9931	1.0900	-1.0527	0.0651	0.1459	0.3515	-0.2056	-1.0486
62	33.88	0.10	6.4801	-7.0702	1.1458	-0.7380	0.0405	0.1808	0.3866	-0.1798	-1.0524
63	34.11	0.08	6.5692	-7.0305	1.0035	-1.0342	0.0735	0.1947	0.3907	-0.2040	-1.0265
64	34.35	0.07	6.6784	-6.9964	0.8784	-0.9402	0.0856	0.1949	0.3941	-0.2092	-1.0106
65	34.60	0.06	7.0089	-6.9341	0.8824	-0.8704	0.0502	0.1253	0.3381	-0.2146	-0.9896
66	34.85	0.06	7.0919	-6.8894	0.8181	-0.8064	0.0337	0.1800	0.3193	-0.2133	-0.9762
67	35.09	0.01	7.1495	-6.8758	-0.1771	0.3211	0.0022	0.1823	0.3212	-0.2189	-0.9511
68	35.34	-0.01	7.2122	-6.8263	-0.5010	0.5079	-0.0753	0.0306	0.2137	-0.2300	-0.9329
69	35.57	0.01	7.2900	-6.7871	-0.6139	0.5917	-0.0210	0.0940	0.3260	-0.2319	-0.9283
70	35.82	-0.01	7.3610	-6.7803	-0.5015	0.4533	-0.0451	0.0880	0.3204	-0.2323	-0.9185
71	36.05	-0.00	7.4130	-6.7817	-0.3875	0.6716	-0.0280	0.0703	0.3223	-0.2459	-0.9300
72	36.27	0.01	7.4740	-6.7898	-0.4291	0.6039	-0.0198	0.0706	0.3226	-0.2521	-0.8906
73	36.52	-0.00	7.5093	-6.7839	-0.4535	0.3640	0.0048	0.0606	0.3201	-0.2592	-0.8819
74	36.75	0.02	7.5334	-6.7354	-0.1335	0.4449	0.0141	0.0734	0.3230	-0.2525	-0.8709
75	36.98	0.03	7.6010	-6.8263	0.0918	0.1152	0.0135	0.0606	0.3240	-0.2683	-0.8692
76	37.23	0.03	7.6345	-6.7616	0.3060	-0.1223	0.0529	0.0754	0.3304	-0.2589	-0.8518
77	37.49	0.03	8.0278	-6.8671	0.4049	-0.1163	0.0452	0.0775	0.3339	-0.2613	-0.8577
78	37.80	0.03	8.0793	-6.8763	0.3701	-0.0336	0.0377	0.0763	0.3349	-0.2605	-0.8333
79	37.93	0.04	8.1030	-6.7952	0.3450	-0.0219	0.0376	0.0661	0.3387	-0.2725	-0.8323
80	38.15	0.03	8.2630	-6.8140	0.4076	-0.0305	0.0460	0.0841	0.3436	-0.2594	-0.8246
81	38.38	0.03	8.2932	-6.7201	0.1912	0.1947	0.0381	0.0674	0.3432	-0.2727	-0.8103
82	38.62	0.02	8.3180	-6.7300	0.0307	0.3030	0.0221	0.0620	0.3422	-0.2801	-0.8028
83	38.89	0.03	8.3478	-6.8084	-0.1903	0.0920	-0.0081	0.0513	0.3436	-0.2923	-0.7841
84	39.04	0.02	8.3561	-6.7400	0.0089	0.4494	0.0133	0.0482	0.3347	-0.2804	-0.7885
85	39.27	-0.01	8.4102	-6.7467	-0.3151	0.7457	-0.0155	0.0319	0.3446	-0.3132	-0.7634
86	39.48	0.00	8.4240	-6.7504	-0.1819	0.7447	0.0	0.0400	0.3342	-0.2992	-0.7790
87	39.68	0.01	8.4330	-6.8395	-0.0774	0.6610	0.0501	0.0250	0.3339	-0.3109	-0.7832
88	39.90	0.00	8.4764	-6.8135	-0.1704	0.7333	-0.0373	0.0317	0.3333	-0.3066	-0.7763
89	40.11	0.00	8.5447	-7.0387	-0.2053	1.0169	-0.0156	0.0186	0.3367	-0.3181	-0.7869
90	40.31	-0.00	8.5949	-6.9515	-0.2696	1.0252	-0.0304	0.0101	0.3333	-0.3192	-0.7738
91	40.51	-0.01	8.6132	-7.0069	-0.4069	1.1492	-0.0305	0.0039	0.3258	-0.3219	-0.7758
92	40.71	-0.02	8.6874	-7.1437	-0.4910	1.1429	-0.0376	0.0091	0.3323	-0.3232	-0.7776

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 07 MACH 0.80 NO. 1.0 PHI 0.0 CONFIG BLNUFIN L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	LA	CAB	CAF	ACP
93	40.93	-0.00	9.2624	-7.1419	-0.2390	0.9903	-0.0140	0.0135	0.3432	-0.3297	-0.7694
94	41.13	0.01	9.4076	-7.2398	-0.0005	0.7913	0.0096	0.0088	0.3333	-0.3315	-0.7696
95	41.33	0.00	9.4332	-7.2753	-0.1503	0.9008	-0.0137	-0.0019	0.3342	-0.3401	-0.7712
96	41.53	-0.01	9.3911	-7.2746	-0.2069	0.7824	-0.0095	-0.0020	0.3284	-0.3314	-0.7630
97	41.73	0.01	9.3734	-7.2801	0.1429	0.6300	0.0261	0.0200	0.3412	-0.3212	-0.7613
98	41.93	-0.01	9.1412	-7.3217	-0.1071	0.4149	-0.0170	-0.0127	0.3339	-0.3402	-0.7512
99	42.13	-0.00	9.7044	-7.2397	-0.0030	0.5370	-0.0029	-0.0193	0.3325	-0.3518	-0.7399
100	42.31	-0.00	9.0367	-7.3858	-0.0809	0.4843	-0.0026	-0.0120	0.3400	-0.3400	-0.7512
101	42.49	-0.01	9.9159	-7.3935	-0.1000	0.5430	-0.0029	-0.0235	0.3270	-0.3245	-0.7456
102	42.66	-0.02	10.0199	-7.3913	-0.2103	0.2435	-0.0019	-0.0313	0.3252	-0.3265	-0.7267
103	42.83	-0.01	10.0947	-7.3970	-0.0034	0.1883	-0.0160	-0.0319	0.3247	-0.3566	-0.7328
104	43.03	-0.01	10.0020	-7.5194	0.0000	0.3703	-0.0013	-0.0325	0.3267	-0.3610	-0.7370
105	43.21	-0.00	10.2951	-7.5903	0.1043	0.3877	0.0066	-0.0403	0.3227	-0.3650	-0.7373
106	43.40	-0.02	10.3470	-7.4303	-0.0509	-0.0613	-0.0247	-0.0496	0.3242	-0.3748	-0.7189
107	43.57	-0.01	10.3912	-7.5107	0.0001	0.2405	-0.0076	-0.0363	0.3207	-0.3590	-0.7228
108	43.75	-0.00	10.4351	-7.4834	0.1636	-0.0041	-0.0064	-0.0519	0.3201	-0.3720	-0.7157
109	43.94	-0.01	10.3491	-7.3971	0.2059	0.0853	0.0225	-0.0291	0.3231	-0.3522	-0.7202
110	44.10	0.00	10.2520	-7.5407	0.1593	-0.1420	-0.0131	-0.0576	0.3197	-0.3793	-0.7126
111	44.30	0.02	10.7305	-7.6074	0.3405	0.3070	0.0310	-0.0245	0.3252	-0.3897	-0.7140
112	44.48	-0.00	10.0630	-7.3731	-0.1403	-0.2011	-0.0014	-0.0030	0.3190	-0.3852	-0.6916
113	44.66	-0.01	10.7302	-7.4315	0.1412	-0.1053	-0.0277	-0.0077	0.3197	-0.3874	-0.6921
114	44.84	-0.00	10.0307	-7.6709	0.1002	0.4474	0.0049	-0.0491	0.3197	-0.3620	-0.7071
115	45.02	-0.01	10.9252	-7.6458	0.1029	0.0527	0.0020	-0.0701	0.3218	-0.3919	-0.7002
116	45.19	0.00	10.9701	-7.5550	0.3314	-0.3030	-0.0190	-0.0000	0.3237	-0.3917	-0.6883
117	45.37	-0.02	11.0301	-7.5037	0.0047	-0.2003	-0.0206	-0.0734	0.3188	-0.3922	-0.6852
118	45.55	-0.02	11.0794	-7.4260	0.0908	-0.0304	-0.0330	-0.0693	0.3308	-0.4001	-0.6703
119	45.73	-0.01	11.2434	-7.6961	0.2410	-0.4102	-0.0102	-0.0870	0.3263	-0.4133	-0.6601
120	45.90	-0.00	11.2034	-7.7144	0.2795	-0.3225	-0.0102	-0.0907	0.3238	-0.4105	-0.6634
121	46.07	0.00	11.3795	-7.6405	0.3190	0.4030	0.0235	-0.0675	0.3417	-0.4042	-0.6597
122	46.24	-0.02	11.3410	-7.5314	0.1951	-0.3001	-0.0010	-0.0899	0.3213	-0.4114	-0.6640
123	46.41	-0.02	11.4525	-7.5597	0.3427	0.1130	-0.0256	-0.0872	0.3245	-0.4107	-0.6684
124	46.59	-0.00	11.5100	-7.7249	0.2922	0.2907	0.0040	-0.0000	0.3305	-0.4265	-0.6772
125	46.76	-0.02	11.3679	-7.6300	0.0900	0.4170	-0.0208	-0.0972	0.3340	-0.4311	-0.6774
126	46.94	-0.02	11.4251	-7.6339	0.0932	0.1321	-0.0405	-0.1119	0.3192	-0.4310	-0.6567
127	47.11	-0.02	11.6039	-7.7305	0.0030	0.0303	-0.0346	-0.1023	0.3256	-0.4378	-0.6622
128	47.23	-0.02	11.6043	-7.6937	0.1326	-0.4703	-0.0300	-0.1113	0.3100	-0.4278	-0.6576
129	47.45	-0.03	11.7042	-7.5219	0.0140	-0.0803	-0.0239	-0.1028	0.3320	-0.4347	-0.6427
130	47.61	-0.03	11.7000	-7.6199	-0.0707	0.7754	-0.0421	-0.0948	0.3479	-0.4422	-0.6408
131	47.78	-0.01	11.6279	-7.7032	0.1513	0.3107	-0.0175	-0.1005	0.3305	-0.4429	-0.6505
132	47.96	-0.01	11.6925	-7.7030	0.0453	0.1621	-0.0030	-0.0051	0.3317	-0.4106	-0.6500
133	48.13	-0.01	11.6901	-7.7032	0.1699	0.3094	-0.0018	-0.1097	0.3346	-0.4442	-0.6598
134	48.31	-0.01	11.6928	-7.7423	-0.0395	0.7506	0.0009	-0.0894	0.3552	-0.4398	-0.6465
135	48.48	-0.02	12.1134	-7.5292	0.0010	0.5855	-0.0245	-0.1082	0.3432	-0.4483	-0.6295
136	48.65	-0.01	12.1193	-7.7340	-0.0073	1.4050	-0.0279	-0.0853	0.3580	-0.4419	-0.6351
137	48.82	-0.02	12.0907	-7.6030	-0.1083	1.4953	-0.0247	-0.0849	0.3631	-0.4480	-0.6349
138	48.98	-0.01	12.2426	-7.7070	-0.0100	1.0091	-0.0133	-0.0800	0.3000	-0.4540	-0.6296

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 MNT MACH NAIO-6 PHI DEG OF L DELI DELA DELS DELR TRANSITION
of 3.00 1.7 0.0 BTHUP14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	LN	LLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	49.15	-0.002	12.4911	-1.0085	-0.0037	1.0343	-0.0215	-0.0935	0.3740	-0.4075	-0.6239
140	49.33	-0.002	12.5957	-1.0136	-0.1163	1.0200	-0.0240	-0.0931	0.3757	-0.4118	-0.6217
141	49.51	-0.002	12.4215	-1.0431	-0.1152	2.1765	-0.0249	-0.0951	0.3807	-0.4819	-0.6235
142	49.68	-0.002	12.4711	-1.0011	-0.1163	1.0382	-0.0264	-0.1040	0.3776	-0.4816	-0.6148
143	49.85	-0.002	12.5883	-1.0134	-0.1277	2.2731	-0.0252	-0.0983	0.4014	-0.5002	-0.6175
144	50.03	-0.001	12.6113	-1.0102	-0.0401	2.3549	-0.0402	-0.0829	0.4220	-0.4850	-0.6246
145	50.20	-0.002	12.6343	-1.0110	-0.1601	2.1543	-0.0443	-0.0990	0.4019	-0.5009	-0.6088
146	50.37	-0.000	12.7613	-1.0007	-0.0116	2.0302	-0.0624	-0.0504	0.4314	-0.4819	-0.6240
147	50.55	-0.000	12.6153	-0.9998	-0.0574	2.1718	-0.0525	-0.0477	0.4435	-0.4913	-0.6268
148	50.70	-0.001	12.8022	-1.0009	-0.1055	3.0372	-0.0784	-0.0412	0.4480	-0.4893	-0.6267
149	50.88	0.000	12.9796	-0.1401	0.0103	3.0002	-0.0704	-0.0411	0.4574	-0.4986	-0.6276
150	51.03	0.001	13.0033	-0.1170	0.0031	3.2582	-0.0700	-0.0363	0.4630	-0.4954	-0.6214
151	51.19	0.001	13.0734	-0.1413	0.1389	3.0053	-0.0858	-0.0223	0.4620	-0.4861	-0.6227
152	51.37	0.001	13.1263	-0.2099	0.0331	3.2034	-0.0702	-0.0312	0.4693	-0.5008	-0.6247
153	51.53	0.002	13.1253	-0.2536	0.1052	3.2112	-0.0734	-0.0320	0.4744	-0.5014	-0.6268
154	51.69	0.003	13.1002	-0.2952	0.2033	3.0300	0.0140	-0.0334	0.4765	-0.5120	-0.6141
155	51.87	0.003	13.2303	-0.2755	0.2342	3.2937	-0.0774	-0.0316	0.4815	-0.4833	-0.6231
156	52.04	0.003	13.3914	-0.2721	0.1301	3.1182	0.0210	-0.0316	0.4700	-0.5099	-0.6313
157	52.22	0.003	13.3099	-0.0303	0.2926	3.1940	0.0135	-0.0201	0.4704	-0.5028	-0.6454
158	52.38	0.004	13.4503	-0.2181	0.3019	3.4301	0.0129	-0.0152	0.4926	-0.5076	-0.6377
159	52.55	0.003	13.3772	-0.1729	0.2429	3.0504	0.0163	-0.0107	0.4521	-0.5106	-0.6417
160	52.73	0.004	13.3524	-0.2950	0.4040	3.7150	0.0122	-0.0060	0.4940	-0.5050	-0.6305
161	52.90	0.003	13.3363	-0.1623	0.2942	3.2308	-0.0029	0.0042	0.5076	-0.5054	-0.6379
162	53.06	0.004	13.4423	-0.2219	0.4193	4.0037	0.0122	0.0235	0.5016	-0.4821	-0.6227
163	53.25	0.010	14.0377	-0.4967	1.1850	3.9449	0.0129	0.0200	0.5097	-0.4837	-0.6048
164	53.40	0.004	13.4711	-0.4370	1.0231	3.8980	0.0123	0.0231	0.5066	-0.4835	-0.6067
165	53.56	0.006	13.4149	-0.3034	0.9930	4.0343	0.0151	0.0244	0.5035	-0.4790	-0.6065
166	53.74	0.006	13.4330	-0.3043	0.9577	3.9030	0.0141	0.0137	0.5031	-0.4894	-0.6141
167	53.93	0.010	13.5001	-0.3504	1.1000	4.1201	0.0139	0.0020	0.4959	-0.4939	-0.6065
168	54.09	0.009	13.5014	-0.3780	0.9002	4.0013	0.0260	-0.0240	0.4774	-0.5013	-0.6113
169	54.25	0.009	13.5993	-0.4307	0.9990	4.0300	0.0268	-0.0151	0.4736	-0.4935	-0.6028
170	54.43	0.009	13.6001	-0.3719	0.8100	4.0410	0.0247	-0.0103	0.4700	-0.4950	-0.6099
171	54.61	0.009	13.7195	-0.3549	0.8091	4.0003	0.0230	-0.0429	0.4735	-0.5165	-0.6072
172	54.74	0.009	13.6901	-0.4553	0.8174	4.0050	0.0231	-0.0230	0.4700	-0.5017	-0.6058
173	54.90	0.010	13.6913	-0.4071	1.0137	4.0372	0.0247	-0.0035	0.4704	-0.4749	-0.6070
174	55.07	0.008	13.8629	-0.4357	0.8013	4.0412	0.0300	-0.0038	0.4744	-0.4906	-0.6078
175	55.19	0.010	13.8193	-0.4431	1.1455	3.9936	0.0310	-0.0128	0.4716	-0.4847	-0.6035
176	55.37	0.009	13.8304	-0.4753	0.9478	4.0541	0.0304	-0.0235	0.4704	-0.5025	-0.6171
177	55.54	0.009	13.8043	-0.3913	0.8961	4.0341	0.0320	-0.0108	0.4704	-0.4953	-0.6102
178	55.70	0.010	13.7813	-0.4141	1.0046	4.0151	0.0325	-0.0314	0.4718	-0.5093	-0.6002
179	55.87	0.008	13.8499	-0.3101	0.8063	4.0022	0.0331	-0.0152	0.4749	-0.4914	-0.6069
180	56.04	0.009	13.8316	-0.4995	1.0490	4.0985	0.0330	-0.0140	0.4703	-0.4894	-0.6032
181	56.18	0.008	13.8454	-0.1371	0.9419	3.9218	0.0345	-0.0193	0.4688	-0.4862	-0.5992
182	56.34	0.009	13.8401	-0.1063	1.0048	3.9903	0.0350	-0.0203	0.4673	-0.4957	-0.5933
183	56.51	0.011	13.8312	-0.3330	1.0300	3.8909	0.0344	-0.0219	0.4734	-0.5014	-0.6137
184	56.64	0.008	13.8050	-0.1432	0.9478	3.8854	0.0352	-0.0354	0.4682	-0.4741	-0.5989

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 5 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 .97 0.80 1.7 30.0 CLEAN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CL	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
185	56.51	0.04	15.3007	-0.2366	1.0746	3.3277	0.0371	-0.0150	0.4092	-0.4679	-0.6017
186	56.96	0.03	15.3122	-0.1157	1.0001	3.0101	0.0323	-0.0264	0.4033	-0.4923	-0.5933
187	57.12	0.04	15.3105	-0.2057	1.0020	3.1465	0.0360	-0.0317	0.4073	-0.4941	-0.5974
188	57.45	0.04	15.3028	-0.0873	1.0033	3.0504	0.0326	-0.0436	0.4027	-0.5080	-0.5938
189	57.91	0.06	15.4401	-0.1891	0.9305	3.1409	0.0384	-0.0260	0.4043	-0.4904	-0.5951
190	57.97	0.04	15.3333	-0.0172	1.1301	3.0242	0.0369	-0.0405	0.4002	-0.5008	-0.5805
191	57.70	0.07	15.3731	-0.0450	1.0072	2.9020	0.0367	-0.0330	0.4592	-0.4923	-0.5884
192	24.06	0.06	15.4471	-0.2153	1.0906	2.4220	0.0333	-0.0332	0.4592	-0.4945	-0.5911
193	58.00	0.04	15.4933	-0.0308	0.8802	2.7408	0.0403	-0.0328	0.4577	-0.4904	-0.5833
194	58.15	0.06	15.5108	-0.0423	0.8004	2.7914	0.0399	-0.0610	0.4537	-0.5108	-0.5759
195	58.20	0.07	15.5710	-0.0025	1.0710	2.6423	0.0408	-0.0482	0.4532	-0.5015	-0.5856
196	58.31	0.07	15.5740	-0.0342	1.0104	2.6437	0.0405	-0.0368	0.4582	-0.4951	-0.5948

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-G PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 .87 0.000 1.0 0.0 STANDARD 0.0 0 0 0 0 UNKNOWN

PLOT	ALPHA	BETA	CNF1	CM1	CA1	ALPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-5.07	0.01	0.0260	0.0	0.0092	0.0	0.3950	-0.2422	-0.0016	-0.0968	0.0066	0.3957
2	-5.08	0.01	0.0178	0.0	0.0069	0.0	0.3978	-0.2459	-0.0016	-0.0986	0.0065	0.4010
3	-5.08	-0.00	0.0178	0.0	0.0083	0.0	0.4716	-0.2491	-0.0016	-0.0980	0.0064	0.3934
4	-5.08	0.01	0.0223	0.0	0.0080	0.0	0.3911	-0.2499	-0.0015	-0.0967	0.0061	0.3949
5	-5.08	-0.00	0.0226	0.0	0.0081	0.0	0.3984	-0.2491	-0.0014	-0.0966	0.0058	0.3974
6	-5.08	0.00	0.0179	0.0	0.0071	0.0	0.3900	-0.2469	-0.0015	-0.0967	0.0061	0.3949
7	-5.08	-0.00	0.0259	0.0	0.0092	0.0	0.3908	-0.2413	-0.0015	-0.0950	0.0062	0.3937
8	-5.08	0.00	0.0229	0.0	0.0093	0.0	0.3924	-0.2449	-0.0016	-0.0967	0.0065	0.3949
9	-5.08	-0.00	0.0227	0.0	0.0079	0.0	0.3900	-0.2412	-0.0015	-0.0957	0.0062	0.3968
10	-5.08	-0.00	0.0227	0.0	0.0074	0.0	0.3900	-0.2394	-0.0015	-0.0955	0.0063	0.3989
11	-5.08	-0.00	0.0225	0.0	0.0080	0.0	0.3911	-0.2407	-0.0016	-0.0970	0.0063	0.3956
12	-5.08	-0.00	0.0240	0.0	0.0091	0.0	0.4042	-0.2371	-0.0014	-0.0937	0.0059	0.3952
13	-5.08	0.00	0.0223	-0.0001	0.0095	-0.0000	0.4200	-0.2401	-0.0016	-0.0975	0.0067	0.4061
14	-5.07	-0.00	0.0242	0.0	0.0077	0.0	0.4010	-0.2439	-0.0015	-0.0963	0.0061	0.3948
15	-5.08	-0.00	0.0229	0.0	0.0086	0.0	0.3929	-0.2384	-0.0013	-0.0951	0.0055	0.3989
16	-5.08	-0.00	0.0230	0.0	0.0086	0.0	0.4135	-0.2384	-0.0014	-0.0951	0.0059	0.3989
17	-5.08	-0.00	0.0237	-0.0001	0.0091	-0.0000	0.3541	-0.2420	-0.0014	-0.0963	0.0058	0.4062
18	-5.08	0.00	0.0225	0.0	0.0081	0.0	0.3900	-0.2402	-0.0016	-0.0946	0.0067	0.3938
19	-5.08	0.00	0.0240	0.0	0.0097	0.0	0.4042	-0.2402	-0.0014	-0.0953	0.0058	0.3968
20	-5.08	0.00	0.0240	0.0	0.0097	0.0	0.4042	-0.2403	-0.0015	-0.0940	0.0062	0.3937
21	-5.08	-0.00	0.0250	0.0	0.0106	0.0	0.4141	-0.2381	-0.0015	-0.0923	0.0065	0.3996
22	-5.08	0.01	0.0242	0.0	0.0077	0.0	0.4010	-0.2384	-0.0013	-0.0876	0.0060	0.4011
23	-4.59	0.00	0.0193	-0.0003	0.0070	-0.0155	0.3627	-0.1634	-0.0003	-0.0655	0.0018	0.3996
24	-2.61	-0.00	0.0193	-0.0003	0.0070	-0.0135	0.3627	-0.0912	0.0003	-0.0346	-0.0033	0.3794
25	-3.99	0.01	0.0178	-0.0003	0.0054	-0.0109	0.3034	-0.0923	0.0004	-0.0050	-0.0095	0.1182
26	0.80	0.01	0.0102	-0.0004	0.0045	-0.0247	0.2778	0.0046	0.0006	0.0186	0.1304	4.0435
27	2.13	0.00	0.0104	-0.0007	0.0030	-0.0421	0.1629	0.0622	0.0006	0.0536	0.0096	0.8658
28	4.59	0.00	0.0100	-0.0009	0.0043	-0.0542	0.1366	0.1418	0.0013	0.0867	0.0092	0.6114
29	6.98	0.00	0.0154	-0.0006	0.0030	-0.0466	0.1829	0.2341	0.0031	0.1200	0.0132	0.5126
30	8.29	0.00	0.0183	-0.0014	0.0029	-0.0690	0.1758	0.3212	0.0054	0.1434	0.0168	0.4465
31	10.03	0.00	0.0163	-0.0023	0.0033	-0.1212	0.2121	0.4027	0.0087	0.1636	0.0216	0.4063
32	11.92	0.00	0.0164	-0.0021	0.0048	-0.1200	0.2927	0.5059	0.0135	0.1864	0.0267	0.3665
33	13.72	0.00	0.0183	-0.0021	0.0038	-0.1820	0.3430	0.5962	0.0180	0.2025	0.0314	0.3385
34	15.00	0.00	0.0239	-0.0013	0.0029	-0.1515	0.2929	0.6959	0.0237	0.2227	0.0341	0.3200
35	17.22	-0.00	0.0263	-0.0045	0.0135	-0.2010	0.0054	0.7791	0.0285	0.2403	0.0366	0.3084
36	19.37	-0.00	-0.0001	-0.0114	0.0106	10.2835	-26.0000	0.8402	0.0337	0.2551	0.0401	0.3012
37	21.23	0.00	-0.0031	-0.0055	0.0031	0.8172	-0.3827	0.9451	0.0400	0.2718	0.0423	0.2876
38	23.07	0.01	-0.0003	-0.0016	0.0034	2.6602	-11.3333	1.0074	0.0470	0.2872	0.0466	0.2845
39	24.94	0.01	-0.0022	0.0	-0.0291	0.0	0.4035	1.0201	0.0545	0.2985	0.0516	0.2732
40	26.84	0.01	-0.0239	0.0034	-0.0199	-0.2307	0.8504	1.0038	0.0632	0.2826	0.0594	0.2657
41	28.23	0.01	-0.0000	0.0033	-0.0127	-0.3437	21.5000	1.1310	0.0614	0.2648	0.0558	0.2567
42	28.24	0.01	0.0209	0.0029	-0.0004	0.1498	-0.0378	1.1142	0.0611	0.2643	0.0549	0.2556
43	28.10	0.03	0.0263	0.0023	0.0204	0.0200	0.3205	1.1327	0.0631	0.2837	0.0557	0.2505
44	28.99	0.03	0.1039	0.0023	0.0374	0.0217	0.3532	1.1400	0.0630	0.2857	0.0553	0.2506
45	29.26	0.04	0.1393	0.0021	0.0459	0.0154	0.3649	1.1473	0.0636	0.2849	0.0554	0.2483
46	29.59	0.00	0.1758	0.0049	0.0547	0.0109	0.3751	1.1546	0.0603	0.2799	0.0574	0.2425

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 4 OF 3
SHEET 2 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RAIO-G	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	+7	0.60	1.1	0.0	31=0F14	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	ACPF1	YCPF1	CNF2	CM2	CB2	ACPF2	YCPF2
47	29.88	0.01	0.2506	0.0006	0.0943	0.0256	0.3080	1.1566	0.0000	0.2799	0.0575	0.2416
48	30.15	0.01	0.2540	0.0006	0.1173	0.0274	0.3736	1.1624	0.0000	0.2773	0.0573	0.2386
49	30.42	0.00	0.2504	0.0001	0.1205	0.0275	0.3047	1.1754	0.0001	0.2791	0.0562	0.2375
50	30.69	0.01	0.2478	0.0003	0.1247	0.0281	0.3009	1.1791	0.0000	0.2780	0.0565	0.2358
51	30.97	0.01	0.2510	0.0000	0.1134	0.0299	0.3548	1.1865	0.0000	0.2786	0.0561	0.2348
52	31.23	0.01	0.2490	0.0000	0.1130	0.0217	0.3707	1.1867	0.0000	0.2786	0.0554	0.2348
53	31.51	0.00	0.2736	0.0020	0.1045	0.0293	0.3817	1.1948	0.0000	0.2847	0.0552	0.2383
54	31.79	0.00	0.2494	-0.0007	0.1030	-0.0108	0.4134	1.2000	0.0002	0.2860	0.0535	0.2399
55	32.06	0.00	0.2155	-0.0004	0.0941	-0.0100	0.4307	1.1952	0.0000	0.2874	0.0552	0.2405
56	32.32	0.00	0.2173	-0.0004	0.0969	-0.0106	0.4405	1.1942	0.0001	0.2822	0.0540	0.2383
57	32.59	0.00	0.2110	-0.0006	0.0910	-0.0205	0.4351	1.1952	0.0000	0.2800	0.0535	0.2393
58	32.85	0.00	0.2098	-0.0004	0.0870	-0.0239	0.4298	1.2005	0.0000	0.2808	0.0526	0.2381
59	33.10	0.00	0.1902	-0.0007	0.0840	-0.0293	0.4312	1.1926	0.0000	0.2832	0.0536	0.2375
60	33.30	0.00	0.2020	-0.0107	0.0940	-0.0528	0.4040	1.1960	0.0000	0.2786	0.0528	0.2357
61	33.61	0.00	0.2097	-0.0009	0.0972	-0.0103	0.4055	1.2111	0.0000	0.2855	0.0523	0.2357
62	33.88	0.00	0.1934	-0.0001	0.0819	-0.0315	0.4293	1.2090	0.0000	0.2819	0.0519	0.2341
63	34.11	0.00	0.2042	-0.0000	0.0900	-0.0124	0.4303	1.2193	0.0001	0.2858	0.0526	0.2346
64	34.35	0.01	0.2090	-0.0004	0.0952	-0.0021	0.3804	1.2227	0.0002	0.2869	0.0533	0.2346
65	34.60	0.00	0.1852	0.0000	0.0807	0.0052	0.3533	1.2333	0.0002	0.2887	0.0545	0.2341
66	34.85	0.02	0.2050	0.0004	0.0872	0.0232	0.2976	1.2341	0.0000	0.2870	0.0551	0.2320
67	35.09	0.01	0.1898	0.0003	-0.0028	-0.2676	1.0505	1.2441	0.0003	0.2846	0.0565	0.2272
68	35.34	-0.01	-0.1430	0.0003	-0.0073	-0.0438	0.3328	1.2384	0.0002	0.2856	0.0550	0.2305
69	35.57	0.01	-0.1493	0.0000	-0.0006	-0.0462	0.4007	1.2470	0.0002	0.2838	0.0555	0.2276
70	35.82	-0.01	-0.0950	0.0006	-0.0075	-0.0031	0.0033	1.2544	0.0004	0.2844	0.0549	0.2267
71	36.05	-0.00	-0.1014	0.0004	-0.0592	-0.0730	0.5838	1.2514	0.0738	0.2854	0.0566	0.2281
72	36.27	0.01	-0.0970	0.0054	-0.0494	-0.0447	0.7175	1.2552	0.0004	0.2857	0.0557	0.2276
73	36.52	-0.00	-0.0960	0.0048	-0.0027	-0.1212	0.6256	1.2523	0.0706	0.2851	0.0564	0.2277
74	36.75	0.02	0.0179	0.0047	-0.0120	0.2701	-0.7241	1.2591	0.0004	0.2866	0.0551	0.2276
75	36.97	0.03	0.0594	0.0051	-0.0037	0.1294	-0.0950	1.2572	0.0004	0.2851	0.0556	0.2268
76	37.23	0.03	0.0241	0.0034	-0.0036	0.0254	0.2416	1.2509	0.0710	0.2859	0.0565	0.2275
77	37.45	0.03	0.0170	0.0034	0.0010	0.0200	0.2492	1.2636	0.0709	0.2862	0.0562	0.2270
78	37.68	0.03	0.0234	0.0040	0.0027	0.0343	0.2442	1.2517	0.0705	0.2847	0.0563	0.2275
79	37.93	0.04	0.0173	0.0043	0.0065	0.0353	0.2396	1.2524	0.0714	0.2844	0.0570	0.2271
80	38.19	0.03	0.0132	0.0040	0.0039	0.0220	0.2473	1.2545	0.0690	0.2873	0.0550	0.2290
81	38.38	0.03	0.0081	0.0036	0.0003	0.0454	0.1250	1.2549	0.0700	0.2835	0.0556	0.2250
82	38.62	0.02	0.0144	0.0048	-0.0037	0.0333	-0.0703	1.2651	0.0709	0.2855	0.0560	0.2257
83	38.84	0.00	-0.0007	0.0041	-0.0081	-0.0712	0.2299	1.2579	0.0717	0.2814	0.0570	0.2237
84	39.04	0.02	0.0019	0.0030	-0.0029	0.0262	-11.7893	1.2724	0.0711	0.2854	0.0559	0.2243
85	39.27	-0.01	-0.0059	0.0057	-0.0060	-0.1242	1.0300	1.2652	0.0738	0.2848	0.0580	0.2251
86	39.49	0.00	-0.0062	0.0053	-0.0036	-0.1387	1.1414	1.2688	0.0732	0.2872	0.0553	0.2264
87	39.68	0.01	-0.0070	0.0049	-0.0059	-0.1069	0.9043	1.2694	0.0723	0.2834	0.0569	0.2233
88	39.90	0.00	-0.0075	0.0018	-0.0016	-0.2278	3.9994	1.2681	0.0734	0.2822	0.0559	0.2240
89	40.11	0.00	-0.0970	0.0059	-0.0705	-0.0557	0.7268	1.2742	0.0713	0.2856	0.0559	0.2241
90	40.31	-0.00	-0.1147	0.0073	-0.0725	-0.0810	0.8284	1.2742	0.0712	0.2863	0.0559	0.2247
91	40.51	-0.01	-0.1221	0.0064	-0.0013	-0.0524	0.6858	1.2834	0.0702	0.2877	0.0547	0.2242
92	40.71	-0.02	-0.1300	0.0078	-0.0095	-0.0529	0.8281	1.2852	0.0700	0.2899	0.0545	0.2256

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NAIL-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSATION
7 47 0.60 1.61 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF1	CM1	CA1	ALPF1	YCPF1	CNF2	CM2	CA2	ALPF2	YCPF2
93	40.93	-0.00	-0.1034	0.0359	-0.0725	-0.0571	0.7012	1.2852	0.0702	0.2885	0.0546	0.2245
94	41.13	0.01	-0.0804	0.0348	-0.0521	-0.0423	0.7546	1.2816	0.0702	0.2868	0.0548	0.2238
95	41.33	0.00	-0.0695	0.0343	-0.0443	-0.0358	0.7184	1.2923	0.0704	0.2891	0.0545	0.2237
96	41.34	-0.01	-0.0498	0.0363	-0.0313	-0.1243	1.0334	1.2851	0.0710	0.2871	0.0552	0.2234
97	41.73	0.01	-0.0259	0.0335	-0.0415	-0.1170	1.0880	1.2853	0.0696	0.2885	0.0541	0.2245
98	41.93	-0.01	-0.0594	0.0379	-0.0505	-0.1330	1.0185	1.3040	0.0685	0.2934	0.0533	0.2254
99	42.13	-0.00	-0.0311	0.0343	-0.0470	-0.1343	1.0113	1.2914	0.0703	0.2887	0.0544	0.2236
100	42.31	-0.00	-0.0453	0.0363	-0.0363	-0.1059	1.1325	1.3058	0.0694	0.2946	0.0531	0.2258
101	42.49	-0.01	-0.0571	0.0382	-0.0472	-0.1071	0.9879	1.3074	0.0707	0.2929	0.0541	0.2240
102	42.68	-0.02	-0.0513	0.0363	-0.0363	-0.0838	1.0975	1.3194	0.0684	0.2976	0.0518	0.2256
103	42.85	-0.01	-0.0510	0.0357	-0.0334	-0.1135	1.0736	1.3159	0.0705	0.2946	0.0536	0.2239
104	43.03	-0.01	-0.0290	0.0320	-0.0440	-0.0870	1.0392	1.3121	0.0692	0.2942	0.0527	0.2242
105	43.21	-0.00	-0.0353	0.0321	-0.0401	-0.0587	1.2877	1.3158	0.0698	0.2960	0.0530	0.2250
106	43.40	-0.02	-0.0418	0.0320	-0.0305	-0.0478	1.2111	1.3170	0.0678	0.2974	0.0513	0.2257
107	43.57	-0.01	-0.0375	0.0329	-0.0353	-0.0200	4.7307	1.3156	0.0693	0.2974	0.0527	0.2261
108	43.75	-0.00	-0.0163	0.0303	-0.0377	-0.2190	3.2905	1.3301	0.0688	0.3014	0.0517	0.2266
109	43.94	0.01	-0.0343	-0.0001	-0.0326	0.0233	1.4419	1.3067	0.0679	0.2953	0.0519	0.2256
110	44.10	0.00	-0.0249	0.0342	-0.0344	-0.0803	1.0027	1.3377	0.0665	0.3040	0.0497	0.2273
111	44.30	0.02	-0.0157	-0.0307	-0.0322	0.0466	2.0784	1.3195	0.0680	0.2969	0.0515	0.2250
112	44.48	-0.03	-0.0303	0.0334	-0.0315	-0.0278	1.0459	1.3348	0.0647	0.3009	0.0483	0.2291
113	44.66	-0.01	-0.0402	0.0367	-0.0313	-0.0721	1.2761	1.3345	0.0642	0.3043	0.0481	0.2280
114	44.84	-0.00	-0.0357	-0.0343	-0.0400	0.0418	0.8141	1.3269	0.0658	0.3010	0.0503	0.2268
115	45.02	-0.01	-0.0380	-0.0344	-0.0425	0.0111	1.1006	1.3369	0.0659	0.3036	0.0493	0.2271
116	45.19	0.00	-0.0359	-0.0316	-0.0420	0.0496	1.1099	1.3373	0.0636	0.3048	0.0477	0.2279
117	45.37	-0.02	-0.0449	0.0362	-0.0420	-0.0345	1.1359	1.3520	0.0624	0.3088	0.0461	0.2284
118	45.55	-0.02	-0.0193	0.0344	-0.0419	-0.0303	2.1102	1.3306	0.0637	0.3064	0.0456	0.2306
119	45.73	-0.01	-0.0045	0.0314	-0.0324	-0.0329	14.0400	1.3485	0.0614	0.3106	0.0455	0.2303
120	45.90	-0.00	-0.0065	0.0345	-0.0357	-0.0362	4.0337	1.3530	0.0628	0.3101	0.0465	0.2297
121	46.07	0.00	-0.0424	-0.0304	-0.0434	0.0064	1.0354	1.3374	0.0630	0.3062	0.0471	0.2290
122	46.24	-0.02	-0.0414	0.0324	-0.0340	-0.0183	30.9341	1.3374	0.0632	0.3062	0.0472	0.2290
123	46.41	-0.02	-0.0071	-0.0304	-0.0355	0.0060	0.8460	1.3399	0.0630	0.3053	0.0470	0.2279
124	46.59	-0.00	-0.0399	0.0314	-0.0324	-0.0234	0.8301	1.3196	0.0625	0.3012	0.0475	0.2288
125	46.76	-0.02	-0.0443	-0.0311	-0.0453	0.0114	0.7075	1.3452	0.0629	0.3043	0.0468	0.2299
126	46.94	-0.02	-0.0493	-0.0305	-0.0434	0.0058	0.7100	1.3547	0.0621	0.3140	0.0457	0.2309
127	47.11	-0.02	-0.0321	-0.0311	-0.0436	0.0303	0.5738	1.3418	0.0625	0.3076	0.0466	0.2292
128	47.28	-0.02	-0.0484	-0.0313	-0.0376	0.0194	0.8320	1.3269	0.0605	0.3128	0.0447	0.2311
129	47.45	-0.03	-0.0218	-0.0309	-0.0319	0.0133	0.7004	1.3436	0.0627	0.3070	0.0467	0.2285
130	47.61	-0.03	-0.0178	-0.0303	-0.0341	0.0303	0.5303	1.3418	0.0618	0.3097	0.0461	0.2308
131	47.78	-0.01	-0.0481	0.0307	-0.0403	-0.0144	0.9507	1.3455	0.0619	0.3093	0.0460	0.2299
132	47.96	-0.01	-0.0612	-0.0308	-0.0331	0.0050	0.5135	1.3087	0.0606	0.3014	0.0463	0.2303
133	48.13	-0.01	-0.0334	-0.0312	-0.0374	0.0168	0.0113	1.3444	0.0602	0.3068	0.0470	0.2282
134	48.31	-0.01	-0.0420	-0.0313	-0.0375	0.0071	0.4013	1.2927	0.0595	0.2988	0.0460	0.2310
135	48.48	-0.02	-0.1309	0.0305	-0.0716	-0.0037	0.5264	1.3235	0.0536	0.3062	0.0450	0.2314
136	48.65	-0.01	-0.0243	-0.0309	-0.0327	0.0144	0.4312	1.3053	0.0594	0.3032	0.0453	0.2323
137	48.82	-0.02	-0.0231	-0.0298	-0.0363	0.0215	0.4406	1.2811	0.0536	0.3007	0.0418	0.2347
138	48.98	-0.01	-0.1935	-0.0305	-0.0635	0.0264	0.4345	1.3197	0.0576	0.3059	0.0452	0.2318

PAGE 4 OF 3
SHEET 4 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 47 0.80 1.7 0.0 BINORM 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CAF1	CM1	CN1	ALPF1	YCPF1	CAF2	CM2	CN2	ALPF2	YCPF2
139	49.13	-0.02	-0.02239	-0.0340	-0.0320	0.0179	0.4136	1.2985	0.0505	0.3045	0.0435	0.2345
140	49.33	-0.02	-0.02331	-0.0350	-0.0371	0.0200	0.3862	1.2821	0.0516	0.3032	0.0404	0.2365
141	49.51	-0.02	-0.02116	-0.0331	-0.0384	0.0140	0.4179	1.3047	0.0508	0.3062	0.0435	0.2347
142	49.03	-0.02	-0.02420	-0.0363	-0.0366	0.0178	0.4000	1.2941	0.0521	0.3052	0.0426	0.2358
143	49.83	-0.02	-0.02489	-0.0367	-0.0360	0.0269	0.3857	1.2980	0.0536	0.3080	0.0413	0.2371
144	50.03	-0.01	-0.02483	-0.0365	-0.0368	0.0298	0.3847	1.3048	0.0499	0.3102	0.0382	0.2400
145	50.20	-0.02	-0.02508	-0.0364	-0.0341	0.0235	0.3752	1.2931	0.0550	0.3054	0.0425	0.2362
146	50.37	-0.00	-0.02110	-0.0159	-0.0309	0.0511	0.3405	1.2237	0.0494	0.3201	0.0343	0.2418
147	50.53	-0.00	-0.02090	-0.0178	-0.0149	0.0369	0.3529	1.2536	0.0492	0.3200	0.0336	0.2432
148	50.70	-0.01	-0.02491	-0.0159	-0.0000	0.0491	0.3289	1.2385	0.0490	0.3277	0.0321	0.2448
149	50.88	0.00	-0.02510	-0.0151	-0.0070	0.0033	0.3243	1.2369	0.0413	0.3327	0.0304	0.2452
150	51.03	0.01	-0.02170	-0.0043	-0.0276	0.0734	0.3073	1.2322	0.0374	0.3341	0.0277	0.2471
151	51.19	0.01	-0.02691	-0.0230	-0.0009	0.0816	0.3006	1.2691	0.0345	0.3369	0.0252	0.2475
152	51.37	0.01	-0.02030	-0.0200	-0.0004	0.0700	0.3030	1.2367	0.0326	0.3350	0.0240	0.2466
153	51.53	0.02	-0.02583	-0.0227	-0.0179	0.0877	0.3010	1.2735	0.0236	0.3432	0.0217	0.2499
154	51.69	0.03	-0.01750	-0.0143	-0.0343	0.0700	0.3084	1.2471	0.0090	0.3269	0.0069	0.2520
155	51.87	0.03	-0.01913	-0.0152	-0.0330	0.0770	0.3294	1.2536	0.0145	0.3376	0.0109	0.2529
156	52.04	0.00	-0.02084	-0.0026	-0.0014	0.0174	0.3724	1.2021	0.0033	0.3177	0.0026	0.2517
157	52.22	0.01	-0.02082	-0.0021	-0.0155	0.0131	0.3620	1.2057	0.0073	0.3166	0.0058	0.2501
158	52.38	0.01	-0.01750	-0.0049	-0.0002	0.0230	0.3760	1.2491	-0.0011	0.3180	-0.0009	0.2530
159	52.55	0.00	-0.02270	-0.0004	-0.0196	0.0282	0.3515	1.2014	0.0015	0.3105	0.0012	0.2509
160	52.73	0.01	-0.01990	-0.0165	-0.0051	0.0539	0.3395	1.2399	-0.0051	0.3149	-0.0041	0.2536
161	52.90	0.00	-0.02024	-0.0100	-0.0094	0.0494	0.3429	1.2000	-0.0000	0.3224	-0.0052	0.2559
162	53.08	0.01	-0.01529	-0.0149	-0.0034	0.0174	0.3196	1.2509	-0.0090	0.3227	-0.0072	0.2567
163	53.23	0.00	-0.01770	-0.0152	-0.0300	0.1290	0.3129	1.2498	-0.0089	0.3214	-0.0071	0.2572
164	53.40	0.00	-0.12061	-0.0143	-0.0027	0.0910	0.3370	1.2490	-0.0037	0.3185	-0.0070	0.2559
165	53.58	0.00	-0.12200	-0.0117	-0.0450	0.0900	0.3175	1.2485	-0.0093	0.3210	-0.0074	0.2571
166	53.74	0.00	-0.02493	-0.0153	-0.0203	0.0287	0.3401	1.2796	-0.0114	0.3221	-0.0088	0.2595
167	53.93	0.10	-0.00990	-0.0170	-0.0243	0.3427	0.4899	1.2500	-0.0105	0.3251	-0.0084	0.2588
168	54.09	0.05	-0.01109	-0.0256	-0.0271	0.4203	0.3022	1.2493	-0.0105	0.3213	-0.0085	0.2591
169	54.25	0.09	-0.01555	-0.0255	-0.0250	0.4764	0.4090	1.2120	-0.0094	0.3128	-0.0078	0.2581
170	54.43	0.05	-0.00930	-0.0271	-0.0191	0.0074	0.4704	1.1999	-0.0101	0.3136	-0.0084	0.2614
171	54.61	0.09	-0.01401	-0.0327	-0.0191	0.0797	0.4096	1.2111	-0.0109	0.3150	-0.0090	0.2584
172	54.79	0.09	-0.00930	-0.0279	-0.0192	0.0809	0.4304	1.2028	-0.0109	0.3172	-0.0089	0.2598
173	54.90	0.10	-0.00923	-0.0301	-0.0170	0.7115	0.4208	1.2304	-0.0110	0.3220	-0.0089	0.2617
174	55.07	0.08	-0.01342	-0.0291	-0.0160	0.7422	0.4235	1.2201	-0.0111	0.3212	-0.0090	0.2614
175	55.19	0.10	-0.01920	-0.0294	-0.0150	0.6930	0.3882	1.2269	-0.0109	0.3196	-0.0089	0.2605
176	55.37	0.09	-0.01929	-0.0290	-0.0183	0.8827	0.4200	1.2451	-0.0113	0.3254	-0.0091	0.2613
177	55.54	0.09	-0.01902	-0.0225	-0.0157	0.7449	0.5199	1.2579	-0.0116	0.3315	-0.0092	0.2635
178	55.70	0.10	-0.01930	-0.0279	-0.0135	0.8093	0.4091	1.2490	-0.0116	0.3279	-0.0093	0.2632
179	55.87	0.08	-0.01970	-0.0220	-0.0139	0.8309	0.5140	1.2625	-0.0124	0.3335	-0.0098	0.2642
180	56.00	0.09	-0.01901	-0.0242	-0.0134	0.8039	0.4018	1.2515	-0.0117	0.3283	-0.0093	0.2623
181	56.18	0.08	-0.01974	-0.0219	-0.0084	2.3295	0.8938	1.2569	-0.0117	0.3324	-0.0093	0.2645
182	56.34	0.09	-0.01937	-0.0217	-0.0134	0.9133	0.5034	1.2033	-0.0125	0.3318	-0.0099	0.2622
183	56.51	0.11	-0.01157	-0.0211	-0.0117	1.3458	0.7452	1.2033	-0.0129	0.3341	-0.0100	0.2642
184	56.69	0.08	-0.01914	-0.0214	-0.0119	1.2182	0.6839	1.2750	-0.0122	0.3375	-0.0096	0.2647

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO PHI CONF L DELA DELC DELS DELA TRANSITION
7 47 0.60 1.7 3.0 BINOPAN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	ALPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
103	58.01	0.00	-0.0005	-0.0119	-0.0126	1.0340	1.0340	1.2831	-0.0119	0.3376	-0.0093	0.2631
106	58.00	0.00	-0.0028	-0.0173	-0.0190	0.6730	0.5736	1.2690	-0.0131	0.3360	-0.0103	0.2646
107	57.16	0.00	-0.0193	-0.0309	-0.0190	0.8490	0.7305	1.2825	-0.0133	0.3399	-0.0104	0.2650
108	57.25	0.00	-0.0110	-0.0277	-0.0126	1.0030	1.0495	1.2779	-0.0133	0.3376	-0.0104	0.2642
109	57.41	0.00	-0.0040	-0.0149	-0.0113	0.9213	0.8750	1.2778	-0.0128	0.3396	-0.0100	0.2659
110	57.51	0.00	0.0000	-0.0090	-0.0086	-2.0349	-2.1500	1.2814	-0.0128	0.3408	-0.0100	0.2660
111	57.70	0.00	0.0022	-0.0091	-0.0086	-1.0340	-0.9041	1.2822	-0.0127	0.3411	-0.0099	0.2660
112	57.80	0.00	0.0023	-0.0072	-0.0069	-0.2219	-0.0277	1.2874	-0.0121	0.3466	-0.0093	0.2653
113	58.00	0.00	0.0040	-0.0070	-0.0072	-0.9599	-1.3143	1.2911	-0.0124	0.3433	-0.0096	0.2659
114	58.15	0.00	0.0027	-0.0038	-0.0045	-0.2021	-0.1825	1.2984	-0.0125	0.3439	-0.0096	0.2649
115	58.28	0.01	0.0016	-0.0038	-0.0062	-0.1714	-0.2952	1.3028	-0.0126	0.3466	-0.0097	0.2660
116	58.31	0.01	0.0197	-0.0001	-0.0062	-0.3090	-0.3141	1.3083	-0.0148	0.3505	-0.0113	0.2679

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 97 0.60 1.7 0.0 BLNDF14 0.0 0 0 3 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
1	-5.67	0.01	-0.0176	0.0000	0.0139	0.0000	-0.7809	-0.2319	-0.0016	-0.0980	0.0069	0.4226
2	-5.68	0.01	-0.0178	0.0000	0.0139	0.0000	-0.7472	-0.2244	-0.0016	-0.0975	0.0071	0.4345
3	-5.68	-0.00	-0.0178	0.0000	0.0139	0.0000	-0.7809	-0.2276	-0.0016	-0.0976	0.0079	0.4288
4	-5.68	0.01	-0.0178	0.0000	0.0145	0.0000	-0.8146	-0.2309	-0.0017	-0.0983	0.0074	0.4257
5	-5.68	-0.00	-0.0178	0.0000	0.0132	0.0000	-0.8535	-0.2291	-0.0016	-0.0975	0.0070	0.4256
6	-5.68	0.00	-0.0177	0.0000	0.0139	0.0000	-0.7855	-0.2272	-0.0016	-0.0973	0.0070	0.4283
7	-5.68	-0.00	-0.0178	0.0000	0.0145	0.0000	-0.8146	-0.2291	-0.0016	-0.0975	0.0070	0.4256
8	-5.68	0.00	-0.0181	0.0000	0.0147	0.0000	-0.9150	-0.2311	-0.0015	-0.0983	0.0065	0.4254
9	-5.68	-0.00	-0.0177	0.0000	0.0132	0.0000	-0.7490	-0.2271	-0.0016	-0.0967	0.0079	0.4258
10	-5.68	-0.00	-0.0177	0.0000	0.0132	0.0000	-0.7490	-0.2273	-0.0015	-0.0973	0.0066	0.4281
11	-5.68	-0.00	-0.0183	0.0000	0.0148	0.0000	-0.8951	-0.2309	-0.0017	-0.0976	0.0074	0.4227
12	-5.68	-0.00	-0.0176	0.0000	0.0125	0.0000	-0.7102	-0.2290	-0.0015	-0.0967	0.0065	0.4193
13	-5.68	0.00	-0.0183	0.0000	0.0141	0.0000	-0.9000	-0.2300	-0.0016	-0.0979	0.0070	0.4257
14	-5.67	-0.00	-0.0185	0.0000	0.0139	0.0000	-0.8865	-0.2280	-0.0017	-0.0971	0.0075	0.4259
15	-5.68	-0.00	-0.0184	0.0000	0.0135	0.0000	-0.8365	-0.2276	-0.0015	-0.0960	0.0067	0.4403
16	-5.68	-0.00	-0.0178	0.0000	0.0132	0.0000	-0.7500	-0.2282	-0.0016	-0.0976	0.0071	0.4315
17	-5.68	-0.00	-0.0183	0.0000	0.0141	0.0000	-0.9000	-0.2301	-0.0016	-0.0979	0.0061	0.4255
18	-5.68	0.00	-0.0184	0.0000	0.0133	0.0000	-0.8365	-0.2282	-0.0015	-0.0970	0.0066	0.4251
19	-5.68	0.00	-0.0180	0.0000	0.0140	0.0000	-0.9125	-0.2300	-0.0016	-0.0979	0.0070	0.4257
20	-5.68	0.00	-0.0183	0.0000	0.0141	0.0000	-0.9000	-0.2284	-0.0015	-0.0959	0.0064	0.4228
21	-5.68	-0.00	-0.0183	0.0000	0.0134	0.0000	-0.9371	-0.2224	-0.0016	-0.0960	0.0072	0.4317
22	-5.01	0.01	-0.0183	0.0000	0.0141	0.0000	-0.9000	-0.2077	-0.0011	-0.0905	0.0053	0.4357
23	-4.59	0.00	-0.0183	0.0000	0.0124	0.0000	-0.8425	-0.1976	-0.0004	-0.0877	0.0027	0.4587
24	-2.81	-0.00	-0.0184	0.0000	0.0133	0.0000	-0.8365	-0.0734	-0.0002	-0.0877	0.0027	0.5101
25	-0.99	0.01	-0.0183	0.0000	0.0133	0.0000	-1.0099	-0.0060	0.0001	-0.0116	-0.0167	1.9333
26	0.00	0.01	-0.0180	0.0000	0.0130	0.0000	-1.2563	0.0454	-0.0002	0.0179	-0.0044	0.3993
27	2.73	0.00	-0.0179	0.0000	0.0132	0.0000	-1.7838	0.1222	0.0003	0.0439	0.0025	0.3592
28	3.34	0.00	-0.0179	0.0000	0.0132	0.0000	-1.7838	0.1603	0.0010	0.0771	0.0048	0.3666
29	6.38	0.00	-0.0173	0.0000	0.0106	0.0000	-1.4521	0.3052	0.0024	0.1053	0.0079	0.3450
30	6.69	0.00	-0.0175	0.0000	0.0115	0.0000	-1.5009	0.3547	0.0037	0.1352	0.0094	0.3425
31	10.03	0.00	0.0013	0.0000	0.0093	0.0000	7.1338	0.4825	0.0069	0.1578	0.0143	0.3270
32	11.52	0.00	-0.0002	0.0000	0.0086	0.0000	-23.0300	0.5784	0.0093	0.1793	0.0161	0.3100
33	13.72	0.00	0.0131	0.0000	0.0089	0.0000	0.8794	0.6879	0.0136	0.2051	0.0196	0.2982
34	15.00	0.00	0.0133	0.0000	0.0087	0.0000	0.9200	0.7620	0.0169	0.2241	0.0207	0.2866
35	17.32	-0.00	0.0184	0.0000	0.0094	0.0000	0.2935	0.8762	0.0201	0.2474	0.0321	0.2624
36	19.37	0.00	0.0117	0.0000	0.0079	0.0000	0.2479	0.9624	0.0234	0.2661	0.0347	0.2765
37	21.23	0.00	0.0151	0.0000	0.0085	0.0000	0.1650	1.0105	0.0293	0.2752	0.0389	0.2723
38	23.09	0.01	0.0218	0.0000	0.0087	0.0000	0.2515	1.0546	0.0455	0.2813	0.0431	0.2667
39	24.94	0.01	0.0184	0.0000	0.0094	0.0000	0.2935	1.1101	0.0346	0.2650	0.0492	0.2567
40	26.82	0.01	0.0003	0.0000	0.0093	0.0000	0.3776	1.1491	0.0308	0.2673	0.0496	0.2511
41	28.23	0.01	0.0150	0.0000	0.0092	0.0000	0.3407	1.1420	0.0618	0.2800	0.0541	0.2452
42	28.29	0.01	0.0150	0.0000	0.0098	0.0000	0.3867	1.1498	0.0633	0.2781	0.0557	0.2438
43	28.10	0.03	0.0217	0.0000	0.0083	0.0000	0.3825	1.1627	0.0625	0.2799	0.0537	0.2407
44	28.29	0.03	0.0214	0.0000	0.0109	0.0000	0.3838	1.1385	0.0645	0.2744	0.0566	0.2410
45	28.28	0.04	0.0211	0.0000	0.0083	0.0000	0.3825	1.1350	0.0642	0.2740	0.0566	0.2414
46	28.29	0.06	0.0200	0.0000	0.0125	0.0000	0.4100	1.1397	0.0629	0.2748	0.0552	0.2411

TEST PART MACH RATIO-B PHA COMP L DELA DELZ DELS DELY TRANSITION
1 47 0.800 1.67 0.0 STANDARD 0.0 0 0

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(RASRUCT) — 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 41 MACH 0.60 ALPHA-B 1.1 PHI 0.0 CONF DIMENSION L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	DELTA	CNFS	CMS	CDS	ALPFS	YCPFS	CNF4	CM4	CD4	XCPF4	YCPF4
93	+0.93	-0.00	0.0014	9.9999	0.0033	9.9999	3.7357	1.2572	0.0373	0.3235	0.0297	0.2572
94	41.13	0.01	0.0014	9.9999	0.0046	9.9999	3.2057	1.2590	0.0375	0.3242	0.0298	0.2575
95	+1.33	0.00	-0.0034	9.9999	0.0041	9.9999	-0.5000	1.2042	0.0379	0.3253	0.0300	0.2573
96	+1.54	-0.01	0.0080	9.9999	0.0074	9.9999	0.8075	1.2050	0.0393	0.3245	0.0311	0.2564
97	41.73	0.01	0.0031	9.9999	0.0054	9.9999	1.7419	1.2464	0.0370	0.3197	0.0297	0.2565
98	+1.93	-0.01	0.0063	9.9999	0.0076	9.9999	1.2083	1.2388	0.0490	0.3168	0.0363	0.2535
99	+2.13	-0.00	-0.0002	9.9999	0.0039	9.9999	-19.5000	1.2429	0.0401	0.3178	0.0323	0.2557
100	+2.31	-0.00	-0.0002	9.9999	0.0063	9.9999	-22.5000	1.2337	0.0424	0.3129	0.0344	0.2536
101	+2.49	-0.01	-0.0002	9.9999	0.0095	9.9999	-22.5000	1.2496	0.0381	0.3215	0.0289	0.2573
102	+2.68	-0.02	0.0014	9.9999	0.0100	9.9999	0.9984	1.2147	0.0403	0.3053	0.0381	0.2513
103	+2.83	-0.01	0.0012	9.9999	0.0100	9.9999	0.8929	1.2307	0.0395	0.3132	0.0324	0.2545
104	+3.03	-0.01	-0.0002	9.9999	0.0093	9.9999	-22.5000	1.2423	0.0368	0.3195	0.0296	0.2572
105	+3.21	-0.00	0.0040	9.9999	0.0082	9.9999	1.7820	1.2279	0.0337	0.3146	0.0315	0.2564
106	+3.40	-0.02	0.0120	9.9999	0.0120	9.9999	0.9375	1.2120	0.0450	0.3062	0.0371	0.2526
107	+3.57	-0.01	0.0080	9.9999	0.0071	9.9999	0.8875	1.2506	0.0380	0.3197	0.0304	0.2556
108	+3.75	-0.00	0.0093	9.9999	0.0118	9.9999	1.2421	1.2142	0.0422	0.3084	0.0348	0.2540
109	+3.94	0.01	0.0012	9.9999	0.0092	9.9999	7.0667	1.2382	0.0378	0.3165	0.0304	0.2560
110	+4.10	0.00	0.0095	9.9999	0.0118	9.9999	1.2421	1.2157	0.0402	0.3094	0.0331	0.2545
111	+4.30	0.02	-0.0002	9.9999	0.0093	9.9999	-22.5000	1.2601	0.0329	0.3261	0.0261	0.2588
112	+4.48	-0.03	0.0177	9.9999	0.0144	9.9999	0.8130	1.1841	0.0426	0.3005	0.0361	0.2541
113	+4.66	-0.01	0.0173	9.9999	0.0152	9.9999	0.7876	1.1848	0.0395	0.3022	0.0333	0.2551
114	+4.84	-0.03	0.0013	9.9999	0.0079	9.9999	0.8709	1.2704	0.0286	0.3231	0.0224	0.2610
115	45.02	-0.01	0.0078	9.9999	0.0110	9.9999	1.4103	1.2623	0.0310	0.3203	0.0246	0.2601
116	45.19	0.00	0.0129	9.9999	0.0128	9.9999	0.8889	1.2320	0.0319	0.3201	0.0259	0.2598
117	45.37	-0.02	0.0153	9.9999	0.0154	9.9999	1.0769	1.2033	0.0354	0.3099	0.0294	0.2575
118	+5.55	-0.02	0.0210	9.9999	0.0180	9.9999	0.7016	1.1723	0.0444	0.2959	0.0379	0.2524
119	45.73	-0.01	0.0176	9.9999	0.0163	9.9999	0.9201	1.1963	0.0370	0.3071	0.0309	0.2563
120	+5.90	-0.00	0.0172	9.9999	0.0132	9.9999	0.7876	1.2147	0.0331	0.3119	0.0289	0.2572
121	46.07	0.00	0.0029	9.9999	0.0061	9.9999	5.0000	1.2021	0.0273	0.3111	0.0216	0.2617
122	46.24	-0.02	0.0101	9.9999	0.0130	9.9999	0.8447	1.2165	0.0340	0.3129	0.0286	0.2568
123	46.41	-0.02	0.0079	9.9999	0.0097	9.9999	1.2278	1.2420	0.0289	0.3238	0.0233	0.2606
124	46.59	-0.00	0.0040	9.9999	0.0059	9.9999	2.0435	1.2720	0.0200	0.3317	0.0209	0.2608
125	46.76	-0.02	0.0013	9.9999	0.0079	9.9999	0.8709	1.2579	0.0256	0.3291	0.0203	0.2612
126	46.94	-0.02	0.0120	9.9999	0.0120	9.9999	0.9375	1.2250	0.0240	0.3284	0.0191	0.2615
127	+7.11	-0.02	0.0013	9.9999	0.0079	9.9999	0.8709	1.2098	0.0240	0.3312	0.0193	0.2619
128	+7.28	-0.02	0.0177	9.9999	0.0144	9.9999	0.8130	1.2139	0.0311	0.3198	0.0248	0.2585
129	+7.45	-0.03	0.0144	9.9999	0.0128	9.9999	0.8889	1.2346	0.0271	0.3208	0.0219	0.2598
130	+7.61	-0.03	0.0012	9.9999	0.0096	9.9999	0.1007	1.2504	0.0234	0.3259	0.0187	0.2606
131	+7.78	-0.01	0.0144	9.9999	0.0122	9.9999	0.8472	1.2539	0.0202	0.3247	0.0209	0.2590
132	+7.98	-0.01	-0.0135	9.9999	0.0028	9.9999	-0.2074	1.2150	0.0159	0.3432	0.0152	0.2614
133	+8.13	-0.04	0.0041	9.9999	0.0065	9.9999	1.4081	1.2490	0.0214	0.3404	0.0165	0.2620
134	+8.31	-0.01	-0.0020	9.9999	0.0045	9.9999	-0.5233	1.3217	0.0169	0.3449	0.0143	0.2611
135	+8.48	-0.04	0.0047	9.9999	0.0056	9.9999	1.1515	1.2016	0.0225	0.3395	0.0173	0.2608
136	+8.63	-0.01	-0.0101	9.9999	0.0018	9.9999	-0.1782	1.3131	0.0178	0.3432	0.0151	0.2614
137	+8.82	-0.04	-0.0082	9.9999	0.0040	9.9999	-0.5747	1.3100	0.0156	0.3460	0.0120	0.2625
138	+8.98	-0.01	-0.0035	9.9999	0.0023	9.9999	-0.6571	1.3014	0.0206	0.3383	0.0158	0.2600

PAGE 3 OF 3
SHEET 4 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 97 0.60 1.7 0.0 0 0.0 0 0 0 0 UNKNOWN

PCINT	ALPHA	BETA	CNF3	CM3	CB3	ACPF3	YCPF3	CNF4	CM4	CB4	ACPF4	YCPF4
139	49.15	-0.02	-0.0003	9.9999	0.0032	9.9999	-0.3765	1.3251	0.0186	0.3451	0.0140	0.2604
140	49.33	-0.02	-0.0002	9.9999	0.0032	9.9999	-10.0000	1.3200	0.0187	0.3455	0.0146	0.2617
141	49.21	-0.02	-0.0003	9.9999	0.0033	9.9999	-21.0667	1.3072	0.0186	0.3445	0.0144	0.2597
142	49.00	-0.02	-0.0001	9.9999	0.0018	9.9999	-0.1786	1.3327	0.0180	0.3483	0.0135	0.2608
143	49.05	-0.02	-0.0026	9.9999	0.0019	9.9999	-0.2059	1.3267	0.0183	0.3477	0.0123	0.2621
144	50.03	-0.01	-0.0003	9.9999	0.0021	9.9999	-0.3971	1.3229	0.0115	0.3477	0.0067	0.2628
145	50.20	-0.02	-0.0036	9.9999	0.0017	9.9999	-0.5300	1.3196	0.0206	0.3413	0.0156	0.2586
146	50.07	-0.00	-0.0003	9.9999	0.0030	9.9999	-0.0371	1.3120	0.0087	0.3470	0.0066	0.2645
147	50.05	-0.00	-0.0002	9.9999	0.0033	9.9999	-0.0734	1.3105	0.0075	0.3462	0.0057	0.2648
148	50.10	-0.01	-0.0135	9.9999	0.0015	9.9999	-0.1111	1.3111	0.0073	0.3473	0.0056	0.2649
149	50.08	0.00	-0.0017	9.9999	0.0030	9.9999	-2.0000	1.3254	0.0035	0.3522	0.0026	0.2658
150	51.03	0.01	-0.0033	9.9999	0.0030	9.9999	-0.0371	1.3235	0.0057	0.3519	0.0043	0.2659
151	51.19	0.01	0.0015	9.9999	0.0007	9.9999	5.1333	1.3114	0.0020	0.3495	0.0015	0.2665
152	51.17	0.01	-0.0002	9.9999	0.0033	9.9999	-10.5000	1.3219	0.0030	0.3520	0.0023	0.2667
153	51.53	0.02	-0.0002	9.9999	0.0006	9.9999	-23.0000	1.3082	0.0014	0.3498	0.0011	0.2674
154	51.64	0.03	0.0019	9.9999	0.0030	9.9999	9.7143	1.3123	0.0026	0.3505	0.0021	0.2665
155	51.67	0.03	0.0031	9.9999	0.0035	9.9999	1.7742	1.3101	-0.0025	0.3516	-0.0019	0.2664
156	52.09	0.06	0.0148	9.9999	0.0009	9.9999	0.9324	1.3276	0.0010	0.3537	0.0007	0.2675
157	52.22	0.07	0.0215	9.9999	0.0010	9.9999	0.5335	1.3734	-0.0028	0.3709	-0.0020	0.2691
158	52.38	0.07	0.0236	9.9999	0.0030	9.9999	0.3879	1.3068	-0.0049	0.3673	-0.0033	0.2695
159	52.55	0.08	0.0196	9.9999	0.0023	9.9999	0.3311	1.3424	-0.0041	0.3744	-0.0029	0.2689
160	52.73	0.07	0.0236	9.9999	0.0027	9.9999	0.3319	1.3469	-0.0071	0.3804	-0.0053	0.2720
161	52.90	0.08	0.0202	9.9999	0.0008	9.9999	0.3121	1.3634	-0.0091	0.3899	-0.0067	0.2713
162	53.06	0.07	0.0181	9.9999	0.0023	9.9999	0.3138	1.3040	-0.0112	0.3805	-0.0086	0.2739
163	53.25	0.10	0.0201	9.9999	0.0024	9.9999	0.3345	1.2689	-0.0099	0.3808	-0.0078	0.2733
164	53.40	0.09	0.0215	9.9999	0.0104	9.9999	0.3302	1.3033	-0.0104	0.3807	-0.0080	0.2736
165	53.56	0.08	0.0248	9.9999	0.0032	9.9999	0.3710	1.2847	-0.0135	0.3808	-0.0086	0.2742
166	53.74	0.08	0.0253	9.9999	0.0032	9.9999	0.3423	1.2918	-0.0088	0.3808	-0.0070	0.2722
167	53.93	0.10	0.0303	9.9999	0.0144	9.9999	0.3315	1.2390	-0.0067	0.3576	-0.0054	0.2725
168	54.09	0.09	0.0203	9.9999	0.0026	9.9999	0.3110	1.2504	0.0036	0.3502	0.0029	0.2676
169	54.23	0.09	0.0314	9.9999	0.0117	9.9999	0.3726	1.2347	0.0060	0.3284	0.0049	0.2660
170	54.43	0.09	0.0349	9.9999	0.0122	9.9999	0.3438	1.2378	0.0101	0.3200	0.0082	0.2639
171	54.61	0.09	0.0363	9.9999	0.0105	9.9999	0.2046	1.2381	0.0171	0.3159	0.0138	0.2584
172	54.74	0.09	0.0349	9.9999	0.0104	9.9999	0.2339	1.2400	0.0125	0.3261	0.0100	0.2617
173	54.90	0.10	0.0418	9.9999	0.0123	9.9999	0.2996	1.2094	0.0147	0.3281	0.0116	0.2585
174	55.07	0.08	0.0318	9.9999	0.0091	9.9999	0.2662	1.2721	0.0137	0.3309	0.0108	0.2601
175	55.19	0.10	0.0401	9.9999	0.0117	9.9999	0.2916	1.2548	0.0141	0.3262	0.0112	0.2600
176	55.37	0.09	0.0351	9.9999	0.0107	9.9999	0.3096	1.2677	0.0047	0.3347	0.0037	0.2640
177	55.54	0.09	0.0416	9.9999	0.0115	9.9999	0.2067	1.2755	0.0067	0.3344	0.0053	0.2622
178	55.70	0.10	0.0356	9.9999	0.0106	9.9999	0.2859	1.2707	0.0093	0.3306	0.0073	0.2602
179	55.87	0.08	0.0367	9.9999	0.0101	9.9999	0.2756	1.2813	0.0027	0.3375	0.0021	0.2636
180	56.00	0.09	0.0316	9.9999	0.0104	9.9999	0.2691	1.2805	0.0003	0.3355	0.0049	0.2620
181	56.16	0.08	0.0308	9.9999	0.0038	9.9999	0.2591	1.2749	0.0037	0.3338	0.0029	0.2618
182	56.34	0.09	0.0346	9.9999	0.0083	9.9999	0.2801	1.2725	0.0052	0.3323	0.0045	0.2611
183	56.51	0.11	0.0334	9.9999	0.0126	9.9999	0.2397	1.3090	0.0044	0.3429	0.0034	0.2620
184	56.69	0.08	0.0401	9.9999	0.0091	9.9999	0.2769	1.2904	0.0029	0.3396	0.0024	0.2632

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 5 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NO.= 0.80 PHI 0.0 CONF 6 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	ALPF3	YCPF3	CNF4	CM4	CB4	ALPF4	YCPF4
185	58.01	0.00	0.0008	0.9999	0.0007	0.9999	0.2038	1.3059	-0.0016	0.3447	-0.0012	0.2640
186	58.09	0.00	0.0009	0.9999	0.0009	0.9999	0.2037	1.2971	-0.0009	0.3423	-0.0007	0.2639
187	57.12	0.00	0.0008	0.9999	0.0008	0.9999	0.2040	1.3122	-0.0011	0.3447	-0.0008	0.2627
188	57.20	0.00	0.0007	0.9999	0.0005	0.9999	0.2173	1.3016	-0.0008	0.3421	-0.0006	0.2628
189	57.91	0.00	0.0010	0.9999	0.0007	0.9999	0.1731	1.3069	-0.0005	0.3412	-0.0004	0.2611
190	57.97	0.00	0.0010	0.9999	0.0007	0.9999	0.1731	1.2867	-0.0003	0.3398	-0.0006	0.2641
191	57.79	0.00	0.0008	0.9999	0.0006	0.9999	0.2098	1.3004	-0.0004	0.3446	-0.0002	0.2650
192	57.88	0.00	0.0008	0.9999	0.0008	0.9999	0.2234	1.2852	-0.0009	0.3401	-0.0008	0.2646
193	58.00	0.00	0.0008	0.9999	0.0006	0.9999	0.1694	1.3078	-0.0004	0.3444	-0.0001	0.2633
194	58.12	0.00	0.0008	0.9999	0.0010	0.9999	0.2147	1.2941	-0.0009	0.3417	-0.0003	0.2640
195	58.28	0.00	0.0010	0.9999	0.0005	0.9999	0.2053	1.2922	-0.0000	0.3414	-0.0002	0.2642
196	58.31	0.00	0.0010	0.9999	0.0008	0.9999	0.2373	1.3107	-0.0006	0.3479	-0.0005	0.2642

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/F-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 46 0.80 1.7 90.0 BINOFIN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.02	0.00	-0.0126	1.0449	-0.0052	-0.1220	-0.0141	0.2201	0.0843	0.1438	-1.7056
2	-5.02	0.10	-0.0141	1.0203	0.0077	-0.1203	-0.0140	0.2259	0.0838	0.1401	-1.6766
3	-5.02	0.09	-0.0235	1.0780	-0.0235	-0.1314	-0.0141	0.2200	0.0870	0.1410	-1.7248
4	-5.15	0.16	-0.0249	0.0993	-0.0078	-0.1350	-0.0141	0.2275	0.0804	0.1471	-1.6670
5	-5.23	0.09	-0.0241	0.0256	-0.0051	-0.0903	-0.0141	0.2479	0.0789	0.1690	-1.6737
6	-1.04	0.10	-0.1124	0.2392	-0.0084	-0.0975	-0.0136	0.2527	0.0738	0.1769	-2.1324
7	0.53	0.10	0.0215	0.0165	-0.0019	-0.0941	-0.0134	0.2571	0.0754	0.1817	0.1803
8	2.00	0.10	0.2300	-0.2240	0.0230	-0.1077	-0.0131	0.2548	0.0789	0.1759	-0.9119
9	4.23	0.10	0.4736	-0.5012	0.0380	-0.1170	-0.0131	0.2497	0.0815	0.1682	-1.2270
10	6.08	0.09	0.6779	-0.7523	-0.0492	-0.1440	-0.0130	0.2544	0.0891	0.1653	-1.3646
11	7.98	0.10	0.9342	-1.0423	0.0130	-0.1793	-0.0130	0.2558	0.0994	0.1565	-1.5157
12	9.77	0.10	1.2033	-1.3702	0.0083	-0.1750	-0.0129	0.2608	0.1098	0.1513	-1.5608
13	11.89	0.10	1.4770	-1.7305	-0.0309	-0.2037	-0.0130	0.2601	0.1220	0.1379	-1.5906
14	13.52	0.09	1.7060	-2.0307	-0.0165	-0.2001	-0.0133	0.2505	0.1300	0.1206	-1.6003
15	15.40	0.09	2.0597	-2.5003	-0.0263	-0.2715	-0.0134	0.2517	0.1548	0.0970	-1.6062
16	17.33	0.10	2.3401	-2.7905	0.0177	-0.3004	-0.0309	0.2578	0.1803	0.0715	-1.6224
17	19.40	0.10	2.6570	-3.0213	0.0093	-0.2999	-0.0292	0.2908	0.2007	0.0401	-1.5925
18	21.09	0.11	2.9592	-3.0600	0.1743	-0.3765	-0.0003	0.2350	0.2224	0.0132	-1.5747
19	22.98	0.11	3.2484	-3.7003	0.2707	-0.0134	-0.0910	0.2219	0.2397	-0.0178	-1.5295
20	24.84	0.12	3.5971	-3.0040	0.3406	-0.3488	-0.0929	0.2200	0.2505	-0.0359	-1.4129
21	26.89	0.13	3.8868	-4.0700	0.4300	-0.0141	0.1247	0.2010	0.3093	-0.0478	-1.2669
22	28.18	0.14	4.0305	-4.0861	0.7727	-0.1917	0.0731	0.2850	0.3013	-0.0762	-1.2037
23	28.18	0.13	4.0475	-4.0810	0.7043	-1.1227	0.0308	0.2009	0.3023	-0.0753	-1.2061
24	28.21	0.13	4.0130	-4.7354	0.8729	-0.9730	0.0092	0.2952	0.3010	-0.0658	-1.1800
25	28.82	0.14	4.1033	-4.9229	0.7341	-1.1256	0.0735	0.2840	0.3649	-0.0308	-1.1825
26	29.87	0.14	4.2413	-4.9990	0.8300	-1.2210	0.0620	0.2891	0.3705	-0.0814	-1.1776
27	29.17	0.13	4.2000	-5.0109	0.9590	-1.2740	0.1305	0.2090	0.3731	-0.0862	-1.1542
28	29.51	0.16	4.2980	-5.1109	0.9930	-1.3324	0.1000	0.2013	0.3751	-0.0937	-1.1507
29	29.80	0.17	4.3551	-5.1903	1.1374	-1.3333	0.1966	0.2715	0.3742	-0.1077	-1.1524
30	30.07	0.17	4.3752	-5.2412	1.0751	-1.3035	0.1964	0.2722	0.3859	-0.1137	-1.1365
31	30.34	0.17	4.4510	-5.2653	1.0917	-1.3000	0.1821	0.2789	0.3910	-0.1121	-1.1390
32	30.61	0.17	4.4948	-5.3424	1.0799	-1.3491	0.1917	0.2711	0.3920	-0.1203	-1.1379
33	30.89	0.18	4.5302	-5.4387	1.2111	-1.3757	0.1751	0.2742	0.3941	-0.1199	-1.1337
34	31.15	0.18	4.5772	-5.4983	1.2097	-1.3800	0.1859	0.2771	0.3957	-0.1188	-1.1314
35	31.44	0.18	4.6266	-5.5706	1.2039	-1.3978	0.1938	0.2735	0.4003	-0.1208	-1.1477
36	31.72	0.19	4.6740	-5.6306	1.3333	-1.4427	0.2010	0.2722	0.4023	-0.1301	-1.1465
37	31.99	0.19	4.7243	-5.6999	1.2781	-1.4467	0.2170	0.2697	0.4065	-0.1416	-1.1197
38	32.27	0.20	4.7747	-5.7609	1.3307	-1.4949	0.2109	0.2676	0.4137	-0.1491	-1.1241
39	32.53	0.20	4.8326	-5.8326	1.2996	-1.5179	0.2244	0.2626	0.4174	-0.1548	-1.0994
40	32.78	0.20	4.8788	-5.8998	1.3050	-1.5099	0.2097	0.2700	0.4214	-0.1514	-1.1017
41	33.05	0.21	4.9281	-5.9435	1.3334	-1.5391	0.2109	0.2649	0.4250	-0.1611	-1.1007
42	33.30	0.20	4.9707	-6.0071	1.3726	-1.5342	0.2171	0.2587	0.4321	-0.1734	-1.0712
43	33.55	0.21	5.0121	-6.0670	1.3981	-1.5630	0.2230	0.2645	0.4377	-0.1732	-1.0783
44	33.81	0.20	5.0623	-6.1099	1.3993	-1.5743	0.1932	0.2620	0.4378	-0.1778	-1.0625
45	34.05	0.20	5.1011	-6.1670	1.4202	-1.5109	0.1954	0.2503	0.4428	-0.1868	-1.0409
46	34.30	0.21	5.1364	-6.2367	1.4333	-1.6033	0.1772	0.2539	0.4404	-0.1925	-1.0560

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

SARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NAL-0 PHI CONF L DELA DELZ DEL3 DEL4 TRANSITION
1 98 0.80 1.7 45.0 STRIPS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.54	0.21	1.0249	-1.3067	1.4952	1.0322	0.1484	0.2558	0.4534	-0.1946	-1.0405
48	34.83	0.22	1.1629	-1.3569	1.3993	1.2932	0.1483	0.2546	0.4526	-0.1930	-1.0265
49	35.04	0.22	1.2561	-1.2670	1.3774	1.2798	0.1311	0.2547	0.4525	-0.1928	-1.0052
50	35.29	0.22	1.3064	-1.3316	1.4780	1.2745	0.1316	0.2475	0.4520	-0.2045	-0.9953
51	35.52	0.22	1.4983	-1.3369	1.4281	1.3109	0.0983	0.2518	0.4596	-0.2078	-0.9784
52	35.77	0.23	1.5696	-1.3208	1.4780	1.5442	0.0293	0.2497	0.4552	-0.2055	-0.9677
53	36.00	0.22	1.5696	-1.1607	1.4870	1.4202	0.0958	0.2539	0.4638	-0.2089	-0.9468
54	36.22	0.23	1.7093	-1.2049	1.5238	1.5082	0.0987	0.2547	0.4669	-0.2142	-0.9349
55	36.47	0.23	1.7953	-1.1704	1.4870	1.5822	-0.0300	0.2567	0.4739	-0.2142	-0.9224
56	36.70	0.23	1.9534	-1.1015	1.5036	1.5333	-0.0393	0.2470	0.4700	-0.2196	-0.8999
57	36.94	0.24	2.0240	-1.1514	1.4293	1.4942	-0.0330	0.2591	0.4822	-0.2230	-0.8912
58	37.19	0.24	2.1404	-1.1551	1.5915	1.6223	-0.0342	0.2510	0.4617	-0.2306	-0.8790
59	37.42	0.23	2.2733	-1.0154	1.4997	1.4729	-0.0450	0.2578	0.4643	-0.2464	-0.8679
60	37.65	0.24	2.4324	-1.0258	1.4150	1.7003	-0.0768	0.2502	0.4622	-0.2519	-0.8451
61	37.88	0.24	2.4347	-0.9560	1.4174	1.4317	-0.0910	0.2519	0.4652	-0.2532	-0.8297
62	38.13	0.24	2.4191	-0.8923	1.3467	1.2870	-0.0122	0.2411	0.4472	-0.2400	-0.7955
63	38.39	0.24	2.4930	-0.8903	1.3171	1.3147	0.0349	0.2375	0.4513	-0.2537	-0.7898
64	38.61	0.24	2.3694	-0.8731	1.1239	1.2175	0.0215	0.2321	0.4479	-0.2657	-0.7554
65	38.80	0.24	2.0539	-0.8987	1.1351	1.1822	0.0540	0.2409	0.4594	-0.2584	-0.7274
66	38.99	0.23	2.0249	-0.8044	1.1180	1.3258	0.0783	0.2331	0.4489	-0.2687	-0.7072
67	39.22	0.23	2.0203	-0.8047	1.1458	1.0478	0.0947	0.2365	0.4484	-0.2658	-0.6806
68	39.44	0.20	2.0311	-0.8014	1.1359	1.1790	0.0310	0.2367	0.4540	-0.2642	-0.6661
69	39.69	0.21	2.3770	-0.7811	1.4722	1.2458	0.0313	0.2287	0.4459	-0.2771	-0.6512
70	39.88	0.19	2.0020	-0.8393	1.1033	1.0140	-0.0714	0.2474	0.4530	-0.2655	-0.6503
71	40.07	0.19	2.1303	-0.7906	1.1520	1.1781	-0.0886	0.2469	0.4521	-0.2711	-0.6448
72	40.27	0.18	2.4901	-0.8210	0.9421	2.0435	-0.1402	0.2382	0.4226	-0.2843	-0.6402
73	40.47	0.18	2.3109	-0.8983	0.9759	2.0923	-0.1496	0.2495	0.4207	-0.2771	-0.6331
74	40.67	0.18	2.3849	-0.7900	0.9731	2.0880	-0.1410	0.2496	0.4328	-0.2881	-0.6288
75	40.89	0.18	2.4913	-0.8028	0.7982	2.0890	-0.1530	0.2514	0.4375	-0.2858	-0.6306
76	41.09	0.18	2.5003	-0.8051	0.7922	2.0953	-0.1660	0.2490	0.4366	-0.2926	-0.6120
77	41.29	0.19	2.4913	-0.8051	0.8990	2.0803	-0.1660	0.2491	0.4431	-0.3020	-0.5934
78	41.50	0.15	2.5039	-0.7403	0.5733	2.0009	-0.2117	0.2493	0.4367	-0.2974	-0.5984
79	41.87	0.13	2.5243	-0.6151	0.5026	2.0993	-0.2121	0.2475	0.4467	-0.2992	-0.5684
80	41.87	0.13	2.5407	-0.6701	0.5931	2.0597	-0.2119	0.2550	0.4541	-0.2977	-0.5704
81	42.08	0.13	2.5478	-0.3136	0.5054	2.5504	-0.2118	0.2485	0.4507	-0.3022	-0.5536
82	42.28	0.13	2.7109	-0.3313	0.5703	2.5973	-0.2271	0.2481	0.4507	-0.3086	-0.5496
83	42.49	0.10	2.6523	-0.3053	0.5998	2.3725	-0.2354	0.2375	0.4572	-0.3199	-0.5082
84	42.82	0.10	2.6619	-0.3054	0.4196	2.4703	-0.2394	0.2482	0.4594	-0.3062	-0.5167
85	42.88	0.11	2.7100	-0.1039	0.4894	2.3024	-0.2340	0.2503	0.4633	-0.3127	-0.5221
86	42.97	0.08	2.7231	-0.1644	-0.1965	2.0332	-0.2382	0.2401	0.4014	-0.3213	-0.4882
87	43.15	0.11	2.8501	-0.2242	0.1000	2.0192	-0.2410	0.2448	0.4065	-0.3217	-0.5250
88	43.33	0.10	2.9038	-0.1409	0.1269	2.1394	-0.2370	0.2489	0.4039	-0.3175	-0.5159
89	43.51	0.10	10.0093	-0.1047	0.0760	2.1277	-0.2371	0.2442	0.4064	-0.3242	-0.5100
90	43.69	0.10	10.0704	-0.0742	0.0353	2.1650	-0.2047	0.2403	0.4040	-0.3287	-0.5033
91	43.87	0.08	10.1772	-0.3429	-0.1792	2.0300	-0.2730	0.2282	0.3700	-0.3438	-0.4809
92	44.03	0.06	10.0703	-0.1208	-0.3531	2.5400	-0.2754	0.2321	0.3694	-0.3373	-0.4688

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 90 0.600 1.7 45.0 DIMPLE 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.23	0.01	10.1317	-4.7883	-0.2109	2.5811	-0.2885	0.2276	0.5670	-0.3354	-0.4726
94	44.41	0.04	10.2697	-4.8804	-0.0287	2.6083	-0.2721	0.2300	0.5735	-0.3375	-0.4855
95	44.58	0.06	10.2572	-4.8849	-0.3776	2.6347	-0.3044	0.2335	0.5730	-0.3335	-0.4762
96	44.76	0.08	10.3803	-4.9834	-0.3785	2.6609	-0.3046	0.2329	0.5715	-0.3481	-0.4798
97	44.95	0.04	10.3203	-4.9730	-0.3529	2.6798	-0.3345	0.2136	0.5675	-0.3539	-0.4554
98	45.13	0.03	10.3890	-4.9916	-0.5223	2.6525	-0.3043	0.2213	0.5710	-0.3497	-0.4516
99	45.31	0.06	10.8123	-5.0170	-0.2420	2.5244	-0.3032	0.2280	0.5740	-0.3460	-0.4728
100	45.47	0.06	10.7137	-5.0777	-0.1787	2.6308	-0.3030	0.2242	0.5730	-0.3508	-0.4832
101	45.67	0.06	10.6993	-4.9818	-0.2196	2.5570	-0.3021	0.2157	0.5744	-0.3567	-0.4527
102	45.84	0.07	10.6987	-5.2008	-0.1301	2.7239	-0.3396	0.2129	0.5744	-0.3615	-0.4773
103	46.01	0.07	10.9049	-5.2120	-0.1023	2.6595	-0.3094	0.2146	0.5743	-0.3597	-0.4780
104	46.19	0.08	11.0231	-5.2911	0.0147	2.7802	-0.3163	0.2173	0.5805	-0.3632	-0.4944
105	46.37	0.07	11.0549	-5.3133	-0.1022	2.7665	-0.3392	0.2175	0.5824	-0.3649	-0.4807
106	46.54	0.07	11.1405	-5.3757	-0.0696	2.7583	-0.3249	0.2099	0.5830	-0.3731	-0.4911
107	46.71	0.05	11.1158	-5.3350	-0.2745	2.6800	-0.3245	0.2136	0.5834	-0.3696	-0.4638
108	46.89	0.07	11.2547	-5.3859	-0.0834	2.8000	-0.3319	0.2023	0.5799	-0.3776	-0.4723
109	47.05	0.05	11.0918	-4.9797	-0.3151	2.6470	-0.3240	0.1930	0.5768	-0.3768	-0.4300
110	47.21	0.06	11.2434	-5.3870	-0.1780	2.8005	-0.3321	0.2089	0.5799	-0.3730	-0.4614
111	47.37	0.04	11.0501	-4.9848	-0.3077	2.6888	-0.3322	0.1911	0.5768	-0.3657	-0.4152
112	47.50	0.05	11.3012	-5.4087	-0.2148	2.8999	-0.3349	0.2033	0.5794	-0.3784	-0.4502
113	47.73	0.03	11.1419	-4.9776	-0.5366	1.8271	-0.3107	0.1744	0.5729	-0.3935	-0.3639
114	47.89	0.03	11.2149	-4.9396	-0.5155	1.9237	-0.3105	0.1883	0.5728	-0.4043	-0.3887
115	48.07	0.06	11.4532	-5.1050	-0.2121	2.0035	-0.3392	0.1811	0.5739	-0.3978	-0.4458
116	48.24	0.04	11.3507	-4.7274	-0.3952	2.1470	-0.3318	0.1751	0.5724	-0.3993	-0.4164
117	48.39	0.03	11.3628	-4.8002	-0.4744	1.9724	-0.3241	0.1659	0.5703	-0.4044	-0.4049
118	48.57	0.03	11.3644	-4.8378	-0.3349	1.9149	-0.3317	0.1900	0.5708	-0.4248	-0.4010
119	48.74	0.03	11.3378	-4.8750	-0.5209	1.8083	-0.3108	0.1768	0.5617	-0.4331	-0.3683
120	48.90	0.03	11.5171	-4.9437	-0.5466	1.9802	-0.3308	0.1278	0.5646	-0.4370	-0.3858
121	49.07	0.03	11.5075	-4.9963	-0.4769	1.9223	-0.3103	0.1281	0.5644	-0.4363	-0.3777
122	49.25	0.03	11.5095	-4.9249	-0.5289	1.7040	-0.3244	0.1403	0.5644	-0.4291	-0.3996
123	49.43	0.01	11.5459	-4.9370	-0.7019	1.4877	-0.3332	0.1245	0.5625	-0.4380	-0.3757
124	49.59	0.01	11.5117	-4.9389	-0.6021	1.5700	-0.3342	0.1150	0.5616	-0.4460	-0.3500
125	49.77	0.02	11.6744	-5.0359	-0.5842	1.6025	-0.3353	0.1121	0.5646	-0.4525	-0.3600
126	49.94	0.00	11.4559	-3.8191	-0.6012	0.7156	-0.2818	0.0928	0.5596	-0.4007	-0.2786
127	50.11	0.01	11.6645	-5.0149	-0.6529	1.1741	-0.2959	0.0873	0.5636	-0.4762	-0.3355
128	50.28	0.01	11.6065	-4.9727	-0.7529	1.3334	-0.3024	0.1077	0.5636	-0.4559	-0.3492
129	50.45	0.01	11.7165	-5.0771	-0.6092	1.0833	-0.2883	0.0867	0.5628	-0.4749	-0.3223
130	50.61	0.01	11.7046	-5.0796	-0.6196	0.8533	-0.2704	0.0972	0.5607	-0.4835	-0.3072
131	50.78	0.01	11.7295	-5.0957	-0.6281	0.9218	-0.2906	0.0941	0.5612	-0.4870	-0.3016
132	50.92	0.00	11.5035	-2.9110	-0.7017	0.4521	-0.0972	0.0800	0.5646	-0.4767	-0.2096
133	51.10	-0.00	11.7705	-5.1023	-0.7397	0.5585	-0.1392	0.0841	0.5650	-0.4809	-0.2083
134	51.27	-0.00	11.7419	-2.0491	-0.7471	0.4270	-0.1287	0.0769	0.5706	-0.4937	-0.2249
135	51.44	0.01	11.7042	-2.5030	-0.7320	0.5151	-0.1443	0.0818	0.5706	-0.4888	-0.2207
136	51.60	0.00	11.6700	-2.5583	-0.6702	0.4926	-0.0955	0.0952	0.5706	-0.4753	-0.2046
137	51.78	-0.00	11.6737	-2.5941	-0.7070	0.4793	-0.1219	0.0833	0.5737	-0.4904	-0.2185
138	51.94	-0.00	11.7714	-2.1775	-0.6719	0.2817	-0.0883	0.0924	0.5731	-0.4807	-0.1850

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NO.=0.80 RN/F=4.7 PHI=45.0 DAMP=14 CONF=0.0 L DEL1=0 DEL2=0 DEL3=0 DEL4=0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.11	-0.00	11.0317	-2.2322	-0.0091	0.3500	-0.0255	0.1038	0.5706	-0.4648	-0.1686
140	52.27	-0.00	11.0861	-2.2444	-0.0594	0.3503	-0.1091	0.1024	0.5732	-0.4708	-0.2057
141	52.43	-0.00	11.0930	-2.2457	-0.0660	0.3111	-0.0801	0.0911	0.5756	-0.4847	-0.1716
142	52.60	-0.01	11.1063	-2.2526	-0.0721	-0.0990	-0.0419	0.1191	0.5844	-0.4653	-0.1999
143	52.77	0.00	11.0870	-2.1857	-0.0002	-0.1105	0.0419	0.1008	0.5834	-0.4847	-0.1839
144	52.93	0.00	11.0531	-2.2539	-0.0091	-0.2171	-0.0093	0.1131	0.5804	-0.4753	-0.1899
145	53.10	-0.00	11.0393	-2.2230	-0.0529	-0.2558	-0.0017	0.1140	0.5869	-0.4729	-0.1946
146	53.26	-0.00	12.1084	-2.0533	-0.2174	-0.1335	0.0145	0.1182	0.5874	-0.4692	-0.2192
147	53.43	-0.00	12.0956	-2.0023	-0.2421	-0.9470	0.0456	0.1150	0.5859	-0.4709	-0.2152
148	53.59	0.01	12.1679	-2.1192	-0.3048	-1.1528	0.0130	0.1200	0.5902	-0.4702	-0.2235
149	53.74	0.00	12.2010	-2.1920	-0.4544	-1.0521	0.0339	0.1291	0.5931	-0.4810	-0.2288
150	53.91	-0.01	12.2750	-2.2220	-0.5094	-1.2299	0.0452	0.1158	0.5886	-0.4748	-0.2502
151	54.07	-0.02	12.3250	-2.2541	-0.7400	-1.2534	0.0210	0.1193	0.5924	-0.4731	-0.2598
152	54.24	-0.03	12.3997	-2.2630	-0.8777	-1.2704	0.0291	0.1180	0.5944	-0.4704	-0.2639
153	54.41	-0.02	12.4029	-2.2515	-0.7228	-1.4749	0.0373	0.1179	0.5949	-0.4681	-0.2778
154	54.55	-0.03	12.4113	-2.2475	-0.8012	-1.5008	0.0291	0.1192	0.5947	-0.4755	-0.2791
155	54.71	-0.04	12.4014	-2.2586	-0.9134	-1.2579	0.0445	0.1182	0.6033	-0.4571	-0.3076
156	54.87	-0.04	12.4311	-2.2540	-0.9742	-1.2130	0.0207	0.1237	0.6000	-0.4650	-0.3042
157	55.02	-0.06	13.0070	-2.4796	-1.0955	-1.2235	0.0353	0.1325	0.6127	-0.4602	-0.3059
158	55.19	-0.07	13.1263	-2.4992	-1.2047	-1.2401	0.0443	0.1336	0.6127	-0.4791	-0.2998
159	55.35	-0.06	13.2060	-2.4816	-1.3140	-1.2705	0.0300	0.1185	0.6112	-0.4628	-0.3015
160	55.54	-0.05	13.4365	-2.4207	-1.3524	-1.0157	0.0203	0.1232	0.6112	-0.4601	-0.3147
161	55.69	-0.07	13.3944	-2.4473	-1.2000	-1.2428	0.0129	0.1243	0.6045	-0.4802	-0.3137
162	55.85	-0.08	13.4113	-2.4382	-1.3030	-1.0314	0.0120	0.1307	0.6037	-0.4730	-0.3221
163	56.03	-0.08	13.4651	-2.4723	-1.3222	-1.0013	0.0129	0.1337	0.6055	-0.4716	-0.3432
164	56.21	-0.09	14.0314	-2.4353	-1.4037	-1.2774	0.0200	0.1393	0.6001	-0.4666	-0.3723
165	56.38	-0.08	14.0344	-2.4376	-1.3276	-1.2830	0.0133	0.1100	0.5999	-0.4652	-0.3705
166	56.55	-0.08	14.0116	-2.4303	-1.3273	-1.0729	0.0134	0.1000	0.6007	-0.4948	-0.3827
167	56.69	-0.07	14.0632	-2.3248	-1.4430	-1.0603	0.0003	0.1134	0.5903	-0.4810	-0.3783
168	56.85	-0.08	14.0247	-2.3440	-1.4534	-1.0118	0.0137	0.1040	0.5963	-0.4918	-0.3784
169	57.00	-0.08	14.0503	-2.3453	-1.2302	-1.0647	-0.0015	0.1021	0.5935	-0.4919	-0.3771
170	57.19	-0.07	14.0130	-2.3473	-1.1040	-1.3405	-0.0092	0.1074	0.5915	-0.4842	-0.3712
171	57.35	-0.07	14.0777	-2.4451	-1.1438	-1.0119	-0.0086	0.1043	0.5925	-0.4863	-0.3660
172	57.49	-0.08	14.0609	-2.3750	-1.0814	-1.1547	-0.0103	0.0824	0.5859	-0.5035	-0.3636
173	57.62	-0.07	14.0169	-2.3428	-1.1030	-1.0460	-0.0107	0.0804	0.5900	-0.5016	-0.3749
174	57.70	-0.09	14.0790	-2.4701	-1.0990	-1.2805	-0.0124	0.0821	0.5809	-0.5048	-0.3682
175	57.92	-0.05	14.0333	-2.3078	-0.9147	-1.2654	-0.0233	0.0716	0.5828	-0.5112	-0.3578
176	58.07	-0.06	14.0170	-2.4179	-1.0034	-1.2450	-0.0139	0.0810	0.5815	-0.5205	-0.3506
177	58.20	-0.06	14.0180	-2.2041	-0.9792	-1.0821	-0.0150	0.0744	0.5816	-0.5072	-0.3567
178	58.43	-0.06	14.0149	-2.1081	-1.0749	-1.1755	-0.0235	0.0692	0.5774	-0.5172	-0.3502
179	58.60	-0.06	14.0031	-2.2003	-1.0806	-1.1230	-0.0234	0.0623	0.5784	-0.5141	-0.3530

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-S PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 46 0.60 1.7 45.0 BINOFIN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CBL	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.02	0.08	0.2522	0.0000	0.0000	0.0000	0.2197	-0.0874	0.0021	-0.0524	-0.0240	0.5995
2	-5.02	0.10	0.2603	0.0000	0.0078	0.0000	0.2221	-0.0875	0.0023	-0.0510	-0.0203	0.5829
3	-5.02	0.09	0.2582	0.0000	0.0000	0.0000	0.2155	-0.0875	0.0021	-0.0535	-0.0240	0.6091
4	-5.03	0.10	0.2602	0.0000	0.0000	0.0019	0.1794	-0.0885	0.0013	-0.0420	-0.0198	0.6412
5	-3.23	0.09	0.1502	0.0001	0.0123	0.0001	0.0319	-0.0253	0.0039	-0.0225	-0.0356	0.8893
6	-1.39	0.10	0.0852	-0.0000	-0.0075	-0.0000	-0.0380	-0.0075	0.0007	-0.0020	-0.0933	0.2667
7	0.03	0.10	0.0447	0.00	-0.0211	0.00	-0.4720	0.0384	0.0008	0.0135	0.0208	0.3516
8	2.43	0.10	0.0073	-0.0002	-0.0323	-0.0274	-0.4247	0.0708	0.0007	0.0397	0.0099	0.5607
9	4.23	0.10	-0.0192	0.0003	-0.0360	-0.0150	2.0698	0.1310	0.0011	0.0674	0.0084	0.5145
10	6.03	0.09	-0.0383	0.0001	-0.0026	-0.0189	1.0738	0.1908	0.0011	0.0972	0.0055	0.4894
11	7.68	0.10	-0.0507	0.0032	-0.0757	-0.0353	0.6340	0.2826	0.0017	0.1314	0.0060	0.4650
12	9.47	0.10	-0.0141	0.0003	-0.0010	-0.0570	0.7399	0.3008	0.0026	0.1503	0.0076	0.4238
13	11.69	0.10	-0.1330	0.0085	-0.0891	-0.0836	0.6629	0.4736	0.0033	0.1820	0.0070	0.3841
14	13.52	0.09	-0.1570	0.0114	-0.0965	-0.0852	0.6752	0.5707	0.0049	0.2066	0.0085	0.3586
15	15.40	0.09	-0.1630	0.0117	-0.1063	-0.0859	0.5590	0.6016	0.0058	0.2296	0.0085	0.3389
16	17.33	0.10	-0.2222	0.0120	-0.1183	-0.0907	0.5108	0.8157	0.0095	0.2550	0.0116	0.3126
17	19.20	0.10	-0.2436	0.0142	-0.1197	-0.0963	0.4914	0.9224	0.0099	0.2831	0.0137	0.3069
18	21.04	0.10	-0.2765	0.0158	-0.1333	-0.0940	0.4026	1.0429	0.0101	0.3083	0.0154	0.2956
19	22.96	0.11	-0.3161	0.0165	-0.1436	-0.0991	0.4273	1.1553	0.0191	0.3346	0.0165	0.2896
20	24.81	0.12	-0.3516	0.0193	-0.1425	-0.0962	0.4247	1.2100	0.0274	0.3619	0.0229	0.2810
21	26.69	0.13	-0.3927	0.0110	-0.1585	-0.0930	0.4100	0.5707	0.0538	0.2555	0.0601	0.2611
22	28.10	0.14	-0.3029	0.0100	-0.1494	-0.0594	0.4272	0.9809	0.0345	0.2889	0.0350	0.2725
23	28.18	0.15	-0.3124	0.0104	-0.1303	-0.0525	0.4171	0.9991	0.0377	0.2872	0.0381	0.2699
24	28.21	0.13	-0.2990	0.0107	-0.1284	-0.0537	0.4203	0.9990	0.0356	0.2710	0.0357	0.2715
25	28.02	0.14	-0.3053	0.0100	-0.1288	-0.0524	0.4209	1.0025	0.0341	0.2702	0.0340	0.2695
26	28.01	0.14	-0.3071	0.0100	-0.1209	-0.0514	0.4197	1.0028	0.0332	0.2694	0.0331	0.2686
27	29.17	0.15	-0.2988	0.0158	-0.1273	-0.0569	0.4260	1.0105	0.0516	0.2729	0.0313	0.2701
28	29.31	0.16	-0.2963	0.0102	-0.1238	-0.0554	0.4304	1.0036	0.0492	0.2699	0.0291	0.2689
29	29.00	0.17	-0.2837	0.0179	-0.1281	-0.0631	0.4515	1.0115	0.0267	0.2733	0.0264	0.2702
30	30.07	0.17	-0.2853	0.0179	-0.1279	-0.0647	0.4544	1.0116	0.0256	0.2749	0.0255	0.2709
31	30.34	0.17	-0.2833	0.0180	-0.1308	-0.0656	0.4614	1.0119	0.0244	0.2732	0.0241	0.2700
32	30.01	0.17	-0.2734	0.0181	-0.1314	-0.0649	0.4795	1.0149	0.0239	0.2730	0.0234	0.2678
33	30.39	0.18	-0.2568	0.0193	-0.1279	-0.0751	0.4981	1.0181	0.0223	0.2720	0.0219	0.2672
34	31.10	0.18	-0.2570	0.0203	-0.1277	-0.0794	0.4989	1.0211	0.0218	0.2709	0.0211	0.2677
35	31.09	0.18	-0.2498	0.0202	-0.1275	-0.0813	0.5131	1.0312	0.0208	0.2774	0.0202	0.2690
36	31.12	0.19	-0.2497	0.0201	-0.1200	-0.0832	0.5060	1.0446	0.0212	0.2800	0.0203	0.2681
37	31.09	0.19	-0.2516	0.0215	-0.1238	-0.0928	0.5345	1.0477	0.0203	0.2821	0.0196	0.2693
38	32.07	0.20	-0.2519	0.0221	-0.1260	-0.0955	0.5471	1.0571	0.0196	0.2843	0.0187	0.2689
39	32.53	0.20	-0.2479	0.0214	-0.1200	-0.0941	0.5541	1.0506	0.0193	0.2845	0.0183	0.2693
40	32.78	0.20	-0.2436	0.0220	-0.1200	-0.0974	0.5502	1.0714	0.0187	0.2908	0.0175	0.2714
41	33.05	0.21	-0.2490	0.0219	-0.1276	-0.0978	0.5670	1.0734	0.0183	0.2902	0.0170	0.2704
42	33.30	0.20	-0.2265	0.0203	-0.1200	-0.1002	0.5903	1.0908	0.0180	0.2904	0.0172	0.2692
43	33.55	0.21	-0.2207	0.0227	-0.1272	-0.1028	0.5703	1.0994	0.0180	0.2953	0.0164	0.2686
44	33.81	0.20	-0.2387	0.0234	-0.1332	-0.1043	0.5580	1.1124	0.0182	0.2993	0.0164	0.2691
45	34.03	0.20	-0.2354	0.0232	-0.1322	-0.0985	0.5616	1.1160	0.0173	0.3011	0.0155	0.2698
46	34.30	0.21	-0.2465	0.0243	-0.1376	-0.0978	0.5513	1.1271	0.0171	0.3042	0.0152	0.2699

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(INSEDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 08 MACH 0.80 RATIO-0 1.7 PHI 45.0 CONF 6 LMUF 1% L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PLANT	ALPHA	BETA	CNF1	CM1	CB1	ALPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	34.39	0.21	-0.2466	0.0238	-0.1376	-0.0965	0.5560	1.1364	0.0169	0.3057	0.0149	0.2690
48	34.80	0.22	-0.2485	0.0243	-0.1378	-0.0978	0.5515	1.1494	0.0168	0.3097	0.0146	0.2694
49	35.06	0.22	-0.2547	0.0260	-0.1431	-0.1021	0.5618	1.1568	0.0166	0.3110	0.0143	0.2688
50	35.49	0.22	-0.2597	0.0257	-0.1424	-0.1009	0.5591	1.1660	0.0156	0.3141	0.0135	0.2689
51	35.52	0.22	-0.2667	0.0262	-0.1491	-0.0982	0.5586	1.1663	0.0153	0.3161	0.0130	0.2678
52	35.77	0.23	-0.2740	0.0272	-0.1546	-0.0993	0.5654	1.1840	0.0153	0.3184	0.0129	0.2672
53	36.00	0.22	-0.2774	0.0268	-0.1515	-0.1002	0.5719	1.1660	0.0146	0.3192	0.0123	0.2696
54	36.22	0.23	-0.2785	0.0271	-0.1515	-0.0973	0.5640	1.2026	0.0140	0.3215	0.0121	0.2673
55	36.47	0.23	-0.2859	0.0272	-0.1562	-0.0989	0.5706	1.2082	0.0140	0.3227	0.0116	0.2671
56	36.70	0.23	-0.2926	0.0280	-0.1583	-0.0824	0.5417	1.2231	0.0131	0.3275	0.0107	0.2678
57	36.94	0.24	-0.2944	0.0283	-0.1584	-0.0843	0.5380	1.2286	0.0130	0.3294	0.0106	0.2681
58	37.19	0.24	-0.3108	0.0296	-0.1665	-0.0803	0.5239	1.2300	0.0126	0.3322	0.0102	0.2688
59	37.42	0.25	-0.3000	0.0240	-0.1609	-0.0818	0.5353	1.2361	0.0126	0.3315	0.0102	0.2682
60	37.65	0.24	-0.3451	0.0283	-0.1659	-0.0717	0.5103	1.2379	0.0128	0.3324	0.0103	0.2685
61	37.88	0.24	-0.3261	0.0214	-0.1635	-0.0664	0.5231	1.2427	0.0119	0.3322	0.0096	0.2673
62	38.10	0.24	-0.3306	0.0205	-0.1646	-0.0690	0.5243	1.2317	0.0119	0.3298	0.0097	0.2678
63	38.34	0.24	-0.1706	0.0108	-0.1179	-0.1064	0.6578	1.2264	0.0114	0.3265	0.0093	0.2683
64	38.57	0.24	-0.1860	0.0153	-0.0958	-0.1316	0.6216	1.2266	0.0097	0.3292	0.0079	0.2684
65	38.80	0.24	-0.0745	0.0131	-0.0810	-0.1765	1.0302	1.2172	0.0100	0.3265	0.0082	0.2699
66	38.99	0.23	-0.0760	0.0116	-0.0583	-0.5749	2.8150	1.1970	0.0100	0.3234	0.0084	0.2706
67	39.22	0.23	-0.0088	0.0104	-0.0490	-1.1017	5.8364	1.2008	0.0097	0.3234	0.0081	0.2693
68	39.44	0.20	-0.0779	0.0169	-0.0793	-0.1656	1.0180	1.2226	0.0107	0.3304	0.0088	0.2702
69	39.64	0.21	-0.0861	0.0170	-0.0896	-0.2029	1.1111	1.2235	0.0105	0.3315	0.0086	0.2709
70	39.88	0.19	-0.2159	0.0169	-0.1283	-0.0708	0.5334	1.2779	0.0130	0.3479	0.0102	0.2722
71	40.07	0.19	-0.2074	0.0174	-0.1290	-0.0651	0.5198	1.3019	0.0127	0.3520	0.0098	0.2706
72	40.27	0.18	-0.2496	0.0184	-0.1507	-0.0614	0.5030	1.3054	0.0133	0.3531	0.0102	0.2705
73	40.47	0.18	-0.2608	0.0182	-0.1615	-0.0557	0.4942	1.3238	0.0135	0.3561	0.0102	0.2690
74	40.67	0.18	-0.2559	0.0189	-0.1595	-0.0566	0.4971	1.3329	0.0126	0.3641	0.0095	0.2732
75	40.89	0.18	-0.2550	0.0179	-0.1575	-0.0496	0.4869	1.3551	0.0120	0.3674	0.0089	0.2711
76	41.09	0.18	-0.2594	0.0171	-0.1592	-0.0465	0.4580	1.3494	0.0120	0.3666	0.0089	0.2717
77	41.29	0.18	-0.2592	0.0177	-0.1725	-0.0443	0.4316	1.3650	0.0129	0.3719	0.0095	0.2735
78	41.50	0.18	-0.2621	0.0176	-0.1749	-0.0423	0.4350	1.3636	0.0121	0.3736	0.0089	0.2739
79	41.67	0.18	-0.2625	0.0180	-0.1750	-0.0437	0.4244	1.3820	0.0120	0.3795	0.0087	0.2746
80	41.87	0.18	-0.2761	0.0195	-0.1710	-0.0467	0.4336	1.3785	0.0115	0.3791	0.0082	0.2750
81	42.08	0.18	-0.2691	0.0190	-0.1747	-0.0470	0.4325	1.3788	0.0111	0.3776	0.0081	0.2739
82	42.28	0.18	-0.2671	0.0201	-0.1787	-0.0482	0.4284	1.3932	0.0110	0.3832	0.0079	0.2751
83	42.49	0.18	-0.2678	0.0206	-0.1753	-0.0505	0.4250	1.3914	0.0109	0.3830	0.0078	0.2753
84	42.69	0.18	-0.2657	0.0213	-0.1783	-0.0512	0.4241	1.3984	0.0110	0.3860	0.0077	0.2764
85	42.88	0.18	-0.2612	0.0207	-0.1695	-0.0469	0.4206	1.4036	0.0101	0.3881	0.0072	0.2761
86	42.97	0.08	-0.2584	0.0222	-0.1821	-0.0506	0.4367	1.4019	0.0099	0.3900	0.0071	0.2782
87	43.15	0.11	-0.2659	0.0206	-0.1880	-0.0486	0.4216	1.3983	0.0094	0.3882	0.0071	0.2776
88	43.33	0.10	-0.2605	0.0224	-0.1921	-0.0488	0.4272	1.4093	0.0094	0.3913	0.0067	0.2777
89	43.51	0.10	-0.2574	0.0234	-0.1918	-0.0512	0.4139	1.4111	0.0097	0.3914	0.0069	0.2774
90	43.69	0.10	-0.2702	0.0223	-0.1952	-0.0478	0.4151	1.4106	-0.0090	0.3940	0.0064	0.2781
91	43.87	0.08	-0.2761	0.0236	-0.1978	-0.0495	0.4149	1.4163	0.0036	0.3941	0.0061	0.2778
92	44.03	0.08	-0.2709	0.0230	-0.1956	-0.0502	0.4145	1.4243	0.0079	0.3966	0.0056	0.2788

MARTIA MISSILE TAILS EFFECTS DATA

TEST P MRT MACH RADIO PHI CONF L DELT DEL2 DEL3 DEL4 TRANSITION
T 90 3.00 1.7 90.0 STANDARD 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	ACPF1	YCPF1	CNF2	CM2	CD2	ACPF2	YCPF2
93	44.43	0.01	-0.4899	0.0250	-0.2033	-0.0510	0.4089	1.4241	0.0077	0.3974	0.0054	0.2791
94	44.41	0.00	-0.4898	0.0248	-0.2004	-0.0508	0.4091	1.4277	0.0078	0.3977	0.0055	0.2786
95	44.38	0.00	-0.5300	0.0271	-0.2148	-0.0541	0.4053	1.4309	0.0071	0.4006	0.0049	0.2788
96	44.78	0.00	-0.5234	0.0269	-0.2125	-0.0493	0.4088	1.4308	0.0068	0.4029	0.0046	0.2800
97	44.95	0.00	-0.5091	0.0260	-0.2064	-0.0526	0.4093	1.4337	0.0070	0.4022	0.0049	0.2796
98	45.13	0.00	-0.5045	0.0267	-0.2051	-0.0529	0.4085	1.4479	0.0065	0.4058	0.0045	0.2803
99	45.31	0.00	-0.5024	0.0263	-0.2038	-0.0498	0.4053	1.4426	0.0059	0.4039	0.0041	0.2800
100	45.49	0.00	-0.5425	0.0283	-0.2182	-0.0490	0.4022	1.4516	0.0050	0.4075	0.0041	0.2807
101	45.67	0.00	-0.4502	0.0234	-0.2006	-0.0418	0.4113	1.4596	0.0046	0.4061	0.0032	0.2799
102	45.84	0.01	-0.5026	0.0259	-0.2043	-0.0390	0.4089	1.4526	0.0048	0.4069	0.0032	0.2801
103	46.01	0.01	-0.5243	0.0274	-0.2142	-0.0404	0.4043	1.4616	0.0045	0.4113	0.0031	0.2814
104	46.19	0.00	-0.5585	0.0276	-0.2243	-0.0387	0.4010	1.4765	0.0040	0.4129	0.0033	0.2804
105	46.37	0.01	-0.5427	0.0285	-0.2171	-0.0378	0.4000	1.4704	0.0037	0.4141	0.0025	0.2815
106	46.54	0.01	-0.5744	0.0266	-0.2306	-0.0363	0.4010	1.4635	0.0043	0.4153	0.0029	0.2799
107	46.71	0.01	-0.5739	0.0265	-0.2264	-0.0392	0.3972	1.4782	0.0035	0.4147	0.0024	0.2805
108	46.89	0.01	-0.5559	0.0278	-0.2246	-0.0354	0.4015	1.4763	0.0034	0.4153	0.0026	0.2813
109	47.05	0.01	-0.5537	0.0276	-0.2230	-0.0394	0.4027	1.4835	0.0035	0.4166	0.0024	0.2823
110	47.24	0.00	-0.5606	0.0278	-0.2263	-0.0394	0.3984	1.4892	0.0030	0.4185	0.0020	0.2810
111	47.37	0.01	-0.5472	0.0269	-0.2205	-0.0373	0.4030	1.4882	0.0027	0.4199	0.0018	0.2820
112	47.58	0.02	-0.5042	0.0247	-0.2049	-0.0331	0.4059	1.4949	0.0015	0.4210	0.0010	0.2816
113	47.75	0.01	-0.4869	0.0239	-0.1998	-0.0337	0.4048	1.4875	0.0020	0.4190	0.0013	0.2817
114	47.89	0.01	-0.4984	0.0240	-0.2035	-0.0341	0.4079	1.4930	0.0017	0.4202	0.0011	0.2814
115	48.07	0.00	-0.5415	0.0267	-0.2224	-0.0338	0.4102	1.5024	0.0001	0.4230	0.0001	0.2815
116	48.24	0.00	-0.5177	0.0269	-0.2135	-0.0328	0.4130	1.4950	0.0012	0.4203	0.0008	0.2811
117	48.39	0.01	-0.5111	0.0261	-0.2102	-0.0276	0.4113	1.4986	0.0009	0.4213	0.0006	0.2811
118	48.59	0.01	-0.4938	0.0248	-0.2038	-0.0306	0.4208	1.4988	0.0010	0.4233	0.0004	0.2828
119	48.74	0.01	-0.4781	0.0241	-0.1984	-0.0267	0.4184	1.4923	0.0011	0.4171	0.0007	0.2814
120	48.90	0.01	-0.4749	0.0234	-0.1939	-0.0241	0.4228	1.4963	-0.0002	0.4238	-0.0001	0.2832
121	49.07	0.01	-0.4931	0.0249	-0.1991	-0.0250	0.4230	1.4981	0.0	0.4252	0.0	0.2825
122	49.25	0.01	-0.4879	0.0247	-0.1960	-0.0265	0.4214	1.5020	-0.0011	0.4242	-0.0007	0.2824
123	49.43	0.01	-0.4939	0.0251	-0.1988	-0.0238	0.4207	1.5070	-0.0011	0.4274	-0.0007	0.2836
124	49.59	0.01	-0.4981	0.0277	-0.1984	-0.0238	0.4277	1.5026	-0.0010	0.4255	-0.0007	0.2831
125	49.77	0.02	-0.4892	0.0253	-0.2008	-0.0250	0.4246	1.5154	-0.0002	0.4295	-0.0001	0.2834
126	49.94	0.00	-0.4715	0.0242	-0.1938	-0.0254	0.4277	1.4574	-0.0010	0.4108	-0.0011	0.2819
127	50.11	0.01	-0.5240	0.0264	-0.1908	-0.0135	0.4043	1.5012	-0.0025	0.4252	-0.0017	0.2832
128	50.28	0.01	-0.5260	0.0264	-0.1781	-0.0161	0.4000	1.5140	-0.0017	0.4298	-0.0011	0.2843
129	50.45	0.01	-0.5067	0.0258	-0.1905	-0.0125	0.4066	1.5042	-0.0022	0.4268	-0.0015	0.2837
130	50.61	0.01	-0.5134	0.0269	-0.1923	-0.0093	0.4050	1.5078	-0.0022	0.4293	-0.0015	0.2847
131	50.78	0.01	-0.2731	0.0084	-0.1377	-0.0033	0.5042	1.4970	-0.0034	0.4276	-0.0023	0.2856
132	50.92	0.00	0.0300	-0.0023	-0.0100	-0.1710	-0.4206	1.5032	-0.0030	0.3936	-0.0004	0.2846
133	51.10	-0.00	-0.0519	-0.0040	-0.0297	0.0693	1.0037	1.4232	-0.0019	0.4047	-0.0013	0.2846
134	51.29	-0.00	-0.0124	-0.0060	-0.0427	0.5322	3.4435	1.4138	-0.0013	0.4047	-0.0009	0.2862
135	51.44	0.01	-0.0052	-0.0042	-0.0734	0.0505	0.8482	1.4524	-0.0026	0.4173	-0.0016	0.2873
136	51.60	0.00	-0.0125	-0.0057	-0.0440	0.0034	0.8260	1.4138	-0.0019	0.4076	-0.0013	0.2883
137	51.78	-0.00	-0.0072	-0.0070	-0.0436	0.9721	0.0556	1.4193	-0.0021	0.4095	-0.0015	0.2885
138	51.94	-0.00	-0.0012	-0.0050	-0.0297	4.1001	33.0833	1.4205	-0.0018	0.4138	-0.0013	0.2901

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(INSROL) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 48 MACH 0.90 RAIO-6 1.7 PHI 45.0 CONF 6 DIMPH 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CAF1	CN1	CM1	XCPF1	YCPF1	CAF2	CN2	CM2	XCPF2	YCPF2
139	52.11	-0.00	0.0177	-0.0044	-0.0305	-0.2456	-1.7232	1.4156	-0.0025	0.4106	-0.0018	0.2901
140	52.47	-0.00	-0.0015	-0.0057	-0.0546	0.1300	1.3284	1.4430	-0.0029	0.4210	-0.0020	0.2922
141	52.83	-0.00	0.0502	-0.0059	-0.0268	-0.1056	-0.4145	1.4363	-0.0022	0.4098	-0.0016	0.2914
142	52.80	-0.01	-0.0073	-0.0030	-0.0427	0.3999	0.0933	1.4432	-0.0035	0.4201	-0.0024	0.2911
143	54.77	0.00	0.0021	-0.0036	-0.0085	-0.0965	-0.1035	1.3954	-0.0022	0.4060	-0.0016	0.2910
144	52.93	0.00	0.0021	-0.0029	-0.0101	-0.0962	-0.2508	1.4136	-0.0031	0.4142	-0.0022	0.2926
145	53.10	-0.00	0.0012	-0.0037	-0.0164	-0.0809	-0.2080	1.4230	-0.0033	0.4162	-0.0023	0.2925
146	53.28	-0.00	0.0021	-0.0073	-0.0163	-0.1031	-0.1417	1.3934	-0.0031	0.4123	-0.0022	0.2959
147	53.45	-0.00	0.0016	-0.0094	0.0006	-0.1024	0.0065	1.3877	-0.0025	0.4057	-0.0018	0.2952
148	53.59	0.01	0.0029	-0.0093	-0.0050	-0.1083	-0.0582	1.3815	-0.0027	0.4090	-0.0020	0.2961
149	53.74	0.00	0.0055	-0.0083	-0.0017	-0.0894	-0.0176	1.3741	-0.0026	0.4084	-0.0019	0.2972
150	53.91	-0.01	0.0065	-0.0135	0.0084	-0.1370	0.0701	1.3821	-0.0026	0.4060	-0.0021	0.2979
151	54.07	-0.02	0.0021	-0.0125	0.0063	-0.1357	0.0467	1.3823	-0.0033	0.4056	-0.0024	0.2979
152	54.24	-0.03	0.0020	-0.0131	0.0007	-0.1284	0.0057	1.3847	-0.0030	0.4078	-0.0026	0.2977
153	54.39	-0.02	0.1161	-0.0122	0.0121	-0.1033	0.1025	1.3736	-0.0048	0.4103	-0.0035	0.2987
154	54.55	-0.03	0.0137	-0.0120	0.0066	-0.1035	0.0774	1.3860	-0.0030	0.4143	-0.0036	0.3002
155	54.71	-0.04	0.1382	-0.0134	0.0145	-0.0969	0.1223	1.3988	-0.0056	0.4209	-0.0042	0.3004
156	54.87	-0.04	0.1452	-0.0142	0.0124	-0.0974	0.1030	1.3941	-0.0034	0.4176	-0.0039	0.2995
157	55.02	-0.06	0.1382	-0.0144	0.0141	-0.0937	0.1003	1.4089	-0.0061	0.4232	-0.0043	0.3004
158	55.19	-0.07	0.1493	-0.0117	0.0149	-0.1018	0.1396	1.4163	-0.0061	0.4252	-0.0043	0.3002
159	55.35	-0.06	0.1397	-0.0122	0.0143	-0.0873	0.1396	1.4149	-0.0059	0.4244	-0.0042	0.3001
160	55.54	-0.08	0.1447	-0.0126	0.0106	-0.0871	0.1424	1.4313	-0.0072	0.4301	-0.0050	0.3005
161	55.69	-0.07	0.1364	-0.0131	0.0136	-0.0980	0.1437	1.4294	-0.0075	0.4269	-0.0051	0.3008
162	55.85	-0.08	0.1345	-0.0137	0.0143	-0.1018	0.1435	1.4281	-0.0078	0.4298	-0.0053	0.3010
163	56.03	-0.08	0.1373	-0.0129	0.0112	-0.0939	0.1544	1.4450	-0.0077	0.4331	-0.0053	0.3008
164	56.21	-0.09	0.1367	-0.0051	0.0219	-0.0886	0.1002	1.4491	-0.0078	0.4361	-0.0052	0.3009
165	56.36	-0.08	0.1302	-0.0102	0.0211	-0.0783	0.1013	1.4437	-0.0079	0.4341	-0.0055	0.3007
166	56.53	-0.08	0.1434	-0.0065	0.0234	-0.0665	0.1004	1.4551	-0.0078	0.4366	-0.0052	0.3000
167	56.69	-0.07	0.1296	-0.0076	0.0180	-0.0540	0.1369	1.4446	-0.0073	0.4337	-0.0051	0.3002
168	56.85	-0.08	0.1356	-0.0066	0.0226	-0.0475	0.1026	1.4390	-0.0078	0.4351	-0.0052	0.2992
169	57.03	-0.08	0.1260	-0.0055	0.0175	-0.0536	0.1421	1.4521	-0.0074	0.4357	-0.0051	0.3000
170	57.19	-0.07	0.1229	-0.0070	0.0194	-0.0620	0.1507	1.4434	-0.0082	0.4337	-0.0057	0.3001
171	57.36	-0.07	0.1227	-0.0078	0.0178	-0.0619	0.1451	1.4502	-0.0084	0.4376	-0.0058	0.3001
172	57.49	-0.06	0.1179	-0.0087	0.0178	-0.0755	0.1510	1.4418	-0.0087	0.4341	-0.0060	0.3011
173	57.62	-0.07	0.1081	-0.0088	0.0153	-0.0814	0.1415	1.4384	-0.0081	0.4376	-0.0062	0.3001
174	57.78	-0.04	0.1065	-0.0088	0.0151	-0.0846	0.1416	1.4500	-0.0094	0.4367	-0.0062	0.2998
175	57.92	-0.05	0.1064	-0.0058	0.0164	-0.0902	0.1541	1.4494	-0.0096	0.4346	-0.0066	0.2998
176	58.07	-0.06	0.1031	-0.0126	0.0173	-0.1241	0.1697	1.4482	-0.0105	0.4345	-0.0072	0.3000
177	58.20	-0.06	0.1059	-0.0099	0.0165	-0.0870	0.1747	1.4590	-0.0101	0.4390	-0.0069	0.3009
178	58.43	-0.06	0.1010	-0.0115	0.0182	-0.1150	0.1602	1.4396	-0.0099	0.4339	-0.0069	0.3014
179	58.28	-0.06	0.1058	-0.0104	0.0165	-0.0983	0.1750	1.4597	-0.0102	0.4392	-0.0070	0.3009

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAID-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
T =0 0.60 1.7 45.0 CONF14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	ACPF3	YCPF3	CNF4	CM4	CB4	ACPF4	YCPF4
1	-5.00	0.00	0.1200	0.0000	0.0745	0.0000	0.0021	-0.1233	-0.0039	-0.0747	0.0073	0.6058
2	-5.02	0.10	0.1243	0.0000	0.0775	0.0000	0.0030	-0.1196	-0.0036	-0.0737	0.0067	0.6162
3	-5.02	0.09	0.1247	0.0000	0.0750	0.0000	0.0014	-0.1238	-0.0039	-0.0756	0.0073	0.6117
4	-5.03	0.10	0.0977	0.0000	0.0603	0.0000	0.0700	-0.0801	-0.0036	-0.0569	0.0075	0.7353
5	-3.23	0.05	0.0594	0.0000	0.0506	0.0000	0.0362	-0.0279	-0.0036	-0.0515	0.0202	1.3755
6	-1.37	0.10	0.0140	0.0000	0.0290	0.0000	2.0714	0.0081	-0.0016	-0.0274	-0.1234	-0.9136
7	0.53	0.10	-0.0143	0.0000	0.0096	0.0000	-0.5078	0.0540	-0.0013	0.0053	-0.0241	0.1722
8	2.40	0.10	-0.0444	0.0000	-0.0118	0.0000	0.1834	0.0840	-0.0018	0.0203	-0.0154	0.3109
9	4.23	0.10	-0.1497	0.0000	-0.0391	0.0000	0.3130	0.1303	-0.0015	0.0416	-0.0115	0.3193
10	8.08	0.09	-0.1933	0.0000	-0.0052	0.0000	0.0370	0.1701	-0.0019	0.0519	-0.0108	0.2947
11	7.98	0.10	-0.2794	0.0000	-0.0533	0.0000	0.3339	0.2470	-0.0033	0.0825	-0.0152	0.2871
12	9.77	0.10	-0.3723	0.0000	-0.0173	0.0000	0.3151	0.2438	-0.0000	0.0750	-0.0246	0.3101
13	11.69	0.10	-0.4733	0.0000	-0.1459	0.0000	0.3081	0.2540	-0.0102	0.0804	-0.0401	0.3158
14	13.52	0.09	-0.5663	0.0000	-0.1706	0.0000	0.3013	0.2623	-0.0117	0.0891	-0.0414	0.3156
15	15.40	0.09	-0.6601	0.0000	-0.1931	0.0000	0.2899	0.2641	-0.0141	0.0915	-0.0496	0.3221
16	17.33	0.10	-0.7761	0.0000	-0.2178	0.0000	0.2800	0.2950	-0.0159	0.0967	-0.0539	0.3210
17	19.20	0.10	-0.9169	0.0000	-0.2435	0.0000	0.2827	0.3139	-0.0185	0.1012	-0.0586	0.3204
18	21.09	0.11	-1.0356	0.0000	-0.2705	0.0000	0.2817	0.3293	-0.0210	0.0986	-0.0722	0.3294
19	22.90	0.11	-1.1636	0.0000	-0.2925	0.0000	0.2837	0.3491	-0.0232	0.0955	-0.0776	0.3193
20	24.81	0.12	-1.2787	0.0000	-0.3140	0.0000	0.2596	0.3490	-0.0203	0.1090	-0.0753	0.3143
21	26.69	0.13	-1.4096	0.0000	-0.3407	0.0000	0.2519	0.4426	-0.0347	0.1379	-0.0764	0.3114
22	28.13	0.14	-1.5035	0.0000	-0.3602	0.0000	0.2493	0.5004	-0.0363	0.1608	-0.0588	0.2970
23	28.16	0.15	-1.5036	0.0000	-0.3606	0.0000	0.2088	0.5016	-0.0333	0.1716	-0.0543	0.3056
24	28.21	0.13	-1.5067	0.0000	-0.3610	0.0000	0.2089	0.5065	-0.0278	0.1663	-0.0540	0.3068
25	28.62	0.14	-1.5259	0.0000	-0.3658	0.0000	0.2130	0.5543	-0.0305	0.1731	-0.0550	0.3123
26	28.67	0.14	-1.5261	0.0000	-0.3662	0.0000	0.2163	0.5591	-0.0322	0.1930	-0.0529	0.3169
27	29.17	0.15	-1.5453	0.0000	-0.3694	0.0000	0.2138	0.6328	-0.0350	0.2015	-0.0484	0.3164
28	29.21	0.16	-1.5441	0.0000	-0.3717	0.0000	0.2165	0.6442	-0.0305	0.2068	-0.0473	0.3207
29	29.80	0.17	-1.5678	0.0000	-0.3752	0.0000	0.2203	0.7152	-0.0256	0.2257	-0.0581	0.3156
30	30.07	0.17	-1.5771	0.0000	-0.3768	0.0000	0.2208	0.6824	-0.0253	0.2208	-0.0571	0.3233
31	30.34	0.17	-1.5883	0.0000	-0.3789	0.0000	0.2301	0.7102	-0.0215	0.2326	-0.0533	0.3267
32	30.81	0.17	-1.6066	0.0000	-0.3832	0.0000	0.2373	0.7152	-0.0178	0.2381	-0.0469	0.3301
33	30.89	0.18	-1.6068	0.0000	-0.3818	0.0000	0.2360	0.7432	-0.0199	0.2400	-0.0494	0.3310
34	31.18	0.18	-1.6084	0.0000	-0.3833	0.0000	0.2390	0.7499	-0.0190	0.2408	-0.0481	0.3318
35	31.49	0.18	-1.6083	0.0000	-0.3860	0.0000	0.2396	0.7716	-0.0064	0.2543	-0.0083	0.3296
36	31.72	0.19	-1.6099	0.0000	-0.3857	0.0000	0.2401	0.7879	-0.0027	0.2565	-0.0034	0.3281
37	31.99	0.19	-1.6143	0.0000	-0.3886	0.0000	0.2427	0.7940	-0.0033	0.2605	-0.0036	0.3281
38	32.27	0.20	-1.6173	0.0000	-0.3897	0.0000	0.2441	0.8134	-0.0044	0.2644	-0.0054	0.3251
39	32.33	0.20	-1.6180	0.0000	-0.3915	0.0000	0.2439	0.8119	-0.0064	0.2622	-0.0079	0.3229
40	32.78	0.20	-1.6253	0.0000	-0.3938	0.0000	0.2453	0.8307	-0.0062	0.2698	-0.0102	0.3233
41	33.03	0.21	-1.6303	0.0000	-0.3965	0.0000	0.2471	0.8343	-0.0048	0.2630	-0.0121	0.3213
42	33.33	0.20	-1.6363	0.0000	-0.4003	0.0000	0.2475	0.8466	-0.0069	0.2667	-0.0142	0.3222
43	33.35	0.21	-1.6355	0.0000	-0.3994	0.0000	0.2477	0.8487	-0.0101	0.2650	-0.0130	0.3275
44	33.81	0.20	-1.6471	0.0000	-0.4029	0.0000	0.2478	0.8539	-0.0130	0.2628	-0.0178	0.3258
45	34.05	0.20	-1.6537	0.0000	-0.4053	0.0000	0.2499	0.8617	-0.0114	0.2691	-0.0159	0.3259
46	34.30	0.21	-1.6604	0.0000	-0.4111	0.0000	0.2492	0.8717	-0.0139	0.2689	-0.0187	0.3256

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/L-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 93.00 1.61 90.0 BIAS/49 0.0 0 0 0 0 UNKNOWN

PCINT	ALPHA	BETA	CNF3	CM3	CA3	ACPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	34.34	0.21	-1.0070	9.9999	-0.2714	9.9999	0.2491	0.7216	0.0152	0.2457	0.0211	0.3404
48	34.80	0.22	-1.0080	9.9999	-0.2724	9.9999	0.2500	0.7044	0.0161	0.2410	0.0257	0.3430
49	35.04	0.22	-1.0085	9.9999	-0.2731	9.9999	0.2502	0.6950	0.0174	0.2380	0.0282	0.3438
50	35.29	0.22	-1.0093	9.9999	-0.2743	9.9999	0.2510	0.6815	0.0199	0.2316	0.0303	0.3371
51	35.52	0.22	-1.0073	9.9999	-0.2725	9.9999	0.2500	0.6891	0.0214	0.1911	0.0376	0.3358
52	35.77	0.23	-1.0080	9.9999	-0.2736	9.9999	0.2520	0.6853	0.0239	0.1879	0.0423	0.3324
53	36.00	0.22	-1.0072	9.9999	-0.2730	9.9999	0.2520	0.6812	0.0237	0.1762	0.0446	0.3317
54	36.22	0.23	-1.0269	9.9999	-0.2804	9.9999	0.2534	0.6902	0.0245	0.1643	0.0490	0.3285
55	36.47	0.23	-1.0168	9.9999	-0.2814	9.9999	0.2531	0.6711	0.0253	0.1532	0.0537	0.3252
56	36.74	0.23	-1.0083	9.9999	-0.2738	9.9999	0.2547	0.6748	0.0237	0.1380	0.0558	0.3202
57	36.96	0.24	-1.0134	9.9999	-0.2765	9.9999	0.2562	0.6828	0.0232	0.1293	0.0536	0.3219
58	37.19	0.24	-1.0097	9.9999	-0.2739	9.9999	0.2564	0.6787	0.0241	0.1296	0.0601	0.3156
59	37.42	0.23	-1.0132	9.9999	-0.2818	9.9999	0.2564	0.6788	0.0242	0.1208	0.0639	0.3189
60	37.69	0.24	-1.0132	9.9999	-0.2818	9.9999	0.2564	0.6742	0.0252	0.1180	0.0673	0.3169
61	37.89	0.24	-1.0098	9.9999	-0.2771	9.9999	0.2568	0.6812	0.0257	0.1041	0.0776	0.3143
62	38.10	0.24	-1.0099	9.9999	-0.2770	9.9999	0.2593	0.6815	0.0234	0.1151	0.0691	0.3132
63	38.34	0.24	-1.0101	9.9999	-0.2765	9.9999	0.2611	0.6769	0.0231	0.1218	0.0613	0.3226
64	38.57	0.24	-1.0094	9.9999	-0.2768	9.9999	0.2625	0.6783	0.0251	0.1165	0.0700	0.3251
65	38.80	0.24	-1.0078	9.9999	-0.2775	9.9999	0.2642	0.6809	0.0242	0.1179	0.0673	0.3267
66	39.04	0.23	-1.0080	9.9999	-0.2768	9.9999	0.2631	0.6827	0.0219	0.1217	0.0604	0.3355
67	39.22	0.23	-1.0079	9.9999	-0.2763	9.9999	0.2644	0.6842	0.0202	0.1129	0.0761	0.3268
68	39.44	0.23	-1.0080	9.9999	-0.2763	9.9999	0.2651	0.6804	0.0214	0.1135	0.0632	0.3354
69	39.68	0.21	-1.0071	9.9999	-0.2749	9.9999	0.2666	0.6809	0.0239	0.1033	0.0773	0.3340
70	39.88	0.19	-1.0071	9.9999	-0.2739	9.9999	0.2668	0.6809	0.0242	0.0748	0.1419	0.3105
71	40.01	0.19	-1.0121	9.9999	-0.2768	9.9999	0.2675	0.6218	0.0340	0.0700	0.1560	0.3156
72	40.27	0.19	-1.0120	9.9999	-0.2770	9.9999	0.2676	0.6256	0.0334	0.0657	0.1624	0.3196
73	40.49	0.18	-1.0121	9.9999	-0.2739	9.9999	0.2688	0.6198	0.0359	0.0554	0.2114	0.3292
74	40.67	0.18	-1.0086	9.9999	-0.2729	9.9999	0.2708	0.6130	0.0316	0.0601	0.1826	0.3474
75	40.89	0.18	-1.0102	9.9999	-0.2740	9.9999	0.2708	0.6304	0.0349	0.0499	0.2521	0.3605
76	41.09	0.18	-1.0093	9.9999	-0.2737	9.9999	0.2714	0.6303	0.0344	0.0495	0.2524	0.3632
77	41.27	0.19	-1.1110	9.9999	-0.3003	9.9999	0.2703	0.6238	0.0285	0.0493	0.2302	0.3982
78	41.50	0.19	-1.1073	9.9999	-0.3013	9.9999	0.2721	0.6157	0.0293	0.0462	0.2532	0.4166
79	41.67	0.19	-1.1203	9.9999	-0.3053	9.9999	0.2733	0.6002	0.0259	0.0435	0.2583	0.4823
80	41.87	0.19	-1.1169	9.9999	-0.3037	9.9999	0.2727	0.6038	0.0192	0.0405	0.2237	0.5420
81	42.08	0.19	-1.1242	9.9999	-0.3066	9.9999	0.2727	0.6041	0.0232	0.0406	0.2465	0.4952
82	42.28	0.19	-1.1210	9.9999	-0.3053	9.9999	0.2727	0.6051	0.0187	0.0430	0.2505	0.6605
83	42.49	0.19	-1.1209	9.9999	-0.3054	9.9999	0.2727	0.6031	0.0195	0.0412	0.3014	0.8565
84	42.69	0.19	-1.1243	9.9999	-0.3071	9.9999	0.2736	0.6030	0.0187	0.0392	0.2377	0.8711
85	42.89	0.21	-1.1444	9.9999	-0.3163	9.9999	0.2748	0.6082	0.0184	0.0360	0.3402	0.7884
86	42.91	0.20	-1.1361	9.9999	-0.3130	9.9999	0.2734	0.6160	0.0194	0.0355	0.5422	1.8011
87	43.13	0.21	-1.1521	9.9999	-0.3171	9.9999	0.2751	0.6263	0.0204	0.0299	0.7208	1.0565
88	43.33	0.19	-1.1510	9.9999	-0.3171	9.9999	0.2760	0.6310	0.0189	0.0320	0.5451	1.0323
89	43.51	0.20	-1.1477	9.9999	-0.3161	9.9999	0.2754	0.6216	0.0192	0.0321	0.6513	1.4725
90	43.69	0.19	-1.1578	9.9999	-0.3213	9.9999	0.2760	0.6004	0.0147	0.0263	2.2906	4.4219
91	43.87	0.20	-1.1544	9.9999	-0.3183	9.9999	0.2749	-0.0055	0.0137	0.0265	-1.5452	-4.8182
92	44.33	0.20	-1.1527	9.9999	-0.3165	9.9999	0.2748	-0.0180	0.0174	0.0254	-0.4111	-1.3000

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 98 MACH 0.80 RN/L 10.0 PHI 45.0 CONF 14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNFS	CMS	CBS	ALPFS	YCPFS	CNFW	CMW	CBW	ACPFW	YCPFW
93	49.43	0.07	-1.2343	0.0997	-0.3180	0.9999	0.2760	-0.0140	0.0095	0.0235	-0.0765	-1.6766
94	49.41	0.09	-1.2402	0.0999	-0.3221	0.9999	0.2762	-0.0084	0.0120	0.0231	-1.9284	-2.7500
95	49.38	0.06	-1.2420	0.0999	-0.3212	0.9999	0.2763	-0.0269	0.0090	0.0198	-0.3614	-0.7952
96	49.78	0.08	-1.2039	0.0999	-0.3246	0.9999	0.2769	-0.0402	0.0107	0.0173	-0.9083	-0.6003
97	49.75	0.04	-1.2343	0.0999	-0.3196	0.9999	0.2757	-0.0360	0.0079	0.0157	-0.2025	-0.4026
98	49.43	0.03	-1.2433	0.0999	-0.3224	0.9999	0.2757	-0.0367	0.0075	0.0179	-0.1709	-0.4877
99	49.31	0.06	-1.2420	0.0999	-0.3274	0.9999	0.2760	-0.0367	0.0121	0.0143	-0.3467	-0.4121
100	49.49	0.06	-1.2426	0.0999	-0.3306	0.9999	0.2774	-0.0250	0.0134	0.0147	-0.5529	-0.5880
101	49.07	0.06	-1.2819	0.0999	-0.3269	0.9999	0.2766	-0.0392	0.0093	0.0106	-0.1748	-0.2030
102	49.09	0.07	-1.2933	0.0999	-0.3309	0.9999	0.2768	-0.0397	0.0125	0.0095	-0.2327	-0.1769
103	48.81	0.07	-1.2934	0.0999	-0.3345	0.9999	0.2760	-0.0466	0.0152	0.0107	-0.2718	-0.2202
104	48.19	0.08	-1.3133	0.0999	-0.3265	0.9999	0.2790	-0.0497	0.0147	0.0105	-0.2957	-0.2072
105	48.37	0.07	-1.2983	0.0999	-0.3375	0.9999	0.2795	-0.0485	0.0130	0.0121	-0.2880	-0.2495
106	48.39	0.07	-1.2986	0.0999	-0.3401	0.9999	0.2795	-0.0593	0.0150	0.0083	-0.2529	-0.1400
107	48.71	0.05	-1.2783	0.0999	-0.3305	0.9999	0.2790	-0.0577	0.0129	0.0093	-0.2235	-0.1612
108	48.89	0.07	-1.2700	0.0999	-0.3270	0.9999	0.2790	-0.0586	0.0124	0.0070	-0.1807	-0.1020
109	47.05	0.05	-1.2700	0.0999	-0.3283	0.9999	0.2796	-0.0636	0.0106	0.0064	-0.1698	-0.1321
110	47.21	0.06	-1.2700	0.0999	-0.3410	0.9999	0.2795	-0.0756	0.0118	0.0069	-0.1561	-0.0648
111	47.37	0.06	-1.2717	0.0999	-0.3377	0.9999	0.2797	-0.0735	0.0131	0.0077	-0.1432	-0.1092
112	47.56	0.05	-1.2732	0.0999	-0.3352	0.9999	0.2806	-0.0704	0.0128	0.0023	-0.1675	-0.0301
113	47.73	0.03	-1.2767	0.0999	-0.3339	0.9999	0.2790	-0.0616	0.0078	0.0021	-0.0929	-0.0257
114	47.89	0.03	-1.2809	0.0999	-0.3288	0.9999	0.2787	-0.0741	0.0075	0.0	-0.0823	0.0
115	48.07	0.06	-1.2218	0.0999	-0.3431	0.9999	0.2809	-0.0862	0.0135	-0.0023	-0.1264	0.0267
116	48.24	0.06	-1.2133	0.0999	-0.3378	0.9999	0.2801	-0.0894	0.0101	-0.0048	-0.1130	0.0537
117	48.39	0.05	-1.2100	0.0999	-0.3401	0.9999	0.2795	-0.0968	0.0076	-0.0054	-0.1014	0.0559
118	48.59	0.05	-1.2100	0.0999	-0.3378	0.9999	0.2796	-0.0992	0.0082	-0.0060	-0.0827	0.0605
119	48.74	0.05	-1.2035	0.0999	-0.3350	0.9999	0.2774	-0.1100	0.0077	-0.0104	-0.0700	0.0965
120	48.90	0.05	-1.2037	0.0999	-0.3405	0.9999	0.2801	-0.1114	0.0092	-0.0115	-0.0820	0.1032
121	49.07	0.05	-1.2029	0.0999	-0.3378	0.9999	0.2794	-0.1147	0.0080	-0.0140	-0.0750	0.1221
122	49.25	0.05	-1.2191	0.0999	-0.3395	0.9999	0.2785	-0.1143	0.0092	-0.0134	-0.0716	0.1345
123	49.43	0.04	-1.2101	0.0999	-0.3373	0.9999	0.2787	-0.1160	0.0100	-0.0152	-0.0682	0.1310
124	49.59	0.01	-1.2100	0.0999	-0.3376	0.9999	0.2776	-0.1159	0.0095	-0.0181	-0.0620	0.1562
125	49.77	0.02	-1.2178	0.0999	-0.3350	0.9999	0.2784	-0.1159	0.0095	-0.0181	-0.0820	0.1562
126	49.94	0.00	-1.2278	0.0999	-0.3412	0.9999	0.2779	-0.1403	0.0078	-0.0231	-0.0512	0.1693
127	50.11	0.01	-1.2310	0.0999	-0.3427	0.9999	0.2784	-0.1419	0.0090	-0.0257	-0.0634	0.1811
128	50.28	0.01	-1.2293	0.0999	-0.3426	0.9999	0.2787	-0.1296	0.0077	-0.0216	-0.0546	0.1667
129	50.45	0.01	-1.2239	0.0999	-0.3400	0.9999	0.2779	-0.1422	0.0090	-0.0264	-0.0633	0.1857
130	50.61	0.01	-1.2368	0.0999	-0.3437	0.9999	0.2779	-0.1455	0.0084	-0.0290	-0.0577	0.1993
131	50.78	0.01	-1.2335	0.0999	-0.3426	0.9999	0.2779	-0.1444	0.0086	-0.0265	-0.0478	0.1976
132	50.92	0.00	-1.2100	0.0999	-0.3426	0.9999	0.2788	-0.1605	0.0081	-0.0307	-0.0478	0.1844
133	51.10	-0.00	-1.2338	0.0999	-0.3467	0.9999	0.2786	-0.1642	0.0091	-0.0339	-0.0311	0.2065
134	51.29	-0.00	-1.2400	0.0999	-0.3517	0.9999	0.2773	-0.1683	0.0091	-0.0347	-0.0164	0.2062
135	51.44	0.01	-1.2710	0.0999	-0.3510	0.9999	0.2765	-0.1676	0.0097	-0.0357	-0.0260	0.2130
136	51.60	0.00	-1.3104	0.0999	-0.3633	0.9999	0.2773	-0.1598	0.0017	-0.0274	-0.0107	0.1717
137	51.78	-0.00	-1.3034	0.0999	-0.3628	0.9999	0.2783	-0.1635	0.0018	-0.0290	-0.0110	0.1774
138	51.94	-0.00	-1.3153	0.0999	-0.3650	0.9999	0.2760	-0.1781	-0.0006	-0.0356	0.0034	0.1992

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 3rd 0.00 1.7 MACH MACH-0 PHI 90.0 CONF Diagnostic L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CN4	CM4	CA4	XCPF4	YCPF4
139	52.11	-0.00	-1.3087	9.9999	-0.3005	9.9999	0.2780	-0.1378	-0.0020	-0.0154	0.0145	0.1118
140	52.47	-0.00	-1.3135	9.9999	-0.3044	9.9999	0.2770	-0.1027	0.0007	-0.0347	-0.0043	0.2010
141	52.43	-0.00	-1.3333	9.9999	-0.3794	9.9999	0.2799	-0.1504	-0.0029	-0.0215	0.0193	0.1430
142	52.00	-0.01	-1.3772	9.9999	-0.3552	9.9999	0.2797	-0.1149	0.0002	-0.0111	-0.0017	0.0900
143	52.77	0.00	-1.4225	9.9999	-0.3795	9.9999	0.2807	-0.0903	-0.0047	0.0050	0.0520	-0.0554
144	52.93	0.00	-1.4271	9.9999	-0.4025	9.9999	0.2816	-0.0849	-0.0017	0.0053	0.0200	-0.0624
145	53.10	-0.00	-1.4291	9.9999	-0.4032	9.9999	0.2821	-0.0791	-0.0011	0.0077	0.0148	-0.1039
146	53.26	-0.00	-1.4313	9.9999	-0.3990	9.9999	0.2819	-0.0110	0.0034	0.0230	-0.4906	-2.0909
147	53.43	-0.00	-1.4191	9.9999	-0.3584	9.9999	0.2807	-0.0028	0.0071	0.0246	-2.5354	-8.7657
148	53.59	0.01	-1.4035	9.9999	-0.3238	9.9999	0.2796	-0.0033	0.0076	0.0260	-2.3027	-8.6667
149	53.74	0.00	-1.3970	9.9999	-0.4064	9.9999	0.2826	0.0118	0.0028	0.0332	0.2373	2.8136
150	53.91	-0.01	-1.4053	9.9999	-0.3713	9.9999	0.2784	-0.0109	0.0101	0.0150	-0.9265	-1.3761
151	54.07	-0.02	-1.3764	9.9999	-0.3691	9.9999	0.2786	-0.0269	0.0035	0.0085	-0.3159	-0.3160
152	54.24	-0.03	-1.4000	9.9999	-0.3990	9.9999	0.2777	-0.0214	0.0095	0.0096	-0.4009	-0.4528
153	54.39	-0.02	-1.4132	9.9999	-0.3938	9.9999	0.2787	-0.0306	0.0033	0.0064	-0.1078	-0.2745
154	54.55	-0.03	-1.4214	9.9999	-0.3957	9.9999	0.2784	-0.0318	0.0048	0.0059	-0.1509	-0.1855
155	54.71	-0.04	-1.4499	9.9999	-0.4035	9.9999	0.2780	-0.0273	0.0014	0.0082	-0.0513	-0.3004
156	54.87	-0.04	-1.4343	9.9999	-0.3993	9.9999	0.2784	-0.0345	0.0033	0.0059	-0.0956	-0.1130
157	55.02	-0.04	-1.4230	9.9999	-0.4004	9.9999	0.2790	-0.0330	0.0024	0.0090	-0.0830	-0.3000
158	55.19	-0.03	-1.4098	9.9999	-0.4114	9.9999	0.2799	-0.0192	0.0002	0.0113	-0.2957	-0.7958
159	55.35	-0.04	-1.4478	9.9999	-0.4044	9.9999	0.2793	-0.0313	0.0066	0.0056	-0.2108	-0.1769
160	55.54	-0.04	-1.4494	9.9999	-0.4052	9.9999	0.2800	-0.0395	0.0073	0.0017	-0.1848	-0.0430
161	55.69	-0.03	-1.4427	9.9999	-0.4060	9.9999	0.2800	-0.0482	0.0088	-0.0007	-0.1625	0.0145
162	55.85	-0.04	-1.4461	9.9999	-0.4064	9.9999	0.2814	-0.0497	0.0089	-0.0032	-0.1690	0.0040
163	56.03	-0.04	-1.4488	9.9999	-0.4057	9.9999	0.2805	-0.0513	0.0130	-0.0026	-0.2066	0.0507
164	56.21	-0.04	-1.4718	9.9999	-0.4130	9.9999	0.2820	-0.0391	0.0110	-0.0002	-0.4347	0.0051
165	56.38	-0.04	-1.4633	9.9999	-0.4123	9.9999	0.2818	-0.0547	0.0131	-0.0034	-0.2760	0.0585
166	56.55	-0.04	-1.4634	9.9999	-0.4130	9.9999	0.2822	-0.0542	0.0100	-0.0034	-0.3175	0.0574
167	56.69	-0.04	-1.4505	9.9999	-0.4074	9.9999	0.2809	-0.0691	0.0171	-0.0052	-0.2474	0.0753
168	56.85	-0.04	-1.4584	9.9999	-0.4107	9.9999	0.2815	-0.0590	0.0160	-0.0020	-0.3152	0.0339
169	57.00	-0.04	-1.4488	9.9999	-0.4000	9.9999	0.2806	-0.0757	0.0159	-0.0053	-0.2100	0.0700
170	57.19	-0.04	-1.4330	9.9999	-0.4024	9.9999	0.2806	-0.0756	0.0150	-0.0060	-0.2090	0.0734
171	57.36	-0.04	-1.4472	9.9999	-0.4072	9.9999	0.2814	-0.0712	0.0150	-0.0037	-0.2106	0.0520
172	57.54	-0.04	-1.4209	9.9999	-0.4034	9.9999	0.2802	-0.0868	0.0154	-0.0061	-0.1509	0.0687
173	57.62	-0.04	-1.4439	9.9999	-0.4050	9.9999	0.2809	-0.0901	0.0147	-0.0057	-0.1409	0.0633
174	57.78	-0.04	-1.4408	9.9999	-0.4040	9.9999	0.2804	-0.0916	0.0142	-0.0059	-0.1332	0.0644
175	57.96	-0.03	-1.4272	9.9999	-0.4010	9.9999	0.2810	-0.0912	0.0117	-0.0046	-0.1283	0.0504
176	58.07	-0.04	-1.4274	9.9999	-0.4003	9.9999	0.2804	-0.0928	0.0135	-0.0059	-0.1096	0.0616
177	58.20	-0.04	-1.4037	9.9999	-0.4061	9.9999	0.2823	-0.0873	0.0116	-0.0050	-0.1351	0.0573
178	58.23	-0.04	-1.4175	9.9999	-0.3970	9.9999	0.2800	-0.0955	0.0134	-0.0059	-0.1089	0.0618
179	58.26	-0.04	-1.4378	9.9999	-0.4045	9.9999	0.2813	-0.0908	0.0116	-0.0060	-0.1277	0.0661

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 49 MACH 0.90 RALP-0 0.7 PHI 45.0 DIHEDRAL CONF L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CA	CLM	CY	CLN	CLL	LA	CAB	CAF	XCP
1	-3.01	0.10	-0.00032	1.03503	0.1888	-0.3397	-0.0114	0.2499	0.0749	0.1750	-1.5929
2	-3.00	0.10	-0.00030	1.03606	0.1372	-0.2719	-0.0115	0.2497	0.0745	0.1748	-1.6740
3	-3.01	0.10	-0.00198	1.01186	0.0174	-0.2445	-0.0117	0.2516	0.0758	0.1756	-1.6568
4	-4.05	0.10	-0.00241	0.98729	0.1044	-0.2841	-0.0116	0.2685	0.0697	0.1988	-1.5854
5	-2.10	0.10	-0.00230	0.35532	0.0766	-0.1548	-0.0116	0.2699	0.0661	0.2038	-1.6583
6	-0.19	0.10	-0.00134	0.00906	0.0398	-0.1069	-0.0114	0.2716	0.0664	0.2052	-5.3674
7	1.71	0.09	0.00154	-0.01154	0.0134	-0.1297	-0.0113	0.2778	0.0665	0.2111	-0.6976
8	3.89	0.10	0.00494	-0.04394	0.0695	-0.2499	-0.0110	0.2855	0.0691	0.1964	-1.1922
9	5.53	0.10	0.00801	-0.08230	0.0989	-0.3255	-0.0110	0.2714	0.0770	0.1944	-1.3995
10	7.45	0.11	0.00819	-0.09055	0.1305	-0.3950	-0.0107	0.2750	0.0870	0.1880	-1.5486
11	9.33	0.10	0.01150	-0.08303	0.0877	-0.3042	-0.0109	0.2827	0.0996	0.1832	-1.6458
12	11.25	0.10	0.01597	-0.09237	0.0830	-0.3423	-0.0113	0.2785	0.1150	0.1636	-1.6605
13	13.18	0.09	0.01832	-0.09336	0.0824	-0.3011	-0.0118	0.2760	0.1294	0.1467	-1.6751
14	15.09	0.10	0.02072	-0.09207	0.0953	-0.3885	-0.0107	0.2630	0.1553	0.1278	-1.6739
15	17.07	0.10	0.02082	-0.09282	0.1168	-0.2651	-0.0101	0.2752	0.1830	0.0952	-1.6445
16	19.04	0.10	0.02004	-0.09554	0.1410	-0.3271	-0.0103	0.2700	0.2068	0.0632	-1.6011
17	20.96	0.12	0.02264	-0.09429	0.1273	-0.0863	-0.0786	0.2729	0.2201	0.0468	-1.5693
18	22.89	0.13	0.02221	-0.09202	0.1267	-0.0994	-0.0840	0.2753	0.2539	0.0214	-1.4835
19	24.89	0.11	0.02591	-0.08914	-0.0031	0.0884	0.0298	0.3189	0.3272	-0.0033	-1.3368
20	26.77	0.10	0.02060	-0.09750	0.0879	-1.1995	0.1108	0.3192	0.3392	-0.0200	-1.1824
21	28.71	0.10	0.01792	-0.08892	0.0875	-1.3356	0.1071	0.3313	0.3797	-0.0464	-1.0584
22	28.71	0.17	0.01803	-0.09762	0.0850	-1.3024	0.1072	0.3291	0.3820	-0.0589	-1.0809
23	28.71	0.15	0.02332	-0.09482	0.0875	-1.3201	0.0999	0.3284	0.3803	-0.0539	-1.0691
24	29.20	0.10	0.02060	-0.09527	0.1411	-1.2681	0.1285	0.3239	0.3869	-0.0650	-1.0704
25	29.96	0.10	0.02396	-0.09498	0.0827	-1.1257	0.1419	0.3247	0.3950	-0.0703	-1.0522
26	29.81	0.17	0.02351	-0.09455	0.0820	-0.0904	0.1150	0.3283	0.4047	-0.0764	-1.0021
27	30.00	0.18	0.01960	-0.09372	0.0875	-0.0857	0.1290	0.3174	0.4090	-0.0918	-1.0035
28	30.33	0.17	0.01819	-0.09333	0.0990	-0.0277	0.1240	0.3219	0.4127	-0.0908	-1.0023
29	30.00	0.17	0.01963	-0.09521	0.0801	-0.0103	0.1155	0.3384	0.4180	-0.0796	-0.9705
30	30.00	0.17	0.01982	-0.09367	0.0814	-0.0109	0.1154	0.3350	0.4207	-0.0849	-0.9752
31	31.18	0.18	0.01860	-0.09079	0.0824	-0.2701	0.1497	0.3359	0.4260	-0.0901	-0.9906
32	31.43	0.13	0.02345	-0.09241	0.0871	-0.2217	0.1635	0.3312	0.4264	-0.0952	-0.9851
33	31.71	0.19	0.01826	-0.08845	1.0715	-0.2200	0.1709	0.3320	0.4305	-0.0966	-0.9737
34	31.99	0.21	0.01956	-0.09275	1.0249	-0.1957	0.2125	0.3136	0.4327	-0.1190	-0.9740
35	32.27	0.21	0.01829	-0.09143	1.0291	-0.2147	0.2131	0.3248	0.4336	-0.1089	-0.9658
36	32.33	0.20	0.01750	-0.08173	1.0362	0.1360	0.2207	0.3228	0.4407	-0.1180	-0.9442
37	32.60	0.21	0.02234	-0.08993	1.0291	0.1430	0.2269	0.3169	0.4416	-0.1248	-0.9423
38	33.08	0.22	0.01881	-0.08853	1.0242	0.3030	0.2207	0.3150	0.4491	-0.1342	-0.9112
39	33.33	0.20	0.02203	-0.08653	1.0224	0.3015	0.2211	0.3163	0.4478	-0.1298	-0.8805
40	33.59	0.20	0.01991	-0.08273	1.0244	0.2985	0.2206	0.3112	0.4517	-0.1406	-0.8742
41	33.84	0.20	0.01997	-0.09068	1.0201	0.4523	0.2191	0.3266	0.4534	-0.1269	-0.8572
42	34.09	0.20	0.02330	-0.08853	1.0079	0.7000	0.2015	0.3010	0.4551	-0.1562	-0.8341
43	34.34	0.21	0.02023	-0.07963	1.0279	0.5213	0.2029	0.3008	0.4564	-0.1557	-0.8051
44	34.60	0.20	0.02063	-0.07440	1.0942	0.8175	0.1891	0.2971	0.4582	-0.1612	-0.7798
45	34.83	0.21	0.01787	-0.05049	1.1050	0.4330	0.1893	0.3039	0.4600	-0.1562	-0.7467
46	35.07	0.23	0.04918	-0.03030	1.3978	0.2940	0.1776	0.3041	0.4613	-0.1573	-0.7159

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 99 MACH 0.90 RATIO 1.0 PHI 90.0 CONF CONFIG 0.0 L 0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	35.31	0.22	1.0793	-0.0135	1.2734	0.1299	0.1711	0.2982	0.4634	-0.1623	-0.6523
48	35.53	0.21	1.0435	-0.0084	1.1826	0.0899	0.1712	0.3138	0.4638	-0.1471	-0.6184
49	35.78	0.22	1.0515	-0.0102	1.2490	-0.0903	0.2209	0.3190	0.4560	-0.1371	-0.5462
50	36.06	0.23	1.0992	-0.0200	1.3902	-0.0992	0.1729	0.3169	0.4374	-0.1408	-0.5311
51	36.28	0.21	1.0603	-0.0193	1.2222	-0.0898	0.1796	0.2996	0.4525	-0.1560	-0.4642
52	36.49	0.22	1.0807	-0.0333	1.2651	-0.0224	0.1734	0.2886	0.4533	-0.1647	-0.4600
53	36.72	0.21	1.0479	-0.0494	1.1877	-0.0818	0.1803	0.2938	0.4573	-0.1638	-0.4581
54	36.96	0.19	1.0043	-0.0178	1.0936	-0.1404	0.1369	0.3078	0.4592	-0.1517	-0.3930
55	37.19	0.19	1.0734	-0.0130	1.0001	-0.0530	0.1117	0.2926	0.4505	-0.1640	-0.3876
56	37.41	0.18	1.0492	-0.0003	0.8997	0.1319	0.0702	0.2916	0.4616	-0.1703	-0.3677
57	37.67	0.18	1.0994	-0.0191	0.8895	0.1523	0.0707	0.2906	0.4644	-0.1682	-0.3549
58	37.89	0.15	1.0015	-0.0410	0.8508	0.3316	0.0265	0.2896	0.4588	-0.1691	-0.3161
59	38.13	0.17	0.9486	-0.0117	0.8088	0.1849	0.0933	0.2888	0.4632	-0.1772	-0.3044
60	38.38	0.19	0.9803	-0.0325	0.8998	0.4252	0.0030	0.2778	0.4496	-0.1668	-0.3160
61	38.61	0.14	0.9270	-0.0204	0.8708	0.2508	-0.0112	0.2974	0.4628	-0.1655	-0.2732
62	38.89	0.12	0.8731	-0.0201	0.8021	0.3005	-0.0191	0.2889	0.4641	-0.1750	-0.2724
63	39.08	0.12	0.8748	-0.0209	0.8138	0.3468	-0.0392	0.2795	0.4655	-0.1862	-0.2702
64	39.31	0.13	0.8855	-0.0175	0.8207	0.3104	-0.0395	0.2825	0.4726	-0.1901	-0.2773
65	39.52	0.11	0.8193	-0.0142	0.7339	0.3958	-0.0740	0.2812	0.4782	-0.1950	-0.2682
66	39.73	0.12	0.8320	-0.0214	0.7435	0.3429	-0.0873	0.2803	0.4726	-0.1923	-0.2650
67	39.94	0.09	0.8015	-0.0208	-0.1273	0.0801	-0.1089	0.2899	0.4752	-0.1854	-0.2777
68	40.10	0.08	0.7854	-0.0184	-0.0838	0.2904	-0.1158	0.2769	0.4724	-0.1955	-0.2656
69	40.39	0.09	0.8081	-0.0198	-0.0195	0.2219	-0.1218	0.2873	0.4784	-0.1891	-0.2759
70	40.58	0.09	0.8104	-0.0209	-0.1309	0.0830	-0.1294	0.2835	0.4787	-0.1932	-0.3174
71	40.80	0.08	0.8283	-0.0253	-0.1334	0.0812	-0.1359	0.2873	0.4819	-0.1926	-0.2957
72	41.00	0.08	0.8024	-0.0276	-0.0863	0.0819	-0.1293	0.2944	0.4893	-0.1949	-0.3202
73	41.20	0.07	0.8040	-0.0275	-0.1935	0.0103	-0.1506	0.2781	0.4884	-0.2102	-0.3040
74	41.44	0.08	0.7741	-0.0264	-0.0707	0.1203	-0.1301	0.2734	0.4945	-0.2190	-0.3294
75	41.62	0.08	0.8133	-0.0299	-0.0774	0.1243	-0.1300	0.2732	0.4915	-0.2182	-0.2993
76	41.82	0.08	0.8215	-0.0305	-0.0848	0.0942	-0.1508	0.2744	0.4982	-0.2237	-0.2991
77	42.02	0.07	0.8053	-0.0285	-0.2195	0.0808	-0.1699	0.2804	0.4914	-0.2309	-0.3005
78	42.22	0.09	0.8207	-0.0250	0.0300	0.2309	-0.1852	0.2859	0.5114	-0.2454	-0.3565
79	42.42	0.08	0.8260	-0.0272	-0.1032	0.0915	-0.1703	0.2733	0.4994	-0.2260	-0.3031
80	42.60	0.08	0.8263	-0.0228	-0.0720	0.0107	-0.2117	0.2713	0.5149	-0.2406	-0.3579
81	42.79	0.08	0.8031	-0.0184	-0.0670	0.0257	-0.1976	0.2781	0.5131	-0.2349	-0.3142
82	42.98	0.08	0.7849	-0.0230	-0.0529	0.0110	-0.1834	0.2689	0.5060	-0.2420	-0.3017
83	43.19	0.07	0.7735	-0.0221	-0.0426	0.2102	-0.2039	0.2842	0.4998	-0.2355	-0.2989
84	43.33	0.08	0.8129	-0.0203	-0.0699	0.0057	-0.1881	0.2809	0.4994	-0.2384	-0.2727
85	43.51	0.07	0.8134	-0.0197	-0.1427	0.0057	-0.1869	0.2750	0.5034	-0.2445	-0.2844
86	43.71	0.07	0.8484	-0.0355	-0.0488	0.0903	-0.1937	0.2792	0.5043	-0.2340	-0.2936
87	43.91	0.07	0.8208	-0.0249	-0.0879	0.0039	-0.2253	0.2803	0.5078	-0.2514	-0.3166
88	44.07	0.08	0.8228	-0.0231	-0.0940	0.0940	-0.2230	0.2837	0.5107	-0.2529	-0.3208
89	44.25	0.06	0.8334	-0.0223	-0.0817	0.0151	-0.2233	0.2806	0.5139	-0.2622	-0.3176
90	44.43	0.07	0.8307	-0.0181	-0.0971	0.0210	-0.2234	0.2813	0.5170	-0.2496	-0.3306
91	44.61	0.05	0.8401	-0.0193	-0.0907	0.0093	-0.2234	0.2863	0.5099	-0.2638	-0.2860
92	44.82	0.05	0.8268	-0.0155	-0.0882	0.0188	-0.2442	0.2905	0.5219	-0.2813	-0.3192

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 99 MACH 0.90 RN/FT 4.0 PHI 45.0 CONF 49 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	45.00	0.05	10.5475	-3.2515	-0.4574	1.1500	-0.2510	0.2439	0.5175	-0.2735	-0.3083
94	45.18	0.02	10.5721	-3.2757	-0.0036	0.1774	-0.2236	0.2366	0.5193	-0.2736	-0.2720
95	45.35	0.03	10.7103	-3.4517	-0.3069	1.2784	-0.2043	0.2456	0.5214	-0.2757	-0.3202
96	45.53	0.05	10.6532	-3.4034	-0.3240	0.9917	-0.2035	0.2452	0.5192	-0.2689	-0.3197
97	45.73	0.01	10.9036	-3.5340	-0.1726	1.0261	-0.2791	0.2246	0.5234	-0.2958	-0.3259
98	45.91	0.01	11.0021	-3.5534	-0.0993	1.2572	-0.2793	0.2283	0.5297	-0.3016	-0.3266
99	46.08	0.02	11.0580	-3.5140	-0.0586	0.9357	-0.2850	0.2443	0.5235	-0.2759	-0.3184
100	46.42	0.04	11.1022	-3.6124	-0.2523	1.2727	-0.2958	0.2270	0.5140	-0.2900	-0.3350
101	46.62	0.03	11.0969	-3.5478	-0.5215	0.8757	-0.2838	0.2217	0.5160	-0.3169	-0.2837
102	46.80	0.03	11.2141	-3.6979	-0.5265	0.9176	-0.2894	0.2100	0.5233	-0.3133	-0.3119
103	46.97	0.01	11.3502	-3.7501	-0.8096	1.0757	-0.3058	0.2155	0.5281	-0.3106	-0.3302
104	47.14	0.04	11.3211	-3.8007	-0.5353	1.0027	-0.2910	0.2303	0.5261	-0.2961	-0.3234
105	47.14	0.04	11.5214	-4.0201	-0.5203	1.4312	-0.3252	0.2357	0.5309	-0.2952	-0.3477
106	47.30	0.02	11.5240	-3.9821	-0.6285	0.7260	-0.2707	0.2162	0.5215	-0.3053	-0.3109
107	47.48	0.02	11.6150	-3.9144	-0.6094	1.1664	-0.3107	0.2105	0.5242	-0.3137	-0.3283
108	47.65	0.04	11.5802	-3.9038	-0.4391	0.7569	-0.2900	0.1993	0.5201	-0.3196	-0.3024
109	47.82	0.02	11.4583	-4.0701	-0.4246	0.1350	-0.2201	0.1963	0.5165	-0.3202	-0.2363
110	47.98	0.01	11.5072	-4.0731	-0.5536	0.4053	-0.2205	0.2146	0.5251	-0.3105	-0.2484
111	48.15	0.04	11.5062	-4.0934	-0.2784	0.2099	-0.1919	0.2222	0.5138	-0.2966	-0.2338
112	48.33	0.04	11.6283	-3.9934	-0.2324	0.4021	-0.2469	0.2065	0.5230	-0.3171	-0.2623
113	48.51	0.01	11.6375	-4.0741	-0.4443	0.0149	-0.1644	0.1854	0.5205	-0.3551	-0.2030
114	48.68	0.01	11.7496	-4.1780	-0.5046	0.0443	-0.1645	0.1815	0.5196	-0.3381	-0.2108
115	48.85	0.02	11.8044	-4.2035	-0.4887	0.0890	-0.1712	0.1819	0.5206	-0.3389	-0.2164
116	49.02	0.04	12.0607	-4.2469	-0.2745	0.4771	-0.2340	0.1773	0.5208	-0.3435	-0.2689
117	49.19	0.01	11.9373	-4.1991	-0.4500	-0.1951	-0.1221	0.1900	0.5235	-0.3335	-0.1847
118	49.36	0.00	11.9843	-4.2035	-0.5078	0.1769	-0.1986	0.1866	0.5288	-0.3422	-0.2205
119	49.53	0.03	12.0864	-4.2135	-0.3560	0.4543	-0.1939	0.1950	0.5336	-0.3356	-0.2245
120	49.71	0.01	12.1143	-4.2393	-0.4240	0.1350	-0.1769	0.1793	0.5279	-0.3576	-0.2237
121	49.89	0.03	12.0065	-4.0859	-0.2766	-0.1703	-0.0735	0.1956	0.5310	-0.3354	-0.1706
122	50.06	-0.00	11.9831	-4.1103	-0.5705	-0.2051	-0.0667	0.1860	0.5330	-0.3620	-0.1430
123	50.24	0.01	11.9750	-4.1099	-0.3987	-0.1311	-0.0809	0.1940	0.5301	-0.3421	-0.1256
124	50.39	0.01	12.0280	-4.2148	-0.4824	-0.0380	-0.1908	0.1905	0.5305	-0.3395	-0.1071
125	50.56	0.03	12.0143	-4.1405	-0.2549	-0.2671	-0.0036	0.2169	0.5459	-0.3270	-0.1453
126	50.73	0.01	12.0495	-4.1485	-0.4718	-0.2569	0.0038	0.2000	0.5449	-0.3363	-0.1178
127	50.90	0.03	12.0695	-4.0270	-0.2411	-0.8270	0.0240	0.2369	0.5516	-0.3132	-0.1348
128	51.05	0.04	12.0527	-4.0832	0.0001	-0.9494	0.0178	0.2181	0.5521	-0.3390	-0.1552
129	51.23	0.04	12.1077	-4.1980	-0.0494	-0.8529	0.0387	0.2177	0.5476	-0.3299	-0.1188
130	51.40	0.03	12.0745	-4.1754	-0.0080	-1.0807	0.0178	0.2382	0.5570	-0.3206	-0.1608
131	51.57	0.03	12.0502	-4.1034	-0.1240	-1.2037	0.0178	0.2195	0.5595	-0.3400	-0.1747
132	51.75	0.04	12.0507	-4.2734	0.0102	-1.4059	0.0411	0.2059	0.5635	-0.3576	-0.2044
133	51.92	0.02	12.0772	-4.1993	-0.0791	-1.2077	0.0049	0.2491	0.5604	-0.3173	-0.1719
134	52.09	-0.01	12.1409	-4.2191	-0.0262	-1.2118	-0.0178	0.2257	0.5655	-0.3398	-0.2134
135	52.27	-0.00	12.1570	-4.2295	-0.0383	-1.2957	-0.0040	0.2109	0.5600	-0.3551	-0.2139
136	52.44	0.03	12.0742	-4.2391	-0.1469	-1.3141	0.0044	0.2002	0.5651	-0.3449	-0.1969
137	52.61	-0.02	12.0057	-4.0573	-0.0063	-1.4237	-0.0303	0.2221	0.5632	-0.3411	-0.2205
138	52.79	-0.05	12.1710	-4.2594	-0.0201	-1.4243	-0.0526	0.2004	0.5623	-0.3619	-0.2228

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 99 MACH 0.90 RN/F 1.0 PHI 45.0 CONF 8 INCHES L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.93	-0.03	12.7793	-2.8003	-0.7077	-1.2540	-0.0516	0.1978	0.5636	-0.3628	-0.2056
140	53.13	-0.03	13.0134	-2.9420	-1.0046	-1.5097	-0.0055	0.2398	0.5763	-0.3417	-0.2603
141	53.30	-0.03	13.2361	-3.0290	-1.2803	-1.7967	-0.0138	0.2893	0.5884	-0.3591	-0.2903
142	53.47	-0.02	13.4691	-3.0943	-0.5775	-2.0240	0.0231	0.1675	0.5732	-0.3857	-0.2934
143	53.63	-0.03	13.6932	-3.0900	-0.7079	-1.9542	0.0290	0.2197	0.5790	-0.3593	-0.2955
144	53.79	-0.03	13.9019	-3.1001	-0.9346	-1.8024	0.0350	0.2362	0.5781	-0.3419	-0.3038
145	53.96	-0.03	13.7078	-3.0373	-1.0134	-1.8343	0.0356	0.2100	0.5746	-0.3586	-0.2932
146	54.10	-0.04	13.7333	-3.1043	-0.7739	-1.9748	-0.0346	0.1637	0.5620	-0.3783	-0.2986
147	54.27	-0.03	13.9379	-3.0919	-0.9241	-2.0018	-0.0342	0.1878	0.5598	-0.3720	-0.3189
148	54.44	-0.04	13.9168	-3.0251	-0.6401	-2.0361	-0.0140	0.1756	0.5637	-0.3681	-0.3036
149	54.58	0.00	13.9264	-3.0167	-0.2729	-2.0910	0.0038	0.1800	0.5548	-0.3796	-0.3302
150	54.77	-0.02	14.3842	-3.2154	-0.4107	-2.0424	0.0099	0.1884	0.5627	-0.3736	-0.3627
151	54.89	-0.03	14.1200	-3.0912	-0.3038	-2.0004	0.0104	0.2006	0.5632	-0.3626	-0.3698
152	55.06	-0.03	14.3072	-3.1532	-0.0093	-2.0441	0.0026	0.1737	0.5601	-0.3864	-0.3690
153	55.23	-0.03	14.3023	-3.1017	-0.2452	-2.0230	-0.0027	0.2062	0.5541	-0.3529	-0.3656
154	55.40	-0.03	14.0847	-3.0004	-0.1076	-2.0418	-0.0043	0.1911	0.5573	-0.3662	-0.3723
155	55.57	0.01	14.7990	-3.2812	-0.1497	-2.0760	-0.0018	0.1678	0.5564	-0.3886	-0.3704
156	55.69	-0.02	14.0430	-3.2351	-0.4507	-2.0375	-0.0096	0.1578	0.5525	-0.3947	-0.3578
157	55.87	-0.01	14.7340	-3.2060	-0.3823	-2.0352	-0.0102	0.1590	0.5555	-0.3965	-0.3569
158	56.03	-0.01	14.0133	-3.0124	-0.4057	-2.0203	-0.0101	0.1721	0.5525	-0.3802	-0.3586
159	56.17	-0.02	14.7042	-3.2079	-0.4757	-2.0355	-0.0097	0.1694	0.5514	-0.3823	-0.3634
160	56.33	-0.01	14.7407	-3.2594	-0.4492	-2.0314	-0.0102	0.1602	0.5528	-0.3926	-0.3567
161	56.48	-0.04	14.0303	-3.2043	-0.0290	-2.0290	-0.0106	0.1636	0.5496	-0.3860	-0.3535
162	56.63	-0.01	14.7339	-3.2521	-0.3951	-2.0268	-0.0224	0.1749	0.5481	-0.3732	-0.3428
163	56.81	-0.02	14.0379	-3.2703	-0.3275	-2.0338	-0.0093	0.1517	0.5499	-0.3962	-0.3541
164	56.99	-0.02	14.0103	-3.2939	-0.2119	-2.0562	-0.0102	0.1428	0.5472	-0.4044	-0.3584
165	57.11	-0.02	15.0110	-3.2210	-0.4166	-2.0293	-0.0222	0.1490	0.5454	-0.3964	-0.3478
166	57.26	-0.01	14.9564	-3.1029	-0.4307	-2.0105	-0.0134	0.1488	0.5440	-0.3952	-0.3412
167	57.40	0.00	14.0123	-3.1103	-0.2243	-2.0441	-0.0210	0.1501	0.5435	-0.3934	-0.3441
168	57.56	-0.00	14.9893	-3.1537	-0.3106	-1.7144	-0.0144	0.1345	0.5435	-0.4090	-0.3438
169	57.69	-0.00	14.9731	-3.1826	-0.2910	-1.7207	-0.0217	0.1428	0.5426	-0.3998	-0.3461
170	57.84	-0.03	14.9277	-3.0701	-0.0644	-1.9050	-0.0130	0.1249	0.5395	-0.4146	-0.3299
171	57.99	0.00	14.9757	-3.0334	-0.2332	-1.8082	-0.0210	0.1454	0.5340	-0.3936	-0.3309
172	58.13	-0.01	14.9727	-3.0333	-0.0333	-1.8444	-0.0215	0.1711	0.5344	-0.3803	-0.3328
173	58.29	0.02	15.0192	-3.0547	-0.0013	-1.8200	-0.0203	0.1063	0.5349	-0.4386	-0.3286
174	58.44	0.01	15.1069	-3.0294	-0.1090	-1.8752	-0.0197	0.1402	0.5356	-0.4096	-0.3262
175	58.59	0.04	15.1141	-3.0488	0.1234	-1.9538	-0.0359	0.1108	0.5389	-0.4283	-0.3195
176	58.59	-0.01	15.0732	-3.0710	-0.0079	-1.8784	-0.0215	0.1244	0.5348	-0.4144	-0.3311
177	58.90	0.07	15.0581	-3.0569	0.3947	-2.0334	-0.0050	0.1204	0.5400	-0.4198	-0.3157

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NXIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 49 0.90 1.7 45.0 dimuf14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.01	0.10	0.2260	-0.0001	0.0369	-0.0004	0.2511	-0.0534	0.0022	-0.0442	-0.0412	0.8277
2	-5.00	0.10	0.2099	-0.0001	0.0301	-0.0005	0.2307	-0.0533	0.0019	-0.0436	-0.0356	0.8180
3	-5.01	0.10	0.2182	-0.0003	0.0347	-0.0014	0.2507	-0.0550	0.0023	-0.0436	-0.0418	0.8291
4	-4.03	0.10	0.1629	0.0	0.0240	0.0	0.1730	-0.0417	0.0010	-0.0264	-0.0461	1.2166
5	-2.10	0.10	0.0958	0.0006	0.0041	0.0063	0.0428	-0.0147	0.0007	-0.0066	-0.0476	-0.5986
6	-0.19	0.10	0.0453	0.0005	-0.0131	0.0060	-0.0392	0.0095	0.0008	0.0035	0.0162	0.1111
7	4.71	0.09	0.0060	-0.0001	-0.0254	-0.0167	-0.2335	0.0772	0.0035	0.0350	0.0117	0.4534
8	3.09	0.10	-0.0208	0.0004	-0.0150	-0.0140	1.0280	0.0407	0.0002	0.0599	0.0014	0.4257
9	5.53	0.10	-0.0500	0.0010	-0.0224	-0.0203	0.9223	0.0200	-0.0008	0.0924	-0.0036	0.4200
10	7.45	0.11	-0.1011	0.0037	-0.0366	0.7056	0.2992	-0.0016	0.1249	-0.0053	0.4174
11	9.33	0.10	-0.1491	0.0073	-0.0480	-0.0388	0.0285	0.0097	-0.0029	0.1559	-0.0049	0.4001
12	11.25	0.10	-0.1990	0.0103	-0.0596	-0.0757	0.0052	0.0093	-0.0029	0.1807	-0.0057	0.3666
13	13.16	0.09	-0.2010	0.0130	-0.0625	-0.0807	0.5745	0.0145	-0.0029	0.2107	-0.0047	0.3429
14	15.09	0.10	-0.1990	0.0134	-0.0629	-0.0795	0.5315	0.7103	-0.0016	0.2351	-0.0025	0.3282
15	17.07	0.10	-0.2005	0.0167	-0.0658	-0.0809	0.0123	0.8992	-0.0038	0.2647	-0.0045	0.3136
16	19.04	0.10	-0.2033	0.0187	-0.0687	-0.0810	0.0284	0.9508	-0.0012	0.2895	-0.0013	0.3026
17	20.96	0.12	-0.2171	0.0221	-0.0775	-0.0897	0.0330	1.0801	0.0043	0.3174	0.0040	0.2917
18	22.89	0.13	-0.2313	0.0257	-0.0860	-0.0951	0.0154	1.1891	0.0091	0.3421	0.0077	0.2877
19	24.84	0.11	-0.2307	0.0329	-0.0829	-0.0777	0.3309	1.0173	0.0563	0.2579	0.0553	0.2535
20	26.77	0.10	-0.2343	0.0251	-0.0837	-0.0891	0.0399	0.9978	0.0439	0.2719	0.0240	0.2726
21	26.71	0.16	-0.2301	0.0256	-0.0876	-0.0823	0.0475	1.0114	0.0187	0.2777	0.0185	0.2746
22	26.91	0.17	-0.2378	0.0243	-0.0866	-0.0789	0.0170	1.0147	0.0179	0.2782	0.0176	0.2742
23	26.91	0.15	-0.2326	0.0242	-0.0835	-0.0803	0.0201	1.0179	0.0183	0.2788	0.0180	0.2717
24	29.20	0.10	-0.2327	0.0243	-0.0855	-0.0809	0.0243	1.0230	0.0170	0.2773	0.0166	0.2711
25	29.98	0.10	-0.2343	0.0245	-0.0859	-0.0832	0.0210	1.0279	0.0167	0.2783	0.0162	0.2707
26	29.91	0.17	-0.2410	0.0251	-0.0877	-0.0851	0.0215	1.0328	0.0163	0.2793	0.0158	0.2704
27	30.00	0.16	-0.2395	0.0254	-0.0877	-0.0877	0.0176	1.0396	0.0156	0.2795	0.0152	0.2689
28	30.03	0.17	-0.2398	0.0265	-0.0899	-0.0914	0.0256	1.0445	0.0157	0.2815	0.0150	0.2695
29	30.00	0.17	-0.2390	0.0253	-0.0894	-0.0906	0.0207	1.0342	0.0152	0.2836	0.0144	0.2690
30	30.00	0.17	-0.2395	0.0265	-0.0899	-0.0965	0.0316	1.0529	0.0144	0.2815	0.0137	0.2674
31	31.10	0.18	-0.2450	0.0259	-0.0899	-0.0960	0.0365	1.0625	0.0143	0.2835	0.0135	0.2668
32	31.03	0.18	-0.2490	0.0254	-0.0931	-0.1017	0.0256	1.0706	0.0130	0.2867	0.0121	0.2677
33	31.71	0.19	-0.2490	0.0260	-0.0947	-0.1007	0.0705	1.0662	0.0117	0.2850	0.0110	0.2679
34	31.99	0.21	-0.2499	0.0271	-0.0951	-0.1181	0.0230	1.0728	0.0108	0.2879	0.0101	0.2684
35	32.27	0.21	-0.2180	0.0200	-0.0974	-0.1230	0.0256	1.0843	0.0099	0.2895	0.0091	0.2670
36	32.55	0.20	-0.2181	0.0208	-0.0999	-0.1229	0.0210	1.0971	0.0099	0.2944	0.0089	0.2683
37	32.83	0.21	-0.2059	0.0270	-0.1050	-0.1316	0.5112	1.1021	0.0091	0.2947	0.0083	0.2674
38	33.08	0.22	-0.2152	0.0271	-0.1091	-0.1259	0.5070	1.1130	0.0090	0.2967	0.0088	0.2673
39	33.33	0.20	-0.1969	0.0265	-0.1016	-0.1340	0.5100	1.1196	0.0090	0.2988	0.0080	0.2668
40	33.59	0.20	-0.2041	0.0283	-0.1060	-0.1239	0.4998	1.1342	0.0080	0.3044	0.0076	0.2684
41	33.84	0.20	-0.1958	0.0280	-0.1005	-0.1328	0.5133	1.1474	0.0079	0.3077	0.0069	0.2682
42	34.09	0.20	-0.2000	0.0280	-0.1044	-0.1240	0.5005	1.1524	0.0080	0.3062	0.0075	0.2658
43	34.32	0.21	-0.1810	0.0247	-0.0949	-0.1300	0.5226	1.1006	0.0070	0.3087	0.0060	0.2660
44	34.00	0.20	-0.1980	0.0247	-0.1005	-0.1244	0.5060	1.1053	0.0073	0.3104	0.0063	0.2664
45	34.83	0.21	-0.1940	0.0240	-0.0991	-0.1300	0.5096	1.1030	0.0060	0.3141	0.0051	0.2662
46	35.07	0.23	-0.1798	0.0223	-0.0956	-0.1251	0.5026	1.1047	0.0053	0.3185	0.0044	0.2666

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 99 MACH 0.90 ALT 1.0 PHI 45.0 CONF 61 NOF 14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN F1	CA1	CM1	ACPF1	XCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	35.31	0.22	-0.1478	0.0210	-0.0020	-0.1425	0.5505	1.2013	0.0043	0.3169	0.0036	0.2655
48	35.33	0.21	-0.1246	0.0184	-0.0736	-0.1317	0.5923	1.1998	0.0038	0.3144	0.0032	0.2662
49	35.78	0.22	-0.0250	0.0096	-0.0301	-0.0326	1.1736	1.1779	0.0010	0.3135	0.0008	0.2662
50	36.02	0.23	-0.0065	0.0118	-0.0419	-0.0237	0.9311	1.1916	0.0018	0.3162	0.0015	0.2670
51	36.26	0.21	-0.0020	0.0057	-0.0196	-0.0054	7.0714	1.1892	0.0014	0.3131	0.0012	0.2678
52	36.49	0.22	-0.0000	0.0090	-0.0249	-0.0000	0.3439	1.1859	0.0015	0.3122	0.0013	0.2678
53	36.72	0.21	0.0071	0.0023	-0.0125	0.0239	-1.7636	1.1741	0.0010	0.3147	0.0009	0.2680
54	36.96	0.19	0.0094	0.0024	-0.0218	0.0253	2.3171	1.1633	0.0014	0.3172	0.0012	0.2669
55	37.19	0.19	0.0078	0.0030	-0.0240	0.0306	3.0769	1.1582	0.0010	0.3199	0.0008	0.2670
56	37.41	0.18	0.0037	0.0037	-0.0238	0.0250	0.6251	1.1742	0.0010	0.3251	0.0008	0.2677
57	37.67	0.18	0.0017	0.0029	-0.0228	0.0263	1.0347	1.1661	0.0014	0.3204	0.0011	0.2671
58	37.89	0.15	0.0009	0.0034	-0.0250	0.0260	0.8960	1.1623	0.0019	0.3280	0.0015	0.2668
59	38.13	0.17	0.0028	0.0017	-0.0303	0.0327	0.9141	1.1593	0.0015	0.3302	0.0012	0.2675
60	38.36	0.14	0.0000	0.0033	-0.0326	0.0000	0.0551	1.1605	0.0020	0.3334	0.0016	0.2688
61	38.61	0.14	0.0030	0.0023	-0.0300	0.0302	0.7356	1.1533	0.0024	0.3357	0.0019	0.2679
62	38.84	0.12	0.0029	0.0031	-0.0309	0.0330	0.7120	1.1504	0.0016	0.3367	0.0013	0.2693
63	39.08	0.12	0.0034	0.0034	-0.0337	0.0348	0.8439	1.1481	0.0024	0.3406	0.0019	0.2690
64	39.31	0.13	0.0071	0.0026	-0.0338	0.0292	0.8030	1.1505	0.0020	0.3456	0.0016	0.2699
65	39.54	0.11	0.1117	0.0020	-0.0207	0.0179	0.5434	1.1500	0.0024	0.3498	0.0019	0.2710
66	39.75	0.12	0.1040	0.0029	-0.0574	0.0277	0.5525	1.1496	0.0016	0.3527	0.0012	0.2704
67	39.99	0.09	0.1310	0.0027	-0.0652	0.0265	0.4997	1.1473	0.0022	0.3564	0.0017	0.2706
68	40.18	0.08	0.1434	0.0040	-0.0696	0.0300	0.4874	1.1474	0.0021	0.3595	0.0016	0.2708
69	40.39	0.09	0.1432	0.0027	-0.0678	0.0304	0.4721	1.1459	0.0016	0.3644	0.0012	0.2707
70	40.58	0.09	0.1772	0.0031	-0.0785	0.0339	0.4930	1.1449	0.0021	0.3666	0.0016	0.2718
71	40.80	0.08	0.2003	0.0031	-0.0719	0.0345	0.4465	1.1422	0.0015	0.3681	0.0011	0.2722
72	41.00	0.08	0.2119	0.0035	-0.0815	0.0389	0.4129	1.1370	0.0027	0.3711	0.0020	0.2715
73	41.20	0.07	0.1971	0.0045	-0.0804	0.0394	0.4184	1.1375	0.0020	0.3735	0.0015	0.2719
74	41.44	0.08	0.1977	0.0037	-0.0824	0.0388	0.4193	1.1367	0.0016	0.3763	0.0012	0.2733
75	41.64	0.08	0.1993	0.0050	-0.0813	0.0351	0.4079	1.1367	0.0021	0.3744	0.0015	0.2720
76	41.84	0.08	0.1939	0.0041	-0.0796	0.0363	0.4005	1.1350	0.0007	0.3719	0.0005	0.2713
77	42.04	0.07	0.2280	0.0070	-0.0944	0.0337	0.4044	1.1382	0.0018	0.3804	0.0013	0.2721
78	42.22	0.09	0.2530	0.0075	-0.1001	0.0299	0.3994	1.1413	0.0014	0.3820	0.0014	0.2726
79	42.42	0.08	0.2550	0.0079	-0.0965	0.0330	0.4106	1.1447	0.0015	0.3835	0.0009	0.2730
80	42.60	0.08	0.2733	0.0107	-0.1092	0.0305	0.3928	1.1426	0.0008	0.3883	0.0013	0.2727
81	42.79	0.08	0.2807	0.0098	-0.1038	0.0308	0.3982	1.1411	0.0014	0.3847	0.0010	0.2726
82	42.98	0.08	0.2834	0.0083	-0.0990	0.0291	0.4103	1.1415	0.0006	0.3855	0.0003	0.2725
83	43.19	0.07	0.2987	0.0118	-0.1130	0.0452	0.4205	1.1384	0.0007	0.3913	0.0005	0.2736
84	43.39	0.08	0.2934	0.0078	-0.0894	0.0383	0.4395	1.1478	0.0002	0.3869	0.0001	0.2743
85	43.61	0.07	0.2909	0.0077	-0.0903	0.0389	0.4506	1.1475	-0.0007	0.3916	-0.0005	0.2743
86	43.81	0.07	0.2997	0.0120	-0.1080	0.0501	0.4447	1.1500	-0.0002	0.3938	-0.0001	0.2742
87	43.91	0.07	0.2992	0.0134	-0.1204	0.0515	0.4291	1.1438	0.0006	0.3971	0.0004	0.2750
88	44.07	0.06	0.3151	0.0170	-0.1342	0.0538	0.4195	1.1466	0.0007	0.3975	0.0005	0.2744
89	44.25	0.06	0.2995	0.0122	-0.1130	0.0470	0.4355	1.1410	-0.0016	0.3968	-0.0008	0.2740
90	44.43	0.07	0.3210	0.0164	-0.1274	0.0531	0.4199	1.1454	0.0002	0.4031	0.0001	0.2751
91	44.61	0.05	0.2960	0.0099	-0.1051	0.0408	0.4456	1.1515	-0.0024	0.3985	-0.0017	0.2745
92	44.82	0.05	0.3261	0.0169	-0.1410	0.0511	0.4264	1.1472	-0.0010	0.4067	-0.0011	0.2763

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYNO PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 49 0.90 1.0 45.0 STANDARD 6.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
93	45.00	0.00	-0.3405	0.0152	-0.1400	-0.0554	0.4214	1.4720	-0.0039	0.4055	-0.0006	0.2755
94	45.16	0.02	-0.2928	0.0142	-0.1091	-0.0489	0.4916	1.4031	-0.0041	0.4032	-0.0028	0.2756
95	45.35	0.03	-0.3599	0.0179	-0.1499	-0.0497	0.4965	1.4728	-0.0024	0.4075	-0.0016	0.2767
96	45.33	0.03	-0.3030	0.0179	-0.1496	-0.0493	0.4905	1.4742	-0.0020	0.4060	-0.0014	0.2758
97	45.15	0.01	-0.3003	0.0157	-0.1278	-0.0448	0.4499	1.4650	-0.0037	0.4114	-0.0025	0.2770
98	45.21	0.01	-0.3260	0.0190	-0.1569	-0.0479	0.4852	1.4735	-0.0041	0.4086	-0.0028	0.2769
99	45.36	0.02	-0.3587	0.0152	-0.1435	-0.0443	0.4256	1.4961	-0.0049	0.4143	-0.0033	0.2766
100	46.25	0.04	-0.4199	0.0219	-0.1738	-0.0521	0.4139	1.5026	-0.0034	0.4101	-0.0023	0.2769
101	45.46	0.03	-0.3519	0.0156	-0.1455	-0.0444	0.4145	1.5038	-0.0051	0.4158	-0.0034	0.2765
102	46.00	0.03	-0.3717	0.0193	-0.1800	-0.0544	0.4290	1.4944	-0.0039	0.4132	-0.0039	0.2764
103	46.17	0.01	-0.4014	0.0164	-0.1644	-0.0458	0.4090	1.5202	-0.0049	0.4218	-0.0032	0.2775
104	46.34	0.04	-0.3741	0.0191	-0.1822	-0.0493	0.4037	1.5209	-0.0039	0.4223	-0.0039	0.2766
105	47.14	0.04	-0.4064	0.0176	-0.1702	-0.0433	0.4188	1.5205	-0.0060	0.4211	-0.0039	0.2769
106	47.30	0.02	-0.3979	0.0151	-0.1656	-0.0395	0.4107	1.5269	-0.0060	0.4235	-0.0043	0.2774
107	47.46	0.02	-0.3752	0.0155	-0.1657	-0.0413	0.4303	1.5260	-0.0068	0.4196	-0.0044	0.2766
108	47.63	0.02	-0.3555	0.0147	-0.1496	-0.0379	0.4319	1.5301	-0.0079	0.4236	-0.0052	0.2768
109	47.82	0.02	-0.4197	0.0182	-0.1896	-0.0488	0.4002	1.5113	-0.0100	0.4180	-0.0066	0.2766
110	47.98	0.01	-0.4248	0.0203	-0.2084	-0.0527	0.4102	1.5204	-0.0095	0.4184	-0.0063	0.2764
111	48.13	0.04	-0.4277	0.0211	-0.2144	-0.0538	0.5033	1.4389	-0.0137	0.4136	-0.0072	0.2778
112	46.33	0.04	-0.4514	0.0202	-0.1773	-0.0454	0.4000	1.5269	-0.0071	0.4219	-0.0060	0.2763
113	46.34	0.01	-0.3869	-0.0030	-0.0427	0.0452	0.8031	1.4097	-0.0119	0.4073	-0.0081	0.2771
114	48.68	0.01	-0.4223	-0.0018	-0.0677	0.0133	0.5530	1.4973	-0.0122	0.4139	-0.0082	0.2783
115	48.83	0.02	-0.4939	-0.0057	-0.0555	0.0037	0.5911	1.4762	-0.0132	0.4116	-0.0089	0.2788
116	49.02	0.04	-0.5101	0.0071	-0.1406	-0.0225	0.4845	1.5355	-0.0112	0.4202	-0.0073	0.2802
117	49.19	0.01	-0.5410	-0.0063	-0.0286	0.1058	0.7024	1.4527	-0.0126	0.4047	-0.0087	0.2786
118	49.38	0.00	-0.5069	-0.0053	-0.0514	0.0760	0.7570	1.4595	-0.0118	0.4083	-0.0079	0.2798
119	49.53	0.03	-0.4764	-0.0062	-0.0531	0.0011	0.8956	1.4791	-0.0139	0.4168	-0.0094	0.2818
120	49.71	0.01	-0.5239	-0.0082	-0.0449	0.1150	0.8257	1.4667	-0.0132	0.4121	-0.0090	0.2810
121	49.89	0.03	0.0140	-0.0096	-0.0063	-0.6715	-0.5714	1.4102	-0.0136	0.3961	-0.0075	0.2809
122	50.08	-0.00	0.0307	-0.0020	0.0018	-0.1578	0.0335	1.3908	-0.0095	0.3901	-0.0068	0.2805
123	50.21	0.01	0.0049	-0.0089	0.0003	-0.1371	0.0971	1.3725	-0.0081	0.3874	-0.0059	0.2823
124	50.39	0.01	0.0006	-0.0073	0.0130	-0.0970	0.1316	1.3709	-0.0081	0.3866	-0.0059	0.2820
125	50.58	0.03	0.0020	-0.0067	0.0033	-0.1001	0.0592	1.3865	-0.0089	0.3944	-0.0064	0.2840
126	50.73	0.01	0.0044	-0.0067	0.0127	-0.0970	0.1377	1.3926	-0.0130	0.3967	-0.0072	0.2849
127	50.90	0.03	0.0068	0.0003	0.0090	0.0045	0.0569	1.4119	-0.0114	0.4052	-0.0081	0.2870
128	51.05	0.04	0.0021	-0.0057	-0.0526	-0.1776	1.4006	-0.0106	0.4030	-0.0075	0.2861
129	51.23	0.04	0.0783	-0.0018	0.0073	-0.0234	0.3932	1.4005	-0.0132	0.4005	-0.0073	0.2860
130	51.40	0.03	0.0039	-0.0011	-0.0014	-0.0197	-0.0415	1.4103	-0.0117	0.4006	-0.0063	0.2865
131	51.57	0.03	0.0049	-0.0040	-0.0032	-0.0055	-0.0704	1.4001	-0.0103	0.4055	-0.0073	0.2880
132	51.75	0.04	0.0080	-0.0042	-0.0018	-0.0215	-0.0042	1.3908	-0.0078	0.3988	-0.0055	0.2876
133	51.92	0.02	0.0062	-0.0033	0.0003	-0.0093	0.0069	1.3900	-0.0090	0.4027	-0.0064	0.2883
134	52.09	-0.01	0.0262	-0.0033	-0.0033	-0.0393	-0.1579	1.3890	-0.0079	0.3998	-0.0055	0.2878
135	52.27	-0.00	0.0410	-0.0074	-0.0040	-0.1805	-0.3976	1.3992	-0.0091	0.4055	-0.0058	0.2896
136	52.44	0.03	0.0357	-0.0039	-0.0069	-0.0833	-0.1933	1.4025	-0.0090	0.4051	-0.0057	0.2888
137	52.61	-0.02	0.0341	-0.0036	-0.0074	-0.0903	-0.2170	1.4044	-0.0082	0.4046	-0.0058	0.2906
138	52.79	-0.05	0.0399	-0.0069	-0.0088	-0.2587	-0.2258	1.4126	-0.0084	0.4111	-0.0059	0.2910

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNLD= PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 99 0.90 1.7 -90.0 BINOFIN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CBI	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
139	52.93	-0.03	0.0360	-0.0068	-0.0077	-0.2279	-0.1995	1.4078	-0.0080	0.4095	-0.0057	0.2909
140	53.13	-0.05	0.0456	-0.0067	-0.0085	-0.1949	-0.1989	1.4237	-0.0102	0.4176	-0.0072	0.2933
141	53.30	-0.03	0.0332	-0.0020	-0.0025	-0.0376	-0.0858	1.4172	-0.0040	0.4145	-0.0028	0.2925
142	53.47	-0.02	0.0207	0.0021	-0.0020	-0.0258	0.1500	1.4041	-0.0026	0.4110	-0.0056	0.2927
143	53.63	-0.03	0.0235	-0.0031	0.0103	-0.0351	0.1700	1.4049	-0.0085	0.4109	-0.0060	0.2925
144	53.79	-0.03	0.0264	-0.0035	0.0180	-0.0329	0.1692	1.4063	-0.0085	0.4111	-0.0060	0.2927
145	53.96	-0.04	0.0287	-0.0037	0.0199	-0.0363	0.1989	1.4127	-0.0084	0.4130	-0.0059	0.2945
146	54.13	-0.04	0.0253	-0.0037	0.0130	-0.0434	0.1700	1.3992	-0.0086	0.4111	-0.0063	0.2938
147	54.27	-0.03	0.0242	-0.0035	0.0109	-0.0353	0.1295	1.4021	-0.0093	0.4125	-0.0066	0.2940
148	54.44	-0.03	0.0238	-0.0035	0.0075	-0.0329	0.0989	1.3999	-0.0091	0.4110	-0.0065	0.2936
149	54.58	0.00	0.0240	-0.0042	0.0105	-0.0500	0.1250	1.4138	-0.0096	0.4174	-0.0068	0.2948
150	54.77	-0.02	0.0251	-0.0056	0.0157	-0.0569	0.1651	1.4293	-0.0103	0.4217	-0.0072	0.2950
151	54.89	-0.01	0.0242	-0.0033	0.0134	-0.0378	0.1670	1.4134	-0.0099	0.4166	-0.0070	0.2948
152	55.06	-0.03	0.0243	-0.0062	0.0153	-0.0678	0.1658	1.4294	-0.0107	0.4263	-0.0075	0.2954
153	55.23	-0.00	0.0201	-0.0062	0.0117	-0.0632	0.1755	1.4315	-0.0104	0.4256	-0.0073	0.2959
154	55.40	-0.03	0.0249	-0.0060	0.0134	-0.0537	0.1499	1.4217	-0.0106	0.4277	-0.0075	0.2967
155	55.57	0.01	0.0256	-0.0049	0.0124	-0.0575	0.1455	1.4414	-0.0110	0.4256	-0.0076	0.2953
156	55.69	-0.02	0.0240	-0.0059	0.0135	-0.0061	0.1559	1.4322	-0.0109	0.4256	-0.0076	0.2972
157	55.87	-0.01	0.0259	-0.0053	0.0096	-0.0603	0.1227	1.4344	-0.0107	0.4263	-0.0075	0.2972
158	56.03	-0.01	0.0264	-0.0056	0.0096	-0.0740	0.1146	1.4416	-0.0112	0.4283	-0.0078	0.2957
159	56.17	-0.02	0.0259	-0.0059	0.0109	-0.0740	0.1300	1.4321	-0.0116	0.4262	-0.0083	0.2962
160	56.33	-0.01	0.0247	-0.0067	0.0068	-0.0921	0.1210	1.4305	-0.0118	0.4267	-0.0082	0.2952
161	56.48	-0.04	0.0248	-0.0073	0.0099	-0.1003	0.1360	1.4343	-0.0121	0.4287	-0.0084	0.2975
162	56.63	-0.01	0.0249	-0.0080	0.0100	-0.1630	0.1491	1.4319	-0.0123	0.4291	-0.0086	0.2962
163	56.81	-0.02	0.0253	-0.0084	0.0110	-0.0850	0.1481	1.4413	-0.0121	0.4287	-0.0084	0.2974
164	56.94	-0.02	0.0262	-0.0084	0.0113	-0.0810	0.1445	1.4402	-0.0123	0.4284	-0.0085	0.2962
165	57.11	-0.04	0.0270	-0.0071	0.0102	-0.1020	0.1468	1.4436	-0.0125	0.4276	-0.0087	0.2962
166	57.26	-0.01	0.0267	-0.0084	0.0114	-0.0834	0.1400	1.4474	-0.0124	0.4297	-0.0086	0.2969
167	57.40	0.00	0.0281	-0.0079	0.0106	-0.1066	0.1557	1.4449	-0.0130	0.4295	-0.0090	0.2973
168	57.58	-0.00	0.0295	-0.0078	0.0072	-0.1271	0.1204	1.4499	-0.0130	0.4295	-0.0090	0.2973
169	57.69	-0.00	0.0267	-0.0072	0.0099	-0.1079	0.1484	1.4513	-0.0131	0.4313	-0.0090	0.2972
170	57.84	-0.03	0.0262	-0.0076	0.0111	-0.0997	0.1537	1.4467	-0.0126	0.4293	-0.0088	0.2963
171	57.99	0.00	0.0267	-0.0064	0.0103	-0.1029	0.1344	1.4520	-0.0135	0.4306	-0.0093	0.2967
172	58.13	-0.01	0.0253	-0.0060	0.0107	-0.1317	0.1634	1.4543	-0.0137	0.4327	-0.0094	0.2975
173	58.27	0.02	0.0268	-0.0065	0.0103	-0.1305	0.1694	1.4534	-0.0142	0.4314	-0.0098	0.2968
174	58.44	0.01	0.0237	-0.0063	0.0106	-0.1303	0.1664	1.4528	-0.0141	0.4347	-0.0096	0.2972
175	58.58	0.04	0.0250	-0.0069	0.0125	-0.1369	0.1923	1.4581	-0.0142	0.4337	-0.0097	0.2974
176	58.58	-0.01	0.0231	-0.0067	0.0119	-0.1330	0.1628	1.4731	-0.0147	0.4362	-0.0100	0.2981
177	58.58	0.01	0.0235	-0.0066	0.0140	-0.1312	0.2205	1.4514	-0.0142	0.4331	-0.0098	0.2984

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	50	0.90	1.7	0.0	BIWORLD	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.26	0.03	0.0250	9.9999	0.0152	9.9999	0.5891	-0.2544	-0.0009	-0.0813	0.0035	0.3196
2	-5.27	0.02	0.0271	9.9999	0.0170	9.9999	0.0273	-0.2544	-0.0008	-0.0813	0.0031	0.3196
3	-5.27	0.02	0.0258	9.9999	0.0141	9.9999	0.5465	-0.2509	-0.0011	-0.0799	0.0044	0.3185
4	-4.08	0.02	0.0258	9.9999	0.0152	9.9999	0.5891	-0.2123	-0.0006	-0.0661	0.0028	0.3114
5	-2.88	0.02	0.0272	9.9999	0.0159	9.9999	0.5848	-0.1699	-0.0013	-0.0525	0.0104	0.2802
6	-0.98	0.01	0.0257	9.9999	0.0165	9.9999	0.6576	-0.0446	-0.0013	-0.0029	0.0291	0.0650
7	0.94	0.01	0.0272	9.9999	0.0165	9.9999	0.6366	0.0979	-0.0012	0.0222	-0.1519	2.8101
8	2.86	0.02	0.0345	9.9999	0.0182	9.9999	0.5275	0.0935	-0.0016	0.0363	-0.0171	0.6021
9	4.74	0.01	0.0301	9.9999	0.0173	9.9999	0.5748	0.1805	-0.0018	0.0681	-0.0100	0.4681
10	6.65	0.01	0.0347	9.9999	0.0142	9.9999	0.4052	0.2691	-0.0021	0.1189	-0.0076	0.4418
11	8.61	0.01	0.0421	9.9999	0.0136	9.9999	0.3230	0.3744	-0.0035	0.1524	-0.0013	0.4071
12	10.49	0.02	0.0480	9.9999	0.0130	9.9999	0.2708	0.4675	0.0017	0.1737	0.0036	0.3716
13	12.46	0.02	0.0590	9.9999	0.0126	9.9999	0.2140	0.5745	0.0028	0.1976	0.0049	0.3440
14	14.39	0.02	0.0656	9.9999	0.0078	9.9999	0.1403	0.6836	0.0076	0.2219	0.0111	0.3246
15	16.38	0.01	0.0658	9.9999	0.0098	9.9999	0.1469	0.7754	0.0116	0.2453	0.0150	0.3164
16	18.39	0.01	0.0586	9.9999	0.0052	9.9999	0.0584	0.8568	0.0177	0.2635	0.0206	0.3068
17	20.34	0.01	0.0715	9.9999	0.0086	9.9999	0.1196	0.9391	0.0240	0.2787	0.0256	0.2968
18	22.29	0.02	0.0747	9.9999	0.0117	9.9999	0.1566	0.9934	0.0299	0.2859	0.0301	0.2878
19	24.26	0.02	0.0852	9.9999	0.0073	9.9999	0.1153	1.0401	0.0380	0.2907	0.0363	0.2779
20	26.18	0.02	0.0866	9.9999	0.0110	9.9999	0.1607	1.0856	0.0420	0.2909	0.0387	0.2680
21	28.15	0.03	0.0704	9.9999	0.0142	9.9999	0.2017	1.1145	0.0428	0.2941	0.0384	0.2639
22	28.97	0.06	0.0763	9.9999	0.0176	9.9999	0.2307	1.1016	0.0408	0.2840	0.0425	0.2578
23	28.97	0.06	0.0794	9.9999	0.0167	9.9999	0.2103	1.1122	0.0431	0.2861	0.0414	0.2572
24	28.98	0.07	0.0807	9.9999	0.0190	9.9999	0.2201	1.1042	0.0479	0.2817	0.0434	0.2551
25	29.29	0.06	0.0868	9.9999	0.0196	9.9999	0.2258	1.1123	0.0480	0.2852	0.0414	0.2564
26	29.33	0.08	0.0839	9.9999	0.0188	9.9999	0.2241	1.0851	0.0514	0.2747	0.0474	0.2532
27	29.87	0.08	0.0825	9.9999	0.0159	9.9999	0.2048	1.0904	0.0531	0.2743	0.0467	0.2516
28	30.18	0.09	0.0943	9.9999	0.0208	9.9999	0.2206	1.0778	0.0529	0.2722	0.0487	0.2526
29	30.42	0.09	0.0927	9.9999	0.0201	9.9999	0.2168	1.0792	0.0545	0.2713	0.0505	0.2514
30	30.69	0.09	0.0936	9.9999	0.0220	9.9999	0.2301	1.0906	0.0547	0.2734	0.0501	0.2507
31	30.98	0.07	0.0854	9.9999	0.0178	9.9999	0.2084	1.0880	0.0538	0.2742	0.0494	0.2520
32	31.45	0.07	0.0867	9.9999	0.0190	9.9999	0.2191	1.1020	0.0522	0.2794	0.0474	0.2535
33	31.92	0.04	0.0736	9.9999	0.0133	9.9999	0.1807	1.1046	0.0503	0.2773	0.0501	0.2510
34	31.91	0.05	0.0807	9.9999	0.0182	9.9999	0.2007	1.1215	0.0477	0.2880	0.0425	0.2568
35	32.08	0.04	0.0776	9.9999	0.0180	9.9999	0.2057	1.1229	0.0480	0.2894	0.0427	0.2577
36	32.38	0.03	0.0761	9.9999	0.0184	9.9999	0.2155	1.1355	0.0482	0.2931	0.0424	0.2581
37	32.82	0.05	0.0790	9.9999	0.0172	9.9999	0.2177	1.1423	0.0500	0.2909	0.0438	0.2547
38	32.88	0.02	0.0736	9.9999	0.0156	9.9999	0.2131	1.1435	0.0527	0.2904	0.0461	0.2540
39	33.15	0.02	0.0859	9.9999	0.0181	9.9999	0.1836	1.1428	0.0530	0.2877	0.0464	0.2518
40	33.40	-0.01	0.0829	9.9999	0.0114	9.9999	0.1892	1.1575	0.0529	0.2912	0.0457	0.2516
41	33.84	0.01	0.0717	9.9999	0.0137	9.9999	0.1911	1.1541	0.0532	0.2922	0.0461	0.2532
42	33.92	0.00	0.0800	9.9999	0.0140	9.9999	0.2128	1.1609	0.0522	0.2933	0.0450	0.2526
43	34.18	0.01	0.0714	9.9999	0.0160	9.9999	0.2241	1.1506	0.0531	0.2927	0.0458	0.2526
44	34.41	0.02	0.0695	9.9999	0.0138	9.9999	0.2107	1.1557	0.0520	0.2925	0.0450	0.2531
45	34.87	0.02	0.0627	9.9999	0.0124	9.9999	0.1976	1.1583	0.0528	0.2929	0.0456	0.2529
46	34.93	0.01	0.0695	9.9999	0.0143	9.9999	0.2103	1.1705	0.0517	0.2936	0.0442	0.2508

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RA10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 50 0.90 1.7 0.0 BlnOF14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CB3	XCPF3	YCPF3	CNF4	CH4	CB4	XCPF4	YCPF4
47	35.15	0.01	0.0635	9.9999	0.0136	9.9999	0.2107	1.1694	0.0532	0.2956	0.0455	0.2528
48	35.90	0.02	0.0641	9.9999	0.0137	9.9999	0.2137	1.1638	0.0521	0.2968	0.0448	0.2550
49	35.65	0.00	0.0582	9.9999	0.0136	9.9999	0.2371	1.1766	0.0501	0.2979	0.0426	0.2532
50	35.90	0.01	0.0640	9.9999	0.0134	9.9999	0.2406	1.1743	0.0512	0.2979	0.0436	0.2537
51	36.12	-0.01	0.0596	9.9999	0.0139	9.9999	0.2332	1.1724	0.0515	0.2991	0.0439	0.2551
52	36.37	0.03	0.0502	9.9999	0.0136	9.9999	0.2371	1.1728	0.0509	0.2972	0.0434	0.2534
53	36.60	0.02	0.0685	9.9999	0.0165	9.9999	0.2474	1.1694	0.0533	0.2987	0.0456	0.2554
54	36.87	0.00	0.0585	9.9999	0.0116	9.9999	0.2004	1.1805	0.0484	0.3040	0.0408	0.2562
55	37.11	0.01	0.0554	9.9999	0.0116	9.9999	0.2130	1.1842	0.0491	0.3028	0.0415	0.2557
56	37.38	0.01	0.0538	9.9999	0.0134	9.9999	0.2491	1.1773	0.0512	0.3012	0.0435	0.2558
57	37.59	-0.00	0.0582	9.9999	0.0132	9.9999	0.2268	1.1849	0.0476	0.3045	0.0402	0.2570
58	37.84	-0.00	0.0553	9.9999	0.0130	9.9999	0.2351	1.1860	0.0456	0.3061	0.0384	0.2577
59	38.10	-0.03	0.0538	9.9999	0.0126	9.9999	0.2379	1.1922	0.0444	0.3092	0.0372	0.2594
60	38.36	-0.01	0.0590	9.9999	0.0139	9.9999	0.2332	1.1865	0.0434	0.3067	0.0366	0.2585
61	38.59	-0.02	0.0465	9.9999	0.0111	9.9999	0.2387	1.1816	0.0454	0.3050	0.0384	0.2581
62	38.82	-0.02	0.0531	9.9999	0.0146	9.9999	0.2650	1.1799	0.0427	0.3057	0.0362	0.2591
63	39.05	-0.01	0.0507	9.9999	0.0137	9.9999	0.2702	1.1782	0.0427	0.3049	0.0362	0.2588
64	39.26	0.01	0.0605	9.9999	0.0166	9.9999	0.2759	1.1972	0.0415	0.3147	0.0347	0.2612
65	39.49	-0.01	0.0538	9.9999	0.0170	9.9999	0.2665	1.1844	0.0411	0.3066	0.0347	0.2606
66	39.70	-0.02	0.0594	9.9999	0.0173	9.9999	0.2912	1.1905	0.0395	0.3123	0.0332	0.2623
67	39.91	0.01	0.0522	9.9999	0.0144	9.9999	0.2759	1.1806	0.0397	0.3066	0.0336	0.2614
68	40.13	-0.00	0.0483	9.9999	0.0134	9.9999	0.2894	1.1860	0.0391	0.3101	0.0330	0.2615
69	40.33	-0.03	0.0531	9.9999	0.0152	9.9999	0.2759	1.1911	0.0388	0.3116	0.0326	0.2616
70	40.54	-0.01	0.0447	9.9999	0.0145	9.9999	0.3333	1.1766	0.0400	0.3068	0.0340	0.2608
71	40.74	-0.01	0.0504	9.9999	0.0170	9.9999	0.3014	1.1891	0.0387	0.3127	0.0309	0.2630
72	40.95	-0.03	0.0507	9.9999	0.0143	9.9999	0.2821	1.2120	0.0345	0.3218	0.0285	0.2655
73	41.17	-0.01	0.0492	9.9999	0.0153	9.9999	0.3110	1.1965	0.0356	0.3154	0.0297	0.2636
74	41.35	-0.04	0.0507	9.9999	0.0149	9.9999	0.2939	1.1943	0.0342	0.3162	0.0286	0.2648
75	41.58	-0.02	0.0520	9.9999	0.0161	9.9999	0.3096	1.2139	0.0291	0.3251	0.0240	0.2678
76	41.79	-0.03	0.0535	9.9999	0.0168	9.9999	0.3140	1.2005	0.0343	0.3172	0.0286	0.2642
77	41.97	-0.03	0.0499	9.9999	0.0127	9.9999	0.2829	1.1846	0.0337	0.3141	0.0284	0.2652
78	42.19	-0.01	0.0508	9.9999	0.0160	9.9999	0.3102	1.2027	0.0313	0.3203	0.0260	0.2663
79	42.38	-0.03	0.0505	9.9999	0.0154	9.9999	0.3050	1.1895	0.0330	0.3157	0.0277	0.2654
80	42.58	-0.02	0.0419	9.9999	0.0124	9.9999	0.2959	1.1905	0.0275	0.3193	0.0231	0.2682
81	42.77	-0.02	0.0490	9.9999	0.0158	9.9999	0.2974	1.1873	0.0295	0.3171	0.0248	0.2671
82	42.94	-0.02	0.0504	9.9999	0.0154	9.9999	0.3056	1.2018	0.0269	0.3226	0.0224	0.2684
83	43.14	-0.01	0.0505	9.9999	0.0148	9.9999	0.2931	1.1847	0.0301	0.3149	0.0254	0.2658
84	43.31	-0.04	0.0490	9.9999	0.0156	9.9999	0.3224	1.1870	0.0295	0.3158	0.0248	0.2660
85	43.49	-0.02	0.0503	9.9999	0.0176	9.9999	0.3499	1.2012	0.0252	0.3227	0.0210	0.2686
86	43.67	-0.02	0.0532	9.9999	0.0149	9.9999	0.3071	1.1992	0.0277	0.3195	0.0231	0.2664
87	43.87	-0.03	0.0547	9.9999	0.0160	9.9999	0.3291	1.1819	0.0312	0.3125	0.0264	0.2644
88	44.05	0.01	0.0589	9.9999	0.0200	9.9999	0.3497	1.1782	0.0290	0.3119	0.0246	0.2647
89	44.21	0.00	0.0546	9.9999	0.0165	9.9999	0.3308	1.1994	0.0266	0.3207	0.0223	0.2674
90	44.41	-0.01	0.0416	9.9999	0.0135	9.9999	0.3245	1.2291	0.0225	0.3301	0.0184	0.2699
91	44.61	-0.01	0.0644	9.9999	0.0238	9.9999	0.3696	1.1947	0.0259	0.3198	0.0217	0.2677
92	44.77	-0.03	0.0531	9.9999	0.0190	9.9999	0.3578	1.1902	0.0278	0.3185	0.0234	0.2676

TEST PART MACH RAIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 50 0.90 1.7 0.0 BIWDFIN 0.0 0 0 0 0 UNKNOWN

PCINT	ALPHA	BETA	CNF3	CM3	CA3	ALPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	44.98	-0.00	0.0016	9.9999	0.0219	9.9999	0.3555	1.1747	0.0306	0.3122	0.0260	0.2656
94	45.15	0.00	0.0039	9.9999	0.0172	9.9999	0.3747	1.2776	0.0126	0.3507	0.0099	0.2745
95	45.32	0.00	0.0067	9.9999	0.0234	9.9999	0.3986	1.1748	0.0327	0.3094	0.0276	0.2634
96	45.50	-0.01	0.0042	9.9999	0.0182	9.9999	0.3625	1.2655	0.0157	0.3445	0.0124	0.2722
97	45.68	-0.01	0.0029	9.9997	0.0212	9.9999	0.4008	1.2034	0.0242	0.3243	0.0184	0.2695
98	45.68	-0.01	0.0029	9.9999	0.0214	9.9999	0.4000	1.2146	0.0206	0.3293	0.0170	0.2711
99	45.00	0.00	0.0043	9.9999	0.0207	9.9999	0.3812	1.2196	0.0197	0.3308	0.0162	0.2712
100	46.21	-0.00	0.0014	9.9999	0.0183	9.9999	0.3937	1.2800	0.0110	0.3540	0.0086	0.2753
101	46.40	-0.02	0.0014	9.9999	0.0189	9.9999	0.4082	1.2338	0.0159	0.3363	0.0129	0.2726
102	46.58	-0.01	0.0043	9.9999	0.0239	9.9999	0.4085	1.2068	0.0237	0.3248	0.0196	0.2691
103	46.76	-0.01	0.0040	9.9999	0.0234	9.9999	0.3900	1.2003	0.0151	0.3459	0.0120	0.2745
104	46.92	-0.03	0.0072	9.9999	0.0213	9.9999	0.3605	1.2379	0.0144	0.3392	0.0116	0.2740
105	47.09	-0.01	0.0042	9.9999	0.0230	9.9999	0.4244	1.2177	0.0197	0.3306	0.0162	0.2715
106	47.27	-0.03	0.0045	9.9999	0.0250	9.9999	0.4274	1.2053	0.0232	0.3239	0.0192	0.2687
107	47.45	-0.00	0.0026	9.9999	0.0212	9.9999	0.4015	1.2618	0.0115	0.3525	0.0090	0.2750
108	47.61	0.02	0.0049	9.9997	0.0173	9.9999	0.4336	1.2762	0.0104	0.3518	0.0081	0.2757
109	47.78	-0.00	0.0057	9.9999	0.0178	9.9999	0.3895	1.2593	0.0113	0.3460	0.0090	0.2748
110	47.97	-0.00	0.0026	9.9999	0.0134	9.9999	0.4065	1.3256	0.0044	0.3660	0.0033	0.2761
111	48.15	-0.00	0.0029	9.9999	0.0117	9.9999	0.3556	1.3167	0.0034	0.3651	0.0026	0.2773
112	48.31	-0.04	0.0043	9.9999	0.0116	9.9999	0.3440	1.3200	0.0024	0.3664	0.0018	0.2776
113	48.49	-0.01	0.0038	9.9999	0.0124	9.9999	0.3464	1.3118	0.0009	0.3641	0.0007	0.2776
114	48.67	0.00	0.0030	9.9999	0.0094	9.9999	0.2848	1.3066	-0.0007	0.3633	-0.0005	0.2780
115	48.82	-0.00	0.0030	9.9999	0.0100	9.9999	0.3030	1.3104	-0.0015	0.3646	-0.0011	0.2782
116	49.01	-0.02	0.0037	9.9999	0.0124	9.9999	0.3473	1.2835	-0.0052	0.3595	-0.0041	0.2801
117	49.18	-0.00	0.0044	9.9999	0.0101	9.9999	0.2936	1.2785	-0.0067	0.3586	-0.0052	0.2805
118	49.35	0.02	0.0039	9.9999	0.0102	9.9999	0.2841	1.2874	-0.0057	0.3607	-0.0044	0.2802
119	49.52	-0.01	0.0038	9.9999	0.0115	9.9999	0.2979	1.2846	-0.0069	0.3609	-0.0054	0.2809
120	49.71	0.07	0.0045	9.9999	0.0114	9.9999	0.2962	1.3060	-0.0097	0.3672	-0.0074	0.2812
121	49.87	-0.02	0.0031	9.9999	0.0147	9.9999	0.2934	1.3005	-0.0093	0.3657	-0.0072	0.2812
122	50.05	0.00	0.0043	9.9999	0.0120	9.9999	0.2708	1.2996	-0.0124	0.3655	-0.0095	0.2812
123	50.24	0.09	0.0072	9.9999	0.0186	9.9999	0.2796	1.3048	-0.0137	0.3666	-0.0105	0.2825
124	50.42	0.11	0.0071	9.9999	0.0230	9.9999	0.2903	1.3079	-0.0135	0.3713	-0.0103	0.2839
125	50.57	0.09	0.0120	9.9997	0.0227	9.9999	0.3116	1.2985	-0.0142	0.3692	-0.0109	0.2843
126	50.77	0.14	0.0151	9.9999	0.0229	9.9999	0.3025	1.3056	-0.0153	0.3731	-0.0117	0.2857
127	50.95	0.08	0.0112	9.9999	0.0213	9.9999	0.2759	1.2777	-0.0143	0.3635	-0.0112	0.2845
128	51.12	0.06	0.0128	9.9999	0.0193	9.9999	0.2651	1.2859	-0.0093	0.3698	-0.0077	0.2818
129	51.29	0.06	0.0129	9.9999	0.0191	9.9999	0.2601	1.2866	-0.0091	0.3698	-0.0075	0.2821
130	51.44	0.03	0.0085	9.9999	0.0153	9.9999	0.2615	1.2838	-0.0130	0.3657	-0.0082	0.2825
131	51.63	0.02	0.0129	9.9999	0.0191	9.9999	0.2601	1.2803	-0.0107	0.3603	-0.0066	0.2824
132	51.79	0.04	0.0102	9.9999	0.0107	9.9999	0.2131	1.2274	-0.0103	0.3451	-0.0084	0.2812
133	51.95	0.01	0.0114	9.9999	0.0144	9.9999	0.2345	1.2436	-0.0091	0.3479	-0.0075	0.2796
134	52.13	0.02	0.0129	9.9999	0.0115	9.9999	0.2174	1.2202	-0.0121	0.3431	-0.0099	0.2812
135	52.34	0.04	0.0129	9.9999	0.0115	9.9999	0.2174	1.2215	-0.0054	0.3400	-0.0044	0.2783
136	52.50	0.01	0.0072	9.9999	0.0106	9.9999	0.2470	1.2329	-0.0052	0.3442	-0.0042	0.2792
137	52.67	0.01	0.0093	9.9999	0.0121	9.9999	0.2283	1.2409	0.0032	0.3396	0.0026	0.2737
138	52.82	0.03	0.0159	9.9999	0.0184	9.9999	0.2424	1.2721	-0.0056	0.3534	-0.0044	0.2778

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/L=6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 50 0.90 1.7 0.0 BINOMIAL 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
139	52.99	0.01	0.0667	9.9999	0.0101	9.9999	0.2344	1.2598	-0.0050	0.3504	-0.0040	0.2781
140	53.14	0.07	0.0773	9.9999	0.0100	9.9999	0.2173	1.2448	-0.0037	0.3466	-0.0070	0.2784
141	53.31	0.08	0.0773	9.9999	0.0108	9.9999	0.2173	1.2364	-0.0107	0.3469	-0.0066	0.2801
142	53.47	0.09	0.0760	9.9999	0.0114	9.9999	0.1727	1.2540	-0.0058	0.3491	-0.0046	0.2784
143	53.62	0.06	0.0617	9.9999	0.0194	9.9999	0.2375	1.2401	-0.0064	0.3443	-0.0068	0.2776
144	53.79	0.08	0.0780	9.9999	0.0186	9.9999	0.2300	1.2533	-0.0066	0.3469	-0.0054	0.2768
145	53.95	0.06	0.0760	9.9999	0.0135	9.9999	0.2078	1.2687	-0.0037	0.3487	-0.0029	0.2746
146	54.12	0.10	0.0734	9.9999	0.0137	9.9999	0.1800	1.2433	-0.0081	0.3444	-0.0065	0.2770
147	54.27	0.07	0.0775	9.9999	0.0100	9.9999	0.2400	1.2574	-0.0075	0.3468	-0.0060	0.2758
148	54.42	0.07	0.0647	9.9999	0.0191	9.9999	0.2255	1.2645	-0.0084	0.3495	-0.0066	0.2764
149	54.58	0.07	0.0730	9.9999	0.0175	9.9999	0.2270	1.2695	-0.0099	0.3504	-0.0075	0.2780
150	54.75	0.03	0.0665	9.9999	0.0135	9.9999	0.2017	1.2621	-0.0082	0.3471	-0.0065	0.2750
151	54.90	0.07	0.0652	9.9999	0.0104	9.9999	0.2214	1.2746	-0.0035	0.3485	-0.0027	0.2734
152	55.05	0.06	0.0775	9.9999	0.0103	9.9999	0.2103	1.2792	-0.0054	0.3502	-0.0042	0.2738
153	55.21	0.03	0.0736	9.9999	0.0140	9.9999	0.2062	1.2707	-0.0068	0.3481	-0.0054	0.2739
154	55.38	0.07	0.0733	9.9999	0.0140	9.9999	0.2019	1.2796	-0.0075	0.3496	-0.0059	0.2732
155	55.50	0.04	0.0790	9.9999	0.0170	9.9999	0.2152	1.2699	-0.0075	0.3465	-0.0059	0.2729
156	55.66	0.07	0.0719	9.9999	0.0104	9.9999	0.2281	1.2795	-0.0034	0.3501	-0.0042	0.2694
157	55.81	0.01	0.0633	9.9999	0.0141	9.9999	0.2227	1.2674	-0.0079	0.3426	-0.0078	0.2703
158	55.98	0.05	0.0752	9.9999	0.0176	9.9999	0.2222	1.2644	-0.0063	0.3460	-0.0069	0.2709
159	56.13	0.04	0.0778	9.9999	0.0175	9.9999	0.2249	1.2741	-0.0076	0.3453	-0.0077	0.2710
160	56.28	0.05	0.0735	9.9999	0.0145	9.9999	0.2027	1.2839	-0.0078	0.3471	-0.0061	0.2703
161	56.44	0.03	0.0704	9.9999	0.0157	9.9999	0.2053	1.2843	-0.0083	0.3470	-0.0065	0.2702
162	56.58	0.08	0.0821	9.9999	0.0192	9.9999	0.2375	1.2650	-0.0072	0.3468	-0.0072	0.2699
163	56.74	0.05	0.0704	9.9999	0.0162	9.9999	0.2120	1.2767	-0.0090	0.3444	-0.0070	0.2698
164	56.90	0.06	0.0681	9.9999	0.0163	9.9999	0.2268	1.2884	-0.0090	0.3464	-0.0075	0.2689
165	57.06	0.01	0.0736	9.9999	0.0156	9.9999	0.2230	1.2864	-0.0111	0.3464	-0.0086	0.2693
166	57.19	0.02	0.0734	9.9999	0.0171	9.9999	0.2330	1.2762	-0.0104	0.3455	-0.0081	0.2692
167	57.35	-0.00	0.0677	9.9999	0.0164	9.9999	0.2127	1.2731	-0.0107	0.3436	-0.0084	0.2700
168	57.50	0.03	0.0650	9.9999	0.0157	9.9999	0.2108	1.2794	-0.0101	0.3450	-0.0079	0.2681
169	57.65	0.06	0.0722	9.9999	0.0154	9.9999	0.2153	1.2719	-0.0106	0.3458	-0.0085	0.2672
170	57.80	-0.03	0.0736	9.9999	0.0166	9.9999	0.2255	1.2737	-0.0114	0.3399	-0.0087	0.2669
171	57.94	-0.01	0.0678	9.9999	0.0150	9.9999	0.2212	1.2815	-0.0086	0.3405	-0.0067	0.2657
172	58.09	-0.02	0.0564	9.9999	0.0101	9.9999	0.1791	1.2809	-0.0079	0.3370	-0.0062	0.2631
173	58.22	-0.01	0.0564	9.9999	0.0124	9.9999	0.2199	1.2817	-0.0092	0.3434	-0.0071	0.2638
174	58.38	-0.03	0.0579	9.9999	0.0120	9.9999	0.2178	1.2980	-0.0085	0.3426	-0.0065	0.2638
175	58.51	-0.00	0.0623	9.9999	0.0129	9.9999	0.2071	1.2810	-0.0131	0.3396	-0.0102	0.2651
176	58.96	-0.01	0.0521	9.9999	0.0127	9.9999	0.2438	1.2824	-0.0129	0.3385	-0.0101	0.2640
177	58.95	-0.00	0.0578	9.9999	0.0100	9.9999	0.2268	1.2715	-0.0134	0.3376	-0.0105	0.2655

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 51 MACH 1.00 RX10-6 1.7 PHI 0.0 CONF BIWDPI4 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.71	0.02	-0.0955	1.3228	0.0744	-0.1623	-0.0068	0.2853	0.0913	0.1920	-1.9021
2	-5.71	0.03	-0.0964	1.3069	0.1116	-0.1671	-0.0067	0.2770	0.0909	0.1861	-1.8796
3	-5.71	0.03	-0.0970	1.2795	0.0996	-0.1759	-0.0066	0.2771	0.0905	0.1866	-1.9420
4	-4.62	0.02	-0.0622	0.8317	0.0813	-0.1013	-0.0062	0.2899	0.0831	0.2067	-1.7993
5	-2.69	0.02	-0.2249	0.3954	0.0812	-0.1616	-0.0056	0.2926	0.0791	0.2134	-1.7581
6	-0.76	0.02	0.0120	-0.0166	0.0811	-0.1618	-0.0049	0.2908	0.0760	0.2147	-0.8603
7	1.14	0.03	0.1837	-0.2801	0.1232	-0.1990	-0.0045	0.3017	0.0777	0.2239	-1.5247
8	3.10	0.03	0.4502	-0.7279	0.1323	-0.2502	-0.0035	0.3006	0.0819	0.2186	-1.6167
9	5.03	0.02	0.7000	-1.2513	0.0597	-0.1828	-0.0031	0.3365	0.0862	0.2182	-1.7876
10	6.96	0.03	1.0331	-1.8908	0.0677	-0.0750	-0.0024	0.3250	0.1066	0.2190	-1.8379
11	8.89	0.03	1.4784	-2.6476	0.0671	-0.0857	-0.0019	0.3274	0.1217	0.2057	-1.9141
12	10.85	0.01	1.8303	-3.1052	-0.0306	-0.0125	-0.0013	0.3312	0.1318	0.1994	-1.9415
13	12.82	0.02	2.0365	-3.3453	-0.0096	-0.0093	0.0057	0.3229	0.1513	0.1716	-1.9145
14	14.80	0.02	2.3475	-4.0320	0.0459	-0.0474	0.0008	0.3405	0.1644	0.1641	-1.8905
15	16.83	0.02	2.7984	-5.2575	-0.0005	0.0710	0.0074	0.3521	0.2132	0.1389	-1.8798
16	18.86	0.02	3.2218	-5.9111	0.0010	0.0908	0.0024	0.3503	0.2414	0.1089	-1.8547
17	20.86	0.03	3.6420	-6.2068	0.1105	-0.2136	-0.0073	0.3651	0.2604	0.0846	-1.7191
18	22.85	0.03	4.1508	-6.4449	0.0896	-0.0586	-0.0114	0.3940	0.3058	0.0482	-1.5505
19	24.87	0.05	4.7577	-6.4963	0.3336	-0.0970	0.0347	0.3466	0.3323	0.0143	-1.3535
20	26.84	0.08	5.3537	-6.3267	0.7004	-1.6039	0.0732	0.3205	0.3264	-0.0059	-1.1730
21	28.47	0.10	5.8963	-6.1863	0.9901	-1.9549	0.1326	0.2919	0.3348	-0.0429	-1.0578
22	28.47	0.08	5.8146	-6.2929	0.8301	-1.7573	0.1078	0.2846	0.3332	-0.0485	-1.0828
23	28.47	0.10	5.8228	-6.2811	1.0342	-2.0041	0.1449	0.2907	0.3339	-0.0432	-1.0701
24	28.47	0.09	5.8167	-6.3013	0.9579	-1.8990	0.1205	0.2978	0.3333	-0.0355	-1.0967
25	28.48	0.10	5.8339	-6.3490	1.0242	-2.0078	0.1530	0.2912	0.3337	-0.0425	-1.0863
26	28.80	0.09	5.9300	-6.2252	0.8347	-1.5927	0.1065	0.2808	0.3305	-0.0498	-1.0672
27	29.10	0.10	6.1045	-6.3775	1.0430	-1.9412	0.1542	0.2725	0.3337	-0.0613	-1.0447
28	29.44	0.10	6.1917	-6.3531	1.0075	-1.8884	0.1340	0.2839	0.3349	-0.0509	-1.0261
29	29.78	0.09	6.3152	-6.3306	0.9227	-1.7963	0.1471	0.2727	0.3361	-0.0633	-1.0018
30	30.04	0.12	6.3800	-6.3932	1.1780	-2.2587	0.1803	0.2800	0.3313	-0.0512	-1.0021
31	30.33	0.11	6.5247	-6.3159	1.2084	-2.2242	0.1672	0.2574	0.3584	-0.0809	-0.9670
32	30.61	0.09	6.2170	-6.2582	0.9453	-1.8490	0.1482	0.2797	0.3371	-0.0573	-0.9572
33	30.88	0.11	6.6702	-6.2679	1.2079	-2.1809	0.1738	0.2676	0.3411	-0.0534	-0.9397
34	31.15	0.09	6.7954	-6.2765	0.9564	-1.8572	0.1676	0.2656	0.3422	-0.0765	-0.9230
35	31.43	0.10	6.9009	-6.2791	1.1300	-2.3294	0.1729	0.2621	0.3429	-0.0807	-0.9099
36	31.71	0.10	6.9734	-6.1303	1.0501	-2.0476	0.1505	0.2677	0.3444	-0.0766	-0.8797
37	31.98	0.12	7.1020	-6.2520	1.3080	-2.6674	0.2005	0.2561	0.3437	-0.0855	-0.8804
38	32.26	0.11	7.1341	-6.0780	1.1002	-2.4334	0.1640	0.2720	0.3401	-0.0672	-0.8495
39	32.53	0.09	7.2717	-5.8706	0.9060	-1.9350	0.1274	0.2579	0.3416	-0.0836	-0.8084
40	32.79	0.09	7.3392	-5.8053	1.0411	-1.9542	0.1157	0.2722	0.3403	-0.0680	-0.7914
41	33.09	0.09	7.4010	-5.7672	0.9816	-2.1513	0.1926	0.2615	0.3474	-0.0858	-0.7793
42	33.31	0.08	7.4110	-5.6053	0.8059	-1.8757	0.0974	0.2490	0.3551	-0.1059	-0.7644
43	33.57	0.06	7.3478	-5.5564	0.8660	-1.7438	0.1345	0.2691	0.3617	-0.0925	-0.7415
44	33.82	0.09	7.6340	-5.6068	0.8695	-1.7754	0.1107	0.2705	0.3625	-0.0919	-0.7339
45	34.06	0.06	7.6938	-5.4099	0.8265	-1.6821	0.0877	0.2969	0.3631	-0.0662	-0.7032
46	34.33	0.06	7.8104	-5.4121	0.8209	-1.7100	0.0806	0.2660	0.3585	-0.0924	-0.6929

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 51 1.00 1.7 0.0 BANDFIX 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.98	0.03	7.9108	-5.3989	0.4967	-0.8215	0.0260	0.2369	0.3581	-0.1272	-0.6825
48	34.83	0.00	7.9099	-5.4745	0.7008	-0.9611	0.0625	0.2644	0.3595	-0.0950	-0.6869
49	35.10	0.00	8.0821	-5.5275	0.7304	-1.0837	0.0654	0.2689	0.3584	-0.0894	-0.6592
50	35.33	0.00	8.1803	-5.4993	0.6101	-1.2988	0.1061	0.2705	0.3595	-0.0889	-0.6643
51	35.58	0.00	8.1941	-5.3382	0.6195	-1.1415	0.0757	0.2654	0.3575	-0.0920	-0.6547
52	35.84	0.03	8.2430	-5.3802	0.5500	-0.7923	0.0516	0.2752	0.3621	-0.0868	-0.6449
53	36.13	0.04	8.3590	-5.4453	0.4585	-0.8694	0.0647	0.2496	0.3633	-0.1137	-0.6362
54	36.37	0.03	8.4716	-5.4766	0.4443	-0.5392	0.0338	0.2057	0.3682	-0.1025	-0.6465
55	36.62	0.04	8.6269	-5.4558	0.4783	-0.7713	0.0526	0.2673	0.3690	-0.1017	-0.6320
56	36.86	0.02	8.7046	-5.4065	0.1657	-0.0757	0.0218	0.2431	0.3721	-0.1290	-0.6211
57	37.09	0.03	8.8003	-5.4756	0.3514	-0.5151	0.0293	0.2246	0.3612	-0.1366	-0.6174
58	37.33	0.06	8.9011	-5.3192	0.6499	-0.7530	0.0421	0.2182	0.3530	-0.1348	-0.6145
59	37.59	0.01	8.9945	-5.4110	0.1664	-0.0238	0.0046	0.2556	0.3610	-0.1254	-0.6016
60	37.81	0.02	9.0031	-5.3330	0.1903	0.0240	0.0100	0.1994	0.3541	-0.1547	-0.5884
61	38.07	0.01	9.1974	-5.4062	0.0730	0.3000	-0.0197	0.2556	0.3637	-0.1081	-0.5878
62	38.30	0.00	9.2736	-5.3916	-0.0195	0.7657	-0.0446	0.2496	0.3583	-0.1087	-0.5814
63	38.54	-0.02	9.4521	-5.4307	-0.2007	0.6355	-0.0375	0.2528	0.3639	-0.1311	-0.5779
64	38.78	0.02	9.4881	-5.4025	0.2617	0.0505	0.0001	0.1908	0.3545	-0.1637	-0.5760
65	39.02	-0.00	9.6182	-5.5056	-0.0503	0.6673	-0.0572	0.2369	0.3623	-0.1254	-0.5724
66	39.23	-0.01	9.6084	-5.4926	-0.1036	0.6217	-0.0508	0.2134	0.3603	-0.1469	-0.5640
67	39.43	-0.02	9.6223	-5.4756	-0.2490	0.4046	-0.0291	0.2161	0.3540	-0.1379	-0.5691
68	39.67	0.00	9.7915	-5.4624	0.0093	0.5078	-0.0539	0.2081	0.3563	-0.1482	-0.5578
69	39.89	0.00	9.8749	-5.5237	-0.0166	0.6307	-0.0730	0.2071	0.3501	-0.1430	-0.5594
70	40.09	-0.01	9.9651	-5.4751	-0.0125	0.6550	-0.0779	0.2190	0.3521	-0.1331	-0.5494
71	40.29	-0.03	9.9492	-5.4593	-0.3256	0.5417	-0.0724	0.2311	0.3478	-0.1167	-0.5488
72	40.52	-0.01	10.2014	-5.5040	-0.0634	0.4009	-0.0279	0.1900	0.3404	-0.1498	-0.5474
73	40.73	0.01	10.2552	-5.4271	0.1933	0.4395	-0.0526	0.1596	0.3451	-0.1855	-0.5585
74	40.93	-0.02	10.3477	-5.4814	-0.0994	0.7045	-0.0526	0.1495	0.3389	-0.1894	-0.5470
75	41.13	-0.01	10.3396	-5.4569	0.0129	0.3942	-0.0337	0.1575	0.3356	-0.1781	-0.5471
76	41.36	0.01	10.4134	-5.4011	0.1952	0.4010	-0.0501	0.1804	0.3356	-0.1552	-0.5474
77	41.56	0.00	10.5996	-5.5100	0.1762	0.1007	-0.0377	0.1734	0.3279	-0.1545	-0.5293
78	41.76	-0.01	10.5567	-5.4037	-0.0132	0.6342	-0.0697	0.1509	0.3286	-0.1777	-0.5308
79	41.97	-0.03	10.6247	-5.4953	-0.1343	0.4999	-0.0441	0.1710	0.3263	-0.1553	-0.5360
80	42.16	0.02	10.7071	-5.4358	0.3021	0.3270	-0.0265	0.1620	0.3255	-0.1435	-0.5327
81	42.37	-0.01	10.8521	-5.4732	0.1022	0.1389	-0.0549	0.1606	0.3149	-0.1543	-0.5274
82	42.58	-0.02	11.0292	-5.4406	0.0175	0.0281	-0.0716	0.1178	0.3146	-0.1968	-0.5205
83	42.77	0.01	10.9571	-5.5066	0.2883	0.0595	-0.0244	0.1653	0.3200	-0.1547	-0.5301
84	42.95	-0.02	11.0061	-5.4913	0.0100	0.0747	-0.0538	0.1186	0.3101	-0.1915	-0.5279
85	43.14	0.00	11.2522	-5.5988	0.2276	-0.1519	-0.0226	0.1201	0.3141	-0.1880	-0.5252
86	43.33	0.02	11.3240	-5.5843	0.4204	-0.1179	-0.0108	0.1057	0.3048	-0.1991	-0.5196
87	43.50	0.01	11.3993	-5.6016	0.2038	-0.2069	-0.0339	0.1171	0.3055	-0.1884	-0.5142
88	43.68	0.00	11.4402	-5.7902	0.2531	-0.2736	-0.0274	0.1264	0.3031	-0.1767	-0.5061
89	43.87	-0.00	11.5405	-5.9706	0.1636	-0.1503	-0.0394	0.1018	0.2984	-0.1966	-0.5174
90	44.05	0.00	11.5061	-5.8739	0.3334	-0.1006	-0.0099	0.1273	0.2968	-0.1695	-0.5102
91	44.24	-0.00	11.5080	-5.9023	0.2022	-0.2078	-0.0082	0.1152	0.2957	-0.1805	-0.5093
92	44.41	-0.00	11.6033	-5.8017	0.3301	-0.4505	-0.0190	0.0774	0.2910	-0.2135	-0.4915

PAGE 1 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 51 MACH 1.00 REYNO-6 1.7 PHI 0.0 CONF 31WOF14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.59	-0.03	11.8045	-5.9328	0.0752	-0.3071	-0.0135	0.0500	0.2913	-0.2412	-0.5026
94	44.79	-0.02	11.8253	-5.9304	0.1906	-0.4883	-0.0309	0.0648	0.2869	-0.2021	-0.4866
95	44.96	0.01	11.9397	-6.0182	0.4380	-0.4035	0.0054	0.0830	0.2868	-0.2050	-0.5040
96	45.15	-0.03	12.0495	-5.9200	0.0542	-0.6147	-0.0123	0.0054	0.2926	-0.2273	-0.4918
97	45.34	-0.01	11.9593	-5.8046	0.2763	-0.5592	-0.0243	0.1141	0.2901	-0.1760	-0.4854
98	45.52	0.01	12.1265	-5.8467	0.4370	-0.5100	-0.0050	0.0772	0.2845	-0.2073	-0.4821
99	45.76	0.07	11.9441	-5.9502	0.5359	-0.9401	-0.0171	-0.0027	0.2883	-0.2891	-0.4830
100	45.87	0.00	12.2120	-5.8097	0.4110	-0.6003	0.0072	0.0977	0.2863	-0.1887	-0.4757
101	46.08	-0.01	12.3270	-5.8243	0.3201	-0.8043	-0.0044	0.0713	0.2835	-0.2122	-0.4725
102	46.24	0.07	12.4431	-5.9363	0.9394	-0.8019	0.0349	0.0389	0.2736	-0.2341	-0.4771
103	46.40	0.01	12.4380	-6.0727	0.5144	0.0229	0.0300	0.0393	0.2702	-0.2309	-0.4882
104	46.59	0.00	12.4892	-6.0054	0.4470	-0.7196	0.0081	0.0795	0.2738	-0.1943	-0.4808
105	46.77	0.02	12.6456	-5.9859	0.5911	-0.7184	0.0329	0.0687	0.2637	-0.1950	-0.4733
106	46.95	0.02	12.6247	-5.9896	0.5901	-0.8010	0.0376	0.0502	0.2551	-0.1989	-0.4744
107	47.12	0.03	12.7030	-5.9622	0.6939	-0.2067	0.0316	0.0579	0.2598	-0.2019	-0.4694
108	47.28	0.01	12.6701	-5.9252	0.4578	-0.1148	0.0305	0.0448	0.2578	-0.2130	-0.4674
109	47.48	0.03	12.8081	-5.9879	0.5991	0.1324	0.0420	0.0430	0.2539	-0.2109	-0.4653
110	47.64	0.02	12.8504	-6.0016	0.4227	0.4383	0.0359	0.0451	0.2597	-0.2146	-0.4670
111	47.81	0.03	12.9172	-5.9883	0.4341	0.0648	0.0413	0.0423	0.2648	-0.2225	-0.4619
112	47.98	0.02	12.9479	-5.8901	0.3329	0.0749	0.0418	0.0495	0.2635	-0.2340	-0.4395
113	48.16	0.03	12.9827	-5.8165	0.5678	0.4136	0.0485	0.1181	0.3097	-0.1918	-0.4489
114	48.33	0.05	12.9945	-5.9015	0.7314	0.4751	0.0420	0.1195	0.3413	-0.2218	-0.4542
115	48.49	0.09	13.0420	-6.1435	1.0542	0.2888	0.0301	0.1434	0.3667	-0.2233	-0.4711
116	48.67	0.07	13.1452	-6.2786	1.0182	0.0859	0.0193	0.1809	0.3908	-0.2039	-0.4776
117	48.83	0.08	13.1991	-6.4008	0.8001	0.3225	0.0309	0.1551	0.4115	-0.2564	-0.4854
118	49.00	0.11	13.4819	-7.3041	1.2068	0.7157	-0.0074	0.2117	0.4337	-0.2220	-0.5418
119	49.19	0.11	13.4308	-7.1338	1.2335	0.4013	-0.0199	0.2033	0.4200	-0.2167	-0.5309
120	49.36	0.04	13.5720	-7.1050	0.9095	1.0208	-0.0185	0.1843	0.4072	-0.2229	-0.5236
121	49.52	0.08	13.5308	-7.0121	0.9003	1.0069	-0.0074	0.1715	0.4024	-0.2249	-0.5180
122	49.71	0.04	13.6274	-7.1493	0.9577	1.2134	-0.0180	0.1764	0.3901	-0.2117	-0.5243
123	49.90	0.04	13.5878	-7.2140	0.9943	1.1792	-0.0177	0.1607	0.3789	-0.2182	-0.5202
124	50.07	0.05	13.6495	-7.2036	0.8087	1.1985	-0.0240	0.1560	0.3830	-0.2240	-0.5201
125	50.25	0.07	13.9059	-7.3501	0.8053	1.0879	-0.0334	0.1328	0.3662	-0.2334	-0.5263
126	50.43	0.06	13.9717	-7.4269	0.8400	1.3183	-0.0242	0.1501	0.3776	-0.2295	-0.5316
127	50.60	0.06	14.0024	-7.2804	0.6934	1.3795	-0.0299	0.1297	0.3780	-0.2483	-0.5170
128	50.79	0.01	14.3254	-7.2939	0.1946	1.7789	0.0002	0.1363	0.3977	-0.2614	-0.5062
129	50.97	0.04	14.3031	-7.3251	0.4547	1.9191	-0.0007	0.1631	0.4054	-0.2423	-0.5100
130	51.13	0.02	14.3052	-7.3101	0.2017	1.9215	0.0056	0.1533	0.4093	-0.2540	-0.5082
131	51.30	0.01	14.4400	-7.5009	0.1632	1.9149	0.0001	0.1709	0.4124	-0.2415	-0.5192
132	51.48	-0.02	14.5019	-7.6452	-0.1240	1.9922	0.0006	0.1493	0.4217	-0.2724	-0.5250
133	51.61	0.01	14.3924	-7.6142	0.1246	1.9683	0.0	0.1872	0.4209	-0.2337	-0.5290
134	51.79	-0.00	14.4944	-7.7750	0.0427	1.9212	0.0136	0.1817	0.4186	-0.2369	-0.5379
135	51.95	0.01	14.3702	-7.5955	0.2031	1.1926	0.0323	0.1532	0.4147	-0.2615	-0.5355
136	52.10	0.01	14.3150	-7.4158	0.2824	0.7547	0.0459	0.1832	0.4109	-0.2277	-0.5180
137	52.28	0.03	14.3092	-7.2959	0.5203	0.6921	0.0401	0.1666	0.4025	-0.2359	-0.5043
138	52.44	0.03	14.3457	-6.8852	0.5061	0.6942	0.0403	0.1604	0.3921	-0.2317	-0.4798

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST / 51 MACH 1.00 RATIO 1.1 PHI 0.0 CONF BIWDF14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PGINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.00	0.02	14.2700	-7.0070	0.4494	0.5352	0.0486	0.1502	0.3609	-0.2307	-0.4911
140	52.70	0.00	14.1954	-6.9887	0.5002	0.4558	0.0471	0.1529	0.3776	-0.2249	-0.4853
141	52.93	0.01	14.2730	-6.9102	0.4577	0.6985	0.0521	0.1425	0.3717	-0.2292	-0.4769
142	53.07	-0.01	14.1781	-6.7009	0.2666	0.5270	0.0471	0.1442	0.3659	-0.2217	-0.4730
143	53.20	-0.01	14.3751	-6.8725	0.2006	0.6231	0.0473	0.1372	0.3748	-0.2376	-0.4782
144	53.42	-0.04	14.3721	-6.8105	-0.0301	0.5700	0.0421	0.1297	0.3738	-0.2441	-0.4738
145	53.59	0.02	14.4016	-6.8018	0.4750	0.4723	0.0478	0.1260	0.3719	-0.2459	-0.4738
146	53.74	0.01	14.3307	-6.7126	0.4099	0.4114	0.0476	0.1359	0.3722	-0.2363	-0.4684
147	53.92	-0.01	14.4750	-6.8356	0.2120	0.5994	0.0476	0.1280	0.3750	-0.2470	-0.4733
148	54.06	-0.02	14.3643	-6.7600	0.1605	0.4671	0.0382	0.1546	0.3731	-0.2135	-0.4709
149	54.23	-0.02	14.4960	-6.8726	0.1697	0.3902	0.0369	0.1514	0.3800	-0.2286	-0.4674
150	54.36	-0.02	14.5157	-6.8182	0.2553	0.1842	0.0437	0.1522	0.3781	-0.2259	-0.4697
151	54.54	-0.03	14.5366	-6.8000	0.1077	0.3551	0.0373	0.1410	0.3695	-0.2395	-0.4721
152	54.70	-0.02	14.6078	-6.9100	0.2018	0.3845	0.0432	0.1477	0.3828	-0.2351	-0.4735
153	54.88	-0.02	14.6458	-6.8851	0.1302	0.3536	0.0437	0.1457	0.3808	-0.2351	-0.4646
154	55.02	-0.03	14.6569	-6.9033	0.0905	0.4434	0.0434	0.1373	0.3816	-0.2443	-0.4766
155	55.16	-0.01	14.6547	-6.9630	0.2506	0.3467	0.0434	0.1374	0.3769	-0.2375	-0.4765
156	55.32	-0.01	14.7510	-7.0305	0.3239	0.2909	0.0378	0.1404	0.3809	-0.2345	-0.4784
157	55.47	-0.02	14.6755	-7.0392	0.1575	0.2542	0.0441	0.1264	0.3824	-0.2560	-0.4790
158	55.62	-0.02	14.6631	-7.0515	0.2360	0.3089	0.0442	0.1457	0.3807	-0.2410	-0.4757
159	55.78	-0.01	14.7033	-7.1424	0.2349	0.2806	0.0381	0.1401	0.3847	-0.2446	-0.4865
160	55.92	-0.02	14.7470	-7.0889	0.2274	0.1350	0.0306	0.1278	0.3850	-0.2578	-0.4807
161	56.09	-0.04	14.8004	-7.2007	0.1148	0.1057	0.0389	0.1353	0.3840	-0.2507	-0.4865
162	56.24	-0.03	14.8221	-7.2161	0.0002	0.2701	0.0447	0.1314	0.3832	-0.2518	-0.4868
163	56.39	-0.04	14.7643	-7.1410	0.0742	0.1179	0.0452	0.1400	0.3829	-0.2429	-0.4830
164	56.55	-0.02	14.8461	-7.1754	0.2014	0.2019	0.0446	0.1372	0.3809	-0.2437	-0.4833
165	56.72	-0.02	15.0026	-7.2940	0.2086	0.0779	0.0458	0.1355	0.3852	-0.2497	-0.4844
166	56.88	-0.07	15.1998	-6.9915	-0.0527	-0.6793	0.0539	0.0557	0.3620	-0.3063	-0.4600
167	57.04	-0.07	15.2225	-7.1312	-0.1700	-0.5071	0.0536	0.0669	0.3732	-0.2893	-0.4685
168	57.21	-0.07	15.4756	-7.2661	-0.0696	-0.6343	0.0486	0.0634	0.3590	-0.2951	-0.4697
169	57.35	-0.06	15.3657	-7.2098	-0.2086	-0.7016	0.0542	0.0696	0.3593	-0.2866	-0.4731
170	57.51	-0.07	15.4443	-7.2797	-0.0529	-0.9407	0.0369	0.0612	0.3734	-0.2922	-0.4714
171	57.65	-0.06	15.4697	-7.3400	-0.2488	-0.8416	0.0424	0.0665	0.3647	-0.3102	-0.4875
172	57.78	-0.03	15.2724	-7.1133	0.3005	-0.1005	0.0424	0.0797	0.3606	-0.3011	-0.4854
173	57.92	-0.02	15.3303	-7.1711	0.3401	-0.6564	0.0540	0.0837	0.3707	-0.2869	-0.4874
174	58.08	-0.07	15.3627	-7.2926	-0.0982	-0.5702	0.0470	0.0794	0.3626	-0.2733	-0.4896
175	58.25	-0.01	15.0343	-7.4031	0.4408	-0.4500	0.0354	0.0312	0.3360	-0.3048	-0.4774
176	58.40	-0.02	15.7402	-7.5014	0.2497	-0.2184	0.0552	0.0420	0.3341	-0.2921	-0.4820
177	58.55	-0.02	15.7001	-7.5365	0.3005	-0.3717	0.0434	0.0460	0.3235	-0.2794	-0.4802
178	58.68	-0.05	15.6424	-7.5515	0.0774	-0.2607	0.0429	0.0339	0.3333	-0.2994	-0.4827
179	58.72	-0.01	15.0306	-7.3001	0.4496	-0.3093	0.0350	0.0252	0.3251	-0.2979	-0.4714
180	58.72	-0.05	15.7696	-7.6944	0.1367	-0.1451	0.0433	0.0364	0.3131	-0.2616	-0.4873
181	58.72	-0.06	15.6201	-7.5338	-0.0199	-0.5041	0.0370	0.0518	0.3337	-0.2818	-0.4823

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REID-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 51 1.00 1.7 0.0 BIWUFIN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	DELTA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
1	-5.71	0.02	-0.0007	0.0	0.0054	0.0	-7.7143	-0.2021	0.0074	-0.1145	-0.0366	0.5666
2	-5.71	0.03	0.0032	0.0003	0.0053	0.0951	1.6562	-0.1978	0.0071	-0.1136	-0.0359	0.5743
3	-5.71	0.03	0.0019	0.0003	0.0057	0.1579	2.7500	-0.1984	0.0072	-0.1129	-0.0367	0.5748
4	-4.62	0.02	0.0008	0.0003	0.0034	0.3749	4.2500	-0.1119	0.0062	-0.0818	-0.0554	0.7310
5	-2.69	0.02	-0.0015	0.0004	0.0018	-0.2666	-0.6667	-0.0473	0.0041	-0.0490	-0.0867	1.0359
6	-0.76	0.02	0.0138	0.0	0.0037	0.0	0.2581	0.0272	0.0012	-0.0077	0.0441	-0.2031
7	1.14	0.03	0.0076	0.0001	0.0008	0.0132	0.1053	0.1107	-0.0006	0.0176	-0.0054	0.1590
8	3.16	0.03	0.0164	-0.0003	-0.0001	-0.0208	-0.0196	0.1739	-0.0031	0.0525	-0.0178	0.3019
9	5.03	0.02	0.0117	-0.0011	0.0005	-0.0940	0.0427	0.2651	-0.0044	0.0953	-0.0166	0.3595
10	6.76	0.03	0.0002	-0.0002	-0.0011	-0.9999	-5.5000	0.3739	-0.0051	0.1229	-0.0136	0.3287
11	8.09	0.03	-0.0011	-0.0022	0.0005	-1.9997	-0.4545	0.4541	-0.0039	0.1426	-0.0086	0.3140
12	10.85	0.01	0.0025	-0.0028	0.0035	-1.1199	1.4000	0.5435	-0.0029	0.1691	-0.0053	0.3111
13	12.82	0.02	-0.0002	-0.0021	0.0008	0.3387	-0.0968	0.6274	0.0001	0.1910	0.0002	0.3044
14	14.80	0.02	-0.0112	-0.0009	-0.0025	0.0803	0.2232	0.7218	0.0015	0.2108	0.0021	0.2920
15	16.03	0.02	-0.0142	-0.0014	-0.0020	0.1250	0.1786	0.8035	0.0025	0.2278	0.0031	0.2835
16	18.30	0.02	-0.0225	-0.0024	-0.0079	0.0716	0.2356	0.8794	0.0037	0.2466	0.0042	0.2804
17	20.00	0.03	-0.0173	0.0023	-0.0090	-0.1329	0.5202	0.9674	0.0061	0.2661	0.0064	0.2751
18	22.03	0.03	-0.0109	-0.0001	-0.0061	0.0092	0.5596	1.0246	0.0125	0.2751	0.0122	0.2685
19	24.07	0.03	0.1360	-0.0002	0.0597	-0.0592	0.4310	1.0804	0.0216	0.2796	0.0199	0.2574
20	26.09	0.08	0.2935	-0.0102	0.1049	-0.0414	0.4138	1.1203	0.0305	0.2765	0.0272	0.2432
21	28.47	0.10	0.3244	-0.0082	0.1324	-0.0293	0.4081	1.1446	0.0321	0.2735	0.0280	0.2389
22	28.47	0.08	0.3079	-0.0108	0.1247	-0.0351	0.4050	1.1409	0.0317	0.2734	0.0276	0.2380
23	28.47	0.10	0.3423	-0.0081	0.1406	-0.0237	0.4108	1.1471	0.0334	0.2714	0.0291	0.2366
24	28.47	0.09	0.3295	-0.0101	0.1309	-0.0326	0.4229	1.1676	0.0321	0.2734	0.0275	0.2342
25	28.48	0.10	0.3330	-0.0088	0.1400	-0.0262	0.4172	1.1617	0.0334	0.2713	0.0287	0.2335
26	28.48	0.09	0.2980	-0.0130	0.1180	-0.0451	0.4118	1.1730	0.0313	0.2742	0.0267	0.2319
27	29.10	0.10	0.3531	-0.0104	0.1434	-0.0305	0.4061	1.1635	0.0317	0.2727	0.0268	0.2304
28	29.47	0.10	0.3711	-0.0102	0.1482	-0.0410	0.3994	1.1952	0.0300	0.2758	0.0251	0.2308
29	29.78	0.09	0.3624	-0.0144	0.1377	-0.0358	0.3719	1.1990	0.0300	0.2756	0.0250	0.2297
30	30.09	0.12	0.4102	-0.0148	0.1624	-0.0350	0.3902	1.2000	0.0291	0.2778	0.0241	0.2302
31	30.33	0.11	0.4128	-0.0150	0.1622	-0.0365	0.3929	1.2063	0.0291	0.2781	0.0241	0.2302
32	30.61	0.09	0.4067	-0.0150	0.1612	-0.0370	0.3718	1.2108	0.0291	0.2775	0.0240	0.2292
33	30.88	0.11	0.4330	-0.0138	0.1641	-0.0310	0.3810	1.2050	0.0293	0.2771	0.0243	0.2300
34	31.15	0.09	0.4082	-0.0154	0.1548	-0.0396	0.3702	1.2007	0.0276	0.2759	0.0248	0.2281
35	31.43	0.10	0.4405	-0.0163	0.1626	-0.0345	0.3696	1.2006	0.0287	0.2741	0.0259	0.2283
36	31.71	0.10	0.4276	-0.0163	0.1591	-0.0359	0.3620	1.1962	0.0294	0.2738	0.0246	0.2289
37	31.98	0.12	0.4782	-0.0007	0.1721	-0.0140	0.3599	1.2165	0.0274	0.2793	0.0225	0.2296
38	32.26	0.11	0.4712	0.0001	0.1505	0.0005	0.3516	1.2147	0.0272	0.2789	0.0224	0.2296
39	32.53	0.09	0.4712	0.0047	0.0990	0.0161	0.3427	1.2119	0.0274	0.2756	0.0226	0.2276
40	32.79	0.09	0.4811	0.0025	0.1025	0.0083	0.3404	1.2073	0.0273	0.2741	0.0226	0.2270
41	33.04	0.09	0.4782	0.0	0.1361	0.0	0.3671	1.2130	0.0269	0.2719	0.0222	0.2291
42	33.31	0.08	0.4242	0.0038	0.0756	0.0169	0.3550	1.2083	0.0274	0.2756	0.0227	0.2281
43	33.57	0.08	0.4919	0.0003	0.1125	0.0013	0.3354	1.2040	0.0260	0.2742	0.0233	0.2277
44	33.82	0.09	0.4446	0.0011	0.0945	0.0045	0.3800	1.2109	0.0281	0.2792	0.0232	0.2306
45	34.08	0.08	0.1425	0.0032	0.0361	0.0225	0.4077	1.2187	0.0299	0.2803	0.0245	0.2300
46	34.33	0.08	0.1851	0.0013	0.0716	0.0070	0.3008	1.2202	0.0297	0.2793	0.0243	0.2289

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-G PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 51 1.00 1.7 0.0 BIKOF14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
47	34.58	0.05	0.1618	0.0005	0.0824	0.0031	0.3857	1.2144	0.0301	0.2783	0.0248	0.2292
48	34.83	0.08	0.2303	-0.0014	0.0803	-0.0059	0.3852	1.2381	0.0295	0.2856	0.0237	0.2307
49	35.13	0.08	0.2320	-0.0023	0.0802	-0.0099	0.3706	1.2365	0.0307	0.2839	0.0248	0.2296
50	35.33	0.06	0.2363	-0.0019	0.0879	-0.0082	0.3784	1.2351	0.0306	0.2832	0.0248	0.2293
51	35.58	0.08	0.2373	0.0005	0.0859	0.0021	0.3536	1.2418	0.0303	0.2857	0.0244	0.2301
52	35.84	0.05	0.2414	0.0015	0.0732	0.0071	0.3463	1.2475	0.0295	0.2864	0.0236	0.2312
53	36.13	0.04	0.1945	0.0009	0.0746	0.0046	0.3635	1.2602	0.0299	0.2912	0.0237	0.2311
54	36.37	0.05	0.1306	0.0033	0.0480	0.0242	0.3514	1.2500	0.0295	0.2878	0.0236	0.2302
55	36.62	0.04	0.1269	0.0030	0.0610	0.0191	0.3920	1.2583	0.0300	0.2907	0.0238	0.2310
56	36.88	0.02	0.0943	0.0036	0.0434	0.1031	0.4309	1.2428	0.0302	0.2856	0.0243	0.2298
57	37.09	0.05	0.0870	0.0042	0.0288	0.0627	0.3970	1.2442	0.0300	0.2875	0.0241	0.2309
58	37.35	0.06	0.1029	0.0047	0.0419	0.0459	0.4092	1.2513	0.0298	0.2890	0.0238	0.2314
59	37.59	0.01	0.0223	0.0053	0.0100	0.2355	0.4444	1.2467	0.0298	0.2878	0.0239	0.2308
60	37.81	0.02	0.0092	0.0084	0.0016	1.6152	0.2308	1.2395	0.0309	0.2840	0.0249	0.2291
61	38.07	0.01	-0.0040	0.0129	-0.0359	-0.1521	0.4233	1.2411	0.0299	0.2851	0.0241	0.2297
62	38.30	0.00	-0.1314	0.0180	-0.0835	-0.1096	0.4194	1.2439	0.0297	0.2876	0.0239	0.2312
63	38.54	-0.02	-0.0805	0.0113	-0.0627	-0.1808	0.3752	1.2481	0.0277	0.2881	0.0236	0.2308
64	38.76	0.02	-0.0830	0.0092	-0.0136	-0.6788	0.4121	1.2398	0.0294	0.2852	0.0237	0.2300
65	39.02	-0.00	-0.1050	0.0150	-0.0679	-0.0945	0.4115	1.2454	0.0294	0.2879	0.0236	0.2312
66	39.25	-0.01	-0.1043	0.0154	-0.0805	-0.0835	0.4308	1.2440	0.0293	0.2868	0.0235	0.2305
67	39.49	-0.02	-0.0885	0.0098	-0.0699	-0.1430	0.4365	1.2450	0.0290	0.2867	0.0238	0.2303
68	39.67	0.00	-0.1506	0.0133	-0.0818	-0.0867	0.4120	1.2430	0.0293	0.2878	0.0235	0.2312
69	39.89	0.00	-0.1955	0.0137	-0.0909	-0.0701	0.4138	1.2550	0.0291	0.2899	0.0232	0.2310
70	40.09	-0.01	-0.2269	0.0148	-0.0941	-0.0646	0.4111	1.2549	0.0288	0.2921	0.0229	0.2328
71	40.29	-0.03	-0.1638	0.0140	-0.0874	-0.0855	0.4096	1.2579	0.0283	0.2912	0.0225	0.2315
72	40.52	-0.01	-0.0699	0.0120	-0.0366	-0.1335	0.4071	1.2524	0.0275	0.2913	0.0220	0.2326
73	40.73	0.01	-0.1178	0.0139	-0.0529	-0.1160	0.4491	1.2609	0.0270	0.2947	0.0214	0.2337
74	40.93	-0.02	-0.1410	0.0120	-0.0585	-0.0890	0.4131	1.2579	0.0287	0.2915	0.0226	0.2317
75	41.13	-0.01	-0.1560	0.0149	-0.0721	-0.0950	0.4598	1.2690	0.0267	0.2964	0.0210	0.2336
76	41.36	0.01	-0.1357	0.0133	-0.0630	-0.0952	0.4510	1.2717	0.0271	0.2967	0.0213	0.2333
77	41.56	0.00	-0.1001	0.0147	-0.0508	-0.1468	0.5075	1.2586	0.0298	0.2908	0.0237	0.2311
78	41.76	-0.01	-0.1050	0.0137	-0.0625	-0.0740	0.4459	1.2715	0.0283	0.2979	0.0223	0.2343
79	41.97	-0.03	-0.1598	0.0140	-0.0664	-0.1046	0.4735	1.2674	0.0282	0.3032	0.0203	0.2355
80	42.18	0.02	-0.1200	0.0144	-0.0603	-0.1143	0.4625	1.2642	0.0283	0.3009	0.0220	0.2343
81	42.37	-0.01	-0.1093	0.0127	-0.0585	-0.1162	0.5389	1.2944	0.0262	0.3060	0.0202	0.2364
82	42.58	-0.02	-0.1312	0.0120	-0.0744	-0.0794	0.4721	1.2853	0.0294	0.2994	0.0229	0.2329
83	42.77	0.01	-0.0948	0.0078	-0.0343	-0.1423	0.6259	1.2625	0.0278	0.2998	0.0217	0.2338
84	42.95	-0.02	-0.1164	0.0101	-0.0612	-0.0868	0.5258	1.3040	0.0256	0.3078	0.0196	0.2360
85	43.14	0.00	-0.0834	0.0066	-0.0372	-0.1041	0.5068	1.2972	0.0265	0.3061	0.0189	0.2360
86	43.33	0.02	-0.0959	0.0060	-0.0343	-0.1073	0.6136	1.2864	0.0261	0.3032	0.0203	0.2353
87	43.50	0.01	-0.0671	0.0066	-0.0342	-0.0963	0.5642	1.3042	0.0251	0.3075	0.0192	0.2358
88	43.68	0.00	-0.0795	0.0070	-0.0430	-0.0860	0.5509	1.2912	0.0271	0.3032	0.0210	0.2348
89	43.87	-0.00	-0.0447	0.0049	-0.0301	-0.1096	0.6754	1.3053	0.0248	0.3086	0.0190	0.2364
90	44.05	0.00	-0.0583	0.0032	-0.0281	-0.0835	0.7337	1.3095	0.0245	0.3101	0.0187	0.2368
91	44.24	-0.00	-0.0371	0.0048	-0.0293	-0.1294	0.7696	1.3080	0.0253	0.3094	0.0193	0.2365
92	44.41	-0.00	-0.0454	0.0026	-0.0339	-0.0817	0.7335	1.3086	0.0260	0.3085	0.0199	0.2361

TEST PART MACH RAID-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 51 1.00 1.7 0.0 DIMOF14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CJ1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
93	44.39	-0.03	-0.0420	0.0093	-0.0319	-0.1262	0.7595	1.3306	0.0279	0.3065	0.0214	0.2357
94	44.79	-0.02	-0.0442	0.0072	-0.0373	-0.1029	0.8439	1.3136	0.0256	0.3113	0.0196	0.2370
95	44.70	0.01	-0.0347	0.0028	-0.0262	-0.0807	0.7550	1.2956	0.0286	0.3017	0.0221	0.2332
96	45.15	-0.03	-0.0270	0.0048	-0.0217	-0.1778	1.0259	1.3066	0.0264	0.3088	0.0202	0.2363
97	45.34	-0.01	-0.0342	0.0073	-0.0337	-0.2134	1.0459	1.3223	0.0280	0.3136	0.0197	0.2372
98	45.52	0.01	0.0014	0.0066	-0.0194	4.8565	-13.8571	1.3152	0.0263	0.3114	0.0200	0.2368
99	51.40	0.07	0.0077	0.0077	-0.0191	0.9999	-2.4305	1.3122	0.0252	0.3110	0.0192	0.2370
100	45.87	0.00	0.0259	0.0078	-0.0135	0.3263	-0.5049	1.3149	0.0263	0.3096	0.0200	0.2355
101	46.08	-0.01	0.0262	0.0062	-0.0067	0.2366	-0.3702	1.3156	0.0228	0.3111	0.0173	0.2365
102	46.24	0.07	-0.0187	0.0054	-0.0229	-0.2807	1.2246	1.2738	0.0253	0.2917	0.0277	0.2290
103	46.40	0.01	-0.0301	0.0066	-0.0260	-0.2192	0.8036	1.2633	0.0261	0.2885	0.0302	0.2282
104	46.59	0.00	0.0011	0.0056	-0.0152	5.0902	-13.8162	1.2934	0.0283	0.3024	0.0219	0.2358
105	46.77	0.02	0.0558	0.0062	-0.0006	0.1469	-0.0136	1.2968	0.0244	0.3055	0.0188	0.2356
106	46.95	0.02	0.0364	0.0047	-0.0027	0.1224	-0.0703	1.2902	0.0263	0.3037	0.0204	0.2354
107	47.12	0.03	-0.0053	0.0050	-0.0150	-1.1319	2.9811	1.2612	0.0311	0.2927	0.0247	0.2321
108	47.28	0.04	-0.0053	0.0057	-0.0159	-1.0753	3.0000	1.2630	0.0288	0.2949	0.0228	0.2335
109	47.48	0.03	-0.0131	0.0061	-0.0161	-0.4656	1.2290	1.2553	0.0327	0.2895	0.0260	0.2306
110	47.64	0.02	-0.0551	0.0077	-0.0326	-0.1397	0.5753	1.2432	0.0370	0.2838	0.0298	0.2283
111	47.81	0.03	-0.0726	0.0069	-0.0365	-0.0950	0.5028	1.2329	0.0393	0.2803	0.0319	0.2274
112	47.98	0.02	-0.0456	0.0111	-0.0284	-0.2423	0.6201	1.2352	0.0347	0.2843	0.0281	0.2302
113	48.16	0.03	-0.0103	0.0150	-0.0177	-1.5144	1.7164	1.2442	0.0316	0.2881	0.0254	0.2316
114	48.33	0.03	-0.0383	0.0119	-0.0274	-0.3107	0.7124	1.2501	0.0305	0.2902	0.0244	0.2321
115	48.49	0.04	-0.0301	0.0156	-0.0252	-0.5240	0.8272	1.2571	0.0232	0.2958	0.0185	0.2353
116	48.67	0.07	-0.0166	0.0159	-0.0188	-0.9577	1.1525	1.2450	0.0122	0.2984	0.0098	0.2397
117	48.83	0.06	-0.0162	0.0091	-0.0147	-0.5617	0.9074	1.2354	0.0023	0.3035	0.0019	0.2457
118	49.00	0.11	-0.0027	-0.0034	-0.0222	0.0542	0.3541	1.2364	-0.0032	0.3076	-0.0026	0.2488
119	49.19	0.11	-0.0093	-0.0031	-0.0201	0.0444	0.3734	1.2255	0.0	0.3026	0.0	0.2471
120	49.36	0.09	-0.0463	-0.0020	-0.0180	0.0961	0.4017	1.2477	0.0012	0.3065	0.0010	0.2473
121	49.52	0.08	-0.0463	-0.0010	-0.0199	0.0610	0.4240	1.2395	0.0002	0.3063	0.0002	0.2471
122	49.71	0.09	-0.0483	-0.0011	-0.0217	0.0227	0.4474	1.2415	0.0019	0.3072	0.0015	0.2474
123	49.90	0.04	-0.0402	-0.0014	-0.0135	0.0348	0.3856	1.2439	0.0040	0.3060	0.0032	0.2460
124	50.07	0.03	-0.0448	-0.0034	-0.0169	0.0759	0.3772	1.2418	0.0055	0.3096	0.0044	0.2454
125	50.25	0.07	-0.0565	-0.0107	-0.0185	0.1894	0.3274	1.2415	0.0049	0.3156	0.0038	0.2463
126	50.43	0.06	-0.0523	-0.0048	-0.0130	0.1424	0.4211	1.2749	0.0023	0.3154	0.0018	0.2474
127	50.60	0.08	-0.0663	-0.0095	-0.0231	0.1433	0.3484	1.2566	0.0022	0.3094	0.0018	0.2462
128	50.79	0.01	-0.0398	-0.0179	-0.0164	0.4999	0.3404	1.2148	-0.0119	0.3061	-0.0098	0.2537
129	50.97	0.04	-0.0493	-0.0174	-0.0175	0.3529	0.3550	1.2216	-0.0127	0.3150	-0.0104	0.2562
130	51.13	0.02	-0.0406	-0.0202	-0.0156	0.4334	0.3348	1.2108	-0.0145	0.3120	-0.0120	0.2577
131	51.30	0.01	-0.0441	-0.0162	-0.0171	0.4120	0.3878	1.2246	-0.0147	0.3152	-0.0120	0.2607
132	51.46	-0.02	-0.0552	-0.0190	-0.0201	0.3442	0.3641	1.2219	-0.0154	0.3206	-0.0126	0.2624
133	51.61	0.01	-0.0613	-0.0191	-0.0224	0.3115	0.3654	1.2261	-0.0156	0.3226	-0.0127	0.2631
134	51.79	-0.00	-0.0421	-0.0098	-0.0217	0.2327	0.5154	1.2455	-0.0150	0.3282	-0.0120	0.2635
135	51.95	0.01	0.0041	-0.0002	-0.0127	-0.0488	-3.0976	1.2410	-0.0130	0.3241	-0.0105	0.2612
136	52.10	0.01	0.0308	0.0034	-0.0042	0.1104	-0.1304	1.2250	-0.0095	0.3166	-0.0078	0.2601
137	52.28	0.03	0.0243	0.0047	-0.0068	0.1918	-0.2776	1.2023	-0.0090	0.3140	-0.0075	0.2611
138	52.44	0.03	0.0168	0.0048	-0.0099	0.4444	-0.9167	1.1770	-0.0072	0.3055	-0.0061	0.2596

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(TRANSONIC 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NO	RE/FT	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	51	1.00	1.7	0.0	814DF14	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
139	52.60	0.02	0.0233	0.0040	-0.0044	0.1739	-0.1913	1.1935	-0.0093	0.3119	-0.0078	0.2609
140	52.76	0.00	0.0205	0.0040	-0.0046	0.1951	-0.2244	1.1840	-0.0071	0.3067	-0.0060	0.2590
141	52.93	0.01	0.0085	0.0025	-0.0071	4.9993	-14.2000	1.1700	-0.0074	0.3033	-0.0068	0.2592
142	53.07	-0.01	0.0091	0.0024	-0.0035	0.2037	-0.3840	1.1829	-0.0093	0.3078	-0.0079	0.2602
143	53.26	-0.01	0.0016	0.0013	-0.0055	0.7221	-3.0536	1.1801	-0.0096	0.3066	-0.0081	0.2615
144	53.42	-0.04	0.0029	0.0017	-0.0043	0.5061	-1.4020	1.1800	-0.0108	0.3094	-0.0091	0.2621
145	53.59	0.02	0.0014	0.0025	-0.0037	1.7855	-2.6429	1.1674	-0.0096	0.3118	-0.0081	0.2626
146	53.74	0.01	-0.0047	0.0007	-0.0047	-0.1409	1.0000	1.1749	-0.0105	0.3090	-0.0089	0.2630
147	53.92	-0.01	0.0002	0.0009	-0.0021	1.9997	-10.5000	1.1690	-0.0108	0.3135	-0.0091	0.2637
148	54.06	-0.02	0.0052	0.0005	-0.0010	0.3961	-0.1923	1.1691	-0.0116	0.3145	-0.0098	0.2645
149	54.23	-0.02	0.0064	0.0005	-0.0003	0.0781	-0.0409	1.1989	-0.0113	0.3159	-0.0094	0.2635
150	54.38	-0.02	-0.0012	0.0003	-0.0006	-0.2500	0.5000	1.1907	-0.0125	0.3152	-0.0105	0.2647
151	54.54	-0.03	-0.0002	0.0010	-0.0002	-7.9989	1.0000	1.1963	-0.0124	0.3167	-0.0104	0.2647
152	54.70	-0.02	0.0	0.0	0.0	0.0	0.0	1.1963	-0.0124	0.3164	-0.0104	0.2662
153	54.86	-0.02	0.0	0.0011	-0.0009	0.0011	-0.0005	1.1948	-0.0121	0.3169	-0.0101	0.2652
154	55.02	-0.03	-0.0003	0.0013	-0.0030	-0.2857	0.4762	1.1991	-0.0126	0.3195	-0.0105	0.2664
155	55.18	-0.01	-0.0015	0.0023	-0.0006	-1.5331	0.5333	1.2032	-0.0123	0.3210	-0.0102	0.2668
156	55.32	-0.01	-0.0038	0.0013	-0.0016	-0.3421	0.4737	1.2046	-0.0125	0.3211	-0.0104	0.2666
157	55.47	-0.02	-0.0103	-0.0001	-0.0023	0.0061	0.1716	1.1836	-0.0123	0.3154	-0.0104	0.2665
158	55.62	-0.02	-0.0112	0.0009	-0.0007	-0.0083	0.3304	1.1977	-0.0132	0.3199	-0.0110	0.2671
159	55.78	-0.01	-0.0113	0.0025	-0.0049	-0.2212	0.5382	1.2046	-0.0126	0.3222	-0.0105	0.2675
160	55.92	-0.02	-0.0113	0.0	-0.0017	0.0	0.1304	1.2004	-0.0125	0.3196	-0.0104	0.2662
161	56.09	-0.04	-0.0090	0.0009	-0.0006	-0.1000	0.0606	1.2047	-0.0131	0.3222	-0.0109	0.2675
162	56.24	-0.03	-0.0104	0.0020	-0.0030	-0.1585	0.3049	1.2057	-0.0113	0.3225	-0.0094	0.2678
163	56.39	-0.04	-0.0104	0.0010	-0.0041	-0.3975	0.2500	1.2004	-0.0126	0.3218	-0.0107	0.2681
164	56.55	-0.02	-0.0142	0.0010	-0.0007	-0.0704	0.0493	1.2127	-0.0110	0.3247	-0.0091	0.2677
165	56.72	-0.02	-0.0169	0.0029	-0.0063	-0.1934	0.3333	1.2278	-0.0096	0.3283	-0.0078	0.2674
166	56.88	-0.07	0.0056	0.0028	0.0034	0.4999	3.0071	1.2524	-0.0034	0.3233	-0.0028	0.2623
167	57.04	-0.07	-0.0065	0.0036	-0.0038	-0.5538	0.5048	1.2309	-0.0081	0.3248	-0.0066	0.2639
168	57.21	-0.07	0.0008	0.0029	0.0007	3.6243	0.8750	1.2556	-0.0053	0.3310	-0.0042	0.2636
169	57.35	-0.08	0.0044	0.0018	0.0041	0.3630	0.9318	1.2556	-0.0054	0.3315	-0.0043	0.2640
170	57.51	-0.07	-0.0056	0.0042	-0.0014	-0.7499	0.2500	1.2602	-0.0064	0.3374	-0.0074	0.2665
171	57.65	-0.08	-0.0027	0.0036	-0.0032	-2.0758	1.9259	1.2647	-0.0067	0.3359	-0.0069	0.2656
172	57.78	-0.05	-0.0135	0.0032	-0.0090	-0.2370	0.6667	1.2567	-0.0112	0.3362	-0.0089	0.2675
173	57.92	-0.02	-0.0120	0.0003	-0.0073	-0.0250	0.6083	1.2485	-0.0088	0.3305	-0.0071	0.2651
174	58.06	-0.07	-0.0130	0.0005	-0.0100	-0.0385	0.7692	1.2485	-0.0093	0.3315	-0.0075	0.2659
175	58.23	-0.01	-0.0134	-0.0009	-0.0054	0.0072	0.4030	1.2500	-0.0051	0.3297	-0.0041	0.2638
176	58.40	-0.02	-0.0010	-0.0005	-0.0016	0.4999	1.8000	1.2659	-0.0085	0.3357	-0.0067	0.2683
177	58.55	-0.02	-0.0011	0.0007	-0.0027	-0.0303	2.4545	1.2645	-0.0075	0.3352	-0.0059	0.2651
178	58.68	-0.05	-0.0023	0.0003	-0.0029	-0.1304	1.2609	1.2743	-0.0079	0.3388	-0.0062	0.2659
179	58.72	-0.01	-0.0071	-0.0007	-0.0047	0.0960	0.0040	1.2446	-0.0064	0.3280	-0.0051	0.2635
180	58.72	-0.05	0.0003	-0.0003	-0.0022	-0.9999	-7.3333	1.2742	-0.0068	0.3366	-0.0053	0.2642
181	58.72	-0.08	0.0028	0.0015	-0.0021	0.5768	-0.6077	1.2742	-0.0070	0.3371	-0.0055	0.2646

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 51 1.00 1./ 0.0 B1WOF14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.71	0.02	0.0266	9.9999	0.0159	9.9999	0.5933	-0.2664	0.0050	-0.1013	-0.0175	0.3537
2	-5.71	0.03	0.0341	9.9999	0.0162	9.9999	0.5277	-0.2774	0.0047	-0.1008	-0.0169	0.3634
3	-5.71	0.03	0.0242	9.9999	0.0152	9.9999	0.6261	-0.2664	0.0050	-0.1024	-0.0175	0.3575
4	-4.62	0.02	0.0225	9.9999	0.0133	9.9999	0.5855	-0.1852	0.0039	-0.0721	-0.0211	0.3893
5	-2.69	0.02	0.0217	9.9999	0.0129	9.9999	0.5945	-0.0978	0.0020	-0.0418	-0.0204	0.4274
6	-0.76	0.02	0.0228	9.9999	0.0134	9.9999	0.5746	-0.0369	-0.0010	-0.0016	0.0271	0.0488
7	1.14	0.03	0.0245	9.9999	0.0141	9.9999	0.4780	0.0547	-0.0028	0.0277	-0.0512	0.5064
8	3.16	0.03	0.0309	9.9999	0.0121	9.9999	0.3916	0.1225	-0.0053	0.0639	-0.0433	0.5216
9	5.03	0.02	0.0375	9.9999	0.0111	9.9999	0.2960	0.2226	-0.0067	0.0984	-0.0301	0.4420
10	6.98	0.03	0.0307	9.9999	0.0087	9.9999	0.2237	0.3253	-0.0060	0.1251	-0.0246	0.3846
11	8.89	0.03	0.0454	9.9999	0.0087	9.9999	0.1910	0.4190	-0.0038	0.1517	-0.0210	0.3621
12	10.85	0.01	0.0434	9.9999	0.0087	9.9999	0.1916	0.5220	-0.0074	0.1773	-0.0142	0.3397
13	12.82	0.02	0.0404	9.9999	0.0092	9.9999	0.0792	0.6157	-0.0065	0.2005	-0.0106	0.3256
14	14.80	0.02	0.0559	9.9999	0.0085	9.9999	0.1521	0.7156	-0.0024	0.2228	-0.0034	0.3115
15	16.83	0.02	0.0365	9.9999	0.0077	9.9999	0.1316	0.8065	-0.0005	0.2467	-0.0006	0.3051
16	18.86	0.02	0.0662	9.9999	0.0114	9.9999	0.1722	0.8921	0.0003	0.2654	0.0003	0.2975
17	20.86	0.03	0.0649	9.9999	0.0102	9.9999	0.1572	0.9903	0.0037	0.2751	0.0039	0.2926
18	22.85	0.03	0.0611	9.9999	0.0099	9.9999	0.1536	0.9891	0.0071	0.2824	0.0072	0.2870
19	24.87	0.03	0.0687	9.9999	0.0140	9.9999	0.2129	1.0294	0.0076	0.2879	0.0074	0.2808
20	26.87	0.08	0.0784	9.9999	0.0198	9.9999	0.2592	1.0598	0.0101	0.2905	0.0095	0.2741
21	28.87	0.10	0.0740	9.9999	0.0191	9.9999	0.2581	1.0764	0.0129	0.2885	0.0120	0.2680
22	28.87	0.08	0.0792	9.9999	0.0211	9.9999	0.2664	1.0806	0.0147	0.2882	0.0136	0.2649
23	28.87	0.10	0.0826	9.9999	0.0208	9.9999	0.2537	1.0849	0.0126	0.2890	0.0116	0.2664
24	28.87	0.09	0.0869	9.9999	0.0203	9.9999	0.2509	1.0914	0.0136	0.2888	0.0125	0.2644
25	28.88	0.10	0.0848	9.9999	0.0211	9.9999	0.2488	1.0863	0.0136	0.2879	0.0127	0.2645
26	28.88	0.09	0.0770	9.9999	0.0184	9.9999	0.2390	1.0891	0.0135	0.2847	0.0170	0.2614
27	29.10	0.10	0.0771	9.9999	0.0184	9.9999	0.2367	1.0906	0.0132	0.2850	0.0167	0.2613
28	29.09	0.10	0.0771	9.9999	0.0184	9.9999	0.2387	1.0904	0.0177	0.2870	0.0161	0.2618
29	29.76	0.09	0.0757	9.9999	0.0197	9.9999	0.2472	1.1054	0.0181	0.2893	0.0184	0.2617
30	30.09	0.12	0.0770	9.9999	0.0193	9.9999	0.2532	1.0992	0.0185	0.2879	0.0168	0.2619
31	30.33	0.11	0.0931	9.9999	0.0257	9.9999	0.2352	1.1127	0.0199	0.2918	0.0179	0.2621
32	30.81	0.09	0.0744	9.9999	0.0182	9.9999	0.2446	1.1115	0.0192	0.2922	0.0173	0.2629
33	30.83	0.11	0.0809	9.9999	0.0203	9.9999	0.2505	1.1161	0.0191	0.2935	0.0171	0.2630
34	31.15	0.09	0.0770	9.9999	0.0195	9.9999	0.2532	1.1189	0.0192	0.2943	0.0172	0.2630
35	31.43	0.10	0.0821	9.9999	0.0219	9.9999	0.2667	1.1196	0.0180	0.2965	0.0161	0.2648
36	31.71	0.10	0.0840	9.9999	0.0231	9.9999	0.2730	1.1185	0.0198	0.2963	0.0177	0.2650
37	31.98	0.12	0.0769	9.9999	0.0199	9.9999	0.2568	1.1150	0.0172	0.2975	0.0155	0.2673
38	32.26	0.11	0.0741	9.9999	0.0202	9.9999	0.2726	1.1153	0.0178	0.2980	0.0160	0.2672
39	32.53	0.09	0.0767	9.9999	0.0214	9.9999	0.2790	1.1181	0.0179	0.2988	0.0160	0.2672
40	32.79	0.09	0.0792	9.9999	0.0220	9.9999	0.2834	1.1150	0.0205	0.2960	0.0184	0.2659
41	33.09	0.09	0.0791	9.9999	0.0237	9.9999	0.2996	1.1172	0.0189	0.3003	0.0169	0.2688
42	33.31	0.08	0.0714	9.9999	0.0184	9.9999	0.2977	1.1047	0.0254	0.2986	0.0230	0.2632
43	33.57	0.08	0.0687	9.9999	0.0167	9.9999	0.2722	1.1019	0.0252	0.2911	0.0229	0.2642
44	33.82	0.09	0.0790	9.9999	0.0241	9.9999	0.3051	1.1053	0.0265	0.2911	0.0240	0.2634
45	34.08	0.08	0.0750	9.9999	0.0218	9.9999	0.2907	1.1051	0.0265	0.2897	0.0256	0.2621
46	34.33	0.08	0.0711	9.9999	0.0209	9.9999	0.2940	1.0962	0.0287	0.2880	0.0262	0.2627

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-S PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 51 1.00 1.7 0.0 BINOFIX 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF3	CN3	CB3	ALPF3	YCPF3	CNF4	CN4	CB4	XLPF4	YCPF4
47	34.58	0.05	0.0711	9.9999	0.0220	9.9999	0.3094	1.1035	0.0287	0.2896	0.0260	0.2624
48	34.85	0.08	0.0633	9.9999	0.0178	9.9999	0.2814	1.0994	0.0281	0.2905	0.0256	0.2642
49	35.10	0.08	0.0710	9.9999	0.0219	9.9999	0.3085	1.1017	0.0289	0.2908	0.0262	0.2640
50	35.35	0.06	0.0634	9.9999	0.0207	9.9999	0.3026	1.1014	0.0293	0.2909	0.0266	0.2641
51	35.58	0.06	0.0683	9.9999	0.0207	9.9999	0.3031	1.0991	0.0291	0.2900	0.0266	0.2651
52	35.84	0.05	0.0663	9.9999	0.0217	9.9999	0.3177	1.1030	0.0289	0.2928	0.0262	0.2655
53	36.13	0.04	0.0631	9.9999	0.0198	9.9999	0.3138	1.1018	0.0287	0.2932	0.0260	0.2661
54	36.37	0.05	0.0592	9.9999	0.0189	9.9999	0.3193	1.0992	0.0280	0.2942	0.0255	0.2676
55	36.62	0.04	0.0539	9.9999	0.0190	9.9999	0.3225	1.0972	0.0271	0.2928	0.0248	0.2683
56	36.86	0.04	0.0553	9.9999	0.0180	9.9999	0.3303	1.0945	0.0246	0.2957	0.0225	0.2702
57	37.09	0.05	0.0630	9.9999	0.0207	9.9999	0.3206	1.0964	0.0242	0.2963	0.0221	0.2702
58	37.33	0.06	0.0579	9.9999	0.0188	9.9999	0.3247	1.0967	0.0237	0.2962	0.0216	0.2701
59	37.59	0.01	0.0527	9.9999	0.0183	9.9999	0.3093	1.1075	0.0208	0.3019	0.0188	0.2726
60	37.81	0.02	0.0462	9.9999	0.0153	9.9999	0.3312	1.1016	0.0206	0.2999	0.0189	0.2722
61	38.07	0.01	0.0501	9.9999	0.0166	9.9999	0.3313	1.1043	0.0193	0.3029	0.0175	0.2743
62	38.30	0.00	0.0559	9.9999	0.0175	9.9999	0.3486	1.1009	0.0181	0.3019	0.0164	0.2742
63	38.54	-0.02	0.0474	9.9999	0.0160	9.9999	0.3757	1.1061	0.0186	0.3021	0.0168	0.2731
64	38.78	0.02	0.0489	9.9999	0.0150	9.9999	0.3567	1.1073	0.0189	0.3039	0.0171	0.2745
65	39.02	-0.00	0.0424	9.9999	0.0135	9.9999	0.3764	1.1081	0.0179	0.3037	0.0162	0.2741
66	39.23	-0.01	0.0437	9.9999	0.0152	9.9999	0.3478	1.1051	0.0178	0.3026	0.0161	0.2738
67	39.43	-0.02	0.0398	9.9999	0.0133	9.9999	0.3542	1.1066	0.0186	0.3035	0.0168	0.2736
68	39.67	0.00	0.0514	9.9999	0.0173	9.9999	0.3366	1.1179	0.0176	0.3059	0.0159	0.2736
69	39.89	0.00	0.0547	9.9999	0.0119	9.9999	0.3425	1.1167	0.0173	0.3070	0.0155	0.2749
70	40.09	-0.01	0.0450	9.9999	0.0147	9.9999	0.3267	1.1140	0.0190	0.3046	0.0171	0.2734
71	40.29	-0.03	0.0398	9.9999	0.0146	9.9999	0.3719	1.1210	0.0174	0.3074	0.0155	0.2742
72	40.52	-0.01	0.0412	9.9999	0.0124	9.9999	0.3510	1.1241	0.0189	0.3058	0.0168	0.2720
73	40.73	0.01	0.0528	9.9999	0.0184	9.9999	0.3106	1.1245	0.0185	0.3068	0.0164	0.2728
74	40.93	-0.02	0.0388	9.9999	0.0137	9.9999	0.3549	1.1294	0.0176	0.3078	0.0156	0.2725
75	41.13	-0.01	0.0514	9.9999	0.0176	9.9999	0.3403	1.1222	0.0191	0.3051	0.0170	0.2719
76	41.36	0.01	0.0525	9.9999	0.0183	9.9999	0.3760	1.1268	0.0180	0.3086	0.0159	0.2734
77	41.56	0.00	0.0503	9.9999	0.0221	9.9999	0.3665	1.1328	0.0185	0.3079	0.0163	0.2718
78	41.76	-0.01	0.0512	9.9999	0.0141	9.9999	0.3790	1.1191	0.0212	0.3011	0.0189	0.2691
79	41.97	-0.03	0.0469	9.9999	0.0120	9.9999	0.4068	1.1237	0.0208	0.3037	0.0185	0.2703
80	42.16	0.02	0.0424	9.9999	0.0156	9.9999	0.3675	1.1279	0.0209	0.3040	0.0185	0.2695
81	42.37	-0.01	0.0411	9.9999	0.0150	9.9999	0.3650	1.1270	0.0221	0.3032	0.0196	0.2690
82	42.56	-0.02	0.0378	9.9999	0.0214	9.9999	0.3702	1.1288	0.0217	0.3032	0.0192	0.2686
83	42.77	0.01	0.0487	9.9999	0.0166	9.9999	0.3819	1.1527	0.0203	0.3097	0.0176	0.2687
84	42.95	-0.02	0.0487	9.9999	0.0196	9.9999	0.4025	1.1300	0.0234	0.3015	0.0207	0.2668
85	43.14	0.00	0.0501	9.9999	0.0196	9.9999	0.3832	1.1486	0.0218	0.3073	0.0190	0.2675
86	43.33	0.02	0.0475	9.9999	0.0190	9.9999	0.4000	1.1570	0.0184	0.3120	0.0159	0.2697
87	43.50	0.01	0.0514	9.9999	0.0199	9.9999	0.3872	1.1459	0.0219	0.3066	0.0190	0.2666
88	43.68	0.00	0.0484	9.9999	0.0231	9.9999	0.3825	1.1582	0.0186	0.3118	0.0161	0.2692
89	43.87	-0.00	0.0450	9.9999	0.0183	9.9999	0.3822	1.1578	0.0187	0.3107	0.0161	0.2684
90	44.05	0.00	0.0498	9.9999	0.0194	9.9999	0.3864	1.1579	0.0205	0.3106	0.0177	0.2682
91	44.24	-0.00	0.0424	9.9999	0.0156	9.9999	0.3879	1.1549	0.0168	0.3116	0.0145	0.2698
92	44.41	-0.00	0.0527	9.9999	0.0213	9.9999	0.4080	1.1540	0.0197	0.3087	0.0171	0.2675

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 51 MACH 1.00 RX10-6 1.7 PHI 0.0 CONF 81MOF14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	44.59	-0.03	0.0566	9.9999	0.0216	9.9999	0.3852	1.1634	0.0168	0.3114	0.0162	0.2677
94	44.79	-0.02	0.0567	9.9999	0.0215	9.9999	0.4000	1.1314	0.0246	0.2996	0.0217	0.2648
95	44.98	0.01	0.0579	9.9999	0.0235	9.9999	0.4059	1.1880	0.0132	0.3218	0.0111	0.2709
96	45.15	-0.03	0.0489	9.9999	0.0197	9.9999	0.4029	1.1560	0.0182	0.3116	0.0157	0.2691
97	45.34	-0.01	0.0464	9.9999	0.0185	9.9999	0.3987	1.1399	0.0227	0.3050	0.0199	0.2658
98	45.52	0.01	0.0528	9.9999	0.0210	9.9999	0.3977	1.1528	0.0190	0.3074	0.0165	0.2667
99	45.70	0.01	0.0554	9.9999	0.0223	9.9999	0.4025	1.1382	0.0226	0.3033	0.0199	0.2665
100	45.87	0.00	0.0476	9.9999	0.0201	9.9999	0.4243	1.1408	0.0201	0.3078	0.0175	0.2679
101	46.06	-0.01	0.0554	9.9999	0.0228	9.9999	0.4116	1.1000	0.0269	0.3138	0.0240	0.2705
102	46.24	0.01	0.0506	9.9999	0.0234	9.9999	0.4134	1.2098	0.0089	0.3324	0.0074	0.2748
103	46.40	0.01	0.0502	9.9999	0.0213	9.9999	0.4243	1.2328	0.0074	0.3375	0.0060	0.2738
104	46.59	0.00	0.0592	9.9999	0.0251	9.9999	0.4246	1.1999	0.0104	0.3277	0.0087	0.2731
105	46.77	0.02	0.0527	9.9999	0.0225	9.9999	0.4269	1.1708	0.0162	0.3153	0.0138	0.2693
106	46.93	0.02	0.0488	9.9999	0.0207	9.9999	0.4242	1.1968	0.0102	0.3268	0.0085	0.2731
107	47.12	0.03	0.0514	9.9999	0.0209	9.9999	0.4066	1.2163	0.0075	0.3319	0.0062	0.2729
108	47.28	0.01	0.0513	9.9999	0.0229	9.9999	0.4464	1.2116	0.0062	0.3323	0.0051	0.2743
109	47.46	0.03	0.0423	9.9999	0.0191	9.9999	0.4515	1.2301	0.0046	0.3362	0.0039	0.2749
110	47.64	0.02	0.0513	9.9999	0.0224	9.9999	0.4366	1.2296	0.0034	0.3378	0.0028	0.2747
111	47.81	0.03	0.0598	9.9999	0.0264	9.9999	0.4121	1.2397	0.0035	0.3402	0.0028	0.2744
112	47.99	0.02	0.0462	9.9999	0.0210	9.9999	0.4545	1.2367	0.0055	0.3380	0.0044	0.2738
113	48.18	0.03	0.0514	9.9999	0.0224	9.9999	0.4358	1.2456	0.0054	0.3419	0.0043	0.2745
114	48.33	0.05	0.0436	9.9999	0.0193	9.9999	0.4427	1.2406	0.0024	0.3398	0.0019	0.2739
115	48.49	0.09	0.0487	9.9999	0.0227	9.9999	0.4061	1.2415	-0.0005	0.3442	-0.0052	0.2772
116	48.67	0.07	0.0629	9.9999	0.0269	9.9999	0.4515	1.1904	-0.0119	0.3354	-0.0100	0.2818
117	48.85	0.08	0.0577	9.9999	0.0270	9.9999	0.4079	1.1813	-0.0115	0.3322	-0.0097	0.2812
118	49.00	0.11	0.0578	9.9999	0.0250	9.9999	0.4325	1.1663	-0.0129	0.3275	-0.0111	0.2808
119	49.19	0.11	0.0574	9.9999	0.0274	9.9999	0.4774	1.1321	-0.0117	0.3174	-0.0103	0.2804
120	49.36	0.04	0.0601	9.9999	0.0251	9.9999	0.4176	1.1166	-0.0109	0.3120	-0.0097	0.2789
121	49.52	0.06	0.0549	9.9999	0.0236	9.9999	0.4299	1.1103	-0.0112	0.3105	-0.0101	0.2797
122	49.71	0.04	0.0509	9.9999	0.0227	9.9999	0.4460	1.1111	-0.0104	0.3091	-0.0094	0.2782
123	49.90	0.04	0.0522	9.9999	0.0223	9.9999	0.4272	1.1021	-0.0095	0.3064	-0.0090	0.2780
124	50.07	0.05	0.0508	9.9999	0.0227	9.9999	0.4409	1.1015	-0.0089	0.3052	-0.0081	0.2771
125	50.25	0.07	0.0573	9.9999	0.0237	9.9999	0.4136	1.0969	-0.0048	0.3011	-0.0044	0.2745
126	50.43	0.06	0.0471	9.9999	0.0199	9.9999	0.4245	1.1015	-0.0089	0.3047	-0.0081	0.2766
127	50.60	0.06	0.0471	9.9999	0.0205	9.9999	0.4013	1.1052	-0.0044	0.3026	-0.0040	0.2740
128	50.79	0.01	0.0547	9.9999	0.0230	9.9999	0.4205	1.1268	0.0013	0.3041	0.0012	0.2699
129	50.97	0.04	0.0520	9.9999	0.0226	9.9999	0.4038	1.1429	0.0010	0.3100	0.0009	0.2712
130	51.13	0.02	0.0445	9.9999	0.0187	9.9999	0.4202	1.1430	0.0045	0.3061	0.0039	0.2678
131	51.30	0.01	0.0472	9.9999	0.0189	9.9999	0.3581	1.1625	0.0036	0.3116	0.0031	0.2680
132	51.48	-0.02	0.0421	9.9999	0.0184	9.9999	0.3858	1.1658	0.0033	0.3122	0.0028	0.2678
133	51.61	0.01	0.0464	9.9999	0.0185	9.9999	0.3822	1.1762	0.0045	0.3133	0.0038	0.2664
134	51.79	-0.00	0.0511	9.9999	0.0177	9.9999	0.3464	1.1981	-0.0046	0.3260	-0.0038	0.2726
135	51.95	0.01	0.0502	9.9999	0.0191	9.9999	0.3399	1.2084	-0.0075	0.3310	-0.0062	0.2739
136	52.10	0.01	0.0537	9.9999	0.0174	9.9999	0.3240	1.1824	-0.0092	0.3250	-0.0078	0.2749
137	52.28	0.03	0.0601	9.9999	0.0189	9.9999	0.3145	1.1796	-0.0094	0.3242	-0.0080	0.2748
138	52.44	0.03	0.0499	9.9999	0.0156	9.9999	0.3126	1.1545	-0.0107	0.3181	-0.0093	0.2755

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 51 MACH RA10-6 1.00 1.7 PHI 0.0 CONF 51BOF14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 .0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CB3	XCPF3	YCPF3	CNF4	CH4	CB4	XCPF4	YCPF4
139	52.03	0.02	0.0623	9.9999	0.0181	9.9999	0.2682	1.1607	-0.0112	0.3216	-0.0096	0.2771
140	52.70	0.00	0.0525	9.9999	0.0166	9.9999	0.3200	1.1481	-0.0117	0.3157	-0.0102	0.2750
141	52.93	0.01	0.0525	9.9999	0.0158	9.9999	0.3010	1.1551	-0.0095	0.3184	-0.0082	0.2756
142	53.07	-0.01	0.0604	9.9999	0.0164	9.9999	0.2715	1.1480	-0.0116	0.3165	-0.0103	0.2757
143	53.20	-0.01	0.0540	9.9999	0.0154	9.9999	0.2481	1.1509	-0.0118	0.3173	-0.0103	0.2757
144	53.42	-0.04	0.0524	9.9999	0.0155	9.9999	0.2437	1.1462	-0.0124	0.3170	-0.0113	0.2766
145	53.59	0.02	0.0567	9.9999	0.0156	9.9999	0.2395	1.1502	-0.0125	0.3169	-0.0109	0.2755
146	53.74	0.01	0.0632	9.9999	0.0161	9.9999	0.2231	1.1555	-0.0119	0.3174	-0.0103	0.2747
147	53.92	-0.01	0.0542	9.9999	0.0114	9.9999	0.2103	1.1521	-0.0112	0.3162	-0.0097	0.2745
148	54.08	-0.02	0.0636	9.9999	0.0134	9.9999	0.2211	1.1497	-0.0120	0.3148	-0.0104	0.2738
149	54.23	-0.02	0.0555	9.9999	0.0110	9.9999	0.1982	1.1470	-0.0122	0.3135	-0.0106	0.2733
150	54.38	-0.02	0.0632	9.9999	0.0141	9.9999	0.2231	1.1585	-0.0121	0.3165	-0.0104	0.2732
151	54.54	-0.03	0.0644	9.9999	0.0147	9.9999	0.2283	1.1561	-0.0127	0.3167	-0.0110	0.2739
152	54.70	-0.02	0.0581	9.9999	0.0107	9.9999	0.1842	1.1610	-0.0117	0.3157	-0.0101	0.2719
153	54.86	-0.02	0.0575	9.9999	0.0137	9.9999	0.2366	1.1606	-0.0129	0.3156	-0.0111	0.2719
154	55.02	-0.03	0.0555	9.9999	0.0095	9.9999	0.1714	1.1662	-0.0126	0.3156	-0.0108	0.2706
155	55.16	-0.01	0.0477	9.9999	0.0088	9.9999	0.1845	1.1681	-0.0132	0.3161	-0.0113	0.2706
156	55.32	-0.01	0.0618	9.9999	0.0130	9.9999	0.2104	1.1605	-0.0126	0.3177	-0.0107	0.2691
157	55.47	-0.02	0.0595	9.9999	0.0131	9.9999	0.2173	1.1797	-0.0116	0.3165	-0.0098	0.2681
158	55.62	-0.02	0.0670	9.9999	0.0139	9.9999	0.2075	1.1833	-0.0124	0.3179	-0.0105	0.2687
159	55.78	-0.01	0.0632	9.9999	0.0121	9.9999	0.1915	1.1805	-0.0126	0.3192	-0.0108	0.2690
160	55.92	-0.02	0.0657	9.9999	0.0133	9.9999	0.2024	1.1843	-0.0118	0.3182	-0.0100	0.2687
161	56.09	-0.04	0.0575	9.9999	0.0127	9.9999	0.2193	1.1878	-0.0127	0.3187	-0.0107	0.2683
162	56.24	-0.05	0.0560	9.9999	0.0086	9.9999	0.1514	1.1890	-0.0123	0.3184	-0.0103	0.2678
163	56.39	-0.04	0.0657	9.9999	0.0143	9.9999	0.2177	1.1922	-0.0128	0.3196	-0.0107	0.2681
164	56.55	-0.02	0.0656	9.9999	0.0123	9.9999	0.1869	1.2013	-0.0134	0.3212	-0.0112	0.2674
165	56.72	-0.02	0.0696	9.9999	0.0138	9.9999	0.1954	1.2034	-0.0120	0.3203	-0.0096	0.2667
166	56.88	-0.01	0.0632	9.9999	0.0131	9.9999	0.2073	1.2202	-0.0061	0.3202	-0.0050	0.2624
167	57.04	-0.01	0.0550	9.9999	0.0103	9.9999	0.1743	1.2269	-0.0088	0.3220	-0.0072	0.2629
168	57.21	-0.01	0.0582	9.9999	0.0107	9.9999	0.1838	1.2340	-0.0104	0.3259	-0.0084	0.2641
169	57.35	-0.06	0.0543	9.9999	0.0104	9.9999	0.1815	1.2334	-0.0080	0.3254	-0.0070	0.2634
170	57.51	-0.01	0.0597	9.9999	0.0106	9.9999	0.1774	1.2244	-0.0131	0.3249	-0.0107	0.2654
171	57.65	-0.08	0.0494	9.9999	0.0070	9.9999	0.1417	1.2234	-0.0145	0.3255	-0.0118	0.2656
172	57.78	-0.03	0.0571	9.9999	0.0096	9.9999	0.1681	1.2219	-0.0138	0.3243	-0.0113	0.2654
173	57.92	-0.02	0.0533	9.9999	0.0073	9.9999	0.1570	1.2186	-0.0115	0.3219	-0.0095	0.2642
174	58.06	-0.01	0.0571	9.9999	0.0091	9.9999	0.1594	1.2254	-0.0119	0.3232	-0.0097	0.2642
175	58.25	-0.01	0.0610	9.9999	0.0089	9.9999	0.1459	1.2271	-0.0092	0.3208	-0.0075	0.2613
176	58.40	-0.02	0.0545	9.9999	0.0089	9.9999	0.1766	1.2374	-0.0094	0.3240	-0.0076	0.2623
177	58.55	-0.02	0.0713	9.9999	0.0117	9.9999	0.1941	1.2326	-0.0107	0.3234	-0.0087	0.2624
178	58.68	-0.05	0.0571	9.9999	0.0071	9.9999	0.1243	1.2332	-0.0114	0.3243	-0.0092	0.2630
179	58.72	-0.01	0.0634	9.9999	0.0115	9.9999	0.1830	1.2201	-0.0095	0.3200	-0.0078	0.2623
180	58.72	-0.05	0.0527	9.9999	0.0103	9.9999	0.1805	1.2343	-0.0111	0.3232	-0.0090	0.2624
181	58.72	-0.06	0.0725	9.9999	0.0144	9.9999	0.1966	1.2305	-0.0117	0.3230	-0.0095	0.2625

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
1 52 1.00 1.7 45.0 0 1HOF14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAO	CAF	XCP
1	-5.00	0.09	-0.0659	1.2212	0.1096	-0.2624	-0.0102	0.2547	0.0856	0.1691	-1.7606
2	-5.00	0.10	-0.0672	1.2109	0.0355	-0.2350	-0.0105	0.2515	0.0836	0.1659	-1.7623
3	-5.15	0.10	-0.0609	1.1723	0.0850	-0.2457	-0.0104	0.2640	0.0838	0.1832	-1.7336
4	-5.25	0.11	-0.0442	1.0032	0.1170	-0.2019	-0.0102	0.2646	0.0744	0.1904	-1.7526
5	-1.38	0.10	-0.1184	0.2572	0.0681	-0.2280	-0.0102	0.2693	0.0724	0.1969	-2.1726
6	0.57	0.11	0.0626	-0.0349	0.1268	-0.2021	-0.0099	0.2750	0.0749	0.2001	-0.5502
7	2.49	0.10	0.2940	-0.3044	0.0791	-0.2203	-0.0100	0.2756	0.0756	0.1980	-1.3078
8	4.40	0.09	0.5229	-0.7095	0.0366	-0.2008	-0.0100	0.2756	0.0835	0.1901	-1.4703
9	6.34	0.10	0.7911	-1.2344	0.1017	-0.2481	-0.0097	0.2918	0.1016	0.1900	-1.5604
10	8.28	0.10	1.0733	-1.7640	0.0496	-0.2931	-0.0098	0.2927	0.1142	0.1785	-1.6440
11	10.18	0.10	1.3514	-2.2810	0.1210	-0.3461	-0.0096	0.3050	0.1313	0.1737	-1.6515
12	12.16	0.09	1.6016	-2.7310	0.0982	-0.2882	-0.0043	0.3126	0.1500	0.1626	-1.6434
13	14.09	0.10	2.0117	-3.1658	0.1132	-0.3667	-0.0039	0.3248	0.1636	0.1442	-1.5737
14	16.10	0.10	2.3406	-3.5925	0.1046	-0.3825	-0.0098	0.3279	0.1704	0.1175	-1.5349
15	18.10	0.10	2.6869	-3.9703	0.1006	-0.4233	-0.0157	0.3378	0.2418	0.0959	-1.4877
16	20.07	0.11	3.0376	-4.1693	0.2470	-0.4730	-0.0265	0.3413	0.2704	0.0708	-1.3594
17	22.05	0.11	3.3975	-4.3724	0.2547	-0.5064	-0.0307	0.3507	0.2983	0.0524	-1.1986
18	24.03	0.12	3.7223	-3.9702	0.3095	-0.6292	-0.0266	0.3772	0.3099	0.0073	-1.0122
19	26.01	0.14	4.3243	-3.3916	0.5215	0.0337	0.3360	0.3514	0.3389	-0.0075	-0.7497
20	26.03	0.16	5.2213	-2.9989	0.8303	-1.4431	0.0081	0.3403	0.3629	-0.0196	-0.5744
21	26.40	0.15	5.1260	-2.9902	0.7800	-1.2030	0.0084	0.3379	0.3722	-0.0343	-0.5736
22	26.40	0.17	5.1242	-2.9316	0.8154	-1.2414	0.0087	0.3395	0.3695	-0.0300	-0.5515
23	26.40	0.16	5.1706	-2.9961	0.8413	-1.2656	0.0088	0.3406	0.3674	-0.0268	-0.5606
24	26.40	0.16	5.1914	-3.0280	0.9036	-1.3295	0.0334	0.3436	0.3735	-0.0299	-0.5833
25	26.69	0.16	5.2563	-2.3092	0.8341	-1.2701	0.0153	0.3543	0.3734	-0.0186	-0.5342
26	28.96	0.15	5.5300	-2.8503	0.7271	-1.0874	0.0095	0.3446	0.3740	-0.0300	-0.4919
27	29.33	0.16	5.5934	-2.8482	0.8207	-1.0675	0.0284	0.3420	0.3766	-0.0346	-0.4765
28	29.62	0.15	5.5876	-2.8029	0.7310	-0.9602	0.0281	0.3432	0.3750	-0.0318	-0.4766
29	29.91	0.16	5.7443	-2.8042	0.9449	-1.0661	0.0843	0.3476	0.3809	-0.0375	-0.4840
30	30.20	0.17	5.8613	-2.7984	1.0515	-1.1695	0.0849	0.3544	0.3908	-0.0364	-0.4770
31	30.50	0.17	5.9457	-2.8283	0.9803	-1.0580	0.0351	0.3650	0.3959	-0.0303	-0.4917
32	30.75	0.19	6.0634	-2.9808	1.1266	-1.2058	0.0477	0.3611	0.3970	-0.0359	-0.4880
33	31.04	0.18	6.0292	-2.7751	1.0845	-1.0554	0.0859	0.3619	0.3993	-0.0374	-0.4365
34	31.32	0.18	6.2028	-2.8349	1.2848	-1.2857	0.0360	0.3725	0.3996	-0.0271	-0.4207
35	31.59	0.19	6.4037	-2.7952	1.4119	-1.3663	0.0926	0.3886	0.4033	-0.0347	-0.4325
36	31.88	0.18	6.5963	-2.8184	1.4250	-1.3373	0.0991	0.3906	0.4048	-0.0342	-0.4000
37	32.15	0.18	6.8738	-2.8277	1.6418	-1.5367	0.0932	0.3947	0.4072	-0.0325	-0.3937
38	32.43	0.19	6.8410	-2.8944	1.6384	-1.5452	0.1056	0.3947	0.4100	-0.0359	-0.4231
39	32.68	0.19	6.8838	-2.7850	1.6426	-1.5009	0.1061	0.3773	0.4142	-0.0369	-0.4017
40	32.95	0.18	6.9746	-2.7147	1.6396	-0.9358	0.1057	0.3738	0.4177	-0.0439	-0.3889
41	33.22	0.19	7.1399	-2.8759	1.6983	-1.0883	0.1124	0.3881	0.4310	-0.0429	-0.4028
42	33.47	0.19	7.2078	-2.7732	1.6216	-1.1535	0.0782	0.4003	0.4436	-0.0433	-0.3648
43	33.73	0.19	7.3374	-2.8389	1.6791	-1.0523	0.0823	0.3995	0.4436	-0.0443	-0.3866
44	33.99	0.19	7.4131	-2.8609	1.6479	-1.0921	0.1189	0.3971	0.4461	-0.0490	-0.4129
45	34.23	0.20	7.6281	-2.8905	1.8720	-1.2585	0.1440	0.3908	0.4465	-0.0557	-0.4143
46	34.47	0.20	7.5961	-2.8781	1.8582	-1.2916	0.0957	0.4125	0.4535	-0.0410	-0.3789

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 52 MACH NO 1.00 RE/ 45.0 BLWOFF14 PHI 0.0 CONF L DELI 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.74	0.20	7.7557	-3.1198	1.2975	-1.2749	0.1077	0.4241	0.4537	-0.0346	-0.4034
48	34.99	0.18	7.8064	-2.8904	1.1000	-0.9070	0.1014	0.4056	0.4606	-0.0548	-0.3709
49	35.21	0.19	7.9250	-2.9015	1.0342	-0.7713	0.1136	0.4048	0.4606	-0.0558	-0.3661
50	35.47	0.18	8.0065	-2.9117	1.0284	-0.7795	0.1137	0.4059	0.4634	-0.0575	-0.3762
51	35.73	0.17	8.0545	-2.9306	0.9990	-0.7040	0.1076	0.4031	0.4665	-0.0634	-0.3639
52	35.99	0.16	8.1505	-2.8858	0.8394	-0.6305	0.0771	0.3927	0.4642	-0.0715	-0.3292
53	36.18	0.16	8.2250	-2.8865	0.8196	-0.5336	0.0774	0.3959	0.4673	-0.0714	-0.3172
54	36.41	0.15	8.2300	-2.8964	0.7149	-0.5067	0.0588	0.4052	0.4665	-0.0615	-0.3155
55	36.64	0.15	8.3058	-2.8321	0.7796	-0.7196	0.0411	0.4070	0.4697	-0.0627	-0.3049
56	36.86	0.15	8.3908	-2.8802	0.6939	-0.6239	0.0411	0.3995	0.4709	-0.0714	-0.2936
57	37.12	0.15	8.4926	-2.8344	0.7076	-0.6163	0.0474	0.3995	0.4720	-0.0725	-0.2984
58	37.36	0.16	8.6249	-2.8852	0.7437	-0.6681	0.0357	0.3741	0.4673	-0.0952	-0.2858
59	37.58	0.14	8.6913	-2.8905	0.6240	-0.5288	0.0354	0.3741	0.4685	-0.0944	-0.2876
60	37.82	0.14	8.7224	-2.8469	0.5885	-0.5464	0.0045	0.3928	0.4649	-0.0721	-0.2691
61	38.08	0.14	8.8771	-2.8863	0.5576	-0.4886	0.0297	0.3840	0.4736	-0.0856	-0.2688
62	38.30	0.14	8.9367	-2.8863	0.5872	-0.4812	0.0420	0.3836	0.4697	-0.0841	-0.2778
63	38.54	0.13	9.0784	-2.8613	0.5573	-0.4142	0.0422	0.3752	0.4716	-0.0965	-0.2711
64	38.75	0.12	9.0575	-2.8768	0.3361	-0.0980	0.0050	0.3636	0.4681	-0.1046	-0.2624
65	38.98	0.12	9.0886	-2.8202	0.2742	-0.2019	-0.0132	0.3672	0.4649	-0.0978	-0.2553
66	39.19	0.12	9.1621	-2.8066	0.3013	-0.2449	-0.0006	0.3654	0.4666	-0.1013	-0.2520
67	39.42	0.12	9.2999	-2.8156	0.2735	-0.1379	-0.0007	0.3734	0.4725	-0.0941	-0.2597
68	39.63	0.14	9.3229	-2.8930	0.4955	-0.3134	0.0365	0.3727	0.4740	-0.1014	-0.2675
69	39.86	0.12	9.4569	-2.8508	0.2558	-0.2745	-0.0165	0.3518	0.4677	-0.1162	-0.2465
70	40.05	0.12	9.4907	-2.8420	0.3098	-0.3920	0.0122	0.3684	0.4714	-0.1031	-0.2492
71	40.28	0.14	9.5065	-2.8833	0.5955	-0.4486	0.0314	0.3829	0.4690	-0.1262	-0.2506
72	40.47	0.11	9.5111	-2.8778	0.2274	-0.3774	-0.0305	0.3531	0.4660	-0.1130	-0.2570
73	40.67	0.14	9.6856	-2.8698	0.3141	-0.4010	0.0436	0.3659	0.4716	-0.1060	-0.2467
74	40.89	0.12	9.7900	-2.8245	0.4037	-0.4594	0.0132	0.3450	0.4714	-0.1265	-0.2373
75	41.10	0.13	9.8407	-2.8278	0.4009	-0.3260	0.0374	0.3524	0.4683	-0.1130	-0.2366
76	41.29	0.13	9.9036	-2.8427	0.4070	-0.2526	0.0442	0.3524	0.4636	-0.1133	-0.2366
77	41.51	0.11	9.9691	-2.8954	0.3564	-0.2447	0.0194	0.3391	0.4660	-0.1270	-0.2403
78	41.70	0.11	10.0293	-2.8358	0.2627	0.0107	0.0313	0.3451	0.4648	-0.1196	-0.2532
79	41.91	0.12	10.1442	-2.8597	0.3233	0.0134	0.0442	0.3328	0.4658	-0.1331	-0.2415
80	42.10	0.10	10.1495	-2.8168	0.2163	-0.1691	0.0015	0.3351	0.4597	-0.1247	-0.2184
81	42.31	0.12	10.2690	-2.8503	0.3400	0.0305	0.0509	0.3194	0.4657	-0.1404	-0.2290
82	42.50	0.13	10.3227	-2.8894	0.4116	0.1372	0.0818	0.3118	0.4686	-0.1569	-0.2308
83	42.68	0.11	10.3872	-2.8637	0.2766	-0.0551	0.0266	0.3203	0.4662	-0.1400	-0.2088
84	42.88	0.11	10.4038	-2.8578	0.2950	0.1769	0.0036	0.3173	0.4691	-0.1519	-0.2157
85	43.05	0.11	10.4716	-2.8554	0.3300	0.1380	0.0038	0.3235	0.4690	-0.1406	-0.2202
86	43.23	0.11	10.5332	-2.8638	0.2947	0.0579	0.0456	0.3161	0.4691	-0.1481	-0.1978
87	43.39	0.12	10.5875	-2.8151	0.3765	0.1016	0.0458	0.2961	0.4614	-0.1654	-0.2092
88	43.58	0.10	10.6335	-2.8415	0.1164	0.1283	0.0369	0.2961	0.4579	-0.1619	-0.2061
89	43.77	0.11	10.7050	-2.8382	0.2595	0.2547	0.0394	0.2807	0.4549	-0.1742	-0.2172
90	43.96	0.11	10.8008	-2.8663	0.3408	0.1597	0.0461	0.2778	0.4591	-0.1813	-0.2197
91	44.11	0.10	10.8248	-2.8758	0.1828	0.2230	0.0336	0.2819	0.4534	-0.1685	-0.1918
92	44.30	0.11	10.9874	-2.8850	0.2058	0.3720	0.0585	0.2804	0.4585	-0.1781	-0.2080

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-6 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
7 52 1.00 1.7 45.0 BTWDFIN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.48	0.11	10.9312	-2.0013	0.1868	0.2437	0.0402	0.2805	0.4570	-0.1765	-0.1831
94	44.66	0.10	11.0033	-2.0641	0.1390	0.1961	0.0341	0.2775	0.4550	-0.1775	-0.1865
95	44.85	0.08	11.0667	-1.9050	0.0702	0.0159	0.0135	0.2711	0.4512	-0.1801	-0.1720
96	45.05	0.09	11.1613	-2.0372	0.1107	0.1189	0.0219	0.2702	0.4529	-0.1767	-0.1822
97	45.21	0.10	11.1157	-1.9642	0.2443	-0.2203	0.0101	0.2033	0.4517	-0.1804	-0.1677
98	45.39	0.09	11.2548	-1.9484	0.1373	0.1197	0.0223	0.2074	0.4538	-0.1804	-0.1732
99	45.55	0.10	11.2060	-2.1415	0.1817	0.2780	0.0345	0.2814	0.4481	-0.1667	-0.1911
100	45.76	0.10	11.2667	-2.0433	0.2696	0.3135	0.0414	0.2801	0.4491	-0.1890	-0.1798
101	45.93	0.10	11.4037	-1.9814	0.2337	0.3505	0.0480	0.2484	0.4439	-0.1975	-0.1728
102	46.09	0.10	11.4998	-1.8860	0.2436	0.2116	0.0295	0.2407	0.4473	-0.2066	-0.1642
103	46.27	0.09	11.5578	-1.7608	0.2477	-0.0381	0.0174	0.2276	0.4401	-0.2025	-0.1523
104	46.44	0.11	11.4824	-1.7013	0.3002	0.0023	0.0175	0.2298	0.4397	-0.2099	-0.1482
105	46.62	0.10	11.5801	-1.8761	0.2134	0.0477	0.0172	0.2474	0.4430	-0.1976	-0.1622
106	46.79	0.10	11.7251	-1.8775	0.2148	-0.0117	0.0113	0.2354	0.4416	-0.2064	-0.1601
107	46.96	0.10	11.7393	-1.8802	0.2544	-0.0044	0.0177	0.2247	0.4374	-0.2127	-0.1604
108	47.13	0.09	11.8207	-1.8945	0.1796	0.0087	0.0114	0.2247	0.4399	-0.2102	-0.1602
109	47.30	0.11	11.7877	-1.7403	0.3394	-0.0240	0.0120	0.2239	0.4351	-0.2112	-0.1476
110	47.48	0.09	12.0096	-1.8522	0.1703	-0.0314	-0.0195	0.2173	0.4347	-0.2174	-0.1543
111	47.66	0.10	12.0818	-1.9418	0.2247	-0.2470	-0.0192	0.2259	0.4332	-0.2093	-0.1607
112	47.84	0.09	12.0668	-1.8055	0.1530	-0.2004	-0.0193	0.2113	0.4300	-0.2187	-0.1494
113	48.02	0.09	12.2170	-1.9589	0.1751	-0.3257	-0.0190	0.2049	0.4310	-0.2261	-0.1603
114	48.18	0.09	12.2471	-1.8910	0.1853	-0.0393	-0.0304	0.2042	0.4309	-0.2264	-0.1544
115	48.36	0.09	12.2783	-1.9359	0.1835	-0.0709	-0.0303	0.2122	0.4367	-0.2245	-0.1577
116	48.54	0.09	12.3707	-1.9942	0.1530	-0.4239	-0.0124	0.2200	0.4444	-0.2244	-0.1611
117	48.69	0.09	12.3533	-1.8967	0.1666	-0.6470	-0.0300	0.2473	0.4577	-0.2104	-0.1540
118	48.86	0.09	12.4403	-2.0652	0.1728	-0.2858	-0.0104	0.2238	0.4522	-0.2284	-0.1675
119	49.04	0.09	12.5099	-2.0008	0.1796	-0.0476	-0.0060	0.2379	0.4670	-0.2490	-0.1883
120	49.21	0.08	12.5503	-2.0091	0.1554	-0.7493	-0.0062	0.2521	0.4700	-0.2239	-0.1998
121	49.40	0.08	12.7214	-2.0471	0.1204	-0.7654	-0.0126	0.2519	0.4681	-0.2311	-0.2237
122	49.56	0.07	12.7332	-2.0467	0.1021	-0.7072	-0.0126	0.2572	0.4702	-0.2329	-0.2236
123	49.73	0.06	12.8393	-2.7613	0.0971	-0.7574	-0.0127	0.2083	0.4938	-0.2254	-0.2201
124	49.91	0.06	12.8300	-2.2130	-0.0555	-0.6769	-0.0258	0.2447	0.4697	-0.2449	-0.2504
125	50.10	0.06	12.9365	-3.3331	-0.0645	-0.5083	-0.0321	0.2100	0.4836	-0.2069	-0.2577
126	50.27	0.04	13.0999	-3.5046	-0.2406	-0.5490	-0.0326	0.1808	0.4539	-0.2051	-0.2675
127	50.44	0.04	13.1477	-3.4033	-0.1672	-0.6475	-0.0256	0.2259	0.4736	-0.2497	-0.2634
128	50.63	0.04	13.2726	-3.7351	-0.1808	-0.6655	-0.0261	0.1864	0.4681	-0.2417	-0.2815
129	50.80	0.04	13.3122	-3.7737	-0.2073	-0.7500	-0.0140	0.1597	0.4774	-0.2577	-0.2835
130	50.98	0.04	13.3116	-3.8812	-0.1701	-0.8441	-0.0076	0.1615	0.4774	-0.2579	-0.2916
131	51.15	0.04	13.4469	-4.0511	-0.1425	-1.0354	-0.0011	0.1609	0.4219	-0.2410	-0.3012
132	51.31	0.04	13.4645	-4.0272	-0.1264	-1.0899	-0.0072	0.1718	0.4264	-0.2546	-0.2991
133	51.49	0.02	13.5187	-3.9951	-0.2072	-0.9882	0.0049	0.1724	0.4320	-0.2604	-0.2955
134	51.66	0.03	13.5004	-4.2040	-0.0955	-1.0793	0.0054	0.1901	0.4444	-0.2543	-0.3098
135	51.83	0.03	13.6401	-4.0055	-0.1960	-0.9324	0.0116	0.1662	0.4441	-0.2579	-0.2994
136	52.00	0.02	13.6074	-3.8758	-0.2722	-1.0999	-0.0008	0.1673	0.4519	-0.2646	-0.2848
137	52.15	0.03	13.4894	-3.8104	-0.1520	-1.2262	-0.0064	0.1601	0.4268	-0.2567	-0.2676
138	52.35	0.02	13.6057	-3.8371	-0.2169	-1.2647	-0.0003	0.1479	0.4220	-0.2741	-0.2673

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 02 MACH 1.000 RALO=6.7 PHI 45.0 BLANK 14 CONF 8 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.91	0.01	15.0104	-3.9479	-0.3525	-1.1910	-0.0037	0.1549	0.4157	-0.2608	-0.2605
140	52.69	0.01	15.0093	-3.9156	-0.2809	-1.2636	-0.0063	0.1384	0.4161	-0.2777	-0.2568
141	52.98	0.00	15.7284	-3.9322	-0.3425	-1.1947	-0.0065	0.1439	0.4210	-0.2771	-0.2573
142	53.03	0.01	15.8096	-3.8516	-0.2607	-1.2342	-0.0001	0.1493	0.4285	-0.2792	-0.2759
143	53.21	-0.00	15.9174	-3.8087	-0.4022	-1.3001	-0.0064	0.1464	0.4306	-0.2822	-0.2593
144	53.42	0.01	16.1623	-3.8085	-0.2541	-1.4039	0.0067	0.1521	0.4374	-0.2853	-0.2732
145	53.57	0.03	16.2163	-3.9967	-0.0746	-1.4120	0.0135	0.1597	0.4492	-0.2896	-0.2813
146	53.76	0.03	16.3540	-4.2709	-0.0345	-1.5471	0.0196	0.1696	0.4678	-0.2983	-0.2975
147	53.92	0.01	16.3399	-4.1993	-0.2307	-1.5174	0.0192	0.1671	0.4604	-0.2934	-0.2929
148	54.10	0.02	16.5253	-4.4359	-0.0446	-1.6740	0.0274	0.1787	0.4596	-0.2809	-0.3046
149	54.24	0.03	16.4447	-4.3188	0.0439	-1.6007	0.0213	0.1418	0.4446	-0.3031	-0.3128
150	54.40	0.03	16.6093	-4.7013	0.1771	-1.5380	-0.0043	0.1652	0.4516	-0.2864	-0.3218
151	54.57	0.07	16.5044	-4.6210	0.3597	-1.4528	-0.0037	0.1735	0.4485	-0.2760	-0.3186
152	54.72	0.03	16.6041	-4.8101	0.1965	-1.5420	-0.0040	0.1766	0.4514	-0.2748	-0.3157
153	54.87	0.06	16.5903	-4.8012	0.2074	-1.5031	-0.0041	0.1615	0.4431	-0.2816	-0.3162
154	55.02	0.04	16.5069	-4.7804	0.1923	-1.5837	0.0021	0.1657	0.4342	-0.2735	-0.3094
155	55.19	0.02	16.5397	-4.8373	-0.0268	-1.6591	0.0016	0.1565	0.4453	-0.3069	-0.2998
156	55.33	0.04	16.4489	-4.6505	0.2015	-1.6341	0.0023	0.1674	0.4491	-0.2727	-0.3011
157	55.49	0.05	16.5259	-4.7143	0.2763	-1.6121	0.0088	0.1625	0.4535	-0.2770	-0.3039
158	55.66	0.05	16.5405	-4.7559	0.3620	-0.9701	0.0019	0.1568	0.4497	-0.2930	-0.3067
159	55.79	0.05	16.5075	-4.7449	0.2084	-1.6973	0.0066	0.1543	0.4585	-0.2840	-0.3024
160	55.97	0.06	16.5019	-4.7841	0.3563	-1.6457	0.0107	0.1465	0.4434	-0.2970	-0.3075
161	56.15	0.05	16.6727	-4.9348	0.3076	-1.6184	0.0091	0.1631	0.4453	-0.2822	-0.3091
162	56.29	0.06	16.6696	-4.9247	0.2954	-0.9092	0.0091	0.1547	0.4545	-0.3029	-0.3084
163	56.47	0.04	16.8245	-4.8150	0.1337	-0.9414	0.0084	0.1743	0.4582	-0.2789	-0.3113
164	56.60	0.04	16.7773	-4.8310	0.1745	-0.7454	0.0098	0.1567	0.4536	-0.2970	-0.3134
165	56.78	0.06	16.8478	-4.7538	0.3694	-0.8544	0.0103	0.1512	0.4577	-0.3066	-0.3202
166	56.94	0.07	16.9515	-4.7845	0.3600	-0.8323	0.0100	0.1727	0.4616	-0.2890	-0.3147
167	57.08	0.07	16.9370	-4.7811	0.3727	-0.8132	0.0107	0.1629	0.4601	-0.2973	-0.3158
168	57.23	0.05	16.8052	-4.8625	0.1000	-0.8831	0.0099	0.1534	0.4531	-0.2993	-0.3149
169	57.40	0.05	16.9653	-4.8028	-0.0316	-0.8799	0.0095	0.1655	0.4566	-0.2912	-0.3209
170	57.58	0.07	16.8043	-4.4900	0.3262	-0.4991	0.0113	0.1471	0.4516	-0.3046	-0.2973
171	57.74	0.09	15.1709	-4.0847	0.5087	-0.0662	0.0127	0.1152	0.4394	-0.3243	-0.2689
172	57.88	0.09	15.2118	-4.2091	0.4514	-0.0504	0.0083	0.1257	0.4300	-0.3130	-0.2801
173	58.01	0.04	15.0447	-4.0412	0.0314	-0.1899	0.0109	0.1011	0.4265	-0.3255	-0.2719
174	58.17	0.06	15.1737	-4.2000	0.2041	-0.0304	-0.0004	0.1120	0.4294	-0.3173	-0.2807
175	58.32	0.05	15.1321	-4.2549	0.1092	-0.2253	0.0035	0.1128	0.4271	-0.3144	-0.2802
176	58.49	0.08	15.2774	-4.3927	0.4451	-0.2998	0.0003	0.0923	0.4264	-0.3311	-0.2872
177	58.63	0.02	15.3145	-4.0050	-0.1748	-0.0217	0.0042	0.1163	0.4300	-0.3218	-0.3007
178	58.80	0.05	15.2809	-4.4022	0.0421	-0.2381	0.0051	0.1170	0.4326	-0.3157	-0.2865
179	58.87	0.05	15.1708	-4.3146	0.1708	-0.2207	-0.0006	0.1106	0.4296	-0.3189	-0.2844
180	58.87	0.02	15.1969	-4.3370	-0.1218	-0.0416	0.0044	0.1045	0.4312	-0.3268	-0.2861
181	58.89	0.03	15.3881	-4.0956	-0.0207	-0.2465	-0.0012	0.1121	0.4321	-0.3201	-0.3050
182	58.98	0.06	15.1729	-4.4243	0.2084	-0.1971	-0.0005	0.1321	0.4348	-0.3028	-0.2916

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 52 1.00 1.7 45.0 BIWOF14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.00	0.09	0.2265	-0.0337	0.0762	-0.0162	0.3335	-0.0656	0.0068	-0.0645	-0.1036	0.9832
2	-5.00	0.10	0.2260	-0.0339	0.0753	-0.0173	0.3332	-0.0729	0.0067	-0.0656	-0.0919	0.8999
3	-5.15	0.10	0.1620	-0.0024	0.0568	-0.0154	0.3121	-0.0424	0.0047	-0.0518	-0.1108	1.2217
4	-3.00	0.11	0.1106	-0.0018	0.0294	-0.0154	0.2521	-0.0139	0.0027	-0.0296	-0.1942	2.1295
5	-1.36	0.10	0.0650	-0.0005	0.0079	-0.0077	0.1215	0.0249	0.0008	-0.0076	0.0321	-0.3052
6	0.37	0.11	0.0079	0.0003	-0.0109	0.0380	-1.3791	0.0856	-0.0004	0.0089	-0.0047	0.1040
7	2.49	0.10	-0.0574	0.0024	-0.0315	-0.0642	0.8422	0.1416	-0.0020	0.0306	-0.0141	0.2158
8	4.40	0.09	-0.0701	0.0049	-0.0463	-0.0842	0.6605	0.2150	-0.0033	0.0430	-0.0153	0.2930
9	6.34	0.10	-0.1145	0.0077	-0.0644	-0.0872	0.5824	0.2914	-0.0046	0.0876	-0.0158	0.3006
10	8.28	0.10	-0.1427	0.0126	-0.0755	-0.0863	0.5277	0.3787	-0.0065	0.1215	-0.0172	0.3208
11	10.18	0.10	-0.1547	0.0176	-0.0784	-0.1138	0.5100	0.4744	-0.0084	0.1556	-0.0175	0.3246
12	12.16	0.09	-0.1814	0.0209	-0.0818	-0.1270	0.5066	0.5790	-0.0107	0.1894	-0.0185	0.3202
13	14.09	0.10	-0.1757	0.0230	-0.0881	-0.1309	0.4906	0.6813	-0.0116	0.2128	-0.0170	0.3123
14	16.10	0.10	-0.2039	0.0243	-0.0933	-0.1192	0.4576	0.7908	-0.0136	0.2453	-0.0172	0.3102
15	18.10	0.10	-0.2265	0.0270	-0.1015	-0.1182	0.4446	0.9147	-0.0141	0.2756	-0.0154	0.3013
16	20.07	0.11	-0.2420	0.0287	-0.1075	-0.1166	0.4442	1.0202	-0.0144	0.3008	-0.0141	0.2948
17	22.03	0.11	-0.2471	0.0305	-0.1111	-0.1234	0.4496	1.1293	-0.0130	0.3243	-0.0115	0.2872
18	24.03	0.12	-0.2491	0.0331	-0.1064	-0.1311	0.4856	1.2177	-0.0086	0.3401	-0.0071	0.2793
19	26.01	0.14	-0.2605	0.0350	-0.1258	-0.1447	0.4465	1.3516	0.0296	0.2743	0.0281	0.2608
20	28.03	0.16	-0.2340	0.0330	-0.1113	-0.1410	0.4756	1.4111	0.0169	0.3022	0.0152	0.2720
21	28.40	0.15	-0.2357	0.0336	-0.1068	-0.1425	0.4606	1.1283	0.0177	0.3025	0.0157	0.2681
22	28.40	0.15	-0.2282	0.0330	-0.1051	-0.1446	0.4606	1.1314	0.0174	0.3005	0.0154	0.2656
23	28.40	0.16	-0.2471	0.0323	-0.1065	-0.1307	0.4363	1.1203	0.0161	0.2986	0.0144	0.2665
24	28.40	0.16	-0.2435	0.0319	-0.1074	-0.1284	0.4322	1.1120	0.0149	0.2944	0.0134	0.2647
25	28.69	0.16	-0.2281	0.0287	-0.0936	-0.1258	0.4323	1.0842	0.0101	0.2694	0.0093	0.2669
26	28.98	0.15	-0.2196	0.0312	-0.0955	-0.1421	0.4349	1.1502	0.0178	0.3024	0.0155	0.2629
27	29.33	0.16	-0.2162	0.0286	-0.0891	-0.1348	0.4199	1.1419	0.0163	0.2999	0.0143	0.2626
28	29.62	0.15	-0.2054	0.0269	-0.0870	-0.1309	0.4236	1.1287	0.0139	0.2976	0.0123	0.2641
29	29.91	0.16	-0.2002	0.0254	-0.0827	-0.1189	0.4131	1.0845	0.0098	0.2692	0.0090	0.2667
30	30.20	0.17	-0.1904	0.0223	-0.0803	-0.1135	0.4089	1.0847	0.0086	0.2906	0.0079	0.2681
31	30.50	0.17	-0.1799	0.0203	-0.0760	-0.1128	0.4113	1.0991	0.0077	0.2965	0.0070	0.2698
32	30.79	0.19	-0.1950	0.0211	-0.0775	-0.1062	0.3974	1.0473	0.0076	0.2961	0.0069	0.2698
33	31.09	0.18	-0.1836	0.0227	-0.0743	-0.1236	0.4047	1.1065	0.0061	0.2999	0.0055	0.2710
34	31.32	0.19	-0.1834	0.0225	-0.0742	-0.1227	0.4046	1.1047	0.0058	0.2988	0.0052	0.2693
35	31.59	0.19	-0.1817	0.0232	-0.0778	-0.1277	0.4262	1.1158	0.0037	0.3014	0.0033	0.2701
36	31.88	0.18	-0.1715	0.0230	-0.0750	-0.1341	0.4408	1.1173	0.0033	0.3026	0.0030	0.2708
37	32.15	0.18	-0.1578	0.0240	-0.0712	-0.1521	0.4512	1.1300	0.0024	0.3081	0.0021	0.2712
38	32.43	0.19	-0.1626	0.0228	-0.0733	-0.1464	0.4506	1.1233	0.0029	0.3040	0.0026	0.2706
39	32.80	0.19	-0.1574	0.0238	-0.0733	-0.1512	0.4657	1.1377	0.0019	0.3065	0.0017	0.2712
40	32.93	0.18	-0.1449	0.0259	-0.0710	-0.1737	0.4900	1.1504	0.0020	0.3124	0.0017	0.2716
41	33.22	0.19	-0.1457	0.0265	-0.0730	-0.1770	0.4716	1.1564	0.0019	0.3081	0.0017	0.2711
42	33.47	0.19	-0.1373	0.0281	-0.0703	-0.2048	0.5120	1.1648	0.0020	0.3173	0.0017	0.2724
43	33.73	0.19	-0.1368	0.0290	-0.0703	-0.2074	0.5029	1.1674	0.0017	0.3178	0.0015	0.2722
44	33.99	0.19	-0.1493	0.0268	-0.0750	-0.1795	0.5023	1.1491	0.0016	0.3111	0.0014	0.2707
45	34.23	0.20	-0.1495	0.0270	-0.0739	-0.1806	0.4945	1.1577	0.0006	0.3152	0.0005	0.2725
46	34.47	0.20	-0.1392	0.0271	-0.0734	-0.1947	0.5275	1.1748	0.0004	0.3200	0.0003	0.2724

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RXIO-6 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
1 52 1.00 1.7 45.0 BINORM 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CBI	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	34.74	0.20	-0.1306	0.0267	-0.0710	-0.1931	0.5190	1.1692	0.0004	0.3172	0.0003	0.2713
48	34.99	0.18	-0.1208	0.0260	-0.0684	-0.2053	0.5403	1.1748	0.0006	0.3177	0.0005	0.2704
49	35.21	0.16	-0.1314	0.0257	-0.0712	-0.1956	0.5419	1.1747	0.0010	0.3189	0.0009	0.2715
50	35.47	0.16	-0.1238	0.0256	-0.0693	-0.2008	0.5396	1.1862	0.0004	0.3221	0.0003	0.2715
51	35.70	0.17	-0.1212	0.0249	-0.0686	-0.2054	0.5660	1.1904	0.0003	0.3241	0.0003	0.2723
52	35.94	0.16	-0.1173	0.0247	-0.0666	-0.2105	0.5805	1.2075	-0.0003	0.3311	-0.0002	0.2742
53	36.18	0.16	-0.1043	0.0221	-0.0591	-0.2115	0.6134	1.2076	-0.0003	0.3300	-0.0002	0.2733
54	36.41	0.15	-0.1056	0.0208	-0.0628	-0.1966	0.5936	1.2064	-0.0015	0.3292	-0.0012	0.2729
55	36.64	0.15	-0.1129	0.0215	-0.0649	-0.1913	0.6103	1.2347	-0.0016	0.3401	-0.0013	0.2755
56	36.88	0.15	-0.1010	0.0204	-0.0647	-0.2038	0.6368	1.2491	-0.0025	0.3452	-0.0020	0.2764
57	37.12	0.15	-0.0954	0.0188	-0.0599	-0.1970	0.6279	1.2393	-0.0025	0.3393	-0.0020	0.2738
58	37.36	0.16	-0.0972	0.0189	-0.0609	-0.1905	0.6139	1.2549	-0.0029	0.3439	-0.0023	0.2740
59	37.58	0.14	-0.0955	0.0180	-0.0590	-0.1885	0.6176	1.2530	-0.0035	0.3438	-0.0028	0.2743
60	37.82	0.14	-0.0977	0.0188	-0.0624	-0.1924	0.6367	1.2780	-0.0046	0.3514	-0.0036	0.2754
61	38.06	0.14	-0.0803	0.0167	-0.0538	-0.2079	0.6700	1.2780	-0.0049	0.3530	-0.0038	0.2762
62	38.30	0.14	-0.0817	0.0171	-0.0579	-0.2340	0.7431	1.2482	-0.0046	0.3410	-0.0037	0.2732
63	38.54	0.13	-0.0805	0.0182	-0.0582	-0.3344	0.9240	1.2411	-0.0046	0.3387	-0.0037	0.2729
64	38.75	0.12	-0.0829	0.0189	-0.0642	-0.2210	0.7027	1.2781	-0.0053	0.3519	-0.0041	0.2753
65	38.93	0.12	-0.0728	0.0169	-0.0483	-0.1772	0.6033	1.2945	-0.0068	0.3569	-0.0053	0.2757
66	39.19	0.12	-0.0805	0.0188	-0.0581	-0.2107	0.7075	1.2843	-0.0059	0.3547	-0.0046	0.2762
67	39.42	0.12	-0.0692	0.0164	-0.0547	-0.1858	0.7077	1.2902	-0.0070	0.3562	-0.0054	0.2761
68	39.63	0.14	-0.0105	0.0056	-0.0100	-0.5333	1.5810	1.2590	-0.0068	0.3451	-0.0054	0.2741
69	39.86	0.12	-0.0753	0.0178	-0.0436	-0.1036	0.5740	1.2677	-0.0091	0.3601	-0.0070	0.2775
70	40.05	0.12	-0.0311	0.0052	-0.0289	-0.1672	0.9293	1.2832	-0.0080	0.3564	-0.0062	0.2777
71	40.28	0.14	-0.0125	0.0023	-0.0181	-0.1640	1.4480	1.2749	-0.0090	0.3522	-0.0071	0.2763
72	40.47	0.11	-0.0097	0.0015	-0.0191	-0.1546	1.9891	1.2850	-0.0097	0.3567	-0.0075	0.2776
73	40.67	0.14	0.0192	-0.0012	-0.0035	-0.0025	-0.2005	1.2768	-0.0091	0.3524	-0.0071	0.2760
74	40.89	0.12	0.0153	-0.0014	-0.0033	-0.0718	-0.4230	1.2879	-0.0103	0.3580	-0.0080	0.2775
75	41.10	0.13	0.0023	-0.0042	0.0052	-0.0803	0.3994	1.2769	-0.0101	0.3546	-0.0079	0.2777
76	41.29	0.13	0.0044	-0.0047	0.0142	-0.0730	0.2205	1.2367	-0.0090	0.3420	-0.0073	0.2765
77	41.51	0.11	0.0023	-0.0039	0.0036	-0.0928	0.0357	1.2634	-0.0094	0.3506	-0.0074	0.2771
78	41.70	0.11	0.0019	-0.0038	0.0042	-0.0907	0.1002	1.2509	-0.0087	0.3466	-0.0070	0.2771
79	41.91	0.12	0.0111	-0.0059	0.0198	-0.0765	0.2268	1.2468	-0.0092	0.3451	-0.0074	0.2752
80	42.10	0.10	0.0049	-0.0046	0.0070	-0.0874	0.1275	1.2609	-0.0098	0.3515	-0.0077	0.2774
81	42.31	0.12	0.0072	-0.0051	0.0221	-0.0585	0.2934	1.2308	-0.0081	0.3401	-0.0066	0.2763
82	42.50	0.13	0.0043	-0.0029	0.0234	-0.0344	0.2176	1.1904	-0.0069	0.3285	-0.0058	0.2760
83	42.68	0.11	0.0041	-0.0051	0.0174	-0.0606	0.2069	1.2528	-0.0093	0.3487	-0.0074	0.2783
84	42.89	0.11	0.1002	-0.0044	0.0260	-0.0439	0.2595	1.2186	-0.0075	0.3370	-0.0062	0.2770
85	43.05	0.11	0.0988	-0.0025	0.0257	-0.0253	0.2001	1.2137	-0.0073	0.3342	-0.0060	0.2754
86	43.23	0.11	0.1042	-0.0020	0.0269	-0.0183	0.2463	1.2338	-0.0078	0.3424	-0.0063	0.2775
87	43.39	0.12	0.0927	-0.0013	0.0231	-0.0139	0.2405	1.2005	-0.0066	0.3311	-0.0055	0.2758
88	43.58	0.10	0.1034	-0.0050	0.0251	-0.0483	0.2427	1.2496	-0.0086	0.3474	-0.0069	0.2780
89	43.77	0.11	0.1066	-0.0039	0.0253	-0.0359	0.2330	1.2469	-0.0084	0.3469	-0.0067	0.2782
90	43.96	0.11	0.1037	-0.0043	0.0242	-0.0415	0.2334	1.2444	-0.0084	0.3453	-0.0067	0.2775
91	44.11	0.10	0.1039	-0.0033	0.0222	-0.0318	0.2197	1.2517	-0.0085	0.3473	-0.0066	0.2775
92	44.30	0.11	0.1098	-0.0022	0.0270	-0.0200	0.2459	1.2398	-0.0078	0.3456	-0.0061	0.2789

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 52 MACH 1.00 RATIO-6 PHI 45.0 CONF 81WGF14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CH1	CA1	ACPF1	YCPF1	CNF2	CH2	CA2	ACPF2	YCPF2
93	44.46	0.11	0.1096	-0.0030	0.0249	-0.0330	0.2284	1.2501	-0.0082	0.3498	-0.0066	0.2798
94	44.80	0.10	0.1146	-0.0016	0.0259	-0.0140	0.2272	1.2471	-0.0082	0.3507	-0.0066	0.2812
95	44.83	0.08	0.1065	-0.0009	0.0218	-0.0084	0.2047	1.2444	-0.0082	0.3467	-0.0066	0.2786
96	45.05	0.09	0.1200	-0.0023	0.0287	-0.0183	0.2278	1.2478	-0.0087	0.3550	-0.0069	0.2784
97	45.21	0.10	0.1094	-0.0006	0.0211	-0.0055	0.1929	1.2502	-0.0085	0.3510	-0.0068	0.2808
98	45.39	0.09	0.1207	-0.0002	0.0264	-0.0017	0.2229	1.2428	-0.0074	0.3467	-0.0060	0.2790
99	45.55	0.10	0.1145	-0.0025	0.0258	-0.0218	0.2253	1.2428	-0.0078	0.3478	-0.0063	0.2799
100	45.76	0.10	0.1202	-0.0024	0.0296	-0.0230	0.2361	1.2398	-0.0072	0.3467	-0.0058	0.2796
101	45.93	0.10	0.1326	-0.0035	0.0326	-0.0284	0.2459	1.2472	-0.0075	0.3473	-0.0060	0.2785
102	46.09	0.10	0.1233	-0.0018	0.0322	-0.0153	0.2380	1.2545	-0.0075	0.3506	-0.0060	0.2795
103	46.27	0.09	0.1250	-0.0021	0.0251	-0.0171	0.2041	1.2561	-0.0081	0.3521	-0.0064	0.2803
104	46.44	0.11	0.1154	-0.0017	0.0215	-0.0147	0.1803	1.2429	-0.0075	0.3470	-0.0060	0.2792
105	46.62	0.10	0.1134	-0.0014	0.0205	-0.0121	0.1776	1.2561	-0.0080	0.3509	-0.0064	0.2794
106	46.79	0.10	0.1129	-0.0017	0.0207	-0.0151	0.1833	1.2547	-0.0079	0.3511	-0.0063	0.2798
107	46.96	0.10	0.1194	-0.0020	0.0225	-0.0167	0.1884	1.2575	-0.0077	0.3520	-0.0061	0.2799
108	47.15	0.09	0.1199	-0.0021	0.0202	-0.0175	0.1665	1.2592	-0.0081	0.3518	-0.0064	0.2794
109	47.30	0.11	0.1145	0.0	0.0250	0.0	0.1730	1.2916	-0.0098	0.3637	-0.0076	0.2816
110	47.48	0.09	0.1003	-0.0017	0.0146	-0.0169	0.1476	1.2720	-0.0095	0.3569	-0.0075	0.2804
111	47.66	0.10	0.1059	-0.0028	0.0135	-0.0284	0.1275	1.2682	-0.0088	0.3543	-0.0069	0.2798
112	47.84	0.09	0.0978	-0.0016	0.0123	-0.0164	0.1258	1.2676	-0.0090	0.3561	-0.0071	0.2809
113	48.02	0.09	0.1050	-0.0027	0.0140	-0.0296	0.1328	1.2665	-0.0086	0.3558	-0.0068	0.2805
114	48.18	0.09	0.1310	-0.0016	0.0238	-0.0122	0.1817	1.2788	-0.0090	0.3596	-0.0070	0.2812
115	48.36	0.09	0.1181	-0.0014	0.0169	-0.0119	0.1566	1.2945	-0.0098	0.3639	-0.0076	0.2811
116	48.54	0.09	0.0859	-0.0012	0.0068	-0.0140	0.1024	1.2857	-0.0096	0.3620	-0.0075	0.2816
117	48.69	0.09	0.0882	0.0028	0.0071	0.0317	0.0805	1.3166	-0.0113	0.3720	-0.0086	0.2825
118	48.88	0.09	0.0975	-0.0014	0.0112	-0.0144	0.1149	1.2925	-0.0100	0.3651	-0.0077	0.2825
119	49.04	0.09	0.0712	0.0005	0.0048	0.0070	0.0674	1.3171	-0.0119	0.3718	-0.0090	0.2823
120	49.21	0.08	0.0382	-0.0005	-0.0008	-0.0131	-0.1760	1.3288	-0.0130	0.3791	-0.0098	0.2853
121	49.40	0.08	0.0167	-0.0036	-0.0095	-0.1905	-0.5026	1.3209	-0.0134	0.3779	-0.0101	0.2848
122	49.56	0.07	0.0039	-0.0091	-0.0111	-2.3330	-2.6462	1.3211	-0.0133	0.3782	-0.0101	0.2848
123	49.73	0.08	0.0360	0.0005	-0.0072	0.0132	-0.1895	1.3312	-0.0132	0.3800	-0.0099	0.2855
124	49.91	0.08	0.0297	-0.0073	-0.0068	-0.2458	-0.2290	1.3103	-0.0125	0.3747	-0.0095	0.2860
125	50.10	0.08	0.0054	-0.0148	-0.0064	-2.7404	-1.1352	1.3091	-0.0135	0.3746	-0.0103	0.2862
126	50.27	0.09	0.0322	-0.0136	0.0017	-0.4223	0.0526	1.2781	-0.0107	0.3630	-0.0084	0.2840
127	50.44	0.09	0.0180	-0.0137	-0.0021	-0.7610	-0.1167	1.3011	-0.0126	0.3718	-0.0097	0.2858
128	50.63	0.09	0.0207	-0.0144	-0.0014	-0.6956	-0.0676	1.3026	-0.0126	0.3734	-0.0097	0.2867
129	50.80	0.09	0.0304	-0.0105	0.0016	-0.3453	0.0526	1.2883	-0.0099	0.3629	-0.0078	0.2861
130	50.98	0.09	0.0392	-0.0081	0.0050	-0.2066	0.0765	1.2945	-0.0089	0.3644	-0.0071	0.2854
131	51.15	0.09	0.0493	-0.0069	0.0061	-0.1399	0.1237	1.2798	-0.0096	0.3679	-0.0077	0.2875
132	51.31	0.09	0.0494	-0.0079	0.0056	-0.1599	0.1174	1.2779	-0.0099	0.3673	-0.0077	0.2874
133	51.49	0.02	0.0659	-0.0072	0.0106	-0.1092	0.1608	1.2763	-0.0092	0.3673	-0.0072	0.2878
134	51.66	0.03	0.0564	-0.0066	0.0054	-0.1130	0.1010	1.2909	-0.0102	0.3724	-0.0079	0.2885
135	51.83	0.03	0.0596	-0.0063	0.0061	-0.1057	0.1023	1.2903	-0.0097	0.3726	-0.0075	0.2888
136	52.00	0.02	0.0686	-0.0065	0.0076	-0.0918	0.1106	1.2825	-0.0092	0.3704	-0.0072	0.2888
137	52.19	0.03	0.0616	-0.0052	0.0067	-0.0837	0.1066	1.2795	-0.0086	0.3706	-0.0067	0.2896
138	52.35	0.02	0.0629	-0.0055	0.0066	-0.0863	0.1062	1.2780	-0.0086	0.3716	-0.0067	0.2908

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RATIO-B	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	22	1.00	1.7	45.0	BIWUFIN	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	52.91	0.01	0.0019	-0.0038	0.0078	-0.0466	0.0957	1.2838	-0.0035	0.3732	-0.0066	0.2907
140	52.99	0.01	0.0081	-0.0026	0.0076	-0.0318	0.0063	1.2765	-0.0077	0.3707	-0.0060	0.2904
141	53.08	0.00	0.0945	-0.0043	0.0119	-0.0455	0.1259	1.2840	-0.0096	0.3750	-0.0070	0.2921
142	53.03	0.01	0.0858	-0.0021	0.0080	-0.0594	0.0932	1.2845	-0.0096	0.3765	-0.0074	0.2920
143	53.21	-0.00	0.1000	-0.0034	0.0104	-0.0340	0.1040	1.2952	-0.0069	0.3785	-0.0069	0.2922
144	53.42	0.01	0.0893	-0.0042	0.0103	-0.0409	0.1151	1.2945	-0.0067	0.3800	-0.0067	0.2924
145	53.57	0.03	0.0924	-0.0064	0.0113	-0.0693	0.1223	1.3160	-0.0108	0.3861	-0.0082	0.2934
146	53.70	0.03	0.0867	-0.0078	0.0117	-0.0879	0.1319	1.3100	-0.0110	0.3882	-0.0084	0.2950
147	53.92	0.01	0.0871	-0.0059	0.0124	-0.0792	0.1481	1.3229	-0.0107	0.3893	-0.0081	0.2943
148	54.10	0.02	0.0587	-0.0049	0.0035	-0.0835	0.0396	1.3245	-0.0115	0.3948	-0.0086	0.2958
149	54.29	0.03	0.0901	-0.0044	0.0122	-0.0784	0.0392	1.3259	-0.0113	0.3946	-0.0085	0.2946
150	54.40	0.05	0.0920	-0.0048	-0.0011	-0.1142	-0.0262	1.3316	-0.0108	0.3929	-0.0081	0.2951
151	54.57	0.07	0.0966	-0.0064	-0.0027	-0.2176	-0.0699	1.3326	-0.0123	0.3965	-0.0092	0.2975
152	54.72	0.05	0.0951	-0.0051	-0.0049	-0.1341	-0.1480	1.3266	-0.0109	0.3920	-0.0082	0.2955
153	54.87	0.06	0.0943	-0.0044	-0.0046	-0.1283	-0.1341	1.3275	-0.0108	0.3923	-0.0081	0.2955
154	55.02	0.04	0.0935	-0.0064	-0.0018	-0.1471	-0.0414	1.3292	-0.0115	0.3950	-0.0087	0.2972
155	55.19	0.02	0.0902	-0.0060	-0.0047	-0.1047	-0.1230	1.3184	-0.0108	0.3914	-0.0082	0.2969
156	55.33	0.04	0.0906	-0.0056	-0.0044	-0.0931	-0.1078	1.3300	-0.0110	0.3969	-0.0087	0.2984
157	55.49	0.05	0.0907	-0.0057	-0.0048	-0.1003	-0.1331	1.3301	-0.0115	0.3984	-0.0088	0.2995
158	55.66	0.03	0.0891	-0.0058	-0.0036	-0.0818	-0.2955	1.3370	-0.0116	0.3985	-0.0087	0.2984
159	55.79	0.05	0.0881	-0.0055	-0.0046	-0.0919	-0.1050	1.3297	-0.0114	0.3983	-0.0086	0.2995
160	55.97	0.06	0.0917	-0.0020	-0.0078	-0.0651	-0.2461	1.3444	-0.0120	0.4033	-0.0089	0.3000
161	56.13	0.05	0.0869	-0.0050	-0.0057	-0.0815	-0.1545	1.3313	-0.0124	0.4061	-0.0092	0.3005
162	56.29	0.06	0.0905	-0.0023	-0.0066	-0.0794	-0.2023	1.3449	-0.0120	0.4060	-0.0093	0.3008
163	56.47	0.04	0.0868	-0.0032	-0.0036	-0.1203	-0.3006	1.3624	-0.0132	0.4105	-0.0097	0.3013
164	56.60	0.04	0.0879	-0.0031	-0.0064	-0.1111	-0.3011	1.3633	-0.0130	0.4107	-0.0099	0.3013
165	56.76	0.06	0.0836	-0.0020	-0.0072	-0.0848	-0.2182	1.3612	-0.0135	0.4112	-0.0099	0.3021
166	56.94	0.07	0.0877	-0.0035	-0.0068	-0.1203	-0.2455	1.3720	-0.0140	0.4150	-0.0102	0.3023
167	57.08	0.07	0.0864	-0.0033	-0.0075	-0.1320	-0.2841	1.3664	-0.0138	0.4135	-0.0101	0.3026
168	57.23	0.05	0.0850	-0.0032	-0.0075	-0.1260	-0.3000	1.3644	-0.0141	0.4123	-0.0103	0.3022
169	57.40	0.05	0.0864	-0.0037	-0.0075	-0.1401	-0.2341	1.3693	-0.0146	0.4155	-0.0107	0.3033
170	57.58	0.07	0.0889	-0.0038	-0.0028	-0.0977	-0.0720	1.3716	-0.0147	0.4167	-0.0107	0.3038
171	57.74	0.04	0.0839	-0.0040	-0.0012	-0.0911	-0.0275	1.3521	-0.0137	0.4124	-0.0101	0.3050
172	57.88	0.04	0.0901	-0.0041	-0.0022	-0.1022	-0.0549	1.3667	-0.0140	0.4158	-0.0108	0.3042
173	58.01	0.04	0.0887	-0.0034	0.0088	-0.0495	0.1281	1.3572	-0.0131	0.4130	-0.0097	0.3043
174	58.17	0.06	0.0911	-0.0044	0.0001	-0.1070	0.0024	1.3512	-0.0143	0.4114	-0.0106	0.3045
175	58.32	0.03	0.0935	-0.0042	0.0010	-0.0965	0.0230	1.3402	-0.0136	0.4101	-0.0101	0.3042
176	58.49	0.08	0.0921	-0.0053	0.0005	-0.1084	0.0119	1.3577	-0.0145	0.4138	-0.0107	0.3048
177	58.63	0.02	0.0819	-0.0043	-0.0003	-0.1346	-0.0344	1.3643	-0.0151	0.4161	-0.0111	0.3050
178	58.68	0.05	0.0843	-0.0039	0.0001	-0.1137	0.0029	1.3537	-0.0140	0.4146	-0.0109	0.3064
179	58.87	0.05	0.0868	-0.0043	0.0008	-0.1168	0.0247	1.3503	-0.0148	0.4155	-0.0110	0.3062
180	58.97	0.02	0.0895	-0.0043	0.0023	-0.1062	0.0568	1.3488	-0.0143	0.4128	-0.0106	0.3060
181	58.89	0.03	0.0908	-0.0043	0.0003	-0.1168	0.0382	1.3724	-0.0155	0.4210	-0.0113	0.3068
182	58.88	0.06	0.0830	-0.0043	-0.0002	-0.1303	-0.0061	1.3550	-0.0148	0.4150	-0.0109	0.3063

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 5c MACH 1.00 RATIO-0 1.7 PHI 45.0 CONF 04 OF 14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
1	-5.00	0.07	0.1780	9.9999	0.0077	9.9999	0.3791	-0.1714	0.0025	-0.0032	-0.0146	0.3687
2	-5.00	0.10	0.1746	9.9999	0.0065	9.9999	0.3832	-0.1744	0.0025	-0.0034	-0.0143	0.3635
3	-5.15	0.10	0.1784	9.9999	0.0075	9.9999	0.3875	-0.1262	0.0017	-0.0063	-0.0135	0.3669
4	-3.25	0.11	0.1063	9.9999	0.0070	9.9999	0.3474	-0.0744	0.0003	-0.0156	-0.0040	0.2124
5	-1.38	0.10	0.0621	9.9999	0.0153	9.9999	0.2484	-0.0283	-0.0013	0.0087	0.0459	-0.3074
6	0.57	0.11	0.0178	9.9999	-0.0046	9.9999	-0.2727	0.0261	-0.0026	0.0256	-0.0996	0.9808
7	2.49	0.10	-0.0423	9.9999	-0.0289	9.9999	0.6752	0.0662	-0.0043	0.0474	-0.0649	0.7160
8	4.40	0.09	-0.1056	9.9999	-0.0505	9.9999	0.5135	0.1200	-0.0056	0.0638	-0.0464	0.5290
9	6.34	0.10	-0.1910	9.9999	-0.0875	9.9999	0.4602	0.1625	-0.0080	0.0740	-0.0492	0.4554
10	8.26	0.10	-0.2715	9.9999	-0.1176	9.9999	0.4238	0.2064	-0.0114	0.0868	-0.0552	0.4205
11	10.16	0.10	-0.3662	9.9999	-0.1492	9.9999	0.4052	0.2520	-0.0156	0.0970	-0.0681	0.4181
12	12.16	0.09	-0.4682	9.9999	-0.1795	9.9999	0.3842	0.2949	-0.0211	0.1011	-0.0861	0.4128
13	14.09	0.10	-0.5670	9.9999	-0.2080	9.9999	0.3666	0.3521	-0.0247	0.1046	-0.0980	0.4149
14	16.10	0.10	-0.6605	9.9999	-0.2386	9.9999	0.3480	0.3930	-0.0280	0.1060	-0.1028	0.4190
15	18.10	0.10	-0.7568	9.9999	-0.2668	9.9999	0.3298	0.4338	-0.0304	0.1101	-0.1076	0.4174
16	20.07	0.11	-0.8629	9.9999	-0.2983	9.9999	0.3160	0.4736	-0.0330	0.1068	-0.1173	0.4175
17	22.03	0.11	-1.0032	9.9999	-0.3083	9.9999	0.3073	0.5203	-0.0302	0.0991	-0.1334	0.4879
18	24.02	0.12	-1.0932	9.9999	-0.3217	9.9999	0.2943	0.5416	-0.0346	0.1047	-0.1440	0.4334
19	26.01	0.14	-1.1538	9.9999	-0.3386	9.9999	0.2935	0.5767	-0.0352	0.1052	-0.1624	0.4762
20	26.03	0.16	-1.0079	9.9999	-0.2876	9.9999	0.2960	0.5963	-0.0504	0.1318	-0.1701	0.4448
21	28.90	0.15	-1.0881	9.9999	-0.2930	9.9999	0.2917	0.6848	-0.0489	0.1297	-0.1717	0.4554
22	28.90	0.15	-1.0882	9.9999	-0.2814	9.9999	0.2902	0.6829	-0.0493	0.1291	-0.1707	0.4563
23	28.90	0.16	-1.0981	9.9999	-0.2857	9.9999	0.2918	0.6747	-0.0495	0.1298	-0.1802	0.4725
24	28.90	0.16	-1.1020	9.9999	-0.2879	9.9999	0.2926	0.6804	-0.0511	0.1331	-0.1822	0.4747
25	28.89	0.16	-1.0948	9.9999	-0.2828	9.9999	0.2900	0.6706	-0.0480	0.1262	-0.1774	0.4738
26	28.96	0.15	-1.1021	9.9999	-0.2865	9.9999	0.2917	0.6810	-0.0496	0.1296	-0.1737	0.4805
27	29.33	0.16	-1.1157	9.9999	-0.2717	9.9999	0.2935	0.6838	-0.0449	0.1262	-0.1702	0.4784
28	29.62	0.15	-1.1145	9.9999	-0.2714	9.9999	0.2935	0.6745	-0.0457	0.1284	-0.1665	0.4696
29	29.91	0.16	-1.1327	9.9999	-0.2800	9.9999	0.2972	0.6918	-0.0505	0.1356	-0.1673	0.4826
30	30.20	0.17	-1.1451	9.9999	-0.2840	9.9999	0.2984	0.6982	-0.0503	0.1406	-0.1675	0.4884
31	30.50	0.17	-1.1509	9.9999	-0.2882	9.9999	0.2994	0.6830	-0.0490	0.1347	-0.1731	0.4760
32	30.75	0.19	-1.1544	9.9999	-0.2892	9.9999	0.2995	0.6902	-0.0522	0.1407	-0.1683	0.4729
33	31.04	0.18	-1.1550	9.9999	-0.2921	9.9999	0.2993	0.6835	-0.0486	0.1356	-0.1714	0.4783
34	31.32	0.18	-1.1511	9.9999	-0.2911	9.9999	0.2993	0.6885	-0.0490	0.1367	-0.1710	0.4771
35	31.59	0.19	-1.1659	9.9999	-0.2990	9.9999	0.2965	0.6893	-0.0486	0.1375	-0.1687	0.4753
36	31.86	0.18	-1.1725	9.9999	-0.3010	9.9999	0.2987	0.6967	-0.0477	0.1356	-0.1724	0.4828
37	32.15	0.18	-1.1775	9.9999	-0.3061	9.9999	0.2980	0.6911	-0.0482	0.1382	-0.1704	0.4803
38	32.43	0.19	-1.1782	9.9999	-0.3052	9.9999	0.2995	0.6917	-0.0484	0.1371	-0.1659	0.4700
39	32.68	0.19	-1.1812	9.9999	-0.3113	9.9999	0.2989	0.6926	-0.0477	0.1390	-0.1630	0.4751
40	32.95	0.18	-1.1911	9.9999	-0.3078	9.9999	0.2721	0.6820	-0.0453	0.1349	-0.1606	0.4784
41	33.22	0.19	-1.1769	9.9999	-0.3149	9.9999	0.2716	0.6788	-0.0490	0.1495	-0.1556	0.4669
42	33.47	0.19	-1.0020	9.9999	-0.3012	9.9999	0.2782	0.6950	-0.0433	0.1434	-0.1535	0.4801
43	33.73	0.19	-1.0301	9.9999	-0.3035	9.9999	0.2784	0.6938	-0.0457	0.1475	-0.1504	0.4855
44	33.99	0.19	-1.1410	9.9999	-0.3158	9.9999	0.2766	0.6885	-0.0469	0.1506	-0.1444	0.4685
45	34.23	0.20	-1.1736	9.9999	-0.3235	9.9999	0.2756	0.6933	-0.0496	0.1560	-0.1494	0.4740
46	34.47	0.20	-1.1279	9.9999	-0.3152	9.9999	0.2795	0.6806	-0.0459	0.1442	-0.1636	0.5139

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 32 1.00 1.7 45.0 BIMORPH 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CA3	ALPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	34.14	0.23	-1.1318	9.9999	-0.3150	9.9999	0.2785	0.3178	-0.0485	0.1588	-0.1526	0.4997
48	34.99	0.16	-1.1465	9.9999	-0.3183	9.9999	0.2790	0.3070	-0.0478	0.1571	-0.1557	0.5117
49	35.21	0.16	-1.1393	9.9999	-0.3192	9.9999	0.2801	0.2958	-0.0464	0.1561	-0.1586	0.5277
50	35.47	0.18	-1.1473	9.9999	-0.3225	9.9999	0.2814	0.2870	-0.0469	0.1577	-0.1576	0.5299
51	35.70	0.17	-1.1459	9.9999	-0.3233	9.9999	0.2821	0.2759	-0.0453	0.1552	-0.1642	0.5553
52	35.94	0.16	-1.1407	9.9999	-0.3234	9.9999	0.2835	0.2656	-0.0425	0.1433	-0.1802	0.6077
53	36.16	0.16	-1.1367	9.9999	-0.3231	9.9999	0.2842	0.1990	-0.0383	0.1362	-0.1924	0.6844
54	36.41	0.15	-1.1367	9.9999	-0.3236	9.9999	0.2847	0.2109	-0.0386	0.1397	-0.1830	0.6024
55	36.64	0.15	-1.1250	9.9999	-0.3191	9.9999	0.2836	0.1459	-0.0336	0.1230	-0.2316	0.8430
56	36.88	0.15	-1.1392	9.9999	-0.3254	9.9999	0.2836	0.1328	-0.0301	0.1186	-0.2206	0.8431
57	37.12	0.15	-1.1379	9.9999	-0.3253	9.9999	0.2859	0.1382	-0.0294	0.1197	-0.2127	0.8661
58	37.36	0.16	-1.1302	9.9999	-0.3216	9.9999	0.2846	0.1162	-0.0255	0.1114	-0.2194	0.9587
59	37.58	0.14	-1.1456	9.9999	-0.3269	9.9999	0.2853	0.1158	-0.0251	0.1120	-0.2167	0.9672
60	37.82	0.12	-1.1546	9.9999	-0.3307	9.9999	0.2864	0.0796	-0.0199	0.0986	-0.2500	1.2387
61	38.06	0.14	-1.1639	9.9999	-0.3340	9.9999	0.2870	0.0766	-0.0197	0.0984	-0.2571	1.2646
62	38.30	0.14	-1.1470	9.9999	-0.3291	9.9999	0.2869	0.1027	-0.0194	0.1048	-0.1889	1.0204
63	38.54	0.13	-1.1305	9.9999	-0.3267	9.9999	0.2875	0.0952	-0.0175	0.0998	-0.1817	1.0483
64	38.78	0.12	-1.1432	9.9999	-0.3307	9.9999	0.2880	0.0405	-0.0149	0.0843	-0.3204	1.6129
65	38.98	0.12	-1.1524	9.9999	-0.3329	9.9999	0.2889	0.0133	-0.0137	0.0736	-1.0299	5.5338
66	39.19	0.12	-1.1446	9.9999	-0.3305	9.9999	0.2887	0.0327	-0.0121	0.0782	-0.3700	2.3914
67	39.42	0.12	-1.1524	9.9999	-0.3332	9.9999	0.2891	0.0070	-0.0094	0.0671	-1.3427	9.5857
68	39.63	0.14	-1.1446	9.9999	-0.3300	9.9999	0.2883	0.0003	-0.0117	0.0868	-0.1940	1.4395
69	39.86	0.12	-1.1393	9.9999	-0.3301	9.9999	0.2897	-0.0427	-0.0039	0.0473	0.0915	-1.1077
70	40.06	0.12	-1.1380	9.9999	-0.3287	9.9999	0.2888	0.0005	-0.0006	0.0630	-13.1982	126.0000
71	40.26	0.14	-1.1380	9.9999	-0.3292	9.9999	0.2893	0.0136	-0.0065	0.0676	-0.5943	6.3774
72	40.47	0.11	-1.1510	9.9999	-0.3341	9.9999	0.2903	-0.0034	-0.0027	0.0500	0.4999	-10.8519
73	40.67	0.14	-1.1375	9.9999	-0.3335	9.9999	0.2897	0.0141	-0.0031	0.0677	-0.2198	4.8014
74	40.89	0.12	-1.1527	9.9999	-0.3341	9.9999	0.2896	-0.0115	-0.0036	0.0555	0.0922	-4.8261
75	41.10	0.13	-1.1353	9.9999	-0.3348	9.9999	0.2898	-0.0190	-0.0035	0.0522	0.0263	-2.7474
76	41.29	0.13	-1.1340	9.9999	-0.3350	9.9999	0.2903	0.0200	-0.0013	0.0670	-0.0650	3.3500
77	41.51	0.11	-1.1401	9.9999	-0.3316	9.9999	0.2895	-0.0136	0.0020	0.0518	-0.1687	-4.8868
78	41.70	0.11	-1.1313	9.9999	-0.3348	9.9999	0.2906	0.0165	0.0014	0.0602	0.0648	3.0405
79	41.91	0.12	-1.1379	9.9999	-0.3355	9.9999	0.2898	-0.0090	0.0018	0.0503	-0.2000	-5.5889
80	42.10	0.10	-1.1301	9.9999	-0.3334	9.9999	0.2899	-0.0272	0.0022	0.0425	-0.0809	-1.5625
81	42.31	0.12	-1.1000	9.9999	-0.3363	9.9999	0.2898	-0.0172	0.0008	0.0484	-0.0465	-2.8140
82	42.50	0.13	-1.1037	9.9999	-0.3390	9.9999	0.2913	0.0070	0.0006	0.0578	0.3286	8.2571
83	42.68	0.11	-1.1363	9.9999	-0.3352	9.9999	0.2894	-0.0666	-0.0005	0.0325	0.0075	-0.4880
84	42.88	0.11	-1.1023	9.9999	-0.3374	9.9999	0.2903	-0.0341	-0.0004	0.0430	0.0117	-1.2845
85	43.05	0.11	-1.1089	9.9999	-0.3397	9.9999	0.2906	-0.0129	-0.0010	0.0491	0.0775	-3.8062
86	43.23	0.11	-1.1089	9.9999	-0.3395	9.9999	0.2904	-0.0522	-0.0001	0.0362	0.0019	-0.7318
87	43.39	0.12	-1.1357	9.9999	-0.3353	9.9999	0.2901	-0.0256	0.0	0.0435	0.0	-1.6992
88	43.58	0.10	-1.1478	9.9999	-0.3329	9.9999	0.2900	-0.0359	0.0017	0.0376	-0.0473	-1.0474
89	43.77	0.11	-1.1356	9.9999	-0.3343	9.9999	0.2892	-0.0503	0.0010	0.0342	-0.0199	-0.6799
90	43.96	0.11	-1.1535	9.9999	-0.3340	9.9999	0.2896	-0.0259	0.0022	0.0414	-0.0849	-1.5985
91	44.11	0.10	-1.1469	9.9999	-0.3322	9.9999	0.2897	-0.0595	0.0011	0.0304	-0.0185	-0.5109
92	44.30	0.11	-1.1041	9.9999	-0.3377	9.9999	0.2901	-0.0478	0.0006	0.0345	-0.0169	-0.7294

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-O PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 32 1.00 1.7 45.0 BINOFIN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
93	44.48	0.11	-1.1530	9.9999	-0.3335	9.9999	0.2591	-0.0843	0.0014	0.0290	-0.0218	-0.4510
94	44.66	0.10	-1.1516	9.9999	-0.3327	9.9999	0.2590	-0.0777	-0.0007	0.0259	0.0090	-0.3333
95	44.85	0.08	-1.1642	9.9999	-0.3373	9.9999	0.2597	-0.0833	-0.0012	0.0254	0.0144	-0.3049
96	45.05	0.09	-1.1670	9.9999	-0.3378	9.9999	0.2595	-0.0752	-0.0010	0.0260	0.0137	-0.3061
97	45.21	0.10	-1.1537	9.9999	-0.3336	9.9999	0.2586	-0.1012	-0.0016	0.0179	0.0158	-0.1769
98	45.39	0.09	-1.1636	9.9999	-0.3385	9.9999	0.2594	-0.0797	-0.0017	0.0253	0.0225	-0.3342
99	45.55	0.10	-1.1603	9.9999	-0.3380	9.9999	0.2596	-0.0942	-0.0005	0.0294	0.0092	-0.5424
100	45.76	0.10	-1.1777	9.9999	-0.3424	9.9999	0.2597	-0.0760	-0.0026	0.0255	0.0359	-0.3609
101	45.95	0.10	-1.1777	9.9999	-0.3413	9.9999	0.2598	-0.0784	-0.0035	0.0253	0.0444	-0.3607
102	46.09	0.10	-1.1756	9.9999	-0.3403	9.9999	0.2599	-0.0869	-0.0025	0.0220	0.0281	-0.2475
103	46.27	0.09	-1.1792	9.9999	-0.3420	9.9999	0.2599	-0.1194	-0.0040	0.0153	0.0335	-0.1114
104	46.44	0.11	-1.1698	9.9999	-0.3397	9.9999	0.2594	-0.1173	-0.0029	0.0143	0.0247	-0.1419
105	46.62	0.10	-1.1752	9.9999	-0.3407	9.9999	0.2599	-0.1163	-0.0042	0.0141	0.0361	-0.1212
106	46.79	0.10	-1.1620	9.9999	-0.3426	9.9999	0.2596	-0.1168	-0.0036	0.0125	0.0325	-0.1070
107	46.96	0.10	-1.1686	9.9999	-0.3434	9.9999	0.2595	-0.1169	-0.0037	0.0131	0.0316	-0.1121
108	47.15	0.09	-1.1635	9.9999	-0.3424	9.9999	0.2593	-0.1259	-0.0039	0.0101	0.0310	-0.0802
109	47.30	0.11	-1.1648	9.9999	-0.3431	9.9999	0.2596	-0.1308	-0.0054	0.0094	0.0413	-0.0719
110	47.48	0.09	-1.1609	9.9999	-0.3401	9.9999	0.2580	-0.1462	-0.0044	0.0017	0.0297	-0.0115
111	47.66	0.10	-1.1603	9.9999	-0.3413	9.9999	0.2592	-0.1431	-0.0049	0.0024	0.0342	-0.0168
112	47.84	0.09	-1.1964	9.9999	-0.3473	9.9999	0.2703	-0.1671	-0.0050	-0.0033	0.0299	0.0197
113	48.02	0.09	-1.1626	9.9999	-0.3410	9.9999	0.2589	-0.1345	-0.0041	0.0032	0.0305	-0.0238
114	48.18	0.09	-1.1666	9.9999	-0.3425	9.9999	0.2588	-0.1282	-0.0044	0.0064	0.0343	-0.0499
115	48.36	0.09	-1.1701	9.9999	-0.3439	9.9999	0.2590	-0.1344	-0.0039	0.0044	0.0290	-0.0327
116	48.54	0.07	-1.2159	9.9999	-0.3523	9.9999	0.2698	-0.1339	-0.0037	0.0024	0.0052	-0.0179
117	48.69	0.09	-1.2366	9.9999	-0.3567	9.9999	0.2700	-0.1196	-0.0055	0.0124	0.0460	-0.1037
118	48.88	0.09	-1.2217	9.9999	-0.3524	9.9999	0.2685	-0.1380	-0.0028	0.0038	0.0203	-0.0275
119	49.04	0.09	-1.2331	9.9999	-0.3546	9.9999	0.2692	-0.0829	-0.0001	0.0190	0.0012	-0.2292
120	49.21	0.08	-1.2437	9.9999	-0.3566	9.9999	0.2699	-0.0501	0.0040	0.0246	-0.0798	-0.4910
121	49.40	0.08	-1.2432	9.9999	-0.3601	9.9999	0.2697	-0.0402	0.0069	0.0267	-0.1716	-0.7139
122	49.56	0.07	-1.2452	9.9999	-0.3596	9.9999	0.2693	-0.0401	0.0067	0.0242	-0.2169	-0.6035
123	49.73	0.08	-1.2486	9.9999	-0.3606	9.9999	0.2688	-0.0456	0.0025	0.0290	-0.0546	-0.6332
124	49.91	0.06	-1.2442	9.9999	-0.3586	9.9999	0.2682	-0.0639	0.0065	0.0191	-0.1017	-0.2989
125	50.10	0.06	-1.2417	9.9999	-0.3583	9.9999	0.2689	-0.0601	0.0073	0.0157	-0.1214	-0.2612
126	50.27	0.04	-1.2310	9.9999	-0.3555	9.9999	0.2670	-0.0879	0.0025	0.0061	-0.0284	-0.0922
127	50.44	0.04	-1.2411	9.9999	-0.3584	9.9999	0.2672	-0.0736	0.0038	0.0116	-0.0515	-0.1572
128	50.63	0.04	-1.2357	9.9999	-0.3572	9.9999	0.2674	-0.0778	0.0030	0.0095	-0.0336	-0.1221
129	50.80	0.04	-1.2222	9.9999	-0.3495	9.9999	0.2680	-0.0615	0.0034	0.0148	-0.0553	-0.2374
130	50.98	0.04	-1.2341	9.9999	-0.3536	9.9999	0.2685	-0.0738	0.0038	0.0094	-0.0515	-0.1274
131	51.15	0.04	-1.2501	9.9999	-0.3586	9.9999	0.2684	-0.0610	0.0047	0.0150	-0.0770	-0.2459
132	51.31	0.04	-1.2435	9.9999	-0.3568	9.9999	0.2685	-0.0620	0.0042	0.0153	-0.0677	-0.2468
133	51.49	0.02	-1.2574	9.9999	-0.3603	9.9999	0.2685	-0.0729	0.0007	0.0118	-0.0919	-0.1619
134	51.66	0.03	-1.2640	9.9999	-0.3624	9.9999	0.2691	-0.0516	0.0002	0.0177	-0.1201	-0.3430
135	51.83	0.03	-1.2638	9.9999	-0.3634	9.9999	0.2684	-0.0561	0.0070	0.0162	-0.1205	-0.2788
136	52.00	0.02	-1.2550	9.9999	-0.3593	9.9999	0.2683	-0.0721	0.0059	0.0111	-0.0818	-0.1540
137	52.15	0.03	-1.2512	9.9999	-0.3578	9.9999	0.2680	-0.0693	0.0050	0.0063	-0.0560	-0.0705
138	52.35	0.02	-1.2552	9.9999	-0.3581	9.9999	0.2683	-0.0900	0.0050	0.0041	-0.0516	-0.0424

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-S PRI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 52 1.00 1.7 45.0 BIWDF14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
139	52.51	0.01	-1.2618	9.9999	-0.3612	9.9999	0.2863	-0.0989	0.0038	0.0026	-0.0384	-0.0263
140	52.69	0.01	-1.2634	9.9999	-0.3601	9.9999	0.2850	-0.1104	0.0012	-0.0010	-0.0103	0.0066
141	52.30	0.00	-1.2662	9.9999	-0.3622	9.9999	0.2861	-0.1134	0.0029	-0.0026	-0.0256	0.0229
142	53.03	0.01	-1.2736	9.9999	-0.3664	9.9999	0.2877	-0.1087	0.0026	-0.0023	-0.0239	0.0212
143	53.21	-0.00	-1.2844	9.9999	-0.3707	9.9999	0.2886	-0.1208	0.0013	-0.0079	-0.0101	0.0613
144	53.42	0.01	-1.2897	9.9999	-0.3727	9.9999	0.2890	-0.1132	0.0025	-0.0032	-0.0221	0.0283
145	53.57	0.03	-1.2991	9.9999	-0.3774	9.9999	0.2905	-0.0731	0.0046	0.0114	-0.0657	-0.1560
146	53.76	0.03	-1.3033	9.9999	-0.3791	9.9999	0.2909	-0.0516	0.0039	0.0160	-0.1143	-0.3101
147	53.92	0.01	-1.3056	9.9999	-0.3797	9.9999	0.2908	-0.0667	0.0061	0.0110	-0.0914	-0.1649
148	54.10	0.02	-1.3083	9.9999	-0.3807	9.9999	0.2897	-0.0462	0.0065	0.0136	-0.1407	-0.2987
149	54.24	0.03	-1.2870	9.9999	-0.3736	9.9999	0.2903	-0.0428	0.0060	0.0128	-0.1402	-0.2991
150	54.40	0.03	-1.2930	9.9999	-0.3747	9.9999	0.2893	-0.0497	0.0052	0.0121	-0.1046	-0.2435
151	54.57	0.01	-1.2957	9.9999	-0.3754	9.9999	0.2897	-0.0466	0.0039	0.0129	-0.0802	-0.2654
152	54.72	0.03	-1.3030	9.9999	-0.3782	9.9999	0.2896	-0.0461	0.0025	0.0139	-0.0542	-0.3015
153	54.87	0.00	-1.2911	9.9999	-0.3740	9.9999	0.2901	-0.0369	0.0022	0.0139	-0.0596	-0.3707
154	55.02	0.04	-1.2848	9.9999	-0.3734	9.9999	0.2907	-0.0347	0.0031	0.0138	-0.0893	-0.3977
155	55.19	0.02	-1.2947	9.9999	-0.3748	9.9999	0.2895	-0.0400	0.0024	0.0121	-0.0600	-0.3025
156	55.33	0.04	-1.2947	9.9999	-0.3756	9.9999	0.2903	-0.0321	0.0017	0.0130	-0.0536	-0.4050
157	55.49	0.05	-1.3037	9.9999	-0.3792	9.9999	0.2905	-0.0320	0.0015	0.0130	-0.0469	-0.4062
158	55.66	0.03	-1.3198	9.9999	-0.3844	9.9999	0.2913	-0.0313	0.0006	0.0129	-0.0192	-0.4121
159	55.79	0.05	-1.3024	9.9999	-0.3793	9.9999	0.2912	-0.0334	0.0014	0.0112	-0.0419	-0.3353
160	55.97	0.08	-1.3168	9.9999	-0.3841	9.9999	0.2913	-0.0256	0.0009	0.0134	-0.0352	-0.5234
161	56.15	0.05	-1.3335	9.9999	-0.3885	9.9999	0.2909	-0.0323	0.0019	0.0103	-0.0588	-0.3169
162	56.29	0.06	-1.3335	9.9999	-0.3885	9.9999	0.2909	-0.0243	0.0011	0.0129	-0.0493	-0.5309
163	56.47	0.04	-1.3500	9.9999	-0.3944	9.9999	0.2909	-0.0244	0.0013	0.0113	-0.0533	-0.4631
164	56.60	0.04	-1.3535	9.9999	-0.3938	9.9999	0.2909	-0.0246	0.0015	0.0113	-0.0610	-0.4593
165	56.76	0.06	-1.3475	9.9999	-0.3924	9.9999	0.2911	-0.0261	0.0016	0.0101	-0.0613	-0.3870
166	56.94	0.07	-1.3717	9.9999	-0.3990	9.9999	0.2909	-0.0275	0.0015	0.0094	-0.0545	-0.3418
167	57.08	0.07	-1.3703	9.9999	-0.3999	9.9999	0.2906	-0.0314	0.0008	0.0095	-0.0255	-0.3025
168	57.23	0.05	-1.3706	9.9999	-0.3996	9.9999	0.2912	-0.0243	0.0012	0.0107	-0.0494	-0.4403
169	57.40	0.03	-1.3731	9.9999	-0.4005	9.9999	0.2917	-0.0218	0.0020	0.0059	-0.0517	-0.4541
170	57.58	0.07	-1.3566	9.9999	-0.3952	9.9999	0.2913	-0.0270	0.0020	0.0067	-0.0703	-0.1611
171	57.74	0.09	-1.3428	9.9999	-0.3918	9.9999	0.2916	-0.0490	0.0030	0.0043	-0.0612	-0.0878
172	57.88	0.09	-1.3545	9.9999	-0.3950	9.9999	0.2921	-0.0459	0.0027	0.0050	-0.0588	-0.1089
173	58.01	0.09	-1.3560	9.9999	-0.3962	9.9999	0.2919	-0.0423	0.0021	0.0084	-0.0496	-0.1966
174	58.17	0.08	-1.3455	9.9999	-0.3930	9.9999	0.2921	-0.0536	0.0035	0.0040	-0.0653	-0.0746
175	58.32	0.09	-1.3427	9.9999	-0.3923	9.9999	0.2922	-0.0458	0.0029	0.0063	-0.0633	-0.1812
176	58.49	0.08	-1.3642	9.9999	-0.3982	9.9999	0.2919	-0.0459	0.0023	0.0007	-0.0349	-0.3106
177	58.63	0.02	-1.3681	9.9999	-0.3996	9.9999	0.2920	-0.0424	0.0024	0.0078	-0.0586	-0.1840
178	58.68	0.05	-1.3628	9.9999	-0.3982	9.9999	0.2917	-0.0420	0.0020	0.0063	-0.0476	-0.1976
179	58.87	0.05	-1.3478	9.9999	-0.3950	9.9999	0.2916	-0.0424	0.0026	0.0068	-0.0613	-0.1604
180	58.87	0.02	-1.3556	9.9999	-0.3967	9.9999	0.2912	-0.0421	0.0021	0.0078	-0.0499	-0.1853
181	58.89	0.03	-1.3731	9.9999	-0.3997	9.9999	0.2911	-0.0335	0.0024	0.0095	-0.0716	-0.2836
182	58.88	0.06	-1.3602	9.9999	-0.3976	9.9999	0.2910	-0.0406	0.0022	0.0073	-0.0542	-0.1798

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-G PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 53 1.10 1.7 45.0 BINOFIN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.74	0.11	-0.6956	1.1662	0.0793	-0.2095	-0.0086	0.4698	0.2135	0.2563	-1.6766
2	-5.74	0.12	-0.7200	1.1723	0.1361	-0.2799	-0.0084	0.4725	0.2139	0.2586	-1.6283
3	-5.74	0.11	-0.6954	1.1702	0.0486	-0.1906	-0.0087	0.4683	0.2140	0.2537	-1.6829
4	-5.46	0.12	-0.6892	1.0428	0.1525	-0.3006	-0.0083	0.4803	0.2092	0.2711	-1.7117
5	-5.43	0.12	-0.6926	0.7061	0.0788	-0.1788	-0.0084	0.4755	0.1975	0.2780	-1.7986
6	-1.53	0.12	-0.1954	0.4457	0.1232	-0.1831	-0.0136	0.4805	0.1935	0.2870	-2.2807
7	0.43	0.11	0.0126	0.1106	0.0427	-0.0806	-0.0136	0.4995	0.2049	0.2946	9.2250
8	2.38	0.11	0.2766	-0.2263	-0.0331	-0.0107	-0.0136	0.5149	0.2146	0.3003	-0.8246
9	4.30	0.10	0.4741	-0.5073	-0.0116	-0.0300	-0.0136	0.5246	0.2299	0.2949	-1.1964
10	6.27	0.12	0.7020	-1.1100	0.1375	-0.2001	-0.0187	0.5423	0.2517	0.2906	-1.4567
11	8.25	0.11	1.0273	-1.6805	0.0489	-0.2135	-0.0193	0.5426	0.2682	0.2773	-1.6358
12	10.16	0.11	1.3952	-2.2975	0.1493	-0.3880	-0.0138	0.5618	0.2804	0.2753	-1.6467
13	12.18	0.11	1.7028	-2.8174	0.0700	-0.2564	-0.0090	0.5846	0.3062	0.2584	-1.6546
14	14.15	0.11	2.0592	-3.3726	0.0678	-0.2944	-0.0094	0.5977	0.3216	0.2465	-1.6376
15	16.19	0.11	2.4429	-3.8811	0.1239	-0.3005	-0.0090	0.5755	0.3485	0.2270	-1.5083
16	18.23	0.10	2.7447	-4.1403	-0.0078	-0.0722	-0.0093	0.5099	0.3623	0.2076	-1.5106
17	20.23	0.12	3.1305	-4.2044	0.1606	-0.2815	-0.0162	0.5571	0.3766	0.1805	-1.3430
18	22.24	0.12	3.0476	-4.1725	0.2108	-0.3191	-0.0212	0.5610e	0.3956	0.1654	-1.1439
19	24.29	0.12	4.2401	-4.0451	0.2000	-0.2958	-0.0026	0.5492	0.4172	0.1320	-0.9527
20	26.31	0.14	4.6013	-3.8447	0.3746	-0.1511	0.0104	0.5648	0.4378	0.1270	-0.8008
21	26.40	0.15	5.4907	-3.8669	0.5095	-0.1857	0.0520	0.5726	0.4572	0.1154	-0.6682
22	28.43	0.15	5.4748	-3.5022	0.4881	-0.0379	0.0464	0.5666	0.4600	0.1066	-0.6506
23	28.48	0.15	5.5114	-3.8535	0.5205	-0.1467	0.0520	0.5692	0.4592	0.1100	-0.6633
24	28.49	0.14	5.5043	-3.8048	0.4108	-0.0437	0.0516	0.5889	0.4632	0.1257	-0.6814
25	28.88	0.16	5.7448	-3.8870	0.5028	-0.0925	0.0744	0.5801	0.4710	0.1091	-0.6766
26	29.13	0.16	5.8504	-4.0123	0.6050	-0.2204	0.0745	0.5825	0.4782	0.1043	-0.6851
27	29.45	0.14	5.9104	-4.0268	0.4023	-0.0155	0.0629	0.5821	0.4805	0.1017	-0.6606
28	29.77	0.14	6.0187	-3.9758	0.4870	-0.0434	0.0746	0.5900	0.4812	0.1089	-0.6604
29	30.01	0.15	6.1021	-3.9984	0.5726	-0.3122	0.0806	0.5951	0.4936	0.1016	-0.6489
30	30.35	0.16	6.2774	-4.1774	0.6024	-0.4598	0.0975	0.5989	0.5000	0.0990	-0.6655
31	30.64	0.16	6.3828	-4.3048	0.6702	-0.4526	0.1034	0.6090	0.5046	0.1045	-0.6376
32	30.91	0.16	6.5185	-4.2699	0.7225	-0.5681	0.1149	0.6073	0.5089	0.0985	-0.6550
33	31.19	0.17	6.6525	-4.3484	0.8160	-0.7185	0.1205	0.5981	0.5121	0.0860	-0.6494
34	31.48	0.18	6.7198	-4.4466	0.8904	-0.7766	0.1318	0.6150	0.5143	0.1006	-0.6617
35	31.75	0.17	6.8956	-4.3273	0.7647	-0.6271	0.1210	0.6009	0.5178	0.0911	-0.6272
36	32.04	0.18	7.0833	-4.5043	0.9091	-0.9210	0.1272	0.6077	0.5199	0.0878	-0.6444
37	32.30	0.17	7.1713	-4.5018	0.8861	-0.8128	0.1216	0.6226	0.5249	0.0978	-0.6361
38	32.56	0.18	7.2511	-4.5082	0.9571	-1.0211	0.1221	0.6225	0.5259	0.0967	-0.6217
39	32.83	0.18	7.4751	-4.6034	0.9058	-1.0251	0.1329	0.6176	0.5276	0.0900	-0.6407
40	33.10	0.17	7.4092	-4.6533	0.9259	-1.0567	0.1278	0.6283	0.5322	0.0961	-0.6230
41	33.37	0.18	7.6012	-4.7550	1.0220	-1.1766	0.1339	0.6277	0.5356	0.0919	-0.6207
42	33.62	0.18	7.7342	-4.7207	0.9620	-1.2142	0.1120	0.6205	0.5375	0.0830	-0.6111
43	33.88	0.19	7.8101	-5.0396	1.0981	-1.1786	0.1122	0.6356	0.5414	0.0942	-0.6452
44	34.14	0.17	7.9930	-4.8702	0.9620	-1.1361	0.1313	0.6408	0.5462	0.0926	-0.6131
45	34.38	0.17	8.0196	-4.9217	0.8883	-1.0704	0.1120	0.6305	0.5436	0.0879	-0.6137
46	34.63	0.18	8.1487	-4.9005	0.8183	-0.9644	0.0793	0.6443	0.5578	0.0867	-0.5977

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 53 MACH 1.10 RX10-6 1.7 PHI 45.0 CONF BIWOF14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.89	0.16	8.1973	-5.0512	0.9650	-1.0039	0.0905	0.6377	0.5566	0.0811	-0.6137
48	35.14	0.15	8.3754	-5.1515	0.7108	-0.7406	0.0699	0.6447	0.5622	0.0825	-0.6151
49	35.37	0.16	8.4234	-4.9447	0.7591	-0.7965	0.0704	0.6542	0.5626	0.0916	-0.5870
50	35.62	0.14	8.4349	-4.9301	0.8258	-0.7508	0.0682	0.6484	0.5633	0.0851	-0.5855
51	35.85	0.15	8.4512	-4.8774	0.8765	-0.7704	0.0794	0.6601	0.5643	0.0958	-0.5771
52	36.09	0.16	8.5734	-5.0074	0.7404	-0.8604	0.0760	0.6601	0.5654	0.0947	-0.5840
53	36.33	0.14	8.6989	-4.8413	0.8077	-0.9804	0.0907	0.6518	0.5661	0.0857	-0.5598
54	36.56	0.14	8.7029	-5.0795	0.5774	-0.7633	0.0908	0.6425	0.5594	0.0831	-0.5706
55	36.81	0.16	8.9351	-5.1184	0.7346	-0.9315	0.1074	0.6436	0.5629	0.0807	-0.5950
56	37.04	0.13	9.0346	-5.2241	0.4755	-0.8015	0.0794	0.6458	0.5622	0.0836	-0.5782
57	37.28	0.13	9.0667	-5.1344	0.5512	-0.7352	0.0799	0.6333	0.5608	0.0725	-0.5849
58	37.52	0.15	9.2083	-5.2365	0.7062	-0.7862	0.1023	0.6340	0.5606	0.0738	-0.5847
59	37.76	0.14	9.2378	-5.2130	0.7044	-0.7208	0.0914	0.6425	0.5618	0.0807	-0.5860
60	38.00	0.11	9.3958	-5.3125	0.3766	-0.4309	0.0580	0.6193	0.5581	0.0612	-0.5655
61	38.24	0.11	9.5135	-5.3005	0.4082	-0.5213	0.0474	0.6210	0.5518	0.0692	-0.5643
62	38.47	0.12	9.6182	-5.3915	0.4217	-0.4019	0.0694	0.6131	0.5511	0.0620	-0.5605
63	38.70	0.12	9.6170	-5.6202	0.4050	-0.5258	0.1022	0.6127	0.5545	0.0582	-0.5844
64	38.95	0.13	9.7521	-5.4485	0.5505	-0.7115	0.0703	0.6123	0.5533	0.0590	-0.5564
65	39.17	0.13	9.7914	-5.4242	0.6355	-0.9306	0.0597	0.6222	0.5529	0.0693	-0.5540
66	39.38	0.10	9.8514	-5.5056	0.2939	-0.4174	0.0145	0.6104	0.5521	0.0588	-0.5569
67	39.61	0.15	9.9536	-5.6218	0.7549	-1.0441	0.0348	0.6134	0.5526	0.0608	-0.5661
68	39.85	0.13	10.0854	-5.6091	0.6272	-0.8886	0.0346	0.5904	0.5419	0.0485	-0.5562
69	40.05	0.12	10.1602	-5.6533	0.5213	-0.7515	0.0543	0.6148	0.5388	0.0760	-0.5587
70	40.27	0.12	10.2490	-5.8470	0.4033	-0.6450	0.0341	0.5916	0.5409	0.0507	-0.5708
71	40.49	0.13	10.3005	-5.8515	0.5582	-0.6768	0.0546	0.5789	0.5271	0.0518	-0.5645
72	40.71	0.11	10.4014	-5.9740	0.4060	-0.5023	0.0487	0.5712	0.5260	0.0452	-0.5710
73	40.89	0.12	10.5700	-5.9487	0.5032	-0.6829	0.0600	0.5837	0.5218	0.0619	-0.5732
74	41.10	0.13	10.5750	-5.9063	0.5085	-0.6515	0.0493	0.5531	0.5105	0.0306	-0.5639
75	41.32	0.11	10.6300	-5.9351	0.3709	-0.2712	0.0490	0.5469	0.5138	0.0331	-0.5600
76	41.51	0.11	10.6539	-5.7772	0.3389	-0.5086	0.0273	0.5435	0.5078	0.0377	-0.5423
77	41.74	0.12	10.7845	-5.9277	0.5592	-0.6724	0.0390	0.5404	0.5117	0.0287	-0.5497
78	41.96	0.11	10.9459	-6.1016	0.3543	-0.2306	0.0384	0.5305	0.5077	0.0228	-0.5629
79	42.15	0.12	10.9953	-6.0178	0.3650	-0.4570	0.0278	0.5314	0.5038	0.0276	-0.5473
80	42.34	0.13	11.0612	-6.2423	0.5053	-0.5739	0.0391	0.5271	0.5014	0.0257	-0.5643
81	42.54	0.10	11.1178	-6.1154	0.4322	-0.5055	0.0446	0.5200	0.4952	0.0248	-0.5501
82	42.74	0.12	11.1914	-6.2032	0.3812	-0.4126	0.0390	0.5233	0.4945	0.0288	-0.5543
83	42.92	0.12	11.3222	-6.3266	0.3566	-0.4456	0.0390	0.5114	0.4951	0.0163	-0.5568
84	43.11	0.12	11.3426	-6.2278	0.4017	-0.2753	0.0393	0.4962	0.4872	0.0090	-0.5491
85	43.30	0.12	11.4981	-6.3519	0.3271	-0.1965	0.0282	0.4753	0.4837	-0.0083	-0.5530
86	43.48	0.13	11.5101	-6.3008	0.4030	-0.1047	0.0287	0.4810	0.4841	-0.0025	-0.5471
87	43.64	0.12	11.4790	-6.2996	0.3294	-0.0214	0.0338	0.4704	0.4765	-0.0061	-0.5488
88	43.84	0.12	11.5980	-6.2578	0.3023	-0.0669	0.0343	0.4886	0.4745	0.0140	-0.5378
89	44.03	0.12	11.7536	-6.2261	0.3125	-0.1177	0.0290	0.4783	0.4782	0.0001	-0.5257
90	44.22	0.11	11.8539	-6.2802	0.2301	0.0069	0.0124	0.4659	0.4701	-0.0042	-0.5303
91	44.37	0.12	11.8203	-6.2747	0.3484	-0.2206	0.0183	0.4590	0.4695	-0.0065	-0.5308
92	44.56	0.11	11.9302	-6.1278	0.2980	-0.1353	0.0185	0.4508	0.4672	-0.0164	-0.5134

TEST 7 PART 55 MACH 1.10 RATIO-6 1.7 PHI 45.0 CONF 81NOF14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSATION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAb	CAF	XCP
93	44.77	0.11	11.9090	-6.2250	0.2055	-0.2825	0.0404	0.4611	0.4647	-0.0030	-0.5201
94	44.93	0.11	12.0134	-6.1142	0.2212	-0.3646	0.0375	0.4491	0.4537	-0.0046	-0.5094
95	45.11	0.11	12.0230	-6.0057	0.2307	-0.1720	0.0167	0.4491	0.4505	-0.0114	-0.5045
96	45.31	0.11	12.1096	-6.1033	0.2338	-0.1627	0.0133	0.4519	0.4580	-0.0061	-0.5040
97	45.49	0.11	12.2118	-6.0000	0.3666	-0.3103	0.0085	0.4174	0.4487	-0.0313	-0.4979
98	45.65	0.10	12.2511	-6.0825	0.2723	-0.2582	-0.0027	0.4221	0.4423	-0.0202	-0.4965
99	45.82	0.11	12.2228	-5.9150	0.2754	-0.2106	0.0140	0.4389	0.4374	-0.0009	-0.4841
100	46.04	0.11	12.3785	-6.0761	0.2426	-0.1392	-0.0061	0.4139	0.4428	-0.0209	-0.4910
101	46.21	0.10	12.4615	-6.0320	0.1902	-0.0439	-0.0245	0.4100	0.4359	-0.0259	-0.4841
102	46.37	0.10	12.5400	-6.1951	0.1746	-0.1740	-0.0240	0.4074	0.4300	-0.0206	-0.4940
103	46.55	0.10	12.5561	-6.3262	0.2283	-0.0867	-0.0190	0.4284	0.4427	-0.0143	-0.5048
104	46.73	0.11	12.6152	-6.3149	0.3927	-0.4742	0.0422	0.4145	0.4370	-0.0225	-0.5006
105	46.90	0.10	12.6658	-6.0843	0.1571	-0.0252	-0.0298	0.3903	0.4292	-0.0389	-0.4804
106	47.08	0.11	12.7249	-6.3041	0.2844	-0.2246	-0.0291	0.3974	0.4306	-0.0332	-0.4766
107	47.25	0.09	12.7763	-6.0448	0.1034	-0.1365	-0.0019	0.3926	0.4320	-0.0394	-0.4731
108	47.43	0.08	12.7551	-5.9353	0.0506	0.0208	-0.0187	0.3941	0.4292	-0.0351	-0.4654
109	47.61	0.09	12.9172	-6.0310	0.2445	-0.2728	-0.0068	0.3765	0.4259	-0.0494	-0.4669
110	47.78	0.08	12.7742	-6.2259	0.1334	-0.0520	-0.0183	0.4007	0.4330	-0.0323	-0.4799
111	47.94	0.08	12.9050	-6.0685	0.2260	-0.3134	0.0153	0.4014	0.4338	-0.0324	-0.4694
112	48.12	0.07	13.0074	-5.9140	0.0252	0.0021	-0.0402	0.3736	0.4270	-0.0534	-0.4547
113	48.32	0.08	13.2151	-6.2206	0.2259	-0.2715	0.0156	0.3890	0.4230	-0.0340	-0.4713
114	48.48	0.09	13.1162	-6.3003	0.2015	-0.3302	0.0209	0.4001	0.4318	-0.0317	-0.4855
115	48.64	0.08	13.1360	-6.1204	0.1863	-0.1853	-0.0008	0.3945	0.4256	-0.0311	-0.4583
116	48.82	0.08	13.2104	-6.0121	0.2079	-0.3042	0.0159	0.3738	0.4274	-0.0536	-0.4551
117	48.98	0.08	13.3603	-6.2745	0.2065	-0.3302	0.0104	0.3957	0.4256	-0.0299	-0.4694
118	49.17	0.08	13.4070	-5.9417	0.2493	-0.3171	0.0275	0.3954	0.4160	-0.0606	-0.4432
119	49.33	0.08	13.4619	-6.1765	0.2134	-0.4249	0.0163	0.3782	0.4210	-0.0428	-0.4590
120	49.49	0.08	13.4415	-6.1408	0.2357	-0.4033	0.0164	0.3662	0.4117	-0.0435	-0.4574
121	49.67	0.09	13.5295	-5.9475	0.3231	-0.5740	0.0171	0.3569	0.4010	-0.0421	-0.4396
122	49.88	0.10	13.4889	-5.6353	0.3033	-0.4985	0.0174	0.3265	0.3839	-0.0554	-0.4178
123	50.05	0.09	13.6549	-5.9014	0.2733	-0.6157	0.0173	0.3403	0.3935	-0.0502	-0.4322
124	50.21	0.10	13.6957	-5.9078	0.3315	-0.6277	0.0176	0.3379	0.3942	-0.0563	-0.4314
125	50.38	0.10	13.6776	-5.7560	0.3204	-0.4528	0.0067	0.3359	0.3860	-0.0501	-0.4210
126	50.54	0.09	13.6125	-5.6076	0.2080	-0.5947	-0.0042	0.3037	0.3653	-0.0616	-0.3898
127	50.71	0.08	13.6375	-5.5825	0.2795	-0.4999	-0.0031	0.3113	0.3721	-0.0608	-0.3947
128	50.90	0.07	13.7467	-5.6194	0.2291	-0.5655	-0.0042	0.3144	0.3677	-0.0533	-0.4088
129	51.06	0.07	13.7601	-5.5367	0.3175	-0.4088	-0.0025	0.3055	0.3652	-0.0597	-0.4022
130	51.23	0.08	13.7797	-5.2955	0.3123	-0.5031	-0.0135	0.2862	0.3534	-0.0721	-0.3843
131	51.40	0.09	13.8139	-5.3947	0.2309	-0.5345	-0.0139	0.2940	0.3609	-0.0669	-0.3905
132	51.59	0.08	13.9417	-5.5684	0.2251	-0.5300	-0.0134	0.2961	0.3638	-0.0677	-0.3994
133	51.74	0.08	13.9159	-5.3044	0.2190	-0.5031	-0.0081	0.2812	0.3549	-0.0730	-0.3812
134	51.91	0.08	13.9976	-5.4466	0.2025	-0.5147	-0.0061	0.2860	0.3609	-0.0748	-0.3891
135	52.09	0.08	14.1052	-5.7232	0.1717	-0.4022	-0.0027	0.2939	0.3704	-0.0765	-0.4035
136	52.25	0.07	14.1398	-5.6071	0.1621	-0.4891	-0.0031	0.2929	0.3729	-0.0800	-0.3965
137	52.41	0.08	14.1208	-5.5193	0.2300	-0.5275	-0.0023	0.2865	0.3751	-0.0865	-0.3907
138	52.59	0.06	14.2918	-5.6062	0.0345	-0.1157	0.0083	0.3073	0.3905	-0.0832	-0.3923

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) . 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 53 1.10 1.7 45.0 BIWOF14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.76	0.06	14.2292	-5.4800	0.0383	-0.1032	0.0140	0.2990	0.3678	-0.0686	-0.3856
140	52.92	0.06	14.2611	-5.4623	0.0367	-0.0883	0.0140	0.2997	0.3928	-0.0931	-0.3830
141	53.09	0.05	14.2827	-5.5130	0.0184	-0.1090	0.0084	0.3060	0.3903	-0.0843	-0.3860
142	53.26	0.07	14.2928	-5.5057	0.1744	-0.2725	0.0145	0.3130	0.4014	-0.0878	-0.3778
143	53.42	0.06	14.3233	-5.4438	0.1006	-0.1490	0.0144	0.2937	0.4006	-0.1070	-0.3801
144	53.59	0.06	14.3517	-5.4943	0.1654	-0.2534	0.0147	0.3051	0.4131	-0.1081	-0.3828
145	53.75	0.05	14.3544	-5.4750	0.1306	-0.1974	0.0092	0.3099	0.4049	-0.0950	-0.3814
146	53.93	0.06	14.3812	-5.4359	0.2009	-0.3037	0.0097	0.3010	0.4089	-0.1080	-0.3780
147	54.10	0.05	14.4133	-5.7348	0.1454	-0.1932	0.0094	0.3135	0.4153	-0.1019	-0.3924
148	54.26	0.04	14.4456	-5.7284	0.0611	-0.7052	0.0147	0.3182	0.4132	-0.0950	-0.3901
149	54.43	0.04	14.4693	-5.4593	0.0263	-0.0625	0.0097	0.3096	0.4171	-0.1074	-0.3696
150	54.55	0.03	14.4838	-4.3853	-0.0107	-0.6209	0.0151	0.2792	0.4071	-0.1279	-0.3396
151	54.74	0.04	14.5115	-5.4455	0.0530	-0.7719	0.0099	0.3128	0.4174	-0.1047	-0.3685
152	54.90	0.04	14.5440	-5.3427	0.0261	-0.6707	0.0099	0.2912	0.4131	-0.1220	-0.3619
153	55.05	0.05	14.5626	-5.1318	0.1081	-0.2583	0.0103	0.2767	0.4064	-0.1297	-0.3495
154	55.22	0.04	14.5878	-5.3473	0.0868	-0.6777	0.0104	0.2930	0.4149	-0.1220	-0.3597
155	55.38	0.05	14.6129	-5.2099	0.0750	-0.4543	0.0102	0.3010	0.4142	-0.1133	-0.3541
156	55.51	0.04	14.6477	-5.2224	0.0316	-0.4909	0.0098	0.2818	0.4092	-0.1274	-0.3582
157	55.68	0.05	14.6916	-5.3577	0.1165	-0.4338	0.0103	0.3002	0.4152	-0.1151	-0.3632
158	55.81	0.05	14.6816	-5.2191	0.1203	-0.3438	0.0212	0.2983	0.4106	-0.1124	-0.3574
159	55.95	0.05	14.6263	-5.3026	0.0884	-0.3706	0.0210	0.2757	0.4145	-0.1408	-0.3625
160	56.13	0.04	14.7052	-5.3275	0.0244	-0.2949	0.0209	0.2711	0.4174	-0.1457	-0.3623
161	56.33	0.05	14.8484	-5.3360	0.1187	-0.3062	0.0213	0.2893	0.4226	-0.1330	-0.3728
162	56.45	0.07	14.8700	-5.3605	0.3105	-0.3971	0.0217	0.2933	0.4102	-0.1169	-0.3680
163	56.66	0.05	15.0213	-5.0577	0.0845	-0.3687	0.0215	0.2983	0.4207	-0.1225	-0.3753
164	56.79	0.00	14.7730	-5.4039	-0.2459	-0.4481	0.0090	0.2540	0.4049	-0.1503	-0.3699
165	56.94	0.07	14.7995	-5.3888	0.3527	-0.1938	0.0220	0.2832	0.4128	-0.1296	-0.3776
166	57.11	0.05	14.7788	-5.3575	0.0070	-0.2734	0.0210	0.2934	0.4070	-0.1137	-0.3760
167	57.23	0.10	14.8139	-5.3015	0.5790	-0.0037	0.0225	0.2881	0.4045	-0.1364	-0.3694
168	57.40	0.05	14.7270	-5.0165	0.2381	-0.3891	0.0215	0.2784	0.4182	-0.1398	-0.3815
169	57.56	0.06	14.7522	-5.2089	0.2618	-0.2415	0.0219	0.2542	0.3995	-0.1453	-0.3658
170	57.71	0.05	14.8444	-5.2442	0.2250	-0.1004	0.0218	0.2781	0.4149	-0.1368	-0.3735
171	57.88	0.02	15.0710	-5.0026	-0.1626	-0.2539	0.0096	0.2524	0.4102	-0.1778	-0.3721
172	58.03	0.04	15.0940	-5.1316	0.0776	0.0033	0.0101	0.2660	0.4173	-0.1493	-0.3797
173	58.15	-0.02	14.9076	-5.4751	-0.3470	-0.3134	-0.0020	0.2245	0.3986	-0.1741	-0.3673
174	58.30	0.00	14.8436	-5.4872	-0.2039	0.0618	0.0036	0.2204	0.3966	-0.1762	-0.3697
175	58.46	0.01	15.0494	-5.5105	-0.1723	-0.0003	0.0210	0.2347	0.4034	-0.1687	-0.3662
176	58.60	0.10	14.9873	-5.3574	0.5719	-0.1038	0.0230	0.2209	0.3880	-0.1671	-0.3575
177	58.71	0.03	14.8568	-5.3310	0.0650	-0.2546	0.0047	0.2316	0.3803	-0.1487	-0.3637
178	58.77	0.03	15.0116	-5.3359	-0.0009	-0.1559	0.0104	0.2410	0.4032	-0.1506	-0.3688
179	58.77	0.01	15.0017	-5.3096	-0.1118	-0.3497	0.0103	0.2127	0.3934	-0.1807	-0.3539
180	58.75	0.00	14.7542	-5.2564	0.4497	-0.2292	0.0116	0.1981	0.3870	-0.2037	-0.3565
181	58.78	0.02	15.1353	-5.4572	0.0124	-0.1677	0.0103	0.2021	0.3992	-0.1971	-0.3606
182	58.78	0.04	15.1437	-5.0547	0.0502	0.2481	0.0102	0.2339	0.4068	-0.1729	-0.3734
183	58.78	0.02	15.1515	-5.5724	-0.1727	-0.3010	0.0100	0.2417	0.3970	-0.1553	-0.3683
184	58.79	-0.02	15.2070	-5.0626	-0.5032	-0.1506	0.0054	0.2413	0.4064	-0.1651	-0.3724

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 53 1.10 1.7 45.0 B1WBF14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.74	0.11	0.2110	-0.0024	0.0788	-0.0114	0.3735	-0.0642	0.0066	-0.0614	-0.1059	0.9564
2	-5.74	0.12	0.2121	-0.0027	0.0793	-0.0127	0.3734	-0.0616	0.0069	-0.0616	-0.1120	1.0000
3	-5.74	0.11	0.2065	-0.0024	0.0768	-0.0116	0.3719	-0.0630	0.0073	-0.0612	-0.1159	0.9714
4	-5.40	0.12	0.1792	-0.0021	0.0669	-0.0117	0.3733	-0.0446	0.0049	-0.0522	-0.1099	1.1704
5	-3.45	0.12	0.1026	-0.0019	0.0341	-0.0103	0.3382	-0.0097	0.0041	-0.0375	-0.4226	3.8660
6	-1.53	0.12	0.0456	-0.0005	0.0153	-0.0110	0.3335	0.0304	0.0015	-0.0137	0.0406	-0.3713
7	0.43	0.11	-0.0078	0.0	-0.0043	0.0	0.5513	0.0823	0.0002	0.0013	0.0024	0.0158
8	2.38	0.11	-0.0535	0.0021	-0.0231	-0.0378	0.4102	0.1416	-0.0006	0.0252	-0.0042	0.1780
9	4.30	0.10	-0.0980	0.0062	-0.0429	-0.0629	0.4351	0.2021	-0.0033	0.0462	-0.0015	0.2286
10	6.27	0.12	-0.1373	0.0107	-0.0612	-0.0779	0.4457	0.2965	-0.0016	0.0777	-0.0054	0.2621
11	8.25	0.11	-0.1791	0.0159	-0.0791	-0.0888	0.4582	0.3949	-0.0037	0.1089	-0.0094	0.2758
12	10.16	0.11	-0.2039	0.0208	-0.0903	-0.1020	0.3889	0.5159	-0.0080	0.1454	-0.0155	0.2818
13	12.18	0.11	-0.2418	0.0255	-0.1060	-0.1109	0.3960	0.6139	-0.0090	0.1714	-0.0147	0.2792
14	14.15	0.11	-0.2669	0.0274	-0.1203	-0.1207	0.3980	0.7101	-0.0119	0.2065	-0.0166	0.2912
15	16.19	0.11	-0.2933	0.0301	-0.1350	-0.1237	0.3705	0.8278	-0.0163	0.2408	-0.0197	0.2981
16	18.23	0.10	-0.2816	0.0296	-0.1291	-0.1151	0.3788	0.9396	-0.0201	0.2790	-0.0214	0.2969
17	20.23	0.12	-0.2614	0.0307	-0.1000	-0.1174	0.3850	1.0473	-0.0205	0.3008	-0.0196	0.2929
18	22.24	0.12	-0.2410	0.0309	-0.1071	-0.1279	0.4015	1.1482	-0.0186	0.3306	-0.0164	0.2879
19	24.24	0.12	-0.2080	0.0306	-0.0990	-0.1471	0.4279	1.2199	-0.0172	0.3508	-0.0141	0.2876
20	26.31	0.14	-0.1613	0.0367	-0.0839	-0.2354	0.5201	1.2309	0.0037	0.3404	0.0006	0.2765
21	28.40	0.15	-0.0865	0.0328	-0.0521	-0.3108	0.6023	1.2310	0.0076	0.3353	0.0062	0.2724
22	28.48	0.15	-0.0902	0.0330	-0.0543	-0.3125	0.5987	1.2327	0.0073	0.3352	0.0059	0.2719
23	28.48	0.15	-0.0920	0.0330	-0.0561	-0.3563	0.5410	1.2327	0.0073	0.3337	0.0059	0.2707
24	28.49	0.14	-0.0957	0.0323	-0.0599	-0.3447	0.5526	1.2457	0.0066	0.3373	0.0053	0.2708
25	28.88	0.16	-0.1117	0.0351	-0.0659	-0.2635	0.4525	1.2458	0.0066	0.3363	0.0053	0.2699
26	29.13	0.16	-0.1072	0.0345	-0.0516	-0.2845	0.4813	1.2679	0.0056	0.3422	0.0044	0.2699
27	29.45	0.14	-0.1003	0.0286	-0.0483	-0.2851	0.4816	1.2769	0.0053	0.3405	0.0042	0.2714
28	29.71	0.14	-0.0980	0.0292	-0.0449	-0.2904	0.4958	1.2795	0.0052	0.3457	0.0041	0.2702
29	30.07	0.15	-0.0671	0.0253	-0.0412	-0.3304	0.4750	1.2929	0.0039	0.3506	0.0030	0.2712
30	30.35	0.16	-0.0735	0.0289	-0.0363	-0.3921	0.4939	1.3047	0.0034	0.3549	0.0026	0.2720
31	30.64	0.16	-0.0654	0.0269	-0.0322	-0.4558	0.5079	1.3035	0.0035	0.3543	0.0027	0.2718
32	30.71	0.16	-0.0486	0.0263	-0.0272	-0.5822	0.5597	1.3176	0.0005	0.3601	0.0004	0.2733
33	31.19	0.17	-0.0552	0.0295	-0.0280	-0.4619	0.5072	1.3166	0.0	0.3599	0.0	0.2734
34	31.46	0.18	-0.0526	0.0292	-0.0280	-0.4600	0.5325	1.3258	-0.0013	0.3637	-0.0010	0.2743
35	31.75	0.17	-0.0528	0.0294	-0.0270	-0.4621	0.5114	1.3314	-0.0022	0.3686	-0.0016	0.2756
36	32.04	0.18	-0.0595	0.0330	-0.0280	-0.3865	0.4706	1.3441	-0.0037	0.3711	-0.0028	0.2761
37	32.30	0.17	-0.0572	0.0312	-0.0250	-0.3736	0.4476	1.3506	-0.0046	0.3751	-0.0034	0.2777
38	32.38	0.18	-0.0538	0.0304	-0.0254	-0.3791	0.4442	1.3466	-0.0064	0.3761	-0.0047	0.2789
39	32.63	0.18	-0.0618	0.0342	-0.0240	-0.3106	0.3883	1.3562	-0.0059	0.3773	-0.0043	0.2782
40	33.10	0.17	-0.0650	0.0360	-0.0231	-0.2769	0.3662	1.3604	-0.0079	0.3806	-0.0058	0.2798
41	33.37	0.18	-0.0662	0.0362	-0.0231	-0.2447	0.3469	1.3567	-0.0092	0.3817	-0.0066	0.2813
42	33.62	0.18	-0.0630	0.0370	-0.0211	-0.2694	0.3649	1.3592	-0.0086	0.3819	-0.0065	0.2810
43	33.86	0.19	-0.0740	0.0349	-0.0198	-0.1997	0.2654	1.3743	-0.0077	0.3863	-0.0056	0.2811
44	34.14	0.17	-0.0636	0.0352	-0.0195	-0.2412	0.3095	1.3772	-0.0094	0.3865	-0.0068	0.2821
45	34.38	0.17	-0.0661	0.0358	-0.0211	-0.2087	0.2842	1.3724	-0.0109	0.3874	-0.0079	0.2823
46	34.63	0.18	-0.0681	0.0355	-0.0219	-0.1932	0.2621	1.3780	-0.0120	0.3901	-0.0087	0.2830

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 53 MACH 1.10 1.7 RNA 45.0 CONF B1WBF14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	34.89	0.16	-0.0784	0.0127	-0.0236	-0.1620	0.3010	1.3701	-0.0111	0.3692	-0.0061	0.2828
48	35.14	0.15	-0.0995	0.0133	-0.0337	-0.1337	0.3387	1.3749	-0.0117	0.3886	-0.0085	0.2826
49	35.37	0.16	-0.0748	0.0158	-0.0276	-0.2112	0.3010	1.3842	-0.0126	0.3916	-0.0091	0.2829
50	35.62	0.14	-0.0746	0.0164	-0.0305	-0.2252	0.4062	1.3803	-0.0125	0.3923	-0.0091	0.2842
51	35.85	0.15	-0.0627	0.0194	-0.0245	-0.3094	0.3907	1.3800	-0.0125	0.3925	-0.0091	0.2844
52	36.09	0.16	-0.0495	0.0177	-0.0160	-0.3375	0.3232	1.3775	-0.0127	0.3912	-0.0092	0.2840
53	36.33	0.14	-0.0597	0.0220	-0.0231	-0.3665	0.3089	1.3782	-0.0126	0.3916	-0.0092	0.2846
54	36.58	0.14	-0.1074	0.0169	-0.0402	-0.1760	0.3743	1.3926	-0.0131	0.3975	-0.0094	0.2854
55	36.81	0.16	-0.0686	0.0150	-0.0237	-0.2769	0.3455	1.3839	-0.0126	0.3933	-0.0092	0.2842
56	37.04	0.13	-0.0573	0.0180	-0.0304	-0.1911	0.3702	1.3906	-0.0131	0.3979	-0.0094	0.2849
57	37.28	0.13	-0.0526	0.0201	-0.0370	-0.2166	0.3967	1.3815	-0.0128	0.3925	-0.0093	0.2842
58	37.52	0.15	-0.0796	0.0194	-0.0297	-0.2437	0.3751	1.3813	-0.0126	0.3920	-0.0093	0.2838
59	37.76	0.14	-0.0861	0.0178	-0.0323	-0.2044	0.3751	1.4041	-0.0134	0.4007	-0.0095	0.2854
60	38.00	0.11	-0.1270	0.0184	-0.0519	-0.1449	0.4087	1.3939	-0.0132	0.3968	-0.0095	0.2847
61	38.24	0.11	-0.1340	0.0199	-0.0564	-0.1476	0.4339	1.4003	-0.0136	0.3999	-0.0097	0.2856
62	38.47	0.12	-0.0945	0.0197	-0.0422	-0.2084	0.4466	1.3810	-0.0129	0.3943	-0.0093	0.2855
63	38.70	0.12	-0.0836	0.0215	-0.0377	-0.3365	0.4342	1.4017	-0.0142	0.4004	-0.0101	0.2857
64	38.93	0.13	-0.0717	0.0209	-0.0364	-0.3751	0.5077	1.3924	-0.0136	0.3979	-0.0098	0.2858
65	39.17	0.13	-0.0732	0.0209	-0.0361	-0.3948	0.4932	1.3928	-0.0144	0.3978	-0.0103	0.2857
66	39.38	0.10	-0.0692	0.0259	-0.0449	-0.2903	0.5034	1.3908	-0.0138	0.3999	-0.0099	0.2859
67	39.61	0.13	-0.0897	0.0300	-0.0460	-0.3411	0.5128	1.3952	-0.0147	0.3986	-0.0105	0.2857
68	39.85	0.13	-0.0741	0.0295	-0.0391	-0.3981	0.5277	1.3925	-0.0143	0.3989	-0.0103	0.2865
69	40.05	0.12	-0.0853	0.0308	-0.0440	-0.3610	0.5156	1.3950	-0.0146	0.4009	-0.0104	0.2866
70	40.27	0.12	-0.0867	0.0300	-0.0426	-0.3717	0.5279	1.4015	-0.0147	0.4021	-0.0105	0.2869
71	40.49	0.13	-0.0774	0.0289	-0.0395	-0.3733	0.5103	1.3903	-0.0142	0.3997	-0.0102	0.2863
72	40.71	0.11	-0.0708	0.0293	-0.0366	-0.4138	0.5196	1.4040	-0.0144	0.4029	-0.0103	0.2870
73	40.89	0.12	-0.0526	0.0284	-0.0295	-0.5018	0.5038	1.3759	-0.0136	0.3925	-0.0099	0.2853
74	41.10	0.13	-0.0686	0.0271	-0.0389	-0.3985	0.5721	1.3926	-0.0148	0.4012	-0.0106	0.2879
75	41.32	0.11	-0.0634	0.0284	-0.0371	-0.4163	0.5652	1.3962	-0.0148	0.4014	-0.0106	0.2875
76	41.51	0.11	-0.0588	0.0296	-0.0358	-0.4353	0.6088	1.3844	-0.0144	0.3976	-0.0104	0.2872
77	41.74	0.12	-0.0533	0.0291	-0.0335	-0.4177	0.6058	1.3795	-0.0152	0.3961	-0.0110	0.2871
78	41.96	0.11	-0.0616	0.0284	-0.0354	-0.3918	0.5803	1.4025	-0.0152	0.4026	-0.0108	0.2871
79	42.15	0.12	-0.0657	0.0265	-0.0371	-0.3881	0.5647	1.3870	-0.0145	0.3983	-0.0103	0.2872
80	42.34	0.13	-0.0613	0.0260	-0.0358	-0.4013	0.5514	1.3883	-0.0145	0.3984	-0.0104	0.2870
81	42.54	0.10	-0.0523	0.0238	-0.0295	-0.4550	0.5041	1.3741	-0.0138	0.3942	-0.0100	0.2869
82	42.74	0.12	-0.0546	0.0230	-0.0303	-0.4322	0.5549	1.3701	-0.0139	0.3936	-0.0101	0.2873
83	42.92	0.12	-0.0596	0.0227	-0.0319	-0.3881	0.5407	1.3888	-0.0141	0.3940	-0.0103	0.2878
84	43.11	0.12	-0.0432	0.0204	-0.0238	-0.4722	0.5509	1.3811	-0.0142	0.3913	-0.0104	0.2875
85	43.30	0.12	-0.0375	0.0185	-0.0201	-0.4933	0.5360	1.3574	-0.0145	0.3905	-0.0107	0.2877
86	43.48	0.13	-0.0432	0.0175	-0.0214	-0.4050	0.4954	1.3930	-0.0143	0.3864	-0.0106	0.2877
87	43.64	0.12	-0.0247	0.0144	-0.0151	-0.5829	0.6113	1.3906	-0.0146	0.3847	-0.0109	0.2870
88	43.84	0.12	-0.0315	0.0154	-0.0186	-0.4888	0.5905	1.3922	-0.0135	0.3896	-0.0115	0.2881
89	44.03	0.12	-0.0340	0.0166	-0.0187	-0.4882	0.5500	1.3948	-0.0153	0.3904	-0.0113	0.2882
90	44.22	0.11	-0.0395	0.0160	-0.0219	-0.4050	0.5544	1.3958	-0.0152	0.3882	-0.0113	0.2885
91	44.37	0.12	-0.0249	0.0142	-0.0142	-0.5702	0.5703	1.3956	-0.0151	0.3842	-0.0113	0.2877
92	44.56	0.11	-0.0204	0.0116	-0.0093	-0.5888	0.4559	1.3278	-0.0150	0.3826	-0.0113	0.2881

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-6 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
7 53 1.10 1.7 45.0 BINOF14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN1	CM1	CB1	XCPF1	YCPF1	CN2	CM2	CB2	XCPF2	YCPF2
93	44.77	0.11	-0.0215	0.0122	-0.0108	-0.5674	0.5023	1.3343	-0.0151	0.3841	-0.0113	0.2879
94	44.93	0.11	-0.0366	0.0137	-0.0190	-0.3605	0.5276	1.3407	-0.0154	0.3867	-0.0115	0.2899
95	45.11	0.11	-0.0112	0.0107	-0.0065	-0.9552	0.5004	1.3150	-0.0148	0.3780	-0.0111	0.2875
96	45.31	0.11	-0.0201	0.0113	-0.0113	-0.5621	0.5022	1.3278	-0.0151	0.3846	-0.0114	0.2897
97	45.49	0.11	-0.0005	0.0094	-0.0053	-1.4460	0.4154	1.3263	-0.0154	0.3837	-0.0116	0.2893
98	45.69	0.10	-0.0133	0.0092	-0.0075	-0.6916	0.5039	1.3275	-0.0155	0.3829	-0.0117	0.2884
99	45.82	0.11	-0.0187	0.0094	-0.0083	-0.5028	0.4970	1.3274	-0.0153	0.3840	-0.0115	0.2893
100	46.04	0.11	-0.0215	0.0091	-0.0125	-0.2869	0.5268	1.3171	-0.0152	0.3811	-0.0115	0.2893
101	46.21	0.10	-0.0404	0.0099	-0.0173	-0.2450	0.4262	1.3171	-0.0152	0.3811	-0.0115	0.2893
102	46.37	0.10	-0.0301	0.0098	-0.0147	-0.3255	0.4884	1.3300	-0.0159	0.3867	-0.0120	0.2908
103	46.55	0.10	-0.0168	0.0121	-0.0307	-0.1575	0.3997	1.3339	-0.0162	0.3880	-0.0121	0.2909
104	46.73	0.11	-0.0074	0.0048	-0.0023	-0.0400	0.5108	1.3066	-0.0150	0.3772	-0.0115	0.2886
105	46.90	0.10	-0.0425	0.0035	-0.0163	-0.2000	0.4300	1.3208	-0.0154	0.3821	-0.0117	0.2893
106	47.08	0.11	-0.0332	0.0065	-0.0147	-0.1958	0.4428	1.3130	-0.0154	0.3814	-0.0117	0.2905
107	47.25	0.09	-0.0285	0.0054	-0.0114	-0.2037	0.4226	1.3141	-0.0154	0.3807	-0.0117	0.2897
108	47.43	0.08	-0.0304	0.0043	-0.0129	-0.1850	0.4175	1.3011	-0.0151	0.3781	-0.0116	0.2906
109	47.61	0.09	-0.0330	0.0031	-0.0134	-0.0939	0.4061	1.3152	-0.0156	0.3815	-0.0120	0.2901
110	47.78	0.08	-0.0468	0.0048	-0.0185	-0.1026	0.3953	1.3190	-0.0154	0.3824	-0.0117	0.2899
111	47.94	0.08	-0.0032	0.0014	-0.0006	-0.4374	1.4375	1.3019	-0.0148	0.3776	-0.0114	0.2900
112	48.12	0.07	-0.0030	-0.0002	-0.0032	0.0000	0.4524	1.3007	-0.0152	0.3770	-0.0117	0.2898
113	48.32	0.06	-0.0121	0.0001	-0.0073	-0.0083	0.0033	1.3068	-0.0154	0.3802	-0.0118	0.2909
114	48.48	0.09	-0.0132	0.0062	-0.0084	-0.0151	0.0304	1.3187	-0.0158	0.3835	-0.0120	0.2908
115	48.64	0.08	-0.0207	-0.0018	-0.0121	0.0869	0.5845	1.2990	-0.0150	0.3775	-0.0115	0.2906
116	48.82	0.06	0.0052	-0.0008	-0.0031	-0.1538	-0.5962	1.3016	-0.0153	0.3777	-0.0118	0.2902
117	48.98	0.06	0.0043	-0.0014	-0.0040	-0.3235	-1.1163	1.3182	-0.0158	0.3834	-0.0120	0.2909
118	49.17	0.08	0.0247	-0.0013	0.0010	-0.0520	0.0729	1.2999	-0.0146	0.3784	-0.0112	0.2915
119	49.33	0.06	0.0066	-0.0013	-0.0041	-0.1987	-0.0212	1.3130	-0.0150	0.3824	-0.0119	0.2912
120	49.49	0.06	0.0087	-0.0020	-0.0042	-0.2405	-0.0269	1.3200	-0.0159	0.3851	-0.0120	0.2916
121	49.67	0.09	0.0375	-0.0022	0.0035	-0.0587	0.0933	1.3075	-0.0146	0.3810	-0.0113	0.2929
122	49.86	0.10	0.0502	-0.0036	0.0071	-0.0717	0.1414	1.2959	-0.0142	0.3780	-0.0110	0.2917
123	50.03	0.09	0.0513	-0.0031	0.0073	-0.0604	0.1423	1.3163	-0.0150	0.3855	-0.0114	0.2929
124	50.21	0.10	0.0481	-0.0035	0.0054	-0.0728	0.1163	1.3165	-0.0155	0.3829	-0.0118	0.2908
125	50.38	0.10	0.0402	-0.0033	0.0021	-0.0821	0.0522	1.3150	-0.0156	0.3840	-0.0119	0.2920
126	50.54	0.09	0.0426	-0.0042	0.0026	-0.0906	0.0610	1.2966	-0.0153	0.3796	-0.0118	0.2928
127	50.71	0.08	0.0438	-0.0042	0.0028	-0.0934	0.0659	1.2875	-0.0147	0.3774	-0.0114	0.2931
128	50.90	0.07	0.0370	-0.0042	0.0005	-0.1135	0.0135	1.3066	-0.0154	0.3832	-0.0118	0.2933
129	51.06	0.09	0.0382	-0.0039	0.0002	-0.1021	0.0052	1.2937	-0.0149	0.3796	-0.0115	0.2934
130	51.23	0.08	0.0180	-0.0059	-0.0050	-0.3277	-0.3222	1.2840	-0.0154	0.3778	-0.0120	0.2941
131	51.40	0.08	0.0238	-0.0067	-0.0039	-0.2615	-0.1639	1.2895	-0.0148	0.3790	-0.0115	0.2939
132	51.56	0.08	0.0089	-0.0069	-0.0075	-0.7752	-0.8427	1.2902	-0.0153	0.3808	-0.0117	0.2945
133	51.74	0.08	0.0054	-0.0077	-0.0085	-1.4257	-1.2037	1.2970	-0.0158	0.3818	-0.0106	0.2944
134	51.91	0.08	0.0111	-0.0071	-0.0058	-0.8396	-0.5225	1.2907	-0.0155	0.3825	-0.0104	0.2950
135	52.09	0.08	0.0099	-0.0078	-0.0055	-0.7676	-0.5556	1.3109	-0.0163	0.3888	-0.0109	0.2966
136	52.25	0.07	0.0158	-0.0072	-0.0055	-0.4556	-0.3354	1.3063	-0.0156	0.3870	-0.0104	0.2958
137	52.41	0.06	0.0153	-0.0038	-0.0056	-0.2353	-0.3660	1.3061	-0.0151	0.3871	-0.0100	0.2959
138	52.59	0.06	0.0148	-0.0039	-0.0067	-0.3611	-0.4204	1.3133	-0.0152	0.3885	-0.0100	0.2958

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) · 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART SB | MACH 1.10 1.7 | RN/D-6 | PHI 45.0 | CONF B1W0P14 | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	52.76	0.00	0.0129	-0.0009	-0.0083	-0.0698	-0.6434	1.3051	-0.0125	0.3865	-0.0096	0.2961
140	52.92	0.00	0.0130	-0.0013	-0.0084	-0.1030	-0.6962	1.3103	-0.0129	0.3885	-0.0098	0.2965
141	53.09	0.00	0.0107	-0.0018	-0.0083	-0.1632	-0.7757	1.3128	-0.0135	0.3904	-0.0103	0.2974
142	53.26	0.07	0.0176	-0.0013	-0.0074	-0.0734	-0.4205	1.3204	-0.0138	0.3918	-0.0104	0.2967
143	53.42	0.00	0.0108	-0.0019	-0.0093	-0.1759	-0.8611	1.3189	-0.0136	0.3919	-0.0105	0.2971
144	53.59	0.00	0.0177	-0.0013	-0.0079	-0.0734	-0.4463	1.3300	-0.0144	0.3954	-0.0108	0.2972
145	53.75	0.00	0.0177	-0.0012	-0.0084	-0.0678	-0.4746	1.3394	-0.0152	0.4014	-0.0113	0.2997
146	53.93	0.00	0.0152	-0.0012	-0.0082	-0.0784	-0.5359	1.3463	-0.0154	0.4023	-0.0114	0.2988
147	54.10	0.00	0.0200	-0.0017	-0.0088	-0.0850	-0.5400	1.3604	-0.0155	0.4068	-0.0114	0.2990
148	54.26	0.00	0.0189	-0.0018	-0.0074	-0.0932	-0.5915	1.3578	-0.0154	0.4056	-0.0113	0.2987
149	54.43	0.00	0.0160	-0.0024	-0.0073	-0.1498	-0.4398	1.3500	-0.0150	0.4024	-0.0111	0.2981
150	54.59	0.00	0.0154	-0.0029	-0.0070	-0.1883	-0.4545	1.3453	-0.0141	0.3952	-0.0106	0.2982
151	54.74	0.00	0.0178	-0.0029	-0.0068	-0.1629	-0.3820	1.3608	-0.0158	0.4066	-0.0116	0.2989
152	54.90	0.00	0.0179	-0.0026	-0.0077	-0.1452	-0.4302	1.3642	-0.0159	0.4079	-0.0117	0.2990
153	55.05	0.00	0.0167	-0.0025	-0.0078	-0.1497	-0.4071	1.3460	-0.0150	0.4018	-0.0111	0.2985
154	55.22	0.00	0.0190	-0.0026	-0.0071	-0.1368	-0.3737	1.3706	-0.0161	0.4115	-0.0117	0.3002
155	55.38	0.00	0.0190	-0.0026	-0.0071	-0.1368	-0.3737	1.3681	-0.0160	0.4097	-0.0117	0.2995
156	55.51	0.00	0.0176	-0.0027	-0.0068	-0.1517	-0.3820	1.3707	-0.0161	0.4099	-0.0117	0.2990
157	55.66	0.00	0.0167	-0.0025	-0.0078	-0.1497	-0.4071	1.3732	-0.0165	0.4119	-0.0120	0.3000
158	55.81	0.00	0.0202	-0.0026	-0.0070	-0.1287	-0.3465	1.3717	-0.0161	0.4116	-0.0117	0.3001
159	55.95	0.00	0.0226	-0.0027	-0.0056	-0.1195	-0.3009	1.3614	-0.0156	0.4076	-0.0115	0.2994
160	56.13	0.00	0.0226	-0.0029	-0.0068	-0.1283	-0.3009	1.3547	-0.0153	0.4056	-0.0113	0.2994
161	56.33	0.00	0.0202	-0.0030	-0.0066	-0.1485	-0.3267	1.3814	-0.0170	0.4164	-0.0123	0.3001
162	56.45	0.07	0.0249	-0.0037	-0.0057	-0.1486	-0.2284	1.3567	-0.0158	0.4069	-0.0116	0.2995
163	56.66	0.00	0.0201	-0.0027	-0.0065	-0.1343	-0.3234	1.4005	-0.0175	0.4200	-0.0125	0.2999
164	56.79	0.00	0.0238	-0.0030	-0.0067	-0.1200	-0.2815	1.3952	-0.0172	0.4178	-0.0123	0.2993
165	56.94	0.07	0.0237	-0.0031	-0.0057	-0.1308	-0.2405	1.3992	-0.0174	0.4189	-0.0124	0.2994
166	57.11	0.00	0.0271	-0.0031	-0.0043	-0.1144	-0.1867	1.3940	-0.0173	0.4169	-0.0124	0.2991
167	57.23	0.10	0.0294	-0.0033	-0.0041	-0.1122	-0.1395	1.3790	-0.0166	0.4137	-0.0122	0.2999
168	57.40	0.00	0.0217	-0.0031	-0.0038	-0.0978	-0.1459	1.4058	-0.0179	0.4199	-0.0127	0.2987
169	57.56	0.00	0.0304	-0.0033	-0.0025	-0.1085	-0.0822	1.3874	-0.0171	0.4154	-0.0123	0.2994
170	57.71	0.05	0.0248	-0.0030	-0.0047	-0.1451	-0.1895	1.4046	-0.0183	0.4188	-0.0130	0.2982
171	57.88	0.02	0.0271	-0.0035	-0.0044	-0.1291	-0.1624	1.3748	-0.0169	0.4078	-0.0123	0.2985
172	58.03	0.04	0.0272	-0.0037	-0.0043	-0.1300	-0.1034	1.4039	-0.0183	0.4179	-0.0130	0.2972
173	58.15	-0.02	0.0339	-0.0021	-0.0029	-0.0619	-0.0355	1.3992	-0.0175	0.4161	-0.0125	0.2974
174	58.33	0.00	0.0321	-0.0015	-0.0039	-0.0459	-0.1193	1.3906	-0.0170	0.4169	-0.0127	0.2985
175	58.48	0.01	0.0294	-0.0034	-0.0037	-0.1150	-0.1259	1.3940	-0.0176	0.4143	-0.0128	0.2972
176	58.63	0.10	0.0271	-0.0035	-0.0039	-0.1291	-0.1439	1.3953	-0.0183	0.4159	-0.0131	0.2981
177	58.71	0.03	0.0310	-0.0021	-0.0037	-0.0664	-0.1171	1.3948	-0.0176	0.4130	-0.0127	0.2982
178	58.77	0.03	0.0272	-0.0034	-0.0044	-0.1250	-0.1018	1.3998	-0.0183	0.4151	-0.0131	0.2980
179	58.77	0.01	0.0272	-0.0034	-0.0044	-0.1250	-0.1018	1.3943	-0.0182	0.4152	-0.0131	0.2978
180	58.73	0.06	0.0295	-0.0028	-0.0041	-0.0949	-0.1340	1.3733	-0.0170	0.4078	-0.0124	0.2969
181	58.78	0.02	0.0284	-0.0035	-0.0038	-0.1232	-0.1338	1.3823	-0.0174	0.4114	-0.0126	0.2976
182	58.78	0.04	0.0249	-0.0035	-0.0047	-0.1405	-0.1668	1.4141	-0.0190	0.4211	-0.0134	0.2967
183	58.78	0.02	0.0271	-0.0034	-0.0034	-0.1254	-0.1255	1.4033	-0.0183	0.4172	-0.0130	0.2973
184	58.79	-0.02	0.0295	-0.0036	-0.0032	-0.1220	-0.1085	1.4165	-0.0188	0.4214	-0.0133	0.2975

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-S PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
7 5b 1.10 1.7 45.0 BINORTH 6.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.74	0.11	0.1771	9.9999	0.0040	9.9999	0.3614	-0.2072	0.0025	-0.0501	-0.0121	0.2804
2	-5.74	0.12	0.1758	9.9999	0.0044	9.9999	0.3603	-0.2074	0.0026	-0.0506	-0.0135	0.2825
3	-5.74	0.11	0.1735	9.9999	0.0028	9.9999	0.3620	-0.2048	0.0027	-0.0579	-0.0132	0.2830
4	-5.46	0.12	0.1641	9.9999	0.0033	9.9999	0.3553	-0.1667	0.0020	-0.0434	-0.0120	0.2603
5	-3.43	0.12	0.1147	9.9999	0.0300	9.9999	0.3191	-0.1070	0.0009	-0.0170	-0.0084	0.1589
6	-1.53	0.12	0.0794	9.9999	0.0212	9.9999	0.2670	-0.0502	0.0	0.0088	0.0	-0.1753
7	0.43	0.11	0.0229	9.9999	-0.0010	9.9999	-0.0437	-0.0029	-0.0038	0.0214	0.2758	-7.3793
8	2.36	0.11	-0.0300	9.9999	-0.0253	9.9999	0.6433	0.0315	-0.0022	0.0394	-0.0427	0.7650
9	4.30	0.10	-0.0912	9.9999	-0.0511	9.9999	0.5603	0.0970	-0.0059	0.0552	-0.0608	0.5691
10	6.27	0.12	-0.1667	9.9999	-0.0809	9.9999	0.4393	0.1430	-0.0101	0.0759	-0.0706	0.5308
11	8.25	0.11	-0.2504	9.9999	-0.1119	9.9999	0.4364	0.1833	-0.0140	0.0889	-0.0764	0.4850
12	10.16	0.11	-0.3213	9.9999	-0.1452	9.9999	0.3911	0.2234	-0.0196	0.0979	-0.0877	0.4382
13	12.15	0.11	-0.4013	9.9999	-0.1716	9.9999	0.3565	0.2387	-0.0224	0.1032	-0.0938	0.4323
14	14.15	0.11	-0.4881	9.9999	-0.2050	9.9999	0.3371	0.2479	-0.0258	0.1066	-0.1041	0.4300
15	16.19	0.11	-0.7219	9.9999	-0.2350	9.9999	0.3255	0.2636	-0.0236	0.1134	-0.1092	0.4302
16	18.23	0.10	-0.8464	9.9999	-0.2663	9.9999	0.3146	0.2545	-0.0308	0.1146	-0.1210	0.4511
17	20.23	0.12	-0.9531	9.9999	-0.2884	9.9999	0.3035	0.2361	-0.0313	0.1115	-0.1326	0.4714
18	22.24	0.12	-1.0869	9.9999	-0.3110	9.9999	0.2931	0.2084	-0.0327	0.1042	-0.1504	0.5048
19	24.29	0.12	-1.1370	9.9999	-0.3252	9.9999	0.2858	0.2193	-0.0342	0.1092	-0.1559	0.4979
20	26.31	0.14	-1.2135	9.9999	-0.3491	9.9999	0.2844	0.1715	-0.0339	0.1008	-0.2093	0.5678
21	28.40	0.15	-1.2537	9.9999	-0.3596	9.9999	0.2830	0.1252	-0.0449	0.0894	-0.3586	0.7141
22	28.48	0.15	-1.2516	9.9999	-0.3526	9.9999	0.2817	0.1120	-0.0434	0.0853	-0.3874	0.7616
23	28.48	0.15	-1.2504	9.9999	-0.3530	9.9999	0.2823	0.1258	-0.0439	0.0916	-0.3489	0.7281
24	28.49	0.14	-1.2588	9.9999	-0.3555	9.9999	0.2825	0.1251	-0.0466	0.0909	-0.3725	0.7266
25	28.66	0.16	-1.2622	9.9999	-0.3557	9.9999	0.2818	0.1457	-0.0475	0.0989	-0.3173	0.6807
26	29.13	0.16	-1.2715	9.9999	-0.3578	9.9999	0.2814	0.1455	-0.0492	0.0995	-0.3301	0.6838
27	29.45	0.14	-1.2727	9.9999	-0.3584	9.9999	0.2816	0.1542	-0.0515	0.1053	-0.3234	0.6614
28	29.77	0.14	-1.2786	9.9999	-0.3598	9.9999	0.2814	0.1577	-0.0496	0.1042	-0.3145	0.6607
29	30.07	0.15	-1.2905	9.9999	-0.3633	9.9999	0.2815	0.1755	-0.0503	0.1126	-0.2806	0.6416
30	30.35	0.16	-1.2980	9.9999	-0.3670	9.9999	0.2820	0.1800	-0.0530	0.1162	-0.2744	0.6456
31	30.64	0.16	-1.2995	9.9999	-0.3689	9.9999	0.2838	0.1842	-0.0530	0.1170	-0.2985	0.6352
32	30.91	0.16	-1.3102	9.9999	-0.3704	9.9999	0.2827	0.2040	-0.0537	0.1246	-0.2877	0.6118
33	31.19	0.17	-1.3021	9.9999	-0.3636	9.9999	0.2808	0.2025	-0.0537	0.1232	-0.2800	0.6084
34	31.46	0.18	-1.3079	9.9999	-0.3679	9.9999	0.2813	0.2150	-0.0574	0.1283	-0.2669	0.5967
35	31.75	0.17	-1.3196	9.9999	-0.3720	9.9999	0.2827	0.2139	-0.0560	0.1281	-0.2618	0.5989
36	32.04	0.18	-1.3208	9.9999	-0.3731	9.9999	0.2825	0.2379	-0.0580	0.1383	-0.2438	0.5729
37	32.30	0.17	-1.3269	9.9999	-0.3706	9.9999	0.2807	0.2273	-0.0528	0.1298	-0.2323	0.5711
38	32.58	0.18	-1.3257	9.9999	-0.3743	9.9999	0.2808	0.2432	-0.0550	0.1363	-0.2179	0.5604
39	32.83	0.18	-1.3253	9.9999	-0.3735	9.9999	0.2822	0.2422	-0.0554	0.1435	-0.2113	0.5473
40	33.10	0.17	-1.3315	9.9999	-0.3751	9.9999	0.2817	0.2543	-0.0561	0.1402	-0.1970	0.5313
41	33.37	0.16	-1.3409	9.9999	-0.3777	9.9999	0.2817	0.2508	-0.0509	0.1413	-0.1967	0.5460
42	33.62	0.18	-1.2810	9.9999	-0.3614	9.9999	0.2821	0.2424	-0.0467	0.1347	-0.1926	0.5557
43	33.88	0.19	-1.2796	9.9999	-0.3627	9.9999	0.2834	0.2938	-0.0531	0.1509	-0.1705	0.5136
44	34.14	0.17	-1.2915	9.9999	-0.3664	9.9999	0.2837	0.2481	-0.0482	0.1361	-0.1958	0.5530
45	34.38	0.17	-1.3115	9.9999	-0.3707	9.9999	0.2827	0.2480	-0.0438	0.1381	-0.1967	0.5569
46	34.63	0.16	-1.3335	9.9999	-0.3754	9.9999	0.2815	0.2052	-0.0446	0.1250	-0.2183	0.6092

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 53 MACH 1.60 RX10-6 1.7 PHI 45.0 CONF 1WOF14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BLTA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	34.89	0.10	-1.3089	9.9999	-0.3709	9.9999	0.2834	0.2490	-0.0438	0.1403	-0.1900	0.5035
48	35.14	0.13	-1.3171	9.9999	-0.3730	9.9999	0.2832	0.2224	-0.0430	0.1320	-0.2023	0.5935
49	35.37	0.10	-1.3312	9.9999	-0.3765	9.9999	0.2843	0.2019	-0.0424	0.1271	-0.2100	0.6295
50	35.62	0.14	-1.3313	9.9999	-0.3776	9.9999	0.2836	0.1879	-0.0393	0.1160	-0.2340	0.6909
51	35.85	0.15	-1.3332	9.9999	-0.3779	9.9999	0.2835	0.1803	-0.0381	0.1156	-0.2376	0.7211
52	36.09	0.10	-1.3285	9.9999	-0.3766	9.9999	0.2835	0.2001	-0.0421	0.1326	-0.2023	0.6382
53	36.33	0.14	-1.3379	9.9999	-0.3767	9.9999	0.2831	0.1711	-0.0348	0.1226	-0.2034	0.7165
54	36.58	0.14	-1.3376	9.9999	-0.3792	9.9999	0.2834	0.1821	-0.0337	0.1275	-0.1850	0.7002
55	36.81	0.10	-1.3414	9.9999	-0.3799	9.9999	0.2832	0.2149	-0.0371	0.1374	-0.1726	0.6394
56	37.04	0.13	-1.3450	9.9999	-0.3797	9.9999	0.2823	0.2016	-0.0351	0.1355	-0.1741	0.6721
57	37.28	0.13	-1.3422	9.9999	-0.3790	9.9999	0.2812	0.1813	-0.0349	0.1298	-0.1892	0.7159
58	37.52	0.15	-1.3496	9.9999	-0.3744	9.9999	0.2815	0.2059	-0.0395	0.1401	-0.1724	0.6804
59	37.76	0.14	-1.3472	9.9999	-0.3801	9.9999	0.2821	0.2238	-0.0363	0.1462	-0.1622	0.6533
60	38.00	0.11	-1.3532	9.9999	-0.3748	9.9999	0.2811	0.1925	-0.0332	0.1229	-0.2330	0.8025
61	38.24	0.11	-1.3425	9.9999	-0.3783	9.9999	0.2816	0.1814	-0.0327	0.1217	-0.2224	1.1016
62	38.47	0.12	-1.3509	9.9999	-0.3742	9.9999	0.2812	0.1969	-0.0347	0.1305	-0.2211	0.8317
63	38.70	0.12	-1.3423	9.9999	-0.3793	9.9999	0.2825	0.1981	-0.0369	0.1442	-0.1662	0.7279
64	38.95	0.13	-1.3459	9.9999	-0.3797	9.9999	0.2821	0.1868	-0.0379	0.1221	-0.3195	1.0295
65	39.17	0.13	-1.3506	9.9999	-0.3801	9.9999	0.2814	0.1856	-0.0399	0.1178	-0.3778	1.1155
66	39.38	0.10	-1.3459	9.9999	-0.3788	9.9999	0.2814	0.0932	-0.0391	0.1185	-0.4195	1.2500
67	39.61	0.13	-1.3594	9.9999	-0.3836	9.9999	0.2821	0.0656	-0.0409	0.1053	-0.6234	1.6052
68	39.85	0.13	-1.3588	9.9999	-0.3785	9.9999	0.2828	0.0953	-0.0458	0.1188	-0.4574	1.2445
69	40.05	0.12	-1.3528	9.9999	-0.3831	9.9999	0.2832	0.0820	-0.0415	0.1158	-0.5060	1.4098
70	40.27	0.12	-1.3527	9.9999	-0.3821	9.9999	0.2824	0.0946	-0.0426	0.1212	-0.4503	1.2812
71	40.49	0.13	-1.3479	9.9999	-0.3757	9.9999	0.2828	0.1034	-0.0420	0.1235	-0.4061	1.1944
72	40.71	0.11	-1.3541	9.9999	-0.3779	9.9999	0.2834	0.1159	-0.0412	0.1275	-0.3554	1.1001
73	40.89	0.12	-1.3568	9.9999	-0.3807	9.9999	0.2831	0.1435	-0.0391	0.1320	-0.2728	0.9211
74	41.10	0.13	-1.3524	9.9999	-0.3745	9.9999	0.2830	0.0778	-0.0361	0.1118	-0.4639	1.4370
75	41.32	0.11	-1.3441	9.9999	-0.3719	9.9999	0.2830	0.0677	-0.0355	0.1122	-0.4825	1.2794
76	41.51	0.11	-1.3462	9.9999	-0.3737	9.9999	0.2839	0.0800	-0.0334	0.1039	-0.5566	1.7317
77	41.74	0.12	-1.3474	9.9999	-0.3742	9.9999	0.2840	0.0803	-0.0348	0.1070	-0.5248	1.0139
78	41.96	0.11	-1.3499	9.9999	-0.3788	9.9999	0.2844	0.0873	-0.0348	0.1090	-0.3986	1.2466
79	42.19	0.12	-1.3415	9.9999	-0.3724	9.9999	0.2839	0.0935	-0.0349	0.1096	-0.3868	1.1722
80	42.34	0.13	-1.3150	9.9999	-0.3731	9.9999	0.2837	0.0868	-0.0342	0.1057	-0.3940	1.2177
81	42.34	0.10	-1.3182	9.9999	-0.3737	9.9999	0.2839	0.0784	-0.0352	0.1048	-0.4489	1.3367
82	42.74	0.12	-1.3140	9.9999	-0.3722	9.9999	0.2838	0.0771	-0.0333	0.1018	-0.4344	1.3204
83	42.92	0.12	-1.3125	9.9999	-0.3736	9.9999	0.2846	0.0840	-0.0323	0.1006	-0.3845	1.1976
84	43.11	0.12	-1.2996	9.9999	-0.3693	9.9999	0.2842	0.0706	-0.0304	0.0927	-0.4305	1.3130
85	43.30	0.12	-1.2925	9.9999	-0.3678	9.9999	0.2846	0.0679	-0.0284	0.0837	-0.5928	1.7474
86	43.48	0.13	-1.2748	9.9999	-0.3620	9.9999	0.2840	0.0586	-0.0288	0.0844	-0.4573	1.4403
87	43.64	0.12	-1.2710	9.9999	-0.3591	9.9999	0.2832	0.0583	-0.0247	0.0795	-0.4256	1.3636
88	43.84	0.12	-1.2912	9.9999	-0.3670	9.9999	0.2842	0.0613	-0.0253	0.0815	-0.4127	1.3295
89	44.03	0.12	-1.3020	9.9999	-0.3702	9.9999	0.2843	0.0290	-0.0243	0.0722	-0.8378	2.4897
90	44.22	0.11	-1.2879	9.9999	-0.3655	9.9999	0.2841	0.0269	-0.0225	0.0696	-0.7784	2.4083
91	44.37	0.12	-1.2844	9.9999	-0.3650	9.9999	0.2846	0.0304	-0.0236	0.0733	-0.6538	2.0137
92	44.56	0.11	-1.2702	9.9999	-0.3617	9.9999	0.2848	0.0184	-0.0185	0.0603	-1.1279	3.6768

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO=0 PRT CONF L DELT DEL2 DEL3 DEL4 TRANSITION
1 33 1.10 1.7 45.0 BINOPLA 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	ALPF3	YCPF3	CNF4	CM4	CA4	ALPF4	YCPF4
93	44.77	0.11	-1.2903	9.9999	-0.3670	9.9999	0.2344	0.0324	-0.0220	0.0695	-0.6769	2.1451
94	44.93	0.11	-1.2942	9.9999	-0.3569	9.9999	0.2841	0.0095	-0.0147	0.0528	-1.5472	5.5579
95	45.11	0.11	-1.2703	9.9999	-0.3614	9.9999	0.2343	0.0151	-0.0105	0.0597	-1.2250	3.9536
96	45.31	0.11	-1.2632	9.9999	-0.3650	9.9999	0.2344	0.0046	-0.0170	0.0529	-3.6952	11.5000
97	45.49	0.11	-1.2489	9.9999	-0.3526	9.9999	0.2847	-0.0005	-0.0121	0.0454	24.1908	-90.8000
98	45.65	0.10	-1.2417	9.9999	-0.3529	9.9999	0.2842	-0.0014	-0.0110	0.0436	7.6501	-31.1429
99	45.82	0.11	-1.2629	9.9999	-0.3567	9.9999	0.2340	0.0030	-0.0132	0.0474	-4.3994	15.8000
100	46.04	0.11	-1.2417	9.9999	-0.3528	9.9999	0.2842	0.0019	-0.0100	0.0441	-5.2625	23.2105
101	46.21	0.10	-1.2217	9.9999	-0.3462	9.9999	0.2834	-0.0148	-0.0056	0.0341	0.3783	-2.3041
102	46.37	0.10	-1.2452	9.9999	-0.3532	9.9999	0.2836	-0.0156	-0.0078	0.0360	0.4936	-2.2785
103	46.55	0.10	-1.2488	9.9999	-0.3535	9.9999	0.2834	-0.0126	-0.0068	0.0354	0.5396	-2.8095
104	46.73	0.11	-1.2782	9.9999	-0.3637	9.9999	0.2845	0.0095	-0.0133	0.0611	-0.2687	1.2343
105	46.90	0.10	-1.2557	9.9999	-0.3496	9.9999	0.2831	-0.0253	-0.0041	0.0268	0.1620	-1.1383
106	47.08	0.11	-1.2442	9.9999	-0.3539	9.9999	0.2840	-0.0201	-0.0057	0.0314	0.2835	-1.5522
107	47.25	0.09	-1.2626	9.9999	-0.3577	9.9999	0.2343	-0.0105	-0.0001	0.0353	0.5009	-3.3619
108	47.43	0.08	-1.2555	9.9999	-0.3562	9.9999	0.2837	-0.0192	-0.0031	0.0320	0.2656	-1.6067
109	47.61	0.09	-1.2563	9.9999	-0.3556	9.9999	0.2830	-0.0318	-0.0027	0.0247	0.0849	-0.7767
110	47.78	0.08	-1.2676	9.9999	-0.3588	9.9999	0.2831	-0.0256	-0.0037	0.0266	0.1250	-0.8966
111	47.94	0.08	-1.2729	9.9999	-0.3613	9.9999	0.2838	-0.0273	-0.0051	0.0448	-0.1668	1.6410
112	48.12	0.07	-1.2446	9.9999	-0.3521	9.9999	0.2829	-0.0421	0.0004	0.0188	-0.0095	-0.4466
113	48.32	0.08	-1.2603	9.9999	-0.3630	9.9999	0.2834	0.0132	-0.0041	0.0375	-0.3106	2.8409
114	48.48	0.09	-1.2931	9.9999	-0.3672	9.9999	0.2835	0.0108	-0.0045	0.0377	-0.4106	3.4907
115	48.64	0.08	-1.2736	9.9999	-0.3606	9.9999	0.2827	-0.0216	-0.0021	0.0240	0.0972	-1.1389
116	48.82	0.08	-1.2711	9.9999	-0.3608	9.9999	0.2825	0.0135	-0.0029	0.0363	-0.2148	2.6869
117	48.98	0.08	-1.2675	9.9999	-0.3642	9.9999	0.2829	0.0147	-0.0028	0.0354	-0.1905	2.4082
118	49.17	0.08	-1.2663	9.9999	-0.3583	9.9999	0.2830	0.0295	0.0005	0.0378	0.0169	1.2814
119	49.33	0.08	-1.2683	9.9999	-0.3643	9.9999	0.2834	0.0232	-0.0035	0.0379	-0.1508	1.6336
120	49.49	0.08	-1.2684	9.9999	-0.3650	9.9999	0.2838	0.0138	-0.0017	0.0326	-0.1232	2.3623
121	49.67	0.08	-1.2614	9.9999	-0.3578	9.9999	0.2837	0.0107	0.0007	0.0294	0.4011	1.7605
122	49.88	0.10	-1.2426	9.9999	-0.3524	9.9999	0.2834	0.0078	0.0098	0.0255	1.2562	3.2692
123	50.03	0.09	-1.2600	9.9999	-0.3575	9.9999	0.2837	-0.0057	0.0130	0.0202	-1.7542	-3.5439
124	50.21	0.10	-1.2661	9.9999	-0.3586	9.9999	0.2836	-0.0010	0.0091	0.0218	-9.0988	-21.8000
125	50.38	0.10	-1.2763	9.9999	-0.3599	9.9999	0.2833	-0.0148	0.0097	0.0165	-0.6553	-1.1149
126	50.54	0.09	-1.2443	9.9999	-0.3515	9.9999	0.2825	-0.0276	0.0093	0.0115	-0.3417	-0.4137
127	50.71	0.08	-1.2431	9.9999	-0.3505	9.9999	0.2826	-0.0306	0.0096	0.0109	-0.3137	-0.3562
128	50.90	0.07	-1.2629	9.9999	-0.3574	9.9999	0.2830	-0.0304	0.0073	0.0096	-0.3059	-0.3224
129	51.08	0.09	-1.2512	9.9999	-0.3527	9.9999	0.2829	-0.0300	0.0037	0.0087	-0.2900	-0.2900
130	51.23	0.08	-1.2430	9.9999	-0.3507	9.9999	0.2824	-0.0352	0.0050	0.0090	-0.1420	-0.2557
131	51.40	0.06	-1.2381	9.9999	-0.3491	9.9999	0.2820	-0.0374	0.0044	0.0082	-0.1176	-0.2193
132	51.56	0.08	-1.2711	9.9999	-0.3591	9.9999	0.2825	-0.0381	0.0030	0.0084	-0.0945	-0.2205
133	51.74	0.08	-1.2805	9.9999	-0.3617	9.9999	0.2825	-0.0362	0.0021	0.0090	-0.0550	-0.2356
134	51.91	0.08	-1.2686	9.9999	-0.3583	9.9999	0.2824	-0.0423	0.0021	0.0083	-0.0496	-0.1962
135	52.09	0.08	-1.2628	9.9999	-0.3574	9.9999	0.2820	-0.0383	0.0021	0.0086	-0.0548	-0.2245
136	52.25	0.07	-1.2494	9.9999	-0.3543	9.9999	0.2819	-0.0424	0.0023	0.0098	-0.0788	-0.3356
137	52.43	0.08	-1.2559	9.9999	-0.3559	9.9999	0.2821	-0.0396	0.0014	0.0094	-0.0564	-0.3611
138	52.59	0.08	-1.2578	9.9999	-0.3562	9.9999	0.2819	-0.0419	0.0013	0.0097	-0.0558	-0.3667

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 53 1.10 1.7 45.0 BINORM 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CD3	XCPF3	YCPF3	CNF4	CH4	CD4	XCPF4	YCPF4
139	52.76	0.06	-1.3449	9.9999	-0.3793	9.9999	0.2820	-0.0371	0.0005	0.0056	-0.0135	-0.1563
140	52.92	0.00	-1.3519	9.9999	-0.3808	9.9999	0.2817	-0.0374	0.0009	0.0059	-0.0241	-0.1578
141	53.09	0.05	-1.3507	9.9999	-0.3809	9.9999	0.2820	-0.0352	0.0014	0.0047	-0.0398	-0.1335
142	53.26	0.07	-1.3460	9.9999	-0.3786	9.9999	0.2808	-0.0282	0.0008	0.0060	-0.0284	-0.2128
143	53.42	0.06	-1.3505	9.9999	-0.3820	9.9999	0.2811	-0.0324	0.0011	0.0053	-0.0339	-0.1636
144	53.59	0.06	-1.3601	9.9999	-0.3821	9.9999	0.2809	-0.0225	0.0003	0.0065	-0.0133	-0.2800
145	53.75	0.05	-1.3494	9.9999	-0.3787	9.9999	0.2806	-0.0078	0.0001	0.0093	-0.0128	-1.1923
146	53.93	0.06	-1.3510	9.9999	-0.3801	9.9999	0.2801	-0.0034	0.0004	0.0091	-0.0741	-1.0852
147	54.10	0.05	-1.3042	9.9999	-0.3665	9.9999	0.2807	-0.0104	0.0	0.0072	0.0	-0.6923
148	54.26	0.04	-1.3634	9.9999	-0.3682	9.9999	0.2802	-0.0105	0.0001	0.0072	-0.0095	-0.6857
149	54.43	0.04	-1.3735	9.9999	-0.3849	9.9999	0.2802	-0.0082	0.0005	0.0075	-0.0610	-0.9146
150	54.59	0.03	-1.3522	9.9999	-0.3790	9.9999	0.2803	-0.0117	0.0010	0.0045	-0.1367	-0.3646
151	54.74	0.04	-1.3606	9.9999	-0.3800	9.9999	0.2810	-0.0060	0.0011	0.0073	-0.1633	-1.2167
152	54.90	0.04	-1.3634	9.9999	-0.3804	9.9999	0.2804	-0.0060	0.0012	0.0068	-0.2000	-1.1333
153	55.05	0.03	-1.3695	9.9999	-0.3835	9.9999	0.2802	-0.0089	0.0014	0.0046	-0.1573	-0.5169
154	55.22	0.04	-1.3830	9.9999	-0.3882	9.9999	0.2807	-0.0077	0.0015	0.0048	-0.1948	-0.6234
155	55.38	0.05	-1.3677	9.9999	-0.3895	9.9999	0.2807	-0.0114	0.0011	0.0054	-0.0965	-0.2982
156	55.51	0.04	-1.3725	9.9999	-0.3904	9.9999	0.2804	-0.0140	0.0011	0.0052	-0.0706	-0.2286
157	55.66	0.05	-1.3937	9.9999	-0.3967	9.9999	0.2803	-0.0090	0.0015	0.0037	-0.1066	-0.4111
158	55.81	0.05	-1.4020	9.9999	-0.3930	9.9999	0.2803	-0.0139	0.0009	0.0027	-0.0647	-0.1942
159	55.93	0.03	-1.3925	9.9999	-0.3904	9.9999	0.2804	-0.0107	0.0011	0.0015	-0.0659	-0.0658
160	56.13	0.04	-1.3902	9.9999	-0.3883	9.9999	0.2793	-0.0179	0.0008	0.0009	-0.0447	-0.0503
161	56.33	0.05	-1.4162	9.9999	-0.3979	9.9999	0.2810	-0.0139	0.0009	0.0022	-0.0647	-0.1583
162	56.45	0.07	-1.3902	9.9999	-0.3878	9.9999	0.2790	-0.0104	0.0007	0.0010	-0.0427	-0.0610
163	56.58	0.03	-1.4201	9.9999	-0.4007	9.9999	0.2800	-0.0140	0.0010	0.0017	-0.0714	-0.1214
164	56.79	0.00	-1.4293	9.9999	-0.4006	9.9999	0.2804	-0.0177	0.0006	-0.0002	-0.0339	0.0113
165	56.94	0.01	-1.4293	9.9999	-0.4003	9.9999	0.2801	-0.0190	0.0006	0.0002	-0.0316	-0.0105
166	57.11	0.03	-1.4317	9.9999	-0.4010	9.9999	0.2801	-0.0168	0.0002	-0.0003	-0.0106	0.0160
167	57.23	0.10	-1.4151	9.9999	-0.3954	9.9999	0.2794	-0.0188	0.0005	-0.0008	-0.0160	0.0426
168	57.40	0.03	-1.4400	9.9999	-0.4030	9.9999	0.2799	-0.0143	0.0013	-0.0012	-0.0909	0.0839
169	57.56	0.06	-1.4196	9.9999	-0.3972	9.9999	0.2796	-0.0195	0.0011	-0.0019	-0.0710	0.1226
170	57.71	0.05	-1.4201	9.9999	-0.4007	9.9999	0.2806	-0.0067	0.0010	-0.0001	-0.2088	0.0149
171	57.88	0.02	-1.3996	9.9999	-0.3924	9.9999	0.2797	-0.0071	0.0024	-0.0009	-0.3360	0.1268
172	58.03	0.04	-1.4234	9.9999	-0.3980	9.9999	0.2796	-0.0071	0.0023	0.0	-0.3634	0.0
173	58.15	-0.02	-1.3818	9.9999	-0.3800	9.9999	0.2795	-0.0027	0.0036	-0.0008	-1.3352	0.2903
174	58.30	0.00	-1.3771	9.9999	-0.3847	9.9999	0.2794	-0.0052	0.0033	-0.0010	-0.6345	0.3077
175	58.40	0.01	-1.4222	9.9999	-0.3984	9.9999	0.2801	-0.0108	0.0017	-0.0009	-0.1604	0.0849
176	58.60	0.10	-1.4080	9.9999	-0.3944	9.9999	0.2801	-0.0042	0.0020	0.0007	-0.4761	-0.1667
177	58.71	0.03	-1.3087	9.9999	-0.3653	9.9999	0.2800	-0.0069	0.0036	-0.0026	-0.5507	0.3768
178	58.77	0.03	-1.4241	9.9999	-0.3994	9.9999	0.2805	-0.0122	0.0019	-0.0024	-0.1557	0.1961
179	58.77	0.01	-1.4145	9.9999	-0.3967	9.9999	0.2805	-0.0072	0.0024	-0.0004	-0.3333	0.0556
180	58.79	0.03	-1.3610	9.9999	-0.3784	9.9999	0.2760	-0.0053	0.0034	-0.0021	-0.6414	0.3962
181	58.78	0.02	-1.4171	9.9999	-0.3933	9.9999	0.2789	-0.0090	0.0015	-0.0009	-0.1444	0.1000
182	58.78	0.04	-1.4305	9.9999	-0.4030	9.9999	0.2792	-0.0109	0.0020	-0.0026	-0.1835	0.2569
183	58.78	0.02	-1.4361	9.9999	-0.4010	9.9999	0.2792	-0.0119	0.0016	-0.0030	-0.1344	0.2521
184	58.79	-0.02	-1.4329	9.9999	-0.4001	9.9999	0.2795	-0.0094	0.0016	-0.0026	-0.1915	0.2979

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 24 MACH 1.10 RATIO-6 1.7 PHI 0.0 CONF 81NOF14 L 0.0 DELI 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAO	CAF	ACP
1	-5.75	0.03	-0.7657	1.5160	0.1405	-0.2030	-0.0054	0.4812	0.2100	0.2051	-1.9825
2	-5.73	0.03	-0.7351	1.4416	0.1001	-0.2590	-0.0034	0.4812	0.2153	0.2058	-1.9612
3	-5.73	0.03	-0.7450	1.4632	0.1101	-0.2100	-0.0034	0.4813	0.2153	0.2059	-1.9620
4	-5.75	0.03	-0.6933	1.3699	0.1111	-0.1802	-0.0034	0.4887	0.2143	0.2743	-1.9760
5	-3.90	0.03	-0.4365	0.9178	0.1191	-0.2008	-0.0045	0.4955	0.2085	0.2871	-2.1025
6	-1.99	0.03	-0.2244	0.5277	0.1001	-0.2230	-0.0040	0.5025	0.2075	0.2950	-2.3514
7	-0.03	0.03	0.0227	0.1560	0.1567	-0.2029	-0.0032	0.5084	0.2121	0.2963	0.6044
8	1.92	0.03	0.2240	-0.1912	0.0743	-0.2017	-0.0027	0.5201	0.2145	0.3056	-0.8533
9	3.90	0.02	0.4823	-0.6734	-0.0095	-0.0854	-0.0023	0.5252	0.2224	0.3028	-1.3973
10	5.80	0.04	0.7481	-1.2156	0.1939	-0.3150	-0.0012	0.5308	0.2274	0.3014	-1.6250
11	7.89	0.03	1.1269	-1.9526	0.0892	-0.1000	-0.0114	0.5488	0.2529	0.2929	-1.7242
12	9.83	0.02	1.4129	-2.6401	0.0047	-0.0539	-0.0112	0.5500	0.2720	0.2779	-1.8085
13	11.88	0.02	1.8476	-3.5122	0.0382	-0.1034	-0.0048	0.5570	0.2906	0.2664	-1.9010
14	13.87	0.02	2.2381	-4.2958	0.0405	-0.1238	0.0009	0.5632	0.3028	0.2604	-1.9194
15	15.93	0.03	2.6684	-5.0928	0.0740	-0.0356	-0.0026	0.5684	0.3228	0.2456	-1.8350
16	18.00	0.02	3.0754	-5.8781	-0.0112	0.0540	-0.0071	0.5747	0.3420	0.2307	-1.7499
17	20.06	0.03	3.5481	-6.7954	0.0811	-0.1279	-0.0104	0.5761	0.3661	0.2100	-1.6328
18	22.09	0.01	4.1104	-8.0552	-0.0292	0.1508	-0.0250	0.5784	0.3860	0.1924	-1.4671
19	24.19	0.04	4.7203	-9.3774	0.2833	-0.6743	0.0116	0.5835	0.3836	0.1799	-1.2875
20	26.26	0.05	5.2269	-10.5207	0.4540	-1.0321	0.0419	0.5978	0.3920	0.1856	-1.1334
21	28.47	0.07	6.0414	-12.1989	0.6572	-1.2324	0.0937	0.5495	0.4066	0.1429	-1.0241
22	28.56	0.09	6.0826	-12.2042	0.8233	-1.4033	0.1051	0.5369	0.4067	0.1302	-1.0200
23	23.95	0.08	6.0263	-12.1041	0.7182	-1.4855	0.1047	0.5627	0.4051	0.1576	-1.0262
24	28.89	0.07	6.1545	-12.3355	0.6214	-1.2261	0.1100	0.5523	0.4104	0.1419	-1.0294
25	29.15	0.08	6.2138	-12.3245	0.5228	-0.7819	0.0383	0.5528	0.4121	0.1407	-1.0178
26	29.31	0.07	6.2443	-12.2771	0.0004	-1.0783	0.0786	0.5436	0.4114	0.1322	-0.9817
27	29.82	0.06	6.2103	-12.2771	0.5560	-0.6527	0.0786	0.5476	0.4116	0.1360	-0.9633
28	30.10	0.08	6.2842	-12.3907	0.7001	-1.4234	0.1121	0.5002	0.4145	0.1457	-0.9715
29	30.39	0.07	6.0534	-12.4775	0.0081	-1.0012	0.1003	0.5502	0.4145	0.1417	-0.9690
30	30.08	0.06	6.0081	-12.4140	0.5304	-0.7149	0.0843	0.5549	0.4228	0.1371	-0.9312
31	30.93	0.06	7.0149	-12.6955	0.5479	-0.9308	0.1020	0.5366	0.4266	0.1320	-0.9551
32	31.22	0.06	7.1171	-12.8777	0.6922	-0.8763	0.0757	0.5311	0.4263	0.1248	-0.9242
33	31.51	0.06	7.1993	-13.0238	0.4342	-0.4404	0.0045	0.5576	0.4265	0.1311	-0.9200
34	31.76	0.06	7.2038	-13.0062	0.4376	-0.5420	0.0051	0.5701	0.4317	0.1384	-0.9018
35	32.06	0.06	7.3772	-13.0272	0.4083	-0.4403	0.0443	0.5506	0.4338	0.1268	-0.8959
36	32.32	0.06	7.4715	-13.0576	0.4079	-0.4587	0.0496	0.5666	0.4376	0.1292	-0.8963
37	32.60	0.04	7.0010	-12.7962	0.2871	-0.2417	0.0490	0.5678	0.4350	0.1296	-0.8941
38	32.88	0.02	7.1713	-13.0823	0.1933	-0.0772	0.0498	0.5624	0.4392	0.1232	-0.8809
39	33.13	0.03	7.1547	-13.0332	0.2791	0.0024	0.0224	0.5656	0.4361	0.1295	-0.8812
40	33.40	0.02	7.2366	-13.1760	0.1640	0.2466	0.0225	0.5530	0.4358	0.1222	-0.8767
41	33.67	0.01	8.1330	-14.7483	-0.0283	0.6849	0.0038	0.5530	0.4310	0.1220	-0.8664
42	33.92	0.02	8.1657	-14.8044	0.1298	0.4603	0.0118	0.5564	0.4104	0.0960	-0.8578
43	34.18	0.03	8.3177	-14.1221	0.1222	0.7543	-0.0154	0.5197	0.4100	0.1097	-0.8563
44	34.42	0.02	8.4156	-14.1300	-0.0464	0.9891	-0.0310	0.5130	0.4133	0.0975	-0.8472
45	34.67	0.01	8.5252	-14.1342	-0.0411	0.8700	-0.0307	0.5008	0.4014	0.0994	-0.8368
46	34.94	0.02	8.6133	-14.1497	-0.0407	0.9893	-0.0201	0.4969	0.3941	0.1048	-0.8301

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RATIO-B	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	54	1.10	1.7	0.0	B1AOF14	0.0	0	0	0	0	UNKNOWN

PCINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	35.16	0.01	9.0845	-7.2961	-0.0662	1.0459	-0.0308	0.5027	0.4031	0.0996	-0.8401
48	35.41	0.00	9.0872	-7.2492	-0.0702	1.1950	-0.0413	0.4773	0.3872	0.0901	-0.8225
49	35.66	0.02	9.0949	-7.2658	-0.0266	0.9334	-0.0435	0.4807	0.3906	0.0900	-0.8159
50	35.92	0.00	9.0814	-7.2883	-0.1713	1.2052	-0.0462	0.5027	0.3981	0.1046	-0.8245
51	36.16	-0.00	9.1153	-7.2661	-0.2670	1.3124	-0.0469	0.4826	0.3924	0.0901	-0.7975
52	36.40	-0.01	9.1907	-7.3565	-0.4323	1.4403	-0.0397	0.4813	0.3921	0.0855	-0.7999
53	36.63	-0.01	9.2595	-7.4036	-0.2636	1.2128	-0.0395	0.4841	0.3903	0.0937	-0.8082
54	36.85	0.00	9.3287	-7.3509	-0.1974	1.1320	-0.0496	0.4880	0.3813	0.0867	-0.7880
55	37.11	-0.01	9.3971	-7.4455	-0.2674	1.0842	-0.0485	0.4574	0.3844	0.0730	-0.7807
56	37.35	-0.00	9.3216	-7.4713	-0.4432	1.1107	-0.0540	0.4816	0.3831	0.0985	-0.7847
57	37.58	0.00	9.0176	-7.3580	-0.1554	1.0091	-0.0644	0.4705	0.3782	0.0923	-0.7858
58	37.82	-0.02	9.0002	-7.5503	-0.4963	1.1815	-0.0464	0.4015	0.3765	0.0850	-0.7816
59	38.06	-0.01	9.7611	-7.3302	-0.2548	1.1112	-0.0690	0.4507	0.3792	0.0715	-0.7705
60	38.28	-0.01	9.8624	-7.3386	-0.4932	1.0325	-0.0365	0.4626	0.3861	0.0765	-0.7745
61	38.53	-0.03	10.0231	-7.1469	-0.3366	0.8356	-0.0363	0.4669	0.3829	0.0840	-0.7729
62	38.77	-0.02	10.0811	-7.1006	-0.1727	0.7294	-0.0453	0.4546	0.3857	0.0689	-0.7639
63	39.03	-0.00	10.0820	-7.0487	-0.0029	0.6095	-0.0452	0.4480	0.3826	0.0654	-0.7586
64	39.23	-0.02	10.2510	-7.0291	-0.2193	0.6972	-0.0552	0.4620	0.3874	0.0746	-0.7637
65	39.45	-0.01	10.2908	-7.1751	-0.1047	0.7420	-0.0341	0.4573	0.3829	0.0744	-0.7551
66	39.67	0.00	10.3695	-7.0745	-0.0503	0.5730	-0.0385	0.4484	0.3777	0.0707	-0.7401
67	39.90	-0.02	10.4707	-7.0816	-0.2534	0.6527	-0.0114	0.4279	0.3584	0.0695	-0.7342
68	40.12	0.01	10.3853	-7.0541	0.0757	0.5060	-0.0272	0.4341	0.3715	0.0626	-0.7420
69	40.32	-0.02	10.5578	-7.1378	-0.1685	0.5924	-0.0378	0.4543	0.3701	0.0842	-0.7490
70	40.54	-0.01	10.7016	-7.1422	-0.1491	0.7073	-0.0112	0.4225	0.3612	0.0613	-0.7422
71	40.76	-0.00	10.8333	-8.0175	0.0245	0.3911	0.0009	0.4217	0.3660	0.0557	-0.7401
72	40.95	0.00	10.8306	-7.8405	-0.0426	0.4264	-0.0104	0.4120	0.3515	0.0605	-0.7245
73	41.18	-0.01	11.0379	-8.1226	-0.0305	0.4241	0.0016	0.4496	0.3691	0.0805	-0.7359
74	41.38	-0.01	11.0263	-8.0369	-0.1280	0.7351	0.0005	0.4177	0.3621	0.0556	-0.7334
75	41.57	-0.01	11.1191	-8.2085	-0.0793	0.4120	0.0128	0.4024	0.3597	0.1028	-0.7383
76	41.80	-0.00	11.1618	-7.8703	-0.0030	0.4363	0.0076	0.3994	0.3396	0.0598	-0.7058
77	41.99	0.01	11.0390	-7.8992	0.0322	0.5465	0.0120	0.3876	0.3390	0.0486	-0.7123
78	42.20	0.00	11.2654	-7.9823	-0.0679	0.5743	-0.0055	0.4023	0.3429	0.0599	-0.7086
79	42.39	0.02	11.2776	-7.8668	0.0050	0.6691	-0.0196	0.3817	0.3503	0.0314	-0.6993
80	42.60	0.01	11.4482	-8.0694	-0.0508	0.4032	-0.0023	0.3818	0.3344	0.0472	-0.7049
81	42.79	0.00	11.4612	-8.1240	-0.1243	0.5003	-0.0030	0.3842	0.3242	0.0600	-0.7093
82	42.98	-0.02	11.5721	-8.0437	-0.1131	0.3508	0.0145	0.3578	0.3357	0.0621	-0.7210
83	43.17	-0.00	11.6488	-8.1542	0.0907	0.1205	-0.0059	0.3756	0.3277	0.0479	-0.7034
84	43.35	-0.01	11.7306	-8.1283	-0.0649	0.6365	-0.0279	0.3402	0.3142	0.0260	-0.6929
85	43.53	-0.01	11.8268	-8.1756	-0.0014	0.3509	-0.0380	0.3622	0.3252	0.0370	-0.6912
86	43.71	-0.01	11.8802	-8.2160	-0.1052	0.7436	-0.0331	0.3596	0.3269	0.0327	-0.6916
87	43.90	-0.02	11.9755	-8.2903	-0.1363	0.5019	-0.0214	0.3601	0.3210	0.0391	-0.6920
88	44.09	-0.01	12.0735	-8.3870	0.0149	-0.0230	-0.0003	0.3547	0.3211	0.0336	-0.6946
89	44.28	-0.00	12.0903	-8.2821	-0.0231	0.3419	-0.0309	0.3407	0.3148	0.0259	-0.6850
90	44.44	-0.01	12.2448	-8.3028	-0.0369	0.2972	-0.0250	0.3682	0.3024	0.0658	-0.6955
91	44.62	-0.00	12.1957	-8.1424	-0.0225	0.5722	-0.0635	0.3135	0.3083	0.0052	-0.6717
92	44.79	0.00	12.2121	-8.3842	0.0062	0.0201	-0.0349	0.3371	0.3075	0.0296	-0.6866

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 54 1.10 1.7 0.0 BLANK14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.98	0.00	12.2729	-8.2731	0.0095	0.1409	-0.0458	0.3141	0.3111	0.0030	-0.6741
94	45.18	-0.00	12.3396	-8.2852	0.0072	0.0471	-0.0291	0.3249	0.3052	0.0197	-0.6714
95	45.37	-0.00	12.4818	-8.5573	0.0526	0.0409	-0.0180	0.3319	0.3097	0.0222	-0.6840
96	45.55	0.00	12.4611	-8.2272	0.0088	-0.1251	-0.0226	0.3038	0.3020	0.0018	-0.6588
97	45.72	-0.01	12.6005	-8.5177	-0.0558	0.1430	-0.0176	0.3140	0.2988	0.0152	-0.6598
98	45.91	-0.01	12.6406	-8.3758	0.0022	-0.0451	-0.0116	0.2961	0.2914	0.0047	-0.6621
99	46.10	0.01	12.7009	-8.2334	0.1395	-0.2211	-0.0002	0.2934	0.2925	0.0009	-0.6483
100	46.27	0.00	12.7938	-8.3690	0.0497	-0.1364	-0.0108	0.2991	0.2984	0.0007	-0.6541
101	46.44	0.00	12.8020	-8.2641	0.1648	-0.0651	-0.0160	0.3056	0.3025	0.0031	-0.6415
102	46.61	0.01	12.8139	-8.1963	0.0832	0.1867	-0.0333	0.3163	0.3029	0.0094	-0.6396
103	46.78	0.01	12.8540	-8.0548	0.0963	0.2130	-0.0440	0.3224	0.3190	0.0034	-0.6266
104	46.97	-0.01	12.9415	-7.9164	-0.0269	0.2019	-0.0326	0.3014	0.3137	-0.0123	-0.6113
105	47.14	-0.00	12.9131	-7.9302	-0.0099	0.3717	-0.0329	0.3050	0.3237	-0.0187	-0.5754
106	47.30	-0.01	12.8407	-7.8028	-0.0491	0.3930	-0.0306	0.3096	0.3177	-0.0081	-0.5750
107	47.49	-0.00	12.9023	-7.8434	-0.0158	0.4050	-0.0332	0.3041	0.3180	-0.0139	-0.5747
108	47.65	0.00	12.9748	-7.8808	0.0052	0.2729	-0.0379	0.3019	0.3246	-0.0227	-0.5768
109	47.82	-0.01	13.1223	-7.8403	-0.0536	0.2280	-0.0273	0.2821	0.3136	-0.0304	-0.5670
110	48.00	-0.02	13.2612	-7.8424	-0.2105	0.7053	-0.0219	0.2581	0.3210	-0.0628	-0.5613
111	48.19	-0.02	13.3047	-7.8474	-0.2117	0.9184	-0.0119	0.2783	0.3254	-0.0470	-0.5748
112	48.36	-0.02	13.3457	-7.8017	-0.1222	0.8515	-0.0163	0.2961	0.3338	-0.0357	-0.5741
113	48.52	-0.01	13.4982	-7.8453	-0.0555	0.7333	-0.0109	0.2973	0.3556	-0.0585	-0.5849
114	48.71	-0.02	13.6307	-7.8262	-0.2334	1.1969	0.0098	0.3196	0.3626	-0.0430	-0.5888
115	48.88	-0.02	13.5013	-7.3554	-0.1769	1.1764	0.0149	0.3213	0.3700	-0.0487	-0.5784
116	49.04	-0.00	13.6652	-7.9869	-0.0433	1.0990	0.0260	0.3401	0.3831	-0.0340	-0.5845
117	49.23	-0.01	13.6734	-7.8072	-0.1659	1.1058	0.0262	0.3178	0.3745	-0.0567	-0.5710
118	49.38	-0.00	13.8511	-7.9780	-0.0067	0.9100	0.0324	0.3295	0.3802	-0.0507	-0.5552
119	49.55	0.01	13.8203	-7.8884	0.1240	0.7006	0.0382	0.3246	0.3633	-0.0387	-0.5351
120	49.73	0.01	13.7753	-7.9335	0.0402	0.7898	0.0308	0.3228	0.3591	-0.0363	-0.5411
121	49.89	0.01	13.7006	-7.8701	0.0248	1.0770	0.0425	0.2948	0.3360	-0.0412	-0.5051
122	50.07	0.01	13.7057	-7.8428	0.0492	1.1030	0.0431	0.2856	0.3415	-0.0558	-0.4993
123	50.24	0.02	13.8329	-7.8223	0.0704	1.0857	0.0323	0.2781	0.3348	-0.0566	-0.4858
124	50.42	0.03	13.8016	-7.8473	0.2183	1.0335	0.0376	0.2904	0.3380	-0.0476	-0.4902
125	50.58	0.01	13.8143	-7.8263	0.1184	1.1075	0.0433	0.3019	0.3498	-0.0479	-0.5086
126	50.74	0.01	13.7531	-7.8314	0.1056	1.0806	0.0434	0.2868	0.3428	-0.0540	-0.4967
127	50.94	0.00	13.8771	-7.8422	0.0533	1.1042	0.0379	0.3016	0.3534	-0.0518	-0.5075
128	51.08	0.03	13.7470	-7.8353	0.2349	0.9025	0.0331	0.2883	0.3470	-0.0585	-0.4827
129	51.26	0.01	13.8422	-7.9322	0.1579	0.9747	0.0331	0.2804	0.3502	-0.0697	-0.5008
130	51.43	0.02	13.8214	-7.8423	0.2681	0.8717	0.0281	0.2771	0.3463	-0.0691	-0.4847
131	51.58	0.02	13.8527	-7.8158	0.2887	0.8230	0.0338	0.2846	0.3445	-0.0598	-0.4703
132	51.77	0.02	13.9078	-7.7912	0.3515	0.6950	0.0345	0.2662	0.3344	-0.0681	-0.4626
133	51.93	0.02	14.0194	-7.7609	0.2525	0.7888	0.0344	0.2676	0.3400	-0.0723	-0.4823
134	52.11	0.04	14.2094	-7.7238	0.4305	0.6609	0.0299	0.2584	0.3330	-0.0745	-0.4732
135	52.28	0.02	14.1488	-7.4985	0.3043	0.6037	0.0301	0.2513	0.3297	-0.0783	-0.4593
136	52.45	0.03	14.2906	-7.5454	0.3403	0.5079	0.0254	0.2553	0.3396	-0.0844	-0.4580
137	52.60	0.04	14.0578	-7.2531	0.4515	0.5670	0.0244	0.2363	0.3377	-0.1014	-0.4446
138	52.78	0.03	14.2421	-7.4006	0.4101	0.4501	0.0258	0.2396	0.3412	-0.1014	-0.4538

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 54 1.10 1.7 0.0 BARUFIA 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.94	0.04	14.2648	-0.3028	0.4390	0.5634	0.0252	0.2432	0.3523	-0.0890	-0.4552
140	53.10	0.03	14.2304	-0.3152	0.4046	0.5643	0.0252	0.2436	0.3515	-0.0876	-0.4480
141	53.27	0.04	14.3048	-0.3579	0.4353	0.4139	0.0259	0.2000	0.3577	-0.0977	-0.4514
142	53.42	0.02	14.1038	-0.0928	0.3143	0.3666	0.0259	0.2435	0.3469	-0.1054	-0.4320
143	53.60	0.03	14.2995	-0.3427	0.4308	0.2525	0.0200	0.2343	0.3446	-0.1103	-0.4436
144	53.77	0.03	14.4060	-0.0431	0.3043	0.3008	0.0322	0.2038	0.3701	-0.1043	-0.4591
145	53.93	0.03	14.4484	-0.7167	0.3630	0.4005	0.0319	0.2522	0.3601	-0.1139	-0.4650
146	54.11	0.02	14.6382	-0.9030	0.3612	0.3629	0.0326	0.2445	0.3546	-0.1095	-0.4717
147	54.28	0.01	14.5447	-0.8731	0.3117	0.3016	0.0272	0.2493	0.3519	-0.1026	-0.4724
148	54.41	0.03	14.5200	-0.8418	0.3824	0.3231	0.0379	0.2542	0.3501	-0.0958	-0.4710
149	54.56	0.01	14.4343	-0.7272	0.2442	0.3448	0.0378	0.2209	0.3505	-0.1216	-0.4661
150	54.72	0.00	14.4031	-0.7423	0.2795	0.3424	0.0370	0.2216	0.3481	-0.1265	-0.4641
151	54.88	-0.01	14.5292	-0.9075	0.1930	0.2409	0.0331	0.2435	0.3500	-0.1131	-0.4754
152	55.05	0.00	14.5532	-0.8817	0.2900	0.2187	0.0330	0.2371	0.3507	-0.1230	-0.4729
153	55.16	-0.01	14.3581	-0.8001	0.1792	0.2011	0.0327	0.2329	0.3479	-0.1155	-0.4778
154	55.30	-0.02	14.0243	-7.0234	0.1490	0.2720	0.0333	0.2307	0.3543	-0.1236	-0.4804
155	55.50	-0.01	14.5346	-7.0230	0.2530	0.2791	0.0362	0.2338	0.3494	-0.1156	-0.4832
156	55.64	-0.02	14.5132	-7.1002	0.1209	0.1967	0.0327	0.2353	0.3440	-0.1087	-0.4897
157	55.82	-0.02	14.5368	-7.0800	0.2009	0.1613	0.0368	0.2247	0.3432	-0.1185	-0.4870
158	55.99	-0.00	14.7180	-7.2214	0.2070	0.2670	0.0307	0.2308	0.3474	-0.1166	-0.4906
159	56.15	-0.02	14.7103	-7.2058	0.1777	0.1632	0.0395	0.2204	0.3428	-0.1164	-0.4939
160	56.31	-0.03	14.0332	-7.2524	0.1108	-0.0104	0.0343	0.2048	0.3442	-0.1394	-0.4958
161	56.45	-0.01	14.3059	-7.0130	0.2204	0.0038	0.0366	0.2164	0.3324	-0.1160	-0.4812
162	56.63	-0.03	14.0024	-7.1802	0.0953	0.0881	0.0396	0.2027	0.3430	-0.1423	-0.4917
163	56.80	-0.00	14.0422	-7.3008	0.3239	0.0305	0.0399	0.2100	0.3575	-0.1475	-0.4973
164	56.98	-0.02	15.1543	-7.0115	0.2494	-0.2651	0.0421	0.1947	0.3657	-0.1710	-0.5021
165	57.12	0.00	14.8508	-7.2305	0.4096	-0.1097	0.0456	0.1838	0.3582	-0.1944	-0.4866
166	57.30	-0.04	15.2755	-7.9777	0.1038	-0.5595	0.0371	0.2174	0.3929	-0.1755	-0.5223
167	57.44	-0.07	15.1077	-7.7991	-0.1020	-0.7213	0.0367	0.2063	0.3955	-0.1892	-0.5142
168	57.59	-0.05	15.0976	-7.0514	0.0518	-0.4387	0.0305	0.2108	0.3833	-0.1865	-0.5068
169	57.74	-0.04	15.1017	-7.7064	0.0806	-0.3755	0.0419	0.1726	0.3916	-0.2190	-0.5103
170	57.88	-0.05	14.9529	-7.4056	0.1604	-0.3387	0.0415	0.1736	0.3830	-0.2094	-0.4999
171	58.01	-0.08	14.9088	-7.3579	-0.3230	-0.1562	0.0334	0.1969	0.3805	-0.1836	-0.5042
172	58.16	-0.04	15.0701	-7.0065	0.0271	-0.1780	0.0410	0.1679	0.3740	-0.2061	-0.5079
173	58.31	0.02	15.0457	-7.7109	0.6105	-0.1712	0.0316	0.1558	0.3805	-0.2247	-0.5125
174	58.47	0.03	15.1769	-7.9088	0.6903	-0.1331	0.0310	0.1565	0.3701	-0.2136	-0.5253
175	58.60	0.03	15.0336	-7.8196	0.6705	-0.1503	0.0301	0.1303	0.3912	-0.2549	-0.5201
176	58.76	-0.07	15.2732	-8.2767	-0.0673	-0.0390	0.0410	0.1746	0.3952	-0.2206	-0.5420
177	58.81	-0.07	15.2250	-8.1318	-0.2163	-0.0057	0.0413	0.1646	0.3956	-0.2310	-0.5342
178	58.84	-0.06	15.2997	-8.1476	-0.2492	0.1303	0.0407	0.1601	0.3873	-0.2272	-0.5503
179	58.79	-0.08	14.9650	-7.8756	-0.1930	-0.2583	0.0410	0.1508	0.3840	-0.2134	-0.5129

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-S PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 54 1.10 1.7 0.0 BIWOF14 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.73	0.03	-0.0118	0.0004	0.0111	-0.0339	-0.9607	-0.2154	0.0076	-0.1071	-0.0355	0.4881
2	-5.73	0.03	-0.0106	0.0002	0.0127	-0.0185	-1.1759	-0.2194	0.0076	-0.1067	-0.0346	0.4863
3	-5.73	0.03	-0.0142	0.0005	0.0114	-0.0332	-0.8028	-0.2193	0.0071	-0.1062	-0.0324	0.4843
4	-5.73	0.03	-0.0117	0.0005	0.0102	-0.0427	-0.6718	-0.1967	0.0072	-0.0978	-0.0366	0.4972
5	-3.93	0.03	-0.0094	0.0003	0.0099	-0.0332	-1.0532	-0.1059	0.0062	-0.0636	-0.0585	0.6066
6	-1.94	0.03	-0.0089	0.0000	0.0087	-0.0809	-1.2609	-0.0250	0.0039	-0.0329	-0.1560	1.3160
7	-0.03	0.03	-0.0033	0.0002	0.0001	-0.0006	-2.4545	0.0535	0.0010	-0.0020	0.0187	-0.0374
8	1.92	0.03	-0.0031	0.0002	0.0001	-0.0645	-1.9077	0.1281	-0.0002	0.0243	-0.0016	0.1897
9	3.90	0.02	-0.0065	0.0003	0.0031	-0.0353	-0.3047	0.2090	-0.0022	0.0485	-0.0105	0.2321
10	5.80	0.04	-0.0137	-0.0005	0.0083	0.0365	-0.0058	0.3089	-0.0041	0.0823	-0.0133	0.2664
11	7.89	0.03	-0.0320	0.0001	0.0060	-0.0051	-0.1875	0.4112	-0.0001	0.1173	-0.0148	0.2853
12	9.83	0.02	-0.0467	-0.0016	0.0055	0.0343	-0.1178	0.4998	-0.0031	0.1516	-0.0182	0.3033
13	11.88	0.02	-0.0434	-0.0014	0.0064	0.0323	-0.1475	0.6135	-0.0074	0.1791	-0.0153	0.2919
14	13.87	0.02	-0.0156	-0.0044	0.0097	0.2820	-0.6218	0.6866	-0.0087	0.1994	-0.0127	0.2904
15	15.93	0.03	-0.0452	-0.0047	0.0065	0.1040	-0.1436	0.7719	-0.0060	0.2213	-0.0078	0.2807
16	18.00	0.02	-0.0526	0.0005	-0.0010	-0.0096	0.0192	0.8700	-0.0044	0.2472	-0.0051	0.2841
17	20.06	0.03	-0.0567	0.0007	0.0	-0.0123	0.0	0.9548	-0.0034	0.2636	-0.0036	0.2820
18	22.09	0.01	-0.0589	0.0036	-0.0116	-0.0506	0.1881	0.9768	-0.0045	0.2739	-0.0046	0.2804
19	24.19	0.04	0.0064	0.0001	0.0225	0.1406	3.5156	1.0334	-0.0072	0.2852	-0.0070	0.2768
20	26.26	0.05	0.1160	-0.0072	0.0015	-0.0010	0.5212	1.0231	-0.0108	0.2906	-0.0100	0.2759
21	28.47	0.07	0.2076	-0.0050	0.0106	-0.0241	0.4364	1.0704	-0.0206	0.2913	-0.0192	0.2721
22	28.50	0.09	0.2095	-0.0051	0.0102	-0.0243	0.4401	1.0695	-0.0202	0.2891	-0.0190	0.2716
23	26.55	0.08	0.2423	-0.0058	0.0107	-0.0239	0.4260	1.0700	-0.0202	0.2920	-0.0187	0.2707
24	28.89	0.07	0.2469	-0.0052	0.0073	-0.0229	0.4288	1.0827	-0.0203	0.2908	-0.0187	0.2686
25	29.15	0.06	0.2147	-0.0038	0.0109	-0.0177	0.4234	1.0793	-0.0195	0.2884	-0.0181	0.2672
26	29.31	0.07	0.1708	0.0025	0.0166	0.0140	0.4284	1.0792	-0.0187	0.2875	-0.0173	0.2664
27	29.82	0.06	0.1591	0.0051	0.0003	0.0307	0.4335	1.0815	-0.0180	0.2882	-0.0166	0.2665
28	30.10	0.08	0.2326	0.0037	0.0033	0.0159	0.4011	1.1039	-0.0187	0.2930	-0.0151	0.2654
29	30.39	0.07	0.2644	0.0032	0.1346	0.0121	0.3964	1.1034	-0.0184	0.2936	-0.0167	0.2661
30	30.68	0.06	0.1740	0.0074	0.0702	0.0425	0.4034	1.1241	-0.0154	0.2968	-0.0137	0.2656
31	30.95	0.06	0.2191	0.0048	0.0886	0.0219	0.4044	1.1243	-0.0169	0.3000	-0.0150	0.2668
32	31.22	0.08	0.1803	0.0066	0.0750	0.0377	0.4193	1.1294	-0.0166	0.3043	-0.0165	0.2694
33	31.51	0.06	0.1102	0.0070	0.0300	0.0633	0.5062	1.1420	-0.0153	0.3032	-0.0136	0.2655
34	31.78	0.06	0.1561	0.0049	0.0697	0.0313	0.4448	1.1514	-0.0169	0.3067	-0.0147	0.2664
35	32.06	0.06	0.0928	0.0048	0.0497	0.0517	0.5356	1.1484	-0.0160	0.3052	-0.0157	0.2658
36	32.32	0.06	0.1393	0.0035	0.0807	0.0259	0.4496	1.1512	-0.0201	0.3073	-0.0175	0.2669
37	32.60	0.04	0.0761	0.0008	0.0475	0.0108	0.6484	1.1624	-0.0194	0.3083	-0.0167	0.2652
38	32.88	0.02	0.0610	-0.0017	0.0449	-0.0279	0.7295	1.1477	-0.0235	0.3027	-0.0179	0.2637
39	33.13	0.03	0.0153	0.0001	0.0240	0.0005	1.5086	1.1647	-0.0188	0.3082	-0.0161	0.2646
40	33.40	0.02	-0.0167	-0.0022	0.0153	0.1176	-0.8269	1.1692	-0.0238	0.3108	-0.0176	0.2658
41	33.67	0.01	-0.0028	-0.0021	0.0039	0.0494	-0.0021	1.1670	-0.0196	0.3114	-0.0168	0.2664
42	33.92	0.02	-0.0038	-0.0034	0.0011	0.0317	-0.0167	1.1593	-0.0171	0.3071	-0.0165	0.2650
43	34.19	0.03	-0.1204	-0.0022	-0.0210	0.0183	0.1744	1.1762	-0.0130	0.3116	-0.0153	0.2649
44	34.42	0.02	-0.1240	-0.0022	-0.0234	0.0177	0.1678	1.1711	-0.0170	0.3086	-0.0145	0.2637
45	34.67	0.01	-0.1206	-0.0012	-0.0272	0.0065	0.2146	1.1660	-0.0173	0.3140	-0.0146	0.2648
46	34.94	0.02	-0.1215	-0.0011	-0.0223	0.0091	0.1835	1.1785	-0.0163	0.3065	-0.0158	0.2618

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 34 MACH 1.10 1.7 RATIO-6 PHI 0.0 CONF BIWOFIN L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CH1	CB1	XCPF1	YCPF1	CNF2	CH2	CB2	XCPF2	YCPF2
47	35.18	0.01	-0.1249	0.0002	-0.0239	-0.0016	0.1914	1.1859	-0.0163	0.3121	-0.0137	0.2632
48	35.41	0.00	-0.1241	0.0	-0.0372	0.0	0.2414	1.1894	-0.0151	0.3124	-0.0127	0.2627
49	35.63	0.02	-0.1264	0.0021	-0.0416	-0.0133	0.2526	1.1864	-0.0139	0.3113	-0.0134	0.2619
50	35.92	0.00	-0.1263	0.0010	-0.0371	-0.0088	0.2538	1.1944	-0.0172	0.3138	-0.0144	0.2627
51	36.16	-0.00	-0.1283	0.0008	-0.0546	-0.0045	0.3062	1.1863	-0.0154	0.3113	-0.0130	0.2620
52	36.40	-0.01	-0.1259	0.0002	-0.0437	-0.0012	0.2634	1.1945	-0.0153	0.3114	-0.0128	0.2607
53	36.63	-0.01	-0.1262	-0.0004	-0.0380	0.0028	0.2667	1.1925	-0.0180	0.3135	-0.0151	0.2629
54	36.65	0.00	-0.1240	-0.0008	-0.0506	0.0046	0.2938	1.1956	-0.0143	0.3120	-0.0120	0.2610
55	37.11	-0.01	-0.1277	0.0015	-0.0465	-0.0095	0.2949	1.1860	-0.0165	0.3111	-0.0139	0.2623
56	37.35	-0.00	-0.1264	0.0020	-0.0574	-0.0106	0.3047	1.1930	-0.0140	0.3114	-0.0117	0.2610
57	37.58	0.00	-0.1264	0.0036	-0.0604	-0.0204	0.3074	1.1905	-0.0171	0.3160	-0.0143	0.2637
58	37.82	-0.02	-0.1295	0.0032	-0.0483	-0.0195	0.2736	1.1909	-0.0163	0.3135	-0.0137	0.2632
59	38.06	-0.01	-0.2134	0.0023	-0.0377	-0.0108	0.3172	1.1907	-0.0150	0.3108	-0.0126	0.2609
60	38.28	-0.01	-0.1712	0.0019	-0.0496	-0.0111	0.2909	1.1937	-0.0130	0.3102	-0.0109	0.2599
61	38.53	-0.03	-0.1083	0.0033	-0.0343	-0.0210	0.3265	1.1856	-0.0095	0.3063	-0.0080	0.2584
62	38.77	-0.02	-0.1018	0.0029	-0.0536	-0.0179	0.3270	1.1856	-0.0106	0.3077	-0.0089	0.2595
63	38.99	-0.00	-0.1020	0.0022	-0.0502	-0.0136	0.3099	1.1806	-0.0092	0.3034	-0.0078	0.2570
64	39.23	-0.02	-0.1714	0.0028	-0.0384	-0.0163	0.3407	1.1880	-0.0094	0.3075	-0.0079	0.2588
65	39.45	-0.01	-0.1389	0.0023	-0.0444	-0.0166	0.3197	1.1815	-0.0101	0.3056	-0.0085	0.2587
66	39.67	0.00	-0.1420	0.0024	-0.0466	-0.0169	0.3282	1.1794	-0.0114	0.3062	-0.0101	0.2596
67	39.90	-0.02	-0.1124	-0.0012	-0.0320	0.0107	0.2900	1.1887	-0.0078	0.2992	-0.0067	0.2560
68	40.12	0.01	-0.1401	0.0004	-0.0405	-0.0027	0.3320	1.1840	-0.0098	0.3053	-0.0083	0.2579
69	40.32	-0.02	-0.1292	0.0012	-0.0345	-0.0075	0.3423	1.1827	-0.0099	0.3062	-0.0084	0.2589
70	40.54	-0.01	-0.1177	0.0003	-0.0382	-0.0065	0.3290	1.1815	-0.0091	0.3056	-0.0082	0.2587
71	40.76	-0.00	-0.0836	0.0019	-0.0284	-0.0227	0.3397	1.1838	-0.0088	0.3054	-0.0074	0.2580
72	40.95	0.00	-0.1092	-0.0021	-0.0333	0.0202	0.3196	1.1740	-0.0097	0.3040	-0.0083	0.2589
73	41.18	-0.01	-0.1033	0.0006	-0.0351	-0.0038	0.3398	1.1834	-0.0095	0.3079	-0.0080	0.2602
74	41.36	-0.01	-0.0992	-0.0006	-0.0330	0.0064	0.3303	1.1751	-0.0076	0.3032	-0.0065	0.2585
75	41.57	-0.01	-0.0838	0.0015	-0.0434	-0.0236	0.3758	1.1848	-0.0104	0.3113	-0.0087	0.2616
76	41.80	-0.00	-0.0909	0.0007	-0.0333	-0.0077	0.3603	1.1772	-0.0096	0.3074	-0.0082	0.2611
77	41.99	0.01	-0.0843	-0.0017	-0.0292	0.0202	0.3404	1.1845	-0.0090	0.3044	-0.0077	0.2614
78	42.20	0.00	-0.1148	-0.0011	-0.0412	0.0148	0.3589	1.1707	-0.0081	0.3045	-0.0069	0.2601
79	42.39	0.02	-0.1037	-0.0028	-0.0383	0.0270	0.3693	1.1850	-0.0087	0.3013	-0.0058	0.2586
80	42.60	0.01	-0.1065	-0.0014	-0.0377	0.0159	0.3751	1.1802	-0.0080	0.3074	-0.0068	0.2605
81	42.79	0.00	-0.0886	-0.0002	-0.0343	0.0023	0.3671	1.1913	-0.0093	0.3124	-0.0078	0.2622
82	42.98	-0.02	-0.0865	-0.0010	-0.0313	0.0118	0.3618	1.1938	-0.0092	0.3116	-0.0077	0.2610
83	43.17	-0.00	-0.0891	-0.0002	-0.0320	0.0024	0.3900	1.1816	-0.0105	0.3075	-0.0087	0.2602
84	43.35	-0.01	-0.0967	-0.0012	-0.0412	0.0124	0.4201	1.2113	-0.0086	0.3151	-0.0071	0.2601
85	43.53	-0.01	-0.1018	-0.0017	-0.0548	0.0129	0.4128	1.1970	-0.0075	0.3087	-0.0063	0.2579
86	43.71	-0.01	-0.1038	-0.0019	-0.0626	0.0124	0.4031	1.2019	-0.0071	0.3111	-0.0059	0.2588
87	43.90	-0.02	-0.1299	-0.0020	-0.0522	0.0154	0.4018	1.2200	-0.0092	0.3162	-0.0075	0.2592
88	44.09	-0.01	-0.1197	-0.0005	-0.0168	0.0254	0.8528	1.2482	-0.0134	0.3282	-0.0107	0.2629
89	44.28	-0.00	-0.1141	-0.0010	-0.0460	0.0091	0.4178	1.2288	-0.0101	0.3203	-0.0082	0.2607
90	44.44	-0.01	-0.1238	-0.0015	-0.0466	0.0121	0.3704	1.2255	-0.0120	0.3294	-0.0096	0.2624
91	44.62	-0.00	-0.1513	-0.0030	-0.0640	0.0196	0.4230	1.2297	-0.0071	0.3200	-0.0057	0.2581
92	44.79	0.00	-0.0634	-0.0020	-0.0229	0.0035	0.4786	1.2382	-0.0142	0.3288	-0.0113	0.2612

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 24 1.60 1.7 0.0 BINOPEN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CH1	CB1	XCPF1	YCPF1	CNF2	CH2	CB2	XCPF2	YCPF2
93	44.98	0.00	-0.0048	-0.0019	-0.0436	0.0212	0.4855	1.2435	-0.0142	0.3228	-0.0090	0.2596
94	45.18	-0.00	-0.0074	-0.0022	-0.0364	0.0326	0.5697	1.2703	-0.0141	0.3333	-0.0111	0.2624
95	45.37	-0.00	-0.0100	-0.0022	-0.0453	0.0220	0.4530	1.2048	-0.0129	0.3296	-0.0102	0.2606
96	45.57	0.00	-0.0083	-0.0029	-0.0197	0.1025	0.6901	1.2002	-0.0151	0.3290	-0.0120	0.2611
97	45.72	-0.01	-0.0277	-0.0015	-0.0169	0.0469	0.6101	1.2562	-0.0155	0.3266	-0.0123	0.2617
98	45.91	-0.01	0.0034	-0.0019	-0.0069	-0.5587	-2.0294	1.2704	-0.0169	0.3349	-0.0132	0.2623
99	46.10	0.01	-0.0197	-0.0037	-0.0141	0.1678	0.7157	1.2002	-0.0153	0.3307	-0.0121	0.2612
100	46.27	0.00	0.0303	-0.0001	-0.0032	-0.0033	-0.1056	1.2640	-0.0164	0.3294	-0.0130	0.2606
101	46.44	0.00	-0.0033	-0.0048	-0.0378	0.0575	0.4527	1.2413	-0.0166	0.3244	-0.0135	0.2613
102	46.61	0.01	-0.0810	-0.0056	-0.0342	0.0691	0.4340	1.2511	-0.0156	0.3263	-0.0125	0.2608
103	46.78	0.01	-0.0877	-0.0092	-0.0372	0.1049	0.4242	1.2317	-0.0146	0.3224	-0.0120	0.2618
104	46.97	-0.01	-0.0825	-0.0053	-0.0373	0.0642	0.4521	1.2250	-0.0141	0.3201	-0.0115	0.2615
105	47.14	-0.00	-0.0586	-0.0076	-0.0227	0.2076	0.6202	1.2198	-0.0135	0.3187	-0.0111	0.2613
106	47.30	-0.01	-0.0518	-0.0135	-0.0250	0.2606	0.4826	1.1929	-0.0137	0.3136	-0.0115	0.2629
107	47.49	-0.00	-0.0538	-0.0140	-0.0179	0.4319	0.5888	1.2128	-0.0122	0.3169	-0.0101	0.2629
108	47.65	0.00	-0.0216	-0.0148	-0.0192	0.6851	0.7037	1.2003	-0.0147	0.3163	-0.0122	0.2635
109	47.82	-0.01	-0.0693	-0.0162	-0.0168	0.5528	0.5734	1.1915	-0.0144	0.3116	-0.0121	0.2615
110	48.00	-0.02	-0.0000	-0.0205	-0.0069	1.0143	1.0147	1.1908	-0.0154	0.3134	-0.0129	0.2619
111	48.19	-0.02	-0.0159	-0.0195	-0.0092	1.2205	0.9788	1.1985	-0.0160	0.3164	-0.0150	0.2640
112	48.30	-0.02	-0.0047	-0.0181	-0.0077	1.0506	1.0383	1.2104	-0.0166	0.3212	-0.0137	0.2654
113	48.52	-0.01	0.0027	-0.0173	-0.0053	-6.4006	-1.2222	1.2071	-0.0187	0.3220	-0.0155	0.2668
114	48.71	-0.02	-0.0135	-0.0117	-0.0203	0.2089	0.4007	1.1705	-0.0194	0.3148	-0.0166	0.2689
115	48.88	-0.02	-0.0434	-0.0124	-0.0200	0.2857	0.4608	1.1551	-0.0166	0.3111	-0.0161	0.2693
116	49.09	-0.00	-0.0260	-0.0086	-0.0176	0.3071	0.4286	1.1742	-0.0197	0.3192	-0.0168	0.2718
117	49.23	-0.01	-0.0230	-0.0056	-0.0176	0.3359	0.6953	1.1410	-0.0184	0.3114	-0.0161	0.2729
118	49.38	-0.00	0.0193	0.0	-0.0063	0.0	-0.3204	1.1407	-0.0164	0.3086	-0.0144	0.2705
119	49.55	0.01	0.0015	-0.0008	-0.0114	-0.5353	-7.6000	1.1263	-0.0163	0.3060	-0.0145	0.2717
120	49.73	0.01	0.0250	0.0003	-0.0056	0.0320	-0.2240	1.1334	-0.0153	0.3081	-0.0135	0.2718
121	49.89	0.01	0.0036	0.0025	-0.0129	0.0944	-3.5833	1.0924	-0.0131	0.2958	-0.0120	0.2708
122	50.07	0.01	-0.0144	0.0031	-0.0107	-0.2152	1.2986	1.0806	-0.0129	0.2915	-0.0119	0.2698
123	50.24	0.02	-0.0075	0.0023	-0.0172	-0.3066	2.2733	1.0776	-0.0130	0.2909	-0.0121	0.2700
124	50.42	0.03	-0.0110	0.0018	-0.0166	-0.1636	1.5091	1.0791	-0.0142	0.2919	-0.0132	0.2705
125	50.58	0.01	-0.0121	0.0020	-0.0177	-0.1653	1.4628	1.0892	-0.0136	0.2943	-0.0125	0.2702
126	50.74	0.01	-0.0110	0.0018	-0.0171	-0.1636	1.5345	1.0852	-0.0131	0.2935	-0.0121	0.2705
127	50.94	0.00	-0.0007	0.0025	-0.0146	-0.3751	2.1791	1.1142	-0.0139	0.3021	-0.0125	0.2711
128	51.08	0.03	-0.0043	0.0010	-0.0136	-0.2325	3.1629	1.1002	-0.0140	0.2999	-0.0127	0.2726
129	51.26	0.01	-0.0023	0.0014	-0.0116	-0.0260	5.1304	1.1077	-0.0136	0.3021	-0.0123	0.2727
130	51.43	0.02	0.0057	0.0006	-0.0092	0.1052	-1.6140	1.1103	-0.0137	0.3018	-0.0123	0.2718
131	51.58	0.02	0.0079	0.0002	-0.0080	0.0253	-1.0127	1.1077	-0.0137	0.3031	-0.0124	0.2736
132	51.77	0.02	0.0214	0.0004	-0.0036	0.0093	-0.1682	1.1254	-0.0134	0.3046	-0.0119	0.2742
133	51.93	0.02	0.0191	0.0014	-0.0051	0.0733	-0.2670	1.1218	-0.0133	0.3068	-0.0119	0.2735
134	52.11	0.04	0.0257	0.0024	-0.0032	0.0934	-0.1245	1.1255	-0.0136	0.3086	-0.0121	0.2742
135	52.28	0.02	0.0213	0.0021	-0.0048	0.0980	-0.2254	1.1214	-0.0143	0.3064	-0.0128	0.2750
136	52.45	0.03	0.0280	0.0031	-0.0034	0.1107	-0.1214	1.1211	-0.0141	0.3068	-0.0126	0.2737
137	52.60	0.04	0.0270	0.0019	-0.0027	0.0734	-0.1000	1.1066	-0.0137	0.3053	-0.0124	0.2741
138	52.78	0.03	0.0270	0.0025	-0.0036	0.0926	-0.1333	1.1194	-0.0140	0.3093	-0.0130	0.2763

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 34 MACH 1.10 1.7 RATIO-0 PHI 0.0 CONF BIADFIN L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	ACPF1	YCPF1	CNF2	CM2	CD2	ACPF2	YCPF2
139	52.99	0.04	0.0201	0.0022	-0.0030	0.0783	-0.1368	1.1235	-0.0148	0.3105	-0.0131	0.2759
140	53.10	0.03	0.0244	0.0020	-0.0034	0.0860	-0.1156	1.1239	-0.0152	0.3115	-0.0135	0.2772
141	53.27	0.04	0.0327	0.0029	-0.0029	0.0887	-0.0887	1.1304	-0.0157	0.3141	-0.0139	0.2779
142	53.42	0.02	0.0308	0.0013	-0.0040	0.0422	-0.1299	1.1124	-0.0147	0.3078	-0.0132	0.2767
143	53.00	0.03	0.0309	0.0019	-0.0048	0.0615	-0.1353	1.1271	-0.0155	0.3155	-0.0138	0.2799
144	53.77	0.03	0.0306	0.0018	-0.0033	0.0437	-0.0902	1.1330	-0.0158	0.3182	-0.0137	0.2792
145	53.93	0.03	0.0344	0.0011	-0.0030	0.0320	-0.1047	1.1411	-0.0168	0.3193	-0.0145	0.2798
146	54.11	0.02	0.0288	0.0003	-0.0049	0.0104	-0.1701	1.1514	-0.0174	0.3237	-0.0151	0.2811
147	54.20	0.01	0.0298	0.0002	-0.0038	0.0067	-0.1275	1.1506	-0.0178	0.3261	-0.0154	0.2819
148	54.41	0.03	0.0281	0.0011	-0.0035	0.0421	-0.1341	1.1505	-0.0169	0.3251	-0.0146	0.2811
149	54.56	0.01	0.0297	0.0011	-0.0038	0.0370	-0.1212	1.1499	-0.0160	0.3211	-0.0139	0.2792
150	54.72	0.00	0.0240	0.0017	-0.0036	0.0708	-0.2333	1.1432	-0.0154	0.3190	-0.0135	0.2790
151	54.83	-0.01	0.0259	0.0011	-0.0046	0.0308	-0.1536	1.1589	-0.0167	0.3233	-0.0144	0.2790
152	55.05	0.00	0.0310	0.0007	-0.0038	0.0226	-0.1181	1.1572	-0.0159	0.3219	-0.0137	0.2782
153	55.18	-0.01	0.0286	0.0010	-0.0042	0.0359	-0.1469	1.1586	-0.0164	0.3225	-0.0142	0.2784
154	55.35	-0.02	0.0267	0.0011	-0.0043	0.0333	-0.1498	1.1597	-0.0158	0.3230	-0.0136	0.2790
155	55.50	-0.01	0.0241	0.0021	-0.0065	0.0671	-0.2097	1.1564	-0.0158	0.3225	-0.0135	0.2784
156	55.64	-0.02	0.0286	0.0021	-0.0046	0.0724	-0.1506	1.1605	-0.0153	0.3260	-0.0132	0.2809
157	55.82	-0.02	0.0266	0.0025	-0.0050	0.0774	-0.1748	1.1614	-0.0160	0.3228	-0.0121	0.2779
158	55.99	-0.03	0.0267	0.0021	-0.0051	0.0732	-0.1777	1.1693	-0.0152	0.3264	-0.0130	0.2791
159	56.15	-0.02	0.0275	0.0020	-0.0056	0.0595	-0.2036	1.1665	-0.0164	0.3267	-0.0123	0.2801
160	56.31	-0.03	0.0306	0.0023	-0.0058	0.0747	-0.1634	1.1613	-0.0164	0.3268	-0.0124	0.2814
161	56.45	-0.01	0.0251	0.0019	-0.0050	0.0757	-0.1992	1.1469	-0.0126	0.3188	-0.0110	0.2776
162	56.63	-0.03	0.0274	0.0021	-0.0046	0.0985	-0.1679	1.1714	-0.0137	0.3272	-0.0117	0.2793
163	56.80	-0.00	0.0265	0.0022	-0.0031	0.0772	-0.1008	1.1764	-0.0125	0.3277	-0.0109	0.2786
164	56.98	-0.02	0.0305	0.0007	-0.0048	0.0197	-0.0169	1.1819	-0.0148	0.3316	-0.0125	0.2806
165	57.12	0.00	0.0215	0.0013	-0.0030	0.0605	-0.1395	1.1714	-0.0138	0.3272	-0.0118	0.2793
166	57.30	-0.04	0.0224	0.0003	-0.0028	0.0132	-0.1140	1.2150	-0.0166	0.3422	-0.0137	0.2815
167	57.44	-0.07	0.0182	0.0005	-0.0040	0.0275	-0.2198	1.2065	-0.0165	0.3399	-0.0137	0.2817
168	57.59	-0.09	0.0054	0.0	-0.0055	0.0	-1.0185	1.1977	-0.0168	0.3374	-0.0139	0.2817
169	57.74	-0.04	0.0018	0.0	-0.0053	0.0	-2.9444	1.1770	-0.0162	0.3305	-0.0138	0.2808
170	57.88	-0.05	-0.0073	0.0007	-0.0087	-0.0959	1.1918	1.1465	-0.0149	0.3200	-0.0130	0.2786
171	58.01	-0.08	0.0055	0.0004	-0.0064	0.0727	-1.1636	1.1755	-0.0163	0.3246	-0.0139	0.2804
172	58.18	-0.04	-0.0061	0.0002	-0.0087	-0.0328	1.4262	1.1651	-0.0163	0.3287	-0.0140	0.2821
173	58.31	0.02	-0.0098	0.0011	-0.0084	-0.1122	0.8571	1.1571	-0.0150	0.3245	-0.0130	0.2804
174	58.47	0.03	-0.0123	0.0006	-0.0067	-0.0606	0.5447	1.1728	-0.0155	0.3284	-0.0132	0.2800
175	58.60	0.03	-0.0171	0.0003	-0.0063	-0.0175	0.3304	1.1569	-0.0152	0.3232	-0.0131	0.2794
176	58.76	-0.07	-0.0127	0.0007	-0.0037	-0.0551	0.2913	1.1973	-0.0167	0.3357	-0.0139	0.2804
177	58.91	-0.07	-0.0105	-0.0006	-0.0007	0.0571	0.0007	1.1948	-0.0166	0.3356	-0.0141	0.2818
178	58.81	-0.06	-0.0131	0.0011	-0.0007	-0.0840	0.0534	1.2049	-0.0168	0.3404	-0.0138	0.2825
179	58.79	-0.08	-0.0177	0.0015	-0.0026	-0.0847	0.1409	1.1646	-0.0148	0.3264	-0.0127	0.2803

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 59 1.10 1.7 0.0 3 INCH 4 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.73	0.03	0.0443	9.9999	0.0062	9.9999	0.1400	-0.3021	0.0063	-0.1038	-0.0209	0.3436
2	-5.73	0.03	0.0466	9.9999	0.0069	9.9999	0.1481	-0.2969	0.0062	-0.1030	-0.0209	0.3469
3	-5.73	0.03	0.0466	9.9999	0.0073	9.9999	0.1567	-0.2976	0.0055	-0.1027	-0.0185	0.3451
4	-5.73	0.03	0.0419	9.9999	0.0079	9.9999	0.1885	-0.2730	0.0056	-0.0951	-0.0205	0.3484
5	-3.90	0.03	0.0359	9.9999	0.0092	9.9999	0.2303	-0.1767	0.0044	-0.0563	-0.0249	0.3356
6	-1.99	0.03	0.0382	9.9999	0.0108	9.9999	0.2827	-0.0952	0.0019	-0.0273	-0.0260	0.2868
7	-0.05	0.03	0.0429	9.9999	0.0102	9.9999	0.2376	-0.0173	-0.0003	0.0035	-0.0169	-0.1966
8	1.92	0.03	0.0464	9.9999	0.0105	9.9999	0.2263	0.0059	-0.0023	0.0328	-0.0349	0.4977
9	3.90	0.02	0.0465	9.9999	0.0082	9.9999	0.1763	0.1523	-0.0048	0.0613	-0.0302	0.4025
10	5.86	0.04	0.0548	9.9999	0.0071	9.9999	0.1296	0.2407	-0.0056	0.1018	-0.0241	0.4229
11	7.89	0.03	0.0606	9.9999	0.0066	9.9999	0.1069	0.3430	-0.0063	0.1323	-0.0248	0.3857
12	9.85	0.02	0.0556	9.9999	0.0038	9.9999	0.0638	0.4466	-0.0115	0.1605	-0.0257	0.3592
13	11.88	0.02	0.0575	9.9999	0.0030	9.9999	0.0628	0.5680	-0.0137	0.1896	-0.0241	0.3338
14	13.87	0.02	0.0597	9.9999	0.0025	9.9999	0.0486	0.6749	-0.0123	0.2137	-0.0182	0.3166
15	15.73	0.03	0.0650	9.9999	0.0055	9.9999	0.0875	0.7749	-0.0107	0.2376	-0.0137	0.3050
16	16.00	0.02	0.0647	9.9999	0.0053	9.9999	0.0873	0.8481	-0.0083	0.2549	-0.0098	0.3003
17	20.06	0.03	0.0583	9.9999	0.0055	9.9999	0.0943	0.9124	-0.0077	0.2663	-0.0084	0.2919
18	22.09	0.01	0.0570	9.9999	0.0063	9.9999	0.1105	0.9667	-0.0081	0.2744	-0.0084	0.2833
19	24.19	0.04	0.0603	9.9999	0.0112	9.9999	0.1857	0.9925	-0.0088	0.2784	-0.0089	0.2805
20	26.26	0.05	0.0705	9.9999	0.0163	9.9999	0.2596	1.0277	-0.0117	0.2859	-0.0114	0.2782
21	28.27	0.01	0.0613	9.9999	0.0149	9.9999	0.2431	1.0324	-0.0140	0.2855	-0.0141	0.2765
22	28.56	0.09	0.0680	9.9999	0.0195	9.9999	0.2868	1.0349	-0.0138	0.2843	-0.0133	0.2747
23	28.55	0.06	0.0652	9.9999	0.0195	9.9999	0.3065	1.0320	-0.0143	0.2841	-0.0139	0.2753
24	28.89	0.07	0.0586	9.9999	0.0178	9.9999	0.3038	1.0499	-0.0123	0.2873	-0.0117	0.2736
25	29.15	0.06	0.0597	9.9999	0.0197	9.9999	0.3300	1.0529	-0.0122	0.2874	-0.0116	0.2730
26	29.31	0.07	0.0597	9.9999	0.0186	9.9999	0.3149	1.0393	-0.0164	0.2863	-0.0158	0.2755
27	29.42	0.06	0.0559	9.9999	0.0179	9.9999	0.3321	1.0456	-0.0181	0.2879	-0.0173	0.2753
28	30.10	0.08	0.0536	9.9999	0.0188	9.9999	0.3494	1.0550	-0.0166	0.2882	-0.0157	0.2732
29	30.39	0.07	0.0572	9.9999	0.0195	9.9999	0.3409	1.0512	-0.0176	0.2869	-0.0167	0.2748
30	30.68	0.06	0.0560	9.9999	0.0194	9.9999	0.3536	1.0766	-0.0135	0.2917	-0.0144	0.2709
31	30.95	0.06	0.0549	9.9999	0.0202	9.9999	0.3679	1.0772	-0.0163	0.2930	-0.0151	0.2720
32	31.22	0.06	0.0577	9.9999	0.0204	9.9999	0.3644	1.0829	-0.0137	0.2912	-0.0126	0.2669
33	31.51	0.06	0.0490	9.9999	0.0127	9.9999	0.3175	1.0765	-0.0145	0.2911	-0.0135	0.2704
34	31.78	0.06	0.0514	9.9999	0.0167	9.9999	0.3249	1.0783	-0.0095	0.2870	-0.0088	0.2662
35	32.06	0.06	0.0548	9.9999	0.0165	9.9999	0.3339	1.0814	-0.0114	0.2886	-0.0104	0.2669
36	32.32	0.06	0.0525	9.9999	0.0177	9.9999	0.3371	1.0852	-0.0103	0.2889	-0.0095	0.2667
37	32.60	0.04	0.0434	9.9999	0.0143	9.9999	0.3295	1.0948	-0.0103	0.2931	-0.0094	0.2677
38	32.88	0.02	0.0554	9.9999	0.0197	9.9999	0.3530	1.1035	-0.0098	0.2955	-0.0089	0.2678
39	33.13	0.03	0.0487	9.9999	0.0154	9.9999	0.3296	1.1119	-0.0107	0.3002	-0.0096	0.2700
40	33.40	0.02	0.0559	9.9999	0.0126	9.9999	0.3158	1.1166	-0.0104	0.3021	-0.0093	0.2701
41	33.67	0.01	0.0489	9.9999	0.0174	9.9999	0.3558	1.1267	-0.0109	0.3054	-0.0097	0.2711
42	33.92	0.02	0.0490	9.9999	0.0160	9.9999	0.3265	1.1129	-0.0113	0.3029	-0.0102	0.2722
43	34.18	0.03	0.0595	9.9999	0.0126	9.9999	0.3158	1.1197	-0.0117	0.3061	-0.0104	0.2734
44	34.42	0.02	0.0490	9.9999	0.0160	9.9999	0.3265	1.1181	-0.0130	0.3076	-0.0116	0.2751
45	34.67	0.01	0.0553	9.9999	0.0114	9.9999	0.3229	1.1099	-0.0121	0.3053	-0.0111	0.2751
46	34.93	0.02	0.0501	9.9999	0.0139	9.9999	0.3290	1.1141	-0.0119	0.3060	-0.0110	0.2756

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
1 54 1.10 1.7 0.0 BINOF14 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF3	CH3	CB3	ACPF3	YCPF3	CNF4	CH4	CB4	ACPF4	YCPF4
47	35.18	0.01	0.0376	9.9999	0.0120	9.9999	0.3191	1.0967	-0.0134	0.3031	-0.0122	0.2764
48	35.41	0.00	0.0456	9.9999	0.0140	9.9999	0.3070	1.1017	-0.0133	0.3044	-0.0121	0.2763
49	35.68	0.02	0.0434	9.9999	0.0129	9.9999	0.2972	1.0904	-0.0136	0.3026	-0.0125	0.2775
50	35.92	0.00	0.0377	9.9999	0.0111	9.9999	0.2944	1.1140	-0.0139	0.3106	-0.0125	0.2787
51	36.16	-0.00	0.0456	9.9999	0.0149	9.9999	0.3208	1.0962	-0.0138	0.3050	-0.0126	0.2777
52	36.40	-0.01	0.0421	9.9999	0.0141	9.9999	0.3349	1.1113	-0.0141	0.3092	-0.0127	0.2782
53	36.63	-0.01	0.0444	9.9999	0.0146	9.9999	0.3333	1.1248	-0.0149	0.3129	-0.0132	0.2782
54	36.83	0.00	0.0395	9.9999	0.0131	9.9999	0.3203	1.1115	-0.0143	0.3097	-0.0129	0.2786
55	37.11	-0.01	0.0444	9.9999	0.0157	9.9999	0.3536	1.1130	-0.0150	0.3128	-0.0132	0.2810
56	37.33	-0.00	0.0419	9.9999	0.0106	9.9999	0.3323	1.1055	-0.0149	0.3082	-0.0135	0.2788
57	37.56	0.00	0.0376	9.9999	0.0124	9.9999	0.3296	1.1201	-0.0155	0.3134	-0.0136	0.2798
58	37.82	-0.02	0.0269	9.9999	0.0090	9.9999	0.3154	1.1133	-0.0166	0.3126	-0.0149	0.2808
59	38.08	-0.01	0.0367	9.9999	0.0134	9.9999	0.3463	1.1138	-0.0139	0.3104	-0.0125	0.2787
60	38.28	-0.01	0.0319	9.9999	0.0120	9.9999	0.3362	1.1235	-0.0139	0.3143	-0.0124	0.2780
61	38.53	-0.03	0.0352	9.9999	0.0130	9.9999	0.3804	1.1211	-0.0123	0.3110	-0.0110	0.2774
62	38.77	-0.02	0.0410	9.9999	0.0150	9.9999	0.3659	1.1241	-0.0129	0.3121	-0.0115	0.2776
63	38.99	-0.00	0.0352	9.9999	0.0136	9.9999	0.3804	1.1111	-0.0126	0.3086	-0.0115	0.2779
64	39.23	-0.02	0.0370	9.9999	0.0138	9.9999	0.3670	1.1223	-0.0105	0.3106	-0.0094	0.2768
65	39.49	-0.01	0.0330	9.9999	0.0123	9.9999	0.3788	1.1311	-0.0144	0.3146	-0.0127	0.2783
66	39.67	0.00	0.0433	9.9999	0.0151	9.9999	0.3487	1.1215	-0.0152	0.3134	-0.0136	0.2794
67	39.90	-0.02	0.0421	9.9999	0.0160	9.9999	0.3800	1.1438	-0.0192	0.3208	-0.0168	0.2805
68	40.12	0.01	0.0490	9.9999	0.0174	9.9999	0.3551	1.1434	-0.0169	0.3203	-0.0148	0.2801
69	40.32	-0.02	0.0301	9.9999	0.0186	9.9999	0.3752	1.1479	-0.0161	0.3213	-0.0140	0.2799
70	40.54	-0.01	0.0390	9.9999	0.0149	9.9999	0.3744	1.1543	-0.0212	0.3240	-0.0184	0.2807
71	40.76	-0.00	0.0398	9.9999	0.0156	9.9999	0.3970	1.1618	-0.0156	0.3229	-0.0136	0.2779
72	40.95	0.00	0.0387	9.9999	0.0157	9.9999	0.4057	1.1367	-0.0266	0.3228	-0.0236	0.2840
73	41.13	-0.01	0.0435	9.9999	0.0170	9.9999	0.3806	1.1669	-0.0179	0.3337	-0.0167	0.2807
74	41.30	-0.01	0.0353	9.9999	0.0127	9.9999	0.3598	1.1567	-0.0241	0.3266	-0.0208	0.2819
75	41.57	-0.01	0.0355	9.9999	0.0285	9.9999	0.3652	1.1913	-0.0146	0.3317	-0.0123	0.2784
76	41.80	-0.00	0.0422	9.9999	0.0155	9.9999	0.3673	1.1758	-0.0213	0.3295	-0.0181	0.2802
77	41.99	0.01	0.0353	9.9999	0.0134	9.9999	0.4061	1.1658	-0.0234	0.3288	-0.0201	0.2820
78	42.20	0.00	0.0444	9.9999	0.0175	9.9999	0.3941	1.1544	-0.0253	0.3261	-0.0219	0.2825
79	42.39	0.02	0.0399	9.9999	0.0153	9.9999	0.3835	1.1654	-0.0268	0.3280	-0.0238	0.2826
80	42.60	0.01	0.0450	9.9999	0.0176	9.9999	0.3860	1.1550	-0.0253	0.3249	-0.0202	0.2808
81	42.79	0.00	0.0395	9.9999	0.0158	9.9999	0.3966	1.1671	-0.0212	0.3268	-0.0182	0.2800
82	42.98	-0.02	0.0321	9.9999	0.0117	9.9999	0.3825	1.1668	-0.0217	0.3273	-0.0186	0.2800
83	43.17	-0.00	0.0314	9.9999	0.0190	9.9999	0.3696	1.1854	-0.0216	0.3310	-0.0182	0.2792
84	43.33	-0.01	0.0331	9.9999	0.0117	9.9999	0.3535	1.1696	-0.0214	0.3262	-0.0181	0.2772
85	43.53	-0.01	0.0330	9.9999	0.0214	9.9999	0.3993	1.1694	-0.0252	0.3243	-0.0198	0.2773
86	43.71	-0.01	0.0389	9.9999	0.0153	9.9999	0.3970	1.1634	-0.0253	0.3246	-0.0219	0.2792
87	43.90	-0.02	0.0378	9.9999	0.0134	9.9999	0.3945	1.1813	-0.0230	0.3278	-0.0200	0.2775
88	44.09	-0.01	0.0354	9.9999	0.0141	9.9999	0.3983	1.1750	-0.0186	0.3247	-0.0158	0.2763
89	44.28	-0.00	0.0440	9.9999	0.0171	9.9999	0.3834	1.1660	-0.0221	0.3237	-0.0190	0.2776
90	44.44	-0.01	0.0286	9.9999	0.0095	9.9999	0.3822	1.1787	-0.0235	0.3281	-0.0199	0.2764
91	44.62	-0.00	0.0412	9.9999	0.0146	9.9999	0.3544	1.1879	-0.0229	0.3266	-0.0196	0.2762
92	44.79	0.00	0.0383	9.9999	0.0238	9.9999	0.4048	1.1842	-0.0194	0.3263	-0.0164	0.2755

TEST / PART 54 MACH 1.10 1.7 RN/D-6 PHI 0.0 CONF 14 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CB3	XCPF3	YCPF3	CNF4	CH4	CB4	XCPF4	YCPF4
93	44.78	0.00	0.0458	9.9999	0.0108	9.9999	0.3000	1.1047	-0.0199	0.3206	-0.0171	0.2753
94	45.18	-0.00	0.0446	9.9999	0.0171	9.9999	0.3834	1.1860	-0.0207	0.3273	-0.0175	0.2760
95	45.37	-0.00	0.0390	9.9999	0.0144	9.9999	0.3692	1.1875	-0.0216	0.3273	-0.0182	0.2756
96	45.55	0.00	0.0469	9.9999	0.0187	9.9999	0.3987	1.1698	-0.0187	0.3200	-0.0160	0.2736
97	45.72	-0.01	0.0402	9.9999	0.0145	9.9999	0.3607	1.1874	-0.0209	0.3249	-0.0172	0.2736
98	45.91	-0.01	0.0466	9.9999	0.0170	9.9999	0.4009	1.1974	-0.0196	0.3287	-0.0165	0.2745
99	46.10	0.01	0.0344	9.9999	0.0127	9.9999	0.3092	1.1097	-0.0192	0.3196	-0.0164	0.2732
100	46.27	0.00	0.0322	9.9999	0.0103	9.9999	0.3199	1.1845	-0.0183	0.3223	-0.0154	0.2741
101	46.44	0.00	0.0459	9.9999	0.0177	9.9999	0.3856	1.1721	-0.0211	0.3217	-0.0180	0.2745
102	46.61	0.01	0.0405	9.9999	0.0141	9.9999	0.3499	1.1864	-0.0204	0.3200	-0.0175	0.2743
103	46.78	0.01	0.0471	9.9999	0.0174	9.9999	0.3694	1.1479	-0.0205	0.3159	-0.0179	0.2752
104	46.97	-0.01	0.0438	9.9999	0.0153	9.9999	0.3493	1.1502	-0.0206	0.3162	-0.0179	0.2749
105	47.14	-0.00	0.0404	9.9999	0.0132	9.9999	0.3267	1.1180	-0.0193	0.3084	-0.0173	0.2758
106	47.30	-0.01	0.0472	9.9999	0.0170	9.9999	0.3602	1.0770	-0.0189	0.2979	-0.0175	0.2766
107	47.49	-0.00	0.0358	9.9999	0.0106	9.9999	0.2981	1.0853	-0.0179	0.2937	-0.0166	0.2749
108	47.65	0.00	0.0365	9.9999	0.0209	9.9999	0.3099	1.0746	-0.0182	0.2962	-0.0169	0.2756
109	47.82	-0.01	0.0392	9.9999	0.0136	9.9999	0.3469	1.0800	-0.0187	0.2974	-0.0155	0.2754
110	48.00	-0.02	0.0269	9.9999	0.0096	9.9999	0.3322	1.0859	-0.0090	0.2873	-0.0075	0.2696
111	48.19	-0.02	0.0265	9.9999	0.0076	9.9999	0.3322	1.1061	-0.0084	0.2988	-0.0076	0.2701
112	48.36	-0.02	0.0302	9.9999	0.0117	9.9999	0.3003	1.1010	-0.0106	0.2985	-0.0098	0.2711
113	48.52	-0.01	0.0417	9.9999	0.0129	9.9999	0.3094	1.1135	-0.0101	0.3009	-0.0091	0.2702
114	48.71	-0.02	0.0404	9.9999	0.0146	9.9999	0.3014	1.1810	-0.0114	0.3205	-0.0097	0.2714
115	48.88	-0.02	0.0405	9.9999	0.0153	9.9999	0.3284	1.1685	-0.0088	0.3134	-0.0075	0.2682
116	49.04	-0.00	0.0426	9.9999	0.0139	9.9999	0.3248	1.2003	-0.0110	0.3204	-0.0092	0.2711
117	49.23	-0.01	0.0382	9.9999	0.0131	9.9999	0.3429	1.1754	-0.0108	0.3188	-0.0092	0.2712
118	49.38	-0.00	0.0405	9.9999	0.0142	9.9999	0.3506	1.1528	-0.0154	0.3151	-0.0134	0.2733
119	49.55	0.01	0.0440	9.9999	0.0145	9.9999	0.3386	1.1620	-0.0161	0.3177	-0.0139	0.2734
120	49.73	0.01	0.0459	9.9999	0.0155	9.9999	0.3180	1.1567	-0.0156	0.3166	-0.0135	0.2732
121	49.89	0.01	0.0470	9.9999	0.0157	9.9999	0.3298	1.1390	-0.0155	0.3123	-0.0136	0.2742
122	50.07	0.01	0.0383	9.9999	0.0122	9.9999	0.3185	1.1305	-0.0137	0.3114	-0.0120	0.2735
123	50.24	0.02	0.0442	9.9999	0.0145	9.9999	0.3201	1.1276	-0.0122	0.3063	-0.0108	0.2716
124	50.42	0.03	0.0390	9.9999	0.0101	9.9999	0.3315	1.1371	-0.0123	0.3089	-0.0108	0.2717
125	50.58	0.01	0.0407	9.9999	0.0124	9.9999	0.3047	1.1406	-0.0137	0.3123	-0.0119	0.2719
126	50.74	0.01	0.0304	9.9999	0.0113	9.9999	0.2943	1.1348	-0.0127	0.3091	-0.0112	0.2724
127	50.94	0.00	0.0397	9.9999	0.0100	9.9999	0.2819	1.1555	-0.0147	0.3142	-0.0127	0.2719
128	51.08	0.03	0.0523	9.9999	0.0175	9.9999	0.3346	1.1423	-0.0129	0.3098	-0.0113	0.2712
129	51.26	0.01	0.0523	9.9999	0.0170	9.9999	0.3250	1.1497	-0.0140	0.3120	-0.0122	0.2714
130	51.43	0.02	0.0489	9.9999	0.0154	9.9999	0.3149	1.1274	-0.0123	0.3059	-0.0109	0.2713
131	51.58	0.02	0.0487	9.9999	0.0144	9.9999	0.2945	1.1255	-0.0132	0.3061	-0.0117	0.2720
132	51.77	0.02	0.0489	9.9999	0.0144	9.9999	0.2945	1.1354	-0.0142	0.3085	-0.0125	0.2717
133	51.93	0.02	0.0478	9.9999	0.0139	9.9999	0.2906	1.1289	-0.0142	0.3061	-0.0126	0.2711
134	52.11	0.04	0.0489	9.9999	0.0140	9.9999	0.2803	1.1148	-0.0147	0.3025	-0.0132	0.2713
135	52.28	0.02	0.0502	9.9999	0.0152	9.9999	0.2829	1.1174	-0.0152	0.3027	-0.0136	0.2709
136	52.45	0.03	0.0503	9.9999	0.0127	9.9999	0.2525	1.1028	-0.0138	0.2976	-0.0125	0.2699
137	52.60	0.04	0.0543	9.9999	0.0166	9.9999	0.3060	1.0934	-0.0142	0.2950	-0.0130	0.2698
138	52.63	0.03	0.0543	9.9999	0.0174	9.9999	0.2806	1.1119	-0.0142	0.3008	-0.0126	0.2703

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 24 MACH 1.10 1.7 RATIO-0 PHI 0.0 81NUF14 CONF 0.0 L DELI 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	ACPF3	YCPF3	CNF4	CM4	CD4	ACPF4	YCPF4
139	52.94	0.04	0.0562	9.9999	0.0160	9.9999	0.2697	1.1181	-0.0143	0.3009	-0.0128	0.2691
140	53.10	0.03	0.0574	9.9999	0.0156	9.9999	0.2716	1.1193	-0.0147	0.3016	-0.0131	0.2695
141	53.27	0.04	0.0528	9.9999	0.0130	9.9999	0.2482	1.1164	-0.0143	0.3019	-0.0128	0.2704
142	53.42	0.02	0.0493	9.9999	0.0132	9.9999	0.2677	1.1019	-0.0143	0.2992	-0.0130	0.2715
143	53.60	0.03	0.0600	9.9999	0.0159	9.9999	0.2650	1.1259	-0.0157	0.3059	-0.0139	0.2717
144	53.77	0.03	0.0534	9.9999	0.0137	9.9999	0.2473	1.1292	-0.0152	0.3064	-0.0135	0.2713
145	53.93	0.03	0.0566	9.9999	0.0135	9.9999	0.2350	1.1408	-0.0167	0.3099	-0.0146	0.2717
146	54.11	0.02	0.0659	9.9999	0.0166	9.9999	0.2549	1.1666	-0.0175	0.3165	-0.0150	0.2713
147	54.28	0.01	0.0613	9.9999	0.0132	9.9999	0.2153	1.1639	-0.0169	0.3147	-0.0146	0.2711
148	54.41	0.03	0.0560	9.9999	0.0128	9.9999	0.2201	1.1642	-0.0178	0.3172	-0.0153	0.2725
149	54.56	0.01	0.0507	9.9999	0.0114	9.9999	0.2249	1.1490	-0.0169	0.3119	-0.0147	0.2715
150	54.72	0.00	0.0543	9.9999	0.0127	9.9999	0.2339	1.1569	-0.0173	0.3143	-0.0150	0.2717
151	54.88	-0.01	0.0545	9.9999	0.0094	9.9999	0.1725	1.1632	-0.0169	0.3154	-0.0145	0.2711
152	55.05	0.00	0.0628	9.9999	0.0124	9.9999	0.1975	1.1660	-0.0167	0.3134	-0.0144	0.2702
153	55.18	-0.01	0.0734	9.9999	0.0156	9.9999	0.2125	1.1664	-0.0172	0.3164	-0.0147	0.2708
154	55.36	-0.02	0.0698	9.9999	0.0144	9.9999	0.2063	1.1736	-0.0171	0.3178	-0.0146	0.2708
155	55.50	-0.01	0.0604	9.9999	0.0108	9.9999	0.1788	1.1689	-0.0178	0.3182	-0.0152	0.2722
156	55.64	-0.02	0.0562	9.9999	0.0083	9.9999	0.1426	1.1650	-0.0168	0.3171	-0.0161	0.2715
157	55.82	-0.02	0.0605	9.9999	0.0105	9.9999	0.1602	1.1688	-0.0136	0.3170	-0.0159	0.2712
158	55.99	-0.00	0.0654	9.9999	0.0103	9.9999	0.1575	1.1782	-0.0187	0.3196	-0.0159	0.2713
159	56.15	-0.02	0.0606	9.9999	0.0093	9.9999	0.1508	1.1778	-0.0182	0.3202	-0.0155	0.2719
160	56.31	-0.03	0.0700	9.9999	0.0144	9.9999	0.2057	1.1768	-0.0186	0.3190	-0.0158	0.2711
161	56.45	-0.01	0.0555	9.9999	0.0072	9.9999	0.1288	1.1555	-0.0169	0.3125	-0.0146	0.2704
162	56.63	-0.03	0.0513	9.9999	0.0059	9.9999	0.1150	1.1776	-0.0183	0.3197	-0.0155	0.2715
163	56.80	-0.00	0.0643	9.9999	0.0102	9.9999	0.1506	1.1947	-0.0181	0.3230	-0.0151	0.2704
164	56.98	-0.02	0.0678	9.9999	0.0119	9.9999	0.1755	1.2036	-0.0175	0.3242	-0.0145	0.2694
165	57.12	0.00	0.0543	9.9999	0.0090	9.9999	0.1642	1.1919	-0.0178	0.3223	-0.0149	0.2704
166	57.30	-0.04	0.0584	9.9999	0.0096	9.9999	0.1676	1.2342	-0.0178	0.3325	-0.0144	0.2694
167	57.44	-0.01	0.0597	9.9999	0.0080	9.9999	0.1340	1.2248	-0.0178	0.3304	-0.0144	0.2698
168	57.59	-0.03	0.0536	9.9999	0.0089	9.9999	0.1660	1.2319	-0.0179	0.3326	-0.0145	0.2700
169	57.74	-0.04	0.0488	9.9999	0.0078	9.9999	0.1557	1.2145	-0.0160	0.3286	-0.0132	0.2691
170	57.88	-0.03	0.0501	9.9999	0.0063	9.9999	0.1257	1.1867	-0.0154	0.3187	-0.0130	0.2681
171	58.01	-0.03	0.0608	9.9999	0.0086	9.9999	0.1414	1.2223	-0.0144	0.3275	-0.0118	0.2679
172	58.16	-0.04	0.0636	9.9999	0.0099	9.9999	0.1509	1.2192	-0.0139	0.3249	-0.0114	0.2665
173	58.31	0.02	0.0608	9.9999	0.0086	9.9999	0.1414	1.2150	-0.0153	0.3243	-0.0126	0.2669
174	58.47	0.03	0.0525	9.9999	0.0079	9.9999	0.1505	1.2302	-0.0161	0.3297	-0.0131	0.2680
175	58.60	0.03	0.0561	9.9999	0.0082	9.9999	0.1402	1.2137	-0.0158	0.3243	-0.0130	0.2672
176	58.76	-0.01	0.0608	9.9999	0.0109	9.9999	0.1795	1.2336	-0.0192	0.3308	-0.0153	0.2687
177	58.81	-0.07	0.0596	9.9999	0.0100	9.9999	0.1612	1.2477	-0.0167	0.3340	-0.0134	0.2677
178	58.81	-0.06	0.0490	9.9999	0.0067	9.9999	0.1367	1.2608	-0.0199	0.3402	-0.0158	0.2698
179	58.79	-0.06	0.0632	9.9999	0.0097	9.9999	0.1535	1.2259	-0.0178	0.3287	-0.0145	0.2681

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 55 0.60 1.7 0.0 STANDARD 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.71	0.01	-0.6654	1.3360	0.0107	-0.0747	-0.0012	0.1872	0.0811	0.1061	-1.9523
2	-5.71	0.02	-0.7142	1.3966	0.0574	-0.0924	-0.0012	0.1872	0.0811	0.1061	-1.9556
3	-5.71	0.01	-0.6663	1.3204	0.0239	-0.1132	-0.0012	0.1853	0.0802	0.1051	-1.9241
4	-5.71	0.01	-0.6651	1.3377	-0.0060	-0.0850	-0.0012	0.1873	0.0797	0.1076	-1.9526
5	-5.71	0.01	-0.7007	1.3498	0.0247	-0.1008	-0.0012	0.1853	0.0806	0.1047	-1.9265
6	-5.71	0.02	-0.6654	1.3379	0.0406	-0.1023	-0.0012	0.1872	0.0816	0.1056	-1.9521
7	-5.71	0.01	-0.6795	1.3671	0.0090	-0.0992	-0.0012	0.1855	0.0816	0.1039	-1.9544
8	-5.70	0.02	-0.6996	1.3673	0.0705	-0.1308	-0.0011	0.1868	0.0811	0.1057	-1.9539
9	-5.71	0.02	-0.7010	1.3501	0.0714	-0.1166	-0.0012	0.1871	0.0811	0.1060	-1.9261
10	-5.71	0.02	-0.7010	1.3501	0.0563	-0.1044	-0.0012	0.1871	0.0801	0.1070	-1.9261
11	-5.70	0.02	-0.6864	1.3205	0.0666	-0.1553	-0.0011	0.1870	0.0816	0.1054	-1.9239
12	-5.70	0.01	-0.6876	1.3033	0.0874	-0.1236	-0.0012	0.1868	0.0806	0.1062	-1.8955
13	-5.71	0.02	-0.7009	1.3503	0.0704	-0.1307	-0.0012	0.1871	0.0836	0.1065	-1.9262
14	-5.70	0.02	-0.6996	1.3673	0.0556	-0.1168	-0.0012	0.1870	0.0811	0.1059	-1.9539
15	-5.71	0.02	-0.7104	1.3022	0.0563	-0.1045	-0.0012	0.1854	0.0832	0.1052	-1.9015
16	-5.70	0.02	-0.6853	1.3375	0.0705	-0.1308	-0.0011	0.1868	0.0816	0.1052	-1.9519
17	-5.70	0.02	-0.6800	1.3207	0.0875	-0.1207	-0.0011	0.1849	0.0801	0.1048	-1.9236
18	-5.71	0.02	-0.7010	1.3501	0.0573	-0.0924	-0.0012	0.1871	0.0820	0.1051	-1.9261
19	-5.70	0.01	-0.7007	1.3498	0.0247	-0.1008	-0.0012	0.1851	0.0801	0.1050	-1.9265
20	-5.71	0.01	-0.7104	1.3625	0.0090	-0.0990	-0.0008	0.1873	0.0806	0.1067	-1.9020
21	-5.71	0.02	-0.7152	1.3793	0.0405	-0.1027	-0.0013	0.1854	0.0801	0.1053	-1.9287
22	-5.71	0.01	-0.7008	1.3500	0.0255	-0.0865	-0.0012	0.1871	0.0811	0.1060	-1.9264
23	-5.71	0.02	-0.7103	1.3021	0.0404	-0.1023	-0.0013	0.1872	0.0816	0.1056	-1.9016
24	-5.70	0.02	-0.6850	1.3382	0.0423	-0.0783	-0.0012	0.1870	0.0797	0.1073	-1.9520
25	-5.71	0.01	-0.7025	1.3337	0.0291	-0.0398	-0.0008	0.1851	0.0796	0.1055	-1.8986
26	-5.71	0.01	-0.7161	1.3620	-0.0149	-0.0403	-0.0014	0.1874	0.0801	0.1073	-1.9020
27	-5.71	0.01	-0.7005	1.3497	-0.0210	-0.0710	-0.0013	0.1874	0.0801	0.1073	-1.9269
28	-5.71	0.01	-0.7316	1.3740	0.0104	-0.0744	-0.0014	0.1852	0.0806	0.1046	-1.8781
29	-5.71	0.01	-0.7150	1.3792	0.0097	-0.0867	-0.0013	0.1873	0.0807	0.1066	-1.9290
30	-5.70	0.01	-0.7317	1.3741	0.0113	-0.0622	-0.0014	0.1870	0.0811	0.1059	-1.8781
31	-5.70	0.01	-0.7295	1.4087	-0.0035	-0.0452	-0.0014	0.1871	0.0801	0.1070	-1.9311
32	-5.70	0.01	-0.6881	1.3044	0.0106	-0.0744	-0.0007	0.1930	0.0802	0.1128	-1.8957
33	-5.69	0.01	-0.6879	1.3038	0.0412	-0.0902	-0.0012	0.1871	0.0787	0.1184	-1.8954
34	-5.69	0.01	-0.6957	1.1963	0.0419	-0.0779	-0.0011	0.1999	0.0792	0.1207	-1.8557
35	-5.34	0.01	-0.6019	1.1093	0.0234	-0.0669	-0.0385	0.2024	0.0782	0.1242	-1.8430
36	-4.67	0.01	-0.5017	0.9603	0.0557	-0.1041	-0.0007	0.2045	0.0768	0.1277	-1.7269
37	-3.78	0.01	-0.3804	0.8124	0.0236	-0.0753	-0.0060	0.2055	0.0758	0.1287	-1.5649
38	-2.85	0.01	-0.2834	0.4220	0.0413	-0.0777	-0.0076	0.2093	0.0767	0.1326	-1.4890
39	-1.93	0.01	-0.1641	0.2371	0.0139	-0.0131	0.0001	0.2115	0.0787	0.1348	-1.4451
40	-0.98	0.01	-0.0000	0.0829	0.0492	-0.0273	-0.0070	0.2140	0.0768	0.1378	-1.3817
41	-0.04	0.01	0.0157	-0.0134	0.0422	-0.0659	0.0006	0.2123	0.0766	0.1355	-1.3522
42	0.90	0.01	0.0700	-0.0794	0.0281	-0.0395	-0.0004	0.2150	0.0768	0.1388	-1.0358
43	1.83	0.01	0.1817	-0.2543	0.0260	-0.0395	-0.0001	0.2174	0.0744	0.1430	-1.3994
44	2.82	0.01	0.2849	-0.4645	0.0280	-0.0396	-0.0008	0.2172	0.0777	0.1395	-1.6300
45	3.74	0.01	0.4176	-0.7340	0.0263	-0.0647	-0.0055	0.2135	0.0767	0.1368	-1.7582
46	4.66	0.00	0.5652	-1.0534	-0.0353	-0.0335	0.0022	0.2139	0.0806	0.1333	-1.8638

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 55 MACH 0.80 RX10-6 1.7 PHI 0.0 CONF DIMOF15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	5.59	0.01	0.6769	-1.3222	-0.0053	-0.0620	0.0025	0.2101	0.0811	0.1290	-1.6973
48	6.55	0.01	0.8715	-1.7169	0.0003	-0.1012	-0.0045	0.2068	0.0833	0.1185	-1.9697
49	7.51	0.01	1.0305	-2.0799	0.0275	-0.0544	-0.0043	0.2056	0.0932	0.1126	-2.0187
50	8.44	0.01	1.2193	-2.5229	0.0268	-0.0674	0.0036	0.2060	0.0991	0.1070	-2.0691
51	9.36	0.00	1.3788	-2.8681	0.0258	-0.0802	0.0039	0.2061	0.1048	0.1014	-2.0801
52	10.29	0.00	1.5504	-3.2192	-0.0407	0.0265	0.0040	0.2102	0.1116	0.0987	-2.1360
53	11.27	-0.00	1.7063	-3.5770	-0.0185	-0.0265	0.0044	0.2051	0.1160	0.0891	-2.1524
54	12.20	-0.00	1.9096	-4.1654	-0.0335	-0.0131	0.0047	0.2091	0.1223	0.0868	-2.1813
55	13.14	-0.00	2.0972	-4.5499	-0.0325	-0.0014	0.0051	0.2034	0.1266	0.0768	-2.1695
56	14.07	-0.00	2.3142	-4.9941	-0.0606	0.0506	0.0055	0.2001	0.1315	0.0686	-2.1960
57	15.03	-0.01	2.4997	-5.3298	-0.0799	0.0030	0.0057	0.1999	0.1363	0.0636	-2.1847
58	16.01	-0.00	2.6963	-5.6981	-0.0466	0.0234	-0.0086	0.1955	0.1436	0.0519	-2.1451
59	16.96	-0.00	2.8116	-6.0169	-0.0300	0.0212	-0.0157	0.2008	0.1531	0.0477	-2.1408
60	17.94	-0.01	2.9376	-6.2044	-0.1001	0.1945	-0.0456	0.2143	0.1636	0.0457	-2.1120
61	18.89	-0.01	2.9920	-6.0351	-0.0669	0.1045	-0.1140	0.2417	0.2014	0.0403	-2.0160
62	19.82	-0.01	3.0225	-5.7361	-0.0535	-0.1207	-0.1780	0.3040	0.2672	0.0367	-1.8918
63	20.77	-0.00	3.1932	-6.0117	-0.0157	-0.2731	-0.2071	0.3125	0.2655	0.0269	-1.8827
64	21.69	-0.01	3.3046	-6.1485	-0.1030	-0.1516	-0.2218	0.3200	0.3108	0.0152	-1.8606
65	22.65	-0.01	3.4651	-6.2117	-0.0326	-0.2547	-0.2507	0.3366	0.3272	0.0114	-1.7927
66	23.60	-0.01	3.6439	-6.4613	-0.0346	-0.3191	-0.2548	0.3443	0.3331	-0.0106	-1.7805
67	24.53	-0.01	3.7665	-6.5542	-0.0426	-0.2064	-0.2640	0.3505	0.3534	-0.0169	-1.7310
68	25.45	-0.01	3.9129	-6.6371	0.0037	-0.4898	-0.1957	0.3040	0.3395	-0.0355	-1.6195
69	26.41	-0.01	4.0482	-6.1971	0.0230	-0.3736	-0.1726	0.3107	0.3627	-0.0520	-1.5308
70	27.37	-0.01	4.1278	-6.1718	-0.0827	-0.0804	-0.1045	0.3330	0.3998	-0.0668	-1.5985
71	28.15	-0.01	4.1437	-5.5256	-0.0292	-0.1069	-0.0969	0.3355	0.4288	-0.0933	-1.3550
72	28.16	-0.01	4.1700	-5.4374	-0.0170	0.0031	-0.1342	0.3354	0.4326	-0.0973	-1.3019
73	28.16	-0.01	4.1421	-5.5790	0.0526	-0.3034	-0.0491	0.3330	0.4297	-0.0968	-1.3467
74	28.15	-0.01	4.1397	-5.5177	0.0000	-0.1907	-0.0787	0.3315	0.4306	-0.0992	-1.3265
75	28.16	-0.00	4.2089	-5.5750	0.1022	-0.3323	-0.0590	0.3327	0.4355	-0.1029	-1.3252
76	28.38	0.00	4.2538	-5.5264	0.1880	-0.4035	-0.0302	0.3299	0.4355	-0.1057	-1.3062
77	28.38	0.00	4.2648	-5.5012	0.1616	-0.3884	-0.0457	0.3277	0.4359	-0.1033	-1.3087
78	28.67	0.00	4.2419	-5.5076	0.1064	-0.3150	-0.0304	0.3310	0.4428	-0.1059	-1.3107
79	28.69	0.01	4.3247	-5.5902	0.2649	-0.4987	-0.0283	0.3342	0.4427	-0.1086	-1.2926
80	29.01	0.01	4.3116	-5.4690	0.2195	-0.4505	-0.0059	0.3396	0.4509	-0.1114	-1.2684
81	29.13	0.02	4.3669	-5.5439	0.3018	-0.6489	0.0166	0.3436	0.4499	-0.1064	-1.2918
82	29.30	0.01	4.4156	-5.5865	0.3152	-0.4931	0.0166	0.3242	0.4476	-0.1235	-1.2651
83	29.48	0.02	4.4441	-5.6047	0.4139	-0.6699	0.0396	0.3425	0.4519	-0.1057	-1.2746
84	29.59	0.02	4.4729	-5.6670	0.4560	-0.7316	0.0249	0.3427	0.4572	-0.1146	-1.2670
85	29.74	0.03	4.5015	-5.5461	0.5134	-0.8248	0.0402	0.3387	0.4548	-0.1162	-1.2504
86	29.87	0.03	4.5178	-5.5700	0.5970	-0.9950	0.0255	0.3445	0.4586	-0.1142	-1.2275
87	30.01	0.03	4.5001	-5.5903	0.6190	-0.9362	0.0550	0.3396	0.4537	-0.1163	-1.2259
88	30.16	0.04	4.6300	-5.6561	0.6905	-0.9854	0.0709	0.3412	0.4653	-0.1242	-1.2186
89	30.29	0.04	4.6817	-5.7041	0.7775	-1.1925	0.0863	0.3355	0.4638	-0.1284	-1.2184
90	30.42	0.05	4.7140	-5.6359	0.8377	-1.2488	0.0867	0.3436	0.4649	-0.1214	-1.1956
91	30.55	0.05	4.7597	-5.6717	0.9204	-1.4345	0.1020	0.3396	0.4682	-0.1285	-1.1916
92	30.68	0.05	4.7754	-5.6434	0.8830	-1.4912	0.0870	0.3367	0.4672	-0.1306	-1.1823

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
/	55	0.60	1.7	0.0	BINDF15	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAb	CAF	XCP
93	30.83	0.00	4.8507	-5.6666	0.9970	-1.4898	0.0951	0.3365	0.4715	-0.1351	-1.1682
94	30.97	0.00	4.8629	-5.7122	1.0403	-1.5505	0.0952	0.3456	0.4720	-0.1263	-1.1746
95	31.10	0.00	4.8550	-5.6240	0.9987	-1.4647	0.0879	0.3373	0.4706	-0.1334	-1.1490
96	31.24	0.00	4.9700	-5.8446	0.9646	-1.4843	0.0753	0.3338	0.4662	-0.1325	-1.1356
97	31.38	0.00	4.9654	-5.8181	0.8808	-1.3145	0.0806	0.3325	0.4730	-0.1406	-1.1269
98	31.51	0.00	5.0129	-5.8799	1.0044	-1.5912	0.0733	0.3342	0.4706	-0.1365	-1.1322
99	31.65	0.00	5.0745	-5.9861	1.0127	-1.4906	0.0812	0.3383	0.4745	-0.1363	-1.1205
100	31.78	0.00	5.1379	-6.0422	1.1431	-1.4823	0.0816	0.3272	0.4715	-0.1444	-1.0982
101	31.91	0.00	5.2003	-6.1411	1.0353	-1.6041	0.0665	0.3160	0.4663	-0.1504	-1.1040
102	32.05	0.00	5.1767	-6.0969	0.9993	-1.5973	0.0736	0.3194	0.4654	-0.1461	-1.1013
103	32.19	0.00	5.2306	-6.1454	1.0702	-1.6430	0.0746	0.3200	0.4726	-0.1527	-1.0989
104	32.32	0.00	5.2494	-6.1252	1.0141	-1.6107	0.0668	0.3185	0.4711	-0.1527	-1.0716
105	32.45	0.00	5.2744	-6.2111	1.0722	-1.6906	0.0602	0.3286	0.4735	-0.1450	-1.0940
106	32.58	0.00	5.3075	-6.2878	1.1000	-1.6698	0.0530	0.3190	0.4759	-0.1620	-1.0949
107	32.72	0.00	5.3594	-6.3028	1.0777	-1.7108	0.0459	0.3260	0.4822	-0.1562	-1.0006
108	32.85	0.00	5.3459	-6.3041	1.0045	-1.5783	0.0401	0.3229	0.4856	-0.1627	-0.9853
109	32.98	0.00	5.3336	-6.2878	0.9306	-1.1542	0.0553	0.3220	0.4847	-0.1627	-0.9555
110	33.11	0.00	5.3164	-6.2515	0.8255	-0.9192	0.0461	0.3213	0.4904	-0.1691	-0.9066
111	33.23	0.00	5.3060	-6.3302	0.8987	-1.2221	0.0466	0.3215	0.4890	-0.1675	-0.9374
112	33.35	0.00	5.0533	-6.2849	0.9872	-1.1230	0.0390	0.3278	0.4926	-0.1650	-0.9348
113	33.47	0.00	5.1248	-6.3765	0.9989	-1.1719	0.0324	0.3274	0.5010	-0.1736	-0.8682
114	33.61	0.00	5.1939	-6.1545	0.9642	-1.2048	0.0399	0.3294	0.5058	-0.1764	-0.8893
115	33.73	0.00	5.0401	-5.9086	0.9115	-1.0509	0.0401	0.3326	0.5111	-0.1785	-0.8566
116	33.86	0.00	5.0051	-5.8524	0.8155	-1.0386	0.0328	0.3277	0.5116	-0.1839	-0.8556
117	33.99	0.00	5.0301	-5.9016	0.7601	-0.9215	0.0328	0.3211	0.5044	-0.1833	-0.8426
118	34.09	0.00	5.0494	-5.9108	0.8006	-0.9512	0.0256	0.3296	0.5159	-0.1863	-0.8422
119	34.22	0.00	5.0171	-5.9151	0.8173	-0.9674	0.0334	0.3241	0.5143	-0.1902	-0.8168
120	34.36	0.00	5.0519	-5.8990	0.8062	-0.9252	0.0331	0.3206	0.5120	-0.1914	-0.8232
121	34.46	0.00	5.0559	-5.9349	0.8212	-0.9390	0.0260	0.3217	0.5107	-0.1950	-0.8314
122	34.60	0.00	5.1494	-5.9962	0.7491	-0.8003	0.0263	0.3225	0.5187	-0.1962	-0.8125
123	34.73	0.00	5.1980	-5.9045	0.7230	-0.7433	0.0339	0.3235	0.5230	-0.1995	-0.7913
124	34.82	0.00	5.2116	-5.8953	0.6770	-0.7129	0.0265	0.3193	0.5210	-0.2017	-0.7881
125	34.96	0.00	5.2982	-5.9161	0.6080	-0.5647	0.0042	0.3216	0.5254	-0.2038	-0.7964
126	35.09	0.00	5.3281	-5.9573	0.6523	-0.6244	0.0266	0.3147	0.5206	-0.2059	-0.7992
127	35.20	0.00	5.3007	-5.9477	0.5935	-0.5557	0.0119	0.3007	0.5134	-0.2127	-0.7901
128	35.33	0.00	5.4170	-5.9305	0.5970	-0.5954	0.0264	0.3148	0.5206	-0.2058	-0.7958
129	35.44	0.00	5.4756	-5.9273	0.6857	-0.7837	-0.0039	0.3320	0.5248	-0.1928	-0.8041
130	35.55	0.00	5.5077	-5.9226	0.6185	-0.5670	0.0117	0.3071	0.5221	-0.2150	-0.7952
131	35.69	0.00	5.5083	-5.9661	0.5446	-0.4447	-0.0047	0.2995	0.5200	-0.2205	-0.7865
132	35.80	0.00	5.6120	-5.9987	0.6000	-0.4824	-0.0027	0.2893	0.5199	-0.2295	-0.7863
133	35.92	0.00	5.6144	-5.9506	0.6502	-0.5504	0.0046	0.3164	0.5310	-0.2146	-0.7696
134	36.03	0.00	5.7303	-5.9478	0.5409	-0.2000	-0.0027	0.2875	0.5166	-0.2290	-0.7642
135	36.14	0.00	5.7540	-5.9639	0.6306	-0.2937	-0.0020	0.2980	0.5147	-0.2167	-0.7668
136	36.26	0.00	5.7753	-5.9297	0.4104	-0.1178	-0.0175	0.2859	0.5133	-0.2273	-0.7719
137	36.38	0.00	5.8240	-5.9769	0.4194	-0.0721	-0.0052	0.3020	0.5191	-0.2171	-0.7586
138	36.50	0.00	5.8415	-5.9303	0.4080	-0.1100	-0.0033	0.3104	0.5310	-0.2206	-0.7508

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 55 0.80 1.7 0.0 BIKOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAb	CAF	XCP
139	36.81	0.03	6.9064	-5.0957	0.3907	0.1257	-0.0029	0.2930	0.5229	-0.2299	-0.7378
140	36.79	0.03	6.9672	-5.2188	0.2799	0.0851	-0.0470	0.2813	0.4999	-0.2385	-0.7634
141	36.83	0.05	7.0179	-5.2080	0.4829	0.0792	-0.0175	0.2716	0.5090	-0.2373	-0.7535
142	36.78	0.04	7.0267	-5.1330	0.4505	0.1835	-0.0176	0.2957	0.5252	-0.2295	-0.7305
143	37.10	0.03	7.0922	-5.3074	0.2151	0.1703	-0.0176	0.2720	0.5085	-0.2364	-0.7483
144	37.21	0.02	7.1791	-5.3911	0.1707	0.1429	-0.0472	0.2598	0.5085	-0.2486	-0.7509
145	37.32	0.02	7.2353	-5.4867	0.1613	0.1103	-0.0467	0.2496	0.5099	-0.2602	-0.7563
146	37.44	0.02	7.1776	-5.1964	0.1359	0.0574	-0.0456	0.2811	0.5228	-0.2416	-0.7164
147	37.55	0.02	7.2012	-5.3041	0.0944	0.0455	-0.0418	0.2536	0.5035	-0.2348	-0.7580
148	37.65	0.02	7.2474	-5.4434	0.1152	0.0578	-0.0472	0.2607	0.5075	-0.2467	-0.7459
149	37.79	0.03	7.3177	-5.1561	0.1872	0.7546	-0.0255	0.2804	0.5226	-0.2423	-0.7046
150	37.90	0.01	7.4033	-5.4691	0.0092	0.0510	-0.0543	0.2513	0.4998	-0.2484	-0.7387
151	38.01	0.02	7.4270	-5.3440	0.0413	0.0538	-0.0408	0.2528	0.5065	-0.2536	-0.7195
152	38.14	0.02	7.4249	-5.1211	0.1335	0.0198	-0.0244	0.2687	0.5209	-0.2521	-0.6906
153	38.25	0.02	7.4691	-5.1613	0.1225	0.7098	-0.0320	0.2605	0.5219	-0.2613	-0.6910
154	38.36	0.01	7.5859	-5.3030	-0.0408	0.0900	-0.0469	0.2486	0.5126	-0.2641	-0.6992
155	38.49	0.00	7.0634	-5.4807	-0.1926	0.9800	-0.0690	0.2344	0.5013	-0.2666	-0.7160
156	38.59	0.01	7.0104	-5.3300	-0.1020	0.9200	-0.0466	0.2508	0.5027	-0.2518	-0.7015
157	38.70	0.00	7.0354	-5.1970	-0.1579	1.0513	-0.0468	0.2632	0.5209	-0.2576	-0.6807
158	38.81	0.01	7.0007	-5.1701	-0.1345	1.1128	-0.0321	0.2626	0.5200	-0.2634	-0.6742
159	38.91	-0.00	7.1704	-5.4963	-0.2756	1.1869	-0.0764	0.2373	0.5047	-0.2671	-0.7073
160	39.02	0.01	7.1759	-5.4352	-0.0914	1.1214	-0.0615	0.2443	0.5132	-0.2688	-0.6750
161	39.15	-0.01	7.0665	-5.4438	-0.2456	1.1609	-0.0759	0.2152	0.5070	-0.2918	-0.6920
162	39.29	0.02	7.3049	-5.1303	0.0011	1.1064	-0.0463	0.2505	0.5206	-0.2700	-0.6582
163	39.35	0.00	7.3087	-5.2807	-0.2335	1.1435	-0.0544	0.2314	0.5156	-0.2841	-0.6677
164	39.46	0.00	7.3086	-5.2783	-0.1736	1.3573	-0.0543	0.2343	0.5113	-0.2769	-0.6676
165	39.55	0.01	7.3485	-5.1321	-0.0811	1.3362	-0.0466	0.2625	0.5206	-0.2602	-0.6457
166	39.65	-0.01	8.0321	-5.2659	-0.3080	1.3273	-0.0615	0.2306	0.5214	-0.2908	-0.6556
167	39.77	-0.02	8.0257	-5.3128	-0.4724	1.6381	-0.0691	0.2241	0.5170	-0.2929	-0.6620
168	39.87	-0.00	8.0491	-5.2733	-0.2363	1.4262	-0.0615	0.2364	0.5141	-0.2776	-0.6556
169	39.97	-0.02	8.1127	-5.1832	-0.4253	1.6465	-0.0540	0.2274	0.5175	-0.2901	-0.6389
170	40.08	-0.01	8.0910	-5.2563	-0.3109	1.7501	-0.0474	0.2299	0.5156	-0.2856	-0.6497
171	40.17	-0.03	8.1398	-5.1836	-0.5598	1.7730	-0.0615	0.2207	0.5189	-0.2922	-0.6368
172	40.28	-0.04	8.1007	-5.2801	-0.6455	1.8180	-0.0765	0.2211	0.5142	-0.2931	-0.6478
173	40.37	-0.04	8.2289	-5.2328	-0.6063	1.7393	-0.0610	0.2113	0.5147	-0.3034	-0.6359
174	40.47	-0.03	8.2535	-5.3234	-0.4791	1.8100	-0.0765	0.2214	0.5133	-0.2919	-0.6450
175	40.57	-0.03	8.2222	-5.2362	-0.6588	2.0129	-0.0619	0.2291	0.5257	-0.2946	-0.6422
176	40.68	-0.06	8.3155	-5.2185	-0.7719	2.0974	-0.0634	0.2080	0.5147	-0.3067	-0.6340
177	40.79	-0.06	8.3394	-5.3122	-0.7078	1.9389	-0.0758	0.2130	0.5204	-0.3074	-0.6355
178	40.88	-0.07	8.3311	-5.3216	-0.8671	1.8774	-0.0901	0.2113	0.5142	-0.3029	-0.6390
179	40.99	-0.08	8.4263	-5.4326	-0.9909	2.2182	-0.0910	0.2148	0.5165	-0.3019	-0.6447
180	41.10	-0.08	8.4193	-5.3466	-1.0042	2.2701	-0.0760	0.2201	0.5237	-0.3036	-0.6308
181	41.19	-0.06	8.4598	-5.4016	-0.7633	2.0258	-0.0833	0.1969	0.5205	-0.3216	-0.6385
182	41.29	-0.07	8.5101	-5.3760	-0.9763	2.5644	-0.0774	0.2213	0.5238	-0.3025	-0.6310
183	41.41	-0.06	8.5676	-5.4501	-0.8022	2.2565	-0.0840	0.2143	0.5229	-0.3086	-0.6361
184	41.49	-0.09	8.5649	-5.4269	-1.0195	2.5269	-0.0761	0.2303	0.5256	-0.2955	-0.6330

TEST / 55 MACH 0.80 RATIO-0 1.7 PHI 0.0 CONF BASOFF 5 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
185	41.89	-0.10	8.6934	-5.4326	-1.2373	2.3594	-0.0753	0.2157	0.5329	-0.3172	-0.6251
186	41.89	-0.09	8.6247	-5.4547	-1.0730	2.3729	-0.0708	0.2128	0.5281	-0.3153	-0.6325
187	41.79	-0.10	8.7074	-5.3924	-1.1788	2.5956	-0.0808	0.2242	0.5300	-0.3058	-0.6193
188	41.89	-0.09	8.6973	-5.3033	-1.1957	2.6737	-0.0725	0.2120	0.5271	-0.3151	-0.6334
189	41.99	-0.08	8.7096	-5.3825	-1.0660	2.9005	-0.0852	0.2172	0.5338	-0.3166	-0.6351
190	42.09	-0.09	8.7772	-5.4810	-1.0775	2.7389	-0.0768	0.2226	0.5333	-0.3105	-0.6245
191	42.18	-0.08	8.8477	-5.5205	-1.0868	2.8975	-0.0774	0.2265	0.5334	-0.3149	-0.6359
192	42.27	-0.11	8.8121	-5.5053	-1.3248	2.8121	-0.0887	0.2159	0.5323	-0.3164	-0.6245
193	42.38	-0.10	8.8521	-5.6037	-1.2347	2.9442	-0.0769	0.2170	0.5338	-0.3168	-0.6302
194	42.48	-0.09	8.8307	-5.6748	-1.2066	2.9667	-0.0915	0.1980	0.5269	-0.3325	-0.6284
195	42.58	-0.09	8.9991	-5.6696	-1.0924	3.0706	-0.0773	0.2239	0.5302	-0.3125	-0.6300
196	42.64	-0.11	9.0707	-5.7593	-1.4375	3.3614	-0.0777	0.2151	0.5338	-0.3187	-0.6349
197	42.74	-0.11	9.1320	-5.7695	-1.4099	3.3591	-0.0847	0.2112	0.5352	-0.3240	-0.6318
198	42.82	-0.11	9.1753	-5.8397	-1.5334	3.6164	-0.0781	0.2019	0.5307	-0.3346	-0.6365
199	42.90	-0.11	9.2240	-5.8506	-1.5183	3.7139	-0.0934	0.1984	0.5316	-0.3332	-0.6349
200	42.99	-0.09	9.2037	-5.8011	-1.3814	3.6013	-0.0715	0.2334	0.5479	-0.3145	-0.6262
201	43.08	-0.09	9.2585	-5.8110	-1.2284	3.5477	-0.0782	0.2317	0.5450	-0.3133	-0.6277
202	43.18	-0.09	9.3939	-5.8538	-1.2155	3.6005	-0.0868	0.2179	0.5425	-0.3246	-0.6338
203	43.27	-0.11	9.3866	-5.8639	-1.5101	3.8787	-0.0934	0.2129	0.5397	-0.3268	-0.6352
204	43.37	-0.10	9.4267	-5.9479	-1.3527	3.8697	-0.0789	0.2179	0.5420	-0.3241	-0.6335
205	43.45	-0.09	9.4522	-5.9062	-1.2456	3.8293	-0.0860	0.2235	0.5459	-0.3224	-0.6306
206	43.55	-0.11	9.5062	-6.0331	-1.5977	4.0141	-0.0934	0.2146	0.5435	-0.3289	-0.6367
207	43.64	-0.11	9.5216	-6.0661	-1.5114	4.1715	-0.0867	0.2104	0.5382	-0.3278	-0.6371
208	43.71	-0.10	9.5241	-6.0556	-1.4056	4.0856	-0.0790	0.2183	0.5478	-0.3295	-0.6338
209	43.81	-0.11	9.5501	-6.0935	-1.4514	4.1153	-0.0804	0.2143	0.5420	-0.3277	-0.6262
210	43.90	-0.11	9.6173	-6.0922	-1.4558	4.3447	-0.0796	0.2255	0.5507	-0.3252	-0.6272
211	43.98	-0.12	9.6436	-6.0488	-1.6095	4.0914	-0.0857	0.1943	0.5376	-0.3435	-0.6272
212	44.09	-0.10	9.7344	-6.1275	-1.3069	4.1909	-0.0788	0.2289	0.5545	-0.3256	-0.6326
213	44.19	-0.09	9.7932	-6.2210	-1.2004	4.1052	-0.0861	0.2150	0.5392	-0.3242	-0.6352
214	44.27	-0.12	9.7898	-6.1960	-1.5932	4.1020	-0.0853	0.1805	0.5315	-0.3510	-0.6329
215	44.37	-0.11	9.8515	-6.2453	-1.4708	4.2715	-0.0785	0.2020	0.5416	-0.3390	-0.6340
216	44.46	-0.12	9.8915	-6.3048	-1.5704	4.2141	-0.0929	0.1951	0.5401	-0.3470	-0.6379
217	44.55	-0.11	9.9145	-6.2822	-1.5397	4.2330	-0.0780	0.2122	0.5450	-0.3328	-0.6256
218	44.64	-0.11	9.9571	-6.2519	-1.4971	4.1451	-0.0850	0.2102	0.5406	-0.3304	-0.6279
219	44.74	-0.13	10.0136	-6.3112	-1.6852	4.1495	-0.0719	0.1935	0.5415	-0.3480	-0.6303
220	44.83	-0.11	10.0403	-6.3874	-1.5756	4.2418	-0.0925	0.1952	0.5446	-0.3494	-0.6358
221	44.91	-0.12	10.0782	-6.3589	-1.7014	4.2796	-0.0722	0.1979	0.5434	-0.3515	-0.6289
222	45.00	-0.13	10.1111	-6.3069	-1.7040	4.1274	-0.0786	0.1927	0.5431	-0.3504	-0.6240
223	45.09	-0.11	10.1231	-6.3549	-1.6228	4.2160	-0.0921	0.1937	0.5412	-0.3475	-0.6277
224	45.19	-0.11	10.1009	-6.3498	-1.6411	4.2541	-0.0845	0.1994	0.5510	-0.3524	-0.6233
225	45.27	-0.11	10.2130	-6.4050	-1.6601	4.3360	-0.0847	0.2091	0.5523	-0.3432	-0.6272
226	45.38	-0.11	10.2800	-6.4615	-1.6594	4.4302	-0.0849	0.2010	0.5523	-0.3513	-0.6300
227	45.47	-0.09	10.3227	-6.3321	-1.4752	4.3428	-0.0773	0.2083	0.5576	-0.3493	-0.6325
228	45.55	-0.11	10.3012	-6.5171	-1.7145	4.2756	-0.0913	0.1956	0.5528	-0.3570	-0.6290
229	45.64	-0.10	10.3497	-6.4364	-1.5003	4.2104	-0.0839	0.1975	0.5505	-0.3530	-0.6219
230	45.72	-0.11	10.3492	-6.3976	-1.6483	4.0270	-0.0755	0.1831	0.5543	-0.3712	-0.6182

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 6 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 55 MACH 0.60 RATIO-G 1.7 PHI 0.0 CONF 81WDF15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
231	45.80	-0.10	10.4090	-0.6820	-1.4965	4.2300	-0.0765	0.1940	0.5571	-0.3631	-0.6227
232	45.89	-0.11	10.4813	-0.6747	-1.0933	4.3881	-0.0705	0.1888	0.5572	-0.3684	-0.6271
233	45.99	-0.11	10.5099	-0.6745	-1.0267	4.4401	-0.0704	0.1900	0.5591	-0.3685	-0.6256
234	46.07	-0.12	10.5260	-0.6809	-1.7521	4.1545	-0.0701	0.1854	0.5578	-0.3624	-0.6205
235	46.15	-0.12	10.5104	-0.6745	-1.7247	4.2695	-0.0759	0.1838	0.5586	-0.3750	-0.6203
236	46.20	-0.11	10.5000	-0.6892	-1.7258	4.3058	-0.0833	0.1884	0.5647	-0.3808	-0.6216
237	46.33	-0.12	10.6010	-0.6859	-1.6975	4.2430	-0.0826	0.1873	0.5707	-0.3834	-0.6224
238	46.42	-0.14	10.6900	-0.6877	-1.7217	4.5369	-0.0982	0.1804	0.5658	-0.3854	-0.6209
239	46.52	-0.12	10.7400	-0.6815	-1.7847	4.4418	-0.0831	0.1801	0.5668	-0.3867	-0.6214
240	46.60	-0.11	10.7643	-0.7140	-1.5546	4.3248	-0.0824	0.1816	0.5706	-0.3890	-0.6238
241	46.68	-0.12	10.8253	-0.7246	-1.6942	4.3492	-0.0825	0.1801	0.5673	-0.3812	-0.6212
242	46.78	-0.14	10.8227	-0.6475	-1.8543	4.1392	-0.0885	0.1842	0.5682	-0.4040	-0.5957
243	46.88	-0.12	10.7571	-0.5906	-1.7436	4.3107	-0.0897	0.1892	0.5803	-0.3971	-0.6104
244	46.95	-0.12	10.8989	-0.7419	-1.6601	4.2589	-0.0893	0.1767	0.5750	-0.3963	-0.6186
245	47.04	-0.12	10.9190	-0.8491	-1.7044	4.4330	-0.0897	0.1715	0.5712	-0.3997	-0.6089
246	47.11	-0.13	10.9320	-0.8380	-1.7597	4.9995	-0.0879	0.1723	0.5731	-0.4008	-0.6072
247	47.21	-0.11	10.9621	-0.8002	-1.5501	4.0950	-0.0886	0.1657	0.5682	-0.4025	-0.6094
248	47.29	-0.12	10.9835	-0.5499	-1.7021	3.8961	-0.0799	0.1670	0.5721	-0.4051	-0.5963
249	47.37	-0.11	11.0577	-0.8443	-1.6023	3.9978	-0.0803	0.1607	0.5692	-0.4025	-0.6009
250	47.48	-0.10	11.0872	-0.8865	-1.3673	3.9763	-0.0732	0.1565	0.5746	-0.4181	-0.6031
251	47.55	-0.12	11.1081	-0.8345	-1.6067	3.9050	-0.0795	0.1634	0.5731	-0.4097	-0.5960
252	47.64	-0.14	11.1970	-0.8412	-1.8210	3.9233	-0.0868	0.1616	0.5749	-0.4169	-0.5931
253	47.72	-0.13	11.2125	-0.8964	-1.8112	3.8002	-0.0862	0.1455	0.5711	-0.4256	-0.5883
254	47.81	-0.12	11.2818	-0.7395	-1.6230	3.9769	-0.0852	0.1490	0.5750	-0.4260	-0.5974
255	47.91	-0.13	11.3260	-0.7741	-1.7208	3.8302	-0.0858	0.1567	0.5745	-0.4178	-0.5981
256	47.99	-0.12	11.3500	-0.7477	-1.5630	3.7556	-0.0783	0.1643	0.5803	-0.4160	-0.5986
257	48.08	-0.14	11.3553	-0.7579	-1.9740	4.1005	-0.0863	0.1576	0.5745	-0.4169	-0.5951
258	48.18	-0.11	11.3997	-0.8302	-1.5800	3.8173	-0.0710	0.1551	0.5765	-0.4214	-0.5992
259	48.28	-0.12	11.4015	-0.8439	-1.5966	3.7935	-0.0706	0.1458	0.5775	-0.4317	-0.5969
260	48.33	-0.13	11.4343	-0.8074	-1.9978	3.9574	-0.0853	0.1470	0.5770	-0.4300	-0.5995
261	48.40	-0.12	11.4782	-0.7001	-1.7159	3.9316	-0.0708	0.1435	0.5742	-0.4309	-0.5907
262	48.50	-0.13	11.4990	-0.9025	-1.8303	4.0448	-0.0784	0.1507	0.5794	-0.4287	-0.6003
263	48.59	-0.13	11.5010	-0.8496	-1.8469	4.1478	-0.0787	0.1510	0.5765	-0.4275	-0.5956
264	48.65	-0.11	11.5469	-0.8658	-1.5618	3.8867	-0.0706	0.1605	0.5818	-0.4213	-0.5963
265	48.78	-0.13	11.5993	-0.8936	-1.8852	4.2141	-0.0713	0.1476	0.5765	-0.4309	-0.5964
266	48.84	-0.13	11.5913	-0.8825	-1.7934	4.2705	-0.0790	0.1458	0.5765	-0.4307	-0.5937
267	48.92	-0.14	11.6308	-0.8980	-1.8130	4.1957	-0.0711	0.1501	0.5746	-0.4245	-0.5928
268	49.02	-0.13	11.6082	-0.8878	-1.7928	4.2833	-0.0789	0.1461	0.5807	-0.4346	-0.5892
269	49.09	-0.13	11.6334	-0.8944	-1.7208	4.1469	-0.0711	0.1332	0.5751	-0.4419	-0.5926
270	49.18	-0.14	11.6920	-0.9380	-1.9004	4.2109	-0.0708	0.1320	0.5776	-0.4456	-0.5934
271	49.27	-0.13	11.6967	-0.8708	-1.6828	4.2225	-0.0637	0.1298	0.5770	-0.4472	-0.5874
272	49.35	-0.12	11.7404	-0.9225	-1.6526	4.2576	-0.0636	0.1336	0.5791	-0.4395	-0.5846
273	49.46	-0.13	11.7994	-0.9476	-1.8929	4.3192	-0.0626	0.1188	0.5727	-0.4539	-0.5888
274	49.55	-0.13	11.8421	-7.0168	-1.8003	4.1095	-0.0628	0.1452	0.5795	-0.4347	-0.5925
275	49.61	-0.11	11.7500	-0.8418	-1.4734	4.0500	-0.0632	0.1227	0.5839	-0.4462	-0.5820
276	49.74	-0.11	11.8259	-0.9862	-1.5429	4.2474	-0.0563	0.1245	0.5727	-0.4482	-0.5908

MARTIN MISSILE TAILS EFFECTS DATA

TEST / 55 PART 0.80 MACH 1.7 RATIO-6 0.0 PHI CONF 0.0 L DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
277	49.79	-0.13	11.8962	-7.3926	-1.6503	4.1432	-0.0626	0.1367	0.5745	-0.4378	-0.5962
278	49.87	-0.13	11.8707	-8.4038	-1.6407	4.1830	-0.0630	0.1256	0.5751	-0.4495	-0.5866
279	49.96	-0.12	11.8758	-8.4458	-1.5708	4.1996	-0.0556	0.1276	0.5761	-0.4485	-0.5851
280	50.04	-0.11	11.9214	-8.9141	-1.3428	4.1927	-0.0558	0.1179	0.5756	-0.4577	-0.5800
281	50.14	-0.13	11.9713	-7.0573	-1.5529	4.1886	-0.0702	0.1316	0.5774	-0.4463	-0.5845
282	50.22	-0.12	11.9655	-8.0905	-1.5446	4.2096	-0.0629	0.1151	0.5736	-0.4585	-0.5759
283	50.31	-0.11	12.0339	-8.9791	-1.4080	4.1400	-0.0627	0.1094	0.5730	-0.4672	-0.5709
284	50.39	-0.12	12.0590	-7.1043	-1.5520	4.0446	-0.0695	0.1193	0.5702	-0.4509	-0.5691
285	50.47	-0.10	12.0940	-7.0967	-1.2488	4.1443	-0.0554	0.1247	0.5810	-0.4563	-0.5870
286	50.56	-0.11	12.0818	-8.9779	-1.3935	4.0810	-0.0625	0.1160	0.5742	-0.4582	-0.5776
287	50.64	-0.10	12.1310	-8.9822	-1.2696	4.2155	-0.0462	0.1141	0.5752	-0.4611	-0.5756
288	50.72	-0.09	12.1874	-7.0794	-1.2273	4.2571	-0.0556	0.1086	0.5776	-0.4690	-0.5809
289	50.81	-0.09	12.1718	-7.0450	-1.1915	4.3430	-0.0500	0.1143	0.5824	-0.4681	-0.5791
290	50.90	-0.09	12.2778	-7.1306	-1.2215	4.3712	-0.0557	0.0977	0.5772	-0.4795	-0.5808
291	50.97	-0.07	12.3229	-7.1272	-0.8457	4.2949	-0.0413	0.0995	0.5671	-0.4677	-0.5784
292	51.07	-0.10	12.3472	-7.1442	-1.2000	4.2818	-0.0626	0.1101	0.5852	-0.4751	-0.5783
293	51.15	-0.08	12.4101	-7.2303	-0.7831	4.3659	-0.0414	0.1018	0.5905	-0.4890	-0.5826
294	51.24	-0.07	12.3721	-7.2148	-0.7857	4.3147	-0.0415	0.1018	0.5857	-0.4840	-0.5822
295	51.32	-0.07	12.4158	-7.3038	-0.7992	4.3543	-0.0503	0.1038	0.5949	-0.4912	-0.5863
296	51.40	-0.06	12.4933	-7.3270	-0.8457	4.3715	-0.0500	0.0987	0.5938	-0.4972	-0.5865
297	51.48	-0.03	12.4120	-7.3570	-0.3044	4.1555	-0.0418	0.1147	0.6017	-0.4871	-0.5927
298	51.56	-0.03	12.4802	-7.4483	-0.2988	4.2505	-0.0407	0.0901	0.6046	-0.5145	-0.6008
299	51.67	-0.04	12.5738	-7.5351	-0.5213	4.2401	-0.0571	0.1134	0.6005	-0.4932	-0.5993
300	51.75	-0.01	12.5223	-7.5098	-0.0379	4.3372	-0.0575	0.0973	0.6048	-0.5074	-0.6044
301	51.84	-0.01	12.6423	-7.6773	-0.1003	4.1240	-0.0582	0.0844	0.6176	-0.5332	-0.6073
302	51.94	0.00	12.6055	-7.7485	0.0012	4.1987	-0.0506	0.1400	0.6215	-0.5016	-0.6108
303	52.02	0.02	12.5229	-7.9130	0.2535	4.5039	-0.0581	0.1027	0.6288	-0.5262	-0.6171
304	52.11	0.03	12.5879	-7.9478	0.3801	4.5051	-0.0657	0.1008	0.6312	-0.5305	-0.6176
305	52.20	0.00	12.5525	-7.8670	0.1554	4.4176	-0.0572	0.1002	0.6320	-0.5319	-0.6117
306	52.28	0.02	12.9620	-8.3008	0.3434	4.4022	-0.0577	0.0959	0.6378	-0.5419	-0.6225
307	52.36	0.02	12.9603	-8.0095	0.3159	4.5417	-0.0652	0.1099	0.6349	-0.5251	-0.6171
308	52.46	0.04	13.1910	-8.3056	0.4879	5.1207	-0.0598	0.1055	0.6334	-0.5300	-0.6296
309	52.53	0.02	13.0304	-8.1931	0.2972	4.7989	-0.0587	0.1008	0.6306	-0.5293	-0.6208
310	52.61	0.01	13.0596	-8.1961	0.2198	4.8318	-0.0660	0.0918	0.6291	-0.5373	-0.6276
311	52.71	0.02	13.1465	-8.2988	0.3271	4.9543	-0.0592	0.0975	0.6348	-0.5374	-0.6311
312	52.79	0.03	13.2333	-8.3605	0.3773	5.1195	-0.0673	0.0921	0.6331	-0.5410	-0.6318
313	52.88	0.05	13.4065	-8.4447	0.5745	5.2264	-0.0600	0.0864	0.6253	-0.5389	-0.6298
314	52.97	0.04	13.3575	-8.4009	0.5043	5.1582	-0.0689	0.0930	0.6156	-0.5226	-0.6289
315	53.04	0.04	13.3898	-8.4095	0.5191	5.2058	-0.0606	0.0782	0.6200	-0.5438	-0.6281
316	53.13	0.05	13.4408	-8.5175	0.4869	5.3094	-0.0606	0.0783	0.6103	-0.5380	-0.6337
317	53.21	0.05	13.5334	-8.5549	0.4016	5.3595	-0.0585	0.0730	0.6143	-0.5413	-0.6320
318	53.31	0.04	13.6946	-8.6063	0.3829	5.8494	-0.0612	0.0774	0.5967	-0.5193	-0.6284
319	53.39	0.04	13.5522	-8.4353	0.4203	5.4831	-0.0680	0.0739	0.5969	-0.5230	-0.6234
320	53.47	0.05	13.5566	-8.5454	0.4756	5.4705	-0.0606	0.0743	0.6106	-0.5363	-0.6304
321	53.56	0.06	13.6478	-8.6349	0.4545	5.6666	-0.0611	0.0674	0.6047	-0.5427	-0.6327
322	53.65	0.06	13.7285	-8.6435	0.5039	5.7206	-0.0659	0.0808	0.5906	-0.5098	-0.6296

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 8 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 55 0.80 1.7 0.0 BLADE15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
323	53.72	0.06	13.8244	-8.0409	0.5269	5.3470	-0.0363	0.0635	0.5913	-0.5306	-0.6250
324	53.79	0.05	13.7977	-8.0048	0.4434	5.8159	-0.0357	0.0651	0.5938	-0.5251	-0.6255
325	53.89	0.07	14.0110	-8.0055	0.0584	5.2253	-0.0134	0.0640	0.5875	-0.5235	-0.6186
326	53.97	0.07	14.0041	-8.7808	0.0077	5.4573	-0.0308	0.0650	0.5846	-0.5346	-0.6235
327	54.06	0.06	14.1411	-8.0060	0.9141	4.9551	0.0027	0.0321	0.5665	-0.5344	-0.6124
328	54.15	0.09	14.1495	-8.2826	0.9802	4.8659	0.0337	0.0197	0.5671	-0.5474	-0.5854
329	54.22	0.09	14.1983	-8.4039	1.0053	4.5069	0.0122	0.0375	0.5592	-0.5217	-0.5961
330	54.30	0.09	14.2440	-8.5170	0.9792	4.9744	0.0106	0.0205	0.5627	-0.5422	-0.5981
331	54.39	0.07	14.2369	-8.0042	0.8042	4.2990	0.0343	0.0317	0.5721	-0.5404	-0.5835
332	54.47	0.10	14.3542	-8.4078	1.1064	4.2153	0.0363	0.0211	0.5633	-0.5416	-0.5699
333	54.54	0.09	14.2259	-8.1461	1.0048	4.9193	0.0355	-0.0043	0.5708	-0.5751	-0.5726
334	54.60	0.08	14.0511	-7.9717	0.9193	4.4070	0.0354	0.0179	0.5664	-0.5485	-0.5673
335	54.70	0.09	14.2596	-8.3377	1.1585	4.0603	0.0306	0.0196	0.5632	-0.5486	-0.5855
336	54.77	0.09	14.2496	-8.1605	1.0006	4.1067	0.0368	0.0323	0.5702	-0.5479	-0.5721
337	54.84	0.08	14.1838	-8.1648	0.9916	4.2447	0.0210	0.0077	0.5639	-0.5562	-0.5765
338	54.91	0.08	14.2004	-8.2556	1.0148	4.0452	0.0294	0.0218	0.5703	-0.5485	-0.5817
339	55.00	0.09	14.3050	-8.3777	0.9561	4.1527	0.0218	0.0376	0.5713	-0.5535	-0.5856
340	55.09	0.08	14.4773	-8.5109	1.0196	4.1338	0.0222	0.0035	0.5526	-0.5491	-0.5679
341	55.14	0.08	14.3549	-8.3602	1.0237	3.8994	0.0227	0.0177	0.5609	-0.5432	-0.5963
342	55.23	0.09	14.3363	-8.4491	1.1211	3.9165	0.0225	0.0218	0.5535	-0.5517	-0.5912
343	55.29	0.09	14.3009	-8.3334	1.0181	4.1061	0.0219	0.0305	0.5732	-0.5447	-0.5827
344	55.37	0.10	14.5066	-8.4227	1.1548	4.2322	0.0206	0.0092	0.5794	-0.5702	-0.5774
345	55.48	0.09	14.6346	-8.4423	1.0924	4.5856	0.0376	0.0176	0.5776	-0.5602	-0.5769
346	55.55	0.08	14.6050	-8.5990	1.0209	4.1492	0.0227	0.0168	0.5615	-0.5445	-0.5888
347	55.64	0.07	14.6932	-8.7443	0.8771	4.1732	0.0079	0.0193	0.5635	-0.5440	-0.5951
348	55.73	0.09	14.7960	-8.8217	1.0053	3.8534	0.0323	0.0349	0.5723	-0.5374	-0.5827
349	55.82	0.10	14.8592	-9.0139	1.2305	3.9084	0.0102	0.0326	0.5731	-0.5405	-0.6050
350	55.88	0.08	14.7488	-8.7900	1.0062	3.9526	0.0175	0.0358	0.5711	-0.5373	-0.5960
351	55.96	0.09	14.8552	-8.8711	1.1553	3.9694	0.0170	0.0152	0.5689	-0.5657	-0.5837
352	56.05	0.10	14.9926	-8.8990	1.2550	3.7525	0.0165	0.0211	0.5614	-0.5603	-0.5915
353	56.13	0.09	15.0204	-9.0394	1.1906	3.4788	0.0049	0.0337	0.5743	-0.5406	-0.6018
354	56.19	0.09	14.9829	-8.8613	1.1074	3.7322	0.0114	0.0250	0.5766	-0.5518	-0.5934
355	56.29	0.09	15.0548	-8.7748	1.1072	3.9591	0.0261	0.0381	0.5704	-0.5623	-0.5829
356	56.35	0.09	14.9276	-8.8704	1.1639	3.6988	0.0269	0.0391	0.5731	-0.5304	-0.5814
357	56.44	0.08	14.9450	-8.8166	1.1300	3.5803	0.0196	0.0154	0.5654	-0.5700	-0.5766
358	56.51	0.09	14.9802	-8.7894	1.1084	3.8188	0.0150	0.0405	0.5712	-0.5507	-0.5867
359	56.59	0.09	15.1034	-8.8844	1.3364	3.2384	0.0136	0.0336	0.5604	-0.5548	-0.5882
360	56.66	0.08	14.9816	-8.9209	1.2035	3.1090	0.0138	0.0323	0.5651	-0.5514	-0.5955
361	56.75	0.09	15.0956	-8.9381	1.3850	3.3041	0.0133	0.0287	0.5671	-0.5564	-0.5921
362	56.81	0.08	14.9784	-8.8803	1.3011	3.4216	0.0135	0.0271	0.5622	-0.5545	-0.5907
363	56.89	0.08	14.9622	-8.8112	1.0268	3.4758	0.0283	0.0257	0.5712	-0.5655	-0.5822
364	56.98	0.08	15.1780	-9.0519	1.1154	3.3289	0.0139	0.0122	0.5662	-0.5740	-0.5964
365	57.05	0.07	15.0778	-8.8092	1.2249	3.2932	0.0137	0.0261	0.5623	-0.5562	-0.5842
366	57.13	0.05	15.0570	-8.7117	0.9725	3.3923	0.0141	0.0085	0.5653	-0.5768	-0.5770
367	57.19	0.06	15.1662	-8.8937	1.1100	3.2390	0.0219	0.0203	0.5691	-0.5688	-0.5864
368	57.27	0.08	15.0331	-8.4494	1.1726	3.2394	0.0242	0.0058	0.5711	-0.5719	-0.5621

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 9 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-G PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 55 0.80 1.7 0.0 BINOFIN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
369	57.34	0.05	15.3435	-0.9135	1.0372	2.8085	0.0156	0.0218	0.5833	-0.5615	-0.5925
370	57.41	0.06	15.2164	-0.8350	1.3763	3.2267	0.0143	0.0105	0.5984	-0.5879	-0.5806
371	57.48	0.08	15.0280	-0.6479	1.4407	2.8170	0.0234	0.0036	0.5955	-0.5919	-0.5754
372	57.56	0.04	15.1372	-0.5921	1.0763	2.8377	0.0243	0.0261	0.6033	-0.5772	-0.5875
373	57.63	0.06	15.1193	-0.7194	1.4233	2.9009	0.0302	0.0126	0.5984	-0.5858	-0.5767
374	57.71	0.04	15.1513	-0.8848	1.0373	2.7382	0.0314	0.0147	0.6016	-0.5821	-0.5864
375	57.78	0.06	15.1209	-0.8436	1.3219	2.7821	0.0252	0.0122	0.5873	-0.5751	-0.5849
376	57.84	0.03	14.9381	-0.7465	0.9259	2.6057	0.0235	0.0349	0.5990	-0.5641	-0.5849
377	57.93	0.05	15.2517	-0.9963	1.2273	2.9821	0.0325	0.0178	0.6140	-0.5962	-0.5899
378	58.00	0.02	15.1433	-0.8157	0.8738	2.5993	0.0258	0.0255	0.6097	-0.5842	-0.5822
379	58.08	0.03	15.1434	-0.8212	0.9788	2.6093	0.0336	0.0067	0.6051	-0.5964	-0.5825
380	58.14	0.03	14.9303	-0.6040	1.0025	2.5051	0.0396	0.0264	0.6063	-0.5799	-0.5694
381	58.22	0.04	15.1905	-0.8100	1.1360	2.9266	0.0333	0.0137	0.6072	-0.5935	-0.5800
382	58.23	0.04	15.0815	-0.7440	1.1124	2.6448	0.0398	0.0226	0.6218	-0.5990	-0.5798
383	58.23	0.02	15.0824	-0.6873	0.8525	2.3524	0.0409	0.0256	0.6121	-0.5865	-0.5760
384	58.23	0.03	15.1464	-0.7210	0.9634	2.3548	0.0483	0.0253	0.6199	-0.5946	-0.5758
385	58.24	0.04	15.1470	-0.7214	1.1019	2.2784	0.0409	0.0211	0.6174	-0.5963	-0.5758

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYNO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 55 0.80 1.7 0.0 BLKOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
1	-5.71	0.01	0.0176	0.0032	-0.0025	0.1819	-0.1420	-0.2769	-0.0411	-0.1304	0.1483	0.4707
2	-5.71	0.02	0.0182	0.0025	-0.0034	0.1544	-0.2099	-0.2837	-0.0419	-0.1338	0.1476	0.4714
3	-5.71	0.01	0.0176	0.0028	-0.0029	0.1542	-0.1420	-0.2769	-0.0412	-0.1293	0.1486	0.4657
4	-5.71	0.01	0.0182	0.0025	-0.0034	0.1544	-0.2099	-0.2735	-0.0408	-0.1267	0.1490	0.4704
5	-5.71	0.01	0.0180	0.0022	-0.0036	0.1507	-0.2466	-0.2768	-0.0415	-0.1318	0.1498	0.4759
6	-5.71	0.02	0.0184	0.0022	-0.0048	0.1342	-0.2927	-0.2752	-0.0412	-0.1296	0.1496	0.4707
7	-5.71	0.01	0.0182	0.0023	-0.0034	0.1420	-0.2099	-0.2734	-0.0409	-0.1301	0.1495	0.4756
8	-5.70	0.02	0.0182	0.0020	-0.0035	0.1239	-0.2180	-0.2786	-0.0416	-0.1313	0.1492	0.4711
9	-5.71	0.02	0.0181	0.0017	-0.0038	0.1298	-0.2901	-0.2734	-0.0413	-0.1301	0.1509	0.4756
10	-5.71	0.02	0.0181	0.0016	-0.0038	0.1222	-0.2901	-0.2734	-0.0411	-0.1294	0.1502	0.4731
11	-5.70	0.02	0.0180	0.0027	-0.0028	0.1688	-0.1250	-0.2717	-0.0408	-0.1293	0.1500	0.4757
12	-5.70	0.01	0.0183	0.0010	-0.0046	0.0752	-0.3459	-0.2751	-0.0414	-0.1310	0.1504	0.4760
13	-5.71	0.02	0.0175	0.0031	-0.0018	0.1772	-0.1029	-0.2717	-0.0408	-0.1293	0.1500	0.4757
14	-5.70	0.02	0.0183	0.0022	-0.0041	0.1350	-0.2515	-0.2752	-0.0412	-0.1296	0.1496	0.4707
15	-5.71	0.02	0.0177	0.0027	-0.0025	0.1526	-0.1412	-0.2751	-0.0414	-0.1310	0.1504	0.4760
16	-5.70	0.02	0.0181	0.0015	-0.0038	0.1145	-0.2701	-0.2751	-0.0414	-0.1310	0.1504	0.4760
17	-5.70	0.02	0.0147	0.0017	-0.0037	0.1157	-0.2517	-0.2734	-0.0409	-0.1294	0.1495	0.4731
18	-5.71	0.02	0.0181	0.0027	-0.0027	0.1678	-0.1677	-0.2769	-0.0414	-0.1304	0.1494	0.4707
19	-5.70	0.01	0.0181	0.0017	-0.0038	0.1298	-0.2701	-0.2752	-0.0410	-0.1289	0.1488	0.4682
20	-5.71	0.01	0.0180	0.0027	-0.0028	0.1688	-0.1250	-0.2735	-0.0410	-0.1287	0.1498	0.4704
21	-5.71	0.02	0.0183	0.0023	-0.0041	0.1412	-0.2515	-0.2786	-0.0415	-0.1313	0.1488	0.4711
22	-5.71	0.01	0.0184	0.0017	-0.0048	0.1057	-0.2927	-0.2735	-0.0410	-0.1287	0.1498	0.4704
23	-5.71	0.02	0.0181	0.0025	-0.0027	0.1553	-0.1677	-0.2751	-0.0414	-0.1303	0.1504	0.4734
24	-5.70	0.02	0.0182	0.0022	-0.0034	0.1359	-0.2099	-0.2752	-0.0410	-0.1289	0.1488	0.4682
25	-5.71	0.01	0.0152	0.0017	-0.0045	0.1288	-0.3409	-0.2718	-0.0408	-0.1265	0.1500	0.4652
26	-5.71	0.01	0.0177	0.0030	-0.0032	0.1696	-0.1608	-0.2786	-0.0415	-0.1299	0.1488	0.4660
27	-5.71	0.01	0.0183	0.0031	-0.0030	0.1607	-0.1554	-0.2734	-0.0412	-0.1294	0.1506	0.4731
28	-5.71	0.01	0.0148	0.0017	-0.0043	0.1149	-0.2903	-0.2752	-0.0414	-0.1289	0.1503	0.4682
29	-5.71	0.01	0.0183	0.0017	-0.0042	0.1043	-0.2577	-0.2752	-0.0411	-0.1282	0.1492	0.4656
30	-5.70	0.01	0.0147	0.0018	-0.0043	0.1225	-0.2925	-0.2752	-0.0412	-0.1289	0.1496	0.4682
31	-5.70	0.01	0.0147	0.0017	-0.0037	0.1157	-0.2517	-0.2765	-0.0417	-0.1313	0.1496	0.4712
32	-5.70	0.01	0.0184	0.0020	-0.0048	0.1220	-0.2927	-0.2667	-0.0400	-0.1253	0.1498	0.4696
33	-5.79	0.01	0.0184	0.0020	-0.0048	0.1220	-0.2927	-0.2599	-0.0392	-0.1212	0.1507	0.4665
34	-5.69	0.01	0.0181	0.0018	-0.0038	0.1379	-0.2901	-0.2701	-0.0380	-0.1165	0.1543	0.4736
35	-5.34	0.01	0.0143	0.0020	-0.0050	0.1352	-0.3378	-0.2291	-0.0360	-0.1073	0.1570	0.4685
36	-4.87	0.01	0.0147	0.0028	-0.0042	0.1769	-0.2857	-0.1866	-0.0305	-0.0854	0.1626	0.4576
37	-3.78	0.01	0.0152	0.0025	-0.0051	0.1695	-0.3664	-0.1424	-0.0244	-0.0669	0.1717	0.4494
38	-2.85	0.01	0.0146	0.0032	-0.0041	0.2193	-0.2808	-0.1071	-0.0175	-0.0426	0.1636	0.3972
39	-1.93	0.01	0.0147	0.0031	-0.0048	0.2110	-0.3265	-0.0702	-0.0107	-0.0183	0.1527	0.2611
40	-0.98	0.01	0.0162	0.0034	-0.0046	0.2100	-0.2840	-0.0398	-0.0044	-0.0057	0.1106	0.1432
41	-0.04	0.01	0.0183	0.0032	-0.0046	0.1964	-0.2822	-0.0147	0.0025	0.0045	-0.1701	-0.3061
42	0.90	0.01	0.0182	0.0034	-0.0046	0.2100	-0.2840	0.0104	0.0096	0.0155	0.9234	1.4712
43	1.83	0.01	0.0179	0.0034	-0.0051	0.1900	-0.2849	0.0406	0.0156	0.0320	0.3844	0.7882
44	2.82	0.01	0.0194	0.0036	-0.0043	0.1856	-0.2216	0.0791	0.0231	0.0600	0.2925	0.7582
45	3.74	0.01	0.0183	0.0027	-0.0047	0.1857	-0.2883	0.1213	0.0295	0.0827	0.2468	0.6815
46	4.66	0.00	0.0210	0.0028	-0.0035	0.1334	-0.1667	0.1757	0.0375	0.1112	0.2132	0.6330

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 55 MACH 0.80 RX10-6 1.7 PHI 0.0 CONF 15 L 6.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	5.59	0.01	0.0195	0.0021	-0.0044	0.1077	-0.2256	0.2166	0.0424	0.1317	0.1956	0.6080
48	6.55	0.01	0.0179	0.0018	-0.0040	0.1006	-0.2235	0.2146	0.0430	0.1305	0.1969	0.5844
49	7.51	0.01	0.0170	0.0017	-0.0026	0.0955	-0.1901	0.2042	0.0547	0.1276	0.1661	0.5700
50	8.44	0.01	0.0193	0.0020	-0.0024	0.1037	-0.1244	0.3057	0.0599	0.2135	0.1553	0.5535
51	9.36	0.00	0.0222	0.0023	-0.0001	0.1038	-0.0045	0.4355	0.0635	0.2359	0.1458	0.5416
52	10.29	0.00	0.0223	0.0022	-0.0007	0.0987	-0.0314	0.4992	0.0676	0.2637	0.1354	0.5283
53	11.27	-0.00	0.0190	0.0014	0.0008	0.0737	0.0421	0.5510	0.0706	0.2842	0.1282	0.5159
54	12.20	-0.00	0.0250	0.0012	0.0042	0.0480	0.1080	0.6168	0.0744	0.3039	0.1207	0.4927
55	13.14	-0.00	0.0183	0.0001	-0.0023	0.0061	-0.1411	0.6790	0.0771	0.3266	0.1136	0.4810
56	14.07	-0.00	0.0160	-0.0002	0.0003	-0.0125	0.0187	0.7396	0.0790	0.3496	0.1077	0.4730
57	15.03	-0.01	0.0210	-0.0002	0.0050	-0.0092	0.2294	0.7884	0.0810	0.3687	0.1028	0.4614
58	16.01	-0.00	0.0152	-0.0007	-0.0028	-0.0531	-0.2121	0.8424	0.0814	0.3788	0.0967	0.4496
59	16.96	-0.00	0.0157	-0.0014	0.0035	-0.0892	0.2229	0.8880	0.0805	0.3909	0.0907	0.4402
60	17.94	-0.01	0.0141	-0.0009	0.0059	-0.0744	0.4876	0.9283	0.0791	0.4032	0.0852	0.4343
61	18.89	-0.01	0.0053	-0.0015	0.0099	-0.2351	1.0079	0.9600	0.0768	0.4147	0.0800	0.4320
62	19.82	-0.01	-0.0052	-0.0026	0.0188	0.5002	-3.8154	0.9879	0.0758	0.4274	0.0765	0.4327
63	20.77	-0.00	-0.0125	-0.0036	0.0138	0.3041	-1.1040	1.0140	0.0728	0.4501	0.0698	0.4311
64	21.69	-0.01	-0.0323	-0.0048	0.0061	0.1467	-0.1089	1.0800	0.0692	0.4640	0.0836	0.4264
65	22.63	-0.01	-0.0405	-0.0054	-0.0072	0.1121	0.1494	1.1274	0.0838	0.4712	0.0566	0.4179
66	23.60	-0.01	-0.0672	-0.0061	-0.0205	0.0609	0.3115	1.1335	0.0542	0.4629	0.0477	0.4076
67	24.53	-0.01	-0.0621	-0.0063	-0.0292	0.0769	0.3561	1.1755	0.0541	0.4780	0.0460	0.4049
68	25.49	-0.01	-0.0504	-0.0057	-0.0296	0.0736	0.3665	1.1105	0.0590	0.4371	0.0351	0.3937
69	26.41	-0.01	-0.0430	-0.0081	-0.0372	0.0872	0.6146	1.0284	0.0524	0.3966	0.0315	0.3856
70	27.37	-0.01	-0.1267	-0.0158	-0.0860	0.1158	0.6293	0.9704	0.0277	0.3735	0.0283	0.3815
71	28.15	-0.01	-0.0913	-0.0125	-0.0676	0.1349	0.7423	0.9152	0.0253	0.3477	0.0277	0.3808
72	28.16	-0.01	-0.1212	-0.0164	-0.0811	0.1300	0.6669	0.9046	0.0254	0.3435	0.0281	0.3797
73	28.16	-0.01	-0.0837	-0.0100	-0.0481	0.1353	0.7547	0.9118	0.0255	0.3448	0.0280	0.3783
74	28.15	-0.01	-0.1035	-0.0136	-0.0713	0.1310	0.6886	0.9058	0.0254	0.3351	0.0272	0.3745
75	28.18	-0.00	-0.0414	-0.0074	-0.0359	0.1792	0.8692	0.9046	0.0250	0.3407	0.0277	0.3766
76	28.36	0.00	-0.0071	-0.0031	-0.0181	0.4308	2.5493	0.8805	0.0249	0.3304	0.0283	0.3753
77	28.38	0.00	-0.0457	-0.0075	-0.0391	0.1645	0.8575	0.9083	0.0249	0.3410	0.0275	0.3754
78	28.67	0.00	-0.0502	-0.0071	-0.0424	0.1418	0.8443	0.8979	0.0247	0.3374	0.0276	0.3758
79	28.84	0.01	0.0043	-0.0006	-0.0085	-0.1396	-1.9767	0.8944	0.0243	0.3310	0.0272	0.3768
80	29.01	0.01	0.0387	0.0031	0.0079	0.0801	0.2041	0.8858	0.0243	0.3322	0.0275	0.3750
81	27.13	0.02	0.0626	0.0043	0.0265	0.1128	0.4424	0.8893	0.0238	0.3345	0.0268	0.3762
82	29.30	0.01	0.0368	0.0037	0.0116	0.1011	0.3060	0.8841	0.0242	0.3306	0.0274	0.3740
83	29.46	0.02	0.0972	0.0111	0.0465	0.1144	0.4779	0.8876	0.0238	0.3330	0.0269	0.3752
84	29.59	0.02	0.0987	0.0106	0.0473	0.1096	0.4767	0.9103	0.0236	0.3418	0.0263	0.3755
85	29.74	0.03	0.1190	0.0152	0.0610	0.1279	0.5122	0.8940	0.0232	0.3336	0.0260	0.3752
86	29.87	0.03	0.1054	0.0219	0.0850	0.1342	0.5239	0.8940	0.0233	0.3356	0.0261	0.3752
87	30.01	0.03	0.1400	0.0187	0.0720	0.1338	0.5186	0.8964	0.0231	0.3383	0.0258	0.3752
88	30.16	0.04	0.1787	0.0245	0.0918	0.1373	0.5137	0.8969	0.0231	0.3363	0.0256	0.3752
89	30.29	0.04	0.1810	0.0240	0.0908	0.1361	0.5159	0.8999	0.0231	0.3372	0.0257	0.3747
90	30.42	0.05	0.2004	0.0270	0.1021	0.1379	0.5195	0.8965	0.0228	0.3349	0.0253	0.3736
91	30.55	0.05	0.2100	0.0304	0.1183	0.1406	0.5465	0.9000	0.0225	0.3379	0.0250	0.3755
92	30.68	0.05	0.2149	0.0311	0.1169	0.1445	0.5536	0.9052	0.0222	0.3390	0.0246	0.3745

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 55 0.80 1.7 0.0 BINORIS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	ALPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
93	30.83	0.00	0.2490	0.0360	0.1358	0.1525	0.5452	0.9105	0.0215	0.3429	0.0237	0.3766
94	30.97	0.00	0.2446	0.0350	0.1344	0.1482	0.5493	0.9201	0.0214	0.3491	0.0231	0.3770
95	31.10	0.00	0.2355	0.0365	0.1301	0.1548	0.5523	0.9157	0.0211	0.3447	0.0231	0.3764
96	31.24	0.00	0.2269	0.0332	0.1240	0.1401	0.5463	0.9455	0.0205	0.3562	0.0217	0.3768
97	31.36	0.00	0.2194	0.0338	0.1191	0.1539	0.5431	0.9386	0.0204	0.3521	0.0218	0.3752
98	31.51	0.00	0.2259	0.0348	0.1254	0.1545	0.5572	0.9315	0.0200	0.3501	0.0215	0.3759
99	31.65	0.00	0.2297	0.0350	0.1253	0.1548	0.5453	0.9490	0.0200	0.3571	0.0211	0.3763
100	31.78	0.00	0.2340	0.0352	0.1290	0.1503	0.5546	0.9700	0.0196	0.3673	0.0192	0.3786
101	31.91	0.01	0.2063	0.0350	0.1156	0.1582	0.5553	0.9061	0.0194	0.3637	0.0201	0.3757
102	32.05	0.01	0.2184	0.0334	0.1199	0.1527	0.5493	0.9748	0.0189	0.3665	0.0190	0.3759
103	32.19	0.01	0.2242	0.0337	0.1247	0.1501	0.5501	0.9628	0.0182	0.3619	0.0189	0.3759
104	32.32	0.00	0.2140	0.0330	0.1174	0.1540	0.5489	0.9706	0.0185	0.3667	0.0190	0.3754
105	32.45	0.00	0.2287	0.0354	0.1255	0.1548	0.5488	0.9787	0.0175	0.3673	0.0179	0.3760
106	32.58	0.01	0.2033	0.0317	0.1134	0.1557	0.5579	1.0009	0.0177	0.3776	0.0177	0.3772
107	32.72	0.01	0.1946	0.0304	0.1075	0.1504	0.5525	0.9941	0.0170	0.3736	0.0171	0.3758
108	32.85	0.01	0.2036	0.0322	0.1121	0.1580	0.5509	1.0096	0.0168	0.3811	0.0167	0.3774
109	32.98	0.00	0.1752	0.0286	0.0970	0.1646	0.5503	0.9836	0.0171	0.3713	0.0174	0.3774
110	33.11	0.00	0.1876	0.0272	0.0929	0.1600	0.5478	0.9653	0.0160	0.3708	0.0183	0.3763
111	33.23	0.00	0.1841	0.0300	0.1023	0.1632	0.5557	1.0149	0.0165	0.3815	0.0163	0.3759
112	33.35	0.01	0.1988	0.0276	0.0998	0.1741	0.5656	1.0380	0.0168	0.3789	0.0167	0.3758
113	33.47	0.01	0.1851	0.0257	0.0918	0.1571	0.5549	1.0096	0.0164	0.3765	0.0164	0.3747
114	33.61	0.01	0.1751	0.0262	0.0991	0.1613	0.5660	1.0185	0.0162	0.3825	0.0159	0.3755
115	33.73	0.01	0.1738	0.0264	0.0969	0.1637	0.5576	1.0064	0.0160	0.3766	0.0159	0.3742
116	33.86	0.00	0.1649	0.0277	0.0918	0.1683	0.5508	1.0115	0.0163	0.3791	0.0161	0.3747
117	33.99	0.00	0.1533	0.0261	0.0836	0.1705	0.5454	1.0257	0.0153	0.3830	0.0149	0.3734
118	34.09	0.00	0.1472	0.0240	0.0827	0.1633	0.5619	1.0185	0.0159	0.3838	0.0156	0.3768
119	34.22	0.00	0.1603	0.0254	0.0895	0.1587	0.5564	1.0286	0.0153	0.3801	0.0149	0.3754
120	34.36	0.00	0.1458	0.0232	0.0854	0.1571	0.5702	1.0217	0.0154	0.3835	0.0151	0.3753
121	34.48	0.00	0.1439	0.0226	0.0820	0.1573	0.5699	1.0336	0.0148	0.3866	0.0143	0.3759
122	34.60	0.00	0.1453	0.0237	0.0830	0.1634	0.5713	1.0409	0.0139	0.3905	0.0134	0.3751
123	34.73	0.00	0.1549	0.0203	0.0794	0.1508	0.5887	1.0428	0.0134	0.3927	0.0129	0.3766
124	34.82	0.00	0.1330	0.0215	0.0760	0.1612	0.5690	1.0391	0.0144	0.3904	0.0139	0.3757
125	34.96	0.00	0.1081	0.0191	0.0649	0.1769	0.6000	1.0720	0.0132	0.4048	0.0123	0.3776
126	35.09	0.00	0.1112	0.0192	0.0659	0.1729	0.5923	1.0565	0.0133	0.3966	0.0126	0.3754
127	35.20	0.00	0.0947	0.0179	0.0588	0.1893	0.6184	1.0618	0.0130	0.3964	0.0123	0.3733
128	35.33	0.00	0.0931	0.0166	0.0596	0.1780	0.6098	1.0635	0.0129	0.3986	0.0121	0.3748
129	35.44	0.00	0.0799	0.0144	0.0516	0.1805	0.6479	1.0758	0.0114	0.4043	0.0106	0.3758
130	35.55	0.00	0.0904	0.0166	0.0552	0.1839	0.6102	1.0861	0.0120	0.4060	0.0111	0.3756
131	35.69	0.00	0.0829	0.0144	0.0520	0.1740	0.6268	1.0869	0.0120	0.4090	0.0118	0.3756
132	35.80	0.00	0.0857	0.0151	0.0544	0.1765	0.6343	1.1218	0.0122	0.4213	0.0109	0.3756
133	35.92	0.00	0.0903	0.0151	0.0550	0.1675	0.6153	1.0752	0.0114	0.4043	0.0106	0.3760
134	36.03	0.00	0.0800	0.0136	0.0449	0.2004	0.6396	1.0943	0.0114	0.4094	0.0104	0.3741
135	36.14	0.00	0.0805	0.0130	0.0468	0.2253	0.6736	1.0822	0.0117	0.4035	0.0108	0.3728
136	36.20	0.00	0.0492	0.0104	0.0316	0.2119	0.8436	1.1337	0.0130	0.4272	0.0115	0.3768
137	36.38	0.00	0.0622	0.0136	0.0402	0.2191	0.8473	1.0873	0.0115	0.4074	0.0106	0.3747
138	36.50	0.00	0.0193	0.0074	0.0186	0.3838	0.9637	1.0991	0.0115	0.4121	0.0105	0.3766

TEST PART MACH NO= PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 55 0.90 1.61 0.0 BINOMIAL 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
139	36.81	0.03	0.0321	0.0115	0.0334	0.2212	0.6423	1.0659	0.0112	0.4071	0.0103	0.3756
140	36.74	0.03	0.0195	0.0074	0.0186	0.3796	0.8513	1.1287	0.0119	0.4233	0.0106	0.3751
141	36.65	0.03	0.0078	0.0059	0.0047	0.7507	1.2436	1.1166	0.0110	0.4101	0.0104	0.3726
142	36.96	0.04	0.0168	0.0071	0.0135	0.4226	0.8036	1.0909	0.0105	0.4090	0.0096	0.3749
143	37.10	0.03	0.0181	0.0067	0.0157	0.3703	0.8074	1.1048	0.0110	0.4116	0.0100	0.3726
144	37.21	0.02	-0.0186	0.0017	-0.0051	-0.0914	0.2742	1.1257	0.0112	0.4259	0.0099	0.3750
145	37.32	0.02	-0.0185	0.0027	-0.0076	-0.1476	0.4153	1.1066	0.0118	0.4395	0.0101	0.3766
146	37.44	0.02	-0.0406	-0.0002	-0.0176	0.0649	0.4384	1.1289	0.0105	0.4246	0.0093	0.3761
147	37.55	0.02	-0.0402	-0.0016	-0.0240	0.0347	0.5206	1.1073	0.0121	0.4469	0.0102	0.3781
148	37.65	0.02	-0.0243	0.0017	-0.0098	-0.0700	0.4033	1.1462	0.0103	0.4295	0.0090	0.3747
149	37.79	0.03	-0.0375	-0.0006	-0.0169	0.0160	0.4507	1.1358	0.0101	0.4279	0.0089	0.3768
150	37.90	0.01	-0.0401	-0.0018	-0.0207	0.0499	0.5162	1.1634	0.0103	0.4364	0.0089	0.3751
151	38.01	0.02	-0.0433	-0.0021	-0.0217	0.0486	0.5023	1.1634	0.0106	0.4358	0.0093	0.3746
152	38.14	0.02	-0.0253	0.0005	-0.0101	-0.0194	0.3415	1.1063	0.0096	0.4159	0.0089	0.3753
153	38.25	0.02	-0.0481	-0.0025	-0.0241	0.0590	0.5259	1.1256	0.0092	0.4229	0.0082	0.3757
154	38.36	0.01	-0.0038	-0.0048	-0.0310	0.0754	0.5181	1.1635	0.0091	0.4384	0.0078	0.3768
155	38.49	0.00	-0.0859	-0.0068	-0.0459	0.0793	0.5338	1.1704	0.0095	0.4404	0.0081	0.3763
156	38.59	0.01	-0.0360	-0.0038	-0.0240	0.0657	0.5112	1.1395	0.0087	0.4275	0.0076	0.3752
157	38.70	0.00	-0.0516	-0.0040	-0.0269	0.0777	0.5012	1.1338	0.0083	0.4297	0.0073	0.3790
158	38.81	0.01	-0.0725	-0.0054	-0.0360	0.0746	0.5249	1.1167	0.0089	0.4174	0.0080	0.3738
159	38.91	-0.00	-0.1150	-0.0090	-0.0634	0.0838	0.5509	1.2026	0.0096	0.4522	0.0082	0.3760
160	39.02	0.01	-0.0901	-0.0077	-0.0484	0.0836	0.5307	1.1511	0.0091	0.4312	0.0079	0.3746
161	39.15	-0.01	-0.0975	-0.0079	-0.0539	0.0813	0.5535	1.1021	0.0092	0.4441	0.0078	0.3757
162	39.25	0.02	-0.0990	-0.0094	-0.0523	0.0951	0.5278	1.1580	0.0082	0.4359	0.0071	0.3764
163	39.35	0.00	-0.1211	-0.0113	-0.0657	0.0951	0.5256	1.1472	0.0076	0.4223	0.0069	0.3747
164	39.48	0.00	-0.1079	-0.0094	-0.0572	0.0826	0.5297	1.1598	0.0076	0.4353	0.0066	0.3753
165	39.55	0.01	-0.0751	-0.0074	-0.0414	0.0907	0.5507	1.1323	0.0076	0.4248	0.0067	0.3752
166	39.65	-0.01	-0.1283	-0.0145	-0.0882	0.1132	0.5516	1.1083	0.0073	0.4145	0.0066	0.3740
167	39.77	-0.02	-0.1526	-0.0141	-0.0720	0.1065	0.5431	1.1426	0.0077	0.4296	0.0067	0.3762
168	39.87	-0.00	-0.1169	-0.0113	-0.0598	0.0968	0.5111	1.1478	0.0075	0.4322	0.0064	0.3766
169	39.97	-0.02	-0.1454	-0.0182	-0.0717	0.1156	0.5107	1.1135	0.0070	0.4184	0.0063	0.3758
170	40.08	-0.01	-0.1367	-0.0172	-0.0603	0.1099	0.5125	1.1203	0.0072	0.4224	0.0064	0.3771
171	40.17	-0.03	-0.1547	-0.0190	-0.0824	0.1230	0.5327	1.1117	0.0062	0.4209	0.0056	0.3766
172	40.26	-0.04	-0.1751	-0.0225	-0.0944	0.1287	0.5396	1.1408	0.0073	0.4317	0.0064	0.3784
173	40.37	-0.04	-0.1928	-0.0249	-0.1034	0.1293	0.5303	1.1237	0.0072	0.4240	0.0064	0.3774
174	40.47	-0.03	-0.1871	-0.0251	-0.0974	0.1344	0.5206	1.1271	0.0067	0.4264	0.0060	0.3763
175	40.57	-0.05	-0.1959	-0.0261	-0.1025	0.1334	0.5232	1.1205	0.0061	0.4244	0.0055	0.3789
176	40.68	-0.06	-0.2080	-0.0280	-0.1088	0.1349	0.5137	1.1300	0.0060	0.4287	0.0053	0.3792
177	40.79	-0.06	-0.1917	-0.0257	-0.0987	0.1343	0.5145	1.1271	0.0064	0.4277	0.0057	0.3795
178	40.88	-0.07	-0.2180	-0.0306	-0.1174	0.1419	0.5436	1.1341	0.0056	0.4310	0.0049	0.3801
179	40.99	-0.06	-0.2442	-0.0306	-0.1149	0.1367	0.5127	1.1169	0.0057	0.4241	0.0051	0.3797
180	41.10	-0.08	-0.2512	-0.0341	-0.1193	0.1473	0.5171	1.1273	0.0055	0.4277	0.0049	0.3794
181	41.19	-0.06	-0.2323	-0.0328	-0.1102	0.1410	0.5004	1.1348	0.0059	0.4297	0.0052	0.3787
182	41.29	-0.07	-0.2484	-0.0336	-0.1183	0.1447	0.5104	1.1244	0.0056	0.4261	0.0050	0.3790
183	41.41	-0.06	-0.2526	-0.0359	-0.1297	0.1420	0.5153	1.1297	0.0050	0.4265	0.0044	0.3793
184	41.49	-0.09	-0.2230	-0.0310	-0.1157	0.1368	0.5141	1.1073	0.0051	0.4191	0.0046	0.3785

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 33 MACH 0.80 RATIO-G 1.7 PHI 0.0 CONF BLKOFF D 0.6 L 0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CBZ	XCPF1	YCPF1	CNF2	CM2	CBZ	XCPF2	YCPF2
185	41.60	-0.10	-0.2224	-0.0338	-0.1186	0.1509	0.5335	1.1090	0.0051	0.4192	0.0046	0.3780
186	41.69	-0.09	-0.2030	-0.0307	-0.1332	0.1470	0.5063	1.1124	0.0051	0.4216	0.0046	0.3790
187	41.79	-0.10	-0.2000	-0.0338	-0.1342	0.1457	0.5043	1.1021	0.0051	0.4180	0.0046	0.3793
188	41.89	-0.09	-0.2091	-0.0322	-0.1455	0.1479	0.5104	1.1245	0.0044	0.4274	0.0039	0.3801
189	41.99	-0.08	-0.2913	-0.0428	-0.1402	0.1468	0.5019	1.1175	0.0051	0.4255	0.0046	0.3808
190	42.09	-0.09	-0.2736	-0.0408	-0.1500	0.1490	0.4969	1.0951	0.0045	0.4174	0.0041	0.3811
191	42.18	-0.08	-0.2709	-0.0405	-0.1516	0.1494	0.4950	1.1193	0.0041	0.4276	0.0037	0.3821
192	42.27	-0.11	-0.3046	-0.0456	-0.1500	0.1495	0.4921	1.0948	0.0045	0.4117	0.0042	0.3795
193	42.38	-0.10	-0.2942	-0.0464	-0.1457	0.1477	0.4952	1.1037	0.0043	0.4201	0.0039	0.3806
194	42.48	-0.09	-0.3080	-0.0464	-0.1491	0.1506	0.4941	1.1036	0.0044	0.4210	0.0040	0.3808
195	42.58	-0.09	-0.2868	-0.0441	-0.1594	0.1526	0.4827	1.0967	0.0042	0.4170	0.0038	0.3795
196	42.69	-0.11	-0.3110	-0.0477	-0.1496	0.1535	0.4810	1.1126	0.0036	0.4229	0.0034	0.3801
197	42.79	-0.11	-0.3109	-0.0470	-0.1509	0.1511	0.4853	1.1090	0.0036	0.4254	0.0034	0.3836
198	42.89	-0.11	-0.3273	-0.0487	-0.1589	0.1467	0.4855	1.1022	0.0042	0.4193	0.0038	0.3805
199	42.99	-0.11	-0.3280	-0.0499	-0.1581	0.1521	0.4820	1.1149	0.0038	0.4238	0.0034	0.3802
200	43.09	-0.08	-0.3192	-0.0494	-0.1523	0.1547	0.4771	1.1044	0.0030	0.4196	0.0027	0.3793
201	43.08	-0.09	-0.3017	-0.0467	-0.1462	0.1614	0.4847	1.1184	0.0029	0.4268	0.0026	0.3816
202	43.18	-0.09	-0.3344	-0.0516	-0.1503	0.1543	0.4874	1.1028	0.0035	0.4193	0.0032	0.3802
203	43.27	-0.11	-0.3656	-0.0550	-0.1715	0.1504	0.4591	1.1150	0.0028	0.4251	0.0025	0.3813
204	43.37	-0.10	-0.3492	-0.0511	-0.1559	0.1571	0.4732	1.1080	0.0030	0.4232	0.0027	0.3820
205	43.49	-0.09	-0.3373	-0.0538	-0.1589	0.1595	0.4651	1.1047	0.0021	0.4215	0.0019	0.3816
206	43.55	-0.11	-0.3609	-0.0564	-0.1699	0.1562	0.4707	1.1133	0.0026	0.4243	0.0025	0.3811
207	43.64	-0.11	-0.3597	-0.0553	-0.1682	0.1529	0.4676	1.0976	0.0030	0.4182	0.0027	0.3810
208	43.71	-0.10	-0.3393	-0.0563	-0.1639	0.1590	0.4613	1.1028	0.0028	0.4214	0.0025	0.3822
209	43.81	-0.11	-0.3705	-0.0577	-0.1710	0.1558	0.4619	1.1012	0.0028	0.4185	0.0025	0.3801
210	43.90	-0.11	-0.3680	-0.0564	-0.1615	0.1630	0.4607	1.1150	0.0023	0.4251	0.0021	0.3813
211	43.96	-0.12	-0.3643	-0.0563	-0.1662	0.1545	0.4617	1.1151	0.0023	0.4244	0.0021	0.3806
212	44.07	-0.10	-0.3572	-0.0559	-0.1565	0.1657	0.4641	1.1081	0.0025	0.4218	0.0023	0.3807
213	44.19	-0.09	-0.3481	-0.0558	-0.1571	0.1631	0.4513	1.1151	0.0016	0.4265	0.0014	0.3825
214	44.27	-0.12	-0.3670	-0.0566	-0.1709	0.1499	0.4572	1.1149	0.0024	0.4279	0.0022	0.3838
215	44.37	-0.11	-0.3703	-0.0598	-0.1693	0.1615	0.4575	1.1220	0.0020	0.4284	0.0018	0.3818
216	44.46	-0.12	-0.3810	-0.0599	-0.1732	0.1572	0.4547	1.1254	0.0019	0.4308	0.0017	0.3828
217	44.55	-0.11	-0.3790	-0.0603	-0.1711	0.1594	0.4508	1.1047	0.0023	0.4201	0.0021	0.3803
218	44.64	-0.11	-0.3563	-0.0592	-0.1619	0.1651	0.4515	1.1185	0.0014	0.4295	0.0013	0.3840
219	44.74	-0.13	-0.3692	-0.0607	-0.1640	0.1644	0.4459	1.1392	0.0012	0.4388	0.0011	0.3852
220	44.83	-0.11	-0.3833	-0.0608	-0.1731	0.1586	0.4517	1.1312	0.0010	0.4354	0.0009	0.3849
221	44.91	-0.12	-0.3882	-0.0615	-0.1755	0.1587	0.4345	1.1277	0.0009	0.4351	0.0008	0.3859
222	45.00	-0.13	-0.3774	-0.0599	-0.1703	0.1587	0.4513	1.1382	0.0007	0.4367	0.0006	0.3855
223	45.09	-0.11	-0.3741	-0.0636	-0.1665	0.1700	0.4505	1.1418	0.0001	0.4376	0.0001	0.3833
224	45.19	-0.11	-0.3830	-0.0621	-0.1692	0.1759	0.4509	1.1279	0.0004	0.4330	0.0004	0.3839
225	45.27	-0.11	-0.3931	-0.0628	-0.1680	0.1778	0.4474	1.1401	-0.0004	0.4381	-0.0004	0.3843
226	45.38	-0.11	-0.3892	-0.0630	-0.1693	0.1754	0.4434	1.1418	-0.0003	0.4390	-0.0003	0.3845
227	45.47	-0.09	-0.3890	-0.0625	-0.1668	0.1900	0.4455	1.1349	-0.0004	0.4356	-0.0004	0.3839
228	45.55	-0.11	-0.3920	-0.0642	-0.1670	0.1725	0.4483	1.1488	-0.0006	0.4409	-0.0005	0.3838
229	45.64	-0.10	-0.3818	-0.0618	-0.1717	0.1819	0.4496	1.1244	-0.0001	0.4341	-0.0001	0.3861
230	45.72	-0.11	-0.3869	-0.0601	-0.1586	0.1686	0.4451	1.1453	-0.0005	0.4386	-0.0003	0.3830

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 55 MACH 0.80 RX10-6 1.7 PHI 0.0 CONF BLANK15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
231	45.80	-0.10	-0.3427	-0.0610	-0.1526	0.1780	0.4452	1.1418	-0.0010	0.4403	-0.0009	0.3857
232	45.89	-0.11	-0.3606	-0.0657	-0.1542	0.1822	0.4514	1.1524	-0.0014	0.4426	-0.0012	0.3841
233	45.99	-0.11	-0.3682	-0.0664	-0.1621	0.1804	0.4403	1.1419	-0.0018	0.4417	-0.0016	0.3868
234	46.07	-0.12	-0.3742	-0.0610	-0.1695	0.1630	0.4250	1.1333	-0.0010	0.4348	-0.0009	0.3837
235	46.15	-0.12	-0.3621	-0.0641	-0.1612	0.1770	0.4451	1.1420	-0.0013	0.4389	-0.0011	0.3844
236	46.26	-0.11	-0.3620	-0.0650	-0.1613	0.1790	0.4455	1.1420	-0.0015	0.4384	-0.0013	0.3844
237	46.33	-0.12	-0.3547	-0.0645	-0.1562	0.1927	0.4487	1.1732	-0.0024	0.4513	-0.0020	0.3846
238	46.42	-0.14	-0.3665	-0.0639	-0.1639	0.1799	0.4473	1.1419	-0.0015	0.4410	-0.0013	0.3862
239	46.52	-0.12	-0.3499	-0.0640	-0.1571	0.1829	0.4469	1.1419	-0.0017	0.4417	-0.0015	0.3868
240	46.60	-0.11	-0.3469	-0.0623	-0.1414	0.1906	0.4455	1.1593	-0.0024	0.4472	-0.0021	0.3858
241	46.68	-0.12	-0.3136	-0.0570	-0.1446	0.1901	0.4610	1.1595	-0.0029	0.4456	-0.0025	0.3845
242	46.78	-0.14	-0.3725	-0.0608	-0.1706	0.1632	0.4281	1.1352	-0.0022	0.4355	-0.0019	0.3837
243	46.86	-0.12	-0.3494	-0.0613	-0.1563	0.1775	0.4325	1.1507	-0.0022	0.4431	-0.0019	0.3851
244	46.95	-0.12	-0.3317	-0.0659	-0.1486	0.1975	0.4479	1.1751	-0.0039	0.4541	-0.0033	0.3864
245	47.04	-0.12	-0.3669	-0.0625	-0.1661	0.1706	0.4333	1.1526	-0.0029	0.4425	-0.0025	0.3839
246	47.11	-0.13	-0.3528	-0.0596	-0.1625	0.1689	0.4600	1.1526	-0.0033	0.4425	-0.0029	0.3839
247	47.21	-0.11	-0.3536	-0.0603	-0.1647	0.1695	0.4631	1.1509	-0.0037	0.4423	-0.0032	0.3843
248	47.29	-0.12	-0.3625	-0.0587	-0.1531	0.1804	0.4706	1.1492	-0.0035	0.4415	-0.0029	0.3842
249	47.37	-0.11	-0.3675	-0.0581	-0.1450	0.1871	0.4718	1.1701	-0.0047	0.4509	-0.0040	0.3853
250	47.48	-0.10	-0.3669	-0.0610	-0.1495	0.2014	0.4741	1.1701	-0.0047	0.4509	-0.0040	0.3853
251	47.55	-0.12	-0.3545	-0.0549	-0.1443	0.1803	0.4739	1.1629	-0.0034	0.4483	-0.0029	0.3854
252	47.64	-0.12	-0.3359	-0.0566	-0.1594	0.1665	0.4745	1.1423	-0.0037	0.4374	-0.0032	0.3829
253	47.72	-0.13	-0.3509	-0.0603	-0.1587	0.1822	0.4796	1.1561	-0.0037	0.4441	-0.0032	0.3842
254	47.81	-0.12	-0.2978	-0.0598	-0.1429	0.2006	0.4798	1.1823	-0.0046	0.4540	-0.0039	0.3840
255	47.91	-0.13	-0.3166	-0.0638	-0.1471	0.1961	0.4745	1.1736	-0.0044	0.4498	-0.0038	0.3832
256	47.99	-0.12	-0.2916	-0.0594	-0.1422	0.2037	0.4876	1.1770	-0.0047	0.4526	-0.0040	0.3847
257	48.08	-0.14	-0.3253	-0.0559	-0.1555	0.1718	0.4760	1.1526	-0.0034	0.4425	-0.0030	0.3839
258	48.16	-0.11	-0.2675	-0.0586	-0.1301	0.2190	0.4862	1.1805	-0.0048	0.4538	-0.0041	0.3844
259	48.26	-0.12	-0.2767	-0.0553	-0.1347	0.2061	0.4900	1.1768	-0.0043	0.4509	-0.0037	0.3825
260	48.33	-0.15	-0.2657	-0.0620	-0.1305	0.2171	0.4777	1.1823	-0.0047	0.4540	-0.0040	0.3840
261	48.40	-0.12	-0.2692	-0.0563	-0.1295	0.2165	0.4908	1.1841	-0.0052	0.4548	-0.0044	0.3841
262	48.50	-0.13	-0.2598	-0.0530	-0.1260	0.2071	0.4924	1.1911	-0.0055	0.4581	-0.0046	0.3846
263	48.59	-0.13	-0.2721	-0.0579	-0.1325	0.2127	0.4868	1.1771	-0.0049	0.4514	-0.0042	0.3834
264	48.65	-0.11	-0.2494	-0.0522	-0.1200	0.2127	0.4892	1.1945	-0.0055	0.4591	-0.0044	0.3843
265	48.76	-0.13	-0.2567	-0.0557	-0.1201	0.2160	0.4872	1.1874	-0.0047	0.4578	-0.0040	0.3855
266	48.84	-0.13	-0.2751	-0.0547	-0.1433	0.1853	0.4856	1.1667	-0.0040	0.4497	-0.0034	0.3820
267	48.92	-0.14	-0.2646	-0.0547	-0.1306	0.2067	0.4934	1.1841	-0.0048	0.4548	-0.0041	0.3841
268	49.02	-0.13	-0.2776	-0.0504	-0.1307	0.1819	0.4933	1.1769	-0.0036	0.4515	-0.0032	0.3836
269	49.09	-0.13	-0.2374	-0.0520	-0.1204	0.2190	0.5074	1.1876	-0.0057	0.4578	-0.0048	0.3855
270	49.18	-0.14	-0.2625	-0.0542	-0.1238	0.2140	0.4980	1.1841	-0.0053	0.4548	-0.0045	0.3841
271	49.27	-0.13	-0.2517	-0.0503	-0.1169	0.2170	0.5040	1.1823	-0.0050	0.4553	-0.0042	0.3851
272	49.35	-0.12	-0.2438	-0.0516	-0.1211	0.2116	0.4969	1.1876	-0.0054	0.4571	-0.0046	0.3849
273	49.46	-0.13	-0.2317	-0.0512	-0.1157	0.2209	0.4996	1.1824	-0.0055	0.4560	-0.0047	0.3856
274	49.55	-0.13	-0.2426	-0.0466	-0.1209	0.1923	0.4986	1.1823	-0.0053	0.4565	-0.0045	0.3861
275	49.61	-0.11	-0.2400	-0.0527	-0.1162	0.2188	0.4911	1.1911	-0.0056	0.4581	-0.0049	0.3846
276	49.74	-0.11	-0.2430	-0.0488	-0.1121	0.2098	0.5029	1.1911	-0.0059	0.4595	-0.0050	0.3858

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 7 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 55 0.80 1.7 0.0 BINOFIS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	ACPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
277	49.79	-0.13	-0.2379	-0.0473	-0.1159	0.1987	0.5042	1.1960	-0.0060	0.4628	-0.0050	0.3863
278	49.87	-0.13	-0.2421	-0.0517	-0.1216	0.2135	0.5025	1.1960	-0.0064	0.4626	-0.0054	0.3863
279	49.96	-0.12	-0.2428	-0.0478	-0.1229	0.2145	0.5070	1.1945	-0.0064	0.4632	-0.0054	0.3878
280	50.04	-0.11	-0.2215	-0.0468	-0.1126	0.2114	0.5090	1.1928	-0.0065	0.4617	-0.0055	0.3871
281	50.14	-0.13	-0.2348	-0.0460	-0.1201	0.1984	0.5117	1.2102	-0.0073	0.4700	-0.0060	0.3884
282	50.22	-0.12	-0.2347	-0.0480	-0.1196	0.2044	0.5098	1.2051	-0.0076	0.4668	-0.0063	0.3873
283	50.31	-0.11	-0.2273	-0.0478	-0.1154	0.2102	0.5079	1.2050	-0.0079	0.4681	-0.0066	0.3885
284	50.39	-0.12	-0.2330	-0.0471	-0.1182	0.2083	0.5082	1.2154	-0.0086	0.4752	-0.0071	0.3910
285	50.47	-0.10	-0.2230	-0.0451	-0.1132	0.2021	0.5079	1.2084	-0.0084	0.4732	-0.0070	0.3916
286	50.56	-0.11	-0.2229	-0.0468	-0.1117	0.2139	0.5013	1.2120	-0.0086	0.4721	-0.0071	0.3895
287	50.64	-0.10	-0.2253	-0.0478	-0.1094	0.2219	0.5064	1.2120	-0.0090	0.4735	-0.0074	0.3907
288	50.72	-0.09	-0.2230	-0.0430	-0.1150	0.1927	0.5159	1.2119	-0.0093	0.4762	-0.0077	0.3929
289	50.81	-0.09	-0.2259	-0.0467	-0.1133	0.2155	0.5018	1.2155	-0.0090	0.4731	-0.0074	0.3892
290	50.90	-0.09	-0.2275	-0.0505	-0.1209	0.2117	0.5093	1.2087	-0.0097	0.4778	-0.0080	0.3903
291	50.97	-0.07	-0.2254	-0.0451	-0.1104	0.2000	0.4922	1.2147	-0.0108	0.4758	-0.0089	0.3917
292	51.07	-0.10	-0.2123	-0.0462	-0.1084	0.2170	0.5096	1.2322	-0.0114	0.4821	-0.0093	0.3912
293	51.15	-0.08	-0.2434	-0.0445	-0.1209	0.1827	0.4969	1.2147	-0.0113	0.4778	-0.0093	0.3933
294	51.24	-0.07	-0.2417	-0.0456	-0.1202	0.1894	0.4975	1.2114	-0.0112	0.4734	-0.0093	0.3908
295	51.32	-0.07	-0.2511	-0.0477	-0.1266	0.1899	0.4813	1.2304	-0.0114	0.4819	-0.0093	0.3917
296	51.40	-0.06	-0.2450	-0.0495	-0.1178	0.2020	0.4777	1.2427	-0.0123	0.4864	-0.0099	0.3914
297	51.48	-0.03	-0.2335	-0.0435	-0.1109	0.1862	0.4751	1.2394	-0.0130	0.4819	-0.0105	0.3888
298	51.58	-0.03	-0.2448	-0.0452	-0.1067	0.2010	0.4970	1.2499	-0.0137	0.4863	-0.0110	0.3907
299	51.67	-0.04	-0.2439	-0.0528	-0.1168	0.2000	0.4927	1.2427	-0.0126	0.4864	-0.0102	0.3914
300	51.75	-0.01	-0.2435	-0.0501	-0.1027	0.2057	0.4219	1.2566	-0.0140	0.4930	-0.0112	0.3923
301	51.84	-0.01	-0.2313	-0.0449	-0.1045	0.2109	0.4078	1.2588	-0.0144	0.4931	-0.0115	0.3918
302	51.94	0.00	-0.2281	-0.0508	-0.0880	0.2240	0.3893	1.2744	-0.0151	0.4986	-0.0119	0.3913
303	52.02	0.02	-0.2441	-0.0528	-0.0957	0.2162	0.3921	1.2640	-0.0151	0.4949	-0.0120	0.3916
304	52.11	0.03	-0.2334	-0.0530	-0.0850	0.2277	0.3739	1.2884	-0.0160	0.5052	-0.0129	0.3921
305	52.20	0.00	-0.2526	-0.0523	-0.0959	0.2070	0.3797	1.2559	-0.0144	0.4895	-0.0115	0.3897
306	52.28	0.02	-0.2253	-0.0540	-0.0818	0.2423	0.3631	1.2978	-0.0167	0.5095	-0.0129	0.3926
307	52.36	0.02	-0.2423	-0.0545	-0.0870	0.2249	0.3591	1.2874	-0.0162	0.5045	-0.0126	0.3919
308	52.46	0.04	-0.2328	-0.0504	-0.0849	0.2422	0.3647	1.2945	-0.0171	0.5065	-0.0132	0.3913
309	52.53	0.02	-0.2573	-0.0506	-0.0936	0.2199	0.3638	1.2962	-0.0164	0.5059	-0.0127	0.3903
310	52.61	0.01	-0.2340	-0.0546	-0.0848	0.2327	0.3615	1.3015	-0.0174	0.5091	-0.0134	0.3912
311	52.71	0.02	-0.2503	-0.0570	-0.0930	0.2224	0.3629	1.3007	-0.0166	0.5078	-0.0128	0.3904
312	52.79	0.03	-0.2334	-0.0582	-0.0945	0.2296	0.3722	1.3085	-0.0177	0.5127	-0.0135	0.3918
313	52.88	0.03	-0.2594	-0.0508	-0.0959	0.2187	0.3313	1.3015	-0.0175	0.5087	-0.0133	0.3909
314	52.97	0.04	-0.2550	-0.0593	-0.0933	0.2325	0.3659	1.3034	-0.0181	0.5102	-0.0139	0.3915
315	53.04	0.04	-0.2475	-0.0500	-0.0908	0.2267	0.3669	1.3086	-0.0175	0.5113	-0.0134	0.3907
316	53.13	0.05	-0.2523	-0.0577	-0.0949	0.2267	0.3762	1.3112	-0.0185	0.5137	-0.0141	0.3918
317	53.21	0.05	-0.2476	-0.0568	-0.1019	0.2122	0.3808	1.2919	-0.0182	0.5056	-0.0141	0.3915
318	53.31	0.04	-0.2703	-0.0545	-0.1074	0.2016	0.3974	1.2849	-0.0181	0.5038	-0.0141	0.3921
319	53.39	0.04	-0.2631	-0.0549	-0.1021	0.2046	0.3852	1.2909	-0.0183	0.5079	-0.0142	0.3935
320	53.47	0.05	-0.2650	-0.0551	-0.1022	0.2079	0.3857	1.2874	-0.0180	0.5048	-0.0140	0.3921
321	53.56	0.06	-0.2771	-0.0545	-0.1090	0.1966	0.3956	1.2839	-0.0177	0.5031	-0.0138	0.3919
322	53.65	0.06	-0.2806	-0.0500	-0.1107	0.1781	0.3946	1.2828	-0.0169	0.4990	-0.0134	0.3904

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NO=0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 55 0.60 1.7 0.0 BINOFIN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	ALPF1	YCPF1	CNF2	CM2	CD2	ALPF2	YCPF2
323	53.72	0.00	-0.2740	-0.0515	-0.1091	0.1873	0.3771	1.2726	-0.0177	0.4908	-0.0139	0.3920
324	53.79	0.05	-0.2412	-0.0450	-0.0976	0.1865	0.4056	1.2054	-0.0177	0.4956	-0.0140	0.3948
325	53.87	0.07	-0.2140	-0.0392	-0.0870	0.1850	0.3596	1.1973	-0.0155	0.4702	-0.0130	0.3927
326	53.91	0.07	-0.2163	-0.0300	-0.0822	0.1767	0.3700	1.2229	-0.0162	0.4831	-0.0132	0.3942
327	54.00	0.08	-0.1484	-0.0241	-0.0549	0.1627	0.3698	1.2325	-0.0175	0.4892	-0.0142	0.3969
328	54.15	0.09	-0.1054	-0.0302	-0.0652	0.1631	0.3215	1.1816	-0.0140	0.4624	-0.0121	0.3980
329	54.22	0.09	-0.1469	-0.0234	-0.0540	0.1570	0.3674	1.2131	-0.0160	0.4813	-0.0139	0.3967
330	54.30	0.09	-0.1515	-0.0250	-0.0568	0.1590	0.3732	1.1758	-0.0153	0.4677	-0.0130	0.3977
331	54.39	0.07	-0.1318	-0.0204	-0.0476	0.1551	0.3625	1.1864	-0.0159	0.4736	-0.0134	0.4004
332	54.47	0.10	-0.1201	-0.0171	-0.0429	0.1530	0.3540	1.1727	-0.0157	0.4717	-0.0134	0.4022
333	54.54	0.09	-0.1370	-0.0181	-0.0488	0.1524	0.3560	1.1926	-0.0163	0.4587	-0.0125	0.4014
334	54.60	0.08	-0.1491	-0.0233	-0.0522	0.1565	0.3499	1.1321	-0.0142	0.4536	-0.0120	0.4006
335	54.70	0.09	-0.1321	-0.0181	-0.0490	0.1573	0.3707	1.1746	-0.0166	0.4725	-0.0142	0.4022
336	54.77	0.09	-0.1201	-0.0151	-0.0444	0.1518	0.3519	1.1622	-0.0161	0.4673	-0.0139	0.4021
337	54.84	0.08	-0.0827	-0.0130	-0.0306	0.1447	0.3705	1.2135	-0.0184	0.4940	-0.0156	0.4071
338	54.91	0.08	-0.1096	-0.0135	-0.0383	0.1483	0.3498	1.1592	-0.0170	0.4691	-0.0147	0.4046
339	55.00	0.09	-0.0859	-0.0120	-0.0330	0.1469	0.3716	1.2330	-0.0207	0.5076	-0.0168	0.4115
340	55.09	0.08	-0.0869	-0.0144	-0.0342	0.1622	0.3651	1.2161	-0.0205	0.4963	-0.0169	0.4081
341	55.14	0.08	-0.1127	-0.0140	-0.0388	0.1297	0.3440	1.1603	-0.0183	0.4753	-0.0157	0.4075
342	55.23	0.09	-0.0767	-0.0104	-0.0303	0.1358	0.3926	1.2125	-0.0203	0.4960	-0.0169	0.4091
343	55.29	0.09	-0.1459	-0.0183	-0.0423	0.1440	0.3660	1.1733	-0.0183	0.4767	-0.0156	0.4060
344	55.39	0.10	-0.0922	-0.0150	-0.0347	0.1429	0.3768	1.2220	-0.0214	0.5018	-0.0175	0.4107
345	55.48	0.09	-0.1481	-0.0197	-0.0577	0.1521	0.3748	1.1562	-0.0180	0.4710	-0.0156	0.4073
346	55.55	0.08	-0.0832	-0.0110	-0.0316	0.1324	0.3827	1.2273	-0.0211	0.5043	-0.0177	0.4109
347	55.64	0.07	-0.0753	-0.0101	-0.0270	0.1720	0.3770	1.2376	-0.0232	0.5092	-0.0188	0.4115
348	55.73	0.09	-0.0877	-0.0118	-0.0330	0.1348	0.3767	1.2231	-0.0223	0.5045	-0.0183	0.4125
349	55.82	0.10	-0.0839	-0.0134	-0.0330	0.1600	0.4246	1.2659	-0.0235	0.5207	-0.0194	0.4114
350	55.88	0.08	-0.1023	-0.0140	-0.0390	0.1364	0.3797	1.2154	-0.0214	0.4989	-0.0176	0.4105
351	55.96	0.09	-0.0780	-0.0114	-0.0339	0.1260	0.3746	1.2295	-0.0226	0.5078	-0.0184	0.4130
352	56.03	0.10	-0.0890	-0.0119	-0.0338	0.1339	0.3802	1.2313	-0.0226	0.5065	-0.0179	0.4114
353	56.13	0.09	-0.0866	-0.0116	-0.0334	0.1669	0.3897	1.2706	-0.0235	0.5206	-0.0200	0.4127
354	56.19	0.09	-0.0716	-0.0103	-0.0280	0.1655	0.3826	1.2705	-0.0231	0.5206	-0.0197	0.4127
355	56.29	0.09	-0.0872	-0.0111	-0.0342	0.1275	0.3727	1.2140	-0.0218	0.4967	-0.0180	0.4106
356	56.35	0.09	-0.0874	-0.0106	-0.0313	0.1215	0.3585	1.2405	-0.0234	0.5058	-0.0189	0.4110
357	56.44	0.08	-0.0735	-0.0101	-0.0340	0.1062	0.3705	1.2176	-0.0221	0.4988	-0.0182	0.4097
358	56.51	0.09	-0.0708	-0.0070	-0.0243	0.0990	0.3927	1.2569	-0.0226	0.5051	-0.0183	0.4108
359	56.57	0.09	-0.0937	-0.0057	-0.0170	0.1127	0.3316	1.2829	-0.0234	0.5206	-0.0193	0.4121
360	56.66	0.08	-0.0913	-0.0050	-0.0134	0.1402	0.3237	1.2601	-0.0221	0.5282	-0.0196	0.4127
361	56.75	0.09	-0.0726	-0.0044	-0.0247	0.1306	0.3435	1.2081	-0.0257	0.5282	-0.0201	0.4127
362	56.81	0.08	-0.0935	-0.0063	-0.0196	0.1274	0.3670	1.2942	-0.0229	0.5330	-0.0200	0.4118
363	56.87	0.08	-0.0813	-0.0074	-0.0230	0.0912	0.3347	1.2255	-0.0226	0.5028	-0.0185	0.4103
364	56.98	0.08	-0.0907	-0.0071	-0.0200	0.1255	0.3534	1.2496	-0.0232	0.5306	-0.0210	0.4130
365	57.05	0.07	-0.0998	-0.0066	-0.0210	0.1139	0.3516	1.2766	-0.0257	0.5272	-0.0202	0.4130
366	57.13	0.05	-0.0845	-0.0069	-0.0242	0.1072	0.3447	1.2731	-0.0234	0.5248	-0.0200	0.4123
367	57.19	0.08	-0.0892	-0.0076	-0.0228	0.1100	0.3500	1.2520	-0.0243	0.5140	-0.0196	0.4106
368	57.27	0.08	-0.0949	-0.0056	-0.0195	0.0970	0.3261	1.2600	-0.0248	0.5186	-0.0196	0.4118

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 9 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 55 0.60 1.1 0.0 BINOFIS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	ACPF1	YCPF1	CNF2	CM2	CA2	ACPF2	YCPF2
369	57.34	0.05	-0.0520	-0.0089	-0.0187	0.1350	0.3218	1.2856	-0.0268	0.5297	-0.0209	0.4120
370	57.41	0.08	-0.0355	-0.0088	-0.0301	0.1031	0.3525	1.2905	-0.0251	0.5129	-0.0201	0.4102
371	57.48	0.08	-0.0292	-0.0043	-0.0071	0.1473	0.2432	1.2908	-0.0273	0.5329	-0.0212	0.4128
372	57.56	0.09	-0.0491	-0.0057	-0.0149	0.1164	0.3041	1.2820	-0.0261	0.5287	-0.0204	0.4124
373	57.63	0.06	-0.0691	-0.0067	-0.0212	0.0971	0.3372	1.2809	-0.0260	0.5267	-0.0207	0.4130
374	57.71	0.09	-0.0310	-0.0031	-0.0071	0.1000	0.2290	1.2925	-0.0270	0.5352	-0.0209	0.4141
375	57.78	0.06	-0.0325	-0.0017	-0.0065	0.0523	0.2015	1.2995	-0.0274	0.5385	-0.0211	0.4144
376	57.84	0.03	-0.0584	-0.0051	-0.0169	0.0875	0.3173	1.2765	-0.0266	0.5277	-0.0206	0.4128
377	57.93	0.05	-0.0558	-0.0035	-0.0166	0.0631	0.2991	1.2820	-0.0266	0.5287	-0.0206	0.4124
378	58.00	0.02	-0.0480	-0.0038	-0.0124	0.0794	0.2569	1.2925	-0.0274	0.5366	-0.0212	0.4151
379	58.08	0.03	-0.0317	-0.0020	-0.0016	0.0631	0.0905	1.2882	-0.0270	0.5333	-0.0210	0.4140
380	58.14	0.03	-0.0491	-0.0023	-0.0092	0.0511	0.2044	1.2767	-0.0263	0.5266	-0.0206	0.4141
381	58.22	0.04	-0.0329	0.0007	-0.0061	-0.0213	0.1354	1.2732	-0.0264	0.5290	-0.0208	0.4155
382	58.29	0.04	-0.0527	-0.0026	-0.0121	0.0494	0.2300	1.2628	-0.0265	0.5253	-0.0210	0.4160
383	58.23	0.02	-0.0332	-0.0005	-0.0022	0.0151	0.0883	1.2767	-0.0269	0.5308	-0.0211	0.4157
384	58.23	0.03	-0.0272	0.0010	-0.0013	-0.0566	0.0478	1.2906	-0.0269	0.5361	-0.0209	0.4154
385	58.24	0.04	-0.0547	-0.0011	-0.0100	0.0602	0.1832	1.2733	-0.0269	0.5276	-0.0212	0.4144

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNLD-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 55 0.60 1.1 0.0 0 0.6 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.71	0.01	-0.0022	9.9999	0.0118	9.9999	-5.3636	-0.2496	-0.0409	-0.1345	0.1637	0.5387
2	-5.71	0.02	-0.0033	9.9999	0.0123	9.9999	-3.2368	-0.2501	-0.0410	-0.1342	0.1619	0.5301
3	-5.71	0.01	-0.0022	9.9999	0.0131	9.9999	-5.9345	-0.2479	-0.0405	-0.1317	0.1632	0.5311
4	-5.71	0.01	-0.0038	9.9999	0.0117	9.9999	-3.0705	-0.2428	-0.0401	-0.1312	0.1650	0.5402
5	-5.71	0.01	-0.0033	9.9999	0.0123	9.9999	-3.2368	-0.2403	-0.0401	-0.1315	0.1627	0.5337
6	-5.71	0.02	-0.0033	9.9999	0.0123	9.9999	-3.2368	-0.2479	-0.0407	-0.1324	0.1640	0.5339
7	-5.71	0.01	-0.0038	9.9999	0.0123	9.9999	-3.2368	-0.2462	-0.0405	-0.1329	0.1644	0.5396
8	-5.70	0.02	-0.0038	9.9999	0.0126	9.9999	-21.0000	-0.2480	-0.0405	-0.1324	0.1632	0.5337
9	-5.71	0.02	-0.0022	9.9999	0.0131	9.9999	-5.9345	-0.2427	-0.0401	-0.1299	0.1651	0.5351
10	-5.71	0.02	-0.0038	9.9999	0.0123	9.9999	-3.2368	-0.2427	-0.0401	-0.1313	0.1651	0.5408
11	-5.70	0.02	-0.0022	9.9999	0.0134	9.9999	-5.9345	-0.2462	-0.0404	-0.1322	0.1640	0.5368
12	-5.70	0.01	-0.0038	9.9999	0.0123	9.9999	-3.2368	-0.2410	-0.0399	-0.1277	0.1654	0.5297
13	-5.71	0.02	-0.0038	9.9999	0.0123	9.9999	-3.2368	-0.2478	-0.0409	-0.1352	0.1637	0.5415
14	-5.70	0.02	-0.0038	9.9999	0.0123	9.9999	-3.2368	-0.2462	-0.0404	-0.1322	0.1640	0.5368
15	-5.71	0.02	-0.0023	9.9999	0.0137	9.9999	-5.9365	-0.2479	-0.0407	-0.1337	0.1640	0.5392
16	-5.70	0.02	-0.0038	9.9999	0.0123	9.9999	-3.2368	-0.2427	-0.0401	-0.1306	0.1651	0.5380
17	-5.70	0.02	-0.0055	9.9999	0.0128	9.9999	-2.3273	-0.2462	-0.0403	-0.1315	0.1635	0.5340
18	-5.71	0.02	-0.0038	9.9999	0.0123	9.9999	-3.2368	-0.2496	-0.0409	-0.1332	0.1637	0.5335
19	-5.70	0.01	-0.0071	9.9999	0.0133	9.9999	-1.8732	-0.2429	-0.0396	-0.1299	0.1637	0.5346
20	-5.71	0.01	-0.0055	9.9999	0.0128	9.9999	-2.3273	-0.2446	-0.0401	-0.1321	0.1638	0.5349
21	-5.71	0.02	-0.0055	9.9999	0.0128	9.9999	-2.3273	-0.2479	-0.0407	-0.1337	0.1640	0.5392
22	-5.71	0.01	-0.0038	9.9999	0.0123	9.9999	-3.2368	-0.2410	-0.0400	-0.1298	0.1658	0.5304
23	-5.71	0.02	-0.0054	9.9999	0.0122	9.9999	-2.2593	-0.2443	-0.0406	-0.1321	0.1660	0.5406
24	-5.70	0.02	-0.0071	9.9999	0.0127	9.9999	-1.7007	-0.2403	-0.0401	-0.1315	0.1627	0.5337
25	-5.71	0.01	-0.0055	9.9999	0.0128	9.9999	-2.3273	-0.2462	-0.0403	-0.1309	0.1635	0.5315
26	-5.71	0.01	-0.0039	9.9999	0.0130	9.9999	-3.4072	-0.2426	-0.0405	-0.1313	0.1608	0.5411
27	-5.71	0.01	-0.0038	9.9999	0.0123	9.9999	-3.2368	-0.2401	-0.0407	-0.1329	0.1652	0.5399
28	-5.71	0.01	-0.0039	9.9999	0.0130	9.9999	-3.4072	-0.2427	-0.0401	-0.1299	0.1651	0.5351
29	-5.71	0.01	-0.0055	9.9999	0.0128	9.9999	-2.3273	-0.2393	-0.0396	-0.1296	0.1662	0.5414
30	-5.70	0.01	-0.0071	9.9999	0.0127	9.9999	-1.7007	-0.2401	-0.0406	-0.1329	0.1648	0.5399
31	-5.70	0.01	-0.0038	9.9999	0.0123	9.9999	-3.2368	-0.2497	-0.0407	-0.1339	0.1629	0.5361
32	-5.70	0.01	-0.0055	9.9999	0.0126	9.9999	-2.3273	-0.2359	-0.0392	-0.1266	0.1660	0.5365
33	-5.70	0.01	-0.0071	9.9999	0.0127	9.9999	-1.7007	-0.2290	-0.0385	-0.1226	0.1680	0.5352
34	-5.69	0.01	-0.0086	9.9999	0.0119	9.9999	-1.3140	-0.2153	-0.0371	-0.1166	0.1722	0.5419
35	-5.39	0.01	-0.0071	9.9999	0.0133	9.9999	-1.8732	-0.1901	-0.0351	-0.1064	0.1769	0.5371
36	-4.07	0.01	-0.0067	9.9999	0.0126	9.9999	-1.4483	-0.1607	-0.0300	-0.0855	0.1870	0.5321
37	-3.78	0.01	-0.0067	9.9999	0.0132	9.9999	-1.5172	-0.1220	-0.0230	-0.0609	0.1953	0.4988
38	-2.83	0.01	-0.0119	9.9999	0.0123	9.9999	-1.0336	-0.0780	-0.0155	-0.0376	0.2152	0.4902
39	-1.93	0.01	-0.0119	9.9999	0.0123	9.9999	-1.0336	-0.0352	-0.0094	-0.0208	0.2672	0.5909
40	-0.98	0.01	-0.0087	9.9999	0.0126	9.9999	-1.4483	-0.0024	-0.0026	-0.0086	1.1071	3.9033
41	-0.04	0.01	-0.0071	9.9999	0.0127	9.9999	-1.7007	0.0280	0.0033	0.0013	0.1146	0.0451
42	0.90	0.01	-0.0071	9.9999	0.0133	9.9999	-1.8732	0.0616	0.0102	0.0140	0.1659	0.2407
43	1.83	0.01	-0.0072	9.9999	0.0140	9.9999	-2.0278	0.1018	0.0162	0.0294	0.1594	0.2891
44	2.82	0.01	-0.0072	9.9999	0.0138	9.9999	-2.1944	0.1456	0.0229	0.0524	0.1576	0.3597
45	3.79	0.01	-0.0072	9.9999	0.0138	9.9999	-2.1944	0.1909	0.0301	0.0765	0.1579	0.4101
46	4.80	0.00	-0.0056	9.9999	0.0100	9.9999	-2.8371	0.2420	0.0386	0.1051	0.1519	0.4344

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 55 0.80 1.7 0.0 BLKOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	5.39	0.01	0.0007	9.9999	0.0183	9.9999	20.1429	0.2898	0.0428	0.1324	0.1476	0.4568
48	6.35	0.01	0.0025	9.9999	0.0153	9.9999	0.1200	0.3431	0.0405	0.1579	0.1413	0.4602
49	7.31	0.01	0.0075	9.9999	0.0136	9.9999	1.0400	0.4033	0.0547	0.1874	0.1356	0.4647
50	8.44	0.01	0.0058	9.9999	0.0137	9.9999	2.3521	0.4625	0.0595	0.2146	0.1267	0.4640
51	9.30	0.00	0.0075	9.9999	0.0126	9.9999	1.0800	0.5132	0.0628	0.2369	0.1224	0.4616
52	10.29	0.00	0.0043	9.9999	0.0123	9.9999	2.0605	0.5673	0.0665	0.2670	0.1132	0.4547
53	11.27	-0.00	0.0073	9.9999	0.0120	9.9999	1.0800	0.6400	0.0695	0.2881	0.1086	0.4501
54	12.20	-0.00	0.0172	9.9999	0.0133	9.9999	0.7733	0.7069	0.0731	0.3143	0.1034	0.4446
55	13.14	-0.00	0.0140	9.9999	0.0118	9.9999	0.8429	0.7601	0.0749	0.3345	0.0986	0.4401
56	14.07	-0.00	0.0141	9.9999	0.0106	9.9999	0.7516	0.8200	0.0766	0.3564	0.0930	0.4315
57	15.03	-0.01	0.0221	9.9999	0.0131	9.9999	0.5928	0.8759	0.0781	0.3723	0.0892	0.4250
58	16.01	-0.00	0.0253	9.9999	0.0134	9.9999	0.5296	0.9159	0.0770	0.3784	0.0841	0.4131
59	16.98	-0.00	0.0285	9.9999	0.0142	9.9999	0.4982	0.9340	0.0691	0.3718	0.0740	0.3980
60	17.94	-0.01	0.0270	9.9999	0.0125	9.9999	0.4778	0.9054	0.0429	0.3535	0.0473	0.3905
61	18.89	-0.01	0.0301	9.9999	0.0150	9.9999	0.4985	0.7790	0.0334	0.2976	0.0454	0.3820
62	19.82	-0.01	0.0348	9.9999	0.0151	9.9999	0.3794	0.6879	0.0279	0.2571	0.0448	0.3849
63	20.77	-0.00	0.0403	9.9999	0.0162	9.9999	0.3939	0.6008	0.0267	0.2601	0.0431	0.3901
64	21.67	-0.01	0.0410	9.9999	0.0146	9.9999	0.3918	0.6726	0.0279	0.2611	0.0415	0.3862
65	22.65	-0.01	0.0403	9.9999	0.0182	9.9999	0.3939	0.6878	0.0269	0.2714	0.0392	0.3947
66	23.60	-0.01	0.0398	9.9999	0.0152	9.9999	0.3917	0.7262	0.0262	0.2885	0.0361	0.3972
67	24.55	-0.01	0.0387	9.9999	0.0141	9.9999	0.3925	0.7268	0.0250	0.2897	0.0353	0.3986
68	25.49	-0.01	0.0454	9.9999	0.0171	9.9999	0.3909	0.7604	0.0253	0.3073	0.0331	0.4009
69	26.41	-0.01	0.0399	9.9999	0.0128	9.9999	0.3958	0.7613	0.0245	0.3122	0.0314	0.3996
70	27.37	-0.01	0.0447	9.9999	0.0111	9.9999	0.4978	0.7703	0.0246	0.3061	0.0320	0.3973
71	28.13	-0.01	0.0433	9.9999	0.0110	9.9999	0.2946	0.8118	0.0263	0.3205	0.0302	0.3948
72	28.15	-0.01	0.0400	9.9999	0.0088	9.9999	0.2200	0.7935	0.0251	0.3119	0.0317	0.3931
73	28.16	-0.01	0.0401	9.9999	0.0076	9.9999	0.1993	0.8100	0.0245	0.3197	0.0303	0.3947
74	28.15	-0.01	0.0501	9.9999	0.0135	9.9999	0.2482	0.8027	0.0245	0.3151	0.0306	0.3925
75	28.18	-0.00	0.0497	9.9999	0.0109	9.9999	0.2196	0.8179	0.0247	0.3189	0.0303	0.3903
76	28.38	0.00	0.0530	9.9999	0.0111	9.9999	0.2098	0.8486	0.0241	0.3317	0.0265	0.3911
77	28.58	0.00	0.0562	9.9999	0.0120	9.9999	0.2139	0.8535	0.0242	0.3260	0.0291	0.3911
78	28.87	0.00	0.0400	9.9999	0.0093	9.9999	0.2000	0.8445	0.0236	0.3321	0.0282	0.3932
79	28.84	0.01	0.0548	9.9999	0.0114	9.9999	0.2053	0.8536	0.0236	0.3347	0.0277	0.3921
80	29.01	0.01	0.0561	9.9999	0.0120	9.9999	0.2050	0.8609	0.0235	0.3366	0.0273	0.3910
81	29.13	0.02	0.0576	9.9999	0.0121	9.9999	0.2097	0.8721	0.0227	0.3415	0.0261	0.3914
82	29.30	0.01	0.0514	9.9999	0.0091	9.9999	0.1774	0.8693	0.0229	0.3436	0.0261	0.3910
83	29.46	0.02	0.0578	9.9999	0.0121	9.9999	0.2097	0.8956	0.0227	0.3490	0.0254	0.3897
84	29.59	0.02	0.0609	9.9999	0.0130	9.9999	0.2237	0.8869	0.0219	0.3469	0.0247	0.3912
85	29.74	0.03	0.0637	9.9999	0.0139	9.9999	0.2424	0.8940	0.0221	0.3481	0.0248	0.3894
86	29.87	0.03	0.0666	9.9999	0.0107	9.9999	0.2122	0.8942	0.0218	0.3487	0.0244	0.3900
87	30.01	0.03	0.0642	9.9999	0.0156	9.9999	0.2485	0.8922	0.0221	0.3479	0.0248	0.3900
88	30.16	0.04	0.0657	9.9999	0.0176	9.9999	0.2713	0.9052	0.0213	0.3534	0.0236	0.3904
89	30.27	0.04	0.0628	9.9999	0.0157	9.9999	0.2512	0.9107	0.0215	0.3556	0.0234	0.3907
90	30.42	0.05	0.0673	9.9999	0.0192	9.9999	0.2857	0.9089	0.0216	0.3543	0.0234	0.3898
91	30.55	0.05	0.0705	9.9999	0.0207	9.9999	0.2940	0.9034	0.0213	0.3512	0.0236	0.3868
92	30.66	0.05	0.0657	9.9999	0.0191	9.9999	0.2912	0.9091	0.0208	0.3536	0.0229	0.3890

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 55 MACH 0.80 RATIO-0 1.7 PHI 0.0 CONF BINDERS L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CB3	XCPF3	YCPF3	CNF4	CH4	CB4	XCPF4	YCPF4
93	30.83	0.00	0.0615	9.9999	0.0273	9.9999	0.3354	0.8892	0.0208	0.3454	0.0234	0.3885
94	30.97	0.00	0.0751	9.9999	0.0249	9.9999	0.3320	0.8965	0.0207	0.3488	0.0231	0.3869
95	31.10	0.00	0.0751	9.9999	0.0249	9.9999	0.3320	0.8711	0.0210	0.3388	0.0241	0.3890
96	31.24	0.00	0.0814	9.9999	0.0240	9.9999	0.3305	0.8928	0.0206	0.3443	0.0231	0.3857
97	31.38	0.05	0.0750	9.9999	0.0287	9.9999	0.3305	0.9112	0.0199	0.3516	0.0219	0.3859
98	31.51	0.00	0.0703	9.9999	0.0232	9.9999	0.3305	0.8929	0.0206	0.3450	0.0231	0.3864
99	31.65	0.00	0.0782	9.9999	0.0283	9.9999	0.3024	0.8968	0.0198	0.3452	0.0221	0.3850
100	31.78	0.00	0.0751	9.9999	0.0261	9.9999	0.3480	0.9038	0.0202	0.3464	0.0224	0.3833
101	31.91	0.07	0.0796	9.9999	0.0290	9.9999	0.3048	0.9151	0.0194	0.3506	0.0212	0.3832
102	32.05	0.07	0.0763	9.9999	0.0274	9.9999	0.3596	0.9151	0.0191	0.3513	0.0209	0.3839
103	32.19	0.07	0.0763	9.9999	0.0280	9.9999	0.3075	0.9021	0.0196	0.3444	0.0220	0.3818
104	32.32	0.00	0.0700	9.9999	0.0238	9.9999	0.3495	0.9039	0.0196	0.3459	0.0219	0.3827
105	32.45	0.00	0.0779	9.9999	0.0288	9.9999	0.3702	0.9007	0.0190	0.3435	0.0211	0.3814
106	32.58	0.07	0.0700	9.9999	0.0244	9.9999	0.3491	0.9112	0.0196	0.3484	0.0215	0.3824
107	32.72	0.07	0.0810	9.9999	0.0297	9.9999	0.3071	0.9042	0.0192	0.3452	0.0213	0.3818
108	32.85	0.07	0.0778	9.9999	0.0294	9.9999	0.3784	0.9043	0.0190	0.3438	0.0210	0.3802
109	32.98	0.00	0.0731	9.9999	0.0265	9.9999	0.3030	0.9136	0.0184	0.3477	0.0202	0.3806
110	33.11	0.00	0.0716	9.9999	0.0245	9.9999	0.3427	0.9117	0.0185	0.3469	0.0203	0.3805
111	33.25	0.00	0.0715	9.9999	0.0264	9.9999	0.3697	0.9084	0.0181	0.3459	0.0200	0.3808
112	33.38	0.07	0.0716	9.9999	0.0251	9.9999	0.3510	0.9211	0.0178	0.3508	0.0194	0.3809
113	33.51	0.07	0.0779	9.9999	0.0288	9.9999	0.3702	0.8971	0.0190	0.3419	0.0212	0.3811
114	33.61	0.07	0.0716	9.9999	0.0251	9.9999	0.3510	0.9173	0.0182	0.3493	0.0199	0.3808
115	33.73	0.07	0.0652	9.9999	0.0234	9.9999	0.3594	0.9101	0.0181	0.3461	0.0199	0.3803
116	33.86	0.00	0.0714	9.9999	0.0283	9.9999	0.3969	0.9138	0.0180	0.3477	0.0197	0.3805
117	33.99	0.00	0.0684	9.9999	0.0249	9.9999	0.3646	0.9102	0.0180	0.3454	0.0198	0.3795
118	34.09	0.00	0.0746	9.9999	0.0291	9.9999	0.3906	0.9140	0.0176	0.3483	0.0193	0.3811
119	34.22	0.00	0.0714	9.9999	0.0263	9.9999	0.3689	0.9247	0.0175	0.3524	0.0190	0.3811
120	34.36	0.00	0.0685	9.9999	0.0226	9.9999	0.3305	0.9134	0.0180	0.3479	0.0197	0.3801
121	34.46	0.00	0.0681	9.9999	0.0261	9.9999	0.3838	0.9356	0.0171	0.3558	0.0183	0.3803
122	34.60	0.00	0.0713	9.9999	0.0278	9.9999	0.3878	0.9213	0.0170	0.3508	0.0185	0.3808
123	34.73	0.00	0.0525	9.9999	0.0173	9.9999	0.3302	0.9231	0.0171	0.3529	0.0186	0.3823
124	34.82	0.00	0.0618	9.9999	0.0243	9.9999	0.3738	0.9284	0.0171	0.3527	0.0184	0.3799
125	34.96	0.05	0.0681	9.9999	0.0261	9.9999	0.3838	0.9251	0.0166	0.3537	0.0180	0.3824
126	35.09	0.05	0.0555	9.9999	0.0213	9.9999	0.3845	0.9436	0.0157	0.3589	0.0167	0.3804
127	35.20	0.04	0.0602	9.9999	0.0229	9.9999	0.3810	0.9381	0.0159	0.3578	0.0170	0.3815
128	35.33	0.04	0.0524	9.9999	0.0186	9.9999	0.3536	0.9615	0.0157	0.3642	0.0164	0.3788
129	35.44	0.05	0.0493	9.9999	0.0184	9.9999	0.3333	0.9599	0.0158	0.3573	0.0168	0.3802
130	35.55	0.05	0.0572	9.9999	0.0196	9.9999	0.3433	0.9638	0.0147	0.3670	0.0153	0.3814
131	35.69	0.05	0.0585	9.9999	0.0231	9.9999	0.3655	0.9618	0.0146	0.3654	0.0152	0.3800
132	35.80	0.04	0.0581	9.9999	0.0197	9.9999	0.3502	0.9780	0.0148	0.3705	0.0152	0.3796
133	35.92	0.05	0.0586	9.9999	0.0203	9.9999	0.3470	0.9455	0.0150	0.3596	0.0159	0.3804
134	36.03	0.04	0.0602	9.9999	0.0216	9.9999	0.3594	0.9712	0.0138	0.3694	0.0142	0.3803
135	36.14	0.00	0.0633	9.9999	0.0223	9.9999	0.3560	0.9911	0.0134	0.3767	0.0135	0.3800
136	36.26	0.04	0.0586	9.9999	0.0203	9.9999	0.3470	0.9977	0.0144	0.3794	0.0145	0.3802
137	36.38	0.03	0.0522	9.9999	0.0178	9.9999	0.3600	0.9767	0.0131	0.3725	0.0134	0.3806
138	36.50	0.05	0.0539	9.9999	0.0180	9.9999	0.3540	0.9947	0.0132	0.3783	0.0133	0.3803

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSROC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 55 MACH 0.80 NAIO-6 PHI 0.0 CONF 81WDF15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
139	36.61	0.03	0.0460	9.9999	0.0195	9.9999	0.3377	0.9748	0.0136	0.3696	0.0140	0.3791
140	36.74	0.03	0.0491	9.9999	0.0170	9.9999	0.3409	1.0110	0.0129	0.3827	0.0128	0.3785
141	36.83	0.03	0.0534	9.9999	0.0206	9.9999	0.3425	1.0058	0.0125	0.3823	0.0124	0.3801
142	36.98	0.04	0.0503	9.9999	0.0219	9.9999	0.3467	1.0078	0.0121	0.3824	0.0120	0.3794
143	37.10	0.03	0.0429	9.9999	0.0134	9.9999	0.3151	1.0240	0.0121	0.3862	0.0116	0.3791
144	37.21	0.02	0.0460	9.9999	0.0155	9.9999	0.3377	1.0402	0.0116	0.3940	0.0114	0.3788
145	37.32	0.02	0.0460	9.9999	0.0155	9.9999	0.3377	1.0509	0.0120	0.3981	0.0114	0.3788
146	37.44	0.02	0.0500	9.9999	0.0124	9.9999	0.3263	1.0405	0.0113	0.3946	0.0109	0.3792
147	37.55	0.02	0.0444	9.9999	0.0148	9.9999	0.3341	1.0562	0.0117	0.4019	0.0111	0.3798
148	37.65	0.02	0.0533	9.9999	0.0108	9.9999	0.3243	1.0403	0.0116	0.3953	0.0114	0.3800
149	37.79	0.03	0.0412	9.9999	0.0139	9.9999	0.3382	1.0404	0.0114	0.3953	0.0110	0.3799
150	37.90	0.01	0.0444	9.9999	0.0148	9.9999	0.3341	1.0064	0.0107	0.4066	0.0100	0.3802
151	38.01	0.02	0.0412	9.9999	0.0143	9.9999	0.3526	1.0560	0.0113	0.4024	0.0107	0.3808
152	38.14	0.02	0.0439	9.9999	0.0108	9.9999	0.3666	1.0409	0.0105	0.3965	0.0101	0.3809
153	38.25	0.02	0.0383	9.9999	0.0095	9.9999	0.2853	1.0516	0.0107	0.4013	0.0102	0.3816
154	38.36	0.01	0.0439	9.9999	0.0106	9.9999	0.3668	1.0787	0.0101	0.4124	0.0094	0.3823
155	38.49	0.00	0.0300	9.9999	0.0118	9.9999	0.3933	1.0699	0.0096	0.4076	0.0092	0.3812
156	38.59	0.01	0.0258	9.9999	0.0069	9.9999	0.2899	1.0516	0.0107	0.4019	0.0102	0.3822
157	38.70	0.00	0.0300	9.9999	0.0099	9.9999	0.3300	1.0555	0.0096	0.4047	0.0091	0.3834
158	38.81	0.01	0.0276	9.9999	0.0142	9.9999	0.3757	1.0735	0.0093	0.4126	0.0087	0.3843
159	38.91	-0.00	0.0301	9.9999	0.0092	9.9999	0.3056	1.1057	0.0095	0.4249	0.0086	0.3843
160	39.02	0.01	0.0332	9.9999	0.0107	9.9999	0.3223	1.0788	0.0095	0.4144	0.0088	0.3841
161	39.15	-0.01	0.0347	9.9999	0.0127	9.9999	0.3660	1.0914	0.0093	0.4199	0.0085	0.3847
162	39.25	0.02	0.0300	9.9999	0.0105	9.9999	0.3500	1.0661	0.0091	0.4175	0.0084	0.3844
163	39.35	0.00	0.0300	9.9999	0.0105	9.9999	0.3500	1.1026	0.0086	0.4252	0.0078	0.3857
164	39.46	0.00	0.0257	9.9999	0.0081	9.9999	0.3418	1.0966	0.0091	0.4224	0.0083	0.3845
165	39.55	0.01	0.0258	9.9999	0.0063	9.9999	0.2647	1.0812	0.0091	0.4097	0.0086	0.3861
166	39.65	-0.01	0.0331	9.9999	0.0132	9.9999	0.3908	1.0884	0.0082	0.4202	0.0075	0.3861
167	39.77	-0.02	0.0305	9.9999	0.0072	9.9999	0.3512	1.1010	0.0082	0.4231	0.0075	0.3843
168	39.87	-0.00	0.0295	9.9999	0.0117	9.9999	0.3913	1.0813	0.0082	0.4177	0.0076	0.3863
169	39.97	-0.02	0.0257	9.9999	0.0087	9.9999	0.3671	1.0930	0.0081	0.4219	0.0074	0.3857
170	40.06	-0.01	0.0242	9.9999	0.0042	9.9999	0.2958	1.1119	0.0079	0.4278	0.0071	0.3848
171	40.17	-0.03	0.0265	9.9999	0.0072	9.9999	0.3512	1.1012	0.0079	0.4257	0.0072	0.3866
172	40.26	-0.04	0.0266	9.9999	0.0096	9.9999	0.3562	1.1259	0.0085	0.4342	0.0076	0.3857
173	40.37	-0.04	0.0265	9.9999	0.0072	9.9999	0.3512	1.1316	0.0078	0.4341	0.0069	0.3881
174	40.47	-0.03	0.0265	9.9999	0.0066	9.9999	0.3220	1.1154	0.0081	0.4320	0.0073	0.3873
175	40.57	-0.05	0.0242	9.9999	0.0042	9.9999	0.2958	1.1298	0.0078	0.4364	0.0069	0.3863
176	40.66	-0.06	0.0196	9.9999	0.0044	9.9999	0.2705	1.1429	0.0073	0.4356	0.0065	0.3881
177	40.79	-0.06	0.0242	9.9999	0.0042	9.9999	0.2958	1.1320	0.0072	0.4347	0.0064	0.3885
178	40.88	-0.07	0.0279	9.9999	0.0019	9.9999	0.2405	1.1211	0.0074	0.4343	0.0066	0.3874
179	40.99	-0.08	0.0112	9.9999	0.0015	9.9999	0.1356	1.1306	0.0063	0.4368	0.0056	0.3882
180	41.10	-0.06	0.0048	9.9999	-0.0002	9.9999	-0.0417	1.1302	0.0072	0.4369	0.0064	0.3884
181	41.19	-0.06	0.0080	9.9999	0.0013	9.9999	0.1625	1.1434	0.0069	0.4433	0.0060	0.3877
182	41.29	-0.07	0.0144	9.9999	0.0024	9.9999	0.1667	1.1401	0.0065	0.4443	0.0057	0.3897
183	41.41	-0.06	0.0111	9.9999	0.0028	9.9999	0.2523	1.1475	0.0059	0.4461	0.0051	0.3888
184	41.49	-0.09	0.0111	9.9999	0.0028	9.9999	0.2523	1.1459	0.0056	0.4459	0.0049	0.3892

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 55 0.80 1.7 0.0 BIWDFIN 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	DELA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
185	41.60	-0.10	0.0111	9.9999	0.0026	9.9999	0.2523	1.1401	0.0052	0.4472	0.0045	0.3902
186	41.69	-0.09	0.0001	9.9999	-0.0025	9.9999	-25.0000	1.1625	0.0047	0.4537	0.0040	0.3902
187	41.79	-0.10	-0.0015	9.9999	-0.0026	9.9999	1.7333	1.1644	0.0043	0.4531	0.0037	0.3891
188	41.89	-0.09	0.0001	9.9999	-0.0019	9.9999	-19.0000	1.1567	0.0051	0.4522	0.0044	0.3902
189	41.99	-0.08	0.0111	9.9999	0.0028	9.9999	0.2523	1.1681	0.0042	0.4567	0.0036	0.3909
190	42.09	-0.09	0.0017	9.9999	-0.0024	9.9999	-1.4118	1.1628	0.0039	0.4529	0.0034	0.3894
191	42.18	-0.08	0.0001	9.9999	-0.0025	9.9999	-25.0000	1.1484	0.0042	0.4486	0.0037	0.3906
192	42.27	-0.11	0.0080	9.9999	0.0008	9.9999	0.0750	1.1795	0.0029	0.4606	0.0025	0.3905
193	42.38	-0.10	0.0002	9.9999	-0.0050	9.9999	-25.0000	1.1594	0.0036	0.4533	0.0031	0.3909
194	42.48	-0.09	0.0033	9.9999	-0.0022	9.9999	-0.6667	1.1670	0.0026	0.4551	0.0024	0.3899
195	42.58	-0.09	0.0064	9.9999	0.0003	9.9999	0.0781	1.1707	0.0024	0.4559	0.0021	0.3894
196	42.64	-0.11	0.0017	9.9999	-0.0017	9.9999	-1.0000	1.1725	0.0025	0.4587	0.0021	0.3912
197	42.74	-0.11	0.0002	9.9999	-0.0037	9.9999	-18.5000	1.1727	0.0022	0.4614	0.0019	0.3934
198	42.82	-0.11	-0.0062	9.9999	-0.0035	9.9999	0.6871	1.1618	0.0020	0.4615	0.0017	0.3903
199	42.90	-0.11	-0.0030	9.9999	-0.0046	9.9999	1.5333	1.1804	0.0024	0.4614	0.0020	0.3906
200	42.99	-0.08	-0.0030	9.9999	-0.0040	9.9999	1.5333	1.1720	0.0013	0.4593	0.0011	0.3919
201	43.08	-0.09	-0.0001	9.9999	-0.0074	9.9999	1.2151	1.1559	0.0015	0.4535	0.0011	0.3923
202	43.18	-0.09	-0.0045	9.9999	-0.0066	9.9999	1.4667	1.1628	0.0014	0.4634	0.0012	0.3918
203	43.27	-0.11	-0.0062	9.9999	-0.0001	9.9999	0.9839	1.2026	0.0014	0.4715	0.0012	0.3921
204	43.37	-0.10	-0.0045	9.9999	-0.0000	9.9999	1.3333	1.1738	0.0012	0.4601	0.0010	0.3919
205	43.45	-0.09	-0.0141	9.9999	-0.0088	9.9999	0.6045	1.1776	0.0010	0.4616	0.0009	0.3919
206	43.55	-0.11	-0.0109	9.9999	-0.0084	9.9999	0.7706	1.1923	0.0003	0.4666	0.0003	0.3913
207	43.64	-0.11	-0.0183	9.9999	-0.0121	9.9999	0.6436	1.1839	0.0002	0.4676	0.0002	0.3933
208	43.71	-0.10	-0.0157	9.9999	-0.0081	9.9999	0.5159	1.1850	0.0007	0.4641	0.0006	0.3916
209	43.81	-0.11	-0.0062	9.9999	-0.0001	9.9999	0.9839	1.1926	-0.0002	0.4685	-0.0002	0.3928
210	43.90	-0.11	-0.0157	9.9999	-0.0088	9.9999	0.5005	1.1708	0.0003	0.4597	0.0003	0.3926
211	43.98	-0.12	-0.0046	9.9999	-0.0041	9.9999	0.8913	1.2054	-0.0007	0.4720	-0.0006	0.3916
212	44.07	-0.10	-0.0157	9.9999	-0.0094	9.9999	0.5987	1.1729	-0.0006	0.4584	-0.0005	0.3908
213	44.17	-0.09	-0.0061	9.9999	-0.0066	9.9999	1.1148	1.1670	-0.0006	0.4580	-0.0005	0.3922
214	44.27	-0.12	-0.0157	9.9999	-0.0086	9.9999	0.5005	1.2259	-0.0021	0.4813	-0.0017	0.3926
215	44.37	-0.11	-0.0189	9.9999	-0.0103	9.9999	0.5450	1.1930	-0.0011	0.4678	-0.0009	0.3921
216	44.46	-0.12	-0.0125	9.9999	-0.0079	9.9999	0.6320	1.2062	-0.0022	0.4732	-0.0018	0.3923
217	44.55	-0.11	-0.0157	9.9999	-0.0088	9.9999	0.5005	1.2060	-0.0019	0.4719	-0.0016	0.3913
218	44.64	-0.11	-0.0109	9.9999	-0.0078	9.9999	0.7156	1.1970	-0.0018	0.4706	-0.0015	0.3931
219	44.74	-0.13	-0.0094	9.9999	-0.0064	9.9999	0.6304	1.2023	-0.0018	0.4723	-0.0013	0.3928
220	44.83	-0.11	-0.0157	9.9999	-0.0094	9.9999	0.5987	1.2213	-0.0023	0.4796	-0.0019	0.3929
221	44.91	-0.12	-0.0077	9.9999	-0.0069	9.9999	0.8961	1.2159	-0.0023	0.4774	-0.0019	0.3926
222	45.00	-0.13	-0.0173	9.9999	-0.0089	9.9999	0.5145	1.2179	-0.0027	0.4781	-0.0022	0.3926
223	45.09	-0.11	-0.0157	9.9999	-0.0088	9.9999	0.5005	1.2090	-0.0026	0.4741	-0.0023	0.3921
224	45.19	-0.11	-0.0110	9.9999	-0.0059	9.9999	0.5364	1.1895	-0.0034	0.4673	-0.0029	0.3928
225	45.27	-0.11	-0.0158	9.9999	-0.0082	9.9999	0.5190	1.1968	-0.0030	0.4718	-0.0030	0.3942
226	45.36	-0.11	-0.0173	9.9999	-0.0065	9.9999	0.5145	1.2043	-0.0043	0.4729	-0.0036	0.3927
227	45.47	-0.09	-0.0158	9.9999	-0.0082	9.9999	0.5190	1.1859	-0.0034	0.4657	-0.0029	0.3927
228	45.55	-0.11	-0.0157	9.9999	-0.0088	9.9999	0.5005	1.2001	-0.0042	0.4737	-0.0035	0.3927
229	45.64	-0.10	-0.0109	9.9999	-0.0064	9.9999	0.7706	1.2169	-0.0041	0.4805	-0.0034	0.3946
230	45.72	-0.11	-0.0189	9.9999	-0.0097	9.9999	0.5132	1.2112	-0.0036	0.4762	-0.0030	0.3932

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) T 8V 16 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 6 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 55 MACH 0.80 RX10-6 1.7. PHI 0.0 CONF 81 WOF 15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
231	45.00	-0.10	-0.0158	9.9999	-0.0062	9.9999	0.5190	1.2006	-0.0039	0.4720	-0.0033	0.3931
232	45.09	-0.11	-0.0190	9.9999	-0.0050	9.9999	0.4737	1.2074	-0.0043	0.4736	-0.0036	0.3922
233	45.19	-0.11	-0.0189	9.9999	-0.0103	9.9999	0.5150	1.2025	-0.0041	0.4721	-0.0034	0.3926
234	46.07	-0.12	-0.0094	9.9999	-0.0064	9.9999	0.6009	1.2190	-0.0048	0.4792	-0.0039	0.3931
235	46.15	-0.12	-0.0190	9.9999	-0.0090	9.9999	0.4737	1.2157	-0.0053	0.4789	-0.0044	0.3939
236	46.20	-0.11	-0.0125	9.9999	-0.0079	9.9999	0.6320	1.2138	-0.0052	0.4774	-0.0043	0.3933
237	46.33	-0.12	-0.0158	9.9999	-0.0075	9.9999	0.4747	1.2029	-0.0050	0.4720	-0.0042	0.3924
238	46.42	-0.14	-0.0110	9.9999	-0.0059	9.9999	0.5304	1.2104	-0.0050	0.4764	-0.0040	0.3930
239	46.52	-0.12	-0.0120	9.9999	-0.0060	9.9999	0.4762	1.2104	-0.0050	0.4758	-0.0040	0.3931
240	46.60	-0.11	-0.0083	9.9999	-0.0036	9.9999	0.5714	1.2031	-0.0054	0.4733	-0.0045	0.3934
241	46.68	-0.12	-0.0127	9.9999	-0.0054	9.9999	0.4252	1.2014	-0.0055	0.4725	-0.0046	0.3933
242	46.78	-0.14	-0.0111	9.9999	-0.0053	9.9999	0.4775	1.2270	-0.0065	0.4806	-0.0053	0.3918
243	46.86	-0.12	-0.0156	9.9999	-0.0069	9.9999	0.4367	1.2120	-0.0063	0.4765	-0.0052	0.3929
244	46.93	-0.12	-0.0083	9.9999	-0.0036	9.9999	0.5714	1.2087	-0.0057	0.4750	-0.0047	0.3935
245	47.04	-0.12	-0.0190	9.9999	-0.0072	9.9999	0.3789	1.2202	-0.0073	0.4789	-0.0060	0.3925
246	47.11	-0.13	-0.0127	9.9999	-0.0054	9.9999	0.4252	1.2102	-0.0065	0.4767	-0.0054	0.3919
247	47.21	-0.11	-0.0095	9.9999	-0.0039	9.9999	0.4105	1.2163	-0.0066	0.4787	-0.0054	0.3930
248	47.29	-0.12	-0.0095	9.9999	-0.0039	9.9999	0.4105	1.2125	-0.0062	0.4772	-0.0051	0.3936
249	47.37	-0.11	-0.0095	9.9999	-0.0039	9.9999	0.4105	1.2144	-0.0064	0.4779	-0.0053	0.3930
250	47.46	-0.10	-0.0139	9.9999	-0.0057	9.9999	0.3585	1.2056	-0.0068	0.4739	-0.0056	0.3931
251	47.55	-0.12	-0.0128	9.9999	-0.0067	9.9999	0.5317	1.2010	-0.0063	0.4730	-0.0053	0.3936
252	47.64	-0.12	-0.0079	9.9999	-0.0031	9.9999	0.3924	1.2020	-0.0068	0.4723	-0.0057	0.3929
253	47.72	-0.13	-0.0127	9.9999	-0.0041	9.9999	0.3226	1.2149	-0.0074	0.4792	-0.0061	0.3944
254	47.81	-0.12	-0.0128	9.9999	-0.0065	9.9999	0.2734	1.2057	-0.0069	0.4746	-0.0057	0.3936
255	47.91	-0.13	-0.0174	9.9999	-0.0070	9.9999	0.4023	1.2035	-0.0062	0.4732	-0.0052	0.3932
256	47.99	-0.12	-0.0095	9.9999	-0.0039	9.9999	0.4105	1.2004	-0.0071	0.4701	-0.0059	0.3916
257	48.08	-0.14	-0.0223	9.9999	-0.0074	9.9999	0.3318	1.2001	-0.0066	0.4715	-0.0055	0.3929
258	48.18	-0.11	-0.0190	9.9999	-0.0072	9.9999	0.3789	1.1875	-0.0064	0.4680	-0.0054	0.3941
259	48.28	-0.12	-0.0079	9.9999	-0.0031	9.9999	0.3924	1.2004	-0.0071	0.4721	-0.0059	0.3933
260	48.33	-0.15	-0.0121	9.9999	-0.0059	9.9999	0.4652	1.1967	-0.0069	0.4712	-0.0058	0.3937
261	48.40	-0.12	-0.0207	9.9999	-0.0067	9.9999	0.3237	1.1911	-0.0066	0.4675	-0.0056	0.3925
262	48.50	-0.13	-0.0190	9.9999	-0.0072	9.9999	0.3789	1.1967	-0.0069	0.4692	-0.0058	0.3921
263	48.59	-0.13	-0.0143	9.9999	-0.0055	9.9999	0.3846	1.2023	-0.0074	0.4722	-0.0062	0.3927
264	48.69	-0.11	-0.0206	9.9999	-0.0079	9.9999	0.3335	1.1858	-0.0066	0.4678	-0.0056	0.3945
265	48.78	-0.13	-0.0174	9.9999	-0.0070	9.9999	0.4023	1.2045	-0.0075	0.4741	-0.0062	0.3920
266	48.84	-0.13	-0.0207	9.9999	-0.0067	9.9999	0.3237	1.2010	-0.0062	0.4733	-0.0068	0.3941
267	48.92	-0.14	-0.0222	9.9999	-0.0087	9.9999	0.3719	1.2043	-0.0077	0.4743	-0.0064	0.3938
268	49.02	-0.13	-0.0111	9.9999	-0.0064	9.9999	0.3063	1.2040	-0.0064	0.4743	-0.0070	0.3937
269	49.09	-0.13	-0.0127	9.9999	-0.0041	9.9999	0.3226	1.2003	-0.0074	0.4721	-0.0062	0.3932
270	49.18	-0.14	-0.0207	9.9999	-0.0067	9.9999	0.3237	1.2048	-0.0064	0.4729	-0.0070	0.3926
271	49.27	-0.13	-0.0065	9.9999	0.0001	9.9999	-0.0154	1.2115	-0.0073	0.4768	-0.0064	0.3930
272	49.35	-0.12	-0.0192	9.9999	-0.0047	9.9999	0.2448	1.2116	-0.0080	0.4762	-0.0060	0.3930
273	49.46	-0.13	-0.0160	9.9999	-0.0025	9.9999	0.1563	1.2118	-0.0084	0.4768	-0.0069	0.3935
274	49.55	-0.13	-0.0112	9.9999	-0.0021	9.9999	0.1875	1.2100	-0.0084	0.4760	-0.0070	0.3934
275	49.61	-0.11	-0.0081	9.9999	0.0	9.9999	0.0	1.2155	-0.0085	0.4797	-0.0070	0.3946
276	49.72	-0.11	-0.0160	9.9999	-0.0036	9.9999	0.2375	1.2140	-0.0091	0.4782	-0.0075	0.3939

TEST PART MACH RATIO-G PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 55 0.60 1.7 0.0 BINOPLD 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
277	49.79	-0.13	-0.0192	9.9999	-0.0047	9.9999	0.2448	1.2177	-0.0093	0.4797	-0.0076	0.3939
278	49.87	-0.13	-0.0176	9.9999	-0.0039	9.9999	0.2216	1.2177	-0.0093	0.4811	-0.0076	0.3951
279	49.96	-0.12	-0.0126	9.9999	-0.0029	9.9999	0.2266	1.2102	-0.0087	0.4779	-0.0072	0.3949
280	50.04	-0.11	-0.0017	9.9999	0.0024	9.9999	-1.4116	1.2212	-0.0090	0.4827	-0.0074	0.3953
281	50.14	-0.13	-0.0128	9.9999	-0.0016	9.9999	0.1250	1.2208	-0.0101	0.4838	-0.0082	0.3937
282	50.22	-0.12	-0.0100	9.9999	-0.0032	9.9999	0.2000	1.2287	-0.0098	0.4818	-0.0080	0.3921
283	50.31	-0.11	-0.0049	9.9999	0.0009	9.9999	-0.1637	1.2306	-0.0100	0.4852	-0.0081	0.3943
284	50.39	-0.12	-0.0128	9.9999	-0.0035	9.9999	0.2734	1.2303	-0.0110	0.4890	-0.0089	0.3949
285	50.47	-0.10	-0.0077	9.9999	-0.0001	9.9999	0.0103	1.2326	-0.0103	0.4873	-0.0084	0.3953
286	50.56	-0.11	-0.0065	9.9999	0.0007	9.9999	-0.1077	1.2265	-0.0094	0.4845	-0.0077	0.3944
287	50.64	-0.10	-0.0175	9.9999	-0.0045	9.9999	0.2571	1.2324	-0.0100	0.4874	-0.0081	0.3955
288	50.72	-0.09	-0.0032	9.9999	0.0004	9.9999	-0.1250	1.2473	-0.0109	0.4923	-0.0088	0.3947
289	50.81	-0.09	-0.0065	9.9999	0.0014	9.9999	-0.2154	1.2402	-0.0112	0.4891	-0.0090	0.3944
290	50.90	-0.09	-0.0047	9.9999	-0.0001	9.9999	0.0103	1.2511	-0.0113	0.4952	-0.0090	0.3958
291	50.97	-0.07	-0.0001	9.9999	0.0031	9.9999	-31.0000	1.2649	-0.0120	0.4996	-0.0095	0.3950
292	51.07	-0.10	-0.0001	9.9999	0.0025	9.9999	-25.0000	1.2501	-0.0114	0.4933	-0.0091	0.3946
293	51.15	-0.06	0.0046	9.9999	0.0046	9.9999	1.0435	1.2601	-0.0136	0.5058	-0.0106	0.3952
294	51.24	-0.07	0.0062	9.9999	0.0035	9.9999	0.8871	1.2724	-0.0125	0.5041	-0.0098	0.3962
295	51.32	-0.07	0.0073	9.9999	0.0053	9.9999	0.8077	1.2808	-0.0132	0.5085	-0.0103	0.3973
296	51.40	-0.06	0.0064	9.9999	0.0070	9.9999	0.7447	1.2691	-0.0130	0.5024	-0.0103	0.3959
297	51.48	-0.03	0.0205	9.9999	0.0125	9.9999	0.0000	1.3025	-0.0150	0.5179	-0.0115	0.3976
298	51.56	-0.03	0.0141	9.9999	0.0099	9.9999	0.7021	1.2874	-0.0136	0.5110	-0.0106	0.3970
299	51.67	-0.04	0.0078	9.9999	0.0083	9.9999	0.8077	1.2802	-0.0130	0.5091	-0.0100	0.3977
300	51.75	-0.01	0.0230	9.9999	0.0138	9.9999	0.3847	1.2989	-0.0149	0.5163	-0.0115	0.3975
301	51.84	-0.01	0.0300	9.9999	0.0162	9.9999	0.3400	1.2911	-0.0137	0.5146	-0.0106	0.3986
302	51.94	0.00	0.0232	9.9999	0.0171	9.9999	0.5151	1.2814	-0.0123	0.5106	-0.0096	0.3987
303	52.02	0.02	0.0204	9.9999	0.0136	9.9999	0.6087	1.2926	-0.0136	0.5141	-0.0105	0.3977
304	52.11	0.03	0.0299	9.9999	0.0181	9.9999	0.6034	1.2962	-0.0131	0.5157	-0.0101	0.3979
305	52.20	0.00	0.0204	9.9999	0.0136	9.9999	0.6087	1.2859	-0.0127	0.5152	-0.0099	0.4007
306	52.28	0.02	0.0303	9.9999	0.0195	9.9999	0.5982	1.2891	-0.0120	0.5129	-0.0093	0.3979
307	52.36	0.02	0.0247	9.9999	0.0198	9.9999	0.5700	1.2888	-0.0114	0.5116	-0.0089	0.3970
308	52.46	0.04	0.0231	9.9999	0.0190	9.9999	0.5744	1.2850	-0.0109	0.5107	-0.0085	0.3975
309	52.55	0.02	0.0206	9.9999	0.0180	9.9999	0.5976	1.3077	-0.0130	0.5167	-0.0100	0.3967
310	52.61	0.01	0.0208	9.9999	0.0186	9.9999	0.6149	1.2817	-0.0116	0.5104	-0.0091	0.3983
311	52.71	0.02	0.0203	9.9999	0.0194	9.9999	0.6467	1.2953	-0.0117	0.5156	-0.0090	0.3981
312	52.79	0.03	0.0234	9.9999	0.0187	9.9999	0.6025	1.2976	-0.0117	0.5153	-0.0090	0.3971
313	52.88	0.05	0.0252	9.9999	0.0172	9.9999	0.6025	1.2964	-0.0129	0.5164	-0.0100	0.3977
314	52.97	0.04	0.0217	9.9999	0.0190	9.9999	0.5944	1.2940	-0.0113	0.5137	-0.0087	0.3970
315	53.04	0.04	0.0220	9.9999	0.0157	9.9999	0.7136	1.2979	-0.0120	0.5152	-0.0093	0.3976
316	53.13	0.05	0.0233	9.9999	0.0210	9.9999	0.6306	1.2934	-0.0123	0.5143	-0.0095	0.3977
317	53.21	0.05	0.0233	9.9999	0.0198	9.9999	0.5946	1.2991	-0.0129	0.5166	-0.0099	0.3977
318	53.31	0.04	0.0231	9.9999	0.0182	9.9999	0.6047	1.2979	-0.0140	0.5171	-0.0106	0.3984
319	53.39	0.04	0.0265	9.9999	0.0226	9.9999	0.6192	1.2996	-0.0129	0.5162	-0.0099	0.3958
320	53.47	0.05	0.0248	9.9999	0.0222	9.9999	0.5978	1.2962	-0.0129	0.5153	-0.0100	0.3976
321	53.56	0.06	0.0230	9.9999	0.0175	9.9999	0.6119	1.3077	-0.0141	0.5200	-0.0108	0.3977
322	53.65	0.06	0.0285	9.9999	0.0188	9.9999	0.6596	1.3044	-0.0149	0.5189	-0.0114	0.3963

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 6 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 55 MACH 0.80 KAI-0 1.7 PHI 0.0 CONF BIMORIS L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
323	53.72	0.06	0.0383	9.9999	0.0183	9.9999	0.6040	1.3035	-0.0146	0.5191	-0.0112	0.3983
324	53.79	0.05	0.0384	9.9999	0.0209	9.9999	0.6158	1.2943	-0.0145	0.5151	-0.0112	0.3980
325	53.89	0.07	0.0389	9.9999	0.0230	9.9999	0.5764	1.2912	-0.0143	0.5137	-0.0111	0.3979
326	53.97	0.07	0.0387	9.9999	0.0214	9.9999	0.5831	1.2915	-0.0148	0.5136	-0.0115	0.3977
327	54.06	0.03	0.0382	9.9999	0.0264	9.9999	0.6125	1.2899	-0.0152	0.5141	-0.0118	0.3986
328	54.15	0.05	0.0389	9.9999	0.0230	9.9999	0.5764	1.2916	-0.0148	0.5164	-0.0115	0.3998
329	54.22	0.05	0.0385	9.9999	0.0260	9.9999	0.5603	1.2877	-0.0145	0.5134	-0.0113	0.3987
330	54.30	0.09	0.0416	9.9999	0.0237	9.9999	0.5711	1.2804	-0.0143	0.5129	-0.0112	0.4006
331	54.39	0.07	0.0388	9.9999	0.0316	9.9999	0.5996	1.2915	-0.0146	0.5150	-0.0115	0.3988
332	54.47	0.10	0.0401	9.9999	0.0281	9.9999	0.5854	1.2941	-0.0148	0.5174	-0.0115	0.3998
333	54.54	0.09	0.0402	9.9999	0.0264	9.9999	0.6125	1.2912	-0.0146	0.5151	-0.0114	0.4005
334	54.60	0.06	0.0416	9.9999	0.0257	9.9999	0.6193	1.2847	-0.0141	0.5154	-0.0110	0.4012
335	54.70	0.09	0.0402	9.9999	0.0271	9.9999	0.6268	1.2774	-0.0143	0.5115	-0.0112	0.4005
336	54.77	0.09	0.0407	9.9999	0.0295	9.9999	0.5940	1.2831	-0.0148	0.5139	-0.0116	0.4005
337	54.84	0.08	0.0393	9.9999	0.0346	9.9999	0.5878	1.2718	-0.0141	0.5064	-0.0111	0.3982
338	54.91	0.08	0.0407	9.9999	0.0315	9.9999	0.6051	1.2778	-0.0140	0.5078	-0.0110	0.3973
339	55.00	0.09	0.0401	9.9999	0.0346	9.9999	0.6179	1.2820	-0.0148	0.5119	-0.0116	0.3993
340	55.09	0.08	0.0397	9.9999	0.0315	9.9999	0.6351	1.2746	-0.0140	0.5107	-0.0115	0.4007
341	55.14	0.08	0.0379	9.9999	0.0282	9.9999	0.6506	1.2860	-0.0155	0.5141	-0.0121	0.3998
342	55.23	0.09	0.0396	9.9999	0.0326	9.9999	0.6026	1.2803	-0.0153	0.5083	-0.0120	0.3970
343	55.29	0.09	0.0529	9.9999	0.0337	9.9999	0.6303	1.2908	-0.0152	0.5170	-0.0117	0.3987
344	55.39	0.10	0.0529	9.9999	0.0350	9.9999	0.6029	1.3088	-0.0157	0.5207	-0.0120	0.3979
345	55.46	0.09	0.0417	9.9999	0.0277	9.9999	0.6059	1.3106	-0.0157	0.5215	-0.0120	0.3979
346	55.55	0.08	0.0433	9.9999	0.0297	9.9999	0.6075	1.3013	-0.0155	0.5161	-0.0119	0.3966
347	55.64	0.07	0.0529	9.9999	0.0330	9.9999	0.6250	1.3140	-0.0167	0.5214	-0.0127	0.3968
348	55.73	0.09	0.0449	9.9999	0.0242	9.9999	0.6518	1.3119	-0.0161	0.5193	-0.0123	0.3959
349	55.82	0.10	0.0529	9.9999	0.0330	9.9999	0.6290	1.3197	-0.0170	0.5259	-0.0129	0.3965
350	55.88	0.06	0.0511	9.9999	0.0305	9.9999	0.6569	1.3055	-0.0160	0.5167	-0.0123	0.3958
351	55.96	0.09	0.0511	9.9999	0.0341	9.9999	0.6068	1.3171	-0.0169	0.5255	-0.0129	0.3990
352	56.05	0.10	0.0463	9.9999	0.0324	9.9999	0.7013	1.3055	-0.0156	0.5187	-0.0121	0.3973
353	56.13	0.09	0.0590	9.9999	0.0372	9.9999	0.6516	1.3254	-0.0174	0.5256	-0.0131	0.3967
354	56.19	0.09	0.0536	9.9999	0.0351	9.9999	0.6409	1.3237	-0.0175	0.5256	-0.0132	0.3971
355	56.29	0.09	0.0494	9.9999	0.0335	9.9999	0.6876	1.3202	-0.0174	0.5240	-0.0130	0.3969
356	56.35	0.09	0.0493	9.9999	0.0332	9.9999	0.6746	1.3174	-0.0174	0.5223	-0.0132	0.3965
357	56.44	0.08	0.0425	9.9999	0.0308	9.9999	0.7196	1.3117	-0.0170	0.5220	-0.0130	0.3980
358	56.51	0.09	0.0524	9.9999	0.0360	9.9999	0.6883	1.3177	-0.0181	0.5229	-0.0138	0.3969
359	56.59	0.09	0.0492	9.9999	0.0351	9.9999	0.7149	1.3193	-0.0177	0.5236	-0.0134	0.3971
360	56.66	0.08	0.0523	9.9999	0.0306	9.9999	0.7011	1.3093	-0.0177	0.5194	-0.0135	0.3967
361	56.75	0.09	0.0475	9.9999	0.0343	9.9999	0.7236	1.3314	-0.0183	0.5277	-0.0138	0.3964
362	56.81	0.06	0.0523	9.9999	0.0306	9.9999	0.7011	1.3279	-0.0187	0.5247	-0.0141	0.3952
363	56.89	0.06	0.0459	9.9999	0.0329	9.9999	0.7183	1.3262	-0.0187	0.5272	-0.0141	0.3976
364	56.98	0.06	0.0427	9.9999	0.0320	9.9999	0.7312	1.3261	-0.0186	0.5252	-0.0140	0.3961
365	57.05	0.07	0.0490	9.9999	0.0303	9.9999	0.7423	1.3240	-0.0183	0.5250	-0.0146	0.3964
366	57.13	0.05	0.0458	9.9999	0.0348	9.9999	0.7015	1.3206	-0.0186	0.5228	-0.0141	0.3959
367	57.19	0.06	0.0490	9.9999	0.0303	9.9999	0.7423	1.3240	-0.0184	0.5209	-0.0139	0.3963
368	57.27	0.06	0.0426	9.9999	0.0332	9.9999	0.7312	1.3143	-0.0183	0.5215	-0.0139	0.3966

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIN-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 55 0.80 1.7 0.0 BINOFIS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CL3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
369	57.34	0.05	0.0553	9.9999	0.0379	9.9999	0.6866	1.3264	-0.0192	0.5254	-0.0145	0.3961
370	57.41	0.06	0.0488	9.9999	0.0366	9.9999	0.7556	1.3340	-0.0199	0.5272	-0.0149	0.3952
371	57.48	0.08	0.0503	9.9999	0.0368	9.9999	0.7729	1.3140	-0.0196	0.5211	-0.0149	0.3966
372	57.56	0.04	0.0409	9.9999	0.0323	9.9999	0.7917	1.3305	-0.0201	0.5263	-0.0151	0.3971
373	57.63	0.06	0.0468	9.9999	0.0361	9.9999	0.7413	1.3269	-0.0201	0.5253	-0.0152	0.3959
374	57.71	0.04	0.0436	9.9999	0.0355	9.9999	0.7690	1.3271	-0.0205	0.5254	-0.0155	0.3963
375	57.78	0.06	0.0537	9.9999	0.0365	9.9999	0.6810	1.3233	-0.0203	0.5223	-0.0154	0.3947
376	57.84	0.03	0.0488	9.9999	0.0361	9.9999	0.7413	1.3343	-0.0204	0.5278	-0.0153	0.3956
377	57.93	0.05	0.0553	9.9999	0.0373	9.9999	0.6757	1.3496	-0.0219	0.5348	-0.0163	0.3962
378	58.00	0.02	0.0521	9.9999	0.0356	9.9999	0.6885	1.3400	-0.0209	0.5303	-0.0156	0.3957
379	58.08	0.03	0.0502	9.9999	0.0378	9.9999	0.6866	1.3319	-0.0210	0.5254	-0.0158	0.3945
380	58.14	0.03	0.0435	9.9999	0.0339	9.9999	0.7467	1.3349	-0.0215	0.5300	-0.0161	0.3970
381	58.22	0.04	0.0550	9.9999	0.0378	9.9999	0.6885	1.3296	-0.0217	0.5269	-0.0163	0.3963
382	58.29	0.04	0.0518	9.9999	0.0375	9.9999	0.7253	1.3405	-0.0218	0.5311	-0.0163	0.3961
383	58.23	0.02	0.0456	9.9999	0.0328	9.9999	0.7165	1.3328	-0.0205	0.5293	-0.0157	0.3971
384	58.23	0.03	0.0423	9.9999	0.0350	9.9999	0.7820	1.3312	-0.0213	0.5284	-0.0160	0.3970
385	58.24	0.04	0.0434	9.9999	0.0325	9.9999	0.7420	1.3388	-0.0220	0.5325	-0.0165	0.3975

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 50 MACH 0.60 1.7 RX10-6 PHI 45.0 CONF BINOFIN L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.70	0.10	-0.0057	1.2042	0.0029	-0.2930	-0.0054	0.2225	0.0894	0.1331	-1.7563
2	-5.71	0.09	-0.0750	1.1854	0.0029	-0.2744	-0.0055	0.2246	0.0899	0.1347	-1.7547
3	-5.71	0.09	-0.0852	1.2113	0.0704	-0.2868	-0.0055	0.2246	0.0904	0.1342	-1.7880
4	-5.70	0.09	-0.0800	1.2048	0.0506	-0.2845	-0.0056	0.2262	0.0936	0.1374	-1.7563
5	-5.70	0.10	-0.0842	1.2021	0.0951	-0.2894	-0.0054	0.2226	0.0894	0.1332	-1.7906
6	-5.71	0.10	-0.7079	1.2194	0.1147	-0.2809	-0.0054	0.2264	0.0904	0.1360	-1.7227
7	-5.71	0.09	-0.0723	1.2274	0.0576	-0.2965	-0.0055	0.2234	0.0928	0.1356	-1.8256
8	-5.71	0.10	-0.7100	1.2345	0.1452	-0.3233	-0.0054	0.2244	0.0894	0.1350	-1.7194
9	-5.71	0.10	-0.6020	1.2023	0.1177	-0.2773	-0.0055	0.2247	0.0906	0.1339	-1.8148
10	-5.71	0.10	-0.6858	1.2020	0.1369	-0.3011	-0.0053	0.2247	0.0909	0.1338	-1.7528
11	-5.71	0.09	-0.6038	1.2263	0.0893	-0.3397	-0.0054	0.2341	0.0899	0.1442	-1.7942
12	-5.81	0.10	-0.0019	1.0862	0.0941	-0.2948	-0.0054	0.2414	0.0899	0.1515	-1.8079
13	-5.00	0.10	-0.5516	0.7255	0.0575	-0.2744	-0.0020	0.2447	0.0846	0.1601	-1.6779
14	-4.00	0.09	-0.4145	0.4928	0.0389	-0.2498	-0.0050	0.2447	0.0811	0.1636	-1.6472
15	-3.11	0.09	-0.2703	0.4706	0.0319	-0.1871	-0.0030	0.2403	0.0736	0.1681	-1.7320
16	-2.20	0.10	-0.1928	0.3143	0.0799	-0.2086	-0.0053	0.2491	0.0773	0.1716	-1.6304
17	-1.29	0.09	-0.0967	0.1877	0.0504	-0.1593	-0.0054	0.2504	0.0777	0.1727	-1.6424
18	-0.31	0.09	-0.0078	0.1033	0.0526	-0.1453	-0.0053	0.2481	0.0772	0.1709	-10.5531
19	0.67	0.10	0.1045	-0.0284	0.0036	-0.1940	-0.0050	0.2526	0.0772	0.1754	-0.2592
20	1.57	0.09	0.1820	-0.1625	0.0536	-0.2152	-0.0050	0.2592	0.0763	0.1829	-0.8931
21	2.56	0.10	0.3081	-0.3394	0.0549	-0.2013	-0.0050	0.2553	0.0788	0.1765	-1.1019
22	3.53	0.09	0.4207	-0.5468	0.0642	-0.2250	-0.0049	0.2554	0.0792	0.1762	-1.2496
23	4.42	0.09	0.5220	-0.7270	0.0757	-0.2242	-0.0048	0.2576	0.0792	0.1784	-1.3912
24	5.35	0.10	0.6438	-0.9760	0.1016	-0.2757	-0.0048	0.2576	0.0851	0.1725	-1.5159
25	6.31	0.10	0.7647	-1.2521	0.0825	-0.2355	-0.0049	0.2551	0.0859	0.1662	-1.5956
26	7.27	0.10	0.9446	-1.5075	0.0948	-0.2234	-0.0051	0.2505	0.0968	0.1538	-1.6803
27	8.21	0.10	1.0753	-1.8241	0.0833	-0.2270	-0.0050	0.2480	0.0971	0.1510	-1.6996
28	9.13	0.10	1.2466	-2.1067	0.0986	-0.3111	-0.0052	0.2447	0.1053	0.1395	-1.7377
29	10.03	0.10	1.3550	-2.4250	0.0933	-0.2809	-0.0058	0.2379	0.1072	0.1208	-1.7926
30	11.02	0.10	1.5364	-2.7801	0.0930	-0.2965	-0.0064	0.2370	0.1170	0.1201	-1.8141
31	11.97	0.10	1.6970	-3.1302	0.0780	-0.3364	-0.0065	0.2311	0.1222	0.1090	-1.8466
32	12.90	0.10	1.8357	-3.4844	0.0814	-0.3522	-0.0070	0.2258	0.1266	0.0992	-1.8871
33	13.84	0.10	2.0201	-3.8275	0.0781	-0.3447	0.0	0.2205	0.1285	0.0920	-1.8873
34	14.80	0.10	2.1934	-4.1894	0.0881	-0.3913	-0.0072	0.2166	0.1375	0.0815	-1.8965
35	15.79	0.10	2.3681	-4.5522	0.0814	-0.3991	-0.0081	0.2143	0.1421	0.0722	-1.8706
36	16.76	0.10	2.5469	-4.9025	0.0880	-0.3930	-0.0010	0.2101	0.1504	0.0597	-1.8841
37	17.75	0.10	2.7190	-5.2852	0.0816	-0.3104	-0.0088	0.2043	0.1586	0.0457	-1.8825
38	18.70	0.10	2.8878	-5.3515	0.0781	-0.4000	-0.0087	0.2011	0.1638	0.0353	-1.8861
39	19.66	0.09	3.0462	-5.0039	0.0598	-0.3078	-0.0092	0.1962	0.1775	0.0207	-1.8859
40	20.61	0.10	3.2087	-5.8834	0.0869	-0.4739	-0.0241	0.1975	0.1906	0.0069	-1.8355
41	21.55	0.11	3.3670	-6.1754	0.1956	-0.4179	-0.0085	0.2038	0.2030	-0.0028	-1.8044
42	22.50	0.10	3.4982	-6.0004	0.1732	-0.4259	-0.0070	0.2121	0.2254	-0.0133	-1.7492
43	23.45	0.11	3.5869	-6.0053	0.2334	-0.3283	-0.0047	0.2429	0.2652	-0.0223	-1.6938
44	24.38	0.12	3.6713	-6.0999	0.3114	-0.3984	-0.0066	0.2471	0.2854	-0.0383	-1.6365
45	25.30	0.12	3.6913	-6.2057	0.3775	-0.4930	-0.0503	0.2638	0.3150	-0.0511	-1.5943
46	26.26	0.12	4.0050	-6.3178	0.4084	-0.7443	-0.0345	0.2823	0.3226	-0.0604	-1.5542

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/D=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	56	0.80	1.7	45.0	BIWOFIS	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAO	CAF	XCP
47	27.22	0.12	4.2444	-0.3824	0.4559	-0.7577	-0.0045	0.2572	0.3277	-0.0704	-1.5508
48	28.11	0.12	4.3567	-0.6658	0.5001	-0.8491	0.0252	0.2542	0.3330	-0.0827	-1.5377
49	28.14	0.12	4.3618	-0.7058	0.4514	-0.8741	0.0330	0.2537	0.3400	-0.0862	-1.5304
50	28.14	0.12	4.3373	-0.6662	0.3904	-0.8415	0.0252	0.2499	0.3400	-0.0900	-1.5370
51	28.14	0.13	4.3561	-0.7367	0.5188	-0.7733	0.0250	0.2479	0.3410	-0.0930	-1.5458
52	28.18	0.12	4.4129	-0.7443	0.4001	-0.8353	0.0329	0.2547	0.3415	-0.0867	-1.5283
53	28.38	0.12	4.4111	-0.7190	0.4427	-0.8908	0.0332	0.2567	0.3419	-0.0851	-1.5232
54	28.58	0.12	4.4603	-0.7533	0.4767	-0.8730	0.0483	0.2437	0.3444	-0.1007	-1.5130
55	28.68	0.12	4.5266	-0.8201	0.4795	-0.8825	0.0484	0.2450	0.3468	-0.1018	-1.5066
56	28.83	0.13	4.5091	-0.8577	0.5073	-0.8396	0.0364	0.2480	0.3478	-0.0998	-1.5009
57	29.02	0.13	4.6407	-0.9613	0.5003	-0.7169	0.0636	0.2551	0.3526	-0.0975	-1.5001
58	29.15	0.14	4.7216	-1.0056	0.6523	-0.7699	0.0791	0.2403	0.3540	-0.1137	-1.4819
59	29.32	0.14	4.7302	-0.9872	0.7395	-0.8401	0.0797	0.2454	0.3541	-0.1087	-1.4667
60	29.47	0.14	4.8056	-0.9401	0.8021	-0.8901	0.0800	0.2407	0.3582	-0.1115	-1.4442
61	29.60	0.14	4.8554	-0.9455	0.7736	-0.9002	0.0950	0.2453	0.3625	-0.1172	-1.4293
62	29.78	0.14	4.8977	-1.0158	0.8392	-0.8824	0.1026	0.2486	0.3640	-0.1154	-1.4447
63	29.89	0.14	4.9347	-0.9100	0.7886	-0.9400	0.1030	0.2475	0.3650	-0.1175	-1.4003
64	30.04	0.15	5.0168	-1.0448	0.8003	-0.7608	0.1105	0.2418	0.3665	-0.1247	-1.4042
65	30.17	0.14	5.0099	-0.9702	0.7397	-0.9945	0.0952	0.2403	0.3675	-0.1290	-1.3876
66	30.31	0.15	5.0566	-1.0567	0.8495	-0.7135	0.1107	0.2481	0.3741	-0.1260	-1.3866
67	30.44	0.14	5.1320	-1.0560	0.7879	-0.9948	0.1106	0.2449	0.3761	-0.1312	-1.3748
68	30.58	0.14	5.1093	-1.0482	0.8493	-0.8630	0.1107	0.2452	0.3775	-0.1323	-1.3796
69	30.70	0.15	5.1540	-1.1142	0.8289	-0.8438	0.1110	0.2419	0.3785	-0.1366	-1.3697
70	30.84	0.15	5.2191	-1.1356	0.9005	-0.8110	0.1110	0.2496	0.3848	-0.1352	-1.3688
71	30.99	0.15	5.2535	-1.1387	0.9122	-0.9523	0.1256	0.2550	0.3869	-0.1319	-1.3583
72	31.12	0.16	5.3000	-1.2196	0.9816	-0.8675	0.1259	0.2459	0.3897	-0.1438	-1.3581
73	31.25	0.17	5.4022	-1.3031	1.0726	-0.5832	0.1337	0.2402	0.3893	-0.1411	-1.3520
74	31.40	0.16	5.3284	-1.2496	1.0301	-0.7748	0.1261	0.2467	0.3951	-0.1484	-1.3430
75	31.54	0.16	5.3578	-1.4031	1.0701	-0.8029	0.1261	0.2432	0.3956	-0.1524	-1.3369
76	31.67	0.17	5.3709	-1.3099	1.0013	-0.4234	0.1340	0.2513	0.3999	-0.1486	-1.3229
77	31.80	0.17	5.4230	-1.3820	1.0742	-0.5415	0.1340	0.2443	0.4028	-0.1585	-1.3127
78	31.93	0.16	5.4662	-1.4506	1.1190	-0.3569	0.1342	0.2505	0.4033	-0.1528	-1.3103
79	32.07	0.17	5.4824	-1.4666	1.1333	-0.3006	0.1344	0.2415	0.4076	-0.1661	-1.2913
80	32.21	0.17	5.4901	-1.5270	1.1434	-0.1802	0.1416	0.2493	0.4071	-0.1578	-1.2978
81	32.34	0.17	5.4660	-1.5139	1.1445	-0.3859	0.1418	0.2424	0.4133	-0.1709	-1.2809
82	32.47	0.17	5.4903	-1.6303	1.1619	-0.0509	0.1339	0.2467	0.4159	-0.1692	-1.2758
83	32.59	0.17	5.5170	-1.5022	1.1510	-0.0057	0.1418	0.2472	0.4169	-0.1697	-1.2695
84	32.74	0.17	5.5032	-1.5705	1.1553	0.1799	0.1269	0.2516	0.4217	-0.1701	-1.2462
85	32.86	0.17	5.1141	-1.6000	1.1263	0.3038	0.1339	0.2534	0.4206	-0.1696	-1.2572
86	32.99	0.17	5.1560	-1.6812	1.1321	0.2808	0.1415	0.2510	0.4246	-0.1736	-1.2478
87	33.12	0.18	5.2403	-1.7460	1.1781	0.4100	0.1267	0.2498	0.4236	-0.1736	-1.2413
88	33.24	0.18	5.2621	-1.6734	1.1590	0.4493	0.1345	0.2584	0.4269	-0.1685	-1.2208
89	33.37	0.18	5.3463	-1.7526	1.1781	0.6032	0.1267	0.2479	0.4303	-0.1824	-1.2273
90	33.49	0.18	5.4333	-1.8317	1.1935	0.7207	0.1195	0.2564	0.4327	-0.1763	-1.2076
91	33.62	0.18	5.3993	-1.8029	1.1945	0.7871	0.1269	0.2457	0.4346	-0.1889	-1.1987
92	33.75	0.18	5.4322	-1.8316	1.1784	0.8755	0.1122	0.2534	0.4370	-0.1837	-1.1809

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAID-0 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
1 56 0.60 1.1 45.0 BIMOFIS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	33.87	0.18	6.5564	-7.7979	1.1549	0.0694	0.1267	0.2542	0.4382	-0.1840	-1.1621
94	34.00	0.17	6.6943	-7.9432	1.1907	0.9302	0.1261	0.2451	0.4336	-0.1935	-1.1959
95	34.12	0.19	6.7731	-7.9128	1.1950	1.0171	0.1121	0.2447	0.4332	-0.1935	-1.1679
96	34.25	0.18	6.7959	-7.8095	1.1117	1.1252	0.1120	0.2455	0.4401	-0.1946	-1.1574
97	34.39	0.18	6.8215	-7.9869	1.0830	1.2227	0.1115	0.2532	0.4477	-0.1945	-1.1708
98	34.49	0.19	6.9144	-7.9221	1.1900	1.0642	0.1125	0.2415	0.4353	-0.2038	-1.1462
99	34.62	0.19	6.9190	-7.9033	1.1846	1.3421	0.0324	0.2519	0.4467	-0.1948	-1.1423
100	34.74	0.18	6.9346	-7.8932	1.1232	1.3385	0.1124	0.2378	0.4358	-0.2082	-1.1301
101	34.85	0.19	7.0305	-7.9499	1.1579	1.3389	0.1126	0.2427	0.4521	-0.2094	-1.1263
102	34.97	0.19	7.1222	-7.9251	1.2027	1.3618	0.0832	0.2397	0.4525	-0.2128	-1.1128
103	35.11	0.20	7.1743	-7.9442	1.1817	1.3634	0.0882	0.2447	0.4550	-0.2103	-1.1076
104	35.23	0.19	7.2302	-7.9357	1.2250	1.0290	0.0759	0.2550	0.4559	-0.2009	-1.0964
105	35.35	0.19	7.1921	-7.8898	1.1335	1.0401	0.0809	0.2540	0.4564	-0.2024	-1.0970
106	35.48	0.19	7.2537	-7.9134	1.1101	1.7943	0.0369	0.2501	0.4579	-0.2078	-1.0761
107	35.59	0.21	7.2492	-7.9951	1.2719	1.8927	0.0396	0.2414	0.4593	-0.2179	-1.0695
108	35.72	0.19	7.4499	-7.9620	1.1930	1.8320	0.0392	0.2497	0.4621	-0.2124	-1.0688
109	35.82	0.19	7.4726	-7.9254	1.1775	1.9432	0.0318	0.2473	0.4608	-0.2135	-1.0606
110	35.95	0.20	7.5149	-7.9134	1.2596	1.7856	0.0250	0.2519	0.4632	-0.2113	-1.0530
111	36.07	0.21	7.5360	-7.8818	1.3104	1.9321	0.0107	0.2459	0.4656	-0.2197	-1.0304
112	36.17	0.20	7.6147	-7.8858	1.1990	2.0004	0.0027	0.2471	0.4641	-0.2170	-1.0355
113	36.29	0.19	7.6593	-7.8359	1.1771	2.0209	0.0104	0.2481	0.4690	-0.2209	-1.0231
114	36.43	0.20	7.7008	-7.8679	1.2043	2.0733	0.0035	0.2415	0.4651	-0.2236	-1.0112
115	36.53	0.21	7.7043	-7.7052	1.3083	2.0922	-0.0257	0.2369	0.4714	-0.2325	-0.9924
116	36.66	0.21	7.8040	-7.8130	1.2683	2.3017	-0.0334	0.2438	0.4680	-0.2242	-0.9913
117	36.78	0.20	7.8704	-7.8792	1.1841	2.1479	-0.0255	0.2485	0.4719	-0.2234	-0.9757
118	36.86	0.21	7.9458	-7.8378	1.2724	2.2012	-0.0351	0.2347	0.4762	-0.2415	-0.9738
119	37.01	0.21	7.9859	-7.8072	1.3044	2.2905	-0.0693	0.2470	0.4767	-0.2297	-0.9526
120	37.13	0.21	8.0159	-7.8172	1.2910	2.3202	-0.0693	0.2478	0.4767	-0.2289	-0.9503
121	37.25	0.21	8.0862	-7.9708	1.2535	2.2807	-0.0538	0.2323	0.4757	-0.2434	-0.9262
122	37.36	0.21	8.0862	-7.8699	1.2995	2.3330	-0.0688	0.2446	0.4830	-0.2383	-0.9380
123	37.48	0.22	8.1323	-7.9830	1.3060	2.2482	-0.0532	0.2345	0.4788	-0.2441	-0.9180
124	37.59	0.22	8.1493	-7.9024	1.3577	2.0650	-0.0434	0.2356	0.4816	-0.2459	-0.9157
125	37.70	0.23	8.1901	-7.9753	1.3935	2.1878	-0.0073	0.2332	0.4807	-0.2474	-0.8998
126	37.83	0.23	8.2752	-7.9285	1.3713	2.3525	-0.1044	0.2434	0.4883	-0.2448	-0.8854
127	37.94	0.23	8.2880	-7.9247	1.3852	2.2207	-0.0887	0.2373	0.4864	-0.2490	-0.8699
128	38.06	0.21	8.2993	-7.8665	1.2901	2.3541	-0.1113	0.2328	0.4849	-0.2522	-0.8645
129	38.19	0.22	8.3071	-7.9169	1.2930	2.3620	-0.1412	0.2335	0.4834	-0.2528	-0.8605
130	38.29	0.23	8.3767	-7.9869	1.3987	2.1535	-0.0857	0.2263	0.4888	-0.2624	-0.8460
131	38.41	0.23	8.4088	-7.9852	1.4066	2.4048	-0.1405	0.2459	0.4931	-0.2491	-0.8484
132	38.52	0.23	8.4546	-7.9291	1.4206	2.3024	-0.0952	0.2323	0.4918	-0.2594	-0.8314
133	38.64	0.23	8.4914	-8.0342	1.4147	2.2691	-0.0798	0.2279	0.4950	-0.2670	-0.8166
134	38.73	0.23	8.4852	-8.0077	1.4050	2.1845	-0.0871	0.2406	0.4905	-0.2558	-0.8156
135	38.85	0.23	8.5076	-8.0122	1.4721	2.1979	-0.0940	0.2326	0.4960	-0.2633	-0.8049
136	38.94	0.23	8.4907	-8.0960	1.5008	1.8345	-0.0261	0.2272	0.4984	-0.2711	-0.7886
137	39.06	0.23	8.6033	-8.0863	1.5041	1.9846	-0.0489	0.2262	0.5008	-0.2725	-0.7997
138	39.17	0.23	8.5565	-8.0344	1.5294	1.7090	-0.0329	0.2258	0.5004	-0.2745	-0.7754

TEST 7 PART 50 MACH 0.80 RATIO 1.1 PHI 45.0 CONF BIMOUNT CL 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	39.28	0.22	8.5662	-5.1910	1.4927	1.4877	0.0211	0.2243	0.4985	-0.2741	-0.7210
140	39.38	0.23	8.5507	-5.4226	1.5267	1.4785	0.0204	0.2232	0.4991	-0.2716	-0.7511
141	39.49	0.23	8.6020	-5.4148	1.5793	1.5258	-0.0015	0.2232	0.5027	-0.2674	-0.7406
142	39.38	0.23	8.5963	-5.4535	1.4578	1.5224	-0.0494	0.2284	0.5023	-0.2738	-0.7044
143	39.08	0.22	8.5926	-5.3714	1.4211	1.2126	0.0444	0.2259	0.5095	-0.2835	-0.7066
144	39.81	0.21	8.6926	-5.4253	1.3624	1.3767	0.0140	0.2237	0.5095	-0.2857	-0.6931
145	39.90	0.20	8.7245	-5.4315	1.2755	1.4902	0.0071	0.2212	0.5095	-0.2862	-0.6798
146	40.01	0.20	8.6868	-5.4116	1.2853	1.5946	0.0073	0.2318	0.5094	-0.2775	-0.6690
147	40.13	0.20	8.6133	-5.3911	1.3265	1.5480	-0.0073	0.2364	0.5105	-0.2941	-0.6664
148	40.21	0.20	8.6278	-5.3893	1.2656	1.4801	-0.0296	0.2218	0.5114	-0.2896	-0.6581
149	40.30	0.20	8.6068	-5.7451	1.3089	1.4479	-0.0145	0.2197	0.5137	-0.2940	-0.6522
150	40.41	0.19	8.6911	-5.7319	1.2291	1.5263	-0.0296	0.2172	0.5142	-0.2970	-0.6483
151	40.50	0.20	8.6195	-5.7061	1.3147	1.4499	-0.0144	0.2228	0.5167	-0.2939	-0.6470
152	40.61	0.20	8.6051	-5.6524	1.2900	1.4024	-0.0291	0.2297	0.5191	-0.2894	-0.6376
153	40.72	0.19	8.5962	-5.5547	1.1675	1.5878	-0.0590	0.2122	0.5210	-0.3008	-0.6222
154	40.63	0.20	8.6708	-5.5922	1.2419	1.5629	-0.0661	0.2230	0.5229	-0.2999	-0.6230
155	40.91	0.19	8.6547	-5.5168	1.1155	1.3857	-0.0591	0.2150	0.5214	-0.3064	-0.6175
156	41.02	0.19	8.6099	-5.5477	1.1955	1.4759	-0.0810	0.2071	0.5249	-0.3178	-0.6157
157	41.13	0.18	8.6058	-5.5182	1.0832	1.3604	-0.0738	0.2237	0.5272	-0.3055	-0.6085
158	41.23	0.17	8.6018	-5.5191	1.0402	1.6770	-0.0763	0.2215	0.5290	-0.3091	-0.6091
159	41.33	0.17	8.6506	-5.5613	1.0182	1.7201	-0.1182	0.2187	0.5300	-0.3113	-0.5946
160	41.45	0.16	8.6003	-5.5027	0.9793	1.9980	-0.1391	0.1959	0.5353	-0.3394	-0.6007
161	41.52	0.17	8.6183	-5.5048	0.9429	1.7663	-0.1407	0.2406	0.5339	-0.2931	-0.5997
162	41.63	0.17	8.6070	-5.5504	0.9477	2.0406	-0.1554	0.2200	0.5362	-0.3162	-0.5996
163	41.71	0.16	8.6534	-5.5564	0.9643	1.8700	-0.1253	0.2177	0.5367	-0.3190	-0.5765
164	41.82	0.15	8.6830	-5.5759	0.8558	2.1035	-0.1780	0.2251	0.5440	-0.3189	-0.5789
165	41.92	0.15	8.6815	-5.5471	0.8695	2.1230	-0.1782	0.2247	0.5430	-0.3183	-0.5845
166	42.01	0.16	8.6722	-5.5741	0.9573	1.8878	-0.1550	0.2282	0.5434	-0.3157	-0.5796
167	42.12	0.14	8.5332	-5.4126	0.6446	2.2159	-0.1634	0.2394	0.5531	-0.3137	-0.5799
168	42.21	0.14	8.4583	-5.3154	0.6700	2.3522	-0.2077	0.2282	0.5478	-0.3216	-0.5831
169	42.29	0.13	8.4092	-5.3638	0.4013	2.3942	-0.2157	0.2317	0.5574	-0.3257	-0.5701
170	42.39	0.14	8.5029	-5.5499	0.5831	2.5548	-0.2303	0.2317	0.5550	-0.3233	-0.5693
171	42.48	0.13	8.3307	-5.3153	0.3564	2.5066	-0.2154	0.2298	0.5622	-0.3324	-0.5765
172	42.58	0.12	8.7049	-5.8984	0.4148	2.8000	-0.2503	0.2242	0.5616	-0.3376	-0.5872
173	42.69	0.12	8.6502	-5.8536	0.3556	3.2802	-0.2845	0.2201	0.5602	-0.3341	-0.5918
174	42.78	0.12	8.7141	-5.7020	0.3319	3.0402	-0.2674	0.2370	0.5626	-0.3256	-0.5870
175	42.89	0.11	8.7301	-5.8433	0.2926	3.1225	-0.2822	0.2404	0.5649	-0.3265	-0.5795
176	42.99	0.11	8.6830	-5.7706	0.2675	3.1478	-0.2822	0.2282	0.5673	-0.3471	-0.5851
177	43.03	0.12	8.9540	-5.8829	0.4400	3.3020	-0.2904	0.2263	0.5673	-0.3410	-0.5910
178	43.11	0.10	8.6482	-5.7022	0.2330	3.1540	-0.2823	0.2332	0.5702	-0.3370	-0.5851
179	43.21	0.10	8.9795	-5.9334	0.1775	3.4715	-0.3048	0.2335	0.5707	-0.3372	-0.5946
180	43.32	0.10	10.1035	-6.0023	0.1590	3.4942	-0.3122	0.2276	0.5736	-0.3460	-0.6000
181	43.40	0.11	10.1169	-6.0239	0.2330	3.4304	-0.2970	0.2203	0.5726	-0.3525	-0.5954
182	43.48	0.08	10.0240	-5.9159	-0.0287	3.2059	-0.2826	0.2292	0.5803	-0.3371	-0.5702
183	43.58	0.07	9.9402	-5.8866	-0.0077	3.0147	-0.2839	0.2153	0.5742	-0.3549	-0.5622
184	43.65	0.09	10.1148	-5.9245	0.0060	3.2842	-0.2823	0.2221	0.5750	-0.3529	-0.5758

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 50 MACH 1.7 RATIO-0 PHI 45.0 CONF B1A0F15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	DLTA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
185	43.74	0.10	10.2384	-5.9033	0.2244	3.3970	-0.2966	0.2319	0.5750	-0.3431	-0.5827
186	43.84	0.07	10.1432	-5.8796	-0.1279	3.0834	-0.2703	0.2101	0.5693	-0.3542	-0.5599
187	43.92	0.06	10.1249	-5.7493	-0.1038	3.1700	-0.2830	0.2197	0.5721	-0.3524	-0.5678
188	44.01	0.06	10.2129	-5.7010	-0.0405	3.0999	-0.2974	0.2179	0.5750	-0.3571	-0.5642
189	44.11	0.07	10.1069	-5.6964	-0.2155	3.0569	-0.2979	0.2191	0.5716	-0.3525	-0.5604
190	44.20	0.07	10.2532	-5.9059	-0.2301	3.2368	-0.3053	0.2137	0.5745	-0.3608	-0.5760
191	44.28	0.05	10.1544	-5.5021	-0.4112	2.8108	-0.2835	0.2075	0.5726	-0.3651	-0.5429
192	44.38	0.05	10.2244	-5.8174	-0.3410	2.9746	-0.2962	0.2058	0.5776	-0.3720	-0.5635
193	44.47	0.06	10.3143	-5.7087	-0.2950	3.0503	-0.2980	0.2172	0.5760	-0.3588	-0.5593
194	44.56	0.06	10.3120	-5.7019	-0.2483	2.9559	-0.2977	0.2133	0.5750	-0.3617	-0.5607
195	44.66	0.06	10.4037	-5.8756	-0.3364	3.0219	-0.3129	0.2017	0.5763	-0.3766	-0.5648
196	44.74	0.05	10.3677	-5.7269	-0.3334	2.9223	-0.3128	0.2094	0.5784	-0.3690	-0.5526
197	44.84	0.05	10.4751	-5.8126	-0.3449	2.9825	-0.3053	0.1923	0.5735	-0.3812	-0.5550
198	44.92	0.05	10.4018	-5.8138	-0.4501	3.0031	-0.3132	0.2112	0.5786	-0.3676	-0.5589
199	45.00	0.04	10.5279	-5.9313	-0.4734	2.9163	-0.3132	0.1963	0.5812	-0.3849	-0.5634
200	45.10	0.05	10.4435	-5.8869	-0.4417	2.9302	-0.3130	0.1936	0.5758	-0.3822	-0.5640
201	45.19	0.03	10.5015	-5.8994	-0.5075	2.9017	-0.3125	0.1902	0.5786	-0.3886	-0.5586
202	45.27	0.02	10.6163	-5.9172	-0.6026	2.8971	-0.3200	0.1902	0.5773	-0.3871	-0.5483
203	45.37	0.04	10.5369	-5.9877	-0.4980	2.8801	-0.3124	0.1957	0.5780	-0.3829	-0.5632
204	45.46	0.03	10.6483	-5.7104	-0.5044	2.7068	-0.3124	0.1751	0.5725	-0.3974	-0.5368
205	45.55	0.02	10.7155	-5.8458	-0.5559	2.8273	-0.3196	0.1884	0.5778	-0.3894	-0.5455
206	45.64	0.02	10.6702	-5.8011	-0.6071	2.8753	-0.3126	0.1893	0.5729	-0.3836	-0.5306
207	45.71	0.00	10.6716	-5.8042	-0.6428	2.8921	-0.3126	0.1898	0.5753	-0.3947	-0.5252
208	45.80	0.03	10.6956	-5.8387	-0.5375	2.8814	-0.3121	0.1898	0.5772	-0.3924	-0.5317
209	45.89	0.01	10.7246	-5.7552	-0.7551	2.8574	-0.3276	0.1823	0.5744	-0.3918	-0.5366
210	45.98	0.02	10.8365	-5.7413	-0.5760	2.5917	-0.3119	0.1757	0.5707	-0.4010	-0.5247
211	46.06	-0.01	10.7619	-5.8275	-0.9089	2.8705	-0.3426	0.1898	0.5771	-0.3969	-0.5224
212	46.15	0.00	10.7611	-5.8576	-0.8766	2.8653	-0.3351	0.1716	0.5753	-0.4037	-0.5247
213	46.25	-0.01	10.8477	-5.9006	-0.9820	2.8740	-0.3426	0.1898	0.5802	-0.4106	-0.5076
214	46.33	0.01	10.9010	-5.7049	-0.7970	2.6352	-0.3272	0.1853	0.5792	-0.3959	-0.5233
215	46.41	-0.02	10.8050	-5.9008	-1.1042	2.8303	-0.3428	0.1716	0.5775	-0.4057	-0.4960
216	46.51	0.00	10.9279	-5.8823	-0.8275	2.8966	-0.3345	0.1719	0.5821	-0.4102	-0.5111
217	46.60	-0.01	10.9446	-5.9676	-0.9510	2.8089	-0.3421	0.1826	0.5775	-0.4147	-0.4996
218	46.67	-0.01	10.9107	-5.9467	-1.0109	2.8416	-0.3350	0.1759	0.5840	-0.4081	-0.4992
219	46.78	-0.00	10.9366	-5.9307	-0.9261	2.8246	-0.3421	0.1740	0.5792	-0.4052	-0.5047
220	46.85	-0.00	10.9775	-5.9130	-0.8750	2.8289	-0.3343	0.1887	0.5831	-0.4114	-0.4931
221	46.94	0.00	11.0339	-5.9343	-0.9396	2.8589	-0.3419	0.1889	0.5874	-0.4205	-0.5016
222	47.02	-0.02	10.9643	-5.8316	-1.0990	2.8142	-0.3275	0.1830	0.5825	-0.4175	-0.4774
223	47.10	-0.01	11.0075	-5.8415	-1.0051	2.8447	-0.3418	0.1879	0.5840	-0.4201	-0.4826
224	47.21	-0.00	11.1011	-5.9954	-1.0023	2.8812	-0.3493	0.1941	0.5878	-0.4337	-0.5004
225	47.28	-0.01	11.0686	-5.8658	-1.0317	2.8528	-0.3411	0.1835	0.5824	-0.4189	-0.4757
226	47.38	-0.01	11.1002	-5.8654	-1.0430	2.8408	-0.3410	0.1878	0.5846	-0.4270	-0.4744
227	47.47	-0.01	11.1432	-5.9111	-1.0298	2.8065	-0.3550	0.1833	0.5878	-0.4243	-0.4856
228	47.54	-0.00	11.2063	-5.9601	-0.9599	2.8490	-0.3553	0.1963	0.5876	-0.4293	-0.4872
229	47.64	-0.00	11.2214	-5.8850	-0.9731	2.8399	-0.3407	0.1890	0.5836	-0.4348	-0.4799
230	47.74	0.00	11.2269	-5.7420	-0.9020	2.8008	-0.3354	0.1892	0.5919	-0.4277	-0.5069

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 20 MACH NO 0.80 1.7 PHI 45.0 BINDERS 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
231	47.80	0.00	11.3077	-5.3608	-0.9265	2.3085	-0.3406	0.1610	0.5886	-0.4276	-0.4918
232	47.89	-0.00	11.2308	-5.2200	-1.0196	2.1251	-0.3405	0.1550	0.5847	-0.4297	-0.4645
233	47.98	-0.01	11.3331	-5.4512	-1.0892	2.2894	-0.3483	0.1459	0.5886	-0.4427	-0.4810
234	48.07	-0.01	11.3512	-5.4654	-1.0044	2.4460	-0.3482	0.1557	0.5867	-0.4310	-0.4815
235	48.15	-0.02	11.4047	-5.4717	-1.1938	2.3367	-0.3359	0.1519	0.5857	-0.4338	-0.4796
236	48.25	-0.01	11.4130	-5.4691	-1.0725	2.3038	-0.3334	0.1556	0.5871	-0.4315	-0.4809
237	48.33	-0.01	11.4740	-5.5690	-1.0197	2.3955	-0.3405	0.1432	0.5886	-0.4434	-0.4854
238	48.40	-0.02	11.3996	-5.3227	-1.1349	2.1654	-0.3336	0.1467	0.5838	-0.4351	-0.4669
239	48.51	-0.01	11.5722	-5.7058	-1.1744	2.4020	-0.3410	0.1471	0.5909	-0.4436	-0.4931
240	48.58	-0.02	11.4265	-5.2055	-1.1338	2.2418	-0.3478	0.1417	0.5880	-0.4469	-0.4556
241	48.65	-0.01	11.5007	-5.4156	-1.0285	2.2561	-0.3285	0.1292	0.5824	-0.4532	-0.4709
242	48.78	-0.02	11.5625	-5.2700	-1.2723	2.0902	-0.3355	0.1407	0.5819	-0.4552	-0.4565
243	48.83	-0.02	11.5759	-5.3472	-1.1414	2.2500	-0.3352	0.1444	0.5930	-0.4456	-0.4662
244	48.91	-0.02	11.6038	-5.2812	-1.2449	2.0817	-0.3300	0.1372	0.5883	-0.4491	-0.4551
245	49.01	-0.03	11.6629	-5.5802	-1.2238	2.2135	-0.3489	0.1449	0.5903	-0.4454	-0.4785
246	49.08	-0.02	11.6333	-5.3339	-1.2081	2.2242	-0.3263	0.1399	0.5869	-0.4470	-0.4585
247	49.16	-0.01	11.7009	-5.4853	-1.0138	2.2508	-0.3149	0.1421	0.5907	-0.4486	-0.4668
248	49.26	-0.02	11.6138	-5.3770	-1.2524	2.0512	-0.3201	0.1250	0.5886	-0.4636	-0.4372
249	49.34	-0.03	11.5744	-4.7524	-1.3219	2.0369	-0.3337	0.1150	0.5835	-0.4679	-0.4279
250	49.44	-0.04	11.5769	-4.7408	-1.3210	1.8566	-0.3111	0.1308	0.5865	-0.4557	-0.4102
251	49.53	-0.03	11.6113	-5.0153	-1.2214	1.8432	-0.3407	0.1230	0.5816	-0.4566	-0.4316
252	49.61	-0.01	11.6343	-4.9282	-1.1576	1.8141	-0.3033	0.1374	0.5921	-0.4547	-0.4234
253	49.71	-0.01	11.7410	-5.0740	-1.0019	2.1501	-0.2880	0.1378	0.5960	-0.4582	-0.4322
254	49.78	-0.01	11.7309	-5.1077	-1.0232	2.0631	-0.2954	0.1344	0.5936	-0.4594	-0.4352
255	49.87	-0.01	11.7516	-4.8782	-1.1176	1.8520	-0.3102	0.1173	0.5859	-0.4686	-0.4151
256	49.95	-0.02	11.5507	-4.0692	-1.0459	1.4575	-0.2555	0.1121	0.5836	-0.4715	-0.3523
257	50.02	-0.01	11.5021	-4.3619	-1.0544	1.5944	-0.2749	0.1104	0.5812	-0.4706	-0.3766
258	50.13	-0.02	11.7000	-4.7330	-1.0778	1.9435	-0.2803	0.1184	0.5868	-0.4724	-0.4046
259	50.21	-0.02	11.7428	-4.5940	-1.1430	1.8923	-0.2659	0.1201	0.5938	-0.4677	-0.3912
260	50.29	-0.01	11.7425	-4.6808	-1.1056	1.7460	-0.2812	0.1206	0.6017	-0.4731	-0.3973
261	50.38	-0.01	11.7423	-4.4283	-1.0832	1.5397	-0.2586	0.1155	0.5969	-0.4815	-0.3771
262	50.45	-0.02	11.7007	-4.1857	-1.1143	1.5389	-0.2810	0.1102	0.5930	-0.4829	-0.3806
263	50.55	-0.01	11.8270	-4.7495	-1.0901	1.9193	-0.2908	0.1317	0.6075	-0.4756	-0.4016
264	50.62	-0.02	11.7317	-4.1879	-1.1043	1.4879	-0.2362	0.1224	0.5931	-0.4707	-0.3570
265	50.70	-0.03	11.8342	-4.4783	-1.1072	1.6230	-0.2568	0.1095	0.5990	-0.4656	-0.3765
266	50.80	-0.03	11.8779	-4.5902	-1.2431	1.8000	-0.2865	0.1135	0.6046	-0.4912	-0.3871
267	50.87	-0.04	11.9045	-4.5621	-1.2818	1.5273	-0.2588	0.1028	0.6042	-0.5017	-0.3664
268	50.95	-0.04	11.8065	-4.2839	-1.3134	1.3700	-0.2214	0.1219	0.6012	-0.4793	-0.3604
269	51.03	-0.03	11.8028	-5.3702	-1.1173	1.8030	-0.1758	0.0918	0.5880	-0.4970	-0.2905
270	51.11	-0.03	11.7457	-4.8234	-1.2209	1.5479	-0.2064	0.1282	0.6001	-0.4779	-0.3426
271	51.20	-0.04	11.7173	-3.5034	-1.2984	1.1530	-0.2214	0.1001	0.5918	-0.4918	-0.3041
272	51.28	-0.04	11.8413	-3.8665	-1.2431	1.3201	-0.2263	0.1063	0.5980	-0.4924	-0.3267
273	51.35	-0.04	11.8343	-3.2918	-1.1893	0.9152	-0.1812	0.1131	-0.6039	-0.4859	-0.2629
274	51.45	-0.03	11.8702	-3.7018	-1.2029	1.2709	-0.2140	0.1149	0.6085	-0.4937	-0.3186
275	51.53	-0.03	11.7591	-3.4351	-1.1083	1.1103	-0.1815	0.1212	0.6061	-0.4850	-0.2921
276	51.61	-0.04	11.8658	-3.4870	-1.3009	1.1415	-0.1716	0.1045	0.6037	-0.4993	-0.2939

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 36 MACH 0.80 RX10-6 1.7 PHI 45.0 CONF 81WDF15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	LA	LAD	LAF	XCP
277	51.58	-0.04	11.7071	-3.1865	-1.1509	0.4648	-0.0864	0.1067	0.6061	-0.4995	-0.2708
278	51.78	-0.05	11.8068	-3.2490	-1.1505	0.4654	-0.1042	0.1031	0.6027	-0.4997	-0.2709
279	51.87	-0.04	11.8218	-3.2654	-1.1654	0.4547	-0.1012	0.1185	0.6031	-0.4897	-0.2684
280	51.94	-0.03	11.7283	-3.0755	-1.1511	0.4556	-0.1609	0.1094	0.6003	-0.4910	-0.2622
281	52.01	-0.04	11.8491	-3.2655	-1.1180	0.4439	-0.1537	0.1046	0.6058	-0.5013	-0.2759
282	52.15	-0.04	11.8750	-3.3506	-1.2103	0.4643	-0.1040	0.0987	0.6102	-0.5116	-0.2965
283	52.16	-0.03	11.8228	-3.1412	-1.1203	0.4265	-0.1311	0.1052	0.6073	-0.5022	-0.2857
284	52.27	-0.03	11.9447	-3.3402	-1.1515	0.4103	-0.1537	0.0980	0.6092	-0.5113	-0.2797
285	52.35	-0.03	11.8131	-3.0332	-1.0326	0.3290	-0.1006	0.0962	0.6102	-0.5121	-0.2463
286	52.43	-0.02	11.8702	-3.0491	-0.9026	-0.1662	-0.0478	0.1156	0.6150	-0.4995	-0.2567
287	52.51	-0.03	11.8744	-3.0413	-0.8309	-0.1653	-0.0552	0.1179	0.6103	-0.4987	-0.2561
288	52.61	-0.03	11.9319	-3.0561	-0.8751	-0.4256	-0.0026	0.1162	0.6223	-0.5062	-0.2561
289	52.68	-0.02	11.9210	-3.2195	-0.7334	-0.9008	0.0199	0.1220	0.6233	-0.5014	-0.2701
290	52.78	-0.02	11.9128	-3.0832	-0.7283	-0.4010	-0.0323	0.1132	0.6252	-0.5121	-0.2588
291	52.86	-0.03	11.9931	-3.2327	-0.7747	-0.8652	-0.0099	0.1227	0.6276	-0.5050	-0.2695
292	52.92	-0.00	11.9259	-3.3042	-0.4711	-1.3797	0.0208	0.1231	0.6290	-0.5060	-0.2764
293	53.01	-0.03	12.0299	-3.1002	-0.7459	-0.9220	-0.0022	0.1122	0.6276	-0.5155	-0.2652
294	53.09	-0.02	12.0425	-3.2949	-0.6579	-1.1651	0.0055	0.1274	0.6334	-0.5061	-0.2736
295	53.18	-0.02	12.0776	-3.2686	-0.6075	-1.3036	0.0207	0.1279	0.6344	-0.5066	-0.2706
296	53.27	-0.01	12.0413	-3.2657	-0.5591	-1.3860	0.0209	0.1185	0.6301	-0.5117	-0.2712
297	53.34	-0.02	12.0425	-3.3234	-0.5622	-1.4393	0.0059	0.1284	0.6349	-0.5066	-0.2748
298	53.42	-0.02	12.1478	-3.4954	-0.4934	-1.5821	0.0213	0.1195	0.6412	-0.5216	-0.2721
299	53.51	-0.03	12.1160	-3.3958	-0.5415	-1.6579	0.0209	0.1252	0.6417	-0.5166	-0.2802
300	53.61	-0.03	12.2723	-3.4485	-0.5946	-1.6691	0.0210	0.1276	0.6484	-0.5209	-0.2810
301	53.67	-0.03	12.2547	-3.4320	-0.8650	-1.4576	0.0051	0.1358	0.6412	-0.5055	-0.2806
302	53.75	-0.04	12.1836	-3.3240	-0.7413	-1.4726	0.0056	0.1281	0.6363	-0.4983	-0.2728
303	53.84	-0.05	12.2231	-3.4706	-0.8359	-1.5827	0.0129	0.1310	0.6489	-0.5160	-0.2814
304	53.92	-0.03	12.2047	-3.4327	-0.7905	-1.6732	0.0205	0.1370	0.6440	-0.5077	-0.2769
305	54.02	-0.03	12.4312	-3.6270	-0.7917	-1.7735	0.0130	0.1391	0.6440	-0.5056	-0.2918
306	54.08	-0.04	12.3339	-3.3465	-0.7511	-1.4714	0.0058	0.1231	0.6363	-0.5133	-0.2713
307	54.17	-0.05	12.3306	-3.3492	-0.8077	-1.5043	0.0057	0.1306	0.6441	-0.5076	-0.2716
308	54.26	-0.06	12.4726	-3.6060	-0.8652	-1.6299	0.0128	0.1200	0.6502	-0.5203	-0.2886
309	54.35	-0.07	12.6317	-3.9387	-0.9101	-2.1820	0.0201	0.1368	0.6467	-0.5100	-0.3118
310	54.41	-0.07	12.4035	-3.5126	-0.9340	-1.6847	0.0053	0.1209	0.6482	-0.5274	-0.2816
311	54.50	-0.07	12.5063	-3.6068	-0.9141	-2.1397	0.0201	0.1341	0.6512	-0.5172	-0.3074
312	54.59	-0.06	12.7319	-3.8913	-0.9708	-2.2625	0.0202	0.1480	0.6531	-0.5052	-0.3056
313	54.67	-0.09	12.8097	-4.2293	-1.1015	-2.5083	0.0340	0.1252	0.6546	-0.5295	-0.3281
314	54.74	-0.09	12.7349	-3.9425	-1.1070	-2.3598	0.0197	0.1297	0.6545	-0.5249	-0.3096
315	54.82	-0.09	12.8022	-4.0607	-1.0931	-2.5472	0.0199	0.1347	0.6588	-0.5192	-0.3163
316	54.92	-0.11	12.9942	-4.3024	-1.1860	-2.8093	0.0203	0.1227	0.6675	-0.5449	-0.3311
317	55.00	-0.11	12.9830	-4.3690	-1.2307	-2.8665	0.0200	0.1305	0.6592	-0.5228	-0.3159
318	55.07	-0.11	12.9954	-4.0042	-1.4240	-2.7456	0.0190	0.1201	0.6640	-0.5440	-0.3127
319	55.17	-0.11	13.0705	-4.1052	-1.4256	-2.9020	0.0191	0.1335	0.6578	-0.5244	-0.3144
320	55.24	-0.11	13.2067	-4.2013	-1.3541	-3.3519	0.0346	0.1207	0.6602	-0.5396	-0.3212
321	55.32	-0.10	13.0857	-4.1918	-1.1764	-3.3413	0.0149	0.1056	0.6549	-0.5292	-0.3203
322	55.39	-0.12	13.1167	-4.0362	-1.4432	-3.2591	0.0268	0.1217	0.6308	-0.5192	-0.3077

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 56 MACH 0.80 RX10-6 4.7 PHI 45.0 BINOFLO CONF 0.0 L DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
323	55.48	-0.10	13.3925	-4.1910	-1.2473	-3.2135	0.0272	0.1164	0.6412	-0.5247	-0.3201
324	55.57	-0.11	13.4707	-4.4056	-1.3006	-3.4535	0.0196	0.1050	0.6394	-0.5305	-0.3320
325	55.65	-0.11	13.3732	-4.3670	-1.2314	-3.7571	0.0051	0.1170	0.6373	-0.5204	-0.3280
326	55.74	-0.10	13.4436	-4.5006	-1.2650	-3.7751	0.0200	0.1119	0.6384	-0.5251	-0.3348
327	55.82	-0.12	13.6055	-4.7857	-1.3039	-3.9491	0.0271	0.1065	0.6359	-0.5275	-0.3518
328	55.93	-0.12	14.1032	-5.1042	-1.3107	-4.0052	0.0277	0.0965	0.6350	-0.5465	-0.3676
329	56.01	-0.10	13.9991	-5.1163	-1.1367	-4.1174	0.0262	0.1192	0.6295	-0.5102	-0.3656
330	56.10	-0.11	14.3931	-5.0130	-1.2566	-4.2618	0.0203	0.0914	0.6279	-0.5305	-0.3900
331	56.17	-0.11	14.2936	-5.4672	-1.2319	-4.2001	0.0260	0.1130	0.6342	-0.5213	-0.3839
332	56.27	-0.10	14.5941	-5.7419	-1.1690	-4.1925	0.0210	0.0911	0.6280	-0.5309	-0.3934
333	56.34	-0.10	14.4456	-5.6635	-1.2184	-3.9850	0.0208	0.1051	0.6260	-0.5210	-0.3921
334	56.44	-0.09	14.5974	-5.8523	-1.1711	-4.0915	0.0209	0.1016	0.6301	-0.5286	-0.4009
335	56.52	-0.09	14.6690	-5.7707	-1.1824	-4.0779	0.0211	0.1101	0.6268	-0.5168	-0.3934
336	56.59	-0.11	14.4723	-5.5757	-1.3520	-3.8427	0.0204	0.0952	0.6181	-0.5229	-0.3851
337	56.66	-0.09	14.7356	-5.8878	-1.1904	-3.9760	0.0137	0.1059	0.6274	-0.5216	-0.3996
338	56.74	-0.09	14.6993	-5.7654	-1.1757	-3.8852	0.0064	0.0894	0.6225	-0.5329	-0.3922
339	56.82	-0.10	14.6729	-5.8238	-1.2479	-3.7200	0.0134	0.1033	0.6180	-0.5148	-0.3833
340	56.90	-0.09	14.7061	-5.7473	-1.1970	-3.8454	0.0064	0.0847	0.6175	-0.5328	-0.3906
341	56.98	-0.09	14.6751	-5.7183	-1.1763	-3.8821	-0.0009	0.1196	0.6185	-0.4990	-0.3897
342	57.05	-0.09	14.6590	-5.6113	-1.1697	-3.9820	0.0065	0.0824	0.6095	-0.5271	-0.3828
343	57.13	-0.09	14.6578	-5.5605	-1.1965	-3.9128	-0.0008	0.1095	0.6147	-0.5053	-0.3807
344	57.21	-0.09	14.7018	-5.5507	-1.1585	-3.9707	-0.0003	0.0710	0.6059	-0.5349	-0.3754
345	57.29	-0.08	14.7695	-5.6492	-1.1207	-3.9023	-0.0077	0.0810	0.6150	-0.5340	-0.3820
346	57.35	-0.09	14.7788	-5.6181	-1.1147	-3.8792	-0.0076	0.0949	0.6131	-0.5182	-0.3801
347	57.42	-0.07	14.7662	-5.4621	-0.9854	-3.8628	-0.0067	0.0905	0.6121	-0.5216	-0.3699
348	57.50	-0.08	14.7609	-5.4113	-1.0323	-3.9543	-0.0144	0.0810	0.6081	-0.5271	-0.3666
349	57.58	-0.07	14.8359	-5.2760	-0.9599	-3.9204	-0.0067	0.0707	0.6011	-0.5304	-0.3605
350	57.64	-0.07	14.8366	-5.2561	-0.9213	-3.8416	-0.0140	0.0568	0.6002	-0.5434	-0.3586
351	57.72	-0.08	14.7013	-5.3941	-1.0108	-3.8208	-0.0144	0.0721	0.6045	-0.5324	-0.3669
352	57.79	-0.07	14.7252	-5.3081	-0.9699	-3.8165	-0.0142	0.0766	0.6088	-0.5322	-0.3741
353	57.86	-0.07	14.8219	-5.1815	-0.8501	-3.8407	-0.0284	0.0737	0.5908	-0.5231	-0.3544
354	57.93	-0.07	14.8858	-5.2987	-0.9650	-3.9960	-0.0215	0.0652	0.6035	-0.5383	-0.3607
355	58.01	-0.05	14.8838	-5.3720	-0.7302	-3.9619	-0.0133	0.0886	0.6011	-0.5125	-0.3656
356	58.10	-0.08	14.8339	-5.2273	-1.0046	-3.8067	-0.0215	0.0735	0.5992	-0.5257	-0.3572
357	58.15	-0.07	14.8758	-5.2316	-0.9020	-3.8615	-0.0213	0.0670	0.5997	-0.5327	-0.3589
358	58.22	-0.07	14.8278	-5.2722	-0.9178	-3.8490	-0.0213	0.0696	0.6015	-0.5319	-0.3604
359	58.22	-0.06	14.8629	-5.3017	-0.7844	-3.8158	-0.0282	0.0662	0.6063	-0.5401	-0.3611
360	58.23	-0.06	14.7721	-5.4547	-0.8429	-4.7351	-0.0210	0.0779	0.6140	-0.5301	-0.3693
361	58.23	-0.05	14.7780	-5.4240	-0.8864	-4.9465	-0.0204	0.0552	0.6032	-0.5480	-0.3670
362	58.24	-0.06	14.7503	-5.3320	-0.8391	-3.8495	-0.0207	0.0849	0.6108	-0.5259	-0.3615

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 56 MACH 0.80 RAID-6 1.7 PHI 45.0 CONF BLMDF15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CH1	CD1	XCPF1	YCPF1	CNF2	CH2	CD2	XCPF2	YCPF2
1	-5.70	0.10	0.2230	0.0302	0.0875	0.1353	0.3914	-0.1204	-0.0228	-0.0052	0.1896	0.5411
2	-5.71	0.09	0.2231	0.0304	0.0877	0.1353	0.3897	-0.1222	-0.0232	-0.0054	0.1902	0.5352
3	-5.71	0.09	0.2231	0.0304	0.0883	0.1353	0.3923	-0.1187	-0.0226	-0.0050	0.1906	0.5304
4	-5.70	0.09	0.2223	0.0296	0.0852	0.1334	0.3883	-0.1222	-0.0233	-0.0047	0.1911	0.5295
5	-5.70	0.10	0.2231	0.0305	0.0900	0.1339	0.3946	-0.1223	-0.0227	-0.0053	0.1860	0.5176
6	-5.71	0.10	0.2232	0.0301	0.0870	0.1339	0.3864	-0.1222	-0.0233	-0.0047	0.1911	0.5295
7	-5.71	0.09	0.2231	0.0300	0.0877	0.1342	0.3897	-0.1205	-0.0225	-0.0038	0.1870	0.5291
8	-5.71	0.10	0.2233	0.0304	0.0875	0.1343	0.3916	-0.1188	-0.0224	-0.0046	0.1888	0.5181
9	-5.71	0.10	0.2230	0.0305	0.0890	0.1338	0.3950	-0.1187	-0.0226	-0.0037	0.1906	0.5363
10	-5.71	0.10	0.2231	0.0304	0.0883	0.1353	0.3923	-0.1223	-0.0226	-0.0053	0.1852	0.5176
11	-5.71	0.09	0.2231	0.0302	0.0883	0.1344	0.3923	-0.1234	-0.0235	-0.0048	0.1901	0.5230
12	-5.81	0.10	0.2115	0.0291	0.0813	0.1378	0.3845	-0.1119	-0.0217	-0.0052	0.1942	0.5197
13	-5.05	0.10	0.1800	0.0250	0.0650	0.1391	0.3810	-0.0881	-0.0182	-0.0048	0.2069	0.5080
14	-4.06	0.09	0.1263	0.0192	0.0446	0.1411	0.3270	-0.0711	-0.0158	-0.0041	0.2226	0.4803
15	-3.11	0.09	0.0903	0.0138	0.0280	0.1428	0.2958	-0.0510	-0.0119	-0.0069	0.2339	0.3713
16	-2.20	0.10	0.0742	0.0104	0.0182	0.1404	0.2456	-0.0252	-0.0075	-0.0088	0.2977	0.3492
17	-1.25	0.09	0.0518	0.0062	0.0076	0.1200	0.1354	-0.0103	-0.0024	-0.0010	0.2351	0.0971
18	-0.31	0.09	0.0258	0.0006	-0.0006	0.0194	-0.0233	0.0082	0.0027	0.0071	0.3294	0.8659
19	0.67	0.10	0.0045	-0.0046	-0.0070	-1.0226	-1.5556	0.0250	0.0079	0.0137	0.3161	0.5480
20	1.57	0.09	-0.0087	-0.0083	-0.0151	0.9544	1.7356	0.0539	0.0133	0.0290	0.2473	0.5390
21	2.56	0.10	-0.0339	-0.0128	-0.0261	0.3567	0.7270	0.0758	0.0173	0.0451	0.2286	0.5945
22	3.55	0.09	-0.0584	-0.0167	-0.0379	0.2866	0.6501	0.0991	0.0223	0.0648	0.2253	0.6545
23	4.42	0.09	-0.0792	-0.0204	-0.0490	0.2580	0.6182	0.1317	0.0267	0.0810	0.2031	0.6152
24	5.33	0.10	-0.1017	-0.0227	-0.0612	0.2295	0.6014	0.1727	0.0322	0.1029	0.1862	0.5959
25	6.31	0.10	-0.1242	-0.0249	-0.0742	0.2059	0.5976	0.2065	0.0369	0.1244	0.1768	0.5965
26	7.27	0.10	-0.1527	-0.0281	-0.0903	0.1868	0.5901	0.2529	0.0419	0.1515	0.1655	0.5990
27	8.21	0.10	-0.1798	-0.0283	-0.1009	0.1570	0.5812	0.2901	0.0457	0.1706	0.1575	0.5882
28	9.13	0.10	-0.2011	-0.0282	-0.1100	0.1404	0.5470	0.3414	0.0512	0.1975	0.1499	0.5786
29	10.05	0.10	-0.2209	-0.0271	-0.1208	0.1229	0.5471	0.3825	0.0553	0.2215	0.1446	0.5791
30	11.02	0.10	-0.2439	-0.0263	-0.1308	0.1030	0.5361	0.4307	0.0587	0.2445	0.1363	0.5676
31	11.97	0.10	-0.2643	-0.0251	-0.1385	0.0909	0.5445	0.4931	0.0614	0.2722	0.1245	0.5521
32	12.90	0.10	-0.2878	-0.0224	-0.1478	0.0838	0.5218	0.5451	0.0640	0.2956	0.1174	0.5422
33	13.84	0.10	-0.2940	-0.0220	-0.1580	0.0750	0.5375	0.6040	0.0665	0.3188	0.1101	0.5278
34	14.80	0.10	-0.3093	-0.0203	-0.1653	0.0657	0.5351	0.6547	0.0694	0.3362	0.1052	0.5096
35	15.79	0.10	-0.3307	-0.0234	-0.1833	0.0637	0.5139	0.7080	0.0713	0.3515	0.1006	0.4961
36	16.76	0.10	-0.3419	-0.0230	-0.1914	0.0620	0.5018	0.7642	0.0726	0.3731	0.0953	0.4881
37	17.75	0.10	-0.3482	-0.0239	-0.2064	0.0572	0.4934	0.8201	0.0742	0.3925	0.0905	0.4786
38	18.70	0.10	-0.3648	-0.0240	-0.2232	0.0529	0.4908	0.8759	0.0762	0.4098	0.0870	0.4679
39	19.66	0.09	-0.3809	-0.0221	-0.2385	0.0472	0.4874	0.9250	0.0767	0.4223	0.0829	0.4565
40	20.61	0.10	-0.3963	-0.0243	-0.2509	0.0404	0.4747	0.9659	0.0722	0.4111	0.0765	0.4356
41	21.55	0.11	-0.3919	-0.0203	-0.2732	0.0433	0.4695	0.9729	0.0672	0.4133	0.0691	0.4248
42	22.50	0.10	-0.0266	-0.0266	-0.2879	0.0460	0.4594	0.9509	0.0527	0.3932	0.0554	0.4135
43	23.43	0.11	-0.0891	-0.0344	-0.3110	0.0479	0.4513	0.8211	0.0314	0.3400	0.0382	0.4141
44	24.38	0.12	-0.0904	-0.0332	-0.3101	0.0475	0.4526	0.8178	0.0301	0.3383	0.0369	0.4137
45	25.30	0.12	-0.0758	-0.0290	-0.3129	0.0427	0.4602	0.8300	0.0284	0.3483	0.0343	0.4197
46	26.26	0.12	-0.0569	-0.0257	-0.3027	0.0345	0.4639	0.8545	0.0273	0.3567	0.0320	0.4196

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAD-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 50 0.80 1.0 45.0 BIWUFLS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	27.22	0.12	-0.6233	-0.0236	-0.2939	0.0379	0.4715	0.8791	0.0257	0.3719	0.0293	0.4230
48	28.11	0.12	-0.6078	-0.0213	-0.2906	0.0351	0.4780	0.8848	0.0242	0.3748	0.0272	0.4212
49	28.14	0.12	-0.6060	-0.0210	-0.2866	0.0357	0.4765	0.8967	0.0244	0.3760	0.0273	0.4215
50	28.14	0.12	-0.6122	-0.0210	-0.2915	0.0353	0.4761	0.8950	0.0243	0.3758	0.0272	0.4198
51	28.14	0.13	-0.6160	-0.0228	-0.2926	0.0367	0.4741	0.8950	0.0243	0.3765	0.0274	0.4206
52	28.18	0.12	-0.6078	-0.0211	-0.2896	0.0348	0.4765	0.9020	0.0241	0.3805	0.0268	0.4218
53	28.38	0.12	-0.5969	-0.0219	-0.2844	0.0367	0.4765	0.9108	0.0239	0.3813	0.0263	0.4186
54	28.58	0.12	-0.5951	-0.0216	-0.2803	0.0364	0.4810	0.9126	0.0237	0.3807	0.0260	0.4171
55	28.58	0.12	-0.5891	-0.0214	-0.2826	0.0364	0.4801	0.9179	0.0235	0.3832	0.0256	0.4174
56	28.65	0.13	-0.5889	-0.0232	-0.2831	0.0395	0.4808	0.9232	0.0232	0.3837	0.0252	0.4156
57	29.02	0.13	-0.5918	-0.0239	-0.2848	0.0404	0.4813	0.9304	0.0229	0.3836	0.0247	0.4122
58	29.13	0.14	-0.5872	-0.0244	-0.2830	0.0410	0.4820	0.9334	0.0230	0.3825	0.0247	0.4095
59	29.32	0.14	-0.5825	-0.0241	-0.2825	0.0414	0.4850	0.9376	0.0232	0.3828	0.0248	0.4083
60	29.47	0.14	-0.5749	-0.0239	-0.2812	0.0416	0.4892	0.9401	0.0228	0.3849	0.0241	0.4068
61	29.60	0.14	-0.5873	-0.0238	-0.2783	0.0420	0.4906	0.9532	0.0228	0.3846	0.0240	0.4037
62	29.76	0.14	-0.5857	-0.0241	-0.2782	0.0427	0.4919	0.9533	0.0228	0.3834	0.0240	0.4022
63	29.89	0.14	-0.5870	-0.0243	-0.2804	0.0429	0.4946	0.9621	0.0222	0.3848	0.0231	0.3999
64	30.04	0.15	-0.5824	-0.0242	-0.2786	0.0431	0.4955	0.9656	0.0225	0.3851	0.0233	0.3988
65	30.17	0.14	-0.5821	-0.0238	-0.2812	0.0421	0.5004	0.9743	0.0221	0.3893	0.0227	0.3995
66	30.31	0.15	-0.5851	-0.0240	-0.2823	0.0440	0.4996	0.9708	0.0221	0.3890	0.0228	0.4007
67	30.44	0.14	-0.5850	-0.0248	-0.2830	0.0440	0.5010	0.9761	0.0220	0.3895	0.0226	0.3990
68	30.58	0.14	-0.5818	-0.0242	-0.2833	0.0431	0.5044	0.9814	0.0219	0.3913	0.0224	0.3987
69	30.70	0.15	-0.5802	-0.0243	-0.2838	0.0434	0.5047	0.9849	0.0219	0.3916	0.0223	0.3976
70	30.84	0.15	-0.5784	-0.0243	-0.2851	0.0436	0.5105	0.9805	0.0216	0.3919	0.0219	0.3964
71	30.99	0.15	-0.5791	-0.0238	-0.2790	0.0437	0.5130	0.9879	0.0214	0.3927	0.0217	0.3967
72	31.12	0.16	-0.5715	-0.0228	-0.2852	0.0422	0.5231	0.9933	0.0213	0.3944	0.0215	0.3970
73	31.25	0.17	-0.5701	-0.0239	-0.2838	0.0438	0.5198	0.9934	0.0211	0.3930	0.0213	0.3956
74	31.40	0.16	-0.5745	-0.0224	-0.2856	0.0412	0.5245	1.0038	0.0211	0.3960	0.0211	0.3965
75	31.54	0.16	-0.5712	-0.0225	-0.2859	0.0416	0.5262	1.0073	0.0209	0.4004	0.0208	0.3975
76	31.67	0.17	-0.5704	-0.0225	-0.2828	0.0419	0.5254	1.0073	0.0209	0.3997	0.0204	0.3968
77	31.80	0.17	-0.5745	-0.0215	-0.2785	0.0411	0.5310	1.0143	0.0204	0.4030	0.0201	0.3973
78	31.93	0.16	-0.5739	-0.0215	-0.2790	0.0419	0.5332	1.0195	0.0202	0.4069	0.0198	0.3991
79	32.07	0.17	-0.5731	-0.0208	-0.2776	0.0398	0.5307	1.0213	0.0204	0.4057	0.0200	0.3973
80	32.21	0.17	-0.5771	-0.0206	-0.2742	0.0399	0.5303	1.0249	0.0201	0.4067	0.0196	0.3968
81	32.34	0.17	-0.5819	-0.0193	-0.2696	0.0385	0.5360	1.0318	0.0201	0.4066	0.0195	0.3960
82	32.47	0.17	-0.5809	-0.0189	-0.2684	0.0378	0.5359	1.0366	0.0193	0.4125	0.0186	0.3980
83	32.59	0.17	-0.5825	-0.0181	-0.2664	0.0381	0.5342	1.0416	0.0194	0.4136	0.0187	0.3970
84	32.74	0.17	-0.5844	-0.0183	-0.2677	0.0324	0.5308	1.0505	0.0189	0.4185	0.0180	0.3984
85	32.88	0.17	-0.5956	-0.0182	-0.2666	0.0326	0.5374	1.0522	0.0190	0.4200	0.0181	0.3992
86	32.99	0.17	-0.6061	-0.0173	-0.2664	0.0330	0.5327	1.0470	0.0185	0.4189	0.0177	0.4001
87	33.12	0.18	-0.6065	-0.0156	-0.2656	0.0318	0.5331	1.0515	0.0184	0.4225	0.0174	0.3995
88	33.24	0.18	-0.6092	-0.0154	-0.2619	0.0315	0.5354	1.0644	0.0184	0.4256	0.0173	0.4001
89	33.37	0.18	-0.6065	-0.0156	-0.2643	0.0313	0.5302	1.0696	0.0180	0.4277	0.0169	0.3999
90	33.49	0.18	-0.6056	-0.0139	-0.2585	0.0287	0.5330	1.0713	0.0181	0.4306	0.0169	0.4020
91	33.63	0.18	-0.6045	-0.0158	-0.2670	0.0310	0.5295	1.0748	0.0182	0.4295	0.0170	0.3996
92	33.75	0.18	-0.6093	-0.0132	-0.2574	0.0276	0.5371	1.0831	0.0179	0.4322	0.0160	0.3991

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO= PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 5a 0.80 1.7 45.0 BINOFIS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
93	33.87	0.18	-0.4852	-0.0141	-0.2572	0.0290	0.5290	1.0758	0.0176	0.4296	0.0164	0.3993
94	34.00	0.17	-0.4875	-0.0144	-0.2583	0.0287	0.5299	1.0671	0.0169	0.4288	0.0159	0.4019
95	34.12	0.19	-0.4816	-0.0141	-0.2560	0.0293	0.5316	1.0645	0.0167	0.4337	0.0154	0.3999
96	34.25	0.18	-0.4847	-0.0143	-0.2584	0.0286	0.5290	1.0914	0.0169	0.4303	0.0155	0.3998
97	34.39	0.18	-0.4937	-0.0148	-0.2601	0.0300	0.5269	1.0949	0.0169	0.4306	0.0155	0.3988
98	34.49	0.19	-0.4874	-0.0153	-0.2595	0.0314	0.5325	1.0879	0.0167	0.4354	0.0154	0.4002
99	34.62	0.19	-0.4953	-0.0152	-0.2613	0.0306	0.5244	1.0949	0.0165	0.4360	0.0151	0.4001
100	34.74	0.18	-0.4999	-0.0153	-0.2615	0.0307	0.5231	1.0984	0.0166	0.4376	0.0151	0.3984
101	34.85	0.19	-0.4726	-0.0144	-0.2497	0.0305	0.5282	1.1002	0.0157	0.4405	0.0143	0.4004
102	34.99	0.19	-0.4863	-0.0143	-0.2559	0.0295	0.5263	1.1124	0.0164	0.4422	0.0148	0.3976
103	35.11	0.20	-0.4906	-0.0151	-0.2598	0.0308	0.5246	1.1089	0.0160	0.4419	0.0145	0.3986
104	35.23	0.19	-0.4810	-0.0147	-0.2534	0.0306	0.5260	1.1125	0.0155	0.4429	0.0140	0.3982
105	35.35	0.19	-0.4780	-0.0153	-0.2530	0.0278	0.5277	1.1193	0.0157	0.4469	0.0140	0.3993
106	35.48	0.19	-0.5073	-0.0158	-0.2691	0.0312	0.5226	1.1245	0.0155	0.4468	0.0138	0.3991
107	35.59	0.21	-0.4967	-0.0155	-0.2612	0.0313	0.5259	1.1245	0.0156	0.4461	0.0139	0.3985
108	35.72	0.19	-0.5012	-0.0155	-0.2697	0.0310	0.5202	1.1280	0.0155	0.4484	0.0138	0.3975
109	35.82	0.19	-0.5105	-0.0160	-0.2675	0.0322	0.5179	1.1300	0.0157	0.4519	0.0138	0.3976
110	35.95	0.20	-0.5038	-0.0165	-0.2643	0.0327	0.5220	1.1367	0.0146	0.4532	0.0130	0.3987
111	36.07	0.21	-0.5103	-0.0171	-0.2656	0.0336	0.5205	1.1367	0.0147	0.4525	0.0130	0.3980
112	36.17	0.20	-0.5057	-0.0170	-0.2638	0.0349	0.5217	1.1367	0.0143	0.4546	0.0126	0.3999
113	36.29	0.19	-0.5179	-0.0175	-0.2685	0.0338	0.5185	1.1437	0.0146	0.4545	0.0126	0.3974
114	36.43	0.20	-0.5237	-0.0172	-0.2720	0.0307	0.5194	1.1436	0.0146	0.4559	0.0126	0.3986
115	36.53	0.21	-0.5102	-0.0170	-0.2690	0.0341	0.5211	1.1505	0.0142	0.4592	0.0124	0.3991
116	36.66	0.21	-0.5190	-0.0170	-0.2776	0.0333	0.5151	1.1592	0.0144	0.4620	0.0124	0.3985
117	36.76	0.20	-0.5222	-0.0210	-0.2701	0.0403	0.5173	1.1540	0.0141	0.4608	0.0122	0.3993
118	36.86	0.21	-0.5410	-0.0204	-0.2795	0.0377	0.5160	1.1626	0.0141	0.4643	0.0121	0.3993
119	37.01	0.21	-0.5204	-0.0202	-0.2718	0.0389	0.5223	1.1679	0.0133	0.4661	0.0114	0.3991
120	37.13	0.21	-0.5327	-0.0204	-0.2758	0.0384	0.5179	1.1643	0.0139	0.4665	0.0120	0.4006
121	37.25	0.21	-0.5316	-0.0224	-0.2739	0.0422	0.5157	1.1576	0.0133	0.4625	0.0115	0.3995
122	37.36	0.21	-0.5150	-0.0214	-0.2695	0.0416	0.5225	1.1680	0.0132	0.4654	0.0113	0.3984
123	37.48	0.22	-0.5112	-0.0217	-0.2683	0.0425	0.5249	1.1697	0.0130	0.4669	0.0111	0.3991
124	37.59	0.22	-0.4976	-0.0211	-0.2611	0.0417	0.5247	1.1646	0.0125	0.4644	0.0108	0.3987
125	37.70	0.23	-0.5201	-0.0202	-0.2732	0.0419	0.5193	1.1715	0.0126	0.4677	0.0108	0.3992
126	37.83	0.23	-0.5442	-0.0216	-0.2830	0.0453	0.5201	1.1749	0.0128	0.4701	0.0109	0.4001
127	37.94	0.23	-0.5202	-0.0252	-0.2698	0.0485	0.5187	1.1715	0.0126	0.4671	0.0108	0.3987
128	38.06	0.21	-0.5032	-0.0268	-0.2648	0.0533	0.5203	1.1700	0.0125	0.4702	0.0106	0.3996
129	38.19	0.22	-0.5337	-0.0288	-0.2751	0.0541	0.5156	1.1654	0.0127	0.4717	0.0107	0.3979
130	38.29	0.23	-0.4820	-0.0280	-0.2516	0.0582	0.5220	1.1726	0.0125	0.4679	0.0105	0.3991
131	38.41	0.23	-0.5302	-0.0281	-0.2744	0.0531	0.5177	1.1949	0.0125	0.4753	0.0105	0.3978
132	38.52	0.23	-0.4757	-0.0291	-0.2498	0.0613	0.5252	1.1774	0.0124	0.4697	0.0105	0.3989
133	38.64	0.23	-0.4928	-0.0261	-0.2425	0.0622	0.5256	1.1827	0.0116	0.4736	0.0100	0.4004
134	38.75	0.23	-0.4483	-0.0291	-0.2381	0.0650	0.5309	1.1705	0.0119	0.4684	0.0102	0.4001
135	38.85	0.23	-0.4571	-0.0312	-0.2440	0.0662	0.5336	1.1826	0.0116	0.4729	0.0098	0.3998
136	38.99	0.23	-0.4127	-0.0329	-0.2209	0.0796	0.5352	1.1990	0.0120	0.4626	0.0104	0.3991
137	39.00	0.23	-0.4293	-0.0324	-0.2294	0.0754	0.5343	1.1762	0.0114	0.4723	0.0097	0.4015
138	39.17	0.23	-0.3947	-0.0313	-0.2134	0.0792	0.5406	1.1569	0.0114	0.4653	0.0099	0.4015

TEST / PART 56 MACH 0.80 RX10-6 1.7 PHI 45.0 CONF BIWDFLS L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
139	39.28	0.22	-0.3357	-0.0286	-0.1938	0.0805	0.5449	1.1486	0.0113	0.4603	0.0099	0.4007
140	39.38	0.23	-0.3002	-0.0279	-0.1963	0.0776	0.5450	1.1641	0.0114	0.4679	0.0098	0.4019
141	39.47	0.23	-0.3077	-0.0303	-0.1994	0.0825	0.5425	1.1572	0.0113	0.4659	0.0096	0.4026
142	39.58	0.23	-0.3209	-0.0299	-0.1928	0.0803	0.5495	1.1624	0.0111	0.4677	0.0096	0.4023
143	39.68	0.22	-0.3258	-0.0305	-0.1760	0.0938	0.5403	1.1416	0.0111	0.4604	0.0097	0.4033
144	39.81	0.21	-0.3374	-0.0305	-0.1854	0.0905	0.5496	1.1465	0.0111	0.4638	0.0097	0.4038
145	39.90	0.20	-0.3232	-0.0307	-0.1782	0.0955	0.5514	1.1497	0.0109	0.4645	0.0095	0.4040
146	40.01	0.20	-0.3168	-0.0298	-0.1729	0.0934	0.5528	1.1549	0.0104	0.4664	0.0090	0.4055
147	40.13	0.20	-0.3333	-0.0291	-0.1879	0.0874	0.5538	1.1739	0.0102	0.4769	0.0087	0.4062
148	40.21	0.20	-0.3435	-0.0328	-0.1896	0.0942	0.5468	1.1635	0.0104	0.4719	0.0090	0.4056
149	40.30	0.20	-0.3182	-0.0299	-0.1803	0.0941	0.5507	1.1705	0.0098	0.4752	0.0084	0.4060
150	40.41	0.19	-0.3171	-0.0300	-0.1768	0.0948	0.5576	1.1619	0.0099	0.4710	0.0085	0.4053
151	40.50	0.20	-0.3091	-0.0276	-0.1718	0.0913	0.5632	1.1774	0.0097	0.4785	0.0083	0.4064
152	40.61	0.20	-0.3184	-0.0298	-0.1781	0.0942	0.5621	1.1723	0.0095	0.4753	0.0081	0.4054
153	40.72	0.19	-0.3249	-0.0310	-0.1869	0.0924	0.5581	1.1827	0.0096	0.4810	0.0081	0.4067
154	40.83	0.20	-0.3152	-0.0293	-0.1792	0.0931	0.5666	1.1914	0.0090	0.4859	0.0076	0.4078
155	40.91	0.18	-0.3436	-0.0330	-0.1908	0.0958	0.5550	1.1862	0.0089	0.4841	0.0075	0.4081
156	41.02	0.19	-0.3314	-0.0307	-0.1948	0.0878	0.5594	1.1949	0.0089	0.4869	0.0075	0.4075
157	41.13	0.18	-0.3403	-0.0325	-0.1918	0.0940	0.5549	1.1984	0.0084	0.4892	0.0070	0.4082
158	41.23	0.17	-0.3432	-0.0321	-0.1929	0.0928	0.5589	1.2070	0.0083	0.4927	0.0069	0.4082
159	41.33	0.17	-0.3704	-0.0313	-0.2033	0.0844	0.5491	1.2219	0.0084	0.4987	0.0069	0.4081
160	41.43	0.16	-0.3560	-0.0327	-0.1948	0.0912	0.5554	1.2202	0.0082	0.4992	0.0067	0.4091
161	41.52	0.17	-0.3712	-0.0323	-0.2030	0.0869	0.5530	1.2306	0.0082	0.5029	0.0067	0.4087
162	41.63	0.17	-0.3578	-0.0331	-0.2002	0.0924	0.5598	1.2237	0.0077	0.5009	0.0063	0.4093
163	41.71	0.16	-0.3746	-0.0327	-0.2054	0.0871	0.5460	1.2306	0.0082	0.5015	0.0067	0.4075
164	41.82	0.15	-0.3596	-0.0330	-0.2154	0.0826	0.5598	1.2496	0.0083	0.5093	0.0067	0.4076
165	41.92	0.15	-0.4004	-0.0349	-0.2158	0.0871	0.5389	1.2444	0.0080	0.5088	0.0064	0.4089
166	42.01	0.16	-0.3690	-0.0334	-0.2000	0.0904	0.5522	1.2410	0.0076	0.5065	0.0063	0.4081
167	42.12	0.14	-0.3735	-0.0351	-0.2014	0.0939	0.5394	1.2460	0.0077	0.5084	0.0062	0.4074
168	42.21	0.14	-0.4156	-0.0374	-0.2178	0.0899	0.5237	1.2636	0.0075	0.5159	0.0059	0.4083
169	42.29	0.13	-0.4219	-0.0383	-0.2210	0.0859	0.5237	1.2670	0.0077	0.5182	0.0061	0.4075
170	42.39	0.14	-0.4024	-0.0420	-0.2091	0.0870	0.5039	1.2660	0.0077	0.5240	0.0060	0.4075
171	42.48	0.13	-0.4063	-0.0401	-0.2123	0.0859	0.4982	1.2860	0.0073	0.5268	0.0057	0.4097
172	42.58	0.12	-0.4052	-0.0416	-0.2123	0.0839	0.4893	1.2963	0.0081	0.5264	0.0063	0.4077
173	42.69	0.12	-0.3922	-0.0442	-0.2044	0.0830	0.4781	1.2972	0.0080	0.5298	0.0062	0.4084
174	42.78	0.12	-0.3954	-0.0442	-0.2047	0.0825	0.4756	1.3000	0.0082	0.5315	0.0063	0.4086
175	42.84	0.11	-0.4089	-0.0419	-0.2124	0.0839	0.4859	1.2956	0.0080	0.5275	0.0062	0.4072
176	42.94	0.11	-0.3951	-0.0457	-0.2050	0.0841	0.4696	1.3041	0.0080	0.5331	0.0061	0.4088
177	43.03	0.12	-0.3979	-0.0458	-0.2080	0.0851	0.4806	1.3060	0.0078	0.5312	0.0060	0.4067
178	43.11	0.10	-0.3903	-0.0435	-0.2076	0.0835	0.4759	1.3111	0.0074	0.5358	0.0057	0.4086
179	43.21	0.10	-0.3905	-0.0471	-0.2014	0.0866	0.4698	1.3111	0.0075	0.5351	0.0057	0.4081
180	43.32	0.10	-0.3835	-0.0505	-0.2045	0.0865	0.4653	1.3197	0.0077	0.5393	0.0058	0.4086
181	43.40	0.11	-0.3719	-0.0481	-0.2045	0.0841	0.4625	1.3215	0.0077	0.5380	0.0056	0.4071
182	43.48	0.08	-0.3924	-0.0493	-0.2073	0.0820	0.4658	1.3250	0.0076	0.5383	0.0057	0.4062
183	43.58	0.07	-0.3994	-0.0482	-0.2091	0.0841	0.4644	1.3181	0.0075	0.5363	0.0057	0.4068
184	43.69	0.09	-0.3935	-0.0484	-0.2092	0.0874	0.4683	1.3181	0.0072	0.5370	0.0055	0.4074

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(TRANSDUCI 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RALO-6	PHI	CONF	L	DELI	DEL2	DEL3	DEL4	TRANSITION
7	50	0.80	1.7	45.0	DEGREES	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
185	43.74	0.10	-0.5576	-0.0488	-0.2024	0.0875	0.4705	1.5250	0.0069	0.5390	0.0052	0.4068
186	43.84	0.07	-0.5654	-0.0471	-0.2004	0.0853	0.4712	1.5293	0.0066	0.5388	0.0051	0.4071
187	43.92	0.06	-0.5658	-0.0454	-0.2042	0.0802	0.4670	1.5284	0.0071	0.5406	0.0054	0.4069
188	44.01	0.06	-0.5717	-0.0469	-0.2070	0.0820	0.4671	1.5302	0.0070	0.5415	0.0053	0.4070
189	44.11	0.07	-0.5746	-0.0484	-0.2082	0.0842	0.4668	1.5324	0.0066	0.5426	0.0050	0.4078
190	44.20	0.07	-0.5775	-0.0492	-0.2093	0.0859	0.4663	1.5338	0.0069	0.5436	0.0052	0.4075
191	44.28	0.05	-0.5866	-0.0464	-0.2753	0.0791	0.4674	1.5324	0.0068	0.5440	0.0051	0.4073
192	44.38	0.05	-0.5901	-0.0469	-0.2793	0.0800	0.4706	1.5423	0.0060	0.5473	0.0045	0.4077
193	44.47	0.06	-0.5767	-0.0471	-0.2750	0.0825	0.4819	1.5337	0.0063	0.5445	0.0045	0.4082
194	44.56	0.06	-0.5846	-0.0485	-0.2805	0.0832	0.4815	1.5302	0.0063	0.5421	0.0047	0.4075
195	44.66	0.06	-0.5951	-0.0498	-0.2873	0.0851	0.4794	1.5459	0.0057	0.5496	0.0042	0.4083
196	44.74	0.05	-0.6010	-0.0497	-0.2876	0.0863	0.4804	1.5470	0.0055	0.5497	0.0041	0.4079
197	44.84	0.05	-0.6000	-0.0482	-0.2843	0.0832	0.4818	1.5424	0.0057	0.5472	0.0043	0.4078
198	44.92	0.05	-0.6033	-0.0479	-0.2865	0.0866	0.4741	1.5428	0.0060	0.5504	0.0044	0.4072
199	45.00	0.04	-0.6124	-0.0498	-0.2901	0.0813	0.4835	1.5524	0.0050	0.5508	0.0037	0.4071
200	45.10	0.03	-0.6115	-0.0474	-0.2853	0.0775	0.4829	1.5521	0.0050	0.5506	0.0037	0.4072
201	45.19	0.03	-0.6017	-0.0502	-0.2940	0.0834	0.4895	1.5434	0.0060	0.5478	0.0044	0.4077
202	45.27	0.02	-0.6000	-0.0473	-0.2889	0.0801	0.4890	1.5503	0.0044	0.5516	0.0033	0.4086
203	45.37	0.04	-0.6004	-0.0491	-0.2903	0.0809	0.4805	1.5503	0.0043	0.5525	0.0032	0.4092
204	45.46	0.03	-0.5990	-0.0490	-0.2909	0.0825	0.4813	1.5470	0.0043	0.5486	0.0032	0.4074
205	45.55	0.02	-0.6015	-0.0486	-0.2944	0.0766	0.4977	1.5521	0.0039	0.5526	0.0029	0.4087
206	45.64	0.02	-0.6064	-0.0478	-0.2968	0.0768	0.4894	1.5434	0.0038	0.5492	0.0028	0.4088
207	45.71	0.00	-0.6047	-0.0484	-0.2991	0.0767	0.4945	1.5542	0.0033	0.5511	0.0026	0.4055
208	45.80	0.03	-0.6019	-0.0483	-0.2981	0.0769	0.4918	1.5522	0.0032	0.5533	0.0024	0.4092
209	45.89	0.01	-0.5970	-0.0483	-0.2959	0.0809	0.4956	1.5505	0.0027	0.5538	0.0020	0.4101
210	45.98	0.02	-0.5881	-0.0480	-0.2909	0.0816	0.4946	1.5540	0.0026	0.5541	0.0021	0.4092
211	46.06	-0.01	-0.5939	-0.0478	-0.2935	0.0804	0.4975	1.5574	0.0025	0.5571	0.0018	0.4104
212	46.15	0.00	-0.6014	-0.0490	-0.2990	0.0798	0.4971	1.5557	0.0023	0.5549	0.0017	0.4093
213	46.25	-0.01	-0.6016	-0.0481	-0.3001	0.0766	0.4988	1.5582	0.0027	0.5593	0.0020	0.4094
214	46.33	0.01	-0.5882	-0.0479	-0.2921	0.0825	0.5034	1.5577	0.0019	0.5572	0.0014	0.4104
215	46.41	-0.02	-0.6000	-0.0462	-0.3000	0.0770	0.4999	1.5660	0.0023	0.5606	0.0017	0.4099
216	46.51	0.00	-0.5834	-0.0480	-0.2917	0.0822	0.4999	1.5577	0.0020	0.5572	0.0015	0.4104
217	46.60	-0.01	-0.5924	-0.0484	-0.2954	0.0817	0.4980	1.5645	0.0020	0.5612	0.0015	0.4113
218	46.67	-0.01	-0.5892	-0.0480	-0.2957	0.0814	0.5010	1.5611	0.0021	0.5589	0.0015	0.4106
219	46.78	-0.00	-0.6029	-0.0511	-0.2977	0.0857	0.4937	1.5629	0.0015	0.5610	0.0010	0.4116
220	46.85	-0.00	-0.5853	-0.0492	-0.2919	0.0843	0.5003	1.5610	0.0019	0.5609	0.0014	0.4121
221	46.94	0.00	-0.5942	-0.0517	-0.3005	0.0855	0.4973	1.5663	0.0015	0.5620	0.0011	0.4113
222	47.02	-0.02	-0.5990	-0.0500	-0.2979	0.0893	0.4967	1.5677	0.0009	0.5606	0.0007	0.4129
223	47.10	-0.01	-0.5956	-0.0514	-0.2982	0.0871	0.4921	1.5715	0.0009	0.5638	0.0007	0.4111
224	47.21	-0.00	-0.5824	-0.0522	-0.2929	0.0895	0.5024	1.5663	0.0010	0.5634	0.0007	0.4124
225	47.28	-0.01	-0.5790	-0.0521	-0.2894	0.0900	0.4991	1.5671	0.0012	0.5620	0.0009	0.4115
226	47.38	-0.01	-0.5956	-0.0509	-0.2984	0.0834	0.4976	1.5723	0.0009	0.5657	0.0007	0.4122
227	47.47	-0.01	-0.6182	-0.0521	-0.3050	0.0843	0.4943	1.5723	0.0007	0.5657	0.0005	0.4122
228	47.54	-0.00	-0.6266	-0.0521	-0.3114	0.0829	0.4954	1.5820	0.0004	0.5714	0.0003	0.4133
229	47.64	-0.00	-0.5985	-0.0545	-0.2935	0.0929	0.4952	1.5707	-0.0001	0.5662	-0.0001	0.4131
230	47.72	0.00	-0.5811	-0.0535	-0.2946	0.0910	0.5012	1.5775	-0.0001	0.5684	-0.0001	0.4130

TEST 7 | PART 5a | MACH NO 0.80 | RN/FT 1.7 | PHI 45.0 | CONF BINORIS | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
231	47.80	0.00	-0.5665	-0.0534	-0.2837	0.0939	0.4991	1.3726	-0.0004	0.5664	-0.0003	0.4127
232	47.89	-0.00	-0.5775	-0.0517	-0.2892	0.0895	0.5007	1.3759	-0.0006	0.5673	-0.0004	0.4123
233	47.98	-0.01	-0.5883	-0.0527	-0.2945	0.0896	0.4997	1.3759	-0.0007	0.5673	-0.0005	0.4123
234	48.07	-0.01	-0.5729	-0.0533	-0.2862	0.0930	0.4995	1.3728	-0.0010	0.5720	-0.0007	0.4137
235	48.15	-0.02	-0.5883	-0.0546	-0.2938	0.0901	0.4995	1.3728	-0.0012	0.5720	-0.0009	0.4137
236	48.25	-0.01	-0.5833	-0.0551	-0.2822	0.0975	0.4993	1.3629	-0.0015	0.5713	-0.0011	0.4131
237	48.33	-0.01	-0.5704	-0.0539	-0.2806	0.0945	0.4920	1.3777	-0.0019	0.5708	-0.0014	0.4143
238	48.40	-0.02	-0.5550	-0.0543	-0.2770	0.0978	0.4992	1.3795	-0.0021	0.5705	-0.0015	0.4134
239	48.51	-0.01	-0.5198	-0.0517	-0.2554	0.0994	0.4913	1.3727	-0.0033	0.5703	-0.0024	0.4155
240	48.56	-0.02	-0.5274	-0.0528	-0.2705	0.1001	0.5129	1.3812	-0.0027	0.5738	-0.0020	0.4154
241	48.63	-0.01	-0.5018	-0.0528	-0.2569	0.1052	0.4920	1.3658	-0.0036	0.5691	-0.0026	0.4167
242	48.70	-0.02	-0.5462	-0.0549	-0.2794	0.1007	0.5126	1.3794	-0.0030	0.5757	-0.0022	0.4174
243	48.83	-0.02	-0.5321	-0.0529	-0.2710	0.0994	0.5094	1.3761	-0.0031	0.5713	-0.0023	0.4152
244	48.91	-0.02	-0.5125	-0.0538	-0.2580	0.1049	0.5034	1.3755	-0.0036	0.5729	-0.0026	0.4165
245	49.01	-0.03	-0.5275	-0.0522	-0.2661	0.0989	0.5045	1.3824	-0.0035	0.5755	-0.0025	0.4163
246	49.08	-0.02	-0.4752	-0.0521	-0.2410	0.1096	0.5072	1.3722	-0.0040	0.5705	-0.0029	0.4158
247	49.13	-0.01	-0.4400	-0.0512	-0.2176	0.1163	0.4944	1.3563	-0.0047	0.5707	-0.0035	0.4202
248	49.20	-0.02	-0.4859	-0.0541	-0.2483	0.1104	0.5068	1.3791	-0.0047	0.5752	-0.0034	0.4171
249	49.34	-0.03	-0.4662	-0.0539	-0.2446	0.1151	0.5225	1.3755	-0.0045	0.5763	-0.0033	0.4190
250	49.44	-0.04	-0.4520	-0.0539	-0.2348	0.1192	0.5195	1.3696	-0.0050	0.5716	-0.0029	0.4177
251	49.53	-0.03	-0.4662	-0.0536	-0.2446	0.1145	0.5225	1.3807	-0.0049	0.5781	-0.0036	0.4187
252	49.61	-0.01	-0.4218	-0.0546	-0.2216	0.1294	0.5253	1.3756	-0.0051	0.5762	-0.0037	0.4189
253	49.71	-0.01	-0.3972	-0.0522	-0.2038	0.1314	0.5130	1.3654	-0.0059	0.5719	-0.0043	0.4165
254	49.78	-0.01	-0.3926	-0.0523	-0.2026	0.1332	0.5162	1.3653	-0.0056	0.5726	-0.0041	0.4194
255	49.87	-0.01	-0.3783	-0.0522	-0.2031	0.1360	0.5171	1.3652	-0.0058	0.5753	-0.0043	0.4214
256	49.95	-0.02	-0.3940	-0.0540	-0.2171	0.1624	0.5262	1.3597	-0.0051	0.5587	-0.0038	0.4198
257	50.02	-0.01	-0.3921	-0.0514	-0.2065	0.1547	0.5375	1.3681	-0.0058	0.5663	-0.0043	0.4201
258	50.12	-0.02	-0.3841	-0.0519	-0.1987	0.1425	0.5183	1.3619	-0.0065	0.5730	-0.0048	0.4207
259	50.21	-0.02	-0.3824	-0.0489	-0.1910	0.1470	0.5145	1.3593	-0.0067	0.5729	-0.0049	0.4215
260	50.29	-0.01	-0.3504	-0.0494	-0.1849	0.1423	0.5277	1.3691	-0.0063	0.5754	-0.0046	0.4203
261	50.38	-0.01	-0.3294	-0.0515	-0.1734	0.1563	0.5264	1.3640	-0.0069	0.5743	-0.0051	0.4211
262	50.45	-0.02	-0.3577	-0.0494	-0.1903	0.1380	0.5320	1.3743	-0.0069	0.5793	-0.0050	0.4215
263	50.55	-0.01	-0.3405	-0.0494	-0.1850	0.1450	0.5140	1.3659	-0.0070	0.5770	-0.0051	0.4231
264	50.62	-0.02	-0.2403	-0.0426	-0.1269	0.1772	0.5279	1.3221	-0.0053	0.5596	-0.0040	0.4234
265	50.73	-0.03	-0.2909	-0.0464	-0.1571	0.1582	0.5262	1.3517	-0.0066	0.5726	-0.0049	0.4236
266	50.80	-0.03	-0.2910	-0.0472	-0.1525	0.1621	0.5241	1.3570	-0.0073	0.5750	-0.0054	0.4237
267	50.87	-0.04	-0.2725	-0.0459	-0.1477	0.1683	0.5219	1.3485	-0.0064	0.5701	-0.0048	0.4234
268	50.95	-0.04	-0.2624	-0.0441	-0.1458	0.1680	0.5161	1.3552	-0.0072	0.5742	-0.0053	0.4237
269	51.03	-0.03	-0.1773	-0.0409	-0.0962	0.2305	0.5426	1.3117	-0.0053	0.5562	-0.0040	0.4240
270	51.11	-0.03	-0.2723	-0.0426	-0.1384	0.1570	0.5081	1.3499	-0.0069	0.5736	-0.0051	0.4251
271	51.20	-0.04	-0.1921	-0.0400	-0.1093	0.2080	0.5090	1.3141	-0.0052	0.5600	-0.0040	0.4261
272	51.28	-0.04	-0.2235	-0.0427	-0.1226	0.1892	0.5213	1.3307	-0.0063	0.5694	-0.0047	0.4260
273	51.37	-0.04	-0.1993	-0.0400	-0.1020	0.2005	0.5148	1.3240	-0.0060	0.5650	-0.0045	0.4265
274	51.45	-0.03	-0.2061	-0.0418	-0.1121	0.2008	0.5190	1.3378	-0.0063	0.5698	-0.0047	0.4259
275	51.53	-0.03	-0.1638	-0.0354	-0.0862	0.2159	0.5263	1.3168	-0.0051	0.5626	-0.0039	0.4272
276	51.61	-0.04	-0.1933	-0.0393	-0.1034	0.2031	0.5350	1.3342	-0.0064	0.5716	-0.0048	0.4284

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 4
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-G PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 56 0.80 1.7 45.0 8 NOR 15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
277	51.68	-0.04	-0.1253	-0.0294	-0.0063	0.2351	0.5292	1.3115	-0.0052	0.5628	-0.0040	0.4291
278	51.78	-0.03	-0.1687	-0.0388	-0.0122	0.2054	0.5416	1.3342	-0.0063	0.5709	-0.0047	0.4279
279	51.87	-0.04	-0.1427	-0.0342	-0.0770	0.2334	0.5396	1.3167	-0.0063	0.5660	-0.0048	0.4314
280	51.94	-0.03	-0.1484	-0.0355	-0.0016	0.2390	0.5513	1.3220	-0.0061	0.5678	-0.0046	0.4295
281	52.01	-0.04	-0.1247	-0.0320	-0.0708	0.2563	0.5679	1.3175	-0.0056	0.5662	-0.0043	0.4297
282	52.13	-0.04	-0.1292	-0.0303	-0.0744	0.2350	0.5760	1.3192	-0.0059	0.5691	-0.0045	0.4314
283	52.18	-0.03	-0.1231	-0.0277	-0.0741	0.2255	0.6021	1.3227	-0.0060	0.5706	-0.0045	0.4315
284	52.27	-0.03	-0.1081	-0.0287	-0.0645	0.2658	0.5963	1.3192	-0.0060	0.5691	-0.0046	0.4314
285	52.35	-0.03	-0.0750	-0.0259	-0.0497	0.3400	0.6522	1.3140	-0.0056	0.5666	-0.0043	0.4312
286	52.43	-0.02	-0.0960	-0.0245	-0.0588	0.2504	0.5996	1.3157	-0.0058	0.5689	-0.0044	0.4324
287	52.51	-0.03	-0.0857	-0.0243	-0.0547	0.2840	0.6374	1.3157	-0.0058	0.5675	-0.0044	0.4315
288	52.61	-0.03	-0.0486	-0.0175	-0.0355	0.3610	0.7320	1.3175	-0.0060	0.5690	-0.0046	0.4319
289	52.68	-0.02	-0.0633	-0.0192	-0.0416	0.2946	0.6365	1.3192	-0.0060	0.5691	-0.0046	0.4314
290	52.78	-0.02	-0.0649	-0.0198	-0.0451	0.3057	0.6944	1.3175	-0.0061	0.5690	-0.0046	0.4319
291	52.88	-0.03	-0.0499	-0.0188	-0.0371	0.3777	0.7450	1.3193	-0.0064	0.5691	-0.0049	0.4314
292	52.92	-0.00	-0.0490	-0.0190	-0.0316	0.3887	0.6462	1.3192	-0.0065	0.5719	-0.0049	0.4335
293	53.01	-0.03	-0.0444	-0.0179	-0.0303	0.4042	0.8040	1.3192	-0.0065	0.5705	-0.0049	0.4325
294	53.09	-0.02	-0.0354	-0.0171	-0.0252	0.4832	0.7119	1.3192	-0.0065	0.5719	-0.0049	0.4335
295	53.18	-0.02	-0.0171	-0.0155	-0.0169	0.9068	1.1053	1.3192	-0.0071	0.5753	-0.0054	0.4346
296	53.27	-0.01	-0.0248	-0.0164	-0.0205	0.6616	0.8266	1.3191	-0.0070	0.5746	-0.0053	0.4356
297	53.34	-0.02	-0.0011	-0.0142	-0.0068	12.9142	0.1618	1.3227	-0.0076	0.5749	-0.0058	0.4346
298	53.42	-0.02	0.0052	-0.0137	-0.0061	-2.6357	-1.1731	1.3192	-0.0076	0.5746	-0.0058	0.4356
299	53.51	-0.03	-0.0039	-0.0131	-0.0111	3.3003	2.8462	1.3157	-0.0073	0.5729	-0.0056	0.4354
300	53.61	-0.03	0.0218	-0.0128	0.0012	-0.5874	0.0250	1.3228	-0.0080	0.5749	-0.0061	0.4346
301	53.67	-0.03	0.0153	-0.0127	0.0006	-0.8197	0.0367	1.3192	-0.0078	0.5753	-0.0059	0.4361
302	53.75	-0.04	0.0173	-0.0131	-0.0018	-0.7575	-0.0751	1.3194	-0.0082	0.5732	-0.0062	0.4344
303	53.84	-0.05	0.0305	-0.0124	0.0085	-0.3222	0.2208	1.3193	-0.0082	0.5746	-0.0062	0.4355
304	53.92	-0.05	0.0333	-0.0116	0.0062	-0.3209	0.1746	1.3228	-0.0082	0.5749	-0.0062	0.4346
305	54.02	-0.05	0.0461	-0.0101	0.0110	-0.2197	0.2391	1.3332	-0.0090	0.5820	-0.0068	0.4365
306	54.08	-0.04	0.0204	-0.0124	0.0024	-0.4694	0.0909	1.3176	-0.0080	0.5737	-0.0065	0.4354
307	54.17	-0.05	0.0477	-0.0102	0.0104	-0.2144	0.2185	1.3193	-0.0086	0.5760	-0.0065	0.4366
308	54.26	-0.06	0.0533	-0.0093	0.0126	-0.1729	0.2342	1.3307	-0.0091	0.5785	-0.0068	0.4347
309	54.35	-0.07	0.0600	-0.0095	0.0186	-0.1442	0.2822	1.3360	-0.0096	0.5810	-0.0072	0.4349
310	54.41	-0.07	0.0525	-0.0099	0.0130	-0.1697	0.2490	1.3324	-0.0094	0.5814	-0.0071	0.4364
311	54.50	-0.07	0.0615	-0.0096	0.0161	-0.1504	0.2822	1.3360	-0.0098	0.5824	-0.0073	0.4359
312	54.59	-0.08	0.0718	-0.0085	0.0228	-0.1186	0.3100	1.3429	-0.0100	0.5804	-0.0075	0.4367
313	54.67	-0.09	0.0688	-0.0083	0.0211	-0.1259	0.3071	1.3535	-0.0103	0.5908	-0.0076	0.4365
314	54.74	-0.09	0.0627	-0.0091	0.0190	-0.1454	0.3035	1.3394	-0.0100	0.5854	-0.0075	0.4371
315	54.82	-0.09	0.0698	-0.0083	0.0195	-0.1284	0.2968	1.3564	-0.0104	0.5938	-0.0078	0.4376
316	54.92	-0.11	0.0720	-0.0069	0.0217	-0.0980	0.3018	1.3579	-0.0106	0.5927	-0.0078	0.4365
317	55.00	-0.11	0.0751	-0.0068	0.0220	-0.0907	0.2933	1.3631	-0.0109	0.5939	-0.0080	0.4372
318	55.07	-0.11	0.0704	-0.0075	0.0221	-0.1067	0.3144	1.3596	-0.0107	0.5950	-0.0079	0.4377
319	55.17	-0.11	0.0825	-0.0063	0.0270	-0.0765	0.3277	1.3631	-0.0111	0.5968	-0.0082	0.4377
320	55.24	-0.11	0.0913	-0.0052	0.0329	-0.0570	0.3607	1.3561	-0.0106	0.5926	-0.0078	0.4370
321	55.32	-0.10	0.0928	-0.0046	0.0331	-0.0496	0.3571	1.3456	-0.0104	0.5896	-0.0077	0.4382
322	55.39	-0.12	0.0957	-0.0058	0.0373	-0.0607	0.3902	1.3508	-0.0110	0.5935	-0.0082	0.4394

TEST PART MACH RATIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 56 0.80 1.7 45.0 0 1WOFIS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
323	55.48	-0.10	0.0695	-0.0036	0.0336	-0.0403	0.3756	1.3526	-0.0111	0.5944	-0.0082	0.4395
324	55.57	-0.11	0.0684	-0.0036	0.0314	-0.0409	0.3668	1.3510	-0.0111	0.5907	-0.0082	0.4373
325	55.65	-0.11	0.0697	-0.0041	0.0322	-0.0426	0.3694	1.3651	-0.0116	0.5973	-0.0085	0.4382
326	55.74	-0.10	0.0834	-0.0035	0.0302	-0.0396	0.3625	1.3597	-0.0116	0.5949	-0.0085	0.4376
327	55.82	-0.12	0.0692	-0.0011	0.0339	-0.0424	0.3805	1.3631	-0.0113	0.5960	-0.0083	0.4367
328	55.93	-0.12	0.0599	0.0010	0.0308	0.0160	0.3687	1.3718	-0.0114	0.6004	-0.0083	0.4380
329	56.01	-0.10	0.1057	0.0017	0.0401	0.0161	0.3797	1.3780	-0.0116	0.6016	-0.0086	0.4366
330	56.10	-0.11	0.1110	0.0052	0.0419	0.0407	0.3749	1.3885	-0.0120	0.6047	-0.0087	0.4355
331	56.17	-0.11	0.1163	0.0041	0.0437	0.0353	0.3752	1.3920	-0.0123	0.6078	-0.0089	0.4367
332	56.27	-0.10	0.1193	0.0059	0.0435	0.0495	0.3841	1.4025	-0.0128	0.6115	-0.0091	0.4360
333	56.34	-0.10	0.1131	0.0067	0.0416	0.0593	0.3873	1.4025	-0.0130	0.6115	-0.0093	0.4360
334	56.44	-0.09	0.1037	0.0039	0.0401	0.0377	0.3871	1.3963	-0.0129	0.6092	-0.0093	0.4363
335	56.52	-0.09	0.1127	0.0076	0.0417	0.0675	0.3894	1.4034	-0.0135	0.6120	-0.0096	0.4360
336	56.58	-0.11	0.1051	0.0034	0.0394	0.0324	0.3752	1.3899	-0.0132	0.6070	-0.0095	0.4368
337	56.66	-0.09	0.1068	0.0059	0.0372	0.0553	0.3880	1.4074	-0.0143	0.6154	-0.0102	0.4372
338	56.74	-0.09	0.1007	0.0041	0.0343	0.0467	0.3810	1.3995	-0.0138	0.6102	-0.0099	0.4360
339	56.82	-0.10	0.1003	0.0034	0.0382	0.0339	0.3812	1.3961	-0.0140	0.6086	-0.0100	0.4360
340	56.90	-0.09	0.1005	0.0036	0.0369	0.0359	0.3875	1.4081	-0.0144	0.6152	-0.0102	0.4369
341	56.98	-0.09	0.0939	0.0028	0.0356	0.0292	0.3716	1.4152	-0.0151	0.6176	-0.0107	0.4365
342	57.05	-0.09	0.0956	0.0034	0.0350	0.0356	0.3728	1.4018	-0.0145	0.6115	-0.0104	0.4362
343	57.13	-0.09	0.1003	0.0036	0.0361	0.0359	0.3803	1.4139	-0.0152	0.6194	-0.0108	0.4380
344	57.21	-0.09	0.0910	-0.0010	0.0305	-0.0110	0.4015	1.3922	-0.0145	0.6090	-0.0104	0.4375
345	57.29	-0.08	0.0885	-0.0010	0.0308	-0.0113	0.3984	1.4027	-0.0150	0.6136	-0.0107	0.4353
346	57.35	-0.09	0.0915	-0.0004	0.0315	-0.0044	0.3990	1.4130	-0.0155	0.6184	-0.0110	0.4376
347	57.42	-0.07	0.0899	-0.0013	0.0323	-0.0145	0.3997	1.4113	-0.0155	0.6162	-0.0110	0.4366
348	57.50	-0.08	0.0942	-0.0026	0.0352	-0.0270	0.3741	1.3982	-0.0153	0.6114	-0.0110	0.4372
349	57.56	-0.07	0.0835	-0.0033	0.0312	-0.0396	0.3741	1.3937	-0.0152	0.6078	-0.0109	0.4361
350	57.64	-0.07	0.0793	-0.0072	0.0303	-0.0709	0.3826	1.3934	-0.0155	0.6090	-0.0112	0.4378
351	57.72	-0.08	0.0955	-0.0008	0.0349	-0.0063	0.3858	1.4144	-0.0164	0.6178	-0.0116	0.4368
352	57.79	-0.07	0.0808	-0.0050	0.0287	-0.0620	0.3556	1.4040	-0.0160	0.6145	-0.0114	0.4369
353	57.86	-0.07	0.0857	-0.0057	0.0310	-0.0682	0.3760	1.3851	-0.0155	0.6050	-0.0112	0.4368
354	57.93	-0.07	0.0804	-0.0060	0.0326	-0.0747	0.4060	1.3954	-0.0161	0.6108	-0.0116	0.4377
355	58.01	-0.05	0.0820	-0.0055	0.0321	-0.0672	0.3919	1.3956	-0.0163	0.6071	-0.0117	0.4370
356	58.10	-0.08	0.0940	-0.0033	0.0304	-0.0352	0.3870	1.4075	-0.0166	0.6159	-0.0118	0.4375
357	58.15	-0.07	0.0762	-0.0004	0.0304	-0.1104	0.3995	1.3869	-0.0162	0.6065	-0.0117	0.4373
358	58.22	-0.07	0.0865	-0.0045	0.0334	-0.0521	0.3866	1.4040	-0.0165	0.6149	-0.0118	0.4374
359	58.22	-0.06	0.0776	-0.0077	0.0314	-0.0994	0.4052	1.3920	-0.0164	0.6097	-0.0118	0.4380
360	58.23	-0.06	0.0761	-0.0073	0.0299	-0.0961	0.3934	1.4144	-0.0173	0.6192	-0.0123	0.4377
361	58.23	-0.05	0.0805	-0.0047	0.0313	-0.0586	0.3903	1.3976	-0.0160	0.6127	-0.0115	0.4384
362	58.24	-0.06	0.0787	-0.0069	0.0329	-0.0878	0.4186	1.4040	-0.0167	0.6146	-0.0119	0.4375

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 56 MACH 0.80 RATIO-0 1.7 PHI 45.0 BUOY 15 CONF L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.70	0.10	0.1841	9.9999	0.0801	9.9999	0.4350	-0.1454	-0.0266	-0.0775	0.1833	0.5331
2	-5.71	0.09	0.1841	9.9999	0.0801	9.9999	0.4350	-0.1486	-0.0275	-0.0813	0.1854	0.5472
3	-5.71	0.09	0.1809	9.9999	0.0798	9.9999	0.4413	-0.1488	-0.0272	-0.0799	0.1831	0.5370
4	-5.70	0.09	0.1745	9.9999	0.0788	9.9999	0.4400	-0.1521	-0.0277	-0.0802	0.1824	0.5273
5	-5.70	0.10	0.1873	9.9999	0.0816	9.9999	0.4356	-0.1454	-0.0267	-0.0789	0.1840	0.5427
6	-5.71	0.10	0.1777	9.9999	0.0776	9.9999	0.4366	-0.1487	-0.0273	-0.0799	0.1839	0.5374
7	-5.71	0.09	0.1840	9.9999	0.0820	9.9999	0.4456	-0.1435	-0.0266	-0.0781	0.1871	0.5443
8	-5.71	0.10	0.1824	9.9999	0.0806	9.9999	0.4418	-0.1454	-0.0266	-0.0782	0.1833	0.5379
9	-5.71	0.10	0.1841	9.9999	0.0801	9.9999	0.4350	-0.1486	-0.0272	-0.0799	0.1831	0.5370
10	-5.71	0.10	0.1824	9.9999	0.0806	9.9999	0.4418	-0.1453	-0.0268	-0.0789	0.1848	0.5431
11	-5.71	0.09	0.1808	9.9999	0.0804	9.9999	0.4446	-0.1521	-0.0277	-0.0802	0.1824	0.5273
12	-5.81	0.10	0.1776	9.9999	0.0757	9.9999	0.4257	-0.1500	-0.0247	-0.0707	0.1904	0.5439
13	-5.05	0.10	0.1473	9.9999	0.0636	9.9999	0.4330	-0.0576	-0.0232	-0.0548	0.2073	0.5610
14	-4.05	0.09	0.1185	9.9999	0.0501	9.9999	0.4223	-0.0687	-0.0156	-0.0392	0.2304	0.5714
15	-3.11	0.09	0.0913	9.9999	0.0383	9.9999	0.4200	-0.0350	-0.0102	-0.0210	0.2915	0.6000
16	-2.20	0.10	0.0656	9.9999	0.0279	9.9999	0.4565	-0.0098	-0.0060	-0.0084	0.6125	0.8571
17	-1.25	0.09	0.0397	9.9999	0.0228	9.9999	0.5743	0.0043	-0.0015	-0.0013	-0.3490	-0.3023
18	-0.31	0.09	0.0123	9.9999	0.0145	9.9999	1.2114	0.0311	0.0028	0.0054	0.0901	0.1736
19	0.67	0.10	-0.0053	9.9999	0.0078	9.9999	-1.4717	0.0575	0.0083	0.0136	0.1447	0.2369
20	1.57	0.09	-0.0339	9.9999	-0.0009	9.9999	0.0251	0.0843	0.0127	0.0216	0.1509	0.2565
21	2.56	0.10	-0.0712	9.9999	-0.0102	9.9999	0.2158	0.1028	0.0158	0.0342	0.1539	0.3330
22	3.55	0.09	-0.1032	9.9999	-0.0265	9.9999	0.2764	0.1266	0.0195	0.0474	0.1543	0.3742
23	4.42	0.09	-0.1418	9.9999	-0.0451	9.9999	0.3037	0.1418	0.0220	0.0570	0.1554	0.4018
24	5.35	0.10	-0.1816	9.9999	-0.0602	9.9999	0.3309	0.1691	0.0256	0.0717	0.1516	0.4239
25	6.31	0.10	-0.2251	9.9999	-0.0776	9.9999	0.3448	0.1968	0.0286	0.0876	0.1455	0.4451
26	7.27	0.10	-0.2745	9.9999	-0.1003	9.9999	0.3569	0.2150	0.0290	0.0971	0.1351	0.4518
27	8.21	0.10	-0.3205	9.9999	-0.1180	9.9999	0.3683	0.2426	0.0311	0.1114	0.1280	0.4593
28	9.13	0.10	-0.3635	9.9999	-0.1392	9.9999	0.3826	0.2692	0.0323	0.1277	0.1198	0.4742
29	10.05	0.10	-0.4148	9.9999	-0.1597	9.9999	0.3850	0.2994	0.0336	0.1395	0.1128	0.4659
30	11.02	0.10	-0.4724	9.9999	-0.1833	9.9999	0.3881	0.3253	0.0333	0.1520	0.1029	0.4701
31	11.97	0.10	-0.5187	9.9999	-0.2015	9.9999	0.3885	0.3488	0.0332	0.1646	0.0950	0.4719
32	12.90	0.10	-0.5627	9.9999	-0.2282	9.9999	0.3916	0.3817	0.0330	0.1790	0.0863	0.4690
33	13.84	0.10	-0.6421	9.9999	-0.2466	9.9999	0.3875	0.3974	0.0336	0.1879	0.0771	0.4729
34	14.80	0.10	-0.6838	9.9999	-0.2662	9.9999	0.3835	0.4356	0.0303	0.2020	0.0697	0.4638
35	15.74	0.10	-0.7464	9.9999	-0.2830	9.9999	0.3792	0.4536	0.0272	0.2089	0.0628	0.4770
36	16.76	0.10	-0.8074	9.9999	-0.3044	9.9999	0.3770	0.4892	0.0270	0.2188	0.0589	0.4721
37	17.75	0.10	-0.8695	9.9999	-0.3229	9.9999	0.3732	0.5014	0.0265	0.2290	0.0547	0.4757
38	18.70	0.10	-0.9037	9.9999	-0.3367	9.9999	0.3726	0.5209	0.0241	0.2365	0.0486	0.4679
39	19.66	0.09	-0.9596	9.9999	-0.3578	9.9999	0.3691	0.5341	0.0224	0.2450	0.0420	0.4588
40	20.61	0.10	-1.0065	9.9999	-0.3697	9.9999	0.3673	0.5543	0.0170	0.2434	0.0338	0.4826
41	21.55	0.11	-1.0201	9.9999	-0.3595	9.9999	0.3529	0.4814	0.0124	0.2430	0.0258	0.5048
42	22.50	0.10	-1.0235	9.9999	-0.3503	9.9999	0.3482	0.4039	0.0105	0.2417	0.0216	0.4974
43	23.45	0.11	-1.0153	9.9999	-0.3344	9.9999	0.3491	0.4723	0.0088	0.2364	0.0187	0.5005
44	24.38	0.12	-0.9667	9.9999	-0.3411	9.9999	0.3529	0.4915	0.0117	0.2439	0.0238	0.4962
45	25.30	0.12	-0.8976	9.9999	-0.3224	9.9999	0.3592	0.5577	0.0168	0.2669	0.0302	0.4786
46	26.26	0.12	-0.8852	9.9999	-0.3175	9.9999	0.3595	0.6411	0.0257	0.2977	0.0370	0.4643

TEST PART MACH RXIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 56 0.80 1.0 45.0 DIHDF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN F3	Cm3	Cd3	XCPF3	YCPF3	CNF4	Cm4	Cd4	XCPF4	YCPF4
47	27.22	0.12	-0.8912	9.9999	-0.3200	9.9999	0.3591	0.6492	0.0273	0.3239	0.0391	0.4633
48	28.11	0.12	-0.8991	9.9999	-0.3259	9.9999	0.3615	0.7341	0.0264	0.3411	0.0360	0.4647
49	28.14	0.12	-0.8993	9.9999	-0.3230	9.9999	0.3598	0.7421	0.0279	0.3465	0.0377	0.4669
50	28.14	0.12	-0.9057	9.9999	-0.3267	9.9999	0.3607	0.7322	0.0261	0.3441	0.0357	0.4700
51	28.14	0.13	-0.9046	9.9999	-0.3268	9.9999	0.3613	0.7315	0.0275	0.3436	0.0377	0.4698
52	28.16	0.12	-0.9105	9.9999	-0.3283	9.9999	0.3606	0.7393	0.0260	0.3508	0.0360	0.4745
53	28.33	0.12	-0.9041	9.9999	-0.3259	9.9999	0.3605	0.7617	0.0269	0.3561	0.0360	0.4702
54	28.58	0.12	-0.9137	9.9999	-0.3292	9.9999	0.3603	0.7640	0.0279	0.3602	0.0366	0.4715
55	28.68	0.12	-0.9200	9.9999	-0.3323	9.9999	0.3612	0.7678	0.0281	0.3638	0.0367	0.4740
56	28.85	0.14	-0.9211	9.9999	-0.3318	9.9999	0.3600	0.8035	0.0320	0.3773	0.0405	0.4695
57	29.02	0.13	-0.9297	9.9999	-0.3343	9.9999	0.3596	0.8043	0.0311	0.3771	0.0386	0.4668
58	29.15	0.14	-0.9328	9.9999	-0.3371	9.9999	0.3614	0.8119	0.0339	0.3795	0.0417	0.4674
59	29.32	0.14	-0.9313	9.9999	-0.3351	9.9999	0.3598	0.8155	0.0339	0.3831	0.0415	0.4697
60	29.47	0.14	-0.9314	9.9999	-0.3361	9.9999	0.3607	0.8328	0.0357	0.3893	0.0428	0.4674
61	29.60	0.14	-0.9422	9.9999	-0.3404	9.9999	0.3613	0.8419	0.0342	0.3912	0.0405	0.4646
62	29.76	0.14	-0.9406	9.9999	-0.3384	9.9999	0.3596	0.8613	0.0403	0.3962	0.0468	0.4623
63	29.89	0.14	-0.9453	9.9999	-0.3415	9.9999	0.3617	0.8515	0.0381	0.3958	0.0447	0.4648
64	30.04	0.15	-0.9434	9.9999	-0.3413	9.9999	0.3610	0.8715	0.0417	0.4045	0.0478	0.4642
65	30.17	0.14	-0.9501	9.9999	-0.3442	9.9999	0.3625	0.8573	0.0376	0.4021	0.0436	0.4690
66	30.31	0.15	-0.9533	9.9999	-0.3445	9.9999	0.3614	0.8709	0.0417	0.4076	0.0475	0.4648
67	30.44	0.14	-0.9597	9.9999	-0.3475	9.9999	0.3621	0.8690	0.0397	0.4067	0.0456	0.4703
68	30.56	0.14	-0.9565	9.9999	-0.3453	9.9999	0.3610	0.8857	0.0423	0.4110	0.0477	0.4661
69	30.70	0.15	-0.9629	9.9999	-0.3477	9.9999	0.3611	0.8852	0.0432	0.4111	0.0488	0.4644
70	30.84	0.15	-0.9662	9.9999	-0.3480	9.9999	0.3602	0.8867	0.0436	0.4120	0.0494	0.4647
71	30.99	0.15	-0.9641	9.9999	-0.3479	9.9999	0.3609	0.8863	0.0441	0.4121	0.0496	0.4639
72	31.12	0.16	-0.9693	9.9999	-0.3483	9.9999	0.3595	0.9107	0.0456	0.4113	0.0503	0.4516
73	31.25	0.17	-0.9714	9.9999	-0.3475	9.9999	0.3572	0.9206	0.0462	0.4145	0.0498	0.4473
74	31.40	0.16	-0.9700	9.9999	-0.3484	9.9999	0.3590	0.9270	0.0452	0.4090	0.0487	0.4412
75	31.54	0.16	-0.9769	9.9999	-0.3521	9.9999	0.3605	0.9268	0.0456	0.4064	0.0492	0.4385
76	31.67	0.17	-0.9769	9.9999	-0.3514	9.9999	0.3597	0.9298	0.0467	0.4066	0.0502	0.4375
77	31.83	0.17	-0.9849	9.9999	-0.3548	9.9999	0.3601	0.9218	0.0451	0.4046	0.0489	0.4390
78	31.93	0.16	-0.9833	9.9999	-0.3545	9.9999	0.3600	0.9235	0.0449	0.4061	0.0486	0.4397
79	32.07	0.17	-0.9880	9.9999	-0.3561	9.9999	0.3605	0.9197	0.0454	0.4072	0.0493	0.4427
80	32.21	0.17	-0.9865	9.9999	-0.3541	9.9999	0.3596	0.9267	0.0450	0.3998	0.0484	0.4385
81	32.34	0.17	-0.9901	9.9999	-0.3574	9.9999	0.3588	0.9186	0.0436	0.3986	0.0474	0.4341
82	32.47	0.17	-0.9981	9.9999	-0.3589	9.9999	0.3594	0.9123	0.0445	0.3933	0.0455	0.4311
83	32.59	0.17	-1.0019	9.9999	-0.3604	9.9999	0.3597	0.9070	0.0441	0.3909	0.0453	0.4310
84	32.74	0.17	-1.0003	9.9999	-0.3603	9.9999	0.3602	0.8977	0.0362	0.3780	0.0407	0.4256
85	32.86	0.17	-1.0115	9.9999	-0.3637	9.9999	0.3596	0.8910	0.0371	0.3837	0.0416	0.4306
86	32.99	0.17	-1.0083	9.9999	-0.3628	9.9999	0.3598	0.8900	0.0393	0.3873	0.0441	0.4351
87	33.12	0.18	-1.0083	9.9999	-0.3628	9.9999	0.3598	0.8851	0.0344	0.3809	0.0388	0.4303
88	33.24	0.18	-1.0130	9.9999	-0.3644	9.9999	0.3598	0.8822	0.0352	0.3807	0.0403	0.4365
89	33.37	0.18	-1.0130	9.9999	-0.3644	9.9999	0.3598	0.8837	0.0344	0.3807	0.0398	0.4408
90	33.49	0.18	-1.0098	9.9999	-0.3633	9.9999	0.3600	0.8922	0.0343	0.3784	0.0407	0.4492
91	33.63	0.18	-1.0136	9.9999	-0.3647	9.9999	0.3598	0.8855	0.0348	0.3781	0.0411	0.4471
92	33.75	0.18	-1.0173	9.9999	-0.3659	9.9999	0.3592	0.8843	0.0340	0.3784	0.0412	0.4493

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAIJ-U PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 50 0.80 1.7 45.0 BIWOF15 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
93	33.87	0.18	-1.0170	9.9999	-0.3642	9.9999	0.3581	0.8400	0.0342	0.3801	0.0404	0.4492
94	34.00	0.17	-1.0234	9.9999	-0.3673	9.9999	0.3589	0.8577	0.0400	0.3938	0.0466	0.4591
95	34.12	0.19	-1.0154	9.9999	-0.3635	9.9999	0.3580	0.8324	0.0364	0.3801	0.0437	0.4566
96	34.25	0.18	-1.0167	9.9999	-0.3637	9.9999	0.3571	0.8194	0.0377	0.3814	0.0460	0.4654
97	34.37	0.18	-1.0167	9.9999	-0.3637	9.9999	0.3571	0.8190	0.0335	0.3760	0.0435	0.4613
98	34.49	0.19	-1.0187	9.9999	-0.3643	9.9999	0.3577	0.8259	0.0340	0.3800	0.0472	0.4673
99	34.62	0.19	-1.0187	9.9999	-0.3642	9.9999	0.3574	0.7868	0.0343	0.3693	0.0434	0.4681
100	34.74	0.18	-1.0167	9.9999	-0.3637	9.9999	0.3571	0.7924	0.0344	0.3722	0.0434	0.4697
101	34.87	0.19	-1.0256	9.9999	-0.3668	9.9999	0.3576	0.7774	0.0322	0.3675	0.0414	0.4727
102	34.99	0.19	-1.0154	9.9999	-0.3628	9.9999	0.3573	0.7647	0.0323	0.3645	0.0422	0.4767
103	35.11	0.20	-1.0122	9.9999	-0.3620	9.9999	0.3571	0.7522	0.0322	0.3615	0.0427	0.4806
104	35.23	0.19	-1.0154	9.9999	-0.3628	9.9999	0.3573	0.7520	0.0315	0.3621	0.0418	0.4812
105	35.35	0.19	-1.0106	9.9999	-0.3625	9.9999	0.3587	0.7112	0.0282	0.3473	0.0397	0.4884
106	35.48	0.19	-1.0027	9.9999	-0.3587	9.9999	0.3576	0.6920	0.0273	0.3424	0.0395	0.4949
107	35.59	0.21	-0.9975	9.9999	-0.3584	9.9999	0.3586	0.6970	0.0276	0.3422	0.0400	0.4910
108	35.72	0.19	-1.0122	9.9999	-0.3632	9.9999	0.3589	0.6854	0.0259	0.3384	0.0378	0.4937
109	35.82	0.19	-1.0042	9.9999	-0.3607	9.9999	0.3592	0.6587	0.0253	0.3277	0.0385	0.4975
110	35.93	0.20	-1.0085	9.9999	-0.3642	9.9999	0.3610	0.6642	0.0253	0.3321	0.0382	0.5000
111	36.07	0.21	-0.9955	9.9999	-0.3591	9.9999	0.3593	0.6621	0.0259	0.3284	0.0392	0.4975
112	36.17	0.20	-0.9983	9.9999	-0.3599	9.9999	0.3612	0.6239	0.0260	0.3141	0.0430	0.5035
113	36.29	0.19	-0.9962	9.9999	-0.3594	9.9999	0.3608	0.6494	0.0262	0.3259	0.0404	0.5019
114	36.43	0.20	-0.9947	9.9999	-0.3587	9.9999	0.3606	0.6097	0.0264	0.3090	0.0434	0.5067
115	36.53	0.21	-0.7867	9.9999	-0.3568	9.9999	0.3616	0.5813	0.0257	0.2969	0.0443	0.5107
116	36.66	0.21	-0.9879	9.9999	-0.3583	9.9999	0.3620	0.5950	0.0269	0.3021	0.0453	0.5077
117	36.78	0.20	-0.9978	9.9999	-0.3608	9.9999	0.3610	0.5693	0.0282	0.2917	0.0496	0.5123
118	36.88	0.21	-0.9881	9.9999	-0.3581	9.9999	0.3615	0.5803	0.0282	0.2978	0.0504	0.5136
119	37.01	0.21	-0.9953	9.9999	-0.3622	9.9999	0.3625	0.5849	0.0259	0.2950	0.0474	0.5249
120	37.13	0.21	-0.9958	9.9999	-0.3624	9.9999	0.3626	0.5800	0.0264	0.2983	0.0522	0.5200
121	37.25	0.21	-0.9953	9.9999	-0.3622	9.9999	0.3625	0.5794	0.0273	0.2992	0.0526	0.5183
122	37.36	0.21	-1.0072	9.9999	-0.3660	9.9999	0.3634	0.5200	0.0260	0.2724	0.0501	0.5259
123	37.48	0.22	-0.9953	9.9999	-0.3622	9.9999	0.3625	0.5089	0.0267	0.2657	0.0525	0.5221
124	37.59	0.22	-1.0000	9.9999	-0.3601	9.9999	0.3629	0.5218	0.0260	0.2725	0.0499	0.5223
125	37.70	0.23	-1.0009	9.9999	-0.3629	9.9999	0.3626	0.4798	0.0274	0.2537	0.0572	0.5288
126	37.83	0.23	-1.0064	9.9999	-0.3636	9.9999	0.3633	0.4864	0.0271	0.2477	0.0625	0.5311
127	37.94	0.23	-1.0068	9.9999	-0.3674	9.9999	0.3641	0.4770	0.0260	0.2540	0.0546	0.5325
128	38.06	0.21	-0.9993	9.9999	-0.3634	9.9999	0.3637	0.4628	0.0262	0.2475	0.0621	0.5360
129	38.19	0.22	-0.9981	9.9999	-0.3632	9.9999	0.3647	0.3769	0.0248	0.2092	0.0659	0.5550
130	38.29	0.23	-1.0045	9.9999	-0.3657	9.9999	0.3641	0.4262	0.0250	0.2292	0.0586	0.5377
131	38.41	0.23	-0.9934	9.9999	-0.3623	9.9999	0.3647	0.3954	0.0254	0.2157	0.0643	0.5455
132	38.52	0.23	-1.0030	9.9999	-0.3656	9.9999	0.3639	0.4099	0.0251	0.2221	0.0613	0.5418
133	38.64	0.23	-1.0172	9.9999	-0.3706	9.9999	0.3643	0.4076	0.0222	0.2226	0.0545	0.5463
134	38.73	0.23	-1.0172	9.9999	-0.3706	9.9999	0.3643	0.4213	0.0239	0.2281	0.0568	0.5413
135	38.85	0.23	-1.0125	9.9999	-0.3690	9.9999	0.3644	0.3728	0.0204	0.2093	0.0548	0.5614
136	38.94	0.23	-1.0257	9.9999	-0.3724	9.9999	0.3650	0.4221	0.0240	0.2272	0.0569	0.5382
137	39.06	0.23	-1.0257	9.9999	-0.3731	9.9999	0.3657	0.3752	0.0206	0.2092	0.0550	0.5575
138	39.17	0.23	-1.0431	9.9999	-0.3814	9.9999	0.3656	0.4335	0.0230	0.2352	0.0581	0.5425

TEST 7 PART 50 MACH 0.80 RATIO-6 1.7 PHI 45.0 CONF BlanF15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CA3	ALPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
139	39.28	0.22	-1.0374	9.9999	-0.3805	9.9999	0.3659	0.4082	0.0227	0.2502	0.0468	0.5367
140	39.38	0.23	-1.0510	9.9999	-0.3845	9.9999	0.3658	0.4243	0.0199	0.2327	0.0470	0.5464
141	39.49	0.23	-1.0494	9.9999	-0.3838	9.9999	0.3657	0.4347	0.0206	0.2396	0.0479	0.5511
142	39.58	0.23	-1.0491	9.9999	-0.3814	9.9999	0.3656	0.4390	0.0235	0.2180	0.0590	0.5403
143	39.68	0.22	-1.0574	9.9999	-0.3865	9.9999	0.3659	0.4324	0.0285	0.2401	0.0631	0.5308
144	39.81	0.21	-1.0573	9.9999	-0.3862	9.9999	0.3671	0.4451	0.0285	0.2576	0.0641	0.5337
145	39.90	0.20	-1.0553	9.9999	-0.3862	9.9999	0.3659	0.4405	0.0252	0.2370	0.0573	0.5380
146	40.01	0.20	-1.0505	9.9999	-0.3852	9.9999	0.3667	0.4002	0.0264	0.2149	0.0661	0.5369
147	40.15	0.20	-1.0555	9.9999	-0.3874	9.9999	0.3671	0.3721	0.0216	0.2061	0.0582	0.5538
148	40.21	0.20	-1.0458	9.9999	-0.3841	9.9999	0.3673	0.3770	0.0261	0.2056	0.0694	0.5458
149	40.30	0.20	-1.0456	9.9999	-0.3835	9.9999	0.3667	0.3510	0.0239	0.1948	0.0662	0.5550
150	40.41	0.19	-1.0537	9.9999	-0.3867	9.9999	0.3670	0.4011	0.0282	0.2146	0.0704	0.5349
151	40.50	0.20	-1.0522	9.9999	-0.3853	9.9999	0.3662	0.3806	0.0231	0.1906	0.0679	0.5597
152	40.61	0.20	-1.0457	9.9999	-0.3854	9.9999	0.3665	0.3649	0.0264	0.1966	0.0779	0.5443
153	40.72	0.19	-1.0489	9.9999	-0.3850	9.9999	0.3676	0.3681	0.0233	0.1749	0.0758	0.5678
154	40.83	0.20	-1.0521	9.9999	-0.3859	9.9999	0.3668	0.2931	0.0209	0.1661	0.0714	0.5736
155	40.91	0.18	-1.0521	9.9999	-0.3865	9.9999	0.3673	0.3293	0.0275	0.1665	0.0836	0.5462
156	41.02	0.19	-1.0521	9.9999	-0.3872	9.9999	0.3680	0.3290	0.0262	0.1819	0.0859	0.5530
157	41.15	0.18	-1.0537	9.9999	-0.3873	9.9999	0.3675	0.2842	0.0239	0.1620	0.0842	0.5699
158	41.23	0.17	-1.0600	9.9999	-0.3891	9.9999	0.3676	0.2721	0.0230	0.1563	0.0847	0.5743
159	41.33	0.17	-1.0548	9.9999	-0.3874	9.9999	0.3673	0.2362	0.0214	0.1393	0.0900	0.5847
160	41.43	0.16	-1.0659	9.9999	-0.3921	9.9999	0.3678	0.2289	0.0219	0.1348	0.0958	0.5888
161	41.52	0.17	-1.0659	9.9999	-0.3927	9.9999	0.3684	0.2056	0.0215	0.1250	0.1047	0.6073
162	41.63	0.17	-1.0659	9.9999	-0.3927	9.9999	0.3684	0.2234	0.0223	0.1337	0.1000	0.5984
163	41.71	0.16	-1.0659	9.9999	-0.3927	9.9999	0.3684	0.2144	0.0222	0.1277	0.1037	0.5955
164	41.82	0.15	-1.0817	9.9999	-0.3990	9.9999	0.3686	0.1628	0.0206	0.1145	0.1129	0.6265
165	41.92	0.15	-1.0736	9.9999	-0.3956	9.9999	0.3686	0.1722	0.0202	0.1090	0.1175	0.6331
166	42.01	0.16	-1.0817	9.9999	-0.3990	9.9999	0.3688	0.2023	0.0211	0.1219	0.1044	0.6027
167	42.12	0.14	-1.0926	9.9999	-0.4030	9.9999	0.3686	0.1565	0.0193	0.1030	0.1235	0.6503
168	42.21	0.14	-1.0896	9.9999	-0.4027	9.9999	0.3690	0.1405	0.0179	0.0961	0.1224	0.6740
169	42.29	0.13	-1.0944	9.9999	-0.4025	9.9999	0.3678	0.1491	0.0196	0.1012	0.1330	0.6790
170	42.39	0.14	-1.0972	9.9999	-0.4040	9.9999	0.3686	0.1014	0.0179	0.0788	0.1768	0.7769
171	42.48	0.13	-1.1103	9.9999	-0.4106	9.9999	0.3698	0.1055	0.0170	0.0816	0.1614	0.7732
172	42.58	0.12	-1.1103	9.9999	-0.4100	9.9999	0.3693	0.1048	0.0184	0.0805	0.1758	0.7679
173	42.69	0.12	-1.1113	9.9999	-0.4107	9.9999	0.3696	0.0749	0.0169	0.0680	0.2260	0.9078
174	42.76	0.12	-1.1145	9.9999	-0.4110	9.9999	0.3688	0.0892	0.0169	0.0743	0.1898	0.8328
175	42.84	0.11	-1.1177	9.9999	-0.4116	9.9999	0.3684	0.0716	0.0154	0.0677	0.2255	0.9455
176	42.94	0.11	-1.1209	9.9999	-0.4127	9.9999	0.3686	0.0691	0.0170	0.0657	0.2552	0.9507
177	43.03	0.12	-1.1145	9.9999	-0.4110	9.9999	0.3688	0.0990	0.0150	0.0585	0.3069	1.1943
178	43.11	0.10	-1.1209	9.9999	-0.4127	9.9999	0.3682	0.0749	0.0170	0.0707	0.2274	0.9439
179	43.21	0.10	-1.1234	9.9999	-0.4135	9.9999	0.3697	0.0588	0.0168	0.0621	0.2863	1.0562
180	43.32	0.10	-1.1334	9.9999	-0.4187	9.9999	0.3694	0.0516	0.0164	0.0590	0.3283	1.1437
181	43.40	0.11	-1.1334	9.9999	-0.4193	9.9999	0.3700	0.0463	0.0169	0.0593	0.3659	1.2814
182	43.48	0.08	-1.1303	9.9999	-0.4186	9.9999	0.3688	0.0759	0.0187	0.0730	0.2466	0.9617
183	43.58	0.07	-1.1255	9.9999	-0.4156	9.9999	0.3693	0.0913	0.0201	0.0796	0.2205	0.8717
184	43.65	0.09	-1.1306	9.9999	-0.4196	9.9999	0.3692	0.0828	0.0177	0.0655	0.2143	1.0431

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DLL1 DEL2 DEL3 DEL4 TRANSITION
7 50 0.60 1.7 45.0 BINOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CB3	ACPF3	YCPF3	CNF4	CH4	CB4	ACPF4	YCPF4
185	43.74	0.00	-1.1358	9.9999	-0.4211	9.9999	0.3695	0.0525	0.0189	0.0620	0.3606	1.1613
186	43.89	0.01	-1.1303	9.9999	-0.4178	9.9999	0.3697	0.0508	0.0194	0.0647	0.1966	0.8571
187	43.92	0.00	-1.1334	9.9999	-0.4167	9.9999	0.3694	0.0446	0.0192	0.0784	0.2273	0.9266
188	44.01	0.00	-1.1331	9.9999	-0.4184	9.9999	0.3694	0.0480	0.0197	0.0807	0.2242	0.9170
189	44.11	0.01	-1.1306	9.9999	-0.4202	9.9999	0.3697	0.0478	0.0200	0.0787	0.2281	0.8962
190	44.20	0.01	-1.1313	9.9999	-0.4225	9.9999	0.3702	0.0483	0.0191	0.0799	0.2166	0.9048
191	44.28	0.05	-1.1303	9.9999	-0.4172	9.9999	0.3691	0.1100	0.0187	0.0921	0.1702	0.8371
192	44.38	0.05	-1.1445	9.9999	-0.4233	9.9999	0.3699	0.1064	0.0188	0.0892	0.1769	0.8382
193	44.47	0.00	-1.1300	9.9999	-0.4208	9.9999	0.3702	0.0520	0.0189	0.0841	0.2057	0.9140
194	44.58	0.00	-1.1318	9.9999	-0.4192	9.9999	0.3704	0.0496	0.0206	0.0806	0.2181	0.8519
195	44.66	0.00	-1.1397	9.9999	-0.4225	9.9999	0.3706	0.0471	0.0194	0.0839	0.2001	0.8639
196	44.74	0.05	-1.1305	9.9999	-0.4215	9.9999	0.3709	0.0993	0.0184	0.0846	0.1856	0.8518
197	44.84	0.05	-1.1350	9.9999	-0.4207	9.9999	0.3707	0.1044	0.0191	0.0864	0.1832	0.8274
198	44.94	0.05	-1.1428	9.9999	-0.4245	9.9999	0.3715	0.0991	0.0188	0.0833	0.1900	0.8404
199	45.00	0.04	-1.1397	9.9999	-0.4217	9.9999	0.3700	0.0976	0.0183	0.0811	0.1878	0.8308
200	45.10	0.03	-1.1343	9.9999	-0.4213	9.9999	0.3714	0.0925	0.0173	0.0818	0.1873	0.8842
201	45.19	0.03	-1.1391	9.9999	-0.4229	9.9999	0.3713	0.0905	0.0177	0.0804	0.1959	0.8883
202	45.27	0.02	-1.1375	9.9999	-0.4222	9.9999	0.3716	0.0755	0.0157	0.0757	0.2083	1.0027
203	45.37	0.04	-1.1405	9.9999	-0.4274	9.9999	0.3722	0.0894	0.0184	0.0788	0.1837	0.8813
204	45.46	0.03	-1.1438	9.9999	-0.4245	9.9999	0.3711	0.0734	0.0161	0.0716	0.2197	0.9754
205	45.55	0.02	-1.1422	9.9999	-0.4244	9.9999	0.3716	0.0784	0.0169	0.0728	0.2159	0.9285
206	45.64	0.02	-1.1359	9.9999	-0.4214	9.9999	0.3710	0.0681	0.0160	0.0699	0.2354	1.0265
207	45.71	0.00	-1.1375	9.9999	-0.4222	9.9999	0.3712	0.0602	0.0139	0.0663	0.2514	1.1015
208	45.80	0.03	-1.1469	9.9999	-0.4260	9.9999	0.3720	0.0685	0.0151	0.0684	0.2208	0.9965
209	45.87	0.01	-1.1430	9.9999	-0.4252	9.9999	0.3718	0.0654	0.0143	0.0668	0.2191	1.0214
210	45.96	0.02	-1.1404	9.9999	-0.4240	9.9999	0.3712	0.0578	0.0151	0.0650	0.2418	1.0901
211	46.06	-0.01	-1.1532	9.9999	-0.4276	9.9999	0.3725	0.0562	0.0147	0.0635	0.2621	1.1301
212	46.15	0.00	-1.1501	9.9999	-0.4281	9.9999	0.3722	0.0472	0.0148	0.0589	0.3144	1.2484
213	46.25	-0.01	-1.1503	9.9999	-0.4276	9.9999	0.3717	0.0517	0.0130	0.0629	0.2520	1.2171
214	46.33	0.01	-1.1581	9.9999	-0.4320	9.9999	0.3730	0.0455	0.0146	0.0574	0.3217	1.2621
215	46.41	-0.02	-1.1534	9.9999	-0.4297	9.9999	0.3726	0.0351	0.0131	0.0574	0.3352	1.4655
216	46.51	0.00	-1.1565	9.9999	-0.4314	9.9999	0.3729	0.0444	0.0132	0.0571	0.2981	1.2867
217	46.60	-0.01	-1.1549	9.9999	-0.4311	9.9999	0.3733	0.0304	0.0125	0.0533	0.4113	1.7500
218	46.67	-0.01	-1.1501	9.9999	-0.4307	9.9999	0.3745	0.0395	0.0123	0.0573	0.3115	1.4481
219	46.78	-0.00	-1.1628	9.9999	-0.4342	9.9999	0.3734	0.0372	0.0132	0.0526	0.3550	1.4113
220	46.85	-0.00	-1.1534	9.9999	-0.4303	9.9999	0.3731	0.0305	0.0123	0.0520	0.4034	1.7016
221	46.94	0.00	-1.1600	9.9999	-0.4351	9.9999	0.3732	0.0268	0.0125	0.0496	0.4006	1.8545
222	47.02	-0.02	-1.1580	9.9999	-0.4345	9.9999	0.3732	0.0146	0.0120	0.0461	0.8222	3.1507
223	47.10	-0.01	-1.1659	9.9999	-0.4378	9.9999	0.3734	0.0129	0.0116	0.0426	0.6998	3.2946
224	47.21	-0.00	-1.1626	9.9999	-0.4365	9.9999	0.3745	0.0197	0.0125	0.0473	0.6348	2.6959
225	47.28	-0.01	-1.1606	9.9999	-0.4360	9.9999	0.3745	0.0203	0.0111	0.0470	0.5470	2.3103
226	47.38	-0.01	-1.1637	9.9999	-0.4361	9.9999	0.3748	0.0200	0.0116	0.0471	0.5902	2.5500
227	47.47	-0.01	-1.1637	9.9999	-0.4361	9.9999	0.3748	0.0091	0.0121	0.0410	1.3302	4.4945
228	47.54	-0.00	-1.1653	9.9999	-0.4369	9.9999	0.3749	0.0205	0.0107	0.0469	0.5222	2.2629
229	47.64	-0.00	-1.1669	9.9999	-0.4364	9.9999	0.3740	0.0038	0.0119	0.0399	3.1328	10.5000
230	47.72	0.00	-1.1700	9.9999	-0.4391	9.9999	0.3753	0.0091	0.0121	0.0410	1.3302	4.4945

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 56 0.80 1.7 45.0 BIWOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CBJ	ACPF3	YCPF3	CNF4	CM4	CB4	ACPF4	YCPF4
231	47.80	0.00	-1.1715	9.9999	-0.4395	9.9999	0.3755	0.0023	0.0112	0.0377	4.8715	16.3913
232	47.84	-0.00	-1.1763	9.9999	-0.4409	9.9999	0.3748	-0.0069	0.0117	0.0311	-1.6963	-4.5072
233	47.98	-0.01	-1.1731	9.9999	-0.4406	9.9999	0.3756	-0.0068	0.0116	0.0311	-1.7066	-4.5735
234	48.07	-0.01	-1.1810	9.9999	-0.4443	9.9999	0.3763	-0.0121	0.0115	0.0300	-0.9508	-2.4793
235	48.15	-0.02	-1.1731	9.9999	-0.4406	9.9999	0.3756	-0.0064	0.0112	0.0296	-1.3339	-3.5238
236	48.25	-0.01	-1.1794	9.9999	-0.4436	9.9999	0.3761	-0.0103	0.0114	0.0275	-1.1072	-2.6699
237	48.33	-0.01	-1.1826	9.9999	-0.4451	9.9999	0.3764	-0.0140	0.0116	0.0266	-0.8289	-1.9000
238	48.40	-0.02	-1.1730	9.9999	-0.4415	9.9999	0.3767	-0.0226	0.0109	0.0219	-0.4625	-0.9690
239	48.51	-0.01	-1.1920	9.9999	-0.4491	9.9999	0.3767	-0.0323	0.0125	0.0175	-0.3872	-0.5418
240	48.58	-0.02	-1.1746	9.9999	-0.4420	9.9999	0.3768	-0.0283	0.0116	0.0189	-0.4101	-0.6678
241	48.65	-0.01	-1.1873	9.9999	-0.4473	9.9999	0.3769	-0.0366	0.0110	0.0126	-0.2836	-0.3299
242	48.78	-0.02	-1.1777	9.9999	-0.4441	9.9999	0.3771	-0.0266	0.0118	0.0184	-0.4438	-0.6917
243	48.83	-0.02	-1.1841	9.9999	-0.4465	9.9999	0.3771	-0.0352	0.0110	0.0151	-0.3126	-0.4290
244	48.91	-0.02	-1.1913	9.9999	-0.4504	9.9999	0.3780	-0.0423	0.0107	0.0145	-0.2537	-0.2962
245	49.01	-0.03	-1.1913	9.9999	-0.4504	9.9999	0.3780	-0.0371	0.0111	0.0123	-0.2993	-0.3315
246	49.08	-0.02	-1.1913	9.9999	-0.4491	9.9999	0.3770	-0.0498	0.0113	0.0101	-0.2275	-0.2032
247	49.18	-0.01	-1.2007	9.9999	-0.4542	9.9999	0.3783	-0.0531	0.0108	0.0071	-0.2039	-0.1340
248	49.25	-0.02	-1.1920	9.9999	-0.4517	9.9999	0.3787	-0.0497	0.0111	0.0087	-0.2239	-0.1754
249	49.34	-0.03	-1.1882	9.9999	-0.4475	9.9999	0.3767	-0.0537	0.0119	0.0059	-0.2221	-0.1101
250	49.44	-0.04	-1.1806	9.9999	-0.4474	9.9999	0.3771	-0.0514	0.0109	0.0073	-0.2126	-0.1423
251	49.53	-0.05	-1.1819	9.9999	-0.4458	9.9999	0.3772	-0.0392	0.0117	0.0109	-0.2986	-0.2781
252	49.61	-0.01	-1.1977	9.9999	-0.4515	9.9999	0.3769	-0.0455	0.0095	0.0115	-0.2181	-0.2533
253	49.71	-0.01	-1.2039	9.9999	-0.4531	9.9999	0.3780	-0.0495	0.0102	0.0073	-0.2074	-0.1486
254	49.78	-0.01	-1.2055	9.9999	-0.4540	9.9999	0.3771	-0.0616	0.0100	0.0057	-0.1627	-0.0927
255	49.87	-0.01	-1.1961	9.9999	-0.4514	9.9999	0.3774	-0.0595	0.0092	0.0051	-0.1549	-0.0859
256	49.95	-0.02	-1.1913	9.9999	-0.4504	9.9999	0.3780	-0.0639	0.0107	0.0017	-0.1678	-0.0266
257	50.02	-0.01	-1.1929	9.9999	-0.4505	9.9999	0.3776	-0.0634	0.0098	0.0042	-0.1549	-0.0664
258	50.13	-0.02	-1.2039	9.9999	-0.4551	9.9999	0.3780	-0.0703	0.0094	-0.0010	-0.1340	0.0142
259	50.21	-0.02	-1.2093	9.9999	-0.4581	9.9999	0.3788	-0.0736	0.0083	-0.0027	-0.1157	0.0367
260	50.29	-0.01	-1.2087	9.9999	-0.4565	9.9999	0.3780	-0.0841	0.0078	-0.0069	-0.0905	0.0821
261	50.38	-0.01	-1.2071	9.9999	-0.4574	9.9999	0.3789	-0.0752	0.0078	-0.0029	-0.1039	0.0386
262	50.45	-0.02	-1.2134	9.9999	-0.4604	9.9999	0.3794	-0.0770	0.0077	-0.0044	-0.1002	0.0572
263	50.55	-0.01	-1.2182	9.9999	-0.4614	9.9999	0.3787	-0.0855	0.0068	-0.0071	-0.0797	0.0831
264	50.62	-0.02	-1.2182	9.9999	-0.4614	9.9999	0.3787	-0.0850	0.0092	-0.0101	-0.1084	0.1190
265	50.70	-0.03	-1.2196	9.9999	-0.4624	9.9999	0.3789	-0.0907	0.0065	-0.0109	-0.0718	0.1203
266	50.80	-0.03	-1.2181	9.9999	-0.4621	9.9999	0.3796	-0.0874	0.0054	-0.0136	-0.0555	0.1398
267	50.87	-0.04	-1.2188	9.9999	-0.4607	9.9999	0.3787	-0.0949	0.0078	-0.0137	-0.0802	0.1445
268	50.95	-0.04	-1.2271	9.9999	-0.4653	9.9999	0.3790	-0.1078	0.0048	-0.0177	-0.0446	0.1643
269	51.03	-0.03	-1.2181	9.9999	-0.4621	9.9999	0.3798	-0.0916	0.0081	-0.0120	-0.0886	0.1311
270	51.11	-0.03	-1.2229	9.9999	-0.4651	9.9999	0.3792	-0.1010	0.0053	-0.0156	-0.0525	0.1566
271	51.20	-0.04	-1.2332	9.9999	-0.4671	9.9999	0.3787	-0.1048	0.0055	-0.0148	-0.0526	0.1414
272	51.28	-0.04	-1.2205	9.9999	-0.4623	9.9999	0.3786	-0.1062	0.0051	-0.0204	-0.0472	0.1887
273	51.39	-0.04	-1.2348	9.9999	-0.4665	9.9999	0.3794	-0.1046	0.0067	-0.0152	-0.0709	0.1397
274	51.45	-0.03	-1.2294	9.9999	-0.4676	9.9999	0.3803	-0.1148	0.0034	-0.0198	-0.0297	0.1726
275	51.53	-0.03	-1.2348	9.9999	-0.4705	9.9999	0.3797	-0.1079	0.0041	-0.0166	-0.0380	0.1540
276	51.61	-0.04	-1.2389	9.9999	-0.4721	9.9999	0.3810	-0.1118	0.0047	-0.0194	-0.0421	0.1737

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 50 MACH 0.80 RX10-6 1.7 PHI 45.0 CONF 81MOD15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CD3	ACPF3	YCPF3	CNF4	CH4	CD4	ACPF4	YCPF4
277	51.66	-0.04	-1.2603	9.9999	-0.4680	9.9999	0.3812	-0.0346	0.0094	0.0197	-0.2718	-0.5694
278	51.78	-0.05	-1.2431	9.9999	-0.4714	9.9999	0.3794	-0.1222	0.0037	-0.0230	-0.0303	0.1885
279	51.87	-0.04	-1.2580	9.9999	-0.4787	9.9999	0.3805	-0.0819	0.0062	-0.0050	-0.0758	0.0611
280	51.94	-0.05	-1.2431	9.9999	-0.4725	9.9999	0.3799	-0.1113	0.0037	-0.0209	-0.0333	0.1879
281	52.01	-0.04	-1.2621	9.9999	-0.4791	9.9999	0.3796	-0.1030	0.0030	-0.0118	-0.0269	0.1138
282	52.13	-0.04	-1.2665	9.9999	-0.4814	9.9999	0.3800	-0.0767	0.0063	-0.0019	-0.0823	0.0248
283	52.16	-0.03	-1.2892	9.9999	-0.4907	9.9999	0.3806	-0.0208	0.0106	0.0263	-0.5098	-1.2644
284	52.27	-0.03	-1.2828	9.9999	-0.4889	9.9999	0.3811	-0.0772	0.0075	-0.0004	-0.0973	0.0052
285	52.35	-0.03	-1.3051	9.9999	-0.4976	9.9999	0.3813	-0.0383	0.0099	0.0102	-0.2572	-0.4727
286	52.43	-0.02	-1.3178	9.9999	-0.5031	9.9999	0.3818	0.0640	0.0184	0.0632	0.2881	0.9875
287	52.51	-0.03	-1.3274	9.9999	-0.5063	9.9999	0.3814	0.0591	0.0174	0.0553	0.4452	1.4118
288	52.61	-0.03	-1.3498	9.9999	-0.5157	9.9999	0.3821	0.1209	0.0276	0.0909	0.2286	0.7517
289	52.68	-0.02	-1.3417	9.9999	-0.5115	9.9999	0.3815	0.1196	0.0300	0.0879	0.2511	0.7347
290	52.76	-0.02	-1.3258	9.9999	-0.5056	9.9999	0.3814	0.0869	0.0246	0.0733	0.2800	0.6328
291	52.80	-0.03	-1.3401	9.9999	-0.5111	9.9999	0.3814	0.1018	0.0259	0.0792	0.2548	0.7778
292	52.92	-0.00	-1.3354	9.9999	-0.5082	9.9999	0.3806	0.1158	0.0301	0.0769	0.2603	0.6811
293	53.01	-0.03	-1.3338	9.9999	-0.5081	9.9999	0.3809	0.1053	0.0294	0.0733	0.2796	0.6958
294	53.09	-0.02	-1.3226	9.9999	-0.5053	9.9999	0.3821	0.0847	0.0270	0.0601	0.3193	0.7092
295	53.18	-0.02	-1.3450	9.9999	-0.5140	9.9999	0.3822	0.1128	0.0288	0.0771	0.2556	0.6832
296	53.27	-0.01	-1.3433	9.9999	-0.5127	9.9999	0.3817	0.1049	0.0300	0.0700	0.2664	0.6670
297	53.34	-0.02	-1.3353	9.9999	-0.5114	9.9999	0.3830	0.0376	0.0232	0.0365	0.6173	0.9707
298	53.42	-0.02	-1.3433	9.9999	-0.5127	9.9999	0.3817	0.0681	0.0240	0.0530	0.3531	0.7779
299	53.51	-0.03	-1.3337	9.9999	-0.5094	9.9999	0.3820	0.0614	0.0228	0.0463	0.3721	0.7537
300	53.61	-0.03	-1.3461	9.9999	-0.5162	9.9999	0.3829	0.0546	0.0219	0.0423	0.4020	0.7743
301	53.67	-0.05	-1.3449	9.9999	-0.5155	9.9999	0.3832	0.0284	0.0196	0.0300	0.6975	1.0563
302	53.75	-0.04	-1.3400	9.9999	-0.5137	9.9999	0.3834	0.0286	0.0196	0.0306	0.6856	1.0699
303	53.84	-0.05	-1.3623	9.9999	-0.5242	9.9999	0.3848	0.0310	0.0163	0.0319	0.5906	1.0290
304	53.92	-0.05	-1.3544	9.9999	-0.5198	9.9999	0.3838	0.0310	0.0163	0.0333	0.5906	1.0742
305	54.02	-0.05	-1.3703	9.9999	-0.5266	9.9999	0.3845	-0.0020	0.0156	0.0204	-7.4032	-10.2000
306	54.08	-0.04	-1.3464	9.9999	-0.5175	9.9999	0.3847	0.0163	0.0189	0.0269	1.1600	1.6503
307	54.17	-0.05	-1.3607	9.9999	-0.5241	9.9999	0.3852	-0.0005	0.0165	0.0213	-33.0132	-42.6000
308	54.26	-0.06	-1.3713	9.9999	-0.5285	9.9999	0.3857	0.0048	0.0166	0.0204	3.4597	4.2500
309	54.35	-0.07	-1.3872	9.9999	-0.5360	9.9999	0.3864	0.0052	0.0159	0.0250	3.0589	4.8077
310	54.41	-0.07	-1.3744	9.9999	-0.5312	9.9999	0.3865	0.0	0.0153	0.0205	0.0153	0.0205
311	54.50	-0.07	-1.3872	9.9999	-0.5366	9.9999	0.3868	-0.0040	0.0162	0.0197	-4.0516	-4.9250
312	54.59	-0.08	-1.4015	9.9999	-0.5426	9.9999	0.3873	0.0106	0.0159	0.0274	1.5006	2.5849
313	54.67	-0.09	-1.4064	9.9999	-0.5438	9.9999	0.3866	0.0105	0.0162	0.0261	1.5435	2.4857
314	54.74	-0.09	-1.3920	9.9999	-0.5383	9.9999	0.3867	0.0067	0.0166	0.0246	2.4766	3.6716
315	54.82	-0.09	-1.4064	9.9999	-0.5432	9.9999	0.3862	0.0106	0.0159	0.0261	1.5006	2.4623
316	54.92	-0.11	-1.4090	9.9999	-0.5461	9.9999	0.3876	0.0252	0.0159	0.0332	0.6312	1.3175
317	55.00	-0.11	-1.4059	9.9999	-0.5440	9.9999	0.3869	0.0139	0.0166	0.0272	1.1947	1.9568
318	55.07	-0.11	-1.4122	9.9999	-0.5477	9.9999	0.3870	0.0063	0.0173	0.0247	2.7471	3.9206
319	55.17	-0.11	-1.4122	9.9999	-0.5477	9.9999	0.3878	-0.0007	0.0168	0.0187	-24.0096	-26.7143
320	55.24	-0.11	-1.4010	9.9999	-0.5430	9.9999	0.3876	-0.0035	0.0151	0.0189	-4.3160	-5.4000
321	55.32	-0.10	-1.3998	9.9999	-0.5395	9.9999	0.3882	-0.0095	0.0162	0.0160	-1.7059	-1.6842
322	55.39	-0.12	-1.4026	9.9999	-0.5450	9.9999	0.3865	-0.0023	0.0164	0.0192	-7.1333	-8.3478

TEST 7 | PART 56 | MACH 0.80 | RX10-6 1.7 | PHI 45.0 | CONF B1W0F15 | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

PLINT	ALPHA	DELA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
323	55.48	-0.10	-1.3576	9.9999	-0.5433	9.9999	0.3887	-0.0109	0.0134	0.0151	-1.4134	-1.3853
324	55.57	-0.11	-1.3847	9.9999	-0.5421	9.9999	0.3901	-0.0215	0.0149	0.0122	-0.6933	-0.5674
325	55.65	-0.11	-1.3697	9.9999	-0.5414	9.9999	0.3896	-0.0297	0.0132	0.0060	-0.4446	-0.2694
326	55.74	-0.10	-1.3529	9.9999	-0.5423	9.9999	0.3893	-0.0225	0.0133	0.0105	-0.5913	-0.4667
327	55.82	-0.12	-1.4068	9.9999	-0.5506	9.9999	0.3906	-0.0107	0.0150	0.0150	-1.4024	-1.4019
328	55.93	-0.12	-1.4155	9.9999	-0.5479	9.9999	0.3870	-0.0095	0.0162	0.0146	-1.7059	-1.5368
329	56.01	-0.10	-1.4159	9.9999	-0.5484	9.9999	0.3873	-0.0101	0.0173	0.0141	-1.7136	-1.3960
330	56.10	-0.11	-1.4190	9.9999	-0.5511	9.9999	0.3863	-0.0200	0.0155	0.0110	-0.7753	-0.5500
331	56.17	-0.11	-1.4175	9.9999	-0.5485	9.9999	0.3869	-0.0153	0.0170	0.0130	-1.1116	-0.8497
332	56.27	-0.10	-1.4159	9.9999	-0.5477	9.9999	0.3868	-0.0133	0.0166	0.0137	-1.2486	-1.0301
333	56.34	-0.10	-1.4142	9.9999	-0.5485	9.9999	0.3881	-0.0220	0.0158	0.0089	-0.7165	-0.4645
334	56.44	-0.09	-1.4226	9.9999	-0.5525	9.9999	0.3883	-0.0151	0.0165	0.0122	-1.0932	-0.8079
335	56.52	-0.09	-1.4163	9.9999	-0.5501	9.9999	0.3884	-0.0209	0.0172	0.0072	-0.8233	-0.3445
336	56.58	-0.11	-1.4133	9.9999	-0.5489	9.9999	0.3884	-0.0376	0.0147	0.0043	-0.3911	-0.1144
337	56.66	-0.09	-1.4165	9.9999	-0.5492	9.9999	0.3877	-0.0270	0.0151	0.0064	-0.5595	-0.2370
338	56.74	-0.09	-1.4138	9.9999	-0.5481	9.9999	0.3876	-0.0408	0.0140	0.0052	-0.3441	-0.0786
339	56.82	-0.10	-1.4090	9.9999	-0.5455	9.9999	0.3874	-0.0308	0.0136	0.0040	-0.3507	-0.1031
340	56.90	-0.09	-1.4138	9.9999	-0.5469	9.9999	0.3868	-0.0456	0.0130	0.0007	-0.2846	-0.0153
341	56.98	-0.09	-1.4234	9.9999	-0.5495	9.9999	0.3860	-0.0481	0.0137	0.0015	-0.2979	-0.0326
342	57.05	-0.09	-1.4173	9.9999	-0.5475	9.9999	0.3863	-0.0458	0.0132	0.0014	-0.2890	-0.0306
343	57.13	-0.09	-1.4186	9.9999	-0.5489	9.9999	0.3866	-0.0446	0.0144	0.0017	-0.3237	-0.0362
344	57.21	-0.09	-1.4050	9.9999	-0.5432	9.9999	0.3866	-0.0474	0.0131	0.0013	-0.2771	-0.0275
345	57.29	-0.08	-1.3988	9.9999	-0.5396	9.9999	0.3857	-0.0537	0.0113	-0.0035	-0.2109	0.0653
346	57.35	-0.09	-1.4192	9.9999	-0.5499	9.9999	0.3874	-0.0571	0.0139	-0.0024	-0.1913	0.0421
347	57.42	-0.07	-1.4145	9.9999	-0.5471	9.9999	0.3867	-0.0674	0.0131	-0.0060	-0.1501	0.1189
348	57.50	-0.08	-1.4068	9.9999	-0.5414	9.9999	0.3865	-0.0672	0.0098	-0.0073	-0.1461	0.1088
349	57.58	-0.07	-1.3995	9.9999	-0.5404	9.9999	0.3861	-0.0594	0.0089	-0.0009	-0.1501	0.0152
350	57.64	-0.07	-1.3980	9.9999	-0.5390	9.9999	0.3855	-0.0714	0.0080	-0.0066	-0.1122	0.0926
351	57.72	-0.08	-1.4069	9.9999	-0.5443	9.9999	0.3863	-0.0627	0.0084	-0.0032	-0.1342	0.0511
352	57.79	-0.07	-1.4090	9.9999	-0.5436	9.9999	0.3858	-0.0657	0.0073	-0.0036	-0.1113	0.0549
353	57.86	-0.07	-1.3980	9.9999	-0.5372	9.9999	0.3864	-0.0704	0.0059	-0.0062	-0.0840	0.0882
354	57.93	-0.07	-1.4026	9.9999	-0.5425	9.9999	0.3868	-0.0741	0.0063	-0.0051	-0.0852	0.0689
355	58.01	-0.08	-1.4042	9.9999	-0.5420	9.9999	0.3860	-0.0733	0.0062	-0.0067	-0.1121	0.0915
356	58.10	-0.08	-1.4073	9.9999	-0.5448	9.9999	0.3871	-0.0664	0.0072	-0.0055	-0.1348	0.0805
357	58.15	-0.07	-1.3990	9.9999	-0.5378	9.9999	0.3869	-0.0740	0.0061	-0.0064	-0.0826	0.0866
358	58.22	-0.07	-1.4042	9.9999	-0.5433	9.9999	0.3869	-0.0724	0.0066	-0.0042	-0.0913	0.0581
359	58.22	-0.06	-1.3994	9.9999	-0.5416	9.9999	0.3870	-0.0796	0.0065	-0.0081	-0.0818	0.1019
360	58.23	-0.06	-1.4085	9.9999	-0.5449	9.9999	0.3867	-0.0719	0.0059	-0.0050	-0.0752	0.0696
361	58.23	-0.05	-1.4123	9.9999	-0.5461	9.9999	0.3866	-0.0704	0.0064	-0.0034	-0.0911	0.0484
362	58.24	-0.06	-1.4170	9.9999	-0.5471	9.9999	0.3861	-0.0797	0.0071	-0.0060	-0.0892	0.0754

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/D-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 57 0.90 1.7 45.0 BIMOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	DELM	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.71	0.10	-0.7219	1.2323	0.1710	-0.3682	-0.0043	0.2365	0.0789	0.1576	-1.7071
2	-5.72	0.09	-0.7147	1.2244	0.1029	-0.3301	-0.0045	0.2349	0.0789	0.1560	-1.7180
3	-5.72	0.09	-0.6997	1.1960	0.1148	-0.3167	-0.0044	0.2351	0.0781	0.1570	-1.7469
4	-5.71	0.09	-0.7034	1.2145	0.0523	-0.3304	-0.0047	0.2300	0.0798	0.1508	-1.7267
5	-5.73	0.09	-0.7790	1.2854	0.0759	-0.2796	-0.0047	0.2268	0.0789	0.1479	-1.6501
6	-5.37	0.09	-0.5349	0.9044	0.0565	-0.1675	-0.0047	0.2493	0.0748	0.1745	-1.6909
7	-4.34	0.09	-0.4098	0.7586	0.0482	-0.2466	-0.0046	0.2482	0.0709	0.1773	-1.6152
8	-3.38	0.10	-0.3710	0.6526	0.1009	-0.2324	-0.0046	0.2498	0.0675	0.1833	-1.4922
9	-2.40	0.09	-0.2517	0.3705	0.0970	-0.1068	-0.0046	0.2546	0.0675	0.1871	-1.4719
10	-1.50	0.08	-0.1342	0.2274	-0.0754	-0.1114	-0.0051	0.2540	0.0676	0.1864	-1.6336
11	-0.54	0.09	-0.0300	0.1042	0.0317	-0.1925	-0.0045	0.2533	0.0675	0.1858	-2.8917
12	0.45	0.09	0.0310	0.0599	0.0816	-0.2015	-0.0042	0.2585	0.0671	0.1914	1.9323
13	1.36	0.08	0.1417	-0.0784	0.0271	-0.1530	-0.0043	0.2607	0.0654	0.1953	-0.5532
14	2.38	0.10	0.2412	-0.2298	0.0382	-0.1613	-0.0040	0.2574	0.0667	0.1907	-0.9525
15	3.37	0.09	0.3377	-0.4458	0.1402	-0.2559	-0.0038	0.2509	0.0698	0.1801	-1.2464
16	4.29	0.09	0.5107	-0.7018	0.0849	-0.2299	-0.0040	0.2508	0.0705	0.1861	-1.3743
17	5.20	0.08	0.5873	-0.8944	-0.0708	-0.1523	-0.0040	0.2046	0.0743	0.1903	-1.5228
18	6.17	0.10	0.7473	-1.2048	0.1574	-0.3576	-0.0039	0.2651	0.0815	0.1836	-1.6122
19	7.15	0.09	0.8953	-1.5159	0.1550	-0.3498	-0.0041	0.2558	0.0662	0.1896	-1.6932
20	8.11	0.09	1.0339	-1.8300	0.1188	-0.3980	-0.0043	0.2508	0.0916	0.1652	-1.7763
21	9.03	0.10	1.1639	-2.1711	0.2089	-0.4813	-0.0045	0.2554	0.0972	0.1583	-1.8339
22	9.98	0.11	1.4067	-2.6132	0.2239	-0.5009	-0.0050	0.2519	0.1035	0.1485	-1.8576
23	10.98	0.10	1.5338	-2.9715	0.1423	-0.4520	-0.0059	0.2504	0.1120	0.1385	-1.9374
24	11.93	0.09	1.7284	-3.3376	0.0766	-0.2801	-0.0062	0.2499	0.1204	0.1296	-1.9311
25	12.90	0.09	1.8963	-3.6569	0.0502	-0.3220	0.0060	0.2449	0.1259	0.1191	-1.9265
26	13.88	0.09	2.1159	-4.1241	0.0238	-0.3497	-0.0012	0.2381	0.1326	0.1056	-1.9491
27	14.84	0.09	2.2651	-4.4987	0.0761	-0.4281	0.0053	0.2424	0.1372	0.1053	-1.9455
28	15.86	0.09	2.5147	-4.8126	0.0418	-0.4389	-0.0082	0.2265	0.1423	0.0840	-1.9138
29	16.86	0.09	2.6535	-5.0517	0.0599	-0.3295	-0.0065	0.2272	0.1486	0.0786	-1.9038
30	17.80	0.11	2.8965	-5.4447	0.2341	-0.5427	-0.0017	0.2232	0.1546	0.0686	-1.9061
31	18.83	0.11	3.0304	-5.7576	0.2430	-0.4396	-0.0007	0.2167	0.1626	0.0541	-1.9000
32	19.82	0.09	3.2059	-5.9895	0.0031	-0.1532	-0.0096	0.2171	0.1727	0.0444	-1.8685
33	20.78	0.10	3.4179	-6.3222	0.2114	-0.4679	-0.0080	0.2174	0.1874	0.0300	-1.8498
34	21.74	0.11	3.5582	-6.5080	0.2342	-0.3393	-0.0220	0.2205	0.2026	0.0179	-1.8292
35	22.72	0.09	3.7370	-6.8325	0.0673	0.1443	0.0165	0.2667	0.2554	0.0113	-1.7745
36	23.70	0.11	3.9041	-6.8738	0.2326	0.0156	0.0106	0.2926	0.2824	0.0101	-1.7007
37	24.64	0.12	4.0137	-6.7659	0.3638	-0.5151	-0.0054	0.3226	0.3259	-0.0033	-1.6902
38	25.59	0.14	4.2347	-6.9310	0.6112	-0.8036	-0.0379	0.3167	0.3390	-0.0219	-1.6367
39	26.58	0.16	4.5150	-7.0343	0.8012	-1.0300	-0.0335	0.2968	0.3412	-0.0424	-1.5591
40	27.55	0.16	4.7303	-7.3084	0.9115	-1.1034	0.0231	0.3006	0.3455	-0.0449	-1.5424
41	28.21	0.15	4.8511	-7.4033	0.7896	-0.9528	0.0495	0.2890	0.3489	-0.0599	-1.4766
42	28.21	0.15	4.8556	-7.3229	0.7919	-1.0448	0.0427	0.2986	0.3489	-0.0503	-1.5081
43	28.22	0.15	4.8665	-7.2034	0.7998	-1.0031	0.0497	0.2909	0.3479	-0.0570	-1.4741
44	28.21	0.15	4.8470	-7.2343	0.7968	-0.9810	0.0494	0.3042	0.3495	-0.0453	-1.4925
45	28.27	0.16	4.8681	-7.1708	0.8509	-0.9738	0.0563	0.2913	0.3507	-0.0594	-1.4730
46	28.51	0.16	4.9442	-7.2206	0.8947	-1.1223	0.0533	0.2925	0.3533	-0.0608	-1.4610

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 57 MACH 0.90 RN/D=0 1.7 PHI 45.0 CONF BLKOFF 5 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	28.68	0.17	4.9474	-7.2456	0.7016	-1.1636	0.0703	0.2957	0.3578	-0.0621	-1.4645
48	28.78	0.17	5.0224	-7.2909	0.9075	-1.0941	0.0703	0.2967	0.3595	-0.0628	-1.4517
49	28.97	0.17	5.1174	-7.3008	0.9361	-1.0711	0.0968	0.3062	0.3629	-0.0567	-1.4278
50	29.13	0.17	5.2016	-7.3055	0.9612	-1.0793	0.0839	0.2625	0.3646	-0.0820	-1.4160
51	29.23	0.17	5.2232	-7.2816	1.0032	-1.0925	0.0710	0.2950	0.3667	-0.0717	-1.3902
52	29.44	0.18	5.3248	-7.3099	1.0701	-1.0866	0.1240	0.2923	0.3701	-0.0778	-1.3916
53	29.53	0.18	5.3405	-7.2723	1.0593	-0.9944	0.1112	0.2842	0.3710	-0.0867	-1.3603
54	29.72	0.18	5.4932	-7.4057	1.0859	-1.1097	0.1182	0.2962	0.3727	-0.0765	-1.3546
55	29.88	0.17	5.5880	-7.3552	0.9770	-0.8797	0.1174	0.2996	0.3727	-0.0731	-1.3651
56	30.00	0.17	5.4467	-7.2305	0.9054	-0.7352	0.1242	0.2816	0.3747	-0.0930	-1.3281
57	30.15	0.17	5.5613	-7.3560	1.0015	-0.7914	0.1246	0.2903	0.3795	-0.0896	-1.3190
58	30.28	0.18	5.5515	-7.3125	1.0300	-0.7650	0.1247	0.2938	0.3786	-0.0848	-1.3173
59	30.43	0.18	5.7017	-7.4017	1.0425	-0.7835	0.1446	0.2873	0.3816	-0.0942	-1.3087
60	30.55	0.18	5.6402	-7.4383	1.0218	-0.6365	0.1441	0.2976	0.3832	-0.0856	-1.3188
61	30.69	0.18	5.7001	-7.3801	1.0374	-0.6747	0.1447	0.3013	0.3874	-0.0861	-1.2958
62	30.82	0.18	5.7130	-7.4561	1.0644	-0.6153	0.1513	0.2851	0.3887	-0.1036	-1.2904
63	30.97	0.19	5.8013	-7.4774	1.1092	-0.6734	0.1646	0.2919	0.3888	-0.0970	-1.2888
64	31.11	0.18	5.8760	-7.4842	1.0959	-0.5740	0.1580	0.2871	0.3908	-0.1037	-1.2735
65	31.25	0.17	5.9503	-7.5869	0.9853	-0.2833	0.1707	0.2947	0.3977	-0.1031	-1.2518
66	31.39	0.19	6.0757	-7.5024	1.1546	-0.4006	0.1782	0.2965	0.4014	-0.1050	-1.2465
67	31.53	0.19	6.1629	-7.5614	1.1648	-0.4225	0.1787	0.2869	0.4032	-0.1163	-1.2269
68	31.68	0.19	6.2673	-7.5513	1.1473	-0.2787	0.1788	0.2873	0.4061	-0.1188	-1.2049
69	31.81	0.19	6.2071	-7.5424	1.1058	-0.3225	0.1652	0.3008	0.4074	-0.1067	-1.2151
70	31.94	0.19	6.3623	-7.5151	1.1306	-0.1195	0.1725	0.3020	0.4124	-0.1105	-1.1811
71	32.07	0.20	6.3643	-7.4024	1.1152	0.0105	0.1661	0.2994	0.4142	-0.1149	-1.1631
72	32.21	0.20	6.4018	-7.3870	1.1346	-0.1413	0.1732	0.3111	0.4159	-0.1049	-1.1539
73	32.35	0.20	6.4941	-7.4467	1.0864	0.1206	0.1794	0.2918	0.4205	-0.1290	-1.1457
74	32.48	0.20	6.5179	-7.5237	1.1243	0.1749	0.1800	0.3041	0.4213	-0.1173	-1.1236
75	32.61	0.20	6.6265	-7.4935	1.0717	0.2551	0.1796	0.3048	0.4227	-0.1180	-1.1308
76	32.73	0.20	6.6677	-7.4487	1.2053	0.1900	0.1800	0.2969	0.4244	-0.1276	-1.1273
77	32.89	0.20	6.8433	-7.5202	1.0866	0.5410	0.1836	0.2960	0.4302	-0.1323	-1.0897
78	33.01	0.19	6.7716	-7.2961	1.0256	0.5702	0.1734	0.3080	0.4317	-0.1238	-1.0775
79	33.13	0.20	6.8520	-7.4766	1.0731	0.4746	0.1799	0.3001	0.4317	-0.1317	-1.0911
80	33.26	0.19	6.9027	-7.1036	1.1172	0.5004	0.1747	0.3029	0.4342	-0.1314	-1.0202
81	33.40	0.19	7.0055	-7.1940	1.0335	0.6632	0.1743	0.3052	0.4359	-0.1308	-1.0269
82	33.52	0.20	6.9711	-6.9965	1.1519	0.4959	0.2000	0.2922	0.4349	-0.1427	-1.0039
83	33.64	0.19	7.0460	-7.1041	0.9240	0.7321	0.2009	0.3095	0.4394	-0.1300	-1.0165
84	33.78	0.18	7.0357	-6.9115	0.8236	0.6023	0.2074	0.2989	0.4385	-0.1417	-0.9624
85	33.90	0.19	7.1315	-6.9463	0.9550	0.5509	0.2084	0.2876	0.4390	-0.1514	-0.9743
86	34.03	0.19	7.2113	-6.8881	1.0340	0.5976	0.2196	0.2752	0.4385	-0.1633	-0.9524
87	34.15	0.19	7.2543	-6.9407	0.9087	0.6513	0.2087	0.2926	0.4402	-0.1477	-0.9579
88	34.27	0.18	7.3490	-6.7122	0.8650	0.6775	0.2292	0.2704	0.4402	-0.1698	-0.9133
89	34.39	0.19	7.2692	-6.9058	0.9703	0.6839	0.2154	0.2941	0.4415	-0.1475	-0.9556
90	34.54	0.18	7.4325	-6.7021	0.8405	0.6234	0.2247	0.2881	0.4423	-0.1542	-0.9017
91	34.64	0.18	7.3831	-6.8951	0.9222	0.6383	0.2252	0.2842	0.4440	-0.1598	-0.9068
92	34.77	0.20	7.4323	-6.8925	1.1015	0.4347	0.2372	0.2930	0.4461	-0.1532	-0.9005

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIU-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 5/ 0.90 1.7 45.0 BIWOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAD	CAF	XCP
93	34.90	0.18	7.5093	-6.4584	0.9061	0.5447	0.2376	0.2708	0.4448	-0.1740	-0.8601
94	35.00	0.18	7.4719	-6.4151	0.9270	0.5622	0.2376	0.2886	0.4440	-0.1555	-0.8586
95	35.14	0.20	7.5031	-6.3574	1.1313	0.5670	0.2380	0.2823	0.4469	-0.1646	-0.8047
96	35.27	0.18	7.5075	-6.3606	0.9305	0.5403	0.2384	0.2732	0.4465	-0.1733	-0.8308
97	35.40	0.19	7.5032	-6.4427	1.0501	0.5662	0.2386	0.2705	0.4469	-0.1764	-0.8407
98	35.52	0.19	7.5057	-6.1444	0.9445	0.5820	0.2200	0.2582	0.4448	-0.1866	-0.8079
99	35.62	0.20	7.7426	-6.6920	1.1006	0.6243	0.2377	0.2908	0.4462	-0.1495	-0.8643
100	35.75	0.19	7.7511	-6.6278	1.0945	0.5877	0.2394	0.2929	0.4466	-0.1937	-0.7906
101	35.89	0.18	7.8410	-6.8858	0.9051	0.5783	0.2202	0.2937	0.4474	-0.1538	-0.7740
102	35.99	0.19	7.7705	-6.9876	1.0398	0.6000	0.2397	0.2727	0.4461	-0.1734	-0.7660
103	36.12	0.19	7.8359	-6.0944	1.0711	0.6053	0.2208	0.2672	0.4445	-0.1773	-0.7267
104	36.24	0.17	7.9572	-6.6241	0.8106	0.5253	0.2137	0.2751	0.4470	-0.1719	-0.7068
105	36.34	0.17	7.9009	-6.5408	0.8350	0.6074	0.2203	0.2828	0.4461	-0.1633	-0.7020
106	36.46	0.19	7.9405	-6.0071	0.9762	0.6374	0.2205	0.2802	0.4478	-0.1876	-0.7314
107	36.61	0.18	7.9314	-6.0072	0.8464	0.4626	0.2008	0.2619	0.4487	-0.1808	-0.7070
108	36.74	0.18	8.0014	-6.7175	0.8233	0.6860	0.2201	0.2661	0.4483	-0.1822	-0.7070
109	36.86	0.17	8.1478	-6.3642	0.7300	0.5784	0.1976	0.2571	0.4491	-0.1920	-0.6808
110	36.98	0.16	8.1183	-6.4707	0.6095	0.6753	0.1874	0.2710	0.4517	-0.1807	-0.6739
111	37.09	0.16	8.1714	-6.4909	0.6025	0.4933	0.2013	0.2472	0.4513	-0.2041	-0.6654
112	37.23	0.16	8.3023	-6.6757	0.6801	0.5311	0.2144	0.2380	0.4530	-0.2150	-0.6771
113	37.36	0.16	8.2947	-6.6177	0.9854	0.5044	0.2148	0.2501	0.4513	-0.2012	-0.6773
114	37.49	0.19	8.2360	-6.2774	0.9876	0.4737	0.1891	0.2619	0.4496	-0.1877	-0.6408
115	37.58	0.16	8.4216	-6.4314	0.7605	0.6079	0.1804	0.2426	0.4537	-0.2111	-0.6449
116	37.69	0.16	8.2360	-6.0492	0.7044	0.5460	0.1689	0.2534	0.4492	-0.1958	-0.6131
117	37.80	0.18	8.3887	-6.1585	1.0022	0.2806	0.1701	0.2362	0.4492	-0.2130	-0.6149
118	37.96	0.17	8.4009	-6.2203	0.9136	0.4255	0.1763	0.2446	0.4496	-0.2050	-0.6214
119	38.13	0.17	8.5114	-6.1516	0.8710	0.7007	0.1630	0.2451	0.4580	-0.2129	-0.6053
120	38.24	0.17	8.4826	-6.2663	0.9187	0.6272	0.1695	0.2458	0.4538	-0.2080	-0.6208
121	38.36	0.16	8.5411	-6.1564	0.7613	0.7049	0.1759	0.2564	0.4508	-0.2004	-0.6037
122	38.48	0.16	8.4471	-6.0057	0.8230	0.6317	0.1312	0.2293	0.4509	-0.2216	-0.5452
123	38.60	0.15	8.4952	-6.0965	0.5479	0.4907	0.1503	0.2481	0.4486	-0.2007	-0.5411
124	38.71	0.15	8.6139	-6.0279	0.7378	0.5652	0.1566	0.2260	0.4517	-0.2257	-0.5837
125	38.83	0.13	8.5168	-6.4974	0.4924	0.6434	0.1108	0.2376	0.4509	-0.2139	-0.5261
126	38.94	0.13	8.5399	-6.3948	0.4004	0.6811	0.0847	0.2452	0.4508	-0.2116	-0.5146
127	39.05	0.15	8.6538	-6.4255	0.6007	0.5013	0.1502	0.2357	0.4547	-0.2190	-0.5692
128	39.15	0.14	8.5059	-6.2466	0.5357	0.6719	0.0567	0.2426	0.4573	-0.2147	-0.4998
129	39.25	0.13	8.6082	-6.0269	0.4327	0.7520	0.0848	0.2356	0.4595	-0.2237	-0.5319
130	39.38	0.13	8.7019	-6.4264	0.4747	0.6202	0.0592	0.2071	0.4611	-0.2540	-0.5051
131	39.50	0.15	8.8351	-6.4665	0.6713	0.6147	0.0796	0.2370	0.4644	-0.2268	-0.5058
132	39.61	0.11	8.8447	-6.2693	0.3079	0.5207	0.0346	0.2271	0.4631	-0.2360	-0.4827
133	39.72	0.11	8.7634	-6.2520	0.2446	0.7443	0.0458	0.2481	0.4649	-0.2168	-0.4852
134	39.81	0.12	8.8056	-6.3291	0.3146	0.7007	0.0397	0.2251	0.4662	-0.2411	-0.4872
135	39.91	0.11	8.8391	-6.1926	0.2257	0.9383	0.0206	0.2432	0.4666	-0.2234	-0.4641
136	40.03	0.10	8.9244	-6.1384	0.1607	0.6714	0.0200	0.2505	0.4655	-0.2146	-0.4037
137	40.14	0.10	9.0050	-6.2414	0.1569	0.7572	0.0330	0.2156	0.4640	-0.2504	-0.4710
138	40.25	0.12	9.0132	-6.1959	0.3385	0.7871	0.0143	0.2383	0.4667	-0.2284	-0.4610

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 57 MACH 0.90 RATIO-0 1.7 PHI 45.0 CONF BIWGF15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	40.33	0.08	8.8407	-3.7404	-0.0935	0.6681	0.0130	0.2207	0.4574	-0.2367	-0.4231
140	40.44	0.10	8.9948	-3.9623	0.3011	0.4009	0.0145	0.2486	0.4641	-0.2155	-0.4405
141	40.53	0.10	9.0297	-3.8520	0.2661	0.5769	0.0146	0.2321	0.4650	-0.2329	-0.4267
142	40.64	0.11	9.0654	-3.8820	0.3014	0.5768	0.0163	0.2153	0.4659	-0.2506	-0.4273
143	40.73	0.08	8.9908	-3.8228	0.0037	0.7398	0.0010	0.2482	0.4657	-0.2175	-0.4029
144	40.84	0.05	9.1470	-4.0501	0.1126	0.6929	0.0011	0.2243	0.4708	-0.2465	-0.4427
145	40.93	0.09	9.2093	-3.9888	0.1249	0.5809	-0.0505	0.2351	0.4831	-0.2479	-0.4310
146	41.06	0.09	9.2765	-4.1066	0.0903	0.5415	-0.0572	0.2361	0.4819	-0.2457	-0.4427
147	41.17	0.05	9.3022	-3.9888	-0.2847	0.6328	-0.0648	0.2305	0.4844	-0.2538	-0.4266
148	41.24	0.07	9.2403	-3.9982	-0.0985	0.6900	-0.0511	0.2507	0.4832	-0.2324	-0.4327
149	41.35	0.08	9.2505	-4.0524	0.0590	0.6761	-0.0506	0.2451	0.4879	-0.2427	-0.4377
150	41.47	0.07	9.4252	-4.0750	-0.0332	0.7100	-0.0696	0.2314	0.4910	-0.2595	-0.4328
151	41.56	0.07	9.3829	-3.9591	-0.0227	0.5374	-0.0695	0.2426	0.4940	-0.2513	-0.4219
152	41.67	0.07	9.4306	-3.9442	-0.0484	0.9250	-0.0830	0.2215	0.4978	-0.2762	-0.4182
153	41.78	0.05	9.3980	-3.9402	-0.2009	0.7427	-0.1031	0.2615	0.4936	-0.2320	-0.4193
154	41.87	0.05	9.4332	-3.9619	-0.2377	0.5448	-0.0967	0.2183	0.4919	-0.2735	-0.4190
155	41.97	0.04	9.4469	-3.8311	-0.2979	0.6691	-0.0998	0.2316	0.4943	-0.2626	-0.4044
156	42.07	0.07	9.3932	-4.0050	-0.0108	0.7010	-0.1067	0.2447	0.4977	-0.2529	-0.4238
157	42.17	0.06	9.5019	-3.7593	-0.1939	0.8736	-0.1154	0.2332	0.4982	-0.2649	-0.3952
158	42.27	0.07	9.5759	-3.8527	-0.0005	0.6946	-0.0886	0.2494	0.5011	-0.2516	-0.4023
159	42.37	0.06	9.7344	-3.7505	-0.1038	0.7306	-0.1150	0.2392	0.5023	-0.2630	-0.4058
160	42.47	0.06	9.8520	-4.0704	-0.1142	0.8039	-0.1345	0.2209	0.5066	-0.2856	-0.4140
161	42.55	0.05	9.8023	-3.9177	-0.2026	0.7046	-0.1263	0.2601	0.5019	-0.2417	-0.4046
162	42.65	0.04	9.8969	-4.1913	-0.3405	1.0019	-0.1546	0.2257	0.5100	-0.2842	-0.4235
163	42.74	0.03	9.8842	-4.1982	-0.4730	1.0058	-0.1617	0.2467	0.5145	-0.2677	-0.4247
164	42.84	0.04	9.9525	-4.3102	-0.3645	1.0826	-0.1661	0.2406	0.5191	-0.2702	-0.4402
165	42.93	0.05	10.0043	-4.0927	-0.2542	0.8870	-0.1542	0.2274	0.5178	-0.2603	-0.4091
166	43.01	0.04	9.9765	-4.1520	-0.4102	1.1522	-0.1680	0.2324	0.5181	-0.2830	-0.4162
167	43.10	0.04	10.0168	-4.1168	-0.4054	1.1766	-0.1661	0.2275	0.5153	-0.2877	-0.4110
168	43.20	0.04	9.9856	-4.1166	-0.3410	0.9264	-0.1740	0.2017	0.5111	-0.2493	-0.4125
169	43.28	0.03	10.0472	-3.9302	-0.4723	1.0401	-0.1546	0.2357	0.5161	-0.2803	-0.3918
170	43.37	0.04	10.0650	-3.8179	-0.3754	0.8405	-0.1542	0.2324	0.5103	-0.2776	-0.3793
171	43.46	0.04	10.0994	-4.1162	-0.4243	1.1207	-0.1676	0.2357	0.5098	-0.2740	-0.4078
172	43.55	0.03	10.0971	-3.9568	-0.3982	0.9002	-0.1414	0.2336	0.5048	-0.2691	-0.3894
173	43.66	0.05	10.1049	-3.9738	-0.2916	0.8386	-0.1536	0.2007	0.5107	-0.3100	-0.3604
174	43.74	0.06	10.0819	-3.8040	-0.1792	0.9347	-0.1268	0.2196	0.4959	-0.2762	-0.3357
175	43.83	0.02	10.1013	-3.9692	-0.3500	0.9704	-0.1347	0.2108	0.5014	-0.2906	-0.3532
176	43.92	0.04	10.1201	-3.7669	-0.3978	0.7306	-0.1409	0.2434	0.5064	-0.2629	-0.3719
177	44.00	0.05	10.2120	-3.8891	-0.2174	0.7477	-0.1265	0.2031	0.5023	-0.2992	-0.3221
178	44.08	0.05	10.1987	-3.8300	-0.2151	0.4934	-0.1136	0.2210	0.4976	-0.2765	-0.3281
179	44.18	0.03	10.2393	-3.8142	-0.4165	0.5726	-0.1207	0.2029	0.4954	-0.2925	-0.3139
180	44.28	0.02	10.4021	-3.8977	-0.3828	0.7313	-0.1401	0.1817	0.5034	-0.3217	-0.3266
181	44.35	0.04	10.2670	-3.8695	-0.2152	0.7825	-0.1332	0.2315	0.5030	-0.2714	-0.3379
182	44.45	0.06	10.3149	-3.8349	0.0747	0.6025	-0.1369	0.2149	0.5114	-0.2965	-0.3524
183	44.56	0.02	10.5426	-4.1115	-0.3823	1.1609	-0.1667	0.2311	0.5181	-0.2869	-0.3900
184	44.64	0.02	10.4699	-3.8243	-0.4043	1.1161	-0.1660	0.2943	0.5181	-0.2637	-0.3565

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FJOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RNIO-6	PHI	CONF	L	DELT	DEL2	DEL3	DEL4	TRANSITION
7	51	0.90	1.7	45.0	B1W0F15	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
185	44.74	0.04	10.4704	-3.4535	-0.2391	0.7797	-0.1522	0.1811	0.5038	-0.3227	-0.3298
186	44.84	0.03	10.5712	-3.6607	-0.3404	0.9796	-0.1657	0.1960	0.5105	-0.3145	-0.3463
187	44.92	0.02	10.5331	-3.5646	-0.3911	1.1966	-0.1985	0.2190	0.5151	-0.2981	-0.3669
188	45.02	0.02	10.5698	-3.5546	-0.3622	0.8032	-0.1760	0.2041	0.5095	-0.2964	-0.3174
189	45.11	-0.02	10.5495	-3.5600	-0.7420	0.7415	-0.1796	0.1837	0.5152	-0.3315	-0.3142
190	45.21	-0.00	10.5302	-3.4527	-0.6708	1.3496	-0.2342	0.2265	0.5307	-0.3022	-0.4111
191	45.30	-0.01	10.7992	-3.6878	-0.7084	1.1937	-0.2319	0.1873	0.5235	-0.3362	-0.3600
192	45.37	-0.01	10.7071	-3.6938	-0.7757	1.2444	-0.2318	0.2157	0.5169	-0.3012	-0.3610
193	45.46	-0.01	10.6612	-3.6224	-0.6097	1.1596	-0.2185	0.1811	0.5215	-0.3404	-0.3519
194	45.57	0.00	10.6810	-3.6632	-0.5823	1.1259	-0.2241	0.1895	0.5191	-0.3256	-0.3367
195	45.64	0.02	10.3130	-3.6324	-0.4264	1.3011	-0.2438	0.2049	0.5193	-0.3144	-0.3544
196	45.73	0.01	11.0250	-4.0901	-0.5902	1.4580	-0.2508	0.2097	0.5265	-0.3168	-0.3714
197	45.83	-0.00	11.0801	-4.0975	-0.7151	1.0781	-0.2711	0.2297	0.5374	-0.3077	-0.4023
198	45.91	-0.02	11.0110	-3.7533	-0.8506	1.0919	-0.2446	0.1964	0.5422	-0.3258	-0.3406
199	46.00	0.00	11.0320	-4.0084	-0.6057	1.2053	-0.2442	0.1967	0.5294	-0.3227	-0.3633
200	46.03	-0.02	11.0051	-3.7965	-0.8087	1.1309	-0.2447	0.1934	0.5210	-0.3276	-0.3450
201	46.16	-0.02	10.9850	-3.9086	-0.8511	1.0695	-0.2118	0.2119	0.5239	-0.3120	-0.3194
202	46.20	-0.02	11.0013	-3.7901	-0.9150	1.3196	-0.2318	0.2070	0.5277	-0.3207	-0.3426
203	46.25	0.00	11.1913	-3.8240	-0.8094	1.3740	-0.2434	0.1547	0.5184	-0.3637	-0.3259
204	46.44	-0.03	11.0727	-3.9715	-0.8943	0.8237	-0.2116	0.1835	0.5209	-0.3374	-0.3135
205	46.53	-0.03	11.2027	-3.9235	-0.9001	0.9971	-0.2573	0.2119	0.5217	-0.3096	-0.3389
206	46.63	-0.02	11.3317	-4.0456	-0.8404	1.4576	-0.2334	0.2057	0.5315	-0.3258	-0.3567
207	46.70	-0.03	11.2343	-3.9305	-0.7316	1.0002	-0.2503	0.2073	0.5260	-0.3167	-0.3344
208	46.79	0.01	11.2459	-4.1802	-0.4915	1.8341	-0.2760	0.2084	0.5390	-0.3306	-0.3716
209	46.90	-0.03	11.2059	-3.8338	-0.8200	1.1796	-0.2239	0.1752	0.5210	-0.3478	-0.2970
210	46.96	-0.02	11.3350	-3.9259	-0.7723	1.2742	-0.2699	0.1929	0.5268	-0.3339	-0.3463
211	47.05	-0.04	11.4333	-4.0025	-0.9303	1.4076	-0.2834	0.1998	0.5281	-0.3263	-0.3527
212	47.14	-0.02	11.3266	-3.8458	-0.7470	1.3373	-0.2702	0.1965	0.5273	-0.3306	-0.3385
213	47.22	-0.07	11.3771	-3.9414	-1.1001	1.0409	-0.2447	0.1831	0.5243	-0.3412	-0.3113
214	47.32	-0.04	11.5555	-3.8960	-0.9915	1.3311	-0.2573	0.1942	0.5267	-0.3625	-0.3104
215	47.40	-0.04	11.5705	-3.8002	-0.9206	1.3628	-0.2702	0.1843	0.5285	-0.3442	-0.3264
216	47.47	-0.04	11.4726	-3.8072	-0.9283	1.0768	-0.2177	0.1716	0.5310	-0.3594	-0.2952
217	47.57	-0.03	11.5835	-3.7218	-0.8190	1.3021	-0.2696	0.1946	0.5271	-0.3325	-0.3213
218	47.65	-0.04	11.5653	-3.9468	-0.8681	1.2250	-0.2501	0.2032	0.5318	-0.3286	-0.3067
219	47.75	-0.02	11.6014	-3.8493	-0.8532	1.1049	-0.2795	0.1932	0.5326	-0.3394	-0.3295
220	47.84	-0.02	11.6016	-3.8509	-0.8590	1.2427	-0.2822	0.1882	0.5309	-0.3427	-0.3388
221	47.92	-0.00	11.7264	-3.7126	-0.8135	1.1410	-0.2886	0.1859	0.5343	-0.3484	-0.3166
222	48.01	-0.02	11.7496	-3.9283	-0.7116	1.1711	-0.2826	0.1843	0.5335	-0.3492	-0.3088
223	48.08	-0.03	11.7497	-3.8011	-0.7002	1.2052	-0.2826	0.1879	0.5338	-0.3459	-0.3065
224	48.16	-0.03	11.7157	-3.8004	-0.7776	0.9158	-0.2429	0.1863	0.5334	-0.3471	-0.2885
225	48.27	-0.05	11.7353	-3.8873	-0.8549	0.8997	-0.2166	0.1888	0.5372	-0.3706	-0.2631
226	48.35	-0.03	11.7534	-3.8407	-0.7029	0.8596	-0.2294	0.1813	0.5342	-0.3529	-0.2762
227	48.44	-0.05	11.7798	-3.8058	-0.8081	0.8964	-0.2026	0.2036	0.5368	-0.3332	-0.2552
228	48.54	-0.01	11.9613	-3.8240	-0.8267	0.9551	-0.2152	0.1811	0.5380	-0.3549	-0.2695
229	48.62	0.02	12.0847	-4.4386	-0.2713	1.5455	-0.3328	0.1872	0.5400	-0.3588	-0.3073
230	48.70	-0.04	11.9358	-3.8379	-0.7959	0.8110	-0.1892	0.1878	0.5342	-0.3084	-0.2978

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSATION
1 21 0.90 1.7 45.0 81WDF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
231	48.77	-0.02	12.1050	-3.9723	-0.0165	1.2745	-0.3072	0.1827	0.5409	-0.3582	-0.3281
232	48.88	-0.03	12.1301	-3.7358	-0.0475	1.2016	-0.2945	0.1759	0.5342	-0.3633	-0.3080
233	48.94	0.00	11.9802	-3.1102	-0.4196	0.7630	-0.2142	0.1568	0.5380	-0.3792	-0.2601
234	49.02	-0.00	11.8627	-2.6822	-0.4598	0.6074	-0.1818	0.1841	0.5389	-0.3548	-0.2261
235	49.12	-0.01	11.6584	-2.3256	-0.5256	0.6770	-0.1818	0.1735	0.5410	-0.3705	-0.2386
236	49.20	-0.04	11.9804	-2.3223	-0.7447	0.6043	-0.1759	0.1723	0.5414	-0.3491	-0.2355
237	49.27	-0.02	11.8915	-2.7396	-0.5150	0.6559	-0.1753	0.1861	0.5409	-0.3548	-0.2304
238	49.38	0.02	12.0366	-2.7806	-0.5078	0.5639	-0.1750	0.1912	0.5452	-0.3540	-0.2310
239	49.43	-0.04	11.9419	-2.6076	-0.6035	0.6262	-0.1758	0.1665	0.5401	-0.3736	-0.2234
240	49.53	-0.00	12.1181	-2.6190	-1.0069	0.4502	-0.1500	0.1337	0.5490	-0.4153	-0.1996
241	49.63	-0.01	12.0347	-2.7030	-0.5646	0.6231	-0.1750	0.1740	0.5476	-0.3736	-0.2242
242	49.72	-0.03	12.0877	-2.6794	-0.5955	0.5863	-0.1693	0.1460	0.5464	-0.4004	-0.1886
243	49.81	0.00	11.9386	-2.1259	-0.2534	0.0367	-0.1313	0.2077	0.5496	-0.3421	-0.1772
244	49.90	-0.04	12.0314	-2.0832	-0.7031	-0.2067	-0.0440	0.1761	0.5485	-0.3724	-0.1731
245	49.98	-0.01	12.0057	-2.1070	-0.3932	-0.0111	-0.0320	0.1946	0.5497	-0.3551	-0.1757
246	50.09	-0.04	12.2051	-2.2423	-0.5515	0.2000	-0.1225	0.1580	0.5518	-0.3938	-0.1837
247	50.13	-0.05	11.9033	-2.1593	-0.8028	-0.2236	-0.0313	0.2164	0.5508	-0.3404	-0.1602
248	50.23	-0.06	12.0760	-2.3024	-0.9652	-0.1403	-0.0313	0.2130	0.5596	-0.3468	-0.1907
249	50.32	-0.02	12.0549	-2.2860	-0.4733	-0.7040	0.0415	0.2083	0.5645	-0.3562	-0.1880
250	50.41	-0.06	12.2249	-2.0674	-0.9665	0.0730	-0.0769	0.1675	0.5619	-0.3944	-0.1707
251	50.50	-0.03	12.1434	-1.9751	-0.6085	-0.0331	-0.0390	0.2292	0.5676	-0.3366	-0.1627
252	50.58	-0.03	12.1642	-2.0920	-0.7696	-0.2320	-0.0300	0.1993	0.5734	-0.3701	-0.1720
253	50.66	-0.02	12.1912	-2.1367	-0.4059	-0.7595	0.0072	0.2205	0.5786	-0.3561	-0.2015
254	50.75	-0.05	12.2651	-2.4800	-0.8350	-0.6918	0.0079	0.2173	0.5820	-0.3647	-0.2029
255	50.83	-0.03	12.2013	-2.4685	-0.6671	-0.5262	-0.0300	0.1944	0.5840	-0.3896	-0.2030
256	50.93	-0.04	12.3070	-2.3846	-0.7550	-0.6801	-0.0241	0.2143	0.5929	-0.3786	-0.1938
257	50.99	-0.02	12.2613	-2.4733	-0.4437	-0.8135	0.0026	0.2135	0.5987	-0.3852	-0.2017
258	51.08	-0.03	12.2687	-2.3386	-0.5566	-0.8469	-0.0346	0.2020	0.5841	-0.3821	-0.1916
259	51.19	-0.03	12.3170	-3.0034	-0.4754	-1.3276	0.0220	0.2327	0.6072	-0.3745	-0.2447
260	51.25	-0.03	12.4046	-2.8415	-0.4566	-1.0191	0.0096	0.2090	0.6021	-0.3981	-0.2129
261	51.34	-0.02	12.4720	-2.9028	-0.4566	-1.1663	0.0027	0.2157	0.6020	-0.3883	-0.2327
262	51.43	-0.00	12.5161	-3.0050	-0.0087	-1.1554	-0.0118	0.2232	0.6083	-0.3851	-0.2449
263	51.51	-0.06	12.5467	-2.8056	-0.8862	-0.5031	-0.0311	0.2017	0.6012	-0.3995	-0.2236
264	51.60	-0.02	12.6241	-3.1050	-0.3241	-1.3466	-0.0162	0.2150	0.6121	-0.3991	-0.2503
265	51.69	-0.04	12.6518	-3.1492	-0.6134	-1.0731	-0.0492	0.2510	0.6134	-0.3824	-0.2489
266	51.78	-0.04	12.6862	-3.0752	-0.6066	-0.9360	-0.0241	0.1970	0.6078	-0.4108	-0.2459
267	51.87	-0.06	12.6829	-3.1344	-0.8675	-1.0742	-0.0566	0.2417	0.6121	-0.3704	-0.2476
268	51.94	-0.05	12.7759	-3.1178	-0.8497	-0.9177	-0.0367	0.2256	0.6133	-0.3877	-0.2440
269	52.02	-0.06	12.8406	-3.2974	-0.9251	-1.0650	-0.0371	0.2159	0.6133	-0.3974	-0.2558
270	52.10	-0.04	12.7413	-3.1055	-0.6737	-1.0993	-0.0303	0.2213	0.6150	-0.3937	-0.2484
271	52.19	-0.04	12.7990	-3.1519	-0.7455	-1.0116	-0.0304	0.2201	0.6121	-0.3920	-0.2462
272	52.30	-0.09	13.0502	-3.3170	-1.2309	-0.7607	-0.0643	0.2471	0.6215	-0.3744	-0.2542
273	52.37	-0.06	13.0101	-3.3197	-1.0045	-0.9351	-0.0574	0.2242	0.6210	-0.3966	-0.2549
274	52.43	-0.09	12.9424	-3.0932	-1.2680	-0.9849	-0.0837	0.2075	0.6155	-0.4080	-0.2390
275	52.57	-0.09	13.0457	-3.0516	-1.0954	-1.2627	-0.0249	0.1994	0.6167	-0.4143	-0.2886
276	52.63	-0.06	13.1027	-3.4367	-0.9742	-1.0013	-0.0567	0.2514	0.6221	-0.3707	-0.2612

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 57 MACH 0.90 RN/FT 1.7 PHI 45.0 CONF 81 NOF 15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSATION UNKNOWN

POINT	ALPHA	DELTA	CN	CLN	CY	CLN	CLL	LA	LAB	CAF	ACP
277	52.71	-0.05	13.3053	-4.1740	-0.7231	-1.9161	0.0279	0.2328	0.5952	-0.3624	-0.3137
278	52.81	-0.02	13.3036	-4.1741	-0.3330	-1.7391	0.0292	0.1741	0.5910	-0.4169	-0.3123
279	52.87	-0.02	13.3124	-4.1013	-0.4424	-1.7080	0.0224	0.1960	0.5870	-0.3916	-0.3126
280	52.97	-0.04	13.4036	-4.2024	-0.3502	-1.8202	0.0228	0.1707	0.5784	-0.4017	-0.3168
281	53.07	-0.03	13.3708	-4.2801	-0.4485	-1.8060	0.0162	0.1769	0.5817	-0.4048	-0.3158
282	53.13	-0.02	13.4700	-4.2613	-0.3668	-1.9585	0.0163	0.1769	0.5817	-0.4028	-0.3164
283	53.22	-0.02	13.4147	-4.1030	-0.5868	-1.9722	0.0098	0.1922	0.5822	-0.3900	-0.3103
284	53.32	-0.04	13.5400	-4.3235	-0.3629	-1.9503	0.0092	0.1842	0.5830	-0.3966	-0.3193
285	53.39	-0.02	13.6262	-4.3760	-0.3393	-2.0515	0.0231	0.1817	0.5825	-0.4008	-0.3211
286	53.47	-0.03	13.5605	-4.2786	-0.4104	-2.0615	0.0099	0.1867	0.5787	-0.3920	-0.3155
287	53.55	-0.05	13.6743	-4.3302	-0.6376	-2.2313	0.0093	0.1837	0.5809	-0.3972	-0.3167
288	53.64	-0.02	13.6760	-4.4207	-0.3908	-2.2450	-0.0030	0.1641	0.5729	-0.4118	-0.3232
289	53.72	-0.06	13.5866	-4.3699	-0.7435	-2.3046	-0.0043	0.1953	0.5763	-0.3810	-0.3216
290	53.80	-0.03	13.8306	-4.5736	-0.3884	-2.2546	-0.0031	0.1219	0.5686	-0.4467	-0.3315
291	53.88	-0.05	13.8132	-4.5479	-0.6125	-2.3494	-0.0036	0.1700	0.5666	-0.3960	-0.3365
292	53.97	0.00	13.7408	-4.6277	-0.1149	-2.4419	-0.0021	0.1917	0.5673	-0.3750	-0.3308
293	54.04	-0.03	13.7723	-4.7037	-0.3693	-2.4122	-0.0095	0.1557	0.5601	-0.4044	-0.3415
294	54.11	-0.02	13.7518	-4.6802	-0.3790	-2.2404	-0.0096	0.1696	0.5630	-0.3934	-0.3408
295	54.21	0.02	13.9291	-4.8576	0.1479	-2.2756	0.0118	0.1459	0.5651	-0.4192	-0.3487
296	54.28	-0.01	13.9035	-4.7707	-0.2229	-2.3574	0.0043	0.1612	0.5609	-0.3997	-0.3417
297	54.36	-0.06	13.9061	-4.8328	-0.7386	-2.4012	-0.0042	0.1552	0.5610	-0.4058	-0.3475
298	54.46	-0.00	14.1178	-5.0828	-0.1115	-2.5201	0.0111	0.1734	0.5647	-0.3913	-0.3600
299	54.51	-0.03	13.9500	-4.8735	-0.3673	-2.4245	-0.0028	0.1886	0.5600	-0.3774	-0.3499
300	54.61	-0.01	14.1706	-5.1270	-0.2062	-2.5062	0.0104	0.1612	0.5639	-0.4027	-0.3618
301	54.69	-0.04	14.2944	-5.1858	-0.5689	-2.6096	0.0030	0.1496	0.5690	-0.4194	-0.3629
302	54.78	-0.02	14.4534	-5.4350	-0.3277	-2.6283	0.0106	0.1704	0.5648	-0.3944	-0.3760
303	54.85	-0.03	14.3673	-5.3056	-0.4511	-2.8006	0.0099	0.1704	0.5601	-0.3957	-0.3832
304	54.94	-0.06	14.4573	-5.2963	-0.7257	-2.4909	0.0029	0.1679	0.5616	-0.3939	-0.3668
305	55.02	-0.04	14.3504	-5.4163	-0.5026	-2.5985	-0.0026	0.1671	0.5627	-0.3956	-0.3722
306	55.10	-0.05	14.6426	-5.5076	-0.4673	-2.8360	-0.0025	0.1741	0.5648	-0.3907	-0.3761
307	55.17	-0.03	14.5575	-5.4251	-0.2752	-2.7414	-0.0020	0.1648	0.5636	-0.3988	-0.3732
308	55.25	-0.05	14.6271	-5.5188	-0.4982	-2.5425	-0.0027	0.1572	0.5581	-0.4009	-0.3773
309	55.34	-0.06	14.6667	-5.5447	-0.6077	-2.5960	-0.0032	0.1472	0.5568	-0.4116	-0.3780
310	55.39	-0.01	14.5731	-5.4388	-0.7151	-2.6792	-0.0049	0.1642	0.5579	-0.3937	-0.3732
311	55.48	-0.04	14.6390	-5.5458	-0.4886	-2.7475	-0.0024	0.1583	0.5579	-0.3990	-0.3852
312	55.56	-0.06	14.5675	-5.4904	-0.9154	-2.5658	-0.0108	0.1699	0.5575	-0.3876	-0.3637
313	55.61	-0.02	14.5459	-5.5363	-0.3308	-2.5192	-0.0065	0.1306	0.5559	-0.4193	-0.3669
314	55.69	-0.03	14.5424	-5.5244	-0.2983	-2.6577	-0.0146	0.1833	0.5554	-0.3721	-0.3543
315	55.76	-0.04	14.6957	-5.6037	-0.4930	-2.5116	-0.0153	0.1425	0.5495	-0.4070	-0.3677
316	55.87	-0.03	14.7304	-5.6551	-0.3882	-2.4359	-0.0064	0.1630	0.5574	-0.3949	-0.3703
317	55.94	-0.04	14.6276	-5.5253	-0.3957	-2.5053	-0.0149	0.1487	0.5542	-0.4055	-0.3572
318	56.03	-0.06	14.6858	-5.5254	-0.4291	-2.3435	-0.0167	0.1422	0.5520	-0.4048	-0.3626
319	56.12	-0.05	14.8350	-5.6252	-0.5779	-2.3350	-0.0152	0.1615	0.5537	-0.3922	-0.3588
320	56.18	-0.03	14.7578	-5.6081	-0.4156	-2.4273	-0.0156	0.1493	0.5521	-0.4118	-0.3665
321	56.26	-0.05	14.7112	-5.5242	-0.5639	-2.3757	-0.0219	0.1574	0.5521	-0.3947	-0.3623
322	56.33	-0.01	14.7725	-5.5063	-0.1617	-2.3158	-0.0139	0.1453	0.5524	-0.4071	-0.3542

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NAIO-B PHI CONF L DELT DEL2 DEL3 DEL4 TRANSITION
7 57 0.90 1.7 45.0 81WOF15 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
323	56.39	-0.03	14.6235	-5.1079	-0.4151	-2.1968	-0.0278	0.1275	0.5491	-0.4216	-0.3493
324	56.47	-0.06	14.6279	-5.1526	-0.6041	-2.2075	-0.0214	0.1691	0.5503	-0.3812	-0.3522
325	56.57	-0.03	14.6027	-5.2100	-0.3414	-2.2016	-0.0143	0.1388	0.5478	-0.4090	-0.3520
326	56.63	-0.06	14.6369	-5.0733	-0.6201	-2.0971	-0.0284	0.1369	0.5486	-0.4077	-0.3486
327	56.71	-0.04	14.6013	-5.1062	-0.4046	-2.0404	-0.0211	0.1497	0.5476	-0.3981	-0.3519
328	56.79	-0.05	14.7121	-5.1160	-0.5108	-2.1318	-0.0278	0.1451	0.5479	-0.4028	-0.3479
329	56.86	-0.04	14.7035	-5.1017	-0.5246	-2.3500	-0.0297	0.1374	0.5483	-0.4109	-0.3470
330	56.94	-0.04	14.7100	-5.1082	-0.5001	-2.1017	-0.0143	0.1301	0.5493	-0.4152	-0.3498
331	57.02	-0.06	14.6963	-5.1130	-0.6760	-2.1511	-0.0217	0.1420	0.5487	-0.4267	-0.3454
332	57.09	-0.03	14.7900	-5.1248	-0.1892	-2.1179	-0.0201	0.1405	0.5474	-0.4009	-0.3470
333	57.17	-0.06	14.7020	-5.0894	-0.5200	-1.8384	-0.0211	0.1520	0.5490	-0.3970	-0.3393
334	57.26	-0.06	14.6957	-5.0793	-0.5027	-1.8240	-0.0144	0.1281	0.5476	-0.4197	-0.3396
335	57.32	-0.03	14.7038	-5.0306	-0.2075	-1.9493	-0.0204	0.1400	0.5478	-0.4078	-0.3406
336	57.39	-0.04	14.7083	-5.0890	-0.3722	-2.0301	-0.0205	0.1367	0.5484	-0.4057	-0.3392
337	57.46	-0.01	14.7508	-4.9646	-0.0169	-2.0065	-0.0213	0.1492	0.5481	-0.3969	-0.3364
338	57.55	-0.04	14.6969	-5.2402	-0.3667	-1.8886	-0.0142	0.1223	0.5478	-0.4255	-0.3519
339	57.61	-0.03	14.6963	-5.2173	-0.2650	-1.8115	-0.0137	0.1395	0.5520	-0.4125	-0.3502
340	57.67	-0.02	14.6932	-5.0336	-0.1171	-1.7771	-0.0131	0.1423	0.5482	-0.4000	-0.3400
341	57.75	-0.06	14.6815	-5.1409	-0.5815	-1.7527	-0.0140	0.1308	0.5478	-0.4170	-0.3459
342	57.83	-0.04	14.6737	-5.2350	-0.3485	-1.5708	-0.0138	0.1387	0.5529	-0.4142	-0.3496
343	57.89	-0.03	14.6769	-5.1469	-0.1918	-1.5731	-0.0134	0.1345	0.5487	-0.4142	-0.3459
344	57.98	-0.04	14.6751	-5.0159	-0.3108	-1.6846	-0.0201	0.1299	0.5483	-0.4184	-0.3360
345	58.04	-0.04	14.6540	-5.1580	-0.3333	-1.6414	-0.0137	0.1306	0.5495	-0.4189	-0.3449
346	58.11	-0.05	14.6405	-5.0324	-0.5244	-1.6557	-0.0142	0.1511	0.5512	-0.4001	-0.3380
347	58.19	0.03	14.6799	-4.8134	0.2697	-1.0772	-0.0111	0.1120	0.5495	-0.4375	-0.3100
348	58.27	-0.03	14.6149	-4.8011	-0.1934	-1.9377	-0.0193	0.1056	0.5499	-0.4443	-0.3219
349	58.33	-0.04	14.7358	-4.5000	-0.3494	-1.3732	-0.0200	0.1118	0.5461	-0.4343	-0.3114
350	58.41	-0.00	14.6459	-4.6513	-0.0009	-0.9250	-0.0059	0.1220	0.5533	-0.4313	-0.3246
351	58.47	0.01	15.0316	-4.7449	0.0100	-0.6793	-0.0118	0.1454	0.5512	-0.4258	-0.3157
352	58.48	0.02	15.0330	-4.6560	0.0450	-0.4337	-0.0117	0.1090	0.5533	-0.4443	-0.3232
353	58.48	0.00	14.8729	-4.7380	0.0473	-0.9715	-0.0120	0.1113	0.5555	-0.4442	-0.3186
354	58.47	-0.01	14.9526	-4.7320	-0.1293	-0.9077	-0.0124	0.1395	0.5508	-0.4113	-0.3165
355	58.47	0.02	14.9638	-4.6663	0.1059	-0.7067	-0.0051	0.1053	0.5538	-0.4465	-0.3254
356	58.47	0.01	14.9235	-4.9582	0.0245	-1.2035	-0.0115	0.1345	0.5529	-0.4184	-0.2987

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 4 OF 4
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 57 0.90 1.7 45.0 BIWDF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.71	0.10	0.2206	0.0351	0.0949	0.1589	0.4303	-0.1266	-0.0240	-0.0565	0.1667	0.4386
2	-5.72	0.09	0.2207	0.0350	0.0937	0.1584	0.4247	-0.1274	-0.0236	-0.0545	0.1672	0.4277
3	-5.72	0.09	0.2206	0.0350	0.0949	0.1585	0.4303	-0.1243	-0.0239	-0.0549	0.1927	0.4416
4	-5.71	0.09	0.2232	0.0354	0.0958	0.1584	0.4293	-0.1273	-0.0240	-0.0564	0.1689	0.4430
5	-5.73	0.09	0.2206	0.0346	0.0936	0.1585	0.4240	-0.1212	-0.0232	-0.0528	0.1917	0.4352
6	-5.37	0.09	0.1712	0.0280	0.0660	0.1673	0.3971	-0.1065	-0.0220	-0.0418	0.2068	0.3919
7	-4.34	0.09	0.1491	0.0256	0.0557	0.1720	0.3734	-0.0797	-0.0179	-0.0313	0.2250	0.3932
8	-3.38	0.10	0.1066	0.0192	0.0367	0.1770	0.3362	-0.0569	-0.0148	-0.0221	0.2518	0.3759
9	-2.46	0.09	0.0741	0.0142	0.0247	0.1920	0.3338	-0.0371	-0.0096	-0.0115	0.3300	0.3952
10	-1.50	0.08	0.0494	0.0090	0.0120	0.1988	0.2649	-0.0117	-0.0036	-0.0036	0.3249	0.3077
11	-0.54	0.09	0.0232	0.0030	0.0023	0.1294	0.0991	0.0057	0.0017	0.0054	0.2984	0.4474
12	0.45	0.09	0.0000	-0.0018	-0.0020	-0.3001	-0.3333	0.0275	0.0088	0.0143	0.3201	0.5200
13	1.36	0.08	-0.0280	-0.0078	-0.0091	0.9754	1.1375	0.0481	0.0139	0.0242	0.2697	0.5042
14	2.30	0.10	-0.0514	-0.0124	-0.0205	0.3921	0.0529	0.0763	0.0188	0.0347	0.2468	0.4554
15	3.37	0.09	-0.0599	-0.0179	-0.0330	0.2992	0.5933	0.1070	0.0263	0.0505	0.2274	0.5276
16	4.25	0.09	-0.0809	-0.0265	-0.0448	0.2536	0.5532	0.1455	0.0306	0.0783	0.2114	0.5382
17	5.20	0.08	-0.1045	-0.0338	-0.0572	0.2285	0.5460	0.1812	0.0382	0.0949	0.1940	0.5238
18	6.17	0.10	-0.1280	-0.0456	-0.0683	0.2004	0.5336	0.2267	0.0415	0.1224	0.1813	0.5350
19	7.15	0.09	-0.1596	-0.0568	-0.0828	0.1776	0.5188	0.2868	0.0480	0.1448	0.1710	0.5365
20	8.11	0.09	-0.1833	-0.0694	-0.0957	0.1606	0.5112	0.3336	0.0505	0.1682	0.1610	0.5364
21	9.03	0.10	-0.2040	-0.0775	-0.1026	0.1363	0.5079	0.3612	0.0557	0.1937	0.1542	0.5363
22	9.96	0.11	-0.2313	-0.0869	-0.1163	0.1165	0.5030	0.4179	0.0612	0.2249	0.1464	0.5381
23	10.96	0.10	-0.2550	-0.0964	-0.1284	0.1031	0.5033	0.4676	0.0635	0.2505	0.1358	0.5358
24	11.93	0.09	-0.2778	-0.1044	-0.1382	0.0860	0.4973	0.5129	0.0645	0.2713	0.1258	0.5290
25	12.90	0.09	-0.2973	-0.1102	-0.1440	0.0764	0.5012	0.5795	0.0653	0.3007	0.1127	0.5188
26	13.86	0.09	-0.3192	-0.1199	-0.1581	0.0624	0.4955	0.6432	0.0666	0.3261	0.1039	0.5070
27	14.84	0.09	-0.3222	-0.1169	-0.1586	0.0525	0.4922	0.6934	0.0673	0.3443	0.0971	0.4906
28	15.80	0.09	-0.3008	-0.1170	-0.1704	0.0462	0.4836	0.7707	0.0683	0.3746	0.0889	0.4660
29	16.86	0.09	-0.3504	-0.1154	-0.1658	0.0395	0.4760	0.8164	0.0691	0.3894	0.0847	0.4769
30	17.80	0.11	-0.3969	-0.1117	-0.1765	0.0295	0.4351	0.8756	0.0680	0.4215	0.0759	0.4707
31	18.83	0.11	-0.4345	-0.1124	-0.2137	0.0273	0.4701	0.9414	0.0684	0.4357	0.0727	0.4629
32	19.82	0.09	-0.4626	-0.1112	-0.2254	0.0232	0.4670	0.9873	0.0670	0.4492	0.0679	0.4549
33	20.78	0.10	-0.5289	-0.1094	-0.2478	0.0175	0.4599	1.0343	0.0623	0.4505	0.0602	0.4355
34	21.74	0.11	-0.5979	-0.1089	-0.2686	0.0149	0.4496	1.0445	0.0588	0.4607	0.0563	0.4220
35	22.72	0.09	-0.6052	-0.1107	-0.3028	0.0157	0.4426	0.8418	0.0331	0.3464	0.0393	0.4115
36	23.70	0.11	-0.7217	-0.0066	-0.3214	0.0090	0.4392	0.8273	0.0274	0.3431	0.0332	0.4147
37	24.64	0.12	-0.7375	0.0001	-0.3204	-0.0001	0.4427	0.8594	0.0252	0.3564	0.0294	0.4171
38	25.59	0.14	-0.7426	0.0011	-0.3303	-0.0023	0.4446	0.8764	0.0241	0.3622	0.0275	0.4133
39	26.56	0.10	-0.7041	0.0050	-0.3157	-0.0071	0.4484	0.9103	0.0222	0.3711	0.0244	0.4076
40	27.55	0.10	-0.6850	0.0107	-0.3147	-0.0156	0.4594	0.9443	0.0204	0.3793	0.0218	0.4017
41	28.21	0.15	-0.6593	0.0103	-0.3073	-0.0156	0.4661	0.9505	0.0196	0.3798	0.0207	0.3996
42	28.21	0.15	-0.6619	0.0095	-0.3065	-0.0144	0.4657	0.9536	0.0197	0.3800	0.0207	0.3991
43	28.22	0.15	-0.6628	0.0092	-0.3093	-0.0139	0.4656	0.9550	0.0199	0.3794	0.0209	0.3973
44	28.21	0.15	-0.6601	0.0093	-0.3084	-0.0141	0.4672	0.9597	0.0197	0.3804	0.0206	0.3963
45	28.27	0.16	-0.6521	0.0086	-0.3053	-0.0132	0.4681	0.9536	0.0194	0.3774	0.0204	0.3957
46	28.31	0.16	-0.6493	0.0081	-0.3045	-0.0125	0.4664	0.9563	0.0191	0.3778	0.0200	0.3942

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 57 0.90 1.7 45.0 BIWOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN F1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
47	28.68	0.17	-0.6515	0.0097	-0.3076	-0.0149	0.4713	0.9660	0.0169	0.3816	0.0196	0.3952
48	28.78	0.17	-0.6430	0.0106	-0.3072	-0.0165	0.4777	0.9676	0.0166	0.3813	0.0193	0.3940
49	28.97	0.17	-0.6322	0.0102	-0.3051	-0.0162	0.4794	0.9708	0.0160	0.3845	0.0185	0.3936
50	29.13	0.17	-0.6424	0.0106	-0.3078	-0.0165	0.4787	0.9814	0.0162	0.3855	0.0186	0.3928
51	29.25	0.17	-0.6227	0.0119	-0.3019	-0.0191	0.4848	0.9982	0.0175	0.3942	0.0176	0.3949
52	29.44	0.18	-0.6173	0.0114	-0.3001	-0.0193	0.4801	0.9891	0.0170	0.3916	0.0172	0.3959
53	29.58	0.18	-0.6259	0.0107	-0.3022	-0.0172	0.4844	0.9922	0.0174	0.3908	0.0176	0.3936
54	29.72	0.18	-0.6131	0.0102	-0.2981	-0.0167	0.4862	1.0014	0.0167	0.3950	0.0167	0.3944
55	29.86	0.17	-0.6128	0.0107	-0.3016	-0.0175	0.4922	1.0029	0.0162	0.3976	0.0162	0.3964
56	30.00	0.17	-0.5980	0.0093	-0.2941	-0.0150	0.4929	1.0050	0.0160	0.3963	0.0160	0.3951
57	30.15	0.17	-0.6059	0.0093	-0.3003	-0.0153	0.4923	1.0044	0.0158	0.3969	0.0158	0.3971
58	30.28	0.18	-0.5977	0.0100	-0.2971	-0.0166	0.4970	1.0106	0.0156	0.4006	0.0155	0.3964
59	30.43	0.18	-0.5949	0.0103	-0.2968	-0.0173	0.4988	1.0108	0.0153	0.4023	0.0151	0.3956
60	30.55	0.18	-0.5921	0.0108	-0.2954	-0.0184	0.5022	1.0077	0.0148	0.3991	0.0147	0.3960
61	30.69	0.18	-0.5954	0.0102	-0.2940	-0.0175	0.5021	1.0200	0.0145	0.4050	0.0142	0.3971
62	30.82	0.18	-0.5880	0.0100	-0.2961	-0.0170	0.5035	1.0106	0.0145	0.4041	0.0143	0.3974
63	30.97	0.19	-0.5877	0.0095	-0.2892	-0.0168	0.5093	1.0231	0.0140	0.4064	0.0137	0.3972
64	31.11	0.18	-0.5718	0.0095	-0.2903	-0.0166	0.5076	1.0262	0.0137	0.4079	0.0134	0.3975
65	31.25	0.17	-0.5821	0.0081	-0.2882	-0.0144	0.5126	1.0276	0.0137	0.4099	0.0134	0.3989
66	31.39	0.19	-0.5763	0.0087	-0.2847	-0.0156	0.5100	1.0307	0.0132	0.4119	0.0128	0.3997
67	31.53	0.19	-0.5515	0.0080	-0.2825	-0.0145	0.5120	1.0277	0.0131	0.4111	0.0128	0.4000
68	31.68	0.19	-0.5447	0.0079	-0.2804	-0.0145	0.5149	1.0307	0.0130	0.4125	0.0126	0.4002
69	31.81	0.19	-0.5368	0.0087	-0.2776	-0.0162	0.5161	1.0323	0.0129	0.4133	0.0125	0.4004
70	31.94	0.19	-0.5342	0.0087	-0.2758	-0.0163	0.5160	1.0353	0.0124	0.4159	0.0120	0.4017
71	32.07	0.20	-0.5247	0.0071	-0.2706	-0.0136	0.5157	1.0430	0.0124	0.4184	0.0119	0.4012
72	32.21	0.20	-0.5114	0.0068	-0.2666	-0.0132	0.5202	1.0414	0.0121	0.4169	0.0116	0.4023
73	32.35	0.20	-0.5181	0.0084	-0.2679	-0.0162	0.5171	1.0414	0.0121	0.4201	0.0116	0.4034
74	32.48	0.20	-0.5021	0.0081	-0.2594	-0.0122	0.5166	1.0445	0.0118	0.4215	0.0113	0.4036
75	32.61	0.20	-0.5048	0.0069	-0.2607	-0.0137	0.5165	1.0399	0.0118	0.4205	0.0114	0.4044
76	32.73	0.20	-0.4981	0.0074	-0.2588	-0.0149	0.5196	1.0490	0.0112	0.4202	0.0107	0.4063
77	32.89	0.20	-0.4781	0.0068	-0.2496	-0.0142	0.5221	1.0505	0.0112	0.4275	0.0107	0.4070
78	33.01	0.19	-0.4977	0.0075	-0.2554	-0.0151	0.5132	1.0566	0.0109	0.4293	0.0103	0.4063
79	33.15	0.20	-0.4894	0.0073	-0.2540	-0.0149	0.5190	1.0469	0.0112	0.4275	0.0107	0.4076
80	33.28	0.19	-0.4912	0.0082	-0.2543	-0.0162	0.5193	1.0528	0.0105	0.4316	0.0099	0.4061
81	33.40	0.19	-0.4912	0.0078	-0.2536	-0.0159	0.5162	1.0612	0.0105	0.4315	0.0099	0.4066
82	33.52	0.20	-0.4816	0.0069	-0.2493	-0.0145	0.5217	1.0504	0.0106	0.4311	0.0095	0.4081
83	33.64	0.19	-0.4891	0.0084	-0.2515	-0.0169	0.5200	1.0636	0.0099	0.4331	0.0093	0.4065
84	33.78	0.18	-0.4928	0.0066	-0.2570	-0.0149	0.5125	1.0702	0.0097	0.4341	0.0091	0.4057
85	33.90	0.19	-0.4283	0.0068	-0.2201	-0.0206	0.5138	1.0763	0.0096	0.4370	0.0089	0.4060
86	34.03	0.19	-0.4242	0.0060	-0.2171	-0.0142	0.5217	1.0703	0.0093	0.4362	0.0087	0.4072
87	34.15	0.19	-0.4241	0.0078	-0.2192	-0.0184	0.5168	1.0824	0.0091	0.4379	0.0084	0.4064
88	34.27	0.18	-0.4247	0.0064	-0.2185	-0.0200	0.5133	1.0717	0.0093	0.4366	0.0087	0.4074
89	34.39	0.19	-0.4256	0.0080	-0.2198	-0.0137	0.5115	1.0748	0.0091	0.4368	0.0085	0.4064
90	34.54	0.18	-0.4268	0.0068	-0.2206	-0.0207	0.5166	1.0779	0.0088	0.4389	0.0082	0.4072
91	34.64	0.18	-0.4132	0.0058	-0.2140	-0.0141	0.5197	1.0779	0.0088	0.4389	0.0082	0.4072
92	34.77	0.20	-0.4169	0.0063	-0.2115	-0.0154	0.5146	1.0780	0.0087	0.4385	0.0081	0.4049

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RXIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 27 0.90 1.7 45.0 BLKOFF 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
93	34.90	0.18	-0.4220	0.0067	-0.2142	-0.0159	0.5166	1.0810	0.0086	0.4379	0.0080	0.4051
94	35.00	0.18	-0.3910	0.0065	-0.2071	-0.0106	0.5285	1.0780	0.0085	0.4377	0.0079	0.4061
95	35.14	0.20	-0.4053	0.0063	-0.2115	-0.0130	0.5217	1.0760	0.0083	0.4377	0.0079	0.4061
96	35.27	0.18	-0.4130	0.0065	-0.2177	-0.0158	0.5270	1.0749	0.0086	0.4362	0.0080	0.4058
97	35.40	0.19	-0.3993	0.0059	-0.2134	-0.0125	0.5344	1.0734	0.0080	0.4340	0.0080	0.4055
98	35.52	0.19	-0.3920	0.0061	-0.2107	-0.0111	0.5363	1.0716	0.0085	0.4366	0.0079	0.4074
99	35.62	0.20	-0.4225	0.0085	-0.2264	-0.0202	0.5356	1.0751	0.0085	0.4359	0.0079	0.4059
100	35.75	0.19	-0.3759	0.0039	-0.2037	-0.0104	0.5418	1.0655	0.0085	0.4324	0.0080	0.4058
101	35.89	0.18	-0.4009	0.0052	-0.2159	-0.0080	0.5305	1.0670	0.0087	0.4338	0.0082	0.4066
102	35.99	0.19	-0.3731	0.0014	-0.2024	-0.0038	0.5427	1.0701	0.0085	0.4346	0.0078	0.4062
103	36.12	0.19	-0.3743	0.0	-0.2026	0.0	0.5420	1.0701	0.0084	0.4328	0.0079	0.4045
104	36.24	0.17	-0.3776	-0.0020	-0.2071	0.0053	0.5461	1.0609	0.0087	0.4314	0.0082	0.4067
105	36.34	0.17	-0.3752	-0.0040	-0.2029	0.0128	0.5410	1.0700	0.0083	0.4352	0.0078	0.4068
106	36.46	0.19	-0.3603	-0.0036	-0.2064	0.0095	0.5424	1.0640	0.0084	0.4323	0.0079	0.4063
107	36.61	0.18	-0.3632	-0.0036	-0.1985	0.0079	0.5466	1.0731	0.0081	0.4359	0.0076	0.4059
108	36.74	0.18	-0.3748	-0.0043	-0.2013	0.0115	0.5473	1.0604	0.0076	0.4391	0.0070	0.4064
109	36.86	0.17	-0.3596	-0.0040	-0.1956	0.0251	0.5440	1.0683	0.0082	0.4320	0.0077	0.4044
110	36.98	0.16	-0.3730	-0.0092	-0.2006	0.0247	0.5380	1.0729	0.0082	0.4342	0.0077	0.4047
111	37.09	0.16	-0.3480	-0.0049	-0.1868	0.0285	0.5388	1.0605	0.0076	0.4379	0.0070	0.4053
112	37.23	0.18	-0.3520	-0.0104	-0.1885	0.0296	0.5356	1.0665	0.0073	0.4420	0.0067	0.4068
113	37.36	0.18	-0.3547	-0.0100	-0.1886	0.0299	0.5323	1.0666	0.0071	0.4414	0.0065	0.4062
114	37.49	0.19	-0.3492	-0.0142	-0.1857	0.0407	0.5318	1.0696	0.0070	0.4422	0.0064	0.4059
115	37.58	0.18	-0.3571	-0.0141	-0.1895	0.0395	0.5307	1.0666	0.0072	0.4408	0.0066	0.4057
116	37.69	0.16	-0.3547	-0.0156	-0.1779	0.0467	0.5316	1.0635	0.0071	0.4417	0.0066	0.4077
117	37.80	0.18	-0.3596	-0.0162	-0.1815	0.0478	0.5342	1.0696	0.0067	0.4434	0.0062	0.4070
118	37.96	0.17	-0.3479	-0.0173	-0.1750	0.0528	0.5337	1.0697	0.0064	0.4434	0.0059	0.4069
119	38.13	0.17	-0.3585	-0.0182	-0.1807	0.0479	0.5339	1.0635	0.0072	0.4417	0.0067	0.4077
120	38.24	0.17	-0.3584	-0.0171	-0.1808	0.0506	0.5343	1.0642	0.0064	0.4402	0.0059	0.4078
121	38.36	0.16	-0.3552	-0.0169	-0.1776	0.0565	0.5299	1.0623	0.0067	0.4443	0.0061	0.4068
122	38.48	0.16	-0.3618	-0.0201	-0.1741	0.0626	0.5346	1.1001	0.0062	0.4467	0.0056	0.4061
123	38.60	0.13	-0.3184	-0.0219	-0.1695	0.0693	0.5358	1.1092	0.0060	0.4500	0.0054	0.4057
124	38.71	0.15	-0.3659	-0.0210	-0.1722	0.0664	0.5284	1.0964	0.0062	0.4486	0.0057	0.4066
125	38.83	0.13	-0.3138	-0.0254	-0.1635	0.0811	0.5274	1.1122	0.0056	0.4532	0.0050	0.4075
126	38.94	0.13	-0.3212	-0.0263	-0.1718	0.0839	0.5349	1.1229	0.0050	0.4577	0.0045	0.4076
127	39.05	0.15	-0.3179	-0.0218	-0.1634	0.0687	0.5298	1.1071	0.0055	0.4504	0.0050	0.4066
128	39.15	0.12	-0.3089	-0.0260	-0.1649	0.0849	0.5374	1.1320	0.0048	0.4615	0.0042	0.4077
129	39.25	0.13	-0.3215	-0.0263	-0.1706	0.0819	0.5307	1.1320	0.0044	0.4621	0.0039	0.4082
130	39.38	0.13	-0.3267	-0.0270	-0.1724	0.0828	0.5277	1.1426	0.0042	0.4654	0.0037	0.4073
131	39.50	0.15	-0.3427	-0.0279	-0.1714	0.0858	0.5312	1.1427	0.0041	0.4654	0.0036	0.4073
132	39.61	0.11	-0.3174	-0.0283	-0.1681	0.0893	0.5291	1.1004	0.0034	0.4732	0.0029	0.4078
133	39.72	0.11	-0.3149	-0.0282	-0.1666	0.0897	0.5272	1.1427	0.0040	0.4654	0.0035	0.4073
134	39.81	0.12	-0.3172	-0.0299	-0.1683	0.0944	0.5306	1.1610	0.0032	0.4717	0.0028	0.4063
135	39.91	0.11	-0.3213	-0.0311	-0.1663	0.0966	0.5238	1.1579	0.0032	0.4726	0.0028	0.4081
136	40.03	0.10	-0.3132	-0.0300	-0.1668	0.0979	0.5326	1.1685	0.0028	0.4759	0.0024	0.4072
137	40.14	0.10	-0.3001	-0.0283	-0.1615	0.0965	0.5382	1.1638	0.0033	0.4702	0.0028	0.4092
138	40.23	0.12	-0.3152	-0.0319	-0.1675	0.1018	0.5314	1.1741	0.0026	0.4794	0.0022	0.4083

TEST PART MACH RATIO-S PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 5/ 0.90 1.1 45.0 DEGREES 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	DELTA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
139	40.33	0.08	-0.3008	-0.0304	-0.1611	0.1012	0.5356	1.1031	0.0026	0.4747	0.0024	0.4064
140	40.44	0.10	-0.2988	-0.0310	-0.1589	0.1043	0.5324	1.1787	0.0021	0.4815	0.0018	0.4085
141	40.33	0.10	-0.2995	-0.0315	-0.1593	0.1077	0.5350	1.1757	0.0023	0.4769	0.0020	0.4073
142	40.04	0.11	-0.2915	-0.0305	-0.1577	0.1048	0.5411	1.1002	0.0018	0.4817	0.0015	0.4081
143	40.73	0.08	-0.2717	-0.0305	-0.1560	0.1047	0.5348	1.1064	0.0019	0.4828	0.0016	0.4070
144	40.84	0.09	-0.2915	-0.0303	-0.1562	0.1107	0.5359	1.2040	0.0009	0.4927	0.0007	0.4090
145	40.93	0.09	-0.3020	-0.0315	-0.1619	0.1042	0.5361	1.2108	0.0002	0.4967	0.0002	0.4082
146	41.00	0.09	-0.3071	-0.0323	-0.1649	0.1050	0.5370	1.2425	-0.0007	0.5085	-0.0006	0.4093
147	41.17	0.05	-0.3053	-0.0317	-0.1647	0.1035	0.5386	1.2456	-0.0009	0.5087	-0.0007	0.4084
148	41.24	0.07	-0.3047	-0.0316	-0.1669	0.1019	0.5390	1.2410	-0.0009	0.5077	-0.0007	0.4091
149	41.35	0.08	-0.3173	-0.0325	-0.1662	0.1023	0.5301	1.2541	-0.0012	0.5117	-0.0010	0.4080
150	41.47	0.07	-0.3149	-0.0319	-0.1692	0.1012	0.5374	1.2575	-0.0017	0.5132	-0.0014	0.4081
151	41.56	0.07	-0.3044	-0.0316	-0.1645	0.1037	0.5405	1.2621	-0.0019	0.5154	-0.0015	0.4084
152	41.67	0.07	-0.3153	-0.0324	-0.1658	0.1020	0.5259	1.2743	-0.0023	0.5206	-0.0018	0.4086
153	41.78	0.05	-0.3138	-0.0316	-0.1741	0.0965	0.5216	1.2924	-0.0027	0.5300	-0.0021	0.4101
154	41.87	0.05	-0.3111	-0.0334	-0.1725	0.1007	0.5204	1.2864	-0.0026	0.5284	-0.0020	0.4092
155	41.97	0.04	-0.3034	-0.0323	-0.1610	0.1063	0.5307	1.2638	-0.0023	0.5149	-0.0018	0.4075
156	42.07	0.07	-0.3240	-0.0333	-0.1687	0.1031	0.5197	1.2910	-0.0030	0.5280	-0.0023	0.4090
157	42.17	0.06	-0.3288	-0.0329	-0.1690	0.0981	0.5140	1.2895	-0.0032	0.5273	-0.0025	0.4090
158	42.27	0.07	-0.3024	-0.0347	-0.1559	0.1146	0.5156	1.2834	-0.0030	0.5243	-0.0023	0.4086
159	42.37	0.06	-0.3340	-0.0334	-0.1714	0.0999	0.5132	1.3031	-0.0035	0.5333	-0.0027	0.4092
160	42.47	0.06	-0.3235	-0.0316	-0.1671	0.0975	0.5166	1.2971	-0.0030	0.5285	-0.0023	0.4075
161	42.55	0.05	-0.3250	-0.0326	-0.1657	0.1002	0.5099	1.3122	-0.0040	0.5377	-0.0031	0.4097
162	42.65	0.04	-0.3257	-0.0320	-0.1700	0.0915	0.4948	1.3318	-0.0039	0.5454	-0.0029	0.4095
163	42.74	0.05	-0.3420	-0.0353	-0.1726	0.1031	0.5047	1.3258	-0.0042	0.5436	-0.0032	0.4100
164	42.84	0.04	-0.3492	-0.0330	-0.1848	0.0893	0.5007	1.3398	-0.0043	0.5497	-0.0032	0.4103
165	42.93	0.05	-0.3471	-0.0330	-0.1712	0.0944	0.4932	1.3308	-0.0039	0.5441	-0.0029	0.4068
166	43.01	0.04	-0.3616	-0.0339	-0.1770	0.0930	0.4895	1.3368	-0.0038	0.5462	-0.0029	0.4095
167	43.10	0.04	-0.3657	-0.0331	-0.1808	0.0857	0.4839	1.3397	-0.0035	0.5491	-0.0026	0.4098
168	43.20	0.04	-0.3478	-0.0347	-0.1757	0.0990	0.5052	1.3339	-0.0048	0.5449	-0.0036	0.4085
169	43.28	0.03	-0.3272	-0.0333	-0.1626	0.1018	0.4989	1.3339	-0.0046	0.5449	-0.0035	0.4085
170	43.37	0.04	-0.3233	-0.0330	-0.1605	0.1044	0.4904	1.3309	-0.0044	0.5435	-0.0033	0.4083
171	43.46	0.04	-0.3053	-0.0356	-0.1681	0.0931	0.4883	1.3444	-0.0036	0.5501	-0.0027	0.4092
172	43.55	0.03	-0.3220	-0.0343	-0.1587	0.1064	0.4928	1.3309	-0.0046	0.5435	-0.0035	0.4083
173	43.66	0.05	-0.2978	-0.0337	-0.1524	0.1150	0.5118	1.3278	-0.0045	0.5438	-0.0034	0.4095
174	43.74	0.06	-0.2872	-0.0355	-0.1468	0.1235	0.5112	1.2975	-0.0034	0.5304	-0.0026	0.4068
175	43.83	0.02	-0.2881	-0.0374	-0.1428	0.1306	0.4791	1.3142	-0.0043	0.5378	-0.0033	0.4092
176	43.92	0.04	-0.3405	-0.0338	-0.1676	0.0991	0.4922	1.3306	-0.0030	0.5341	-0.0037	0.4103
177	44.00	0.05	-0.2954	-0.0356	-0.1339	0.1378	0.5100	1.2976	-0.0040	0.5298	-0.0031	0.4083
178	44.08	0.05	-0.2941	-0.0358	-0.1315	0.1407	0.5173	1.2859	-0.0035	0.5275	-0.0027	0.4105
179	44.18	0.03	-0.2932	-0.0365	-0.1305	0.1440	0.5152	1.3024	-0.0040	0.5357	-0.0035	0.4113
180	44.26	0.02	-0.2784	-0.0348	-0.1414	0.1242	0.5050	1.3222	-0.0040	0.5422	-0.0035	0.4100
181	44.35	0.04	-0.2732	-0.0357	-0.1379	0.1312	0.5046	1.3178	-0.0051	0.5417	-0.0039	0.4111
182	44.45	0.06	-0.2980	-0.0370	-0.1498	0.1249	0.4926	1.3373	-0.0049	0.5489	-0.0037	0.4104
183	44.56	0.02	-0.3183	-0.0368	-0.1570	0.1155	0.4732	1.3540	-0.0051	0.5581	-0.0038	0.4122
184	44.64	0.02	-0.3003	-0.0380	-0.1647	0.1133	0.4640	1.3518	-0.0049	0.5546	-0.0036	0.4104

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNLD-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 51 0.90 1.7 45.0 BLWUP15 0.0 0 0 0 0 UNKNOWN

PUINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
185	44.74	0.04	-0.3377	-0.0380	-0.1632	0.1142	0.4832	1.3442	-0.0051	0.5523	-0.0038	0.4109
186	44.84	0.03	-0.3109	-0.0388	-0.1545	0.1247	0.4969	1.3396	-0.0052	0.5501	-0.0039	0.4106
187	44.92	0.02	-0.3080	-0.0379	-0.1708	0.1029	0.4860	1.3607	-0.0046	0.5604	-0.0034	0.4118
188	45.02	0.02	-0.3277	-0.0397	-0.1647	0.1210	0.5026	1.3381	-0.0053	0.5500	-0.0040	0.4110
189	45.11	-0.02	-0.2948	-0.0416	-0.1473	0.1410	0.4947	1.3005	-0.0058	0.5323	-0.0045	0.4093
190	45.21	-0.00	-0.4222	-0.0386	-0.2018	0.0913	0.4781	1.3758	-0.0040	0.5647	-0.0029	0.4105
191	45.30	-0.01	-0.3742	-0.0422	-0.1818	0.1127	0.4860	1.3459	-0.0051	0.5500	-0.0038	0.4086
192	45.31	-0.01	-0.3778	-0.0414	-0.1874	0.1095	0.4962	1.3669	-0.0054	0.5620	-0.0040	0.4111
193	45.48	-0.01	-0.3008	-0.0414	-0.1773	0.1196	0.4914	1.3549	-0.0055	0.5562	-0.0041	0.4105
194	45.57	0.00	-0.3922	-0.0422	-0.1944	0.1015	0.4958	1.3760	-0.0053	0.5623	-0.0039	0.4104
195	45.64	0.02	-0.3840	-0.0416	-0.1937	0.1001	0.5038	1.3628	-0.0045	0.5566	-0.0033	0.4100
196	45.76	0.01	-0.4111	-0.0423	-0.2015	0.1017	0.4966	1.3720	-0.0048	0.5626	-0.0035	0.4101
197	45.83	-0.00	-0.3917	-0.0414	-0.2406	0.0825	0.4795	1.3930	-0.0042	0.5716	-0.0030	0.4103
198	45.91	-0.02	-0.3703	-0.0434	-0.1835	0.1171	0.4957	1.3534	-0.0060	0.5555	-0.0044	0.4103
199	46.00	0.00	-0.4113	-0.0441	-0.2016	0.1072	0.4903	1.3781	-0.0057	0.5660	-0.0041	0.4107
200	46.08	-0.02	-0.3552	-0.0434	-0.1814	0.1221	0.5107	1.3569	-0.0061	0.5576	-0.0045	0.4109
201	46.16	-0.02	-0.3598	-0.0445	-0.1767	0.1236	0.4911	1.3569	-0.0063	0.5562	-0.0047	0.4114
202	46.26	-0.02	-0.3528	-0.0442	-0.1896	0.1121	0.5096	1.3509	-0.0063	0.5565	-0.0047	0.4119
203	46.35	0.00	-0.3882	-0.0437	-0.1908	0.1125	0.5071	1.3690	-0.0061	0.5640	-0.0045	0.4120
204	46.44	-0.03	-0.3123	-0.0425	-0.1559	0.1360	0.4992	1.3298	-0.0072	0.5462	-0.0054	0.4107
205	46.53	-0.03	-0.4129	-0.0438	-0.2114	0.1060	0.5119	1.3811	-0.0064	0.5667	-0.0046	0.4118
206	46.63	-0.02	-0.4381	-0.0429	-0.2226	0.0978	0.5085	1.3901	-0.0057	0.5731	-0.0041	0.4123
207	46.70	-0.03	-0.3869	-0.0431	-0.2028	0.1123	0.5216	1.3720	-0.0063	0.5655	-0.0046	0.4122
208	46.76	0.01	-0.4389	-0.0434	-0.2210	0.0993	0.5057	1.3749	-0.0053	0.5664	-0.0039	0.4120
209	46.93	-0.03	-0.3283	-0.0440	-0.1727	0.1339	0.5201	1.3540	-0.0074	0.5591	-0.0055	0.4129
210	46.96	-0.02	-0.3726	-0.0423	-0.2002	0.1135	0.5215	1.3705	-0.0073	0.5696	-0.0053	0.4156
211	47.05	-0.04	-0.3819	-0.0435	-0.2017	0.1191	0.5263	1.3705	-0.0068	0.5660	-0.0050	0.4130
212	47.14	-0.02	-0.4071	-0.0436	-0.2131	0.1075	0.5234	1.3719	-0.0066	0.5685	-0.0048	0.4144
213	47.22	-0.07	-0.3415	-0.0421	-0.1737	0.1232	0.5262	1.3570	-0.0079	0.5623	-0.0058	0.4144
214	47.32	-0.04	-0.3670	-0.0421	-0.1725	0.1264	0.5266	1.3530	-0.0079	0.5596	-0.0058	0.4136
215	47.40	-0.04	-0.3813	-0.0431	-0.1914	0.1247	0.5298	1.3696	-0.0074	0.5665	-0.0054	0.4136
216	47.47	-0.04	-0.4005	-0.0421	-0.1940	0.1178	0.5026	1.3257	-0.0087	0.5488	-0.0066	0.4139
217	47.57	-0.03	-0.4570	-0.0436	-0.2374	0.0996	0.5186	1.3932	-0.0073	0.5614	-0.0052	0.4167
218	47.65	-0.04	-0.3508	-0.0434	-0.1835	0.1293	0.5288	1.3741	-0.0082	0.5723	-0.0060	0.4165
219	47.73	-0.02	-0.3707	-0.0434	-0.1969	0.1170	0.5313	1.3742	-0.0084	0.5711	-0.0061	0.4156
220	47.84	-0.02	-0.3771	-0.0462	-0.2058	0.1223	0.5446	1.3832	-0.0084	0.5755	-0.0061	0.4161
221	47.92	-0.00	-0.3814	-0.0434	-0.1952	0.1255	0.5402	1.3822	-0.0082	0.5749	-0.0059	0.4159
222	48.01	-0.02	-0.4070	-0.0447	-0.2170	0.1145	0.5338	1.3928	-0.0085	0.5816	-0.0061	0.4177
223	48.08	-0.03	-0.3835	-0.0467	-0.2091	0.1217	0.5452	1.3867	-0.0082	0.5783	-0.0059	0.4170
224	48.18	-0.03	-0.4218	-0.0447	-0.1816	0.1394	0.5534	1.3456	-0.0087	0.5621	-0.0065	0.4177
225	48.27	-0.05	-0.2417	-0.0398	-0.1252	0.1045	0.5176	1.3275	-0.0085	0.5521	-0.0064	0.4159
226	48.35	-0.03	-0.2460	-0.0413	-0.1391	0.1672	0.5035	1.3427	-0.0088	0.5606	-0.0066	0.4175
227	48.44	-0.03	-0.2698	-0.0432	-0.1447	0.1630	0.5362	1.3519	-0.0095	0.5662	-0.0070	0.4186
228	48.54	-0.01	-0.2576	-0.0394	-0.1358	0.1530	0.5276	1.3366	-0.0088	0.5577	-0.0066	0.4172
229	48.62	0.02	-0.4072	-0.0476	-0.2579	0.0917	0.5294	1.4039	-0.0075	0.5662	-0.0054	0.4176
230	48.70	-0.04	-0.4534	-0.0421	-0.1379	0.1660	0.5441	1.3541	-0.0096	0.5650	-0.0071	0.4195

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-S PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 57 0.90 1.7 45.0 BIWOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
231	48.77	-0.02	-0.3749	-0.0471	-0.2044	0.1256	0.5451	1.3920	-0.0087	0.5803	-0.0063	0.4169
232	48.88	-0.03	-0.3811	-0.0402	-0.1083	0.1331	0.5579	1.3494	-0.0062	0.5641	-0.0061	0.4160
233	48.94	-0.00	-0.2545	-0.0428	-0.1599	0.1673	0.5496	1.3404	-0.0096	0.5620	-0.0072	0.4193
234	49.02	-0.00	-0.2087	-0.0342	-0.1100	0.1637	0.5274	1.3191	-0.0088	0.5530	-0.0067	0.4192
235	49.12	-0.01	-0.2267	-0.0416	-0.1171	0.1834	0.5166	1.3359	-0.0102	0.5616	-0.0076	0.4204
236	49.20	-0.04	-0.2472	-0.0432	-0.1309	0.1746	0.5294	1.3403	-0.0096	0.5638	-0.0072	0.4206
237	49.27	-0.02	-0.2222	-0.0379	-0.1222	0.1734	0.5398	1.3311	-0.0095	0.5613	-0.0071	0.4217
238	49.30	0.02	-0.2313	-0.0385	-0.1256	0.1662	0.5424	1.3372	-0.0096	0.5654	-0.0072	0.4228
239	49.45	-0.04	-0.1857	-0.0314	-0.0968	0.1892	0.5049	1.3083	-0.0084	0.5515	-0.0064	0.4215
240	49.53	-0.06	-0.1631	-0.0311	-0.0959	0.1904	0.5881	1.3083	-0.0087	0.5527	-0.0067	0.4224
241	49.63	-0.01	-0.1703	-0.0334	-0.1050	0.1892	0.5843	1.3209	-0.0096	0.5592	-0.0073	0.4233
242	49.72	-0.03	-0.1010	-0.0175	-0.0661	0.1733	0.6341	1.2781	-0.0066	0.5412	-0.0053	0.4234
243	49.81	0.00	-0.1719	-0.0300	-0.0950	0.1748	0.5527	1.3152	-0.0085	0.5562	-0.0065	0.4235
244	49.90	-0.04	-0.0723	-0.0163	-0.0529	0.1704	0.7313	1.2811	-0.0066	0.5421	-0.0052	0.4231
245	49.98	-0.01	-0.1456	-0.0210	-0.0781	0.1723	0.6220	1.2926	-0.0079	0.5483	-0.0061	0.4242
246	50.09	-0.04	-0.1211	-0.0242	-0.0760	0.2001	0.6438	1.2941	-0.0079	0.5497	-0.0061	0.4248
247	50.13	-0.05	-0.0929	-0.0123	-0.0602	0.1326	0.7123	1.2941	-0.0074	0.5497	-0.0057	0.4248
248	50.23	-0.06	-0.1056	-0.0173	-0.0707	0.1637	0.6679	1.2937	-0.0081	0.5504	-0.0063	0.4248
249	50.32	-0.02	-0.0793	-0.0068	-0.0625	0.0854	0.7680	1.3001	-0.0076	0.5520	-0.0059	0.4250
250	50.41	-0.06	-0.1057	-0.0154	-0.0734	0.1459	0.6941	1.3031	-0.0083	0.5571	-0.0064	0.4275
251	50.50	-0.03	-0.1005	-0.0146	-0.0669	0.1453	0.6853	1.3032	-0.0084	0.5546	-0.0065	0.4256
252	50.58	-0.03	-0.1217	-0.0182	-0.0780	0.1533	0.6672	1.3143	-0.0090	0.5602	-0.0069	0.4269
253	50.66	-0.02	-0.1004	-0.0121	-0.0717	0.1207	0.7139	1.2944	-0.0083	0.5542	-0.0064	0.4265
254	50.75	-0.05	-0.1244	-0.0137	-0.0804	0.1103	0.6465	1.3131	-0.0091	0.5601	-0.0069	0.4265
255	50.83	-0.03	-0.1161	-0.0127	-0.0793	0.1095	0.6826	1.3100	-0.0090	0.5605	-0.0069	0.4279
256	50.93	-0.04	-0.0767	-0.0119	-0.0602	0.1594	0.7646	1.3070	-0.0087	0.5572	-0.0067	0.4263
257	50.99	-0.02	-0.0872	-0.0086	-0.0686	0.0968	0.7065	1.3223	-0.0096	0.5633	-0.0074	0.4260
258	51.00	-0.03	-0.0951	-0.0085	-0.0724	0.0845	0.7611	1.3182	-0.0096	0.5616	-0.0073	0.4262
259	51.19	-0.03	-0.1155	-0.0121	-0.0739	0.1049	0.6395	1.3203	-0.0095	0.5674	-0.0072	0.4272
260	51.25	-0.03	-0.0992	-0.0102	-0.0715	0.1030	0.7105	1.3182	-0.0096	0.5628	-0.0073	0.4276
261	51.34	-0.02	-0.0997	-0.0119	-0.0644	0.1195	0.6956	1.3260	-0.0099	0.5691	-0.0075	0.4262
262	51.43	-0.06	-0.0883	-0.0097	-0.0499	0.1423	0.7243	1.3321	-0.0099	0.5699	-0.0074	0.4278
263	51.51	-0.06	-0.0757	-0.0091	-0.0602	0.1144	0.7550	1.3260	-0.0101	0.5664	-0.0076	0.4275
264	51.60	-0.02	-0.0979	-0.0083	-0.0304	0.1737	0.7615	1.3320	-0.0101	0.5694	-0.0076	0.4273
265	51.69	-0.04	-0.0807	-0.0105	-0.0441	0.1733	0.7261	1.3371	-0.0103	0.5722	-0.0077	0.4279
266	51.78	-0.04	-0.0915	-0.0093	-0.0405	0.1610	0.7479	1.3204	-0.0097	0.5646	-0.0074	0.4277
267	51.87	-0.06	-0.0572	-0.0083	-0.0317	0.2252	0.8522	1.3311	-0.0104	0.5699	-0.0078	0.4281
268	51.94	-0.03	-0.0478	-0.0090	-0.0305	0.1888	0.7652	1.3325	-0.0103	0.5716	-0.0077	0.4291
269	52.02	-0.06	-0.0414	-0.0089	-0.0323	0.2156	0.7821	1.3284	-0.0102	0.5686	-0.0077	0.4286
270	52.10	-0.04	-0.0410	-0.0084	-0.0357	0.2053	0.8149	1.3302	-0.0110	0.5703	-0.0082	0.4285
271	52.19	-0.04	-0.0414	-0.0076	-0.0327	0.1841	0.7918	1.3311	-0.0106	0.5705	-0.0080	0.4286
272	52.30	-0.04	-0.0411	-0.0083	-0.0332	0.2025	0.8305	1.3361	-0.0112	0.5740	-0.0084	0.4296
273	52.37	-0.06	-0.0427	-0.0081	-0.0335	0.1902	0.7864	1.3330	-0.0110	0.5744	-0.0083	0.4309
274	52.45	-0.04	-0.0406	-0.0092	-0.0391	0.1880	0.8012	1.3315	-0.0110	0.5730	-0.0083	0.4303
275	52.57	-0.04	-0.0279	-0.0066	-0.0278	0.3084	0.9964	1.3369	-0.0116	0.5745	-0.0087	0.4297
276	52.63	-0.06	-0.0329	-0.0081	-0.0330	0.2463	1.0030	1.3323	-0.0115	0.5729	-0.0086	0.4300

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 57 0.90 1.7 45.0 BLWOF15 0.0 0 0 0 0 UNKNOWN

PGINT	ALPHA	DELA	CNF1	CM1	CD1	ALPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
277	52.71	-0.05	0.0678	0.0055	0.0115	0.0813	0.1699	1.3186	-0.0105	0.5675	-0.0080	0.4304
278	52.81	-0.02	0.0567	0.0031	0.0084	0.0529	0.1433	1.3186	-0.0105	0.5669	-0.0080	0.4299
279	52.87	-0.02	0.0561	0.0028	0.0069	0.0500	0.1232	1.3156	-0.0105	0.5661	-0.0080	0.4303
280	52.97	-0.02	0.0612	0.0017	0.0121	0.0276	0.1980	1.3236	-0.0110	0.5698	-0.0083	0.4305
281	53.07	-0.03	0.0574	0.0013	0.0092	0.0227	0.1806	1.3207	-0.0114	0.5733	-0.0086	0.4311
282	53.13	-0.02	0.0552	0.0026	0.0112	0.0799	0.1720	1.3207	-0.0114	0.5713	-0.0086	0.4306
283	53.22	-0.02	0.0600	0.0026	0.0105	0.0434	0.1720	1.3207	-0.0116	0.5725	-0.0088	0.4315
284	53.32	-0.04	0.0717	0.0060	0.0149	0.0838	0.2081	1.3312	-0.0116	0.5741	-0.0087	0.4313
285	53.37	-0.02	0.0755	0.0067	0.0172	0.0889	0.2281	1.3373	-0.0119	0.5776	-0.0089	0.4319
286	53.47	-0.03	0.0555	0.0026	0.0144	0.0438	0.2424	1.3326	-0.0122	0.5742	-0.0092	0.4308
287	53.55	-0.03	0.0597	0.0015	0.0131	0.0252	0.2196	1.3389	-0.0124	0.5783	-0.0093	0.4319
288	53.64	-0.02	0.0551	0.0023	0.0115	0.0414	0.2068	1.3313	-0.0124	0.5758	-0.0093	0.4325
289	53.72	-0.06	0.0597	0.0009	0.0136	0.0151	0.2282	1.3296	-0.0125	0.5745	-0.0093	0.4320
290	53.80	-0.03	0.0543	-0.0001	0.0128	-0.0018	0.2362	1.3281	-0.0120	0.5756	-0.0090	0.4334
291	53.86	-0.05	0.0635	0.0	0.0174	0.0	0.2744	1.3297	-0.0123	0.5751	-0.0093	0.4325
292	53.97	0.00	0.0648	0.0014	0.0165	0.0216	0.2550	1.3365	-0.0126	0.5791	-0.0096	0.4333
293	54.04	-0.03	0.0518	-0.0018	0.0111	-0.0348	0.2147	1.3290	-0.0127	0.5761	-0.0096	0.4335
294	54.11	-0.02	0.0597	0.0009	0.0129	0.0151	0.2164	1.3365	-0.0131	0.5809	-0.0098	0.4346
295	54.21	0.02	0.0705	0.0026	0.0221	0.0340	0.2393	1.3365	-0.0128	0.5791	-0.0096	0.4333
296	54.28	-0.01	0.0622	-0.0003	0.0106	-0.0048	0.2073	1.3401	-0.0128	0.5801	-0.0096	0.4329
297	54.36	-0.06	0.0926	0.0056	0.0260	0.0627	0.2611	1.3447	-0.0131	0.5829	-0.0098	0.4335
298	54.46	-0.00	0.0663	0.0009	0.0295	0.0718	0.3067	1.3536	-0.0137	0.5872	-0.0101	0.4338
299	54.51	-0.03	0.0728	0.0019	0.0196	0.0261	0.2724	1.3416	-0.0132	0.5820	-0.0099	0.4338
300	54.61	-0.01	0.1004	0.0069	0.0300	0.0808	0.2991	1.3630	-0.0143	0.5910	-0.0105	0.4336
301	54.69	-0.04	0.0777	0.0002	0.0296	0.0035	0.3033	1.3568	-0.0137	0.5893	-0.0101	0.4344
302	54.78	-0.02	0.1082	0.0084	0.0340	0.0777	0.3145	1.3660	-0.0144	0.5937	-0.0106	0.4347
303	54.85	-0.03	0.1093	0.0094	0.0354	0.0861	0.3242	1.3752	-0.0146	0.5962	-0.0106	0.4336
304	54.94	-0.00	0.0980	0.0081	0.0311	0.0821	0.3151	1.3660	-0.0144	0.5931	-0.0106	0.4342
305	55.02	-0.04	0.1069	0.0091	0.0334	0.0852	0.3127	1.3712	-0.0149	0.5956	-0.0109	0.4329
306	55.10	-0.05	0.1045	0.0078	0.0317	0.0747	0.3036	1.3634	-0.0154	0.5994	-0.0112	0.4333
307	55.17	-0.03	0.1013	0.0066	0.0319	0.0649	0.3137	1.3758	-0.0151	0.5956	-0.0110	0.4331
308	55.25	-0.05	0.0960	0.0060	0.0289	0.0622	0.2995	1.3712	-0.0148	0.5948	-0.0108	0.4338
309	55.34	-0.06	0.1094	0.0097	0.0343	0.0866	0.3136	1.3779	-0.0153	0.5987	-0.0111	0.4345
310	55.39	-0.07	0.1017	0.0068	0.0307	0.0670	0.3022	1.3749	-0.0155	0.5967	-0.0113	0.4340
311	55.46	-0.04	0.0963	0.0062	0.0300	0.0645	0.3119	1.3704	-0.0151	0.5945	-0.0110	0.4338
312	55.56	-0.08	0.0978	0.0056	0.0295	0.0573	0.3019	1.3628	-0.0153	0.5920	-0.0112	0.4344
313	55.61	-0.02	0.0937	0.0045	0.0295	0.0481	0.3152	1.3813	-0.0149	0.5987	-0.0110	0.4340
314	55.69	-0.03	0.1042	0.0079	0.0325	0.0739	0.3103	1.3780	-0.0158	0.5981	-0.0115	0.4341
315	55.78	-0.04	0.0884	0.0047	0.0272	0.0552	0.3080	1.3750	-0.0159	0.5973	-0.0116	0.4344
316	55.87	-0.03	0.0951	0.0053	0.0292	0.0558	0.3074	1.3719	-0.0159	0.5964	-0.0116	0.4348
317	55.94	-0.04	0.1043	0.0063	0.0339	0.0605	0.3253	1.3760	-0.0159	0.5985	-0.0116	0.4340
318	56.03	-0.08	0.0992	0.0053	0.0292	0.0558	0.3070	1.3753	-0.0158	0.5980	-0.0115	0.4346
319	56.12	-0.05	0.0900	0.0026	0.0277	0.0289	0.3081	1.3801	-0.0162	0.6002	-0.0118	0.4349
320	56.18	-0.05	0.0992	0.0054	0.0308	0.0545	0.3106	1.3877	-0.0166	0.6039	-0.0120	0.4352
321	56.26	-0.05	0.0915	0.0037	0.0262	0.0405	0.2867	1.3801	-0.0163	0.6002	-0.0118	0.4349
322	56.33	-0.01	0.0860	0.0019	0.0272	0.0221	0.3106	1.3801	-0.0163	0.6002	-0.0118	0.4349

TEST 7 PART 57 MACH 0.90 RATIO-6 1.7 PHI 45.0 DIMPLES CONF 0.0 L 0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	ALPF2	YCPF2
323	56.39	-0.03	0.0024	0.0002	0.0236	0.0024	0.2068	1.3695	-0.0163	0.5957	-0.0119	0.4350
324	56.47	-0.00	0.0764	0.0035	0.0214	0.0064	0.2733	1.3648	-0.0157	0.5941	-0.0115	0.4353
325	56.57	-0.03	0.0835	0.0011	0.0256	0.0132	0.3076	1.3631	-0.0166	0.6025	-0.0120	0.4355
326	56.63	-0.00	0.0009	0.0036	0.0241	0.0074	0.2703	1.3740	-0.0164	0.5997	-0.0120	0.4365
327	56.71	-0.04	0.0757	-0.0023	0.0225	-0.0304	0.2976	1.3649	-0.0159	0.5941	-0.0117	0.4353
328	56.79	-0.05	0.0743	0.0	0.0215	0.0	0.2596	1.3601	-0.0170	0.6014	-0.0123	0.4358
329	56.86	-0.04	0.0810	-0.0006	0.0239	-0.0099	0.2954	1.3710	-0.0168	0.5988	-0.0123	0.4368
330	56.94	-0.04	0.0755	-0.0010	0.0233	-0.0153	0.3090	1.3740	-0.0169	0.6003	-0.0123	0.4369
331	57.02	-0.00	0.0782	-0.0026	0.0226	-0.0332	0.2906	1.3710	-0.0175	0.6000	-0.0126	0.4377
332	57.07	-0.03	0.0812	-0.0010	0.0239	-0.0128	0.2947	1.3683	-0.0175	0.6004	-0.0126	0.4368
333	57.17	-0.00	0.0851	-0.0031	0.0195	-0.0477	0.3000	1.3688	-0.0168	0.5998	-0.0123	0.4389
334	57.26	-0.06	0.0742	-0.0010	0.0238	-0.0135	0.3212	1.3761	-0.0168	0.6006	-0.0122	0.4365
335	57.32	-0.03	0.0730	-0.0025	0.0229	-0.0345	0.3141	1.3777	-0.0176	0.6019	-0.0128	0.4365
336	57.39	-0.04	0.0760	-0.0029	0.0219	-0.0382	0.2885	1.3822	-0.0176	0.6047	-0.0129	0.4375
337	57.46	-0.01	0.0812	-0.0023	0.0243	-0.0204	0.2996	1.3687	-0.0176	0.6033	-0.0128	0.4370
338	57.55	-0.04	0.0717	-0.0029	0.0215	-0.0404	0.2994	1.3776	-0.0175	0.6019	-0.0127	0.4370
339	57.61	-0.03	0.0731	-0.0031	0.0228	-0.0425	0.3125	1.3825	-0.0178	0.6035	-0.0129	0.4366
340	57.67	-0.02	0.0747	-0.0030	0.0224	-0.0402	0.3003	1.3813	-0.0176	0.6029	-0.0129	0.4365
341	57.75	-0.00	0.0787	-0.0027	0.0234	-0.0344	0.2777	1.3809	-0.0183	0.6066	-0.0132	0.4368
342	57.83	-0.04	0.0693	-0.0025	0.0201	-0.0361	0.2905	1.3873	-0.0180	0.6070	-0.0130	0.4376
343	57.89	-0.03	0.0719	-0.0039	0.0232	-0.0543	0.3231	1.3935	-0.0186	0.6100	-0.0134	0.4378
344	57.96	-0.04	0.0734	-0.0031	0.0226	-0.0496	0.3083	1.3844	-0.0186	0.6059	-0.0135	0.4374
345	58.04	-0.04	0.0707	-0.0030	0.0208	-0.0425	0.2990	1.3904	-0.0186	0.6097	-0.0134	0.4385
346	58.11	-0.05	0.0780	-0.0020	0.0235	-0.0255	0.2994	1.3905	-0.0189	0.6091	-0.0136	0.4381
347	58.19	0.03	0.0691	-0.0006	0.0202	-0.1032	0.3156	1.3798	-0.0186	0.6046	-0.0135	0.4382
348	58.27	-0.03	0.0747	-0.0044	0.0228	-0.0590	0.3056	1.3935	-0.0191	0.6112	-0.0137	0.4386
349	58.33	-0.04	0.0668	-0.0071	0.0210	-0.1065	0.3148	1.3828	-0.0189	0.6066	-0.0137	0.4387
350	58.41	-0.00	0.0652	-0.0066	0.0227	-0.1014	0.3487	1.3813	-0.0187	0.6071	-0.0136	0.4395
351	58.47	0.01	0.0652	-0.0061	0.0215	-0.0957	0.3303	1.3905	-0.0192	0.6097	-0.0138	0.4385
352	58.48	0.02	0.0625	-0.0059	0.0213	-0.0946	0.3413	1.3874	-0.0186	0.6070	-0.0134	0.4375
353	58.46	0.06	0.0633	-0.0033	0.0209	-0.0844	0.3129	1.3845	-0.0195	0.6067	-0.0141	0.4382
354	58.47	-0.01	0.0652	-0.0057	0.0216	-0.0876	0.3318	1.3921	-0.0194	0.6092	-0.0140	0.4376
355	58.47	0.02	0.0611	-0.0053	0.0206	-0.0869	0.3377	1.3844	-0.0189	0.6073	-0.0137	0.4387
356	58.47	0.01	0.0612	-0.0061	0.0205	-0.0999	0.3355	1.3875	-0.0189	0.6070	-0.0136	0.4375

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYNO PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 57 0.90 1.7 45.0 BIWOFIN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.71	0.10	0.1632	9.9999	0.0919	9.9999	0.5832	-0.1360	-0.0298	-0.0801	0.2195	0.6333
2	-5.72	0.09	0.1643	9.9999	0.0931	9.9999	0.5800	-0.1269	-0.0289	-0.0824	0.2282	0.6496
3	-5.72	0.09	0.1518	9.9999	0.0907	9.9999	0.5908	-0.1300	-0.0290	-0.0826	0.2235	0.6356
4	-5.71	0.09	0.1673	9.9999	0.0939	9.9999	0.5813	-0.1269	-0.0289	-0.0829	0.2282	0.6335
5	-5.73	0.09	0.1576	9.9999	0.0898	9.9999	0.5899	-0.1271	-0.0285	-0.0823	0.2247	0.6478
6	-5.37	0.09	0.1251	9.9999	0.0740	9.9999	0.5866	-0.1005	-0.0242	-0.0804	0.2411	0.6006
7	-4.34	0.09	0.1061	9.9999	0.0675	9.9999	0.6358	-0.0862	-0.0193	-0.0444	0.2835	0.6505
8	-3.38	0.10	0.0699	9.9999	0.0536	9.9999	0.7065	-0.0357	-0.0145	-0.0295	0.4063	0.8263
9	-2.48	0.09	0.0447	9.9999	0.0466	9.9999	1.0426	0.0008	-0.0086	-0.0159	-10.7543	-19.8750
10	-1.50	0.08	0.0152	9.9999	0.0370	9.9999	2.4737	0.0228	-0.0021	-0.0069	-0.0921	-0.3026
11	-0.54	0.09	-0.0072	9.9999	0.0314	9.9999	-4.3611	0.0432	0.0013	-0.0019	0.0362	-0.0441
12	0.43	0.09	-0.0295	9.9999	0.0241	9.9999	-0.8169	0.0652	0.0079	0.0006	0.1214	0.1014
13	1.36	0.08	-0.0534	9.9999	0.0184	9.9999	-0.3452	0.0883	0.0120	0.0153	0.1361	0.1735
14	2.36	0.10	-0.0967	9.9999	0.0095	9.9999	-0.0466	0.1072	0.0154	0.0237	0.1438	0.2213
15	3.37	0.09	-0.1344	9.9999	-0.0108	9.9999	0.0750	0.1412	0.0201	0.0366	0.1426	0.2810
16	4.43	0.09	-0.1691	9.9999	-0.0455	9.9999	0.1510	0.1765	0.0240	0.0515	0.1457	0.3018
17	5.40	0.08	-0.2095	9.9999	-0.0832	9.9999	0.2060	0.1915	0.0271	0.0628	0.1417	0.3278
18	6.41	0.10	-0.2526	9.9999	-0.0620	9.9999	0.2453	0.2169	0.0304	0.0766	0.1404	0.3624
19	7.15	0.09	-0.2799	9.9999	-0.0839	9.9999	0.2796	0.2386	0.0316	0.0932	0.1322	0.3907
20	8.11	0.09	-0.3497	9.9999	-0.1085	9.9999	0.3115	0.2561	0.0314	0.1033	0.1224	0.4034
21	9.05	0.10	-0.3818	9.9999	-0.1231	9.9999	0.3223	0.2900	0.0335	0.1213	0.1154	0.4185
22	9.98	0.11	-0.4514	9.9999	-0.1517	9.9999	0.3361	0.3154	0.0332	0.1325	0.1051	0.4200
23	10.98	0.10	-0.5025	9.9999	-0.1718	9.9999	0.3416	0.3509	0.0318	0.1466	0.0905	0.4177
24	11.95	0.09	-0.5720	9.9999	-0.1994	9.9999	0.3463	0.3708	0.0299	0.1548	0.0808	0.4175
25	12.90	0.09	-0.6227	9.9999	-0.2205	9.9999	0.3541	0.4087	0.0299	0.1716	0.0733	0.4199
26	13.88	0.09	-0.6729	9.9999	-0.2487	9.9999	0.3592	0.4176	0.0250	0.1797	0.0600	0.4304
27	14.84	0.09	-0.7482	9.9999	-0.2691	9.9999	0.3597	0.4338	0.0243	0.1889	0.0561	0.4355
28	15.88	0.09	-0.8152	9.9999	-0.2927	9.9999	0.3590	0.4428	0.0193	0.1993	0.0437	0.4501
29	16.86	0.09	-0.8723	9.9999	-0.3127	9.9999	0.3584	0.4502	0.0181	0.2072	0.0397	0.4541
30	17.88	0.11	-0.9212	9.9999	-0.3314	9.9999	0.3597	0.5034	0.0182	0.2224	0.0362	0.4417
31	18.83	0.11	-0.9562	9.9999	-0.3560	9.9999	0.3603	0.5029	0.0131	0.2262	0.0281	0.4497
32	19.82	0.09	-1.0413	9.9999	-0.3758	9.9999	0.3609	0.5027	0.0103	0.2293	0.0205	0.4561
33	20.73	0.10	-1.0859	9.9999	-0.3920	9.9999	0.3610	0.5044	0.0035	0.2375	0.0069	0.4662
34	21.74	0.11	-1.1196	9.9999	-0.4002	9.9999	0.3574	0.4918	-0.0019	0.2307	-0.0039	0.4692
35	22.72	0.09	-1.1700	9.9999	-0.4146	9.9999	0.3594	0.5026	-0.0111	0.2394	-0.0221	0.4765
36	23.70	0.11	-1.1926	9.9999	-0.4263	9.9999	0.3606	0.5190	-0.0155	0.2446	-0.0299	0.4713
37	24.64	0.12	-0.9572	9.9999	-0.3221	9.9999	0.3585	0.5042	-0.0109	0.2015	-0.0194	0.4635
38	25.59	0.14	-0.9749	9.9999	-0.3283	9.9999	0.3578	0.4152	-0.0063	0.1782	-0.0041	0.4523
39	26.53	0.16	-0.9473	9.9999	-0.3219	9.9999	0.3598	0.7014	0.0021	0.3128	0.0030	0.4460
40	27.55	0.16	-0.9640	9.9999	-0.3270	9.9999	0.3596	0.7777	0.0013	0.3475	0.0019	0.4469
41	28.21	0.15	-0.9724	9.9999	-0.3305	9.9999	0.3599	0.7983	-0.0018	0.3591	-0.0023	0.4499
42	28.21	0.15	-0.9725	9.9999	-0.3294	9.9999	0.3587	0.7987	0.0005	0.3586	0.0011	0.4511
43	28.22	0.15	-0.9655	9.9999	-0.3265	9.9999	0.3582	0.7988	-0.0005	0.3633	-0.0004	0.4549
44	28.21	0.15	-0.9741	9.9999	-0.3297	9.9999	0.3595	0.7987	0.0001	0.3649	0.0001	0.4564
45	28.21	0.16	-0.9683	9.9999	-0.3278	9.9999	0.3585	0.8134	0.0023	0.3701	0.0028	0.4549
46	28.51	0.16	-0.9697	9.9999	-0.3290	9.9999	0.3593	0.8170	0.0013	0.3732	0.0016	0.4567

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 57 0.90 1.7 45.0 BINOMIAL 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CB3	XCPF3	YCPF3	CNF4	CH4	CB4	XCPF4	YCPF4
47	26.66	0.17	-0.9742	9.9999	-0.3507	9.9999	0.3395	0.8100	0.0016	0.3714	0.0020	0.4585
48	26.78	0.17	-0.9757	9.9999	-0.3545	9.9999	0.3414	0.8312	0.0005	0.3827	0.0006	0.4604
49	26.91	0.17	-0.9895	9.9999	-0.3380	9.9999	0.3416	0.8723	0.0043	0.3981	0.0049	0.4564
50	29.13	0.17	-0.9826	9.9999	-0.3547	9.9999	0.3406	0.8702	0.0053	0.3969	0.0061	0.4561
51	29.25	0.17	-0.9909	9.9999	-0.3392	9.9999	0.3423	0.8598	0.0009	0.3978	0.0010	0.4627
52	29.44	0.18	-0.9923	9.9999	-0.3394	9.9999	0.3420	0.8991	0.0048	0.4125	0.0053	0.4588
53	29.58	0.18	-0.9909	9.9999	-0.3537	9.9999	0.3418	0.8986	0.0027	0.4156	0.0030	0.4625
54	29.72	0.18	-0.9923	9.9999	-0.3388	9.9999	0.3414	0.9113	0.0028	0.4224	0.0031	0.4635
55	29.86	0.17	-1.0046	9.9999	-0.3437	9.9999	0.3420	0.8864	-0.0013	0.4153	-0.0015	0.4685
56	30.00	0.17	-1.0021	9.9999	-0.3429	9.9999	0.3422	0.8994	0.0013	0.4202	0.0014	0.4672
57	30.15	0.17	-1.0049	9.9999	-0.3442	9.9999	0.3425	0.9068	0.0020	0.4251	0.0022	0.4679
58	30.28	0.18	-1.0091	9.9999	-0.3457	9.9999	0.3426	0.8973	-0.0008	0.4244	-0.0007	0.4730
59	30.43	0.18	-1.0101	9.9999	-0.3490	9.9999	0.3435	0.9129	-0.0001	0.4315	-0.0001	0.4727
60	30.55	0.18	-1.0133	9.9999	-0.3471	9.9999	0.3426	0.9243	0.0024	0.4351	0.0026	0.4708
61	30.69	0.18	-1.0175	9.9999	-0.3491	9.9999	0.3431	0.9360	0.0038	0.4416	0.0041	0.4709
62	30.82	0.18	-1.0204	9.9999	-0.3479	9.9999	0.3429	0.9274	0.0027	0.4389	0.0029	0.4733
63	30.97	0.19	-1.0218	9.9999	-0.3500	9.9999	0.3432	0.9525	0.0101	0.4466	0.0106	0.4690
64	31.11	0.18	-1.0218	9.9999	-0.3511	9.9999	0.3437	0.9583	0.0077	0.4500	0.0080	0.4704
65	31.25	0.17	-1.0310	9.9999	-0.3547	9.9999	0.3439	0.9478	0.0159	0.4418	0.0168	0.4662
66	31.39	0.19	-1.0338	9.9999	-0.3561	9.9999	0.3438	0.9553	0.0106	0.4437	0.0174	0.4645
67	31.53	0.19	-1.0380	9.9999	-0.3550	9.9999	0.3428	0.9467	0.0177	0.4585	0.0187	0.4632
68	31.68	0.19	-1.0426	9.9999	-0.3589	9.9999	0.3442	0.9452	0.0208	0.4560	0.0220	0.4613
69	31.81	0.19	-1.0441	9.9999	-0.3600	9.9999	0.3434	0.9404	0.0178	0.4393	0.0190	0.4672
70	31.94	0.19	-1.0440	9.9999	-0.3601	9.9999	0.3445	0.9213	0.0207	0.4224	0.0225	0.4585
71	32.07	0.20	-1.0520	9.9999	-0.3613	9.9999	0.3433	0.9107	0.0226	0.4143	0.0249	0.4549
72	32.21	0.20	-1.0541	9.9999	-0.3601	9.9999	0.3451	0.9142	0.0222	0.4204	0.0243	0.4599
73	32.35	0.20	-1.0600	9.9999	-0.3602	9.9999	0.3447	0.9008	0.0207	0.4204	0.0230	0.4667
74	32.48	0.20	-1.0722	9.9999	-0.3696	9.9999	0.3447	0.9003	0.0245	0.4153	0.0273	0.4591
75	32.61	0.20	-1.0706	9.9999	-0.3684	9.9999	0.3445	0.8949	0.0228	0.4144	0.0255	0.4631
76	32.75	0.20	-1.0711	9.9999	-0.3723	9.9999	0.3434	0.8894	0.0242	0.4119	0.0273	0.4631
77	32.89	0.20	-1.0917	9.9999	-0.3778	9.9999	0.3460	0.8866	0.0254	0.4021	0.0294	0.4640
78	33.01	0.19	-1.0925	9.9999	-0.3775	9.9999	0.3454	0.8864	0.0231	0.4030	0.0267	0.4652
79	33.15	0.20	-1.0929	9.9999	-0.3780	9.9999	0.3458	0.8814	0.0236	0.4039	0.0272	0.4646
80	33.28	0.19	-1.1000	9.9999	-0.3808	9.9999	0.3462	0.8844	0.0212	0.4108	0.0246	0.4653
81	33.40	0.19	-1.0972	9.9999	-0.3784	9.9999	0.3448	0.8871	0.0220	0.4076	0.0254	0.4701
82	33.52	0.20	-1.1051	9.9999	-0.3823	9.9999	0.3459	0.8819	0.0232	0.4134	0.0235	0.4797
83	33.64	0.19	-1.1079	9.9999	-0.3826	9.9999	0.3453	0.8813	0.0215	0.4130	0.0250	0.4795
84	33.78	0.18	-1.1075	9.9999	-0.3837	9.9999	0.3463	0.8801	0.0184	0.4211	0.0213	0.4862
85	33.90	0.19	-1.1079	9.9999	-0.3831	9.9999	0.3456	0.8756	0.0183	0.4223	0.0209	0.4823
86	34.03	0.19	-1.1107	9.9999	-0.3839	9.9999	0.3456	0.8850	0.0177	0.4256	0.0205	0.4921
87	34.15	0.19	-1.1163	9.9999	-0.3860	9.9999	0.3458	0.8838	0.0170	0.4236	0.0197	0.4904
88	34.27	0.18	-1.1200	9.9999	-0.3912	9.9999	0.3474	0.8802	0.0097	0.4408	0.0112	0.5090
89	34.39	0.19	-1.1163	9.9999	-0.3865	9.9999	0.3462	0.8809	0.0171	0.4285	0.0198	0.4943
90	34.54	0.18	-1.1330	9.9999	-0.3934	9.9999	0.3472	0.8740	0.0101	0.4407	0.0116	0.5112
91	34.64	0.18	-1.1330	9.9999	-0.3934	9.9999	0.3472	0.8802	0.0091	0.4411	0.0061	0.5250
92	34.77	0.20	-1.1329	9.9999	-0.3950	9.9999	0.3487	0.8879	0.0048	0.4470	0.0054	0.5211

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 57 0.90 1.7 45.0 BINOFIS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CDO	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
93	34.90	0.18	-1.1599	9.9999	-0.3962	9.9999	0.3476	0.6554	0.0055	0.4471	0.0076	0.5228
94	35.00	0.18	-1.1468	9.9999	-0.4011	9.9999	0.3497	0.8378	-0.0025	0.4510	-0.0027	0.5382
95	35.14	0.20	-1.1413	9.9999	-0.3965	9.9999	0.3492	0.6459	0.0003	0.4457	0.0004	0.5315
96	35.27	0.16	-1.1496	9.9999	-0.4024	9.9999	0.3500	0.6362	0.0007	0.4472	0.0008	0.5348
97	35.40	0.19	-1.1482	9.9999	-0.4018	9.9999	0.3499	0.6149	-0.0036	0.4432	-0.0047	0.5439
98	35.52	0.19	-1.1524	9.9999	-0.4038	9.9999	0.3504	0.6041	-0.0044	0.4394	-0.0055	0.5465
99	35.62	0.20	-1.1505	9.9999	-0.4009	9.9999	0.3484	0.8588	0.0032	0.4522	0.0037	0.5265
100	35.75	0.19	-1.1574	9.9999	-0.4038	9.9999	0.3506	0.7996	-0.0075	0.4379	-0.0094	0.5477
101	35.89	0.18	-1.1643	9.9999	-0.4067	9.9999	0.3519	0.7930	-0.0069	0.4369	-0.0087	0.5510
102	35.99	0.19	-1.1558	9.9999	-0.4079	9.9999	0.3529	0.7867	-0.0069	0.4324	-0.0088	0.5497
103	36.14	0.19	-1.1642	9.9999	-0.4113	9.9999	0.3533	0.7726	-0.0082	0.4215	-0.0109	0.5601
104	36.24	0.17	-1.1670	9.9999	-0.4116	9.9999	0.3527	0.7452	-0.0092	0.4184	-0.0124	0.5615
105	36.34	0.17	-1.1614	9.9999	-0.4095	9.9999	0.3526	0.7327	-0.0083	0.4127	-0.0086	0.5633
106	36.46	0.19	-1.1693	9.9999	-0.4134	9.9999	0.3534	0.7490	-0.0073	0.4196	-0.0098	0.5602
107	36.61	0.18	-1.1669	9.9999	-0.4132	9.9999	0.3541	0.7343	-0.0064	0.4007	-0.0091	0.5690
108	36.74	0.18	-1.1706	9.9999	-0.4129	9.9999	0.3527	0.7407	-0.0075	0.4185	-0.0071	0.5605
109	36.86	0.17	-1.1704	9.9999	-0.4162	9.9999	0.3536	0.6650	-0.0061	0.3836	-0.0092	0.5798
110	36.98	0.18	-1.1663	9.9999	-0.4143	9.9999	0.3532	0.6992	-0.0050	0.3962	-0.0072	0.5695
111	37.09	0.18	-1.1704	9.9999	-0.4157	9.9999	0.3552	0.7005	-0.0044	0.3984	-0.0063	0.5688
112	37.23	0.18	-1.1760	9.9999	-0.4172	9.9999	0.3548	0.7103	-0.0019	0.4047	-0.0027	0.5698
113	37.36	0.18	-1.1705	9.9999	-0.4151	9.9999	0.3546	0.7325	-0.0022	0.4122	-0.0030	0.5627
114	37.44	0.19	-1.1537	9.9999	-0.4111	9.9999	0.3563	0.6451	0.0021	0.3732	0.0033	0.5745
115	37.58	0.16	-1.1607	9.9999	-0.4133	9.9999	0.3561	0.6810	0.0018	0.3801	0.0027	0.5750
116	37.69	0.16	-1.1636	9.9999	-0.4138	9.9999	0.3565	0.6960	0.0044	0.3894	0.0069	0.5806
117	37.80	0.18	-1.1509	9.9999	-0.4103	9.9999	0.3565	0.6160	0.0086	0.3576	0.0107	0.5806
118	37.96	0.17	-1.1592	9.9999	-0.4132	9.9999	0.3565	0.6402	0.0055	0.3693	0.0086	0.5768
119	38.13	0.17	-1.1759	9.9999	-0.4211	9.9999	0.3561	0.5990	0.0056	0.3510	0.0094	0.5860
120	38.24	0.17	-1.1704	9.9999	-0.4179	9.9999	0.3565	0.6028	0.0044	0.3601	0.0066	0.5734
121	38.36	0.16	-1.1683	9.9999	-0.4177	9.9999	0.3575	0.6194	0.0072	0.3610	0.0116	0.5829
122	38.48	0.16	-1.1544	9.9999	-0.4139	9.9999	0.3585	0.5524	0.0116	0.3276	0.0210	0.5931
123	38.60	0.15	-1.1474	9.9999	-0.4111	9.9999	0.3583	0.5088	0.0136	0.3355	0.0239	0.5899
124	38.71	0.15	-1.1600	9.9999	-0.4154	9.9999	0.3581	0.6019	0.0104	0.3509	0.0173	0.5830
125	38.83	0.13	-1.1349	9.9999	-0.4068	9.9999	0.3584	0.5029	0.0191	0.3018	0.0380	0.6000
126	38.94	0.13	-1.1280	9.9999	-0.4035	9.9999	0.3577	0.4663	0.0196	0.2828	0.0421	0.6066
127	39.05	0.13	-1.1316	9.9999	-0.4136	9.9999	0.3592	0.5007	0.0137	0.3344	0.0241	0.5880
128	39.15	0.12	-1.1210	9.9999	-0.4019	9.9999	0.3585	0.4378	0.0186	0.2679	0.0448	0.6119
129	39.25	0.13	-1.1335	9.9999	-0.4067	9.9999	0.3588	0.4676	0.0180	0.2918	0.0370	0.5984
130	39.36	0.13	-1.1210	9.9999	-0.4019	9.9999	0.3585	0.4608	0.0186	0.2856	0.0392	0.5939
131	39.50	0.13	-1.1259	9.9999	-0.4021	9.9999	0.3576	0.4726	0.0195	0.2839	0.0413	0.6008
132	39.61	0.11	-1.1210	9.9999	-0.4024	9.9999	0.3590	0.4426	0.0194	0.2677	0.0439	0.6048
133	39.72	0.11	-1.1322	9.9999	-0.4050	9.9999	0.3577	0.4389	0.0205	0.2641	0.0468	0.6017
134	39.81	0.12	-1.1210	9.9999	-0.4024	9.9999	0.3590	0.4293	0.0208	0.2599	0.0485	0.6054
135	39.91	0.11	-1.1155	9.9999	-0.3992	9.9999	0.3579	0.4131	0.0215	0.2507	0.0521	0.6069
136	40.03	0.10	-1.1183	9.9999	-0.4006	9.9999	0.3582	0.4053	0.0214	0.2449	0.0529	0.6042
137	40.14	0.10	-1.1238	9.9999	-0.4043	9.9999	0.3598	0.4230	0.0206	0.2524	0.0488	0.5967
138	40.23	0.12	-1.1122	9.9999	-0.3990	9.9999	0.3588	0.4086	0.0226	0.2455	0.0554	0.6008

TEST 7 PART 27 MACH 0.90 RX10-6 1.7 PHI 45.0 CONF 81NCH15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PLINT	ALPHA	DELTA	CNF3	CH3	CD3	XCPF3	YCPF3	CNF4	CH4	CD4	XCPF4	YCPF4
139	40.33	0.08	-1.1053	9.9999	-0.3963	9.9999	0.3585	0.3837	0.0223	0.2349	0.0582	0.6122
140	40.44	0.10	-1.1136	9.9999	-0.3997	9.9999	0.3589	0.3775	0.0220	0.2296	0.0584	0.6088
141	40.53	0.10	-1.1150	9.9999	-0.3998	9.9999	0.3586	0.3730	0.0215	0.2294	0.0577	0.6150
142	40.64	0.11	-1.1169	9.9999	-0.3973	9.9999	0.3576	0.3669	0.0206	0.2219	0.0566	0.6147
143	40.73	0.08	-1.1053	9.9999	-0.3957	9.9999	0.3580	0.3460	0.0218	0.2129	0.0631	0.6152
144	40.84	0.09	-1.1164	9.9999	-0.3999	9.9999	0.3582	0.3512	0.0208	0.2143	0.0593	0.6100
145	40.95	0.09	-1.0983	9.9999	-0.3924	9.9999	0.3572	0.3263	0.0201	0.2006	0.0617	0.6149
146	41.06	0.09	-1.1026	9.9999	-0.3959	9.9999	0.3572	0.3343	0.0178	0.2006	0.0530	0.6038
147	41.17	0.05	-1.1053	9.9999	-0.3957	9.9999	0.3580	0.3151	0.0181	0.1923	0.0579	0.6143
148	41.24	0.07	-1.1108	9.9999	-0.3983	9.9999	0.3586	0.3262	0.0172	0.1990	0.0528	0.6102
149	41.35	0.06	-1.1007	9.9999	-0.3926	9.9999	0.3567	0.3218	0.0184	0.1951	0.0573	0.6064
150	41.47	0.07	-1.1010	9.9999	-0.3926	9.9999	0.3566	0.2883	0.0173	0.1805	0.0601	0.6263
151	41.56	0.07	-1.0967	9.9999	-0.3917	9.9999	0.3571	0.2972	0.0133	0.1830	0.0617	0.6159
152	41.67	0.07	-1.1051	9.9999	-0.3951	9.9999	0.3575	0.2851	0.0172	0.1750	0.0604	0.6140
153	41.78	0.05	-1.1051	9.9999	-0.3945	9.9999	0.3570	0.2826	0.0127	0.1729	0.0450	0.6118
154	41.87	0.05	-1.1023	9.9999	-0.3938	9.9999	0.3573	0.3017	0.0155	0.1817	0.0515	0.6024
155	41.97	0.04	-1.1065	9.9999	-0.3960	9.9999	0.3566	0.2848	0.0169	0.1659	0.0639	0.6265
156	42.07	0.07	-1.1148	9.9999	-0.3980	9.9999	0.3570	0.2772	0.0139	0.1681	0.0502	0.6064
157	42.17	0.06	-1.1135	9.9999	-0.3963	9.9999	0.3559	0.2499	0.0120	0.1588	0.0481	0.6354
158	42.27	0.07	-1.1161	9.9999	-0.3956	9.9999	0.3562	0.2663	0.0137	0.1643	0.0515	0.6169
159	42.37	0.06	-1.1189	9.9999	-0.4006	9.9999	0.3560	0.2594	0.0116	0.1606	0.0456	0.6191
160	42.47	0.06	-1.1134	9.9999	-0.3974	9.9999	0.3569	0.2317	0.0106	0.1491	0.0458	0.6435
161	42.55	0.05	-1.1162	9.9999	-0.3987	9.9999	0.3572	0.2480	0.0074	0.1536	0.0380	0.6193
162	42.65	0.04	-1.1203	9.9999	-0.4007	9.9999	0.3577	0.2132	0.0068	0.1384	0.0320	0.6491
163	42.74	0.03	-1.1245	9.9999	-0.4026	9.9999	0.3580	0.2244	0.0064	0.1444	0.0286	0.6435
164	42.84	0.04	-1.1233	9.9999	-0.4023	9.9999	0.3583	0.2306	0.0069	0.1440	0.0300	0.6244
165	42.93	0.03	-1.1234	9.9999	-0.4006	9.9999	0.3568	0.2196	0.0071	0.1403	0.0324	0.6389
166	43.01	0.04	-1.1233	9.9999	-0.4025	9.9999	0.3583	0.2141	0.0054	0.1373	0.0253	0.6413
167	43.10	0.04	-1.1262	9.9999	-0.4021	9.9999	0.3570	0.2031	0.0052	0.1324	0.0256	0.6516
168	43.20	0.04	-1.1290	9.9999	-0.4029	9.9999	0.3569	0.1900	0.0063	0.1269	0.0332	0.6675
169	43.28	0.03	-1.1303	9.9999	-0.4041	9.9999	0.3575	0.1902	0.0059	0.1275	0.0311	0.6700
170	43.37	0.04	-1.1281	9.9999	-0.4032	9.9999	0.3581	0.1900	0.0063	0.1269	0.0332	0.6675
171	43.46	0.04	-1.1330	9.9999	-0.4065	9.9999	0.3588	0.2175	0.0079	0.1362	0.0384	0.6262
172	43.55	0.03	-1.1288	9.9999	-0.4057	9.9999	0.3594	0.1952	0.0053	0.1289	0.0272	0.6600
173	43.66	0.05	-1.1366	9.9999	-0.4086	9.9999	0.3589	0.1777	0.0058	0.1212	0.0327	0.6823
174	43.74	0.06	-1.1427	9.9999	-0.4111	9.9999	0.3598	0.1638	0.0084	0.1171	0.0514	0.7152
175	43.83	0.02	-1.1365	9.9999	-0.4092	9.9999	0.3594	0.1716	0.0052	0.1163	0.0304	0.6896
176	43.92	0.04	-1.1385	9.9999	-0.4103	9.9999	0.3604	0.2070	0.0069	0.1324	0.0334	0.6396
177	44.00	0.05	-1.1357	9.9999	-0.4089	9.9999	0.3600	0.1516	0.0067	0.1022	0.0510	0.7770
178	44.08	0.05	-1.1358	9.9999	-0.4084	9.9999	0.3596	0.1638	0.0063	0.1159	0.0508	0.7078
179	44.18	0.03	-1.1376	9.9999	-0.4101	9.9999	0.3606	0.1357	0.0062	0.1023	0.0605	0.7562
180	44.28	0.02	-1.1360	9.9999	-0.4083	9.9999	0.3594	0.1638	0.0067	0.1136	0.0532	0.6950
181	44.35	0.04	-1.1415	9.9999	-0.4121	9.9999	0.3610	0.1457	0.0070	0.1056	0.0481	0.7265
182	44.45	0.06	-1.1413	9.9999	-0.4120	9.9999	0.3615	0.1581	0.0044	0.1110	0.0279	0.7025
183	44.56	0.02	-1.1396	9.9999	-0.4105	9.9999	0.3609	0.1843	0.0085	0.1176	0.0462	0.6382
184	44.64	0.02	-1.1493	9.9999	-0.4145	9.9999	0.3610	0.1504	0.0058	0.1065	0.0243	0.6814

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 37 MACH 0.90 RATIO-0 1.0 PHI 45.0 BINDFIN CONF 8 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CB3	XCPF3	YCPF3	CNF4	CH4	CB4	XCPF4	YCPF4
185	44.74	0.04	-1.1451	9.9999	-0.4135	9.9999	0.3011	0.1424	0.0067	0.1013	0.0471	0.7117
186	44.84	0.03	-1.1479	9.9999	-0.4148	9.9999	0.3014	0.1418	0.0079	0.1003	0.0558	0.7076
187	44.92	0.02	-1.1492	9.9999	-0.4160	9.9999	0.3020	0.1010	0.0040	0.1086	0.0249	0.6748
188	45.02	0.02	-1.1451	9.9999	-0.4146	9.9999	0.3021	0.0980	0.0040	0.0819	0.0409	0.8355
189	45.11	-0.02	-1.1424	9.9999	-0.4121	9.9999	0.3007	0.0702	0.0134	0.0782	0.1155	0.8668
190	45.21	-0.00	-1.1590	9.9999	-0.4195	9.9999	0.3020	0.1574	0.0018	0.1033	0.0115	0.6505
191	45.30	-0.01	-1.1479	9.9999	-0.4140	9.9999	0.3014	0.0811	0.0032	0.0718	0.0395	0.8852
192	45.37	-0.01	-1.1645	9.9999	-0.4210	9.9999	0.3015	0.0789	0.0014	0.0713	0.0178	0.9036
193	45.46	-0.01	-1.1590	9.9999	-0.4190	9.9999	0.3015	0.1004	0.0024	0.0812	0.0239	0.8086
194	45.57	0.00	-1.1645	9.9999	-0.4216	9.9999	0.3020	0.0822	0.0009	0.0709	0.0110	0.8624
195	45.64	0.02	-1.1621	9.9999	-0.4202	9.9999	0.3016	0.0801	0.0023	0.0722	0.0288	0.9013
196	45.76	0.01	-1.1734	9.9999	-0.4236	9.9999	0.3019	0.0810	0.0004	0.0697	0.0049	0.8803
197	45.83	-0.00	-1.1740	9.9999	-0.4236	9.9999	0.3023	0.1110	0.0001	0.0800	0.0009	0.7205
198	45.91	-0.02	-1.1699	9.9999	-0.4220	9.9999	0.3027	0.0506	0.0013	0.0577	0.0258	1.1406
199	46.00	0.00	-1.1734	9.9999	-0.4242	9.9999	0.3024	0.0670	0.0001	0.0634	0.0015	0.9462
200	46.08	-0.02	-1.1682	9.9999	-0.4233	9.9999	0.3030	0.0557	0.0005	0.0565	0.0090	1.0564
201	46.16	-0.02	-1.1716	9.9999	-0.4246	9.9999	0.3025	0.0491	0.0012	0.0541	0.0245	1.1020
202	46.26	-0.02	-1.1690	9.9999	-0.4241	9.9999	0.3026	0.0503	0.0018	0.0542	0.0359	1.0777
203	46.35	0.00	-1.1731	9.9999	-0.4255	9.9999	0.3027	0.0417	0.0001	0.0504	0.0024	1.2091
204	46.44	-0.03	-1.1717	9.9999	-0.4254	9.9999	0.3031	0.0301	0.0048	0.0478	0.1330	1.3213
205	46.53	-0.03	-1.1773	9.9999	-0.4275	9.9999	0.3031	0.0406	-0.0010	0.0519	-0.0206	1.0660
206	46.63	-0.02	-1.1824	9.9999	-0.4312	9.9999	0.3040	0.0416	-0.0029	0.0500	-0.0099	1.2024
207	46.70	-0.03	-1.1815	9.9999	-0.4295	9.9999	0.3030	0.0435	-0.0003	0.0517	-0.0009	1.1889
208	46.78	0.01	-1.1801	9.9999	-0.4286	9.9999	0.3034	0.0440	-0.0014	0.0496	-0.0319	1.1321
209	46.90	-0.03	-1.1717	9.9999	-0.4254	9.9999	0.3031	0.0234	0.0017	0.0395	0.0727	1.7051
210	46.98	-0.02	-1.1800	9.9999	-0.4295	9.9999	0.3043	0.0272	0.0005	0.0418	0.0184	1.5331
211	47.05	-0.04	-1.1870	9.9999	-0.4327	9.9999	0.3048	0.0065	0.0039	0.0310	0.1365	4.7692
212	47.14	-0.02	-1.1800	9.9999	-0.4294	9.9999	0.3039	0.0224	0.0006	0.0391	0.0268	1.7455
213	47.22	-0.01	-1.1912	9.9999	-0.4341	9.9999	0.3049	0.0063	0.0012	0.0304	0.1906	4.8254
214	47.32	-0.04	-1.1943	9.9999	-0.4365	9.9999	0.3055	0.0016	0.0040	0.0288	2.2431	16.0000
215	47.40	-0.04	-1.1915	9.9999	-0.4352	9.9999	0.3053	-0.0050	0.0017	0.0233	-0.3401	-4.6800
216	47.47	-0.04	-1.1901	9.9999	-0.4351	9.9999	0.3050	-0.0077	0.0040	0.0223	-0.5197	-2.8961
217	47.57	-0.03	-1.2027	9.9999	-0.4395	9.9999	0.3058	0.0152	0.0023	0.0307	0.1514	2.0197
218	47.65	-0.04	-1.1999	9.9999	-0.4391	9.9999	0.3060	-0.0093	0.0039	0.0205	-0.0988	-2.2043
219	47.75	-0.02	-1.1984	9.9999	-0.4390	9.9999	0.3064	-0.0054	0.0024	0.0216	-0.4446	-4.0000
220	47.84	-0.02	-1.1984	9.9999	-0.4390	9.9999	0.3064	0.0045	0.0015	0.0257	0.3335	5.7111
221	47.92	-0.00	-1.2002	9.9999	-0.4402	9.9999	0.3066	-0.0079	0.0011	0.0215	-0.1393	-2.6962
222	48.01	-0.02	-1.2039	9.9999	-0.4443	9.9999	0.3073	-0.0023	0.0024	0.0207	-1.0439	-9.0000
223	48.08	-0.03	-1.2050	9.9999	-0.4404	9.9999	0.3061	-0.0002	0.0014	0.0236	-7.0028	-118.0000
224	48.16	-0.03	-1.2044	9.9999	-0.4411	9.9999	0.3063	-0.0064	0.0042	0.0195	-0.6565	-3.0469
225	48.27	-0.05	-1.2058	9.9999	-0.4429	9.9999	0.3074	-0.0203	0.0037	0.0126	-0.1823	-0.5911
226	48.35	-0.03	-1.2018	9.9999	-0.4403	9.9999	0.3063	-0.0183	0.0032	0.0136	-0.1750	-0.7459
227	48.44	-0.03	-1.2058	9.9999	-0.4423	9.9999	0.3069	-0.0213	0.0024	0.0105	-0.1127	-0.4930
228	48.54	-0.01	-1.2164	9.9999	-0.4471	9.9999	0.3075	-0.0314	0.0007	0.0059	-0.1179	-0.1879
229	48.62	0.02	-1.2134	9.9999	-0.4467	9.9999	0.3082	-0.0096	0.0042	0.0140	-0.4377	-1.4563
230	48.70	-0.04	-1.2120	9.9999	-0.4461	9.9999	0.3081	-0.0150	0.0025	0.0116	-0.1667	-0.7753

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RA10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 57 0.90 1.7 45.0 BIWOFIS 0.0 0 0 0 0 UNKNOWN

PCINT	ALPHA	BETA	CNF3	CH3	CD3	XCPF3	YCPF3	CNF4	CH4	CD4	XCPF4	YCPF4
231	48.77	-0.02	-1.2120	9.9999	-0.4481	9.9999	0.3001	-0.0241	0.0019	0.0096	-0.0789	-0.3983
232	48.88	-0.03	-1.2179	9.9999	-0.4494	9.9999	0.3091	-0.0195	0.0051	0.0095	-0.2616	-0.5077
233	48.94	0.00	-1.2120	9.9999	-0.4486	9.9999	0.3085	-0.0371	0.0025	0.0012	-0.0674	-0.0323
234	49.02	-0.00	-1.2259	9.9999	-0.4511	9.9999	0.3079	-0.0319	0.0046	0.0031	-0.1443	-0.0972
235	49.12	-0.01	-1.2134	9.9999	-0.4473	9.9999	0.3087	-0.0303	0.0040	-0.0003	-0.1102	0.0083
236	49.20	-0.04	-1.2231	9.9999	-0.4514	9.9999	0.3090	-0.0415	0.0015	-0.0016	-0.0362	0.0386
237	49.27	-0.02	-1.2161	9.9999	-0.4492	9.9999	0.3093	-0.0208	0.0040	0.0033	-0.1007	-0.1146
238	49.38	0.02	-1.2238	9.9999	-0.4533	9.9999	0.3096	-0.0428	0.0041	-0.0030	-0.0961	0.0703
239	49.45	-0.04	-1.2286	9.9999	-0.4552	9.9999	0.3105	-0.0413	0.0073	-0.0024	-0.1773	0.0583
240	49.55	-0.06	-1.2341	9.9999	-0.4573	9.9999	0.3105	-0.0367	0.0055	-0.0031	-0.1422	0.0801
241	49.63	-0.01	-1.2270	9.9999	-0.4545	9.9999	0.3102	-0.0366	0.0044	-0.0020	-0.1203	0.0710
242	49.72	-0.03	-1.2735	9.9999	-0.4753	9.9999	0.3732	-0.0203	0.0129	0.0053	-0.0357	-0.4581
243	49.81	0.00	-1.2471	9.9999	-0.4616	9.9999	0.3701	-0.0514	0.0052	-0.0099	-0.1014	0.1930
244	49.90	-0.04	-1.3111	9.9999	-0.4906	9.9999	0.3744	0.0154	0.0146	0.0339	0.9484	2.2015
245	49.93	-0.01	-1.2700	9.9999	-0.4727	9.9999	0.3722	-0.0115	0.0112	0.0136	-0.9743	-1.2000
246	50.09	-0.04	-1.2587	9.9999	-0.4696	9.9999	0.3731	-0.0539	0.0073	-0.0096	-0.1357	0.1822
247	50.15	-0.05	-1.3286	9.9999	-0.5013	9.9999	0.3750	0.0716	0.0150	0.0053	0.2177	0.8815
248	50.23	-0.06	-1.3005	9.9999	-0.4861	9.9999	0.3738	0.0008	0.0149	0.0240	1.6939	2.1273
249	50.32	-0.02	-1.3045	9.9999	-0.5118	9.9999	0.3750	0.1170	0.0203	0.0915	0.1737	0.7802
250	50.41	-0.06	-1.3213	9.9999	-0.4960	9.9999	0.3754	0.0476	0.0155	0.0501	0.2843	1.0526
251	50.50	-0.03	-1.2950	9.9999	-0.4835	9.9999	0.3734	-0.0841	0.0016	-0.0152	-0.3214	0.1810
252	50.58	-0.03	-1.3240	9.9999	-0.5000	9.9999	0.3761	0.0810	0.0181	0.0541	0.2973	0.8867
253	50.66	-0.02	-1.3243	9.9999	-0.5013	9.9999	0.3757	0.0553	0.0167	0.0522	0.3027	0.9438
254	50.75	-0.05	-1.3412	9.9999	-0.5035	9.9999	0.3754	0.1503	0.0203	0.0925	0.1666	0.6156
255	50.83	-0.03	-1.3328	9.9999	-0.5029	9.9999	0.3773	0.0744	0.0194	0.0605	0.2612	0.8129
256	50.93	-0.04	-1.3214	9.9999	-0.5011	9.9999	0.3766	0.0379	0.0136	0.0476	0.3590	1.0533
257	50.99	-0.02	-1.3408	9.9999	-0.5073	9.9999	0.3767	0.0949	0.0197	0.0754	0.2079	0.7443
258	51.08	-0.03	-1.3404	9.9999	-0.5072	9.9999	0.3770	0.1151	0.0231	0.0792	0.2009	0.6878
259	51.19	-0.03	-1.3420	9.9999	-0.5082	9.9999	0.3755	0.1510	0.0298	0.0803	0.1977	0.5716
260	51.29	-0.03	-1.3458	9.9999	-0.5081	9.9999	0.3762	0.1130	0.0237	0.0737	0.2157	0.6697
261	51.34	-0.02	-1.3355	9.9999	-0.5062	9.9999	0.3767	0.1289	0.0260	0.0718	0.2021	0.5571
262	51.43	-0.06	-1.3242	9.9999	-0.5008	9.9999	0.3768	0.0934	0.0214	0.0533	0.2295	0.5702
263	51.51	-0.06	-1.3314	9.9999	-0.5004	9.9999	0.3759	0.0789	0.0194	0.0532	0.2463	0.6739
264	51.60	-0.02	-1.3367	9.9999	-0.5051	9.9999	0.3764	0.0111	0.0097	0.0152	0.8742	1.3694
265	51.69	-0.04	-1.3325	9.9999	-0.5023	9.9999	0.3768	0.0476	0.0155	0.0275	0.3264	0.5789
266	51.78	-0.04	-1.3401	9.9999	-0.4997	9.9999	0.3755	0.0548	0.0168	0.0299	0.3073	0.5466
267	51.87	-0.00	-1.3367	9.9999	-0.5036	9.9999	0.3768	0.0017	0.0065	0.0116	0.8251	0.8235
268	51.94	-0.05	-1.3367	9.9999	-0.5025	9.9999	0.3759	-0.0241	0.0020	-0.0020	-0.1053	0.1053
269	52.02	-0.06	-1.3394	9.9999	-0.5049	9.9999	0.3770	-0.0378	0.0000	-0.0050	-0.0159	0.1323
270	52.10	-0.04	-1.3394	9.9999	-0.5049	9.9999	0.3770	0.0014	0.0070	0.0117	1.0274	1.5811
271	52.19	-0.04	-1.3421	9.9999	-0.5074	9.9999	0.3761	-0.0324	0.0022	-0.0028	-0.0622	0.0791
272	52.30	-0.09	-1.3590	9.9999	-0.5132	9.9999	0.3775	-0.0655	-0.0042	-0.0140	0.0642	0.2263
273	52.37	-0.06	-1.3706	9.9999	-0.5156	9.9999	0.3791	-0.0835	-0.0019	-0.0151	0.0360	0.2066
274	52.45	-0.09	-1.3553	9.9999	-0.5134	9.9999	0.3780	-0.0836	-0.0055	-0.0209	0.0033	0.2497
275	52.57	-0.09	-1.3700	9.9999	-0.5215	9.9999	0.3789	-0.0849	-0.0033	-0.0157	0.0460	0.1991
276	52.65	-0.06	-1.3775	9.9999	-0.5227	9.9999	0.3794	-0.0809	-0.0055	-0.0096	0.0576	0.1579

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	57	0.90	1.7	45.0	B1WOF15	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CN4	CM4	CD4	XCPF4	YCPF4
277	52.71	-0.05	-1.3307	9.9999	-0.5031	9.9999	0.3781	0.0624	0.0141	0.0342	0.2264	0.5490
278	52.81	-0.02	-1.3321	9.9999	-0.5043	9.9999	0.3786	0.0496	0.0144	0.0269	0.2910	0.5434
279	52.87	-0.02	-1.3293	9.9999	-0.5035	9.9999	0.3786	0.0441	0.0128	0.0239	0.2910	0.5432
280	52.97	-0.02	-1.3341	9.9999	-0.5050	9.9999	0.3790	0.0490	0.0128	0.0272	0.2619	0.5562
281	53.07	-0.03	-1.3313	9.9999	-0.5043	9.9999	0.3788	0.0334	0.0122	0.0178	0.3654	0.5329
282	53.13	-0.02	-1.3258	9.9999	-0.5016	9.9999	0.3783	0.0443	0.0126	0.0215	0.2852	0.4864
283	53.22	-0.02	-1.3299	9.9999	-0.5036	9.9999	0.3787	0.0412	0.0124	0.0201	0.3018	0.4891
284	53.32	-0.04	-1.3334	9.9999	-0.5062	9.9999	0.3791	0.0413	0.0122	0.0201	0.2962	0.4879
285	53.39	-0.02	-1.3307	9.9999	-0.5104	9.9999	0.3790	0.0503	0.0131	0.0250	0.2611	0.4980
286	53.47	-0.03	-1.3283	9.9999	-0.5040	9.9999	0.3794	0.0415	0.0119	0.0195	0.2876	0.4710
287	53.55	-0.05	-1.3326	9.9999	-0.5060	9.9999	0.3797	0.0327	0.0104	0.0157	0.3182	0.4801
288	53.64	-0.04	-1.3340	9.9999	-0.5067	9.9999	0.3798	0.0292	0.0111	0.0144	0.3803	0.4932
289	53.72	-0.06	-1.3216	9.9999	-0.5007	9.9999	0.3789	0.0253	0.0093	0.0121	0.3677	0.4783
290	53.80	-0.03	-1.3243	9.9999	-0.5021	9.9999	0.3791	0.0337	0.0104	0.0148	0.2914	0.4146
291	53.88	-0.05	-1.3187	9.9999	-0.5005	9.9999	0.3795	0.0254	0.0091	0.0109	0.3584	0.4291
292	53.97	0.00	-1.3234	9.9999	-0.5025	9.9999	0.3805	0.0338	0.0110	0.0141	0.3256	0.4172
293	54.04	-0.03	-1.3137	9.9999	-0.4994	9.9999	0.3802	0.0221	0.0091	0.0063	0.4119	0.3756
294	54.11	-0.04	-1.3178	9.9999	-0.5014	9.9999	0.3805	0.0145	0.0087	0.0048	0.6002	0.3310
295	54.21	0.02	-1.3275	9.9999	-0.5055	9.9999	0.3808	0.0256	0.0115	0.0083	0.4494	0.3242
296	54.28	-0.01	-1.3307	9.9999	-0.5069	9.9999	0.3804	0.0220	0.0094	0.0083	0.4274	0.3773
297	54.36	-0.06	-1.3178	9.9999	-0.5102	9.9999	0.3814	0.0327	0.0132	0.0120	0.4038	0.3670
298	54.45	-0.00	-1.3304	9.9999	-0.5145	9.9999	0.3810	0.0233	0.0131	0.0078	0.5625	0.3348
299	54.51	-0.03	-1.3408	9.9999	-0.5099	9.9999	0.3804	0.0204	0.0096	0.0082	0.4708	0.4020
300	54.61	-0.01	-1.3503	9.9999	-0.5167	9.9999	0.3827	0.0246	0.0130	0.0074	0.5531	0.3008
301	54.69	-0.04	-1.3572	9.9999	-0.5194	9.9999	0.3827	0.0234	0.0130	0.0084	0.5558	0.3590
302	54.78	-0.02	-1.3542	9.9999	-0.5170	9.9999	0.3817	0.0163	0.0136	0.0058	0.7435	0.3169
303	54.85	-0.03	-1.3642	9.9999	-0.5222	9.9999	0.3828	0.0161	0.0141	0.0047	0.7793	0.2597
304	54.94	-0.06	-1.3600	9.9999	-0.5206	9.9999	0.3825	0.0092	0.0130	0.0027	1.4136	0.2935
305	55.02	-0.04	-1.3648	9.9999	-0.5223	9.9999	0.3827	0.0001	0.0124	-0.0010	124.0495	-10.0000
306	55.10	-0.03	-1.3648	9.9999	-0.5223	9.9999	0.3827	-0.0041	0.0112	-0.0032	-2.7326	0.7805
307	55.17	-0.03	-1.3621	9.9999	-0.5204	9.9999	0.3821	0.0001	0.0123	-0.0004	123.0491	-4.0000
308	55.25	-0.05	-1.3593	9.9999	-0.5196	9.9999	0.3823	-0.0096	0.0096	-0.0056	-1.0004	0.5833
309	55.34	-0.06	-1.3596	9.9999	-0.5195	9.9999	0.3821	0.0031	0.0125	-0.0013	4.0339	-0.4194
310	55.39	-0.07	-1.3625	9.9999	-0.5205	9.9999	0.3819	-0.0116	0.0104	-0.0068	-0.8969	0.5862
311	55.48	-0.04	-1.3635	9.9999	-0.5210	9.9999	0.3820	-0.0069	0.0106	-0.0035	-1.5368	0.5072
312	55.56	-0.08	-1.3570	9.9999	-0.5188	9.9999	0.3824	-0.0127	0.0096	-0.0053	-0.7562	0.4173
313	55.61	-0.02	-1.3542	9.9999	-0.5174	9.9999	0.3821	-0.0130	0.0102	-0.0058	-0.7849	0.4462
314	55.69	-0.03	-1.3609	9.9999	-0.5221	9.9999	0.3828	-0.0214	0.0086	-0.0084	-0.8833	0.5925
315	55.78	-0.04	-1.3625	9.9999	-0.5214	9.9999	0.3827	-0.0155	0.0089	-0.0067	-0.5744	0.4323
316	55.87	-0.03	-1.3666	9.9999	-0.5234	9.9999	0.3830	-0.0144	0.0100	-0.0059	-0.6947	0.4097
317	55.94	-0.04	-1.3645	9.9999	-0.5222	9.9999	0.3827	-0.0115	0.0092	-0.0044	-0.8263	0.3826
318	56.03	-0.08	-1.3613	9.9999	-0.5233	9.9999	0.3829	-0.0197	0.0079	-0.0076	-0.4012	0.3959
319	56.12	-0.05	-1.3756	9.9999	-0.5275	9.9999	0.3835	-0.0248	0.0087	-0.0092	-0.3509	0.3710
320	56.18	-0.05	-1.3728	9.9999	-0.5267	9.9999	0.3837	-0.0183	0.0086	-0.0071	-0.4403	0.3880
321	56.26	-0.05	-1.3714	9.9999	-0.5255	9.9999	0.3832	-0.0240	0.0090	-0.0082	-0.2918	0.3417
322	56.33	-0.01	-1.3612	9.9999	-0.5246	9.9999	0.3834	-0.0271	0.0089	-0.0091	-0.2947	0.3356

TEST PART MACH RATIO-B PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
1 57 0.90 1.0 45.0 DEGREES 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CB3	XCPF3	YCPF3	CNF4	CH4	CB4	XCPF4	YCPF4
323	56.39	-0.03	-1.3645	9.9999	-0.5222	9.9999	0.3827	-0.0252	0.0035	-0.0078	-0.2372	0.3362
324	56.47	-0.06	-1.3617	9.9999	-0.5214	9.9999	0.3829	-0.0247	0.0034	-0.0080	-0.2187	0.3482
325	56.57	-0.03	-1.3742	9.9999	-0.5266	9.9999	0.3834	-0.0292	0.0049	-0.0101	-0.1679	0.3459
326	56.63	-0.06	-1.3666	9.9999	-0.5232	9.9999	0.3836	-0.0256	0.0062	-0.0101	-0.2628	0.4280
327	56.71	-0.04	-1.3643	9.9999	-0.5233	9.9999	0.3835	-0.0317	0.0035	-0.0111	-0.1105	0.3502
328	56.79	-0.03	-1.3756	9.9999	-0.5275	9.9999	0.3835	-0.0307	0.0047	-0.0103	-0.1532	0.3355
329	56.88	-0.04	-1.3666	9.9999	-0.5252	9.9999	0.3838	-0.0303	0.0039	-0.0098	-0.1288	0.3234
330	56.94	-0.04	-1.3736	9.9999	-0.5275	9.9999	0.3832	-0.0319	0.0040	-0.0110	-0.1634	0.3448
331	57.02	-0.06	-1.3714	9.9999	-0.5266	9.9999	0.3836	-0.0308	0.0021	-0.0124	-0.0541	0.3196
332	57.09	-0.03	-1.3660	9.9999	-0.5243	9.9999	0.3840	-0.0291	0.0025	-0.0118	-0.0640	0.3018
333	57.17	-0.06	-1.3707	9.9999	-0.5265	9.9999	0.3834	-0.0314	0.0030	-0.0106	-0.0956	0.3376
334	57.26	-0.06	-1.3632	9.9999	-0.5235	9.9999	0.3842	-0.0359	0.0024	-0.0116	-0.0669	0.3231
335	57.32	-0.03	-1.3674	9.9999	-0.5250	9.9999	0.3841	-0.0308	0.0026	-0.0143	-0.0639	0.3514
336	57.39	-0.04	-1.3646	9.9999	-0.5242	9.9999	0.3843	-0.0304	0.0013	-0.0149	-0.0281	0.3218
337	57.46	-0.07	-1.3664	9.9999	-0.5300	9.9999	0.3845	-0.0398	0.0005	-0.0127	-0.0226	0.3191
338	57.55	-0.04	-1.3744	9.9999	-0.5341	9.9999	0.3830	-0.0401	0.0013	-0.0132	-0.0524	0.3292
339	57.61	-0.03	-1.3620	9.9999	-0.5229	9.9999	0.3845	-0.0302	0.0030	-0.0121	-0.0629	0.3343
340	57.67	-0.02	-1.3860	9.9999	-0.5342	9.9999	0.3848	-0.0406	0.0023	-0.0120	-0.0567	0.2956
341	57.75	-0.06	-1.3634	9.9999	-0.5349	9.9999	0.3850	-0.0356	0.0018	-0.0111	-0.0506	0.3118
342	57.83	-0.04	-1.4008	9.9999	-0.5385	9.9999	0.3844	-0.0391	0.0020	-0.0118	-0.0665	0.3018
343	57.89	-0.03	-1.4000	9.9999	-0.5391	9.9999	0.3849	-0.0432	0.0011	-0.0135	-0.0255	0.3132
344	57.98	-0.04	-1.3666	9.9999	-0.5241	9.9999	0.3852	-0.0405	0.0020	-0.0126	-0.0494	0.3111
345	58.04	-0.04	-1.3991	9.9999	-0.5395	9.9999	0.3850	-0.0432	0.0010	-0.0135	-0.0232	0.3132
346	58.11	-0.05	-1.3978	9.9999	-0.5378	9.9999	0.3847	-0.0447	0.0005	-0.0122	-0.0126	0.3073
347	58.19	0.03	-1.3984	9.9999	-0.5371	9.9999	0.3846	-0.0430	0.0006	-0.0130	-0.0140	0.3030
348	58.27	-0.03	-1.3963	9.9999	-0.5382	9.9999	0.3854	-0.0472	-0.0004	-0.0152	0.0085	0.3227
349	58.33	-0.04	-1.3987	9.9999	-0.5377	9.9999	0.3846	-0.0433	0.0012	-0.0135	-0.0278	0.3125
350	58.41	-0.06	-1.3992	9.9999	-0.5390	9.9999	0.3852	-0.0435	-0.0007	-0.0140	0.0154	0.3084
351	58.47	0.01	-1.4015	9.9999	-0.5406	9.9999	0.3851	-0.0491	0.0002	-0.0141	-0.0041	0.2878
352	58.48	0.02	-1.4047	9.9999	-0.5422	9.9999	0.3860	-0.0430	0.0007	-0.0124	-0.0163	0.2890
353	58.48	0.00	-1.3921	9.9999	-0.5373	9.9999	0.3859	-0.0401	0.0005	-0.0144	-0.0109	0.3130
354	58.47	-0.01	-1.4047	9.9999	-0.5422	9.9999	0.3860	-0.0548	-0.0010	-0.0159	0.0183	0.2907
355	58.47	0.02	-1.4021	9.9999	-0.5428	9.9999	0.3860	-0.0419	0.0010	-0.0126	-0.0383	0.3062
356	58.47	0.01	-1.4019	9.9999	-0.5414	9.9999	0.3862	-0.0405	0.0012	-0.0149	-0.0259	0.3211

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 58 MACH 0.90 KA10-6 1.7 PHI 0.0 CONF BINORIS L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.70	0.01	-0.7312	1.4347	0.0375	-0.1227	-0.0011	0.2331	0.0729	0.1602	-1.9461
2	-5.71	0.01	-0.7314	1.4350	0.0005	-0.0551	-0.0014	0.2333	0.0721	0.1612	-1.9461
3	-5.71	0.01	-0.7314	1.4350	-0.0007	-0.0521	-0.0012	0.2300	0.0717	0.1583	-1.9461
4	-5.76	0.00	-0.6982	1.3920	-0.0207	-0.0277	-0.0011	0.2381	0.0721	0.1660	-2.0378
5	-5.16	0.01	-0.5648	1.0145	0.0017	-0.0090	-0.0009	0.2485	0.0683	0.1802	-1.7963
6	-4.14	0.01	-0.4391	0.7248	0.0304	-0.0779	-0.0005	0.2473	0.0662	0.1811	-1.6506
7	-3.18	0.03	-0.2638	0.4395	0.1491	-0.1014	-0.0001	0.2403	0.0645	0.1818	-1.6189
8	-2.27	0.02	-0.2233	0.2691	0.0793	-0.0936	0.0001	0.2519	0.0641	0.1878	-1.2768
9	-1.31	0.01	-0.0791	0.0928	0.0422	-0.0245	0.0004	0.2511	0.0645	0.1866	-1.1724
10	-0.35	0.00	-0.0134	0.0046	-0.0379	-0.0270	0.0006	0.2554	0.0662	0.1892	-0.7134
11	0.65	0.01	0.0079	-0.0545	-0.0126	-0.0076	0.0010	0.2518	0.0662	0.1856	-0.8021
12	1.57	0.02	0.1567	-0.2389	0.0407	-0.0404	0.0013	0.2617	0.0674	0.1943	-1.5053
13	2.57	0.04	0.2506	-0.3922	0.1382	-0.0782	0.0016	0.2578	0.0675	0.1903	-1.5849
14	3.60	0.01	0.3933	-0.6466	0.0612	-0.0735	0.0020	0.2553	0.0671	0.1882	-1.6490
15	4.48	0.01	0.5198	-0.9753	0.0392	-0.0681	0.0022	0.2546	0.0696	0.1850	-1.8726
16	5.44	0.01	0.6678	-1.2143	-0.0007	-0.1518	-0.0039	0.2588	0.0742	0.1846	-1.9111
17	6.44	0.00	0.8765	-1.7760	-0.0274	-0.0781	0.0026	0.2552	0.0797	0.1755	-2.0149
18	7.43	0.00	1.0299	-2.1462	-0.0201	-0.0782	0.0031	0.2534	0.0860	0.1674	-2.0838
19	8.38	0.01	1.2461	-2.5371	0.0025	-0.0603	-0.0030	0.2508	0.0924	0.1584	-2.1162
20	9.34	0.00	1.4100	-3.0717	-0.0283	-0.1006	0.0038	0.2567	0.1005	0.1563	-2.1765
21	10.30	-0.00	1.6001	-3.4953	-0.0900	0.0138	0.0039	0.2577	0.1060	0.1496	-2.1632
22	11.33	0.00	1.8402	-4.0030	-0.0392	-0.0574	0.0046	0.2566	0.1152	0.1415	-2.2192
23	12.29	0.01	2.0274	-4.5674	-0.0522	-0.0529	0.0048	0.2541	0.1203	0.1339	-2.2529
24	13.27	0.01	2.2425	-5.0405	0.0291	-0.0772	0.0053	0.2462	0.1262	0.1221	-2.2476
25	14.24	0.01	2.4508	-5.5125	-0.0071	0.0018	0.0056	0.2492	0.1313	0.1180	-2.2438
26	15.25	0.01	2.6583	-5.9654	-0.0321	0.0484	-0.0007	0.2460	0.1388	0.1073	-2.2290
27	16.26	0.00	2.8592	-6.4141	-0.0699	0.1073	-0.0134	0.2502	0.1463	0.1040	-2.1887
28	17.27	0.01	3.0240	-6.8758	-0.0263	0.1574	-0.0459	0.2606	0.1661	0.0945	-2.1459
29	18.24	0.01	3.2009	-7.3054	0.0965	-0.3479	-0.1553	0.3436	0.2396	0.1042	-1.9803
30	19.22	0.01	3.4914	-7.8983	0.0014	-0.4915	-0.1610	0.3573	0.2688	0.0884	-1.9052
31	20.19	0.01	3.6426	-8.3729	0.1179	-0.4805	-0.1929	0.3840	0.3039	0.0801	-1.8596
32	21.15	0.00	3.8000	-8.8271	0.0090	-0.4294	-0.1992	0.3883	0.3179	0.0704	-1.8375
33	22.12	0.00	3.9509	-9.2901	-0.0210	-0.4191	-0.2312	0.4071	0.3377	0.0694	-1.8100
34	23.10	0.00	4.0997	-9.7429	-0.0002	-0.4130	-0.1723	0.3811	0.3481	0.0330	-1.7651
35	24.07	0.01	4.2981	-10.3935	0.0151	-0.4770	-0.1981	0.3843	0.3558	0.0285	-1.6676
36	25.01	0.01	4.4762	-10.8196	0.1021	-0.4715	-0.1831	0.3849	0.3803	0.0186	-1.5814
37	25.98	0.02	4.6625	-11.2561	0.2261	-0.4754	-0.0838	0.4068	0.4181	-0.0115	-1.4120
38	26.93	0.01	4.8524	-11.7483	0.1515	-0.5149	-0.0373	0.4253	0.4447	-0.0194	-1.3121
39	27.87	0.04	5.0618	-12.2300	0.4255	-0.8260	0.0301	0.4230	0.4578	-0.0348	-1.2506
40	28.21	0.04	5.1503	-12.4197	0.4307	-0.7364	0.0186	0.4133	0.4582	-0.0449	-1.2458
41	28.42	0.03	5.1952	-12.5178	0.4211	-0.8070	0.0238	0.4082	0.4599	-0.0517	-1.2140
42	28.42	0.04	5.1750	-12.5119	0.4012	-0.7571	0.0237	0.4157	0.4649	-0.0492	-1.2142
43	28.42	0.03	5.1729	-12.5750	0.4411	-0.7947	0.0257	0.4222	0.4619	-0.0397	-1.2293
44	28.31	0.04	5.1503	-12.5258	0.5437	-0.9180	0.0374	0.4300	0.4683	-0.0383	-1.2015
45	28.57	0.05	5.1930	-12.6355	0.5198	-0.8924	0.0443	0.4148	0.4681	-0.0533	-1.1706
46	28.70	0.04	5.2185	-12.6951	0.4932	-0.8676	0.0509	0.4149	0.4707	-0.0558	-1.1719

TEST 7 PART 5B MACH 0.90 RX10-6 1.7 PHI 0.0 CONF BINORIS L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	DELTA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	28.81	0.03	4.9080	-5.2691	0.3911	-0.7255	0.0309	0.4227	0.4737	-0.0510	-1.1740
48	29.01	0.05	4.9280	-5.3354	0.6540	-1.0198	0.0709	0.4156	0.4733	-0.0577	-1.1781
49	29.13	0.06	4.8498	-5.2355	0.7420	-1.1713	0.0783	0.4241	0.4771	-0.0530	-1.1369
50	29.29	0.06	4.8803	-5.2469	0.7570	-1.1370	0.0853	0.4110	0.4792	-0.0682	-1.1639
51	29.48	0.05	4.8732	-5.2331	0.6945	-1.0063	0.0852	0.4161	0.4809	-0.0647	-1.1202
52	29.69	0.06	4.8154	-5.2193	0.7722	-1.1696	0.0789	0.4077	0.4843	-0.0765	-1.1069
53	29.74	0.06	4.7430	-5.1746	0.7866	-1.1229	0.0790	0.4246	0.4835	-0.0588	-1.0910
54	29.89	0.06	4.7931	-5.2786	0.7862	-1.1553	0.0792	0.4109	0.4852	-0.0742	-1.1012
55	30.03	0.06	4.8488	-5.2883	0.7552	-1.1842	0.0926	0.4146	0.4872	-0.0725	-1.0908
56	30.17	0.08	4.9500	-5.1081	0.4950	-1.4094	0.1069	0.4094	0.4873	-0.0778	-1.0482
57	30.31	0.08	4.9209	-5.1691	1.0166	-1.4986	0.1069	0.4076	0.4872	-0.0793	-1.0496
58	30.45	0.08	5.0058	-5.1169	1.0052	-1.4913	0.1205	0.4198	0.4868	-0.0669	-1.0222
59	30.58	0.08	5.0478	-5.0839	1.0600	-1.4204	0.1273	0.4102	0.4855	-0.0752	-1.0072
60	30.71	0.09	5.0726	-5.1357	1.1484	-1.4819	0.1340	0.4136	0.4882	-0.0745	-1.0124
61	30.84	0.10	5.0825	-5.1911	1.2250	-1.5796	0.1210	0.4120	0.4881	-0.0760	-1.0213
62	31.00	0.09	5.1794	-5.1660	1.1706	-1.4558	0.1278	0.4020	0.4911	-0.0890	-0.9917
63	31.14	0.09	5.2036	-5.1160	1.2131	-1.5448	0.1210	0.4025	0.4920	-0.0894	-0.9723
64	31.29	0.09	5.2757	-5.1101	1.1214	-1.4330	0.1218	0.4201	0.4986	-0.0784	-0.9686
65	31.41	0.08	5.4540	-5.1027	1.0900	-1.4042	0.1224	0.3934	0.4962	-0.1028	-0.9503
66	31.54	0.09	5.3898	-5.0814	1.1893	-1.5287	0.1223	0.4213	0.4974	-0.0760	-0.9428
67	31.68	0.10	5.4432	-5.1228	1.2253	-1.5892	0.1291	0.4057	0.4966	-0.0908	-0.9411
68	31.83	0.08	5.3944	-5.1409	1.0753	-1.4605	0.1229	0.4004	0.4956	-0.0953	-0.9190
69	31.95	0.09	5.5361	-5.0967	1.1184	-1.4434	0.1293	0.4007	0.4937	-0.0930	-0.9203
70	32.09	0.08	5.4862	-5.0577	1.0214	-1.3392	0.1103	0.4109	0.5022	-0.0912	-0.8904
71	32.24	0.08	5.7906	-5.0289	1.0065	-1.3023	0.1105	0.3912	0.4958	-0.1046	-0.8684
72	32.38	0.08	5.7331	-4.9827	1.0655	-1.3149	0.0974	0.3950	0.4996	-0.1046	-0.8690
73	32.49	0.08	5.7090	-4.9453	0.9814	-1.2331	0.0974	0.3958	0.4992	-0.1034	-0.8539
74	32.62	0.07	5.6962	-4.9453	0.9570	-1.4008	0.0847	0.3965	0.5004	-0.1039	-0.8445
75	32.75	0.07	5.8070	-4.9024	0.9242	-1.3262	0.0845	0.3963	0.5004	-0.1041	-0.8328
76	32.89	0.07	5.9392	-4.7623	1.0916	-1.5078	0.0720	0.3931	0.5004	-0.1103	-0.7992
77	33.02	0.09	6.0248	-4.8122	1.1735	-1.5980	0.0592	0.3737	0.5006	-0.1071	-0.7967
78	33.16	0.08	6.1496	-4.7814	0.9290	-1.2650	0.0592	0.3783	0.4983	-0.1200	-0.7743
79	33.27	0.06	6.1242	-4.7223	0.8100	-1.1294	0.0658	0.3959	0.5021	-0.1062	-0.7715
80	33.42	0.07	6.2008	-4.7019	0.9526	-0.9261	0.0531	0.3825	0.5027	-0.1202	-0.7486
81	33.52	0.07	6.1669	-4.7013	0.9103	-0.9099	0.0526	0.3993	0.5018	-0.1025	-0.7633
82	33.66	0.06	6.3145	-4.6216	0.7936	-0.9597	0.0396	0.3732	0.5035	-0.1303	-0.7030
83	33.79	0.07	6.3178	-4.5361	0.8807	-0.7072	0.0462	0.3855	0.5047	-0.1192	-0.7183
84	33.91	0.07	6.3035	-4.5092	0.8504	-0.7370	0.0466	0.3881	0.5060	-0.1179	-0.7168
85	34.03	0.05	6.4226	-4.6179	0.8418	-0.4028	0.0527	0.3808	0.5061	-0.1253	-0.7190
86	34.16	0.06	6.4696	-4.6303	0.7007	-0.7374	0.0406	0.3643	0.5036	-0.1411	-0.7145
87	34.27	0.04	6.4754	-4.5469	0.5204	-0.4153	0.0405	0.3853	0.5035	-0.1140	-0.7020
88	34.41	0.04	6.5726	-4.5246	0.5337	-0.4272	0.0339	0.3817	0.5099	-0.1282	-0.6863
89	34.54	0.05	6.6033	-4.5046	0.7012	-0.4209	0.0270	0.3664	0.5066	-0.1402	-0.6913
90	34.65	0.04	6.6542	-4.4455	0.5751	-0.4014	0.0276	0.3742	0.5094	-0.1302	-0.6681
91	34.78	0.06	6.6360	-4.4782	0.6887	-0.3504	0.0139	0.3724	0.5085	-0.1361	-0.6748
92	34.91	0.04	6.8329	-4.5034	0.4353	-0.1093	0.0133	0.3572	0.5098	-0.1526	-0.6544

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 53 MACH NO. 0.90 1.07 PHI 0.0 CONF 15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAU	CAF	XCP
93	35.01	0.03	0.7953	-4.3958	0.3052	0.0433	0.0201	0.3835	0.5125	-0.1288	-0.6469
94	35.15	0.03	0.8506	-4.3734	0.3266	0.1071	0.0006	0.3590	0.5081	-0.1491	-0.6364
95	35.27	0.03	0.9211	-4.3648	0.3150	0.1940	0.0007	0.3599	0.5145	-0.1546	-0.6308
96	35.38	0.02	0.9022	-4.4131	0.3405	0.2746	0.0003	0.3770	0.5145	-0.1375	-0.6394
97	35.52	-0.00	1.0000	-4.4756	0.0214	0.0625	-0.0131	0.3534	0.5077	-0.1543	-0.6334
98	35.64	0.01	1.0800	-4.4541	0.0715	0.5080	-0.0127	0.3728	0.5174	-0.1446	-0.6291
99	35.75	0.00	1.0697	-4.4925	0.0671	0.6005	-0.0125	0.3482	0.5140	-0.1658	-0.6337
100	35.88	0.01	1.1716	-4.5245	0.1051	0.5039	-0.0056	0.3588	0.5136	-0.1548	-0.6309
101	35.99	0.02	1.2484	-4.5144	0.1961	0.6022	-0.0387	0.3577	0.5166	-0.1589	-0.6366
102	36.13	0.01	1.3434	-4.4678	0.1115	0.6116	-0.0194	0.3566	0.5224	-0.1638	-0.6084
103	36.24	0.02	1.4024	-4.4205	0.2206	0.6329	-0.0062	0.3708	0.5139	-0.1491	-0.6137
104	36.35	0.01	1.4909	-4.4239	0.0994	0.8401	-0.0190	0.3638	0.5220	-0.1582	-0.6214
105	36.48	-0.00	1.4965	-4.3453	-0.0459	0.9625	-0.0127	0.3450	0.5204	-0.1754	-0.6104
106	36.61	0.01	1.5588	-4.3427	0.0777	0.9603	-0.0387	0.3483	0.5224	-0.1741	-0.6274
107	36.69	0.00	1.4219	-4.4294	0.0293	0.8302	-0.0122	0.3653	0.5271	-0.1618	-0.5968
108	36.87	0.01	1.6250	-4.3380	0.0490	0.9341	-0.0360	0.3574	0.5196	-0.1624	-0.6190
109	36.99	0.01	1.6519	-4.3794	0.1195	0.9771	-0.0121	0.3534	0.5250	-0.1716	-0.5985
110	37.11	0.00	1.6770	-4.3981	-0.0468	1.2381	-0.0128	0.3411	0.5214	-0.1801	-0.5989
111	37.25	0.00	1.6971	-4.4563	-0.0618	1.0049	-0.0250	0.3549	0.5237	-0.1688	-0.6052
112	37.37	0.01	1.7395	-4.4437	0.1290	0.8871	-0.0245	0.3536	0.5291	-0.1755	-0.6000
113	37.48	0.00	1.7537	-4.4510	0.0271	1.0530	-0.0379	0.3498	0.5220	-0.1722	-0.6001
114	37.60	0.00	1.8239	-4.3968	-0.0154	1.0344	-0.0244	0.3510	0.5266	-0.1756	-0.5875
115	37.71	-0.01	1.8177	-4.4389	0.1807	1.0381	-0.0241	0.3423	0.5253	-0.1830	-0.5931
116	37.82	0.00	1.8706	-4.4859	0.0258	1.0308	-0.0241	0.3503	0.5262	-0.1697	-0.5705
117	37.96	0.00	1.8227	-4.4166	-0.0190	1.2576	-0.0246	0.3242	0.5316	-0.2074	-0.5679
118	38.12	0.02	1.8325	-4.4680	0.1579	0.9084	-0.0108	0.3441	0.5307	-0.1866	-0.5585
119	38.24	0.02	1.8316	-4.5316	0.1185	1.2235	-0.0242	0.3451	0.5274	-0.1823	-0.5573
120	38.36	0.01	1.8011	-4.5054	0.0799	1.0051	-0.0233	0.3295	0.5278	-0.1983	-0.5561
121	38.48	0.01	1.8368	-4.4841	0.0410	1.0537	-0.0361	0.3371	0.5291	-0.1720	-0.5497
122	38.59	-0.02	1.8279	-4.4649	-0.2231	1.3012	-0.0235	0.3294	0.5291	-0.2037	-0.5670
123	38.71	-0.02	1.8420	-4.4439	-0.3408	1.5923	-0.0243	0.3204	0.5224	-0.1960	-0.5634
124	38.84	-0.02	1.8720	-4.4744	-0.2701	1.3286	-0.0361	0.3253	0.5260	-0.2007	-0.5703
125	38.94	-0.00	1.9073	-4.4866	-0.0774	1.1763	-0.0360	0.3244	0.5244	-0.2000	-0.5610
126	39.06	0.01	1.9120	-4.4817	-0.0111	1.3940	-0.0235	0.3138	0.5278	-0.2140	-0.5470
127	39.16	0.00	1.9132	-4.5542	-0.0260	1.3750	-0.0233	0.3318	0.5273	-0.1955	-0.5413
128	39.27	-0.00	1.9514	-4.5569	-0.0548	1.0221	-0.0372	0.3277	0.5269	-0.1992	-0.5442
129	39.39	-0.01	1.9814	-4.5215	-0.1674	1.5673	-0.0237	0.3390	0.5190	-0.1800	-0.5462
130	39.50	-0.03	1.9906	-4.5340	-0.3785	1.7856	-0.0235	0.3291	0.5202	-0.1911	-0.5588
131	39.60	-0.03	1.9493	-4.7015	-0.5377	1.4910	-0.0358	0.3120	0.5190	-0.2070	-0.5499
132	39.71	-0.05	1.9112	-4.8129	-0.6504	2.1723	-0.0507	0.3166	0.5244	-0.2078	-0.5589
133	39.82	-0.03	1.9120	-4.8142	-0.5831	2.2338	-0.0512	0.2836	0.5223	-0.2386	-0.5526
134	39.91	-0.03	1.8504	-4.7362	-0.4196	1.7896	-0.0363	0.3323	0.5253	-0.1930	-0.5471
135	40.03	-0.02	1.7464	-4.8579	-0.3006	2.1164	-0.0506	0.2824	0.5196	-0.2373	-0.5554
136	40.15	-0.05	1.8003	-4.9176	-0.6834	2.2799	-0.0506	0.2926	0.5189	-0.2263	-0.5546
137	40.23	-0.05	1.7578	-4.8817	-0.4359	2.2797	-0.0246	0.3418	0.5256	-0.1838	-0.5323
138	40.35	-0.06	1.9251	-4.8446	-0.6306	2.0506	-0.0378	0.2774	0.5210	-0.2435	-0.5410

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 3B MACH 0.90 RN/0-6 1.7 PHI 0.0 CONF BINORIG L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	40.44	-0.05	8.8350	-4.7199	-0.5847	2.6062	-0.0449	0.3278	0.5197	-0.1919	-0.5342
140	40.54	-0.07	9.0051	-4.8811	-0.7011	2.5346	-0.0503	0.2867	0.5181	-0.2313	-0.5420
141	40.64	-0.04	8.9300	-4.8260	-0.5055	2.2528	-0.0564	0.2941	0.5169	-0.2248	-0.5401
142	40.75	-0.05	9.0090	-4.9292	-0.5953	2.3038	-0.0629	0.2887	0.5185	-0.2298	-0.5435
143	40.85	-0.06	9.0884	-4.9121	-0.6854	2.5150	-0.0632	0.2903	0.5152	-0.2249	-0.5417
144	40.96	-0.08	9.1021	-5.0619	-0.9092	2.6300	-0.0628	0.2788	0.5092	-0.2303	-0.5512
145	41.07	-0.06	9.2009	-5.1690	-0.9495	2.4716	-0.0622	0.2731	0.5025	-0.2293	-0.5618
146	41.19	-0.07	9.2656	-5.0403	-0.8073	2.6113	-0.0626	0.2577	0.5097	-0.2519	-0.5446
147	41.28	-0.05	9.2147	-4.9602	-0.6424	2.5447	-0.0628	0.2888	0.5092	-0.2204	-0.5383
148	41.38	-0.07	9.2656	-5.0191	-0.7712	2.4181	-0.0616	0.2565	0.4999	-0.2433	-0.5470
149	41.48	-0.05	9.1965	-4.9492	-0.5098	2.4276	-0.0430	0.2869	0.5096	-0.2226	-0.5382
150	41.59	-0.07	9.3711	-5.0350	-0.7423	2.4489	-0.0351	0.2773	0.5054	-0.2280	-0.5373
151	41.71	-0.07	9.5032	-5.1702	-0.7924	2.6217	-0.0625	0.2700	0.5096	-0.2395	-0.5440
152	41.79	-0.05	9.4318	-4.9570	-0.5570	2.5773	-0.0556	0.2929	0.5113	-0.2184	-0.5256
153	41.89	-0.09	9.5014	-5.2578	-0.9079	2.5912	-0.0741	0.2537	0.4979	-0.2441	-0.5499
154	41.99	-0.06	9.4853	-4.9496	-0.6971	2.6020	-0.0625	0.2660	0.5113	-0.2252	-0.5218
155	42.08	-0.09	9.6321	-5.2543	-1.0448	3.0010	-0.0753	0.2616	0.5041	-0.2424	-0.5434
156	42.18	-0.08	9.5029	-5.1751	-0.9259	2.6392	-0.0680	0.2648	0.5057	-0.2408	-0.5412
157	42.27	-0.05	9.6280	-5.2751	-0.8824	2.9750	-0.0627	0.2461	0.5082	-0.2620	-0.5479
158	42.38	-0.09	9.6730	-5.1979	-1.0859	3.0868	-0.0625	0.2564	0.5049	-0.2484	-0.5374
159	42.48	-0.08	9.7307	-5.2896	-0.9409	3.0034	-0.0755	0.2524	0.5036	-0.2511	-0.5425
160	42.58	-0.12	9.9547	-5.5066	-1.3225	3.2651	-0.0879	0.2219	0.5061	-0.2841	-0.5391
161	42.68	-0.10	9.8191	-5.2614	-1.1201	3.1676	-0.0816	0.2793	0.5066	-0.2272	-0.5358
162	42.77	-0.10	9.9600	-5.3872	-1.2371	3.3028	-0.0885	0.2513	0.5176	-0.2664	-0.5406
163	42.84	-0.10	9.8642	-5.3067	-1.1736	3.2566	-0.0803	0.2795	0.5056	-0.2260	-0.5369
164	42.93	-0.10	9.9497	-5.4917	-1.1774	3.1784	-0.0880	0.2527	0.4993	-0.2465	-0.5524
165	43.04	-0.12	10.0946	-5.4830	-1.3520	3.2729	-0.1006	0.2347	0.5085	-0.2537	-0.5432
166	43.14	-0.10	10.1266	-5.4727	-1.2043	3.0969	-0.0867	0.2581	0.5090	-0.2508	-0.5345
167	43.22	-0.11	10.1956	-5.4483	-1.2503	3.0958	-0.0930	0.2548	0.5034	-0.2545	-0.5345
168	43.31	-0.09	10.2472	-5.6534	-1.0968	3.0875	-0.0802	0.2173	0.5005	-0.2831	-0.5517
169	43.39	-0.10	10.1514	-5.4521	-1.2449	3.4303	-0.0879	0.2589	0.5052	-0.2462	-0.5381
170	43.49	-0.09	10.2397	-5.5209	-1.0978	3.2952	-0.0874	0.2352	0.5030	-0.2677	-0.5392
171	43.58	-0.10	10.2517	-5.4036	-1.2110	3.5439	-0.0879	0.2620	0.5105	-0.2544	-0.5281
172	43.69	-0.10	10.3358	-5.5151	-1.1593	3.3251	-0.0804	0.2519	0.4976	-0.2456	-0.5336
173	43.76	-0.10	10.2671	-5.3704	-1.2472	3.3918	-0.0807	0.2488	0.5022	-0.2533	-0.5415
174	43.86	-0.11	10.3596	-5.4816	-1.2280	2.9435	-0.0851	0.2408	0.5039	-0.2630	-0.5291
175	43.96	-0.11	10.4252	-5.5073	-1.2763	2.7903	-0.0710	0.2329	0.5004	-0.2734	-0.5267
176	44.03	-0.10	10.4767	-5.6073	-1.2523	3.3001	-0.1002	0.2554	0.5059	-0.2504	-0.5351
177	44.12	-0.12	10.5227	-5.5276	-1.3470	3.0324	-0.0716	0.2333	0.5031	-0.2697	-0.5253
178	44.22	-0.12	10.5444	-5.6416	-1.2357	3.3456	-0.0866	0.2273	0.5001	-0.2727	-0.5350
179	44.29	-0.10	10.5516	-5.7256	-1.0749	3.2533	-0.0796	0.2420	0.5005	-0.2584	-0.5426
180	44.36	-0.13	10.5072	-5.4056	-1.4273	3.0533	-0.0584	0.2320	0.4997	-0.2676	-0.5202
181	44.51	-0.10	10.6822	-5.6300	-0.9998	2.5798	-0.0572	0.1993	0.5013	-0.3020	-0.5270
182	44.57	-0.11	10.6108	-5.6216	-1.2372	3.0623	-0.0589	0.2198	0.4996	-0.2797	-0.5298
183	44.66	-0.09	10.7108	-5.7411	-1.0108	3.4521	-0.0605	0.2369	0.5013	-0.2643	-0.5356
184	44.78	-0.12	10.7411	-5.4404	-1.2361	2.5074	-0.0298	0.2086	0.5007	-0.2981	-0.5065

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 58 MACH 0.90 RX10-6 1.7 PHI 0.0 CONF 81NOF15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
165	44.80	-0.13	10.8092	-5.4788	-1.2021	2.9678	-0.0442	0.2396	0.5029	-0.2632	-0.5069
166	44.96	-0.12	10.7722	-5.7797	-1.2711	3.1809	-0.0716	0.2105	0.4983	-0.2877	-0.5366
167	45.06	-0.11	10.8950	-5.8224	-1.1598	2.8570	-0.0306	0.2229	0.5000	-0.2770	-0.5161
168	45.15	-0.11	10.8996	-5.7525	-1.1315	2.9448	-0.0509	0.2173	0.4996	-0.2822	-0.5278
189	45.24	-0.12	10.8836	-5.5163	-1.2062	2.9373	-0.0294	0.2133	0.5033	-0.2900	-0.5068
190	45.32	-0.12	10.9430	-5.4911	-1.1903	2.8245	-0.0153	0.2139	0.5025	-0.2886	-0.4981
191	45.41	-0.10	10.9720	-5.4452	-0.9516	2.3914	-0.0269	0.2149	0.4970	-0.2646	-0.4961
192	45.51	-0.13	11.0167	-5.7017	-1.2549	2.8648	-0.0293	0.2131	0.4971	-0.2839	-0.5175
193	45.59	-0.12	11.0471	-5.8456	-1.1297	2.5701	-0.0263	0.2016	0.4979	-0.2963	-0.5110
194	45.68	-0.10	11.0335	-5.6359	-1.0626	2.6092	-0.0294	0.2027	0.4956	-0.2931	-0.5108
195	45.80	-0.14	11.2248	-5.7138	-1.4060	2.6767	-0.0415	0.1740	0.5024	-0.3284	-0.5040
196	45.87	-0.11	11.1839	-5.7161	-1.0762	2.6711	-0.0292	0.2065	0.4939	-0.2934	-0.5111
197	45.96	-0.13	11.1964	-5.8750	-1.2506	2.5835	-0.0416	0.1805	0.4953	-0.3348	-0.5069
198	46.04	-0.08	11.1732	-5.5954	-0.8757	2.7025	-0.0428	0.2074	0.5037	-0.2963	-0.4972
199	46.12	-0.13	11.1710	-5.9182	-1.0064	2.3710	-0.0344	0.2167	0.5057	-0.2890	-0.4960
200	46.21	-0.14	11.2548	-5.8913	-1.5365	3.0101	-0.0551	0.2307	0.5070	-0.2762	-0.5057
201	46.31	-0.10	11.3526	-5.7556	-1.1051	3.1022	-0.0364	0.1946	0.5036	-0.3112	-0.5070
202	46.39	-0.12	11.3184	-5.7965	-1.2468	3.3171	-0.0697	0.2395	0.5188	-0.2792	-0.5116
203	46.49	-0.13	11.4732	-5.7035	-1.3529	3.1258	-0.0422	0.2040	0.5124	-0.3084	-0.5041
204	46.58	-0.15	11.2980	-5.8671	-1.4155	2.9756	-0.0420	0.2292	0.5117	-0.2824	-0.4981
205	46.66	-0.13	11.4815	-5.7901	-1.2089	3.4107	-0.0694	0.2398	0.5249	-0.2650	-0.5043
206	46.73	-0.13	11.4779	-5.8132	-1.3246	3.1571	-0.0350	0.2301	0.5216	-0.2854	-0.4890
207	46.83	-0.13	11.5239	-5.7090	-1.3330	2.9798	-0.0543	0.2244	0.5207	-0.2963	-0.4954
208	46.93	-0.10	11.6018	-5.6021	-1.0151	3.2849	-0.0560	0.2149	0.5258	-0.3109	-0.5044
209	47.06	-0.14	11.6148	-5.7950	-1.3753	3.2054	-0.0549	0.1962	0.5161	-0.3179	-0.4989
210	47.10	-0.14	11.6995	-5.7853	-1.3144	3.3750	-0.0614	0.2108	0.5199	-0.3031	-0.4928
211	47.19	-0.14	11.6826	-5.8740	-1.3979	3.3190	-0.0484	0.2414	0.5224	-0.2809	-0.4865
212	47.26	-0.12	11.6241	-5.7121	-1.1258	2.9500	-0.0476	0.2126	0.5178	-0.3050	-0.4914
213	47.37	-0.13	11.6423	-5.7853	-1.3786	3.1120	-0.0534	0.2118	0.5270	-0.3152	-0.4886
214	47.45	-0.14	11.8277	-5.7571	-1.4786	3.0203	-0.0400	0.1894	0.5241	-0.3347	-0.4867
215	47.53	-0.12	11.8046	-5.7564	-1.1394	3.2503	-0.0676	0.2344	0.5290	-0.2946	-0.5046
216	47.61	-0.11	11.8377	-5.6716	-1.1002	3.2293	-0.0612	0.2006	0.5236	-0.3170	-0.4960
217	47.70	-0.14	11.8989	-5.8596	-1.3453	3.2413	-0.0603	0.2171	0.5306	-0.3135	-0.4925
218	47.80	-0.14	11.9550	-5.8469	-1.3414	3.2656	-0.0606	0.2350	0.5266	-0.2918	-0.4927
219	47.88	-0.12	12.0199	-5.9225	-1.2550	3.3663	-0.0603	0.2206	0.5256	-0.2970	-0.4927
220	47.95	-0.12	11.9873	-5.9422	-1.2741	3.2484	-0.0606	0.2359	0.5265	-0.2946	-0.4957
221	48.06	-0.07	12.1269	-5.9435	-0.8702	3.1599	-0.0660	0.2124	0.5465	-0.3341	-0.4901
222	48.15	-0.14	12.0782	-5.9039	-1.4231	3.2449	-0.0706	0.2522	0.5389	-0.2866	-0.4889
223	48.23	-0.12	12.0915	-5.8851	-1.1904	2.9790	-0.0587	0.2159	0.5339	-0.3180	-0.4867
224	48.33	-0.14	12.2300	-5.9847	-1.3525	3.0630	-0.0639	0.2180	0.5459	-0.3259	-0.4895
225	48.42	-0.10	12.2437	-5.9029	-0.9537	2.9359	-0.0641	0.2074	0.5414	-0.3340	-0.4821
226	48.49	-0.12	12.2224	-5.9291	-1.1925	2.6702	-0.0692	0.2315	0.5435	-0.3120	-0.4851
227	48.59	-0.07	12.2418	-5.9014	-0.7070	2.8275	-0.0576	0.2408	0.5531	-0.3063	-0.4821
228	48.68	-0.09	12.2965	-5.9794	-0.8419	2.8350	-0.0635	0.2320	0.5522	-0.3202	-0.4863
229	48.74	-0.11	12.2710	-5.8945	-1.0370	2.7752	-0.0564	0.2596	0.5580	-0.2984	-0.4804
230	48.83	-0.08	12.3426	-6.1098	-0.8306	2.8824	-0.0503	0.2453	0.5605	-0.3152	-0.4950

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 58 MACH 0.90 RX10-6 1.7 PHI 0.0 CONF DIHDF15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
231	48.92	-0.06	12.3063	-5.4729	-0.3950	2.4613	-0.0499	0.2433	0.5643	-0.3210	-0.4853
232	49.01	-0.09	12.4675	-6.0405	-0.8030	2.5466	-0.0554	0.2487	0.5664	-0.3377	-0.4857
233	49.10	-0.09	12.5006	-6.0516	-0.7694	2.5768	-0.0429	0.2551	0.5680	-0.3109	-0.4841
234	49.18	-0.12	12.3475	-6.0254	-1.0040	2.5461	-0.0487	0.2643	0.5723	-0.3080	-0.4863
235	49.25	-0.04	12.4553	-5.9769	-0.1032	2.1734	-0.0291	0.2771	0.5725	-0.2954	-0.4799
236	49.35	-0.08	12.4701	-6.0459	-0.6681	2.3137	-0.0334	0.2584	0.5776	-0.3192	-0.4887
237	49.44	-0.05	12.5159	-6.0662	-0.2560	2.2295	-0.0356	0.2662	0.5788	-0.3126	-0.4845
238	49.52	-0.07	12.5156	-6.0754	-0.5043	2.2186	-0.0266	0.2721	0.5784	-0.3063	-0.4855
239	49.61	-0.03	12.5030	-6.0372	0.0070	1.7490	0.0113	0.2583	0.5821	-0.3238	-0.4806
240	49.70	-0.05	12.6436	-6.0502	-0.2907	1.8079	0.0183	0.1984	0.5839	-0.3825	-0.4785
241	49.78	-0.06	12.5205	-5.9194	-0.3722	1.9723	0.0127	0.2583	0.5779	-0.3196	-0.4728
242	49.88	-0.01	12.4883	-6.0914	0.1390	1.2142	0.0189	0.2315	0.5615	-0.3300	-0.4878
243	49.96	0.01	12.5697	-6.1570	0.3525	1.5256	0.0179	0.2344	0.5577	-0.3233	-0.4898
244	50.05	-0.01	12.6067	-6.1958	0.2630	1.5778	0.0318	0.1941	0.5564	-0.3623	-0.4756
245	50.13	-0.00	12.5960	-6.2853	0.3466	1.5923	0.0054	0.1858	0.5527	-0.3669	-0.4989
246	50.23	0.04	12.7951	-6.3741	0.7429	1.8870	0.0043	0.2238	0.5664	-0.3426	-0.4981
247	50.32	0.01	12.6073	-6.3784	0.3630	1.5861	0.0054	0.2265	0.5668	-0.3403	-0.4979
248	50.39	0.04	12.7104	-6.2759	0.7536	1.3533	0.0182	0.2144	0.5580	-0.3436	-0.4935
249	50.51	-0.07	13.3431	-7.1164	-0.5605	2.5855	-0.0020	0.2675	0.5910	-0.3035	-0.5708
250	50.61	-0.09	13.4107	-7.1040	-0.9939	2.9983	-0.0092	0.2570	0.5916	-0.3348	-0.5742
251	50.70	-0.03	13.3534	-7.1907	-0.1030	2.2285	0.0115	0.2503	0.5807	-0.3364	-0.5609
252	50.81	-0.00	13.4258	-6.0405	-0.5031	3.4430	-0.0257	0.2423	0.5939	-0.3486	-0.5862
253	50.87	-0.04	13.5093	-7.0453	-0.4397	3.2003	-0.0134	0.2706	0.5933	-0.3227	-0.5762
254	50.97	-0.06	13.6470	-7.3710	-0.8511	3.4369	-0.0233	0.2175	0.5942	-0.3767	-0.5768
255	51.04	-0.06	13.5436	-7.1962	-0.8458	3.7845	-0.0248	0.2548	0.5836	-0.3286	-0.5756
256	51.15	-0.07	13.9714	-6.3763	-0.9020	4.5915	-0.0401	0.2334	0.5861	-0.3527	-0.5989
257	51.21	-0.02	13.8740	-7.0661	-0.3080	3.9067	-0.0259	0.2657	0.5965	-0.3308	-0.5753
258	51.33	-0.05	14.0103	-6.9024	-0.7250	4.0938	-0.0281	0.2628	0.5874	-0.3246	-0.5994
259	51.39	-0.05	13.9839	-6.2918	-0.3095	3.9930	-0.0379	0.2587	0.5899	-0.3312	-0.5938
260	51.53	-0.06	14.0372	-6.8946	-0.6715	4.1900	-0.0323	0.2052	0.5841	-0.3789	-0.6077
261	51.58	-0.07	14.2207	-6.5021	-0.7359	4.1173	-0.0310	0.2089	0.5857	-0.3766	-0.5979
262	51.67	-0.02	14.3505	-6.6105	-0.3309	3.9048	-0.0243	0.1998	0.5822	-0.3824	-0.6001
263	51.76	-0.05	14.5701	-6.8476	-0.6053	4.2559	-0.0369	0.2236	0.5872	-0.3836	-0.6069
264	51.88	-0.03	14.7511	-6.8462	-0.5240	4.3929	-0.0117	0.1987	0.5764	-0.3777	-0.5997
265	51.95	-0.03	14.8953	-6.8088	-0.5020	4.5150	-0.0101	0.1881	0.5826	-0.3945	-0.6049
266	52.04	0.03	14.7056	-6.8649	-0.3059	4.0328	0.0084	0.1948	0.5805	-0.3857	-0.6071
267	52.12	-0.03	14.7337	-6.8723	-0.4752	3.7525	0.0034	0.1965	0.5818	-0.3833	-0.6021
268	52.19	-0.00	14.7160	-6.7674	-0.0364	3.5917	-0.0027	0.2097	0.5800	-0.3703	-0.5958
269	52.28	0.00	14.5507	-6.7952	0.0413	3.4019	0.0024	0.1932	0.5679	-0.3947	-0.6031
270	52.33	0.04	14.5508	-6.8102	0.5520	3.2670	0.0034	0.1921	0.5696	-0.3975	-0.6056
271	52.45	0.02	14.6522	-6.7112	0.3329	3.0538	0.0044	0.2379	0.5846	-0.3607	-0.5945
272	52.51	0.03	14.6080	-6.7750	0.4011	3.0123	0.0110	0.2064	0.5808	-0.3822	-0.6008
273	52.61	0.02	14.6049	-6.7234	0.3384	2.8926	0.0185	0.2022	0.5894	-0.3872	-0.5949
274	52.69	0.04	14.4352	-6.4245	0.1518	2.7628	0.0166	0.2314	0.5677	-0.3563	-0.5836
275	52.78	0.02	14.5621	-6.6253	0.3373	2.7251	0.0166	0.1900	0.5911	-0.4011	-0.5915
276	52.83	-0.00	14.4001	-6.5425	0.1391	2.7224	0.0123	0.2265	0.5845	-0.3610	-0.5932

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 5a MACH 0.90 RX10-6 1.7 PHI 0.0 CONF B1WDF15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
277	52.93	0.03	14.5506	-0.6646	0.7484	2.6227	0.0248	0.2155	0.5865	-0.3710	-0.5955
278	53.00	0.03	14.6969	-0.6752	0.7619	2.6452	0.0170	0.1700	0.5907	-0.4119	-0.5950
279	53.08	0.07	14.4196	-0.6240	0.8870	2.5564	0.0181	0.2536	0.5935	-0.3399	-0.5981
280	53.16	0.06	14.5979	-0.6685	0.8309	2.6369	0.0184	0.2081	0.5916	-0.3837	-0.5938
281	53.26	0.03	14.6036	-0.6726	0.6060	2.6251	0.0207	0.2130	0.5916	-0.3788	-0.5879
282	53.35	0.04	14.3972	-0.6527	1.1431	2.5975	0.0116	0.2408	0.5927	-0.3514	-0.5926
283	53.42	0.02	14.5035	-0.6649	0.4763	2.0942	0.0083	0.2221	0.5943	-0.3722	-0.5941
284	53.50	0.06	14.7320	-0.6965	1.0656	2.1494	0.0073	0.2094	0.5876	-0.3782	-0.6005
285	53.58	0.06	14.6425	-0.6194	1.0933	2.1068	0.0200	0.2180	0.5944	-0.3764	-0.6023
286	53.68	0.04	14.8130	-0.6329	0.6094	2.2900	0.0208	0.2344	0.5965	-0.3621	-0.6030
287	53.76	0.07	14.7032	-0.6322	1.0081	2.0603	0.0143	0.2157	0.5914	-0.3757	-0.5985
288	53.84	0.03	14.6722	-0.6305	1.1025	2.0469	0.0205	0.1977	0.5917	-0.3940	-0.5952
289	53.92	0.02	14.7905	-0.7516	0.4736	2.3263	0.0274	0.2243	0.5913	-0.3670	-0.5944
290	54.01	0.03	14.8068	-0.6511	0.8581	1.6900	0.0294	0.2026	0.5921	-0.3695	-0.5953
291	54.08	0.03	14.8264	-0.6474	0.8759	1.5024	0.0350	0.2140	0.5854	-0.3708	-0.5852
292	54.15	0.06	14.7951	-0.6691	0.9094	2.0094	0.0215	0.1920	0.5862	-0.3942	-0.5859
293	54.23	0.06	14.8753	-0.6357	1.1371	1.9338	0.0214	0.1883	0.5900	-0.4017	-0.6007
294	54.30	0.03	14.7096	-0.6150	0.6462	1.7839	0.0352	0.2209	0.5841	-0.3632	-0.5857
295	54.38	0.08	14.8090	-0.6340	1.0485	2.0739	0.0408	0.1995	0.5859	-0.3864	-0.5830
296	54.47	0.05	14.8610	-0.7431	0.6701	1.7819	0.0326	0.1926	0.5825	-0.3899	-0.5883
297	54.55	0.04	14.8825	-0.7508	0.7035	1.8151	0.0357	0.2212	0.5905	-0.3693	-0.5885
298	54.62	0.04	14.8732	-0.7698	1.2945	1.7098	0.0348	0.1694	0.5922	-0.4226	-0.5896
299	54.70	0.07	14.9180	-0.6767	1.0972	1.6525	0.0359	0.2001	0.6086	-0.4085	-0.5816
300	54.77	0.06	14.7007	-0.5834	0.9326	1.6450	0.0487	0.2075	0.6026	-0.3983	-0.5807
301	54.85	0.04	14.8862	-0.6928	0.7874	1.4825	0.0241	0.2332	0.6057	-0.3725	-0.5847
302	54.93	0.04	14.9033	-0.7343	0.7379	1.8394	0.0425	0.2107	0.6069	-0.3962	-0.5841
303	55.01	0.01	14.8913	-0.6654	0.3083	1.4332	0.0316	0.2006	0.6027	-0.4021	-0.5819
304	55.08	0.04	14.8807	-0.6717	0.7077	1.6176	0.0423	0.2015	0.5959	-0.3944	-0.5831
305	55.16	0.05	14.9539	-0.6068	0.9056	1.4897	0.0436	0.2019	0.5947	-0.3928	-0.5757
306	55.23	0.05	14.9571	-0.8551	0.9169	1.3365	0.0375	0.2041	0.5968	-0.3927	-0.5920
307	55.31	0.01	14.9081	-0.6720	0.4041	1.5657	0.0311	0.2108	0.5985	-0.3877	-0.5817
308	55.39	0.05	14.9007	-0.6064	0.8909	1.3006	0.0504	0.1922	0.5964	-0.4042	-0.5776
309	55.47	0.02	15.0154	-0.7967	0.6503	1.4715	0.0378	0.1850	0.5993	-0.4143	-0.5862
310	55.55	0.05	15.0499	-0.6432	0.9951	1.2166	0.0513	0.2031	0.6018	-0.3987	-0.5743
311	55.62	0.08	14.9460	-0.7194	1.2624	1.1264	0.0506	0.1812	0.6035	-0.4223	-0.5834
312	55.67	0.02	14.8265	-0.6602	0.5063	1.2891	0.0512	0.2167	0.6032	-0.3835	-0.5709
313	55.77	0.06	15.0376	-0.5770	1.1137	1.1631	0.0511	0.1650	0.6040	-0.4390	-0.5715
314	55.85	0.04	14.9933	-0.7022	0.6432	0.9436	0.0525	0.2252	0.6081	-0.3829	-0.5804
315	55.94	0.05	15.1301	-0.5952	0.8930	1.3847	0.0512	0.1618	0.6069	-0.4451	-0.5677
316	56.00	0.08	14.9702	-0.5963	1.2099	0.9735	0.0515	0.1975	0.6116	-0.4141	-0.5716
317	56.09	0.02	15.0063	-0.6201	0.7262	0.7791	0.0535	0.1696	0.6162	-0.4206	-0.5747
318	56.16	0.02	15.0231	-0.6080	0.5748	1.0369	0.0483	0.1756	0.6145	-0.4389	-0.5770
319	56.24	0.03	15.0038	-0.7013	0.8189	0.9924	0.0526	0.1670	0.6150	-0.4260	-0.5776
320	56.33	0.03	15.0069	-0.7032	0.8396	0.8577	0.0467	0.1856	0.6301	-0.4443	-0.5788
321	56.39	0.01	14.9709	-0.5310	0.5748	1.0250	0.0526	0.1954	0.6322	-0.4368	-0.5698
322	56.45	0.03	14.9358	-0.4260	0.7068	1.0412	0.0522	0.1709	0.6343	-0.4634	-0.5641

TEST PART MACH MAG-G PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 55 0.90 1.7 0.0 BIWOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
323	56.54	0.04	14.9577	-8.5001	0.0001	1.0962	0.0519	0.1923	0.6385	-0.4442	-0.5667
324	56.62	0.01	15.0481	-8.6937	0.0002	0.9888	0.0531	0.1823	0.6391	-0.4568	-0.5777
325	56.70	0.00	15.1247	-8.6470	1.1440	0.6977	0.0528	0.1750	0.6446	-0.4696	-0.5717
326	56.76	0.03	15.0682	-8.5674	0.8274	0.8480	0.0533	0.1664	0.6475	-0.4812	-0.5686
327	56.87	0.04	15.2156	-8.8536	0.5033	0.7193	0.0410	0.1617	0.6492	-0.4876	-0.5819
328	56.92	0.03	15.0930	-8.7443	0.8041	0.9270	0.0529	0.1395	0.5731	-0.4336	-0.5793
329	56.99	0.02	15.0803	-8.6979	0.8011	0.5951	0.0478	0.1519	0.5676	-0.4157	-0.5768
330	57.08	0.03	15.1434	-8.8109	0.8502	0.7008	0.0536	0.1520	0.5727	-0.4207	-0.5818
331	57.16	0.00	15.1223	-8.8012	0.5394	0.8406	0.0541	0.1523	0.5687	-0.4314	-0.5725
332	57.23	-0.03	15.1101	-8.8926	0.4150	1.0903	0.0532	0.1330	0.5686	-0.4558	-0.5687
333	57.30	-0.02	15.0390	-8.8467	0.2110	1.1257	0.0599	0.1212	0.5842	-0.4650	-0.5550
334	57.37	0.04	15.1110	-8.8471	0.8508	0.7423	0.0538	0.1610	0.5917	-0.4307	-0.5656
335	57.45	-0.01	15.0815	-8.8038	0.4819	0.8307	0.0608	0.1219	0.6019	-0.4800	-0.5638
336	57.53	0.02	15.1423	-8.8404	0.8997	0.7597	0.0542	0.1501	0.5942	-0.4381	-0.5710
337	57.60	-0.00	15.0968	-8.8512	0.5722	0.6709	0.0612	0.1163	0.5925	-0.4762	-0.5535
338	57.66	0.01	15.1172	-8.8088	0.8298	0.4531	0.0557	0.1436	0.5854	-0.4418	-0.5496
339	57.74	0.02	15.1915	-8.9617	0.7829	0.4965	0.0555	0.1074	0.5951	-0.4878	-0.5570
340	57.83	-0.01	15.1891	-7.7826	0.5209	-0.0904	0.0568	0.1234	0.5875	-0.4641	-0.5111
341	57.89	-0.03	15.1509	-7.8555	0.2925	0.0228	0.0521	0.0818	0.6010	-0.5192	-0.5165
342	57.98	-0.04	15.2226	-7.9105	0.2201	-0.0849	0.0466	0.1065	0.5833	-0.4708	-0.4934
343	58.04	-0.03	15.1158	-7.9990	0.5593	-0.0830	0.0475	0.0783	0.5890	-0.4907	-0.5027
344	58.10	-0.09	15.1117	-7.9744	-0.5178	-0.0610	0.0403	0.1103	0.5733	-0.4630	-0.4959
345	58.19	-0.04	15.3169	-7.8117	-0.3097	-0.9407	0.0345	0.0759	0.5671	-0.4932	-0.5100
346	58.27	-0.09	15.2425	-7.8151	-0.3040	-0.8591	0.0277	0.1012	0.5856	-0.4644	-0.5127
347	58.33	-0.12	15.2045	-8.2113	-0.5359	-1.2170	0.0272	0.0848	0.5815	-0.4766	-0.5401
348	58.42	-0.11	15.3559	-8.4547	-0.4432	-1.2698	0.0278	0.1050	0.5877	-0.4627	-0.5506
349	58.48	-0.09	15.3044	-8.0343	-0.2902	-1.3638	0.0346	0.1300	0.5754	-0.4454	-0.5612
350	58.51	-0.10	15.2491	-8.3071	-0.3009	-1.2789	0.0277	0.1201	0.5750	-0.4549	-0.5448
351	58.52	-0.10	15.3638	-8.0492	-0.2973	-1.5174	0.0262	0.0864	0.5750	-0.4886	-0.5622
352	58.51	-0.12	15.2780	-8.5506	-0.3078	-1.3017	0.0274	0.1234	0.5720	-0.4486	-0.5597
353	58.52	-0.07	15.3627	-8.5066	-0.0574	-1.4811	0.0349	0.0929	0.5734	-0.4774	-0.5537
354	58.51	-0.08	15.2072	-8.0371	-0.1746	-0.9883	0.0342	0.1037	0.5636	-0.4599	-0.5285
355	57.82	0.01	15.1229	-8.5059	0.6269	0.6470	0.0548	0.1297	0.5911	-0.4614	-0.5625
356	57.10	0.02	15.0933	-8.6035	0.6956	0.9075	0.0534	0.1301	0.5805	-0.4444	-0.5700

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH-RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 58 0.90 1.7 0.0 BLMOFF 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CH1	CB1	XCPF1	YCPF1	CNF2	CH2	CB2	XCPF2	YCPF2
1	-5.70	0.01	0.0030	0.0001	0.0053	2.0341	1.7667	-0.2322	-0.0436	-0.1366	0.1877	0.5862
2	-5.71	0.01	-0.0005	0.0043	0.0011	-8.6034	-2.2000	-0.2351	-0.0442	-0.1381	0.1879	0.5873
3	-5.71	0.01	-0.0019	0.0041	0.0010	-2.1588	-0.5263	-0.2381	-0.0446	-0.1402	0.1872	0.5887
4	-5.76	0.00	-0.0020	0.0042	0.0016	-2.1008	-0.8000	-0.2232	-0.0429	-0.1328	0.1921	0.5949
5	-5.16	0.01	-0.0033	0.0047	0.0003	-1.4248	-0.3909	-0.1667	-0.0359	-0.1033	0.2151	0.6198
6	-4.14	0.01	-0.0020	0.0056	0.0011	-2.8011	-0.5500	-0.1223	-0.0276	-0.0798	0.2425	0.6527
7	-3.18	0.03	-0.0008	0.0058	0.0019	-7.2529	-2.3750	-0.0778	-0.0226	-0.0570	0.2910	0.7323
8	-2.27	0.02	-0.0034	0.0049	0.0015	-1.4417	-0.4412	-0.0456	-0.0167	-0.0356	0.3672	0.7624
9	-1.31	0.01	-0.0034	0.0049	0.0015	-1.4417	-0.4412	-0.0026	-0.0065	-0.0195	3.2705	7.5000
10	-0.35	0.00	0.0005	0.0060	0.0027	12.0048	3.4000	0.0235	-0.0001	-0.0071	-0.0043	-0.3021
11	0.65	0.01	-0.0006	0.0048	0.0018	-3.0032	-3.0000	0.0511	0.0091	0.0054	0.1765	0.1059
12	1.57	0.02	-0.0019	0.0043	0.0010	-2.2691	-0.5263	0.0877	0.0172	0.0240	0.1964	0.2740
13	2.57	0.02	-0.0033	0.0039	0.0014	-1.1623	-0.4242	0.1218	0.0228	0.0387	0.1874	0.3180
14	3.60	0.01	0.0021	0.0045	0.0026	2.1437	1.2381	0.1657	0.0312	0.0690	0.1860	0.4163
15	4.46	0.01	0.0024	0.0034	0.0007	1.4172	0.2917	0.2066	0.0378	0.0936	0.1811	0.4469
16	5.44	0.01	0.0037	0.0030	0.0026	0.8111	0.5405	0.2561	0.0437	0.1179	0.1705	0.4605
17	6.44	0.00	0.0063	0.0027	0.0040	0.4287	0.3429	0.3231	0.0516	0.1519	0.1597	0.4701
18	7.43	0.00	0.0063	0.0020	0.0039	0.3176	0.3190	0.3753	0.0572	0.1778	0.1564	0.4739
19	8.38	0.01	0.0057	0.0017	0.0024	0.4596	0.3636	0.4340	0.0652	0.2099	0.1453	0.4826
20	9.34	0.00	0.0052	0.0015	0.0020	0.3655	0.3846	0.4858	0.0664	0.2356	0.1367	0.4850
21	10.33	-0.00	0.0077	0.0024	0.0035	0.3118	0.4545	0.5490	0.0804	0.2611	0.1219	0.4791
22	11.33	0.00	0.0105	0.0024	0.0050	0.2287	0.3619	0.6191	0.0886	0.2906	0.1108	0.4694
23	12.29	0.01	0.0104	0.0024	0.0050	0.2309	0.4348	0.6869	0.0879	0.3159	0.1009	0.4565
24	13.27	0.01	0.0065	0.0013	0.0027	0.2001	0.4154	0.7406	0.0782	0.3324	0.0948	0.4488
25	14.24	0.01	0.0013	-0.0003	0.0007	-0.2309	0.5385	0.8105	0.0707	0.3583	0.0872	0.4421
26	15.25	0.01	0.0027	-0.0006	0.0014	-0.2223	0.5185	0.8684	0.0712	0.3766	0.0820	0.4336
27	16.26	0.00	-0.0026	-0.0004	-0.0009	0.1539	0.3462	0.9155	0.0708	0.3907	0.0773	0.4267
28	17.27	0.01	-0.0048	-0.0012	0.0007	0.1429	-0.0833	0.9434	0.0684	0.3978	0.0730	0.4217
29	18.24	0.01	0.0143	-0.0004	0.0193	-0.0276	1.3310	0.9796	0.0663	0.4095	0.0682	0.4197
30	19.22	0.01	0.0120	0.0001	0.0162	0.0083	1.3500	1.0173	0.0626	0.4219	0.0617	0.4147
31	20.19	0.01	0.0026	-0.0004	0.0043	-3.2341	12.0385	1.0504	0.0617	0.4422	0.0583	0.4178
32	21.15	0.00	-0.0114	-0.0064	0.0176	0.5016	-1.5439	1.1099	0.0548	0.4554	0.0494	0.4103
33	22.12	0.00	-0.0208	-0.0121	0.0155	0.4203	-0.5362	1.1620	0.0524	0.4736	0.0451	0.4075
34	23.10	0.00	-0.0187	-0.0109	0.0114	0.5831	-0.6996	1.1374	0.0426	0.4453	0.0374	0.3915
35	24.07	0.01	-0.0105	-0.0093	0.0125	0.8801	-1.1905	1.1530	0.0389	0.4550	0.0337	0.3946
36	25.01	0.01	-0.0071	-0.0088	-0.0017	0.3249	0.0667	1.1209	0.0333	0.4299	0.0295	0.3815
37	25.96	0.02	-0.0197	-0.0072	-0.0044	0.4538	0.2803	1.0150	0.0259	0.3630	0.0256	0.3773
38	26.93	0.01	-0.0313	-0.0070	-0.0145	0.2237	0.4033	0.9514	0.0233	0.3487	0.0251	0.3744
39	27.87	0.04	0.1198	0.0158	0.0078	0.1520	0.5039	0.9119	0.0216	0.3384	0.0237	0.3711
40	28.81	0.04	0.0834	0.0102	0.0474	0.1225	0.5078	0.9165	0.0210	0.3400	0.0236	0.3710
41	28.22	0.03	0.0001	0.0111	0.0540	0.1202	0.6125	0.9211	0.0210	0.3404	0.0235	0.3696
42	28.22	0.04	0.0768	0.0099	0.0449	0.1291	0.5041	0.9148	0.0217	0.3365	0.0236	0.3700
43	28.22	0.03	0.0003	0.0106	0.0490	0.1319	0.6382	0.9118	0.0216	0.3358	0.0237	0.3683
44	28.31	0.04	0.0944	0.0139	0.0593	0.1475	0.6278	0.9101	0.0211	0.3369	0.0230	0.3670
45	28.37	0.05	0.1064	0.0171	0.0641	0.1609	0.6021	0.9010	0.0220	0.3291	0.0245	0.3653
46	28.70	0.04	0.1151	0.0204	0.0709	0.1775	0.6157	0.9057	0.0217	0.3301	0.0240	0.3645

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 50 0.90 1.7 0.0 BLANK 15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CH1	CB1	ALPF1	YCPF1	CNF2	CH2	CB2	XCPF2	YCPF2
47	28.81	0.03	0.0961	0.0139	0.0584	0.1446	0.6073	0.9257	0.0207	0.3379	0.0224	0.3650
48	29.01	0.05	0.1371	0.0231	0.0802	0.1668	0.6289	0.9104	0.0210	0.3311	0.0231	0.3637
49	29.15	0.06	0.1503	0.0259	0.0915	0.1726	0.6089	0.9212	0.0204	0.3356	0.0222	0.3643
50	29.29	0.06	0.1527	0.0270	0.0938	0.1771	0.6144	0.9197	0.0203	0.3343	0.0221	0.3645
51	29.46	0.05	0.1520	0.0238	0.0834	0.1791	0.6320	0.9303	0.0201	0.3380	0.0216	0.3653
52	29.60	0.06	0.1485	0.0279	0.0953	0.1802	0.6419	0.9242	0.0202	0.3363	0.0219	0.3649
53	29.74	0.06	0.1502	0.0327	0.1041	0.1941	0.6190	0.9227	0.0204	0.3343	0.0221	0.3623
54	29.89	0.06	0.1630	0.0321	0.1004	0.1900	0.6101	0.9307	0.0194	0.3397	0.0207	0.3627
55	30.03	0.06	0.1928	0.0372	0.1187	0.1927	0.6156	0.9256	0.0198	0.3352	0.0214	0.3621
56	30.17	0.06	0.2255	0.0455	0.1340	0.2017	0.5977	0.9274	0.0194	0.3359	0.0210	0.3622
57	30.31	0.08	0.2428	0.0475	0.1423	0.1947	0.5860	0.9275	0.0194	0.3347	0.0209	0.3609
58	30.45	0.08	0.2491	0.0516	0.1454	0.2071	0.5836	0.9162	0.0194	0.3321	0.0212	0.3617
59	30.58	0.08	0.2566	0.0529	0.1524	0.2061	0.5938	0.9152	0.0190	0.3299	0.0208	0.3605
60	30.71	0.09	0.2463	0.0504	0.1481	0.2046	0.5931	0.9291	0.0188	0.3348	0.0203	0.3603
61	30.84	0.10	0.2577	0.0555	0.1534	0.2153	0.5952	0.9168	0.0189	0.3295	0.0206	0.3594
62	31.00	0.09	0.2545	0.0512	0.1483	0.2011	0.5826	0.9369	0.0183	0.3385	0.0196	0.3613
63	31.14	0.09	0.2490	0.0512	0.1471	0.2056	0.5907	0.9402	0.0178	0.3429	0.0186	0.3624
64	31.25	0.09	0.2460	0.0518	0.1475	0.2105	0.5995	0.9400	0.0179	0.3393	0.0191	0.3610
65	31.41	0.08	0.2538	0.0536	0.1516	0.2111	0.5972	0.9478	0.0175	0.3412	0.0185	0.3600
66	31.54	0.09	0.2599	0.0532	0.1524	0.2157	0.5955	0.9432	0.0170	0.3391	0.0181	0.3596
67	31.68	0.10	0.2664	0.0542	0.1594	0.2034	0.5963	0.9539	0.0160	0.3442	0.0174	0.3609
68	31.83	0.08	0.2709	0.0514	0.1595	0.1897	0.5887	0.9600	0.0156	0.3455	0.0169	0.3628
69	31.95	0.09	0.2709	0.0533	0.1579	0.1967	0.5828	0.9755	0.0157	0.3533	0.0161	0.3622
70	32.09	0.08	0.2771	0.0513	0.1623	0.1850	0.5856	0.9922	0.0150	0.3591	0.0151	0.3620
71	32.24	0.08	0.2567	0.0513	0.1520	0.1982	0.5875	0.9925	0.0146	0.3585	0.0149	0.3613
72	32.38	0.08	0.2965	0.0465	0.1499	0.1814	0.5843	1.0108	0.0137	0.3710	0.0135	0.3648
73	32.47	0.08	0.2590	0.0472	0.1520	0.1821	0.5891	1.0153	0.0134	0.3690	0.0132	0.3634
74	32.62	0.07	0.2906	0.0441	0.1498	0.1710	0.5825	1.0304	0.0132	0.3769	0.0127	0.3645
75	32.75	0.07	0.2938	0.0442	0.1560	0.1089	0.5701	1.0259	0.0131	0.3743	0.0128	0.3648
76	32.89	0.09	0.2952	0.0438	0.1387	0.1801	0.5898	1.0336	0.0124	0.3767	0.0120	0.3644
77	33.02	0.09	0.2109	0.0407	0.1297	0.1875	0.5979	1.0383	0.0124	0.3777	0.0120	0.3637
78	33.18	0.08	0.1905	0.0390	0.1164	0.2045	0.6111	1.0444	0.0121	0.3806	0.0116	0.3644
79	33.27	0.06	0.2089	0.0410	0.1259	0.1961	0.6026	1.0459	0.0123	0.3814	0.0118	0.3646
80	33.42	0.07	0.1797	0.0382	0.1103	0.2123	0.6139	1.0413	0.0116	0.3799	0.0112	0.3648
81	33.52	0.07	0.1761	0.0372	0.1104	0.2086	0.6200	1.0457	0.0114	0.3804	0.0109	0.3657
82	33.66	0.06	0.1932	0.0394	0.1179	0.2016	0.6041	1.0396	0.0115	0.3793	0.0111	0.3648
83	33.79	0.07	0.1562	0.0320	0.0985	0.2046	0.6308	1.0518	0.0108	0.3839	0.0103	0.3650
84	33.91	0.07	0.1455	0.0315	0.0949	0.2102	0.6324	1.0486	0.0108	0.3818	0.0103	0.3640
85	34.03	0.05	0.1567	0.0342	0.0996	0.2152	0.6278	1.0549	0.0106	0.3854	0.0103	0.3653
86	34.16	0.06	0.1613	0.0316	0.1031	0.1956	0.6394	1.0518	0.0110	0.3845	0.0105	0.3655
87	34.27	0.04	0.1339	0.0285	0.0891	0.2132	0.6657	1.0579	0.0100	0.3868	0.0100	0.3656
88	34.41	0.04	0.1115	0.0245	0.0790	0.2209	0.7083	1.0610	0.0102	0.3877	0.0096	0.3654
89	34.54	0.05	0.1038	0.0230	0.0739	0.2277	0.7117	1.0642	0.0100	0.3879	0.0094	0.3645
90	34.65	0.04	0.0906	0.0207	0.0696	0.2159	0.7241	1.0745	0.0100	0.3919	0.0093	0.3647
91	34.78	0.06	0.0857	0.0202	0.0631	0.2361	0.7360	1.0700	0.0094	0.3932	0.0088	0.3654
92	34.91	0.04	0.0870	0.0115	0.0330	0.4201	1.2444	1.0775	0.0095	0.3940	0.0088	0.3662

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 33 MACH 0.90 RATIO-0 1.7 PHI 0.0 CONF BLKOFF L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	35.01	0.03	0.0074	0.0173	0.0548	0.2572	0.8128	1.0622	0.0069	0.3933	0.0084	0.3703
94	35.15	0.03	0.0194	0.0082	0.0300	0.4383	1.5404	1.0529	0.0088	0.4009	0.0080	0.3658
95	35.27	0.03	0.0080	0.0077	0.0250	0.8753	2.9310	1.0808	0.0087	0.3977	0.0080	0.3659
96	35.38	0.02	0.0259	0.0112	0.0310	0.4326	1.2201	1.0777	0.0086	0.3921	0.0080	0.3638
97	35.52	-0.00	-0.0300	0.0019	0.0030	-0.0624	-0.1200	1.0990	0.0085	0.4012	0.0077	0.3650
98	35.62	0.01	-0.0431	-0.0004	-0.0022	0.0043	0.0512	1.1063	0.0078	0.4043	0.0070	0.3648
99	35.75	0.00	-0.0431	-0.0016	-0.0065	0.0333	0.1354	1.1114	0.0074	0.4058	0.0067	0.3651
100	35.86	0.01	-0.0052	0.0053	0.0126	-1.0196	-3.0000	1.1033	0.0072	0.4053	0.0065	0.3659
101	35.99	0.02	-0.0077	-0.0027	-0.0165	0.0400	0.2441	1.1063	0.0075	0.4049	0.0068	0.3653
102	36.13	0.01	-0.0417	-0.0005	-0.0021	0.0120	0.0505	1.1100	0.0066	0.4050	0.0060	0.3649
103	36.24	0.02	-0.0002	0.0059	0.0204	-24.5118	-102.0000	1.1024	0.0067	0.4014	0.0061	0.3641
104	36.35	0.01	-0.0561	-0.0011	-0.0096	0.0197	0.1714	1.1267	0.0063	0.4113	0.0056	0.3651
105	36.48	-0.00	-0.0456	0.0002	-0.0070	-0.0040	0.1414	1.1178	0.0061	0.4099	0.0055	0.3668
106	36.61	0.01	-0.1041	-0.0076	-0.0353	0.0731	0.3394	1.1389	0.0059	0.4184	0.0047	0.3676
107	36.69	0.00	-0.1029	-0.0070	-0.0344	0.0681	0.3346	1.1206	0.0063	0.4101	0.0056	0.3660
108	36.81	0.01	-0.0783	-0.0042	-0.0190	0.0537	0.2430	1.1371	0.0055	0.4158	0.0047	0.3657
109	36.99	0.01	-0.0774	-0.0031	-0.0157	0.0401	0.2031	1.1158	0.0055	0.4079	0.0048	0.3656
110	37.11	0.00	-0.0668	-0.0025	-0.0121	0.0375	0.1814	1.1235	0.0050	0.4104	0.0045	0.3653
111	37.25	0.00	-0.0707	-0.0005	-0.0153	0.0071	0.2167	1.1220	0.0045	0.4096	0.0040	0.3651
112	37.37	0.01	-0.0643	-0.0020	-0.0100	0.0312	0.1556	1.1160	0.0042	0.4067	0.0038	0.3644
113	37.48	0.00	-0.1045	-0.0061	-0.0321	0.0585	0.3075	1.1280	0.0049	0.4126	0.0044	0.3658
114	37.60	0.00	-0.0822	-0.0023	-0.0227	0.0280	0.2765	1.1493	0.0044	0.4216	0.0038	0.3668
115	37.71	-0.01	-0.0697	-0.0030	-0.0102	0.0431	0.1466	1.1180	0.0045	0.4055	0.0040	0.3654
116	37.82	0.00	-0.0903	-0.0070	-0.0218	0.0776	0.2417	1.1205	0.0045	0.4089	0.0040	0.3649
117	37.96	0.00	-0.1100	-0.0072	-0.0334	0.0655	0.3039	1.1298	0.0042	0.4131	0.0037	0.3657
118	38.12	0.02	-0.0845	-0.0027	-0.0192	0.0638	0.2148	1.1359	0.0037	0.4161	0.0033	0.3663
119	38.24	0.02	-0.0967	-0.0066	-0.0232	0.0670	0.2353	1.1491	0.0031	0.4192	0.0027	0.3661
120	38.36	0.01	-0.1167	-0.0079	-0.0271	0.0715	0.2950	1.1390	0.0042	0.4151	0.0037	0.3645
121	38.48	0.01	-0.0883	-0.0068	-0.0168	0.0771	0.1905	1.1315	0.0032	0.4126	0.0028	0.3647
122	38.59	-0.02	-0.1091	-0.0089	-0.0276	0.0817	0.2552	1.1300	0.0034	0.4113	0.0030	0.3640
123	38.71	-0.02	-0.1559	-0.0147	-0.0531	0.0944	0.3404	1.1541	0.0036	0.4236	0.0031	0.3671
124	38.84	-0.02	-0.1313	-0.0127	-0.0368	0.0969	0.4900	1.1093	0.0029	0.4122	0.0025	0.3696
125	38.94	-0.00	-0.1196	-0.0109	-0.0320	0.0912	0.2078	1.1526	0.0031	0.4241	0.0027	0.3680
126	39.06	0.01	-0.1301	-0.0126	-0.0369	0.0970	0.2841	1.1435	0.0033	0.4203	0.0029	0.3676
127	39.18	0.00	-0.1301	-0.0131	-0.0364	0.1055	0.2802	1.1314	0.0034	0.4132	0.0030	0.3652
128	39.27	-0.00	-0.1490	-0.0152	-0.0424	0.1053	0.2929	1.1329	0.0032	0.4146	0.0028	0.3660
129	39.39	-0.01	-0.1434	-0.0147	-0.0411	0.1027	0.2803	1.1300	0.0027	0.4172	0.0024	0.3673
130	39.50	-0.03	-0.1692	-0.0184	-0.0557	0.1107	0.3290	1.1295	0.0030	0.4091	0.0027	0.3635
131	39.60	-0.03	-0.1555	-0.0162	-0.0501	0.0976	0.2316	1.1513	0.0021	0.4221	0.0018	0.3666
132	39.71	-0.05	-0.2515	-0.0274	-0.0971	0.1091	0.3361	1.1033	0.0027	0.4274	0.0023	0.3674
133	39.82	-0.03	-0.2347	-0.0263	-0.0868	0.1122	0.3699	1.1390	0.0028	0.4187	0.0025	0.3676
134	39.94	-0.03	-0.1882	-0.0203	-0.0597	0.1000	0.3170	1.1331	0.0027	0.4121	0.0024	0.3637
135	40.03	-0.02	-0.2411	-0.0271	-0.0881	0.1120	0.3654	1.1416	0.0031	0.4190	0.0027	0.3670
136	40.15	-0.05	-0.2502	-0.0287	-0.0916	0.1149	0.3881	1.1543	0.0016	0.4240	0.0016	0.3680
137	40.23	-0.03	-0.1997	-0.0207	-0.0650	0.1038	0.3253	1.1159	0.0031	0.4065	0.0028	0.3643
138	40.35	-0.06	-0.2476	-0.0280	-0.0907	0.1133	0.3664	1.1266	0.0023	0.4116	0.0020	0.3654

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 5d MACH 0.90 1.7 RX10-6 1.7 PHI 0.0 CONF BIWDFLS L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CH1	CD1	XCPF1	YCPF1	CNF2	CH2	CD2	XCPF2	YCPF2
139	40.44	-0.05	-0.2645	-0.0309	-0.0980	0.1166	0.3736	1.1281	0.0024	0.4136	0.0021	0.3666
140	40.54	-0.07	-0.2720	-0.0314	-0.0994	0.1223	0.3741	1.1372	0.0019	0.4167	0.0017	0.3664
141	40.64	-0.04	-0.2632	-0.0308	-0.0986	0.1168	0.3747	1.1311	0.0024	0.4136	0.0021	0.3658
142	40.75	-0.05	-0.2734	-0.0314	-0.1007	0.1238	0.3745	1.1735	0.0013	0.4343	0.0011	0.3701
143	40.85	-0.06	-0.2998	-0.0352	-0.1102	0.1173	0.3878	1.1462	0.0020	0.4212	0.0023	0.3675
144	40.96	-0.08	-0.3180	-0.0394	-0.1241	0.1258	0.3901	1.1565	0.0020	0.4240	0.0017	0.3660
145	41.07	-0.06	-0.3080	-0.0372	-0.1228	0.1204	0.3978	1.1660	0.0020	0.4276	0.0017	0.3667
146	41.19	-0.07	-0.2788	-0.0335	-0.1000	0.1200	0.3805	1.1433	0.0020	0.4179	0.0018	0.3655
147	41.28	-0.05	-0.2970	-0.0361	-0.1154	0.1214	0.3887	1.1658	0.0013	0.4277	0.0011	0.3692
148	41.38	-0.07	-0.3095	-0.0382	-0.1216	0.1233	0.3931	1.1717	0.0009	0.4305	0.0008	0.3674
149	41.48	-0.05	-0.2783	-0.0333	-0.1058	0.1195	0.3802	1.1429	0.0019	0.4179	0.0017	0.3657
150	41.59	-0.07	-0.3042	-0.0375	-0.1192	0.1232	0.3920	1.1586	0.0010	0.4215	0.0009	0.3663
151	41.71	-0.07	-0.3484	-0.0433	-0.1414	0.1242	0.4057	1.1855	0.0002	0.4359	0.0002	0.3677
152	41.79	-0.05	-0.2991	-0.0393	-0.1147	0.1313	0.3837	1.1506	0.0006	0.4209	0.0007	0.3658
153	41.89	-0.07	-0.3495	-0.0442	-0.1434	0.1264	0.4102	1.1778	0.0005	0.4328	0.0004	0.3675
154	41.99	-0.06	-0.3447	-0.0430	-0.1343	0.1260	0.3991	1.1588	0.0008	0.4144	0.0007	0.3640
155	42.08	-0.09	-0.3799	-0.0500	-0.1553	0.1316	0.4035	1.1505	0.0009	0.4233	0.0008	0.3679
156	42.18	-0.08	-0.3580	-0.0455	-0.1456	0.1270	0.4072	1.1735	0.0003	0.4317	0.0003	0.3679
157	42.27	-0.08	-0.3633	-0.0465	-0.1490	0.1324	0.4007	1.1373	0.0	0.4141	0.0	0.3641
158	42.38	-0.09	-0.3917	-0.0484	-0.1593	0.1318	0.3980	1.1512	0.0006	0.4119	0.0007	0.3641
159	42.48	-0.08	-0.3901	-0.0537	-0.1598	0.1355	0.4034	1.1615	0.0002	0.4247	0.0002	0.3657
160	42.58	-0.12	-0.4208	-0.0559	-0.1724	0.1328	0.4109	1.1646	0.0	0.4249	0.0	0.3649
161	42.68	-0.10	-0.4223	-0.0556	-0.1724	0.1316	0.4083	1.1616	-0.0001	0.4240	-0.0001	0.3650
162	42.77	-0.10	-0.4220	-0.0584	-0.1750	0.1362	0.4094	1.1725	-0.0007	0.4290	-0.0006	0.3659
163	42.84	-0.10	-0.4149	-0.0553	-0.1695	0.1333	0.4081	1.1724	-0.0002	0.4285	-0.0002	0.3655
164	42.93	-0.10	-0.4176	-0.0556	-0.1697	0.1336	0.4084	1.1735	-0.0005	0.4299	-0.0004	0.3657
165	43.04	-0.12	-0.4344	-0.0590	-0.1872	0.1312	0.4121	1.1724	-0.0004	0.4291	-0.0003	0.3660
166	43.14	-0.10	-0.4340	-0.0593	-0.1813	0.1226	0.4172	1.1694	-0.0002	0.4276	-0.0002	0.3657
167	43.22	-0.11	-0.3964	-0.0512	-0.1644	0.1291	0.4148	1.1754	-0.0007	0.4317	-0.0006	0.3673
168	43.31	-0.09	-0.4351	-0.0575	-0.1793	0.1317	0.4121	1.1760	-0.0006	0.4314	-0.0005	0.3662
169	43.39	-0.10	-0.4417	-0.0587	-0.1814	0.1329	0.4107	1.1645	-0.0011	0.4248	-0.0009	0.3648
170	43.49	-0.09	-0.4151	-0.0562	-0.1753	0.1257	0.4223	1.1704	-0.0002	0.4277	-0.0002	0.3654
171	43.58	-0.10	-0.4221	-0.0590	-0.1794	0.1298	0.4237	1.1554	-0.0009	0.4216	-0.0008	0.3649
172	43.69	-0.10	-0.4259	-0.0598	-0.1773	0.1298	0.4124	1.1705	-0.0007	0.4277	-0.0006	0.3654
173	43.78	-0.10	-0.4251	-0.0558	-0.1808	0.1282	0.4156	1.1614	-0.0007	0.4245	-0.0006	0.3655
174	43.88	-0.11	-0.4113	-0.0513	-0.1730	0.1247	0.4200	1.1700	-0.0010	0.4306	-0.0009	0.3660
175	43.98	-0.11	-0.4169	-0.0536	-0.1715	0.1285	0.4114	1.1706	-0.0016	0.4318	-0.0014	0.3670
176	44.08	-0.10	-0.4209	-0.0623	-0.1848	0.1382	0.4095	1.1612	-0.0020	0.4328	-0.0017	0.3664
177	44.12	-0.12	-0.4221	-0.0524	-0.1754	0.1241	0.4156	1.1673	-0.0004	0.4299	-0.0008	0.3683
178	44.22	-0.12	-0.3917	-0.0481	-0.1645	0.1221	0.4200	1.1703	-0.0015	0.4301	-0.0013	0.3675
179	44.29	-0.10	-0.4349	-0.0596	-0.1796	0.1270	0.4116	1.1628	-0.0024	0.4347	-0.0020	0.3676
180	44.38	-0.13	-0.3773	-0.0477	-0.1570	0.1264	0.4161	1.1644	-0.0013	0.4278	-0.0011	0.3674
181	44.51	-0.10	-0.3606	-0.0443	-0.1520	0.1228	0.4214	1.1814	-0.0019	0.4357	-0.0016	0.3688
182	44.57	-0.11	-0.3922	-0.0494	-0.1643	0.1259	0.4189	1.1814	-0.0018	0.4351	-0.0015	0.3683
183	44.68	-0.09	-0.4212	-0.0594	-0.1712	0.1410	0.4065	1.1931	-0.0027	0.4403	-0.0023	0.3689
184	44.78	-0.12	-0.4246	-0.0602	-0.1744	0.1226	0.4092	1.1765	-0.0020	0.4341	-0.0017	0.3691

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 5a 0.90 1.7 0.0 BINOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	ACPF1	YCPF1	CNF2	CM2	CB2	ACPF2	YCPF2
185	44.86	-0.13	-0.3770	-0.0470	-0.1598	0.1246	0.4239	1.1779	-0.0024	0.4330	-0.0020	0.3676
186	44.96	-0.12	-0.4058	-0.0558	-0.1686	0.1375	0.4160	1.1902	-0.0027	0.4376	-0.0023	0.3677
187	45.06	-0.11	-0.3923	-0.0417	-0.1482	0.1163	0.4208	1.1764	-0.0023	0.4329	-0.0020	0.3680
188	45.15	-0.11	-0.3767	-0.0498	-0.1602	0.1322	0.4253	1.2114	-0.0032	0.4473	-0.0026	0.3693
189	45.24	-0.12	-0.3149	-0.0384	-0.1306	0.1218	0.4337	1.1666	-0.0028	0.4345	-0.0024	0.3696
190	45.32	-0.12	-0.3199	-0.0300	-0.1308	0.1187	0.4301	1.1840	-0.0027	0.4371	-0.0023	0.3692
191	45.41	-0.10	-0.3249	-0.0421	-0.1358	0.1296	0.4184	1.1947	-0.0034	0.4410	-0.0029	0.3692
192	45.51	-0.13	-0.3424	-0.0459	-0.1410	0.1340	0.4117	1.2140	-0.0045	0.4499	-0.0037	0.3706
193	45.59	-0.12	-0.3398	-0.0462	-0.1393	0.1359	0.4090	1.2124	-0.0041	0.4492	-0.0034	0.3705
194	45.68	-0.10	-0.3366	-0.0429	-0.1447	0.1274	0.4298	1.1928	-0.0036	0.4408	-0.0032	0.3696
195	45.80	-0.14	-0.3471	-0.0459	-0.1477	0.1319	0.4247	1.2083	-0.0046	0.4466	-0.0040	0.3698
196	45.87	-0.11	-0.2925	-0.0375	-0.1264	0.1274	0.4320	1.2260	-0.0049	0.4540	-0.0040	0.3697
197	45.96	-0.13	-0.3608	-0.0484	-0.1529	0.1341	0.4237	1.2007	-0.0049	0.4444	-0.0041	0.3702
198	46.04	-0.08	-0.3280	-0.0439	-0.1404	0.1335	0.4272	1.2016	-0.0048	0.4451	-0.0040	0.3705
199	46.12	-0.10	-0.3578	-0.0478	-0.1511	0.1336	0.4225	1.1940	-0.0044	0.4427	-0.0037	0.3708
200	46.21	-0.14	-0.3758	-0.0522	-0.1590	0.1389	0.4247	1.2032	-0.0059	0.4483	-0.0049	0.3726
201	46.31	-0.10	-0.3937	-0.0575	-0.1661	0.1460	0.4270	1.2107	-0.0054	0.4519	-0.0045	0.3732
202	46.39	-0.14	-0.3887	-0.0602	-0.1621	0.1549	0.4171	1.2079	-0.0066	0.4492	-0.0055	0.3719
203	46.49	-0.13	-0.3867	-0.0486	-0.1564	0.1325	0.4265	1.2017	-0.0057	0.4462	-0.0048	0.3714
204	46.58	-0.15	-0.3854	-0.0497	-0.1540	0.1359	0.4214	1.2048	-0.0063	0.4478	-0.0052	0.3716
205	46.66	-0.13	-0.3702	-0.0615	-0.1520	0.1661	0.4106	1.2137	-0.0072	0.4526	-0.0059	0.3729
206	46.73	-0.13	-0.3524	-0.0540	-0.1449	0.1533	0.4113	1.2107	-0.0073	0.4516	-0.0060	0.3721
207	46.83	-0.13	-0.3652	-0.0514	-0.1506	0.1407	0.4205	1.1955	-0.0070	0.4466	-0.0059	0.3738
208	46.93	-0.10	-0.3823	-0.0576	-0.1566	0.1509	0.4156	1.2043	-0.0070	0.4513	-0.0056	0.3746
209	47.00	-0.14	-0.3532	-0.0568	-0.1499	0.1438	0.4243	1.2257	-0.0079	0.4602	-0.0065	0.3754
210	47.10	-0.14	-0.3748	-0.0550	-0.1579	0.1475	0.4236	1.2091	-0.0079	0.4534	-0.0065	0.3750
211	47.19	-0.14	-0.3493	-0.0444	-0.1405	0.1304	0.4304	1.2081	-0.0074	0.4508	-0.0061	0.3737
212	47.28	-0.12	-0.3539	-0.0529	-0.1484	0.1523	0.4192	1.2227	-0.0080	0.4568	-0.0065	0.3749
213	47.37	-0.13	-0.3606	-0.0520	-0.1513	0.1456	0.4195	1.2231	-0.0086	0.4606	-0.0070	0.3764
214	47.45	-0.14	-0.3412	-0.0459	-0.1442	0.1344	0.4225	1.2142	-0.0079	0.4573	-0.0065	0.3751
215	47.53	-0.12	-0.3742	-0.0541	-0.1584	0.1446	0.4233	1.2100	-0.0091	0.4569	-0.0075	0.3755
216	47.61	-0.11	-0.3680	-0.0546	-0.1564	0.1483	0.4236	1.2135	-0.0082	0.4563	-0.0066	0.3743
217	47.70	-0.14	-0.3654	-0.0550	-0.1568	0.1450	0.4283	1.2329	-0.0085	0.4651	-0.0069	0.3757
218	47.80	-0.14	-0.3696	-0.0508	-0.1542	0.1534	0.4315	1.2144	-0.0090	0.4573	-0.0074	0.3765
219	47.88	-0.12	-0.3783	-0.0599	-0.1601	0.1583	0.4232	1.2310	-0.0091	0.4653	-0.0074	0.3780
220	47.95	-0.12	-0.3933	-0.0580	-0.1695	0.1641	0.4231	1.2385	-0.0094	0.4690	-0.0076	0.3787
221	48.06	-0.07	-0.3537	-0.0537	-0.1516	0.1531	0.4305	1.2220	-0.0097	0.4609	-0.0080	0.3771
222	48.15	-0.14	-0.3582	-0.0577	-0.1496	0.1700	0.4245	1.2390	-0.0100	0.4690	-0.0080	0.3783
223	48.23	-0.12	-0.3503	-0.0533	-0.1496	0.1521	0.4270	1.2350	-0.0095	0.4650	-0.0077	0.3765
224	48.33	-0.14	-0.3430	-0.0539	-0.1455	0.1571	0.4241	1.2304	-0.0100	0.4682	-0.0080	0.3780
225	48.42	-0.10	-0.3215	-0.0566	-0.1371	0.1767	0.4263	1.2444	-0.0105	0.4717	-0.0085	0.3790
226	48.49	-0.12	-0.3087	-0.0562	-0.1292	0.1820	0.4184	1.2520	-0.0100	0.4748	-0.0085	0.3792
227	48.59	-0.04	-0.3194	-0.0487	-0.1375	0.1524	0.4304	1.2292	-0.0096	0.4657	-0.0080	0.3788
228	48.68	-0.09	-0.4971	-0.0524	-0.1267	0.1750	0.4255	1.2514	-0.0117	0.4764	-0.0094	0.3807
229	48.74	-0.11	-0.3054	-0.0516	-0.1322	0.1669	0.4326	1.2393	-0.0106	0.4695	-0.0086	0.3788
230	48.83	-0.08	-0.2664	-0.0480	-0.1157	0.1748	0.4269	1.2513	-0.0111	0.4777	-0.0089	0.3817

TEST PART MACH RATIO-6 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
/ 58 0.90 1.7 0.0 BINOMIAL 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CBI	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
231	48.92	-0.00	-0.2035	-0.0404	-0.1145	0.1760	0.4347	1.2454	-0.0112	0.4736	-0.0090	0.3803
232	49.01	-0.04	-0.2586	-0.0465	-0.1104	0.1875	0.4290	1.2592	-0.0119	0.4812	-0.0095	0.3821
233	49.10	-0.09	-0.2298	-0.0447	-0.1002	0.1944	0.4362	1.2606	-0.0118	0.4814	-0.0094	0.3818
234	49.18	-0.12	-0.2443	-0.0438	-0.1004	0.1892	0.4377	1.2583	-0.0122	0.4798	-0.0097	0.3819
235	49.25	-0.04	-0.2066	-0.0382	-0.0873	0.1848	0.4227	1.2525	-0.0118	0.4801	-0.0093	0.3833
236	49.35	-0.08	-0.1990	-0.0382	-0.0825	0.1901	0.4239	1.2585	-0.0125	0.4847	-0.0099	0.3851
237	49.44	-0.05	-0.2219	-0.0417	-0.0984	0.1878	0.4436	1.2529	-0.0129	0.4836	-0.0103	0.3860
238	49.52	-0.07	-0.1856	-0.0368	-0.0803	0.1900	0.4326	1.2650	-0.0134	0.4900	-0.0106	0.3874
239	49.61	-0.03	-0.1307	-0.0254	-0.0504	0.1862	0.4125	1.2528	-0.0125	0.4842	-0.0100	0.3865
240	49.70	-0.05	-0.0870	-0.0110	-0.0308	0.1258	0.4206	1.2377	-0.0141	0.4841	-0.0114	0.3911
241	49.78	-0.06	-0.1143	-0.0195	-0.0509	0.1708	0.4448	1.2405	-0.0131	0.4868	-0.0106	0.3924
242	49.88	-0.01	-0.1364	-0.0193	-0.0620	0.1418	0.4545	1.2387	-0.0149	0.4856	-0.0120	0.3922
243	49.96	0.01	-0.0033	-0.0093	-0.0315	0.1472	0.4984	1.2568	-0.0107	0.4957	-0.0133	0.3944
244	50.05	-0.01	-0.0087	-0.0102	-0.0317	0.1487	0.4621	1.2417	-0.0154	0.4885	-0.0124	0.3934
245	50.13	-0.00	-0.1072	-0.0251	-0.0795	0.1584	0.4743	1.2447	-0.0156	0.4905	-0.0127	0.3941
246	50.23	0.04	-0.1054	-0.0149	-0.0557	0.1416	0.5280	1.2547	-0.0168	0.4980	-0.0134	0.3953
247	50.32	0.01	-0.1459	-0.0214	-0.0708	0.1469	0.4852	1.2502	-0.0170	0.4951	-0.0136	0.3960
248	50.39	0.04	-0.1174	-0.0191	-0.0563	0.1629	0.4791	1.2517	-0.0171	0.4964	-0.0137	0.3966
249	50.51	-0.07	-0.1529	-0.0245	-0.0641	0.1697	0.4823	1.2837	-0.0181	0.5116	-0.0141	0.3986
250	50.61	-0.09	-0.1589	-0.0252	-0.0709	0.1589	0.4839	1.2841	-0.0184	0.5122	-0.0134	0.3973
251	50.70	-0.03	-0.1393	-0.0283	-0.0649	0.1891	0.4659	1.2725	-0.0182	0.5070	-0.0143	0.3985
252	50.81	-0.06	-0.1615	-0.0309	-0.0744	0.1700	0.4926	1.2725	-0.0177	0.5070	-0.0139	0.3985
253	50.87	-0.04	-0.1975	-0.0343	-0.0922	0.1734	0.4868	1.2635	-0.0178	0.5026	-0.0141	0.3978
254	50.97	-0.08	-0.2076	-0.0350	-0.0943	0.1713	0.4785	1.2637	-0.0185	0.4956	-0.0135	0.3985
255	51.04	-0.06	-0.1968	-0.0342	-0.0949	0.1735	0.4822	1.2628	-0.0182	0.5055	-0.0144	0.4003
256	51.15	-0.07	-0.2470	-0.0433	-0.1042	0.1915	0.4572	1.2812	-0.0184	0.5136	-0.0144	0.4009
257	51.21	-0.02	-0.2207	-0.0375	-0.1038	0.1698	0.4705	1.2800	-0.0176	0.5035	-0.0140	0.3996
258	51.33	-0.05	-0.2233	-0.0429	-0.1013	0.1920	0.4538	1.2723	-0.0184	0.5086	-0.0149	0.3998
259	51.39	-0.05	-0.2282	-0.0436	-0.1074	0.1778	0.4708	1.2723	-0.0186	0.5080	-0.0146	0.3993
260	51.52	-0.06	-0.2017	-0.0404	-0.0968	0.2001	0.4402	1.2922	-0.0178	0.5188	-0.0153	0.4014
261	51.58	-0.07	-0.1937	-0.0392	-0.0876	0.2021	0.4552	1.2727	-0.0175	0.5104	-0.0153	0.4011
262	51.67	-0.02	-0.1961	-0.0321	-0.0681	0.2127	0.4358	1.2856	-0.0207	0.5173	-0.0161	0.4024
263	51.78	-0.05	-0.1739	-0.0362	-0.0781	0.2079	0.4525	1.2808	-0.0210	0.5194	-0.0163	0.4031
264	51.88	-0.03	-0.1751	-0.0357	-0.0755	0.2049	0.4319	1.2750	-0.0200	0.5141	-0.0157	0.4033
265	51.93	-0.03	-0.1919	-0.0391	-0.0845	0.2047	0.4545	1.2739	-0.0206	0.5146	-0.0162	0.4040
266	52.04	0.03	-0.1199	-0.0264	-0.0520	0.2372	0.4332	1.2711	-0.0216	0.5119	-0.0170	0.4028
267	52.12	-0.03	-0.1267	-0.0284	-0.0545	0.2246	0.4300	1.2740	-0.0216	0.5157	-0.0170	0.4048
268	52.19	-0.00	-0.1094	-0.0257	-0.0481	0.2352	0.4392	1.2854	-0.0225	0.5207	-0.0175	0.4051
269	52.26	0.00	-0.1230	-0.0254	-0.0572	0.2059	0.4627	1.2810	-0.0229	0.5180	-0.0175	0.4044
270	52.35	0.04	-0.1034	-0.0244	-0.0481	0.2318	0.4338	1.2794	-0.0215	0.5161	-0.0168	0.4034
271	52.45	0.02	-0.0728	-0.0195	-0.0363	0.2063	0.4993	1.2889	-0.0227	0.5218	-0.0176	0.4047
272	52.51	0.03	-0.0845	-0.0180	-0.0421	0.2134	0.4976	1.2927	-0.0230	0.5236	-0.0178	0.4051
273	52.61	0.02	-0.0534	-0.0128	-0.0297	0.2402	0.5572	1.2956	-0.0228	0.5263	-0.0176	0.4063
274	52.69	0.04	-0.0742	-0.0144	-0.0380	0.1944	0.5209	1.2745	-0.0217	0.5174	-0.0171	0.4060
275	52.76	0.02	-0.0755	-0.0154	-0.0389	0.2043	0.5159	1.2851	-0.0225	0.5218	-0.0175	0.4061
276	52.83	-0.00	-0.0520	-0.0124	-0.0295	0.2390	0.5084	1.2926	-0.0227	0.5240	-0.0176	0.4060

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 58 0.90 1.7 0.0 BINOF15 0.0 0 0 0 0 UNKNOWN

PCINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
277	52.93	0.05	-0.0093	-0.0138	-0.0339	0.1975	0.4399	1.2746	-0.0216	0.5150	-0.0170	0.4041
278	53.00	0.05	-0.0053	-0.0105	-0.0277	0.1956	0.5156	1.2966	-0.0230	0.5203	-0.0177	0.4069
279	53.08	0.07	-0.0014	-0.0124	-0.0317	0.2024	0.5171	1.2984	-0.0233	0.5276	-0.0180	0.4064
280	53.16	0.06	-0.0004	-0.0116	-0.0291	0.1924	0.4826	1.2923	-0.0226	0.5247	-0.0175	0.4061
281	53.20	0.03	-0.0317	-0.0073	-0.0179	0.2304	0.5847	1.2908	-0.0222	0.5240	-0.0172	0.4060
282	53.25	0.09	-0.0344	-0.0059	-0.0312	0.1811	0.5704	1.2999	-0.0234	0.5283	-0.0180	0.4065
283	53.42	0.02	-0.0472	-0.0073	-0.0272	0.1551	0.3775	1.2923	-0.0228	0.5259	-0.0177	0.4076
284	53.50	0.08	-0.0382	-0.0099	-0.0109	0.2593	0.4948	1.3163	-0.0244	0.5353	-0.0186	0.4097
285	53.56	0.06	-0.0342	-0.0056	-0.0220	0.1638	0.6433	1.3065	-0.0239	0.5337	-0.0183	0.4085
286	53.68	0.04	-0.0167	-0.0049	-0.0132	0.2021	0.7059	1.3244	-0.0252	0.5436	-0.0191	0.4104
287	53.76	0.07	-0.0305	-0.0047	-0.0166	0.1942	0.6098	1.3062	-0.0235	0.5344	-0.0180	0.4091
288	53.84	0.08	-0.0317	-0.0056	-0.0168	0.1767	0.5731	1.3041	-0.0237	0.5316	-0.0182	0.4078
289	53.92	0.02	-0.0241	-0.0052	-0.0138	0.2159	0.5726	1.3206	-0.0247	0.5420	-0.0187	0.4104
290	54.01	0.05	-0.0025	-0.0012	-0.0010	0.4802	0.4000	1.3115	-0.0247	0.5366	-0.0189	0.4106
291	54.08	0.06	-0.0205	-0.0027	-0.0113	0.1918	0.5512	1.2919	-0.0238	0.5324	-0.0185	0.4121
292	54.15	0.06	-0.0267	-0.0049	-0.0152	0.1836	0.5093	1.3085	-0.0242	0.5368	-0.0185	0.4102
293	54.23	0.08	-0.0215	-0.0036	-0.0134	0.1875	0.6253	1.3116	-0.0249	0.5388	-0.0190	0.4108
294	54.30	0.05	-0.0074	-0.0016	-0.0057	0.2163	0.7703	1.3100	-0.0249	0.5393	-0.0190	0.4116
295	54.38	0.08	-0.0046	-0.0014	-0.0066	0.3045	1.4340	1.3069	-0.0247	0.5396	-0.0189	0.4129
296	54.47	0.05	-0.0129	0.0	-0.0078	0.0	0.8047	1.3029	-0.0241	0.5357	-0.0185	0.4111
297	54.55	0.04	-0.0061	0.0	-0.0065	0.0	1.0656	1.3104	-0.0245	0.5429	-0.0186	0.4124
298	54.62	0.09	-0.0203	-0.0031	-0.0126	0.1528	0.8207	1.3179	-0.0246	0.5442	-0.0187	0.4129
299	54.70	0.07	0.0303	-0.0002	-0.0024	-0.0009	-8.0000	1.3119	-0.0251	0.5419	-0.0192	0.4130
300	54.77	0.06	0.0012	0.0023	-0.0001	1.9174	-0.0833	1.3060	-0.0241	0.5375	-0.0185	0.4125
301	54.85	0.04	0.0023	0.0021	0.0023	0.9134	1.0000	1.3148	-0.0250	0.5445	-0.0190	0.4141
302	54.93	0.04	0.0005	0.0015	0.0027	0.2309	0.4154	1.3238	-0.0248	0.5403	-0.0188	0.4142
303	55.01	0.01	0.0167	0.0026	0.0060	0.1558	0.4790	1.3155	-0.0245	0.5450	-0.0187	0.4147
304	55.08	0.04	-0.0039	0.0007	-0.0027	-0.1796	0.6923	1.3066	-0.0249	0.5419	-0.0191	0.4147
305	55.16	0.05	0.0128	0.0043	0.0055	0.3361	0.4297	1.3201	-0.0238	0.5490	-0.0196	0.4159
306	55.23	0.05	0.0232	0.0045	0.0101	0.1940	0.4353	1.3366	-0.0270	0.5607	-0.0202	0.4188
307	55.31	0.01	-0.0027	0.0027	-0.0029	-1.0004	1.0741	1.3025	-0.0251	0.5416	-0.0193	0.4158
308	55.39	0.05	-0.0031	0.0032	0.0007	-1.0327	-0.2258	1.2879	-0.0244	0.5337	-0.0190	0.4145
309	55.47	0.02	0.0103	0.0034	0.0035	0.3302	0.3700	1.3131	-0.0266	0.5464	-0.0203	0.4176
310	55.55	0.05	0.0049	0.0030	0.0012	1.0208	0.2445	1.3085	-0.0259	0.5462	-0.0198	0.4174
311	55.62	0.08	0.0110	0.0059	0.0075	0.5308	0.6030	1.3070	-0.0268	0.5473	-0.0205	0.4187
312	55.67	0.02	0.0007	0.0053	0.0020	7.5744	2.6571	1.2904	-0.0267	0.5429	-0.0207	0.4207
313	55.71	0.00	0.0202	0.0060	0.0097	0.3962	0.4302	1.2979	-0.0269	0.5465	-0.0208	0.4210
314	55.83	0.04	0.0313	0.0098	0.0194	0.3132	0.6198	1.3071	-0.0280	0.5490	-0.0215	0.4205
315	55.94	0.05	0.0200	0.0068	0.0125	0.3401	0.6250	1.3031	-0.0284	0.5467	-0.0218	0.4211
316	56.00	0.08	0.0278	0.0094	0.0166	0.3407	0.6014	1.3015	-0.0274	0.5466	-0.0211	0.4201
317	56.09	0.02	0.0422	0.0098	0.0223	0.2929	0.5247	1.3100	-0.0283	0.5546	-0.0215	0.4212
318	56.16	0.02	0.0463	0.0096	0.0227	0.2079	0.4213	1.3226	-0.0292	0.5561	-0.0221	0.4220
319	56.24	0.03	0.0265	0.0077	0.0156	0.2907	0.5867	1.3075	-0.0288	0.5532	-0.0221	0.4231
320	56.33	0.03	0.0197	0.0071	0.0149	0.3910	0.7563	1.3060	-0.0289	0.5513	-0.0217	0.4221
321	56.39	0.01	0.0286	0.0068	0.0202	0.3078	0.7063	1.3075	-0.0284	0.5533	-0.0218	0.4232
322	56.45	0.03	0.0221	0.0090	0.0165	0.4074	0.7466	1.2909	-0.0277	0.5453	-0.0215	0.4224

TEST 7 PART 58 MACH 0.90 1.7 PHI 0.0 CONF BIWOF15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
323	56.54	0.04	0.0011	0.0067	0.0067	6.0933	7.9091	1.3016	-0.0291	0.5503	-0.0224	0.4228
324	56.62	0.01	0.0061	0.0077	0.0123	1.2628	2.0164	1.3004	-0.0286	0.5526	-0.0221	0.4230
325	56.70	0.06	0.0006	0.0073	0.0105	9.1286	13.1250	1.2884	-0.0282	0.5427	-0.0219	0.4212
326	56.78	0.03	0.0104	0.0077	0.0193	0.4097	1.1768	1.3080	-0.0293	0.5533	-0.0224	0.4230
327	56.87	0.04	0.0103	0.0067	0.0204	0.4112	1.2515	1.3247	-0.0279	0.5583	-0.0226	0.4214
328	56.92	0.03	0.0012	0.0057	0.0092	4.7519	7.0067	1.3022	-0.0290	0.5496	-0.0223	0.4190
329	56.99	0.02	0.0050	0.0062	0.0124	0.6092	1.3778	1.3188	-0.0302	0.5536	-0.0229	0.4198
330	57.06	0.03	0.0008	0.0064	0.0116	8.0032	14.5000	1.3049	-0.0300	0.5480	-0.0229	0.4183
331	57.16	0.00	0.0112	0.0073	0.0169	0.6520	1.5069	1.3098	-0.0294	0.5474	-0.0225	0.4179
332	57.23	-0.00	-0.0121	0.0052	0.0047	-0.4299	-0.3884	1.2977	-0.0294	0.5440	-0.0227	0.4192
333	57.30	-0.02	-0.0255	0.0030	0.0019	-0.1412	-0.0745	1.2796	-0.0272	0.5318	-0.0213	0.4156
334	57.39	0.04	-0.0034	0.0068	0.0116	-2.0008	-3.4706	1.3130	-0.0302	0.5477	-0.0230	0.4171
335	57.45	-0.01	-0.0103	0.0063	0.0116	-0.6119	-1.1262	1.3069	-0.0298	0.5454	-0.0228	0.4173
336	57.53	0.02	0.0	0.0068	0.0175	0.0068	0.0175	1.3178	-0.0305	0.5486	-0.0232	0.4163
337	57.60	-0.00	-0.0129	0.0062	0.0101	-0.4308	-0.7849	1.2904	-0.0292	0.5391	-0.0226	0.4158
338	57.66	0.01	0.0078	0.0063	0.0209	1.0645	2.6795	1.3266	-0.0308	0.5530	-0.0232	0.4168
339	57.74	0.02	-0.0064	0.0068	0.0136	-1.0629	-2.1563	1.3251	-0.0309	0.5517	-0.0233	0.4163
340	57.83	-0.01	-0.0118	0.0057	0.0131	-0.4832	-1.1102	1.3252	-0.0314	0.5510	-0.0237	0.4158
341	57.89	-0.03	-0.0104	0.0047	0.0157	-0.4521	-1.3173	1.3373	-0.0313	0.5545	-0.0234	0.4146
342	57.98	-0.04	-0.0062	0.0041	0.0141	-0.6016	-2.2742	1.3455	-0.0317	0.5588	-0.0235	0.4153
343	58.04	-0.03	-0.0058	0.0015	0.0126	-0.2567	-2.1724	1.3743	-0.0337	0.5714	-0.0245	0.4158
344	58.10	-0.04	-0.0228	0.0004	0.0042	-0.0395	-0.1842	1.3630	-0.0332	0.5682	-0.0243	0.4164
345	58.19	-0.04	-0.0135	-0.0028	-0.0068	0.0645	0.1567	1.3508	-0.0323	0.5618	-0.0239	0.4159
346	58.27	-0.04	-0.0304	-0.0025	-0.0037	0.0678	0.1003	1.3569	-0.0332	0.5653	-0.0244	0.4166
347	58.33	-0.12	-0.0213	-0.0003	0.0042	0.0141	-0.1972	1.3584	-0.0330	0.5672	-0.0243	0.4176
348	58.42	-0.11	-0.0394	-0.0011	-0.0067	0.0279	0.1701	1.3624	-0.0331	0.5643	-0.0244	0.4173
349	58.48	-0.09	-0.0166	0.0021	0.0025	-0.1129	-0.1344	1.3629	-0.0329	0.5676	-0.0241	0.4165
350	58.51	-0.10	-0.0244	0.0004	-0.0036	-0.0116	-0.1047	1.3534	-0.0330	0.5644	-0.0243	0.4169
351	58.52	-0.10	-0.0147	0.0022	0.0053	-0.1497	-0.3605	1.3706	-0.0333	0.5706	-0.0243	0.4163
352	58.51	-0.12	-0.0341	-0.0007	-0.0049	0.0205	0.1437	1.3479	-0.0330	0.5609	-0.0244	0.4161
353	58.52	-0.07	-0.0094	0.0017	0.0075	-0.1809	-0.7979	1.3629	-0.0324	0.5670	-0.0237	0.4160
354	58.51	-0.08	-0.0288	0.0003	-0.0036	-0.0104	0.1250	1.3600	-0.0332	0.5655	-0.0244	0.4158
355	57.82	0.01	-0.0061	0.0056	0.0114	-0.9512	-1.0089	1.3234	-0.0304	0.5481	-0.0230	0.4141
356	57.10	0.02	-0.0062	0.0062	0.0120	-1.0004	-1.9355	1.3141	-0.0297	0.5474	-0.0226	0.4165

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 58 0.90 1.7 0.0 81NOFIS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	ACPF3	YCPF3	CNF4	CM4	CD4	ACPF4	YCPF4
1	-5.70	0.01	0.0046	9.9999	0.0224	9.9999	4.8898	-0.2832	-0.0437	-0.1329	0.1542	0.4691
2	-5.71	0.01	0.0032	9.9999	0.0228	9.9999	7.1250	-0.2771	-0.0433	-0.1301	0.1561	0.4643
3	-5.71	0.01	0.0046	9.9999	0.0224	9.9999	4.8898	-0.2817	-0.0437	-0.1322	0.1550	0.4691
4	-5.76	0.00	0.0032	9.9999	0.0217	9.9999	6.7812	-0.2655	-0.0417	-0.1237	0.1570	0.4660
5	-5.16	0.01	0.0018	9.9999	0.0216	9.9999	12.0000	-0.2116	-0.0351	-0.0923	0.1657	0.4363
6	-4.14	0.01	0.0034	9.9999	0.0215	9.9999	53.7500	-0.1664	-0.0276	-0.0714	0.1761	0.4239
7	-3.18	0.03	0.0032	9.9999	0.0217	9.9999	6.7812	-0.1169	-0.0217	-0.0405	0.1859	0.3973
8	-2.27	0.02	0.0046	9.9999	0.0219	9.9999	4.7009	-0.0855	-0.0158	-0.0278	0.1895	0.3333
9	-1.31	0.01	0.0018	9.9999	0.0216	9.9999	12.0000	-0.0371	-0.0075	-0.0091	0.2022	0.2453
10	-0.35	0.00	0.0032	9.9999	0.0223	9.9999	6.9687	-0.0109	0.0	0.0004	0.0	-0.0367
11	0.65	0.01	0.0034	9.9999	0.0215	9.9999	53.7500	0.0228	0.0041	0.0111	0.3554	0.4868
12	1.57	0.02	0.0032	9.9999	0.0217	9.9999	6.7812	0.0679	0.0100	0.0320	0.2361	0.4720
13	2.57	0.02	-0.0018	9.9999	0.0209	9.9999	-20.9000	0.1061	0.0218	0.0475	0.2039	0.4472
14	3.60	0.01	0.0018	9.9999	0.0218	9.9999	12.0000	0.1561	0.0291	0.0722	0.1867	0.4625
15	4.48	0.01	0.0005	9.9999	0.0226	9.9999	75.3333	0.2076	0.0367	0.1011	0.1705	0.4867
16	5.44	0.01	0.0059	9.9999	0.0233	9.9999	4.2961	0.2540	0.0424	0.1259	0.1668	0.4955
17	6.44	0.00	0.0200	9.9999	0.0253	9.9999	1.2650	0.3230	0.0501	0.1625	0.1551	0.5031
18	7.43	0.00	0.0200	9.9999	0.0253	9.9999	1.2650	0.3744	0.0550	0.1893	0.1469	0.5058
19	8.38	0.01	0.0229	9.9999	0.0255	9.9999	1.1135	0.4442	0.0606	0.2222	0.1364	0.5001
20	9.34	0.00	0.0145	9.9999	0.0221	9.9999	1.5241	0.4936	0.0631	0.2443	0.1278	0.4949
21	10.30	-0.00	0.0210	9.9999	0.0226	9.9999	1.0463	0.5646	0.0631	0.2717	0.1118	0.4813
22	11.33	0.00	0.0244	9.9999	0.0225	9.9999	0.9385	0.6404	0.0663	0.3016	0.1035	0.4712
23	12.29	0.01	0.0245	9.9999	0.0207	9.9999	0.8449	0.7109	0.0672	0.3270	0.0945	0.4600
24	13.27	0.01	0.0305	9.9999	0.0240	9.9999	0.6234	0.7765	0.0678	0.3507	0.0871	0.4505
25	14.24	0.01	0.0344	9.9999	0.0209	9.9999	0.6076	0.8327	0.0665	0.3727	0.0799	0.4475
26	15.23	0.01	0.0317	9.9999	0.0190	9.9999	0.5994	0.8835	0.0659	0.3885	0.0746	0.4397
27	16.20	0.00	0.0317	9.9999	0.0185	9.9999	0.5836	0.9039	0.0509	0.3947	0.0652	0.4256
28	17.27	0.01	0.0308	9.9999	0.0196	9.9999	0.5956	0.8774	0.0433	0.3858	0.0550	0.4170
29	18.24	0.01	0.0326	9.9999	0.0201	9.9999	0.4763	0.8383	0.0329	0.2027	0.0515	0.4116
30	19.22	0.01	0.0371	9.9999	0.0238	9.9999	0.4175	0.8265	0.0315	0.2616	0.0502	0.4176
31	20.19	0.01	0.0345	9.9999	0.0203	9.9999	0.3752	0.5809	0.0277	0.2466	0.0478	0.4245
32	21.19	0.00	0.0345	9.9999	0.0203	9.9999	0.3732	0.8417	0.0263	0.2719	0.0411	0.4238
33	22.12	0.00	0.0302	9.9999	0.0197	9.9999	0.3278	0.8526	0.0233	0.2667	0.0400	0.4247
34	23.10	0.00	0.0262	9.9999	0.0188	9.9999	0.2959	0.7114	0.0244	0.3004	0.0344	0.4222
35	24.07	0.01	0.0290	9.9999	0.0180	9.9999	0.3038	0.7228	0.0236	0.3040	0.0330	0.4214
36	25.01	0.01	0.0272	9.9999	0.0244	9.9999	0.3165	0.7551	0.0225	0.3156	0.0298	0.4179
37	25.96	0.02	0.0268	9.9999	0.0220	9.9999	0.3202	0.7821	0.0224	0.3222	0.0287	0.4120
38	26.93	0.01	0.0273	9.9999	0.0214	9.9999	0.3175	0.8008	0.0222	0.3287	0.0278	0.4105
39	27.87	0.04	0.0275	9.9999	0.0220	9.9999	0.3264	0.8116	0.0201	0.3505	0.0231	0.4022
40	28.21	0.04	0.0264	9.9999	0.0194	9.9999	0.2958	0.8441	0.0210	0.3387	0.0249	0.4015
41	28.22	0.03	0.0251	9.9999	0.0241	9.9999	0.3301	0.8030	0.0200	0.3435	0.0232	0.3978
42	28.22	0.04	0.0290	9.9999	0.0210	9.9999	0.3135	0.8617	0.0201	0.3408	0.0234	0.3955
43	28.22	0.03	0.0246	9.9999	0.0248	9.9999	0.3329	0.8000	0.0202	0.3425	0.0233	0.3946
44	28.21	0.04	0.0245	9.9999	0.0253	9.9999	0.3401	0.8719	0.0197	0.3438	0.0226	0.3946
45	28.21	0.05	0.0247	9.9999	0.0254	9.9999	0.3405	0.8629	0.0201	0.3376	0.0233	0.3915
46	28.20	0.04	0.0274	9.9999	0.0278	9.9999	0.3596	0.9043	0.0196	0.3519	0.0217	0.3891

TEST PART MACH RN/D-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 5B 0.90 1.7 0.0 BINDER 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	ACPF3	YCPF3	CNF4	CM4	CA4	ACPF4	YCPF4
47	28.81	0.03	0.3691	9.9999	0.0227	9.9999	0.3270	0.8693	0.0199	0.3376	0.0229	0.3864
48	29.01	0.03	0.0715	9.9999	0.0240	9.9999	0.3343	0.8981	0.0195	0.3479	0.0217	0.3874
49	29.15	0.06	0.0733	9.9999	0.0247	9.9999	0.3374	0.8835	0.0192	0.3428	0.0217	0.3872
50	29.29	0.06	0.0747	9.9999	0.0254	9.9999	0.3405	0.8857	0.0188	0.3428	0.0213	0.3871
51	29.40	0.05	0.0691	9.9999	0.0236	9.9999	0.3449	0.8936	0.0185	0.3449	0.0207	0.3860
52	29.60	0.06	0.0747	9.9999	0.0271	9.9999	0.3533	0.9032	0.0185	0.3485	0.0205	0.3859
53	29.74	0.06	0.0747	9.9999	0.0278	9.9999	0.3700	0.9066	0.0181	0.3505	0.0200	0.3866
54	29.89	0.06	0.0701	9.9999	0.0283	9.9999	0.3724	0.9049	0.0181	0.3486	0.0200	0.3853
55	30.03	0.06	0.0747	9.9999	0.0276	9.9999	0.3700	0.8907	0.0178	0.3469	0.0198	0.3860
56	30.17	0.08	0.0803	9.9999	0.0303	9.9999	0.3778	0.9164	0.0174	0.3511	0.0190	0.3832
57	30.31	0.08	0.0715	9.9999	0.0307	9.9999	0.4020	0.8909	0.0174	0.3428	0.0196	0.3848
58	30.45	0.08	0.0830	9.9999	0.0339	9.9999	0.4089	0.9278	0.0170	0.3500	0.0184	0.3857
59	30.58	0.08	0.0802	9.9999	0.0314	9.9999	0.3920	0.8959	0.0170	0.3442	0.0190	0.3842
60	30.71	0.09	0.0719	9.9999	0.0283	9.9999	0.3963	0.9279	0.0167	0.3560	0.0180	0.3837
61	30.84	0.10	0.0838	9.9999	0.0352	9.9999	0.4107	0.9250	0.0161	0.3551	0.0174	0.3839
62	31.00	0.09	0.0830	9.9999	0.0339	9.9999	0.4069	0.9233	0.0163	0.3538	0.0177	0.3842
63	31.14	0.09	0.0829	9.9999	0.0335	9.9999	0.4287	0.9334	0.0159	0.3585	0.0164	0.3841
64	31.25	0.09	0.0829	9.9999	0.0350	9.9999	0.4227	0.9187	0.0159	0.3516	0.0173	0.3827
65	31.41	0.08	0.0913	9.9999	0.0360	9.9999	0.4276	0.9400	0.0149	0.3595	0.0159	0.3825
66	31.54	0.09	0.0826	9.9999	0.0377	9.9999	0.4570	0.9370	0.0146	0.3605	0.0156	0.3848
67	31.68	0.10	0.0827	9.9999	0.0366	9.9999	0.4431	0.9303	0.0150	0.3566	0.0161	0.3833
68	31.83	0.08	0.0827	9.9999	0.0368	9.9999	0.4431	0.9418	0.0145	0.3615	0.0154	0.3839
69	31.95	0.09	0.0771	9.9999	0.0328	9.9999	0.4260	0.9497	0.0147	0.3662	0.0155	0.3857
70	32.09	0.08	0.0822	9.9999	0.0382	9.9999	0.4036	0.9307	0.0142	0.3589	0.0153	0.3856
71	32.24	0.08	0.0797	9.9999	0.0368	9.9999	0.4623	0.9470	0.0138	0.3635	0.0144	0.3839
72	32.36	0.08	0.0769	9.9999	0.0355	9.9999	0.4624	0.9474	0.0144	0.3564	0.0136	0.3843
73	32.49	0.08	0.0741	9.9999	0.0336	9.9999	0.4541	0.9260	0.0142	0.3574	0.0154	0.3860
74	32.62	0.07	0.0811	9.9999	0.0375	9.9999	0.4630	0.9372	0.0142	0.3629	0.0152	0.3873
75	32.75	0.07	0.0736	9.9999	0.0324	9.9999	0.4615	0.9293	0.0138	0.3583	0.0149	0.3856
76	32.89	0.09	0.0837	9.9999	0.0395	9.9999	0.4773	0.9181	0.0142	0.3557	0.0155	0.3875
77	33.02	0.09	0.0822	9.9999	0.0403	9.9999	0.4909	0.9324	0.0140	0.3609	0.0150	0.3871
78	33.16	0.08	0.0850	9.9999	0.0417	9.9999	0.4900	0.9295	0.0139	0.3600	0.0144	0.3873
79	33.27	0.08	0.0733	9.9999	0.0355	9.9999	0.4774	0.9279	0.0139	0.3593	0.0145	0.3872
80	33.42	0.07	0.0752	9.9999	0.0358	9.9999	0.4787	0.9397	0.0129	0.3661	0.0138	0.3897
81	33.52	0.07	0.0808	9.9999	0.0395	9.9999	0.4907	0.9396	0.0128	0.3661	0.0136	0.3897
82	33.66	0.06	0.0752	9.9999	0.0368	9.9999	0.4905	0.9381	0.0127	0.3654	0.0136	0.3896
83	33.79	0.07	0.0739	9.9999	0.0363	9.9999	0.4865	0.9396	0.0129	0.3662	0.0136	0.3898
84	33.91	0.07	0.0750	9.9999	0.0369	9.9999	0.4927	0.9400	0.0119	0.3696	0.0126	0.3898
85	34.03	0.05	0.0625	9.9999	0.0320	9.9999	0.5126	0.9400	0.0121	0.3667	0.0129	0.3901
86	34.16	0.06	0.0680	9.9999	0.0348	9.9999	0.5096	0.9398	0.0124	0.3668	0.0132	0.3903
87	34.27	0.04	0.0667	9.9999	0.0329	9.9999	0.4940	0.9424	0.0117	0.3759	0.0122	0.3906
88	34.41	0.04	0.0667	9.9999	0.0329	9.9999	0.4940	0.9405	0.0111	0.3794	0.0115	0.3909
89	34.54	0.05	0.0653	9.9999	0.0322	9.9999	0.4939	0.9407	0.0108	0.3793	0.0111	0.3907
90	34.65	0.04	0.0611	9.9999	0.0291	9.9999	0.4770	0.9515	0.0110	0.3727	0.0121	0.3892
91	34.78	0.06	0.0624	9.9999	0.0303	9.9999	0.4864	0.9625	0.0112	0.3765	0.0117	0.3911
92	34.91	0.04	0.0624	9.9999	0.0308	9.9999	0.4944	0.9771	0.0104	0.3821	0.0107	0.3910

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 5B MACH 0.90 RATIO-0 1.7 PHI 0.0 CONF BIKOF15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
93	35.01	0.03	0.0666	9.9999	0.0312	9.9999	0.4692	0.9645	0.0104	0.3759	0.0108	0.3897
94	35.15	0.03	0.0625	9.9999	0.0297	9.9999	0.4760	0.9652	0.0101	0.3862	0.0103	0.3920
95	35.27	0.03	0.0556	9.9999	0.0242	9.9999	0.4360	0.9789	0.0099	0.3834	0.0101	0.3916
96	35.38	0.02	0.0597	9.9999	0.0273	9.9999	0.4561	0.9773	0.0101	0.3821	0.0104	0.3909
97	35.52	-0.00	0.0611	9.9999	0.0285	9.9999	0.4672	1.0159	0.0085	0.3981	0.0084	0.3918
98	35.62	0.01	0.0543	9.9999	0.0236	9.9999	0.4354	1.0128	0.0085	0.3973	0.0084	0.3923
99	35.75	0.00	0.0459	9.9999	0.0207	9.9999	0.4520	1.0175	0.0087	0.4000	0.0086	0.3931
100	35.88	0.01	0.0543	9.9999	0.0238	9.9999	0.4354	1.0084	0.0079	0.3963	0.0078	0.3930
101	35.99	0.02	0.0556	9.9999	0.0242	9.9999	0.4360	1.0339	0.0076	0.4063	0.0074	0.3930
102	36.13	0.01	0.0529	9.9999	0.0229	9.9999	0.4337	1.0165	0.0074	0.3966	0.0073	0.3921
103	36.24	0.02	0.0543	9.9999	0.0236	9.9999	0.4354	0.9876	0.0084	0.3876	0.0085	0.3926
104	36.35	0.01	0.0557	9.9999	0.0237	9.9999	0.4263	1.0338	0.0068	0.4069	0.0066	0.3928
105	36.48	-0.00	0.0459	9.9999	0.0196	9.9999	0.4279	1.0327	0.0068	0.4055	0.0066	0.3927
106	36.61	0.01	0.0515	9.9999	0.0223	9.9999	0.4339	1.0601	0.0055	0.4172	0.0052	0.3936
107	36.69	0.00	0.0546	9.9999	0.0165	9.9999	0.4769	1.0500	0.0070	0.4138	0.0067	0.3941
108	36.81	0.01	0.0513	9.9999	0.0233	9.9999	0.4351	1.0506	0.0052	0.4130	0.0050	0.3931
109	36.93	0.01	0.0574	9.9999	0.0179	9.9999	0.4759	1.0485	0.0063	0.4130	0.0060	0.3939
110	37.11	0.00	0.0485	9.9999	0.0225	9.9999	0.4044	1.0360	0.0061	0.4080	0.0059	0.3938
111	37.25	0.00	0.0401	9.9999	0.0191	9.9999	0.4763	1.0505	0.0055	0.4142	0.0052	0.3943
112	37.37	0.01	0.0509	9.9999	0.0205	9.9999	0.4665	1.0349	0.0051	0.4072	0.0049	0.3935
113	37.48	0.00	0.0456	9.9999	0.0218	9.9999	0.4770	1.0633	0.0051	0.4203	0.0048	0.3953
114	37.60	0.00	0.0430	9.9999	0.0205	9.9999	0.4779	1.0633	0.0051	0.4197	0.0048	0.3947
115	37.71	-0.01	0.0499	9.9999	0.0238	9.9999	0.4779	1.0337	0.0046	0.4087	0.0045	0.3954
116	37.82	0.00	0.0471	9.9999	0.0224	9.9999	0.4766	1.0348	0.0053	0.4072	0.0051	0.3935
117	37.96	0.00	0.0332	9.9999	0.0170	9.9999	0.5120	1.0655	0.0038	0.4202	0.0036	0.3944
118	38.12	0.02	0.0486	9.9999	0.0231	9.9999	0.4763	1.0573	0.0045	0.4180	0.0043	0.3954
119	38.24	0.02	0.0462	9.9999	0.0192	9.9999	0.4776	1.0717	0.0041	0.4225	0.0038	0.3942
120	38.36	0.01	0.0542	9.9999	0.0247	9.9999	0.4566	1.0779	0.0043	0.4270	0.0040	0.3962
121	38.48	0.01	0.0528	9.9999	0.0231	9.9999	0.4763	1.0402	0.0040	0.4120	0.0039	0.3961
122	38.59	-0.02	0.0387	9.9999	0.0196	9.9999	0.5005	1.0655	0.0040	0.4226	0.0038	0.3966
123	38.71	-0.02	0.0505	9.9999	0.0151	9.9999	0.4951	1.1128	0.0042	0.4401	0.0038	0.3955
124	38.84	-0.02	0.0518	9.9999	0.0205	9.9999	0.5126	1.0973	0.0035	0.4353	0.0032	0.3967
125	38.94	-0.00	0.0459	9.9999	0.0213	9.9999	0.4651	1.0891	0.0041	0.4313	0.0038	0.3960
126	39.06	0.01	0.0535	9.9999	0.0153	9.9999	0.4595	1.0879	0.0032	0.4299	0.0029	0.3952
127	39.16	0.00	0.0450	9.9999	0.0216	9.9999	0.5035	1.0771	0.0028	0.4262	0.0026	0.3957
128	39.27	-0.00	0.0431	9.9999	0.0205	9.9999	0.4767	1.0772	0.0027	0.4285	0.0025	0.3978
129	39.39	-0.01	0.0401	9.9999	0.0208	9.9999	0.5187	1.0948	0.0021	0.4338	0.0019	0.3963
130	39.50	-0.03	0.0367	9.9999	0.0196	9.9999	0.5065	1.1058	0.0023	0.4375	0.0021	0.3957
131	39.60	-0.03	0.0374	9.9999	0.0189	9.9999	0.5053	1.0993	0.0026	0.4359	0.0024	0.3965
132	39.71	-0.03	0.0352	9.9999	0.0189	9.9999	0.5355	1.1582	0.0026	0.4563	0.0023	0.3963
133	39.82	-0.03	0.0235	9.9999	0.0123	9.9999	0.5234	1.1391	0.0021	0.4511	0.0018	0.3960
134	39.91	-0.03	0.0346	9.9999	0.0171	9.9999	0.4942	1.1175	0.0021	0.4411	0.0020	0.3948
135	40.03	-0.02	0.0340	9.9999	0.0165	9.9999	0.4769	1.1404	0.0016	0.4523	0.0016	0.3966
136	40.15	-0.03	0.0262	9.9999	0.0136	9.9999	0.5191	1.1613	0.0010	0.4607	0.0009	0.3967
137	40.23	-0.03	0.0124	9.9999	0.0070	9.9999	0.5645	1.1060	0.0012	0.4362	0.0011	0.3944
138	40.35	-0.04	0.0179	9.9999	0.0097	9.9999	0.5419	1.1502	0.0014	0.4541	0.0010	0.3948

TEST PART MACH RX10-6 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
7 58 0.90 1.7 0.0 BIMOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
139	40.44	-0.05	0.0124	9.9999	0.0070	9.9999	0.5045	1.1455	0.0012	0.4532	0.0010	0.3956
140	40.54	-0.07	0.0209	9.9999	0.0131	9.9999	0.4981	1.1523	0.0001	0.4552	0.0001	0.3950
141	40.64	-0.04	0.0234	9.9999	0.0129	9.9999	0.5513	1.1470	0.0012	0.4544	0.0010	0.3961
142	40.75	-0.05	0.0124	9.9999	0.0059	9.9999	0.4756	1.1569	0.0004	0.4574	0.0003	0.3953
143	40.85	-0.06	0.0248	9.9999	0.0141	9.9999	0.5085	1.1759	0.0002	0.4661	0.0002	0.3960
144	40.96	-0.06	0.0193	9.9999	0.0098	9.9999	0.5078	1.1901	0.0003	0.4736	0.0003	0.3976
145	41.07	-0.06	0.0133	9.9999	0.0066	9.9999	0.4763	1.1947	0.0005	0.4747	0.0004	0.3973
146	41.19	-0.07	0.0239	9.9999	0.0123	9.9999	0.5234	1.1710	0.0005	0.4637	0.0004	0.3959
147	41.28	-0.05	0.0110	9.9999	0.0064	9.9999	0.5816	1.1900	0.0005	0.4732	0.0004	0.3976
148	41.38	-0.07	0.0068	9.9999	0.0035	9.9999	0.6066	1.1928	0.0002	0.4733	0.0002	0.3968
149	41.48	-0.05	0.0207	9.9999	0.0110	9.9999	0.5314	1.1741	-0.0002	0.4672	-0.0002	0.3979
150	41.59	-0.07	0.0234	9.9999	0.0123	9.9999	0.5256	1.1883	-0.0001	0.4723	-0.0001	0.3975
151	41.71	-0.07	0.0062	9.9999	0.0001	9.9999	0.7439	1.2228	0.0001	0.4871	0.0001	0.3983
152	41.79	-0.05	0.0206	9.9999	0.0121	9.9999	0.5874	1.1710	-0.0002	0.4647	-0.0002	0.3968
153	41.89	-0.09	0.0192	9.9999	0.0114	9.9999	0.5937	1.2150	0.0001	0.4854	0.0001	0.3995
154	41.99	-0.06	0.0192	9.9999	0.0114	9.9999	0.5937	1.1778	-0.0012	0.4673	-0.0010	0.3967
155	42.08	-0.09	0.0151	9.9999	0.0074	9.9999	0.6225	1.2137	-0.0005	0.4846	-0.0004	0.3993
156	42.18	-0.08	0.0065	9.9999	0.0005	9.9999	0.8947	1.2168	0.0001	0.4849	0.0001	0.3985
157	42.27	-0.08	0.0110	9.9999	0.0064	9.9999	0.5816	1.2017	-0.0014	0.4784	-0.0012	0.3981
158	42.38	-0.09	0.0054	9.9999	0.0059	9.9999	1.0926	1.1891	-0.0012	0.4734	-0.0010	0.3961
159	42.48	-0.08	0.0067	9.9999	0.0008	9.9999	1.3134	1.2195	-0.0017	0.4872	-0.0014	0.3996
160	42.58	-0.12	0.0137	9.9999	0.0093	9.9999	0.6788	1.2301	-0.0012	0.4927	-0.0010	0.4005
161	42.68	-0.10	0.0026	9.9999	0.0057	9.9999	2.1923	1.2254	-0.0014	0.4894	-0.0011	0.3994
162	42.77	-0.10	-0.0014	9.9999	0.0004	9.9999	-0.2857	1.2162	-0.0014	0.4853	-0.0012	0.3990
163	42.84	-0.10	-0.0028	9.9999	0.0003	9.9999	-0.1071	1.2225	-0.0014	0.4892	-0.0011	0.4002
164	42.93	-0.10	-0.0001	9.9999	0.0027	9.9999	-27.0000	1.2370	-0.0020	0.4949	-0.0016	0.4001
165	43.04	-0.12	0.0008	9.9999	0.0008	9.9999	0.9706	1.2560	-0.0022	0.5021	-0.0018	0.3998
166	43.14	-0.10	0.0013	9.9999	0.0034	9.9999	2.0154	1.2502	-0.0025	0.5000	-0.0020	0.4020
167	43.22	-0.11	0.0137	9.9999	0.0088	9.9999	0.6423	1.2324	-0.0024	0.4921	-0.0020	0.3993
168	43.31	-0.09	0.0088	9.9999	0.0049	9.9999	0.7206	1.2619	-0.0025	0.5044	-0.0020	0.4013
169	43.39	-0.10	0.0095	9.9999	0.0085	9.9999	0.8947	1.2479	-0.0028	0.4995	-0.0022	0.4003
170	43.49	-0.09	0.0088	9.9999	0.0055	9.9999	0.8088	1.2399	-0.0025	0.4964	-0.0020	0.4020
171	43.58	-0.10	-0.0002	9.9999	0.0033	9.9999	-16.5000	1.2148	-0.0029	0.4842	-0.0024	0.3986
172	43.69	-0.10	0.0013	9.9999	0.0034	9.9999	2.6154	1.2484	-0.0030	0.4994	-0.0024	0.4007
173	43.78	-0.10	0.0011	9.9999	0.0056	9.9999	5.0909	1.2563	-0.0037	0.5046	-0.0029	0.4017
174	43.88	-0.11	0.0088	9.9999	0.0055	9.9999	0.8088	1.2530	-0.0034	0.5033	-0.0027	0.4017
175	43.98	-0.11	0.0081	9.9999	0.0072	9.9999	0.8839	1.2504	-0.0041	0.5034	-0.0033	0.4007
176	44.03	-0.10	-0.0001	9.9999	0.0011	9.9999	-11.0000	1.2404	-0.0037	0.4996	-0.0030	0.3979
177	44.12	-0.12	0.0143	9.9999	0.0090	9.9999	0.7967	1.2708	-0.0043	0.5097	-0.0034	0.4011
178	44.22	-0.12	-0.0025	9.9999	0.0020	9.9999	-0.6897	1.2519	-0.0045	0.5036	-0.0036	0.4023
179	44.29	-0.10	0.0012	9.9999	0.0035	9.9999	3.2500	1.2597	-0.0044	0.5071	-0.0035	0.4026
180	44.38	-0.13	0.0088	9.9999	0.0088	9.9999	0.9706	1.2489	-0.0045	0.4987	-0.0036	0.4019
181	44.51	-0.10	0.0082	9.9999	0.0073	9.9999	0.8702	1.2573	-0.0052	0.5080	-0.0041	0.4040
182	44.57	-0.14	-0.0008	9.9999	0.0015	9.9999	-0.1744	1.2481	-0.0045	0.5107	-0.0036	0.4028
183	44.68	-0.09	-0.0002	9.9999	0.0044	9.9999	-22.0000	1.2654	-0.0055	0.5103	-0.0044	0.4033
184	44.78	-0.12	0.0093	9.9999	0.0090	9.9999	0.9474	1.2552	-0.0053	0.5060	-0.0042	0.4031

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 5B MACH 0.90 1.7 RX10-6 PHI 0.0 CONF BINOFIS L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
185	44.88	-0.13	0.0039	9.9999	0.0004	9.9999	1.0410	1.2714	-0.0059	0.5129	-0.0046	0.4034
186	44.96	-0.12	-0.0003	9.9999	0.0033	9.9999	-18.3333	1.2554	-0.0057	0.5048	-0.0045	0.4021
187	45.06	-0.11	0.0067	9.9999	0.0077	9.9999	1.1493	1.2796	-0.0055	0.5169	-0.0051	0.4040
188	45.15	-0.11	-0.0015	9.9999	0.0026	9.9999	-1.7333	1.2969	-0.0065	0.5246	-0.0050	0.4045
189	45.24	-0.12	0.0104	9.9999	0.0117	9.9999	0.7134	1.2744	-0.0057	0.5135	-0.0045	0.4045
190	45.32	-0.12	0.0122	9.9999	0.0103	9.9999	0.8443	1.2825	-0.0061	0.5189	-0.0048	0.4046
191	45.41	-0.10	0.0040	9.9999	0.0053	9.9999	1.3250	1.2731	-0.0062	0.5153	-0.0049	0.4048
192	45.51	-0.13	0.0081	9.9999	0.0083	9.9999	1.0247	1.2807	-0.0067	0.5197	-0.0052	0.4058
193	45.59	-0.12	0.0011	9.9999	0.0056	9.9999	5.0909	1.2804	-0.0062	0.5186	-0.0049	0.4051
194	45.68	-0.10	0.0039	9.9999	0.0074	9.9999	1.8974	1.2918	-0.0070	0.5246	-0.0054	0.4061
195	45.80	-0.14	0.0122	9.9999	0.0114	9.9999	0.9344	1.2924	-0.0070	0.5222	-0.0059	0.4041
196	45.87	-0.11	0.0011	9.9999	0.0061	9.9999	5.5455	1.2830	-0.0065	0.5213	-0.0051	0.4055
197	45.96	-0.13	0.0060	9.9999	0.0099	9.9999	1.5300	1.2799	-0.0070	0.5184	-0.0059	0.4051
198	46.04	-0.08	0.0066	9.9999	0.0098	9.9999	1.4848	1.2727	-0.0071	0.5131	-0.0056	0.4032
199	46.12	-0.10	0.0123	9.9999	0.0134	9.9999	0.8221	1.2811	-0.0082	0.5182	-0.0064	0.4045
200	46.21	-0.14	0.0011	9.9999	0.0061	9.9999	5.5455	1.2827	-0.0082	0.5184	-0.0064	0.4042
201	46.31	-0.10	-0.0128	9.9999	0.0012	9.9999	-0.8938	1.2713	-0.0075	0.5142	-0.0059	0.4045
202	46.39	-0.12	-0.0004	9.9999	0.0087	9.9999	-21.7500	1.2595	-0.0092	0.5090	-0.0073	0.4041
203	46.49	-0.13	-0.0058	9.9999	0.0028	9.9999	-0.4828	1.2955	-0.0088	0.5227	-0.0068	0.4035
204	46.58	-0.15	0.0011	9.9999	0.0072	9.9999	6.5455	1.2933	-0.0079	0.5221	-0.0061	0.4037
205	46.66	-0.13	-0.0003	9.9999	0.0066	9.9999	-22.0000	1.2939	-0.0100	0.5024	-0.0081	0.4039
206	46.73	-0.13	-0.0003	9.9999	0.0066	9.9999	-22.0000	1.2601	-0.0102	0.5098	-0.0081	0.4027
207	46.83	-0.13	-0.0016	9.9999	0.0043	9.9999	-2.6875	1.2738	-0.0100	0.5138	-0.0079	0.4034
208	46.93	-0.10	-0.0004	9.9999	0.0077	9.9999	-19.2500	1.2671	-0.0101	0.5055	-0.0081	0.4053
209	47.00	-0.14	-0.0030	9.9999	0.0031	9.9999	-1.0333	1.2819	-0.0104	0.5173	-0.0081	0.4036
210	47.10	-0.14	0.0066	9.9999	0.0088	9.9999	1.3333	1.2712	-0.0109	0.5147	-0.0086	0.4049
211	47.19	-0.14	-0.0058	9.9999	0.0034	9.9999	-0.5862	1.2917	-0.0112	0.5225	-0.0087	0.4045
212	47.26	-0.12	-0.0099	9.9999	0.0014	9.9999	-0.1414	1.2701	-0.0099	0.5140	-0.0078	0.4047
213	47.37	-0.13	-0.0003	9.9999	0.0055	9.9999	-18.3333	1.2739	-0.0111	0.5170	-0.0087	0.4059
214	47.45	-0.14	-0.0003	9.9999	0.0071	9.9999	-23.0000	1.2978	-0.0120	0.5250	-0.0093	0.4046
215	47.53	-0.12	0.0025	9.9999	0.0068	9.9999	2.7200	1.2855	-0.0119	0.5201	-0.0093	0.4046
216	47.61	-0.11	0.0011	9.9999	0.0072	9.9999	6.5455	1.2574	-0.0123	0.5105	-0.0098	0.4060
217	47.70	-0.14	-0.0031	9.9999	0.0052	9.9999	-1.6774	1.2846	-0.0112	0.5212	-0.0087	0.4058
218	47.80	-0.14	-0.0141	9.9999	0.0005	9.9999	-0.0355	1.2696	-0.0126	0.5158	-0.0099	0.4063
219	47.88	-0.12	-0.0058	9.9999	0.0039	9.9999	-0.6724	1.2717	-0.0135	0.5176	-0.0106	0.4071
220	47.95	-0.12	-0.0044	9.9999	0.0040	9.9999	-0.9091	1.2619	-0.0129	0.5146	-0.0102	0.4078
221	48.06	-0.07	0.0038	9.9999	-0.0005	9.9999	2.2368	1.2460	-0.0126	0.5065	-0.0101	0.4065
222	48.15	-0.14	0.0038	9.9999	0.0080	9.9999	2.1053	1.2547	-0.0122	0.5106	-0.0097	0.4070
223	48.23	-0.12	0.0011	9.9999	0.0072	9.9999	6.5455	1.2693	-0.0130	0.5156	-0.0103	0.4062
224	48.33	-0.14	-0.0016	9.9999	0.0048	9.9999	-3.0000	1.2676	-0.0123	0.5150	-0.0097	0.4063
225	48.42	-0.10	-0.0003	9.9999	0.0055	9.9999	-18.3333	1.2362	-0.0123	0.5046	-0.0100	0.4082
226	48.49	-0.12	0.0107	9.9999	0.0118	9.9999	1.1028	1.2362	-0.0123	0.5046	-0.0100	0.4082
227	48.59	-0.07	0.0052	9.9999	0.0081	9.9999	1.5577	1.2577	-0.0144	0.5134	-0.0115	0.4082
228	48.68	-0.09	0.0121	9.9999	0.0106	9.9999	0.8926	1.2342	-0.0122	0.5049	-0.0099	0.4091
229	48.74	-0.11	0.0025	9.9999	0.0068	9.9999	2.7200	1.2350	-0.0139	0.5059	-0.0113	0.4096
230	48.83	-0.08	0.0041	9.9999	0.0072	9.9999	6.5455	1.2288	-0.0139	0.5031	-0.0113	0.4094

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/D-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	03	0.90	1.7	0.0	81KOFIS	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
231	48.92	-0.06	0.0007	9.9999	0.0076	9.9999	1.1343	1.2312	-0.0125	0.5052	-0.0102	0.4103
232	49.01	-0.04	0.0176	9.9999	0.0140	9.9999	0.7935	1.2271	-0.0133	0.5043	-0.0109	0.4110
233	49.10	-0.09	0.0122	9.9999	0.0103	9.9999	0.8443	1.2302	-0.0132	0.5045	-0.0107	0.4101
234	49.18	-0.12	0.0135	9.9999	0.0120	9.9999	0.8089	1.2272	-0.0135	0.5037	-0.0110	0.4105
235	49.25	-0.04	0.0149	9.9999	0.0121	9.9999	0.8121	1.2173	-0.0133	0.5000	-0.0109	0.4108
236	49.33	-0.06	0.0165	9.9999	0.0132	9.9999	0.8042	1.2062	-0.0130	0.4969	-0.0108	0.4120
237	49.44	-0.03	0.0148	9.9999	0.0136	9.9999	0.9524	1.2226	-0.0140	0.5043	-0.0115	0.4125
238	49.52	-0.07	0.0086	9.9999	0.0087	9.9999	1.3182	1.2210	-0.0140	0.5031	-0.0115	0.4121
239	49.61	-0.03	0.0209	9.9999	0.0153	9.9999	0.7500	1.2176	-0.0134	0.5017	-0.0110	0.4121
240	49.70	-0.05	0.0207	9.9999	0.0181	9.9999	0.6537	1.2061	-0.0130	0.5006	-0.0105	0.4096
241	49.78	-0.06	0.0240	9.9999	0.0162	9.9999	0.6985	1.2243	-0.0143	0.5050	-0.0117	0.4125
242	49.86	-0.01	0.0327	9.9999	0.0212	9.9999	0.6463	1.2026	-0.0137	0.5002	-0.0109	0.4105
243	49.96	0.01	0.0266	9.9999	0.0197	9.9999	0.6886	1.2073	-0.0132	0.5003	-0.0107	0.4108
244	50.05	-0.01	0.0341	9.9999	0.0224	9.9999	0.6369	1.2012	-0.0136	0.5000	-0.0111	0.4110
245	50.13	-0.00	0.0424	9.9999	0.0257	9.9999	0.6076	1.2066	-0.0149	0.5038	-0.0117	0.4096
246	50.23	0.04	0.0410	9.9999	0.0240	9.9999	0.5868	1.2000	-0.0151	0.5003	-0.0120	0.4104
247	50.32	0.01	0.0362	9.9999	0.0227	9.9999	0.5942	1.2051	-0.0145	0.5012	-0.0131	0.4120
248	50.39	0.04	0.0464	9.9999	0.0286	9.9999	0.6220	1.2021	-0.0148	0.5007	-0.0133	0.4110
249	50.51	-0.07	0.0203	9.9999	0.0184	9.9999	0.6079	1.2527	-0.0103	0.5187	-0.0130	0.4141
250	50.61	-0.09	0.0146	9.9999	0.0137	9.9999	0.9257	1.2627	-0.0175	0.5227	-0.0137	0.4140
251	50.70	-0.03	0.0297	9.9999	0.0200	9.9999	0.7762	1.2449	-0.0172	0.5184	-0.0138	0.4164
252	50.81	-0.06	0.0244	9.9999	0.0183	9.9999	0.7500	1.2668	-0.0186	0.5264	-0.0142	0.4149
253	50.87	-0.04	0.0202	9.9999	0.0165	9.9999	0.8366	1.2722	-0.0186	0.5277	-0.0146	0.4148
254	50.97	-0.06	0.0313	9.9999	0.0205	9.9999	0.6550	1.2536	-0.0175	0.5200	-0.0142	0.4149
255	51.04	-0.08	0.0186	9.9999	0.0156	9.9999	0.8298	1.2515	-0.0180	0.5236	-0.0148	0.4164
256	51.13	-0.07	0.0147	9.9999	0.0146	9.9999	1.0068	1.2562	-0.0186	0.5224	-0.0148	0.4159
257	51.21	-0.02	0.0162	9.9999	0.0138	9.9999	0.8519	1.2627	-0.0188	0.5269	-0.0149	0.4173
258	51.33	-0.05	0.0091	9.9999	0.0097	9.9999	1.0020	1.2516	-0.0191	0.5232	-0.0153	0.4160
259	51.39	-0.05	0.0257	9.9999	0.0189	9.9999	0.7354	1.2646	-0.0174	0.5261	-0.0154	0.4177
260	51.53	-0.06	0.0149	9.9999	0.0121	9.9999	0.8121	1.2489	-0.0189	0.5219	-0.0152	0.4179
261	51.58	-0.07	0.0257	9.9999	0.0175	9.9999	0.7588	1.2456	-0.0185	0.5205	-0.0149	0.4179
262	51.67	-0.02	0.0299	9.9999	0.0203	9.9999	0.6789	1.2277	-0.0181	0.5134	-0.0146	0.4162
263	51.78	-0.05	0.0263	9.9999	0.0192	9.9999	0.6737	1.2510	-0.0179	0.5226	-0.0149	0.4176
264	51.88	-0.03	0.0265	9.9999	0.0192	9.9999	0.7408	1.2545	-0.0187	0.5233	-0.0149	0.4172
265	51.93	-0.03	0.0350	9.9999	0.0233	9.9999	0.5864	1.2567	-0.0195	0.5257	-0.0155	0.4163
266	52.04	0.03	0.0334	9.9999	0.0235	9.9999	0.6038	1.2737	-0.0190	0.5316	-0.0149	0.4175
267	52.12	-0.03	0.0213	9.9999	0.0179	9.9999	0.6358	1.2073	-0.0186	0.5296	-0.0147	0.4179
268	52.19	-0.00	0.0423	9.9999	0.0231	9.9999	0.5946	1.2024	-0.0192	0.5263	-0.0152	0.4165
269	52.26	0.00	0.0409	9.9999	0.0256	9.9999	0.6275	1.2074	-0.0198	0.5299	-0.0156	0.4161
270	52.35	0.04	0.0464	9.9999	0.0282	9.9999	0.6091	1.2184	-0.0199	0.5304	-0.0156	0.4196
271	52.45	0.02	0.0431	9.9999	0.0276	9.9999	0.6133	1.2030	-0.0199	0.5266	-0.0158	0.4170
272	52.51	0.03	0.0477	9.9999	0.0294	9.9999	0.6176	1.2012	-0.0201	0.5250	-0.0157	0.4165
273	52.61	0.02	0.0422	9.9999	0.0266	9.9999	0.6366	1.2073	-0.0202	0.5284	-0.0160	0.4170
274	52.69	0.04	0.0524	9.9999	0.0320	9.9999	0.6026	1.2036	-0.0196	0.5271	-0.0155	0.4171
275	52.76	0.02	0.0422	9.9999	0.0276	9.9999	0.6003	1.2028	-0.0204	0.5263	-0.0162	0.4169
276	52.83	-0.00	0.0490	9.9999	0.0322	9.9999	0.6085	1.2049	-0.0204	0.5261	-0.0162	0.4177

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
7 38 0.90 1.7 0.0 BIWOF15 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
277	52.93	0.03	0.0447	9.9999	0.0302	9.9999	0.0741	1.2722	-0.0208	0.5305	-0.0164	0.4170
278	53.00	0.05	0.0404	9.9999	0.0287	9.9999	0.0199	1.2675	-0.0207	0.5276	-0.0164	0.4165
279	53.08	0.07	0.0421	9.9999	0.0285	9.9999	0.6001	1.2657	-0.0207	0.5287	-0.0164	0.4178
280	53.18	0.06	0.0403	9.9999	0.0298	9.9999	0.0450	1.2637	-0.0199	0.5275	-0.0158	0.4175
281	53.20	0.03	0.0559	9.9999	0.0344	9.9999	0.0165	1.2656	-0.0207	0.5284	-0.0164	0.4160
282	53.33	0.09	0.0504	9.9999	0.0316	9.9999	0.6322	1.2753	-0.0213	0.5323	-0.0167	0.4174
283	53.42	0.02	0.0350	9.9999	0.0335	9.9999	0.6373	1.2767	-0.0210	0.5319	-0.0165	0.4166
284	53.50	0.08	0.0477	9.9999	0.0305	9.9999	0.6408	1.2686	-0.0204	0.5290	-0.0161	0.4170
285	53.58	0.08	0.0450	9.9999	0.0292	9.9999	0.6503	1.2618	-0.0216	0.5346	-0.0166	0.4170
286	53.68	0.04	0.0477	9.9999	0.0310	9.9999	0.6313	1.2803	-0.0212	0.5351	-0.0166	0.4179
287	53.78	0.07	0.0532	9.9999	0.0342	9.9999	0.6441	1.2771	-0.0210	0.5337	-0.0165	0.4179
288	53.89	0.05	0.0469	9.9999	0.0333	9.9999	0.6624	1.2855	-0.0216	0.5356	-0.0165	0.4178
289	53.92	0.02	0.0498	9.9999	0.0313	9.9999	0.7002	1.2875	-0.0212	0.5377	-0.0165	0.4176
290	54.01	0.05	0.0531	9.9999	0.0341	9.9999	0.6434	1.2765	-0.0211	0.5323	-0.0166	0.4170
291	54.08	0.06	0.0503	9.9999	0.0328	9.9999	0.6554	1.2831	-0.0219	0.5350	-0.0171	0.4160
292	54.15	0.06	0.0489	9.9999	0.0333	9.9999	0.6624	1.2718	-0.0211	0.5297	-0.0166	0.4165
293	54.23	0.08	0.0503	9.9999	0.0335	9.9999	0.6753	1.2750	-0.0213	0.5316	-0.0167	0.4169
294	54.30	0.05	0.0489	9.9999	0.0333	9.9999	0.6624	1.2815	-0.0219	0.5332	-0.0171	0.4160
295	54.36	0.08	0.0421	9.9999	0.0289	9.9999	0.6381	1.2830	-0.0218	0.5339	-0.0170	0.4161
296	54.47	0.05	0.0492	9.9999	0.0331	9.9999	0.7180	1.2913	-0.0221	0.5362	-0.0171	0.4152
297	54.55	0.04	0.0478	9.9999	0.0336	9.9999	0.7116	1.2837	-0.0225	0.5350	-0.0176	0.4167
298	54.62	0.05	0.0471	9.9999	0.0300	9.9999	0.7143	1.2900	-0.0220	0.5355	-0.0175	0.4151
299	54.70	0.07	0.0517	9.9999	0.0303	9.9999	0.7035	1.2831	-0.0215	0.5327	-0.0166	0.4153
300	54.77	0.06	0.0470	9.9999	0.0315	9.9999	0.8240	1.2854	-0.0227	0.5334	-0.0177	0.4149
301	54.85	0.04	0.0571	9.9999	0.0403	9.9999	0.7018	1.2818	-0.0218	0.5321	-0.0170	0.4151
302	54.93	0.04	0.0491	9.9999	0.0331	9.9999	0.8465	1.2896	-0.0219	0.5344	-0.0170	0.4144
303	55.01	0.01	0.0461	9.9999	0.0341	9.9999	0.7413	1.2813	-0.0220	0.5313	-0.0172	0.4146
304	55.08	0.04	0.0419	9.9999	0.0333	9.9999	0.7907	1.2907	-0.0222	0.5348	-0.0172	0.4143
305	55.16	0.03	0.0447	9.9999	0.0333	9.9999	0.7511	1.2941	-0.0226	0.5362	-0.0176	0.4143
306	55.23	0.05	0.0502	9.9999	0.0301	9.9999	0.7206	1.3086	-0.0230	0.5413	-0.0178	0.4136
307	55.31	0.01	0.0502	9.9999	0.0372	9.9999	0.7425	1.2977	-0.0230	0.5376	-0.0178	0.4142
308	55.39	0.05	0.0504	9.9999	0.0312	9.9999	0.8571	1.2879	-0.0221	0.5330	-0.0172	0.4138
309	55.47	0.02	0.0391	9.9999	0.0320	9.9999	0.8104	1.2977	-0.0230	0.5359	-0.0178	0.4129
310	55.55	0.03	0.0488	9.9999	0.0366	9.9999	0.7315	1.2990	-0.0226	0.5378	-0.0174	0.4140
311	55.62	0.00	0.0502	9.9999	0.0372	9.9999	0.7425	1.3086	-0.0230	0.5401	-0.0178	0.4127
312	55.67	0.02	0.0461	9.9999	0.0347	9.9999	0.7543	1.3054	-0.0229	0.5394	-0.0176	0.4132
313	55.77	0.00	0.0543	9.9999	0.0382	9.9999	0.7232	1.2926	-0.0223	0.5350	-0.0173	0.4143
314	55.85	0.04	0.0486	9.9999	0.0377	9.9999	0.7741	1.2924	-0.0219	0.5345	-0.0170	0.4135
315	55.94	0.05	0.0338	9.9999	0.0305	9.9999	0.9077	1.2951	-0.0226	0.5351	-0.0175	0.4138
316	56.00	0.00	0.0420	9.9999	0.0350	9.9999	0.8353	1.2944	-0.0220	0.5347	-0.0170	0.4131
317	56.09	0.02	0.0391	9.9999	0.0331	9.9999	0.8465	1.2960	-0.0221	0.5354	-0.0171	0.4131
318	56.16	0.02	0.0447	9.9999	0.0368	9.9999	0.8251	1.2862	-0.0214	0.5313	-0.0167	0.4130
319	56.24	0.05	0.0435	9.9999	0.0362	9.9999	0.8380	1.3074	-0.0230	0.5413	-0.0176	0.4140
320	56.33	0.03	0.0447	9.9999	0.0368	9.9999	0.8251	1.3041	-0.0227	0.5382	-0.0174	0.4127
321	56.39	0.01	0.0420	9.9999	0.0344	9.9999	0.8210	1.3010	-0.0227	0.5368	-0.0175	0.4126
322	56.45	0.03	0.0420	9.9999	0.0334	9.9999	0.7971	1.2912	-0.0220	0.5327	-0.0171	0.4125

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 58 0.90 1.7 0.0 BINORIS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	LB3	XCPF3	YCPF3	CNF4	CM4	LB4	XCPF4	YCPF4
323	56.54	0.04	0.0448	9.9999	0.0352	9.9999	0.7075	1.3169	-0.0233	0.5425	-0.0177	0.4119
324	56.62	0.01	0.0336	9.9999	0.0316	9.9999	0.9405	1.3140	-0.0230	0.5415	-0.0175	0.4119
325	56.70	0.06	0.0475	9.9999	0.0382	9.9999	0.6059	1.3204	-0.0233	0.5429	-0.0177	0.4111
326	56.78	0.03	0.0336	9.9999	0.0316	9.9999	0.9405	1.3124	-0.0231	0.5394	-0.0176	0.4110
327	56.87	0.04	0.0447	9.9999	0.0360	9.9999	0.6520	1.3139	-0.0231	0.5378	-0.0176	0.4093
328	56.92	0.03	0.0282	9.9999	0.0274	9.9999	0.9716	1.3251	-0.0230	0.5356	-0.0176	0.4094
329	56.99	0.02	0.0420	9.9999	0.0350	9.9999	0.8496	1.3247	-0.0230	0.5351	-0.0174	0.4059
330	57.08	0.03	0.0391	9.9999	0.0343	9.9999	0.8772	1.3244	-0.0237	0.5342	-0.0178	0.4040
331	57.16	0.00	0.0342	9.9999	0.0332	9.9999	0.8469	1.3201	-0.0237	0.5318	-0.0179	0.4004
332	57.23	-0.00	0.0420	9.9999	0.0343	9.9999	0.8234	1.3424	-0.0240	0.5397	-0.0179	0.4020
333	57.30	-0.02	0.0308	9.9999	0.0314	9.9999	1.0195	1.3331	-0.0243	0.5367	-0.0183	0.4026
334	57.39	0.04	0.0391	9.9999	0.0354	9.9999	0.9034	1.3313	-0.0239	0.5300	-0.0180	0.4026
335	57.45	-0.01	0.0335	9.9999	0.0338	9.9999	1.0090	1.3508	-0.0251	0.5419	-0.0186	0.4012
336	57.53	0.02	0.0351	9.9999	0.0348	9.9999	0.8930	1.3442	-0.0245	0.5374	-0.0183	0.3998
337	57.60	-0.00	0.0330	9.9999	0.0334	9.9999	0.9343	1.3379	-0.0245	0.5376	-0.0183	0.4018
338	57.66	0.01	0.0322	9.9999	0.0321	9.9999	0.9769	1.3282	-0.0240	0.5317	-0.0181	0.4003
339	57.74	0.02	0.0420	9.9999	0.0361	9.9999	0.8016	1.3414	-0.0234	0.5365	-0.0180	0.3999
340	57.83	-0.01	0.0350	9.9999	0.0334	9.9997	0.9343	1.3509	-0.0234	0.5401	-0.0188	0.3998
341	57.89	-0.03	0.0274	9.9999	0.0319	9.9999	1.0850	1.3478	-0.0236	0.5370	-0.0190	0.3984
342	57.98	-0.04	0.0300	9.9999	0.0328	9.9999	1.0384	1.3357	-0.0249	0.5321	-0.0187	0.3989
343	58.04	-0.03	0.0293	9.9999	0.0316	9.9997	1.2490	1.3408	-0.0256	0.5352	-0.0192	0.3974
344	58.10	-0.04	0.0198	9.9999	0.0284	9.9999	1.4343	1.3508	-0.0261	0.5388	-0.0194	0.3974
345	58.19	-0.04	0.0253	9.9999	0.0322	9.9999	1.2727	1.3455	-0.0263	0.5377	-0.0194	0.3967
346	58.27	-0.04	0.0282	9.9997	0.0300	9.9999	1.0922	1.3508	-0.0262	0.5387	-0.0194	0.3973
347	58.33	-0.02	0.0240	9.9999	0.0288	9.9999	1.2000	1.3363	-0.0257	0.5294	-0.0193	0.3961
348	58.42	-0.11	0.0171	9.9999	0.0260	9.9999	1.5235	1.3380	-0.0260	0.5295	-0.0192	0.3957
349	58.48	-0.09	0.0157	9.9999	0.0254	9.9999	1.6178	1.3350	-0.0263	0.5296	-0.0197	0.3968
350	58.51	-0.10	0.0253	9.9999	0.0311	9.9999	1.2292	1.3405	-0.0270	0.5346	-0.0201	0.3970
351	58.52	-0.10	0.0322	9.9999	0.0355	9.9999	1.1025	1.3399	-0.0265	0.5315	-0.0198	0.3965
352	58.51	-0.12	0.0226	9.9999	0.0296	9.9997	1.3186	1.3398	-0.0264	0.5324	-0.0197	0.3973
353	58.52	-0.07	0.0190	9.9999	0.0295	9.9999	1.4099	1.3237	-0.0255	0.5249	-0.0193	0.3968
354	58.51	-0.08	0.0199	9.9999	0.0274	9.9999	1.3709	1.3429	-0.0263	0.5327	-0.0196	0.3966
355	57.82	0.01	0.0323	9.9999	0.0333	9.9999	1.0310	1.3421	-0.0245	0.5356	-0.0183	0.3992
356	57.10	0.02	0.0336	9.9999	0.0339	9.9999	1.0089	1.3175	-0.0225	0.5255	-0.0171	0.3969

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 8

MARTIN MARIETTA FAILS EFFECTS DATA

TEST / RUN 57 MACH NO. 1.00 ALT 1.0 PHI 0.0 CONF BLANKFLD ETA 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	M/D
1	-3.992	-0.001	-0.00458	1.00040	0.01754	-0.01950	-0.00038	0.3317	0.1330	0.2311	-2.2038
2	-3.992	0.001	-0.00363	1.00739	0.00423	-0.01400	-0.00038	0.3271	0.1007	0.2264	-2.1832
3	-3.993	0.001	-0.07431	1.00950	0.00707	-0.01005	-0.00007	0.3392	0.0991	0.2401	-2.1355
4	-4.994	0.001	-0.00309	1.01140	0.00423	-0.01402	-0.00003	0.3370	0.0926	0.2444	-2.0631
5	-5.991	0.001	-0.00309	1.01409	0.00283	-0.01199	-0.00001	0.3335	0.0867	0.2447	-2.0395
6	-6.993	0.001	-0.00261	1.01491	0.00368	-0.01007	0.00003	0.3341	0.0834	0.2506	-1.9963
7	-2.000	1.001	-0.00209	0.99348	0.00277	-0.01323	0.00006	0.3291	0.0807	0.2483	-1.9037
8	-1.003	0.001	-0.01011	0.98059	0.01105	-0.01401	0.00009	0.3350	0.0846	0.2543	-2.0376
9	-0.004	0.001	0.00124	-0.00259	0.00348	-0.01716	0.00012	0.3382	0.0832	0.2532	-2.1213
10	0.993	0.001	0.00163	-0.00257	0.00314	-0.01090	0.00014	0.3394	0.0750	0.2528	-1.9065
11	1.991	0.000	0.02406	-0.03013	0.00315	-0.01095	0.00017	0.3364	0.0852	0.2531	-2.0325
12	2.994	0.000	0.03006	-0.04037	0.00403	-0.00990	0.00020	0.3307	0.0924	0.2562	-2.0342
13	3.987	0.000	0.05013	-0.06548	-0.00024	-0.00577	-0.00036	0.3551	0.0975	0.2576	-2.0565
14	4.986	0.000	0.07107	-0.09548	0.00030	-0.00625	-0.00032	0.3578	0.1035	0.2543	-2.1174
15	5.984	0.000	0.09398	-0.09371	0.00300	-0.01208	0.00030	0.3809	0.1116	0.2532	-2.1672
16	0.988	-0.000	0.00853	-0.00910	-0.00390	-0.00547	-0.00000	0.3627	0.1217	0.2410	-2.2451
17	7.000	0.001	1.00479	-0.00335	-0.01499	-0.00484	-0.00003	0.3051	0.1301	0.2350	-2.2875
18	8.002	-0.000	0.00174	-0.00224	-0.00491	-0.00050	0.00001	0.3696	0.1407	0.2283	-2.2914
19	9.004	-0.000	1.00281	-3.70005	-0.00130	-0.00399	-0.00017	0.3753	0.1487	0.2266	-2.2759
20	10.002	0.000	1.00420	-0.02409	0.00136	-0.00399	-0.00014	0.3780	0.1574	0.2214	-2.3056
21	11.004	-0.000	1.00291	-0.00338	-0.00301	0.00032	0.00008	0.3740	0.1653	0.2087	-2.2842
22	12.002	-0.000	1.02422	-0.01054	-0.00222	0.00174	0.00052	0.3745	0.1716	0.2027	-2.2788
23	13.002	-0.000	1.04038	-0.03872	-0.00300	0.00432	0.00037	0.3794	0.1838	0.1966	-2.2495
24	14.003	0.000	1.06040	-0.04001	-0.00101	0.00050	0.00001	0.3747	0.1905	0.1842	-2.2473
25	15.001	0.000	1.08107	-0.05049	0.00031	0.00133	0.00005	0.3714	0.1973	0.1741	-2.2172
26	16.000	-0.000	1.09105	-0.07107	-0.00035	0.00463	-0.00006	0.3714	0.2086	0.1628	-2.1554
27	17.002	-0.000	1.09169	-0.09403	-0.00411	0.00500	-0.00004	0.3718	0.2330	0.1304	-2.1230
28	18.003	-0.000	1.09190	-7.12000	-0.00551	0.00541	0.00043	0.3646	0.2517	0.1329	-2.0884
29	19.000	-0.001	1.08044	-0.14205	-0.01330	0.00249	-0.00152	0.3974	0.2736	0.1236	-2.0250
30	20.003	0.001	1.08233	-0.16053	0.00320	0.00359	-0.00158	0.3968	0.2886	0.1103	-1.9830
31	21.003	0.000	1.08033	-0.18228	0.00228	-0.01078	-0.00382	0.4009	0.2993	0.1017	-1.8750
32	22.003	0.001	1.08019	-0.20293	0.00670	0.00077	-0.00764	0.3980	0.3115	0.0861	-1.7476
33	23.008	0.001	1.08067	-0.22192	0.01258	-0.01730	-0.00987	0.3835	0.3179	0.0656	-1.6217
34	24.005	0.003	1.07144	-0.24008	0.03502	-0.01139	0.01211	0.4246	0.3384	0.0862	-1.4466
35	25.007	0.004	1.05021	-0.26021	0.04771	-0.77140	0.01705	0.4340	0.3799	0.0547	-1.3253
36	27.000	0.005	1.02466	-0.28091	0.06095	-0.68703	0.02254	0.4399	0.4031	0.0368	-1.1944
37	28.000	0.006	1.00333	-0.30253	0.07306	-1.01171	0.02598	0.4311	0.3637	0.0474	-1.1264
38	28.998	0.005	1.00191	-0.32300	0.08423	-1.00351	0.02455	0.4215	0.3900	0.0249	-1.0936
39	29.998	0.005	1.00029	-0.34179	0.09305	-1.00332	0.02397	0.4170	0.3927	0.0243	-1.1028
40	29.997	0.005	0.99932	-0.36035	0.10030	-1.00755	0.02260	0.4131	0.3952	0.0199	-1.1087
41	29.997	0.005	0.99100	-0.37813	0.10770	-1.00219	0.01906	0.3979	0.3821	0.0158	-1.1439
42	29.991	0.004	0.98390	-0.39702	0.11580	-0.97044	0.01604	0.3952	0.3924	0.0128	-1.1133
43	29.009	0.005	0.98042	-0.41055	0.12189	-0.99769	0.01754	0.3964	0.3856	0.0106	-1.0785
44	30.004	0.005	0.97961	-0.43408	0.12930	-1.00402	0.01923	0.4045	0.3891	0.0154	-1.0681
45	30.993	0.005	0.97221	-0.45305	0.13535	-0.99526	0.01909	0.4003	0.3870	0.0133	-1.0747
46	29.011	0.003	0.98100	-0.43370	0.12394	-0.99400	0.01111	0.3973	0.3809	0.0004	-1.0550

MAPTAN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO= PHI CONF L DELA DEL2 DEL3 DEL4 TRANSITION
1 SY 1.00 1.1 0.0 0 1=FIX 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLR	CY	CLN	CLL	CA	CAB	CAF	XCP
47	29.20	0.03	5.0925	-0.3241	0.0604	-0.0573	0.0516	0.3804	0.3807	-0.0003	-1.0732
48	29.90	0.04	5.2283	-0.3424	0.0603	-0.0591	0.0540	0.3872	0.3924	-0.0052	-1.0869
49	29.57	0.03	5.1979	-0.3509	0.0917	-1.1367	0.0055	0.3944	0.3970	-0.0026	-1.0035
50	29.73	0.04	5.2060	-0.3223	0.0857	-0.9315	-0.0980	0.3957	0.3989	-0.0032	-1.0091
51	29.88	0.04	5.2390	-0.3403	0.0865	-1.0319	0.0429	0.4046	0.4077	-0.0031	-1.0087
52	30.02	0.03	5.2717	-0.3488	0.0881	-1.0507	0.0303	0.3993	0.4028	-0.0035	-0.9551
53	30.15	0.04	5.2139	-0.3468	0.0923	-0.9206	0.0301	0.3967	0.4031	-0.0064	-0.9726
54	30.30	0.05	5.2242	-0.3042	0.0931	-1.0179	0.1316	0.3915	0.4050	-0.0135	-0.9421
55	30.44	0.07	5.1971	-0.3193	0.0826	-1.0119	0.0554	0.3979	0.4043	-0.0064	-0.9254
56	30.59	0.06	5.2001	-0.3561	0.0990	-1.0302	0.1028	0.3754	0.4012	-0.0258	-0.9356
57	30.70	0.07	5.2160	-0.3733	0.0876	-1.0003	0.0910	0.3935	0.4005	-0.0066	-0.9297
58	30.84	0.05	5.2020	-0.3732	0.0958	-1.0410	0.1023	0.3835	0.4066	-0.0231	-0.9089
59	30.98	0.07	5.1951	-0.3783	0.0884	-1.0004	0.1701	0.3929	0.4070	-0.0141	-0.8916
60	31.12	0.07	5.2083	-0.3863	0.0917	-1.0479	0.1986	0.3808	0.4031	-0.0185	-0.8878
61	31.27	0.06	5.2079	-0.3829	0.0834	-1.0403	0.1695	0.3790	0.3995	-0.0205	-0.8673
62	31.40	0.07	5.2013	-0.3967	0.0824	-1.0546	0.1931	0.3809	0.3995	-0.0186	-0.8699
63	31.53	0.06	5.2071	-0.3850	0.0903	-1.0481	0.1201	0.3752	0.4049	-0.0297	-0.8794
64	31.68	0.07	5.1930	-0.3950	0.0837	-1.0420	0.0925	0.3892	0.3949	-0.0257	-0.8933
65	31.82	0.07	5.1777	-0.3906	0.0824	-1.0464	0.1782	0.3890	0.3953	-0.0263	-0.8758
66	31.98	0.07	5.2061	-0.4021	0.0836	-1.0472	0.1946	0.3875	0.3932	-0.0257	-0.8608
67	32.09	0.06	5.2043	-0.3962	0.0854	-1.0459	0.0928	0.3855	0.3932	-0.0277	-0.8674
68	32.24	0.07	5.1930	-0.4046	0.0835	-1.0351	0.1906	0.3877	0.3901	-0.0324	-0.8791
69	32.39	0.07	5.2129	-0.3952	0.0843	-1.0000	0.1825	0.3870	0.3917	-0.0247	-0.8586
70	32.50	0.07	5.2015	-0.3986	0.0873	-1.0430	0.1913	0.3880	0.3920	-0.0412	-0.8585
71	32.62	0.07	5.2060	-0.3962	0.0870	-1.0304	0.1175	0.3858	0.3916	-0.0358	-0.8458
72	32.76	0.07	5.1973	-0.3982	0.0850	-1.0033	0.0820	0.3898	0.3917	-0.0419	-0.8405
73	32.89	0.05	5.1891	-0.4091	0.0841	-1.0076	0.0800	0.3832	0.3898	-0.0366	-0.8500
74	33.03	0.05	5.2007	-0.3869	0.0870	-1.0963	0.1005	0.3877	0.3906	-0.0429	-0.8329
75	33.18	0.05	5.2060	-0.3993	0.0877	-1.0264	0.0705	0.3891	0.3893	-0.0502	-0.8146
76	33.40	0.04	5.2391	-0.3960	0.0834	-1.0479	0.0405	0.3833	0.3896	-0.0363	-0.8263
77	33.41	0.06	5.2401	-0.4034	0.0851	-1.0340	0.0831	0.3835	0.3885	-0.0550	-0.8281
78	33.54	0.03	5.2640	-0.4016	0.0860	-0.7504	0.0174	0.3501	0.3918	-0.0417	-0.7993
79	33.66	0.04	5.2470	-0.3965	0.0847	-0.8755	0.0247	0.3932	0.3955	-0.0523	-0.7854
80	33.78	0.02	5.2604	-0.3962	0.0863	-0.8078	-0.0420	0.3919	0.3949	-0.0530	-0.7867
81	33.92	0.04	5.2451	-0.4050	0.0866	-0.8243	-0.0115	0.3826	0.3965	-0.0439	-0.7732
82	34.07	0.03	5.2643	-0.4243	0.0838	-0.8271	-0.0240	0.3897	0.3953	-0.0556	-0.7807
83	34.18	0.02	5.2452	-0.3871	0.0874	-0.8601	-0.0525	0.3809	0.4010	-0.0501	-0.7670
84	34.29	0.05	5.2431	-0.4060	0.0843	-0.8718	0.0069	0.3902	0.3950	-0.0548	-0.7673
85	34.42	0.02	5.2363	-0.4052	0.0823	-0.8100	-0.1306	0.3871	0.4023	-0.0552	-0.7448
86	34.54	0.01	5.2231	-0.4049	0.0800	-0.8467	-0.0521	0.3833	0.4035	-0.0552	-0.7467
87	34.69	0.01	5.2401	-0.4169	0.0839	-0.8490	-0.0674	0.3913	0.4077	-0.0564	-0.7284
88	34.80	0.03	5.2006	-0.3901	0.0781	-0.8440	-0.0978	0.3854	0.4089	-0.0585	-0.7055
89	34.93	0.02	5.2543	-0.4301	0.0824	-0.8419	-0.0839	0.3808	0.4074	-0.0566	-0.7306
90	35.05	0.03	5.2446	-0.4352	0.0800	-0.8203	-0.0362	0.3893	0.4135	-0.0442	-0.6801
91	35.17	0.01	5.2547	-0.4439	0.0793	-0.8052	-0.0941	0.3827	0.4174	-0.0547	-0.6764
92	35.30	-0.00	5.2252	-0.4118	0.0786	-0.8003	-0.1212	0.3873	0.4209	-0.0636	-0.6745

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(RKDCT 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NAIJ=6 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
/ 39.1000 .61 0.0 CLEAN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	35.092	-0.001	0.00755	-5.5000	-0.00774	0.4171	-0.1262	0.3473	0.4171	-0.0696	-0.6892
94	35.36	-0.000	0.02493	-5.5905	0.00675	0.4270	-0.0986	0.3484	0.4268	-0.0784	-0.6006
95	35.09	-0.001	0.02539	-5.5931	-0.00543	0.4227	-0.1481	0.3484	0.4178	-0.0694	-0.6804
96	35.19	0.000	0.01774	-5.5487	0.02222	-0.0115	-0.0911	0.3652	0.4236	-0.0584	-0.6541
97	35.09	0.000	0.02540	-5.5904	0.01052	-0.1393	-0.0345	0.3633	0.4225	-0.0592	-0.6652
98	35.05	0.002	0.02532	-5.5909	0.03492	-0.1407	-0.0333	0.3711	0.4278	-0.0567	-0.6469
99	35.10	-0.000	0.02549	-5.5975	0.00140	0.2870	-0.0357	0.3602	0.4315	-0.0633	-0.6187
100	35.09	-0.001	0.01733	-5.5993	-0.00774	0.0003	-0.1393	0.3567	0.4245	-0.0596	-0.6433
101	35.09	-0.002	0.01739	-5.5781	-0.01001	0.3532	-0.0358	0.3603	0.4234	-0.0631	-0.6369
102	35.03	-0.003	0.01709	-5.7549	-0.03791	1.2451	-0.1165	0.3355	0.4275	-0.0920	-0.6628
103	35.04	-0.002	0.01593	-5.5979	-0.02001	0.0070	-0.0855	0.3550	0.4230	-0.0680	-0.6452
104	35.11	-0.000	0.01753	-5.6002	-0.01699	0.4792	-0.0759	0.3597	0.4430	-0.0553	-0.5687
105	35.09	-0.001	0.01761	-5.5894	-0.02218	0.3979	-0.0801	0.3592	0.4284	-0.0792	-0.6319
106	35.09	0.000	0.01740	-5.5963	-0.01931	0.0400	-0.0979	0.3583	0.4330	-0.0700	-0.6348
107	37.13	-0.003	0.01740	-5.5526	-0.03307	1.1181	-0.0745	0.3110	0.4274	-0.1165	-0.6320
108	37.03	-0.001	0.01701	-5.5393	-0.01925	0.0000	-0.0734	0.3631	0.4473	-0.0842	-0.5942
109	37.31	-0.003	0.01983	-5.5931	-0.01122	1.1301	-0.0901	0.3453	0.4359	-0.0906	-0.6066
110	37.04	0.000	0.01761	-5.6741	0.00176	0.0113	-0.0491	0.3704	0.4342	-0.0778	-0.5949
111	37.02	-0.003	0.01980	-5.6107	-0.02082	1.0330	-0.0941	0.3587	0.4380	-0.0793	-0.5738
112	37.04	-0.003	0.01733	-5.6490	-0.02476	1.0032	-0.0734	0.3502	0.4301	-0.0799	-0.5882
113	37.03	-0.004	0.01990	-5.6495	-0.03066	1.1735	-0.0357	0.3349	0.4339	-0.0991	-0.5801
114	37.98	-0.002	0.01900	-5.6363	-0.02429	1.1307	-0.0300	0.3604	0.4376	-0.0767	-0.5599
115	38.11	-0.004	0.01930	-5.6731	-0.03003	1.2520	-0.0019	0.3256	0.4277	-0.1022	-0.5823
116	38.04	-0.002	0.01991	-5.6786	-0.02496	1.0479	-0.0021	0.3430	0.4243	-0.1186	-0.6121
117	38.04	-0.002	0.01722	-5.6470	-0.01909	1.0183	-0.0493	0.3604	0.4303	-0.0819	-0.5728
118	38.04	-0.003	0.01793	-5.6838	-0.03999	1.0922	-0.0908	0.3490	0.3980	-0.1284	-0.6186
119	38.00	-0.002	0.02031	-5.6584	-0.02629	1.0750	-0.0648	0.3695	0.4159	-0.1045	-0.5988
120	38.02	-0.003	0.02021	-5.7318	-0.04710	1.2000	-0.0912	0.2994	0.4012	-0.1168	-0.6109
121	38.09	-0.003	0.01912	-5.6988	-0.03330	1.1191	-0.0775	0.3061	0.4177	-0.1117	-0.5847
122	38.07	-0.003	0.01853	-5.6395	-0.05501	1.1279	-0.0984	0.3090	0.4178	-0.1281	-0.6031
123	39.09	-0.005	0.02362	-5.6610	-0.03552	1.0110	-0.1130	0.2729	0.3995	-0.1266	-0.6044
124	39.07	-0.004	0.02306	-5.7269	-0.04514	1.0192	-0.0832	0.3024	0.4021	-0.1028	-0.5765
125	39.01	-0.003	0.02053	-5.7559	-0.03695	1.0933	-0.1364	0.2909	0.3985	-0.1077	-0.5966
126	39.03	-0.004	0.01990	-5.7001	-0.05350	1.0159	-0.1004	0.2888	0.4046	-0.1301	-0.5855
127	39.03	-0.001	0.01763	-5.6894	-0.05460	1.0904	-0.1301	0.2903	0.3978	-0.1074	-0.5823
128	39.00	-0.004	0.02010	-5.7420	-0.07220	1.0710	-0.1361	0.2648	0.3978	-0.1330	-0.5841
129	39.11	-0.006	0.01912	-5.7029	-0.06254	1.0987	-0.1160	0.2541	0.3952	-0.1312	-0.5944
130	39.03	-0.003	0.02055	-5.7062	-0.05093	1.0919	-0.0703	0.2810	0.4014	-0.1204	-0.5792
131	39.00	-0.007	0.01792	-5.7593	-0.07554	1.0000	-0.0879	0.2781	0.4025	-0.1244	-0.5603
132	39.09	-0.008	40.01969	-5.7953	-0.08406	1.0980	-0.0935	0.2543	0.3875	-0.1332	-0.5908
133	39.07	-0.006	40.01972	-5.8042	-0.05705	1.0432	-0.1286	0.2643	0.3900	-0.1257	-0.5825
134	39.03	-0.008	40.01753	-5.8352	-0.08816	1.0204	-0.1100	0.2522	0.3852	-0.1330	-0.5792
135	39.02	-0.005	40.01796	-5.8560	-0.06931	1.0649	-0.0751	0.2593	0.3900	-0.0907	-0.5565
136	39.04	-0.006	40.02469	-5.8908	-0.07405	1.0402	-0.0858	0.2501	0.3819	-0.1318	-0.5756
137	39.03	-0.007	40.01978	-5.8292	-0.08030	1.0126	-0.1043	0.2473	0.3769	-0.1316	-0.5738
138	39.02	-0.009	40.01964	-5.8569	-0.07997	1.0498	-0.0972	0.2952	0.3910	-0.0958	-0.5605

TEST 7 PART 59 MACH 1.00 RALPH 1.4 PHI 0.0 CONF 3INDFLD L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAD	CAP	XCP
139	40.83	-0.00	10.3231	-5.9020	-0.7501	1.0995	-0.0925	0.2046	0.3724	-0.1678	-0.5716
140	40.93	-0.00	10.3371	-5.9130	-0.8201	1.0850	-0.0916	0.2403	0.3674	-0.1269	-0.5721
141	41.07	-0.01	10.4167	-5.9839	-0.8701	1.0933	-0.0910	0.2342	0.3743	-0.1401	-0.5651
142	41.18	-0.05	10.3909	-5.9626	-0.8600	1.0804	-0.0969	0.2601	0.3639	-0.1208	-0.5661
143	41.28	-0.00	10.4265	-5.9784	-0.9306	1.0726	-0.0955	0.2301	0.3732	-0.1371	-0.5734
144	41.39	-0.00	10.5094	-5.9960	-0.9793	1.0934	-0.1083	0.2490	0.3768	-0.1268	-0.5563
145	41.47	-0.00	10.3354	-5.9528	-0.9839	1.0951	-0.0905	0.2459	0.3734	-0.1245	-0.5650
146	41.58	-0.00	10.5455	-5.9752	-0.9118	1.0685	-0.1047	0.2302	0.3741	-0.1439	-0.5666
147	41.69	-0.00	10.5273	-5.9509	-0.8851	1.0650	-0.1014	0.2338	0.3694	-0.1303	-0.5526
148	41.79	-0.00	10.6100	-5.9860	-0.9126	1.0618	-0.0909	0.2249	0.3667	-0.1416	-0.5545
149	41.90	-0.01	10.6714	-5.9852	-0.9466	1.0259	-0.1107	0.2458	0.3784	-0.1326	-0.5468
150	42.00	-0.01	10.6338	-5.9740	-0.9810	1.0421	-0.0781	0.2020	0.3629	-0.1209	-0.5373
151	42.09	-0.01	10.7309	-5.9862	-0.9985	1.0316	-0.1013	0.2414	0.3743	-0.1329	-0.5439
152	42.20	-0.01	10.9161	-6.0053	-0.9990	1.0100	-0.1010	0.2067	0.3650	-0.1503	-0.5556
153	42.30	-0.05	10.8358	-5.9894	-0.9407	1.0242	-0.0894	0.2167	0.3705	-0.1576	-0.5351
154	42.40	-0.00	10.8961	-5.9741	-0.9900	1.0021	-0.0897	0.2133	0.3639	-0.1551	-0.5435
155	42.49	-0.00	10.7003	-5.9747	-0.9837	1.0012	-0.1010	0.2353	0.3704	-0.1420	-0.5274
156	42.59	-0.00	10.9462	-5.9940	-0.9749	1.0303	-0.1002	0.2219	0.3599	-0.1380	-0.5394
157	42.69	-0.01	10.9303	-5.9727	-0.9894	1.0353	-0.0948	0.2333	0.3664	-0.1351	-0.5236
158	42.79	-0.00	10.9549	-5.9790	-0.9834	1.0822	-0.1013	0.2026	0.3524	-0.1498	-0.5367
159	42.88	-0.00	11.0034	-5.9951	-0.9813	1.0370	-0.0764	0.2107	0.3584	-0.1397	-0.5289
160	42.97	-0.01	10.9934	-5.9890	-0.9834	1.0040	-0.0711	0.2015	0.3748	-0.1133	-0.5120
161	43.05	-0.01	10.9543	-5.9496	-0.8655	1.0742	-0.0004	0.2043	0.3748	-0.1155	-0.4974
162	43.15	-0.00	11.1474	-5.9849	-0.9177	1.0491	-0.0941	0.2144	0.3630	-0.1486	-0.5257
163	43.26	-0.00	11.2169	-5.9893	-0.9701	1.0430	-0.0987	0.2089	0.3682	-0.1393	-0.5224
164	43.33	-0.00	11.1173	-5.9297	-0.8926	1.0710	-0.0909	0.2007	0.3603	-0.1396	-0.5150
165	43.42	-0.01	11.2316	-5.9644	-0.9499	1.0439	-0.0935	0.1993	0.3616	-0.1423	-0.5186
166	43.52	-0.00	11.3961	-5.9749	-0.9903	1.0059	-0.0746	0.2008	0.3590	-0.1308	-0.5135
167	43.60	-0.01	11.2700	-5.9007	-0.9341	1.0444	-0.0872	0.1804	0.3504	-0.1700	-0.5119
168	43.69	-0.00	11.2003	-5.9151	-0.9437	1.0194	-0.0756	0.2033	0.3627	-0.1194	-0.4983
169	43.80	-0.00	11.4264	-5.9416	-0.9871	1.0062	-0.0794	0.1937	0.3523	-0.1586	-0.5160
170	43.90	-0.01	11.4545	-5.9747	-0.9990	0.9951	-0.0938	0.1877	0.3369	-0.1692	-0.4980
171	43.97	-0.00	11.3077	-5.9001	-0.9184	1.0263	-0.0831	0.2023	0.3438	-0.1111	-0.5063
172	44.08	-0.01	11.4246	-5.9460	-0.9529	1.0109	-0.0812	0.1909	0.3473	-0.1004	-0.5093
173	44.17	-0.00	11.5495	-5.9779	-0.9751	0.9877	-0.0954	0.1825	0.3310	-0.1485	-0.5124
174	44.23	-0.01	11.5134	-5.9750	-0.9963	0.9966	-0.0810	0.2103	0.3492	-0.1329	-0.5014
175	44.32	-0.01	11.5345	-5.9904	-0.9586	0.9890	-0.0873	0.1827	0.3477	-0.1650	-0.5011
176	44.43	-0.00	11.6934	-5.9900	-0.9994	0.9888	-0.0947	0.1654	0.3336	-0.1662	-0.5079
177	44.51	-0.00	11.6223	-5.9490	-0.9936	0.9751	-0.0906	0.1808	0.3412	-0.1624	-0.5025
178	44.61	-0.00	11.6342	-5.9811	-0.9902	0.9791	-0.0946	0.1839	0.3330	-0.1667	-0.4970
179	44.72	-0.00	11.6960	-5.9871	-0.9971	0.9700	-0.0901	0.1588	0.3332	-0.1764	-0.4966
180	44.79	-0.01	11.6979	-5.9919	-0.9994	0.9506	-0.0943	0.1818	0.3407	-0.1171	-0.4773
181	44.89	-0.00	11.7340	-5.9756	-0.9990	0.9702	-0.0977	0.1774	0.3376	-0.1602	-0.4865
182	45.00	-0.01	11.6991	-5.9991	-0.9995	0.9102	-0.0936	0.2024	0.3409	-0.1365	-0.4823
183	45.09	-0.00	11.8307	-5.9130	-0.9912	0.9726	-0.0907	0.1670	0.3406	-0.1736	-0.4911
184	45.18	-0.00	11.8090	-5.9999	-0.9990	0.9962	-0.0956	0.1925	0.3431	-0.1508	-0.4710

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFELTS DATA

TEST PART MACH RATIO-S PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 [illegible] 1.97 0.0 0.0 0 0 0 0 ON/ON

POINT	ALPHA	BETA	CA	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
183	[illegible]	-0.000	12.00008	-0.01163	-0.27490	0.00232	-0.00342	0.1951	0.33315	-0.1446	-0.4720
186	45.35	-0.003	11.94231	-0.10000	0.00030	0.03411	-0.00367	0.18163	0.33331	-0.1500	-0.4635
187	45.43	-0.001	12.17530	-0.03101	-0.04120	0.00133	-0.00403	0.22450	0.33540	-0.1490	-0.4518
188	45.39	-0.003	11.97733	-0.00115	-0.12691	0.03509	-0.00315	0.18006	0.33303	-0.1574	-0.4637
189	45.04	-0.003	12.00001	-0.07100	-0.00409	0.01030	-0.00474	0.17101	0.33353	-0.1652	-0.4779
190	45.12	-0.000	12.00120	-0.00093	-0.04021	0.04182	-0.00315	0.17042	0.33330	-0.1348	-0.4732
191	45.19	-0.001	12.00009	-0.07243	-0.38007	0.03033	-0.00345	0.18960	0.33379	-0.1601	-0.4767
192	45.90	-0.001	12.00111	-0.07109	-0.04130	0.00178	-0.00400	0.18071	0.33333	-0.1606	-0.4692
193	45.39	-0.000	12.00002	-0.06796	-0.27109	0.03174	-0.00343	0.18112	0.33420	-0.1608	-0.4695
194	45.08	-0.001	12.01330	-0.00031	-0.03241	0.03414	-0.00372	0.17009	0.33431	-0.1527	-0.4594
195	45.10	-0.003	12.00141	-0.02194	-0.03133	0.03443	-0.00409	0.17930	0.33432	-0.1736	-0.4362
196	45.20	-0.003	12.01549	-0.05130	0.01178	0.03427	-0.00434	0.21008	0.33420	-0.1232	-0.4538
197	45.33	-0.000	12.02021	-0.08151	-0.14000	0.04113	-0.00450	0.17110	0.33459	-0.1734	-0.4590
198	45.41	-0.004	12.00143	-0.02014	-0.00331	0.03001	-0.00441	0.21121	0.33429	-0.1402	-0.4367
199	45.31	-0.003	12.02333	-0.03043	-0.04109	0.00400	-0.00427	0.17140	0.33339	-0.1649	-0.4402
200	45.00	-0.004	12.03400	-0.04930	0.03386	0.02023	-0.00445	0.18330	0.33435	-0.1659	-0.4452
201	45.06	-0.000	12.01401	-0.03040	-0.03340	0.03795	-0.00354	0.18993	0.33499	-0.1506	-0.4421
202	45.18	-0.004	12.03035	-0.03040	-0.00001	0.04039	-0.00451	0.17104	0.33470	-0.1406	-0.4362
203	45.09	-0.004	12.02011	-0.03303	-0.00033	0.03054	-0.00450	0.21000	0.33436	-0.1394	-0.4518
204	45.04	-0.005	12.03044	-0.03199	-0.00024	0.03010	-0.00447	0.18039	0.33403	-0.1856	-0.4457
205	47.01	-0.001	12.02789	-0.04115	-0.03104	0.02723	-0.00421	0.17930	0.33010	-0.1882	-0.4407
206	47.12	-0.004	12.04242	-0.04013	-0.12190	0.01130	-0.00400	0.19042	0.33147	-0.1555	-0.4401
207	47.20	0.000	12.03701	-0.02009	-0.03242	0.03044	-0.00403	0.22223	0.33335	-0.1302	-0.4272
208	47.30	-0.000	12.03344	-0.02023	-0.02392	0.00771	-0.00384	0.17353	0.33333	-0.1832	-0.4385
209	47.37	-0.003	12.04034	-0.04407	0.00014	0.01170	-0.00401	0.18002	0.33537	-0.1735	-0.4384
210	47.47	-0.005	12.05330	-0.04035	-0.13990	0.00057	-0.00319	0.15500	0.33011	-0.1053	-0.4257
211	47.34	-0.003	12.04341	-0.04400	0.00351	0.01000	-0.00405	0.20009	0.33342	-0.1523	-0.4375
212	47.03	-0.003	12.03012	-0.04194	0.00001	1.00057	-0.00241	0.18811	0.33011	-0.1730	-0.4335
213	47.10	-0.003	12.03013	-0.03753	0.01501	0.01001	-0.00346	0.21179	0.33057	-0.1478	-0.4300
214	47.19	-0.000	12.04003	-0.03091	-0.02304	0.00334	-0.00232	0.17953	0.33750	-0.1797	-0.4309
215	47.09	-0.004	12.01123	-0.04307	-0.02000	1.00047	-0.00110	0.19009	0.33030	-0.1097	-0.4277
216	47.07	-0.003	12.04201	-0.02234	0.00357	0.00033	-0.00115	0.22320	0.33042	-0.1572	-0.4193
217	48.07	-0.004	12.07224	-0.03002	0.04420	0.02298	0.00120	0.19175	0.40030	-0.2025	-0.4196
218	48.15	-0.000	12.08012	-0.03424	0.02405	0.00001	0.00117	0.22340	0.40200	-0.1810	-0.4252
219	48.23	-0.004	12.05012	-0.01003	0.01714	1.01254	0.00453	0.22543	0.41194	-0.1651	-0.4118
220	48.33	-0.002	12.07300	-0.02174	0.00330	0.01041	0.00420	0.22005	0.41209	-0.1704	-0.4176
221	48.41	0.001	12.05335	-0.01179	0.03579	0.00832	0.00524	0.21791	0.41000	-0.1695	-0.4371
222	48.32	0.003	12.04770	-0.01170	0.02071	0.04400	-0.00113	0.23048	0.41109	-0.1722	-0.5361
223	48.39	0.003	12.04250	-0.00324	0.00039	0.03039	-0.00100	0.23041	0.41342	-0.1732	-0.5377
224	48.01	0.003	12.13213	-0.01210	0.00074	0.00074	-0.00110	0.23123	0.40023	-0.1730	-0.5450
225	48.15	0.000	12.30043	-0.14510	0.03170	1.04500	-0.00120	0.25344	0.41136	-0.2112	-0.5575
226	48.08	-0.003	12.04990	-0.00004	-0.01304	1.00397	-0.00358	0.22241	0.40004	-0.1008	-0.5783
227	48.09	0.002	12.05110	-0.00075	0.04722	1.03933	-0.00305	0.24071	0.41719	-0.2252	-0.5779
228	47.02	0.001	12.04330	-0.01370	0.00033	1.00484	-0.00253	0.24003	0.40622	-0.1003	-0.5757
229	47.13	0.004	12.03103	-0.01123	0.02341	1.03035	-0.00124	0.22026	0.40170	-0.1852	-0.5828
230	47.21	0.000	12.03041	-0.00354	0.01534	1.01103	-0.00175	0.24535	0.40501	-0.2040	-0.5908

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 29 CONF 0.0 CONFIG 0.0 L DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	DELTA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
231	49.26	0.00	13.0300	-7.3948	0.1074	2.1175	-0.0318	0.2667	0.4500	-0.1879	-0.5826
232	49.90	-0.01	13.0102	-7.3580	0.0910	2.0749	-0.0424	0.2670	0.4505	-0.1815	-0.5748
233	49.47	-0.03	13.1005	-7.4099	-0.0480	2.0565	-0.0376	0.2705	0.4603	-0.1759	-0.5704
234	49.34	-0.04	13.1210	-7.4000	-0.2320	2.0409	-0.0375	0.2753	0.4535	-0.2140	-0.5683
235	49.00	-0.01	13.0913	-7.4337	0.0490	2.0696	-0.0474	0.2652	0.4648	-0.2098	-0.5727
236	49.72	-0.02	13.0210	-7.4041	-0.0787	2.0009	-0.0419	0.2734	0.4665	-0.1951	-0.5747
237	49.03	-0.03	13.0330	-0.3062	-0.3725	2.1073	-0.0350	0.2269	0.4723	-0.2463	-0.5739
238	49.91	-0.05	13.0221	-7.4017	-0.3301	2.0908	-0.0354	0.2744	0.4697	-0.1953	-0.5719
239	50.00	-0.01	13.0035	-0.0120	0.0753	2.0760	-0.0301	0.2707	0.4723	-0.2016	-0.5730
240	50.10	-0.04	13.0030	-0.3399	-0.1315	2.0525	-0.0227	0.2727	0.4737	-0.1980	-0.5741
241	50.20	-0.06	13.1079	-0.2330	-0.0497	2.0110	-0.0171	0.2953	0.4752	-0.2319	-0.5805
242	50.20	-0.06	13.0977	-0.1201	-0.3701	2.0409	-0.0173	0.2977	0.4756	-0.2279	-0.5804
243	50.13	-0.10	13.1900	-0.0953	-0.0057	2.0375	-0.0123	0.3496	0.4632	-0.1187	-0.5705
244	50.93	-0.06	13.0262	-0.1073	-0.0983	2.0508	-0.0240	0.2438	0.4719	-0.2231	-0.5715
245	50.59	-0.05	13.0240	-0.3291	-0.2414	2.0551	-0.0306	0.2638	0.4741	-0.2133	-0.5481
246	50.09	-0.07	13.0133	-7.3279	-0.4746	2.0493	-0.0474	0.2201	0.4660	-0.2427	-0.5500
247	50.71	-0.03	13.0030	-7.3043	-0.2427	1.9825	-0.0424	0.2601	0.4657	-0.2056	-0.5164
248	50.81	-0.06	13.0325	-7.3078	-0.2780	1.9516	-0.0265	0.2472	0.4687	-0.2215	-0.5288
249	50.90	-0.05	13.0200	-7.3558	-0.2841	1.9192	-0.0363	0.2546	0.4680	-0.2134	-0.5135
250	50.98	-0.04	13.0367	-7.3343	-0.1526	1.8938	-0.0429	0.2450	0.4659	-0.2203	-0.5150
251	51.04	-0.05	13.0200	-7.3832	-0.2007	1.7254	-0.0328	0.2749	0.4617	-0.1668	-0.5329
252	51.14	-0.04	13.0219	-7.3707	-0.1390	1.8243	-0.0334	0.2529	0.4642	-0.2073	-0.5310
253	51.24	-0.05	13.0065	-7.3372	-0.3557	2.0479	-0.0364	0.2275	0.4539	-0.2264	-0.5281
254	51.31	-0.04	13.0277	-7.3263	-0.4000	2.0120	-0.0367	0.2306	0.4591	-0.2223	-0.5192
255	51.37	-0.05	13.2331	-7.0090	-0.1715	1.2209	-0.0361	0.2071	0.4651	-0.1960	-0.5346
256	51.40	0.00	13.2509	-7.0803	0.3112	1.0862	-0.0399	0.2523	0.4607	-0.2134	-0.5393
257	51.54	-0.04	13.2515	-7.0300	0.0221	0.9236	-0.0326	0.2349	0.4631	-0.2252	-0.5213
258	51.62	-0.03	13.2299	-7.0028	0.0408	0.9712	-0.0371	0.2597	0.4605	-0.2048	-0.5271
259	51.70	-0.02	13.2140	-7.0337	0.2106	0.9358	-0.0379	0.2586	0.4530	-0.1946	-0.5012
260	51.77	-0.01	13.1961	-7.0147	0.3317	0.7500	-0.0363	0.2514	0.4515	-0.2001	-0.5033
261	51.81	-0.03	13.1780	-7.0876	-0.0942	0.7900	-0.0337	0.2652	0.4484	-0.1852	-0.4999
262	51.94	-0.03	13.0170	-6.9359	0.3020	0.7617	-0.0297	0.2459	0.4432	-0.2213	-0.4942
263	52.03	-0.04	13.0049	-6.9309	0.3320	0.7672	-0.0295	0.2660	0.4476	-0.1618	-0.4962
264	52.11	-0.02	13.0172	-6.9348	0.1018	0.6918	-0.0290	0.2516	0.4403	-0.1947	-0.4928
265	52.20	-0.02	13.0300	-6.9367	0.3037	0.6713	-0.0279	0.2497	0.4430	-0.2019	-0.4872
266	52.27	-0.02	13.0103	-6.9034	0.1716	0.7227	-0.0275	0.2655	0.4403	-0.1808	-0.4906
267	52.30	-0.03	13.2127	-6.9471	0.0034	0.6803	-0.0302	0.2411	0.4435	-0.2044	-0.4868
268	52.49	-0.01	13.0774	-6.9034	0.3009	0.5117	-0.0301	0.2611	0.4432	-0.1871	-0.4890
269	52.39	-0.02	13.1078	-6.7053	0.4220	0.5394	-0.0320	0.2559	0.4474	-0.1915	-0.4796
270	52.62	-0.04	13.2390	-6.9432	0.3309	0.4998	-0.0330	0.2518	0.4490	-0.1972	-0.4862
271	52.69	-0.04	13.1570	-6.9001	0.0933	0.4140	-0.0335	0.2408	0.4351	-0.2123	-0.4874
272	52.78	-0.01	13.0598	-6.8944	0.4714	0.5347	-0.0300	0.2636	0.4493	-0.1857	-0.4874
273	52.85	-0.02	13.1039	-6.9347	0.2112	0.5499	-0.0305	0.2454	0.4460	-0.2006	-0.4900
274	52.93	-0.02	13.1191	-6.9309	0.2050	0.6791	-0.0300	0.2533	0.4474	-0.2119	-0.4798
275	53.03	-0.04	13.2230	-6.9330	-0.0021	0.4309	-0.0339	0.2434	0.4498	-0.2044	-0.4784
276	53.10	0.01	13.2194	-6.9349	0.4343	0.4808	-0.0335	0.2447	0.4508	-0.2021	-0.4796

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 59 MACH 1.70 PHI 0.0 DUMP 0.0 L 0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
277	53.18	-0.04	14.0193	-0.0736	0.2036	0.2788	0.0539	0.2385	0.4501	-0.2116	-0.4745
278	53.43	-0.01	14.0231	-0.0784	0.2044	0.2828	0.0539	0.2371	0.4501	-0.2100	-0.4764
279	53.35	-0.04	14.0209	-0.0811	0.2134	0.2824	0.0534	0.2368	0.4501	-0.2113	-0.4802
280	53.44	-0.01	14.0202	-0.0842	0.2148	0.2805	0.0532	0.2447	0.4505	-0.2058	-0.4787
281	53.54	-0.03	14.0201	-0.0912	0.1993	0.2847	0.0541	0.2190	0.4523	-0.2333	-0.4822
282	53.58	-0.02	14.0180	-0.0864	0.2001	0.2815	0.0539	0.2188	0.4528	-0.2092	-0.4842
283	53.50	0.00	14.0220	-0.0810	0.2042	0.2875	0.0543	0.2315	0.4507	-0.2192	-0.4771
284	53.71	-0.03	14.0204	-0.0835	0.1970	0.2805	0.0541	0.2459	0.4500	-0.2101	-0.4761
285	53.65	-0.01	14.0210	-0.0807	0.2096	0.2821	0.0549	0.2455	0.4509	-0.2094	-0.4808
286	53.78	-0.02	14.0208	-0.0862	0.1965	0.2791	0.0549	0.2476	0.4504	-0.2128	-0.4805
287	54.01	-0.03	14.0230	-0.0795	0.2080	0.2781	0.0543	0.2507	0.4523	-0.2210	-0.4755
288	54.10	-0.02	14.0201	-0.0841	0.1814	0.2803	0.0552	0.2497	0.4511	-0.2214	-0.4767
289	54.18	-0.02	14.0194	-0.0819	0.1837	0.2874	0.0555	0.2481	0.4523	-0.2082	-0.4794
290	54.28	-0.01	14.0139	-1.0874	0.2297	0.3039	0.0553	0.2197	0.4533	-0.2336	-0.4811
291	54.32	-0.03	14.0230	-0.0720	0.1978	0.3501	0.0547	0.2322	0.4485	-0.2163	-0.4708
292	54.42	-0.01	14.0240	-0.0980	0.2306	0.3401	0.0541	0.2090	0.4371	-0.2331	-0.4813
293	54.49	-0.02	14.0234	-1.0307	0.2218	0.3028	0.0554	0.2055	0.4231	-0.1896	-0.4828
294	54.51	0.00	14.0234	-1.0054	0.1909	0.2970	0.0552	0.2204	0.4202	-0.1996	-0.4823
295	54.61	-0.02	14.0234	-1.0893	0.2130	0.2728	0.0554	0.2163	0.4236	-0.2053	-0.4843
296	54.74	-0.02	14.0240	-1.1143	0.1909	0.3479	0.0551	0.2171	0.4265	-0.2094	-0.4875
297	54.80	-0.01	14.0214	-1.1111	0.1757	0.3249	0.0548	0.2319	0.4264	-0.1945	-0.4912
298	54.88	-0.01	14.0244	-1.1913	0.1571	0.4447	0.0545	0.2379	0.4256	-0.1877	-0.4944
299	54.98	-0.02	14.0176	-1.2126	0.2030	0.4008	0.0550	0.2179	0.4253	-0.2074	-0.4913
300	55.04	-0.02	14.0201	-1.2011	0.2130	0.3400	0.0551	0.2052	0.4241	-0.2169	-0.4910
301	55.13	-0.02	14.0169	-1.2218	0.2080	0.4004	0.0549	0.2110	0.4233	-0.2123	-0.5033
302	55.13	-0.02	14.0194	-1.1958	0.2176	0.1823	0.0555	0.2604	0.4103	-0.1899	-0.4903
303	55.27	-0.02	14.0180	-1.2481	0.1940	0.4250	0.0546	0.2136	0.4258	-0.2072	-0.4959
304	55.35	-0.04	14.0163	-1.3302	0.1417	0.4013	0.0550	0.2744	0.4230	-0.1988	-0.4979
305	55.43	-0.01	14.0171	-1.2389	0.2254	0.3491	0.0551	0.2013	0.4201	-0.2188	-0.4932
306	55.52	-0.01	14.0164	-1.4371	0.2333	0.3100	0.0547	0.2491	0.4156	-0.1865	-0.5029
307	55.57	-0.02	14.0193	-1.2015	0.1857	0.2837	0.0556	0.2010	0.4119	-0.2109	-0.4937
308	55.65	-0.03	14.0184	-1.2065	0.1189	0.4080	0.0554	0.2191	0.4133	-0.1962	-0.4948
309	55.73	-0.02	14.0178	-1.2168	0.1010	0.2700	0.0559	0.2164	0.4171	-0.2007	-0.4949
310	55.80	-0.03	14.0169	-1.2376	0.0673	0.3532	0.0553	0.2124	0.4152	-0.2028	-0.5011
311	55.88	-0.03	14.0164	-1.2165	0.1362	0.2883	0.0561	0.2043	0.4122	-0.2079	-0.4940
312	55.97	-0.01	14.0142	-1.2392	0.2454	0.2931	0.0557	0.2113	0.4085	-0.1970	-0.4982
313	56.05	-0.02	14.0144	-1.2348	0.1974	0.2974	0.0554	0.1977	0.4092	-0.2115	-0.4986
314	56.13	-0.02	14.0130	-1.2482	0.1870	0.3129	0.0557	0.1954	0.4052	-0.2088	-0.4983
315	56.20	-0.02	14.0141	-1.2400	0.2189	0.2841	0.0557	0.1924	0.4055	-0.2131	-0.4962
316	56.26	-0.02	14.0129	-1.2439	0.1908	0.1930	0.0563	0.2048	0.4107	-0.2059	-0.4924
317	56.33	-0.04	14.0119	-1.2345	0.0190	0.2197	0.0559	0.1967	0.4174	-0.2207	-0.5011
318	56.43	-0.03	14.0119	-1.2000	0.0842	0.3905	0.0556	0.1708	0.4033	-0.2265	-0.4941
319	56.51	-0.02	14.0164	-1.2475	0.1000	0.2000	0.0560	0.2019	0.4156	-0.2137	-0.4966
320	56.59	-0.01	14.0200	-1.2530	0.2259	0.2985	0.0559	0.1687	0.4104	-0.2417	-0.4949
321	56.73	-0.03	14.0192	-1.2221	0.1119	0.2503	0.0577	0.1907	0.4120	-0.2033	-0.4747
322	56.77	-0.04	14.0205	-1.2360	-0.0154	0.3907	0.0566	0.1808	0.4140	-0.2338	-0.4889

PAGE 4 OF 5
SHEET 0 OF 0

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAID-0 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
1 57 1.00 1.0 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ALP
323	56.03	-0.04	15.1430	-1.1047	0.1008	-0.1789	0.0596	0.1370	0.4197	-0.2827	-0.4731
324	56.93	-0.04	15.1430	-1.2263	0.0760	-0.3479	0.0595	0.1594	0.4179	-0.2565	-0.4745
325	57.02	-0.01	15.2251	-1.1834	-0.1128	-0.5114	0.0595	0.1515	0.4217	-0.2702	-0.4706
326	57.08	-0.00	15.2414	-1.0594	-0.2479	-0.7100	0.0599	0.1491	0.4187	-0.2736	-0.4632
327	57.11	-0.03	15.3360	-1.0063	0.1424	-0.2792	0.0598	0.1388	0.4201	-0.2813	-0.4614
328	57.24	-0.04	15.2130	-1.1727	-0.3128	-0.4495	0.0617	0.1381	0.4230	-0.2708	-0.4714
329	57.32	-0.00	15.4149	-1.0599	-0.1870	-0.3114	0.0597	0.1420	0.4251	-0.2631	-0.4807
330	57.40	-0.04	15.3101	-1.1382	0.0193	-0.4057	0.0603	0.1349	0.4214	-0.2865	-0.4772
331	57.48	-0.00	15.2248	-1.2319	-0.3473	-0.6057	0.0619	0.1446	0.4236	-0.2790	-0.4750
332	57.52	-0.03	15.0341	-1.2308	-0.0525	-0.2572	0.0528	0.1498	0.4158	-0.2800	-0.4807
333	57.60	-0.04	15.1424	-1.2341	-0.0147	-0.2424	0.0536	0.1387	0.4121	-0.2734	-0.4973
334	57.69	-0.00	14.9824	-1.1112	-0.1301	-0.4219	0.0670	0.1546	0.4132	-0.2586	-0.4789
335	57.73	-0.02	15.1721	-1.2160	0.2209	-0.3386	0.0592	0.1160	0.4136	-0.2547	-0.4955
336	57.81	-0.01	15.0317	-1.2704	-0.2542	-0.2818	0.0606	0.1219	0.4060	-0.2841	-0.4934
337	57.88	-0.03	15.0735	-1.2052	-0.0284	-0.4422	0.0615	0.1472	0.4089	-0.2617	-0.4913
338	57.93	-0.03	15.1104	-1.2063	-0.0736	-0.2079	0.0670	0.0921	0.3941	-0.3020	-0.4870
339	58.03	-0.04	15.0852	-1.2061	-0.0340	0.1721	0.0579	0.1172	0.4019	-0.2847	-0.4930
340	58.09	-0.03	15.1283	-1.2330	0.0034	-0.1554	0.0672	0.1006	0.4018	-0.2953	-0.4912
341	58.17	-0.01	15.1546	-1.2353	-0.2305	-0.1406	0.0609	0.1047	0.3981	-0.2935	-0.4907
342	58.24	-0.03	15.1730	-1.2043	-0.2221	-0.0016	0.0527	0.1197	0.4026	-0.2629	-0.4983
343	58.32	-0.04	15.1107	-1.2006	-0.0176	0.0957	0.0475	0.1132	0.4012	-0.2680	-0.4896
344	58.40	-0.01	15.0994	-1.1921	-0.0305	0.0562	0.0414	0.0836	0.3996	-0.3104	-0.4853
345	58.49	-0.02	15.0171	-1.2715	0.1941	-0.1138	0.0596	0.0798	0.3906	-0.3170	-0.4846
346	58.58	-0.04	15.0150	-1.3014	0.1611	0.2449	0.0585	0.0763	0.3965	-0.3202	-0.4736
347	58.63	-0.02	15.2273	-1.3093	0.0453	0.1203	0.0472	0.1053	0.4003	-0.3011	-0.4789
348	58.68	-0.03	15.2194	-1.2201	0.1013	-0.0303	0.0477	0.1329	0.3999	-0.2971	-0.4832
349	58.68	-0.00	15.3005	-1.1917	-0.1284	-0.0508	0.0419	0.0830	0.3984	-0.3128	-0.4845
350	58.61	-0.03	15.2511	-1.2930	-0.0311	0.1878	0.0530	0.1163	0.4161	-0.3059	-0.4816
351	58.58	-0.00	15.2071	-1.2927	-0.3416	-0.1021	0.0469	0.1080	0.4026	-0.2947	-0.4927

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 4 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NAIU-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 54 1.00 0.1 0.0 SIMPLE 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF1	CM1	CA1	ALPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-5.96	-0.01	-0.0149	0.0025	0.0251	-0.1713	-1.7192	-0.2549	-0.0341	-0.1564	0.1336	0.6135
2	-5.97	0.01	-0.0170	0.0029	0.0243	-0.1412	-1.4294	-0.2070	-0.0349	-0.1035	0.1305	0.6123
3	-5.93	0.01	-0.0124	0.0025	0.0240	-0.2067	-2.0990	-0.2238	-0.0316	-0.1433	0.1410	0.6403
4	-4.99	0.01	-0.0098	0.0026	0.0275	-0.0349	-5.6875	-0.1044	-0.0237	-0.1149	0.1306	0.6991
5	-3.97	0.01	-0.0141	0.0020	0.0200	-0.1419	-1.4752	-0.1266	-0.0217	-0.0962	0.1715	0.7591
6	-2.95	0.01	-0.0100	0.0026	0.0216	-0.3032	-3.0727	-0.0730	-0.0145	-0.0716	0.1996	0.9808
7	-1.00	0.01	-0.0111	0.0017	0.0173	-0.1532	-1.5588	-0.0303	-0.0063	-0.0469	0.2740	1.5446
8	-1.03	0.01	-0.0003	0.0010	0.0199	-0.2391	-2.1507	0.0144	-0.0020	-0.0221	-0.2259	-1.7823
9	-0.04	0.01	-0.0100	0.0020	0.0190	-0.2301	-1.9000	0.0402	0.0016	-0.0020	0.0398	-0.0498
10	0.93	0.01	-0.0020	0.0017	0.0131	-0.0820	-0.8329	0.0686	0.0030	0.0201	0.0842	0.3023
11	1.91	0.00	-0.0111	0.0028	0.0189	-0.2529	-1.5225	0.1201	0.0131	0.0459	0.1042	0.3817
12	2.99	0.00	-0.0109	0.0023	0.0136	-0.2114	-1.9995	0.1629	0.0139	0.0604	0.1167	0.4198
13	3.97	0.00	-0.0097	0.0018	0.0133	-0.1650	-1.8004	0.2205	0.0207	0.0993	0.1213	0.4505
14	4.80	0.00	-0.0131	0.0018	0.0136	-0.0784	-1.0534	0.2675	0.0320	0.1228	0.1194	0.4588
15	5.09	0.00	-0.0108	0.0003	0.0100	-0.0278	-1.3370	0.3372	0.0301	0.1578	0.1129	0.4679
16	6.06	-0.00	-0.0227	0.0003	0.0100	-0.2604	-0.9995	0.3552	0.0421	0.1809	0.1005	0.4730
17	7.00	0.01	-0.0203	0.0000	0.0113	-0.0290	-0.5567	0.4082	0.0470	0.2217	0.1003	0.4735
18	8.02	-0.00	-0.0231	-0.0000	0.0100	0.0289	-0.4225	0.4155	0.0530	0.2459	0.0970	0.4731
19	9.04	0.00	-0.0226	-0.0011	0.0108	0.0467	-0.3779	0.5878	0.0521	0.2713	0.0886	0.4618
20	10.02	0.00	-0.0130	-0.0002	0.0144	0.0120	-0.7231	0.6500	0.0526	0.3007	0.0802	0.4583
21	11.09	-0.00	-0.0096	0.0005	0.0102	-0.0521	-1.0875	0.7121	0.0530	0.3234	0.0744	0.4542
22	12.02	-0.00	-0.0104	-0.0001	0.0111	0.0001	-0.8700	0.7890	0.0528	0.3447	0.0691	0.4512
23	13.04	-0.00	-0.0102	-0.0002	0.0100	0.0130	-0.5714	0.8297	0.0521	0.3726	0.0628	0.4490
24	14.03	0.00	-0.0233	-0.0003	0.0076	0.0128	-0.3234	0.8792	0.0535	0.3931	0.0574	0.4471
25	15.01	0.00	-0.0100	0.0004	0.0096	-0.0213	-0.3213	0.9369	0.0479	0.4190	0.0511	0.4473
26	16.00	-0.00	-0.0095	-0.0020	0.0082	0.0078	-0.2102	0.9808	0.0480	0.4320	0.0469	0.4405
27	17.02	-0.00	-0.0295	-0.0034	0.0181	0.1498	-0.2740	1.0393	0.0503	0.4369	0.0498	0.4349
28	18.03	-0.00	-0.0247	-0.0019	0.0139	0.0419	-0.1305	1.0490	0.0474	0.4515	0.0451	0.4301
29	19.00	-0.01	-0.0163	-0.0004	0.0087	0.0332	-0.1030	1.0030	0.0410	0.4614	0.0376	0.4173
30	20.03	0.01	-0.0313	-0.0051	0.0233	0.1520	-0.1034	1.1500	0.0392	0.4715	0.0341	0.4100
31	21.03	0.00	-0.0178	-0.0005	0.0110	0.0281	-0.1311	1.1078	0.0369	0.4800	0.0310	0.4042
32	22.02	0.01	-0.0332	-0.0053	-0.0021	0.1037	0.0303	1.1491	0.0350	0.4875	0.0276	0.4015
33	23.00	0.01	-0.0465	-0.0051	-0.0117	0.1034	0.2417	1.2421	0.0330	0.4951	0.0242	0.3986
34	24.03	0.03	0.1262	0.0204	0.0084	0.0709	0.0898	1.0049	0.0210	0.3950	0.0206	0.3767
35	25.97	0.04	0.1093	0.0130	0.1109	0.3700	0.0340	0.9997	0.0103	0.3717	0.0165	0.3718
36	27.00	0.05	0.1975	0.0192	0.1205	0.0964	0.0938	1.0000	0.0109	0.3707	0.0108	0.3737
37	28.00	0.06	0.2301	0.0230	0.1613	0.3993	0.0249	1.0181	0.0157	0.3758	0.0154	0.3691
38	28.98	0.05	0.2484	0.0243	0.1335	0.0980	0.0195	1.0203	0.0151	0.3763	0.0147	0.3686
39	29.98	0.05	0.2315	0.0229	0.1403	0.1013	0.0498	1.0318	0.0157	0.3777	0.0152	0.3660
40	29.97	0.05	0.2300	0.0220	0.1330	0.1124	0.0100	1.0040	0.0151	0.3675	0.0151	0.3660
41	28.97	0.05	0.1933	0.0138	0.1290	0.0809	0.0826	1.0094	0.0100	0.3901	0.0147	0.3636
42	26.41	0.04	0.1000	0.0170	0.1226	0.0935	0.0497	1.1071	0.0101	0.4074	0.0146	0.3680
43	23.89	0.05	0.2001	0.0127	0.1334	0.0948	0.0988	1.1017	0.0130	0.4023	0.0144	0.3652
44	23.89	0.05	0.2370	0.0230	0.1497	0.0937	0.0310	1.0074	0.0150	0.3808	0.0141	0.3623
45	20.93	0.05	0.1053	0.0130	0.0823	0.1003	0.7777	1.2049	0.0171	0.4456	0.0142	0.3699
46	29.41	0.05	0.1690	0.0100	0.1130	0.0998	0.0000	1.1707	0.0103	0.4266	0.0139	0.3644

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NUMBER PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 39 1.600 1.7 0.0 0 DEGREES 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CY1	CA1	ALPF1	YCPF1	CNF2	CM2	CA2	XLPF2	YCPF2
47	29.62	0.03	0.2010	0.0152	0.1007	0.0545	0.0029	1.2120	0.0136	0.4455	0.0137	0.3676
48	29.94	0.00	0.1949	0.0149	0.1009	0.0504	0.0074	1.2139	0.0105	0.4466	0.0138	0.3664
49	29.97	0.03	0.1973	0.0174	0.1173	0.0903	0.0018	1.2041	0.0152	0.4470	0.0126	0.3630
50	29.73	0.04	0.0952	0.0050	0.0000	0.1050	0.7744	1.2072	0.0103	0.4796	0.0147	0.3720
51	29.80	0.04	0.1177	0.0112	0.0075	0.0951	0.7419	1.2073	0.0101	0.4678	0.0147	0.3691
52	30.02	0.03	0.1019	0.0149	0.1166	0.0892	0.7003	1.2096	0.0134	0.4557	0.0122	0.3646
53	30.15	0.04	0.1207	0.0125	0.0029	0.1037	0.7373	1.2020	0.0156	0.4722	0.0123	0.3682
54	30.30	0.00	0.1097	0.0154	0.1210	0.0998	0.0725	1.2100	0.0143	0.4504	0.0118	0.3603
55	30.44	0.01	0.1903	0.0178	0.1201	0.0857	0.0041	1.2049	0.0131	0.4471	0.0123	0.3622
56	30.58	0.06	0.1922	0.0206	0.1178	0.0854	0.0093	1.2035	0.0143	0.4473	0.0116	0.3635
57	30.70	0.01	0.2192	0.0200	0.1231	0.0820	0.0209	1.2013	0.0144	0.4516	0.0116	0.3637
58	30.84	0.06	0.2092	0.0209	0.1050	0.0990	0.0010	1.1918	0.0119	0.4425	0.0105	0.3557
59	30.98	0.01	0.2341	0.0291	0.1192	0.1020	0.0133	1.1899	0.0125	0.4207	0.0108	0.3613
60	31.12	0.01	0.2091	0.0336	0.1176	0.1032	0.0987	1.1809	0.0145	0.4006	0.0102	0.3549
61	31.27	0.06	0.2966	0.0277	0.1179	0.0950	0.0050	1.2078	0.0128	0.4348	0.0100	0.3603
62	31.40	0.01	0.2334	0.0366	0.1176	0.1007	0.0968	1.1892	0.0111	0.3952	0.0099	0.3534
63	31.53	0.08	0.2649	0.0279	0.1177	0.0961	0.0748	1.1909	0.0131	0.4552	0.0105	0.3639
64	31.68	0.01	0.2579	0.0260	0.1213	0.1041	0.0130	1.2041	0.0135	0.4079	0.0105	0.3644
65	31.82	0.01	0.2190	0.0337	0.1171	0.1078	0.0749	1.2387	0.0120	0.4481	0.0104	0.3617
66	31.96	0.07	0.3043	0.0332	0.1169	0.1050	0.0749	1.2003	0.0122	0.4281	0.0097	0.3634
67	32.09	0.08	0.2924	0.0271	0.1341	0.1103	0.0769	1.3001	0.0129	0.4758	0.0099	0.3660
68	32.22	0.01	0.3209	0.0366	0.1019	0.1147	0.0009	1.2729	0.0119	0.4008	0.0094	0.3620
69	32.33	0.07	0.3330	0.0374	0.1139	0.1113	0.0775	1.2570	0.0112	0.4535	0.0089	0.3605
70	32.50	0.01	0.3004	0.0379	0.1101	0.1230	0.0772	1.2917	0.0112	0.4701	0.0087	0.3639
71	32.62	0.01	0.2923	0.0309	0.1127	0.1293	0.0707	1.3027	0.0116	0.4758	0.0091	0.3637
72	32.76	0.01	0.1039	0.0263	0.1113	0.1443	0.0053	1.3390	0.0122	0.4917	0.0091	0.3672
73	32.89	0.03	0.2172	0.0303	0.1252	0.1390	0.0039	1.3208	0.0119	0.4646	0.0090	0.3652
74	33.03	0.03	0.2293	0.0350	0.1308	0.1200	0.0840	1.3496	0.0116	0.4859	0.0087	0.3654
75	33.16	0.03	0.1880	0.0262	0.1072	0.1406	0.5140	1.3317	0.0121	0.4678	0.0091	0.3663
76	33.29	0.04	0.1931	0.0233	0.0777	0.1022	0.5333	1.3453	0.0117	0.4936	0.0087	0.3670
77	33.41	0.06	0.1308	0.0270	0.1029	0.1496	0.5092	1.3302	0.0123	0.5013	0.0091	0.3697
78	33.54	0.03	0.0338	0.0095	0.0774	0.2029	0.0155	1.3733	0.0137	0.5078	0.0100	0.3698
79	33.68	0.04	0.0263	0.0050	0.0761	0.1999	0.0203	1.3733	0.0137	0.5078	0.0100	0.3698
80	33.78	0.02	0.0200	0.0074	0.0101	0.1701	0.0000	1.3032	0.0135	0.5042	0.0099	0.3699
81	33.92	0.04	0.0133	0.0050	0.0109	0.2212	1.5714	1.3023	0.0135	0.5123	0.0098	0.3706
82	34.04	0.03	0.0011	0.0025	0.0101	2.2730	9.1310	1.3929	0.0134	0.5209	0.0102	0.3740
83	34.18	0.02	-0.0010	-0.0050	-0.0027	0.0838	0.0000	1.4281	0.0101	0.5393	0.0113	0.3776
84	34.29	0.03	0.0070	0.0039	0.0030	0.1190	0.7230	1.3909	0.0134	0.5220	0.0102	0.3744
85	34.42	0.02	-0.0010	-0.0100	-0.0056	0.1093	0.0341	1.4200	0.0157	0.5348	0.0111	0.3764
86	34.54	0.01	0.0050	0.0012	0.0073	0.0210	0.8174	1.4344	0.0130	0.5414	0.0105	0.3774
87	34.69	0.01	0.0070	-0.0000	0.0019	-0.0120	0.0103	1.4315	0.0153	0.5426	0.0107	0.3792
88	34.80	0.03	-0.0204	-0.0053	0.0000	0.1414	-0.0000	1.4019	0.0103	0.5595	0.0112	0.3827
89	34.93	0.02	-0.0028	-0.0059	0.0072	2.1080	-9.7143	1.4592	0.0139	0.5576	0.0109	0.3821
90	35.05	0.03	0.1042	-0.0011	0.1171	-0.0307	0.7134	1.4113	0.0107	0.5271	0.0076	0.3735
91	35.17	0.01	0.0349	-0.0102	0.0303	-0.2424	1.4304	1.4498	0.0129	0.5506	0.0089	0.3798
92	35.30	-0.00	-0.0020	-0.0145	0.0123	0.5474	-0.0042	1.4655	0.0143	0.5614	0.0098	0.3829

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(TRANSONIC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 5F 1.000 1.01 MACH 0.0 NO. RATIO-0.0 PHI 0.0 CONF 0.0 CONFIGURATION L 0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNA1	CM1	CY1	ACPF1	YCPF1	CNF2	CM2	CL2	ACPF2	YCPF2
93	35.42	-0.01	-0.0691	-0.0192	-0.0180	0.2280	0.2110	1.4628	0.0145	0.5569	0.0099	0.3821
94	35.58	-0.00	-0.0514	-0.0148	0.0085	0.2077	-0.1063	1.4601	0.0145	0.5581	0.0094	0.3862
95	35.69	-0.01	-0.0393	-0.0113	-0.0045	0.3008	0.0760	1.4602	0.0134	0.5580	0.0092	0.3821
96	35.79	0.02	-0.0619	-0.0217	-0.0041	0.2670	0.0578	1.4450	0.0122	0.5469	0.0085	0.3765
97	35.92	0.00	0.0023	-0.0055	0.0059	-0.4108	2.0308	1.4504	0.0126	0.5556	0.0087	0.3810
98	36.03	0.02	0.0279	-0.0163	0.0328	-0.4271	1.7017	1.4203	0.0103	0.5365	0.0072	0.3701
99	36.18	-0.00	-0.0272	-0.0179	0.0236	0.4403	-0.7347	1.3658	0.0098	0.5151	0.0071	0.3717
100	36.30	-0.01	-0.1516	-0.0281	-0.0279	0.2033	0.2266	1.4416	0.0115	0.5405	0.0080	0.3791
101	36.40	-0.02	-0.0081	-0.0102	0.0272	2.0000	-3.3280	1.3888	0.0090	0.5162	0.0065	0.3723
102	36.53	-0.03	-0.1463	-0.0220	-0.0351	0.1793	0.2134	1.4454	0.0127	0.5501	0.0088	0.3810
103	36.64	-0.02	-0.0659	-0.0158	0.0015	0.3010	-0.0220	1.3974	0.0096	0.5193	0.0069	0.3716
104	36.77	-0.01	-0.0390	-0.0101	0.0103	0.4920	-0.5027	1.3202	0.0071	0.4823	0.0054	0.3653
105	36.87	-0.01	-0.1200	-0.0263	-0.0282	0.2082	0.2231	1.4304	0.0109	0.5374	0.0076	0.3760
106	36.99	0.00	-0.0911	-0.0233	-0.0192	0.2512	0.2098	1.4248	0.0110	0.5360	0.0077	0.3778
107	37.13	-0.03	-0.1421	-0.0209	-0.0293	0.2130	0.2392	1.3981	0.0101	0.5210	0.0072	0.3727
108	37.25	-0.01	-0.0733	-0.0130	-0.0007	0.3143	0.0913	1.3953	0.0091	0.5205	0.0065	0.3767
109	37.37	-0.03	-0.1491	-0.0264	-0.0301	0.1974	0.2550	1.3900	0.0102	0.5180	0.0074	0.3712
110	37.52	0.00	-0.0996	-0.0246	-0.0139	0.2604	0.1420	1.3812	0.0078	0.5080	0.0057	0.3732
111	37.62	-0.03	-0.0504	-0.0197	0.0002	0.3501	-0.2101	1.3250	0.0066	0.4878	0.0050	0.3680
112	37.74	-0.03	-0.0704	-0.0208	-0.0024	0.2701	0.0315	1.3894	0.0086	0.5087	0.0060	0.3715
113	37.88	-0.04	-0.0783	-0.0172	-0.0031	0.2649	0.0493	1.3508	0.0067	0.4984	0.0050	0.3690
114	37.98	-0.02	-0.0564	-0.0208	-0.0120	0.2140	0.1498	1.3429	0.0061	0.4865	0.0046	0.3677
115	38.11	-0.04	-0.0780	-0.0165	-0.0004	0.2491	0.0843	1.3407	0.0071	0.4993	0.0053	0.3702
116	38.24	-0.00	-0.0163	-0.0141	-0.0012	0.2093	0.0187	1.3380	0.0065	0.4930	0.0049	0.3685
117	38.34	-0.02	-0.1218	-0.0253	-0.0243	0.2033	0.1797	1.3874	0.0088	0.5075	0.0063	0.3712
118	38.49	-0.03	-0.1439	-0.0277	-0.0091	0.1931	0.2304	1.4208	0.0123	0.5288	0.0086	0.3771
119	38.60	-0.02	-0.1477	-0.0262	-0.0273	0.1908	0.2200	1.3748	0.0093	0.5114	0.0068	0.3720
120	38.72	-0.00	-0.1116	-0.0269	-0.0724	0.1380	0.3428	1.4108	0.0117	0.5330	0.0083	0.3760
121	38.84	-0.03	-0.0996	-0.0147	-0.0025	0.2903	0.0537	1.3815	0.0065	0.4966	0.0049	0.3697
122	38.91	-0.03	-0.1103	-0.0206	-0.0091	0.1908	0.2996	1.4409	0.0123	0.5462	0.0086	0.3791
123	39.05	-0.03	-0.0973	-0.0341	-0.1053	0.1323	0.4393	1.4222	0.0124	0.5339	0.0087	0.3754
124	39.20	-0.04	-0.1313	-0.0218	-0.0336	0.1698	0.2399	1.3811	0.0091	0.5113	0.0066	0.3702
125	39.31	-0.05	-0.1764	-0.0282	-0.0006	0.1038	0.3990	1.4229	0.0119	0.5344	0.0084	0.3755
126	39.43	-0.05	-0.1568	-0.0269	-0.0356	0.1867	0.3392	1.4047	0.0107	0.5268	0.0076	0.3751
127	39.53	-0.01	-0.2112	-0.0362	-0.0870	0.1401	0.4030	1.4337	0.0129	0.5381	0.0090	0.3753
128	39.68	-0.01	-0.2306	-0.0338	-0.0912	0.1498	0.3983	1.4257	0.0121	0.5341	0.0085	0.3750
129	39.77	-0.00	-0.2318	-0.0347	-0.0974	0.1495	0.4203	1.4444	0.0132	0.5427	0.0092	0.3757
130	39.90	-0.02	-0.1208	-0.0231	-0.0403	0.1865	0.3183	1.4185	0.0108	0.5318	0.0076	0.3749
131	40.00	-0.01	-0.1439	-0.0269	-0.0814	0.1544	0.3874	1.4241	0.0116	0.5310	0.0082	0.3736
132	40.09	-0.00	-0.1613	-0.0278	-0.0872	0.1497	0.3705	1.4397	0.0124	0.5411	0.0090	0.3762
133	40.20	-0.02	-0.2281	-0.0335	-0.0934	0.1283	0.4272	1.4402	0.0140	0.5423	0.0097	0.3765
134	40.33	-0.00	-0.2421	-0.0281	-0.1005	0.1100	0.4972	1.4349	0.0130	0.5408	0.0095	0.3769
135	40.42	-0.03	-0.1859	-0.0187	-0.0315	0.1712	0.2862	1.3874	0.0090	0.5150	0.0065	0.3712
136	40.54	-0.00	-0.1702	-0.0251	-0.0803	0.1514	0.3394	1.4318	0.0130	0.5349	0.0091	0.3755
137	40.63	-0.01	-0.2100	-0.0277	-0.0934	0.1321	0.4449	1.4349	0.0137	0.5413	0.0096	0.3772
138	40.72	-0.04	-0.1135	-0.0210	-0.0339	0.1853	0.3160	1.4194	0.0103	0.5288	0.0074	0.3737

TEST PART MACH RADIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 55 1.50 1.61 0.0 DIAGRAD 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	ACPF1	YCPF1	CNF2	CM2	CB2	ACPF2	YCPF2
139	40.03	-0.03	-0.0659	-0.0275	-0.0955	0.1276	0.9425	1.4291	0.0139	0.5370	0.0097	0.3757
140	40.95	-0.00	-0.0650	-0.0263	-0.0906	0.1254	0.9408	1.4347	0.0146	0.5384	0.0088	0.3753
141	41.01	-0.01	-0.0659	-0.0258	-0.0935	0.1268	0.9307	1.4295	0.0116	0.5348	0.0063	0.3741
142	41.16	-0.03	-0.0751	-0.0273	-0.0965	0.1313	0.9277	1.4425	0.0138	0.5440	0.0096	0.3771
143	41.28	-0.00	-0.0593	-0.0263	-0.0928	0.1218	0.9359	1.4400	0.0126	0.5421	0.0068	0.3764
144	41.39	-0.03	-0.0709	-0.0269	-0.1009	0.1250	0.9339	1.4395	0.0144	0.5380	0.0101	0.3750
145	41.47	-0.00	-0.0682	-0.0250	-0.0901	0.1259	0.9407	1.4434	0.0125	0.5429	0.0087	0.3761
146	41.58	-0.00	-0.0727	-0.0266	-0.1006	0.1280	0.9398	1.4355	0.0121	0.5390	0.0064	0.3755
147	41.69	-0.03	-0.0811	-0.0279	-0.1023	0.1304	0.9355	1.4343	0.0132	0.5408	0.0091	0.3768
148	41.79	-0.03	-0.0721	-0.0267	-0.0944	0.1263	0.9371	1.4388	0.0119	0.5412	0.0083	0.3767
149	41.90	-0.03	-0.0690	-0.0257	-0.0884	0.1263	0.9399	1.4349	0.0135	0.5387	0.0074	0.3750
150	42.00	-0.01	-0.0699	-0.0262	-0.0853	0.1249	0.9418	1.4389	0.0139	0.5388	0.0076	0.3760
151	42.09	-0.01	-0.0729	-0.0301	-0.0860	0.1263	0.9458	1.4431	0.0117	0.5421	0.0081	0.3756
152	42.20	-0.01	-0.0706	-0.0282	-0.0941	0.1258	0.9391	1.4402	0.0132	0.5453	0.0091	0.3765
153	42.30	-0.03	-0.0733	-0.0280	-0.0780	0.1268	0.9431	1.4403	0.0123	0.5414	0.0086	0.3759
154	42.40	-0.03	-0.0720	-0.0274	-0.0903	0.1263	0.9388	1.4393	0.0120	0.5425	0.0083	0.3766
155	42.49	-0.00	-0.0701	-0.0279	-0.1022	0.1253	0.9378	1.4393	0.0091	0.5325	0.0064	0.3751
156	42.59	-0.03	-0.0720	-0.0272	-0.0944	0.1298	0.9373	1.4327	0.0098	0.5374	0.0069	0.3751
157	42.69	-0.01	-0.0696	-0.0278	-0.0932	0.1263	0.9389	1.4295	0.0101	0.5336	0.0071	0.3745
158	42.78	-0.00	-0.0711	-0.0265	-0.0998	0.1272	0.9350	1.4370	0.0124	0.5416	0.0086	0.3764
159	42.88	-0.00	-0.0680	-0.0269	-0.0884	0.1275	0.9345	1.4357	0.0072	0.5310	0.0051	0.3750
160	42.97	-0.01	-0.0690	-0.0260	-0.0948	0.1279	0.9378	1.4304	0.0087	0.5288	0.0048	0.3750
161	43.05	-0.01	-0.0630	-0.0261	-0.0913	0.1269	0.9373	1.3756	0.0061	0.5128	0.0044	0.3733
162	43.15	-0.10	-0.1719	-0.0259	-0.0908	0.1264	0.9367	1.4321	0.0106	0.5306	0.0076	0.3748
163	43.26	-0.00	-0.0723	-0.0261	-0.0919	0.1283	0.9375	1.4269	0.0095	0.5306	0.0067	0.3762
164	43.33	-0.03	-0.0750	-0.0282	-0.1012	0.1274	0.9427	1.4039	0.0065	0.5262	0.0046	0.3743
165	43.42	-0.01	-0.0706	-0.0281	-0.1027	0.1330	0.9428	1.4125	0.0080	0.5306	0.0057	0.3756
166	43.54	-0.03	-0.0758	-0.0271	-0.0945	0.1259	0.9265	1.4210	0.0043	0.5333	0.0030	0.3753
167	43.60	-0.07	-0.1423	-0.0267	-0.0945	0.1293	0.9314	1.4023	0.0046	0.5236	0.0033	0.3734
168	43.69	-0.03	-0.0820	-0.0271	-0.0923	0.1261	0.9319	1.3730	0.0040	0.5115	0.0029	0.3726
169	43.80	-0.00	-0.1464	-0.0258	-0.0928	0.1307	0.9392	1.4049	0.0039	0.5270	0.0035	0.3751
170	43.90	-0.01	-0.1442	-0.0199	-0.0783	0.1298	0.9431	1.3742	0.0001	0.5114	0.0005	0.3722
171	43.97	-0.03	-0.1533	-0.0231	-0.0886	0.1338	0.9429	1.3725	0.0029	0.5119	0.0021	0.3730
172	44.08	-0.01	-0.1479	-0.0240	-0.0909	0.1308	0.9480	1.4202	0.0001	0.5343	0.0043	0.3776
173	44.17	-0.04	-0.1508	-0.0231	-0.0833	0.1312	0.9400	1.4178	0.0024	0.5334	0.0029	0.3762
174	44.23	-0.01	-0.1524	-0.0227	-0.0902	0.1296	0.9283	1.4100	0.0029	0.5350	0.0020	0.3773
175	44.32	-0.01	-0.1593	-0.0197	-0.0810	0.1279	0.9192	1.3852	-0.0010	0.5190	-0.0007	0.3747
176	44.43	-0.00	-0.1480	-0.0234	-0.0918	0.1300	0.9444	1.4340	0.0039	0.5422	0.0027	0.3761
177	44.51	-0.00	-0.1523	-0.0220	-0.0978	0.1302	0.9381	1.4048	0.0045	0.5295	0.0032	0.3755
178	44.61	-0.00	-0.0004	-0.0176	-0.0475	0.2340	0.9539	1.4011	0.0003	0.5297	0.0002	0.3762
179	44.72	-0.03	-0.1524	-0.0235	-0.0906	0.2039	0.9079	1.4134	0.0028	0.5326	0.0020	0.3762
180	44.79	-0.01	-0.1041	-0.0225	-0.0947	0.2152	0.9284	1.4172	-0.0001	0.5304	-0.0001	0.3715
181	44.89	-0.03	-0.0795	-0.0240	-0.0909	0.2415	0.9658	1.4321	0.0034	0.5404	0.0024	0.3773
182	45.00	-0.01	-0.1098	-0.0259	-0.0949	0.2437	0.9392	1.3725	-0.0003	0.5126	-0.0004	0.3735
183	45.08	-0.00	-0.0918	-0.0214	-0.0905	0.2335	0.9398	1.4056	-0.0013	0.5321	-0.0009	0.3785
184	45.18	-0.00	-0.0974	-0.0239	-0.0991	0.2430	0.9522	1.3966	-0.0003	0.5253	-0.0002	0.3762

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 59 MACH 1.60 ALPHA 0.0 PHI 0.0 CONF 61 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CBA	ALPF1	YCPF1	CNF2	CM2	CBZ	ACPF2	YCPF2
100	45.27	-0.00	-0.1031	-0.0283	-0.0065	0.2457	0.4505	1.4330	-0.0014	0.5296	-0.0010	0.3776
100	45.33	-0.03	-0.1016	-0.0287	-0.0490	0.2533	0.4518	1.4127	-0.0036	0.5337	-0.0036	0.3777
101	45.43	-0.07	-0.1193	-0.0296	-0.0304	0.2031	0.4725	1.4249	-0.0047	0.4955	-0.0036	0.3740
102	45.54	-0.05	-0.0892	-0.0242	-0.0349	0.2309	0.4492	1.4129	-0.0026	0.5336	-0.0018	0.3776
103	45.64	-0.03	-0.0929	-0.0239	-0.0447	0.2508	0.4627	1.4093	-0.0036	0.5310	-0.0026	0.3767
104	45.74	-0.00	-0.0800	-0.0222	-0.0516	0.2562	0.4610	1.3799	-0.0031	0.5240	-0.0022	0.3769
105	45.79	-0.01	-0.0784	-0.0238	-0.0469	0.2422	0.4701	1.3761	-0.0049	0.5146	-0.0036	0.3740
106	45.90	-0.01	-0.0749	-0.0249	-0.0445	0.2617	0.4664	1.3852	-0.0035	0.5203	-0.0025	0.3756
107	45.99	-0.00	-0.0848	-0.0214	-0.0368	0.2309	0.4780	1.4119	-0.0030	0.5325	-0.0021	0.3770
108	46.08	-0.01	-0.0834	-0.0239	-0.0384	0.2870	0.4610	1.3980	-0.0037	0.5257	-0.0026	0.3759
109	46.18	-0.00	-0.0830	-0.0221	-0.0381	0.2648	0.4703	1.3812	-0.0049	0.5116	-0.0036	0.3760
110	46.28	-0.02	-0.0767	-0.0229	-0.0338	0.2965	0.4613	1.3825	-0.0034	0.5201	-0.0025	0.3762
111	46.33	-0.00	-0.0802	-0.0221	-0.0325	0.2647	0.4743	1.4146	-0.0041	0.5302	-0.0029	0.3790
112	46.43	-0.00	-0.0836	-0.0194	-0.0355	0.2200	0.4653	1.3867	-0.0063	0.5017	-0.0047	0.3748
113	46.53	-0.00	-0.0838	-0.0247	-0.0393	0.2683	0.4588	1.3841	-0.0048	0.5217	-0.0035	0.3770
114	46.63	-0.00	-0.0818	-0.0265	-0.0407	0.2524	0.4627	1.3810	-0.0053	0.5259	-0.0038	0.3781
115	46.68	-0.00	-0.0788	-0.0234	-0.0314	0.2473	0.4606	1.3650	-0.0072	0.4940	-0.0054	0.3727
116	46.78	-0.04	-0.0654	-0.0207	-0.0277	0.3171	0.4242	1.3804	-0.0039	0.5217	-0.0043	0.3780
117	46.88	-0.00	-0.0803	-0.0213	-0.0367	0.2657	0.4576	1.3791	-0.0061	0.5260	-0.0046	0.3771
118	46.94	-0.05	-0.0858	-0.0208	-0.0304	0.3159	0.4305	1.3961	-0.0030	0.5230	-0.0043	0.3763
119	47.01	-0.07	-0.1402	-0.0263	-0.0369	0.1749	0.5063	1.3390	-0.0057	0.5025	-0.0050	0.3753
120	47.12	-0.04	-0.0868	-0.0190	-0.0260	0.2498	0.4602	1.3605	-0.0060	0.5108	-0.0044	0.3755
121	47.20	0.00	-0.1042	-0.0264	-0.0367	0.2193	0.4937	1.3541	-0.0073	0.5074	-0.0054	0.3747
122	47.33	-0.00	-0.0885	-0.0174	-0.0451	0.1969	0.5071	1.3661	-0.0070	0.5154	-0.0051	0.3773
123	47.37	-0.03	-0.0793	-0.0178	-0.0375	0.2476	0.4735	1.3595	-0.0074	0.5116	-0.0055	0.3763
124	47.47	-0.05	-0.1002	-0.0242	-0.0475	0.2219	0.4725	1.3606	-0.0062	0.5123	-0.0046	0.3766
125	47.54	-0.03	-0.1063	-0.0213	-0.0474	0.2127	0.4721	1.3460	-0.0070	0.5081	-0.0052	0.3768
126	47.63	-0.03	-0.1003	-0.0200	-0.0494	0.1997	0.4920	1.3569	-0.0078	0.5118	-0.0058	0.3772
127	47.70	-0.03	-0.0904	-0.0196	-0.0402	0.2367	0.5006	1.3663	-0.0071	0.5154	-0.0052	0.3775
128	47.79	-0.00	-0.0875	-0.0206	-0.0461	0.2238	0.5145	1.3503	-0.0087	0.5102	-0.0065	0.3779
129	47.84	-0.04	-0.0853	-0.0183	-0.0354	0.2271	0.5425	1.3260	-0.0099	0.5023	-0.0071	0.3780
130	47.91	-0.03	-0.0897	-0.0197	-0.0401	0.2113	0.5301	1.3100	-0.0104	0.4958	-0.0080	0.3785
131	48.01	-0.04	-0.0930	-0.0110	-0.0474	0.2060	0.5144	1.2996	-0.0102	0.4928	-0.0079	0.3792
132	48.13	-0.00	-0.0940	-0.0165	-0.0406	0.2329	0.5306	1.3263	-0.0109	0.5057	-0.0082	0.3816
133	48.23	-0.01	-0.0902	-0.0091	-0.0402	0.1107	0.5063	1.2977	-0.0113	0.4775	-0.0090	0.3796
134	48.33	-0.02	-0.0819	-0.0067	-0.0169	-0.0411	0.0304	1.2910	-0.0110	0.4747	-0.0094	0.3794
135	48.41	0.01	-0.0917	-0.0055	-0.0195	-0.1736	0.0151	1.2300	-0.0130	0.4758	-0.0110	0.3841
136	48.52	0.03	-0.0747	-0.0171	-0.0372	0.2293	0.4987	1.2804	-0.0150	0.4695	-0.0119	0.3884
137	48.59	0.03	-0.0696	-0.0157	-0.0297	0.3502	0.5374	1.2712	-0.0159	0.4979	-0.0125	0.3917
138	48.67	0.03	-0.0815	-0.0140	-0.0260	0.2745	0.5136	1.2591	-0.0160	0.4930	-0.0134	0.3915
139	48.78	0.00	-0.0864	-0.0168	-0.0423	0.2179	0.4913	1.2818	-0.0150	0.4944	-0.0124	0.3919
140	48.83	0.03	-0.0827	-0.0207	-0.0306	0.2501	0.4882	1.2633	-0.0165	0.5353	-0.0129	0.3938
141	48.93	0.02	-0.1089	-0.0270	-0.0500	0.2527	0.4672	1.2880	-0.0165	0.5051	-0.0129	0.3928
142	49.02	0.01	-0.0992	-0.0254	-0.0431	0.2504	0.4939	1.2800	-0.0173	0.5072	-0.0135	0.3944
143	49.13	0.01	-0.1049	-0.0288	-0.0452	0.2733	0.4303	1.3039	-0.0176	0.5127	-0.0136	0.3941
144	49.21	0.00	-0.1240	-0.0269	-0.0520	0.2332	0.4472	1.2790	-0.0178	0.5102	-0.0137	0.3955

PAGE 2 OF 3
SHELT 6 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-D PHI CURV L DELA DELZ DELJ DELA TRANSITION
7 59 1.00 1.01 0.0 STANDARD 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	ACPF1	YCPF1	CNF2	CM2	CD2	ACPF2	YCPF2
231	49.28	0.00	-0.1168	-0.3303	-0.0436	0.2202	0.4268	1.3308	-0.0173	0.5128	-0.0133	0.3962
232	49.90	-0.01	-0.1319	-0.0273	-0.0511	0.2220	0.4374	1.2740	-0.0197	0.5124	-0.0153	0.3971
233	49.47	-0.03	-0.1495	-0.0278	-0.0572	0.1803	0.4494	1.2796	-0.0231	0.5164	-0.0155	0.3989
234	49.54	-0.04	-0.1483	-0.0264	-0.0608	0.1918	0.4490	1.2713	-0.0183	0.5027	-0.0146	0.3954
235	49.60	-0.01	-0.1407	-0.0292	-0.0571	0.1904	0.4436	1.2850	-0.0213	0.5128	-0.0166	0.3991
236	49.72	-0.02	-0.1429	-0.0284	-0.0594	0.1913	0.4445	1.2836	-0.0223	0.5230	-0.0156	0.4012
237	49.83	-0.03	-0.1438	-0.0293	-0.0572	0.1907	0.4620	1.3091	-0.0212	0.5245	-0.0162	0.4007
238	49.91	-0.05	-0.1491	-0.0296	-0.0596	0.2149	0.4728	1.2784	-0.0226	0.5204	-0.0167	0.4008
239	50.00	-0.01	-0.1428	-0.0261	-0.0457	0.2947	0.4449	1.2800	-0.0221	0.5303	-0.0172	0.4017
240	50.10	-0.04	-0.1401	-0.0230	-0.0433	0.2430	0.4408	1.3092	-0.0225	0.5256	-0.0172	0.4015
241	50.20	-0.06	-0.1313	-0.0263	-0.0545	0.2007	0.4150	1.2903	-0.0224	0.5186	-0.0174	0.4020
242	50.28	-0.08	-0.1340	-0.0243	-0.0456	0.2359	0.4379	1.3031	-0.0227	0.5263	-0.0174	0.4033
243	50.18	-0.10	-0.1369	-0.0264	-0.0667	0.1753	0.4419	1.2713	-0.0213	0.5117	-0.0168	0.4025
244	50.93	-0.00	-0.0971	-0.0210	-0.0433	0.2100	0.4954	1.2887	-0.0240	0.5226	-0.0191	0.4059
245	50.54	-0.05	-0.1103	-0.0182	-0.0307	0.1652	0.4592	1.2540	-0.0217	0.5076	-0.0173	0.4048
246	50.64	-0.07	-0.0985	-0.0144	-0.0208	0.1497	0.4702	1.2579	-0.0222	0.5066	-0.0180	0.4046
247	50.71	-0.09	-0.0846	-0.0165	-0.0268	0.1014	0.4493	1.1784	-0.0201	0.4734	-0.0171	0.4017
248	50.81	-0.06	-0.0996	-0.0141	-0.0186	0.1036	0.4545	1.2178	-0.0219	0.4944	-0.0180	0.4041
249	50.90	-0.09	-0.0959	-0.0138	-0.0167	0.1067	0.4391	1.2014	-0.0235	0.4850	-0.0174	0.4037
250	51.00	-0.04	-0.0894	-0.0122	-0.0200	0.0990	0.4719	1.1879	-0.0205	0.4813	-0.0171	0.4052
251	51.09	-0.05	-0.0815	-0.0089	-0.0101	0.1094	0.4509	1.1906	-0.0209	0.4877	-0.0175	0.4069
252	51.19	-0.09	-0.0796	-0.0073	-0.0241	0.1340	0.4932	1.2041	-0.0211	0.4866	-0.0176	0.4058
253	51.27	-0.08	-0.0826	-0.0073	-0.0232	0.1103	0.4498	1.1987	-0.0211	0.4866	-0.0176	0.4059
254	51.31	-0.07	-0.0913	-0.0037	-0.0144	0.1103	0.4501	1.1900	-0.0211	0.4853	-0.0177	0.4058
255	51.37	-0.05	-0.0156	0.0010	-0.0109	-0.0505	0.5505	1.2244	-0.0221	0.4978	-0.0181	0.4066
256	51.40	0.00	-0.0249	-0.0006	-0.0121	0.0062	0.4954	1.2190	-0.0219	0.4953	-0.0180	0.4063
257	51.54	-0.04	0.0062	0.0057	0.0057	0.9197	0.9194	1.2013	-0.0234	0.4891	-0.0170	0.4072
258	51.62	-0.03	-0.0048	0.0036	-0.0031	-0.1503	0.7106	1.2108	-0.0218	0.4946	-0.0180	0.4085
259	51.70	-0.02	0.0014	0.0067	0.0031	4.7876	2.0429	1.1919	-0.0234	0.4856	-0.0171	0.4074
260	51.77	-0.01	0.0013	0.0065	0.0041	5.0020	3.6154	1.1767	-0.0197	0.4787	-0.0167	0.4058
261	51.87	-0.03	-0.0039	0.0048	0.0060	-1.1800	-2.2051	1.1783	-0.0178	0.4802	-0.0168	0.4075
262	51.94	-0.00	-0.0026	0.0001	0.0034	-0.7406	-1.0211	1.1824	-0.0197	0.4822	-0.0167	0.4078
263	52.03	-0.01	-0.0065	0.0050	-0.0119	-1.0512	-1.1824	1.1824	-0.0197	0.4811	-0.0167	0.4065
264	52.11	-0.02	-0.0043	0.0043	0.0138	-0.9559	-1.0567	1.1843	-0.0234	0.4853	-0.0172	0.4064
265	52.20	0.02	-0.0059	0.0042	0.0147	-0.7121	-2.4913	1.1914	-0.0236	0.4856	-0.0173	0.4074
266	52.27	-0.02	-0.0134	0.0049	0.0112	-0.5103	-0.7273	1.1892	-0.0203	0.4849	-0.0171	0.4078
267	52.36	-0.03	-0.0248	0.0027	0.0077	-0.1398	-0.3130	1.1770	-0.0196	0.4786	-0.0167	0.4066
268	52.44	-0.01	-0.0215	0.0030	0.0119	-0.1700	-0.5035	1.1806	-0.0208	0.4851	-0.0176	0.4071
269	52.54	-0.02	-0.0121	0.0027	0.0109	-0.2252	-1.3354	1.1800	-0.0236	0.4838	-0.0175	0.4072
270	52.62	-0.01	-0.0203	0.0013	0.0136	-0.0759	-0.6796	1.1900	-0.0208	0.4856	-0.0175	0.4079
271	52.69	-0.04	-0.0173	0.0043	0.0121	-0.1192	-0.7029	1.1900	-0.0213	0.4882	-0.0178	0.4082
272	52.78	-0.01	-0.0230	0.0027	0.0142	-0.1201	-0.6174	1.1800	-0.0209	0.4846	-0.0176	0.4081
273	52.85	-0.02	-0.0215	0.0027	0.0211	-0.1349	-1.8870	1.2015	-0.0220	0.4907	-0.0183	0.4084
274	52.93	-0.04	-0.0234	0.0019	0.0144	-0.1193	-0.5069	1.1893	-0.0211	0.4855	-0.0178	0.4082
275	53.03	-0.04	-0.0303	0.0013	0.0221	-0.2001	-3.4330	1.2002	-0.0223	0.4908	-0.0186	0.4088
276	53.13	0.01	-0.0112	0.0042	0.0203	-0.0119	-1.0001	1.1908	-0.0220	0.4900	-0.0184	0.4088

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 39 1.00 1.1 0.0 3 RUNS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
277	33.18	-0.01	-0.0268	0.0015	0.0175	-0.0721	-0.0413	1.1950	-0.0217	0.4806	-0.0182	0.4089
278	33.28	-0.01	-0.0185	0.0036	0.0174	-0.0493	-1.0376	1.1941	-0.0215	0.4804	-0.0181	0.4082
279	33.33	-0.01	-0.0172	0.0025	0.0180	-0.1454	-1.0005	1.2031	-0.0219	0.4925	-0.0182	0.4094
280	33.39	-0.01	-0.0199	0.0013	0.0187	-0.1007	-1.0221	1.2005	-0.0221	0.4901	-0.0184	0.4083
281	33.39	-0.03	-0.0138	0.0017	0.0209	-0.1232	-1.0145	1.1977	-0.0215	0.4894	-0.0180	0.4086
282	33.38	-0.02	-0.0174	0.0013	0.0199	-0.0741	-1.1437	1.2075	-0.0220	0.4939	-0.0182	0.4090
283	33.88	0.00	-0.0249	0.0008	0.0185	-0.0328	-1.0782	1.1895	-0.0207	0.4845	-0.0174	0.4072
284	33.77	-0.03	-0.0300	0.0021	0.0237	-0.0020	-2.0925	1.2074	-0.0217	0.4940	-0.0180	0.4092
285	33.83	-0.01	-0.0288	0.0025	0.0233	-0.0078	-2.0285	1.2089	-0.0220	0.4924	-0.0182	0.4073
286	33.93	-0.02	-0.0257	0.0021	0.0250	-0.0000	-4.0000	1.2088	-0.0218	0.4941	-0.0179	0.4088
287	34.01	-0.03	-0.0232	0.0025	0.0267	-0.0097	-3.7198	1.1990	-0.0211	0.4884	-0.0177	0.4074
288	34.10	-0.02	-0.0209	0.0010	0.0188	-0.0372	-1.6245	1.1979	-0.0211	0.4930	-0.0176	0.4091
289	34.18	-0.02	-0.0249	0.0019	0.0197	-0.0990	-1.5221	1.2115	-0.0220	0.4946	-0.0182	0.4084
290	34.28	-0.01	-0.0233	0.0012	0.0177	-0.0515	-0.7567	1.2113	-0.0215	0.4949	-0.0178	0.4085
291	34.32	-0.03	-0.0302	0.0008	0.0193	-0.0265	-0.4735	1.1990	-0.0206	0.4835	-0.0173	0.4063
292	34.42	-0.01	-0.0267	0.0019	0.0196	-0.0712	-0.5243	1.2007	-0.0212	0.4910	-0.0177	0.4089
293	34.49	-0.02	-0.0302	0.0010	0.0193	-0.0331	-0.4735	1.2073	-0.0217	0.4967	-0.0180	0.4097
294	34.57	0.00	-0.0297	0.0008	0.0181	-0.0251	-0.3194	1.2038	-0.0220	0.4961	-0.0182	0.4121
295	34.67	-0.02	-0.0324	0.0019	0.0220	-0.0432	-0.3706	1.2008	-0.0213	0.4911	-0.0176	0.4090
296	34.74	-0.04	-0.0313	0.0013	0.0197	-0.0443	-0.4007	1.2061	-0.0212	0.4946	-0.0177	0.4110
297	34.80	-0.01	-0.0368	0.0013	0.0183	-0.0201	-0.2009	1.2075	-0.0219	0.4955	-0.0182	0.4104
298	34.88	-0.01	-0.0279	0.0011	0.0181	-0.0394	-0.5771	1.2068	-0.0213	0.4913	-0.0176	0.4114
299	34.98	-0.02	-0.0344	0.0009	0.0178	-0.0203	-0.2107	1.2062	-0.0216	0.4949	-0.0179	0.4103
300	35.04	-0.02	-0.0349	0.0013	0.0187	-0.0373	-0.3039	1.2116	-0.0220	0.4964	-0.0182	0.4097
301	35.13	-0.02	-0.0370	0.0004	0.0171	-0.0101	-0.3050	1.2150	-0.0220	0.4983	-0.0182	0.4106
302	35.19	-0.02	-0.0372	0.0010	0.0179	-0.0269	-0.3199	1.2093	-0.0219	0.4944	-0.0178	0.4107
303	35.27	-0.02	-0.0390	0.0009	0.0176	-0.0220	-0.2934	1.2102	-0.0220	0.4960	-0.0182	0.4115
304	35.33	-0.02	-0.0403	0.0008	0.0169	-0.0190	-0.3057	1.2130	-0.0221	0.5004	-0.0187	0.4125
305	35.43	-0.01	-0.0422	-0.0002	0.0163	-0.0048	-0.2722	1.2130	-0.0222	0.5006	-0.0183	0.4118
306	35.52	-0.01	-0.0413	-0.0001	0.0166	0.0020	-0.1289	1.2103	-0.0220	0.5040	-0.0187	0.4137
307	35.56	-0.02	-0.0403	0.0009	0.0191	-0.0165	-0.1850	1.1932	-0.0223	0.4963	-0.0186	0.4126
308	35.63	-0.03	-0.0408	0.0010	0.0193	-0.0219	-0.1991	1.2129	-0.0221	0.5004	-0.0183	0.4126
309	35.73	-0.02	-0.0443	0.0011	0.0191	-0.0248	-0.2275	1.2089	-0.0227	0.4995	-0.0188	0.4132
310	35.80	-0.03	-0.0465	0.0008	0.0176	-0.0176	-0.1552	1.2038	-0.0222	0.4973	-0.0185	0.4129
311	35.88	-0.03	-0.0503	0.0005	0.0179	-0.0179	-0.1574	1.1990	-0.0222	0.4951	-0.0185	0.4127
312	35.97	-0.01	-0.0511	0.0005	0.0171	-0.0135	-0.1492	1.2078	-0.0230	0.5000	-0.0191	0.4141
313	36.05	-0.02	-0.0583	0.0007	0.0177	-0.0163	-0.1655	1.2157	-0.0233	0.5047	-0.0191	0.4138
314	36.13	-0.02	-0.0478	0.0012	0.0171	-0.0252	-0.1490	1.2078	-0.0223	0.4984	-0.0185	0.4127
315	36.20	-0.02	-0.0490	0.0010	0.0182	-0.0213	-0.1911	1.1990	-0.0222	0.4937	-0.0186	0.4129
316	36.28	-0.02	-0.0476	0.0011	0.0181	-0.0234	-0.1284	1.2057	-0.0221	0.5001	-0.0181	0.4135
317	36.33	-0.04	-0.0516	0.0012	0.0182	-0.0235	-0.1010	1.2024	-0.0218	0.4979	-0.0178	0.4141
318	36.43	-0.04	-0.0429	0.0021	0.0177	-0.0251	-0.1799	1.2010	-0.0232	0.4966	-0.0183	0.4137
319	36.51	-0.02	-0.0451	0.0009	0.0187	-0.0209	-0.2023	1.2210	-0.0238	0.5063	-0.0195	0.4147
320	36.59	-0.01	-0.0467	0.0	0.0187	0.0	-0.1887	1.2199	-0.0232	0.5061	-0.0207	0.4149
321	36.70	-0.03	-0.0523	0.0006	0.0183	-0.0153	-0.0870	1.2117	-0.0237	0.5006	-0.0196	0.4132
322	36.11	-0.04	-0.0421	0.0010	0.0184	-0.0238	-0.2478	1.2225	-0.0234	0.5068	-0.0208	0.4146

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 6 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-6 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
1 59 1.000 1.7 0.0 0 INCH 15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
327	36.03	-0.04	-0.0470	0.0024	0.0085	-0.0512	-0.1812	1.2256	-0.0255	0.5070	-0.0208	0.4137
328	36.93	-0.04	-0.0493	0.0010	0.0090	-0.0203	-0.1743	1.2304	-0.0266	0.5121	-0.0215	0.4142
329	37.02	-0.01	-0.0543	0.0017	0.0082	-0.0314	-0.1513	1.2250	-0.0262	0.5096	-0.0214	0.4158
330	37.08	-0.08	-0.0563	0.0013	0.0153	-0.0411	-0.1494	1.2269	-0.0261	0.5100	-0.0213	0.4164
331	37.17	-0.03	-0.0507	0.0027	0.0081	-0.0334	-0.1601	1.2238	-0.0265	0.5129	-0.0223	0.4157
332	37.24	-0.04	-0.0516	0.0008	0.0086	-0.0134	-0.1478	1.2267	-0.0271	0.5120	-0.0221	0.4164
333	37.32	-0.06	-0.0528	0.0008	0.0081	-0.0152	-0.1157	1.2276	-0.0272	0.5130	-0.0220	0.4186
334	37.40	-0.04	-0.0511	0.0011	0.0091	-0.0191	-0.0865	1.2290	-0.0264	0.5120	-0.0215	0.4164
335	37.48	-0.06	-0.0429	0.0003	0.0124	-0.0114	-0.2951	1.2916	-0.0275	0.5178	-0.0222	0.4170
336	37.54	-0.03	-0.0552	0.0008	0.0070	-0.0103	-0.1420	1.2134	-0.0262	0.5083	-0.0216	0.4173
337	37.60	-0.04	-0.0508	-0.0004	0.0061	0.0000	0.0017	1.2215	-0.0258	0.5102	-0.0220	0.4177
338	37.66	-0.06	-0.0506	0.0003	0.0065	-0.0034	-0.0268	1.2140	-0.0260	0.5077	-0.0221	0.4189
339	37.73	-0.04	-0.0477	-0.0002	0.0049	0.0042	-0.1029	1.2263	-0.0272	0.5123	-0.0222	0.4171
340	37.81	-0.01	-0.0434	0.0013	0.0049	-0.0331	-0.1082	1.2227	-0.0270	0.5086	-0.0221	0.4155
341	37.88	-0.05	-0.0465	0.0003	0.0048	-0.0138	-0.0991	1.2256	-0.0267	0.5111	-0.0218	0.4169
336	37.93	-0.03	-0.0477	-0.0014	0.0059	0.0299	-0.1008	1.2221	-0.0273	0.5086	-0.0224	0.4147
339	38.03	-0.04	-0.0525	0.0003	0.0024	-0.0035	-0.0958	1.2253	-0.0276	0.5107	-0.0226	0.4175
340	38.09	-0.03	-0.0536	-0.0005	0.0026	0.0134	-0.0304	1.2318	-0.0275	0.5124	-0.0224	0.4160
341	38.17	-0.07	-0.0365	-0.0010	0.0084	0.0253	-0.2127	1.2316	-0.0281	0.5140	-0.0228	0.4173
342	38.24	-0.05	-0.0455	0.0006	0.0048	-0.0068	-0.1057	1.2253	-0.0234	0.5131	-0.0231	0.4161
343	38.32	-0.04	-0.0491	-0.0013	0.0069	0.0342	-0.1408	1.2470	-0.0237	0.5184	-0.0239	0.4157
344	38.40	-0.01	-0.0465	-0.0008	0.0053	0.0125	-0.0134	1.2415	-0.0234	0.5163	-0.0237	0.4159
345	38.49	-0.02	-0.0391	0.0008	0.0081	-0.0202	-0.2040	1.2473	-0.0292	0.5195	-0.0234	0.4165
346	38.55	-0.04	-0.0419	-0.0012	0.0060	0.0207	-0.1435	1.2470	-0.0281	0.5187	-0.0234	0.4146
347	38.63	-0.02	-0.0422	0.0008	0.0068	-0.0190	-0.1615	1.2310	-0.0286	0.5127	-0.0234	0.4165
348	38.88	-0.03	-0.0416	0.0004	0.0079	-0.0024	-0.1934	1.2393	-0.0294	0.5145	-0.0238	0.4152
349	38.88	-0.06	-0.0408	-0.0010	0.0045	0.0214	-0.0904	1.2468	-0.0293	0.5190	-0.0235	0.4156
350	38.87	-0.05	-0.0419	-0.0005	0.0056	0.0215	-0.1340	1.2459	-0.0292	0.5198	-0.0235	0.4172
351	38.96	-0.06	-0.0400	0.0	0.0060	0.0	-0.0430	1.2338	-0.0269	0.5129	-0.0235	0.4157

AEDC-TR-75-125

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(TASRDCT 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 5
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH MACH-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 BY 1.00 1.07 0.0 BINDERS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
1	-5.02	-0.01	0.0L33	9.9999	0.0173	9.9999	0.7302	-0.3325	-0.0337	-0.1410	0.1012	0.4258
2	-5.02	0.01	0.0L03	9.9999	0.0187	9.9999	0.0701	-0.3333	-0.0345	-0.1455	0.1015	0.4299
3	-5.03	0.01	0.0203	9.9999	0.0192	9.9999	0.0737	-0.3397	-0.0310	-0.1282	0.1033	0.4277
4	-4.99	0.01	0.0259	9.9999	0.0195	9.9999	0.7349	-0.3393	-0.0338	-0.1005	0.1037	0.4048
5	-3.91	0.01	0.0222	9.9999	0.0186	9.9999	0.8196	-0.1993	-0.0200	-0.0758	0.1005	0.3802
6	-2.93	0.01	0.0234	9.9999	0.0193	9.9999	0.8218	-0.1001	-0.0124	-0.0507	0.0850	0.3468
7	-2.00	0.01	0.0259	9.9999	0.0200	9.9999	0.7722	-0.0553	-0.0056	-0.0289	0.0588	0.3036
8	-1.03	0.01	0.0258	9.9999	0.0178	9.9999	0.5973	-0.0501	-0.0013	-0.0101	0.0232	0.1804
9	-0.04	0.01	0.0307	9.9999	0.0195	9.9999	0.3239	-0.0176	0.0020	0.0138	-0.1137	-0.7841
10	0.93	0.01	0.0259	9.9999	0.0158	9.9999	0.5234	0.0204	0.0008	0.0369	0.2395	1.2993
11	1.91	0.00	0.0300	9.9999	0.0181	9.9999	0.4925	0.0306	0.0137	0.0603	0.1703	0.7478
12	2.94	0.00	0.0307	9.9999	0.0180	9.9999	0.4931	0.1345	0.0242	0.0800	0.1507	0.5956
13	3.87	0.00	0.0360	9.9999	0.0180	9.9999	0.4124	0.1801	0.0268	0.1113	0.1427	0.5918
14	4.88	0.00	0.0368	9.9999	0.0183	9.9999	0.3317	0.2305	0.0317	0.1360	0.1327	0.5765
15	5.89	0.00	0.0378	9.9999	0.0187	9.9999	0.3301	0.3034	0.0389	0.1668	0.1207	0.5528
16	6.90	-0.00	0.0441	9.9999	0.0175	9.9999	0.2932	0.3650	0.0490	0.1947	0.1095	0.5335
17	7.90	0.01	0.0479	9.9999	0.0187	9.9999	0.2800	0.4342	0.0493	0.2207	0.1027	0.5257
18	8.92	-0.00	0.0442	9.9999	0.0185	9.9999	0.2978	0.4808	0.0478	0.2312	0.0978	0.5103
19	9.94	-0.00	0.0502	9.9999	0.0186	9.9999	0.2178	0.5522	0.0499	0.2629	0.0887	0.5033
20	10.92	0.00	0.0537	9.9999	0.0186	9.9999	0.1978	0.6330	0.0537	0.3125	0.0801	0.4937
21	11.89	-0.00	0.0520	9.9999	0.0178	9.9999	0.1850	0.6909	0.0509	0.3396	0.0730	0.4876
22	12.82	-0.00	0.0561	9.9999	0.0178	9.9999	0.1982	0.7442	0.0504	0.3648	0.0677	0.4902
23	13.82	-0.00	0.0548	9.9999	0.0178	9.9999	0.1931	0.8156	0.0500	0.3958	0.0613	0.4653
24	14.83	0.00	0.0574	9.9999	0.0170	9.9999	0.1226	0.8833	0.0465	0.4175	0.0562	0.4836
25	15.87	0.00	0.0547	9.9999	0.0158	9.9999	0.1062	0.9358	0.0434	0.4366	0.0532	0.4804
26	16.90	-0.00	0.0547	9.9999	0.0158	9.9999	0.1062	0.9307	0.0431	0.4408	0.0512	0.4697
27	17.92	-0.00	0.0622	9.9999	0.0164	9.9999	0.1353	0.9655	0.0453	0.4549	0.0459	0.4615
28	18.93	-0.00	0.0644	9.9999	0.0184	9.9999	0.1353	1.0321	0.0429	0.4679	0.0415	0.4533
29	19.90	-0.01	0.0535	9.9999	0.0142	9.9999	0.0767	1.0370	0.0413	0.4628	0.0398	0.4463
30	20.93	0.01	0.0517	9.9999	0.0170	9.9999	0.1220	1.0544	0.0377	0.4666	0.0357	0.4446
31	21.93	0.00	0.0537	9.9999	0.0177	9.9999	0.1254	1.0654	0.0355	0.4628	0.0327	0.4448
32	22.93	0.01	0.0497	9.9999	0.0161	9.9999	0.1203	1.0678	0.0305	0.4660	0.0286	0.4364
33	23.96	0.01	0.0534	9.9999	0.0110	9.9999	0.1578	1.0697	0.0259	0.4669	0.0266	0.4303
34	24.95	0.03	0.0547	9.9999	0.0090	9.9999	0.1486	1.1066	0.0279	0.5067	0.0259	0.4353
35	25.97	0.04	0.0755	9.9999	0.0190	9.9999	0.2016	1.1059	0.0247	0.5076	0.0208	0.4266
36	27.00	0.05	0.0710	9.9999	0.0191	9.9999	0.1969	1.2117	0.0234	0.5095	0.0193	0.4205
37	28.00	0.06	0.0722	9.9999	0.0192	9.9999	0.1969	1.2235	0.0222	0.5065	0.0182	0.4140
38	28.98	0.05	0.0774	9.9999	0.0176	9.9999	0.2477	1.2427	0.0243	0.5091	0.0178	0.4115
39	28.98	0.04	0.0774	9.9999	0.0176	9.9999	0.2477	1.2294	0.0221	0.5057	0.0180	0.4097
40	28.97	0.05	0.0813	9.9999	0.0189	9.9999	0.2928	1.2327	0.0211	0.5016	0.0171	0.4069
41	28.97	0.03	0.0812	9.9999	0.0194	9.9999	0.2592	1.2223	0.0194	0.4968	0.0159	0.4049
42	28.91	0.04	0.0855	9.9999	0.0190	9.9999	0.2149	1.1959	0.0204	0.4824	0.0171	0.4034
43	28.89	0.03	0.0813	9.9999	0.0194	9.9999	0.2389	1.1824	0.0184	0.4736	0.0156	0.4005
44	28.84	0.05	0.0825	9.9999	0.0210	9.9999	0.2345	1.2041	0.0191	0.4797	0.0151	0.3994
45	28.93	0.05	0.0777	9.9999	0.0176	9.9999	0.2466	1.2120	0.0159	0.4346	0.0143	0.3909
46	29.11	0.05	0.0752	9.9999	0.0182	9.9999	0.2197	1.1999	0.0158	0.4997	0.0138	0.3927

TEST 1 PART 59 MACH 1.00 RATIO 1.0 PHI 0.0 CONF BINDFIN L 0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CA3	ACPF3	YCPF3	CNF4	CM4	CA4	ACPF4	YCPF4
47	29.26	0.03	0.0753	9.9999	0.0160	9.9999	0.2126	1.0903	0.0146	0.4243	0.0136	0.3690
48	29.40	0.04	0.0803	9.9999	0.0179	9.9999	0.2232	1.0909	0.0145	0.4242	0.0133	0.3889
49	29.57	0.03	0.0810	9.9999	0.0180	9.9999	0.2270	1.0997	0.0145	0.4296	0.0132	0.3907
50	29.73	0.04	0.0752	9.9999	0.0165	9.9999	0.2197	1.0894	0.0138	0.4108	0.0131	0.3897
51	29.86	0.04	0.0776	9.9999	0.0171	9.9999	0.2221	1.0968	0.0143	0.4189	0.0133	0.3890
52	30.02	0.05	0.0803	9.9999	0.0179	9.9999	0.2232	1.0994	0.0130	0.3900	0.0130	0.3879
53	30.13	0.04	0.0805	9.9999	0.0180	9.9999	0.2302	1.0897	0.0136	0.4160	0.0127	0.3889
54	30.30	0.06	0.0853	9.9999	0.0211	9.9999	0.2305	1.1073	0.0133	0.4330	0.0120	0.3911
55	30.44	0.07	0.0877	9.9999	0.0225	9.9999	0.2363	1.0726	0.0132	0.4178	0.0123	0.3895
56	30.58	0.06	0.0886	9.9999	0.0213	9.9999	0.2446	1.1245	0.0133	0.4336	0.0118	0.3910
57	30.73	0.07	0.0904	9.9999	0.0247	9.9999	0.2435	1.0937	0.0125	0.4085	0.0122	0.3870
58	30.84	0.06	0.0900	9.9999	0.0237	9.9999	0.2425	1.1000	0.0130	0.4061	0.0117	0.3930
59	30.99	0.07	0.0853	9.9999	0.0180	9.9999	0.2126	1.1757	0.0143	0.4006	0.0122	0.3917
60	31.12	0.07	0.0859	9.9999	0.0213	9.9999	0.2497	1.2089	0.0140	0.4757	0.0116	0.3935
61	31.27	0.08	0.0860	9.9999	0.0207	9.9999	0.2467	1.1745	0.0131	0.4598	0.0112	0.3914
62	31.43	0.07	0.0860	9.9999	0.0214	9.9999	0.2479	1.1977	0.0128	0.4694	0.0107	0.3915
63	31.53	0.06	0.0877	9.9999	0.0229	9.9999	0.2497	1.1832	0.0133	0.4658	0.0113	0.3937
64	31.68	0.07	0.0877	9.9999	0.0225	9.9999	0.2491	1.1832	0.0133	0.4656	0.0113	0.3937
65	31.84	0.07	0.0877	9.9999	0.0240	9.9999	0.2490	1.2119	0.0149	0.4788	0.0118	0.3951
66	31.98	0.07	0.0901	9.9999	0.0240	9.9999	0.2733	1.2036	0.0138	0.4700	0.0115	0.3998
67	32.09	0.08	0.0883	9.9999	0.0238	9.9999	0.2701	1.1950	0.0137	0.4710	0.0115	0.3939
68	32.22	0.07	0.0870	9.9999	0.0229	9.9999	0.2709	1.2105	0.0136	0.4627	0.0113	0.3961
69	32.35	0.07	0.0903	9.9999	0.0238	9.9999	0.2761	1.2111	0.0142	0.4691	0.0117	0.3964
70	32.50	0.07	0.0881	9.9999	0.0235	9.9999	0.2674	1.2337	0.0142	0.4918	0.0115	0.3966
71	32.64	0.07	0.0874	9.9999	0.0249	9.9999	0.2752	1.2243	0.0130	0.4672	0.0106	0.3979
72	32.75	0.07	0.0873	9.9999	0.0235	9.9999	0.2741	1.2472	0.0138	0.4955	0.0111	0.3969
73	32.89	0.08	0.0881	9.9999	0.0238	9.9999	0.2767	1.2510	0.0132	0.4904	0.0107	0.3968
74	33.03	0.05	0.0833	9.9999	0.0235	9.9999	0.2518	1.2208	0.0131	0.4905	0.0107	0.3990
75	33.19	0.09	0.0851	9.9999	0.0214	9.9999	0.2603	1.2323	0.0128	0.4909	0.0104	0.3964
76	33.28	0.09	0.0854	9.9999	0.0211	9.9999	0.2695	1.2476	0.0136	0.4990	0.0109	0.4000
77	33.41	0.08	0.0859	9.9999	0.0247	9.9999	0.2379	1.2518	0.0136	0.5014	0.0110	0.4005
78	33.54	0.08	0.0843	9.9999	0.0196	9.9999	0.2601	1.2385	0.0112	0.4903	0.0091	0.4007
79	33.68	0.09	0.0834	9.9999	0.0197	9.9999	0.2695	1.2135	0.0099	0.4853	0.0082	0.3999
80	33.78	0.07	0.0844	9.9999	0.0198	9.9999	0.2685	1.2107	0.0094	0.4859	0.0076	0.3997
81	33.92	0.09	0.0815	9.9999	0.0186	9.9999	0.2591	1.2334	0.0095	0.4951	0.0077	0.4014
82	34.09	0.08	0.0844	9.9999	0.0203	9.9999	0.2732	1.2071	0.0081	0.4845	0.0067	0.4014
83	34.18	0.07	0.0869	9.9999	0.0210	9.9999	0.2734	1.2110	0.0080	0.4877	0.0050	0.4027
84	34.29	0.08	0.0860	9.9999	0.0213	9.9999	0.2700	1.1990	0.0084	0.4810	0.0069	0.4029
85	34.42	0.07	0.0843	9.9999	0.0202	9.9999	0.2722	1.2014	0.0046	0.4652	0.0040	0.4039
86	34.54	0.08	0.0813	9.9999	0.0181	9.9999	0.2564	1.1849	0.0057	0.4694	0.0049	0.4032
87	34.67	0.08	0.0834	9.9999	0.0217	9.9999	0.2726	1.1961	0.0061	0.4818	0.0036	0.4045
88	34.80	0.08	0.0834	9.9999	0.0202	9.9999	0.2720	1.1950	0.0039	0.4791	0.0034	0.4045
89	34.93	0.07	0.0873	9.9999	0.0234	9.9999	0.2225	1.1989	0.0043	0.4854	0.0037	0.4042
90	35.05	0.08	0.0834	9.9999	0.0202	9.9999	0.2691	1.0038	0.0049	0.4267	0.0040	0.4030
91	35.17	0.08	0.0841	9.9999	0.0202	9.9999	0.2730	1.0020	0.0029	0.4373	0.0027	0.4039
92	35.30	-0.00	0.0854	9.9999	0.0180	9.9999	0.2490	1.1112	0.0029	0.4469	0.0026	0.4039

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 4 OF 4
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NO.=.6 PHI COMP L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 39 1.000 1.0 0.0 STANDARD 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	39.96	-0.001	0.00642	9.9999	0.0145	9.9999	0.2262	1.1358	0.0026	0.4591	0.0023	0.4038
94	39.50	-0.00	0.00601	9.9999	0.0134	9.9999	0.2185	1.1369	0.0025	0.4591	0.0022	0.4038
95	39.04	-0.01	0.00504	9.9999	0.0099	9.9999	0.1980	1.1375	0.0018	0.4610	0.0011	0.4052
96	38.57	0.00	0.00618	9.9999	0.0133	9.9999	0.2183	1.1370	0.0022	0.4576	0.0020	0.4057
97	38.96	0.00	0.00691	9.9999	0.0153	9.9999	0.2309	1.1044	0.0022	0.4466	0.0020	0.4044
98	38.45	0.02	0.00604	9.9999	0.0122	9.9999	0.2329	1.1017	0.0019	0.4464	0.0017	0.4053
99	38.15	-0.00	0.00342	9.9999	0.0097	9.9999	0.1793	1.1134	0.0011	0.4519	0.0010	0.4058
100	38.50	-0.01	0.00363	9.9999	0.0130	9.9999	0.1940	1.1388	0.0003	0.4713	0.0003	0.4067
101	38.00	-0.02	0.00365	9.9999	0.0114	9.9999	0.2110	1.1034	0.0015	0.4467	0.0014	0.4060
102	38.53	-0.03	0.00390	9.9999	0.0050	9.9999	0.1930	1.1057	0.0004	0.4467	0.0003	0.4071
103	38.09	-0.02	0.00310	9.9999	0.0090	9.9999	0.1748	1.1348	0.0004	0.4612	0.0004	0.4064
104	38.77	-0.01	0.00340	9.9999	0.0107	9.9999	0.1805	1.0990	-0.0001	0.4459	-0.0001	0.4056
105	38.09	-0.01	0.00339	9.9999	0.0084	9.9999	0.1836	1.1714	0.0	0.4700	0.0	0.4070
106	38.99	0.00	0.00377	9.9999	0.0090	9.9999	0.1826	1.1531	0.0001	0.4708	0.0001	0.4083
107	37.13	-0.03	0.00309	9.9999	0.0070	9.9999	0.1759	1.1584	-0.0003	0.4722	-0.0003	0.4074
108	37.62	-0.01	0.00377	9.9999	0.0087	9.9999	0.1828	1.1452	-0.0010	0.4659	-0.0009	0.4068
109	37.31	-0.03	0.00401	9.9999	0.0076	9.9999	0.1895	1.1706	-0.0011	0.4701	-0.0009	0.4067
110	37.92	0.00	0.00369	9.9999	0.0115	9.9999	0.1950	1.1579	-0.0008	0.4628	-0.0007	0.4067
111	37.62	-0.03	0.00366	9.9999	0.0090	9.9999	0.2062	1.1134	-0.0013	0.4550	-0.0012	0.4068
112	37.14	-0.03	0.00308	9.9999	0.0083	9.9999	0.1875	1.1337	-0.0009	0.4609	-0.0008	0.4065
113	37.80	-0.04	0.00335	9.9999	0.0051	9.9999	0.1504	1.1563	-0.0017	0.4735	-0.0015	0.4069
114	37.48	-0.02	0.00421	9.9999	0.0078	9.9999	0.1831	1.1467	-0.0016	0.4669	-0.0014	0.4071
115	38.11	-0.04	0.00400	9.9999	0.0066	9.9999	0.1850	1.1530	-0.0017	0.4711	-0.0015	0.4083
116	38.74	-0.06	0.00413	9.9999	0.0064	9.9999	0.1833	1.1537	-0.0019	0.4721	-0.0016	0.4092
117	38.34	-0.02	0.00400	9.9999	0.0102	9.9999	0.2099	1.1775	-0.0017	0.4822	-0.0014	0.4095
118	38.99	-0.05	0.00314	9.9999	0.0083	9.9999	0.1815	1.2392	-0.0013	0.5096	-0.0011	0.4112
119	38.60	-0.02	0.00420	9.9999	0.0073	9.9999	0.1710	1.2098	-0.0021	0.4969	-0.0017	0.4107
120	38.12	-0.06	0.00420	9.9999	0.0010	9.9999	0.0790	1.2402	-0.0021	0.5102	-0.0009	0.4114
121	38.69	-0.03	0.00364	9.9999	0.0083	9.9999	0.1740	1.2067	-0.0022	0.4710	-0.0019	0.4107
122	38.67	-0.05	0.00304	9.9999	-0.0011	9.9999	-0.0071	1.2518	-0.0024	0.5165	-0.0019	0.4126
123	38.09	-0.05	0.00237	9.9999	0.0033	9.9999	0.1372	1.2709	-0.0012	0.5248	-0.0009	0.4130
124	38.20	-0.04	0.00366	9.9999	0.0050	9.9999	0.2073	1.2004	-0.0026	0.4949	-0.0027	0.4123
125	38.31	-0.05	0.00263	9.9999	0.0021	9.9999	0.0796	1.2188	-0.0029	0.5024	-0.0024	0.4129
126	38.43	-0.06	0.00267	9.9999	0.0007	9.9999	0.1038	1.2034	-0.0030	0.4986	-0.0025	0.4126
127	38.53	-0.07	0.00363	9.9999	0.0005	9.9999	0.2012	1.2447	-0.0026	0.5143	-0.0023	0.4132
128	38.00	-0.07	0.00225	9.9999	0.0010	9.9999	0.0300	1.2407	-0.0025	0.5162	-0.0020	0.4134
129	38.77	-0.06	0.00188	9.9999	0.0	9.9999	0.0	1.2501	-0.0032	0.5192	-0.0026	0.4134
130	38.98	-0.05	0.00167	9.9999	-0.0004	9.9999	-0.0478	1.2127	-0.0027	0.4996	-0.0021	0.4122
131	38.00	-0.07	0.00151	9.9999	-0.0008	9.9999	-0.0530	1.2270	-0.0033	0.5067	-0.0027	0.4127
132	38.09	-0.06	0.00170	9.9999	-0.0015	9.9999	-0.0352	1.2250	-0.0036	0.5113	-0.0029	0.4140
133	38.20	-0.06	0.00153	9.9999	0.0076	9.9999	0.2350	1.2459	-0.0038	0.5151	-0.0031	0.4135
134	38.33	-0.06	0.00130	9.9999	0.0	9.9999	0.0	1.2009	-0.0016	0.5241	-0.0014	0.4140
135	38.42	-0.05	0.00201	9.9999	0.0035	9.9999	0.1361	1.1661	-0.0040	0.4905	-0.0034	0.4136
136	38.54	-0.06	0.00214	9.9999	0.0031	9.9999	0.1431	1.2404	-0.0036	0.5175	-0.0024	0.4145
137	38.03	-0.07	0.00237	9.9999	0.0028	9.9999	0.1161	1.2519	-0.0025	0.5243	-0.0020	0.4144
138	38.72	-0.04	0.00201	9.9999	0.0045	9.9999	0.1724	1.2150	-0.0039	0.5035	-0.0032	0.4144

TEST PART MACH ALFA-B PAI CONF E DEL1 DEL2 DEL3 DEL4 TRANSITION
7 39 1.600 1.61 0.0 BINDER 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CD3	ALPF3	YCPF3	CNF4	CM4	CD4	ALPF4	YCPF4
139	40.83	-0.03	0.0263	0.9999	0.0002	0.9999	0.2175	1.2674	-0.0025	0.5260	-0.0020	0.4151
140	40.92	-0.06	0.0181	0.9999	0.0000	0.9999	0.1870	1.2428	-0.0037	0.5153	-0.0030	0.4148
141	41.07	-0.07	0.0235	0.9999	0.0002	0.9999	0.2030	1.2717	-0.0029	0.5273	-0.0023	0.4147
142	41.16	-0.03	0.0210	0.9999	0.0004	0.9999	0.1903	1.2536	-0.0042	0.5149	-0.0034	0.4153
143	41.26	-0.06	0.0297	0.9999	0.0002	0.9999	0.2464	1.2969	-0.0039	0.5163	-0.0031	0.4154
144	41.39	-0.03	0.0230	0.9999	0.0115	0.9999	0.2019	1.2652	-0.0037	0.5267	-0.0029	0.4164
145	41.47	-0.06	0.0260	0.9999	0.0035	0.9999	0.2115	1.2695	-0.0047	0.5191	-0.0036	0.4158
146	41.56	-0.06	0.0182	0.9999	0.0013	0.9999	0.0002	1.2679	-0.0043	0.5278	-0.0034	0.4163
147	41.65	-0.03	0.0260	0.9999	0.0004	0.9999	0.2402	1.2912	-0.0045	0.5196	-0.0036	0.4155
148	41.79	-0.04	0.0210	0.9999	0.0000	0.9999	0.2190	1.2743	-0.0037	0.5241	-0.0031	0.4162
149	41.90	-0.07	0.0269	0.9999	0.0000	0.9999	0.2324	1.2141	-0.0061	0.5039	-0.0050	0.4151
150	42.00	-0.07	0.0182	0.9999	-0.0002	0.9999	-0.0163	1.2367	-0.0051	0.5141	-0.0041	0.4151
151	42.05	-0.07	0.0235	0.9999	0.0057	0.9999	0.2428	1.2829	-0.0052	0.5169	-0.0042	0.4159
152	42.20	-0.07	0.0259	0.9999	0.0074	0.9999	0.2457	1.2870	-0.0043	0.5201	-0.0034	0.4167
153	42.30	-0.03	0.0234	0.9999	0.0072	0.9999	0.3377	1.2457	-0.0054	0.5166	-0.0043	0.4147
154	42.40	-0.06	0.0237	0.9999	0.0041	0.9999	0.1933	1.2884	-0.0044	0.5254	-0.0039	0.4149
155	42.49	-0.03	0.0181	0.9999	0.0037	0.9999	0.2498	1.2819	-0.0043	0.5236	-0.0034	0.4149
156	42.59	-0.03	0.0232	0.9999	0.0053	0.9999	0.2455	1.2821	-0.0046	0.5246	-0.0037	0.4157
157	42.69	-0.07	0.0235	0.9999	0.0053	0.9999	0.2455	1.2963	-0.0050	0.5178	-0.0040	0.4148
158	42.78	-0.03	0.0210	0.9999	0.0051	0.9999	0.2429	1.2933	-0.0050	0.5176	-0.0040	0.4156
159	42.88	-0.06	0.0181	0.9999	0.0037	0.9999	0.2296	1.2577	-0.0044	0.5217	-0.0035	0.4148
160	42.97	-0.07	0.0228	0.9999	0.0130	0.9999	0.2436	1.2879	-0.0057	0.5112	-0.0046	0.4151
161	43.05	-0.07	0.0261	0.9999	0.0012	0.9999	0.1879	1.2852	-0.0056	0.4977	-0.0046	0.4116
162	43.15	-0.10	0.0180	0.9999	0.0067	0.9999	0.2937	1.2670	-0.0035	0.5106	-0.0045	0.4128
163	43.20	-0.06	0.0235	0.9999	0.0057	0.9999	0.2426	1.2933	-0.0047	0.5207	-0.0038	0.4155
164	43.33	-0.06	0.0263	0.9999	-0.0005	0.9999	-0.0734	1.2734	-0.0030	0.5276	-0.0024	0.4144
165	43.42	-0.07	0.0210	0.9999	0.0051	0.9999	0.2429	1.2880	-0.0046	0.5270	-0.0036	0.4155
166	43.52	-0.09	0.0158	0.9999	0.0055	0.9999	0.2776	1.2908	-0.0023	0.5287	-0.0018	0.4154
167	43.60	-0.07	0.0130	0.9999	0.0090	0.9999	0.2941	1.2873	-0.0044	0.5220	-0.0035	0.4152
168	43.69	-0.03	0.0183	0.9999	0.0058	0.9999	0.3135	1.2179	-0.0064	0.5033	-0.0053	0.4133
169	43.80	-0.06	0.0256	0.9999	0.0135	0.9999	0.3792	1.2578	-0.0055	0.5203	-0.0046	0.4137
170	43.90	-0.07	0.0207	0.9999	0.0112	0.9999	0.3040	1.2881	-0.0030	0.5267	-0.0023	0.4161
171	43.97	-0.03	0.0180	0.9999	0.0050	0.9999	0.3550	1.2589	-0.0050	0.5109	-0.0049	0.4131
172	44.06	-0.07	0.0256	0.9999	0.0084	0.9999	0.3256	1.2881	-0.0051	0.5210	-0.0041	0.4135
173	44.17	-0.04	0.0235	0.9999	0.0055	0.9999	0.3110	1.2739	-0.0047	0.5268	-0.0037	0.4152
174	44.23	-0.07	0.0183	0.9999	0.0063	0.9999	0.3405	1.2790	-0.0038	0.5209	-0.0030	0.4151
175	44.32	-0.07	0.0270	0.9999	0.0136	0.9999	0.4037	1.2934	-0.0043	0.5267	-0.0033	0.4143
176	44.43	-0.06	0.0261	0.9999	0.0081	0.9999	0.3005	1.2805	-0.0050	0.5252	-0.0039	0.4141
177	44.51	-0.03	0.0184	0.9999	0.0075	0.9999	0.3707	1.2459	-0.0062	0.5134	-0.0050	0.4147
178	44.61	-0.04	0.0263	0.9999	0.0100	0.9999	0.3534	1.2850	-0.0029	0.5221	-0.0023	0.4162
179	44.72	-0.03	0.0270	0.9999	0.0104	0.9999	0.3552	1.2760	-0.0045	0.5296	-0.0035	0.4148
180	44.79	-0.07	0.0233	0.9999	0.0082	0.9999	0.3519	1.1803	-0.0070	0.4691	-0.0059	0.4116
181	44.89	-0.03	0.0256	0.9999	0.0093	0.9999	0.3035	1.2583	-0.0052	0.5192	-0.0041	0.4126
182	45.00	-0.07	0.0210	0.9999	0.0109	0.9999	0.4037	1.1982	-0.0074	0.4954	-0.0062	0.4135
183	45.09	-0.06	0.0263	0.9999	0.0139	0.9999	0.4052	1.2787	-0.0039	0.5313	-0.0031	0.4155
184	45.19	-0.06	0.0231	0.9999	0.0133	0.9999	0.4018	1.2320	-0.0055	0.5089	-0.0045	0.4131

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 5 OF 8
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NAU-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 54 1.00 1.7 0.0 DIAMPIS 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CD3	XLPF3	YCPF3	CNF4	CM4	CD4	XLPF4	YCPF4
183	45.27	-0.00	0.0336	9.9999	0.0140	9.9999	0.4771	1.2349	-0.0058	0.5108	-0.0047	0.4135
184	45.36	-0.03	0.0336	9.9999	0.0136	9.9999	0.4444	1.2303	-0.0040	0.5202	-0.0032	0.4141
185	45.43	-0.07	0.0298	9.9999	0.0103	9.9999	0.3992	1.1920	-0.0003	0.4965	-0.0053	0.4132
186	45.34	-0.03	0.0429	9.9999	0.0139	9.9999	0.4333	1.2730	-0.0037	0.5215	-0.0029	0.4150
187	45.34	-0.03	0.0178	9.9999	0.0089	9.9999	0.4341	1.2300	-0.0043	0.5204	-0.0034	0.4128
188	45.42	-0.03	0.0306	9.9999	0.0140	9.9999	0.4771	1.2305	-0.0053	0.5098	-0.0043	0.4143
189	45.19	-0.01	0.0233	9.9999	0.0101	9.9999	0.4335	1.2371	-0.0047	0.5114	-0.0038	0.4134
190	45.30	-0.01	0.0201	9.9999	0.0114	9.9999	0.3501	1.2306	-0.0061	0.5000	-0.0050	0.4116
191	45.39	-0.00	0.0200	9.9999	0.0095	9.9999	0.4700	1.2417	-0.0058	0.5121	-0.0045	0.4124
192	46.03	-0.01	0.0233	9.9999	0.0111	9.9999	0.4704	1.2305	-0.0035	0.5051	-0.0045	0.4105
193	46.10	-0.04	0.0220	9.9999	0.0110	9.9999	0.5000	1.1883	-0.0070	0.4878	-0.0064	0.4105
194	46.09	-0.03	0.0304	9.9999	0.0143	9.9999	0.4777	1.2049	-0.0072	0.4956	-0.0060	0.4115
195	46.33	-0.06	0.0282	9.9999	0.0125	9.9999	0.4433	1.2310	-0.0065	0.5076	-0.0053	0.4124
196	46.41	-0.04	0.0301	9.9999	0.0141	9.9999	0.4593	1.1930	-0.0072	0.4903	-0.0060	0.4103
197	46.31	-0.04	0.0356	9.9999	0.0131	9.9999	0.4770	1.2302	-0.0064	0.4929	-0.0053	0.4107
198	46.03	-0.04	0.0356	9.9999	0.0170	9.9999	0.4775	1.2174	-0.0078	0.4991	-0.0063	0.4100
199	46.33	-0.04	0.0184	9.9999	0.0091	9.9999	0.5212	1.1969	-0.0034	0.4897	-0.0070	0.4092
200	46.18	-0.04	0.0344	9.9999	0.0134	9.9999	0.4771	1.2303	-0.0062	0.4935	-0.0060	0.4090
201	46.08	-0.04	0.0356	9.9999	0.0170	9.9999	0.4775	1.2178	-0.0068	0.5009	-0.0056	0.4107
202	46.44	-0.05	0.0256	9.9999	0.0120	9.9999	0.4901	1.2134	-0.0060	0.4997	-0.0056	0.4101
203	47.01	-0.07	0.0121	9.9999	0.0068	9.9999	0.7273	1.2033	-0.0078	0.4928	-0.0065	0.4095
204	47.12	-0.04	0.0233	9.9999	0.0121	9.9999	0.5143	1.2000	-0.0034	0.4934	-0.0070	0.4089
205	47.07	-0.06	0.0306	9.9999	0.0143	9.9999	0.4754	1.2116	-0.0074	0.4954	-0.0061	0.4089
206	47.33	-0.06	0.0295	9.9999	0.0130	9.9999	0.5003	1.2311	-0.0073	0.5031	-0.0059	0.4087
207	47.37	-0.03	0.0319	9.9999	0.0107	9.9999	0.5235	1.2075	-0.0076	0.4946	-0.0063	0.4096
208	47.47	-0.03	0.0331	9.9999	0.0100	9.9999	0.5378	1.2078	-0.0074	0.4946	-0.0061	0.4097
209	47.34	-0.03	0.0381	9.9999	0.0191	9.9999	0.5013	1.2047	-0.0079	0.4971	-0.0065	0.4092
210	47.03	-0.03	0.0241	9.9999	0.0125	9.9999	0.5650	1.2299	-0.0076	0.5029	-0.0062	0.4089
211	47.13	-0.03	0.0337	9.9999	0.0130	9.9999	0.5001	1.2240	-0.0064	0.5006	-0.0069	0.4090
212	47.14	-0.06	0.0343	9.9999	0.0134	9.9999	0.5030	1.2238	-0.0064	0.5042	-0.0068	0.4080
213	47.09	-0.04	0.0285	9.9999	0.0150	9.9999	0.5200	1.2334	-0.0091	0.5044	-0.0074	0.4093
214	47.37	-0.03	0.0284	9.9999	0.0153	9.9999	0.5496	1.2285	-0.0080	0.5038	-0.0066	0.4101
215	46.07	-0.04	0.0233	9.9999	0.0131	9.9999	0.5022	1.2443	-0.0107	0.5092	-0.0086	0.4092
216	46.13	-0.00	0.0337	9.9999	0.0145	9.9999	0.5482	1.2375	-0.0110	0.5066	-0.0089	0.4094
217	46.23	-0.01	0.0292	9.9999	0.0131	9.9999	0.5309	1.2821	-0.0123	0.5170	-0.0098	0.4097
218	46.33	-0.02	0.0281	9.9999	0.0202	9.9999	0.5302	1.2020	-0.0130	0.5161	-0.0106	0.4094
219	46.41	0.01	0.0305	9.9999	0.0216	9.9999	0.5303	1.2045	-0.0169	0.5206	-0.0134	0.4118
220	46.32	0.03	0.0281	9.9999	0.0239	9.9999	0.4979	1.1894	-0.0153	0.4942	-0.0124	0.4155
221	46.59	0.03	0.0318	9.9999	0.0205	9.9999	0.5200	1.1974	-0.0157	0.4969	-0.0132	0.4167
222	46.01	0.03	0.0300	9.9999	0.0243	9.9999	0.5203	1.1924	-0.0136	0.4975	-0.0131	0.4172
223	46.18	0.00	0.0280	9.9999	0.0211	9.9999	0.5253	1.1899	-0.0153	0.4956	-0.0129	0.4164
224	46.03	-0.03	0.0252	9.9999	0.0204	9.9999	0.5196	1.1900	-0.0100	0.4982	-0.0134	0.4163
225	46.35	0.02	0.0250	9.9999	0.0234	9.9999	0.5455	1.1827	-0.0156	0.4921	-0.0132	0.4161
226	46.02	0.01	0.0256	9.9999	0.0222	9.9999	0.5003	1.1907	-0.0104	0.4961	-0.0138	0.4174
227	46.13	0.01	0.0255	9.9999	0.0240	9.9999	0.5219	1.1857	-0.0101	0.4953	-0.0136	0.4161
230	46.21	0.00	0.0331	9.9999	0.0160	9.9999	0.5000	1.1972	-0.0167	0.4996	-0.0140	0.4175

TEST PART MACH NAMBER PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 3Y 1.00 1.7 0.0 DIMPLE 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN13	CN3	CA3	ALPF3	YCPF3	CNF4	CN4	CA4	ALPF4	YCPF4
231	49.26	0.00	0.0256	0.9999	0.0172	0.9999	0.0719	1.1852	-0.0170	0.4927	-0.0144	0.4154
232	49.40	-0.01	0.0235	0.9999	0.0179	0.9999	0.5405	1.1720	-0.0175	0.4931	-0.0147	0.4154
233	49.47	-0.03	0.0231	0.9999	0.0184	0.9999	0.5850	1.2037	-0.0186	0.5005	-0.0155	0.4158
234	49.54	-0.04	0.0231	0.9999	0.0180	0.9999	0.6420	1.1920	-0.0180	0.4970	-0.0150	0.4173
235	49.60	-0.04	0.0236	0.9999	0.0223	0.9999	0.5245	1.2077	-0.0181	0.5024	-0.0150	0.4160
236	49.72	-0.06	0.0300	0.9999	0.0268	0.9999	0.6010	1.2120	-0.0230	0.5046	-0.0165	0.4161
237	49.83	-0.05	0.0282	0.9999	0.0149	0.9999	0.5264	1.2092	-0.0183	0.5020	-0.0152	0.4152
238	49.91	-0.05	0.0294	0.9999	0.0203	0.9999	0.5936	1.2113	-0.0190	0.5029	-0.0164	0.4152
239	50.03	-0.01	0.0281	0.9999	0.0184	0.9999	0.5836	1.2097	-0.0179	0.5023	-0.0161	0.4152
240	50.13	-0.04	0.0283	0.9999	0.0191	0.9999	0.5822	1.2052	-0.0187	0.4990	-0.0155	0.4141
241	50.20	-0.06	0.0282	0.9999	0.0196	0.9999	0.6243	1.2295	-0.0196	0.5069	-0.0161	0.4139
242	50.26	-0.06	0.0287	0.9999	0.0144	0.9999	0.6957	1.2093	-0.0190	0.4993	-0.0154	0.4129
243	46.18	-0.70	0.0220	0.9999	0.0140	0.9999	0.6364	1.2269	-0.0201	0.5092	-0.0164	0.4150
244	50.43	-0.06	0.0257	0.9999	0.0182	0.9999	0.5914	1.2064	-0.0196	0.4995	-0.0161	0.4139
245	50.54	-0.03	0.0282	0.9999	0.0184	0.9999	0.5816	1.2058	-0.0190	0.4980	-0.0158	0.4131
246	50.64	-0.07	0.0269	0.9999	0.0183	0.9999	0.6056	1.2143	-0.0197	0.5022	-0.0162	0.4136
247	50.71	-0.05	0.0263	0.9999	0.0184	0.9999	0.5306	1.2313	-0.0189	0.4952	-0.0158	0.4122
248	50.81	-0.06	0.0280	0.9999	0.0200	0.9999	0.5961	1.1932	-0.0192	0.4990	-0.0161	0.4140
249	50.90	-0.05	0.0274	0.9999	0.0170	0.9999	0.5752	1.2046	-0.0197	0.4979	-0.0164	0.4133
250	50.98	-0.04	0.0295	0.9999	0.0208	0.9999	0.5136	1.2035	-0.0201	0.4978	-0.0167	0.4136
251	51.04	-0.05	0.0291	0.9999	0.0216	0.9999	0.5524	1.2328	-0.0199	0.5078	-0.0162	0.4119
252	51.14	-0.04	0.0330	0.9999	0.0192	0.9999	0.5816	1.2202	-0.0195	0.5022	-0.0163	0.4116
253	51.24	-0.03	0.0306	0.9999	0.0160	0.9999	0.5425	1.2299	-0.0198	0.5066	-0.0161	0.4119
254	51.31	-0.07	0.0260	0.9999	0.0174	0.9999	0.6214	1.2062	-0.0198	0.4981	-0.0164	0.4130
255	51.37	-0.05	0.0269	0.9999	0.0169	0.9999	0.5721	1.2413	-0.0202	0.5105	-0.0163	0.4113
256	51.46	0.00	0.0299	0.9999	0.0189	0.9999	0.5768	1.2289	-0.0205	0.5060	-0.0167	0.4118
257	51.54	-0.04	0.0294	0.9999	0.0185	0.9999	0.5272	1.2186	-0.0198	0.5022	-0.0163	0.4121
258	51.62	-0.03	0.0296	0.9999	0.0194	0.9999	0.6034	1.2360	-0.0206	0.5085	-0.0167	0.4114
259	51.70	-0.02	0.0305	0.9999	0.0175	0.9999	0.5738	1.2269	-0.0204	0.5060	-0.0166	0.4118
260	51.77	-0.01	0.0291	0.9999	0.0190	0.9999	0.6494	1.2175	-0.0200	0.5010	-0.0165	0.4115
261	51.87	-0.03	0.0293	0.9999	0.0173	0.9999	0.5044	1.2175	-0.0206	0.5030	-0.0165	0.4107
262	51.94	-0.03	0.0299	0.9999	0.0190	0.9999	0.5574	1.2293	-0.0211	0.5079	-0.0172	0.4132
263	52.03	-0.01	0.0317	0.9999	0.0181	0.9999	0.5710	1.2221	-0.0207	0.5053	-0.0170	0.4118
264	52.11	-0.02	0.0279	0.9999	0.0201	0.9999	0.5303	1.2196	-0.0197	0.4995	-0.0162	0.4111
265	52.20	0.02	0.0376	0.9999	0.0204	0.9999	0.5305	1.2143	-0.0192	0.4989	-0.0158	0.4109
266	52.27	-0.02	0.0316	0.9999	0.0180	0.9999	0.5425	1.2203	-0.0199	0.5023	-0.0163	0.4116
267	52.36	-0.03	0.0423	0.9999	0.0243	0.9999	0.5091	1.2161	-0.0199	0.4995	-0.0164	0.4108
268	52.44	-0.01	0.0341	0.9999	0.0193	0.9999	0.5000	1.2132	-0.0197	0.4993	-0.0163	0.4116
269	52.54	-0.02	0.0280	0.9999	0.0187	0.9999	0.6133	1.1936	-0.0194	0.4922	-0.0163	0.4124
270	52.62	-0.01	0.0280	0.9999	0.0173	0.9999	0.6179	1.2303	-0.0199	0.4928	-0.0158	0.4106
271	52.69	-0.04	0.0287	0.9999	0.0172	0.9999	0.6992	1.2198	-0.0203	0.4985	-0.0166	0.4117
272	52.78	-0.01	0.0275	0.9999	0.0187	0.9999	0.5084	1.2149	-0.0206	0.4980	-0.0170	0.4113
273	52.85	-0.02	0.0292	0.9999	0.0174	0.9999	0.5959	1.2001	-0.0206	0.4972	-0.0171	0.4116
274	52.93	-0.02	0.0281	0.9999	0.0153	0.9999	0.6710	1.2051	-0.0206	0.4950	-0.0168	0.4106
275	53.03	-0.04	0.0317	0.9999	0.0181	0.9999	0.5710	1.1898	-0.0186	0.4871	-0.0157	0.4111
276	53.10	0.01	0.0403	0.9999	0.0217	0.9999	0.5365	1.1875	-0.0184	0.4873	-0.0155	0.4104

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NAIO-6 PHI CONF L DLE1 DLE2 DLE3 DLE4 TRANSITION
1 59 1.00 1.01 0.0 SLAVE15 0.0 0 0 0 0 UNKNOWN

PLANT	ALPHA	BETA	CNF3	CN3	CD3	ALPF3	YCPF3	CNF4	CM4	CD4	ALPF4	YCPF4
271	53.13	-0.01	0.0305	9.9999	0.0165	9.9999	0.0036	1.2036	-0.0174	0.4960	-0.0161	0.4104
270	53.20	-0.01	0.0300	9.9999	0.0224	9.9999	0.0044	1.1991	-0.0172	0.4963	-0.0161	0.4108
279	53.33	-0.01	0.0341	9.9999	0.0203	9.9999	0.0033	1.2000	-0.0172	0.4962	-0.0168	0.4104
203	53.44	-0.01	0.0349	9.9999	0.0197	9.9999	0.0060	1.1993	-0.0175	0.4919	-0.0163	0.4111
204	53.34	-0.03	0.0341	9.9999	0.0217	9.9999	0.0034	1.1957	-0.0204	0.4907	-0.0171	0.4104
202	53.28	-0.02	0.0349	9.9999	0.0207	9.9999	0.0032	1.2009	-0.0171	0.4930	-0.0164	0.4095
203	53.00	0.00	0.0358	9.9999	0.0172	9.9999	0.0019	1.1988	-0.0238	0.4915	-0.0172	0.4100
204	53.11	-0.03	0.0303	9.9999	0.0195	9.9999	0.0033	1.1910	-0.0170	0.4905	-0.0160	0.4085
205	53.03	-0.01	0.0286	9.9999	0.0183	9.9999	0.0030	1.1969	-0.0176	0.4909	-0.0164	0.4085
200	53.93	-0.02	0.0304	9.9999	0.0205	9.9999	0.0043	1.1978	-0.0193	0.4904	-0.0162	0.4088
201	54.01	-0.03	0.0316	9.9999	0.0211	9.9999	0.0077	1.1999	-0.0197	0.4900	-0.0166	0.4069
206	54.10	-0.02	0.0291	9.9999	0.0236	9.9999	0.0030	1.2007	-0.0201	0.4934	-0.0166	0.4079
207	54.16	-0.02	0.0317	9.9999	0.0196	9.9999	0.0103	1.2027	-0.0201	0.4913	-0.0167	0.4085
270	54.23	-0.01	0.0240	9.9999	0.0178	9.9999	0.0037	1.2120	-0.0201	0.4947	-0.0166	0.4080
271	54.32	-0.03	0.0268	9.9999	0.0210	9.9999	0.0080	1.2019	-0.0201	0.4938	-0.0168	0.4077
272	54.44	-0.01	0.0316	9.9999	0.0210	9.9999	0.0090	1.2069	-0.0209	0.4920	-0.0173	0.4077
273	54.44	-0.02	0.0329	9.9999	0.0200	9.9999	0.0081	1.2220	-0.0204	0.4960	-0.0167	0.4057
274	54.51	0.00	0.0265	9.9999	0.0176	9.9999	0.0030	1.2214	-0.0206	0.4975	-0.0169	0.4073
275	54.61	-0.02	0.0253	9.9999	0.0210	9.9999	0.0117	1.2215	-0.0210	0.4959	-0.0172	0.4080
276	54.74	-0.02	0.0231	9.9999	0.0231	9.9999	0.0074	1.2231	-0.0211	0.4976	-0.0173	0.4068
277	54.80	-0.01	0.0252	9.9999	0.0213	9.9999	0.0051	1.2302	-0.0212	0.5022	-0.0173	0.4062
278	54.88	-0.01	0.0247	9.9999	0.0220	9.9999	0.0072	1.2176	-0.0211	0.4957	-0.0174	0.4071
279	54.98	-0.02	0.0302	9.9999	0.0209	9.9999	0.0042	1.2402	-0.0216	0.5035	-0.0176	0.4060
300	55.04	-0.02	0.0278	9.9999	0.0242	9.9999	0.0090	1.2213	-0.0205	0.4930	-0.0168	0.4057
301	55.13	-0.02	0.0233	9.9999	0.0183	9.9999	0.7312	1.2290	-0.0215	0.4992	-0.0175	0.4062
302	55.19	-0.02	0.0229	9.9999	0.0173	9.9999	0.7355	1.2282	-0.0206	0.4946	-0.0169	0.4049
303	55.27	-0.02	0.0229	9.9999	0.0178	9.9999	0.7773	1.2252	-0.0223	0.4977	-0.0182	0.4062
304	55.33	-0.02	0.0290	9.9999	0.0186	9.9999	0.0093	1.2359	-0.0210	0.4996	-0.0175	0.4042
305	55.43	-0.01	0.0290	9.9999	0.0188	9.9999	0.0093	1.2347	-0.0217	0.5011	-0.0176	0.4059
306	55.52	-0.01	0.0302	9.9999	0.0213	9.9999	0.7055	1.2520	-0.0232	0.5073	-0.0180	0.4052
307	55.58	-0.02	0.0270	9.9999	0.0187	9.9999	0.0727	1.2372	-0.0215	0.4992	-0.0174	0.4035
310	55.63	-0.03	0.0280	9.9999	0.0184	9.9999	0.0095	1.2349	-0.0221	0.5000	-0.0179	0.4049
309	55.73	-0.02	0.0254	9.9999	0.0171	9.9999	0.0732	1.2316	-0.0217	0.4973	-0.0176	0.4037
310	55.80	-0.03	0.0275	9.9999	0.0230	9.9999	0.0097	1.2329	-0.0219	0.4992	-0.0173	0.4039
311	55.88	-0.03	0.0275	9.9999	0.0238	9.9999	0.0097	1.2360	-0.0215	0.4982	-0.0174	0.4031
312	55.97	-0.01	0.0302	9.9999	0.0203	9.9999	0.0722	1.2389	-0.0218	0.4989	-0.0176	0.4027
313	56.03	-0.02	0.0277	9.9999	0.0211	9.9999	0.7317	1.2332	-0.0210	0.4959	-0.0175	0.4021
314	56.13	-0.02	0.0301	9.9999	0.0213	9.9999	0.7370	1.2289	-0.0216	0.4972	-0.0173	0.4046
315	56.20	-0.02	0.0301	9.9999	0.0213	9.9999	0.7370	1.2250	-0.0218	0.4932	-0.0178	0.4026
316	56.28	-0.02	0.0321	9.9999	0.0217	9.9999	0.0132	1.2307	-0.0210	0.4974	-0.0175	0.4016
317	56.33	-0.04	0.0350	9.9999	0.0240	9.9999	0.7329	1.2440	-0.0223	0.4992	-0.0179	0.4011
318	56.43	-0.04	0.0302	9.9999	0.0198	9.9999	0.0330	1.2303	-0.0219	0.4937	-0.0174	0.4019
319	56.51	-0.02	0.0275	9.9999	0.0248	9.9999	0.0013	1.2492	-0.0232	0.5019	-0.0186	0.4018
320	56.59	-0.01	0.0276	9.9999	0.0194	9.9999	0.0930	1.2484	-0.0217	0.4990	-0.0174	0.3997
321	56.70	-0.03	0.0315	9.9999	0.0210	9.9999	0.0057	1.2703	-0.0237	0.5050	-0.0187	0.4007
322	56.77	-0.04	0.0290	9.9999	0.0198	9.9999	0.0040	1.2597	-0.0238	0.4990	-0.0192	0.4025

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 59 MACH 1.60 RATIO 1.0 PRI 0.0 CLOF 15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
323	36.03	-0.04	0.0303	9.9999	0.0209	9.9999	0.6396	1.2817	-0.0237	0.5113	-0.0165	0.3990
324	36.93	-0.04	0.0269	9.9999	0.0181	9.9999	0.7120	1.2795	-0.0235	0.5135	-0.0200	0.4012
325	37.02	-0.01	0.0229	9.9999	0.0179	9.9999	0.7817	1.2846	-0.0243	0.5140	-0.0189	0.4001
326	37.08	-0.00	0.0229	9.9999	0.0189	9.9999	0.8253	1.2599	-0.0246	0.5070	-0.0196	0.4029
327	37.11	-0.03	0.0230	9.9999	0.0181	9.9999	0.7120	1.2599	-0.0237	0.5100	-0.0198	0.3987
328	37.09	-0.04	0.0230	9.9999	0.0179	9.9999	0.7783	1.2693	-0.0243	0.5067	-0.0192	0.4001
329	37.02	-0.00	0.0230	9.9999	0.0174	9.9999	0.7565	1.2941	-0.0261	0.5170	-0.0202	0.3995
330	37.00	-0.04	0.0219	9.9999	0.0188	9.9999	0.6758	1.2793	-0.0245	0.5105	-0.0192	0.3991
331	37.00	-0.00	0.0383	9.9999	0.0269	9.9999	0.8030	1.2592	-0.0249	0.5067	-0.0197	0.4008
332	37.02	-0.03	0.0199	9.9999	0.0178	9.9999	0.8006	1.2430	-0.0240	0.4965	-0.0196	0.4010
333	37.00	-0.04	0.0218	9.9999	0.0211	9.9999	0.7006	1.2706	-0.0259	0.5078	-0.0188	0.3997
334	37.00	-0.00	0.0229	9.9999	0.0189	9.9999	0.8253	1.2527	-0.0246	0.5017	-0.0197	0.4005
335	37.75	-0.02	0.0218	9.9999	0.0184	9.9999	0.7523	1.2651	-0.0241	0.5053	-0.0191	0.3994
336	37.01	-0.01	0.0221	9.9999	0.0197	9.9999	0.7370	1.2612	-0.0243	0.5039	-0.0193	0.3988
337	37.00	-0.03	0.0209	9.9999	0.0213	9.9999	0.7012	1.2600	-0.0247	0.5013	-0.0196	0.3983
338	37.02	-0.03	0.0218	9.9999	0.0184	9.9999	0.8440	1.2547	-0.0254	0.5002	-0.0203	0.3987
339	36.03	-0.04	0.0188	9.9999	0.0180	9.9999	0.9524	1.2799	-0.0252	0.5067	-0.0197	0.3959
340	36.09	-0.03	0.0228	9.9999	0.0230	9.9999	0.7761	1.2706	-0.0255	0.5039	-0.0201	0.3966
341	36.11	-0.01	0.0231	9.9999	0.0190	9.9999	0.8225	1.2656	-0.0256	0.5030	-0.0205	0.3972
342	36.24	-0.05	0.0233	9.9999	0.0202	9.9999	0.7922	1.2778	-0.0256	0.5039	-0.0201	0.3944
343	36.32	-0.04	0.0233	9.9999	0.0212	9.9999	0.8319	1.2700	-0.0264	0.5057	-0.0207	0.3962
344	36.40	-0.01	0.0260	9.9999	0.0223	9.9999	0.7904	1.2809	-0.0260	0.5060	-0.0208	0.3951
345	36.49	-0.02	0.0230	9.9999	0.0188	9.9999	0.9126	1.2720	-0.0261	0.5050	-0.0205	0.3969
346	36.56	-0.04	0.0236	9.9999	0.0197	9.9999	0.7695	1.2801	-0.0256	0.5011	-0.0202	0.3952
347	36.03	-0.02	0.0260	9.9999	0.0224	9.9999	0.8030	1.2639	-0.0256	0.5007	-0.0203	0.3962
348	36.08	-0.03	0.0242	9.9999	0.0203	9.9999	0.7840	1.2801	-0.0271	0.5053	-0.0212	0.3948
349	36.06	-0.06	0.0258	9.9999	0.0222	9.9999	0.8072	1.2840	-0.0265	0.5062	-0.0207	0.3943
350	36.07	-0.05	0.0199	9.9999	0.0188	9.9999	0.8091	1.2800	-0.0273	0.5069	-0.0212	0.3934
351	36.06	-0.08	0.0256	9.9999	0.0203	9.9999	0.7930	1.2957	-0.0272	0.5100	-0.0210	0.3936

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(ASRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 00 MACH 1.01 PHI 45.0 CONF 0 L 0.0 DELT 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	LA	CAB	CAF	XCP
1	-5.71	0.00	-0.7428	1.0753	0.1150	-0.3228	-0.0035	0.3143	0.0965	0.2178	-1.9658
2	-5.71	0.10	-0.7305	1.0173	0.0903	-0.3395	-0.0035	0.3191	0.0947	0.2193	-2.0004
3	-5.72	0.10	-0.7136	1.0900	0.0004	-0.3333	-0.0037	0.3201	0.0928	0.2276	-1.6718
4	-5.72	0.10	-0.6962	1.1870	0.0004	-0.2598	-0.0037	0.3212	0.0903	0.2368	-2.0057
5	-5.69	0.10	-0.7143	0.9401	0.1230	-0.2993	-0.0036	0.3294	0.0852	0.2441	-1.9937
6	-5.63	0.11	-0.6359	0.7291	0.1615	-0.2702	-0.0036	0.3245	0.0816	0.2408	-2.0515
7	-6.31	0.10	-0.6459	0.9020	0.1004	-0.2200	-0.0037	0.3260	0.0796	0.2463	-2.0436
8	-1.33	0.10	-0.0998	0.6579	0.1018	-0.2248	-0.0036	0.3202	0.0725	0.2472	-2.5910
9	-0.36	0.10	0.0021	0.0023	0.1399	-0.2084	-0.0036	0.3272	0.0769	0.2502	23.1185
10	0.09	0.10	0.1290	-0.1915	0.1712	-0.2127	-0.0036	0.3314	0.0760	0.2553	-1.4768
11	1.20	0.10	0.2603	-0.4161	0.1393	-0.2033	-0.0036	0.3347	0.0785	0.2561	-1.5435
12	2.00	0.10	0.3349	-0.6180	0.0915	-0.2021	-0.0038	0.3339	0.0821	0.2517	-1.6953
13	3.02	0.10	0.4916	-0.8472	0.1038	-0.2330	-0.0036	0.3348	0.0860	0.2487	-1.7234
14	4.02	0.10	0.6390	-1.1119	0.0040	-0.2204	-0.0039	0.3452	0.0940	0.2511	-1.7631
15	5.00	0.10	0.7990	-1.3903	0.0982	-0.2230	-0.0041	0.3399	0.0935	0.2414	-1.8120
16	6.00	0.10	0.9341	-1.6716	0.0901	-0.2295	-0.0043	0.3491	0.1136	0.2355	-1.8477
17	7.00	0.10	1.0760	-1.9413	0.0824	-0.2373	-0.0048	0.3521	0.1224	0.2297	-1.8974
18	8.04	0.10	1.2231	-2.2126	0.0725	-0.2521	-0.0054	0.3484	0.1289	0.2195	-1.9390
19	9.01	0.10	1.3537	-2.4712	0.0647	-0.2385	-0.0055	0.3539	0.1383	0.2126	-1.9453
20	10.03	0.10	1.5049	-2.7421	0.0532	-0.2557	-0.0056	0.3485	0.1455	0.2030	-1.9345
21	11.00	0.10	1.7305	-3.0730	0.0509	-0.2410	-0.0063	0.3515	0.1511	0.2004	-1.9428
22	12.01	0.10	1.8593	-3.3782	0.0007	-0.2253	-0.0067	0.3493	0.1575	0.1920	-1.9422
23	13.05	0.10	2.0401	-3.6843	0.0093	-0.2429	-0.0066	0.3470	0.1648	0.1822	-1.9009
24	14.04	0.11	2.2309	-4.0203	0.1304	-0.2980	0.0026	0.3404	0.1668	0.1776	-1.6015
25	15.07	0.11	2.4913	-4.0200	0.1413	-0.3009	-0.0070	0.3448	0.1776	0.1672	-1.8545
26	16.06	0.10	2.6751	-4.9000	0.1090	-0.2760	-0.0011	0.3423	0.1859	0.1564	-1.8345
27	17.09	0.11	2.8257	-5.1962	0.1348	-0.2355	-0.0074	0.3490	0.1953	0.1537	-1.8182
28	18.09	0.11	3.0310	-5.5211	0.1455	-0.2796	-0.0070	0.3436	0.2080	0.1376	-1.7667
29	19.09	0.11	3.2401	-5.8055	0.1164	-0.2807	-0.0071	0.3453	0.2211	0.1242	-1.7268
30	20.09	0.11	3.4905	-6.0087	0.1263	-0.2431	-0.0066	0.3420	0.2312	0.1108	-1.6854
31	21.07	0.11	3.6366	-6.3624	0.2016	-0.2851	-0.0066	0.3411	0.2450	0.0960	-1.6331
32	22.07	0.12	3.8971	-6.7020	0.2903	-0.2589	-0.0057	0.3323	0.2584	0.0736	-1.5350
33	23.07	0.12	4.1010	-6.9193	0.3271	-0.2607	-0.0070	0.3349	0.2665	0.0683	-1.4906
34	24.07	0.13	4.4715	-7.3039	0.3084	-0.2200	-0.0070	0.3402	0.2803	0.0598	-1.3037
35	25.04	0.13	4.6561	-7.6160	0.3035	0.0651	0.0736	0.3742	0.3194	0.0548	-1.1551
36	26.08	0.14	5.0009	-7.6736	0.4185	0.0231	0.1003	0.3737	0.3336	0.0401	-1.0532
37	27.00	0.13	5.3393	-8.9751	0.5599	-0.0114	0.1391	0.3765	0.3451	0.0314	-0.9318
38	28.03	0.13	5.5102	-9.3049	0.6104	-0.3513	0.0309	0.3849	0.3649	0.0230	-0.8326
39	28.03	0.17	5.5913	-9.3354	0.6003	-0.4500	0.0732	0.3826	0.3625	0.0201	-0.8827
40	28.03	0.13	5.5371	-9.4623	0.5798	-0.4436	0.0825	0.3902	0.3696	0.0206	-0.8557
41	27.03	0.14	5.0159	-8.8060	0.5190	0.0837	0.1220	0.3808	0.3605	0.0263	-0.8659
42	26.03	0.14	5.2908	-9.0112	0.5020	-0.2247	0.0873	0.4053	0.3735	0.0318	-0.8239
43	26.01	0.15	5.0519	-8.5931	0.4815	-0.3215	0.0433	0.4146	0.3739	0.0407	-0.8127
44	24.15	0.15	5.1401	-8.0492	0.5020	-0.1874	0.0554	0.3934	0.3703	0.0231	-0.8092
45	23.08	0.15	5.0034	-7.9114	0.0774	-0.2706	0.0380	0.4016	0.3804	0.0212	-0.7702
46	22.00	0.15	5.1044	-7.9069	0.0924	-0.2923	0.0376	0.4156	0.3824	0.0332	-0.7726

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 60 1.00 1.7 45.0 GROUPS C.G 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	29.21	0.15	0.7502	-0.0090	0.0058	-0.2658	0.0440	0.4142	0.3647	0.0295	-0.7512
48	29.33	0.13	0.0010	-0.0298	0.0056	-0.0032	0.0323	0.4103	0.3659	0.0244	-0.7374
49	29.40	0.16	0.0131	-0.0278	0.0060	-0.0046	0.0047	0.4114	0.3674	0.0240	-0.7290
50	29.00	0.16	0.0192	-0.0281	0.7104	-0.0320	0.0500	0.4161	0.3680	0.0281	-0.7333
51	29.17	0.16	0.1634	-0.0371	0.7113	-0.0338	0.0313	0.4104	0.3685	0.0219	-0.7199
52	29.24	0.15	0.1659	-0.0001	0.0059	-0.0320	0.0308	0.4104	0.3696	0.0208	-0.7085
53	30.33	0.13	0.1961	-0.0007	0.0051	-0.0329	0.0309	0.4130	0.3695	0.0231	-0.7080
54	30.42	0.11	0.2099	-0.0137	0.0132	-0.0204	0.0218	0.4197	0.3947	0.0250	-0.0058
55	30.31	0.11	0.3421	-0.0481	0.0006	-0.0506	0.0520	0.4105	0.3962	0.0203	-0.7044
56	30.21	0.13	0.3316	-0.0260	0.7014	-0.0370	0.0069	0.4224	0.4013	0.0211	-0.6846
57	30.09	0.13	0.3238	-0.0245	0.7104	-0.0340	0.0047	0.4184	0.4037	0.0147	-0.6678
58	30.78	0.11	0.4741	-0.1758	0.0036	-0.0346	0.0347	0.4170	0.4044	0.0126	-0.6458
59	30.90	0.11	0.4752	-0.1110	0.0047	-0.0100	0.0390	0.4286	0.4087	0.0199	-0.6349
60	31.03	0.11	0.6238	-0.0000	0.0003	-0.0247	0.0392	0.4318	0.4137	0.0211	-0.6082
61	31.19	0.11	0.6209	-0.0505	0.0120	-0.0042	0.0406	0.4247	0.4105	0.0142	-0.6065
62	31.35	0.11	0.6927	-0.0335	0.7100	-0.0050	0.0055	0.4326	0.4127	0.0199	-0.5964
63	31.46	0.10	0.6919	-0.1000	1.0035	-0.0100	0.0542	0.4302	0.4147	0.0155	-0.5645
64	31.01	0.10	0.7001	-0.0015	1.0007	-0.0127	0.0063	0.4303	0.4135	0.0140	-0.5677
65	31.79	0.11	0.7710	-0.0929	0.7105	-0.0242	0.0002	0.4312	0.4186	0.0226	-0.5743
66	31.09	0.11	0.8030	-0.1041	0.0091	-0.0140	0.0043	0.4303	0.4181	0.0122	-0.5508
67	32.02	0.11	0.8907	-0.0100	1.0121	-0.0302	0.0130	0.4415	0.4193	0.0222	-0.5240
68	32.19	0.10	0.9190	-0.0031	1.0004	-0.0179	0.0016	0.4372	0.4193	0.0179	-0.5540
69	32.30	0.10	1.0001	-0.0179	1.0130	-0.0158	0.0015	0.4369	0.4232	0.0157	-0.5282
70	32.43	0.11	1.0030	-0.0900	1.0200	-0.0009	0.0194	0.4254	0.4220	0.0034	-0.5222
71	32.50	0.10	1.0041	-0.0943	1.0220	-0.0070	0.0177	0.4380	0.4232	0.0120	-0.5230
72	32.09	0.10	1.0193	-0.0174	1.0125	-0.0151	0.0060	0.4295	0.4240	0.0055	-0.5280
73	32.82	0.10	1.1093	-0.0150	1.0310	-0.0100	0.1039	0.4302	0.4270	0.0132	-0.5041
74	32.95	0.10	1.1176	-0.0020	1.0300	-0.0070	0.0057	0.4239	0.4263	-0.0024	-0.5102
75	33.09	0.10	1.2000	-0.0325	1.0510	-0.0001	0.0019	0.4360	0.4263	0.0103	-0.5122
76	33.22	0.11	1.2000	-0.0099	1.0010	-0.0117	0.0041	0.4311	0.4263	0.0020	-0.5136
77	33.35	0.11	1.2113	-0.0370	1.0150	-0.0119	0.0342	0.4265	0.4298	-0.0013	-0.5036
78	33.48	0.10	1.2153	-0.0020	1.0004	-0.0090	0.1042	0.4259	0.4290	-0.0031	-0.5153
79	33.60	0.11	1.3001	-0.0001	0.9500	-0.0035	0.1284	0.4249	0.4333	-0.0004	-0.4983
80	33.72	0.11	1.3091	-0.0140	0.9497	-0.0019	0.1224	0.4244	0.4341	-0.0007	-0.4986
81	33.85	0.10	1.3170	-0.0018	0.9167	-0.0021	0.1223	0.4511	0.4349	0.0162	-0.4852
82	33.99	0.11	1.3110	-0.0003	0.9965	-0.0033	0.1005	0.4341	0.4391	-0.0050	-0.5150
83	34.11	0.15	1.3215	-0.0430	0.7371	-0.0093	0.1281	0.4414	0.4375	0.0039	-0.4714
84	34.49	0.17	1.0101	-0.0003	0.9355	-0.0238	0.1004	0.4293	0.4367	-0.0074	-0.5227
85	34.35	0.10	1.3102	-0.0040	0.8892	-0.0125	0.1004	0.4303	0.4350	0.0007	-0.4979
86	34.47	0.10	1.3100	-0.0277	0.8802	-0.0307	0.1284	0.4297	0.4391	-0.0094	-0.4961
87	34.01	0.10	1.3370	-0.0010	0.7930	-0.0355	0.1283	0.4204	0.4376	-0.0092	-0.4940
88	34.73	0.15	1.3226	-0.1103	0.7221	-0.1042	0.1283	0.4385	0.4340	0.0005	-0.4769
89	34.85	0.13	0.0210	-0.0353	0.7514	-0.0301	0.1222	0.4315	0.4414	-0.0099	-0.5056
90	34.99	0.13	0.0003	-0.0020	0.7044	-0.0272	0.1103	0.4301	0.4429	-0.0048	-0.4923
91	35.09	0.14	0.1100	-0.0044	0.0137	-0.1333	0.1102	0.4347	0.4419	-0.0072	-0.4982
92	35.22	0.14	0.1003	-0.9708	0.0542	-0.0371	0.1103	0.4295	0.4449	-0.0154	-0.4850

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 00 MACH 1.07 RAID-0 PHI 45.0 CONF BASIC13 L D.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	35.53	0.13	0.2243	-0.0824	0.7027	-0.1910	0.1200	0.4361	0.4449	-0.0088	-0.4646
94	35.48	0.14	0.3130	-0.0445	0.7051	-0.2031	0.0926	0.4271	0.4476	-0.0205	-0.4745
95	35.58	0.14	0.2012	-0.0928	0.6922	-0.1830	0.0961	0.4312	0.4503	-0.0191	-0.4690
96	35.71	0.13	0.1268	-0.0231	0.7001	-0.1740	0.1047	0.4317	0.4522	-0.0205	-0.4647
97	35.83	0.14	0.0464	-0.0960	0.6920	-0.1492	0.0927	0.4251	0.4503	-0.0266	-0.4663
98	35.76	0.16	0.0874	-0.1243	0.7145	-0.2290	0.0950	0.4471	0.4534	-0.0063	-0.4680
99	35.71	0.14	0.0984	-0.0958	0.6896	-0.1691	0.0928	0.4289	0.4546	-0.0257	-0.4665
100	36.19	0.13	0.0493	-0.0581	0.6830	-0.1316	0.0806	0.4181	0.4561	-0.0180	-0.4629
101	36.30	0.16	0.0049	-0.1053	0.6134	-0.0481	0.0000	0.4400	0.4545	-0.0139	-0.4427
102	36.41	0.16	0.0329	-0.0782	0.6146	-0.1080	0.0020	0.4339	0.4504	-0.0230	-0.4345
103	36.33	0.11	0.0697	-0.0615	0.6200	-0.0000	0.0300	0.4300	0.4558	-0.0178	-0.4219
104	36.05	0.13	0.0540	-0.0500	0.6029	-0.1059	0.0691	0.4350	0.4606	-0.0252	-0.4427
105	36.10	0.13	0.0540	-0.0734	0.6001	-0.1125	0.0833	0.4302	0.4603	-0.0301	-0.4301
106	35.89	0.11	0.0744	-0.0990	0.5725	-0.0237	0.0440	0.4407	0.4536	-0.0129	-0.4169
107	37.01	0.12	0.1009	-0.1009	0.6104	-0.0790	0.0570	0.4315	0.4611	-0.0296	-0.4309
108	37.13	0.11	0.0953	-0.0982	0.5979	-0.1520	0.0550	0.4350	0.4610	-0.0259	-0.4125
109	37.24	0.12	0.0694	-0.0823	0.5929	-0.2781	0.0933	0.4303	0.4615	-0.0252	-0.4301
110	37.36	0.14	0.0736	-0.0150	0.6093	-0.2116	0.0695	0.4278	0.4615	-0.0337	-0.4253
111	37.48	0.11	0.0901	-0.0740	0.6150	-0.1173	0.0532	0.4351	0.4603	-0.0252	-0.4183
112	37.60	0.12	0.0804	-0.0750	0.6140	-0.1828	0.0456	0.4328	0.4603	-0.0275	-0.4100
113	37.72	0.11	0.0191	-0.0792	0.6073	-0.2257	0.0454	0.4228	0.4600	-0.0376	-0.4208
114	37.83	0.08	0.0535	-0.0750	0.6023	-0.0504	0.0328	0.4316	0.4615	-0.0299	-0.4064
115	37.93	0.10	0.0892	-0.0980	0.6291	-0.1488	0.0472	0.4327	0.4646	-0.0319	-0.4069
116	38.01	0.10	0.1102	-0.0137	0.5959	-0.1103	0.0393	0.4179	0.4614	-0.0435	-0.4186
117	38.19	0.10	0.2522	-0.0699	0.6421	-0.0217	0.0334	0.4238	0.4599	-0.0361	-0.4117
118	38.29	0.10	0.2010	-0.0144	0.6331	-0.0457	0.0152	0.4171	0.4591	-0.0420	-0.4113
119	38.41	0.10	0.2954	-0.0991	0.6298	-0.0393	0.0375	0.4259	0.4599	-0.0340	-0.4242
120	38.34	0.10	0.3540	-0.0891	0.6208	-0.0444	0.0210	0.4142	0.4592	-0.0450	-0.4159
121	38.09	0.10	0.4134	-0.0711	0.6103	-0.0003	0.0457	0.4077	0.4572	-0.0495	-0.4155
122	38.10	0.10	0.4149	-0.0947	0.6259	-0.0214	0.0390	0.4008	0.4567	-0.0559	-0.4094
123	38.09	0.09	0.4707	-0.0373	0.6085	-0.0233	0.0154	0.4003	0.4560	-0.0497	-0.4050
124	39.00	0.09	0.5330	-0.0433	0.6200	0.0225	0.0332	0.4050	0.4580	-0.0504	-0.4105
125	39.11	0.12	0.0211	-0.1113	0.5960	-0.1130	0.0385	0.3960	0.4583	-0.0623	-0.4339
126	39.40	0.11	0.5707	-0.0984	0.6733	-0.1535	0.0641	0.4109	0.4563	-0.0454	-0.4226
127	39.32	0.11	0.7021	-0.0704	0.6615	-0.0489	0.0226	0.4045	0.4560	-0.0515	-0.4195
128	39.44	0.09	0.8065	-0.0780	0.6160	-0.0402	0.0157	0.3976	0.4521	-0.0545	-0.4112
129	39.34	0.10	0.7130	-0.0351	0.6255	-0.1241	0.0221	0.3850	0.4490	-0.0640	-0.4155
130	39.23	0.11	0.6219	-0.0810	0.6274	-0.0742	0.0521	0.4118	0.4490	-0.0360	-0.4299
131	39.11	0.10	0.6122	-0.1312	0.6440	-0.1229	0.0161	0.3819	0.4529	-0.0710	-0.4185
132	39.00	0.10	0.6205	-0.0723	0.6101	-0.1363	0.0284	0.3954	0.4508	-0.0554	-0.4147
133	38.87	0.10	0.6294	-0.1043	0.6214	-0.0301	0.0505	0.3799	0.4494	-0.0695	-0.4188
134	40.06	0.10	0.9052	-0.1346	0.6126	-0.0540	0.0181	0.3807	0.4502	-0.0695	-0.4175
135	40.19	0.11	0.9357	-0.1759	0.6342	-0.1859	0.0347	0.3741	0.4474	-0.0733	-0.4196
136	40.30	0.11	10.0483	-0.1029	0.6213	-0.0727	0.0290	0.3719	0.4463	-0.0749	-0.4144
137	40.40	0.11	10.0084	-0.0411	0.6051	-0.0691	0.0166	0.3679	0.4420	-0.0741	-0.4038
138	40.49	0.11	10.0019	-0.1307	0.6124	-0.0462	0.0409	0.3753	0.4493	-0.0690	-0.4173

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NRLD=0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 00 1.00 1.07 45.0 BIASED 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLM	CLL	CA	CAB	CAF	XCP
139	40.39	0.13	10.17420	-0.3720	0.0735	0.0178	0.0396	0.3752	0.4478	-0.0726	-0.4311
140	40.69	0.14	10.15042	-0.3704	0.0384	0.0027	0.0714	0.3703	0.4431	-0.0728	-0.4204
141	40.81	0.12	10.23465	-0.2123	0.0187	-0.0184	0.0716	0.3550	0.4406	-0.0856	-0.4116
142	40.90	0.12	10.24462	-0.2201	0.0091	0.0063	0.0775	0.3501	0.4421	-0.0920	-0.4178
143	41.00	0.11	10.17334	-0.0815	0.0041	-0.0054	0.0233	0.3412	0.4316	-0.0904	-0.3935
144	41.14	0.11	10.24419	-0.2302	0.0338	-0.0022	0.0396	0.3484	0.4396	-0.0912	-0.4116
145	41.23	0.11	10.31115	-0.1201	0.0427	-0.0126	0.0477	0.3543	0.4381	-0.0838	-0.4034
146	41.33	0.12	10.30001	-0.1021	0.0395	0.0188	0.0721	0.3557	0.4413	-0.0856	-0.4061
147	41.43	0.10	10.24714	-0.1756	0.0207	-0.0090	0.0173	0.3411	0.4350	-0.0939	-0.3863
148	41.54	0.10	10.24772	-0.2228	0.0274	-0.1106	0.0175	0.3349	0.4334	-0.0986	-0.3820
149	41.63	0.10	10.24714	-0.1529	0.0279	-0.1028	0.0721	0.3523	0.4403	-0.0880	-0.3966
150	41.76	0.09	10.24197	-0.2470	0.0220	-0.1038	0.0301	0.3349	0.4337	-0.0989	-0.3787
151	41.86	0.10	10.25206	-0.2744	0.0297	-0.0822	0.0535	0.3350	0.4392	-0.1043	-0.3772
152	41.96	0.09	10.25021	-0.2746	0.0300	0.0330	0.0005	0.3269	0.4353	-0.1085	-0.3760
153	42.05	0.10	10.25768	-0.2973	0.0214	-0.0106	0.0544	0.3350	0.4374	-0.1025	-0.3782
154	42.15	0.11	10.26186	-0.1330	0.0394	0.0100	0.0832	0.3269	0.4369	-0.1101	-0.3893
155	42.25	0.12	10.26419	-0.2911	0.0308	0.0348	0.0918	0.3314	0.4342	-0.1029	-0.3806
156	42.35	0.10	10.26259	-0.2930	0.0255	0.1544	0.0731	0.3253	0.4362	-0.1110	-0.3685
157	42.45	0.10	10.25912	-0.2777	0.0218	-0.0360	0.0491	0.3223	0.4339	-0.1117	-0.3490
158	42.55	0.10	10.27426	-0.2180	0.0243	0.0900	0.0787	0.3300	0.4374	-0.1075	-0.3538
159	42.63	0.10	10.27896	-0.2034	0.0219	-0.0256	0.0737	0.3254	0.4370	-0.1117	-0.3559
160	42.74	0.10	10.27819	-0.2724	0.0278	-0.1120	0.0934	0.3206	0.4362	-0.1157	-0.3413
161	42.84	0.11	10.27956	-0.2784	0.0313	0.0125	0.0860	0.3175	0.4363	-0.1189	-0.3593
162	42.91	0.08	10.28012	-0.2472	0.0134	0.2191	0.0901	0.3237	0.4336	-0.1150	-0.3634
163	43.00	0.11	10.25229	-0.2439	0.0372	0.1488	0.0863	0.3222	0.4374	-0.1153	-0.3516
164	43.10	0.10	10.27479	-0.2920	0.0291	-0.0001	0.0495	0.3082	0.4303	-0.1262	-0.3201
165	43.18	0.11	10.25360	-0.2944	0.2100	-0.0959	0.0520	0.3223	0.4370	-0.1148	-0.3287
166	43.25	0.10	10.28427	-0.2747	0.0245	-0.0578	0.0496	0.3268	0.4363	-0.1096	-0.3297
167	43.38	0.11	11.07709	-0.0529	0.0086	0.3301	0.0806	0.2966	0.4367	-0.1402	-0.3252
168	43.44	0.09	10.29981	-0.2464	0.1995	0.1125	0.0623	0.3213	0.4372	-0.1160	-0.3043
169	43.53	0.09	10.27825	-0.2014	0.1849	0.0534	0.0501	0.3073	0.4345	-0.1277	-0.3014
170	43.63	0.09	11.03241	-0.1007	0.0249	0.1941	0.0024	0.3026	0.4345	-0.1320	-0.3087
171	43.73	0.09	11.11350	-0.0366	0.1634	0.0615	0.0746	0.3174	0.4352	-0.1279	-0.3005
172	43.81	0.09	11.04170	-0.0976	0.0245	0.0012	0.0365	0.3029	0.4334	-0.1306	-0.2811
173	43.91	0.09	11.14903	-0.0249	0.1203	0.0403	0.0387	0.3031	0.4373	-0.1343	-0.2899
174	44.00	0.10	11.10151	-0.0020	0.2596	0.0815	0.0873	0.2908	0.4322	-0.1415	-0.3024
175	44.05	0.09	11.03087	-0.1395	0.1769	0.2009	0.0750	0.3019	0.4333	-0.1315	-0.2831
176	44.16	0.10	11.14034	-0.0207	0.1845	0.1086	0.0949	0.2850	0.4363	-0.1513	-0.2706
177	44.25	0.10	11.15536	-0.0346	0.2153	0.2001	0.0852	0.3114	0.4350	-0.1237	-0.2810
178	44.34	0.09	11.12317	-0.0503	0.2036	0.0816	0.0873	0.2975	0.4343	-0.1369	-0.2716
179	44.44	0.09	11.12303	-0.0470	0.1758	-0.0719	0.0207	0.2940	0.4354	-0.1415	-0.2713
180	44.55	0.10	11.14462	-0.0290	0.2101	0.1258	0.0455	0.2977	0.4353	-0.1376	-0.2670
181	44.61	0.09	11.12054	-0.0556	0.1008	-0.0049	0.0330	0.3023	0.4399	-0.1377	-0.2624
182	44.71	0.10	11.14004	-0.0188	0.1933	0.2070	0.0394	0.2871	0.4340	-0.1469	-0.2574
183	44.81	0.10	11.13871	-0.0378	0.1775	0.0613	0.0273	0.2978	0.4375	-0.1398	-0.2545
184	44.89	0.09	11.14008	-0.0252	0.1341	0.1200	0.0352	0.2888	0.4324	-0.1518	-0.2526

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 4 OF 3
SHEET 5 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 00 MACH 1.00 RALP-0 1.0 PHI 45.0 CONF 8 SWORD 15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
185	49.99	0.00	11.4927	-2.1380	0.1255	0.5142	0.0035	0.2965	0.4347	-0.1383	-0.2745
186	49.98	0.00	11.4923	-2.0890	0.1497	0.3147	0.0517	0.2761	0.4330	-0.1547	-0.2528
187	49.97	0.00	11.4943	-2.0936	0.1632	0.3423	0.0540	0.2778	0.4344	-0.1533	-0.2567
188	49.98	0.00	11.5575	-2.0811	0.1923	0.0717	0.0401	0.2779	0.4348	-0.1569	-0.2432
189	49.99	0.00	11.4950	-2.0881	0.2007	-0.0510	0.0219	0.2843	0.4312	-0.1469	-0.2334
190	49.93	0.00	11.5331	-2.0734	0.2191	0.1950	0.0403	0.2850	0.4332	-0.1502	-0.2406
191	49.92	0.00	11.5135	-2.0810	0.1948	0.3485	0.0398	0.2862	0.4321	-0.1459	-0.2448
192	49.89	0.00	11.5344	-2.0867	0.1955	0.2230	0.0279	0.2757	0.4290	-0.1533	-0.2350
193	49.72	0.00	11.0127	-2.0734	0.1871	0.4084	0.0281	0.2759	0.4326	-0.1567	-0.2355
194	49.80	0.00	11.6390	-2.0813	0.1919	0.2628	0.0284	0.2775	0.4290	-0.1515	-0.2246
195	49.89	0.00	11.7012	-2.0850	0.1993	0.1220	0.0340	0.2834	0.4293	-0.1456	-0.2265
196	49.98	0.00	11.6016	-2.0701	0.2073	0.3121	0.0231	0.2788	0.4321	-0.1533	-0.1943
197	49.85	0.00	11.7065	-2.0744	0.2343	-0.0903	0.0226	0.2736	0.4317	-0.1581	-0.2200
198	49.89	0.00	11.7079	-2.0830	0.1892	0.2643	0.0287	0.2570	0.4293	-0.1723	-0.2191
199	49.83	0.00	11.7093	-2.0834	0.1713	-0.0378	0.0243	0.2708	0.4239	-0.1521	-0.2150
200	49.81	0.00	11.7004	-2.0837	0.1906	0.1913	0.0206	0.2583	0.4293	-0.1708	-0.2156
201	49.91	0.00	11.7092	-2.0820	0.1923	-0.0537	0.0102	0.2843	0.4335	-0.1662	-0.2223
202	49.89	0.00	11.6833	-2.0783	0.2296	0.1130	0.0231	0.2544	0.4274	-0.1730	-0.2060
203	49.58	0.00	11.6759	-2.0892	0.1349	-0.1213	0.0104	0.2587	0.4298	-0.1681	-0.2197
204	49.87	0.00	11.6963	-2.0877	0.2243	0.0073	0.0252	0.2701	0.4330	-0.1629	-0.2090
205	49.79	0.00	11.6777	-2.0854	0.1234	0.0302	-0.0015	0.2594	0.4318	-0.1724	-0.1980
206	49.89	0.00	11.6923	-2.0829	0.2238	0.2038	0.0172	0.2770	0.4341	-0.1571	-0.2038
207	49.73	0.00	11.6900	-2.0775	0.1719	0.0414	0.0110	0.2659	0.4314	-0.1655	-0.1986
208	49.80	0.00	11.6993	-2.0847	0.1706	-0.0005	0.0232	0.2523	0.4305	-0.1780	-0.2048
209	49.81	0.00	11.6864	-2.0832	0.1220	-0.0326	0.0110	0.2603	0.4339	-0.1676	-0.2041
210	49.79	0.00	11.6857	-2.0848	0.1231	0.0193	0.0110	0.2603	0.4316	-0.1653	-0.1930
211	49.77	0.00	11.6959	-2.0814	0.1027	0.1393	0.0113	0.2598	0.4330	-0.1632	-0.1952
212	49.80	0.00	11.6972	-2.0818	0.1931	0.0301	0.0236	0.2578	0.4312	-0.1734	-0.1998
213	49.99	0.00	11.6774	-2.0869	0.0908	-0.1191	-0.0074	0.2515	0.4330	-0.1861	-0.2042
214	49.83	0.00	11.6854	-2.0807	0.0858	-0.3347	-0.0012	0.2652	0.4303	-0.1751	-0.2064
215	49.80	0.00	11.6865	-2.0827	0.0933	-0.0858	-0.0134	0.2533	0.4307	-0.1834	-0.1940
216	49.84	0.00	11.6963	-2.0838	0.1268	-0.0149	-0.0070	0.2478	0.4331	-0.1903	-0.1913
217	49.79	0.00	11.6938	-2.0805	0.1493	-0.0078	-0.0255	0.2584	0.4309	-0.1805	-0.2004
218	49.86	0.00	11.6933	-2.0903	0.0914	0.2428	-0.0302	0.2514	0.4333	-0.1861	-0.1966
219	49.97	0.00	11.6917	-2.0864	0.1726	-0.3713	0.0050	0.2587	0.4416	-0.1824	-0.2029
220	49.83	0.00	11.6971	-2.0816	0.1344	-0.2418	-0.0008	0.2452	0.4434	-0.1982	-0.2018
221	49.83	0.00	12.4301	-2.0844	0.1250	-0.2569	0.0050	0.2472	0.4454	-0.1982	-0.2038
222	49.83	0.00	11.6990	-2.0822	0.2330	-0.2207	-0.0062	0.2631	0.4438	-0.1807	-0.2060
223	49.80	0.00	11.6976	-2.0870	0.1550	-0.3025	-0.0056	0.2500	0.4441	-0.1875	-0.1979
224	49.89	0.00	11.7000	-2.0889	0.1337	-0.4470	-0.0003	0.2522	0.4462	-0.1940	-0.2006
225	49.87	0.00	11.6983	-2.0864	0.0948	-0.1713	-0.0150	0.2603	0.4586	-0.1983	-0.2144
226	49.87	0.00	11.6943	-2.0875	0.1093	-0.0895	0.0121	0.2677	0.4562	-0.1885	-0.2129
227	49.89	0.00	11.6882	-2.1051	0.2278	-0.8901	0.0240	0.2722	0.4701	-0.1979	-0.2528
228	49.82	0.00	11.6765	-2.0926	0.1396	-0.5703	0.0005	0.2522	0.4639	-0.2117	-0.2329
229	49.82	0.00	11.6817	-2.0861	0.1393	-0.2565	-0.0124	0.2498	0.4591	-0.2093	-0.2083
230	49.91	0.00	11.7102	-2.0779	0.1331	-0.0500	0.0115	0.2757	0.4774	-0.2017	-0.2579

PAGE 1 OF 3
SHEET 6 OF 8

MARTIN MISSILE FAILS_EFFECTS DATA

TEST PART MACH MAX-Q PHI COND L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 00 1.00 1.67 45.0 DEGREES 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CA	CLN	CY	CLN	CLL	LA	CAB	CAF	XCP
231	48.97	0.01	12.06470	-3.0657	0.2235	-0.5402	0.0058	0.2640	0.4762	-0.2122	-0.2424
232	49.07	0.01	12.06960	-3.1004	0.1598	-0.5594	-0.0006	0.2686	0.4774	-0.2086	-0.2457
233	49.18	0.00	12.07484	-3.0776	0.1003	-0.7754	0.0003	0.2758	0.4902	-0.2143	-0.2806
234	49.22	0.00	12.07643	-3.0444	0.0826	-0.8034	0.0049	0.2749	0.4823	-0.2073	-0.2698
235	49.33	0.00	12.07961	-3.0657	-0.0247	-0.8698	-0.0080	0.2746	0.4877	-0.2128	-0.2888
236	49.41	0.01	12.08193	-3.0260	0.0031	-0.7892	0.0119	0.2753	0.4865	-0.2111	-0.2735
237	49.48	0.00	12.07987	-3.0000	-0.2267	-0.1641	-0.0085	0.2829	0.4752	-0.2163	-0.2868
238	49.58	0.00	12.07996	-3.0119	0.0571	-0.8233	0.0051	0.2677	0.4872	-0.2194	-0.2875
239	49.66	0.00	12.08153	-3.0786	-0.0396	-0.8356	-0.0141	0.2805	0.4927	-0.2121	-0.2935
240	49.71	0.00	12.08307	-3.0035	0.1437	-0.6037	-0.0037	0.2638	0.4919	-0.2480	-0.2825
241	49.87	0.00	12.08357	-3.0739	0.1025	-0.4017	-0.0140	0.2608	0.4752	-0.2144	-0.2902
242	49.94	0.00	12.08502	-3.0000	-0.2213	-0.8357	-0.0143	0.2681	0.4548	-0.2267	-0.2982
243	50.04	0.00	12.08739	-3.0751	-0.2025	-0.4013	-0.0266	0.2561	0.4727	-0.2166	-0.2881
244	50.11	0.00	12.08907	-3.0377	-0.2023	-0.3914	-0.0062	0.2520	0.4620	-0.2130	-0.2948
245	50.20	-0.00	12.09108	-3.0000	-0.0977	-0.8175	0.0095	0.2536	0.4392	-0.2356	-0.3087
246	50.30	0.01	12.09342	-3.0004	-0.0919	-0.8126	0.0033	0.2619	0.4534	-0.2265	-0.3077
247	50.37	0.00	12.09493	-3.0703	-0.0701	-0.4342	-0.0021	0.2640	0.4373	-0.2333	-0.2926
248	50.45	0.01	12.09662	-3.0000	-0.0705	-0.8003	0.0159	0.1994	0.4275	-0.2281	-0.3068
249	50.57	0.02	12.09907	-3.0253	-0.0504	-0.8790	0.0103	0.2166	0.4299	-0.2133	-0.3148
250	50.63	0.01	12.10101	-3.0001	-0.0107	-0.8691	0.0030	0.1965	0.4239	-0.2270	-0.3070
251	50.73	0.01	12.10350	-3.0327	-0.0049	-0.9505	0.0100	0.2226	0.4304	-0.2138	-0.3253
252	50.81	0.01	12.10491	-3.0050	-0.0270	-0.8705	0.0222	0.2263	0.4534	-0.2211	-0.3299
253	50.91	0.01	12.10694	-3.0734	-0.0202	-0.8993	0.0224	0.2202	0.4416	-0.2214	-0.3375
254	50.99	0.01	12.10874	-3.0178	-0.0176	-1.0686	0.0264	0.2343	0.4347	-0.2204	-0.3377
255	51.07	0.01	12.11080	-3.0504	-0.0236	-1.0098	0.0225	0.2391	0.4473	-0.2082	-0.3302
256	51.17	0.01	12.11317	-3.0110	-0.0133	-1.0488	0.0227	0.2347	0.4505	-0.2218	-0.3314
257	51.25	0.00	12.11530	-3.0184	-0.0185	-1.0508	0.0225	0.2352	0.4575	-0.2241	-0.3392
258	51.34	0.01	12.11739	-3.0334	-0.0002	-0.9653	0.0227	0.2354	0.4541	-0.2187	-0.3313
259	51.43	-0.00	12.11965	-3.0455	-0.0174	-1.0010	0.0247	0.2305	0.4616	-0.2311	-0.3250
260	51.52	0.00	12.12162	-3.0052	-0.0007	-1.0953	0.0229	0.2346	0.4613	-0.2287	-0.3267
261	51.60	0.01	12.12438	-3.0379	-0.0045	-1.0971	0.0230	0.2259	0.4501	-0.2311	-0.3301
262	51.70	-0.00	12.12609	-3.0309	-0.0105	-1.1419	0.0171	0.2344	0.4562	-0.2238	-0.3136
263	51.78	0.00	12.12799	-3.0020	-0.0052	-1.1469	0.0170	0.2268	0.4550	-0.2290	-0.3081
264	51.88	0.01	12.13024	-3.0403	-0.0001	-1.1024	0.0234	0.2334	0.4614	-0.2260	-0.3230
265	51.95	0.00	12.13240	-3.0115	-0.0015	-1.2671	0.0112	0.2226	0.4542	-0.2316	-0.3112
266	52.02	-0.00	12.13440	-3.0006	-0.0019	-1.2134	0.0112	0.2323	0.4536	-0.2215	-0.3069
267	52.10	-0.01	12.13625	-3.0236	-0.0026	-1.1934	0.0112	0.2172	0.4616	-0.2444	-0.3114
268	52.20	-0.01	12.13811	-3.0239	-0.0030	-1.2141	0.0112	0.2235	0.4493	-0.2458	-0.3054
269	52.28	-0.00	12.14013	-3.0230	-0.0016	-1.3140	0.0110	0.2220	0.4568	-0.2348	-0.3093
270	52.37	-0.00	12.14234	-3.0216	-0.0070	-1.4134	0.0110	0.2208	0.4496	-0.2268	-0.3125
271	52.44	0.00	12.14440	-3.0003	-0.0109	-1.3451	-0.0001	0.2090	0.4453	-0.2363	-0.2865
272	52.54	-0.01	12.14702	-3.0072	-0.0005	-1.2710	-0.0005	0.1994	0.4407	-0.2413	-0.2932
273	52.63	-0.00	12.14972	-3.0117	-0.0023	-1.3443	-0.0035	0.2137	0.4446	-0.2309	-0.2949
274	52.71	-0.01	12.15179	-3.0109	-0.0009	-1.4307	0.0056	0.2220	0.4535	-0.2315	-0.3061
275	52.79	-0.01	12.15341	-3.0163	-0.0008	-1.3070	0.0117	0.2100	0.4515	-0.2415	-0.3015
276	52.58	-0.00	12.15410	-3.0165	-0.0005	-1.3000	0.0058	0.2119	0.4507	-0.2368	-0.2989

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 4 OF 5
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RATIO-G	PHI	CONF	L	DELL	DELZ	DELS	DELG	TRANSITION
7	60	1.00	1.01	45.0	0	MOFIS	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
277	52.90	0.00	14.0020	-0.2405	-0.2220	-1.4360	0.0123	0.2139	0.4487	-0.2348	-0.3017
278	53.06	-0.01	14.0041	-0.2803	-0.2001	-1.4302	0.0103	0.2090	0.4477	-0.2387	-0.3045
279	53.15	-0.02	14.0102	-0.3000	-0.2070	-1.4248	0.0102	0.2054	0.4533	-0.2379	-0.3082
280	53.21	-0.00	14.0102	-0.2290	-0.2136	-1.4231	0.0120	0.2159	0.4566	-0.2407	-0.3066
281	53.32	-0.00	14.0095	-0.2002	-0.2199	-1.3978	0.0104	0.2052	0.4570	-0.2518	-0.3148
282	53.40	-0.01	14.0080	-0.2020	-0.2271	-1.4509	0.0100	0.2154	0.4634	-0.2450	-0.3099
283	53.49	-0.01	14.0057	-0.2067	-0.2405	-1.0027	0.0126	0.2126	0.4623	-0.2497	-0.3111
284	53.59	-0.01	14.0041	-0.2005	-0.2551	-1.0249	0.0107	0.2144	0.4620	-0.2476	-0.3184
285	53.65	0.00	14.0040	-0.2033	-0.2435	-1.0715	0.0140	0.2007	0.4612	-0.2545	-0.3203
286	53.75	-0.00	14.0050	-0.2043	-0.1707	-1.0363	0.0130	0.2211	0.4632	-0.2421	-0.3180
287	53.83	0.00	14.0054	-0.2070	-0.1475	-1.0000	0.0133	0.1953	0.4505	-0.2612	-0.3110
288	53.94	0.02	14.0066	-0.2092	0.0054	-1.0352	0.0013	0.2047	0.4500	-0.2519	-0.3294
289	54.01	0.01	14.0013	-0.2259	-0.0520	-1.0020	0.0011	0.2049	0.4500	-0.2517	-0.3287
290	54.03	0.02	14.0173	-0.2310	-0.0270	-1.0990	0.0013	0.2192	0.4570	-0.2378	-0.3305
291	54.19	0.03	14.0267	-0.2300	0.0755	-1.2027	0.0077	0.2207	0.4567	-0.2300	-0.3308
292	54.23	0.03	14.0247	-0.2205	0.1900	-1.2112	0.0052	0.2197	0.4595	-0.2448	-0.3269
293	54.30	0.03	14.0213	-0.2040	0.2102	-1.2249	0.0015	0.2111	0.4572	-0.2401	-0.3276
294	54.38	0.04	14.0223	-0.2059	0.2020	-1.0731	0.0077	0.2089	0.4529	-0.2440	-0.3201
295	54.45	0.04	14.0200	-0.2073	0.2109	-0.9976	0.0077	0.2217	0.4534	-0.2317	-0.3251
296	54.53	0.05	14.0215	-0.2015	0.1835	-0.9870	0.0142	0.2133	0.4503	-0.2450	-0.3217
297	54.61	0.05	14.0150	-0.2000	0.1842	-1.1000	0.0142	0.2180	0.4567	-0.2367	-0.3238
298	54.70	0.05	14.0249	-0.2040	0.1649	-1.1002	0.0141	0.2226	0.4599	-0.2373	-0.3305
299	54.77	0.05	14.0240	-0.2105	0.1710	-1.0908	0.0060	0.2068	0.4534	-0.2416	-0.3207
300	54.85	0.06	14.0206	-0.2006	0.0926	-0.9091	0.0140	0.2262	0.4500	-0.2358	-0.3179
301	54.94	0.05	14.0213	-0.2029	0.0520	-0.9435	0.0141	0.2211	0.4610	-0.2399	-0.3246
302	55.01	0.04	14.0203	-0.2032	-0.0100	-0.9302	0.0136	0.2215	0.4637	-0.2422	-0.3170
303	55.08	0.05	14.0201	-0.2047	0.1073	-0.8918	0.0144	0.2358	0.4662	-0.2304	-0.3247
304	55.16	0.06	14.0200	-0.2067	0.1044	-0.8201	0.0205	0.2178	0.4670	-0.2492	-0.3163
305	55.24	0.04	14.0247	-0.2003	0.0113	-0.7919	0.0140	0.2337	0.4670	-0.2335	-0.3252
306	55.32	0.04	14.0220	-0.2010	0.0100	-0.7052	0.0140	0.2229	0.4603	-0.2454	-0.3196
307	55.40	0.05	14.0223	-0.2000	0.1442	-0.8710	0.0205	0.2311	0.4725	-0.2414	-0.3183
308	55.47	0.04	14.0100	-0.2002	0.1114	-0.8174	0.0204	0.2334	0.4750	-0.2396	-0.3235
309	55.55	0.05	14.0241	-0.2001	0.0103	-0.8503	0.0200	0.2271	0.4703	-0.2432	-0.3212
310	55.64	0.04	14.0144	-0.2037	0.1500	-0.8410	0.0200	0.2323	0.4725	-0.2400	-0.3217
311	55.70	0.05	14.0039	-0.2001	0.2320	-0.9230	0.0140	0.2219	0.4691	-0.2472	-0.3136
312	55.78	0.04	14.0012	-0.2010	0.2049	-0.8349	0.0263	0.2346	0.4700	-0.2414	-0.3205
313	55.87	0.04	14.0073	-0.2050	0.1267	-0.7072	0.0270	0.2317	0.4720	-0.2403	-0.3191
314	55.95	0.04	14.0027	-0.2009	0.1026	-0.8051	0.0143	0.2400	0.4756	-0.2270	-0.3262
315	56.04	0.03	14.0103	-0.2059	0.0514	-0.9422	0.0200	0.2274	0.4700	-0.2494	-0.3248
316	56.12	0.03	14.0021	-0.2041	0.0717	-0.8039	0.0204	0.2209	0.4703	-0.2489	-0.3238
317	56.20	0.04	14.0000	-0.2013	-0.0073	-0.8423	0.0142	0.2327	0.4729	-0.2402	-0.3255
318	56.28	0.04	14.0104	-0.2041	0.1546	-0.7121	0.0155	0.2434	0.4765	-0.2311	-0.3276
319	56.37	0.03	14.0101	-0.2037	0.0381	-0.8657	0.0287	0.2165	0.4667	-0.2482	-0.3132
320	56.46	0.04	14.0004	-0.2015	-0.0212	-0.8415	0.0141	0.2230	0.4704	-0.2474	-0.3247
321	56.54	0.03	14.0145	-0.2041	0.1697	-0.7420	0.0159	0.2249	0.4747	-0.2498	-0.3150
322	56.63	0.03	14.0164	-0.2050	0.1701	-0.8404	0.0158	0.2131	0.4738	-0.2407	-0.3229

TEST PART EACH PAIR-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 00 1.00 1.0 45.0 BLANK 15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
323	56.70	0.00	14.7323	-0.0850	0.1004	-0.8996	0.0157	0.2363	0.4731	-0.2368	-0.3292
324	56.79	0.00	14.6517	-0.0741	0.0939	-0.8931	0.0159	0.2364	0.4732	-0.2368	-0.3236
325	56.88	0.00	14.6333	-0.0801	0.1766	-0.8021	0.0154	0.2369	0.4718	-0.2374	-0.3204
326	56.99	0.00	14.7244	-0.0816	0.0350	-0.8908	0.0155	0.2378	0.4757	-0.2379	-0.3241
327	57.02	0.00	14.7602	-0.0965	0.0912	-0.8502	0.0097	0.2370	0.4755	-0.2383	-0.3249
328	57.09	0.00	14.8543	-0.0795	0.1930	-0.7630	0.0150	0.2371	0.4725	-0.2352	-0.3203
329	57.18	0.00	14.8542	-0.0814	0.2547	-0.6954	0.0108	0.2278	0.4737	-0.2429	-0.3152
330	57.25	0.01	14.8183	-0.0753	-0.2358	-0.9648	0.0137	0.2308	0.4765	-0.2457	-0.3290
331	57.34	0.00	14.9145	-0.0926	-0.1781	-0.9594	0.0093	0.2307	0.4719	-0.2412	-0.3120
332	57.43	0.00	15.0414	-0.0937	0.1926	-0.8349	0.0049	0.1940	0.4025	-0.2079	-0.3022
333	57.49	0.00	14.8501	-0.0822	0.0876	-0.9004	0.0102	0.2203	0.4657	-0.2456	-0.3113
334	57.55	0.00	14.7462	-0.0799	0.2453	-0.7165	0.0109	0.2010	0.4541	-0.2531	-0.2946
335	57.61	0.00	15.1297	-0.0840	0.1959	-0.7921	0.0054	0.1583	0.4402	-0.2819	-0.2865
336	57.74	0.01	15.1243	-0.0910	0.0996	-0.8812	0.0122	0.1655	0.4304	-0.2709	-0.2904
337	57.80	0.00	15.1264	-0.0829	0.0325	-0.9171	0.0055	0.1663	0.4330	-0.2673	-0.2891
338	57.88	0.00	14.9168	-0.0800	0.0342	-0.1005	0.0103	0.1582	0.4274	-0.2692	-0.2939
339	57.94	0.01	15.0747	-0.2996	-0.1613	0.0158	0.0141	0.1793	0.4289	-0.2490	-0.2852
340	58.01	0.00	15.0817	-0.0905	0.2412	-0.2802	0.0173	0.1599	0.4291	-0.2692	-0.2977
341	58.06	0.00	14.9005	-0.0790	-0.0051	-0.9711	0.0101	0.1657	0.4158	-0.3002	-0.2884
342	58.10	0.00	14.9643	-0.1721	0.0371	-0.1177	0.0107	0.1433	0.4199	-0.2766	-0.2788
343	58.24	0.00	15.1550	-0.2575	0.1550	-0.2501	0.0114	0.1512	0.4165	-0.2651	-0.2809
344	58.31	0.00	15.0572	-0.0981	0.2918	-0.1960	0.0103	0.1330	0.4167	-0.2831	-0.2881
345	58.38	0.00	15.1559	-0.3049	0.0106	-0.4566	0.0067	0.0958	0.4076	-0.3120	-0.2840
346	58.46	0.00	15.0041	-0.1435	0.3049	-0.2209	0.0118	0.1408	0.4156	-0.2748	-0.2759
347	58.53	0.02	15.0575	-0.3492	0.0800	-0.1024	0.0109	0.1627	0.4234	-0.2607	-0.2688
348	58.61	0.00	15.0491	-0.4128	0.4054	-0.3845	0.0062	0.1408	0.4193	-0.2789	-0.2898
349	58.67	0.00	15.1474	-0.2703	0.3552	-0.3919	0.0127	0.1408	0.4192	-0.2786	-0.2819
350	58.82	0.00	15.2070	-0.4278	0.1033	-0.2427	-0.0307	0.1403	0.4228	-0.2825	-0.2912

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NO.	ALPHA-C	CONF	C	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	00	1.00	1.07	45.0	41.0	0.0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.71	0.09	0.1040	0.0269	0.1176	0.1464	0.6393	-0.0980	-0.0186	-0.0855	0.1665	0.8652
2	-5.71	0.10	0.1009	0.0271	0.1209	0.1469	0.6375	-0.0973	-0.0184	-0.0854	0.1694	0.8776
3	-5.72	0.10	0.1000	0.0257	0.1127	0.1456	0.6376	-0.0884	-0.0179	-0.0807	0.2017	0.9077
4	-5.72	0.10	0.1023	0.0260	0.1160	0.1471	0.6744	-0.0705	-0.0161	-0.0744	0.2288	1.0554
5	-4.19	0.10	0.1037	0.0154	0.0754	0.1459	0.7102	-0.0350	-0.0117	-0.0540	0.2956	1.4674
6	-3.63	0.11	0.0749	0.0111	0.0561	0.1483	0.8021	-0.0174	-0.0080	-0.0444	0.4600	2.5460
7	-2.31	0.10	0.0500	0.0084	0.0402	0.1001	1.1525	0.0033	-0.0044	-0.0292	-1.3339	-8.8485
8	-1.33	0.10	0.0423	0.0060	0.0337	1.1349	14.0522	0.0128	-0.0018	-0.0124	-0.0549	-0.3740
9	-0.38	0.10	-0.0196	0.0005	0.0159	-0.0265	-1.0153	0.0353	0.0018	-0.0016	0.0326	-0.0290
10	0.09	0.10	-0.0263	-0.0011	0.0077	0.0360	-0.1475	0.0787	0.0049	0.0195	0.0624	0.2481
11	1.53	0.11	-0.0749	-0.0048	-0.0029	0.0643	0.0390	0.1022	0.0090	0.0360	0.0682	0.3526
12	2.00	0.10	-0.1000	-0.0100	-0.0071	0.0939	0.1000	0.1258	0.0130	0.0503	0.1083	0.3997
13	3.02	0.10	-0.1272	-0.0137	-0.0305	0.1079	0.2402	0.1622	0.0189	0.0688	0.1167	0.4191
14	4.54	0.10	-0.1557	-0.0170	-0.0454	0.1087	0.2895	0.1965	0.0240	0.0808	0.1241	0.4372
15	5.40	0.10	-0.1732	-0.0179	-0.0535	0.1063	0.3139	0.2183	0.0316	0.1150	0.1261	0.4596
16	6.48	0.10	-0.2112	-0.0198	-0.0746	0.0939	0.3504	0.2912	0.0380	0.1342	0.1256	0.4608
17	7.48	0.10	-0.2547	-0.0180	-0.0975	0.0708	0.3729	0.3446	0.0423	0.1546	0.1232	0.4631
18	8.44	0.10	-0.2800	-0.0187	-0.0993	0.0681	0.3818	0.3893	0.0468	0.1669	0.1202	0.4699
19	9.41	0.10	-0.2770	-0.0157	-0.1077	0.0494	0.3880	0.4553	0.0534	0.2107	0.1107	0.4627
20	10.39	0.10	-0.2980	-0.0142	-0.1167	0.0343	0.3918	0.5049	0.0538	0.2339	0.1061	0.4632
21	11.40	0.10	-0.3162	-0.0090	-0.1234	0.0195	0.4033	0.5682	0.0560	0.2598	0.0989	0.4589
22	12.37	0.10	-0.3254	-0.0040	-0.1312	0.0125	0.4025	0.6190	0.0585	0.2815	0.0945	0.4549
23	13.35	0.10	-0.3334	-0.0006	-0.1384	0.0024	0.4143	0.6824	0.0597	0.3102	0.0875	0.4545
24	14.34	0.11	-0.3380	0.0029	-0.1426	-0.0116	0.4230	0.7410	0.0630	0.3369	0.0810	0.4547
25	15.37	0.11	-0.3081	0.0055	-0.1572	-0.0152	0.4271	0.8026	0.0589	0.3654	0.0734	0.4553
26	16.36	0.10	-0.3654	0.0095	-0.1536	-0.0260	0.4373	0.8602	0.0586	0.3908	0.0658	0.4543
27	17.33	0.11	-0.3960	0.0120	-0.1701	-0.0295	0.4317	0.9193	0.0550	0.4176	0.0598	0.4543
28	18.39	0.11	-0.4265	0.0179	-0.1857	-0.0414	0.4417	0.9842	0.0515	0.4446	0.0523	0.4518
29	19.39	0.11	-0.4406	0.0201	-0.1926	-0.0457	0.4444	1.0281	0.0490	0.4606	0.0477	0.4489
30	20.39	0.11	-0.4629	0.0255	-0.2040	-0.0552	0.4493	1.0765	0.0478	0.4792	0.0444	0.4451
31	21.37	0.11	-0.4819	0.0270	-0.2133	-0.0574	0.4437	1.1273	0.0436	0.4969	0.0388	0.4408
32	22.37	0.12	-0.4960	0.0291	-0.2181	-0.0606	0.4496	1.1610	0.0403	0.5115	0.0341	0.4331
33	23.37	0.12	-0.4952	0.0303	-0.2217	-0.0623	0.4495	1.2217	0.0365	0.5210	0.0298	0.4265
34	24.37	0.13	-0.4911	0.0327	-0.2189	-0.0603	0.4457	1.2135	0.0337	0.4990	0.0277	0.3955
35	25.34	0.13	-0.5024	0.0277	-0.2335	-0.0521	0.4306	1.0427	0.0234	0.3973	0.0225	0.3810
36	26.36	0.14	-0.5379	0.0271	-0.2349	-0.0505	0.4360	1.0038	0.0154	0.3840	0.0154	0.3832
37	27.40	0.15	-0.5173	0.0265	-0.2269	-0.0552	0.4386	1.0185	0.0129	0.3925	0.0127	0.3865
38	28.43	0.15	-0.5038	0.0273	-0.2188	-0.0535	0.4342	1.0290	0.0119	0.4005	0.0116	0.3889
39	28.33	0.17	-0.5195	0.0263	-0.2230	-0.0545	0.4356	1.0215	0.0116	0.3941	0.0114	0.3858
40	28.35	0.15	-0.4893	0.0262	-0.2118	-0.0538	0.4326	1.0317	0.0141	0.4003	0.0108	0.3880
41	27.80	0.14	-0.4983	0.0260	-0.2100	-0.0533	0.4312	1.0232	0.0114	0.3950	0.0112	0.3860
42	28.33	0.14	-0.4716	0.0261	-0.2013	-0.0554	0.4266	1.0335	0.0107	0.3969	0.0104	0.3860
43	28.51	0.15	-0.4745	0.0253	-0.2000	-0.0534	0.4216	1.0448	0.0105	0.4055	0.0101	0.3881
44	28.75	0.15	-0.4704	0.0250	-0.1993	-0.0526	0.4169	1.0433	0.0103	0.4055	0.0099	0.3887
45	28.85	0.16	-0.4860	0.0262	-0.1934	-0.0494	0.4151	1.0464	0.0099	0.4065	0.0095	0.3885
46	29.00	0.15	-0.4900	0.0243	-0.1882	-0.0531	0.4079	1.0504	0.0096	0.4107	0.0091	0.3886

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 80 1.00 1.7 45.0 DEGREES 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	29.61	0.15	-0.4512	0.0227	-0.1010	-0.0508	0.4030	1.0468	0.0093	0.4056	0.0069	0.3875
48	29.53	0.15	-0.4514	0.0227	-0.1004	-0.0504	0.3993	1.0461	0.0091	0.4110	0.0086	0.3884
49	29.48	0.15	-0.4513	0.0226	-0.1003	-0.0503	0.3984	1.0459	0.0093	0.4114	0.0080	0.3882
50	29.00	0.15	-0.4434	0.0223	-0.0978	-0.0508	0.3981	1.0355	0.0083	0.4100	0.0079	0.3884
51	29.75	0.15	-0.4508	0.0219	-0.1004	-0.0478	0.3869	1.0384	0.0082	0.4113	0.0078	0.3886
52	29.99	0.15	-0.4521	0.0232	-0.1020	-0.0527	0.3782	1.0497	0.0074	0.4107	0.0069	0.3896
53	30.09	0.15	-0.4516	0.0225	-0.1012	-0.0517	0.3735	1.0469	0.0076	0.4159	0.0071	0.3898
54	30.24	0.17	-0.4534	0.0213	-0.1004	-0.0505	0.3868	1.0488	0.0074	0.4152	0.0069	0.3886
55	30.37	0.17	-0.4478	0.0209	-0.1015	-0.0501	0.3820	1.0468	0.0084	0.4214	0.0059	0.3892
56	30.31	0.18	-0.4496	0.0221	-0.1004	-0.0541	0.3579	1.0703	0.0083	0.4171	0.0059	0.3897
57	30.04	0.16	-0.3977	0.0238	-0.1420	-0.0594	0.3588	1.0845	0.0059	0.4222	0.0054	0.3893
58	30.73	0.17	-0.3960	0.0242	-0.1434	-0.0611	0.3810	1.0803	0.0060	0.4185	0.0056	0.3874
59	30.90	0.17	-0.3932	0.0229	-0.1371	-0.0677	0.3577	1.0930	0.0053	0.4263	0.0049	0.3900
60	31.05	0.17	-0.3844	0.0260	-0.1367	-0.0696	0.3808	1.0911	0.0049	0.4239	0.0045	0.3883
61	31.19	0.17	-0.3784	0.0267	-0.1356	-0.0711	0.3802	1.1015	0.0049	0.4276	0.0045	0.3882
62	31.93	0.17	-0.3604	0.0268	-0.1494	-0.0733	0.3531	1.1004	0.0046	0.4272	0.0042	0.3883
63	31.98	0.18	-0.3598	0.0263	-0.1317	-0.0818	0.3859	1.1047	0.0041	0.4292	0.0037	0.3866
64	31.81	0.18	-0.3525	0.0302	-0.1465	-0.0807	0.3844	1.0969	0.0042	0.4265	0.0038	0.3881
65	31.74	0.17	-0.3418	0.0321	-0.1533	-0.0938	0.3638	1.1033	0.0039	0.4291	0.0035	0.3890
66	31.89	0.17	-0.3336	0.0323	-0.1624	-0.0907	0.3607	1.1063	0.0038	0.4295	0.0033	0.3883
67	32.02	0.17	-0.3144	0.0345	-0.1722	-0.1090	0.3570	1.1078	0.0032	0.4307	0.0029	0.3888
68	32.14	0.18	-0.2984	0.0347	-0.1830	-0.1102	0.3520	1.1134	0.0030	0.4334	0.0027	0.3893
69	32.30	0.18	-0.2920	0.0353	-0.1809	-0.1222	0.3450	1.1120	0.0026	0.4333	0.0023	0.3897
70	32.43	0.21	-0.3032	0.0343	-0.1903	-0.1150	0.3513	1.1092	0.0029	0.4325	0.0026	0.3900
71	32.30	0.13	-0.2898	0.0349	-0.1835	-0.1206	0.3575	1.1163	0.0025	0.4336	0.0022	0.3885
72	32.09	0.18	-0.2956	0.0351	-0.1874	-0.1188	0.3635	1.1248	0.0022	0.4377	0.0020	0.3892
73	32.36	0.18	-0.2898	0.0361	-0.1912	-0.1262	0.3542	1.1165	0.0024	0.4350	0.0022	0.3897
74	32.93	0.18	-0.3004	0.0343	-0.1859	-0.1111	0.3700	1.1193	0.0020	0.4363	0.0018	0.3898
75	33.09	0.18	-0.3132	0.0333	-0.1782	-0.1062	0.3776	1.1221	0.0019	0.4376	0.0017	0.3900
76	33.22	0.17	-0.3069	0.0334	-0.1803	-0.1035	0.3841	1.1250	0.0015	0.4390	0.0013	0.3903
77	33.33	0.17	-0.2993	0.0327	-0.1833	-0.1093	0.3791	1.1236	0.0019	0.4376	0.0017	0.3897
78	33.48	0.18	-0.3036	0.0304	-0.1771	-0.1065	0.3789	1.1235	0.0018	0.4394	0.0016	0.3911
79	33.00	0.17	-0.2998	0.0313	-0.1804	-0.1088	0.3749	1.1204	0.0013	0.4391	0.0012	0.3899
80	33.12	0.17	-0.2905	0.0323	-0.1832	-0.1117	0.3699	1.1294	0.0013	0.4399	0.0012	0.3896
81	33.03	0.18	-0.2880	0.0333	-0.1814	-0.1230	0.3776	1.1250	0.0015	0.4390	0.0013	0.3903
82	33.99	0.17	-0.2781	0.0323	-0.1852	-0.1167	0.3783	1.1266	0.0012	0.4394	0.0011	0.3905
83	34.11	0.15	-0.2777	0.0320	-0.1880	-0.1150	0.3676	1.1294	0.0012	0.4406	0.0011	0.3902
84	34.24	0.17	-0.2763	0.0311	-0.1890	-0.1041	0.3991	1.1322	0.0004	0.4437	0.0008	0.3919
85	34.35	0.18	-0.2677	0.0305	-0.1908	-0.1072	0.3853	1.1295	0.0010	0.4401	0.0009	0.3897
86	34.47	0.18	-0.2780	0.0282	-0.1810	-0.0987	0.4111	1.1323	0.0006	0.4431	0.0005	0.3914
87	34.61	0.18	-0.2689	0.0298	-0.1882	-0.0968	0.4116	1.1379	0.0004	0.4458	0.0004	0.3918
88	34.73	0.15	-0.2567	0.0296	-0.1880	-0.1034	0.4110	1.1403	0.0001	0.4494	0.0001	0.3920
89	34.83	0.15	-0.2483	0.0284	-0.1881	-0.0994	0.4181	1.1435	0.0	0.4491	0.0	0.3927
90	34.99	0.15	-0.2481	0.0278	-0.1843	-0.0969	0.4221	1.1407	0.0002	0.4466	0.0002	0.3916
91	35.09	0.14	-0.2477	0.0274	-0.1903	-0.0957	0.4280	1.1004	-0.0007	0.4550	-0.0006	0.3921
92	35.44	0.14	-0.2430	0.0271	-0.1933	-0.0967	0.4256	1.1977	-0.0001	0.4501	-0.0001	0.3921

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO= PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 00 1.00 1.61 90.0 0 INCHES 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	35.03	0.13	-0.3209	0.0200	-0.1397	-0.0016	0.4275	1.1436	-0.0004	0.4480	-0.0006	0.3917
94	35.40	0.14	-0.3096	0.0209	-0.1357	-0.0039	0.4379	1.1578	-0.0006	0.4544	-0.0007	0.3924
95	35.38	0.14	-0.3213	0.0203	-0.1396	-0.0009	0.4270	1.1462	-0.0014	0.4579	-0.0010	0.3926
96	35.71	0.13	-0.3108	0.0190	-0.1400	-0.0778	0.4418	1.1578	-0.0011	0.4549	-0.0010	0.3929
97	35.03	0.14	-0.3120	0.0196	-0.1376	-0.0796	0.4397	1.1578	-0.0016	0.4608	-0.0014	0.3946
98	35.90	0.12	-0.3106	0.0237	-0.1300	-0.0752	0.4225	1.1648	-0.0019	0.4563	-0.0012	0.3934
99	36.07	0.14	-0.3096	0.0258	-0.1369	-0.0835	0.4421	1.1563	-0.0012	0.4565	-0.0010	0.3948
100	36.19	0.13	-0.3169	0.0245	-0.1389	-0.0774	0.4362	1.1620	-0.0015	0.4581	-0.0013	0.3942
101	36.30	0.12	-0.2969	0.0255	-0.1330	-0.0858	0.4456	1.1718	-0.0019	0.4633	-0.0016	0.3953
102	36.41	0.12	-0.3020	0.0259	-0.1355	-0.0859	0.4436	1.1816	-0.0022	0.4664	-0.0019	0.3946
103	36.53	0.11	-0.2910	0.0268	-0.1315	-0.0916	0.4318	1.1901	-0.0025	0.4715	-0.0021	0.3962
104	36.63	0.13	-0.2967	0.0245	-0.1311	-0.0833	0.4446	1.1783	-0.0024	0.4663	-0.0019	0.3940
105	36.78	0.13	-0.2967	0.0257	-0.1326	-0.0879	0.4478	1.1784	-0.0024	0.4650	-0.0020	0.3944
106	36.89	0.11	-0.2921	0.0253	-0.1318	-0.0860	0.4511	1.1874	-0.0028	0.4702	-0.0024	0.3960
107	37.01	0.12	-0.2934	0.0247	-0.1341	-0.0852	0.4540	1.1869	-0.0032	0.4721	-0.0027	0.3971
108	37.13	0.11	-0.2965	0.0249	-0.1340	-0.0826	0.4536	1.1929	-0.0034	0.4778	-0.0028	0.3972
109	37.24	0.12	-0.2938	0.0241	-0.1353	-0.0826	0.4505	1.1878	-0.0030	0.4692	-0.0025	0.3951
110	37.38	0.14	-0.2969	0.0233	-0.1348	-0.0767	0.4541	1.1749	-0.0022	0.4621	-0.0019	0.3933
111	37.48	0.11	-0.3000	0.0231	-0.1400	-0.0750	0.4575	1.1859	-0.0032	0.4710	-0.0027	0.3962
112	37.60	0.12	-0.3045	0.0241	-0.1441	-0.0780	0.4655	1.2029	-0.0037	0.4777	-0.0031	0.3971
113	37.72	0.11	-0.2981	0.0239	-0.1372	-0.0809	0.4633	1.1882	-0.0030	0.4686	-0.0025	0.3950
114	37.83	0.09	-0.3001	0.0249	-0.1350	-0.0740	0.4695	1.2142	-0.0047	0.4831	-0.0039	0.3979
115	37.93	0.10	-0.3057	0.0231	-0.1422	-0.0757	0.4651	1.1988	-0.0037	0.4752	-0.0031	0.3964
116	38.07	0.10	-0.3009	0.0222	-0.1430	-0.0725	0.4659	1.1945	-0.0036	0.4748	-0.0030	0.3975
117	38.19	0.10	-0.3043	0.0242	-0.1351	-0.0839	0.4667	1.2142	-0.0046	0.4831	-0.0038	0.3979
118	38.29	0.10	-0.3074	0.0226	-0.1371	-0.0871	0.4656	1.2159	-0.0044	0.4847	-0.0040	0.3973
119	38.41	0.10	-0.3089	0.0212	-0.1405	-0.0889	0.4655	1.2090	-0.0042	0.4868	-0.0037	0.3963
120	38.54	0.10	-0.3007	0.0202	-0.1421	-0.0877	0.4622	1.2157	-0.0050	0.4838	-0.0041	0.3980
121	38.64	0.10	-0.3042	0.0210	-0.1409	-0.0857	0.4650	1.2174	-0.0049	0.4850	-0.0043	0.3987
122	38.78	0.10	-0.3075	0.0210	-0.1391	-0.0823	0.4595	1.2058	-0.0045	0.4791	-0.0037	0.3973
123	38.89	0.09	-0.3096	0.0199	-0.1406	-0.0859	0.4672	1.2171	-0.0052	0.4839	-0.0043	0.3978
124	39.00	0.09	-0.3087	0.0194	-0.1429	-0.0827	0.4690	1.2203	-0.0050	0.4898	-0.0047	0.3988
125	39.11	0.12	-0.3100	0.0190	-0.1416	-0.0895	0.4600	1.2050	-0.0045	0.4768	-0.0037	0.3980
126	39.20	0.11	-0.3096	0.0187	-0.1393	-0.0852	0.4631	1.2143	-0.0050	0.4831	-0.0041	0.3978
127	39.32	0.11	-0.3093	0.0180	-0.1389	-0.0841	0.4612	1.2115	-0.0050	0.4817	-0.0041	0.3976
128	39.44	0.09	-0.3117	0.0190	-0.1399	-0.0838	0.4603	1.2101	-0.0046	0.4811	-0.0040	0.3976
129	39.54	0.10	-0.3103	0.0182	-0.1382	-0.0850	0.4612	1.2073	-0.0050	0.4797	-0.0041	0.3973
130	39.65	0.11	-0.3253	0.0189	-0.1401	-0.0862	0.4652	1.1863	-0.0039	0.4696	-0.0033	0.3958
131	39.77	0.10	-0.3225	0.0187	-0.1393	-0.0831	0.4666	1.2201	-0.0053	0.4858	-0.0044	0.3980
132	39.88	0.09	-0.3237	0.0191	-0.1389	-0.0826	0.4650	1.2201	-0.0053	0.4868	-0.0044	0.3990
133	39.97	0.10	-0.3234	0.0187	-0.1393	-0.0862	0.4644	1.1948	-0.0040	0.4724	-0.0034	0.3954
134	40.10	0.10	-0.3258	0.0184	-0.1429	-0.0889	0.4679	1.2230	-0.0055	0.4864	-0.0045	0.3977
135	40.19	0.11	-0.3479	0.0172	-0.1367	-0.0895	0.4561	1.1949	-0.0044	0.4735	-0.0037	0.3963
136	40.30	0.11	-0.3007	0.0180	-0.1476	-0.0903	0.4555	1.2074	-0.0053	0.4805	-0.0044	0.3980
137	40.40	0.11	-0.3776	0.0177	-0.1740	-0.0870	0.4809	1.2173	-0.0056	0.4841	-0.0046	0.3977
138	40.49	0.11	-0.3569	0.0181	-0.1615	-0.0909	0.4525	1.1904	-0.0044	0.4751	-0.0037	0.3972

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
T 00 1.000 1.1 +5.0 DIAM15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	ACPF1	YCPF1	CNF2	CM2	CB2	ACPF2	YCPF2
139	40.39	0.13	-0.3435	0.0163	-0.1535	-0.3405	0.4399	1.1677	-0.0039	0.4659	-0.0033	0.3958
140	40.89	0.12	-0.3508	0.0151	-0.1474	-0.0967	0.4376	1.1763	-0.0033	0.4645	-0.0028	0.3948
141	40.61	0.12	-0.3345	0.0147	-0.1458	-0.0990	0.4356	1.1691	-0.0033	0.4632	-0.0028	0.3962
142	40.90	0.12	-0.3496	0.0137	-0.1514	-0.0993	0.4399	1.1594	-0.0028	0.4596	-0.0024	0.3964
143	41.00	0.11	-0.3479	0.0157	-0.1511	-0.0952	0.4532	1.1636	-0.0041	0.4700	-0.0035	0.3971
144	41.19	0.11	-0.3591	0.0148	-0.1591	-0.0919	0.4493	1.1598	-0.0043	0.4760	-0.0036	0.3984
145	41.23	0.11	-0.3459	0.0148	-0.1535	-0.0929	0.4498	1.2518	-0.0048	0.4760	-0.0038	0.3982
146	41.33	0.12	-0.3291	0.0149	-0.1439	-0.0935	0.4374	1.1691	-0.0032	0.4647	-0.0027	0.3974
147	41.49	0.10	-0.3528	0.0132	-0.1556	-0.0905	0.4574	1.2046	-0.0033	0.4611	-0.0044	0.3996
148	41.59	0.10	-0.3493	0.0134	-0.1574	-0.0909	0.4505	1.2004	-0.0044	0.4790	-0.0041	0.3990
149	41.65	0.10	-0.3159	0.0142	-0.1447	-0.0956	0.4465	1.1676	-0.0039	0.4734	-0.0033	0.3986
150	41.70	0.09	-0.3504	0.0123	-0.1490	-0.0873	0.4527	1.2008	-0.0044	0.4769	-0.0041	0.3989
151	41.88	0.10	-0.3110	0.0111	-0.1372	-0.0858	0.4411	1.1935	-0.0042	0.4749	-0.0035	0.3979
152	41.98	0.09	-0.3079	0.0108	-0.1331	-0.0851	0.4341	1.1790	-0.0034	0.4697	-0.0029	0.3984
153	42.05	0.10	-0.3375	0.0118	-0.1379	-0.0884	0.4488	1.1905	-0.0041	0.4748	-0.0034	0.3987
154	42.13	0.11	-0.3109	0.0099	-0.1334	-0.0853	0.4287	1.1933	-0.0042	0.4765	-0.0035	0.3993
155	42.25	0.12	-0.2981	0.0085	-0.1263	-0.0788	0.4238	1.1805	-0.0039	0.4692	-0.0033	0.3974
156	42.33	0.10	-0.2913	0.0092	-0.1280	-0.0848	0.4393	1.1990	-0.0046	0.4803	-0.0038	0.4006
157	42.43	0.10	-0.2707	0.0055	-0.1101	-0.0735	0.4250	1.1916	-0.0044	0.4762	-0.0037	0.3996
158	42.53	0.10	-0.2584	0.0038	-0.1048	-0.0747	0.4156	1.1832	-0.0034	0.4727	-0.0029	0.3995
159	42.63	0.10	-0.2437	0.0038	-0.0987	-0.0700	0.4025	1.1746	-0.0034	0.4686	-0.0029	0.3989
160	42.72	0.10	-0.2593	0.0026	-0.1114	-0.0768	0.4247	1.1901	-0.0044	0.4777	-0.0037	0.3994
161	42.81	0.11	-0.2469	0.0030	-0.1008	-0.0721	0.4051	1.1769	-0.0034	0.4706	-0.0029	0.3992
162	42.91	0.08	-0.2352	0.0048	-0.0941	-0.0699	0.4002	1.1684	-0.0030	0.4676	-0.0026	0.4000
163	43.00	0.11	-0.2243	-0.0002	-0.0805	0.0009	0.3857	1.1601	-0.0027	0.4634	-0.0023	0.3974
164	43.10	0.10	-0.2209	-0.0004	-0.0747	0.0013	0.3795	1.1704	-0.0042	0.4701	-0.0035	0.3999
165	43.18	0.11	-0.2084	-0.0027	-0.0765	0.0130	0.3662	1.1633	-0.0031	0.4631	-0.0027	0.3961
166	43.25	0.10	-0.2163	0.0009	-0.0808	-0.0042	0.4108	1.1889	-0.0042	0.4765	-0.0035	0.4008
167	43.38	0.11	-0.1978	-0.0019	-0.0767	0.0098	0.3877	1.1832	-0.0037	0.4736	-0.0031	0.4004
168	43.44	0.09	-0.1776	-0.0052	-0.0634	0.0294	0.3576	1.1703	-0.0033	0.4664	-0.0028	0.3985
169	43.53	0.09	-0.1878	-0.0031	-0.0746	0.0185	0.3782	1.1765	-0.0036	0.4701	-0.0031	0.4002
170	43.63	0.09	-0.1720	-0.0015	-0.0682	0.0067	0.3647	1.1673	-0.0042	0.4774	-0.0035	0.4021
171	43.73	0.09	-0.1545	-0.0037	-0.0586	0.0240	0.3491	1.1644	-0.0033	0.4755	-0.0030	0.4015
172	43.81	0.09	-0.1561	-0.0029	-0.0584	0.0247	0.3526	1.1744	-0.0036	0.4705	-0.0031	0.4006
173	43.91	0.09	-0.1430	-0.0069	-0.0487	0.0421	0.3384	1.1771	-0.0036	0.4730	-0.0031	0.4018
174	44.00	0.10	-0.1417	-0.0046	-0.0483	0.0363	0.3265	1.1701	-0.0034	0.4685	-0.0029	0.4004
175	44.05	0.09	-0.1259	-0.0042	-0.0435	0.0396	0.3400	1.1743	-0.0037	0.4716	-0.0032	0.4016
176	44.16	0.10	-0.1501	-0.0035	-0.0548	0.0249	0.3649	1.1843	-0.0040	0.4751	-0.0034	0.4012
177	44.25	0.10	-0.1440	-0.0063	-0.0419	0.0509	0.3578	1.1829	-0.0036	0.4750	-0.0032	0.4016
178	44.34	0.09	-0.1430	-0.0040	-0.0405	0.0366	0.3422	1.1857	-0.0040	0.4758	-0.0034	0.4013
179	44.44	0.09	-0.1420	-0.0021	-0.0433	0.0159	0.3278	1.1929	-0.0047	0.4792	-0.0039	0.4017
180	44.55	0.10	-0.1332	-0.0041	-0.0451	0.0150	0.3303	1.1926	-0.0047	0.4791	-0.0039	0.4017
181	44.61	0.09	-0.1428	0.0001	-0.0421	-0.0009	0.3727	1.2085	-0.0051	0.4855	-0.0042	0.4017
182	44.71	0.10	-0.1454	-0.0071	-0.0366	0.0010	0.3174	1.1842	-0.0042	0.4761	-0.0036	0.4020
183	44.81	0.10	-0.0971	0.0023	-0.0333	-0.0209	0.3433	1.1999	-0.0052	0.4846	-0.0043	0.4040
184	44.89	0.09	-0.1099	-0.0047	-0.0341	0.0451	0.3039	1.1884	-0.0045	0.4799	-0.0038	0.4038

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAIO-S PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
1 60 1.00 1.7 45.0 DIAMETER 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	ACPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
180	49.99	0.10	-0.0090	-0.0086	-0.0210	0.0939	0.4230	1.1642	-0.0042	0.4767	-0.0036	0.4026
180	49.00	0.10	-0.0072	-0.0051	-0.0224	0.0566	0.4230	1.1627	-0.0040	0.4766	-0.0034	0.4030
181	49.17	0.10	-0.0070	-0.0064	-0.0169	0.0732	0.4214	1.1741	-0.0036	0.4719	-0.0031	0.4019
188	49.28	0.10	-0.0060	-0.0048	-0.0134	0.0331	0.4228	1.1912	-0.0043	0.4805	-0.0038	0.4034
189	49.34	0.10	-0.0074	0.0037	-0.0336	-0.0065	0.3151	1.2027	-0.0055	0.4648	-0.0046	0.4031
190	49.43	0.10	-0.0701	-0.0015	-0.0139	0.0214	0.4230	1.2064	-0.0055	0.4666	-0.0046	0.4048
191	49.32	0.10	-0.0770	-0.0035	-0.0170	0.0452	0.4271	1.1840	-0.0043	0.4762	-0.0036	0.4039
192	49.00	0.09	-0.0704	-0.0047	-0.0134	0.0304	0.4196	1.1911	-0.0049	0.4826	-0.0041	0.4052
193	49.12	0.10	-0.0720	-0.0097	0.0035	0.0382	-0.0281	1.2241	-0.0059	0.4965	-0.0048	0.4066
194	49.09	0.09	-0.0740	-0.0010	-0.0104	0.0272	0.4206	1.1954	-0.0052	0.4847	-0.0044	0.4055
195	49.09	0.10	-0.0703	-0.0021	-0.0012	0.0521	0.0296	1.1968	-0.0052	0.4854	-0.0044	0.4056
196	49.08	0.10	-0.0193	-0.0023	-0.0001	0.1180	0.0351	1.2372	-0.0067	0.5045	-0.0054	0.4078
197	48.05	0.09	-0.0743	-0.0011	-0.0175	0.0203	0.1452	1.2019	-0.0052	0.4879	-0.0043	0.4061
198	48.19	0.09	-0.0754	-0.0041	0.0002	0.1165	-0.0257	1.2028	-0.0054	0.4891	-0.0045	0.4066
199	48.23	0.09	-0.0739	-0.0011	-0.0049	0.0199	0.1700	1.2115	-0.0062	0.4910	-0.0051	0.4053
200	48.31	0.08	-0.0758	-0.0023	-0.0021	0.0081	0.0365	1.1962	-0.0052	0.4830	-0.0044	0.4081
201	48.41	0.08	-0.0728	-0.0001	-0.0037	0.0023	0.1335	1.2068	-0.0060	0.4913	-0.0050	0.4065
202	48.49	0.09	-0.0696	-0.0007	0.0030	0.0715	-0.0102	1.2157	-0.0060	0.4946	-0.0049	0.4069
203	48.58	0.08	-0.0680	0.0030	-0.0180	-0.0442	0.2851	1.2371	-0.0060	0.4905	-0.0050	0.4084
204	48.67	0.09	-0.0130	-0.0013	0.0048	0.0798	-0.2128	1.2100	-0.0060	0.4913	-0.0050	0.4060
205	48.74	0.08	-0.0717	0.0010	-0.0092	-0.0144	0.1763	1.2244	-0.0070	0.4982	-0.0057	0.4069
206	48.84	0.09	-0.0717	-0.0033	-0.0072	0.1105	0.2271	1.2299	-0.0072	0.5055	-0.0059	0.4110
207	48.93	0.08	-0.0732	-0.0001	-0.0060	0.0030	0.2410	1.2306	-0.0077	0.5073	-0.0062	0.4096
208	47.00	0.09	-0.0700	0.0004	-0.0031	-0.0133	0.1033	1.2143	-0.0067	0.4944	-0.0055	0.4072
209	47.11	0.08	-0.0715	0.0014	0.0017	-0.0000	-0.0971	1.2179	-0.0067	0.4983	-0.0055	0.4085
210	47.19	0.08	-0.0730	0.0000	-0.0090	-0.0178	0.1301	1.2150	-0.0067	0.4961	-0.0055	0.4081
211	47.27	0.08	-0.0470	0.0002	-0.0095	-0.0042	0.1992	1.2243	-0.0069	0.4991	-0.0056	0.4077
212	47.36	0.08	-0.0104	0.0010	0.0012	-0.0021	-0.0745	1.2300	-0.0072	0.5018	-0.0059	0.4080
213	47.44	0.07	-0.0469	0.0019	-0.0051	-0.0030	0.1706	1.2243	-0.0072	0.4991	-0.0059	0.4077
214	47.53	0.07	-0.0337	0.0010	-0.0037	-0.0297	0.1691	1.2329	-0.0078	0.5043	-0.0063	0.4090
215	47.63	0.07	-0.0350	0.0031	-0.0078	-0.0080	0.2229	1.2286	-0.0080	0.5028	-0.0065	0.4093
216	47.69	0.08	-0.0341	0.0039	-0.0048	-0.0144	0.1908	1.2180	-0.0075	0.4982	-0.0062	0.4072
217	47.79	0.08	-0.0521	-0.0024	-0.0100	0.0462	0.3077	1.2458	-0.0086	0.5139	-0.0071	0.4125
218	47.88	0.07	-0.0445	-0.0004	-0.0105	0.0031	0.2333	1.2343	-0.0081	0.5088	-0.0066	0.4104
219	47.97	0.08	-0.0388	0.0010	-0.0078	-0.0015	0.2010	1.2265	-0.0077	0.5050	-0.0063	0.4111
220	48.05	0.07	-0.0351	0.0036	-0.0077	-0.1020	0.2194	1.2300	-0.0078	0.5059	-0.0064	0.4097
221	48.13	0.07	-0.0315	0.0014	-0.0060	-0.0447	0.1534	1.2329	-0.0082	0.5064	-0.0067	0.4108
222	48.23	0.08	-0.0330	0.0041	-0.0081	-0.1414	0.2390	1.2337	-0.0080	0.5069	-0.0069	0.4118
223	48.30	0.07	-0.0474	-0.0002	-0.0129	0.0042	0.2727	1.2431	-0.0084	0.5099	-0.0068	0.4112
224	48.39	0.07	-0.0467	0.0041	-0.0118	-0.0963	0.2770	1.2444	-0.0090	0.5125	-0.0072	0.4119
225	48.47	0.07	-0.0474	0.0026	-0.0139	-0.0109	0.2736	1.2410	-0.0089	0.5103	-0.0072	0.4112
226	48.57	0.07	-0.0337	0.0041	-0.0108	-0.0765	0.2670	1.2500	-0.0090	0.5174	-0.0077	0.4120
227	48.64	0.08	-0.0005	0.0010	-0.0209	-0.0241	0.3148	1.2532	-0.0078	0.5155	-0.0078	0.4114
228	48.72	0.07	-0.0512	0.0001	-0.0144	-0.0020	0.2618	1.2360	-0.0088	0.5090	-0.0071	0.4116
229	48.82	0.07	-0.0026	0.0018	-0.0193	-0.0288	0.3083	1.2483	-0.0095	0.5162	-0.0076	0.4135
230	48.91	0.07	-0.0077	0.0008	-0.0249	-0.0069	0.3350	1.2629	-0.0109	0.5208	-0.0082	0.4124

TEST PART MACH RATIO PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 60 1.600 1.61 +0.0 BANDED 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CAF1	CN1	CA1	ACPF1	YCPF1	CAF2	CN2	CA2	ACPF2	YCPF2
231	48.97	0.01	-0.0378	-0.0003	-0.0180	0.0131	0.5149	1.2470	-0.0131	0.5149	-0.0081	0.4129
232	49.01	0.01	-0.0310	0.0013	-0.0176	-0.0275	0.3340	1.2312	-0.0097	0.5164	-0.0078	0.4127
233	49.10	0.00	-0.0248	-0.0008	-0.0169	0.0540	0.2401	1.2044	-0.0124	0.5240	-0.0090	0.4134
234	49.04	0.03	-0.0250	-0.0030	-0.0170	0.0391	0.2040	1.2003	-0.0114	0.5246	-0.0090	0.4137
235	49.03	0.05	-0.0243	-0.0103	-0.0170	0.0659	0.2371	1.2010	-0.0113	0.5210	-0.0090	0.4137
236	49.04	0.07	-0.0250	-0.0263	-0.0181	0.0215	0.3303	1.2078	-0.0115	0.5252	-0.0091	0.4137
237	49.98	0.03	-0.0242	-0.0256	-0.0178	0.0993	0.1254	1.2422	-0.0131	0.5136	-0.0081	0.4136
238	49.98	0.00	-0.0240	-0.0038	-0.0241	0.0420	0.2003	1.2610	-0.0134	0.5222	-0.0087	0.4141
239	49.00	0.03	-0.0237	-0.0015	-0.0252	0.0033	0.2419	1.2671	-0.0127	0.5246	-0.0100	0.4153
240	49.01	0.06	-0.0222	-0.0070	-0.0247	0.0700	0.2139	1.2502	-0.0112	0.5201	-0.0089	0.4139
241	49.01	0.04	-0.0237	-0.0116	-0.0215	0.1304	0.1370	1.2655	-0.0117	0.5241	-0.0093	0.4142
242	49.99	0.02	-0.0210	0.0113	0.0070	0.2195	-0.1470	1.2208	-0.0101	0.5043	-0.0083	0.4131
243	50.04	0.02	-0.0215	-0.0021	-0.0065	0.1502	0.0839	1.2510	-0.0116	0.5206	-0.0093	0.4142
244	50.01	0.03	-0.0214	-0.0123	-0.0097	0.1317	0.1490	1.2508	-0.0119	0.5211	-0.0095	0.4146
245	50.00	-0.00	-0.0204	-0.0078	0.0150	0.2458	-0.5385	1.2140	-0.0091	0.5039	-0.0075	0.4148
246	50.00	0.01	-0.0228	-0.0092	0.0137	0.2218	-0.4730	1.2149	-0.0099	0.5033	-0.0082	0.4143
247	50.01	0.02	-0.0287	-0.0078	0.0134	0.2379	-0.4569	1.2102	-0.0096	0.5000	-0.0076	0.4132
248	50.03	0.01	-0.0192	-0.0054	0.0172	0.3333	-1.0017	1.2043	-0.0070	0.4995	-0.0075	0.4148
249	50.01	0.02	-0.0111	-0.0052	0.0163	0.4667	-1.7027	1.2288	-0.0096	0.5137	-0.0078	0.4156
250	50.03	0.01	-0.0200	-0.0069	0.0069	0.2918	-0.2750	1.2216	-0.0106	0.5066	-0.0087	0.4147
251	50.03	0.01	-0.0195	-0.0065	0.0042	1.2505	-0.1111	1.2313	-0.0130	0.5114	-0.0081	0.4154
252	50.01	0.01	0.0202	-0.0092	0.0090	-0.0733	0.7692	1.2313	-0.0130	0.5114	-0.0081	0.4154
253	50.01	0.01	0.0175	-0.0043	0.0050	-0.5445	3.1646	1.2485	-0.0106	0.5197	-0.0083	0.4163
254	50.00	0.01	0.0201	-0.0025	0.0010	-0.0333	1.1317	1.2471	-0.0104	0.5196	-0.0084	0.4167
255	51.00	0.01	0.0127	-0.0050	0.0275	-0.2363	2.1966	1.2498	-0.0099	0.5179	-0.0080	0.4174
256	51.01	0.01	0.0242	-0.0017	0.0290	-0.0703	1.2314	1.2509	-0.0107	0.5227	-0.0086	0.4179
257	51.02	0.00	0.0232	-0.0019	0.0260	-0.0819	1.2369	1.2495	-0.0106	0.5226	-0.0085	0.4183
258	51.02	0.01	0.0230	-0.0021	0.0319	-0.0750	1.1393	1.2466	-0.0102	0.5201	-0.0082	0.4172
259	51.03	-0.00	0.0229	-0.0017	0.0308	-0.3371	0.7991	1.2500	-0.0106	0.5206	-0.0086	0.4191
260	51.02	0.00	0.0231	-0.0024	0.0320	-0.0647	0.0041	1.2545	-0.0110	0.5200	-0.0087	0.4192
261	51.03	0.01	0.0227	-0.0025	0.0330	-0.0830	0.8483	1.2560	-0.0110	0.5279	-0.0088	0.4197
262	51.03	-0.00	0.0243	-0.0024	0.0333	-0.0498	0.7091	1.2502	-0.0110	0.5271	-0.0088	0.4196
263	51.03	0.00	0.0267	-0.0030	0.0300	-0.0102	0.8587	1.2505	-0.0106	0.5243	-0.0087	0.4193
264	51.00	0.01	0.0213	-0.0019	0.0354	-0.0371	0.6714	1.2591	-0.0113	0.5264	-0.0090	0.4197
265	51.03	0.00	0.0230	-0.0029	0.0333	-0.0657	0.7731	1.2533	-0.0114	0.5266	-0.0091	0.4206
266	52.02	-0.00	0.0185	-0.0013	0.0352	-0.0660	0.7258	1.2547	-0.0113	0.5275	-0.0090	0.4204
267	52.01	-0.01	0.0200	0.0012	0.0377	0.0205	0.6444	1.2615	-0.0114	0.5303	-0.0091	0.4203
268	52.02	-0.01	0.0213	-0.0003	0.0343	-0.0098	0.6736	1.2601	-0.0118	0.5302	-0.0094	0.4207
269	52.02	-0.00	0.0227	0.0004	0.0375	0.0084	0.5950	1.2566	-0.0117	0.5306	-0.0093	0.4215
270	52.03	-0.00	0.0245	-0.0002	0.0352	-0.0033	0.6710	1.2645	-0.0122	0.5345	-0.0097	0.4227
271	52.04	0.00	0.0280	-0.0008	0.0347	-0.0105	0.7155	1.2643	-0.0114	0.5259	-0.0092	0.4227
272	52.04	-0.01	0.0236	0.00	0.0375	0.00	0.6410	1.2553	-0.0120	0.5304	-0.0096	0.4229
273	52.03	-0.00	0.0213	-0.0004	0.0333	-0.0078	0.6504	1.2597	-0.0120	0.5312	-0.0095	0.4216
274	52.01	-0.01	0.0212	-0.0005	0.0349	-0.0098	0.6731	1.2562	-0.0122	0.5339	-0.0097	0.4243
275	52.04	-0.01	0.0201	-0.0002	0.0370	-0.0030	0.6750	1.2582	-0.0124	0.5336	-0.0096	0.4243
276	52.08	-0.00	0.0203	-0.0003	0.0361	-0.0053	0.6423	1.2652	-0.0126	0.5367	-0.0100	0.4241

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 60 MACH 1.60 RNIO-6 4506 PHI 0.0 CONF STINGFIN DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CBL	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
277	52.90	0.00	0.00612	0.00000	0.00375	0.00098	0.6203	1.2726	-0.0129	0.5402	-0.0102	0.4245
278	53.06	-0.01	0.00530	-0.00014	0.00308	-0.02604	0.0879	1.2036	-0.0120	0.5334	-0.0100	0.4237
279	53.15	-0.02	0.00625	0.00012	0.00376	0.01492	0.0826	1.2837	-0.0135	0.5455	-0.0105	0.4249
280	53.21	-0.00	0.00580	0.00002	0.00349	0.00034	0.6410	1.2046	-0.0131	0.5381	-0.0104	0.4255
281	53.32	-0.00	0.00587	0.00023	0.00352	0.00421	0.6747	1.2741	-0.0134	0.5418	-0.0105	0.4250
282	53.40	-0.01	0.00580	-0.00001	0.00349	-0.00018	0.6869	1.2718	-0.0129	0.5413	-0.0102	0.4258
283	53.49	-0.01	0.00535	0.00020	0.00321	0.00407	0.6573	1.2962	-0.0145	0.5532	-0.0115	0.4268
284	53.58	-0.01	0.00539	0.00006	0.00321	0.00173	0.7445	1.2934	-0.0147	0.5512	-0.0114	0.4261
285	53.65	0.00	0.00532	0.00020	0.00318	0.00444	0.6934	1.2929	-0.0146	0.5506	-0.0113	0.4259
286	53.75	-0.00	0.00541	-0.00033	0.00326	-0.01005	1.1105	1.2973	-0.0150	0.5531	-0.0122	0.4263
287	53.83	0.00	0.00569	-0.00003	0.00343	-0.00081	0.8902	1.2815	-0.0147	0.5467	-0.0115	0.4266
288	53.91	0.00	0.00557	-0.00049	0.00335	-0.01506	0.3496	1.2907	-0.0153	0.5553	-0.0118	0.4282
289	54.01	0.01	0.00163	-0.00029	0.00228	-0.01508	1.2364	1.2988	-0.0160	0.5541	-0.0124	0.4273
290	54.08	0.02	-0.00000	-0.00055	0.00150	0.01703	-33.00000	1.2849	-0.0141	0.5506	-0.0110	0.4271
291	54.14	0.03	0.00019	-0.00007	0.00202	-2.09747	10.03110	1.2889	-0.0139	0.5518	-0.0108	0.4281
292	54.23	0.03	-0.00000	-0.00021	0.00190	0.50334	-33.00000	1.2882	-0.0133	0.5494	-0.0104	0.4291
293	54.30	0.03	0.00030	-0.00038	0.00210	-1.62005	1.0000	1.2870	-0.0140	0.5510	-0.0109	0.4281
294	54.38	0.04	0.00044	-0.00046	0.00218	-1.00004	0.7747	1.2864	-0.0138	0.5497	-0.0108	0.4300
295	54.45	0.04	-0.00020	-0.00023	0.00134	1.62503	-9.20000	1.2838	-0.0132	0.5506	-0.0103	0.4289
296	54.53	0.05	0.00030	-0.00021	0.00205	-0.49004	0.8823	1.2865	-0.0140	0.5525	-0.0109	0.4294
297	54.61	0.05	0.00019	-0.00041	0.00201	-2.09747	10.57109	1.2779	-0.0131	0.5496	-0.0103	0.4301
298	54.70	0.05	0.00034	-0.00030	0.00207	-0.00330	24.67300	1.2803	-0.0135	0.5497	-0.0106	0.4293
299	54.77	0.05	0.00343	-0.00040	0.00218	-0.49308	4.80037	1.2780	-0.0137	0.5515	-0.0108	0.4322
300	54.83	0.06	0.00030	-0.00024	0.00205	-0.49071	0.80333	1.2817	-0.0135	0.5515	-0.0106	0.4303
301	54.94	0.06	0.00342	-0.00025	0.00200	-0.59335	0.79040	1.2899	-0.0142	0.5534	-0.0110	0.4306
302	55.01	0.06	-0.00020	-0.00025	0.00183	1.62505	-9.15000	1.2885	-0.0140	0.5536	-0.0109	0.4296
303	55.08	0.06	0.00030	-0.00019	0.00200	-0.00330	0.80007	1.2937	-0.0140	0.5567	-0.0113	0.4303
304	55.16	0.06	0.00034	-0.00035	0.00200	-0.47535	24.50000	1.2930	-0.0144	0.5584	-0.0111	0.4317
305	55.24	0.06	0.00036	-0.00025	0.00180	-0.16003	30.00000	1.3022	-0.0151	0.5614	-0.0116	0.4311
306	55.32	0.06	-0.00019	-0.00033	0.00182	1.73375	-9.57109	1.3003	-0.0149	0.5605	-0.0115	0.4310
307	55.40	0.05	-0.00019	-0.00034	0.00182	1.75002	-9.57109	1.2990	-0.0148	0.5576	-0.0115	0.4309
308	55.47	0.04	-0.00031	-0.00031	0.00175	1.00004	-5.00452	1.3031	-0.0152	0.5625	-0.0117	0.4317
309	55.55	0.03	-0.00019	-0.00030	0.00181	2.00002	-9.57203	1.2973	-0.0152	0.5602	-0.0117	0.4319
310	55.64	0.04	-0.00034	-0.00039	0.00185	1.62492	-9.78142	1.3006	-0.0154	0.5649	-0.0118	0.4323
311	55.70	0.03	0.00042	-0.00037	0.00215	-0.92007	5.11191	1.3125	-0.0160	0.5662	-0.0122	0.4329
312	55.78	0.04	-0.00039	-0.00036	0.00178	0.81825	-4.04935	1.2984	-0.0153	0.5617	-0.0118	0.4333
313	55.87	0.04	0.00031	-0.00049	0.00212	-1.56813	0.83387	1.3107	-0.0161	0.5662	-0.0123	0.4320
314	55.93	0.04	0.00035	-0.00047	0.00204	-0.49030	40.00000	1.3190	-0.0164	0.5674	-0.0125	0.4321
315	56.04	0.04	0.00036	-0.00053	0.00219	-0.99400	3.91107	1.3201	-0.0169	0.5714	-0.0128	0.4326
316	56.12	0.03	0.00050	-0.00051	0.00217	-1.70007	1.02333	1.3102	-0.0160	0.5677	-0.0127	0.4333
317	56.20	0.04	0.00061	-0.00040	0.00217	-0.50001	2.00790	1.3223	-0.0169	0.5748	-0.0128	0.4347
318	56.26	0.04	0.00042	-0.00053	0.00239	-0.51703	2.59778	1.3306	-0.0175	0.5766	-0.0132	0.4333
319	56.37	0.04	0.00030	-0.00051	0.00210	-1.70007	7.20000	1.3097	-0.0165	0.5670	-0.0126	0.4329
320	56.46	0.04	0.00030	-0.00053	0.00213	-0.99400	3.00030	1.3240	-0.0170	0.5737	-0.0133	0.4330
321	56.54	0.05	0.00029	-0.00049	0.00203	-0.00205	2.99494	1.3102	-0.0170	0.5708	-0.0129	0.4337
322	56.63	0.05	0.00031	-0.00049	0.00222	-0.00024	2.79407	1.3190	-0.0172	0.5733	-0.0131	0.4346

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(TRANSONIC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 0 OF 0

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/L-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 60 1.00 1.7 45.0 DIMOF15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
323	56.79	0.00	0.0060	-0.0056	0.0232	-0.6753	2.9330	1.3334	-0.0160	0.5753	-0.0136	0.4324
324	56.89	0.00	0.0062	-0.0060	0.0229	-0.6053	2.6691	1.3215	-0.0162	0.5733	-0.0138	0.4336
325	56.88	0.00	0.0117	-0.0047	0.0242	-0.4019	2.0684	1.3215	-0.0163	0.5744	-0.0139	0.4347
326	56.99	0.00	0.0117	-0.0047	0.0242	-0.4019	2.0684	1.3212	-0.0164	0.5771	-0.0139	0.4348
327	57.02	0.00	0.0116	-0.0055	0.0234	-0.5191	2.2375	1.3312	-0.0163	0.5614	-0.0138	0.4367
328	57.09	0.00	0.0080	-0.0069	0.0211	-1.0340	7.2000	1.3211	-0.0164	0.5726	-0.0140	0.4334
329	57.18	0.00	0.0141	-0.0049	0.0255	-0.3477	1.6065	1.3336	-0.0165	0.5615	-0.0139	0.4360
330	57.23	0.01	0.0083	-0.0054	0.0216	-0.9278	3.9530	1.3304	-0.0164	0.5633	-0.0142	0.4365
331	57.34	0.01	0.0154	-0.0046	0.0249	-0.4017	2.0377	1.3336	-0.0169	0.5614	-0.0142	0.4360
332	57.43	0.00	0.0234	-0.0033	0.0290	-0.1581	1.2134	1.3368	-0.0170	0.5612	-0.0143	0.4367
333	57.49	0.00	0.0154	-0.0043	0.0252	-0.2193	1.4364	1.3365	-0.0172	0.5628	-0.0144	0.4361
334	57.55	0.00	0.0154	-0.0037	0.0241	-0.4409	1.8039	1.3289	-0.0170	0.5792	-0.0143	0.4358
335	57.67	0.00	0.0303	-0.0031	0.0312	-0.1034	1.0400	1.3178	-0.0171	0.5749	-0.0145	0.4361
336	57.74	0.01	0.0341	-0.0040	0.0337	-0.0504	0.8992	1.3447	-0.0201	0.5801	-0.0150	0.4359
337	57.80	0.00	0.0323	-0.0025	0.0327	-0.0774	1.0124	1.3277	-0.0172	0.5785	-0.0145	0.4357
338	57.88	0.00	0.0372	-0.0025	0.0344	-0.0403	0.9247	1.3192	-0.0171	0.5756	-0.0145	0.4363
339	57.94	0.01	0.0253	-0.0038	0.0285	-0.1505	1.1265	1.3203	-0.0172	0.5795	-0.0145	0.4369
340	58.01	0.00	0.0307	0.0001	0.0405	0.0020	0.8804	1.3401	-0.0202	0.5895	-0.0150	0.4380
341	58.08	0.00	0.0449	-0.0018	0.0356	-0.0402	0.7991	1.3268	-0.0169	0.5740	-0.0143	0.4346
342	58.16	0.00	0.0335	0.0002	0.0362	0.0087	0.7241	1.3293	-0.0170	0.5803	-0.0148	0.4305
343	58.24	0.00	0.0236	-0.0027	0.0296	-0.1060	1.1920	1.3052	-0.0185	0.5733	-0.0142	0.4392
344	58.31	0.00	0.0300	-0.0029	0.0319	-0.0907	1.0907	1.3163	-0.0170	0.5710	-0.0145	0.4350
345	58.38	0.00	0.0225	-0.0025	0.0296	-0.1112	1.3156	1.3153	-0.0172	0.5752	-0.0146	0.4373
346	58.45	0.00	0.0274	-0.0007	0.0330	-0.0107	0.8904	1.3068	-0.0167	0.5717	-0.0145	0.4375
347	58.53	0.02	0.0500	0.0014	0.0437	0.0247	0.7590	1.3478	-0.0206	0.5902	-0.0153	0.4379
348	58.61	0.00	0.0289	-0.0036	0.0307	-0.1038	1.0923	1.3162	-0.0170	0.5703	-0.0149	0.4370
349	58.62	0.00	0.0259	-0.0017	0.0320	-0.0571	1.0740	1.3208	-0.0170	0.5818	-0.0149	0.4405
350	58.62	0.00	0.0227	-0.0037	0.0294	-0.1031	1.2952	1.3334	-0.0170	0.5812	-0.0149	0.4357

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NO.=0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 00 1.00 1.7 +3.0 SLOPES 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CA3	CB3	ALPF3	YCPF3	CNF4	CM4	CB4	ALPF4	YCPF4
1	-5.71	0.00	0.2414	9.9999	0.3053	9.9999	0.3538	-0.2103	-0.0232	-0.0731	0.1105	0.3478
2	-5.71	0.10	0.2429	9.9999	0.3055	9.9999	0.3544	-0.2145	-0.0237	-0.0741	0.1107	0.3455
3	-5.72	0.10	0.2332	9.9999	0.3025	9.9999	0.3538	-0.2178	-0.0216	-0.0670	0.1073	0.3366
4	-5.72	0.10	0.2010	9.9999	0.3091	9.9999	0.3426	-0.1771	-0.0177	-0.0555	0.1001	0.3132
5	-4.69	0.10	0.1721	9.9999	0.3583	9.9999	0.3366	-0.1315	-0.0145	-0.0350	0.0803	0.2666
6	-3.25	0.11	0.1412	9.9999	0.3492	9.9999	0.3150	-0.1022	-0.0083	-0.0217	0.0617	0.2165
7	-2.31	0.10	0.1062	9.9999	0.0335	9.9999	0.3049	-0.0855	-0.0025	-0.0090	0.0382	0.1376
8	-1.33	0.10	0.0775	9.9999	0.0228	9.9999	0.2931	-0.0662	-0.0007	0.0134	0.0166	-0.3183
9	-0.38	0.10	0.0466	9.9999	0.0083	9.9999	0.1353	-0.0178	0.0041	0.0254	-0.1072	-1.2959
10	0.04	0.10	0.0096	9.9999	-0.0006	9.9999	-0.0770	0.0174	0.0033	0.0397	0.3047	2.2816
11	1.58	0.11	-0.0150	9.9999	-0.0215	9.9999	1.4333	0.0437	0.0095	0.0512	0.2180	1.1720
12	2.00	0.10	-0.0545	9.9999	-0.0306	9.9999	0.6720	0.0702	0.0132	0.0620	0.1664	0.8830
13	3.02	0.10	-0.0514	9.9999	-0.0300	9.9999	0.5466	0.0902	0.0178	0.0740	0.1853	0.7690
14	4.02	0.10	-0.1335	9.9999	-0.0638	9.9999	0.4729	0.1249	0.0616	0.0874	0.1748	0.7197
15	5.48	0.10	-0.1703	9.9999	-0.0817	9.9999	0.4618	0.1409	0.0741	0.1013	0.1643	0.6898
16	6.48	0.10	-0.2265	9.9999	-0.1005	9.9999	0.4510	0.1746	0.0826	0.1140	0.1496	0.6565
17	7.48	0.10	-0.2754	9.9999	-0.1427	9.9999	0.4460	0.2078	0.0919	0.1303	0.1056	0.6270
18	8.44	0.10	-0.3271	9.9999	-0.1431	9.9999	0.4366	0.2303	0.0984	0.1420	0.0886	0.6034
19	9.41	0.10	-0.3834	9.9999	-0.1655	9.9999	0.4327	0.2600	0.1071	0.1552	0.0736	0.5968
20	10.39	0.10	-0.4335	9.9999	-0.1877	9.9999	0.4300	0.2861	0.1164	0.1665	0.0588	0.5850
21	11.40	0.10	-0.5016	9.9999	-0.2138	9.9999	0.4261	0.3105	0.1238	0.1785	0.0445	0.5750
22	12.37	0.10	-0.5600	9.9999	-0.2362	9.9999	0.4256	0.3151	0.1277	0.1840	0.0245	0.5840
23	13.35	0.10	-0.6257	9.9999	-0.2659	9.9999	0.4223	0.3329	0.1362	0.1939	0.0120	0.5826
24	14.34	0.11	-0.6868	9.9999	-0.2941	9.9999	0.4251	0.3579	0.1419	0.2034	0.0053	0.5737
25	15.31	0.10	-0.7477	9.9999	-0.3179	9.9999	0.4251	0.3809	-0.0037	0.2136	-0.0103	0.5917
26	16.38	0.10	-0.8182	9.9999	-0.3485	9.9999	0.4201	0.3797	-0.0052	0.2246	-0.0137	0.5915
27	17.39	0.11	-0.8836	9.9999	-0.3715	9.9999	0.4223	0.3865	-0.0121	0.2282	-0.0331	0.6172
28	18.39	0.11	-0.9342	9.9999	-0.3934	9.9999	0.4243	0.3880	-0.0156	0.2360	-0.0394	0.6114
29	19.39	0.10	-0.9801	9.9999	-0.4174	9.9999	0.4227	0.3844	-0.0209	0.2399	-0.0545	0.6241
30	20.39	0.11	-1.0316	9.9999	-0.4333	9.9999	0.4201	0.3944	-0.0236	0.2450	-0.0681	0.6212
31	21.37	0.11	-1.0750	9.9999	-0.4480	9.9999	0.4149	0.3710	-0.0334	0.2372	-0.0821	0.6394
32	22.37	0.12	-1.1041	9.9999	-0.4541	9.9999	0.4099	0.3755	-0.0330	0.2370	-0.0894	0.6312
33	23.37	0.12	-1.1474	9.9999	-0.4665	9.9999	0.4169	0.3650	-0.0306	0.2275	-0.0842	0.6242
34	24.37	0.13	-1.2001	9.9999	-0.4830	9.9999	0.4065	0.3999	-0.0320	0.2419	-0.0811	0.6141
35	25.39	0.13	-1.2341	9.9999	-0.4971	9.9999	0.4028	0.3855	-0.0336	0.2340	-0.0880	0.6070
36	26.38	0.14	-1.2641	9.9999	-0.5020	9.9999	0.3971	0.3951	-0.0326	0.2361	-0.0829	0.5976
37	27.40	0.13	-1.2831	9.9999	-0.4914	9.9999	0.3868	0.4212	-0.0334	0.2450	-0.0839	0.5816
38	28.43	0.13	-1.3000	9.9999	-0.4934	9.9999	0.3719	0.4044	-0.0330	0.2427	-0.0884	0.5836
39	29.43	0.17	-1.2963	9.9999	-0.4935	9.9999	0.3759	0.4442	-0.0341	0.2540	-0.0767	0.5718
40	28.43	0.13	-1.2830	9.9999	-0.4890	9.9999	0.3808	0.4205	-0.0323	0.2445	-0.0750	0.5732
41	27.08	0.14	-1.2543	9.9999	-0.4724	9.9999	0.3765	0.4101	-0.0349	0.2408	-0.0850	0.5872
42	26.35	0.14	-1.1673	9.9999	-0.4315	9.9999	0.3847	0.4355	-0.0338	0.2491	-0.0770	0.5720
43	25.31	0.13	-1.1243	9.9999	-0.4130	9.9999	0.3846	0.4227	-0.0316	0.2436	-0.0746	0.5748
44	24.75	0.13	-1.1312	9.9999	-0.4134	9.9999	0.3844	0.4013	-0.0314	0.2350	-0.0781	0.5806
45	23.38	0.10	-1.1074	9.9999	-0.4032	9.9999	0.3841	0.4031	-0.0299	0.2320	-0.0743	0.5755
46	22.00	0.15	-1.0814	9.9999	-0.3934	9.9999	0.3838	0.4009	-0.0285	0.2321	-0.0712	0.5789

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 00 MACH 1.00 RN/FT 2.7 PHI 90.0 CONF STANDFD L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNFS	CAS	CDS	ACPFS	YCPFS	CNFW	CMW	CDW	ACPFW	YCPFW
47	29.21	0.15	-1.0[illegible]16	9.9999	-0.[illegible]496	9.9999	0.3535	0.4[illegible]48	-0.0312	0.2339	-0.0770	0.5778
48	29.33	0.15	-1.0[illegible]61	9.9999	-0.[illegible]431	9.9999	0.3031	0.3001	-0.0[illegible]92	0.2241	-0.0756	0.5804
49	29.46	0.16	-1.0[illegible]34	9.9999	-0.[illegible]87	9.9999	0.3034	0.3459	-0.0[illegible]49	0.2290	-0.0731	0.5764
50	29.00	0.16	-1.0[illegible]77	9.9999	-0.[illegible]45	9.9999	0.3043	0.3500	-0.0[illegible]96	0.2315	-0.0744	0.5808
51	29.74	0.16	-1.0[illegible]78	9.9999	-0.[illegible]37	9.9999	0.3046	0.4225	-0.0301	0.2403	-0.0714	0.5829
52	29.96	0.15	-1.0[illegible]76	9.9999	-0.[illegible]92	9.9999	0.3030	0.3981	-0.0285	0.2333	-0.0717	0.5860
53	30.09	0.15	-1.0[illegible]13	9.9999	-0.[illegible]77	9.9999	0.3043	0.4079	-0.0279	0.2358	-0.0720	0.5886
54	30.22	0.17	-1.0[illegible]64	9.9999	-0.[illegible]39	9.9999	0.3032	0.4013	-0.0326	0.2331	-0.0816	0.5933
55	30.37	0.17	-1.0[illegible]67	9.9999	-0.[illegible]35	9.9999	0.3035	0.4000	-0.0331	0.2335	-0.0826	0.5962
56	30.51	0.18	-1.0[illegible]46	9.9999	-0.[illegible]38	9.9999	0.3036	0.4041	-0.0304	0.2338	-0.0841	0.5920
57	30.64	0.18	-1.0[illegible]14	9.9999	-0.[illegible]42	9.9999	0.3038	0.4056	-0.0304	0.2442	-0.0869	0.6021
58	30.78	0.17	-1.0[illegible]60	9.9999	-0.[illegible]26	9.9999	0.3042	0.3910	-0.0301	0.2362	-0.0922	0.6092
59	30.90	0.17	-1.0[illegible]12	9.9999	-0.[illegible]52	9.9999	0.3047	0.3881	-0.0376	0.2350	-0.0996	0.6183
60	31.05	0.17	-1.0[illegible]41	9.9999	-0.[illegible]04	9.9999	0.3051	0.3704	-0.0349	0.2303	-0.1030	0.6221
61	31.19	0.17	-1.0[illegible]60	9.9999	-0.[illegible]37	9.9999	0.3002	0.3516	-0.0330	0.2226	-0.1079	0.6332
62	31.33	0.17	-1.0[illegible]11	9.9999	-0.[illegible]14	9.9999	0.3040	0.3727	-0.0339	0.2315	-0.1056	0.6212
63	31.48	0.18	-1.0[illegible]79	9.9999	-0.[illegible]30	9.9999	0.3038	0.3272	-0.0306	0.2080	-0.1117	0.6358
64	31.61	0.16	-1.0[illegible]67	9.9999	-0.[illegible]62	9.9999	0.3002	0.3399	-0.0373	0.2164	-0.1096	0.6375
65	31.74	0.17	-1.0[illegible]20	9.9999	-0.[illegible]98	9.9999	0.3002	0.3336	-0.0374	0.2138	-0.1120	0.6408
66	31.89	0.17	-1.0[illegible]77	9.9999	-0.[illegible]36	9.9999	0.3008	0.3206	-0.0360	0.2069	-0.1101	0.6395
67	32.02	0.17	-1.0[illegible]16	9.9999	-0.[illegible]49	9.9999	0.3007	0.3222	-0.0356	0.2092	-0.1110	0.6492
68	32.17	0.18	-1.0[illegible]40	9.9999	-0.[illegible]34	9.9999	0.3007	0.3402	-0.0307	0.2169	-0.1078	0.6374
69	32.30	0.16	-1.0[illegible]05	9.9999	-0.[illegible]92	9.9999	0.3076	0.3353	-0.0350	0.2151	-0.1043	0.6420
70	32.43	0.17	-1.1[illegible]31	9.9999	-0.[illegible]39	9.9999	0.3073	0.3537	-0.0355	0.2263	-0.0997	0.6361
71	32.58	0.18	-1.1[illegible]57	9.9999	-0.[illegible]31	9.9999	0.3567	0.3527	-0.0354	0.2234	-0.1002	0.6333
72	32.69	0.16	-1.1[illegible]62	9.9999	-0.[illegible]39	9.9999	0.3000	0.3990	-0.0349	0.2252	-0.0997	0.6383
73	32.82	0.16	-1.1[illegible]71	9.9999	-0.[illegible]05	9.9999	0.3069	0.3552	-0.0352	0.2272	-0.0960	0.6395
74	32.93	0.16	-1.1[illegible]34	9.9999	-0.[illegible]08	9.9999	0.3079	0.3305	-0.0358	0.2300	-0.0997	0.6414
75	33.09	0.16	-1.1[illegible]22	9.9999	-0.[illegible]33	9.9999	0.3074	0.3317	-0.0303	0.2334	-0.1002	0.6452
76	33.24	0.17	-1.1[illegible]30	9.9999	-0.[illegible]70	9.9999	0.3076	0.3915	-0.0374	0.2479	-0.0949	0.6332
77	33.33	0.17	-1.1[illegible]12	9.9999	-0.[illegible]71	9.9999	0.3076	0.3768	-0.0371	0.2414	-0.0964	0.6407
78	33.48	0.18	-1.1[illegible]30	9.9999	-0.[illegible]89	9.9999	0.3002	0.4025	-0.0301	0.2521	-0.0896	0.6264
79	33.60	0.17	-1.1[illegible]02	9.9999	-0.[illegible]06	9.9999	0.3002	0.4147	-0.0300	0.2615	-0.0866	0.6306
80	33.72	0.17	-1.1[illegible]03	9.9999	-0.[illegible]03	9.9999	0.3041	0.3999	-0.0374	0.2570	-0.0936	0.6442
81	33.85	0.16	-1.1[illegible]40	9.9999	-0.[illegible]32	9.9999	0.3090	0.3925	-0.0370	0.2552	-0.0993	0.6503
82	33.99	0.17	-1.1[illegible]91	9.9999	-0.[illegible]58	9.9999	0.3090	0.4101	-0.0374	0.2645	-0.0898	0.6357
83	34.11	0.15	-1.1[illegible]51	9.9999	-0.[illegible]33	9.9999	0.3098	0.4098	-0.0338	0.2660	-0.0946	0.6495
84	34.29	0.17	-1.1[illegible]91	9.9999	-0.[illegible]63	9.9999	0.3700	0.4007	-0.0375	0.2608	-0.0834	0.6286
85	34.33	0.16	-1.1[illegible]02	9.9999	-0.[illegible]90	9.9999	0.3095	0.4356	-0.0333	0.2777	-0.0878	0.6376
86	34.47	0.16	-1.1[illegible]31	9.9999	-0.[illegible]01	9.9999	0.3007	0.4475	-0.0380	0.2839	-0.0860	0.6345
87	34.61	0.16	-1.1[illegible]92	9.9999	-0.[illegible]48	9.9999	0.3007	0.4134	-0.0387	0.2742	-0.0924	0.6554
88	34.73	0.15	-1.1[illegible]48	9.9999	-0.[illegible]16	9.9999	0.3097	0.4024	-0.0415	0.2715	-0.1031	0.6748
89	34.85	0.15	-1.1[illegible]70	9.9999	-0.[illegible]74	9.9999	0.3085	0.4229	-0.0356	0.2772	-0.0897	0.6469
90	34.99	0.15	-1.1[illegible]14	9.9999	-0.[illegible]37	9.9999	0.3090	0.4158	-0.0411	0.2757	-0.0992	0.6603
91	35.09	0.14	-1.1[illegible]32	9.9999	-0.[illegible]01	9.9999	0.3700	0.4365	-0.0350	0.2890	-0.0906	0.6619
92	35.22	0.14	-1.1[illegible]09	9.9999	-0.[illegible]94	9.9999	0.3703	0.4207	-0.0401	0.2844	-0.0952	0.6761

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 60 MACH 1.000 ALPHA 1.7 PHI 45.0 CONF 81 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CD3	ALPF3	YCPF3	CNF4	CM4	CD4	ALPF4	YCPF4
93	35.35	0.13	-1.1791	9.9999	-0.4353	9.9999	0.3692	0.4100	-0.0335	0.2620	-0.0949	0.6780
94	35.48	0.14	-1.1626	9.9999	-0.4290	9.9999	0.3703	0.3717	-0.0334	0.2640	-0.0946	0.7104
95	35.58	0.14	-1.1727	9.9999	-0.4344	9.9999	0.3706	0.4083	-0.0304	0.2606	-0.0890	0.6873
96	35.71	0.15	-1.1564	9.9999	-0.4276	9.9999	0.3704	0.3714	-0.0303	0.2663	-0.1030	0.7172
97	35.83	0.14	-1.1550	9.9999	-0.4308	9.9999	0.3710	0.3469	-0.0342	0.2560	-0.0979	0.7354
98	35.96	0.16	-1.1403	9.9999	-0.4260	9.9999	0.3711	0.3694	-0.0342	0.2651	-0.0965	0.7178
99	36.07	0.14	-1.1743	9.9999	-0.4348	9.9999	0.3712	0.3721	-0.0337	0.2676	-0.0905	0.7193
100	36.19	0.13	-1.1739	9.9999	-0.4353	9.9999	0.3710	0.3551	-0.0321	0.2601	-0.0903	0.7324
101	36.30	0.16	-1.1662	9.9999	-0.4323	9.9999	0.3707	0.3247	-0.0322	0.2492	-0.0990	0.7675
102	36.41	0.16	-1.1624	9.9999	-0.4315	9.9999	0.3712	0.3484	-0.0334	0.2463	-0.1089	0.7908
103	36.53	0.11	-1.1700	9.9999	-0.4352	9.9999	0.3720	0.2822	-0.0347	0.2344	-0.1226	0.8304
104	36.65	0.13	-1.1624	9.9999	-0.4315	9.9999	0.3712	0.3200	-0.0317	0.2527	-0.0971	0.7752
105	36.78	0.13	-1.1649	9.9999	-0.4327	9.9999	0.3715	0.3158	-0.0314	0.2487	-0.0993	0.7861
106	36.89	0.11	-1.1613	9.9999	-0.4333	9.9999	0.3713	0.2871	-0.0325	0.2373	-0.1131	0.8266
107	37.01	0.12	-1.1611	9.9999	-0.4314	9.9999	0.3715	0.2862	-0.0312	0.2383	-0.1069	0.8328
108	37.13	0.11	-1.1752	9.9999	-0.4366	9.9999	0.3717	0.2514	-0.0345	0.2200	-0.1371	0.9012
109	37.24	0.14	-1.1662	9.9999	-0.4330	9.9999	0.3713	0.2807	-0.0322	0.2336	-0.1145	0.8392
110	37.36	0.12	-1.1624	9.9999	-0.4324	9.9999	0.3718	0.3203	-0.0295	0.2523	-0.0923	0.7877
111	37.48	0.11	-1.1701	9.9999	-0.4343	9.9999	0.3712	0.2677	-0.0313	0.2405	-0.1086	0.8361
112	37.60	0.12	-1.1734	9.9999	-0.4373	9.9999	0.3721	0.2664	-0.0325	0.2329	-0.1218	0.8741
113	37.72	0.11	-1.1673	9.9999	-0.4341	9.9999	0.3716	0.2945	-0.0301	0.2455	-0.1024	0.8337
114	37.83	0.09	-1.1666	9.9999	-0.4347	9.9999	0.3719	0.2306	-0.0310	0.2207	-0.1308	0.9327
115	37.95	0.10	-1.1765	9.9999	-0.4379	9.9999	0.3722	0.2750	-0.0305	0.2382	-0.1101	0.8641
116	38.07	0.10	-1.1716	9.9999	-0.4345	9.9999	0.3713	0.2696	-0.0294	0.2456	-0.1016	0.8483
117	38.19	0.10	-1.1693	9.9999	-0.4342	9.9999	0.3721	0.2649	-0.0292	0.2360	-0.1104	0.8708
118	38.29	0.10	-1.1765	9.9999	-0.4374	9.9999	0.3718	0.2592	-0.0294	0.2368	-0.1136	0.8980
119	38.41	0.10	-1.1739	9.9999	-0.4361	9.9999	0.3715	0.3071	-0.0282	0.2524	-0.0855	0.8220
120	38.54	0.10	-1.1740	9.9999	-0.4368	9.9999	0.3724	0.2438	-0.0278	0.2206	-0.1142	0.9294
121	38.66	0.10	-1.1725	9.9999	-0.4366	9.9999	0.3724	0.2742	-0.0284	0.2336	-0.0971	0.8801
122	38.78	0.10	-1.1715	9.9999	-0.4355	9.9999	0.3722	0.2640	-0.0275	0.2345	-0.1043	0.8881
123	38.89	0.09	-1.1730	9.9999	-0.4362	9.9999	0.3733	0.2501	-0.0272	0.2325	-0.1056	0.9007
124	39.00	0.09	-1.1703	9.9999	-0.4342	9.9999	0.3730	0.2463	-0.0266	0.2291	-0.1090	0.9301
125	39.11	0.12	-1.1667	9.9999	-0.4332	9.9999	0.3735	0.2880	-0.0229	0.2467	-0.0797	0.8567
126	39.20	0.11	-1.1655	9.9999	-0.4326	9.9999	0.3734	0.2657	-0.0240	0.2404	-0.0842	0.8826
127	39.32	0.11	-1.1649	9.9999	-0.4314	9.9999	0.3732	0.2881	-0.0230	0.2472	-0.0800	0.8582
128	39.44	0.09	-1.1692	9.9999	-0.4326	9.9999	0.3733	0.2803	-0.0220	0.2471	-0.0794	0.8672
129	39.54	0.10	-1.1764	9.9999	-0.4359	9.9999	0.3731	0.2703	-0.0229	0.2410	-0.0830	0.8721
130	39.65	0.14	-1.1696	9.9999	-0.4326	9.9999	0.3733	0.3140	-0.0186	0.2556	-0.0597	0.8195
131	39.77	0.10	-1.1748	9.9999	-0.4343	9.9999	0.3744	0.2653	-0.0209	0.2462	-0.0739	0.8689
132	39.88	0.10	-1.1723	9.9999	-0.4338	9.9999	0.3736	0.2721	-0.0219	0.2470	-0.0806	0.8893
133	39.97	0.10	-1.1697	9.9999	-0.4333	9.9999	0.3740	0.3101	-0.0189	0.2571	-0.0611	0.8292
134	40.08	0.10	-1.1671	9.9999	-0.4331	9.9999	0.3733	0.2693	-0.0213	0.2393	-0.0807	0.9046
135	40.19	0.11	-1.1619	9.9999	-0.4327	9.9999	0.3746	0.2982	-0.0188	0.2514	-0.0625	0.8432
136	40.30	0.11	-1.1650	9.9999	-0.4333	9.9999	0.3744	0.2812	-0.0190	0.2449	-0.0677	0.8708
137	40.40	0.11	-1.1719	9.9999	-0.4418	9.9999	0.3731	0.2670	-0.0198	0.2405	-0.0743	0.9006
138	40.49	0.11	-1.1705	9.9999	-0.4405	9.9999	0.3753	0.2950	-0.0172	0.2522	-0.0584	0.8551

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAIO-6 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
7 00 1.000 1.7 45.0 BIRDFIS 0.0 0 0 0 0 UNKNOWN

PCINT	ALPHA	BETA	CNF3	CM3	CD3	ALPF3	YCPF3	CNF4	CM4	CD4	ACPF4	YCPF4
139	40.39	0.13	-1.1722	9.9999	-0.4479	9.9999	0.3754	0.3116	-0.0155	0.2574	-0.0458	0.8262
140	40.89	0.12	-1.1739	9.9999	-0.4482	9.9999	0.3755	0.3263	-0.0133	0.2643	-0.0408	0.8098
141	40.81	0.12	-1.1695	9.9999	-0.4471	9.9999	0.3756	0.3243	-0.0111	0.2609	-0.0343	0.8046
142	40.90	0.12	-1.1676	9.9999	-0.4459	9.9999	0.3757	0.3413	-0.0103	0.2693	-0.0342	0.7886
143	41.00	0.11	-1.1731	9.9999	-0.4482	9.9999	0.3761	0.2730	-0.0136	0.2393	-0.0484	0.8764
144	41.19	0.11	-1.1730	9.9999	-0.4490	9.9999	0.3760	0.2859	-0.0145	0.2500	-0.0497	0.8670
145	41.29	0.11	-1.1709	9.9999	-0.4502	9.9999	0.3763	0.2851	-0.0129	0.2497	-0.0453	0.8760
146	41.39	0.12	-1.2003	9.9999	-0.4520	9.9999	0.3765	0.2897	-0.0130	0.2508	-0.0367	0.8590
147	41.49	0.10	-1.1693	9.9999	-0.4504	9.9999	0.3762	0.2513	-0.0130	0.2331	-0.0518	0.9275
148	41.59	0.10	-1.1644	9.9999	-0.4494	9.9999	0.3760	0.2649	-0.0120	0.2402	-0.0455	0.9097
149	41.69	0.10	-1.2050	9.9999	-0.4535	9.9999	0.3761	0.3066	-0.0080	0.2565	-0.0261	0.8362
150	41.78	0.09	-1.1773	9.9999	-0.4495	9.9999	0.3771	0.2589	-0.0093	0.2359	-0.0360	0.9111
151	41.88	0.10	-1.1851	9.9999	-0.4470	9.9999	0.3772	0.2750	-0.0052	0.2414	-0.0191	0.8841
152	41.98	0.09	-1.2019	9.9999	-0.4525	9.9999	0.3781	0.2909	-0.0035	0.2496	-0.0135	0.8597
153	42.05	0.10	-1.1941	9.9999	-0.4516	9.9999	0.3783	0.2772	-0.0071	0.2443	-0.0257	0.8812
154	42.15	0.11	-1.1910	9.9999	-0.4498	9.9999	0.3773	0.2499	-0.0087	0.2309	-0.0270	0.9272
155	42.25	0.12	-1.1825	9.9999	-0.4482	9.9999	0.3774	0.2603	-0.0032	0.2345	-0.0120	0.8820
156	42.35	0.10	-1.1942	9.9999	-0.4508	9.9999	0.3775	0.2413	-0.0031	0.2260	-0.0129	0.9365
157	42.45	0.10	-1.1838	9.9999	-0.4487	9.9999	0.3774	0.2597	-0.0015	0.2379	-0.0072	0.9914
158	42.55	0.10	-1.1964	9.9999	-0.4524	9.9999	0.3780	0.2252	0.0001	0.2179	0.0004	0.9053
159	42.65	0.10	-1.1981	9.9999	-0.4525	9.9999	0.3777	0.2352	0.0006	0.2204	0.0026	0.9370
160	42.74	0.10	-1.1956	9.9999	-0.4493	9.9999	0.3775	0.2499	-0.0017	0.2293	-0.0081	0.9981
161	42.81	0.11	-1.1953	9.9999	-0.4502	9.9999	0.3787	0.2450	0.0016	0.2240	0.0065	0.9142
162	42.91	0.06	-1.1929	9.9999	-0.4510	9.9999	0.3785	0.2450	0.0025	0.2191	0.0103	0.9015
163	43.00	0.11	-1.1901	9.9999	-0.4536	9.9999	0.3788	0.2188	0.0042	0.2088	0.0192	0.9551
164	43.10	0.10	-1.1759	9.9999	-0.4496	9.9999	0.3776	0.1795	0.0024	0.1930	0.0111	1.0729
165	43.18	0.11	-1.1677	9.9999	-0.4497	9.9999	0.3780	0.2148	0.0057	0.2032	0.0266	0.9464
166	43.25	0.10	-1.1671	9.9999	-0.4491	9.9999	0.3781	0.1928	0.0027	0.1990	0.0140	1.0342
167	43.30	0.11	-1.1796	9.9999	-0.4459	9.9999	0.3780	0.1509	0.0036	0.1750	0.0230	1.1347
168	43.49	0.09	-1.1812	9.9999	-0.4463	9.9999	0.3779	0.1843	0.0019	0.1840	0.0402	0.9973
169	43.53	0.09	-1.1734	9.9999	-0.4426	9.9999	0.3772	0.1767	0.0035	0.1859	0.0312	1.0521
170	43.63	0.09	-1.1735	9.9999	-0.4465	9.9999	0.3784	0.1697	0.0052	0.1833	0.0402	1.0595
171	43.73	0.09	-1.1765	9.9999	-0.4481	9.9999	0.3780	0.1509	0.0040	0.1767	0.0266	1.1314
172	43.81	0.09	-1.1642	9.9999	-0.4443	9.9999	0.3791	0.1370	0.0093	0.1624	0.0388	1.1857
173	43.91	0.09	-1.1694	9.9999	-0.4462	9.9999	0.3782	0.1564	0.0065	0.1582	0.0477	1.1601
174	44.00	0.10	-1.1625	9.9999	-0.4466	9.9999	0.3779	0.1470	0.0059	0.1621	0.0402	1.1029
175	44.09	0.09	-1.1720	9.9999	-0.4429	9.9999	0.3779	0.1237	0.0055	0.1576	0.0446	1.2745
176	44.18	0.10	-1.1666	9.9999	-0.4414	9.9999	0.3783	0.0976	0.0045	0.1454	0.0462	1.4892
177	44.25	0.10	-1.1763	9.9999	-0.4459	9.9999	0.3784	0.1105	0.0023	0.1467	0.0208	1.3451
178	44.34	0.09	-1.1780	9.9999	-0.4442	9.9999	0.3777	0.0890	0.0039	0.1372	0.0439	1.5036
179	44.44	0.09	-1.1666	9.9999	-0.4419	9.9999	0.3783	0.0839	0.0039	0.1280	0.0612	2.0031
180	44.52	0.10	-1.1706	9.9999	-0.4426	9.9999	0.3781	0.0874	0.0024	0.1269	0.0419	2.0112
181	44.61	0.09	-1.1720	9.9999	-0.4437	9.9999	0.3786	0.0595	-0.0018	0.1292	-0.0303	2.1717
182	44.71	0.10	-1.1741	9.9999	-0.4432	9.9999	0.3782	0.0747	0.0031	0.1310	0.0416	1.7534
183	44.81	0.10	-1.1746	9.9999	-0.4450	9.9999	0.3784	0.0491	-0.0004	0.1228	-0.0091	2.7864
184	44.89	0.09	-1.1699	9.9999	-0.4425	9.9999	0.3784	0.0580	0.0010	0.1246	0.0173	2.1485

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 5 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 .60 1.00 1.07 45.00 BANDS 15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	DELA	CNF3	CM3	CB3	ALPF3	YLPF3	CNF4	CM4	CB4	XCPF4	YLPF4
105	44.99	0.10	-1.1772	9.9999	-0.4482	9.9999	0.3791	0.0672	0.0031	0.1234	0.0015	1.8361
106	45.00	0.10	-1.1741	9.9999	-0.4434	9.9999	0.3775	0.0497	-0.0001	0.1198	-0.0020	2.4133
107	45.17	0.10	-1.1741	9.9999	-0.4434	9.9999	0.3775	0.0615	-0.0005	0.1234	-0.0074	1.6279
108	45.26	0.10	-1.1734	9.9999	-0.4442	9.9999	0.3766	0.0342	-0.0018	0.1157	-0.0527	3.3216
109	45.34	0.10	-1.1703	9.9999	-0.4391	9.9999	0.3765	-0.0043	-0.0018	0.0935	0.4188	-22.1800
110	45.43	0.10	-1.1734	9.9999	-0.4446	9.9999	0.3766	0.0140	-0.0018	0.1027	-0.1501	6.5500
111	45.52	0.10	-1.1733	9.9999	-0.4447	9.9999	0.3750	0.0392	-0.0031	0.1135	-0.0791	2.8678
112	45.60	0.09	-1.1681	9.9999	-0.4431	9.9999	0.3744	-0.0058	-0.0048	0.0912	0.4479	-15.7069
113	45.72	0.10	-1.1691	9.9999	-0.4511	9.9999	0.3753	-0.0178	-0.0047	0.0843	0.2642	-4.7303
114	45.80	0.09	-1.1734	9.9999	-0.4441	9.9999	0.3765	-0.0231	-0.0034	0.0846	0.2555	-3.6667
115	45.89	0.10	-1.1660	9.9999	-0.4400	9.9999	0.3768	-0.0093	-0.0040	0.0868	0.4303	-9.5484
116	45.98	0.10	-1.1696	9.9999	-0.4516	9.9999	0.3746	-0.0504	-0.0050	0.0735	0.0994	-1.4553
117	46.05	0.09	-1.1664	9.9999	-0.4431	9.9999	0.3719	-0.0068	-0.0030	0.0679	0.5684	-9.9773
118	46.19	0.09	-1.1663	9.9999	-0.4493	9.9999	0.3686	-0.0233	-0.0037	0.0806	0.4447	-5.4549
119	46.28	0.09	-1.1683	9.9999	-0.4471	9.9999	0.3743	-0.0301	-0.0029	0.0750	0.0761	-1.4659
200	46.31	0.08	-1.1751	9.9999	-0.4482	9.9999	0.3767	-0.0114	-0.0036	0.0859	0.5090	-7.5263
201	46.41	0.00	-1.1664	9.9999	-0.4491	9.9999	0.3742	-0.0211	-0.0043	0.0810	0.2039	-3.8341
202	46.49	0.09	-1.1697	9.9999	-0.4506	9.9999	0.3680	-0.0350	-0.0062	0.0760	0.1772	-2.1666
203	46.58	0.08	-1.1751	9.9999	-0.4481	9.9999	0.3757	-0.0396	-0.0029	0.0734	0.0733	-1.8510
204	46.67	0.09	-1.1618	9.9999	-0.4483	9.9999	0.3795	-0.0244	-0.0037	0.0777	0.1517	-3.1803
205	46.76	0.08	-1.1644	9.9999	-0.4506	9.9999	0.3795	-0.0759	-0.0020	0.0577	0.0264	-0.7599
206	46.84	0.09	-1.1726	9.9999	-0.4536	9.9999	0.3801	-0.0110	-0.0037	0.0846	0.0637	-7.6018
207	46.93	0.08	-1.1599	9.9999	-0.4546	9.9999	0.3799	-0.0068	-0.0053	0.0817	0.0795	-0.9235
208	47.00	0.08	-1.1631	9.9999	-0.4486	9.9999	0.3793	-0.0490	-0.0043	0.0854	0.0869	-1.3192
209	47.11	0.08	-1.1603	9.9999	-0.4523	9.9999	0.3806	-0.0444	-0.0038	0.0699	0.1265	-1.5756
210	47.19	0.08	-1.1671	9.9999	-0.4521	9.9999	0.3808	-0.0652	-0.0060	0.0591	0.0922	-0.9063
211	47.27	0.08	-1.1684	9.9999	-0.4517	9.9999	0.3801	-0.0493	-0.0020	0.0653	0.0407	-1.3252
212	47.36	0.08	-1.1616	9.9999	-0.4506	9.9999	0.3813	-0.0504	-0.0059	0.0640	0.1173	-1.2704
213	47.44	0.07	-1.1697	9.9999	-0.4533	9.9999	0.3810	-0.0549	-0.0058	0.0615	0.1059	-1.1204
214	47.53	0.07	-1.1702	9.9999	-0.4503	9.9999	0.3802	-0.0589	-0.0038	0.0593	0.0647	-1.0068
215	47.60	0.07	-1.1723	9.9999	-0.4538	9.9999	0.3804	-0.0625	-0.0041	0.0504	0.0498	-0.6104
216	47.69	0.08	-1.1636	9.9999	-0.4515	9.9999	0.3811	-0.0721	-0.0043	0.0539	0.0597	-0.7472
217	47.79	0.08	-1.1650	9.9999	-0.4537	9.9999	0.3813	-0.0803	-0.0043	0.0556	0.0715	-0.9269
218	47.88	0.07	-1.1634	9.9999	-0.4531	9.9999	0.3816	-0.0872	-0.0035	0.0524	0.0820	-0.7794
219	47.97	0.08	-1.1682	9.9999	-0.4535	9.9999	0.3800	-0.0526	-0.0016	0.0615	0.0305	-1.1657
220	48.05	0.07	-1.1705	9.9999	-0.4537	9.9999	0.3809	-0.0881	-0.0035	0.0544	0.0515	-0.7965
221	48.13	0.07	-1.1730	9.9999	-0.4578	9.9999	0.3805	-0.0535	-0.0030	0.0589	0.0562	-1.1011
222	48.23	0.08	-1.1743	9.9999	-0.4530	9.9999	0.3811	-0.0841	-0.0027	0.0576	0.0422	-0.8984
223	48.30	0.07	-1.1736	9.9999	-0.4596	9.9999	0.3814	-0.0539	-0.0024	0.0576	0.0446	-1.0725
224	48.33	0.07	-1.1767	9.9999	-0.4672	9.9999	0.3821	-0.0503	-0.0013	0.0764	0.0429	-2.3861
225	48.47	0.07	-1.1761	9.9999	-0.4646	9.9999	0.3820	-0.0842	-0.0027	0.0537	0.0421	-0.8362
226	48.57	0.07	-1.1795	9.9999	-0.4726	9.9999	0.3813	-0.0134	0.0017	0.0764	-0.1104	-5.0844
227	48.64	0.06	-1.2519	9.9999	-0.4711	9.9999	0.3824	0.0105	0.0058	0.0871	0.5323	7.9816
228	48.72	0.07	-1.2193	9.9999	-0.4664	9.9999	0.3824	-0.0119	0.0024	0.0711	-0.1388	-4.1040
229	48.82	0.07	-1.2214	9.9999	-0.4707	9.9999	0.3835	-0.0192	0.0023	0.0752	-0.1620	-5.2867
230	48.91	0.07	-1.2232	9.9999	-0.4756	9.9999	0.3825	0.0437	0.0066	0.0961	0.2019	2.2477

TEST PART MACH MACH-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 60 1.00 1.7 45.0 BLOWER 3.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CB3	ALPF3	YCPF3	CNF4	CM4	CB4	ALPF4	YCPF4
231	90.97	0.07	-1.2248	9.9999	-0.4079	9.9999	0.3320	-0.0356	0.0	0.0017	0.0	-1.7303
232	90.07	0.07	-1.2249	9.9999	-0.4084	9.9999	0.3024	-0.0034	0.0026	0.0180	-0.4817	-14.5370
233	90.10	0.00	-1.2245	9.9999	-0.4734	9.9999	0.3032	0.0545	0.0134	0.0656	0.2464	1.5754
234	90.22	0.03	-1.2216	9.9999	-0.4794	9.9999	0.3029	0.0611	0.0134	0.0698	0.2538	2.0659
235	90.33	0.05	-1.2243	9.9999	-0.4748	9.9999	0.3024	0.0238	0.0120	0.0726	0.5044	3.0546
236	90.41	0.07	-1.2234	9.9999	-0.4777	9.9999	0.3032	0.0671	0.0134	0.0671	0.1601	1.4923
237	90.50	0.03	-1.2309	9.9999	-0.4714	9.9999	0.3030	-0.0109	0.0095	0.0522	-0.8719	-4.7798
238	90.58	0.06	-1.2278	9.9999	-0.4765	9.9999	0.3034	0.0230	0.0091	0.0704	0.3825	3.2899
239	90.68	0.05	-1.2273	9.9999	-0.4833	9.9999	0.3044	0.0446	0.0116	0.0610	0.2641	1.8098
240	90.77	0.06	-1.2293	9.9999	-0.4785	9.9999	0.3029	0.0092	0.0083	0.0883	0.9025	7.1958
241	90.87	0.09	-1.2322	9.9999	-0.4837	9.9999	0.3039	-0.0178	0.0053	0.0530	-0.2979	-2.8034
242	90.96	0.06	-1.2312	9.9999	-0.4787	9.9999	0.3023	-0.0041	0.0069	0.0282	-0.0766	-0.4406
243	91.04	0.02	-1.2299	9.9999	-0.4776	9.9999	0.3033	-0.0359	0.0055	0.0396	-0.1914	-1.0180
244	91.11	0.03	-1.2290	9.9999	-0.4765	9.9999	0.3030	-0.0107	0.0086	0.0493	-0.0428	-0.6168
245	90.20	-0.00	-1.2233	9.9999	-0.4686	9.9999	0.3020	-0.0440	0.0092	0.0339	-0.2097	-0.7039
246	90.30	0.01	-1.2290	9.9999	-0.4697	9.9999	0.3035	-0.0525	0.0084	0.0269	-0.1604	-0.5134
247	90.37	0.02	-1.2222	9.9999	-0.4690	9.9999	0.3025	-0.0330	0.0093	0.0291	-0.2448	-0.7658
248	90.49	0.01	-1.2213	9.9999	-0.4688	9.9999	0.3036	-0.0399	0.0102	0.0266	-0.2557	-0.7168
249	90.57	0.02	-1.2299	9.9999	-0.4770	9.9999	0.3047	-0.0281	0.0104	0.0339	-0.3703	-1.2064
250	90.63	0.01	-1.2241	9.9999	-0.4724	9.9999	0.3040	-0.0518	0.0088	0.0299	-0.1316	-0.4720
251	90.73	0.01	-1.2263	9.9999	-0.4767	9.9999	0.3038	-0.0246	0.0097	0.0329	-0.3913	-1.3266
252	90.84	0.01	-1.2320	9.9999	-0.4743	9.9999	0.3047	-0.0234	0.0100	0.0347	-0.4275	-1.4029
253	90.91	0.01	-1.2259	9.9999	-0.4806	9.9999	0.3037	-0.0232	0.0095	0.0330	-0.4096	-1.4224
254	90.99	0.01	-1.2308	9.9999	-0.4815	9.9999	0.3035	-0.0347	0.0086	0.0296	-0.2537	-0.8588
255	91.07	0.01	-1.2325	9.9999	-0.4772	9.9999	0.3039	-0.0259	0.0091	0.0316	-0.3515	-1.2201
256	91.17	0.01	-1.2346	9.9999	-0.4833	9.9999	0.3032	-0.0297	0.0077	0.0311	-0.2594	-1.0471
257	91.25	0.00	-1.2494	9.9999	-0.4838	9.9999	0.3046	-0.0216	0.0094	0.0350	-0.4354	-1.5278
258	91.32	0.01	-1.2494	9.9999	-0.4808	9.9999	0.3048	-0.0313	0.0080	0.0293	-0.2557	-0.9361
259	91.43	-0.00	-1.2536	9.9999	-0.4833	9.9999	0.3052	-0.0400	0.0080	0.0240	-0.1361	-0.5072
260	91.52	0.00	-1.2572	9.9999	-0.4846	9.9999	0.3034	-0.0403	0.0080	0.0259	-0.1986	-0.6427
261	91.60	0.01	-1.2506	9.9999	-0.4847	9.9999	0.3031	-0.0413	0.0070	0.0268	-0.1700	-0.6505
262	91.70	-0.00	-1.2560	9.9999	-0.4838	9.9999	0.3059	-0.0512	0.0080	0.0226	-0.1175	-0.4423
263	91.76	0.00	-1.2514	9.9999	-0.4835	9.9999	0.3004	-0.0784	0.0052	0.0186	-0.0660	-0.2107
264	91.90	0.01	-1.2579	9.9999	-0.4861	9.9999	0.3004	-0.0615	0.0080	0.0207	-0.0978	-0.3371
265	91.93	0.00	-1.2579	9.9999	-0.4881	9.9999	0.3004	-0.0711	0.0043	0.0161	-0.0606	-0.2549
266	92.02	-0.00	-1.2579	9.9999	-0.4881	9.9999	0.3004	-0.0701	0.0059	0.0169	-0.0772	-0.2700
267	92.10	-0.01	-1.2549	9.9999	-0.4847	9.9999	0.3002	-0.0760	0.0034	0.0169	-0.0437	-0.2169
268	92.20	-0.01	-1.2528	9.9999	-0.4845	9.9999	0.3018	-0.0801	0.0021	0.0117	-0.0307	-0.1330
269	92.28	-0.00	-1.2501	9.9999	-0.4852	9.9999	0.3014	-0.0527	0.0032	0.0125	-0.0346	-0.1350
270	92.37	-0.00	-1.2454	9.9999	-0.4907	9.9999	0.3010	-0.0794	0.0032	0.0157	-0.0404	-0.1980
271	92.44	0.00	-1.2515	9.9999	-0.4870	9.9999	0.3013	-0.1000	0.0008	0.0033	-0.0076	-0.0306
272	92.54	-0.01	-1.2495	9.9999	-0.4892	9.9999	0.3004	-0.0878	0.0024	0.0110	-0.0274	-0.1324
273	92.63	-0.00	-1.2552	9.9999	-0.4875	9.9999	0.3014	-0.0969	0.0028	0.0077	-0.0269	-0.0795
274	92.71	-0.01	-1.2517	9.9999	-0.4900	9.9999	0.3012	-0.0936	0.0018	0.0100	-0.0193	-0.1070
275	92.79	-0.01	-1.2597	9.9999	-0.4871	9.9999	0.3007	-0.0880	0.0025	0.0105	-0.0285	-0.1195
276	92.88	-0.00	-1.2703	9.9999	-0.4920	9.9999	0.3013	-0.0960	0.0017	0.0075	-0.0174	-0.0766

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 5 OF 8
SHEET 7 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH AXIS-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 03 1.00 1.61 +0.0 0.MNUP15 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN3	CM3	CO3	ALPF3	YLPF3	CNF4	CM4	CD4	XLPF4	YLPF4
277	54.96	0.00	-1.27755	9.99999	-0.99995	9.99999	0.3877	-0.3828	0.0036	0.0144	-0.0461	-0.1745
278	55.06	-0.01	-1.27710	9.99999	-0.99996	9.99999	0.3876	-0.3780	0.0037	0.0145	-0.0484	-0.2157
279	55.15	-0.02	-1.27721	9.99999	-0.99914	9.99999	0.3881	-0.3787	0.0036	0.0213	-0.0536	-0.3017
280	53.21	-0.00	-1.27756	9.99999	-0.99997	9.99999	0.3886	-0.3826	0.0028	0.0159	-0.0342	-0.1941
281	55.32	-0.00	-1.27637	9.99999	-0.99981	9.99999	0.3880	-0.3830	0.0012	0.0165	-0.0140	-0.1930
282	55.49	-0.01	-1.27780	9.99999	-0.99950	9.99999	0.3878	-0.3840	0.0037	0.0137	-0.0491	-0.1633
283	55.49	-0.01	-1.27852	9.99999	-0.99978	9.99999	0.3872	-0.3829	0.0067	0.0236	-0.1269	-0.4470
284	55.58	-0.01	-1.27917	9.99999	-0.99913	9.99999	0.3881	-0.3890	0.0077	0.0241	-0.1375	-0.4928
285	55.65	0.00	-1.27859	9.99999	-0.99987	9.99999	0.3870	-0.3905	0.0070	0.0256	-0.1447	-0.5269
286	55.75	-0.00	-1.27911	9.99999	-0.99911	9.99999	0.3881	-0.3903	0.0050	0.0181	-0.0887	-0.3209
287	55.83	0.00	-1.27833	9.99999	-0.99978	9.99999	0.3870	-0.3917	0.0062	0.0197	-0.1179	-0.3745
288	55.91	0.00	-1.27892	9.99999	-0.99909	9.99999	0.3882	-0.3873	0.0043	0.0187	-0.0911	-0.3962
289	54.01	0.01	-1.27879	9.99999	-0.99996	9.99999	0.3881	-0.3923	0.0054	0.0185	-0.1035	-0.3544
290	54.00	0.02	-1.27971	9.99999	-0.99998	9.99999	0.3869	-0.3904	0.0048	0.0174	-0.0953	-0.3459
291	54.19	0.03	-1.30001	9.99999	-0.99999	9.99999	0.3891	-0.3934	0.0030	0.0162	-0.0543	-0.2929
292	54.23	0.03	-1.30110	9.99999	-0.99985	9.99999	0.3894	-0.3927	0.0033	0.0159	-0.0628	-0.3023
293	54.30	0.03	-1.29993	9.99999	-0.99988	9.99999	0.3898	-0.3944	0.0028	0.0160	-0.0568	-0.3367
294	54.38	0.04	-1.29892	9.99999	-0.99988	9.99999	0.3893	-0.3949	0.0037	0.0181	-0.0743	-0.3233
295	54.45	0.04	-1.30097	9.99999	-0.99100	9.99999	0.3899	-0.3922	0.0026	0.0141	-0.0499	-0.2706
296	54.53	0.05	-1.30003	9.99999	-0.99999	9.99999	0.3898	-0.3919	0.0019	0.0146	-0.0367	-0.2819
297	54.61	0.05	-1.30036	9.99999	-0.99992	9.99999	0.3885	-0.3933	0.0026	0.0149	-0.0529	-0.3028
298	54.70	0.05	-1.30051	9.99999	-0.99985	9.99999	0.3896	-0.3909	0.0028	0.0148	-0.0605	-0.3153
299	54.77	0.05	-1.29921	9.99999	-0.99994	9.99999	0.3890	-0.3909	0.0026	0.0133	-0.0644	-0.3292
300	54.85	0.06	-1.30037	9.99999	-0.99999	9.99999	0.3916	-0.3909	0.0018	0.0142	-0.0369	-0.2910
301	54.94	0.05	-1.31137	9.99999	-0.99152	9.99999	0.3907	-0.3974	0.0018	0.0143	-0.0381	-0.3023
302	55.01	0.06	-1.31203	9.99999	-0.99153	9.99999	0.3903	-0.3983	0.0025	0.0140	-0.0541	-0.3030
303	55.06	0.05	-1.31224	9.99999	-0.99164	9.99999	0.3906	-0.3989	0.0009	0.0142	-0.0192	-0.3034
304	55.10	0.06	-1.33177	9.99999	-0.99233	9.99999	0.3912	-0.3981	0.0015	0.0124	-0.0300	-0.2960
305	55.19	0.06	-1.33351	9.99999	-0.99220	9.99999	0.3910	-0.3966	0.0010	0.0134	-0.0235	-0.3153
306	55.32	0.06	-1.33370	9.99999	-0.99230	9.99999	0.3918	-0.3913	0.0013	0.0141	-0.0364	-0.3422
307	55.40	0.05	-1.33397	9.99999	-0.99236	9.99999	0.3910	-0.3957	0.0016	0.0133	-0.0351	-0.2917
308	55.47	0.06	-1.33489	9.99999	-0.99231	9.99999	0.3901	-0.3969	0.0018	0.0130	-0.0421	-0.3037
309	55.55	0.05	-1.33499	9.99999	-0.99181	9.99999	0.3914	-0.3928	0.0017	0.0129	-0.0396	-0.3021
310	55.64	0.06	-1.33610	9.99999	-0.99331	9.99999	0.3921	-0.3931	0.0024	0.0136	-0.0556	-0.3163
311	55.70	0.05	-1.33620	9.99999	-0.99194	9.99999	0.3915	-0.3984	0.0030	0.0107	-0.0648	-0.2811
312	55.78	0.06	-1.33552	9.99999	-0.99111	9.99999	0.3919	-0.3915	0.0020	0.0145	-0.0483	-0.3019
313	55.87	0.06	-1.33601	9.99999	-0.99172	9.99999	0.3926	-0.3906	0.0020	0.0087	-0.0411	-0.1786
314	55.95	0.06	-1.33703	9.99999	-0.99333	9.99999	0.3926	-0.3906	0.0028	0.0141	-0.0697	-0.3010
315	56.04	0.07	-1.33695	9.99999	-0.99383	9.99999	0.3929	-0.3902	0.0028	0.0101	-0.0608	-0.2191
316	56.12	0.06	-1.33843	9.99999	-0.99323	9.99999	0.3924	-0.3900	0.0037	0.0097	-0.0796	-0.2066
317	56.20	0.06	-1.33892	9.99999	-0.99376	9.99999	0.3926	-0.3900	0.0025	0.0090	-0.0545	-0.1961
318	56.28	0.06	-1.33710	9.99999	-0.99403	9.99999	0.3924	-0.3929	0.0034	0.0076	-0.0652	-0.1656
319	56.37	0.07	-1.33705	9.99999	-0.99362	9.99999	0.3927	-0.3945	0.0020	0.0045	-0.0368	-0.0827
320	56.46	0.06	-1.33647	9.99999	-0.99428	9.99999	0.3924	-0.3933	0.0031	0.0087	-0.0718	-0.2014
321	56.54	0.05	-1.33621	9.99999	-0.99349	9.99999	0.3927	-0.3974	0.0025	0.0072	-0.0529	-0.1522
322	56.63	0.05	-1.33716	9.99999	-0.99394	9.99999	0.3919	-0.3915	0.0020	0.0063	-0.0369	-0.1228

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 8 OF 8

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 03 1.000 1.1 0.0 DEGREES 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN F3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
323	56.70	0.04	-1.3653	0.9999	-0.3435	0.9999	0.3926	-0.0475	0.0027	0.0073	-0.0570	-0.1560
324	56.79	0.05	-1.3601	0.9999	-0.3424	0.9999	0.3926	-0.0518	0.0025	0.0062	-0.0484	-0.0812
325	56.88	0.03	-1.3720	0.9999	-0.3506	0.9999	0.3925	-0.0485	0.0016	0.0076	-0.0372	-0.1570
326	56.96	0.03	-1.3655	0.9999	-0.3431	0.9999	0.3925	-0.0474	0.0025	0.0072	-0.0529	-0.1522
327	57.02	0.03	-1.3648	0.9999	-0.3437	0.9999	0.3926	-0.0518	0.0025	0.0053	-0.0484	-0.1025
328	57.09	0.04	-1.3918	0.9999	-0.3472	0.9999	0.3931	-0.0480	0.0020	0.0054	-0.0413	-0.1113
329	57.16	0.05	-1.3641	0.9999	-0.3435	0.9999	0.3927	-0.0520	0.0030	0.0032	-0.0578	-0.0617
330	57.23	0.01	-1.3608	0.9999	-0.3404	0.9999	0.3929	-0.0498	0.0037	0.0071	-0.0851	-0.1632
331	57.34	0.01	-1.3672	0.9999	-0.3403	0.9999	0.3934	-0.0538	0.0032	0.0026	-0.0598	-0.0466
332	57.43	0.04	-1.3706	0.9999	-0.3478	0.9999	0.3925	-0.0494	0.0033	0.0	-0.0527	0.0
333	57.49	0.04	-1.3615	0.9999	-0.3433	0.9999	0.3934	-0.0521	0.0032	0.0027	-0.0616	-0.0519
334	57.55	0.03	-1.3749	0.9999	-0.3492	0.9999	0.3932	-0.0544	0.0020	0.0014	-0.0368	-0.0421
335	57.67	0.05	-1.3647	0.9999	-0.3468	0.9999	0.3931	-0.0520	0.0030	0.0021	-0.0578	-0.0405
336	57.74	0.01	-1.3594	0.9999	-0.3434	0.9999	0.3932	-0.0477	0.0032	0.0001	-0.0673	-0.1071
337	57.80	0.03	-1.3618	0.9999	-0.3511	0.9999	0.3929	-0.0506	0.0032	0.0036	-0.0634	-0.0752
338	57.88	0.04	-1.3581	0.9999	-0.3452	0.9999	0.3931	-0.0507	0.0033	0.0033	-0.0652	-0.0652
339	57.94	0.01	-1.3557	0.9999	-0.3434	0.9999	0.3931	-0.0507	0.0037	0.0	-0.0621	0.0
340	58.01	0.06	-1.3642	0.9999	-0.3509	0.9999	0.3935	-0.0485	0.0034	0.0062	-0.0764	-0.1889
341	58.08	0.03	-1.3524	0.9999	-0.3429	0.9999	0.3940	-0.0491	0.0033	0.0034	-0.0612	-0.0694
342	58.16	0.04	-1.3553	0.9999	-0.3448	0.9999	0.3929	-0.0515	0.0018	0.0030	-0.0350	-0.0584
343	58.24	0.04	-1.3590	0.9999	-0.3479	0.9999	0.3940	-0.0548	0.0049	-0.0004	-0.0439	0.0073
344	58.31	0.00	-1.3591	0.9999	-0.3485	0.9999	0.3935	-0.0518	0.0025	0.0026	-0.0484	-0.0503
345	58.38	0.04	-1.3604	0.9999	-0.3518	0.9999	0.3944	-0.0544	0.0017	0.0012	-0.0313	-0.0221
346	58.46	0.03	-1.3503	0.9999	-0.3442	0.9999	0.3941	-0.0541	0.0010	0.0010	-0.0185	-0.0296
347	58.53	0.02	-1.3574	0.9999	-0.3496	0.9999	0.3938	-0.0455	0.0014	0.0005	-0.0308	-0.0991
348	58.61	0.00	-1.3510	0.9999	-0.3463	0.9999	0.3941	-0.0548	0.0004	0.0007	-0.0439	-0.0128
349	58.62	0.00	-1.3510	0.9999	-0.3510	0.9999	0.3936	-0.0510	0.0005	0.0018	-0.0098	-0.0354
350	58.82	0.04	-1.3659	0.9999	-0.3583	0.9999	0.3942	-0.0490	0.0028	0.0006	-0.0471	-0.0123

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(ASRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAID-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 01 0.40 1.7 45.0 DIAGFLD 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.75	0.11	-0.7070	1.5434	0.1607	-0.3747	-0.0025	0.5144	0.2331	0.2812	-1.9591
2	-5.73	0.09	-0.6990	1.6035	0.1220	-0.3706	-0.0043	0.5106	0.2335	0.2852	-1.9899
3	-5.72	0.10	-0.6903	1.5971	0.1249	-0.3723	-0.0021	0.5102	0.2337	0.2815	-2.0508
4	-3.19	0.10	-0.3700	0.9723	0.1265	-0.1734	-0.0020	0.5108	0.2157	0.3151	-2.1995
5	-1.27	0.08	-0.1362	0.4152	0.0470	-0.0576	-0.0027	0.5141	0.2104	0.3181	-2.0245
6	0.74	0.08	0.1430	-0.1554	0.0106	-0.1378	-0.0029	0.5500	0.2230	0.3270	-1.0756
7	2.72	0.09	0.4170	-0.0554	0.1130	-0.2055	-0.0026	0.5865	0.2347	0.3338	-1.5606
8	4.03	0.09	0.5811	-0.0867	0.0060	-0.1985	-0.0026	0.5753	0.2534	0.3244	-1.7040
9	6.03	0.09	0.8334	-0.1722	0.0423	-0.1890	-0.0042	0.5810	0.2734	0.3076	-1.8263
10	8.00	0.09	1.0105	-0.2044	0.0104	-0.1994	-0.0046	0.5872	0.2932	0.2941	-1.9572
11	10.58	0.10	1.2631	-0.2078	0.1425	-0.2330	-0.0054	0.5905	0.3100	0.2805	-1.9890
12	12.54	0.10	1.4931	-0.0070	0.1537	-0.2344	0.0035	0.5846	0.3217	0.2629	-1.9731
13	14.54	0.09	1.6955	-0.1250	0.0077	-0.2019	0.0100	0.5829	0.3334	0.2495	-1.9244
14	16.04	0.10	1.7774	-0.1436	0.1421	-0.1933	0.0048	0.5781	0.3422	0.2359	-1.8519
15	18.70	0.10	2.0108	-0.2635	0.0922	-0.2031	-0.0175	0.5729	0.3508	0.2161	-1.7179
16	20.84	0.10	2.1871	-0.2441	0.1900	-0.2711	-0.0156	0.5642	0.3659	0.1983	-1.5366
17	22.74	0.13	2.3672	-0.2342	0.2216	-0.2463	-0.0215	0.5664	0.3786	0.1898	-1.3569
18	24.75	0.14	2.5261	-0.2024	0.2183	-0.2072	0.0416	0.5673	0.4041	0.1634	-1.1526
19	26.81	0.12	2.6815	-0.2763	0.3075	-0.2717	0.0656	0.5544	0.4339	0.1505	-0.9931
20	28.42	0.14	2.8528	-0.2474	0.2215	-0.1910	0.0450	0.5630	0.4614	0.1214	-0.8449
21	28.41	0.13	2.8435	-0.2479	0.2551	-0.2022	0.0447	0.5674	0.4615	0.1255	-0.8977
22	28.43	0.14	2.8474	-0.2398	0.2155	-0.1224	0.0452	0.5749	0.4616	0.1131	-0.8947
23	28.78	0.13	2.8743	-0.2361	0.2303	-0.1324	0.0339	0.5706	0.4643	0.1326	-0.8775
24	29.03	0.13	2.8960	-0.2452	0.2365	0.0251	0.0437	0.5919	0.4715	0.1206	-0.8438
25	29.39	0.14	2.9239	-0.2458	0.2538	-0.0553	0.0517	0.5881	0.4796	0.1085	-0.8346
26	29.70	0.14	2.9483	-0.2163	0.2460	-0.0782	0.1382	0.6057	0.4849	0.1159	-0.8156
27	29.99	0.14	2.9742	-0.2519	0.2453	-0.0829	0.1390	0.6136	0.4990	0.1147	-0.7826
28	30.47	0.14	3.0125	-0.2345	0.2447	-0.0548	0.1592	0.6191	0.5078	0.1116	-0.7766
29	30.56	0.16	3.0196	-0.2087	0.2349	-0.2833	0.1626	0.6316	0.5184	0.1133	-0.7588
30	30.83	0.13	3.0404	-0.2491	0.2441	0.0440	0.1594	0.6342	0.5200	0.1143	-0.7318
31	31.10	0.15	3.0653	-0.2483	0.2178	-0.1281	0.1657	0.6354	0.5244	0.1111	-0.7225
32	31.39	0.15	3.0926	-0.2102	0.2219	-0.2480	0.1791	0.6307	0.5240	0.1068	-0.7298
33	31.67	0.17	3.1239	-0.2562	0.1960	-0.2459	0.2114	0.6380	0.5284	0.1099	-0.7228
34	31.94	0.15	3.1481	-0.2173	0.2121	-0.4447	0.2034	0.6356	0.5312	0.1047	-0.7208
35	32.22	0.14	3.1712	-0.2724	0.2019	-0.3034	0.1991	0.6470	0.5348	0.0948	-0.7133
36	32.50	0.10	3.1950	-0.2498	0.1987	-0.0710	0.1803	0.6437	0.5365	0.1073	-0.7128
37	32.78	0.11	3.2191	-0.2601	0.2180	-0.0850	0.1455	0.6375	0.5405	0.0971	-0.7070
38	33.01	0.15	3.2372	-0.2271	0.2224	-0.2492	0.1388	0.6490	0.5439	0.1040	-0.7229
39	33.27	0.14	3.2593	-0.2026	0.2145	-0.0000	0.1391	0.6562	0.5513	0.1050	-0.7373
40	33.52	0.10	3.2783	-0.2502	0.2440	-0.2032	0.1821	0.6514	0.5531	0.0984	-0.7328
41	33.77	0.13	3.2976	-0.2423	0.2235	-0.2394	0.1777	0.6550	0.5520	0.1031	-0.7185
42	34.04	0.14	3.3203	-0.2490	0.2190	-0.2604	0.1287	0.6511	0.5565	0.0926	-0.7268
43	34.29	0.13	3.3394	-0.2356	0.2376	-0.2525	0.1179	0.6526	0.5617	0.0909	-0.7293
44	34.53	0.13	3.3590	-0.2193	0.2231	-0.2503	0.1008	0.6500	0.5621	0.0765	-0.6987
45	34.80	0.12	3.3810	-0.2089	0.2211	-0.2074	0.1061	0.6635	0.5693	0.0983	-0.7213
46	35.04	0.10	3.4000	-0.2048	0.2278	-0.1201	0.0945	0.6700	0.5667	0.1034	-0.6962

PAGE 1 OF 9
SHEET 2 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NAJ-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 01 1.10 1.7 45.0 BLNDFLD 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	35.47	0.11	0.5033	-0.1215	0.3692	-0.0599	0.0635	0.6591	0.5669	0.0902	-0.7115
48	35.53	0.11	0.5063	-0.1256	0.3697	-0.0629	0.0661	0.6544	0.5696	0.0848	-0.7206
49	35.70	0.10	0.5179	-0.1336	0.3833	-0.0702	0.0750	0.6450	0.5690	0.0760	-0.6857
50	35.92	0.12	0.5178	-0.1020	0.3818	-0.0632	0.0625	0.6544	0.5699	0.0845	-0.6881
51	36.20	0.11	0.5111	-0.2108	0.4324	-0.0409	0.1012	0.6501	0.5699	0.0802	-0.6892
52	36.49	0.09	0.5109	-0.1987	0.4324	-0.0208	0.0813	0.6517	0.5685	0.0932	-0.6817
53	36.73	0.10	0.5269	-0.3282	0.2613	-0.0486	0.0751	0.6561	0.5681	0.0880	-0.6868
54	36.98	0.10	0.5093	-0.2780	0.3168	-0.0471	0.1012	0.6532	0.5671	0.0961	-0.6816
55	37.20	0.09	0.4983	-0.2442	0.2283	-0.0617	0.0822	0.6494	0.5681	0.0813	-0.6713
56	37.45	0.10	0.5267	-0.1791	0.2183	-0.0478	0.0769	0.6474	0.5656	0.0768	-0.6622
57	37.69	0.10	0.5249	-0.3249	0.3204	-0.0307	0.0516	0.6622	0.5659	0.0964	-0.6640
58	37.92	0.11	0.5342	-0.3305	0.4736	-0.0067	0.0969	0.6497	0.5660	0.0777	-0.6661
59	38.18	0.11	0.0741	-0.3710	0.4593	-0.0385	0.1191	0.6396	0.5599	0.0797	-0.6793
60	38.39	0.09	0.0814	-0.4810	0.2186	-0.0112	0.0736	0.6248	0.5638	0.0610	-0.6694
61	38.62	0.09	0.0928	-0.3985	0.1084	-0.0408	0.0757	0.6284	0.5659	0.0605	-0.6727
62	38.87	0.10	0.0944	-0.3716	0.2033	-0.1853	0.0744	0.6196	0.5616	0.0583	-0.6611
63	39.10	0.09	10.0769	-0.0381	0.2273	-0.3046	0.0634	0.6173	0.5596	0.0575	-0.6585
64	39.30	0.09	10.1188	-0.7210	0.2422	-0.3429	0.0363	0.6205	0.5591	0.0674	-0.6642
65	39.54	0.08	10.2324	-0.7457	0.1208	-0.3190	0.0832	0.6084	0.5569	0.0515	-0.6591
66	39.78	0.10	10.2826	-0.7062	0.3227	-0.3668	0.0363	0.6244	0.5530	0.0714	-0.6533
67	39.93	0.09	10.2816	-0.6938	0.2249	-0.4071	0.0525	0.6135	0.5480	0.0659	-0.6655
68	40.16	0.09	10.3178	-0.6350	0.2260	-0.4235	0.0538	0.6147	0.5418	0.0729	-0.6560
69	40.39	0.10	10.3257	-0.6857	0.3385	-0.4245	0.0534	0.6033	0.5444	0.0589	-0.6527
70	40.59	0.10	10.3181	-0.6859	0.2784	-0.4327	0.0143	0.6065	0.5388	0.0717	-0.6512
71	40.80	0.09	10.3871	-7.0535	0.2445	-0.0146	0.0309	0.5862	0.5358	0.0504	-0.6614
72	41.02	0.09	10.4191	-7.0136	0.2494	-0.0268	0.0569	0.5767	0.5281	0.0486	-0.6519
73	41.24	0.10	10.4438	-6.9128	0.3742	-0.0084	0.0262	0.5688	0.5258	0.0430	-0.6434
74	41.43	0.08	10.4644	-7.1437	0.2170	-0.0068	0.0269	0.5705	0.5264	0.0441	-0.6517
75	41.65	0.10	11.0140	-7.1082	0.2075	-0.0042	0.0596	0.5697	0.5217	0.0480	-0.6456
76	41.87	0.10	11.1190	-7.1420	0.2252	-0.0525	0.0434	0.5708	0.5213	0.0495	-0.6370
77	42.07	0.08	11.1493	-7.1405	0.0847	-0.0203	0.0315	0.5508	0.5154	0.0432	-0.6348
78	42.27	0.09	11.2019	-7.0950	0.2526	-0.0410	0.0431	0.5674	0.5064	0.0590	-0.6334
79	42.48	0.09	11.2798	-7.0032	0.2279	-0.1999	0.0434	0.5450	0.4911	0.0519	-0.6209
80	42.68	0.08	11.3005	-7.2484	0.1026	-0.2163	0.0432	0.5316	0.4895	0.0419	-0.6314
81	42.85	0.08	11.3088	-7.1948	0.1335	-0.1082	0.0430	0.5229	0.4839	0.0340	-0.6425
82	43.04	0.09	11.3282	-7.1057	0.2334	-0.0655	0.0080	0.5271	0.4879	0.0391	-0.6164
83	43.22	0.09	11.3109	-7.2551	0.3112	-0.3422	0.0441	0.5287	0.4730	0.0556	-0.6232
84	43.39	0.09	11.3424	-7.2058	0.2434	-0.0445	0.0439	0.5067	0.4640	0.0446	-0.6189
85	43.58	0.08	11.3651	-7.2009	0.1837	-0.0208	0.0440	0.4823	0.4564	0.0258	-0.6110
86	43.78	0.08	11.3877	-7.1966	0.1879	-0.1049	0.0397	0.4906	0.4514	0.0391	-0.6085
87	43.93	0.09	11.4210	-7.3320	0.1999	-0.0585	0.0387	0.4874	0.4497	0.0376	-0.6153
88	44.13	0.08	11.4318	-7.2134	0.1838	-0.0882	0.0383	0.4730	0.4432	0.0298	-0.6067
89	44.30	0.09	11.4553	-7.4765	0.2653	-0.0335	0.0502	0.4797	0.4439	0.0358	-0.6205
90	44.47	0.08	11.4773	-7.3518	0.1486	0.1720	0.0221	0.4696	0.4341	0.0317	-0.6067
91	44.68	0.08	11.4988	-7.1495	0.1503	-0.0081	0.0225	0.4569	0.4363	0.0206	-0.5866
92	44.85	0.07	11.5209	-7.2017	0.1514	-0.1071	0.0338	0.4512	0.4334	0.0178	-0.5929

PAGE 1 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART REIN PATH-E PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 01 1.10 1.7 45.0 0 1NOFIX 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CA	CLM	CY	CLN	CLL	CA	CAB	CAF	KCP
93	45.02	0.01	0.02231	-7.1000	0.1074	-0.1758	0.0396	0.4446	0.4339	0.0107	-0.5864
94	45.23	0.01	0.02333	-7.1003	0.1067	-0.1718	0.0393	0.4375	0.4234	0.0141	-0.5783
95	45.43	0.01	0.02333	-7.1439	0.1049	-0.1655	0.0375	0.4259	0.4263	-0.0006	-0.5744
96	45.27	0.01	0.02330	-7.0934	0.1003	-0.1494	0.0269	0.4199	0.4200	-0.0001	-0.5696
97	45.13	0.01	0.02327	-7.0956	0.1063	-0.0334	0.0007	0.4187	0.4212	-0.0025	-0.5634
98	45.93	0.00	0.02375	-0.1145	0.1079	-0.1059	0.0237	0.4136	0.4173	-0.0037	-0.5515
99	46.12	0.00	0.02395	-7.0744	0.0992	-0.1992	0.0005	0.4209	0.4212	-0.0057	-0.5590
100	46.27	0.01	0.02391	-6.7591	0.1795	-0.2103	0.0335	0.4132	0.4136	-0.0004	-0.5358
101	46.43	0.01	0.02333	-6.4212	0.2213	-0.1574	0.0375	0.4104	0.4183	-0.0079	-0.5401
102	46.09	0.00	0.01781	-0.1037	0.1333	-0.0305	-0.0037	0.4054	0.4147	-0.0095	-0.5314
103	46.02	0.00	0.02000	-0.1034	0.1434	-0.2040	0.0240	0.4258	0.4098	-0.0142	-0.5331
104	46.99	0.00	0.02420	-6.8315	0.1335	-0.0657	-0.0146	0.4026	0.4136	-0.0110	-0.5287
105	47.15	0.01	0.02304	-6.8089	0.1019	-0.1457	-0.0031	0.3998	0.4136	-0.0142	-0.5167
106	47.35	0.00	0.02351	-6.8059	0.1444	-0.1703	-0.0032	0.3949	0.4130	-0.0221	-0.5262
107	47.52	0.01	0.02350	-6.7826	0.1373	-0.1104	-0.0142	0.3972	0.4112	-0.0140	-0.5180
108	47.68	0.01	0.02328	-6.7531	0.0805	-0.0173	-0.0142	0.3888	0.4113	-0.0249	-0.5127
109	47.89	0.00	0.02322	-6.6993	0.1569	-0.1022	0.0085	0.3923	0.4130	-0.0205	-0.5117
110	48.02	0.01	0.02393	-6.6776	0.1424	-0.0232	0.0200	0.3859	0.4130	-0.0271	-0.4998
111	48.20	0.00	0.02130	-6.6125	0.2011	-0.3195	0.0239	0.3867	0.4119	-0.0232	-0.5004
112	48.35	0.00	0.02327	-6.6471	0.1614	-0.2530	0.0093	0.3868	0.4119	-0.0281	-0.4888
113	48.53	0.00	0.02297	-6.6075	0.1305	-0.2405	0.0205	0.3859	0.4081	-0.0362	-0.4780
114	48.72	0.00	0.02271	-6.5546	0.2139	-0.4735	0.0382	0.3836	0.4073	-0.0437	-0.4683
115	48.88	0.00	0.02297	-6.5243	0.1988	-0.1410	0.0097	0.3850	0.4120	-0.0270	-0.4816
116	49.05	0.00	0.02271	-6.4947	0.2194	-0.3233	0.0213	0.3882	0.4054	-0.0172	-0.4799
117	49.21	0.01	0.02403	-6.2207	0.3324	-0.6933	0.0360	0.3851	0.4039	-0.0348	-0.4640
118	49.37	0.01	0.02357	-6.1761	0.2888	-0.7032	0.0332	0.3883	0.4032	-0.0449	-0.4603
119	49.57	0.00	0.02309	-6.0389	0.3781	-0.8810	0.0309	0.3978	0.4091	-0.0513	-0.4616
120	49.73	0.00	0.02183	-5.9289	0.3041	-0.9884	0.0316	0.3932	0.3920	-0.0474	-0.4335
121	49.92	0.01	0.02330	-6.0267	0.3744	-0.8478	0.0297	0.3949	0.4041	-0.0312	-0.4506
122	50.10	0.01	0.02329	-6.1596	0.3467	-0.8857	0.0230	0.3902	0.4051	-0.0346	-0.4458
123	50.27	0.01	0.01962	-6.0182	0.4000	-0.9202	0.0232	0.3804	0.3971	-0.0807	-0.4378
124	50.43	0.01	0.02009	-6.1385	0.3450	-0.8484	0.0252	0.3999	0.3978	-0.0479	-0.4429
125	50.61	0.01	0.02321	-6.0479	0.3140	-0.8657	0.0121	0.3918	0.3941	-0.0523	-0.4339
126	50.79	0.01	0.02296	-6.0178	0.2355	-0.9031	-0.0053	0.3886	0.3915	-0.0349	-0.4306
127	50.96	0.01	0.02133	-6.1133	0.2892	-0.8710	-0.0055	0.3817	0.3924	-0.0507	-0.4375
128	51.13	0.00	0.02220	-5.8810	0.2253	-0.9809	-0.0137	0.3805	0.3798	-0.0633	-0.4180
129	51.30	0.00	0.02375	-6.0532	0.1358	-0.9737	-0.0111	0.3867	0.3897	-0.0730	-0.4336
130	51.49	0.00	0.02396	-5.8081	0.1903	-0.9184	-0.0052	0.3812	0.3835	-0.0623	-0.4087
131	51.63	0.00	0.02403	-5.7313	0.0937	-0.8623	-0.0055	0.3800	0.3884	-0.0722	-0.4224
132	51.82	0.00	0.02329	-5.8110	0.0994	-0.8698	0.0110	0.3840	0.3919	-0.0579	-0.4117
133	51.98	0.00	0.02307	-5.8250	0.0938	-0.8224	0.0119	0.3805	0.3886	-0.0781	-0.4011
134	52.19	0.00	0.02295	-5.6782	0.0164	0.0191	0.0240	0.3803	0.3935	-0.0836	-0.3757
135	52.30	0.00	0.02331	-5.8035	-0.0570	-0.1153	0.0117	0.3805	0.3983	-0.0778	-0.4008
136	52.48	0.00	0.02305	-5.8759	0.0090	-0.0479	0.0139	0.3817	0.3978	-0.0804	-0.3804
137	52.65	0.00	0.01785	-5.4703	0.1900	-0.1510	0.0136	0.3877	0.3901	-0.0864	-0.3862
138	52.81	0.00	0.02313	-5.8909	-0.0070	-0.1218	0.0006	0.2982	0.3912	-0.0930	-0.3893

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAID-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 01 1.60 A-7 45.0 STANDS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	32.98	0.00	14.22499	-5.09745	0.3602	-0.3956	0.0136	0.3148	0.3982	-0.0834	-0.3842
140	33.17	0.00	14.31734	-5.06249	0.1624	-0.3811	0.0326	0.3113	0.4010	-0.0903	-0.3913
141	33.33	0.00	14.40067	-5.03740	0.1767	-0.4390	-0.0030	0.3053	0.3999	-0.0967	-0.3869
142	33.50	0.00	14.48533	-5.00307	0.0723	-0.4626	0.0023	0.3040	0.4005	-0.1026	-0.4006
143	33.66	0.00	14.56031	-5.04701	0.1516	-0.4741	0.0028	0.3018	0.3976	-0.0960	-0.3803
144	33.83	0.00	14.64386	-5.00332	0.0304	-0.4990	0.0015	0.3019	0.4106	-0.1088	-0.3875
145	33.98	0.00	14.72613	-5.02011	0.0947	-0.9623	0.0017	0.2938	0.4143	-0.1206	-0.3647
146	34.13	0.00	14.80193	-5.03278	-0.0011	-0.0442	0.0265	0.3125	0.4210	-0.1086	-0.3669
147	34.30	0.00	14.89210	-5.04350	0.0624	-0.7334	0.0203	0.3192	0.4224	-0.1038	-0.3730
148	34.44	0.00	14.97330	-5.01542	-0.0006	-0.0092	0.0178	0.2990	0.4080	-0.1141	-0.3571
149	34.62	0.00	15.05374	-5.00373	-0.0258	-0.3463	0.0196	0.2869	0.4186	-0.1317	-0.3479
150	34.78	0.00	15.14088	-4.98629	-0.0426	-0.3707	0.0250	0.2818	0.4144	-0.1331	-0.3458
151	34.92	0.00	15.22537	-4.99515	-0.0083	-0.4006	0.0201	0.2885	0.4190	-0.1306	-0.3467
152	35.08	0.00	15.30383	-5.02346	-0.1178	-0.2789	0.0230	0.3061	0.4234	-0.1174	-0.3583
153	35.22	0.00	15.38731	-5.02049	-0.0936	-0.2790	0.0257	0.2921	0.4178	-0.1258	-0.3589
154	35.38	0.00	15.46961	-5.02747	-0.0183	-0.3443	0.0203	0.3091	0.4234	-0.1144	-0.3626
155	35.52	0.00	15.55210	-5.02000	-0.0121	-0.3798	0.0200	0.3015	0.4258	-0.1242	-0.3624
156	35.67	0.00	15.63532	-5.01027	-0.0072	-0.1910	0.0259	0.2816	0.4179	-0.1361	-0.3542
157	35.85	0.00	15.72231	-5.10033	0.0564	-0.1344	0.0264	0.2691	0.4247	-0.1357	-0.3551
158	36.02	0.00	15.80179	-5.02719	0.1706	-0.2005	0.0194	0.2849	0.4195	-0.1297	-0.3631
159	36.19	0.00	15.88519	-5.03060	0.0953	-0.2035	0.0204	0.2890	0.4281	-0.1392	-0.3684
160	36.34	0.00	15.96049	-5.03004	-0.1309	-0.2400	0.0199	0.2973	0.4275	-0.1301	-0.3717
161	36.50	0.00	16.04281	-5.04972	-0.0391	-0.1405	0.0200	0.2933	0.4303	-0.1321	-0.3731
162	36.65	0.00	16.12631	-5.03301	0.0481	-0.3101	0.0190	0.2991	0.4342	-0.1352	-0.3690
163	36.82	0.00	16.20880	-5.03554	0.0067	-0.3147	0.0197	0.3131	0.4345	-0.1215	-0.3787
164	36.97	0.00	16.29080	-5.03153	0.2825	-0.4746	0.0154	0.3016	0.4406	-0.1347	-0.3781
165	37.12	0.00	16.36812	-5.03260	0.1029	-0.2145	0.0150	0.2876	0.4368	-0.1492	-0.3767
166	37.25	0.00	16.45061	-5.04390	0.2431	-0.3507	0.0207	0.2948	0.4122	-0.1474	-0.3763
167	37.43	-0.00	16.53772	-5.00315	-0.2626	-0.4029	0.0026	0.2983	0.4440	-0.1458	-0.3765
168	37.59	0.00	16.62430	-5.00990	0.0396	-0.1457	0.0093	0.3057	0.4375	-0.1319	-0.3780
169	37.76	0.00	16.70683	-5.03723	0.0765	-0.0193	0.0179	0.2767	0.4334	-0.1547	-0.3580
170	37.91	0.00	16.79006	-5.04974	0.1271	-0.0305	0.0160	0.2793	0.4476	-0.1665	-0.3723
171	38.05	0.00	16.87413	-5.00823	-0.0604	-0.4369	-0.0018	0.2939	0.4287	-0.1349	-0.3728
172	38.18	0.00	16.96440	-5.00806	-0.1573	-0.2780	-0.0006	0.2889	0.4298	-0.1609	-0.3810
173	38.30	0.00	17.04831	-5.06717	0.2470	0.1307	0.0043	0.2509	0.4226	-0.1719	-0.3816
174	38.48	0.01	17.13963	-5.07425	-0.1619	-0.4774	-0.0007	0.2536	0.4318	-0.1780	-0.3842
175	38.59	0.00	17.22343	-5.03730	-0.3758	0.2139	-0.0031	0.2909	0.4351	-0.1682	-0.3954
176	38.80	0.00	17.31366	-5.00064	0.2732	-0.2105	-0.0015	0.2814	0.4411	-0.1797	-0.3819
177	38.99	0.00	17.40032	-5.00472	0.3039	-0.3126	-0.0014	0.2872	0.4359	-0.1687	-0.3752
178	39.00	0.00	17.48134	-5.04933	0.2594	-0.1334	0.0044	0.2793	0.4146	-0.1353	-0.3631
179	37.93	0.00	17.56317	-5.04014	0.1261	-0.4200	0.0041	0.2526	0.4350	-0.1822	-0.3611

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 PART 01 MACH 1.10 1.7 PHI 45.0 BINARIES CONF 0.0 L 0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	ACPF1	YCPF1	CNF2	CM2	CB2	ACPF2	YCPF2
1	-5.13	0.11	0.2079	0.0327	0.1239	0.1575	0.5975	-0.1148	-0.0172	-0.0747	0.1500	0.6504
2	-5.13	0.09	0.2244	0.0344	0.1321	0.1531	0.5980	-0.1212	-0.0183	-0.0780	0.1526	0.6493
3	-5.22	0.10	0.1972	0.0259	0.1159	0.1315	0.6517	-0.0926	-0.0134	-0.0613	0.1716	0.6602
4	-3.19	0.10	0.0649	0.0100	0.0036	0.2451	0.7239	-0.0338	-0.0049	-0.0357	0.2295	0.8680
5	-1.47	0.08	0.0019	0.0003	0.0032	4.0947	23.9268	0.0049	-0.0029	-0.0118	-0.5921	-2.4082
6	0.12	0.00	-0.0040	-0.0021	0.0021	0.0481	-0.0781	0.0825	0.0075	0.0108	0.0911	0.2039
7	2.12	0.09	-0.1030	-0.0077	-0.0108	0.0733	0.1717	0.1628	0.0102	0.0441	0.1120	0.2706
8	4.03	0.09	-0.1570	-0.0142	-0.0431	0.0778	0.2742	0.2357	0.0305	0.0771	0.1288	0.3271
9	6.03	0.09	-0.2230	-0.0120	-0.0781	0.0559	0.3373	0.3352	0.0293	0.1260	0.1171	0.3617
10	8.03	0.09	-0.2771	-0.0069	-0.1041	0.0422	0.3805	0.4359	0.0450	0.1423	0.1032	0.4412
11	10.06	0.10	-0.3402	-0.0053	-0.1368	0.0372	0.3850	0.5502	0.0456	0.2529	0.0819	0.4547
12	12.09	0.10	-0.3824	0.0017	-0.1247	-0.0034	0.3350	0.6944	0.0434	0.3272	0.0625	0.4712
13	14.09	0.09	-0.3901	0.0033	-0.1424	-0.0157	0.4033	0.8182	0.0304	0.3824	0.0469	0.4673
14	16.07	0.10	-0.3718	0.0060	-0.1376	-0.0212	0.4472	0.9309	0.0346	0.4260	0.0373	0.4576
15	18.13	0.10	-0.4247	0.0124	-0.1643	-0.0292	0.4297	1.0471	0.0274	0.4716	0.0263	0.4525
16	20.09	0.10	-0.3990	0.0190	-0.1749	-0.0490	0.4990	1.1303	0.0227	0.5057	0.0200	0.4451
17	22.11	0.13	-0.3817	0.0230	-0.1844	-0.0657	0.5339	1.2433	0.0148	0.5493	0.0119	0.4418
18	24.13	0.14	-0.4292	0.0310	-0.1860	-0.1410	0.5353	1.3041	0.0082	0.5672	0.0068	0.4367
19	26.21	0.12	-0.4395	0.0444	-0.1780	-0.2760	0.4887	1.3350	0.0131	0.5693	0.0076	0.4264
20	28.24	0.13	-0.4102	0.0300	-0.1738	-0.2197	0.4183	1.3900	0.0109	0.5659	0.0081	0.4190
21	28.41	0.13	-0.4102	0.0301	-0.0040	-0.2334	0.3000	1.3501	0.0104	0.5700	0.0077	0.4197
22	28.43	0.14	-0.4030	0.0309	-0.0032	-0.2039	0.3839	1.3319	0.0110	0.5624	0.0082	0.4160
23	28.70	0.13	-0.4040	0.0304	-0.0074	-0.2005	0.3902	1.3373	0.0105	0.5623	0.0077	0.4143
24	29.03	0.13	-0.4040	0.0308	-0.0057	-0.1943	0.3309	1.3373	0.0104	0.5612	0.0077	0.4135
25	29.39	0.14	-0.4040	0.0309	-0.0062	-0.1899	0.3503	1.3463	0.0108	0.5552	0.0080	0.4103
26	29.70	0.14	-0.4033	0.0303	-0.0057	-0.2071	0.3187	1.3300	0.0098	0.5409	0.0074	0.4065
27	29.95	0.14	-0.0905	0.0033	-0.0180	-0.4990	0.2055	1.3309	0.0056	0.5282	0.0043	0.4061
28	30.21	0.14	-0.0921	0.0034	-0.0191	-0.4870	0.2003	1.3013	0.0049	0.5284	0.0038	0.4061
29	30.50	0.10	-0.0899	0.0042	-0.0073	-0.7440	0.1231	1.2891	0.0002	0.5252	0.0002	0.4075
30	30.83	0.13	-0.0906	0.0041	-0.0210	-0.5190	0.2097	1.2905	-0.0002	0.5258	-0.0002	0.4075
31	31.10	0.13	-0.0941	0.0357	-0.0201	-0.4353	0.3300	1.3300	-0.0013	0.5328	-0.0010	0.4084
32	31.39	0.13	-0.0910	0.0371	-0.0189	-0.4770	0.2374	1.2999	-0.0022	0.5213	-0.0017	0.4059
33	31.68	0.11	-0.0823	0.0351	-0.0200	-0.4740	0.2300	1.2942	-0.0027	0.5255	-0.0021	0.4067
34	31.99	0.13	-0.0791	0.0365	-0.0188	-0.4003	0.2147	1.3001	-0.0035	0.5282	-0.0027	0.4063
35	32.22	0.14	-0.1103	0.0369	-0.0374	-0.3115	0.3104	1.3144	-0.0036	0.5342	-0.0027	0.4064
36	32.50	0.10	-0.1335	0.0382	-0.0474	-0.2499	0.3333	1.3220	-0.0051	0.5340	-0.0039	0.4079
37	32.73	0.17	-0.1060	0.0370	-0.0637	-0.1609	0.3810	1.3213	-0.0047	0.5370	-0.0036	0.4064
38	33.04	0.13	-0.1057	0.0419	-0.0750	-0.1303	0.3989	1.3330	-0.0050	0.5415	-0.0038	0.4062
39	33.27	0.14	-0.2041	0.0233	-0.0802	-0.1242	0.3930	1.3409	-0.0036	0.5446	-0.0042	0.4063
40	33.52	0.10	-0.2140	0.0233	-0.0810	-0.1000	0.3773	1.3430	-0.0061	0.5460	-0.0045	0.4064
41	33.77	0.13	-0.2013	0.0201	-0.1190	-0.0716	0.4231	1.3035	-0.0067	0.5536	-0.0049	0.4069
42	34.04	0.14	-0.2011	0.0233	-0.0941	-0.0960	0.4070	1.3600	-0.0069	0.5551	-0.0051	0.4065
43	34.29	0.13	-0.2025	0.0243	-0.1098	-0.0927	0.4184	1.3627	-0.0073	0.5622	-0.0053	0.4066
44	34.53	0.13	-0.2041	0.0263	-0.0945	-0.1260	0.4210	1.3801	-0.0077	0.5624	-0.0056	0.4075
45	34.80	0.12	-0.2554	0.0263	-0.1103	-0.1031	0.4520	1.4004	-0.0085	0.5704	-0.0059	0.4072
46	35.04	0.10	-0.2068	0.0313	-0.0992	-0.1321	0.4263	1.3941	-0.0085	0.5674	-0.0061	0.4068

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NO=0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 01 1.60 1.7 +90.0 BLOWERS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	35.27	0.11	-0.0038	0.0241	-0.1279	-0.0038	0.4611	1.4351	-0.0038	0.5714	-0.0063	0.4067
48	35.53	0.11	-0.0235	0.0235	-0.1242	-0.0070	0.4631	1.4223	-0.0095	0.5795	-0.0067	0.4075
49	35.78	0.10	-0.0213	0.0231	-0.0938	-0.1800	0.4637	1.4057	-0.0098	0.5732	-0.0070	0.4069
50	36.02	0.12	-0.0240	0.0234	-0.1342	-0.0998	0.4777	1.4265	-0.0107	0.5837	-0.0075	0.4086
51	36.26	0.11	-0.0260	0.0200	-0.1104	-0.1467	0.4582	1.4238	-0.0113	0.5841	-0.0079	0.4074
52	36.49	0.09	-0.0269	0.0200	-0.1243	-0.1297	0.4585	1.4200	-0.0111	0.5814	-0.0078	0.4077
53	36.73	0.10	-0.0269	0.0240	-0.1279	-0.1258	0.4737	1.4325	-0.0116	0.5860	-0.0081	0.4077
54	36.96	0.10	-0.0260	0.0206	-0.1293	-0.1743	0.4596	1.4181	-0.0111	0.5782	-0.0078	0.4077
55	37.20	0.09	-0.0294	0.0201	-0.1226	-0.1409	0.4710	1.4252	-0.0121	0.5852	-0.0084	0.4078
56	37.43	0.08	-0.0301	0.0206	-0.1260	-0.1308	0.4826	1.4252	-0.0120	0.5847	-0.0084	0.4074
57	37.67	0.10	-0.0281	0.0171	-0.1033	-0.2159	0.4736	1.4241	-0.0131	0.5928	-0.0090	0.4083
58	37.92	0.11	-0.0309	0.0206	-0.1296	-0.2593	0.4914	1.4230	-0.0120	0.5884	-0.0087	0.4078
59	38.18	0.11	-0.0320	0.0204	-0.0763	-0.2548	0.4791	1.4339	-0.0125	0.5841	-0.0086	0.4074
60	38.39	0.09	-0.0283	0.0242	-0.0978	-0.2074	0.4730	1.4313	-0.0127	0.5849	-0.0089	0.4087
61	38.64	0.09	-0.0290	0.0237	-0.1209	-0.1836	0.4898	1.4293	-0.0135	0.5901	-0.0094	0.4086
62	38.87	0.10	-0.0299	0.0242	-0.1254	-0.1719	0.5116	1.4418	-0.0133	0.5883	-0.0094	0.4081
63	39.10	0.09	-0.0292	0.0232	-0.1223	-0.1777	0.5053	1.4300	-0.0138	0.5873	-0.0096	0.4088
64	39.30	0.09	-0.0282	0.0241	-0.0798	-0.2198	0.4800	1.4270	-0.0142	0.5918	-0.0098	0.4090
65	39.54	0.08	-0.1010	0.0434	-0.0848	-0.2385	0.4864	1.4269	-0.0135	0.5831	-0.0095	0.4081
66	39.78	0.10	-0.0289	0.0235	-0.1130	-0.2009	0.5141	1.4308	-0.0149	0.5873	-0.0104	0.4088
67	39.93	0.09	-0.1598	0.0436	-0.1034	-0.2150	0.5115	1.4329	-0.0152	0.5874	-0.0106	0.4100
68	40.18	0.09	-0.2041	0.0413	-0.1022	-0.2018	0.4995	1.4186	-0.0149	0.5785	-0.0105	0.4078
69	40.39	0.10	-0.1959	0.0404	-0.0954	-0.2080	0.4870	1.4209	-0.0153	0.5827	-0.0108	0.4101
70	40.64	0.10	-0.2357	0.0407	-0.1210	-0.1734	0.5170	1.4278	-0.0161	0.5883	-0.0113	0.4107
71	40.83	0.09	-0.2152	0.0393	-0.1120	-0.1811	0.5244	1.4137	-0.0157	0.5771	-0.0111	0.4091
72	41.07	0.09	-0.1993	0.0378	-0.0987	-0.1894	0.4952	1.4114	-0.0153	0.5777	-0.0109	0.4094
73	41.29	0.10	-0.2337	0.0388	-0.1220	-0.1560	0.5178	1.3947	-0.0158	0.5694	-0.0114	0.4091
74	41.53	0.08	-0.2295	0.0367	-0.1173	-0.1653	0.5227	1.3914	-0.0155	0.5697	-0.0112	0.4094
75	41.80	0.10	-0.1953	0.0359	-0.1006	-0.1838	0.5151	1.3883	-0.0158	0.5677	-0.0114	0.4095
76	41.87	0.10	-0.2021	0.0369	-0.1057	-0.1778	0.5352	1.3988	-0.0162	0.5705	-0.0117	0.4108
77	42.07	0.08	-0.2218	0.0357	-0.1193	-0.1667	0.5391	1.3880	-0.0158	0.5623	-0.0116	0.4108
78	42.21	0.09	-0.2034	0.0355	-0.1078	-0.1728	0.5250	1.3849	-0.0158	0.5590	-0.0115	0.4102
79	42.46	0.09	-0.2000	0.0317	-0.1033	-0.1577	0.5150	1.3973	-0.0162	0.5620	-0.0113	0.4097
80	42.68	0.08	-0.2142	0.0296	-0.1080	-0.1384	0.5072	1.3887	-0.0161	0.5491	-0.0113	0.4108
81	42.85	0.09	-0.2076	0.0306	-0.1047	-0.1462	0.5246	1.3973	-0.0154	0.5536	-0.0114	0.4109
82	43.09	0.09	-0.2042	0.0269	-0.0993	-0.1493	0.4965	1.3910	-0.0155	0.5455	-0.0104	0.4097
83	43.22	0.09	-0.2242	0.0259	-0.1110	-0.1357	0.4980	1.3865	-0.0145	0.5424	-0.0110	0.4113
84	43.39	0.09	-0.1920	0.0261	-0.0981	-0.1557	0.4990	1.3933	-0.0163	0.5399	-0.0109	0.4111
85	43.58	0.08	-0.1975	0.0259	-0.0958	-0.1488	0.4850	1.3905	-0.0161	0.5371	-0.0108	0.4111
86	43.78	0.08	-0.2000	0.0243	-0.1002	-0.1402	0.4799	1.3961	-0.0157	0.5321	-0.0106	0.4105
87	43.95	0.09	-0.2000	0.0240	-0.0979	-0.1404	0.4870	1.3917	-0.0163	0.5399	-0.0109	0.4116
88	44.13	0.08	-0.2029	0.0249	-0.0980	-0.1034	0.4893	1.3939	-0.0163	0.5361	-0.0110	0.4111
89	44.38	0.09	-0.2097	0.0219	-0.0951	-0.1040	0.4537	1.3926	-0.0146	0.5360	-0.0112	0.4115
90	44.47	0.08	-0.1993	0.0179	-0.0941	-0.0929	0.4850	1.3949	-0.0144	0.5376	-0.0111	0.4120
91	44.68	0.08	-0.2013	0.0202	-0.0973	-0.0970	0.4890	1.3870	-0.0138	0.5303	-0.0107	0.4118
92	44.85	0.07	-0.1921	0.0194	-0.0947	-0.1011	0.4865	1.3967	-0.0142	0.5357	-0.0110	0.4131

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 4 OF 5
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NO.=0.60 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 01 1.600 1.67 45.0 DEGREES 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	ALPF1	YCPF1	CNF2	CM2	CA2	ALPF2	YCPF2
93	45.02	0.01	-0.1097	0.0109	-0.0055	-0.0998	0.4529	1.2839	-0.0140	0.5335	-0.0109	0.4132
94	45.43	0.01	-0.1141	0.0106	-0.0081	-0.0650	0.4538	1.2852	-0.0142	0.5341	-0.0111	0.4140
95	45.90	0.01	-0.1180	0.0122	-0.0090	-0.0710	0.4077	1.2823	-0.0137	0.5312	-0.0107	0.4142
96	45.51	0.01	-0.1010	0.0120	-0.0094	-0.0795	0.4042	1.2790	-0.0137	0.5310	-0.0107	0.4149
97	45.15	0.01	-0.1012	0.0103	-0.0106	-0.0697	0.4516	1.2836	-0.0142	0.5334	-0.0111	0.4155
98	45.47	0.00	-0.1011	0.0102	-0.0081	-0.0830	0.4091	1.2813	-0.0143	0.5321	-0.0111	0.4156
99	45.12	0.00	-0.1009	0.0100	-0.0085	-0.0725	0.4523	1.2865	-0.0144	0.5360	-0.0112	0.4160
100	45.47	0.01	-0.1007	0.0095	-0.0076	-0.0830	0.4095	1.2779	-0.0140	0.5340	-0.0110	0.4163
101	45.43	0.01	-0.1012	0.0101	-0.0090	-0.0829	0.4295	1.2792	-0.0145	0.5352	-0.0112	0.4164
102	45.69	0.00	-0.1001	0.0102	-0.0111	-0.0918	0.4317	1.2808	-0.0140	0.5339	-0.0114	0.4164
103	45.86	0.00	-0.1008	0.0085	-0.0080	-0.0800	0.4121	1.2800	-0.0146	0.5354	-0.0116	0.4166
104	45.99	0.00	-0.1048	0.0086	-0.0106	-0.0903	0.4083	1.2809	-0.0133	0.5400	-0.0119	0.4191
105	47.15	0.01	-0.1032	0.0080	-0.0057	-0.0645	0.4119	1.2899	-0.0143	0.5327	-0.0113	0.4195
106	47.53	0.00	-0.1050	0.0089	-0.0077	-0.0923	0.4126	1.2891	-0.0150	0.5390	-0.0117	0.4201
107	47.54	0.01	-0.1132	0.0093	-0.0096	-0.0813	0.4081	1.2852	-0.0147	0.5363	-0.0115	0.4205
108	47.58	0.03	-0.1113	0.0054	-0.0095	-0.0900	0.3903	1.2786	-0.0146	0.5367	-0.0116	0.4205
109	47.89	0.00	-0.1119	0.0081	-0.0096	-0.0881	0.4017	1.2882	-0.0135	0.5396	-0.0121	0.4215
110	48.02	0.01	-0.0985	0.0080	-0.0098	-0.0916	0.3916	1.2735	-0.0149	0.5360	-0.0117	0.4229
111	48.29	0.00	-0.1119	0.0075	-0.0096	-0.0125	0.3574	1.2735	-0.0152	0.5366	-0.0120	0.4229
112	48.33	0.00	-0.0919	0.0083	-0.0829	-0.0881	0.3564	1.2880	-0.0140	0.5340	-0.0115	0.4217
113	48.53	0.00	-0.0933	0.0060	-0.0827	-0.0835	0.3492	1.2813	-0.0147	0.5343	-0.0117	0.4236
114	48.72	0.00	-0.0930	0.0053	-0.0829	-0.0871	0.3577	1.2838	-0.0140	0.5354	-0.0118	0.4240
115	48.88	0.00	-0.0748	0.0062	-0.0850	-0.0888	0.3427	1.2719	-0.0151	0.5301	-0.0119	0.4230
116	49.05	0.00	-0.0812	0.0038	-0.0809	-0.0809	0.3011	1.2829	-0.0140	0.5321	-0.0116	0.4239
117	49.21	0.01	-0.0893	0.0053	0.0059	-0.3657	-0.4389	1.2849	-0.0143	0.5363	-0.0113	0.4240
118	49.31	0.01	-0.0894	0.0060	0.0092	-1.4890	-2.4495	1.2822	-0.0144	0.5361	-0.0114	0.4247
119	49.57	0.00	0.0711	0.0073	0.0213	0.3401	1.0095	1.2801	-0.0133	0.5474	-0.0119	0.4256
120	49.73	0.00	0.0733	0.0077	0.0211	0.3218	0.8979	1.2728	-0.0144	0.5410	-0.0113	0.4255
121	49.92	0.01	0.0698	0.0057	0.0153	0.3019	1.5016	1.2801	-0.0150	0.5474	-0.0121	0.4256
122	50.19	0.01	0.0750	0.0061	0.0173	0.3912	1.1218	1.2928	-0.0160	0.5495	-0.0124	0.4250
123	50.27	0.01	0.0765	0.0061	0.0209	0.2141	0.7333	1.2856	-0.0160	0.5466	-0.0124	0.4257
124	50.45	0.01	0.0838	0.0094	0.0187	0.2642	0.8209	1.2934	-0.0161	0.5394	-0.0129	0.4265
125	50.61	0.01	0.0825	0.0092	0.0183	0.3301	1.1990	1.2801	-0.0156	0.5474	-0.0123	0.4256
126	50.79	0.01	-0.0929	-0.0057	-0.0059	0.1302	0.1253	1.2594	-0.0164	0.5368	-0.0131	0.4279
127	50.90	0.01	-0.0843	-0.0091	-0.0120	0.1909	0.1729	1.2528	-0.0160	0.5344	-0.0128	0.4265
128	51.13	0.00	-0.0972	-0.0081	-0.0082	0.1840	0.1316	1.2594	-0.0161	0.5381	-0.0128	0.4272
129	51.30	0.00	-0.0983	-0.0084	-0.0093	0.1930	0.1328	1.2542	-0.0152	0.5275	-0.0123	0.4276
130	51.49	0.00	-0.0920	-0.0087	0.0031	0.2077	-0.0029	1.2580	-0.0161	0.5223	-0.0116	0.4289
131	51.63	0.00	-0.0983	-0.0099	-0.0062	0.2333	0.0020	1.2511	-0.0163	0.5306	-0.0130	0.4289
132	51.82	0.00	-0.0181	-0.0090	0.0067	0.2401	-0.3203	1.2455	-0.0149	0.5351	-0.0116	0.4296
133	51.98	0.00	-0.0234	-0.0050	0.0051	0.2130	-0.2179	1.2533	-0.0137	0.5303	-0.0113	0.4299
134	52.19	0.00	-0.0165	-0.0061	0.0061	0.1857	-0.4301	1.2242	-0.0130	0.5261	-0.0111	0.4297
135	52.30	0.00	-0.0139	-0.0050	0.0077	0.4050	-0.5240	1.2493	-0.0147	0.5367	-0.0118	0.4296
136	52.48	0.00	-0.0071	-0.0020	0.0094	0.2010	-1.3944	1.2492	-0.0138	0.5300	-0.0111	0.4297
137	52.63	0.00	-0.0105	-0.0045	0.0079	0.2302	-0.7529	1.2450	-0.0142	0.5357	-0.0114	0.4302
138	52.81	0.00	-0.0131	-0.0052	0.0057	0.3797	-0.9101	1.2030	-0.0133	0.5436	-0.0121	0.4301

MARTIN MISSILE FALLS EFFECTS DATA

TEST PART MACH RADIO PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
7 .61 1.10 1.1 45.0 DEGREES 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
139	52.98	0.00	-0.0093	-0.0319	0.0078	0.2044	-0.0172	1.2570	-0.0145	0.5394	-0.0116	0.4291
140	53.17	0.01	-0.0092	-0.0099	0.0083	0.1083	-0.0122	1.2746	-0.0101	0.5466	-0.0127	0.4304
141	53.33	0.00	-0.0124	-0.0070	0.0081	0.0567	-0.0118	1.2044	-0.0171	0.5460	-0.0135	0.4301
142	53.50	0.05	-0.0003	-0.0056	0.0081	0.0300	-0.0032	1.2935	-0.0101	0.5575	-0.0140	0.4310
143	53.68	0.00	-0.0035	-0.0040	0.0110	1.1433	-0.0143	1.2720	-0.0101	0.5457	-0.0127	0.4290
144	53.83	0.02	-0.0032	-0.0022	0.0132	-0.2004	1.0851	1.2960	-0.0173	0.5578	-0.0134	0.4304
145	53.98	0.04	-0.0023	-0.0014	0.0121	-0.0009	5.2605	1.2810	-0.0186	0.5527	-0.0130	0.4315
146	54.15	0.03	-0.0010	-0.0007	0.0103	2.7311	-10.5006	1.2705	-0.0100	0.5493	-0.0132	0.4296
147	54.30	0.03	-0.0012	-0.0022	0.0110	1.0341	-3.0007	1.2867	-0.0177	0.5515	-0.0138	0.4286
148	54.49	0.03	0.0100	-0.0032	0.0104	-0.3020	1.5472	1.2677	-0.0176	0.5541	-0.0137	0.4303
149	54.62	0.02	-0.0035	-0.0025	0.0103	0.7140	-2.9249	1.2665	-0.0165	0.5411	-0.0130	0.4272
150	54.78	0.04	-0.0033	-0.0028	0.0092	0.4468	-1.7879	1.2526	-0.0102	0.5394	-0.0130	0.4305
151	54.92	0.04	-0.0024	-0.0028	0.0114	1.1671	-4.7550	1.2704	-0.0169	0.5462	-0.0133	0.4299
152	55.09	0.03	-0.0041	-0.0020	0.0111	2.3040	-10.0909	1.3051	-0.0190	0.5634	-0.0143	0.4321
153	55.22	0.04	-0.0033	-0.0026	0.0108	0.7934	-3.0857	1.2864	-0.0183	0.5532	-0.0142	0.4300
154	55.38	0.04	0.0003	-0.0028	0.0102	-0.3375	1.0513	1.3226	-0.0193	0.5701	-0.0146	0.4310
155	55.52	0.04	0.0030	-0.0030	0.0138	-0.0337	3.7778	1.3010	-0.0187	0.5586	-0.0144	0.4296
156	55.67	0.04	0.0009	-0.0031	0.0141	-0.0092	1.0780	1.3037	-0.0190	0.5609	-0.0146	0.4302
157	55.83	0.04	0.0037	-0.0028	0.0126	-0.7571	3.4054	1.3026	-0.0192	0.5593	-0.0148	0.4293
158	56.02	0.05	0.0013	-0.0032	0.0142	-0.1503	0.9484	1.3470	-0.0210	0.5831	-0.0156	0.4329
159	56.19	0.04	0.0073	-0.0030	0.0135	-0.4111	1.0693	1.3059	-0.0197	0.5619	-0.0151	0.4309
160	56.34	0.02	0.0107	-0.0030	0.0171	-0.1747	1.0599	1.3389	-0.0211	0.5796	-0.0158	0.4330
161	56.50	0.03	0.0001	-0.0023	0.0150	-0.3772	2.1311	1.3148	-0.0206	0.5660	-0.0157	0.4305
162	56.69	0.03	0.0130	-0.0026	0.0108	-0.0001	1.2923	1.3137	-0.0200	0.5670	-0.0152	0.4316
163	56.82	0.02	0.0206	-0.0022	0.0212	-0.0770	0.7413	1.3652	-0.0230	0.5895	-0.0169	0.4318
164	56.97	0.05	0.0174	-0.0030	0.0170	-0.1677	0.9944	1.3300	-0.0213	0.5737	-0.0160	0.4313
165	57.12	0.04	0.0297	-0.0027	0.0223	-0.0909	0.7508	1.3653	-0.0232	0.5884	-0.0170	0.4310
166	57.45	0.05	0.0132	-0.0024	0.0150	-0.1019	1.1970	1.3261	-0.0214	0.5725	-0.0161	0.4309
167	57.45	-0.00	0.0033	-0.0010	0.0226	-0.0591	0.8647	1.4005	-0.0256	0.6036	-0.0185	0.4310
168	57.59	0.03	0.0170	-0.0020	0.0144	-0.0992	0.7029	1.3749	-0.0230	0.5997	-0.0180	0.4307
169	57.76	0.10	0.0392	-0.0023	0.0259	-0.0567	0.6480	1.3857	-0.0252	0.5975	-0.0182	0.4312
170	57.91	0.05	0.0333	-0.0029	0.0237	-0.0871	0.7117	1.3858	-0.0234	0.5959	-0.0184	0.4300
171	58.05	0.04	0.0441	-0.0012	0.0272	-0.0273	0.6162	1.4200	-0.0270	0.6106	-0.0190	0.4300
172	58.18	0.00	0.0451	-0.0008	0.0269	-0.0178	0.6422	1.3705	-0.0258	0.5920	-0.0173	0.4301
173	58.33	0.00	0.0432	-0.0001	0.0270	-0.0022	0.5967	1.4254	-0.0286	0.6145	-0.0187	0.4309
174	58.49	0.01	0.0391	-0.0005	0.0256	-0.0077	0.6396	1.4241	-0.0287	0.6092	-0.0188	0.4278
175	58.63	0.03	0.0434	-0.0005	0.0259	-0.0124	0.6411	1.4270	-0.0272	0.6116	-0.0191	0.4286
176	58.80	0.03	0.0440	-0.0012	0.0263	-0.0273	0.6446	1.4133	-0.0260	0.6061	-0.0189	0.4289
177	58.80	0.03	0.0404	-0.0009	0.0269	-0.0223	0.6535	1.3916	-0.0256	0.5957	-0.0184	0.4281
178	58.99	0.04	0.0383	-0.0018	0.0260	-0.0474	0.6842	1.3969	-0.0258	0.6016	-0.0185	0.4307
179	57.93	0.03	0.0340	-0.0030	0.0250	-0.0001	0.7225	1.3646	-0.0252	0.5876	-0.0170	0.4306

NAVAL SHIP R&D SEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-S PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 01 1.10 1.1 90.0 3.1MDF15 0.0 0 0 0 0 0 MAXIMUM

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.73	0.11	0.2466	0.9999	0.0677	0.9999	0.3508	-0.2358	-0.0265	-0.0783	0.1392	0.3805
2	-5.73	0.09	0.2430	0.9999	0.0703	0.9999	0.3517	-0.2135	-0.0241	-0.0821	0.1396	0.3846
3	-5.72	0.10	0.1916	0.9999	0.0736	0.9999	0.3505	-0.1559	-0.0174	-0.0516	0.1375	0.3320
4	-3.19	0.10	0.1316	0.9999	0.0467	0.9999	0.3532	-0.0989	-0.0112	-0.0205	0.1269	0.2299
5	-1.27	0.08	0.0782	0.9999	0.0230	0.9999	0.3504	-0.0224	-0.0040	0.0043	0.0447	-0.1920
6	0.72	0.08	0.0099	0.9999	-0.0001	0.9999	-0.0204	0.0472	0.0076	0.0340	0.1614	0.7219
7	2.72	0.09	-0.0615	0.9999	-0.0249	0.9999	0.3669	0.1032	0.0131	0.0578	0.1271	0.5597
8	4.03	0.09	-0.1196	0.9999	-0.0344	0.9999	0.3635	0.1063	0.0134	0.0659	0.1170	0.5107
9	6.03	0.09	-0.2017	0.9999	-0.0532	0.9999	0.3636	0.2270	0.0166	0.1063	0.0733	0.4773
10	8.00	0.09	-0.2900	0.9999	-0.1003	0.9999	0.3701	0.2850	0.0196	0.1366	0.0512	0.4853
11	10.20	0.10	-0.3640	0.9999	-0.1038	0.9999	0.3886	0.3267	0.0196	0.1624	0.0323	0.4941
12	12.24	0.10	-0.4443	0.9999	-0.1375	0.9999	0.4031	0.3870	0.0256	0.1905	0.0145	0.4924
13	14.24	0.09	-0.5252	0.9999	-0.1715	0.9999	0.4043	0.4104	-0.0031	0.2034	-0.0052	0.4957
14	16.24	0.10	-0.6061	0.9999	-0.2012	0.9999	0.4029	0.4478	-0.0033	0.2154	-0.0149	0.5034
15	18.70	0.10	-0.6963	0.9999	-0.2399	0.9999	0.4102	0.5243	-0.0132	0.2066	-0.0337	0.5265
16	20.69	0.10	-0.7632	0.9999	-0.2751	0.9999	0.3983	0.5010	-0.0190	0.1974	-0.0526	0.5470
17	22.71	0.13	-0.8293	0.9999	-0.3008	0.9999	0.3993	0.5049	-0.0197	0.2001	-0.0541	0.5484
18	24.15	0.14	-0.8786	0.9999	-0.3065	0.9999	0.3918	0.5031	-0.0201	0.2070	-0.0736	0.5699
19	26.81	0.12	-0.9588	0.9999	-0.3363	0.9999	0.3895	0.2600	-0.0387	0.1624	-0.1453	0.6857
20	26.92	0.14	-0.9810	0.9999	-0.3424	0.9999	0.3875	0.2143	-0.0378	0.1490	-0.1847	0.6748
21	28.91	0.13	-0.9923	0.9999	-0.3417	0.9999	0.3883	0.2121	-0.0409	0.1471	-0.1927	0.6836
22	28.93	0.14	-1.0000	0.9999	-0.3584	0.9999	0.3834	0.2049	-0.0405	0.1405	-0.1975	0.6857
23	28.78	0.13	-1.0078	0.9999	-0.3547	0.9999	0.3798	0.1992	-0.0427	0.1413	-0.2142	0.7090
24	29.05	0.13	-1.0135	0.9999	-0.3596	0.9999	0.3810	0.2171	-0.0405	0.1474	-0.1864	0.6790
25	29.34	0.14	-1.0233	0.9999	-0.3578	0.9999	0.3758	0.2206	-0.0432	0.1507	-0.1905	0.6850
26	29.40	0.14	-1.0280	0.9999	-0.3588	0.9999	0.3784	0.2511	-0.0475	0.1684	-0.1876	0.6891
27	29.99	0.14	-1.0417	0.9999	-0.3675	0.9999	0.3800	0.2426	-0.0459	0.1642	-0.1891	0.6768
28	30.21	0.14	-1.0473	0.9999	-0.3634	0.9999	0.3781	0.2581	-0.0474	0.1710	-0.1835	0.6625
29	30.50	0.10	-1.0540	0.9999	-0.3590	0.9999	0.3787	0.2522	-0.0522	0.1697	-0.2069	0.6729
30	30.83	0.13	-1.0618	0.9999	-0.3601	0.9999	0.3781	0.2231	-0.0538	0.1568	-0.2276	0.7029
31	31.10	0.15	-1.0690	0.9999	-0.3695	0.9999	0.3765	0.2368	-0.0517	0.1630	-0.2163	0.6884
32	31.39	0.13	-1.0760	0.9999	-0.3699	0.9999	0.3771	0.2370	-0.0488	0.1941	-0.1576	0.6271
33	31.67	0.11	-1.0836	0.9999	-0.3695	0.9999	0.3771	0.2116	-0.0479	0.1569	-0.1536	0.6317
34	31.99	0.13	-1.0906	0.9999	-0.3700	0.9999	0.3772	0.2307	-0.0478	0.2004	-0.1445	0.6240
35	32.22	0.14	-1.0983	0.9999	-0.3729	0.9999	0.3772	0.2172	-0.0478	0.2013	-0.1506	0.6348
36	32.50	0.10	-1.1042	0.9999	-0.3780	0.9999	0.3781	0.2319	-0.0531	0.2059	-0.1527	0.6202
37	32.76	0.11	-1.1126	0.9999	-0.3790	0.9999	0.3674	0.2372	-0.0530	0.2176	-0.1399	0.6096
38	33.01	0.13	-1.1206	0.9999	-0.3831	0.9999	0.3682	0.2588	-0.0532	0.2174	-0.1482	0.6057
39	33.27	0.14	-1.1274	0.9999	-0.3837	0.9999	0.3683	0.2412	-0.0527	0.2187	-0.1458	0.6053
40	33.56	0.10	-1.1347	0.9999	-0.3840	0.9999	0.3694	0.2427	-0.0530	0.2284	-0.1437	0.5981
41	33.71	0.13	-1.1401	0.9999	-0.3818	0.9999	0.3701	0.2410	-0.0549	0.2198	-0.1520	0.6087
42	34.04	0.14	-1.1487	0.9999	-0.3830	0.9999	0.3700	0.2384	-0.0533	0.2376	-0.1448	0.6110
43	34.29	0.13	-1.1562	0.9999	-0.3853	0.9999	0.3709	0.2355	-0.0577	0.2333	-0.1545	0.6247
44	34.53	0.13	-1.1620	0.9999	-0.3899	0.9999	0.3711	0.2435	-0.0593	0.2333	-0.1631	0.6417
45	34.83	0.12	-1.1687	0.9999	-0.3838	0.9999	0.3709	0.2421	-0.0532	0.2498	-0.1523	0.6538
46	35.09	0.13	-1.1776	0.9999	-0.3881	0.9999	0.3721	0.2327	-0.0574	0.2399	-0.1638	0.6744

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NAIJ-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 01 1.612 1.61 >9.0 DEGREES 0.00 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	AXPF3	YCPF3	CNF4	CM4	CA4	AXPF4	YCPF4
47	35.27	0.11	-1.64135	9.99999	-0.52775	9.99999	0.3735	0.3638	-0.0542	0.2510	-0.1469	0.6899
48	35.33	0.11	-1.64134	9.99999	-0.53306	9.99999	0.3728	0.3570	-0.0526	0.2518	-0.1465	0.7013
49	35.78	0.10	-1.64115	9.99999	-0.52772	9.99999	0.3734	0.3340	-0.0492	0.2403	-0.1472	0.7194
50	36.02	0.12	-1.64060	9.99999	-0.52755	9.99999	0.3738	0.3088	-0.0476	0.2306	-0.1461	0.7466
51	36.26	0.11	-1.64063	9.99999	-0.53333	9.99999	0.3739	0.3039	-0.0472	0.2392	-0.1459	0.7396
52	36.75	0.09	-1.64107	9.99999	-0.52671	9.99999	0.3734	0.2885	-0.0461	0.2182	-0.1606	0.7616
53	36.73	0.10	-1.64143	9.99999	-0.53295	9.99999	0.3743	0.3386	-0.0424	0.2460	-0.1251	0.7324
54	36.98	0.10	-1.64092	9.99999	-0.52701	9.99999	0.3747	0.3336	-0.0425	0.2490	-0.1254	0.7354
55	37.22	0.09	-1.64047	9.99999	-0.52688	9.99999	0.3751	0.3215	-0.0451	0.2297	-0.1546	0.7880
56	37.49	0.08	-1.64030	9.99999	-0.53463	9.99999	0.3750	0.3196	-0.0469	0.2096	-0.1641	0.8238
57	37.69	0.10	-1.64079	9.99999	-0.53327	9.99999	0.3753	0.2996	-0.0437	0.2238	-0.1740	0.7996
58	37.94	0.11	-1.64169	9.99999	-0.53427	9.99999	0.3754	0.3259	-0.0491	0.2460	-0.1506	0.7610
59	38.18	0.11	-1.64159	9.99999	-0.53306	9.99999	0.3748	0.3232	-0.0482	0.2526	-0.1468	0.7703
60	38.39	0.09	-1.64131	9.99999	-0.52692	9.99999	0.3747	0.2880	-0.0435	0.2339	-0.1684	0.8122
61	38.62	0.09	-1.64120	9.99999	-0.53330	9.99999	0.3746	0.2200	-0.0487	0.2014	-0.2154	0.8914
62	38.87	0.10	-1.64133	9.99999	-0.53301	9.99999	0.3745	0.2491	-0.0496	0.2143	-0.2065	0.8924
63	39.10	0.09	-1.64154	9.99999	-0.53306	9.99999	0.3748	0.2229	-0.0476	0.2054	-0.2135	0.9214
64	39.30	0.09	-1.64163	9.99999	-0.53335	9.99999	0.3750	0.2437	-0.0463	0.2141	-0.1699	0.8784
65	39.54	0.08	-1.64147	9.99999	-0.52608	9.99999	0.3751	0.2691	-0.0481	0.2370	-0.1622	0.8340
66	39.78	0.10	-1.64142	9.99999	-0.53314	9.99999	0.3757	0.2498	-0.0493	0.2083	-0.1970	0.8976
67	39.95	0.09	-1.64143	9.99999	-0.53343	9.99999	0.3756	0.2327	-0.0457	0.2094	-0.1963	0.8997
68	40.18	0.09	-1.64116	9.99999	-0.52681	9.99999	0.3752	0.2411	-0.0497	0.2132	-0.1811	0.8846
69	40.39	0.10	-1.63956	9.99999	-0.52454	9.99999	0.3767	0.2382	-0.0428	0.2159	-0.1796	0.9063
70	40.59	0.10	-1.64036	9.99999	-0.53306	9.99999	0.3774	0.2333	-0.0411	0.1940	-0.2018	0.9562
71	40.80	0.09	-1.64022	9.99999	-0.53276	9.99999	0.3762	0.2300	-0.0426	0.2083	-0.1851	0.9055
72	41.02	0.09	-1.63964	9.99999	-0.52716	9.99999	0.3773	0.2307	-0.0401	0.2270	-0.1549	0.8773
73	41.24	0.10	-1.63903	9.99999	-0.53179	9.99999	0.3779	0.2160	-0.0372	0.2013	-0.1705	0.9224
74	41.43	0.08	-1.63892	9.99999	-0.53171	9.99999	0.3777	0.2325	-0.0380	0.2135	-0.1547	0.9053
75	41.65	0.10	-1.63715	9.99999	-0.53197	9.99999	0.3782	0.2519	-0.0379	0.2235	-0.1508	0.8903
76	41.87	0.10	-1.63705	9.99999	-0.53177	9.99999	0.3778	0.2329	-0.0381	0.2179	-0.1506	0.9101
77	42.07	0.10	-1.63525	9.99999	-0.53102	9.99999	0.3773	0.2190	-0.0332	0.2069	-0.1514	0.9447
78	42.27	0.09	-1.63430	9.99999	-0.53071	9.99999	0.3774	0.2316	-0.0316	0.2116	-0.1362	0.9135
79	42.48	0.09	-1.63353	9.99999	-0.53054	9.99999	0.3774	0.2471	-0.0302	0.2174	-0.1224	0.8797
80	42.68	0.08	-1.63356	9.99999	-0.53037	9.99999	0.3771	0.2452	-0.0309	0.2139	-0.1078	0.8722
81	42.83	0.08	-1.63201	9.99999	-0.53003	9.99999	0.3765	0.2541	-0.0242	0.2142	-0.0961	0.8495
82	43.04	0.09	-1.63096	9.99999	-0.49941	9.99999	0.3773	0.2303	-0.0219	0.2134	-0.0856	0.8402
83	43.22	0.09	-1.63239	9.99999	-0.49594	9.99999	0.3772	0.2282	-0.0236	0.2013	-0.1054	0.8902
84	43.39	0.09	-1.63037	9.99999	-0.49712	9.99999	0.3780	0.2420	-0.0209	0.2038	-0.0844	0.8411
85	43.58	0.08	-1.63012	9.99999	-0.49395	9.99999	0.3785	0.2329	-0.0182	0.1958	-0.0783	0.8409
86	43.78	0.08	-1.62995	9.99999	-0.49503	9.99999	0.3774	0.2372	-0.0180	0.1965	-0.0676	0.8371
87	43.93	0.09	-1.63013	9.99999	-0.49712	9.99999	0.3775	0.2313	-0.0143	0.1912	-0.0619	0.8268
88	44.13	0.08	-1.62870	9.99999	-0.49848	9.99999	0.3767	0.2201	-0.0123	0.1828	-0.0545	0.8078
89	44.30	0.09	-1.63020	9.99999	-0.49954	9.99999	0.3778	0.2380	-0.0130	0.1922	-0.0552	0.8146
90	44.47	0.08	-1.62749	9.99999	-0.49304	9.99999	0.3780	0.1973	-0.0120	0.1596	-0.0609	0.8087
91	44.68	0.08	-1.62842	9.99999	-0.49857	9.99999	0.3782	0.2193	-0.0113	0.1820	-0.0525	0.8301
92	44.85	0.07	-1.62870	9.99999	-0.49884	9.99999	0.3777	0.2004	-0.0121	0.1675	-0.0605	0.8357

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-G PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 81 1.10 1.7 90.0 BINARIES 0.0 0 0 0 0 UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CA3	ALPF3	YCPF3	CNF4	CM4	CA4	XLPF4	YCPF4
93	45.02	0.01	-1.2681	0.0000	-0.4069	0.9999	0.3760	0.2584	-0.0099	0.1750	-0.0481	0.8384
94	45.43	0.01	-1.2672	0.0000	-0.4011	0.9999	0.3775	0.1740	-0.0007	0.1588	-0.0251	0.8312
95	45.90	0.01	-1.2580	0.0000	-0.4149	0.9999	0.3775	0.1611	-0.0039	0.1462	-0.0326	0.8181
96	45.31	0.01	-1.2664	0.0000	-0.4184	0.9999	0.3778	0.1779	-0.0046	0.1492	-0.0270	0.8385
97	45.15	0.01	-1.2645	0.0000	-0.4003	0.9999	0.3784	0.1697	-0.0066	0.1151	-0.0510	0.8886
98	45.53	0.00	-1.2584	0.0000	-0.4152	0.9999	0.3777	0.1585	-0.0039	0.1356	-0.0373	0.8577
99	46.12	0.00	-1.2783	0.0000	-0.4052	0.9999	0.3796	0.1595	-0.0053	0.1371	-0.0333	0.8594
100	46.27	0.01	-1.2764	0.0000	-0.4195	0.9999	0.3780	0.1605	-0.0039	0.1288	-0.0267	0.8790
101	46.45	0.01	-1.2741	0.0000	-0.4110	0.9999	0.3788	0.1604	-0.0039	0.1257	-0.0267	0.8564
102	46.84	0.00	-1.2708	0.0000	-0.4115	0.9999	0.3779	0.1600	-0.0046	0.1053	-0.0419	0.9572
103	46.82	0.00	-1.2783	0.0000	-0.4045	0.9999	0.3790	0.1619	-0.0036	0.1124	-0.0312	0.9220
104	46.99	0.00	-1.2764	0.0000	-0.4091	0.9999	0.3790	0.1630	-0.0032	0.0973	-0.0345	1.0463
105	47.15	0.01	-1.2684	0.0000	-0.4191	0.9999	0.3790	0.1648	-0.0013	0.0972	-0.0137	1.0253
106	47.33	0.00	-1.2678	0.0000	-0.4195	0.9999	0.3785	0.1609	-0.0015	0.0859	-0.0192	1.0958
107	47.52	0.01	-1.2780	0.0000	-0.4044	0.9999	0.3780	0.1601	0.0008	0.0905	0.0091	1.0273
108	47.68	0.05	-1.2771	0.0000	-0.4046	0.9999	0.3790	0.1602	-0.0005	0.0892	-0.0058	1.0346
109	47.89	0.00	-1.2695	0.0000	-0.4025	0.9999	0.3790	0.1630	-0.0030	0.0801	-0.0122	1.2177
110	48.02	0.01	-1.2661	0.0000	-0.4098	0.9999	0.3807	0.1710	-0.0031	0.0836	0.0013	1.0774
111	48.20	0.00	-1.2771	0.0000	-0.4046	0.9999	0.3796	0.1641	-0.0005	0.0827	-0.0147	1.8358
112	48.35	0.00	-1.2722	0.0000	-0.4052	0.9999	0.3790	0.1660	0.0005	0.0863	0.0109	1.4423
113	48.53	0.00	-1.2677	0.0000	-0.4010	0.9999	0.3795	0.1644	0.0014	0.0595	0.0407	1.7267
114	48.72	0.00	-1.2680	0.0000	-0.4014	0.9999	0.3794	0.1692	0.0044	0.0603	0.0494	0.9001
115	48.88	0.00	-1.2660	0.0000	-0.4008	0.9999	0.3805	0.1682	0.0024	0.0715	0.0399	1.1847
116	49.05	0.00	-1.2680	0.0000	-0.4005	0.9999	0.3799	0.1737	0.0025	0.0734	0.0340	0.9959
117	49.21	0.01	-1.2696	0.0000	-0.4022	0.9999	0.3796	0.1698	0.0049	0.0807	0.0492	0.8084
118	49.37	0.01	-1.2661	0.0000	-0.4013	0.9999	0.3803	0.1713	0.0055	0.0766	0.0603	0.8388
119	49.51	0.00	-1.2737	0.0000	-0.4034	0.9999	0.3795	0.1725	0.0039	0.0728	0.0964	0.7868
120	49.73	0.01	-1.2556	0.0000	-0.4276	0.9999	0.3804	0.1933	0.0101	0.0731	0.1084	0.7833
121	49.92	0.01	-1.2746	0.0000	-0.4054	0.9999	0.3806	0.1695	0.0107	0.0597	0.1542	0.8588
122	50.10	0.01	-1.2730	0.0000	-0.4066	0.9999	0.3800	0.1692	0.0120	0.0489	0.2722	1.0612
123	50.27	0.01	-1.2803	0.0000	-0.4760	0.9999	0.3793	0.1656	0.0123	0.0406	0.3456	1.1404
124	50.45	0.01	-1.2712	0.0000	-0.4021	0.9999	0.3797	0.1681	0.0138	0.0368	0.3845	1.3096
125	50.61	0.01	-1.2676	0.0000	-0.4019	0.9999	0.3802	0.1650	0.0096	0.0264	0.7062	2.0882
126	50.79	0.01	-1.2773	0.0000	-0.4036	0.9999	0.3802	-0.0160	0.0028	0.0161	-0.1751	-1.0062
127	50.96	0.01	-1.3078	0.0000	-0.4380	0.9999	0.3802	-0.0360	-0.0010	0.0094	0.0278	-0.2611
128	51.13	0.00	-1.3031	0.0000	-0.4306	0.9999	0.3809	-0.0387	-0.0016	0.0072	0.0310	-0.1860
129	51.30	0.00	-1.2832	0.0000	-0.4278	0.9999	0.3801	-0.0362	-0.0037	0.0074	0.0193	-0.2044
130	51.49	0.00	-1.3026	0.0000	-0.4025	0.9999	0.3806	-0.0517	-0.0031	0.0019	0.0601	-0.0368
131	51.63	0.00	-1.3169	0.0000	-0.3929	0.9999	0.3811	-0.0445	-0.0027	0.0028	0.0582	-0.0603
132	51.82	0.00	-1.3502	0.0000	-0.3149	0.9999	0.3814	-0.0615	-0.0057	-0.0033	0.0429	0.0537
133	51.98	0.00	-1.3330	0.0000	-0.3970	0.9999	0.3806	-0.0485	-0.0014	0.0014	0.0289	-0.0249
134	52.14	0.00	-1.3429	0.0000	-0.3106	0.9999	0.3802	-0.0421	-0.0005	0.0028	0.0067	-0.0622
135	52.30	0.00	-1.3462	0.0000	-0.3057	0.9999	0.3796	-0.0499	-0.0010	0.0006	0.0362	0.0161
136	52.48	0.00	-1.3491	0.0000	-0.3122	0.9999	0.3814	-0.0430	0.0010	0.0022	-0.0233	-0.0513
137	52.65	0.00	-1.3408	0.0000	-0.3138	0.9999	0.3815	-0.0414	0.0005	0.0017	-0.0121	-0.0412
138	52.81	0.00	-1.3346	0.0000	-0.3080	0.9999	0.3806	-0.0293	0.0013	0.0047	-0.0444	-0.1604

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO= PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 01 1.10 0.7 45.0 PLANFIX 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CY3	CA3	ALPF3	YLPF3	CNF4	CM4	CA4	ALPF4	YLPF4
139	32.98	0.00	-1.3395	0.0000	-0.0509	0.0000	0.3803	-0.0289	0.0035	0.0057	-0.0173	-0.1972
140	33.47	0.04	-1.3561	0.0000	-0.0485	0.0000	0.3806	-0.0277	0.0019	0.0063	-0.0137	-0.1775
141	33.93	0.05	-1.3719	0.0000	-0.0460	0.0000	0.3788	-0.0268	0.0026	0.0044	-0.2594	-0.1764
142	33.50	0.05	-1.3490	0.0000	-0.0135	0.0000	0.3805	-0.0265	0.0000	0.0001	-0.0255	-0.2990
143	33.00	0.00	-1.3241	0.0000	-0.0502	0.0000	0.3800	-0.0119	0.0025	0.0077	-0.1934	-0.6471
144	33.03	0.05	-1.3387	0.0000	-0.0506	0.0000	0.3796	-0.0105	0.0020	0.0062	-0.1906	-0.5905
145	33.98	0.04	-1.3275	0.0000	-0.0324	0.0000	0.3784	-0.0062	0.0017	0.0060	-0.2743	-1.2903
146	34.45	0.03	-1.3442	0.0000	-0.0274	0.0000	0.3810	-0.0156	0.0012	0.0052	-0.0770	-0.3388
147	34.93	0.05	-1.3603	0.0000	-0.0307	0.0000	0.3800	-0.0209	0.0008	0.0017	-0.0383	-0.0613
148	34.44	0.03	-1.3444	0.0000	-0.0434	0.0000	0.3792	-0.0172	0.0014	0.0026	-0.0814	-0.1512
149	34.02	0.02	-1.3271	0.0000	-0.0263	0.0000	0.3795	-0.0210	0.0000	0.0001	-0.0381	-0.0648
150	34.76	0.04	-1.3833	0.0000	-0.0260	0.0000	0.3803	-0.0209	0.0003	-0.0004	-0.0144	0.0191
151	34.92	0.04	-1.3784	0.0000	-0.0241	0.0000	0.3803	-0.0134	0.0010	0.0014	-0.0544	-0.0761
152	35.00	0.03	-1.4113	0.0000	-0.0384	0.0000	0.3814	-0.0197	0.0006	0.0004	-0.0406	-0.0102
153	35.42	0.04	-1.4056	0.0000	-0.0350	0.0000	0.3806	-0.0237	0.0005	-0.0017	-0.0211	0.0717
154	35.38	0.04	-1.4105	0.0000	-0.0343	0.0000	0.3807	-0.0236	0.0006	-0.0001	-0.0036	0.0042
155	35.82	0.04	-1.4118	0.0000	-0.0376	0.0000	0.3807	-0.0160	0.0	-0.0003	0.0	0.0167
156	35.87	0.04	-1.4024	0.0000	-0.0304	0.0000	0.3810	-0.0237	0.0003	-0.0022	-0.0127	0.0926
157	35.85	0.04	-1.4195	0.0000	-0.0419	0.0000	0.3817	-0.0249	-0.0001	-0.0023	0.0040	0.0924
158	36.02	0.03	-1.4209	0.0000	-0.0330	0.0000	0.3814	-0.0263	-0.0001	-0.0019	0.0038	0.0726
159	36.19	0.04	-1.4269	0.0000	-0.0410	0.0000	0.3817	-0.0248	-0.0003	-0.0024	0.0121	0.0968
160	36.34	0.02	-1.4333	0.0000	-0.0458	0.0000	0.3820	-0.0234	-0.0003	-0.0012	0.0126	0.0513
161	36.30	0.03	-1.4307	0.0000	-0.0404	0.0000	0.3820	-0.0244	-0.0001	-0.0025	0.0451	0.1025
162	36.85	0.03	-1.4243	0.0000	-0.0406	0.0000	0.3797	-0.0247	-0.0000	-0.0024	0.0243	0.0972
163	36.84	0.02	-1.4431	0.0000	-0.0493	0.0000	0.3801	-0.0256	-0.0015	-0.0021	0.0586	0.0820
164	36.97	0.03	-1.4240	0.0000	-0.0423	0.0000	0.3806	-0.0194	0.0	-0.0014	0.0	0.0722
165	37.12	0.04	-1.4315	0.0000	-0.0448	0.0000	0.3806	-0.0236	-0.0001	-0.0025	0.0042	0.1186
166	37.45	0.03	-1.4477	0.0000	-0.0440	0.0000	0.3810	-0.0237	0.0001	-0.0038	-0.0042	0.1603
167	37.45	-0.00	-1.4613	0.0000	-0.0369	0.0000	0.3814	-0.0231	-0.0010	-0.0029	0.0433	0.1255
168	37.39	0.03	-1.4534	0.0000	-0.0303	0.0000	0.3811	-0.0196	0.0002	-0.0029	-0.0102	0.1480
169	37.75	0.10	-1.4327	0.0000	-0.0454	0.0000	0.3807	-0.0260	0.0019	-0.0052	-0.0731	0.2000
170	37.91	0.03	-1.4424	0.0000	-0.0324	0.0000	0.3805	-0.0181	0.0002	-0.0013	-0.0111	0.0718
171	38.03	0.02	-1.4567	0.0000	-0.0340	0.0000	0.3807	-0.0247	0.0019	-0.0057	-0.0770	0.2308
172	38.13	0.00	-1.4561	0.0000	-0.0315	0.0000	0.3802	-0.0224	0.0020	-0.0064	-0.1250	0.2657
173	38.33	0.06	-1.4433	0.0000	-0.0301	0.0000	0.3811	-0.0247	0.0020	-0.0056	-0.0810	0.2267
174	38.48	0.01	-1.4444	0.0000	-0.0311	0.0000	0.3815	-0.0279	0.0020	-0.0079	-0.0932	0.2852
175	38.59	0.03	-1.4520	0.0000	-0.0337	0.0000	0.3813	-0.0262	0.0022	-0.0066	-0.0840	0.2595
176	38.63	0.05	-1.4459	0.0000	-0.0275	0.0000	0.3813	-0.0261	0.0020	-0.0094	-0.1068	0.3345
177	38.80	0.03	-1.4486	0.0000	-0.0295	0.0000	0.3801	-0.0261	0.0020	-0.0089	-0.1068	0.3167
178	38.80	0.04	-1.4463	0.0000	-0.0305	0.0000	0.3808	-0.0252	0.0020	-0.0076	-0.1112	0.3016
179	37.93	0.03	-1.4160	0.0000	-0.0307	0.0000	0.3799	-0.0193	0.0017	-0.0051	-0.1043	0.3129

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 5
SHEET 1 OF 4

MARTIA MISSILE TAILS EFFECTS DATA

TEST PART MACH AXIS-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 02 1.10 1.7 0.0 BANDED 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CA	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.79	0.02	-0.0514	1.9181	0.0481	-0.1305	0.0	0.5321	0.2331	0.2990	-2.3070
2	-5.81	-0.00	-0.0476	1.9641	-0.0333	-0.0334	-0.0033	0.5240	0.2316	0.2984	-2.1969
3	-5.84	0.00	-0.0534	1.9429	0.0410	-0.1735	0.0057	0.5338	0.2323	0.3015	-2.2471
4	-5.09	0.00	-0.0463	1.9167	0.0084	-0.2137	0.0006	0.5402	0.2405	0.3197	-2.3373
5	-5.03	0.01	-0.0358	0.0763	0.2103	-0.2907	0.0070	0.5435	0.2217	0.3218	-2.3151
6	-6.11	-0.00	0.0000	0.0000	0.0000	-0.1496	0.0174	0.5009	0.2242	0.3367	-3.0015
7	0.00	0.00	0.1409	-0.1413	0.1113	-0.2225	0.0023	0.5617	0.2248	0.3369	-1.0030
8	0.99	-0.00	0.4446	-0.1723	0.0370	-0.1321	0.0030	0.5734	0.2347	0.3387	-1.7307
9	0.02	-0.01	0.7230	-1.3476	0.0212	-0.1296	0.0035	0.5667	0.2534	0.3363	-1.9315
10	0.99	0.00	1.0109	-2.0014	0.0008	-0.1470	0.0043	0.5700	0.2681	0.3279	-2.0731
11	0.01	-0.00	1.0973	-2.2103	0.0092	-0.1082	0.0040	0.5939	0.2875	0.3084	-2.1896
12	10.09	0.00	1.0710	-2.3193	0.1152	-0.1010	0.0037	0.5975	0.3023	0.2953	-2.2139
13	12.03	0.00	2.0304	-2.2483	0.0124	-0.0939	0.0120	0.5987	0.3174	0.2793	-2.2272
14	14.08	-0.00	2.0100	-2.0303	0.0014	-0.0937	0.0073	0.5924	0.3241	0.2643	-2.1623
15	16.02	-0.01	3.0142	-1.8015	-0.0103	-0.1175	0.0133	0.5953	0.3417	0.2536	-2.0943
16	19.00	-0.01	3.0504	-1.0200	-0.0191	0.0209	-0.0021	0.5976	0.3574	0.2402	-1.9824
17	22.03	-0.00	4.0707	-1.3491	0.0210	0.0243	-0.0114	0.5879	0.3652	0.2227	-1.8040
18	23.09	0.01	4.0001	-1.0622	0.1194	-0.1704	0.0030	0.5707	0.3666	0.2041	-1.5958
19	25.13	0.02	5.2710	-1.3736	0.3483	-0.0579	0.0179	0.5703	0.3756	0.1945	-1.3971
20	27.20	0.03	5.2012	-1.3042	0.0032	-1.5773	0.1125	0.5742	0.3873	0.1829	-1.2712
21	28.93	0.03	6.2403	-1.3238	0.7000	-1.4003	0.0909	0.5811	0.3953	0.1858	-1.2056
22	29.95	0.03	6.2451	-1.0220	0.7170	-1.3090	0.1234	0.5734	0.3901	0.1773	-1.2108
23	29.72	0.03	6.2062	-1.0348	0.6358	-1.4215	0.1252	0.5760	0.3972	0.1808	-1.1852
24	29.03	0.03	6.2723	-1.0304	0.7419	-1.5713	0.1322	0.5705	0.3987	0.1718	-1.1621
25	29.37	0.01	6.0391	-1.7175	0.6213	-1.6406	0.1495	0.5590	0.4006	0.1584	-1.1624
26	29.00	0.00	6.1314	-1.0455	0.0991	-1.5134	0.1213	0.5670	0.4015	0.1657	-1.1358
27	29.98	0.04	6.0734	-1.0142	0.4940	-0.7348	0.0965	0.5694	0.4026	0.1662	-1.1235
28	30.26	0.03	6.0715	-1.0195	0.3981	-0.4831	0.0900	0.5729	0.3999	0.1560	-1.1058
29	30.39	0.04	7.1760	-1.1870	0.4915	-0.5502	0.0879	0.5635	0.4038	0.1577	-1.0851
30	30.81	0.03	7.2066	-1.1900	0.4066	-0.4758	0.0705	0.5630	0.4047	0.1565	-1.0709
31	31.09	0.03	7.2044	-1.0740	0.3524	-0.4030	0.0834	0.5580	0.4042	0.1538	-1.0634
32	31.38	0.01	7.2066	-1.0069	0.1203	0.2768	0.0304	0.5524	0.4042	0.1487	-1.0480
33	31.69	0.01	7.2626	-1.1860	0.1061	0.3719	0.0305	0.5591	0.4050	0.1541	-1.0291
34	31.92	0.01	7.2324	-1.0343	0.0236	0.5916	0.0020	0.5679	0.4134	0.1575	-1.0240
35	32.23	0.00	7.1814	-1.1970	-0.0708	0.6910	0.0126	0.5651	0.4130	0.1501	-1.0020
36	32.47	-0.00	7.2014	-1.0262	-0.0257	0.7153	0.0230	0.5592	0.4140	0.1452	-1.0196
37	32.72	-0.01	7.2211	-1.0767	-0.1567	1.0343	-0.0343	0.5567	0.4106	0.1421	-0.9984
38	32.99	-0.02	8.0163	-1.0910	-0.2077	1.0106	-0.0342	0.5655	0.4215	0.1442	-0.9832
39	33.20	-0.01	8.1374	-1.0944	-0.2361	1.0894	-0.0323	0.5629	0.4249	0.1380	-0.9738
40	33.52	-0.02	8.2301	-1.0506	-0.3304	1.0744	-0.0211	0.5570	0.4290	0.1280	-0.9650
41	33.77	-0.01	8.2160	-1.0762	-0.2015	1.0332	-0.0265	0.5693	0.4346	0.1349	-0.9528
42	34.04	-0.01	8.2120	-1.0217	-0.2933	1.0344	-0.0292	0.5548	0.4297	0.1249	-0.9365
43	34.27	-0.01	8.2434	-0.1021	-0.2759	1.0368	-0.0295	0.5532	0.4389	0.1213	-0.9578
44	34.53	-0.02	8.2301	-0.1262	-0.2073	1.0394	-0.0422	0.5726	0.4395	0.1331	-0.9394
45	34.81	-0.04	8.0535	-0.0342	-0.0495	1.0752	-0.0385	0.5574	0.4391	0.1183	-0.9321
46	35.04	-0.02	8.0024	-0.2179	-0.2077	1.0008	-0.0746	0.5555	0.4346	0.1207	-0.9451

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE FAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 02 1.610 1.0 0.0 BLANKETS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	35.26	-0.03	0.7037	-0.3305	-0.3582	1.3557	-0.0745	0.5542	0.4395	0.1247	-0.9279
48	35.54	-0.02	0.7033	-0.3276	-0.3462	1.4130	-0.0743	0.5548	0.4373	0.1175	-0.9276
49	35.78	-0.01	0.7031	-0.3338	-0.3574	1.2870	-0.0733	0.5446	0.4377	0.1071	-0.9149
50	36.02	-0.02	0.7041	-0.3342	-0.3558	1.2709	-0.0754	0.5496	0.4391	0.1097	-0.9024
51	36.25	-0.03	0.7056	-0.3342	-0.3650	1.1154	-0.0659	0.5340	0.4337	0.1003	-0.9023
52	36.50	-0.03	0.7047	-0.3463	-0.3230	0.8089	-0.0481	0.5357	0.4393	0.0964	-0.8947
53	36.72	0.00	0.7135	-0.3691	-0.3060	0.7693	-0.0736	0.5330	0.4280	0.1050	-0.8956
54	36.97	-0.01	0.6777	-0.3847	-0.4951	1.0914	-0.0819	0.5357	0.4309	0.1048	-0.8922
55	37.21	-0.02	0.6883	-0.3543	-0.3710	1.2080	-0.0764	0.5369	0.4262	0.1127	-0.8912
56	37.45	-0.02	0.6906	-0.3397	-0.2813	1.3340	-0.0727	0.5176	0.4204	0.0972	-0.8780
57	37.70	-0.02	0.6940	-0.3490	-0.2033	1.0736	-0.0748	0.5203	0.4248	0.1015	-0.8780
58	37.93	-0.02	0.6724	-0.3071	-0.1837	0.7208	-0.0688	0.5307	0.4219	0.1088	-0.8791
59	38.15	-0.01	0.6743	-0.3163	-0.1337	0.9332	-0.0506	0.5160	0.4182	0.0998	-0.8751
60	38.40	0.00	0.6773	-0.3492	0.0203	0.7897	-0.1013	0.5179	0.4136	0.1073	-0.8523
61	38.64	-0.01	0.6797	-0.3653	-0.0714	0.3923	-0.0488	0.5167	0.4162	0.1005	-0.8648
62	38.88	0.00	0.6743	-0.3574	0.1372	0.4774	-0.0820	0.5026	0.4105	0.0880	-0.8455
63	39.10	-0.01	0.6917	-0.3686	0.0221	0.4134	-0.0301	0.4881	0.4100	0.0780	-0.8340
64	39.32	-0.01	0.6931	-0.3740	0.0001	0.2795	-0.0527	0.4811	0.4092	0.0718	-0.8333
65	39.54	-0.01	0.6959	-0.3808	0.0591	0.1591	-0.0331	0.4973	0.4077	0.0895	-0.8359
66	39.77	-0.03	0.6920	-0.3719	-0.0820	0.1818	-0.0370	0.4874	0.3990	0.0883	-0.8234
67	40.01	-0.04	0.7174	-0.3815	-0.1198	0.1459	-0.0307	0.4948	0.4017	0.0961	-0.8213
68	40.27	0.02	0.7019	-0.3830	0.0453	-0.3737	-0.0444	0.5000	0.4079	0.0920	-0.7927
69	40.47	-0.04	0.6931	-0.3755	0.0565	-0.0364	-0.0168	0.4851	0.3963	0.0888	-0.8130
70	40.63	-0.01	0.6930	-0.3712	0.1412	-0.1001	-0.0277	0.4814	0.4025	0.0788	-0.8227
71	40.82	-0.02	0.6944	-0.3785	0.1260	-0.1433	-0.0328	0.4585	0.3952	0.0633	-0.7995
72	41.04	-0.02	0.6974	-0.3853	0.0749	-0.0051	-0.0161	0.4809	0.3965	0.0724	-0.7994
73	41.29	-0.01	0.6821	-0.3779	0.1911	-0.2441	-0.0154	0.4503	0.3885	0.0618	-0.7866
74	41.44	-0.03	0.6987	-0.3864	-0.0285	0.0749	-0.0130	0.4617	0.3933	0.0684	-0.7988
75	41.68	-0.02	0.6950	-0.3801	0.0031	0.0314	-0.0107	0.4646	0.3859	0.0789	-0.7786
76	41.89	-0.02	0.6990	-0.3843	0.0204	-0.0003	0.0192	0.4283	0.3841	0.0442	-0.7533
77	42.07	-0.03	0.6979	-0.3867	0.1307	-0.2440	-0.0305	0.4487	0.3895	0.0592	-0.7603
78	42.26	-0.03	0.6913	-0.3850	-0.0024	-0.0130	0.0028	0.4479	0.3886	0.0593	-0.7664
79	42.48	-0.02	0.6929	-0.3908	0.1393	-0.2430	0.0091	0.4491	0.3856	0.0635	-0.7463
80	42.67	-0.03	0.6977	-0.3911	0.1421	-0.1979	-0.0135	0.4457	0.3838	0.0619	-0.7543
81	42.85	-0.02	0.7120	-0.3966	0.0031	-0.0725	-0.0150	0.4472	0.3874	0.0598	-0.7556
82	43.04	-0.02	0.7004	-0.3980	0.0378	-0.0292	-0.0413	0.4408	0.3848	0.0560	-0.7556
83	43.23	-0.02	0.7059	-0.3965	0.1708	-0.3620	0.0214	0.4217	0.3771	0.0446	-0.7290
84	43.43	-0.03	0.6966	-0.3967	0.0243	-0.0480	-0.0353	0.4320	0.3803	0.0517	-0.7347
85	43.58	-0.02	0.6919	-0.3993	0.1120	-0.1693	-0.0307	0.4089	0.3829	0.0260	-0.7123
86	43.78	-0.02	0.6979	-0.3973	0.1712	-0.3035	0.0126	0.4280	0.3793	0.0495	-0.7251
87	43.99	-0.02	0.6942	-0.4110	0.1250	0.2743	-0.0329	0.4540	0.3823	0.0721	-0.6846
88	44.13	-0.02	0.6787	-0.3955	0.1908	-0.3478	0.0171	0.4114	0.3726	0.0368	-0.7049
89	44.29	-0.03	0.6931	-0.3910	0.1749	-0.0845	0.0348	0.4067	0.3748	0.0319	-0.6944
90	44.49	-0.03	0.6905	-0.3854	0.1210	-0.0901	0.0232	0.4038	0.3797	0.0241	-0.7066
91	44.67	-0.02	0.6909	-0.3799	0.1820	-0.2394	-0.0106	0.4103	0.3768	0.0412	-0.7070
92	44.84	-0.03	0.6985	-0.3900	0.1207	-0.0020	0.0077	0.4226	0.3815	0.0411	-0.6874

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 82 1.10 1.7 0.0 SINGLE 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	45.00	-0.03	12.5046	-0.5275	0.1427	-0.3007	0.0079	0.4260	0.3691	0.0399	-0.6099
94	45.23	-0.03	12.5006	-0.5346	0.0107	0.0292	-0.0095	0.4127	0.3626	0.0391	-0.6011
95	45.35	-0.02	12.5000	-0.5855	0.1433	-0.2597	0.0023	0.4108	0.3804	0.0304	-0.6931
96	45.27	-0.03	12.6131	-0.5572	0.1303	-0.3427	0.0255	0.4099	0.3607	0.0292	-0.6765
97	45.15	-0.02	12.6193	-0.4230	0.1779	-0.4911	0.0259	0.4273	0.3835	0.0388	-0.6675
98	45.35	-0.03	12.7422	-0.5290	-0.0016	0.1307	-0.0091	0.4240	0.3947	0.0299	-0.6094
99	46.12	-0.03	12.7560	-0.4920	0.3245	0.4352	-0.0320	0.4450	0.3951	0.0499	-0.6500
100	46.27	-0.02	12.7743	-0.5008	0.1473	0.0200	0.0035	0.4324	0.3943	0.0411	-0.6545
101	46.47	-0.03	12.8342	-0.1954	0.0230	0.2733	-0.0039	0.4304	0.4028	0.0276	-0.6379
102	46.33	-0.03	12.8242	-0.3440	-0.0264	0.3603	-0.0274	0.4345	0.3973	0.0372	-0.6504
103	46.02	-0.03	12.9089	-0.1470	0.0341	0.1350	0.0035	0.4228	0.4012	0.0216	-0.6273
104	46.47	-0.02	13.0043	-0.0355	0.1341	0.2252	-0.0158	0.4302	0.3906	0.0334	-0.6179
105	47.13	-0.03	12.9999	-0.4480	-0.0415	0.7965	-0.0328	0.4454	0.4054	0.0400	-0.6112
106	47.34	-0.03	13.0830	-0.1746	-0.0052	0.8104	-0.0324	0.4388	0.4081	0.0345	-0.5929
107	47.50	-0.04	13.0077	-0.0710	-0.0332	0.7330	-0.0342	0.4408	0.4042	0.0300	-0.5897
108	47.07	-0.04	13.2119	-0.7571	-0.0316	0.7051	-0.0317	0.4156	0.4019	0.0157	-0.5071
109	47.05	-0.03	13.2165	-0.0343	-0.0104	0.5443	-0.0306	0.4202	0.4137	0.0145	-0.5776
110	48.02	-0.03	13.1015	-0.0346	-0.1103	0.7504	-0.0316	0.4158	0.4083	0.0075	-0.5716
111	46.19	-0.04	13.3423	-0.7098	-0.0327	0.7571	-0.0142	0.4349	0.4136	0.0193	-0.5787
112	46.35	-0.03	13.3460	-0.0754	-0.1153	1.0331	-0.0036	0.4349	0.4083	-0.0034	-0.5750
113	46.54	-0.04	13.4804	-0.0001	-0.1566	1.1733	0.0249	0.4185	0.4006	0.0179	-0.5562
114	48.70	-0.03	13.4116	-0.7407	-0.0242	0.7435	0.0032	0.4301	0.4039	0.0262	-0.5778
115	46.07	-0.05	13.4130	-0.1414	-0.2016	1.2366	0.0420	0.3910	0.3984	-0.0074	-0.5323
116	49.03	-0.03	13.5358	-0.1022	-0.0200	0.9655	0.0466	0.3943	0.3979	-0.0036	-0.5291
117	49.20	-0.02	13.4362	-0.7501	0.0209	0.5015	0.0487	0.3678	0.3832	-0.0156	-0.5024
118	49.36	-0.02	13.3041	-0.3652	0.0701	0.9884	0.0534	0.3626	0.3803	-0.0177	-0.4936
119	49.34	-0.03	13.4825	-0.0875	-0.0225	0.9490	0.0547	0.3793	0.3796	-0.0005	-0.5101
120	49.71	-0.00	13.5049	-0.9500	0.1470	1.0339	0.0404	0.3617	0.3805	-0.0188	-0.5151
121	49.90	-0.00	13.7934	-1.4582	0.2265	0.8872	0.0495	0.3606	0.3650	-0.0044	-0.5407
122	50.06	-0.01	13.6944	-0.7031	0.1029	1.0177	0.0460	0.3309	0.3710	-0.0401	-0.4967
123	50.24	-0.00	13.8612	-1.1069	0.2134	1.0372	0.0483	0.3511	0.3769	-0.0258	-0.5191
124	50.40	-0.01	13.7403	-1.0541	0.1965	0.9500	0.0494	0.3545	0.3799	-0.0254	-0.5331
125	50.58	-0.00	13.7927	-1.1532	0.2023	0.9820	0.0493	0.3519	0.3751	-0.0232	-0.5208
126	50.78	0.01	13.7543	-0.8913	0.3335	1.0000	0.0491	0.3407	0.3684	-0.0277	-0.5009
127	50.92	-0.01	13.8920	-1.2055	0.2240	1.0283	0.0494	0.3427	0.3714	-0.0287	-0.5244
128	51.09	0.01	13.8592	-0.9911	0.3314	0.8890	0.0497	0.3344	0.3683	-0.0339	-0.5044
129	51.26	0.01	13.9373	-1.0525	0.3091	0.9936	0.0505	0.3249	0.3564	-0.0315	-0.5089
130	51.43	0.00	14.0342	-1.1537	0.3403	0.7945	0.0507	0.3256	0.3673	-0.0417	-0.5090
131	51.62	0.01	14.0302	-1.1901	0.4386	0.8831	0.0481	0.3219	0.3706	-0.0487	-0.5179
132	51.79	0.01	14.0222	-1.1781	0.4091	0.8634	0.0519	0.3106	0.3680	-0.0574	-0.5146
133	51.95	0.00	14.0335	-1.1861	0.4720	0.8197	0.0513	0.3044	0.3650	-0.0606	-0.5107
134	52.12	0.01	14.0320	-1.2333	0.4756	0.8464	0.0490	0.2908	0.3620	-0.0660	-0.5041
135	52.28	0.01	14.0492	-1.2085	0.4537	0.8525	0.0514	0.2947	0.3479	-0.0532	-0.4991
136	52.46	0.00	14.0454	-1.1466	0.4102	0.7965	0.0461	0.2933	0.3475	-0.0542	-0.5100
137	52.61	0.00	14.0390	-1.1934	0.4473	0.8303	0.0413	0.2931	0.3493	-0.0506	-0.4997
138	52.79	0.00	14.0459	-0.9927	0.3084	0.8528	0.0281	0.2795	0.3448	-0.0652	-0.4811

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH MACH-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 66 1.60 1.7 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.93	-0.00	14.3071	-0.7240	0.0017	0.0995	0.0316	0.2715	0.3415	-0.0699	-0.4700
140	53.11	-0.00	14.5336	-6.9993	0.0179	0.1020	0.0370	0.2654	0.3396	-0.0741	-0.4809
141	53.29	-0.00	14.3596	-6.9870	0.0021	0.1012	0.0321	0.2824	0.3444	-0.0619	-0.4600
142	53.49	-0.01	14.4017	-6.7000	0.0005	0.1028	0.0312	0.2505	0.3446	-0.0002	-0.4708
143	53.61	-0.01	14.4784	-6.6951	0.0033	0.1004	0.0312	0.2541	0.3444	-0.0902	-0.4825
144	53.71	-0.01	14.5004	-6.9271	0.0025	0.1044	0.0315	0.2594	0.3430	-0.0835	-0.4778
145	53.99	-0.01	14.3045	-7.0990	0.0302	0.1003	0.0372	0.2630	0.3497	-0.0866	-0.4872
146	54.07	-0.01	14.4219	-6.8707	0.0333	0.1021	0.0307	0.2534	0.3460	-0.0925	-0.4764
147	54.24	-0.02	14.5274	-7.0283	0.0304	0.1031	0.0315	0.2521	0.3479	-0.0957	-0.4838
148	54.38	-0.01	14.3734	-6.9213	0.0300	0.1000	0.0315	0.2501	0.3445	-0.0943	-0.4813
149	54.54	-0.03	14.2056	-6.9139	0.0278	0.1046	0.0316	0.2539	0.3460	-0.0920	-0.4841
150	54.72	-0.03	14.5030	-7.0520	0.0316	0.1021	0.0321	0.2570	0.3437	-0.1067	-0.4862
151	54.80	-0.03	14.1902	-6.9162	0.0352	0.1044	0.0256	0.2544	0.3290	-0.0945	-0.4875
152	55.01	-0.02	14.3315	-7.1600	0.0216	0.1022	0.0316	0.2556	0.3396	-0.1040	-0.4996
153	55.19	-0.02	14.1555	-7.0101	0.0280	0.1000	0.0311	0.2465	0.3392	-0.1207	-0.4946
154	55.38	-0.03	14.3277	-7.0140	0.0191	0.1034	0.0200	0.2507	0.3434	-0.1067	-0.4962
155	55.45	-0.02	14.1471	-7.1214	0.0305	0.1013	0.0307	0.2522	0.3305	-0.0983	-0.5034
156	55.63	-0.02	14.4094	-7.2230	0.0316	0.1015	0.0201	0.2347	0.3347	-0.1000	-0.5082
157	55.79	-0.01	14.3506	-7.1920	0.0322	0.1023	0.0203	0.2132	0.3336	-0.1204	-0.5126
158	55.95	-0.02	14.3176	-7.1922	0.0316	0.1020	0.0200	0.2230	0.3410	-0.1180	-0.5124
159	56.11	-0.00	14.3970	-7.1853	0.0305	0.1102	0.0256	0.2170	0.3229	-0.1063	-0.5199
160	56.29	-0.01	14.3097	-7.0777	0.0004	-0.0152	0.0207	0.2259	0.3340	-0.1081	-0.5270
161	56.45	-0.02	14.5542	-7.0789	0.2698	0.1170	0.0321	0.2311	0.3295	-0.0984	-0.5276
162	56.60	-0.00	14.3933	-7.0115	0.3022	0.2295	0.0312	0.1809	0.3242	-0.1433	-0.5371
163	56.77	-0.03	14.0070	-7.2034	0.1900	-0.0761	0.0218	0.2025	0.3318	-0.1293	-0.5157
164	56.97	-0.00	13.9311	-7.1302	-0.1072	-0.0641	0.0200	0.1942	0.3328	-0.1386	-0.5136
165	57.11	-0.04	15.0210	-7.5032	-0.0020	-0.1040	0.0400	0.1634	0.3250	-0.1416	-0.5035
166	57.27	-0.06	15.0963	-7.5553	-0.2002	-0.4120	0.0322	0.1777	0.3378	-0.1601	-0.5005
167	57.43	-0.06	15.1661	-7.7197	-0.2069	-0.5200	0.0356	0.1960	0.3457	-0.1477	-0.5083
168	57.58	-0.07	14.9391	-7.6020	-0.2296	-0.0500	0.0400	0.1750	0.3245	-0.1495	-0.5131
169	57.70	-0.05	14.9618	-7.4334	-0.0021	-0.1433	0.0402	0.1920	0.3203	-0.1683	-0.5002
170	57.85	-0.05	14.9003	-7.6017	-0.0775	0.2000	0.0274	0.1917	0.3336	-0.1419	-0.5196
171	57.95	-0.04	14.8504	-7.5150	0.1130	0.1920	0.0307	0.1867	0.3214	-0.1627	-0.5064
172	58.10	-0.04	15.1443	-7.7402	0.0490	0.1572	0.0277	0.1838	0.3394	-0.1756	-0.5221
173	58.50	-0.00	15.2095	-8.0214	0.3401	0.4117	0.0562	0.1369	0.3249	-0.1880	-0.5274
174	58.90	-0.02	15.1311	-7.9700	0.1757	0.1809	0.0357	0.1253	0.3132	-0.1879	-0.5254
175	58.29	-0.04	15.1549	-8.0269	0.3659	0.3330	0.0364	0.1001	0.3260	-0.1859	-0.5295
176	58.03	-0.02	15.2031	-8.1435	0.2481	0.4095	0.0261	0.1495	0.3420	-0.1925	-0.5356
177	58.01	-0.00	14.9957	-7.9275	-0.1982	0.0803	0.0554	0.1358	0.3283	-0.1925	-0.5074

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 02 1.10 1.7 0.0 BINDERS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	DELTA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
1	-5.79	0.02	-0.0015	0.0037	0.0277	-0.0894	-0.6091	-0.2644	-0.0333	-0.1540	0.1169	0.5414
2	-5.81	-0.06	-0.0448	0.0030	0.0237	-0.0000	-0.3745	-0.2816	-0.0347	-0.1542	0.1230	0.5306
3	-5.81	0.00	-0.0480	0.0038	0.0258	-0.0735	-0.5577	-0.2870	-0.0339	-0.1556	0.1180	0.5429
4	-5.04	0.00	-0.0459	0.0042	0.0279	-0.0959	-0.6275	-0.2110	-0.0260	-0.1153	0.1326	0.5492
5	-3.03	0.01	-0.0350	0.0044	0.0280	-0.1149	-0.7179	-0.1004	-0.0182	-0.0835	0.1073	0.5627
6	-1.11	-0.00	-0.0329	0.0047	0.0277	-0.1429	-0.8919	-0.0079	-0.0051	-0.0199	0.0458	2.4557
7	0.80	0.00	-0.0349	0.0037	0.0247	-0.1001	-0.7077	0.0777	0.0056	0.0158	0.0748	0.2036
8	2.89	-0.00	-0.0314	0.0043	0.0237	-0.1370	-0.8485	0.1844	0.0180	0.0525	0.0978	0.3008
9	4.82	-0.01	-0.0387	0.0029	0.0281	-0.0750	-0.6525	0.2858	0.0265	0.0994	0.0999	0.3479
10	6.84	0.00	-0.0318	0.0016	0.0291	-0.0194	-0.4855	0.4055	0.0357	0.1699	0.0885	0.4192
11	8.81	-0.00	-0.0329	0.0002	0.0249	-0.0050	-0.5251	0.5307	0.0336	0.2406	0.0748	0.4538
12	10.89	0.00	-0.0323	0.0004	0.0317	-0.0070	-0.0350	0.6700	0.0399	0.3074	0.0595	0.4568
13	12.85	0.00	-0.0338	0.0002	0.0292	-0.0038	-0.5242	0.7882	0.0391	0.3581	0.0496	0.4544
14	14.88	-0.00	-0.0344	-0.0022	0.0308	0.0371	-0.5100	0.9020	0.0328	0.4055	0.0390	0.4496
15	16.93	-0.01	-0.0450	-0.0083	0.0350	0.0406	-0.4790	0.9873	0.0309	0.4334	0.0312	0.4390
16	19.03	-0.01	-0.0492	-0.0060	0.0149	0.0731	-0.1332	1.0002	0.0200	0.4753	0.0239	0.4349
17	21.03	-0.00	-0.1000	-0.0073	-0.0083	0.0044	0.0704	1.1499	0.0216	0.4963	0.0168	0.4316
18	23.04	0.01	-0.0747	-0.0026	0.0077	0.0349	-0.1032	1.2036	0.0147	0.5163	0.0122	0.4307
19	25.13	0.02	-0.0039	-0.0010	0.0434	0.2305	-11.1026	1.2589	0.0052	0.5369	0.0041	0.4280
20	27.20	0.05	0.0252	0.0138	0.1576	0.0674	0.7092	1.2847	-0.0023	0.5465	-0.0020	0.4276
21	26.45	0.05	0.0297	0.0176	0.1700	0.0710	0.7116	1.2937	-0.0049	0.5503	-0.0038	0.4254
22	26.45	0.05	0.0290	0.0177	0.1757	0.0758	0.7210	1.3059	-0.0046	0.5521	-0.0037	0.4228
23	26.72	0.05	0.0287	0.0158	0.1801	0.0796	0.7864	1.2998	-0.0048	0.5501	-0.0037	0.4233
24	29.03	0.05	0.0290	0.0150	0.1577	0.0770	0.8345	1.2970	-0.0045	0.5466	-0.0035	0.4216
25	29.37	0.07	0.0283	0.0103	0.2015	0.0570	0.7038	1.3131	-0.0060	0.5517	-0.0046	0.4201
26	29.66	0.05	0.0292	0.0131	0.1951	0.0824	0.8484	1.3009	-0.0054	0.5481	-0.0040	0.4195
27	29.96	0.04	0.0287	0.0076	0.0000	0.1100	1.2009	1.3142	-0.0041	0.5493	-0.0031	0.4179
28	30.26	0.03	0.0280	0.0044	0.1672	0.0879	0.9170	1.3147	-0.0031	0.5489	-0.0039	0.4175
29	30.54	0.04	0.0289	0.0060	0.0910	0.1010	1.1037	1.3253	-0.0062	0.5545	-0.0047	0.4184
30	30.81	0.03	0.0275	0.0031	0.0012	0.0099	1.4109	1.3253	-0.0050	0.5509	-0.0042	0.4157
31	31.09	0.03	0.0417	0.0020	0.0735	0.0451	1.7044	1.3357	-0.0046	0.5546	-0.0036	0.4152
32	31.38	0.01	-0.0024	-0.0043	0.0167	0.0402	-0.4214	1.3410	-0.0046	0.5545	-0.0034	0.4135
33	31.64	0.01	-0.0010	-0.0034	0.0243	0.0078	-0.3484	1.3296	-0.0047	0.5480	-0.0035	0.4121
34	31.92	0.01	-0.1005	-0.0073	-0.0004	0.0777	0.0090	1.3426	-0.0044	0.5538	-0.0033	0.4125
35	32.20	0.00	-0.1584	-0.0104	-0.0045	0.0001	0.1509	1.3479	-0.0038	0.5537	-0.0028	0.4108
36	32.47	-0.00	-0.0494	-0.0035	0.0330	0.1110	-0.0594	1.3004	-0.0049	0.5610	-0.0036	0.4106
37	32.72	-0.01	-0.1165	-0.0093	-0.0005	0.0756	0.0042	1.3572	-0.0040	0.5561	-0.0030	0.4097
38	32.99	-0.02	-0.0990	-0.0079	0.0133	0.0793	-0.1354	1.3743	-0.0040	0.5632	-0.0035	0.4098
39	33.20	-0.01	-0.1506	-0.0094	-0.0140	0.0623	0.0771	1.3692	-0.0046	0.5648	-0.0046	0.4125
40	33.52	-0.02	-0.1520	-0.0090	-0.0104	0.0590	0.1073	1.3790	-0.0041	0.5663	-0.0044	0.4119
41	33.77	-0.01	-0.1640	-0.0106	-0.0249	0.0635	0.1398	1.3802	-0.0049	0.5724	-0.0050	0.4129
42	34.04	-0.01	-0.2013	-0.0123	-0.0415	0.0812	0.2059	1.4057	-0.0055	0.5778	-0.0059	0.4110
43	34.27	-0.01	-0.1849	-0.0105	-0.0292	0.0569	0.1561	1.4109	-0.0046	0.5783	-0.0036	0.4099
44	34.53	-0.02	-0.1509	-0.0084	-0.0135	0.0525	0.0843	1.4240	-0.0042	0.5815	-0.0030	0.4084
45	34.81	-0.04	-0.2396	-0.0151	-0.0619	0.0651	0.2503	1.4371	-0.0029	0.5853	-0.0020	0.4075
46	35.09	-0.02	-0.1931	-0.0093	-0.0304	0.0402	0.1576	1.4348	-0.0038	0.5847	-0.0027	0.4075

MARTIN MISSILE TAILS EFFECTS DATA

TEST RMAT MACH RADIO PHI CONF L DELT DELZ DELS DELS TRANSITION
1 CC 1.010 1.01 0.0 BARNES 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	35.20	-0.03	-0.2073	-0.0102	-0.0429	0.0493	0.2088	1.4492	-0.0045	0.5931	-0.0031	0.4072
48	35.09	-0.02	-0.2070	-0.0112	-0.0407	0.0510	0.2143	1.4519	-0.0051	0.5908	-0.0035	0.4069
49	35.10	-0.04	-0.1830	-0.0050	-0.0327	0.0406	0.1764	1.4410	-0.0052	0.5852	-0.0036	0.4060
50	35.02	-0.02	-0.1760	-0.0001	-0.0238	0.0401	0.1554	1.4758	-0.0051	0.5945	-0.0035	0.4056
51	35.03	-0.03	-0.1770	-0.0084	-0.0302	0.0474	0.1702	1.4691	-0.0042	0.5914	-0.0029	0.4037
52	35.00	-0.00	-0.1852	-0.0043	0.0012	0.0409	-0.0065	1.4739	-0.0060	0.5967	-0.0041	0.4049
53	35.02	0.00	-0.2122	-0.0112	-0.0086	0.0529	0.2269	1.4898	-0.0026	0.5923	-0.0025	0.4030
54	35.01	-0.01	-0.1963	-0.0054	-0.0020	0.0511	0.1736	1.4713	-0.0045	0.5919	-0.0031	0.4029
55	35.01	-0.02	-0.1939	-0.0062	-0.0146	0.0433	0.1978	1.4701	-0.0050	0.5902	-0.0034	0.4015
56	35.03	-0.02	-0.2000	-0.0124	-0.0066	0.0536	0.2174	1.4801	-0.0010	0.5960	-0.0007	0.4005
57	35.00	-0.02	-0.1793	-0.0086	-0.0035	0.0480	0.1570	1.4866	-0.0038	0.5909	-0.0026	0.4028
58	35.03	-0.02	-0.1943	-0.0061	-0.0245	0.0520	0.1800	1.4803	-0.0034	0.5956	-0.0023	0.4025
59	35.13	-0.01	-0.1940	-0.0097	-0.0238	0.0631	0.1947	1.4842	-0.0036	0.5962	-0.0026	0.4031
60	35.00	0.00	-0.1838	-0.0105	-0.0200	0.0654	0.1650	1.4817	-0.0045	0.5909	-0.0030	0.4029
61	35.04	-0.01	-0.1823	-0.0060	-0.0092	0.0541	0.0753	1.4985	-0.0024	0.6016	-0.0016	0.4015
62	35.06	0.00	-0.1899	-0.0080	-0.0169	0.0619	0.1429	1.4494	-0.0056	0.5859	-0.0039	0.4029
63	35.11	-0.01	-0.0968	-0.0020	0.0005	0.0600	-0.0531	1.4702	0.0003	0.5911	0.0002	0.4004
64	35.02	-0.01	-0.0809	-0.0040	0.0048	0.0440	-0.0594	1.4804	-0.0024	0.5939	-0.0016	0.4012
65	35.04	-0.01	-0.0583	-0.0032	0.0202	0.0570	-0.0599	1.4790	-0.0013	0.5923	-0.0009	0.4005
66	35.11	-0.03	-0.0693	-0.0034	0.0101	0.0479	-0.1201	1.4833	-0.0021	0.5933	-0.0014	0.3988
67	40.04	-0.04	-0.0810	-0.0023	-0.0063	0.0264	0.0779	1.4473	-0.0038	0.5706	-0.0026	0.3943
68	40.14	0.02	-0.0878	-0.0022	0.0487	0.7054	-0.4390	1.4809	-0.0028	0.5907	-0.0019	0.3989
69	40.02	-0.02	-0.0963	-0.0018	0.0154	0.0390	-0.3333	1.4563	-0.0024	0.5730	-0.0017	0.3935
70	40.03	-0.01	-0.0818	-0.0022	0.0033	0.0472	-0.0537	1.4838	-0.0049	0.5815	-0.0033	0.3968
71	40.02	-0.02	-0.0356	-0.0035	0.0163	0.0984	-0.5140	1.4785	-0.0024	0.5837	-0.0016	0.3968
72	41.04	-0.02	-0.0992	-0.0039	0.0102	0.0745	-0.2011	1.4741	-0.0040	0.5805	-0.0027	0.3936
73	41.24	-0.01	-0.0964	-0.0030	0.0063	0.0646	-0.1434	1.4493	-0.0063	0.5652	-0.0044	0.3901
74	41.44	-0.03	-0.0551	-0.0049	0.0002	0.0691	-0.0330	1.4621	-0.0071	0.5725	-0.0049	0.3916
75	41.08	-0.02	-0.0591	-0.0074	0.0035	0.1371	-0.0346	1.4705	-0.0042	0.5760	-0.0029	0.3916
76	41.89	-0.02	-0.0638	-0.0050	-0.0075	0.0787	0.1177	1.4912	-0.0060	0.5900	-0.0041	0.3873
77	42.07	-0.03	-0.0564	-0.0077	0.0079	0.2116	-0.2170	1.4580	-0.0059	0.5679	-0.0041	0.3895
78	42.28	-0.03	-0.0550	-0.0044	-0.0078	0.0791	0.1304	1.5047	-0.0116	0.5921	-0.0084	0.3842
79	42.48	-0.02	-0.0442	0.0002	-0.0052	-0.0045	0.1179	1.5090	-0.0120	0.5210	-0.0088	0.3836
80	42.07	-0.03	-0.0540	-0.0042	0.0046	0.1430	-0.1353	1.4355	-0.0103	0.5572	-0.0074	0.3882
81	42.05	-0.02	-0.0591	-0.0117	0.0020	0.2594	-0.3512	1.4702	-0.0060	0.5703	-0.0041	0.3879
82	43.04	-0.02	-0.0460	-0.0126	-0.0009	0.2015	0.0190	1.4977	-0.0064	0.5865	-0.0047	0.3873
83	43.23	-0.02	-0.0168	0.0041	0.0045	-0.2471	-0.2711	1.3637	-0.0147	0.5223	-0.0108	0.3830
84	43.43	-0.03	-0.0291	-0.0113	0.0077	0.0691	-0.3195	1.4812	-0.0052	0.5618	-0.0036	0.3845
85	43.08	-0.02	-0.0187	0.0004	-0.0043	-0.0214	-0.2239	1.3578	-0.0134	0.5168	-0.0098	0.3792
86	43.28	-0.02	-0.0214	0.0041	0.0159	0.0354	0.1466	1.3705	-0.0156	0.5200	-0.0115	0.3800
87	43.49	-0.02	-0.0378	-0.0102	-0.0125	0.2805	0.2166	1.3450	-0.0130	0.5337	-0.0093	0.3825
88	43.13	-0.02	-0.0155	-0.0041	0.0007	0.2217	-0.3081	1.4018	-0.0150	0.5303	-0.0107	0.3840
89	43.29	-0.03	-0.0049	-0.0013	0.0117	0.2654	-2.3578	1.3637	-0.0176	0.5237	-0.0131	0.3841
90	43.49	-0.03	0.0200	0.0032	0.0227	0.1601	1.1350	1.3700	-0.0101	0.5297	-0.0132	0.3842
91	43.07	-0.02	-0.0150	-0.0048	0.0024	0.3001	-0.3375	1.4023	-0.0180	0.5436	-0.0133	0.3876
92	43.09	-0.03	0.0013	0.0023	0.0174	0.1267	0.9049	1.3707	-0.0174	0.5328	-0.0141	0.3864

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 5 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
1 02 1.10 0.7 0.0 BINOFIS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
93	45.35	-0.03	-0.0270	-0.0006	0.0023	0.2485	-0.0333	1.3990	-0.0136	0.5430	-0.0135	0.3879
94	45.43	-0.03	-0.0276	-0.0030	-0.0041	0.1751	0.0030	1.3028	-0.0145	0.5272	-0.0143	0.3869
95	45.39	-0.02	-0.0533	-0.0114	-0.0139	0.2687	0.2013	1.3806	-0.0202	0.5398	-0.0146	0.3893
96	45.57	-0.03	0.0213	0.0026	0.0253	0.1239	1.6446	1.3721	-0.0197	0.5317	-0.0144	0.3875
97	45.75	-0.02	0.0168	0.0014	0.0226	0.0849	1.6814	1.3670	-0.0136	0.5185	-0.0140	0.3858
98	45.93	-0.03	-0.0571	-0.0175	-0.0376	0.1801	0.3807	1.3404	-0.0201	0.5189	-0.0155	0.3871
99	46.12	-0.03	-0.1313	-0.0234	-0.0335	0.1829	0.4075	1.3120	-0.0180	0.5040	-0.0143	0.3860
100	46.27	-0.02	-0.0786	-0.0149	-0.0245	0.1934	0.4818	1.3337	-0.0199	0.5157	-0.0149	0.3867
101	46.47	-0.03	-0.1083	-0.0184	-0.0304	0.1754	0.3605	1.3109	-0.0186	0.5056	-0.0142	0.3859
102	46.63	-0.03	-0.1477	-0.0243	-0.0470	0.1812	0.3988	1.3070	-0.0187	0.5044	-0.0143	0.3859
103	46.82	-0.03	-0.0441	-0.0079	-0.0075	0.1772	0.1771	1.3199	-0.0190	0.5105	-0.0144	0.3868
104	46.97	-0.02	-0.1271	-0.0254	-0.0494	0.2042	0.3861	1.2723	-0.0185	0.4907	-0.0146	0.3857
105	47.15	-0.03	-0.1407	-0.0297	-0.0554	0.2115	0.3936	1.2632	-0.0178	0.4878	-0.0141	0.3862
106	47.34	-0.03	-0.1330	-0.0279	-0.0489	0.2154	0.3875	1.2765	-0.0175	0.4832	-0.0140	0.3858
107	47.50	-0.04	-0.1319	-0.0260	-0.0509	0.2038	0.3857	1.2813	-0.0175	0.4896	-0.0139	0.3882
108	47.67	-0.04	-0.1198	-0.0254	-0.0467	0.2140	0.3905	1.2944	-0.0180	0.4888	-0.0144	0.3897
109	47.85	-0.03	-0.0977	-0.0213	-0.0351	0.2183	0.3598	1.2516	-0.0176	0.4901	-0.0142	0.3916
110	48.02	-0.03	-0.1012	-0.0236	-0.0353	0.2332	0.3492	1.2497	-0.0172	0.4857	-0.0138	0.3902
111	48.19	-0.04	-0.1038	-0.0266	-0.0373	0.2057	0.3597	1.2249	-0.0172	0.4797	-0.0141	0.3918
112	48.35	-0.03	-0.0568	-0.0184	-0.0335	0.1835	0.3401	1.1929	-0.0160	0.4659	-0.0134	0.3905
113	48.54	-0.04	-0.0933	-0.0128	-0.0308	0.1342	0.3206	1.1792	-0.0160	0.4669	-0.0136	0.3958
114	48.70	-0.03	-0.0894	-0.0173	-0.0275	0.1938	0.3060	1.2219	-0.0187	0.4905	-0.0153	0.4014
115	48.87	-0.05	-0.0079	-0.0088	-0.0261	0.1935	0.2973	1.1293	-0.0133	0.4478	-0.0118	0.3965
116	49.05	-0.04	-0.0712	-0.0140	-0.0169	0.0363	0.2377	1.1242	-0.0134	0.4458	-0.0120	0.3978
117	49.20	-0.02	-0.0609	-0.0006	-0.0128	0.0132	0.2105	1.1127	-0.0124	0.4435	-0.0112	0.3986
118	49.38	-0.02	-0.0615	0.0008	-0.0136	-0.0130	0.1720	1.1057	-0.0115	0.4369	-0.0104	0.3979
119	49.54	-0.03	-0.0062	0.0	-0.0122	0.0	0.1340	1.1094	-0.0128	0.4426	-0.0116	0.3990
120	49.71	-0.03	-0.0479	0.0021	-0.0127	-0.0440	0.0505	1.1293	-0.0115	0.4487	-0.0102	0.3973
121	49.90	-0.03	-0.0458	0.0015	-0.0084	-0.0330	0.0360	1.1001	-0.0127	0.4430	-0.0113	0.3991
122	50.06	-0.04	-0.0496	0.0023	-0.0023	-0.0369	0.0408	1.1287	-0.0110	0.4473	-0.0098	0.3971
123	50.24	-0.05	-0.0499	0.0013	-0.0003	-0.0264	0.0361	1.1455	-0.0121	0.4556	-0.0106	0.3979
124	50.40	-0.01	-0.0455	0.0015	0.0040	-0.0345	-0.0015	1.1256	-0.0149	0.4602	-0.0112	0.3989
125	50.58	-0.00	-0.0393	0.0016	0.0035	-0.0410	-0.0410	1.1509	-0.0138	0.4626	-0.0120	0.4018
126	50.76	0.01	-0.0449	0.0040	0.0010	-0.0093	-0.0357	1.1376	-0.0149	0.4582	-0.0131	0.4027
127	50.92	-0.01	-0.0379	0.0018	0.0072	-0.0475	-0.0190	1.1508	-0.0147	0.4673	-0.0128	0.4060
128	51.09	0.01	-0.0391	0.0040	0.0048	-0.1043	-0.1228	1.1411	-0.0146	0.4626	-0.0128	0.4054
129	51.26	0.01	-0.0489	0.0038	0.0037	-0.0738	-0.0756	1.1306	-0.0156	0.4590	-0.0140	0.4060
130	51.43	0.00	-0.0408	0.0038	0.0071	-0.0771	-0.1560	1.1279	-0.0169	0.4603	-0.0150	0.4081
131	51.62	0.01	-0.0119	0.0027	0.0248	-0.2270	-2.0860	1.1775	-0.0199	0.4835	-0.0169	0.4109
132	51.79	0.01	-0.0037	0.0026	0.0288	-0.7030	-7.7030	1.1652	-0.0195	0.4796	-0.0168	0.4116
133	51.95	0.00	-0.0333	0.0021	0.0183	-0.0631	-0.5495	1.1435	-0.0183	0.4690	-0.0160	0.4101
134	52.14	0.01	-0.0053	0.0030	0.0309	-0.5003	-5.8502	1.1701	-0.0199	0.4817	-0.0170	0.4117
135	52.28	0.01	-0.0051	0.0027	0.0278	-0.5296	-5.0431	1.1755	-0.0203	0.4843	-0.0173	0.4120
136	52.46	0.00	-0.0019	0.0031	0.0297	-2.2154	-21.2143	1.1689	-0.0210	0.4832	-0.0180	0.4134
137	52.61	0.00	0.0034	0.0029	0.0313	0.3533	9.2059	1.1685	-0.0209	0.4824	-0.0179	0.4128
138	52.79	0.00	0.0308	0.0014	0.0309	0.0455	1.3247	1.1792	-0.0211	0.4842	-0.0179	0.4148

SPARTAN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DELT DEL2 DEL3 DEL4 TRANSITION
1 02 1.10 1.7 0.0 BINARIES 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
139	56.95	-0.00	0.02209	0.00819	0.0350	0.0736	1.7157	1.1737	-0.00232	0.4872	-0.0172	0.4151
140	53.11	-0.00	0.01833	0.00822	0.0322	0.1203	2.6214	1.1656	-0.00202	0.4825	-0.0174	0.4136
141	55.49	-0.00	0.01963	0.00813	0.0344	0.0909	2.0456	1.1630	-0.0212	0.4902	-0.0160	0.4144
142	53.45	-0.01	0.00003	0.00021	0.0200	0.3333	99.9999	1.1640	-0.00202	0.4805	-0.0174	0.4148
143	55.61	-0.01	-0.00070	0.00008	0.0203	-0.0837	-3.7571	1.1778	-0.0222	0.4880	-0.0189	0.4144
144	55.79	-0.01	0.00037	0.00021	0.0210	0.0273	0.5704	1.1734	-0.0219	0.4872	-0.0185	0.4152
145	55.54	-0.01	-0.01154	-0.00006	0.0240	0.0130	-1.6134	1.1760	-0.0221	0.4877	-0.0188	0.4147
146	54.09	-0.01	-0.01103	-0.00005	0.0236	0.0203	-2.4340	1.1765	-0.0220	0.4882	-0.0188	0.4154
147	54.24	-0.02	-0.01190	-0.00006	0.0234	0.0185	-2.2516	1.1776	-0.0230	0.4894	-0.0196	0.4156
148	54.38	-0.01	-0.00982	-0.00004	0.0208	0.0245	-4.9355	1.1695	-0.0229	0.4945	-0.0193	0.4157
149	54.54	-0.03	0.00029	-0.00002	0.0215	-0.0034	23.1250	1.1812	-0.0222	0.4906	-0.0188	0.4153
150	54.74	-0.03	0.00243	-0.00006	0.0203	-0.1339	23.3077	1.1908	-0.0234	0.4978	-0.0196	0.4153
151	54.98	-0.03	0.00211	-0.00002	0.0215	-0.1619	29.0000	1.1825	-0.0227	0.4905	-0.0192	0.4148
152	55.04	-0.02	0.00208	0.00000	0.0211	-0.1260	8.4092	1.1733	-0.0231	0.4950	-0.0194	0.4148
153	55.15	-0.02	0.00203	-0.00007	0.0224	-0.0824	3.9059	1.1755	-0.0220	0.4854	-0.0187	0.4129
154	55.33	-0.03	0.00256	-0.00002	0.0207	-0.0527	8.0769	1.2095	-0.0239	0.5010	-0.0198	0.4142
155	55.49	-0.02	-0.00210	-0.00004	0.0291	0.4002	-29.1000	1.1841	-0.0222	0.4885	-0.0186	0.4133
156	55.69	-0.02	0.00226	-0.00005	0.0205	-0.3403	11.7308	1.2026	-0.0234	0.4972	-0.0195	0.4135
157	55.79	-0.01	0.00213	-0.00004	0.0304	-0.3078	25.7692	1.2169	-0.0239	0.5051	-0.0196	0.4144
158	55.95	-0.02	0.00003	-0.00002	0.0283	-0.0084	99.3333	1.2007	-0.0238	0.5001	-0.0196	0.4145
159	56.11	-0.00	0.00239	-0.00003	0.0275	-0.1000	9.1667	1.1998	-0.0227	0.4968	-0.0190	0.4141
160	56.29	-0.01	0.00226	-0.00002	0.0285	-0.0715	10.1786	1.2178	-0.0240	0.5055	-0.0197	0.4151
161	56.45	-0.02	-0.00064	0.00002	0.0278	-0.2223	-30.6667	1.2259	-0.0242	0.5105	-0.0198	0.4164
162	56.60	-0.00	-0.00019	-0.00001	0.0259	0.0527	-13.0918	1.2178	-0.0236	0.5044	-0.0196	0.4142
163	56.77	-0.03	-0.00008	-0.00002	0.0255	0.3333	-42.5000	1.2110	-0.0238	0.5017	-0.0197	0.4143
164	56.97	-0.06	-0.00271	0.00008	0.0259	-0.0293	-0.5667	1.2326	-0.0235	0.5136	-0.0207	0.4167
165	57.11	-0.04	-0.00391	0.00020	0.0210	-0.0409	-0.2643	1.2055	-0.0251	0.5004	-0.0209	0.4151
166	57.27	-0.06	-0.00474	0.00019	0.0259	-0.0402	-0.1247	1.2000	-0.0245	0.4978	-0.0205	0.4147
167	57.43	-0.06	-0.00330	0.00025	0.0238	-0.0407	-0.0710	1.1997	-0.0241	0.4964	-0.0201	0.4138
168	57.58	-0.07	-0.00420	0.00028	0.0203	-0.0493	-0.0346	1.1914	-0.0241	0.4951	-0.0203	0.4156
169	57.70	-0.05	-0.00444	0.00017	0.0204	-0.0284	-0.0082	1.1722	-0.0238	0.4854	-0.0202	0.4141
170	57.85	-0.05	-0.00543	0.00023	0.0210	-0.0423	-0.0184	1.1791	-0.0241	0.4945	-0.0203	0.4155
171	57.98	-0.04	-0.00582	0.00015	0.0210	-0.0256	-0.0172	1.1736	-0.0238	0.4871	-0.0203	0.4150
172	58.18	-0.04	-0.00520	0.00016	0.0222	-0.0308	-0.0424	1.1902	-0.0249	0.4950	-0.0210	0.4159
173	58.30	-0.06	-0.00642	0.00020	-0.0012	-0.0312	0.0167	1.1877	-0.0251	0.4949	-0.0212	0.4167
174	58.46	-0.02	-0.00571	0.00024	0.0218	-0.0421	-0.0316	1.1845	-0.0241	0.4951	-0.0204	0.4180
175	58.59	-0.01	-0.00617	0.00021	-0.0019	-0.0341	0.0308	1.1911	-0.0254	0.5009	-0.0214	0.4206
176	58.63	-0.02	-0.00007	0.00022	-0.0007	-0.0303	0.0116	1.1926	-0.00253	0.4983	-0.0212	0.4178
177	58.81	-0.08	-0.00685	0.00008	-0.0031	-0.0121	0.0537	1.1480	-0.0229	0.4770	-0.0203	0.4162

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 22 MACH 1.40 MACH-0 1.4 PHI 0.0 CONF BINOFIN L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION JARANDOM

POINT	ALPHA	BETA	CNFB	CMB	CDB	XCPFB	YCPFB	CNFW	CMW	CDW	XCPFW	YCPFW
1	-5.79	0.00	0.0527	0.0000	0.0090	0.0000	0.1741	-0.3524	-0.0338	-0.1533	0.1015	0.4611
2	-5.81	-0.00	0.0514	0.0000	0.0083	0.0000	0.1735	-0.3248	-0.0332	-0.1506	0.1062	0.4630
3	-5.81	0.00	0.0514	0.0000	0.0089	0.0000	0.1735	-0.3237	-0.0347	-0.1497	0.1071	0.4624
4	-5.80	0.00	0.0504	0.0000	0.0104	0.0000	0.1740	-0.2990	-0.0347	-0.1422	0.1158	0.4522
5	-5.80	0.01	0.0500	0.0000	0.0135	0.0000	0.1765	-0.1436	-0.0178	-0.0591	0.1242	0.4114
6	-1.11	-0.00	0.0400	0.0000	0.0126	0.0000	0.2000	-0.0000	-0.0000	-0.0000	0.0000	0.3835
7	0.00	0.00	0.0470	0.0000	0.0100	0.0000	0.2105	0.0362	0.0073	0.0221	0.2017	0.6105
8	2.85	-0.00	0.0501	0.0000	0.0096	0.0000	0.1640	0.1308	0.0191	0.0630	0.1379	0.4538
9	4.82	-0.01	0.0520	0.0000	0.0099	0.0000	0.1600	0.2479	0.0269	0.1147	0.1168	0.4628
10	6.84	0.00	0.0503	0.0000	0.0096	0.0000	0.1675	0.3744	0.0346	0.1777	0.0928	0.4747
11	8.81	-0.00	0.0465	0.0000	0.0078	0.0000	0.1750	0.5122	0.0370	0.2497	0.0722	0.4675
12	10.84	0.00	0.0402	0.0000	0.0057	0.0000	0.1940	0.6551	0.0384	0.3136	0.0585	0.4785
13	12.83	0.00	0.0340	0.0000	0.0038	0.0000	0.2105	0.7842	0.0357	0.3699	0.0455	0.4717
14	14.88	-0.00	0.0213	0.0000	0.0000	0.0000	0.1111	0.8902	0.0327	0.4209	0.0364	0.4686
15	16.93	-0.01	0.0057	0.0000	0.0100	0.0000	0.1552	1.0016	0.0265	0.4814	0.0285	0.4606
16	17.90	-0.01	0.0102	0.0000	0.0048	0.0000	0.0799	1.0734	0.0210	0.4823	0.0203	0.4493
17	21.03	-0.00	0.0073	0.0000	0.0084	0.0000	0.1220	1.1930	0.0104	0.5005	0.0144	0.4420
18	23.09	0.01	0.0150	0.0000	0.0117	0.0000	0.1540	1.2028	0.0130	0.5255	0.0108	0.4369
19	25.13	0.02	0.0026	0.0000	0.0185	0.0000	0.2257	1.2985	0.0085	0.5364	0.0071	0.4296
20	27.20	0.05	0.0067	0.0000	0.0220	0.0000	0.2373	1.4960	0.0078	0.5318	0.0063	0.4261
21	28.43	0.03	0.0022	0.0000	0.0255	0.0000	0.2769	1.2566	0.0069	0.5346	0.0055	0.4255
22	28.43	0.03	0.0078	0.0000	0.0243	0.0000	0.2709	1.2021	0.0051	0.5351	0.0040	0.4271
23	28.72	0.03	0.0073	0.0000	0.0236	0.0000	0.2736	1.2629	0.0044	0.5412	0.0035	0.4285
24	29.03	0.03	0.0062	0.0000	0.0205	0.0000	0.2889	1.2867	0.0046	0.5410	0.0036	0.4276
25	29.37	0.03	0.0038	0.0000	0.0250	0.0000	0.2845	1.2894	0.0045	0.5423	0.0039	0.4272
26	29.66	0.05	0.0040	0.0000	0.0267	0.0000	0.2949	1.2883	0.0039	0.5494	0.0026	0.4270
27	29.90	0.04	0.0117	0.0000	0.0100	0.0000	0.2316	1.2945	0.0012	0.5557	0.0009	0.4293
28	30.26	0.03	0.0040	0.0000	0.0211	0.0000	0.2841	1.3071	0.0038	0.5572	0.0029	0.4263
29	30.54	0.04	0.0160	0.0000	0.0191	0.0000	0.2927	1.3049	0.0002	0.5605	0.0002	0.4295
30	30.81	0.03	0.0012	0.0000	0.0212	0.0000	0.2814	1.3215	0.0016	0.5645	0.0012	0.4270
31	31.05	0.03	0.0067	0.0000	0.0143	0.0000	0.2147	1.3244	0.0022	0.5643	0.0017	0.4261
32	31.36	0.01	0.0103	0.0000	0.0131	0.0000	0.2431	1.3303	0.0	0.5717	0.0	0.4265
33	31.64	0.01	0.0174	0.0000	0.0134	0.0000	0.2310	1.3266	0.0022	0.5557	0.0017	0.4182
34	31.92	0.01	0.0114	0.0000	0.0101	0.0000	0.2256	1.3378	0.0015	0.5564	0.0011	0.4168
35	32.20	0.00	0.0068	0.0000	0.0143	0.0000	0.2130	1.3333	-0.0001	0.5594	-0.0001	0.4164
36	32.47	-0.00	0.0546	0.0000	0.0106	0.0000	0.1935	1.3274	-0.0011	0.5506	-0.0008	0.4148
37	32.72	-0.01	0.0596	0.0000	0.0123	0.0000	0.2074	1.3263	-0.0016	0.5484	-0.0012	0.4135
38	32.99	-0.02	0.0588	0.0000	0.0089	0.0000	0.1921	1.3140	-0.0059	0.5418	-0.0045	0.4120
39	33.20	-0.01	0.0630	0.0000	0.0145	0.0000	0.2305	1.3102	-0.0074	0.5413	-0.0056	0.4106
40	33.52	-0.02	0.0593	0.0000	0.0123	0.0000	0.2314	1.3223	-0.0078	0.5426	-0.0059	0.4103
41	33.77	-0.01	0.0593	0.0000	0.0147	0.0000	0.2403	1.3101	-0.0101	0.5399	-0.0077	0.4096
42	34.04	-0.01	0.0569	0.0000	0.0107	0.0000	0.2100	1.3179	-0.0096	0.5415	-0.0073	0.4108
43	34.27	-0.01	0.0505	0.0000	0.0120	0.0000	0.2218	1.3291	-0.0134	0.5437	-0.0078	0.4090
44	34.53	-0.02	0.0576	0.0000	0.0054	0.0000	0.1936	1.3219	-0.0121	0.5424	-0.0092	0.4103
45	34.81	-0.04	0.0497	0.0000	0.0111	0.0000	0.2233	1.3447	-0.0113	0.5512	-0.0084	0.4099
46	35.04	-0.02	0.0580	0.0000	0.0141	0.0000	0.2435	1.3230	-0.0106	0.5425	-0.0082	0.4092

TEST 7 PART 62 MACH .910 RNIJ-6 1.7 PHI 0.0 CONF STRAIGHT L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

PLANE	ALPHA	DELTA	CNF3	CM3	CD3	ALPF3	YCPF3	CNF4	CM4	CD4	ALPF4	YCPF4
47	35.26	-0.003	0.0000	0.0000	0.0126	0.0000	0.2424	1.3456	-0.0125	0.5517	-0.0093	0.4100
48	35.39	-0.002	0.0000	0.0000	0.0130	0.0000	0.2391	1.3481	-0.0120	0.5520	-0.0089	0.4095
49	35.76	-0.001	0.0000	0.0000	0.0126	0.0000	0.3029	1.3240	-0.0124	0.5441	-0.0098	0.4109
50	36.02	-0.002	0.0000	0.0000	0.0126	0.0000	0.2314	1.3500	-0.0127	0.5502	-0.0094	0.4110
51	36.63	-0.003	0.0000	0.0000	0.0130	0.0000	0.2943	1.3420	-0.0130	0.5502	-0.0081	0.4100
52	36.50	-0.000	0.0000	0.0000	0.0135	0.0000	0.2819	1.3254	-0.0130	0.5420	-0.0103	0.4089
53	36.72	0.000	0.0000	0.0000	0.0200	0.0000	0.3006	1.3714	-0.0102	0.5645	-0.0074	0.4116
54	36.97	-0.001	0.0000	0.0000	0.0134	0.0000	0.2721	1.3190	-0.0128	0.5447	-0.0097	0.4090
55	37.21	-0.002	0.0000	0.0000	0.0169	0.0000	0.2929	1.3004	-0.0136	0.5336	-0.0104	0.4084
56	37.49	-0.002	0.0000	0.0000	0.0137	0.0000	0.2721	1.3567	-0.0093	0.5502	-0.0089	0.4108
57	37.70	-0.002	0.0000	0.0000	0.0131	0.0000	0.2604	1.3499	-0.0116	0.5523	-0.0086	0.4107
58	37.93	-0.002	0.0000	0.0000	0.0175	0.0000	0.2771	1.3450	-0.0117	0.5523	-0.0087	0.4106
59	38.15	-0.001	0.0000	0.0000	0.0215	0.0000	0.3207	1.3222	-0.0125	0.5409	-0.0095	0.4091
60	38.40	0.000	0.0000	0.0000	0.0230	0.0000	0.3303	1.3167	-0.0124	0.5393	-0.0094	0.4097
61	38.64	-0.001	0.0000	0.0000	0.0200	0.0000	0.3266	1.3776	-0.0094	0.5661	-0.0066	0.4123
62	38.90	0.000	0.0000	0.0000	0.0303	0.0000	0.3895	1.3245	-0.0063	0.5434	-0.0063	0.4102
63	39.10	-0.001	0.0000	0.0000	0.0150	0.0000	0.3307	1.3132	-0.0102	0.5378	-0.0078	0.4095
64	39.36	-0.001	0.0000	0.0000	0.0204	0.0000	0.3004	1.3503	-0.0081	0.5544	-0.0060	0.4109
65	39.59	-0.001	0.0000	0.0000	0.0170	0.0000	0.3450	1.3282	-0.0075	0.5443	-0.0057	0.4098
66	39.77	-0.003	0.0000	0.0000	0.0200	0.0000	0.3030	1.3514	-0.0055	0.5502	-0.0041	0.4116
67	40.01	-0.004	0.0000	0.0000	0.0201	0.0000	0.3564	1.3936	0.0005	0.5735	0.0004	0.4116
68	40.19	0.002	0.0000	0.0000	0.0245	0.0000	0.3040	1.2900	-0.0133	0.5065	-0.0107	0.4087
69	40.42	-0.002	0.0000	0.0000	0.0180	0.0000	0.3750	1.3473	-0.0050	0.5520	-0.0037	0.4097
70	40.63	-0.001	0.0000	0.0000	0.0206	0.0000	0.4124	1.3070	-0.0054	0.5481	-0.0039	0.4093
71	40.82	-0.002	0.0000	0.0000	0.0225	0.0000	0.3990	1.3190	-0.0065	0.5378	-0.0065	0.4077
72	41.04	-0.002	0.0000	0.0000	0.0213	0.0000	0.4034	1.3067	-0.0042	0.5379	-0.0068	0.4094
73	41.24	-0.001	0.0000	0.0000	0.0205	0.0000	0.3870	1.3592	-0.0051	0.5563	-0.0038	0.4093
74	41.44	-0.003	0.0000	0.0000	0.0184	0.0000	0.3694	1.3716	-0.0033	0.5622	-0.0061	0.4098
75	41.66	-0.002	0.0000	0.0000	0.0241	0.0000	0.4106	1.3240	-0.0109	0.5412	-0.0082	0.4087
76	41.89	-0.002	0.0000	0.0000	0.0276	0.0000	0.4191	1.3511	-0.0065	0.5510	-0.0063	0.4078
77	42.07	-0.003	0.0000	0.0000	0.0202	0.0000	0.4268	1.3116	-0.0113	0.5360	-0.0086	0.4086
78	42.26	-0.003	0.0000	0.0000	0.0246	0.0000	0.4571	1.3020	-0.0074	0.5378	-0.0054	0.4084
79	42.48	-0.002	0.0000	0.0000	0.0236	0.0000	0.4407	1.3400	-0.0088	0.5485	-0.0063	0.4078
80	42.61	-0.003	0.0000	0.0000	0.0200	0.0000	0.4178	1.3439	-0.0107	0.5475	-0.0080	0.4074
81	42.80	-0.002	0.0000	0.0000	0.0200	0.0000	0.4156	1.2962	-0.0136	0.5262	-0.0105	0.4075
82	43.04	-0.002	0.0000	0.0000	0.0225	0.0000	0.4573	1.3014	-0.0120	0.5304	-0.0097	0.4076
83	43.23	-0.002	0.0000	0.0000	0.0255	0.0000	0.4592	1.3414	-0.0093	0.5456	-0.0069	0.4069
84	43.40	-0.003	0.0000	0.0000	0.0219	0.0000	0.4506	1.2962	-0.0120	0.5242	-0.0098	0.4057
85	43.58	-0.002	0.0000	0.0000	0.0223	0.0000	0.4078	1.3232	-0.0091	0.5377	-0.0069	0.4063
86	43.76	-0.002	0.0000	0.0000	0.0237	0.0000	0.4575	1.3250	-0.0130	0.5300	-0.0076	0.4049
87	43.94	-0.002	0.0000	0.0000	0.0190	0.0000	0.4473	1.2537	-0.0137	0.5019	-0.0111	0.4068
88	44.13	-0.002	0.0000	0.0000	0.0224	0.0000	0.4504	1.3154	-0.0120	0.5260	-0.0096	0.4059
89	44.29	-0.003	0.0000	0.0000	0.0210	0.0000	0.4770	1.3028	-0.0127	0.5296	-0.0098	0.4063
90	44.44	-0.003	0.0000	0.0000	0.0234	0.0000	0.4484	1.3251	-0.0103	0.5305	-0.0078	0.4048
91	44.67	-0.002	0.0000	0.0000	0.0206	0.0000	0.4443	1.3204	-0.0125	0.5362	-0.0097	0.4057
92	44.84	-0.003	0.0000	0.0000	0.0200	0.0000	0.4445	1.3167	-0.0120	0.5344	-0.0096	0.4055

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 02 MACH 1.60 RX10-6 1.7 PHI 0.0 CONF BRAVO 15 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CL3	ALPF3	YCPF3	CNF4	CM4	CL4	XCPF4	YCPF4
93	45.03	-0.03	0.0470	0.0000	0.0234	0.0000	0.4985	1.3057	-0.0151	0.5321	-0.0115	0.4062
94	45.23	-0.03	0.0491	0.0000	0.0209	0.0000	0.5204	1.2879	-0.0154	0.5242	-0.0120	0.4071
95	45.39	-0.02	0.0423	0.0000	0.0201	0.0000	0.4703	1.2484	-0.0154	0.5266	-0.0123	0.4064
96	45.57	-0.03	0.0470	0.0000	0.0234	0.0000	0.4984	1.3070	-0.0150	0.5329	-0.0115	0.4077
97	45.75	-0.02	0.0471	0.0000	0.0229	0.0000	0.4874	1.2490	-0.0152	0.5269	-0.0117	0.4081
98	45.93	-0.03	0.0513	0.0000	0.0188	0.0000	0.5040	1.2134	-0.0174	0.5199	-0.0137	0.4082
99	46.12	-0.03	0.0543	0.0000	0.0268	0.0000	0.4945	1.2507	-0.0178	0.5115	-0.0143	0.4090
100	46.27	-0.02	0.0523	0.0000	0.0201	0.0000	0.4703	1.2703	-0.0168	0.5200	-0.0132	0.4079
101	46.47	-0.03	0.0538	0.0000	0.0192	0.0000	0.4644	1.2709	-0.0175	0.5194	-0.0138	0.4087
102	46.63	-0.03	0.0523	0.0000	0.0211	0.0000	0.5000	1.2818	-0.0164	0.5156	-0.0146	0.4087
103	46.82	-0.03	0.0529	0.0000	0.0192	0.0000	0.4639	1.2718	-0.0170	0.5204	-0.0134	0.4093
104	46.97	-0.02	0.0480	0.0000	0.0215	0.0000	0.4771	1.2494	-0.0164	0.5015	-0.0151	0.4097
105	47.15	-0.03	0.0497	0.0000	0.0227	0.0000	0.4577	1.2078	-0.0184	0.4952	-0.0153	0.4100
106	47.34	-0.03	0.0530	0.0000	0.0201	0.0000	0.4703	1.2770	-0.0170	0.4829	-0.0150	0.4103
107	47.50	-0.04	0.0595	0.0000	0.0190	0.0000	0.4702	1.2829	-0.0178	0.4936	-0.0147	0.4105
108	47.67	-0.04	0.0551	0.0000	0.0190	0.0000	0.4501	1.2001	-0.0180	0.4867	-0.0152	0.4103
109	47.85	-0.03	0.0542	0.0000	0.0243	0.0000	0.4009	1.2179	-0.0183	0.4841	-0.0155	0.4105
110	48.02	-0.03	0.0425	0.0000	0.0212	0.0000	0.5000	1.2001	-0.0178	0.4760	-0.0151	0.4099
111	48.19	-0.04	0.0480	0.0000	0.0241	0.0000	0.4959	1.2043	-0.0179	0.4838	-0.0151	0.4085
112	48.35	-0.03	0.0490	0.0000	0.0186	0.0000	0.4830	1.1999	-0.0180	0.4915	-0.0155	0.4096
113	48.54	-0.04	0.0527	0.0000	0.0190	0.0000	0.4771	1.2126	-0.0182	0.4954	-0.0159	0.4086
114	48.70	-0.03	0.0426	0.0000	0.0186	0.0000	0.4924	1.2190	-0.0178	0.4955	-0.0159	0.4082
115	48.87	-0.05	0.0503	0.0000	0.0145	0.0000	0.4785	1.2003	-0.0178	0.4915	-0.0149	0.4094
116	49.05	-0.03	0.0512	0.0000	0.0229	0.0000	0.4601	1.2000	-0.0182	0.4934	-0.0151	0.4087
117	49.23	-0.02	0.0500	0.0000	0.0220	0.0000	0.4505	1.2014	-0.0175	0.4909	-0.0146	0.4086
118	49.38	-0.02	0.0478	0.0000	0.0228	0.0000	0.4758	1.1881	-0.0185	0.4848	-0.0139	0.4081
119	49.54	-0.03	0.0489	0.0000	0.0223	0.0000	0.4570	1.2090	-0.0174	0.4927	-0.0144	0.4075
120	49.71	-0.00	0.0370	0.0000	0.0175	0.0000	0.4030	1.1894	-0.0170	0.4857	-0.0143	0.4084
121	49.90	-0.00	0.0500	0.0000	0.0243	0.0000	0.4870	1.2154	-0.0191	0.4976	-0.0157	0.4094
122	50.08	-0.01	0.0428	0.0000	0.0204	0.0000	0.4770	1.1825	-0.0169	0.4821	-0.0143	0.4077
123	50.24	-0.00	0.0452	0.0000	0.0215	0.0000	0.4767	1.2001	-0.0188	0.4908	-0.0157	0.4090
124	50.40	-0.01	0.0465	0.0000	0.0233	0.0000	0.4715	1.2092	-0.0168	0.4917	-0.0155	0.4083
125	50.58	-0.00	0.0477	0.0000	0.0217	0.0000	0.4559	1.1910	-0.0184	0.4872	-0.0155	0.4089
126	50.76	0.01	0.0513	0.0000	0.0244	0.0000	0.4700	1.2026	-0.0187	0.4900	-0.0156	0.4074
127	50.92	-0.01	0.0483	0.0000	0.0221	0.0000	0.4703	1.2020	-0.0179	0.4903	-0.0160	0.4079
128	51.09	0.01	0.0456	0.0000	0.0212	0.0000	0.4934	1.1999	-0.0171	0.4896	-0.0159	0.4080
129	51.28	0.01	0.0527	0.0000	0.0223	0.0000	0.5235	1.2049	-0.0209	0.4922	-0.0174	0.4085
130	51.43	0.00	0.0502	0.0000	0.0210	0.0000	0.4955	1.2027	-0.0191	0.4903	-0.0159	0.4077
131	51.62	0.01	0.0465	0.0000	0.0231	0.0000	0.4976	1.1865	-0.0182	0.4844	-0.0156	0.4083
132	51.79	0.01	0.0526	0.0000	0.0236	0.0000	0.4876	1.1852	-0.0175	0.4748	-0.0150	0.4075
133	51.95	0.00	0.0502	0.0000	0.0239	0.0000	0.5170	1.1808	-0.0176	0.4835	-0.0150	0.4067
134	52.12	0.01	0.0469	0.0000	0.0229	0.0000	0.5234	1.1837	-0.0171	0.4729	-0.0147	0.4057
135	52.23	0.01	0.0484	0.0000	0.0212	0.0000	0.5240	1.1726	-0.0174	0.4770	-0.0149	0.4069
136	52.40	0.00	0.0539	0.0000	0.0206	0.0000	0.5242	1.1650	-0.0173	0.4729	-0.0149	0.4056
137	52.61	0.00	0.0454	0.0000	0.0236	0.0000	0.5210	1.1539	-0.0167	0.4678	-0.0145	0.4054
138	52.79	0.00	0.0491	0.0000	0.0244	0.0000	0.4960	1.1469	-0.0156	0.4556	-0.0140	0.4043

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NA13-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 62 1.10 0.1 0.0 61NOFLS 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	ALPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
139	52.93	-0.00	0.0000	0.0000	0.0252	0.0000	0.5419	1.1408	-0.0157	0.4608	-0.0138	0.4039
140	53.21	-0.00	0.0000	0.0000	0.0250	0.0000	0.5421	1.1380	-0.0164	0.4603	-0.0144	0.4045
141	53.29	-0.00	0.0342	0.0000	0.0266	0.0000	0.4954	1.1519	-0.0170	0.4657	-0.0146	0.4043
142	53.45	-0.01	0.0455	0.0000	0.0240	0.0000	0.5419	1.1447	-0.0167	0.4611	-0.0146	0.4028
143	53.81	-0.01	0.0461	0.0000	0.0250	0.0000	0.5380	1.1477	-0.0176	0.4714	-0.0153	0.4037
144	53.79	-0.01	0.0404	0.0000	0.0243	0.0000	0.5407	1.1452	-0.0170	0.4620	-0.0154	0.4034
145	53.94	-0.01	0.0431	0.0000	0.0229	0.0000	0.5233	1.1772	-0.0179	0.4755	-0.0152	0.4039
146	54.09	-0.01	0.0421	0.0000	0.0245	0.0000	0.5403	1.1634	-0.0182	0.4703	-0.0157	0.4042
147	54.29	-0.02	0.0430	0.0000	0.0252	0.0000	0.5338	1.1758	-0.0192	0.4766	-0.0163	0.4052
148	54.30	-0.01	0.0530	0.0000	0.0271	0.0000	0.5380	1.1734	-0.0191	0.4754	-0.0165	0.4051
149	54.39	-0.03	0.0437	0.0000	0.0237	0.0000	0.5197	1.1537	-0.0191	0.4672	-0.0166	0.4049
150	54.72	-0.03	0.0402	0.0000	0.0241	0.0000	0.5392	1.1693	-0.0200	0.4722	-0.0171	0.4036
151	54.88	-0.03	0.0431	0.0000	0.0264	0.0000	0.5300	1.1502	-0.0195	0.4653	-0.0168	0.4045
152	55.01	-0.02	0.0433	0.0000	0.0246	0.0000	0.5394	1.1617	-0.0195	0.4695	-0.0168	0.4041
153	55.15	-0.02	0.0457	0.0000	0.0256	0.0000	0.5356	1.1493	-0.0195	0.4646	-0.0162	0.4034
154	55.33	-0.03	0.0382	0.0000	0.0223	0.0000	0.5438	1.1650	-0.0199	0.4695	-0.0171	0.4027
155	55.45	-0.02	0.0421	0.0000	0.0240	0.0000	0.5414	1.1597	-0.0191	0.4655	-0.0165	0.4014
156	55.63	-0.02	0.0443	0.0000	0.0237	0.0000	0.5380	1.1641	-0.0194	0.4679	-0.0167	0.4019
157	55.79	-0.01	0.0356	0.0000	0.0206	0.0000	0.5754	1.1771	-0.0201	0.4724	-0.0171	0.4013
158	55.93	-0.02	0.0446	0.0000	0.0258	0.0000	0.5178	1.1765	-0.0204	0.4739	-0.0173	0.4021
159	56.11	-0.00	0.0397	0.0000	0.0231	0.0000	0.5471	1.1662	-0.0197	0.4685	-0.0169	0.4010
160	56.29	-0.01	0.0446	0.0000	0.0252	0.0000	0.5663	1.1644	-0.0200	0.4750	-0.0169	0.4010
161	56.49	-0.02	0.0383	0.0000	0.0213	0.0000	0.5561	1.1947	-0.0209	0.4793	-0.0175	0.4012
162	56.60	-0.00	0.0371	0.0000	0.0217	0.0000	0.5649	1.1934	-0.0212	0.4781	-0.0178	0.4006
163	56.77	-0.03	0.0533	0.0000	0.0295	0.0000	0.5620	1.1903	-0.0206	0.4764	-0.0173	0.4002
164	56.97	-0.00	0.0373	0.0000	0.0232	0.0000	0.6270	1.2409	-0.0234	0.4973	-0.0189	0.4008
165	57.11	-0.04	0.0470	0.0000	0.0191	0.0000	0.6453	1.2415	-0.0245	0.4993	-0.0198	0.4022
166	57.27	-0.00	0.0422	0.0000	0.0256	0.0000	0.6061	1.2495	-0.0239	0.4994	-0.0192	0.3997
167	57.49	-0.00	0.0410	0.0000	0.0251	0.0000	0.6137	1.2564	-0.0243	0.5016	-0.0191	0.3994
168	57.50	-0.01	0.0367	0.0000	0.0216	0.0000	0.6225	1.2624	-0.0244	0.5042	-0.0194	0.3978
169	57.70	-0.03	0.0347	0.0000	0.0206	0.0000	0.5937	1.2371	-0.0225	0.4912	-0.0182	0.3971
170	57.89	-0.03	0.0361	0.0000	0.0219	0.0000	0.6342	1.2665	-0.0255	0.5079	-0.0200	0.3973
171	57.98	-0.04	0.0346	0.0000	0.0221	0.0000	0.6387	1.2503	-0.0240	0.4976	-0.0191	0.3961
172	58.10	-0.04	0.0404	0.0000	0.0191	0.0000	0.6725	1.2744	-0.0259	0.5080	-0.0204	0.3971
173	58.30	-0.00	0.0320	0.0000	0.0226	0.0000	0.7125	1.2703	-0.0247	0.5050	-0.0196	0.3951
174	58.40	-0.02	0.0339	0.0000	0.0215	0.0000	0.6937	1.2792	-0.0256	0.5028	-0.0201	0.3948
175	58.59	-0.01	0.0359	0.0000	0.0242	0.0000	0.6741	1.3013	-0.0262	0.5146	-0.0202	0.3955
176	58.69	-0.02	0.0303	0.0000	0.0238	0.0000	0.7767	1.2807	-0.0261	0.5111	-0.0203	0.3966
177	58.81	-0.00	0.0253	0.0000	0.0212	0.0000	0.8099	1.2972	-0.0230	0.4906	-0.0185	0.3936

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NAJ=C PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 80 0.60 4.7 0.0 BLNOFIN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
3	-0.09	-0.00	0.03443	-0.0099	0.0216	-0.1344	0.0011	0.2558	0.0834	0.1699	-0.2851
4	1.02	0.00	0.1734	-0.3313	0.0637	-0.2437	0.0016	0.2524	0.0634	0.1720	-1.9139
5	2.09	0.00	0.4803	-0.7934	0.0857	-0.2084	0.0021	0.2504	0.0644	0.1720	-2.2804
6	4.04	0.01	0.8773	-1.4429	0.1140	-0.3130	0.0106	0.2440	0.0940	0.1536	-2.4200
7	6.78	0.01	1.4536	-2.1907	0.1436	-0.3529	0.0034	0.2450	0.1022	0.1429	-2.5453
8	8.81	0.01	1.8334	-3.2961	0.1607	-0.3301	0.0140	0.2524	0.1153	0.1442	-2.5393
9	10.08	0.00	1.8356	-3.7052	0.1100	-0.3290	0.0125	0.2611	0.1270	0.1342	-2.4954
10	12.00	0.00	2.1209	-3.0425	0.0745	-0.3041	0.0055	0.2787	0.1528	0.1260	-2.3708
11	14.04	0.00	2.3390	-3.0053	0.0931	-0.3540	0.0065	0.3120	0.1921	0.1205	-2.1734
12	16.47	-0.00	2.6242	-3.7224	0.0021	-0.1759	0.0230	0.3534	0.2534	0.1000	-1.9483
13	18.30	0.00	2.8607	-4.0424	0.1135	-0.4504	-0.0004	0.4335	0.3433	0.0852	-1.6428
14	20.20	-0.00	2.8718	-4.1201	0.0527	-0.4235	0.0025	0.4884	0.4035	0.0804	-1.5422
15	22.23	-0.00	2.8384	-4.3943	0.0150	-0.2372	-0.0043	0.4789	0.4330	0.0399	-1.4705
16	24.17	-0.01	3.0003	-4.7531	-0.1433	0.1372	-0.0349	0.4713	0.4613	0.0100	-1.4120
17	26.13	-0.00	3.1111	-4.7365	-0.0019	0.0010	-0.0077	0.4816	0.4871	-0.0055	-1.2768
18	28.08	0.01	3.1183	-4.8714	0.2734	-0.0040	-0.0144	0.4822	0.5075	-0.0253	-1.1832
19	30.02	0.00	4.3473	-4.7768	1.0027	-1.3504	0.1407	0.4543	0.5101	-0.0637	-1.0931
20	31.91	0.00	3.4353	-5.0893	1.3005	-1.4310	0.2283	0.4209	0.5100	-0.0971	-0.9720
21	33.88	0.00	3.0741	-5.2926	1.2040	-1.1805	0.2215	0.3950	0.5191	-0.1241	-0.9300
22	33.91	0.00	3.1394	-5.3499	1.2076	-1.1984	0.2216	0.3804	0.5150	-0.1324	-0.9287
23	33.93	0.00	3.1741	-5.2391	1.2405	-1.1912	0.2144	0.3948	0.5237	-0.1289	-0.9078
24	34.02	0.00	3.0279	-5.3946	1.2006	-1.0935	0.2142	0.3908	0.5247	-0.1339	-0.9162
25	34.04	0.00	3.0100	-5.3154	1.2000	-1.0927	0.2072	0.3871	0.5256	-0.1383	-0.8903
26	34.01	0.00	3.0171	-5.2500	1.1958	-1.0779	0.1734	0.3813	0.5275	-0.1462	-0.8725
27	34.03	0.00	3.1567	-5.3989	1.1838	-1.0787	0.1735	0.3785	0.5340	-0.1555	-0.8765
28	33.18	0.00	3.1403	-5.2256	1.0699	-0.9150	0.1008	0.3749	0.5270	-0.1521	-0.8511
29	33.40	0.00	3.2030	-5.3556	1.1715	-0.9953	0.1311	0.3808	0.5332	-0.1714	-0.8523
30	33.03	0.00	3.0907	-5.3735	0.9930	0.1701	0.1105	0.3709	0.5349	-0.1680	-0.8587
31	33.09	0.00	3.3307	-5.0082	1.0701	0.1900	0.1205	0.3583	0.5344	-0.1866	-0.8580
32	30.13	0.00	3.7044	-5.1414	1.0154	0.7125	0.1094	0.3094	0.5330	-0.1640	-0.8465
33	30.37	0.00	3.8734	-5.7530	0.9658	0.7173	0.1019	0.3464	0.5330	-0.2036	-0.8365
34	30.59	0.00	3.9310	-5.8150	1.0142	0.7033	0.0930	0.3605	0.5310	-0.1905	-0.8358
35	30.02	0.00	3.8013	-5.8360	0.3937	1.2554	0.0926	0.3526	0.5325	-0.1997	-0.8262
36	37.09	0.00	3.4034	-5.7733	1.0174	1.4132	0.0703	0.3430	0.5334	-0.2124	-0.8222
37	37.31	0.00	3.5770	-6.0123	0.8510	1.7400	0.0602	0.3340	0.5303	-0.1963	-0.8132
38	37.33	0.00	3.4070	-5.9044	0.9172	1.7040	0.0301	0.3474	0.5352	-0.2078	-0.8049
39	37.11	0.00	3.5231	-5.9120	0.8091	1.8101	0.0448	0.3418	0.5307	-0.2089	-0.7858
40	38.00	0.00	3.6109	-5.9631	0.7435	2.0010	0.0307	0.3438	0.5493	-0.2057	-0.7829
41	30.49	0.00	3.7516	-6.0360	0.8290	2.2137	0.0204	0.3254	0.5510	-0.2256	-0.7777
42	30.43	0.00	3.9431	-6.0310	0.7443	2.3372	0.0207	0.3300	0.5530	-0.2170	-0.7676
43	30.09	0.00	3.8193	-6.0160	0.7090	1.9220	0.0303	0.3348	0.5525	-0.2177	-0.7597
44	38.90	0.00	3.9994	-6.0973	0.7931	2.0030	0.0220	0.3300	0.5546	-0.2186	-0.7528
45	39.13	0.00	3.1345	-5.9090	0.9020	1.8304	0.0242	0.3157	0.5488	-0.2331	-0.7339
46	39.24	0.00	3.0377	-5.8504	1.1154	0.8601	0.0090	0.3216	0.5400	-0.2270	-0.7241
47	39.55	0.00	3.2019	-5.8400	1.0333	0.8020	0.0000	0.3170	0.5543	-0.2373	-0.7128
48	39.77	0.00	3.0763	-5.9191	1.0797	0.8099	0.0028	0.3116	0.5532	-0.2416	-0.7135

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 63 MACH 0.60 RAID-0 1.7 PHI 0.0 CONF DIMOFIG LC 0.0 DELI 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
49	39.96	0.08	0.3376	-0.0486	0.0662	0.0729	0.0072	0.3225	0.5576	-0.2351	-0.7135
50	40.10	0.07	0.3390	-0.0744	0.0424	0.0811	0.0034	0.3213	0.5590	-0.2377	-0.6949
51	40.30	0.08	0.3397	-0.0499	0.0617	0.0873	0.0034	0.3145	0.5560	-0.2421	-0.6918
52	40.37	0.10	0.3421	-0.0501	1.2239	0.0871	0.0070	0.3008	0.5546	-0.2528	-0.7041
53	40.60	0.08	0.3493	-0.0378	0.0743	0.0840	0.0047	0.3160	0.5608	-0.2480	-0.7121
54	40.99	0.08	0.3610	-0.0103	1.0930	0.0740	0.0083	0.3080	0.5609	-0.2523	-0.6993
55	41.20	0.09	0.3673	-0.0320	1.1031	1.0383	0.0082	0.3091	0.5659	-0.2568	-0.7048
56	41.42	0.09	0.3730	-0.0270	1.2346	1.1235	0.0525	0.2975	0.5582	-0.2607	-0.6929
57	41.60	0.08	0.3785	-0.0349	1.1902	1.2119	0.0008	0.3015	0.5637	-0.2622	-0.6900
58	41.83	0.08	0.3853	-0.0298	1.2130	1.0315	0.0091	0.2869	0.5602	-0.2713	-0.6818
59	42.01	0.08	0.3910	-0.0262	1.1905	1.0027	0.0050	0.2796	0.5610	-0.2811	-0.6771
60	42.19	0.09	0.3963	-0.0263	1.2191	1.2308	0.0006	0.2809	0.5634	-0.2799	-0.6835
61	42.38	0.10	0.3982	-0.0303	1.3102	1.4107	0.0004	0.2739	0.5595	-0.2859	-0.6849
62	42.58	0.10	0.4013	-0.0197	1.2949	1.7258	0.0004	0.2757	0.5644	-0.2887	-0.6861
63	42.75	0.08	0.4078	-0.0092	1.1371	1.5036	0.0009	0.2701	0.5685	-0.2984	-0.6726

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(TRANSDUCT) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 03 MACH NAID-0 0.80 1.07 PHI 0.0 CONF 8 INDEX 13 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CBI	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
3	-0.09	-0.00	0.00490	0.00050	0.00026	0.1142	0.3596	-0.00070	0.00036	0.00001	-0.5146	-0.0143
4	1.02	0.00	0.00930	0.00100	0.00026	0.1142	0.0596	0.00568	0.00172	0.00201	0.3588	0.5134
5	2.08	0.00	0.01467	0.00153	0.00052	0.1138	0.0607	0.01751	0.00393	0.00789	0.2242	0.4508
6	4.04	0.01	0.02421	0.00256	0.00058	0.1152	0.1117	0.03070	0.00604	0.01429	0.1967	0.4055
7	6.16	0.01	0.03580	0.00355	0.00076	0.04950	0.1213	0.04410	0.00714	0.02048	0.1617	0.4054
8	8.01	0.01	0.04603	0.00458	0.00104	0.05004	0.1350	0.05594	0.00891	0.02600	0.1315	0.4491
9	10.08	0.00	0.05669	0.00560	0.00130	0.05997	0.1750	0.06862	0.00853	0.02956	0.1077	0.4365
10	12.00	0.00	0.06815	0.00669	0.00149	0.06846	0.2993	0.08617	0.01002	0.02859	0.0849	0.4320
11	14.09	0.00	0.08014	0.00779	0.00226	0.07050	0.3394	0.08698	0.00998	0.02712	0.0743	0.4049
12	16.07	-0.00	0.09090	0.00917	0.00174	0.08347	0.3501	0.08267	0.00925	0.02524	0.0684	0.4064
13	18.06	0.00	0.09908	-0.00036	-0.00068	-0.00067	0.0597	0.01625	0.00409	0.02539	0.0667	0.4148
14	20.08	-0.00	0.09814	-0.00940	0.00313	-0.07062	0.0613	0.08304	0.00909	0.02575	0.0642	0.4084
15	22.03	-0.00	0.09322	-0.00883	0.00424	-0.14958	0.0885	0.08758	0.00995	0.02738	0.0564	0.4053
16	24.19	-0.01	-0.00455	-0.01193	0.00378	0.07573	-0.3009	0.07402	0.00904	0.02990	0.0491	0.4051
17	26.13	-0.00	-0.11402	-0.02602	-0.00009	0.16536	0.5531	0.07358	0.00948	0.03182	0.0449	0.4112
18	28.08	0.01	0.01944	0.00020	-0.00090	0.13491	-0.4034	0.08044	0.00927	0.03333	0.0407	0.4143
19	30.02	0.00	0.03242	0.00530	0.00900	0.16354	0.4522	0.08208	0.00907	0.03436	0.0371	0.4140
20	31.91	0.00	0.04257	0.00812	0.00498	0.14208	0.5300	0.08567	0.00908	0.03520	0.0311	0.4109
21	33.88	0.00	0.05341	0.01260	0.00883	0.13727	0.5795	0.08959	0.00940	0.03665	0.0268	0.4091
22	35.91	0.00	0.06495	0.01673	0.01084	0.13653	0.5779	0.09121	0.00931	0.03758	0.0234	0.4098
23	33.83	0.00	0.07605	0.02122	0.01431	0.13652	0.5781	0.09059	0.00936	0.03894	0.0201	0.4076
24	39.82	0.00	0.08001	0.02492	0.01744	0.13630	0.5871	0.09142	0.00925	0.03911	0.0178	0.4059
25	39.99	0.00	0.09955	0.02815	0.02334	0.13547	0.5731	0.09246	0.00924	0.03965	0.0243	0.4072
26	39.87	0.00	0.09951	0.03178	0.02695	0.13513	0.6094	0.09200	0.00919	0.03987	0.0436	0.4060
27	39.93	0.00	0.09987	0.03083	0.02188	0.06238	0.6209	0.09379	0.00915	0.03800	0.0230	0.4051
28	39.18	0.00	0.09182	0.00354	0.00008	0.0170	0.0311	0.09331	0.00915	0.03795	0.0231	0.4066
29	39.40	0.00	0.08038	0.00493	0.00184	0.00159	0.0494	0.09350	0.00913	0.03787	0.0228	0.4050
30	39.60	0.00	0.07949	-0.00028	0.00150	-0.01110	0.0747	0.09627	0.00901	0.03907	0.0209	0.4058
31	35.09	0.00	0.04530	-0.00062	0.00069	-0.00255	0.0650	0.09676	0.00199	0.03923	0.0206	0.4055
32	38.13	0.00	0.04962	-0.00105	0.00077	-0.00434	0.0963	0.09659	0.00194	0.04011	0.0197	0.4071
33	38.37	0.00	0.02088	-0.00129	0.00327	-0.00019	0.7313	0.09823	0.00190	0.03983	0.0196	0.4055
34	38.39	0.00	0.02091	-0.00130	0.00311	-0.00023	0.7227	0.09921	0.00190	0.04015	0.0192	0.4047
35	38.04	0.00	0.01782	-0.00127	0.00306	-0.00714	0.7770	0.09856	0.00194	0.03969	0.0197	0.4048
36	37.09	0.00	0.01699	-0.00130	0.00299	-0.00950	0.7871	0.09952	0.00185	0.04012	0.0187	0.4040
37	37.31	0.00	0.01551	-0.00179	0.00174	-0.01327	0.8007	1.00048	0.00183	0.04058	0.0182	0.4039
38	37.33	0.00	0.01493	-0.00211	0.00173	-0.01449	0.9391	1.00049	0.00178	0.04038	0.0177	0.4020
39	37.77	0.00	0.00870	-0.00229	0.00020	-0.02579	1.0044	1.00039	0.00178	0.04047	0.0177	0.4023
40	38.00	0.00	0.00775	-0.00249	0.00001	-0.02960	1.1100	1.00054	0.00176	0.04039	0.0175	0.4017
41	38.24	0.00	0.00542	-0.00243	0.00151	-0.04400	1.3500	1.00060	0.00175	0.04058	0.0174	0.4023
42	38.48	0.00	0.00270	-0.00280	0.00596	-1.00370	2.2070	1.00150	0.00169	0.04042	0.0167	0.4031
43	38.69	0.00	0.00469	-0.00243	0.00099	-0.04972	1.4279	1.00104	0.00166	0.04089	0.0163	0.4015
44	38.90	0.00	0.00231	-0.00203	0.00346	-0.02390	0.9949	1.00313	0.00159	0.04146	0.0154	0.4022
45	39.15	0.00	0.10002	-0.00177	0.00953	-0.16358	0.8807	1.00243	0.00157	0.04115	0.0153	0.4017
46	39.34	0.00	0.11701	-0.00095	0.01335	-0.00557	0.7426	1.00334	0.00149	0.04100	0.0144	0.4025
47	39.55	0.00	0.11997	-0.00150	0.01033	-0.12355	0.8031	1.00498	0.00139	0.04216	0.0133	0.4016
48	39.77	0.00	0.11772	-0.00175	0.01097	-0.14778	0.9504	1.00448	0.00140	0.04200	0.0134	0.4020

TEST PART MACH HALF-E PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 03 0.80 1.7 0.0 81MUFIG 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	ACPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
49	39.96	0.00	0.1349	-0.0159	0.1104	-0.1113	0.6025	1.0036	0.0125	0.4277	0.0116	0.4021
50	40.16	0.01	0.1135	-0.0110	0.1062	-0.0971	0.9527	1.0504	0.0124	0.4192	0.0123	0.3991
51	40.36	0.00	0.1121	-0.0142	0.1091	-0.1209	0.9736	1.0504	0.0128	0.4235	0.0121	0.4002
52	40.57	0.10	0.1341	-0.0116	0.1231	-0.0035	0.0046	1.0049	0.0121	0.4236	0.0114	0.3997
53	40.00	0.00	0.0334	-0.0277	0.0713	-0.0246	2.1315	1.0721	0.0123	0.4267	0.0115	0.3998
54	40.99	0.00	0.0813	-0.0103	0.0965	-0.0455	1.2105	1.0503	0.0107	0.4315	0.0099	0.3992
55	41.20	0.00	0.1218	-0.0177	0.1207	-0.1455	0.9308	1.0851	0.0135	0.4326	0.0095	0.3988
56	41.42	0.00	0.0929	-0.0191	0.1074	-0.2059	1.1567	1.0823	0.0109	0.4332	0.0101	0.4001
57	41.60	0.00	0.0331	-0.0224	0.1053	-0.2500	1.2079	1.0830	0.0107	0.4311	0.0099	0.3980
58	41.80	0.00	0.0847	-0.0245	0.1017	-0.2790	1.2731	1.0802	0.0102	0.4334	0.0094	0.3990
59	42.01	0.00	0.0887	-0.0229	0.1023	-0.3340	1.4902	1.0773	0.0106	0.4304	0.0099	0.3995
60	42.19	0.00	0.0799	-0.0283	0.1060	-0.5074	2.0105	1.0945	0.0092	0.4353	0.0084	0.3977
61	42.38	0.10	0.0930	-0.0201	0.1051	-0.5550	2.0758	1.0849	0.0102	0.4305	0.0096	0.3968
62	42.58	0.10	0.0804	-0.0334	0.0947	-0.6233	0.1414	1.0850	0.0100	0.4301	0.0092	0.3964
63	42.75	0.00	0.0955	-0.0272	0.1092	-0.4000	1.9596	1.0849	0.0102	0.4305	0.0096	0.3968

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAID-0 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
1 03 0.80 1.1 0.0 0.0 DIHEDRAL 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
3	-0.09	-0.00	0.0043	0.9999	0.0216	0.9999	0.0377	0.0467	0.0029	-0.0057	0.0596	-0.1174
4	1.02	0.00	0.0074	0.9999	0.0227	0.9999	0.0038	0.1143	0.0172	0.0215	0.1507	0.1880
5	2.03	0.00	0.0044	0.9999	0.0230	0.9999	0.2242	0.2415	0.0381	0.0737	0.1576	0.3052
6	4.04	0.01	0.0133	0.9999	0.0239	0.9999	1.0063	0.5029	0.0577	0.1367	0.1506	0.3564
7	6.10	0.01	0.0172	0.9999	0.0260	0.9999	0.0423	0.5081	0.0670	0.1941	0.1319	0.3820
8	8.01	0.01	0.0250	0.9999	0.0295	0.9999	1.1938	0.8039	0.0833	0.2331	0.1051	0.3859
9	10.00	0.00	0.0374	0.9999	0.0355	0.9999	0.0013	0.8343	0.0555	0.2617	0.0810	0.3823
10	12.00	0.00	0.0343	0.9999	0.0473	0.9999	0.7155	0.7118	0.0500	0.2684	0.0702	0.3770
11	14.04	0.00	0.0368	0.9999	0.0287	0.9999	0.7395	0.8020	0.0412	0.2547	0.0603	0.3731
12	16.07	-0.00	0.0345	0.9999	0.0234	0.9999	0.6750	0.8025	0.0379	0.2578	0.0555	0.3777
13	18.08	0.00	0.0320	0.9999	0.0253	0.9999	0.6339	0.8308	0.0385	0.2175	0.0698	0.3946
14	20.20	-0.00	0.0084	0.9999	0.0495	0.9999	0.3807	0.8240	0.0335	0.2372	0.0648	0.3999
15	22.23	-0.00	0.0373	0.9999	0.0271	0.9999	0.3819	0.8459	0.0376	0.2569	0.0581	0.4008
16	24.19	-0.01	0.0004	0.9999	0.0236	0.9999	0.3993	0.7962	0.0335	0.2615	0.0505	0.4006
17	26.13	-0.00	0.0356	0.9999	0.0241	0.9999	0.3904	0.7505	0.0332	0.2962	0.0443	0.3947
18	28.06	0.01	0.0169	0.9999	0.0276	0.9999	0.3992	0.8191	0.0307	0.3194	0.0375	0.3899
19	30.02	0.00	0.0316	0.9999	0.0335	0.9999	0.3700	0.8709	0.0262	0.3364	0.0324	0.3866
20	31.97	0.00	0.0392	0.9999	0.0432	0.9999	0.3754	0.8937	0.0260	0.3404	0.0291	0.3876
21	33.88	0.00	0.0353	0.9999	0.0365	0.9999	0.3793	0.9073	0.0261	0.3485	0.0288	0.3841
22	35.74	0.00	0.0376	0.9999	0.0375	0.9999	0.3879	0.8954	0.0260	0.3430	0.0292	0.3831
23	37.73	0.00	0.0353	0.9999	0.0355	0.9999	0.3982	0.9126	0.0253	0.3498	0.0278	0.3832
24	39.62	0.00	0.0364	0.9999	0.0361	0.9999	0.3802	0.8994	0.0253	0.3463	0.0279	0.3808
25	34.49	0.00	0.0004	0.9999	0.0327	0.9999	0.3790	0.9061	0.0263	0.3450	0.0291	0.3808
26	34.01	0.00	0.0353	0.9999	0.0303	0.9999	0.3815	0.7263	0.0240	0.3310	0.0270	0.3814
27	34.93	0.00	0.0333	0.9999	0.0308	0.9999	0.3857	0.8202	0.0250	0.3506	0.0272	0.3810
28	35.18	0.00	0.0365	0.9999	0.0335	0.9999	0.3925	0.9117	0.0254	0.3466	0.0279	0.3802
29	35.43	0.00	0.0020	0.9999	0.0321	0.9999	0.3920	0.9222	0.0247	0.3500	0.0268	0.3795
30	35.03	0.00	0.0313	0.9999	0.0354	0.9999	0.3896	0.9304	0.0238	0.3502	0.0255	0.3804
31	35.04	0.00	0.0339	0.9999	0.0312	0.9999	0.3951	0.9398	0.0238	0.3505	0.0254	0.3814
32	36.13	0.00	0.0116	0.9999	0.0279	0.9999	0.3921	0.9503	0.0234	0.3523	0.0247	0.3812
33	36.31	0.00	0.0151	0.9999	0.0300	0.9999	0.3797	0.9608	0.0227	0.3674	0.0237	0.3824
34	36.59	0.00	0.0005	0.9999	0.0343	0.9999	0.3971	0.9507	0.0225	0.3643	0.0237	0.3832
35	36.82	0.00	0.0116	0.9999	0.0280	0.9999	0.3915	0.9540	0.0227	0.3656	0.0238	0.3834
36	37.09	0.00	0.0174	0.9999	0.0306	0.9999	0.3936	0.9660	0.0215	0.3702	0.0223	0.3833
37	37.31	0.00	0.0033	0.9999	0.0333	0.9999	0.4003	0.9758	0.0211	0.3758	0.0216	0.3836
38	37.53	0.00	0.0113	0.9999	0.0274	0.9999	0.3917	0.9848	0.0209	0.3779	0.0213	0.3839
39	37.77	0.00	0.0172	0.9999	0.0306	0.9999	0.3969	0.9848	0.0206	0.3768	0.0209	0.3846
40	38.00	0.00	0.0194	0.9999	0.0330	0.9999	0.4136	0.9860	0.0199	0.3807	0.0202	0.3853
41	38.24	0.00	0.0199	0.9999	0.0342	0.9999	0.4035	0.9869	0.0196	0.3806	0.0199	0.3856
42	38.48	0.00	0.0141	0.9999	0.0284	0.9999	0.3837	1.0037	0.0189	0.3889	0.0189	0.3875
43	38.69	0.00	0.0120	0.9999	0.0291	0.9999	0.4013	1.0036	0.0183	0.3865	0.0182	0.3863
44	38.90	0.00	0.0069	0.9999	0.0340	0.9999	0.4107	1.0145	0.0181	0.3922	0.0179	0.3874
45	39.13	0.00	0.0060	0.9999	0.0358	0.9999	0.4047	1.0009	0.0181	0.3907	0.0180	0.3880
46	39.34	0.00	0.0114	0.9999	0.0378	0.9999	0.4055	1.0071	0.0172	0.3976	0.0168	0.3871
47	39.55	0.00	0.0003	0.9999	0.0373	0.9999	0.4220	1.0187	0.0171	0.3951	0.0168	0.3879
48	39.77	0.00	0.0035	0.9999	0.0351	0.9999	0.4190	1.0341	0.0167	0.4012	0.0162	0.3880

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-B PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 03 0.60 1.7 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
49	39.96	0.00	0.0852	0.9999	0.0334	0.9999	0.4151	1.0425	0.0155	0.4056	0.0149	0.3892
50	40.18	0.01	0.0845	0.9999	0.0373	0.9999	0.4163	1.0576	0.0146	0.4167	0.0138	0.3883
51	40.36	0.00	0.0853	0.9999	0.0336	0.9999	0.4218	1.0576	0.0146	0.4116	0.0138	0.3892
52	40.37	0.00	0.0840	0.9999	0.0373	0.9999	0.4094	1.0576	0.0142	0.4111	0.0134	0.3886
53	40.60	0.00	0.0873	0.9999	0.0283	0.9999	0.4240	1.0607	0.0138	0.4133	0.0128	0.3897
54	40.77	0.00	0.0842	0.9999	0.0279	0.9999	0.4265	1.0729	0.0127	0.4200	0.0119	0.3915
55	41.20	0.00	0.0856	0.9999	0.0397	0.9999	0.4236	1.0633	0.0122	0.4250	0.0113	0.3924
56	41.42	0.00	0.0845	0.9999	0.0366	0.9999	0.4195	1.0710	0.0121	0.4200	0.0115	0.3922
57	41.60	0.00	0.0865	0.9999	0.0367	0.9999	0.4272	1.0802	0.0110	0.4269	0.0101	0.3923
58	41.80	0.00	0.0845	0.9999	0.0360	0.9999	0.4195	1.0900	0.0107	0.4263	0.0098	0.3929
59	42.01	0.00	0.0844	0.9999	0.0366	0.9999	0.4256	1.0801	0.0105	0.4273	0.0095	0.3934
60	42.19	0.00	0.0810	0.9999	0.0363	0.9999	0.4177	1.0938	0.0099	0.4207	0.0090	0.3930
61	42.38	0.10	0.0844	0.9999	0.0367	0.9999	0.4309	1.0841	0.0101	0.4276	0.0093	0.3944
62	42.58	0.10	0.0831	0.9999	0.0366	0.9999	0.4260	1.1012	0.0090	0.4333	0.0082	0.3935
63	42.75	0.00	0.0850	0.9999	0.0391	0.9999	0.4201	1.0962	0.0090	0.4316	0.0082	0.3939

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH =M1=6. PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 =3 0.00 1.7 0.0 BL=2.13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
1	0.00	0.00	-0.0426	0.1769	0.0033	-0.2013	0.0098	0.2366	0.0843	0.1523	-2.5203
2	-0.00	0.01	-0.0471	0.1955	0.1039	-0.1738	0.0011	0.2409	0.0834	0.1550	-2.5218
3	-0.04	-0.01	0.1345	-0.0599	0.0210	-0.1848	0.0011	0.2558	0.0859	0.1699	-0.2851
4	1.02	0.00	0.1731	-0.3313	0.0037	-0.2037	0.0016	0.2554	0.0836	0.1720	-1.9139
5	2.03	0.00	0.4513	-1.1954	0.0037	-0.2034	0.0021	0.2554	0.0849	0.1720	-2.2804
6	4.04	0.01	0.4773	-0.1224	0.1120	-0.3136	0.0106	0.2446	0.0910	0.1536	-2.4200
7	5.08	0.01	1.0238	-0.1507	0.1233	-0.3229	0.0034	0.2450	0.1022	0.1429	-2.5453
8	8.51	0.01	1.5567	-0.0981	0.1207	-0.3301	0.0116	0.2554	0.1153	0.1402	-2.5393
9	10.26	0.00	1.8425	-0.1332	0.1102	-0.3220	0.0125	0.2611	0.1270	0.1342	-2.4954
10	12.00	0.00	2.1294	-0.0825	0.0745	-0.3641	0.0055	0.2787	0.1525	0.1260	-2.3708
11	14.54	0.00	2.5336	-0.0659	0.0431	-0.3246	0.0065	0.3126	0.1921	0.1205	-2.1734
12	16.47	-0.00	2.8282	-0.0722	0.0051	-0.1759	0.0230	0.3534	0.2534	0.1000	-1.9443
13	18.38	0.00	3.1637	-0.0424	0.1155	-0.4451	-0.0056	0.4335	0.3683	0.0652	-1.6626
14	20.28	-0.00	3.4715	-0.1201	0.0527	-0.4235	0.0025	0.4699	0.4035	0.0664	-1.5422
15	22.23	-0.00	3.8000	-0.0362	0.0159	-0.2272	-0.0043	0.4784	0.4390	0.0389	-1.4705
16	24.14	-0.01	4.1603	-0.0581	-0.1953	0.1377	-0.0349	0.4713	0.4613	0.0100	-1.4120
17	26.13	-0.01	4.4711	-0.0385	-0.3019	0.3019	-0.0977	0.4816	0.4871	-0.0055	-1.2768
18	28.06	0.01	4.1175	-0.0771	0.2734	-0.6020	-0.0144	0.4822	0.5075	-0.0253	-1.1832
19	30.02	0.00	5.2373	-0.0700	1.0527	-1.5362	0.1407	0.4543	0.5181	-0.0637	-1.0731
20	31.97	0.00	5.2357	-0.0993	1.3405	-1.9310	0.2253	0.4239	0.5180	-0.0971	-0.9720
21	33.96	0.00	5.5711	-0.0720	1.2695	-1.1865	0.2215	0.3950	0.5191	-0.1241	-0.9300
22	35.91	0.00	5.7344	-0.3297	1.2078	-1.1484	0.2218	0.3852	0.5186	-0.1324	-0.9287
23	33.93	0.00	5.7711	-0.2391	1.2265	-1.1512	0.2144	0.3948	0.5237	-0.1289	-0.9078
24	34.26	0.00	5.6283	-0.3414	1.3086	-1.0955	0.2142	0.3908	0.5247	-0.1339	-0.9162
25	34.44	0.00	5.7703	-0.4154	1.2900	-0.9027	0.2072	0.3871	0.5254	-0.1383	-0.8903
26	34.67	0.00	6.0171	-0.2560	1.1458	-0.7749	0.1754	0.3813	0.5275	-0.1462	-0.8725
27	34.93	0.00	6.1547	-0.3784	1.1036	-0.6787	0.1735	0.3795	0.5340	-0.1555	-0.8765
28	35.16	0.00	6.1643	-0.2258	1.0699	-0.3150	0.1468	0.3749	0.5270	-0.1521	-0.8511
29	35.40	0.00	6.2636	-0.3559	1.1715	-0.2953	0.1511	0.3668	0.5362	-0.1714	-0.8523
30	35.65	0.00	6.4907	-0.5735	0.9930	0.1701	0.1185	0.3769	0.5449	-0.1680	-0.8587
31	35.84	0.00	6.5307	-0.6162	1.0761	0.1446	0.1265	0.3583	0.5449	-0.1856	-0.8580
32	36.13	0.00	6.7525	-0.7414	1.0149	0.7175	0.1044	0.3644	0.5440	-0.1846	-0.8465
33	36.41	0.00	6.8794	-0.7236	0.9969	0.7175	0.1019	0.3484	0.5506	-0.2036	-0.8365
34	36.64	0.00	6.9576	-0.6150	1.1242	0.7855	0.0936	0.3605	0.5510	-0.1905	-0.8358
35	36.86	0.00	7.0875	-0.6561	0.9957	1.2554	0.0928	0.3529	0.5525	-0.1997	-0.8262
36	37.09	0.00	7.2455	-0.6733	1.0197	1.0162	0.0765	0.3430	0.5554	-0.2124	-0.8222
37	37.41	0.00	7.3591	-0.6125	0.8510	1.2465	0.0902	0.3540	0.5503	-0.1963	-0.8132
38	37.63	0.00	7.4894	-0.6960	0.9172	1.2660	0.0631	0.3474	0.5552	-0.2078	-0.8049
39	37.77	0.00	7.5231	-0.6126	0.8691	1.6191	0.0448	0.3418	0.5507	-0.2069	-0.7858
40	38.00	0.00	7.6183	-0.6921	0.7435	2.0070	0.0367	0.3438	0.5495	-0.2057	-0.7829
41	38.24	0.00	7.7019	-0.6386	0.8595	2.2137	0.0294	0.3254	0.5510	-0.2256	-0.7777
42	38.48	0.00	7.9231	-0.6618	0.7493	2.3542	0.0207	0.3360	0.5530	-0.2170	-0.7676
43	38.69	0.00	7.9154	-0.6160	0.7690	1.9228	0.0303	0.3348	0.5525	-0.2177	-0.7597
44	38.90	0.00	8.0941	-0.6173	0.7931	2.0038	0.0228	0.3360	0.5546	-0.2186	-0.7528
45	39.13	0.00	8.1385	-0.6096	0.9006	1.6384	0.0242	0.3157	0.5558	-0.2331	-0.7339
46	39.38	0.00	8.2677	-0.6364	1.1154	0.8601	0.0696	0.3216	0.5486	-0.2270	-0.7241

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH PAIRED PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 67 0.60 1.7 0.0 MIN PHI 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	ACP
87	39.33	0.00	5.2414	-5.3950	1.0333	0.8420	0.0000	0.3178	0.5544	-0.2373	-0.7128
88	39.77	0.00	5.2903	-5.4191	1.0747	0.8704	0.0928	0.3116	0.5532	-0.2416	-0.7135
89	39.98	0.00	5.3178	-5.4482	0.9092	0.8729	0.0872	0.3225	0.5578	-0.2351	-0.7135
90	40.18	0.01	5.3698	-5.4744	0.8964	0.8811	0.0934	0.3413	0.5590	-0.2177	-0.6949
91	40.38	0.00	5.4557	-5.5244	0.8917	0.8873	0.0934	0.3145	0.5566	-0.2421	-0.6916
92	40.57	0.01	5.4921	-5.5501	1.2439	0.8871	0.0957	0.3064	0.5546	-0.2528	-0.7041
93	40.80	0.00	5.5543	-5.5771	0.9783	1.0000	0.0927	0.3128	0.5508	-0.2480	-0.7121
94	40.99	0.00	5.6110	-5.6013	1.0950	0.9260	0.0963	0.3086	0.5609	-0.2523	-0.6993
95	41.24	0.00	5.6873	-5.6324	1.1631	1.0363	0.0962	0.3091	0.5559	-0.2508	-0.7048
96	41.42	0.00	5.7490	-5.6704	1.2346	1.1235	0.0525	0.2975	0.5582	-0.2607	-0.6929
97	41.58	0.00	5.8132	-5.7032	1.1402	1.1119	0.0806	0.3015	0.5537	-0.2622	-0.6930
98	41.80	0.00	5.8705	-5.7390	1.2136	1.0315	0.0691	0.2849	0.5602	-0.2713	-0.6818
99	42.01	0.00	5.9356	-5.7712	1.1305	1.1627	0.0850	0.2798	0.5610	-0.2811	-0.6771
60	42.19	0.00	5.9953	-5.8063	1.2191	1.2368	0.0666	0.2804	0.5604	-0.2739	-0.6835
61	42.38	0.00	6.0582	-5.8385	1.3102	1.4107	0.0824	0.2732	0.5594	-0.2859	-0.6849
62	42.58	0.00	6.1210	-5.8747	1.2449	1.3536	0.0394	0.2757	0.5644	-0.2887	-0.6861
63	42.75	0.00	6.1778	-5.9139	1.1371	1.3536	0.0802	0.2701	0.5645	-0.2984	-0.6726
64	42.93	0.00	6.2408	-5.9478	1.2239	1.7435	0.0448	0.2675	0.5664	-0.2969	-0.6860
65	43.11	0.00	6.3030	-5.9776	1.2185	2.0513	0.0302	0.2712	0.5664	-0.2952	-0.6822
66	43.28	0.00	6.3679	-6.0011	1.0950	1.7206	0.0047	0.2580	0.5640	-0.3060	-0.6883
67	43.47	0.00	6.4340	-6.0351	1.2509	1.8747	0.0451	0.2589	0.5669	-0.3060	-0.6853
68	43.65	0.00	6.5044	-6.0686	1.2816	1.8955	0.0456	0.2616	0.5660	-0.3244	-0.6697
69	43.83	0.00	6.5658	-6.0980	1.2554	1.9147	0.0993	0.2456	0.5595	-0.3139	-0.6894
70	43.99	0.00	6.6264	-6.1362	1.2909	1.9381	0.0944	0.2380	0.5595	-0.3215	-0.6824
71	44.20	0.00	6.6930	-6.1652	1.3397	1.9472	0.0870	0.2293	0.5570	-0.3277	-0.6582
72	44.38	0.00	6.7526	-6.2031	1.2873	1.9456	0.0876	0.2356	0.5545	-0.3229	-0.6590
73	44.55	0.00	6.8097	-6.2339	1.3160	1.9036	0.0879	0.2257	0.5555	-0.3298	-0.6574
74	44.74	0.00	6.8669	-6.2678	1.2943	1.9293	0.0567	0.2213	0.5595	-0.3382	-0.6584
75	44.92	0.00	6.9316	-6.2992	1.2365	1.9838	0.0563	0.2178	0.5608	-0.3422	-0.6537
76	45.09	0.01	6.9838	-6.3360	1.2522	1.9698	0.0411	0.2162	0.5561	-0.3419	-0.6466
77	45.27	0.01	7.0381	-6.3679	1.1884	1.9373	0.0442	0.2221	0.5706	-0.3425	-0.6577
78	45.46	0.01	7.0950	-6.4120	1.3290	1.7369	0.0253	0.2017	0.5670	-0.3653	-0.6528
79	45.64	0.01	7.1508	-6.4422	1.3443	1.8424	0.0267	0.2141	0.5691	-0.3550	-0.6436
80	45.79	0.00	7.2042	-6.4740	1.3388	1.8555	0.0108	0.2182	0.5741	-0.3559	-0.6408
81	45.97	0.01	7.2601	-6.5137	1.2116	1.7337	0.0184	0.2226	0.5736	-0.3510	-0.6478
82	46.15	0.00	7.3203	-6.5493	1.2762	1.7541	0.0158	0.2087	0.5781	-0.3694	-0.6473
83	46.32	0.00	7.3792	-6.5852	1.2582	2.1112	0.0321	0.2046	0.5807	-0.3761	-0.6594
84	46.50	0.01	7.4432	-6.6134	1.2109	1.8002	-0.0042	0.2151	0.5942	-0.3691	-0.6505
85	46.68	0.01	7.5028	-6.6503	1.1846	2.0971	-0.0203	0.1936	0.5902	-0.3906	-0.6469
86	46.85	0.01	7.5592	-6.6861	1.0868	2.2194	-0.0291	0.2073	0.5951	-0.3878	-0.6474
87	47.02	0.00	7.6233	-6.7181	1.0811	2.1009	-0.0429	0.1996	0.5941	-0.3943	-0.6459
88	47.19	0.00	7.6841	-6.7535	0.9559	2.5629	-0.0441	0.1981	0.6016	-0.4035	-0.6472
89	47.37	0.01	7.7453	-6.7917	0.8704	2.6869	-0.0543	0.1942	0.6026	-0.4134	-0.6598
90	47.52	0.00	7.8018	-6.8249	0.8728	2.8359	-0.0602	0.1969	0.6036	-0.4067	-0.6479
91	47.70	0.00	7.8594	-6.8598	0.8565	2.8935	-0.0662	0.1971	0.6067	-0.4176	-0.6502
92	47.87	0.00	7.9148	-6.8935	0.7311	2.9552	-0.0676	0.2075	0.6067	-0.4112	-0.6555

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(INSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RNLG-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	43	0.90	1.7	0.0	81.0F13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
93	45.39	0.02	11.7[illegible]23	-7.[illegible]31	[illegible]817	2.9466	-0.0752	0.2022	0.6237	-0.4215	-0.6487
94	45.23	0.00	11.[illegible]190	-7.[illegible]30	[illegible]761	3.1933	-0.0904	0.1909	0.6256	-0.4349	-0.6343
95	45.37	0.02	11.[illegible]17	-7.[illegible]77	[illegible]844	3.5942	-0.0918	0.1842	0.6237	-0.4395	-0.6338
96	45.55	-0.00	11.6[illegible]49	-7.[illegible]50	0.[illegible]53	3.7621	-0.1152	0.1812	0.6207	-0.4345	-0.6223
97	45.71	-0.02	11.[illegible]025	-7.[illegible]26	-0.[illegible]774	3.4374	-0.1211	0.1732	0.6207	-0.4475	-0.5889
98	44.97	-0.01	11.[illegible]38	-6.[illegible]21	-0.[illegible]277	3.1545	-0.1123	0.1837	0.6173	-0.4336	-0.5648
99	43.25	-0.02	11.[illegible]316	-6.[illegible]79	-0.[illegible]922	3.2575	-0.1198	0.1570	0.6107	-0.4537	-0.5710
100	44.23	-0.04	11.[illegible]376	-6.[illegible]53	-0.6373	4.0629	-0.1219	0.1580	0.6148	-0.4568	-0.5701
101	44.41	-0.03	11.[illegible]15	-6.[illegible]52	-0.2961	3.3359	-0.1195	0.1537	0.6131	-0.4594	-0.5511
102	44.59	-0.05	12.[illegible]10	-6.[illegible]56	-0.7621	4.1457	-0.1293	0.1427	0.6151	-0.4724	-0.5791
103	43.78	-0.02	12.1[illegible]9	-7.[illegible]61	-0.[illegible]12	4.3445	-0.1378	0.1389	0.6276	-0.4891	-0.5903
104	44.94	-0.00	12.1[illegible]2	-7.13[illegible]1	-0.[illegible]90	4.5675	-0.1534	0.1469	0.6211	-0.4742	-0.5884
105	50.11	-0.02	12.[illegible]81	-7.[illegible]26	-0.[illegible]73	4.6567	-0.1454	0.1354	0.6292	-0.4939	-0.5937
106	50.28	-0.04	12.3[illegible]3	-7.3[illegible]3	-0.6311	4.7952	-0.1467	0.1346	0.6367	-0.5012	-0.6006
107	51.45	-0.03	12.3[illegible]2	-7.[illegible]37	-0.[illegible]367	4.7879	-0.1548	0.1457	0.6356	-0.4900	-0.5981
108	50.63	-0.03	12.[illegible]17	-7.[illegible]63	-0.[illegible]92	5.1220	-0.1403	0.1344	0.6362	-0.5039	-0.6045
109	50.80	-0.03	12.5101	-7.[illegible]54	-0.5715	5.0388	-0.1551	0.1293	0.6441	-0.5149	-0.5981
110	50.95	-0.04	12.5[illegible]7	-7.[illegible]53	-0.[illegible]65	4.9641	-0.1469	0.1226	0.6461	-0.5236	-0.6015
111	51.12	-0.04	12.[illegible]37	-7.[illegible]74	-0.[illegible]76	5.0063	-0.1549	0.1227	0.6482	-0.5256	-0.6081
112	51.29	-0.01	12.[illegible]94	-7.[illegible]53	-0.3242	4.7506	-0.1311	0.1151	0.6542	-0.5392	-0.6095
113	51.48	0.00	12.7[illegible]7	-8.[illegible]04	-0.[illegible]95	4.7497	-0.1081	0.1406	0.6628	-0.5223	-0.6280
114	51.62	0.02	12.7[illegible]6	-8.[illegible]13	0.[illegible]17	4.7840	-0.1085	0.1387	0.6642	-0.5256	-0.6341
115	51.78	0.03	12.[illegible]93	-8.3177	0.[illegible]96	5.0512	-0.1170	0.1506	0.6662	-0.5157	-0.6441
116	51.96	0.02	12.9561	-8.[illegible]13	0.0994	5.0341	-0.1044	0.1185	0.6651	-0.5067	-0.6440
117	52.13	0.02	12.9[illegible]5	-8.3371	0.[illegible]31	5.0712	-0.1098	0.1128	0.6675	-0.5549	-0.6439
118	52.30	0.03	13.1951	-8.[illegible]30	0.4113	5.3555	-0.1260	0.1168	0.6621	-0.5454	-0.6565
119	52.47	0.04	13.3[illegible]9	-8.[illegible]43	0.3705	5.5189	-0.1339	0.1097	0.6656	-0.5560	-0.6518
120	52.67	0.05	13.[illegible]03	-8.[illegible]22	0.[illegible]65	5.9648	-0.1586	0.0996	0.6669	-0.5674	-0.6617
121	52.82	0.04	13.[illegible]70	-8.[illegible]61	0.4760	5.9469	-0.1430	0.1068	0.6680	-0.5613	-0.6594
122	53.00	0.05	13.[illegible]46	-8.[illegible]60	0.6810	5.4740	-0.1018	0.0723	0.6665	-0.5642	-0.6526
123	53.17	0.03	13.[illegible]03	-8.[illegible]59	1.[illegible]45	5.5321	-0.1405	0.0929	0.6688	-0.5562	-0.6580
124	53.37	0.00	14.134[illegible]	-8.1081	0.[illegible]56	5.1656	-0.0456	0.0464	0.6364	-0.5900	-0.6441
125	53.53	0.05	14.[illegible]21	-8.[illegible]63	0.7302	5.2820	-0.0901	0.0690	0.6296	-0.5808	-0.6456
126	53.70	0.07	14.3232	-8.[illegible]15	1.0214	4.9977	-0.0449	0.0440	0.6314	-0.5674	-0.6424
127	53.88	0.07	14.[illegible]51	-8.[illegible]30	1.0459	5.8731	0.0139	0.0641	0.6451	-0.5810	-0.6306
128	54.04	0.07	14.[illegible]37	-8.1626	1.2077	5.4709	0.0001	0.0526	0.6370	-0.5842	-0.6349
129	54.18	0.07	14.[illegible]40	-8.[illegible]06	1.[illegible]58	5.5565	0.0305	0.0489	0.6249	-0.5765	-0.6177
130	54.34	0.08	14.[illegible]37	-8.[illegible]74	1.3347	5.3722	0.0313	0.0530	0.6328	-0.5798	-0.6267
131	54.52	0.09	14.5[illegible]5	-8.[illegible]19	1.3036	5.2925	0.0323	0.0539	0.6442	-0.5903	-0.6362
132	54.68	0.09	14.5[illegible]4	-8.[illegible]01	1.3083	5.3105	0.0262	0.0630	0.6447	-0.5817	-0.6362
133	54.83	0.08	14.[illegible]97	-8.[illegible]69	1.3335	5.2590	0.0172	0.0560	0.6432	-0.5872	-0.6539
134	54.99	0.07	14.7759	-8.[illegible]30	1.2471	5.9649	0.0032	0.1011	0.6380	-0.5370	-0.6649
135	55.16	0.07	14.[illegible]34	-8.[illegible]73	1.5468	5.2126	0.0252	0.0583	0.6482	-0.5579	-0.6388
136	55.29	0.09	14.[illegible]4	-8.[illegible]67	1.4306	5.2694	0.0253	0.0675	0.6448	-0.5773	-0.6417
137	55.45	0.09	14.9621	-9.[illegible]08	1.4077	2.8643	0.0117	0.0729	0.6426	-0.5652	-0.6466
138	55.53	0.10	15.1029	-9.[illegible]07	1.5424	5.2522	0.0415	0.0657	0.6497	-0.5840	-0.6403

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	EAST	MACH	REY/FT	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	63	0.60	1.7	0.0	81-0P13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
139	55.84	0.11	15.2677	-0.2797	1.2405	2.5800	0.0052	0.0800	0.6336	-0.5534	-0.6499
140	56.44	0.10	15.0156	-0.3042	1.5476	2.6706	0.0274	0.0775	0.6322	-0.5547	-0.6384
141	56.03	0.10	14.9827	-0.3126	1.5655	2.8370	0.0273	0.0493	0.6362	-0.5649	-0.6343
142	56.27	0.11	15.2613	-0.3126	1.6560	2.7222	0.0128	0.0679	0.6278	-0.5600	-0.6451
143	56.42	0.10	15.0784	-0.3284	1.5869	2.6468	0.0286	0.0554	0.6227	-0.5666	-0.6212
144	56.35	0.11	14.9577	-0.1415	1.6317	2.5856	0.0362	0.0474	0.6320	-0.5846	-0.6112
145	56.72	0.11	15.0637	-0.2836	1.7235	2.6719	0.0366	0.0581	0.6234	-0.5653	-0.6278
146	56.56	0.10	15.2102	-0.3509	1.5581	2.3718	0.0300	0.0549	0.6276	-0.5627	-0.6343
147	57.06	0.09	15.0161	-0.3574	1.6963	2.3360	0.0452	0.0515	0.6287	-0.5772	-0.6297
148	57.18	0.09	15.2479	-0.3615	1.4984	2.4969	0.0453	0.0472	0.6428	-0.5956	-0.6258
149	57.36	0.09	15.1201	-0.3597	1.3714	2.2703	0.0228	0.0370	0.6336	-0.5968	-0.6256
150	57.47	0.07	15.3014	-0.3447	1.3715	1.9509	0.0323	0.0524	0.6317	-0.5793	-0.6404
151	57.60	0.09	15.1502	-0.3193	1.3165	1.8214	0.0325	0.0543	0.6247	-0.5754	-0.6339
152	57.74	0.07	15.0177	-0.1425	1.4997	1.8718	0.0474	0.0558	0.6356	-0.5800	-0.6088
153	57.85	0.05	15.1142	-0.3371	1.2926	1.8733	0.0461	0.0812	0.6302	-0.5490	-0.6308
154	58.05	0.05	15.2479	-0.3549	1.2326	1.7896	0.0410	0.0314	0.6205	-0.5892	-0.6270
155	58.18	0.04	15.1494	-0.3481	1.0551	1.6592	0.0329	0.0508	0.6206	-0.5658	-0.6396
156	58.20	0.06	15.2781	-0.3035	1.0367	1.6845	0.0464	0.0456	0.6141	-0.5665	-0.6286
157	58.20	0.08	15.0772	-0.3082	1.3369	1.8302	0.0332	0.0508	0.6102	-0.5562	-0.6279

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) / 8T 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	MACH	WAVE	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	0.60	1.7	0.0	81.0	13 0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	ACPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
1	0.26	0.02	[illegible]	0.1052	0.0030	0.1121	0.7643	-0.6320	-0.0021	-0.0104	0.0657	0.3260
2	-0.00	0.01	[illegible]	0.0944	0.0023	0.1076	0.7564	-0.0284	-0.0011	-0.0045	0.0381	0.2951
3	-0.07	-0.01	[illegible]	0.0939	0.0025	0.1142	0.7576	-0.0070	0.0036	0.0001	-0.5140	-0.0143
4	1.02	0.00	[illegible]	0.0956	0.0026	0.1147	0.7596	0.0508	0.0172	0.0261	0.3386	0.5134
5	2.02	0.00	[illegible]	0.0954	0.0032	0.1136	0.7567	0.1751	0.0393	0.0749	0.2242	0.4508
6	4.04	0.01	0.0521	0.0969	0.0058	0.1142	0.1117	0.3070	0.0404	0.1429	0.1457	0.4655
7	6.06	0.01	0.0865	0.0955	0.0070	0.0950	0.1213	0.4416	0.0714	0.2045	0.1517	0.4634
8	8.01	0.01	0.0913	0.0939	0.0105	0.0964	0.1250	0.5254	0.0691	0.2350	0.1315	0.4491
9	10.08	0.00	0.0953	0.0964	0.0105	0.0997	0.1750	0.6062	0.0653	0.2658	0.1077	0.4385
10	12.06	0.00	0.0919	0.0969	0.0744	0.0948	0.2945	0.6617	0.0562	0.2859	0.0869	0.4320
11	14.05	[illegible]	0.0976	0.1044	0.0622	0.0956	0.3374	0.6698	0.0498	0.2712	0.0743	0.4049
12	16.07	-0.00	0.0990	0.0017	0.0172	0.0347	0.3501	0.6207	0.0475	0.2522	0.0684	0.4064
13	18.06	0.00	0.0928	0.0700	0.0504	-0.0066	0.5537	0.6125	0.0409	0.2539	0.0667	0.4146
14	20.06	-0.00	0.0517	-0.0041	0.0313	-0.0782	0.4113	0.6304	0.0405	0.2575	0.0642	0.4084
15	22.03	-0.00	0.0362	-0.0353	0.0222	-0.1558	0.6563	0.6756	0.0395	0.2738	0.0584	0.4053
16	24.19	-0.01	-0.0295	-0.0193	0.0178	0.7573	-0.3469	0.7402	0.0364	0.2996	0.0491	0.4051
17	26.13	-0.00	-0.0112	-0.0202	-0.0009	0.1836	0.5581	0.7738	0.0348	0.3142	0.0469	0.4112
18	28.08	0.01	0.0194	0.0023	-0.0070	0.1341	-0.4556	0.8044	0.0327	0.3333	0.0407	0.4143
19	30.02	0.00	0.0242	0.0134	0.1066	0.1634	0.8722	0.8285	0.0307	0.3436	0.0371	0.4146
20	31.97	0.00	0.0237	0.0512	0.2248	0.1208	0.5336	0.8567	0.0266	0.3520	0.0311	0.4109
21	33.88	0.00	0.0991	0.1286	0.2243	0.0727	0.5799	0.8959	0.0240	0.3665	0.0268	0.4091
22	33.91	0.00	0.0295	0.0273	0.2482	0.0837	0.5779	0.9121	0.0231	0.3738	0.0254	0.4098
23	33.93	0.00	0.0785	0.0322	0.2151	0.0852	0.5791	0.9059	0.0236	0.3699	0.0261	0.4079
24	34.72	0.00	0.0701	0.0267	0.2349	0.0606	0.5871	0.9142	0.0225	0.3711	0.0246	0.4059
25	34.94	0.00	0.0735	0.0215	0.2334	0.0567	0.5931	0.9246	0.0224	0.3765	0.0243	0.4072
26	34.97	0.00	0.0697	0.0178	0.2095	0.0513	0.6096	0.9260	0.0219	0.3767	0.0236	0.4060
27	34.93	0.00	0.0702	0.0084	0.2196	0.0238	0.6269	0.9379	0.0215	0.3800	0.0230	0.4051
28	35.18	0.00	0.0760	0.0058	0.2004	0.0170	0.6311	0.9331	0.0215	0.3795	0.0231	0.4064
29	35.46	0.00	0.0736	0.0053	0.1962	0.0159	0.6494	0.9350	0.0213	0.3787	0.0228	0.4050
30	35.69	0.00	0.0724	-0.0028	0.1636	-0.0116	0.6767	0.9427	0.0201	0.3907	0.0209	0.4058
31	35.89	0.00	0.0745	-0.0062	0.1669	-0.0235	0.6854	0.9876	0.0199	0.3923	0.0206	0.4055
32	36.13	0.00	0.0762	-0.0109	0.1677	-0.0434	0.6923	0.9854	0.0194	0.4011	0.0197	0.4071
33	36.37	0.00	0.0728	-0.0127	0.1527	-0.0419	0.7315	0.9823	0.0190	0.3983	0.0194	0.4055
34	36.59	0.00	0.0741	-0.0134	0.1511	-0.0423	0.7227	0.9921	0.0190	0.4015	0.0192	0.4047
35	36.82	0.00	0.0722	-0.0127	0.1396	-0.0414	0.7778	0.9856	0.0194	0.3989	0.0197	0.4049
36	37.09	0.00	0.0744	-0.0156	0.1294	-0.0450	0.7871	0.9932	0.0185	0.4012	0.0187	0.4040
37	37.31	0.00	0.0751	-0.0170	0.1174	-0.0467	0.8067	1.0046	0.0183	0.4058	0.0182	0.4039
38	37.53	0.00	0.0763	-0.0211	0.1073	-0.0469	0.9391	1.0063	0.0176	0.4038	0.0177	0.4020
39	37.77	0.00	0.0770	-0.0224	0.0926	-0.0479	1.0999	1.0059	0.0178	0.4047	0.0177	0.4023
40	38.00	0.00	0.0778	-0.0229	0.0961	-0.0963	1.1196	1.0054	0.0176	0.4039	0.0175	0.4017
41	38.24	0.00	0.0542	-0.0284	0.0737	-0.4466	1.3588	1.0086	0.0175	0.4058	0.0176	0.4023
42	38.48	0.00	0.0270	-0.0260	0.0596	-1.0376	2.2670	1.0150	0.0164	0.4042	0.0167	0.4031
43	38.69	0.00	0.0232	-0.0293	0.0599	-0.9972	1.4279	1.0184	0.0166	0.4089	0.0163	0.4015
44	38.96	0.00	0.0241	-0.0263	0.0546	-0.2390	0.9389	1.0313	0.0159	0.4148	0.0154	0.4022
45	39.13	0.00	0.0202	-0.0177	0.0953	-0.1638	0.8527	1.0293	0.0157	0.4115	0.0153	0.4017
46	39.34	0.00	0.0197	-0.0095	0.1335	-0.0557	0.7826	1.0334	0.0149	0.4160	0.0144	0.4025

TEST	RUN	MACH	RATIO	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	63	0.80	1.7	0.0	=1.0E13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
47	43.55	0.00	0.1147	=0.015	0.1433	=0.1285	0.8631	1.0698	0.0134	0.4216	0.0133	0.4016
48	39.77	0.00	0.1172	=0.173	0.1197	=0.1478	0.9364	1.0444	0.0140	0.4200	0.0134	0.4020
49	39.96	0.00	0.1349	=0.0159	0.1164	=0.1113	0.8625	1.0636	0.0125	0.4277	0.0118	0.4021
50	40.10	0.00	0.1145	=0.0117	0.1042	=0.0971	0.9537	1.0504	0.0126	0.4192	0.0123	0.3991
51	40.36	0.00	0.1121	=0.0142	0.1091	=0.1259	0.9736	1.0584	0.0120	0.4235	0.0121	0.4002
52	40.57	0.00	0.1191	=0.0115	0.1231	=0.0835	0.8466	1.0669	0.0121	0.4256	0.0114	0.3997
53	40.80	0.00	0.1336	=0.0277	0.0713	=0.0825	2.1325	1.0721	0.0123	0.4287	0.0115	0.3998
54	40.99	0.00	0.1413	=0.0149	0.0999	=0.2755	1.2169	1.0903	0.0137	0.4313	0.0099	0.3992
55	41.26	0.00	0.1215	=0.0177	0.1207	=0.1455	0.9908	1.0951	0.0103	0.4328	0.0095	0.3988
56	41.47	0.00	0.1429	=0.0141	0.1074	=0.2059	1.1567	1.0824	0.0104	0.4332	0.0101	0.4001
57	41.80	0.00	0.1331	=0.0213	0.1253	=0.2565	1.2679	1.0833	0.0107	0.4311	0.0099	0.3980
58	41.96	0.00	0.1467	=0.0245	0.1017	=0.3795	1.5731	1.0862	0.0102	0.4334	0.0094	0.3990
59	42.21	0.00	0.1267	=0.0229	0.1023	=0.3360	1.4902	1.0773	0.0106	0.4334	0.0099	0.3995
60	42.49	0.00	0.0995	=0.1263	0.1038	=0.5674	2.0145	1.0945	0.0092	0.4353	0.0084	0.3977
61	42.62	0.00	0.1502	=0.0281	0.1051	=0.5556	2.0758	1.0849	0.0102	0.4335	0.0094	0.3968
62	42.96	0.00	0.0104	=0.0336	0.0947	=3.2133	8.1014	1.0850	0.0100	0.4301	0.0092	0.3964
63	42.75	0.00	0.0998	=0.0272	0.1092	=0.4856	1.9578	1.0849	0.0102	0.4305	0.0094	0.3965
64	42.93	0.00	0.0132	=0.1348	0.0885	=2.6372	6.5638	1.0977	0.0092	0.4363	0.0084	0.3975
65	43.11	0.00	0.0957	=0.1169	0.0818	=5.1958	12.1832	1.1061	0.0091	0.4375	0.0083	0.3962
66	44.72	0.00	0.0573	=0.0285	0.1150	=0.4619	2.0151	1.0915	0.0095	0.4309	0.0087	0.3947
67	43.47	0.00	0.1004	=0.0333	0.0945	=3.6083	8.6156	1.1074	0.0087	0.4345	0.0079	0.3960
68	43.65	0.00	0.1724	=0.0271	0.1434	=0.3750	1.7053	1.1074	0.0080	0.4385	0.0072	0.3969
69	43.83	0.00	0.1117	=0.0216	0.1401	=0.1961	1.2540	1.1042	0.0085	0.4368	0.0075	0.3974
70	43.99	0.00	0.1169	=0.0196	0.1411	=0.1721	1.2496	1.1122	0.0083	0.4396	0.0075	0.3952
71	44.20	0.00	0.0721	=0.0262	0.1244	=0.3446	1.7253	1.0973	0.0083	0.4346	0.0076	0.3958
72	44.40	0.00	0.0912	=0.0218	0.1298	=0.2089	1.5994	1.1108	0.0074	0.4387	0.0067	0.3949
73	44.55	0.00	0.0827	=0.0261	0.1325	=0.2279	1.5042	1.1075	0.0076	0.4385	0.0069	0.3959
74	44.74	0.00	0.0937	=0.0268	0.1102	=0.6136	2.5183	1.1219	0.0070	0.4431	0.0062	0.3950
75	44.92	0.00	0.0178	=0.0293	0.1038	=1.6770	5.7119	1.1204	0.0072	0.4418	0.0064	0.3943
76	45.09	0.00	0.0111	=0.0300	0.0959	=2.7041	8.6311	1.1204	0.0065	0.4426	0.0058	0.3950
77	45.27	0.00	0.0055	=0.0331	0.0953	=6.0032	17.3037	1.1378	0.0056	0.4508	0.0051	0.3962
78	45.46	0.00	=0.0324	=0.0339	0.0716	1.0349	=2.1741	1.1332	0.0061	0.4459	0.0054	0.3935
79	45.59	0.00	=0.0334	=0.0349	0.0742	1.1491	=2.4467	1.1360	0.0058	0.4482	0.0051	0.3939
80	45.79	0.00	=0.0000	=0.0420	0.0563	0.6243	=0.8269	1.1560	0.0045	0.4552	0.0039	0.3964
81	45.97	0.00	=0.0342	=0.0401	0.0619	0.6343	=0.9794	1.1461	0.0048	0.4512	0.0042	0.3937
82	46.15	0.00	=0.0293	=0.0429	0.0562	0.5645	=0.7471	1.1397	0.0050	0.4492	0.0044	0.3962
83	46.32	0.00	=0.1101	=0.0382	1.6368	0.9378	=0.2916	1.1653	0.0032	0.4604	0.0028	0.3951
84	46.56	0.00	=0.0916	=0.0393	1.0496	0.9308	=0.5500	1.1653	0.0032	0.4596	0.0026	0.3944
85	46.57	0.00	=0.1112	=0.0397	1.0370	0.9404	=0.3323	1.1718	0.0028	0.4608	0.0022	0.3932
86	46.45	0.00	=0.1035	=0.0360	0.0711	0.3414	=0.1373	1.1743	0.0027	0.4614	0.0023	0.3929
87	47.02	0.00	=0.1330	=0.0327	0.0251	0.3610	=0.1919	1.1934	0.0010	0.4701	0.0012	0.3939
88	47.19	0.00	=0.1492	=0.0284	0.0225	0.3677	=0.1507	1.1951	0.0010	0.4685	0.0013	0.3920
89	47.37	0.00	=0.1585	=0.0302	0.0074	0.3279	=0.0430	1.2045	0.0008	0.4735	0.0007	0.3915
90	47.56	0.00	=0.2031	=0.0264	=0.0033	0.2993	0.0148	1.1967	0.0016	0.4690	0.0010	0.3919
91	47.76	0.00	=0.2145	=0.0257	=0.0089	0.2905	0.0407	1.2063	0.0005	0.4725	0.0006	0.3917
92	47.87	0.00	=0.2404	=0.0264	=0.0220	0.2694	0.0892	1.2207	0.0001	0.4772	0.0001	0.3909

MARTIN MISSILE TAILS EFFECTS DATA

TEST	RN/L	MACH	RE/10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	e3	0.800	1.7	0.0	MIXED	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CAF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	94.09	0.10	-0.2493	-0.0653	-0.0221	0.2627	0.0836	1.2201	0.0	0.4776	0.0	0.3912
94	94.23	0.09	-0.2530	-0.0697	-0.0432	0.2656	0.1523	1.2240	-0.0004	0.4773	-0.0003	0.3899
95	92.37	0.07	-0.2918	-0.0702	-0.0863	0.2906	0.1567	1.2240	-0.0008	0.4773	-0.0007	0.3899
96	89.55	-0.00	-0.3254	-0.0735	-0.0838	0.2240	0.1963	1.2364	-0.0009	0.4794	-0.0007	0.3896
97	88.71	-0.02	-0.3326	-0.0788	-0.0725	0.2086	0.2178	1.2273	-0.0011	0.4775	-0.0009	0.3898
98	89.87	-0.01	-0.3467	-0.0844	-0.0871	0.1690	0.2555	1.2401	-0.0023	0.4833	-0.0019	0.3897
99	89.05	-0.02	-0.3413	-0.0923	-0.0867	0.1916	0.2583	1.2401	-0.0026	0.4829	-0.0021	0.3898
100	89.23	-0.01	-0.3613	-0.0899	-0.1130	0.1745	0.2821	1.2274	-0.0015	0.4767	-0.0012	0.3883
101	89.91	-0.03	-0.3658	-0.0849	-0.0987	0.1774	0.2694	1.2298	-0.0022	0.4784	-0.0018	0.3873
102	89.59	-0.03	-0.3917	-0.0941	-0.1040	0.1739	0.2784	1.2377	-0.0024	0.4806	-0.0019	0.3883
103	89.79	-0.03	-0.3918	-0.0737	-0.1196	0.1752	0.2907	1.2361	-0.0022	0.4797	-0.0018	0.3880
104	89.94	-0.02	-0.3918	-0.0786	-0.1300	0.1751	0.3014	1.2345	-0.0025	0.4796	-0.0020	0.3885
105	90.11	-0.03	-0.3925	-0.0752	-0.1261	0.1772	0.3018	1.2330	-0.0019	0.4774	-0.0015	0.3871
106	90.28	-0.04	-0.3918	-0.0765	-0.1244	0.1804	0.3021	1.2409	-0.0023	0.4812	-0.0019	0.3878
107	90.43	-0.03	-0.4239	-0.0777	-0.1297	0.1835	0.3063	1.2533	-0.0035	0.4849	-0.0028	0.3869
108	90.63	-0.03	-0.4194	-0.0774	-0.1257	0.1844	0.2994	1.2548	-0.0037	0.4871	-0.0030	0.3882
109	90.80	-0.03	-0.4192	-0.0759	-0.1311	0.1811	0.3104	1.2485	-0.0037	0.4838	-0.0030	0.3875
110	90.95	-0.04	-0.4190	-0.0764	-0.1305	0.1824	0.3116	1.2629	-0.0047	0.4868	-0.0037	0.3870
111	91.12	-0.03	-0.4207	-0.0756	-0.1341	0.1784	0.3129	1.2501	-0.0046	0.4856	-0.0037	0.3884
112	91.29	-0.01	-0.4153	-0.0753	-0.1273	0.1813	0.3066	1.2440	-0.0046	0.4805	-0.0039	0.3862
113	91.48	0.00	-0.4119	-0.0717	-0.1264	0.2097	0.2528	1.2823	-0.0074	0.4970	-0.0058	0.3876
114	91.62	0.02	-0.4036	-0.0737	-0.0967	0.2026	0.2603	1.2776	-0.0075	0.4946	-0.0059	0.3872
115	91.80	0.02	-0.3734	-0.0741	-0.1005	0.1955	0.2660	1.2822	-0.0074	0.4953	-0.0058	0.3887
116	91.99	0.02	-0.3615	-0.0747	-0.0948	0.2090	0.2373	1.2914	-0.0079	0.4992	-0.0061	0.3866
117	92.13	0.02	-0.3735	-0.0742	-0.0931	0.2055	0.2991	1.2850	-0.0081	0.4972	-0.0063	0.3870
118	92.30	0.03	-0.3941	-0.0755	-0.1177	0.1900	0.2720	1.3106	-0.0089	0.5059	-0.0068	0.3860
119	92.47	0.04	-0.3937	-0.0722	-0.1101	0.1849	0.2696	1.3042	-0.0096	0.5043	-0.0074	0.3867
120	92.67	0.05	-0.4141	-0.0729	-0.1203	0.1761	0.2905	1.3245	-0.0100	0.5113	-0.0076	0.3860
121	92.82	0.04	-0.4056	-0.0735	-0.1346	0.1950	0.3025	1.3006	-0.0098	0.5019	-0.0075	0.3859
122	93.04	0.05	-0.3748	-0.0703	-0.1124	0.1672	0.2709	1.2959	-0.0106	0.4998	-0.0082	0.3857
123	93.19	0.05	-0.3738	-0.0693	-0.1068	0.1693	0.2912	1.3196	-0.0114	0.5093	-0.0087	0.3859
124	93.37	0.05	-0.3796	-0.0711	-0.0774	0.1651	0.2502	1.2783	-0.0099	0.4920	-0.0076	0.3849
125	93.53	0.06	-0.2922	-0.0677	-0.0960	0.1932	0.2327	1.2556	-0.0100	0.4857	-0.0080	0.3867
126	93.70	0.07	-0.2920	-0.0615	-0.0351	0.1592	0.2104	1.2500	-0.0089	0.4799	-0.0071	0.3839
127	93.86	0.07	-0.1593	-0.0235	-0.0183	0.1464	0.1153	1.2595	-0.0102	0.4868	-0.0081	0.3865
128	94.04	0.07	-0.1710	-0.0259	-0.0223	0.1500	0.1304	1.2742	-0.0111	0.4918	-0.0087	0.3860
129	94.18	0.07	-0.1693	-0.0234	-0.0182	0.1413	0.1115	1.2695	-0.0103	0.4819	-0.0083	0.3860
130	94.36	0.08	-0.1570	-0.0227	-0.0121	0.1403	0.0776	1.2541	-0.0109	0.4856	-0.0087	0.3872
131	94.52	0.08	-0.1030	-0.0113	0.0035	0.1059	-0.0351	1.2937	-0.0127	0.5029	-0.0098	0.3867
132	94.68	0.09	-0.1297	-0.0154	-0.0028	0.1709	0.0222	1.3179	-0.0130	0.5115	-0.0099	0.3881
133	94.83	0.08	-0.1072	-0.0110	0.0035	0.1102	-0.0328	1.3277	-0.0138	0.5146	-0.0104	0.3876
134	94.99	0.07	-0.1116	-0.0136	0.0014	0.1171	-0.0126	1.3503	-0.0156	0.5231	-0.0116	0.3874
135	95.16	0.10	-0.1397	-0.0171	-0.0116	0.1251	0.0521	1.3278	-0.0162	0.5129	-0.0107	0.3863
136	95.29	0.09	-0.1361	-0.0177	-0.0102	0.1362	0.0457	1.3069	-0.0144	0.5053	-0.0110	0.3860
137	95.43	0.07	-0.1778	-0.0172	-0.0130	0.1526	-0.1670	1.3896	-0.0177	0.5406	-0.0126	0.3891
138	95.63	0.10	-0.1353	-0.0174	-0.0090	0.1286	0.0068	1.3544	-0.0161	0.5232	-0.0119	0.3863

TEST PART MACH NUM=6 PHI COMP L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 83 0.80 1.7 0.0 MIDPLN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	ACPF1	YCPF1	CNF2	CM2	CH2	ACPF2	YCPF2
139	55.81	0.11	-0.1859	-0.0970	0.0137	0.1016	-0.1981	1.4089	-0.0190	0.5481	-0.0135	0.3891
140	55.96	0.10	-0.1142	-0.0767	-0.0011	0.1269	0.0097	1.3361	-0.0166	0.5143	-0.0124	0.3869
141	55.89	0.10	-0.1127	-0.0736	-0.0013	0.1268	0.0116	1.3425	-0.0168	0.5158	-0.0125	0.3850
142	56.27	0.11	-0.1016	-0.0717	-0.0004	0.1158	0.0060	1.3405	-0.0149	0.5365	-0.0136	0.3858
143	55.92	0.10	-0.1268	-0.0785	-0.0081	0.1167	-0.0652	1.3299	-0.0172	0.5109	-0.0130	0.3842
144	56.06	0.11	-0.0968	-0.0693	0.0000	0.1112	-0.0303	1.3567	-0.0189	0.5241	-0.0139	0.3872
145	56.12	0.11	-0.0871	-0.0684	0.0144	0.1269	-0.2201	1.3812	-0.0201	0.5350	-0.0148	0.3876
146	56.06	0.10	-0.0933	-0.0736	0.0038	0.0859	-0.0459	1.3761	-0.0192	0.5297	-0.0140	0.3869
147	57.02	0.09	-0.0865	-0.0761	0.0116	0.0723	-0.1379	1.3616	-0.0191	0.5245	-0.0140	0.3852
148	57.16	0.09	-0.1040	-0.0791	0.0012	0.0871	-0.0115	1.3648	-0.0193	0.5265	-0.0142	0.3857
149	57.32	0.10	-0.0577	-0.0617	0.0158	0.0295	-0.2903	1.3926	-0.0207	0.5377	-0.0149	0.3867
150	57.07	0.07	-0.0838	-0.0804	0.0270	0.0706	-0.5016	1.4224	-0.0219	0.5502	-0.0154	0.3869
151	57.06	0.08	-0.0398	-0.0616	0.0282	-0.0349	-0.7611	1.4397	-0.0217	0.5443	-0.0156	0.3861
152	57.74	0.07	-0.0995	-0.0811	0.0268	0.0199	-0.3748	1.3778	-0.0214	0.5373	-0.0156	0.3863
153	57.69	0.05	-0.1476	-0.0829	0.0245	-0.0810	-0.5227	1.3968	-0.0214	0.5396	-0.0156	0.3860
154	58.05	0.05	-0.0374	-0.0723	0.0260	-0.0015	-0.6967	1.4041	-0.0220	0.5446	-0.0156	0.3868
155	58.18	0.04	-0.0782	-0.0835	0.0163	0.0873	-0.1862	1.3875	-0.0220	0.5385	-0.0159	0.3852
156	58.20	0.05	-0.0293	0.0041	0.0292	-0.1405	-0.9996	1.4161	-0.0228	0.5476	-0.0161	0.3867
157	58.20	0.08	-0.0300	0.0042	0.0281	-0.1067	-0.6098	1.4211	-0.0231	0.5485	-0.0163	0.3860

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART [illegible] MACH= 1.7 PHI 0.0 CONF [illegible]13 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CN4	XCPF4	YCPF4
1	0.01	[illegible]	0.0075	0.0000	0.0223	0.9999	2.9895	0.0201	-0.0019	-0.0137	-0.0697	-0.6788
2	-0.00	0.01	0.0000	0.0000	0.0219	0.9999	4.6377	0.0216	-0.0011	-0.0174	-0.0510	-0.5713
3	-0.00	-0.01	0.0000	0.0000	0.0218	0.9999	4.6377	0.0457	0.0029	-0.0057	0.0598	-0.1174
4	1.00	0.00	0.0074	0.0000	0.0227	0.9999	3.0638	0.1143	0.0172	0.0715	0.1507	0.1880
5	2.00	0.00	0.0149	0.0000	0.0230	0.9999	5.2212	0.2415	0.0381	0.0737	0.1576	0.3052
6	4.00	0.01	0.0133	0.0000	0.0250	0.9999	1.9063	0.3829	0.0577	0.1367	0.1506	0.3569
7	6.00	0.01	0.0072	0.0000	0.0260	0.9999	3.4923	0.5081	0.0670	0.1641	0.1319	0.3820
8	8.01	0.01	0.0299	0.0000	0.0269	0.9999	1.1958	0.6039	0.0635	0.2331	0.1051	0.3859
9	10.00	0.00	0.0376	0.0000	0.0255	0.9999	0.6813	0.6845	0.0555	0.2017	0.0810	0.3823
10	12.00	0.00	0.0343	0.0000	0.0273	0.9999	0.7955	0.7118	0.0500	0.2694	0.0702	0.3770
11	13.99	0.00	0.0345	0.0000	0.0267	0.9999	0.7395	0.6824	0.0412	0.2547	0.0603	0.3731
12	16.47	-0.01	0.0340	0.0000	0.0234	0.9999	0.6756	0.6625	0.0379	0.2578	0.0555	0.3777
13	18.36	0.00	0.0350	0.0000	0.0253	0.9999	0.4539	0.5508	0.0385	0.2173	0.0498	0.3946
14	20.20	-0.00	0.0354	0.0000	0.0245	0.9999	0.3867	0.5930	0.0385	0.2372	0.0448	0.3999
15	22.23	-0.00	0.0373	0.0000	0.0219	0.9999	0.3810	0.6459	0.0376	0.2589	0.0581	0.4008
16	24.19	-0.01	0.0360	0.0000	0.0232	0.9999	0.3843	0.7025	0.0355	0.2815	0.0505	0.4006
17	26.13	-0.00	0.0340	0.0000	0.0241	0.9999	0.3804	0.7505	0.0332	0.2982	0.0443	0.3947
18	28.06	0.01	0.0284	0.0000	0.0276	0.9999	0.3542	0.8191	0.0307	0.3194	0.0375	0.3899
19	30.02	0.00	0.0319	0.0000	0.0339	0.9999	0.3706	0.8709	0.0282	0.3384	0.0324	0.3886
20	31.97	0.00	0.1092	0.0000	0.0432	0.9999	0.3954	0.8937	0.0260	0.3484	0.0291	0.3875
21	33.96	0.00	0.0530	0.0000	0.0325	0.9999	0.3793	0.9073	0.0261	0.3485	0.0288	0.3841
22	33.91	0.00	0.0478	0.0000	0.0337	0.9999	0.3879	0.8954	0.0261	0.3430	0.0292	0.3831
23	34.93	0.00	0.0443	0.0000	0.0359	0.9999	0.3982	0.9126	0.0253	0.3498	0.0276	0.3832
24	34.22	0.00	0.0486	0.0000	0.0367	0.9999	0.3902	0.9094	0.0253	0.3463	0.0279	0.3808
25	34.44	0.00	0.0500	0.0000	0.0327	0.9999	0.3790	0.9061	0.0263	0.3450	0.0291	0.3809
26	34.97	0.00	0.0493	0.0000	0.0363	0.9999	0.3815	0.9203	0.0244	0.3510	0.0270	0.3814
27	34.93	0.00	0.0453	0.0000	0.0368	0.9999	0.3657	0.9202	0.0250	0.3506	0.0272	0.3810
28	35.16	0.00	0.0500	0.0000	0.0337	0.9999	0.3925	0.9117	0.0254	0.3466	0.0279	0.3807
29	35.40	0.00	0.0520	0.0000	0.0321	0.9999	0.3920	0.9222	0.0247	0.3500	0.0268	0.3795
30	35.65	0.00	0.0510	0.0000	0.0354	0.9999	0.3896	0.9364	0.0238	0.3562	0.0255	0.3804
31	35.89	0.00	0.0495	0.0000	0.0372	0.9999	0.3957	0.9398	0.0236	0.3585	0.0256	0.3814
32	36.15	0.00	0.0478	0.0000	0.0299	0.9999	0.3857	0.9503	0.0234	0.3623	0.0247	0.3812
33	36.37	0.00	0.0491	0.0000	0.0300	0.9999	0.3747	0.9608	0.0227	0.3674	0.0237	0.3824
34	36.59	0.00	0.0505	0.0000	0.0343	0.9999	0.3971	0.9507	0.0225	0.3643	0.0237	0.3832
35	36.82	0.00	0.0510	0.0000	0.0250	0.9999	0.3915	0.9540	0.0227	0.3654	0.0238	0.3834
36	37.09	0.00	0.0474	0.0000	0.0302	0.9999	0.3906	0.9660	0.0215	0.3702	0.0223	0.3833
37	37.31	0.00	0.0484	0.0000	0.0433	0.9999	0.4303	0.9798	0.0211	0.3758	0.0216	0.3836
38	37.53	0.00	0.0513	0.0000	0.0279	0.9999	0.3917	0.9846	0.0209	0.3779	0.0213	0.3839
39	37.77	0.00	0.0512	0.0000	0.0306	0.9999	0.3969	0.9848	0.0205	0.3788	0.0209	0.3846
40	38.00	0.00	0.0499	0.0000	0.0330	0.9999	0.4136	0.9880	0.0199	0.3807	0.0202	0.3853
41	38.24	0.00	0.0499	0.0000	0.0322	0.9999	0.4035	0.9864	0.0196	0.3806	0.0199	0.3858
42	38.46	0.00	0.0481	0.0000	0.0296	0.9999	0.3837	1.0037	0.0189	0.3869	0.0189	0.3875
43	38.69	0.00	0.0520	0.0000	0.0291	0.9999	0.4013	1.0056	0.0183	0.3865	0.0182	0.3863
44	38.90	0.00	0.0529	0.0000	0.0340	0.9999	0.4137	1.0125	0.0181	0.3927	0.0179	0.3874
45	39.13	0.00	0.0546	0.0000	0.0358	0.9999	0.4047	1.0069	0.0181	0.3907	0.0180	0.3880
46	39.36	0.00	0.0514	0.0000	0.0371	0.9999	0.4055	1.0271	0.0172	0.3976	0.0168	0.3871

PANTIN MISSILE TAILS EFFECTS DATA

IESI PART MACH RX10=6 PHI CONE L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 63 0.60 1.7 0.0 61.0F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CMF3	CH3	ACPF3	YCPF3	CNF4	CM4	CH4	ACPF4	YCPF4
47	39.55	0.00	0.0384	9.9999	0.0373	9.9999	0.4220	1.0187	0.0171	0.3951	0.0168	0.3879
48	39.77	0.00	0.0379	9.9999	0.0351	9.9999	0.4190	1.0341	0.0167	0.4012	0.0162	0.3880
49	39.98	0.00	0.0382	9.9999	0.0356	9.9999	0.4161	1.0425	0.0155	0.4058	0.0149	0.3892
50	40.18	0.01	0.0385	9.9999	0.0374	9.9999	0.4163	1.0576	0.0146	0.4107	0.0138	0.3883
51	40.38	0.00	0.0386	9.9999	0.0358	9.9999	0.4218	1.0576	0.0146	0.4116	0.0138	0.3892
52	40.57	0.00	0.0390	9.9999	0.0373	9.9999	0.4044	1.0578	0.0142	0.4111	0.0134	0.3886
53	40.86	0.00	0.0373	9.9999	0.0385	9.9999	0.4260	1.0607	0.0146	0.4133	0.0128	0.3897
54	41.09	0.00	0.0392	9.9999	0.0389	9.9999	0.4265	1.0729	0.0127	0.4200	0.0119	0.3915
55	41.29	0.00	0.0390	9.9999	0.0387	9.9999	0.4238	1.0833	0.0122	0.4250	0.0113	0.3924
56	41.42	0.00	0.0395	9.9999	0.0380	9.9999	0.4195	1.0710	0.0121	0.4200	0.0113	0.3922
57	41.60	0.00	0.0395	9.9999	0.0387	9.9999	0.4272	1.0862	0.0110	0.4269	0.0101	0.3923
58	41.80	0.00	0.0405	9.9999	0.0380	9.9999	0.4195	1.0900	0.0107	0.4283	0.0098	0.3929
59	42.01	0.00	0.0389	9.9999	0.0388	9.9999	0.4356	1.0861	0.0103	0.4273	0.0095	0.3936
60	42.19	0.00	0.0410	9.9999	0.0383	9.9999	0.4177	1.0958	0.0099	0.4307	0.0090	0.3930
61	42.36	0.00	0.0404	9.9999	0.0387	9.9999	0.4339	1.0841	0.0101	0.4276	0.0093	0.3944
62	42.56	0.00	0.0401	9.9999	0.0386	9.9999	0.4250	1.1012	0.0090	0.4333	0.0082	0.3935
63	42.75	0.00	0.0401	9.9999	0.0391	9.9999	0.4201	1.0962	0.0090	0.4318	0.0082	0.3939
64	42.93	0.00	0.0407	9.9999	0.0373	9.9999	0.4201	1.1080	0.0086	0.4365	0.0080	0.3939
65	43.11	0.00	0.0403	9.9999	0.0355	9.9999	0.4218	1.1082	0.0081	0.4377	0.0073	0.3950
66	43.28	0.00	0.0402	9.9999	0.0367	9.9999	0.4354	1.1031	0.0082	0.4342	0.0074	0.3936
67	43.47	0.00	0.0396	9.9999	0.0323	9.9999	0.4275	1.1202	0.0074	0.4411	0.0066	0.3938
68	43.65	0.00	0.0429	9.9999	0.0356	9.9999	0.4282	1.1116	0.0079	0.4392	0.0071	0.3942
69	43.83	0.00	0.0401	9.9999	0.0346	9.9999	0.4280	1.1316	0.0081	0.4356	0.0074	0.3963
70	43.99	0.00	0.0405	9.9999	0.0400	9.9999	0.4230	1.1033	0.0080	0.4370	0.0073	0.3961
71	44.20	0.00	0.0371	9.9999	0.0399	9.9999	0.4405	1.1049	0.0081	0.4351	0.0073	0.3938
72	44.38	0.00	0.0408	9.9999	0.0395	9.9999	0.4244	1.1136	0.0073	0.4408	0.0066	0.3958
73	44.55	0.00	0.0369	9.9999	0.0410	9.9999	0.4411	1.1051	0.0075	0.4363	0.0068	0.3968
74	44.74	0.00	0.0459	9.9999	0.0412	9.9999	0.4243	1.1153	0.0073	0.4412	0.0066	0.3956
75	44.92	0.00	0.0400	9.9999	0.0400	9.9999	0.4163	1.1304	0.0056	0.4468	0.0051	0.3951
76	45.09	0.00	0.0411	9.9999	0.0385	9.9999	0.4280	1.1240	0.0060	0.4445	0.0057	0.3955
77	45.27	0.00	0.0374	9.9999	0.0403	9.9999	0.4196	1.1360	0.0055	0.4487	0.0048	0.3950
78	45.46	0.00	0.1018	9.9999	0.0427	9.9999	0.4192	1.1360	0.0055	0.4495	0.0048	0.3957
79	45.64	0.00	0.1075	9.9999	0.0457	9.9999	0.4250	1.1295	0.0052	0.4483	0.0046	0.3969
80	45.79	0.00	0.0961	9.9999	0.0386	9.9999	0.4280	1.1535	0.0037	0.4577	0.0032	0.3968
81	45.97	0.00	0.0872	9.9999	0.0378	9.9999	0.4338	1.1433	0.0041	0.4535	0.0036	0.3966
82	46.15	0.00	0.0915	9.9999	0.0396	9.9999	0.4346	1.1417	0.0037	0.4530	0.0032	0.3967
83	46.34	0.00	0.0915	9.9999	0.0394	9.9999	0.4363	1.1716	0.0018	0.4645	0.0015	0.3967
84	46.50	0.00	0.0930	9.9999	0.0407	9.9999	0.4330	1.1641	0.0023	0.4622	0.0020	0.3971
85	46.67	0.00	0.0929	9.9999	0.0407	9.9999	0.4378	1.1618	0.0020	0.4628	0.0017	0.3986
86	46.85	0.00	0.0909	9.9999	0.0387	9.9999	0.4403	1.1792	0.0005	0.4669	0.0004	0.3977
87	47.02	0.00	0.0927	9.9999	0.0416	9.9999	0.4420	1.1723	0.0012	0.4668	0.0010	0.4980
88	47.19	0.00	0.0901	9.9999	0.0385	9.9999	0.4367	1.1843	0.0003	0.4725	0.0003	0.3990
89	47.37	0.00	0.0939	9.9999	0.0422	9.9999	0.4304	1.1829	0.0	0.4711	0.0	0.3983
90	47.52	0.00	0.0920	9.9999	0.0381	9.9999	0.4376	1.1929	-0.0003	0.4711	-0.0003	0.3983
91	47.71	0.00	0.0881	9.9999	0.0395	9.9999	0.4429	1.1968	-0.0013	0.4779	-0.0015	0.3993
92	47.87	0.00	0.0897	9.9999	0.0392	9.9999	0.4194	1.2206	-0.0030	0.4876	-0.0025	0.3995

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART HAL- PATUB6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
F 67 0.00 1.7 0.0 HIWDP13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	ACPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
93	48.29	0.00	0.07[illegible]	9.99999	0.0345	9.9999	0.4369	1.2172	-0.0027	0.4854	-0.0022	0.3988
94	48.23	0.00	0.0838	9.99999	0.0281	9.9999	0.4410	1.2091	-0.0032	0.4833	-0.0027	0.3987
95	48.17	-0.01	0.0826	9.99999	0.0265	9.9999	0.4405	1.2212	-0.0035	0.4867	-0.0037	0.3985
96	48.35	-0.00	0.0536	9.99999	0.0227	9.9999	0.4136	1.2384	-0.0058	0.4931	-0.0047	0.3982
97	48.71	-0.02	0.0582	9.99999	0.0249	9.9999	0.4226	1.2286	-0.0062	0.4918	-0.0051	0.3983
98	48.67	0.01	0.0564	9.99999	0.0191	9.9999	0.4136	1.2340	-0.0073	0.4938	-0.0059	0.3986
99	49.05	-0.02	0.0600	9.99999	0.0161	9.9999	0.3953	1.2388	-0.0076	0.4935	-0.0057	0.3986
100	49.23	-0.04	0.0284	9.99999	0.0087	9.9999	0.3331	1.2645	-0.0086	0.5045	-0.0068	0.3989
101	49.41	-0.03	0.0404	9.99999	0.0107	9.9999	0.4161	1.2486	-0.0084	0.4983	-0.0067	0.3991
102	49.59	-0.05	0.0365	9.99999	0.0112	9.9999	0.3936	1.2623	-0.0095	0.5039	-0.0075	0.3991
103	49.76	-0.05	0.0281	9.99999	0.0102	9.9999	0.3921	1.2507	-0.0096	0.4991	-0.0077	0.3991
104	49.94	-0.06	0.0294	9.99999	0.0112	9.9999	0.3874	1.2572	-0.0093	0.4996	-0.0074	0.3990
105	50.11	-0.05	0.0234	9.99999	0.0099	9.9999	0.4021	1.2456	-0.0093	0.4968	-0.0075	0.3989
106	50.28	-0.04	0.0280	9.99999	0.0114	9.9999	0.4553	1.2388	-0.0090	0.4941	-0.0073	0.3989
107	50.45	-0.04	0.0367	9.99999	0.0147	9.9999	0.4239	1.2569	-0.0106	0.5012	-0.0090	0.3987
108	50.63	-0.03	0.0319	9.99999	0.0134	9.9999	0.4183	1.2676	-0.0115	0.5066	-0.0091	0.3996
109	50.80	-0.03	0.0334	9.99999	0.0131	9.9999	0.3905	1.2621	-0.0109	0.5039	-0.0083	0.3992
110	50.95	-0.04	0.0294	9.99999	0.0114	9.9999	0.4117	1.2676	-0.0114	0.5066	-0.0090	0.3996
111	51.12	-0.03	0.0362	9.99999	0.0141	9.9999	0.3783	1.2707	-0.0109	0.5067	-0.0086	0.3988
112	51.29	-0.01	0.0334	9.99999	0.0134	9.9999	0.3995	1.2711	-0.0120	0.5047	-0.0095	0.3986
113	51.46	0.00	0.0396	9.99999	0.0216	9.9999	0.4366	1.3114	-0.0139	0.5233	-0.0106	0.3989
114	51.62	0.02	0.0360	9.99999	0.0255	9.9999	0.4401	1.3149	-0.0149	0.5265	-0.0113	0.3992
115	51.80	0.03	0.0521	9.99999	0.0233	9.9999	0.4467	1.3295	-0.0163	0.5293	-0.0123	0.3981
116	51.96	0.02	0.0557	9.99999	0.0263	9.9999	0.4406	1.3272	-0.0166	0.5281	-0.0125	0.3979
117	52.13	0.02	0.0507	9.99999	0.0243	9.9999	0.4269	1.3221	-0.0164	0.5274	-0.0124	0.3989
118	52.30	0.03	0.0535	9.99999	0.0271	9.9999	0.4678	1.3464	-0.0165	0.5354	-0.0140	0.3976
119	52.47	0.04	0.0493	9.99999	0.0216	9.9999	0.4375	1.3359	-0.0175	0.5321	-0.0131	0.3983
120	52.67	0.05	0.0553	9.99999	0.0243	9.9999	0.4396	1.3321	-0.0162	0.5320	-0.0137	0.3994
121	52.82	0.04	0.0506	9.99999	0.0249	9.9999	0.4370	1.3491	-0.0196	0.5370	-0.0138	0.3995
122	53.00	0.05	0.0542	9.99999	0.0250	9.9999	0.4472	1.3272	-0.0182	0.5309	-0.0137	0.4000
123	53.17	0.05	0.0536	9.99999	0.0273	9.9999	0.4506	1.3217	-0.0173	0.5270	-0.0131	0.3987
124	53.37	0.06	0.0539	9.99999	0.0302	9.9999	0.4733	1.3754	-0.0192	0.5292	-0.0136	0.3992
125	53.53	0.06	0.0561	9.99999	0.0268	9.9999	0.4618	1.3357	-0.0185	0.5342	-0.0132	0.3998
126	53.70	0.07	0.0736	9.99999	0.0327	9.9999	0.4466	1.3291	-0.0174	0.5322	-0.0131	0.4004
127	53.88	0.07	0.0720	9.99999	0.0346	9.9999	0.4407	1.3208	-0.0172	0.5298	-0.0130	0.4012
128	54.04	0.07	0.0578	9.99999	0.0302	9.9999	0.4596	1.3240	-0.0174	0.5308	-0.0132	0.4009
129	54.16	0.07	0.0767	9.99999	0.0376	9.9999	0.4748	1.3273	-0.0170	0.5322	-0.0128	0.4009
130	54.39	0.08	0.0760	9.99999	0.0340	9.9999	0.4505	1.3286	-0.0174	0.5336	-0.0131	0.4017
131	54.56	0.08	0.0839	9.99999	0.0401	9.9999	0.4805	1.3296	-0.0177	0.5354	-0.0133	0.4027
132	54.86	0.09	0.0850	9.99999	0.0396	9.9999	0.4632	1.3347	-0.0178	0.5356	-0.0134	0.4013
133	54.93	0.08	0.0821	9.99999	0.0377	9.9999	0.4586	1.3260	-0.0172	0.5344	-0.0130	0.4030
134	54.99	0.07	0.0835	9.99999	0.0387	9.9999	0.4571	1.3607	-0.0185	0.5467	-0.0144	0.4018
135	55.19	0.10	0.0826	9.99999	0.0373	9.9999	0.4623	1.3560	-0.0195	0.5455	-0.0144	0.4029
136	55.29	0.09	0.0842	9.99999	0.0426	9.9999	0.4571	1.3579	-0.0202	0.5467	-0.0149	0.4026
137	55.45	0.09	0.0903	9.99999	0.0411	9.9999	0.4539	1.3377	-0.0184	0.5383	-0.0138	0.4024
138	55.63	0.10	0.0786	9.99999	0.0358	9.9999	0.4551	1.3826	-0.0212	0.5564	-0.0154	0.4024

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

MARTIN MISSILE TAILS EFFECTS DATA

IFSI	PARI	MACH	RAIG-0	PHI	CONF	L	DEL1	DEL2	DEL3	DELA	TRANSITION
7	A9	0.60	1.7	0.0	81-0F13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	ACPF3	YCPF3	CNF4	CM4	CA4	YCPF4	YCPF4
139	55.96	0.11	0.0[illegible]6	9.9999	0.0396	9.9999	0.4498	1.3550	-0.0196	0.5446	-0.0146	0.4018
140	55.96	0.10	0.0[illegible]	9.9999	0.0405	9.9999	0.4598	1.3598	-0.0204	0.5491	-0.0150	0.4038
141	56.09	0.10	0.0[illegible]	9.9999	0.0394	9.9999	0.4489	1.3703	-0.0217	0.5529	-0.0159	0.4038
142	56.27	0.11	0.0[illegible]	9.9999	0.0419	9.9999	0.4503	1.3739	-0.0222	0.5547	-0.0162	0.4037
143	56.42	0.10	0.0[illegible]	9.9999	0.0381	9.9999	0.4520	1.3669	-0.0215	0.5515	-0.0158	0.4034
144	56.56	0.11	0.0[illegible]	9.9999	0.0381	9.9999	0.4448	1.3688	-0.0214	0.5478	-0.0159	0.4032
145	56.72	0.11	0.0[illegible]	9.9999	0.0371	9.9999	0.4462	1.3671	-0.0216	0.5481	-0.0159	0.4032
146	56.88	0.10	0.0[illegible]	9.9999	0.0374	9.9999	0.4452	1.3636	-0.0223	0.5496	-0.0164	0.4030
147	57.02	0.09	0.0771	9.9999	0.0380	9.9999	0.4417	1.3725	-0.0210	0.5557	-0.0172	0.4049
148	57.18	0.09	0.0[illegible]	9.9999	0.0314	9.9999	0.4319	1.3793	-0.0237	0.5590	-0.0172	0.4044
149	57.32	0.08	0.0[illegible]	9.9999	0.0382	9.9999	0.4298	1.3807	-0.0233	0.5586	-0.0171	0.4046
150	57.47	0.07	0.0693	9.9999	0.0386	9.9999	0.4271	1.3724	-0.0234	0.5549	-0.0171	0.4043
151	57.62	0.08	0.0[illegible]	9.9999	0.0352	9.9999	0.4491	1.3837	-0.0227	0.5606	-0.0169	0.4055
152	57.74	0.07	0.0756	9.9999	0.0335	9.9999	0.4436	1.3553	-0.0225	0.5487	-0.0166	0.4049
153	57.89	0.05	0.0726	9.9999	0.0318	9.9999	0.4376	1.3796	-0.0239	0.5564	-0.0174	0.4048
154	58.05	0.05	0.0[illegible]	9.9999	0.0360	9.9999	0.4460	1.3675	-0.0237	0.5534	-0.0174	0.4046
155	58.18	0.04	0.0737	9.9999	0.0331	9.9999	0.4379	1.3684	-0.0252	0.5561	-0.0182	0.4063
156	58.30	0.05	0.0762	9.9999	0.0367	9.9999	0.4418	1.3573	-0.0237	0.5504	-0.0171	0.4055
157	58.20	0.06	0.0763	9.9999	0.0355	9.9999	0.4541	1.3618	-0.0241	0.5516	-0.0177	0.4051

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART DATA VALUES . MN1 CONF L DEL1 DEL2 DEL3 DELA TRANSITION
/ 00 0.00 1.7 45.0 91.0713 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.70	0.00	-0.8416	2.3382	0.1320	-0.3711	-0.0050	0.2346	0.0955	0.1411	-2.6231
2	-5.76	0.00	-1.2267	2.5727	0.1412	-0.3550	-0.0046	0.2329	0.0955	0.1374	-2.0982
3	-3.65	0.00	-0.8014	1.5208	0.1495	-0.3914	-0.0048	0.2629	0.0987	0.1722	-2.5421
4	-2.57	0.00	-0.3067	0.7093	0.1031	-0.3067	-0.0050	0.2701	0.0897	0.1804	-2.6028
5	-2.69	0.00	-0.3363	0.2364	0.1273	-0.2879	-0.0050	0.2780	0.0867	0.1913	-6.4992
6	1.26	0.00	0.2705	-0.3053	0.1035	-0.2743	-0.0053	0.2766	0.0847	0.1919	-1.4857
7	3.26	0.00	0.6572	-1.1232	0.0914	-0.3442	-0.0057	0.2720	0.0872	0.1848	-2.0162
8	5.10	0.00	1.2443	-1.7063	0.0929	-0.3713	0.0015	0.2688	0.0917	0.1771	-2.2463
9	7.05	0.00	1.8178	-2.4473	0.1491	-0.3563	-0.0003	0.2513	0.0977	0.1537	-2.3534
10	8.93	0.00	1.8415	-3.0493	0.1197	-0.3560	-0.0097	0.2456	0.1078	0.1373	-2.3940
11	10.88	0.00	1.9057	-3.5280	0.1199	-0.3562	-0.0110	0.2433	0.1163	0.1271	-2.3764
12	12.77	0.00	2.2733	-3.9480	0.0968	-0.3147	0.0032	0.2471	0.1301	0.1171	-2.3704
13	14.69	0.00	2.6251	-4.4388	0.0692	-0.2923	-0.0057	0.2628	0.1433	0.0996	-2.3185
14	16.66	0.00	2.8838	-4.8911	0.0782	-0.3045	-0.0132	0.2516	0.1634	0.0884	-2.2355
15	18.66	0.00	3.1020	-5.2873	0.0781	-0.2964	-0.0027	0.2862	0.2083	0.0779	-2.1558
16	20.61	0.00	3.4471	-7.1722	0.1611	-0.3196	-0.0048	0.2903	0.2466	0.0436	-2.0807
17	22.61	0.00	3.7361	-7.5577	0.2776	-0.4300	-0.0196	0.2855	0.2657	0.0198	-2.0227
18	24.36	0.00	4.0921	-7.9716	0.3085	-0.4464	-0.0196	0.2720	0.2864	-0.0144	-1.9481
19	26.19	0.00	4.4784	-8.2593	0.4671	-0.5349	-0.0439	0.2753	0.3077	-0.0323	-1.8424
20	28.07	0.00	4.7381	-8.5345	0.6347	-0.5345	-0.0430	0.2801	0.3325	-0.0523	-1.7648
21	29.13	0.00	4.7315	-8.3008	0.5632	-0.4938	-0.0404	0.2805	0.3345	-0.0539	-1.7729
22	28.13	0.00	4.7583	-8.3534	0.5154	-0.4396	-0.0325	0.2825	0.3335	-0.0509	-1.7564
23	28.22	0.00	4.6939	-8.3995	0.4681	-0.4241	-0.0242	0.2879	0.3401	-0.0721	-1.7309
24	28.76	0.00	4.6993	-8.3365	0.4996	-0.3615	-0.0159	0.2849	0.3461	-0.0611	-1.7007
25	29.05	0.00	5.0547	-8.1807	0.4280	-0.3379	-0.0013	0.2770	0.3561	-0.0790	-1.6145
26	29.46	0.00	5.0960	-8.1891	0.4383	-0.3320	0.0014	0.2796	0.3592	-0.0793	-1.6068
27	29.69	0.00	5.1165	-8.2284	0.4674	-0.3324	0.0015	0.2927	0.3678	-0.0751	-1.5665
28	29.97	0.00	5.2537	-8.4959	0.6412	-0.3331	0.0177	0.2914	0.3744	-0.0830	-1.5334
29	30.24	0.00	5.2938	-8.1209	0.4524	-0.3021	0.0100	0.2933	0.3766	-0.0853	-1.5341
30	30.51	0.00	5.3479	-8.0784	0.4894	-0.2863	0.0103	0.2940	0.3841	-0.0901	-1.5102
31	30.79	0.00	5.4011	-8.0427	1.0320	-0.2577	0.0104	0.2884	0.3916	-0.1028	-1.4900
32	31.07	0.00	5.4554	-8.0186	1.0917	-0.2797	0.0104	0.2956	0.3967	-0.1012	-1.4708
33	31.34	0.00	5.5396	-8.3706	1.1140	-0.5161	0.0108	0.2927	0.4017	-0.1091	-1.4356
34	31.61	0.00	5.5473	-8.3362	1.1279	-0.5110	0.0112	0.2934	0.4042	-0.1109	-1.4305
35	31.89	0.00	5.6553	-8.4210	1.1309	-0.7415	0.0199	0.2987	0.4113	-0.1132	-1.3852
36	32.15	0.00	5.6579	-8.4245	1.1595	-0.8607	0.0344	0.2915	0.4145	-0.1234	-1.4029
37	32.42	0.00	5.6337	-8.4250	1.2155	-0.8728	0.0359	0.2922	0.4210	-0.1269	-1.3621
38	32.68	0.00	5.6211	-8.4758	1.3132	-1.0446	0.0351	0.2873	0.4239	-0.1366	-1.3641
39	32.99	0.00	5.6443	-8.5206	1.2670	-1.1790	0.0353	0.2867	0.4244	-0.1377	-1.3423
40	33.19	0.00	5.5961	-8.4704	1.2891	-1.2570	0.0353	0.2983	0.4280	-0.1397	-1.3352
41	33.49	0.00	5.6734	-8.5473	1.2878	-1.5343	0.0508	0.2844	0.4285	-0.1441	-1.3136
42	33.70	0.00	5.6846	-8.4927	1.3465	-1.5116	0.0433	0.2795	0.4320	-0.1525	-1.3091
43	33.95	0.00	5.8951	-8.4234	1.4304	-1.5811	0.0364	0.2757	0.4370	-0.1613	-1.2757
44	34.18	0.00	7.0454	-8.5846	1.2965	-1.8772	0.0358	0.2638	0.4405	-0.1567	-1.2688
45	34.44	0.00	7.1471	-8.5903	1.3962	-1.8694	0.0212	0.2853	0.4491	-0.1588	-1.2438
46	34.69	0.00	7.2745	-8.6466	1.3695	-2.2700	0.0129	0.2745	0.4442	-0.1697	-1.2293

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH MA10-6 RN/L CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 55 0.60 1.7 45.0 81=0F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CYN	CLL	CA	CAB	CAF	AC
47	34.93	0.21	7.4491	-0.0511	1.3403	2.3252	-0.0022	0.2768	0.4507	-0.1739	-1.2159
48	35.17	0.21	7.4544	-0.0520	1.3372	2.3513	0.0058	0.2745	0.4537	-0.1792	-1.2028
49	35.41	0.21	7.5192	-0.0538	1.3480	2.4032	-0.0013	0.2650	0.4571	-0.1921	-1.1778
50	35.66	0.21	7.4495	-0.0407	1.3773	2.4329	-0.0152	0.2726	0.4621	-0.1895	-1.1614
51	35.90	0.21	7.4124	-0.0533	1.3437	2.5546	-0.0316	0.2689	0.4601	-0.1972	-1.1462
52	36.12	0.21	7.4774	-0.0538	1.2344	2.0455	-0.0316	0.2655	0.4641	-0.2036	-1.1379
53	36.36	0.22	8.0573	-0.0582	1.3665	2.7563	-0.0568	0.2781	0.4771	-0.1990	-1.1116
54	36.59	0.22	8.1497	-0.0744	1.3001	3.0256	-0.0777	0.2627	0.4771	-0.2144	-1.1067
55	36.80	0.21	8.2578	-0.0988	1.3750	2.8399	-0.0612	0.2627	0.4791	-0.2164	-1.0885
56	37.04	0.21	8.1267	-0.0938	1.2746	3.1062	-0.0772	0.2604	0.4782	-0.2733	-1.0809
57	37.31	0.21	8.0316	-0.0609	1.3039	3.0459	-0.0923	0.2641	0.4847	-0.2215	-1.0746
58	37.53	0.22	8.4169	-0.0564	1.2786	3.1022	-0.0840	0.2695	0.4892	-0.2196	-1.0534
59	37.77	0.22	8.5814	-0.0590	1.3414	3.0503	-0.0984	0.2678	0.4922	-0.2243	-1.0462
60	37.99	0.22	8.6649	-0.0599	1.3706	2.8934	-0.0743	0.2569	0.4942	-0.2352	-1.0081
61	38.23	0.22	8.7012	-0.0584	1.3788	2.8516	-0.0811	0.2649	0.4962	-0.2332	-0.9914
62	38.47	0.21	8.3291	-0.0583	1.2384	2.8924	-0.1044	0.2545	0.4957	-0.2361	-0.9691
63	38.71	0.19	8.2618	-0.0747	1.2052	3.7050	-0.1670	0.2431	0.5008	-0.2578	-0.9484
64	38.92	0.19	8.4774	-0.0660	0.8921	4.1615	-0.1934	0.2481	0.5068	-0.2586	-0.9543
65	39.17	0.20	8.5997	-0.0782	0.9365	4.2877	-0.2143	0.2446	0.5036	-0.2591	-0.9374
66	39.38	0.20	8.6835	-0.0735	1.0786	4.2955	-0.2219	0.2477	0.5073	-0.2595	-0.9259
67	39.57	0.19	8.7241	-0.0756	1.0496	4.4065	-0.2305	0.2401	0.5104	-0.2702	-0.9180
68	39.79	0.20	8.6111	-0.0740	0.8978	4.3269	-0.2300	0.2429	0.5109	-0.2680	-0.9167
69	40.04	0.20	8.5149	-0.0723	0.9368	4.3222	-0.2294	0.2421	0.5145	-0.2723	-0.9019
70	40.20	0.20	8.6471	-0.0680	0.8949	4.3404	-0.2294	0.2511	0.5175	-0.2663	-0.8985
71	40.37	0.20	8.6021	-0.0725	1.0263	4.2815	-0.2526	0.2483	0.5139	-0.2695	-0.9020
72	40.60	0.20	10.1037	-0.0297	0.9217	4.1033	-0.2752	0.2393	0.5154	-0.2760	-0.8937
73	40.82	0.19	10.1999	-0.0373	0.8818	4.1714	-0.2597	0.2304	0.5168	-0.2655	-0.8909
74	41.04	0.19	10.2162	-0.0404	0.8563	4.0803	-0.2752	0.2259	0.5195	-0.2937	-0.8955
75	41.21	0.17	10.1559	-0.0753	1.0291	3.9569	-0.2744	0.2287	0.5190	-0.2903	-0.8741
76	41.43	0.17	10.3215	-0.0833	0.8123	4.0972	-0.2744	0.2201	0.5195	-0.2944	-0.8684
77	41.60	0.17	10.3130	-0.0811	0.7998	4.0829	-0.2741	0.2194	0.5226	-0.3027	-0.8646
78	41.80	0.18	10.2959	-0.0782	0.8878	3.9191	-0.2737	0.2153	0.5205	-0.3052	-0.8511
79	41.97	0.19	10.0984	-0.0864	0.9361	3.5759	-0.2422	0.2233	0.5267	-0.3034	-0.8227
80	42.18	0.19	10.2750	-0.0870	0.8481	3.7419	-0.2576	0.2249	0.5328	-0.3079	-0.8142
81	42.35	0.19	10.1999	-0.0904	0.8054	3.4398	-0.2637	0.2230	0.5308	-0.3078	-0.7956
82	42.53	0.18	10.2489	-0.0886	0.8673	3.6844	-0.2641	0.2132	0.5348	-0.3216	-0.7718
83	42.72	0.18	10.3069	-0.0928	0.8125	3.6883	-0.2629	0.2220	0.5357	-0.3133	-0.7662
84	42.89	0.11	10.3972	-0.0955	0.8002	3.4118	-0.2627	0.2106	0.5367	-0.3261	-0.7547
85	43.07	0.16	10.5719	-0.0742	0.8247	3.5252	-0.3011	0.2002	0.5341	-0.3339	-0.7654
86	43.29	0.14	10.4913	-0.0745	0.8279	3.3376	-0.2536	0.2004	0.5331	-0.3327	-0.7356
87	43.43	0.14	10.5260	-0.0804	0.8114	3.3426	-0.2649	0.2023	0.5326	-0.3303	-0.7277
88	43.62	0.15	10.7372	-0.0934	0.8365	3.2616	-0.2841	0.1921	0.5372	-0.3451	-0.7413
89	43.78	0.15	10.5543	-0.0703	0.8338	2.9702	-0.2513	0.1976	0.5356	-0.3378	-0.7175
90	43.97	0.14	10.7750	-0.0502	0.8345	2.9858	-0.2975	0.1855	0.5349	-0.3494	-0.7285
91	44.17	0.14	10.7854	-0.0703	0.8316	3.1052	-0.2974	0.1969	0.5424	-0.3455	-0.7214
92	44.33	0.07	10.8131	-0.0624	0.8326	2.8119	-0.2740	0.1866	0.5403	-0.3517	-0.7232

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PANI	MACH NO10-9	PRI	CONF.	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	64	0.60 1.7	65.0	413+0413	3.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAF	CAF	ACP
93	54.51	0.01	10.8211	-7.0551	-0.2357	2.7670	-0.2915	0.1845	0.5423	-0.3578	-0.7065
94	54.70	0.03	10.8443	-7.0569	-0.2153	2.7563	-0.2746	0.1724	0.5433	-0.3709	-0.6978
95	54.89	0.01	10.8761	-7.0566	-0.2193	2.6743	-0.2963	0.1720	0.5442	-0.3722	-0.6928
96	55.08	0.01	11.0203	-7.0709	-0.2334	2.6713	-0.2953	0.1817	0.5484	-0.3672	-0.7025
97	55.23	0.00	11.0503	-7.0721	-0.2358	2.6263	-0.2958	0.1681	0.5480	-0.3799	-0.6895
98	55.42	0.00	11.0744	-7.0780	-0.2347	2.6266	-0.2967	0.1658	0.5425	-0.3767	-0.6783
99	55.59	0.01	11.1167	-7.0871	-0.2269	2.4365	-0.2839	0.1629	0.5499	-0.3866	-0.6797
100	55.75	0.00	11.1264	-7.0918	-0.2366	2.3220	-0.2966	0.1486	0.5489	-0.4003	-0.6698
101	55.92	0.00	11.1411	-7.0989	-0.2121	2.3591	-0.2965	0.1565	0.5488	-0.3923	-0.6626
102	56.11	0.00	11.2744	-7.0963	-0.2491	2.3155	-0.2965	0.1564	0.5519	-0.3955	-0.6665
103	56.29	0.02	11.2753	-7.1022	-0.2368	1.9272	-0.2942	0.1504	0.5489	-0.3985	-0.6478
104	56.45	0.01	11.2744	-7.2137	-0.2230	2.0326	-0.2948	0.1713	0.5438	-0.4225	-0.6397
105	56.62	0.02	11.3227	-7.1975	-0.2216	1.8505	-0.2332	0.1120	0.5304	-0.4246	-0.6357
106	56.80	0.03	11.3423	-7.1282	-0.2369	1.7829	-0.2478	0.1256	0.5423	-0.4167	-0.6262
107	56.97	0.03	11.4494	-7.2427	-0.2559	2.0721	-0.2765	0.1242	0.5433	-0.4191	-0.6371
108	57.15	0.02	11.5478	-7.2356	-0.2754	1.6946	-0.2441	0.1143	0.5497	-0.4304	-0.6439
109	57.31	0.02	11.5119	-6.9993	-0.2758	1.6919	-0.2399	0.1073	0.5372	-0.4366	-0.6032
110	57.48	0.03	11.5463	-7.2211	-0.2565	1.9148	-0.2776	0.1254	0.5446	-0.4194	-0.6229
111	57.58	0.01	11.6023	-7.2074	-0.2794	1.7594	-0.2629	0.1038	0.5408	-0.4370	-0.6041
112	57.63	0.02	11.6561	-7.1466	-0.2756	1.9196	-0.2777	0.1026	0.5408	-0.4362	-0.6116
113	58.04	0.02	11.6525	-7.2093	-0.2758	1.7652	-0.2777	0.1203	0.5404	-0.4205	-0.6015
114	58.18	0.02	11.7436	-7.2765	-0.2774	2.0533	-1.2932	0.1014	0.5373	-0.4359	-0.6099
115	58.36	0.02	11.7707	-7.2906	-0.2732	1.9325	-0.2934	0.1063	0.5443	-0.4346	-0.5979
116	58.51	0.01	11.8907	-6.9499	-0.2523	1.6076	-0.2240	0.0635	0.5265	-0.4629	-0.5560
117	58.67	0.02	11.8629	-7.2138	-0.2737	1.8861	-0.3102	0.1072	0.5446	-0.4374	-0.6013
118	58.83	0.02	11.8929	-6.9987	-0.2808	2.0853	-0.2965	0.1004	0.5441	-0.4437	-0.5883
119	59.04	0.02	11.8919	-6.9787	-0.2717	2.0219	-0.2942	0.0969	0.5411	-0.4442	-0.5707
120	59.18	0.02	11.9438	-6.9888	-0.2705	2.1953	-0.2946	0.0997	0.5467	-0.4478	-0.5807
121	59.35	0.01	11.9463	-6.9781	-0.2797	1.9276	-0.2950	0.0896	0.5447	-0.4550	-0.5675
122	59.52	0.00	11.9478	-6.9373	-0.2838	1.9157	-0.2948	0.0827	0.5443	-0.4615	-0.5672
123	59.69	-0.01	11.9829	-6.9263	-1.6.93	1.7622	-0.2911	0.0567	0.5309	-0.4791	-0.5182
124	59.87	-0.00	11.9238	-6.9459	-0.2839	1.5392	-0.2176	0.0797	0.5414	-0.4616	-0.5020
125	60.04	0.02	12.0109	-6.9383	-0.2682	1.6111	-0.2645	0.0843	0.5450	-0.4606	-0.5276
126	60.20	0.01	11.9848	-6.9259	-0.2969	1.4805	-0.2020	0.0793	0.5416	-0.4622	-0.4816
127	60.38	0.02	11.9747	-6.9299	-0.2944	1.6579	-0.1807	0.0882	0.5460	-0.4577	-0.4914
128	60.54	0.01	11.9712	-6.9763	-0.2192	1.2516	-0.1760	0.0667	0.5380	-0.4712	-0.4573
129	60.71	0.01	11.9722	-6.9929	-0.3628	1.4361	-0.1705	0.0834	0.5456	-0.4621	-0.4632
130	60.88	0.00	12.0217	-6.9633	-0.2519	1.3614	-0.1703	0.0804	0.5466	-0.4661	-0.4411
131	61.04	0.01	12.1043	-6.9383	-0.2774	0.7584	-0.1076	0.0808	0.5519	-0.4707	-0.4489
132	61.21	-0.00	12.1602	-6.9382	-0.2362	1.0545	-0.1235	0.0618	0.5521	-0.4903	-0.4480
133	61.37	0.01	12.1839	-6.1324	-0.2810	1.1660	-0.1538	0.0628	0.5501	-0.4973	-0.4241
134	61.55	0.01	12.1974	-6.1435	-0.2600	0.9403	-0.1303	0.0671	0.5576	-0.4905	-0.4217
135	61.72	0.01	12.2543	-6.1247	-0.2772	0.5731	-0.0751	0.0660	0.5632	-0.4952	-0.4100
136	61.88	0.01	12.2376	-6.0904	-0.2617	0.2335	-0.0358	0.0568	0.5697	-0.5129	-0.4011
137	62.05	0.01	12.2544	-6.0531	-0.2531	-0.1427	0.0028	0.0827	0.5813	-0.5486	-0.4072
138	62.22	0.01	12.4284	-6.1574	-0.2996	-0.3005	-0.0046	0.0856	0.5904	-0.5048	-0.4149

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 6 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYNOLDS PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 64 0.60 1.7 45.0 61-0F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAH	CAF	ACP
134	52.49	[illegible]	12.4720	-5.2498	-0.4982	-0.9263	0.0491	0.0892	0.5934	-0.5046	-0.4209
140	52.57	0.01	12.4858	-5.2643	-0.5048	-0.9446	0.0426	0.0865	0.5976	-0.5111	-0.4050
141	52.72	0.02	12.5021	-5.2791	-0.3352	-1.4211	0.1283	0.1097	0.6117	-0.5021	-0.4215
142	52.86	0.03	12.5257	-5.2982	-0.1737	-1.8589	0.1367	0.1045	0.6142	-0.5098	-0.4212
143	53.02	0.01	12.5252	-5.2935	-0.4827	-1.1441	0.0277	0.1025	0.6117	-0.5043	-0.3966
144	53.23	0.01	12.5500	-5.3164	-0.4470	-1.3534	0.0615	0.1083	0.6172	-0.5090	-0.4128
145	53.36	0.01	12.5616	-5.3132	-0.4833	-1.1902	0.0271	0.1060	0.6262	-0.5143	-0.3964
146	53.55	-0.00	12.5751	-5.3262	-0.4924	-1.1710	0.0352	0.1069	0.6127	-0.5059	-0.3928
147	53.71	0.02	12.5956	-5.3458	-0.5302	-1.1335	0.0579	0.1168	0.6162	-0.5015	-0.4072
148	53.87	-0.01	12.6149	-5.3649	-0.4755	-1.3786	0.0145	0.1069	0.6189	-0.5121	-0.3996
149	54.04	0.00	12.6330	-5.3825	-0.4952	-1.2045	0.0261	0.1013	0.6214	-0.5202	-0.4140
150	54.21	-0.02	12.6535	-5.4041	-0.5316	-1.1734	0.0429	0.1140	0.6154	-0.4975	-0.4058
151	54.37	-0.03	13.1137	-5.3442	-0.4814	-1.5221	0.0388	0.0932	0.6185	-0.5253	-0.4142
152	54.51	-0.04	12.6948	-5.3476	-0.4768	-1.6343	0.0423	0.1201	0.6230	-0.5030	-0.4157
153	54.70	-0.05	13.3304	-5.7161	-1.1366	-2.3906	0.0495	0.1007	0.6303	-0.5297	-0.4296
154	54.85	-0.06	13.2743	-5.7761	-1.1636	-2.4935	0.0570	0.1034	0.6317	-0.5284	-0.4351
155	54.93	-0.06	13.3003	-5.7306	-1.3158	-2.6745	0.0416	0.1190	0.6410	-0.5221	-0.4287
156	55.10	-0.07	13.3752	-5.5382	-1.1504	-2.5171	0.0343	0.1165	0.6416	-0.5252	-0.4141
157	55.32	-0.08	13.5113	-5.6733	-1.3563	-3.0587	0.0181	0.0851	0.6264	-0.5413	-0.4314
158	55.49	-0.09	13.7520	-5.9069	-1.4360	-3.4051	0.0335	0.0997	0.6233	-0.5336	-0.4352
159	55.68	-0.09	13.9154	-5.9182	-1.3362	-3.6734	0.0416	0.0864	0.6206	-0.5346	-0.4531
160	55.81	-0.09	13.9385	-5.9394	-1.3165	-3.8254	0.0417	0.0718	0.6218	-0.5500	-0.4473
161	55.98	-0.10	14.1213	-6.0882	-1.3548	-4.0498	0.0416	0.0944	0.6203	-0.5259	-0.4652
162	56.15	-0.09	14.2441	-6.0642	-1.3569	-3.9549	0.0419	0.0760	0.6188	-0.5428	-0.4608
163	56.32	-0.10	14.3224	-7.1545	-1.6.78	-3.9129	0.0495	0.0994	0.6243	-0.5250	-0.4893
164	56.49	-0.09	14.4642	-7.1775	-1.3342	-3.9718	0.0267	0.0810	0.6097	-0.5287	-0.4860
165	56.66	-0.09	14.5152	-7.2264	-1.3564	-3.7468	0.0206	0.0970	0.6175	-0.5206	-0.4899
166	56.79	-0.09	14.4942	-7.2594	-1.2478	-3.7764	0.0271	0.0664	0.6211	-0.5347	-0.4897
167	56.96	-0.11	14.5023	-7.2234	-1.3691	-3.7308	0.0271	0.0538	0.6073	-0.5535	-0.4745
168	57.09	-0.08	14.4850	-7.1237	-1.2536	-3.4912	0.0198	0.0839	0.6150	-0.5311	-0.4760
169	57.28	-0.08	14.5263	-7.2621	-1.2615	-3.6305	0.0265	0.0595	0.6063	-0.5468	-0.4657
170	57.39	-0.08	14.4933	-7.1665	-1.2265	-3.5434	0.0199	0.0786	0.6109	-0.5323	-0.4781
171	57.52	-0.08	14.4937	-7.2543	-1.1304	-3.2590	-0.0026	0.0869	0.6073	-0.5224	-0.4583
172	57.67	-0.06	14.4427	-7.1596	-1.1374	-3.2422	0.0050	0.0702	0.6079	-0.5377	-0.4554
173	57.82	-0.07	14.3134	-7.0833	-1.2142	-3.1507	-0.0106	0.0682	0.6024	-0.5342	-0.4518
174	57.97	-0.06	14.3240	-7.0227	-1.1435	-3.1145	0.0052	0.0734	0.5968	-0.5234	-0.4466
175	58.13	-0.07	14.2931	-7.0278	-1.1094	-2.9213	-0.0143	0.0553	0.6120	-0.5567	-0.4467
176	58.15	-0.05	15.1016	-7.4920	-1.3287	-2.9273	-0.0031	0.0609	0.6134	-0.5525	-0.4570
177	58.18	-0.03	15.0918	-7.4915	-0.9383	-2.9389	-0.0053	0.0591	0.6097	-0.5506	-0.4500

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH PALPH RNL COMF 1 DEL1 DEL2 DEL3 DEL4 TRANSITION
7 84 1.60 1.7 4500 M1=0F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
1	-5.14	0.04	0.2794	0.0419	0.1432	0.1515	0.5209	-0.1875	-0.1397	-0.1016	0.2115	0.5420
2	-4.74	0.04	0.2749	0.0413	0.1434	0.1501	0.5232	-0.1859	-0.1392	-0.1019	0.2107	0.5483
3	-4.44	0.04	0.2715	0.0409	0.1436	0.1504	0.5519	-0.1841	-0.1378	-0.1023	0.2111	0.6552
4	-2.67	0.04	0.0799	0.0116	0.0365	0.1435	0.7104	-0.0275	-0.0144	-0.0333	0.5249	1.2111
5	-0.84	0.04	0.0172	-0.0043	0.0272	-0.5715	3.7759	0.0314	0.0013	-0.0059	0.0414	-0.1885
6	1.26	0.04	-0.0551	-0.0140	-0.0004	0.3456	0.0109	0.1063	0.0180	0.0266	0.1696	0.2503
7	3.26	0.04	-0.1213	-0.0322	-0.0318	0.2642	0.2624	0.1481	0.0324	0.0668	0.1672	0.3441
8	5.16	0.04	-0.1816	-0.0439	-0.0659	0.2182	0.3256	0.2829	0.0469	0.1152	0.1728	0.4072
9	7.03	0.04	-0.2394	-0.0531	-0.1061	0.1912	0.3679	0.3778	0.0619	0.1606	0.1638	0.4249
10	8.99	0.04	-0.2912	-0.0589	-0.1486	0.1830	0.3936	0.4790	0.0678	0.2070	0.1615	0.4322
11	10.88	0.04	-0.3318	-0.0593	-0.1735	0.1309	0.4023	0.5715	0.0683	0.2453	0.1195	0.4292
12	12.77	0.04	-0.3694	-0.0586	-0.1943	0.1094	0.4061	0.6530	0.0668	0.2761	0.1023	0.4229
13	14.65	0.04	-0.3939	-0.0525	-0.2078	0.0962	0.4060	0.7243	0.0603	0.3022	0.0832	0.4173
14	16.56	0.04	-0.4177	-0.0454	-0.2434	0.0872	0.3939	0.7784	0.0548	0.3125	0.0704	0.4015
15	18.51	0.04	-0.4329	-0.0419	-0.2565	0.0771	0.3841	0.7532	0.0412	0.2917	0.0546	0.3873
16	20.51	0.04	-0.4367	-0.0417	-0.2617	0.0719	0.3732	0.7695	0.0394	0.2956	0.0511	0.3842
17	22.51	0.04	-0.4353	-0.0427	-0.2627	0.0646	0.3708	0.8015	0.0376	0.3094	0.0468	0.3859
18	24.51	0.04	-0.4345	-0.0403	-0.2623	0.0577	0.3638	0.8482	0.0356	0.3295	0.0417	0.3885
19	26.49	0.04	-0.4321	-0.0395	-0.2625	0.0524	0.3635	0.8940	0.0312	0.3597	0.0346	0.3979
20	28.47	0.04	-0.4321	-0.0421	-0.2649	0.0496	0.3678	0.9075	0.0282	0.3824	0.0311	0.3993
21	29.43	0.04	-0.4329	-0.0435	-0.2665	0.0481	0.4148	0.9042	0.0280	0.3818	0.0310	0.4001
22	29.43	0.04	-0.4341	-0.0417	-0.2667	0.0494	0.4156	0.9171	0.0278	0.3859	0.0301	0.3990
23	25.52	0.04	-0.4345	-0.0412	-0.2686	0.0491	0.4158	0.9204	0.0274	0.3865	0.0298	0.3982
24	25.52	0.04	-0.4357	-0.0398	-0.2695	0.0482	0.4211	0.9237	0.0280	0.3850	0.0304	0.3951
25	25.52	0.04	-0.4345	-0.0393	-0.2682	0.0496	0.4216	0.9446	0.0269	0.3743	0.0285	0.3963
26	24.42	0.04	-0.4334	-0.0373	-0.2691	0.0480	0.4265	0.9495	0.0266	0.3765	0.0283	0.3945
27	23.33	0.04	-0.4304	-0.0378	-0.2682	0.0500	0.4239	0.9657	0.0262	0.3794	0.0272	0.3928
28	24.37	0.04	-0.4324	-0.0363	-0.2686	0.0495	0.4274	0.9770	0.0260	0.3830	0.0267	0.3928
29	25.24	0.04	-0.4293	-0.0357	-0.2689	0.0490	0.4289	0.9911	0.0252	0.3874	0.0255	0.3909
30	26.51	0.04	-0.4345	-0.0394	-0.2677	0.0492	0.4282	1.0055	0.0245	0.3929	0.0244	0.3908
31	26.27	0.04	-0.4316	-0.0391	-0.2687	0.0507	0.4348	1.0161	0.0228	0.4036	0.0220	0.3895
32	31.07	0.04	-0.4346	-0.0352	-0.2696	0.0510	0.4356	1.0522	0.0224	0.4104	0.0213	0.3900
33	31.34	0.04	-0.4342	-0.0331	-0.2681	0.0531	0.4361	1.0635	0.0218	0.4140	0.0205	0.3893
34	31.61	0.04	-0.4333	-0.0350	-0.2677	0.0526	0.4350	1.0731	0.0218	0.4163	0.0203	0.3886
35	31.44	0.04	-0.4363	-0.0364	-0.2696	0.0536	0.4356	1.0667	0.0214	0.4151	0.0205	0.3892
36	32.15	0.04	-0.4325	-0.0357	-0.2674	0.0530	0.4333	1.0731	0.0213	0.4176	0.0199	0.3892
37	32.42	0.04	-0.4326	-0.0373	-0.2693	0.0542	0.4350	1.0806	0.0208	0.4194	0.0193	0.3881
38	32.68	0.04	-0.4313	-0.0367	-0.2694	0.0539	0.4314	1.0821	0.0208	0.4225	0.0192	0.3905
39	32.94	0.04	-0.4342	-0.0393	-0.2677	0.0546	0.4312	1.0934	0.0203	0.4252	0.0186	0.3889
40	33.19	0.04	-0.4324	-0.0384	-0.2694	0.0544	0.4317	1.0931	0.0202	0.4291	0.0185	0.3925
41	33.44	0.04	-0.4345	-0.0371	-0.2678	0.0549	0.4266	1.0979	0.0204	0.4303	0.0186	0.3919
42	33.70	0.04	-0.4342	-0.0378	-0.2695	0.0557	0.4294	1.0930	0.0204	0.4308	0.0187	0.3941
43	33.95	0.04	-0.4343	-0.0380	-0.2693	0.0578	0.4274	1.1084	0.0196	0.4345	0.0177	0.3954
44	34.19	0.04	-0.4334	-0.0372	-0.2691	0.0585	0.4261	1.1136	0.0193	0.4368	0.0174	0.3940
45	34.44	0.04	-0.4317	-0.0363	-0.2682	0.0599	0.4260	1.1089	0.0193	0.4369	0.0174	0.3958
46	34.69	0.04	-0.4315	-0.0360	-0.2686	0.0595	0.4271	1.1187	0.0190	0.4417	0.0170	0.3948

TEST PART MACH RX10-6 PHI CD ALPHA DEL1 DEL2 DEL3 DEL4 TRANSITION
1 64 0.60 1.7 45.0 0.0013 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	-PITCH	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
47	35.54	0.21	-0.6862	-0.2426	-0.2918	0.0826	0.4226	1.1298	0.0185	0.0170	0.0164	0.3957
48	35.17	0.21	-0.6829	-0.2428	-0.2875	0.0826	0.4214	1.1218	0.0186	0.0168	0.0160	0.3958
49	35.41	0.21	-0.6833	-0.2426	-0.2919	0.0816	0.4206	1.1314	0.0181	0.0179	0.0160	0.3959
50	35.49	0.21	-0.6862	-0.2442	-0.2943	0.0841	0.4186	1.1361	0.0181	0.0167	0.0160	0.3967
51	35.70	0.21	-0.6859	-0.2441	-0.2939	0.0841	0.4213	1.1462	0.0175	0.0526	0.0153	0.3955
52	35.17	0.21	-0.6821	-0.2445	-0.2951	0.0853	0.4203	1.1380	0.0179	0.0517	0.0158	0.3976
53	35.35	0.22	-0.7145	-0.2488	-0.2983	0.0863	0.4155	1.1570	0.0173	0.0546	0.0150	0.3970
54	36.59	0.22	-0.7275	-0.2682	-0.3005	0.0862	0.4131	1.1608	0.0173	0.0598	0.0149	0.3961
55	36.86	0.21	-0.7212	-0.2661	-0.3044	0.0838	0.4156	1.1660	0.0171	0.0616	0.0147	0.3966
56	37.14	0.21	-0.7253	-0.2694	-0.3098	0.0878	0.4115	1.1672	0.0164	0.0639	0.0141	0.3975
57	37.31	0.21	-0.7256	-0.2698	-0.3092	0.0874	0.4121	1.1735	0.0163	0.0669	0.0139	0.3975
58	37.53	0.22	-0.7191	-0.2699	-0.2952	0.0863	0.4129	1.1751	0.0162	0.0669	0.0138	0.3973
59	37.77	0.22	-0.7091	-0.2658	-0.2924	0.0725	0.4126	1.1896	0.0155	0.0715	0.0130	0.3964
60	37.99	0.22	-0.6943	-0.2581	-0.2881	0.0779	0.4120	1.1927	0.0152	0.0734	0.0128	0.3970
61	38.24	0.22	-0.6941	-0.2583	-0.2863	0.0728	0.4153	1.1959	0.0149	0.0762	0.0125	0.3982
62	38.41	0.21	-0.7093	-0.2667	-0.2864	0.0860	0.4078	1.2023	0.0147	0.0774	0.0122	0.3970
63	38.71	0.19	-0.7104	-0.2672	-0.2786	0.0735	0.3979	1.2278	0.0140	0.0873	0.0116	0.3969
64	38.92	0.19	-0.7392	-0.2736	-0.2755	0.0993	0.3728	1.2406	0.0142	0.0910	0.0115	0.3958
65	39.17	0.20	-0.7521	-0.2753	-0.2783	0.1041	0.3652	1.2390	0.0144	0.0905	0.0116	0.3959
66	39.36	0.20	-0.7464	-0.2737	-0.2784	0.0993	0.3697	1.2360	0.0142	0.0905	0.0115	0.3959
67	39.57	0.19	-0.7426	-0.2746	-0.2788	0.1045	0.3698	1.2378	0.0138	0.0905	0.0112	0.3963
68	39.79	0.20	-0.7453	-0.2738	-0.2785	0.0990	0.3715	1.2522	0.0137	0.0964	0.0110	0.3964
69	40.00	0.20	-0.7411	-0.2721	-0.2759	0.0973	0.3719	1.2522	0.0136	0.0973	0.0107	0.3972
70	40.20	0.20	-0.7414	-0.2702	-0.2744	0.0922	0.3671	1.2554	0.0135	0.0983	0.0108	0.3969
71	40.44	0.20	-0.7411	-0.2655	-0.2684	0.0866	0.3666	1.2635	0.0132	0.5000	0.0105	0.3957
72	40.60	0.20	-0.7445	-0.2682	-0.2705	0.0795	0.3679	1.2683	0.0132	0.5025	0.0104	0.3962
73	40.82	0.19	-0.7396	-0.2668	-0.2671	0.0826	0.3662	1.2618	0.0132	0.4999	0.0105	0.3962
74	41.00	0.19	-0.7429	-0.2610	-0.2643	0.0769	0.3678	1.2715	0.0125	0.5053	0.0098	0.3974
75	41.21	0.17	-0.7371	-0.2606	-0.2654	0.0790	0.3617	1.2715	0.0125	0.5044	0.0098	0.3967
76	41.43	0.17	-0.7370	-0.2566	-0.2661	0.0738	0.3730	1.2651	0.0119	0.5032	0.0094	0.3977
77	41.61	0.17	-0.7343	-0.2557	-0.2638	0.0737	0.3745	1.2786	0.0118	0.5065	0.0092	0.3963
78	41.90	0.16	-0.7363	-0.2629	-0.2641	0.0823	0.3690	1.2714	0.0112	0.5062	0.0088	0.3997
79	41.97	0.13	-0.7401	-0.2660	-0.2757	0.0914	0.3696	1.2868	0.0105	0.5131	0.0082	0.3981
80	42.16	0.13	-0.7359	-0.2662	-0.2625	0.0871	0.3717	1.2872	0.0107	0.5130	0.0083	0.3985
81	42.35	0.13	-0.7512	-0.2715	-0.2792	0.0952	0.3717	1.2935	0.0099	0.5176	0.0077	0.4002
82	42.53	0.12	-0.7391	-0.2676	-0.2635	0.0895	0.3754	1.2903	0.0096	0.5162	0.0075	0.4001
83	42.72	0.12	-0.7342	-0.2702	-0.2616	0.0937	0.3758	1.2941	0.0090	0.5189	0.0070	0.4010
84	42.89	0.11	-0.7509	-0.2812	-0.2812	0.0970	0.3744	1.3005	0.0090	0.5218	0.0069	0.4013
85	43.07	0.12	-0.7551	-0.2841	-0.2881	0.0985	0.3797	1.2979	0.0089	0.5208	0.0069	0.4013
86	43.24	0.11	-0.7477	-0.2862	-0.2825	0.0985	0.3778	1.2995	0.0081	0.5225	0.0062	0.4021
87	43.43	0.09	-0.7336	-0.2838	-0.2787	0.0894	0.3799	1.2978	0.0081	0.5229	0.0063	0.4030
88	43.62	0.10	-0.7627	-0.2920	-0.2912	0.0913	0.3818	1.3075	0.0076	0.5261	0.0058	0.4023
89	43.78	0.09	-0.7638	-0.2937	-0.2929	0.0935	0.3792	1.3037	0.0076	0.5239	0.0058	0.4019
90	43.97	0.09	-0.7502	-0.2907	-0.2945	0.0796	0.3874	1.3148	0.0067	0.5297	0.0051	0.4029
91	44.17	0.10	-0.7610	-0.2901	-0.2903	0.0864	0.3882	1.3180	0.0063	0.5307	0.0048	0.4026
92	44.33	0.07	-0.7478	-0.2894	-0.2905	0.0860	0.3887	1.3217	0.0058	0.5325	0.0044	0.4029

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) / BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART MACH VALUES 1.7 PHI 45.0 CONF MI=0P13 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
93	85.01	0.01	-0.2577	-0.0577	-0.2462	0.0771	0.3891	1.3313	0.0045	0.5373	0.0037	0.4036
94	85.77	0.03	-0.2675	-0.0577	-0.2421	0.0772	0.3904	1.3284	0.0052	0.5344	0.0039	0.4033
95	84.48	0.01	-0.2734	-0.0577	-0.2417	0.0776	0.3926	1.3288	0.0047	0.5366	0.0035	0.4039
96	85.16	0.01	-0.2734	-0.0539	-0.2394	0.0727	0.3957	1.3400	0.0038	0.5417	0.0028	0.4043
97	85.23	0.02	-0.2739	-0.0561	-0.2419	0.0761	0.3907	1.3353	0.0036	0.5398	0.0026	0.4043
98	85.47	0.02	-0.2719	-0.0538	-0.2414	0.0748	0.3944	1.3363	0.0039	0.5437	0.0030	0.4054
99	85.59	0.01	-0.2734	-0.0549	-0.2484	0.0743	0.4012	1.3347	0.0032	0.5405	0.0024	0.4053
100	85.75	0.00	-0.2716	-0.0550	-0.2439	0.0772	0.3947	1.3201	0.0038	0.5338	0.0027	0.4044
101	85.92	0.00	-0.2729	-0.0572	-0.2439	0.0757	0.4043	1.3390	0.0027	0.5424	0.0020	0.4051
102	85.11	0.00	-0.2749	-0.0508	-0.2515	0.0743	0.4050	1.3468	0.0023	0.5466	0.0017	0.4059
103	85.28	0.02	-0.2823	-0.0541	-0.2792	0.0790	0.5099	1.3170	0.0027	0.5328	0.0021	0.4045
104	85.45	0.01	-0.2778	-0.0517	-0.2642	0.0761	0.4073	1.3234	0.0021	0.5373	0.0016	0.4059
105	85.62	0.02	-0.2805	-0.0496	-0.2665	0.0711	0.4194	1.3301	0.0018	0.5401	0.0014	0.4061
106	85.80	0.01	-0.2778	-0.0500	-0.2642	0.0708	0.4195	1.3170	0.0020	0.5340	0.0016	0.4053
107	85.97	0.03	-0.2837	-0.0535	-0.2866	0.0634	0.4218	1.3384	0.0016	0.5422	0.0012	0.4057
108	87.15	0.02	-0.2673	-0.0503	-0.2646	0.0678	0.4264	1.3288	0.0013	0.5396	0.0010	0.4061
109	87.31	0.02	-0.2652	-0.0469	-0.2692	0.0677	0.4250	1.3285	0.0014	0.5405	0.0011	0.4069
110	87.48	0.03	-0.2659	-0.0469	-0.2662	0.0614	0.4297	1.3506	0.0001	0.5492	0.0001	0.4067
111	87.66	0.01	-0.2621	-0.0462	-0.2614	0.0656	0.4335	1.3332	0.0006	0.5432	0.0006	0.4075
112	87.83	0.02	-0.2580	-0.0466	-0.2614	0.0643	0.4410	1.3349	0.0005	0.5442	0.0004	0.4077
113	88.00	0.02	-0.2682	-0.0479	-0.2779	0.0664	0.4425	1.3284	0.0005	0.5430	0.0004	0.4088
114	84.14	0.02	-0.2433	-0.0271	-0.2459	0.0429	0.4514	1.3456	-0.0003	0.5524	-0.0002	0.4105
115	84.31	0.02	-0.2427	-0.0252	-0.2423	0.0416	0.4526	1.3469	-0.0001	0.5500	-0.0001	0.4083
116	84.51	0.01	-0.2564	-0.0263	-0.2515	0.0407	0.4538	1.3106	0.0013	0.5353	0.0010	0.4084
117	84.67	0.02	-0.2613	-0.0227	-0.2560	0.0374	0.4631	1.3035	-0.0008	0.5576	-0.0006	0.4089
118	84.83	0.02	-0.2551	-0.0232	-0.2531	0.0360	0.4709	1.3445	0.0	0.5502	0.0	0.4092
119	89.00	0.02	-0.2553	-0.0172	-0.2560	0.0305	0.4704	1.3361	0.0	0.5484	0.0	0.4099
120	89.18	0.02	-0.2531	-0.0186	-0.2601	0.0290	0.4702	1.3471	-0.0003	0.5525	-0.0002	0.4101
121	89.35	0.01	-0.2574	-0.0122	-0.2477	0.0236	0.4788	1.3376	-0.0001	0.5472	0.0001	0.4091
122	89.52	0.00	-0.2512	-0.0145	-0.2515	0.0252	0.4688	1.3373	-0.0002	0.5487	-0.0001	0.4103
123	89.69	-0.00	-0.2539	-0.0131	-0.2503	0.0241	0.4697	1.3214	0.0005	0.5414	0.0004	0.4097
124	89.87	-0.01	-0.2550	-0.0133	-0.2554	0.0240	0.4574	1.3224	0.0003	0.5432	0.0002	0.4108
125	90.03	0.02	-0.2551	-0.0134	-0.2222	0.0257	0.4747	1.3271	0.0	0.5405	0.0	0.4118
126	90.20	0.01	-0.2559	-0.0141	-0.2098	0.0307	0.4564	1.3233	0.0001	0.5464	0.0001	0.4129
127	90.36	0.01	-0.2545	-0.0115	-0.2037	0.0257	0.4553	1.3234	0.0	0.5451	0.0	0.4119
128	90.54	0.01	-0.2574	-0.0138	-0.2159	0.0324	0.4558	1.3233	-0.0001	0.5472	-0.0001	0.4135
129	90.71	0.01	-0.2532	-0.0103	-0.1997	0.0205	0.4558	1.3249	-0.0004	0.5477	-0.0003	0.4134
130	90.88	0.00	-0.2559	-0.0115	-0.1752	0.0252	0.4436	1.3169	0.0	0.5451	0.0	0.4140
131	91.04	0.01	-0.2493	-0.0094	-0.1509	0.0272	0.4369	1.3232	-0.0008	0.5494	-0.0006	0.4152
132	91.21	-0.00	-0.2527	-0.0097	-0.1561	0.0275	0.4427	1.3296	-0.0011	0.5523	-0.0008	0.4154
133	91.37	0.01	-0.2517	-0.0098	-0.1639	0.0266	0.4530	1.3327	-0.0014	0.5546	-0.0011	0.4161
134	91.55	0.01	-0.2535	-0.0097	-0.1582	0.0310	0.4343	1.3247	-0.0011	0.5525	-0.0008	0.4170
135	91.72	0.01	-0.2542	-0.0115	-0.1239	0.0324	0.4227	1.3262	-0.0017	0.5551	-0.0013	0.4185
136	91.88	0.01	-0.2552	-0.0111	-0.1202	0.0346	0.4171	1.3213	-0.0017	0.5544	-0.0013	0.4196
137	92.05	0.01	-0.2599	-0.0127	-0.1247	0.0275	0.4297	1.3340	-0.0022	0.5615	-0.0017	0.4209
138	92.22	0.01	-0.2591	-0.0161	-0.1269	0.0211	0.4321	1.3516	-0.0033	0.5684	-0.0024	0.4208

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE/D=E6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	64	0.60	1.7	-45.0	B1-OF13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CMF	CA2	XCPF2	YCPF2
149	52.3x	0.02	-0.2xx3	-0.0001	-0.1001	0.0256	0.4166	1.3549	-0.0036	0.5711	-0.0028	0.4216
150	52.47	0.01	-0.2xx5	-0.0007	-0.1025	0.0139	0.4109	1.3489	-0.0035	0.5660	-0.0026	0.4218
151	52.72	0.02	-0.1597	-0.0062	-0.0767	0.0811	0.3842	1.3616	-0.0046	0.5757	-0.0032	0.4228
152	52.xx	0.03	-0.15xx	-0.0078	-0.0553	0.0678	0.3678	1.3640	-0.0046	0.5769	-0.0034	0.4217
153	53.06	0.01	-0.1297	-0.0112	-0.0376	0.0665	0.2895	1.3697	-0.0047	0.5796	-0.0034	0.4209
154	53.23	0.01	-0.1170	-0.0xx4	-0.0268	0.0716	0.3015	1.3727	-0.0055	0.5810	-0.0040	0.4239
155	53.36	-0.01	-0.1057	-0.0113	-0.0227	0.1289	0.2187	1.3711	-0.0052	0.5805	-0.0038	0.4234
156	53.55	-0.00	-0.0xx6	-0.0132	-0.0146	0.1527	0.1642	1.3680	-0.0052	0.5778	-0.0038	0.4223
157	53.71	-0.02	-0.0863	-0.0114	-0.0049	0.1753	0.0760	1.3711	-0.0061	0.5817	-0.0045	0.4242
158	53.87	-0.01	-0.0xx6	-0.0137	-0.0165	0.1479	0.1842	1.3734	-0.0060	0.5825	-0.0044	0.4240
159	54.04	-0.04	-0.0xx0	-0.0137	-0.0096	0.1811	0.1272	1.3772	-0.0064	0.5835	-0.0047	0.4237
160	54.21	-0.02	-0.0771	-0.0115	-0.0161	0.1496	0.1579	1.3803	-0.0066	0.5867	-0.0048	0.4251
161	54.37	-0.03	-0.0755	-0.0131	-0.0112	0.1725	0.1490	1.3691	-0.0066	0.5818	-0.0048	0.4249
162	54.51	-0.04	-0.0762	-0.0112	-0.0246	0.1599	0.1731	1.3755	-0.0071	0.5855	-0.0052	0.4257
163	54.71	-0.03	-0.0856	-0.0134	0.0304	0.1385	-0.0255	1.3866	-0.0077	0.5893	-0.0056	0.4251
164	54.85	-0.06	-0.0776	-0.0067	0.0035	0.1502	-0.0971	1.3896	-0.0080	0.5911	-0.0058	0.4254
165	54.97	-0.03	-0.0776	-0.0053	0.0053	0.1558	-0.1407	1.3835	-0.0076	0.5971	-0.0060	0.4255
166	55.16	-0.07	-0.0791	-0.0155	0.0077	0.1078	-0.2636	1.4115	-0.0091	0.6006	-0.0065	0.4255
167	55.32	-0.06	-0.0735	-0.0107	0.0068	0.1315	-0.1949	1.3987	-0.0087	0.5987	-0.0062	0.4252
168	55.49	-0.09	-0.0730	-0.0140	0.0157	0.3540	-1.2038	1.4051	-0.0091	0.5985	-0.0065	0.4259
169	55.66	-0.05	-0.0834	-0.0138	0.0177	0.4272	-1.9639	1.4051	-0.0090	0.5985	-0.0064	0.4259
170	55.81	-0.09	0.0782	0.0011	0.0229	0.1775	3.6892	1.4084	-0.0094	0.5996	-0.0070	0.4257
171	55.95	-0.10	0.0756	0.0031	0.0318	0.1157	1.1791	1.4142	-0.0100	0.6016	-0.0071	0.4252
172	56.15	-0.09	0.0322	0.0043	0.0336	0.1936	1.0499	1.4163	-0.0100	0.6039	-0.0071	0.4264
173	56.32	-0.10	0.0211	0.0009	0.0311	0.2067	1.0739	1.4139	-0.0111	0.6094	-0.0078	0.4259
174	56.49	-0.09	0.0356	0.0060	0.0332	0.1131	0.9380	1.4292	-0.0113	0.6110	-0.0079	0.4275
175	56.66	-0.09	0.0161	-0.0012	0.0293	-0.0852	2.0775	1.4225	-0.0113	0.6059	-0.0080	0.4266
176	56.79	-0.09	0.0270	0.0032	0.0309	0.1196	1.1444	1.4400	-0.0120	0.6178	-0.0083	0.4290
177	56.94	-0.09	0.0295	0.0006	0.0343	0.0271	1.1630	1.4274	-0.0116	0.6069	-0.0081	0.4266
178	57.09	-0.10	0.0173	0.0002	0.0279	0.0116	1.6121	1.4305	-0.0125	0.6130	-0.0088	0.4285
179	57.24	-0.07	0.0281	0.0018	0.0336	0.0493	1.1846	1.4298	-0.0121	0.6094	-0.0085	0.4264
180	57.39	-0.08	0.0253	-0.0003	0.0331	-0.0119	1.3045	1.4386	-0.0130	0.6151	-0.0090	0.4276
181	57.52	-0.08	0.0145	-0.0031	0.0307	-0.1672	1.6593	1.4356	-0.0130	0.6141	-0.0091	0.4278
182	57.67	-0.08	0.0152	-0.0037	0.0336	-0.0598	2.7110	1.4291	-0.0131	0.6048	-0.0092	0.4267
183	57.82	-0.07	0.0211	-0.0043	0.0333	-0.2039	1.5735	1.4402	-0.0136	0.6173	-0.0095	0.4286
184	57.97	-0.08	0.0122	-0.0055	0.0336	-0.0511	2.7405	1.4274	-0.0133	0.6119	-0.0093	0.4287
185	58.13	-0.07	0.0171	-0.0075	0.0292	-1.4569	0.1117	1.4372	-0.0140	0.6161	-0.0098	0.4273
186	58.15	-0.08	0.0150	-0.0057	0.0345	-0.3502	2.3007	1.4322	-0.0138	0.6134	-0.0096	0.4283
187	58.16	-0.05	0.0126	-0.0078	0.0296	-3.0016	11.3825	1.4309	-0.0141	0.6136	-0.0099	0.4288

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST RPST MACH NXIV=6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 64 .60 1.7 45.0 0.0E+13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
1	-5.70	0.15	0.3154	0.0000	0.1151	0.9999	0.3869	-0.2341	-0.0450	-0.1142	0.1921	0.4877
2	-5.76	0.09	0.3145	0.0000	0.1144	0.9999	0.3861	-0.2341	-0.0450	-0.1142	0.1921	0.4877
3	-5.66	0.09	0.2761	0.0000	0.0829	0.9999	0.3573	-0.1364	-0.0282	-0.0702	0.2078	0.5145
4	-5.67	0.09	0.2791	0.0000	0.0846	0.9999	0.3784	-0.0476	-0.0137	-0.0304	0.3100	0.7135
5	-5.66	0.09	0.0265	0.0000	0.0235	0.9999	0.4471	0.0200	0.0012	-0.0036	0.0462	-0.1389
6	1.26	0.09	-0.1326	0.0000	0.0072	0.9999	0.7216	0.0946	0.0160	0.0249	0.1694	0.2633
7	3.26	0.09	-0.1222	0.0000	-0.0337	0.9999	0.3645	0.1706	0.0298	0.0570	0.1703	0.3346
8	5.10	0.09	-0.2137	0.0000	-0.0815	0.9999	0.3469	0.2521	0.0410	0.0938	0.1625	0.3720
9	7.05	0.09	-0.3487	0.0000	-0.1272	0.9999	0.3648	0.3312	0.0489	0.1328	0.1478	0.4011
10	8.93	0.09	-0.4526	0.0000	-0.1701	0.9999	0.3760	0.4118	0.0563	0.1703	0.1318	0.4136
11	10.86	0.09	-0.5639	0.0000	-0.2049	0.9999	0.3788	0.4704	0.0644	0.1918	0.1156	0.4077
12	12.77	0.09	-0.6484	0.0000	-0.2459	0.9999	0.3801	0.5420	0.0507	0.2219	0.0935	0.4094
13	14.69	0.09	-0.7249	0.0000	-0.2762	0.9999	0.3763	0.5953	0.0481	0.2498	0.0807	0.4109
14	16.56	0.09	-0.7566	0.0000	-0.2914	0.9999	0.3730	0.6301	0.0454	0.2568	0.0720	0.4123
15	18.60	0.09	-0.7369	0.0000	-0.2783	0.9999	0.3709	0.6540	0.0452	0.2816	0.0651	0.4057
16	20.51	0.09	-0.7359	0.0000	-0.2829	0.9999	0.3726	0.7201	0.0400	0.3051	0.0595	0.4238
17	22.41	0.10	-0.7803	0.0000	-0.2978	0.9999	0.3788	0.7127	0.0336	0.3151	0.0472	0.4221
18	24.30	0.10	-0.8109	0.0000	-0.3121	0.9999	0.3848	0.7780	0.0301	0.3290	0.0489	0.4229
19	26.19	0.11	-0.8492	0.0000	-0.3269	0.9999	0.3857	0.7957	0.0345	0.3195	0.0490	0.4066
20	28.07	0.13	-0.8782	0.0000	-0.3398	0.9999	0.3869	0.7965	0.0171	0.3057	0.0223	0.4016
21	29.13	0.12	-0.8967	0.0000	-0.3512	0.9999	0.3865	0.7991	0.0205	0.3127	0.0267	0.4066
22	29.13	0.12	-0.8968	0.0000	-0.3420	0.9999	0.3875	0.7782	0.0232	0.3187	0.0299	0.4095
23	29.56	0.13	-0.8968	0.0000	-0.3468	0.9999	0.3876	0.7777	0.0199	0.3172	0.0256	0.4079
24	29.78	0.13	-0.9149	0.0000	-0.3534	0.9999	0.3863	0.7690	0.0159	0.3103	0.0207	0.4035
25	29.99	0.13	-0.9296	0.0000	-0.3576	0.9999	0.3868	0.7712	0.0196	0.3094	0.0187	0.4011
26	29.42	0.13	-0.9297	0.0000	-0.3574	0.9999	0.3864	0.7763	0.0145	0.3122	0.0187	0.4021
27	29.63	0.14	-0.9459	0.0000	-0.3629	0.9999	0.3837	0.7492	0.0147	0.2996	0.0196	0.3999
28	29.97	0.10	-0.9578	0.0000	-0.3659	0.9999	0.3820	0.7461	0.0140	0.2990	0.0188	0.4009
29	30.24	0.10	-0.9572	0.0000	-0.3669	0.9999	0.3828	0.7481	0.0148	0.3010	0.0196	0.4035
30	30.51	0.15	-0.9668	0.0000	-0.3691	0.9999	0.3827	0.7445	0.0145	0.3001	0.0195	0.4031
31	30.79	0.17	-0.9732	0.0000	-0.3746	0.9999	0.3850	0.7378	0.0167	0.2978	0.0227	0.4041
32	31.07	0.16	-0.9844	0.0000	-0.3756	0.9999	0.3854	0.7305	0.0163	0.2975	0.0223	0.4073
33	31.36	0.16	-0.9934	0.0000	-0.3850	0.9999	0.3857	0.7161	0.0179	0.2933	0.0250	0.4085
34	31.61	0.16	-1.0026	0.0000	-0.3835	0.9999	0.3826	0.7202	0.0170	0.2956	0.0236	0.4102
35	31.89	0.17	-1.0107	0.0000	-0.3895	0.9999	0.3823	0.7237	0.0163	0.3000	0.0226	0.4145
36	32.15	0.16	-1.0200	0.0000	-0.3923	0.9999	0.3824	0.7343	0.0156	0.3060	0.0213	0.4167
37	32.42	0.17	-1.0270	0.0000	-0.3952	0.9999	0.3826	0.7212	0.0155	0.3018	0.0215	0.4185
38	32.68	0.20	-1.0387	0.0000	-0.3966	0.9999	0.3799	0.7241	0.0145	0.3082	0.0200	0.4250
39	32.94	0.17	-1.0440	0.0000	-0.3984	0.9999	0.3795	0.7132	0.0144	0.3060	0.0206	0.4290
40	33.19	0.20	-1.0507	0.0000	-0.3988	0.9999	0.3777	0.7170	0.0141	0.3086	0.0197	0.4304
41	33.44	0.20	-1.0585	0.0000	-0.3998	0.9999	0.3781	0.7334	0.0141	0.3150	0.0192	0.4306
42	33.70	0.21	-1.0623	0.0000	-0.4020	0.9999	0.3765	0.7190	0.0137	0.3156	0.0191	0.4390
43	33.95	0.22	-1.0800	0.0000	-0.4008	0.9999	0.3778	0.6934	0.0141	0.3099	0.0204	0.4466
44	34.18	0.20	-1.0897	0.0000	-0.4024	0.9999	0.3762	0.6950	0.0154	0.3113	0.0222	0.4479
45	34.44	0.21	-1.0741	0.0000	-0.4043	0.9999	0.3764	0.6729	0.0169	0.3066	0.0247	0.4556
46	34.69	0.21	-1.0755	0.0000	-0.4045	0.9999	0.3761	0.6502	0.0156	0.3018	0.0256	0.4642

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NUMBER PHI CONE L DEL1 DEL2 DEL3 DEL4 TRANSITION
f 95.0 rl=0.13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CM4	XCPF4	YCPF4
47	34.93	0.21	-1.0676	9.9999	-0.4812	9.9999	0.3774	0.6345	0.0147	0.3058	0.0230	0.4781
48	35.17	0.21	-1.0784	9.9999	-0.4862	9.9999	0.3767	0.6475	0.0156	0.3064	0.0243	0.4768
49	35.41	0.21	-1.0898	9.9999	-0.4905	9.9999	0.3786	0.6317	0.0143	0.3068	0.0211	0.4826
50	35.65	0.21	-1.0957	9.9999	-0.4936	9.9999	0.3778	0.6168	0.0135	0.3074	0.0219	0.4904
51	35.90	0.21	-1.0995	9.9999	-0.4965	9.9999	0.3762	0.5984	0.0103	0.3012	0.0173	0.5051
52	36.17	0.21	-1.0964	9.9999	-0.4944	9.9999	0.3766	0.6010	0.0111	0.3011	0.0185	0.5010
53	36.36	0.22	-1.0954	9.9999	-0.4968	9.9999	0.3775	0.5878	0.0099	0.4005	0.0169	0.5113
54	36.54	0.22	-1.0980	9.9999	-0.4984	9.9999	0.3776	0.5716	0.0088	0.2988	0.0154	0.5228
55	36.84	0.21	-1.0962	9.9999	-0.4981	9.9999	0.3777	0.5779	0.0094	0.2967	0.0163	0.5134
56	37.09	0.21	-1.0969	9.9999	-0.4917	9.9999	0.3790	0.5556	0.0073	0.2946	0.0132	0.5302
57	37.31	0.21	-1.0911	9.9999	-0.4991	9.9999	0.3797	0.5532	0.0088	0.2913	0.0159	0.5266
58	37.53	0.22	-1.0914	9.9999	-0.4916	9.9999	0.3784	0.5346	0.0067	0.2831	0.0122	0.5295
59	37.77	0.22	-1.0972	9.9999	-0.4951	9.9999	0.3796	0.5298	0.0089	0.2820	0.0168	0.5322
60	37.99	0.22	-1.0799	9.9999	-0.4987	9.9999	0.3799	0.5234	0.0082	0.2799	0.0157	0.5349
61	38.23	0.22	-1.0812	9.9999	-0.4916	9.9999	0.3813	0.5282	0.0085	0.2765	0.0161	0.5274
62	38.47	0.21	-1.0700	9.9999	-0.4872	9.9999	0.3805	0.4885	0.0075	0.2691	0.0154	0.5508
63	38.71	0.19	-1.0658	9.9999	-0.4862	9.9999	0.3812	0.4635	0.0075	0.2569	0.0169	0.5748
64	38.92	0.19	-1.0627	9.9999	-0.4853	9.9999	0.3814	0.3923	0.0059	0.2359	0.0151	0.6013
65	39.17	0.20	-1.0537	9.9999	-0.4820	9.9999	0.3815	0.3774	0.0051	0.2293	0.0135	0.6076
66	39.38	0.20	-1.0509	9.9999	-0.4890	9.9999	0.3833	0.3592	0.0040	0.2222	0.0128	0.6186
67	39.57	0.19	-1.0572	9.9999	-0.4893	9.9999	0.3836	0.3625	0.0044	0.2236	0.0122	0.6168
68	39.79	0.21	-1.0787	9.9999	-0.4934	9.9999	0.3836	0.3475	0.0047	0.2208	0.0121	0.6354
69	40.04	0.20	-1.0883	9.9999	-0.4954	9.9999	0.3840	0.3356	0.0040	0.2141	0.0119	0.6375
70	40.26	0.20	-1.0944	9.9999	-0.4977	9.9999	0.3847	0.3294	0.0020	0.2153	0.0061	0.6526
71	40.35	0.20	-1.0931	9.9999	-0.4955	9.9999	0.3842	0.3173	0.0	0.2104	0.0	0.6630
72	40.60	0.20	-1.0750	9.9999	-0.4944	9.9999	0.3853	0.3156	0.0	0.2091	0.0	0.6624
73	40.82	0.19	-1.0836	9.9999	-0.4965	9.9999	0.3858	0.3217	0.0015	0.2107	0.0047	0.6569
74	41.00	0.19	-1.0858	9.9999	-0.4942	9.9999	0.3861	0.2942	-0.0014	0.1992	-0.0048	0.6772
75	41.21	0.17	-1.0856	9.9999	-0.4939	9.9999	0.3873	0.2953	0.0	0.1951	0.0	0.6839
76	41.43	0.17	-1.0942	9.9999	-0.4910	9.9999	0.3867	0.2853	-0.0002	0.1947	-0.0007	0.6825
77	41.60	0.17	-1.0941	9.9999	-0.4921	9.9999	0.3872	0.2911	-0.0021	0.1946	-0.0072	0.6824
78	41.80	0.16	-1.0913	9.9999	-0.4943	9.9999	0.3878	0.3062	-0.0075	0.1980	-0.0062	0.6667
79	41.97	0.15	-1.0942	9.9999	-0.4966	9.9999	0.3874	0.3083	-0.0020	0.1994	-0.0065	0.6669
80	42.19	0.15	-1.0913	9.9999	-0.4934	9.9999	0.3866	0.3124	0.0004	0.1973	0.0013	0.6316
81	42.35	0.15	-1.0912	9.9999	-0.4975	9.9999	0.3892	0.3023	-0.0002	0.1873	-0.0007	0.6195
82	42.53	0.16	-1.0995	9.9999	-0.4995	9.9999	0.3894	0.2831	0.0015	0.1802	0.0053	0.6368
83	42.76	0.16	-1.1117	9.9999	-0.4912	9.9999	0.3882	0.3039	0.0020	0.1847	0.0086	0.6077
84	42.99	0.17	-1.1193	9.9999	-0.4963	9.9999	0.3879	0.3036	0.0033	0.1848	0.0109	0.6086
85	43.07	0.16	-1.1076	9.9999	-0.4929	9.9999	0.3879	0.2918	0.0059	0.1766	0.0203	0.6056
86	43.24	0.19	-1.1171	9.9999	-0.4944	9.9999	0.3890	0.3073	0.0046	0.1793	0.0150	0.5836
87	43.43	0.09	-1.1172	9.9999	-0.4939	9.9999	0.3884	0.3033	0.0064	0.1792	0.0211	0.5910
88	43.62	0.11	-1.1162	9.9999	-0.4937	9.9999	0.3892	0.3063	0.0070	0.1757	0.0229	0.5737
89	43.78	0.09	-1.1156	9.9999	-0.4945	9.9999	0.3911	0.3272	0.0059	0.1867	0.0181	0.5705
90	43.97	0.09	-1.1197	9.9999	-0.4963	9.9999	0.3896	0.3195	0.0063	0.1786	0.0260	0.5591
91	44.17	0.10	-1.1216	9.9999	-0.4964	9.9999	0.3892	0.3209	0.0097	0.1788	0.0303	0.5578
92	44.33	0.07	-1.1190	9.9999	-0.4951	9.9999	0.3886	0.3418	0.0096	0.1857	0.0281	0.5435

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 # 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART RACK R810-6 MOI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 64 0.80 1.7 45.0 MIXED 13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CN3	CM3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
93	[illegible]	[illegible]	-1.1252	9.9999	-0.4326	9.9999	0.3544	0.3149	0.0100	0.1729	0.0318	0.5493
94	[illegible]	[illegible]	-1.1197	9.9999	-0.4354	9.9999	0.3896	0.3595	0.0109	0.1936	0.0304	0.5385
95	[illegible]	[illegible]	-1.1229	9.9999	-0.4308	9.9999	0.3909	0.3240	0.0103	0.1755	0.0318	0.5417
96	[illegible]	[illegible]	-1.1200	9.9999	-0.4378	9.9999	0.3909	0.3357	0.0124	0.1792	0.0370	0.5339
97	[illegible]	[illegible]	-1.1230	9.9999	-0.4378	9.9999	0.3927	0.3359	0.0115	0.1791	0.0352	0.5333
98	[illegible]	[illegible]	-1.1215	9.9999	-0.4379	9.9999	0.3906	0.3460	0.0117	0.2040	0.0304	0.5287
99	[illegible]	[illegible]	-1.1301	9.9999	-0.4419	9.9999	0.3909	0.3636	0.0110	0.1872	0.0315	0.5353
100	[illegible]	[illegible]	-1.1280	9.9999	-0.4404	9.9999	0.3911	0.3713	0.0132	0.1974	0.0356	0.5316
101	[illegible]	[illegible]	-1.1230	9.9999	-0.4342	9.9999	0.3909	0.3295	0.0136	0.1754	0.0419	0.5324
102	[illegible]	[illegible]	-1.1293	9.9999	-0.4422	9.9999	0.3916	0.3478	0.0135	0.1837	0.0389	0.5280
103	[illegible]	[illegible]	-1.1362	9.9999	-0.4423	9.9999	0.3907	0.3965	0.0137	0.2104	0.0398	0.5333
104	[illegible]	[illegible]	-1.1314	9.9999	-0.4427	9.9999	0.3913	0.3585	0.0146	0.1917	0.0408	0.5346
105	[illegible]	[illegible]	-1.1329	9.9999	-0.4423	9.9999	0.3909	0.3508	0.0141	0.1906	0.0374	0.5327
106	[illegible]	[illegible]	-1.1262	9.9999	-0.4397	9.9999	0.3911	0.3545	0.0147	0.1941	0.0411	0.5414
107	[illegible]	[illegible]	-1.1292	9.9999	-0.4397	9.9999	0.3911	0.3387	0.0143	0.1834	0.0423	0.5413
108	[illegible]	[illegible]	-1.1342	9.9999	-0.4444	9.9999	0.3916	0.3326	0.0136	0.1829	0.0410	0.5404
109	[illegible]	[illegible]	-1.1313	9.9999	-0.4435	9.9999	0.3923	0.3342	0.0135	0.1851	0.0405	0.5537
110	[illegible]	[illegible]	-1.1350	9.9999	-0.4456	9.9999	0.3920	0.3045	0.0127	0.1665	0.0418	0.5468
111	[illegible]	[illegible]	-1.1325	9.9999	-0.4456	9.9999	0.3924	0.3243	0.0131	0.1750	0.0401	0.5490
112	[illegible]	[illegible]	-1.1399	9.9999	-0.4485	9.9999	0.3935	0.2948	0.0121	0.1636	0.0411	0.5549
113	[illegible]	[illegible]	-1.1384	9.9999	-0.4488	9.9999	0.3943	0.2978	0.0130	0.1638	0.0437	0.5509
114	[illegible]	[illegible]	-1.1350	9.9999	-0.4477	9.9999	0.3933	0.2839	0.0104	0.1493	0.0395	0.5657
115	[illegible]	[illegible]	-1.1458	9.9999	-0.4515	9.9999	0.3939	0.2437	0.0085	0.1451	0.0349	0.5953
116	[illegible]	[illegible]	-1.1552	9.9999	-0.4560	9.9999	0.3930	0.2253	0.0094	0.1403	0.0418	0.6226
117	[illegible]	[illegible]	-1.1523	9.9999	-0.4543	9.9999	0.3941	0.2312	0.0087	0.1385	0.0377	0.5902
118	[illegible]	[illegible]	-1.1650	9.9999	-0.4596	9.9999	0.3943	0.1725	0.0057	0.1134	0.0331	0.6573
119	[illegible]	[illegible]	-1.1597	9.9999	-0.4572	9.9999	0.3940	0.1906	0.0062	0.1208	0.0326	0.6338
120	[illegible]	[illegible]	-1.1679	9.9999	-0.4613	9.9999	0.3950	0.1834	0.0044	0.1155	0.0240	0.6462
121	[illegible]	[illegible]	-1.1725	9.9999	-0.4624	9.9999	0.3949	0.1504	0.0033	0.1049	0.0220	0.7108
122	[illegible]	[illegible]	-1.1654	9.9999	-0.4601	9.9999	0.3949	0.1603	0.0045	0.1097	0.0281	0.6845
123	[illegible]	[illegible]	-1.1537	9.9999	-0.4712	9.9999	0.3958	0.1500	0.0054	0.1064	0.0360	0.7094
124	[illegible]	[illegible]	-1.1618	9.9999	-0.4719	9.9999	0.3961	0.1617	0.0060	0.1115	0.0371	0.6891
125	[illegible]	[illegible]	-1.1498	9.9999	-0.4728	9.9999	0.3963	0.1537	0.0048	0.1059	0.0313	0.6890
126	[illegible]	[illegible]	-1.2113	9.9999	-0.4750	9.9999	0.3959	0.1543	0.0044	0.1086	0.0285	0.7039
127	[illegible]	[illegible]	-1.2071	9.9999	-0.4763	9.9999	0.3962	0.1378	0.0037	0.1026	0.0269	0.7460
128	[illegible]	[illegible]	-1.2070	9.9999	-0.4795	9.9999	0.3972	0.1602	0.0066	0.1116	0.0412	0.6962
129	[illegible]	[illegible]	-1.2143	9.9999	-0.4822	9.9999	0.3971	0.1311	0.0037	0.1000	0.0283	0.7627
130	[illegible]	[illegible]	-1.2172	9.9999	-0.4831	9.9999	0.3969	0.1224	0.0045	0.0951	0.0368	0.7768
131	[illegible]	[illegible]	-1.2494	9.9999	-0.4943	9.9999	0.3966	0.1444	0.0044	0.1085	0.0305	0.7515
132	[illegible]	[illegible]	-1.2435	9.9999	-0.4930	9.9999	0.3965	0.1349	0.0031	0.1059	0.0230	0.7857
133	[illegible]	[illegible]	-1.2391	9.9999	-0.4916	9.9999	0.3967	0.1181	0.0028	0.0955	0.0237	0.8094
134	[illegible]	[illegible]	-1.2295	9.9999	-0.4924	9.9999	0.3970	0.1473	0.0059	0.1142	0.0401	0.7749
135	[illegible]	[illegible]	-1.2396	9.9999	-0.5126	9.9999	0.3973	0.2372	0.0086	0.1593	0.0372	0.6713
136	[illegible]	[illegible]	-1.2746	9.9999	-0.5074	9.9999	0.3971	0.1902	0.0084	0.1338	0.0442	0.7038
137	[illegible]	[illegible]	-1.3151	9.9999	-0.5213	9.9999	0.3968	0.2664	0.0092	0.1762	0.0311	0.6664
138	[illegible]	[illegible]	-1.3150	9.9999	-0.5221	9.9999	0.3971	0.2371	0.0087	0.1602	0.0199	0.6754

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 6 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RALDS6	PRI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	6A	0.60	1.7	45.0	81=0F13	3.0	0	0	0	0	UNKNOWN

POINT	ALPHA	EFF1a	CNF3	Cm3	Cn3	XCPF3	YCPF3	CNF4	Cm4	CR4	XCPF4	YCPF4
139	52.34	[illegible]	-1.3355	[illegible]	-0.5300	9.3949	0.3375	0.3556	0.0113	0.2146	0.0318	0.6028
140	52.57	[illegible]	-1.3365	[illegible]	-0.5315	9.9949	0.3973	0.2724	0.0033	0.1742	0.0121	0.6579
141	52.72	[illegible]	-1.3747	[illegible]	-0.5436	9.9999	0.3966	0.3523	0.0052	0.2188	0.0144	0.6028
142	52.99	[illegible]	-1.3747	[illegible]	-0.5436	9.9969	0.3966	0.2884	0.0051	0.1745	0.0177	0.6191
143	53.08	[illegible]	-1.3559	[illegible]	-0.5412	9.9999	0.3991	0.1602	0.0057	0.1114	0.0356	0.6949
144	53.43	[illegible]	-1.3802	[illegible]	-0.5437	9.9999	0.3980	0.1524	0.0044	0.1105	0.0269	0.7246
145	53.33	-0.01	-1.3763	[illegible]	-0.5501	9.9999	0.3927	0.1195	0.0068	0.0909	0.0570	0.7604
146	54.55	-0.03	-1.3821	[illegible]	-0.5520	9.9999	0.3999	0.0433	0.0054	0.0420	0.0580	0.8794
147	53.71	-0.02	-1.4024	[illegible]	-0.5620	9.9999	0.4008	0.0995	0.0066	0.0845	0.0664	0.8498
148	53.47	-0.01	-1.3878	[illegible]	-0.5564	9.9999	0.3994	0.0799	0.0064	0.0750	0.0605	0.9426
149	54.03	-0.04	-1.3822	[illegible]	-0.5582	9.9999	0.3995	0.0777	0.0029	0.0775	0.0378	0.9980
150	54.21	-0.06	-1.4125	[illegible]	-0.5662	9.9999	0.4009	0.0419	0.0050	0.0796	0.0545	0.8666
151	54.37	-0.03	-1.3987	[illegible]	-0.5604	9.9999	0.4009	0.0867	0.0052	0.0761	0.0601	0.8781
152	54.51	-0.04	-1.4134	[illegible]	-0.5670	9.9999	0.4010	0.0747	0.0059	0.0713	0.0742	0.8948
153	54.70	-0.03	-1.4313	[illegible]	-0.5745	9.9999	0.4016	0.0577	0.0063	0.0583	0.1038	1.0119
154	54.45	-0.05	-1.4363	[illegible]	-0.5746	9.9999	0.4006	0.0719	0.0066	0.0672	0.0641	0.9367
155	54.64	-0.04	-1.4367	[illegible]	-0.5742	9.9999	0.4008	0.0562	0.0064	0.0568	0.1141	1.0121
156	55.15	-0.07	-1.4498	[illegible]	-0.5763	9.9999	0.4001	0.0565	0.0059	0.0549	0.1047	1.0441
157	55.36	-0.05	-1.4421	[illegible]	-0.5745	9.9999	0.4008	0.0388	0.0072	0.0469	0.1457	1.2075
158	55.49	-0.09	-1.4455	[illegible]	-0.5723	9.9999	0.4015	0.0306	0.0064	0.0457	0.2256	1.4917
159	55.56	-0.08	-1.4498	[illegible]	-0.5778	9.9999	0.4006	0.0337	0.0073	0.0451	0.2167	1.3366
160	55.81	-0.09	-1.4471	[illegible]	-0.5767	9.9999	0.4013	0.0256	0.0071	0.0417	0.2797	1.6391
161	55.88	-0.10	-1.4458	[illegible]	-0.5723	9.9999	0.4015	0.0372	0.0070	0.0466	0.1883	1.1920
162	55.15	-0.07	-1.4364	[illegible]	-0.5763	9.9999	0.4017	0.0283	0.0061	0.0411	0.2864	1.4499
163	55.46	-0.10	-1.4533	[illegible]	-0.5824	9.9999	0.4021	0.0286	0.0075	0.0419	0.2624	1.4627
164	54.89	-0.09	-1.4364	[illegible]	-0.5767	9.9999	0.4020	0.0212	0.0069	0.0362	0.4200	1.7083
165	55.09	-0.08	-1.4342	[illegible]	-0.5777	9.9999	0.4024	0.0265	0.0094	0.0395	0.3839	1.6092
166	55.74	-0.09	-1.4519	[illegible]	-0.5857	9.9999	0.4036	0.0149	0.0078	0.0321	0.5238	2.1545
167	55.98	-0.09	-1.4337	[illegible]	-0.5742	9.9999	0.4027	0.0009	0.0091	0.0251	10.1165	32.3253
168	57.09	-0.08	-1.4460	[illegible]	-0.5930	9.9999	0.4032	-0.0140	0.0041	0.0212	-0.5789	-1.5120
169	56.24	-0.08	-1.4371	[illegible]	-0.5802	9.9999	0.4037	-0.0218	0.0056	0.0211	-0.2618	-0.9844
170	57.34	-0.08	-1.4431	[illegible]	-0.5913	9.9999	0.4028	-0.0304	0.0070	0.0154	-0.2304	-0.5049
171	57.52	-0.08	-1.4312	[illegible]	-0.5763	9.9999	0.4040	-0.0348	0.0049	0.0113	-0.1232	-0.2848
172	57.67	-0.08	-1.4204	[illegible]	-0.5734	9.9999	0.4046	-0.0475	0.0031	0.0104	-0.0653	-0.2196
173	57.42	-0.08	-1.4493	[illegible]	-0.5825	9.9999	0.4037	-0.0597	0.0039	0.0057	-0.0655	-0.0959
174	57.47	-0.06	-1.4425	[illegible]	-0.5837	9.9999	0.4045	-0.0476	0.0034	0.0124	-0.0715	-0.2634
175	56.61	-0.07	-1.4460	[illegible]	-0.5819	9.9999	0.4041	-0.0439	-0.0003	-0.0007	0.0036	0.0086
176	56.15	-0.06	-1.4435	[illegible]	-0.5842	9.9999	0.4040	-0.0641	0.0020	0.0026	-0.0290	-0.0378
177	56.16	-0.08	-1.4456	[illegible]	-0.5803	9.9999	0.4042	-0.0619	0.0012	0.0056	-0.0194	-0.1071

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REIC=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	65	0.90	1.7	+5.0	8.40013	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.72	0.02	-0.2563	2.5712	0.1434	-0.4459	-0.0171	0.2297	0.0889	0.1408	-2.4134
2	-5.71	0.09	-0.3626	2.5715	0.0808	-0.3223	-0.0173	0.2331	0.0898	0.1433	-2.4146
3	-5.23	0.10	-0.2879	1.9327	0.1284	-0.2985	-0.0178	0.2595	0.0941	0.1754	-2.2682
4	-3.22	0.10	-0.3413	0.8867	0.1438	-0.1946	-0.0045	0.2627	0.0774	0.1853	-2.1741
5	-1.39	0.09	-0.1337	0.2732	-0.0219	-0.0554	-0.0050	0.2709	0.0749	0.1960	-2.0427
6	0.03	0.09	0.0549	0.0022	-0.1147	-0.1158	-0.0048	0.2731	0.0731	0.2000	0.0373
7	2.07	0.10	0.3319	-0.4943	0.0770	-0.2318	-0.0112	0.2654	0.0756	0.1901	-1.6673
8	4.07	0.10	0.6259	-1.0180	0.0404	-0.2730	-0.0050	0.2629	0.0814	0.1815	-1.9370
9	6.06	0.10	0.9722	-2.1491	0.0310	-0.2756	-0.0063	0.2517	0.0916	0.1601	-2.2354
10	8.06	0.10	1.3091	-3.2000	0.0538	-0.3019	-0.0093	0.2443	0.1031	0.1410	-2.3136
11	10.08	0.11	1.6196	-4.3313	0.1068	-0.4129	-0.0102	0.2390	0.1115	0.1276	-2.4085
12	12.06	0.10	2.1774	-5.6594	0.1617	-0.5445	-0.0119	0.2430	0.1240	0.1191	-2.4152
13	14.09	0.09	2.5784	-6.8735	-0.0164	-0.6832	-0.0064	0.2531	0.1454	0.1078	-2.3435
14	16.20	0.11	2.9036	-8.0949	0.1730	-0.2527	0.0072	0.2684	0.1727	0.0957	-2.2747
15	14.19	0.10	3.1691	-7.0254	0.0502	-0.1273	-0.0066	0.2763	0.2044	0.0719	-2.2049
16	20.13	0.10	3.5355	-7.5434	0.0335	-0.1630	-0.0068	0.3070	0.2546	0.0523	-2.1279
17	21.89	0.09	3.8879	-7.9243	0.1011	-0.1350	-0.0056	0.3238	0.2884	0.0349	-2.0674
18	24.06	0.13	4.2552	-8.3755	0.4035	-0.6495	-0.0251	0.3004	0.3064	-0.0076	-1.9683
19	25.93	0.16	4.6172	-8.8483	0.5146	-0.5965	-0.0306	0.2777	0.3277	-0.0499	-1.8380
20	27.88	0.15	4.9539	-9.7914	0.6223	-0.3756	-0.0150	0.2870	0.3465	-0.0594	-1.6742
21	29.28	0.19	5.1234	-9.9243	0.5662	-0.5098	-0.0078	0.2584	0.3483	-0.0898	-1.6631
22	28.20	0.15	5.0714	-9.8733	0.6407	-0.6169	-0.0145	0.2790	0.3489	-0.0698	-1.6905
23	25.20	0.14	5.0972	-9.9224	0.5251	-0.4554	-0.0151	0.2865	0.3495	-0.0629	-1.6915
24	25.92	0.16	5.2267	-9.8484	0.6609	-0.6106	-0.0070	0.2825	0.3610	-0.0784	-1.6620
25	23.74	0.12	5.3396	-9.9113	0.7695	-0.3650	-0.0060	0.2925	0.3654	-0.0733	-1.5768
26	24.13	0.12	5.3725	-9.9157	0.7634	-0.1773	-0.0054	0.2903	0.3749	-0.0846	-1.5478
27	24.44	0.13	5.3313	-9.8989	0.7043	-0.0038	-0.0057	0.2937	0.3842	-0.0905	-1.5188
28	24.71	0.17	5.3407	-9.8529	0.8116	-0.0123	-0.0050	0.2995	0.3917	-0.0922	-1.4922
29	24.99	0.15	5.3572	-9.8165	0.6731	0.1401	-0.0052	0.3016	0.3926	-0.0910	-1.4801
30	30.28	0.16	5.7209	-9.3453	0.7689	0.3677	0.0015	0.2860	0.4041	-0.1181	-1.4657
31	30.55	0.16	5.7376	-9.4056	0.8251	0.4557	0.0041	0.2891	0.4037	-0.1147	-1.4252
32	30.81	0.15	5.7538	-9.4507	0.8606	0.5042	0.0042	0.3038	0.4098	-0.1061	-1.4346
33	31.10	0.17	5.7737	-9.4910	0.8332	0.6294	0.0026	0.2941	0.4106	-0.1168	-1.3940
34	31.38	0.17	5.7964	-9.5446	0.8306	0.7324	0.0107	0.2871	0.4161	-0.1290	-1.3625
35	31.66	0.17	5.8193	-9.5923	0.7504	0.9959	0.0305	0.2870	0.4182	-0.1312	-1.3309
36	31.92	0.19	5.8367	-9.6307	0.9584	0.8211	0.0316	0.2966	0.4163	-0.1218	-1.3147
37	32.21	0.20	5.8584	-9.6483	1.0629	1.0281	0.0391	0.2909	0.4243	-0.1341	-1.2735
38	32.46	0.21	5.8761	-9.6743	1.0496	1.1431	0.0466	0.2990	0.4284	-0.1295	-1.2370
39	32.76	0.24	5.8916	-9.6952	1.1574	0.9816	0.0470	0.2996	0.4324	-0.1429	-1.2436
40	33.06	0.19	7.0050	-9.8784	0.9454	1.2211	0.0542	0.2839	0.4324	-0.1485	-1.1963
41	33.26	0.24	7.1172	-9.9937	1.0591	1.2622	0.0476	0.2707	0.4334	-0.1627	-1.1866
42	34.56	0.16	7.2356	-9.9896	0.9541	1.4215	0.0477	0.2849	0.4344	-0.1495	-1.1622
43	31.76	0.16	7.2745	-9.9591	0.9532	1.3604	0.0549	0.2788	0.4357	-0.1569	-1.1491
44	34.00	0.17	7.3459	-9.9956	0.9486	1.3093	0.0487	0.2768	0.4355	-0.1587	-1.1157
45	34.25	0.16	7.4053	-9.0408	1.0239	1.4440	0.0291	0.2784	0.4359	-0.1575	-1.0779
46	34.51	0.16	7.5843	-9.1462	0.9376	1.4569	0.0360	0.2743	0.4346	-0.1603	-1.0763

PAGE 1 OF 5
SHEET 2 OF

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART PALP MALT-6 PAI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 65 [illegible] 1.7 45.0 SLOT13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	ACP
47	34.76	0.11	7.5954	-7.2[illegible]	0.2[illegible]7	1.6629	0.0294	0.2590	0.4417	-0.1827	-1.0504
48	34.49	0.12	7.6737	-7.1[illegible]	0.[illegible]57	1.4112	0.0247	0.2622	0.4426	-0.1804	-1.0560
49	35.25	0.12	8.0011	-8.2713	0.[illegible]3d	1.4269	0.0238	0.2656	0.4470	-0.1812	-1.0338
50	35.47	0.14	8.0689	-8.3218	1.1110	1.2755	0.0039	0.2567	0.4506	-0.1919	-1.0342
51	35.73	0.11	8.2211	-8.[illegible]59	0.[illegible]36	1.6246	-0.0097	0.2946	0.4569	-0.1704	-0.9957
52	35.98	0.11	8.3[illegible]	-8.[illegible]79	0.[illegible]57	1.7811	-0.0231	0.2928	0.4654	-0.1727	-0.9828
53	36.21	0.10	8.33[illegible]	-8.[illegible]7[illegible]	0.[illegible]10	1.6.56	-0.[illegible]56	0.2695	0.4680	-0.1786	-0.9691
54	35.65	0.14	8.[illegible]	-7.[illegible]56	1.0714	1.4765	-0.0367	0.2914	0.4680	-0.1767	-0.9452
55	36.[illegible]	0.11	8.[illegible]	-7.[illegible]73	0.8858	1.5990	-0.0213	0.2741	0.4702	-0.1961	-0.9348
56	45.43	0.16	8.4933	-7.7436	1.[illegible]76	1.5163	0.0134	0.2550	0.4671	-0.2121	-0.9115
57	37.29	0.17	8.[illegible]3[illegible]	-7.[illegible]10[illegible]	0.[illegible]873	1.3386	-0.0335	0.2750	0.4725	-0.1975	-0.9046
58	37.50	0.17	8.7479	-7.7726	0.[illegible]504	1.4503	-0.0467	0.2539	0.4742	-0.2153	-0.8835
59	37.74	0.17	8.7[illegible]3	-7.[illegible]2[illegible]	0.[illegible]114	1.5530	-0.0198	0.2655	0.4777	-0.2122	-0.8723
60	37.98	0.19	8.7[illegible]9	-7.[illegible]10[illegible]	0.5006	1.5455	0.0077	0.2469	0.4724	-0.2255	-0.8597
61	38.21	0.17	8.[illegible]4[illegible]	-7.[illegible]36[illegible]	0.[illegible]81[illegible]	1.3353	0.0096	0.2319	0.4669	-0.2370	-0.8297
62	38.45	0.16	8.[illegible]31	-7.[illegible]16	0.[illegible]69	1.5241	-0.0040	0.2409	0.4697	-0.2288	-0.8230
63	38.67	0.17	8.[illegible]6	-7.[illegible]36[illegible]	0.[illegible]15	1.[illegible]41	-0.0310	0.2673	0.4[illegible]	-0.2113	-0.8285
64	38.91	0.13	8.[illegible]3	-7.2106	0.[illegible]769	1.1313	0.0173	0.2367	0.4547	-0.2480	-0.7919
65	39.11	0.16	8.[illegible]2	-7.[illegible]24	0.[illegible]25	1.[illegible]97	0.0448	0.2136	0.4555	-0.2621	-0.7917
66	39.34	0.11	8.2[illegible]	-7.2139	0.2261	1.2[illegible]4	0.0305	0.2050	0.4533	-0.2483	-0.7783
67	39.56	0.11	8.[illegible]4	-7.[illegible]2[illegible]	0.[illegible]33	1.[illegible]31	0.0158	0.1969	0.4586	-0.2737	-0.7714
68	39.79	0.11	8.[illegible]5	-7.1930	0.2123	1.6036	0.0170	0.1940	0.4546	-0.2706	-0.7664
69	40.02	0.11	8.[illegible]3	-7.[illegible]3	0.[illegible]83	1.[illegible]11	0.0108	0.2160	0.4565	-0.2405	-0.7528
70	40.21	0.12	8.5574	-7.2064	0.3402	1.4298	0.0179	0.1978	0.4561	-0.2563	-0.7539
71	40.42	0.12	8.[illegible]5	-7.[illegible]55	0.[illegible]75	1.55[illegible]	-0.[illegible]45	0.[illegible]69	0.4653	-0.2664	-0.7476
72	40.61	0.10	8.[illegible]12	-7.1056	0.[illegible]70	1.5367	0.0035	0.1999	0.4591	-0.2592	-0.7347
73	40.[illegible]	0.[illegible]	8.[illegible]3	-7.[illegible]3	-0.[illegible]39	1.[illegible]62	-0.[illegible]36	0.[illegible]87	0.4622	-0.[illegible]35	-0.7420
74	41.03	0.10	8.7[illegible]	-7.2113	0.0525	1.4175	-0.0030	0.1927	0.4671	-0.2744	-0.7365
75	41.21	0.11	8.[illegible]29	-7.[illegible]2[illegible]	-0.[illegible]26	1.[illegible]55	-0.[illegible]29	0.[illegible]97	0.[illegible]40	-0.2593	-0.7171
76	41.[illegible]	0.09	8.[illegible]5	-7.[illegible]46	-0.[illegible]56	1.5581	-0.0060	0.1756	0.4627	-0.2849	-0.7219
77	41.53	0.07	10.[illegible]53	-7.[illegible]51	-0.[illegible]76	1.[illegible]16	-0.0576	0.2012	0.[illegible]60	-0.27[illegible]	-0.7063
78	41.43	0.08	10.[illegible]1[illegible]	-8.[illegible]04	-0.[illegible]15	1.7513	-0.[illegible]41	0.1765	0.4733	-0.2949	-0.6913
79	42.[illegible]	0.08	10.[illegible]25	-7.[illegible]77	-0.[illegible]46	1.[illegible]04	-0.[illegible]85	0.[illegible]65	0.[illegible]79	-0.2915	-0.7049
80	42.22	0.07	10.[illegible]3	-8.[illegible]5[illegible]	-0.[illegible]49	1.6480	-0.0642	0.1968	0.4766	-0.2798	-0.6849
81	42.[illegible]	0.[illegible]	10.[illegible]3	-7.[illegible]51	-0.[illegible]84	1.[illegible]2	-0.[illegible]73	0.1[illegible]1	0.[illegible]26	-0.[illegible]16	-0.6801
82	42.[illegible]	0.05	10.[illegible]17	-8.[illegible]23	0.[illegible]33	1.3[illegible]1	-0.0416	0.[illegible]90	0.4749	-0.2859	-0.6576
83	42.[illegible]	0.[illegible]	10.[illegible]3[illegible]	-8.[illegible]1[illegible]	-0.[illegible]07	1.[illegible]53	-0.[illegible]85	0.1770	0.[illegible]23	-0.[illegible]95	-0.6581
84	42.[illegible]	0.06	10.[illegible]7[illegible]	-8.[illegible]7[illegible]	-0.[illegible]032	1.3475	-0.0426	0.1748	0.[illegible]87	-0.2940	-0.6357
85	43.15	0.[illegible]	10.[illegible]3[illegible]	-8.[illegible]7[illegible]	-0.[illegible]053	1.[illegible]07	-0.[illegible]67	0.[illegible]63	0.[illegible]63	-0.[illegible]01	-0.6449
86	43.43	0.[illegible]	10.[illegible]7	-7.[illegible]7	-0.[illegible]079	1.7445	-0.1120	0.1729	0.4844	-0.3115	-0.6596
87	43.[illegible]	0.[illegible]	10.[illegible]37	-8.[illegible]10[illegible]	-0.[illegible]732	1.[illegible]05	-0.[illegible]80	0.[illegible]22	0.[illegible]13	-0.[illegible]91	-0.6463
88	43.71	0.[illegible]	10.[illegible]4	-8.[illegible]4[illegible]	-0.[illegible]536	1.[illegible]02	-0.[illegible]18	0.[illegible]01	0.4784	-0.[illegible]84	-0.6443
89	43.[illegible]	0.[illegible]	10.[illegible]7[illegible]	-7.[illegible]10[illegible]	-0.[illegible]76	1.[illegible]39[illegible]	-0.[illegible]23	0.[illegible]67	0.[illegible]35	-0.[illegible]84	-0.6531
90	44.[illegible]	0.[illegible]	10.[illegible]67	-7.[illegible]85	-0.[illegible]551	1.8465	-0.1251	0.1447	0.4789	-0.3343	-0.6430
91	44.[illegible]	0.[illegible]	10.[illegible]11	-8.[illegible]72	-0.[illegible]524	1.[illegible]55	-0.[illegible]96	0.[illegible]45	0.[illegible]67	-0.[illegible]23	-0.6224
92	44.[illegible]	0.[illegible]	11.[illegible]3	-8.[illegible]41	-0.3359	1.5255	-0.1238	0.1429	0.4865	-0.3436	-0.6193

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH PALO-B RNL CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 65 0.60 1.7 45.0 61.0713 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
93	64.62	0.00	11.2809	-5.1284	-1.3740	1.6359	-0.1032	0.1517	0.4807	-0.3240	-0.6068
94	64.31	0.03	11.3550	-5.1521	-0.6332	1.0862	-0.1036	0.1259	0.4717	-0.3459	-0.5836
95	63.96	0.06	11.4148	-5.0284	-0.0442	1.5505	-0.1237	0.1543	0.4784	-0.3242	-0.5936
96	65.19	0.00	11.4153	-7.3464	-0.7730	1.7253	-0.1568	0.1367	0.4895	-0.3528	-0.6192
97	65.38	0.01	11.3933	-6.7399	-0.7632	1.4796	-0.1512	0.1128	0.4798	-0.3621	-0.5915
98	65.58	0.03	11.3841	-6.2491	-0.1985	1.0418	-0.0944	0.1199	0.4793	-0.3595	-0.5496
99	65.76	0.05	11.4160	-6.5311	-0.1329	1.4596	-0.1147	0.1069	0.4798	-0.3140	-0.5794
100	65.89	0.03	11.4169	-6.3483	-0.1364	0.9133	-0.0799	0.1027	0.4698	-0.3642	-0.5345
101	65.98	0.02	11.3622	-6.0077	-0.5716	1.5062	-0.1497	0.1374	0.4842	-0.3498	-0.5784
102	66.24	0.00	11.4514	-6.1768	-0.1564	1.0313	-0.1207	0.1308	0.4739	-0.3432	-0.5395
103	66.42	0.03	11.4332	-6.0313	-0.4977	1.5153	-0.1492	0.1567	0.4836	-0.3269	-0.5890
104	66.61	-0.01	11.4138	-6.3483	-0.0922	1.3041	-0.2067	0.1148	0.4835	-0.3659	-0.5561
105	66.78	-0.01	11.4314	-6.0303	-0.4787	1.5442	-0.2183	0.1342	0.4855	-0.3613	-0.5732
106	65.98	0.03	11.4143	-6.3482	-0.5049	1.3577	-0.1869	0.1005	0.4867	-0.3662	-0.5349
107	67.14	0.03	11.3611	-5.9348	-0.5498	1.6324	-0.1477	0.1090	0.4774	-0.3645	-0.5004
108	67.31	0.01	12.0337	-6.4339	-0.7207	1.2436	-0.1464	0.1023	0.4857	-0.3834	-0.5347
109	67.47	0.02	12.0473	-5.8275	-0.4991	0.8075	-0.1547	0.0941	0.4842	-0.3660	-0.4837
110	67.64	0.02	12.1491	-6.1934	-0.6744	1.2644	-0.1955	0.0969	0.4902	-0.3952	-0.5015
111	67.82	0.02	12.1164	-5.8628	-0.3927	1.2474	-0.2215	0.1020	0.4853	-0.3833	-0.4979
112	68.01	0.02	12.2647	-6.2091	-0.6541	1.2317	-0.2050	0.1019	0.4886	-0.3869	-0.4973
113	68.17	0.02	12.2823	-6.2522	-0.7099	1.3654	-0.2155	0.1026	0.4863	-0.3857	-0.4936
114	68.35	0.03	12.3373	-6.2935	-0.6804	1.2550	-0.2202	0.0994	0.4896	-0.3902	-0.4891
115	68.52	0.03	12.3824	-5.9672	-0.4343	1.0541	-0.2132	0.0865	0.4895	-0.4010	-0.4743
116	68.68	0.01	12.3942	-6.2572	-0.6752	1.5337	-0.2555	0.1109	0.4992	-0.3843	-0.4886
117	68.78	0.01	12.4163	-5.9464	-0.6194	1.4179	-0.1882	0.0952	0.4935	-0.4042	-0.4907
118	69.01	-0.02	12.4764	-6.2738	-0.6959	1.5073	-0.2556	0.1207	0.5019	-0.3732	-0.4950
119	69.18	0.02	12.3513	-6.7122	-0.1272	0.2429	-0.0952	0.0686	0.5028	-0.4141	-0.3815
120	69.37	-0.01	12.5622	-6.3318	-0.8143	1.2966	-0.2067	0.0937	0.4973	-0.4035	-0.4318
121	69.53	0.00	12.5927	-6.5079	-0.5836	0.2096	-0.0828	0.1168	0.5126	-0.3960	-0.3707
122	69.70	-0.00	12.5913	-6.3382	-0.6671	0.6795	-0.1239	0.0930	0.5061	-0.4130	-0.3853
123	69.89	-0.00	12.6324	-6.4217	-0.5823	0.1631	-0.0921	0.0967	0.5157	-0.4190	-0.3527
124	70.06	-0.01	12.5437	-6.0533	-0.6515	0.5704	-0.1237	0.1332	0.5118	-0.3726	-0.3900
125	70.24	0.02	12.6422	-6.3759	-0.2710	-0.3265	-0.0053	0.0894	0.5139	-0.4244	-0.3459
126	70.40	-0.01	12.6179	-6.5967	-0.8134	-0.9527	0.0965	0.1352	0.5319	-0.3947	-0.3644
127	70.58	-0.02	12.5562	-6.7022	-0.4435	-0.8958	0.0284	0.1286	0.5358	-0.4072	-0.3719
128	70.75	-0.02	12.7726	-6.4517	-0.7141	-0.1469	-0.0002	0.1008	0.5279	-0.4271	-0.3485
129	70.91	-0.01	12.7705	-6.4127	-0.1351	-1.1376	0.0821	0.1574	0.5506	-0.3932	-0.3764
130	71.11	-0.01	12.7853	-6.3791	-0.9432	0.0311	-0.1512	0.1405	0.5405	-0.3963	-0.3665
131	71.26	0.02	12.7822	-6.3792	-1.2320	0.0994	-0.1829	0.1624	0.5545	-0.3921	-0.3894
132	71.42	-0.01	13.1724	-6.5634	-1.3453	0.0212	-0.1417	0.1471	0.5871	-0.4254	-0.3859
133	71.59	-0.01	13.1529	-6.6384	-0.9991	-0.0612	0.0132	0.1395	0.5710	-0.4315	-0.4009
134	71.78	0.01	13.1380	-6.6467	-0.3298	-1.0265	0.0211	0.1576	0.5766	-0.4190	-0.3714
135	71.93	-0.02	13.2129	-6.8335	-1.0513	-1.4251	-0.0250	0.1434	0.5751	-0.4317	-0.3649
136	72.08	-0.03	13.1345	-6.6382	-0.9366	-0.9045	-0.0551	0.1628	0.5747	-0.4119	-0.3757
137	72.27	-0.01	13.2977	-6.8634	-1.2253	-0.7029	-0.0750	0.1476	0.5710	-0.4234	-0.3823
138	72.43	-0.02	13.3446	-6.7797	-1.0960	-1.4131	-0.0443	0.1427	0.5645	-0.4258	-0.3805

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	ALPHA	BETA	RN/L	CORE	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	65	0.96	1.7		0.0	41.0F13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
139	52.55	-0.07	13.3123	-0.0041	-1.1523	-0.9868	-0.0020	0.1527	0.5702	-0.4175	-0.3609
140	52.76	-0.03	13.7052	-0.0220	-0.0071	-1.4151	0.0196	0.0985	0.5562	-0.4577	-0.4597
141	52.95	-0.09	13.3278	-0.0335	+0.0782	-1.2860	0.0399	0.1159	0.5571	-0.4612	-0.4559
142	53.10	-0.01	13.7052	-0.0002	-0.3722	-1.9335	0.0210	0.1270	0.5566	-0.4296	-0.4408
143	53.28	-0.02	13.4182	-0.0097	-0.0321	-1.8104	0.0276	0.1108	0.5573	-0.4662	-0.4429
144	53.44	0.01	13.9776	-0.1221	-0.1357	-2.1030	0.0156	0.1083	0.5526	-0.4403	-0.4387
145	53.60	-0.05	13.5278	-0.0227	-0.2715	-1.7728	0.0058	0.1136	0.5552	-0.4616	-0.4655
146	53.76	-0.02	13.6555	-0.0352	-0.3042	-2.0438	0.0081	0.1247	0.5522	-0.4235	-0.4368
147	53.95	-0.03	13.8981	-0.0378	-0.5239	-1.8389	-0.0062	0.0930	0.5482	-0.4551	-0.4528
148	54.09	-0.01	14.2979	-0.0698	-0.3078	-2.0408	0.0003	0.1153	0.5481	-0.4328	-0.4545
149	54.24	-0.01	14.1553	-0.0581	-0.3045	-1.9276	-0.0055	0.1332	0.5496	-0.4162	-0.4628
150	54.41	-0.03	14.1493	-0.0227	-0.5311	-2.1235	-0.0196	0.1094	0.5481	-0.4387	-0.4596
151	54.56	-0.04	14.2847	-0.0252	-0.1025	-2.5098	0.0226	0.1275	0.5490	-0.4212	-0.4549
152	54.74	-0.02	14.5109	-0.0438	-0.3300	-2.6927	0.0288	0.1221	0.5591	-0.4370	-0.4718
153	54.90	-0.03	14.6337	-0.0299	-0.0344	-2.5774	0.0276	0.1263	0.5566	-0.4301	-0.4803
154	55.08	-0.04	14.3797	-0.1900	-0.5103	-2.4726	0.0081	0.1261	0.5608	-0.4367	-0.4830
155	55.24	-0.03	14.7767	-0.1877	-0.5430	-2.3693	0.0252	0.1304	0.5585	-0.4281	-0.4850
156	54.37	-0.03	14.4771	-0.0478	-0.4170	-2.5310	0.0088	0.1300	0.5611	-0.4311	-0.4730
157	55.54	-0.02	14.6306	-0.1277	-0.3502	-2.4191	0.0222	0.1272	0.5611	-0.4539	-0.4754
158	55.67	-0.03	15.0396	-0.0506	-0.5126	-2.2638	0.0087	0.1156	0.5611	-0.4455	-0.4690
159	55.83	-0.02	14.9726	-0.0259	-0.2578	-2.2553	0.0026	0.1560	0.5632	-0.4272	-0.4693
160	55.99	-0.01	14.8431	-0.0377	-0.2577	-2.1083	0.0159	0.1193	0.5560	-0.4347	-0.4847
161	56.19	-0.06	15.0478	-0.0763	-0.2163	-1.8681	0.0006	0.1396	0.5593	-0.4199	-0.4827
162	56.30	-0.00	15.1663	-0.0399	-0.0364	-2.2485	0.0103	0.1374	0.5619	-0.4265	-0.4777
163	56.49	-0.03	15.2491	-0.0499	-0.4047	-2.1650	0.0095	0.1265	0.5602	-0.4357	-0.4585
164	56.61	-0.03	15.1514	-0.0151	-0.2976	-2.1625	0.0099	0.1260	0.5586	-0.4324	-0.4630
165	56.78	-0.02	15.2598	-0.0484	-0.1604	-2.1574	0.0036	0.1236	0.5619	-0.4383	-0.4585
166	56.96	-0.03	15.1647	-0.0509	-0.2439	-2.1053	0.0101	0.1336	0.5580	-0.4244	-0.4552
167	57.05	-0.02	15.5363	-0.1475	-0.2204	-2.2002	0.0034	0.1087	0.5602	-0.4515	-0.4499
168	57.21	0.00	15.0438	-0.0116	-0.0740	-1.6963	0.0041	0.1072	0.5575	-0.4503	-0.4521
169	57.37	0.01	15.2398	-0.0506	-0.0233	-1.8322	0.0182	0.1107	0.5623	-0.4516	-0.4496
170	57.52	-0.02	15.3464	-0.0121	-0.3030	-0.9925	-0.0042	0.1034	0.5596	-0.4560	-0.4883
171	57.68	-0.04	15.3062	-0.0270	-0.4023	-1.7393	0.0031	0.1162	0.5597	-0.4415	-0.4513
172	57.78	-0.03	15.1452	-0.0037	-0.3553	-1.6216	0.0099	0.1093	0.5602	-0.4509	-0.4545
173	57.95	-0.04	15.3545	-0.2171	-0.4282	-1.6107	0.0095	0.1093	0.5575	-0.4582	-0.4698
174	58.08	-0.01	15.1057	-0.0182	0.0182	-1.6042	0.0184	0.1263	0.5620	-0.4357	-0.4399
175	58.24	-0.04	15.2405	-0.0473	-0.0521	-1.6051	0.0182	0.1329	0.5598	-0.4269	-0.4425
176	54.34	0.05	15.3328	-0.0757	0.3223	-0.6027	0.0130	0.1172	0.5615	-0.4443	-0.4354
177	58.46	-0.02	15.3459	-0.1774	-0.2784	-1.1273	0.0107	0.0981	0.5637	-0.4656	-0.4418
178	58.62	0.01	15.3464	-0.0859	-0.0567	-1.2018	0.0049	0.1034	0.5633	-0.4599	-0.4357

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	PXIV=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	85	0.60	1.7	45.0	81+0F13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
1	-5.72	0.05	-0.2543	0.0588	0.1499	0.2225	0.5894	-0.1361	-0.0528	-0.0424	0.3877	0.6786
2	-5.71	0.09	-0.2545	0.0581	0.1491	0.2247	0.5915	-0.1365	-0.0527	-0.0905	0.3907	0.6710
3	-5.23	0.10	-0.2511	0.0582	0.1482	0.2314	0.5945	-0.1362	-0.0462	-0.0862	0.5247	0.6108
4	-3.22	0.10	0.0883	0.0308	0.0743	0.3636	0.8817	-0.0303	-0.0282	-0.0393	0.9312	1.2946
5	-1.36	0.09	-0.0875	0.0110	0.0374	-1.4406	-4.9759	0.0231	-0.0061	-0.0158	-0.2042	-0.6818
6	0.03	0.05	-0.0566	-0.0182	0.0103	0.2479	-0.2847	0.0765	0.0183	0.0059	0.2397	0.0775
7	2.57	0.10	-0.1101	-0.0338	-0.0057	0.3635	0.0885	0.1509	0.0393	0.0403	0.2601	0.2668
8	4.47	0.10	-0.1783	-0.0561	-0.0401	0.2727	0.2273	0.2394	0.0569	0.0443	0.2376	0.3523
9	5.46	0.10	-0.2434	-0.0757	-0.0731	0.2423	0.3003	0.3542	0.0704	0.1394	0.2157	0.3935
10	6.36	0.10	-0.3268	-0.0926	-0.1154	0.1904	0.3524	0.4741	0.0818	0.1959	0.1718	0.4114
11	10.28	0.11	-0.6193	-0.1696	-0.1536	0.1484	0.3749	0.5927	0.0437	0.2505	0.1412	0.4227
12	12.26	0.10	-0.4578	-0.0551	-0.1779	0.1204	0.3890	0.7094	0.0795	0.2971	0.1121	0.4188
13	14.26	0.09	-0.5127	-0.0521	-0.2005	0.1016	0.3913	0.7783	0.0578	0.3081	0.0742	0.3932
14	16.20	0.11	-0.5451	-0.0445	-0.2203	0.0858	0.3898	0.8231	0.0452	0.3199	0.0569	0.3886
15	18.19	0.10	-0.6271	-0.0435	-0.2353	0.0693	0.3840	0.8629	0.0441	0.3260	0.0511	0.3802
16	20.13	0.10	-0.7244	-0.0381	-0.2491	0.0525	0.3715	0.8852	0.0345	0.3299	0.0399	0.3812
17	21.84	0.24	-0.7950	-0.0340	-0.2592	0.0436	0.3713	0.8821	0.0309	0.3401	0.0351	0.3855
18	24.06	0.13	-0.8536	-0.0284	-0.3207	0.0339	0.3759	0.9213	0.0294	0.3577	0.0320	0.3882
19	25.93	0.14	-0.8966	-0.0159	-0.3348	0.0226	0.3937	0.9049	0.0251	0.3800	0.0261	0.3938
20	27.86	0.15	-0.9478	-0.0115	-0.3614	0.0133	0.4170	0.9783	0.0212	0.3804	0.0217	0.3888
21	28.20	0.16	-0.9475	-0.0131	-0.3513	0.0155	0.4146	0.9939	0.0209	0.3839	0.0211	0.3862
22	28.20	0.15	-0.9536	-0.0126	-0.3508	0.0146	0.4170	0.9901	0.0211	0.3805	0.0213	0.3843
23	28.24	0.14	-0.9519	-0.0114	-0.3491	0.0137	0.4170	0.9965	0.0211	0.3824	0.0212	0.3845
24	28.52	0.16	-0.9451	-0.0094	-0.3604	0.0104	0.4238	0.9889	0.0212	0.3798	0.0215	0.3840
25	28.74	0.15	-0.9519	-0.0093	-0.3586	0.0127	0.4253	1.0018	0.0205	0.3850	0.0205	0.3844
26	29.13	0.16	-0.9558	-0.0090	-0.3607	0.0112	0.4228	1.0230	0.0143	0.3927	0.0189	0.3839
27	29.49	0.15	-0.9599	-0.0093	-0.3336	0.0118	0.4229	1.0372	0.0186	0.3980	0.0180	0.3837
28	29.71	0.17	-0.9533	-0.0095	-0.3625	0.0130	0.4225	1.0486	0.0161	0.4033	0.0173	0.3846
29	29.99	0.15	-0.9567	-0.0090	-0.3650	0.0129	0.4261	1.0599	0.0176	0.4076	0.0166	0.3845
30	30.28	0.16	-0.9593	-0.0091	-0.3207	0.0121	0.4251	1.0712	0.0173	0.4113	0.0162	0.3840
31	30.55	0.16	-0.9658	-0.0103	-0.3166	0.0138	0.4264	1.0783	0.0165	0.4150	0.0153	0.3859
32	30.81	0.15	-0.9644	-0.0094	-0.3186	0.0133	0.4260	1.0981	0.0161	0.4197	0.0148	0.3857
33	31.10	0.17	-0.9595	-0.0083	-0.3216	0.0111	0.4268	1.0910	0.0160	0.4199	0.0147	0.3849
34	31.34	0.17	-0.9629	-0.0087	-0.3208	0.0090	0.4319	1.1004	0.0155	0.4253	0.0141	0.3864
35	31.46	0.17	-0.9715	-0.0099	-0.3097	0.0119	0.4278	1.1051	0.0159	0.4275	0.0135	0.3868
36	31.62	0.19	-0.9720	-0.0092	-0.3144	0.0072	0.4355	1.1084	0.0150	0.4287	0.0136	0.3874
37	32.20	0.20	-0.9955	-0.0096	-0.3019	0.0075	0.4325	1.1298	0.0140	0.4309	0.0125	0.3884
38	32.48	0.20	-0.9940	-0.0094	-0.3048	0.0033	0.4361	1.1261	0.0141	0.4381	0.0125	0.3890
39	32.72	0.20	-0.9914	-0.0093	-0.3058	0.0033	0.4359	1.1359	0.0134	0.4439	0.0118	0.3904
40	33.00	0.19	-0.9978	-0.0092	-0.3036	0.0046	0.4351	1.1331	0.0135	0.4430	0.0119	0.3910
41	33.25	0.20	-0.9957	-0.0093	-0.3002	0.0062	0.4315	1.1395	0.0127	0.4468	0.0112	0.3921
42	33.56	0.19	-0.9991	-0.0090	-0.2977	0.0078	0.4277	1.1479	0.0125	0.4510	0.0109	0.3929
43	33.79	0.19	-0.9956	-0.0089	-0.2957	0.0093	0.4299	1.1535	0.0126	0.4537	0.0108	0.3933
44	34.00	0.17	-0.9929	-0.0093	-0.3027	0.0047	0.4312	1.1489	0.0122	0.4521	0.0106	0.3934
45	34.25	0.19	-0.9953	-0.0092	-0.3019	0.0102	0.4263	1.1581	0.0117	0.4564	0.0101	0.3941
46	34.51	0.18	-0.9983	-0.0077	-0.3014	0.0109	0.4258	1.1524	0.0124	0.4531	0.0108	0.3931

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYNO RNL CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 65 0.90 1.7 45.0 W1.0P13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CM1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	39.70	0.17	-0.6997	-0.3101	-0.2763	0.0145	0.4261	1.1581	0.0121	0.0568	0.0105	0.3944
48	34.99	0.18	-0.7.91	-0.0284	-0.3024	0.0126	0.4271	1.1643	0.0115	0.4592	0.0099	0.3951
49	35.23	0.19	-0.7033	-0.0037	-0.3125	0.0124	0.4320	1.1665	0.0115	0.0618	0.0099	0.3952
50	35.49	0.19	-0.7056	-0.0117	-0.3029	0.0106	0.4282	1.1735	0.0108	0.0647	0.0092	0.3960
51	35.73	0.17	-0.7105	-0.0145	-0.3015	0.0191	0.4268	1.1851	0.0106	0.4701	0.0090	0.3967
52	35.96	0.18	-0.7018	-0.0200	-0.2904	0.0265	0.4723	1.1879	0.0102	0.4729	0.0086	0.3981
53	36.21	0.18	-0.7053	-0.0152	-0.3023	0.0216	0.4240	1.1851	0.0105	0.4701	0.0089	0.3967
54	36.45	0.19	-0.7044	-0.0178	-0.2972	0.0253	0.4219	1.1963	0.0100	0.4756	0.0084	0.3976
55	36.69	0.17	-0.6982	-0.0196	-0.2951	0.0281	0.4226	1.1935	0.0100	0.4747	0.0086	0.3978
56	36.93	0.18	-0.6924	-0.0164	-0.2970	0.0236	0.4287	1.1879	0.0107	0.4717	0.0086	0.3971
57	37.24	0.17	-0.7054	-0.0192	-0.3004	0.0272	0.4253	1.2048	0.0093	0.4799	0.0077	0.3983
58	37.50	0.17	-0.7162	-0.0230	-0.2940	0.0322	0.4187	1.2132	0.0090	0.4837	0.0074	0.3987
59	37.74	0.17	-0.6944	-0.0255	-0.2978	0.0365	0.4144	1.2089	0.0086	0.4827	0.0073	0.3993
60	37.98	0.16	-0.7062	-0.0211	-0.2974	0.0300	0.4223	1.1963	0.0094	0.4761	0.0082	0.3979
61	38.21	0.17	-0.7206	-0.0258	-0.3053	0.0357	0.4205	1.1879	0.0100	0.4729	0.0086	0.3981
62	38.45	0.16	-0.7139	-0.0287	-0.2989	0.0402	0.4149	1.1934	0.0099	0.4770	0.0082	0.3997
63	38.69	0.17	-0.7065	-0.0262	-0.2988	0.0370	0.4216	1.1878	0.0100	0.4736	0.0084	0.3988
64	38.91	0.19	-0.7315	-0.0341	-0.3002	0.0467	0.4104	1.1878	0.0098	0.4744	0.0083	0.3994
65	39.11	0.16	-0.7075	-0.0236	-0.3156	0.0479	0.4111	1.1673	0.0111	0.4626	0.0095	0.3963
66	39.34	0.11	-0.7597	-0.0334	-0.3082	0.0518	0.4056	1.1756	0.0104	0.4683	0.0089	0.3984
67	39.56	0.14	-0.7604	-0.0437	-0.3026	0.0578	0.3983	1.1614	0.0096	0.4647	0.0081	0.3976
68	39.79	0.11	-0.7625	-0.0342	-0.3094	0.0514	0.4065	1.1842	0.0095	0.4714	0.0081	0.3981
69	40.00	0.11	-0.7542	-0.0436	-0.2954	0.0578	0.3976	1.1960	0.0096	0.4786	0.0075	0.4001
70	40.21	0.12	-0.7567	-0.0455	-0.3019	0.0593	0.3938	1.1919	0.0093	0.4746	0.0078	0.3984
71	40.42	0.09	-0.7592	-0.0413	-0.2912	0.0578	0.3836	1.2015	0.0088	0.4819	0.0072	0.4011
72	40.60	0.08	-0.7608	-0.0350	-0.2882	0.0723	0.3788	1.1988	0.0088	0.4802	0.0074	0.4005
73	40.82	0.08	-0.7625	-0.0525	-0.2892	0.0696	0.3795	1.2128	0.0080	0.4862	0.0066	0.4009
74	41.03	0.08	-0.7534	-0.0527	-0.2988	0.0699	0.3806	1.2015	0.0083	0.4830	0.0069	0.4020
75	41.21	0.07	-0.7496	-0.0398	-0.2863	0.0726	0.3820	1.2100	0.0079	0.4861	0.0065	0.4017
76	41.44	0.05	-0.7456	-0.0491	-0.3103	0.0624	0.3948	1.1917	0.0086	0.4783	0.0072	0.4013
77	41.65	0.07	-0.7414	-0.0573	-0.2763	0.0775	0.3725	1.2374	0.0062	0.5019	0.0050	0.4054
78	41.83	0.08	-0.7463	-0.0511	-0.2869	0.0686	0.3861	1.2240	0.0065	0.4936	0.0053	0.4033
79	42.02	0.09	-0.7404	-0.0484	-0.2765	0.0815	0.3703	1.2436	0.0057	0.5037	0.0046	0.4050
80	42.22	0.07	-0.7395	-0.0592	-0.2767	0.0750	0.3715	1.2463	0.0055	0.5058	0.0044	0.4052
81	42.43	0.08	-0.7542	-0.0556	-0.2981	0.0732	0.3820	1.2329	0.0059	0.4988	0.0048	0.4046
82	42.61	0.09	-0.7350	-0.0503	-0.2775	0.0804	0.3911	1.2136	0.0067	0.4910	0.0055	0.4045
83	42.79	0.08	-0.7110	-0.0520	-0.2736	0.0711	0.3879	1.2060	0.0074	0.4884	0.0062	0.4040
84	42.98	0.08	-0.7209	-0.0515	-0.2764	0.0720	0.3863	1.2180	0.0067	0.4931	0.0055	0.4049
85	43.15	0.08	-0.7153	-0.0506	-0.2710	0.0717	0.3842	1.2375	0.0054	0.5048	0.0044	0.4079
86	43.33	0.08	-0.7283	-0.0550	-0.2760	0.0757	0.3801	1.2571	0.0039	0.5149	0.0031	0.4094
87	43.52	0.09	-0.7311	-0.0522	-0.2735	0.0714	0.3824	1.2545	0.0042	0.5102	0.0034	0.4067
88	43.71	0.08	-0.7266	-0.0573	-0.2740	0.0765	0.3771	1.2614	0.0038	0.5158	0.0030	0.4089
89	43.92	0.07	-0.7344	-0.0584	-0.2763	0.0784	0.3762	1.2902	0.0018	0.5276	0.0014	0.4089
90	44.16	0.03	-0.7272	-0.0564	-0.2774	0.0755	0.3822	1.2620	0.0031	0.5166	0.0025	0.4093
91	44.25	0.05	-0.7432	-0.0556	-0.2687	0.0782	0.3742	1.2591	0.0031	0.5166	0.0025	0.4101
92	44.44	0.04	-0.7025	-0.0532	-0.2705	0.0757	0.3850	1.2639	0.0030	0.5177	0.0024	0.4096

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	ALPHA	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	99	0.60	1.0	45.0	BLOCK13	3.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
93	44.56	0.00	-0.6914	-0.5526	-0.2875	0.0763	0.3869	1.2567	0.0036	0.5173	0.0027	0.4116
94	44.41	0.01	-0.6945	-0.5553	-0.2893	0.0669	0.4066	1.2391	0.0034	0.5099	0.0027	0.4115
95	45.06	0.02	-0.6982	-0.5614	-0.2735	0.0734	0.3944	1.2544	0.0025	0.5183	0.0020	0.4132
96	45.19	0.00	-0.6948	-0.5535	-0.2862	0.0770	0.3876	1.2919	0.0005	0.5346	0.0004	0.4141
97	45.38	0.01	-0.6903	-0.5421	-0.2775	0.0822	0.4044	1.2517	0.0023	0.5170	0.0018	0.4130
98	45.58	0.03	-0.6851	-0.5329	-0.2854	0.0509	0.4115	1.2266	0.0036	0.5040	0.0029	0.4109
99	45.76	0.00	-0.6815	-0.5282	-0.2835	0.0696	0.3965	1.2606	0.0021	0.5208	0.0017	0.4131
100	45.89	0.05	-0.6943	-0.5265	-0.2689	0.0412	0.4179	1.2313	0.0032	0.5076	0.0026	0.4122
101	46.08	0.02	-0.6925	-0.5237	-0.2779	0.0549	0.4005	1.2859	0.0001	0.5327	0.0001	0.4143
102	46.26	0.00	-0.6847	-0.5219	-0.2657	0.0499	0.4153	1.2519	0.0018	0.5147	0.0014	0.4143
103	46.42	0.03	-0.6849	-0.5223	-0.2818	0.0650	0.4120	1.3163	-0.0023	0.5468	-0.0017	0.4170
104	46.01	-0.01	-0.6918	-0.5343	-0.2795	0.0525	0.4277	1.2913	-0.0010	0.5348	-0.0008	0.4142
105	46.18	-0.01	-0.6895	-0.5315	-0.2765	0.0619	0.4187	1.3059	-0.0020	0.5407	-0.0015	0.4161
106	46.96	0.01	-0.6599	-0.5359	-0.2717	0.0543	0.4268	1.3001	-0.0014	0.5400	-0.0011	0.4154
107	47.14	0.03	-0.6566	-0.5256	-0.2659	0.0431	0.4356	1.2808	-0.0007	0.5318	-0.0005	0.4153
108	47.31	0.01	-0.6600	-0.5287	-0.2838	0.0696	0.4369	1.2887	-0.0014	0.5352	-0.0011	0.4153
109	47.47	0.03	-0.6585	-0.5262	-0.2829	0.0372	0.4469	1.2858	-0.0013	0.5346	-0.0010	0.4158
110	47.66	0.02	-0.6578	-0.5236	-0.2565	0.0467	0.4456	1.2901	-0.0014	0.5352	-0.0011	0.4149
111	47.82	0.03	-0.6564	-0.5224	-0.2812	0.0465	0.4528	1.2996	-0.0017	0.5406	-0.0015	0.4159
112	44.01	0.02	-0.6941	-0.5541	-0.2857	0.0294	0.4538	1.2864	-0.0017	0.5342	-0.0013	0.4153
113	45.17	0.01	-0.6933	-0.5523	-0.2853	0.0436	0.4531	1.3162	-0.0031	0.5483	-0.0024	0.4171
114	44.35	0.03	-0.6926	-0.5516	-0.2844	0.0410	0.4597	1.3107	-0.0031	0.5463	-0.0024	0.4168
115	44.52	0.02	-0.6945	-0.5541	-0.2836	0.0376	0.4581	1.3051	-0.0029	0.5441	-0.0022	0.4169
116	44.69	0.00	-0.6921	-0.5511	-0.2814	0.0344	0.4615	1.3121	-0.0035	0.5475	-0.0027	0.4173
117	44.85	0.01	-0.6919	-0.5508	-0.2836	0.0272	0.4628	1.3055	-0.0031	0.5452	-0.0024	0.4176
118	44.01	-0.02	-0.6948	-0.5539	-0.2845	0.0318	0.4732	1.3250	-0.0043	0.5549	-0.0032	0.4184
119	44.18	0.00	-0.3155	-0.2507	-0.1423	0.0022	0.4496	1.2998	-0.0029	0.5445	-0.0022	0.4189
120	44.37	-0.01	-0.6943	-0.5519	-0.1992	0.0717	0.4695	1.3150	-0.0039	0.5498	-0.0030	0.4181
121	44.53	0.00	-0.3090	-0.2455	-0.1327	0.0050	0.4625	1.3022	-0.0035	0.5479	-0.0027	0.4208
122	44.70	-0.00	-0.3104	-0.2467	-0.1420	0.0092	0.4689	1.3079	-0.0040	0.5496	-0.0031	0.4208
123	44.87	-0.01	-0.2736	-0.2172	-0.1218	0.0199	0.4901	1.3097	-0.0041	0.5509	-0.0031	0.4206
124	50.18	-0.01	-0.3045	-0.2421	-0.1347	0.0219	0.4591	1.3134	-0.0046	0.5529	-0.0035	0.4208
125	50.29	0.00	-0.2971	-0.2361	-0.1121	0.0074	0.4358	1.3074	-0.0045	0.5528	-0.0034	0.4226
126	50.40	-0.00	-0.2731	-0.2170	-0.1232	0.0132	0.4512	1.3074	-0.0044	0.5529	-0.0034	0.4229
127	50.58	-0.01	-0.2913	-0.2315	-0.1125	0.0188	0.4300	1.3022	-0.0042	0.5514	-0.0032	0.4234
128	50.75	-0.02	-0.2760	-0.2193	-0.1217	0.0146	0.4441	1.3218	-0.0054	0.5592	-0.0041	0.4231
129	50.91	-0.01	-0.2562	-0.2035	-0.1169	0.0015	0.4515	1.3349	-0.0064	0.5659	-0.0048	0.4239
130	51.07	-0.00	-0.2727	-0.2167	-0.1260	-0.0004	0.4429	1.3311	-0.0064	0.5655	-0.0048	0.4249
131	51.22	0.00	-0.2383	-0.1897	-0.1021	0.0157	0.4321	1.3631	-0.0079	0.5792	-0.0058	0.4249
132	51.42	-0.01	-0.2709	-0.2152	-0.1162	0.0256	0.4297	1.3749	-0.0086	0.5868	-0.0064	0.4253
133	51.59	-0.00	-0.2318	-0.1843	-0.1035	0.0130	0.4479	1.3744	-0.0085	0.5827	-0.0063	0.4239
134	51.74	0.01	-0.1974	-0.1573	-0.0779	0.0293	0.4153	1.3834	-0.0089	0.5873	-0.0066	0.4244
135	51.93	-0.00	-0.1918	-0.1528	-0.0801	0.0511	0.3739	1.3785	-0.0096	0.5868	-0.0065	0.4257
136	52.04	-0.00	-0.1437	-0.1145	-0.0460	0.0662	0.3339	1.3771	-0.0091	0.5864	-0.0066	0.4258
137	52.27	-0.01	-0.1336	-0.1065	-0.0419	0.0520	0.3087	1.3858	-0.0100	0.5900	-0.0072	0.4258
138	52.43	-0.01	-0.1323	-0.1052	-0.0391	0.0621	0.2952	1.3704	-0.0089	0.5833	-0.0065	0.4256

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REIG=6	PHI	CONE	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	65	0.90	1.7	45.0	81.0813	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	52.59	-0.01	-0.1344	-0.0804	-0.0414	0.0631	0.3103	1.4782	-0.0047	0.5671	-0.0070	0.4260
140	52.79	-0.03	-0.0514	-0.0054	-0.0284	0.0709	0.3471	1.3561	-0.0086	0.5751	-0.0064	0.4240
141	52.95	-0.04	-0.0442	0.0001	-0.0124	-0.0025	0.3064	1.3685	-0.0085	0.5802	-0.0065	0.4239
142	53.16	-0.01	-0.0749	-0.0056	-0.0236	0.0778	0.3192	1.3633	-0.0092	0.5787	-0.0068	0.4245
143	53.28	-0.02	-0.0635	-0.0029	-0.0095	0.0528	0.2183	1.3662	-0.0097	0.5799	-0.0071	0.4244
144	53.49	0.01	-0.0584	-0.0047	-0.0135	0.0935	0.2388	1.3655	-0.0099	0.5803	-0.0072	0.4249
145	53.58	-0.05	-0.0678	-0.0124	-0.0129	0.1020	0.2824	1.3726	-0.0105	0.5840	-0.0077	0.4255
146	53.76	-0.02	-0.0475	-0.0051	-0.0035	0.1074	0.1162	1.3781	-0.0105	0.5847	-0.0076	0.4243
147	53.95	-0.04	-0.0599	-0.0078	-0.0196	0.1265	0.1550	1.3715	-0.0106	0.5819	-0.0077	0.4243
148	54.09	-0.01	-0.0510	-0.0071	-0.0163	0.1373	0.1234	1.3736	-0.0106	0.5828	-0.0079	0.4243
149	54.29	-0.01	-0.0584	-0.0085	-0.0208	0.1607	-0.0233	1.3608	-0.0111	0.5862	-0.0081	0.4246
150	54.41	-0.03	-0.0376	-0.0036	-0.0113	0.1866	-0.0352	1.3819	-0.0115	0.5868	-0.0083	0.4261
151	54.58	-0.01	-0.0515	-0.0032	-0.0092	0.3094	-0.0172	1.3956	-0.0121	0.5968	-0.0087	0.4262
152	54.74	-0.02	-0.0295	-0.0017	-0.0259	0.0553	1.1014	1.4036	-0.0123	0.5964	-0.0088	0.4249
153	54.94	-0.05	-0.0534	-0.0041	-0.0193	0.0820	0.6932	1.4161	-0.0134	0.6031	-0.0095	0.4259
154	55.08	-0.04	-0.0344	-0.0001	-0.0192	0.0029	0.4778	1.4202	-0.0135	0.6048	-0.0095	0.4258
155	55.20	-0.03	-0.0443	-0.0031	-0.0384	-0.0621	0.7623	1.4286	-0.0141	0.6091	-0.0094	0.4263
156	55.37	-0.03	-0.0335	-0.0022	-0.0269	0.0657	0.4026	1.4284	-0.0144	0.6084	-0.0101	0.4258
157	55.52	-0.02	-0.0333	-0.0008	-0.0207	-0.0286	0.4618	1.4311	-0.0148	0.6097	-0.0104	0.4260
158	55.67	-0.03	0.0316	0.0007	-0.0292	0.0229	0.9540	1.4310	-0.0146	0.6097	-0.0102	0.4261
159	55.83	-0.02	-0.0034	-0.0013	-0.0284	-0.0421	0.9188	1.4311	-0.0149	0.6093	-0.0104	0.4258
160	55.99	-0.01	0.0455	-0.0009	-0.0313	-0.0256	0.8817	1.4367	-0.0154	0.6107	-0.0107	0.4251
161	56.19	-0.00	0.0434	-0.0008	-0.0284	0.0198	0.7225	1.4436	-0.0158	0.6144	-0.0110	0.4256
162	56.39	-0.00	0.0344	-0.0008	-0.0305	-0.0253	0.8665	1.4476	-0.0160	0.6142	-0.0111	0.4256
163	56.46	-0.02	0.0366	-0.0004	-0.0345	-0.0109	0.8601	1.4423	-0.0159	0.6140	-0.0110	0.4257
164	56.61	-0.03	0.0182	-0.0040	0.0257	-0.2470	1.5953	1.4306	-0.0157	0.6094	-0.0110	0.4260
165	56.78	-0.02	0.0332	-0.0017	-0.0313	-0.0573	0.9246	1.4445	-0.0162	0.6157	-0.0112	0.4262
166	56.96	-0.03	0.0341	-0.0020	0.0329	-0.0763	0.9650	1.4376	-0.0162	0.6120	-0.0113	0.4257
167	57.03	-0.02	0.0304	-0.0010	0.0339	-0.0440	0.9315	1.4333	-0.0163	0.6128	-0.0114	0.4276
168	57.21	0.00	0.0277	-0.0019	0.0347	-0.0506	0.9207	1.4467	-0.0173	0.6188	-0.0120	0.4278
169	57.37	0.01	0.0345	-0.0013	0.0379	-0.0326	0.9551	1.4328	-0.0167	0.6129	-0.0117	0.4278
170	57.52	-0.02	0.0310	-0.0031	0.0312	-0.0961	1.0196	1.4467	-0.0174	0.6188	-0.0120	0.4278
171	57.66	-0.04	0.0254	-0.0045	0.0322	-0.1773	1.2678	1.4355	-0.0173	0.6156	-0.0121	0.4289
172	57.76	-0.03	0.0321	-0.0045	0.0347	-0.1496	1.1532	1.4394	-0.0173	0.6158	-0.0120	0.4277
173	57.93	-0.04	0.0283	-0.0043	0.0330	-0.1699	1.2455	1.4426	-0.0177	0.6175	-0.0123	0.4281
174	58.08	-0.00	0.0345	-0.0029	0.0305	-0.0733	0.9703	1.4439	-0.0161	0.6194	-0.0126	0.4290
175	58.29	0.00	0.0325	-0.0041	0.0357	-0.1231	1.0949	1.4383	-0.0179	0.6178	-0.0125	0.4294
176	58.49	0.00	0.0274	-0.0065	0.0362	-0.2376	1.3217	1.4398	-0.0183	0.6177	-0.0127	0.4290
177	58.62	-0.02	0.0232	-0.0065	0.0335	-0.1787	1.3257	1.4446	-0.0187	0.6195	-0.0130	0.4291
178	58.82	0.01	0.0324	-0.0066	0.0343	-0.1939	1.2758	1.4531	-0.0189	0.6242	-0.0130	0.4295

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(INSHOC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

SHEET 1 OF 6

LSI PARI SREF=810-6 PHI CONF 1 DEL1 DEL2 DEL3 DEL4 TRANSITION
7 65 0.950 1.07 45.0 01=0.13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CN3	CM3	XCPF3	YCPF3	CNF4	CM4	CN4	XCPF4	YCPF4
1	-5.72	0.19	[illegible]	9.9999	0.1641	9.9999	0.3578	-0.2498	-0.0559	-0.1074	0.2237	0.4301
2	-5.71	0.09	0.2847	9.9999	0.1624	9.9999	0.3545	-0.2494	-0.0558	-0.1063	0.2233	0.4256
3	-5.23	0.19	0.2412	9.9999	0.0858	9.9999	0.3555	-0.1846	-0.0456	-0.0741	0.2436	0.4015
4	-3.22	0.19	0.1482	9.9999	0.0521	9.9999	0.4566	-0.0479	-0.0287	-0.0356	0.2936	0.3661
5	-1.39	0.09	0.0900	9.9999	0.0264	9.9999	0.4988	-0.0240	-0.0061	-0.0062	0.2543	0.1756
6	1.63	0.09	-0.0019	9.9999	0.0009	9.9999	-3.5869	0.0375	0.0177	0.0141	0.4723	0.4815
7	2.57	0.19	[illegible]	9.9999	-0.0112	9.9999	0.2138	0.1308	0.0438	0.0859	0.3414	0.4553
8	4.47	0.19	-0.1863	9.9999	-0.0574	9.9999	0.3035	0.1679	0.0474	0.0797	0.2822	0.4720
9	6.92	0.19	-0.3052	9.9999	-0.1052	9.9999	0.3429	0.2576	0.0596	0.1169	0.2305	0.4615
10	9.36	0.19	-0.4446	9.9999	-0.1574	9.9999	0.3637	0.3304	0.0623	0.1578	0.1885	0.4777
11	11.25	0.21	-0.5372	9.9999	-0.2113	9.9999	0.3792	0.3859	0.0611	0.1856	0.1505	0.4646
12	12.25	0.19	-0.6738	9.9999	-0.2541	9.9999	0.3830	0.4066	0.0537	0.2135	0.1150	0.4573
13	14.26	0.19	-0.7535	9.9999	-0.2792	9.9999	0.3753	0.5154	0.0485	0.2350	0.0960	0.4559
14	15.20	0.11	-0.8073	9.9999	-0.3047	9.9999	0.3766	0.5638	0.0449	0.2547	0.0796	0.4518
15	15.19	0.19	-0.8343	9.9999	-0.3113	9.9999	0.3730	0.5951	0.0365	0.2694	0.0613	0.4527
16	21.13	0.19	-0.8809	9.9999	-0.3205	9.9999	0.3786	0.6541	0.0224	0.3101	0.0367	0.4712
17	21.89	0.09	-0.8726	9.9999	-0.3345	9.9999	0.3829	0.6977	0.0122	0.3355	0.0175	0.4808
18	24.12	0.19	-0.9005	9.9999	-0.3447	9.9999	0.3867	0.7271	0.0078	0.3500	0.0107	0.4814
19	25.23	0.19	-0.9266	9.9999	-0.3558	9.9999	0.3847	0.7725	0.0105	0.3698	0.0240	0.4529
20	27.48	0.19	-0.9542	9.9999	-0.3666	9.9999	0.3846	0.8013	0.0153	0.3555	0.0141	0.4436
21	28.20	0.19	-0.9495	9.9999	-0.3637	9.9999	0.3830	0.7863	0.0160	0.3511	0.0204	0.4466
22	28.20	0.19	-0.9560	9.9999	-0.3625	9.9999	0.3800	0.7965	0.0162	0.3559	0.0204	0.4468
23	28.20	0.19	-0.9527	9.9999	-0.3645	9.9999	0.3810	0.7905	0.0155	0.3579	0.0196	0.4525
24	28.52	0.19	-0.9605	9.9999	-0.3657	9.9999	0.3807	0.7972	0.0138	0.3552	0.0173	0.4455
25	28.79	0.19	-0.9544	9.9999	-0.3676	9.9999	0.3812	0.7812	0.0129	0.3477	0.0165	0.4451
26	29.13	0.19	-0.9770	9.9999	-0.3715	9.9999	0.3800	0.7925	0.0103	0.3369	0.0135	0.4418
27	29.49	0.19	-0.9854	9.9999	-0.3743	9.9999	0.3799	0.7978	0.0101	0.3318	0.0135	0.4437
28	29.71	0.17	-0.9942	9.9999	-0.3803	9.9999	0.3809	0.7392	0.0094	0.3287	0.0127	0.4447
29	29.99	0.19	-1.0070	9.9999	-0.3839	9.9999	0.3806	0.7225	0.0105	0.3225	0.0140	0.4464
30	30.28	0.19	-1.0290	9.9999	-0.3917	9.9999	0.3815	0.7386	0.0109	0.3281	0.0148	0.4443
31	30.55	0.19	-1.0324	9.9999	-0.3935	9.9999	0.3820	0.7281	0.0115	0.3250	0.0158	0.4464
32	30.81	0.19	-1.0420	9.9999	-0.3980	9.9999	0.3820	0.7363	0.0123	0.3319	0.0167	0.4495
33	31.10	0.17	-1.0473	9.9999	-0.4000	9.9999	0.3820	0.7331	0.0104	0.3329	0.0162	0.4561
34	31.39	0.17	-1.0515	9.9999	-0.4044	9.9999	0.3814	0.7287	0.0104	0.3316	0.0163	0.4550
35	31.66	0.17	-1.0736	9.9999	-0.4179	9.9999	0.3801	0.7272	0.0105	0.3327	0.0165	0.4575
36	31.92	0.19	-1.0750	9.9999	-0.4200	9.9999	0.3800	0.7397	0.0107	0.3379	0.0138	0.4571
37	32.20	0.24	-1.0930	9.9999	-0.4263	9.9999	0.3796	0.7169	0.0121	0.3323	0.0169	0.4638
38	32.48	0.21	-1.1042	9.9999	-0.4342	9.9999	0.3797	0.7212	0.0114	0.3353	0.0158	0.4649
39	32.72	0.23	-1.1029	9.9999	-0.4296	9.9999	0.3793	0.7271	0.0115	0.3400	0.0158	0.4676
40	33.00	0.19	-1.1172	9.9999	-0.4336	9.9999	0.3792	0.7169	0.0097	0.3380	0.0135	0.4702
41	33.26	0.23	-1.1152	9.9999	-0.4325	9.9999	0.3789	0.7187	0.0108	0.3386	0.0150	0.4711
42	33.50	0.19	-1.1152	9.9999	-0.4314	9.9999	0.3792	0.7132	0.0100	0.3419	0.0140	0.4794
43	33.78	0.19	-1.1152	9.9999	-0.4325	9.9999	0.3785	0.7123	0.0097	0.3448	0.0136	0.4843
44	34.00	0.17	-1.1134	9.9999	-0.4319	9.9999	0.3790	0.7143	0.0094	0.3468	0.0118	0.4855
45	34.25	0.19	-1.1116	9.9999	-0.4304	9.9999	0.3787	0.6852	0.0087	0.3424	0.0127	0.4997
46	34.51	0.19	-1.1115	9.9999	-0.4301	9.9999	0.3780	0.6759	0.0084	0.3435	0.0095	0.5082

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH=MA10=6 P=1 CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 85 1.7 45.0 81=0F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CM3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	34.78	0.17	-1.1164	9.9999	-0.4186	9.9999	0.3706	0.6579	0.0075	0.3346	0.0116	0.5163
48	34.99	0.19	-1.1167	9.9999	-0.4207	9.9999	0.3750	0.6704	0.0056	0.3465	0.0087	0.5169
49	35.23	0.19	-1.1208	9.9999	-0.4182	9.9999	0.3748	0.6735	0.0061	0.3543	0.0091	0.5260
50	35.44	0.19	-1.0767	9.9999	-0.4096	9.9999	0.3692	0.6598	0.0060	0.3442	0.0091	0.5301
51	35.73	0.17	-1.1086	9.9999	-0.4161	9.9999	0.3818	0.6817	0.0035	0.3472	0.0055	0.5611
52	35.95	0.17	-1.0970	9.9999	-0.4160	9.9999	0.3826	0.6965	0.0021	0.3524	0.0035	0.5575
53	36.21	0.15	-1.1075	9.9999	-0.4150	9.9999	0.3823	0.6848	0.0024	0.3568	0.0037	0.5668
54	36.43	0.19	-1.0961	9.9999	-0.4205	9.9999	0.3837	0.6933	0.0024	0.3273	0.0041	0.5517
55	36.69	0.17	-1.1027	9.9999	-0.4171	9.9999	0.3828	0.6956	-0.0003	0.3327	-0.0005	0.5582
56	34.93	0.19	-1.1155	9.9999	-0.4207	9.9999	0.3826	0.6980	-0.0001	0.3400	-0.0002	0.5502
57	37.25	0.17	-1.1087	9.9999	-0.4217	9.9999	0.3838	0.6867	-0.0006	0.3290	-0.0014	0.5589
58	37.50	0.17	-1.1016	9.9999	-0.4225	9.9999	0.3837	0.6759	-0.0016	0.3254	-0.0031	0.5651
59	37.78	0.17	-1.1062	9.9999	-0.4143	9.9999	0.3839	0.6598	-0.0026	0.3195	-0.0043	0.5706
60	37.98	0.19	-1.1062	9.9999	-0.4332	9.9999	0.3839	0.6871	-0.0037	0.3338	-0.0067	0.5685
61	38.21	0.17	-1.1029	9.9999	-0.4304	9.9999	0.3806	0.6185	-0.0037	0.3472	-0.0011	0.5614
62	34.45	0.19	-1.1306	9.9999	-0.4304	9.9999	0.3800	0.5856	-0.0039	0.3341	-0.0065	0.5704
63	38.67	0.17	-1.1093	9.9999	-0.4248	9.9999	0.3859	0.5969	-0.0038	0.3380	-0.0066	0.5643
64	34.91	0.13	-1.1330	9.9999	-0.4209	9.9999	0.3863	0.6037	-0.0031	0.3452	-0.0051	0.5723
65	39.11	0.16	-1.1312	9.9999	-0.4334	9.9999	0.3884	0.7131	-0.0030	0.3463	-0.0042	0.5557
66	39.34	0.11	-1.1257	9.9999	-0.4375	9.9999	0.3889	0.6930	0.0016	0.3494	0.0023	0.5619
67	39.58	0.14	-1.1218	9.9999	-0.4382	9.9999	0.3892	0.6780	-0.0001	0.3556	-0.0001	0.5704
68	39.79	0.11	-1.1249	9.9999	-0.4394	9.9999	0.3890	0.6703	-0.0006	0.3656	-0.0009	0.5752
69	40.04	0.11	-1.1162	9.9999	-0.4399	9.9999	0.3892	0.6445	-0.0021	0.3734	-0.0033	0.5794
70	40.21	0.12	-1.1239	9.9999	-0.4382	9.9999	0.3896	0.6631	-0.0001	0.3854	-0.0002	0.5812
71	40.42	0.07	-1.1132	9.9999	-0.4427	9.9999	0.3900	0.6069	-0.0043	0.3598	-0.0086	0.5929
72	40.60	0.08	-1.1275	9.9999	-0.4389	9.9999	0.3893	0.6211	-0.0024	0.3664	-0.0039	0.5900
73	40.82	0.07	-1.1321	9.9999	-0.4431	9.9999	0.3899	0.6327	-0.0018	0.3696	-0.0028	0.5842
74	41.03	0.05	-1.1391	9.9999	-0.4394	9.9999	0.3886	0.6257	-0.0030	0.3866	-0.0048	0.5859
75	41.21	0.07	-1.1326	9.9999	-0.4411	9.9999	0.3902	0.5999	-0.0016	0.3523	-0.0030	0.5873
76	41.44	0.05	-1.1130	9.9999	-0.4358	9.9999	0.3892	0.6534	0.0021	0.3611	0.0032	0.5832
77	41.63	0.07	-1.1330	9.9999	-0.4393	9.9999	0.3907	0.6249	-0.0057	0.3144	-0.0108	0.6020
78	41.83	0.06	-1.1210	9.9999	-0.4379	9.9999	0.3906	0.6579	-0.0032	0.3383	-0.0056	0.5957
79	42.02	0.08	-1.1323	9.9999	-0.4393	9.9999	0.3914	0.6143	-0.0067	0.3062	-0.0130	0.5992
80	42.26	0.07	-1.1396	9.9999	-0.4403	9.9999	0.3917	0.6088	-0.0056	0.3047	-0.0110	0.5990
81	42.44	0.08	-1.1359	9.9999	-0.4448	9.9999	0.3912	0.6061	-0.0024	0.3221	-0.0044	0.5899
82	42.61	0.07	-1.1333	9.9999	-0.4439	9.9999	0.3916	0.6456	-0.0024	0.3227	-0.0044	0.5904
83	42.79	0.08	-1.1362	9.9999	-0.4512	9.9999	0.3928	0.6405	-0.0022	0.3186	-0.0041	0.5858
84	42.98	0.06	-1.1473	9.9999	-0.4502	9.9999	0.3929	0.6240	-0.0032	0.3090	-0.0061	0.5874
85	43.15	0.08	-1.1473	9.9999	-0.4515	9.9999	0.3935	0.6923	-0.0049	0.2969	-0.0089	0.5908
86	43.33	0.08	-1.1437	9.9999	-0.4496	9.9999	0.3925	0.6981	-0.0075	0.2952	-0.0151	0.5927
87	43.52	0.09	-1.1411	9.9999	-0.4481	9.9999	0.3927	0.6901	-0.0063	0.2913	-0.0129	0.5943
88	43.71	0.03	-1.1498	9.9999	-0.4502	9.9999	0.3934	0.6725	-0.0071	0.2791	-0.0150	0.5907
89	43.92	0.01	-1.1423	9.9999	-0.4457	9.9999	0.3935	0.6605	-0.0092	0.2721	-0.0200	0.5908
90	44.08	0.03	-1.1336	9.9999	-0.4470	9.9999	0.3943	0.6779	-0.0079	0.2629	-0.0163	0.5918
91	44.25	0.00	-1.1342	9.9999	-0.4537	9.9999	0.3947	0.6624	-0.0063	0.2710	-0.0136	0.5861
92	44.44	0.00	-1.1471	9.9999	-0.4537	9.9999	0.3953	0.6481	-0.0079	0.2733	-0.0169	0.5839

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHUC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH.EX10-6 PSI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 65 0.900 1.7 49.0 R1+0F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CN4	XCPF4	YCPF4
93	44.82	0.00	-1.1912	0.0000	-0.6557	0.5999	0.3959	0.4721	-0.0065	0.2751	-0.0138	0.5827
94	44.81	0.01	-1.1935	0.0000	-0.6572	0.5999	0.3965	0.4481	-0.0041	0.2758	-0.0086	0.5854
95	45.00	0.00	-1.1925	0.0000	-0.6562	0.5999	0.3946	0.4675	-0.0045	0.2735	-0.0096	0.5850
96	45.19	0.01	-1.1941	0.0000	-0.6579	0.5999	0.3968	0.4742	-0.0102	0.2515	-0.0239	0.5874
97	45.38	0.01	-1.1903	0.0000	-0.6531	0.5999	0.3952	0.4423	-0.0047	0.2599	-0.0106	0.5873
98	45.56	0.01	-1.1911	0.0000	-0.6521	0.5999	0.3961	0.4549	0.0015	0.2654	0.0033	0.5835
99	45.72	0.00	-1.1900	0.0000	-0.6523	0.5999	0.3965	0.4842	-0.0062	0.2389	-0.0152	0.5852
100	45.89	0.00	-1.1957	0.0000	-0.6587	0.5999	0.3984	0.4625	0.0029	0.2442	0.0069	0.5875
101	46.06	0.00	-1.1951	0.0000	-0.6583	0.5999	0.3999	0.3999	-0.0072	0.2362	-0.0180	0.5908
102	46.24	0.00	-1.1961	0.0000	-0.6582	0.5999	0.3970	0.3966	-0.0020	0.2349	-0.0051	0.5950
103	46.42	0.00	-1.1991	0.0000	-0.6602	0.5999	0.3976	0.3993	-0.0105	0.2199	-0.0265	0.5970
104	47.01	-0.01	-1.1977	0.0000	-0.6556	0.5999	0.3971	0.3727	-0.0061	0.2242	-0.0164	0.6069
105	46.78	-0.01	-1.1962	0.0000	-0.6552	0.5999	0.3978	0.3612	-0.0048	0.2175	-0.0249	0.6021
106	46.96	0.00	-1.1951	0.0000	-0.6577	0.5999	0.3966	0.3751	-0.0068	0.2227	-0.0182	0.5937
107	47.14	0.00	-1.1961	0.0000	-0.6586	0.5999	0.3995	0.3955	-0.0060	0.2134	-0.0174	0.6176
108	47.31	0.01	-1.1962	0.0000	-0.6594	0.5999	0.3990	0.3830	-0.0074	0.2048	-0.0216	0.6115
109	47.47	0.00	-1.1982	0.0000	-0.6603	0.5999	0.3996	0.3175	-0.0024	0.1967	-0.0076	0.6196
110	47.60	0.00	-1.1967	0.0000	-0.6621	0.5999	0.3991	0.3178	-0.0036	0.1955	-0.0107	0.6152
111	47.82	0.00	-1.1957	0.0000	-0.6585	0.5999	0.3995	0.2995	-0.0057	0.1868	-0.0191	0.6275
112	48.01	0.00	-1.1783	0.0000	-0.6700	0.5999	0.3996	0.2676	-0.0041	0.1736	-0.0153	0.6487
113	48.17	0.01	-1.1732	0.0000	-0.6704	0.5999	0.3993	0.2706	-0.0073	0.1737	-0.0270	0.6418
114	48.35	0.00	-1.1791	0.0000	-0.6711	0.5999	0.3999	0.2369	-0.0074	0.1583	-0.0313	0.6684
115	48.52	0.00	-1.1676	0.0000	-0.6746	0.5999	0.3999	0.2196	-0.0050	0.1538	-0.0365	0.7005
116	48.68	0.00	-1.1663	0.0000	-0.6738	0.5999	0.4000	0.2294	-0.0047	0.1535	-0.0265	0.6678
117	48.88	0.00	-1.2115	0.0000	-0.6805	0.5999	0.3999	0.2017	-0.0046	0.1429	-0.0228	0.7085
118	49.01	-0.02	-1.1949	0.0000	-0.6797	0.5999	0.4001	0.1953	-0.0042	0.1309	-0.0227	0.7067
119	49.18	0.00	-1.2129	0.0000	-0.6861	0.5999	0.4003	0.2016	-0.0002	0.1458	-0.0010	0.7233
120	49.37	-0.01	-1.2126	0.0000	-0.6860	0.5999	0.4008	0.1953	-0.0063	0.1228	-0.0406	0.7905
121	49.53	0.00	-1.2917	0.0000	-0.6939	0.5999	0.4007	0.1654	-0.0002	0.1345	-0.0011	0.7470
122	49.70	-0.00	-1.2202	0.0000	-0.6898	0.5999	0.4010	0.1703	-0.0030	0.1310	-0.0176	0.7697
123	49.89	-0.00	-1.2461	0.0000	-0.6957	0.5999	0.4015	0.1692	-0.0007	0.1410	-0.0037	0.7452
124	50.06	-0.01	-1.2417	0.0000	-0.6943	0.5999	0.4017	0.1582	-0.0030	0.1241	-0.0190	0.7843
125	50.24	0.00	-1.2348	0.0000	-0.6925	0.5999	0.4038	0.3969	0.0090	0.2262	0.0248	0.6165
126	50.40	-0.01	-1.2400	0.0000	-0.6915	0.5999	0.4026	0.3033	0.0068	0.1948	0.0225	0.6556
127	50.59	-0.01	-1.2473	0.0000	-0.6959	0.5999	0.4063	0.2652	0.0052	0.1802	0.0126	0.6795
128	50.75	-0.00	-1.2402	0.0000	-0.6963	0.5999	0.4018	0.1613	-0.0037	0.1371	-0.0199	0.7190
129	50.91	0.01	-1.3317	0.0000	-0.7385	0.5999	0.4026	0.1042	0.0038	0.2474	0.0094	0.6122
130	51.07	-0.01	-1.2710	0.0000	-0.6307	0.5999	0.4023	0.3315	0.0006	0.2167	0.0024	0.6597
131	51.22	0.00	-1.3499	0.0000	-0.6963	0.5999	0.4023	0.2947	-0.0007	0.1783	-0.0024	0.6852
132	51.42	-0.01	-1.3526	0.0000	-0.6939	0.5999	0.4023	0.2772	-0.0009	0.1436	-0.0040	0.6329
133	51.57	0.00	-1.3446	0.0000	-0.6937	0.5999	0.4026	0.2757	-0.0009	0.1730	-0.0032	0.6187
134	51.74	0.01	-1.3564	0.0000	-0.6964	0.5999	0.4025	0.1654	-0.0002	0.1741	-0.0011	0.6677
135	51.93	-0.00	-1.3528	0.0000	-0.6959	0.5999	0.4032	0.1325	0.0010	0.0984	0.0070	0.7425
136	52.15	-0.00	-1.3518	0.0000	-0.6947	0.5999	0.4030	0.0414	-0.0017	0.0589	-0.0411	1.4224
137	52.27	-0.01	-1.3383	0.0000	-0.6872	0.5999	0.4029	0.0177	-0.0043	0.0507	-0.2431	2.8622
138	52.43	-0.01	-1.3604	0.0000	-0.6960	0.5999	0.4027	0.0184	-0.0061	0.0517	-0.3317	2.8079

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	65	0.60	1.7	45.0	81.0F13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CS3	XCPF3	YCPF3	CNF4	CM4	CS4	XCPF4	YCPF4
134	52.54	-0.01	-1.3577	9.9999	-0.5342	9.9999	0.4038	0.0263	-0.0041	0.0526	-0.1560	1.9988
140	52.77	-0.03	-1.4451	9.9999	-0.5422	9.9999	0.4031	0.1232	0.0082	0.0756	0.0666	0.8137
141	52.85	-0.04	-1.4352	9.9999	-0.5406	9.9999	0.4037	0.1232	0.0066	0.0727	0.0550	0.5908
142	53.11	-0.01	-1.3961	9.9999	-0.5423	9.9999	0.4035	0.1394	0.0076	0.0728	0.0763	0.6289
143	53.28	-0.02	-1.3902	9.9999	-0.5409	9.9999	0.4032	0.1216	0.0076	0.0716	0.0626	0.5871
144	53.44	0.01	-1.3938	9.9999	-0.5462	9.9999	0.4035	0.0895	0.0044	0.0596	0.0492	0.6658
145	53.69	-0.03	-1.3988	9.9999	-0.5421	9.9999	0.4031	0.0832	0.0021	0.0591	0.0253	0.7111
146	53.76	-0.02	-1.4062	9.9999	-0.5424	9.9999	0.4033	0.0776	0.0052	0.0533	0.0671	0.6874
147	53.95	-0.03	-1.3973	9.9999	-0.5394	9.9999	0.4037	0.0636	0.0032	0.0474	0.0504	0.7457
148	54.09	-0.01	-1.3965	9.9999	-0.5419	9.9999	0.4031	0.0612	0.0021	0.0469	0.0344	0.7669
149	54.29	-0.01	-1.3927	9.9999	-0.5404	9.9999	0.4033	0.0432	0.0031	0.0384	0.0718	0.8430
150	54.41	-0.03	-1.3926	9.9999	-0.5407	9.9999	0.4034	0.0407	0.0015	0.0347	0.0467	0.8528
151	54.58	-0.04	-1.3893	9.9999	-0.5392	9.9999	0.4036	0.0277	0.0034	0.0315	0.0591	0.7193
152	54.74	-0.02	-1.4717	9.9999	-0.5443	9.9999	0.4035	0.0592	0.0072	0.0401	0.1219	0.6773
153	54.96	-0.03	-1.3819	9.9999	-0.5409	9.9999	0.4034	0.0439	0.0066	0.0323	0.1960	0.7358
154	55.10	-0.04	-1.3896	9.9999	-0.5427	9.9999	0.4050	0.0129	0.0058	0.0196	0.4499	1.5009
155	55.29	-0.03	-1.3895	9.9999	-0.5379	9.9999	0.4055	-0.0187	0.0057	0.0225	0.3150	1.2017
156	55.37	-0.03	-1.3973	9.9999	-0.5454	9.9999	0.4050	0.0129	0.0057	0.0205	0.4421	1.5865
157	55.56	-0.02	-1.4026	9.9999	-0.5374	9.9999	0.4051	-0.0128	0.0073	0.0218	0.3390	1.6909
158	55.67	-0.03	-1.4037	9.9999	-0.5375	9.9999	0.4052	0.0032	0.0047	0.0162	1.4695	5.6743
159	55.84	-0.02	-1.3993	9.9999	-0.5365	9.9999	0.4063	-0.0085	0.0058	0.0139	-1.2451	-3.1765
160	55.99	-0.01	-1.4021	9.9999	-0.5414	9.9999	0.4051	0.0101	0.0050	0.0155	50.0766	154.4927
161	56.19	-0.02	-1.4044	9.9999	-0.5401	9.9999	0.4060	-0.0125	0.0035	0.0104	-0.2801	-0.8347
162	56.30	-0.00	-1.4132	9.9999	-0.5444	9.9999	0.4054	-0.0185	0.0046	0.0086	-0.2446	-0.3522
163	56.49	-0.03	-1.4143	9.9999	-0.5446	9.9999	0.4063	-0.0183	0.0036	0.0094	-0.1964	-0.3153
164	56.61	-0.03	-1.4117	9.9999	-0.5424	9.9999	0.4059	-0.0251	0.0023	0.0065	-0.0917	-0.2598
165	56.76	-0.02	-1.4154	9.9999	-0.5452	9.9999	0.4064	-0.0267	0.0025	0.0056	-0.0937	-0.2029
166	56.90	-0.03	-1.4142	9.9999	-0.5441	9.9999	0.4066	-0.0348	0.0003	0.0	-0.0067	0.0
167	57.05	-0.02	-1.4073	9.9999	-0.5424	9.9999	0.4066	-0.1333	0.0038	0.0035	-0.0240	-0.1054
168	57.21	0.01	-1.4230	9.9999	-0.5504	9.9999	0.4080	-0.0367	0.0017	0.0020	-0.0053	-0.0547
169	57.37	-0.01	-1.4164	9.9999	-0.5479	9.9999	0.4073	-0.0617	-0.0004	0.0015	0.0098	-0.0361
170	57.52	-0.02	-1.4241	9.9999	-0.5501	9.9999	0.4073	-0.0417	-0.0001	0.0030	0.0024	-0.0722
171	57.68	-0.04	-1.4252	9.9999	-0.5515	9.9999	0.4081	-0.0474	-0.0008	-0.0009	0.3169	0.0190
172	57.76	-0.03	-1.4367	9.9999	-0.5556	9.9999	0.4083	-0.0418	0.0001	0.0019	-0.0024	-0.0456
173	57.95	-0.04	-1.4391	9.9999	-0.5574	9.9999	0.4082	-0.0498	-0.0018	0.0	0.0362	0.0
174	58.10	-0.00	-1.4402	9.9999	-0.5593	9.9999	0.4093	-0.0560	-0.0024	-0.0024	0.0445	0.0446
175	58.28	0.01	-1.4371	9.9999	-0.5578	9.9999	0.4082	-0.0573	-0.0018	-0.0043	0.0315	0.0754
176	58.39	0.00	-1.4424	9.9999	-0.5490	9.9999	0.4082	-0.0636	-0.0042	-0.0034	0.0862	0.0537
177	58.56	-0.02	-1.4438	9.9999	-0.5542	9.9999	0.4088	-0.0538	-0.0013	-0.0005	0.0245	0.0095
178	58.62	0.01	-1.4515	9.9999	-0.5529	9.9999	0.4085	-0.0645	-0.0022	-0.0058	0.0342	0.0904

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYNOLDS FPI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 06 0.90 1.7 0.0 F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLP	CY	CLN	CLL	CA	CAB	CAF	XCP
23	28.20	0.04	6.3[illegible]	-0.[illegible]045	0.2497	-0.5496	-0.0375	0.4760	0.4922	-0.0161	-1.1320
24	28.20	0.04	6.3337	-0.[illegible]266	0.3517	-0.7519	-0.0237	0.4777	0.4949	-0.0171	-1.1368
25	28.44	0.05	6.3[illegible]	-0.[illegible]320	0.4297	-0.8824	0.0102	0.4789	0.4976	-0.0186	-1.1296
26	28.70	0.06	6.4073	-0.[illegible]993	0.6525	-1.3059	0.0192	0.4894	0.4984	-0.0090	-1.1191
27	29.09	0.07	6.[illegible]	-0.[illegible]905	0.7512	-1.3717	0.0475	0.4667	0.4994	-0.0326	-1.0933
28	28.98	0.06	6.[illegible]	-0.[illegible]437	0.8784	-1.6867	0.0555	0.4598	0.5011	-0.0442	-1.0547
29	29.66	0.15	6.[illegible]	-0.[illegible]37	0.8213	-1.3339	0.0361	0.4714	0.5082	-0.0367	-1.0570
30	29.95	0.05	6.4[illegible]	-0.[illegible]	0.8247	-1.6270	0.0555	0.4732	0.5100	-0.0367	-1.0297
31	30.29	0.07	6.[illegible]	-0.[illegible]	0.[illegible]91	-1.6968	0.1123	0.4677	0.5096	-0.0418	-0.9851
32	30.52	0.06	5.1[illegible]	-0.[illegible]	1.0122	-1.8852	0.1491	0.4400	0.5091	-0.0690	-0.9308
33	30.77	0.07	5.0[illegible]	-0.[illegible]	0.9640	-1.7340	0.1130	0.4675	0.5119	-0.0443	-0.9454
34	31.07	0.06	5.[illegible]	-0.[illegible]	0.9398	-1.6841	0.1762	0.4360	0.5073	-0.0712	-0.8780
35	31.34	0.05	5.[illegible]	-0.[illegible]	1.[illegible]	-1.6701	0.1639	0.4396	0.5051	-0.0664	-0.8469
36	31.61	0.09	5.4[illegible]	-0.[illegible]	1.[illegible]	-1.6593	0.1703	0.4356	0.5064	-0.0707	-0.8361
37	31.84	0.08	5.[illegible]	-0.[illegible]	1.0911	-1.6409	0.1987	0.4170	0.5024	-0.0853	-0.7978
38	32.16	0.09	5.[illegible]	-0.[illegible]	1.1018	-1.5354	0.2292	0.4203	0.5038	-0.0834	-0.7793
39	32.41	0.09	5.[illegible]	-0.[illegible]	1.1924	-1.5474	0.1996	0.4211	0.5051	-0.0839	-0.7847
40	32.66	0.09	5.[illegible]	-0.[illegible]	1.0563	-1.3472	0.2277	0.4117	0.5064	-0.0946	-0.7556
41	32.94	0.08	5.[illegible]	-0.[illegible]	0.8[illegible]	-1.1319	0.2008	0.4132	0.5132	-0.1000	-0.7524
42	33.20	0.08	5.1[illegible]	-0.[illegible]	1.[illegible]	-1.1066	0.2144	0.4219	0.5122	-0.0911	-0.7474
43	33.49	0.08	5.[illegible]	-0.[illegible]	0.8[illegible]	-0.8809	0.2003	0.4196	0.5217	-0.1021	-0.7392
44	33.70	0.07	5.[illegible]	-0.[illegible]	0.[illegible]	-0.4206	0.1940	0.4135	0.5199	-0.1064	-0.7262
45	33.94	0.08	5.3311	-0.[illegible]	0.7767	-0.8773	0.2009	0.4184	0.5222	-0.1038	-0.7262
46	34.18	0.05	5.[illegible]	-0.[illegible]	0.[illegible]	-0.5881	0.1800	0.4206	0.5311	-0.1105	-0.7118
47	34.45	0.08	5.[illegible]	-0.[illegible]	0.[illegible]	-0.5109	0.1596	0.4218	0.5334	-0.1116	-0.7017
48	34.68	0.04	5.[illegible]	-0.[illegible]	0.5[illegible]	-0.4015	0.1526	0.4168	0.5365	-0.1197	-0.6896
49	34.91	0.06	5.[illegible]	-0.[illegible]	0.[illegible]	-0.0058	0.1174	0.4211	0.5436	-0.1225	-0.6731
50	35.17	0.05	6.[illegible]	-0.[illegible]	0.3133	0.3536	0.1027	0.4107	0.5469	-0.1362	-0.6599
51	35.42	0.03	6.[illegible]	-0.[illegible]	0.3061	0.5275	0.1094	0.4138	0.5532	-0.1394	-0.6451
52	35.64	0.04	7.[illegible]	-0.[illegible]	0.3206	0.6634	0.0743	0.4196	0.5540	-0.1346	-0.6443
53	35.89	0.06	7.2[illegible]	-0.[illegible]	0.[illegible]	1.0317	0.0391	0.4074	0.5572	-0.1498	-0.6387
54	36.12	0.05	7.2[illegible]	-0.[illegible]	0.3332	0.7339	0.0609	0.4121	0.5599	-0.1478	-0.6443
55	36.35	0.04	7.3[illegible]	-0.[illegible]	0.0123	1.1221	0.0605	0.4061	0.5612	-0.1551	-0.6209
56	36.59	0.01	7.4[illegible]	-0.[illegible]	0.0[illegible]	1.2427	0.0464	0.4184	0.5639	-0.1455	-0.6198
57	36.83	0.01	7.[illegible]	-0.[illegible]	-0.0052	1.3513	0.0394	0.4102	0.5644	-0.1542	-0.6144
58	37.08	0.04	7.[illegible]	-0.[illegible]	-0.[illegible]	1.2963	0.0481	0.4019	0.5639	-0.1620	-0.5975
59	37.30	0.01	7.[illegible]	-0.[illegible]	-0.[illegible]	1.4964	0.0342	0.4073	0.5652	-0.1579	-0.5918
60	37.53	0.02	7.7[illegible]	-0.[illegible]	0.0742	1.4654	0.0399	0.3947	0.5639	-0.1692	-0.5934
61	37.78	0.02	7.[illegible]	-0.[illegible]	0.[illegible]	1.3524	0.0284	0.4075	0.5684	-0.1609	-0.5907
62	38.00	0.01	7.9[illegible]	-0.[illegible]	-0.[illegible]	1.3569	0.0273	0.4080	0.5621	-0.1541	-0.5811
63	38.25	0.02	8.0[illegible]	-0.[illegible]	0.0021	1.2026	0.0144	0.4003	0.5736	-0.1733	-0.5879
64	38.47	0.03	8.1[illegible]	-0.[illegible]	0.[illegible]	0.4238	0.0365	0.3831	0.5695	-0.1864	-0.5709
65	38.70	-0.01	8.[illegible]	-0.[illegible]	-0.[illegible]	1.2206	0.0015	0.3769	0.5708	-0.1939	-0.5763
66	38.92	0.03	8.2[illegible]	-0.[illegible]	0.1950	0.9214	0.0299	0.3820	0.5663	-0.1843	-0.5736
67	39.13	0.02	8.3[illegible]	-0.[illegible]	-0.0392	0.9644	0.0166	0.3820	0.5713	-0.1893	-0.5756
68	39.45	0.03	8.5[illegible]	-0.[illegible]	0.1000	0.8052	0.0314	0.3662	0.5758	-0.2096	-0.5583

PAGE 1 OF 3
SHEET 2 OF 4

PANTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	ALPHA	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	66	0.90	1.7	0.0	81	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
69	39.68	[illegible]	5.5593	[illegible]	[illegible]	0.8696	0.0452	0.3774	0.5731	-0.1957	-0.5542
70	39.87	[illegible]	[illegible]	[illegible]	[illegible]	0.8866	0.0314	0.3851	0.5763	-0.1912	-0.5674
71	40.11	[illegible]	[illegible]	[illegible]	[illegible]	0.8390	0.0316	0.3622	0.5736	-0.2114	-0.5581
72	40.33	[illegible]	[illegible]	[illegible]	[illegible]	1.3323	0.0171	0.3620	0.5709	-0.2089	-0.5465
73	40.52	[illegible]	[illegible]	[illegible]	[illegible]	0.8104	1.3352	-0.0108	0.3520	0.5744	-0.2224	-0.5630
74	40.78	[illegible]	[illegible]	[illegible]	[illegible]	1.1417	1.1436	-0.0236	0.3401	0.5753	-0.2152	-0.5663
75	41.38	[illegible]	[illegible]	[illegible]	[illegible]	1.3369	1.3046	0.0104	0.3379	0.5659	-0.2280	-0.5639
76	41.18	[illegible]	[illegible]	[illegible]	[illegible]	0.0677	1.3056	-0.0097	0.3501	0.5732	-0.2231	-0.5469
77	41.38	[illegible]	[illegible]	[illegible]	[illegible]	0.8303	1.1356	-0.0359	0.3464	0.5718	-0.2256	-0.5619
78	41.58	[illegible]	[illegible]	[illegible]	[illegible]	0.0113	1.0761	-0.0080	0.3273	0.5718	-0.2445	-0.5687
79	41.77	[illegible]	[illegible]	[illegible]	[illegible]	0.8369	1.0828	-0.0572	0.3421	0.5727	-0.2306	-0.5634
80	41.97	-0.01	[illegible]	[illegible]	[illegible]	0.7316	0.9526	-0.0489	0.3353	0.5731	-0.2378	-0.5675
81	42.16	-0.01	[illegible]	[illegible]	[illegible]	0.2220	0.8436	-0.0551	0.3311	0.5682	-0.2371	-0.5659
82	42.37	[illegible]	[illegible]	[illegible]	[illegible]	0.0104	0.8713	-0.0344	0.3290	0.5677	-0.2367	-0.5535
83	42.55	[illegible]	[illegible]	[illegible]	[illegible]	0.6919	0.7008	-0.0409	0.3325	0.5668	-0.2343	-0.5477
84	42.73	[illegible]	[illegible]	[illegible]	[illegible]	0.2826	0.5577	0.0019	0.3305	0.5716	-0.2399	-0.5623
85	42.91	[illegible]	[illegible]	[illegible]	[illegible]	0.3239	0.6344	-0.0398	0.3363	0.5722	-0.2362	-0.5494
86	43.09	0.03	[illegible]	[illegible]	[illegible]	0.3375	0.4448	-0.0466	0.3046	0.5672	-0.2626	-0.5514
87	43.27	-0.02	[illegible]	[illegible]	[illegible]	0.1419	0.5534	-0.0546	0.3098	0.5640	-0.2544	-0.5455
88	43.45	0.03	[illegible]	[illegible]	[illegible]	0.3525	0.4869	0.0150	0.3031	0.5690	-0.2659	-0.5446
89	43.59	[illegible]	[illegible]	[illegible]	[illegible]	0.4805	-0.2483	-0.0081	0.3368	0.5687	-0.2599	-0.5411
90	43.82	-0.02	[illegible]	[illegible]	[illegible]	0.1076	0.0079	-0.0293	0.3018	0.5659	-0.2641	-0.5403
91	43.92	-0.01	[illegible]	[illegible]	[illegible]	0.0747	0.2296	-0.0294	0.3016	0.5677	-0.2661	-0.5314
92	44.17	-0.00	[illegible]	[illegible]	[illegible]	0.1751	-0.3397	-0.0418	0.2971	0.5672	-0.2701	-0.5335
93	44.35	[illegible]	[illegible]	[illegible]	[illegible]	0.2048	-0.0318	-0.0358	0.3057	0.5672	-0.2615	-0.5313
94	44.52	[illegible]	[illegible]	[illegible]	[illegible]	0.2845	0.1631	-0.0502	0.3002	0.5649	-0.2647	-0.5340
95	44.72	-0.01	[illegible]	[illegible]	[illegible]	0.0303	0.8355	-0.0381	0.2821	0.5599	-0.2772	-0.5310
96	44.90	-0.00	[illegible]	[illegible]	[illegible]	0.1994	0.3500	-0.0435	0.2874	0.5632	-0.2757	-0.5274
97	45.09	-0.01	[illegible]	[illegible]	[illegible]	0.1735	0.4733	-0.0433	0.2809	0.5665	-0.2835	-0.5336
98	45.25	-0.01	[illegible]	[illegible]	[illegible]	0.1753	-0.5617	-0.0336	0.2868	0.5632	-0.2763	-0.5239
99	45.44	[illegible]	[illegible]	[illegible]	[illegible]	0.1168	0.1156	-0.0556	0.2814	0.5623	-0.2808	-0.5174
100	45.63	-0.01	[illegible]	[illegible]	[illegible]	0.0916	0.1275	-0.0494	0.2811	0.5609	-0.2797	-0.5173
101	45.80	[illegible]	[illegible]	[illegible]	[illegible]	-0.2014	-0.2100	-0.0471	0.2635	0.5613	-0.2978	-0.5167
102	45.96	-0.03	[illegible]	[illegible]	[illegible]	0.0510	0.0553	-0.0478	0.2683	0.5550	-0.2866	-0.5093
103	46.15	-0.03	[illegible]	[illegible]	[illegible]	0.1657	0.9778	-0.0713	0.2502	0.5561	-0.3061	-0.5114
104	46.31	-0.05	[illegible]	[illegible]	[illegible]	0.4463	1.1865	-0.0575	0.2651	0.5541	-0.2890	-0.5208
105	46.49	-0.03	[illegible]	[illegible]	[illegible]	0.1024	0.8616	-0.0567	0.2560	0.5482	-0.2942	-0.5066
106	46.65	-0.05	[illegible]	[illegible]	[illegible]	0.4755	1.7723	-0.0808	0.2548	0.5518	-0.2970	-0.5078
107	46.83	-0.03	[illegible]	[illegible]	[illegible]	0.3413	1.4659	-0.0794	0.2515	0.5518	-0.3003	-0.5041
108	47.02	-0.03	[illegible]	[illegible]	[illegible]	0.1257	1.3012	-0.0461	0.2475	0.5505	-0.3030	-0.4938
109	47.18	[illegible]	[illegible]	[illegible]	[illegible]	2.2379	2.2379	-0.0893	0.2411	0.5487	-0.3076	-0.4927
110	47.35	[illegible]	[illegible]	[illegible]	[illegible]	0.2761	0.5449	-0.0611	0.2497	0.5507	-0.3090	-0.4877
111	47.53	[illegible]	[illegible]	[illegible]	[illegible]	0.2736	1.8104	-0.0715	0.2143	0.5482	-0.3339	-0.4958
112	47.71	-0.03	[illegible]	[illegible]	[illegible]	0.1495	1.5016	-0.0576	0.2298	0.5496	-0.3198	-0.4955
113	47.88	[illegible]	[illegible]	[illegible]	[illegible]	0.2529	2.0156	-0.0676	0.2100	0.5497	-0.3397	-0.4968
114	48.04	-0.04	[illegible]	[illegible]	[illegible]	0.2434	1.3376	-0.0498	0.2041	0.5487	-0.3446	-0.4960

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RATIO=	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	66	0.90	1.7	0.0	M1=0.13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
115	48.23	-0.09	11.4491	-5.4821	-0.4557	2.4884	-0.0816	0.1484	0.5574	-0.3605	-0.4943
116	48.40	-0.03	11.4674	-5.4381	-0.0592	1.7341	-0.0541	0.2328	0.5514	-0.3186	-0.4987
117	48.57	-0.06	12.0044	-5.7234	-0.4639	2.0345	-0.0506	0.2129	0.5467	-0.3358	-0.4766
118	48.75	-0.04	12.0910	-5.6535	-0.1803	2.1449	-0.0730	0.2049	0.5498	-0.3447	-0.4863
119	48.90	-0.02	12.0394	-5.6383	-0.3153	2.1785	-0.0724	0.1960	0.5464	-0.3504	-0.4728
120	49.09	-0.03	12.2572	-5.6993	-0.1725	2.2599	-0.1033	0.2058	0.5597	-0.3539	-0.4821
121	49.28	-0.06	12.2955	-5.7247	-0.4116	2.5328	-0.1170	0.2054	0.5562	-0.3603	-0.4828
122	49.42	-0.04	12.2869	-5.7444	-0.3710	2.6922	-0.1096	0.2019	0.5689	-0.3670	-0.4790
123	49.61	-0.01	12.3293	-5.7499	-0.1971	2.6568	-0.1315	0.2066	0.5956	-0.3890	-0.4960
124	49.79	-0.02	12.5528	-5.8440	-0.1853	3.0639	-0.1747	0.2061	0.6036	-0.3977	-0.5098
125	49.96	-0.02	12.6011	-5.8293	-0.2321	3.0318	-0.1606	0.2048	0.6046	-0.4000	-0.5098
126	50.13	0.00	12.5835	-5.8284	0.3662	2.6374	-0.1170	0.2138	0.5964	-0.3846	-0.4974
127	50.31	-0.01	12.6588	-5.8493	-0.4678	2.9633	-0.1457	0.2374	0.6049	-0.3879	-0.5011
128	50.49	0.00	12.6286	-5.7883	0.6446	2.2374	-0.1229	0.1958	0.5818	-0.3860	-0.5261
129	50.67	0.00	13.2532	-7.4291	1.6001	2.7225	-0.1320	0.2016	0.5901	-0.3685	-0.5634
130	50.86	0.00	13.1993	-7.2882	1.6173	2.7882	-0.1321	0.2094	0.5952	-0.3658	-0.5660
131	50.99	0.00	13.2498	-7.2988	0.9979	2.4008	-0.1379	0.2060	0.5919	-0.3833	-0.5574
132	51.17	0.00	13.3914	-7.5806	1.1678	3.3400	-0.1628	0.2042	0.5994	-0.3932	-0.5629
133	51.36	0.00	13.5728	-7.9330	0.5421	3.7021	-0.1774	0.2086	0.6060	-0.3952	-0.5842
134	51.52	0.00	13.4447	-7.6811	1.0935	3.0616	-0.1646	0.2059	0.6207	-0.4148	-0.5435
135	51.71	0.00	14.2858	-9.3780	1.1993	3.0058	-0.1632	0.1983	0.6221	-0.4236	-0.6204
136	51.88	0.00	13.9538	-8.6956	1.0726	3.7751	-0.1646	0.2041	0.6244	-0.4153	-0.5988
137	52.05	0.01	14.2629	-9.2926	1.1878	3.1230	-0.1632	0.1825	0.6221	-0.4396	-0.6304
138	52.22	0.02	14.1358	-8.8576	1.2013	3.5397	-0.1339	0.1952	0.6232	-0.4280	-0.6264
139	52.40	0.02	14.2517	-9.2213	1.3449	3.0926	-0.1311	0.1879	0.6205	-0.4526	-0.6333
140	52.58	0.01	14.7214	-9.3977	1.1821	3.0052	-0.1573	0.1864	0.6177	-0.4488	-0.6323
141	52.75	0.01	14.5225	-9.3208	1.1746	3.1214	-0.0694	0.1766	0.6220	-0.4652	-0.6423
142	52.90	0.02	14.6107	-9.5688	1.3072	3.0477	-0.0578	0.1717	0.6261	-0.4564	-0.6515
143	53.05	0.00	14.6745	-9.5522	1.1425	2.7931	-0.0426	0.1678	0.6225	-0.4547	-0.6511
144	53.24	0.01	14.7742	-9.5167	1.2567	2.8322	-0.0425	0.1572	0.6196	-0.4624	-0.6438
145	53.42	0.00	14.7465	-9.7002	1.2198	2.9782	-0.0271	0.1766	0.6193	-0.4425	-0.6599
146	53.58	0.00	14.7648	-9.6918	1.2762	1.8159	-0.0029	0.2038	0.6202	-0.4164	-0.6429
147	53.76	0.01	14.8592	-9.9592	1.4165	2.2202	-0.0201	0.1655	0.6137	-0.4482	-0.6507
148	53.96	0.00	14.7599	-9.7411	1.3444	1.9436	-0.0135	0.1740	0.6115	-0.4375	-0.6553
149	54.01	0.00	14.7670	-9.8048	1.1875	1.7646	-0.0097	0.1924	0.6191	-0.4167	-0.6470
150	54.17	0.00	14.8687	-9.8068	1.2678	1.8950	0.0043	0.1713	0.6106	-0.4393	-0.6525
151	54.34	0.02	14.8479	-9.8569	1.3455	1.8798	0.0129	0.1850	0.6067	-0.4237	-0.6442
152	54.49	0.00	14.8028	-9.8424	1.3105	1.8915	0.0056	0.1863	0.6078	-0.4235	-0.6457
153	54.67	0.00	15.2273	-9.9707	1.3799	1.8551	0.0202	0.1792	0.6012	-0.4220	-0.6514
154	54.81	0.01	15.1254	-9.8961	1.2564	1.8875	0.0143	0.1903	0.6031	-0.4128	-0.6543
155	54.98	0.00	15.2573	-9.9836	1.4365	1.8736	0.0210	0.1767	0.5934	-0.4187	-0.6408
156	55.11	0.00	15.0883	-9.8512	1.2642	1.8240	0.0220	0.1729	0.5976	-0.4247	-0.6406
157	55.28	0.01	15.0295	-9.8907	1.2218	1.8539	0.0360	0.1866	0.5897	-0.4231	-0.6448
158	55.46	0.00	15.1815	-9.9113	1.3656	1.8339	0.0153	0.1875	0.5929	-0.4056	-0.6528
159	55.61	0.01	15.1623	-9.8478	0.9136	1.8115	0.0375	0.1885	0.5826	-0.3971	-0.6314
160	55.73	0.00	15.1674	-9.7568	1.0245	1.8947	0.0359	0.1815	0.5842	-0.4027	-0.6432

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REXI0-6 RNI CORR L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 88 0.90 1.7 0.0 MI=0F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
161	55.90	0.03	15.2512	-5.0359	1.0037	1.0705	0.0380	0.1909	0.5800	-0.3992	-0.6049
162	56.05	0.02	15.2506	-5.0360	1.0365	1.0711	0.0516	0.1672	0.5747	-0.4095	-0.6402
163	56.21	0.03	15.2500	-5.0215	1.0362	0.8936	0.0458	0.1826	0.5726	-0.3898	-0.6436
164	56.35	0.04	15.4262	-5.0180	1.0363	0.8778	0.0390	0.1640	0.5674	-0.3994	-0.6415
165	55.20	0.02	15.1782	-5.0360	1.0931	0.9814	0.0526	0.1701	0.5567	-0.3866	-0.6304
166	56.66	0.04	15.1647	-5.0335	1.0471	0.9837	0.0531	0.1665	0.5568	-0.3892	-0.6275
167	56.80	0.02	15.1780	-5.0511	1.1044	0.8757	0.0528	0.1636	0.5576	-0.3940	-0.6358
168	56.96	0.03	15.2530	-5.0009	0.8769	0.8063	0.0612	0.1769	0.5539	-0.3771	-0.6294
169	57.12	0.03	15.3164	-5.7104	0.8512	0.7735	0.0398	0.1561	0.5562	-0.4021	-0.6344
170	57.28	0.04	15.3062	-5.7079	0.9163	0.7242	0.0475	0.1664	0.5578	-0.3914	-0.6361
171	57.43	0.03	15.4339	-5.7743	0.9292	0.8741	0.0471	0.1528	0.5585	-0.4057	-0.6333
172	57.57	0.03	15.3790	-5.6486	0.7150	0.6233	0.0556	0.1479	0.5604	-0.4125	-0.6270
173	57.71	0.03	15.3031	-5.6265	0.7698	0.6246	0.0486	0.1456	0.5628	-0.4172	-0.6291
174	57.87	0.04	15.4491	-5.7273	0.8697	0.6594	0.0555	0.1248	0.5740	-0.4492	-0.6276
175	58.00	0.03	15.3693	-5.6038	0.8190	0.5805	0.0484	0.1205	0.5750	-0.4485	-0.6259
176	58.15	0.01	15.2744	-5.5523	0.5114	0.4692	0.0492	0.1321	0.5795	-0.4474	-0.6252
177	58.30	-0.01	15.2671	-5.5510	0.4528	-0.3605	0.0461	0.0935	0.5837	-0.4902	-0.5783
178	58.34	-0.00	15.1287	-5.1367	-0.0695	-0.5214	0.0322	0.0875	0.5730	-0.4855	-0.5292
179	58.36	-0.01	15.0991	-5.1491	-0.1196	-1.2846	0.0141	0.1038	0.5749	-0.4711	-0.5356

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	COSF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	66	0.90	1.7	0.0	01.0F13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CN1	CM1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
23	24.20	0.03	-0.0159	-0.0022	0.0234	0.1324	-1.4701	0.9092	0.0266	0.3611	0.0293	0.3752
24	26.20	0.04	0.0134	0.0003	0.0407	0.2240	3.0321	0.9064	0.0267	0.3391	0.0295	0.3741
25	28.44	0.03	0.0284	0.0075	0.0485	0.2613	1.9460	0.9176	0.0258	0.3435	0.0282	0.3743
26	28.74	0.04	0.0412	0.0140	0.0525	0.3046	1.0213	0.9267	0.0251	0.3460	0.0271	0.3734
27	29.09	0.01	0.1051	0.0327	0.0936	0.3116	0.7959	0.9338	0.0249	0.3487	0.0267	0.3734
28	29.38	0.06	0.1265	0.0378	0.0957	0.2966	0.7564	0.9440	0.0243	0.3516	0.0256	0.3725
29	29.68	0.03	0.1256	0.0369	0.0938	0.2910	0.7466	0.9580	0.0233	0.3569	0.0245	0.3736
30	29.95	0.05	0.1826	0.0574	0.1209	0.2483	0.6644	0.9655	0.0230	0.3593	0.0239	0.3721
31	30.29	0.07	0.1948	0.0614	0.1254	0.2721	0.6644	0.9696	0.0225	0.3615	0.0232	0.3727
32	30.52	0.08	0.2051	0.0646	0.1293	0.2134	0.6612	0.9628	0.0225	0.3561	0.0234	0.3698
33	30.77	0.07	0.2531	0.0796	0.1466	0.2237	0.6451	0.9700	0.0223	0.3584	0.0230	0.3695
34	31.07	0.08	0.2905	0.0904	0.1589	0.2010	0.6710	0.9586	0.0221	0.3547	0.0231	0.3700
35	31.34	0.08	0.2962	0.0926	0.1620	0.1971	0.6790	0.9671	0.0220	0.3563	0.0228	0.3705
36	31.61	0.09	0.2929	0.0950	0.1645	0.1944	0.6876	0.9729	0.0214	0.3593	0.0220	0.3693
37	31.89	0.08	0.3003	0.0933	0.1703	0.1774	0.6935	0.9630	0.0215	0.3550	0.0224	0.3686
38	32.16	0.09	0.3219	0.0913	0.1743	0.1599	0.6969	0.9590	0.0221	0.3533	0.0231	0.3685
39	32.41	0.07	0.3166	0.0917	0.2168	0.1632	0.6848	0.9705	0.0212	0.3578	0.0219	0.3686
40	32.68	0.09	0.3230	0.0990	0.2266	0.1516	0.7010	0.9705	0.0206	0.3582	0.0213	0.3691
41	32.94	0.08	0.3257	0.0959	0.2271	0.1405	0.6974	0.9834	0.0201	0.3635	0.0205	0.3696
42	33.20	0.06	0.3146	0.0979	0.2234	0.1524	0.7127	0.9977	0.0192	0.3696	0.0193	0.3705
43	33.46	0.08	0.2916	0.0909	0.2161	0.1404	0.7427	0.9964	0.0190	0.3676	0.0191	0.3689
44	33.70	0.07	0.2560	0.0878	0.2126	0.1318	0.7418	1.0049	0.0180	0.3719	0.0179	0.3701
45	33.99	0.05	0.2715	0.0897	0.2071	0.1460	0.7626	1.0092	0.0179	0.3740	0.0178	0.3706
46	34.18	0.05	0.2353	0.0824	0.1899	0.1409	0.8244	1.0278	0.0167	0.3812	0.0163	0.3708
47	34.45	0.05	0.2148	0.0769	0.1820	0.1382	0.8531	1.0293	0.0163	0.3816	0.0159	0.3707
48	34.68	0.04	0.1944	0.0722	0.1698	0.1217	0.9210	1.0279	0.0160	0.3812	0.0156	0.3708
49	34.91	0.02	0.1215	0.0553	0.1380	0.1257	1.1317	1.0436	0.0151	0.3879	0.0145	0.3712
50	35.17	0.03	0.0956	0.0521	0.1267	0.1255	1.3120	1.0399	0.0149	0.3855	0.0143	0.3707
51	35.42	0.03	0.0515	0.0474	0.1070	0.1418	2.0765	1.0399	0.0145	0.3862	0.0140	0.3713
52	35.66	0.03	0.0287	0.0452	0.0913	0.1949	3.4154	1.0528	0.0143	0.3915	0.0136	0.3719
53	35.89	0.02	-0.0352	-0.0098	0.0354	0.1372	-1.5937	1.0543	0.0142	0.3912	0.0135	0.3711
54	36.12	0.03	-0.0282	-0.0033	0.0252	0.1269	-2.4850	1.0686	0.0130	0.3941	0.0122	0.3726
55	36.35	0.01	-0.0399	-0.0053	0.0299	0.1339	-1.5124	1.0658	0.0130	0.3968	0.0122	0.3723
56	36.59	0.01	-0.0515	-0.0066	0.0330	0.1243	-1.0285	1.0667	0.0127	0.3977	0.0119	0.3722
57	36.83	0.01	-0.0514	-0.0065	0.0360	0.1265	-1.0110	1.0590	0.0129	0.3927	0.0122	0.3708
58	37.09	0.01	-0.0421	-0.0065	0.0362	0.1345	-1.0703	1.0704	0.0119	0.3991	0.0110	0.3729
59	37.30	0.01	-0.0442	-0.0137	0.0379	0.1630	-0.4427	1.0676	0.0124	0.3986	0.0116	0.3715
60	37.53	0.02	-0.1356	-0.0223	0.0171	0.1632	-0.1246	1.0876	0.0112	0.4062	0.0103	0.3735
61	37.78	0.02	-0.1349	-0.0156	0.0323	0.1517	-0.3139	1.0905	0.0108	0.4075	0.0099	0.3737
62	38.00	0.01	-0.0960	-0.0129	0.0327	0.1375	-0.3483	1.0948	0.0106	0.4093	0.0097	0.3738
63	38.25	0.02	-0.1359	-0.0205	0.0102	0.1518	-0.1189	1.1043	0.0103	0.4133	0.0093	0.3743
64	38.47	0.03	-0.0634	-0.0145	0.0428	0.1701	-0.5010	1.1030	0.0101	0.4105	0.0092	0.3721
65	38.74	-0.01	-0.1183	-0.0174	0.0203	0.1464	-0.1719	1.1254	0.0088	0.4218	0.0078	0.3747
66	38.92	0.03	-0.0924	-0.0154	0.0381	0.1669	-0.4119	1.1145	0.0086	0.4173	0.0077	0.3744
67	39.13	0.02	-0.1180	-0.0180	0.0254	0.1539	-0.2309	1.1392	0.0078	0.4285	0.0069	0.3761
68	39.45	0.03	-0.0852	-0.0161	0.0417	0.1693	-0.4892	1.1306	0.0082	0.4249	0.0073	0.3758

MARTIN MISSILE TAILS EFFECTS DATA

TEST RANI MACH RALO-6 PHI CONF. L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 AA 0.60 1.7 0.0 PLOT13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
69	39.56	0.00	-0.0691	-0.0134	0.0030	0.2016	-0.8026	1.1192	0.0088	0.4173	0.0079	0.3729
70	39.47	0.00	-0.0704	-0.0137	0.0074	0.1950	-0.8736	1.1423	0.0071	0.4279	0.0062	0.3765
71	40.11	0.00	-0.0681	-0.0130	0.0042	0.1910	-0.5325	1.1423	-0.0068	0.4287	0.0060	0.3752
72	40.33	0.00	-0.0736	-0.0257	0.0126	0.1673	-0.0403	1.1222	0.0074	0.4190	0.0066	0.3734
73	40.52	0.00	-0.1724	-0.0280	-0.0030	0.1511	-0.0175	1.1538	0.0064	0.4331	0.0056	0.3753
74	40.74	-0.00	-0.1636	-0.0257	0.0014	0.1571	-0.0086	1.1653	0.0057	0.4391	0.0049	0.3768
75	41.36	0.01	-0.1508	-0.0256	0.0057	0.1624	-0.0365	1.1509	0.0061	0.4330	0.0053	0.3762
76	41.16	0.02	-0.1654	-0.0241	0.0033	0.1455	-0.0200	1.1471	0.0065	0.4295	0.0057	0.3744
77	41.36	-0.02	-0.1671	-0.0242	-0.0036	0.1492	-0.0216	1.1486	0.0065	0.4302	0.0038	0.3787
78	41.56	0.02	-0.1535	-0.0220	0.0064	0.1466	-0.0427	1.1702	0.0045	0.4419	0.0039	0.3776
79	41.77	0.02	-0.1642	-0.0245	-0.0028	0.1338	-0.1129	1.2020	0.0028	0.4505	0.0023	0.3781
80	41.97	-0.01	-0.2017	-0.0255	-0.0066	0.1249	0.1827	1.2178	0.0021	0.4615	0.0017	0.3790
81	42.16	-0.01	-0.1937	-0.0280	-0.0035	0.1348	0.1737	1.2250	0.0009	0.4658	0.0007	0.3799
82	42.37	0.01	-0.1692	-0.0217	-0.0025	0.1458	0.0168	1.2198	0.0013	0.4630	0.0011	0.3796
83	42.55	0.02	-0.1761	-0.0239	-0.0033	0.1374	-0.1356	1.2212	0.0009	0.4650	0.0007	0.3808
84	42.73	0.03	-0.1617	-0.0182	0.0065	0.1286	-0.0461	1.2026	0.0015	0.4567	0.0012	0.3781
85	42.91	0.03	-0.1615	-0.0217	-0.0137	0.1363	-0.0848	1.2300	0.0001	0.4670	0.0001	0.3797
86	43.09	0.03	-0.1611	-0.0208	-0.0257	0.1268	0.1595	1.2673	-0.0010	0.4753	-0.0008	0.3811
87	43.27	0.02	-0.1563	-0.0208	-0.0223	0.1320	0.1426	1.2615	-0.0006	0.4734	-0.0005	0.3813
88	43.45	0.03	-0.1369	-0.0211	0.0065	0.1567	-0.0484	1.2344	-0.0008	0.4696	-0.0006	0.3795
89	43.64	0.03	-0.1376	-0.0178	-0.0083	0.1585	-0.0776	1.2461	-0.0019	0.4729	-0.0015	0.3795
90	43.82	-0.00	-0.1166	-0.0140	-0.0024	0.1250	0.0251	1.2502	-0.0019	0.4778	-0.0015	0.3821
91	43.97	-0.01	-0.0592	-0.0181	0.0025	0.1516	-0.0252	1.2581	-0.0030	0.4808	-0.0024	0.3821
92	44.17	-0.00	-0.1216	-0.0194	-0.0113	0.1570	0.0936	1.2655	-0.0042	0.4835	-0.0033	0.3821
93	44.35	0.01	-0.1367	-0.0225	-0.0256	0.1624	0.0660	1.2610	-0.0036	0.4818	-0.0027	0.3820
94	44.52	0.01	-0.2105	-0.0363	-0.0378	0.1637	0.1796	1.2322	-0.0014	0.4674	-0.0011	0.3793
95	44.72	-0.01	-0.1759	-0.0261	-0.0234	0.1657	0.1354	1.2523	-0.0030	0.4757	-0.0024	0.3830
96	44.90	-0.00	-0.1644	-0.0265	-0.0266	0.1562	0.1685	1.2596	-0.0036	0.4813	-0.0029	0.3821
97	45.09	-0.01	-0.1612	-0.0201	-0.0259	0.1663	0.1572	1.2589	-0.0041	0.4806	-0.0033	0.3816
98	45.25	-0.01	-0.0595	-0.0106	0.0160	0.1840	-0.2134	1.2893	-0.0056	0.4940	-0.0043	0.3837
99	45.44	-0.01	-0.1484	-0.0202	-0.0212	0.1706	0.1451	1.2522	-0.0055	0.4957	-0.0043	0.3836
100	45.53	-0.01	-0.2005	-0.0319	-0.0438	0.1593	0.2184	1.2691	-0.0050	0.4868	-0.0039	0.3820
101	45.66	-0.00	-0.1564	-0.0243	-0.0306	0.1556	0.1958	1.2866	-0.0062	0.4923	-0.0048	0.3827
102	45.96	-0.00	-0.1465	-0.0200	-0.0234	0.1654	0.1701	1.2880	-0.0068	0.4943	-0.0053	0.3838
103	46.15	-0.00	-0.2593	-0.0398	-0.0705	0.1524	0.2716	1.2706	-0.0055	0.4884	-0.0043	0.3828
104	46.31	-0.00	-0.2003	-0.0311	-0.0452	0.1555	0.2256	1.2908	-0.0067	0.4967	-0.0052	0.3848
105	46.49	-0.00	-0.2034	-0.0324	-0.0451	0.1579	0.2221	1.2893	-0.0070	0.4963	-0.0054	0.3850
106	46.65	-0.00	-0.2401	-0.0408	-0.0639	0.1616	0.2722	1.2610	-0.0046	0.4819	-0.0038	0.3821
107	46.83	-0.00	-0.2908	-0.0497	-0.0792	0.1538	0.2726	1.2566	-0.0050	0.4813	-0.0040	0.3830
108	47.02	-0.00	-0.3096	-0.0484	-0.0859	0.1607	0.2901	1.2479	-0.0041	0.4762	-0.0033	0.3816
109	47.18	-0.00	-0.3052	-0.0427	-0.0747	0.1662	0.2867	1.2305	-0.0040	0.4681	-0.0033	0.3804
110	47.35	-0.00	-0.2488	-0.0352	-0.0670	0.1436	0.2736	1.2713	-0.0066	0.4863	-0.0052	0.3825
111	47.53	-0.01	-0.3174	-0.0473	-0.0929	0.1487	0.2923	1.2763	-0.0060	0.4880	-0.0047	0.3824
112	47.71	-0.01	-0.2925	-0.0447	-0.0867	0.1574	0.2368	1.2706	-0.0061	0.4866	-0.0048	0.3814
113	47.88	-0.00	-0.3432	-0.0545	-0.0945	0.1584	0.2747	1.2560	-0.0056	0.4776	-0.0045	0.3802
114	48.06	-0.00	-0.2749	-0.0440	-0.0860	0.1571	0.2357	1.2866	-0.0066	0.4909	-0.0051	0.3816

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PARI MACH REIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 AA 0.96 1.7 0.0 M1=0F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
115	45.23	-0.04	-0.3539	-0.0639	-0.0917	0.1791	0.2530	1.2538	-0.0050	0.4754	-0.0040	0.3792
116	48.40	-0.03	-0.3781	-0.0737	-0.0912	0.1836	0.2476	1.2786	-0.0068	0.4869	-0.0053	0.3808
117	45.57	-0.02	-0.2797	-0.0598	-0.0598	0.1773	0.2140	1.2029	-0.0075	0.4906	-0.0059	0.3824
118	48.75	-0.01	-0.3240	-0.0554	-0.0810	0.1709	0.2501	1.2815	-0.0071	0.4886	-0.0055	0.3813
119	48.90	-0.00	-0.3089	-0.0543	-0.0732	0.1770	0.2388	1.2584	-0.0066	0.4768	-0.0053	0.3773
120	49.09	-0.03	-0.3635	-0.0624	-0.1019	0.1718	0.2745	1.2863	-0.0068	0.4807	-0.0054	0.3794
121	49.26	-0.02	-0.3629	-0.0647	-0.1001	0.1748	0.2759	1.2839	-0.0066	0.4876	-0.0067	0.3799
122	49.42	-0.04	-0.3656	-0.0650	-0.1024	0.1743	0.2811	1.2781	-0.0089	0.4859	-0.0070	0.3802
123	49.61	-0.01	-0.3744	-0.0667	-0.1065	0.1810	0.2845	1.3015	-0.0101	0.4950	-0.0078	0.3806
124	49.79	-0.02	-0.3805	-0.0718	-0.1161	0.1887	0.3050	1.3043	-0.0106	0.4975	-0.0081	0.3815
125	49.98	-0.02	-0.3853	-0.0754	-0.1209	0.1958	0.3138	1.2955	-0.0096	0.4939	-0.0074	0.3813
126	50.13	0.03	-0.3494	-0.0645	-0.1016	0.1843	0.2904	1.3043	-0.0102	0.4971	-0.0078	0.3812
127	50.31	-0.01	-0.3577	-0.0675	-0.1055	0.1887	0.2950	1.3152	-0.0111	0.5028	-0.0085	0.3823
128	50.49	0.04	-0.3663	-0.0514	-0.0917	0.1679	0.2980	1.3006	-0.0096	0.4957	-0.0074	0.3812
129	50.67	0.02	-0.3504	-0.0650	-0.1116	0.1872	0.2956	1.3045	-0.0105	0.4985	-0.0080	0.3807
130	50.84	0.05	-0.3119	-0.0614	-0.0845	0.1969	0.2711	1.3033	-0.0102	0.5124	-0.0106	0.3814
131	50.99	0.04	-0.3314	-0.0575	-0.0982	0.1735	0.2957	1.3183	-0.0118	0.5022	-0.0090	0.3809
132	51.17	0.10	-0.3769	-0.0715	-0.1298	0.1907	0.2930	1.3411	-0.0124	0.5100	-0.0093	0.3803
133	51.36	0.07	-0.3919	-0.0701	-0.1217	0.1749	0.3106	1.3490	-0.0127	0.5113	-0.0095	0.3804
134	51.56	0.10	-0.3797	-0.0705	-0.1172	0.1857	0.3046	1.3492	-0.0136	0.5146	-0.0101	0.3814
135	51.71	0.11	-0.3242	-0.0564	-0.0953	0.1758	0.3131	1.3669	-0.0148	0.5203	-0.0108	0.3807
136	51.88	0.10	-0.3509	-0.0619	-0.1072	0.1764	0.3056	1.3288	-0.0125	0.5045	-0.0094	0.3796
137	52.05	0.11	-0.2579	-0.0427	-0.0662	0.1654	0.2565	1.3434	-0.0139	0.5116	-0.0104	0.3808
138	52.22	0.16	-0.2741	-0.0450	-0.0614	0.1837	0.2970	1.3692	-0.0154	0.5227	-0.0113	0.3818
139	52.46	0.12	-0.1891	-0.0304	-0.0350	0.1691	0.2104	1.3429	-0.0142	0.5095	-0.0106	0.3794
140	52.58	0.10	-0.1694	-0.0264	-0.0230	0.1667	0.2021	1.3678	-0.0155	0.5215	-0.0113	0.3813
141	52.75	0.14	-0.1646	-0.0261	-0.0358	0.1567	0.2177	1.3819	-0.0161	0.5278	-0.0117	0.3819
142	52.90	0.12	-0.1470	-0.0247	-0.0263	0.1682	0.1926	1.3880	-0.0173	0.5297	-0.0125	0.3816
143	53.05	0.09	-0.1360	-0.0216	-0.0258	0.1596	0.1886	1.3717	-0.0165	0.5228	-0.0120	0.3812
144	53.20	0.10	-0.1666	-0.0260	-0.0328	0.1583	0.1971	1.3629	-0.0166	0.5199	-0.0122	0.3815
145	53.34	0.07	-0.0932	-0.0162	-0.0112	0.1436	0.1134	1.3889	-0.0179	0.5305	-0.0129	0.3819
146	53.56	0.09	-0.0693	-0.0126	0.0031	0.1822	-0.0449	1.4008	-0.0189	0.5346	-0.0135	0.3816
147	53.72	0.10	-0.0734	-0.0137	-0.0034	0.1737	0.0432	1.3948	-0.0189	0.5335	-0.0136	0.3825
148	53.88	0.09	-0.0764	-0.0057	0.0135	0.1646	-0.3456	1.4081	-0.0195	0.5386	-0.0139	0.3825
149	54.01	0.07	-0.0575	-0.0103	0.0004	0.1630	-0.0856	1.4096	-0.0201	0.5398	-0.0143	0.3830
150	54.17	0.08	-0.0649	-0.0103	0.0038	0.1563	-0.0571	1.3869	-0.0188	0.5308	-0.0136	0.3822
151	54.34	0.06	-0.0217	-0.0034	0.0254	0.1643	-1.2261	1.4097	-0.0203	0.5382	-0.0144	0.3818
152	54.49	0.08	-0.0456	-0.0063	0.0130	0.1382	-0.2838	1.3875	-0.0191	0.5304	-0.0138	0.3823
153	54.67	0.02	-0.0398	-0.0051	0.0178	0.1397	-0.5290	1.3993	-0.0195	0.5385	-0.0140	0.3820
154	54.81	0.07	-0.0371	-0.0052	0.0187	0.1402	-0.5030	1.4161	-0.0204	0.5412	-0.0148	0.3827
155	54.96	0.02	-0.0265	-0.0050	0.0225	0.1766	-0.7941	1.4105	-0.0210	0.5410	-0.0149	0.3836
156	55.11	0.06	-0.0320	-0.0044	0.0207	0.1401	-0.6333	1.4033	-0.0209	0.5343	-0.0149	0.3822
157	55.26	0.07	-0.0345	-0.0014	0.0253	0.0522	-0.7326	1.3956	-0.0201	0.5290	-0.0145	0.3819
158	55.42	0.05	-0.0379	-0.0009	0.0222	0.1214	-0.5950	1.4091	-0.0217	0.5405	-0.0154	0.3836
159	55.57	0.09	-0.0120	0.0003	0.0356	-0.0250	-2.9678	1.4120	-0.0218	0.5410	-0.0155	0.3846
160	55.73	0.05	-0.0207	-0.0020	0.0321	0.0967	-1.5508	1.4210	-0.0228	0.5459	-0.0161	0.3842

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ AA 3.50 1.7 0.0 BLADE13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
161	55.30	0.00	0.0345	0.0207	0.0403	0.1945	11.1745	1.4270	-0.0230	0.5462	-0.0161	0.3828
162	54.05	0.05	-0.0100	0.0024	0.0341	-0.2902	-3.4024	1.4224	-0.0222	0.5440	-0.0156	0.3839
163	55.21	0.05	0.0104	0.0060	0.0351	0.3552	3.2589	1.4343	-0.0235	0.5514	-0.0164	0.3844
164	54.35	0.04	0.0046	0.0031	0.0338	0.4743	10.5554	1.4372	-0.0237	0.5537	-0.0165	0.3849
165	55.50	0.06	0.0142	0.0060	0.0368	0.4228	3.8576	1.4331	-0.0244	0.5512	-0.0171	0.3846
166	54.46	0.04	0.0060	0.0040	0.0354	1.0005	9.0957	1.4213	-0.0238	0.5454	-0.0166	0.3839
167	55.46	0.06	0.0044	0.0043	0.0537	1.0005	10.9533	1.4435	-0.0247	0.5530	-0.0171	0.3831
168	54.96	0.03	0.0041	0.0064	0.0542	0.7405	7.1434	1.4376	-0.0246	0.5511	-0.0173	0.3833
169	57.12	0.05	0.0104	0.0052	0.0580	0.4773	5.3197	1.4469	-0.0256	0.5566	-0.0177	0.3852
170	57.28	0.04	0.0026	0.0060	0.0563	2.5348	22.4176	1.4629	-0.0272	0.5607	-0.0186	0.3833
171	57.63	0.05	-0.0101	0.0038	0.0588	-0.3754	-5.3035	1.4512	-0.0270	0.5568	-0.0186	0.3837
172	57.57	0.03	-0.0223	0.0031	0.0562	-0.1391	-2.4293	1.4337	-0.0256	0.5471	-0.0180	0.3816
173	57.71	0.03	-0.0145	0.0040	0.0607	-1.0572	-13.4875	1.4450	-0.0266	0.5513	-0.0183	0.3815
174	57.67	0.04	-0.0079	0.0053	0.0622	-0.6477	-8.1706	1.4469	-0.0267	0.5525	-0.0185	0.3824
175	56.00	0.03	-0.0128	0.0042	0.0617	-0.3283	-4.8122	1.4421	-0.0264	0.5504	-0.0186	0.3816
176	58.15	0.01	-0.0040	0.0063	0.0636	-0.5378	-8.1134	1.4511	-0.0276	0.5551	-0.0192	0.3825
177	58.36	-0.00	-0.0215	0.0013	0.0587	-0.4845	-2.3584	1.4715	-0.0280	0.5640	-0.0191	0.3833
178	58.34	-0.00	-0.0326	-0.0006	0.0649	0.0184	-1.3725	1.4667	-0.0280	0.5615	-0.0191	0.3823
179	55.34	-0.01	-0.0155	-0.0022	0.0408	0.0516	-1.0552	1.4663	-0.0280	0.5601	-0.0191	0.3825

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) — 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST 3 ART MACH NAL= .901 CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 AA 0.90 1.7 0.0 BL=0F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CN3	CB3	XCPF3	YCPF3	CNF4	CN4	CB4	XCPF4	YCPF4
23	29.29	0.01	0.1170	9.9999	0.0228	9.9999	0.1946	0.8361	0.0218	0.3440	0.0261	0.4115
24	29.76	0.00	0.1150	9.9999	0.0217	9.9999	0.1873	0.8223	0.0225	0.3376	0.0274	0.4105
25	29.44	0.02	0.1160	9.9999	0.0199	9.9999	0.1752	0.8451	0.0215	0.3455	0.0255	0.4089
26	29.76	0.00	0.1173	9.9999	0.0221	9.9999	0.1883	0.8516	0.0206	0.3485	0.0245	0.4094
27	29.09	0.01	0.1151	9.9999	0.0210	9.9999	0.1807	0.8668	0.0204	0.3545	0.0236	0.4091
28	29.38	0.00	0.1162	9.9999	0.0273	9.9999	0.2114	0.8650	0.0250	0.3533	0.0232	0.4085
29	29.68	0.02	0.1150	9.9999	0.0255	9.9999	0.2038	0.8785	0.0196	0.3580	0.0223	0.4075
30	29.95	0.02	0.1168	9.9999	0.0251	9.9999	0.1983	0.8908	0.0187	0.3626	0.0210	0.4070
31	30.29	0.01	0.1214	9.9999	0.0234	9.9999	0.1927	0.9060	0.0180	0.3673	0.0199	0.4054
32	30.52	0.00	0.1348	9.9999	0.0269	9.9999	0.2151	0.8923	0.0187	0.3634	0.0210	0.4072
33	30.77	0.01	0.1241	9.9999	0.0236	9.9999	0.1901	0.9059	0.0182	0.3677	0.0201	0.4059
34	31.07	0.00	0.1181	9.9999	0.0225	9.9999	0.1937	0.9076	0.0177	0.3685	0.0195	0.4060
35	31.39	0.00	0.1352	9.9999	0.0323	9.9999	0.2319	0.9151	0.0177	0.3707	0.0196	0.4051
36	31.61	0.00	0.1241	9.9999	0.0250	9.9999	0.2170	0.9212	0.0173	0.3716	0.0188	0.4034
37	31.89	0.00	0.1302	9.9999	0.0316	9.9999	0.2288	0.9269	0.0177	0.3727	0.0191	0.4021
38	32.18	0.00	0.1213	9.9999	0.0268	9.9999	0.2041	0.9228	0.0173	0.3712	0.0188	0.4023
39	32.41	0.00	0.1297	9.9999	0.0275	9.9999	0.2171	0.9350	0.0170	0.3758	0.0182	0.4020
40	32.68	0.00	0.1194	9.9999	0.0266	9.9999	0.2052	0.9440	0.0167	0.3777	0.0177	0.4002
41	32.98	0.00	0.1262	9.9999	0.0253	9.9999	0.2122	0.9568	0.0163	0.3809	0.0171	0.3990
42	33.20	0.00	0.1194	9.9999	0.0267	9.9999	0.2077	0.9608	0.0156	0.3822	0.0163	0.3978
43	33.59	0.00	0.1196	9.9999	0.0269	9.9999	0.2143	0.9700	0.0151	0.3856	0.0156	0.3975
44	33.70	0.01	0.1196	9.9999	0.0264	9.9999	0.2117	0.9744	0.0153	0.3865	0.0157	0.3966
45	33.99	0.00	0.1111	9.9999	0.0222	9.9999	0.1999	0.9836	0.0146	0.3891	0.0149	0.3956
46	34.18	0.00	0.1019	9.9999	0.0166	9.9999	0.1823	1.0007	0.0130	0.3961	0.0130	0.3958
47	34.45	0.00	0.1030	9.9999	0.0196	9.9999	0.1948	1.0085	0.0122	0.3989	0.0121	0.3956
48	34.68	0.00	0.1032	9.9999	0.0194	9.9999	0.1878	1.0069	0.0123	0.3989	0.0122	0.3962
49	34.91	0.02	0.1121	9.9999	0.0216	9.9999	0.2062	1.0240	0.0139	0.4063	0.0107	0.3967
50	35.17	0.03	0.1019	9.9999	0.0163	9.9999	0.1745	1.0286	0.0113	0.4065	0.0110	0.3951
51	35.42	0.03	0.1052	9.9999	0.0139	9.9999	0.1631	1.0318	0.0110	0.4081	0.0107	0.3955
52	35.66	0.03	0.1043	9.9999	0.0168	9.9999	0.1661	1.0425	0.0102	0.4119	0.0098	0.3951
53	35.89	0.02	0.1064	9.9999	0.0132	9.9999	0.1546	1.0450	0.0094	0.4128	0.0089	0.3951
54	36.12	0.03	0.1052	9.9999	0.0132	9.9999	0.1546	1.0487	0.0087	0.4222	0.0082	0.3951
55	36.35	0.01	0.1003	9.9999	0.0134	9.9999	0.1564	1.0704	0.0081	0.4226	0.0076	0.3948
56	36.59	0.01	0.1059	9.9999	0.0139	9.9999	0.1257	1.0705	0.0079	0.4255	0.0073	0.3953
57	36.83	0.01	0.1093	9.9999	0.0073	9.9999	0.1129	1.0692	0.0079	0.4216	0.0074	0.3943
58	37.06	0.01	0.1059	9.9999	0.0053	9.9999	0.0796	1.0679	0.0075	0.4219	0.0070	0.3951
59	37.30	0.01	0.1076	9.9999	0.0161	9.9999	0.1601	1.0804	0.0093	0.4306	0.0058	0.3963
60	37.53	0.02	0.1047	9.9999	0.0096	9.9999	0.1130	1.1035	0.0049	0.4379	0.0044	0.3968
61	37.78	0.02	0.1039	9.9999	0.0125	9.9999	0.1484	1.1113	0.0040	0.4401	0.0036	0.3960
62	38.00	0.01	0.1025	9.9999	0.0126	9.9999	0.1497	1.1112	0.0043	0.4408	0.0039	0.3967
63	38.25	0.02	0.1073	9.9999	0.0107	9.9999	0.1387	1.1248	0.0028	0.4466	0.0025	0.3989
64	38.47	0.03	0.1040	9.9999	0.0106	9.9999	0.1407	1.1093	0.0036	0.4413	0.0032	0.3978
65	38.70	-0.01	0.0981	9.9999	0.0127	9.9999	0.1580	1.1342	0.0017	0.4531	0.0015	0.3994
66	38.92	0.03	0.0967	9.9999	0.0151	9.9999	0.1738	1.1282	0.0017	0.4502	0.0015	0.3991
67	39.13	0.02	0.0934	9.9999	0.0161	9.9999	0.1882	1.1423	0.0010	0.4556	0.0009	0.3988
68	39.45	0.03	0.0954	9.9999	0.0154	9.9999	0.1846	1.1363	0.0010	0.4542	0.0009	0.3997

PAGE 3 OF 3
SHEET 2 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST	RABT	MACH	REYNOLDS	PHI	CONF.	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	90	0.950	1.7	0.0	91=OF13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
69	39.69	0.04	0.0615	9.9999	0.0136	9.9999	0.1688	1.1224	0.0020	0.4663	0.0418	0.3994
70	39.47	0.04	0.0616	9.9999	0.0136	9.9999	0.2073	1.1365	0.0006	0.4542	0.0005	0.3996
71	40.11	0.04	0.0621	9.9999	0.0136	9.9999	0.1793	1.1301	0.0004	0.4554	0.0004	0.4001
72	40.33	0.04	0.0749	9.9999	0.0116	9.9999	0.1556	1.1521	-0.0007	0.4615	-0.0006	0.4005
73	40.52	0.02	0.0596	9.9999	0.0096	9.9999	0.1386	1.1693	-0.0019	0.4700	-0.0016	0.4020
74	40.70	-0.01	0.0742	9.9999	0.0111	9.9999	0.1544	1.1755	-0.0025	0.4716	-0.0021	0.4010
75	40.90	0.01	0.0873	9.9999	0.0096	9.9999	0.1326	1.1557	-0.0018	0.4662	-0.0016	0.4017
76	41.10	0.02	0.0871	9.9999	0.0095	9.9999	0.1422	1.1699	-0.0023	0.4703	-0.0020	0.4020
77	41.30	-0.02	0.0842	9.9999	0.0152	9.9999	0.1891	1.1915	-0.0043	0.4810	-0.0036	0.4036
78	41.56	0.00	0.0775	9.9999	0.0143	9.9999	0.1849	1.1842	-0.0040	0.4773	-0.0034	0.4030
79	41.77	0.02	0.0854	9.9999	0.0184	9.9999	0.2056	1.1981	-0.0049	0.4842	-0.0041	0.4041
80	41.97	-0.01	0.0749	9.9999	0.0142	9.9999	0.1841	1.2106	-0.0058	0.4903	-0.0048	0.4050
81	42.16	-0.01	0.0782	9.9999	0.0139	9.9999	0.1815	1.2076	-0.0059	0.4883	-0.0049	0.4044
82	42.37	0.01	0.0801	9.9999	0.0208	9.9999	0.2362	1.2126	-0.0059	0.4911	-0.0049	0.4050
83	42.55	0.02	0.0818	9.9999	0.0187	9.9999	0.2343	1.2224	-0.0067	0.4961	-0.0055	0.4044
84	42.73	0.03	0.0862	9.9999	0.0175	9.9999	0.2078	1.2035	-0.0059	0.4873	-0.0049	0.4049
85	42.91	0.01	0.0826	9.9999	0.0181	9.9999	0.2136	1.2160	-0.0067	0.4931	-0.0055	0.4055
86	43.09	0.03	0.0841	9.9999	0.0192	9.9999	0.2241	1.2221	-0.0069	0.4963	-0.0057	0.4061
87	43.27	-0.02	0.0815	9.9999	0.0177	9.9999	0.2165	1.2226	-0.0075	0.4963	-0.0061	0.4060
88	43.45	0.03	0.0844	9.9999	0.0219	9.9999	0.2486	1.2241	-0.0080	0.4974	-0.0065	0.4064
89	43.66	0.03	0.0838	9.9999	0.0197	9.9999	0.2305	1.2040	-0.0069	0.4895	-0.0057	0.4066
90	43.82	-0.00	0.0845	9.9999	0.0256	9.9999	0.2800	1.2039	-0.0067	0.4906	-0.0056	0.4075
91	43.97	-0.01	0.0916	9.9999	0.0249	9.9999	0.2557	1.1999	-0.0069	0.4898	-0.0056	0.4080
92	44.17	-0.00	0.0936	9.9999	0.0243	9.9999	0.2602	1.2139	-0.0077	0.4967	-0.0064	0.4076
93	44.35	0.01	0.0824	9.9999	0.0188	9.9999	0.2256	1.2248	-0.0083	0.5004	-0.0068	0.4086
94	44.52	0.00	0.0842	9.9999	0.0193	9.9999	0.2290	1.2374	-0.0095	0.5066	-0.0077	0.4094
95	44.72	-0.01	0.0915	9.9999	0.0188	9.9999	0.2302	1.2436	-0.0096	0.5091	-0.0079	0.4094
96	44.90	-0.00	0.0918	9.9999	0.0186	9.9999	0.2253	1.2358	-0.0094	0.5050	-0.0076	0.4086
97	45.09	-0.01	0.0918	9.9999	0.0199	9.9999	0.2437	1.2521	-0.0106	0.5135	-0.0086	0.4101
98	45.29	-0.01	0.0932	9.9999	0.0252	9.9999	0.2620	1.1943	-0.0079	0.4913	-0.0066	0.4097
99	45.48	-0.01	0.0946	9.9999	0.0251	9.9999	0.2648	1.2427	-0.0101	0.5101	-0.0081	0.4105
100	45.63	-0.01	0.0934	9.9999	0.0189	9.9999	0.2236	1.2459	-0.0103	0.5114	-0.0083	0.4105
101	45.84	-0.00	0.0956	9.9999	0.0211	9.9999	0.2406	1.2491	-0.0109	0.5130	-0.0087	0.4107
102	45.96	-0.03	0.0969	9.9999	0.0206	9.9999	0.2484	1.2363	-0.0105	0.5048	-0.0085	0.4109
103	46.15	-0.03	0.0971	9.9999	0.0135	9.9999	0.2036	1.2757	-0.0125	0.5251	-0.0098	0.4116
104	46.31	-0.05	0.0977	9.9999	0.0175	9.9999	0.2249	1.2712	-0.0125	0.5236	-0.0095	0.4119
105	46.49	-0.03	0.0976	9.9999	0.0171	9.9999	0.2235	1.2566	-0.0116	0.5166	-0.0090	0.4121
106	46.65	-0.05	0.0976	9.9999	0.0134	9.9999	0.2048	1.2490	-0.0134	0.5316	-0.0108	0.4124
107	46.83	-0.03	0.0966	9.9999	0.0122	9.9999	0.1875	1.2769	-0.0140	0.5261	-0.0110	0.4120
108	47.02	-0.03	0.0976	9.9999	0.0100	9.9999	0.1621	1.2550	-0.0126	0.5164	-0.0102	0.4131
109	47.18	-0.05	0.0971	9.9999	0.0063	9.9999	0.1139	1.2583	-0.0134	0.5152	-0.0107	0.4126
110	47.35	-0.04	0.0974	9.9999	0.0120	9.9999	0.1741	1.2612	-0.0129	0.5205	-0.0102	0.4127
111	47.53	-0.07	0.0990	9.9999	0.0099	9.9999	0.1636	1.2977	-0.0149	0.5357	-0.0115	0.4128
112	47.71	-0.03	0.0978	9.9999	0.0120	9.9999	0.1709	1.2808	-0.0145	0.5297	-0.0113	0.4136
113	47.88	-0.04	0.0968	9.9999	0.0105	9.9999	0.1625	1.2784	-0.0149	0.5291	-0.0117	0.4145
114	48.04	-0.04	0.0939	9.9999	0.0097	9.9999	0.1535	1.2886	-0.0151	0.5334	-0.0117	0.4139

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/10**6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 FR 0.90 1.7 0.0 01=0.13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CM3	XCPF3	YCPF3	CNF4	CM4	CM4	XCPF4	YCPF4
115	49.24	-0.03	0.0542	9.9999	0.0060	9.9999	0.1111	1.2900	-0.0148	0.5218	-0.0118	0.4141
116	48.40	-0.03	0.0439	9.9999	0.0097	9.9999	0.1532	1.2975	-0.0166	0.5367	-0.0130	0.4136
117	48.57	-0.05	0.0564	9.9999	0.0073	9.9999	0.1256	1.2926	-0.0159	0.5358	-0.0123	0.4145
118	48.75	-0.03	0.0499	9.9999	0.0033	9.9999	0.0677	1.2911	-0.0159	0.5357	-0.0123	0.4149
119	48.90	-0.05	0.0545	9.9999	0.0110	9.9999	0.1818	1.2918	-0.0166	0.5227	-0.0116	0.4144
120	49.09	-0.03	0.0518	9.9999	0.0056	9.9999	0.1147	1.2854	-0.0152	0.5256	-0.0120	0.4153
121	49.26	-0.02	0.0529	9.9999	0.0062	9.9999	0.1144	1.2821	-0.0149	0.5223	-0.0118	0.4139
122	49.42	-0.04	0.0536	9.9999	0.0056	9.9999	0.1040	1.2864	-0.0146	0.5171	-0.0119	0.4147
123	49.61	-0.01	0.0543	9.9999	0.0067	9.9999	0.1236	1.2886	-0.0157	0.5257	-0.0124	0.4144
124	49.79	-0.02	0.0570	9.9999	0.0076	9.9999	0.1340	1.2913	-0.0145	0.5096	-0.0118	0.4139
125	49.92	-0.02	0.0543	9.9999	0.0094	9.9999	0.1620	1.2892	-0.0151	0.5133	-0.0122	0.4142
126	50.13	0.03	0.0570	9.9999	0.0074	9.9999	0.1340	1.2961	-0.0152	0.5205	-0.0121	0.4144
127	50.31	-0.01	0.0597	9.9999	0.0102	9.9999	0.1717	1.2984	-0.0149	0.5179	-0.0119	0.4147
128	50.49	0.00	0.0602	9.9999	0.0214	9.9999	0.2603	1.2804	-0.0178	0.5314	-0.0139	0.4149
129	50.67	0.00	0.0592	9.9999	0.0201	9.9999	0.2435	1.2977	-0.0180	0.5386	-0.0139	0.4151
130	50.89	0.02	0.0915	9.9999	0.0203	9.9999	0.2821	1.2819	-0.0169	0.5315	-0.0132	0.4146
131	50.99	0.00	0.0602	9.9999	0.0226	9.9999	0.2736	1.2963	-0.0190	0.5377	-0.0142	0.4148
132	51.17	0.01	0.1057	9.9999	0.0271	9.9999	0.2833	1.3190	-0.0199	0.5478	-0.0151	0.4153
133	51.36	0.02	0.0648	9.9999	0.0233	9.9999	0.2767	1.3111	-0.0196	0.5494	-0.0148	0.4152
134	51.52	0.01	0.0600	9.9999	0.0262	9.9999	0.2802	1.2912	-0.0179	0.5357	-0.0139	0.4149
135	51.71	0.01	0.0609	9.9999	0.0272	9.9999	0.3062	1.2878	-0.0186	0.5236	-0.0141	0.4131
136	51.88	0.01	0.0595	9.9999	0.0282	9.9999	0.3175	1.2863	-0.0185	0.5321	-0.0144	0.4130
137	52.05	0.01	0.0595	9.9999	0.0327	9.9999	0.3290	1.3133	-0.0197	0.5419	-0.0150	0.4126
138	52.22	0.02	0.0591	9.9999	0.0292	9.9999	0.3139	1.2873	-0.0183	0.5310	-0.0142	0.4125
139	52.41	0.02	0.1029	9.9999	0.0335	9.9999	0.3285	1.3159	-0.0209	0.5412	-0.0159	0.4113
140	52.58	0.01	0.0594	9.9999	0.0316	9.9999	0.3215	1.3237	-0.0210	0.5461	-0.0159	0.4126
141	52.75	0.02	0.0572	9.9999	0.0313	9.9999	0.3223	1.3212	-0.0208	0.5446	-0.0158	0.4122
142	52.90	0.02	0.0914	9.9999	0.0288	9.9999	0.3136	1.3278	-0.0216	0.5467	-0.0164	0.4118
143	53.05	0.03	0.0591	9.9999	0.0267	9.9999	0.3139	1.3152	-0.0211	0.5428	-0.0161	0.4127
144	53.24	0.01	0.0594	9.9999	0.0278	9.9999	0.3220	1.3449	-0.0222	0.5537	-0.0165	0.4117
145	53.39	0.03	0.0614	9.9999	0.0249	9.9999	0.3062	1.3206	-0.0215	0.5446	-0.0163	0.4124
146	53.56	0.03	0.0620	9.9999	0.0258	9.9999	0.3220	1.3207	-0.0215	0.5457	-0.0163	0.4132
147	53.74	0.01	0.1021	9.9999	0.0322	9.9999	0.3226	1.3301	-0.0219	0.5480	-0.0165	0.4120
148	53.88	0.04	0.0593	9.9999	0.0287	9.9999	0.3217	1.3240	-0.0221	0.5466	-0.0167	0.4129
149	54.01	0.02	0.0634	9.9999	0.0293	9.9999	0.3140	1.3319	-0.0225	0.5497	-0.0169	0.4127
150	54.17	0.04	0.0607	9.9999	0.0285	9.9999	0.3145	1.3349	-0.0224	0.5517	-0.0168	0.4133
151	54.34	0.03	0.1028	9.9999	0.0334	9.9999	0.3253	1.3271	-0.0220	0.5465	-0.0166	0.4134
152	54.49	0.04	0.0610	9.9999	0.0324	9.9999	0.3296	1.3303	-0.0225	0.5491	-0.0169	0.4128
153	54.67	0.04	0.0658	9.9999	0.0257	9.9999	0.3011	1.3352	-0.0233	0.5517	-0.0175	0.4132
154	54.81	0.04	0.0643	9.9999	0.0250	9.9999	0.3136	1.3559	-0.0247	0.5598	-0.0182	0.4128
155	54.96	0.03	0.1042	9.9999	0.0329	9.9999	0.3267	1.3405	-0.0237	0.5543	-0.0177	0.4136
156	55.11	0.03	0.0619	9.9999	0.0274	9.9999	0.3016	1.3362	-0.0237	0.5529	-0.0178	0.4138
157	55.28	0.04	0.0615	9.9999	0.0268	9.9999	0.2993	1.3479	-0.0248	0.5588	-0.0186	0.4126
158	55.42	0.05	0.0642	9.9999	0.0266	9.9999	0.2923	1.3617	-0.0259	0.5623	-0.0190	0.4129
159	55.57	0.04	0.0635	9.9999	0.0257	9.9999	0.3179	1.3490	-0.0245	0.5572	-0.0185	0.4130
160	55.73	0.03	0.0656	9.9999	0.0266	9.9999	0.2875	1.3491	-0.0253	0.5580	-0.0188	0.4136

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 6 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REINO	PHI	CONF	L	DEL1	DEL2	DEL3	DELA	TRANSITION
7	66	0.90	1.7	0.0	81<0F13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CY3	XCPF3	YCPF3	CNF4	CM4	CY4	XCPF4	YCPF4
161	55.96	0.06	0.6548	9.9993	0.0270	9.9959	0.3015	1.3508	-0.0257	0.5576	-0.0191	0.4128
162	55.75	0.05	0.6527	9.9999	0.0245	9.9999	0.2971	1.3747	-0.0273	0.5674	-0.0199	0.4128
163	55.81	0.05	0.6535	9.9999	0.0272	9.9999	0.3136	1.3559	-0.0262	0.5608	-0.0199	0.4136
164	55.85	0.05	0.6542	9.9999	0.0269	9.9999	0.2956	1.3592	-0.0274	0.5617	-0.0202	0.4132
165	55.50	0.06	0.6564	9.9999	0.0262	9.9999	0.2878	1.3567	-0.0278	0.5591	-0.0205	0.4121
166	55.80	0.04	0.6542	9.9999	0.0285	9.9999	0.3100	1.3615	-0.0287	0.5616	-0.0207	0.4125
167	55.80	0.05	0.6573	9.9999	0.0220	9.9999	0.2866	1.3725	-0.0286	0.5647	-0.0209	0.4114
168	55.79	0.03	0.6573	9.9999	0.0220	9.9999	0.2966	1.3726	-0.0289	0.5662	-0.0211	0.4125
169	57.16	0.05	0.6527	9.9999	0.0237	9.9999	0.2866	1.3570	-0.0263	0.5606	-0.0209	0.4131
170	57.28	0.04	0.6560	9.9999	0.0224	9.9999	0.2901	1.3825	-0.0300	0.5711	-0.0217	0.4131
171	57.24	0.05	0.6528	9.9999	0.0238	9.9999	0.3037	1.3859	-0.0297	0.5726	-0.0215	0.4132
172	57.57	0.03	0.6744	9.9999	0.0158	9.9999	0.2811	1.3907	-0.0302	0.5736	-0.0217	0.4125
173	57.71	0.04	0.6833	9.9999	0.0263	9.9999	0.3136	1.3726	-0.0291	0.5653	-0.0212	0.4119
174	57.97	0.04	0.6745	9.9999	0.0256	9.9999	0.2921	1.3871	-0.0299	0.5703	-0.0217	0.4127
175	58.00	0.03	0.6834	9.9999	0.0267	9.9999	0.3136	1.3869	-0.0303	0.5720	-0.0219	0.4125
176	58.15	0.01	0.6736	9.9999	0.0225	9.9999	0.3063	1.3748	-0.0303	0.5663	-0.0221	0.4119
177	58.49	-0.00	0.6854	9.9999	0.0179	9.9999	0.2736	1.3859	-0.0304	0.5702	-0.0223	0.4115
178	54.34	-0.05	0.7003	9.9999	0.0194	9.9999	0.2955	1.3831	-0.0313	0.5708	-0.0227	0.4127
179	58.36	-0.07	0.6973	9.9999	0.0205	9.9999	0.2910	1.3783	-0.0310	0.5694	-0.0225	0.4132

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART ALPHA ALPHA0. PHI CONF. L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 67 1.00 1.7 0.0 0.0313 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.71	-0.00	-1.1195	3.2793	0.0250	-0.2038	-0.0001	0.3830	0.1346	0.2444	-2.5311
2	-5.71	0.01	-1.1600	3.3555	0.0432	-0.2192	-0.0001	0.3812	0.1350	0.2442	-2.9420
3	-5.72	0.02	-1.1745	3.3855	-0.0305	-0.1522	-0.0003	0.3784	0.1303	0.2461	-2.8724
4	-4.29	0.01	-0.7941	2.0777	0.0159	-0.2158	0.0004	0.3845	0.1142	0.2693	-2.9551
5	-2.84	0.02	-0.3439	1.0392	0.0808	-0.1987	0.0011	0.3872	0.1122	0.2750	-3.0238
6	-0.45	0.01	-0.0242	0.1394	0.0694	-0.3075	0.0016	0.3920	0.1042	0.2878	-4.7699
7	1.97	0.01	0.3143	-0.8115	0.1458	-0.2545	0.0020	0.3889	0.1078	0.2811	-2.5805
8	3.56	0.01	0.7144	-1.9101	0.0971	-0.2744	0.0025	0.3968	0.1176	0.2790	-2.6949
9	5.09	0.01	1.1008	-3.0387	0.0694	-0.2252	0.0039	0.4138	0.1395	0.2743	-2.7587
10	7.46	0.01	1.6136	-4.2964	0.0700	-0.1659	-0.0027	0.4147	0.1649	0.2498	-2.8005
11	9.93	0.01	1.9395	-5.2771	0.0294	-0.1826	-0.0041	0.4199	0.1843	0.2356	-2.7330
12	11.47	0.02	2.3669	-6.3270	0.1156	-0.2546	0.0111	0.4309	0.2005	0.2243	-2.6982
13	13.99	0.01	2.7697	-7.4253	-0.0055	-0.1206	0.0115	0.4272	0.2159	0.2073	-2.6247
14	15.49	0.00	3.0628	-7.4703	-0.0420	-0.0969	0.0063	0.4285	0.2053	0.1832	-2.4689
15	17.48	0.00	3.3594	-7.6451	-0.0484	-0.1193	-0.0171	0.4398	0.2790	0.1598	-2.3342
16	19.46	0.01	3.6394	-7.6726	0.0137	-0.3067	-0.0890	0.4603	0.3168	0.1436	-2.1495
17	21.42	0.01	3.8525	-7.6711	0.1257	-0.5223	-0.1726	0.4850	0.3552	0.1298	-1.8789
18	23.40	0.01	4.2593	-8.0999	0.1499	-0.6422	-0.1944	0.4763	0.3762	0.1002	-1.5823
19	25.36	0.00	4.5599	-8.4287	0.0750	-0.6536	-0.1279	0.5010	0.4147	0.0862	-1.2865
20	27.40	0.00	5.1791	-9.0806	1.0012	-2.2514	0.2600	0.5074	0.4403	0.0670	-1.0558
21	25.33	0.00	5.4197	-9.4398	1.0388	-2.3042	0.2572	0.5335	0.4436	0.0568	-1.0046
22	24.36	0.00	5.4799	-9.4584	0.9733	-2.1241	0.2572	0.4975	0.4456	0.0518	-0.9963
23	23.36	0.01	5.4226	-9.4653	1.1261	-2.5272	0.2623	0.4976	0.4471	0.0504	-0.9709
24	22.53	0.00	5.4051	-9.5454	1.1451	-2.4924	0.3377	0.5159	0.4475	0.0683	-1.0071
25	20.57	0.00	5.4564	-9.4857	1.0344	-2.1659	0.2519	0.4923	0.4448	0.0474	-0.9702
26	19.20	0.01	5.4223	-9.4030	0.9139	-2.0126	0.2337	0.4967	0.4444	0.0522	-0.9275
27	29.50	0.01	5.4028	-9.3126	0.9219	-2.0546	0.2403	0.4826	0.4424	0.0401	-0.9146
28	24.79	0.01	5.4454	-9.4960	0.9702	-2.1643	0.2638	0.4853	0.4466	0.0384	-0.9245
29	30.04	0.00	5.4843	-9.2032	1.0333	-2.2013	0.2418	0.4803	0.4451	0.0352	-0.8695
30	30.36	0.00	5.4141	-9.1902	1.0510	-2.3358	0.2306	0.4869	0.4487	0.0381	-0.8372
31	30.69	0.01	5.4263	-9.1880	0.9682	-2.2638	0.2132	0.4878	0.4538	0.0339	-0.8335
32	30.69	0.00	5.4129	-9.1092	1.1042	-2.5770	0.2806	0.4800	0.4527	0.0273	-0.8170
33	31.18	0.00	5.4364	-9.0711	0.8488	-1.9190	0.1445	0.4802	0.4523	0.0279	-0.8023
34	31.49	0.00	5.4534	-9.1005	0.8493	-1.9510	0.0523	0.4785	0.4539	0.0246	-0.7935
35	31.73	0.00	5.4543	-9.0984	1.0557	-2.4352	0.2199	0.4853	0.4570	0.0282	-0.7833
36	32.01	0.00	5.4240	-9.1104	0.8285	-1.9192	0.0035	0.4814	0.4546	0.0227	-0.7715
37	32.26	0.00	5.4274	-9.1788	0.8352	-1.9158	0.0191	0.4715	0.4574	0.0141	-0.7627
38	32.54	0.00	5.4194	-9.1690	0.8701	-1.9624	-0.0087	0.4726	0.4594	0.0132	-0.7625
39	32.69	0.00	5.4302	-9.2572	0.8955	-1.9297	0.0908	0.4668	0.4582	0.0086	-0.7308
40	33.00	0.00	5.4264	-9.2865	0.8913	-1.9343	-0.0581	0.4673	0.4588	0.0045	-0.7013
41	33.32	0.00	5.4259	-9.2574	0.8710	-1.9337	0.0101	0.4532	0.4544	-0.0012	-0.6638
42	33.58	0.00	7.6522	-9.5923	0.1591	-0.0111	-0.0335	0.4574	0.4604	-0.0030	-0.6512
43	33.82	0.00	7.6563	-9.5923	0.2709	-0.0029	0.1659	0.4494	0.4552	-0.0058	-0.6152
44	34.08	0.00	7.7306	-9.6910	0.2307	-0.3420	0.0174	0.4569	0.4607	-0.0038	-0.6465
45	34.31	0.01	7.6538	-9.6997	0.0155	-0.2443	-0.0083	0.4491	0.4596	-0.0105	-0.6255
46	34.58	0.00	7.6717	-9.6917	0.2120	-0.2382	0.0306	0.4532	0.4615	-0.0083	-0.6159

PAGE 1 OF 3
SHEET 2 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | FANT 67 1.00 1.67 | MACH .8&10=6 | ZUI 0.0 | CONF nl=0P13 | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DELA 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	35.06	0.02	7.2825	-0.0314	0.1963	-0.0102	0.0179	0.4451	0.4545	-0.0144	-0.6104
48	35.30	0.00	7.2151	-0.0417	-0.5357	-0.0030	0.1745	0.4490	0.4588	-0.0178	-0.5804
49	35.32	0.05	7.2144	-0.0272	-0.5354	-0.0298	0.1502	0.4503	0.4583	-0.0180	-0.5785
50	35.55	0.02	7.2736	-0.0525	0.3114	-0.3429	0.0825	0.4162	0.4587	-0.0405	-0.5628
51	35.77	0.04	7.2811	-0.0351	0.6024	-1.0138	0.1876	0.4470	0.4738	-0.0268	-0.5593
52	36.04	0.01	-0.0764	-0.7507	0.1804	0.0089	0.0012	0.4132	0.4647	-0.0515	-0.5898
53	36.27	0.03	6.2735	-0.5342	0.4466	-0.5983	0.1434	0.4295	0.4651	-0.0336	-0.5659
54	36.50	0.02	6.3149	-0.5290	0.3389	-0.3461	0.0300	0.4053	0.4610	-0.0557	-0.5802
55	36.74	0.04	6.3256	-0.5050	0.5654	-0.6245	0.1091	0.4257	0.4673	-0.0416	-0.5866
56	36.99	0.01	6.4907	-0.4941	0.1870	0.0067	0.0089	0.4046	0.4617	-0.0571	-0.5823
57	37.22	0.01	6.5323	-0.4879	0.1827	-0.0278	0.0156	0.4115	0.4609	-0.0494	-0.5697
58	37.45	0.03	6.5506	-0.4750	0.4065	-0.3543	0.0784	0.4047	0.4609	-0.0512	-0.5523
59	37.70	0.02	6.7259	-0.4959	0.2123	-0.0453	0.0246	0.4037	0.4609	-0.0572	-0.5614
60	37.91	-0.01	6.7052	-0.5144	-0.1912	0.7459	-0.0850	0.4067	0.4577	-0.0570	-0.5695
61	38.16	-0.00	6.6945	-0.4991	-0.4339	1.0030	-0.0098	0.4032	0.4601	-0.0569	-0.5699
62	38.41	0.01	6.6842	-0.4802	0.0497	0.3341	-0.0519	0.3866	0.4521	-0.0655	-0.5604
63	38.62	0.01	6.8838	-0.4861	0.0387	0.4245	-0.0520	0.3872	0.4493	-0.0621	-0.5575
64	38.86	-0.00	6.8923	-0.5178	-0.4152	1.0142	-0.1150	0.3844	0.4529	-0.0685	-0.5676
65	39.09	-0.01	6.8774	-0.5033	-0.1283	0.5246	-0.0636	0.3786	0.4465	-0.0679	-0.5679
66	39.30	-0.01	6.8372	-0.4933	-0.1095	0.5472	-0.0636	0.3651	0.4445	-0.0794	-0.5651
67	39.53	-0.02	6.8405	-0.4805	0.2005	0.5952	-0.0815	0.3593	0.4425	-0.0832	-0.5577
68	39.75	-0.01	6.8629	-0.4992	-0.1220	0.6091	-0.0630	0.3630	0.4466	-0.0839	-0.5591
69	39.95	-0.00	6.7109	-0.4961	-0.0335	0.2822	-0.0306	0.3375	0.4324	-0.0949	-0.5601
70	40.17	-0.00	6.7504	-0.4893	-0.0075	0.2803	-0.0562	0.3597	0.4393	-0.0796	-0.5605
71	40.39	0.00	6.6918	-0.5005	0.0867	0.1890	-0.0868	0.3602	0.4433	-0.0831	-0.5622
72	40.58	0.01	6.6738	-0.4870	0.0563	0.0299	-0.0226	0.3354	0.4321	-0.0968	-0.5502
73	40.80	-0.01	10.2727	-0.6418	-0.1316	0.4064	-0.0605	0.3376	0.4324	-0.0950	-0.5597
74	41.00	-0.00	10.0731	-0.5410	0.0650	0.2785	-0.0105	0.3369	0.4280	-0.0911	-0.5303
75	41.21	0.01	10.2864	-0.5817	0.1104	0.1520	-0.0283	0.3233	0.4316	-0.1084	-0.5430
76	41.42	-0.01	10.2141	-0.5459	-0.0379	0.1975	-0.0159	0.3041	0.4260	-0.1240	-0.5334
77	41.62	0.02	10.2162	-0.5550	0.2253	-0.0176	-0.0157	0.3300	0.4332	-0.1033	-0.5377
78	41.82	0.03	10.2409	-0.5267	0.3570	-0.4118	0.0562	0.3376	0.4268	-0.0892	-0.5149
79	42.02	-0.00	10.0734	-0.5323	-0.0100	0.2274	-0.0196	0.3281	0.4284	-0.1004	-0.5327
80	42.22	-0.01	10.0700	-0.5795	0.1367	0.1767	-0.0207	0.3309	0.4128	-0.1120	-0.5114
81	42.43	0.01	10.0709	-0.5991	0.1831	0.0311	-0.0076	0.3046	0.4204	-0.1159	-0.5230
82	42.60	-0.00	10.0752	-0.5833	0.1137	-0.1527	-0.0068	0.2955	0.4152	-0.1198	-0.5239
83	42.79	-0.00	10.0776	-0.5753	0.0986	-0.1712	-0.0085	0.2921	0.4051	-0.1133	-0.5242
84	42.98	0.00	10.0732	-0.5824	0.1306	-0.1963	0.0002	0.2921	0.4116	-0.1196	-0.5113
85	43.15	0.01	10.0928	-0.5903	0.1831	-0.0768	0.0184	0.2747	0.3971	-0.1229	-0.4958
86	43.33	-0.01	11.1751	-0.6544	0.2815	-0.3700	0.0072	0.2848	0.3996	-0.1111	-0.5123
87	43.51	0.01	11.1865	-0.6009	0.1961	-0.2431	0.0193	0.2775	0.3982	-0.1207	-0.5076
88	43.71	0.01	11.1693	-0.5954	0.2762	-0.2643	0.0136	0.2790	0.4003	-0.1213	-0.5006
89	43.89	0.00	11.1373	-0.5822	0.1862	-0.3319	0.0075	0.2807	0.4011	-0.1204	-0.4958
90	44.08	0.01	11.2711	-0.5949	0.3517	-0.7010	0.0330	0.2616	0.3911	-0.1495	-0.4941
91	44.24	0.01	11.3008	-0.6726	0.4130	-0.6972	0.0218	0.2634	0.3995	-0.1361	-0.5020
92	44.42	0.02	11.3198	-0.5266	0.3458	-0.6048	0.0212	0.2639	0.3911	-0.1272	-0.4706

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) ; 8V 16 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NO	RN	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	67	1.00	1.7	0.0	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CA	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
94	44.50	0.00	11.5165	-5.7443	0.1629	-0.4778	0.0212	0.2530	0.3984	-0.1454	-0.4992
96	44.79	0.01	11.4710	-5.5674	0.2580	-0.5677	0.0183	0.2605	0.4000	-0.1395	-0.4835
95	44.98	0.01	11.4505	-5.4523	1.2279	-0.5424	0.0152	0.2548	0.3992	-0.1346	-0.4768
96	45.17	0.01	11.4013	-5.6376	0.3029	-0.6472	0.0047	0.2513	0.3956	-0.1443	-0.4818
97	45.33	0.01	11.6411	-5.6389	0.3112	-0.7307	0.0233	0.2453	0.3961	-0.1508	-0.4751
98	45.51	0.01	11.7136	-5.3752	0.2450	-0.7337	0.0173	0.2236	0.3825	-0.1569	-0.4589
99	45.70	0.01	11.6557	-5.4435	0.3761	-0.4432	0.0306	0.2547	0.3926	-0.1377	-0.4630
100	45.87	0.02	11.7569	-5.0767	0.3565	-0.5119	0.0485	0.1987	0.3716	-0.1729	-0.4317
101	46.04	0.03	11.6918	-5.2551	0.4451	-0.5997	0.0310	0.2394	0.3825	-0.1431	-0.4652
102	46.22	0.02	11.9746	-5.4283	0.3748	-0.7567	0.0166	0.2521	0.3899	-0.1378	-0.4533
103	46.49	0.03	12.0291	-5.4413	0.5362	-1.1365	0.0502	0.2234	0.3775	-0.1541	-0.4524
104	46.58	0.03	12.1936	-5.3534	0.4570	-0.3795	0.0434	0.2304	0.3835	-0.1531	-0.4406
105	46.74	0.02	12.2143	-5.3723	0.3134	-0.2127	0.0432	0.2374	0.3831	-0.1457	-0.4398
106	46.92	0.03	12.1736	-5.2112	0.4419	-0.4594	0.0439	0.2309	0.3849	-0.1541	-0.4280
107	47.10	0.04	12.1777	-5.1374	0.5117	-0.3202	0.0434	0.2245	0.3926	-0.1681	-0.4219
108	47.27	0.04	12.2993	-5.0935	0.5520	-0.3634	0.0507	0.2345	0.3954	-0.1509	-0.4155
109	47.42	0.03	12.2145	-5.0414	0.5020	-0.4475	0.0524	0.2322	0.4050	-0.1728	-0.4126
110	47.60	0.05	12.1960	-5.0522	0.6532	-0.5041	0.0545	0.2491	0.4250	-0.1759	-0.4065
111	47.81	0.07	12.5381	-5.2693	0.4219	-0.5128	0.0255	0.2879	0.4490	-0.1611	-0.4983
112	47.99	0.07	12.5285	-7.3726	0.7273	0.4790	-0.0274	0.2625	0.4403	-0.1778	-0.5752
113	48.18	0.06	12.5274	-7.5705	0.7745	0.5051	-0.0395	0.2910	0.4424	-0.1515	-0.5836
114	48.34	0.05	13.0049	-7.4527	0.6673	0.7056	-0.0565	0.2677	0.4419	-0.1742	-0.5731
115	48.52	0.07	13.1737	-7.6944	0.7339	0.4906	-0.0630	0.2819	0.4341	-0.1572	-0.5803
116	48.68	0.09	13.1414	-7.6197	0.8361	0.6686	-0.0517	0.2720	0.4344	-0.1624	-0.5791
117	48.86	0.07	13.2194	-7.6956	0.8389	0.6576	-0.0634	0.2613	0.4416	-0.1803	-0.5665
118	49.02	0.07	13.2439	-7.5965	0.8317	0.8022	-0.0698	0.2484	0.4324	-0.1840	-0.5696
119	49.20	0.06	13.3284	-7.6594	0.8633	0.9995	-0.0763	0.2501	0.4426	-0.1927	-0.5747
120	49.38	0.08	13.3935	-7.6340	0.8527	0.7650	-0.0568	0.2475	0.4373	-0.1898	-0.5700
121	49.56	0.09	13.5679	-7.6963	0.8558	1.1296	-0.0823	0.2540	0.4464	-0.1924	-0.5817
122	49.73	0.10	13.5916	-7.6996	0.8827	1.1909	-0.0947	0.2480	0.4370	-0.1890	-0.5860
123	49.93	0.09	13.7422	-8.1183	0.8732	1.0951	-0.0788	0.2555	0.4442	-0.1937	-0.5890
124	50.10	0.08	13.7422	-8.0541	0.8560	1.3045	-0.0646	0.2453	0.4476	-0.2023	-0.5878
125	50.27	0.10	13.9446	-8.1819	0.8057	1.5539	-0.0755	0.2497	0.4429	-0.1932	-0.5867
126	50.43	0.08	13.9716	-8.2424	0.8209	1.6266	-0.0823	0.2390	0.4442	-0.2052	-0.5971
127	50.63	0.01	14.0143	-8.2678	0.8503	1.4613	-0.0566	0.2488	0.4516	-0.2028	-0.5915
128	50.79	0.02	13.9784	-8.3405	0.1777	1.3517	-0.0629	0.2565	0.4474	-0.1839	-0.6003
129	50.95	0.01	13.9547	-8.4347	0.4951	1.3145	-0.0123	0.2194	0.4446	-0.2252	-0.5772
130	51.09	0.01	13.9687	-7.1385	0.2871	0.7056	0.0247	0.2019	0.4140	-0.2121	-0.5299
131	51.25	0.01	13.9384	-7.0491	0.2903	0.5999	0.0233	0.2630	0.4339	-0.1769	-0.5789
132	51.45	0.01	14.2841	-7.3172	0.2715	0.9146	0.0136	0.2369	0.4336	-0.1967	-0.5832
133	51.61	0.02	13.8497	-7.2883	0.3595	0.7413	0.0361	0.2254	0.4104	-0.1850	-0.5303
134	51.77	0.03	13.7373	-7.4182	0.3379	0.8698	0.0227	0.2227	0.4093	-0.1866	-0.5396
135	51.93	0.03	13.7116	-7.3387	0.3131	0.2505	0.0639	0.2264	0.4109	-0.1845	-0.5346
136	52.08	0.02	13.6932	-7.2923	0.3404	0.4966	0.0695	0.2292	0.4112	-0.1870	-0.5181
137	52.28	0.02	13.6162	-7.2612	0.4578	0.1921	0.0564	0.2260	0.4104	-0.1844	-0.5916
138	52.42	0.02	13.6782	-6.9496	0.4148	0.3659	0.0639	0.2198	0.3984	-0.1786	-0.5081

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 6 OF 6

MARTIN MISSILE TAILS-EFFECTS DATA

TEST	PART	MACH	RNU-6	RNI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	67	1.00	1.7	7.0	9.0F13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	ACP
139	52.60	0.01	13.7743	-7.6598	0.1577	0.2658	0.0523	0.2393	0.4166	-0.1773	-0.5269
140	52.74	0.02	13.7740	-7.1578	0.4449	0.1729	0.0523	0.2117	0.4081	-0.1964	-0.5215
141	52.89	0.01	13.5273	-6.8958	0.2533	0.0016	0.0691	0.2021	0.3938	-0.1917	-0.4952
142	53.11	0.01	13.1109	-7.5345	0.4187	-0.1004	0.0423	0.2265	0.4175	-0.1930	-0.5343
143	53.25	0.01	13.2819	-7.0021	0.3845	0.2838	0.0548	0.2046	0.4036	-0.1988	-0.5046
144	53.40	0.01	13.4635	-7.2447	0.4234	-0.0055	0.0560	0.2249	0.4040	-0.1831	-0.5192
145	53.56	0.01	13.4451	-7.3654	0.4159	-0.0277	0.0479	0.2206	0.4104	-0.1903	-0.5263
146	53.72	0.01	13.7541	-6.9795	0.3903	0.3594	0.0643	0.1928	0.3754	-0.1826	-0.5076
147	53.93	0.02	13.8877	-6.9311	0.5336	-0.1962	0.0482	0.1761	0.3907	-0.2146	-0.4998
148	54.09	0.01	14.1157	-7.5449	0.3958	-0.2556	0.0430	0.1960	0.3868	-0.1908	-0.5344
149	54.25	0.01	14.1113	-7.6462	0.5602	-0.2538	0.0429	0.2038	0.3793	-0.1755	-0.5274
150	54.42	0.00	14.1658	-7.6688	0.4130	-0.2059	0.0431	0.1893	0.3746	-0.1853	-0.5265
151	54.56	-0.01	14.2062	-7.6194	0.1171	0.5614	0.0525	0.1763	0.3780	-0.2017	-0.5083
152	54.72	-0.02	14.0366	-7.2606	0.2746	0.1469	0.0539	0.1644	0.3729	-0.2085	-0.5130
153	54.88	-0.01	14.1164	-7.2564	0.2629	0.5912	0.0524	0.1623	0.3718	-0.2098	-0.5142
154	55.04	-0.03	14.0924	-7.1483	0.1573	0.4982	0.0523	0.1617	0.3557	-0.1940	-0.5072
155	55.20	-0.02	14.2604	-7.0443	0.2593	0.4612	0.0416	0.1766	0.3730	-0.1956	-0.5321
156	55.38	-0.02	14.5143	-7.3931	0.3031	-0.0578	0.0315	0.1763	0.3754	-0.1991	-0.5292
157	55.52	-0.01	14.4436	-7.5203	0.3672	0.3365	0.0583	0.1731	0.3664	-0.1673	-0.5214
158	55.66	-0.02	14.1471	-7.1774	0.2527	0.2436	0.0416	0.1367	0.3491	-0.2124	-0.5088
159	55.83	-0.03	14.5244	-7.7436	0.2125	0.2665	0.0367	0.1738	0.3603	-0.1865	-0.5332
160	56.00	-0.02	14.2152	-7.1644	0.2556	0.3157	0.0479	0.1415	0.3354	-0.1939	-0.5040
161	56.15	-0.03	14.4246	-7.4067	0.1654	-0.0134	0.0439	0.1509	0.3416	-0.1909	-0.5138
162	56.30	-0.03	14.7414	-7.3796	0.1564	0.4276	0.0540	0.1336	0.3326	-0.2016	-0.5146
163	56.45	-0.02	14.4256	-7.4271	0.2359	0.4433	0.0582	0.1301	0.3421	-0.2120	-0.5145
164	56.60	-0.04	15.1249	-7.6101	0.0201	-0.1635	0.0344	0.1111	0.3433	-0.2322	-0.5036
165	56.81	-0.01	14.8244	-7.4416	-0.2865	0.2756	0.0387	0.1043	0.3365	-0.2322	-0.5055
166	56.99	-0.04	14.7757	-7.1593	0.2137	-0.5702	0.0205	0.0932	0.3143	-0.2210	-0.4845
167	57.14	-0.03	14.8753	-7.4.696	0.2537	-0.4939	0.0465	0.0853	0.3325	-0.2631	-0.4781
168	57.30	-0.07	14.7330	-7.2287	-0.1468	-0.6943	0.0396	0.0934	0.3293	-0.2353	-0.4904
169	57.47	-0.05	14.9649	-7.4263	-0.2136	-0.5246	0.0334	0.1146	0.3316	-0.2170	-0.5208
170	57.61	-0.03	14.8077	-7.4261	0.2359	-0.4448	0.0339	0.0882	0.3099	-0.2216	-0.5225
171	57.78	-0.02	14.8254	-7.4712	0.3096	-0.4365	0.0221	0.1048	0.2887	-0.1839	-0.5223
172	57.96	0.01	14.6546	-7.5424	0.5597	-0.4976	0.0338	0.0977	0.2883	-0.1907	-0.5137
173	58.08	-0.02	15.2871	-7.6114	0.2699	-0.2224	0.0107	0.0934	0.2845	-0.1960	-0.5308
174	58.26	0.01	15.0491	-7.4474	0.0486	-0.2031	0.0274	0.0512	0.2734	-0.2226	-0.5356
175	58.39	-0.03	15.0366	-7.5143	0.2573	-0.0737	0.0273	0.0765	0.2613	-0.1828	-0.5066
176	58.56	-0.02	15.1569	-7.4115	-0.0113	-0.2522	0.0282	0.0604	0.2750	-0.2146	-0.5267
177	58.67	0.01	14.9867	-7.7684	0.4836	-0.0202	0.0266	0.0544	0.2739	-0.2195	-0.5226

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | DAT 67 | MACH 1.60 | RN1 0.0 | CONF 81-0813 | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CAF1	CN1	CD1	ACPF1	XCPF1	CAF2	CN2	CD2	XCPF2	YCPF2
1	-5.71	-0.00	-0.0117	-0.0034	0.0501	0.1942	-2.9467	-0.0089	-0.0036	-0.2247	0.1072	0.5503
2	-5.71	0.01	-0.0236	-0.0033	0.0459	0.1240	-1.7909	-0.0172	-0.0041	-0.2279	0.1056	0.5464
3	-5.72	0.02	-0.0321	-0.0034	0.0435	0.1029	-1.3532	-0.0133	-0.0046	-0.2273	0.1073	0.5501
4	-4.29	0.01	-0.0236	-0.0033	0.0424	0.1367	-1.7788	-0.0272	-0.0092	-0.1476	0.1243	0.6222
5	-2.86	0.02	-0.0165	-0.0033	0.0459	0.2579	-3.5917	-0.0230	-0.0111	-0.0804	0.1195	0.8650
6	-0.45	0.01	-0.0026	-0.0032	0.0438	0.1069	-2.1733	0.0330	0.0043	-0.0203	0.1304	-0.6141
7	1.45	0.01	-0.0097	-0.0062	0.0331	0.0559	-0.8339	0.1590	0.0171	0.0695	0.1177	0.2800
8	3.56	0.01	-0.0270	-0.0070	0.0383	0.0720	-1.3749	0.3149	0.0376	0.1142	0.1193	0.3626
9	5.66	0.01	-0.0396	-0.0103	0.0391	0.0655	-0.8836	0.4637	0.0510	0.1830	0.1099	0.3947
10	7.68	0.01	-0.0553	-0.0087	0.0344	0.0456	-0.7947	0.6345	0.0576	0.2634	0.0908	0.4151
11	9.63	0.01	-0.0632	-0.0103	0.0405	0.1129	-1.2326	0.7684	0.0573	0.3265	0.0745	0.4250
12	11.47	0.02	-0.0727	-0.0043	0.0495	0.3528	-4.0539	0.8991	0.0527	0.3871	0.0586	0.4305
13	13.29	0.01	-0.0769	-0.0092	0.0479	0.3931	-3.3546	1.0148	0.0496	0.4367	0.0468	0.4303
14	15.05	0.00	-0.0765	-0.0053	0.0483	0.2851	-2.4864	1.0414	0.0473	0.4266	0.0454	0.4097
15	17.48	0.00	-0.0815	-0.0099	0.0519	0.3528	-4.5100	1.1207	0.0372	0.4528	0.0332	0.4048
16	19.46	0.01	-0.0907	-0.0104	0.0564	0.4765	-5.2691	1.1948	0.0286	0.4740	0.0240	0.4000
17	21.42	0.01	-0.0922	-0.0117	0.0600	0.5134	-4.7512	1.2216	0.0158	0.4815	0.0138	0.3941
18	23.40	0.01	-0.0796	-0.0136	0.0320	0.4628	-1.0485	1.2047	0.0122	0.4706	0.0101	0.3907
19	25.36	0.00	-0.1163	-0.0185	0.0961	0.1556	-0.8407	0.9849	0.0171	0.3733	0.0174	0.3791
20	27.40	0.00	0.3517	0.0010	0.2101	0.1155	0.5972	0.9079	0.0158	0.3712	0.0160	0.3758
21	28.33	0.00	0.4001	0.0042	0.2272	0.0930	0.6151	1.0321	0.0137	0.3849	0.0133	0.3768
22	28.34	0.00	0.3444	0.0315	0.2174	0.0916	0.6317	1.0422	0.0133	0.3919	0.0128	0.3760
23	28.36	0.01	0.3189	0.0387	0.2463	0.0945	0.6029	1.0171	0.0145	0.3794	0.0143	0.3730
24	24.33	0.00	0.3346	0.0441	0.2575	0.1014	0.5924	1.0274	0.0136	0.3819	0.0133	0.3717
25	24.37	0.00	0.3090	0.0331	0.2443	0.0916	0.6220	1.0627	0.0119	0.3980	0.0112	0.3766
26	24.20	0.01	0.3223	0.0279	0.2119	0.0964	0.6574	1.0703	0.0117	0.4011	0.0109	0.3768
27	25.50	0.01	0.3473	0.0274	0.2289	0.0787	0.6592	1.0717	0.0112	0.4002	0.0105	0.3735
28	24.79	0.01	0.3546	0.0304	0.2363	0.0854	0.6586	1.0781	0.0106	0.4030	0.0098	0.3738
29	30.08	0.00	0.3167	0.0248	0.2135	0.0898	0.6741	1.0859	0.0104	0.4066	0.0096	0.3744
30	30.38	0.00	0.3406	0.0370	0.2414	0.0946	0.6194	1.1074	0.0095	0.4129	0.0086	0.3745
31	30.64	0.01	0.3425	0.0367	0.2280	0.0958	0.5961	1.1075	0.0092	0.4149	0.0083	0.3746
32	30.89	0.00	0.4140	0.0377	0.2567	0.0908	0.6148	1.1077	0.0086	0.4132	0.0078	0.3730
33	31.18	0.00	0.2521	0.0273	0.1890	0.1064	0.6703	1.1480	0.0066	0.4327	0.0059	0.3769
34	31.46	0.00	0.1974	0.0226	0.1389	0.1147	0.6934	1.1646	0.0057	0.4397	0.0049	0.3776
35	31.73	0.00	0.2165	0.0242	0.2050	0.0930	0.6516	1.1481	0.0065	0.4327	0.0057	0.3768
36	32.01	0.00	0.0809	0.0053	0.0443	0.9469	7.9902	1.2000	0.0034	0.4555	0.0028	0.3796
37	32.28	0.00	0.0367	0.0005	0.0533	0.0747	7.9507	1.2214	0.0024	0.4665	0.0020	0.3819
38	32.54	0.00	-0.0056	-0.0019	0.0510	0.3395	-9.1005	1.2140	0.0026	0.4614	0.0021	0.3801
39	32.80	0.00	0.1205	0.0053	0.1275	0.0440	1.0573	1.2064	0.0027	0.4576	0.0022	0.3793
40	33.06	0.00	-0.1139	-0.0180	0.0007	0.1543	-0.0062	1.2293	0.0019	0.4677	0.0015	0.3805
41	33.32	0.00	-0.0245	-0.0135	0.0529	0.4739	-1.8234	1.1868	0.0039	0.4495	0.0033	0.3782
42	33.58	0.00	-0.0025	-0.0027	0.0263	0.2756	-0.3433	1.2135	0.0025	0.4611	0.0021	0.3800
43	33.82	0.00	0.0388	-0.0052	0.1177	-0.2739	2.1455	1.1984	0.0034	0.4535	0.0028	0.3784
44	34.06	0.00	-0.0126	-0.0215	0.0761	1.7348	-6.1325	1.2187	0.0017	0.4634	0.0014	0.3802
45	34.31	0.01	-0.0139	-0.0178	0.0771	1.4252	-5.5429	1.2111	0.0022	0.4589	0.0018	0.3789
46	34.58	0.00	0.0535	-0.0162	0.1125	-0.3030	2.1002	1.2162	0.0013	0.4626	0.0011	0.3804

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	PALN-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
F	67	1.00	1.7	0.0	0	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	PITM	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	36.02	0.02	-0.0417	-0.0234	0.0501	0.3736	-0.8127	1.2238	0.0012	0.0656	0.0010	0.3803
48	35.26	0.00	-0.1454	-0.0806	0.1735	-0.0429	0.9878	1.1744	0.0034	0.0423	0.0029	0.3766
49	35.32	0.00	-0.1577	-0.0871	0.1711	-0.0641	1.0040	1.1870	0.0022	0.0437	0.0019	0.3789
50	35.55	0.02	-0.0734	-0.0414	0.1411	-0.2458	3.3014	1.1959	0.0014	0.0547	0.0012	0.3802
51	35.77	0.00	-0.1629	-0.0904	0.1651	-0.0077	1.0120	1.1832	0.0015	0.0485	0.0016	0.3791
52	36.00	0.01	-0.0030	-0.0128	0.0951	-2.2689	29.3571	1.2517	-0.0011	0.0792	-0.0009	0.3928
53	36.27	0.01	-0.1641	-0.0857	0.1458	-0.0568	1.0380	1.2272	-0.0006	0.0666	-0.0003	0.3802
54	36.50	0.02	0.0543	-0.0196	0.1139	-0.1453	2.0951	1.2602	-0.0023	0.0824	-0.0018	0.3828
55	36.74	0.00	-0.1648	-0.0917	0.1653	-0.0121	1.0455	1.2473	-0.0019	0.0768	-0.0015	0.3822
56	36.99	0.01	-0.0334	-0.0179	0.0878	0.5382	-2.0218	1.2779	-0.0030	0.0900	-0.0024	0.3835
57	37.22	0.01	-0.0152	-0.0293	0.0784	1.3362	-5.1546	1.2638	-0.0025	0.0842	-0.0020	0.3831
58	37.45	0.03	0.0711	-0.0127	0.1328	-0.1736	1.8104	1.2385	-0.0018	0.0725	-0.0015	0.3815
59	37.70	0.02	0.0033	-0.0152	0.1024	-0.0845	25.5666	1.2562	-0.0026	0.0820	-0.0021	0.3837
60	37.91	-0.01	-0.1692	-0.0351	-0.0194	0.1503	0.1036	1.3033	-0.0047	0.0574	-0.0036	0.3855
61	38.16	-0.00	-0.0319	-0.0224	0.0857	0.7251	-2.5762	1.2792	-0.0041	0.0526	-0.0032	0.3850
62	38.41	0.01	-0.1458	-0.0369	0.0101	0.2513	-0.0692	1.3160	-0.0056	0.0578	-0.0043	0.3859
63	38.62	0.01	-0.1539	-0.0329	0.0038	0.2121	-0.0235	1.3086	-0.0056	0.0547	-0.0041	0.3857
64	38.86	-0.03	-0.2035	-0.0410	-0.0536	0.1648	0.2164	1.3199	-0.0066	0.0597	-0.0050	0.3862
65	39.09	-0.01	-0.1343	-0.0367	0.0038	0.2306	-0.0437	1.3289	-0.0070	0.0526	-0.0053	0.3857
66	39.30	-0.01	-0.1736	-0.0344	-0.0119	0.2010	0.0689	1.3364	-0.0070	0.0564	-0.0052	0.3864
67	39.53	-0.02	-0.1618	-0.0388	-0.0187	0.2055	0.1036	1.3390	-0.0071	0.0568	-0.0053	0.3868
68	39.75	-0.01	-0.1625	-0.0375	-0.0050	0.2363	0.0309	1.3493	-0.0079	0.0505	-0.0059	0.3854
69	39.95	-0.00	-0.1592	-0.0302	-0.0535	0.5427	-0.9757	1.3404	-0.0062	0.0566	-0.0061	0.3854
70	40.17	-0.00	-0.1544	-0.0346	-0.0063	0.2473	0.0346	1.3556	-0.0083	0.0539	-0.0061	0.3865
71	40.39	0.00	-0.1290	-0.0319	0.0021	0.2466	-0.0163	1.3671	-0.0090	0.0560	-0.0066	0.3862
72	40.58	0.01	-0.0715	-0.0297	0.0400	0.3641	-0.5592	1.3658	-0.0088	0.0579	-0.0065	0.3865
73	40.80	-0.01	-0.1328	-0.0282	-0.0606	0.2201	-0.0455	1.3583	-0.0090	0.0522	-0.0066	0.3848
74	41.00	-0.00	-0.1203	-0.0306	0.0067	0.2547	-0.0559	1.3365	-0.0085	0.0528	-0.0064	0.3837
75	41.21	0.01	-0.0847	-0.0290	0.0251	0.3238	-0.2756	1.3530	-0.0092	0.0598	-0.0068	0.3842
76	41.42	-0.01	-0.0547	-0.0287	0.0476	0.4816	-0.7978	1.3340	-0.0082	0.0513	-0.0062	0.3833
77	41.62	1.02	-0.0350	-0.0296	0.0542	0.7032	-1.0911	1.3570	-0.0096	0.0500	-0.0071	0.3832
78	41.82	0.03	-0.0547	-0.0118	0.1006	-0.2086	1.4823	1.3341	-0.0091	0.0506	-0.0068	0.3827
79	42.02	-1.00	-0.1014	-0.0273	0.0058	0.2696	-0.0495	1.3619	-0.0096	0.0560	-0.0071	0.3848
80	42.22	-0.01	-0.0765	-0.0281	0.0269	0.3709	-0.4018	1.3467	-0.0091	0.0570	-0.0068	0.3839
81	42.43	0.01	-0.1036	-0.0288	0.0206	3.3652	-0.2481	1.3620	-0.0095	0.0523	-0.0073	0.3835
82	42.60	-0.00	-0.0297	-0.0215	0.0492	0.7495	-1.7178	1.3646	-0.0103	0.0538	-0.0076	0.3839
83	42.79	-0.00	-0.0576	-0.0284	0.0243	0.3277	-0.3512	1.3748	-0.0107	0.0571	-0.0078	0.3834
84	42.98	0.00	-0.0319	-0.0282	0.0413	0.6963	-1.2925	1.3646	-0.0105	0.0538	-0.0077	0.3839
85	43.15	0.01	-0.0075	-0.0199	0.0612	2.5347	-8.1463	1.3500	-0.0096	0.0552	-0.0073	0.3816
86	43.33	-0.01	-0.0603	-0.0175	0.0535	2.0952	-6.2907	1.3894	-0.0116	0.0537	-0.0085	0.3841
87	43.51	-0.01	-0.0679	-0.0199	0.0593	1.9396	-5.5381	1.3727	-0.0109	0.0570	-0.0080	0.3839
88	43.71	0.01	-0.0604	-0.0178	0.0642	1.9796	-5.5232	1.3669	-0.0115	0.0534	-0.0084	0.3829
89	43.89	0.00	-0.1170	-0.0121	0.0544	-0.7121	3.4935	1.3846	-0.0117	0.0519	-0.0085	0.3842
90	44.10	0.01	-0.0438	-0.0175	0.0496	-0.1474	1.6908	1.3682	-0.0110	0.0528	-0.0081	0.3821
91	44.29	0.01	-0.0134	-0.0122	0.0522	32.2572	-130.4150	1.3814	-0.0123	0.0545	-0.0089	0.3826
92	44.46	0.02	-0.0034	-0.0109	0.0549	-1.2983	6.5327	1.3736	-0.0114	0.0546	-0.0083	0.3819

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH VALUES PHI LONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 P7 1.60 1.7 0.0 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CD2	XCPF2	YCPF2
93	44.60	0.01	0.0306	-0.0262	0.2645	-0.2064	2.1562	1.3978	-0.0125	0.5362	-0.0098	0.3836
94	44.79	0.01	0.0309	-0.0094	0.2697	-10.8947	55.7333	1.3509	-0.0117	0.5145	-0.0083	0.3809
95	44.98	0.01	0.0254	-0.0274	0.2732	-0.2757	2.7638	1.3676	-0.0117	0.5228	-0.0086	0.3823
96	45.17	0.01	-0.0044	-0.0184	0.2794	1.5846	-9.0288	1.3644	-0.0128	0.5190	-0.0094	0.3804
97	45.33	0.01	-0.0040	-0.0154	0.2862	1.1528	-6.7235	1.3593	-0.0128	0.5180	-0.0094	0.3811
98	45.51	0.00	0.0133	-0.0139	0.2516	-0.2934	3.8770	1.3516	-0.0123	0.5149	-0.0091	0.3810
99	45.70	0.01	0.0234	-0.0240	0.2553	-0.1725	2.3826	1.3656	-0.0127	0.5201	-0.0093	0.3809
100	45.87	0.02	0.0047	-0.0036	0.2470	-0.7496	9.9843	1.3363	-0.0109	0.5073	-0.0062	0.3796
101	46.09	0.03	0.0229	-0.0139	0.2569	-0.1966	2.4639	1.3707	-0.0132	0.5231	-0.0096	0.3816
102	46.22	0.02	0.0111	-0.0019	0.2553	-0.1713	5.0883	1.3371	-0.0127	0.5046	-0.0095	0.3789
103	46.49	0.03	0.0267	-0.0030	0.2531	-0.0774	1.2858	1.3612	-0.0127	0.5165	-0.0093	0.3796
104	46.56	0.03	0.0517	0.0034	0.2538	0.0656	1.0203	1.3663	-0.0133	0.5188	-0.0097	0.3797
105	46.74	0.02	0.0229	0.0002	0.2478	0.0070	2.4833	1.3397	-0.0124	0.5058	-0.0093	0.3775
106	46.92	0.03	0.0501	0.0019	0.2594	0.0320	1.5919	1.3364	-0.0119	0.5053	-0.0089	0.3781
107	47.10	0.03	0.0375	0.0005	0.2715	-0.0150	1.9128	1.3375	-0.0118	0.5077	-0.0088	0.3796
108	47.27	0.04	0.0480	0.0123	0.2760	0.2564	1.5403	1.2921	-0.0117	0.4858	-0.0091	0.3760
109	47.42	0.03	0.0502	0.0027	0.2774	0.1176	1.5488	1.3099	-0.0116	0.4964	-0.0089	0.3790
110	47.60	0.05	0.0669	0.0096	0.2752	0.2091	1.6021	1.2719	-0.0107	0.4794	-0.0084	0.3769
111	47.81	0.07	0.0836	0.0169	0.2775	0.2008	1.8171	1.2631	-0.0123	0.4756	-0.0098	0.3766
112	47.99	0.07	-0.0522	-0.0213	0.2235	0.4083	-0.4497	1.2944	-0.0140	0.4884	-0.0108	0.3773
113	48.16	0.08	-0.0763	-0.0223	0.2282	0.3007	-0.1244	1.3085	-0.0156	0.4936	-0.0119	0.3772
114	48.34	0.06	-0.0907	-0.0246	0.2331	0.2717	0.0343	1.3046	-0.0154	0.4930	-0.0118	0.3779
115	48.52	0.07	-0.0762	-0.0231	0.2268	0.3050	-0.0912	1.3360	-0.0174	0.5082	-0.0130	0.3804
116	48.68	0.09	-0.0904	-0.0207	-0.0038	0.2259	0.0421	1.3113	-0.0162	0.4967	-0.0124	0.3788
117	48.85	0.07	-0.0693	-0.0221	-0.0172	0.2229	0.0728	1.3169	-0.0171	0.4998	-0.0130	0.3790
118	49.02	0.07	-0.1224	-0.0239	-0.0194	0.1949	0.1565	1.3125	-0.0161	0.4977	-0.0123	0.3792
119	49.20	0.08	-0.1011	-0.0228	-0.0180	0.2239	0.0993	1.3292	-0.0177	0.5031	-0.0133	0.3785
120	49.36	0.08	-0.0748	-0.0212	0.0062	0.2840	-0.0433	1.3256	-0.0177	0.5026	-0.0134	0.3788
121	49.56	0.09	-0.1062	-0.0272	-0.0109	0.2768	0.1068	1.3622	-0.0210	0.5187	-0.0156	0.3808
122	49.74	0.08	-0.0957	-0.0257	-0.0054	0.2690	0.0577	1.3613	-0.0204	0.5191	-0.0152	0.3813
123	49.93	0.08	-0.0973	-0.0258	-0.0058	0.2703	0.0679	1.3610	-0.0204	0.5195	-0.0150	0.3817
124	50.10	0.06	-0.0991	-0.0265	-0.0167	0.2736	0.1045	1.3569	-0.0202	0.5166	-0.0150	0.3809
125	50.27	0.08	-0.0971	-0.0262	-0.0165	0.2676	0.1117	1.3634	-0.0197	0.5188	-0.0147	0.3802
126	50.43	0.08	-0.1394	-0.0311	-0.0307	0.2776	0.2752	1.3675	-0.0201	0.5119	-0.0149	0.3799
127	50.63	0.01	-0.1102	-0.0220	-0.0213	0.1992	0.1925	1.3319	-0.0196	0.5052	-0.0147	0.3793
128	50.79	0.02	-0.1054	-0.0220	-0.0185	0.2090	0.1763	1.3462	-0.0204	0.5108	-0.0152	0.3794
129	50.95	0.01	-0.1034	-0.0214	-0.0159	0.0935	0.1441	1.2677	-0.0169	0.4753	-0.0118	0.3750
130	51.09	0.01	-0.0993	-0.0209	-0.0123	0.0935	0.0242	1.2373	-0.0140	0.4643	-0.0113	0.3752
131	51.25	0.01	-0.0903	0.0092	0.0331	-0.6670	-5.2549	1.3210	-0.0182	0.5012	-0.0138	0.3794
132	51.41	0.01	-0.0282	0.0027	0.0317	-0.0954	-1.1064	1.2858	-0.0164	0.4848	-0.0128	0.3770
133	51.61	0.02	-0.0343	0.0022	0.0291	-0.0575	-0.7596	1.2659	-0.0153	0.4779	-0.0121	0.3775
134	51.77	0.03	0.0227	0.0048	0.0259	0.0314	2.8726	1.2781	-0.0171	0.4857	-0.0134	0.3800
135	51.93	0.03	-0.0267	0.0000	0.0258	-1.3629	-11.8674	1.2718	-0.0156	0.4813	-0.0131	0.3784
136	52.08	0.02	-0.0043	0.0155	0.0565	-0.6942	-6.4048	1.2565	-0.0160	0.4743	-0.0128	0.3775
137	52.28	0.04	-0.0329	0.0106	0.0738	0.3224	2.2412	1.2820	-0.0179	0.4865	-0.0140	0.3796
138	52.42	0.02	-0.0043	0.0065	0.0549	-1.5124	-13.9281	1.2617	-0.0165	0.4785	-0.0131	0.3792

MARTIN MISSILE TAILS EFFECTS DATA

TEST / 67 1.CU 1.7 | MACH NUMBER 0.0 | PHI 0.0 | CONF 1=0F13 | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
139	52.60	0.01	-0.0177	0.0050	0.0028	0.2826	3.5426	1.3015	-0.0187	0.4961	-0.0144	0.3812
140	52.74	0.02	-0.0148	0.0042	0.0060	-0.2479	-3.1745	1.2645	-0.0171	0.4810	-0.0135	0.3792
141	52.89	0.04	-0.0142	0.0054	0.0055	-0.3430	-3.1341	1.2419	-0.0157	0.4694	-0.0127	0.3780
142	53.11	0.01	0.0134	0.0013	0.0056	1.0971	8.1476	1.3222	-0.0206	0.5046	-0.0156	0.3814
143	53.25	0.01	-0.0247	0.0013	0.0349	-0.0438	-1.3410	1.2457	-0.0156	0.4700	-0.0125	0.3773
144	53.40	0.01	-0.0137	0.0011	0.0440	-0.0403	-3.5734	1.2790	-0.0177	0.4877	-0.0139	0.3813
145	53.58	0.01	-0.0228	0.0038	0.0547	0.1304	-2.7132	1.3161	-0.0202	0.5027	-0.0154	0.3819
146	53.72	0.01	0.0028	0.0056	0.0536	1.9296	19.2041	1.2841	-0.0167	0.4916	-0.0148	0.3827
147	53.93	0.02	0.0282	0.0042	0.0627	0.2000	3.0993	1.2756	-0.0179	0.4837	-0.0141	0.3793
148	54.09	0.01	0.0614	0.0047	0.0690	0.1136	1.6547	1.3224	-0.0214	0.5058	-0.0162	0.3824
149	54.23	0.01	0.0214	0.0029	0.0657	0.1048	2.3516	1.3139	-0.0206	0.5024	-0.0159	0.3826
150	54.42	0.00	0.0142	0.0017	0.0574	0.2674	7.0469	1.2980	-0.0197	0.4956	-0.0152	0.3824
151	54.56	-0.03	-0.0218	-0.0016	0.0239	0.0267	-0.3349	1.2261	-0.0158	0.4629	-0.0129	0.3775
152	54.72	-0.02	-0.0431	-0.0031	0.0304	0.0492	-0.4425	1.2465	-0.0172	0.4708	-0.0136	0.3777
153	54.88	-0.01	-0.0307	-0.0026	0.0384	0.0808	-0.9021	1.2619	-0.0184	0.4796	-0.0146	0.3808
154	55.06	-0.03	-0.0572	-0.0037	0.0305	0.0646	-0.5341	1.2556	-0.0178	0.4766	-0.0142	0.3795
155	55.24	-0.02	-0.0178	-0.0022	0.0468	0.1237	-2.6206	1.3079	-0.0209	0.4995	-0.0160	0.3819
156	55.38	-0.02	-0.0214	-0.0022	0.0472	0.1029	-2.2033	1.2990	-0.0204	0.4969	-0.0157	0.3810
157	55.52	-0.01	-0.0417	-0.0041	0.0215	0.0966	-0.2364	1.2439	-0.0172	0.4730	-0.0139	0.3780
158	55.66	-0.02	-0.0103	-0.0070	0.0145	0.0471	-0.1480	1.2249	-0.0171	0.4635	-0.0134	0.3772
159	55.83	-0.03	-0.0558	-0.0056	0.0357	0.0985	-0.6063	1.2647	-0.0200	0.4893	-0.0156	0.3809
160	56.08	-0.02	-0.1134	-0.0083	0.0173	0.0753	-0.1564	1.2245	-0.0171	0.4634	-0.0140	0.3784
161	56.13	-0.03	-0.2434	-0.0134	0.0926	0.6777	-2.9711	1.2727	-0.0199	0.4846	-0.0157	0.3808
162	56.40	-0.03	-0.0556	-0.0070	0.0231	0.0736	-0.2426	1.2599	-0.0192	0.4789	-0.0153	0.3801
163	56.65	-0.02	-0.0503	-0.0067	0.0240	0.0647	-0.2451	1.2604	-0.0178	0.4790	-0.0144	0.3781
164	56.80	-0.04	-0.0624	-0.0029	0.0379	0.0402	-0.6022	1.3113	-0.0230	0.5024	-0.0176	0.3831
165	56.81	-0.02	-0.0455	-0.0072	0.0222	0.0733	-0.2317	1.2547	-0.0190	0.4773	-0.0152	0.3804
166	56.99	-0.04	-0.0307	-0.0020	0.0560	0.0652	-1.7598	1.3140	-0.0233	0.5061	-0.0178	0.3951
167	57.14	-0.03	-0.1047	-0.0075	0.0215	0.0727	-0.2052	1.2313	-0.0184	0.4671	-0.0150	0.3796
168	57.30	-0.01	-0.1045	-0.0064	0.0202	0.0661	-0.1931	1.2491	-0.0202	0.4734	-0.0162	0.3790
169	57.47	-0.00	-0.0414	-0.0074	0.0247	0.0858	-0.3529	1.2785	-0.0216	0.4867	-0.0169	0.3807
170	57.61	-0.03	-0.0054	-0.0034	0.0360	0.0904	-0.5577	1.2870	-0.0216	0.4908	-0.0166	0.3814
171	57.78	-0.02	-0.0472	-0.0082	0.0393	0.1314	-0.8318	1.3186	-0.0242	0.5061	-0.0184	0.3838
172	57.89	0.01	-0.0535	-0.0063	0.0375	0.1172	-0.6955	1.3072	-0.0233	0.5029	-0.0179	0.3847
173	58.08	-0.02	-0.0504	-0.0062	0.0364	0.1132	-0.6645	1.3112	-0.0243	0.5021	-0.0186	0.3829
174	58.22	0.01	-0.0368	-0.0065	0.0415	0.1411	-1.0696	1.3013	-0.0247	0.4991	-0.0190	0.3834
175	58.38	-0.03	-0.0643	-0.0081	0.0373	0.1178	-0.8402	1.3081	-0.0249	0.5033	-0.0191	0.3847
176	58.54	-0.04	-0.0611	-0.0087	0.0347	0.1099	-0.7640	1.2960	-0.0241	0.4953	-0.0187	0.3846
177	58.67	0.01	-0.0618	-0.0077	0.0311	0.1204	-0.8882	1.2936	-0.0240	0.4967	-0.0186	0.3840

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | MACH 1.00 | RN/10**6 1.7 | PHI 0.0 | CONF 1 | ALPHA 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.71	-0.00	0.0000	0.0000	0.0152	0.0000	0.3403	-0.0393	-0.0465	-0.2036	0.0941	0.4122
2	-5.71	0.01	0.0507	0.0000	0.0177	0.0000	0.3403	-0.0379	-0.0460	-0.2042	0.0932	0.4143
3	-5.72	0.00	0.0497	0.0000	0.0152	0.0000	0.3404	-0.0395	-0.0456	-0.1966	0.0952	0.4108
4	-4.29	0.01	0.0415	0.0000	0.0162	0.0000	0.3403	-0.3177	-0.0296	-0.1206	0.0933	0.3796
5	-2.86	0.02	0.0536	0.0000	0.0178	0.0000	0.3405	-0.1737	-0.0122	-0.0576	0.0704	0.3319
6	-0.45	0.01	0.0879	0.0000	0.0197	0.0000	0.2991	-0.0269	-0.0007	0.0058	0.0260	-0.2163
7	1.99	0.01	0.0629	0.0000	0.0167	0.0000	0.2332	0.1274	0.0146	0.0673	0.1148	0.5280
8	3.56	0.01	0.0722	0.0000	0.0179	0.0000	0.2341	0.2729	0.0332	0.1371	0.1218	0.5022
9	5.44	0.01	0.0975	0.0000	0.0153	0.0000	0.2259	0.4288	0.0456	0.2101	0.1063	0.4699
10	7.46	0.01	0.0693	0.0000	0.0114	0.0000	0.1749	0.5925	0.0510	0.2659	0.0860	0.4825
11	9.03	0.01	0.0798	0.0000	0.0135	0.0000	0.1900	0.7340	0.0520	0.3502	0.0708	0.4772
12	11.47	0.02	0.0781	0.0000	0.0113	0.0000	0.1492	0.8763	0.0474	0.4144	0.0541	0.4729
13	13.44	0.01	0.0776	0.0000	0.0103	0.0000	0.1363	0.9987	0.0444	0.4813	0.0445	0.4666
14	15.45	0.00	0.0794	0.0000	0.0103	0.0000	0.1296	0.9491	0.0342	0.4404	0.0346	0.4453
15	17.98	0.00	0.0799	0.0000	0.0111	0.0000	0.1409	1.0191	0.0208	0.4486	0.0204	0.4402
16	19.98	0.01	0.0792	0.0000	0.0114	0.0000	0.1266	0.9610	0.0169	0.4194	0.0176	0.4365
17	21.92	0.01	0.1002	0.0000	0.0109	0.0000	0.1735	0.8634	-0.0158	0.3884	0.0193	0.4405
18	23.40	0.01	0.0960	0.0000	0.0105	0.0000	0.1356	0.8425	0.0148	0.3688	0.0176	0.4378
19	25.36	0.00	0.1027	0.0000	0.0193	0.0000	1.1746	1.0512	0.0052	0.4459	0.0050	0.4280
20	27.40	0.00	0.1273	0.0000	0.0207	0.0000	0.2098	1.0446	0.0046	0.4410	0.0046	0.4227
21	28.33	0.00	0.1229	0.0000	0.0243	0.0000	0.1977	1.0807	0.0040	0.4431	0.0038	0.4178
22	29.36	0.00	0.1149	0.0000	0.0199	0.0000	0.1730	1.0554	0.0039	0.4396	0.0037	0.4165
23	29.86	0.01	0.1367	0.0000	0.0291	0.0000	0.2130	1.0362	0.0050	0.4290	0.0048	0.4149
24	29.53	0.00	0.1230	0.0000	0.0222	0.0000	0.1804	1.0916	0.0026	0.4510	0.0024	0.4132
25	29.37	0.00	0.1356	0.0000	0.0291	0.0000	0.2073	1.1062	0.0023	0.4560	0.0021	0.4122
26	29.20	0.01	0.1241	0.0000	0.0224	0.0000	0.1845	1.0699	0.0035	0.4396	0.0033	0.4109
27	29.04	0.01	0.1254	0.0000	0.0239	0.0000	0.1890	1.0739	0.0035	0.4401	0.0033	0.4098
28	29.79	0.01	0.1366	0.0000	0.0268	0.0000	0.2106	1.1456	-0.0003	0.4707	-0.0003	0.4109
29	30.18	0.01	0.1255	0.0000	0.0227	0.0000	0.1868	1.1095	0.0012	0.4551	0.0011	0.4101
30	30.36	0.00	0.1458	0.0000	0.0324	0.0000	0.2250	1.1190	0.0005	0.4561	0.0004	0.4094
31	30.69	0.01	0.1479	0.0000	0.0319	0.0000	0.2293	1.1068	0.0012	0.4520	0.0011	0.4083
32	30.39	0.00	0.1311	0.0000	0.0273	0.0000	0.2043	1.0946	0.0017	0.4471	0.0016	0.4085
33	31.18	0.00	0.1296	0.0000	0.0261	0.0000	0.1960	1.1175	0.0009	0.4557	0.0008	0.4077
34	31.46	0.00	0.1234	0.0000	0.0244	0.0000	0.1904	1.1214	0.0010	0.4559	0.0009	0.4065
35	31.73	0.00	0.1299	0.0000	0.0262	0.0000	0.2034	1.1243	0.0008	0.4567	0.0009	0.4062
36	32.01	0.00	0.1150	0.0000	0.0205	0.0000	0.1790	1.1065	0.0017	0.4477	0.0015	0.4046
37	32.28	0.00	0.1167	0.0000	0.0194	0.0000	0.1755	1.1376	0.0002	0.4602	0.0002	0.4045
38	32.54	0.00	0.1150	0.0000	0.0200	0.0000	0.1737	1.1242	0.0004	0.4541	0.0004	0.4039
39	32.80	0.00	0.1099	0.0000	0.0181	0.0000	0.1674	1.1363	0.0001	0.4592	0.0001	0.4041
40	33.06	0.00	0.0979	0.0000	0.0134	0.0000	0.1407	1.1146	0.0010	0.4461	0.0009	0.4021
41	33.32	0.00	0.0977	0.0000	0.0145	0.0000	0.1460	1.0902	0.0021	0.4363	0.0019	0.4002
42	33.56	0.00	0.0922	0.0000	0.0119	0.0000	0.1296	1.1135	0.0004	0.4465	0.0006	0.4010
43	33.82	0.00	0.1199	0.0000	0.0184	0.0000	0.1695	1.1123	0.0007	0.4461	0.0006	0.4011
44	34.06	0.00	0.1014	0.0000	0.0144	0.0000	0.1654	1.1287	-0.0004	0.4528	-0.0004	0.4011
45	34.31	0.01	0.0873	0.0000	0.0117	0.0000	0.1343	1.1302	-0.0104	0.4532	-0.0104	0.4010
46	34.58	0.00	0.1014	0.0000	0.0164	0.0000	0.1654	1.1260	-0.0005	0.4513	-0.0004	0.4008

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	MACH	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
1	67	1.60	1.67	0.0	81.0P13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CM3	XCPF3	YCPF3	CNF4	CM4	CM4	XCPF4	YCPF4
47	36.82	0.02	0.0745	9.9999	0.0160	9.9999	0.1477	1.1518	-0.0017	0.4620	-0.0015	0.4011
48	35.86	0.00	0.0741	9.9999	0.0161	9.9999	0.1621	1.1207	-0.0006	0.4494	-0.0005	0.4001
49	35.32	0.00	0.0745	9.9999	0.0134	9.9999	0.1413	1.1235	-0.0036	0.4565	-0.0007	0.4010
50	35.55	0.02	0.0751	9.9999	0.0114	9.9999	0.1389	1.1251	-0.0016	0.4568	-0.0014	0.4007
51	35.77	0.04	0.0754	9.9999	0.0120	9.9999	0.1373	1.1294	-0.0022	0.4534	-0.0020	0.4014
52	36.06	0.01	0.0747	9.9999	0.0141	9.9999	0.1547	1.1783	-0.0045	0.4739	-0.0036	0.4027
53	36.27	0.03	0.0868	9.9999	0.0134	9.9999	0.1506	1.1652	-0.0060	0.4678	-0.0036	0.4015
54	36.50	0.02	0.1013	9.9999	0.0193	9.9999	0.1900	1.1843	-0.0048	0.4746	-0.0041	0.4024
55	36.78	0.04	0.1258	9.9999	0.0166	9.9999	0.1712	1.1858	-0.0056	0.4772	-0.0046	0.4024
56	36.99	0.01	0.0875	9.9999	0.0130	9.9999	0.1481	1.1954	-0.0060	0.4808	-0.0050	0.4027
57	37.22	0.01	0.0921	9.9999	0.0157	9.9999	0.1701	1.1889	-0.0059	0.4782	-0.0050	0.4023
58	37.65	0.03	0.0957	9.9999	0.0141	9.9999	0.1656	1.1738	-0.0057	0.4712	-0.0049	0.4015
59	37.70	0.02	0.0792	9.9999	0.0116	9.9999	0.1471	1.1886	-0.0054	0.4776	-0.0050	0.4018
60	37.91	-0.01	0.0757	9.9999	0.0105	9.9999	0.1393	1.2080	-0.0076	0.4862	-0.0063	0.4025
61	38.16	-0.00	0.0867	9.9999	0.0082	9.9999	0.1198	1.1972	-0.0075	0.4818	-0.0063	0.4024
62	38.41	0.01	0.0875	9.9999	0.0134	9.9999	0.1515	1.2176	-0.0082	0.4909	-0.0067	0.4032
63	38.62	0.01	0.0817	9.9999	0.0111	9.9999	0.1365	1.2244	-0.0086	0.4962	-0.0070	0.4036
64	38.86	-0.03	0.0766	9.9999	0.0092	9.9999	0.1239	1.2347	-0.0101	0.5011	-0.0082	0.4042
65	39.09	-0.01	0.0757	9.9999	0.0111	9.9999	0.1373	1.2357	-0.0101	0.4998	-0.0082	0.4045
66	39.36	-0.01	0.0766	9.9999	0.0096	9.9999	0.1320	1.2437	-0.0101	0.5026	-0.0081	0.4041
67	39.53	-0.02	0.0735	9.9999	0.0088	9.9999	0.1203	1.2367	-0.0098	0.4996	-0.0076	0.4040
68	39.79	-0.01	0.0793	9.9999	0.0110	9.9999	0.1363	1.2467	-0.0110	0.5043	-0.0088	0.4045
69	39.95	-0.00	0.0781	9.9999	0.0112	9.9999	0.1446	1.2268	-0.0103	0.4958	-0.0086	0.4043
70	40.17	-0.00	0.0736	9.9999	0.0103	9.9999	0.1410	1.2414	-0.0111	0.5021	-0.0090	0.4044
71	40.35	0.00	0.0757	9.9999	0.0108	9.9999	0.1443	1.2470	-0.0117	0.5046	-0.0094	0.4046
72	40.58	0.01	0.0850	9.9999	0.0108	9.9999	0.1737	1.2603	-0.0116	0.5102	-0.0092	0.4048
73	40.80	-0.01	0.0710	9.9999	0.0102	9.9999	0.1383	1.2088	-0.0120	0.5104	-0.0099	0.4054
74	41.06	-0.00	0.0750	9.9999	0.0111	9.9999	0.1475	1.2429	-0.0117	0.5036	-0.0096	0.4051
75	41.21	0.01	0.0756	9.9999	0.0111	9.9999	0.1475	1.2510	-0.0118	0.5075	-0.0096	0.4056
76	41.42	-0.01	0.0823	9.9999	0.0152	9.9999	0.1838	1.2417	-0.0120	0.5025	-0.0097	0.4046
77	41.62	0.02	0.0803	9.9999	0.0125	9.9999	0.1564	1.2502	-0.0132	0.5074	-0.0106	0.4058
78	41.82	0.03	0.0869	9.9999	0.0154	9.9999	0.1812	1.2284	-0.0122	0.4978	-0.0099	0.4053
79	42.02	-0.00	0.0825	9.9999	0.0165	9.9999	0.1765	1.2676	-0.0130	0.5151	-0.0103	0.4064
80	42.22	-0.01	0.0778	9.9999	0.0137	9.9999	0.1756	1.2501	-0.0130	0.5074	-0.0104	0.4059
81	42.43	0.01	0.0755	9.9999	0.0127	9.9999	0.1676	1.2637	-0.0136	0.5139	-0.0108	0.4067
82	42.60	-0.00	0.0771	9.9999	0.0173	9.9999	0.1963	1.2596	-0.0134	0.5124	-0.0107	0.4068
83	42.74	-0.00	0.0821	9.9999	0.0164	9.9999	0.1863	1.2602	-0.0143	0.5212	-0.0113	0.4072
84	42.99	0.00	0.0720	9.9999	0.0112	9.9999	0.1563	1.2597	-0.0137	0.5131	-0.0109	0.4073
85	43.15	0.01	0.0854	9.9999	0.0151	9.9999	0.1883	1.2311	-0.0139	0.5009	-0.0109	0.4068
86	43.33	-0.01	0.0823	9.9999	0.0164	9.9999	0.1989	1.2664	-0.0148	0.5145	-0.0117	0.4079
87	43.51	0.00	0.0841	9.9999	0.0146	9.9999	0.1859	1.2578	-0.0137	0.5107	-0.0109	0.4080
88	43.71	0.01	0.0784	9.9999	0.0153	9.9999	0.1935	1.2597	-0.0144	0.5145	-0.0114	0.4084
89	43.89	0.00	0.0815	9.9999	0.0218	9.9999	0.2343	1.2596	-0.0143	0.5152	-0.0119	0.4090
90	44.08	0.01	0.0798	9.9999	0.0160	9.9999	0.2103	1.2662	-0.0142	0.5076	-0.0114	0.4073
91	44.26	0.01	0.0867	9.9999	0.0191	9.9999	0.2253	1.2749	-0.0153	0.5213	-0.0120	0.4089
92	44.42	0.02	0.0835	9.9999	0.0160	9.9999	0.2273	1.2532	-0.0146	0.5127	-0.0117	0.4091

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PASS MACH REYNO/FT CONF CORR L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 67 1.600 1.7 0.0 BLOCK 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	ACNF3	YCNF3	CNF4	CM4	CA4	ACNF4	YCNF4
93	44.60	0.00	0.0754	0.0000	0.0164	0.0000	0.2162	1.2833	-0.0162	0.5259	-0.0126	0.4098
94	44.79	0.01	0.0747	0.0000	0.0161	0.0000	0.2077	1.2559	-0.0160	0.5142	-0.0116	0.4094
95	44.98	0.01	0.0716	0.0000	0.0217	0.0000	0.2494	1.2570	-0.0152	0.5154	-0.0121	0.4098
96	45.17	0.01	0.0682	0.0000	0.0265	0.0000	0.2850	1.2726	-0.0157	0.5219	-0.0124	0.4101
97	45.33	0.01	0.0717	0.0000	0.0235	0.0000	0.2563	1.2604	-0.0157	0.5207	-0.0124	0.4104
98	45.51	0.00	0.0701	0.0000	0.0195	0.0000	0.2436	1.2591	-0.0151	0.5163	-0.0120	0.4101
99	45.70	0.01	0.0745	0.0000	0.0263	0.0000	0.2927	1.2755	-0.0159	0.5233	-0.0125	0.4103
100	45.87	0.00	0.0731	0.0000	0.0187	0.0000	0.2185	1.2455	-0.0146	0.5121	-0.0117	0.4111
101	46.06	0.01	0.0717	0.0000	0.0244	0.0000	0.2661	1.2786	-0.0159	0.5261	-0.0132	0.4114
102	46.22	0.00	0.0715	0.0000	0.0244	0.0000	0.2647	1.2642	-0.0159	0.5126	-0.0128	0.4120
103	46.46	0.00	0.0737	0.0000	0.0225	0.0000	0.2625	1.2695	-0.0160	0.5141	-0.0126	0.4114
104	46.58	0.00	0.0691	0.0000	0.0185	0.0000	0.1930	1.2363	-0.0161	0.5099	-0.0130	0.4124
105	46.76	0.00	0.0752	0.0000	0.0185	0.0000	0.2471	1.2336	-0.0161	0.5075	-0.0131	0.4114
106	46.92	0.00	0.0744	0.0000	0.0215	0.0000	0.2547	1.2251	-0.0160	0.5054	-0.0131	0.4125
107	47.10	0.00	0.0720	0.0000	0.0217	0.0000	0.2656	1.2239	-0.0163	0.5057	-0.0133	0.4132
108	47.27	0.00	0.0679	0.0000	0.0229	0.0000	0.2605	1.2338	-0.0179	0.5103	-0.0145	0.4136
109	47.42	0.00	0.0730	0.0000	0.0184	0.0000	0.2333	1.2259	-0.0156	0.5062	-0.0130	0.4131
110	47.60	0.00	0.0680	0.0000	0.0235	0.0000	0.2709	1.2134	-0.0165	0.5017	-0.0136	0.4134
111	47.81	0.01	0.0734	0.0000	0.0215	0.0000	0.2827	1.2268	-0.0159	0.5056	-0.0132	0.4108
112	47.99	0.01	0.0713	0.0000	0.0205	0.0000	0.2744	1.1909	-0.0148	0.4902	-0.0124	0.4116
113	48.18	0.00	0.0729	0.0000	0.0382	0.0000	0.2937	1.2007	-0.0162	0.4938	-0.0135	0.4113
114	48.34	0.00	0.0729	0.0000	0.0267	0.0000	0.2796	1.1949	-0.0158	0.4913	-0.0133	0.4115
115	48.52	0.01	0.0722	0.0000	0.0296	0.0000	0.2996	1.2006	-0.0159	0.4943	-0.0133	0.4117
116	48.68	0.00	0.0733	0.0000	0.0262	0.0000	0.2809	1.2072	-0.0171	0.4972	-0.0142	0.4119
117	48.86	0.00	0.0687	0.0000	0.0291	0.0000	0.2717	1.1957	-0.0173	0.4931	-0.0145	0.4121
118	49.02	0.01	0.0736	0.0000	0.0277	0.0000	0.2974	1.2064	-0.0176	0.4950	-0.0146	0.4109
119	49.20	0.00	0.0745	0.0000	0.0289	0.0000	0.2848	1.2105	-0.0168	0.4982	-0.0150	0.4116
120	49.38	0.00	0.0696	0.0000	0.0251	0.0000	0.2793	1.1967	-0.0173	0.4897	-0.0146	0.4120
121	49.56	0.00	0.0719	0.0000	0.0291	0.0000	0.2953	1.2078	-0.0176	0.4956	-0.0154	0.4114
122	49.73	0.00	0.0733	0.0000	0.0300	0.0000	0.3022	1.2069	-0.0174	0.4950	-0.0159	0.4111
123	49.93	0.00	0.0739	0.0000	0.0322	0.0000	0.2622	1.2100	-0.0180	0.4973	-0.0156	0.4110
124	50.10	0.00	0.0734	0.0000	0.0268	0.0000	0.2694	1.2101	-0.0181	0.4976	-0.0158	0.4112
125	50.27	0.00	0.0685	0.0000	0.0194	0.0000	0.2408	1.2155	-0.0172	0.5012	-0.0158	0.4123
126	50.43	-0.00	0.0734	0.0000	0.0196	0.0000	0.2467	1.2251	-0.0200	0.5041	-0.0163	0.4114
127	50.63	0.00	0.0747	0.0000	0.0255	0.0000	0.2515	1.2161	-0.0201	0.5013	-0.0165	0.4115
128	50.79	0.00	0.0741	0.0000	0.0218	0.0000	0.2544	1.2329	-0.0203	0.5071	-0.0165	0.4113
129	51.02	0.01	0.0749	0.0000	0.0265	0.0000	0.2471	1.2599	-0.0223	0.5136	-0.0177	0.4127
130	51.09	0.01	0.0773	0.0000	0.0194	0.0000	0.2443	1.2306	-0.0207	0.5068	-0.0166	0.4134
131	51.29	0.01	0.0775	0.0000	0.0247	0.0000	0.2820	1.2549	-0.0216	0.5177	-0.0174	0.4125
132	51.48	0.01	0.0781	0.0000	0.0191	0.0000	0.2713	1.2471	-0.0217	0.5228	-0.0172	0.4126
133	51.61	0.02	0.0842	0.0000	0.0230	0.0000	0.2736	1.2475	-0.0227	0.5234	-0.0179	0.4130
134	51.77	0.03	0.0727	0.0000	0.0169	0.0000	0.2321	1.2358	-0.0209	0.5120	-0.0169	0.4133
135	51.93	0.03	0.0710	0.0000	0.0184	0.0000	0.2343	1.2599	-0.0227	0.5200	-0.0180	0.4129
136	52.08	0.02	0.0751	0.0000	0.0174	0.0000	0.2381	1.2411	-0.0209	0.5121	-0.0169	0.4129
137	52.28	0.02	0.0776	0.0000	0.0203	0.0000	0.2654	1.2269	-0.0213	0.5062	-0.0174	0.4126
138	52.42	0.02	0.0691	0.0000	0.0180	0.0000	0.2346	1.2418	-0.0215	0.5133	-0.0173	0.4133

PAGE 3 OF 3
SHEET 6 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAID-N PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 07 1.60 1.7 0.0 01e0F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	ACPF3	YCPF3	CNF4	CM4	CA4	YCPF4	YCPF4
139	52.60	[illegible]	0.[illegible]	9.[illegible]	0.0213	9.9999	0.2656	1.2353	-0.0217	0.5096	-0.0176	0.4125
140	52.74	[illegible]	0.[illegible]	9.[illegible]	0.0154	9.9999	0.2254	1.2527	-0.0216	0.5169	-0.0174	0.4129
141	52.85	[illegible]	0.[illegible]	9.[illegible]	0.0163	9.9999	0.2263	1.2300	-0.0215	0.5062	-0.0175	0.4115
142	53.11	[illegible]	0.[illegible]	9.[illegible]	0.0161	9.9999	0.2401	1.2423	-0.0222	0.5114	-0.0179	0.4116
143	53.25	0.01	0.[illegible]	9.[illegible]	0.0160	9.9999	0.2376	1.2459	-0.0226	0.5118	-0.0182	0.4111
144	53.40	[illegible]	0.[illegible]	9.9999	0.0164	9.9999	0.2348	1.2466	-0.0227	0.5131	-0.0182	0.4114
145	53.58	[illegible]	[illegible]	[illegible]	0.0230	[illegible]	0.2736	1.2303	-0.0221	0.5058	-0.0180	0.4111
146	53.72	0.01	0.[illegible]	9.[illegible]	0.0164	9.9999	0.2336	1.2420	-0.0222	0.5116	-0.0179	0.4118
147	53.93	[illegible]	0.[illegible]	9.[illegible]	0.0193	9.9999	0.2600	1.2017	-0.0208	0.4952	-0.0173	0.4121
148	54.09	0.01	[illegible]	9.9999	0.0177	9.9999	0.2506	1.2139	-0.0212	0.4990	-0.0175	0.4111
149	54.25	[illegible]	[illegible]	[illegible]	0.0169	9.9999	0.2478	1.2242	-0.0217	0.5033	-0.0178	0.4111
150	54.42	0.00	0.[illegible]	9.9999	0.0156	9.9999	0.2347	1.2244	-0.0222	0.5043	-0.0182	0.4118
151	54.56	[illegible]	0.[illegible]	9.9999	0.0161	9.9999	0.2293	1.2512	-0.0226	0.5127	-0.0181	0.4098
152	54.72	-0.02	0.[illegible]	9.9999	0.0169	9.9999	0.2478	1.2664	-0.0236	0.5205	-0.0187	0.4115
153	54.88	-0.01	0.[illegible]	9.9999	0.0162	9.9999	0.2455	1.2378	-0.0222	0.5081	-0.0180	0.4105
154	55.04	-0.03	0.[illegible]	9.9999	0.0157	9.9999	0.2516	1.2473	-0.0227	0.5091	-0.0182	0.4081
155	55.21	-0.02	0.[illegible]	9.9999	0.0173	9.9999	0.2678	1.2460	-0.0227	0.5054	-0.0182	0.4088
156	55.38	-0.02	0.[illegible]	9.9999	0.0167	9.9999	0.2445	1.2364	-0.0223	0.5054	-0.0181	0.4087
157	55.52	[illegible]	0.[illegible]	9.9999	0.0167	9.9999	0.2435	1.2761	-0.0240	0.5199	-0.0195	0.4081
158	55.66	-0.02	0.0713	9.9999	0.0192	9.9999	0.2691	1.2584	-0.0235	0.5143	-0.0187	0.4087
159	55.83	[illegible]	0.[illegible]	9.9999	0.0174	9.9999	0.2661	1.2636	-0.0234	0.5145	-0.0185	0.4072
160	55.99	-0.02	0.0585	9.9999	0.0164	9.9999	0.2525	1.2622	-0.0246	0.5144	-0.0195	0.4075
161	56.15	[illegible]	0.[illegible]	9.9999	0.0207	9.9999	0.2811	1.2309	-0.0226	0.5016	-0.0184	0.4075
162	56.30	-0.03	0.0598	9.9999	0.0155	9.9999	0.2497	1.2668	-0.0261	0.5253	-0.0203	0.4082
163	56.47	[illegible]	0.[illegible]	9.9999	0.0176	9.9999	0.2649	1.2760	-0.0254	0.5161	-0.0200	0.4067
164	56.62	-0.02	0.0552	9.9999	0.0149	9.9999	0.2447	1.3043	-0.0282	0.5325	-0.0217	0.4083
165	56.81	[illegible]	0.[illegible]	9.9999	0.0179	9.9999	0.2747	1.2761	-0.0260	0.5192	-0.0204	0.4069
166	56.97	-0.04	0.0673	9.9999	0.0169	9.9999	0.2756	1.2544	-0.0249	0.5105	-0.0199	0.4069
167	57.13	[illegible]	0.0626	9.9999	0.0165	9.9999	0.2641	1.2622	-0.0264	0.5118	-0.0209	0.4055
168	57.30	-0.07	0.0615	9.9999	0.0155	9.9999	0.2516	1.2854	-0.0278	0.5232	-0.0217	0.4071
169	57.47	[illegible]	0.[illegible]	9.9999	0.0163	9.9999	0.2635	1.2866	-0.0260	0.5231	-0.0218	0.4060
170	57.61	-0.03	0.0590	9.9999	0.0154	9.9999	0.2436	1.2661	-0.0264	0.5124	-0.0209	0.4053
171	57.78	[illegible]	0.[illegible]	9.9999	0.0168	9.9999	0.2647	1.2661	-0.0254	0.5063	-0.0204	0.4063
172	57.94	0.01	0.0622	9.9999	0.0170	9.9999	0.2730	1.2609	-0.0266	0.5124	-0.0211	0.4064
173	58.08	[illegible]	0.[illegible]	9.9999	0.0192	9.9999	0.2980	1.2634	-0.0275	0.5118	-0.0218	0.4050
174	58.22	0.01	0.0551	9.9999	0.0151	9.9999	0.2736	1.2325	-0.0261	0.4984	-0.0212	0.4044
175	58.38	[illegible]	0.[illegible]	9.9999	0.0168	9.9999	0.2875	1.2462	-0.0273	0.5062	-0.0219	0.4055
176	58.54	-0.05	0.0658	9.9999	0.0184	9.9999	0.2956	1.2736	-0.0290	0.5160	-0.0228	0.4052
177	58.67	[illegible]	0.0571	9.9999	0.0165	9.9999	0.2906	1.2717	-0.0286	0.5156	-0.0225	0.4055

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 4.

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART [illegible] [illegible] FM1 CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 84 1.60 1.7 45.0 81.0F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.75	0.09	-1.0131	2.5170	0.1941	-0.3261	-0.0081	0.3369	0.1160	0.2189	-2.7805
2	-5.75	0.10	-1.0955	2.6004	0.0720	-0.2417	-0.0063	0.3384	0.1186	0.2200	-2.8132
3	-5.75	0.10	-1.0224	2.5383	0.0326	-0.2213	-0.0147	0.3416	0.1206	0.2212	-2.7771
4	-5.75	0.10	-1.0164	2.5243	0.0187	-0.1870	-0.0064	0.3401	0.1189	0.2212	-2.7932
5	-5.74	0.10	-0.9610	2.3773	0.0303	-0.2036	-0.0104	0.3412	0.1155	0.2257	-2.9923
6	-5.66	0.10	-0.9974	1.4771	0.0994	-0.3244	-0.0086	0.3521	0.1030	0.2491	-2.8331
7	-2.59	0.10	-0.3658	1.1257	0.0095	-0.2167	-0.0092	0.3656	0.1015	0.2641	-3.0691
8	-0.57	0.10	-0.0191	0.2005	-0.0001	-0.1333	-0.0162	0.3615	0.0926	0.2588	-10.9131
9	1.37	0.10	0.3194	-0.1225	0.0618	-0.2326	-0.0105	0.3648	0.0948	0.2743	-2.2909
10	3.44	0.10	0.8673	-1.0676	0.0507	-0.2676	-0.0116	0.3581	0.0989	0.2572	-2.4489
11	5.33	0.10	1.2932	-2.5304	0.0033	-0.2382	-0.0196	0.3582	0.1142	0.2440	-2.5219
12	7.36	0.10	1.6031	-3.5701	0.0570	-0.2659	-0.0214	0.3599	0.1345	0.2254	-2.5465
13	9.36	0.10	1.8029	-4.2589	0.0302	-0.2178	-0.0109	0.3593	0.1598	0.1999	-2.5236
14	11.33	0.10	2.1597	-5.2265	0.0200	-0.2449	-0.0059	0.3701	0.1861	0.1840	-2.4704
15	13.29	0.09	2.5224	-6.2200	-0.0277	-0.1360	-0.0113	0.3686	0.2074	0.1612	-2.4025
16	15.31	0.10	2.9488	-7.4313	0.0179	-0.1941	-0.0170	0.3613	0.2167	0.1446	-2.3191
17	17.30	0.10	3.3613	-8.5302	0.0025	-0.1990	-0.0083	0.3609	0.2198	0.1210	-2.2289
18	19.34	0.11	3.8713	-9.7171	0.0462	-0.0823	-0.0075	0.3635	0.2235	0.1200	-2.1026
19	21.31	0.10	4.2852	-10.9511	0.0833	0.0135	-0.0430	0.3698	0.2538	0.0955	-1.9591
20	23.31	0.11	4.6521	-12.0170	0.0837	0.0354	-0.0534	0.3640	0.2943	0.0697	-1.7512
21	25.27	0.10	5.1127	-13.2964	0.3569	-0.2891	-0.0301	0.3695	0.3139	0.0359	-1.4873
22	27.36	0.10	5.7006	-14.1575	0.5186	-0.2421	0.0175	0.3313	0.3243	0.0070	-1.2557
23	29.32	0.10	6.2536	-15.0932	0.4203	-0.2093	0.0107	0.3162	0.3260	-0.0124	-1.1820
24	25.42	0.15	5.2478	-12.2265	0.4491	-0.2555	0.0308	0.3128	0.3274	-0.0146	-1.2013
25	29.30	0.10	6.2921	-14.7797	0.5535	-0.2297	0.0492	0.3075	0.3262	-0.0187	-1.1809
26	29.29	0.15	6.2993	-14.8855	0.5652	-0.3186	0.0447	0.3210	0.3278	-0.0068	-1.1503
27	29.05	0.10	6.1316	-14.5606	0.6337	-0.4063	0.0395	0.3107	0.3398	-0.0291	-1.1199
28	29.30	0.17	6.2993	-14.9963	0.7524	-0.5210	0.0587	0.3075	0.3330	-0.0254	-1.1146
29	29.00	0.10	6.2376	-14.8293	0.8990	-0.5384	0.0472	0.3102	0.3370	-0.0268	-1.0814
30	29.46	0.10	6.3554	-15.0206	0.8912	-0.6554	0.0664	0.3072	0.3435	-0.0363	-1.0753
31	30.29	0.10	6.5503	-15.7021	0.9172	-0.7116	0.0675	0.3204	0.3475	-0.0271	-1.0332
32	30.52	0.10	6.5249	-15.7375	0.9814	-0.6177	0.1226	0.3220	0.3511	-0.0291	-1.0615
33	30.79	0.19	6.5766	-15.8698	1.0849	-0.6521	0.1150	0.3260	0.3515	-0.0255	-1.0393
34	31.07	0.19	6.6870	-16.1965	1.0312	-0.6749	0.1141	0.3062	0.3543	-0.0481	-1.0116
35	31.34	0.19	7.0062	-17.1687	1.0864	-0.6559	0.1183	0.3072	0.3544	-0.0472	-1.0175
36	31.62	0.19	7.0016	-17.2436	1.0415	-0.7341	0.1132	0.3178	0.3556	-0.0378	-0.9805
37	31.84	0.20	7.1139	-17.4960	1.1400	-0.7940	0.1260	0.3184	0.3572	-0.0388	-0.9812
38	32.15	0.20	7.1828	-17.6804	1.1381	-0.8511	0.1203	0.3067	0.3592	-0.0525	-0.9578
39	32.45	0.22	7.2385	-17.8019	1.2370	-1.1557	0.1401	0.3165	0.3676	-0.0511	-0.9285
40	32.70	0.20	7.3159	-18.0264	1.3136	-1.1726	0.1494	0.3209	0.3672	-0.0463	-0.9171
41	32.98	0.20	7.3249	-18.0325	1.2172	-1.0698	0.1032	0.3252	0.3692	-0.0440	-0.8815
42	33.23	0.22	7.3472	-18.0594	1.4183	-1.3230	0.1248	0.3160	0.3736	-0.0576	-0.8859
43	33.47	0.21	7.3789	-18.1673	1.2983	-1.1831	0.1161	0.3111	0.3680	-0.0569	-0.8685
44	33.71	0.22	7.4066	-18.2693	1.3439	-1.1965	0.1291	0.3063	0.3704	-0.0641	-0.8504
45	33.98	0.21	7.4694	-18.4554	1.3404	-1.1194	0.1292	0.3073	0.3704	-0.0631	-0.8460
46	34.23	0.21	7.4781	-18.6818	1.4047	-1.1507	0.1541	0.2958	0.3708	-0.0750	-0.8377

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	MAID-S	RMI	COMP	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	6P	1.60	1.7	45.0	M1.0F13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	XCP
47	34.47	0.20	8.0668	-5.9213	1.4187	-1.2722	0.1487	0.2813	0.3691	-0.0877	-0.8086
48	34.72	0.20	8.0538	-5.9402	1.2174	-1.0734	0.1174	0.2930	0.3647	-0.0816	-0.7805
49	34.98	0.21	8.0500	-5.9434	1.3714	-1.3016	0.1615	0.2887	0.3576	-0.0789	-0.7835
50	35.21	0.21	8.0440	-5.9610	1.4153	-1.2361	0.1307	0.2953	0.3727	-0.0774	-0.7591
51	35.48	0.21	8.0400	-5.9673	1.3325	-1.2632	0.1433	0.2853	0.3743	-0.0889	-0.7683
52	35.69	0.20	8.0410	-5.9116	1.1439	-0.9751	0.1059	0.2895	0.3748	-0.0853	-0.7189
53	35.98	0.19	8.0414	-5.9059	0.9530	-0.7564	0.0818	0.2873	0.3687	-0.0814	-0.6983
54	36.17	0.19	8.0400	-5.9589	1.1477	-0.9042	0.0935	0.2499	0.3670	-0.1171	-0.6988
55	36.39	0.17	8.0533	-5.9133	0.8993	-0.6062	0.1240	0.2626	0.3674	-0.1048	-0.7126
56	36.64	0.19	8.0419	-5.9060	1.0131	-0.8330	0.1063	0.2616	0.3627	-0.1011	-0.6850
57	36.87	0.15	8.0589	-5.9994	0.8757	-0.6352	0.0863	0.2700	0.3675	-0.0975	-0.6869
58	37.13	0.13	8.0477	-5.9580	0.8915	-0.6488	0.0813	0.2614	0.3676	-0.1062	-0.6824
59	37.35	0.14	8.0504	-5.9163	0.8562	-0.6325	0.1053	0.2673	0.3623	-0.0949	-0.6520
60	37.58	0.14	8.0331	-5.9004	0.8415	-0.6195	0.1056	0.2458	0.3724	-0.1266	-0.6517
61	37.80	0.13	8.0502	-5.9209	0.8483	-0.6258	0.1057	0.2715	0.3746	-0.1025	-0.6364
62	38.14	0.10	8.0355	-5.9154	0.8592	-0.6110	0.0862	0.2696	0.3646	-0.0950	-0.6261
63	38.27	0.11	8.0264	-5.9114	0.8346	-0.6230	0.1056	0.2455	0.3650	-0.1155	-0.6192
64	38.51	0.12	8.0367	-5.9347	0.8169	-0.6137	0.0940	0.2420	0.3466	-0.1246	-0.6023
65	38.74	0.11	8.0329	-5.9394	0.8316	-0.6218	0.0938	0.2260	0.3458	-0.1266	-0.6050
66	39.08	0.12	8.0175	-5.9325	0.8356	-0.6102	0.1063	0.2398	0.3646	-0.1248	-0.6087
67	39.16	0.12	8.0224	-5.9424	0.8296	-0.6095	0.1251	0.2265	0.3626	-0.1361	-0.6114
68	39.40	0.09	8.0350	-5.9352	0.8117	0.4226	0.0863	0.2259	0.3667	-0.1408	-0.6108
69	39.61	0.10	8.0342	-5.9424	0.8106	-0.3595	0.0999	0.2253	0.3659	-0.1406	-0.6055
70	39.92	0.10	8.0116	-5.9365	0.8233	0.2507	0.0939	0.2217	0.3705	-0.1491	-0.6048
71	40.05	0.12	8.0509	-5.9685	0.8247	0.2470	0.0942	0.2157	0.3751	-0.1594	-0.5995
72	40.26	0.10	8.0410	-5.9739	0.8118	0.5203	0.0750	0.2249	0.3680	-0.1431	-0.6009
73	40.45	0.08	8.0466	-5.9769	-0.0006	0.7332	0.0447	0.2231	0.3664	-0.1433	-0.5911
74	40.60	0.09	10.0748	-5.9809	-0.0145	0.7462	0.0375	0.2099	0.3736	-0.1637	-0.5937
75	40.87	0.08	10.1242	-5.9907	-0.0781	0.8259	0.0437	0.2167	0.3667	-0.1500	-0.5891
76	41.11	0.07	10.3904	-5.9724	-0.2341	1.0890	0.0062	0.2087	0.3756	-0.1669	-0.5702
77	41.25	0.08	10.4073	-5.9803	-0.1945	1.0276	0.0129	0.2070	0.3732	-0.1662	-0.5713
78	41.50	0.08	10.4054	-5.9908	-0.0130	1.0037	0.0198	0.2223	0.3691	-0.1638	-0.5713
79	41.72	0.08	10.4316	-5.9784	-0.0186	1.0084	0.0327	0.2151	0.3752	-0.1601	-0.5659
80	41.98	0.07	10.4344	-5.9785	0.1571	1.0251	0.0146	0.2104	0.3785	-0.1681	-0.5666
81	42.10	0.08	10.4594	-5.9871	0.1722	0.8860	0.0458	0.2095	0.3744	-0.1649	-0.5278
82	42.24	0.05	10.4594	-5.9893	0.1643	0.8859	0.0337	0.1935	0.3772	-0.1837	-0.5185
83	42.49	0.08	10.4764	-5.9914	-0.1843	1.0722	0.0196	0.1939	0.3769	-0.1830	-0.5141
84	42.67	0.07	10.4744	-5.9911	-0.1214	1.0447	-0.0106	0.1807	0.3792	-0.1985	-0.5263
85	42.85	0.09	10.4952	-5.9855	-0.3212	1.2961	-0.0490	0.1809	0.3933	-0.2021	-0.5346
86	43.04	0.07	10.4950	-5.9917	-0.1262	1.0067	-0.0227	0.1939	0.3797	-0.1859	-0.5158
87	43.20	0.05	10.5032	-5.9778	-0.4391	1.4523	-0.0740	0.1872	0.3563	-0.1691	-0.5266
88	43.38	0.05	11.0087	-5.9274	-0.3750	1.4799	-0.0736	0.1953	0.3960	-0.1927	-0.5293
89	43.58	0.07	11.0440	-5.9354	-0.4913	1.5312	-0.0369	0.1784	0.3797	-0.2013	-0.4804
90	43.74	0.07	10.9550	-5.9937	-0.1744	1.0439	-0.0348	0.1607	0.3712	-0.2105	-0.4660
91	43.92	0.07	11.0534	-5.9782	-0.4476	1.4945	-0.0221	0.1526	0.3838	-0.2312	-0.4594
92	44.10	0.07	11.1450	-5.2955	-0.1760	1.1227	-0.0347	0.1724	0.3840	-0.2156	-0.4751

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART M/LM RNLM=6 PM1 CONF 1 DEL1 DEL2 DEL3 DEL4 TRANSITION
7 AB 1.00 1.7 55.0 MACH13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.27	0.07	11.1415	-5.1175	-0.1625	1.0024	-1.0279	0.1549	0.4834	-0.2240	-0.4487
94	44.48	0.08	11.1433	-5.1071	-0.2417	1.0365	-0.0549	0.1594	0.3466	-0.2270	-0.4564
95	44.85	0.07	11.2713	-5.1713	-0.2776	0.9921	-0.0594	0.1440	0.3537	-0.2247	-0.4257
96	44.93	0.08	11.3036	-5.0983	-0.3545	1.2159	-0.0724	0.1420	0.3742	-0.2322	-0.4410
97	45.02	0.07	11.4337	-5.0481	-0.1131	1.1235	-0.0599	0.1536	0.3861	-0.2325	-0.4915
98	45.19	0.08	11.4141	-5.0123	-0.2554	0.8766	-0.0406	0.1402	0.3776	-0.2374	-0.4320
99	45.37	0.06	11.3527	-5.0373	-0.1173	0.7314	-0.0454	0.1216	0.3649	-0.2435	-0.3830
100	45.55	0.07	11.5610	-5.0760	-0.1203	0.9406	-0.0329	0.1527	0.3793	-0.2266	-0.4073
101	45.74	0.08	11.5821	-5.0764	-0.0874	1.0099	-0.0455	0.1480	0.3872	-0.2392	-0.4097
102	45.90	0.08	11.5873	-5.0518	-0.0818	0.8394	-0.0451	0.1350	0.3746	-0.2396	-0.3889
103	46.07	0.07	11.6121	-5.0171	-0.1405	0.6147	-0.0514	0.1322	0.3787	-0.2465	-0.3718
104	46.24	0.07	11.6416	-5.0215	-0.1569	0.6733	-0.0515	0.1420	0.3820	-0.2400	-0.3671
105	46.42	0.08	11.6687	-5.0595	-0.2285	0.8140	-0.0693	0.1219	0.3787	-0.2573	-0.3792
106	46.59	0.07	11.7038	-5.0290	-0.1518	0.8606	-0.0938	0.1152	0.3768	-0.2636	-0.3650
107	46.77	0.08	11.6966	-5.0326	-0.2967	0.7127	-0.0951	0.1232	0.3731	-0.2499	-0.3627
108	46.94	0.05	11.6966	-5.0211	-0.3204	0.6273	-0.1153	0.1026	0.3707	-0.2681	-0.3592
109	47.12	0.07	12.0343	-5.0575	-0.2602	0.6361	-0.0831	0.1212	0.3872	-0.2660	-0.3771
110	47.29	0.08	12.0343	-5.0287	-0.3067	0.5367	-0.0895	0.1182	0.3796	-0.2606	-0.3513
111	47.46	0.06	12.0641	-5.0223	-0.1933	0.5629	-0.0825	0.1154	0.3816	-0.2562	-0.3496
112	47.64	0.07	12.0178	-5.0438	-0.1699	0.5968	-0.0846	0.1257	0.3821	-0.2564	-0.3517
113	47.81	0.07	12.0681	-5.1463	-0.1387	0.1314	-0.0627	0.1210	0.3928	-0.2718	-0.3375
114	47.99	0.08	12.0344	-5.0168	-0.1772	0.2596	-0.0649	0.1163	0.3815	-0.2652	-0.3206
115	48.16	0.05	12.0637	-5.0383	-0.1644	0.1158	-0.0555	0.1248	0.3846	-0.2668	-0.3198
116	48.35	0.05	12.0522	-5.0210	-0.0832	0.5315	-0.0617	0.1175	0.3845	-0.2670	-0.3366
117	48.52	0.06	12.0504	-5.0134	-0.0706	-0.1654	-0.0167	0.1334	0.3873	-0.2539	-0.3217
118	48.69	0.05	12.0603	-5.0300	-0.0957	-0.3049	-0.0038	0.1320	0.3848	-0.2578	-0.3118
119	48.87	0.07	12.0606	-5.0337	0.0103	-0.0668	-0.0413	0.1517	0.4052	-0.2535	-0.3009
120	49.04	0.07	12.0284	-5.0331	0.0232	-0.3429	-0.0093	0.1338	0.4044	-0.2706	-0.3090
121	49.21	0.07	12.0631	-5.0403	0.0262	-0.0650	0.0155	0.2003	0.4286	-0.2263	-0.3057
122	49.39	0.07	12.0104	-5.1782	0.0041	-0.5209	0.0221	0.1543	0.4103	-0.2563	-0.3260
123	49.56	0.05	12.0179	-5.1564	-0.1384	-0.4650	-0.0160	0.2106	0.4331	-0.2225	-0.3914
124	49.76	0.05	12.0134	-5.0106	-0.1054	-0.4439	-0.0035	0.2116	0.4329	-0.2213	-0.3821
125	49.96	0.06	12.0476	-5.0149	-0.0731	-0.3239	-0.0034	0.2054	0.4240	-0.2187	-0.3898
126	50.13	0.06	12.0411	-5.0178	-0.1568	-0.6498	0.0152	0.1830	0.4064	-0.2239	-0.3882
127	50.32	0.05	12.0319	-5.0139	-0.1424	-0.6245	0.0153	0.1731	0.4060	-0.2329	-0.3534
128	50.50	0.06	12.0170	-5.0078	-0.0994	-0.6168	0.0212	0.1570	0.3769	-0.2149	-0.3699
129	50.67	0.03	12.0237	-5.0253	-0.1351	-0.4056	0.0213	0.1665	0.3924	-0.2259	-0.3920
130	50.84	0.03	12.0462	-5.0223	-0.1331	-1.0323	0.0215	0.1654	0.4057	-0.2353	-0.3883
131	51.02	0.04	12.0491	-5.0233	-0.1954	-0.9723	0.0215	0.1641	0.4028	-0.2187	-0.3893
132	51.20	0.04	12.0195	-5.0414	-0.2223	-0.8891	0.0214	0.1755	0.4046	-0.2293	-0.3988
133	51.36	0.04	12.0154	-5.0361	-0.1761	-1.0613	0.0097	0.1697	0.4030	-0.2333	-0.3918
134	51.53	0.05	12.0284	-5.0364	-0.1175	-1.1661	0.0164	0.1778	0.4056	-0.2276	-0.3694
135	51.71	0.04	12.0731	-5.1131	-0.2271	-1.0250	0.0161	0.1753	0.4034	-0.2181	-0.3724
136	51.90	0.03	12.0112	-5.0427	-0.2278	-0.9656	0.0161	0.1958	0.4068	-0.2111	-0.3674
137	52.05	0.04	12.0709	-5.0162	-0.1203	-1.1663	-0.0013	0.1726	0.3922	-0.2196	-0.3635
138	52.25	0.03	12.0963	-5.0206	-0.1956	-1.2108	0.0049	0.1913	0.3963	-0.2070	-0.3720

PANTIN MISSILE TAILS EFFECTS DATA

TEST PART WALL MACH= PHI= COLF= L= DEL1 DEL2 DEL3 DEL4 TRANSITION
7 AA 1.60 1.7 45.0 MINUS13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	C_A	C_{LM}	C_Y	C_{LN}	CLL	CA	CAB	CAF	ACP
139	52.41	0.03	14.0[illegible]	-5.2136	-0.0[illegible]706	-1.0[illegible]737	0.0050	0.1827	0.4011	-0.2146	-0.3706
140	52.69	0.03	14.0413	-5.1751	-0.0[illegible]4[illegible]5	-1.0[illegible]4[illegible]9	0.0053	0.1732	0.3981	-0.2068	-0.3686
141	52.79	0.03	14.[illegible]3	-5.[illegible]4	-0.[illegible]05	-1.[illegible]931	-0.0005	0.1833	0.3985	-0.2152	-0.3568
142	52.90	0.04	14.0155	-5.[illegible]1[illegible]	-0.0[illegible]7[illegible]	-1.07[illegible]	-0.0004	0.1775	0.3967	-0.2072	-0.3611
143	53.03	0.03	14.0731	-5.1388	-0.[illegible]309	-1.[illegible]576	0.0054	0.1719	0.3917	-0.2198	-0.3650
144	53.29	0.03	14.[illegible]27	-5.[illegible]33	0.[illegible]402	-1.0332	0.0124	0.1761	0.4026	-0.2148	-0.3815
145	53.03	0.03	14.5121	-5.[illegible]4	-0.[illegible]2	-1.[illegible]966	0.0184	0.1798	0.3905	-0.2107	-0.3886
146	53.46	0.04	14.5412	-5.[illegible]20	-0.0224	-1.29[illegible]	0.0119	0.1617	0.4049	-0.2022	-0.4058
147	53.80	0.04	14.[illegible]13	-5.[illegible]35	-0.[illegible]3[illegible]	-1.2922	0.0006	0.1685	0.[illegible]95	-0.2370	-0.3861
148	53.96	0.04	14.[illegible]1	-5.[illegible]7	-0.0[illegible]17	-0.[illegible]418	0.0004	0.1962	0.4136	-0.2154	-0.3928
149	54.12	0.04	14.7524	-5.[illegible]20	-0.[illegible]0[illegible]4	-1.0006	0.0004	0.1[illegible]3	0.4191	-0.2308	-0.3930
150	54.20	0.03	14.5[illegible]21	-5.[illegible]7[illegible]	0.[illegible]743	-0.[illegible]57	0.0068	0.1893	0.4224	-0.2336	-0.3828
151	54.37	0.04	13.[illegible]3[illegible]	-5.[illegible]3[illegible]	0.[illegible]4[illegible]	-0.[illegible]42[illegible]	0.0066	0.1[illegible]6	0.[illegible]27	-0.2[illegible]1	-0.3[illegible]2
152	54.55	0.03	14.2[illegible]	-5.[illegible]71[illegible]	0.[illegible]36[illegible]	-0.6943	0.0005	0.1782	0.3[illegible]2	-0.2060	-0.3703
153	54.71	0.03	14.1[illegible]2[illegible]	-5.[illegible]7[illegible]	0.[illegible]3[illegible]6	-0.[illegible]5[illegible]	0.0007	0.1780	0.3923	-0.2163	-0.3[illegible]3
154	54.87	0.03	14.[illegible]3[illegible]	-5.[illegible]5[illegible]	0.[illegible]4[illegible]	-0.7677	0.0126	0.1[illegible]5	0.[illegible]65	-0.2310	-0.3792
155	55.01	0.03	14.[illegible]2[illegible]	-5.[illegible]3[illegible]	0.[illegible]4[illegible]	-0.[illegible]6[illegible]	0.0126	0.1[illegible]5[illegible]	0.[illegible]16[illegible]	-0.[illegible]308	-0.3[illegible]4
156	55.19	0.03	14.[illegible]7[illegible]	-5.[illegible]2[illegible]	-0.[illegible]50[illegible]	-0.[illegible]4[illegible]9	0.0062	0.1606	0.3946	-0.2390	-0.3517
157	55.33	0.04	14.3[illegible]3	-5.[illegible]3[illegible]	-0.[illegible]381	-0.[illegible]2[illegible]	0.0122	0.1[illegible]2[illegible]	0.[illegible]45	-0.2377	-0.3[illegible]9
158	55.46	0.03	14.[illegible]5[illegible]	-5.[illegible]7[illegible]	0.[illegible]2[illegible]	-0.6618	0.0047	0.1[illegible]3	0.[illegible]97	-0.2234	-0.3[illegible]1
159	55.61	0.04	14.[illegible]2[illegible]	-5.[illegible]3[illegible]	0.[illegible]4[illegible]	-0.[illegible]7[illegible]	0.0126	0.2151	0.[illegible]58	-0.[illegible]107	-0.3[illegible]6
160	55.79	0.05	14.[illegible]3	-5.[illegible]1[illegible]	0.[illegible]3[illegible]	-0.7725	0.0133	0.2090	0.[illegible]09	-0.2219	-0.3977
161	55.96	0.04	14.[illegible]3[illegible]	-5.[illegible]2[illegible]	0.[illegible]33[illegible]	-0.[illegible]525[illegible]	0.0076	0.1962	0.[illegible]66	-0.2204	-0.[illegible]03
162	56.11	0.04	14.[illegible]3	-5.[illegible]3[illegible]	0.[illegible]2[illegible]	-0.3412	0.0070	0.1758	0.[illegible]96	-0.2338	-0.3968
163	56.31	0.04	14.[illegible]2[illegible]	-5.[illegible]1[illegible]	-0.[illegible]1[illegible]2	-0.[illegible]362[illegible]	-0.0004	0.1[illegible]6[illegible]	0.[illegible]77	-0.2509	-0.[illegible]62
164	56.44	0.03	14.[illegible]5[illegible]	-5.[illegible]3[illegible]	0.[illegible]4[illegible]	-0.[illegible]5[illegible]6	0.0070	0.1[illegible]3[illegible]	0.[illegible]27[illegible]	-0.2[illegible]40	-0.3[illegible]89
165	56.61	0.01	14.[illegible]3[illegible]	-5.[illegible]3[illegible]	-0.[illegible]2[illegible]	-0.[illegible]70[illegible]	-0.0056	0.155[illegible]	0.[illegible]69	-0.2519	-0.[illegible]033
166	56.78	0.03	14.[illegible]3[illegible]	-5.[illegible]7[illegible]	-0.0[illegible]02	-0.3172	0.0063	0.1[illegible]4[illegible]	0.[illegible]75	-0.2481	-0.3960
167	56.95	0.01	14.[illegible]7[illegible]	-5.[illegible]4[illegible]	0.[illegible]317	-0.[illegible]26[illegible]	0.0025	0.1955	0.[illegible]21	-0.2266	-0.[illegible]204
168	57.11	0.04	14.[illegible]3	-5.[illegible]4[illegible]	0.[illegible]65[illegible]	-0.[illegible]3[illegible]5	0.0015	0.1[illegible]11	0.[illegible]20	-0.2409	-0.3849
169	57.27	0.04	14.[illegible]3[illegible]	-5.[illegible]3[illegible]	-0.[illegible]16[illegible]	-0.[illegible]8[illegible]6	-0.0004	0.[illegible]167	0.[illegible]361	-0.[illegible]75[illegible]	-0.[illegible]48[illegible]
170	57.44	0.03	14.[illegible]3[illegible]	-5.[illegible]7[illegible]	-0.[illegible]3[illegible]	-0.0943	-0.0049	0.1620	0.[illegible]74	-0.2454	-0.3901
171	57.61	0.04	15.[illegible]3[illegible]	-5.[illegible]5[illegible]	0.[illegible]42[illegible]	1.3[illegible]6[illegible]	-0.0026	0.1057	0.[illegible]45	-0.3149	-0.[illegible]298
172	57.77	0.04	15.[illegible]3[illegible]	-5.[illegible]3[illegible]	0.[illegible]2[illegible]	0.0[illegible]73	0.0041	0.1[illegible]75	0.[illegible]16	-0.2641	-0.3770
173	57.96	0.03	15.[illegible]41	-5.[illegible]4[illegible]	-0.[illegible]7[illegible]	1.7521	-0.0105	0.1[illegible]10	0.[illegible]17	-0.2507	-0.[illegible]401
174	58.03	0.03	15.[illegible]2	-5.[illegible]31	0.[illegible]3[illegible]	-0.25[illegible]	-0.0021	0.1560	0.[illegible]3[illegible]	-0.2564	-0.3977
175	58.17	0.04	15.[illegible]3	-5.[illegible]2[illegible]	-0.[illegible]2[illegible]	0.[illegible]29[illegible]	-0.0116	0.1161	0.[illegible]16	-0.2035	-0.3956
176	58.31	0.01	14.[illegible]7	-5.[illegible]7[illegible]	0.[illegible]113	1.1[illegible]4	-0.0[illegible]2	0.1103	0.3877	-0.2774	-0.4026
177	58.49	0.03	15.[illegible]3[illegible]	-5.[illegible]3[illegible]	-0.[illegible]2[illegible]	-0.02[illegible]	-0.0092	0.1253	0.3905	-0.2655	-0.3993
178	58.61	-0.[illegible]	15.[illegible]3[illegible]	-7.[illegible]3[illegible]	-0.3[illegible]1	0.72[illegible]	-0.0241	0.1567	0.[illegible]4[illegible]	-0.2621	-0.4631
179	58.82	0.04	15.[illegible]7	-5.[illegible]52	-0.[illegible]61[illegible]	0.[illegible]5[illegible]2	-0.[illegible]219	0.150[illegible]	0.[illegible]29[illegible]	-0.2769	-0.[illegible]347
180	58.91	0.03	15.[illegible]4	-5.[illegible]1	-0.[illegible]7[illegible]	2.3[illegible]1	-0.0267	0.0741	0.[illegible]53	-0.3412	-0.5435
181	58.[illegible]	-0.[illegible]	15.[illegible]2[illegible]	-7.[illegible]3[illegible]	-0.[illegible]527[illegible]	0.[illegible]89[illegible]	-0.0367	0.[illegible]859	0.3[illegible]51	-0.2942	-0.[illegible]333

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART ALPH SIZE=A PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 0P 1.00 1.7 45.0 BL=UPR13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CAF1	CN1	CH1	XCPF1	YCPF1	CAF2	CN2	CH2	XCPF2	YCPF2
1	-5.75	0.14	0.3073	0.1338	0.1629	0.1102	0.5944	-0.1960	-0.0287	-0.1350	0.1487	0.6886
2	-5.75	0.10	0.3114	0.1359	0.1662	0.1115	0.5971	-0.1997	-0.0294	-0.1374	0.1474	0.6854
3	-5.75	0.14	0.3117	0.1333	0.1662	0.1115	0.5971	-0.1972	-0.0294	-0.1361	0.1493	0.6900
4	-5.75	0.14	0.3116	0.1339	0.1669	0.1115	0.5970	-0.1978	-0.0289	-0.1369	0.1469	0.6851
5	-5.75	0.14	0.3259	0.1432	0.1784	0.1117	0.6001	-0.1895	-0.0287	-0.1313	0.1517	0.6932
6	-4.44	0.14	0.1944	0.0193	0.1287	0.1002	0.5606	-0.1249	-0.0176	-0.0967	0.1411	0.7902
7	+2.59	0.14	0.0163	0.0359	0.0197	0.0060	0.0314	-0.0507	-0.0065	-0.0552	0.0888	1.0883
8	-0.57	0.14	-0.0335	-0.0044	0.0320	0.1453	-1.0562	0.0459	0.0068	-0.0119	0.1046	-0.2601
9	1.37	0.14	-0.0145	-0.0143	-0.0067	0.1251	0.0588	0.1471	0.0160	0.0390	0.0953	0.2648
10	3.44	0.14	-0.0145	-0.0278	-0.0481	0.1432	0.2473	0.2504	0.0289	0.0496	0.1156	0.3577
11	5.33	0.14	-0.0287	-0.0368	-0.0889	0.1282	0.3117	0.3600	0.0434	0.1431	0.1209	0.3974
12	7.36	0.14	-0.0340	-0.0401	-0.1231	0.1130	0.3472	0.5082	0.0565	0.2095	0.1111	0.4122
13	9.32	0.14	-0.0392	-0.0388	-0.1579	0.0977	0.3768	0.6618	0.0591	0.2733	0.0921	0.4259
14	11.33	0.14	-0.0423	-0.0358	-0.1970	0.0769	0.4044	0.7806	0.0600	0.3374	0.0766	0.4321
15	13.29	0.14	-0.0418	-0.0325	-0.2069	0.0664	0.4208	0.9016	0.0559	0.3908	0.0620	0.4334
16	15.31	0.14	-0.0393	-0.0247	-0.2004	0.0569	0.4386	1.0212	0.0499	0.4449	0.0488	0.4357
17	17.32	0.14	-0.0367	-0.0234	-0.2072	0.0419	0.4425	1.1177	0.0450	0.4891	0.0402	0.4376
18	19.34	0.11	-0.0339	-0.0138	-0.2050	0.0056	0.4426	1.0527	0.0252	0.4205	0.0240	0.3995
19	21.31	0.14	-0.0324	0.0096	-0.2057	0.0003	0.4998	1.0849	0.0231	0.4277	0.0213	0.3992
20	23.31	0.11	-0.0277	0.0112	-0.1975	-0.0142	0.4412	1.1090	0.0199	0.4721	0.0180	0.3806
21	25.27	0.14	-0.0253	0.0124	-0.1971	-0.0166	0.4460	1.0992	0.0171	0.4171	0.0156	0.3795
22	27.36	0.15	-0.0229	0.0151	-0.1938	-0.0200	0.4536	1.0851	0.0125	0.4090	0.0118	0.3840
23	29.32	0.14	-0.0250	0.0175	-0.1918	-0.0234	0.4552	1.0851	0.0121	0.4097	0.0114	0.3846
24	25.36	0.15	-0.0254	0.0185	-0.1905	-0.0215	0.4540	1.0716	0.0114	0.4104	0.0110	0.3830
25	28.35	0.14	-0.0273	0.0173	-0.1903	-0.0229	0.4554	1.0741	0.0115	0.4123	0.0107	0.3839
26	26.29	0.15	-0.0265	0.0178	-0.1902	-0.0239	0.4557	1.0754	0.0110	0.4138	0.0102	0.3848
27	29.05	0.14	-0.0262	0.0190	-0.1871	-0.0257	0.4548	1.0830	0.0109	0.4166	0.0101	0.3847
28	29.34	0.17	-0.0291	0.0195	-0.1902	-0.0266	0.4549	1.0818	0.0105	0.4165	0.0097	0.3850
29	29.05	0.14	-0.0282	0.0214	-0.1897	-0.0283	0.4571	1.0741	0.0103	0.4154	0.0096	0.3869
30	29.96	0.14	-0.0284	0.0224	-0.1897	-0.0311	0.4576	1.0643	0.0099	0.4143	0.0091	0.3858
31	30.29	0.14	-0.0272	0.0229	-0.1881	-0.0322	0.4590	1.0865	0.0096	0.4171	0.0089	0.3860
32	30.52	0.14	-0.0263	0.0224	-0.1816	-0.0319	0.4436	1.0729	0.0096	0.4136	0.0090	0.3855
33	30.75	0.14	-0.0248	0.0234	-0.1841	-0.0343	0.4449	1.1234	0.0093	0.4283	0.0075	0.3881
34	31.07	0.14	-0.0270	0.0219	-0.1816	-0.0342	0.4404	1.0729	0.0095	0.4146	0.0089	0.3864
35	31.39	0.14	-0.0271	0.0200	-0.1828	-0.0288	0.4362	1.0742	0.0093	0.4154	0.0087	0.3867
36	31.66	0.14	-0.0263	0.0230	-0.1834	-0.0327	0.4391	1.0805	0.0087	0.4203	0.0081	0.3890
37	31.49	0.14	-0.0261	0.0221	-0.1825	-0.0307	0.4353	1.0805	0.0087	0.4196	0.0081	0.3884
38	32.15	0.14	-0.0295	0.0229	-0.1826	-0.0331	0.4397	1.0869	0.0087	0.4223	0.0080	0.3886
39	32.45	0.14	-0.0284	0.0235	-0.1814	-0.0341	0.4397	1.1008	0.0079	0.4311	0.0072	0.3916
40	32.71	0.14	-0.0281	0.0271	-0.1828	-0.0358	0.4354	1.1048	0.0078	0.4330	0.0071	0.3920
41	32.98	0.14	-0.0295	0.0257	-0.1871	-0.0336	0.4413	1.1285	0.0073	0.4342	0.0066	0.3917
42	33.23	0.14	-0.0282	0.0280	-0.1864	-0.0377	0.4415	1.1032	0.0078	0.4331	0.0071	0.3926
43	33.47	0.14	-0.0273	0.0259	-0.1867	-0.0325	0.4370	1.0995	0.0075	0.4292	0.0068	0.3903
44	33.71	0.14	-0.0256	0.0241	-0.1864	-0.0341	0.4382	1.1072	0.0074	0.4330	0.0067	0.3911
45	33.98	0.14	-0.0213	0.0192	-0.1867	-0.0311	0.4390	1.1110	0.0072	0.4356	0.0065	0.3921
46	34.23	0.14	-0.0251	0.0203	-0.1825	-0.0347	0.4379	1.1122	0.0070	0.4367	0.0063	0.3926

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NO.	PHI	CONE	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	AB	1.60 1.70	45.0	9.50E13	3.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
47	34.47	0.22	-0.5267	0.0139	-0.2965	-0.0636	0.4715	1.1122	0.0078	0.4353	0.0070	0.3914
48	34.72	0.20	-0.5036	0.0137	-0.3064	-0.0545	0.4794	1.1071	0.0075	0.4344	0.0068	0.3924
49	34.96	0.21	-0.5027	0.0133	-0.2965	-0.0609	0.4723	1.1123	0.0070	0.4353	0.0064	0.3913
50	35.21	0.21	-0.5172	0.0109	-0.2967	-0.0556	0.4811	1.1250	0.0066	0.4411	0.0061	0.3921
51	35.46	0.21	-0.5245	0.0099	-0.3018	-0.0625	0.4825	1.1276	0.0066	0.4420	0.0059	0.3920
52	35.69	0.20	-0.5005	0.0137	-0.3170	-0.0584	0.4903	1.1250	0.0066	0.4422	0.0059	0.3931
53	35.94	0.19	-0.5078	0.0153	-0.3243	-0.0535	0.4923	1.1135	0.0071	0.4364	0.0064	0.3919
54	36.17	0.19	-0.5072	0.0156	-0.3222	-0.0536	0.4903	1.1123	0.0073	0.4353	0.0066	0.3913
55	36.39	0.17	-0.5015	0.0126	-0.3231	-0.0484	0.4885	1.1097	0.0073	0.4342	0.0066	0.3913
56	36.64	0.19	-0.5060	0.0139	-0.3143	-0.0524	0.4912	1.1204	0.0061	0.4427	0.0054	0.3930
57	36.87	0.15	-0.5005	0.0129	-0.3132	-0.0514	0.4889	1.1391	0.0052	0.4495	0.0046	0.3946
58	37.10	0.15	-0.5050	0.0146	-0.3169	-0.0543	0.4936	1.1468	0.0052	0.4521	0.0045	0.3942
59	37.35	0.16	-0.5054	0.0129	-0.3142	-0.0511	0.4886	1.1479	0.0056	0.4477	0.0049	0.3935
60	37.58	0.14	-0.5024	0.0122	-0.3071	-0.0517	0.4876	1.1442	0.0050	0.4511	0.0044	0.3943
61	37.80	0.14	-0.5016	0.0130	-0.2983	-0.0579	0.4910	1.1519	0.0049	0.4547	0.0043	0.3947
62	38.04	0.14	-0.5193	0.0141	-0.3079	-0.0551	0.4971	1.1642	0.0036	0.4616	0.0031	0.3965
63	38.27	0.11	-0.5110	0.0144	-0.3018	-0.0562	0.4940	1.1516	0.0047	0.4548	0.0041	0.3949
64	38.51	0.12	-0.5117	0.0143	-0.3042	-0.0562	0.4974	1.1501	0.0050	0.4547	0.0044	0.3953
65	38.74	0.11	-0.5152	0.0154	-0.3038	-0.0569	0.4991	1.1424	0.0052	0.4523	0.0046	0.3959
66	38.98	0.12	-0.5094	0.0123	-0.3022	-0.0531	0.4982	1.1515	0.0049	0.4553	0.0043	0.3954
67	39.16	0.12	-0.5077	0.0126	-0.2983	-0.0583	0.4937	1.1490	0.0052	0.4528	0.0045	0.3948
68	39.40	0.06	-0.5043	0.0259	-0.2984	-0.0491	0.4991	1.1581	0.0047	0.4571	0.0041	0.3947
69	39.61	0.10	-0.5062	0.0290	-0.2937	-0.0498	0.4893	1.1505	0.0050	0.4531	0.0044	0.3938
70	39.82	0.10	-0.5127	0.0267	-0.3033	-0.0469	0.4951	1.1672	0.0040	0.4622	0.0034	0.3960
71	40.05	0.12	-0.5208	0.0269	-0.2937	-0.0616	0.4816	1.1666	0.0052	0.4522	0.0045	0.3943
72	40.28	0.10	-0.5094	0.0252	-0.2934	-0.0361	0.4815	1.1672	0.0039	0.4622	0.0033	0.3960
73	40.45	0.08	-0.5116	0.0267	-0.2931	-0.0323	0.4793	1.1748	0.0036	0.4660	0.0031	0.3967
74	40.66	0.09	-0.5135	0.0284	-0.2953	-0.0329	0.4814	1.1722	0.0035	0.4655	0.0030	0.3971
75	40.87	0.08	-0.5042	0.0278	-0.2909	-0.0286	0.4784	1.1672	0.0040	0.4622	0.0034	0.3960
76	41.11	0.07	-0.5157	0.0140	-0.2955	-0.0227	0.4792	1.1646	0.0038	0.4617	0.0033	0.3965
77	41.29	0.08	-0.5328	0.0167	-0.3073	-0.0284	0.4857	1.1812	0.0028	0.4691	0.0024	0.3972
78	41.50	0.05	-0.5139	0.0139	-0.2982	-0.0221	0.4769	1.1694	0.0036	0.4630	0.0031	0.3958
79	41.72	0.06	-0.5954	0.0153	-0.2982	-0.0257	0.4802	1.1529	0.0046	0.4578	0.0038	0.3964
80	41.96	0.04	-0.5749	0.0143	-0.2873	-0.0067	0.4696	1.1645	0.0036	0.4627	0.0031	0.3973
81	42.19	0.06	-0.5764	0.0142	-0.2837	-0.0337	0.4870	1.1280	0.0051	0.4468	0.0045	0.3968
82	42.39	0.03	-0.5717	0.0147	-0.2754	-0.0257	0.4818	1.1286	0.0049	0.4473	0.0043	0.3964
83	42.64	0.06	-0.5935	0.0091	-0.2818	-0.0153	0.4767	1.1401	0.0043	0.4550	0.0038	0.3990
84	42.87	0.01	-0.5737	0.0093	-0.2741	-0.0159	0.4766	1.1474	0.0040	0.4585	0.0035	0.3994
85	43.13	0.02	-0.5671	0.0101	-0.2713	-0.0261	0.4807	1.1698	0.0031	0.4681	0.0027	0.4002
86	43.34	0.01	-0.5691	0.0115	-0.2681	-0.0142	0.4666	1.1620	0.0033	0.4656	0.0028	0.4007
87	43.59	0.03	-0.5614	0.0134	-0.2642	-0.0317	0.4345	1.1615	0.0024	0.4733	0.0020	0.4006
88	43.82	0.05	-0.5602	0.0124	-0.2645	-0.0206	0.4672	1.1829	0.0021	0.4749	0.0018	0.4015
89	44.06	0.01	-0.5553	0.0140	-0.2533	-0.0181	0.4529	1.1833	0.0043	0.4579	0.0038	0.4005
90	44.26	0.01	-0.5561	0.0042	-0.2550	0.0075	0.4602	1.1552	0.0035	0.4639	0.0030	0.4016
91	44.52	0.01	-0.5540	0.0027	-0.2533	-0.0049	0.4615	1.1437	0.0035	0.4575	0.0030	0.4000
92	44.76	0.01	-0.5474	0.0064	-0.2467	0.0117	0.4540	1.1580	0.0033	0.4653	0.0029	0.4019

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 6

MANTA MISSILE TAILS EFFECTS DATA

TEST PART MACH RE/10**6 PHI CONF. L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 .85 1.60 1.7 45.0 .91E-13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
93	44.27	Data	-0.5247	-0.0027	-0.2438	0.0051	0.4601	1.1501	0.0036	0.4625	0.0031	0.4021
94	44.48	0.00	-0.5376	-0.0070	-0.2442	0.0130	0.4544	1.1750	0.0022	0.4737	0.0019	0.4032
95	44.65	Data	-0.5191	-0.0178	-0.2269	0.0343	0.4405	1.1659	0.0029	0.4701	0.0025	0.4032
96	44.83	0.00	-0.5230	-0.0227	-0.2252	0.0435	0.4347	1.1659	0.0026	0.4701	0.0022	0.4032
97	45.02	0.00	-0.5076	-0.0155	-0.2207	0.0306	0.4353	1.1764	0.0022	0.4750	0.0019	0.4038
98	45.19	0.00	-0.5106	-0.0192	-0.2209	0.0377	0.4328	1.1804	0.0017	0.4759	0.0014	0.4032
99	45.37	0.00	-0.5075	-0.0115	-0.2013	0.0251	0.4397	1.1562	0.0026	0.4668	0.0022	0.4068
100	45.55	0.00	-0.4930	-0.0143	-0.1974	0.0416	0.4362	1.1779	0.0021	0.4763	0.0018	0.4063
101	45.74	0.00	-0.4925	-0.0180	-0.1899	0.0497	0.4298	1.1680	0.0023	0.4725	0.0020	0.4046
102	45.90	0.00	-0.4776	-0.0082	-0.1867	0.0197	0.4470	1.1693	0.0019	0.4736	0.0016	0.4051
103	46.07	0.00	-0.4790	-0.0107	-0.1822	0.0255	0.4505	1.1655	0.0020	0.4736	0.0017	0.4064
104	46.24	0.00	-0.4797	-0.0111	-0.1835	0.0265	0.4371	1.1811	0.0013	0.4798	0.0011	0.4062
105	46.42	0.00	-0.4741	-0.0177	-0.1744	0.0432	0.4293	1.1637	0.0012	0.4809	0.0010	0.4063
106	46.59	0.00	-0.4783	-0.0200	-0.1838	0.0470	0.4238	1.1930	0.0005	0.4841	0.0004	0.4075
107	46.77	0.00	-0.4814	-0.0141	-0.1822	0.0327	0.4221	1.2038	-0.0002	0.4900	-0.0002	0.4071
108	46.96	0.00	-0.4820	-0.0127	-0.1836	0.0314	0.4064	1.1967	0.0002	0.4857	0.0002	0.4069
109	47.16	0.00	-0.4814	-0.0097	-0.1837	0.0255	0.4035	1.2108	-0.0005	0.4933	-0.0004	0.4076
110	47.29	0.00	-0.4559	-0.0072	-0.1384	0.0203	0.3896	1.2113	-0.0007	0.4947	-0.0006	0.4084
111	47.48	0.00	-0.4539	-0.0092	-0.1502	0.0259	0.4128	1.2100	-0.0004	0.4962	-0.0003	0.4084
112	47.64	0.00	-0.4530	-0.0084	-0.1435	0.0249	0.4058	1.2139	-0.0007	0.4962	-0.0006	0.4088
113	47.81	0.00	-0.4324	-0.0055	-0.1274	0.0172	0.3978	1.2046	-0.0004	0.4915	-0.0003	0.4080
114	47.99	0.00	-0.4179	-0.0039	-0.1273	0.0110	0.4010	1.2172	-0.0013	0.4965	-0.0011	0.4096
115	48.18	0.00	-0.4274	-0.0052	-0.1261	0.0175	0.4106	1.2116	-0.0012	0.4976	-0.0010	0.4107
116	48.35	0.00	-0.2910	-0.0059	-0.1217	0.0193	0.4165	1.2096	-0.0013	0.4986	-0.0011	0.4122
117	48.52	0.00	-0.2745	-0.0097	-0.1032	0.0288	0.3979	1.2173	-0.0014	0.5010	-0.0012	0.4115
118	48.68	0.00	-0.2573	-0.0062	-0.0950	0.0241	0.3871	1.2177	-0.0018	0.5012	-0.0015	0.4116
119	48.87	0.00	-0.2542	-0.0084	-0.1039	0.0293	0.3990	1.2329	-0.0029	0.5076	-0.0026	0.4117
120	49.04	0.00	-0.2419	-0.0061	-0.0945	0.0251	0.3878	1.2239	-0.0028	0.5029	-0.0023	0.4109
121	49.21	0.00	-0.2516	-0.0078	-0.0921	0.0311	0.3865	1.2434	-0.0057	0.5299	-0.0044	0.4129
122	49.38	0.00	-0.2478	-0.0095	-0.0777	0.0422	0.3815	1.2407	-0.0039	0.5115	-0.0031	0.4123
123	49.50	0.00	-0.1457	-0.0103	-0.0561	0.0573	0.3056	1.2995	-0.0071	0.5365	-0.0055	0.4129
124	49.78	0.00	-0.1338	-0.0136	-0.0246	0.1044	0.1909	1.3015	-0.0078	0.5408	-0.0060	0.4155
125	49.98	0.00	-0.1124	-0.0135	-0.0150	0.1137	0.1325	1.2825	-0.0068	0.5315	-0.0053	0.4144
126	50.13	0.00	-0.0980	-0.0179	0.0272	-0.4590	1.2621	-0.0062	0.5264	-0.0049	0.4155
127	50.36	Data	-0.0780	-0.0077	0.0223	0.2751	-0.7954	1.2506	-0.0057	0.5192	-0.0044	0.4152
128	50.56	0.00	-0.0383	-0.0094	0.0178	0.2701	-0.4836	1.2347	-0.0051	0.5138	-0.0041	0.4161
129	50.87	Data	-0.0197	-0.0074	0.0214	0.3477	-1.7948	1.2515	-0.0062	0.5206	-0.0050	0.4160
130	50.99	Data	-0.0105	-0.0086	0.0267	1.1145	-4.5968	1.2440	-0.0060	0.5172	-0.0048	0.4158
131	51.02	Data	Data	-0.0082	0.0340	-0.4886	2.5559	1.2621	-0.0069	0.5273	-0.0055	0.4177
132	51.20	0.00	Data	-0.0075	0.0333	-2.0551	9.0017	1.2734	-0.0076	0.5329	-0.0060	0.4185
133	51.36	0.00	0.0103	-0.0092	0.0394	-0.6023	3.3498	1.2603	-0.0064	0.5276	-0.0066	0.4199
134	51.53	0.00	0.1154	-0.0066	0.0381	-0.3926	2.2858	1.2685	-0.0078	0.5303	-0.0062	0.4180
135	51.71	0.00	0.2124	-0.0062	0.0354	-0.5567	2.8892	1.2822	-0.0086	0.5374	-0.0067	0.4191
136	51.90	Data	0.2143	-0.0078	0.0382	-0.5457	2.8656	1.3000	-0.0094	0.5461	-0.0075	0.4201
137	52.05	0.00	0.2075	-0.0097	0.0317	-0.4950	3.3379	1.2743	-0.0098	0.5355	-0.0069	0.4202
138	52.25	Data	0.2103	-0.0081	0.0369	-0.3744	2.3818	1.3034	-0.0104	0.5487	-0.0080	0.4210

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	PALM	MACH	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	84	1.00	1.7	45.0	81.0F13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	ACPF1	YCPF1	CNF2	CM2	CA2	ACPF2	YCPF2
139	52.81	0.03	[illegible]	-0.0056	[illegible]	-0.3437	2.3572	1.2939	-0.0101	0.5446	-0.0078	0.4209
140	52.80	0.03	[illegible]	-0.0047	0.0374	-0.2375	1.8848	1.2892	-0.0101	0.5426	-0.0078	0.4209
141	52.78	[illegible]	0.[illegible]	-0.[illegible]	[illegible]	-0.0933	3.4711	1.2818	-0.0103	0.5403	-0.0080	0.4215
142	52.80	0.00	0.0005	-0.0075	0.0351	-1.1370	5.3200	1.2908	-0.0105	0.5442	-0.0081	0.4216
143	53.09	0.03	0.0101	-0.0055	0.0403	-0.3206	2.2226	1.2822	-0.0102	0.5404	-0.0080	0.4215
144	53.29	0.05	-0.0031	-0.0062	0.0325	2.6446	-10.4851	1.2859	-0.0105	0.5419	-0.0082	0.4214
145	53.43	0.05	-0.0052	-0.[illegible]	0.0316	1.5068	-6.0385	1.3056	-0.0117	0.5516	-0.0090	0.4225
146	53.52	0.04	-0.0052	-0.0073	0.0314	1.4046	-6.0385	1.3048	-0.0120	0.5508	-0.0092	0.4208
147	53.80	0.04	-0.0053	-0.0082	0.0323	1.5069	-6.0949	1.3136	-0.0126	0.5553	-0.0098	0.4227
148	53.96	0.04	-0.0215	-0.0[illegible]	0.0274	0.4002	-1.2925	1.3115	-0.0133	0.5550	-0.0102	0.4232
149	54.12	0.04	-0.0208	-0.0092	0.0252	0.3650	-0.9806	1.3103	-0.0134	0.5544	-0.0102	0.4235
150	54.28	0.05	-0.0227	-0.0101	0.0242	0.4452	-1.2440	1.3065	-0.0136	0.5528	-0.0104	0.4231
151	54.37	0.04	-0.0229	-0.[illegible]	[illegible]	0.3647	-0.9525	1.2504	-0.0111	0.5301	-0.0089	0.4238
152	54.55	0.05	-0.0205	-0.0[illegible]	0.0229	0.5076	-1.4436	1.2947	-0.0133	0.5518	-0.0103	0.4262
153	54.71	0.03	-0.0238	-0.[illegible]	0.0208	0.4246	-1.2197	1.2867	-0.0133	0.5494	-0.0103	0.4263
154	54.87	0.05	-0.0198	-0.0107	0.0307	0.5462	-1.5062	1.3123	-0.0145	0.5577	-0.0111	0.4250
155	55.01	0.05	-0.0234	-0.[illegible]	0.0208	[illegible]	-1.1402	1.3049	-0.0142	0.5554	-0.0109	0.4256
156	55.19	0.03	-0.0155	-0.[illegible]	0.0304	0.5442	-1.4648	1.2719	-0.0132	0.5420	-0.0104	0.4262
157	55.33	0.05	-0.0132	-0.[illegible]	0.0330	0.4262	-2.5006	1.3229	-0.0154	0.5635	-0.0117	0.4263
158	55.48	0.05	-0.0175	-0.0105	0.0315	0.6003	-1.6000	1.3171	-0.0156	0.5622	-0.0119	0.4268
159	55.61	0.04	-0.0144	-0.[illegible]	0.0434	0.7256	-2.2920	1.3098	-0.0154	0.5592	-0.0118	0.4269
160	55.79	0.05	-0.0121	-0.[illegible]	0.0331	0.6013	-2.7360	1.3330	-0.0164	0.5696	-0.0126	0.4273
161	55.90	0.04	-0.[illegible]	-0.[illegible]	0.[illegible]	[illegible]	-2.2749	1.3453	-0.0178	0.5753	-0.0133	0.4276
162	54.11	0.04	-0.0152	-0.0104	0.0313	0.7109	-2.0592	1.3171	-0.0159	0.5632	-0.0121	0.4276
163	56.31	0.04	-0.0154	-0.[illegible]	[illegible]	[illegible]	-2.[illegible]	1.[illegible]	-0.0166	0.5631	-0.0126	0.4283
164	56.44	0.05	-0.0153	-0.0107	0.0319	0.6997	-2.0851	1.3416	-0.0161	0.5744	-0.0135	0.4281
165	56.58	0.01	-0.[illegible]	-0.[illegible]	[illegible]	1.[illegible]	-6.1722	1.3123	-0.0163	0.5610	-0.0124	0.4275
166	56.78	0.03	-0.0111	-0.0106	0.0334	0.9735	-3.0456	1.3324	-0.0176	0.5702	-0.0132	0.4280
167	56.98	0.01	-0.[illegible]	-0.[illegible]	0.0365	1.3632	-4.[illegible]92	1.[illegible]81	-0.0189	0.[illegible]79	-0.[illegible]140	0.4283
168	57.11	0.04	-0.0133	-0.0104	0.0336	1.4290	-2.5769	1.3407	-0.0187	0.5751	-0.0140	0.4289
169	57.21	0.04	-0.[illegible]31	-0.[illegible]07	[illegible]	[illegible]8172	-2.[illegible]8[illegible]	1.[illegible]528	-0.[illegible]146	0.5826	-0.[illegible]164	0.4306
170	57.42	0.03	-0.0039	-0.0104	0.0381	2.7464	-9.7690	1.3284	-0.0182	0.5649	-0.0137	0.4283
171	57.61	0.05	0.[illegible]12[illegible]	-0.[illegible]062	[illegible]	-[illegible].6360	3.[illegible]062	1.[illegible]73[illegible]	-0.0200	0.[illegible]867	-0.[illegible]166	0.4285
172	57.77	0.04	0.0086	-0.[illegible]084	0.[illegible]17	-1.[illegible]119	4.7310	1.3576	-0.0198	0.5823	-0.0144	0.4289
173	57.[illegible]	0.05	-0.[illegible]46	-0.[illegible]102	[illegible]3362	2.[illegible]348	-10.[illegible]599	1.[illegible]762	-0.[illegible]211	0.[illegible]956	-0.[illegible]153	0.4321
174	58.03	0.04	[illegible]79	-0.[illegible]05[illegible]	0.[illegible]71	-[illegible].1937	1.68[illegible]	1.3690	-0.0209	0.5971	-0.0151	0.4299
175	58.17	[illegible]	0.[illegible]2[illegible]	-0.[illegible]0[illegible]	[illegible]511	-[illegible].2205	1.[illegible]7275	1.3572	-0.0195	0.[illegible]83	-0.[illegible]144	0.4305
176	58.36	0.[illegible]	0.[illegible]23[illegible]	-0.[illegible]053	0.[illegible]67	-0.[illegible]2256	1.9935	1.3679	-0.[illegible]210	0.5[illegible]9	-0.[illegible]146	0.4305
177	58.[illegible]	0.[illegible]	0.[illegible]317	-[illegible].[illegible]0[illegible]	0.[illegible]5[illegible]	-0.[illegible]1[illegible]7	1.[illegible]013	1.[illegible]33	-0.[illegible]222[illegible]	0.[illegible]052	-0.[illegible]157	0.4313
178	58.81	-0.[illegible]	0.[illegible]17[illegible]	-0.[illegible]	[illegible]	-0.[illegible]3[illegible]	2.[illegible]5[illegible]5	1.3974	-0.0220	0.6000	-0.0158	0.4293
179	58.62	-0.[illegible]	0.[illegible]1[illegible]2	-0.[illegible]00[illegible]	0.[illegible]457	-[illegible].3439	2.3774	1.3864	-0.[illegible]213	0.[illegible]951	-0.[illegible]150	0.4293
180	58.81	0.05	0.[illegible]23[illegible]	-[illegible].[illegible]761	0.[illegible]47[illegible]	-0.2604	2.0066	1.3878	-0.0210	0.5955	-0.0152	0.4292
181	58.[illegible]	-0.[illegible]	[illegible]0[illegible]33	-0.[illegible]0[illegible]72	[illegible]4[illegible]82	-[illegible].[illegible]092	2.0667	1.3831	-0.0202	0.5873	-0.[illegible]148	0.4308

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART W/CH RALD=6 RMI LOSP L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ AR 1.00 1.0 45.0 .1E+13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNFS	CM3	CP3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.75	0.00	0.3638	9.9999	0.1417	9.9999	0.3625	-0.3238	-0.0348	-0.1233	0.1071	0.3999
2	-5.75	0.10	0.3598	9.9999	0.1321	9.9999	0.3624	-0.3247	-0.0344	-0.1234	0.1073	0.3986
3	-5.75	0.15	0.3624	9.9999	0.1301	9.9999	0.3612	-0.3266	-0.0353	-0.1239	0.1073	0.3985
4	-5.75	0.19	0.3578	9.9999	0.1262	9.9999	0.3614	-0.3334	-0.0356	-0.1331	0.1059	0.3988
5	-5.75	0.15	0.3587	9.9999	0.1251	9.9999	0.3609	-0.3256	-0.0348	-0.1249	0.1067	0.3980
6	-4.44	0.10	0.2746	9.9999	0.0948	9.9999	0.3444	-0.2133	-0.0194	-0.0771	0.0916	0.3415
7	-2.59	0.15	0.1711	9.9999	0.0528	9.9999	0.3088	-0.1104	-0.0066	-0.0309	0.0615	0.2791
8	-0.57	0.10	0.0639	9.9999	0.0111	9.9999	0.1765	-0.0179	0.0030	0.0109	-0.1677	-0.6109
9	1.37	0.10	-0.0347	9.9999	-0.0328	9.9999	0.9454	0.0903	0.0106	0.0569	0.1176	0.6306
10	3.44	0.10	-0.1535	9.9999	-0.0777	9.9999	0.5029	0.1819	0.0233	0.0972	0.1283	0.5345
11	5.43	0.10	-0.2868	9.9999	-0.1204	9.9999	0.4545	0.2562	0.0325	0.1382	0.1286	0.5392
12	7.36	0.10	-0.4196	9.9999	-0.1486	9.9999	0.4492	0.3151	0.0337	0.1779	0.1007	0.5310
13	9.32	0.10	-0.5653	9.9999	-0.2519	9.9999	0.4455	0.4033	0.0348	0.2135	0.0856	0.5294
14	11.33	0.10	-0.7193	9.9999	-0.3153	9.9999	0.4408	0.4686	0.0285	0.2468	0.0615	0.5331
15	13.27	0.09	-0.8582	9.9999	-0.3745	9.9999	0.4396	0.5194	0.0225	0.2709	0.0451	0.5425
16	15.41	0.10	-0.9738	9.9999	-0.4300	9.9999	0.4415	0.5298	0.0188	0.2925	0.0355	0.5521
17	17.39	0.10	-1.0732	9.9999	-0.4772	9.9999	0.4437	0.5164	0.0136	0.2986	0.0252	0.5783
18	19.34	0.11	-1.0867	9.9999	-0.4196	9.9999	0.4168	0.5915	-0.0023	0.3277	-0.0039	0.5541
19	21.31	0.10	-1.0512	9.9999	-0.4308	9.9999	0.4100	0.6063	-0.0160	0.3369	-0.0268	0.5557
20	23.31	0.11	-1.0816	9.9999	-0.4409	9.9999	0.4067	0.5901	-0.0194	0.3249	-0.0336	0.5506
21	25.27	0.10	-1.0742	9.9999	-0.4307	9.9999	0.4009	0.6501	-0.0145	0.3618	-0.0223	0.5258
22	27.32	0.10	-1.0588	9.9999	-0.4229	9.9999	0.4002	0.7068	-0.0157	0.3695	-0.0222	0.5228
23	28.32	0.10	-1.0382	9.9999	-0.4156	9.9999	0.3997	0.7135	-0.0166	0.3777	-0.0233	0.5294
24	29.32	0.10	-1.0307	9.9999	-0.4202	9.9999	0.3962	0.7202	-0.0163	0.3801	-0.0227	0.5277
25	29.36	0.10	-1.0572	9.9999	-0.4184	9.9999	0.3958	0.7638	-0.0148	0.3977	-0.0194	0.5207
26	29.79	0.10	-1.0591	9.9999	-0.4163	9.9999	0.3946	0.7586	-0.0162	0.3991	-0.0214	0.5262
27	29.85	0.10	-1.0620	9.9999	-0.4194	9.9999	0.3949	0.7604	-0.0158	0.3986	-0.0212	0.5287
28	29.34	0.17	-1.0560	9.9999	-0.4159	9.9999	0.3938	0.7605	-0.0149	0.4010	-0.0196	0.5271
29	29.88	0.10	-1.0529	9.9999	-0.4149	9.9999	0.3941	0.7603	-0.0172	0.3939	-0.0233	0.5321
30	29.48	0.10	-1.0522	9.9999	-0.4170	9.9999	0.3926	0.7498	-0.0174	0.3979	-0.0232	0.5307
31	30.29	0.10	-1.0560	9.9999	-0.4161	9.9999	0.3929	0.7559	-0.0142	0.4027	-0.0258	0.5328
32	30.58	0.15	-1.0529	9.9999	-0.4131	9.9999	0.3924	0.8188	-0.0160	0.4245	-0.0196	0.5185
33	30.75	0.17	-1.0544	9.9999	-0.4171	9.9999	0.3918	0.8072	-0.0135	0.4215	-0.0167	0.5222
34	31.07	0.19	-1.0576	9.9999	-0.4173	9.9999	0.3925	0.8079	-0.0151	0.4247	-0.0187	0.5257
35	31.34	0.12	-1.0466	9.9999	-0.4088	9.9999	0.3930	0.8168	-0.0133	0.4271	-0.0163	0.5216
36	31.62	0.19	-1.0536	9.9999	-0.4147	9.9999	0.3934	0.8056	-0.0177	0.4287	-0.0220	0.5321
37	31.89	0.20	-1.0560	9.9999	-0.4171	9.9999	0.3935	0.8278	-0.0126	0.4318	-0.0155	0.5216
38	32.15	0.21	-1.0565	9.9999	-0.4154	9.9999	0.3932	0.8337	-0.0078	0.4266	-0.0094	0.5120
39	32.45	0.22	-1.0535	9.9999	-0.4204	9.9999	0.3937	0.8096	-0.0144	0.4241	-0.0178	0.5287
40	32.70	0.22	-1.0542	9.9999	-0.4290	9.9999	0.3938	0.8091	-0.0131	0.4265	-0.0162	0.5272
41	32.96	0.20	-1.0515	9.9999	-0.4294	9.9999	0.3934	0.7559	-0.0175	0.4147	-0.0232	0.5433
42	33.23	0.22	-1.0537	9.9999	-0.4306	9.9999	0.3937	0.7746	-0.0162	0.4172	-0.0209	0.5386
43	33.47	0.21	-1.0581	9.9999	-0.4275	9.9999	0.3936	0.7707	-0.0161	0.4167	-0.0209	0.5433
44	33.71	0.22	-1.0594	9.9999	-0.4324	9.9999	0.3936	0.7532	-0.0190	0.4143	-0.0253	0.5527
45	33.98	0.21	-1.0535	9.9999	-0.4345	9.9999	0.3939	0.7698	-0.0171	0.4218	-0.0222	0.5480
46	34.23	0.21	-1.0501	9.9999	-0.4361	9.9999	0.3938	0.7762	-0.0159	0.4273	-0.0205	0.5504

TEST PART MACH RA10+6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 FF 1.00 1.7 45.0 BLACK13 0.0 0 0 0 5 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CN4	XCPF4	YCPF4
87	34.81	0.22	-1.1111	9.9999	-0.4356	9.9999	0.3935	0.7454	-0.0193	0.4175	-0.0259	0.5601
88	34.72	0.21	-1.1112	9.9999	-0.4377	9.9999	0.3939	0.6995	-0.0223	0.4002	-0.0319	0.5721
89	34.95	0.21	-1.1154	9.9999	-0.4393	9.9999	0.3933	0.7310	-0.0202	0.4131	-0.0277	0.5651
90	35.21	0.21	-1.1316	9.9999	-0.4459	9.9999	0.3943	0.7074	-0.0226	0.4046	-0.0320	0.5744
91	35.46	0.21	-1.1345	9.9999	-0.4470	9.9999	0.3940	0.7225	-0.0224	0.4125	-0.0311	0.5718
92	35.69	0.21	-1.1333	9.9999	-0.4467	9.9999	0.3942	0.6967	-0.0268	0.4036	-0.0391	0.5876
93	35.98	0.21	-1.1366	9.9999	-0.4483	9.9999	0.3946	0.6853	-0.0301	0.3982	-0.0453	0.5986
94	36.17	0.19	-1.1162	9.9999	-0.4400	9.9999	0.3962	0.7304	-0.0270	0.4121	-0.0386	0.5883
95	36.34	0.17	-1.1094	9.9999	-0.4376	9.9999	0.3963	0.6953	-0.0277	0.4105	-0.0399	0.5903
96	36.44	0.19	-1.1365	9.9999	-0.4513	9.9999	0.3969	0.6907	-0.0327	0.4102	-0.0481	0.6026
97	36.87	0.19	-1.1152	9.9999	-0.4431	9.9999	0.3971	0.7388	-0.0306	0.4211	-0.0434	0.5958
98	37.10	0.19	-1.1151	9.9999	-0.4441	9.9999	0.3972	0.6711	-0.0353	0.4118	-0.0525	0.6136
99	37.35	0.19	-1.1164	9.9999	-0.4452	9.9999	0.3974	0.7022	-0.0324	0.4238	-0.0462	0.6035
60	37.58	0.19	-1.1273	9.9999	-0.4493	9.9999	0.3986	0.6903	-0.0327	0.4208	-0.0474	0.6096
61	37.80	0.19	-1.1291	9.9999	-0.4505	9.9999	0.3988	0.7112	-0.0312	0.4260	-0.0439	0.6017
62	38.04	0.19	-1.1301	9.9999	-0.4527	9.9999	0.3984	0.6912	-0.0346	0.4051	-0.0532	0.6220
63	38.27	0.11	-1.1291	9.9999	-0.4497	9.9999	0.3983	0.6782	-0.0316	0.4146	-0.0469	0.6149
64	38.51	0.16	-1.1304	9.9999	-0.4495	9.9999	0.3977	0.6525	-0.0313	0.4047	-0.0480	0.6202
65	38.78	0.16	-1.1303	9.9999	-0.4499	9.9999	0.3981	0.6812	-0.0290	0.4165	-0.0426	0.6114
66	38.98	0.16	-1.1241	9.9999	-0.4466	9.9999	0.3971	0.6674	-0.0260	0.4096	-0.0390	0.6137
67	39.16	0.16	-1.1271	9.9999	-0.4485	9.9999	0.3980	0.6893	-0.0207	0.4121	-0.0301	0.5978
68	39.40	0.17	-1.1225	9.9999	-0.4472	9.9999	0.3984	0.6857	-0.0227	0.4171	-0.0332	0.6043
69	39.61	0.16	-1.1214	9.9999	-0.4465	9.9999	0.3988	0.6741	-0.0186	0.4091	-0.0276	0.6068
70	39.82	0.16	-1.1343	9.9999	-0.4501	9.9999	0.3972	0.6334	-0.0245	0.3970	-0.0387	0.6268
71	40.05	0.16	-1.1343	9.9999	-0.4511	9.9999	0.3972	0.6480	-0.0243	0.3963	-0.0364	0.6230
72	40.26	0.16	-1.1415	9.9999	-0.4534	9.9999	0.3971	0.6484	-0.0198	0.4003	-0.0307	0.6193
73	40.45	0.16	-1.1368	9.9999	-0.4512	9.9999	0.3969	0.6186	-0.0206	0.3966	-0.0337	0.6315
74	40.66	0.16	-1.1439	9.9999	-0.4539	9.9999	0.3968	0.5857	-0.0194	0.3738	-0.0340	0.6382
75	40.87	0.16	-1.1418	9.9999	-0.4522	9.9999	0.3961	0.5935	-0.0158	0.3722	-0.0267	0.6271
76	41.11	0.17	-1.1311	9.9999	-0.4484	9.9999	0.3951	0.5510	-0.0209	0.3566	-0.0380	0.6471
77	41.29	0.16	-1.1334	9.9999	-0.4504	9.9999	0.3956	0.5612	-0.0229	0.3574	-0.0424	0.6613
78	41.51	0.16	-1.1418	9.9999	-0.4534	9.9999	0.3956	0.5635	-0.0197	0.3684	-0.0389	0.6415
79	41.72	0.16	-1.1586	9.9999	-0.4593	9.9999	0.3966	0.5334	-0.0110	0.3374	-0.0207	0.6335
80	41.99	0.17	-1.1787	9.9999	-0.4665	9.9999	0.3965	0.4685	-0.0062	0.2968	-0.0175	0.6334
81	42.19	0.16	-1.1593	9.9999	-0.4594	9.9999	0.3956	0.5222	-0.0099	0.3322	-0.0198	0.6361
82	42.29	0.16	-1.1618	9.9999	-0.4624	9.9999	0.3958	0.4976	-0.0093	0.3171	-0.0187	0.6373
83	42.47	0.16	-1.1625	9.9999	-0.4628	9.9999	0.3955	0.4872	-0.0143	0.3033	-0.0285	0.6492
84	42.67	0.17	-1.1612	9.9999	-0.4652	9.9999	0.3952	0.4720	-0.0151	0.3055	-0.0320	0.6471
85	42.85	0.16	-1.1327	9.9999	-0.4478	9.9999	0.3952	0.4324	-0.0202	0.2829	-0.0468	0.6542
86	43.04	0.17	-1.1491	9.9999	-0.4574	9.9999	0.3957	0.4249	-0.0182	0.2793	-0.0429	0.6575
87	43.26	0.16	-1.1366	9.9999	-0.4489	9.9999	0.3950	0.4159	-0.0185	0.2709	-0.0445	0.6514
88	43.36	0.15	-1.1556	9.9999	-0.4564	9.9999	0.3949	0.4036	-0.0203	0.2671	-0.0504	0.6618
89	43.58	0.17	-1.1561	9.9999	-0.4573	9.9999	0.3955	0.3998	-0.0178	0.2607	-0.0431	0.6603
90	43.79	0.17	-1.1563	9.9999	-0.4573	9.9999	0.3958	0.4144	-0.0162	0.2735	-0.0387	0.6522
91	43.96	0.17	-1.1245	9.9999	-0.4443	9.9999	0.3955	0.4044	-0.0181	0.2653	-0.0448	0.6562
92	44.10	0.17	-1.1557	9.9999	-0.4569	9.9999	0.3953	0.3839	-0.0174	0.2533	-0.0454	0.6598

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST RAPT MACH REX10-6 PHI CURV L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 FR 1.600 1.7 45.0 SIMOFF13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	45.27	0.07	-1.1451	9.9994	-0.4545	9.9999	0.3965	0.3475	-0.0160	0.2559	-0.0413	0.6604
94	45.44	0.06	-1.1343	9.9994	-0.4511	9.9999	0.3960	0.3782	-0.0142	0.2501	-0.0508	0.6613
95	45.52	0.06	-1.1197	9.9994	-0.4427	9.9999	0.3964	0.3513	-0.0161	0.2334	-0.0959	0.6648
96	45.63	0.06	-1.1217	9.9999	-0.4420	9.9999	0.3960	0.3490	-0.0147	0.2303	-0.0422	0.6600
97	45.02	0.07	-1.1497	9.9999	-0.4530	9.9999	0.3956	0.3355	-0.0142	0.2206	-0.0424	0.6575
98	45.19	0.05	-1.1216	9.9999	-0.4437	9.9999	0.3965	0.3355	-0.0142	0.2222	-0.0424	0.6621
99	45.27	0.08	-1.1130	9.9999	-0.4473	9.9999	0.3965	0.3340	-0.0104	0.2188	-0.0309	0.6551
100	45.53	0.07	-1.1292	9.9999	-0.4577	9.9999	0.3962	0.3156	-0.0112	0.2101	-0.0355	0.6656
101	45.79	0.05	-1.1525	9.9999	-0.4678	9.9999	0.3981	0.2986	-0.1089	0.1979	-0.0299	0.6629
102	45.60	0.05	-1.1343	9.9999	-0.4469	9.9999	0.3967	0.3060	-0.0098	0.2042	-0.0321	0.6741
103	45.01	0.07	-1.1316	9.9999	-0.4403	9.9999	0.3954	0.2972	-0.0075	0.1982	-0.0293	0.6670
104	46.24	0.07	-1.1496	9.9999	-0.4568	9.9999	0.3969	0.2881	-0.0049	0.1946	-0.0309	0.6755
105	47.46	0.08	-1.1346	9.9999	-0.4517	9.9999	0.3984	0.2582	-0.0081	0.1809	-0.0237	0.7007
106	46.56	0.07	-1.1306	9.9999	-0.4511	9.9999	0.3970	0.2635	-0.0064	0.1736	-0.0263	0.7129
107	47.77	0.09	-1.1276	9.9999	-0.4472	9.9999	0.3965	0.2461	-0.0046	0.1765	-0.0350	0.7254
108	46.46	0.05	-1.1256	9.9999	-0.4469	9.9999	0.3964	0.1978	-0.0074	0.1561	-0.0375	0.7895
109	47.12	0.07	-1.1435	9.9999	-0.4552	9.9999	0.3979	0.2250	-0.0075	0.1560	-0.0306	0.7710
110	47.29	0.08	-1.1346	9.9999	-0.4514	9.9999	0.3983	0.1712	-0.0062	0.1466	-0.0480	0.8577
111	47.46	0.06	-1.1462	9.9999	-0.4561	9.9999	0.3976	0.2156	-0.0050	0.1624	-0.0269	0.7531
112	47.64	0.07	-1.1347	9.9999	-0.4563	9.9999	0.3978	0.1879	-0.0056	0.1468	-0.0299	0.7814
113	47.81	0.07	-1.1571	9.9999	-0.4607	9.9999	0.3979	0.1606	-0.0044	0.1451	-0.0244	0.8036
114	47.99	0.06	-1.1571	9.9999	-0.4607	9.9999	0.3982	0.1755	-0.0076	0.1414	-0.0447	0.8318
115	48.16	0.08	-1.1774	9.9999	-0.4691	9.9999	0.3995	0.1678	-0.0044	0.1411	-0.0263	0.8410
116	48.35	0.05	-1.1601	9.9999	-0.4620	9.9999	0.3988	0.1658	-0.0032	0.1352	-0.0192	0.8105
117	48.52	0.06	-1.1454	9.9999	-0.4559	9.9999	0.3985	0.1684	-0.0034	0.1509	-0.0160	0.7991
118	48.69	0.05	-1.2151	9.9999	-0.4848	9.9999	0.3995	0.1434	-0.0013	0.1358	-0.0088	0.8186
119	48.87	0.07	-1.2153	9.9999	-0.4841	9.9999	0.3981	0.1644	-0.0030	0.1381	-0.0183	0.8273
120	49.04	0.07	-1.2067	9.9999	-0.4816	9.9999	0.3983	0.1425	0.0002	0.1445	0.0010	0.7611
121	49.21	0.07	-1.2057	9.9999	-0.4807	9.9999	0.3989	0.2272	-0.0007	0.1572	-0.0031	0.6921
122	49.38	0.07	-1.2266	9.9999	-0.4891	9.9999	0.3995	0.1764	0.0023	0.1301	0.0131	0.7379
123	49.56	0.05	-1.2245	9.9999	-0.5187	9.9999	0.3995	0.1143	0.0012	0.0958	0.0105	0.9381
124	49.73	0.05	-1.2301	9.9999	-0.5100	9.9999	0.4000	0.0690	0.0026	0.0778	0.0378	1.0702
125	49.90	0.08	-1.2561	9.9999	-0.5136	9.9999	0.4005	0.0467	0.0039	0.0807	0.0836	1.2996
126	51.13	0.06	-1.2594	9.9999	-0.5051	9.9999	0.4012	0.0282	0.0054	0.0424	0.1916	1.5012
127	50.26	0.08	-1.2323	9.9999	-0.4967	9.9999	0.4021	0.0293	0.0052	0.0388	0.1776	1.2531
128	50.50	0.02	-1.2726	9.9999	-0.4907	9.9999	0.4013	0.0227	0.0054	0.0357	0.2360	1.6131
129	51.07	0.03	-1.2342	9.9999	-0.4972	9.9999	0.4026	0.0334	0.0049	0.0340	0.1376	1.1654
130	50.98	0.03	-1.2362	9.9999	-0.4970	9.9999	0.4015	0.0134	0.0039	0.0298	0.2428	2.1591
131	51.02	0.03	-1.2554	9.9999	-0.5073	9.9999	0.4029	0.0133	0.0029	0.0318	0.2817	3.0875
132	51.20	0.04	-1.2625	9.9999	-0.5095	9.9999	0.4037	0.0075	0.0024	0.0278	0.3418	3.6564
133	51.38	0.04	-1.2636	9.9999	-0.5112	9.9999	0.4045	-0.0062	0.0013	0.0215	-0.2098	-3.4627
134	51.53	0.04	-1.2552	9.9999	-0.5065	9.9999	0.4035	-0.0161	0.0003	0.0224	-0.0166	-1.4144
135	51.71	0.04	-1.2716	9.9999	-0.5131	9.9999	0.4036	-0.0238	-0.0002	0.0202	-0.0084	-0.8472
136	51.90	0.03	-1.2976	9.9999	-0.5268	9.9999	0.4045	-0.0285	0.0	0.0161	0.0	-0.6057
137	52.03	0.03	-1.2966	9.9999	-0.5263	9.9999	0.4042	-0.0339	-0.0005	0.0153	0.0206	-0.4998
138	52.25	0.03	-1.2921	9.9999	-0.5242	9.9999	0.4057	-0.0317	0.0002	0.0146	-0.0063	-0.4589

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RALW	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	AR	1.60	1.7	45.0	61-0F13	0.0	0	3	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	ACPF3	YCPF3	CNF4	CM4	CN4	ACPF4	YCPF4
139	52.41	0.04	-1.2[illegible]	0.[illegible]	-0.5214	0.4949	0.4057	-0.0419	0.0	0.0098	0.0	-0.2366
140	52.80	0.03	-1.2[illegible]	0.[illegible]	-0.5203	0.4949	0.4057	-0.0506	-0.0006	0.0073	0.0119	-0.1447
141	52.79	0.04	-1.2593	0.[illegible]	-0.5253	0.4949	0.4056	-0.0644	-0.0016	0.0047	0.0249	-0.0733
142	52.90	0.04	-1.2[illegible]	0.[illegible]	-0.5211	0.4949	0.4050	-0.0302	0.0001	0.0112	-0.0033	-0.3720
143	53.04	0.04	-1.2[illegible]	0.[illegible]	-0.5172	0.4949	0.4038	-0.0391	-0.0001	0.0085	0.0026	-0.2181
144	53.29	0.05	-1.2[illegible]	0.[illegible]	-0.5212	0.4949	0.4048	-0.0265	0.0002	0.0101	-0.0044	-0.5399
145	53.65	0.05	-1.2[illegible]	0.[illegible]	-0.5298	0.4949	0.4055	-0.0069	0.0012	0.0216	-0.1213	-2.1787
146	53.82	0.04	-1.2[illegible]	0.[illegible]	-0.5259	0.4949	0.4051	-0.0014	0.0023	0.0208	-1.6437	-14.8330
147	53.86	0.04	-1.2992	0.[illegible]	-0.5272	0.4949	0.4056	-0.0141	0.0015	0.0131	-0.1064	-0.9249
148	53.96	0.04	-1.3272	0.[illegible]	-0.5395	0.4949	0.4057	-0.0228	0.0007	0.0078	-0.0307	-0.3432
149	54.12	0.04	-1.3223	0.[illegible]	-0.5383	0.4949	0.4052	-0.0166	0.0010	0.0091	-0.0603	-0.5499
150	54.29	0.05	-1.3325	0.[illegible]	-0.5404	0.4949	0.4056	-0.0245	0.0017	0.0049	-0.0694	-0.2006
151	54.47	0.04	-1.2[illegible]	0.[illegible]	-0.5211	0.4949	0.4047	-0.0230	0.0004	0.0040	-0.0392	-0.1745
152	54.55	0.05	-1.3217	0.[illegible]	-0.5355	0.4949	0.4052	-0.0205	0.0017	0.0033	-0.0694	-0.1351
153	54.71	0.05	-1.3105	0.[illegible]	-0.5334	0.4949	0.4052	-0.0236	0.0019	0.0034	-0.0812	-0.1458
154	54.87	0.05	-1.3425	0.[illegible]	-0.5439	0.4949	0.4049	-0.0247	0.0016	0.0021	-0.0729	-0.0853
155	55.01	0.05	-1.3462	0.[illegible]	-0.5436	0.4949	0.4043	-0.0205	0.0014	0.0033	-0.0572	-0.1351
156	55.14	0.03	-1.3[illegible]	0.[illegible]	-0.5284	0.4949	0.4057	-0.0409	0.0011	-0.0008	-0.0356	0.0260
157	55.31	0.04	-1.3530	0.[illegible]	-0.5494	0.4949	0.4055	-0.0295	0.0011	0.0014	-0.0451	-0.0576
158	55.46	0.03	-1.3429	0.[illegible]	-0.5441	0.4949	0.4043	-0.0242	0.0005	0.0014	-0.0297	-0.0580
159	55.61	0.04	-1.3604	0.[illegible]	-0.5523	0.4949	0.4046	-0.0264	0.0009	0.0008	-0.0369	-0.0329
160	55.79	0.05	-1.3773	0.[illegible]	-0.5588	0.4949	0.4043	-0.0280	0.0004	0.0018	-0.0143	-0.0645
161	55.96	0.04	-1.3823	0.[illegible]	-0.5615	0.4949	0.4048	-0.0319	0.0005	-0.0012	-0.0157	0.0377
162	56.11	0.07	-1.3516	0.[illegible]	-0.5471	0.4949	0.4049	-0.0263	0.0006	0.0001	-0.0267	-0.0041
163	56.31	0.04	-1.3818	0.[illegible]	-0.5565	0.4949	0.4046	-0.0310	0.0015	-0.0017	-0.0489	0.0550
164	56.49	0.03	-1.3[illegible]	0.[illegible]	-0.5613	0.4949	0.4056	-0.0344	0.0003	-0.0023	-0.0047	0.0671
165	56.61	0.04	-1.3357	0.[illegible]	-0.5415	0.4949	0.4054	-0.0298	0.0017	-0.0019	-0.0571	0.0640
166	56.78	0.03	-1.3851	0.[illegible]	-0.5531	0.4949	0.4051	-0.0323	0.0015	-0.0024	-0.0465	0.0745
167	56.99	0.04	-1.3[illegible]	0.[illegible]	-0.5661	0.4949	0.4048	-0.0346	0.0003	-0.0032	-0.0231	0.0928
168	57.11	0.04	-1.4[illegible]	0.[illegible]	-0.5567	0.4949	0.4051	-0.0372	0.0012	-0.0042	0.0323	0.1133
169	57.27	0.04	-1.3[illegible]	0.[illegible]	-0.5[illegible]	0.4949	0.4046	-0.0366	-0.0002	-0.0043	0.0356	0.1172
170	57.42	0.03	-1.3677	0.[illegible]	-0.5563	0.4949	0.4052	-0.0429	0.0004	-0.0070	-0.0071	0.1672
171	57.61	0.05	-1.3[illegible]	0.[illegible]	-0.5551	0.4949	0.4051	-0.0394	-0.0001	-0.0030	0.0033	0.0990
172	57.77	0.06	-1.3757	0.[illegible]	-0.5593	0.4949	0.4055	-0.0419	-0.0003	-0.0040	0.0072	0.1915
173	57.94	0.05	-1.4[illegible]	0.[illegible]	-0.5725	0.4949	0.4061	-0.0503	-0.0015	-0.0104	0.0298	0.2078
174	58.03	0.06	-1.3[illegible]	0.[illegible]	-0.5578	0.4949	0.4036	-0.0293	0.0005	-0.0020	-0.0171	0.0685
175	58.17	0.01	-1.3[illegible]	0.[illegible]	-0.5651	0.4949	0.4053	-0.0229	-0.0006	-0.0015	0.0302	0.0672
176	58.30	0.10	-1.3[illegible]	0.[illegible]	-0.5561	0.4949	0.4050	-0.0355	-0.0002	-0.0007	0.0056	0.1849
177	58.49	0.04	-1.3[illegible]	0.[illegible]	-0.5659	0.4949	0.4050	-0.0355	-0.0002	-0.0057	0.0056	0.1893
178	58.61	0.04	-1.3[illegible]	0.[illegible]	-0.5632	0.4949	0.4041	-0.0336	0.0015	-0.0071	-0.0447	0.2120
179	58.82	0.04	-1.3[illegible]	0.[illegible]	-0.5592	0.4949	0.4041	-0.0281	0.0004	-0.0057	-0.0142	0.2035
180	58.81	0.05	-1.3[illegible]	0.[illegible]	-0.5544	0.4949	0.4032	-0.0286	-0.0010	-0.0050	0.0560	0.1754
181	58.88	0.01	-1.3615	0.[illegible]	-0.5504	0.4949	0.4038	-0.0279	-0.0003	-0.0070	0.0108	0.2517

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE/L=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	04	1.10	1.7	45.0	0.0	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAN	CAF	ACP
1	-5.75	0.10	-1.3625	2.4330	0.0939	-0.1910	-0.0007	0.5605	0.2306	0.3297	-2.8105
2	-5.75	0.10	-1.2366	3.1250	0.0334	-0.2621	-0.0011	0.5461	0.2327	0.3134	-2.5279
3	-5.38	0.11	-0.8734	2.1572	0.0524	-0.2332	-0.0124	0.5536	0.2190	0.3348	-2.3176
4	-2.00	0.11	-0.3412	1.2704	0.0535	-0.2165	-0.0073	0.5479	0.2729	0.3450	-3.3271
5	-0.46	0.10	-0.0352	0.1562	-0.0320	-0.1062	-0.0082	0.5619	0.2257	0.3562	-5.3934
6	1.53	0.10	0.3141	-0.0303	-0.0049	-0.0804	-0.0145	0.5474	0.2348	0.3526	-2.0798
7	3.92	0.11	0.8232	-1.0000	0.0326	-0.2018	-0.0157	0.5531	0.2690	0.3461	-2.4328
8	5.55	0.10	1.2712	-2.4673	-0.0265	-0.0757	-0.0049	0.5499	0.2602	0.3397	-2.4892
9	7.92	0.11	1.8139	-3.8189	0.0264	-0.0924	-0.0201	0.5926	0.2813	0.3113	-2.5273
10	9.55	0.11	1.9918	-4.9296	0.0644	-0.2067	-0.0106	0.6043	0.3057	0.2987	-2.5387
11	11.87	0.11	2.4892	-5.9878	0.0138	-0.0750	-0.0059	0.6028	0.3198	0.2830	-2.9681
12	13.65	0.11	2.7344	-6.6295	0.0476	-0.1584	-0.0020	0.5983	0.3250	0.2713	-2.4223
13	15.71	0.11	3.1926	-7.3281	0.0161	-0.0776	0.0029	0.5803	0.3277	0.2526	-2.3157
14	17.82	0.10	3.5322	-7.7950	-0.0008	-0.1537	-0.0136	0.5643	0.3331	0.2312	-2.2070
15	19.80	0.10	3.8598	-8.0917	0.0093	-0.0504	-0.0246	0.5519	0.3389	0.2130	-2.0808
16	21.82	0.11	4.2349	-7.9201	0.1461	-0.2404	-0.0360	0.5561	0.3534	0.1967	-1.8246
17	23.85	0.10	4.5823	-7.7108	0.1511	-0.0761	-0.0433	0.5563	0.3799	0.1784	-1.5783
18	25.90	0.13	5.0107	-7.0107	0.2569	-0.3124	0.0432	0.5915	0.4180	0.1735	-1.2982
19	28.01	0.14	5.4234	-6.2814	0.4154	-0.5097	0.0872	0.6152	0.4560	0.1592	-1.0911
20	29.81	0.14	5.7875	-5.5624	0.5047	-0.6470	0.1048	0.6049	0.4669	0.1380	-1.0747
21	29.86	0.14	5.8633	-5.5733	0.4384	-0.5725	0.0990	0.6107	0.4669	0.1438	-1.0721
22	28.71	0.14	5.6754	-5.8414	0.3137	-0.5983	0.1103	0.6154	0.4726	0.1428	-1.0755
23	24.94	0.13	5.0346	-6.3662	0.3047	-0.1919	0.0991	0.6110	0.4756	0.1354	-1.0328
24	24.35	0.14	4.9124	-6.0943	0.5005	-0.5376	0.1395	0.5983	0.4824	0.1160	-1.0275
25	24.84	0.13	5.0152	-6.2328	0.5523	-0.5360	0.1394	0.6209	0.4856	0.1354	-1.0476
26	24.93	0.14	5.0307	-6.2400	0.4793	-0.5274	0.1453	0.6179	0.4870	0.1310	-1.0125
27	30.23	0.15	6.0835	-6.6132	0.6220	-0.6549	0.1462	0.6167	0.4917	0.1251	-0.9927
28	30.51	0.13	6.0972	-6.7443	0.5397	-0.5999	0.1796	0.6197	0.5019	0.1179	-0.9778
29	30.75	0.14	7.0208	-6.9683	0.6145	-0.5729	0.1967	0.6331	0.5055	0.1277	-0.9882
30	31.06	0.15	7.1911	-6.9992	0.7164	-0.7213	0.2029	0.6261	0.5064	0.1178	-0.9582
31	31.35	0.15	7.2173	-6.9908	0.7029	-0.6793	0.1973	0.6334	0.5056	0.1237	-0.9616
32	31.61	0.15	7.3116	-6.9780	0.6924	-0.7257	0.1920	0.6256	0.5091	0.1166	-0.9407
33	31.91	0.17	7.3518	-7.0396	0.6870	-0.6912	0.2374	0.6259	0.5155	0.1105	-0.9278
34	32.17	0.15	7.3224	-6.9777	0.5990	-0.6045	0.1910	0.6283	0.5148	0.1136	-0.9143
35	32.45	0.16	7.4044	-7.0151	0.7063	-0.7262	0.2095	0.6216	0.5160	0.1037	-0.9190
36	32.71	0.16	7.4946	-7.1714	0.7079	-0.7351	0.1816	0.6165	0.5177	0.0989	-0.9136
37	32.96	0.15	7.5424	-7.2594	0.6722	-0.6963	0.1815	0.6287	0.5176	0.1112	-0.9164
38	33.26	0.15	7.5965	-7.2780	0.6153	-0.6514	0.1310	0.6158	0.5162	0.0997	-0.9029
39	33.50	0.16	7.6223	-7.2859	0.8329	-0.8060	0.1711	0.6121	0.5180	0.0941	-0.9202
40	33.75	0.16	7.6784	-7.4023	0.7556	-0.7203	0.1929	0.6182	0.5154	0.1029	-0.9349
41	34.01	0.17	7.8154	-7.6223	0.6595	-0.6556	0.1371	0.6095	0.5158	0.0940	-0.9162
42	34.25	0.15	7.8643	-7.6840	0.6566	-0.3962	0.1256	0.6113	0.5169	0.0944	-0.9094
43	34.51	0.15	7.9270	-7.6980	0.6121	-0.6271	0.1091	0.6183	0.5209	0.0975	-0.9071
44	34.77	0.15	7.9734	-7.6983	0.6126	-0.3000	0.1058	0.5962	0.5169	0.0793	-0.9037
45	35.04	0.15	8.0432	-7.7394	0.6478	-0.6481	0.1152	0.6060	0.5175	0.0905	-0.8966
46	35.24	0.15	8.0853	-7.8542	0.6269	-0.6180	0.1155	0.6025	0.5157	0.0868	-0.8697

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RALD-6 PHI CONF L DELI DEL2 DEL3 DEL4 TRANSITION
7 6Y 1.10 1.7 45.0 01=0713 5.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CD	CLM	CY	CLN	CLL	CA	CAM	CAF	ACP
47	35.55	-0.15	8.5510	-7.4504	0.6221	-0.0215	0.1491	0.0047	0.5142	0.0865	-0.8917
48	35.76	0.13	9.0327	-7.6553	0.6510	-0.0478	0.2136	0.5955	0.5153	0.0802	-0.8940
49	35.92	0.14	9.2016	-8.0299	0.6556	-0.0951	0.1824	0.5847	0.5153	0.0694	-0.8726
50	36.22	0.13	9.4210	-8.1663	0.3241	-0.3174	0.0673	0.5777	0.5170	0.0607	-0.8713
51	36.48	0.14	9.6712	-8.1973	0.6615	-0.0676	0.0624	0.5786	0.5134	0.0652	-0.8651
52	36.70	0.14	9.8577	-8.2415	0.5124	-0.5074	0.1452	0.5855	0.5133	0.0722	-0.8648
53	36.93	0.13	9.9862	-8.2631	0.6048	-0.4112	0.0934	0.5788	0.5133	0.0655	-0.8640
54	37.15	0.13	9.9689	-8.3009	0.3724	-0.4826	0.0748	0.5661	0.5105	0.0554	-0.8605
55	37.41	0.16	9.7852	-8.4549	0.3301	-0.3242	0.1829	0.5548	0.5116	0.0432	-0.8567
56	37.62	0.16	9.4569	-8.2262	0.3[illegible]	-0.5437	0.0716	0.5669	0.5100	0.0569	-0.8548
57	37.87	0.16	9.2108	-8.1078	0.3752	-0.5490	0.0719	0.5597	0.5083	0.0518	-0.8273
58	38.11	0.11	10.0352	-8.4251	0.3367	-0.5215	0.1165	0.5485	0.5066	0.0399	-0.8398
59	38.35	0.11	10.1241	-8.4897	0.2[illegible]	-0.3801	0.1058	0.5546	0.5047	0.0499	-0.8363
60	38.58	0.11	10.1169	-8.4737	0.2915	-0.2361	0.1055	0.5506	0.5021	0.0485	-0.8307
61	38.81	0.12	10.1713	-8.3883	0.2607	-0.2420	0.0897	0.5527	0.5043	0.0486	-0.8247
62	39.10	0.13	10.3656	-8.5144	0.3054	-0.3582	0.0637	0.5348	0.5006	0.0362	-0.8230
63	39.27	0.12	10.3475	-8.4508	0.3115	-0.4168	0.0726	0.5367	0.4985	0.0412	-0.8128
64	39.50	0.14	10.4933	-8.5702	0.2732	-0.5113	0.0894	0.5270	0.4915	0.0355	-0.8095
65	39.74	0.12	10.5547	-8.5508	0.2320	-0.5268	0.0224	0.5263	0.4879	0.0384	-0.8012
66	39.94	0.14	10.6240	-8.5163	0.2[illegible]	-0.5814	0.1074	0.5136	0.4853	0.0243	-0.8013
67	40.19	0.12	10.7134	-8.5744	0.2285	-0.6374	0.0347	0.5245	0.4853	0.0392	-0.8002
68	40.37	0.14	10.8427	-8.5713	0.2[illegible]5	-0.4653	0.0792	0.5184	0.4831	0.0373	-0.8152
69	40.59	0.14	10.8882	-8.5233	0.2752	-0.6715	0.1186	0.5070	0.4842	0.0228	-0.8044
70	40.78	0.14	11.0578	-8.4367	0.3784	-0.3588	0.1634	0.4964	0.4722	0.0261	-0.8082
71	40.99	0.13	11.0348	-8.4274	0.2933	-0.4331	0.0896	0.4935	0.4716	0.0220	-0.7949
72	41.21	0.14	11.1866	-8.4921	0.3633	-0.3611	0.1077	0.4831	0.4631	0.0199	-0.7921
73	41.40	0.14	11.3346	-8.5597	0.2[illegible]2	-0.0135	0.1234	0.4959	0.4692	0.0265	-0.8260
74	41.62	0.13	11.3211	-8.1003	0.3316	-0.1965	0.1077	0.4961	0.4600	0.0340	-0.6091
75	41.82	0.12	11.3692	-8.0305	0.3[illegible]3	-0.3669	0.0631	0.4792	0.4573	0.0199	-0.7944
76	42.02	0.10	11.5066	-8.1564	0.2692	-0.1023	0.0965	0.4706	0.4510	0.0156	-0.7958
77	42.23	0.14	11.4944	-8.2468	0.2[illegible]6	-0.1216	0.0573	0.4648	0.4582	-0.0054	-0.7926
78	42.43	0.14	11.6833	-8.2268	0.1598	-0.0430	0.0629	0.4686	0.4623	0.0263	-0.7897
79	42.63	0.11	11.8335	-8.4120	0.3[illegible]4	-0.2183	0.0859	0.4610	0.4365	0.0045	-0.7936
80	42.81	0.14	11.8138	-8.2784	0.3578	-0.3509	0.0750	0.4465	0.4241	0.0224	-0.7854
81	42.99	0.14	11.9578	-8.3380	0.2967	-0.4269	0.0536	0.4326	0.4267	0.0079	-0.7851
82	43.18	0.13	11.9481	-8.2330	0.4001	-0.5523	0.0532	0.4182	0.4123	0.0059	-0.7707
83	43.35	0.14	12.0026	-8.3106	0.2[illegible]5	-0.1698	0.0752	0.4186	0.4090	0.0096	-0.7758
84	43.53	0.14	12.1271	-8.4077	0.1[illegible]7	0.0425	0.0335	0.4281	0.4102	0.0179	-0.7758
85	43.72	0.14	12.2391	-8.3853	0.1[illegible]	-0.1003	0.0416	0.4094	0.3982	0.0112	-0.7636
86	43.96	0.13	12.2437	-8.3498	0.2967	-0.0377	0.0589	0.4007	0.3944	0.0059	-0.7636
87	44.10	0.14	12.3472	-8.3804	0.2617	-0.0956	0.0533	0.4019	0.3967	0.0052	-0.7692
88	44.29	0.14	12.3177	-8.2136	0.1845	-0.0393	0.0621	0.3886	0.3832	0.0054	-0.7486
89	44.49	0.14	12.4511	-8.3495	0.2[illegible]9	-0.1320	0.0536	0.4797	0.3893	-0.0096	-0.7509
90	44.66	0.14	12.5452	-8.3984	0.0[illegible]5	-0.0341	0.0198	0.3976	0.3851	0.0125	-0.7490
91	44.80	0.13	12.5581	-8.2982	0.1[illegible]7	-0.1023	0.0134	0.3746	0.3811	-0.0065	-0.7403
92	45.01	0.14	12.6001	-8.4384	0.1457	0.1105	-0.0135	0.3663	0.3753	-0.0090	-0.7372

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART. MACH. SALVO PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 69 1.60 1.7 45.0 81.0E13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAH	CAF	ACP
93	45.15	0.07	12.74 9	-4.2213	0.2672	-0.1040	0.0149	0.3703	0.3704	-0.0006	-0.7400
94	45.36	0.07	12.7512	-4.3705	0.3055	-0.1435	0.0152	0.3692	0.3755	-0.0063	-0.7349
95	45.53	0.08	12.7134	-4.3928	0.1177	0.3734	-0.0038	0.3612	0.3691	-0.0079	-0.7066
96	45.72	0.07	12.7009	-4.2369	0.1941	-0.2959	0.0207	0.3579	0.3672	-0.0093	-0.7180
97	45.91	0.08	12.6753	-4.2123	0.1509	-0.1767	0.0153	0.3522	0.3650	-0.0128	-0.7156
98	46.08	0.07	12.6491	-4.2496	0.1473	-0.0485	-0.0160	0.3340	0.3595	-0.0255	-0.6896
99	46.29	0.07	12.6178	-4.2746	0.0717	0.2002	-0.0633	0.3674	0.3680	-0.0206	-0.6917
100	45.42	0.07	13.0259	-4.5525	0.1321	0.0292	-0.0236	0.3497	0.3665	-0.0168	-0.6881
101	45.55	0.07	13.1316	-4.1703	0.1505	-0.0220	-0.0292	0.3579	0.3701	-0.0131	-0.6984
102	45.78	0.06	13.1491	-4.1490	0.2359	-0.1465	0.0286	0.3399	0.3672	-0.0273	-0.6814
103	46.59	0.07	13.1547	-4.0951	0.1191	-0.0857	-0.0177	0.3488	0.3635	-0.0147	-0.6502
104	47.11	0.08	13.2367	-4.0519	0.2475	-0.2736	0.0056	0.3363	0.3592	-0.0229	-0.6697
105	47.29	0.07	13.1997	-4.0497	0.1362	-0.0469	-0.0173	0.3295	0.3646	-0.0351	-0.6617
106	47.47	0.07	13.3027	-4.0761	0.1117	-0.3050	-0.0001	0.3331	0.3647	-0.0316	-0.6554
107	47.62	0.07	13.2236	-4.0330	0.0934	-0.1433	0.0	0.3136	0.3524	-0.0496	-0.6373
108	47.81	0.08	13.4431	-4.0023	0.1307	-0.1440	0.0061	0.3377	0.3739	-0.0362	-0.6399
109	48.09	0.07	13.4934	-4.0560	0.0504	-0.1415	0.0118	0.3281	0.3768	-0.0487	-0.6268
110	48.16	0.08	13.4634	-4.0462	0.1634	-0.2214	0.0065	0.3269	0.3775	-0.0506	-0.6229
111	48.36	0.07	13.5237	-4.0302	0.2253	-0.4482	0.0184	0.3144	0.3690	-0.0546	-0.6135
112	48.49	0.07	13.5144	-4.0313	0.1123	-0.2519	0.0123	0.3219	0.3672	-0.0453	-0.6152
113	48.66	0.07	13.5828	-4.0161	0.1306	-0.4093	0.0240	0.3249	0.3690	-0.0441	-0.6023
114	48.84	0.09	13.6721	-4.0297	0.1640	-0.4679	0.0185	0.3163	0.3727	-0.0564	-0.6069
115	49.02	0.08	13.7109	-4.0549	0.2159	-0.4871	0.0248	0.3002	0.3702	-0.0700	-0.5884
116	49.17	0.09	13.6490	-4.1367	0.2054	-0.5107	0.0303	0.3209	0.3666	-0.0457	-0.5943
117	49.35	0.08	13.7043	-4.0610	0.2273	-0.4837	0.0250	0.3101	0.3683	-0.0582	-0.5824
118	49.53	0.09	13.7491	-7.7150	0.2613	-0.7506	0.0316	0.3110	0.3717	-0.0607	-0.5580
119	49.69	0.08	13.7342	-7.7204	0.2142	-0.6732	0.0255	0.3113	0.3713	-0.0600	-0.5625
120	49.86	0.09	13.8149	-7.7555	0.3269	-0.8180	0.0262	0.3009	0.3788	-0.0779	-0.5479
121	50.03	0.08	13.8118	-7.8067	0.3419	-0.8059	0.0435	0.3142	0.3747	-0.0605	-0.5511
122	50.23	0.09	13.7739	-7.8351	0.3593	-0.7910	0.0098	0.3179	0.3776	-0.0597	-0.5316
123	50.39	0.09	13.7352	-7.8853	0.4316	-0.8381	0.0213	0.3065	0.3758	-0.0673	-0.5468
124	50.56	0.07	13.8733	-7.8454	0.3003	-0.7052	-0.0129	0.3002	0.3736	-0.0734	-0.5245
125	50.74	0.08	13.8267	-7.7715	0.2574	-0.5656	0.0152	0.3106	0.3754	-0.0646	-0.5487
126	50.90	0.08	13.8744	-7.8767	0.3163	-0.5543	-0.0241	0.3184	0.3798	-0.0614	-0.5222
127	51.08	0.08	13.8257	-7.8523	0.2929	-0.4519	-0.0298	0.3102	0.3786	-0.0684	-0.5226
128	51.24	0.08	13.8635	-7.8663	0.2679	-0.5082	-0.0126	0.3127	0.3866	-0.0744	-0.5241
129	51.41	0.08	13.8962	-7.8723	0.1633	-0.4115	0.0213	0.3312	0.3958	-0.0676	-0.5210
130	51.58	0.08	13.8774	-7.8491	0.1779	-0.0571	0.0816	0.3363	0.3906	-0.0663	-0.5077
131	51.75	0.08	13.8566	-7.8428	0.0467	0.0178	0.0729	0.3368	0.4106	-0.0738	-0.4975
132	51.91	0.08	13.8888	-8.0696	0.1205	-0.0210	0.0819	0.3200	0.4106	-0.0906	-0.4836
133	52.08	0.08	13.8853	-7.8715	0.0727	0.0170	0.0816	0.3349	0.4091	-0.0742	-0.4991
134	52.24	0.08	13.8963	-8.0551	0.0400	0.0664	0.0534	0.3346	0.4136	-0.0790	-0.4859
135	52.42	0.08	13.9129	-7.8125	0.0057	0.0544	0.0384	0.3320	0.4131	-0.0811	-0.4940
136	52.58	0.08	13.9498	-8.0477	0.1178	-0.2252	0.0224	0.3263	0.4063	-0.0800	-0.4790
137	52.75	0.08	13.8721	-7.8493	0.0424	-0.0656	0.0221	0.3319	0.4169	-0.0850	-0.4871
138	52.93	0.09	13.9368	-8.0286	0.0057	-0.1245	0.0185	0.3152	0.4195	-0.1044	-0.4806

PAGE 1 OF 3
SHEET 4 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/L	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	A9	1.19	1.7	45.0	91a0P13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
139	53.09	0.05	16.5356	-6.8823	0.0262	-0.0456	0.0223	0.3217	0.4227	-0.1011	-0.4484
140	53.26	0.06	16.6202	-7.0375	0.0259	-0.0536	0.0225	0.3272	0.4157	-0.0885	-0.4814
141	53.09	0.05	16.5567	-7.1454	0.0364	-0.0265	0.0053	0.3224	0.4219	-0.0996	-0.4871
142	53.01	0.07	16.5191	-6.9316	0.2567	-0.7417	0.0059	0.2967	0.4097	-0.1131	-0.4776
143	53.17	0.05	16.6241	-6.9323	0.2151	-0.6297	0.0119	0.2935	0.4189	-0.1235	-0.4739
144	53.04	0.06	16.5332	-7.0233	0.2769	-0.9416	0.0006	0.3210	0.4207	-0.0998	-0.4808
145	53.13	0.05	16.5546	-7.0708	0.1643	-0.5163	0.0120	0.3073	0.4270	-0.1198	-0.4760
146	53.24	0.05	16.5120	-7.1952	0.1493	-0.8544	0.0050	0.3303	0.4304	-0.1002	-0.4658
147	53.42	0.05	16.5506	-7.1070	0.1164	-0.9510	0.0005	0.3325	0.4381	-0.1057	-0.4786
148	53.51	0.05	16.5661	-6.8307	-0.1737	-0.5218	0.0115	0.3134	0.4354	-0.1220	-0.4570
149	53.78	0.04	16.5930	-6.9318	-0.1338	-0.5166	0.0115	0.2905	0.4222	-0.1318	-0.4390
150	54.00	0.05	16.7424	-6.9080	0.0414	-0.3767	0.0230	0.2934	0.4315	-0.1382	-0.4471
151	53.29	0.05	16.6544	-6.9725	0.0741	-0.4471	0.0168	0.3064	0.4293	-0.1205	-0.4417
152	53.71	0.05	16.6188	-6.8713	0.0561	-0.3196	0.0179	0.2939	0.4296	-0.1358	-0.4504
153	53.47	0.04	16.6351	-6.8622	-0.0179	-0.3820	0.0235	0.3242	0.4408	-0.1167	-0.4543
154	53.51	0.05	16.6343	-6.9316	-0.1018	-0.1604	0.0226	0.2961	0.4355	-0.1514	-0.4672
155	53.51	0.04	16.6525	-6.8965	-0.1017	-0.2713	0.0229	0.3110	0.4370	-0.1261	-0.4610
156	53.43	0.04	16.6344	-6.8633	0.0057	-0.4358	0.0179	0.3205	0.4417	-0.1213	-0.4615
157	53.29	0.04	16.6265	-6.8718	0.0295	-0.4157	0.0236	0.2799	0.4331	-0.1533	-0.4525
158	53.15	0.04	16.7755	-6.9489	0.0494	-0.3461	0.0235	0.3055	0.4361	-0.1307	-0.4635
159	53.28	0.04	16.6233	-6.8778	-0.0389	-0.3434	0.0229	0.2842	0.4298	-0.1456	-0.4639
160	53.43	0.03	16.6784	-6.8728	-0.0197	-0.1493	0.0231	0.2796	0.4272	-0.1476	-0.4628
161	53.61	0.04	16.6531	-6.8652	-0.1619	-0.3630	0.0176	0.3172	0.4424	-0.1353	-0.4662
162	53.78	0.04	16.7716	-6.8585	-0.0807	-0.2790	0.0174	0.3200	0.4340	-0.1181	-0.4647
163	53.63	0.03	16.7306	-6.8721	-0.1149	-0.0342	0.0235	0.2859	0.4336	-0.1479	-0.4701
164	53.74	0.04	16.7161	-6.8744	-0.0854	-0.0637	0.0233	0.3061	0.4376	-0.1316	-0.4676
165	53.63	0.04	16.6830	-7.1101	-0.0625	-0.1909	0.0176	0.3113	0.4436	-0.1294	-0.4744
166	53.63	0.03	15.1918	-7.4164	-0.0394	0.5041	0.0123	0.2764	0.4331	-0.1567	-0.5014
167	53.84	0.03	15.3068	-7.4255	-0.2782	0.4434	-0.0166	0.2815	0.4161	-0.1356	-0.5087
168	53.71	0.03	15.2131	-7.2125	0.0053	0.2536	0.0130	0.2635	0.4264	-0.1629	-0.4804
169	53.84	0.02	15.2641	-7.2980	-0.3365	0.4447	-0.0109	0.2667	0.4375	-0.1668	-0.5112
170	53.73	0.02	15.3431	-7.3547	-0.3491	0.5473	0.0006	0.2734	0.4357	-0.1619	-0.4932
171	53.61	0.03	15.2918	-7.2516	0.3764	0.1810	0.0081	0.2657	0.4293	-0.1636	-0.4745
172	53.43	0.02	15.4243	-6.8459	0.0764	1.7101	0.0036	0.2514	0.4238	-0.1724	-0.5374
173	53.29	0.04	15.4229	-6.8739	-0.2955	1.5896	-0.0065	0.2255	0.4179	-0.1924	-0.5628
174	53.43	-0.01	15.1923	-7.7479	-0.4491	1.0734	-0.0040	0.2752	0.4127	-0.1875	-0.5110
175	53.61	0.05	15.3414	-6.8652	0.1108	-0.1513	-0.0092	0.2241	0.4034	-0.1768	-0.4694
176	53.78	0.02	15.2164	-7.0687	-0.1561	0.1720	0.0132	0.2761	0.4219	-0.1458	-0.4639
177	53.63	-0.01	15.4726	-6.8752	-0.7547	1.5960	0.0087	0.2496	0.4231	-0.1737	-0.5416

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | MACH 1.07 | X10-6 1.7 | PHI 45.0 | CONF 81 | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
93	45.19	0.09	-0.1182	0.1171	-0.2229	-0.0409	0.5356	1.3987	-0.0165	0.5786	-0.0118	0.4137
94	45.36	0.09	-0.1095	0.1163	-0.2177	-0.0452	0.5365	1.3907	-0.0162	0.5732	-0.0117	0.4122
95	45.53	0.08	-0.1026	0.1015	-0.1924	-0.0062	0.4803	1.3559	-0.0144	0.5577	-0.0106	0.4113
96	45.72	0.07	-0.1779	0.1184	-0.1988	-0.0382	0.5295	1.3719	-0.0152	0.5669	-0.0111	0.4132
97	45.91	0.08	-0.1078	0.0124	-0.1907	-0.0338	0.5190	1.3684	-0.0154	0.5661	-0.0113	0.4137
98	46.08	0.07	-0.1073	0.0054	-0.1823	-0.0147	0.4964	1.3534	-0.0144	0.5594	-0.0107	0.4133
99	46.24	0.07	-0.1030	0.0027	-0.1868	-0.0062	0.4792	1.3626	-0.0154	0.5627	-0.0113	0.4129
100	46.42	0.07	-0.1044	0.0051	-0.1780	-0.0136	0.4853	1.3701	-0.0159	0.5681	-0.0116	0.4146
101	46.59	0.08	-0.1029	-0.0001	-0.1678	0.0003	0.4523	1.3795	-0.0163	0.5711	-0.0118	0.4140
102	46.76	0.08	-0.1017	0.0002	-0.1665	-0.0006	0.4696	1.3701	-0.0162	0.5684	-0.0116	0.4149
103	46.94	0.07	-0.1027	0.0009	-0.1678	-0.0012	0.4560	1.3724	-0.0161	0.5694	-0.0117	0.4149
104	47.11	0.08	-0.1011	0.0003	-0.1567	-0.0072	0.4682	1.3584	-0.0152	0.5637	-0.0112	0.4150
105	47.29	0.07	-0.1036	-0.0002	-0.1599	0.0017	0.4592	1.3502	-0.0144	0.5612	-0.0111	0.4156
106	47.47	0.07	-0.1056	-0.0010	-0.1711	0.0036	0.4759	1.3641	-0.0153	0.5642	-0.0113	0.4167
107	47.62	0.07	-0.1007	-0.0022	-0.1612	0.0063	0.4564	1.3368	-0.0141	0.5537	-0.0106	0.4160
108	47.81	0.06	-0.0920	-0.0023	-0.1469	0.0091	0.4323	1.3500	-0.0151	0.5615	-0.0112	0.4159
109	48.00	0.07	-0.0929	-0.0035	-0.1505	0.0157	0.4138	1.3534	-0.0156	0.5606	-0.0115	0.4172
110	48.18	0.06	-0.0941	-0.0051	-0.1105	0.0118	0.4346	1.3440	-0.0149	0.5604	-0.0111	0.4170
111	48.36	0.07	-0.0930	-0.0067	-0.1025	0.0201	0.4402	1.3393	-0.0143	0.5592	-0.0107	0.4175
112	48.49	0.07	-0.0971	-0.0087	-0.0942	0.0727	0.4306	1.3277	-0.0136	0.5526	-0.0104	0.4162
113	48.68	0.07	-0.1004	-0.0053	-0.0881	0.0323	0.4146	1.3486	-0.0154	0.5637	-0.0114	0.4180
114	48.86	0.06	-0.1055	-0.0051	-0.0818	0.0275	0.4405	1.3463	-0.0155	0.5627	-0.0115	0.4180
115	49.02	0.05	-0.1052	-0.0065	-0.0555	0.0414	0.3944	1.3200	-0.0140	0.5503	-0.0106	0.4169
116	49.17	0.07	-0.1029	-0.0063	-0.0581	0.0352	0.4226	1.3434	-0.0156	0.5615	-0.0116	0.4180
117	49.35	0.06	-0.1044	-0.0081	-0.0432	0.0650	0.3459	1.3444	-0.0152	0.5633	-0.0113	0.4190
118	49.53	0.07	-0.0952	-0.0051	-0.0219	0.0784	0.3359	1.3567	-0.0163	0.5674	-0.0120	0.4182
119	49.69	0.06	-0.1184	-0.0081	-0.0445	0.0516	0.3757	1.3379	-0.0154	0.5602	-0.0115	0.4187
120	49.86	0.07	-0.0934	-0.0043	-0.0155	0.0806	0.2893	1.3431	-0.0154	0.5621	-0.0115	0.4185
121	50.05	0.06	-0.0909	-0.0043	-0.0173	0.0754	0.3065	1.3607	-0.0165	0.5703	-0.0121	0.4191
122	50.23	0.07	-0.0727	-0.0054	-0.0231	0.0744	0.3178	1.3559	-0.0165	0.5695	-0.0122	0.4200
123	50.39	0.07	-0.0741	-0.0062	-0.0214	0.0839	0.2898	1.3513	-0.0161	0.5661	-0.0119	0.4189
124	50.56	0.07	-0.0680	-0.0075	-0.0103	0.1253	0.1702	1.3442	-0.0157	0.5632	-0.0117	0.4190
125	50.74	0.06	-0.0745	-0.0075	-0.0265	0.0792	0.2807	1.3441	-0.0155	0.5642	-0.0115	0.4198
126	50.90	0.06	-0.0745	-0.0100	-0.0131	0.1276	0.1643	1.3401	-0.0154	0.5624	-0.0115	0.4197
127	51.08	0.06	-0.0865	-0.0144	-0.0160	0.1585	0.1135	1.3225	-0.0149	0.5555	-0.0113	0.4200
128	51.23	0.06	-0.0922	-0.0124	-0.0024	0.1610	0.0461	1.3499	-0.0162	0.5673	-0.0120	0.4206
129	51.41	0.06	-0.0860	-0.0132	0.0038	0.2067	-0.0537	1.3430	-0.0165	0.5665	-0.0123	0.4218
130	51.58	0.06	-0.0871	-0.0091	0.0114	0.1933	-0.2428	1.3196	-0.0156	0.5558	-0.0118	0.4212
131	51.75	0.05	-0.0945	-0.0080	0.0107	0.1976	-0.2656	1.3301	-0.0163	0.5611	-0.0123	0.4218
132	51.91	0.05	-0.0949	-0.0078	0.0156	0.2645	-0.5271	1.3184	-0.0154	0.5554	-0.0117	0.4212
133	52.08	0.05	-0.0936	-0.0084	0.0142	0.1906	-0.4210	1.3243	-0.0164	0.5585	-0.0124	0.4217
134	52.24	0.05	-0.0915	-0.0065	0.0140	0.2045	-0.4427	1.3265	-0.0160	0.5594	-0.0121	0.4217
135	52.42	0.05	-0.0915	-0.0070	0.0143	0.2223	-0.4522	1.3348	-0.0170	0.5633	-0.0128	0.4220
136	52.58	0.05	-0.0904	-0.0073	0.0204	0.3970	-1.1066	1.3406	-0.0172	0.5668	-0.0128	0.4228
137	52.75	0.05	-0.0912	-0.0071	0.0179	0.3351	-0.8376	1.3441	-0.0176	0.5668	-0.0131	0.4232
138	52.93	0.04	-0.0905	-0.0065	0.0194	0.3172	-0.9445	1.3512	-0.0180	0.5712	-0.0133	0.4228

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART SALM SXIS=6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 69 ALT 1.7 45.0 ALPHA 13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	C81	XCPF1	YCPF1	CNF2	CM2	C82	XCPF2	YCPF2
47	35.56	0.10	-0.3164	0.0316	-0.1664	-0.1005	0.5331	1.4901	-0.0167	0.6029	-0.0112	0.4046
48	35.76	0.15	-0.2946	0.0296	-0.1493	-0.1385	0.5317	1.4868	-0.0167	0.5987	-0.0110	0.4043
49	35.93	0.14	-0.2526	0.0261	-0.1329	-0.1594	0.5286	1.4739	-0.0162	0.5970	-0.0110	0.4051
50	36.22	0.13	-0.2175	0.0230	-0.2101	-0.0468	0.5422	1.4792	-0.0162	0.5976	-0.0110	0.4040
51	36.48	0.14	-0.2821	0.0330	-0.2087	-0.0865	0.5401	1.4723	-0.0163	0.5953	-0.0111	0.4043
52	36.76	0.14	-0.2196	0.0281	-0.1736	-0.1191	0.5439	1.4724	-0.0166	0.5953	-0.0113	0.4043
53	36.93	0.13	-0.3063	0.0385	-0.2025	-0.0945	0.5524	1.4862	-0.0173	0.6023	-0.0117	0.4053
54	37.18	0.13	-0.2663	0.0377	-0.2095	-0.0980	0.5470	1.4815	-0.0174	0.5994	-0.0118	0.4049
55	37.41	0.12	-0.2958	0.0419	-0.1595	-0.1396	0.5384	1.4838	-0.0174	0.6015	-0.0117	0.4053
56	37.62	0.12	-0.3440	0.0413	-0.1871	-0.1159	0.5438	1.4881	-0.0180	0.6041	-0.0121	0.4065
57	37.87	0.12	-0.3020	0.0468	-0.1862	-0.1093	0.5386	1.4897	-0.0169	0.5912	-0.0116	0.4050
58	38.11	0.11	-0.2783	0.0421	-0.1796	-0.1269	0.5499	1.4930	-0.0185	0.6072	-0.0124	0.4067
59	38.35	0.11	-0.2478	0.0412	-0.1732	-0.1257	0.5290	1.4826	-0.0179	0.6030	-0.0121	0.4067
60	38.56	0.11	-0.2614	0.0413	-0.1964	-0.1142	0.5434	1.4854	-0.0176	0.5952	-0.0120	0.4062
61	38.81	0.09	-0.3482	0.0483	-0.1925	-0.1156	0.5528	1.4792	-0.0182	0.6007	-0.0123	0.4061
62	39.06	0.10	-0.3363	0.0417	-0.1965	-0.1218	0.5468	1.4845	-0.0186	0.6037	-0.0125	0.4067
63	39.27	0.09	-0.3041	0.0393	-0.1867	-0.1152	0.5451	1.4815	-0.0178	0.5935	-0.0121	0.4061
64	39.50	0.09	-0.3413	0.0384	-0.1767	-0.1170	0.5319	1.4872	-0.0179	0.5968	-0.0122	0.4068
65	39.73	0.10	-0.3771	0.0486	-0.2043	-0.0975	0.5416	1.4919	-0.0169	0.5859	-0.0117	0.4063
66	39.96	0.11	-0.3269	0.0375	-0.1956	-0.1154	0.5231	1.4898	-0.0180	0.5941	-0.0123	0.4070
67	40.18	0.09	-0.3598	0.0363	-0.1920	-0.1010	0.5350	1.4863	-0.0176	0.5917	-0.0121	0.4063
68	40.37	0.11	-0.3619	0.0384	-0.1724	-0.1129	0.5356	1.4875	-0.0192	0.6061	-0.0129	0.4075
69	40.59	0.10	-0.3218	0.0343	-0.1877	-0.1081	0.5214	1.4863	-0.0180	0.5936	-0.0124	0.4076
70	40.78	0.10	-0.2894	0.0324	-0.1341	-0.1245	0.4988	1.4736	-0.0191	0.6004	-0.0130	0.4074
71	40.96	0.09	-0.3345	0.0355	-0.1773	-0.1075	0.5306	1.4848	-0.0178	0.5880	-0.0122	0.4070
72	41.21	0.10	-0.3197	0.0344	-0.1869	-0.1041	0.5273	1.4863	-0.0184	0.5945	-0.0127	0.4082
73	41.40	0.10	-0.3121	0.0320	-0.1606	-0.1027	0.5165	1.4736	-0.0193	0.6004	-0.0131	0.4074
74	41.62	0.10	-0.3227	0.0340	-0.1694	-0.1055	0.5252	1.4784	-0.0197	0.6040	-0.0134	0.4091
75	41.82	0.10	-0.3565	0.0382	-0.1862	-0.1021	0.5503	1.4883	-0.0187	0.5965	-0.0126	0.4085
76	42.12	0.10	-0.3345	0.0357	-0.1837	-0.1053	0.5413	1.4911	-0.0181	0.5927	-0.0125	0.4085
77	42.23	0.10	-0.3374	0.0364	-0.2005	-0.0951	0.5466	1.4915	-0.0174	0.5868	-0.0121	0.4085
78	42.43	0.09	-0.3795	0.0367	-0.2100	-0.0896	0.5567	1.4953	-0.0181	0.5914	-0.0125	0.4092
79	42.64	0.11	-0.3602	0.0385	-0.1949	-0.0868	0.5299	1.4873	-0.0178	0.5873	-0.0124	0.4086
80	42.81	0.10	-0.3569	0.0316	-0.2129	-0.0810	0.5457	1.4902	-0.0175	0.5869	-0.0123	0.4104
81	42.99	0.09	-0.3436	0.0328	-0.2128	-0.0851	0.5541	1.4884	-0.0172	0.5862	-0.0121	0.4104
82	43.19	0.10	-0.3412	0.0321	-0.2140	-0.0843	0.5613	1.4889	-0.0162	0.5774	-0.0115	0.4098
83	43.35	0.10	-0.3626	0.0331	-0.2114	-0.0832	0.5538	1.4904	-0.0171	0.5830	-0.0121	0.4104
84	43.53	0.09	-0.3796	0.0378	-0.2107	-0.0591	0.5312	1.4907	-0.0158	0.5736	-0.0113	0.4096
85	43.72	0.09	-0.3624	0.0324	-0.2221	-0.0742	0.5520	1.4931	-0.0165	0.5756	-0.0118	0.4102
86	43.90	0.10	-0.3497	0.0273	-0.2173	-0.0696	0.5492	1.4930	-0.0166	0.5772	-0.0118	0.4114
87	44.10	0.10	-0.3453	0.0325	-0.2038	-0.0671	0.5419	1.4907	-0.0163	0.5755	-0.0117	0.4108
88	44.29	0.09	-0.3918	0.0320	-0.2040	-0.0578	0.5334	1.3787	-0.0153	0.5666	-0.0111	0.4110
89	44.49	0.09	-0.3729	0.0322	-0.2197	-0.0555	0.5413	1.3880	-0.0156	0.5696	-0.0113	0.4104
90	44.62	0.08	-0.4180	0.0378	-0.2264	-0.0563	0.5443	1.3989	-0.0165	0.5744	-0.0118	0.4120
91	44.84	0.08	-0.4152	0.0424	-0.2242	-0.0488	0.5388	1.3942	-0.0160	0.5703	-0.0115	0.4119
92	45.01	0.08	-0.4145	0.0407	-0.2126	-0.0759	0.5129	1.3926	-0.0157	0.5692	-0.0114	0.4117

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH 3AXIS=6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 60 1.15 1.7 45.0 b1.0F13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-5.75	0.16	0.3319	0.0353	0.1035	0.1062	0.5539	-0.2172	-0.0191	-0.1352	0.0881	0.6223
2	-5.75	0.16	0.3394	0.0381	0.1047	0.1008	0.5587	-0.2060	-0.0187	-0.1300	0.0909	0.6313
3	-4.36	0.11	0.2060	0.0292	0.1078	0.1165	0.6282	-0.1331	-0.0154	-0.0927	0.1154	0.6962
4	-2.44	0.11	0.0781	0.0094	0.0785	0.1172	1.0322	-0.0574	-0.0065	-0.0560	0.1241	1.0663
5	-0.46	0.16	-0.0225	-0.0263	0.0637	0.1921	-1.6981	0.0417	0.0036	-0.0121	0.0816	-0.2911
6	1.43	0.16	-0.1291	-0.0146	0.0594	0.1234	0.8338	0.1542	0.0169	0.0344	0.1097	0.2733
7	3.82	0.11	-0.2112	-0.0217	0.0670	0.1025	0.2225	0.2824	0.0326	0.0910	0.1156	0.3222
8	5.55	0.16	-0.3061	-0.0282	0.0897	0.0857	0.2911	0.3765	0.0421	0.1393	0.1111	0.3678
9	7.66	0.11	-0.3996	-0.0361	0.1345	0.0854	0.3363	0.5251	0.0452	0.2189	0.0850	0.4169
10	9.59	0.11	-0.4531	-0.0202	-0.1585	0.0441	0.3679	0.6698	0.0431	0.2871	0.0543	0.4286
11	11.67	0.16	-0.5115	-0.0155	-0.2005	0.0305	0.3926	0.8092	0.0415	0.3492	0.0512	0.4278
12	13.65	0.11	-0.5754	-0.0118	-0.2496	0.0210	0.4071	0.9380	0.0365	0.4003	0.0389	0.4268
13	15.71	0.16	-0.6329	-0.0091	-0.2931	0.0158	0.4204	1.0573	0.0292	0.4530	0.0277	0.4284
14	17.62	0.16	-0.6851	-0.0061	-0.3314	0.0088	0.4318	1.1731	0.0201	0.5019	0.0172	0.4278
15	19.56	0.16	-0.7292	-0.0041	-0.3655	0.0062	0.4403	1.2701	0.0143	0.5445	0.0113	0.4287
16	21.42	0.11	-0.7696	0.0005	-0.3957	-0.0006	0.4504	1.3645	0.0163	0.5567	0.0125	0.4267
17	23.48	0.12	-0.8036	0.0150	-0.4239	-0.0290	0.4754	1.4692	0.0052	0.5200	0.0341	0.4097
18	25.90	0.15	-0.8159	0.0343	-0.4394	-0.0626	0.5317	1.5132	0.0004	0.5397	0.0003	0.4110
19	28.01	0.16	-0.8282	0.0521	-0.4531	-0.0919	0.5531	1.5350	-0.0032	0.5466	-0.0029	0.4093
20	24.00	0.16	-0.8225	0.0405	-0.4456	-0.0684	0.5342	1.5380	-0.0033	0.5473	-0.0025	0.4091
21	28.40	0.16	-0.8250	0.0417	-0.4374	-0.0627	0.5365	1.5416	-0.0040	0.5472	-0.0030	0.4079
22	29.71	0.16	-0.8281	0.0412	-0.4315	-0.0672	0.5344	1.5521	-0.0046	0.5511	-0.0034	0.4075
23	25.95	0.15	-0.8289	0.0387	-0.4289	-0.0814	0.5390	1.5544	-0.0045	0.5528	-0.0036	0.4081
24	24.35	0.16	-0.8278	0.0382	-0.4371	-0.0660	0.5316	1.5573	-0.0054	0.5534	-0.0040	0.4077
25	29.69	0.15	-0.8291	0.0363	-0.4183	-0.0582	0.5163	1.5438	-0.0068	0.5662	-0.0049	0.4092
26	29.93	0.16	-0.8340	0.0410	-0.4273	-0.0750	0.5441	1.5417	-0.0070	0.5636	-0.0051	0.4079
27	30.24	0.15	-0.8361	0.0424	-0.4323	-0.0811	0.5508	1.5463	-0.0060	0.5695	-0.0057	0.4085
28	30.51	0.13	-0.8420	0.0439	-0.4361	-0.0785	0.5633	1.5411	-0.0079	0.5653	-0.0057	0.4064
29	30.78	0.16	-0.8417	0.0392	-0.4352	-0.0722	0.5545	1.5497	-0.0091	0.5769	-0.0066	0.4077
30	31.06	0.15	-0.8460	0.0419	-0.4359	-0.0552	0.5665	1.5464	-0.0091	0.5720	-0.0065	0.4062
31	31.35	0.15	-0.8498	0.0417	-0.4403	-0.0657	0.5546	1.5431	-0.0096	0.5728	-0.0067	0.4054
32	31.61	0.15	-0.8479	0.0418	-0.4404	-0.0594	0.5598	1.5500	-0.0102	0.5752	-0.0072	0.4050
33	31.91	0.17	-0.8488	0.0431	-0.4423	-0.0575	0.5680	1.5515	-0.0105	0.5801	-0.0073	0.4052
34	32.17	0.15	-0.8511	0.0433	-0.4415	-0.0642	0.5659	1.5561	-0.0107	0.5828	-0.0075	0.4058
35	32.45	0.18	-0.8515	0.0417	-0.4405	-0.0569	0.5838	1.5539	-0.0109	0.5809	-0.0076	0.4050
36	32.71	0.16	-0.8547	0.0392	-0.4367	-0.0591	0.5801	1.5596	-0.0115	0.5841	-0.0080	0.4057
37	32.99	0.15	-0.8548	0.0413	-0.4391	-0.0598	0.5749	1.5566	-0.0117	0.5842	-0.0081	0.4038
38	33.24	0.15	-0.8540	0.0375	-0.4342	-0.0500	0.5977	1.5535	-0.0132	0.5868	-0.0091	0.4051
39	33.59	0.16	-0.8551	0.0425	-0.4395	-0.0634	0.5629	1.5590	-0.0130	0.5858	-0.0090	0.4043
40	33.75	0.15	-0.8542	0.0351	-0.4359	-0.0447	0.5571	1.5593	-0.0145	0.5909	-0.0093	0.4049
41	34.01	0.17	-0.8528	0.0414	-0.4361	-0.0597	0.5538	1.5593	-0.0137	0.5906	-0.0094	0.4047
42	34.25	0.15	-0.8527	0.0419	-0.4347	-0.0555	0.5593	1.5652	-0.0150	0.5930	-0.0103	0.4047
43	34.56	0.15	-0.8543	0.0373	-0.4319	-0.0515	-0.1101	0.5573	1.5845	-0.0146	0.6018	-0.0100	0.4054
44	34.77	0.15	-0.8542	0.0371	-0.4307	-0.0835	0.5269	1.5766	-0.0160	0.5985	-0.0109	0.4053
45	35.06	0.15	-0.8538	0.0321	-0.4345	-0.1176	0.5290	1.5785	-0.0162	0.5963	-0.0110	0.4046
46	35.24	0.15	-0.8537	0.0309	-0.4369	-0.0956	0.5372	1.5716	-0.0154	0.5962	-0.0105	0.4038

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RNI0=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	69	1.10	1.7	45.0	61.0	13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
139	53.05	0.00	-0.0229	-0.0374	0.0180	0.3261	-0.8017	1.3501	-0.0162	0.5708	-0.0135	0.4228
140	53.26	0.00	-0.0256	-0.0565	0.0160	0.2943	-0.6042	1.3547	-0.0183	0.5744	-0.0135	0.4240
141	53.44	0.00	-0.0183	-0.0072	0.0142	0.3629	-0.9928	1.3566	-0.0187	0.5742	-0.0138	0.4232
142	53.61	0.00	-0.0144	-0.0063	0.0229	0.6197	-1.7069	1.3660	-0.0197	0.5792	-0.0144	0.4240
143	53.78	0.00	-0.0118	-0.0044	0.0243	0.6665	-1.7069	1.3613	-0.0192	0.5758	-0.0141	0.4229
144	53.96	0.00	-0.0070	-0.0104	0.0265	1.4855	-3.4969	1.3767	-0.0206	0.5846	-0.0150	0.4248
145	54.13	0.00	-0.0106	-0.0106	0.0211	0.9635	-1.9567	1.3862	-0.0212	0.5877	-0.0153	0.4240
146	54.28	0.00	-0.0066	-0.0064	0.0221	1.0856	-2.3660	1.3909	-0.0214	0.5906	-0.0154	0.4246
147	54.44	0.00	-0.0122	-0.0164	0.0167	0.8447	-1.7654	1.4146	-0.0231	0.5995	-0.0166	0.4238
148	54.61	0.00	-0.0111	-0.0097	0.0224	0.8743	-2.0154	1.3910	-0.0216	0.5893	-0.0156	0.4237
149	54.78	0.00	-0.0176	-0.0087	0.0203	0.6441	-1.0646	1.3543	-0.0201	0.5752	-0.0149	0.4247
150	54.90	0.00	-0.0165	-0.0152	0.0220	0.5579	-1.3315	1.3626	-0.0205	0.5779	-0.0151	0.4241
151	55.08	0.00	-0.0153	-0.0092	0.0218	0.6016	-1.4228	1.3818	-0.0215	0.5856	-0.0156	0.4239
152	55.21	0.00	-0.0144	-0.0094	0.0225	0.6931	-1.5695	1.3764	-0.0215	0.5847	-0.0156	0.4247
153	55.37	0.00	-0.0113	-0.0098	0.0237	0.8323	-2.0952	1.4018	-0.0228	0.5922	-0.0163	0.4225
154	55.51	0.00	-0.0096	-0.0103	0.0267	1.0112	-2.6164	1.3876	-0.0223	0.5860	-0.0161	0.4238
155	55.67	0.00	-0.0113	-0.0150	0.0237	0.8500	-2.0952	1.3967	-0.0228	0.5906	-0.0164	0.4235
156	55.83	0.00	-0.0094	-0.0099	0.0269	1.0619	-2.6149	1.4189	-0.0245	0.6001	-0.0173	0.4229
157	55.95	0.00	-0.0065	-0.0103	0.0267	2.2901	-6.3759	1.3767	-0.0214	0.5639	-0.0158	0.4235
158	56.15	0.00	-0.0063	-0.0104	0.0293	34.8891	-97.6446	1.4106	-0.0241	0.5972	-0.0171	0.4234
159	56.28	0.00	-0.0035	-0.0109	0.0323	-2.3730	4.2296	1.3983	-0.0237	0.5936	-0.0170	0.4252
160	56.45	0.00	0.0005	-0.0104	0.0312	-22.4111	62.3990	1.3811	-0.0229	0.5856	-0.0166	0.4240
161	56.61	0.00	0.0001	-0.0103	0.0300	-1.6599	2.9173	1.4150	-0.0251	0.6001	-0.0177	0.4229
162	56.78	0.00	0.0046	-0.0099	0.0296	-2.6743	7.3986	1.4228	-0.0253	0.6020	-0.0178	0.4231
163	56.93	0.00	0.0077	-0.0099	0.0333	-1.2256	4.3255	1.4202	-0.0252	0.6019	-0.0178	0.4238
164	57.09	0.00	0.0058	-0.0094	0.0324	-1.4557	4.7092	1.4320	-0.0259	0.6063	-0.0181	0.4234
165	57.25	0.00	0.0030	-0.0095	0.0317	-1.3926	4.5296	1.4439	-0.0265	0.6104	-0.0184	0.4227
166	57.43	0.00	0.0064	-0.0097	0.0323	-1.4272	4.7534	1.4380	-0.0261	0.6070	-0.0182	0.4221
167	57.60	0.00	0.0105	-0.0083	0.0356	-1.7809	5.3727	1.4425	-0.0263	0.6102	-0.0183	0.4230
168	57.71	0.00	0.0094	-0.0107	0.0343	-1.0924	3.5010	1.4297	-0.0261	0.6055	-0.0183	0.4235
169	57.88	0.00	0.0048	-0.0098	0.0330	-2.4133	8.7076	1.4460	-0.0272	0.6068	-0.0189	0.4216
170	58.03	0.00	0.0050	-0.0100	0.0331	-1.8939	5.9117	1.4381	-0.0266	0.6069	-0.0185	0.4220
171	58.18	0.00	0.0065	-0.0115	0.0346	-1.7732	5.3247	1.4345	-0.0266	0.6058	-0.0186	0.4223
172	58.33	0.00	0.0057	-0.0100	0.0323	-1.8606	5.7552	1.4416	-0.0269	0.6064	-0.0187	0.4220
173	58.48	0.00	0.0053	-0.0103	0.0349	-1.9622	6.5871	1.4266	-0.0264	0.6042	-0.0185	0.4229
174	58.60	-0.01	0.0099	-0.0096	0.0344	-0.9560	3.9115	1.4179	-0.0255	0.5999	-0.0180	0.4231
175	58.81	0.00	0.0106	-0.0092	0.0401	-0.8523	3.7063	1.4155	-0.0253	0.5997	-0.0179	0.4236
176	58.96	0.00	0.0101	-0.0113	0.0387	-1.1194	3.8241	1.4193	-0.0261	0.5998	-0.0184	0.4226
177	59.05	-0.01	0.0052	-0.0105	0.0359	-1.7429	5.7927	1.4323	-0.0269	0.6046	-0.0188	0.4221

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART PASS RNLV-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 69 1.10 1.7 45.0 0.13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.75	0.10	0.3364	0.2999	0.1318	0.9999	0.3944	-0.3535	-0.0402	-0.1465	0.1136	0.4144
2	-5.75	0.10	0.3414	0.2999	0.1362	0.9999	0.3926	-0.3459	-0.0390	-0.1409	0.1163	0.4132
3	-4.38	0.11	0.2550	0.2999	0.1018	0.9999	0.3892	-0.2150	-0.0251	-0.0865	0.1169	0.4021
4	-2.44	0.11	0.1691	0.2999	0.0633	0.9999	0.3742	-0.1030	-0.0095	-0.0359	0.0924	0.3490
5	-0.49	0.10	0.0351	0.2999	0.0106	0.9999	0.3335	-0.0097	0.0006	0.0017	-0.0619	-0.1758
6	1.53	0.10	-0.0594	0.2999	-0.0235	0.9999	0.4215	0.0977	0.0130	0.0477	0.1405	0.5440
7	3.62	0.11	-0.1446	0.2999	-0.0716	0.9999	0.3879	0.1958	0.0221	0.0930	0.1130	0.4749
8	5.55	0.10	-0.2324	0.2999	-0.1209	0.9999	0.3818	0.2755	0.0232	0.1253	0.0843	0.4659
9	7.52	0.11	-0.4929	0.2999	-0.1958	0.9999	0.3972	0.3608	0.0226	0.1690	0.0629	0.4694
10	9.59	0.11	-0.6373	0.2999	-0.2611	0.9999	0.4099	0.4395	0.0204	0.2093	0.0463	0.4655
11	11.67	0.10	-0.7961	0.2999	-0.3235	0.9999	0.4086	0.5133	0.0139	0.2477	0.0271	0.4826
12	13.65	0.11	-0.9157	0.2999	-0.3743	0.9999	0.4048	0.5669	0.0092	0.2719	0.0168	0.4954
13	15.71	0.10	-1.0412	0.2999	-0.4270	0.9999	0.4101	0.5749	0.0061	0.2918	0.0071	0.5061
14	17.82	0.10	-1.1006	0.2999	-0.4707	0.9999	0.4048	0.5762	-0.0019	0.2984	-0.0033	0.5179
15	19.80	0.10	-1.2490	0.2999	-0.5112	0.9999	0.4030	0.5471	-0.0079	0.2911	-0.0145	0.5321
16	21.42	0.11	-1.2923	0.2999	-0.5234	0.9999	0.4056	0.5108	-0.0109	0.2798	-0.0214	0.5479
17	23.85	0.10	-1.3572	0.2999	-0.5522	0.9999	0.4033	0.4929	-0.0095	0.2759	-0.0193	0.5598
18	25.90	0.10	-1.3902	0.2999	-0.5631	0.9999	0.3933	0.4581	-0.0077	0.2793	-0.0606	0.6098
19	28.01	0.10	-1.3805	0.2999	-0.5326	0.9999	0.3913	0.3539	-0.0315	0.2366	-0.0891	0.6684
20	28.40	0.10	-1.3805	0.2999	-0.5309	0.9999	0.3913	0.3464	-0.0314	0.2357	-0.0908	0.6788
21	29.88	0.10	-1.3819	0.2999	-0.5320	0.9999	0.3906	0.3295	-0.0373	0.2369	-0.1131	0.7189
22	29.71	0.10	-1.3794	0.2999	-0.5324	0.9999	0.3891	0.3249	-0.0384	0.2364	-0.1181	0.7275
23	24.99	0.10	-1.3720	0.2999	-0.5339	0.9999	0.3889	0.3553	-0.0294	0.2427	-0.0843	0.6830
24	29.35	0.10	-1.3928	0.2999	-0.5368	0.9999	0.3897	0.3931	-0.0273	0.2552	-0.0698	0.6494
25	29.04	0.10	-1.3753	0.2999	-0.5365	0.9999	0.3908	0.3616	-0.0331	0.2491	-0.0917	0.6861
26	29.93	0.10	-1.3994	0.2999	-0.5451	0.9999	0.3896	0.3916	-0.0302	0.2577	-0.0772	0.6590
27	30.23	0.10	-1.4113	0.2999	-0.5510	0.9999	0.3899	0.3639	-0.0336	0.2492	-0.0925	0.6868
28	30.51	0.10	-1.4156	0.2999	-0.5522	0.9999	0.3902	0.3629	-0.0371	0.2519	-0.1021	0.6942
29	30.79	0.10	-1.4367	0.2999	-0.5595	0.9999	0.3905	0.4071	-0.0386	0.2705	-0.0952	0.6645
30	31.06	0.10	-1.4254	0.2999	-0.5571	0.9999	0.3908	0.4191	-0.0364	0.2744	-0.0867	0.6548
31	31.45	0.10	-1.4265	0.2999	-0.5574	0.9999	0.3907	0.4276	-0.0354	0.2777	-0.0850	0.6495
32	31.61	0.10	-1.4213	0.2999	-0.5561	0.9999	0.3898	0.3967	-0.0377	0.2652	-0.0949	0.6685
33	31.91	0.10	-1.4333	0.2999	-0.5600	0.9999	0.3905	0.4146	-0.0340	0.2728	-0.0821	0.6581
34	32.17	0.10	-1.4341	0.2999	-0.5620	0.9999	0.3905	0.4270	-0.0344	0.2793	-0.0516	0.6542
35	32.45	0.10	-1.4426	0.2999	-0.5593	0.9999	0.3904	0.4429	-0.0323	0.2842	-0.0730	0.6416
36	32.71	0.10	-1.4294	0.2999	-0.5565	0.9999	0.3904	0.4537	-0.0316	0.2905	-0.0698	0.6410
37	32.96	0.10	-1.4234	0.2999	-0.5553	0.9999	0.3900	0.4798	-0.0259	0.2984	-0.0615	0.6232
38	33.24	0.10	-1.4364	0.2999	-0.5605	0.9999	0.3907	0.4359	-0.0336	0.2862	-0.0767	0.6565
39	33.50	0.10	-1.4284	0.2999	-0.5570	0.9999	0.3906	0.5049	-0.0309	0.3111	-0.0613	0.6162
40	33.75	0.10	-1.4345	0.2999	-0.5606	0.9999	0.3913	0.5141	-0.0312	0.3175	-0.0602	0.6117
41	34.01	0.10	-1.4284	0.2999	-0.5583	0.9999	0.3910	0.4877	-0.0334	0.3060	-0.0706	0.6273
42	34.25	0.10	-1.4293	0.2999	-0.5605	0.9999	0.3921	0.4752	-0.0364	0.3031	-0.0765	0.6379
43	34.52	0.10	-1.4345	0.2999	-0.5615	0.9999	0.3917	0.4944	-0.0392	0.3023	-0.0843	0.6510
44	34.77	0.10	-1.4157	0.2999	-0.5564	0.9999	0.3919	0.4419	-0.0316	0.3141	-0.0662	0.6517
45	35.04	0.10	-1.4196	0.2999	-0.5584	0.9999	0.3929	0.4948	-0.0418	0.3212	-0.0849	0.6492
46	35.29	0.10	-1.4142	0.2999	-0.5563	0.9999	0.3919	0.4715	-0.0436	0.3152	-0.0928	0.6684

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH. VALUE PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 69 1.10 1.7 45.0 CONFIG 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	35.50	0.10	-1.4410	9.9999	-0.5313	9.9999	0.3922	0.4570	-0.0435	0.3125	-0.0951	0.6837
48	35.76	0.10	-1.4344	9.9999	-0.5263	9.9999	0.3920	0.4470	-0.0407	0.3276	-0.0818	0.6593
49	35.98	0.10	-1.4425	9.9999	-0.5566	9.9999	0.3927	0.4876	-0.0364	0.3250	-0.0787	0.6665
50	36.22	0.10	-1.4537	9.9999	-0.5701	9.9999	0.3922	0.4875	-0.0383	0.2965	-0.0939	0.7277
51	36.46	0.10	-1.4441	9.9999	-0.5666	9.9999	0.3926	0.4681	-0.0363	0.3079	-0.0824	0.6995
52	36.70	0.10	-1.4530	9.9999	-0.5717	9.9999	0.3928	0.4730	-0.0339	0.3230	-0.0718	0.6829
53	36.93	0.10	-1.4544	9.9999	-0.5722	9.9999	0.3923	0.4567	-0.0337	0.3179	-0.0736	0.6915
54	37.18	0.10	-1.4508	9.9999	-0.5727	9.9999	0.3926	0.4577	-0.0353	0.3040	-0.0824	0.7109
55	37.41	0.10	-1.4572	9.9999	-0.5763	9.9999	0.3928	0.4728	-0.0335	0.3145	-0.0710	0.6757
56	37.62	0.10	-1.4619	9.9999	-0.5747	9.9999	0.3931	0.4810	-0.0374	0.3062	-0.0867	0.7103
57	37.87	0.10	-1.4434	9.9999	-0.5674	9.9999	0.3932	0.4119	-0.0375	0.2939	-0.0810	0.7141
58	38.11	0.11	-1.4577	9.9999	-0.5735	9.9999	0.3935	0.4229	-0.0366	0.3018	-0.0912	0.7138
59	38.35	0.11	-1.4506	9.9999	-0.5701	9.9999	0.3931	0.4691	-0.0376	0.3142	-0.0832	0.6996
60	38.58	0.11	-1.4461	9.9999	-0.5687	9.9999	0.3933	0.4107	-0.0382	0.2974	-0.0929	0.7242
61	38.81	0.09	-1.4621	9.9999	-0.5858	9.9999	0.3921	0.4142	-0.0377	0.2988	-0.0909	0.7215
62	39.06	0.10	-1.4511	9.9999	-0.5699	9.9999	0.3928	0.4302	-0.0409	0.2963	-0.1021	0.7355
63	39.27	0.09	-1.4345	9.9999	-0.5547	9.9999	0.3926	0.3842	-0.0426	0.2853	-0.1056	0.7424
64	39.50	0.09	-1.4364	9.9999	-0.5641	9.9999	0.3927	0.4036	-0.0403	0.2939	-0.0998	0.7283
65	39.73	0.09	-1.4280	9.9999	-0.5600	9.9999	0.3926	0.3501	-0.0401	0.2668	-0.1144	0.7609
66	39.94	0.11	-1.4218	9.9999	-0.5564	9.9999	0.3928	0.4137	-0.0395	0.2974	-0.0954	0.7190
67	40.19	0.09	-1.4238	9.9999	-0.5616	9.9999	0.3928	0.3758	-0.0391	0.2776	-0.1039	0.7382
68	40.37	0.11	-1.4400	9.9999	-0.5694	9.9999	0.3929	0.4063	-0.0394	0.2914	-0.0969	0.7172
69	40.59	0.10	-1.4121	9.9999	-0.5529	9.9999	0.3915	0.4313	-0.0384	0.3038	-0.0889	0.7036
70	40.78	0.10	-1.4255	9.9999	-0.5617	9.9999	0.3940	0.4798	-0.0380	0.3306	-0.0791	0.6889
71	40.99	0.08	-1.4140	9.9999	-0.5539	9.9999	0.3926	0.4303	-0.0388	0.3036	-0.0901	0.7057
72	41.21	0.10	-1.4192	9.9999	-0.5556	9.9999	0.3937	0.4495	-0.0381	0.3154	-0.0847	0.7016
73	41.40	0.10	-1.4300	9.9999	-0.5625	9.9999	0.3931	0.4583	-0.0359	0.3175	-0.0782	0.6928
74	41.62	0.10	-1.4346	9.9999	-0.5644	9.9999	0.3934	0.4499	-0.0378	0.3155	-0.0839	0.7012
75	41.82	0.10	-1.4231	9.9999	-0.5596	9.9999	0.3932	0.4236	-0.0392	0.3030	-0.0926	0.7151
76	42.02	0.10	-1.4283	9.9999	-0.5606	9.9999	0.3930	0.4573	-0.0380	0.3191	-0.0830	0.6978
77	42.23	0.10	-1.4197	9.9999	-0.5584	9.9999	0.3933	0.4255	-0.0376	0.3044	-0.0876	0.7155
78	42.43	0.09	-1.4209	9.9999	-0.5595	9.9999	0.3938	0.4258	-0.0370	0.3051	-0.0869	0.7173
79	42.63	0.11	-1.4199	9.9999	-0.5592	9.9999	0.3936	0.4594	-0.0312	0.3153	-0.0840	0.6863
80	42.81	0.10	-1.4135	9.9999	-0.5540	9.9999	0.3948	0.4405	-0.0372	0.3042	-0.0732	0.7019
81	42.99	0.10	-1.4209	9.9999	-0.5595	9.9999	0.3941	0.4409	-0.0319	0.3102	-0.0725	0.7035
82	43.18	0.10	-1.3963	9.9999	-0.5507	9.9999	0.3944	0.4563	-0.0319	0.3174	-0.0703	0.6986
83	43.35	0.10	-1.4040	9.9999	-0.5567	9.9999	0.3952	0.4396	-0.0317	0.3049	-0.0722	0.7049
84	43.53	0.09	-1.3859	9.9999	-0.5454	9.9999	0.3933	0.3685	-0.0213	0.2576	-0.0579	0.6989
85	43.72	0.09	-1.3875	9.9999	-0.5503	9.9999	0.3951	0.4251	-0.0290	0.3020	-0.0677	0.7039
86	43.90	0.10	-1.3858	9.9999	-0.5470	9.9999	0.3949	0.4348	-0.0278	0.3044	-0.0640	0.7002
87	44.10	0.10	-1.3836	9.9999	-0.5480	9.9999	0.3951	0.4196	-0.0267	0.2937	-0.0647	0.7008
88	44.28	0.09	-1.3571	9.9999	-0.5374	9.9999	0.3963	0.4026	-0.0227	0.2781	-0.0565	0.6913
89	44.48	0.09	-1.3741	9.9999	-0.5431	9.9999	0.3953	0.4313	-0.0248	0.2964	-0.0576	0.6873
90	44.62	0.08	-1.3758	9.9999	-0.5444	9.9999	0.3957	0.3961	-0.0268	0.2802	-0.0678	0.7076
91	44.80	0.08	-1.3789	9.9999	-0.5480	9.9999	0.3963	0.3941	-0.0280	0.2810	-0.0712	0.7130
92	45.01	0.09	-1.3650	9.9999	-0.5329	9.9999	0.3962	0.3969	-0.0211	0.2491	-0.0592	0.6980

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REICHD PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 69 1.10 1.7 45.0 61-OF-13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CN3	CM3	XCPF3	YCPF3	CNF4	CN4	CM4	XCPF4	YCPF4
93	45.19	0.05	-1.3600	9.9999	-0.5287	9.9999	0.3966	0.3783	-0.0226	0.2653	-0.0598	0.7012
94	45.36	0.04	-1.3577	9.9999	-0.5302	9.9999	0.3964	0.3767	-0.0220	0.2733	-0.0555	0.6891
95	45.53	0.06	-1.2835	9.9999	-0.5072	9.9999	0.3951	0.2370	-0.0069	0.1681	-0.0376	0.7092
96	45.72	0.07	-1.3597	9.9999	-0.5405	9.9999	0.3975	0.3744	-0.0157	0.2573	-0.0420	0.6739
97	45.91	0.05	-1.3387	9.9999	-0.5319	9.9999	0.3970	0.3574	-0.0136	0.2432	-0.0443	0.6804
98	46.09	0.07	-1.3141	9.9999	-0.5196	9.9999	0.3964	0.3167	-0.0122	0.2150	-0.0386	0.6825
99	46.26	0.07	-1.3405	9.9999	-0.5303	9.9999	0.3966	0.2587	-0.0109	0.1837	-0.0422	0.7098
100	46.42	0.07	-1.3413	9.9999	-0.5326	9.9999	0.3971	0.3038	-0.0147	0.2153	-0.0485	0.7087
101	46.59	0.08	-1.3371	9.9999	-0.5307	9.9999	0.3969	0.2211	-0.0071	0.1660	-0.0322	0.7507
102	46.76	0.05	-1.3151	9.9999	-0.5217	9.9999	0.3958	0.2548	-0.0092	0.1797	-0.0362	0.7053
103	46.94	0.07	-1.3392	9.9999	-0.5314	9.9999	0.3968	0.2353	-0.0096	0.1736	-0.0383	0.7369
104	47.11	0.06	-1.3367	9.9999	-0.5284	9.9999	0.3971	0.2905	-0.0067	0.1931	-0.0231	0.6648
105	47.29	0.07	-1.3279	9.9999	-0.5297	9.9999	0.3967	0.2309	-0.0039	0.1644	-0.0169	0.7118
106	47.47	0.07	-1.3441	9.9999	-0.5334	9.9999	0.3968	0.2560	-0.0051	0.1729	-0.0199	0.6753
107	47.62	0.07	-1.3136	9.9999	-0.5221	9.9999	0.3966	0.2372	-0.0036	0.1633	-0.0152	0.6883
108	47.81	0.08	-1.3342	9.9999	-0.5279	9.9999	0.3956	0.2133	-0.0009	0.1537	-0.0042	0.7207
109	48.00	0.07	-1.3491	9.9999	-0.5356	9.9999	0.3970	0.1965	-0.0012	0.1488	-0.0061	0.7574
110	48.18	0.08	-1.3374	9.9999	-0.5307	9.9999	0.3968	0.2154	-0.0009	0.1525	-0.0042	0.7068
111	48.36	0.09	-1.3422	9.9999	-0.5266	9.9999	0.3974	0.2228	-0.0006	0.1501	-0.0018	0.6738
112	48.49	0.07	-1.3267	9.9999	-0.5271	9.9999	0.3973	0.1931	0.0002	0.1346	0.0010	0.6969
113	48.66	0.07	-1.3456	9.9999	-0.5346	9.9999	0.3972	0.1867	0.0003	0.1276	0.0016	0.6837
114	48.84	0.08	-1.3344	9.9999	-0.5328	9.9999	0.3978	0.1942	0.0	0.1294	0.0	0.6666
115	49.02	0.06	-1.3291	9.9999	-0.5250	9.9999	0.3965	0.1755	0.0008	0.1167	0.0046	0.6650
116	49.17	0.09	-1.3432	9.9999	-0.5334	9.9999	0.3975	0.1865	0.0	0.1228	0.0	0.6657
117	49.35	0.08	-1.3350	9.9999	-0.5315	9.9999	0.3972	0.1516	0.0027	0.1042	0.0178	0.7138
118	49.53	0.09	-1.3343	9.9999	-0.5314	9.9999	0.3992	0.1206	0.0034	0.0851	0.0282	0.7060
119	49.64	0.08	-1.3322	9.9999	-0.5298	9.9999	0.3977	0.1433	0.0022	0.0980	0.0154	0.6837
120	49.86	0.09	-1.3294	9.9999	-0.5265	9.9999	0.3972	0.1142	0.0005	0.0802	0.0395	0.7025
121	50.05	0.08	-1.3345	9.9999	-0.5352	9.9999	0.3980	0.1050	0.0025	0.0778	0.0267	0.7412
122	50.23	0.09	-1.3319	9.9999	-0.5292	9.9999	0.3973	0.1103	0.0051	0.0793	0.0463	0.7192
123	50.39	0.09	-1.3320	9.9999	-0.5283	9.9999	0.3980	0.0773	0.0070	0.0566	0.0907	0.7589
124	50.56	0.07	-1.4727	9.9999	-0.5255	9.9999	1.3974	0.0309	0.0051	0.0359	0.1651	1.1623
125	50.74	0.06	-1.3382	9.9999	-0.5327	9.9999	0.3982	0.0975	0.0060	0.0590	0.0016	0.7075
126	50.90	0.06	-1.3396	9.9999	-0.5327	9.9999	0.3976	0.0100	0.0016	0.0285	0.1601	2.8491
127	51.08	0.06	-1.3558	9.9999	-0.5404	9.9999	0.3986	-0.0155	0.0006	0.0188	-0.0516	-1.2103
128	51.23	0.06	-1.3409	9.9999	-0.5367	9.9999	0.3979	0.0005	0.0008	0.0237	1.6009	47.3510
129	51.41	0.06	-1.4016	9.9999	-0.5574	9.9999	0.3976	-0.0133	0.0017	0.0223	-0.1279	-1.6745
130	51.58	0.06	-1.4208	9.9999	-0.5655	9.9999	0.3980	-0.0033	0.0021	0.0321	-0.6367	-9.7280
131	51.75	0.05	-1.4346	9.9999	-0.5705	9.9999	0.3976	0.0023	0.0003	0.0362	0.1305	15.7459
132	51.91	0.05	-1.4214	9.9999	-0.5655	9.9999	0.3980	-0.0023	-0.0007	0.0311	0.3045	-13.5214
133	52.08	0.05	-1.4463	9.9999	-0.5735	9.9999	0.3977	-0.0037	-0.0002	0.0319	0.0541	-9.6221
134	52.24	0.05	-1.4265	9.9999	-0.5667	9.9999	0.3978	-0.0153	-0.0033	0.0214	0.2026	-1.3109
135	52.42	0.05	-1.4324	9.9999	-0.5694	9.9999	0.3974	-0.0155	-0.0026	0.0179	0.1678	-1.1521
136	52.58	0.05	-1.4082	9.9999	-0.5595	9.9999	0.3975	-0.0200	-0.0041	0.0099	0.2051	-0.4966
137	52.75	0.05	-1.4367	9.9999	-0.5684	9.9999	0.3973	-0.0208	-0.0053	0.0107	0.2549	-0.5161
138	52.93	0.04	-1.4136	9.9999	-0.5635	9.9999	0.3980	-0.0164	-0.0043	0.0086	0.2623	-0.5261

PAGE 1 OF 3
SHEET 2 OF 4

PARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REID-6	PHI	CONE	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	70	1.19	1.7	0.0	81.0713	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CY	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	35.27	[illegible]	9.4153	-9.2155	0.0455	0.2061	-0.0035	0.5708	0.4143	0.1565	-1.0109
48	35.53	0.01	9.1934	-9.2074	-0.0001	0.4531	-0.0600	0.5554	0.4143	0.1415	-1.0026
49	35.77	-0.00	9.2050	-9.2482	-0.0042	0.4652	0.0021	0.5735	0.4176	0.1560	-1.0023
50	36.00	0.01	9.4050	-9.2320	0.1109	0.2545	-0.0370	0.5561	0.4186	0.1375	-0.9920
51	36.25	0.01	9.4981	-9.2328	0.1603	0.0171	-0.0069	0.5560	0.4190	0.1390	-0.9728
52	36.49	0.02	9.4214	-9.2955	0.1259	0.0874	-0.0011	0.5478	0.4210	0.1268	-0.9552
53	36.71	0.00	9.5543	-9.1397	0.0911	0.0455	-0.0067	0.5396	0.4176	0.1220	-0.9570
54	36.95	0.02	9.4499	-9.2428	0.1502	0.0067	-0.0118	0.5523	0.4297	0.1226	-0.9570
55	37.19	0.01	9.4734	-9.2065	-0.0207	0.2872	-0.0296	0.5452	0.4296	0.1244	-0.9510
56	37.43	0.02	9.4721	-9.2702	0.1212	-0.0093	0.0004	0.5350	0.4273	0.1077	-0.9396
57	37.67	0.02	10.0271	-9.2829	0.1693	-0.2452	0.0188	0.5362	0.4302	0.1080	-0.9258
58	37.90	0.03	10.0141	-9.2295	0.3473	-0.4738	0.0249	0.5391	0.4277	0.1104	-0.9216
59	38.13	0.02	10.1142	-9.3054	0.3533	-0.5496	0.0308	0.5675	0.4369	0.1306	-0.9201
60	38.36	-0.01	10.1570	-9.2343	0.0320	-0.2379	0.0421	0.5578	0.4420	0.1158	-0.9095
61	38.61	-0.00	10.2572	-9.3024	0.0452	-0.0442	-0.0036	0.5415	0.4356	0.1062	-0.9118
62	38.83	0.0	10.2727	-9.4527	0.1117	-0.3227	0.0426	0.5412	0.4243	0.1169	-0.9184
63	39.09	-0.01	10.3223	-9.2969	0.0984	-0.0457	0.0258	0.5306	0.4239	0.1067	-0.8920
64	39.30	-0.00	10.5099	-9.4472	0.0330	-0.0578	-0.0025	0.5352	0.4258	0.1094	-0.8989
65	39.52	0.01	10.4761	-9.2747	0.1450	-0.1543	0.0377	0.5213	0.4210	0.0993	-0.8859
66	39.75	-0.00	10.6369	-9.3560	0.0791	-0.1029	-0.0148	0.5135	0.4194	0.0950	-0.8755
67	39.98	-0.02	10.7369	-9.3995	-0.0171	-0.0633	-0.0187	0.5178	0.4176	0.1002	-0.8695
68	40.17	0.00	10.7947	-9.3283	0.1054	-0.2447	-0.0066	0.5140	0.4166	0.0974	-0.8638
69	40.37	-0.01	10.7705	-9.4520	0.0840	-0.2647	-0.0183	0.5114	0.4113	0.1001	-0.8769
70	40.60	-0.02	10.9996	-9.4233	0.0300	-0.1425	0.0054	0.5229	0.4188	0.1041	-0.8569
71	40.78	0.01	10.8886	-9.4519	0.2642	-0.4596	0.0116	0.5138	0.4184	0.0953	-0.8316
72	41.00	-0.00	11.0401	-9.3397	0.1219	-0.1895	-0.0171	0.5099	0.4162	0.0936	-0.8460
73	41.23	0.00	11.2604	-9.3821	0.1756	-0.2813	-0.0369	0.5001	0.4217	0.0783	-0.8509
74	41.42	-0.02	11.2459	-9.4861	-0.0205	-0.1256	-0.0240	0.5117	0.4154	0.0963	-0.8432
75	41.63	-0.02	11.2206	-9.2524	0.1279	-0.2656	-0.0047	0.5019	0.4228	0.0790	-0.8256
76	41.85	-0.02	11.3603	-9.4456	0.0429	-0.0851	-0.0159	0.5130	0.4229	0.0900	-0.8310
77	42.08	-0.02	11.4624	-9.3563	0.0551	-0.2656	-0.0303	0.5213	0.4277	0.0935	-0.8207
78	42.23	-0.01	11.4622	-9.1815	0.0732	0.0141	-0.0270	0.5300	0.4376	0.0923	-0.8007
79	42.44	-0.01	11.6641	-9.3259	0.1404	-0.0636	-0.0265	0.5167	0.4321	0.0825	-0.8040
80	42.63	-0.00	11.5177	-9.2160	0.0949	-0.0415	-0.0494	0.5056	0.4265	0.0790	-0.8002
81	42.81	-0.01	11.6352	-9.2060	-0.0279	0.0463	-0.0263	0.5007	0.4321	0.0685	-0.7914
82	43.00	-0.02	11.7567	-9.1151	-0.1125	0.1440	-0.0488	0.5039	0.4376	0.0662	-0.7754
83	43.18	0.01	11.7513	-9.1550	0.1644	0.1596	-0.0379	0.5093	0.4365	0.0727	-0.7791
84	43.38	-0.00	11.8758	-9.1954	0.0091	0.1629	-0.0490	0.5124	0.4406	0.0717	-0.7789
85	43.54	-0.01	11.8821	-9.1032	-0.0571	0.4472	-0.0360	0.5186	0.4521	0.0664	-0.7648
86	43.73	-0.01	11.9681	-9.1529	-0.1151	0.5872	-0.0342	0.5126	0.4443	0.0682	-0.7635
87	43.92	-0.01	12.1502	-9.2344	-0.1102	0.4669	-0.0371	0.4981	0.4413	0.0567	-0.7598
88	44.10	-0.02	12.0750	-9.2450	-0.1693	0.5034	-0.0260	0.5009	0.4465	0.0543	-0.7656
89	44.29	-0.01	12.2882	-9.1637	-0.0715	0.2845	-0.0310	0.4939	0.4450	0.0488	-0.7597
90	44.45	-0.01	12.2442	-9.3505	-0.1068	0.5374	-0.0428	0.5096	0.4451	0.0644	-0.7634
91	44.65	-0.01	12.2674	-9.2783	-0.0656	0.3973	-0.0537	0.5048	0.4428	0.0619	-0.7575
92	44.81	-0.01	12.3673	-9.5043	-0.1532	0.3755	-0.0417	0.5072	0.4547	0.0524	-0.7688

PAGE 1 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RALNO PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 70 1.10 1.7 0.0 81=0613 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	XCP
93	45.02	-0.01	12.4813	-9.2929	-0.2593	1.1113	-0.0725	0.5021	0.4528	0.0492	-0.7445
94	45.19	-0.01	12.3489	-9.1461	-0.1998	0.8567	-0.0717	0.5035	0.4450	0.0584	-0.7384
95	45.30	-0.02	12.3543	-9.1282	-0.1542	0.8350	-0.0589	0.4884	0.4487	0.0396	-0.7277
96	45.50	-0.00	12.5472	-9.2365	-0.0150	0.1967	-0.0517	0.4958	0.4502	0.0455	-0.7332
97	45.73	-0.02	12.2137	-8.9420	-0.2533	0.9547	-0.1056	0.5040	0.4468	0.0577	-0.7040
98	45.93	-0.02	12.7365	-9.1578	-0.1637	0.6374	-0.0649	0.4902	0.4476	0.0425	-0.7192
99	46.10	-0.03	12.7162	-9.1311	-0.3775	1.1829	-0.1163	0.4851	0.4338	0.0512	-0.6907
100	46.25	-0.01	12.7 [illegible]	-8.9623	-0.1647	0.3417	-0.0743	0.4931	0.4346	0.0584	-0.7068
101	46.45	-0.01	12.5124	-8.8255	-0.1797	0.7925	-0.0978	0.4797	0.4305	0.0492	-0.6943
102	46.61	-0.01	12.4577	-8.8956	-0.0774	0.1416	-0.0552	0.4662	0.4246	0.0415	-0.7075
103	46.86	-0.03	12.4184	-8.7365	-0.4264	1.6714	-0.1030	0.4805	0.4170	0.0635	-0.6764
104	46.98	-0.02	12.4573	-8.8689	-0.2213	0.9151	-0.1316	0.4606	0.4097	0.0509	-0.6519
105	47.13	-0.02	12.2232	-8.6967	-0.1708	0.5555	-0.1017	0.4753	0.4162	0.0571	-0.6802
106	47.32	-0.02	13.0446	-8.7204	-0.1594	0.5054	-0.1013	0.4697	0.4130	0.0567	-0.6685
107	47.49	-0.01	13.1111	-8.8178	-0.1312	0.5220	-0.1126	0.4627	0.4141	0.0486	-0.6573
108	47.68	-0.02	13.2146	-8.8312	-0.2411	0.7487	-0.1243	0.4648	0.4111	0.0537	-0.6529
109	47.82	-0.02	13.2339	-8.8478	-0.2567	0.6809	-0.1125	0.4505	0.4159	0.0347	-0.6551
110	48.01	-0.02	13.4514	-8.8642	-0.2447	0.7005	-0.1066	0.4656	0.4204	0.0452	-0.6623
111	48.19	-0.01	13.4888	-8.8788	-0.1833	0.6342	-0.0869	0.4673	0.4241	0.0432	-0.6609
112	48.35	-0.01	13.5513	-8.8784	-0.1737	0.4874	-0.0538	0.4459	0.4267	0.0192	-0.6683
113	48.58	-0.01	13.6704	-8.9289	-0.0619	0.3162	-0.0478	0.4499	0.4278	0.0221	-0.6576
114	48.71	0.00	13.6674	-8.9613	0.0152	0.3220	-0.0531	0.4553	0.4253	0.0300	-0.6718
115	48.88	0.00	13.6554	-8.9508	0.0377	0.2765	0.0160	0.4074	0.4099	0.0025	-0.6258
116	49.05	0.00	13.6575	-8.9128	0.0414	0.1109	0.0055	0.4264	0.4096	0.0168	-0.6379
117	49.20	0.00	13.5428	-8.8297	0.0285	0.5354	0.0443	0.3824	0.3926	-0.0102	-0.5925
118	49.37	0.00	13.5249	-8.8004	0.0601	0.7199	0.0378	0.3634	0.3644	-0.0006	-0.5876
119	49.54	0.00	13.5785	-8.8383	0.1022	0.1154	0.0283	0.3989	0.3773	0.0216	-0.6101
120	49.72	0.02	13.5974	-8.8669	0.1512	0.3465	0.0454	0.3805	0.3896	-0.0091	-0.6106
121	49.89	0.01	13.6135	-8.8433	0.1558	0.2096	0.0232	0.3625	0.3810	0.0015	-0.6068
122	50.04	0.01	13.6383	-8.8609	0.0855	0.3148	0.0174	0.3471	0.3421	0.0050	-0.6171
123	50.20	0.01	13.6521	-8.8691	0.2176	0.2131	0.0174	0.3827	0.3900	-0.0073	-0.6196
124	50.40	0.01	13.7746	-7.9962	0.1918	0.6646	0.0269	0.3572	0.3799	-0.0227	-0.5796
125	50.57	0.01	13.8334	-8.8225	0.1902	0.4038	0.0139	0.3794	0.3780	0.0014	-0.6117
126	50.77	0.01	13.8232	-8.8452	0.1771	0.3512	0.0174	0.3774	0.3769	0.0005	-0.6015
127	50.96	0.03	13.8312	-8.8557	0.3299	0.2569	0.0117	0.3983	0.3868	-0.0165	-0.5932
128	51.11	0.02	13.8490	-8.8778	0.2305	0.3795	0.0057	0.3673	0.3879	-0.0206	-0.5896
129	51.27	0.02	13.9109	-8.9115	0.3404	0.2126	0.0119	0.3511	0.3649	-0.0136	-0.5789
130	51.42	0.02	13.8972	-8.8707	0.3154	0.2052	0.0062	0.3431	0.3641	-0.0210	-0.5706
131	51.54	0.02	13.8922	-8.8134	0.3414	0.2226	0.0063	0.3218	0.3570	-0.0352	-0.5757
132	51.77	0.01	14.1149	-8.9101	0.3053	0.2351	0.0007	0.3371	0.3518	-0.0147	-0.5798
133	51.93	0.02	14.0675	-7.8222	0.3212	0.2947	-0.0053	0.3062	0.3456	-0.0394	-0.5689
134	52.10	0.02	14.1218	-7.8201	0.4103	0.3459	-0.0056	0.3210	0.3366	-0.0156	-0.5538
135	52.26	0.02	14.1571	-7.8194	0.3295	0.3539	0.0060	0.2840	0.3294	-0.0453	-0.5414
136	52.46	0.02	14.2949	-7.9257	0.3317	0.2641	0.0075	0.2776	0.3342	-0.0565	-0.5437
137	52.62	0.02	14.3065	-8.1001	0.4177	0.2272	0.0075	0.2949	0.3412	-0.0463	-0.5584
138	52.79	0.02	14.5208	-8.0247	0.4007	0.1249	0.0139	0.2854	0.3356	-0.0501	-0.5526

PAGE 1 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH MACH-6 PHI CONE L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 70 1.19 1.7 0.0 0.0 13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.95	0.00	14.6516	-7.6504	0.4285	0.1864	0.0134	0.2906	0.3445	-0.0549	-0.5464
140	53.16	0.01	14.6732	-7.6714	0.2722	0.2604	0.0133	0.2737	0.3322	-0.0584	-0.5457
141	53.25	0.01	14.6832	-7.6814	0.1696	0.3276	0.0122	0.2641	0.3156	-0.0514	-0.5201
142	53.45	0.01	14.6820	-7.6796	0.3035	0.1382	0.0062	0.2738	0.3264	-0.0525	-0.5413
143	53.61	-0.00	14.6749	-7.6744	0.1581	0.1580	0.0199	0.2560	0.3302	-0.0741	-0.5405
144	53.77	-0.00	14.6669	-7.6769	0.2172	0.1247	0.0082	0.2610	0.3275	-0.0664	-0.5416
145	53.93	0.00	14.6788	-7.6710	0.2421	0.1669	0.0063	0.2575	0.3230	-0.0656	-0.5335
146	54.09	0.01	14.6616	-7.6832	0.2570	0.1926	0.0079	0.2518	0.3188	-0.0669	-0.5456
147	54.24	-0.00	14.6736	-7.6856	0.2453	-0.0562	-0.0027	0.2627	0.3162	-0.0736	-0.5428
148	54.40	-0.01	14.6806	-7.6877	0.1201	0.1549	0.0084	0.2228	0.3170	-0.0941	-0.5419
149	54.56	0.00	14.3192	-7.7188	0.1982	-0.0518	-0.0031	0.2398	0.3155	-0.0756	-0.5391
150	54.73	-0.01	14.6756	-7.6942	0.1147	0.0455	-0.0030	0.2226	0.3106	-0.0879	-0.5523
151	54.56	-0.01	14.6256	-7.6183	0.1737	-0.0200	-0.0023	0.2182	0.3132	-0.0949	-0.5414
152	54.64	0.01	14.5700	-7.6827	0.3223	-0.0732	-0.0046	0.2232	0.3135	-0.0902	-0.5455
153	55.15	-0.01	14.5656	-8.6771	0.2210	-0.0644	-0.0027	0.2256	0.3097	-0.0840	-0.5563
154	55.32	-0.02	14.3573	-7.6851	0.1712	0.0183	0.0083	0.2207	0.3056	-0.0848	-0.5562
155	55.49	-0.02	14.6636	-8.6516	0.0787	0.0556	-0.0026	0.2027	0.3078	-0.1051	-0.5625
156	55.66	-0.02	14.7476	-8.7414	0.1001	-0.0025	-0.0137	0.2140	0.3112	-0.0972	-0.5581
157	55.77	-0.02	14.6596	-8.6393	0.1376	-0.0327	-0.0066	0.2056	0.3062	-0.0947	-0.5748
158	55.95	-0.02	14.6194	-8.3735	0.0967	-0.0839	-0.0024	0.1979	0.3079	-0.1100	-0.5728
159	56.11	-0.01	14.6717	-8.3256	0.2423	-0.1573	-0.0140	0.1926	0.3073	-0.1147	-0.5674
160	56.23	-0.03	14.5615	-8.3004	0.0150	-0.1617	0.0086	0.2417	0.3103	-0.0685	-0.5768
161	56.43	-0.02	14.7413	-8.5691	0.1397	-0.1655	-0.0019	0.2156	0.3183	-0.1027	-0.5736
162	56.63	0.00	15.1363	-8.8103	0.3371	-0.0053	0.0102	0.2014	0.3453	-0.1439	-0.5689
163	56.80	-0.01	15.3153	-8.9702	0.2308	-0.1052	0.0105	0.2293	0.3268	-0.0956	-0.5796
164	55.05	-0.00	15.1521	-8.7933	-0.1235	-0.3597	0.0111	0.2361	0.3075	-0.0693	-0.5803
165	57.11	-0.01	15.2692	-8.9882	-0.6201	-0.3065	0.0226	0.1994	0.2994	-0.1000	-0.5886
166	57.28	-0.02	15.1741	-8.8394	0.2192	-0.1277	0.0079	0.1720	0.3188	-0.1468	-0.5818
167	57.42	-0.03	15.2913	-8.9849	-0.1033	0.1125	0.0277	0.1975	0.3046	-0.1069	-0.5994
168	57.55	-0.03	15.0411	-8.8822	0.0061	0.3351	0.0559	0.1643	0.2918	-0.1235	-0.5788
169	57.74	-0.02	15.2754	-8.9657	0.1304	0.4362	0.0612	0.1388	0.2785	-0.1398	-0.5875
170	57.94	-0.01	15.1445	-8.9203	-0.2765	-0.1134	0.0457	0.1712	0.2912	-0.1200	-0.5898
171	58.09	-0.03	15.1853	-8.9537	-0.0218	0.5012	0.0672	0.1473	0.2788	-0.1316	-0.5984
172	58.18	-0.00	15.3941	-9.1777	-0.0200	0.2548	0.0576	0.1680	0.2968	-0.0808	-0.5962
173	58.29	-0.00	15.2767	-9.0559	-0.0425	-0.2761	0.0484	0.1881	0.2432	-0.0551	-0.5826
174	58.44	-0.00	15.2744	-9.0632	-0.0484	-0.1257	0.0515	0.2002	0.2364	-0.0362	-0.5919
175	58.60	-0.01	15.4774	-9.2581	-0.1569	-0.2705	0.0292	0.1655	0.2510	-0.0655	-0.6118
176	58.80	-0.00	15.1826	-8.9297	-0.3759	0.3575	0.0451	0.1458	0.2160	-0.0702	-0.5889
177	58.96	-0.01	15.1711	-8.9314	-0.4155	0.0368	0.0331	0.1573	0.2510	-0.0937	-0.5966

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART REN MX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 70 1.16 1.7 0.0 CONFIG13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CD1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
1	-5.72	0.01	-0.0154	-0.0084	0.0341	0.0544	-0.5528	-0.3917	-0.0371	-0.2237	0.0996	0.5712
2	-5.73	0.01	-0.0[illegible]	-0.0020	0.0304	0.0511	-0.7423	-0.3444	-0.0369	-0.2196	0.0958	0.5708
3	-5.72	0.02	-0.0014	-0.0030	0.0337	0.0564	-0.5496	-0.3519	-0.0366	-0.2028	0.1039	0.5764
4	-4.02	0.02	-0.0[illegible]	-0.0036	0.0343	0.0595	-0.5505	-0.2330	-0.0290	-0.1442	0.1246	0.6274
5	-2.08	0.01	-0.0[illegible]	-0.0027	0.0416	0.0637	-0.9795	-0.0687	-0.0126	-0.0780	0.1838	1.1363
6	-0.02	0.02	-0.0[illegible]	-0.0065	0.0317	0.0760	-0.5288	0.0653	0.0044	-0.0125	0.0636	-0.1798
7	1.93	0.01	-0.0[illegible]	-0.0127	0.0347	0.0843	-0.4435	0.2159	0.0203	0.0503	0.0942	0.2330
8	3.93	0.02	-0.0[illegible]	-0.0107	0.0451	0.0644	-0.6108	0.3719	0.0334	0.1218	0.0913	0.3275
9	5.99	0.01	-0.0[illegible]	-0.0044	0.0442	0.0756	-0.7696	0.5436	0.0427	0.2020	0.0785	0.3717
10	6.07	0.01	-0.0[illegible]	-0.0037	0.0442	0.0891	-1.0078	0.6932	0.0455	0.2769	0.0656	0.3995
11	10.07	0.02	-0.0[illegible]	-0.0061	0.0497	0.1341	-1.0589	0.8543	0.0491	0.3521	0.0516	0.4122
12	12.15	0.02	-0.0538	-0.0081	0.0569	0.1512	-0.9489	0.9672	0.0416	0.4053	0.0430	0.4190
13	14.17	0.01	-0.0[illegible]	-0.0094	0.0565	0.2388	-1.1791	1.1013	0.0366	0.4618	0.0432	0.4191
14	16.27	0.00	-0.0[illegible]	-0.0113	0.0535	0.1409	-0.6555	1.2015	0.0304	0.5021	0.0253	0.4179
15	18.39	0.01	-0.0[illegible]	-0.0112	0.0567	0.1737	-0.8168	1.2905	0.0236	0.5463	0.0183	0.4187
16	20.38	0.01	-0.1173	-0.0179	0.0259	0.1405	-0.2208	1.3075	0.0219	0.5228	0.0168	0.3999
17	22.41	0.01	-0.1[illegible]	-0.0123	0.0196	0.1156	-0.1637	1.3614	0.0133	0.5430	0.0098	0.3989
18	24.50	0.01	-0.1[illegible]	-0.0104	0.0005	0.0777	-0.0036	1.4127	0.0081	0.5638	0.0057	0.3991
19	26.56	0.02	-0.[illegible]	-0.0126	0.0113	0.1501	1.0091	1.4513	0.0048	0.5820	0.0033	0.3983
20	28.43	0.01	-0.1[illegible]	-0.0029	-0.0495	0.0147	0.2522	1.4984	0.0044	0.5982	0.0029	0.3997
21	28.48	0.01	-0.2[illegible]	-0.0501	-0.0250	0.0359	1.4965	0.0053	0.5977	0.0035	0.3994	
22	28.48	0.02	-0.1[illegible]	-0.0034	-0.0425	0.0134	0.2290	1.5096	0.0045	0.6016	0.0030	0.3985
23	24.17	0.01	-0.1[illegible]	-0.0026	-0.0484	0.0144	0.2480	1.5157	0.0020	0.6027	0.0013	0.3976
24	24.05	0.01	-0.2[illegible]	-0.0022	-0.0701	0.0145	0.3014	1.5227	0.0007	0.6061	0.0005	0.3980
25	29.69	0.02	-0.2[illegible]	-0.0[illegible]	-0.0987	0.0267	0.3273	1.5287	0.0002	0.6060	0.0001	0.3964
26	29.70	-0.02	-0.2[illegible]	-0.0[illegible]	-0.0984	0.0248	0.3226	1.5357	-0.0004	0.6085	-0.0003	0.3962
27	29.69	-0.01	-0.3[illegible]	-0.0[illegible]	-0.0999	0.0328	0.3265	1.5391	0.0001	0.6102	0.0001	0.3965
28	30.28	-0.01	-0.2[illegible]	-0.0[illegible]	-0.0860	0.0302	0.2688	1.5534	-0.0015	0.6134	-0.0010	0.3949
29	30.57	-0.01	-0.1[illegible]	-0.0[illegible]	-0.0840	0.0423	0.1752	1.5538	-0.0015	0.6134	-0.0010	0.3948
30	30.43	0.01	-0.0[illegible]	-0.0131	0.0471	0.1630	-0.5852	1.5675	0.0006	0.6208	0.0004	0.3961
31	31.11	0.01	-0.1[illegible]	-0.0145	0.0137	0.1025	-0.2964	1.5700	-0.0003	0.6203	-0.0002	0.3951
32	31.36	0.01	-0.1[illegible]	-0.0149	0.0[illegible]	0.1800	-0.5900	1.5748	-0.0001	0.6202	-0.0001	0.3938
33	31.37	0.01	-0.1[illegible]	-0.0131	0.1427	-0.1892	2.0249	1.5851	0.0	0.6204	0.0	0.3951
34	31.96	0.02	-0.0[illegible]	-0.0134	0.1279	-0.2946	2.6465	1.5851	0.0	0.6251	0.0	0.3943
35	32.22	0.02	-0.0[illegible]	-0.0138	0.0536	0.3678	-2.2423	1.6038	-0.0006	0.6359	-0.0004	0.3965
36	32.46	0.02	-0.1[illegible]	-0.0167	0.0769	0.3570	-1.6649	1.5988	-0.0006	0.6321	-0.0005	0.3955
37	32.76	0.02	-0.1[illegible]	-0.0191	0.0842	0.2356	-0.7919	1.5981	-0.0015	0.6353	-0.0009	0.3975
38	33.01	0.02	-0.0[illegible]	-0.0144	0.1167	-0.8479	7.0224	1.6075	-0.0014	0.6341	-0.0009	0.3970
39	33.26	0.01	-0.0[illegible]	-0.0171	0.1117	-57.0304	371.8525	1.6041	-0.0023	0.6366	-0.0014	0.3969
40	33.54	0.01	-0.0[illegible]	-0.0210	0.0671	0.2502	-0.7300	1.6086	-0.0021	0.6349	-0.0013	0.3972
41	33.78	0.01	-0.0[illegible]	-0.0182	0.1074	1.0968	-11.1815	1.6054	-0.0027	0.6331	-0.0017	0.3964
42	34.05	0.01	-0.0[illegible]	-0.0142	0.1001	0.8549	-4.6357	1.6275	-0.0032	0.6440	-0.0020	0.3957
43	34.34	0.01	-0.1[illegible]	-0.0244	0.0443	0.1452	-0.3547	1.6287	-0.0032	0.6444	-0.0020	0.3957
44	34.62	0.00	-0.0[illegible]	-0.0195	0.0481	0.4927	-2.2217	1.6289	-0.0045	0.6475	-0.0028	0.3965
45	34.80	0.02	-0.0[illegible]	-0.0[illegible]	0.0[illegible]	0.2546	-0.8743	1.6301	-0.0048	0.6435	-0.0029	0.3948
46	35.05	0.01	-0.0[illegible]	-0.0193	0.0056	0.2545	-0.8805	1.6372	-0.0062	0.6470	-0.0038	0.3952

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	SCLN	MX10=6	PSI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	70	1.10	1.7	0.0	BLAFFIS	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	35.27	0.02	0.1335	-0.0134	0.1273	-0.0104	3.8547	1.6279	-0.0075	0.6407	-0.0046	0.3938
48	35.53	0.01	-0.0157	-0.0744	0.0919	0.9446	-5.8467	1.6344	-0.0066	0.6452	-0.0051	0.3935
49	35.77	-1.00	0.0287	-0.0126	0.1206	0.0183	4.1911	1.6377	-0.0083	0.6461	-0.0055	0.3933
50	34.90	0.01	0.0469	-0.0177	0.1274	-0.2603	2.7251	1.6403	-0.0086	0.6459	-0.0051	0.3939
51	36.25	0.01	0.0495	-0.0107	0.1182	-0.2307	2.5498	1.6454	-0.0103	0.6462	-0.0063	0.3929
52	34.49	0.02	0.0637	-0.0105	0.1202	-0.2541	2.9504	1.6473	-0.0102	0.6462	-0.0062	0.3923
53	36.71	0.00	0.0406	-0.0083	0.1181	-0.1103	2.4780	1.6380	-0.0101	0.6443	-0.0062	0.3909
54	35.45	0.02	0.0369	-0.0094	0.1121	-0.2462	3.2451	1.6359	-0.0113	0.6343	-0.0069	0.3902
55	37.19	0.01	0.0132	-0.0111	0.1035	-0.7119	6.6301	1.6452	-0.0115	0.6432	-0.0070	0.3910
56	37.43	0.02	0.0025	-0.0067	0.1334	-0.1051	1.6126	1.6383	-0.0122	0.6377	-0.0075	0.3893
57	37.67	0.02	0.0035	-0.0065	0.1329	-0.0727	1.4801	1.6349	-0.0133	0.6356	-0.0081	0.3888
58	37.90	0.03	0.1434	-0.0056	0.1650	-0.0445	1.1527	1.6365	-0.0136	0.6376	-0.0084	0.3891
59	34.13	0.02	0.1101	-0.0076	0.1511	-0.0273	1.3726	1.6491	-0.0144	0.6416	-0.0090	0.3891
60	38.36	-0.01	0.1375	-0.0056	0.1525	-0.0446	1.1704	1.6386	-0.0159	0.6353	-0.0097	0.3877
61	38.81	-0.00	0.0116	-0.0055	0.0779	-0.5003	6.9418	1.6098	-0.0169	0.6185	-0.0105	0.3862
62	36.43	0.00	0.1497	-0.0063	0.1576	-0.0258	1.0528	1.6050	-0.0168	0.6171	-0.0105	0.3845
63	39.09	-0.01	0.0043	-0.0082	0.0745	-1.4426	17.3110	1.6366	-0.0179	0.6151	-0.0112	0.3829
64	39.36	-0.00	0.0287	-0.0071	0.0731	-1.0403	10.9004	1.5996	-0.0179	0.6114	-0.0112	0.3824
65	39.52	0.01	0.0724	-0.0073	0.1196	-0.1012	1.6576	1.5763	-0.0177	0.6010	-0.0112	0.3812
66	39.75	-0.00	-0.0042	-0.0094	0.0417	0.1951	-0.8638	1.5846	-0.0187	0.6037	-0.0118	0.3810
67	39.98	0.00	0.0117	-0.0092	0.0765	-0.7887	8.5337	1.5671	-0.0188	0.5974	-0.0120	0.3812
68	40.17	0.00	-0.0010	-0.0092	0.0685	0.2049	-66.4182	1.5789	-0.0196	0.6022	-0.0124	0.3814
69	40.37	-0.01	0.0234	-0.0097	0.0817	-0.3642	3.2664	1.5591	-0.0199	0.5926	-0.0126	0.3802
70	40.60	-0.02	-0.0135	-0.0109	0.0663	0.8078	-4.9045	1.5767	-0.0201	0.6011	-0.0128	0.3812
71	40.78	0.01	0.0434	-0.0088	0.1277	-0.1043	1.3664	1.5462	-0.0192	0.5877	-0.0124	0.3801
72	41.00	-0.00	-0.0337	-0.0087	0.0384	0.2583	-1.1491	1.5510	-0.0204	0.5895	-0.0132	0.3801
73	41.23	0.01	-0.0104	-0.0104	0.0541	1.0866	-5.9088	1.5662	-0.0216	0.5972	-0.0138	0.3813
74	41.46	-0.00	-0.0171	-0.0114	0.0505	0.6870	-2.9569	1.5441	-0.0214	0.5866	-0.0139	0.3799
75	41.63	-0.02	-0.0284	-0.0115	0.0643	-0.3961	2.9154	1.5450	-0.0209	0.5881	-0.0135	0.3807
76	41.85	-0.00	-0.0054	-0.0151	0.0858	2.2491	-9.9560	1.5405	-0.0214	0.5841	-0.0139	0.3792
77	42.09	-0.02	-0.0047	-0.0147	0.0102	0.2154	-0.2647	1.5040	-0.0206	0.5634	-0.0136	0.3774
78	42.23	-0.01	-0.0217	-0.0205	0.0309	0.9452	-2.8062	1.5171	-0.0213	0.5740	-0.0141	0.3783
79	42.44	-0.01	-0.0241	-0.0224	0.0457	0.4576	-0.9496	1.5126	-0.0214	0.5726	-0.0142	0.3785
80	42.63	-0.00	-0.0561	-0.0242	0.0451	0.4833	-0.8991	1.5231	-0.0217	0.5753	-0.0143	0.3777
81	42.81	-0.01	-0.0643	-0.0225	0.0325	0.3569	-0.5063	1.5196	-0.0214	0.5749	-0.0141	0.3783
82	43.00	-0.02	-0.0748	-0.0248	0.0319	0.4032	-0.4282	1.4832	-0.0208	0.5643	-0.0140	0.3764
83	43.18	0.01	-0.0884	-0.0273	0.0233	0.3109	-0.2700	1.5045	-0.0214	0.5674	-0.0142	0.3772
84	43.36	-0.00	-0.0743	-0.0299	0.0301	0.4032	-0.4056	1.4940	-0.0210	0.5621	-0.0141	0.3763
85	43.54	-0.01	-0.1113	-0.0311	0.0116	0.2798	-0.1674	1.4660	-0.0245	0.5529	-0.0140	0.3766
86	43.73	-0.01	-0.1017	-0.0294	0.0131	0.2944	-0.1284	1.4894	-0.0215	0.5600	-0.0145	0.3760
87	43.92	-0.01	-0.0926	-0.0223	0.0153	0.2724	-0.1662	1.4871	-0.0210	0.5574	-0.0141	0.3748
88	44.10	-0.02	-0.1045	-0.0248	0.0105	0.2747	-0.1019	1.4797	-0.0211	0.5582	-0.0143	0.3772
89	44.25	-0.01	-0.0985	-0.0174	0.0198	0.2610	-0.2463	1.4623	-0.0208	0.5460	-0.0142	0.3768
90	44.45	-0.01	-0.0832	-0.0225	0.0116	0.2810	-0.1453	1.4999	-0.0219	0.5659	-0.0146	0.3773
91	44.65	-0.01	-0.1011	-0.0180	-0.0235	0.2268	0.1450	1.4448	-0.0238	0.5398	-0.0144	0.3736
92	44.81	-0.01	-0.1290	-0.0329	-0.0045	0.2484	0.0350	1.4859	-0.0220	0.5602	-0.0148	0.3770

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART VALID DATA PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 10 VALID 0.0 MACH 3 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	ALPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	45.02	-0.01	-0.1923	-0.0374	-0.0177	0.2452	0.1159	1.4588	-0.0211	0.5472	-0.0145	0.3751
94	45.19	-0.01	-0.1703	-0.0334	-0.0254	0.2341	0.1522	1.4423	-0.0207	0.5403	-0.0144	0.3746
95	45.36	-0.02	-0.1769	-0.0342	-0.0272	0.2272	0.1575	1.4435	-0.0212	0.5414	-0.0147	0.3751
96	45.56	-0.02	-0.1918	-0.0385	-0.0317	0.2118	0.1720	1.4319	-0.0218	0.5357	-0.0152	0.3741
97	45.73	-0.02	-0.2062	-0.0421	-0.0367	0.2011	0.2701	1.4296	-0.0216	0.5349	-0.0151	0.3742
98	45.93	-0.02	-0.1877	-0.0333	-0.0312	0.2025	0.1853	1.4472	-0.0230	0.5431	-0.0159	0.3753
99	46.10	-0.03	-0.2349	-0.0461	-0.0564	0.2029	0.2847	1.4024	-0.0203	0.5260	-0.0145	0.3737
100	46.25	-0.01	-0.1929	-0.0416	-0.0422	0.2156	0.2144	1.4434	-0.0231	0.5417	-0.0160	0.3749
101	46.44	-0.01	-0.2251	-0.0483	-0.0501	0.2079	0.2696	1.4213	-0.0219	0.5263	-0.0150	0.3742
102	46.61	-0.01	-0.1708	-0.0271	-0.0119	0.2250	0.0941	1.4569	-0.0238	0.5453	-0.0164	0.3759
103	46.80	-0.03	-0.1902	-0.0342	-0.0525	0.1993	0.2673	1.4154	-0.0215	0.5305	-0.0152	0.3748
104	46.98	-0.02	-0.1998	-0.0436	-0.0630	0.2181	0.3151	1.3847	-0.0205	0.5190	-0.0148	0.3748
105	47.13	-0.02	-0.1929	-0.0474	-0.0539	0.1961	0.2509	1.4037	-0.0221	0.5267	-0.0156	0.3752
106	47.32	-0.02	-0.1998	-0.0379	-0.0495	0.2094	0.2739	1.4035	-0.0215	0.5260	-0.0153	0.3767
107	47.49	-0.01	-0.1924	-0.0402	-0.0595	0.2116	0.3103	1.3800	-0.0209	0.5171	-0.0152	0.3747
108	47.68	-0.02	-0.1982	-0.0473	-0.0673	0.2026	0.3395	1.3784	-0.0205	0.5164	-0.0149	0.3756
109	47.82	-0.02	-0.1952	-0.0378	-0.0529	0.2221	0.3147	1.3882	-0.0217	0.5223	-0.0157	0.3763
110	48.01	-0.02	-0.1963	-0.0373	-0.0593	0.2067	0.3292	1.3834	-0.0210	0.5208	-0.0152	0.3765
111	48.19	-0.01	-0.1951	-0.0321	-0.0506	0.2033	0.3294	1.3784	-0.0205	0.5173	-0.0149	0.3759
112	48.35	-0.01	-0.1923	-0.0253	-0.0327	0.2068	0.2572	1.3881	-0.0205	0.5224	-0.0148	0.3764
113	48.54	-0.01	-0.1962	-0.0261	-0.0175	0.2067	0.1887	1.3967	-0.0218	0.5284	-0.0156	0.3778
114	48.71	0.00	-0.1998	-0.0198	-0.0133	0.2436	0.1649	1.3917	-0.0212	0.5236	-0.0153	0.3763
115	48.88	0.00	-0.1961	-0.0112	0.0015	0.1751	-0.0235	1.3849	-0.0191	0.5032	-0.0142	0.3733
116	49.05	0.00	-0.0518	-0.0072	0.0167	0.1391	-0.3215	1.2973	-0.0171	0.4811	-0.0132	0.3708
117	49.20	0.00	-0.0838	-0.0086	0.0118	0.0878	-0.1726	1.2506	-0.0169	0.4624	-0.0119	0.3696
118	49.37	0.00	-0.0885	-0.0094	0.0195	0.0756	-0.3070	1.2625	-0.0169	0.4700	-0.0118	0.3723
119	49.54	0.00	-0.0886	-0.0096	0.0361	0.3440	-0.1994	1.3171	-0.0172	0.4916	-0.0131	0.3731
120	49.72	0.00	-0.0968	-0.0053	0.0204	0.0969	-0.3716	1.2686	-0.0146	0.4694	-0.0117	0.3700
121	49.90	0.01	0.0239	-0.0239	-0.0336	-0.1051	2.2894	1.3537	-0.0196	0.5096	-0.0145	0.3764
122	50.09	0.01	-0.0144	-0.0096	0.0495	-0.3841	3.4346	1.3536	-0.0191	0.5096	-0.0141	0.3765
123	50.26	0.01	0.0125	-0.0267	0.0469	-0.3732	3.7142	1.3512	-0.0192	0.5101	-0.0142	0.3775
124	50.40	0.01	-0.0582	-0.0001	0.0155	0.1066	-0.2772	1.2637	-0.0150	0.4694	-0.0119	0.3715
125	50.57	0.00	0.0223	-0.0072	0.0042	-0.3230	2.1818	1.3594	-0.0204	0.5130	-0.0150	0.3776
126	50.77	0.01	0.0152	-0.0162	0.0452	-0.2181	2.9750	1.3560	-0.0198	0.5117	-0.0146	0.3773
127	50.94	0.03	0.0249	-0.0255	0.0987	-0.2255	1.9941	1.3477	-0.0198	0.5090	-0.0147	0.3777
128	51.11	0.02	0.0185	-0.0265	0.0491	-0.3496	2.4217	1.3382	-0.0186	0.5047	-0.0141	0.3771
129	51.27	0.02	0.0185	-0.0263	0.0457	-0.3515	2.4673	1.3403	-0.0187	0.5059	-0.0140	0.3774
130	51.42	0.02	0.0177	-0.0274	0.0454	-0.3981	2.4374	1.3369	-0.0186	0.5044	-0.0139	0.3773
131	51.60	0.02	0.0138	-0.0282	0.0445	-0.4384	2.3639	1.3417	-0.0190	0.5066	-0.0142	0.3776
132	51.77	0.01	0.0132	-0.0274	0.0445	-0.3607	1.9156	1.3445	-0.0194	0.5092	-0.0144	0.3775
133	51.92	0.02	0.0233	-0.0258	0.0445	-0.3593	1.9077	1.3316	-0.0185	0.5015	-0.0139	0.3766
134	52.10	0.02	0.0150	-0.0265	0.0424	-0.5941	2.6456	1.3397	-0.0190	0.5077	-0.0142	0.3769
135	52.26	0.02	0.0221	-0.0249	0.0459	-0.4486	2.1641	1.3351	-0.0189	0.5037	-0.0142	0.3772
136	52.44	0.02	0.0212	-0.0273	0.0492	-0.2405	1.5755	1.3233	-0.0187	0.4979	-0.0142	0.3763
137	52.62	0.02	0.0216	-0.0288	1.0478	-0.3350	1.7556	1.3536	-0.0201	0.5109	-0.0149	0.3774
138	52.79	0.02	0.0215	-0.0273	0.0502	-0.1760	1.3054	1.3634	-0.0209	0.5120	-0.0154	0.3755

PARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	PALO-6	ZPI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	70	1.10	1.7	0.0	01=0F13	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	C62	XCPF2	YCPF2
139	52.65	0.03	0.0353	-0.1365	0.0522	-1.2436	1.4776	1.3659	-0.0211	0.5125	-0.0155	0.3752
140	53.12	0.01	0.0343	-0.1365	0.0546	-1.2149	1.3887	1.3547	-0.0215	0.5102	-0.0158	0.3755
141	53.25	0.01	0.0223	-0.0941	0.0484	-0.4159	2.1250	1.3300	-0.0186	0.4968	-0.0140	0.3736
142	53.45	0.01	0.0240	-0.0947	0.0504	-0.3668	1.7948	1.3695	-0.0212	0.5128	-0.0156	0.3761
143	53.91	-0.06	0.0267	-0.0947	0.0509	-0.3929	2.0592	1.3570	-0.0205	0.5089	-0.0154	0.3758
144	53.77	-0.06	0.0195	-0.0799	0.0495	-0.5543	2.5343	1.3656	-0.0210	0.5145	-0.0161	0.3761
145	53.93	0.00	0.0192	-0.0814	0.0487	-0.6178	3.3036	1.3569	-0.0214	0.5105	-0.0156	0.3762
146	54.09	0.00	0.0164	-0.0812	0.0496	-0.6054	3.5255	1.3737	-0.0229	0.5194	-0.0167	0.3781
147	54.26	-0.00	0.0169	-0.0809	0.0498	-0.6988	3.3355	1.3630	-0.0226	0.5128	-0.0166	0.3762
148	54.66	-0.01	0.0133	-0.0809	0.0513	-1.0598	4.9770	1.3499	-0.0219	0.5072	-0.0162	0.3757
149	54.54	0.00	0.0169	-0.0810	0.0515	-0.8716	4.1503	1.3595	-0.0229	0.5119	-0.0169	0.3765
150	54.73	-0.01	0.0029	-0.0811	0.0542	-3.7951	16.9936	1.3750	-0.0240	0.5204	-0.0181	0.3785
151	54.90	-0.01	-0.0006	-0.0818	0.0574	-5.5235	-5.3808	1.3698	-0.0241	0.5166	-0.0176	0.3771
152	55.04	0.00	-0.0071	-0.0825	0.0645	1.7756	-7.0043	1.3748	-0.0252	0.5192	-0.0184	0.3777
153	55.19	-0.01	0.0016	-0.0818	0.0556	-6.3367	30.5782	1.3663	-0.0241	0.5169	-0.0177	0.3769
154	55.36	-0.02	-0.0057	-0.0821	0.0515	1.2451	-5.3159	1.3543	-0.0236	0.5041	-0.0175	0.3759
155	55.49	-0.02	-0.0136	-0.0822	0.0525	0.9267	-3.9826	1.3442	-0.0266	0.5269	-0.0190	0.3779
156	55.56	-0.02	-0.0169	-0.0829	0.0533	0.7594	-3.2090	1.4003	-0.0271	0.5294	-0.0194	0.3780
157	55.71	-0.02	-0.0273	-0.0815	0.0545	0.4215	-1.8447	1.3604	-0.0249	0.5121	-0.0183	0.3764
158	55.85	-0.02	-0.0295	-0.0819	0.0526	0.4240	-2.0534	1.3719	-0.0252	0.5165	-0.0184	0.3765
159	56.11	-0.01	-0.0345	-0.0823	0.0528	0.3567	-1.5295	1.3793	-0.0260	0.5202	-0.0189	0.3772
160	56.23	-0.03	-0.0306	-0.0812	0.0544	0.3868	-1.8018	1.3793	-0.0254	0.5203	-0.0184	0.3773
161	56.43	-0.02	-0.0321	-0.0812	0.0552	0.3969	-1.9864	1.3976	-0.0274	0.5282	-0.0196	0.3779
162	56.53	0.00	-0.0331	-0.0810	0.0530	0.2980	-1.1012	1.3977	-0.0279	0.5272	-0.0200	0.3772
163	56.36	-0.01	-0.0623	-0.0810	0.0503	0.1013	-0.8191	1.4205	-0.0284	0.5368	-0.0204	0.3779
164	56.69	-0.00	-0.0695	-0.0791	0.0534	0.1341	-0.7690	1.4084	-0.0292	0.5331	-0.0208	0.3785
165	57.11	-0.11	-0.0991	-0.0809	0.0854	0.0980	-0.4627	1.3879	-0.0273	0.5229	-0.0197	0.3768
166	57.26	-0.02	-0.1150	-0.0877	0.0432	0.0953	-0.3659	1.3469	-0.0250	0.5033	-0.0186	0.3736
167	57.42	-0.03	-0.1416	-0.0867	0.0376	0.0615	-0.2637	1.3607	-0.0249	0.5095	-0.0183	0.3744
168	57.58	-0.03	-0.1774	-0.0974	0.0244	0.0446	-0.1376	1.3100	-0.0220	0.4866	-0.0168	0.3714
169	57.74	-0.02	-0.1781	-0.0970	0.0271	0.0427	-0.1635	1.3196	-0.0226	0.4916	-0.0173	0.3725
170	57.88	-0.01	-0.1782	-0.0971	0.0304	0.0434	-0.1750	1.3137	-0.0228	0.4867	-0.0174	0.3705
171	57.99	-0.03	-0.1844	-0.0859	0.0306	0.0321	-0.1694	1.3233	-0.0236	0.4924	-0.0179	0.3721
172	58.18	-0.02	-0.1931	-0.0866	0.0310	0.0314	-0.2027	1.3281	-0.0246	0.4980	-0.0185	0.3750
173	58.29	-0.04	-0.1113	-0.0993	0.0429	0.0476	-0.3764	1.3474	-0.0260	0.5081	-0.0193	0.3771
174	58.44	-0.10	-0.1124	-0.0987	0.0383	0.0594	-0.3348	1.3425	-0.0256	0.5069	-0.0191	0.3776
175	58.60	-0.07	-0.0966	-0.0861	0.0421	0.0593	-0.4058	1.3679	-0.0276	0.5172	-0.0202	0.3781
176	58.80	-0.09	-0.1051	-0.0983	0.0314	0.0791	-0.3329	1.3786	-0.0252	0.5002	-0.0190	0.3765
177	58.60	-0.04	-0.1185	-0.0984	0.0398	0.1146	-0.5867	1.3639	-0.0268	0.5129	-0.0197	0.3760

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	MACH	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CN4	XCPF4	YCPF4
7	7C	1.16	1.7	0.0	0.0	0.0	0	0	0	0	UNKNOWN		
POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CN4	XCPF4	YCPF4	
1	-2.17	0.01	0.0438	0.0000	0.0265	0.0000	0.6074	-0.4535	-0.0621	-0.2215	0.0927	0.4884	
2	-1.73	0.01	0.0501	0.0000	0.0263	0.0000	0.5647	-0.4510	-0.0621	-0.2202	0.0933	0.4882	
3	-1.28	0.02	0.0493	0.0000	0.0261	0.0000	0.6002	-0.4092	-0.0608	-0.1985	0.0998	0.4852	
4	-0.82	0.02	0.0543	0.0000	0.0305	0.0000	0.7043	-0.2822	-0.0341	-0.1340	0.1210	0.4890	
5	-2.26	0.01	0.0450	0.0000	0.0315	0.0000	0.6760	-0.1346	-0.0166	-0.0733	0.1250	0.5445	
6	-0.82	0.02	0.0534	0.0000	0.0265	0.0000	0.7046	0.0145	0.0001	-0.0051	0.0069	-0.3528	
7	1.63	0.03	0.0407	0.0000	0.0293	0.0000	0.5930	0.1466	0.0158	0.0556	0.1079	0.3780	
8	3.05	0.02	0.0425	0.0000	0.0254	0.0000	0.5019	0.3095	0.0285	0.1227	0.0922	0.3965	
9	5.39	0.01	0.0355	0.0000	0.0208	0.0000	0.5283	0.6883	0.0360	0.2078	0.0736	0.4254	
10	8.07	0.01	0.0424	0.0000	0.0207	0.0000	0.4817	0.6449	0.0371	0.2848	0.0575	0.4415	
11	10.07	0.02	0.0538	0.0000	0.0227	0.0000	0.4214	0.9120	0.0373	0.3557	0.0458	0.4414	
12	12.15	0.02	0.0583	0.0000	0.0232	0.0000	0.3962	0.9490	0.0342	0.4130	0.0361	0.4352	
13	14.17	0.01	0.0572	0.0000	0.0237	0.0000	0.4145	1.0823	0.0297	0.4552	0.0275	0.4308	
14	16.27	0.00	0.0551	0.0000	0.0214	0.0000	0.3922	1.2034	0.0211	0.5117	0.0176	0.4252	
15	18.34	0.01	0.0572	0.0000	0.0220	0.0000	0.3953	1.2883	0.0169	0.5379	0.0132	0.4188	
16	20.38	0.01	0.0515	0.0000	0.0240	0.0000	0.3849	1.2811	0.0077	0.5208	0.0060	0.4066	
17	22.41	0.01	0.0796	0.0000	0.0315	0.0000	0.3947	1.3102	0.0031	0.5319	0.0029	0.4041	
18	24.50	0.01	0.0777	0.0000	0.0300	0.0000	0.3964	1.3695	-0.0003	0.5520	-0.0002	0.4030	
19	26.56	0.00	0.0816	0.0000	0.0307	0.0000	0.3795	1.3875	-0.0016	0.5624	-0.0012	0.4053	
20	28.63	0.01	0.0714	0.0000	0.0265	0.0000	0.3715	1.4452	-0.0037	0.5831	-0.0026	0.4035	
21	29.64	0.01	0.0800	0.0000	0.0292	0.0000	0.3654	1.4339	-0.0034	0.5770	-0.0024	0.4024	
22	29.66	0.02	0.0735	0.0000	0.0266	0.0000	0.3622	1.4485	-0.0026	0.5820	-0.0018	0.4018	
23	28.79	0.01	0.0734	0.0000	0.0263	0.0000	0.3545	1.4663	-0.0039	0.5893	-0.0027	0.4019	
24	29.65	0.01	0.0691	0.0000	0.0259	0.0000	0.3602	1.4821	-0.0032	0.5966	-0.0022	0.4024	
25	29.66	0.00	0.0769	0.0000	0.0275	0.0000	0.3689	1.4923	-0.0037	0.6004	-0.0025	0.4023	
26	29.70	-0.02	0.0760	0.0000	0.0275	0.0000	0.3598	1.4890	-0.0049	0.5986	-0.0032	0.4020	
27	29.99	-0.01	0.0716	0.0000	0.0267	0.0000	0.3671	1.4990	-0.0053	0.6029	-0.0035	0.4022	
28	30.28	-0.01	0.0825	0.0000	0.0282	0.0000	0.3553	1.5071	-0.0036	0.6076	-0.0024	0.4032	
29	30.57	-0.01	0.0745	0.0000	0.0115	0.0000	0.3354	1.5063	-0.0032	0.6084	-0.0021	0.4039	
30	30.83	0.01	0.0850	0.0000	0.0104	0.0000	0.2931	1.4970	-0.0082	0.6018	-0.0055	0.4020	
31	31.11	0.00	0.0852	0.0000	0.0102	0.0000	0.3129	1.4991	-0.0072	0.6029	-0.0048	0.4022	
32	31.38	0.01	0.0852	0.0000	0.0154	0.0000	0.2875	1.4972	-0.0066	0.6015	-0.0059	0.4017	
33	31.67	0.01	0.0819	0.0000	0.0137	0.0000	0.3256	1.4581	-0.0133	0.5843	-0.0091	0.3980	
34	31.94	0.02	0.0810	0.0000	0.0155	0.0000	0.3168	1.4502	-0.0120	0.5787	-0.0083	0.3987	
35	32.22	0.02	0.0852	0.0000	0.0206	0.0000	0.3422	1.4828	-0.0134	0.5942	-0.0090	0.4007	
36	32.48	0.02	0.0877	0.0000	0.0224	0.0000	0.3309	1.4517	-0.0141	0.5746	-0.0097	0.3992	
37	32.76	0.02	0.0794	0.0000	0.0201	0.0000	0.3562	1.4533	-0.0149	0.5807	-0.0103	0.3996	
38	33.01	0.02	0.0842	0.0000	0.0185	0.0000	0.3413	1.4555	-0.0142	0.5824	-0.0098	0.4001	
39	33.28	0.01	0.0859	0.0000	0.0218	0.0000	0.3528	1.4342	-0.0165	0.5723	-0.0115	0.3991	
40	33.54	0.01	0.0841	0.0000	0.0179	0.0000	0.3712	1.4429	-0.0163	0.5779	-0.0113	0.4005	
41	33.78	0.01	0.0852	0.0000	0.0185	0.0000	0.3647	1.3985	-0.0157	0.5600	-0.0112	0.4004	
42	34.05	0.01	0.0844	0.0000	0.0184	0.0000	0.3667	1.4359	-0.0172	0.5762	-0.0120	0.4013	
43	34.30	0.01	0.0829	0.0000	0.0241	0.0000	0.3690	1.4387	-0.0181	0.5790	-0.0126	0.4024	
44	34.52	0.00	0.0845	0.0000	0.0192	0.0000	0.3835	1.4191	-0.0181	0.5707	-0.0128	0.4022	
45	34.80	0.02	0.0870	0.0000	0.0239	0.0000	0.3999	1.4189	-0.0176	0.5711	-0.0124	0.4025	
46	35.05	0.01	0.0843	0.0000	0.0225	0.0000	0.4216	1.4366	-0.0189	0.5798	-0.0132	0.4036	

PAGE 3 OF 3
SHEET 2 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO=S PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 70 1.10 1.7 0.0 MIXUP13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
47	35.27	0.02	0.0519	9.9999	0.0256	9.9999	0.4172	1.4020	-0.0181	0.5657	-0.0129	0.4035
48	35.53	0.01	0.0418	9.9999	0.0277	9.9999	0.4468	1.4236	-0.0185	0.5746	-0.0130	0.4038
49	35.77	-0.00	0.0426	9.9999	0.0282	9.9999	0.4756	1.4341	-0.0187	0.5790	-0.0131	0.4037
50	36.00	0.01	0.0726	9.9999	0.0304	9.9999	0.4262	1.4019	-0.0181	0.5657	-0.0129	0.4043
51	36.25	0.01	0.0509	9.9999	0.0225	9.9999	0.4657	1.4141	-0.0184	0.5727	-0.0126	0.4050
52	36.49	0.02	0.0458	9.9999	0.0214	9.9999	0.4775	1.4103	-0.0177	0.5721	-0.0126	0.4055
53	36.71	0.02	0.0486	9.9999	0.0233	9.9999	0.4973	1.4069	-0.0182	0.5694	-0.0130	0.4053
54	36.95	0.02	0.0532	9.9999	0.0264	9.9999	0.4458	1.3912	-0.0179	0.5624	-0.0129	0.4043
55	37.19	0.01	0.0457	9.9999	0.0230	9.9999	0.5027	1.4114	-0.0191	0.5702	-0.0136	0.4041
56	37.43	0.02	0.0496	9.9999	0.0268	9.9999	0.5016	1.3864	-0.0173	0.5605	-0.0125	0.4043
57	37.67	0.02	0.0533	9.9999	0.0260	9.9999	0.4875	1.3983	-0.0196	0.5630	-0.0140	0.4026
58	37.90	0.03	0.0508	9.9999	0.0277	9.9999	0.4717	1.3782	-0.0187	0.5569	-0.0136	0.4026
59	38.13	0.02	0.0419	9.9999	0.0249	9.9999	0.4837	1.3819	-0.0184	0.5572	-0.0133	0.4032
60	38.36	-0.01	0.0414	9.9999	0.0218	9.9999	0.5210	1.3785	-0.0190	0.5568	-0.0138	0.4025
61	38.61	-0.00	0.0510	9.9999	0.0266	9.9999	0.5173	1.4334	-0.0206	0.5791	-0.0149	0.4040
62	38.83	0.00	0.0425	9.9999	0.0218	9.9999	0.5028	1.3900	-0.0199	0.5591	-0.0143	0.4022
63	39.09	-0.01	0.0498	9.9999	0.0170	9.9999	0.5728	1.4581	-0.0210	0.5882	-0.0149	0.4036
64	39.30	-0.00	0.0478	9.9999	0.0273	9.9999	0.4746	1.4430	-0.0201	0.5824	-0.0139	0.4036
65	39.52	0.01	0.0487	9.9999	0.0233	9.9999	0.5225	1.3798	-0.0193	0.5536	-0.0141	0.4025
66	39.75	-0.00	0.0467	9.9999	0.0324	9.9999	0.4902	1.4057	-0.0215	0.5660	-0.0149	0.4042
67	39.98	-0.00	0.0364	9.9999	0.0211	9.9999	0.5234	1.4073	-0.0206	0.5680	-0.0147	0.4036
68	40.17	0.00	0.0435	9.9999	0.0332	9.9999	0.4710	1.4250	-0.0214	0.5756	-0.0153	0.4039
69	40.37	-0.01	0.0473	9.9999	0.0322	9.9999	0.4792	1.3939	-0.0212	0.5622	-0.0152	0.4033
70	40.60	-0.00	0.0506	9.9999	0.0304	9.9999	0.5008	1.4188	-0.0218	0.5715	-0.0154	0.4028
71	40.78	0.00	0.0419	9.9999	0.0313	9.9999	0.5065	1.3202	-0.0192	0.5368	-0.0148	0.4028
72	41.00	-0.00	0.0555	9.9999	0.0274	9.9999	0.5016	1.4327	-0.0225	0.5783	-0.0157	0.4036
73	41.23	0.00	0.0544	9.9999	0.0266	9.9999	0.4887	1.4215	-0.0223	0.5738	-0.0157	0.4036
74	41.42	-0.02	0.0562	9.9999	0.0257	9.9999	0.4920	1.3962	-0.0220	0.5612	-0.0156	0.4025
75	41.63	-0.02	0.0553	9.9999	0.0272	9.9999	0.4907	1.3945	-0.0216	0.5640	-0.0160	0.4016
76	41.85	-0.02	0.0511	9.9999	0.0259	9.9999	0.5065	1.3898	-0.0222	0.5505	-0.0162	0.4019
77	42.08	-0.02	0.0520	9.9999	0.0256	9.9999	0.4829	1.3875	-0.0235	0.5556	-0.0170	0.4026
78	42.23	-0.01	0.0511	9.9999	0.0255	9.9999	0.5065	1.3313	-0.0221	0.5341	-0.0166	0.4012
79	42.49	0.01	0.0552	9.9999	0.0278	9.9999	0.5016	1.3459	-0.0215	0.5409	-0.0160	0.4019
80	42.63	-0.00	0.0575	9.9999	0.0294	9.9999	0.5208	1.3477	-0.0232	0.5415	-0.0172	0.4011
81	42.81	-0.01	0.0418	9.9999	0.0235	9.9999	0.5386	1.3748	-0.0233	0.5529	-0.0170	0.4021
82	43.00	-0.02	0.0547	9.9999	0.0303	9.9999	0.5083	1.3350	-0.0225	0.5355	-0.0170	0.4011
83	43.16	0.01	0.0534	9.9999	0.0314	9.9999	0.5092	1.3763	-0.0249	0.5531	-0.0174	0.4019
84	43.36	-0.00	0.0448	9.9999	0.0248	9.9999	0.5295	1.3391	-0.0239	0.5369	-0.0179	0.4009
85	43.59	-0.01	0.0434	9.9999	0.0261	9.9999	0.5336	1.3616	-0.0247	0.5458	-0.0182	0.4009
86	43.73	-0.01	0.0361	9.9999	0.0205	9.9999	0.5697	1.3687	-0.0234	0.5440	-0.0175	0.4011
87	43.92	-0.01	0.0456	9.9999	0.0242	9.9999	0.5272	1.3349	-0.0232	0.5350	-0.0173	0.4007
88	44.10	-0.02	0.0348	9.9999	0.0213	9.9999	0.5412	1.3774	-0.0236	0.5528	-0.0172	0.4013
89	44.25	-0.01	0.0509	9.9999	0.0307	9.9999	0.5063	1.3582	-0.0221	0.5462	-0.0163	0.4022
90	44.45	-0.01	0.0403	9.9999	0.0231	9.9999	0.5725	1.3638	-0.0244	0.5506	-0.0177	0.4008
91	44.65	-0.01	0.0462	9.9999	0.0250	9.9999	0.5601	1.3466	-0.0242	0.5388	-0.0180	0.4001
92	44.91	-0.01	0.0537	9.9999	0.0263	9.9999	0.5318	1.3802	-0.0248	0.5530	-0.0180	0.4007

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 70 1.10 1.7 0.0 BLOCK13 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	45.02	-0.01	0.0329	9.9999	0.0192	9.9999	0.5826	1.3643	-0.0256	0.5462	-0.0186	0.4004
94	45.19	-0.01	0.0342	9.9999	0.0227	9.9999	0.5786	1.3507	-0.0252	0.5401	-0.0187	0.3999
95	45.36	-0.01	0.0352	9.9999	0.0224	9.9999	0.5836	1.3552	-0.0244	0.5414	-0.0180	0.3995
96	45.54	-0.00	0.0425	9.9999	0.0238	9.9999	0.5594	1.3401	-0.0237	0.5368	-0.0177	0.4006
97	45.71	-0.02	0.0318	9.9999	0.0192	9.9999	0.6026	1.3378	-0.0243	0.5339	-0.0182	0.3991
98	45.03	-0.02	0.0508	9.9999	0.0273	9.9999	0.5457	1.3627	-0.0247	0.5454	-0.0182	0.4002
99	45.10	-0.03	0.0329	9.9999	0.0201	9.9999	0.6098	1.3062	-0.0227	0.5215	-0.0174	0.3993
100	45.25	-0.01	0.0322	9.9999	0.0286	9.9999	0.5477	1.3524	-0.0242	0.5409	-0.0179	0.4000
101	45.49	-0.01	0.0327	9.9999	0.0249	9.9999	0.5305	1.2975	-0.0232	0.5175	-0.0179	0.3989
102	45.61	-0.01	0.0321	9.9999	0.0271	9.9999	0.5406	1.3565	-0.0250	0.5422	-0.0185	0.3997
103	45.84	-0.03	0.0460	9.9999	0.0241	9.9999	0.5952	1.3137	-0.0234	0.5247	-0.0178	0.3994
104	45.96	-0.02	0.0459	9.9999	0.0237	9.9999	0.5158	1.2522	-0.0214	0.4987	-0.0171	0.3983
105	47.13	-0.02	0.0432	9.9999	0.0269	9.9999	0.5305	1.3153	-0.0243	0.5247	-0.0185	0.3998
106	47.42	-0.02	0.0459	9.9999	0.0237	9.9999	0.5158	1.2998	-0.0226	0.5183	-0.0174	0.3988
107	47.65	-0.01	0.0521	9.9999	0.0314	9.9999	0.5065	1.2572	-0.0216	0.5020	-0.0172	0.3993
108	47.89	-0.02	0.0536	9.9999	0.0270	9.9999	0.5056	1.2573	-0.0219	0.5008	-0.0174	0.3983
109	47.82	-0.02	0.0513	9.9999	0.0266	9.9999	0.5182	1.2673	-0.0220	0.5049	-0.0174	0.3984
110	48.01	-0.02	0.0459	9.9999	0.0269	9.9999	0.5420	1.2736	-0.0225	0.5071	-0.0177	0.3987
111	48.19	-0.01	0.0514	9.9999	0.0271	9.9999	0.5260	1.2725	-0.0230	0.5091	-0.0181	0.3977
112	48.35	-0.01	0.0295	9.9999	0.0155	9.9999	0.6059	1.2874	-0.0233	0.5113	-0.0181	0.3972
113	48.54	-0.01	0.0535	9.9999	0.0281	9.9999	0.5259	1.2922	-0.0232	0.5132	-0.0180	0.3972
114	48.71	0.00	0.0514	9.9999	0.0263	9.9999	0.5055	1.2865	-0.0232	0.5121	-0.0180	0.3974
115	48.90	0.00	0.0354	9.9999	0.0214	9.9999	0.5538	1.2837	-0.0235	0.5109	-0.0183	0.3980
116	49.05	0.00	0.0507	9.9999	0.0271	9.9999	0.5346	1.2669	-0.0218	0.5032	-0.0172	0.3972
117	49.20	0.00	0.0449	9.9999	0.0241	9.9999	0.5256	1.2606	-0.0217	0.5006	-0.0172	0.3971
118	49.37	0.01	0.0550	9.9999	0.0287	9.9999	0.4955	1.2669	-0.0221	0.5056	-0.0175	0.3989
119	49.54	0.00	0.0509	9.9999	0.0313	9.9999	0.5323	1.2721	-0.0226	0.5081	-0.0176	0.3994
120	49.72	0.00	0.0321	9.9999	0.0182	9.9999	0.5674	1.2639	-0.0216	0.5017	-0.0171	0.3969
121	49.90	0.01	0.0429	9.9999	0.0222	9.9999	0.5168	1.2367	-0.0198	0.4903	-0.0161	0.3971
122	50.09	0.01	0.0443	9.9999	0.0260	9.9999	0.5270	1.2387	-0.0206	0.4913	-0.0167	0.3966
123	50.26	0.01	0.0491	9.9999	0.0232	9.9999	0.5027	1.2481	-0.0205	0.4945	-0.0165	0.3968
124	50.46	0.01	0.0515	9.9999	0.0281	9.9999	0.5065	1.2536	-0.0208	0.4957	-0.0166	0.3954
125	50.67	0.01	0.0417	9.9999	0.0230	9.9999	0.5509	1.2260	-0.0200	0.4847	-0.0163	0.3953
126	50.77	0.01	0.0432	9.9999	0.0194	9.9999	0.6044	1.2367	-0.0205	0.4891	-0.0166	0.3961
127	50.99	0.03	0.0515	9.9999	0.0270	9.9999	0.5290	1.2245	-0.0198	0.4850	-0.0162	0.3961
128	51.11	0.02	0.0559	9.9999	0.0288	9.9999	0.5016	1.2209	-0.0200	0.4839	-0.0164	0.3963
129	51.21	0.02	0.0472	9.9999	0.0262	9.9999	0.5122	1.2229	-0.0195	0.4838	-0.0160	0.3956
130	51.42	0.02	0.0570	9.9999	0.0290	9.9999	0.5045	1.2192	-0.0195	0.4818	-0.0160	0.3952
131	51.60	0.02	0.0537	9.9999	0.0274	9.9999	0.5100	1.2153	-0.0197	0.4801	-0.0162	0.3950
132	51.77	0.01	0.0503	9.9999	0.0308	9.9999	0.5053	1.2177	-0.0194	0.4812	-0.0160	0.3951
133	51.93	0.02	0.0506	9.9999	0.0253	9.9999	0.4995	1.1942	-0.0186	0.4714	-0.0154	0.3949
134	52.10	0.02	0.0499	9.9999	0.0334	9.9999	0.5084	1.2183	-0.0201	0.4817	-0.0165	0.3954
135	52.26	0.02	0.0531	9.9999	0.0275	9.9999	0.5052	1.2041	-0.0193	0.4756	-0.0161	0.3952
136	52.46	0.02	0.0453	9.9999	0.0233	9.9999	0.5138	1.1921	-0.0180	0.4654	-0.0152	0.3937
137	52.62	0.02	0.0519	9.9999	0.0303	9.9999	0.5069	1.2191	-0.0199	0.4807	-0.0163	0.3943
138	52.79	0.02	0.0432	9.9999	0.0232	9.9999	0.5364	1.2026	-0.0193	0.4734	-0.0161	0.3937

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RA10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 70 1.10 1.7 0.0 BLOWER 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
139	52.35	0.03	0.0455	9.9999	0.0241	9.9999	0.5071	1.2177	-0.0201	0.4808	-0.0165	0.3945
140	53.12	0.01	0.0499	9.9999	0.0259	9.9999	0.5197	1.2115	-0.0202	0.4773	-0.0167	0.3939
141	53.25	0.01	0.0498	9.9999	0.0253	9.9999	0.5078	1.1873	-0.0196	0.4663	-0.0164	0.3928
142	53.45	0.01	0.0502	9.9999	0.0276	9.9999	0.5040	1.2192	-0.0210	0.4807	-0.0172	0.3938
143	53.51	-0.00	0.0467	9.9999	0.0261	9.9999	0.5156	1.2167	-0.0207	0.4789	-0.0170	0.3936
144	53.77	-0.00	0.0555	9.9999	0.0280	9.9999	0.5152	1.2273	-0.0219	0.4848	-0.0179	0.3950
145	53.93	0.00	0.0475	9.9999	0.0333	9.9999	0.4982	1.2198	-0.0212	0.4799	-0.0176	0.3935
146	54.09	0.00	0.0467	9.9999	0.0235	9.9999	0.5027	1.2322	-0.0217	0.4857	-0.0176	0.3942
147	54.26	-0.01	0.0506	9.9999	0.0266	9.9999	0.5025	1.2221	-0.0218	0.4808	-0.0179	0.3932
148	54.40	-0.01	0.0510	9.9999	0.0261	9.9999	0.5114	1.2394	-0.0214	0.4756	-0.0177	0.3933
149	54.58	0.00	0.0544	9.9999	0.0268	9.9999	0.4926	1.2091	-0.0207	0.4767	-0.0171	0.3926
150	54.73	-0.01	0.0500	9.9999	0.0251	9.9999	0.5116	1.2249	-0.0226	0.4913	-0.0185	0.3929
151	54.90	-0.01	0.0512	9.9999	0.0253	9.9999	0.4979	1.2221	-0.0213	0.4791	-0.0175	0.3928
152	55.04	0.00	0.0504	9.9999	0.0282	9.9999	0.4972	1.2287	-0.0223	0.4822	-0.0182	0.3924
153	55.19	-0.01	0.0519	9.9999	0.0263	9.9999	0.4922	1.2159	-0.0220	0.4770	-0.0181	0.3923
154	55.32	-0.00	0.0501	9.9999	0.0255	9.9999	0.5046	1.2109	-0.0221	0.4754	-0.0183	0.3926
155	55.49	-0.00	0.0479	9.9999	0.0251	9.9999	0.5236	1.2327	-0.0232	0.4852	-0.0188	0.3936
156	55.66	-0.01	0.0579	9.9999	0.0291	9.9999	0.5033	1.2328	-0.0234	0.4842	-0.0190	0.3927
157	55.77	-0.00	0.0498	9.9999	0.0217	9.9999	0.4837	1.2228	-0.0227	0.4801	-0.0186	0.3927
158	55.95	-0.00	0.0497	9.9999	0.0214	9.9999	0.4890	1.2184	-0.0223	0.4789	-0.0183	0.3929
159	56.11	-0.01	0.0526	9.9999	0.0264	9.9999	0.5131	1.2316	-0.0230	0.4833	-0.0187	0.3924
160	56.23	-0.01	0.0520	9.9999	0.0260	9.9999	0.4960	1.2341	-0.0231	0.4854	-0.0187	0.3933
161	56.43	-0.00	0.0480	9.9999	0.0222	9.9999	0.4820	1.2497	-0.0242	0.4917	-0.0196	0.3935
162	56.63	0.00	0.0481	9.9999	0.0233	9.9999	0.5060	1.2628	-0.0250	0.4972	-0.0201	0.3937
163	56.80	-0.01	0.0513	9.9999	0.0259	9.9999	0.5165	1.3071	-0.0282	0.5147	-0.0216	0.3938
164	56.95	-0.00	0.0459	9.9999	0.0239	9.9999	0.5071	1.3072	-0.0284	0.5154	-0.0218	0.3947
165	57.11	-0.11	0.0439	9.9999	0.0201	9.9999	0.4616	1.3320	-0.0303	0.5267	-0.0228	0.3954
166	57.26	-0.02	0.0459	9.9999	0.0233	9.9999	0.5071	1.3134	-0.0306	0.5258	-0.0230	0.3943
167	57.42	-0.03	0.0526	9.9999	0.0261	9.9999	0.4946	1.3657	-0.0409	0.5397	-0.0227	0.3952
168	57.58	-0.03	0.0427	9.9999	0.0217	9.9999	0.5075	1.3702	-0.0329	0.5369	-0.0240	0.3933
169	57.74	-0.02	0.0371	9.9999	0.0136	9.9999	0.5273	1.3665	-0.0331	0.5388	-0.0243	0.3943
170	57.88	-0.07	0.0367	9.9999	0.0273	9.9999	0.4988	1.3639	-0.0330	0.5369	-0.0242	0.3938
171	57.99	-0.03	0.0371	9.9999	0.0196	9.9999	0.5273	1.3621	-0.0346	0.5426	-0.0246	0.3926
172	58.16	-0.05	0.0462	9.9999	0.0211	9.9999	0.4922	1.3651	-0.0328	0.5369	-0.0241	0.3933
173	58.25	-0.06	0.0481	9.9999	0.0228	9.9999	0.4960	1.3117	-0.0293	0.5163	-0.0224	0.3926
174	58.44	-0.10	0.0394	9.9999	0.0207	9.9999	0.4765	1.3235	-0.0304	0.5194	-0.0230	0.3925
175	58.60	-0.07	0.0491	9.9999	0.0268	9.9999	0.5116	1.3198	-0.0304	0.5168	-0.0231	0.3931
176	58.80	-0.06	0.0383	9.9999	0.0206	9.9999	0.5370	1.3072	-0.0295	0.5127	-0.0227	0.3922
177	58.60	-0.01	0.0518	9.9999	0.0256	9.9999	0.4997	1.2942	-0.0291	0.5076	-0.0225	0.3922

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART EACH RA10=5 PHI COMP L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ 71 0.80 1.7 0.0 31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.88	0.02	-0.0119	1.4915	-0.0094	-0.0571	-0.0015	0.2225	0.0742	0.1483	-1.8376
2	-5.08	0.01	-0.0275	1.5341	-0.0065	-0.0442	-0.0016	0.2225	0.0757	0.1468	-1.8170
3	-5.67	0.01	-0.0502	1.5701	0.0582	-0.0526	0.0063	0.2228	0.0757	0.1471	-1.8087
4	-5.75	0.01	-0.0717	1.6303	0.0393	-0.0754	0.0064	0.2286	0.0736	0.1550	-1.8293
5	-5.87	0.01	-0.0709	1.5516	0.0573	-0.1071	-0.0012	0.2426	0.0741	0.1685	-1.7619
6	-4.14	0.02	-0.0555	0.7451	0.0387	-0.0754	-0.0006	0.2269	0.0711	0.1749	-1.6305
7	-2.30	0.01	-0.0352	0.1013	0.0376	-0.0484	0.0002	0.2527	0.0681	0.1846	-1.1401
8	-0.38	0.01	0.0072	-0.2961	-0.0247	-0.0311	0.0008	0.2599	0.0686	0.1913	-2.0356
9	1.37	0.02	0.0299	-0.3369	0.0326	-0.0867	0.0018	0.2656	0.0697	0.1959	-1.3203
10	3.80	0.02	0.0800	-0.4085	0.0700	-0.1062	0.0026	0.2617	0.0727	0.1890	-1.6351
11	5.83	0.01	0.0952	-0.0932	-0.0091	-0.0467	0.0111	0.2643	0.0793	0.1850	-1.7784
12	7.82	0.01	1.0919	-0.5068	-0.0229	-0.0355	0.0118	0.2679	0.0882	0.1797	-1.9282
13	9.83	0.01	1.0329	-0.4298	0.0131	-0.0019	0.0045	0.2800	0.1025	0.1776	-2.0353
14	11.29	0.01	0.9829	-0.4918	-0.0103	-0.0514	0.0058	0.2829	0.1207	0.1623	-2.1125
15	13.82	0.01	0.9358	-0.5216	0.0085	-0.0696	0.0068	0.2887	0.1418	0.1469	-2.1873
16	15.19	0.01	0.8538	-0.5026	-0.0027	-0.0147	0.0155	0.2959	0.1662	0.1277	-2.2411
17	17.23	0.01	0.1336	-0.4933	-0.0509	-0.0520	0.0321	0.2954	0.1874	0.1080	-2.2047
18	19.29	0.01	0.8331	-0.5962	-0.0703	0.0198	0.0332	0.2846	0.2035	0.0811	-2.2766
19	21.22	0.01	0.8367	-0.6539	-0.1126	0.1331	0.0340	0.2804	0.2196	0.0608	-2.2510
20	23.20	0.01	0.8057	-0.6093	-0.1192	0.1963	-0.0196	0.2668	0.2272	0.0396	-2.2194
21	25.16	0.01	0.8849	-0.7879	-0.2324	0.0401	-0.1135	0.2564	0.2433	0.0131	-2.1364
22	27.09	0.00	0.8271	-0.6549	-0.2191	0.5293	-0.1115	0.2259	0.2479	-0.0220	-2.0570
23	27.32	0.01	0.8298	-0.6794	-0.2019	-0.0671	-0.0804	0.2138	0.2570	-0.0432	-2.0272
24	29.33	0.02	0.8019	-0.7218	0.0527	-0.1706	-0.0147	0.2136	0.2565	-0.0429	-2.0161
25	29.28	0.03	0.8041	-0.7566	0.2569	-0.4805	0.0174	0.2238	0.2637	-0.0399	-2.0113
26	29.49	0.03	0.8066	-0.8157	0.2921	-0.6762	0.0571	0.2145	0.2703	-0.0558	-2.0008
27	29.25	0.04	0.8022	-0.8258	0.4578	-0.9931	0.0895	0.2196	0.2780	-0.0584	-1.9853
28	29.57	0.05	0.8062	-0.8579	0.7189	-1.5490	0.1852	0.2296	0.2865	-0.0569	-1.9673
29	25.86	0.06	0.7491	-0.1917	0.6685	-1.8153	0.2332	0.2471	0.2959	-0.0567	-1.9604
30	30.13	0.07	0.8034	-0.8370	0.8224	-1.7576	0.2175	0.2216	0.2933	-0.0716	-1.9564
31	30.41	0.08	0.8033	-0.8588	1.0792	-2.1784	0.2508	0.2271	0.2969	-0.0697	-1.9445
32	30.68	0.09	0.8061	-0.8733	1.1590	-2.2404	0.2741	0.2175	0.3004	-0.0828	-1.9304
33	30.95	0.09	0.8093	-0.8788	1.2804	-2.4279	0.2940	0.2202	0.2995	-0.0792	-1.9193
34	31.23	0.09	0.8134	-0.8734	1.2945	-2.3948	0.2943	0.2166	0.3016	-0.0849	-1.9116
35	31.51	0.10	0.8156	-0.8734	1.3421	-2.5878	0.3237	0.2168	0.3032	-0.0863	-1.8935
36	31.78	0.11	0.8227	-0.8705	1.4075	-2.6429	0.3243	0.2073	0.3031	-0.0957	-1.8716
37	32.06	0.11	0.8259	-0.8805	1.5227	-2.6559	0.3247	0.2041	0.3052	-0.1011	-1.8627
38	32.42	0.12	0.8350	-0.7919	1.6246	-2.8737	0.3177	0.2005	0.3051	-0.1046	-1.8288
39	32.58	0.12	0.8376	-0.8776	1.6546	-2.8563	0.3024	0.2050	0.3021	-0.0965	-1.8184
40	32.83	0.12	0.8424	-0.8128	1.6628	-2.6782	0.2965	0.2032	0.3057	-0.1025	-1.8037
41	33.10	0.12	0.8463	-0.8872	1.7124	-2.7520	0.2742	0.2021	0.3082	-0.1061	-1.7814
42	33.36	0.13	0.8497	-0.8879	1.7513	-2.7646	0.2876	0.1971	0.3156	-0.1183	-1.7702
43	31.59	0.13	0.8139	-0.8343	1.6959	-2.7362	0.2793	0.2055	0.3205	-0.1150	-1.7935
44	33.66	0.13	0.8331	-0.8959	1.7193	-2.5295	0.1779	0.1968	0.3230	-0.1262	-1.7248
45	34.19	0.14	0.8313	-0.8941	1.7961	-2.5978	0.1765	0.1985	0.3296	-0.1311	-1.7075
46	34.33	0.13	0.8430	-0.8923	1.8041	-2.6732	0.1706	0.2020	0.3404	-0.1384	-1.6811

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RNLDS	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	71	0.60	1.7	0.0	h1>0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.81	0.14	9.5274	-15.4947	1.7115	-2.5171	0.1551	0.2126	0.3551	-0.1423	-1.6725
48	34.95	0.14	9.5341	-15.5214	1.7139	-2.4566	0.1320	0.2185	0.3657	-0.1472	-1.6518
49	35.07	0.14	9.7432	-15.6126	1.7730	-2.3221	0.1614	0.2404	0.3815	-0.1406	-1.6399
50	35.33	0.14	9.7356	-15.5955	1.7906	-2.0529	0.1160	0.2498	0.3933	-0.1435	-1.6384
51	35.56	0.15	9.7071	-15.5955	1.8343	-1.9837	0.0848	0.2557	0.4125	-0.1568	-1.6295
52	35.46	0.15	9.7297	-15.5165	1.7495	-1.4558	0.0294	0.3147	0.4500	-0.1354	-1.5744
53	36.03	0.14	9.8057	-15.5554	1.7627	-1.3364	0.0450	0.3045	0.4661	-0.1617	-1.5736
54	36.26	0.15	9.8715	-15.6492	1.8124	-1.0769	-0.0140	0.3266	0.4809	-0.1543	-1.5333
55	36.49	0.14	9.9324	-15.6826	1.8506	-0.8140	-0.0341	0.3478	0.4925	-0.1447	-1.5236
56	36.73	0.15	10.0053	-15.7553	1.8936	-0.5663	-0.0337	0.3379	0.4884	-0.1508	-1.5324
57	36.98	0.14	10.2154	-15.9013	1.9278	-0.5309	-0.0003	0.3515	0.5030	-0.1515	-1.5036
58	37.21	0.14	10.2634	-15.9170	1.9615	-0.5110	-0.0574	0.3456	0.5021	-0.1565	-1.4925
59	37.45	0.14	10.3302	-15.9108	1.9918	-0.2633	-0.0635	0.3436	0.5111	-0.1675	-1.4862
60	37.68	0.15	10.3657	-15.9105	1.8882	-0.2660	-0.0809	0.3458	0.5127	-0.1669	-1.4574
61	37.90	0.15	10.4543	-15.9818	1.9543	-0.1779	-0.0732	0.3441	0.5202	-0.1761	-1.4581
62	38.13	0.15	10.4961	-15.9794	1.9128	-0.0457	-0.0653	0.3465	0.5217	-0.1752	-1.4379
63	38.36	0.15	10.5315	-15.9114	1.8731	0.0749	-0.0729	0.3506	0.5273	-0.1767	-1.4065
64	38.61	0.15	10.5532	-15.9871	1.8831	-0.0635	-0.0643	0.3391	0.5303	-0.1912	-1.4043
65	38.83	0.14	11.0254	-16.1454	1.9371	0.1347	-0.0719	0.3569	0.5383	-0.1814	-1.3916
66	39.04	0.15	11.1125	-16.1915	1.9758	-0.0609	-0.0671	0.3565	0.5348	-0.1783	-1.3625
67	39.27	0.15	11.1843	-16.2992	1.9563	0.1641	-0.0677	0.3431	0.5323	-0.1892	-1.3616
68	39.49	0.15	11.1961	-16.0625	1.9538	0.0563	-0.0160	0.3381	0.5297	-0.1916	-1.3478
69	39.69	0.14	11.3203	-16.3403	1.9383	-0.2239	0.0108	0.3040	0.5146	-0.2066	-1.3544
70	39.90	0.14	11.4334	-16.4998	1.9787	-0.7254	0.0499	0.3089	0.5152	-0.2063	-1.3556
71	40.11	0.14	11.5008	-16.5852	1.9438	-0.5032	0.0913	0.2998	0.5026	-0.2028	-1.3619
72	40.31	0.13	11.5420	-16.6076	1.9300	-0.7413	0.0895	0.2629	0.4763	-0.2134	-1.3750
73	40.50	0.13	11.7029	-16.8361	1.9305	-0.6252	0.0896	0.2627	0.4786	-0.2161	-1.3563
74	40.71	0.13	11.7214	-16.8713	1.9487	-0.7350	0.0980	0.2498	0.4753	-0.2255	-1.3541
75	40.93	0.14	11.8421	-16.8861	1.9273	-0.4784	0.0861	0.2643	0.4773	-0.2130	-1.3562
76	41.12	0.13	11.8974	-16.8119	1.9731	-0.2115	0.0499	0.2719	0.4844	-0.2124	-1.3291
77	41.34	0.11	12.0106	-16.9109	1.9233	-0.0677	0.0732	0.2668	0.4970	-0.2303	-1.3412
78	41.55	0.13	12.0186	-16.9197	1.9546	-0.5509	0.0985	0.2594	0.5056	-0.2461	-1.3222
79	41.74	0.13	12.2606	-16.1527	1.9664	-0.3247	0.0867	0.2726	0.5021	-0.2294	-1.3197
80	41.93	0.14	12.2671	-16.9403	1.7112	-0.7950	0.1391	0.2470	0.4905	-0.2434	-1.3014
81	42.13	0.13	12.3003	-16.9123	1.7004	-0.3023	0.1063	0.2640	0.5091	-0.2450	-1.2866
82	42.34	0.13	12.3440	-16.8507	1.8504	0.1522	0.0579	0.2816	0.5213	-0.2396	-1.2792
83	42.56	0.13	12.5304	-16.9093	1.8304	-0.5948	0.1077	0.2431	0.4960	-0.2528	-1.2828
84	42.84	0.13	12.7247	-16.1749	1.9273	-0.8555	0.1409	0.2516	0.4926	-0.2409	-1.2671
85	42.86	0.13	12.7349	-16.1223	1.9367	-0.6671	0.1561	0.2373	0.5067	-0.2693	-1.2601
86	43.05	0.10	12.8442	-16.1500	2.0165	-0.7296	0.1565	0.2430	0.5047	-0.2616	-1.2534
87	43.25	0.10	13.0114	-16.2823	2.0713	-0.9629	0.1578	0.2254	0.4942	-0.2687	-1.2441
88	43.46	0.10	13.0633	-16.2293	2.0859	-1.0707	0.1820	0.2344	0.5078	-0.2729	-1.2424
89	43.59	0.10	13.0814	-16.2534	2.0596	-0.9859	0.1563	0.2470	0.5048	-0.2577	-1.2319
90	43.76	0.10	13.0936	-15.6774	2.1024	-0.9919	0.1743	0.2429	0.5037	-0.2607	-1.2131
91	43.95	0.10	13.1775	-16.6028	2.2201	-1.7136	0.1924	0.2168	0.5002	-0.2853	-1.2192
92	44.13	0.10	13.2891	-16.1324	2.2308	-1.6608	0.2082	0.2107	0.4967	-0.2859	-1.2140

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/D-0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 71 0.60 1.7 0.0 plane 31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAN	CAF	ACP
93	44.34	0.17	13.3[illegible]	-16.0343	2.2207	-1.3444	0.1920	0.2181	0.5042	-0.2860	-1.1976
94	44.49	0.15	13.32[illegible]	-15.9807	2.1805	-1.3182	0.1856	0.2151	0.5012	-0.2860	-1.1907
95	44.65	0.15	13.52[illegible]	-15.[illegible]	2.1391	-1.3697	0.1849	0.2048	0.5047	-0.2999	-1.1916
96	44.81	0.15	13.67[illegible]	-15.[illegible]	2.1664	-1.3820	0.1929	0.2064	0.5017	-0.2953	-1.1901
97	44.96	0.14	13.83[illegible]	-15.[illegible]	2.0849	-1.3370	0.1853	0.2065	0.5107	-0.3022	-1.1838
98	45.21	0.14	13.71[illegible]	-15.3219	2.0189	-1.1665	0.1768	0.2124	0.5167	-0.3043	-1.1904
99	45.41	0.15	13.[illegible]	-15.[illegible]	2.[illegible]	-1.[illegible]	0.177[illegible]	0.2022	0.5168	-0.3146	-1.1753
100	45.64	0.14	13.7[illegible]	-15.0803	2.0785	-1.1959	0.1616	0.2159	0.5231	-0.3072	-1.1657
101	45.76	0.14	13.[illegible]	-15.[illegible]	1.9225	-1.[illegible]	0.1668	0.2141	0.5247	-0.3146	-1.1631
102	45.92	0.15	13.98[illegible]	-14.[illegible]	2.1025	-0.9569	0.1611	0.2133	0.5281	-0.3178	-1.1560
103	46.10	0.13	14.0[illegible]	-14.[illegible]	1.[illegible]	-0.7858	0.1606	0.2145	0.5361	-0.3216	-1.1582
104	46.29	0.15	14.25[illegible]	-15.[illegible]	2.0504	-0.8516	0.1365	0.2221	0.5442	-0.3221	-1.1501
105	46.46	0.13	14.24[illegible]	-15.[illegible]	2.[illegible]	-0.6274	0.1539	0.2070	0.5407	-0.3337	-1.1307
106	46.63	0.14	14.2753	-15.[illegible]	2.1718	-0.6619	0.1543	0.2074	0.5376	-0.3302	-1.1217
107	46.80	0.13	14.[illegible]	-15.[illegible]	2.1516	-0.4783	0.1472	0.2019	0.5416	-0.3397	-1.1220
108	46.99	0.14	14.[illegible]	-15.[illegible]	2.0639	-0.7659	0.1315	0.2119	0.5416	-0.3247	-1.1216
109	47.15	0.14	14.[illegible]	-15.[illegible]	2.[illegible]	-0.4940	0.1456	0.2060	0.5416	-0.3336	-1.1162
110	47.31	0.14	14.5[illegible]	-15.[illegible]	2.0697	-0.5523	0.1307	0.2065	0.5460	-0.3415	-1.1162
111	47.48	0.13	14.[illegible]	-15.[illegible]	1.9771	-0.4089	0.1383	0.2149	0.5551	-0.3402	-1.1125
112	47.67	0.13	14.71[illegible]	-15.[illegible]	1.9456	-0.4088	0.1464	0.2011	0.5501	-0.3490	-1.1152
113	47.84	0.12	14.[illegible]	-15.2077	1.9930	-0.4327	0.1312	0.2019	0.5506	-0.3547	-1.1022
114	48.01	0.13	14.[illegible]	-15.[illegible]	1.9460	-0.0471	0.1224	0.2358	0.5466	-0.3608	-1.1066
115	48.18	0.12	14.[illegible]	-15.[illegible]	1.[illegible]	-0.1902	0.1308	0.1990	0.5506	-0.3576	-1.1048
116	48.35	0.11	15.0[illegible]	-15.[illegible]	1.7993	-0.0493	0.1306	0.2046	0.5596	-0.3510	-1.1159
117	48.51	0.10	15.[illegible]	-15.[illegible]	1.[illegible]	0.0626	0.1336	0.1993	0.5536	-0.3633	-1.1109
118	48.70	0.09	15.15[illegible]	-15.[illegible]	1.5152	0.1049	0.1312	0.1711	0.5506	-0.3797	-1.1129
119	48.85	0.08	15.[illegible]	-15.[illegible]	1.[illegible]	0.2753	0.1156	0.1866	0.5487	-0.3621	-1.0917
120	49.03	0.09	15.[illegible]	-15.[illegible]	0.5401	1.2131	0.0436	0.1413	0.5140	-0.3727	-1.0752
121	49.22	0.08	15.[illegible]	-15.[illegible]	0.[illegible]	1.2459	0.0438	0.1317	0.5106	-0.3789	-1.0710
122	49.40	0.08	15.[illegible]	-15.[illegible]	0.3855	1.4986	0.0123	0.1359	0.5221	-0.3862	-1.0670
123	49.57	0.07	15.[illegible]	-15.[illegible]	1.[illegible]	1.5466	0.0110	0.1144	0.5065	-0.3936	-1.0699
124	49.74	0.06	15.1217	-15.[illegible]	0.4156	1.5031	0.0049	0.1430	0.5275	-0.3845	-1.0531
125	49.94	0.06	15.25[illegible]	-16.[illegible]	0.2893	1.5577	-0.0198	0.1562	0.5401	-0.3739	-1.0594
126	50.10	0.01	15.[illegible]	-15.[illegible]	0.1472	1.7[illegible]	-0.0033	0.1596	0.5366	-0.3770	-1.0522
127	50.27	0.02	15.3[illegible]	-15.[illegible]	0.[illegible]	2.0506	-0.0198	0.1635	0.5517	-0.3672	-1.0585
128	50.44	0.03	15.[illegible]	-15.[illegible]	0.[illegible]	2.0557	-0.0274	0.1714	0.5466	-0.3752	-1.0553
129	50.61	0.01	15.[illegible]	-15.[illegible]	0.[illegible]	2.[illegible]	-0.0131	0.1641	0.5431	-0.3850	-1.0506
130	50.79	0.03	15.[illegible]	-15.[illegible]	0.3641	2.0069	-0.0207	0.1765	0.5593	-0.3828	-1.0555
131	50.95	0.02	15.[illegible]	-15.[illegible]	0.[illegible]	2.0373	-0.0219	0.1592	0.5633	-0.4041	-1.0623
132	51.10	0.02	15.[illegible]	-15.[illegible]	0.[illegible]	2.[illegible]	-0.0207	0.1666	0.5533	-0.3847	-1.0483
133	51.28	0.02	15.[illegible]	-15.[illegible]	0.[illegible]	2.[illegible]	-0.0352	0.1475	0.5528	-0.4053	-1.0450
134	51.46	0.04	15.[illegible]	-15.[illegible]	0.3[illegible]	2.5953	-0.0206	0.1633	0.5498	-0.3865	-1.0497
135	51.61	0.03	15.[illegible]	-15.[illegible]	0.[illegible]	3.20[illegible]	-0.0405	0.1677	0.5598	-0.3921	-1.0539
136	51.79	0.05	15.[illegible]	-15.[illegible]	0.4716	2.9460	-0.0529	0.1565	0.5671	-0.4106	-1.0457
137	51.95	0.02	15.[illegible]	-15.[illegible]	0.[illegible]	3.2596	-0.0354	0.1494	0.5635	-0.4141	-1.0457
138	52.12	0.06	15.[illegible]	-15.3349	0.6506	3.2499	-0.0386	0.1618	0.5771	-0.4153	-1.0270

PAGE 1 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	TEAM	MACH	PSI	CONF	ALPHA	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	71	JOHN	1.7	0.0	-1.0731	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
140	52.28	0.00	16.3421	-16.1334	0.5728	2.9838	-0.0378	0.1516	0.5742	-0.4228	-1.0241
140	52.45	0.00	16.1108	-16.0376	0.6397	3.0191	-0.0377	0.1716	0.5841	-0.4145	-1.0246
141	52.62	0.00	16.0844	-16.0687	0.6401	3.1128	-0.0379	0.1469	0.5765	-0.4316	-1.0247
142	52.79	0.00	16.1550	-16.0315	1.1116	2.8726	0.0169	0.1451	0.5746	-0.4315	-1.0232
143	52.95	0.00	16.2948	-16.1731	1.1116	3.1333	0.0006	0.1378	0.5751	-0.4373	-1.0296
144	53.12	0.00	16.2147	-16.0991	1.1161	3.2612	0.0078	0.1386	0.5817	-0.4431	-1.0174
145	53.29	0.00	16.6036	-16.1963	1.1202	3.6516	0.0013	0.1401	0.5892	-0.4491	-1.0237
146	53.47	0.00	16.5877	-16.1619	1.3495	3.1526	0.0090	0.1405	0.5964	-0.4559	-1.0117
147	53.62	0.00	16.5902	-16.1352	1.6996	3.1625	-0.0226	0.1411	0.5996	-0.4563	-0.9861
148	53.79	0.00	16.5713	-16.1516	1.5016	3.1934	-0.0069	0.1283	0.5988	-0.4605	-0.9978
149	53.95	0.00	16.5235	-16.1362	1.6803	3.1860	-0.0148	0.1249	0.5929	-0.4720	-0.9828
150	54.11	0.00	16.4690	-16.1784	1.6477	3.3947	-0.0228	0.1229	0.6002	-0.4773	-0.9824
151	54.29	0.00	16.4997	-16.1382	1.5597	3.4115	-0.0543	0.1249	0.5966	-0.4717	-0.9784
152	54.45	0.00	16.7390	-16.1775	1.5518	3.8065	-0.0396	0.1382	0.5921	-0.4559	-0.9805
153	54.63	0.00	16.5161	-16.1727	1.6528	3.6472	-0.0401	0.1257	0.5960	-0.4703	-0.9567
154	54.78	0.00	16.9154	-16.1988	1.6962	4.2714	-0.0245	0.1097	0.5709	-0.4612	-0.9483
155	54.95	0.00	16.9127	-16.2526	1.6760	4.5734	-0.0066	0.0716	0.5327	-0.4610	-0.9241
156	55.11	0.00	17.1078	-16.2525	0.9869	4.7570	-0.0012	0.0789	0.5296	-0.4506	-0.9269
157	55.29	0.00	17.1171	-16.2988	1.6717	4.8565	0.0160	0.0761	0.5424	-0.4662	-0.9268
158	55.46	0.00	17.1550	-16.2748	0.9778	4.9879	0.0220	0.0498	0.5199	-0.4700	-0.9061
159	55.62	0.00	17.3267	-16.2162	1.6718	4.7061	-0.0073	0.0885	0.5367	-0.4671	-0.9246
160	55.78	0.00	17.3387	-16.2765	0.9666	4.8906	0.0225	0.0581	0.5327	-0.4745	-0.9156
161	55.91	0.00	17.5134	-16.2657	1.6782	4.9517	0.0231	0.0533	0.5282	-0.4748	-0.9053
162	56.08	0.00	17.5409	-16.2612	1.2255	4.5658	0.0003	0.0754	0.5399	-0.4644	-0.9334
163	56.21	0.00	17.5447	-16.2436	1.2137	4.3573	0.0091	0.0736	0.5405	-0.4678	-0.9291
164	56.37	0.00	17.5731	-16.2756	1.1573	4.5656	0.0086	0.0783	0.5414	-0.4630	-0.9265
165	56.52	0.00	17.6156	-16.2614	1.0659	4.6083	0.0089	0.0662	0.5424	-0.4622	-0.9194
166	56.68	0.00	17.6816	-16.2873	0.9783	4.3009	-0.0055	0.0849	0.5467	-0.4577	-0.9359
167	56.84	0.00	17.5158	-16.2572	1.0927	4.4256	0.0186	0.0705	0.5330	-0.4624	-0.9281
168	56.98	0.00	17.4177	-16.2136	0.9656	4.2715	0.0031	0.0721	0.5437	-0.4715	-0.9320
169	57.16	0.00	17.6526	-16.2933	0.9457	4.2723	0.0135	0.0613	0.5366	-0.4752	-0.9311
170	57.29	0.00	17.2497	-16.2557	0.8934	4.1745	0.0116	0.0651	0.5436	-0.4754	-0.9294
171	57.44	0.00	17.5248	-16.2338	0.9782	4.0146	0.0109	0.0617	0.5369	-0.4731	-0.9360
172	57.57	0.00	17.5433	-16.2726	0.9258	3.6933	0.0049	0.0498	0.5379	-0.4881	-0.9280
173	57.71	0.00	17.5691	-16.2593	0.8285	3.4013	-0.0011	0.0686	0.5446	-0.4761	-0.9341
174	57.88	0.00	17.5269	-16.2767	0.8444	3.3417	-0.0003	0.0819	0.5537	-0.4717	-0.9413
175	58.01	0.00	17.5528	-16.2612	0.8315	3.2306	0.0065	0.0665	0.5365	-0.4699	-0.9296
176	58.18	0.00	17.6532	-16.2963	0.7680	3.0147	0.0080	0.0904	0.5425	-0.4570	-0.9382
177	58.29	0.00	17.5252	-16.2485	0.8316	3.4526	0.0139	0.0622	0.5405	-0.4762	-0.9327
178	58.33	0.00	17.6612	-16.2627	0.8240	2.9972	0.0160	0.0757	0.5492	-0.4734	-0.9435

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RA10-6 PHI CONF I DEL1 DEL2 DEL3 DEL4 TRANSITION
/ /1 0.80 1.7 0.0 =1=CF31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CPF1	CM1	CN1	ACPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-5.66	0.02	0.0139	0.0015	-0.0062	0.1151	-0.0199	-0.1936	-0.0204	-0.0759	0.1056	0.3918
2	-5.66	0.01	0.0143	0.0021	-0.0065	0.1243	0.0307	-0.1935	-0.0205	-0.0763	0.1062	0.3941
3	-5.64	0.01	0.0123	0.0010	-0.0057	0.1361	-0.0569	-0.1984	-0.0208	-0.0782	0.1048	0.3929
4	-5.75	0.01	0.0148	0.0017	-0.0066	0.1169	-0.0270	-0.1901	-0.0200	-0.0734	0.1054	0.3859
5	-5.57	0.01	0.0155	0.0019	0.0	0.1161	0.0	-0.1696	-0.0183	-0.0649	0.1041	0.3828
6	-4.19	0.02	0.0141	0.0018	-0.0048	0.1135	-0.1135	-0.1149	-0.0131	-0.0363	0.1142	0.3330
7	-2.39	0.01	0.0162	0.0021	0.0	0.1157	0.0	-0.0645	-0.0065	-0.0107	0.1316	0.2168
8	-0.38	0.00	0.0143	0.0015	-0.0021	0.1124	-0.1575	-0.0143	0.0034	0.0079	-0.0280	-0.5524
9	1.57	0.02	0.0142	0.0010	-0.0027	0.1127	-0.1991	0.0210	0.0071	0.0248	0.3381	1.1762
10	3.56	0.02	0.0154	0.0018	-0.0022	0.1006	-0.1364	0.0881	0.0141	0.0532	0.1604	0.6041
11	5.54	0.01	0.0179	0.0019	-0.0025	0.0833	-0.1488	0.1589	0.0205	0.0857	0.1293	0.5391
12	7.52	0.01	0.0190	0.0013	-0.0029	0.0812	-0.1812	0.2369	0.0269	0.1210	0.1124	0.5067
13	9.33	0.01	0.0174	0.0016	-0.0033	0.0835	-0.0767	0.3329	0.0313	0.1650	0.0938	0.4958
14	11.29	0.01	0.0178	0.0014	-0.0010	0.0905	-0.0575	0.4323	0.0360	0.2098	0.0832	0.4854
15	13.26	0.01	0.0191	0.0009	-0.0021	0.0936	-0.1391	0.5305	0.0408	0.2496	0.0760	0.4853
16	15.19	0.01	0.0218	0.0005	0.0035	0.0235	0.1051	0.6393	0.0444	0.2870	0.0694	0.4889
17	17.23	0.01	0.0262	0.0001	0.0057	0.0850	0.2822	0.7494	0.0481	0.3265	0.0642	0.4956
18	19.20	0.01	0.0194	-0.0029	0.0044	-0.1495	0.4665	0.8343	0.0506	0.3571	0.0607	0.4281
19	21.22	0.01	0.0179	-0.0054	0.0072	-0.1774	0.9674	0.9145	0.0534	0.3885	0.0586	0.4248
20	23.20	0.01	0.0197	-0.0042	0.0	0.7119	0.0	0.9954	0.0567	0.4196	0.0570	0.4215
21	25.16	0.00	-0.0795	-0.2654	-0.0366	0.6677	0.4662	1.0614	0.0600	0.4440	0.0566	0.4183
22	27.09	0.00	-0.0867	0.0017	-0.0394	-0.0142	0.6723	1.1155	0.0665	0.4567	0.0596	0.4112
23	28.32	0.01	0.0326	0.0067	-0.0163	1.2335	-3.5192	1.1238	0.0620	0.4541	0.0552	0.4041
24	28.33	0.02	-0.0164	0.0356	-0.0252	-0.0097	1.9514	1.1272	0.0631	0.4556	0.0560	0.4042
25	28.28	0.03	0.1342	0.0096	-0.0027	0.2302	-0.0691	1.1168	0.0507	0.4493	0.0508	0.4023
26	28.49	0.03	0.0214	0.0044	0.0160	0.1219	0.1970	1.1026	0.0521	0.4414	0.0473	0.4003
27	29.25	0.05	0.1406	0.0109	0.0310	0.1005	0.2861	1.0974	0.0496	0.4356	0.0452	0.3969
28	29.57	0.05	0.1759	0.0135	0.0707	0.0756	0.3955	1.0842	0.0443	0.4284	0.0409	0.3951
29	29.86	0.06	0.2245	0.0153	0.0934	0.0562	0.4155	1.0899	0.0407	0.4285	0.0373	0.3931
30	30.13	0.07	0.2275	0.0155	0.0964	0.0463	0.4326	1.0995	0.0429	0.4321	0.0390	0.3930
31	30.41	0.08	0.2950	0.0204	0.1277	0.0315	0.4327	1.1140	0.0403	0.4363	0.0362	0.3917
32	30.68	0.09	0.2726	0.0218	0.1169	0.0793	0.4460	1.1091	0.0415	0.4346	0.0374	0.3919
33	30.95	0.09	0.3078	0.0256	0.1371	0.0853	0.4456	1.1236	0.0406	0.4386	0.0361	0.3904
34	31.23	0.09	0.3176	0.0262	0.1394	0.0926	0.4349	1.1234	0.0381	0.4375	0.0339	0.3894
35	31.51	0.10	0.3597	0.0314	0.1595	0.0966	0.4435	1.1241	0.0355	0.4373	0.0316	0.3890
36	31.78	0.11	0.3591	0.0316	0.1595	0.0876	0.4456	1.1377	0.0397	0.4415	0.0349	0.3881
37	32.04	0.11	0.3814	0.0338	0.1706	0.0985	0.4479	1.1591	0.0420	0.4505	0.0362	0.3887
38	32.32	0.12	0.4116	0.0391	0.1867	0.0950	0.4479	1.1634	0.0436	0.4503	0.0375	0.3871
39	32.58	0.12	0.4158	0.0391	0.1894	0.0990	0.4555	1.1799	0.0466	0.4575	0.0395	0.3878
40	32.83	0.12	0.3978	0.0359	0.1793	0.0901	0.4513	1.1842	0.0480	0.4584	0.0405	0.3871
41	33.10	0.12	0.4214	0.0378	0.1935	0.0997	0.4595	1.1981	0.0511	0.4639	0.0427	0.3873
42	33.36	0.13	0.4223	0.0381	0.1931	0.0902	0.4570	1.2064	0.0513	0.4651	0.0425	0.3855
43	33.64	0.13	0.4403	0.0389	0.1997	0.0959	0.4603	1.2287	0.0567	0.4745	0.0462	0.3862
44	33.90	0.13	0.3912	0.0305	0.1819	0.0981	0.4649	1.2375	0.0580	0.4787	0.0469	0.3868
45	34.10	0.14	0.4141	0.0342	0.1957	0.0913	0.4624	1.2377	0.0571	0.4793	0.0461	0.3872
46	34.33	0.13	0.3962	0.0294	0.1872	0.0769	0.4773	1.2405	0.0579	0.4761	0.0467	0.3854

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART RUN RX10=6 CM1 CONE L DEL1 DEL2 DEL3 DELA TRANSITION
7 71 0.80 1.7 0.0 BLADE31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
47	34.61	0.13	0.3945	0.0401	0.1580	0.0762	0.4795	1.2062	0.0574	0.4796	0.0461	0.3849
48	34.89	0.14	0.3920	0.0435	0.1636	0.0811	0.4811	1.2049	0.0593	0.4816	0.0473	0.3838
49	35.17	0.14	0.3944	0.0388	0.1606	0.0696	0.4820	1.2331	0.0551	0.4739	0.0447	0.3843
50	35.33	0.14	0.3931	0.0361	0.1749	0.0663	0.4952	1.2280	0.0539	0.4700	0.0439	0.3827
51	35.50	0.15	0.3939	0.0374	0.1549	0.0515	0.4949	1.2311	0.0526	0.4715	0.0427	0.3830
52	35.80	0.14	0.2705	0.0277	0.1361	0.1004	0.4957	1.1696	0.0439	0.4479	0.0375	0.3930
53	36.03	0.14	0.2803	0.0284	0.1264	0.1061	0.5065	1.1747	0.0453	0.4488	0.0366	0.3821
54	36.24	0.13	0.2953	0.0269	0.1023	0.1234	0.5007	1.1775	0.0451	0.4496	0.0363	0.3820
55	36.49	0.14	0.2909	0.0249	0.0837	0.1556	0.4921	1.1735	0.0443	0.4490	0.0377	0.3826
56	36.73	0.13	0.1859	0.0282	0.0924	0.1515	0.4970	1.1797	0.0448	0.4507	0.0380	0.3821
57	36.98	0.14	0.1856	0.0267	0.0813	0.1639	0.4936	1.1993	0.0465	0.4583	0.0388	0.3822
58	37.21	0.14	0.1542	0.0270	0.0789	0.1693	0.4953	1.1904	0.0457	0.4549	0.0384	0.3822
59	37.45	0.14	0.1534	0.0267	0.0756	0.1715	0.4861	1.1979	0.0461	0.4577	0.0385	0.3822
60	37.68	0.15	0.1440	0.0273	0.0655	0.1893	0.4951	1.1829	0.0433	0.4518	0.0366	0.3820
61	37.96	0.15	0.1438	0.0271	0.0576	0.1852	0.4706	1.1816	0.0444	0.4515	0.0376	0.3821
62	38.13	0.15	0.1261	0.0252	0.0570	0.1945	0.4523	1.1792	0.0399	0.4515	0.0338	0.3829
63	38.38	0.15	0.1158	0.0271	0.0507	0.2340	0.4345	1.1682	0.0402	0.4470	0.0344	0.3827
64	38.61	0.15	0.1222	0.0269	0.0524	0.2199	0.4290	1.1759	0.0384	0.4504	0.0326	0.3830
65	38.83	0.15	0.1191	0.0252	0.0452	0.2278	0.4254	1.1865	0.0375	0.4488	0.0321	0.3844
66	39.04	0.15	0.1249	0.0271	0.0504	0.2265	0.4347	1.1568	0.0342	0.4420	0.0296	0.3829
67	39.27	0.15	0.1158	0.0265	0.0496	0.2359	0.4151	1.1457	0.0339	0.4379	0.0296	0.3822
68	39.49	0.15	0.1224	0.0269	0.0529	0.2359	0.4300	1.1459	0.0333	0.4393	0.0290	0.3834
69	39.69	0.15	0.1159	0.0267	0.0703	0.2185	0.4483	1.1730	0.0339	0.4483	0.0289	0.3831
70	39.90	0.15	0.2179	0.0306	0.0948	0.1405	0.4588	1.1734	0.0327	0.4481	0.0278	0.3819
71	40.11	0.15	0.2004	0.0287	0.0926	0.1630	0.4630	1.1851	0.0326	0.4520	0.0276	0.3816
72	40.31	0.15	0.2017	0.0281	0.0953	0.1597	0.4724	1.1858	0.0340	0.4507	0.0266	0.3801
73	40.50	0.15	0.2052	0.0256	0.1161	0.1036	0.4655	1.2075	0.0345	0.4599	0.0285	0.3809
74	40.71	0.15	0.2309	0.0245	0.1095	0.1043	0.4746	1.2032	0.0334	0.4576	0.0281	0.3804
75	40.93	0.15	0.2048	0.0263	0.0950	0.1256	0.4559	1.2067	0.0340	0.4594	0.0262	0.3808
76	41.12	0.15	0.1917	0.0288	0.0860	0.1458	0.4353	1.1700	0.0320	0.4441	0.0273	0.3796
77	41.48	0.11	0.2037	0.0254	0.0915	0.1481	0.4496	1.2043	0.0331	0.4587	0.0275	0.3809
78	41.55	0.13	0.2156	0.0312	0.0994	0.1444	0.4624	1.1922	0.0301	0.4552	0.0252	0.3818
79	41.74	0.13	0.1829	0.0294	0.0995	0.1533	0.4566	1.2018	0.0318	0.4587	0.0266	0.3817
80	41.93	0.14	0.2000	0.0304	0.1190	0.1304	0.4487	1.1953	0.0274	0.4563	0.0232	0.3818
81	42.14	0.15	0.2016	0.0342	0.1068	0.1647	0.4421	1.1811	0.0267	0.4502	0.0226	0.3812
82	42.32	0.15	0.1908	0.0370	0.0914	0.1940	0.4269	1.1800	0.0270	0.4520	0.0228	0.3831
83	42.56	0.15	0.1951	0.0382	0.0864	0.1921	0.4306	1.1933	0.0282	0.4569	0.0236	0.3829
84	42.79	0.15	0.2076	0.0344	0.1004	0.1727	0.4234	1.2016	0.0276	0.4612	0.0229	0.3839
85	42.98	0.15	0.2077	0.0367	0.1161	0.1704	0.4203	1.1966	0.0258	0.4588	0.0215	0.3834
86	43.15	0.16	0.2067	0.0395	0.1067	0.1903	0.4190	1.1767	0.0251	0.4504	0.0213	0.3831
87	43.29	0.16	0.2077	0.0386	0.1117	0.1866	0.4173	1.2012	0.0259	0.4610	0.0215	0.3838
88	43.42	0.16	0.1954	0.0383	0.1134	0.1963	0.4142	1.1956	0.0223	0.4598	0.0187	0.3846
89	43.59	0.16	0.2048	0.0365	0.1168	0.1918	0.4032	1.1847	0.0222	0.4548	0.0186	0.3839
90	43.78	0.15	0.1963	0.0369	0.1223	0.1931	0.4154	1.1895	0.0215	0.4574	0.0181	0.3846
91	43.95	0.15	0.1932	0.0411	0.1368	0.1835	0.4093	1.2064	0.0245	0.4631	0.0203	0.3839
92	44.13	0.16	0.1985	0.0429	0.1415	0.1816	0.4083	1.2094	0.0233	0.4659	0.0193	0.3852

AEDC-TR-75-125

MARTIN MISSILE TAILS EFFECTS DATA

TEST	RUN	MACH	REAL-G	PHI	CONE	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	71	0.80	1.7	0.0	0.0CF31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
93	99.39	0.17	0.3324	0.0058	0.1325	0.1943	0.3940	1.1904	0.0213	0.4571	0.0179	0.3839
94	99.69	0.15	0.3354	0.0064	0.1454	0.1919	0.4012	1.1940	0.0215	0.4667	0.0180	0.3843
95	99.80	0.15	0.3224	0.0057	0.1314	0.1979	0.3996	1.2023	0.0225	0.4633	0.0188	0.3854
96	94.47	0.15	0.4141	0.0614	0.1284	0.1955	0.4034	1.2094	0.0232	0.4648	0.0192	0.3843
97	95.48	0.15	0.3154	0.0056	0.1265	0.1965	0.3996	1.2148	0.0234	0.4674	0.0193	0.3847
98	95.81	0.15	0.2963	0.0512	0.1131	0.2141	0.3942	1.2150	0.0237	0.4656	0.0195	0.3838
99	95.81	0.15	0.2969	0.0618	0.1185	0.2069	0.3993	1.2233	0.0230	0.4710	0.0188	0.3850
100	95.99	0.16	0.2969	0.0639	0.1120	0.2241	0.3932	1.2099	0.0226	0.4631	0.0189	0.3828
101	95.78	0.16	0.2792	0.0606	0.1109	0.2196	0.3955	1.2091	0.0232	0.4643	0.0192	0.3840
102	95.96	0.15	0.2946	0.0627	0.1062	0.2405	0.3842	1.2128	0.0232	0.4657	0.0192	0.3840
103	95.81	0.15	0.2990	0.0599	0.1069	0.2236	0.3899	1.2255	0.0229	0.4718	0.0187	0.3850
104	96.29	0.16	0.2963	0.0601	0.0934	0.2441	0.3792	1.2277	0.0251	0.4704	0.0204	0.3831
105	95.98	0.15	0.2959	0.0653	0.1025	0.2457	0.3855	1.2133	0.0214	0.4655	0.0177	0.3836
106	95.63	0.16	0.2896	0.0629	0.0994	0.2426	0.3838	1.2151	0.0211	0.4675	0.0174	0.3847
107	95.80	0.15	0.2934	0.0643	0.0992	0.2513	0.3797	1.2199	0.0236	0.4695	0.0194	0.3840
108	95.99	0.16	0.2974	0.0634	0.0930	0.2564	0.3756	1.2275	0.0223	0.4719	0.0182	0.3844
109	97.15	0.16	0.2317	0.0611	0.0663	0.2654	0.3740	1.2119	0.0241	0.4638	0.0199	0.3828
110	97.31	0.16	0.2277	0.0621	0.0523	0.2729	0.3614	1.2228	0.0237	0.4691	0.0194	0.3836
111	97.48	0.16	0.2263	0.0616	0.0536	0.2746	0.3727	1.2291	0.0247	0.4700	0.0201	0.3827
112	97.47	0.15	0.2250	0.0612	0.0540	0.2710	0.3716	1.2387	0.0253	0.4749	0.0204	0.3834
113	97.84	0.16	0.2206	0.0595	0.0527	0.2712	0.3748	1.2331	0.0257	0.4731	0.0208	0.3836
114	98.01	0.15	0.2014	0.0567	0.0746	0.2830	0.3730	1.2348	0.0250	0.4749	0.0201	0.3833
115	98.16	0.16	0.2291	0.0586	0.0779	0.2717	0.3718	1.2457	0.0260	0.4785	0.0208	0.3841
116	99.35	0.15	0.1661	0.0522	0.0691	0.2806	0.3716	1.2582	0.0268	0.4821	0.0213	0.3832
117	98.51	0.15	0.1870	0.0521	0.0715	0.2793	0.3860	1.2528	0.0264	0.4816	0.0210	0.3844
118	98.70	0.09	0.1827	0.0505	0.0520	0.3103	0.3812	1.2677	0.0268	0.4861	0.0227	0.3834
119	98.85	0.05	0.1813	0.0437	0.0527	0.3092	0.3993	1.2550	0.0292	0.4753	0.0232	0.3819
120	99.03	0.03	0.0154	0.0184	0.0062	1.0049	0.4026	1.2502	0.0346	0.4737	0.0277	0.3789
121	99.22	0.03	-0.0231	0.0057	-0.0033	-0.2554	0.1429	1.2491	0.0359	0.4730	0.0283	0.3787
122	99.46	0.02	-0.0350	0.0039	-0.0054	-0.1491	0.2407	1.2531	0.0340	0.4753	0.0271	0.3793
123	99.57	0.01	-0.0716	-0.0003	-0.0201	0.0042	0.3636	1.2485	0.0369	0.4672	0.0307	0.3762
124	99.76	0.02	-0.0463	0.0075	-0.0165	-0.2457	0.2134	1.2644	0.0321	0.4804	0.0254	0.3799
125	99.99	0.02	-0.0332	0.0099	-0.0133	-0.2521	0.3706	1.2659	0.0243	0.4688	0.0192	0.3843
126	51.10	0.01	-0.0239	0.0125	-0.0068	-0.5459	0.2957	1.2759	0.0254	0.4806	0.0202	0.3829
127	50.87	0.02	-0.0274	0.0101	-0.0178	-0.2113	0.3724	1.2767	0.0222	0.4923	0.0174	0.3856
128	51.04	0.03	-0.0264	0.0113	-0.0179	-0.2441	0.3737	1.2861	0.0240	0.4963	0.0187	0.3853
129	50.81	0.01	-0.0253	0.0115	-0.0194	-0.2291	0.3805	1.2813	0.0223	0.4937	0.0174	0.3853
130	50.79	0.03	-0.0305	0.0118	-0.0195	-0.2302	0.3869	1.2811	0.0200	0.4946	0.0156	0.3861
131	50.93	0.02	-0.0328	0.0109	-0.0220	-0.1736	0.3901	1.2973	0.0205	0.5011	0.0158	0.3863
132	51.10	0.02	-0.0435	0.0087	-0.0241	-0.1372	0.3801	1.2836	0.0208	0.4946	0.0162	0.3853
133	51.28	0.02	-0.0733	0.0050	-0.0251	-0.0945	0.3911	1.2809	0.0251	0.4912	0.0196	0.3835
134	51.46	0.03	-0.0653	0.0096	-0.0241	-0.1472	0.3696	1.2903	0.0192	0.4996	0.0149	0.3872
135	51.61	0.03	-0.1056	0.0085	-0.0496	-0.0614	0.3828	1.2871	0.0210	0.4971	0.0163	0.3862
136	51.79	0.04	-0.1030	0.0096	-0.0540	-0.0518	0.3775	1.2935	0.0216	0.4985	0.0167	0.3854
137	51.95	0.04	-0.0955	0.0090	-0.0515	-0.0563	0.3681	1.2919	0.0204	0.4997	0.0158	0.3868
138	52.17	0.05	-0.0793	0.0056	-0.0454	-0.0717	0.3360	1.2808	0.0180	0.4959	0.0141	0.3872

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	ALFA-B	PHI	CONF	I	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	71	0.60	1.7	0.0	-1.0731	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
139	52.20	0.05	-0.0496	0.0063	-0.0296	-0.0428	0.3345	1.2776	0.0192	0.4566	0.0151	0.3870
140	52.45	0.10	-0.1525	0.0169	-0.0167	-0.1098	0.3167	1.2966	0.0155	0.5057	0.0120	0.3895
141	52.82	0.05	-0.0548	0.0074	-0.0287	-0.0909	0.3516	1.2888	0.0147	0.5026	0.0114	0.3900
142	52.79	0.10	-0.1248	0.0184	-0.0087	-0.0599	0.3091	1.2988	0.0167	0.4929	0.0112	0.3885
143	52.95	0.15	-0.2178	0.0194	-0.0268	-0.1378	0.3717	1.2725	0.0149	0.4951	0.0109	0.3899
144	53.16	0.05	-0.0591	0.0157	-0.0164	-0.0380	0.3880	1.2596	0.0134	0.4906	0.0107	0.3896
145	53.24	0.05	-0.0590	0.0157	-0.0213	-0.0621	0.3556	1.2669	0.0131	0.4959	0.0103	0.3908
146	53.47	0.10	-0.1967	0.0154	-0.0024	-1.2565	0.1973	1.2818	0.0168	0.5096	0.0106	0.3906
147	53.62	0.15	-0.2962	0.0154	-0.0064	-1.0164	0.4635	1.2756	0.0049	0.5011	0.0070	0.3929
148	53.79	0.11	-0.2277	0.0121	-0.0103	-0.7243	0.3732	1.2880	0.0134	0.5041	0.0104	0.3914
149	53.95	0.15	-0.2154	0.0179	-0.0084	-1.1258	0.4065	1.2726	0.0098	0.4998	0.0078	0.3928
150	54.11	0.10	-0.1240	0.0174	-0.0103	-0.0840	0.5049	1.2826	0.0056	0.5051	0.0044	0.3938
151	54.25	0.12	-0.1582	0.0153	-0.0149	-0.0805	0.4546	1.2864	0.0027	0.5042	0.0021	0.3957
152	54.46	0.12	-0.1814	0.0142	-0.0083	-1.0075	0.4701	1.2846	-0.0012	0.5050	-0.0009	0.3981
153	54.63	0.12	-0.2352	0.0177	-0.0162	-0.8199	0.4040	1.2501	-0.0109	0.5048	-0.0087	0.4033
154	54.78	0.10	-0.1617	0.0161	-0.0084	-0.0364	0.3120	1.2140	-0.0189	0.4942	-0.0156	0.4071
155	54.93	0.17	-0.3362	0.0217	-0.0088	-0.9499	0.2403	1.1910	-0.0228	0.4882	-0.0192	0.4099
156	55.11	0.05	-0.0591	-0.0128	-0.0147	0.0414	0.3397	1.1987	-0.0241	0.4844	-0.0203	0.4092
157	55.25	0.10	-0.1627	-0.0180	-0.0192	0.0783	0.3115	1.1795	-0.0241	0.4836	-0.0205	0.4098
158	55.42	0.09	-0.1491	-0.0185	-0.0171	0.1443	0.2948	1.1745	-0.0249	0.4848	-0.0211	0.4110
159	55.57	0.05	-0.0819	-0.0138	-0.0122	0.0501	0.2914	1.2066	-0.0250	0.4931	-0.0207	0.4094
160	55.74	0.05	-0.0829	-0.0184	-0.0177	0.1147	0.3172	1.1934	-0.0247	0.4849	-0.0207	0.4097
161	55.91	0.10	-0.1727	-0.0128	-0.0227	0.1793	0.3127	1.1650	-0.0247	0.4774	-0.0212	0.4098
162	56.06	0.11	-0.2041	-0.0169	-0.0169	0.1071	0.2979	1.2232	-0.0264	0.5040	-0.0215	0.4121
163	56.21	0.11	-0.2032	-0.0167	-0.0185	0.1754	0.2756	1.2067	-0.0265	0.4960	-0.0219	0.4111
164	56.37	0.10	-0.1835	-0.0133	-0.0124	0.0944	0.3713	1.2305	-0.0262	0.5054	-0.0213	0.4107
165	56.52	0.08	-0.1493	-0.0125	-0.0122	0.1722	0.3165	1.2146	-0.0262	0.4996	-0.0215	0.4116
166	56.68	0.08	-0.1418	-0.0132	-0.0124	0.0747	0.3070	1.2259	-0.0266	0.5043	-0.0217	0.4130
167	56.82	0.07	-0.1167	-0.0103	-0.0116	0.0982	0.1224	1.2292	-0.0275	0.5071	-0.0223	0.4126
168	56.99	0.07	-0.0820	-0.0102	-0.0102	0.0878	0.3147	1.2404	-0.0282	0.5112	-0.0227	0.4121
169	57.16	0.08	-0.0776	-0.0144	-0.0103	0.1724	0.2566	1.2344	-0.0267	0.5096	-0.0216	0.4130
170	57.29	0.07	-0.0720	-0.0133	-0.0072	0.1591	0.3273	1.2357	-0.0281	0.5101	-0.0227	0.4128
171	57.43	0.05	-0.0212	-0.0138	-0.0051	0.2871	0.2525	1.2296	-0.0288	0.5075	-0.0234	0.4128
172	57.57	0.06	-0.0422	-0.0136	-0.0054	0.1532	0.2613	1.2294	-0.0287	0.5058	-0.0230	0.4130
173	57.71	0.05	-0.0240	-0.0139	-0.0035	0.2712	0.1403	1.2305	-0.0289	0.5083	-0.0235	0.4131
174	57.88	0.06	-0.0215	-0.0129	-0.0055	0.1307	0.2556	1.2473	-0.0298	0.5148	-0.0239	0.4127
175	58.01	0.07	-0.0215	-0.0126	-0.0016	0.2130	0.1353	1.2430	-0.0282	0.5147	-0.0227	0.4140
176	58.16	0.04	-0.0178	-0.0136	0.0	0.4515	0.0	1.2518	-0.0301	0.5177	-0.0240	0.4135
177	58.29	0.05	-0.0112	-0.0129	-0.0032	0.2665	0.1025	1.2434	-0.0295	0.5138	-0.0237	0.4132
178	58.33	0.04	-0.0125	-0.0056	0.0	0.4320	0.0	1.2399	-0.0302	0.5134	-0.0243	0.4140

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

IES1 EAS1 MACH RATIO PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 71 0.80 1.0 0.0 M1=0F31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CM4	XCPF3	YCPF3	CNF4	CM4	CM4	XCPF4	YCPF4
1	-5.05	0.02	-0.0136	0.0113	0.0113	0.9999	-0.7152	-0.1568	-0.0214	-0.0940	0.1350	0.5918
2	-5.00	0.01	-0.0141	0.0117	0.0117	0.9999	-0.8258	-0.1597	-0.0214	-0.0934	0.1343	0.5847
3	-5.05	0.01	-0.0136	0.0113	0.0113	0.9999	-0.7152	-0.1567	-0.0214	-0.0933	0.1351	0.5878
4	-5.05	0.01	-0.0136	0.0113	0.0113	0.9999	-0.7152	-0.1527	-0.0209	-0.0895	0.1371	0.5860
5	-5.07	0.01	-0.0136	0.0113	0.0113	0.9999	-0.6526	-0.1362	-0.0194	-0.0805	0.1426	0.5938
6	-4.99	0.02	-0.0134	0.0111	0.0111	0.9999	-0.7152	-0.0749	-0.0136	-0.0556	0.1521	0.7430
7	-2.31	0.01	-0.0141	0.0121	0.0121	0.9999	-0.8582	-0.0127	-0.0066	-0.0256	0.5147	2.0000
8	-0.38	0.00	-0.0141	0.0121	0.0121	0.9999	-0.8582	0.0241	0.0008	-0.0071	0.0276	-0.2448
9	1.67	0.02	-0.0141	0.0121	0.0121	0.9999	-0.8582	0.0681	0.0071	0.0117	0.1044	0.1721
10	3.66	0.02	-0.0116	0.0114	0.0114	0.9999	-1.0259	0.1357	0.0142	0.0403	0.1049	0.2969
11	5.63	0.01	-0.0096	0.0112	0.0112	0.9999	-1.5732	0.2091	0.0213	0.0766	0.1021	0.3661
12	7.62	0.01	-0.0096	0.0110	0.0110	0.9999	-1.3111	0.2900	0.0275	0.1152	0.0947	0.3974
13	9.33	0.01	-0.0109	0.0101	0.0101	0.9999	-1.0338	0.3606	0.0334	0.1536	0.0877	0.4042
14	11.29	0.01	-0.0084	0.0091	0.0091	0.9999	-1.4219	0.4730	0.0384	0.1937	0.0811	0.4095
15	13.22	0.01	-0.0021	0.0091	0.0091	0.9999	-4.3333	0.5809	0.0414	0.2404	0.0709	0.4068
16	15.19	0.01	-0.0036	0.0102	0.0102	0.9999	2.6667	0.7051	0.0453	0.2936	0.0642	0.4022
17	17.23	0.01	-0.0089	0.0106	0.0106	0.9999	1.2045	0.8259	0.0501	0.3289	0.0607	0.3982
18	19.20	0.01	-0.0084	0.0106	0.0106	0.9999	1.2045	0.9279	0.0539	0.3655	0.0581	0.3940
19	21.26	0.01	-0.0113	0.0102	0.0102	0.9999	1.9558	0.9955	0.0617	0.3877	0.0620	0.3894
20	23.26	0.01	-0.0077	0.0095	0.0095	0.9999	1.3194	1.0406	0.0656	0.3985	0.0631	0.3830
21	25.16	0.01	-0.0064	0.0091	0.0091	0.9999	1.4219	1.0794	0.0698	0.4062	0.0681	0.3763
22	27.09	0.00	-0.0039	0.0079	0.0079	0.9999	2.0256	1.1415	0.0661	0.4302	0.0579	0.3768
23	29.06	0.01	-0.0089	0.0113	0.0113	0.9999	1.2841	1.1674	0.0674	0.4394	0.0578	0.3764
24	29.93	0.02	-0.0071	0.0112	0.0112	0.9999	1.5775	1.1720	0.0675	0.4408	0.0576	0.3761
25	29.99	0.01	-0.0136	0.0109	0.0109	0.9999	1.1233	1.1606	0.0661	0.4448	0.0577	0.3768
26	29.96	0.03	-0.0120	0.0159	0.0159	0.9999	1.3250	1.1858	0.0676	0.4478	0.0570	0.3776
27	29.25	0.03	-0.0153	0.0188	0.0188	0.9999	1.2268	1.1925	0.0683	0.4510	0.0573	0.3782
28	29.57	0.03	-0.0195	0.0202	0.0202	0.9999	1.0359	1.1934	0.0683	0.4511	0.0573	0.3780
29	29.80	0.02	-0.0130	0.0211	0.0211	0.9999	1.1344	1.1994	0.0681	0.4528	0.0568	0.3776
30	30.13	0.02	-0.0165	0.0217	0.0217	0.9999	1.1667	1.2009	0.0685	0.4524	0.0571	0.3768
31	30.41	0.02	-0.0204	0.0225	0.0225	0.9999	1.1088	1.1921	0.0677	0.4483	0.0568	0.3761
32	30.00	0.02	-0.0235	0.0241	0.0241	0.9999	1.0212	1.2039	0.0683	0.4518	0.0568	0.3753
33	30.93	0.02	-0.0216	0.0230	0.0230	0.9999	1.0869	1.2004	0.0677	0.4485	0.0564	0.3737
34	31.23	0.02	-0.0240	0.0273	0.0273	0.9999	0.9477	1.2190	0.0681	0.4564	0.0559	0.3744
35	31.51	0.01	-0.0230	0.0259	0.0259	0.9999	0.9297	1.2054	0.0675	0.4488	0.0560	0.3724
36	31.78	0.01	-0.0253	0.0261	0.0261	0.9999	0.9924	1.2080	0.0676	0.4498	0.0560	0.3724
37	32.04	0.01	-0.0274	0.0269	0.0269	0.9999	0.9690	1.2175	0.0677	0.4519	0.0558	0.3712
38	32.32	0.01	-0.0247	0.0265	0.0265	0.9999	0.8295	1.1838	0.0650	0.4359	0.0549	0.3682
39	32.56	0.01	-0.0234	0.0241	0.0241	0.9999	0.8382	1.1636	0.0604	0.4273	0.0519	0.3672
40	32.83	0.01	-0.0203	0.0201	0.0201	0.9999	0.9924	1.1939	0.0625	0.4363	0.0524	0.3671
41	33.10	0.01	-0.0256	0.0263	0.0263	0.9999	0.9129	1.1332	0.0516	0.4120	0.0455	0.3636
42	33.36	0.13	-0.0250	0.0267	0.0267	0.9999	0.9268	1.1599	0.0565	0.4227	0.0470	0.3644
43	33.62	0.13	-0.0255	0.0259	0.0259	0.9999	1.0000	1.1201	0.0455	0.4042	0.0406	0.3609
44	33.46	0.13	-0.0305	0.0277	0.0277	0.9999	0.9112	1.1179	0.0430	0.4025	0.0385	0.3601
45	34.16	0.14	-0.0247	0.0260	0.0260	0.9999	0.9755	1.1105	0.0390	0.4004	0.0351	0.3606
46	34.43	0.13	-0.0311	0.0291	0.0291	0.9999	0.9355	1.0925	0.0369	0.3940	0.0319	0.3606

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	ENI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	71	0.40	1.7	0.0	B1=0P31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	YCPF4	YCPF4
47	34.81	0.14	0.0311	9.9999	0.0267	9.9999	0.9226	1.0740	0.0316	0.3841	0.0296	0.3814
48	34.85	0.14	0.0314	9.9999	0.0295	9.9999	0.9245	1.0714	0.0295	0.3841	0.0275	0.3832
49	35.02	0.14	0.0314	9.9999	0.0314	9.9999	0.9656	1.0553	0.0229	0.3805	0.0217	0.3803
50	35.33	0.14	0.0298	9.9999	0.0275	9.9999	0.9614	1.0495	0.0187	0.3873	0.0179	0.3890
51	35.58	0.15	0.0316	9.9999	0.0361	9.9999	0.9666	1.0479	0.0127	0.3876	0.0121	0.3701
52	35.80	0.15	0.0261	9.9999	0.0265	9.9999	0.9467	0.9867	0.0066	0.3862	0.0049	0.3731
53	36.04	0.14	0.0277	9.9999	0.0267	9.9999	1.0362	0.9928	0.0026	0.3715	0.0026	0.3741
54	36.26	0.15	0.0303	9.9999	0.0313	9.9999	0.9123	0.9879	0.0008	0.3705	0.0008	0.3750
55	36.49	0.14	0.0316	9.9999	0.0303	9.9999	0.9632	0.9898	0.0004	0.3834	0.0004	0.3749
56	36.73	0.15	0.0314	9.9999	0.0297	9.9999	0.9338	0.9759	0.0005	0.3865	0.0005	0.3755
57	36.98	0.14	0.0317	9.9999	0.0313	9.9999	0.9873	1.0839	-0.0036	0.3705	-0.0008	0.3765
58	37.21	0.14	0.0278	9.9999	0.0265	9.9999	1.0165	0.9908	-0.0002	0.3726	-0.0002	0.3760
59	37.45	0.14	0.0302	9.9999	0.0311	9.9999	0.9538	1.0030	-0.0010	0.3768	-0.0010	0.3757
60	37.68	0.15	0.0321	9.9999	0.0295	9.9999	0.9800	0.9885	-0.0007	0.3718	-0.0007	0.3759
61	37.94	0.15	0.0314	9.9999	0.0269	9.9999	0.9353	1.0033	-0.0006	0.3773	-0.0006	0.3760
62	38.13	0.15	0.0290	9.9999	0.0262	9.9999	1.0077	0.9991	-0.0010	0.3758	-0.0010	0.3761
63	38.38	0.15	0.0316	9.9999	0.0300	9.9999	0.9632	0.9993	-0.0012	0.3761	-0.0012	0.3763
64	38.61	0.15	0.0318	9.9999	0.0300	9.9999	0.9632	1.0161	-0.0016	0.3827	-0.0018	0.3766
65	38.83	0.14	0.0314	9.9999	0.0285	9.9999	0.8991	1.0148	-0.0017	0.3821	-0.0017	0.3765
66	39.10	0.15	0.0334	9.9999	0.0307	9.9999	0.9189	1.0289	-0.0025	0.3845	-0.0024	0.3786
67	39.27	0.15	0.0317	9.9999	0.0293	9.9999	0.9241	1.0177	-0.0026	0.3844	-0.0026	0.3777
68	39.49	0.15	0.0291	9.9999	0.0259	9.9999	1.0240	1.0233	-0.0025	0.3862	-0.0024	0.3774
69	39.69	0.14	0.0282	9.9999	0.0257	9.9999	1.0576	1.0437	-0.0032	0.3952	-0.0031	0.3786
70	39.90	0.14	0.0302	9.9999	0.0311	9.9999	0.9041	1.0672	-0.0030	0.4061	-0.0028	0.3806
71	40.11	0.14	0.0321	9.9999	0.0275	9.9999	0.9233	1.0810	-0.0036	0.4097	-0.0033	0.3790
72	40.31	0.13	0.0276	9.9999	0.0267	9.9999	0.9673	1.1225	-0.0016	0.4267	-0.0014	0.3801
73	40.56	0.14	0.0310	9.9999	0.0305	9.9999	1.0780	1.1145	-0.0011	0.4238	-0.0010	0.3802
74	40.71	0.13	0.0286	9.9999	0.0235	9.9999	1.0394	1.1219	-0.0020	0.4262	-0.0018	0.3799
75	40.93	0.13	0.0283	9.9999	0.0263	9.9999	1.0000	1.1111	-0.0025	0.4235	-0.0023	0.3811
76	41.16	0.13	0.0276	9.9999	0.0267	9.9999	0.9673	1.0932	-0.0053	0.4168	-0.0049	0.3812
77	41.38	0.11	0.0276	9.9999	0.0273	9.9999	0.9691	1.1216	-0.0044	0.4245	-0.0039	0.3820
78	41.55	0.13	0.0296	9.9999	0.0296	9.9999	0.9541	1.1306	-0.0040	0.4328	-0.0035	0.3828
79	41.74	0.13	0.0288	9.9999	0.0256	9.9999	0.9551	1.1209	-0.0056	0.4262	-0.0050	0.3829
80	41.93	0.14	0.0335	9.9999	0.0295	9.9999	0.8802	1.1361	-0.0036	0.4367	-0.0032	0.3837
81	42.14	0.15	0.0295	9.9999	0.0253	9.9999	0.9776	1.1261	-0.0047	0.4330	-0.0042	0.3845
82	42.36	0.15	0.0309	9.9999	0.0294	9.9999	0.9574	1.1172	-0.0071	0.4288	-0.0064	0.3838
83	42.58	0.15	0.0328	9.9999	0.0294	9.9999	0.9016	1.1213	-0.0066	0.4317	-0.0059	0.3850
84	42.69	0.15	0.0326	9.9999	0.0310	9.9999	0.8803	1.1272	-0.0062	0.4341	-0.0055	0.3851
85	42.88	0.15	0.0319	9.9999	0.0297	9.9999	0.9308	1.1286	-0.0064	0.4348	-0.0057	0.3853
86	43.05	0.16	0.0326	9.9999	0.0317	9.9999	0.9003	1.1246	-0.0064	0.4338	-0.0057	0.3857
87	43.23	0.16	0.0302	9.9999	0.0303	9.9999	0.8816	1.1449	-0.0059	0.4418	-0.0052	0.3859
88	43.42	0.16	0.0304	9.9999	0.0315	9.9999	0.8533	1.1226	-0.0062	0.4337	-0.0055	0.3863
89	43.59	0.16	0.0306	9.9999	0.0331	9.9999	0.8842	1.1194	-0.0078	0.4327	-0.0070	0.3865
90	43.78	0.15	0.0333	9.9999	0.0276	9.9999	0.9106	1.1263	-0.0071	0.4366	-0.0063	0.3876
91	43.95	0.16	0.0321	9.9999	0.0309	9.9999	0.8820	1.1287	-0.0070	0.4378	-0.0062	0.3879
92	44.13	0.16	0.0401	9.9999	0.0333	9.9999	0.8300	1.1196	-0.0076	0.4334	-0.0068	0.3870

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PBL CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 11 0.80 1.7 0.0 BLADE 31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	C43	XCPF3	YCPF3	CNF4	CM4	C84	XCPF4	YCPF4
93	99.39	0.17	0.0091	9.9999	0.0363	9.9999	0.8044	1.1265	-0.0060	0.4370	-0.0071	0.3878
94	99.09	0.15	0.0091	9.9999	0.0349	9.9999	0.8625	1.1279	-0.0081	0.4370	-0.0072	0.3874
95	99.68	0.15	0.0091	9.9999	0.0353	9.9999	0.8522	1.1356	-0.0092	0.4404	-0.0081	0.3878
96	99.67	0.15	0.0085	9.9999	0.0299	9.9999	0.8892	1.1340	-0.0068	0.4425	-0.0077	0.3885
97	95.08	0.15	0.0318	9.9999	0.0347	9.9999	0.9053	1.1318	-0.0097	0.4352	-0.0086	0.3873
98	95.21	0.14	0.0300	9.9999	0.0321	9.9999	0.8355	1.1713	-0.0133	0.4538	-0.0066	0.3875
99	95.41	0.15	0.0307	9.9999	0.0323	9.9999	0.8798	1.1576	-0.0108	0.4492	-0.0093	0.3881
100	95.59	0.14	0.0290	9.9999	0.0319	9.9999	0.8712	1.1374	-0.0105	0.4421	-0.0092	0.3886
101	95.76	0.14	0.0301	9.9999	0.0310	9.9999	0.9068	1.1459	-0.0100	0.4435	-0.0087	0.3872
102	95.92	0.15	0.0302	9.9999	0.0323	9.9999	0.8491	1.1526	-0.0115	0.4470	-0.0100	0.3878
103	95.10	0.13	0.0310	9.9999	0.0305	9.9999	0.9051	1.1638	-0.0115	0.4514	-0.0099	0.3879
104	96.29	0.16	0.0302	9.9999	0.0336	9.9999	0.8793	1.1677	-0.0116	0.4530	-0.0100	0.3880
105	96.46	0.15	0.0312	9.9999	0.0306	9.9999	0.9215	1.1494	-0.0121	0.4463	-0.0105	0.3883
106	96.63	0.16	0.0324	9.9999	0.0305	9.9999	0.9012	1.1501	-0.0118	0.4468	-0.0103	0.3885
107	96.80	0.15	0.0302	9.9999	0.0323	9.9999	0.8951	1.1514	-0.0122	0.4478	-0.0106	0.3889
108	96.96	0.14	0.0317	9.9999	0.0318	9.9999	0.8904	1.1667	-0.0120	0.4544	-0.0107	0.3895
109	97.15	0.15	0.0332	9.9999	0.0299	9.9999	0.9003	1.1625	-0.0125	0.4526	-0.0108	0.3893
110	97.31	0.14	0.0326	9.9999	0.0329	9.9999	0.8136	1.1660	-0.0121	0.4551	-0.0104	0.3903
111	97.48	0.13	0.0332	9.9999	0.0305	9.9999	0.9215	1.1721	-0.0135	0.4582	-0.0115	0.3910
112	97.67	0.15	0.0299	9.9999	0.0263	9.9999	0.9463	1.1824	-0.0135	0.4606	-0.0114	0.3929
113	97.89	0.12	0.0373	9.9999	0.0326	9.9999	0.8790	1.1839	-0.0141	0.4642	-0.0119	0.3920
114	98.01	0.13	0.0376	9.9999	0.0306	9.9999	0.9215	1.1967	-0.0142	0.4696	-0.0119	0.3925
115	98.18	0.12	0.0410	9.9999	0.0263	9.9999	1.1250	1.1963	-0.0143	0.4692	-0.0120	0.3922
116	98.35	0.11	0.0294	9.9999	0.0269	9.9999	1.0806	1.2115	-0.0152	0.4770	-0.0126	0.3937
117	98.51	0.10	0.0260	9.9999	0.0281	9.9999	1.0566	1.2160	-0.0151	0.4798	-0.0124	0.3946
118	98.70	0.09	0.0250	9.9999	0.0269	9.9999	1.0402	1.2354	-0.0154	0.4877	-0.0129	0.3948
119	98.85	0.08	0.0250	9.9999	0.0257	9.9999	1.0281	1.2203	-0.0149	0.4817	-0.0122	0.3947
120	99.03	0.03	0.0045	9.9999	0.0161	9.9999	1.8961	1.2372	-0.0154	0.4900	-0.0125	0.3960
121	99.22	0.03	0.0035	9.9999	0.0160	9.9999	4.0000	1.2448	-0.0165	0.4957	-0.0117	0.3982
122	99.40	0.02	0.0000	9.9999	0.0166	9.9999	1.7209	1.2492	-0.0160	0.4983	-0.0128	0.3989
123	99.57	0.01	-0.0000	9.9999	0.0204	9.9999	-2.9667	1.2723	-0.0147	0.5073	-0.0108	0.3988
124	99.79	0.02	0.0019	9.9999	0.0136	9.9999	7.1579	1.2386	-0.0167	0.4946	-0.0135	0.3993
125	99.96	0.02	0.0040	9.9999	0.0140	9.9999	4.6000	1.2333	-0.0170	0.4927	-0.0138	0.3995
126	50.10	0.01	0.0019	9.9999	0.0129	9.9999	6.7895	1.2399	-0.0171	0.4949	-0.0138	0.3991
127	50.21	0.02	0.0030	9.9999	0.0137	9.9999	3.8056	1.2474	-0.0178	0.4996	-0.0143	0.3997
128	50.44	0.03	0.0025	9.9999	0.0164	9.9999	1.8824	1.2615	-0.0175	0.5055	-0.0139	0.4007
129	50.61	0.01	-0.0030	9.9999	0.0209	9.9999	-1.7241	1.2599	-0.0183	0.5034	-0.0146	0.3997
130	50.79	0.03	0.0020	9.9999	0.0130	9.9999	4.6429	1.2629	-0.0191	0.5056	-0.0152	0.4002
131	50.92	0.02	0.0035	9.9999	0.0130	9.9999	4.2857	1.2719	-0.0187	0.5093	-0.0147	0.4005
132	51.10	0.02	0.0019	9.9999	0.0123	9.9999	6.4737	1.2643	-0.0195	0.5067	-0.0155	0.4008
133	51.26	0.02	0.0030	9.9999	0.0139	9.9999	2.9833	1.2680	-0.0185	0.5084	-0.0144	0.4010
134	51.46	0.03	0.0050	9.9999	0.0155	9.9999	2.7500	1.2815	-0.0198	0.5149	-0.0155	0.4018
135	51.61	0.02	-0.0031	9.9999	0.0125	9.9999	-4.0323	1.3096	-0.0205	0.5249	-0.0157	0.4017
136	51.79	0.04	0.0035	9.9999	0.0150	9.9999	4.2857	1.2920	-0.0219	0.5168	-0.0170	0.4015
137	51.95	0.03	0.0011	9.9999	0.0132	9.9999	12.2000	1.2849	-0.0216	0.5167	-0.0167	0.4021
138	52.12	0.06	0.0060	9.9999	0.0162	9.9999	2.7000	1.2650	-0.0212	0.5085	-0.0168	0.4020

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYNOLDS PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 71 0.80 1.7 0.0 0.0031 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	ACPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
134	52.22	0.05	0.0254	0.0000	0.0153	0.0000	2.2178	1.2679	-0.0226	0.5113	-0.0179	0.4033
140	52.45	0.08	0.0244	0.0000	0.0152	0.0000	3.4545	1.2656	-0.0223	0.5093	-0.0177	0.4025
141	52.62	0.08	0.0209	0.0000	0.0154	0.0000	2.2318	1.2746	-0.0237	0.5138	-0.0186	0.4031
142	52.79	0.10	0.0264	0.0000	0.0221	0.0000	1.3155	1.2805	-0.0224	0.5142	-0.0175	0.4015
143	52.95	0.09	0.0255	0.0000	0.0199	0.0000	1.4741	1.2933	-0.0236	0.5209	-0.0184	0.4027
144	53.12	0.09	0.0251	0.0000	0.0220	0.0000	1.4570	1.2822	-0.0232	0.5151	-0.0181	0.4017
145	53.29	0.09	0.0241	0.0000	0.0252	0.0000	1.2688	1.3027	-0.0230	0.5264	-0.0177	0.4025
146	53.47	0.10	0.0243	0.0000	0.0279	0.0000	1.1447	1.2845	-0.0251	0.5193	-0.0194	0.4027
147	53.62	0.12	0.0251	0.0000	0.0298	0.0000	1.1800	1.2595	-0.0235	0.5091	-0.0197	0.4042
148	53.79	0.11	0.0250	0.0000	0.0263	0.0000	1.3135	1.2784	-0.0235	0.5155	-0.0184	0.4032
149	53.95	0.13	0.0251	0.0000	0.0259	0.0000	1.2836	1.2540	-0.0237	0.5067	-0.0189	0.4025
150	54.11	0.10	0.0243	0.0000	0.0288	0.0000	1.1728	1.2515	-0.0225	0.5060	-0.0180	0.4028
151	54.29	0.12	0.0243	0.0000	0.0306	0.0000	1.1726	1.2385	-0.0226	0.4983	-0.0178	0.4023
152	54.46	0.12	0.0252	0.0000	0.0303	0.0000	1.2032	1.2771	-0.0221	0.4978	-0.0180	0.4016
153	54.63	0.12	0.0235	0.0000	0.0283	0.0000	1.2000	1.2263	-0.0196	0.4926	-0.0162	0.4017
154	54.78	0.10	0.0277	0.0000	0.0323	0.0000	1.1667	1.2786	-0.0192	0.4940	-0.0157	0.4021
155	54.95	0.08	0.0253	0.0000	0.0291	0.0000	1.1528	1.2100	-0.0187	0.4868	-0.0155	0.4023
156	55.11	0.09	0.0219	0.0000	0.0265	0.0000	1.2055	1.2291	-0.0187	0.4945	-0.0152	0.4023
157	55.25	0.09	0.0185	0.0000	0.0259	0.0000	1.3406	1.2363	-0.0203	0.4975	-0.0164	0.4018
158	55.42	0.09	0.0177	0.0000	0.0234	0.0000	1.3220	1.2438	-0.0191	0.4987	-0.0154	0.4010
159	55.57	0.09	0.0210	0.0000	0.0266	0.0000	1.2526	1.2381	-0.0192	0.4961	-0.0155	0.4007
160	55.74	0.08	0.0194	0.0000	0.0234	0.0000	1.2320	1.2471	-0.0204	0.4999	-0.0164	0.4009
161	55.91	0.10	0.0238	0.0000	0.0263	0.0000	1.1142	1.2535	-0.0183	0.5000	-0.0166	0.3989
162	56.06	0.11	0.0273	0.0000	0.0292	0.0000	1.0818	1.2713	-0.0208	0.5090	-0.0164	0.4004
163	56.21	0.11	0.0219	0.0000	0.0255	0.0000	1.1598	1.2548	-0.0206	0.5011	-0.0165	0.3994
164	56.37	0.10	0.0239	0.0000	0.0273	0.0000	1.1574	1.2662	-0.0215	0.5063	-0.0170	0.3999
165	56.52	0.09	0.0242	0.0000	0.0253	0.0000	1.2475	1.2642	-0.0195	0.5043	-0.0155	0.3989
166	56.66	0.08	0.0266	0.0000	0.0296	0.0000	1.0351	1.2799	-0.0228	0.5045	-0.0179	0.3981
167	56.82	0.09	0.0235	0.0000	0.0262	0.0000	1.1106	1.2679	-0.0228	0.5056	-0.0180	0.3988
168	56.98	0.07	0.0261	0.0000	0.0276	0.0000	1.0530	1.2805	-0.0231	0.5095	-0.0181	0.3980
169	57.16	0.08	0.0252	0.0000	0.0276	0.0000	1.0955	1.2695	-0.0245	0.5056	-0.0193	0.3983
170	57.29	0.07	0.0265	0.0000	0.0259	0.0000	1.0574	1.2749	-0.0231	0.5081	-0.0182	0.3986
171	57.43	0.08	0.0210	0.0000	0.0236	0.0000	1.1333	1.2742	-0.0226	0.5063	-0.0176	0.3974
172	57.57	0.08	0.0226	0.0000	0.0251	0.0000	1.1062	1.2638	-0.0234	0.5038	-0.0186	0.3987
173	57.71	0.05	0.0278	0.0000	0.0264	0.0000	0.9634	1.2618	-0.0243	0.5108	-0.0190	0.3985
174	57.88	0.08	0.0265	0.0000	0.0274	0.0000	0.9718	1.2871	-0.0254	0.5144	-0.0201	0.3996
175	58.01	0.07	0.0218	0.0000	0.0239	0.0000	1.0963	1.2764	-0.0246	0.5068	-0.0194	0.3971
176	58.16	0.06	0.0232	0.0000	0.0224	0.0000	1.1069	1.2845	-0.0261	0.5119	-0.0203	0.3985
177	58.29	0.08	0.0218	0.0000	0.0225	0.0000	1.0820	1.2779	-0.0252	0.5099	-0.0197	0.3990
178	58.33	0.06	0.0245	0.0000	0.0228	0.0000	0.9344	1.2861	-0.0264	0.5117	-0.0193	0.3979

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NO.	E+6	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	72	0.60	1.7	45.0	01.0P31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.05	0.11	-0.0[illegible]69	1.[illegible]78	0.1624	-0.4067	-0.0053	0.2634	0.0601	0.2033	-1.7253
2	-3.98	0.11	-0.0[illegible]95	1.[illegible]71	0.1776	-0.4975	-0.0131	0.2829	0.0796	0.2033	-1.7201
3	-5.48	0.11	-0.[illegible]91	1.[illegible]92	0.1112	-0.4992	-0.0130	0.2835	0.0803	0.2032	-1.6899
4	-4.43	0.11	-0.[illegible]57	0.[illegible]61	0.0869	-0.3510	-0.0057	0.3079	0.0737	0.2341	-1.6185
5	-2.55	0.11	-0.2[illegible]32	0.[illegible]95	0.0197	-0.2994	-0.0136	0.3137	0.0716	0.2420	-1.6055
6	-0.69	0.11	-0.0[illegible]83	0.1353	0.0127	-0.2495	-0.0133	0.3164	0.0702	0.2461	-7.3891
7	1.29	0.11	0.2[illegible]81	-0.[illegible]27	0.0136	-0.3356	-0.0130	0.3238	0.0685	0.2551	-0.5894
8	3.21	0.11	0.4[illegible]65	-0.[illegible]73	0.3561	-0.3564	-0.0127	0.3302	0.0732	0.2569	-1.1665
9	5.06	0.12	0.7[illegible]78	-1.[illegible]95	0.[illegible]63	-0.4068	-0.0125	0.3357	0.0814	0.2542	-1.4256
10	6.47	0.11	1.1[illegible]59	-1.[illegible]65	0.1014	-0.4039	-0.0126	0.3331	0.0964	0.2367	-1.5822
11	8.03	0.12	1.4[illegible]36	-2.[illegible]72	0.0927	-0.3950	-0.0035	0.3386	0.1069	0.2317	-1.7269
12	10.76	0.12	1.9[illegible]72	-3.[illegible]64	0.1394	-0.4592	-0.0067	0.3331	0.1180	0.2151	-1.8336
13	12.46	0.12	2.3[illegible]59	-4.[illegible]24	0.1673	-0.5217	-0.0083	0.3282	0.1297	0.1985	-1.9209
14	14.41	0.12	2.[illegible]97	-5.[illegible]22	0.1366	-0.6136	-0.0099	0.3273	0.1414	0.1859	-1.9880
15	15.69	0.12	3.3[illegible]32	-6.[illegible]42	0.1399	-0.6462	-0.0113	0.3190	0.1536	0.1594	-2.0053
16	18.58	0.12	3.[illegible]81	-7.[illegible]06	0.1221	-0.6076	-0.0126	0.3165	0.1830	0.1379	-1.9975
17	20.62	0.12	4.3[illegible]25	-8.[illegible]90	0.2264	-0.6242	-0.0450	0.3150	0.2115	0.1035	-2.0328
18	22.45	0.13	4.[illegible]95	-9.[illegible]03	0.2263	-0.6186	-0.1241	0.3128	0.2369	0.0758	-1.9733
19	24.36	0.13	5.2[illegible]52	-10.[illegible]85	0.2264	-0.3485	-0.0934	0.3532	0.2956	0.0576	-1.9365
20	26.28	0.14	5.7[illegible]27	-10.[illegible]67	0.4040	-0.5247	-0.0916	0.3589	0.3252	0.0337	-1.8293
21	28.16	0.15	6.[illegible]92	-10.[illegible]37	0.6928	-0.7836	-0.0032	0.3674	0.3556	0.0116	-1.7748
22	29.24	0.15	6.[illegible]52	-10.[illegible]57	0.8088	-0.8499	0.0053	0.3617	0.3543	0.0074	-1.7662
23	28.25	0.16	6.[illegible]76	-10.[illegible]93	0.7688	-0.8321	0.0130	0.3701	0.3570	0.0131	-1.7648
24	26.62	0.16	6.[illegible]47	-10.[illegible]08	0.8360	-0.9385	0.0536	0.3707	0.3640	0.0067	-1.7312
25	24.62	0.16	6.[illegible]38	-10.[illegible]83	0.[illegible]89	-0.9565	0.0934	0.3620	0.3645	-0.0025	-1.6962
26	24.19	0.17	6.[illegible]42	-10.[illegible]62	0.9[illegible]4	-1.0567	0.1417	0.3607	0.3706	-0.0099	-1.6930
27	23.61	0.17	6.[illegible]35	-10.[illegible]75	1.0771	-1.1476	0.1897	0.3677	0.3757	-0.0080	-1.6795
28	29.79	0.17	6.[illegible]27	-11.[illegible]03	1.1444	-1.1790	0.2695	0.3724	0.3893	-0.0169	-1.6752
29	30.07	0.18	6.[illegible]94	-11.[illegible]24	1.1854	-1.1720	0.3172	0.3845	0.3981	-0.0136	-1.6695
30	30.35	0.18	6.[illegible]9	-11.[illegible]04	1.[illegible]51	-1.2298	0.3741	0.3695	0.4030	-0.0335	-1.6546
31	32.62	0.19	7.[illegible]44	-11.[illegible]69	1.[illegible]16	-1.3251	0.4301	0.3740	0.4082	-0.0342	-1.6416
32	33.49	0.20	7.[illegible]58	-11.[illegible]98	1.5169	-1.4216	0.4944	0.3766	0.4123	-0.0357	-1.6254
33	31.17	0.21	7.[illegible]52	-11.[illegible]78	1.5200	-1.5133	0.5025	0.3769	0.4113	-0.0344	-1.6256
34	31.45	0.20	7.[illegible]03	-11.[illegible]08	1.5962	-1.4968	0.5029	0.3796	0.4195	-0.0399	-1.5981
35	31.72	0.21	7.[illegible]30	-12.[illegible]10	1.6970	-1.6521	0.5746	0.3798	0.4206	-0.0408	-1.6111
36	31.99	0.22	7.[illegible]61	-12.[illegible]53	1.[illegible]02	-1.7558	0.6234	0.3686	0.4246	-0.0560	-1.5817
37	32.26	0.22	7.[illegible]25	-12.[illegible]63	1.[illegible]26	-1.6518	0.6393	0.3699	0.4267	-0.0573	-1.5741
38	32.51	0.23	7.[illegible]89	-12.[illegible]63	1.[illegible]20	-1.6253	0.6710	0.3629	0.4333	-0.0507	-1.5726
39	32.77	0.23	8.[illegible]13	-12.[illegible]87	1.9690	-1.7010	0.6555	0.3636	0.4303	-0.0667	-1.5662
40	33.04	0.23	8.[illegible]92	-12.[illegible]27	2.[illegible]12	-1.8040	0.7040	0.3565	0.4319	-0.0754	-1.5480
41	33.29	0.24	8.[illegible]39	-12.[illegible]69	2.[illegible]78	-1.8[illegible]4	0.7520	0.3535	0.4334	-0.0799	-1.5459
42	33.53	0.25	8.[illegible]72	-13.[illegible]37	2.[illegible]95	-1.8155	0.7839	0.3471	0.4303	-0.0832	-1.5360
43	33.80	0.25	8.[illegible]83	-13.[illegible]19	2.3922	-1.8[illegible]6	0.7845	0.3444	0.4339	-0.0895	-1.5185
44	34.06	0.26	8.[illegible]97	-13.[illegible]61	2.[illegible]97	-1.7414	0.8491	0.3399	0.4277	-0.0878	-1.5103
45	34.27	0.27	9.[illegible]2	-13.[illegible]84	2.[illegible]76	-1.7466	0.6985	0.3217	0.4267	-0.1051	-1.5008
46	34.54	0.27	9.[illegible]48	-13.[illegible]66	2.4773	-1.6894	0.8682	0.3282	0.4316	-0.1035	-1.4971

PAGE 1 OF 3
SHEET 2 OF 6

MARTIN 4155LE TAILS EFFECTS DATA

TEST PART PACK RALU-B PHI CONF L DELI DELZ DEL3 DELA TRANSITION
7 72 .900 1.7 45.0 81.0F31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
47	3e.7x	0.x1	9.1347	-13.3352	2.4311	-1.5413	0.8046	0.3220	0.4362	-0.1143	-1.4752
48	35.02	0.2-	9.1734	-13.3549	2.5068	-1.5393	0.8066	0.3305	0.4471	-0.1167	-1.4601
49	35.27	0.2x	9.2271	-13.2232	2.4852	-1.3865	0.8776	0.3243	0.4460	-0.1218	-1.4334
50	35.51	0.29	9.3454	-13.2209	2.4758	-1.0350	0.8074	0.3235	0.4548	-0.1314	-1.4131
51	35.78	0.2E	9.3144	-12.9755	2.4857	-1.0274	0.8479	0.3256	0.4574	-0.1323	-1.3931
52	35.98	0.29	9.4497	-13.0341	2.5734	-1.2560	0.8184	0.3285	0.4641	-0.1357	-1.3792
53	36.21	0.2x	9.5001	-13.0816	2.5504	-1.6327	0.8101	0.3313	0.4657	-0.1345	-1.3707
54	36.45	0.2E	9.7053	-13.1023	2.3153	-0.5071	0.7700	0.3219	0.4692	-0.1474	-1.3418
55	36.68	0.2E	9.7421	-13.1202	2.3639	-0.4935	0.7596	0.3153	0.4662	-0.1504	-1.3365
56	36.93	0.2E	10.1210	-13.2442	2.2755	-0.0561	0.7295	0.3065	0.4643	-0.1629	-1.3266
57	37.17	0.2E	10.1538	-13.2248	2.1471	0.1346	0.6981	0.3214	0.4726	-0.1511	-1.2952
58	37.40	0.2E	10.2643	-13.5414	2.3045	-0.1053	0.7539	0.3086	0.4662	-0.1577	-1.3190
59	37.68	0.2E	10.3601	-13.1414	2.1467	0.3467	0.6545	0.3144	0.4748	-0.1601	-1.2667
60	37.87	0.2E	10.3741	-13.4884	2.1869	0.3856	0.6754	0.3082	0.4750	-0.1669	-1.2495
61	38.09	0.2E	10.3816	-13.0116	2.2056	0.3130	0.7143	0.2984	0.4756	-0.1773	-1.2365
62	38.34	0.2E	10.4262	-13.0757	2.3157	0.3165	0.6543	0.3017	0.4751	-0.1740	-1.2117
63	38.57	0.2E	10.4555	-13.0641	2.2945	0.2992	0.6661	0.3111	0.4787	-0.1677	-1.2069
64	38.80	0.2E	10.4366	-13.0405	2.3195	0.0428	0.7325	0.3019	0.4797	-0.1779	-1.1515
65	39.01	0.2E	10.4414	-13.0804	2.0755	0.0133	0.5865	0.2943	0.4760	-0.1768	-1.1352
66	39.29	0.2E	10.4659	-13.0804	2.0663	0.7012	0.4905	0.3007	0.4755	-0.1754	-1.1198
67	39.46	0.2E	10.5275	-13.0794	1.9723	1.0344	0.3550	0.2839	0.4829	-0.1989	-1.1056
68	39.67	0.2E	10.5744	-13.0437	1.9516	1.1403	0.3554	0.2993	0.4839	-0.1846	-1.0930
69	39.87	0.2E	10.5943	-13.0228	1.9555	1.1056	0.2369	0.2992	0.4854	-0.1862	-1.0736
70	40.06	0.2E	10.6465	-13.0363	1.8915	1.0741	0.2668	0.2974	0.4856	-0.1884	-1.0523
71	40.28	0.2E	10.6626	-13.0184	1.9772	1.0142	0.1627	0.2887	0.4920	-0.2033	-1.0349
72	40.48	0.2E	10.6929	-13.0024	1.7715	1.1239	0.1503	0.2965	0.4997	-0.2032	-1.0167
73	40.66	0.2E	10.7197	-13.0764	1.7537	1.2908	0.0086	0.2900	0.4982	-0.2042	-1.0000
74	40.95	0.2E	10.7599	-13.0514	1.8866	0.9718	0.0332	0.2665	0.5038	-0.2172	-0.9987
75	41.08	0.2E	10.7995	-13.0777	1.8706	1.3322	-0.0405	0.2975	0.5106	-0.2133	-0.9902
76	41.30	0.2E	10.8010	-13.1394	1.5471	1.3614	-0.0223	0.2961	0.5063	-0.2102	-0.9771
77	41.49	0.2E	10.8323	-13.0774	1.8111	1.3562	-0.0065	0.3016	0.5179	-0.2163	-0.9679
78	41.69	0.2E	10.8538	-13.0340	1.3966	1.2704	0.0492	0.3076	0.5240	-0.2214	-0.9558
79	41.88	0.2E	10.8717	-13.0186	1.3649	1.1657	0.1128	0.2939	0.5306	-0.2367	-0.9388
80	42.07	0.1F	10.9141	-13.0264	1.0273	1.0761	0.1763	0.3168	0.5522	-0.2354	-0.9936
81	42.25	0.1E	10.9382	-13.0980	1.0447	0.9782	0.1612	0.3322	0.5548	-0.2226	-0.8824
82	42.43	0.1F	10.9586	-13.0920	1.1033	0.8291	0.2785	0.3238	0.5568	-0.2330	-0.8909
83	42.61	0.1E	10.9799	-13.0812	0.9772	0.9687	0.1149	0.3287	0.5645	-0.2358	-0.8652
84	42.79	0.1E	11.0203	-13.0813	0.9604	0.9136	0.0840	0.3274	0.5718	-0.2440	-0.8498
85	42.97	0.1F	11.0518	-13.0300	1.1251	0.8821	0.1151	0.3077	0.5678	-0.2601	-0.8713
86	43.14	0.1E	11.0502	-13.0706	0.9777	0.9036	0.0843	0.3079	0.5596	-0.2517	-0.8278
87	43.33	0.1F	11.0293	-13.0603	1.0293	0.7656	0.0698	0.2957	0.5682	-0.2725	-0.8211
88	43.51	0.1E	11.0200	-13.1285	1.0193	0.6531	0.0369	0.2995	0.5641	-0.2646	-0.7987
89	43.69	0.1F	11.0510	-13.2187	0.9393	0.8749	0.0464	0.3173	0.5702	-0.2529	-0.8059
90	43.86	0.1F	11.0497	-13.2643	1.0278	0.9348	0.0305	0.2999	0.5611	-0.2612	-0.8346
91	44.02	0.1F	11.0496	-13.2538	0.9772	0.7845	-0.0080	0.3037	0.5571	-0.2534	-0.7525
92	44.23	0.1F	11.0520	-13.2161	0.9401	0.8655	-0.0314	0.3129	0.5571	-0.2442	-0.7493

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REID-D	PHI	CONE	L	DEL1	DEL2	DEL3	DEL6	TRANSITION
7	72	0.60	1.7	+5.0	01+0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAH	CAF	ACP
93	44.90	0.16	11.5196	-6.7907	0.5485	1.0896	-0.0857	0.3109	0.5677	-0.2568	-0.7605
94	44.57	0.16	11.3722	-6.7348	0.3960	0.9218	-0.1100	0.3025	0.5571	-0.2546	-0.7090
95	44.28	0.16	11.2390	-6.7258	0.3571	1.2493	-0.1416	0.2984	0.5707	-0.2723	-0.7484
96	44.95	0.11	11.0712	-6.6263	0.1718	1.0846	-0.1730	0.2862	0.5662	-0.2799	-0.7207
97	45.11	0.11	11.0641	-6.6078	0.2916	0.9277	-0.1724	0.3023	0.5606	-0.2583	-0.7103
98	45.29	0.10	11.0355	-6.6733	0.1823	0.6699	-0.2037	0.2941	0.5651	-0.2630	-0.6939
99	45.48	0.09	11.0316	-6.6280	0.0871	1.0932	-0.2040	0.2860	0.5561	-0.2720	-0.6981
100	45.66	0.10	11.0724	-6.6396	0.0273	1.1365	-0.2273	0.3042	0.5727	-0.2680	-0.6997
101	45.80	0.09	11.0896	-7.2452	-0.0119	0.8953	-0.2348	0.2746	0.5556	-0.2607	-0.6947
102	45.99	0.11	11.0972	-7.0552	0.2474	0.6878	-0.2026	0.2813	0.5562	-0.2751	-0.6675
103	46.15	0.10	11.0794	-6.9743	0.2906	-0.1162	-0.1549	0.2269	0.5153	-0.2863	-0.5826
104	46.32	0.12	11.0653	-7.0408	0.3903	0.0864	-0.1314	0.2554	0.5330	-0.2775	-0.6291
105	46.49	0.12	11.0598	-7.0414	0.4194	-0.0156	-0.1231	0.2359	0.5209	-0.2849	-0.6041
106	46.65	0.12	11.0518	-6.9911	0.4418	-0.0011	-0.0604	0.2408	0.5068	-0.2659	-0.5914
107	46.84	0.12	11.0503	-6.9282	0.5401	-0.0356	-0.0676	0.2310	0.5042	-0.2721	-0.5875
108	47.00	0.11	11.0715	-6.8990	0.3868	0.0035	0.0415	0.2002	0.4991	-0.2969	-0.5475
109	47.16	0.11	11.0727	-6.9209	0.3992	0.1554	0.0416	0.1991	0.5012	-0.3021	-0.5482
110	47.33	0.12	11.0898	-6.8793	0.5941	0.0216	-0.0047	0.2099	0.5215	-0.3117	-0.5702
111	47.51	0.10	11.0893	-6.9259	0.3862	0.1187	0.0026	0.2041	0.4997	-0.2956	-0.5429
112	47.66	0.11	11.0969	-6.8770	0.5700	-0.2354	-0.0121	0.2060	0.5038	-0.2978	-0.5519
113	47.85	0.11	11.0909	-6.8738	0.4678	-0.1216	-0.0125	0.2026	0.5018	-0.2942	-0.5551
114	48.01	0.10	11.0973	-6.9361	0.4507	-0.2396	0.0111	0.2032	0.5023	-0.2991	-0.5448
115	48.19	0.11	12.0312	-6.9221	0.5526	-0.4950	-0.0744	0.2045	0.5114	-0.3069	-0.5504
116	48.35	0.09	12.0138	-6.7552	0.4219	-0.3246	-0.0907	0.2078	0.5257	-0.3179	-0.5554
117	48.53	0.09	12.0158	-6.8592	0.4426	-0.2468	-0.0435	0.1983	0.5024	-0.3041	-0.5399
118	48.69	0.09	12.0117	-6.8505	0.4975	-0.4442	-0.0629	0.1751	0.4978	-0.3227	-0.5291
119	48.86	0.09	12.0102	-6.8992	0.4542	-0.4776	-0.0273	0.1779	0.4998	-0.3219	-0.5256
120	49.03	0.07	12.0265	-6.8378	0.1196	0.1459	0.0187	0.1754	0.4973	-0.3219	-0.5237
121	49.20	0.08	12.0254	-6.8155	0.2619	0.0223	0.0350	0.1740	0.4989	-0.3249	-0.5221
122	49.36	0.07	12.0256	-6.8111	0.2165	-0.0135	0.0351	0.1805	0.5070	-0.3265	-0.5180
123	49.55	0.07	12.0451	-6.8210	0.2229	-0.0116	-0.0039	0.1711	0.5025	-0.3314	-0.5074
124	49.73	0.07	12.0549	-6.8337	-0.0021	0.2749	0.0584	0.1556	0.5009	-0.3453	-0.5051
125	49.91	0.06	12.0723	-6.7681	0.2146	-0.4763	-0.1984	0.1765	0.5244	-0.3479	-0.5354
126	50.07	0.06	12.0773	-6.8186	-0.0872	0.2131	0.0187	0.1690	0.5039	-0.3349	-0.5133
127	50.25	0.05	12.0784	-6.8252	-0.0035	-0.6048	-0.2643	0.1742	0.5111	-0.3369	-0.5362
128	50.43	0.06	13.0252	-6.8706	-0.1890	-0.8485	-0.3042	0.1562	0.5131	-0.3569	-0.5367
129	51.54	0.03	12.9939	-6.8511	-0.0444	-1.4343	-0.2636	0.1626	0.5117	-0.3491	-0.4945
130	50.76	0.05	12.9330	-6.8181	-0.0289	-1.5071	-0.2794	0.1569	0.5178	-0.3609	-0.5038
131	50.92	0.05	13.0552	-6.8582	-0.1497	-1.2762	-0.2402	0.1645	0.5193	-0.3548	-0.5022
132	51.10	0.04	12.9805	-6.8513	-0.1884	-1.5737	-0.2398	0.1446	0.5172	-0.3776	-0.4693
133	51.27	0.04	13.0107	-6.8590	-0.2518	-1.1402	-0.2401	0.1477	0.5132	-0.3655	-0.4736
134	51.43	0.03	13.0003	-6.8732	-0.3480	-1.1153	-0.1696	0.1391	0.5183	-0.3792	-0.4518
135	51.61	0.03	13.0249	-6.8420	-0.3468	-1.3139	-0.1845	0.1455	0.5142	-0.3687	-0.4407
136	51.76	0.03	12.9858	-6.8084	-0.3646	-0.9192	-0.1061	0.1572	0.5116	-0.3544	-0.4409
137	51.94	0.03	13.0553	-6.8814	-0.4297	-1.0988	-0.0671	0.1481	0.5172	-0.3641	-0.4490
138	52.12	0.04	13.1929	-6.9520	-0.3832	-0.8922	-0.2245	0.1260	0.5101	-0.3961	-0.4512

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 72 MACH 1.7 PHI 45.0 CONF 31 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	ACP
139	52.29	0.03	13.1574	-0.0057	-0.0038	-0.0048	-0.0356	0.1480	0.5182	-0.3702	-0.4565
140	52.45	0.03	13.2004	-0.1133	-0.0412	-0.0479	0.1066	0.1410	0.5158	-0.3748	-0.4608
141	52.62	0.03	13.2401	-0.1120	-0.0508	-0.0529	-0.0590	0.1380	0.5210	-0.3830	-0.4631
142	52.78	0.03	13.2825	-0.5534	-0.5574	-0.7958	0.1643	0.1606	0.5251	-0.3465	-0.4983
143	52.95	0.02	13.3233	-0.3769	-0.0012	-1.1391	0.1220	0.1371	0.5215	-0.3884	-0.4757
144	53.11	0.01	13.3643	-0.0071	-0.0549	-1.0708	0.1692	0.1398	0.5260	-0.3492	-0.4888
145	53.29	0.02	13.4132	-0.5653	-0.5383	-0.9627	0.1223	0.1166	0.5153	-0.3967	-0.4878
146	53.46	0.01	13.4564	-0.1515	-0.0871	-0.7514	0.2083	0.1737	0.5470	-0.3733	-0.5221
147	53.62	0.02	13.5003	-0.5451	-0.5504	-0.8826	0.1307	0.1512	0.5326	-0.3816	-0.4860
148	53.78	0.01	13.5434	-0.0916	-0.0136	-0.7831	0.1541	0.1446	0.5330	-0.3864	-0.4975
149	53.95	-0.00	13.5873	-0.5089	-0.0824	-0.9867	0.1857	0.1718	0.5573	-0.3855	-0.5335
150	54.10	-0.00	13.6273	-0.1094	-0.0954	-0.6615	0.1862	0.1512	0.5459	-0.3958	-0.5118
151	54.27	0.00	13.6702	-0.5388	-0.6435	-1.1584	0.1708	0.1719	0.5599	-0.3860	-0.5295
152	54.43	0.01	13.7101	-0.4534	-0.0190	-1.1488	0.1630	0.1569	0.5491	-0.4122	-0.5263
153	54.59	-0.01	13.7548	-0.7044	-0.7103	-1.9457	0.0272	0.1737	0.5802	-0.4125	-0.5401
154	54.75	-0.00	13.7911	-0.4444	-0.0150	-2.3040	0.0764	0.1784	0.5743	-0.4259	-0.5509
155	54.92	-0.02	13.8384	-0.4183	-0.0797	-2.5226	0.0140	0.1837	0.5978	-0.4134	-0.5666
156	55.08	-0.03	13.8781	-0.7551	-0.0454	-2.1166	0.0348	0.1752	0.5806	-0.4254	-0.5458
157	55.24	-0.03	13.9253	-0.4497	-0.0903	-2.7658	0.0034	0.1776	0.6043	-0.4267	-0.5616
158	55.39	-0.04	13.9619	-0.2743	-0.0444	-3.1441	0.0148	0.1805	0.6254	-0.4389	-0.5546
159	55.55	-0.04	14.0030	-0.1554	-0.0717	-3.2267	0.0109	0.1761	0.6211	-0.4464	-0.5490
160	55.72	-0.04	14.0462	-0.2677	-0.1197	-3.3124	0.0178	0.1949	0.6246	-0.4247	-0.5669
161	55.89	-0.05	14.0918	-0.0560	-0.2534	-3.3637	0.0098	0.1908	0.6335	-0.4431	-0.5701
162	56.05	-0.04	14.1311	-0.2311	-0.3384	-3.6810	0.0017	0.2040	0.6566	-0.4506	-0.5869
163	56.25	-0.04	14.1721	-0.3284	-0.4234	-3.7011	0.0445	0.2313	0.6561	-0.4268	-0.5907
164	56.41	-0.04	14.2133	-0.4837	-0.3564	-3.6472	0.0745	0.2572	0.6603	-0.4230	-0.5978
165	56.59	-0.04	14.2596	-0.4225	-0.3576	-3.6808	0.0584	0.2156	0.6613	-0.4457	-0.5830
166	56.75	-0.04	14.3171	-0.4122	-0.3422	-3.6722	0.0509	0.1931	0.6497	-0.4566	-0.5916
167	56.96	-0.04	14.3606	-0.3527	-0.4905	-4.0223	0.0436	0.2077	0.6617	-0.4340	-0.5858
168	57.15	-0.04	14.4028	-0.3467	-0.3443	-3.7957	0.0512	0.2134	0.6397	-0.4263	-0.5852
169	57.34	-0.04	14.4485	-0.4483	-0.3583	-3.8303	0.0276	0.1868	0.6259	-0.4346	-0.5822
170	57.54	-0.04	14.4953	-0.4012	-0.4951	-3.8861	0.0358	0.1841	0.6506	-0.4465	-0.5856
171	57.69	-0.05	14.5385	-0.4787	-0.3342	-3.8260	0.0202	0.1780	0.6294	-0.4504	-0.5820
172	57.93	-0.04	14.5817	-0.4493	-0.3533	-3.7039	0.0125	0.1662	0.6208	-0.4346	-0.5771
173	58.14	-0.05	14.6250	-0.3892	-0.4349	-3.8926	0.0049	0.1829	0.6223	-0.4394	-0.5788
174	58.43	-0.04	14.6711	-0.3111	-0.4428	-3.8205	0.0052	0.1545	0.6124	-0.4583	-0.5698
175	58.49	-0.04	14.7152	-0.4424	-0.4214	-3.9374	0.0053	0.1626	0.6169	-0.4543	-0.5703
176	58.73	-0.04	14.7586	-0.3142	-0.4442	-3.8517	0.0130	0.1975	0.6263	-0.4268	-0.5802
177	58.89	-0.04	14.8017	-0.3387	-1.0249	-4.9875	0.2127	0.1842	0.6146	-0.4304	-0.5722
178	59.29	-0.03	14.8457	-0.4510	-0.4364	-3.8447	0.0138	0.1653	0.6141	-0.4458	-0.5757
179	59.29	-0.04	14.8903	-0.3431	-0.4270	-3.8037	0.0132	0.1923	0.6211	-0.4288	-0.5775
180	59.29	-0.04	14.9328	-0.4480	-0.3777	-3.8741	0.0130	0.1755	0.6105	-0.4350	-0.5739

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART PAGE MACH= ... PHI LOOP ... L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 72 0.xxx 1.07 45.0 81.0F31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN1	CM1	CA1	ACPF1	YCPF1	CNF2	CM2	CA2	ACPF2	YCPF2
1	-3.85	0.11	[illegible]	[illegible]	[illegible]	0.1325	0.5356	-0.0819	-0.0118	-0.0290	0.1449	0.4537
2	-3.00	0.11	0.1673	0.1152	0.0793	0.1033	0.5376	-0.0793	-0.0115	-0.0273	0.1454	0.3439
3	-2.00	0.11	0.1934	0.1330	0.0787	0.1016	0.5315	-0.0804	-0.0115	-0.0282	0.1434	0.3504
4	-1.03	0.11	0.1960	0.1364	0.0809	0.1104	0.5416	-0.0447	-0.0084	-0.0120	0.1483	0.2691
5	-0.55	0.11	0.0939	0.0653	0.0425	0.1086	0.5615	-0.0110	-0.0043	0.0312	0.1505	-0.1091
6	-0.04	0.11	0.0113	0.0097	0.0143	0.0343	0.7814	0.0077	0.0005	0.0124	0.0049	1.6104
7	1.24	0.11	-0.0836	-0.0615	0.0783	1.2167	-1.3837	0.0328	0.0053	0.0266	0.1621	0.8043
8	3.21	0.11	-0.0366	-0.0262	0.0462	0.2555	0.2555	0.0737	0.0099	0.0442	0.1347	0.6000
9	5.04	0.12	-0.0549	-0.0411	-0.0228	0.1033	0.3602	0.1263	0.0195	0.0692	0.1151	0.5484
10	6.97	0.11	-0.1014	-0.0745	-0.0419	0.1434	0.4050	0.1883	0.0195	0.1005	0.1038	0.5338
11	8.93	0.12	-0.1446	-0.0957	-0.0623	0.1093	0.4328	0.2589	0.0236	0.1334	0.0913	0.5151
12	10.78	0.12	-0.1850	-0.1337	-0.0961	0.0740	0.4530	0.3343	0.0276	0.1683	0.0815	0.4978
13	12.68	0.12	-0.2152	-0.1552	-0.1212	0.0500	0.4629	0.4269	0.0316	0.2062	0.0739	0.4831
14	14.61	0.12	-0.2404	-0.1791	-0.1201	0.0350	0.4613	0.5229	0.0350	0.2463	0.0669	0.4749
15	16.60	0.12	-0.2614	-0.1982	-0.1386	0.0273	0.4598	0.6315	0.0387	0.2916	0.0612	0.4615
16	18.58	0.12	-0.2799	-0.2160	-0.1558	0.0230	0.4578	0.7359	0.0424	0.3256	0.0576	0.4426
17	20.56	0.12	-0.2937	-0.2301	-0.1774	0.0178	0.4456	0.8376	0.0465	0.3579	0.0555	0.4274
18	22.45	0.13	-0.3052	-0.2405	-0.1990	0.0129	0.4416	0.9365	0.0501	0.3927	0.0535	0.4193
19	24.38	0.13	-0.3125	-0.2464	-0.2215	0.0058	0.4255	0.9789	0.0665	0.4022	0.0663	0.4109
20	26.28	0.13	-0.3205	-0.2538	-0.2215	0.0058	0.4255	1.0419	0.0634	0.4235	0.0609	0.4064
21	28.18	0.13	-0.3237	-0.2563	-0.2233	0.0155	0.4151	0.9859	0.0537	0.3906	0.0565	0.4043
22	30.24	0.16	-0.3299	-0.2607	-0.2197	0.0146	0.4147	0.9843	0.0547	0.3998	0.0553	0.4041
23	28.25	0.19	-0.3255	-0.2577	-0.2180	0.0131	0.4142	1.0006	0.0550	0.4021	0.0550	0.4019
24	26.42	0.16	-0.3250	-0.2585	-0.2146	0.0162	0.4085	0.9857	0.0466	0.3977	0.0473	0.4035
25	24.46	0.16	-0.3222	-0.2561	-0.2121	0.0155	0.4063	0.9791	0.0437	0.3957	0.0446	0.4042
26	24.19	0.17	-0.3210	-0.2554	-0.2154	0.0130	0.4061	0.9845	0.0410	0.3961	0.0416	0.4044
27	29.51	0.17	-0.3213	-0.2555	-0.2123	0.0109	0.4066	0.9721	0.0372	0.3924	0.0403	0.4037
28	29.79	0.17	-0.4473	-0.3537	-0.1996	0.0090	0.4096	0.9544	0.0370	0.3858	0.0387	0.4042
29	30.97	0.16	-0.4774	-0.3805	-0.1959	0.0094	0.4104	0.9539	0.0343	0.3839	0.0363	0.4067
30	32.35	0.16	-0.4907	-0.3911	-0.1889	0.0085	0.4097	0.9445	0.0331	0.3852	0.0350	0.4078
31	32.62	0.15	-0.4978	-0.3924	-0.1865	0.0053	0.4119	0.9444	0.0297	0.3871	0.0314	0.4099
32	33.59	0.21	-0.4391	-0.3466	-0.1819	0.0097	0.4160	0.9365	0.0285	0.3826	0.0304	0.4085
33	31.17	0.21	-0.4238	-0.3344	-0.1782	0.0106	0.4206	0.9364	0.0287	0.3819	0.0306	0.4078
34	31.45	0.21	-0.4249	-0.3354	-0.1803	0.0108	0.4285	0.9386	0.0276	0.3827	0.0294	0.4077
35	31.72	0.21	-0.4232	-0.3341	-0.1782	0.0129	0.4306	0.9476	0.0285	0.3857	0.0300	0.4070
36	31.99	0.22	-0.4262	-0.3361	-0.1862	0.0227	0.4361	0.9368	0.0275	0.3807	0.0293	0.4064
37	32.26	0.22	-0.4301	-0.3397	-0.1869	0.0295	0.4449	0.9406	0.0273	0.3821	0.0290	0.4062
38	32.51	0.23	-0.4311	-0.3412	-0.1898	0.0363	0.4513	0.9480	0.0272	0.3841	0.0286	0.4051
39	32.77	0.23	-0.4279	-0.3381	-0.1903	0.0336	0.4539	0.9527	0.0278	0.3853	0.0289	0.4044
40	33.04	0.23	-0.4291	-0.3410	-0.1910	0.0390	0.4651	0.9555	0.0272	0.3866	0.0284	0.4046
41	33.27	0.24	-0.4285	-0.3411	-0.1856	0.0358	0.4734	0.9630	0.0270	0.3887	0.0280	0.4036
42	33.53	0.23	-0.4314	-0.3434	-0.1874	0.0501	0.4855	0.9650	0.0264	0.3906	0.0273	0.4048
43	33.80	0.24	-0.4254	-0.3413	-0.1853	0.0466	0.4953	0.9866	0.0266	0.3924	0.0274	0.4051
44	34.06	0.25	-0.4299	-0.3427	-0.1903	0.0496	0.5066	0.9871	0.0255	0.3922	0.0263	0.4056
45	34.27	0.27	-0.4301	-0.3423	-0.1873	0.0592	0.5181	0.9838	0.0250	0.3995	0.0254	0.4061
46	34.54	0.27	-0.4302	-0.3429	-0.1885	0.0564	0.5285	0.9817	0.0247	0.3976	0.0251	0.4050

TEST	ART	MACH	PALG-6	RN1	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	72	1.61		4.9	M1=0P31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	34.75	[illegible]	-0.1[illegible]	-0.0132	-0.[illegible]	0.0696	0.5267	0.9817	0.0287	0.3978	0.0251	0.4050
48	35.[illegible]	[illegible]	-0.1[illegible]	-0.[illegible]	-0.[illegible]	0.0770	0.5554	0.9959	0.0295	0.4039	0.0236	0.4056
49	35.27	[illegible]	-0.1[illegible]	-0.0134	-0.[illegible]	0.1049	0.5876	0.9953	0.0224	0.4041	0.0226	0.4060
50	35.51	[illegible]	-0.1[illegible]	-0.[illegible]	-0.0[illegible]	0.0810	0.5607	1.0039	0.0245	0.4104	0.0239	0.4048
51	35.74	[illegible]	-0.1[illegible]	-0.[illegible]	-0.0[illegible]	0.1245	0.6236	1.0152	0.0220	0.4127	0.0217	0.4066
52	35.98	[illegible]	-0.1[illegible]	-0.[illegible]	-0.0[illegible]	0.0970	0.6097	1.0377	0.0214	0.4197	0.0226	0.4044
53	36.21	[illegible]	-0.[illegible]	-0.[illegible]	-0.[illegible]	0.0844	0.6150	1.0436	0.0230	0.4216	0.0221	0.4040
54	36.45	[illegible]	-0.1[illegible]	-0.0139	-0.0[illegible]	0.1252	0.6243	1.0436	0.0223	0.4234	0.0214	0.4057
55	36.68	[illegible]	-0.[illegible]	-0.[illegible]	-0.[illegible]	0.1387	0.6356	1.0513	0.0218	0.4262	0.0208	0.4054
56	36.93	[illegible]	-0.12[illegible]	-0.0157	-0.0777	0.1221	0.6026	1.0669	0.0232	0.4326	0.0208	0.4047
57	37.17	[illegible]	-0.[illegible]	-0.[illegible]	-0.0[illegible]	0.1624	0.6037	1.0898	0.0220	0.4326	0.0206	0.4047
58	37.40	[illegible]	-0.11[illegible]	-0.[illegible]	-0.0[illegible]	0.1447	0.5892	1.0740	0.0205	0.4354	0.0191	0.4054
59	37.[illegible]	[illegible]	-0.11[illegible]	-0.[illegible]	-0.[illegible]	0.1[illegible]	0.5818	1.1021	0.0218	0.4462	0.0198	0.[illegible]
60	37.87	0.21	-0.[illegible]	-0.[illegible]	-0.0[illegible]	0.1439	0.6322	1.0866	0.0206	0.4403	0.0190	0.4052
61	38.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	-0.[illegible]	0.1705	0.[illegible]305	1.0707	0.0172	0.[illegible]360	0.[illegible]161	0.[illegible]072
62	38.34	0.[illegible]	-0.[illegible]	-0.[illegible]	-0.0341	0.2231	0.6427	1.0966	0.0183	0.4449	0.0188	0.4056
63	38.57	[illegible]	-0.[illegible]	-0.[illegible]	-0.[illegible]	0.1397	0.6261	1.1033	0.0195	0.4471	0.0177	0.4053
64	38.80	0.21	0.0133	-0.[illegible]	0.0024	-1.0526	0.1955	1.0841	0.0145	0.4409	0.0134	0.4067
65	39.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	-0.[illegible]	0.[illegible]	0.5158	1.1187	0.[illegible]198	0.4513	0.[illegible]174	0.[illegible]049
66	39.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	-0.[illegible]	0.0251	0.4626	1.1427	0.0221	0.4613	0.0194	0.[illegible]039
67	39.[illegible]	[illegible]	-0.1351	[illegible]	-0.[illegible]	-0.[illegible]	0.[illegible]607	1.[illegible]671	0.[illegible]227	0.[illegible]713	0.[illegible]145	0.4038
68	39.67	[illegible]	-0.1[illegible]	0.[illegible]	-0.[illegible]	-0.[illegible]	0.4448	1.1720	0.[illegible]221	0.4720	0.[illegible]189	0.[illegible]027
69	39.[illegible]	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.0530	0.4301	1.[illegible]87[illegible]	0.[illegible]229	0.[illegible]790	0.[illegible]193	0.[illegible]036
70	40.[illegible]	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.0412	0.4250	1.1934	0.0216	0.[illegible]825	0.[illegible]181	0.4043
71	40.[illegible]	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.[illegible]353	1.[illegible]102	0.[illegible]222	0.[illegible]876	0.[illegible]184	0.[illegible]029
72	40.[illegible]	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.0435	0.4270	1.2112	0.0220	0.[illegible]8[illegible]	0.[illegible]162	0.4036
73	40.[illegible]	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.4311	1.2340	0.[illegible]236	0.[illegible]978	0.[illegible]192	0.[illegible]034
74	40.99	[illegible].23	-0.1[illegible]	[illegible].[illegible]163	-0.[illegible]791	-0.0860	0.4164	1.2443	0.0229	0.5015	0.0184	0.4030
75	41.[illegible]	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.4305	1.2533	0.[illegible]236	0.5052	0.[illegible]189	0.4031
76	41.[illegible]	[illegible]	-0.[illegible]	[illegible].[illegible]179	-0.[illegible]	-0.0872	0.4118	1.2490	0.0237	0.5025	0.0190	0.4024
77	41.[illegible]	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.4103	1.2455	0.[illegible]227	0.[illegible]007	0.[illegible]183	0.[illegible]020
78	41.69	[illegible].26	-0.1[illegible]	[illegible]	-0.[illegible]	-0.0709	0.4084	1.2404	0.0221	0.4960	0.0179	0.4023
79	41.[illegible]	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.[illegible]384	1.2578	0.[illegible]220	0.[illegible]067	0.[illegible]175	0.[illegible]029
80	42.07	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.3979	1.2358	0.[illegible]184	0.5046	0.[illegible]149	0.4051
81	42.25	[illegible].[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.[illegible]3[illegible]2	1.[illegible]444	0.[illegible]184	0.[illegible]032	0.[illegible]148	0.[illegible]045
82	42.43	[illegible].[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.3619	1.2524	0.0179	0.5067	0.[illegible]143	0.4046
83	42.61	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.3985	1.[illegible]741	0.[illegible]185	0.[illegible]149	0.[illegible]145	0.[illegible]041
84	42.79	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.4012	1.2716	0.[illegible]182	0.5138	0.[illegible]143	0.4040
85	42.97	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.0856	0.[illegible]4085	1.2679	0.[illegible]184	0.[illegible]207	0.[illegible]143	0.[illegible]043
86	43.14	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.4339	1.2884	0.0171	0.5216	0.0133	0.4048
87	43.33	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.[illegible]433[illegible]	1.[illegible]	0.[illegible]171	0.5236	0.[illegible]132	0.[illegible]043
88	43.51	[illegible].[illegible]	-0.[illegible]	[illegible].[illegible]164	-0.[illegible]	-0.1518	0.4277	1.3007	0.0176	0.5248	0.0136	0.4036
89	43.[illegible]	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.[illegible]4196	1.2921	0.[illegible]170	0.5222	0.[illegible]132	0.[illegible]041
90	44.[illegible]	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.4196	1.3111	0.[illegible]161	0.5272	0.[illegible]138	0.[illegible]021
91	44.[illegible]	[illegible]	-0.[illegible]	[illegible]	-0.[illegible]	-0.[illegible]	0.[illegible]4410	1.3205	0.[illegible]188	0.[illegible]318	0.[illegible]127	0.[illegible]027
92	44.23	[illegible].15	-0.0515	[illegible].[illegible]164	-0.[illegible]	-0.1946	0.4747	1.3235	0.0157	0.5330	0.0119	0.4027

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYNOLDS/M CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 72 0.80 1.7 45.0 MIDPOINT 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
93	44.40	0.15	-0.0273	0.0121	-0.0412	-0.1242	0.4220	1.3364	0.0173	0.5349	0.0130	0.4007
94	44.27	0.12	-0.0194	0.0123	-0.0364	-0.1371	0.4047	1.3423	0.0166	0.5391	0.0124	0.4016
95	44.28	0.16	-0.0296	0.0116	-0.0409	-0.1652	0.4498	1.3552	0.0165	0.5427	0.0122	0.4005
96	44.35	0.11	-0.1154	0.0101	-0.0441	-0.1342	0.4149	1.3705	0.0170	0.5491	0.0124	0.4007
97	45.11	0.11	-0.1104	0.0103	-0.0465	-0.1491	0.4372	1.3677	0.0174	0.5474	0.0127	0.4002
98	45.29	0.11	-0.1200	0.0106	-0.0491	-0.1369	0.4090	1.3748	0.0166	0.5508	0.0122	0.3995
99	45.48	0.09	-0.1249	0.0103	-0.0553	-0.1512	0.4253	1.3726	0.0165	0.5468	0.0130	0.3982
100	45.68	0.11	-0.1253	0.0172	-0.0552	-0.1376	0.4408	1.3916	0.0164	0.5562	0.0118	0.3997
101	45.80	0.09	-0.1287	0.0163	-0.0610	-0.1354	0.4328	1.3975	0.0151	0.5591	0.0108	0.4001
102	44.99	0.11	-0.0921	0.0170	-0.0342	-0.2076	0.4652	1.3959	0.0152	0.5583	0.0109	0.4009
103	45.15	0.10	-0.0965	0.0179	-0.0373	-0.7520	0.5840	1.3920	0.0084	0.5563	0.0061	0.4040
104	45.36	0.12	0.0026	0.0194	-0.0019	3.1766	-0.6786	1.3777	0.0074	0.5567	0.0054	0.4041
105	45.84	0.12	0.1455	0.0182	0.0134	0.6650	0.2794	1.3647	0.0050	0.5539	0.0037	0.4059
106	46.65	0.12	0.3618	0.0328	0.0145	0.1398	0.3494	1.3585	0.0035	0.5550	0.0026	0.4096
107	46.68	0.12	0.3911	0.0345	0.0205	0.0736	0.3361	1.3766	0.0035	0.5646	0.0025	0.4101
108	47.00	0.11	0.1275	0.0121	0.0566	-0.0185	0.4426	1.2739	-0.0042	0.5293	-0.0033	0.4155
109	47.19	0.11	0.1283	0.0118	0.0568	-0.0081	0.4447	1.2985	-0.0041	0.5390	-0.0032	0.4151
110	47.33	0.12	0.1154	0.0114	0.0490	0.0122	0.4265	1.3207	-0.0010	0.5493	-0.0008	0.4114
111	47.51	0.10	0.0981	0.0135	0.0367	0.0376	0.4154	1.3405	-0.0008	0.5555	-0.0006	0.4144
112	47.68	0.11	0.1091	0.0115	0.0455	0.0138	0.4169	1.3435	-0.0016	0.5546	-0.0012	0.4128
113	47.95	0.11	0.1036	0.0115	0.0410	0.0106	0.3979	1.3519	-0.0025	0.5613	-0.0019	0.4152
114	48.01	0.10	0.1093	0.0066	0.0459	0.0016	0.4198	1.3357	-0.0032	0.5519	-0.0024	0.4132
115	48.19	0.11	0.0956	0.0121	0.0356	0.0247	0.4106	1.3744	-0.0039	0.5653	-0.0027	0.4113
116	44.35	0.09	0.2345	0.0320	0.0353	0.0237	0.4178	1.3910	-0.0002	0.5703	-0.0001	0.4100
117	44.53	0.09	0.1362	-0.0367	0.0442	-0.0095	0.4003	1.2986	-0.0042	0.5360	-0.0032	0.4142
118	44.69	0.09	0.1296	-0.0001	0.0504	-0.0008	0.4230	1.3355	-0.0055	0.5541	-0.0041	0.4149
119	44.84	0.09	0.1304	-0.0001	0.0560	-0.0008	0.4300	1.3282	-0.0057	0.5534	-0.0043	0.4167
120	44.03	0.07	0.1145	-0.0004	0.0494	-0.0034	0.4166	1.3291	-0.0049	0.5562	-0.0045	0.4185
121	49.21	0.08	0.1216	-0.0002	0.0534	-0.0016	0.4383	1.3313	-0.0066	0.5565	-0.0050	0.4180
122	49.36	0.07	0.1422	-0.0010	0.0623	-0.0127	0.4383	1.3069	-0.0082	0.5481	-0.0063	0.4194
123	49.55	0.11	0.1191	-0.0026	0.0512	-0.0219	0.4348	1.2994	-0.0073	0.5447	-0.0056	0.4192
124	49.73	0.07	0.1345	-0.0039	0.0594	-0.0291	0.4449	1.2741	-0.0084	0.5322	-0.0066	0.4177
125	49.91	0.08	0.1261	-0.0013	0.0325	-0.0171	0.4269	1.3544	-0.0060	0.5766	-0.0043	0.4123
126	51.07	0.08	0.0977	0.0127	0.0203	0.0567	0.4307	1.3467	-0.0042	0.5751	-0.0030	0.4147
127	51.26	0.09	-0.0013	0.0122	-0.0114	-0.5365	0.7692	1.4589	-0.0029	0.5978	-0.0016	0.4098
128	50.43	0.04	0.2342	0.0323	0.0001	0.0790	0.4036	1.4805	-0.0080	0.6085	-0.0054	0.4110
129	51.55	0.05	0.1492	0.0134	0.0121	0.0282	0.2435	1.4846	-0.0096	0.6109	-0.0066	0.4114
130	52.76	0.05	0.0961	-0.0013	0.0292	-0.0141	0.3166	1.4515	-0.0122	0.5998	-0.0084	0.4112
131	52.92	0.03	0.1473	-0.0030	0.0549	-0.0338	0.4175	1.4428	-0.0141	0.5933	-0.0096	0.4112
132	51.10	0.04	0.1076	-0.0017	0.0343	-0.0112	0.3577	1.4457	-0.0130	0.5955	-0.0090	0.4121
133	51.27	0.04	0.0976	-0.0013	0.0307	-0.0069	0.3501	1.4593	-0.0108	0.5991	-0.0074	0.4106
134	51.43	0.03	0.1402	-0.0026	0.0526	-0.0224	0.3787	1.4169	-0.0140	0.5868	-0.0099	0.4141
135	51.61	0.03	0.1417	-0.0032	0.0545	-0.0177	0.3777	1.4169	-0.0136	0.5939	-0.0096	0.4121
136	51.78	0.03	0.1337	-0.0018	0.0449	-0.0135	0.3658	1.4635	-0.0130	0.6036	-0.0089	0.4125
137	51.94	0.03	0.1529	-0.0041	0.0582	-0.0072	0.3815	1.4363	-0.0137	0.5931	-0.0096	0.4129
138	52.12	0.04	0.1175	0.0017	0.0403	0.0145	0.3427	1.4337	-0.0106	0.5895	-0.0074	0.4112

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNLW*6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 72 0.80 1.7 +5.0 #1=0F31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	52.28	0.04	0.1002	-0.0020	0.0242	0.0200	0.2910	1.4746	-0.0129	0.6048	-0.0048	0.4129
140	52.65	0.03	0.1236	-0.0044	0.0437	0.0347	0.3536	1.4446	-0.0121	0.5968	-0.0064	0.4132
141	52.66	0.03	0.1466	-0.0031	0.0579	0.0212	0.3945	1.4158	-0.0143	0.5866	-0.0101	0.4165
142	52.78	0.04	0.1362	-0.0030	0.0537	-0.0220	0.3935	1.3513	-0.0155	0.5655	-0.0115	0.4185
143	52.95	0.06	0.1436	-0.0023	0.0587	0.0161	0.3826	1.3955	-0.0146	0.5788	-0.0105	0.4168
144	53.11	0.01	0.1495	-0.0004	0.0592	0.0027	0.3958	1.3746	-0.0152	0.5743	-0.0116	0.4178
145	54.29	0.02	0.1358	-0.0026	0.0522	0.0059	0.3856	1.3678	-0.0149	0.5712	-0.0109	0.4176
146	53.46	0.01	0.1159	-0.0065	0.0462	-0.0497	0.3950	1.3319	-0.0164	0.5629	-0.0123	0.4226
147	53.62	0.02	0.1281	-0.0034	0.0506	-0.0235	0.3936	1.3445	-0.0159	0.5649	-0.0118	0.4208
148	53.76	0.01	0.1271	-0.0049	0.0495	-0.0395	0.3904	1.3369	-0.0166	0.5622	-0.0124	0.4205
149	53.95	-0.00	0.1127	-0.0124	0.0481	-0.1147	0.4267	1.3391	-0.0182	0.5658	-0.0136	0.4225
150	54.10	-0.00	0.1218	-0.0130	0.0506	-0.1059	0.4164	1.3371	-0.0183	0.5675	-0.0137	0.4204
151	54.27	0.00	0.1178	-0.0178	0.0523	-0.1519	0.4456	1.3431	-0.0199	0.5693	-0.0148	0.4238
152	54.43	0.01	0.1153	-0.0112	0.0487	-0.0945	0.4115	1.3352	-0.0182	0.5642	-0.0137	0.4240
153	54.59	-0.01	0.1641	-0.0027	0.0527	-0.2073	0.4804	1.3805	-0.0221	0.5728	-0.0163	0.4248
154	54.75	-0.03	0.1116	-0.0255	0.0450	-0.2280	0.4428	1.3612	-0.0234	0.5658	-0.0170	0.4241
155	54.90	-0.02	0.1141	-0.0262	0.0463	-0.2143	0.4885	1.3878	-0.0238	0.5696	-0.0172	0.4248
156	55.06	-0.05	0.1081	-0.0230	0.0526	-0.2187	0.4866	1.3757	-0.0236	0.5831	-0.0172	0.4238
157	55.22	-0.04	0.1141	-0.0258	0.0585	-0.2278	0.4998	1.3981	-0.0247	0.5937	-0.0176	0.4246
158	54.38	-0.05	0.1103	-0.0259	0.0587	-0.2214	0.5047	1.4151	-0.0249	0.5981	-0.0176	0.4227
159	55.55	-0.04	0.1016	-0.0255	0.0545	-0.2515	0.5386	1.4050	-0.0251	0.5914	-0.0178	0.4209
160	55.72	-0.05	0.0993	-0.0267	0.0548	-0.2452	0.5499	1.4085	-0.0251	0.5941	-0.0178	0.4232
161	55.85	-0.06	0.0967	-0.0234	0.0522	-0.2415	0.5461	1.4130	-0.0253	0.5940	-0.0179	0.4203
162	56.00	-0.07	0.0938	-0.0222	0.0504	-0.2372	0.5423	1.4210	-0.0258	0.5949	-0.0181	0.4187
163	56.25	-0.10	0.1136	-0.0217	0.0632	-0.1820	0.5666	1.4443	-0.0263	0.6057	-0.0182	0.4194
164	56.41	-0.09	0.1256	-0.0209	0.0696	-0.1671	0.5316	1.4555	-0.0270	0.6122	-0.0185	0.4206
165	56.60	-0.08	0.1400	-0.0186	0.0736	-0.1317	0.5256	1.4627	-0.0263	0.6111	-0.0179	0.4178
166	56.75	-0.08	0.1337	-0.0150	0.0689	-0.1124	0.5157	1.4602	-0.0258	0.6090	-0.0176	0.4171
167	56.90	-0.07	0.1400	-0.0166	0.0723	-0.1124	0.5168	1.4574	-0.0263	0.6085	-0.0180	0.4176
168	57.13	-0.08	0.1342	-0.0154	0.0702	-0.1150	0.5234	1.4499	-0.0263	0.6071	-0.0181	0.4188
169	57.19	-0.08	0.1284	-0.0163	0.0656	-0.1117	0.5102	1.4467	-0.0260	0.6043	-0.0179	0.4177
170	57.34	-0.09	0.1268	-0.0152	0.0650	-0.1201	0.5126	1.4543	-0.0268	0.6071	-0.0184	0.4175
171	57.49	-0.09	0.1183	-0.0144	0.0622	-0.1217	0.5269	1.4433	-0.0268	0.6032	-0.0185	0.4180
172	57.63	-0.08	0.1174	-0.0142	0.0600	-0.1206	0.5089	1.4580	-0.0271	0.6095	-0.0186	0.4181
173	57.79	-0.09	0.1134	-0.0131	0.0576	-0.1167	0.5213	1.4507	-0.0269	0.6057	-0.0185	0.4176
174	57.93	-0.09	0.1155	-0.0115	0.0585	-0.0947	0.5069	1.4475	-0.0271	0.6039	-0.0187	0.4172
175	58.09	-0.08	0.1173	-0.0118	0.0588	-0.1062	0.5210	1.4400	-0.0267	0.6012	-0.0185	0.4175
176	58.24	-0.08	0.1081	-0.0126	0.0577	-0.1140	0.5266	1.4687	-0.0285	0.6134	-0.0194	0.4176
177	58.28	-0.05	0.1117	-0.0131	0.0582	-0.1173	0.5201	1.4497	-0.0278	0.6054	-0.0191	0.4176
178	58.24	-0.03	0.1121	-0.0141	0.0601	-0.1256	0.5336	1.4580	-0.0284	0.6093	-0.0195	0.4179
179	58.24	-0.04	0.1081	-0.0113	0.0558	-0.1077	0.5310	1.4550	-0.0276	0.6060	-0.0189	0.4179
180	58.29	-0.05	0.1143	-0.0145	0.0637	-0.1217	0.5340	1.4665	-0.0286	0.6127	-0.0195	0.4178

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYN-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 72 0.60 1.67 45.0 M1=OF31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
1	-5.69	0.10	[illegible]	[illegible]	[illegible]	9.9999	0.4111	-0.0390	-0.0146	-0.0597	0.1578	0.6356
2	-5.68	0.11	[illegible]	[illegible]	[illegible]	9.9999	0.4102	-0.0392	-0.0145	-0.0592	0.1573	0.6410
3	-5.68	0.11	[illegible]	[illegible]	[illegible]	9.9999	0.4130	-0.0927	-0.0144	-0.0586	0.1557	0.6324
4	-4.43	0.11	[illegible]	[illegible]	[illegible]	9.9999	0.4133	-0.0405	-0.0093	-0.0306	0.2302	0.7550
5	-2.55	0.11	[illegible]	[illegible]	[illegible]	9.9999	0.5085	0.0004	-0.0046	-0.0112	-11.0000	-28.0000
6	-0.64	0.11	[illegible]	[illegible]	[illegible]	9.9999	0.8223	0.0231	0.0004	0.0015	0.0173	0.0649
7	1.29	0.11	[illegible]	[illegible]	[illegible]	9.9999	-0.6705	0.0509	0.0051	0.0120	0.1004	0.2362
8	3.21	0.11	-0.0551	9.9999	-0.0103	9.9999	0.1873	0.0814	0.0089	0.0261	0.1096	0.3202
9	5.04	0.11	-0.1165	9.9999	-0.0341	9.9999	0.2932	0.1143	0.0122	0.0408	0.1069	0.3567
10	6.97	0.11	-0.1772	9.9999	-0.0614	9.9999	0.3490	0.1485	0.0149	0.0609	0.1005	0.4103
11	8.83	0.10	-0.2573	9.9999	-0.0927	9.9999	0.3700	0.1938	0.0158	0.0827	0.0917	0.4266
12	10.76	0.10	-0.3345	9.9999	-0.1274	9.9999	0.3838	0.2452	0.0166	0.1058	0.0687	0.4315
13	12.68	0.10	-0.4161	9.9999	-0.1587	9.9999	0.3816	0.2899	0.0151	0.1273	0.0522	0.4390
14	14.61	0.10	-0.4965	9.9999	-0.1983	9.9999	0.3838	0.3322	0.0119	0.1459	0.0359	0.4392
15	16.60	0.10	-0.5824	9.9999	-0.2337	9.9999	0.3752	0.3662	0.0093	0.1613	0.0254	0.4405
16	18.56	0.10	-0.6720	9.9999	-0.2656	9.9999	0.3626	0.3992	0.0074	0.1764	0.0196	0.4418
17	20.52	0.12	-0.7567	9.9999	-0.3007	9.9999	0.3566	0.4048	0.0044	0.1842	0.0104	0.4552
18	22.45	0.13	-0.8423	9.9999	-0.3349	9.9999	0.3554	0.4117	0.0031	0.1896	0.0075	0.4605
19	24.36	0.13	-1.0244	9.9999	-0.3917	9.9999	0.3407	0.4161	0.0025	0.1911	0.0050	0.4593
20	26.28	0.14	-1.1033	9.9999	-0.3678	9.9999	0.3332	0.4402	0.0023	0.2013	0.0052	0.4573
21	28.18	0.15	-1.1346	9.9999	-0.3711	9.9999	0.3270	0.4766	0.0023	0.2206	0.0046	0.4628
22	28.24	0.16	-1.1251	9.9999	-0.3466	9.9999	0.3266	0.4776	0.0023	0.2221	0.0048	0.4650
23	28.25	0.16	-1.1313	9.9999	-0.3477	9.9999	0.3250	0.4819	0.0028	0.2251	0.0058	0.4670
24	28.62	0.16	-1.1452	9.9999	-0.3720	9.9999	0.3235	0.4989	0.0051	0.2342	0.0102	0.4694
25	28.80	0.16	-1.1550	9.9999	-0.3753	9.9999	0.3256	0.5147	0.0076	0.2436	0.0148	0.4733
26	29.19	0.17	-1.1703	9.9999	-0.3795	9.9999	0.3243	0.5537	0.0079	0.2625	0.0143	0.4741
27	29.51	0.17	-1.1736	9.9999	-0.3824	9.9999	0.3258	0.5948	0.0091	0.2823	0.0153	0.4746
28	29.79	0.17	-1.1879	9.9999	-0.3878	9.9999	0.3264	0.6327	0.0090	0.2989	0.0143	0.4724
29	30.07	0.18	-1.1944	9.9999	-0.4908	9.9999	0.3257	0.6582	0.0094	0.3116	0.0143	0.4734
30	30.35	0.18	-1.2077	9.9999	-0.3934	9.9999	0.3258	0.6894	0.0096	0.3253	0.0140	0.4718
31	30.62	0.19	-1.2143	9.9999	-0.3977	9.9999	0.3261	0.6960	0.0098	0.3298	0.0141	0.4738
32	30.89	0.20	-1.2162	9.9999	-0.3951	9.9999	0.3257	0.7557	0.0108	0.3567	0.0143	0.4747
33	31.17	0.20	-1.2153	9.9999	-0.3957	9.9999	0.3256	0.7819	0.0117	0.3720	0.0150	0.4757
34	31.45	0.21	-1.1967	9.9999	-0.3928	9.9999	0.3284	0.7946	0.0108	0.3763	0.0134	0.4768
35	31.72	0.21	-1.1941	9.9999	-0.3905	9.9999	0.3301	0.8459	0.0123	0.4000	0.0146	0.4729
36	31.99	0.22	-1.1931	9.9999	-0.3877	9.9999	0.3334	0.8650	0.0115	0.4107	0.0133	0.4749
37	32.26	0.22	-1.1849	9.9999	-0.3860	9.9999	0.3364	0.8836	0.0111	0.4112	0.0129	0.4762
38	32.51	0.23	-1.1999	9.9999	-0.3884	9.9999	0.3357	0.9076	0.0114	0.4296	0.0126	0.4733
39	32.77	0.23	-1.1993	9.9999	-0.3892	9.9999	0.3372	0.9160	0.0109	0.4314	0.0120	0.4741
40	33.04	0.23	-1.1934	9.9999	-0.3894	9.9999	0.3376	0.9372	0.0106	0.4422	0.0113	0.4718
41	33.29	0.24	-1.1979	9.9999	-0.3911	9.9999	0.3379	0.9470	0.6105	0.4671	0.0111	0.4721
42	33.53	0.25	-1.1976	9.9999	-0.3916	9.9999	0.3361	0.9436	0.6132	0.4603	0.0134	0.4680
43	33.80	0.25	-1.1967	9.9999	-0.3932	9.9999	0.3382	0.9913	0.3142	0.4629	0.0144	0.4678
44	34.06	0.26	-1.1716	9.9999	-0.3994	9.9999	0.3415	1.0056	0.0106	0.4790	0.0166	0.4674
45	34.27	0.27	-1.1382	9.9999	-0.3950	9.9999	0.3497	1.0276	0.6078	0.4768	0.0076	0.4648
46	34.54	0.27	-1.1469	9.9999	-0.4006	9.9999	0.3494	1.0463	0.0096	0.4835	0.0086	0.4621

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/D=E6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	72	0.60	1.7	45.0	81-0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	ACPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	34.74	0.27	-1.1434	9.9999	-0.4408	9.9999	0.3506	1.0386	0.0071	0.4813	0.0068	0.4630
48	35.02	0.26	-1.1447	9.9999	-0.4432	9.9999	0.3522	1.0398	0.0097	0.4811	0.0093	0.4627
49	35.27	0.25	-1.1421	9.9999	-0.4433	9.9999	0.3529	1.0336	0.0158	0.4754	0.0153	0.4599
50	35.51	0.24	-1.1378	9.9999	-0.4423	9.9999	0.3537	0.9923	0.0272	0.4516	0.0274	0.4551
51	35.74	0.25	-1.1281	9.9999	-0.4412	9.9999	0.3557	0.9883	0.0256	0.4565	0.0259	0.4619
52	35.98	0.24	-1.1326	9.9999	-0.4409	9.9999	0.3563	0.9864	0.0297	0.4524	0.0301	0.4587
53	36.21	0.24	-1.1341	9.9999	-0.4437	9.9999	0.3560	0.9864	0.0322	0.4613	0.0333	0.4567
54	36.45	0.25	-1.1295	9.9999	-0.4413	9.9999	0.3566	0.9502	0.0319	0.4397	0.0335	0.4627
55	36.68	0.25	-1.1255	9.9999	-0.4410	9.9999	0.3583	0.9416	0.0357	0.4363	0.0379	0.4633
56	36.93	0.24	-1.1152	9.9999	-0.3962	9.9999	0.3576	0.9133	0.0369	0.4269	0.0404	0.4696
57	37.17	0.25	-1.1202	9.9999	-0.4416	9.9999	0.3588	0.8795	0.0387	0.4150	0.0440	0.4719
58	37.40	0.25	-1.1151	9.9999	-0.4403	9.9999	0.3595	0.8865	0.0346	0.4197	0.0390	0.4734
59	37.64	0.25	-1.1115	9.9999	-0.4422	9.9999	0.3619	0.7936	0.0420	0.3769	0.0529	0.4725
60	37.87	0.24	-1.1194	9.9999	-0.4354	9.9999	0.3626	0.7985	0.0421	0.3808	0.0527	0.4768
61	38.09	0.21	-1.1282	9.9999	-1.4065	9.9999	0.3628	0.8269	1.0400	0.3947	0.0484	0.4773
62	38.30	0.20	-1.1200	9.9999	-0.4107	9.9999	0.3653	0.7659	0.0426	0.3602	0.0556	0.4704
63	38.57	0.20	-1.1237	9.9999	-0.4107	9.9999	0.3655	0.7471	0.0421	0.3470	0.0563	0.4665
64	38.80	0.21	-1.1417	9.9999	-0.4154	9.9999	0.3640	0.7928	0.0418	0.3706	0.0528	0.4679
65	39.01	0.20	-1.1330	9.9999	-0.4175	9.9999	0.3686	0.7048	0.0428	0.3304	0.0598	0.4668
66	39.24	0.20	-1.1220	9.9999	-0.4156	9.9999	0.3704	0.6635	0.0394	0.3092	0.0594	0.4661
67	39.48	0.20	-1.1208	9.9999	-0.4235	9.9999	0.3782	0.5853	0.0357	0.2702	0.0631	0.4779
68	39.67	0.20	-1.1291	9.9999	-0.4304	9.9999	0.3813	0.5535	0.0357	0.2429	0.0644	0.4750
69	39.87	0.20	-1.1040	9.9999	-0.4256	9.9999	0.3839	0.4642	0.0324	0.2261	0.0690	0.4818
70	40.06	0.25	-1.1048	9.9999	-0.4264	9.9999	0.3871	0.4231	0.0351	0.2060	0.0829	0.4870
71	40.28	0.25	-1.1051	9.9999	-0.4304	9.9999	0.3891	0.4057	0.0351	0.1966	0.0864	0.4866
72	40.48	0.24	-1.1036	9.9999	-0.4292	9.9999	0.3889	0.3572	0.0365	0.1716	0.1021	0.4802
73	40.68	0.24	-1.0903	9.9999	-0.4288	9.9999	0.3892	0.2920	0.0311	0.1442	0.1064	0.4938
74	40.49	0.23	-1.1005	9.9999	-0.4292	9.9999	0.3900	0.2986	0.0330	0.1460	0.1104	0.4889
75	41.08	0.21	-1.0997	9.9999	-0.4293	9.9999	0.3907	0.2475	0.0308	0.1233	0.1243	0.4980
76	41.30	0.21	-1.1008	9.9999	-0.4291	9.9999	0.3898	0.2595	0.0298	0.1290	0.1147	0.4969
77	41.49	0.20	-1.1217	9.9999	-0.4346	9.9999	0.3917	0.2843	0.0373	0.1384	0.1311	0.4868
78	41.69	0.20	-1.1240	9.9999	-0.4420	9.9999	0.3922	0.2975	0.0377	0.1449	0.1266	0.4870
79	41.88	0.20	-1.1212	9.9999	-0.4475	9.9999	0.3921	0.2652	0.0386	0.1298	0.1456	0.4892
80	42.07	0.17	-1.1230	9.9999	-0.4561	9.9999	0.3922	0.2845	0.0369	0.1452	0.1296	0.5104
81	42.26	0.16	-1.1256	9.9999	-0.4585	9.9999	0.3930	0.2784	0.0346	0.1472	0.1282	0.5288
82	42.43	0.17	-1.1272	9.9999	-0.4615	9.9999	0.3921	0.3081	0.0342	0.1623	0.1109	0.5268
83	42.61	0.16	-1.1311	9.9999	-0.4646	9.9999	0.3932	0.2650	0.0369	0.1444	0.1166	0.5448
84	42.79	0.16	-1.1423	9.9999	-0.4664	9.9999	0.3929	0.2546	0.0318	0.1408	0.1223	0.5415
85	42.97	0.17	-1.1522	9.9999	-0.4652	9.9999	0.3935	0.2836	0.0363	0.1475	0.1279	0.5201
86	43.14	0.16	-1.1502	9.9999	-0.4662	9.9999	0.3940	0.1691	0.0243	0.1041	0.1440	0.6155
87	43.33	0.17	-1.1552	9.9999	-0.4676	9.9999	0.3935	0.1928	0.0263	0.1123	0.1362	0.5826
88	43.51	0.16	-1.1542	9.9999	-0.4701	9.9999	0.3934	0.1793	0.0266	0.1069	0.1481	0.5964
89	43.69	0.17	-1.1582	9.9999	-0.4723	9.9999	0.3942	0.1906	0.0268	0.1127	0.1299	0.5915
90	43.86	0.17	-1.1442	9.9999	-0.4682	9.9999	0.3940	0.1957	0.0326	0.1061	0.1664	0.5422
91	44.04	0.15	-1.2295	9.9999	-0.4761	9.9999	0.3948	0.1210	0.0204	0.0811	0.1669	0.6697
92	44.23	0.15	-1.2299	9.9999	-0.4767	9.9999	0.3942	0.0742	0.0201	0.0614	0.2716	0.8284

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10=6	RN1	CONF	I	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	72	0.60	1.7	45.0	81.0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
93	44.90	0.14	-1.1858	9.9999	-0.4667	9.9999	0.3947	0.1008	0.0245	0.0690	0.2435	0.6869
94	44.57	0.16	-1.2069	9.9999	-0.4701	9.9999	0.3954	0.0702	0.0220	0.0576	0.3134	0.8203
95	44.78	0.12	-1.2049	9.9999	-0.4774	9.9999	0.3952	0.0191	0.0104	0.0484	0.9639	2.0052
96	44.95	0.11	-1.2005	9.9999	-0.4743	9.9999	0.3946	0.0241	0.0190	0.0391	0.7308	1.5000
97	45.11	0.11	-1.2092	9.9999	-0.4775	9.9999	0.3947	0.0225	0.0177	0.0377	0.7867	1.6711
98	45.29	0.10	-1.2015	9.9999	-0.4768	9.9999	0.3950	0.0164	0.0173	0.0354	1.0549	2.1524
99	45.48	0.09	-1.2057	9.9999	-0.4785	9.9999	0.3952	0.0087	0.0174	0.0328	2.0000	3.7586
100	45.46	0.10	-1.2081	9.9999	-0.4787	9.9999	0.3962	0.0030	0.0174	0.0285	5.8000	9.4667
101	45.60	0.09	-1.2126	9.9999	-0.4777	9.9999	0.3940	-0.0580	0.0137	0.0080	-0.2745	-0.1603
102	45.99	0.11	-1.2201	9.9999	-0.4816	9.9999	0.3945	-0.0369	0.0148	0.0178	-0.4022	-0.3478
103	46.15	0.14	-1.2125	9.9999	-0.4896	9.9999	0.3949	-0.0590	0.0123	0.0234	-0.2048	-0.0577
104	46.32	0.12	-1.2300	9.9999	-0.4884	9.9999	0.3956	-0.0536	0.0136	0.0063	-0.2562	-0.1178
105	46.49	0.12	-1.2333	9.9999	-0.4877	9.9999	0.3954	-0.0889	0.0108	-0.0063	-0.1275	0.0764
106	46.65	0.12	-1.2418	9.9999	-0.4923	9.9999	0.3965	-0.0666	0.0106	0.0016	-0.1594	-0.0241
107	46.84	0.12	-1.2457	9.9999	-0.4936	9.9999	0.3962	-0.0788	0.0104	-0.0035	-0.1423	0.0445
108	47.00	0.11	-1.2431	9.9999	-0.5116	9.9999	0.3946	-0.1212	0.0075	-0.0147	-0.0620	0.1545
109	47.16	0.11	-1.2693	9.9999	-0.5061	9.9999	0.3986	-0.1215	0.0069	-0.0207	-0.0569	0.1787
110	47.33	0.12	-1.2676	9.9999	-0.5051	9.9999	0.3985	-0.1041	0.0064	-0.0147	-0.0778	0.1362
111	47.51	0.10	-1.2617	9.9999	-0.5027	9.9999	0.3993	-0.1013	0.0091	-0.0133	-0.0900	0.1316
112	47.66	0.11	-1.2616	9.9999	-0.5020	9.9999	0.3981	-0.1051	0.0091	-0.0153	-0.0867	0.1459
113	47.85	0.11	-1.2512	9.9999	-0.5010	9.9999	0.3973	-0.1060	0.0081	-0.0178	-0.0766	0.1682
114	48.01	0.10	-1.2716	9.9999	-0.5057	9.9999	0.3979	-0.1177	0.0065	-0.0219	-0.0553	0.1864
115	48.19	0.11	-1.2643	9.9999	-0.5029	9.9999	0.3978	-0.1089	0.0091	-0.0191	-0.0837	0.1757
116	48.35	0.09	-1.2486	9.9999	-0.4956	9.9999	0.3969	-0.1044	0.0100	-0.0192	-0.0960	0.1843
117	48.53	0.09	-1.2547	9.9999	-0.5139	9.9999	0.3999	-0.1320	0.0062	-0.0299	-0.0471	0.2263
118	48.69	0.09	-1.2454	9.9999	-0.5045	9.9999	0.3987	-0.1231	0.0068	-0.0273	-0.0554	0.2215
119	48.84	0.10	-1.2516	9.9999	-0.5053	9.9999	0.3988	-0.1222	0.0058	-0.0269	-0.0558	0.2199
120	49.03	0.07	-1.2421	9.9999	-0.5156	9.9999	0.3991	-0.1347	0.0058	-0.0320	-0.0432	0.2374
121	49.20	0.08	-1.2348	9.9999	-0.5153	9.9999	0.3992	-0.1231	0.0072	-0.0279	-0.0566	0.2264
122	49.38	0.07	-1.2442	9.9999	-0.5156	9.9999	0.3983	-0.1354	0.0043	-0.0329	-0.0318	0.2428
123	49.55	0.07	-1.2433	9.9999	-0.5241	9.9999	0.3995	-0.1346	0.0056	-0.0343	-0.0402	0.2547
124	49.73	0.07	-1.2277	9.9999	-0.5312	9.9999	0.4001	-0.1452	0.0045	-0.0369	-0.0311	0.2678
125	49.91	0.08	-1.2035	9.9999	-0.5097	9.9999	0.3965	-0.1299	0.0092	-0.0348	-0.0715	0.2696
126	50.07	0.06	-1.2053	9.9999	-0.5134	9.9999	0.3984	-0.1239	0.0097	-0.0329	-0.0785	0.2654
127	50.26	0.09	-1.2016	9.9999	-0.4953	9.9999	0.3986	-0.1267	0.0100	-0.0374	-0.0839	0.2951
128	50.43	0.09	-1.2339	9.9999	-0.5075	9.9999	0.3992	-0.1324	0.0138	-0.0425	-0.1042	0.3200
129	50.59	0.09	-1.2259	9.9999	-0.5034	9.9999	0.3984	-0.1414	0.0119	-0.0401	-0.0843	0.3260
130	50.78	0.05	-1.2334	9.9999	-0.5012	9.9999	0.3957	-0.1562	0.0059	-0.0531	-0.0374	0.3357
131	50.92	0.03	-1.2034	9.9999	-0.4992	9.9999	0.3957	-0.1660	0.0062	-0.0577	-0.0470	0.3435
132	51.10	0.04	-1.2344	9.9999	-0.5019	9.9999	0.3955	-0.1812	0.0050	-0.0634	-0.0277	0.3529
133	51.27	0.04	-1.2574	9.9999	-0.4958	9.9999	0.3961	-0.1717	0.0060	-0.0597	-0.0350	0.3479
134	51.43	0.03	-1.3003	9.9999	-0.5104	9.9999	0.3956	-0.2038	0.0009	-0.0732	-0.0044	0.3594
135	51.61	0.04	-1.3472	9.9999	-0.5371	9.9999	0.3987	-0.1885	0.0	-0.0632	0.0	0.3355
136	51.78	0.04	-1.3230	9.9999	-0.5235	9.9999	0.3957	-0.1970	0.0009	-0.0692	-0.0046	0.3515
137	51.94	0.04	-1.3277	9.9999	-0.5496	9.9999	0.3935	-0.1726	-0.0028	-0.0531	0.0163	0.3078
138	52.12	0.04	-1.3025	9.9999	-0.5441	9.9999	0.3994	-0.1591	0.0008	-0.0503	-0.0050	0.3161

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 77 | MACH 0.60 | RATIO-6 1.7 | PHI 45.0 | CONF Minor31 | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
139	52.28	0.03	-1.3780	0.9999	-0.5879	0.9999	0.3962	-0.1329	0.0016	-0.0369	-0.0106	0.2775
140	52.45	0.03	-1.4475	0.9999	-0.5763	0.9999	0.3941	-0.0723	-0.0036	-0.0050	0.0099	0.0693
141	52.62	0.03	-1.4966	0.9999	-0.5766	0.9999	0.4003	-0.0625	-0.0001	-0.0025	0.0016	0.0401
142	52.78	0.03	-1.5056	0.9999	-0.5690	0.9999	0.4011	-0.0492	0.0	0.0049	0.0	-0.0998
143	52.95	0.02	-1.4523	0.9999	-0.5634	0.9999	0.4017	-0.0225	0.0020	0.0149	-0.0889	-0.6622
144	53.11	0.01	-1.4991	0.9999	-0.5759	0.9999	0.4016	-0.0457	0.0022	0.0044	-0.0482	-0.0965
145	53.29	0.02	-1.4931	0.9999	-0.5652	0.9999	0.4033	-0.0536	0.0042	0.0014	-0.0413	-0.0263
146	53.46	0.01	-1.4763	0.9999	-0.5959	0.9999	0.4044	-0.0315	0.0051	0.0049	-0.1624	-0.2834
147	53.62	0.02	-1.4924	0.9999	-0.5893	0.9999	0.4039	-0.0383	0.0041	0.0057	-0.1073	-0.1754
148	53.78	0.01	-1.4954	0.9999	-0.5935	0.9999	0.4047	-0.0364	0.0066	-0.0027	-0.1208	0.0480
149	53.95	-0.01	-1.4859	0.9999	-0.6003	0.9999	0.4071	-0.0439	0.0096	0.0036	-0.2192	-0.0776
150	54.10	-0.00	-1.4991	0.9999	-0.5971	0.9999	0.4084	-0.0465	0.0093	0.0020	-0.2004	-0.0431
151	54.27	0.01	-1.5021	0.9999	-0.6028	0.9999	0.4087	-0.0525	0.0113	-0.0056	-0.2156	0.1069
152	54.43	0.01	-1.4771	0.9999	-0.6000	0.9999	0.4082	-0.0553	0.0098	-0.0047	-0.1759	0.1203
153	54.59	-0.01	-1.4311	0.9999	-0.5811	0.9999	0.4051	-0.0584	0.0042	-0.0362	-0.0831	0.3658
154	54.75	-0.03	-1.4173	0.9999	-0.5717	0.9999	0.4039	-0.1001	0.0074	-0.0372	-0.0741	0.3716
155	54.93	-0.02	-1.4593	0.9999	-0.5713	0.9999	0.4067	-0.0781	0.0076	-0.0374	-0.0756	0.3810
156	55.09	-0.03	-1.4530	0.9999	-0.5761	0.9999	0.4056	-0.1017	0.0071	-0.0342	-0.0700	0.3852
157	55.26	-0.02	-1.4487	0.9999	-0.5884	0.9999	0.4070	-0.0890	0.0072	-0.0404	-0.0729	0.4079
158	55.38	-0.03	-1.4528	0.9999	-0.5791	0.9999	0.4076	-0.0911	0.0090	-0.0364	-0.0990	0.3993
159	55.55	-0.02	-1.3973	0.9999	-0.5888	0.9999	0.4071	-0.0810	0.0096	-0.0354	-0.1188	0.4369
160	55.72	-0.03	-1.4734	0.9999	-0.5724	0.9999	0.4079	-0.0701	0.0122	-0.0327	-0.1743	0.4657
161	55.89	-0.04	-1.4612	0.9999	-0.5761	0.9999	0.4078	-0.0664	0.0124	-0.0317	-0.1670	0.4766
162	56.04	-0.05	-1.4781	0.9999	-0.5960	0.9999	0.4091	-0.1573	0.0167	-0.0266	-0.2920	0.4983
163	56.20	-0.04	-1.4665	0.9999	-0.5893	0.9999	0.4096	-0.0340	0.0234	-0.0206	-0.6174	0.5383
164	56.41	-0.05	-1.4988	0.9999	-0.5966	0.9999	0.4072	-0.0366	0.0251	-0.0196	-0.6094	0.5091
165	56.58	-0.04	-1.4581	0.9999	-0.5921	0.9999	0.4075	-0.0430	0.0284	-0.0253	-0.6597	0.5874
166	56.75	-0.05	-1.4639	0.9999	-0.5993	0.9999	0.4081	-0.0464	0.0281	-0.0247	-0.6048	0.5745
167	56.90	-0.07	-1.4873	0.9999	-0.5985	0.9999	0.4096	-0.0422	0.0268	-0.0230	-0.6342	0.5863
168	57.05	-0.05	-1.4841	0.9999	-0.5993	0.9999	0.4091	-0.0412	0.0277	-0.0234	-0.6715	0.5693
169	57.19	-0.06	-1.4826	0.9999	-0.6048	0.9999	0.4096	-0.0525	0.0256	-0.0267	-0.6866	0.5076
170	57.36	-0.05	-1.4814	0.9999	-0.5993	0.9999	0.4093	-0.0529	0.0240	-0.0268	-0.6565	0.5057
171	57.49	-0.06	-1.4815	0.9999	-0.5784	0.9999	0.4085	-0.0548	0.0237	-0.0270	-0.6365	0.4954
172	57.63	-0.06	-1.4894	0.9999	-0.5838	0.9999	0.4085	-0.0523	0.0245	-0.0284	-0.6674	0.5421
173	57.79	-0.07	-1.4963	0.9999	-0.5762	0.9999	0.4079	-0.0523	0.0216	-0.0261	-0.6138	0.4981
174	57.93	-0.06	-1.4951	0.9999	-0.5868	0.9999	0.4077	-0.0456	0.0185	-0.0232	-0.6132	0.5099
175	58.09	-0.06	-1.4906	0.9999	-0.5784	0.9999	0.4075	-0.0494	0.0168	-0.0238	-0.5813	0.4828
176	58.23	-0.06	-1.4894	0.9999	-0.5790	0.9999	0.4080	-0.0426	0.0177	-0.0268	-0.6165	0.4894
177	58.20	-0.07	-1.4910	0.9999	-0.5785	0.9999	0.4084	-0.0543	0.0201	-0.0254	-0.5708	0.4868
178	58.29	-0.07	-1.4917	0.9999	-0.5806	0.9999	0.4088	-0.0529	0.0201	-0.0250	-0.5843	0.4761
179	58.29	-0.06	-1.4926	0.9999	-0.5808	0.9999	0.4082	-0.0497	0.0192	-0.0235	-0.5871	0.4738
180	58.29	-0.05	-1.4824	0.9999	-0.5861	0.9999	0.4090	-0.0558	0.0217	-0.0274	-0.5896	0.4901

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

ITEST	PANEL	XCG	MACH	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	73	1.50	1.7	45.0	PI=0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAH	CAF	ACP
1	-3.88	0.11	-0.6172	1.2065	0.1961	-0.4958	-0.2046	0.2646	0.0669	0.1977	-1.7210
2	-3.89	0.10	-0.6893	1.2208	0.1465	-0.5080	-0.2045	0.2664	0.0669	0.2015	-1.6460
3	-3.87	0.11	-0.7065	1.2179	0.1064	-0.5022	-0.2041	0.2664	0.0665	0.1999	-1.6074
4	-3.72	0.10	-0.6967	1.2717	0.1519	-0.4872	-0.2046	0.2879	0.0607	0.2272	-1.5537
5	-2.43	0.09	-0.5239	0.3398	0.0521	-0.3952	-0.2047	0.2911	0.0576	0.2334	-1.4186
6	-1.82	0.11	-0.4249	0.0953	0.1969	-0.3451	-0.2041	0.2933	0.0572	0.2360	-3.9858
7	1.56	0.11	0.2113	-0.1358	0.1792	-0.0849	-0.2047	0.3026	0.0572	0.2451	-0.6922
8	3.52	0.10	0.6467	-0.3772	0.1206	-0.4420	-0.2038	0.3052	0.0625	0.2426	-1.1668
9	5.36	0.11	0.9117	-1.1589	0.1794	-0.4559	-0.2040	0.3129	0.0726	0.2402	-1.4196
10	7.35	0.10	1.1925	-1.3473	0.1337	-0.4326	-0.2041	0.3135	0.0880	0.2254	-1.6329
11	9.28	0.11	1.4523	-2.0579	0.1393	-0.4638	-0.2052	0.3158	0.1003	0.2155	-1.7789
12	11.24	0.11	2.0718	-3.9955	0.1961	-0.6544	-0.2065	0.3125	0.1138	0.1987	-1.8451
13	14.19	0.11	2.5872	-5.4980	0.2208	-0.8268	-0.2088	0.3150	0.1302	0.1846	-1.9832
14	15.19	0.11	3.1184	-6.8572	0.1370	-0.5597	-0.2037	0.3107	0.1465	0.1642	-2.0139
15	17.23	0.11	3.6208	-7.2361	0.0501	-0.5042	-0.2037	0.3079	0.1706	0.1373	-1.9990
16	19.24	0.11	4.1443	-8.3694	0.0152	-0.6026	-0.2028	0.3073	0.2005	0.1068	-2.0026
17	21.24	0.11	4.6612	-9.2961	0.2231	-0.6959	-0.2047	0.3117	0.2299	0.0817	-1.9756
18	23.21	0.11	5.0660	-9.9219	0.1902	-0.6849	-0.2093	0.3395	0.2752	0.0642	-1.9577
19	25.19	0.10	5.4854	-12.5504	0.4991	-0.5712	-0.1626	0.3651	0.3314	0.0333	-1.8664
20	27.13	0.11	6.1461	-10.4745	0.7307	-0.8580	-0.0366	0.3664	0.3517	0.0147	-1.7037
21	29.32	0.10	6.3435	-10.3725	0.8542	-0.8498	-0.0394	0.3506	0.3677	-0.0171	-1.6352
22	25.32	0.11	6.3714	-10.4691	0.7450	-0.7396	-0.0190	0.3528	0.3688	-0.0160	-1.6063
23	25.32	0.11	6.3026	-10.4190	0.7495	-0.8233	-0.0123	0.3568	0.3681	-0.0113	-1.6531
24	28.33	0.10	6.4191	-10.4745	0.8692	-0.7462	-0.0537	0.3567	0.3707	-0.0140	-1.6328
25	23.34	0.10	6.4773	-10.4867	0.8773	-0.8571	-0.0752	0.3506	0.3753	-0.0247	-1.6066
26	28.47	0.11	6.4842	-10.4868	0.7912	-0.7078	-0.0818	0.3579	0.3775	-0.0196	-1.6037
27	29.22	0.10	6.6242	-10.5201	0.9025	-0.8468	-0.1508	0.3748	0.3863	-0.0123	-1.5888
28	29.36	0.10	6.6442	-10.5068	0.8701	-0.7342	-0.1512	0.3598	0.3886	-0.0288	-1.5707
29	29.30	0.12	6.5798	-10.4644	0.8850	-0.5666	-0.2329	0.3475	0.3975	-0.0500	-1.5793
30	30.09	0.10	6.8213	-10.7925	0.9563	-0.7057	-0.2337	0.3597	0.4076	-0.0479	-1.5596
31	30.37	0.12	6.8578	-10.7458	0.8457	-0.5468	-0.1219	0.3658	0.4148	-0.0490	-1.5433
32	30.64	0.10	7.0751	-10.7963	0.9314	-0.5334	-0.2478	0.3541	0.4206	-0.0665	-1.5255
33	30.91	0.10	7.1053	-10.7337	0.8395	-0.3385	-0.2755	0.3830	0.4272	-0.0442	-1.4936
34	31.20	0.20	7.3274	-10.7377	1.0004	-0.4904	-0.2905	0.3694	0.4264	-0.0570	-1.4812
35	31.48	0.20	7.5737	-10.9512	0.9997	-0.4916	-0.3593	0.3664	0.4276	-0.0612	-1.4459
36	31.76	0.21	7.5147	-10.9153	1.1045	-0.5926	-0.4015	0.3846	0.4278	-0.0397	-1.4325
37	32.03	0.22	7.7752	-11.1887	1.3710	-0.6267	-0.3701	0.3787	0.4335	-0.0548	-1.4206
38	32.32	0.23	8.1650	-11.4650	1.3105	-0.6784	-0.5394	0.3671	0.4371	-0.0700	-1.4070
39	32.60	0.23	8.1863	-11.4852	1.3095	-0.6579	-0.5186	0.3679	0.4385	-0.0706	-1.3939
40	32.84	0.24	8.2177	-11.1537	1.6249	-1.0465	-0.5666	0.3830	0.4404	-0.0576	-1.3573
41	33.09	0.24	8.3109	-11.2289	1.3120	-0.7440	-0.5538	0.4019	0.4451	-0.0432	-1.3512
42	33.37	0.23	8.3981	-11.5156	1.4289	-0.6284	-0.6294	0.3957	0.4522	-0.0565	-1.3414
43	33.62	0.23	8.4750	-11.5491	1.5917	-0.7823	-0.6994	0.3825	0.4527	-0.0702	-1.3302
44	33.89	0.23	8.4539	-11.7674	1.6667	-0.9546	-0.6710	0.3731	0.4563	-0.0832	-1.3120
45	34.12	0.23	8.4536	-11.9799	1.6784	-1.0038	-0.7050	0.3622	0.4566	-0.0944	-1.3230
46	34.37	0.23	8.1800	-11.9755	1.5182	-0.5766	-0.4906	0.3798	0.4669	-0.0871	-1.3066

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | SALT 73 | SALN 0.00 | MXI=0.7 | PHI 90.0 | CONF PHI=0.31 | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	ACP
47	34.39	0.22	9.3414	-11.1250	1.5066	-0.6316	0.6781	0.3883	0.0709	-0.0626	-1.2779
48	34.48	0.21	9.4492	-11.0860	1.5891	-0.4494	0.7190	0.3884	0.0740	-0.0859	-1.2639
49	35.16	0.22	9.6249	-11.0461	1.6327	-0.4256	0.7201	0.3766	0.0779	-0.1016	-1.2303
50	35.36	0.21	9.6919	-11.7210	1.6700	-0.3838	0.6928	0.3712	0.0797	-0.1066	-1.2239
51	35.56	0.22	9.8194	-11.6415	1.6957	-0.5151	0.7216	0.3591	0.0829	-0.1238	-1.1964
52	35.61	0.19	9.8926	-11.1340	1.1487	-0.0982	0.6436	0.3844	0.0851	-0.1067	-1.1702
53	35.15	0.22	9.7152	-10.7602	1.6827	-0.3187	0.6556	0.3502	0.0863	-0.1361	-1.1076
54	34.39	0.19	9.7450	-10.5560	1.1357	0.2254	0.6275	0.3459	0.0872	-0.1413	-1.0908
55	35.62	0.19	9.7361	-10.6743	1.0564	0.3397	0.5439	0.3552	0.0895	-0.1343	-1.0550
56	35.58	0.18	9.8199	-10.4504	0.9727	0.5394	0.6000	0.3691	0.0899	-0.1206	-1.0642
57	37.11	0.19	9.9563	-10.6597	1.1188	0.3814	0.6003	0.3685	0.0930	-0.1245	-1.0409
58	37.34	0.19	10.0477	-10.1981	1.1041	0.4479	0.5943	0.3555	0.0956	-0.1401	-1.0150
59	37.57	0.17	9.9799	-9.9158	0.8366	0.6552	0.5876	0.3584	0.0961	-0.1372	-1.0016
60	37.58	0.19	10.1691	-10.0799	1.0944	0.3997	0.6694	0.3146	0.0943	-0.1797	-1.0449
61	35.07	0.16	10.0145	-9.8631	0.9044	0.4655	0.5011	0.3339	0.0956	-0.1617	-0.9345
62	35.30	0.17	9.9142	-9.7577	0.8510	0.5525	0.4820	0.3393	0.0959	-0.1471	-0.8833
63	35.59	0.17	9.9799	-9.8105	0.8906	0.4365	0.4148	0.3595	0.0903	-0.1308	-0.8586
64	36.74	0.15	9.9869	-9.9867	0.9351	0.4300	0.1960	0.3391	0.0743	-0.1353	-0.7202
65	35.96	0.19	9.8599	-9.6238	0.8027	0.7415	0.2238	0.3596	0.0749	-0.0791	-0.7313
66	39.20	0.19	9.7999	-9.2156	0.5816	0.6145	0.2389	0.3624	0.0725	-0.1102	-0.7396
67	39.61	0.19	9.7611	-9.0791	0.5565	0.6863	0.1628	0.3675	0.0664	-0.1189	-0.6829
68	39.69	0.18	9.8949	-9.2262	0.6498	0.4439	0.1635	0.3145	0.0678	-0.1496	-0.6997
69	39.59	0.18	10.0046	-9.3758	0.7582	0.2828	0.1154	0.3109	0.0673	-0.1565	-0.6752
70	40.05	0.14	9.9969	-9.0135	0.4766	0.5556	0.1152	0.3204	0.0682	-0.1479	-0.6824
71	41.21	0.14	10.0923	-9.0763	0.3561	0.8169	0.1152	0.3267	0.0682	-0.1416	-0.6813
72	41.48	0.13	10.1342	-8.9239	0.3460	0.7117	0.1156	0.2946	0.0669	-0.1724	-0.6631
73	40.97	0.14	10.1463	-8.9364	0.2866	0.5919	0.0194	0.3042	0.0656	-0.1615	-0.6352
74	40.49	0.12	10.0230	-8.8997	0.2211	0.6636	-0.0071	0.3170	0.0691	-0.1522	-0.6368
75	41.10	0.15	10.2559	-8.9769	0.2807	0.3492	-0.0152	0.3062	0.0757	-0.1696	-0.6218
76	41.29	0.13	10.2542	-8.9102	0.2552	-0.0971	-0.0262	0.3081	0.0808	-0.1726	-0.6186
77	41.52	0.14	10.2512	-8.9396	0.2598	0.0559	-0.0258	0.3350	0.0814	-0.1669	-0.6261
78	41.72	0.14	10.2642	-8.9264	0.2519	0.0623	-0.0342	0.3225	0.0803	-0.1678	-0.6218
79	41.94	0.12	10.2838	-8.9358	0.2506	0.1514	-0.1161	0.3263	0.0821	-0.1661	-0.6191
80	42.13	0.11	10.2799	-8.9169	0.2289	0.5022	-0.0613	0.3436	0.0809	-0.1573	-0.6403
81	42.33	0.09	10.2352	-8.8784	0.2116	0.0918	-0.1496	0.3388	0.0835	-0.1651	-0.6259
82	42.53	0.14	10.2972	-8.9161	-0.0470	0.1897	-0.1221	0.3155	0.5067	-0.1912	-0.6255
83	42.71	0.14	10.3162	-8.9319	0.2567	0.6017	-0.0816	0.3340	0.5123	-0.1763	-0.6040
84	42.96	0.09	10.2368	-8.8997	0.0420	-0.1187	-0.0391	0.2937	0.5003	-0.2046	-0.5536
85	43.08	0.14	10.3113	-8.8964	0.5258	0.1577	0.0029	0.3482	0.5078	-0.1592	-0.5978
86	43.25	0.15	10.3836	-8.8668	0.0105	-0.0927	-0.0369	0.3469	0.4929	-0.1440	-0.5528
87	43.48	0.16	10.4164	-8.8871	0.3564	0.0419	-0.0307	0.3115	0.4824	-0.1709	-0.5247
88	43.62	0.11	10.2340	-8.8473	0.3610	-0.4963	-0.0506	0.2975	0.4894	-0.1919	-0.5418
89	43.82	0.07	10.4554	-8.8456	0.0372	-0.6692	-0.0051	0.3240	0.5060	-0.1780	-0.5446
90	43.99	0.09	10.2283	-8.8277	0.2483	-0.6696	-0.0779	0.3081	0.4903	-0.1822	-0.5308
91	44.19	0.13	10.2714	-8.8132	0.5625	-0.7567	-0.0631	0.3348	0.4843	-0.1665	-0.5335
92	44.35	0.10	10.2490	-8.8253	0.2444	-0.9377	-0.1455	0.3298	0.4951	-0.1653	-0.5506

PAGE 1 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REYNOLDS	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	73	0.90	1.7	45.0	01=0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	ACP
93	44.56	0.07	11.3[illegible]	-0.2267	0.1693	-0.0765	-0.1323	0.3308	0.4936	-0.1638	-0.5462
94	44.71	0.09	11.5[illegible]	-0.2317	0.3126	-0.0772	-0.1107	0.3006	0.4894	-0.1892	-0.5207
95	44.91	0.08	11.6[illegible]	-0.2387	0.2269	-1.0270	-0.0963	0.2762	0.4984	-0.2126	-0.5105
96	45.09	0.11	11.7[illegible]	-0.2374	0.1047	-1.3422	-0.1156	0.2862	0.4989	-0.2126	-0.5181
97	45.28	0.09	11.8[illegible]	-0.2414	0.2989	-0.8995	-0.0625	0.2839	0.4934	-0.2049	-0.5030
98	45.43	0.08	11.8[illegible]	-0.1882	0.2622	-0.9944	-0.0847	0.2902	0.4954	-0.2052	-0.5190
99	45.63	0.07	12.0[illegible]	-0.2069	0.2520	-1.1746	-0.1432	0.3113	0.5161	-0.2028	-0.5218
100	45.80	0.07	12.0[illegible]	-0.1719	0.2539	-1.1759	-0.1736	0.3338	0.5197	-0.1859	-0.5389
101	45.96	0.07	12.2[illegible]	-0.2303	0.3045	-1.2160	-0.1837	0.3307	0.5149	-0.1842	-0.5453
102	46.15	0.05	12.2[illegible]	-0.1911	0.0990	-1.2344	-0.1860	0.3029	0.5144	-0.2115	-0.5422
103	46.34	0.02	12.3[illegible]	-0.1997	0.0525	-1.5014	-0.1824	0.2754	0.5143	-0.2388	-0.5257
104	46.51	0.03	12.4[illegible]	-0.1343	0.1527	-1.5557	-0.1832	0.3029	0.5143	-0.2114	-0.5256
105	46.69	0.05	12.4[illegible]	-0.1403	0.1388	-1.4724	-0.1631	0.2859	0.5126	-0.2266	-0.5163
106	46.85	0.03	12.5[illegible]	-0.1701	-0.0056	-1.6102	-0.1974	0.2915	0.5134	-0.2219	-0.5086
107	47.03	0.04	12.5[illegible]	-0.1835	0.0524	-1.7557	-0.2031	0.2726	0.5198	-0.2469	-0.5091
108	47.22	0.04	12.6[illegible]	-0.2442	0.1264	-2.0746	-0.1958	0.2552	0.5177	-0.2624	-0.4941
109	47.38	0.01	12.6[illegible]	-0.1942	0.3866	-1.9847	-0.2153	0.2664	0.5162	-0.2297	-0.5139
110	47.54	0.04	12.6[illegible]	-0.1844	0.0579	-1.1073	-0.2370	0.3063	0.5254	-0.2171	-0.5560
111	47.72	0.04	12.6[illegible]	-0.1925	0.1494	-2.1146	-0.2219	0.2621	0.5102	-0.2280	-0.4907
112	47.90	0.03	12.6[illegible]	-0.1935	0.1277	-1.6379	-0.2220	0.2746	0.5149	-0.2382	-0.5013
113	48.07	0.02	12.6[illegible]	-0.1936	0.2283	-1.8761	-0.2062	0.2643	0.5205	-0.2561	-0.4961
114	48.23	0.05	12.6[illegible]	-0.1829	0.1291	-1.6365	-0.2148	0.2957	0.5174	-0.2217	-0.4717
115	48.42	0.04	12.6[illegible]	-0.1942	0.0716	-1.9367	-0.2144	0.2712	0.5105	-0.2392	-0.4628
116	48.59	0.03	12.6[illegible]	-0.1892	0.0891	-1.6547	-0.1543	0.2573	0.5183	-0.2509	-0.4513
117	48.78	0.02	12.6[illegible]	-0.1896	0.0571	-1.5957	-0.1319	0.2654	0.5064	-0.2369	-0.4495
118	48.93	0.02	12.6[illegible]	-0.1852	-0.0717	0.0640	-0.0[illegible]	0.2764	0.5076	-0.2313	-0.4532
119	49.09	0.03	12.6[illegible]	-0.1858	-0.1514	0.1378	-0.0067	0.2811	0.5112	-0.2300	-0.4566
120	49.27	0.03	12.7[illegible]	-0.1979	-0.1183	-0.0342	0.0034	0.2914	0.5121	-0.2306	-0.4513
121	49.45	0.02	12.7[illegible]	-0.1837	-0.0231	0.0055	0.0187	0.2464	0.5101	-0.2716	-0.4600
122	49.63	0.04	12.7[illegible]	-0.2016	-0.3687	0.7591	0.0263	0.2896	0.5315	-0.2419	-0.4670
123	49.84	0.03	12.7[illegible]	-0.2124	0.0956	0.3133	0.0281	0.2695	0.5142	-0.2446	-0.4664
124	49.99	0.02	12.8[illegible]	-0.2061	-0.5184	0.0653	0.0524	0.2658	0.5276	-0.2617	-0.4872
125	50.17	0.03	12.8[illegible]	-0.2008	-0.4812	0.4729	0.0596	0.3024	0.5370	-0.2346	-0.4810
126	50.33	0.07	12.8[illegible]	-0.2042	0.1247	0.1539	0.0817	0.2720	0.5313	-0.2592	-0.4834
127	50.49	0.09	12.8[illegible]	-0.2079	-0.3592	0.8552	0.0868	0.2762	0.5400	-0.2637	-0.4748
128	50.67	0.09	12.8[illegible]	-0.2072	-0.2073	-0.2696	0.1767	0.3380	0.5652	-0.2272	-0.5055
129	50.83	0.05	12.8[illegible]	-0.1773	-0.1313	-0.5644	0.1479	0.3047	0.5716	-0.2669	-0.5104
130	51.01	0.06	12.9[illegible]	-0.1880	0.3161	-1.0033	0.1363	0.3325	0.5734	-0.2409	-0.5060
131	51.17	0.07	12.9[illegible]	-0.1900	0.2623	-0.8067	0.1496	0.3111	0.5754	-0.2648	-0.4964
132	51.34	0.06	12.9[illegible]	-0.1903	0.0540	-0.7604	0.1468	0.2925	0.5711	-0.2786	-0.5065
133	51.52	0.04	12.9[illegible]	-0.1861	-0.0302	-0.6516	0.1467	0.3137	0.5728	-0.2591	-0.5172
134	51.67	0.04	12.9[illegible]	-0.1883	0.0252	-0.9361	0.1426	0.3112	0.5706	-0.2594	-0.4939
135	51.85	0.02	12.9[illegible]	-0.1871	-0.2361	-1.0247	0.1215	0.2909	0.5545	-0.2736	-0.5075
136	52.01	0.03	13.0[illegible]	-0.1878	-0.1150	-0.8623	0.1047	0.2816	0.5550	-0.2733	-0.4884
137	52.18	-0.02	13.0[illegible]	-0.1882	-0.5365	-1.1850	0.0471	0.2517	0.5537	-0.3020	-0.4982
138	52.35	-0.03	13.0[illegible]	-0.1845	-0.6577	-1.0426	0.0204	0.2642	0.5433	-0.2790	-0.4909

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RAIGA PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 73 0.90 1.7 45.0 91.0F31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	ACP
139	52.51	-0.02	14.5035	-7.1841	-0.5564	-1.3821	0.0004	0.2665	0.5563	-0.2894	-0.4939
140	52.67	-0.04	14.4757	-7.1815	-0.7429	-1.1376	0.0196	0.2658	0.5533	-0.2774	-0.4875
141	52.58	-0.01	14.4812	-7.1841	-0.6765	-1.2739	-0.0351	0.2651	0.5546	-0.2995	-0.5032
142	53.02	-0.04	14.7564	-7.3443	-1.2481	-1.7315	-0.0556	0.2603	0.5476	-0.3073	-0.5045
143	53.19	-0.01	14.8134	-7.3597	-1.4567	-1.7756	-0.1037	0.2974	0.5621	-0.2847	-0.5163
144	53.17	-0.07	14.7973	-7.3527	-1.4153	-1.7663	-0.0750	0.2898	0.5530	-0.3064	-0.5113
145	53.38	-0.03	15.3.61	-7.4524	-0.7833	-2.1833	0.0670	0.2896	0.5532	-0.3047	-0.5084
146	53.49	-0.04	15.1561	-7.3005	-0.5435	-2.5194	0.0607	0.2729	0.5470	-0.3245	-0.5478
147	53.58	-0.03	15.2112	-7.3736	-0.5576	-2.4536	0.0588	0.2823	0.5470	-0.3167	-0.5439
148	54.12	0.01	15.2944	-7.4769	-0.0594	-2.4770	0.0548	0.2837	0.5470	-0.3133	-0.5559
149	54.16	-0.03	15.3674	-7.5252	-0.4614	-2.3379	0.0609	0.2589	0.5319	-0.3430	-0.5734
150	54.73	-0.01	15.4143	-7.5785	-0.3527	-2.1803	0.0749	0.3014	0.5450	-0.3037	-0.5758
151	54.53	-0.02	15.4554	-7.6285	-0.4993	-2.4836	0.0565	0.2917	0.5392	-0.3176	-0.5829
152	54.56	-0.02	15.4557	-7.6344	-0.5104	-2.4716	0.0477	0.2906	0.5410	-0.3304	-0.5744
153	54.63	-0.03	15.4554	-7.6371	-0.4933	-2.7531	0.0611	0.2780	0.5429	-0.3389	-0.5812
154	54.94	-0.04	15.4.67	-7.6454	-0.0659	-2.7117	0.0542	0.2657	0.5077	-0.3420	-0.5690
155	55.19	-0.00	15.4852	-7.6.67	-0.2434	-2.7116	0.0536	0.2535	0.5013	-0.3678	-0.5894
156	55.31	-0.01	15.4741	-7.6593	-0.6570	-2.6309	0.0552	0.2725	0.5999	-0.3174	-0.5693
157	55.65	-0.03	15.5.28	-7.6863	-0.7150	-2.6528	0.0606	0.2747	0.6001	-0.3256	-0.5891
158	55.62	-0.03	15.4.46	-7.6.67	-0.6677	-2.7095	0.0276	0.2708	0.5918	-0.3210	-0.5891
159	55.78	-0.04	15.4.2.	-7.6.71	-0.6.06	-2.5768	0.0288	0.2572	0.5900	-0.3328	-0.5778
160	55.92	-0.04	15.4521	-7.6561	-0.6787	-2.5146	0.0275	0.2491	0.5452	-0.3361	-0.5891
161	56.47	-0.01	15.4.2.	-7.6.11	-0.6.39	-2.4658	0.0213	0.2335	0.5783	-0.3448	-0.5769
162	56.24	0.02	15.4.62	-7.6.37	-0.6296	-2.4282	0.0226	0.2303	0.5818	-0.3515	-0.5774
163	56.34	-0.04	15.4.7.	-7.6.53	-0.3670	-2.3621	0.0222	0.2467	0.5774	-0.3287	-0.5719
164	56.56	-0.01	15.4736	-7.6.23	-0.3456	-2.3014	0.0223	0.2380	0.5794	-0.3404	-0.5765
165	56.69	0.01	15.4.2.	-7.6.84	-0.2.81	-2.4319	0.0234	0.2391	0.5757	-0.3366	-0.5738
166	56.63	-0.02	15.4.62	-7.6.23	-0.5229	-2.1705	0.0206	0.2625	0.5756	-0.3133	-0.5771
167	57.00	0.02	15.4.2.	-7.6.34	-0.1.66	-2.1541	0.0232	0.2389	0.5759	-0.3370	-0.5743
168	57.14	0.01	15.4911	-7.6967	-0.3213	-2.0.50	0.0226	0.2468	0.5724	-0.3256	-0.5751
169	57.31	0.02	15.4.7.	-7.6.34	-0.1.65	-2.2.56	0.0232	0.2360	0.5701	-0.3361	-0.5755
170	57.62	-0.01	15.4.39	-7.6.96	-0.3356	-1.9919	0.0229	0.2355	0.5697	-0.3342	-0.5656
171	57.63	-0.01	15.4.34	-7.6.48	-0.3252	-1.9906	0.0224	0.2563	0.5756	-0.3193	-0.5655
172	57.73	-0.01	15.4.6.	-7.6.59	-0.3220	-2.1742	0.0230	0.2470	0.5764	-0.3344	-0.5701
173	57.84	-0.01	15.4.33	-7.6.41	-0.4538	-1.9136	0.0157	0.2175	0.5734	-0.3559	-0.5697
174	58.04	0.02	15.5.01	-7.6.63	-0.0623	-1.2267	0.0104	0.1998	0.5672	-0.3674	-0.5402
175	58.11	-0.01	15.4.74	-7.6.07	-0.3544	-1.6965	0.0048	0.2214	0.5623	-0.3409	-0.5439
176	58.46	0.01	15.5.42	-7.6.62	0.2426	0.1029	-0.0020	0.2135	0.5609	-0.3471	-0.5560
177	58.38	-0.02	15.5.33	-7.6.70	0.0.05	0.5631	-0.0090	0.2131	0.5638	-0.3307	-0.5781
178	58.51	0.01	15.5.4.	-7.6.50	0.3259	0.6.35	-0.0027	0.2185	0.5667	-0.3442	-0.5551
179	58.52	-0.02	15.5.7.	-7.6.76	0.1.62	0.1731	-0.0101	0.1975	0.5620	-0.3645	-0.5825
180	57.95	-0.01	15.4.77	-7.6.74	-0.2.84	-2.0.36	0.0229	0.2196	0.5793	-0.3597	-0.5715

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) / AV 16 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST / T4 / 650 1.7 / M5.0 / 01-0F31 / 0.0 / DEL1 0 / DEL2 0 / DEL3 0 / DEL4 0 / TRANSITION: UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.88	0.11	0.1407	0.0158	0.0708	0.1055	0.5192	-0.0233	-0.0124	-0.0296	0.1492	0.3559
2	-5.69	0.11	0.1394	0.0161	0.0709	0.1040	0.5194	-0.0233	-0.0124	-0.0303	0.1492	0.3634
3	-5.67	0.11	0.1392	0.0152	0.0709	0.1038	0.5177	-0.0257	-0.0116	-0.0257	0.1536	0.3391
4	-4.22	0.10	0.0940	0.0064	0.0429	0.1491	0.5251	-0.0440	-0.0043	-0.0096	0.1891	0.2187
5	-2.33	0.09	0.0405	0.0030	0.0243	0.1250	0.5924	-0.0141	-0.0047	0.0030	0.3333	-0.2128
6	-0.45	0.11	0.0154	0.0005	0.0111	0.0327	0.7255	0.0074	0.0005	0.0114	0.0676	1.5495
7	1.54	0.11	-0.0307	-0.0004	0.0020	0.7313	-0.2985	0.0358	0.0004	0.0256	0.1793	0.7143
8	3.52	0.10	-0.0784	-0.0086	-0.0114	0.2474	0.3278	0.0820	0.0114	0.0491	0.1394	0.5023
9	5.38	0.10	-0.0960	-0.0142	-0.0278	0.1639	0.4003	0.1490	0.0157	0.0730	0.1124	0.5218
10	7.35	0.10	-0.1115	-0.0152	-0.0473	0.1376	0.4279	0.2064	0.0206	0.1057	0.0994	0.5116
11	9.29	0.11	-0.1307	-0.0170	-0.0710	0.0997	0.4714	0.2835	0.0245	0.1424	0.0862	0.5018
12	11.24	0.11	-0.1425	-0.0179	-0.0910	0.0870	0.4719	0.3642	0.0283	0.1802	0.0765	0.4881
13	13.19	0.11	-0.1534	-0.0186	-0.1094	0.0763	0.4752	0.4547	0.0312	0.2219	0.0678	0.4826
14	15.19	0.11	-0.1651	-0.0195	-0.1284	0.0705	0.4727	0.5620	0.0337	0.2667	0.0599	0.4747
15	17.23	0.11	-0.1808	-0.0203	-0.1438	0.0649	0.4659	0.6670	0.0329	0.3127	0.0538	0.4539
16	19.24	0.11	-0.1933	-0.0209	-0.1586	0.0609	0.4620	0.7916	0.0379	0.3643	0.0478	0.4349
17	21.29	0.11	-0.2092	-0.0221	-0.1736	0.0591	0.4491	0.9864	0.0401	0.3796	0.0452	0.4280
18	23.21	0.12	-0.2258	-0.0235	-0.2072	0.0674	0.4359	0.9554	0.0498	0.4010	0.0521	0.4198
19	25.15	0.12	-0.2429	-0.0247	-0.2250	0.0893	0.4282	1.0166	0.0556	0.4108	0.0549	0.4108
20	27.13	0.12	-0.2623	-0.0260	-0.2415	0.0974	0.4211	1.0101	0.0491	0.4049	0.0486	0.4059
21	29.36	0.12	-0.2810	-0.0261	-0.2564	0.0912	0.4170	0.9796	0.0449	0.3963	0.0456	0.4046
22	29.32	0.12	-0.2819	-0.0264	-0.2567	0.0918	0.4176	1.0103	0.0466	0.4042	0.0461	0.4041
23	29.32	0.12	-0.2852	-0.0264	-0.2573	0.0905	0.4187	1.0114	0.0456	0.4041	0.0453	0.4035
24	29.33	0.12	-0.2865	-0.0265	-0.2581	0.0910	0.4151	0.9863	0.0442	0.3956	0.0446	0.4011
25	29.36	0.12	-0.2917	-0.0272	-0.2629	0.0863	0.4163	0.9916	0.0416	0.3991	0.0421	0.4025
26	29.37	0.12	-0.2778	0.0018	-0.1993	-0.0038	0.4172	0.9919	0.0409	0.3997	0.0412	0.4030
27	29.22	0.12	-0.2871	0.0020	-0.1947	-0.0013	0.4169	0.9939	0.0397	0.3991	0.0399	0.4016
28	29.62	0.12	-0.2888	0.0015	-0.1965	-0.0032	0.4189	1.0035	0.0401	0.4022	0.0399	0.4008
29	29.90	0.12	-0.2910	0.0005	-0.1987	-0.0016	0.4178	1.0037	0.0391	0.4024	0.0389	0.4010
30	30.04	0.12	-0.2936	0.0013	-0.1991	-0.0034	0.4213	1.0168	0.0378	0.4085	0.0372	0.4018
31	30.37	0.11	-0.2977	0.0024	-0.2014	-0.0053	0.4231	1.0132	0.0368	0.4055	0.0363	0.4003
32	30.64	0.12	-0.2995	0.0032	-0.1747	-0.0047	0.4243	1.0036	0.0337	0.4024	0.0335	0.4010
33	30.91	0.12	-0.3137	0.0034	-0.1760	-0.0052	0.4272	1.0072	0.0322	0.4045	0.0319	0.4017
34	31.20	0.12	-0.3151	0.0031	-0.1702	-0.0038	0.4309	0.9900	0.0302	0.3964	0.0305	0.4024
35	31.46	0.12	-0.3249	0.0027	-0.1663	-0.0018	0.4341	0.9976	0.0288	0.4011	0.0288	0.4021
36	31.74	0.11	-0.3342	0.0	-0.1644	0.0	0.4345	0.9765	0.0246	0.3934	0.0255	0.4054
37	32.04	0.12	-0.3407	-0.0007	-0.1603	0.0019	0.4389	0.9754	0.0240	0.3956	0.0247	0.4056
38	32.36	0.11	-0.3499	-0.0023	-0.1536	0.0056	0.4405	0.9629	0.0234	0.3947	0.0244	0.4047
39	32.65	0.11	-0.3529	-0.0026	-0.1526	0.0058	0.4431	0.9811	0.0237	0.3964	0.0242	0.4040
40	32.98	0.11	-0.3621	-0.0017	-0.1376	0.0056	0.4554	0.9807	0.0223	0.3965	0.0228	0.4043
41	33.05	0.12	-0.3675	-0.0015	-0.1366	0.0054	0.4586	0.9936	0.0219	0.4014	0.0221	0.4040
42	33.37	0.13	-0.3749	-0.0023	-0.1343	0.0060	0.4632	0.9934	0.0219	0.4007	0.0221	0.4033
43	33.62	0.13	-0.3788	-0.0022	-0.1329	0.0063	0.4651	0.9967	0.0215	0.4023	0.0216	0.4036
44	33.89	0.13	-0.3871	-0.0027	-0.1309	0.0063	0.4679	1.0009	0.0210	0.4042	0.0210	0.4039
45	34.12	0.13	-0.3955	-0.0027	-0.1118	0.0064	0.4733	1.0084	0.0208	0.4070	0.0207	0.4035
46	34.37	0.13	-0.4018	-0.0029	-0.1106	0.0062	0.4741	1.0147	0.0201	0.4100	0.0198	0.4041

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 73 MACH 1.07 ALPHA 45.0 CODE 1 81E0F31 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
87	34.84	0.22	-1.2376	-0.4081	-0.1135	0.0257	0.4783	1.0263	0.0200	0.4133	0.0196	0.4035
88	34.95	0.21	-1.2135	-0.4056	-0.1061	0.0253	0.4667	1.0343	0.0193	0.4174	0.0187	0.4036
89	35.12	0.22	-1.2401	-0.4072	-0.1078	0.0253	0.4796	1.0335	0.0181	0.4175	0.0175	0.4039
90	35.30	0.21	-1.2618	-0.4087	-0.1082	0.0304	0.4905	1.0465	0.0184	0.4236	0.0176	0.4040
91	35.62	0.22	-1.2868	-0.4077	-0.1016	0.0439	0.4987	1.0687	0.0176	0.4241	0.0168	0.4044
92	35.81	0.19	-1.1765	-0.4074	-0.1027	0.0464	0.4847	1.0426	0.0187	0.4210	0.0180	0.4037
93	36.15	0.22	-1.1458	-0.4078	-0.0732	0.0519	0.4630	1.0635	0.0162	0.4303	0.0153	0.4046
94	36.39	0.19	-1.1316	-0.4103	-0.0841	0.0743	0.4532	1.0584	0.0154	0.4292	0.0146	0.4053
95	36.62	0.19	-1.1276	-0.4094	-0.0835	0.0741	0.4596	1.0573	0.0157	0.4281	0.0149	0.4049
96	36.86	0.18	-1.1364	-0.4077	-0.0674	0.0575	0.4652	1.0749	0.0155	0.4343	0.0144	0.4040
97	37.11	0.19	-1.1189	-0.4068	-0.0583	0.0846	0.5113	1.0780	0.0141	0.4367	0.0131	0.4051
98	37.34	0.19	-1.0944	-0.4111	-0.0465	0.1172	0.4931	1.0862	0.0130	0.4409	0.0120	0.4058
99	37.57	0.17	-1.0842	-0.4112	-0.0428	0.1369	0.4846	1.0735	0.0124	0.4368	0.0116	0.4069
100	37.84	0.19	-1.0734	-0.4125	-0.0395	0.1706	0.4836	1.0864	0.0107	0.4426	0.0099	0.4066
101	38.07	0.16	-1.0502	-0.4124	-0.0273	0.2441	0.5356	1.0957	0.0095	0.4457	0.0087	0.4064
102	38.30	0.17	-1.0431	-0.4104	-0.0262	0.2467	0.4942	1.1173	0.0101	0.4526	0.0091	0.4051
103	38.59	0.17	-1.0430	-0.4099	-0.0232	0.2481	0.5965	1.1156	0.0100	0.4531	0.0093	0.4062
104	38.74	0.15	-1.0437	-0.4052	-0.0327	0.1140	0.7039	1.1646	0.0109	0.4749	0.0093	0.4060
105	38.96	0.14	-1.0393	-0.4063	-0.0258	0.1091	0.6326	1.1569	0.0116	0.4697	0.0100	0.4069
106	39.20	0.15	-1.0294	-0.4057	-0.0199	0.2209	0.7713	1.1689	0.0105	0.4738	0.0090	0.4053
107	39.41	0.15	-1.0269	-0.4049	-0.0225	0.1867	0.7118	1.1701	0.0103	0.4729	0.0088	0.4041
108	39.64	0.16	-1.0191	-0.4050	-0.0118	0.3441	0.7662	1.1885	0.0099	0.4795	0.0083	0.4034
109	39.88	0.16	-1.0315	-0.4061	-0.0267	0.1694	0.6542	1.1953	0.0113	0.4860	0.0094	0.4036
110	40.05	0.14	-1.0278	-0.4063	-0.0149	0.1564	0.7127	1.2067	0.0103	0.4858	0.0086	0.4026
111	40.27	0.13	-1.0258	-0.4055	-0.0178	0.2292	0.6957	1.2149	0.0096	0.4890	0.0079	0.4025
112	40.46	0.13	-1.0089	-0.4070	-0.0062	1.0769	1.7615	1.2241	0.0076	0.4936	0.0062	0.4032
113	40.67	0.14	-1.0117	-0.4071	-0.0131	0.6068	1.1197	1.2395	0.0068	0.4998	0.0055	0.4032
114	40.89	0.12	-1.0341	-0.4035	-0.0169	0.1094	0.5936	1.2574	0.0085	0.5053	0.0068	0.4019
115	41.10	0.10	-1.0035	-0.4079	-0.0252	-2.1143	-1.7143	1.2629	0.0061	0.5092	0.0048	0.4035
116	41.29	0.13	-1.0007	-0.4059	-0.0064	7.8571	6.2857	1.2784	0.0042	0.5156	0.0033	0.4033
117	41.52	0.14	-1.0126	-0.4042	-0.0175	0.2561	0.6046	1.2891	0.0057	0.5166	0.0044	0.4007
118	41.72	0.10	-1.0074	-0.4038	-0.0077	0.4557	0.9747	1.2907	0.0056	0.5180	0.0043	0.4013
119	41.93	0.09	-1.0125	-0.4003	-0.0118	0.0171	0.6743	1.3096	0.0062	0.5250	0.0047	0.4009
120	42.13	0.11	-0.9225	-0.4014	-0.0146	-0.0800	0.4267	1.3062	0.0074	0.5214	0.0057	0.3992
121	42.33	0.09	-1.0351	-0.4043	-0.0178	-0.1143	0.5046	1.3350	0.0061	0.5357	0.0046	0.4013
122	42.53	0.09	-0.9241	-0.3966	-0.0123	-0.0249	0.5104	1.3208	0.0060	0.5284	0.0046	0.4000
123	42.71	0.10	-1.0385	-0.4044	-0.0152	-0.1269	0.5000	1.3112	0.0042	0.5226	0.0030	0.3984
124	42.96	0.09	-0.9524	-0.4077	-0.0198	-0.1475	0.3793	1.3046	-0.0010	0.5276	-0.0008	0.4029
125	43.08	0.10	-1.0541	-0.4055	-0.0215	-0.1038	0.4637	1.2893	0.0041	0.5164	0.0032	0.4005
126	43.25	0.10	-1.0776	-0.4094	-0.0242	-0.1214	0.3760	1.2896	-0.0002	0.5190	-0.0002	0.4024
127	43.44	0.12	-1.0933	-0.4102	-0.0491	-0.1171	0.4296	1.2889	-0.0035	0.5208	-0.0027	0.4040
128	43.62	0.11	-1.0877	-0.4106	-0.0406	-0.1211	0.4169	1.3264	-0.0031	0.5344	-0.0023	0.4035
129	43.86	0.09	-1.0943	-0.4051	-0.0198	-0.0937	0.3640	1.2969	-0.0018	0.5238	-0.0011	0.4037
130	43.99	0.09	-1.0963	-0.4106	-0.0371	-0.1199	0.4024	1.3416	-0.0066	0.5445	-0.0049	0.4058
131	44.19	0.13	-1.0821	-0.4097	-0.0323	-0.1184	0.3932	1.3608	-0.0069	0.5523	-0.0051	0.4059
132	44.35	0.10	-1.0946	-0.4071	-0.0218	-0.1101	0.3390	1.3826	-0.0060	0.5615	-0.0043	0.4061

PAGE 2 OF 3
SHEET 1 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REY-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	73	0.60	1.7	45.0	81.0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CPF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
93	44.52	0.07	0.0944	-0.0048	0.0201	-0.0768	0.3456	1.3717	-0.0034	0.5557	-0.0025	0.4051
94	44.71	0.09	0.0979	-0.0050	0.0379	-0.1024	0.3484	1.3261	-0.0080	0.5344	-0.0061	0.4051
95	44.91	0.06	0.1077	-0.0107	0.0415	-0.0945	0.3674	1.3449	-0.0103	0.5454	-0.0077	0.4056
96	45.09	0.11	0.1049	-0.0116	0.0444	-0.1049	0.4112	1.3733	-0.0104	0.5540	-0.0079	0.4063
97	45.26	0.08	0.1038	-0.0114	0.0431	-0.1050	0.4024	1.3479	-0.0100	0.5477	-0.0074	0.4064
98	45.03	0.08	0.0991	-0.0110	0.0430	-0.1055	0.4010	1.3697	-0.0094	0.5577	-0.0069	0.4072
99	45.63	0.07	0.0945	-0.0107	0.0375	-0.1217	0.4174	1.3733	-0.0112	0.5580	-0.0082	0.4063
100	45.80	0.07	0.0876	-0.0057	0.0164	-0.1205	0.3510	1.4048	-0.0067	0.5710	-0.0048	0.4053
101	45.96	0.07	0.1332	-0.0057	0.0103	-0.1691	0.3056	1.4261	-0.0070	0.5784	-0.0049	0.4056
102	46.15	0.05	0.0836	-0.0071	0.0170	-0.1762	0.4218	1.4179	-0.0093	0.5746	-0.0066	0.4066
103	46.34	0.06	0.2458	-0.0097	0.0140	-0.1638	0.4678	1.4252	-0.0088	0.5794	-0.0062	0.4065
104	46.51	0.05	0.0999	-0.0105	0.0285	-0.1506	0.4075	1.4171	-0.0136	0.5782	-0.0096	0.4080
105	46.69	0.05	0.0878	-0.0104	0.0242	-0.1591	0.4311	1.4116	-0.0135	0.5761	-0.0097	0.4081
106	46.85	0.03	0.0774	-0.0099	0.0325	-0.1782	0.4197	1.4344	-0.0150	0.5874	-0.0105	0.4095
107	47.03	0.04	0.0815	-0.0113	0.0329	-0.1385	0.4020	1.4395	-0.0172	0.5895	-0.0120	0.4095
108	47.22	0.04	0.0835	-0.0096	0.0333	-0.1178	0.3986	1.4329	-0.0156	0.5854	-0.0109	0.4085
109	47.39	0.04	0.0816	-0.0122	0.0329	-0.1598	0.4049	1.4395	-0.0184	0.5893	-0.0128	0.4094
110	47.56	0.04	0.0815	-0.0097	0.0152	-0.1537	0.2957	1.4477	-0.0154	0.6017	-0.0105	0.4100
111	47.72	0.04	0.0815	-0.0113	0.0325	-0.1494	0.3996	1.4454	-0.0185	0.5923	-0.0128	0.4097
112	47.96	0.03	0.0950	-0.0131	0.0377	-0.1382	0.3966	1.4481	-0.0190	0.5941	-0.0131	0.4103
113	48.07	0.05	0.0837	-0.0095	0.0320	-0.1174	0.3820	1.4371	-0.0191	0.5973	-0.0133	0.4087
114	48.23	0.05	0.0855	-0.0103	0.0345	-0.1186	0.3896	1.4111	-0.0184	0.5768	-0.0131	0.4087
115	48.42	0.04	0.0883	-0.0111	0.0341	-0.1248	0.3885	1.4273	-0.0188	0.5864	-0.0132	0.4108
116	48.59	0.03	0.1004	-0.0081	0.0434	-0.0763	0.4072	1.3770	-0.0173	0.5627	-0.0126	0.4086
117	48.75	0.05	0.1142	-0.0081	0.0439	-0.0711	0.4325	1.3826	-0.0176	0.5653	-0.0129	0.4088
118	48.93	0.06	0.0977	-0.0074	0.0423	-0.0779	0.4329	1.3297	-0.0163	0.5469	-0.0123	0.4113
119	49.09	0.05	0.1016	-0.0081	0.0452	-0.0804	0.4474	1.3243	-0.0159	0.5375	-0.0122	0.4121
120	49.27	0.05	0.1038	-0.0094	0.0467	-0.0811	0.4498	1.2917	-0.0156	0.5318	-0.0121	0.4117
121	49.46	0.06	0.0914	-0.0140	0.0388	-0.1305	0.4788	1.2595	-0.0150	0.5163	-0.0119	0.4115
122	49.63	0.04	0.0796	-0.0139	0.0367	-0.1811	0.4863	1.2564	-0.0158	0.5179	-0.0126	0.4121
123	49.96	0.06	0.0799	-0.0107	0.0341	-0.1253	0.4567	1.2613	-0.0156	0.5192	-0.0122	0.4116
124	49.96	0.06	0.0743	-0.0107	0.0362	-0.2456	0.4953	1.2704	-0.0175	0.5247	-0.0138	0.4130
125	50.17	0.03	0.0812	-0.0174	0.0390	-0.2148	0.4802	1.2716	-0.0176	0.5255	-0.0139	0.4132
126	50.33	0.01	0.0790	-0.0175	0.0375	-0.2221	0.4784	1.2734	-0.0183	0.5263	-0.0144	0.4133
127	50.49	0.04	0.0874	-0.0139	0.0392	-0.1537	0.4953	1.2567	-0.0169	0.5186	-0.0135	0.4126
128	50.67	0.04	0.0967	-0.0139	0.0471	-0.2469	0.4855	1.3029	-0.0204	0.5376	-0.0157	0.4126
129	50.93	0.03	0.1157	-0.0202	0.0547	-0.2263	0.4867	1.3143	-0.0206	0.5423	-0.0157	0.4126
130	51.01	0.04	0.1141	-0.0230	0.0576	-0.2145	0.4936	1.3265	-0.0214	0.5464	-0.0161	0.4124
131	51.17	0.07	0.1387	-0.0243	0.0608	-0.1817	0.4835	1.3159	-0.0204	0.5412	-0.0155	0.4113
132	51.34	0.06	0.1174	-0.0242	0.0553	-0.2041	0.4676	1.3223	-0.0211	0.5444	-0.0160	0.4117
133	51.52	0.04	0.1153	-0.0249	0.0557	-0.2136	0.4789	1.3409	-0.0219	0.5524	-0.0164	0.4120
134	51.67	0.04	0.1096	-0.0241	0.0510	-0.1837	0.4653	1.3186	-0.0210	0.5425	-0.0160	0.4114
135	51.85	0.02	0.1013	-0.0201	0.0498	-0.1976	0.4808	1.3394	-0.0220	0.5510	-0.0165	0.4118
136	52.01	0.03	0.0937	-0.0157	0.0435	-0.1648	0.4667	1.3205	-0.0214	0.5442	-0.0162	0.4121
137	52.18	-0.02	0.0856	-0.0143	0.0294	-0.2531	0.5156	1.3337	-0.0223	0.5481	-0.0168	0.4110
138	52.35	-0.03	0.0822	-0.0153	0.0254	-0.2937	0.4952	1.3356	-0.0230	0.5506	-0.0173	0.4123

MARTIN MISSILE TAILS EFFECTS DATA

TEST	ART	MACH	RALPH	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	73	0.60	1.7	45.0	81=0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CAF2	CM2	CN2	XCPF2	YCPF2
135	52.51	-0.02	0.2991	-0.0171	0.0282	-0.3562	0.5637	1.3668	-0.0283	0.5565	-0.0181	0.4118
136	52.47	-0.00	0.2934	-0.0150	0.0284	-0.3551	0.4881	1.3379	-0.0235	0.5511	-0.0176	0.4119
137	52.50	-0.01	0.2963	-0.0151	0.0285	-0.3602	0.5111	1.3595	-0.0251	0.5599	-0.0184	0.4119
142	53.02	-0.04	0.3072	-0.0203	0.0201	-0.3672	0.5418	1.3613	-0.0269	0.5612	-0.0192	0.4123
143	53.19	-0.11	0.3036	-0.0235	0.0203	-0.6106	0.5273	1.4032	-0.0282	0.5765	-0.0201	0.4130
144	53.37	-0.07	0.3021	-0.0247	0.0212	-0.6050	0.5300	1.4004	-0.0281	0.5790	-0.0200	0.4133
145	53.56	-0.05	0.3004	-0.0261	0.0220	-0.2330	0.5220	1.4004	-0.0265	0.5773	-0.0189	0.4122
146	53.69	-0.04	0.1694	-0.0177	0.0543	-0.1667	0.5104	1.3956	-0.0259	0.5747	-0.0185	0.4118
147	53.86	-0.03	0.1684	-0.0176	0.0552	-0.1627	0.5092	1.3628	-0.0256	0.5763	-0.0183	0.4124
148	54.02	0.01	0.1643	-0.0180	0.0553	-0.1729	0.5303	1.3931	-0.0263	0.5746	-0.0188	0.4125
149	54.18	-0.03	0.1643	-0.0192	0.0566	-0.1918	0.5465	1.4075	-0.0272	0.5746	-0.0193	0.4116
150	54.33	-0.01	0.1611	-0.0194	0.0530	-0.2134	0.5820	1.4004	-0.0271	0.5770	-0.0193	0.4120
151	54.53	-0.02	0.1593	-0.0183	0.0535	-0.1910	0.5576	1.4261	-0.0276	0.5852	-0.0194	0.4121
152	54.66	-0.02	0.1577	-0.0195	0.0545	-0.2004	0.5591	1.4195	-0.0280	0.5853	-0.0200	0.4123
153	54.83	-0.04	0.1553	-0.0183	0.0553	-0.1725	0.5580	1.4274	-0.0282	0.5841	-0.0197	0.4127
154	54.99	-0.04	0.1519	-0.0170	0.0575	-0.1672	0.5654	1.4290	-0.0281	0.5866	-0.0196	0.4119
155	55.14	0.00	0.1521	-0.0184	0.0581	-0.1639	0.5659	1.4211	-0.0280	0.5874	-0.0197	0.4132
156	55.31	-0.01	0.0980	-0.0136	0.0555	-0.1644	0.5856	1.4257	-0.0282	0.5881	-0.0197	0.4125
157	55.45	-0.03	0.1027	-0.0160	0.0595	-0.1620	0.5795	1.4275	-0.0284	0.5887	-0.0199	0.4126
158	55.62	-0.03	0.0964	-0.0153	0.0552	-0.1590	0.5728	1.4306	-0.0283	0.5903	-0.0198	0.4126
159	55.76	-0.00	0.0910	-0.0155	0.0527	-0.1707	0.5793	1.4276	-0.0287	0.5890	-0.0201	0.4126
160	55.92	-0.02	0.0937	-0.0152	0.0534	-0.1626	0.5701	1.4261	-0.0269	0.5882	-0.0202	0.4125
161	56.07	-0.01	0.0883	-0.0150	0.0506	-0.1646	0.5732	1.4219	-0.0286	0.5871	-0.0201	0.4129
162	56.24	0.02	0.0903	-0.0131	0.0513	-0.1454	0.5683	1.4347	-0.0290	0.5925	-0.0199	0.4130
163	56.39	-0.00	0.0899	-0.0127	0.0518	-0.1400	0.5740	1.4363	-0.0289	0.5938	-0.0201	0.4136
164	56.54	-0.01	0.0865	-0.0142	0.0506	-0.1636	0.5825	1.4309	-0.0293	0.5914	-0.0204	0.4133
165	56.69	-0.01	0.0821	-0.0134	0.0472	-0.1635	0.5751	1.4265	-0.0293	0.5912	-0.0205	0.4139
166	56.85	-0.02	0.0819	-0.0122	0.0469	-0.1443	0.5728	1.4245	-0.0290	0.5894	-0.0203	0.4138
167	57.00	-0.02	0.0813	-0.0125	0.0478	-0.1541	0.5842	1.4262	-0.0290	0.5904	-0.0203	0.4140
168	57.14	0.01	0.0790	-0.0130	0.0465	-0.1641	0.5859	1.4343	-0.0299	0.5951	-0.0208	0.4149
169	57.31	-0.02	0.0775	-0.0118	0.0465	-0.1519	0.5716	1.4318	-0.0295	0.5939	-0.0206	0.4148
170	57.45	-0.00	0.0742	-0.0104	0.0453	-0.1294	0.5546	1.4365	-0.0292	0.5950	-0.0203	0.4142
171	57.59	-0.00	0.0723	-0.0112	0.0455	-0.1418	0.5740	1.4377	-0.0297	0.5953	-0.0206	0.4141
172	57.73	-0.00	0.0670	-0.0122	0.0449	-0.1406	0.5726	1.4474	-0.0303	0.5998	-0.0209	0.4144
173	57.87	-0.01	0.0704	-0.0103	0.0439	-0.1352	0.5748	1.4409	-0.0300	0.5974	-0.0208	0.4146
174	58.04	0.02	0.0743	-0.0134	0.0414	-0.1608	0.5601	1.4374	-0.0308	0.5964	-0.0214	0.4148
175	58.17	-0.00	0.0719	-0.0133	0.0423	-0.1652	0.5877	1.4421	-0.0311	0.5990	-0.0215	0.4156
176	58.30	0.01	0.0585	-0.0107	0.0364	-0.2981	0.6436	1.4341	-0.0319	0.5961	-0.0222	0.4157
177	58.46	-0.02	0.0597	-0.0125	0.0369	-0.3514	0.6486	1.4457	-0.0328	0.6014	-0.0227	0.4160
178	58.61	0.00	0.0478	-0.0104	0.0361	-0.3453	0.6737	1.4287	-0.0314	0.5930	-0.0222	0.4151
179	58.52	0.00	0.0491	-0.0158	0.0312	-0.3435	0.6761	1.4351	-0.0319	0.5964	-0.0222	0.4156
180	57.45	-0.01	0.0960	-0.0121	0.0471	-0.1444	0.5609	1.4313	-0.0297	0.5941	-0.0207	0.4151

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIN-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 73 0.60 1.67 45.0 CLEAN 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.58	0.11	0.1114	9.9999	0.0622	9.9999	0.5550	-0.0873	-0.0156	-0.0627	0.1791	0.7187
2	-5.59	0.10	0.1104	9.9999	0.0631	9.9999	0.5526	-0.0865	-0.0156	-0.0629	0.1808	0.7277
3	-5.57	0.11	0.1129	9.9999	0.0618	9.9999	0.5521	-0.0868	-0.0160	-0.0626	0.1906	0.7507
4	-4.62	0.10	0.0943	9.9999	0.0427	9.9999	0.6869	-0.0266	-0.0098	-0.0315	0.3439	1.1018
5	-2.33	0.09	0.0474	9.9999	0.0311	9.9999	1.1314	0.0078	-0.0049	-0.0132	-0.6282	-1.6923
6	-0.42	0.11	-0.0067	9.9999	0.0217	9.9999	-0.6170	0.0312	0.0006	-0.0024	0.0193	-0.0772
7	1.56	0.11	-0.0389	9.9999	0.0125	9.9999	-0.3264	0.0569	0.0058	0.0088	0.0986	0.1497
8	3.42	0.10	-0.1030	9.9999	-0.0050	9.9999	0.0691	0.0945	0.0097	0.0224	0.1029	0.2375
9	5.36	0.09	-0.1378	9.9999	-0.0291	9.9999	0.2139	0.1250	0.0135	0.0420	0.1057	0.3281
10	7.35	0.10	-0.2116	9.9999	-0.0502	9.9999	0.2843	0.1665	0.0154	0.0634	0.0927	0.3809
11	9.26	0.11	-0.2579	9.9999	-0.0942	9.9999	0.3272	0.2105	0.0160	0.0849	0.0762	0.4031
12	11.24	0.11	-0.3577	9.9999	-0.1277	9.9999	0.3474	0.2649	0.0148	0.1102	0.0560	0.4160
13	13.19	0.10	-0.4032	9.9999	-0.1667	9.9999	0.3545	0.3135	0.0119	0.1317	0.0380	0.4199
14	15.19	0.11	-0.5020	9.9999	-0.2199	9.9999	0.3607	0.3614	0.0072	0.1451	0.0211	0.4250
15	17.23	0.10	-0.5829	9.9999	-0.2630	9.9999	0.3567	0.3873	0.0045	0.1574	0.0123	0.4286
16	19.20	0.10	-0.6033	9.9999	-0.2825	9.9999	0.3516	0.4161	0.0047	0.1791	0.0101	0.4304
17	21.24	0.10	-0.6394	9.9999	-0.3146	9.9999	0.3530	0.4133	0.0016	0.1836	0.0034	0.4435
18	23.21	0.12	-0.6966	9.9999	-0.3406	9.9999	0.3458	0.4236	-0.0025	0.1913	-0.0059	0.4516
19	25.13	0.13	-0.6925	9.9999	-0.3397	9.9999	0.3339	0.4101	-0.0024	0.1824	-0.0059	0.4447
20	27.13	0.13	-0.7116	9.9999	-0.3719	9.9999	0.3326	0.4414	0.0003	0.1968	0.0007	0.4459
21	28.32	0.10	-0.7379	9.9999	-0.3726	9.9999	0.3314	0.4741	0.0007	0.2145	0.0015	0.4525
22	28.32	0.17	-0.7439	9.9999	-0.3775	9.9999	0.3300	0.4657	-0.0008	0.2129	-0.0017	0.4573
23	28.32	0.17	-0.7423	9.9999	-0.3762	9.9999	0.3296	0.4585	-0.0013	0.2094	-0.0026	0.4567
24	28.33	0.18	-0.7446	9.9999	-0.3776	9.9999	0.3302	0.4762	0.0002	0.2195	0.0004	0.4611
25	28.31	0.19	-0.7432	9.9999	-0.3763	9.9999	0.3303	0.4709	-0.0003	0.2237	-0.0006	0.4651
26	28.47	0.17	-0.7574	9.9999	-0.3835	9.9999	0.3312	0.4984	0.0005	0.2332	0.0010	0.4678
27	29.26	0.18	-0.7758	9.9999	-0.3852	9.9999	0.3311	0.5354	0.0002	0.2529	0.0004	0.4722
28	29.52	0.18	-0.7853	9.9999	-0.3917	9.9999	0.3318	0.5217	-0.0010	0.2480	-0.0019	0.4754
29	29.80	0.19	-0.7982	9.9999	-0.3977	9.9999	0.3319	0.5735	-0.0012	0.2740	-0.0021	0.4777
30	30.09	0.19	-0.8060	9.9999	-0.4060	9.9999	0.3303	0.5767	-0.0026	0.2768	-0.0045	0.4799
31	30.37	0.17	-0.8211	9.9999	-0.4051	9.9999	0.3298	0.5955	-0.0030	0.2744	-0.0053	0.4834
32	30.64	0.19	-0.8256	9.9999	-0.4087	9.9999	0.3307	0.5938	-0.0030	0.2822	-0.0051	0.4834
33	30.91	0.18	-0.8312	9.9999	-0.4126	9.9999	0.3324	0.5895	-0.0021	0.2859	-0.0036	0.4850
34	31.20	0.21	-0.8376	9.9999	-0.4124	9.9999	0.3330	0.6028	-0.0020	0.2937	-0.0033	0.4872
35	31.49	0.21	-0.8428	9.9999	-0.4224	9.9999	0.3366	0.6481	-0.0048	0.3155	-0.0074	0.4869
36	31.78	0.21	-0.8478	9.9999	-0.4255	9.9999	0.3388	0.6631	-0.0067	0.3227	-0.0101	0.4866
37	32.03	0.22	-0.8511	9.9999	-0.4305	9.9999	0.3391	0.7032	-0.0070	0.3424	-0.0100	0.4869
38	32.32	0.23	-0.8565	9.9999	-0.4311	9.9999	0.3408	0.7527	-0.0115	0.3651	-0.0154	0.4851
39	32.56	0.23	-0.8610	9.9999	-0.4353	9.9999	0.3430	0.7230	-0.0118	0.3525	-0.0164	0.4876
40	32.84	0.24	-0.8663	9.9999	-0.4359	9.9999	0.3447	0.7682	-0.0167	0.3625	-0.0224	0.4858
41	33.07	0.24	-0.8701	9.9999	-0.4401	9.9999	0.3474	0.7394	-0.0182	0.3512	-0.0247	0.4885
42	33.37	0.23	-0.8763	9.9999	-0.4477	9.9999	0.3448	0.7978	-0.0193	0.3848	-0.0262	0.4823
43	33.62	0.24	-0.8799	9.9999	-0.4503	9.9999	0.3491	0.8085	-0.0172	0.3900	-0.0213	0.4824
44	33.89	0.23	-0.8773	9.9999	-0.4563	9.9999	0.3519	0.8232	-0.0216	0.3919	-0.0264	0.4778
45	34.12	0.23	-0.8824	9.9999	-0.4585	9.9999	0.3492	0.8535	-0.0159	0.4074	-0.0187	0.4773
46	34.37	0.23	-0.8787	9.9999	-0.4566	9.9999	0.3534	0.8565	-0.0189	0.4055	-0.0221	0.4735

PAGE 3 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 73 Calv RALG=0 Cv0.90 1e7 MNL 0.50 CONF MI=0.31 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CN4	XCPF4	YCPF4
47	34.09	0.02	-1.1772	9.9999	-0.4165	9.9999	0.3536	0.4526	-0.0200	0.4149	-0.0235	0.4769
48	34.48	0.01	-1.1751	9.9999	-0.4172	9.9999	0.3546	0.4742	-0.0200	0.4176	-0.0229	0.4776
49	35.16	0.02	-1.1726	9.9999	-0.4195	9.9999	0.3559	0.4877	-0.0215	0.4146	-0.0251	0.4835
50	35.36	0.01	-1.1704	9.9999	-0.4224	9.9999	0.3567	0.4911	-0.0224	0.4095	-0.0270	0.4855
51	35.52	0.02	-1.1662	9.9999	-0.4218	9.9999	0.3568	0.4917	-0.0229	0.4108	-0.0273	0.4881
52	35.51	0.01	-1.1635	9.9999	-0.4252	9.9999	0.3584	0.7931	-0.0251	0.3995	-0.0316	0.4911
53	36.15	0.02	-1.1603	9.9999	-0.4239	9.9999	0.3742	1.0852	-0.0181	0.3484	-0.0265	0.5085
54	36.39	0.01	-1.1591	9.9999	-0.4570	9.9999	0.3621	0.6075	-0.0063	0.3356	-0.0144	0.5183
55	36.62	0.01	-1.1562	9.9999	-0.4612	9.9999	0.3617	0.5869	-0.0086	0.3108	-0.0143	0.5296
56	36.86	0.15	-1.2216	9.9999	-0.4617	9.9999	0.3644	0.5746	-0.0069	0.3058	-0.0120	0.5323
57	37.11	0.01	-1.2113	9.9999	-0.4577	9.9999	0.3661	0.5452	-0.0050	0.2937	-0.0092	0.5387
58	37.34	0.01	-1.2094	9.9999	-0.4660	9.9999	0.3656	0.5691	-0.0032	0.3070	-0.0056	0.5395
59	37.57	0.01	-1.2060	9.9999	-0.4686	9.9999	0.3651	0.5951	-0.0044	0.3178	-0.0076	0.5339
60	37.80	0.01	-1.2143	9.9999	-0.4585	9.9999	0.3858	0.5667	0.0	0.3051	0.0	0.5385
61	38.07	0.10	-1.2221	9.9999	-0.4773	9.9999	0.3903	0.6148	0.0037	0.2365	0.0089	0.5749
62	38.30	0.17	-1.2156	9.9999	-0.4744	9.9999	0.3937	0.3276	0.0072	0.1955	0.0220	0.5968
63	38.54	0.17	-1.2281	9.9999	-0.4796	9.9999	0.3916	0.3152	0.0079	0.1876	0.0251	0.5944
64	38.74	0.15	-1.2142	9.9999	-0.4783	9.9999	0.3926	0.1351	0.0141	0.1038	0.1046	0.7685
65	38.96	0.15	-1.2216	9.9999	-0.4747	9.9999	0.3941	0.1744	0.0137	0.1223	0.0787	0.7011
66	39.20	0.15	-1.2281	9.9999	-0.4936	9.9999	0.3944	0.1587	0.0153	0.1139	0.0966	0.7178
67	39.41	0.15	-1.2253	9.9999	-0.4851	9.9999	0.3949	0.1536	0.0173	0.1116	0.1127	0.7257
68	39.64	0.16	-1.2210	9.9999	-0.4822	9.9999	0.3949	0.1292	0.0181	0.0999	0.1404	0.7735
69	39.88	0.15	-1.2132	9.9999	-0.4950	9.9999	0.3945	0.0984	0.0190	0.0845	0.1935	0.8585
70	40.05	0.14	-1.2174	9.9999	-0.4744	9.9999	0.3942	0.0891	0.0184	0.0796	0.2070	0.8909
71	40.27	0.13	-1.2281	9.9999	-0.4943	9.9999	0.3950	0.0927	0.0197	0.0800	0.2130	0.8627
72	40.46	0.13	-1.2251	9.9999	-0.4846	9.9999	0.3952	0.0584	0.0201	0.0641	0.3448	1.0979
73	41.67	0.10	-1.2611	9.9999	-0.4773	9.9999	0.3943	0.0242	0.0202	0.0480	0.8347	1.8967
74	40.89	0.12	-1.1956	9.9999	-0.4712	9.9999	0.3941	0.0356	0.0188	0.0488	0.5296	1.3719
75	41.10	0.10	-1.2216	9.9999	-0.4727	9.9999	0.3936	0.0158	0.0187	0.0416	1.1835	2.6266
76	41.29	0.13	-1.1967	9.9999	-0.4695	9.9999	0.3936	0.0122	0.0181	0.0375	1.4836	3.0656
77	41.52	0.14	-1.1818	9.9999	-0.4855	9.9999	0.3938	0.0209	0.0188	0.0392	0.8038	1.8708
78	41.72	0.14	-1.1833	9.9999	-0.4662	9.9999	0.3939	0.0065	0.0184	0.0338	2.5231	5.1846
79	41.93	0.09	-1.1544	9.9999	-0.4583	9.9999	0.3936	-0.0037	0.0159	0.0291	4.2973	7.8379
80	42.13	0.11	-1.1774	9.9999	-0.4664	9.9999	0.3947	0.0098	0.0160	0.0302	0.3219	1.0080
81	42.33	0.09	-1.1570	9.9999	-0.4503	9.9999	0.3926	-0.0023	0.0147	0.0259	6.3913	11.2174
82	42.53	0.09	-1.1566	9.9999	-0.4614	9.9999	0.3947	0.0119	0.0149	0.0303	1.2521	2.5378
83	42.71	0.10	-1.1618	9.9999	-0.4677	9.9999	0.3956	0.0585	0.0161	0.0475	0.2960	0.8713
84	42.90	0.09	-1.1918	9.9999	-0.4702	9.9999	0.3946	-0.0444	0.0152	0.0056	-0.3431	-0.1309
85	43.08	0.14	-1.2089	9.9999	-0.4613	9.9999	0.3941	-0.0026	0.0161	0.0254	-5.7083	-10.5417
86	43.25	0.14	-1.2215	9.9999	-0.4681	9.9999	0.3983	-0.0517	0.0161	0.0049	-0.3120	-0.0950
87	43.49	0.12	-1.2284	9.9999	-0.4945	9.9999	0.3923	-0.0472	0.0157	0.0070	-0.3333	-0.1486
88	43.52	0.11	-1.1975	9.9999	-0.4759	9.9999	0.3974	-0.0413	0.0147	0.0060	-0.3568	-0.1942
89	43.82	0.09	-1.2191	9.9999	-0.4982	9.9999	0.3968	-0.0115	0.0161	0.0203	-1.4000	-1.7652
90	43.99	0.09	-1.1942	9.9999	-0.4666	9.9999	0.3952	-0.0676	0.0140	-0.0054	-0.2074	0.0800
91	44.14	0.13	-1.1859	9.9999	-0.4673	9.9999	0.3947	-0.0571	0.0133	-0.0018	-0.2333	0.0316
92	44.35	0.14	-1.1844	9.9999	-0.4526	9.9999	0.3956	-0.0468	0.0144	-0.0001	-0.3084	0.0021

TEST	PART	MACH	RNI/L	PHI	LONG	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	73	0.90	1.7	45.0	61.0E31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	44.52	0.07	-1.1717	9.9999	-0.4635	9.9999	0.3977	-0.0431	0.0141	0.0025	-0.3279	-0.0581
94	44.71	0.09	-1.1712	9.9999	-0.4774	9.9999	0.3974	-0.0897	0.0131	0.0183	-0.1464	0.1621
95	44.91	0.09	-1.1731	9.9999	-0.4714	9.9999	0.3961	-0.0910	0.0129	-0.0192	-0.1410	0.2115
96	45.09	0.11	-1.1743	9.9999	-0.4664	9.9999	0.3955	-0.0750	0.0131	-0.0122	-0.1751	0.1631
97	45.26	0.08	-1.1735	9.9999	-0.4728	9.9999	0.3965	-0.0821	0.0122	-0.0157	-0.1470	0.1917
98	45.43	0.05	-1.1679	9.9999	-0.4713	9.9999	0.3967	-0.0663	0.0124	-0.0105	-0.1618	0.1540
99	45.63	0.07	-1.1699	9.9999	-0.4593	9.9999	0.3950	-0.0770	0.0120	-0.0172	-0.1562	0.2260
100	45.80	0.07	-1.1715	9.9999	-0.4644	9.9999	0.3964	-0.0358	0.0146	-0.0004	-0.4146	0.0117
101	45.98	0.07	-1.1736	9.9999	-0.4659	9.9999	0.3968	-0.0340	0.0154	-0.0003	-0.4543	0.0088
102	46.15	0.05	-1.1693	9.9999	-0.4642	9.9999	0.3973	-0.0356	0.0157	-0.0018	-0.4449	0.0516
103	46.34	0.06	-1.1736	9.9999	-0.4657	9.9999	0.3967	-0.0359	0.0165	-0.0047	-0.4609	0.1313
104	46.51	0.05	-1.1692	9.9999	-0.4621	9.9999	0.3969	-0.0538	0.0140	-0.0119	-0.2907	0.2216
105	46.69	0.03	-1.1679	9.9999	-0.4623	9.9999	0.3965	-0.0625	0.0130	-0.0158	-0.2483	0.2532
106	46.85	0.03	-1.1736	9.9999	-0.4667	9.9999	0.3969	-0.0604	0.0149	-0.0142	-0.2671	0.2355
107	47.03	0.04	-1.1697	9.9999	-0.4622	9.9999	0.3968	-0.0552	0.0146	-0.0133	-0.2650	0.2414
108	47.22	0.04	-1.1735	9.9999	-0.4656	9.9999	0.3967	-0.0640	0.0153	-0.0173	-0.2394	0.2707
109	47.38	0.07	-1.1698	9.9999	-0.4624	9.9999	0.3971	-0.0773	0.0153	-0.0241	-0.1959	0.3102
110	47.56	0.06	-1.1737	9.9999	-0.4745	9.9999	0.3971	-0.0610	0.0161	-0.0147	-0.2972	0.2414
111	47.72	0.07	-1.1698	9.9999	-0.4625	9.9999	0.3969	-0.0726	0.0161	-0.0216	-0.1995	0.2979
112	47.90	0.03	-1.1735	9.9999	-0.4650	9.9999	0.3971	-0.0793	0.0164	-0.0248	-0.1820	0.3123
113	48.07	0.05	-1.1731	9.9999	-0.4683	9.9999	0.3975	-0.1006	0.0122	-0.0346	-0.1213	0.3629
114	48.23	0.05	-1.1702	9.9999	-0.4674	9.9999	0.3980	-0.1149	0.0097	-0.0346	-0.0802	0.3844
115	48.42	0.04	-1.1708	9.9999	-0.4673	9.9999	0.3971	-0.1009	0.0116	-0.0357	-0.1152	0.3535
116	48.59	0.03	-1.1716	9.9999	-0.4771	9.9999	0.3972	-0.1242	0.0073	-0.0441	-0.0569	0.3551
117	48.75	0.06	-1.1709	9.9999	-0.4751	9.9999	0.3972	-0.1021	0.0079	-0.0348	-0.0775	0.3405
118	48.93	0.06	-1.2016	9.9999	-0.5032	9.9999	0.3984	-0.1324	0.0056	-0.0452	-0.0439	0.3414
119	49.09	0.05	-1.2984	9.9999	-0.5199	9.9999	0.4005	-0.1473	0.0053	-0.0503	-0.0361	0.3415
120	49.27	0.05	-1.3144	9.9999	-0.5275	9.9999	0.4013	-0.1552	0.0042	-0.0530	-0.0271	0.3415
121	49.46	0.02	-1.3515	9.9999	-0.5465	9.9999	0.4044	-0.1624	0.0055	-0.0559	-0.0401	0.3444
122	49.63	0.04	-1.3864	9.9999	-0.5632	9.9999	0.4056	-0.1704	0.0057	-0.0608	-0.0510	0.3560
123	49.79	0.02	-1.3973	9.9999	-0.5518	9.9999	0.4038	-0.1618	0.0053	-0.0556	-0.0390	0.3449
124	49.99	0.02	-1.3963	9.9999	-0.5680	9.9999	0.4052	-0.1655	0.0063	-0.0582	-0.0985	0.3313
125	50.17	0.03	-1.3976	9.9999	-0.5724	9.9999	0.4060	-0.1641	0.0127	-0.0678	-0.0063	0.3317
126	50.33	0.07	-1.4044	9.9999	-0.5694	9.9999	0.4057	-0.1395	0.0143	-0.0449	-0.1025	0.3355
127	50.49	0.08	-1.4041	9.9999	-0.5686	9.9999	0.4062	-0.1621	0.0115	-0.0581	-0.0711	0.3585
128	50.67	0.04	-1.4065	9.9999	-0.5703	9.9999	0.4068	-0.1646	0.0147	-0.0306	-0.1887	0.2921
129	50.83	0.03	-1.4098	9.9999	-0.5685	9.9999	0.4058	-0.0842	0.0219	-0.0191	-0.2489	0.2170
130	51.01	0.05	-1.4351	9.9999	-0.5736	9.9999	0.4056	-0.0897	0.0209	-0.0219	-0.2335	0.2447
131	51.17	0.07	-1.4329	9.9999	-0.5737	9.9999	0.4073	-0.1027	0.0193	-0.0271	-0.1883	0.2634
132	51.34	0.05	-1.4446	9.9999	-0.5745	9.9999	0.4072	-0.0921	0.0194	-0.0228	-0.2111	0.2481
133	51.52	0.04	-1.4494	9.9999	-0.5917	9.9999	0.4084	-0.0775	0.0193	-0.0167	-0.2497	0.2160
134	51.67	0.04	-1.4393	9.9999	-0.5762	9.9999	0.4080	-0.0943	0.0166	-0.0259	-0.1764	0.2731
135	51.85	0.02	-1.4424	9.9999	-0.5744	9.9999	0.4081	-0.0921	0.0151	-0.0279	-0.1643	0.3025
136	52.01	0.03	-1.4483	9.9999	-0.5721	9.9999	0.4075	-0.1034	0.0127	-0.0313	-0.1231	0.3023
137	52.18	-0.02	-1.4561	9.9999	-0.5867	9.9999	0.4046	-0.0632	0.0047	-0.0224	-0.0745	0.3550
138	52.35	-0.03	-1.3733	9.9999	-0.5563	9.9999	0.4051	-0.0835	0.0038	-0.0312	-0.0456	0.3733

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART /3 MACH 0.60 RNIU=6 .PHI 45.0 CONF MIA0F31 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CA3	CN3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
139	52.51	-0.02	-1.3515	0.0000	-0.5454	0.9939	0.4039	-0.0775	0.0042	-0.0324	-0.0563	0.6179
140	52.67	-0.00	-1.3533	0.0000	-0.5526	0.9949	0.4052	-0.0792	0.0035	-0.0309	-0.0443	0.3899
141	52.69	-0.01	-1.3418	0.0000	-0.5413	0.9939	0.4034	-0.0725	0.0049	-0.0336	-0.0677	0.8627
142	53.02	-0.05	-1.3318	0.0000	-0.5371	0.9999	0.4033	-0.0811	0.0061	-0.0405	-0.0754	0.4994
143	53.14	-0.11	-1.3345	0.0000	-0.5438	0.9999	0.4043	-0.1034	0.0118	-0.0636	-0.1176	0.4368
144	53.37	-0.01	-1.3358	0.0000	-0.5446	0.9999	0.4038	-0.1137	-0.0006	-0.0502	0.0053	0.4414
145	53.56	-0.05	-1.3388	0.0000	-0.5465	0.9999	0.4055	-0.0651	0.0075	-0.0308	-0.1215	0.4723
146	53.69	-0.04	-1.3407	0.0000	-0.5538	0.9999	0.4054	-0.0402	0.0131	-0.0215	-0.3267	0.5362
147	53.88	-0.03	-1.3932	0.0000	-0.5681	0.9999	0.4063	-0.0539	0.0106	-0.0249	-0.1970	0.4618
148	54.02	0.01	-1.3814	0.0000	-0.5561	0.9999	0.4040	-0.0185	0.0200	-0.0169	-1.0811	0.9135
149	54.16	-0.03	-1.3870	0.0000	-0.5620	0.9999	0.4049	-0.0058	0.0234	-0.0130	-4.0345	2.2414
150	54.33	-0.01	-1.3930	0.0000	-0.5630	0.9999	0.4047	-0.0056	0.0225	-0.0121	-4.0179	2.1607
151	54.53	-0.02	-1.4002	0.0000	-0.5683	0.9999	0.4045	-0.0044	0.0221	-0.0128	-5.0227	2.8182
152	54.68	-0.02	-1.4057	0.0000	-0.5720	0.9999	0.4046	-0.0101	0.0205	-0.0152	-2.0297	1.5049
153	54.83	-0.03	-1.4077	0.0000	-0.5698	0.9999	0.4046	-0.0105	0.0233	-0.0165	-2.2190	1.5716
154	54.99	-0.04	-1.3999	0.0000	-0.5669	0.9999	0.4050	0.0021	0.0255	-0.0119	12.0952	-5.6667
155	55.14	-0.04	-1.3978	0.0000	-0.5654	0.9999	0.4045	-0.0053	0.0250	-0.0158	-4.0113	2.9811
156	55.31	-0.01	-1.4042	0.0000	-0.5660	0.9999	0.4037	-0.0090	0.0241	-0.0173	-3.0125	2.1625
157	55.45	-0.05	-1.3999	0.0000	-0.5661	0.9999	0.4045	-0.0046	0.0249	-0.0160	-5.1913	3.4783
158	55.62	-0.03	-1.3920	0.0000	-0.5630	0.9999	0.4042	-0.0104	0.0232	-0.0164	-2.2308	1.7692
159	55.78	-0.04	-1.4018	0.0000	-0.5627	0.9999	0.4048	-0.0111	0.0222	-0.0191	-2.0300	1.7207
160	55.92	-0.02	-1.4053	0.0000	-0.5604	0.9999	0.4043	-0.0098	0.0216	-0.0173	-2.2265	1.7653
161	56.17	-0.01	-1.4044	0.0000	-0.5591	0.9999	0.4042	-0.0094	0.0222	-0.0175	-2.3617	1.8617
162	56.24	0.02	-1.3917	0.0000	-0.5521	0.9999	0.4039	-0.0119	0.0206	-0.0179	-1.7311	1.5062
163	56.34	-0.00	-1.3917	0.0000	-0.5533	0.9999	0.4047	-0.0134	0.0205	-0.0186	-1.5249	1.3881
164	56.56	-0.01	-1.3973	0.0000	-0.5611	0.9999	0.4045	-0.0127	0.0206	-0.0169	-1.6220	1.4882
165	56.69	0.01	-1.3987	0.0000	-0.5627	0.9999	0.4052	-0.0151	0.0197	-0.0184	-1.3046	1.2185
166	56.85	-0.02	-1.3973	0.0000	-0.5617	0.9999	0.4049	-0.0097	0.0193	-0.0169	-1.9897	1.7423
167	57.00	0.02	-1.3965	0.0000	-0.5651	0.9999	0.4045	-0.0179	0.0192	-0.0197	-1.0726	1.1006
168	57.14	0.01	-1.3971	0.0000	-0.5671	0.9999	0.4059	-0.0162	0.0197	-0.0190	-1.1852	1.1728
169	57.31	-0.02	-1.3943	0.0000	-0.5656	0.9999	0.4057	-0.0114	0.0177	-0.0167	-1.5526	1.4649
170	57.49	-0.00	-1.3960	0.0000	-0.5648	0.9999	0.4052	-0.0122	0.0168	-0.0173	-1.3770	1.4180
171	57.65	-0.01	-1.3967	0.0000	-0.5667	0.9999	0.4057	-0.0172	0.0169	-0.0192	-0.9826	1.1163
172	57.73	-0.01	-1.4025	0.0000	-0.5703	0.9999	0.4065	-0.0177	0.0174	-0.0200	-1.9831	1.1299
173	57.87	-0.01	-1.4029	0.0000	-0.5672	0.9999	0.4063	-0.0169	0.0165	-0.0193	-0.9822	1.1420
174	58.04	0.02	-1.3979	0.0000	-0.5637	0.9999	0.4061	-0.0245	0.0117	-0.0204	-0.4795	0.8361
175	58.17	-0.00	-1.3993	0.0000	-0.5661	0.9999	0.4060	-0.0181	0.0121	-0.0183	-0.6685	1.0110
176	58.30	0.01	-1.3978	0.0000	-0.5674	0.9999	0.4063	-0.0351	0.0130	-0.0247	-0.2957	0.7029
177	58.48	0.01	-1.4000	0.0000	-0.5685	0.9999	0.4061	-0.0300	0.0141	-0.0211	-0.2709	0.7057
178	58.61	0.02	-1.3911	0.0000	-0.5647	0.9999	0.4059	-0.0329	0.0095	-0.0234	-0.2599	0.7156
179	58.82	0.01	-1.3965	0.0000	-0.5673	0.9999	0.4056	-0.0314	0.0079	-0.0235	-0.2526	0.7508
180	57.85	-0.01	-1.3912	0.0000	-0.5535	0.9999	0.4050	-0.0207	0.0179	-0.0217	-0.8647	1.0483

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART SCALE MACH=0.6 PHI 0.0 CONF 81.0F31 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.87	0.02	-0.5372	1.3027	0.1222	-0.2852	0.0056	0.2703	0.0675	0.2028	-1.8065
2	-5.88	0.02	-0.5267	1.3309	0.0493	-0.0484	-0.0013	0.2671	0.0674	0.1997	-1.8635
3	-5.89	0.02	-0.5128	1.2279	0.1614	-0.1372	-0.0009	0.2873	0.0644	0.2229	-1.7324
4	-3.58	0.02	-0.3453	0.5859	0.1451	-0.1586	0.0	0.2960	0.0665	0.2295	-1.4635
5	-1.71	0.01	-0.1144	0.0365	0.0145	-0.1056	0.0005	0.3001	0.0572	0.2428	-0.7748
6	0.25	0.02	0.0199	-0.1470	0.0334	-0.0560	0.0013	0.3025	0.0580	0.2444	-1.4935
7	2.16	0.02	0.3052	-0.2102	0.0832	-0.0572	0.0021	0.3057	0.0595	0.2457	-1.1967
8	4.11	0.01	0.5790	-1.1484	-0.0019	-0.0191	0.0026	0.3047	0.0655	0.2391	-1.6899
9	6.07	0.01	1.0217	-2.0370	-0.0241	-0.0352	0.0030	0.3115	0.0735	0.2279	-1.8218
10	8.07	0.01	1.5524	-3.0017	0.0187	-0.0576	0.0043	0.3182	0.0865	0.2316	-1.9980
11	9.99	0.02	2.0930	-4.0167	0.0447	-0.1422	-0.0015	0.3265	0.1049	0.2216	-2.1030
12	12.03	0.01	2.6431	-5.1673	-0.0072	-0.0345	-0.0008	0.3306	0.1277	0.2027	-2.1820
13	14.02	0.01	3.2252	-7.2259	-0.0145	0.0234	0.0070	0.3353	0.1509	0.1844	-2.2387
14	16.08	0.02	3.8199	-8.4190	-0.0326	0.0577	0.0148	0.3413	0.1740	0.1673	-2.2811
15	18.15	0.02	4.5711	-10.2307	-0.0426	0.0650	0.0159	0.3390	0.1951	0.1437	-2.2819
16	20.16	0.01	5.1844	-11.5095	-0.1035	0.2205	0.0236	0.3426	0.2221	0.1205	-2.2779
17	22.16	0.02	5.7310	-12.7557	-0.1265	0.1449	-0.0164	0.3275	0.2341	0.0933	-2.2255
18	24.19	0.01	6.2444	-13.8516	-0.2457	0.5464	-0.0434	0.3280	0.2568	0.0711	-2.1371
19	26.17	0.01	6.6991	-14.8742	-0.1702	0.6055	-0.0494	0.2918	0.2488	0.0429	-2.0266
20	28.16	0.03	7.0734	-15.5006	0.1687	-0.6473	0.0804	0.2810	0.2462	0.0348	-1.9262
21	29.91	0.03	7.3571	-15.9555	0.3930	-0.7498	0.1089	0.2817	0.2571	0.0246	-1.9176
22	28.92	0.03	7.5003	-16.0597	0.0963	-0.3016	0.0348	0.2813	0.2658	0.0155	-1.9174
23	28.97	0.03	7.4910	-16.0535	0.2090	-0.5563	0.1083	0.2954	0.2662	0.0291	-1.9342
24	28.98	0.03	7.5746	-16.1503	0.3020	-0.5802	0.1021	0.2952	0.2840	0.0271	-1.9154
25	28.93	0.03	7.7003	-16.3414	0.4988	-1.0493	0.1659	0.2894	0.2716	0.0177	-1.8939
26	28.98	0.01	7.7457	-16.3909	0.5985	-1.2690	0.2229	0.2886	0.2793	0.0092	-1.8609
27	29.53	0.01	7.9136	-16.6173	0.5894	-1.1930	0.1956	0.2923	0.2826	0.0103	-1.8657
28	29.95	0.00	8.0305	-16.7722	0.5834	-1.2755	0.2097	0.2723	0.2824	-0.0101	-1.8395
29	30.14	0.00	8.2245	-16.9591	0.6738	-1.6123	0.2807	0.2752	0.2894	-0.0141	-1.8111
30	30.02	0.00	8.2433	-16.9232	0.8085	-1.6629	0.2460	0.2626	0.2893	-0.0266	-1.8100
31	30.04	0.00	8.2812	-16.9143	0.8303	-1.6087	0.2746	0.2736	0.2905	-0.0169	-1.7809
32	30.05	0.00	8.5170	-16.9481	0.8597	-1.6850	0.3031	0.2731	0.2970	-0.0238	-1.7667
33	31.25	0.11	8.7324	-17.3128	1.1642	-2.0851	0.2835	0.2565	0.2979	-0.0393	-1.7322
34	31.52	0.11	8.8335	-17.1045	1.2414	-2.0349	0.3165	0.2693	0.3055	-0.0361	-1.7099
35	31.80	0.11	8.9172	-17.1319	1.2436	-2.0875	0.3257	0.2626	0.3019	-0.0392	-1.6991
36	32.08	0.10	9.1570	-17.5978	1.0993	-1.9806	0.3263	0.2527	0.3069	-0.0540	-1.6804
37	32.34	0.10	9.1780	-17.6787	1.3430	-2.3652	0.3333	0.2825	0.3072	-0.0246	-1.6361
38	32.92	0.14	9.3866	-17.9733	1.5929	-2.5957	0.2949	0.2725	0.3112	-0.0386	-1.6462
39	32.98	0.12	9.4892	-17.9511	1.3569	-2.3065	0.2923	0.2527	0.3085	-0.0557	-1.6430
40	33.16	0.13	9.5448	-18.0577	1.3799	-2.2194	0.2726	0.2377	0.3045	-0.0667	-1.6160
41	33.40	0.11	9.6750	-18.2929	1.4735	-1.8791	0.2926	0.2563	0.3044	-0.0480	-1.6197
42	33.67	0.10	9.8551	-18.7798	1.6194	-1.7800	0.3072	0.2350	0.3083	-0.0732	-1.5850
43	33.91	0.11	10.0410	-18.7787	1.2240	-1.6413	0.3198	0.2307	0.3137	-0.0829	-1.5712
44	34.17	0.10	10.1838	-18.7486	1.0526	-1.4307	0.2875	0.2258	0.3106	-0.0849	-1.5463
45	34.41	0.10	10.1916	-18.5083	0.7795	-1.5432	0.2727	0.2263	0.3154	-0.0950	-1.5372
46	34.67	0.10	10.2469	-18.4235	1.1011	-1.8525	0.2956	0.2391	0.3217	-0.0825	-1.5002

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RATIO6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	74	0.90	1.7	0.0	41.0731	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAH	CAF	ACP
47	34.49	0.00	10.4145	-15.2371	0.8557	-1.5225	0.2178	0.2448	0.3186	-0.0735	-1.5098
48	35.15	0.00	10.5121	-15.4035	0.8937	-1.7068	0.1363	0.2117	0.3269	-0.1152	-1.4915
49	35.80	0.00	10.6084	-15.6103	0.8996	-1.9525	0.0454	0.2554	0.3318	-0.0763	-1.4535
50	35.83	0.00	10.5993	-15.3387	0.6004	-0.5508	0.0517	0.2560	0.3394	-0.0838	-1.4547
51	35.90	0.01	10.5993	-15.2561	0.8345	-1.1020	0.0875	0.2656	0.3446	-0.0587	-1.4388
52	36.14	0.02	10.7614	-15.5875	0.5152	-0.4571	0.0316	0.2241	0.3401	-0.1160	-1.4296
53	36.46	0.00	10.7778	-15.6474	0.8958	-0.9262	0.0606	0.2734	0.3462	-0.0751	-1.4194
54	36.65	0.13	10.9276	-15.2115	1.2116	-1.5111	0.0967	0.2669	0.3561	-0.0891	-1.3920
55	36.93	0.00	10.9195	-15.4784	0.8968	-0.9842	0.0339	0.2690	0.3534	-0.0908	-1.3703
56	37.21	0.03	11.0941	-15.7917	0.5044	-0.2695	0.0054	0.2566	0.3595	-0.1029	-1.3588
57	37.42	0.03	11.1615	-15.9288	0.5088	-0.4531	0.0058	0.2556	0.3608	-0.1058	-1.3488
58	37.66	0.07	11.2115	-15.9993	0.8725	-0.8826	0.0206	0.2526	0.3636	-0.1110	-1.3469
59	37.91	0.08	11.3167	-15.9805	0.8120	-0.8120	0.0280	0.2482	0.3573	-0.1091	-1.3362
60	38.13	0.05	11.3499	-15.1163	0.3938	-0.6423	0.0215	0.2549	0.3602	-0.1013	-1.3256
61	38.38	0.06	11.5134	-16.4552	0.1525	-0.3035	-0.0334	0.2470	0.3615	-0.1145	-1.2989
62	38.62	0.06	11.5421	-16.4539	0.1524	-0.0660	-0.0336	0.2419	0.3527	-0.1108	-1.2917
63	38.89	0.09	11.6114	-16.4932	0.3935	-0.8500	-0.0119	0.2300	0.3633	-0.1333	-1.2826
64	39.08	0.05	11.7059	-15.1517	0.3142	-0.6434	0.0161	0.2478	0.3647	-0.1169	-1.2858
65	39.30	0.01	11.7367	-15.3554	0.0145	-0.3137	-0.0752	0.2067	0.3596	-0.1531	-1.2705
66	39.50	0.06	11.8316	-15.3572	0.1709	-0.0184	-0.0329	0.2513	0.3598	-0.1085	-1.2735
67	39.73	-0.01	11.9717	-15.6763	-0.1997	0.5491	-0.0826	0.2223	0.3594	-0.1375	-1.2588
68	39.96	-0.00	12.0457	-15.1018	-0.1508	0.5186	-0.0641	0.2113	0.3617	-0.1504	-1.2537
69	40.13	0.00	12.0591	-15.1075	-0.0405	0.0613	-0.0887	0.1974	0.3594	-0.1515	-1.2531
70	40.37	0.01	12.2116	-15.1581	-0.2708	1.3119	-0.1531	0.2260	0.3599	-0.1339	-1.2413
71	40.57	-0.03	12.2174	-15.2403	-0.5275	0.8227	-0.0677	0.2336	0.3656	-0.1318	-1.2351
72	40.79	-0.00	12.3209	-15.1500	-0.0991	1.2067	-0.1029	0.2297	0.3665	-0.1364	-1.2302
73	40.98	0.01	12.4918	-15.5371	0.0058	0.7362	-0.0402	0.2026	0.3717	-0.1691	-1.2438
74	41.15	0.01	12.4803	-15.5115	-0.0673	1.0794	-0.0413	0.2158	0.3721	-0.1563	-1.2449
75	41.39	-0.02	12.5297	-15.6465	-0.4377	1.1822	-0.1027	0.2297	0.3730	-0.1433	-1.2323
76	41.61	-0.01	12.6570	-15.6438	-0.4091	1.4747	-0.0757	0.2079	0.3641	-0.1562	-1.2173
77	41.81	-0.04	12.7585	-15.2244	-0.2883	1.0181	-0.0462	0.1960	0.3700	-0.1740	-1.1960
78	42.01	-0.02	12.7944	-15.1440	-0.4514	1.2556	-0.0189	0.2043	0.3787	-0.1744	-1.1841
79	42.20	-0.03	12.8389	-15.1063	-0.6514	1.2986	-0.0664	0.1850	0.3680	-0.1830	-1.1769
80	42.40	0.01	12.9240	-15.2153	-0.1343	0.8945	0.0306	0.2102	0.3800	-0.1698	-1.1771
81	42.61	-0.02	12.9405	-15.0133	-0.3478	0.8737	-0.0166	0.2211	0.3846	-0.1635	-1.1594
82	42.77	-0.01	12.9859	-15.0104	-0.1533	0.8157	0.0245	0.2279	0.3824	-0.1545	-1.1579
83	42.97	-0.02	13.1405	-15.3171	-0.3143	0.8058	0.0054	0.2241	0.3837	-0.1596	-1.1656
84	43.16	0.02	13.2393	-15.4830	0.1215	0.4707	0.0397	0.2159	0.3917	-0.1758	-1.1680
85	43.36	-0.00	13.2151	-15.4731	-0.1048	0.3257	0.0408	0.2500	0.3967	-0.1467	-1.1709
86	43.50	0.02	13.3111	-15.1742	0.2262	0.5325	0.0537	0.2055	0.3836	-0.1781	-1.1600
87	43.68	0.00	13.3324	-15.4928	0.00	0.3743	0.0683	0.2056	0.3925	-0.1669	-1.1607
88	43.88	0.00	13.4495	-15.4220	0.0119	0.0736	0.0405	0.1952	0.3761	-0.1809	-1.1321
89	44.07	0.02	13.6025	-15.5324	0.3417	0.4972	0.0753	0.1559	0.3761	-0.2207	-1.1349
90	44.22	-0.01	13.4515	-15.5574	-0.2258	0.8083	0.0406	0.1495	0.3860	-0.2362	-1.1396
91	44.43	-0.04	13.7032	-15.4434	-0.1216	0.5588	0.0271	0.1704	0.3825	-0.2121	-1.1216
92	44.61	-0.01	13.6273	-15.6467	-0.2479	1.0063	-0.0156	0.1493	0.3755	-0.2262	-1.1230

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/L*10**-6	PRE	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	74	0.60	1.7	0.0	M1=0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
93	44.78	-0.04	13.2610	-15.5478	-0.0005	1.3105	0.0126	0.1747	0.3804	-0.2057	-1.1152
94	44.98	0.00	13.2823	-15.5787	-0.0035	1.3493	-0.0014	0.1966	0.3706	-0.1740	-1.0612
95	45.15	-0.06	13.2830	-15.5781	-0.0035	1.3700	0.0261	0.1827	0.3961	-0.2134	-1.1073
96	45.33	-0.04	13.1114	-15.5146	-0.0044	1.3324	-0.0162	0.1869	0.3797	-0.2128	-1.0994
97	45.51	-0.01	13.1879	-15.5433	-0.0053	1.6269	-0.0018	0.2260	0.4226	-0.1966	-1.1019
98	45.69	-0.03	13.2235	-15.5296	-0.0214	1.5375	0.0563	0.1776	0.3974	-0.2196	-1.0848
99	45.88	-0.05	13.3023	-15.5627	-0.0231	1.5795	0.0480	0.2028	0.4036	-0.2008	-1.0852
100	46.05	-0.01	13.3428	-15.6050	0.0365	1.3965	0.0271	0.2242	0.4320	-0.2078	-1.0880
101	46.22	-0.05	13.3970	-15.6269	-0.0600	1.6941	0.0569	0.1630	0.4054	-0.2434	-1.0566
102	46.39	0.00	13.3962	-15.5345	0.1217	1.3536	0.0070	0.2450	0.4498	-0.2048	-1.0769
103	46.57	-0.03	13.4517	-15.5724	-0.2329	0.9503	0.0439	0.2201	0.4274	-0.1993	-1.0630
104	46.75	-0.03	13.4791	-15.4580	-0.2434	1.3429	0.0360	0.1931	0.4066	-0.2157	-1.0584
105	46.91	-0.01	13.5246	-15.3206	0.0264	1.1476	0.0436	0.1969	0.4403	-0.2446	-1.0383
106	47.10	0.01	13.4792	-15.2103	0.2041	1.0417	0.0373	0.1702	0.4054	-0.2356	-1.0292
107	47.27	-0.04	13.4250	-15.4362	-0.3659	1.5121	0.0296	0.1542	0.4030	-0.2488	-1.0412
108	47.43	-0.02	13.3941	-15.3459	0.0820	0.2471	0.1091	0.1923	0.4173	-0.2250	-1.0360
109	47.61	-0.03	13.4136	-15.4502	-0.0307	1.2397	0.0097	0.2393	0.4306	-0.1913	-1.0415
110	47.79	0.01	13.4548	-15.5907	0.3327	0.9656	0.1064	0.1858	0.4426	-0.2568	-1.0398
111	47.95	-0.01	13.4722	-15.2198	0.2174	0.8008	-0.0017	0.2745	0.4659	-0.2113	-1.0233
112	48.13	0.01	13.0344	-15.2245	0.4410	1.1036	0.0173	0.2411	0.5183	-0.2771	-1.0130
113	48.29	0.01	13.1153	-15.1578	0.3098	0.8390	0.0050	0.3223	0.5108	-0.1885	-1.0096
114	48.46	-0.02	13.0503	-15.1133	0.0971	0.9006	-0.0062	0.2900	0.5182	-0.2282	-1.0042
115	48.64	0.02	13.0445	-15.0527	0.3778	1.0139	0.0135	0.3122	0.5345	-0.2223	-1.0138
116	48.83	-0.01	13.0734	-15.1426	0.0540	1.1431	-0.0013	0.2607	0.5257	-0.2649	-0.9968
117	48.99	0.03	13.2710	-15.1586	0.4698	1.1925	-0.0299	0.3090	0.5426	-0.2334	-1.0357
118	49.14	0.02	13.3577	-15.1734	0.3316	1.5215	-0.0101	0.2902	0.5450	-0.2548	-1.0015
119	49.34	0.05	13.5317	-15.2209	0.6554	1.5598	-0.0311	0.2767	0.5490	-0.2722	-1.0022
120	49.50	0.03	13.4734	-15.1239	0.5415	1.3619	-0.0307	0.2761	0.5498	-0.2736	-0.9998
121	49.67	0.02	13.5044	-15.1570	0.4442	1.4652	-0.0367	0.3157	0.5530	-0.2373	-0.9989
122	49.86	0.04	13.6014	-15.1752	0.7422	1.3444	-0.0297	0.2973	0.5555	-0.2567	-0.9945
123	50.04	0.06	13.6426	-15.1681	0.7873	2.1271	-0.0394	0.3134	0.5606	-0.2469	-1.0088
124	50.21	0.07	13.7471	-15.1815	0.8101	2.1431	-0.0343	0.3105	0.5695	-0.2590	-0.9978
125	50.37	0.07	13.6852	-15.0137	0.6030	1.9824	-0.0249	0.3181	0.5734	-0.2558	-0.9968
126	50.56	0.10	13.6944	-15.0197	1.2108	2.0106	-0.0457	0.2883	0.5712	-0.2828	-0.9913
127	50.74	0.07	13.7969	-15.1651	0.8532	2.3037	0.0016	0.2960	0.5797	-0.2937	-1.0045
128	50.90	0.08	13.8492	-15.1262	0.8409	2.0460	-0.0262	0.3162	0.5776	-0.2612	-1.0023
129	51.09	0.11	13.8491	-15.0522	1.1814	2.3217	0.0431	0.2919	0.5814	-0.2696	-1.0032
130	51.25	0.15	13.8239	-15.0282	1.0782	2.0219	0.0293	0.2881	0.5819	-0.2938	-1.0046
131	51.44	0.14	13.7594	-15.0951	1.0902	2.2106	0.0438	0.3084	0.5871	-0.2787	-0.9941
132	51.56	0.16	13.7690	-15.0720	1.0525	2.6051	0.0756	0.2843	0.5862	-0.3219	-0.9942
133	51.78	0.16	13.7716	-15.0218	1.0999	2.3334	0.0226	0.2973	0.5973	-0.3001	-0.9706
134	51.93	0.17	13.7569	-15.0488	1.1779	2.2634	0.0246	0.2749	0.5974	-0.3185	-0.9839
135	52.12	0.16	13.8229	-15.0726	1.1944	2.1746	-0.0103	0.2748	0.5935	-0.3187	-0.9504
136	52.27	0.11	13.8163	-15.1414	1.1154	3.2318	-0.0540	0.2646	0.5907	-0.3321	-0.9362
137	52.46	0.08	13.8029	-15.0472	0.7699	3.3563	-0.0399	0.2595	0.5777	-0.3182	-0.9209
138	52.62	0.08	13.8261	-15.0629	0.8351	3.1464	-0.0321	0.2361	0.5670	-0.3309	-0.9228

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REYLNO	RMI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	74	0.90	1.7	0.0	BIW3F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.74	0.00	16.5670	-15.5365	0.4786	3.5607	-0.0330	0.2358	0.5617	-0.3259	-0.9189
140	52.94	0.00	17.0255	-15.9849	0.5116	3.8134	-0.0266	0.2290	0.5532	-0.3242	-0.9330
141	53.10	0.01	17.0498	-15.9561	0.6621	3.8330	-0.0129	0.2350	0.5564	-0.3214	-0.9357
142	53.28	0.00	17.0346	-16.0767	0.6174	3.1405	-0.0111	0.2269	0.5573	-0.3304	-0.9435
143	53.43	0.01	16.9199	-15.9686	0.6531	3.2733	-0.0258	0.2661	0.5550	-0.2869	-0.9448
144	53.59	0.00	17.0177	-16.0023	0.9164	3.0612	-0.0112	0.2491	0.5537	-0.3041	-0.9439
145	53.77	0.01	17.1052	-16.0784	0.7371	2.6161	-0.0094	0.1838	0.5532	-0.3694	-0.9517
146	54.42	0.09	17.0922	-16.2545	0.6789	3.1218	0.0021	0.2191	0.5430	-0.3239	-0.9510
147	54.49	0.05	17.1439	-16.2582	0.6293	2.6790	-0.0161	0.2300	0.5467	-0.3167	-0.9483
148	54.23	0.00	17.2245	-16.3080	0.5874	2.6122	-0.0232	0.2259	0.5436	-0.3177	-0.9514
149	54.43	0.15	17.2065	-16.2001	1.0229	2.7661	-0.0106	0.2177	0.5449	-0.3272	-0.9531
150	54.56	0.08	17.2237	-16.3325	0.5472	2.9675	-0.0102	0.2412	0.5462	-0.3050	-0.9484
151	54.71	0.06	17.2681	-16.3639	0.6634	2.8892	-0.0095	0.2286	0.5431	-0.3145	-0.9469
152	54.87	0.08	17.3597	-16.4306	0.6072	2.7954	-0.0096	0.2122	0.5423	-0.3301	-0.9465
153	55.62	0.09	17.4781	-16.7339	0.8185	2.6607	-0.0156	0.2409	0.5490	-0.3041	-0.9604
154	55.17	0.05	17.4073	-16.7474	0.6073	2.6930	-0.0041	0.2303	0.5432	-0.3129	-0.9577
155	55.32	0.02	17.4689	-16.8436	0.2855	2.6125	-0.0143	0.2329	0.5428	-0.3099	-0.9528
156	55.46	0.07	17.4567	-16.8506	0.8011	2.6408	-0.0018	0.2040	0.5401	-0.3341	-0.9539
157	55.63	0.08	17.5116	-16.8711	0.7599	2.5972	-0.0080	0.2006	0.5387	-0.3381	-0.9463
158	55.77	0.06	17.4553	-16.8367	0.9763	2.5808	0.0059	0.1962	0.5415	-0.3433	-0.9475
159	55.43	-0.06	17.4758	-16.8568	0.7210	2.6735	-0.0039	0.2123	0.5438	-0.3315	-0.9490
160	56.10	0.08	17.6577	-16.9724	0.9424	2.1913	-0.0067	0.1916	0.5515	-0.3599	-0.9510
161	56.25	0.07	17.6065	-16.9133	0.8417	2.2612	0.0088	0.1983	0.5536	-0.3553	-0.9436
162	56.41	0.06	17.6518	-16.9544	0.6306	2.4345	-0.0071	0.2157	0.5564	-0.3407	-0.9449
163	56.56	0.05	17.6782	-16.9853	0.8045	2.0816	0.0013	0.2227	0.5559	-0.3327	-0.9415
164	56.70	0.05	17.6803	-16.9521	0.6567	2.0746	0.0082	0.1884	0.5604	-0.3720	-0.9461
165	56.81	0.03	17.6863	-16.9548	0.4558	2.1894	0.0056	0.1935	0.5581	-0.3606	-0.9443
166	57.01	0.02	17.6970	-16.9422	0.4397	2.1343	0.0018	0.1812	0.5591	-0.3779	-0.9386
167	57.17	0.05	17.7377	-16.9863	0.6316	2.1205	0.0045	0.1873	0.5583	-0.3710	-0.9441
168	57.32	0.00	17.7759	-16.9794	0.4310	1.9948	0.0224	0.1657	0.5615	-0.3948	-0.9496
169	57.48	0.02	17.7573	-16.9377	0.4756	1.9366	0.0025	0.1813	0.5596	-0.3783	-0.9426
170	57.61	0.02	17.8017	-16.9843	0.4757	1.8660	0.0178	0.1546	0.5563	-0.3957	-0.9333
171	57.78	-0.03	17.8416	-16.9583	-0.1742	0.1696	0.0273	0.0247	0.4802	-0.4555	-0.8724
172	57.92	-0.02	18.0296	-16.9995	0.1893	0.5367	0.0196	0.0669	0.4780	-0.4041	-0.8871
173	58.05	-0.03	17.8999	-16.9583	-0.1237	-0.1133	0.0136	0.0293	0.4332	-0.4039	-0.8711
174	58.20	-0.04	17.9627	-16.9739	-0.3861	-0.6978	0.7352	0.0817	0.4345	-0.3578	-0.8901
175	58.35	-0.07	17.9445	-16.9307	-0.3469	-0.6525	0.0350	0.0635	0.4539	-0.3964	-0.8856
176	58.49	-0.07	18.1128	-16.9675	-0.2275	-1.3007	-0.0004	0.1361	0.5019	-0.3638	-0.9262
177	58.57	-0.10	17.9831	-16.9424	-0.5103	-1.4947	-0.0051	0.1421	0.5009	-0.3588	-0.9349
178	58.57	-0.08	17.9571	-16.9615	-0.2494	-1.3427	-0.0080	0.1420	0.4964	-0.3544	-0.9334
179	58.57	-0.11	17.9645	-16.9802	-0.5875	-1.4498	-0.0012	0.1462	0.5019	-0.3557	-0.9332

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 74 | MACH 0.60 | RX10-6 1.7 | PHI 0.0 | CONF 31 | I 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-5.57	0.03	-0.0257	0.0125	0.0106	-0.5319	-2.2553	-0.1781	-0.0211	-0.0084	0.1183	0.4947
2	-5.58	0.02	-0.0261	0.0124	0.0104	-0.5334	-2.2549	-0.1723	-0.0209	-0.0089	0.1216	0.4927
3	-5.59	0.03	-0.0260	0.0125	0.0104	-0.7000	-2.6000	-0.1363	-0.0178	-0.0070	0.1309	0.4919
4	-3.58	0.02	-0.0260	0.0125	0.0107	-0.6250	-2.6750	-0.0699	-0.0113	-0.0329	0.1619	0.4699
5	-1.71	0.01	-0.0231	0.0125	0.0092	-0.8065	-3.1613	-0.0138	-0.0051	-0.0009	0.3698	0.5000
6	0.25	0.02	-0.0230	0.0125	0.0091	-0.6579	-2.3947	0.0199	0.0035	0.0065	0.1759	0.4271
7	2.16	0.02	-0.0230	0.0121	0.0078	-0.3621	-1.3448	0.0494	0.0049	0.0278	0.1530	0.4281
8	4.11	0.01	-0.0221	0.0119	0.0065	-0.9045	-4.0476	0.1318	0.0163	0.0600	0.1240	0.4555
9	6.07	0.01	-0.0201	0.0120	0.0097	-20.0000	-97.0000	0.2352	0.0229	0.0958	0.1118	0.4665
10	8.07	0.01	-0.0189	0.0110	0.0065	-0.1449	-0.9420	0.2984	0.0291	0.1356	0.1008	0.4701
11	9.99	0.02	-0.0182	0.0103	0.0063	-0.9643	-3.6714	0.3925	0.0319	0.1854	0.0812	0.4723
12	12.03	0.01	-0.0120	0.0112	0.0063	-0.6000	-4.1500	0.4951	0.0356	0.2278	0.0718	0.4600
13	14.02	0.01	-0.0079	0.0107	0.0074	-0.1134	-1.0126	0.5975	0.0377	0.2638	0.0631	0.4416
14	16.06	0.02	-0.0015	0.0101	0.0152	-0.0526	-0.0000	0.7115	0.0389	0.3060	0.0546	0.4301
15	18.15	0.02	-0.0136	0.0123	0.0242	-0.0556	0.8072	0.8073	0.0404	0.3425	0.0500	0.4243
16	20.16	0.01	-0.0199	0.0123	0.0281	-0.7270	0.8673	0.8673	0.0419	0.3720	0.0472	0.4192
17	22.16	0.02	-0.0271	-0.0047	0.0079	0.1270	-0.2000	0.9665	0.0424	0.4009	0.0449	0.4157
18	24.19	0.01	-0.0344	-0.0041	-0.0177	0.0485	0.2007	1.0340	0.0449	0.4240	0.0434	0.4100
19	26.17	0.01	-0.0391	0.0133	-0.0463	-0.0526	0.4920	1.0894	0.0526	0.4382	0.0443	0.4022
20	28.19	0.03	0.0503	0.0025	0.0228	0.0498	0.4462	1.0711	0.0342	0.4203	0.0366	0.3924
21	28.41	0.05	0.0645	0.0025	0.0353	0.0366	0.5072	1.0862	0.0401	0.4265	0.0369	0.3908
22	28.42	0.03	0.0176	0.0038	0.0016	0.2735	0.8941	1.0857	0.0424	0.4243	0.0390	0.3908
23	26.47	0.05	0.0641	0.0037	0.0187	0.0902	0.4561	1.0723	0.0391	0.4151	0.0364	0.3872
24	26.56	0.05	0.0523	0.0035	0.0242	0.0670	0.4636	1.0828	0.0394	0.4184	0.0364	0.3864
25	25.93	0.06	0.1157	0.0021	0.0366	0.0182	0.5065	1.0857	0.0355	0.4174	0.0327	0.3844
26	29.20	0.07	0.1830	0.0043	0.0550	0.0235	0.5192	1.0854	0.0323	0.4154	0.0297	0.3827
27	29.53	0.07	0.1836	0.0063	0.0707	0.0022	0.5127	1.0993	0.0346	0.4210	0.0316	0.3829
28	29.65	0.06	0.1488	0.0059	0.0579	0.0046	0.5197	1.1082	0.0324	0.4231	0.0292	0.3818
29	31.18	0.05	0.2139	0.0067	0.1115	0.0033	0.5235	1.1065	0.0301	0.4215	0.0272	0.3809
30	30.46	0.05	0.2345	0.0012	0.1167	0.0051	0.5064	1.1225	0.0306	0.4274	0.0272	0.3807
31	30.65	0.05	0.2363	0.0011	0.1357	0.0042	0.5172	1.1278	0.0293	0.4287	0.0259	0.3801
32	30.95	0.05	0.2707	0.0026	0.1400	0.0074	0.5172	1.1297	0.0285	0.4297	0.0252	0.3803
33	31.25	0.11	0.2510	0.0086	0.1361	0.0227	0.5154	1.1533	0.0314	0.4365	0.0272	0.3802
34	31.62	0.11	0.3174	0.0084	0.1644	0.0277	0.5167	1.1519	0.0293	0.4358	0.0254	0.3786
35	31.85	0.11	0.3152	0.0088	0.1633	0.0254	0.5176	1.1663	0.0310	0.4434	0.0265	0.3800
36	32.10	0.10	0.3343	0.0105	0.1729	0.0316	0.5186	1.1781	0.0306	0.4463	0.0261	0.3788
37	32.34	0.12	0.3542	0.0118	0.1842	0.0333	0.5189	1.1838	0.0317	0.4486	0.0267	0.3790
38	32.62	0.14	0.3603	0.0101	0.1893	0.0438	0.5137	1.2184	0.0365	0.4667	0.0299	0.3812
39	32.88	0.12	0.3485	0.0103	0.1834	0.0296	0.5262	1.2340	0.0373	0.4703	0.0302	0.3811
40	33.10	0.13	0.3534	0.0129	0.1829	0.0366	0.5177	1.2425	0.0358	0.4734	0.0312	0.3810
41	33.30	0.11	0.3586	0.0142	0.1841	0.0343	0.5159	1.2463	0.0375	0.4751	0.0301	0.3812
42	33.67	0.10	0.3730	0.0140	0.1907	0.0342	0.5113	1.2456	0.0390	0.4753	0.0313	0.3815
43	33.91	0.11	0.3821	0.0106	0.1876	0.0299	0.5120	1.2496	0.0404	0.4751	0.0323	0.3802
44	34.17	0.10	0.3901	0.0097	0.1939	0.0260	0.5249	1.2542	0.0442	0.4783	0.0351	0.3782
45	34.41	0.08	0.3957	0.0085	0.1870	0.0206	0.5293	1.2597	0.0434	0.4771	0.0360	0.3787
46	34.67	0.10	0.3960	0.0108	0.1870	0.0334	0.5256	1.2705	0.0475	0.4808	0.0374	0.3784

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART PARA VALUES PHI CONF L DEL1 DEL2 DEL3 DELA TRANSITION
7 74 0.99 1.7 0.0 81.0731 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	ACPF1	YCPF1	CNF2	CM2	CG2	XCPF2	YCPF2
47	34.85	0.00	0.3164	0.0107	0.1056	0.0367	0.5208	1.2756	0.0478	0.4818	0.0372	0.3778
48	35.15	0.00	0.2171	0.0102	0.1201	0.0471	0.5533	1.2672	0.0485	0.4805	0.0377	0.3779
49	35.40	0.00	0.1752	0.0100	0.0985	0.0618	0.5628	1.2677	0.0486	0.4866	0.0382	0.3779
50	35.63	0.00	0.1334	0.0075	0.0772	0.0561	0.5763	1.2926	0.0487	0.4886	0.0357	0.3780
51	35.90	0.00	0.2461	0.0178	0.1134	0.0381	0.5696	1.2983	0.0464	0.4913	0.0357	0.3784
52	36.19	0.00	0.1245	0.0094	0.0759	0.0467	0.6095	1.2952	0.0464	0.4891	0.0358	0.3776
53	36.42	0.00	0.1004	0.0100	0.0732	0.0366	0.5700	1.3068	0.0451	0.4928	0.0365	0.3771
54	36.65	0.10	0.2349	0.0075	0.1207	0.0333	0.5371	1.3078	0.0471	0.4931	0.0360	0.3771
55	36.93	0.00	0.1698	0.0060	0.1094	0.0318	0.5775	1.3066	0.0448	0.4944	0.0363	0.3783
56	37.21	0.03	0.1523	0.0060	0.0956	0.0394	0.5598	1.3075	0.0454	0.4932	0.0367	0.3772
57	37.42	0.03	0.1543	0.0081	0.0871	0.0397	0.5661	1.3107	0.0456	0.4965	0.0368	0.3773
58	37.66	0.07	0.1132	0.0035	0.0963	0.0310	0.5658	1.3058	0.0463	0.4893	0.0355	0.3747
59	37.91	0.03	0.1525	0.0065	0.0875	0.0302	0.5736	1.3156	0.0456	0.4945	0.0367	0.3759
60	38.13	0.00	0.1152	0.0007	0.0596	0.0001	0.4051	1.3133	0.0453	0.4924	0.0345	0.3749
61	38.38	0.02	0.0849	-0.0030	0.0518	-0.0072	0.6136	1.3078	0.0456	0.4910	0.0365	0.3755
62	38.62	0.02	0.0899	-0.0024	0.0213	-0.2647	2.3533	1.3009	0.0470	0.4866	0.0361	0.3739
63	38.88	0.00	0.1676	-0.0037	0.0625	-0.0346	0.6124	1.3098	0.0466	0.4912	0.0356	0.3750
64	39.08	0.03	0.1744	-0.0073	0.0965	-0.0420	0.5672	1.3091	0.0459	0.4921	0.0351	0.3759
65	39.38	0.01	0.0963	-0.0071	0.0182	-3.0870	7.0935	1.3001	0.0485	0.4868	0.0373	0.3741
66	39.50	0.02	0.1395	-0.0067	0.0911	-0.0053	0.5940	1.2989	0.0468	0.4874	0.0360	0.3753
67	39.73	-0.01	0.0151	-0.0114	0.0263	-0.7002	1.5187	1.3016	0.0490	0.4860	0.0378	0.3734
68	39.99	-0.00	-0.0134	-0.0105	0.0101	0.7836	-0.7537	1.3012	0.0493	0.4856	0.0379	0.3732
69	40.13	0.00	-0.0209	-0.0122	0.0075	1.5437	-0.3646	1.3052	0.0494	0.4872	0.0379	0.3733
70	40.37	0.00	-0.1359	-0.0133	-0.0549	0.0581	0.4041	1.2968	0.0509	0.4832	0.0393	0.3726
71	40.57	-0.03	-0.0853	-0.0194	-0.0146	0.2219	0.2250	1.2872	0.0506	0.4801	0.0392	0.3730
72	40.78	-0.04	-0.1159	-0.0162	-0.0437	0.1217	0.3753	1.2888	0.0505	0.4802	0.0392	0.3728
73	40.98	0.01	-0.0343	-0.0133	0.0037	0.3883	-0.1082	1.2891	0.0497	0.4801	0.0386	0.3724
74	41.18	0.01	-0.0284	-0.0119	0.0083	0.4979	-0.3473	1.2819	0.0491	0.4791	0.0383	0.3737
75	41.39	-0.02	-0.1382	-0.0134	-0.0504	0.0955	0.4053	1.2898	0.0501	0.4799	0.0388	0.3720
76	41.61	-0.01	-0.0779	-0.0117	-0.0230	0.1508	0.2984	1.2898	0.0502	0.4799	0.0389	0.3720
77	41.81	-0.01	-0.1193	-0.0184	-0.0458	0.6283	-0.2525	1.2802	0.0516	0.4757	0.0403	0.3716
78	42.01	-0.02	-0.0847	-0.0139	-0.0178	0.2152	0.2726	1.2682	0.0520	0.4699	0.0410	0.3705
79	42.20	-0.03	-0.0553	-0.0092	-0.0108	0.1567	0.3043	1.2787	0.0515	0.4784	0.0403	0.3716
80	42.40	0.01	0.0190	-0.0127	0.0264	-1.4651	2.4302	1.2649	0.0520	0.4703	0.0411	0.3718
81	42.60	-0.02	-0.0365	-0.0095	-0.0062	0.2610	0.2198	1.2637	0.0523	0.4662	0.0414	0.3705
82	42.77	-0.00	0.0127	-0.0045	0.0157	-3.5165	5.8649	1.2670	0.0517	0.4703	0.0408	0.3712
83	42.97	-0.02	-0.0654	-0.0103	0.0065	-0.1618	0.7149	1.2883	0.0499	0.4812	0.0387	0.3735
84	43.16	0.02	0.0312	-0.0095	0.0231	-0.3151	1.0096	1.2851	0.0496	0.4803	0.0386	0.3737
85	43.32	-0.00	0.0132	-0.0067	0.0061	-0.0917	0.7116	1.2876	0.0494	0.4814	0.0388	0.3739
86	43.50	0.02	0.0530	-0.0084	0.0393	-0.1570	0.7421	1.2880	0.0504	0.4773	0.0391	0.3705
87	43.68	0.00	0.0516	-0.0103	0.0466	-0.1660	0.7259	1.2725	0.0516	0.4697	0.0406	0.3691
88	43.86	0.00	-0.0095	-0.0116	0.0049	1.2211	-1.0421	1.2721	0.0528	0.4698	0.0415	0.3693
89	44.07	0.02	0.0159	-0.0133	0.0283	-0.2365	1.7736	1.2755	0.0526	0.4717	0.0411	0.3686
90	44.26	-0.01	0.0173	-0.0093	0.0225	-0.5202	1.3006	1.2845	0.0434	0.4768	0.0377	0.3712
91	44.43	-0.00	-0.0200	-0.0181	0.0000	0.7350	-0.2400	1.2847	0.0513	0.4736	0.0399	0.3686
92	44.61	-0.01	-0.0176	-0.0167	-0.0123	0.2904	0.2139	1.2745	0.0521	0.4689	0.0409	0.3679

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIC*6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 74 0.60 1.7 0.0 MI=0P31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CAF1	CM1	CN1	XCPF1	YCPF1	CAF2	CM2	CB2	XCPF2	YCPF2
93	[illegible]	[illegible]	-[illegible]925	-[illegible]152	-0.0306	0.1755	0.3239	1.2762	0.0503	0.4706	0.0394	0.3681
94	[illegible]	0.00	-[illegible]541	-[illegible]151	-0.0091	0.2949	0.1717	1.2659	0.0518	0.4626	0.0409	0.3655
95	[illegible]	-0.02	-0.0548	-[illegible]173	-0.0081	0.3421	0.1630	1.2759	0.0504	0.4669	0.0395	0.3675
96	45.93	-0.00	-0.0473	-0.0146	-0.0310	0.2135	0.3548	1.2500	0.0505	0.4604	0.0401	0.3654
97	45.51	-0.01	-[illegible]549	-[illegible]106	-0.0110	0.1892	0.2136	1.2757	0.0466	0.4693	0.0365	0.3678
98	45.69	-0.03	-0.0340	-0.0119	-0.0011	0.3059	0.0203	1.2733	0.0466	0.4694	0.0368	0.3696
99	45.48	-0.03	-0.0411	-0.0053	-0.0001	0.2668	-0.0032	1.2734	0.0464	0.4659	0.0368	0.3688
100	46.05	-[illegible]01	-0.0365	-0.0073	-0.0023	0.1911	0.0602	1.2803	0.0466	0.4723	0.0368	0.3689
101	46.22	-0.09	-0.0337	-0.0218	-0.0052	0.4552	0.1710	1.2470	0.0481	0.4507	0.0386	0.3615
102	44.39	0.00	-[illegible]369	-[illegible]092	0.0000	0.1890	-0.0244	1.2805	0.0406	0.4738	0.0318	0.3700
103	46.57	-0.03	-0.0134	-0.0014	0.0084	0.1567	-0.5971	1.2717	0.0397	0.4704	0.0312	0.3699
104	45.75	-0.03	-0.1504	-0.0097	-[illegible]130	0.1723	0.2309	1.2692	0.0436	0.4648	0.0343	0.3662
105	45.91	-0.00	-0.0371	-0.0100	0.0010	0.3333	-0.0333	1.2675	0.0427	0.4632	0.0337	0.3654
106	47.16	[illegible]01	-[illegible]045	-[illegible]073	-0.0081	0.1508	0.1574	1.2616	0.0424	0.4617	0.0336	0.3660
107	47.27	-0.04	-[illegible]510	-[illegible]084	-0.0103	0.1625	0.1992	1.2677	0.0422	0.4634	0.0333	0.3656
108	47.43	-0.02	-0.0638	-0.0128	0.0508	-0.1805	0.7380	1.2626	0.0442	0.4594	0.0350	0.3639
109	47.66	-0.04	-0.1254	-[illegible]036	-0.0037	0.1272	0.1307	1.2635	0.0435	0.4603	0.0344	0.3643
110	47.79	0.00	0.0240	-0.0044	[illegible]260	-0.1796	1.1348	1.2651	0.0437	0.4627	0.0345	0.3658
111	47.45	-0.00	-[illegible]104	-0.0013	0.0061	0.1360	-0.6100	1.2583	0.0357	0.4675	0.0281	0.3686
112	48.13	[illegible]01	-0.0015	[illegible]518	0.0107	-1.2500	-0.6667	1.2788	0.0320	0.4747	0.0250	0.3712
113	48.29	0.01	0.0042	0.0002	0.0111	0.4091	-5.0455	1.2791	0.0305	0.4762	0.0236	0.3723
114	49.08	-0.02	-0.0014	0.0013	0.0049	-0.9286	-7.2714	1.2793	0.0281	0.4800	0.0219	0.3752
115	48.89	0.02	[illegible]197	0.0072	0.0159	0.3636	0.9796	1.2985	0.0236	0.4907	0.0182	0.3778
116	48.83	-0.01	0.0012	0.0078	0.0085	6.5000	7.0833	1.3027	0.0209	0.4968	0.0161	0.3798
117	48.98	0.03	-[illegible]244	0.0153	[illegible]030	-0.5636	-1.3141	1.2968	0.0162	0.4947	0.0125	0.3815
118	49.14	0.02	-[illegible]158	0.0060	0.0030	-0.7547	-0.2830	1.3025	0.0174	0.4965	0.0134	0.3812
119	49.34	0.02	-[illegible]284	0.0083	-0.0041	-0.2471	0.1559	1.3118	0.0146	0.5037	0.0112	0.3840
120	49.50	[illegible]03	-0.0397	0.0076	-[illegible]070	-0.2549	0.2248	1.3072	0.0142	0.5007	0.0109	0.3831
121	49.87	0.02	-[illegible]258	0.0044	-0.0018	-0.1725	0.0706	1.3120	0.0161	0.5000	0.0123	0.3811
122	49.96	0.04	-[illegible]256	0.0012	0.0064	-[illegible]053	-0.0154	1.3172	0.0213	0.4981	0.0162	0.3782
123	50.49	0.06	-[illegible]214	[illegible]214	-[illegible]167	-0.0212	0.2729	1.3141	0.0111	0.5028	0.0085	0.3826
124	50.71	[illegible]07	-[illegible]359	[illegible]031	-[illegible]178	0.2705	1.2998	0.0043	0.4963	0.0064	0.3867	
125	51.37	0.07	-[illegible]378	0.0051	-0.0054	-0.1368	0.1640	1.3234	0.0091	0.5077	0.0069	0.3837
126	50.50	[illegible]10	-[illegible]857	[illegible]685	-[illegible]781	-0.0678	0.3275	1.3034	0.0084	0.4969	0.0065	0.3828
127	50.69	0.07	-[illegible]973	0.0193	-0.0105	-0.1970	0.2225	1.3067	0.0076	0.5014	0.0060	0.3837
128	50.90	[illegible]05	-[illegible]000	[illegible]126	-0.0228	-[illegible]594	0.3429	1.3002	0.0086	0.4981	0.0066	0.3831
129	51.09	[illegible]11	-[illegible]413	[illegible]171	-[illegible]112	-[illegible]130	0.2716	1.3046	0.0096	0.5006	0.0076	0.3836
130	51.25	[illegible]13	[illegible]037	0.0197	[illegible]074	26.1429	10.5714	1.3023	0.0116	0.4969	0.0089	0.3816
131	51.44	[illegible]15	-[illegible]263	0.0223	-0.0145	-0.2468	0.4550	1.3160	0.0108	0.5037	0.0082	0.3828
132	51.35	0.18	-[illegible]084	[illegible]219	0.0053	-3.2273	-0.7794	1.3038	0.0114	0.4993	0.0088	0.3830
133	51.78	[illegible]16	-0.0099	[illegible]192	0.0068	2.0926	2.9362	1.3097	0.0036	0.5066	0.0029	0.3868
134	51.93	[illegible]17	[illegible]170	[illegible]197	0.0125	1.1538	0.7353	1.3241	0.0032	0.5121	0.0024	0.3871
135	52.12	[illegible]18	-[illegible]165	[illegible]188	[illegible]127	1.1538	[illegible]752	1.3245	0.0005	0.5156	0.0004	0.3894
136	52.27	[illegible]11	-[illegible]351	[illegible]112	-[illegible]084	-0.0341	0.2366	1.2951	-0.0186	0.4947	-0.0150	0.3958
137	52.48	[illegible]16	-[illegible]572	-[illegible]021	-[illegible]155	0.0473	0.2715	1.2336	-0.0222	0.4878	-0.0180	0.3954
138	52.82	0.00	-[illegible]030	-[illegible]027	-0.0027	0.0593	0.1912	1.2492	-0.0225	0.4970	-0.0180	0.3979

PAGE 2 OF 3
SHEET 6 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	MACH-S	PHI	CONE	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	7a	0.60	1.7	0.0	61.0631	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
139	52.74	[illegible]	[illegible]	[illegible]	[illegible]	0.0213	0.2014	1.2516	-0.0224	0.4948	-0.0183	0.3986
140	52.94	[illegible]	[illegible]	-0.0024	-0.0140	0.0343	0.2241	1.2457	-0.0252	0.4974	-0.0202	0.3993
141	53.14	[illegible]	-0.0341	[illegible]	-0.0134	-0.0149	0.2543	1.2627	-0.0225	0.5042	-0.0179	0.3993
142	53.28	[illegible]	-0.0231	[illegible]	[illegible]	-0.0103	0.1540	1.2604	-0.0245	0.5045	-0.0194	0.4002
143	53.43	[illegible]	-0.0411	[illegible]	-0.0104	-0.0415	0.2537	1.2524	-0.0247	0.5006	-0.0197	0.3997
144	53.59	[illegible]	-0.0240	0.0003	-0.0104	-0.0045	0.2206	1.2597	-0.0250	0.5040	-0.0198	0.4001
145	53.77	[illegible]	-0.0214	[illegible]	-0.0001	0.0	0.0047	1.2734	-0.0253	0.5093	-0.0196	0.4000
146	53.92	[illegible]	-0.0131	0.0005	-0.0071	-0.0151	0.2145	1.2653	-0.0252	0.5061	-0.0199	0.4000
147	54.09	[illegible]	-0.0271	[illegible]	-0.0036	-0.0259	0.1333	1.2715	-0.0276	0.5093	-0.0217	0.4006
148	54.23	[illegible]	-0.0304	-0.0003	-0.0052	0.0099	0.1716	1.2715	-0.0260	0.5108	-0.0220	0.4018
149	54.43	[illegible]	-0.0261	-0.0004	-0.0033	0.0346	0.1269	1.2633	-0.0272	0.5077	-0.0215	0.4019
150	54.58	[illegible]	-0.0429	-0.0011	-0.0104	0.0257	0.2523	1.2594	-0.0277	0.5051	-0.0220	0.4011
151	54.71	[illegible]	-0.0203	-0.0001	[illegible]	0.0335	0.1738	1.2662	-0.0275	0.5093	-0.0216	0.4016
152	54.87	[illegible]	-0.0351	-0.0017	-0.0077	0.0486	0.2200	1.2641	-0.0267	0.5090	-0.0210	0.4011
153	55.02	[illegible]	-0.0230	[illegible]	[illegible]	0.0187	0.1835	1.2304	-0.0270	0.5142	-0.0209	0.4022
154	55.17	[illegible]	-0.0270	-0.0015	-0.0033	0.0545	0.1200	1.2839	-0.0285	0.5168	-0.0222	0.4040
155	55.32	[illegible]	-0.0168	[illegible]	0.0	0.0135	0.0	1.2778	-0.0269	0.5159	-0.0210	0.4037
156	55.46	0.07	-0.0212	-0.0025	-0.0009	0.1238	0.0446	1.2819	-0.0300	0.5178	-0.0234	0.4039
157	55.63	[illegible]	-0.0225	[illegible]	[illegible]	-0.0116	[illegible]	1.2884	-0.0276	0.5212	-0.0216	0.4045
158	55.77	[illegible]	-0.0120	-0.0013	0.0025	0.1043	-0.2303	1.2968	-0.0299	0.5221	-0.0232	0.4051
159	55.93	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.2750	-0.0334	0.5163	-0.0237	0.4052
160	56.10	[illegible]	-0.0099	-0.0001	0.0042	0.0206	-0.0600	1.2919	-0.0307	0.5261	-0.0237	0.4072
161	56.25	[illegible]	[illegible]	-0.0005	[illegible]	[illegible]	[illegible]	1.2740	[illegible]	0.5186	-0.0236	0.4070
162	56.41	[illegible]	[illegible]	-0.0006	-0.0070	0.0159	0.2704	1.2720	-0.0306	0.5188	-0.0240	0.4061
163	56.59	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.2791	-0.0312	0.5211	[illegible]	0.4074
164	56.70	[illegible]	-0.0110	[illegible]	0.0026	0.0094	-0.1967	1.2686	-0.0313	0.5252	-0.0243	0.4075
165	56.87	[illegible]	-0.0105	[illegible]	[illegible]	[illegible]	[illegible]	1.2942	-0.0333	0.5260	-0.0257	0.4079
166	57.01	[illegible]	-0.0209	[illegible]	-0.0023	-0.0051	0.1100	1.2829	-0.0318	0.5240	-0.0248	0.4084
167	57.17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.2856	-0.0322	0.5243	[illegible]	0.4079
168	57.32	[illegible]	-0.0226	-0.0032	-0.0011	0.1584	0.0565	1.2866	-0.0337	0.5258	-0.0262	0.4086
169	57.48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.2807	-0.0328	0.5232	-0.0256	0.4085
170	57.61	[illegible]	[illegible]	[illegible]	-0.0037	-0.2000	[illegible]	1.2971	-0.0335	0.5306	-0.0256	0.4091
171	57.78	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.3105	[illegible]	0.5195	[illegible]	0.3966
172	57.92	[illegible]	-0.0072	-0.0001	0.0037	0.0139	-0.5139	1.3104	-0.0217	0.5332	-0.0165	0.4055
173	58.05	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.3029	-0.0034	0.5203	[illegible]	0.3993
174	58.20	[illegible]	-0.0218	[illegible]	-0.0017	[illegible]	0.0780	1.3111	-0.0199	0.5338	-0.0152	0.4064
175	58.35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.2035	1.3021	[illegible]	0.5291	[illegible]	0.4063
176	58.49	[illegible]	0.0150	[illegible]	0.0064	0.0564	[illegible]	1.3244	-0.0277	0.5415	-0.0209	0.4089
177	58.67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.3194	[illegible]	0.5413	[illegible]	0.4101
178	58.81	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.3195	-0.0312	0.5425	-0.0236	0.4111
179	58.97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.3306	[illegible]	0.5456	-0.0222	0.4100

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NUMBER RN1 CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 7.00 0.59 1.7 0.0 0.0P31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CN3	CM3	ACPF3	YCPF3	CNF4	CM4	CM4	XCPF4	YCPF4
1	-5.67	0.03	-0.0252	9.9999	0.0149	9.9999	-1.6951	-0.1058	-0.0220	-0.0931	0.1187	0.5011
2	-5.58	0.02	-0.0234	9.9999	0.0138	9.9999	-1.5281	-0.1745	-0.0217	-0.0920	0.1212	0.5014
3	-5.60	0.03	-0.0216	9.9999	0.0124	9.9999	-1.2404	-0.1480	-0.0188	-0.0741	0.1273	0.5003
4	-3.58	0.02	-0.0205	9.9999	0.0129	9.9999	-1.3439	-0.0793	-0.0121	-0.0603	0.1530	0.5042
5	-1.71	0.01	-0.0242	9.9999	0.0137	9.9999	-1.6951	-0.1185	-0.0050	-0.0125	0.2703	0.6757
6	0.25	0.02	-0.0164	9.9999	0.0150	9.9999	-1.6667	0.0191	0.0033	0.0018	0.1726	0.0942
7	2.18	0.02	-0.0112	9.9999	0.0158	9.9999	-1.3750	0.0702	0.0100	0.0240	0.1427	0.3624
8	4.11	0.03	-0.0088	9.9999	0.0163	9.9999	-2.3971	0.1365	0.0154	0.0578	0.1204	0.4236
9	6.07	0.01	-0.0060	9.9999	0.0155	9.9999	-2.5833	0.2380	0.0225	0.0949	0.1160	0.4549
10	8.07	0.01	-0.0052	9.9999	0.0147	9.9999	-2.8263	0.3389	0.0320	0.1366	0.0976	0.4515
11	9.99	0.02	0.0	9.9999	0.0151	9.9999	0.0151	0.3976	0.0345	0.1769	0.0667	0.4498
12	12.03	0.01	0.0045	9.9999	0.0152	9.9999	3.3778	0.5051	0.0373	0.2241	0.0738	0.4436
13	14.02	0.01	0.0110	9.9999	0.0111	9.9999	11.1000	0.6175	0.0377	0.2666	0.0810	0.4315
14	15.98	0.02	0.0090	9.9999	0.0144	9.9999	1.6000	0.7413	0.0396	0.3108	0.0537	0.4193
15	18.15	0.02	0.0168	9.9999	0.0199	9.9999	1.1250	0.8529	0.0414	0.3539	0.0485	0.4189
16	20.18	0.01	0.0158	9.9999	0.0187	9.9999	0.9304	0.9467	0.0446	0.3906	0.0471	0.4126
17	22.18	0.02	0.0150	9.9999	0.0154	9.9999	0.8555	0.9883	0.0513	0.3948	0.0519	0.4035
18	24.19	0.01	0.0140	9.9999	0.0140	9.9999	1.3708	1.0147	0.0498	0.3998	0.0491	0.3940
19	25.17	0.01	0.0138	9.9999	0.0138	9.9999	1.0842	1.1032	0.0494	0.4378	0.0448	0.3969
20	24.19	0.03	0.0192	9.9999	0.0191	9.9999	0.9955	1.1521	0.0518	0.4601	0.0450	0.3994
21	20.21	0.02	0.0187	9.9999	0.0189	9.9999	0.9840	1.1489	0.0531	0.4569	0.0464	0.3977
22	18.22	0.03	0.0172	9.9999	0.0178	9.9999	1.0349	1.1463	0.0527	0.4545	0.0460	0.3983
23	16.17	0.02	0.0150	9.9999	0.0179	9.9999	1.1933	1.1576	0.0518	0.4616	0.0448	0.3988
24	14.18	0.05	0.0145	9.9999	0.0169	9.9999	1.2519	1.1482	0.0543	0.4568	0.0473	0.3979
25	12.23	0.05	0.0250	9.9999	0.0224	9.9999	0.8760	1.1651	0.0512	0.4642	0.0439	0.3984
26	10.20	0.07	0.0203	9.9999	0.0199	9.9999	0.9863	1.1647	0.0488	0.4644	0.0419	0.3987
27	8.23	0.07	0.0217	9.9999	0.0217	9.9999	1.0006	1.1809	0.0512	0.4698	0.0436	0.3978
28	6.25	0.06	0.0232	9.9999	0.0228	9.9999	0.9955	1.1792	0.0511	0.4684	0.0433	0.3972
29	4.19	0.06	0.0232	9.9999	0.0219	9.9999	0.9940	1.1941	0.0513	0.4700	0.0433	0.3969
30	2.42	0.06	0.0259	9.9999	0.0257	9.9999	1.8591	1.1918	0.0511	0.4727	0.0429	0.3966
31	0.69	0.07	0.0254	9.9999	0.0256	9.9999	1.9011	1.1914	0.0541	0.4705	0.0456	0.3969
32	0.45	0.08	0.0249	9.9999	0.0257	9.9999	1.9691	1.1992	0.0523	0.4752	0.0436	0.3963
33	1.25	0.11	0.0252	9.9999	0.0274	9.9999	0.7626	1.1935	0.0519	0.4703	0.0435	0.3960
34	1.52	0.11	0.0314	9.9999	0.0246	9.9999	0.7827	1.1961	0.0504	0.4718	0.0421	0.3944
35	1.80	0.11	0.0295	9.9999	0.0217	9.9999	0.8543	1.1965	0.0517	0.4713	0.0432	0.3939
36	2.08	0.10	0.0344	9.9999	0.0265	9.9999	0.7726	1.2101	0.0491	0.4753	0.0406	0.3928
37	2.34	0.12	0.0345	9.9999	0.0293	9.9999	0.7335	1.1994	0.0499	0.4691	0.0416	0.3911
38	2.62	0.10	0.0302	9.9999	0.0298	9.9999	0.7307	1.1651	0.0485	0.4527	0.0419	0.3886
39	2.88	0.12	0.0357	9.9999	0.0277	9.9999	0.7809	1.2064	0.0504	0.4697	0.0418	0.3893
40	3.16	0.13	0.0340	9.9999	0.0283	9.9999	0.7441	1.2120	0.0506	0.4711	0.0418	0.3887
41	3.40	0.11	0.0334	9.9999	0.0273	9.9999	0.8156	1.2099	0.0498	0.4698	0.0403	0.3883
42	3.67	0.10	0.0327	9.9999	0.0268	9.9999	0.8020	1.2096	0.0499	0.4691	0.0413	0.3878
43	3.91	0.11	0.0313	9.9999	0.0255	9.9999	0.8007	1.2142	0.0500	0.4708	0.0412	0.3876
44	4.17	0.10	0.0297	9.9999	0.0259	9.9999	0.9999	1.2045	0.0491	0.4667	0.0408	0.3874
45	4.41	0.08	0.0285	9.9999	0.0237	9.9999	0.9876	1.2262	0.0511	0.4741	0.0417	0.3866
46	4.67	0.10	0.0293	9.9999	0.0243	9.9999	0.9382	1.1719	0.0426	0.4528	0.0363	0.3864

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART. SECT. REYNO-E PHI. CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 74 1.7 0.0 -1.0731 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CM3	XCPF3	YCPF3	CNF4	CM4	CM4	XCPF4	YCPF4
47	34.84	0.03	0.0267	0.0000	0.0267	0.9999	0.9268	1.1720	0.0420	0.0561	0.0358	0.3875
48	35.15	0.03	0.0215	0.0000	0.0215	0.9999	1.0000	1.1473	0.0417	0.0621	0.0368	0.3860
49	35.46	0.03	0.0262	0.0000	0.0261	0.9999	0.8897	1.1403	0.0325	0.0362	0.0285	0.3825
50	35.83	0.03	0.0170	0.0000	0.0203	0.9999	1.1941	1.1724	0.0373	0.0511	0.0318	0.3849
51	35.93	0.03	0.0221	0.0000	0.0223	0.9999	1.0773	1.1502	0.0331	0.0414	0.0288	0.3838
52	36.19	0.03	0.0163	0.0000	0.0202	0.9999	1.2193	1.1632	0.0360	0.0466	0.0309	0.3840
53	36.46	0.03	0.0182	0.0000	0.0205	0.9999	1.2656	1.1556	0.0324	0.0414	0.0288	0.3820
54	36.65	0.03	0.0189	0.0000	0.0217	0.9999	1.2840	1.1219	0.0269	0.0306	0.0257	0.3838
55	36.93	0.03	0.0230	0.0000	0.0259	0.9999	1.0361	1.1218	0.0265	0.0299	0.0256	0.3832
56	37.21	0.03	0.0200	0.0000	0.0236	0.9999	1.1359	1.1519	0.0310	0.0412	0.0269	0.3838
57	37.46	0.03	0.0177	0.0000	0.0212	0.9999	1.1977	1.1331	0.0297	0.0360	0.0262	0.3848
58	37.66	0.03	0.0155	0.0000	0.0207	0.9999	1.3355	1.1574	0.0321	0.0441	0.0277	0.3837
59	37.91	0.03	0.0161	0.0000	0.0222	0.9999	1.1623	1.1605	0.0323	0.0450	0.0278	0.3835
60	38.13	0.03	0.0179	0.0000	0.0220	0.9999	1.2500	1.1674	0.0316	0.0480	0.0270	0.3838
61	38.38	0.03	0.0134	0.0000	0.0210	0.9999	1.3636	1.1558	0.0300	0.0451	0.0259	0.3851
62	38.66	0.03	0.0132	0.0000	0.0199	0.9999	1.5070	1.1783	0.0340	0.0514	0.0288	0.3831
63	38.93	0.03	0.0184	0.0000	0.0215	0.9999	1.3818	1.1624	0.0308	0.0459	0.0265	0.3836
64	39.08	0.03	0.0167	0.0000	0.0200	0.9999	1.3605	1.1379	0.0265	0.0387	0.0215	0.3855
65	39.36	0.03	0.0231	0.0000	0.0162	0.9999	0.5806	1.1697	0.0303	0.0477	0.0259	0.3828
66	39.59	0.03	0.0133	0.0000	0.0184	0.9999	1.4135	1.1574	0.0252	0.0452	0.0217	0.3847
67	39.73	-0.03	0.0163	0.0000	0.0153	0.9999	2.6500	1.1786	0.0289	0.0516	0.0245	0.3832
68	39.96	-0.03	0.0131	0.0000	0.0139	0.9999	0.4839	1.1786	0.0291	0.0516	0.0247	0.3832
69	40.13	0.03	0.0165	0.0000	0.0135	0.9999	2.9348	1.1419	0.0267	0.0383	0.0224	0.3845
70	40.37	0.03	-0.0035	0.0000	0.0102	0.9999	-2.9143	1.2143	0.0310	0.0468	0.0255	0.3827
71	40.57	-0.03	0.0041	0.0000	0.0133	0.9999	4.2963	1.2148	0.0266	0.0372	0.0172	0.3886
72	40.76	-0.03	0.0127	0.0000	0.0116	0.9999	50.0000	1.2201	0.0271	0.0392	0.0222	0.3845
73	41.02	0.03	0.0165	0.0000	0.0152	0.9999	2.7000	1.2149	0.0263	0.0362	0.0218	0.3920
74	41.18	0.03	0.0154	0.0000	0.0126	0.9999	7.3333	1.2141	0.0266	0.0406	0.0256	0.3958
75	41.39	-0.03	0.0163	0.0000	0.0140	0.9999	1.6867	1.2944	0.0178	0.0256	0.0143	0.3900
76	41.61	-0.03	-0.0069	0.0000	0.0043	0.9999	-1.6935	1.2311	0.0195	0.0281	0.0159	0.3893
77	41.81	-0.03	0.0136	0.0000	0.0116	0.9999	3.6250	1.2234	0.0195	0.0270	0.0160	0.3897
78	42.01	-0.03	-0.0064	0.0000	0.0093	0.9999	-23.2500	1.2293	0.0196	0.0288	0.0158	0.3895
79	42.26	-0.03	-0.0036	0.0000	0.0088	0.9999	-1.6286	1.2280	0.0273	0.0393	0.0222	0.3838
80	42.46	0.03	0.0116	0.0000	0.0130	0.9999	54.0000	1.2162	0.0204	0.0295	0.0168	0.3878
81	42.66	-0.03	0.0091	0.0000	0.0136	0.9999	2.2295	1.2313	0.0205	0.0283	0.0170	0.3868
82	42.77	-0.03	-0.0029	0.0000	0.0076	0.9999	-2.9231	1.2235	0.0221	0.0316	0.0191	0.3871
83	42.97	-0.03	-0.0042	0.0000	0.0072	0.9999	-1.7561	1.2255	0.0209	0.0298	0.0196	0.3938
84	43.19	0.03	0.0113	0.0000	0.0109	0.9999	10.0000	1.2316	0.0057	0.0084	0.0046	0.3949
85	43.36	-0.03	0.0130	0.0000	0.0126	0.9999	2.2963	1.2159	0.0049	0.0081	0.0040	0.3968
86	43.56	0.03	0.0114	0.0000	0.0114	0.9999	3.6250	1.2298	0.0221	0.0305	0.0180	0.3874
87	43.68	0.03	0.0151	0.0000	0.0151	0.9999	1.4381	1.2312	0.0191	0.0281	0.0155	0.3883
88	43.98	0.03	-0.0053	0.0000	0.0053	0.9999	-23.2500	1.2459	0.0178	0.0274	0.0143	0.3912
89	44.21	0.03	0.0132	0.0000	0.0116	0.9999	3.6250	1.2509	0.0170	0.0266	0.0136	0.3890
90	44.42	-0.03	-0.0027	0.0000	0.0102	0.9999	-3.7778	1.2380	0.0060	0.0471	0.0049	0.3934
91	44.61	-0.03	0.0015	0.0000	0.0094	0.9999	5.2222	1.2663	0.0167	0.0278	0.0132	0.3892
92	44.81	-0.03	0.0033	0.0000	0.0099	0.9999	3.0030	1.2793	0.0092	0.0503	0.0072	0.3933

PAGE 3 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RELOS	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	74	0.60	1.7	0.0	81+0P31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	44.77	-0.05	-0.0019	9.9999	0.0066	9.9999	-4.5263	1.2796	0.0177	0.4975	0.0139	0.3887
94	44.99	0.00	-0.0 19	9.9999	0.0066	9.9999	-4.5263	1.2795	0.0219	0.4983	0.0175	0.3870
95	45.12	-0.02	-0.0077	9.9999	0.0043	9.9999	-3.5584	1.2800	0.0147	0.5018	0.0115	0.3915
96	45.33	-0.04	-0.0077	9.9999	0.0049	9.9999	-3.6384	1.2933	0.0161	0.5056	0.0125	0.3910
97	45.51	-0.04	-0.0125	9.9999	0.0052	9.9999	-2.3830	1.2727	-0.0019	0.5043	-0.0015	0.3963
98	45.69	-0.03	-0.0088	9.9999	0.0047	9.9999	-3.3471	1.2607	-0.0030	0.5014	-0.0024	0.3977
99	45.88	-0.03	-0.0119	9.9999	-0.0001	9.9999	0.0396	1.2594	-0.0032	0.4983	-0.0026	0.3968
100	46.05	-0.01	0.0033	9.9999	0.0057	9.9999	2.6794	1.2618	-0.0107	0.5037	-0.0085	0.3992
101	46.26	-0.04	-0.0042	9.9999	0.0063	9.9999	-1.5759	1.2596	-0.0115	0.5051	-0.0084	0.3920
102	46.39	0.00	0.0013	9.9999	0.0064	9.9999	28.0000	1.2378	-0.0139	0.4946	-0.0113	0.3994
103	46.57	-0.03	-0.0147	9.9999	0.0102	9.9999	2.1772	1.2539	-0.0147	0.4973	-0.0118	0.3998
104	46.75	-0.03	0.0062	9.9999	0.0115	9.9999	1.8508	1.2748	-0.0040	0.5051	-0.0031	0.3962
105	46.91	-0.02	0.0012	9.9999	0.0074	9.9999	3.8967	1.2668	-0.0024	0.5100	-0.0019	0.3970
106	47.10	0.01	0.0007	9.9999	0.0102	9.9999	2.1712	1.2569	-0.0057	0.4985	-0.0053	0.3966
107	47.27	-0.04	-0.0004	9.9999	0.0101	9.9999	-21.2500	1.2560	-0.0041	0.5060	-0.0072	0.3991
108	47.43	-0.02	0.0126	9.9999	0.0166	9.9999	1.2157	1.2832	0.0040	0.5019	0.0062	0.3911
109	47.54	-0.03	0.0032	9.9999	0.0104	9.9999	3.2540	1.2675	-0.0125	0.5066	-0.0099	0.3997
110	47.79	0.00	0.0033	9.9999	0.0092	9.9999	2.7874	1.2759	-0.0116	0.5104	-0.0091	0.4001
111	47.95	-0.01	0.0127	9.9999	0.0155	9.9999	1.2215	1.2235	-0.0186	0.4913	-0.0152	0.4016
112	48.13	0.01	-0.0019	9.9999	0.0096	9.9999	-4.6476	1.2722	-0.0205	0.4915	-0.0168	0.4021
113	48.29	0.01	0.0171	9.9999	0.0132	9.9999	1.4956	1.2107	-0.0196	0.4878	-0.0164	0.4029
114	48.46	-0.02	0.0102	9.9999	0.0192	9.9999	1.1652	1.2156	-0.0200	0.4917	-0.0165	0.4045
115	48.64	0.02	0.0161	9.9999	0.0196	9.9999	1.2789	1.2122	-0.0199	0.4905	-0.0165	0.4046
116	48.83	-0.01	0.0102	9.9999	0.0184	9.9999	1.1481	1.2159	-0.0191	0.4925	-0.0157	0.4051
117	48.99	0.03	0.0214	9.9999	0.0228	9.9999	1.2611	1.2071	-0.0196	0.4903	-0.0164	0.4062
118	49.16	0.02	0.0161	9.9999	0.0152	9.9999	2.5333	1.2241	-0.0205	0.4982	-0.0171	0.4070
119	49.34	0.05	0.0185	9.9999	0.0180	9.9999	1.4400	1.2327	-0.0204	0.5027	-0.0166	0.4078
120	49.51	0.03	0.0214	9.9999	0.0231	9.9999	1.2548	1.2389	-0.0208	0.5056	-0.0168	0.4083
121	49.67	0.06	0.0196	9.9999	0.0212	9.9999	1.0707	1.2432	-0.0215	0.5084	-0.0173	0.4090
122	49.86	0.04	0.0216	9.9999	0.0230	9.9999	1.0849	1.2310	-0.0223	0.5037	-0.0182	0.4092
123	50.04	0.06	0.0167	9.9999	0.0191	9.9999	1.2593	1.2564	-0.0227	0.5147	-0.0181	0.4096
124	50.21	0.07	0.0211	9.9999	0.0267	9.9999	1.1469	1.2503	-0.0234	0.5128	-0.0191	0.4102
125	50.37	0.07	0.0178	9.9999	0.0224	9.9999	1.2600	1.2565	-0.0242	0.5159	-0.0193	0.4106
126	50.56	0.10	0.0218	9.9999	0.0252	9.9999	1.1514	1.2961	-0.0261	0.5323	-0.0201	0.4113
127	50.74	0.07	0.0255	9.9999	0.0275	9.9999	1.0787	1.2431	-0.0259	0.5317	-0.0200	0.4112
128	50.90	0.09	0.0216	9.9999	0.0261	9.9999	1.1927	1.2936	-0.0272	0.5322	-0.0210	0.4114
129	51.09	0.11	0.0235	9.9999	0.0281	9.9999	1.1524	1.3178	-0.0282	0.5422	-0.0219	0.4115
130	51.25	0.10	0.0371	9.9999	0.0357	9.9999	0.6422	1.3180	-0.0281	0.5424	-0.0213	0.4115
131	51.44	0.14	0.0277	9.9999	0.0295	9.9999	1.0052	1.2925	-0.0275	0.5312	-0.0212	0.4110
132	51.58	0.16	0.0248	9.9999	0.0275	9.9999	1.1393	1.3447	-0.0297	0.5539	-0.0221	0.4120
133	51.76	0.16	0.0249	9.9999	0.0314	9.9999	1.0539	1.2666	-0.0272	0.5202	-0.0214	0.4107
134	51.93	0.17	0.0235	9.9999	0.0303	9.9999	1.0240	1.2680	-0.0266	0.5215	-0.0209	0.4113
135	52.16	0.16	0.0330	9.9999	0.0341	9.9999	0.9782	1.2952	-0.0287	0.5317	-0.0194	0.4110
136	52.27	0.11	0.0306	9.9999	0.0318	9.9999	1.0393	1.2691	-0.0209	0.4952	-0.0173	0.4096
137	52.44	0.16	0.0247	9.9999	0.0273	9.9999	1.0456	1.2680	-0.0198	0.4956	-0.0164	0.4101
138	52.62	0.05	0.0249	9.9999	0.0273	9.9999	1.0956	1.2176	-0.0209	0.4989	-0.0172	0.4098

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NUMBER	PHI	CONF	L	DEL1	DEL2	DEL3	DELA	TRANSITION
7	74	0.90	0.0	81*0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
139	52.75	0.06	0.0293	9.9999	0.0383	9.9999	1.0240	1.2166	-0.0207	0.4977	-0.0178	0.4091
140	52.94	0.06	0.0294	9.9999	0.0386	9.9999	1.1325	1.2374	-0.0215	0.5044	-0.0174	0.4094
141	53.10	0.07	0.0158	9.9999	0.0283	9.9999	1.4206	1.2450	-0.0201	0.5065	-0.0162	0.4085
142	53.26	0.06	0.0219	9.9999	0.0259	9.9999	1.1370	1.2433	-0.0226	0.5064	-0.0182	0.4091
143	53.43	0.07	0.0269	9.9999	0.0285	9.9999	1.0636	1.2360	-0.0219	0.5040	-0.0177	0.4087
144	53.59	0.05	0.0181	9.9999	0.0234	9.9999	1.4658	1.2474	-0.0221	0.5041	-0.0178	0.4082
145	53.77	0.07	0.0264	9.9999	0.0275	9.9999	1.1210	1.2398	-0.0213	0.5056	-0.0172	0.4077
146	53.92	0.05	0.0216	9.9999	0.0253	9.9999	1.1847	1.2473	-0.0229	0.5070	-0.0184	0.4065
147	54.09	0.05	0.0241	9.9999	0.0278	9.9999	1.1411	1.2531	-0.0231	0.5112	-0.0185	0.4080
148	54.23	0.06	0.0250	9.9999	0.0283	9.9999	1.1325	1.2525	-0.0234	0.5098	-0.0187	0.4071
149	54.43	0.15	0.0154	9.9999	0.0239	9.9999	1.4935	1.2407	-0.0228	0.5036	-0.0184	0.4058
150	54.58	0.06	0.0234	9.9999	0.0267	9.9999	1.1358	1.2603	-0.0237	0.5128	-0.0188	0.4069
151	54.71	0.06	0.0248	9.9999	0.0284	9.9999	1.1249	1.2561	-0.0228	0.5109	-0.0182	0.4068
152	54.87	0.06	0.0273	9.9999	0.0289	9.9999	1.0441	1.2689	-0.0231	0.5151	-0.0182	0.4059
153	55.02	0.07	0.0221	9.9999	0.0281	9.9999	1.1818	1.2717	-0.0242	0.5162	-0.0191	0.4059
154	55.17	0.05	0.0236	9.9999	0.0254	9.9999	1.0405	1.2746	-0.0238	0.5169	-0.0187	0.4055
155	55.32	0.06	0.0273	9.9999	0.0265	9.9999	1.0441	1.2666	-0.0247	0.5131	-0.0188	0.4057
156	55.48	0.07	0.0235	9.9999	0.0260	9.9999	1.1362	1.2731	-0.0248	0.5155	-0.0194	0.4049
157	55.63	0.08	0.0131	9.9999	0.0252	9.9999	1.3037	1.2706	-0.0246	0.5157	-0.0195	0.4058
158	55.77	0.06	0.0177	9.9999	0.0237	9.9999	1.3340	1.2714	-0.0248	0.5138	-0.0195	0.4041
159	55.93	0.08	0.0232	9.9999	0.0259	9.9999	1.0478	1.2728	-0.0245	0.5137	-0.0192	0.4036
160	56.10	0.06	0.0229	9.9999	0.0251	9.9999	1.0417	1.2725	-0.0259	0.5135	-0.0203	0.4035
161	56.25	0.07	0.0214	9.9999	0.0252	9.9999	1.1724	1.2768	-0.0262	0.5165	-0.0190	0.4045
162	56.41	0.06	0.0252	9.9999	0.0276	9.9999	1.0717	1.2851	-0.0251	0.5163	-0.0195	0.4017
163	56.58	0.05	0.0237	9.9999	0.0268	9.9999	1.0422	1.2863	-0.0255	0.5175	-0.0198	0.4023
164	56.70	0.05	0.0268	9.9999	0.0278	9.9999	1.0529	1.2785	-0.0252	0.5145	-0.0197	0.4024
165	56.87	0.03	0.0126	9.9999	0.0218	9.9999	1.1505	1.2933	-0.0265	0.5211	-0.0205	0.4029
166	57.01	0.06	0.0196	9.9999	0.0212	9.9999	1.0428	1.2854	-0.0268	0.5148	-0.0208	0.4020
167	57.17	0.05	0.0159	9.9999	0.0212	9.9999	1.0428	1.3021	-0.0250	0.5243	-0.0192	0.4026
168	57.32	0.05	0.0238	9.9999	0.0234	9.9999	1.0042	1.3060	-0.0246	0.5229	-0.0190	0.4003
169	57.48	0.06	0.0258	9.9999	0.0264	9.9999	0.9780	1.3031	-0.0277	0.5232	-0.0212	0.4015
170	57.61	0.06	0.0224	9.9999	0.0227	9.9999	1.0134	1.3005	-0.0276	0.5228	-0.0212	0.4020
171	57.78	-0.06	0.0143	9.9999	0.0173	9.9999	1.1008	1.3315	-0.0053	0.5227	-0.0040	0.3925
172	57.96	-0.06	0.0216	9.9999	0.0224	9.9999	0.9826	1.3089	-0.0181	0.5209	-0.0139	0.3979
173	58.05	-0.06	0.0116	9.9999	0.0166	9.9999	1.2932	1.3212	-0.0102	0.5264	-0.0077	0.3956
174	58.21	-0.06	0.0166	9.9999	0.0175	9.9999	1.0542	1.3269	-0.0225	0.5306	-0.0172	0.3993
175	58.43	-0.07	0.0151	9.9999	0.0163	9.9999	1.0110	1.3267	-0.0232	0.5301	-0.0175	0.3995
176	58.65	-0.07	0.0181	9.9999	0.0177	9.9999	0.9774	1.2960	-0.0317	0.5199	-0.0241	0.4017
177	58.87	-0.10	0.0226	9.9999	0.0201	9.9999	0.8824	1.3323	-0.0326	0.5231	-0.0250	0.4017
178	59.07	-0.08	0.0214	9.9999	0.0183	9.9999	0.8956	1.2952	-0.0324	0.5204	-0.0250	0.4018
179	58.87	-0.11	0.0187	9.9999	0.0181	9.9999	0.9577	1.3091	-0.0326	0.5253	-0.0250	0.4013

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	FACT	MACH NO	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	75	1.60	1.7	0.0	-1.0F31	0.0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.07	0.03	-0.9536	1.9316	0.0844	-0.0949	0.0052	0.3286	0.0796	0.2493	-2.0222
2	-5.00	0.02	-0.9311	1.8922	0.1107	-0.2145	-0.0009	0.3271	0.0781	0.2509	-2.0215
3	-5.67	0.02	-0.9142	1.8617	0.0859	-0.2141	0.0054	0.3302	0.0785	0.2516	-2.0037
4	-4.60	0.02	-0.9456	1.9093	0.0810	-0.1414	0.0081	0.3392	0.0693	0.2728	-1.9220
5	-2.05	0.02	-0.2477	0.4951	0.0657	-0.0421	0.0067	0.3675	0.0598	0.2876	-1.6201
6	-0.73	0.01	-0.0123	0.2084	-0.0014	-0.1012	0.0011	0.4515	0.0590	0.2925	-0.6520
7	1.21	0.02	0.2053	-0.3884	0.0382	-0.1075	0.0021	0.3558	0.0594	0.2958	-1.2853
8	3.20	0.02	0.5704	-0.9587	0.0349	-0.1219	0.0029	0.3704	0.0697	0.3007	-1.5765
9	5.19	0.02	0.9754	-1.6171	0.0640	-0.1716	0.0037	0.3849	0.0824	0.3025	-1.8629
10	7.18	0.02	1.3993	-2.3613	0.1068	-0.2005	0.0046	0.3883	0.1001	0.2882	-1.9752
11	9.13	0.02	1.8108	-3.0481	0.1288	-0.2557	0.0054	0.3963	0.1222	0.2741	-2.1090
12	11.18	0.02	2.5351	-3.9963	0.0434	-0.0906	0.0062	0.4140	0.1457	0.2688	-2.1681
13	13.19	0.01	3.1254	-7.0356	-0.0895	0.0568	0.0056	0.4460	0.1751	0.2709	-2.2529
14	15.24	0.01	3.4079	-5.6736	-0.0854	0.0042	0.0079	0.4494	0.1974	0.2430	-2.2778
15	17.37	0.11	4.4969	-11.1647	-0.0435	0.0179	0.0224	0.4605	0.2256	0.2350	-2.2595
16	19.41	0.01	5.0747	-11.3422	-0.0251	0.1123	0.0164	0.4755	0.2546	0.2209	-2.2449
17	21.37	0.01	5.7468	-12.2622	-0.0178	-0.0305	-0.0015	0.4575	0.2834	0.1742	-2.1726
18	23.54	0.02	6.4448	-13.3077	0.1063	-0.2580	0.0082	0.4341	0.2853	0.1488	-2.0509
19	25.60	0.03	7.2143	-13.8643	0.5342	-1.0191	0.0629	0.4176	0.2928	0.1249	-1.8941
20	27.76	0.07	7.9909	-13.7791	0.7502	-1.4966	0.1559	0.4059	0.3067	0.0993	-1.7226
21	28.92	0.05	8.1599	-13.9569	0.8231	-1.1770	0.1436	0.3636	0.3095	0.0541	-1.6756
22	28.51	0.07	8.1032	-13.8943	0.8511	-1.6152	0.1951	0.3973	0.3058	0.0915	-1.6764
23	28.53	0.07	8.1473	-13.8711	0.8348	-1.4674	0.1825	0.3895	0.3062	0.0833	-1.6800
24	28.59	0.06	8.2374	-13.7352	0.8465	-1.2644	0.1635	0.3714	0.3028	0.0686	-1.6674
25	28.91	0.06	8.3014	-13.7146	0.8429	-1.2945	0.1633	0.3847	0.2951	0.0896	-1.6506
26	29.24	0.07	8.3944	-14.1017	0.7776	-1.1921	0.1586	0.3731	0.2938	0.0793	-1.6593
27	29.53	0.06	8.4849	-14.2163	0.6535	-1.1362	0.1459	0.3379	0.2956	0.0421	-1.6301
28	29.88	0.06	8.7416	-14.2704	0.5475	-0.9533	0.1457	0.3521	0.2901	0.0620	-1.6325
29	30.15	0.06	8.8471	-14.4601	0.6569	-1.2057	0.2044	0.3616	0.2962	0.0654	-1.5780
30	30.42	0.05	8.8742	-14.0363	0.5429	-1.0455	0.1783	0.3472	0.2925	0.0547	-1.5806
31	30.70	0.06	9.0311	-14.1161	0.4219	-0.7892	0.1277	0.3466	0.2954	0.0512	-1.5631
32	30.97	0.06	9.1212	-14.1110	0.5451	-0.8240	0.1218	0.3416	0.2983	0.0433	-1.5471
33	31.25	0.05	9.2418	-14.2987	0.5267	-0.8422	0.1351	0.3298	0.3011	0.0287	-1.5157
34	31.52	0.03	9.3637	-14.3413	0.1886	0.0170	-0.0124	0.3479	0.3059	0.0420	-1.5359
35	31.80	0.02	9.4545	-14.3917	0.0503	-0.0472	-0.0326	0.3461	0.3075	0.0386	-1.5191
36	32.08	0.04	9.5977	-14.4497	0.2034	0.0594	0.0008	0.3485	0.3092	0.0393	-1.5013
37	32.35	0.02	9.7129	-14.4934	-0.0017	-0.0090	0.0273	0.3449	0.3111	0.0338	-1.4934
38	32.63	0.02	9.8115	-14.4178	0.0097	0.1971	-0.0486	0.3488	0.3147	0.0341	-1.4684
39	32.89	0.03	9.9420	-14.6392	0.1579	0.0988	-0.0168	0.3258	0.3103	0.0155	-1.4472
40	33.16	0.03	10.0307	-14.5215	0.2390	-0.2570	0.0353	0.3246	0.3171	0.0075	-1.4477
41	33.43	0.04	10.0573	-14.3674	0.3102	-0.0605	-0.0214	0.3441	0.3130	0.0311	-1.4285
42	33.69	-0.00	10.2884	-14.5252	-0.2619	0.7594	-0.0610	0.3034	0.3109	-0.0075	-1.4121
43	33.96	0.01	10.4584	-14.6342	-0.0155	0.4920	-0.0845	0.3139	0.3099	0.0041	-1.3806
44	34.20	0.01	10.6234	-14.6938	0.0943	0.3704	-0.0716	0.3383	0.3199	0.0184	-1.3905
45	34.45	0.00	10.5163	-14.3825	-0.1451	0.6356	-0.0521	0.3254	0.3186	0.0068	-1.3679
46	34.69	0.00	10.6620	-14.5134	0.3555	-0.0382	-0.0382	0.3371	0.3202	0.0169	-1.3638

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	PACK	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	15	1.00	1.7	0.0	91A0831	0.0	0	0	0	0	ON/ON

POINT	ALPHA	BETA	CN	CL-A	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.49	0.00	12.2178	-14.3851	0.5262	-1.5055	0.0201	0.3122	0.3177	0.0145	-1.3436
48	34.78	0.00	12.2542	-14.4515	0.5477	-1.5179	-0.0116	0.3337	0.3165	0.0152	-1.3245
49	35.08	0.00	12.2905	-14.4987	0.5119	-1.5333	-0.0143	0.3100	0.3104	-0.0004	-1.3226
50	34.75	0.00	12.2569	-14.4386	0.4754	-1.4703	0.0841	0.2882	0.3051	-0.0168	-1.3008
51	36.01	0.00	12.3372	-14.4724	0.5763	-1.4966	0.1035	0.2836	0.3027	-0.0192	-1.2750
52	34.25	0.00	12.1627	-14.1776	0.6245	-1.0013	0.1296	0.3019	0.3042	-0.0023	-1.2617
53	36.03	0.00	12.2684	-14.3563	0.6066	-1.0065	0.1098	0.2825	0.3062	-0.0236	-1.2514
54	36.71	0.00	12.2998	-14.2153	0.7504	-0.5170	0.0563	0.3039	0.2965	0.0074	-1.2046
55	36.97	0.00	12.4058	-14.1319	0.6776	-1.3559	0.1436	0.3094	0.2967	0.0097	-1.2398
56	37.24	0.00	12.4177	-14.1426	0.6123	-0.9565	0.1060	0.2679	0.2973	-0.0294	-1.2216
57	37.48	0.00	12.4584	-13.9194	0.5967	-0.8206	0.1060	0.3049	0.2985	0.0064	-1.2037
58	37.71	0.00	12.4722	-14.1253	0.7711	-1.2742	0.1315	0.2843	0.2904	-0.0060	-1.2153
59	37.98	0.00	12.4828	-14.1115	0.6047	-1.0727	0.0962	0.2724	0.2944	-0.0219	-1.2102
60	38.17	0.00	12.4971	-14.1159	0.6469	-0.9227	0.0757	0.2796	0.2924	-0.0127	-1.1924
61	38.44	0.01	12.5439	-13.9289	0.6827	-0.5861	0.0196	0.2726	0.2980	-0.0253	-1.1592
62	38.65	0.05	12.5806	-13.9274	0.6493	-0.7405	0.0574	0.2818	0.2907	-0.0088	-1.1704
63	38.89	0.09	12.6202	-13.7505	0.6867	-0.7669	0.0390	0.2651	0.2960	-0.0311	-1.1563
64	39.12	0.06	12.6591	-13.6967	0.6597	-1.1180	0.0337	0.2636	0.2946	-0.0311	-1.1338
65	39.35	0.03	12.6958	-13.6906	0.3333	-0.7220	0.0506	0.2597	0.2963	-0.0365	-1.1392
66	39.55	0.02	12.7312	-13.6547	0.6943	-0.5036	0.0087	0.2657	0.3034	-0.0346	-1.1207
67	39.78	0.01	12.7696	-13.6431	0.6722	-0.7422	0.0152	0.2596	0.2963	-0.0368	-1.1124
68	40.00	0.02	12.8049	-13.6665	0.2973	-0.6525	-0.0031	0.2649	0.3023	-0.0373	-1.1119
69	40.26	0.03	12.8481	-13.6729	0.3593	-0.7236	0.0469	0.2738	0.2971	-0.0232	-1.1173
70	40.42	0.04	12.8741	-13.6593	0.0016	-0.5051	-0.0040	0.2619	0.3047	-0.0427	-1.0894
71	40.63	0.06	12.9071	-13.6780	0.3464	-0.6017	0.0418	0.2645	0.2898	-0.0252	-1.0985
72	40.83	0.10	12.9399	-13.7262	0.1005	-0.6141	0.0231	0.2236	0.2996	-0.0763	-1.0804
73	41.03	0.08	12.9722	-13.6595	0.5114	-0.9356	0.0242	0.2287	0.2954	-0.0668	-1.0613
74	41.23	0.13	13.0047	-13.7404	0.4795	-1.2967	0.0494	0.2561	0.2985	-0.0427	-1.0835
75	41.45	0.14	13.0415	-13.6929	0.3902	-0.8445	0.0242	0.2055	0.2969	-0.0313	-1.0677
76	41.68	0.16	13.0784	-13.7499	0.2251	-0.3461	0.0424	0.2927	0.2941	-0.0014	-1.0711
77	41.88	0.21	13.1098	-13.5588	0.1637	-0.6588	0.0140	0.2525	0.2943	-0.0467	-1.0522
78	42.07	0.19	13.1428	-13.5155	0.5537	-1.0830	0.0255	0.2544	0.2945	-0.0400	-1.0419
79	42.25	0.21	13.1748	-13.5037	0.1859	-0.5266	0.0184	0.2546	0.2920	-0.0371	-1.0451
80	42.46	0.26	13.2108	-13.5057	0.3120	-0.4712	0.0313	0.2370	0.2967	-0.0797	-1.0476
81	42.66	0.25	13.2479	-13.5245	0.3639	-0.6726	0.0197	0.2322	0.2926	-0.0601	-1.0285
82	42.84	0.26	13.2791	-13.4971	0.4152	-0.8984	0.0968	0.2344	0.2940	-0.0595	-1.0485
83	43.03	0.25	13.3151	-13.7512	0.3610	-0.8115	0.0326	0.2367	0.2911	-0.0543	-1.0286
84	43.22	0.23	13.3466	-13.4752	0.4464	-0.9956	0.0775	0.2013	0.2890	-0.0876	-1.0214
85	43.40	0.32	13.3788	-14.1374	0.2654	-0.2187	0.0326	0.1968	0.2784	-0.0821	-1.0292
86	43.57	0.30	13.4100	-13.5065	0.1354	-0.5994	0.0079	0.1875	0.2830	-0.0925	-1.0187
87	43.75	0.32	13.4433	-13.7577	0.2564	-0.6933	0.0212	0.2024	0.2786	-0.0764	-1.0047
88	43.93	0.32	13.4745	-13.7203	0.3701	-0.8167	0.0590	0.2151	0.2783	-0.0632	-1.0011
89	44.13	0.31	13.5094	-13.8132	0.4525	-0.3062	0.0021	0.2013	0.2880	-0.0791	-0.9976
90	44.31	0.31	13.5443	-13.6535	0.0374	-0.2743	-0.0162	0.1765	0.2817	-0.1050	-0.9928
91	44.49	0.32	13.5782	-13.6949	0.2501	-0.3907	0.0474	0.1912	0.2825	-0.0913	-0.9901
92	44.66	0.31	13.6129	-13.7229	0.2901	-0.3965	0.0477	0.2235	0.2817	-0.0582	-0.9762

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH 6X10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 PS 1.00 1.7 0.0 MINOF31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.87	0.02	14.3010	-13.9675	0.3190	-0.1553	0.0412	0.1747	0.2781	-0.1035	-0.9767
94	45.15	-0.03	14.3492	-13.9728	0.1616	0.0206	0.0475	0.1803	0.2774	-0.0972	-0.9569
95	45.23	-0.01	14.3291	-13.9223	0.0098	0.0456	0.0352	0.1912	0.2790	-0.0878	-0.9646
96	45.42	0.00	14.3557	-13.7334	0.1430	-0.1794	0.0484	0.1954	0.2746	-0.0852	-0.9567
97	45.59	0.02	14.4308	-13.7899	0.3601	-0.4215	0.1243	0.2008	0.2778	-0.0778	-0.9548
98	45.77	0.01	14.4445	-13.7214	0.1262	0.0340	0.0459	0.1897	0.2827	-0.0930	-0.9463
99	45.98	0.02	14.4122	-13.8803	0.2924	-0.1066	0.0679	0.2197	0.2776	-0.0579	-0.9362
100	46.18	0.03	14.4294	-13.9346	0.4630	-0.2396	0.1496	0.2661	0.2816	-0.0735	-0.9320
101	46.32	0.01	14.4515	-13.8253	0.2258	0.1213	0.0734	0.1957	0.2869	-0.0912	-0.9417
102	46.47	-0.06	14.7992	-13.8227	0.0053	-0.0301	0.1187	0.1763	0.2807	-0.1045	-0.9340
103	46.65	0.02	14.7593	-13.8572	0.1315	0.1075	0.1431	0.2314	0.2836	-0.0822	-0.9258
104	46.83	0.04	14.8314	-13.8374	0.4439	-0.2435	0.1381	0.1854	0.2808	-0.0954	-0.9128
105	47.00	0.02	14.8584	-13.8328	0.3820	-0.1945	0.1449	0.1783	0.2759	-0.0997	-0.9041
106	47.18	0.03	14.9019	-13.8128	0.3365	-0.0410	0.1817	0.1814	0.2783	-0.0970	-0.8934
107	47.36	0.05	14.9831	-13.8729	0.5743	0.0667	0.1808	0.1874	0.2784	-0.0910	-0.8915
108	47.52	0.05	14.9573	-13.8631	0.4753	-0.1361	0.1939	0.2250	0.2876	-0.0626	-0.9115
109	47.71	0.01	15.2229	-13.7433	0.2459	-0.0006	0.1701	0.1947	0.3107	-0.1110	-0.9028
110	47.96	0.07	15.1691	-13.9337	0.8405	-0.2674	0.1446	0.2969	0.3415	-0.0446	-0.9202
111	48.13	0.01	15.2052	-14.0007	0.9364	-0.3690	0.1333	0.3131	0.3701	-0.0570	-0.9253
112	48.21	0.05	15.2899	-14.2950	0.8854	-0.3565	0.1208	0.3238	0.3958	-0.0720	-0.9301
113	18.03	-0.07	15.2057	-14.7329	1.2458	-0.4502	0.1268	0.6706	0.3947	0.5759	-0.9346
114	48.36	0.04	15.4539	-14.1586	1.0473	-0.4473	0.1213	0.3118	0.4056	-0.0938	-0.9162
115	48.72	0.07	15.5150	-14.1717	0.9341	-0.3269	0.0963	0.3279	0.4271	-0.0697	-0.9134
116	47.09	-0.11	15.5279	-14.1798	0.8982	-0.2053	0.0832	0.3997	0.4315	-0.0318	-0.9132
117	49.26	0.10	15.5920	-14.2016	1.1338	-0.0217	0.0512	0.3963	0.4424	-0.0977	-0.8976
118	49.25	0.06	15.7359	-13.8963	0.6911	0.4254	0.0060	0.3409	0.4391	-0.0983	-0.8823
119	49.42	0.07	15.8566	-15.1049	0.7693	0.7669	-0.0326	0.3765	0.4668	-0.0923	-0.9563
120	49.57	0.09	15.7980	-15.1573	0.7142	0.9230	-0.0269	0.3767	0.4660	-0.0873	-0.9594
121	49.75	0.06	15.8534	-15.1024	0.5444	0.8762	-0.0386	0.3820	0.4626	-0.0806	-0.9525
122	49.93	0.04	15.9336	-15.1297	0.4768	1.2544	-0.0457	0.3778	0.4646	-0.0868	-0.9497
123	50.12	0.05	15.9298	-15.0662	0.4795	1.2516	-0.0576	0.3347	0.4588	-0.1242	-0.9531
124	50.28	0.03	15.9127	-15.0638	0.4314	1.3527	-0.0517	0.3628	0.4601	-0.0976	-0.9407
125	50.46	0.06	15.9491	-15.1544	0.5758	1.3495	-0.0517	0.3585	0.4587	-0.0980	-0.9416
126	50.64	0.04	15.9603	-15.1304	0.4453	1.3799	-0.0374	0.3633	0.4563	-0.0930	-0.9239
127	50.81	0.02	15.9781	-15.1233	0.2203	1.4749	-0.0555	0.3677	0.4612	-0.0935	-0.9170
128	50.98	0.03	15.9559	-15.0334	0.4622	1.4012	-0.0439	0.3567	0.4563	-0.0997	-0.9002
129	51.15	0.04	15.9335	-15.0890	0.4664	1.5715	-0.0497	0.3393	0.4523	-0.1141	-0.8995
130	51.31	0.02	15.9770	-15.0310	0.6175	1.3344	-0.0306	0.3467	0.4470	-0.1004	-0.8989
131	51.49	0.02	15.9945	-15.0321	0.5537	1.3994	-0.0242	0.3409	0.4486	-0.1078	-0.9011
132	51.66	0.04	16.0148	-15.0963	0.4537	1.3165	-0.0175	0.3295	0.4435	-0.1141	-0.9014
133	51.81	0.04	16.0767	-15.0958	0.3596	1.2537	0.0202	0.3143	0.4354	-0.1212	-0.9130
134	51.99	-0.01	16.0210	-14.9515	-0.0071	1.5362	0.0074	0.3189	0.4322	-0.1134	-0.9123
135	52.14	0.02	16.0499	-14.9985	0.2211	1.4994	0.0355	0.3283	0.4306	-0.1024	-0.9113
136	52.31	0.01	16.0678	-15.0311	0.0445	1.2672	0.0456	0.3277	0.4338	-0.1062	-0.9128
137	52.48	0.01	16.0742	-15.0110	0.1081	1.1152	0.0453	0.3034	0.4363	-0.1330	-0.8929
138	52.64	-0.00	16.0520	-14.9835	0.0545	1.2447	0.0399	0.3259	0.4328	-0.1079	-0.9002

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 75 1.60 1.7 0.0 BIS0P31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	ACP
139	52.66	-0.01	16.4506	-14.6617	0.1015	1.1161	0.0404	0.3067	0.0328	-0.1262	-0.8480
140	52.96	0.02	16.4433	-14.5375	0.2021	1.0194	0.0342	0.3057	0.0279	-0.1223	-0.8901
141	53.12	0.02	16.4775	-14.8029	0.2036	1.0581	0.0402	0.3155	0.0295	-0.1141	-0.8962
142	53.30	0.00	16.5326	-14.7371	0.1373	1.0294	0.0345	0.2952	0.0335	-0.1304	-0.9914
143	53.46	0.00	16.6117	-14.8047	0.0330	1.0590	0.0349	0.2899	0.0305	-0.1457	-0.8935
144	53.62	-0.01	16.5102	-14.6122	0.0860	1.0578	0.0347	0.3017	0.0351	-0.1335	-0.8867
145	53.78	-0.01	16.5403	-14.7387	0.0383	1.0224	0.0353	0.2966	0.0396	-0.1431	-0.8911
146	53.96	0.01	16.6619	-14.7855	0.0467	0.9280	0.0335	0.2923	0.0376	-0.1454	-0.8884
147	54.10	0.03	16.6396	-14.9178	0.0561	0.9561	0.0269	0.3042	0.0393	-0.1352	-0.8968
148	54.28	-0.01	16.5441	-14.6424	-0.0014	0.9041	0.0293	0.3152	0.0427	-0.1276	-0.8942
149	54.40	-0.00	16.6097	-14.8221	0.1142	0.8959	0.0292	0.3068	0.0404	-0.1337	-0.8924
150	54.58	-0.01	16.6056	-14.7260	-0.0240	0.9437	0.0296	0.3035	0.0491	-0.1457	-0.8938
151	54.73	-0.00	16.6618	-14.8793	0.0083	0.9066	0.0294	0.2913	0.0515	-0.1603	-0.8975
152	54.88	-0.01	16.6059	-14.6272	0.0431	0.9503	0.0295	0.2938	0.0458	-0.1521	-0.8955
153	55.06	-0.02	16.7712	-14.9091	-0.0732	1.0536	0.0294	0.3205	0.0449	-0.1295	-0.8938
154	55.20	-0.03	16.5524	-14.7342	-0.0696	0.9029	0.0305	0.2997	0.0484	-0.1488	-0.8971
155	55.35	0.00	16.6758	-14.8258	0.1435	0.8837	0.0237	0.2761	0.0500	-0.1739	-0.8921
156	55.51	-0.02	16.9335	-14.9730	-0.0430	0.9459	0.0301	0.2986	0.0511	-0.1526	-0.8964
157	55.65	-0.02	16.9331	-14.9382	0.0478	0.8817	0.0308	0.2710	0.0519	-0.1809	-0.8918
158	55.81	0.01	17.0410	-15.0002	0.2168	0.7694	0.0180	0.2905	0.0507	-0.1603	-0.9037
159	55.95	-0.01	17.0317	-15.3918	0.1383	0.7058	0.0185	0.3283	0.0553	-0.1311	-0.9019
160	56.12	-0.01	16.9736	-14.8244	0.0078	0.8112	0.0245	0.3173	0.0541	-0.1369	-0.8967
161	56.29	-0.01	17.0331	-15.0196	0.0026	0.8561	0.0245	0.3036	0.0602	-0.1567	-0.8995
162	56.46	-0.01	17.0366	-15.0480	0.1397	0.7790	0.0193	0.2652	0.0579	-0.1927	-0.8852
163	56.60	-0.01	17.0416	-15.0327	0.0998	0.8253	0.0188	0.2682	0.0656	-0.2178	-0.8778
164	56.73	-0.00	17.0423	-14.9087	-0.0865	0.8138	0.0293	0.2396	0.0611	-0.2215	-0.8596
165	56.92	-0.00	17.0348	-15.1258	-0.0278	-0.3070	0.0295	0.2256	0.0346	-0.2060	-0.8704
166	57.08	-0.00	17.0483	-15.0102	-0.2208	-0.3911	0.0294	0.2296	0.0211	-0.1915	-0.8824
167	57.23	-0.01	17.0569	-15.0360	-0.0350	-0.0352	0.0301	0.2426	0.0318	-0.1892	-0.8745
168	57.40	-0.00	17.0418	-15.0452	-0.1490	-0.0211	0.0181	0.2363	0.0408	-0.2065	-0.8734
169	57.54	-0.00	17.0494	-15.0492	-0.1323	-0.3656	0.0172	0.2390	0.0566	-0.2176	-0.8832
170	57.67	-0.01	17.0571	-15.0133	-0.3624	-0.2960	0.0105	0.2502	0.0476	-0.1974	-0.8893
171	57.80	-0.00	17.0527	-15.0608	-0.0535	-0.0508	0.0095	0.2085	0.0482	-0.2397	-0.8878
172	57.98	-0.02	17.0329	-15.0530	0.0975	-0.2700	0.0100	0.2154	0.0508	-0.2354	-0.8865
173	58.08	-0.02	17.0291	-15.0459	-0.1700	-0.2177	0.0101	0.2163	0.0415	-0.2252	-0.8701
174	58.25	-0.01	17.0734	-15.0114	-0.3971	-0.2752	-0.0024	0.2094	0.0548	-0.2450	-0.8883
175	58.39	-0.05	17.0316	-15.3755	-0.1711	0.1549	0.0038	0.2136	0.0453	-0.2323	-0.8770
176	58.55	-0.02	17.0755	-15.0504	0.1330	0.0699	-0.0026	0.2041	0.0446	-0.2405	-0.8722
177	58.68	-0.00	17.1082	-15.0334	-0.2992	0.0312	-0.0026	0.2019	0.0599	-0.2580	-0.8696
178	58.70	-0.03	17.0993	-15.0529	0.0003	0.0545	0.0094	0.1765	0.0652	-0.2488	-0.8708
179	58.71	-0.02	17.0983	-15.0059	0.1683	0.2537	-0.0021	0.1924	0.0646	-0.2722	-0.8720
180	58.71	-0.00	17.0981	-15.0429	-0.3637	0.3141	0.0112	0.1854	0.0707	-0.2453	-0.8700

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST	RAPI	MACH	MACH=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	75	1.00	1.7	0.0	81.0P31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-5.97	0.03	-0.0145	0.0016	0.0121	-0.0952	-1.1528	-0.2020	-0.0172	-0.0919	0.0853	0.4549
2	-5.98	0.02	0.0042	0.0018	0.0108	0.4286	0.4762	-0.1904	-0.0164	-0.0865	0.0874	0.4542
3	-5.97	0.02	-0.0027	0.0011	0.0150	-0.4074	-5.5556	-0.1934	-0.0164	-0.0870	0.0853	0.4508
4	-4.96	0.02	0.0008	0.0011	0.0134	1.3750	17.3750	-0.1271	-0.0120	-0.0541	0.0946	0.4259
5	-2.95	0.02	-0.0031	0.0012	0.0132	-0.3226	-4.2581	-0.0515	-0.0064	-0.0177	0.1245	0.3444
6	-0.73	0.01	-0.0058	0.0010	0.0102	-0.1471	-1.5000	-0.0075	-0.0005	0.0026	0.0967	-0.3467
7	1.21	0.02	-0.0011	0.0021	0.0120	-1.9091	-10.5091	0.0355	0.0066	0.0234	0.1884	0.4610
8	3.24	0.02	-0.0067	0.0011	0.0091	-0.1642	-1.3582	0.0969	0.0114	0.0481	0.1257	0.5292
9	5.19	0.02	-0.0034	0.0006	0.0103	-0.2353	-3.0294	0.1711	0.0198	0.0876	0.0984	0.5120
10	7.16	0.02	-0.0013	0.0002	0.0106	-0.1538	-0.1538	0.2601	0.0223	0.1296	0.0959	0.4981
11	9.13	0.02	-0.0040	0.0003	0.0101	-0.0750	-2.5250	0.3465	0.0237	0.1721	0.0685	0.4965
12	11.16	0.02	-0.0067	0.0006	0.0095	-0.1277	-2.0213	0.4511	0.0236	0.2207	0.0520	0.4891
13	13.12	0.01	-0.0073	0.0005	0.0090	-0.1096	-1.2329	0.5489	0.0229	0.2562	0.0418	0.4631
14	15.24	0.01	-0.0011	0.0011	0.0134	-1.0000	-12.1818	0.6621	0.0215	0.2980	0.0325	0.4501
15	17.37	0.01	-0.0052	0.0002	0.0158	-0.0444	-3.2889	0.7541	0.0197	0.3315	0.0262	0.4395
16	19.41	0.01	-0.0104	-0.0014	0.0120	0.0833	-0.7143	0.8365	0.0183	0.3606	0.0219	0.4311
17	21.47	0.01	-0.0092	0.0001	0.0131	-0.0109	-0.3370	0.9278	0.0167	0.3931	0.0180	0.4237
18	23.54	0.02	0.0012	-0.0032	0.0114	-2.6667	9.5000	0.9967	0.0155	0.4177	0.0156	0.4190
19	25.52	0.03	0.0076	-0.0069	0.0092	-0.0713	0.6312	1.0561	0.0137	0.4327	0.0225	0.4097
20	27.75	0.01	0.1674	-0.0004	0.1057	-0.0043	0.5902	1.0842	0.0240	0.4340	0.0222	0.4003
21	29.52	0.00	0.1509	0.0318	0.0874	0.0115	0.5568	1.0951	0.0249	0.4367	0.0227	0.3988
22	29.51	0.01	0.2055	0.0018	0.1152	0.0088	0.5607	1.0878	0.0243	0.4269	0.0225	0.3942
23	29.53	0.01	0.1936	0.0014	0.1095	0.0072	0.5599	1.0797	0.0241	0.4253	0.0229	0.3939
24	29.56	0.00	0.1971	0.0022	0.1091	0.0112	0.5536	1.0911	0.0253	0.4285	0.0231	0.3927
25	29.51	0.00	0.1977	0.0024	0.1069	0.0107	0.5691	1.1031	0.0251	0.4336	0.0227	0.3931
26	29.29	0.01	0.1950	0.0029	0.0933	0.0176	0.5653	1.1310	0.0251	0.4459	0.0221	0.3943
27	29.53	0.00	0.1967	0.0032	0.0959	0.0179	0.5459	1.1371	0.0246	0.4475	0.0216	0.3935
28	29.54	0.00	0.1976	0.0040	0.0977	0.0271	0.5937	1.1430	0.0249	0.4483	0.0217	0.3922
29	30.15	0.00	0.2025	0.0005	0.1105	0.0336	0.5956	1.1119	0.0228	0.4325	0.0205	0.3890
30	30.42	0.00	0.1980	0.0007	0.1065	0.0341	0.5311	1.1252	0.0219	0.4346	0.0195	0.3898
31	30.74	0.00	0.1974	0.0004	0.0917	0.0459	0.5367	1.1446	0.0237	0.4460	0.0207	0.3897
32	30.97	0.00	0.1990	0.0005	0.0963	0.0942	0.5668	1.1575	0.0247	0.4514	0.0213	0.3900
33	31.25	0.00	0.1971	0.0003	0.0937	0.0634	0.5692	1.1606	0.0239	0.4511	0.0206	0.3887
34	31.57	0.00	0.2052	0.0012	0.0149	0.5100	0.5936	1.1921	0.0261	0.4653	0.0219	0.3903
35	31.84	0.00	0.1976	0.0012	0.0291	0.2615	0.6067	1.1934	0.0255	0.4660	0.0213	0.3904
36	32.08	0.00	0.2073	0.0014	0.0175	2.0274	1.0274	1.1995	0.0253	0.4682	0.0211	0.3903
37	32.35	0.00	0.2047	0.0012	0.0095	2.7447	2.0213	1.2065	0.0249	0.4712	0.0206	0.3905
38	32.63	0.00	-0.0404	0.0014	-0.0206	-0.3543	0.5012	1.2030	0.0256	0.4667	0.0214	0.3896
39	32.82	0.00	-0.0388	0.0012	-0.0198	-0.3324	0.2886	1.2076	0.0253	0.4705	0.0209	0.3896
40	33.16	0.00	0.0010	0.0013	0.0141	11.3000	1.1000	1.2160	0.0258	0.4710	0.0212	0.3873
41	33.43	0.00	0.0384	0.0009	0.0278	0.2701	1.7845	1.2088	0.0252	0.4676	0.0206	0.3868
42	33.69	-0.00	-0.0209	0.0007	-0.0061	-0.0077	0.1005	1.2208	0.0256	0.4712	0.0209	0.3859
43	33.94	0.01	-0.0048	0.0010	-0.0045	-0.1016	0.4967	1.2239	0.0252	0.4726	0.0206	0.3861
44	34.20	0.01	-0.0055	0.0013	-0.0042	-0.1859	0.4386	1.2272	0.0249	0.4736	0.0202	0.3861
45	34.42	0.00	-0.0016	0.0017	-0.0219	-0.1734	0.3549	1.2267	0.0255	0.4732	0.0207	0.3857
46	34.69	0.00	-0.0205	0.0021	-0.0031	-0.3951	0.1512	1.2343	0.0242	0.4755	0.0196	0.3852

PAGE 2 OF 3
SHEET 2 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

ISI	PART	MACH	RA10=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	/5	1.60	1.7	0.0	31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	34.49	0.00	0.0414	0.0273	0.0275	0.2352	0.8900	1.2366	0.0287	0.4769	0.0149	0.3839
48	35.48	0.00	0.0141	0.0087	0.0153	0.3506	0.7853	1.2289	0.0242	0.4713	0.0197	0.3835
49	35.50	0.00	0.0087	0.0083	0.0108	0.0341	0.8206	1.2401	0.0230	0.4770	0.0186	0.3846
50	36.75	0.00	0.1736	0.0379	0.0739	0.0640	0.5960	1.2315	0.0237	0.4732	0.0193	0.3842
51	36.01	0.00	0.1343	0.0598	0.0811	0.0697	0.5581	1.2262	0.0247	0.4706	0.0201	0.3839
52	36.48	0.00	0.1718	0.0109	0.0902	0.0637	0.5257	1.2276	0.0249	0.4720	0.0202	0.3848
53	36.49	0.00	0.1342	0.0071	0.0755	0.0530	0.5624	1.2216	0.0251	0.4676	0.0205	0.3828
54	36.71	0.00	0.1376	0.0093	0.0712	0.0680	0.5291	1.2345	0.0222	0.4722	0.0180	0.3825
55	36.97	0.00	0.2111	0.0100	0.1041	0.0513	0.5166	1.2280	0.0249	0.4708	0.0202	0.3834
56	37.24	0.00	0.1775	0.0117	0.0915	0.0421	0.5155	1.2370	0.0249	0.4747	0.0201	0.3837
57	37.48	0.00	0.0538	0.0088	0.0535	0.0474	0.5754	1.2331	0.0225	0.4749	0.0185	0.3850
58	37.71	0.00	0.2257	0.0157	0.1088	0.0457	0.4813	1.2395	0.0249	0.4756	0.0200	0.3837
59	37.98	0.00	0.1306	0.0085	0.0706	0.0471	0.5671	1.2488	0.0261	0.4796	0.0161	0.3840
60	38.17	0.00	0.1729	0.1079	0.0675	0.0458	0.5061	1.2540	0.0198	0.4817	0.0158	0.3841
61	38.49	0.01	0.1117	0.0731	0.0638	0.0263	0.5395	1.2514	0.0208	0.4828	0.0167	0.3858
62	38.65	0.00	0.1510	0.0057	0.0829	0.0387	0.5108	1.2463	0.0213	0.4792	0.0171	0.3845
63	38.99	0.00	0.1229	0.0025	0.0678	0.0204	0.5506	1.2479	0.0207	0.4807	0.0166	0.3852
64	39.12	0.00	0.1605	-0.0017	0.0590	-0.0159	0.5932	1.2363	0.0243	0.4741	0.0197	0.3835
65	39.39	0.00	0.1525	0.0049	0.0603	0.0278	0.5063	1.2547	0.0227	0.4816	0.0181	0.3839
66	39.65	0.00	0.1725	-0.0305	0.0451	-0.0089	0.6190	1.2492	0.0214	0.4787	0.0172	0.3832
67	39.78	0.01	0.1642	-0.0331	0.0417	-0.0206	0.5997	1.2518	0.0210	0.4792	0.0168	0.3828
68	40.06	0.02	0.1756	-0.0330	0.0420	-0.0350	0.6063	1.2554	0.0183	0.4823	0.0146	0.3842
69	40.25	0.03	0.1961	0.0	0.0736	0.0	0.5196	1.2579	0.0200	0.4821	0.0159	0.3833
70	40.42	0.00	0.1713	-0.0356	0.0537	-0.0593	0.5884	1.2525	0.0213	0.4800	0.0170	0.3837
71	41.63	0.02	0.1721	-0.0332	0.0437	-0.0446	1.6056	1.2549	0.0223	0.4803	0.0178	0.3829
72	41.83	0.00	0.1663	-0.0317	0.0764	-0.0063	0.5181	1.2534	0.0236	0.4782	0.0189	0.3815
73	41.93	0.03	0.2225	-0.0305	0.0911	-0.1115	0.7033	1.2468	0.0240	0.4785	0.0193	0.3806
74	41.23	0.05	0.1277	-0.0022	0.0713	-0.0173	0.5589	1.2634	0.0218	0.4816	0.0173	0.3812
75	41.45	0.03	0.2720	-0.0001	0.0965	-0.0865	0.6312	1.2603	0.0223	0.4799	0.0177	0.3808
76	41.64	0.02	0.1693	-0.0030	0.0813	-0.0278	0.5661	1.2569	0.0250	0.4782	0.0199	0.3805
77	41.85	0.01	0.1322	-0.0202	0.0657	-0.0152	0.5201	1.2556	0.0261	0.4772	0.0207	0.3800
78	42.07	0.04	0.1411	-0.0057	0.0596	-0.0565	0.5847	1.2566	0.0264	0.4760	0.0209	0.3798
79	42.25	0.01	0.1315	-0.0031	0.0715	-0.0236	0.5646	1.2504	0.0273	0.4737	0.0216	0.3788
80	42.49	0.02	0.1491	-0.0000	0.0592	-0.0055	0.5256	1.2644	0.0250	0.4803	0.0204	0.3799
81	42.65	0.02	0.1806	-0.0003	0.0521	-0.0426	0.5777	1.2591	0.0266	0.4771	0.0211	0.3789
82	42.84	0.02	0.1534	0.0012	0.0796	0.0076	0.5199	1.2595	0.0260	0.4772	0.0222	0.3789
83	43.03	0.02	0.1605	-0.0029	0.0612	-0.0461	0.5748	1.2641	0.0246	0.4786	0.0194	0.3786
84	43.26	0.03	0.1152	-0.0020	0.0683	-0.0174	0.5939	1.2631	0.0257	0.4780	0.0203	0.3784
85	43.49	0.02	0.1412	-0.0017	0.0518	-0.0188	0.5048	1.2617	0.0255	0.4773	0.0202	0.3783
86	43.67	0.00	0.0935	-0.0076	0.0533	-0.0434	0.6185	1.2601	0.0262	0.4754	0.0206	0.3773
87	43.75	0.02	0.0944	-0.0030	0.0519	-0.0534	0.5743	1.2679	0.0260	0.4792	0.0205	0.3779
88	43.93	0.02	0.1421	-0.0004	0.0564	-0.0391	0.4203	1.2572	0.0279	0.4747	0.0222	0.3776
89	44.13	-0.01	0.0534	-0.0067	0.0355	-0.0743	0.5978	1.2604	0.0273	0.4750	0.0216	0.3768
90	44.31	0.01	-0.0274	0.0014	-0.0095	-0.0676	0.3416	1.2346	0.0276	0.4677	0.0223	0.3782
91	44.49	0.02	0.0335	-0.0054	0.0261	-0.1497	0.7107	1.2590	0.0264	0.4756	0.0209	0.3776
92	44.66	0.01	0.0638	-0.0098	0.0448	-0.1512	0.7039	1.2523	0.0267	0.4721	0.0213	0.3770

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	MACH	REYN=6	PHI	CONF	I	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	75	1.00	1.7	0.0	01.0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	44.87	0.02	0.0959	[illegible]	0.0263	0.0943	0.5779	1.2262	0.0305	0.0599	0.0264	0.3757
94	45.05	-0.00	0.0013	-0.0024	0.0092	-1.9231	7.0769	1.2379	0.0284	0.0660	0.0229	0.3764
95	45.23	-0.01	0.0241	-0.0016	0.0193	-0.0561	0.8038	1.2470	0.0273	0.0703	0.0219	0.3771
96	45.42	0.00	0.0347	0.0045	0.0234	0.1301	0.6763	1.2111	0.0306	0.0556	0.0252	0.3762
97	45.59	0.02	0.1653	0.0079	0.0790	0.0500	0.5324	1.2174	0.0323	0.0575	0.0265	0.3757
98	45.77	0.01	0.0745	0.0131	0.0384	0.1765	0.5245	1.2113	0.0295	0.0570	0.0243	0.3773
99	45.98	0.02	0.0993	0.0165	0.0517	0.1661	0.4421	1.1969	0.0306	0.0501	0.0256	0.3767
100	46.18	0.03	0.1227	0.0171	0.0568	0.1397	0.4796	1.1845	0.0318	0.0450	0.0268	0.3757
101	46.32	0.01	0.0961	0.0165	0.0272	0.2625	0.4236	1.1809	0.0287	0.0456	0.0243	0.3775
102	46.47	-0.00	0.1014	0.0189	0.0437	0.1819	0.4334	1.1837	0.0290	0.0463	0.0245	0.3778
103	46.65	0.01	0.1201	0.0209	0.0530	0.1655	0.4256	1.1691	0.0293	0.0411	0.0250	0.3773
104	46.83	0.04	0.1419	0.0185	0.0539	0.1524	0.4432	1.1689	0.0304	0.0369	0.0260	0.3755
105	47.00	0.02	0.1116	0.0171	0.0490	0.1543	0.4413	1.1765	0.0292	0.0411	0.0248	0.3749
106	47.18	0.03	0.1172	0.0230	0.0495	0.2017	0.4222	1.1516	0.0296	0.0418	0.0257	0.3750
107	47.35	0.05	0.0932	0.0210	0.0410	0.2162	0.4131	1.1395	0.0285	0.0257	0.0250	0.3735
108	47.52	0.05	0.1319	0.0154	0.0568	0.1208	0.4243	1.1575	0.0293	0.0340	0.0253	0.3749
109	47.71	0.01	0.1102	0.0187	0.0515	0.1680	0.4431	1.1585	0.0284	0.0340	0.0245	0.3746
110	47.86	0.07	0.1148	0.0150	0.0506	0.1288	0.4724	1.1688	0.0251	0.0394	0.0214	0.3759
111	48.03	0.07	0.1051	0.0154	0.0457	0.1021	0.5007	1.1579	0.0223	0.0396	0.0187	0.3795
112	48.21	0.05	0.1060	0.0138	0.0516	0.0816	0.4994	1.2174	0.0189	0.0612	0.0156	0.3789
113	48.03	-0.07	0.1051	0.0149	0.0485	0.0867	0.5106	1.2210	0.0188	0.0631	0.0154	0.3793
114	48.56	0.09	0.1399	0.0129	0.0715	0.0924	0.5122	1.2043	0.0191	0.0544	0.0159	0.3774
115	48.72	0.07	0.1914	0.0137	0.0734	0.0974	0.5211	1.2149	0.0170	0.0607	0.0140	0.3792
116	47.09	-0.11	0.1180	0.0109	0.0645	0.0961	0.5501	1.2231	0.0167	0.0629	0.0137	0.3785
117	49.06	0.10	0.0732	0.0089	0.0483	0.0949	0.5329	1.2267	0.0172	0.0530	0.0140	0.3775
118	49.25	0.00	0.0934	0.0081	0.0605	0.2552	0.8577	1.2291	0.0161	0.0459	0.0131	0.3790
119	49.42	0.07	0.0247	-0.0001	0.0227	-0.0048	1.0986	1.2464	-0.0001	0.0407	-0.0001	0.3857
120	49.57	0.06	-0.0015	0.0009	0.0111	-0.5333	-7.4000	1.2492	-0.0044	0.0453	-0.0035	0.3885
121	49.75	0.06	0.0211	-0.0005	0.0133	-0.4545	12.0909	1.2316	-0.0017	0.0473	-0.0014	0.3858
122	49.93	0.08	-0.0101	-0.0001	0.0108	0.0099	-0.6535	1.2485	-0.0042	0.0428	-0.0034	0.3867
123	50.12	0.08	-0.0251	0.0004	0.0019	-0.0356	-0.0780	1.2498	-0.0065	0.0460	-0.0052	0.3869
124	50.28	0.05	-0.0147	0.0003	0.0154	-0.0224	-0.4014	1.2456	-0.0076	0.0438	-0.0061	0.3884
125	50.46	0.08	-0.0181	0.0014	0.0044	-0.0570	-0.2733	1.2502	-0.0085	0.0482	-0.0066	0.3905
126	50.64	0.08	-0.0142	0.0015	0.0054	-0.1056	-0.3803	1.2453	-0.0123	0.0483	-0.0099	0.3921
127	50.81	0.06	-0.0177	0.0019	0.0023	-0.0894	-0.1397	1.2470	-0.0120	0.0475	-0.0101	0.3910
128	50.98	0.05	-0.0134	0.0031	-0.0000	-0.0931	0.1321	1.2401	-0.0145	0.0462	-0.0117	0.3920
129	51.15	0.04	-0.0227	0.0030	0.0215	-0.1666	-0.0725	1.2475	-0.0123	0.0496	-0.0099	0.3925
130	51.31	0.05	-0.0123	0.0029	0.0077	-0.0430	-1.4520	1.2442	-0.0197	0.0479	-0.0159	0.3962
131	51.49	0.05	-0.0179	0.0025	0.0067	-0.3291	-0.8491	1.2380	-0.0207	0.0491	-0.0166	0.3951
132	51.64	0.04	0.0031	0.0035	0.0125	0.7491	2.4706	1.2382	-0.0246	0.0524	-0.0198	0.3977
133	51.81	0.03	-0.0153	-0.0044	0.0102	0.2876	-0.4052	1.2011	-0.0265	0.0487	-0.0220	0.3985
134	51.99	-0.01	-0.0042	0.0030	0.0049	0.0737	-0.9756	1.2177	-0.0267	0.0467	-0.0219	0.3997
135	52.14	0.02	-0.0344	-0.0174	-0.0125	0.2157	0.0758	1.1865	-0.0262	0.0491	-0.0220	0.3995
136	52.31	0.01	-0.0209	-0.0061	0.0029	0.0068	-0.0962	1.1869	-0.0256	0.0437	-0.0216	0.3997
137	52.48	0.01	-0.0252	0.0067	0.0	-0.0276	0.0	1.1773	-0.0245	0.0400	-0.0208	0.3992
138	52.64	-0.00	-0.0208	0.0034	0.0011	-0.1827	-0.0529	1.1801	-0.0247	0.0430	-0.0209	0.4008

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10=6	PHI	CONF	L	DEL1	DEL2	DEL3	DELA	TRANSITION
7	75	1.60	1.7	0.0	81=0.31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	ΔCPF1	YCPF1	CNF2	CM2	CH2	ΔCPF2	YCPF2
139	52.82	-0.01	-0.0322	0.0041	-0.0046	-0.0466	0.1059	1.1681	-0.0230	0.4675	-0.0197	0.4002
140	52.96	0.02	-0.0293	0.0052	-0.0071	-0.1751	0.1062	1.1653	-0.0230	0.4681	-0.0196	0.3999
141	53.12	0.02	-0.0250	0.0046	-0.0015	-0.1635	0.0579	1.1726	-0.0229	0.4705	-0.0198	0.4013
142	53.30	0.00	-0.0252	0.0057	-0.0024	-0.2164	0.0996	1.1710	-0.0226	0.4706	-0.0192	0.4018
143	53.46	0.00	-0.0216	0.0072	-0.0034	-0.2618	0.1342	1.1711	-0.0227	0.4697	-0.0196	0.4018
144	53.62	-0.01	-0.0274	0.0056	-0.0026	-0.1905	0.0957	1.1633	-0.0235	0.4683	-0.0202	0.4025
145	53.78	-0.01	-0.0262	0.0070	-0.0042	-0.2431	0.1495	1.1723	-0.0223	0.4723	-0.0191	0.4029
146	53.96	0.00	-0.0250	0.0049	-0.0030	-0.1756	0.1075	1.1646	-0.0237	0.4731	-0.0203	0.4045
147	54.10	0.02	-0.0246	0.0069	-0.0048	-0.2335	0.1286	1.1726	-0.0237	0.4749	-0.0203	0.4041
148	54.26	-0.01	-0.0250	0.0065	-0.0026	-0.2651	0.1124	1.1827	-0.0239	0.4783	-0.0202	0.4044
149	54.40	-0.01	-0.0274	0.0051	-0.0032	-0.1868	0.1172	1.1746	-0.0242	0.4766	-0.0206	0.4041
150	54.56	-0.01	-0.0285	0.0062	-0.0074	-0.1065	0.2016	1.1730	-0.0240	0.4735	-0.0211	0.4036
151	54.73	-0.00	-0.0256	0.0063	-0.0033	-0.2471	0.1296	1.1892	-0.0259	0.4815	-0.0217	0.4049
152	54.88	-0.01	-0.0273	0.0046	-0.0037	-0.1691	0.1213	1.1848	-0.0256	0.4808	-0.0217	0.4058
153	55.06	-0.02	-0.0326	0.0055	-0.0071	-0.1703	0.2148	1.1937	-0.0264	0.4864	-0.0221	0.4058
154	55.20	-0.03	-0.0265	0.0039	-0.0049	-0.1477	0.1515	1.1936	-0.0265	0.4854	-0.0222	0.4064
155	55.35	0.00	-0.0359	0.0065	-0.0065	-0.1275	0.2493	1.1904	-0.0272	0.4839	-0.0226	0.4063
156	55.51	-0.02	-0.0275	0.0051	-0.0019	-0.2440	0.0909	1.2047	-0.0279	0.4897	-0.0231	0.4065
157	55.65	-0.02	-0.0278	0.0029	-0.0046	-0.1067	0.1300	1.1913	-0.0277	0.4851	-0.0232	0.4072
158	55.81	0.01	-0.0226	0.0037	-0.0022	-0.1637	0.0973	1.2040	-0.0283	0.4919	-0.0235	0.4086
159	55.95	-0.01	-0.0256	0.0030	-0.0056	-0.1212	0.1686	1.2003	-0.0284	0.4894	-0.0236	0.4077
160	56.12	-0.01	-0.0250	0.0047	-0.0043	-0.1615	0.1660	1.2079	-0.0299	0.4946	-0.0247	0.4095
161	56.29	-0.01	-0.0207	0.0060	-0.0017	-0.1932	0.0821	1.2062	-0.0289	0.4937	-0.0239	0.4093
162	56.46	-0.01	-0.0224	0.0046	-0.0025	-0.2105	0.1096	1.2204	-0.0302	0.5002	-0.0247	0.4099
163	56.60	-0.01	-0.0208	0.0037	-0.0009	-0.1774	0.0833	1.2201	-0.0303	0.4999	-0.0248	0.4097
164	56.73	-0.04	0.0020	0.0039	0.0117	0.4475	1.4625	1.2289	-0.0295	0.5012	-0.0199	0.4079
165	56.92	-0.04	-0.0054	0.0041	0.0045	-0.7593	-0.9376	1.2327	-0.0252	0.5043	-0.0204	0.4091
166	57.08	-0.06	-0.0010	0.0051	0.0084	-5.1000	-6.8000	1.2422	-0.0262	0.5072	-0.0202	0.4083
167	57.23	-0.07	0.0023	0.0038	0.0063	1.6522	3.9134	1.2394	-0.0258	0.5072	-0.0206	0.4092
168	57.40	-0.05	0.0045	0.0029	0.0119	0.4265	1.7530	1.2560	-0.0302	0.5176	-0.0240	0.4121
169	57.58	-0.05	0.0044	-0.0006	0.0105	-1.0000	22.0000	1.2481	-0.0335	0.5169	-0.0271	0.4141
170	57.77	-0.07	-0.0073	0.0030	0.0052	-0.1370	-0.4364	1.2375	-0.0330	0.5107	-0.0266	0.4127
171	57.88	-0.05	-0.0156	0.0004	0.0062	-0.0256	-0.0126	1.2308	-0.0326	0.5080	-0.0265	0.4128
172	57.96	-0.02	-0.0174	-0.0007	0.0014	0.0364	-0.0745	1.2334	-0.0317	0.5106	-0.0257	0.4140
173	58.08	-0.05	-0.0142	-0.0002	0.0029	0.0152	-0.2197	1.2192	-0.0306	0.5027	-0.0249	0.4123
174	58.25	-0.07	-0.0200	-0.0020	-0.0011	0.1000	0.0050	1.2445	-0.0343	0.5147	-0.0275	0.4135
175	58.34	-0.05	-0.0192	-0.0055	-0.0028	0.1651	0.0930	1.2342	-0.0327	0.5106	-0.0265	0.4137
176	58.55	-0.06	-0.0225	-0.0043	0.0011	0.1911	-0.0489	1.2340	-0.0316	0.5100	-0.0257	0.4133
177	58.66	-0.06	-0.0229	-0.0065	-0.0017	0.2218	0.0560	1.2395	-0.0329	0.5146	-0.0269	0.4151
178	58.76	-0.05	-0.0227	-0.0071	0.0005	0.2128	-0.0264	1.2445	-0.0357	0.5145	-0.0286	0.4137
179	58.71	-0.02	-0.0334	-0.0052	-0.0037	0.2763	0.1111	1.2433	-0.0367	0.5166	-0.0295	0.4153
180	58.71	-0.06	-0.0225	-0.0031	0.0002	0.1372	-0.0088	1.2367	-0.0366	0.5117	-0.0296	0.4138

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART SKID RUNNER PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 75 1.70 1.7 0.0 MINOF31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CAF3	CN3	CM3	ACPF3	YCPF3	CAF4	CN4	CM4	ACPF4	YCPF4
1	-5.07	0.01	-0.0014	0.9999	0.0100	0.9999	-5.5536	-0.2003	-0.0177	-0.0997	0.3885	0.4977
2	-5.05	0.02	0.0013	0.9999	0.0111	0.9999	7.4000	-0.2002	-0.0178	-0.0992	0.0891	0.4955
3	-5.07	0.02	-0.0002	0.9999	0.0112	0.9999	-22.4000	-0.1919	-0.0169	-0.0955	0.0883	0.4976
4	-4.60	0.02	-0.0018	0.9999	0.0067	0.9999	-5.3448	-0.1249	-0.0175	-0.0599	0.1003	0.4799
5	-2.05	0.02	-0.0005	0.9999	0.0107	0.9999	-1.3333	-0.0507	-0.0062	-0.0262	0.1225	0.5158
6	-0.73	0.01	-0.0004	0.9999	0.0103	0.9999	-2.2391	-0.0014	-0.0002	-0.0047	0.1429	3.3571
7	1.21	0.02	0.0004	0.9999	0.0105	0.9999	3.5366	0.0065	0.0004	0.0150	0.1479	0.3233
8	3.20	0.02	0.0020	0.9999	0.0120	0.9999	4.5714	0.1065	0.0117	0.0425	0.1101	0.3989
9	5.19	0.02	0.0103	0.9999	0.0139	0.9999	1.3495	0.1889	0.0171	0.0855	0.0927	0.4623
10	7.16	0.02	0.0091	0.9999	0.0114	0.9999	1.2527	0.2705	0.0223	0.1229	0.0426	0.4542
11	9.13	0.02	0.0153	0.9999	0.0119	0.9999	0.7778	0.3669	0.0253	0.1548	0.0645	0.4469
12	11.10	0.02	0.0147	0.9999	0.0094	0.9999	0.6054	0.4742	0.0259	0.2048	0.0565	0.4404
13	13.10	0.01	0.0172	0.9999	0.0083	0.9999	0.4763	0.5633	0.0227	0.2534	0.0390	0.4345
14	15.09	0.01	0.0207	0.9999	0.0114	0.9999	0.4953	0.6459	0.0217	0.2976	0.0312	0.4276
15	17.07	0.01	0.0234	0.9999	0.0082	0.9999	0.3565	0.7450	0.0204	0.3381	0.0252	0.4253
16	19.01	0.01	0.0189	0.9999	0.0069	0.9999	0.3520	0.8413	0.0196	0.3696	0.0221	0.4193
17	21.07	0.01	0.0207	0.9999	0.0106	0.9999	0.4214	0.9426	0.0196	0.3899	0.0198	0.4136
18	23.58	0.02	0.0142	0.9999	0.0066	0.9999	0.4074	0.9940	0.0177	0.4087	0.0178	0.4112
19	25.60	0.03	0.0279	0.9999	0.0113	0.9999	0.4779	1.0381	0.0172	0.4244	0.0166	0.4088
20	27.78	0.03	0.0277	0.9999	0.0134	0.9999	0.4855	1.0873	0.0164	0.4306	0.0173	0.4034
21	29.56	0.03	0.0324	0.9999	0.0159	0.9999	0.4923	1.0912	0.0190	0.4394	0.0174	0.4027
22	28.51	0.03	0.0353	0.9999	0.0178	0.9999	0.4930	1.0792	0.0185	0.4337	0.0172	0.4019
23	25.53	0.01	0.0324	0.9999	0.0165	0.9999	0.5108	1.0833	0.0188	0.4345	0.0174	0.4011
24	23.59	0.02	0.0263	0.9999	0.0147	0.9999	0.5611	1.0915	0.0196	0.4375	0.0180	0.4008
25	21.91	0.02	0.0241	0.9999	0.0158	0.9999	0.5336	1.0990	0.0197	0.4403	0.0180	0.4006
26	27.24	0.01	0.0277	0.9999	0.0154	0.9999	0.5500	1.1199	0.0203	0.4478	0.0182	0.3997
27	29.53	0.00	0.0271	0.9999	0.0160	0.9999	0.5517	1.1305	0.0216	0.4511	0.0191	0.3989
28	29.44	0.02	0.0227	0.9999	0.0134	0.9999	0.5939	1.1340	0.0216	0.4513	0.0191	0.3980
29	31.15	0.02	0.0283	0.9999	0.0158	0.9999	0.6031	1.1294	0.0200	0.4496	0.0177	0.3981
30	30.42	0.03	0.0317	0.9999	0.0166	0.9999	0.5886	1.1363	0.0197	0.4520	0.0174	0.3978
31	31.70	0.03	0.0234	0.9999	0.0150	0.9999	0.5410	1.1362	0.0221	0.4511	0.0195	0.3970
32	30.47	0.03	0.0289	0.9999	0.0165	0.9999	0.6194	1.1484	0.0236	0.4559	0.0206	0.3969
33	31.25	0.03	0.0293	0.9999	0.0155	0.9999	0.6031	1.1439	0.0209	0.4541	0.0217	0.3970
34	31.52	0.03	0.0193	0.9999	0.0134	0.9999	0.7232	1.1652	0.0204	0.4615	0.0226	0.3961
35	31.69	0.02	0.0189	0.9999	0.0117	0.9999	0.7348	1.1659	0.0203	0.4609	0.0225	0.3957
36	32.08	0.04	0.0151	0.9999	0.0124	0.9999	0.6439	1.1721	0.0261	0.4646	0.0222	0.3963
37	32.35	0.02	0.0193	0.9999	0.0134	0.9999	0.7150	1.1758	0.0269	0.4645	0.0228	0.3951
38	32.03	0.02	0.0225	0.9999	0.0162	0.9999	0.7200	1.1760	0.0274	0.4633	0.0233	0.3947
39	32.87	0.03	0.0233	0.9999	0.0154	0.9999	0.6809	1.1717	0.0281	0.4617	0.0239	0.3941
40	33.16	0.03	0.0247	0.9999	0.0163	0.9999	0.6626	1.1697	0.0273	0.4678	0.0230	0.3952
41	33.43	0.04	0.0219	0.9999	0.0137	0.9999	0.6256	1.1756	0.0252	0.4643	0.0222	0.3949
42	33.69	-0.00	0.0138	0.9999	0.0117	0.9999	0.6478	1.1760	0.0271	0.4627	0.0230	0.3935
43	33.94	0.01	0.0179	0.9999	0.0134	0.9999	0.7603	1.1741	0.0252	0.4608	0.0214	0.3925
44	34.20	0.01	0.0176	0.9999	0.0134	0.9999	0.6970	1.1918	0.0271	0.4690	0.0227	0.3935
45	34.45	0.00	0.0164	0.9999	0.0123	0.9999	0.8542	1.1900	0.0252	0.4675	0.0220	0.3928
46	34.69	0.00	0.0245	0.9999	0.0175	0.9999	0.7172	1.1924	0.0276	0.4692	0.0231	0.3934

PAGE 3 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART VALM RALM-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 75 1.00 1.7 0.0 PHI=0.31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF4	CM3	CM4	XCPF3	YCPF3	CNF4	CM4	CA4	YCPF4	YCPF4
47	34.99	0.00	0.0231	9.9993	0.0153	9.9999	0.8623	1.1933	0.0301	0.4692	0.0252	0.3931
48	35.26	0.04	0.0204	9.9994	0.0134	9.9999	0.7157	1.1844	0.0300	0.4649	0.0253	0.3925
49	35.50	0.03	0.0271	9.9999	0.0183	9.9999	0.8778	1.1934	0.0292	0.4700	0.0244	0.3925
50	35.75	0.04	0.0257	9.9999	0.0174	9.9999	0.8475	1.1823	0.0310	0.4627	0.0262	0.3914
51	36.01	0.03	0.0256	9.9999	0.0184	9.9999	0.7540	1.1812	0.0305	0.4619	0.0258	0.3911
52	36.26	0.05	0.0271	9.9999	0.0194	9.9999	0.8989	1.1774	0.0314	0.4605	0.0266	0.3911
53	36.49	0.05	0.0234	9.9999	0.0202	9.9996	0.6990	1.1753	0.0309	0.4571	0.0263	0.3890
54	36.71	0.04	0.0243	9.9999	0.0195	9.9999	0.7443	1.1863	0.0297	0.4629	0.0250	0.3902
55	36.97	0.06	0.0262	9.9993	0.0212	9.9993	0.7546	1.1783	0.0301	0.4585	0.0255	0.3891
56	37.24	0.05	0.0255	9.9999	0.0202	9.9999	0.7953	1.1826	0.0304	0.4610	0.0260	0.3898
57	37.48	0.06	0.0182	9.9999	0.0154	9.9999	0.8736	1.1786	0.0298	0.4606	0.0251	0.3908
58	37.71	0.06	0.0300	9.9999	0.0243	9.9999	0.7298	1.1821	0.0314	0.4610	0.0269	0.3900
59	37.99	0.06	0.0228	9.9999	0.0184	9.9999	0.8209	1.1763	0.0315	0.4568	0.0267	0.3901
60	38.17	0.04	0.0214	9.9999	0.0183	9.9999	0.8551	1.1941	0.0319	0.4698	0.0276	0.3898
61	38.44	0.01	0.0175	9.9999	0.0184	9.9999	0.9371	1.1921	0.0311	0.4659	0.0272	0.3904
62	38.65	0.05	0.0197	9.9999	0.0178	9.9999	0.9519	1.1367	0.0312	0.4433	0.0274	0.3900
63	38.89	0.05	0.0240	9.9999	0.0200	9.9999	0.8333	1.1354	0.0302	0.4432	0.0266	0.3903
64	39.12	0.04	0.0267	9.9999	0.0223	9.9999	0.8343	1.1144	0.0301	0.4344	0.0270	0.3898
65	39.35	0.05	0.0143	9.9999	0.0167	9.9999	1.0849	1.1228	0.0314	0.4389	0.0279	0.3909
66	39.55	0.02	0.0141	9.9999	0.0140	9.9999	0.9965	1.1399	0.0316	0.4438	0.0277	0.3893
67	39.78	0.01	0.0148	9.9999	0.0154	9.9999	1.0081	1.1207	0.0325	0.4363	0.0290	0.3893
68	40.00	0.02	0.0174	9.9999	0.0190	9.9999	1.0920	1.1375	0.0320	0.4431	0.0281	0.3895
69	40.20	0.03	0.0213	9.9999	0.0204	9.9999	0.9577	1.1437	0.0320	0.4452	0.0279	0.3893
70	40.46	0.00	0.0161	9.9999	0.0163	9.9999	1.0124	1.1335	0.0301	0.4419	0.0265	0.3899
71	40.62	0.02	0.0167	9.9999	0.0176	9.9999	1.0378	1.1482	0.0319	0.4461	0.0278	0.3885
72	40.83	0.00	0.0227	9.9999	0.0215	9.9999	0.9471	1.1287	0.0317	0.4400	0.0281	0.3898
73	41.03	0.02	0.0250	9.9999	0.0218	9.9999	0.8917	1.1356	0.0317	0.4413	0.0279	0.3887
74	41.23	0.03	0.0240	9.9999	0.0220	9.9999	0.8607	1.1518	0.0335	0.4493	0.0291	0.3901
75	41.45	0.03	0.0200	9.9999	0.0205	9.9999	1.0310	1.1469	0.0316	0.4452	0.0273	0.3882
76	41.64	0.02	0.0181	9.9999	0.0165	9.9999	1.3634	1.1462	0.0299	0.4441	0.0261	0.3892
77	41.86	0.01	0.0181	9.9999	0.0176	9.9999	1.2057	1.1469	0.0313	0.4463	0.0274	0.3894
78	42.07	0.00	0.0194	9.9999	0.0195	9.9999	1.0552	1.1377	0.0299	0.4420	0.0262	0.3885
79	42.25	0.01	0.0200	9.9999	0.0214	9.9999	1.0000	1.1425	0.0305	0.4439	0.0267	0.3885
80	42.45	0.02	0.0174	9.9999	0.0202	9.9999	1.1009	1.1484	0.0324	0.4538	0.0282	0.3890
81	42.65	0.02	0.0181	9.9999	0.0200	9.9999	1.1050	1.1512	0.0316	0.4462	0.0276	0.3876
82	42.84	0.02	0.0184	9.9999	0.0191	9.9999	1.2230	1.1568	0.0284	0.4495	0.0245	0.3886
83	43.03	0.02	0.0201	9.9999	0.0220	9.9999	1.0945	1.1621	0.0299	0.4530	0.0257	0.3898
84	43.22	0.03	0.0203	9.9999	0.0205	9.9999	0.9104	1.1794	0.0315	0.4570	0.0267	0.3875
85	43.40	0.02	0.0221	9.9999	0.0233	9.9999	1.0264	1.1938	0.0316	0.4655	0.0264	0.3899
86	43.57	0.00	0.0215	9.9999	0.0214	9.9999	1.0047	1.1560	0.0328	0.4471	0.0283	0.3868
87	43.75	0.02	0.0184	9.9999	0.0185	9.9999	1.1104	1.1751	0.0322	0.4536	0.0274	0.3860
88	43.93	0.02	0.0182	9.9999	0.0193	9.9999	1.0879	1.1722	0.0313	0.4540	0.0267	0.3873
89	44.13	0.01	0.0185	9.9999	0.0188	9.9999	1.2129	1.1745	0.0344	0.4581	0.0293	0.3884
90	44.31	0.01	0.0181	9.9999	0.0194	9.9999	1.2174	1.2280	0.0265	0.4758	0.0215	0.3874
91	44.49	0.02	0.0175	9.9999	0.0202	9.9999	1.1543	1.1923	0.0333	0.4624	0.0279	0.3878
92	44.68	0.01	0.0252	9.9999	0.0252	9.9999	0.9617	1.1755	0.0328	0.4561	0.0279	0.3880

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	9X10=6	PN1	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	75	1.60	1.7	0.0	81=0F31	0.0	0.	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	45.87	0.02	0.0224	0.0000	0.0237	0.9999	1.0771	1.2056	0.0293	0.4697	0.0263	0.3826
94	45.05	-0.00	0.0114	0.0000	0.0186	0.9999	1.0140	1.2047	0.0317	0.4657	0.0263	0.3865
95	45.23	-0.01	0.0107	0.0000	0.0175	0.9999	1.0335	1.2046	0.0327	0.4681	0.0271	0.3886
96	45.42	0.00	0.0173	0.0000	0.0217	0.9999	1.0543	1.2014	0.0309	0.4669	0.0257	0.3867
97	45.59	0.02	0.0125	0.0000	0.0170	0.9999	1.0741	1.1811	0.0289	0.4589	0.0244	0.3886
98	45.77	0.01	0.0121	0.0000	0.0174	0.9999	1.0945	1.2179	0.0297	0.4699	0.0239	0.3858
99	45.96	0.02	0.0227	0.0000	0.0239	0.9999	1.0308	1.2120	0.0291	0.4687	0.0240	0.3867
100	46.14	0.03	0.0174	0.0000	0.0212	0.9999	1.2254	1.2056	0.0302	0.4665	0.0250	0.3861
101	46.32	0.01	0.0227	0.0000	0.0249	0.9999	1.0308	1.2312	0.0295	0.4748	0.0239	0.3856
102	46.47	-0.00	0.0121	0.0000	0.0171	0.9999	1.4132	1.2251	0.0266	0.4737	0.0217	0.3866
103	46.65	0.00	0.0157	0.0000	0.0213	0.9999	1.1340	1.2263	0.0226	0.4770	0.0185	0.3890
104	46.83	0.00	0.0174	0.0000	0.0201	0.9999	1.1552	1.2097	0.0247	0.4691	0.0204	0.3878
105	47.01	0.02	0.0227	0.0000	0.0225	0.9999	1.0070	1.2178	0.0240	0.4726	0.0197	0.3881
106	47.18	0.03	0.0146	0.0000	0.0193	0.9999	1.3786	1.2167	0.0254	0.4709	0.0208	0.3864
107	47.36	0.05	0.0174	0.0000	0.0207	0.9999	1.1897	1.2183	0.0242	0.4719	0.0199	0.3873
108	47.56	0.03	0.0207	0.0000	0.0214	0.9999	1.0538	1.2272	0.0065	0.4849	0.0053	0.3969
109	47.71	0.01	0.0221	0.0000	0.0227	0.9999	1.0000	1.2277	0.0001	0.4891	0.0001	0.3984
110	47.90	0.07	0.0236	0.0000	0.0230	0.9999	0.9929	1.2042	-0.0104	0.4841	-0.0087	0.4020
111	48.03	0.07	0.0234	0.0000	0.0232	0.9999	0.9957	1.1735	-0.0153	0.4739	-0.0131	0.4038
112	48.21	0.05	0.0195	0.0000	0.0203	0.9999	1.0410	1.1614	-0.0194	0.4704	-0.0171	0.4050
113	48.03	-0.07	0.0253	0.0000	0.0243	0.9999	0.9567	1.1683	-0.0193	0.4730	-0.0166	0.4048
114	48.59	0.07	0.0241	0.0000	0.0231	0.9999	0.9585	1.1750	-0.0183	0.4757	-0.0156	0.4048
115	48.76	0.07	0.0209	0.0000	0.0203	0.9999	0.9903	1.1669	-0.0208	0.4724	-0.0179	0.4048
116	47.09	-0.11	0.0221	0.0000	0.0213	0.9999	0.9535	1.1670	-0.0216	0.4722	-0.0185	0.4046
117	49.06	0.10	0.0226	0.0000	0.0227	0.9999	0.9956	1.1548	-0.0222	0.4672	-0.0193	0.4045
118	49.25	0.06	0.0201	0.0000	0.0201	0.9999	1.0300	1.1560	-0.0217	0.4681	-0.0188	0.4049
119	49.42	0.07	0.0241	0.0000	0.0239	0.9999	0.9715	1.1561	-0.0206	0.4675	-0.0180	0.4046
120	49.57	0.06	0.0150	0.0000	0.0170	0.9999	1.1039	1.1639	-0.0203	0.4708	-0.0175	0.4045
121	49.75	0.08	0.0279	0.0000	0.0262	0.9999	0.9356	1.1539	-0.0206	0.4668	-0.0179	0.4045
122	49.93	0.06	0.0224	0.0000	0.0222	0.9999	1.0000	1.1665	-0.0204	0.4722	-0.0175	0.4048
123	50.12	0.08	0.0219	0.0000	0.0222	0.9999	1.0137	1.1730	-0.0207	0.4752	-0.0177	0.4051
124	50.28	0.05	0.0204	0.0000	0.0245	0.9999	0.9957	1.1656	-0.0201	0.4721	-0.0173	0.4050
125	50.48	0.08	0.0134	0.0000	0.0182	0.9999	1.0597	1.1547	-0.0187	0.4679	-0.0162	0.4052
126	50.64	0.06	0.0193	0.0000	0.0206	0.9999	1.0570	1.1640	-0.0212	0.4728	-0.0183	0.4062
127	50.81	0.06	0.0219	0.0000	0.0214	0.9999	0.9772	1.1581	-0.0206	0.4715	-0.0178	0.4071
128	50.94	0.05	0.0191	0.0000	0.0193	0.9999	1.1437	1.1657	-0.0221	0.4760	-0.0190	0.4083
129	51.15	0.09	0.0225	0.0000	0.0235	0.9999	1.0444	1.1624	-0.0215	0.4751	-0.0185	0.4085
130	51.31	0.05	0.0232	0.0000	0.0223	0.9999	0.9617	1.1648	-0.0220	0.4763	-0.0189	0.4089
131	51.49	0.05	0.0192	0.0000	0.0205	0.9999	1.0805	1.1644	-0.0230	0.4776	-0.0198	0.4102
132	51.64	0.04	0.0194	0.0000	0.0199	0.9999	1.0311	1.1630	-0.0231	0.4772	-0.0199	0.4103
133	51.81	0.03	0.0203	0.0000	0.0232	0.9999	0.9206	1.1993	-0.0186	0.4917	-0.0157	0.4100
134	51.99	-0.01	0.0213	0.0000	0.0211	0.9999	0.9906	1.1847	-0.0223	0.4871	-0.0189	0.4111
135	52.16	0.02	0.0150	0.0000	0.0183	0.9999	1.1437	1.2218	-0.0128	0.4994	-0.0105	0.4088
136	52.31	0.01	0.0194	0.0000	0.0194	0.9999	1.0311	1.2092	-0.0183	0.4951	-0.0152	0.4095
137	52.48	0.01	0.0150	0.0000	0.0178	0.9999	1.1125	1.2084	-0.0160	0.4936	-0.0133	0.4087
138	52.64	-0.00	0.0147	0.0000	0.0172	0.9999	1.1731	1.1998	-0.0192	0.4918	-0.0160	0.4100

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX1e6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7		75	1.60	1.7	0.0	BL=0F31	0.0	0.	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
139	52.42	-0.01	0.0133	9.5999	0.0161	9.9999	1.3609	1.2032	-0.0176	0.4926	-0.0167	0.4094
140	52.96	0.02	0.0140	9.9999	0.0195	9.9999	1.0833	1.1936	-0.0194	0.4874	-0.0163	0.4083
141	53.12	0.02	0.0121	9.9999	0.0154	9.9999	1.2727	1.1993	-0.0197	0.4962	-0.0165	0.4088
142	53.36	0.00	0.0134	9.9999	0.0205	9.9999	1.0319	1.2000	-0.0196	0.4903	-0.0164	0.4086
143	53.66	0.00	0.0154	9.9999	0.0175	9.9999	1.1366	1.1992	-0.0218	0.4904	-0.0182	0.4090
144	53.92	-0.00	0.0147	9.9999	0.0183	9.9999	1.2469	1.1986	-0.0216	0.4906	-0.0181	0.4083
145	53.78	-0.01	0.0161	9.9999	0.0186	9.9999	1.1423	1.2002	-0.0218	0.4962	-0.0176	0.4084
146	53.98	0.00	0.0221	9.9999	0.0207	9.9999	0.9367	1.2035	-0.0217	0.4904	-0.0181	0.4075
147	54.16	0.01	0.0178	9.9999	0.0185	9.9999	1.0832	1.2046	-0.0226	0.4921	-0.0190	0.4085
148	54.26	-0.01	0.0175	9.9999	0.0172	9.9999	0.9829	1.2063	-0.0224	0.4905	-0.0186	0.4066
149	54.40	-0.00	0.0175	9.9999	0.0184	9.9999	1.0457	1.2079	-0.0223	0.4919	-0.0185	0.4073
150	54.58	-0.01	0.0181	9.9999	0.0189	9.9999	1.0442	1.2174	-0.0235	0.4960	-0.0193	0.4074
151	54.73	-0.00	0.0182	9.9999	0.0192	9.9999	1.0329	1.2090	-0.0242	0.4913	-0.0201	0.4064
152	54.88	-0.01	0.0175	9.9999	0.0181	9.9999	1.0343	1.2129	-0.0236	0.4937	-0.0195	0.4071
153	55.04	-0.02	0.0184	9.9999	0.0193	9.9999	1.0960	1.2268	-0.0238	0.4984	-0.0196	0.4071
154	55.20	-0.03	0.0194	9.9999	0.0177	9.9999	1.0178	1.2223	-0.0240	0.4973	-0.0197	0.4069
155	55.35	0.00	0.0190	9.9999	0.0195	9.9999	0.9936	1.2214	-0.0231	0.4964	-0.0190	0.4064
156	55.51	-0.02	0.0194	9.9999	0.0182	9.9999	0.9930	1.2249	-0.0257	0.4985	-0.0209	0.4070
157	55.65	-0.02	0.0192	9.9999	0.0183	9.9999	1.1111	1.2242	-0.0241	0.4969	-0.0197	0.4059
158	55.81	0.01	0.0195	9.9999	0.0177	9.9999	1.1419	1.2280	-0.0265	0.4993	-0.0215	0.4066
159	56.08	-0.04	0.0163	9.9999	0.0186	9.9999	0.8865	1.2886	-0.0256	0.5038	-0.0205	0.4093
160	57.06	-0.05	0.0164	9.9999	0.0185	9.9999	1.0261	1.2670	-0.0260	0.5045	-0.0193	0.4038
161	57.23	-0.07	0.0146	9.9999	0.0157	9.9999	1.1588	1.2532	-0.0257	0.5058	-0.0205	0.4036
162	57.40	-0.06	0.0218	9.9999	0.0172	9.9999	0.7890	1.2531	-0.0270	0.5042	-0.0215	0.4056
163	57.56	-0.07	0.0272	9.9999	0.0241	9.9999	0.7346	1.2500	-0.0261	0.5050	-0.0207	0.4053
170	57.67	-0.07	0.0274	9.9999	0.0224	9.9999	0.8087	1.2513	-0.0267	0.5065	-0.0213	0.4048
171	57.80	-0.06	0.0211	9.9999	0.0177	9.9999	0.8389	1.2464	-0.0256	0.5043	-0.0200	0.4046
172	57.96	-0.06	0.0219	9.9999	0.0185	9.9999	0.8488	1.2504	-0.0252	0.5054	-0.0201	0.4042
173	58.12	-0.05	0.0246	9.9999	0.0186	9.9999	0.7673	1.2307	-0.0248	0.4969	-0.0201	0.4038
174	58.25	-0.07	0.0247	9.9999	0.0191	9.9999	0.7766	1.2541	-0.0235	0.5063	-0.0188	0.4038
175	58.34	-0.05	0.0214	9.9999	0.0170	9.9999	0.7961	1.2474	-0.0212	0.5020	-0.0170	0.4025
176	58.55	-0.06	0.0213	9.9999	0.0167	9.9999	0.7840	1.2429	-0.0229	0.4991	-0.0185	0.4016
177	58.68	-0.06	0.0233	9.9999	0.0182	9.9999	0.7811	1.2588	-0.0210	0.5063	-0.0167	0.4022
178	58.76	-0.03	0.0193	9.9999	0.0164	9.9999	0.7661	1.2542	-0.0211	0.5039	-0.0169	0.4018
179	58.71	-0.02	0.0213	9.9999	0.0164	9.9999	0.7700	1.2579	-0.0194	0.5069	-0.0153	0.4014
180	58.71	-0.05	0.0246	9.9999	0.0222	9.9999	0.7577	1.2590	-0.0242	0.5079	-0.0193	0.4035

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REY-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 7A 1.60 1.7 45.0 SLOF31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.70	0.11	-0.8836	1.6114	0.1473	-0.4360	-0.0035	0.3401	0.0652	0.2748	-1.8558
2	-5.70	0.11	-0.8847	1.6126	0.1478	-0.4359	-0.0036	0.3322	0.0611	0.2710	-1.8558
3	-5.69	0.11	-0.8563	1.6124	0.2057	-0.5123	-0.0033	0.3336	0.0640	0.2695	-1.8790
4	-5.02	0.11	-0.5442	1.1472	0.2255	-0.4876	-0.0034	0.3518	0.0591	0.2927	-1.7697
5	-3.01	0.11	-0.2337	0.6806	0.1645	-0.4117	-0.0038	0.3550	0.0531	0.3019	-1.6789
6	-1.00	0.10	-0.0674	0.1761	0.1173	-0.3506	-0.0038	0.3551	0.0482	0.3069	-2.5044
7	0.04	0.11	0.0334	0.0548	0.1473	-0.3644	-0.0035	0.3535	0.0514	0.3021	1.7826
8	1.81	0.11	0.3008	-0.3696	0.1332	-0.3928	-0.0034	0.3691	0.0502	0.3189	-1.0294
9	3.82	0.11	0.5824	-0.8631	0.1435	-0.4011	-0.0033	0.3751	0.0567	0.3184	-1.4093
10	5.80	0.10	0.8781	-1.3937	0.1503	-0.3721	-0.0035	0.3867	0.0734	0.3133	-1.6396
11	7.65	0.11	1.1711	-1.9501	0.1448	-0.3515	-0.0047	0.3981	0.0988	0.2994	-1.7943
12	9.79	0.10	1.4643	-2.5034	0.1515	-0.5036	-0.0062	0.3976	0.1192	0.2787	-1.9380
13	11.86	0.10	2.3532	-4.0872	0.1252	-0.4267	-0.0017	0.4054	0.1441	0.2653	-1.9847
14	13.86	0.11	2.8744	-5.0600	0.2046	-0.5639	-0.0030	0.4176	0.1654	0.2522	-2.0147
15	15.92	0.10	3.3955	-6.0397	0.1303	-0.5496	-0.0017	0.4200	0.1791	0.2409	-2.0230
16	15.00	0.10	3.3775	-7.0436	0.1146	-0.6661	-0.0120	0.4263	0.2075	0.2208	-1.9845
17	20.03	0.11	4.8790	-8.7151	0.2435	-0.5145	-0.0154	0.4458	0.2396	0.2064	-1.9353
18	22.05	0.11	5.0861	-9.2407	0.2883	-0.5361	-0.0489	0.4428	0.2722	0.1706	-1.8240
19	24.12	0.12	5.2939	-9.7939	0.5063	-0.6772	-0.1078	0.4512	0.3009	0.1504	-1.6021
20	25.16	0.13	6.4847	-9.3523	0.6457	-0.7533	-0.1295	0.4762	0.3426	0.1337	-1.4467
21	25.27	0.10	7.6756	-9.0732	0.8715	-1.4960	-0.1114	0.4824	0.3730	0.1094	-1.2779
22	26.44	0.10	7.0685	-9.0856	0.8836	-1.4040	-0.1240	0.4817	0.3744	0.1073	-1.2890
23	28.45	0.10	7.1596	-8.8793	0.9385	-1.3738	-0.1168	0.4854	0.3756	0.1098	-1.2404
24	28.46	0.10	7.1516	-8.8324	0.8025	-1.3171	-0.1104	0.4785	0.3780	0.1006	-1.2350
25	26.81	0.10	7.1991	-8.9059	0.9313	-1.2978	-0.0976	0.4955	0.3807	0.1148	-1.2369
26	29.07	0.10	7.4151	-8.7197	0.8253	-1.2353	-0.0862	0.4868	0.3858	0.1010	-1.1920
27	29.81	0.10	7.5052	-8.9339	1.0251	-1.4506	-0.0957	0.4983	0.3926	0.1057	-1.1898
28	29.74	0.19	7.6364	-8.8995	1.1213	-1.4246	-0.0825	0.5076	0.4023	0.1053	-1.1654
29	30.01	0.18	7.6712	-8.9309	0.9860	-1.2004	-0.0822	0.5088	0.4098	0.0998	-1.1381
30	30.32	0.20	7.8846	-8.9331	1.1598	-1.3742	-0.0812	0.5118	0.4165	0.0952	-1.1330
31	30.80	0.17	7.9451	-8.9219	1.0896	-1.1763	-0.0691	0.5093	0.4181	0.0911	-1.1229
32	30.88	0.20	8.0892	-8.8851	1.1317	-1.2927	-0.0744	0.5168	0.4244	0.0903	-1.1044
33	31.13	0.20	8.1895	-8.9547	1.1160	-1.2411	-0.0670	0.5029	0.4260	0.0768	-1.0609
34	31.42	0.19	8.2229	-8.9596	1.0720	-1.2319	-0.0675	0.5166	0.4300	0.0865	-1.0770
35	31.69	0.21	8.3617	-8.7621	1.1904	-1.3244	-0.0766	0.5180	0.4357	0.0822	-1.0482
36	31.98	0.21	8.4894	-8.9047	1.1421	-1.3484	-0.0786	0.5247	0.4376	0.0870	-1.0508
37	32.25	0.21	8.6854	-8.9339	1.2425	-1.5356	-0.0778	0.5207	0.4424	0.0782	-1.0407
38	32.52	0.21	8.6984	-8.9469	1.1342	-1.2980	-0.0780	0.5247	0.4432	0.0814	-1.0305
39	32.78	0.21	8.8965	-8.9116	1.1939	-1.4472	-0.0461	0.5223	0.4460	0.0762	-1.0264
40	33.05	0.22	9.0446	-8.9299	1.2911	-1.5078	-0.0693	0.5297	0.4497	0.0799	-1.0248
41	33.32	0.22	9.1159	-8.9364	1.3279	-1.5233	-0.0952	0.5227	0.4509	0.0717	-1.0154
42	33.57	0.22	9.2161	-8.9537	1.3167	-1.5972	-0.1017	0.5253	0.4548	0.0704	-1.0052
43	33.81	0.22	9.3484	-8.9504	1.3137	-1.6498	-0.0823	0.5110	0.4552	0.0557	-0.9907
44	34.07	0.22	9.4117	-8.9111	1.3541	-1.7251	-0.0757	0.5184	0.4544	0.0639	-0.9787
45	34.32	0.21	9.4641	-8.9321	1.2545	-1.6042	-0.0512	0.5200	0.4564	0.0635	-0.9775
46	34.55	0.21	9.5377	-8.9120	1.2716	-1.6672	-0.0262	0.4998	0.4521	0.0476	-0.9659

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REIG=5	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	76	1.00	1.7	+5.0	81+0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
47	34.82	0.21	9.5196	-8.4445	1.1134	-1.4166	0.0233	0.5060	0.4532	0.0527	-0.9365
48	35.07	0.20	9.6413	-8.6429	1.0826	-1.3170	0.0231	0.5151	0.4596	0.0554	-0.9382
49	35.29	0.19	9.7134	-8.8537	0.9272	-1.1761	-0.0258	0.5216	0.4744	0.0469	-0.9105
50	35.56	0.19	9.7944	-8.8341	0.9234	-1.0717	-0.0755	0.5292	0.4804	0.0487	-0.9020
51	35.78	0.19	9.8548	-8.7857	0.9240	-1.0727	-0.0753	0.5135	0.4776	0.0358	-0.8899
52	36.01	0.18	9.9498	-8.8765	0.9674	-1.1813	-0.0627	0.5183	0.4813	0.0370	-0.8922
53	36.25	0.17	9.9933	-8.9163	0.7553	-1.0265	-0.0505	0.4981	0.4732	0.0248	-0.8503
54	36.48	0.16	10.0467	-8.9376	0.8706	-0.8928	-0.0940	0.5067	0.4807	0.0260	-0.8496
55	36.72	0.17	10.1248	-8.9545	0.9478	-1.1911	-0.0308	0.5135	0.4882	0.0253	-0.8408
56	36.95	0.16	10.2360	-8.3669	0.8155	-0.8915	-0.0502	0.5017	0.4848	0.0169	-0.8178
57	37.19	0.16	10.3132	-8.4373	0.8173	-0.8726	-0.0562	0.5065	0.4864	0.0201	-0.8150
58	37.43	0.16	10.3757	-8.4506	0.8866	-1.1050	-0.0118	0.5084	0.4925	0.0159	-0.8150
59	37.66	0.14	10.4335	-8.4102	0.5214	-0.7517	-0.0887	0.5044	0.4936	0.0108	-0.8061
60	37.89	0.13	10.5152	-8.4737	0.5763	-0.7257	-0.0819	0.5001	0.4858	0.0143	-0.7876
61	38.14	0.14	10.5825	-8.2823	0.6579	-0.8508	-0.0469	0.5131	0.4959	0.0172	-0.7795
62	38.39	0.15	10.6412	-8.3506	0.5062	-0.7247	-0.0805	0.5132	0.5002	0.0130	-0.7818
63	38.60	0.15	10.5139	-8.4381	0.7533	-0.9089	-0.0436	0.5214	0.5051	0.0163	-0.7867
64	38.82	0.16	10.8816	-8.3465	0.4751	-0.6677	-0.0491	0.4905	0.4902	0.0003	-0.7694
65	39.05	0.16	10.9253	-8.4047	0.4804	-0.5572	-0.0498	0.5100	0.4998	0.0102	-0.7691
66	39.28	0.15	10.9956	-8.3423	0.5059	-0.6253	-0.0362	0.5092	0.5062	0.0030	-0.7587
67	39.50	0.14	11.0800	-8.2321	0.4552	-0.6612	-0.0422	0.4985	0.4939	0.0046	-0.7448
68	39.71	0.14	11.1591	-8.3554	0.4419	-0.6407	-0.0407	0.5030	0.5003	0.0027	-0.7488
69	39.92	0.14	11.3146	-8.4083	0.5136	-0.7006	-0.0477	0.4932	0.5015	-0.0083	-0.7336
70	40.13	0.13	11.2594	-8.1346	0.4161	-0.5047	-0.0106	0.5070	0.5039	0.0031	-0.7227
71	40.35	0.14	11.2809	-7.9535	0.4156	-0.4486	-0.0069	0.4960	0.4810	0.0149	-0.7042
72	40.56	0.14	11.4456	-8.2432	0.6223	-0.7685	-0.0405	0.4926	0.4934	-0.0008	-0.7236
73	40.77	0.13	11.5092	-8.0780	0.5216	-0.6372	-0.0094	0.4737	0.4946	-0.0208	-0.6976
74	40.97	0.12	11.5549	-8.0251	0.4003	-0.5950	-0.0345	0.4696	0.4889	-0.0192	-0.6943
75	41.20	0.13	11.6734	-8.1141	0.5497	-0.7351	-0.0338	0.4744	0.4961	-0.0112	-0.6351
76	41.39	0.14	11.7455	-7.9413	0.5393	-0.5639	-0.0068	0.4784	0.4930	-0.0145	-0.6804
77	41.61	0.12	11.8137	-8.1397	0.4218	-0.6598	-0.0216	0.4844	0.4871	-0.0027	-0.6811
78	41.82	0.13	11.8577	-7.7953	0.5279	-0.6462	0.0041	0.4700	0.4831	-0.0130	-0.6574
79	42.01	0.12	11.9134	-7.8933	0.6532	-0.6274	0.0292	0.4572	0.4778	-0.0206	-0.6625
80	42.22	0.13	12.0453	-7.7826	0.4536	-0.4270	0.0166	0.4371	0.4783	-0.0412	-0.6461
81	42.40	0.14	11.9639	-7.5708	0.5249	-0.3562	0.0092	0.4269	0.4687	-0.0418	-0.6327
82	42.61	0.13	12.0987	-7.5186	0.4712	-0.3531	0.0419	0.4744	0.4685	-0.0441	-0.6218
83	42.78	0.14	12.1248	-7.4781	0.5006	-0.5026	0.0176	0.4801	0.4741	-0.0340	-0.6165
84	42.96	0.13	12.1541	-7.4315	0.4654	-0.4574	0.0237	0.4547	0.4682	-0.0135	-0.6115
85	43.14	0.13	12.1513	-7.2042	0.4311	-0.4462	0.0983	0.4375	0.4693	-0.0318	-0.5929
86	43.32	0.11	12.2365	-7.1905	0.3307	-0.5409	-0.0010	0.4407	0.4455	-0.0248	-0.5878
87	43.48	0.12	12.2187	-7.2475	0.4514	-0.5577	0.0180	0.4363	0.4673	-0.0298	-0.5925
88	43.67	0.11	12.3196	-8.0903	0.3650	-0.5294	0.0183	0.4164	0.4550	-0.0442	-0.5595
89	43.86	0.11	12.2784	-8.0755	0.2995	-0.4970	0.0240	0.4215	0.4622	-0.0407	-0.5601
90	44.05	0.11	12.3482	-7.1023	0.2672	0.0940	0.1116	0.4352	0.4763	-0.0411	-0.5729
91	44.20	0.12	12.4692	-8.4009	0.3001	-0.2760	0.0494	0.4139	0.4684	-0.0545	-0.5547
92	44.38	0.11	12.4164	-8.0960	0.2655	-0.3410	0.0061	0.4142	0.4685	-0.0543	-0.5388

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART M/LM SEQ=0 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 76 1.00 1.7 45.0 M1=WT31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	RCP
93	44.59	0.10	12.5794	-0.5031	0.2242	-0.1632	0.0375	0.4140	0.4990	-0.0500	-0.5259
94	44.78	0.11	12.5866	-0.4910	0.2931	-0.2811	0.0755	0.4054	0.4610	-0.0556	-0.5167
95	44.93	0.10	12.6034	-0.4966	0.2043	0.0527	0.0752	0.4219	0.4773	-0.0554	-0.5282
96	45.13	0.11	12.6497	-0.7040	0.1824	0.3856	0.1381	0.4255	0.4802	-0.0547	-0.5279
97	45.30	0.10	12.7316	-0.5421	0.1228	-0.0129	0.0757	0.4159	0.4706	-0.0607	-0.5178
98	45.47	0.10	12.7525	-0.4259	0.2046	0.3145	0.0634	0.4005	0.4762	-0.0757	-0.5039
99	45.65	0.10	12.8736	-0.5215	0.1756	0.2519	0.0624	0.4109	0.4776	-0.0667	-0.5063
100	45.85	0.10	12.9567	-0.4471	0.1200	-0.0089	0.0539	0.3961	0.4780	-0.0819	-0.4994
101	46.02	0.10	12.9711	-0.4921	0.2051	0.0884	0.0765	0.4156	0.4766	-0.0612	-0.5005
102	46.19	0.11	13.0966	-0.5478	0.1422	0.2259	0.1140	0.4076	0.4793	-0.0717	-0.5038
103	46.37	0.10	13.1711	-0.6091	0.1654	0.0265	0.0579	0.4177	0.4803	-0.0626	-0.5018
104	46.55	0.11	13.1617	-0.5454	0.1591	0.0531	0.0641	0.4156	0.4784	-0.0628	-0.4973
105	46.74	0.10	13.2866	-0.5772	0.1277	-0.1537	0.0392	0.4076	0.4751	-0.0675	-0.4953
106	46.91	0.11	13.4167	-0.6770	0.2241	-0.1913	0.0658	0.3980	0.4732	-0.0752	-0.4978
107	47.08	0.10	13.4210	-0.3505	0.1403	-0.1699	0.0272	0.3762	0.4687	-0.0925	-0.4736
108	47.27	0.11	13.5405	-0.5410	0.2213	-0.5534	-0.0099	0.3846	0.4664	-0.0818	-0.4829
109	47.44	0.11	13.5926	-0.6533	0.2322	-0.4010	0.0026	0.4011	0.4721	-0.0710	-0.4895
110	47.61	0.10	13.6923	-0.7433	0.1764	-0.5295	-0.0599	0.3876	0.4649	-0.0773	-0.4928
111	47.78	0.09	13.6797	-0.6265	0.0812	-0.4211	-0.0545	0.3872	0.4566	-0.0894	-0.4595
112	47.96	0.10	13.7749	-0.5907	0.1465	-0.3733	0.0029	0.3890	0.4579	-0.0849	-0.4783
113	48.15	0.10	13.9016	-0.6207	0.1825	-0.4385	-0.0404	0.3746	0.4534	-0.0766	-0.4823
114	48.29	0.09	13.9691	-0.6475	0.0856	-0.1723	-0.0280	0.3721	0.4435	-0.0714	-0.4419
115	48.48	0.09	13.9767	-0.6241	0.0269	-0.3378	-0.0405	0.3635	0.4472	-0.0837	-0.4699
116	48.64	0.07	13.9396	-0.5985	-0.1365	-0.2359	-0.0221	0.3668	0.4348	-0.0740	-0.4331
117	48.79	0.09	13.9529	-0.6713	-0.0467	-0.2356	-0.0152	0.3633	0.4343	-0.0710	-0.4287
118	48.99	0.09	13.9636	-0.6562	0.0541	-0.3574	-0.0028	0.3767	0.4381	-0.0634	-0.4518
119	49.15	0.08	14.0178	-0.6532	-0.0187	-0.4912	-0.0156	0.3539	0.4376	-0.0835	-0.4746
120	49.31	0.08	14.1348	-0.7061	-0.0015	-0.5569	-0.0156	0.3617	0.4432	-0.0820	-0.4797
121	49.50	0.09	14.1637	-0.7076	-0.0560	-0.6826	-0.0156	0.3495	0.4379	-0.0884	-0.4792
122	49.66	0.08	14.2120	-0.6914	-0.0414	-0.7567	-0.0218	0.3497	0.4357	-0.0860	-0.4867
123	49.85	0.08	14.3613	-0.7066	-0.0516	-0.5092	-0.0094	0.3440	0.4345	-0.0905	-0.4990
124	50.03	0.07	14.3271	-0.7237	-0.1117	-0.8563	-0.0219	0.3381	0.4434	-0.1014	-0.4902
125	50.21	0.08	14.5561	-0.7386	-0.0194	-1.1059	-0.0090	0.3559	0.4407	-0.0848	-0.5062
126	50.38	0.07	14.5799	-0.7257	-0.0498	-0.9839	-0.0090	0.3465	0.4384	-0.0919	-0.4911
127	50.55	0.08	14.6829	-0.7498	-0.0661	-0.6536	-0.0166	0.3301	0.4336	-0.1036	-0.5121
128	50.74	0.08	14.6859	-0.7406	0.0180	-1.0368	0.0036	0.3300	0.4359	-0.1060	-0.5043
129	50.89	0.09	14.8622	-0.7127	-0.0634	-0.7471	0.0076	0.3161	0.4322	-0.1162	-0.5265
130	51.06	0.06	14.8567	-0.7111	-0.0615	-0.6708	0.0076	0.2958	0.4192	-0.1235	-0.5125
131	51.22	0.08	14.9194	-0.7135	-0.0265	-0.7445	-0.0045	0.3344	0.4389	-0.1046	-0.5310
132	51.40	0.08	14.9598	-0.6917	-0.0600	-0.7902	-0.0102	0.3367	0.4469	-0.1003	-0.5302
133	51.57	0.06	14.9758	-0.7251	-0.0617	-0.8026	0.0203	0.2958	0.4215	-0.1258	-0.5224
134	51.75	0.06	14.9931	-0.7503	-0.0652	-0.7756	0.0204	0.3090	0.4287	-0.1198	-0.5200
135	51.96	0.06	14.9551	-0.6222	-0.0581	-0.6051	0.0062	0.2973	0.4265	-0.1293	-0.5231
136	52.08	0.06	14.9809	-0.6163	-0.0581	-0.7912	0.0145	0.3054	0.4277	-0.1224	-0.5218
137	52.24	0.01	14.9849	-0.7464	-0.0778	-0.8772	0.0206	0.2990	0.4282	-0.1293	-0.5168
138	52.41	0.01	15.0275	-0.8164	-0.0113	-0.3926	0.0142	0.3122	0.4282	-0.1161	-0.5200

PAGE 1 OF 3
SHEET A OF A

PARTIN MISSILE TAILS EFFECTS DATA

ILSI	PART	SCLE	REIOE6	PHI	CONF	L	DEL1	DEL2	DEL3	DELA	TRANSITION
7	76	1.00	1.7	45.0	81.0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
139	52.59	0.01	15.1603	-7.4354	-0.5905	-0.5540	0.0163	0.3176	0.4359	-0.1184	-0.5255
140	52.74	0.03	15.1517	-7.4522	-0.5209	-0.7454	0.0167	0.3120	0.4300	-0.1181	-0.5196
141	52.93	0.01	15.1222	-7.5586	-0.3484	-1.2454	0.0221	0.2860	0.4241	-0.1381	-0.4933
142	53.10	0.02	15.2062	-7.5247	-0.2673	-1.2729	0.0225	0.2857	0.4210	-0.1358	-0.4930
143	53.29	0.01	15.0671	-7.5111	-0.3421	-1.2833	0.0286	0.3079	0.4355	-0.1277	-0.5058
144	53.48	0.03	15.0649	-8.0612	-0.1164	-1.7546	0.0245	0.3040	0.4468	-0.1429	-0.5151
145	53.65	0.01	15.0267	-8.0481	-0.0616	-1.8525	0.0170	0.3141	0.4536	-0.1396	-0.5361
146	53.41	0.03	15.7713	-8.3444	0.1304	-1.7940	0.0177	0.3006	0.4452	-0.1445	-0.5323
147	53.98	0.01	15.7249	-8.5252	0.2660	-1.8960	-0.0067	0.3041	0.4453	-0.1413	-0.5415
148	54.12	0.06	15.6429	-8.4161	0.2473	-1.9743	-0.0132	0.3013	0.4301	-0.1289	-0.5380
149	54.21	0.03	15.7741	-8.4581	0.1215	-1.8854	0.0052	0.2948	0.4402	-0.1415	-0.5361
150	54.43	0.06	15.7440	-8.5082	0.2612	-1.7969	-0.0006	0.2991	0.4358	-0.1368	-0.5406
151	54.61	0.07	15.7326	-8.4077	0.2660	-1.8241	0.0117	0.2970	0.4340	-0.1421	-0.5471
152	54.76	0.03	15.6716	-8.3717	0.1027	-1.3651	0.0050	0.2846	0.4283	-0.1437	-0.5342
153	54.94	0.04	15.5847	-8.0737	-0.0368	-1.2675	0.0110	0.2973	0.4413	-0.1441	-0.5441
154	55.10	0.05	15.6228	-8.0695	0.0424	-1.0917	0.0238	0.3068	0.4474	-0.1407	-0.5498
155	55.26	0.07	15.6836	-8.1604	0.2391	-1.1780	0.0248	0.2966	0.4466	-0.1501	-0.5468
156	55.40	0.05	15.6032	-8.1048	0.0643	-0.7955	0.0237	0.3114	0.4592	-0.1479	-0.5474
157	55.56	0.08	15.5987	-8.0811	0.1816	-0.6637	0.0241	0.3160	0.4684	-0.1525	-0.5534
158	55.73	0.05	15.6872	-8.0907	0.0569	-0.6440	0.0236	0.3084	0.4697	-0.1614	-0.5508
159	55.87	0.07	15.6273	-8.0549	0.1766	-0.5758	0.0262	0.3271	0.4718	-0.1448	-0.5526
160	54.04	0.06	15.3735	-8.0684	0.1110	-0.6754	0.0240	0.3269	0.4731	-0.1463	-0.5518
161	56.22	0.07	15.1176	-8.0476	0.2087	-0.6498	0.0309	0.3376	0.4795	-0.1420	-0.5520
162	56.37	0.06	15.2587	-8.1684	0.2068	-0.6492	0.0306	0.3367	0.4880	-0.1513	-0.5637
163	56.52	0.06	15.1434	-8.0849	0.1884	-0.6530	0.0245	0.3266	0.4813	-0.1547	-0.5641
164	56.69	0.07	15.1107	-8.1463	0.3624	-0.6256	0.0252	0.3049	0.4764	-0.1712	-0.5655
165	56.85	0.03	15.3109	-8.1601	0.1074	-0.6402	0.0237	0.3111	0.4795	-0.1685	-0.5504
166	57.02	0.01	15.4220	-8.0578	-0.1490	-0.5054	0.0117	0.2820	0.4621	-0.1801	-0.5272
167	57.15	0.03	15.2711	-8.0372	0.2065	-0.6923	0.0246	0.3111	0.4693	-0.1563	-0.5493
168	57.33	0.04	15.4554	-8.0662	0.4377	0.1390	0.0210	0.2686	0.4618	-0.1932	-0.5268
169	57.48	0.06	15.4477	-8.0388	-0.0724	0.1156	0.0123	0.2863	0.4517	-0.1654	-0.5222
170	57.62	0.07	15.3777	-8.0191	0.2361	0.1717	0.0202	0.2718	0.4528	-0.1810	-0.5263
171	57.76	0.08	15.2832	-8.0208	0.1521	0.1499	0.0187	0.2699	0.4497	-0.1798	-0.5356
172	57.89	0.09	15.1837	-8.0805	0.0198	0.2542	0.0119	0.2831	0.4467	-0.1636	-0.5426
173	58.04	0.09	15.3376	-8.0760	0.1913	-0.1478	0.0127	0.2624	0.4455	-0.1831	-0.5334
174	58.20	0.08	15.2751	-8.0672	0.3608	-0.0577	0.0194	0.2835	0.4472	-0.1637	-0.5386
175	58.36	0.05	15.1424	-8.0864	0.1427	0.1515	0.0187	0.2849	0.4559	-0.1710	-0.5413
176	58.50	0.04	14.9822	-8.0984	0.5348	-0.2049	0.0152	0.2935	0.4557	-0.1623	-0.5412
177	58.64	0.06	16.4454	-8.0330	0.2143	-0.3479	0.0072	0.2506	0.4532	-0.2026	-0.5280
178	58.80	0.05	16.5206	-8.0925	0.1276	-0.3758	0.0130	0.2240	0.4405	-0.2365	-0.5355
179	58.96	0.02	16.7342	-8.0187	-0.0187	-0.4586	0.0204	0.2524	0.4561	-0.2052	-0.5425
180	58.45	0.05	16.6041	-8.1722	0.2348	-0.2268	0.0204	0.2974	0.4404	-0.1636	-0.5509

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REYN	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	74	1.00	1.7	45.0	M1=0.31	0.0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-5.79	0.11	0.1425	0.0114	0.0820	0.0835	0.5744	-0.0030	-0.0106	-0.0337	0.1240	0.4058
2	-5.76	0.11	0.1427	0.0119	0.0832	0.0836	0.5829	-0.0051	-0.0109	-0.0354	0.1272	0.4158
3	-5.59	0.11	0.1434	0.0116	0.0826	0.0825	0.5758	-0.0037	-0.0108	-0.0344	0.1293	0.4108
4	-5.42	0.11	0.1443	0.0096	0.0824	0.0663	0.6023	-0.0041	-0.0089	-0.0304	0.1648	0.3778
5	-3.01	0.11	0.1563	0.0094	0.0357	0.0839	0.6824	-0.0172	-0.0048	-0.0020	0.2731	0.1163
6	-1.08	0.10	0.1755	0.0005	0.0184	0.0485	1.1455	0.0078	-0.0001	0.0094	-0.0128	1.2051
7	0.04	0.11	0.1982	-0.0208	0.0133	-0.1159	2.5731	0.0184	0.0016	0.0140	0.0761	0.7609
8	1.81	0.11	0.2212	-0.0394	0.0614	0.2873	-0.0841	0.0582	0.0063	0.0318	0.1084	0.5456
9	3.82	0.11	0.2457	-0.0547	-0.0147	0.1716	0.2597	0.1091	0.0105	0.0550	0.0969	0.5041
10	5.80	0.10	0.2678	-0.0745	-0.0349	0.1791	0.3566	0.1720	0.0143	0.0845	0.0833	0.4913
11	7.55	0.10	0.2913	-0.0923	-0.0556	0.0872	0.3950	0.2354	0.0178	0.1157	0.0758	0.4917
12	9.79	0.10	0.3188	-0.1083	-0.0792	0.0651	0.4249	0.3312	0.0215	0.1600	0.0651	0.4832
13	11.80	0.10	0.3435	-0.1232	-0.0993	0.0139	0.4304	0.4128	0.0236	0.1968	0.0573	0.4767
14	13.80	0.11	0.3636	0.0020	-0.1148	-0.0076	0.4356	0.5102	0.0243	0.2344	0.0477	0.4692
15	15.82	0.10	0.3918	0.0048	-0.1285	-0.0165	0.4402	0.5104	0.0258	0.2763	0.0422	0.4558
16	18.00	0.10	0.4114	0.0079	-0.1454	-0.0233	0.4273	0.7211	0.0271	0.3166	0.0375	0.4391
17	20.03	0.11	0.4353	0.0124	-0.1596	-0.0331	0.4254	0.8321	0.0275	0.3566	0.0330	0.4286
18	22.05	0.11	0.4610	0.0161	-0.1693	-0.0413	0.4305	0.9410	0.0261	0.3952	0.0277	0.4200
19	24.12	0.10	0.4836	0.0224	-0.1857	-0.0575	0.4325	1.0441	0.0248	0.4361	0.0237	0.4177
20	26.16	0.10	0.5104	0.0272	-0.1747	-0.0654	0.4330	1.0956	0.0258	0.4471	0.0327	0.4081
21	28.27	0.10	0.5358	0.0223	-0.1670	-0.0587	0.4401	1.1605	0.0264	0.4692	0.0227	0.4043
22	28.44	0.10	0.5360	0.0238	-0.1683	-0.0615	0.4377	1.1553	0.0265	0.4646	0.0229	0.4021
23	28.45	0.10	0.5367	0.0252	-0.1812	-0.0604	0.4385	1.1641	0.0262	0.4652	0.0225	0.4022
24	28.46	0.10	0.5378	0.0265	-0.1637	-0.0710	0.4361	1.1606	0.0265	0.4646	0.0228	0.4003
25	28.41	0.10	0.5365	0.0277	-0.1815	-0.0752	0.4395	1.1628	0.0257	0.4638	0.0221	0.3989
26	29.07	0.10	0.5517	0.0245	-0.1830	-0.0695	0.4350	1.1733	0.0246	0.4683	0.0209	0.3991
27	29.41	0.10	0.5716	0.0247	-0.1832	-0.0664	0.4398	1.1690	0.0250	0.4627	0.0213	0.3959
28	29.74	0.10	0.5941	0.0238	-0.1827	-0.0661	0.4409	1.1767	0.0238	0.4632	0.0203	0.3937
29	30.01	0.10	0.6148	0.0243	-0.1834	-0.0650	0.4361	1.1722	0.0240	0.4596	0.0205	0.3921
30	30.32	0.20	0.6409	0.0259	-0.1700	-0.0581	0.4350	1.1709	0.0236	0.4577	0.0202	0.3909
31	30.64	0.10	0.6667	0.0253	-0.1707	-0.0565	0.4314	1.1616	0.0238	0.4515	0.0205	0.3887
32	30.96	0.20	0.6947	0.0265	-0.1696	-0.0672	0.4309	1.1711	0.0234	0.4551	0.0200	0.3886
33	31.13	0.20	0.7092	0.0271	-0.1678	-0.0693	0.4301	1.1692	0.0230	0.4528	0.0197	0.3873
34	31.42	0.19	0.7343	0.0277	-0.1674	-0.0705	0.4278	1.1832	0.0220	0.4582	0.0186	0.3873
35	31.59	0.21	0.7492	0.0292	-0.1688	-0.0752	0.4287	1.1912	0.0216	0.4608	0.0182	0.3869
36	31.98	0.21	0.7840	0.0314	-0.1654	-0.0811	0.4286	1.2009	0.0208	0.4642	0.0174	0.3865
37	32.25	0.21	0.8080	0.0343	-0.1678	-0.0867	0.4326	1.2172	0.0190	0.4717	0.0156	0.3875
38	32.52	0.21	0.8329	0.0328	-0.1738	-0.0809	0.4297	1.2165	0.0192	0.4700	0.0158	0.3863
39	42.78	0.21	0.9260	0.0295	-0.1732	-0.0732	0.4286	1.2260	0.0186	0.4742	0.0152	0.3868
40	33.05	0.22	0.8515	0.0305	-0.1769	-0.0759	0.4335	1.2337	0.0167	0.4760	0.0136	0.3874
41	33.32	0.22	0.8762	0.0260	-0.1753	-0.0700	0.4293	1.2373	0.0167	0.4786	0.0135	0.3868
42	33.57	0.22	0.8987	0.0284	-0.1716	-0.0726	0.4303	1.2440	0.0159	0.4817	0.0128	0.3872
43	33.81	0.22	0.9201	0.0272	-0.1692	-0.0700	0.4301	1.2586	0.0154	0.4866	0.0123	0.3882
44	34.07	0.22	0.9436	0.0272	-0.1679	-0.0708	0.4378	1.2579	0.0151	0.4880	0.0120	0.3880
45	34.32	0.21	0.9656	0.0278	-0.1652	-0.0722	0.4372	1.2602	0.0147	0.4887	0.0117	0.3878
46	34.55	0.21	0.9867	0.0250	-0.1626	-0.0697	0.4436	1.2548	0.0133	0.4872	0.0106	0.3883

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH WALL=6 PHI CONF L DEL1 DEL2 DEL3 DELA TRANSITION
7 7A 1.00 1.7 45.0 BLWOFF 0.0 0 0 0 0 UNSPOIL

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
47	34.42	0.20	-0.3263	0.0245	-0.1546	-0.0710	0.4673	1.2575	0.0140	0.4844	0.0112	0.3884
48	34.67	0.20	-0.3439	0.0253	-0.1535	-0.0734	0.4685	1.2603	0.0143	0.4898	0.0114	0.3886
49	35.29	0.19	-0.3389	0.0247	-0.1546	-0.0934	0.4562	1.2778	0.0131	0.4992	0.0103	0.3907
50	35.54	0.19	-0.3316	0.0314	-0.1514	-0.0904	0.4578	1.2495	0.0124	0.5044	0.0096	0.3912
51	35.78	0.19	-0.3234	0.0309	-0.1508	-0.0955	0.4659	1.2696	0.0128	0.5067	0.0099	0.3914
52	36.01	0.19	-0.3049	0.0297	-0.1461	-0.0940	0.4726	1.2933	0.0086	0.5069	0.0069	0.3920
53	36.25	0.19	-0.2806	0.0237	-0.1357	-0.0836	0.4915	1.2805	0.0053	0.5048	0.0041	0.3936
54	36.48	0.18	-0.3013	0.0264	-0.1459	-0.0956	0.4822	1.3113	0.0116	0.5156	0.0089	0.3932
55	36.72	0.17	-0.2817	0.0238	-0.1407	-0.0840	0.4995	1.2962	0.0062	0.5105	0.0048	0.3939
56	36.95	0.18	-0.2731	0.0195	-0.1378	-0.0716	0.5031	1.2928	0.0021	0.5099	0.0016	0.3944
57	37.19	0.18	-0.2559	0.0172	-0.1369	-0.0673	0.5157	1.3075	-0.0034	0.5189	-0.0030	0.3968
58	37.43	0.18	-0.2469	0.0159	-0.1263	-0.0665	0.5195	1.2796	0.0001	0.5057	0.0001	0.3957
59	37.66	0.18	-0.2492	0.0183	-0.1291	-0.0666	0.5200	1.3130	-0.0059	0.5229	-0.0045	0.3982
60	37.89	0.18	-0.2367	0.0160	-0.1234	-0.0543	0.5233	1.3114	-0.0051	0.5222	-0.0039	0.3982
61	38.13	0.18	-0.2315	0.0138	-0.1226	-0.0589	0.5298	1.3218	-0.0034	0.5276	-0.0045	0.3992
62	38.35	0.18	-0.2316	0.0144	-0.1227	-0.0623	0.5296	1.3307	-0.0075	0.5316	-0.0056	0.3995
63	38.60	0.18	-0.2253	0.0141	-0.1175	-0.0527	0.5213	1.3387	-0.0077	0.5349	-0.0058	0.3996
64	38.84	0.18	-0.2178	0.0129	-0.1142	-0.0594	0.5249	1.3395	-0.0041	0.5352	-0.0061	0.3995
65	39.08	0.18	-0.2158	0.0129	-0.1141	-0.0558	0.5196	1.3395	-0.0041	0.5358	-0.0061	0.4000
66	39.30	0.18	-0.2035	0.0102	-0.1091	-0.0490	0.5233	1.3346	-0.0046	0.5333	-0.0065	0.3996
67	39.54	0.18	-0.1960	0.0082	-0.1063	-0.0469	0.5316	1.3317	-0.0077	0.5317	-0.0058	0.3992
68	39.71	0.18	-0.1883	0.0074	-0.0998	-0.0420	0.5290	1.3364	-0.0040	0.5347	-0.0068	0.4005
69	39.92	0.18	-0.1827	0.0078	-0.1012	-0.0406	0.5252	1.3537	-0.0118	0.5431	-0.0087	0.4012
70	40.13	0.18	-0.1695	0.0037	-0.0891	-0.0230	0.5254	1.3069	-0.0067	0.5216	-0.0051	0.3991
71	40.35	0.18	-0.1701	0.0012	-0.0910	-0.0071	0.5347	1.3221	-0.0098	0.5306	-0.0076	0.4013
72	40.58	0.18	-0.1703	0.0043	-0.0897	-0.0253	0.5265	1.3463	-0.0107	0.5418	-0.0080	0.4025
73	40.77	0.18	-0.1637	0.0002	-0.0859	-0.0016	0.5358	1.3330	-0.0100	0.5368	-0.0075	0.4027
74	40.97	0.18	-0.1547	0.0004	-0.0846	-0.0025	0.5295	1.3506	-0.0136	0.5450	-0.0101	0.4035
75	41.20	0.18	-0.1325	-0.0021	-0.0758	0.0159	0.5665	1.3527	-0.0135	0.5456	-0.0100	0.4035
76	41.39	0.18	-0.1295	-0.0025	-0.0725	0.0203	0.5877	1.3628	-0.0116	0.5406	-0.0087	0.4026
77	41.61	0.18	-0.0952	-0.0068	-0.0547	0.0485	0.6020	1.3369	-0.0117	0.5356	-0.0088	0.4009
78	41.82	0.18	-0.0965	-0.0057	-0.0535	0.0603	0.5914	1.3184	-0.0104	0.5260	-0.0079	0.4005
79	42.01	0.18	-0.0716	-0.0083	-0.0431	0.1104	0.6031	1.3253	-0.0123	0.5327	-0.0093	0.4019
80	42.22	0.18	-0.0618	-0.0091	-0.0419	0.1368	0.6193	1.3096	-0.0099	0.5260	-0.0076	0.4016
81	42.44	0.18	-0.0439	-0.0103	-0.0345	0.2072	0.6720	1.2950	-0.0097	0.5205	-0.0075	0.4019
82	42.61	0.18	-0.0344	-0.0112	-0.0374	0.2105	0.6333	1.3190	-0.0130	0.5316	-0.0099	0.4030
83	42.78	0.18	-0.0412	-0.0122	-0.0310	0.2538	0.6561	1.3211	-0.0127	0.5315	-0.0096	0.4023
84	42.98	0.18	-0.0321	-0.0128	-0.0268	0.3912	0.8360	1.3168	-0.0123	0.5293	-0.0094	0.4019
85	43.19	0.18	0.0013	-0.0125	-0.0055	-5.0923	-5.4615	1.2748	-0.0126	0.5154	-0.0099	0.4043
86	43.37	0.11	-0.0004	-0.0166	-0.0113	30.5000	28.2500	1.3081	-0.0147	0.5268	-0.0113	0.4027
87	43.48	0.12	-0.0013	-0.0138	-0.0143	0.6421	7.7895	1.3147	-0.0150	0.5298	-0.0114	0.4030
88	43.67	0.11	0.0092	-0.0121	0.0108	-0.3017	0.2693	1.2633	-0.0145	0.5063	-0.0115	0.4008
89	43.86	0.11	0.0099	-0.0108	0.0149	-0.2589	0.3333	1.2530	-0.0140	0.5029	-0.0112	0.4016
90	44.05	0.11	0.0094	-0.0113	0.0144	-0.2441	0.3218	1.2665	-0.0147	0.5120	-0.0116	0.4043
91	44.20	0.12	0.0054	-0.0124	0.0141	-0.2485	0.3320	1.2753	-0.0146	0.5115	-0.0115	0.4011
92	44.38	0.11	0.0063	-0.0119	0.0116	-0.2576	0.2511	1.2798	-0.0153	0.5164	-0.0120	0.4035

PAGE 2 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RNX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	7A	1.00	1.7	+5.0	B1=0.31	3.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
93	49.59	0.11	0.0691	-0.0116	0.0294	-0.1933	0.4133	1.2516	-0.0153	0.5023	-0.0122	0.4014
94	44.78	0.11	0.0445	-0.0117	0.0160	-0.2635	0.3604	1.2833	-0.0172	0.5175	-0.0134	0.4032
95	44.93	0.13	0.0712	-0.0107	0.0325	-0.1505	0.4571	1.2271	-0.0143	0.4937	-0.0117	0.4023
96	45.13	0.11	0.0462	-0.0097	0.0215	-0.1155	0.4929	1.2169	-0.0143	0.4901	-0.0118	0.4028
97	45.39	0.15	0.0936	-0.0077	0.0378	-0.0934	0.4553	1.2311	-0.0155	0.4966	-0.0126	0.4016
98	45.47	0.10	0.0774	-0.0078	0.0359	-0.1065	0.4613	1.2215	-0.0153	0.4918	-0.0126	0.4025
99	45.65	0.15	0.0747	-0.0076	0.0348	-0.1020	0.4658	1.2274	-0.0156	0.4946	-0.0127	0.4030
100	45.85	0.10	0.0819	-0.0074	0.0379	-0.0909	0.4644	1.2260	-0.0159	0.4950	-0.0130	0.4039
101	46.02	0.14	0.0838	-0.0075	0.0389	-0.0875	0.4542	1.2475	-0.0167	0.5040	-0.0134	0.4040
102	46.19	0.11	0.0891	-0.0083	0.0432	-0.0934	0.4648	1.2300	-0.0158	0.4959	-0.0129	0.4032
103	46.37	0.16	0.0902	-0.0074	0.0307	-0.1231	0.5092	1.2477	-0.0163	0.5025	-0.0131	0.4028
104	46.55	0.15	0.0832	-0.0084	0.0395	-0.0831	0.4747	1.2377	-0.0164	0.4993	-0.0133	0.4034
105	46.74	0.15	0.0711	-0.0081	0.0348	-0.1141	0.4847	1.2533	-0.0168	0.5052	-0.0134	0.4031
106	46.91	0.11	0.0865	-0.0091	0.0451	-0.1047	0.5276	1.2322	-0.0163	0.4976	-0.0133	0.4038
107	47.08	0.14	0.0883	-0.0075	0.0395	-0.1103	0.5059	1.2336	-0.0157	0.4987	-0.0128	0.4026
108	47.27	0.11	0.0852	-0.0090	0.0311	-0.1569	0.5336	1.2518	-0.0170	0.5041	-0.0136	0.4027
109	47.44	0.11	0.0552	-0.0094	0.0281	-0.1706	0.5982	1.2495	-0.0165	0.5037	-0.0132	0.4032
110	47.61	0.10	0.0760	-0.0104	0.0383	-0.1500	0.6792	1.2545	-0.0180	0.5060	-0.0144	0.4034
111	47.78	0.14	0.0499	-0.0100	0.0239	-0.2257	0.5372	1.2377	-0.0168	0.4992	-0.0136	0.4033
112	47.96	0.10	0.0756	-0.0102	0.0399	-0.1339	0.5223	1.2470	-0.0173	0.5026	-0.0139	0.4032
113	48.15	0.14	0.0599	-0.0095	0.0310	-0.1569	0.5107	1.2631	-0.0183	0.5099	-0.0145	0.4037
114	48.29	0.09	0.0758	-0.0096	0.0371	-0.0741	0.4894	1.2524	-0.0176	0.5056	-0.0141	0.4037
115	48.46	0.09	0.0670	-0.0094	0.0310	-0.1319	0.5574	1.2463	-0.0177	0.5022	-0.0142	0.4038
116	48.64	0.07	0.0838	-0.0093	0.0351	-0.0786	0.4353	1.2463	-0.0181	0.5044	-0.0146	0.4049
117	48.79	0.09	0.0610	-0.0096	0.0417	-0.0928	0.4562	1.2432	-0.0175	0.5025	-0.0141	0.4042
118	48.99	0.09	0.0818	-0.0103	0.0376	-0.0849	0.4457	1.2626	-0.0196	0.5121	-0.0157	0.4056
119	49.15	0.06	0.0296	-0.0088	0.0183	-0.1522	0.4946	1.2525	-0.0211	0.5068	-0.0169	0.4047
120	49.31	0.08	0.0316	-0.0097	0.0186	-0.1651	0.5270	1.2555	-0.0214	0.5080	-0.0171	0.4047
121	49.50	0.06	0.0290	-0.0093	0.0155	-0.2414	0.5254	1.2498	-0.0219	0.5061	-0.0176	0.4050
122	49.66	0.08	0.0374	-0.0087	0.0190	-0.1796	0.5094	1.2625	-0.0223	0.5120	-0.0177	0.4056
123	49.85	0.06	0.0256	-0.0123	0.0173	-0.4562	1.6638	1.2635	-0.0236	0.5122	-0.0187	0.4054
124	50.03	0.07	0.0147	-0.0132	0.0132	-0.6940	0.8956	1.2475	-0.0226	0.5051	-0.0182	0.4049
125	50.21	0.08	0.0318	-0.0161	0.0219	-0.5127	0.6943	1.2767	-0.0243	0.5184	-0.0191	0.4060
126	50.38	0.07	0.0320	-0.0165	0.0242	-0.5169	0.7446	1.2639	-0.0238	0.5126	-0.0189	0.4056
127	50.55	0.05	0.0209	-0.0177	0.0227	-0.6730	0.8531	1.2666	-0.0233	0.5149	-0.0184	0.4065
128	50.74	0.06	0.0264	-0.0169	0.0273	-0.4552	0.7341	1.2760	-0.0247	0.5192	-0.0193	0.4062
129	50.89	0.05	0.0216	-0.0197	0.0135	-0.5206	0.7143	1.2382	-0.0209	0.5018	-0.0169	0.4053
130	51.06	0.02	0.0116	-0.0198	0.0175	-0.7547	1.6509	1.2731	-0.0194	0.4963	-0.0159	0.4041
131	51.22	0.03	0.0	-0.0061	0.0115	-0.0091	0.0116	1.2445	-0.0215	0.5024	-0.0173	0.4037
132	51.40	0.03	0.0104	-0.0100	0.0173	-0.4174	1.6672	1.2670	-0.0224	0.5140	-0.0177	0.4056
133	51.57	0.02	0.0142	-0.0094	0.0164	-0.3216	1.6471	1.2555	-0.0215	0.5105	-0.0172	0.4067
134	51.75	0.02	0.0155	-0.0072	0.0168	-0.4645	1.2129	1.2373	-0.0204	0.5010	-0.0165	0.4049
135	51.90	0.02	0.0118	-0.0062	0.0153	-0.5259	1.2966	1.2419	-0.0206	0.5033	-0.0166	0.4053
136	52.08	0.02	0.0116	-0.0061	0.0164	-0.5727	1.5091	1.2396	-0.0208	0.5031	-0.0168	0.4058
137	52.24	0.01	0.0142	-0.0064	0.0173	-0.4225	1.2163	1.2397	-0.0207	0.5033	-0.0167	0.4060
138	52.41	0.01	0.0104	-0.0066	0.0165	-0.6346	1.5865	1.2464	-0.0210	0.5069	-0.0169	0.4067

MARTIN MISSILE TAILS EFFECTS DATA

TEST	MACH	RN/L-6	PHI	CONF	I	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	7A 1.00	1.7	45.0	H1.0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CN2	CM2	CB2	XCPF2	YCPF2
139	52.54	0.01	0.0136	-0.0039	0.0177	-0.3333	1.0546	1.2866	-0.0216	0.5151	-0.0173	0.4068
140	52.74	0.00	0.0140	-0.0052	0.0194	-0.3444	1.0774	1.2624	-0.0217	0.5134	-0.0172	0.4067
141	52.93	0.01	0.0411	-0.0067	0.0477	-0.1634	0.6732	1.2597	-0.0219	0.5100	-0.0174	0.4069
142	53.10	0.02	0.0520	-0.0069	0.0589	-0.1715	0.6532	1.2771	-0.0227	0.5192	-0.0178	0.4065
143	53.29	0.01	0.0502	-0.0112	0.0577	-0.1848	0.6205	1.2956	-0.0241	0.5283	-0.0186	0.4068
144	53.48	0.03	0.0583	-0.0129	0.0756	-0.2216	0.6581	1.3172	-0.0258	0.5356	-0.0196	0.4066
145	53.65	0.04	0.0697	-0.0172	0.0249	-0.1579	0.6535	1.3614	-0.0262	0.5460	-0.0195	0.4069
146	53.81	0.05	0.0563	-0.0067	0.0325	-0.1733	0.6454	1.3354	-0.0265	0.5437	-0.0198	0.4071
147	53.98	0.07	0.0367	-0.0085	0.0280	-0.1661	0.7045	1.3466	-0.0268	0.5492	-0.0199	0.4079
148	54.12	0.06	0.0630	-0.0078	0.0282	-0.1955	0.7043	1.3475	-0.0272	0.5481	-0.0202	0.4068
149	54.27	0.05	0.0318	-0.0059	0.0225	-0.1714	0.7143	1.3365	-0.0256	0.5404	-0.0192	0.4062
150	54.43	0.06	0.0366	-0.0061	0.0263	-0.1564	0.6605	1.3422	-0.0263	0.5465	-0.0196	0.4072
151	54.61	0.07	0.0240	-0.0063	0.0203	-0.3609	1.8826	1.3257	-0.0269	0.5396	-0.0203	0.4070
152	54.78	0.05	0.0231	-0.0080	0.0194	-0.3723	0.8485	1.3172	-0.0265	0.5362	-0.0201	0.4071
153	54.94	0.04	0.0172	-0.0082	0.0136	-0.4767	1.2465	1.3363	-0.0274	0.5440	-0.0205	0.4075
154	55.10	0.05	0.0105	-0.0056	0.0151	-0.5333	1.4351	1.3264	-0.0270	0.5401	-0.0203	0.4071
155	55.26	0.07	0.0103	-0.0062	0.0136	-0.5965	1.4857	1.3290	-0.0274	0.5423	-0.0206	0.4081
156	55.40	0.06	0.0103	-0.0057	0.0161	-0.3986	1.1744	1.3227	-0.0271	0.5391	-0.0205	0.4076
157	55.56	0.06	0.0145	-0.0033	0.0146	-0.3474	1.0737	1.3416	-0.0280	0.5475	-0.0208	0.4081
158	55.73	0.05	0.0095	-0.0033	0.0140	-0.3158	1.0737	1.3334	-0.0281	0.5436	-0.0210	0.4075
159	55.87	0.07	0.0088	-0.0028	0.0132	-0.2955	1.0000	1.3426	-0.0285	0.5483	-0.0212	0.4084
160	56.04	0.06	0.0096	-0.0027	0.0132	-0.3068	1.0030	1.3414	-0.0286	0.5478	-0.0213	0.4084
161	56.22	0.07	0.0073	-0.0045	0.0131	-0.3333	1.0467	1.3560	-0.0292	0.5536	-0.0215	0.4083
162	56.37	0.06	0.0085	-0.0036	0.0133	-0.3409	1.0114	1.3704	-0.0304	0.5609	-0.0221	0.4092
163	56.52	0.08	0.0078	-0.0021	0.0128	-0.2838	1.0027	1.3514	-0.0293	0.5516	-0.0217	0.4082
164	56.69	0.07	0.0097	-0.0030	0.0137	-0.2989	1.0747	1.3549	-0.0293	0.5533	-0.0216	0.4084
165	56.85	0.03	0.0093	-0.0025	0.0138	-0.2698	1.0839	1.3667	-0.0302	0.5601	-0.0220	0.4093
166	57.02	0.01	0.0125	-0.0023	0.0142	-0.1840	1.1360	1.3732	-0.0304	0.5615	-0.0221	0.4089
167	57.15	0.02	0.0138	-0.0020	0.0151	-0.1894	1.0942	1.3769	-0.0310	0.5639	-0.0225	0.4095
168	57.33	0.04	0.0108	-0.0039	0.0150	-0.3611	1.3866	1.3695	-0.0305	0.5594	-0.0223	0.4097
169	57.48	0.06	0.0114	-0.0037	0.0145	-0.3246	1.2715	1.3663	-0.0304	0.5602	-0.0222	0.4100
170	57.62	0.07	0.0095	-0.0035	0.0138	-0.3564	1.4526	1.3649	-0.0304	0.5569	-0.0222	0.4095
171	57.76	0.08	0.0112	-0.0044	0.0129	-0.2844	1.0497	1.3651	-0.0306	0.5598	-0.0224	0.4101
172	57.89	0.06	0.0089	-0.0041	0.0136	-0.4667	1.5506	1.3645	-0.0307	0.5596	-0.0225	0.4101
173	58.04	0.05	0.0228	-0.0057	0.0210	-0.2516	0.9211	1.3732	-0.0310	0.5627	-0.0225	0.4097
174	58.20	0.08	0.0139	-0.0065	0.0197	-0.2646	1.0423	1.3770	-0.0314	0.5657	-0.0228	0.4108
175	58.36	0.05	0.0215	-0.0062	0.0140	-0.1453	0.8437	1.3635	-0.0316	0.5662	-0.0230	0.4107
176	58.50	0.09	0.0170	-0.0063	0.0177	-0.2529	1.0412	1.3750	-0.0317	0.5646	-0.0230	0.4106
177	58.64	0.08	0.0152	-0.0061	0.0164	-0.2597	1.0789	1.3614	-0.0311	0.5568	-0.0228	0.4090
178	58.80	0.05	0.0171	-0.0062	0.0166	-0.2456	0.9798	1.3800	-0.0317	0.5667	-0.0229	0.4106
179	58.96	0.02	0.0136	-0.0033	0.0150	-0.1094	0.7389	1.3874	-0.0325	0.5709	-0.0231	0.4120
180	59.05	0.05	0.0160	-0.0047	0.0158	-0.3357	1.1286	1.4033	-0.0328	0.5772	-0.0234	0.4113

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE/10**6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	7B	1.60	1.7	45.0	B1=0.31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.26	0.11	0.1478	9.9999	0.0584	9.9999	0.9276	-0.1095	-0.0116	-0.0037	0.1061	0.5819
2	-5.70	0.11	0.1483	9.9999	0.0590	9.9999	0.4262	-0.1059	-0.0113	-0.0019	0.1069	0.5847
3	-5.89	0.11	0.1356	9.9999	0.0560	9.9999	0.4273	-0.1091	-0.0117	-0.0032	0.1072	0.5784
4	-5.02	0.11	0.1042	9.9999	0.0463	9.9999	0.4358	-0.0873	-0.0096	-0.0013	0.1280	0.6131
5	-3.01	0.11	0.0583	9.9999	0.0249	9.9999	0.4966	-0.0190	-0.0041	-0.0174	0.2156	0.9158
6	-1.05	0.10	0.0214	9.9999	0.0117	9.9999	0.8119	0.0136	0.0	-0.0019	0.0	-0.1397
7	0.04	0.11	0.0143	9.9999	0.0131	9.9999	1.2716	0.0268	0.0013	0.0018	0.0687	0.0674
8	1.91	0.11	-0.0249	9.9999	-0.0004	9.9999	0.0139	0.0628	0.0065	0.0156	0.1037	0.2488
9	3.82	0.11	-0.0827	9.9999	-0.0224	9.9999	0.2764	0.1009	0.0105	0.0325	0.1043	0.3217
10	5.81	0.10	-0.1485	9.9999	-0.0527	9.9999	0.3598	0.1367	0.0131	0.0546	0.0960	0.3996
11	7.35	0.10	-0.2127	9.9999	-0.0855	9.9999	0.3940	0.1756	0.0125	0.0743	0.0713	0.4229
12	9.79	0.10	-0.2983	9.9999	-0.1168	9.9999	0.4008	0.2371	0.0123	0.1042	0.0520	0.4396
13	11.26	0.10	-0.3945	9.9999	-0.1586	9.9999	0.4031	0.2794	0.0078	0.1247	0.0251	0.4454
14	13.48	0.11	-0.4856	9.9999	-0.1989	9.9999	0.4010	0.3267	0.0011	0.1444	0.0034	0.4420
15	15.42	0.10	-0.5881	9.9999	-0.2339	9.9999	0.3977	0.3536	-0.0033	0.1561	-0.0029	0.4472
16	18.05	0.10	-0.7060	9.9999	-0.2752	9.9999	0.3980	0.3720	-0.0079	0.1685	-0.0213	0.4531
17	20.03	0.11	-0.8126	9.9999	-0.3120	9.9999	0.3980	0.3863	-0.0113	0.1779	-0.0293	0.4606
18	22.05	0.11	-0.9150	9.9999	-0.3529	9.9999	0.3963	0.3982	-0.0152	0.1717	-0.0414	0.4662
19	24.12	0.10	-1.0069	9.9999	-0.3862	9.9999	0.3793	0.3246	-0.0177	0.1506	-0.0540	0.4660
20	25.10	0.10	-1.0734	9.9999	-0.3959	9.9999	0.3607	0.3178	-0.0224	0.1443	-0.0706	0.4541
21	26.27	0.10	-1.1174	9.9999	-0.3984	9.9999	0.3566	0.3268	-0.0260	0.1473	-0.0856	0.4508
22	26.99	0.10	-1.1172	9.9999	-0.3960	9.9999	0.3565	0.3270	-0.0275	0.1483	-0.0840	0.4536
23	28.45	0.10	-1.1255	9.9999	-0.4004	9.9999	0.3555	0.3034	-0.0308	0.1400	-0.1312	0.4608
24	29.46	0.10	-1.1252	9.9999	-0.4002	9.9999	0.3557	0.3116	-0.0305	0.1427	-0.0977	0.4579
25	29.91	0.10	-1.1349	9.9999	-0.4021	9.9999	0.3563	0.3119	-0.0306	0.1434	-0.0980	0.4613
26	29.47	0.10	-1.1402	9.9999	-0.4064	9.9999	0.3550	0.3036	-0.0315	0.1420	-0.1036	0.4677
27	29.81	0.10	-1.1536	9.9999	-0.4099	9.9999	0.3546	0.3017	-0.0296	0.1405	-0.0980	0.4656
28	29.74	0.10	-1.1648	9.9999	-0.4156	9.9999	0.3555	0.2991	-0.0300	0.1408	-0.1002	0.4707
29	30.01	0.10	-1.1771	9.9999	-0.4199	9.9999	0.3565	0.2920	-0.0296	0.1378	-0.1012	0.4719
30	30.32	0.20	-1.1875	9.9999	-0.4243	9.9999	0.3573	0.2799	-0.0295	0.1328	-0.1053	0.4744
31	30.61	0.19	-1.1955	9.9999	-0.4236	9.9999	0.3573	0.2841	-0.0289	0.1364	-0.0946	0.4718
32	30.88	0.20	-1.1988	9.9999	-0.4284	9.9999	0.3574	0.2831	-0.0304	0.1350	-0.1073	0.4768
33	31.13	0.20	-1.1988	9.9999	-0.4293	9.9999	0.3583	0.2788	-0.0294	0.1346	-0.1053	0.4827
34	31.42	0.19	-1.2133	9.9999	-0.4358	9.9999	0.3586	0.2796	-0.0302	0.1358	-0.1079	0.4857
35	31.69	0.21	-1.2216	9.9999	-0.4395	9.9999	0.3597	0.2729	-0.0302	0.1339	-0.1105	0.4906
36	31.99	0.21	-1.2337	9.9999	-0.4443	9.9999	0.3609	0.2727	-0.0299	0.1342	-0.1095	0.4921
37	32.25	0.21	-1.2416	9.9999	-0.4480	9.9999	0.3594	0.2731	-0.0303	0.1350	-0.1108	0.4943
38	32.52	0.21	-1.2436	9.9999	-0.4483	9.9999	0.3605	0.2722	-0.0302	0.1352	-0.1108	0.4967
39	32.78	0.21	-1.2436	9.9999	-0.4483	9.9999	0.3605	0.2717	-0.0296	0.1365	-0.1088	0.5026
40	33.05	0.22	-1.2518	9.9999	-0.4512	9.9999	0.3605	0.2765	-0.0297	0.1366	-0.1065	0.4977
41	33.32	0.22	-1.2455	9.9999	-0.4497	9.9999	0.3611	0.2871	-0.0293	0.1427	-0.1019	0.4979
42	33.57	0.22	-1.2171	9.9999	-0.4341	9.9999	0.3608	0.2963	-0.0305	0.1473	-0.1035	0.5005
43	33.81	0.22	-1.2236	9.9999	-0.4405	9.9999	0.3603	0.3144	-0.0355	0.1597	-0.1128	0.5080
44	34.07	0.22	-1.2317	9.9999	-0.4434	9.9999	0.3604	0.3134	-0.0345	0.1616	-0.1100	0.5157
45	34.36	0.21	-1.2456	9.9999	-0.4493	9.9999	0.3593	0.3160	-0.0358	0.1631	-0.1126	0.5162
46	34.55	0.21	-1.2445	9.9999	-0.4494	9.9999	0.3610	0.3298	-0.0387	0.1706	-0.1173	0.5175

MARTIN MISSILE TAILS EFFECTS DATA

TEST	RUN	MACH	P(10-P	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	76	1.00	1.7	45.0	PI=3.131	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	34.02	0.00	-1.2512	9.9999	-0.4509	9.9999	0.3655	0.3430	-0.0414	0.1600	-0.1207	0.5247
48	35.07	0.00	-1.2544	9.9999	-0.4538	9.9999	0.3666	0.3476	-0.0414	0.1631	-0.1191	0.5267
49	36.24	0.00	-1.1919	9.9999	-0.4301	9.9999	0.3610	0.2922	-0.0251	0.1508	-0.0857	0.5436
50	35.50	0.00	-1.1945	9.9999	-0.4333	9.9999	0.3626	0.2935	-0.0223	0.1571	-0.0788	0.5543
51	35.75	0.00	-1.1744	9.9999	-0.4518	9.9999	0.3633	0.2819	-0.0187	0.1584	-0.0666	0.5559
52	36.01	0.00	-1.1967	9.9999	-0.4562	9.9999	0.3636	0.2852	-0.0195	0.1592	-0.0685	0.5583
53	36.25	0.00	-1.1953	9.9999	-0.4567	9.9999	0.3653	0.2745	-0.0155	0.1575	-0.0568	0.5739
54	34.98	0.00	-1.1918	9.9999	-0.4409	9.9999	0.3862	0.2663	-0.0107	0.1569	-0.0403	0.5892
55	35.72	0.00	-1.1918	9.9999	-0.4465	9.9999	0.3867	0.2553	-0.0057	0.1534	-0.0341	0.6009
56	36.95	0.00	-1.1998	9.9999	-0.4533	9.9999	0.3875	0.2374	-0.0054	0.1477	-0.0228	0.6227
57	37.19	0.00	-1.2024	9.9999	-0.4570	9.9999	0.3869	0.2234	-0.0038	0.1464	-0.0170	0.6453
58	37.43	0.00	-1.1992	9.9999	-0.4567	9.9999	0.3875	0.2421	-0.0057	0.1493	-0.0236	0.6167
59	37.69	0.00	-1.2000	9.9999	-0.4721	9.9999	0.3903	0.2162	-0.0015	0.1440	-0.0070	0.6659
60	37.94	0.00	-1.2000	9.9999	-0.4720	9.9999	0.3915	0.2061	0.0013	0.1385	0.0063	0.6719
61	38.19	0.00	-1.2003	9.9999	-0.4723	9.9999	0.3915	0.2030	0.0030	0.1399	0.0148	0.6698
62	38.35	0.00	-1.2014	9.9999	-0.4761	9.9999	0.3930	0.2002	0.0020	0.1360	0.0100	0.6892
63	38.80	0.00	-1.2007	9.9999	-0.4789	9.9999	0.3936	0.2003	0.0033	0.1370	0.0165	0.6838
64	39.06	0.00	-1.2007	9.9999	-0.4806	9.9999	0.3942	0.1929	0.0055	0.1349	0.0286	0.6992
65	39.63	0.00	-1.2013	9.9999	-0.4816	9.9999	0.3942	0.1923	0.0059	0.1349	0.0291	0.7014
66	39.88	0.00	-1.2026	9.9999	-0.4862	9.9999	0.3944	0.1917	0.0066	0.1341	0.0345	0.6994
67	40.14	0.00	-1.2056	9.9999	-0.4883	9.9999	0.3952	0.1800	0.0063	0.1253	0.0462	0.7127
68	39.71	0.00	-1.2033	9.9999	-0.4896	9.9999	0.3958	0.1799	0.0064	0.1278	0.0468	0.7103
69	39.96	0.00	-1.2039	9.9999	-0.4937	9.9999	0.3963	0.1570	0.0046	0.1195	0.0362	0.7613
70	40.13	0.00	-1.2041	9.9999	-0.4965	9.9999	0.3961	0.1556	0.0123	0.1169	0.0792	0.7514
71	40.32	0.00	-1.2047	9.9999	-0.4985	9.9999	0.3952	0.1296	0.0104	0.1056	0.1106	0.8152
72	40.58	0.00	-1.2378	9.9999	-0.4932	9.9999	0.3982	0.1515	0.0130	0.1143	0.0860	0.7546
73	40.77	0.00	-1.2342	9.9999	-0.4937	9.9999	0.3984	0.1397	0.0151	0.1085	0.1083	0.7769
74	40.97	0.00	-1.2319	9.9999	-0.4979	9.9999	0.3977	0.1250	0.0134	0.1053	0.1075	0.8428
75	41.20	0.00	-1.2516	9.9999	-0.4989	9.9999	0.3988	0.1195	0.0158	0.1004	0.1324	0.8416
76	41.39	0.00	-1.2471	9.9999	-0.4984	9.9999	0.4000	0.1138	0.0170	0.0970	0.1496	0.8521
77	41.61	0.00	-1.2532	9.9999	-0.5018	9.9999	0.4003	0.1137	0.0176	0.0956	0.1551	0.8388
78	41.86	0.00	-1.2377	9.9999	-0.4957	9.9999	0.4008	0.1132	0.0167	0.0941	0.1655	0.8310
79	42.01	0.00	-1.2565	9.9999	-0.5016	9.9999	0.4012	0.1055	0.0182	0.0909	0.1726	0.8604
80	42.22	0.00	-1.2545	9.9999	-0.5037	9.9999	0.4015	0.0895	0.0200	0.0809	0.2240	0.9037
81	42.46	0.00	-1.2439	9.9999	-0.4991	9.9999	0.4017	0.0929	0.0212	0.0812	0.2287	0.8738
82	42.61	0.00	-1.2515	9.9999	-0.5026	9.9999	0.4017	0.0705	0.0196	0.0727	0.2784	1.0312
83	42.78	0.00	-1.2334	9.9999	-0.4965	9.9999	0.4020	0.0636	0.0193	0.0582	0.4483	1.1356
84	42.98	0.00	-1.2336	9.9999	-0.4972	9.9999	0.4031	0.0534	0.0196	0.0432	0.3677	1.1839
85	43.16	0.00	-1.2189	9.9999	-0.4908	9.9999	0.4027	0.0328	0.0206	0.0503	0.6300	1.5352
86	43.32	0.00	-1.2276	9.9999	-0.4953	9.9999	0.4023	0.0167	0.0187	0.0442	1.1198	2.6407
87	43.45	0.00	-1.2271	9.9999	-0.4937	9.9999	0.4024	0.0257	0.0196	0.0465	0.7656	1.8906
88	43.67	0.00	-1.2203	9.9999	-0.4907	9.9999	0.4021	0.0137	0.0186	0.0400	1.3939	3.0227
89	43.85	0.00	-1.2271	9.9999	-0.4939	9.9999	0.4025	0.0072	0.0184	0.0362	2.5556	5.0139
90	44.03	0.00	-1.2277	9.9999	-0.4939	9.9999	0.4023	0.0128	0.0173	0.0383	1.3516	2.9844
91	44.21	0.00	-1.2259	9.9999	-0.4937	9.9999	0.4026	0.0005	0.0167	0.0328	27.8333	54.5000
92	44.38	0.00	-1.2179	9.9999	-0.4895	9.9999	0.4015	-0.0167	0.0164	0.0240	-0.8770	-1.2834

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(ASROC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART SCALE MACH= PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 7A 1.60 1.7 45.0 81-0F31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
93	44.56	0.10	-1.2159	9.9999	-0.4676	9.9999	0.4010	-0.0235	0.0151	0.0204	-0.6426	-0.8681
94	44.78	0.11	-1.2038	9.9999	-0.4797	9.9999	0.3995	-0.0383	0.0131	0.0128	-0.3829	-0.3351
95	44.93	0.10	-1.2201	9.9999	-0.4701	9.9999	0.4017	-0.0085	0.0145	0.0254	-1.7059	-2.9765
96	45.13	0.11	-1.2321	9.9999	-0.4586	9.9999	0.4031	-0.0025	0.0138	0.0287	-5.5200	-11.4400
97	45.30	0.11	-1.2275	9.9999	-0.4633	9.9999	0.4019	-0.0313	0.0121	0.0156	-0.3878	-0.5000
98	45.47	0.10	-1.2192	9.9999	-0.4451	9.9999	0.4015	-0.0372	0.0119	0.0128	-0.3208	-0.3396
99	45.65	0.10	-1.2303	9.9999	-0.4550	9.9999	0.4023	-0.0360	0.0122	0.0125	-0.3498	-0.3482
100	45.85	0.10	-1.2103	9.9999	-0.4755	9.9999	0.4011	-0.0390	0.0121	0.0091	-0.3111	-0.2339
101	46.02	0.10	-1.2123	9.9999	-0.4654	9.9999	0.4006	-0.0355	0.0116	0.0098	-0.3277	-0.2768
102	46.19	0.11	-1.2278	9.9999	-0.4529	9.9999	0.4015	-0.0181	0.0110	0.0170	-0.4077	-0.9392
103	46.37	0.10	-1.2477	9.9999	-0.4433	9.9999	0.4001	-0.0482	0.0122	0.0020	-0.2536	-0.0416
104	46.55	0.11	-1.2196	9.9999	-0.4686	9.9999	0.4009	-0.0365	0.0111	0.0084	-0.3049	-0.2308
105	46.74	0.10	-1.2075	9.9999	-0.4824	9.9999	0.3995	-0.0424	0.0109	0.0049	-0.2577	-0.1158
106	46.91	0.11	-1.2190	9.9999	-0.4674	9.9999	0.4002	-0.0235	0.0114	0.0141	-0.5064	-0.6000
107	47.08	0.10	-1.2023	9.9999	-0.4705	9.9999	0.3996	-0.0432	0.0113	-0.0046	-0.1791	0.1066
108	47.27	0.11	-1.1955	9.9999	-0.4783	9.9999	0.3999	-0.0823	0.0099	-0.0180	-0.1206	0.2192
109	47.44	0.11	-1.1958	9.9999	-0.4775	9.9999	0.3993	-0.0619	0.0116	-0.0079	-0.1877	0.1278
110	47.61	0.10	-1.1844	9.9999	-0.4840	9.9999	0.3985	-0.0915	0.0110	-0.0237	-0.1271	0.2598
111	47.78	0.09	-1.1916	9.9999	-0.4798	9.9999	0.3978	-0.1048	0.0113	-0.0279	-0.1082	0.2663
112	47.96	0.10	-1.1957	9.9999	-0.4779	9.9999	0.3996	-0.0746	0.0118	-0.0179	-0.1505	0.2283
113	48.15	0.11	-1.2155	9.9999	-0.4679	9.9999	0.4003	-0.1363	0.0073	-0.0289	-0.0688	0.2714
114	48.29	0.09	-1.2425	9.9999	-0.4573	9.9999	0.4001	-0.1419	0.0003	-0.0393	-0.0021	0.2768
115	48.48	0.09	-1.2034	9.9999	-0.4805	9.9999	0.3995	-0.1045	0.0080	-0.0280	-0.0767	0.2675
116	48.64	0.07	-1.2291	9.9999	-0.4620	9.9999	0.4003	-0.1269	-0.0016	-0.0330	0.0128	0.2640
117	48.79	0.09	-1.2239	9.9999	-0.4600	9.9999	0.4006	-0.1277	0.0041	-0.0361	-0.0322	0.2826
118	48.99	0.07	-1.2523	9.9999	-0.4545	9.9999	0.4029	-0.0907	-0.0006	-0.0145	0.0066	0.2044
119	49.15	0.08	-1.2280	9.9999	-0.4640	9.9999	0.4025	-0.0812	0.0	-0.0089	0.0	0.1457
120	49.31	0.06	-1.2373	9.9999	-0.4590	9.9999	0.4033	-0.0719	0.0007	-0.0143	-0.0028	0.1992
121	49.50	0.08	-1.2108	9.9999	-0.4683	9.9999	0.4033	-0.0510	0.0032	-0.0048	-0.0629	0.1729
122	49.66	0.06	-1.2367	9.9999	-0.4603	9.9999	0.4039	-0.0682	0.0011	-0.0146	-0.0162	0.2144
123	49.85	0.08	-1.2235	9.9999	-0.4668	9.9999	0.4041	-0.0609	0.0006	-0.0166	-0.0016	0.1569
124	50.03	0.07	-1.2111	9.9999	-0.4676	9.9999	0.4026	-0.0340	0.0071	-0.0054	-0.2094	0.1711
125	50.21	0.08	-1.2381	9.9999	-0.4510	9.9999	0.4047	-0.0360	0.0105	-0.0082	-0.2925	0.2284
126	50.38	0.07	-1.2205	9.9999	-0.4620	9.9999	0.4031	-0.0359	0.0111	-0.0049	-0.3109	0.2773
127	50.55	0.05	-1.2352	9.9999	-0.4528	9.9999	0.4030	-0.0463	0.0095	-0.0159	-0.2056	0.3442
128	50.74	0.06	-1.2396	9.9999	-0.4520	9.9999	0.4049	-0.0323	0.0114	-0.0093	-0.3540	0.2848
129	50.94	0.05	-1.2425	9.9999	-0.4514	9.9999	0.4040	-0.0304	0.0069	-0.0090	-0.1617	0.2970
130	51.08	0.06	-1.2275	9.9999	-0.4636	9.9999	0.4021	-0.0304	0.0064	-0.0118	-0.2112	0.3894
131	51.22	0.05	-1.2514	9.9999	-0.4503	9.9999	0.4040	-0.0323	0.0045	-0.0115	-0.1398	0.3571
132	51.40	0.05	-1.2401	9.9999	-0.4589	9.9999	0.4039	-0.0344	0.0058	-0.0137	-0.1691	0.3994
133	51.57	0.06	-1.2507	9.9999	-0.4535	9.9999	0.4041	-0.0253	0.0056	-0.0108	-0.2302	0.4286
134	51.75	0.06	-1.2494	9.9999	-0.4538	9.9999	0.4030	-0.0360	0.0075	-0.0159	-0.2089	0.4401
135	51.90	0.06	-1.2410	9.9999	-0.4585	9.9999	0.4042	-0.0479	0.0066	-0.0207	-0.1423	0.4331
136	52.08	0.06	-1.2543	9.9999	-0.4512	9.9999	0.4044	-0.0483	0.0063	-0.0215	-0.1307	0.4461
137	52.24	0.01	-1.2703	9.9999	-0.4563	9.9999	0.4045	-0.0590	0.0051	-0.0258	-0.0866	0.4363
138	52.41	0.01	-1.2724	9.9999	-0.4539	9.9999	0.4038	-0.0468	0.0062	-0.0214	-0.1328	0.4582

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 PA 1.60 1.7 45.0 B1=0F31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CN4	XCPF4	YCPF4
139	52.54	0.01	-1.2917	9.9999	-0.5163	9.9999	0.4043	-0.0045	0.0055	-0.0201	-0.1239	0.4527
140	52.74	0.01	-1.2934	9.9999	-0.5160	9.9999	0.4044	-0.0037	0.0064	-0.0204	-0.1583	0.4679
141	52.93	0.01	-1.2947	9.9999	-0.5119	9.9999	0.4046	-0.0033	0.0067	-0.0240	-0.1254	0.4511
142	53.10	0.02	-1.2996	9.9999	-0.5098	9.9999	0.4046	-0.0045	0.0098	-0.0207	-0.2207	0.4662
143	53.29	0.01	-1.2917	9.9999	-0.5115	9.9999	0.4051	-0.0215	0.0124	-0.0119	-0.5767	0.5535
144	53.48	0.03	-1.2878	9.9999	-0.5139	9.9999	0.4053	-0.0127	0.0136	-0.0078	-1.1148	0.6393
145	53.65	0.03	-1.2896	9.9999	-0.5135	9.9999	0.4045	0.0058	0.0106	-0.0015	1.8276	-0.2586
146	53.81	0.05	-1.2859	9.9999	-0.5114	9.9999	0.4047	0.0005	0.0099	-0.0041	19.9000	-8.2000
147	53.98	0.07	-1.2850	9.9999	-0.5111	9.9999	0.4044	0.0066	0.0069	-0.0006	1.0455	-0.0606
148	54.12	0.06	-1.2880	9.9999	-0.5096	9.9999	0.4043	0.0114	0.0065	0.0009	0.5702	0.0789
149	54.27	0.05	-1.2824	9.9999	-0.5094	9.9999	0.4034	0.0069	0.0051	-0.0010	0.7391	-0.1449
150	54.43	0.06	-1.2867	9.9999	-0.5097	9.9999	0.4045	0.0149	0.0053	0.0022	0.3557	0.1477
151	54.61	0.07	-1.2868	9.9999	-0.5139	9.9999	0.4050	0.0106	0.0066	0.0	0.6226	0.0
152	54.78	0.05	-1.2818	9.9999	-0.5099	9.9999	0.4042	0.0096	0.0061	-0.0010	0.6356	-0.1042
153	54.96	0.04	-1.2849	9.9999	-0.5218	9.9999	0.4054	0.2160	0.0056	0.0007	0.3500	0.0437
154	55.10	0.03	-1.2824	9.9999	-0.5245	9.9999	0.4056	0.0063	0.0041	-0.0027	0.6508	-0.4286
155	55.28	0.04	-1.2845	9.9999	-0.5271	9.9999	0.4059	0.0076	0.0043	-0.0025	0.5658	-0.3289
156	55.46	0.06	-1.2855	9.9999	-0.5299	9.9999	0.4059	0.0041	0.0041	-0.0034	1.0000	-0.8293
157	55.56	0.03	-1.2865	9.9999	-0.5256	9.9999	0.4072	-0.0004	0.0025	-0.0045	-6.2500	11.2500
158	55.73	0.03	-1.2824	9.9999	-0.5347	9.9999	0.4064	0.0017	0.0026	-0.0040	1.5294	-2.3529
159	55.87	0.07	-1.2843	9.9999	-0.5470	9.9999	0.4089	0.0003	0.0025	-0.0047	8.3333	-15.6667
160	56.04	0.06	-1.2865	9.9999	-0.5444	9.9999	0.4073	0.0046	0.0027	-0.0033	0.5870	-0.8261
161	56.22	0.07	-1.2838	9.9999	-0.5535	9.9999	0.4083	0.0046	0.0028	-0.0035	0.6087	-0.7609
162	56.37	0.06	-1.2861	9.9999	-0.5565	9.9999	0.4081	0.0066	0.0030	-0.0036	0.4545	-0.5455
163	56.52	0.05	-1.2827	9.9999	-0.5651	9.9999	0.4073	0.0059	0.0029	-0.0047	0.4915	-0.7966
164	56.69	0.07	-1.2843	9.9999	-0.5694	9.9999	0.4078	0.0041	0.0032	-0.0045	0.7805	-1.0976
165	56.85	0.03	-1.2816	9.9999	-0.5723	9.9999	0.4087	-0.0046	0.0034	-0.0049	0.7391	-1.0652
166	57.02	0.01	-1.2818	9.9999	-0.5681	9.9999	0.4085	0.0124	0.0030	-0.0026	0.2419	-0.2097
167	57.15	0.03	-1.2823	9.9999	-0.5567	9.9999	0.4096	0.0071	0.0032	-0.0043	0.4507	-0.6056
168	57.33	0.09	-1.2817	9.9999	-0.5432	9.9999	0.4097	-0.0015	0.0043	-0.0062	-2.8667	5.4667
169	57.48	0.05	-1.2826	9.9999	-0.5533	9.9999	0.4095	-0.0006	0.0042	-0.0044	-7.0000	14.0000
170	57.62	0.07	-1.2838	9.9999	-0.5531	9.9999	0.4102	0.0021	0.0037	-0.0075	1.7619	-3.5714
171	57.78	0.05	-1.2801	9.9999	-0.5522	9.9999	0.4103	-0.0072	0.0047	-0.0115	-0.6528	1.5972
172	57.89	0.04	-1.2832	9.9999	-0.5592	9.9999	0.4111	-0.0047	0.0044	-0.0111	-0.9362	2.3617
173	58.06	0.06	-1.2873	9.9999	-0.5538	9.9999	0.4109	-0.0067	0.0050	-0.0113	-0.7463	1.6886
174	58.20	0.06	-1.2818	9.9999	-0.5535	9.9999	0.4110	-0.0147	0.0041	-0.0147	-0.2789	1.0000
175	58.36	0.02	-1.2783	9.9999	-0.5528	9.9999	0.4120	-0.0163	0.0043	-0.0156	-0.2638	0.9571
176	58.50	0.05	-1.2861	9.9999	-0.5620	9.9999	0.4114	-0.0117	0.0041	-0.0144	-0.3504	1.2308
177	58.69	0.06	-1.2852	9.9999	-0.5533	9.9999	0.4111	-0.0082	0.0043	-0.0130	-0.5244	1.5854
178	58.84	0.05	-1.2859	9.9999	-0.5604	9.9999	0.4121	0.0011	0.0046	-0.0150	4.1818	-9.0909
179	58.96	0.06	-1.2819	9.9999	-0.5519	9.9999	0.4117	0.0154	0.0043	-0.0052	0.2792	-0.3377
180	58.85	0.05	-1.2866	9.9999	-0.5716	9.9999	0.4127	0.0039	0.0047	-0.0098	1.2051	-2.5128

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	MACH-B	RNI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	77	1.10	1.7	4?.0	81.0[illegible]1	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CL*	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.72	0.13	-0.9511	1.6899	0.0081	-0.3194	-0.0191	0.5741	0.2273	0.3468	-1.9311
2	-5.73	0.12	-0.9[illegible]28	1.6[illegible]5	0.025[illegible]	-0.3015	-0.0193	0.5770	0.2296	0.3474	-1.8980
3	-5.73	0.13	-0.95[illegible]	1.67[illegible]5	0.1394	-0.4150	-0.0134	0.5713	0.2286	0.3447	-1.8590
4	-4.96	0.14	-0.7361	1.[illegible]025	0.2020	-0.4449	-0.0188	0.5913	0.2189	0.3724	-1.9210
5	-2.91	0.13	-0.4222	0.[illegible]38	0.1257	-0.3817	-0.0191	0.5950	0.2091	0.3859	-1.9467
6	-0.95	0.14	-0.1[illegible]6	0.[illegible]122	0.[illegible]1[illegible]	-0.4228	-0.0187	0.6042	0.2127	0.3915	-3.0138
7	1.06	0.13	0.1[illegible]1	0.[illegible]77	0.[illegible]051	-0.2535	-0.0191	0.6212	0.2186	0.4066	-0.2981
8	3.15	0.13	0.[illegible]6[illegible]	-0.[illegible]3	0.1391	-0.3540	-0.0188	0.6314	0.2262	0.4056	-1.2824
9	5.11	0.19	0.[illegible]5[illegible]	-1.[illegible]16[illegible]	0.2246	-0.5209	-0.0242	0.6583	0.2472	0.4111	-1.5029
10	7.16	0.12	1.2525	-2.[illegible]01	0.3279	-0.2666	-0.0260	0.6753	0.2719	0.4033	-1.7886
11	9.22	0.13	1.[illegible]24	-3.[illegible]12[illegible]	0.1210	-0.4210	-0.0273	0.6758	0.2927	0.3831	-1.9012
12	11.30	0.13	2.2[illegible]7	-4.[illegible]217	0.1556	-0.4368	-0.0239	0.6766	0.3072	0.3696	-2.0202
13	13.35	0.13	2.[illegible]516	-5.[illegible]09[illegible]	0.[illegible]1[illegible]7	-0.6055	-0.0255	0.6819	0.3192	0.3627	-2.0579
14	15.[illegible]2	0.13	3.[illegible]1[illegible]7	-6.[illegible]9[illegible]5	0.1566	-0.4475	-0.0215	0.6846	0.3330	0.3506	-2.0346
15	17.56	0.14	3.9[illegible]65	-7.[illegible]56[illegible]	0.[illegible]2[illegible]2	-0.7100	-0.0277	0.6874	0.3527	0.3347	-2.0192
16	19.6[illegible]	0.13	4.[illegible]51[illegible]	-8.[illegible]730[illegible]	0.1612	-0.5075	-0.0566	0.7029	0.3835	0.3194	-1.9180
17	21.73	0.14	5.[illegible]16[illegible]	-9.[illegible]2[illegible]31	0.[illegible]2166	-0.3991	-0.0998	0.6989	0.[illegible]082	0.2917	-1.7824
18	23.90	0.16	5.[illegible]3[illegible]7	-9.[illegible]3[illegible]24	0.[illegible]4655	-0.6149	-0.0805	0.6927	0.4244	0.2682	-1.5778
19	25.[illegible]8	0.16	6.[illegible]7[illegible]71	-9.[illegible]3[illegible]477	0.[illegible]6[illegible]87	-0.8274	-0.0559	0.6[illegible]69	0.[illegible]317	0.2247	-1.4295
20	28.50	0.15	7.3[illegible]96	-9.[illegible]3[illegible]61	0.[illegible]8135	-0.8167	-0.0287	0.6814	0.4659	0.2154	-1.3053
21	28.[illegible]6	0.16	7.3[illegible]19	-9.[illegible]3[illegible]85	0.[illegible]6[illegible]4	-0.8[illegible]37	-0.0175	0.[illegible]640	0.[illegible]687	0.2152	-1.3185
22	28.56	0.16	7.3[illegible]49	-9.[illegible]7202	0.[illegible]6[illegible]91	-0.8269	-0.0123	0.[illegible]682	0.[illegible]698	0.2143	-1.3216
23	28.[illegible]4	0.17	7.[illegible]3[illegible]91	-9.[illegible]4[illegible]45	0.[illegible]5[illegible]63	-0.[illegible]7039	-0.0119	0.[illegible]855	0.[illegible]713	0.2141	-1.2907
24	28.[illegible]5[illegible]	0.17	7.[illegible]3[illegible]78	-9.[illegible]7[illegible]6[illegible]	0.[illegible]5[illegible]63	-0.[illegible]6565	-0.0179	0.[illegible]761	0.[illegible]69[illegible]	0.2082	-1.3045
25	28.[illegible]4	0.17	7.[illegible]8136	-9.[illegible]9212	0.[illegible]6[illegible]78	-1.[illegible]8[illegible]49	0.[illegible]005	0.[illegible]826	0.[illegible]763	0.2062	-1.2634
26	29.18	0.14	7.7[illegible]16	-9.[illegible]7[illegible]45	0.[illegible]6931	-0.8778	0.0008	0.[illegible]902	0.[illegible]798	0.2103	-1.2511
27	29.[illegible]6[illegible]	0.18	7.[illegible]8[illegible]73	-9.[illegible]9[illegible]13[illegible]	0.[illegible]8[illegible]81	-0.[illegible]9506	-0.0107	0.[illegible]7045	0.[illegible]8[illegible]65	0.2180	-1.2698
28	29.[illegible]1	0.21	8.[illegible]0[illegible]6[illegible]	-9.[illegible]9[illegible]5[illegible]	0.9750	-1.2750	0.0078	0.6915	0.4905	0.2010	-1.2435
29	29.[illegible]2	0.19	7.[illegible]9[illegible]17	-9.[illegible]9[illegible]2[illegible]	0.[illegible]8[illegible]5[illegible]	-0.9343	0.0008	0.7190	0.[illegible]918	0.2272	-1.2567
30	30.33	0.20	8.2373	-9.[illegible]18[illegible]	0.[illegible]7[illegible]33	-0.9670	0.0194	0.6982	0.[illegible]984	0.1948	-1.1919
31	30.[illegible]7	0.2[illegible]	8.[illegible]3[illegible]	-9.[illegible]7[illegible]	0.[illegible]8[illegible]17	-1.[illegible]6[illegible]12	0.[illegible]032	0.[illegible]7[illegible]76	0.[illegible]5[illegible]59	0.2017	-1.[illegible]876
32	30.[illegible]0	0.19	8.[illegible]7[illegible]2	-9.[illegible]8[illegible]47	0.[illegible]7[illegible]10	-1.[illegible]6[illegible]60	0.0201	0.[illegible]7[illegible]47	0.[illegible]5[illegible]70	0.2077	-1.[illegible]784
33	31.[illegible]2	0.19	8.[illegible]5[illegible]76	-9.[illegible]8[illegible]12	0.[illegible]7[illegible]24	-1.[illegible]0[illegible]31	0.[illegible]0094	0.[illegible]7[illegible]44	0.[illegible]5[illegible]31	0.2213	-1.[illegible]591
34	31.[illegible]0	0.19	8.[illegible]5[illegible]6	-9.[illegible]9[illegible]2[illegible]	0.[illegible]7[illegible]35	-1.[illegible]0[illegible]99	0.[illegible]0763	0.[illegible]7[illegible]62	0.[illegible]522[illegible]	0.2038	-1.[illegible]540
35	31.[illegible]1	0.19	8.[illegible]7[illegible]77	-9.[illegible]9[illegible]72	0.[illegible]7[illegible]45	-1.[illegible]0[illegible]212	0.[illegible]0545	0.[illegible]7[illegible]42	0.[illegible]5[illegible]268	0.2074	-1.[illegible]417
36	31.[illegible]6	0.19	8.[illegible]8[illegible]75[illegible]	-10.[illegible]0[illegible]01	0.[illegible]6[illegible]91[illegible]	-0.[illegible]9[illegible]836	0.[illegible]0717	0.[illegible]7[illegible]326	0.[illegible]5[illegible]300	0.[illegible]2[illegible]24	-1.[illegible]1335
37	32.[illegible]2[illegible]	0.19	8.[illegible]8[illegible]73	-10.[illegible]0[illegible]63	0.[illegible]6[illegible]71	-0.[illegible]9[illegible]176	0.[illegible]0708	0.[illegible]7[illegible]314	0.[illegible]5[illegible]339	0.[illegible]1[illegible]75	-1.[illegible]1[illegible]61
38	32.49	0.17	8.[illegible]8[illegible]3	-10.[illegible]8[illegible]49	0.[illegible]5[illegible]35	-0.[illegible]8[illegible]336	0.[illegible]0871	0.[illegible]7[illegible]160	0.[illegible]5[illegible]366	0.2012	-1.[illegible]1[illegible]39
39	32.[illegible]5	0.1[illegible]	8.[illegible]2[illegible]40	-10.[illegible]9[illegible]72	0.[illegible]6[illegible]4[illegible]	-0.[illegible]9[illegible]754	0.0712	0.7400	0.[illegible]5[illegible]4[illegible]	0.[illegible]1[illegible]96	-1.[illegible]1[illegible]26
40	33.[illegible]2	0.17	8.[illegible]1[illegible]3[illegible]	-10.[illegible]1[illegible]04	0.[illegible]5[illegible]20	-0.8[illegible]35	0.0764	0.7[illegible]74	0.[illegible]5[illegible]37	0.2142	-1.1329
41	33.[illegible]2[illegible]	0.[illegible]1[illegible]	8.[illegible]9[illegible]25[illegible]	-10.[illegible]9[illegible]4[illegible]	0.[illegible]7[illegible]2[illegible]	-1.[illegible]1[illegible]39	0.[illegible]0890	0.[illegible]7[illegible]39[illegible]	0.[illegible]5[illegible]43[illegible]	0.[illegible]1[illegible]63	-1.[illegible]1[illegible]30
42	33.56	0.17	8.[illegible]5[illegible]6[illegible]	-10.[illegible]7[illegible]53	0.[illegible]6[illegible]61	-0.[illegible]9[illegible]434	0.[illegible]0772	0.[illegible]7[illegible]450	0.[illegible]5[illegible]461	0.[illegible]1[illegible]49	-1.[illegible]1[illegible]97
43	33.[illegible]1	0.17	8.[illegible]5[illegible]23	-10.[illegible]3[illegible]12	0.[illegible]0[illegible]49	-0.[illegible]9[illegible]3[illegible]8	0.[illegible]0[illegible]66	0.[illegible]7[illegible]421	0.[illegible]5[illegible]436	0.[illegible]1[illegible]65	-1.[illegible]1[illegible]35
44	34.[illegible]0	0.17	8.[illegible]7[illegible]5[illegible]	-10.[illegible]7[illegible]3[illegible]	0.[illegible]5[illegible]24	-0.[illegible]8[illegible]025	0.[illegible]0[illegible]47	0.[illegible]7[illegible]533	0.[illegible]5[illegible]4[illegible]2	0.2[illegible]51	-1.[illegible]1[illegible]05
45	34.31	0.16	8.[illegible]1[illegible]3[illegible]	-10.[illegible]9[illegible]1[illegible]	0.[illegible]6[illegible]83	-0.[illegible]9[illegible]70	0.[illegible]0[illegible]88	0.[illegible]7[illegible]379	0.[illegible]5[illegible]525	0.[illegible]1[illegible]54	-1.[illegible]1[illegible]20
46	34.56	0.16	8.[illegible]8[illegible]22	-10.[illegible]7[illegible]72	0.[illegible]5[illegible]27[illegible]	-0.[illegible]8[illegible]171	0.[illegible]0[illegible]43	0.[illegible]7[illegible]374	0.[illegible]5[illegible]474	0.[illegible]1[illegible]900	-1.[illegible]0[illegible]960

TEST	PART	MACH	REYN-6	PHI	CONF	L	CELL	DEL2	DEL3	DEL4	TRANSITION
7	77	1.10	1.7	45.0	BLANK	31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.92	0.15	10.4822	-11.2918	0.4179	-0.8021	0.0329	0.7700	0.5485	0.2215	-1.0896
48	35.06	0.17	10.5047	-10.9849	0.5721	-0.9634	0.0563	0.7288	0.5452	0.1836	-1.0803
49	35.21	0.15	10.2117	-11.1265	0.0099	-0.9789	0.0785	0.7269	0.5470	0.1799	-1.0890
50	35.37	0.15	10.3530	-11.1506	0.4972	-0.8545	0.0451	0.7340	0.5420	0.1920	-1.0770
51	35.53	0.16	10.5533	-11.2274	0.3915	-0.9126	0.0346	0.7199	0.5442	0.1757	-1.0728
52	35.68	0.16	10.6036	-11.3149	0.4940	-0.7754	0.0232	0.7171	0.5452	0.1919	-1.0675
53	35.31	0.16	10.0035	-11.1704	0.6385	-0.9673	0.0681	0.7210	0.5431	0.1779	-1.0643
54	36.54	0.15	10.7411	-11.0554	0.4505	-0.9736	0.0567	0.7366	0.5384	0.1982	-1.0712
55	36.70	0.16	10.8745	-11.0441	0.4767	-0.8514	0.0406	0.7163	0.5413	0.1750	-1.0556
56	37.02	0.14	10.9417	-11.2520	0.4541	-0.8564	0.0136	0.6956	0.5392	0.1562	-1.0293
57	37.25	0.15	10.9471	-11.4218	0.5233	-0.9272	-0.0251	0.7191	0.5410	0.1781	-1.0395
58	37.47	0.14	11.0684	-11.2530	0.4081	-0.8504	-0.0467	0.7098	0.5424	0.1674	-1.0187
59	37.73	0.15	11.1200	-11.3711	0.4701	-0.8147	0.0752	0.7152	0.5467	0.1685	-1.0228
60	37.97	0.13	11.2643	-11.4786	0.3700	-0.7757	-0.0244	0.7087	0.5470	0.1617	-1.0124
61	38.15	0.15	11.2572	-11.4468	0.4878	-0.8384	0.0256	0.7317	0.5420	0.1897	-1.0131
62	38.44	0.14	11.4091	-11.1349	0.4169	-0.8352	0.0486	0.6993	0.5435	0.1558	-0.9794
63	38.68	0.15	11.4906	-11.3384	0.4587	-0.8758	0.0499	0.7153	0.5406	0.1747	-0.9863
64	38.90	0.13	11.4855	-11.4779	0.3875	-0.8150	0.0602	0.7066	0.5369	0.1697	-0.9557
65	39.10	0.14	11.5491	-11.1150	0.3175	-0.8545	0.0498	0.7108	0.5344	0.1724	-0.9625
66	39.39	0.14	11.6425	-11.2048	0.3949	-0.7716	0.0569	0.6965	0.5364	0.1601	-0.9583
67	39.59	0.13	11.7143	-11.1894	0.4670	-0.8211	0.0386	0.6992	0.5333	0.1659	-0.9527
68	39.81	0.14	11.7775	-11.1751	0.3628	-0.8166	0.0385	0.7083	0.5377	0.1706	-0.9404
69	40.04	0.14	11.8437	-11.1868	0.3711	-0.8248	0.0165	0.7018	0.5362	0.1656	-0.9477
70	40.24	0.12	11.8934	-11.0016	0.3295	-0.8594	0.0610	0.6843	0.5348	0.1495	-0.9272
71	40.48	0.12	11.9603	-11.1277	0.3764	-0.7016	0.0279	0.7004	0.5341	0.1663	-0.9282
72	40.69	0.13	12.0154	-11.2697	0.2359	-0.5650	0.0276	0.7021	0.5330	0.1631	-0.9267
73	40.87	0.13	12.0593	-11.2585	0.3583	-0.6873	0.0112	0.6937	0.5275	0.1662	-0.9263
74	41.09	0.13	12.2704	-11.3163	0.4516	-0.7116	0.0453	0.6942	0.5333	0.1609	-0.9222
75	41.30	0.11	12.3761	-11.3093	0.3339	-0.7205	0.0115	0.6885	0.5340	0.1545	-0.9137
76	41.51	0.14	12.3371	-11.4155	0.5220	-0.6639	-0.0149	0.6592	0.5192	0.1401	-0.8848
77	41.72	0.12	12.5480	-11.1085	0.3767	-0.6656	-0.0656	0.6569	0.5195	0.1375	-0.8906
78	41.92	0.13	12.5533	-11.4349	0.4951	-1.0069	-0.0539	0.6549	0.5119	0.1431	-0.8790
79	42.12	0.12	12.5612	-11.2260	0.4059	-0.8423	-0.0655	0.6456	0.5151	0.1306	-0.8776
80	42.30	0.11	12.6552	-11.1670	0.3684	-0.8991	-0.0432	0.6598	0.5119	0.1480	-0.8821
81	42.51	0.11	12.7316	-11.1028	0.4803	-0.8133	-0.0527	0.6660	0.4912	0.1555	-0.8767
82	42.70	0.14	12.8583	-11.4170	0.7654	-1.2162	0.0149	0.6215	0.4916	0.1300	-0.8389
83	42.89	0.12	12.8451	-11.3064	0.3657	-0.8516	-0.0761	0.6047	0.4836	0.1212	-0.8411
84	43.07	0.12	12.8185	-11.2406	0.4466	-1.0170	-0.0532	0.6205	0.4972	0.1374	-0.8463
85	43.27	0.11	13.0142	-11.2314	0.3575	-0.8960	-0.0083	0.6170	0.4817	0.1354	-0.8327
86	43.49	0.11	13.0245	-11.0011	0.4154	-0.8579	-0.0195	0.6210	0.4780	0.1430	-0.8444
87	43.61	0.10	13.1787	-11.2318	0.3461	-0.7456	-0.0307	0.6054	0.4765	0.1289	-0.8371
88	43.80	0.11	13.2875	-11.2162	0.3824	-0.8210	-0.0015	0.5931	0.4742	0.1189	-0.8228
89	43.94	0.10	13.1882	-11.2281	0.2571	-0.7284	-0.0543	0.5967	0.4684	0.1283	-0.7996
90	44.10	0.11	13.2442	-11.2512	0.3616	-0.8516	-0.0299	0.5967	0.4717	0.1250	-0.7988
91	44.32	0.12	13.2842	-11.2946	0.1972	-0.8217	-0.0131	0.5859	0.4654	0.1204	-0.7749
92	44.53	0.10	13.3981	-11.5297	0.3109	-0.8083	0.0323	0.5871	0.4665	0.1203	-0.7859

PAGE 1 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RAIO=B	RNI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	77	1.10	1.7	45.0	61.0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.79	0.11	13.3865	-10.5259	0.3733	-0.6231	-0.0013	0.5912	0.4606	0.1306	-0.7863
94	44.96	0.10	13.5259	-10.6353	0.2940	-0.5790	-0.0181	0.5661	0.4533	0.1128	-0.7730
95	45.07	0.10	13.6311	-10.7553	0.2877	-0.5617	-0.0010	0.5602	0.4486	0.1116	-0.7835
96	45.26	0.10	13.8753	-10.9000	0.2776	-0.5960	0.0045	0.5639	0.4502	0.1136	-0.7751
97	45.46	0.09	13.9935	-11.0409	0.2070	-0.3515	0.0100	0.5658	0.4495	0.1163	-0.7500
98	45.61	0.10	13.7250	-10.8019	0.2143	-0.3719	0.0415	0.5564	0.4515	0.1049	-0.7462
99	45.79	0.11	13.6751	-10.7506	0.2267	-0.2650	0.0221	0.5562	0.4597	0.0965	-0.7427
100	45.98	0.10	13.7922	-10.8227	0.2817	-0.2930	0.0620	0.5337	0.4542	0.0794	-0.7339
101	46.16	0.09	13.8494	-10.8743	0.2065	-0.3931	0.0449	0.5443	0.4405	0.1038	-0.7389
102	46.33	0.10	13.9596	-10.9906	0.2520	-0.6728	0.0058	0.5330	0.4274	0.1056	-0.7278
103	46.50	0.10	13.9213	-10.8385	0.3001	-0.5621	0.0116	0.5324	0.4321	0.1003	-0.7211
104	46.67	0.10	13.9691	-10.8877	0.3337	-0.7345	0.0119	0.5764	0.4343	0.0922	-0.7230
105	46.85	0.09	14.0416	-10.9635	0.2123	-0.5009	0.0174	0.5282	0.4352	0.0929	-0.7138
106	47.00	0.10	13.9389	-9.9741	0.2436	-0.6473	-0.0049	0.5325	0.4388	0.0936	-0.7125
107	47.20	0.09	14.1526	-10.2101	0.1736	-0.4515	0.0176	0.5208	0.4410	0.0795	-0.7073
108	47.36	0.09	14.0925	-9.9486	0.1570	-0.1559	0.0234	0.5263	0.4369	0.0893	-0.6952
109	47.53	0.09	14.1763	-9.9860	0.2134	-0.3737	0.0125	0.5270	0.4347	0.0922	-0.6900
110	47.69	0.09	14.1714	-9.9544	0.2267	-0.4646	0.0240	0.5184	0.4316	0.0867	-0.6841
111	47.87	0.09	14.2737	-9.9988	0.1765	-0.4469	0.0124	0.5299	0.4258	0.0840	-0.6942
112	48.06	0.09	14.4926	-9.9478	0.1602	-0.4784	-0.0044	0.5102	0.4339	0.0762	-0.6893
113	48.23	0.08	14.5296	-9.9557	0.0591	-0.2040	0.0183	0.5475	0.4348	0.0726	-0.6786
114	48.38	0.10	14.4294	-9.8212	0.2571	-0.2915	0.0075	0.5150	0.4278	0.0871	-0.6807
115	48.56	0.10	14.3699	-9.8578	0.2987	-0.3990	0.0043	0.4965	0.4287	0.0697	-0.6442
116	48.73	0.10	14.4339	-9.8969	0.1910	-0.4520	0.0023	0.4910	0.4201	0.0708	-0.6435
117	48.91	0.09	14.5635	-9.9807	0.2522	-0.4982	0.0023	0.5032	0.4274	0.0752	-0.6633
118	49.07	0.09	14.5437	-9.9413	0.2652	-0.5165	0.0370	0.4922	0.4233	0.0688	-0.6623
119	49.29	0.09	14.6563	-9.9774	0.2789	-0.6572	0.0373	0.4753	0.4120	0.0633	-0.6332
120	49.42	0.09	14.6223	-9.9150	0.2034	-0.6863	0.0567	0.4763	0.4075	0.0708	-0.6165
121	49.59	0.09	14.7013	-9.9215	0.3471	-0.9650	0.0725	0.4650	0.4006	0.0644	-0.6166
122	49.74	0.09	14.6535	-9.8489	0.3632	-0.7206	0.0501	0.4416	0.3924	0.0492	-0.5806
123	49.92	0.08	14.7156	-9.8592	0.3712	-0.9220	0.0729	0.4784	0.4081	0.0703	-0.6027
124	50.11	0.10	14.6386	-9.8617	0.4541	-1.0309	0.0904	0.4614	0.4022	0.0592	-0.6073
125	50.29	0.09	14.7882	-9.9199	0.3987	-1.0771	0.0903	0.4371	0.3992	0.0379	-0.6033
126	50.45	0.08	15.0381	-9.1201	0.4284	-1.0406	0.0903	0.4360	0.3855	0.0505	-0.6069
127	50.63	0.08	15.0209	-9.9502	0.3959	-1.3841	0.0820	0.4281	0.3783	0.0498	-0.5980
128	50.80	0.08	14.9716	-9.9009	0.4066	-1.3798	0.0509	0.4187	0.3782	0.0405	-0.5877
129	50.97	0.08	15.1799	-9.2152	0.3595	-1.4457	0.0335	0.4430	0.3994	0.0506	-0.6071
130	51.14	0.08	15.1744	-9.1355	0.4334	-1.6232	0.0224	0.4264	0.3913	0.0335	-0.6000
131	51.31	0.07	15.2577	-9.2947	0.3151	-1.5306	0.0219	0.4400	0.3932	0.0468	-0.6092
132	51.48	0.07	15.3183	-9.1170	0.2982	-1.6145	-0.0008	0.4374	0.3909	0.0465	-0.5952
133	51.62	0.07	15.2913	-9.2350	0.2842	-1.6010	0.0186	0.4485	0.3899	0.0586	-0.6040
134	51.91	0.06	15.3505	-9.1619	0.2400	-1.6184	-0.0123	0.4210	0.3891	0.0319	-0.5903
135	51.97	0.07	15.2505	-9.1041	0.2107	-1.5229	-0.0126	0.4305	0.3903	0.0202	-0.5810
136	52.12	0.06	15.1548	-9.0737	0.1982	-1.1696	-0.0008	0.4051	0.3820	0.0231	-0.5722
137	52.30	0.07	15.3405	-9.0724	0.2962	-1.6014	-0.0120	0.4207	0.3881	0.0326	-0.5847
138	52.48	0.07	15.3122	-9.1706	0.2544	-1.3002	0.0054	0.4231	0.3892	0.0339	-0.5733

MARTIN MISSILE TAILS EFFECTS DATA

TEST	MACH	PRESS-PSIA	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	77	1.10	1.7	45.0	81.0P31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CA	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.85	0.00	15.3354	-0.0304	0.3365	-1.3611	-0.0002	0.4293	0.3884	0.0409	-0.5747
140	52.44	0.00	15.4030	-0.0339	0.3473	-1.5447	-0.0117	0.4178	0.3892	0.0286	-0.5799
141	52.94	0.00	15.4078	-0.0036	0.2636	-1.3323	-0.0061	0.4152	0.3952	0.0200	-0.5821
142	53.16	0.00	15.5944	-0.0363	0.3264	-1.5752	-0.0057	0.4313	0.3975	0.0338	-0.5769
143	53.32	0.00	15.4449	-0.0352	0.1868	-1.2349	0.0110	0.4079	0.3958	0.0121	-0.5732
144	53.51	0.00	15.7827	-0.0232	0.1452	-1.2130	0.0053	0.4219	0.4067	0.0152	-0.5863
145	53.67	0.00	15.7006	-0.0700	-0.1322	-0.7269	0.0218	0.4044	0.4160	-0.0136	-0.5775
146	53.85	0.00	15.6512	-0.1074	-0.1626	-0.7560	0.0220	0.4096	0.4165	-0.0069	-0.5746
147	54.01	0.00	15.6284	-0.1064	-0.0532	-0.5867	0.0223	0.4086	0.4197	-0.0111	-0.5777
148	54.17	0.00	15.6913	-0.0108	-0.1276	-0.7033	0.0223	0.4031	0.4174	-0.0143	-0.5681
149	54.31	0.00	15.6436	-0.0109	-0.0134	-0.7674	0.0286	0.4012	0.4242	-0.0230	-0.5638
150	54.47	0.00	15.6473	-0.0059	-0.1415	-0.5017	0.0224	0.3952	0.4156	-0.0204	-0.5645
151	54.63	0.00	15.6761	-0.0262	-0.0117	-0.4760	0.0306	0.4058	0.4240	-0.0182	-0.5623
152	54.78	0.00	15.6956	-0.0041	-0.0034	-0.2604	0.0208	0.4104	0.4246	-0.0042	-0.5567
153	54.93	0.00	15.7636	-0.0747	-0.2234	-0.3515	0.0242	0.3859	0.4238	-0.0379	-0.5549
154	55.09	0.00	15.8102	-0.0432	-0.0944	-0.1546	0.0343	0.4051	0.4353	-0.0302	-0.5617
155	55.24	0.00	15.8183	-0.1551	-0.0892	-0.2963	0.0227	0.4184	0.4347	-0.0213	-0.5717
156	55.42	0.00	15.8852	-0.2051	-0.2341	-0.1757	0.0241	0.4041	0.4359	-0.0318	-0.5755
157	55.56	0.00	15.9342	-0.2553	-0.0134	-0.2677	0.0245	0.4145	0.4381	-0.0236	-0.5744
158	55.71	0.00	15.8205	-0.3115	-0.1353	-0.2626	0.0224	0.3933	0.4378	-0.0445	-0.5812
159	55.84	0.00	15.8232	-0.2667	-0.0142	-0.1546	0.0223	0.4042	0.4431	-0.0339	-0.5858
160	56.09	0.00	15.7207	-0.3403	-0.1240	-0.2519	0.0218	0.4004	0.4332	-0.0269	-0.5977
161	56.15	0.00	15.8933	-0.3422	-0.1365	-0.2263	0.0227	0.4119	0.4354	-0.0235	-0.5952
162	56.32	0.00	15.8170	-0.3133	-0.0467	-0.1745	0.0220	0.4373	0.4391	-0.0018	-0.6015
163	56.51	0.00	16.0279	-0.5561	0.0028	-0.3617	0.0230	0.4263	0.4402	-0.0139	-0.5962
164	56.62	0.00	15.8929	-0.5204	-0.3016	-0.1964	0.0213	0.3956	0.4341	-0.0385	-0.6002
165	56.83	0.00	16.2462	-0.5967	-0.1678	-0.1715	0.0227	0.3853	0.4353	-0.0500	-0.5911
166	56.93	0.00	15.8029	-0.4365	0.4247	-0.3337	0.0239	0.4172	0.4276	-0.0104	-0.5970
167	57.17	0.00	16.4203	-0.6208	0.0258	-0.3172	0.0175	0.4007	0.4465	-0.0478	-0.5959
168	57.32	0.00	16.3584	-0.7003	0.1583	-0.0975	0.0179	0.4125	0.4364	-0.0239	-0.5926
169	57.48	0.00	16.3162	-0.6934	0.1428	-0.0626	0.0295	0.3962	0.4405	-0.0443	-0.5936
170	57.59	0.00	16.0750	-0.6210	0.1962	-0.0517	-0.0116	0.3504	0.4078	-0.0574	-0.5857
171	57.78	0.00	16.1050	-0.6164	0.2203	-0.0787	-0.0173	0.3532	0.4273	-0.0741	-0.5843
172	57.97	0.00	16.1179	-0.5907	0.1965	-0.0823	-0.0189	0.3604	0.4240	-0.0631	-0.5944
173	58.03	0.00	16.2130	-0.6240	0.1975	-0.0342	-0.0238	0.4031	0.4327	-0.0296	-0.6059
174	58.18	0.00	16.0815	-0.5103	-0.0491	-0.5464	-0.0186	0.3550	0.4243	-0.0693	-0.5936
175	58.32	0.00	15.1512	-0.5103	0.3691	-1.0524	-0.3229	0.3784	0.4245	-0.0501	-0.5950
176	58.48	0.00	16.2313	-0.5364	0.3344	-0.6525	-0.0169	0.3627	0.4237	-0.0610	-0.5934
177	58.63	0.00	16.5041	-0.6413	0.3324	-0.6336	-0.0110	0.3339	0.4351	-0.1013	-0.6024
178	54.69	0.00	16.0194	-0.2471	0.0240	-0.8876	-0.0236	0.3857	0.4146	-0.0289	-0.5772
179	58.69	0.00	16.0049	-0.4481	0.5545	-0.8057	-0.0100	0.3056	0.3940	-0.0884	-0.5655
180	58.71	0.00	16.2544	-0.5028	0.1690	-0.7846	-0.0174	0.3498	0.4232	-0.0734	-0.5896

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) , 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NO	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	77	1.10	1.7	45.0	61.0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
1	-5.72	0.13	0.1918	0.0148	0.0931	0.1946	0.5585	-0.0704	-0.0101	-0.0428	0.1437	0.6074
2	-5.73	0.12	0.1918	0.0150	0.0931	0.1960	0.6565	-0.0717	-0.0100	-0.0429	0.1397	0.5978
3	-5.73	0.13	0.1940	0.0150	0.0944	0.1944	0.6555	-0.0690	-0.0103	-0.0419	0.1495	0.6067
4	-4.96	0.14	0.0960	0.0109	0.0676	0.1192	0.7217	-0.0408	-0.0070	-0.0275	0.1720	0.6732
5	-2.91	0.13	0.0492	0.0086	0.0418	0.1303	0.6453	-0.0057	-0.0043	-0.0106	0.7566	1.8596
6	-0.95	0.14	0.0099	0.0025	0.0236	0.2678	2.3438	0.0237	-0.0001	0.0054	-0.0042	0.2278
7	1.08	0.13	-0.0252	-0.0016	0.0116	0.0637	-0.4382	0.0587	0.0054	0.0219	0.0922	0.3737
8	3.15	0.13	-0.0547	-0.0057	-0.0058	0.0956	0.0973	0.1019	0.0097	0.0428	0.0956	0.4199
9	5.11	0.14	-0.0963	-0.0079	-0.0242	0.0779	0.2518	0.1656	0.0147	0.0754	0.0689	0.4569
10	7.18	0.12	-0.1478	-0.0079	-0.0482	0.0516	0.3265	0.2345	0.0202	0.1086	0.0663	0.4632
11	9.22	0.13	-0.2069	-0.0097	-0.0735	0.0230	0.3540	0.3131	0.0238	0.1452	0.0762	0.4637
12	11.30	0.13	-0.2511	0.0006	-0.0950	-0.0032	0.3783	0.4037	0.0247	0.1819	0.0611	0.4505
13	13.35	0.13	-0.2960	0.0063	-0.1129	-0.0282	0.3977	0.5241	0.0245	0.2304	0.0467	0.4336
14	15.42	0.13	-0.3079	0.0142	-0.1258	-0.0492	0.4084	0.6292	0.0235	0.2708	0.0374	0.4303
15	17.56	0.14	-0.3531	0.0195	-0.1432	-0.0611	0.4055	0.7397	0.0238	0.3107	0.0322	0.4201
16	19.64	0.13	-0.3573	0.0218	-0.1604	-0.0696	0.4142	0.8509	0.0238	0.3500	0.0280	0.4113
17	21.73	0.14	-0.3937	0.0270	-0.1675	-0.0534	0.4256	0.9612	0.0201	0.3884	0.0210	0.4041
18	23.90	0.15	-0.3620	0.0251	-0.1546	-0.0691	0.4264	1.0691	0.0143	0.4268	0.0134	0.3992
19	26.12	0.14	-0.3372	0.0335	-0.1527	-0.1004	0.4529	1.1815	0.0117	0.4618	0.0101	0.3976
20	28.50	0.16	-0.2795	0.0305	-0.1304	-0.1037	0.4683	1.2263	0.0079	0.4846	0.0065	0.3952
21	28.54	0.15	-0.2742	0.0294	-0.1280	-0.1776	0.4600	1.2242	0.0079	0.4856	0.0064	0.3950
22	28.54	0.15	-0.2763	0.0296	-0.1290	-0.1703	0.4634	1.2279	0.0093	0.4835	0.0068	0.3937
23	28.54	0.17	-0.2776	0.0272	-0.1280	-0.1599	0.4556	1.2282	0.0084	0.4832	0.0069	0.3934
24	28.56	0.17	-0.2836	0.0286	-0.1297	-0.1714	0.4572	1.2349	0.0080	0.4850	0.0065	0.3928
25	28.93	0.19	-0.2714	0.0276	-0.1223	-0.1791	0.4505	1.2497	0.0060	0.4910	0.0048	0.3929
26	29.18	0.19	-0.2675	0.0262	-0.1204	-0.1652	0.4502	1.2575	0.0048	0.4938	0.0038	0.3927
27	29.52	0.16	-0.2756	0.0281	-0.1263	-0.1648	0.4513	1.2699	0.0042	0.4994	0.0033	0.3933
28	29.77	0.21	-0.2566	0.0223	-0.1142	-0.1648	0.4451	1.2761	0.0030	0.5011	0.0024	0.3927
29	29.92	0.19	-0.2726	0.0272	-0.1227	-0.1514	0.4510	1.2803	0.0030	0.5027	0.0023	0.3927
30	30.13	0.20	-0.2659	0.0320	-0.1213	-0.1234	0.4598	1.2887	0.0031	0.5063	0.0024	0.3929
31	30.57	0.24	-0.2725	0.0288	-0.1245	-0.1416	0.4568	1.2901	0.0027	0.5079	0.0021	0.3937
32	30.80	0.19	-0.2574	0.0313	-0.1194	-0.1234	0.4656	1.3007	0.0019	0.5118	0.0015	0.3935
33	31.12	0.17	-0.2614	0.0312	-0.1259	-0.1192	0.4614	1.3099	0.0016	0.5157	0.0012	0.3937
34	31.40	0.19	-0.2629	0.0312	-0.1230	-0.1165	0.4676	1.3094	0.0009	0.5153	0.0007	0.3935
35	31.87	0.17	-0.2548	0.0293	-0.1180	-0.1148	0.4632	1.3259	-0.0001	0.5226	-0.0001	0.3941
36	31.96	0.19	-0.2557	0.0279	-0.1167	-0.1078	0.4565	1.3275	-0.0001	0.5224	-0.0001	0.3935
37	32.49	0.19	-0.2554	0.0261	-0.1173	-0.1020	0.4526	1.3341	-0.0010	0.5255	-0.0008	0.3946
38	32.49	0.17	-0.2583	0.0269	-0.1118	-0.1069	0.4537	1.3343	-0.0017	0.5255	-0.0013	0.3932
39	32.78	0.18	-0.2529	0.0259	-0.1159	-0.1062	0.4604	1.3516	-0.0029	0.5324	-0.0022	0.3939
40	33.02	0.17	-0.2546	0.0265	-0.1158	-0.1038	0.4546	1.3558	-0.0033	0.5349	-0.0024	0.3945
41	33.29	0.16	-0.2536	0.0277	-0.1153	-0.1062	0.4512	1.3545	-0.0032	0.5333	-0.0024	0.3937
42	33.58	0.17	-0.2721	0.0286	-0.1237	-0.1050	0.4545	1.3722	-0.0043	0.5411	-0.0031	0.3943
43	33.81	0.17	-0.2566	0.0303	-0.1205	-0.1134	0.4521	1.3703	-0.0044	0.5402	-0.0032	0.3942
44	34.06	0.17	-0.2642	0.0314	-0.1264	-0.1102	0.4471	1.3808	-0.0051	0.5451	-0.0037	0.3948
45	34.31	0.16	-0.2744	0.0312	-0.1218	-0.1136	0.4441	1.3796	-0.0045	0.5420	-0.0035	0.3943
46	34.56	0.16	-0.2788	0.0326	-0.1245	-0.1181	0.4454	1.3747	-0.0043	0.5412	-0.0031	0.3937

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/FT	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	77	1.10	1.7	45.0	R1-0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
47	34.42	0.15	-0.2435	0.0322	-0.1453	-0.1078	0.4517	1.3965	-0.0059	0.5516	-0.0042	0.3950
48	35.06	0.17	-0.2473	0.0333	-0.1292	-0.1156	0.4496	1.3911	-0.0054	0.5489	-0.0039	0.3946
49	35.31	0.16	-0.2784	0.0432	-0.1250	-0.1192	0.4490	1.3716	-0.0040	0.5404	-0.0029	0.3941
50	35.57	0.16	-0.2434	0.0325	-0.1342	-0.1139	0.4565	1.4010	-0.0062	0.5540	-0.0044	0.3955
51	35.83	0.16	-0.2382	0.0349	-0.1419	-0.1096	0.4511	1.4154	-0.0072	0.5610	-0.0051	0.3964
52	36.08	0.16	-0.2365	0.0367	-0.1341	-0.1122	0.4475	1.4141	-0.0069	0.5606	-0.0049	0.3963
53	36.41	0.16	-0.2411	0.0331	-0.1324	-0.1136	0.4547	1.4010	-0.0059	0.5535	-0.0042	0.3951
54	36.54	0.15	-0.2364	0.0349	-0.1358	-0.1140	0.4551	1.4246	-0.0077	0.5642	-0.0054	0.3960
55	36.78	0.16	-0.2384	0.0371	-0.1414	-0.1216	0.4635	1.4227	-0.0076	0.5625	-0.0052	0.3953
56	37.02	0.16	-0.2370	0.0379	-0.1376	-0.1208	0.4591	1.3900	-0.0089	0.5510	-0.0064	0.3964
57	37.25	0.15	-0.2411	0.0354	-0.1373	-0.1233	0.4725	1.4371	-0.0085	0.5703	-0.0059	0.3968
58	37.47	0.14	-0.2435	0.0361	-0.1349	-0.1221	0.4734	1.4178	-0.0086	0.5627	-0.0061	0.3968
59	37.73	0.14	-0.2477	0.0310	-0.1400	-0.1195	0.4656	1.3864	-0.0127	0.5521	-0.0092	0.3982
60	37.97	0.13	-0.2443	0.0315	-0.1363	-0.1103	0.4647	1.3962	-0.0126	0.5555	-0.0090	0.3979
61	38.19	0.13	-0.2602	0.0324	-0.1293	-0.1214	0.4911	1.4051	-0.0124	0.5601	-0.0088	0.3987
62	38.44	0.14	-0.2312	0.0214	-0.1187	-0.0965	0.5137	1.3543	-0.0154	0.5388	-0.0114	0.3979
63	38.68	0.14	-0.2589	0.0280	-0.1336	-0.1034	0.5161	1.3795	-0.0157	0.5501	-0.0114	0.3988
64	38.90	0.13	-0.1942	0.0181	-0.1063	-0.0910	0.5238	1.3595	-0.0169	0.5382	-0.0125	0.3978
65	39.16	0.12	-0.1894	0.0183	-0.1015	-0.0941	0.5379	1.3668	-0.0176	0.5435	-0.0129	0.3977
66	39.39	0.12	-0.1984	0.0178	-0.0981	-0.0944	0.5252	1.3700	-0.0171	0.5440	-0.0125	0.3971
67	39.59	0.13	-0.1987	0.0172	-0.1008	-0.0987	0.5376	1.3759	-0.0178	0.5483	-0.0130	0.3985
68	39.81	0.12	-0.1777	0.0164	-0.0979	-0.0953	0.5510	1.3670	-0.0184	0.5444	-0.0135	0.3983
69	40.04	0.12	-0.1825	0.0164	-0.0693	-0.1011	0.5493	1.3704	-0.0204	0.5463	-0.0149	0.3985
70	40.24	0.12	-0.1946	0.0132	-0.0917	-0.0855	0.5282	1.3661	-0.0196	0.5437	-0.0145	0.3980
71	40.48	0.12	-0.1892	0.0124	-0.0898	-0.0757	0.5455	1.3855	-0.0201	0.5520	-0.0145	0.3984
72	40.69	0.10	-0.1844	0.0120	-0.0885	-0.0731	0.5381	1.3943	-0.0197	0.5553	-0.0142	0.3983
73	41.07	0.10	-0.1853	0.0139	-0.0888	-0.0868	0.5377	1.3758	-0.0211	0.5482	-0.0154	0.3985
74	41.09	0.13	-0.1841	0.0102	-0.0765	-0.0709	0.5306	1.3817	-0.0215	0.5513	-0.0156	0.3990
75	41.30	0.10	-0.1837	0.0136	-0.0875	-0.0832	0.5361	1.3852	-0.0235	0.5537	-0.0170	0.3997
76	41.51	0.10	-0.1819	0.0179	-0.0790	-0.1229	0.5595	1.3839	-0.0231	0.5538	-0.0167	0.4002
77	41.72	0.12	-0.1794	0.0154	-0.0934	-0.0935	0.5479	1.3830	-0.0227	0.5540	-0.0178	0.4006
78	41.92	0.13	-0.1847	0.0147	-0.0825	-0.0944	0.5509	1.3867	-0.0238	0.5546	-0.0172	0.4007
79	42.12	0.12	-0.1862	0.0134	-0.0872	-0.0884	0.5510	1.3848	-0.0255	0.5568	-0.0186	0.4007
80	42.30	0.11	-0.1818	0.0111	-0.0985	-0.0897	0.5467	1.3900	-0.0258	0.5589	-0.0185	0.4021
81	42.51	0.11	-0.1835	0.0115	-0.1043	-0.0943	0.5717	1.3956	-0.0236	0.5601	-0.0169	0.4014
82	42.70	0.10	-0.1804	0.0103	-0.0813	-0.0935	0.5534	1.3744	-0.0227	0.5543	-0.0165	0.4017
83	42.89	0.10	-0.1859	0.0094	-0.0865	-0.0958	0.5446	1.3880	-0.0256	0.5601	-0.0187	0.4014
84	43.07	0.12	-0.1881	0.0123	-0.0724	-0.0926	0.5459	1.3874	-0.0252	0.5590	-0.0181	0.4022
85	43.27	0.11	-0.1817	0.0081	-0.0737	-0.0858	0.5637	1.3962	-0.0235	0.5610	-0.0169	0.4019
86	43.48	0.11	-0.1895	0.0066	-0.0574	-0.0865	0.5770	1.3779	-0.0212	0.5524	-0.0154	0.4009
87	43.61	0.10	-0.1867	0.0106	-0.0745	-0.0883	0.5612	1.4095	-0.0246	0.5673	-0.0179	0.4025
88	43.80	0.11	-0.1796	0.0036	-0.0635	-0.0826	0.5319	1.3695	-0.0251	0.5498	-0.0183	0.4015
89	43.99	0.10	-0.1892	0.0125	-0.0528	-0.0864	0.5989	1.3763	-0.0249	0.5558	-0.0181	0.4044
90	44.18	0.11	-0.1836	0.0039	-0.0561	-0.0837	0.5142	1.3601	-0.0253	0.5472	-0.0186	0.4023
91	44.32	0.09	-0.1826	0.0022	-0.0492	-0.0816	0.4764	1.3223	-0.0256	0.5305	-0.0192	0.4012
92	44.53	0.10	-0.0690	0.0	-0.0387	0.0	0.5602	1.3606	-0.0237	0.5454	-0.0175	0.4009

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	77	1.10	1.7	45.0	81.0731	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CHP	CM2	XCPF2	YCPF2
93	44.79	0.11	-0.0719	-0.0007	-0.0033	0.0097	0.4017	1.3755	-0.0233	0.5516	-0.0170	0.4009
94	44.89	0.10	-0.0699	-0.0033	-0.0065	0.0459	0.5750	1.3824	-0.0256	0.5561	-0.0185	0.4023
95	45.07	0.10	-0.0615	-0.0037	-0.0059	0.0643	0.5831	1.3559	-0.0243	0.5443	-0.0180	0.4014
96	45.25	0.10	-0.0460	-0.0033	-0.0326	0.0590	0.5814	1.3708	-0.0252	0.5520	-0.0183	0.4027
97	45.49	0.09	-0.0503	-0.0014	-0.0280	0.0249	0.4984	1.3258	-0.0236	0.5314	-0.0178	0.4008
98	45.61	0.10	-0.0481	-0.0063	-0.0184	0.0045	0.4047	1.3032	-0.0224	0.5215	-0.0172	0.4002
99	45.79	0.11	-0.0492	-0.0012	-0.0220	0.0248	0.4981	1.3047	-0.0230	0.5215	-0.0177	0.3997
100	45.98	0.10	-0.0222	-0.0020	-0.0079	0.1171	0.3559	1.3030	-0.0225	0.5207	-0.0173	0.3996
101	46.18	0.09	-0.0229	-0.0043	-0.0105	0.1667	0.4109	1.3380	-0.0246	0.5363	-0.0183	0.4008
102	46.33	0.10	-0.0279	-0.0071	-0.0154	0.2554	0.4540	1.3536	-0.0264	0.5440	-0.0195	0.4019
103	46.56	0.10	-0.0351	-0.0055	-0.0186	0.1571	0.5257	1.3499	-0.0256	0.5420	-0.0189	0.4015
104	46.67	0.10	-0.0057	-0.0090	-0.0044	1.5764	0.7719	1.3606	-0.0262	0.5470	-0.0192	0.4020
105	46.85	0.09	-0.0432	-0.0052	-0.0174	0.1206	0.4037	1.3267	-0.0247	0.5313	-0.0186	0.4005
106	47.00	0.10	-0.0213	-0.0081	-0.0078	0.3403	0.3662	1.3504	-0.0266	0.5420	-0.0198	0.4014
107	47.20	0.09	-0.0297	-0.0085	-0.0129	0.2196	0.4189	1.3251	-0.0243	0.5305	-0.0189	0.4003
108	47.36	0.09	-0.0456	-0.0062	-0.0156	0.1357	0.5414	1.3100	-0.0236	0.5238	-0.0181	0.3998
109	47.53	0.09	-0.0421	-0.0077	-0.0138	0.1833	0.5286	1.3125	-0.0242	0.5264	-0.0185	0.4011
110	47.69	0.09	-0.0164	-0.0067	0.0004	0.6442	-0.0365	1.3207	-0.0251	0.5296	-0.0190	0.4010
111	47.87	0.08	-0.0410	-0.0063	-0.0154	0.1540	0.3765	1.3299	-0.0250	0.5341	-0.0188	0.4016
112	48.06	0.09	-0.0354	-0.0084	-0.0104	0.1890	0.2849	1.3260	-0.0253	0.5316	-0.0190	0.4009
113	48.25	0.08	-0.0443	-0.0104	-0.0121	0.2443	0.2736	1.3041	-0.0251	0.5249	-0.0191	0.4009
114	48.38	0.10	-0.0310	-0.0140	-0.0064	0.4551	0.2071	1.2999	-0.0252	0.5202	-0.0193	0.4002
115	48.56	0.10	-0.0259	-0.0151	-0.0012	0.5653	0.0465	1.2971	-0.0247	0.5192	-0.0190	0.4003
116	48.73	0.08	-0.0237	-0.0178	-0.0001	0.7511	0.0042	1.2873	-0.0256	0.5154	-0.0198	0.4003
117	48.91	0.09	-0.0096	-0.0158	0.0059	2.0444	-0.6556	1.2971	-0.0256	0.5195	-0.0197	0.4005
118	49.07	0.09	-0.0164	-0.0170	0.0045	1.0346	-0.2744	1.2965	-0.0258	0.5203	-0.0198	0.4007
119	49.29	0.09	-0.0043	-0.0160	0.0084	3.7279	-2.0698	1.3031	-0.0258	0.5218	-0.0198	0.4004
120	49.42	0.09	0.0295	-0.0167	0.0237	-0.6325	0.4977	1.3010	-0.0253	0.5214	-0.0194	0.4008
121	49.59	0.09	0.0439	-0.0138	0.0311	-0.3141	0.7159	1.2927	-0.0240	0.5164	-0.0186	0.3994
122	49.74	0.09	0.0402	-0.0159	0.0307	-0.3945	0.7631	1.2659	-0.0245	0.5156	-0.0190	0.4009
123	49.92	0.08	0.0503	-0.0138	0.0367	-0.2420	0.6512	1.2933	-0.0236	0.5171	-0.0183	0.3998
124	50.11	0.10	0.0536	-0.0127	0.0378	-0.2374	0.7047	1.2906	-0.0239	0.5159	-0.0186	0.3997
125	50.29	0.09	0.0490	-0.0093	0.0324	-0.2245	0.7336	1.2805	-0.0235	0.5107	-0.0184	0.3989
126	50.45	0.08	0.0542	-0.0042	0.0321	-0.0952	0.7256	1.3019	-0.0233	0.5165	-0.0179	0.3987
127	50.63	0.08	0.0450	-0.0044	0.0319	-0.0986	0.7082	1.3119	-0.0249	0.5245	-0.0189	0.3998
128	50.80	0.08	0.0411	-0.0064	0.0314	-0.1561	0.7634	1.2853	-0.0237	0.5125	-0.0185	0.3988
129	50.97	0.08	0.0369	-0.0029	0.0267	-0.0548	0.7288	1.3373	-0.0265	0.5344	-0.0198	0.3996
130	51.14	0.08	0.0387	-0.0025	0.0277	-0.0431	0.6970	1.3398	-0.0270	0.5351	-0.0201	0.3994
131	51.31	0.08	0.0379	-0.0021	0.0269	-0.0556	0.7090	1.3560	-0.0274	0.5438	-0.0201	0.4005
132	51.48	0.07	0.0424	-0.0030	0.0277	-0.0701	0.6449	1.3464	-0.0284	0.5476	-0.0208	0.4009
133	51.62	0.07	0.0384	-0.0034	0.0254	-0.0951	0.6624	1.3597	-0.0282	0.5438	-0.0207	0.4000
134	51.81	0.08	0.0401	-0.0036	0.0264	-0.0900	0.6575	1.3491	-0.0286	0.5483	-0.0209	0.4005
135	51.97	0.07	0.0363	-0.0019	0.0237	-0.0359	0.6547	1.3525	-0.0275	0.5401	-0.0203	0.3993
136	52.12	0.08	0.0376	-0.0009	0.0209	-0.0297	0.6865	1.3487	-0.0278	0.5414	-0.0206	0.4014
137	52.30	0.07	0.0367	-0.0009	0.0238	-0.0233	0.6166	1.3754	-0.0287	0.5511	-0.0208	0.4007
138	52.48	0.07	0.0376	-0.0017	0.0229	-0.0458	0.6173	1.3680	-0.0287	0.5486	-0.0209	0.4010

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	R16-6	PHI	CORR	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	77	1.19	1.7	45.0	BL=0.31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CH2	CB2	XCPF2	YCPF2
139	52.65	0.00	0.0355	-0.0025	0.0235	-0.0549	0.6656	1.3674	-0.0286	0.5494	-0.0209	0.4017
140	52.94	0.00	0.0400	-0.0018	0.0245	-0.0341	0.6190	1.3773	-0.0289	0.5525	-0.0210	0.4012
141	52.39	0.01	0.0377	-0.0311	0.0238	-0.0293	0.6223	1.3805	-0.0292	0.5523	-0.0211	0.4001
142	53.16	0.00	0.0390	-0.0027	0.0215	-0.0879	0.7003	1.3735	-0.0285	0.5492	-0.0207	0.3999
143	53.32	0.00	0.0147	-0.0105	0.0165	-0.3285	1.2117	1.3811	-0.0282	0.5378	-0.0210	0.4010
144	53.51	0.00	0.0372	-0.0056	0.0147	-0.7222	2.0417	1.3523	-0.0289	0.5414	-0.0213	0.4004
145	54.07	0.00	-0.0004	-0.0133	0.0104	6.5000	-10.0000	1.4383	-0.0265	0.5349	-0.0213	0.4009
146	54.95	0.00	0.0022	-0.0033	0.0123	-1.5000	5.5909	1.3418	-0.0285	0.5360	-0.0212	0.4009
147	54.01	0.00	0.0016	-0.0032	0.0113	-1.8125	7.0625	1.3656	-0.0288	0.5389	-0.0214	0.4005
148	54.17	0.00	0.0009	-0.0029	0.0109	-2.4444	12.1111	1.3627	-0.0285	0.5385	-0.0212	0.4010
149	54.11	0.00	0.0015	-0.0026	0.0121	-1.8667	8.0667	1.3304	-0.0279	0.5323	-0.0209	0.4001
150	54.47	0.00	0.0044	-0.0019	0.0123	-0.3409	2.7955	1.3337	-0.0281	0.5343	-0.0210	0.4006
151	54.63	0.00	0.0018	-0.0018	0.0112	-1.0000	8.0000	1.3436	-0.0286	0.5360	-0.0213	0.4006
152	54.78	0.00	-0.0010	-0.0011	0.0100	1.0000	-10.0000	1.3474	-0.0288	0.5403	-0.0213	0.4010
153	54.43	0.00	-0.0022	-0.0019	0.0096	0.6364	-4.4545	1.3295	-0.0281	0.5318	-0.0211	0.4008
154	55.09	0.00	0.0010	-0.0030	0.0115	-3.0000	11.5000	1.3405	-0.0286	0.5373	-0.0213	0.4008
155	55.26	0.00	-0.0003	-0.0018	0.0102	-0.3111	-1.8222	1.3654	-0.0302	0.5475	-0.0221	0.4010
156	55.42	0.00	-0.0029	-0.0036	0.0091	0.4304	-1.0253	1.3704	-0.0308	0.5487	-0.0224	0.4004
157	55.58	0.00	-0.0040	-0.0043	0.0103	1.6333	-4.6333	1.3812	-0.0314	0.5537	-0.0227	0.4009
158	55.71	0.00	-0.0056	-0.0034	0.0087	0.5909	-1.3182	1.3736	-0.0310	0.5499	-0.0225	0.4004
159	55.33	0.00	-0.0017	-0.0052	0.0112	3.0556	-6.5862	1.3750	-0.0314	0.5511	-0.0228	0.4008
160	55.99	0.00	-0.0034	-0.0042	0.0092	0.7778	-1.7037	1.3770	-0.0313	0.5532	-0.0227	0.4018
161	56.15	0.00	-0.0042	-0.0062	0.0098	1.0000	-2.2381	1.3868	-0.0322	0.5572	-0.0232	0.4018
162	56.32	0.00	-0.0063	-0.0052	0.0094	1.8761	-4.2609	1.3924	-0.0323	0.5588	-0.0232	0.4012
163	56.50	0.00	-0.0022	-0.0051	0.0104	2.3152	-5.2273	1.3994	-0.0330	0.5615	-0.0236	0.4011
164	56.62	0.00	-0.0060	-0.0044	0.0104	1.8333	-4.4167	1.3679	-0.0311	0.5481	-0.0227	0.4007
165	56.53	0.00	-0.0018	-0.0060	0.0106	2.2222	-5.6333	1.4059	-0.0327	0.5652	-0.0232	0.4020
166	56.95	0.00	0.0026	-0.0052	0.0116	-2.6000	5.8000	1.4090	-0.0336	0.5659	-0.0238	0.4016
167	57.17	0.00	0.0006	-0.0051	0.0140	-0.7500	2.0588	1.4366	-0.0347	0.5774	-0.0241	0.4019
168	57.32	0.01	0.0012	-0.0044	0.0114	-3.6667	9.8333	1.4331	-0.0348	0.5765	-0.0243	0.4023
169	57.48	0.00	-0.0032	-0.0041	0.0120	-1.7647	5.0000	1.4426	-0.0327	0.5627	-0.0233	0.4012
170	57.59	0.00	0.0032	-0.0024	0.0100	-0.0455	0.7955	1.4225	-0.0337	0.5717	-0.0237	0.4018
171	57.74	0.00	0.0034	-0.0022	0.0114	-0.0736	0.7326	1.4355	-0.0340	0.5774	-0.0237	0.4022
172	57.87	0.00	0.0024	-0.0026	0.0127	-0.0441	0.7028	1.4542	-0.0347	0.5863	-0.0238	0.4032
173	58.03	0.00	0.0013	-0.0052	0.0213	-0.0541	0.6827	1.4763	-0.0352	0.5952	-0.0238	0.4032
174	58.18	0.00	0.0023	-0.0019	0.0239	-0.0556	0.7236	1.4362	-0.0343	0.5788	-0.0239	0.4030
175	58.36	0.00	0.0029	-0.0022	0.0221	-0.0735	0.7617	1.4456	-0.0349	0.5825	-0.0241	0.4030
176	58.46	0.01	0.0027	-0.0020	0.0219	-0.0450	0.7157	1.4717	-0.0363	0.5940	-0.0246	0.4036
177	59.05	0.01	0.0021	-0.0021	0.0225	-0.0484	0.9071	1.4586	-0.0359	0.5865	-0.0246	0.4035
178	58.59	0.00	0.0001	-0.0023	0.0213	-0.0767	0.7100	1.4329	-0.0349	0.5781	-0.0243	0.4035
179	58.69	0.00	0.0020	-0.0021	0.0201	-0.1227	0.9136	1.4023	-0.0336	0.5669	-0.0239	0.4042
180	58.71	0.00	0.0004	-0.0023	0.0250	-0.0663	0.7176	1.4638	-0.0358	0.5928	-0.0244	0.4050

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	Re/ft	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	77	1.10	1.7	45.0	01&OF31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	Cm3	Ca3	XCPF3	YCPF3	CNF4	Cm4	Ca4	XCPF4	YCPF4
1	-5.72	0.13	0.1912	0.9999	0.0673	0.9999	0.4803	-0.1165	-0.0131	-0.0736	0.1186	0.6604
2	-5.73	0.12	0.1831	0.9999	0.0585	0.9999	0.4740	-0.1097	-0.0131	-0.0715	0.1196	0.6521
3	-5.73	0.13	0.1826	0.9999	0.0600	0.9999	0.4772	-0.1110	-0.0132	-0.0716	0.1191	0.6653
4	-5.74	0.14	0.1109	0.9999	0.0565	0.9999	0.5095	-0.0639	-0.0046	-0.0452	0.1348	0.7069
5	-5.71	0.13	0.0334	0.9999	0.0397	0.9999	0.6016	-0.0189	-0.0045	-0.0224	0.2381	1.1652
6	-0.95	0.14	0.0737	0.9999	0.0264	0.9999	1.1097	0.0183	-0.0003	-0.0041	-0.0164	-0.4426
7	1.06	0.13	-0.0134	0.9999	0.0131	0.9999	-0.9357	0.0578	0.0043	0.0046	0.0745	0.0832
8	3.15	0.13	-0.0857	0.9999	-0.0040	0.9999	0.0610	0.0450	0.0047	0.0725	0.0918	0.2373
9	5.11	0.14	-0.1222	0.9999	-0.0260	0.9999	0.2178	0.1435	0.0105	0.0450	0.0733	0.3135
10	7.16	0.14	-0.2011	0.9999	-0.0604	0.9999	0.3324	0.1814	0.0095	0.0656	0.0525	0.3619
11	9.22	0.13	-0.2706	0.9999	-0.0941	0.9999	0.3396	0.2317	0.0062	0.0962	0.0268	0.3893
12	11.30	0.13	-0.3061	0.9999	-0.1343	0.9999	0.3657	0.2846	0.0015	0.1114	0.0053	0.3915
13	13.45	0.13	-0.4739	0.9999	-0.1760	0.9999	0.3725	0.3277	-0.0047	0.1331	-0.0199	0.4061
14	15.42	0.13	-0.6114	0.9999	-0.2240	0.9999	0.3724	0.3427	-0.0117	0.1429	-0.0342	0.4170
15	17.56	0.14	-0.7108	0.9999	-0.2860	0.9999	0.3654	0.3302	-0.0148	0.1604	-0.0340	0.4111
16	19.64	0.13	-0.8152	0.9999	-0.2997	0.9999	0.3672	0.3481	-0.0167	0.1604	-0.0431	0.4134
17	21.73	0.14	-0.9270	0.9999	-0.3390	0.9999	0.3663	0.3565	-0.0152	0.1687	-0.0427	0.4171
18	23.90	0.15	-1.0235	0.9999	-0.3674	0.9999	0.3589	0.3429	-0.0166	0.1626	-0.0491	0.4158
19	26.06	0.15	-1.1260	0.9999	-0.4038	0.9999	0.3594	0.3386	-0.0227	0.1561	-0.0612	0.4433
20	28.56	0.15	-1.2319	0.9999	-0.4310	0.9999	0.3546	0.2982	-0.0347	0.1400	-0.1163	0.4694
21	28.56	0.14	-1.2321	0.9999	-0.4362	0.9999	0.3535	0.3028	-0.0328	0.1426	-0.1082	0.4709
22	28.56	0.16	-1.1997	0.9999	-0.4280	0.9999	0.3576	0.3136	-0.0328	0.1471	-0.1045	0.4690
23	28.56	0.17	-1.2355	0.9999	-0.4438	0.9999	0.3546	0.3024	-0.0345	0.1434	-0.1140	0.4782
24	28.56	0.17	-1.2734	0.9999	-0.4553	0.9999	0.3601	0.3108	-0.0339	0.1476	-0.1077	0.4749
25	28.93	0.19	-1.2110	0.9999	-0.4376	0.9999	0.3543	0.3044	-0.0364	0.1461	-0.1259	0.4791
26	29.18	0.19	-1.2734	0.9999	-0.4446	0.9999	0.3623	0.2956	-0.0416	0.1364	-0.1456	0.4775
27	29.56	0.16	-1.2424	0.9999	-0.4383	0.9999	0.3608	0.2966	-0.0432	0.1432	-0.1455	0.4824
28	29.77	0.21	-1.2477	0.9999	-0.4527	0.9999	0.3629	0.3005	-0.0442	0.1444	-0.1470	0.4805
29	29.96	0.19	-1.2551	0.9999	-0.4551	0.9999	0.3626	0.2975	-0.0422	0.1435	-0.1418	0.4823
30	30.33	0.20	-1.2647	0.9999	-0.4614	0.9999	0.3637	0.3016	-0.0446	0.1482	-0.1485	0.4914
31	30.57	0.20	-1.2652	0.9999	-0.4587	0.9999	0.3626	0.2820	-0.0456	0.1341	-0.1610	0.4932
32	30.40	0.19	-1.2743	0.9999	-0.4661	0.9999	0.3643	0.3042	-0.0440	0.1501	-0.1446	0.4934
33	31.16	0.19	-1.2696	0.9999	-0.4663	0.9999	0.3629	0.3025	-0.0436	0.1509	-0.1441	0.4988
34	31.40	0.19	-1.2842	0.9999	-0.4761	0.9999	0.3644	0.3064	-0.0435	0.1534	-0.1419	0.5007
35	31.62	0.19	-1.3019	0.9999	-0.4753	0.9999	0.3625	0.3310	-0.0444	0.1669	-0.1341	0.4983
36	31.96	0.19	-1.3062	0.9999	-0.4800	0.9999	0.3670	0.3435	-0.0444	0.1704	-0.1292	0.4962
37	32.29	0.19	-1.3157	0.9999	-0.4860	0.9999	0.3663	0.3407	-0.0436	0.1707	-0.1279	0.5012
38	32.49	0.17	-1.3188	0.9999	-0.4869	0.9999	0.3677	0.3440	-0.0446	0.1702	-0.1275	0.4949
39	32.78	0.18	-1.3263	0.9999	-0.4880	0.9999	0.3667	0.3534	-0.0434	0.1775	-0.1228	0.5021
40	33.02	0.17	-1.3273	0.9999	-0.4915	0.9999	0.3647	0.3577	-0.0445	0.1794	-0.1244	0.5014
41	33.29	0.19	-1.3281	0.9999	-0.4914	0.9999	0.3700	0.3652	-0.0434	0.1813	-0.1168	0.4963
42	33.50	0.17	-1.3405	0.9999	-0.4960	0.9999	0.3715	0.3572	-0.0427	0.1802	-0.1195	0.5043
43	33.81	0.17	-1.3387	0.9999	-0.4979	0.9999	0.3714	0.3672	-0.0425	0.1849	-0.1157	0.5008
44	34.06	0.17	-1.3440	0.9999	-0.5010	0.9999	0.3731	0.3669	-0.0404	0.1832	-0.1107	0.5019
45	34.31	0.18	-1.3370	0.9999	-0.4982	0.9999	0.3726	0.3865	-0.0426	0.1919	-0.1102	0.4965
46	34.56	0.16	-1.3276	0.9999	-0.4967	0.9999	0.3741	0.3744	-0.0401	0.1872	-0.1071	0.5008

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART PASS MACH= PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
/ // 1.10 1.7 45.0 01.0E31 0.0 0 0 0 0 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
47	35.42	0.13	-1.3405	9.9999	-0.5085	9.9999	0.3756	0.3666	-0.0390	0.1454	-0.1058	0.5030
46	35.06	0.17	-1.3240	9.9999	-0.4971	9.9999	0.3755	0.3769	-0.0342	0.1907	-0.1005	0.5020
45	35.31	0.17	-1.3243	9.9999	-0.4984	9.9999	0.3753	0.3973	-0.0396	0.1977	-0.0996	0.4976
50	35.47	0.16	-1.3375	9.9999	-0.5038	9.9999	0.3767	0.3754	-0.0344	0.1905	-0.1022	0.5075
51	35.83	0.15	-1.3564	9.9999	-0.5113	9.9999	0.3781	0.3729	-0.0399	0.1904	-0.1070	0.5106
52	35.36	0.15	-1.3554	9.9999	-0.5104	9.9999	0.3794	0.3813	-0.0416	0.1947	-0.1091	0.5106
53	35.31	0.16	-1.3561	9.9999	-0.5112	9.9999	0.3792	0.3973	-0.0498	0.2016	-0.1026	0.5074
54	35.56	0.15	-1.3614	9.9999	-0.5134	9.9999	0.3813	0.3745	-0.0428	0.1941	-0.1143	0.5183
55	35.70	0.14	-1.3569	9.9999	-0.5195	9.9999	0.3824	0.3701	-0.0430	0.1937	-0.1162	0.5234
56	37.02	0.14	-1.2963	9.9999	-0.4939	9.9999	0.3846	0.3308	-0.0293	0.1809	-0.0885	0.5468
57	37.25	0.13	-1.3052	9.9999	-0.5043	9.9999	0.3861	0.3254	-0.0313	0.1862	-0.0961	0.5537
58	37.07	0.14	-1.3032	9.9999	-0.5034	9.9999	0.3863	0.3216	-0.0315	0.1788	-0.0978	0.5559
59	37.73	0.15	-1.3046	9.9999	-0.5039	9.9999	0.3867	0.3159	-0.0279	0.1773	-0.0882	0.5611
61	37.97	0.13	-1.3064	9.9999	-0.5053	9.9999	0.3874	0.2880	-0.0247	0.1660	-0.0856	0.5835
61	38.19	0.15	-1.3102	9.9999	-0.5066	9.9999	0.3861	0.3268	-0.0279	0.1850	-0.0847	0.5626
62	35.66	0.14	-1.2967	9.9999	-0.4988	9.9999	0.3881	0.2672	-0.0214	0.1585	-0.0802	0.5932
63	38.08	0.15	-1.3066	9.9999	-0.5072	9.9999	0.3882	0.2532	-0.0221	0.1583	-0.0875	0.6094
66	38.40	0.15	-1.2965	9.9999	-0.5018	9.9999	0.3895	0.2261	-0.0175	0.1430	-0.0776	0.6325
65	38.15	0.16	-1.3036	9.9999	-0.5076	9.9999	0.3895	0.2459	-0.0193	0.1510	-0.0788	0.6235
66	38.39	0.17	-1.2969	9.9999	-0.5070	9.9999	0.3905	0.2552	-0.0177	0.1570	-0.0695	0.6152
67	38.55	0.13	-1.3003	9.9999	-0.5106	9.9999	0.3908	0.2234	-0.0182	0.1438	-0.0817	0.6438
68	38.41	0.16	-1.3004	9.9999	-0.5076	9.9999	0.3904	0.2156	-0.0165	0.1415	-0.0767	0.6515
69	40.08	0.16	-1.3144	9.9999	-0.5112	9.9999	0.3919	0.2046	-0.0156	0.1355	-0.0769	0.6621
70	40.24	0.16	-1.2913	9.9999	-0.5055	9.9999	0.3915	0.2196	-0.0134	0.1415	-0.0615	0.6477
71	40.48	0.17	-1.3049	9.9999	-0.5124	9.9999	0.3931	0.1995	-0.0132	0.1334	-0.0663	0.6695
72	40.64	0.16	-1.3154	9.9999	-0.5167	9.9999	0.3928	0.2095	-0.0149	0.1373	-0.0713	0.6552
73	40.27	0.16	-1.2727	9.9999	-0.5037	9.9999	0.3936	0.1855	-0.0112	0.1250	-0.0605	0.6737
74	41.09	0.15	-1.3016	9.9999	-0.5117	9.9999	0.3933	0.2009	-0.0137	0.1330	-0.0663	0.6618
75	41.30	0.16	-1.2943	9.9999	-0.5094	9.9999	0.3936	0.1624	-0.0120	0.1146	-0.0736	0.7040
76	41.51	0.16	-1.2963	9.9999	-0.5065	9.9999	0.3944	0.1719	-0.0106	0.1194	-0.0618	0.6950
77	41.72	0.16	-1.2920	9.9999	-0.5135	9.9999	0.3956	0.1335	-0.0100	0.1023	-0.0751	0.7665
78	41.92	0.15	-1.2774	9.9999	-0.5047	9.9999	0.3950	0.1449	-0.0091	0.1056	-0.0629	0.7289
79	42.16	0.16	-1.2745	9.9999	-0.5054	9.9999	0.3956	0.1398	-0.0091	0.1036	-0.0652	0.7412
80	42.36	0.11	-1.2966	9.9999	-0.5049	9.9999	0.3958	0.1312	-0.0087	0.0993	-0.0512	0.7571
81	42.51	0.14	-1.2955	9.9999	-0.5115	9.9999	0.3962	0.1527	-0.0098	0.1096	-0.0391	0.7178
82	42.70	0.14	-1.2852	9.9999	-0.5122	9.9999	0.3970	0.1359	-0.0019	0.0984	-0.0140	0.7242
83	42.89	0.15	-1.2761	9.9999	-0.5075	9.9999	0.3973	0.0912	0.0001	0.0763	0.0011	0.8363
84	43.07	0.16	-1.2751	9.9999	-0.5074	9.9999	0.3983	0.1058	-0.0016	0.0836	-0.0152	0.7898
85	43.27	0.11	-1.2729	9.9999	-0.5080	9.9999	0.3992	0.1346	-0.0011	0.0931	-0.0082	0.6917
86	43.44	0.11	-1.2762	9.9999	-0.5121	9.9999	0.3994	0.1460	-0.0016	0.1049	-0.0084	0.6319
87	43.61	0.14	-1.2761	9.9999	-0.5126	9.9999	0.3998	0.1358	-0.0010	0.0936	-0.0072	0.6695
88	43.80	0.11	-1.2870	9.9999	-0.5057	9.9999	0.3997	0.1092	0.0011	0.0785	0.0101	0.7000
89	44.04	0.11	-1.2793	9.9999	-0.5115	9.9999	0.4008	0.1347	0.0022	0.0750	0.0211	0.7158
90	44.16	0.11	-1.2749	9.9999	-0.5120	9.9999	0.4001	0.0780	0.0044	0.0624	0.0566	0.8008
91	44.32	0.14	-1.2825	9.9999	-0.5051	9.9999	0.3991	0.0467	0.0031	0.0445	0.0038	0.9136
92	44.53	0.14	-1.2725	9.9999	-0.5107	9.9999	0.4013	0.1072	0.0026	0.0703	0.0243	0.6561

MARTIN MISSILE TAILS EFFECTS DATA

TEST	RUN	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	77	1.10	1.7	45.0	n1-0P31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	44.70	0.11	-1.2678	9.9999	-0.5100	9.9999	0.4020	0.1232	0.0023	0.0761	0.0187	0.0176
94	44.98	0.10	-1.2560	9.9999	-0.5043	9.9999	0.4015	0.1062	0.0035	0.0643	0.0330	0.0245
95	45.07	0.16	-1.2534	9.9999	-0.5035	9.9999	0.4017	0.0961	0.0041	0.0592	0.0428	0.0163
96	45.20	0.10	-1.2537	9.9999	-0.5064	9.9999	0.4020	0.1214	0.0028	0.0665	0.0231	0.5644
97	45.44	0.09	-1.2522	9.9999	-0.5066	9.9999	0.4012	0.0781	0.0037	0.0495	0.0475	0.0341
98	45.61	0.10	-1.2565	9.9999	-0.5049	9.9999	0.4025	0.0866	0.0040	0.0515	0.0474	0.0090
99	45.74	0.11	-1.2726	9.9999	-0.5125	9.9999	0.4027	0.0665	0.0042	0.0435	0.0643	0.0536
100	45.98	0.10	-1.2508	9.9999	-0.4984	9.9999	0.4018	0.0976	0.0046	0.0514	0.0472	0.5267
101	46.16	0.09	-1.2630	9.9999	-0.4995	9.9999	0.4019	0.1119	0.0055	0.0579	0.0492	0.5175
102	46.33	0.11	-1.2503	9.9999	-0.5029	9.9999	0.4023	0.0869	0.0047	0.0471	0.0481	0.5299
103	46.50	0.11	-1.2490	9.9999	-0.5001	9.9999	0.4020	0.0967	0.0083	0.0487	0.0876	0.5143
104	46.67	0.10	-1.2218	9.9999	-0.4912	9.9999	0.4021	0.1136	0.0107	0.0523	0.0944	0.4603
105	46.85	0.09	-1.2508	9.9999	-0.5059	9.9999	0.4030	0.0833	0.0091	0.0350	0.1440	0.5522
106	47.00	0.10	-1.2425	9.9999	-0.4962	9.9999	0.4028	0.0814	0.0108	0.0392	0.1330	0.4819
107	47.20	0.09	-1.2347	9.9999	-0.4942	9.9999	0.4016	0.0777	0.0111	0.0362	0.1432	0.4658
108	47.36	0.09	-1.2734	9.9999	-0.5136	9.9999	0.4033	0.0961	0.0088	0.0320	0.1630	0.5907
109	47.53	0.09	-1.2575	9.9999	-0.5063	9.9999	0.4027	0.0959	0.0097	0.0314	0.1636	0.5278
110	47.69	0.09	-1.2767	9.9999	-0.4927	9.9999	0.4023	0.0776	0.0127	0.0340	0.1641	0.4380
111	47.87	0.08	-1.2496	9.9999	-0.5019	9.9999	0.4023	0.0703	0.0097	0.0330	0.1382	0.4687
112	48.06	0.09	-1.2376	9.9999	-0.4974	9.9999	0.4024	0.0868	0.0117	0.0288	0.1754	0.4303
113	48.24	0.08	-1.2638	9.9999	-0.5096	9.9999	0.4025	0.0859	0.0116	0.0225	0.2489	0.4913
114	48.38	0.10	-1.2555	9.9999	-0.5052	9.9999	0.4024	0.0295	0.0141	0.0142	0.4796	0.4830
115	48.56	0.10	-1.2503	9.9999	-0.5021	9.9999	0.4017	0.0161	0.0116	0.0072	0.8085	0.5106
116	48.73	0.08	-1.2457	9.9999	-0.4999	9.9999	0.4013	0.0118	0.0109	0.0056	0.9237	0.4746
117	48.91	0.09	-1.2657	9.9999	-0.5088	9.9999	0.4020	0.0033	0.0126	0.0036	3.8182	1.0303
118	49.07	0.09	-1.2705	9.9999	-0.5111	9.9999	0.4023	0.0255	0.0112	0.0141	0.4409	0.5551
119	49.24	0.09	-1.2554	9.9999	-0.5051	9.9999	0.4024	0.0221	0.0123	0.0098	0.5566	0.3982
120	49.42	0.09	-1.2674	9.9999	-0.5108	9.9999	0.4031	0.0153	0.0136	0.0069	0.8869	0.4518
121	49.59	0.07	-1.2563	9.9999	-0.5065	9.9999	0.4023	0.0219	0.0154	0.0087	0.7032	0.3973
122	49.74	0.09	-1.2459	9.9999	-0.5007	9.9999	0.4020	-0.0067	0.0136	-0.0040	-2.0299	0.8955
123	49.92	0.08	-1.2619	9.9999	-0.5078	9.9999	0.4026	-0.0255	0.0145	-0.0025	-2.6364	0.6545
124	50.11	0.10	-1.2552	9.9999	-0.5060	9.9999	0.4023	0.0164	0.0164	0.0052	1.1081	0.3514
125	50.29	0.09	-1.2542	9.9999	-0.5065	9.9999	0.4023	0.0457	0.0187	0.0130	0.4101	0.2451
126	50.45	0.08	-1.2178	9.9999	-0.4882	9.9999	0.4009	0.0617	0.0205	0.0127	0.3328	0.2062
127	50.63	0.08	-1.2229	9.9999	-0.4915	9.9999	0.4022	0.0627	0.0196	0.0128	0.3131	0.2045
128	50.80	0.09	-1.2264	9.9999	-0.4936	9.9999	0.4025	0.0404	0.0191	0.0081	0.4739	0.1514
129	50.97	0.08	-1.2349	9.9999	-0.4985	9.9999	0.4015	0.0567	0.0174	0.0081	0.3187	0.1484
130	51.14	0.09	-1.2413	9.9999	-0.4990	9.9999	0.4020	0.0439	0.0164	0.0039	0.3744	0.0890
131	51.31	0.07	-1.2531	9.9999	-0.5041	9.9999	0.4023	0.0443	0.0168	0.0039	0.3750	0.0871
132	51.48	0.07	-1.2650	9.9999	-0.5103	9.9999	0.4019	0.0350	0.0128	-0.0001	0.3668	-0.0029
133	51.62	0.07	-1.2450	9.9999	-0.5003	9.9999	0.4019	0.0388	0.0139	0.0007	0.3592	0.0181
134	51.81	0.06	-1.2456	9.9999	-0.4999	9.9999	0.4011	0.0302	0.0092	-0.0021	0.3056	-0.0698
135	51.97	0.07	-1.2178	9.9999	-0.4854	9.9999	0.4002	0.0229	0.0139	-0.0025	0.1703	-0.1092
136	52.12	0.06	-1.2432	9.9999	-0.4985	9.9999	0.4010	0.0270	0.0026	-0.0003	0.1941	-0.0112
137	52.30	0.07	-1.2494	9.9999	-0.5022	9.9999	0.4021	0.0301	0.0025	-0.0001	0.2033	-0.0033
138	52.48	0.07	-1.2570	9.9999	-0.5053	9.9999	0.4020	0.0279	0.0032	-0.0013	0.1151	-0.0468

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/B-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	77	1.10	1.7	45.0	61.0831	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
139	52.65	0.00	-1.2554	0.0000	-0.5338	0.0000	0.4018	0.0297	0.0044	-0.0014	0.1453	-0.0473
140	52.86	0.00	-1.2527	0.0000	-0.5321	0.0000	0.4006	0.0325	0.0029	-0.0001	0.0895	-0.0031
141	52.97	0.00	-1.2638	0.0000	-0.5375	0.0000	0.4017	0.0316	0.0025	-0.0011	0.0794	-0.0349
142	53.16	0.00	-1.2564	0.0000	-0.5341	0.0000	0.4020	0.0331	0.0036	-0.0006	0.1152	-0.0182
143	53.32	0.00	-1.2673	0.0000	-0.5394	0.0000	0.4022	0.0322	0.0034	-0.0005	0.1059	-0.0156
144	53.51	0.00	-1.2776	0.0000	-0.5434	0.0000	0.4035	0.0297	0.0036	-0.0007	0.1435	-0.1561
145	53.67	0.00	-1.2830	0.0000	-0.5462	0.0000	0.4034	0.0157	0.0030	-0.0068	0.1911	-0.4331
146	53.95	0.00	-1.2944	0.0000	-0.5508	0.0000	0.4031	0.0170	0.0031	-0.0072	0.1745	-0.4235
147	54.01	0.00	-1.3216	0.0000	-0.5625	0.0000	0.4029	0.0124	0.0026	-0.0061	0.2256	-0.6532
148	54.17	0.00	-1.3147	0.0000	-0.5323	0.0000	0.4033	0.0150	0.0023	-0.0076	0.1533	-0.5067
149	54.31	0.00	-1.3226	0.0000	-0.5363	0.0000	0.4035	0.0079	0.0030	-0.0110	0.3797	-1.3924
150	54.47	0.00	-1.3240	0.0000	-0.5363	0.0000	0.4035	0.0073	0.0023	-0.0108	0.3151	-1.4795
151	54.63	0.00	-1.3299	0.0000	-0.5414	0.0000	0.4042	0.0100	0.0024	-0.0095	0.2400	-0.9500
152	54.78	0.00	-1.3438	0.0000	-0.5435	0.0000	0.4045	0.0078	0.0025	-0.0110	0.3205	-1.4103
153	54.93	0.00	-1.3226	0.0000	-0.5327	0.0000	0.4026	0.0107	0.0024	-0.0097	0.2243	-0.9065
154	55.09	0.00	-1.3313	0.0000	-0.5366	0.0000	0.4032	0.0146	0.0029	-0.0080	0.1916	-0.5479
155	55.24	0.00	-1.3387	0.0000	-0.5383	0.0000	0.4031	0.0152	0.0029	-0.0080	0.1908	-0.5263
156	55.42	0.02	-1.3449	0.0000	-0.5476	0.0000	0.4057	0.0142	0.0039	-0.0074	0.2031	-0.3854
157	55.56	0.00	-1.3504	0.0000	-0.5536	0.0000	0.4055	0.0176	0.0041	-0.0077	0.2330	-0.4375
158	55.71	0.03	-1.3538	0.0000	-0.5497	0.0000	0.4061	0.0202	0.0043	-0.0072	0.2129	-0.3564
159	55.83	0.02	-1.3492	0.0000	-0.5464	0.0000	0.4063	0.0146	0.0045	-0.0078	0.2419	-0.4194
160	55.99	0.00	-1.3542	0.0000	-0.5507	0.0000	0.4067	0.0199	0.0046	-0.0076	0.2312	-0.3819
161	56.15	0.02	-1.3567	0.0000	-0.5525	0.0000	0.4073	0.0190	0.0048	-0.0082	0.2526	-0.4316
162	56.32	0.03	-1.3587	0.0000	-0.5531	0.0000	0.4074	0.0204	0.0046	-0.0081	0.2353	-0.3971
163	56.50	0.00	-1.3574	0.0000	-0.5543	0.0000	0.4063	0.0247	0.0049	-0.0070	0.1972	-0.2846
164	56.62	0.02	-1.3601	0.0000	-0.5579	0.0000	0.4071	0.0186	0.0045	-0.0064	0.2419	-0.4624
165	56.83	0.00	-1.3623	0.0000	-0.5605	0.0000	0.4081	0.0151	0.0037	-0.0056	0.2450	-0.6358
166	56.95	0.00	-1.3621	0.0000	-0.5571	0.0000	0.4090	0.0178	0.0053	-0.0069	0.2976	-0.5009
167	57.17	0.00	-1.3654	0.0000	-0.5602	0.0000	0.4099	0.0183	0.0048	-0.0080	0.2623	-0.4918
168	57.32	0.00	-1.3654	0.0000	-0.5601	0.0000	0.4099	0.0252	0.0037	-0.0062	0.1474	-0.2470
169	57.49	0.05	-1.3709	0.0000	-0.5652	0.0000	1.4093	0.0092	0.0035	-0.0129	0.4239	-1.4022
170	57.64	0.00	-1.3134	0.0000	-0.5307	0.0000	0.4070	0.0331	0.0042	-0.0058	0.1273	-0.1758
171	57.79	0.00	-1.3153	0.0000	-0.5304	0.0000	0.4075	0.0313	0.0039	-0.0057	0.1250	-0.1827
172	57.97	0.00	-1.3344	0.0000	-0.5463	0.0000	0.4094	0.0303	0.0043	-0.0057	0.1424	-0.1887
173	58.03	0.05	-1.3378	0.0000	-0.5574	0.0000	0.4106	0.0246	0.0046	-0.0075	0.1943	-0.3036
174	58.16	0.03	-1.3175	0.0000	-0.5383	0.0000	0.4096	0.0277	0.0041	-0.0062	0.1466	-0.2246
175	58.32	0.00	-1.3262	0.0000	-0.5427	0.0000	0.4092	0.0284	0.0047	-0.0067	0.1561	-0.2367
176	58.48	0.07	-1.3348	0.0000	-0.5554	0.0000	0.4116	0.0258	0.0045	-0.0068	0.1751	-0.2646
177	58.65	0.07	-1.3444	0.0000	-0.5518	0.0000	0.4102	0.0192	0.0054	-0.0093	0.2612	-0.4844
178	58.69	0.04	-1.3196	0.0000	-0.5389	0.0000	0.4101	0.0266	0.0044	-0.0065	0.1660	-0.2453
179	59.59	0.10	-1.2990	0.0000	-0.5264	0.0000	0.4063	0.0260	0.0042	-0.0068	0.1639	-0.2625
180	58.71	0.00	-1.3487	0.0000	-0.5531	0.0000	0.4101	0.0200	0.0046	-0.0060	0.2300	-0.4500

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PAPL	MACH	MX10=6	RNI	CONE	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	79	1.10	1.7	6.0	-1.0E31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.75	0.02	-1.0149	2.0901	-0.0439	0.0136	-0.0009	0.5166	0.1954	0.3192	-2.0101
2	-5.75	0.02	-1.0281	2.1067	-0.0184	0.0700	-0.0010	0.5137	0.1959	0.3163	-2.0102
3	-5.75	0.00	-1.0146	2.0895	0.1729	-0.0143	-0.0005	0.5164	0.1969	0.3215	-2.0099
4	-5.05	0.03	-0.7729	1.7459	-0.0063	0.0080	-0.0003	0.5184	0.1962	0.3322	-2.0001
5	-3.02	0.03	-0.3276	0.7894	0.0029	-0.0310	0.0006	0.5213	0.1921	0.3392	-1.9632
6	-1.34	0.03	-0.1519	0.3383	0.0259	-0.0524	0.0013	0.5343	0.1946	0.3495	-2.2274
7	0.72	0.03	0.1002	0.0322	-0.0182	0.0286	0.0020	0.5435	0.1912	0.3523	0.0216
8	2.73	0.03	0.3965	-0.4081	-0.0236	0.0135	0.0029	0.5674	0.2052	0.3622	-1.1805
9	4.63	0.04	0.7769	-1.0179	0.0908	-0.0987	0.0038	0.5730	0.2251	0.3479	-1.6920
10	4.76	0.03	1.2490	-2.9615	-0.0377	-0.0143	0.0044	0.5908	0.2502	0.3406	-1.9857
11	8.75	0.03	1.4196	-3.9582	0.0726	-0.0914	0.0055	0.6233	0.2782	0.3451	-2.1290
12	10.43	0.03	2.0208	-5.0317	0.0146	-0.0390	0.0062	0.6415	0.2985	0.3431	-2.2439
13	12.40	0.03	3.0400	-8.2560	-0.0215	-0.0166	0.0071	0.6510	0.3199	0.3312	-2.2976
14	14.97	0.03	3.7476	-8.8165	-0.0190	0.0193	0.0026	0.6670	0.3406	0.3265	-2.2988
15	17.16	0.03	4.3519	-9.6939	0.0103	0.1412	0.0088	0.6777	0.3649	0.3128	-2.2963
16	19.29	0.03	5.0557	-11.2394	-0.0447	0.1931	-0.0011	0.6810	0.3870	0.2940	-2.2231
17	21.49	0.03	5.7449	-12.2339	-0.0192	0.1986	-0.0218	0.6835	0.3935	0.2700	-2.0946
18	23.66	0.03	6.5147	-13.4725	-0.1200	0.5170	-0.0314	0.6829	0.3936	0.2493	-1.9241
19	25.92	0.03	7.5137	-15.5562	-0.0664	0.3767	-0.0618	0.6810	0.4057	0.2353	-1.9040
20	28.51	0.04	8.3489	-17.3932	-0.0557	0.3480	-0.0980	0.6894	0.4354	0.2040	-1.6693
21	28.61	0.02	8.3373	-17.3878	-0.2478	0.5205	-0.1039	0.6868	0.4360	0.2136	-1.6801
22	28.62	0.02	8.3529	-17.4222	-0.1662	0.4252	-0.1156	0.6864	0.4334	0.2030	-1.6668
23	28.63	0.01	8.4758	-17.6355	-0.2345	0.5863	-0.1151	0.6307	0.4337	0.1970	-1.6703
24	28.91	0.03	8.4712	-17.6914	-0.1369	0.4032	-0.0859	0.6411	0.4352	0.2059	-1.6610
25	29.20	0.02	8.6622	-18.1798	-0.2736	0.7642	-0.1261	0.6461	0.4352	0.2109	-1.6625
26	29.56	0.04	8.7947	-18.2725	-0.0135	0.0132	-0.0327	0.6354	0.4353	0.2001	-1.6229
27	29.72	0.03	8.8906	-18.4265	0.0129	-0.2925	-0.0729	0.6246	0.4368	0.1938	-1.5995
28	30.09	0.04	8.9816	-18.6264	0.0500	0.1043	0.0014	0.6156	0.4283	0.1883	-1.5869
29	30.46	0.04	9.1835	-19.0417	0.2933	-0.6042	0.0881	0.6213	0.4315	0.1898	-1.5769
30	30.65	0.04	9.2832	-19.2365	0.6678	-1.4138	0.1914	0.6356	0.4404	0.1952	-1.5587
31	30.95	0.04	9.4537	-19.5753	0.3763	-0.8919	0.1854	0.6130	0.4250	0.1880	-1.5575
32	31.22	0.04	9.5393	-19.7539	0.3523	-0.8867	0.1666	0.5401	0.3777	0.1624	-1.5248
33	31.56	0.04	9.6763	-20.0361	0.3523	-0.5127	0.1466	0.5120	0.3602	0.1518	-1.5021
34	31.76	0.04	9.6817	-20.0361	-0.0398	0.2296	0.0661	0.4798	0.3313	0.1486	-1.4548
35	32.05	0.03	9.7895	-20.2313	0.0659	0.1906	0.0437	0.4841	0.3305	0.1536	-1.4549
36	32.32	0.05	9.8686	-20.4184	0.1367	-0.0296	0.0619	0.4832	0.3309	0.1523	-1.4391
37	32.58	0.03	9.9333	-20.5651	0.1955	-0.1372	0.0682	0.4846	0.3200	0.1646	-1.4381
38	32.86	0.04	10.0001	-20.7617	0.1206	0.0900	0.0341	0.4709	0.3200	0.1510	-1.4140
39	33.13	0.04	10.1795	-21.2462	0.0571	0.0178	0.0963	0.4698	0.3251	0.1448	-1.3497
40	33.36	0.04	10.2323	-21.3769	0.0776	0.1927	0.0065	0.4643	0.3215	0.1429	-1.3661
41	33.65	0.04	10.4491	-21.8783	0.2215	-0.4106	0.0938	0.4761	0.3288	0.1474	-1.3757
42	33.90	0.04	10.5139	-21.9599	-0.0248	0.0643	0.0531	0.4697	0.3277	0.1421	-1.3750
43	34.15	0.03	10.5729	-22.1267	0.2197	-0.4447	0.1000	0.4733	0.3241	0.1493	-1.3529
44	34.38	0.03	10.6241	-22.1949	0.1361	-0.2659	0.0599	0.4534	0.3219	0.1316	-1.3472
45	34.66	0.03	10.6925	-22.3719	0.2309	-0.4335	0.1181	0.4621	0.3253	0.1369	-1.3322
46	34.90	-0.45	11.0054	-22.8988	0.5320	-1.0078	0.1755	0.4727	0.3216	0.1507	-1.3534

PAGE 1 OF 3
SHEET 2 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	MART	MACH	PALN-A	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	79	1.10	1.7	0.0	81.0031	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAH	CAF	XCP
87	35.16	0.06	11.0953	-14.6744	0.2569	-0.5262	0.1751	0.4421	0.3114	0.1309	-1.3407
88	35.46	0.06	11.1543	-14.7316	0.6501	-1.2301	0.2500	0.4335	0.3073	0.1263	-1.3380
89	35.56	0.07	11.2547	-14.8727	0.4547	-0.9175	0.2221	0.4163	0.3046	0.1118	-1.3083
90	35.69	0.06	11.4547	-14.9234	0.5324	-1.0300	0.2062	0.4269	0.3112	0.1156	-1.3028
91	35.11	0.05	11.4114	-14.8203	0.5261	-1.0010	0.2230	0.4170	0.3006	0.1165	-1.2900
92	35.37	0.06	11.5246	-14.7659	0.4057	-0.8373	0.2176	0.4184	0.3021	0.1164	-1.2810
93	35.51	0.07	11.5472	-14.8251	0.4156	-0.8751	0.2142	0.4086	0.3049	0.1036	-1.2757
94	35.63	0.04	11.6751	-14.8373	0.5315	-1.0797	0.2071	0.4043	0.3035	0.1006	-1.2683
95	37.07	0.08	11.7281	-14.8534	0.2521	-0.6967	0.1899	0.3979	0.2990	0.0990	-1.2662
96	37.32	0.06	11.9491	-14.8523	0.3911	-0.8391	0.2077	0.3735	0.2920	0.0815	-1.2535
97	37.55	0.06	12.0214	-14.9152	0.3572	-0.8840	0.1808	0.3944	0.2931	0.1014	-1.2405
98	37.80	0.06	12.0911	-14.9370	0.3121	-0.8428	0.1515	0.3704	0.2897	0.0807	-1.2332
99	38.04	0.02	12.2703	-15.2633	-0.0810	0.0316	0.0546	0.3669	0.2904	0.0765	-1.2033
90	38.26	0.05	12.3752	-15.1715	0.2254	-0.3813	0.1234	0.3655	0.2864	0.0810	-1.2260
91	38.51	0.06	12.4115	-15.1342	0.3728	-0.6256	0.1701	0.3663	0.2870	0.0792	-1.2167
92	38.76	0.06	12.5344	-15.1452	0.3134	-0.5235	0.1359	0.3779	0.2936	0.0940	-1.2242
93	38.97	0.05	12.5943	-15.2622	0.0359	-0.0523	-0.0071	0.3545	0.2867	0.0677	-1.2066
94	39.24	0.03	12.6556	-15.2648	0.0733	-0.1184	0.0673	0.3756	0.2820	0.0935	-1.2260
95	39.45	0.04	12.6734	-15.4235	0.1715	-0.1334	0.0997	0.3662	0.2892	0.0971	-1.2170
96	39.67	0.03	12.7343	-15.2580	0.0464	-0.1300	0.1251	0.3481	0.2741	0.0719	-1.1882
97	39.90	0.01	12.8754	-15.1016	-0.0336	0.0771	0.1305	0.3264	0.2617	0.0591	-1.1727
98	40.13	0.03	12.9976	-15.2547	0.0316	-0.0165	0.0629	0.3316	0.2665	0.0650	-1.1741
99	40.32	0.03	13.0726	-15.4345	0.0616	0.0369	0.0343	0.3365	0.2666	0.0696	-1.1846
70	40.45	0.04	13.1048	-15.2461	0.1085	0.0928	0.1140	0.3239	0.2696	0.0543	-1.1634
71	40.78	0.02	13.2235	-15.5336	-0.0798	-0.2029	0.1038	0.3404	0.2557	0.0846	-1.1746
72	40.94	0.04	13.2721	-15.4137	0.1003	-0.0960	0.0867	0.3273	0.2635	0.0637	-1.1614
73	41.17	0.02	13.3491	-15.3871	0.1147	-0.0244	0.1096	0.3161	0.2472	0.0708	-1.1532
74	41.36	0.02	13.4168	-15.1969	0.0268	0.1135	0.0469	0.3139	0.2471	0.0667	-1.1388
75	41.56	0.02	13.4854	-15.2797	-0.0092	0.1597	0.0813	0.3047	0.2498	0.0552	-1.1249
76	41.78	0.04	13.5317	-14.8723	0.4766	-0.6084	0.1853	0.2825	0.2466	0.0357	-1.1155
77	42.04	0.01	13.7535	-15.5788	-0.0337	0.1020	0.0257	0.3154	0.2422	0.0731	-1.1326
78	42.19	0.02	13.8496	-15.4765	0.0144	0.1437	0.0534	0.3147	0.2478	0.0668	-1.1315
79	42.34	0.02	13.9598	-14.8788	0.1158	0.0069	0.1058	0.2654	0.2334	0.0320	-1.0896
80	42.59	0.03	14.1042	-14.9476	0.1528	-0.0154	0.0945	0.2677	0.2249	0.0428	-1.0903
81	42.78	0.02	13.7259	-15.0177	0.0151	0.1622	0.1055	0.2704	0.2194	0.0510	-1.0534
82	42.96	0.02	14.1077	-15.4971	0.0784	-0.0659	0.0272	0.2635	0.2435	0.0400	-1.1056
83	43.15	0.02	13.9727	-14.8784	0.1491	0.1582	0.0469	0.2637	0.2290	0.0347	-1.0701
84	43.33	0.03	13.9757	-15.1152	0.1442	-0.0777	0.0843	0.2676	0.2401	0.0275	-1.0815
85	43.51	0.04	14.0814	-15.0851	0.1268	-0.0656	0.1013	0.2721	0.2324	0.0397	-1.0719
86	43.68	0.01	14.0449	-14.4532	-0.0075	0.2069	0.0730	0.2750	0.2370	0.0380	-1.0557
87	43.86	0.01	14.0354	-15.0571	-0.0495	0.3367	0.0727	0.2606	0.2184	0.0422	-1.0391
88	44.04	0.02	13.9970	-14.3765	0.0601	0.1114	0.1365	0.2606	0.2242	0.0364	-1.0241
89	44.25	0.01	14.3811	-15.1373	-0.0488	0.1920	0.0340	0.2868	0.2312	0.0556	-1.0568
90	44.40	0.02	14.4023	-14.9961	0.0155	0.1474	0.0458	0.2674	0.2228	0.0446	-1.0339
91	44.58	0.02	14.4481	-14.9780	0.0212	0.3042	0.0853	0.2309	0.2128	0.0181	-1.0132
92	44.76	0.02	14.2579	-14.2843	0.0734	0.1219	0.0978	0.2651	0.2348	0.0303	-1.0020

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10**6	PHI	CONF	L	DEL1	DEL2	DEL3	DELA	TRANSITION
7	79	1.10	1.7	0.0	1.0E31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLM	CLL	CA	CAB	CAF	XCP
93	94.93	0.01	14.5455	-14.5229	-0.0367	0.3695	0.0691	0.2420	0.2315	0.0105	-1.0053
94	95.13	0.02	14.3949	-14.4400	0.0014	0.0457	0.0123	0.2736	0.2325	0.0411	-1.0044
95	95.33	0.02	14.5472	-14.7186	-0.0317	0.4624	0.0458	0.2593	0.2224	0.0369	-1.0083
96	95.50	0.01	14.5691	-14.4554	-0.0513	0.6092	0.0457	0.2493	0.2283	0.0210	-0.9922
97	95.95	0.01	14.7833	-15.0210	-0.0256	0.3409	0.0410	0.2743	0.2379	0.0364	-1.0161
98	95.93	0.02	14.5475	-14.6085	0.0432	0.2322	0.0459	0.2775	0.2330	0.0445	-0.9968
99	95.95	0.01	14.5169	-14.4702	-0.0004	0.3546	0.0478	0.2605	0.2535	0.0070	-0.9768
100	96.20	0.01	14.7736	-14.7105	0.0388	0.4141	0.0468	0.3184	0.2697	0.0490	-0.9958
101	96.38	0.01	14.8153	-14.8967	-0.0440	0.4822	0.0471	0.2857	0.2547	0.0310	-0.9717
102	96.56	0.01	14.9102	-14.9124	-0.0285	0.3294	0.0473	0.2918	0.2744	0.0173	-0.9666
103	96.78	-0.00	15.0537	-14.9594	-0.0354	0.3328	0.0196	0.3130	0.2718	0.0411	-0.9871
104	96.91	0.01	15.1164	-14.9815	0.0535	0.2265	0.0025	0.3642	0.3004	0.0674	-0.9913
105	97.07	0.01	15.1132	-15.0426	0.1037	0.0052	-0.0136	0.4933	0.3261	0.0672	-0.9944
106	97.28	0.00	15.1438	-15.0844	-0.0104	0.3456	0.0042	0.3439	0.3065	0.0374	-0.9935
107	97.49	0.01	15.2074	-14.9281	0.0640	0.1756	-0.0080	0.3599	0.3444	0.0155	-0.9815
108	97.59	0.00	15.2003	-14.8862	-0.0272	0.3136	-0.0195	0.3711	0.3570	0.0141	-0.9866
109	97.77	0.01	15.3007	-14.9363	0.1021	0.2028	-0.0420	0.3928	0.3659	0.0267	-0.9898
110	97.94	0.01	15.2779	-14.8761	0.0555	0.2469	-0.0477	0.3931	0.3674	0.0257	-0.9800
111	98.13	0.01	15.3069	-14.9179	0.0724	0.3352	-0.0705	0.4306	0.3852	0.0450	-0.9811
112	98.29	0.01	15.4940	-14.9800	0.0900	0.2550	-0.0704	0.4144	0.3877	0.0267	-0.9875
113	98.47	0.01	15.4916	-15.0130	-0.0310	0.4529	-0.0819	0.4339	0.3944	0.0395	-0.9823
114	98.69	0.01	15.5477	-14.9935	0.0435	0.4853	-0.0879	0.4296	0.4003	0.0293	-0.9535
115	98.91	-0.01	15.6528	-14.9703	-0.0558	0.4535	-0.0746	0.4090	0.3904	0.0186	-0.9426
116	98.99	0.01	15.7002	-14.9183	0.0908	0.6257	-0.0637	0.4127	0.3872	0.0255	-0.9438
117	99.15	0.02	15.7382	-14.9349	0.1036	0.4983	-0.0574	0.3927	0.3557	0.0270	-0.9379
118	99.38	0.02	15.8346	-14.9251	0.0624	0.6491	-0.0066	0.3793	0.3635	0.0158	-0.9291
119	99.59	0.01	15.7241	-14.7191	-0.0215	0.6854	-0.0121	0.3803	0.3644	0.0159	-0.9371
120	99.80	0.02	15.7838	-14.7353	0.0554	0.7754	0.0104	0.3759	0.3597	0.0062	-0.9336
121	99.83	0.02	15.7429	-14.6108	0.0961	1.0263	0.0270	0.3844	0.3640	0.0204	-0.9253
122	50.01	0.00	15.8406	-14.8005	0.2041	1.0433	0.0325	0.3867	0.3675	0.0192	-0.9314
123	50.19	0.01	15.8466	-14.7297	0.1782	0.9805	0.0271	0.3885	0.3619	0.0266	-0.9299
124	50.39	0.02	15.8473	-14.7408	0.0397	1.1865	0.0323	0.3890	0.3663	0.0227	-0.9343
125	50.62	0.03	15.9038	-14.8652	0.2037	1.0823	0.0324	0.3832	0.3582	0.0250	-0.9227
126	50.79	0.03	15.8862	-14.8468	0.2583	1.2042	0.0378	0.3658	0.3541	0.0077	-0.9220
127	50.97	0.03	15.8820	-14.8112	0.2035	1.2323	0.0377	0.3608	0.3515	0.0093	-0.8993
128	51.03	0.02	15.8478	-14.7863	0.1195	1.2506	0.0373	0.3334	0.3469	-0.0155	-0.8955
129	51.21	0.03	15.9125	-14.8990	0.3734	1.3313	0.0431	0.3307	0.3415	-0.0108	-0.9020
130	51.37	0.03	16.0288	-14.9134	0.3578	1.2556	0.0380	0.3404	0.3440	-0.0076	-0.9055
131	51.56	0.03	15.9195	-14.8938	0.4355	1.3561	0.0432	0.3290	0.3484	-0.0194	-0.9029
132	51.71	0.03	15.9967	-14.8877	0.3962	1.2628	0.0382	0.3359	0.3491	-0.0132	-0.8869
133	51.87	0.03	16.0629	-14.9332	0.2692	1.4204	0.0435	0.3167	0.3459	-0.0312	-0.8788
134	52.06	0.02	15.1341	-14.8903	0.2918	1.3493	0.0382	0.3370	0.3522	-0.0152	-0.8972
135	52.21	0.03	15.1362	-14.8871	0.2025	1.3559	0.0330	0.3468	0.3508	-0.0040	-0.8960
136	52.35	0.03	15.9035	-13.9360	0.2637	1.2319	0.0328	0.3174	0.3388	-0.0214	-0.8773
137	52.55	0.03	16.1368	-14.0269	0.1923	1.0979	0.0295	0.3264	0.3502	-0.0216	-0.8696
138	52.76	0.03	16.0870	-13.9935	0.2483	1.0058	0.0230	0.3264	0.3445	-0.0177	-0.8636

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(INSRUC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART.	MACH	RNLG-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	79	1.10	1.7	0.0	51-0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
139	52.69	0.00	16.3031	-14.2533	0.1658	1.0442	0.0349	0.3322	0.3445	-0.0123	-0.8749
140	53.06	0.03	16.4756	-14.4521	0.1774	0.7470	0.0307	0.3316	0.3467	-0.0151	-0.8772
141	53.23	0.02	16.4723	-14.4821	0.1656	0.6867	0.0304	0.3161	0.3464	-0.0303	-0.8780
142	53.42	0.02	16.5842	-14.4822	0.2003	0.7552	0.0311	0.3063	0.3334	-0.0271	-0.8730
143	53.58	0.03	16.2067	-13.9471	0.2265	0.8423	0.0261	0.3245	0.3446	-0.0201	-0.8609
144	53.70	0.04	16.2446	-14.2048	0.3167	0.6568	0.0248	0.3107	0.3360	-0.0253	-0.8623
145	53.90	0.02	16.3745	-14.1088	0.1532	0.7905	0.0307	0.3190	0.3456	-0.0266	-0.8616
146	54.04	0.02	16.3273	-14.3012	0.1005	0.6824	0.0249	0.3055	0.3412	-0.0357	-0.8759
147	54.22	0.01	16.2830	-14.2022	0.0891	0.7145	0.0253	0.2951	0.3545	-0.0594	-0.8658
148	54.37	0.01	16.5570	-14.0356	0.0849	0.6304	0.0201	0.3176	0.3451	-0.0275	-0.8639
149	54.54	0.01	16.6422	-14.5716	0.1105	0.5679	0.0284	0.3039	0.3437	-0.0398	-0.8756
150	54.67	0.01	16.3656	-14.3625	0.0412	0.6865	0.0259	0.2905	0.3330	-0.0425	-0.8799
151	54.95	0.01	16.5154	-14.7176	0.0822	0.5715	0.0263	0.3057	0.3374	-0.0317	-0.8851
152	54.98	0.01	16.2417	-14.3044	0.0683	0.4628	0.0314	0.2921	0.3325	-0.0404	-0.8804
153	55.11	0.01	16.1467	-14.2763	0.0891	0.4637	0.0252	0.2921	0.3329	-0.0408	-0.8836
154	55.26	0.03	16.4169	-14.6345	0.0486	0.3465	0.0207	0.3154	0.3417	-0.0263	-0.8917
155	55.45	-0.01	16.5154	-14.9447	-0.0491	0.3661	0.0276	0.2987	0.3361	-0.0374	-0.8998
156	55.61	0.02	16.0329	-14.2102	0.2769	0.4217	0.0262	0.2783	0.3441	-0.0657	-0.9025
157	55.73	0.01	16.3345	-14.6035	0.1132	0.4421	0.0200	0.2963	0.3380	-0.0417	-0.8962
158	55.91	0.01	16.4271	-15.3750	0.1080	0.2971	0.0214	0.2864	0.3500	-0.0635	-0.9138
159	56.05	-0.01	16.0210	-15.0474	-0.0349	0.4255	0.0209	0.2998	0.3516	-0.0518	-0.9063
160	56.20	0.02	16.0271	-14.7606	0.0987	0.3948	0.0145	0.2948	0.3497	-0.0549	-0.8985
161	56.37	0.00	16.3633	-14.9353	-0.0345	0.5266	0.0201	0.3079	0.3600	-0.0521	-0.8872
162	56.60	0.01	17.0170	-14.9956	0.0699	0.3074	0.0343	0.2756	0.3509	-0.0952	-0.8816
163	56.70	0.02	16.6564	-14.9260	0.1034	0.4638	0.0322	0.2812	0.3618	-0.0805	-0.8959
164	56.90	-0.03	16.9944	-15.0975	-0.3377	-0.0781	0.0249	0.2335	0.3446	-0.1113	-0.8739
165	57.05	-0.02	17.2525	-15.4468	-0.1734	-0.3427	0.0184	0.2656	0.3849	-0.1193	-0.8925
166	57.23	0.02	17.0455	-15.1104	0.2981	-0.5222	0.0250	0.2389	0.3623	-0.1234	-0.8842
167	57.35	-0.03	16.7747	-15.0549	-0.0228	-0.0308	0.0351	0.2563	0.3615	-0.1052	-0.8855
168	57.52	-0.01	16.9474	-15.2124	-0.0175	0.0257	0.0115	0.2590	0.3665	-0.1055	-0.8977
169	57.68	-0.02	16.6906	-14.8853	-0.0153	0.0736	0.0230	0.2280	0.3466	-0.1204	-0.8856
170	57.82	0.02	16.9433	-14.9436	0.3665	-0.1171	0.0114	0.2003	0.3539	-0.1636	-0.8790
171	57.98	0.02	16.8812	-14.9151	0.2365	0.0686	0.0112	0.2417	0.3823	-0.1406	-0.8776
172	58.12	-0.00	17.1591	-15.3757	-0.0793	0.3868	0.0173	0.2454	0.3964	-0.1508	-0.8961
173	58.24	-0.01	16.8943	-14.8239	-0.0496	0.1576	0.0112	0.2400	0.3772	-0.1372	-0.8773
174	58.38	-0.03	16.7739	-14.5217	-0.0635	0.1112	0.0232	0.2259	0.3821	-0.1546	-0.8657
175	58.58	-0.00	17.3339	-15.3991	-0.3163	0.4610	0.0344	0.2010	0.3549	-0.1539	-0.8998
176	58.71	-0.00	17.1744	-15.0172	-0.0507	0.5252	0.0112	0.2473	0.3685	-0.1212	-0.8974
177	58.79	-0.00	17.3431	-15.7220	-0.0528	0.4120	0.0236	0.2453	0.3785	-0.1332	-0.9046
178	58.78	-0.00	17.2136	-15.3795	-0.2784	0.5117	0.0228	0.2256	0.3664	-0.1408	-0.8932
179	58.78	-0.00	16.7821	-14.8878	-0.0163	0.2652	0.0163	0.1985	0.3577	-0.1592	-0.8735

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(RINSHUC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST / PART 79 ALPH 1.0 RSLV 1.7 PHI 0.0 CONF BLNT31 L 0.0 DEL1 0 DEL2 0 DEL3 0 DEL4 0 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-5.75	0.02	-0.0300	0.0024	0.0259	-0.0892	-0.7435	-0.1459	-0.0174	-0.1047	0.1225	0.7177
2	-5.75	0.02	-0.0300	0.0025	0.0234	-0.0846	-0.6150	-0.1480	-0.0175	-0.1061	0.1185	0.7170
3	-5.75	0.04	-0.0327	0.0023	0.0250	-0.0805	-0.7370	-0.1479	-0.0160	-0.1056	0.1220	0.7127
4	-5.05	0.03	-0.0319	0.0027	0.0266	-0.0849	-0.8333	-0.0968	-0.0132	-0.0814	0.1395	0.8584
5	-3.02	0.04	-0.0306	0.0014	0.0235	-0.0526	-0.6510	-0.0210	-0.0074	-0.0422	0.3762	2.0048
6	-1.34	0.03	-0.0316	0.0021	0.0252	-0.0567	-0.7954	0.0240	-0.0033	-0.0190	-0.1375	-0.7917
7	0.72	0.04	-0.0306	0.0014	0.0229	-0.0403	-0.6599	0.0687	-0.0031	-0.0013	0.0452	-0.0190
8	2.73	0.03	-0.0326	0.0018	0.0235	-0.0554	-0.7231	0.1206	0.0090	0.0241	0.0748	0.2002
9	4.53	0.04	-0.0356	0.0005	0.0221	-0.0223	-0.6173	0.1856	0.0129	0.0597	0.0697	0.3218
10	6.70	0.03	-0.0366	0.0011	0.0243	-0.0286	-0.6312	0.2883	0.0172	0.1063	0.0598	0.3757
11	8.75	0.03	-0.0410	0.0009	0.0263	-0.0145	-0.5855	0.3897	0.0176	0.1511	0.0453	0.3878
12	10.83	0.03	-0.0450	0.0002	0.0233	-0.0045	-0.5169	0.5048	0.0164	0.1981	0.0326	0.3924
13	12.90	0.03	-0.0491	0.0002	0.0263	-0.0044	-0.5400	0.5976	0.0147	0.2356	0.0247	0.3963
14	14.94	0.03	-0.0536	-0.0005	0.0243	0.0119	-0.4831	0.7134	0.0130	0.2813	0.0183	0.3943
15	17.16	0.03	-0.0587	-0.0028	0.0239	0.0406	-0.4223	0.8019	0.0112	0.3156	0.0140	0.3939
16	19.29	0.03	-0.0646	-0.0026	0.0176	0.0409	-0.2569	0.8892	0.0094	0.3475	0.0106	0.3908
17	21.43	0.03	-0.0705	-0.0021	0.0200	0.0265	-0.0757	0.9519	0.0080	0.3701	0.0084	0.3887
18	23.62	0.03	-0.0763	0.0029	-0.0076	-0.0293	0.0747	1.0080	0.0029	0.3937	0.0029	0.3906
19	25.92	0.03	-0.0829	0.0050	-0.0214	-0.0501	0.1788	1.0644	-0.0079	0.4158	-0.0074	0.3906
20	28.41	0.04	-0.1320	0.0065	-0.0326	-0.0494	0.2408	1.0764	-0.0133	0.4150	-0.0124	0.3856
21	28.61	0.02	-0.1516	0.0065	-0.0449	-0.0508	0.2917	1.0783	-0.0137	0.4147	-0.0127	0.3846
22	28.62	0.02	-0.1902	0.0065	-0.0526	-0.0446	0.3293	1.0730	-0.0134	0.4109	-0.0125	0.3839
23	28.63	0.01	-0.1769	0.0079	-0.0551	-0.0452	0.3188	1.0744	-0.0136	0.4113	-0.0127	0.3829
24	28.91	0.03	-0.1356	0.0053	-0.0336	-0.0392	0.2476	1.0798	-0.0140	0.4127	-0.0130	0.3822
25	29.20	0.02	-0.1495	0.0065	-0.0457	-0.0436	0.3058	1.0904	-0.0144	0.4171	-0.0132	0.3823
26	29.50	0.04	-0.0634	0.0032	0.0040	-0.0487	-0.0609	1.1017	-0.0156	0.4221	-0.0142	0.3831
27	29.72	0.04	-0.1151	0.0048	-0.0308	-0.0363	-0.2672	1.0892	-0.0157	0.4153	-0.0144	0.3812
28	30.09	0.04	-0.0974	0.0053	0.0354	-0.0674	-0.6447	1.1073	-0.0167	0.4235	-0.0151	0.3824
29	30.30	0.06	-0.0528	-0.0002	0.0241	-0.0038	1.4023	1.1169	-0.0184	0.4263	-0.0165	0.3835
30	30.65	0.04	-0.1545	-0.0025	0.1215	-0.0162	0.7861	1.1277	-0.0195	0.4330	-0.0173	0.3840
31	30.95	0.07	-0.1768	0.0036	0.1365	-0.0187	0.7211	1.1354	-0.0191	0.4340	-0.0168	0.3844
32	31.22	0.07	-0.1494	0.0016	0.1208	0.0036	0.8089	1.1290	-0.0182	0.4308	-0.0144	0.3816
33	31.50	0.07	-0.1342	-0.0004	0.1125	-0.0069	0.8695	1.1272	-0.0119	0.4287	-0.0106	0.3803
34	31.70	0.04	-0.1167	-0.0017	0.1035	-0.0146	0.8859	1.1305	-0.0097	0.4300	-0.0086	0.3803
35	32.05	0.05	-0.0737	-0.0037	0.0868	-0.0271	0.9620	1.1195	-0.0074	0.4230	-0.0066	0.3778
36	32.32	0.05	-0.1032	-0.0063	0.1004	-0.0394	0.9193	1.1446	-0.0041	0.4345	-0.0071	0.3794
37	32.58	0.05	-0.0783	-0.0087	0.0878	-0.0783	1.1078	1.1509	-0.0054	0.4370	-0.0056	0.3797
38	32.86	0.04	-0.0613	-0.0110	0.0782	-0.2657	1.7874	1.1464	-0.0046	0.4334	-0.0040	0.3780
39	33.13	0.04	-0.1127	-0.0115	0.0969	-0.3992	1.7182	1.1410	-0.0039	0.4298	-0.0034	0.3767
40	33.30	0.04	-0.0101	-0.0179	0.0519	179.0000	-518.0000	1.1380	-0.0046	0.4285	-0.0040	0.3763
41	33.55	0.03	-0.1532	-0.0182	0.1012	-0.1742	1.0850	1.1626	-0.0056	0.4401	-0.0048	0.3786
42	33.90	0.03	-0.0561	-0.0180	0.0941	-0.2613	1.3139	1.1554	-0.0053	0.4371	-0.0046	0.3783
43	34.15	0.03	-0.0305	-0.0176	0.0755	-0.0835	2.0769	1.1520	-0.0049	0.4345	-0.0043	0.3772
44	34.38	0.03	-0.1065	-0.0189	0.0994	-0.1848	0.9736	1.1599	-0.0052	0.4396	-0.0045	0.3790
45	34.98	0.05	-0.1331	-0.0171	0.1192	-0.1288	0.8584	1.1775	-0.0054	0.4458	-0.0046	0.3795
46	34.90	-0.35	0.1358	-0.0140	0.1174	-0.1033	0.8649	1.1826	-0.0049	0.4469	-0.0042	0.3796

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	ALPHA	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	79	1.20	1.7	0.0	81.0831	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	35.16	0.05	0.1754	-0.0284	0.1454	-0.0561	0.7356	1.1848	-0.0026	0.4519	-0.0020	0.3798
48	35.40	0.05	0.2243	-0.0057	0.1534	-0.0250	0.6716	1.1960	-0.0005	0.4519	-0.0004	0.3796
49	35.96	0.07	0.2137	-0.0061	0.1476	-0.0286	0.6915	1.1768	0.0013	0.4450	0.0011	0.3782
50	35.49	0.05	0.1960	-0.0072	0.1437	-0.0372	0.6896	1.1937	0.0001	0.4523	0.0001	0.3789
51	36.11	0.07	0.2175	-0.0041	0.1481	-0.0184	0.6716	1.1856	0.0019	0.4484	0.0016	0.3783
52	36.37	0.08	0.2132	-0.0013	0.1420	-0.0061	0.6659	1.1936	0.0029	0.4518	0.0024	0.3785
53	36.61	0.07	0.2203	-0.0016	0.1437	-0.0016	0.6526	1.1929	0.0033	0.4510	0.0028	0.3781
54	36.83	0.08	0.1961	-0.0063	0.1322	-0.0120	0.6881	1.1969	0.0034	0.4509	0.0028	0.3766
55	37.07	0.10	0.1835	-0.0012	0.1229	-0.0056	0.6896	1.2036	0.0045	0.4542	0.0037	0.3774
56	37.32	0.08	0.1504	0.0	0.1142	0.0	0.7303	1.2061	0.0050	0.4539	0.0050	0.3764
57	37.55	0.08	0.1536	-0.0042	0.1134	-0.0013	0.7133	1.2132	0.0042	0.4575	0.0035	0.3771
58	37.80	0.08	0.1868	0.0010	0.1136	0.0062	0.6987	1.2023	0.0067	0.4521	0.0056	0.3761
59	38.04	0.06	0.1381	0.0041	0.0962	0.0179	1.5289	1.2176	0.0071	0.4568	0.0056	0.3735
60	38.26	0.05	0.0943	-0.0007	0.0825	-0.0071	0.8389	1.2323	0.0056	0.4650	0.0047	0.3773
61	38.51	0.06	0.1605	0.0029	0.1124	0.0181	0.7024	1.2195	0.0071	0.4573	0.0056	0.3750
62	38.74	0.06	0.1064	0.0	0.0857	0.0	0.8464	1.2425	0.0060	0.4662	0.0048	0.3768
63	38.97	0.08	0.0882	-0.0025	0.0784	-0.0516	0.1774	1.2660	0.0055	0.4682	0.0044	0.3757
64	39.24	0.03	0.0776	0.0036	0.0706	0.0413	0.9109	1.2656	0.0068	0.4690	0.0055	0.3765
65	39.45	0.03	0.0496	0.0027	0.0558	0.0184	1.4777	1.2698	0.0052	0.4700	0.0042	0.3760
66	39.67	0.03	0.0414	0.0021	0.0671	0.0446	1.0930	1.2918	0.0087	0.4662	0.0070	0.3754
67	39.90	0.01	0.0837	0.0065	0.0763	0.0667	0.9114	1.2226	0.0115	0.4561	0.0094	0.3731
68	40.13	0.03	-0.0157	0.0003	0.0286	-0.0171	-1.8260	1.2497	0.0092	0.4683	0.0074	0.3747
69	40.32	0.04	-0.0381	-0.0017	0.0149	0.0447	-0.3921	1.2653	0.0075	0.4752	0.0059	0.3755
70	40.55	0.04	-0.0016	0.0037	0.0367	-2.6629	-26.1429	1.2378	0.0117	0.4606	0.0095	0.3721
71	40.76	0.06	0.0397	0.0069	0.0775	0.0547	0.8637	1.2436	0.0113	0.4639	0.0091	0.3730
72	40.94	0.04	0.0358	0.0063	0.0537	0.1218	1.5164	1.2287	0.0139	0.4550	0.0113	0.3703
73	41.17	0.02	0.0302	0.0066	0.0479	0.1307	1.5621	1.2470	0.0134	0.4654	0.0106	0.3732
74	41.36	0.02	-0.0041	0.0020	0.0310	-0.4878	-7.5366	1.2567	0.0117	0.4694	0.0093	0.3735
75	41.58	0.02	0.0449	0.0066	0.0523	0.1516	1.1652	1.2239	0.0127	0.4540	0.0104	0.3711
76	41.78	0.00	0.1533	0.0026	0.1056	0.0592	0.6902	1.2040	0.0160	0.4454	0.0133	0.3687
77	42.00	0.01	0.0242	0.0064	0.0435	0.1368	1.8707	1.2615	0.0072	0.4683	0.0056	0.3748
78	42.19	0.02	0.0025	0.0033	0.0367	1.3043	15.9130	1.2609	0.0110	0.4641	0.0087	0.3723
79	42.34	0.02	0.0530	0.0058	0.0518	0.1248	1.1588	1.1997	0.0219	0.4384	0.0183	0.3654
80	42.59	0.03	0.0055	0.0040	0.0349	0.7273	7.1818	1.2358	0.0174	0.4569	0.0141	0.3697
81	42.76	0.02	0.0242	0.0057	0.0447	0.2558	2.0090	1.2369	0.0156	0.4573	0.0128	0.3697
82	42.98	0.02	0.0065	-0.0006	0.0373	-0.0615	5.7231	1.2712	0.0104	0.4722	0.0082	0.3714
83	43.15	0.02	0.0181	0.0057	0.0409	0.3543	2.7626	1.2092	0.0204	0.4616	0.0169	0.3652
84	43.33	0.03	0.0141	0.0017	0.0493	0.0449	2.7182	1.2287	0.0166	0.4500	0.0137	0.3663
85	43.51	0.03	0.0306	0.0023	0.0584	0.0598	1.5561	1.2349	0.0186	0.4516	0.0151	0.3657
86	43.68	0.01	0.0171	0.0029	0.0473	0.1404	2.7602	1.2270	0.0186	0.4471	0.0152	0.3644
87	43.90	0.01	0.0096	0.0052	0.0391	0.8667	6.5000	1.1885	0.0258	0.4303	0.0215	0.3620
88	44.09	0.02	0.0546	0.0030	0.0451	0.0550	1.2110	1.1990	0.0228	0.4346	0.0191	0.3625
89	44.25	0.01	-0.0206	-0.0008	0.0184	0.0150	-0.8891	1.2591	0.0151	0.4637	0.0123	0.3683
90	44.40	0.02	-0.0216	0.0010	0.0274	-0.0588	-0.9417	1.2424	0.0142	0.4551	0.0115	0.3663
91	44.58	0.02	-0.0134	0.0048	0.0264	-0.2767	-1.7734	1.2145	0.0202	0.4453	0.0166	0.3652
92	44.76	0.02	-0.0039	0.0045	0.0361	-5.0000	-40.2222	1.2176	0.0223	0.4423	0.0184	0.3633

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST 1 | CAR1 79 | MACH 1.10 | RE10-6 1.7 | PHI 3.0 | CONF 31 | L 0.0 | DEL1 0 | DEL2 0 | DEL3 0 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	44.95	0.01	-0.0220	0.0054	0.0278	-0.2452	-1.3990	1.2001	0.0227	0.4350	0.0190	0.3625
94	45.13	0.02	-0.0310	0.0071	0.0186	-0.0671	-0.5306	1.2377	0.0117	0.4551	0.0095	0.3677
95	45.33	0.02	-0.0347	0.0063	0.0161	-0.1056	-0.4060	1.2256	0.0210	0.4474	0.0172	0.3651
96	45.50	0.01	-0.0177	0.0037	0.0274	-0.2090	-1.6554	1.2199	0.0228	0.4479	0.0187	0.3631
97	45.68	0.01	-0.0506	0.0065	0.0060	-0.0826	-0.1161	1.2417	0.0111	0.4583	0.0090	0.3691
98	45.85	0.02	-0.0230	0.0040	0.0265	-0.1695	-1.1186	1.2258	0.0211	0.4474	0.0172	0.3650
99	45.05	0.01	-0.0322	0.0032	0.0211	-0.0997	-0.6573	1.1953	0.0205	0.4388	0.0172	0.3604
100	46.20	0.01	-0.0045	0.0021	0.0365	-0.2711	-3.6211	1.2492	0.0186	0.4587	0.0151	0.3672
101	46.38	0.01	-0.0555	0.0059	0.0119	-0.0675	-0.2148	1.2047	0.0213	0.4386	0.0177	0.3641
102	46.56	0.01	-0.0515	0.0040	0.0116	-0.0778	-0.2257	1.2067	0.0186	0.4390	0.0154	0.3638
103	46.74	-0.01	-0.0502	0.0036	0.0152	-0.0781	-0.3297	1.2357	0.0162	0.4552	0.0131	0.3684
104	46.91	0.01	-0.0037	-0.0004	0.0365	0.1051	-9.8376	1.2674	0.0166	0.4695	0.0130	0.3703
105	47.07	0.01	-0.0272	-0.0043	0.0403	-0.2778	5.5833	1.2755	0.0144	0.4723	0.0115	0.3702
106	47.26	0.00	-0.0293	0.0063	0.0222	-0.0171	-0.7603	1.2646	0.0151	0.4685	0.0120	0.3704
107	47.44	0.01	-0.0313	-0.0017	0.0218	0.0604	-0.6947	1.2642	0.0134	0.4687	0.0106	0.3691
108	47.59	0.00	-0.0370	-0.0010	0.0179	0.0271	-0.4698	1.2513	0.0116	0.4616	0.0093	0.3689
109	47.77	0.01	-0.0318	-0.0023	0.0214	0.0749	-0.6477	1.2614	0.0113	0.4665	0.0090	0.3698
110	47.94	0.01	-0.0145	-0.0038	0.0253	0.2142	-1.5273	1.2767	0.0084	0.4762	0.0066	0.3730
111	48.13	0.01	-0.0330	-0.0008	0.0175	0.0208	-0.5319	1.2339	-0.0004	0.4683	-0.0007	0.3774
112	48.29	0.01	-0.0305	-0.0049	0.0160	0.1673	-0.5980	1.2469	0.0004	0.4689	0.0007	0.3760
113	48.47	0.00	-0.0293	-0.0061	0.0199	0.3092	-0.7595	1.2944	-0.0052	0.4889	-0.0040	0.3777
114	48.64	0.01	-0.0311	-0.0080	0.0168	0.2129	-0.5355	1.2827	-0.0084	0.4859	-0.0070	0.3788
115	48.81	-0.01	-0.0197	-0.0073	0.0230	0.3706	-1.0558	1.2844	-0.0132	0.4901	-0.0103	0.3816
116	48.99	0.01	-0.0143	-0.0074	0.0221	0.5175	-1.6455	1.2791	-0.0176	0.4917	-0.0138	0.3844
117	49.16	0.02	-0.0220	-0.0071	0.0197	0.3142	-0.8717	1.2915	-0.0186	0.4914	-0.0128	0.3835
118	49.30	0.02	-0.0004	-0.0035	0.0273	4.3750	-34.0000	1.2277	-0.0242	0.4745	-0.0229	0.3865
119	49.49	0.01	-0.0006	-0.0061	0.0258	2.7439	-3.1341	1.2442	-0.0238	0.4833	-0.0231	0.3884
120	49.66	0.02	-0.0004	-0.0037	0.0241	0.5606	-3.4515	1.2253	-0.0294	0.4752	-0.0240	0.3878
121	49.83	0.02	-0.0353	0.0038	0.0102	-0.1050	-0.2816	1.1955	-0.0263	0.4621	-0.0217	0.3866
122	50.01	0.02	-0.0420	0.0060	0.0064	-0.0941	-0.1600	1.1920	-0.0266	0.4620	-0.0223	0.3876
123	50.19	0.03	-0.0349	0.0038	0.0092	-0.0907	-0.2340	1.1879	-0.0263	0.4609	-0.0221	0.3880
124	50.36	0.02	-0.0342	0.0043	0.0087	-0.1023	-0.2225	1.1946	-0.0266	0.4642	-0.0222	0.3885
125	50.52	0.02	-0.0345	0.0047	0.0080	-0.1076	-0.1373	1.1798	-0.0269	0.4579	-0.0223	0.3881
126	50.70	0.03	-0.0357	0.0029	0.0066	-0.0943	-0.1419	1.1743	-0.0257	0.4562	-0.0218	0.3885
127	50.87	0.03	-0.0363	0.0033	0.0074	-0.0832	-0.1490	1.1849	-0.0253	0.4606	-0.0217	0.3868
128	51.03	0.00	-0.0367	0.0050	0.0057	-0.1134	-0.0839	1.1558	-0.0234	0.4464	-0.0203	0.3862
129	51.21	0.02	-0.0402	0.0017	0.0144	-0.0369	-0.2954	1.1675	-0.0255	0.4540	-0.0218	0.3889
130	51.37	0.03	-0.0400	0.0054	0.0037	-0.1106	-0.0772	1.1743	-0.0245	0.4555	-0.0206	0.3879
131	51.54	0.02	-0.0396	0.0046	0.0015	-0.0731	-0.0293	1.1584	-0.0249	0.4537	-0.0212	0.3883
132	51.71	0.02	-0.0402	0.0048	0.0038	-0.1011	-0.0788	1.1519	-0.0229	0.4472	-0.0199	0.3883
133	51.87	0.03	-0.0430	0.0047	0.0037	-0.1376	-0.0760	1.1603	-0.0232	0.4497	-0.0200	0.3877
134	52.04	0.03	-0.0477	0.0054	0.0041	-0.1429	-0.1061	1.1810	-0.0253	0.4608	-0.0214	0.3902
135	52.21	0.03	-0.0516	0.0066	0.0027	-0.1272	-0.0554	1.1620	-0.0234	0.4514	-0.0202	0.3885
136	52.35	0.03	-0.0495	0.0061	0.0051	-0.1315	-0.1049	1.1490	-0.0236	0.4482	-0.0206	0.3901
137	52.55	0.03	-0.0491	0.0053	0.0056	-0.1173	-0.1253	1.1569	-0.0246	0.4517	-0.0214	0.3905
138	52.70	0.03	-0.0423	0.0049	0.0082	-0.1019	-0.1943	1.1620	-0.0251	0.4535	-0.0216	0.3903

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST	RUN	MACH	REYN-6	PHI	CONF	I	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	79	1.10	1.7	0.0	61	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	ACPF1	XCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
139	52.84	0.02	-0.0446	0.0042	0.0054	-0.0964	-0.1325	1.1604	-0.0256	0.4526	-0.0212	0.3901
140	53.06	0.03	-0.0346	0.0017	0.0109	-0.0469	-0.2876	1.1761	-0.0260	0.4569	-0.0221	0.3911
141	53.23	0.02	-0.0384	0.0021	0.0102	-0.0734	-0.2772	1.1808	-0.0267	0.4606	-0.0228	0.3930
142	53.40	0.02	-0.0390	0.0018	0.0107	-0.0790	-0.2741	1.1763	-0.0264	0.4604	-0.0228	0.3914
143	53.58	0.03	-0.0401	0.0031	0.0078	-0.0760	-0.1912	1.1604	-0.0251	0.4544	-0.0216	0.3916
144	53.70	0.04	-0.0385	0.0032	0.0075	-0.0733	-0.2031	1.1674	-0.0261	0.4560	-0.0224	0.3905
145	53.90	0.02	-0.0403	0.0026	0.0063	-0.0652	-0.1561	1.1665	-0.0263	0.4577	-0.0225	0.3917
146	54.08	0.02	-0.0399	0.0007	0.0135	-0.0271	-0.5233	1.1934	-0.0274	0.4704	-0.0233	0.3941
147	54.22	0.01	-0.0336	0.0012	0.0112	-0.0356	-0.3323	1.1680	-0.0265	0.4540	-0.0226	0.3930
148	54.37	0.01	-0.0265	0.0007	0.0154	-0.0341	-0.7610	1.2146	-0.0300	0.4789	-0.0247	0.3943
149	54.54	0.01	-0.0301	0.0016	0.0116	-0.0334	-0.3933	1.1918	-0.0281	0.4760	-0.0235	0.3943
150	54.67	0.00	-0.0247	0.0004	0.0161	-0.0163	-0.5732	1.1962	-0.0289	0.4727	-0.0241	0.3951
151	54.85	0.01	-0.0229	0.0004	0.0159	-0.0128	-0.6158	1.2185	-0.0296	0.4841	-0.0243	0.3973
152	54.99	0.01	-0.0234	0.0011	0.0134	-0.0435	-0.5296	1.1915	-0.0277	0.4655	-0.0234	0.3939
153	55.11	0.01	-0.0205	-0.0001	0.0155	-0.0049	-0.7581	1.1843	-0.0265	0.4664	-0.0240	0.3938
154	55.28	0.00	-0.0170	0.0	0.0172	0.0	-1.0115	1.2175	-0.0304	0.4847	-0.0249	0.3981
155	55.42	-0.01	-0.0115	-0.0010	0.0194	0.0070	-1.6076	1.2251	-0.0311	0.4871	-0.0254	0.3974
156	55.61	0.02	-0.0170	-0.0001	0.0172	0.0055	-1.0118	1.2127	-0.0294	0.4827	-0.0242	0.3980
157	55.73	0.01	-0.0241	0.0001	0.0141	-0.0041	-0.5851	1.1876	-0.0299	0.4701	-0.0251	0.3959
158	55.91	0.01	-0.0109	-0.0009	0.0193	0.0736	-1.7706	1.2306	-0.0315	0.4900	-0.0256	0.3982
159	56.05	-0.01	-0.0152	0.0006	0.0157	-0.0330	-0.8828	1.2171	-0.0317	0.4858	-0.0260	0.3988
160	56.20	0.02	-0.0241	0.0003	0.0134	-0.0124	-0.5560	1.2107	-0.0323	0.4839	-0.0267	0.3997
161	56.37	0.00	-0.0245	0.0012	0.0125	-0.0484	-0.5081	1.1894	-0.0305	0.4768	-0.0256	0.3990
162	56.50	0.00	-0.0303	0.0014	0.0102	-0.0464	-0.3377	1.2310	-0.0309	0.4929	-0.0251	0.4004
163	56.70	0.02	-0.0261	0.0011	0.0127	-0.0623	-0.4845	1.2229	-0.0308	0.4887	-0.0252	0.3996
164	56.90	-0.00	-0.0090	0.0006	0.0192	-0.0444	-2.1333	1.2295	-0.0276	0.4912	-0.0224	0.3995
165	57.05	-0.02	-0.0206	0.0003	0.0164	-0.0267	-0.6943	1.2353	-0.0306	0.4935	-0.0247	0.3995
166	57.23	0.02	-0.0050	0.0038	0.0210	-0.6060	-4.3203	1.2390	-0.0304	0.4977	-0.0245	0.4017
167	57.35	-0.05	-0.0170	0.0	0.0165	0.0	-0.9706	1.2185	-0.0323	0.4879	-0.0265	0.4004
168	57.52	-0.01	-0.0345	-0.0023	0.0093	0.0469	-0.2703	1.2359	-0.0309	0.4992	-0.0298	0.4039
169	57.68	-0.02	-0.0339	-0.0027	0.0100	0.0377	-0.3442	1.2352	-0.0357	0.4908	-0.0296	0.4039
170	57.82	0.02	-0.0317	-0.0056	0.0104	0.1772	-0.3418	1.2128	-0.0309	0.4906	-0.0304	0.4045
171	57.94	0.02	-0.0256	-0.0057	0.0135	0.2218	-0.5253	1.2113	-0.0362	0.4883	-0.0299	0.4031
172	58.12	-0.00	-0.0305	-0.0059	0.0110	0.1609	-0.3616	1.2116	-0.0374	0.4888	-0.0308	0.4034
173	58.24	-0.01	-0.0322	-0.0025	0.0100	0.0719	-0.3115	1.1964	-0.0387	0.4835	-0.0323	0.4041
174	58.38	-0.03	-0.0314	-0.0035	0.0110	0.1136	-0.3571	1.1614	-0.0375	0.4759	-0.0317	0.4036
175	58.58	-0.04	-0.0345	0.0	0.0097	0.0	-0.2820	1.2360	-0.0409	0.5031	-0.0331	0.4071
176	58.71	-0.00	-0.0011	0.0002	0.0072	-0.0009	-0.1756	1.2289	-0.0400	0.4981	-0.0325	0.4054
177	58.89	-0.02	-0.0356	-0.0014	0.0093	0.0356	-0.2312	1.2306	-0.0408	0.5000	-0.0331	0.4063
178	58.78	-0.04	-0.0376	-0.0001	0.0096	0.0027	-0.2507	1.2290	-0.0400	0.5002	-0.0325	0.4070
179	58.74	-0.02	-0.0327	-0.0004	0.0101	0.0092	-0.3099	1.1986	-0.0391	0.4848	-0.0317	0.4045

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	PALH	MACH-E	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	79	1.10	1.7	0.0	81-0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM3	CM3	ACPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.75	0.02	0.0363	9.9999	0.0016	9.9999	0.0249	-0.2566	-0.0197	-0.0850	0.0771	0.3319
2	-5.75	0.02	0.0376	9.9999	0.0001	9.9999	0.0027	-0.2549	-0.0194	-0.0851	0.0763	0.3337
3	-5.75	0.03	0.0403	9.9999	0.0015	9.9999	0.0373	-0.2545	-0.0194	-0.0847	0.0780	0.3327
4	-5.05	0.03	0.0340	9.9999	0.0004	9.9999	0.0231	-0.2059	-0.0145	-0.0612	0.0706	0.2973
5	-3.02	0.03	0.0360	9.9999	0.0	9.9999	0.0	-0.1267	-0.0060	-0.0206	0.0623	0.1620
6	-1.34	0.03	0.0441	9.9999	0.0018	9.9999	0.0410	-0.0810	-0.0026	0.0010	0.0522	-0.0124
7	0.72	0.03	0.0402	9.9999	0.0120	9.9999	1.0899	-0.0309	0.0039	0.0192	-0.1266	-0.6234
8	2.73	0.03	0.0402	9.9999	0.0020	9.9999	0.0499	0.0222	0.0103	0.0440	0.4640	1.9775
9	4.63	0.04	0.0462	9.9999	0.0015	9.9999	0.0378	0.0960	0.0153	0.0802	0.1597	0.8351
10	6.70	0.03	0.0409	9.9999	0.0004	9.9999	0.0196	0.2019	0.0193	0.1278	0.0958	0.6328
11	8.75	0.03	0.0432	9.9999	0.0016	9.9999	0.0310	0.3011	0.0208	0.1724	0.0692	0.5724
12	10.83	0.03	0.0463	9.9999	0.0020	9.9999	0.0433	0.4132	0.0201	0.2230	0.0487	0.5395
13	12.96	0.03	0.0505	9.9999	0.0056	9.9999	0.0992	0.5229	0.0167	0.2656	0.0326	0.5080
14	14.94	0.03	0.0498	9.9999	0.0057	9.9999	0.1031	0.6445	0.0143	0.3121	0.0222	0.4843
15	17.16	0.03	0.0497	9.9999	0.0063	9.9999	0.0360	0.7396	0.0127	0.3457	0.0172	0.4674
16	19.29	0.03	0.0497	9.9999	0.0071	9.9999	0.1431	0.8361	0.0105	0.3801	0.0120	0.4548
17	21.43	0.03	0.0439	9.9999	0.0057	9.9999	0.1256	0.9868	0.0074	0.3984	0.0084	0.4493
18	23.62	0.03	0.0477	9.9999	0.0061	9.9999	0.1702	0.9568	0.0039	0.4243	0.0041	0.4434
19	25.92	0.03	0.0477	9.9999	0.0081	9.9999	0.1702	0.9988	-0.0056	0.4349	-0.0056	0.4356
20	28.51	0.04	0.0445	9.9999	0.0089	9.9999	0.1807	1.0067	-0.0106	0.4306	-0.0108	0.4277
21	29.61	0.02	0.0433	9.9999	0.0084	9.9999	0.1574	1.0123	-0.0116	0.4311	-0.0115	0.4259
22	28.62	0.02	0.0463	9.9999	0.0080	9.9999	0.1732	1.0221	-0.0126	0.4330	-0.0124	0.4236
23	28.63	0.01	0.0451	9.9999	0.0083	9.9999	0.1844	1.0198	-0.0117	0.4301	-0.0115	0.4217
24	28.91	0.03	0.0345	9.9999	0.0054	9.9999	0.1406	1.0134	-0.0121	0.4262	-0.0120	0.4205
25	29.20	0.02	0.0373	9.9999	0.0065	9.9999	0.1237	1.0201	-0.0134	0.4310	-0.0131	0.4200
26	29.56	0.04	0.0432	9.9999	0.0079	9.9999	0.1633	1.0202	-0.0123	0.4266	-0.0121	0.4181
27	29.72	0.04	0.0504	9.9999	0.0109	9.9999	0.2167	1.0344	-0.0122	0.4319	-0.0116	0.4175
28	30.09	0.04	0.0444	9.9999	0.0095	9.9999	0.2144	1.0290	-0.0110	0.4264	-0.0107	0.4144
29	30.40	0.05	0.0539	9.9999	0.0150	9.9999	0.2786	1.0433	-0.0103	0.4319	-0.0099	0.4139
30	30.65	0.05	0.0509	9.9999	0.0133	9.9999	0.2618	1.0377	-0.0086	0.4279	-0.0085	0.4123
31	30.95	0.07	0.0473	9.9999	0.0126	9.9999	0.2664	1.0413	-0.0066	0.4362	-0.0060	0.4110
32	31.22	0.07	0.0519	9.9999	0.0136	9.9999	0.2641	1.0402	-0.0013	0.4341	-0.0012	0.4095
33	31.50	0.07	0.0536	9.9999	0.0118	9.9999	0.2418	1.0355	0.0096	0.4211	0.0093	0.4066
34	31.76	0.06	0.0426	9.9999	0.0106	9.9999	0.2347	1.0202	0.0112	0.4154	0.0110	0.4071
35	32.05	0.05	0.0419	9.9999	0.0102	9.9999	0.2440	1.0309	0.0115	0.4191	0.0112	0.4065
36	32.32	0.05	0.0447	9.9999	0.0142	9.9999	0.2463	1.0334	0.0117	0.4198	0.0113	0.4062
37	32.58	0.05	0.0444	9.9999	0.0113	9.9999	0.2606	1.0456	0.0121	0.4208	0.0117	0.4063
38	32.86	0.04	0.0424	9.9999	0.0102	9.9999	0.2506	1.0285	0.0137	0.4177	0.0133	0.4061
39	33.13	0.05	0.0441	9.9999	0.0103	9.9999	0.2575	1.0382	0.0129	0.4220	0.0125	0.4064
40	33.38	0.04	0.0456	9.9999	0.0124	9.9999	0.2725	1.0399	0.0133	0.4225	0.0128	0.4062
41	33.65	0.05	0.0431	9.9999	0.0138	9.9999	0.3116	1.0629	0.0122	0.4319	0.0115	0.4063
42	33.90	0.03	0.0378	9.9999	0.0097	9.9999	0.2573	1.0532	0.0130	0.4276	0.0124	0.4060
43	34.15	0.25	0.0420	9.9999	0.0115	9.9999	0.2745	1.0568	0.0121	0.4297	0.0115	0.4074
44	34.38	0.03	0.0346	9.9999	0.0110	9.9999	0.2765	1.0550	0.0146	0.4274	0.0139	0.4051
45	34.66	0.03	0.0413	9.9999	0.0128	9.9999	0.3107	1.0755	0.0138	0.4360	0.0129	0.4054
46	34.90	-0.35	0.0478	9.9999	0.0169	9.9999	0.3543	1.1016	0.0138	0.4465	0.0126	0.4053

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	SALV-S	CM1	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	74	1.10	1.7	0.0	01=0F31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
47	35.16	0.02	0.0431	9.9999	0.0137	9.9999	0.3186	1.1267	0.0152	0.4544	0.0136	0.4055
48	35.40	0.02	0.0407	9.9999	0.0113	9.9999	0.2763	1.1244	0.0156	0.4564	0.0134	0.4059
49	35.66	0.01	0.0382	9.9999	0.0204	9.9999	0.3702	1.1288	0.0167	0.4579	0.0150	0.4057
50	35.89	0.05	0.0428	9.9999	0.0131	9.9999	0.3059	1.1178	0.0163	0.4533	0.0146	0.4056
51	36.11	0.03	0.0518	9.9999	0.0167	9.9999	0.3631	1.1265	0.0166	0.4563	0.0148	0.4051
52	36.37	0.06	0.0450	9.9999	0.0160	9.9999	0.3563	1.1338	0.0169	0.4569	0.0149	0.4048
53	36.61	0.07	0.0462	9.9999	0.0161	9.9999	0.3642	1.1313	0.0166	0.4579	0.0147	0.4048
54	36.83	0.06	0.0490	9.9999	0.0167	9.9999	0.3696	1.1367	0.0152	0.4621	0.0134	0.4067
55	37.07	0.06	0.0420	9.9999	0.0149	9.9999	0.3437	1.1394	0.0163	0.4628	0.0143	0.4062
56	37.32	0.06	0.0409	9.9999	0.0131	9.9999	0.3211	1.1507	0.0135	0.4691	0.0118	0.4076
57	37.55	0.05	0.0429	9.9999	0.0165	9.9999	0.3675	1.1499	0.0156	0.4674	0.0136	0.4064
58	37.80	0.05	0.0417	9.9999	0.0202	9.9999	0.3915	1.1502	0.0163	0.4659	0.0142	0.4050
59	38.04	0.06	0.0365	9.9999	0.0124	9.9999	0.3229	1.1779	0.0114	0.4815	0.0097	0.4088
60	38.26	0.05	0.0463	9.9999	0.0171	9.9999	0.3701	1.1697	0.0134	0.4767	0.0115	0.4075
61	38.51	0.06	0.0475	9.9999	0.0159	9.9999	0.3882	1.1662	0.0155	0.4730	0.0133	0.4056
62	38.74	0.06	0.0389	9.9999	0.0114	9.9999	0.3233	1.1685	0.0143	0.4768	0.0123	0.4080
63	38.97	0.06	0.0375	9.9999	0.0131	9.9999	0.3475	1.1644	0.0135	0.4755	0.0116	0.4083
64	39.24	0.03	0.0372	9.9999	0.0124	9.9999	0.3315	1.1765	0.0125	0.4806	0.0106	0.4089
65	39.45	0.03	0.0361	9.9999	0.0143	9.9999	0.3743	1.1752	0.0128	0.4803	0.0109	0.4087
66	39.67	0.03	0.0377	9.9999	0.0135	9.9999	0.3590	1.1853	0.0106	0.4849	0.0090	0.4091
67	39.90	0.01	0.0347	9.9999	0.0116	9.9999	0.3353	1.1818	0.0135	0.4832	0.0116	0.4089
68	40.13	0.03	0.0420	9.9999	0.0144	9.9999	0.3748	1.1950	0.0143	0.4863	0.0121	0.4087
69	40.32	0.03	0.0371	9.9999	0.0123	9.9999	0.3324	1.1855	0.0125	0.4842	0.0106	0.4084
70	40.55	0.04	0.0365	9.9999	0.0120	9.9999	0.3297	1.1697	0.0124	0.4860	0.0104	0.4085
71	40.78	0.02	0.0371	9.9999	0.0139	9.9999	0.3649	1.1915	0.0147	0.4877	0.0124	0.4093
72	40.99	0.04	0.0371	9.9999	0.0124	9.9999	0.3459	1.1934	0.0135	0.4866	0.0113	0.4077
73	41.17	0.02	0.0299	9.9999	0.0093	9.9999	0.3121	1.2001	0.0146	0.4891	0.0117	0.4076
74	41.36	0.02	0.0396	9.9999	0.0139	9.9999	0.3519	1.1941	0.0145	0.4868	0.0122	0.4077
75	41.56	0.02	0.0363	9.9999	0.0132	9.9999	0.3697	1.1835	0.0161	0.4810	0.0136	0.4064
76	41.74	0.05	0.0455	9.9999	0.0160	9.9999	0.3965	1.1736	0.0205	0.4757	0.0175	0.4053
77	42.00	0.01	0.0333	9.9999	0.0093	9.9999	0.3185	1.2051	0.0155	0.4895	0.0129	0.4062
78	42.19	0.02	0.0344	9.9999	0.0134	9.9999	0.3449	1.2094	0.0133	0.4907	0.0110	0.4058
79	42.39	0.02	0.0410	9.9999	0.0155	9.9999	0.3808	1.1969	0.0175	0.4850	0.0147	0.4052
80	42.59	0.03	0.0419	9.9999	0.0153	9.9999	0.3705	1.2012	0.0153	0.4872	0.0128	0.4056
81	42.78	0.02	0.0429	9.9999	0.0117	9.9999	0.3557	1.2162	0.0148	0.4921	0.0122	0.4046
82	42.96	0.02	0.0335	9.9999	0.0127	9.9999	0.3802	1.1911	0.0161	0.4907	0.0152	0.4036
83	43.15	0.02	0.0299	9.9999	0.0116	9.9999	0.3594	1.1996	0.0180	0.4851	0.0150	0.4044
84	43.33	0.03	0.0384	9.9999	0.0132	9.9999	0.3677	1.1872	0.0145	0.4806	0.0122	0.4048
85	43.51	0.03	0.0293	9.9999	0.0077	9.9999	0.3156	1.1970	0.0177	0.4826	0.0148	0.4031
86	43.68	0.01	0.0393	9.9999	0.0119	9.9999	0.3567	1.1973	0.0153	0.4849	0.0128	0.4050
87	43.90	0.01	0.0328	9.9999	0.0125	9.9999	0.3670	1.1950	0.0175	0.4803	0.0147	0.4019
88	44.04	0.02	0.0295	9.9999	0.0084	9.9999	0.3230	1.1637	0.0094	0.4722	0.0072	0.4058
89	44.25	0.01	0.0337	9.9999	0.0143	9.9999	0.3661	1.1947	0.0155	0.4813	0.0130	0.4028
90	44.40	0.02	0.0265	9.9999	0.0103	9.9999	0.3503	1.1872	0.0150	0.4776	0.0127	0.4023
91	44.56	0.02	0.0343	9.9999	0.0138	9.9999	0.4035	1.2003	0.0162	0.4835	0.0120	0.4028
92	44.76	0.02	0.0284	9.9999	0.0113	9.9999	0.3576	1.1903	0.0110	0.4792	0.0093	0.4026

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10**6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	7	7.96	1.10	1.67	0.0	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
93	44.95	0.01	0.0271	9.9999	0.0097	9.9999	0.3516	1.2001	0.0069	0.0583	0.0001	0.4069
94	45.13	0.02	0.0396	9.9999	0.0170	9.9999	0.4262	1.1824	0.0133	0.0747	0.0113	0.4014
95	45.34	0.02	0.0343	9.9999	0.0106	9.9999	0.4042	1.2173	0.0046	0.0556	0.0028	0.4071
96	45.56	0.01	0.0267	9.9999	0.0070	9.9999	0.2846	1.1817	-0.0014	0.0430	-0.0012	0.4087
97	45.68	0.01	0.0300	9.9999	0.0151	9.9999	0.3786	1.2207	0.0180	0.0530	0.0148	0.3998
98	45.85	0.02	0.0315	9.9999	0.0107	9.9999	0.3408	1.1651	-0.0074	0.0473	-0.0063	0.4112
99	46.05	0.01	0.0326	9.9999	0.0121	9.9999	0.3723	1.1843	-0.0007	0.0739	-0.0006	0.4078
100	46.20	0.01	0.0327	9.9999	0.0108	9.9999	0.3313	1.1456	-0.0215	0.0766	-0.0188	0.4160
101	46.38	0.01	0.0338	9.9999	0.0126	9.9999	0.3739	1.1917	-0.0129	0.0926	-0.0108	0.4136
102	46.56	0.01	0.0301	9.9999	0.0123	9.9999	0.4100	1.1955	-0.0064	0.0845	-0.0054	0.4086
103	46.79	-0.00	0.0325	9.9999	0.0126	9.9999	0.3951	1.1816	-0.0180	0.0942	-0.0119	0.4140
104	46.91	0.01	0.0293	9.9999	0.0085	9.9999	0.3691	1.1851	-0.0224	0.0701	-0.0198	0.4141
105	47.07	0.01	0.0356	9.9999	0.0137	9.9999	0.3859	1.1274	-0.0222	0.0965	-0.0197	0.4136
106	47.26	0.00	0.0292	9.9999	0.0117	9.9999	0.4154	1.1669	-0.0224	0.0841	-0.0197	0.4149
107	47.44	0.01	0.0284	9.9999	0.0112	9.9999	0.3849	1.1398	-0.0211	0.0718	-0.0185	0.4139
108	47.59	0.00	0.0284	9.9999	0.0108	9.9999	0.3750	1.1309	-0.0213	0.0672	-0.0189	0.4131
109	47.77	0.01	0.0345	9.9999	0.0135	9.9999	0.4167	1.1295	-0.0220	0.0909	-0.0195	0.4129
110	47.94	0.01	0.0337	9.9999	0.0131	9.9999	0.3899	1.0995	-0.0211	0.0533	-0.0192	0.4123
111	48.13	0.01	0.0334	9.9999	0.0131	9.9999	0.3527	1.1154	-0.0216	0.0556	-0.0195	0.4119
112	48.29	0.01	0.0271	9.9999	0.0089	9.9999	0.3296	1.1266	-0.0221	0.0629	-0.0197	0.4117
113	48.47	0.00	0.0254	9.9999	0.0090	9.9999	0.3571	1.1040	-0.0205	0.0549	-0.0185	0.4102
114	48.64	0.01	0.0307	9.9999	0.0154	9.9999	0.4114	1.1147	-0.0206	0.0563	-0.0185	0.4094
115	48.81	-0.00	0.0239	9.9999	0.0108	9.9999	0.3755	1.1095	-0.0182	0.0561	-0.0164	0.4093
116	48.99	0.01	0.0337	9.9999	0.0136	9.9999	0.4048	1.1196	-0.0182	0.0582	-0.0163	0.4092
117	49.16	0.02	0.0314	9.9999	0.0119	9.9999	0.3694	1.1310	-0.0190	0.0619	-0.0168	0.4084
118	49.30	0.02	0.0301	9.9999	0.0105	9.9999	0.3533	1.1296	-0.0224	0.0630	-0.0199	0.4099
119	49.49	0.01	0.0289	9.9999	0.0103	9.9999	0.3472	1.1388	-0.0225	0.0676	-0.0198	0.4106
120	49.66	0.02	0.0301	9.9999	0.0111	9.9999	0.3700	1.1500	-0.0236	0.0703	-0.0206	0.4089
121	49.83	0.02	0.0346	9.9999	0.0153	9.9999	0.4487	1.1795	-0.0248	0.0526	-0.0210	0.4091
122	50.01	0.04	0.0336	9.9999	0.0140	9.9999	0.4174	1.1911	-0.0243	0.0869	-0.0204	0.4088
123	50.19	0.03	0.0346	9.9999	0.0179	9.9999	0.4532	1.1679	-0.0236	0.0850	-0.0201	0.4083
124	50.36	0.02	0.0324	9.9999	0.0136	9.9999	0.4149	1.1880	-0.0247	0.0847	-0.0207	0.4080
125	50.52	0.04	0.0402	9.9999	0.0181	9.9999	0.4514	1.1856	-0.0240	0.0825	-0.0198	0.4069
126	50.70	0.05	0.0296	9.9999	0.0134	9.9999	0.4512	1.1885	-0.0204	0.0638	-0.0172	0.4070
127	50.87	0.05	0.0317	9.9999	0.0134	9.9999	0.4241	1.1803	-0.0204	0.0804	-0.0173	0.4070
128	51.03	0.06	0.0341	9.9999	0.0150	9.9999	0.4412	1.1569	-0.0198	0.0710	-0.0172	0.4078
129	51.21	0.06	0.0317	9.9999	0.0141	9.9999	0.4452	1.1839	-0.0178	0.0625	-0.0151	0.4075
130	51.37	0.05	0.0341	9.9999	0.0167	9.9999	0.4912	1.1875	-0.0211	0.0856	-0.0178	0.4089
131	51.54	0.07	0.0327	9.9999	0.0160	9.9999	0.4643	1.1908	-0.0189	0.0873	-0.0159	0.4092
132	51.71	0.07	0.0396	9.9999	0.0183	9.9999	0.4633	1.1659	-0.0202	0.0779	-0.0174	0.4099
133	51.87	0.05	0.0345	9.9999	0.0172	9.9999	0.4956	1.1732	-0.0199	0.0814	-0.0170	0.4103
134	52.04	0.06	0.0274	9.9999	0.0121	9.9999	0.4432	1.1817	-0.0226	0.0867	-0.0193	0.4119
135	52.21	0.09	0.0322	9.9999	0.0156	9.9999	0.4922	1.1696	-0.0213	0.0517	-0.0182	0.4118
136	52.35	0.03	0.0329	9.9999	0.0166	9.9999	0.5000	1.1560	-0.0210	0.0759	-0.0182	0.4124
137	52.55	0.03	0.0311	9.9999	0.0143	9.9999	0.4813	1.1557	-0.0225	0.0769	-0.0195	0.4126
138	52.70	0.03	0.0304	9.9999	0.0142	9.9999	0.5013	1.1535	-0.0220	0.0762	-0.0191	0.4128

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REALGAS	MNI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	/9	1.1	1.7	0.0	M1a0P31	0.0	0	0	0	0	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
139	52.89	[illegible]	0.0234	[illegible]	0.0150	9.9999	0.4580	1.1516	-0.0212	0.4751	-0.0188	0.4125
140	53.00	0.03	0.0275	[illegible]	0.0141	9.9999	0.5146	1.1647	-0.0224	0.4818	-0.0192	0.4130
141	53.23	[illegible]	[illegible]	[illegible]	0.0142	9.9999	0.5175	1.1746	-0.0234	0.4856	-0.0200	0.4134
142	53.42	0.04	0.0267	[illegible]	0.0139	9.9999	0.4860	1.1629	-0.0221	0.4800	-0.0190	0.4128
143	53.56	0.03	0.0304	[illegible]	0.0150	9.9999	0.5326	1.1539	-0.0221	0.4758	-0.0192	0.4123
144	53.70	0.04	[illegible]	[illegible]	0.0147	9.9999	0.5225	1.1513	-0.0223	0.4740	-0.0194	0.4117
145	53.90	0.04	0.0354	[illegible]	0.0161	9.9999	0.5127	1.1651	-0.0227	0.4801	-0.0195	0.4121
146	54.04	0.02	0.0331	[illegible]	0.0170	9.9999	0.5152	1.1727	-0.0242	0.4836	-0.0207	0.4122
147	54.22	0.01	0.0313	[illegible]	0.0154	9.9999	0.4936	1.1535	-0.0229	0.4745	-0.0199	0.4113
148	54.37	0.01	0.0304	[illegible]	0.0161	9.9999	0.5201	1.1906	-0.0253	0.4897	-0.0212	0.4113
149	54.54	0.01	[illegible]	[illegible]	0.0160	9.9999	0.5351	1.1751	-0.0251	0.4842	-0.0213	0.4120
150	54.67	0.00	0.0314	[illegible]	0.0174	9.9999	0.5472	1.1761	-0.0246	0.4836	-0.0209	0.4112
151	54.85	0.01	0.0313	[illegible]	[illegible]	9.9999	0.5160	1.1983	-0.0264	0.4940	-0.0220	0.4123
152	54.98	0.01	[illegible]	[illegible]	0.0122	9.9999	0.4980	1.1560	-0.0245	0.4751	-0.0212	0.4110
153	55.11	0.01	0.0331	[illegible]	0.0181	9.9999	0.5371	1.1811	-0.0256	0.4866	-0.0215	0.4103
154	55.28	0.01	[illegible]	[illegible]	0.0160	9.9999	0.5121	1.1913	-0.0267	0.4941	-0.0224	0.4105
155	55.42	-0.01	[illegible]	[illegible]	0.0172	9.9999	0.5495	1.1998	-0.0262	0.4934	-0.0235	0.4113
156	55.61	0.02	0.0285	[illegible]	0.0161	9.9999	0.5341	1.1871	-0.0251	0.4881	-0.0236	0.4112
157	55.73	[illegible]	[illegible]	[illegible]	0.0153	9.9999	0.5356	1.1888	-0.0256	0.4751	-0.0219	0.4099
158	55.91	0.01	0.0316	[illegible]	0.0164	9.9999	0.5449	1.2028	-0.0266	0.4967	-0.0237	0.4113
159	55.35	-0.00	[illegible]	[illegible]	0.0165	9.9999	0.5121	1.1922	-0.0279	0.4900	-0.0234	0.4110
160	56.20	0.02	0.0302	[illegible]	0.0192	9.9999	0.5470	1.1940	-0.0275	0.4902	-0.0230	0.4105
161	56.37	0.01	[illegible]	[illegible]	0.0183	9.9999	0.5649	1.1748	-0.0259	0.4820	-0.0220	0.4103
162	56.66	0.00	0.0215	[illegible]	0.0124	9.9999	0.5581	1.2162	-0.0266	0.5001	-0.0216	0.4112
163	56.76	[illegible]	[illegible]	[illegible]	0.0113	9.9999	0.5918	1.2052	-0.0264	0.4945	-0.0235	0.4103
164	56.90	-0.03	0.0267	[illegible]	0.0130	9.9999	0.5417	1.2047	-0.0279	0.4944	-0.0231	0.4104
165	57.05	-0.02	[illegible]	[illegible]	0.0128	9.9999	0.4979	1.2122	-0.0275	0.4972	-0.0227	0.4102
166	57.23	0.02	0.0318	0.0000	0.0173	9.9999	0.5492	1.2134	-0.0269	0.4976	-0.0221	0.4101
167	57.35	-0.03	[illegible]	[illegible]	0.0180	9.9999	0.4902	1.1952	-0.0252	0.4894	-0.0213	0.4095
168	57.52	-0.01	0.0272	[illegible]	0.0159	9.9999	0.5720	1.2264	-0.0264	0.5017	-0.0215	0.4096
169	57.68	-0.02	[illegible]	[illegible]	0.0169	9.9999	0.5120	1.2309	-0.0269	0.4918	-0.0207	0.4095
170	57.86	0.02	0.0273	[illegible]	0.0140	9.9999	0.5041	1.2017	-0.0210	0.4860	-0.0175	0.4061
171	57.98	[illegible]	[illegible]	[illegible]	0.0165	9.9999	0.5998	1.1909	-0.0219	0.4853	-0.0179	0.4056
172	58.16	-0.04	0.0255	[illegible]	0.0136	9.9999	0.5356	1.2078	-0.0214	0.4890	-0.0178	0.4049
173	58.29	[illegible]	0.0334	[illegible]	0.0175	9.9999	0.5224	1.2051	-0.0278	0.4916	-0.0230	0.4079
174	58.38	-0.03	0.0302	[illegible]	0.0165	9.9999	0.4839	1.1897	-0.0262	0.4823	-0.0204	0.4054
175	58.58	-0.04	[illegible]	[illegible]	0.0099	9.9999	0.4561	1.2344	-0.0325	0.5071	-0.0262	0.4095
176	58.71	-0.06	0.0317	[illegible]	0.0173	9.9999	0.5475	1.2409	-0.0317	0.5074	-0.0255	0.4089
177	58.79	-0.00	[illegible]	[illegible]	0.0130	9.9999	0.5677	1.2421	-0.0320	0.5040	-0.0257	0.4090
178	58.78	-0.04	0.0274	[illegible]	0.0140	9.9999	0.5128	1.2398	-0.0325	0.5071	-0.0262	0.4090
179	58.78	-0.04	[illegible]	[illegible]	0.0177	9.9999	0.5380	1.2091	-0.0309	0.4928	-0.0255	0.4076

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 1 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	VALUE	MRC	CURVE	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	BS	0.60	1.7	0.0	MIL-DTL	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2

PAGE 1 OF 1
SHEET 2 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	RUN	MACH NUMBER	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	45	0.60	0.0	MIXED	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 3 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	PALO=A	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	65	0.60	1.7	0.0	BLANK	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2

PAGE 1 OF 1
SHEET 4 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RNL=6	PHI	CONF	L	DEL1	DEL2	DEL3	DELA	TRANSITION
7	M5	0.60	1.7	0.0	B1=0F0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 5 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/FT X10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	85	0.60	1.7	6.0	BLADE	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2

PAGE 1 OF 1
SHEET 1 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REYN-E	PHI	CLM	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	#5	0.60	1.7	0.0	BL=DF0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.58	0.01	-0.3002	-0.5772	0.0205	-0.0716	0.0050	0.2716	0.1124	0.1693	1.9230
2	-5.65	0.01	-0.3007	-0.5784	0.0573	-0.0771	-0.0013	0.2715	0.1015	0.1701	1.9171
3	-5.60	0.01	-0.3151	-0.5838	0.0249	-0.0717	-0.0013	0.2693	0.1004	0.1690	1.7889
4	-5.00	0.01	-0.3152	-0.5835	0.0574	-0.0346	-0.0014	0.2713	0.1018	0.1696	1.7879
5	-5.58	0.01	-0.3295	-0.5508	0.0531	-0.0510	-0.0014	0.2667	0.1002	0.1686	1.6717
6	-5.58	0.01	-0.3295	-0.5508	0.0211	-0.0591	-0.0014	0.2688	0.1002	0.1687	1.6717
7	-5.58	0.02	-0.3295	-0.5508	0.0348	-0.0848	-0.0013	0.2705	0.1002	0.1704	1.6717
8	-5.65	0.02	-0.2988	-0.5387	0.0515	-0.0749	-0.0012	0.2705	0.1011	0.1695	1.8044
9	-5.58	0.01	-0.3294	-0.5502	0.0660	-0.0884	-0.0013	0.2706	0.1002	0.1704	1.6707
10	-5.58	0.01	-0.3296	-0.5506	0.0375	-0.0490	-0.0014	0.2706	0.1002	0.1705	1.6707
11	-5.76	0.01	-0.3261	-0.5478	-0.0071	-0.0291	0.0009	0.2757	0.0997	0.1761	1.5179
12	-5.57	0.01	-0.3120	-0.5242	0.0231	-0.0354	-0.0017	0.2816	0.0958	0.1852	1.5201
13	-5.29	0.02	-0.2438	-0.3490	0.0521	-0.0750	-0.0007	0.2785	0.0903	0.1882	1.6316
14	-2.50	0.02	-0.1730	-0.1176	0.0862	-0.0792	0.0	0.2756	0.0794	0.1962	0.6798
15	-0.96	0.03	-0.0943	0.0512	0.0703	-0.0655	0.0006	0.2760	0.0742	0.2018	-0.5672
16	1.19	0.02	-0.0128	0.2724	0.0568	-0.0637	0.0013	0.2810	0.0784	0.2026	-21.2672
17	3.10	0.03	0.0842	0.4772	0.0714	-0.0443	0.0020	0.2855	0.0879	0.1976	7.5962
18	4.54	0.03	0.1529	0.6721	0.0696	-0.0380	0.0028	0.2894	0.1021	0.1873	4.3965
19	6.69	0.02	0.2516	0.8989	0.0253	-0.0226	0.0036	0.2959	0.1176	0.1769	3.2102
20	8.48	0.02	0.3396	0.9228	-0.0050	-0.0055	0.0044	0.3027	0.1307	0.1720	2.4293
21	10.26	0.02	0.5226	1.1933	-0.0180	0.0817	0.0050	0.3060	0.1434	0.1626	1.9965
22	12.04	0.02	0.6809	1.1335	-0.0444	0.1346	0.0057	0.3048	0.1561	0.1487	1.7150
23	13.83	0.02	0.8003	1.2591	-0.0106	0.0456	0.0070	0.3043	0.1678	0.1365	1.5732
24	15.67	0.02	0.9374	1.3875	-0.0736	0.1758	0.0002	0.3014	0.1838	0.1176	1.4801
25	17.50	0.01	1.0923	1.5547	-0.1136	0.3045	0.0080	0.2977	0.1970	0.1007	1.4234
26	19.29	0.01	1.2069	1.7206	-0.1916	0.5986	0.0081	0.2919	0.2153	0.0765	1.3690
27	21.10	0.00	1.4292	1.9007	-0.3228	0.7995	0.0016	0.2804	0.2284	0.0575	1.3341
28	22.91	-0.01	1.6447	2.0995	-0.4593	1.0479	0.0017	0.2703	0.2387	0.0316	1.2765
29	24.69	0.00	1.8337	2.4535	-0.2019	0.6559	0.0117	0.2577	0.2505	0.0072	1.3359
30	26.53	0.02	2.1247	2.8575	0.0382	-0.0307	0.0156	0.2295	0.2586	-0.0271	1.3449
31	27.43	0.02	2.2548	3.0754	0.0184	-0.0880	0.0196	0.2161	0.2609	-0.0448	1.3502
32	27.43	0.03	2.2958	3.0665	0.0578	0.0552	0.0162	0.2139	0.2632	-0.0493	1.3357
33	28.84	-0.01	2.3089	3.0159	0.0406	0.0154	0.0161	0.2351	0.2623	-0.0272	1.3073
34	27.46	0.03	2.3275	3.0958	0.1142	-0.0496	0.0167	0.2086	0.2608	-0.0522	1.3300
35	28.31	0.03	2.3433	3.1737	0.0976	-0.0729	0.0170	0.2182	0.2656	-0.0474	1.3545
36	28.44	0.04	2.4519	3.1984	0.2594	-0.2121	0.0177	0.2039	0.2651	-0.0612	1.3037
37	28.91	0.03	2.4858	3.2670	0.2525	-0.2261	0.0182	0.2029	0.2660	-0.0631	1.3130
38	29.21	0.05	2.5171	3.2985	0.3612	-0.3458	0.0184	0.2047	0.2693	-0.0651	1.3041
39	29.59	0.05	2.5772	3.4202	0.4233	-0.4544	0.0189	0.1966	0.2745	-0.0779	1.2768
40	29.79	0.06	2.6358	3.2624	0.5691	-0.4168	0.0188	0.2131	0.2858	-0.0727	1.2379
41	30.60	0.07	2.7151	3.3074	0.6241	-0.5329	0.0188	0.2098	0.2911	-0.0812	1.2183
42	30.32	0.07	2.7172	3.2111	0.6775	-0.1877	0.0185	0.2215	0.3034	-0.0818	1.1398
43	30.61	0.07	2.8588	3.4602	0.7962	-0.3583	0.0266	0.2123	0.3052	-0.0928	1.1771
44	30.87	0.08	2.9301	3.3554	0.7584	-0.1774	0.0190	0.2169	0.3085	-0.0915	1.1453
45	31.15	0.08	3.0302	3.4731	0.8432	-0.1054	0.0192	0.2101	0.3180	-0.1079	1.1462
46	31.42	0.08	3.1161	3.3709	0.7830	0.0783	0.0259	0.2214	0.3312	-0.1098	1.0817

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(INSROC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 2 OF 5

MANTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIO-M PHI CONF I DEL1 DEL2 DEL3 DEL4 TRANSITION
7 85 0.61 1.7 0.0 BLKOFO 0.0 OFF OFF OFF OFF UNKNOWN

POINT	ALPHA	BETA	CA	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
87	31.89	0.00	3.2276	3.0775	0.6109	0.3255	0.0254	0.2203	0.3391	-0.1188	1.0557
88	31.96	0.00	3.2916	3.0660	0.8304	0.4113	0.0254	0.2227	0.3461	-0.1234	1.0527
89	32.21	0.00	3.2503	3.0652	0.7455	0.6454	0.0248	0.2246	0.3534	-0.1290	0.9869
90	32.48	0.00	3.2594	3.0279	0.7904	0.8144	0.0249	0.2216	0.3572	-0.1356	0.9631
91	32.73	0.00	3.2806	3.0594	0.7775	0.8678	0.0256	0.2191	0.3548	-0.1357	0.9938
92	32.98	0.00	3.2595	3.0369	0.7112	1.0865	0.0246	0.2205	0.3619	-0.1414	0.9754
93	33.24	0.00	3.2399	3.0610	0.6509	1.1172	0.0251	0.2167	0.3591	-0.1444	0.9862
94	33.48	0.00	3.2511	3.0188	0.6443	1.2931	0.0249	0.2088	0.3661	-0.1573	0.9658
95	33.73	0.00	3.2772	3.0456	0.6517	1.4627	0.0249	0.2157	0.3713	-0.1556	0.9816
96	33.99	0.00	3.2597	3.0344	0.5858	1.3388	0.0256	0.2050	0.3744	-0.1694	0.9938
97	34.22	0.00	3.2784	3.0213	0.6149	1.6119	0.0248	0.2138	0.3825	-0.1687	0.9818
98	34.45	0.00	3.1372	3.0150	0.5406	1.7936	0.0245	0.2100	0.3881	-0.1781	0.9221
99	34.71	0.00	3.2589	3.0553	0.4568	2.1651	0.0235	0.2093	0.3963	-0.1850	0.8608
100	34.96	0.00	3.3537	3.0580	0.5575	2.3652	0.0229	0.2161	0.4032	-0.1871	0.8172
101	35.17	0.00	3.3237	3.0650	0.4741	2.8079	0.0219	0.2241	0.4144	-0.1903	0.7683
102	35.42	0.00	3.3020	3.0488	0.4549	2.7342	0.0217	0.2218	0.4173	-0.1955	0.7698
103	35.66	0.00	3.3026	3.0407	0.3957	2.9665	0.0216	0.2099	0.4185	-0.2086	0.8337
104	35.87	0.00	3.3242	3.0790	0.5094	2.2572	0.0208	0.2123	0.4186	-0.2063	0.8198
105	36.12	0.00	3.3051	3.0384	0.4562	2.3020	0.0254	0.2033	0.4167	-0.2134	0.8188
106	36.36	0.00	3.2557	3.0686	0.4247	2.1057	0.0263	0.2016	0.4170	-0.2154	0.8135
107	36.57	0.00	3.2808	3.0855	0.3877	2.2481	0.0260	0.2002	0.4255	-0.2253	0.7829
108	36.83	0.00	3.2178	3.0495	0.2858	2.7340	0.0325	0.2024	0.4348	-0.2324	0.7473
109	37.06	0.00	3.2538	3.0446	0.2896	3.0391	0.0318	0.2082	0.4406	-0.2324	0.7072
110	37.28	0.00	3.2401	3.0404	0.4135	3.1018	0.0315	0.2045	0.4425	-0.2380	0.6756
111	37.52	0.00	3.2247	3.0500	0.3563	3.2086	0.0261	0.1970	0.4448	-0.2478	0.6583
112	37.75	0.00	3.2465	3.0132	0.3027	3.0743	0.0327	0.2015	0.4468	-0.2453	0.6650
113	37.98	0.00	3.2818	3.0073	0.2558	3.0719	0.0330	0.1986	0.4508	-0.2562	0.6581
114	38.21	0.00	3.2949	3.0363	0.2826	2.8266	0.0342	0.1860	0.4503	-0.2645	0.6884
115	38.42	0.00	3.2737	3.0287	0.2095	2.7722	0.0346	0.1963	0.4471	-0.2508	0.7104
116	38.63	0.00	3.2156	3.1102	0.2775	2.4245	0.0362	0.1694	0.4415	-0.2721	0.7452
117	38.85	0.00	3.2365	3.0264	0.1329	2.8878	0.0384	0.1667	0.4376	-0.2709	0.7632
118	39.05	0.00	3.2346	3.0378	0.2562	2.4055	0.0367	0.1639	0.4366	-0.2727	0.7891
119	39.28	0.00	3.2534	3.0244	0.2631	2.5825	0.0364	0.1648	0.4423	-0.2775	0.7559
120	39.48	0.00	3.2739	3.0439	0.3178	2.5277	0.0388	0.1598	0.4380	-0.2782	0.7759
121	39.69	0.00	3.2838	3.0334	0.3337	2.4239	0.0375	0.1551	0.4413	-0.2862	0.7597
122	39.87	0.00	3.2653	3.0343	0.2967	2.4766	0.0380	0.1535	0.4422	-0.2948	0.7711
123	40.09	0.00	3.2814	3.0477	0.3612	2.6299	0.0375	0.1556	0.4469	-0.2934	0.7303
124	40.29	0.00	3.1614	3.0472	0.3814	2.7355	0.0375	0.1515	0.4470	-0.2956	0.7125
125	40.50	0.00	3.1353	3.0412	0.2843	2.6732	0.0384	0.1361	0.4551	-0.3191	0.7268
126	40.71	0.00	3.1645	3.0778	0.3240	2.5546	0.0390	0.1391	0.4474	-0.3084	0.7403
127	40.90	0.00	3.1724	3.0524	0.3121	2.5343	0.0389	0.1404	0.4493	-0.3090	0.7415
128	41.11	0.00	3.1724	3.0419	0.3651	2.7920	0.0385	0.1428	0.4604	-0.3177	0.6814
129	41.30	0.00	3.1282	3.0483	0.3819	2.7157	0.0391	0.1313	0.4580	-0.3268	0.6924
130	41.51	0.00	3.1372	3.0339	0.4007	2.8865	0.0385	0.1432	0.4633	-0.3202	0.6477
131	41.70	0.00	3.1435	3.0279	0.3491	2.8472	0.0392	0.1528	0.4733	-0.3206	0.6573
132	41.88	0.00	3.1795	3.0110	0.4021	2.7394	0.0398	0.1375	0.4724	-0.3350	0.6457

PAGE 1 OF 1
SHEET 3 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART ES 0.80 | HALF BODY=0 1.7 | PHI 0.0 | CONE WING=0 0.0 | L | DEL1 OFF | DEL2 OFF | DEL3 OFF | DEL4 OFF | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	42.07	0.05	6.7954	4.1825	1.5452	2.8215	3.0397	0.1539	0.4796	-0.3258	0.6154
94	42.28	0.06	6.8813	4.0438	0.6317	2.9670	0.0391	0.1340	0.4772	-0.3433	0.5876
95	42.43	0.07	7.0469	3.9154	0.8099	2.9166	0.0396	0.1415	0.4889	-0.3474	0.5556
96	42.61	0.07	7.1358	3.8478	0.7566	2.9103	0.0400	0.1454	0.4903	-0.3449	0.5392
97	42.79	0.06	7.1817	3.8059	0.7377	2.8490	0.0405	0.1282	0.4874	-0.3592	0.5487
98	42.98	0.06	7.2415	3.8041	0.7415	2.9246	0.0404	0.1354	0.4904	-0.3550	0.5305
99	43.17	0.06	7.4033	3.6065	0.5645	3.0121	0.0401	0.1193	0.4893	-0.3700	0.4872
100	43.32	0.06	7.3497	3.7245	0.7704	2.8707	0.0411	0.1484	0.4855	-0.3368	0.5047
101	43.53	0.07	7.6003	3.3713	0.4200	3.0515	0.0409	0.1311	0.4909	-0.3598	0.4385
102	43.69	0.07	7.7124	3.2499	0.4108	3.0758	0.0409	0.1140	0.4845	-0.3745	0.4279
103	43.88	0.06	7.8024	3.2496	1.0053	3.0218	0.0413	0.1175	0.4807	-0.3632	0.4165
104	44.09	0.09	8.0378	3.1011	1.1202	3.3960	0.0403	0.1014	0.4836	-0.3822	0.3858
105	44.26	0.09	8.0505	3.0996	1.1052	3.3029	0.0417	0.1017	0.4801	-0.3785	0.3823
106	44.43	0.08	8.0644	3.1593	0.9235	3.3142	0.0412	0.0905	0.4767	-0.3862	0.3918
107	44.61	0.08	8.1906	3.0008	0.9766	3.3954	0.0411	0.0846	0.4756	-0.3912	0.3668
108	44.80	0.08	8.2763	2.9706	1.0457	3.2884	0.0417	0.0957	0.4792	-0.3835	0.3621
109	44.96	0.09	8.3976	2.9041	1.1437	3.1961	0.0423	0.0824	0.4762	-0.3938	0.3459
110	45.15	0.09	8.4743	2.8636	1.1208	3.3934	0.0419	0.0947	0.4762	-0.3820	0.3379
111	45.32	0.09	8.5607	2.8718	1.1651	3.4503	0.0418	0.0807	0.4757	-0.3950	0.3243
112	45.50	0.09	8.5406	2.9991	1.0781	3.4150	0.0424	0.0758	0.4733	-0.3975	0.3512
113	45.68	0.08	8.6444	2.8648	0.9969	3.4753	0.0425	0.0682	0.4748	-0.4066	0.3337
114	45.85	0.08	8.6448	2.9403	1.0354	3.5911	0.0421	0.0605	0.4757	-0.4152	0.3401
115	46.01	0.09	8.8039	2.8365	1.0860	3.5351	0.0428	0.0746	0.4826	-0.4079	0.3248
116	46.19	0.09	8.9112	2.7923	1.0921	3.6963	0.0425	0.0727	0.4866	-0.4138	0.3133
117	46.37	0.09	8.9138	2.8035	1.0554	3.5414	0.0433	0.0615	0.4837	-0.4221	0.3258
118	46.54	0.10	9.0360	2.8243	1.1414	3.7024	0.0441	0.0803	0.4984	-0.4180	0.3236
119	46.70	0.10	9.1145	2.7668	1.1287	3.7254	0.0432	0.0700	0.4925	-0.4224	0.3038
120	46.90	0.09	9.1399	2.8492	1.0374	3.8368	0.0441	0.0717	0.5024	-0.4306	0.3117
121	47.05	0.09	9.1540	2.8572	1.0523	4.0308	0.0435	0.0652	0.5161	-0.4308	0.3121
122	47.22	0.09	9.2129	2.7975	0.9973	3.9657	0.0441	0.0782	0.5191	-0.4408	0.3037
123	47.38	0.09	9.2937	2.8092	1.0536	3.9439	0.0443	0.0704	0.5176	-0.4427	0.3023
124	47.56	0.09	9.2233	2.8304	0.9672	4.0076	0.0440	0.0673	0.5176	-0.4502	0.3069
125	47.73	0.09	9.3316	2.7658	1.0288	3.9641	0.0445	0.0754	0.5338	-0.4583	0.2964
126	47.90	0.09	9.3447	2.8055	1.0179	4.0552	0.0444	0.0913	0.5457	-0.4543	0.3043
127	48.06	0.07	9.3420	2.8381	0.7513	3.8844	0.0455	0.0849	0.5441	-0.4591	0.3038
128	48.23	0.08	9.4078	2.7967	0.8627	4.2581	0.0444	0.0926	0.5490	-0.4563	0.2948
129	48.40	0.09	9.4454	2.7381	1.0109	3.9358	0.0454	0.1005	0.5614	-0.4609	0.2884
130	48.57	0.09	9.5073	2.6282	1.0004	4.0306	0.0457	0.1048	0.5732	-0.4684	0.2747
131	48.75	0.07	9.4892	2.7348	0.7168	4.1724	0.0458	0.0838	0.5727	-0.4497	0.2884
132	48.91	0.09	9.7249	2.6859	1.0153	4.0034	0.0460	0.0866	0.5666	-0.4801	0.2765
133	49.11	0.10	9.8374	2.6473	1.1319	3.7579	0.0468	0.0667	0.5653	-0.4986	0.2495
134	49.28	0.08	9.8253	2.5274	0.9544	4.0741	0.0461	0.0753	0.5736	-0.4983	0.2572
135	49.42	0.08	9.8494	2.6938	0.9779	3.9026	0.0469	0.0725	0.5540	-0.4815	0.2513
136	49.61	0.07	9.9332	2.6050	0.8007	4.0225	0.0465	0.0655	0.5438	-0.4983	0.2421
137	49.80	0.07	9.9311	2.6956	0.8847	4.0241	0.0466	0.0490	0.5326	-0.4926	0.2463
138	49.95	0.07	10.0253	2.6293	0.7949	4.1490	0.0466	0.0161	0.5145	-0.4984	0.2423

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) — 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 4 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH.RX10-6 PHI CONF. L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 85 0.60 1.7 0.0 Rl.0F0 0.0 OFF OFF OFF OFF UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
140	50.12	0.07	10.0588	2.6498	1.8174	3.9654	0.0475	0.0245	0.5218	-0.4973	0.2486
141	50.25	0.10	10.0734	2.6673	0.7033	4.2422	0.0464	0.0199	0.5124	-0.4926	0.2641
141	50.37	0.05	10.1182	2.6335	0.6216	4.2539	0.0470	0.0145	0.5176	-0.5031	0.2603
142	50.62	0.05	10.0456	2.6907	0.5810	4.0742	0.0405	0.0201	0.5196	-0.4995	0.2965
143	50.75	0.08	10.0825	2.6515	0.3479	4.2463	0.0404	0.0159	0.5182	-0.5023	0.3225
144	50.93	0.08	10.1417	2.6552	0.2734	4.2083	0.0405	-0.0011	0.5137	-0.5148	0.3012
145	51.12	0.04	10.0584	2.6760	0.3352	3.9554	0.0420	0.0272	0.5308	-0.5036	0.3443
146	51.28	0.05	10.1545	2.6240	0.5156	4.0724	0.0489	0.0160	0.5326	-0.5166	0.3374
147	51.46	0.04	10.2231	2.6414	0.3748	4.1115	0.0418	0.0112	0.5341	-0.5229	0.3415
148	51.62	0.06	10.2473	2.6361	0.5454	4.1757	0.0413	0.0135	0.5370	-0.5435	0.3318
149	51.74	0.06	10.3072	2.6727	0.5553	4.2226	0.0413	0.0292	0.5745	-0.5457	0.3272
150	51.96	0.06	10.3063	2.6562	0.5693	4.0945	0.0419	0.0399	0.5749	-0.5390	0.3296
151	52.11	0.05	10.3271	2.6505	0.6662	4.1825	0.0417	0.0422	0.6006	-0.5644	0.3117
152	52.29	0.06	10.3188	2.7161	0.6477	4.1325	0.0423	0.0525	0.6306	-0.5781	0.3059
153	52.47	0.07	10.3318	2.6695	0.6506	4.0661	0.0425	0.0697	0.6404	-0.5707	0.2887
154	52.62	0.08	10.3543	2.6944	0.9557	3.9276	0.0429	0.0857	0.6526	-0.5669	0.2797
155	52.78	0.08	10.3513	2.6349	0.8503	4.0686	0.0426	0.0898	0.6572	-0.5776	0.2756
156	52.96	0.07	10.3295	2.6562	0.8444	3.9200	0.0434	0.0800	0.6647	-0.5847	0.2750
157	53.12	0.07	10.3445	2.6116	0.7665	4.0171	0.0435	0.0906	0.6661	-0.5755	0.2695
158	53.29	0.08	11.3945	2.6329	1.0197	3.5675	0.0457	0.0953	0.6645	-0.5692	0.2372
159	53.44	0.10	11.4194	2.6684	1.1814	3.2758	0.0469	0.0868	0.6654	-0.5826	0.2383
160	53.61	0.11	11.4547	2.6263	1.3783	3.0404	0.0475	0.0835	0.6675	-0.5840	0.2377
161	53.78	0.11	11.4399	2.6553	1.4632	2.8051	0.0489	0.0556	0.6650	-0.5934	0.2232
162	53.94	0.12	11.5322	2.6522	1.6011	2.7645	0.0491	0.0430	0.6320	-0.5890	0.2213
163	54.11	0.10	11.6566	2.6072	1.8535	2.6878	0.0503	0.0384	0.6179	-0.5790	0.2165
164	54.28	0.10	11.7756	2.6361	1.9529	2.9038	0.0499	0.0384	0.6194	-0.5810	0.2070
165	54.42	0.09	11.7823	2.6365	1.9564	3.2037	0.0490	0.0185	0.5970	-0.5785	0.2161
166	54.58	0.09	11.8156	2.6764	1.9709	3.2769	0.0490	0.0117	0.5797	-0.5680	0.2113
167	54.78	0.10	11.8687	2.6333	1.9375	3.2988	0.0567	0.0071	0.5913	-0.5842	0.2030
168	54.99	0.09	11.8853	2.6577	1.9302	3.1723	0.0572	-0.0106	0.5928	-0.6034	0.2050
169	55.16	0.08	11.8932	2.6072	1.9130	3.3353	0.0567	0.0175	0.5934	-0.5759	0.2108
170	55.33	0.09	12.0044	2.6669	1.9140	3.4047	0.0569	-0.0008	0.6003	-0.6011	0.2043
171	55.51	0.08	12.0833	2.6565	1.9282	3.1927	0.0577	0.0076	0.6007	-0.5933	0.2106
172	55.66	0.07	12.0247	2.6051	0.9617	3.2346	0.0503	0.0016	0.6008	-0.5992	0.2083
173	55.70	0.06	11.9219	2.6963	0.8780	3.0565	0.0510	0.0207	0.6077	-0.5870	0.2228
174	55.86	0.05	12.0015	2.6656	1.2664	3.0059	0.0507	0.0071	0.6034	-0.5963	0.2205
175	55.89	0.06	12.0115	2.6529	1.1833	2.8036	0.0521	0.0162	0.6158	-0.5986	0.2108
176	56.21	0.06	12.1476	2.6529	1.1054	3.1573	0.0511	0.0021	0.6205	-0.6184	0.2075
177	56.36	0.07	12.1005	2.7033	1.2948	2.8930	0.0522	0.0001	0.6152	-0.6151	0.2300
178	56.56	0.07	12.1265	2.6979	0.9394	2.7561	0.0529	0.0187	0.6212	-0.6025	0.2200
179	56.66	0.06	12.2356	2.6519	1.1561	2.9437	0.0522	0.0137	0.6217	-0.6080	0.2167
180	56.82	0.06	12.2272	2.7907	1.0823	2.9622	0.0524	0.0041	0.6135	-0.6094	0.2282
181	56.96	0.05	12.1598	2.7283	0.9934	2.8306	0.0453	-0.0284	0.6078	-0.6362	0.2235
182	57.12	0.07	12.2905	2.6566	1.1270	2.7516	0.0531	-0.0384	0.6148	-0.6232	0.2163
183	57.26	0.06	12.2543	2.7341	1.1153	2.8246	0.0528	-0.0242	0.6027	-0.6269	0.2234
184	57.41	0.07	12.3337	2.7211	1.0551	2.5744	0.0542	-0.0052	0.6091	-0.6143	0.2206

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 5 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REX10-6 P-T LONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 85 0.6 1.7 0.0 MINUTE 0.0 OFF OFF OFF OFF UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAP	CAF	XCP
185	57.55	0.03	12.1350	2.9233	0.7850	2.4456	0.0455	-0.0301	0.5957	-0.6258	0.2342
186	57.73	0.05	12.3774	2.9474	0.9591	2.4693	0.0460	-0.0214	0.6137	-0.6351	0.2260
187	57.53	0.01	12.2452	2.8266	1.1135	2.3722	0.0461	-0.0056	0.6152	-0.6236	0.2299
188	57.48	0.06	12.4036	2.7402	0.9726	2.5102	0.0475	-0.0230	0.6007	-0.6237	0.2241

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER/MINUS 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 1 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REIN=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	MS	0.40	1.7	0.0	81=0F0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 2 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RNIO-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	85	0.60	1.7	0.0	BLOFD	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	Cm3	Cd3	XCPF3	YCPF3	CNF4	Cm4	Cd4	XCPF4	YCPF4

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 3 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	B5	0.80	1.7	0.0	BLADE	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4

PAGE 1 OF 1
SHEET 4 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/10**6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	85	0.60	1.7	0.0	BLKOFD	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 5 OF 5

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	65	0.60	1.7	0.0	B1-0F0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	ACPF3	YCPF3	CNF4	CM4	C94	ACPF4	YCPF4

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(USNSDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 1 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REINOD	PHI	CONE	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	BP	0.90	1.7	0.0	MINUS 0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(USHUC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 2 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	R10-6	Pol	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	AA	0.50	1.7	0.0	B1=0P0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2

PAGE 1 OF 1
SHEET 1 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PAR1	MACH	RX10-6	PH1	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	EP	0.90	1.7	0.0	MI=UP0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	ACPF1	YCPF1	CNF2	CM2	C62	ACPF2	YCPF2

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 6 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

[ES]	PART	MACH	RN/D=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	6A	0.90	1.7	0.0	91=0F0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2

PAGE 1 OF 1
SHEET 5 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART	MACH RNLD-S	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	A6 0.90 1.7	0.0	61-60-0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 6 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	66	0.90	1.7	0.0	81.010	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2

PAGE 1 OF 1
SHEET 7 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	BALO-A	PHI	CONE	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	BA	0.90	1.7	0.0	81.0F0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) ... 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 1 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNLN=6 PHI CONE L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 BA 0.90 1.7 0.0 BI=OFF 0.0 OFF OFF OFF OFF UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.67	-0.00	-0.2033	-0.6373	0.0558	-0.0752	-0.0012	0.2363	0.0926	0.1417	2.6453
2	-5.67	-0.00	-0.2568	-0.8584	0.0010	-0.0086	-0.0013	0.2341	0.0933	0.1408	2.5835
3	-5.67	0.00	-0.2278	-0.8478	0.0314	-0.0419	-0.0012	0.2342	0.0940	0.1412	2.6815
4	-4.92	0.01	-0.1549	-0.5303	0.0472	-0.0412	-0.0006	0.2476	0.0834	0.1642	3.4236
5	-2.97	0.01	-0.0778	-0.3217	0.1021	-0.1029	0.0001	0.2360	0.0726	0.1638	4.1334
6	-1.14	-0.00	-0.0025	-0.0945	0.0569	-0.1197	0.0007	0.2374	0.0672	0.1702	37.9908
7	0.72	0.00	0.0304	0.0243	0.0482	-0.0446	0.0012	0.2404	0.0659	0.1750	2.0211
8	2.60	0.00	0.1004	0.2927	0.0749	-0.0463	0.0020	0.2490	0.0760	0.1730	1.8252
9	4.61	0.00	0.2395	0.6652	0.0181	-0.0059	0.0028	0.2589	0.0900	0.1689	1.9421
10	6.76	-0.00	0.3994	0.8957	0.0311	-0.0726	0.0101	0.2724	0.1054	0.1671	1.7687
11	8.11	0.01	0.4871	0.7398	0.1518	-0.1174	0.0110	0.2730	0.1202	0.1529	1.5189
12	9.96	-0.00	0.6296	0.8306	0.0338	-0.0298	0.0117	0.2779	0.1335	0.1445	1.3363
13	11.77	-0.01	0.7514	0.6801	0.0175	-0.0541	0.0126	0.2837	0.1472	0.1366	1.2780
14	13.57	-0.00	0.9369	1.1021	0.0225	0.0505	0.0134	0.2746	0.1597	0.1190	1.1814
15	15.47	-0.00	1.1145	1.2174	0.0381	0.0701	0.0143	0.2731	0.1721	0.1011	1.0962
16	17.37	-0.01	1.3039	1.3429	-0.0231	0.2315	0.0149	0.2650	0.1903	0.0747	1.0006
17	19.21	-0.02	1.4972	1.5849	-0.1706	0.5186	0.0152	0.2572	0.2065	0.0487	1.0452
18	21.07	-0.03	1.6739	1.7293	-0.3564	0.9099	0.0151	0.2528	0.2247	0.0281	1.0332
19	22.95	-0.02	1.8850	2.0084	-0.3653	0.8813	0.0146	0.2372	0.2326	0.0046	1.0663
20	24.79	-0.03	2.1295	2.3729	-0.2349	0.6594	0.0187	0.2183	0.2386	-0.0201	1.1158
21	26.69	-0.04	2.4063	2.6852	0.0181	0.2364	0.0241	0.1972	0.2458	-0.0486	1.1917
22	27.87	0.01	2.5820	3.1702	0.0703	0.0493	0.0298	0.1706	0.2491	-0.0785	1.2301
23	28.05	0.01	2.6037	3.2541	0.1662	-0.0579	0.0305	0.1650	0.2503	-0.0853	1.2122
24	28.39	0.01	2.7156	3.3369	0.1269	-0.0429	0.0244	0.1773	0.2528	-0.0755	1.2178
25	29.74	0.02	2.8056	3.4867	0.2757	-0.2956	0.0255	0.1847	0.2558	-0.0911	1.2359
26	29.01	0.02	2.9426	3.4543	0.3391	-0.3748	0.0256	0.1649	0.2552	-0.0913	1.2151
27	29.31	0.03	2.9388	3.4536	0.4315	-0.4633	0.0262	0.1580	0.2603	-0.1024	1.2093
28	29.60	0.04	2.9995	3.5072	0.5852	-0.3930	0.0326	0.1577	0.2631	-0.1055	1.1893
29	29.97	0.04	3.0435	3.6153	0.5706	-0.4134	0.0267	0.1614	0.2706	-0.1093	1.1891
30	30.14	0.06	3.1166	3.6731	0.7267	-0.6056	0.0275	0.1705	0.2815	-0.1111	1.1624
31	30.41	0.07	3.2326	3.7455	0.8504	-0.7542	0.0349	0.1695	0.2891	-0.1196	1.1463
32	30.70	0.07	3.3104	3.7879	0.8786	-0.8403	0.0292	0.1731	0.2908	-0.1177	1.1357
33	30.95	0.07	3.3581	3.7961	0.9103	-0.7545	0.0290	0.1837	0.2983	-0.1146	1.1311
34	31.24	0.08	3.5344	3.9426	0.9941	-0.7177	0.0296	0.1775	0.3041	-0.1266	1.1155
35	31.51	0.09	3.5899	3.9784	0.7833	-0.5662	0.0360	0.1805	0.3046	-0.1241	1.0900
36	31.78	0.08	3.6510	4.1050	0.9019	-0.6540	0.0350	0.1532	0.3004	-0.1472	1.1243
37	32.04	0.07	3.7604	4.1643	0.8247	-0.6436	0.0361	0.1701	0.3047	-0.1346	1.1169
38	32.31	0.05	3.7870	4.2581	0.6770	-0.2350	0.0298	0.1650	0.3121	-0.1471	1.1330
39	32.57	0.08	3.8263	4.2186	0.8411	-0.3255	0.0276	0.1895	0.3271	-0.1376	1.0142
40	32.83	0.07	4.0454	4.3491	0.7630	0.3957	0.0343	0.1826	0.3388	-0.1562	1.0009
41	33.08	0.08	4.1772	4.4328	1.7595	0.8747	0.0330	0.1771	0.3463	-0.1712	0.9893
42	33.34	0.06	4.2593	4.3663	0.7509	0.9752	0.0332	0.1833	0.3475	-0.1642	1.0117
43	33.58	0.06	4.2749	4.4357	0.5038	1.0476	0.0338	0.1841	0.3496	-0.1655	1.0377
44	33.83	0.06	4.4144	4.4662	0.5712	1.2021	0.0270	0.1820	0.3474	-0.1854	1.0122
45	34.14	0.06	4.5539	4.6065	0.5453	1.5028	0.0328	0.1846	0.3558	-0.1912	0.9814
46	34.33	0.05	4.5583	4.6084	0.3474	1.5496	0.0331	0.1851	0.3579	-0.1928	1.0110

PAGE 1 OF 1
SHEET 2 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH PA10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 BA 0.50 1.7 0.0 81.000 0.0 OFF OFF OFF OFF UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
47	34.58	0.04	4.7087	4.6025	0.2665	1.6610	0.0335	0.1472	0.3620	-0.2148	0.9774
48	34.64	0.05	4.8574	4.5492	0.3818	1.7836	0.0270	0.1894	0.3737	-0.2043	0.9365
49	35.08	0.05	4.9071	4.5149	0.3757	1.8627	0.0276	0.1848	0.3782	-0.2114	0.9197
50	35.30	0.05	4.9595	4.5048	0.3247	1.7333	0.0341	0.1697	0.3783	-0.2080	0.9083
51	35.55	0.03	5.0611	4.6117	0.1909	1.7849	0.0284	0.1837	0.3824	-0.1947	0.9112
52	35.78	0.05	5.1241	4.6089	0.3846	1.5453	0.0291	0.1588	0.3812	-0.2224	0.8980
53	35.99	0.04	5.1280	5.4478	0.2758	1.2779	0.0373	0.1429	0.4044	-0.2320	0.9941
54	36.25	0.03	5.1576	5.1868	0.2363	1.3151	0.0310	0.1372	0.3603	-0.2231	1.0057
55	36.48	0.02	5.2617	5.2328	0.2102	1.3337	0.0314	0.1391	0.3646	-0.2253	0.9983
56	36.70	0.02	5.3257	5.2792	0.1645	1.2436	0.0306	0.1086	0.3552	-0.2466	0.9913
57	36.95	0.02	5.3559	5.5849	0.2421	0.8705	0.0339	0.0775	0.3318	-0.2542	1.0438
58	37.19	0.00	5.4093	5.6281	0.2168	1.0246	0.0340	0.0932	0.3339	-0.2408	1.0405
59	37.42	0.01	5.4591	5.6521	0.1703	0.7998	0.0351	0.0578	0.3252	-0.2673	1.0628
60	37.64	0.01	5.5056	5.7443	0.0964	1.0060	0.0346	0.0641	0.3205	-0.2563	1.0321
61	37.87	0.02	5.6013	5.6935	0.2437	1.0562	0.0343	0.0721	0.3296	-0.2572	1.0150
62	38.09	0.02	5.6079	5.8730	0.2674	0.5658	0.0364	0.0402	0.3139	-0.2736	1.0473
63	38.33	0.03	5.7234	5.9396	0.2944	0.8220	0.0358	0.0534	0.3180	-0.2645	1.0377
64	38.55	0.01	5.7840	5.8636	0.1377	0.9697	0.0292	0.0559	0.3281	-0.2721	1.0137
65	38.75	0.01	5.8365	6.1407	0.0507	0.8479	0.0303	0.0381	0.3118	-0.2756	1.0525
66	38.97	0.03	5.9226	5.9421	0.2533	1.0829	0.0292	0.0473	0.3231	-0.2757	1.0117
67	39.16	0.01	5.9201	6.1405	0.0481	0.8323	0.0307	0.0339	0.3131	-0.2791	1.0372
68	39.38	-0.00	5.9880	6.2179	0.0	0.9534	0.0308	0.0304	0.3133	-0.2828	1.0384
69	39.54	0.00	6.0350	6.1870	0.0034	1.3098	0.0295	0.0454	0.3186	-0.2711	1.0181
70	39.63	-0.01	6.2335	6.1705	-0.2107	1.4196	0.0303	0.0254	0.3154	-0.2900	0.9899
71	40.02	-0.01	6.2410	6.2257	-0.1670	1.1917	0.0312	0.0398	0.3178	-0.2779	0.9966
72	40.24	0.00	6.4214	5.9995	0.0369	1.4614	0.0308	0.0269	0.3207	-0.2918	0.9343
73	40.44	-0.00	6.4584	6.2138	-0.3513	1.3631	0.0323	0.0297	0.3199	-0.2902	0.9624
74	40.65	-0.00	6.4523	6.1805	-0.4559	1.7519	0.0310	0.0370	0.3250	-0.2879	0.9588
75	40.87	-0.00	6.5942	6.1186	-0.5951	1.7139	0.0323	0.0550	0.3481	-0.2931	0.9154
76	41.07	-0.01	6.6825	6.1536	-0.6740	1.7940	0.0322	0.0380	0.3393	-0.3013	0.9209
77	41.30	-0.00	6.6104	6.1201	-0.7261	1.8548	0.0326	0.0635	0.3494	-0.2858	0.8988
78	41.52	-0.01	6.9250	6.0780	-0.8136	2.0297	0.0325	0.0529	0.3556	-0.3027	0.8777
79	41.74	-0.01	7.0016	6.0340	-0.8519	2.0850	0.0326	0.0538	0.3696	-0.3158	0.8617
80	41.93	-0.01	7.0854	6.0000	-0.8202	1.8986	0.0337	0.0618	0.3624	-0.3006	0.8561
81	42.11	-0.01	7.1322	6.1202	-0.8431	1.9877	0.0336	0.0519	0.3733	-0.3214	0.8595
82	42.30	-0.00	7.2115	6.0962	-0.8726	1.9205	0.0342	0.0599	0.3748	-0.3149	0.8451
83	42.49	-0.01	7.3170	6.0613	-1.0444	1.9476	0.0349	0.0651	0.3882	-0.3231	0.8283
84	42.67	-0.00	7.4259	5.8694	-0.9307	1.8840	0.0352	0.0614	0.3934	-0.3320	0.7904
85	42.85	-0.00	7.5019	5.7747	-0.8933	1.8555	0.0356	0.0709	0.3976	-0.3267	0.7704
86	43.07	-0.00	7.5140	6.0406	-0.9733	1.8544	0.0359	0.0609	0.3943	-0.3336	0.8038
87	43.27	-0.00	7.6122	5.9188	-0.8618	1.8524	0.0359	0.0830	0.4120	-0.3290	0.7844
88	43.45	-0.00	7.7021	5.9558	-0.9672	1.8079	0.0368	0.0804	0.4125	-0.3321	0.7733
89	43.60	-0.00	7.7021	6.0340	-1.0250	1.5302	0.0379	0.0912	0.4103	-0.3291	0.7832
90	43.80	-0.00	7.7815	5.9758	-0.9118	1.6676	0.0376	0.0803	0.4102	-0.3359	0.7679
91	43.99	-0.00	7.9330	6.0436	-1.0048	1.6970	0.0382	0.0593	0.4166	-0.3573	0.7612
92	44.17	-0.00	7.9970	5.9346	-0.9212	1.4211	0.0393	0.0758	0.4241	-0.3485	0.7421

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 3 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | MACH 0.90 | RA10=6 1.7 | PHI 0.0 | CONF 81 & BPG | L 0.0 | DEL1 OFF | DEL2 OFF | DEL3 OFF | DEL4 OFF | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
93	44.36	-0.10	7.9xx3	6.1e3x	-0.9935	1.2919	0.0000	0.0696	0.0132	-0.3638	0.7685
94	44.55	-0.09	8.1900	5.8xxx	-0.9332	1.4556	0.0349	0.0490	0.4304	-0.3614	0.7183
95	44.72	-0.1x	8.2473	6.0120	-0.8xx3	1.1718	0.0611	0.0627	0.4282	-0.3655	0.7290
96	44.96	-0.09	8.4297	5.8458	-0.9080	1.3735	0.0279	0.0871	0.4502	-0.3631	0.6629
97	45.10	-0.09	8.6109	5.2000	-0.8636	1.4319	0.0336	0.1172	0.4485	-0.3314	0.6190
98	45.27	-0.09	8.5150	5.5350	-0.9144	1.5530	0.0340	0.0400	0.4593	-0.3493	0.6500
99	45.46	-0.10	8.6x2x	5.5117	-1.0342	1.4976	0.0285	0.0777	0.4613	-0.3836	0.6361
100	45.63	-0.10	8.6809	5.1851	-0.7e74	1.6534	0.0338	0.0927	0.4668	-0.3741	0.5973
101	45.83	-0.10	8.7x19	5.x16x	-1.x262	1.4376	0.0356	0.0855	0.4642	-0.3747	0.6161
102	46.01	-0.09	8.7886	5.4200	-0.9775	1.5536	0.0350	0.0836	0.4638	-0.3802	0.6168
103	46.19	-0.10	8.8758	5.5117	-1.0010	1.3913	0.0296	0.0793	0.4634	-0.3841	0.6210
104	46.34	-0.10	8.7980	6.0711	-0.8910	0.7894	0.0317	0.0427	0.4396	-0.3969	0.6901
105	46.58	-0.09	8.8537	5.5428	-0.9327	1.3729	0.0306	0.0750	0.4693	-0.3943	0.6122
106	46.72	-0.09	8.9522	5.7655	-0.9245	1.2361	0.0308	0.0720	0.4514	-0.3794	0.6444
107	46.88	-0.08	9.1221	5.6176	-0.8828	1.2533	0.0310	0.0787	0.4547	-0.3810	0.6158
108	47.05	-0.10	9.0961	5.7712	-1.0854	1.2369	0.0314	0.0716	0.4550	-0.3834	0.6352
109	47.24	-0.09	9.2867	5.6778	-0.8x36	1.3249	0.0315	0.0516	0.4586	-0.4030	0.6114
110	47.42	-0.09	9.2977	5.x363	-0.8586	1.5791	0.0306	0.0140	0.4522	-0.4382	0.6412
111	47.58	-0.11	9.3513	5.6x3x	-0.9xx8	1.3959	0.0316	0.0704	0.4618	-0.3916	0.6088
112	47.74	-0.10	9.2x12	5.4641	-0.9x8x	1.4417	0.0313	0.0413	0.4554	-0.4141	0.6436
113	47.92	-0.11	9.x316	5.x325	-0.9783	1.3665	0.0321	0.0667	0.4756	-0.4107	0.6378
114	48.09	-0.10	9.4224	5.6621	-0.9570	1.4660	0.0317	0.0648	0.4716	-0.4068	0.6009
115	48.26	-0.11	9.4xx5	5.6x3x	-0.9x1x	1.3142	0.0320	0.0453	0.4666	-0.4213	0.5899
116	48.42	-0.09	9.5250	5.6157	-0.7918	1.5424	0.0315	0.0667	0.4674	-0.4187	0.5898
117	48.59	-0.0x	9.5x25	5.5235	-0.7x75	1.4xx2	0.0320	0.0634	0.4600	-0.3962	0.5743
118	48.77	-0.06	9.6797	5.5057	-0.4470	1.3913	0.0320	0.0437	0.4587	-0.4150	0.5688
119	48.94	-0.0x	9.7x12	5.xx4x	-0.8xxx	1.4338	0.032x	0.0496	0.4540	-0.4096	0.5594
120	49.11	-0.06	9.8002	5.5719	-0.6889	1.0516	0.0342	0.0243	0.4432	-0.4189	0.5685
121	49.28	-0.02	9.7272	5.5316	0.0109	0.9956	0.0327	0.0027	0.4244	-0.4217	0.5667
122	49.47	-0.03	9.7x01	5.xx61	-0.3667	1.1099	0.0325	-0.0070	0.4272	-0.4292	0.5628
123	49.64	0.02	9.8273	5.6140	0.xx57	0.7819	0.0345	-0.0060	0.4187	-0.4267	0.5713
124	49.80	-0.02	9.9112	5.7116	0.0103	0.8500	0.0341	-0.0086	0.4175	-0.4261	0.5763
125	49.99	0.02	10.13xx	5.2x95	0.9291	0.9178	0.0391	0.0200	0.4367	-0.4167	0.5226
126	50.21	-0.03	10.7476	3.9202	-0.1747	1.2725	0.0348	0.0269	0.4581	-0.4312	0.3646
127	50.38	0.00	10.79xx	3.x505	0.2131	1.0391	0.0369	0.0382	0.4735	-0.4353	0.3659
128	50.56	-0.02	11.0643	3.8326	-0.0105	1.2799	0.0352	0.0782	0.4936	-0.4153	0.3256
129	50.72	-0.02	11.1x52	3.2x21	-0.0516	1.x5x4	0.0345	0.1131	0.5026	-0.3955	0.2905
130	50.91	0.03	11.1476	3.3535	0.0471	1.3547	0.0341	0.0791	0.5169	-0.4377	0.2395
131	51.05	-0.09	11.2550	3.x5x8	0.5049	1.7013	0.039x	0.0911	0.5215	-0.4303	0.2996
132	51.25	0.05	11.0731	3.0621	0.7169	1.6761	0.0400	0.0979	0.5424	-0.4446	0.2049
133	51.44	0.06	11.1x4x	2.3xx7	0.7120	1.8745	0.0463	0.1007	0.5528	-0.4521	0.1972
134	51.56	0.07	11.5305	2.8201	0.9444	1.5240	0.0400	0.1027	0.5523	-0.4496	0.2451
135	51.78	0.06	12.0118	2.3066	1.0805	1.7x01	0.0496	0.0867	0.5452	-0.4604	0.1917
136	51.97	0.07	12.2296	1.x960	0.7904	1.9723	0.0403	0.1003	0.5573	-0.4570	0.1551
137	52.14	0.10	11.9372	2.3726	1.1260	2.0779	0.0386	0.0969	0.5376	-0.4387	0.1987
138	52.30	0.07	12.0865	2.2722	0.9342	1.8370	0.0404	0.0915	0.5342	-0.4426	0.1880

PAGE 1 OF 1
SHEET 6 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE/10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	66	0.90	1.7	0.0	BI=UFO	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
139	52.63	0.07	12.0370	2.2175	0.4612	2.0208	0.0396	0.0825	0.5296	-0.4478	0.1862
140	52.54	0.10	11.9910	2.5545	1.2282	1.6575	0.0404	0.0764	0.5212	-0.4447	0.2130
141	52.77	0.08	12.0589	2.3621	1.0304	2.0332	0.0396	0.0540	0.5212	-0.4671	0.1959
142	52.48	0.05	12.1785	2.4108	0.7401	2.0391	0.0339	0.0718	0.5188	-0.4467	0.1980
143	53.10	0.08	12.1720	2.4068	0.7474	1.9310	0.0408	0.0565	0.5187	-0.4621	0.1972
144	53.28	0.08	12.2431	2.1436	0.7457	1.6979	0.0411	0.0502	0.5271	-0.4768	0.1748
145	53.45	0.08	12.3120	2.1475	0.9842	1.6720	0.0474	0.0732	0.5215	-0.4682	0.1744
146	53.61	0.10	12.2363	2.3171	1.1497	1.7091	0.0474	0.0507	0.5203	-0.4695	0.1896
147	53.76	0.06	12.3660	2.3504	0.8360	1.8086	0.0482	0.0399	0.5161	-0.4761	0.1936
148	53.91	0.07	12.2597	2.4726	0.9282	1.7313	0.0417	0.0634	0.5082	-0.4447	0.2017
149	54.08	0.07	12.3397	2.4500	0.8993	1.6347	0.0426	0.0366	0.5165	-0.4798	0.2018
150	54.23	0.06	12.3708	2.7359	0.7544	1.8160	0.0423	0.0334	0.5102	-0.4767	0.2212
151	54.38	0.08	12.3861	2.6169	0.5816	1.7178	0.0419	0.0382	0.5114	-0.4731	0.2126
152	54.54	0.07	12.3993	2.5071	0.6673	1.8112	0.0485	0.0476	0.5173	-0.4696	0.2022
153	54.70	0.09	12.4929	2.5320	0.5931	1.9757	0.0380	0.0399	0.5177	-0.4777	0.2027
154	54.84	0.06	12.3592	2.6349	0.6944	1.9160	0.0480	0.0299	0.5173	-0.4874	0.2132
155	55.01	0.08	12.4028	2.6149	0.7892	1.8852	0.0485	0.0311	0.5105	-0.4793	0.2108
156	55.16	0.06	12.5403	2.4475	0.7722	1.6758	0.0433	0.0520	0.5235	-0.4714	0.1952
157	55.31	0.05	12.6236	2.5311	0.7543	1.8196	0.0429	0.0184	0.5251	-0.5097	0.1926
158	55.47	0.08	12.6058	2.6497	0.6015	1.7823	0.0370	0.0169	0.5217	-0.5048	0.1943
159	55.62	0.07	12.6752	2.7699	0.9996	1.8280	0.0489	0.0485	0.5184	-0.4718	0.2232
160	55.78	0.05	12.6237	2.7795	0.7136	1.9488	0.0426	0.0331	0.5171	-0.4840	0.2237
161	55.94	0.07	12.5435	2.7009	0.8346	2.0395	0.0485	0.0174	0.5117	-0.4943	0.2153
162	56.08	0.04	12.5847	2.6563	0.5660	1.6197	0.0443	0.0280	0.5238	-0.4958	0.2110
163	56.24	0.04	12.5600	2.5613	0.5268	1.8419	0.0498	0.0419	0.5258	-0.4839	0.2294
164	56.40	0.04	12.6095	2.8816	0.5446	1.7319	0.0442	0.0220	0.5221	-0.5001	0.2278
165	56.56	0.04	12.4804	2.7486	0.5752	1.5501	0.0380	0.0457	0.5291	-0.4836	0.2236
166	56.70	-0.02	12.6249	2.7423	-0.0652	1.9404	0.0448	0.0240	0.5328	-0.5088	0.2172
167	56.86	0.01	12.6248	2.5980	0.3328	1.8693	0.0440	0.0368	0.5229	-0.4963	0.2057
168	57.01	0.01	12.6262	2.8655	0.3422	1.7805	0.0381	0.0089	0.5362	-0.5273	0.2209
169	57.16	0.04	12.7259	2.7511	0.5302	1.8263	0.0505	0.0345	0.5312	-0.5267	0.2193
170	57.29	0.00	12.6507	2.8239	0.2363	1.8371	0.0361	0.0117	0.5266	-0.5149	0.2232
171	57.45	0.00	12.7411	2.9938	0.3004	1.8781	0.0399	-0.0016	0.5287	-0.5301	0.2347
172	57.59	0.00	12.6726	3.1482	0.2797	1.8123	0.0456	0.0096	0.5341	-0.5245	0.2492
173	57.72	-0.06	12.4926	3.0260	-0.1672	2.2018	0.0458	-0.0787	0.5878	-0.5626	0.3562
174	57.87	-0.09	12.4602	3.2823	-0.4360	-0.2977	0.0461	-0.0769	0.4728	-0.5498	0.3437
175	58.04	-0.12	12.6987	3.9238	-0.7671	-0.7178	0.0335	-0.0223	0.5141	-0.5364	0.2698
176	58.11	-0.09	12.4971	3.6315	-0.4798	-0.7259	0.0332	-0.0502	0.5008	-0.5510	0.2900
177	58.12	-0.08	12.6240	3.4383	-0.3208	-0.8109	0.0403	-0.0130	0.5087	-0.5217	0.2724
178	58.12	-0.10	12.5961	3.6476	-0.4344	-0.8704	0.0401	-0.0337	0.5091	-0.5428	0.2898
179	58.12	-0.09	12.6333	3.5723	-0.4312	-0.8209	0.0338	-0.0437	0.5099	-0.5536	0.2827
180	58.12	-0.08	12.6670	3.3746	-0.3197	-0.7908	0.0339	-0.0376	0.5165	-0.5541	0.2679
181	58.13	-0.09	12.7211	3.5544	-0.4036	-0.8133	0.0342	-0.0305	0.5049	-0.5354	0.2794
182	-9.70	0.00	-0.2734	-0.6198	0.0361	-0.0642	-0.0136	0.2524	0.0700	0.1824	2.2647
183	-5.69	0.01	-0.2695	-0.6162	-0.0180	-0.0042	-0.0131	0.2520	0.0718	0.1802	2.3573
184	-5.70	0.01	-0.2732	-0.6339	-0.0339	0.0220	-0.0073	0.2552	0.0753	0.1799	2.3199

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 5 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST RAKE MACH 3X10=6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 MA 0.90 1.7 0.0 81=OFD 0.0 OFF OFF OFF OFF UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
185	-5.69	[illegible]	-0.2[illegible]	-0.0527	0.0727	-0.0862	-0.0124	0.2516	0.0733	0.1783	2.6209
186	-5.68	0.02	-0.2737	-0.0681	0.0945	-0.0833	-0.0130	0.2560	0.0744	0.1816	2.3675
187	-5.69	0.02	-0.2729	-0.0333	0.0602	-0.0241	-0.0072	0.2554	0.0743	0.1816	2.3203
188	-5.70	0.02	-0.2[illegible]	-0.0527	0.0762	-0.0502	-0.0130	0.2531	0.0709	0.1822	2.4638
189	-5.70	0.02	-0.2726	-0.0187	0.0404	-0.0106	-0.0131	0.2546	0.0721	0.1825	2.2696
190	-5.70	0.03	-0.2114	-0.0518	0.0[illegible]	-0.0396	-0.0127	0.2592	0.0724	0.1868	3.0832
191	-5.70	0.03	-0.2[illegible]	-0.0[illegible]	0.0624	-0.0478	-0.0070	0.2610	0.0[illegible]	0.1[illegible]	2.3557
192	-4.66	0.02	-0.1913	-0.0[illegible]	0.0246	-0.0157	-0.0125	0.2572	0.0540	0.1992	2.3469
193	-2.88	0.02	-0.1903	-0.0519	0.0478	-0.0809	-0.0118	0.2498	0.0458	0.2040	2.3264
194	-0.97	0.02	-0.0340	0.0002	0.0301	-0.0266	-0.0112	0.2502	0.0396	0.2106	-0.0053
195	0.91	0.02	-0.2518	0.1735	0.0038	-0.0315	-0.0046	0.2563	0.0404	0.2159	3.4130
196	2.84	0.02	0.1422	0.3476	0.0318	0.0145	-0.0040	0.2639	0.0515	0.2124	2.7274
197	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
198	6.54	0.02	0.3526	0.7271	0.0256	-0.0827	-0.0021	0.2897	0.0901	0.1995	2.0623
199	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
200	10.75	0.02	0.[illegible]	1.[illegible]	-0.0057	0.1776	-0.0006	0.3014	0.1206	0.1808	1.5658
201	12.14	0.02	[illegible]	1.[illegible]	-0.0411	0.1059	0.0003	0.3115	0.1326	0.1689	1.4353
202	13.82	0.01	1.0020	1.2347	-0.0624	0.1576	-0.0047	0.3060	0.1452	0.1608	1.2323
203	15.82	[illegible]	1.[illegible]	1.[illegible]	-0.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
204	17.77	0.01	1.[illegible]	1.[illegible]	-0.1314	0.2470	0.0033	0.[illegible]	0.1713	0.1198	1.1294
205	19.67	0.00	1.[illegible]	1.[illegible]	-0.2656	0.[illegible]	0.0036	0.2865	0.1896	0.0969	1.1214
206	21.59	0.02	1.9309	2.1706	-0.0636	0.1714	0.0125	0.2675	0.1973	0.0707	1.1272
207	23.56	0.01	2.[illegible]	2.[illegible]	-0.[illegible]	0.2228	0.0149	0.2362	0.1877	0.0465	1.1313
208	25.49	0.03	2.[illegible]	3.4437	0.3036	-0.4327	0.0193	0.2205	0.1973	0.0232	1.1874
209	27.41	0.02	3.[illegible]	4.[illegible]	0.5104	-0.5841	0.0223	0.2003	0.2095	-0.0092	1.2102
210	27.99	0.01	3.4428	4.1944	0.5005	-0.5857	0.0227	0.1922	0.2118	-0.0196	1.2184
211	27.45	0.03	3.4393	4.[illegible]	0.[illegible]	-0.[illegible]	0.0225	0.1917	0.2107	-0.0190	1.1928
212	26.15	0.01	3.4721	4.0382	0.5427	-0.6925	0.0229	0.2009	0.2090	-0.0081	1.1625
213	24.54	0.02	3.[illegible]	3.[illegible]	0.[illegible]	-0.5123	0.0231	0.1957	0.2113	-0.0156	1.1650
214	23.04	0.01	3.4649	4.[illegible]	0.[illegible]	-0.[illegible]	0.0239	0.1868	0.2204	-0.0321	1.1993
215	23.11	0.01	3.[illegible]	4.[illegible]	0.[illegible]	-0.[illegible]	0.0240	0.1985	0.2182	-0.0197	1.2219
216	24.41	0.01	3.4215	4.[illegible]	0.5902	-0.7053	0.0306	0.1864	0.2182	-0.0318	1.2063
217	29.71	0.01	3.[illegible]	4.[illegible]	0.6650	-0.7[illegible]	0.0255	0.1784	0.2174	-0.0385	1.2146
218	30.[illegible]	0.01	4.[illegible]	4.7291	0.7332	-0.8750	0.0263	0.1760	0.2163	-0.0403	1.1624
219	31.21	0.01	4.[illegible]	4.[illegible]	0.[illegible]	-0.6791	0.0321	0.1756	0.2132	-0.0378	1.1922
220	30.53	[illegible]	4.1653	4.9153	0.6226	-0.6470	0.0324	0.1643	0.2109	-0.0464	1.1801
221	30.82	0.01	4.[illegible]	4.[illegible]	0.[illegible]	-0.7495	0.0332	0.1660	0.2140	-0.0480	1.1604
222	31.09	0.01	4.[illegible]	4.[illegible]	0.7350	-0.5172	0.0336	0.1697	0.2148	-0.0451	1.1411
223	31.36	0.02	4.[illegible]	4.[illegible]	0.8555	-0.9365	0.0341	0.1638	0.2174	-0.0536	1.1160
224	31.64	0.02	4.5141	5.1069	0.5244	-0.7253	0.0342	0.1530	0.2113	-0.0583	1.1318
225	31.[illegible]	0.01	4.[illegible]	5.[illegible]	0.7315	-0.7362	0.0346	0.1506	0.2097	-0.0591	1.1084
226	32.18	0.01	4.7143	5.[illegible]	0.7505	-0.8409	0.0347	0.1512	0.2198	-0.0686	1.0816
227	32.[illegible]	0.02	4.7327	5.[illegible]	0.[illegible]	-0.[illegible]	0.0411	0.1393	0.2131	-0.0738	1.1261
228	32.70	0.04	4.[illegible]	5.[illegible]	0.[illegible]	-0.[illegible]	0.0416	0.1182	0.2095	-0.0913	1.1012
229	32.96	0.03	4.[illegible]	5.[illegible]	0.[illegible]	-0.[illegible]	0.0363	0.1253	0.2072	-0.0819	1.1104
230	33.21	0.02	5.0070	5.5569	0.5351	-0.4697	0.0363	0.1178	0.2065	-0.0890	1.0971

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYN-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 BA 0.90 1.7 0.0 R1=0F0 0.0 OFF OFF OFF OFF UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
231	33.45	0.02	5.0316	5.0731	0.5249	-0.3361	0.0361	0.1319	0.2111	-0.0792	1.0877
232	33.71	0.03	5.2157	5.3481	0.5406	-0.3574	0.0365	0.1317	0.2149	-0.0832	1.0633
233	33.95	0.05	5.2599	5.4106	0.5145	-0.1017	0.0359	0.1241	0.2147	-0.0906	1.0685
234	34.21	0.05	5.3976	5.6584	0.5143	-0.2965	0.0370	0.0349	0.2077	-0.1128	1.0494
235	34.45	0.02	5.5149	5.8657	0.4937	-0.2819	0.0372	0.1084	0.2150	-0.1067	1.0469
236	34.69	0.04	5.6082	5.8361	0.4167	-0.0615	0.0429	0.1132	0.2160	-0.1029	1.0595
237	34.95	0.04	5.6929	5.9930	0.3454	0.0169	0.0373	0.0968	0.2099	-0.1132	1.0608
238	35.18	0.03	5.6744	5.9946	0.4141	0.1317	0.0376	0.1004	0.2114	-0.1111	1.0564
239	35.41	0.03	5.8116	5.9958	0.2892	0.3951	0.0373	0.1129	0.2214	-0.1086	1.0255
240	35.68	0.02	5.9107	6.2325	0.1318	0.5239	0.0377	0.0860	0.2108	-0.1248	1.0544
241	35.92	0.01	6.0055	6.2033	-0.1317	0.7732	0.0350	0.0879	0.2105	-0.1226	1.0227
242	36.14	0.03	6.1291	6.2106	0.1345	0.6836	0.0379	0.0946	0.2074	-0.1228	1.0133
243	36.40	0.01	6.2646	6.2030	-0.0195	0.8339	0.0390	0.0743	0.1885	-0.1142	0.9963
244	36.62	0.01	6.1870	6.1731	0.0599	0.5976	0.0327	0.0770	0.1929	-0.1159	0.9977
245	36.86	0.03	6.3973	6.1924	0.1274	0.7117	0.0389	0.0908	0.1960	-0.1056	0.9880
246	37.11	0.02	6.5123	6.1342	0.0367	1.0427	0.0321	0.0968	0.1909	-0.0960	0.9819
247	37.35	-0.01	6.6215	6.2513	-0.2536	1.1914	0.0328	0.0527	0.1811	-0.1284	0.9460
248	37.61	-0.02	6.7478	6.1933	-0.0217	1.3927	0.0327	0.0578	0.1805	-0.1227	0.9164
249	37.83	-0.01	6.8476	6.1917	-0.2377	1.3458	0.0332	0.0439	0.1809	-0.1370	0.8840
250	38.05	-0.01	6.8794	6.2122	-0.3564	1.4751	0.0327	0.0459	0.1807	-0.1348	0.9035
251	38.28	-0.03	7.0012	6.1319	-0.5633	1.7179	0.0325	0.0540	0.1850	-0.1310	0.8759
252	38.52	-0.01	7.1144	6.0992	-0.6730	1.7930	0.0325	0.0420	0.1775	-0.1355	0.8574
253	38.75	-0.01	7.2911	5.8793	-0.4563	1.6335	0.0336	0.0572	0.1811	-0.1239	0.8064
254	38.95	-0.02	7.2677	6.0678	-0.6478	1.5585	0.0340	0.0391	0.1691	-0.1300	0.8326
255	39.19	-0.04	7.4514	5.8643	-0.3193	1.6430	0.0337	0.0066	0.1836	-0.1220	0.7853
256	39.41	-0.02	7.5273	5.8205	-0.5124	1.7203	0.0342	0.0456	0.1749	-0.1343	0.7740
257	39.66	-0.02	7.6272	5.8104	-0.4385	1.8135	0.0307	0.0496	0.1737	-0.1241	0.7618
258	39.84	-0.01	7.6965	5.9639	-0.3995	1.8259	0.0306	0.0284	0.1635	-0.1371	0.7850
259	40.05	-0.01	7.7852	5.8318	-0.4044	1.8763	0.0302	0.0316	0.1741	-0.1425	0.7530
260	40.26	-0.01	7.9976	5.8333	-0.3494	1.9438	0.0367	0.0354	0.1787	-0.1433	0.7044
261	40.48	-0.01	8.1302	5.8579	-0.3453	1.9196	0.0314	0.0405	0.1787	-0.1382	0.6902
262	40.66	-0.02	8.0433	5.8408	-0.3864	1.8884	0.0322	0.0300	0.1709	-0.1409	0.7028
263	40.88	-0.04	8.1336	5.7124	-0.2160	1.9576	0.0324	0.0421	0.1743	-0.1322	0.7023
264	41.08	-0.01	8.1795	5.7073	-0.3140	1.9545	0.0327	0.0375	0.1744	-0.1369	0.6977
265	41.29	-0.00	8.3012	5.8083	-0.2591	1.9496	0.0324	0.0427	0.1764	-0.1437	0.6708
266	41.51	-0.00	8.4314	5.8281	-0.1751	1.7865	0.0348	0.0319	0.1863	-0.1544	0.6672
267	41.69	-0.01	8.4536	5.8227	-0.2579	1.8804	0.0347	0.0185	0.1659	-0.1504	0.6770
268	41.88	-0.02	8.3418	5.9774	-0.3247	1.8868	0.0339	0.0185	0.1605	-0.1420	0.7166
269	42.09	-0.02	8.5449	5.8938	-0.2906	1.9856	0.0356	0.0253	0.1735	-0.1482	0.6666
270	42.27	-0.00	8.6174	5.8489	-0.2209	1.8750	0.0284	0.0149	0.1653	-0.1504	0.6787
271	42.47	-0.01	8.7549	5.8708	-0.2525	1.8779	0.0289	0.0319	0.1802	-0.1483	0.6388
272	42.66	-0.00	8.8815	5.8794	-0.2118	1.8157	0.0355	0.0321	0.1836	-0.1515	0.6653
273	42.91	-0.01	8.8351	5.8941	-0.2078	1.8944	0.0353	0.0218	0.1672	-0.1454	0.6680
274	43.00	-0.00	8.9548	5.7488	-0.1961	1.8340	0.0388	0.0133	0.1695	-0.1562	0.6423
275	43.18	-0.02	8.8749	5.9385	-0.2878	1.8990	0.0413	0.0046	0.1614	-0.1568	0.6672
276	43.38	-0.01	9.0714	5.7515	-0.2316	0.6476	0.0430	0.0014	0.1722	-0.1708	0.6340

NAVAL AIR DEVELOPMENT CENTER(NSWDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 1 OF 1

PANTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH HALO-6 PHI CONF L DELL DEL2 DEL3 DEL4 TRANSITION
7 6P 0.90 1.7 0.0 BLOCFD 0.0 OFF OFF OFF OFF UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
277	43.56	-0.00	9.0623	5.7693	-0.1063	0.8841	0.0370	0.0013	0.1697	-0.1684	0.6402
278	43.71	-0.01	9.1619	5.8758	-0.1056	0.3656	0.0396	-0.0024	0.1631	-0.1655	0.6283
279	43.91	-0.01	9.2203	5.8281	-0.2532	0.9098	0.0433	0.0116	0.1798	-0.1692	0.6091
280	44.08	0.00	9.2756	5.9379	-0.1715	0.8553	0.0435	0.0159	0.1795	-0.1636	0.6078
281	44.27	-0.01	9.3420	5.8394	-0.1360	0.5526	0.0453	0.0121	0.1791	-0.1670	0.6132
282	44.46	-0.01	9.4145	5.8945	-0.0546	0.1361	0.0469	0.0032	0.1802	-0.1770	0.6148
283	44.64	-0.03	9.4818	5.8515	-0.2746	0.8736	0.0494	0.0031	0.1715	-0.1684	0.6077
284	44.81	-0.03	9.4493	5.9050	-0.2762	0.9317	0.0445	0.0064	0.1839	-0.1775	0.6334
285	44.99	-0.03	9.5391	5.8913	-0.2068	0.6053	0.0466	-0.0021	0.1828	-0.1849	0.6265
286	45.17	-0.02	9.5716	5.9469	-0.2567	0.7915	0.0454	0.0125	0.1869	-0.1744	0.6152
287	45.43	-0.02	9.6579	5.9159	-0.1731	0.5662	0.0466	0.0173	0.1980	-0.1807	0.6452
288	45.62	-0.02	9.6109	6.0292	-0.0779	0.4961	0.0467	0.0303	0.2022	-0.1719	0.6337
289	45.79	-0.03	9.6636	6.0163	-0.2035	0.6930	0.0466	0.0221	0.2018	-0.1797	0.6326
290	45.98	-0.02	9.8361	5.9125	-0.1120	0.5505	0.0472	0.0277	0.2350	-0.2073	0.5897
291	46.03	-0.01	9.8961	6.0701	-0.0717	0.6256	0.0465	0.0776	0.2663	-0.1887	0.6269
292	46.22	-0.02	9.7657	6.0592	-0.1522	0.4747	0.0477	0.0749	0.2819	-0.2050	0.6409
293	46.36	0.00	10.0031	6.0718	0.1526	0.1661	0.0487	0.2162	0.3843	-0.1701	0.6969
294	45.56	0.00	9.8753	5.9674	0.2326	-0.1234	0.0496	0.6955	0.3389	-0.2433	0.6043
295	46.72	-0.01	9.8920	5.9599	0.1915	0.0386	0.0489	0.1613	0.3479	-0.1866	0.5610
296	46.89	0.02	10.1598	6.0601	0.2811	0.1294	0.0493	0.1665	0.3513	-0.2048	0.6239
297	47.07	0.00	10.3306	6.2163	0.1205	0.3323	0.0483	0.1296	0.3531	-0.2235	0.6073
298	47.25	0.02	10.4038	6.1150	0.3299	0.3679	0.0480	0.1261	0.3460	-0.2199	0.3985
299	47.43	0.02	10.5958	6.2331	0.3638	0.5579	0.0472	0.1282	0.3611	-0.2129	0.3248
300	47.60	0.03	10.7365	6.3572	0.3640	0.4873	0.0519	0.1339	0.3497	-0.2158	0.2719
301	47.78	0.03	10.9148	6.4543	0.4337	0.9368	0.0523	0.1356	0.3606	-0.2250	0.2619
302	47.97	0.02	11.0429	6.4781	0.3003	1.2469	0.0515	0.1311	0.3487	-0.2176	0.2425
303	48.13	0.03	11.1023	6.4928	0.4081	1.1875	0.0517	0.1022	0.3445	-0.2423	0.2561
304	48.32	0.04	11.1574	6.7228	0.5415	1.1753	0.0518	0.1283	0.3583	-0.2300	0.2438
305	48.47	0.04	11.1716	6.6943	0.5640	0.9550	0.0527	0.1233	0.3621	-0.2388	0.2560
306	48.63	0.05	11.0915	3.3312	0.6517	1.1347	0.0576	0.0622	0.3274	-0.2651	0.3003
307	48.83	0.03	11.2367	3.4164	0.7070	1.0052	0.0569	0.0459	0.3366	-0.2608	0.2765
308	48.99	0.04	11.2334	3.1222	0.6377	0.9051	0.0587	0.1022	0.3345	-0.2323	0.2779
309	49.17	0.04	11.3275	3.4584	0.5820	1.1763	0.0587	0.0668	0.3274	-0.2605	0.3053
310	49.35	0.05	11.3804	3.2597	0.6296	1.1543	0.0530	0.0814	0.3205	-0.2340	0.2862
311	49.55	0.05	11.5526	3.4275	0.6432	1.1726	0.0593	0.0832	0.3367	-0.2534	0.2801
312	49.75	0.05	11.3615	3.3938	0.3651	1.2681	0.0532	0.0675	0.3236	-0.2560	0.3163
313	49.92	0.04	11.6097	3.3078	0.5499	1.0438	0.0597	0.0763	0.3404	-0.2640	0.3058

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 1 OF 2

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	PALDEG	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	04	0.60	1.7	0.0	010P10	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 2 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NUMBER	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	BB	0.9, 1.7	0.0	1	3.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 3 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REINO	P=1	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	8A	0.80	1.67	0.0	81=0F0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	ACPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 4 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	SALOM	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	MA	0.95	1.7	0.0	BODY	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4

PAGE 1 OF 1
SHEET 5 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REID-6	M=1	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	68	3.00	1.7	0.0	MIDFU	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 6 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RALPH	PHI	CONE	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	BA	0.96	1.7	0.0	BLACK0	9.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	YCPF4	YCPF4

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 7 OF 7

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	84	0.96	1.7	0.0	B1+0F0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 1 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

I	J	PART	MACH	REINOR	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7		M7	1.00	1.7	0.0	MINOR0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CN1	CA1	XCPF1	YCPF1	CNF2	CN2	CA2	XCPF2	YCPF2

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 2 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	M7	1.60	1.7	0.0	81-UP 0	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 3 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NO.×10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	MT	1.00 1.7	0.0	b1=OFO	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	ACPF1	YCPF1	CNF2	CM2	CB2	ACPF2	YCPF2

PAGE 1 OF 1
SHEET 1 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NUMBER	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	67	1.00	1.7	3.0	81.000	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.08	0.01	-0.2940	-2.7775	0.0004	0.0064	-0.0004	0.4438	0.1837	0.2601	3.1800
2	-5.09	0.00	-0.2941	-0.5141	0.0119	-0.0018	-0.0006	0.4439	0.1843	0.2594	3.4731
3	-5.08	-0.01	-0.2161	-0.7415	-0.0556	0.0234	0.0007	0.4427	0.1861	0.2566	3.7671
4	-5.01	0.01	-0.1865	-0.7042	0.0587	0.0029	0.0048	0.4493	0.1801	0.2692	3.8169
5	-3.03	0.01	-0.1375	-0.5787	0.1238	-0.0952	0.0057	0.4433	0.1693	0.2740	2.7484
6	-1.79	0.01	-0.0603	-0.1184	0.1264	-0.0792	0.0004	0.4333	0.1622	0.2711	1.9300
7	0.16	0.01	0.0456	0.1336	0.0043	-0.0166	0.0016	0.4380	0.1559	0.2821	2.4158
8	2.03	0.01	0.1323	0.3537	0.1021	-0.0754	0.0080	0.4571	0.1689	0.2862	2.6758
9	3.91	0.01	0.2358	0.5395	0.1435	-0.0952	0.0048	0.4930	0.2047	0.2882	2.2457
10	5.82	0.01	0.3365	0.6678	0.1015	-0.0928	0.0097	0.5174	0.2356	0.2817	1.9730
11	7.76	0.00	0.4259	0.8393	0.0243	-0.0196	0.0031	0.5303	0.2689	0.2613	1.7656
12	9.56	0.02	0.6319	0.9299	0.1389	-0.0204	0.0058	0.5495	0.2890	0.2605	1.4738
13	11.53	-0.01	0.6633	1.0882	-0.0183	0.0575	0.0066	0.5573	0.3038	0.2535	1.2516
14	13.41	0.00	1.0163	1.1217	-0.0157	0.1196	0.0077	0.5654	0.3206	0.2448	1.1015
15	15.37	-0.02	1.2226	1.3093	-0.0378	0.1358	0.0089	0.5826	0.3306	0.2258	1.0716
16	17.34	-0.00	1.4702	1.4823	-0.0511	0.3143	0.0095	0.5845	0.3544	0.2171	0.9947
17	19.21	-0.00	1.6871	1.7532	-0.0955	0.3865	0.0107	0.5586	0.3684	0.1900	1.0450
18	21.22	-0.00	2.0604	2.1076	-0.0699	0.1880	0.0134	0.5413	0.3495	0.1718	1.0317
19	23.25	0.01	2.6525	2.3051	0.0440	-0.0538	0.0170	0.5275	0.3500	0.1569	0.8562
20	25.21	0.03	3.0952	3.3757	0.2085	-0.3497	0.0201	0.5117	0.3816	0.1299	0.9934
21	27.26	0.04	3.6349	3.6634	0.3862	-0.4352	0.0232	0.5083	0.3961	0.1122	0.7979
22	28.06	0.04	3.9227	3.2923	0.4111	-0.3094	0.0235	0.4926	0.4011	0.0914	0.8393
23	24.08	0.04	3.9136	3.1555	0.3886	-0.2961	0.0234	0.5131	0.4043	0.1088	0.8864
24	23.06	0.06	3.9343	3.1455	0.5445	-0.3666	0.0269	0.5122	0.4119	0.1003	0.7996
25	24.08	0.05	3.9618	3.1156	0.4555	-0.3223	0.0234	0.5107	0.4106	0.1001	0.7955
26	25.07	0.04	3.9528	3.0931	0.3521	-0.3126	0.0240	0.5195	0.4115	0.1080	0.7750
27	28.07	0.03	3.9578	3.1374	0.3134	-0.1697	0.0232	0.5278	0.4108	0.1170	0.7927
28	28.31	0.04	4.0938	3.1944	0.3248	-0.1756	0.0236	0.5207	0.4087	0.1120	0.7880
29	28.52	0.04	4.1328	3.1891	0.3501	-0.1171	0.0239	0.5145	0.4101	0.1046	0.7612
30	28.97	0.04	4.2451	3.1447	0.3296	-0.0859	0.0241	0.5202	0.4105	0.1097	0.7373
31	29.25	0.03	4.3254	3.1374	0.2782	-0.0141	0.0245	0.5124	0.4098	0.1026	0.7087
32	29.58	0.04	4.4947	3.0833	0.3542	-0.0342	0.0296	0.5243	0.4125	0.1118	0.7012
33	29.84	0.03	4.5558	3.1907	0.2055	0.1925	0.0299	0.5153	0.4192	0.0960	0.7018
34	30.14	0.03	4.6521	3.2041	0.1468	0.2775	0.0331	0.4984	0.4137	0.0850	0.6942
35	30.41	0.02	4.6561	3.1203	0.1457	0.3736	0.0249	0.5063	0.4162	0.0940	0.6693
36	30.68	0.03	4.7343	3.1099	0.1471	0.4670	0.0302	0.5032	0.4173	0.0858	0.6197
37	30.97	0.02	5.0318	3.0963	-0.0137	0.6056	0.0304	0.5126	0.4209	0.0816	0.6040
38	31.25	0.01	5.2144	3.0134	-0.0261	0.7776	0.0305	0.5045	0.4191	0.0853	0.5779
39	31.52	0.01	5.3243	2.9991	-0.1530	1.0212	0.0301	0.4927	0.4166	0.0760	0.5526
40	31.80	0.02	5.4031	2.9362	-0.0017	0.8694	0.0254	0.4957	0.4128	0.0828	0.5431
41	32.07	0.00	5.5226	2.9274	-0.1792	1.1726	0.0303	0.4953	0.4160	0.0792	0.5294
42	32.34	-0.01	5.6146	2.8993	-0.2174	1.3315	0.0268	0.5096	0.4205	0.0890	0.5158
43	32.60	-0.01	5.7119	2.8213	-0.2695	1.4131	0.0252	0.5156	0.4244	0.0911	0.4940
44	32.86	-0.01	5.7720	2.8390	-0.2521	1.3152	0.0256	0.5110	0.4268	0.0841	0.4902
45	33.14	-0.01	5.8362	2.8153	-0.2901	1.4777	0.0253	0.5040	0.4205	0.0824	0.4503
46	33.37	-0.01	5.9466	2.7726	-0.2787	1.4653	0.0256	0.4937	0.4282	0.0654	0.4663

PAGE 1 OF 1
SHEET 2 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 67 MACH 1.00 1.7 PHI 0.0 CONF 61.000 L 0.0 DEL1 OFF DEL2 OFF DEL3 OFF DEL4 OFF TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.69	[illegible]	6.8108	2.6367	-0.1512	1.5093	0.0259	0.5051	0.4326	0.0730	0.4273
48	33.99	-0.02	6.7496	2.6196	-0.3795	1.7333	0.0266	0.5041	0.4365	0.0675	0.4162
49	34.13	-0.02	6.8311	2.6717	-0.4111	1.7523	0.0260	0.4972	0.4407	0.0566	0.4220
50	34.34	-0.00	6.8022	2.6526	-0.2800	1.6439	0.0264	0.5054	0.4428	0.0629	0.3986
51	34.03	-0.01	6.8376	2.6519	-0.2380	1.5270	0.0281	0.5029	0.4458	0.0574	0.3791
52	34.97	-0.01	6.8122	2.6311	-0.3764	1.7241	0.0274	0.5234	0.4496	0.0737	0.3637
53	35.19	-0.01	6.7485	2.5626	-0.2787	1.6624	0.0282	0.4963	0.4458	0.0484	0.3738
54	35.38	-0.01	6.9326	2.6171	-0.3435	1.7533	0.0286	0.4965	0.4530	0.0414	0.3502
55	35.60	-0.00	6.9227	2.6328	-0.1657	1.5501	0.0289	0.5076	0.4530	0.0545	0.3225
56	35.46	-0.02	7.0301	2.6711	-0.4218	1.7821	0.0290	0.4876	0.4436	0.0439	0.3302
57	36.10	-0.03	7.2084	2.2222	-0.2946	1.6322	0.0302	0.4875	0.4443	0.0431	0.3083
58	36.42	-0.02	7.2336	2.2822	-0.2501	1.5697	0.0304	0.4932	0.4537	0.0394	0.3155
59	36.56	-0.02	7.2759	2.3685	-0.2073	1.5154	0.0307	0.4764	0.4380	0.0383	0.3228
60	36.80	-0.02	7.3942	2.1241	-0.2916	1.6459	0.0307	0.4887	0.4412	0.0474	0.2871
61	37.04	-0.03	7.4143	2.2441	-0.3301	1.5574	0.0313	0.4866	0.4419	0.0446	0.3027
62	37.28	-0.01	7.5443	2.1167	-0.1810	1.5607	0.0312	0.4707	0.4276	0.0431	0.2806
63	37.51	-0.03	7.5819	2.2216	-0.3032	1.6473	0.0324	0.4551	0.4276	0.0275	0.2930
64	37.75	-0.03	7.8146	1.8596	-0.3294	1.7875	0.0315	0.4605	0.4308	0.0297	0.2392
65	37.99	-0.04	7.9267	2.0464	-0.4555	1.9513	0.0333	0.4582	0.4241	0.0241	0.2581
66	38.23	-0.04	7.9947	1.9613	-0.4065	1.8206	0.0331	0.4693	0.4412	0.0081	0.2453
67	38.44	-0.03	8.0183	1.8284	-0.3265	1.6315	0.0329	0.4631	0.4276	0.0354	0.2278
68	38.70	-0.02	8.2115	1.8565	-0.2921	1.6273	0.0335	0.4449	0.4322	0.0127	0.2066
69	38.92	-0.03	8.2122	1.8505	-0.3017	1.2045	0.0334	0.4351	0.4109	0.0242	0.2387
70	39.12	-0.03	8.2574	1.9928	-0.4251	1.2340	0.0357	0.4239	0.4123	0.0119	0.2413
71	39.35	-0.03	8.3435	1.8781	-0.4830	1.3596	0.0355	0.4119	0.4012	0.0107	0.2308
72	39.58	-0.04	8.4135	1.7618	-0.3471	1.3134	0.0358	0.4163	0.4026	0.0137	0.2118
73	39.77	-0.04	8.5424	1.8267	-0.3766	1.3043	0.0363	0.4081	0.4015	0.0066	0.2137
74	39.98	-0.02	8.5445	1.7781	-0.2022	1.3713	0.0356	0.3901	0.3911	-0.0010	0.2081
75	40.20	-0.03	8.6777	1.8006	-0.3867	1.3357	0.0365	0.3918	0.3928	-0.0012	0.2075
76	40.38	-0.03	8.7566	1.8063	-0.2048	1.0131	0.0379	0.3860	0.3811	0.0049	0.2063
77	40.60	-0.04	8.7532	1.8669	-0.2677	1.0627	0.0381	0.3965	0.3923	0.0042	0.1902
78	40.80	-0.03	8.8159	1.7838	-0.2117	0.9549	0.0383	0.3837	0.3860	-0.0023	0.1997
79	41.01	-0.04	9.0142	1.8199	-0.2885	1.0215	0.0389	0.3834	0.3850	-0.0016	0.1797
80	41.23	-0.05	9.0554	1.5904	-0.3743	1.0299	0.0338	0.3924	0.3853	0.0071	0.1757
81	41.48	-0.01	9.1852	1.5921	-0.1643	1.1653	0.0386	0.3721	0.3815	-0.0094	0.1736
82	41.63	-0.03	9.2218	1.5150	-0.2324	0.9976	0.0342	0.3679	0.3787	-0.0108	0.1643
83	41.83	-0.02	9.3410	1.4387	-0.2263	1.0711	0.0375	0.3858	0.3843	-0.0015	0.1268
84	42.05	-0.02	9.4270	1.4857	-0.1692	1.1714	0.0397	0.3958	0.3746	-0.0188	0.1577
85	42.25	-0.01	9.4912	1.4600	-0.1323	1.0947	0.0357	0.3667	0.3710	-0.0263	0.1545
86	42.41	-0.03	9.5786	1.5816	-0.1457	0.9386	0.0350	0.3692	0.3742	-0.0050	0.1666
87	42.61	-0.03	9.6801	1.4922	-0.1009	1.0693	0.0385	0.3572	0.3678	-0.0106	0.1732
88	42.80	-0.04	9.6196	1.5594	-0.1817	0.9117	0.0360	0.3695	0.3696	-0.0201	0.1631
89	42.97	-0.04	9.7092	1.4753	-0.1936	1.0615	0.0372	0.3838	0.3688	-0.0250	0.1520
90	43.15	-0.03	9.7526	1.5822	-0.1734	0.8106	0.0369	0.3561	0.3702	-0.0161	0.1602
91	43.34	-0.04	9.8106	1.5536	-0.1784	0.7168	0.0375	0.3663	0.3713	-0.0250	0.1568
92	43.52	-0.03	9.8377	1.5496	-0.1560	0.8365	0.0388	0.3556	0.3713	-0.0155	0.1626

PAGE 1 OF 1
SHEET 3 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART SCALE RATIO=.6 PHI COSF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 87 1.00 1.67 0.0 01.0F0 0.0 OFF OFF OFF OFF UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAH	CAF	XCP
93	43.72	-0.03	9.9726	1.0369	-0.1582	0.5123	0.0349	0.3308	0.3713	-0.0405	0.1539
94	43.87	-0.01	10.0021	1.0304	-0.0379	0.3163	0.0343	0.3243	0.3681	-0.0438	0.1439
95	43.96	-0.02	10.0231	1.0322	-0.0123	0.1377	0.0350	0.3188	0.3600	-0.0412	0.1079
96	44.20	-0.03	10.2140	1.0594	-0.2792	0.6116	0.0344	0.3217	0.3667	-0.0450	0.1527
97	44.43	-0.02	10.2961	1.0237	-0.0869	0.2464	0.0419	0.3047	0.3583	-0.0466	0.1585
98	44.62	-0.02	10.2975	1.0349	-0.0295	0.1396	0.0412	0.3150	0.3610	-0.0460	0.1763
99	44.82	-0.02	10.2919	1.0322	-0.0385	0.0856	0.0406	0.3035	0.3613	-0.0578	0.1811
100	44.98	-0.02	10.3570	1.0143	-0.0158	0.0440	0.0367	0.3219	0.3694	-0.0475	0.1752
101	45.19	-0.00	10.3744	1.0338	0.0079	-0.1341	0.0373	0.3111	0.3623	-0.0512	0.1864
102	45.36	-0.00	10.4002	1.0306	0.0306	-0.0751	0.0429	0.3150	0.3718	-0.0568	0.1705
103	45.53	-0.02	10.5173	1.0313	-0.0047	-0.1277	0.0377	0.3111	0.3687	-0.0576	0.1760
104	45.71	-0.02	10.7111	1.0559	0.0134	-0.2014	0.0383	0.3167	0.3722	-0.0555	0.1490
105	45.88	-0.01	10.6225	1.0455	0.0771	-0.1196	0.0391	0.3302	0.3863	-0.0575	0.1643
106	46.04	-0.01	10.6702	1.0703	0.1103	-0.3115	0.0389	0.3197	0.3929	-0.0732	0.1596
107	46.21	-0.02	10.6735	1.0525	0.0489	-0.4043	0.0386	0.2952	0.3810	-0.0858	0.1736
108	46.41	-0.01	10.9123	1.0529	0.1067	-0.1941	0.0392	0.3311	0.4059	-0.0748	0.1468
109	46.58	-0.02	10.8353	1.0705	0.0326	-0.0859	0.0386	0.3358	0.4052	-0.0694	0.1574
110	46.75	-0.03	11.0473	1.0502	-0.0141	-0.1530	0.0396	0.3485	0.4319	-0.0834	0.1365
111	46.93	-0.01	10.9504	1.0279	0.0528	-0.1930	0.0396	0.3674	0.4400	-0.0526	0.1480
112	47.10	-0.01	11.1364	1.0320	0.0956	-0.1836	0.0401	0.3794	0.4379	-0.0585	0.1330
113	47.27	-0.01	11.3340	1.0158	0.0988	-0.2396	0.0405	0.3920	0.4473	-0.0553	0.1046
114	47.46	-0.01	11.3096	1.0251	0.1277	-0.2234	0.0407	0.4017	0.4582	-0.0565	0.1145
115	47.63	-0.02	11.3779	0.9703	0.1049	-0.1202	0.0405	0.4154	0.4716	-0.0562	0.0860
116	47.81	-0.00	11.5275	1.0062	0.1910	-0.3209	0.0415	0.3887	0.4565	-0.0643	0.0944
117	47.97	-0.01	11.5305	1.0102	0.1620	-0.2662	0.0414	0.3841	0.4609	-0.0768	0.1029
118	48.17	-0.01	11.6927	0.9962	0.0968	-0.1640	0.0417	0.3862	0.4507	-0.0645	0.0852
119	48.34	-0.02	11.8303	0.9792	0.0394	-0.0123	0.0416	0.3599	0.4398	-0.0799	0.0692
120	48.50	-0.00	11.7737	0.9533	0.1438	-0.1326	0.0417	0.3559	0.4264	-0.0706	0.0725
121	48.68	-0.00	11.8167	1.0184	0.1052	-0.3951	0.0454	0.3034	0.4116	-0.1083	0.0859
122	48.83	-0.02	11.8972	1.0125	-0.0075	0.0418	0.0449	0.2660	0.3929	-0.1269	0.0986
123	48.98	-0.02	11.8539	0.9834	0.0931	0.1571	0.0455	0.3331	0.4014	-0.0683	0.0703
124	49.17	0.00	11.8419	0.9563	0.1155	0.3707	0.0457	0.3069	0.4039	-0.0972	0.0744
125	48.49	-0.01	11.8604	0.9709	0.0557	0.1044	0.0466	0.3485	0.4213	-0.0728	0.0737

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 1 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RAIL-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	47	1.00	1.7	0.0	81.0470	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	ACPF3	YCPF3	CNF4	CM4	CH4	ACPF4	YCPF4

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 2 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NUMBER	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	07	1.60 1.97	0.0	SIMUFC	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	ACPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) . . . . . 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 1
SHEET 3 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NUMBER	RNL	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
/	W7	1.00 1.7	0.0	MIDPO	0.0	OFF	OFF	OFF	OFF	UNKNOWN

POINT	ALPHA	BETA	CNF4	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART PATCH RADIUS PHI CUTF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 90 0.06 1.7 0.0 81=0F31 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-4.17	-0.02	-2.0756	0.1506	0.0613	-0.1048	0.0069	0.4906	0.1163	0.3739	-2.9574
2	-4.08	-0.03	-2.0748	0.1483	0.0595	-0.0377	0.0069	0.4906	0.1164	0.3742	-2.9673
3	-4.02	-0.03	-2.1107	0.1751	-0.0330	-0.0142	0.0066	0.4911	0.1165	0.3746	-2.9256
4	-3.97	-0.03	-1.8947	0.5035	0.0130	-0.0360	0.0070	0.4900	0.1125	0.3775	-2.9560
5	-1.90	-0.02	-1.4289	0.4257	0.0442	-0.0526	0.0077	0.4440	0.1056	0.3383	-3.1015
6	-0.07	-0.05	-1.0345	0.4481	0.0139	-0.0268	0.0063	0.4005	0.0961	0.3044	-3.3407
7	1.82	-0.02	-0.6481	0.3184	0.0415	-0.0854	0.0016	0.3621	0.0841	0.2729	-3.9663
8	3.87	-0.03	-0.3604	1.5574	-0.0771	-0.0705	0.0345	0.3353	0.0901	0.2451	-5.2314
9	5.56	-0.03	-0.0510	1.2508	0.0173	-0.1107	0.0328	0.3063	0.0841	0.2261	-24.6980
10	7.61	-0.02	0.2804	0.7514	0.0394	-0.1019	0.0037	0.2831	0.0934	0.1897	2.8216
11	9.34	-0.02	0.6738	0.9757	0.0178	-0.0357	0.2045	0.2760	0.1051	0.1710	1.2160
12	11.16	-0.02	0.7319	0.7156	0.0123	-0.0244	0.0053	0.2669	0.1143	0.1527	0.2946
13	13.07	-0.02	1.0576	0.2674	0.1241	-0.0268	0.0137	0.2356	0.1186	0.1167	-0.2721
14	14.91	-0.02	1.4215	-0.0441	-0.0478	0.0312	0.0145	0.2034	0.1251	0.0783	-0.6641
15	16.83	-0.03	1.7883	-1.0824	-0.0587	0.0698	0.0478	0.1818	0.1304	0.0514	-0.9295
16	18.80	-0.03	2.2635	-2.5742	-0.0425	0.0582	0.0734	0.1136	0.1366	-0.0250	-1.1395
17	20.73	-0.03	2.7348	-3.9856	-0.1141	0.1592	0.0538	0.0764	0.1525	-0.0780	-1.3111
18	22.66	-0.03	3.2804	-5.7061	-0.2451	0.5926	0.0906	0.0302	0.1703	-0.1401	-1.4344
19	24.64	-0.03	3.8436	-5.8073	-0.2414	0.6639	0.0334	-0.0264	0.1819	-0.2063	-1.5143
20	26.54	-0.03	4.4016	-7.0576	-0.3719	1.0330	0.0243	-0.0473	0.1933	-0.2805	-1.5748
21	28.44	-0.04	5.0536	-7.8582	-0.1494	0.6024	-0.0398	-0.1683	0.1837	-0.3520	-1.5442
22	29.43	-0.01	5.3911	-8.2705	-0.3442	0.0514	-0.0373	-0.2068	0.1870	-0.3958	-1.5342
23	29.96	-0.02	5.3817	-8.1923	-0.1484	0.4665	-0.0533	-0.2015	0.1865	-0.3860	-1.5279
24	30.91	-0.03	5.4410	-8.3781	0.5784	-0.0805	-0.0293	-0.2040	0.1876	-0.3918	-1.5334
25	32.62	-0.01	5.5330	-8.5139	0.6373	0.0386	-0.1470	-0.2225	0.1893	-0.4118	-1.5395
26	34.72	-0.00	5.6454	-8.5586	0.1249	-0.1194	-0.0361	-0.2245	0.1932	-0.4177	-1.5183
27	36.45	0.01	5.7458	-8.6458	0.2565	-0.3182	-0.0356	-0.2414	0.1927	-0.4341	-1.5119
28	37.31	0.02	5.8750	-8.8545	0.5490	-0.9904	0.0109	-0.2504	0.1941	-0.4445	-1.5072
29	37.56	0.02	5.9386	-8.9319	0.5414	-0.9253	-0.0040	-0.2466	0.1960	-0.4424	-1.5061
30	37.87	0.04	6.0643	-9.1454	0.4944	-1.6852	0.0276	-0.2562	0.1941	-0.4523	-1.5148
31	38.13	0.05	6.1095	-9.2276	1.0236	-2.0756	0.0282	-0.2581	0.1946	-0.4569	-1.5131
32	38.41	0.06	6.2134	-9.3960	1.2443	-2.6443	0.0368	-0.2738	0.2007	-0.4745	-1.5193
33	38.70	0.05	6.2194	-9.4233	1.1194	-2.6735	0.0385	-0.2646	0.2022	-0.4869	-1.5159
34	38.96	0.07	6.3033	-9.5504	1.3565	-2.6549	0.0376	-0.2882	0.2037	-0.4920	-1.5161
35	39.28	0.06	6.3934	-10.0582	1.2243	-2.8659	0.0450	-0.3021	0.2068	-0.5069	-1.5082
36	39.51	0.06	6.4236	-10.0647	1.2341	-2.5628	0.0483	-0.3052	0.2081	-0.5133	-1.4752
37	39.76	0.05	6.4991	-10.1693	1.2511	-2.8401	0.0341	-0.3011	0.2125	-0.5136	-1.4703
38	40.05	0.04	7.0356	-10.2461	1.5427	-2.6477	0.0418	-0.3096	0.2150	-0.5249	-1.4567
39	40.36	0.07	7.1424	-10.2561	1.5173	-2.8516	0.0498	-0.3158	0.2134	-0.5322	-1.4359
40	40.58	0.08	7.2447	-10.4273	1.5243	-2.5756	0.1148	-0.3207	0.2202	-0.5409	-1.4393
41	40.84	0.06	7.3604	-10.5023	1.5178	-2.5514	0.1451	-0.3363	0.2227	-0.5590	-1.4192
42	41.08	0.07	7.5365	-10.6071	1.5364	-2.3454	0.1602	-0.3366	0.2270	-0.5436	-1.4075
43	41.32	0.07	7.6094	-10.6867	1.6334	-2.2222	0.1677	-0.3366	0.2275	-0.5641	-1.4036
44	41.58	0.07	7.7644	-10.8710	1.6470	-2.2544	0.1760	-0.3371	0.2304	-0.5675	-1.3743
45	41.84	0.08	7.8405	-10.8485	1.6304	-2.1713	0.2066	-0.3438	0.2341	-0.5819	-1.3700
46	42.08	0.07	7.9031	-10.9066	1.6378	-2.1267	0.2213	-0.3420	0.2425	-0.5845	-1.3643

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) / BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	RAPL	MACH NO.	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	90	0.60 1.7	0.0	31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
47	36.36	0.07	8.1196	-10.9741	1.5143	-1.9867	0.2141	-0.3477	0.2420	-0.5897	-1.3538
48	36.57	0.06	8.1508	-11.0781	1.5915	-1.0795	0.2289	-0.3387	0.2567	-0.5894	-1.3512
49	36.81	0.06	8.2128	-11.1343	1.5922	-1.5931	0.2446	-0.3313	0.2556	-0.5869	-1.3459
50	37.05	0.05	8.2851	-11.1956	1.6507	-1.3347	0.2359	-0.3201	0.2715	-0.5916	-1.3375
51	37.27	0.06	8.3742	-11.1352	1.5145	-1.0899	0.2055	-0.3195	0.2729	-0.5924	-1.3297
52	37.54	0.07	8.4582	-11.2332	1.4331	-1.1317	0.1942	-0.3307	0.2724	-0.6031	-1.3132
53	37.76	0.07	8.5573	-11.2373	1.4232	-1.1596	0.1875	-0.3443	0.2711	-0.6156	-1.3096
54	37.98	0.06	8.7149	-11.3985	1.2398	-0.9357	0.1471	-0.3417	0.2691	-0.6108	-1.3080
55	38.23	0.06	8.8384	-11.4504	1.2094	-1.1999	0.1411	-0.3529	0.2759	-0.6288	-1.2962
56	38.48	0.06	8.9377	-11.4252	1.0779	-0.9982	0.0997	-0.3341	0.2890	-0.6230	-1.3007
57	38.69	0.08	9.0509	-11.5578	1.1571	-0.3609	0.0938	-0.3391	0.2920	-0.6310	-1.2789
58	38.93	0.05	9.2424	-11.7460	0.8824	0.8077	0.0604	-0.3148	0.3162	-0.6309	-1.2752
59	39.17	0.06	9.3376	-11.6890	0.9051	1.1980	0.0591	-0.2957	0.3396	-0.6302	-1.2717
60	39.41	0.07	9.5108	-12.0882	0.9905	1.3532	0.0364	-0.3017	0.3416	-0.6432	-1.2724
61	39.64	0.08	9.6328	-11.8534	0.9803	1.6376	0.0209	-0.2708	0.3659	-0.6367	-1.2631
62	39.86	0.07	9.6997	-11.8447	0.9169	1.6363	0.0356	-0.2663	0.3698	-0.6371	-1.2402
63	40.09	0.08	9.8705	-11.8609	1.0906	1.7378	-0.0388	-0.2111	0.4123	-0.6234	-1.1869
64	40.33	0.07	9.8391	-11.8588	0.9523	1.5190	-0.0522	-0.2026	0.4024	-0.6050	-1.1684
65	40.55	0.07	9.8617	-11.8588	0.8735	1.8618	-0.0453	-0.1920	0.4349	-0.6319	-1.1613
66	40.75	0.07	9.8817	-11.8278	0.8616	1.6158	-0.0743	-0.1774	0.4487	-0.6261	-1.1390
67	40.96	0.06	9.7771	-10.9195	1.0855	1.3289	-0.0738	-0.1837	0.4589	-0.6226	-1.1163
68	41.19	0.07	9.8898	-11.1939	0.9430	1.5929	-0.0286	-0.1953	0.4486	-0.6439	-1.1252
69	41.39	0.07	9.9624	-11.2442	0.9867	1.5930	-0.0508	-0.1892	0.4608	-0.6300	-1.1086
70	41.62	0.07	9.9991	-10.8923	0.9400	1.5906	-0.0426	-0.1565	0.4725	-0.6290	-1.0725
71	41.86	0.07	10.1836	-11.1543	0.9015	1.4531	0.0631	-0.2165	0.4390	-0.6505	-1.1006
72	42.12	0.06	10.4371	-12.2112	0.6980	1.6317	0.0927	-0.3407	0.3799	-0.7206	-1.1708
73	42.22	0.07	10.3962	-11.9184	0.9074	1.2394	0.0715	-0.3239	0.3838	-0.7077	-1.1407
74	42.42	0.07	10.4908	-12.0878	0.8981	1.3205	0.1017	-0.3516	0.3829	-0.7345	-1.1503
75	42.65	0.07	10.5519	-11.9434	0.8165	1.4555	0.0640	-0.3236	0.3883	-0.6919	-1.1319
76	42.88	0.05	10.6386	-12.1020	0.6983	1.1924	0.1030	-0.3776	0.3522	-0.7298	-1.1375
77	43.15	0.07	10.7599	-12.1184	0.7311	1.5609	0.0494	-0.3514	0.3726	-0.7240	-1.1263
78	43.25	0.05	10.7545	-12.0027	0.6705	1.9582	0.0032	-0.3098	0.3892	-0.6990	-1.1156
79	43.44	0.04	10.8726	-12.2417	0.6826	1.9897	0.0259	-0.3578	0.3960	-0.7538	-1.1256
80	43.63	0.05	10.8951	-11.9152	0.3454	2.1412	-0.0114	-0.3139	0.4296	-0.7435	-1.0986
81	43.83	0.05	10.9585	-11.9717	0.4360	2.3321	-0.0646	-0.2995	0.4365	-0.7360	-1.0914
82	44.02	0.05	11.1242	-12.3571	0.2109	2.5966	-0.0426	-0.3397	0.4244	-0.7645	-1.1103
83	44.21	0.05	11.0998	-11.8710	0.3911	2.1953	-0.0936	-0.2573	0.4774	-0.7348	-1.0611
84	44.34	0.05	11.0805	-11.9018	0.3845	2.2491	-0.1158	-0.2458	0.4729	-0.7188	-1.0410
85	44.56	0.04	11.1545	-11.9157	0.2956	2.3966	-0.1158	-0.2320	0.4966	-0.7206	-1.0337
86	44.76	0.04	11.1766	-11.9246	0.4260	2.1301	-0.1222	-0.2168	0.4947	-0.7015	-1.0227
87	44.91	0.04	11.1769	-11.8759	0.5813	1.9782	-0.1141	-0.1880	0.5056	-0.6936	-1.0092
88	45.10	0.05	11.3048	-11.8731	0.4354	2.3222	-0.1151	-0.2420	0.4867	-0.7287	-1.0286
89	45.28	0.01	11.4124	-11.9324	0.2245	2.4856	-0.1223	-0.2254	0.5032	-0.7291	-1.0106
90	45.46	0.01	11.4316	-11.8034	0.3064	2.3353	-0.1715	-0.2217	0.4998	-0.7215	-0.9880
91	45.66	0.02	11.4353	-11.8380	0.3333	2.5133	-0.1144	-0.2258	0.5115	-0.7373	-0.9977
92	45.86	0.02	11.4942	-11.8543	0.2981	2.4394	-0.1363	-0.2408	0.5139	-0.7547	-0.9970

PAGE 1 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	SCLN	REIN=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
1	90	0.50	1.7	0.0	81.0F31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	46.00	0.01	11.6495	-11.6134	0.2214	2.5107	-0.1062	-0.2369	0.5119	-0.7488	-0.9932
94	46.19	0.01	11.6570	-11.6972	0.2387	2.5247	-0.0989	-0.2815	0.4857	-0.7676	-1.0110
95	46.38	0.01	11.6746	-11.6171	0.3148	2.4554	-0.1208	-0.2260	0.5047	-0.7287	-0.9870
96	46.53	0.01	11.6907	-11.6226	0.2621	2.4795	-0.0989	-0.2758	0.4959	-0.7717	-0.9943
97	46.72	-0.01	12.0479	-11.9669	0.1877	2.7139	-0.0835	-0.2792	0.4827	-0.7619	-0.9947
98	46.90	-0.00	12.1398	-12.0917	0.1987	2.8151	-0.0761	-0.2630	0.5095	-0.7925	-0.9961
99	47.08	0.01	12.2641	-11.6527	0.3914	2.6103	-0.1042	-0.2366	0.5051	-0.7617	-0.9661
100	47.26	-0.00	12.2594	-11.6463	0.2429	2.6308	-0.0972	-0.2265	0.5130	-0.7395	-0.9660
101	47.44	0.01	12.6573	-12.0267	0.2792	2.7041	-0.0976	-0.2963	0.5042	-0.7925	-0.9841
102	47.59	-0.01	12.6237	-12.1345	0.1692	2.7404	-0.1048	-0.2740	0.4896	-0.7650	-0.9783
103	47.78	-0.01	12.6326	-12.1437	0.1660	2.8353	-0.1122	-0.2793	0.5178	-0.7971	-0.9690
104	47.97	-0.01	12.6927	-12.1736	0.1745	2.8701	-0.0894	-0.2968	0.5030	-0.8047	-0.9756
105	48.13	-0.01	12.7057	-12.2301	0.2128	2.9731	-0.0973	-0.3660	0.4876	-0.8335	-0.9838
106	48.31	0.01	12.7552	-12.3313	0.2373	3.0251	-0.1116	-0.3750	0.5242	-0.7992	-0.9668
107	48.48	0.00	12.8307	-12.3704	0.2863	3.0800	-0.1118	-0.2842	0.5110	-0.7952	-0.9641
108	48.65	-0.00	12.9157	-12.5834	0.1539	3.0652	-0.1146	-0.3033	0.4881	-0.7913	-0.9743
109	48.83	-0.01	12.9711	-12.7378	0.0291	3.2382	-0.1049	-0.3621	0.4567	-0.8208	-0.9820
110	49.00	0.00	12.9517	-12.6256	0.2422	2.6914	-0.0776	-0.3463	0.4460	-0.8123	-0.9589
111	49.17	0.00	13.1117	-12.8587	0.2318	3.0314	-0.0802	-0.3670	0.4544	-0.8203	-0.9683
112	49.35	0.02	13.2745	-12.9015	0.3942	2.7703	-0.0576	-0.3849	0.4767	-0.8667	-0.9701
113	49.52	0.02	13.2148	-12.8598	0.4826	2.7873	-0.0724	-0.3546	0.4742	-0.8338	-0.9523
114	49.71	0.03	13.4418	-12.9867	0.5040	2.7346	-0.0494	-0.3892	0.4758	-0.8651	-0.9631
115	49.87	0.03	13.4577	-12.9249	0.4508	2.1862	-0.0324	-0.3329	0.4973	-0.8301	-0.9345
116	50.05	0.04	13.4439	-12.9344	0.7123	2.4599	-0.0832	-0.3344	0.5037	-0.8380	-0.9323
117	50.21	0.04	13.5599	-12.8992	1.0179	2.1927	-0.0016	-0.3472	0.5042	-0.8513	-0.9313
118	50.39	0.07	13.7129	-12.9941	1.0615	2.1043	-0.0314	-0.3489	0.5104	-0.8453	-0.9239
119	50.56	0.06	13.8102	-12.9792	1.0967	1.9119	0.0310	-0.3255	0.5052	-0.8707	-0.9121
120	50.73	0.10	13.9576	-12.7892	1.4037	1.5594	0.0235	-0.3465	0.5179	-0.8844	-0.9162
121	50.91	0.10	13.9731	-12.8012	1.4541	1.6055	0.0237	-0.3151	0.5526	-0.8677	-0.9065
122	51.05	0.11	14.0610	-12.7573	1.5219	1.6159	0.0234	-0.3174	0.5563	-0.8737	-0.9072
123	51.27	0.11	14.1334	-12.8346	1.5346	1.5108	0.0470	-0.3287	0.5641	-0.8928	-0.9091
124	51.43	0.11	14.1032	-12.8553	1.5326	1.6221	0.0459	-0.3281	0.5651	-0.8932	-0.9075
125	51.64	0.11	14.2533	-12.9394	1.6789	1.7234	0.0391	-0.3291	0.5753	-0.9044	-0.9078
126	51.78	0.09	14.2787	-12.9775	1.6673	1.8777	0.0470	-0.3446	0.5697	-0.9163	-0.9090
127	51.95	0.08	14.3637	-12.9881	1.6435	1.9589	0.0394	-0.3340	0.5765	-0.9105	-0.8992
128	52.12	0.09	14.4084	-12.9144	1.3175	2.2594	0.0001	-0.3219	0.5859	-0.9078	-0.8907
129	52.28	0.09	14.3110	-12.7449	1.1965	1.8737	0.0173	-0.3263	0.5865	-0.9136	-0.8911
130	52.46	0.08	14.4256	-12.8215	1.2479	2.1916	0.0159	-0.3376	0.5913	-0.9269	-0.8888
131	52.62	0.09	14.4618	-12.9168	1.4761	2.3991	0.0158	-0.3497	0.5922	-0.9419	-0.8921
132	52.79	0.08	14.4521	-12.7624	0.9421	2.4245	-0.0144	-0.3464	0.5893	-0.9377	-0.8843
133	52.94	0.09	14.4532	-12.8439	0.9264	2.7195	-0.0377	-0.3435	0.5944	-0.9383	-0.8788
134	53.11	0.08	14.4167	-12.8113	1.0994	2.6472	-0.0596	-0.3325	0.5989	-0.9214	-0.8603
135	53.27	0.01	14.4250	-12.8479	1.3391	2.6417	-0.0743	-0.3390	0.5973	-0.9363	-0.9576
136	53.44	0.02	14.4537	-12.8336	0.7613	3.0057	-0.0756	-0.3462	0.5977	-0.9459	-0.8583
137	53.62	0.02	14.4357	-12.7818	0.3845	3.1034	-0.0685	-0.3594	0.6017	-0.9611	-0.8678
138	53.78	0.02	14.4576	-12.8692	0.4047	3.3121	-0.0649	-0.3352	0.6076	-0.9428	-0.8550

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) / 6T 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 9 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10**6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 90 0.60 1.7 0.0 B1A0F31 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	53.99	0.03	14.7695	-12.5211	0.5339	3.0002	-0.0525	-0.3657	0.6091	-0.9748	-0.8681
140	54.11	0.03	14.7471	-12.8405	0.5360	3.0341	-0.0602	-0.3704	0.6057	-0.9761	-0.8670
141	54.28	0.03	14.8044	-12.7944	0.6916	3.2644	-0.0004	-0.3560	0.6052	-0.9612	-0.8608
142	54.47	0.03	15.0436	-13.0714	0.6615	3.3130	-0.0152	-0.3672	0.6076	-0.9748	-0.8689
143	54.63	0.03	15.1023	-13.1927	0.6579	3.5600	-0.0010	-0.3780	0.6194	-0.9974	-0.8736
144	54.80	0.05	15.2173	-13.3301	0.9383	3.3760	-0.0081	-0.3759	0.6244	-1.0003	-0.8766
145	54.98	0.06	15.2724	-13.2299	0.9748	3.5696	-0.0009	-0.3731	0.6415	-1.0146	-0.8663
146	55.17	0.06	15.3766	-13.3502	1.0526	3.7005	-0.0089	-0.3620	0.6486	-1.0108	-0.8682
147	55.31	0.07	15.3329	-13.0458	1.1355	3.9333	-0.0154	-0.3565	0.6454	-1.0019	-0.8510
148	55.47	0.09	15.4236	-13.0816	1.4002	3.1945	-0.0376	-0.3549	0.6468	-1.0217	-0.8482
149	55.63	0.08	15.4425	-13.2033	1.3468	3.4549	-0.0156	-0.3635	0.6563	-1.0298	-0.8528
150	55.79	0.09	15.4873	-12.9019	1.5030	3.3142	-0.0378	-0.3546	0.6698	-1.0244	-0.8331
151	55.96	0.09	15.5603	-12.9352	1.4225	3.3114	-0.0756	-0.3612	0.6585	-1.0197	-0.8313
152	56.13	0.07	15.5565	-12.9366	1.2288	3.5973	-0.0535	-0.3605	0.6673	-1.0278	-0.8313
153	56.26	0.07	15.7052	-12.8866	1.3756	3.5661	-0.0754	-0.3638	0.6578	-1.0216	-0.8174
154	56.43	0.09	15.7005	-12.7774	1.4910	3.6079	-0.0763	-0.3532	0.6572	-1.0104	-0.8139
155	56.66	0.07	15.8758	-11.9511	1.1969	3.9776	-0.0152	-0.3636	0.6463	-1.0097	-0.7663
156	56.77	0.06	15.9526	-11.9156	1.0296	4.4472	0.0296	-0.3346	0.6441	-0.9787	-0.7357
157	56.92	0.06	15.9266	-11.8376	0.8391	4.5304	0.0227	-0.3600	0.6456	-1.0056	-0.7433
158	57.07	0.04	15.8250	-11.7046	0.8127	4.3361	0.0306	-0.3311	0.6192	-0.9503	-0.7209
159	57.24	0.05	15.9016	-11.8590	0.8787	4.3561	0.0388	-0.3616	0.6426	-0.9842	-0.7289
160	57.41	0.05	15.9571	-11.8664	0.8790	4.3563	0.0236	-0.3563	0.6486	-1.0049	-0.7312
161	57.58	0.05	15.9562	-11.8510	0.9235	4.2732	0.0237	-0.3615	0.6431	-1.0046	-0.7427
162	57.73	0.05	16.1059	-11.8163	0.8701	4.5015	0.0236	-0.3440	0.6511	-0.9991	-0.7338
163	57.89	0.07	16.1432	-11.9161	1.0055	3.9439	0.0177	-0.3373	0.6565	-0.9938	-0.7383
164	58.04	0.05	16.2292	-12.0215	0.7831	4.0936	0.0178	-0.3426	0.6709	-1.0135	-0.7543
165	58.20	0.06	16.1952	-12.0251	0.9121	4.0546	0.0177	-0.3462	0.6644	-1.0106	-0.7472
166	58.36	0.06	16.3330	-12.3190	0.9882	3.9517	0.0183	-0.3490	0.6648	-1.0138	-0.7542
167	58.52	0.05	16.3760	-12.1458	0.9343	4.1697	0.0179	-0.3550	0.6529	-1.0079	-0.7417
168	58.67	0.06	16.5815	-12.5304	0.9471	4.0998	0.0185	-0.3615	0.6714	-1.0329	-0.7566
169	58.82	0.06	16.4715	-12.3046	1.0267	3.9457	0.0188	-0.3737	0.6639	-1.0376	-0.7473
170	58.97	0.06	16.5791	-12.5796	0.9719	3.9834	0.0206	-0.3675	0.6843	-1.0517	-0.7587
171	59.13	0.05	16.6566	-12.5504	0.9129	3.7436	0.0291	-0.3893	0.6620	-1.0513	-0.7531
172	59.29	0.06	16.6593	-12.4267	1.0054	3.9904	0.0288	-0.3936	0.6595	-1.0533	-0.7479
173	59.42	0.02	16.5335	-12.4578	0.5968	3.7965	0.0217	-0.3752	0.6706	-1.0498	-0.7463
174	59.58	0.05	16.7387	-12.7870	0.9164	3.7731	0.0216	-0.3620	0.6660	-1.0479	-0.7441
175	59.74	0.05	16.8329	-12.8722	0.7949	4.0448	0.0368	-0.3947	0.6681	-1.0629	-0.7444
176	59.88	0.04	16.8772	-12.9608	0.8210	3.3045	0.0240	-0.3771	0.6846	-1.0617	-0.7663
177	60.01	0.04	16.7769	-12.8181	0.7810	3.6214	0.0298	-0.3779	0.6763	-1.0541	-0.7461
178	60.02	0.04	16.8377	-12.8096	0.9271	3.2190	0.0237	-0.3709	0.6930	-1.0639	-0.7579
179	60.03	0.02	16.8131	-12.7693	0.6746	3.6228	0.0307	-0.3703	0.6910	-1.0613	-0.7559

PAGE 2 OF 3
SHEET 1 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	EARL PALE PALE=	RN1	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	90 0.RV 1.7	0.0	61.0731	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
1	-4.07	-0.06	-0.0003	0.0109	0.0021	-1.3333	-7.0000	-0.5200	-0.0334	-0.2470	0.0577	0.4096
2	-4.05	-0.03	-0.0019	0.0104	0.0020	-0.2105	-1.0526	-0.5330	-0.0365	-0.2497	0.0572	0.4085
3	-4.07	-0.03	0.0049	0.0099	0.0025	1.0000	6.2500	-0.5252	-0.0365	-0.2469	0.0580	0.4096
4	-3.97	-0.03	-0.0033	0.0091	0.0016	-0.0303	-0.3030	-0.4725	-0.0349	-0.2264	0.0611	0.4791
5	-1.99	-0.02	-0.0027	0.0086	0.0015	-0.2222	-0.5926	-0.3659	-0.0240	-0.1639	0.0657	0.5025
6	-0.97	-0.03	-0.0019	0.0088	0.0010	-0.4211	-0.5263	-0.2769	-0.0195	-0.1439	0.0706	0.5197
7	1.02	-0.02	-0.0023	0.0101	0.0013	-3.3333	-0.3333	-0.1963	-0.0144	-0.0991	0.0785	0.5208
8	3.07	-0.03	-0.0025	0.0083	0.0065	-0.1200	-0.2000	-0.1149	-0.0096	-0.0641	0.0857	0.5594
9	5.04	-0.03	-0.0003	0.0097	0.0016	1.4000	3.2300	-0.0351	-0.0049	-0.0253	0.1009	0.6267
10	7.01	-0.02	-0.0010	0.0082	0.0018	-0.2000	-1.0000	-0.0004	-0.0004	-0.0091	1.0000	22.7500
11	9.00	-0.02	0.0002	0.0013	0.0038	0.2381	0.9095	0.0233	0.0024	0.0041	0.3176	0.1760
12	11.16	-0.02	0.0041	0.0007	0.0044	0.1707	1.0732	0.0631	0.0143	0.0207	0.2270	0.3286
13	13.07	-0.02	0.0036	0.0047	0.0057	0.1750	1.4250	0.1148	0.0258	0.0445	0.1796	0.3674
14	14.91	-0.02	-0.0010	0.0052	0.0044	-0.3333	-7.3333	0.1737	0.0270	0.0718	0.1552	0.4137
15	15.84	-0.03	-0.0022	0.0201	0.0144	-0.0455	-2.2273	0.2084	0.0333	0.1019	0.1350	0.4136
16	14.80	-0.03	0.0057	-0.0003	0.0120	-0.0526	2.1754	0.3158	0.0388	0.1333	0.1226	0.4220
17	20.73	-0.03	0.0047	-0.0025	0.0229	-0.2577	2.2560	0.3955	0.0437	0.1638	0.1134	0.4251
18	22.66	-0.03	-0.0033	-0.0071	0.0241	2.1515	-7.3030	0.4582	0.0463	0.1966	0.1010	0.4290
19	24.66	-0.03	-0.0277	-0.0063	0.0091	0.2545	-0.3297	0.5475	0.0496	0.2365	0.0888	0.4319
20	26.59	-0.03	-0.0006	-0.0047	-0.0094	0.0707	0.1414	0.6429	0.0519	0.2723	0.0807	0.4235
21	28.45	-0.02	-0.0535	0.0012	-0.0277	-0.0183	0.4218	0.7644	0.0543	0.3100	0.0711	0.4135
22	29.93	-0.01	-0.0525	0.0020	-0.0284	-0.0495	0.5019	0.8164	0.0572	0.3364	0.0699	0.4110
23	29.96	-0.02	-0.0259	0.0034	-0.0131	-0.1196	0.5178	0.8230	0.0564	0.4377	0.0685	0.4103
24	30.01	-0.00	-0.0575	0.0000	-0.0040	-0.5967	0.5333	0.8418	0.0573	0.3444	0.0681	0.4091
25	30.02	-0.01	-0.0134	0.0031	-0.0070	-0.2663	0.5226	0.8458	0.0585	0.3470	0.0692	0.4103
26	30.02	-0.00	-0.0237	0.0041	-0.0154	-0.1750	0.4998	0.8587	0.0597	0.3506	0.0696	0.4083
27	30.99	0.01	-0.0227	0.0038	-0.0151	-0.1572	0.5594	0.8715	0.0605	0.3560	0.0694	0.4085
28	31.31	0.02	0.0599	0.0064	0.0302	0.1348	0.5033	0.8992	0.0613	0.3657	0.0682	0.4067
29	31.99	0.02	-0.0729	0.0099	0.0322	0.1102	0.4990	0.9263	0.0611	0.3684	0.0674	0.4065
30	31.97	0.04	0.1165	0.0114	0.0548	0.0980	0.4703	0.9374	0.0615	0.3794	0.0656	0.4046
31	32.13	0.05	0.1981	0.0159	0.0775	0.0821	0.4514	0.9746	0.0639	0.3931	0.0625	0.4034
32	32.41	0.06	0.2510	0.0191	0.1061	0.0786	0.4594	1.0064	0.0596	0.0047	0.0595	0.4022
33	32.70	0.05	0.2293	0.0183	0.1033	0.0810	0.4556	1.0219	0.0509	0.4100	0.0595	0.4013
34	32.98	0.07	0.2560	0.0214	0.1146	0.0764	0.4525	1.0411	0.0613	0.4137	0.0589	0.3974
35	33.24	0.06	0.2153	0.0171	0.0968	0.0796	0.4579	1.0353	0.0621	0.4126	0.0600	0.3984
36	33.51	0.06	0.2628	0.0205	0.1168	0.0765	0.4522	1.0499	0.0632	0.4137	0.0602	0.3941
37	33.78	0.07	0.2591	0.0335	0.1321	0.1119	0.4415	1.0594	0.0625	0.4156	0.0590	0.3921
38	34.05	0.09	0.2792	0.0359	0.1278	0.1221	0.4460	1.0562	0.0634	0.4129	0.0601	0.3910
39	34.30	0.07	0.2791	0.0369	0.1282	0.1123	0.4418	1.0620	0.0645	0.4169	0.0608	0.3907
40	34.58	0.08	0.2893	0.0359	0.1303	0.1230	0.4503	1.0593	0.0651	0.4130	0.0615	0.3899
41	34.83	0.08	0.2842	0.0373	0.1373	0.1242	0.4454	1.0651	0.0650	0.4132	0.0611	0.3880
42	35.08	0.07	0.2898	0.0381	0.1337	0.1245	0.4413	1.0585	0.0662	0.4046	0.0626	0.3869
43	35.32	0.07	0.2943	0.0381	0.1337	0.1231	0.4562	1.0570	0.0653	0.4092	0.0628	0.3872
44	35.58	0.07	0.2917	0.0375	0.1439	0.1191	0.4572	1.0591	0.0655	0.4075	0.0619	0.3848
45	35.84	0.07	0.2956	0.0376	0.1492	0.1185	0.4597	1.0619	0.0666	0.4068	0.0628	0.3933
46	36.08	0.07	0.3109	0.0373	0.1461	0.1176	0.4610	1.0536	0.0665	0.4047	0.0632	0.3842

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	90	0.80	1.7	0.0	M1-OF31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CH2	CA2	XCPF2	YCPF2
47	34.32	0.07	0.3126	0.0355	0.1427	0.1137	0.4573	1.0561	0.0571	0.4050	0.0636	0.3835
48	36.57	0.08	0.3020	0.0350	0.1405	0.1158	0.4652	1.0361	0.0665	0.3974	0.0642	0.3836
49	36.81	0.08	0.3196	0.0373	0.1484	0.1179	0.4632	1.0174	0.0556	0.3881	0.0645	0.3815
50	37.05	0.09	0.3266	0.0385	0.1476	0.1166	0.4548	1.0253	0.0652	0.3915	0.0636	0.3818
51	37.27	0.08	0.2796	0.0349	0.1363	0.1257	0.4783	1.0045	0.0653	0.3814	0.0650	0.3797
52	37.53	0.07	0.2606	0.0334	0.1258	0.1279	0.4821	1.0157	0.0655	0.3855	0.0645	0.3795
53	37.76	0.07	0.2282	0.0285	0.1085	0.1247	0.4756	1.0416	0.0673	0.3971	0.0646	0.3812
54	37.98	0.06	0.2365	0.0294	0.1075	0.1274	0.4585	1.0482	0.0687	0.3978	0.0656	0.3795
55	38.23	0.06	0.2319	0.0322	0.1055	0.1387	0.4551	1.0577	0.0691	0.4028	0.0659	0.3809
56	38.46	0.06	0.1696	0.0265	0.0815	0.1477	0.4802	1.0347	0.0684	0.3935	0.0659	0.3788
57	38.69	0.06	0.1915	0.0296	0.0899	0.1537	0.4701	1.0438	0.0691	0.3964	0.0662	0.3798
58	38.95	0.05	0.1037	0.0226	0.0631	0.2063	0.5806	1.0151	0.0628	0.3846	0.0678	0.3789
59	39.17	0.05	0.0956	0.0220	0.0612	0.2311	0.6418	1.0036	0.0606	0.3793	0.0664	0.3779
60	39.40	0.07	0.0671	0.0194	0.0466	0.4213	0.9851	1.0020	0.0666	0.3790	0.0667	0.3777
61	39.64	0.08	0.0563	0.0215	0.0469	0.3879	0.8327	0.9937	0.0652	0.3733	0.0659	0.3756
62	39.86	0.07	0.0097	0.0204	0.0284	2.1546	2.9175	0.9597	0.0627	0.3548	0.0654	0.3718
63	40.09	0.08	-0.0407	0.0237	0.0170	-5.0625	-3.6170	0.9543	0.0608	0.3535	0.0637	0.3705
64	40.33	0.07	-0.0055	0.0245	0.0164	-4.6034	-2.7170	0.9603	0.0612	0.3562	0.0638	0.3710
65	40.55	0.07	-0.0112	0.0231	0.0152	-2.0525	-0.4643	0.9232	0.0583	0.3375	0.0610	0.3656
66	40.75	0.07	-0.0091	0.0234	0.0157	-2.6264	-0.7363	0.9472	0.0577	0.3502	0.0609	0.3697
67	40.98	0.08	-0.0056	0.0233	0.0172	-4.0000	-1.4600	0.9325	0.0549	0.3392	0.0589	0.3637
68	41.19	0.07	-0.0005	0.0240	0.0169	-48.0000	-17.8000	0.9309	0.0545	0.3385	0.0586	0.3636
69	41.39	0.07	0.0152	0.0250	0.0197	1.6326	0.6382	0.9298	0.0521	0.3374	0.0560	0.3629
70	41.62	0.07	0.0045	0.0245	0.0168	5.4222	1.5111	0.9183	0.0494	0.3249	0.0543	0.3592
71	41.82	0.07	0.0176	0.0277	0.0149	1.5862	0.8563	0.9320	0.0512	0.3367	0.0549	0.3591
72	42.06	0.08	0.0295	0.0264	0.0258	0.8435	0.9042	0.9817	0.0550	0.3568	0.0560	0.3635
73	42.22	0.07	0.0430	0.0265	0.0325	0.6154	0.7622	0.9786	0.0543	0.3550	0.0556	0.3641
74	42.42	0.07	0.0459	0.0251	0.0375	0.5459	0.8166	0.9909	0.0562	0.3629	0.0567	0.3663
75	42.65	0.07	0.0609	0.0269	0.0339	0.4079	0.5559	0.9979	0.0565	0.3635	0.0566	0.3643
76	42.84	0.06	0.0943	0.0285	0.0532	0.2697	0.5043	1.0324	0.0611	0.3928	0.0592	0.3708
77	43.05	0.07	0.0359	0.0228	0.0237	0.6257	0.6620	1.0147	0.0599	0.3720	0.0586	0.3666
78	43.25	0.05	-0.0277	0.0225	-0.0046	-0.8158	0.1867	0.9934	0.0571	0.3615	0.0575	0.3639
79	43.49	0.05	-0.0202	0.0198	0.0047	-0.9802	-0.2327	1.0239	0.0602	0.3785	0.0588	0.3696
80	43.63	0.03	-0.0519	0.0192	-0.0132	-0.3707	0.2546	1.0105	0.0583	0.3722	0.0577	0.3683
81	43.83	0.04	-0.0446	0.0177	-0.0261	-0.2741	0.3448	1.0127	0.0569	0.3715	0.0581	0.3668
82	44.02	0.02	-0.0919	0.0170	-0.0333	-0.1854	0.3671	1.0241	0.0597	0.3770	0.0583	0.3681
83	44.21	0.03	-0.0942	0.0161	-0.0352	-0.1824	0.3565	1.0317	0.0610	0.3802	0.0591	0.3685
84	44.39	0.03	-0.0743	0.0153	-0.0296	-0.2345	0.3954	1.0263	0.0583	0.3770	0.0568	0.3673
85	44.56	0.03	-0.0922	0.0124	-0.0375	-0.1402	0.4065	1.0110	0.0571	0.3690	0.0565	0.3650
86	44.74	0.04	-0.0793	0.0169	-0.0311	-0.1593	0.3919	1.0186	0.0560	0.3700	0.0551	0.3639
87	44.91	0.04	-0.0673	0.0119	-0.0279	-0.1771	0.4137	1.0090	0.0517	0.3660	0.0512	0.3620
88	45.10	0.03	-0.1149	0.0121	-0.0472	-0.1011	0.3935	1.0194	0.0555	0.3702	0.0545	0.3631
89	45.28	0.01	-0.1400	0.0092	-0.0574	-0.0859	0.4116	1.0121	0.0536	0.3658	0.0528	0.3615
90	45.46	0.01	-0.0750	0.0095	-0.0333	-0.1253	0.4340	1.0148	0.0500	0.3660	0.0493	0.3607
91	45.66	0.02	-0.1242	0.0100	-0.0515	-0.0819	0.4182	1.0345	0.0547	0.3759	0.0529	0.3633
92	45.80	0.02	-0.1144	0.0096	-0.0493	-0.0841	0.4282	1.0286	0.0541	0.3719	0.0526	0.3615

PAGE 6 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	90	0.800	1.7	0.0	B1&OF31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	46.90	0.01	-0.1035	0.0107	-0.0465	-0.1032	0.4282	1.0342	0.0530	0.3729	0.0513	0.3605
94	46.19	0.01	-0.1057	0.0100	-0.0437	-0.1004	0.4129	1.0281	0.0538	0.3703	0.0523	0.3601
95	46.36	0.01	-0.1041	0.0108	-0.0443	-0.1020	0.4254	1.0270	0.0519	0.3686	0.0505	0.3589
96	46.55	0.01	-0.0990	0.0118	-0.0426	-0.1194	0.4241	1.0313	0.0520	0.3714	0.0504	0.3601
97	46.72	-0.01	-0.0971	0.0140	-0.0445	-0.1445	0.4169	1.0472	0.0546	0.3763	0.0521	0.3612
98	46.90	-0.00	-0.1043	0.0135	-0.0457	-0.1237	0.4153	1.0355	0.0528	0.3711	0.0510	0.3583
99	47.08	0.01	-0.0755	0.0168	-0.0302	-0.1929	0.3976	1.0541	0.0526	0.3867	0.0447	0.3612
100	47.26	-0.00	-0.0674	0.0180	-0.0276	-0.2377	0.4056	1.0562	0.0509	0.3818	0.0482	0.3615
101	47.44	0.00	-0.1027	0.0136	-0.0434	-0.1522	0.4224	1.0646	0.0520	0.3861	0.0449	0.3627
102	47.60	-0.01	-0.0911	0.0167	-0.0376	-0.1617	0.4125	1.0637	0.0524	0.3839	0.0493	0.3609
103	47.78	-0.01	-0.0970	0.0142	-0.0412	-0.1496	0.4206	1.0733	0.0524	0.3893	0.0488	0.3627
104	47.97	-0.01	-0.1050	0.0100	-0.0450	-0.1471	0.4127	1.0740	0.0536	0.3881	0.0497	0.3614
105	48.13	-0.01	-0.1135	0.0145	-0.0492	-0.1298	0.4112	1.0749	0.0534	0.3911	0.0499	0.3622
106	44.31	0.01	-0.1009	0.0127	-0.0403	-0.1261	0.3992	1.0899	0.0524	0.3963	0.0481	0.3636
107	48.49	0.10	-0.0960	0.0136	-0.0392	-0.1523	0.4316	1.0929	0.0514	0.3961	0.0470	0.3624
108	48.65	-0.00	-0.1295	0.0140	-0.0521	-0.1127	0.4015	1.1015	0.0545	0.3996	0.0495	0.3627
109	48.83	-0.01	-0.1130	0.0157	-0.0495	-0.1442	0.4138	1.1070	0.0547	0.4029	0.0494	0.3640
110	49.00	0.00	-0.0693	0.0194	-0.0303	-0.2803	0.4354	1.0936	0.0515	0.3958	0.0471	0.3619
111	49.17	0.00	-0.0778	0.0215	-0.0326	-0.2778	0.4199	1.1101	0.0560	0.4019	0.0510	0.3621
112	49.35	0.02	-0.0944	0.0165	-0.0378	-0.2074	0.4226	1.1158	0.0546	0.4054	0.0489	0.3634
113	49.52	0.02	-0.0824	0.0200	-0.0329	-0.2565	0.4699	1.1012	0.0540	0.3964	0.0490	0.3600
114	49.71	0.03	-0.0873	0.0230	-0.0369	-0.6491	0.4543	1.1175	0.0554	0.4031	0.0496	0.3607
115	49.87	0.05	-0.0970	0.0254	-0.0401	-1.4002	0.3405	1.1097	0.0517	0.3993	0.0486	0.3599
116	50.05	0.06	-0.0945	0.0197	-0.0215	-0.3659	0.4026	1.1249	0.0538	0.4071	0.0478	0.3619
117	50.21	0.07	0.0205	0.0312	0.0105	1.1625	0.4030	1.1172	0.0502	0.4008	0.0449	0.3588
118	50.39	0.07	0.0036	0.0286	0.0017	4.7833	0.2833	1.1195	0.0483	0.4015	0.0431	0.3587
119	50.56	0.10	0.0556	0.0349	0.0261	0.5982	0.3957	1.1113	0.0506	0.3966	0.0455	0.3567
120	50.73	0.10	0.0439	0.0344	0.0232	0.6248	0.3642	1.1179	0.0528	0.3996	0.0472	0.3575
121	50.91	0.10	0.0797	0.0403	0.0259	0.5722	0.3954	1.1142	0.0509	0.3959	0.0457	0.3553
122	51.08	0.10	0.0636	0.0436	0.0312	0.5192	0.3729	1.1272	0.0536	0.4022	0.0476	0.3568
123	51.27	0.11	0.0579	0.0427	0.0302	0.4935	0.3811	1.1225	0.0550	0.3995	0.0490	0.3559
124	51.43	0.11	0.0592	0.0403	0.0281	0.5018	0.3763	1.1245	0.0538	0.4020	0.0479	0.3575
125	51.60	0.11	0.0609	0.0355	0.0234	0.5316	0.3931	1.1321	0.0550	0.4045	0.0486	0.3573
126	51.78	0.09	0.0741	0.0394	0.0298	0.5318	0.4019	1.1298	0.0559	0.4019	0.0495	0.3557
127	51.95	0.08	0.0641	0.0351	0.0259	0.5538	0.4047	1.1435	0.0573	0.4058	0.0501	0.3575
128	52.12	0.09	0.0367	0.0367	0.0115	1.0000	0.3410	1.1401	0.0534	0.4021	0.0468	0.3580
129	52.28	0.09	0.0366	0.0393	0.0250	0.6059	0.3849	1.1435	0.0570	0.4098	0.0499	0.3584
130	52.46	0.08	0.0485	0.0432	0.0177	0.7069	0.3915	1.1549	0.0563	0.4144	0.0470	0.3589
131	52.62	0.09	0.0372	0.0432	0.0144	0.8677	0.3915	1.1599	0.0555	0.4164	0.0479	0.3590
132	52.78	0.08	0.0274	0.0306	0.0115	1.1026	0.4212	1.1658	0.0534	0.4188	0.0458	0.3592
133	52.93	0.08	0.0251	0.0287	0.0125	1.0235	0.4902	1.1674	0.0549	0.4197	0.0462	0.3595
134	53.11	0.06	-0.0173	0.0184	-0.0062	-1.0600	0.2400	1.1781	0.0532	0.4255	0.0452	0.3611
135	53.27	0.01	-0.0501	0.0133	-0.0155	-0.2690	0.3106	1.1717	0.0509	0.4222	0.0434	0.3603
136	53.44	0.02	-0.0017	0.0194	-0.0021	-0.1526	0.3504	1.1702	0.0487	0.4209	0.0373	0.3597
137	53.62	0.02	-0.0071	0.0190	-0.0073	-0.1155	0.3492	1.1758	0.0427	0.4223	0.0363	0.3591
138	53.78	0.02	-0.0713	0.0113	-0.0256	-0.1587	0.3581	1.1696	0.0397	0.4163	0.0339	0.3576

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 9 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RALO-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	90	0.80	1.7	0.0	81-0F31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
139	53.99	0.03	-0.0396	0.0140	-0.0117	-0.3502	0.2977	1.1861	0.0407	0.0248	0.0343	0.3581
140	54.11	0.03	-0.0470	0.0160	-0.0160	-0.2965	0.3412	1.1745	0.0415	0.0189	0.0353	0.3566
141	54.28	0.03	-0.0540	0.0177	-0.0214	-0.2555	0.3539	1.1676	0.0399	0.0168	0.0343	0.3565
142	54.47	0.03	-0.0647	0.0184	-0.0137	-0.2532	0.3376	1.1598	0.0402	0.0129	0.0340	0.3561
143	54.63	0.03	-0.0599	0.0229	-0.0184	-0.2595	0.3228	1.1626	0.0462	0.0134	0.0397	0.3555
144	54.80	0.05	-0.0720	0.0266	-0.0091	-1.1136	0.4134	1.1647	0.0413	0.0158	0.0370	0.3557
145	54.98	0.06	-0.0748	0.0272	-0.0006	-5.6458	0.1250	1.1626	0.0464	0.0117	0.0399	0.3562
146	55.17	0.06	-0.0257	0.0264	-0.0113	-0.9336	0.3991	1.1689	0.0451	0.0144	0.0386	0.3566
147	55.31	0.07	-0.0262	0.0250	-0.0419	-0.9280	0.4524	1.1748	0.0456	0.0164	0.0388	0.3566
148	55.47	0.09	0.0162	0.0241	0.0059	1.4877	0.3962	1.1924	0.0452	0.0239	0.0379	0.3555
149	55.63	0.09	0.0064	0.0276	0.0027	9.4928	0.9310	1.1890	0.0481	0.0232	0.0405	0.3559
150	55.79	0.09	0.0154	0.0239	0.0056	1.5519	0.3766	1.1900	0.0410	0.0232	0.0344	0.3556
151	55.96	0.09	0.0050	0.0201	0.0024	0.0200	0.5800	1.1970	0.0347	0.0270	0.0290	0.3567
152	56.13	0.07	0.0012	0.0194	0.0014	10.5000	1.1667	1.1723	0.0297	0.0194	0.0253	0.3577
153	56.28	0.09	-0.0016	0.0124	0.0009	-0.0000	-0.5625	1.1718	0.0168	0.0235	0.0149	0.3614
154	56.43	0.09	0.0021	0.0156	0.0	7.5238	0.0	1.1712	0.0190	0.0234	0.0163	0.3615
155	56.60	0.07	-0.0141	0.0005	0.0004	-0.0426	-0.0286	1.1335	-0.0029	0.0217	-0.0028	0.3596
156	56.77	0.06	-0.0020	-0.0032	-0.0095	0.0704	0.2029	0.9855	-0.0058	0.3529	-0.0059	0.3581
157	56.92	0.04	-0.0324	-0.0043	-0.0043	0.1331	0.1331	1.0095	-0.0068	0.3606	-0.0067	0.3613
158	57.07	0.04	-0.0379	-0.0043	-0.0068	0.1138	0.1706	0.9817	-0.0058	0.3561	-0.0059	0.3628
159	57.24	0.03	-0.0287	-0.0028	-0.0035	0.0979	0.1224	0.9968	-0.0055	0.3620	-0.0055	0.3632
160	57.41	0.05	-0.0132	-0.0036	-0.0055	0.1048	0.1662	1.0025	-0.0067	0.3659	-0.0067	0.3651
161	57.58	0.05	-0.0246	-0.0036	-0.0022	0.1951	0.0678	1.0204	-0.0069	0.3729	-0.0066	0.3654
162	57.73	0.03	-0.0215	-0.0022	-0.0025	0.1023	0.1163	1.0250	-0.0074	0.3750	-0.0072	0.3658
163	57.89	0.01	0.0004	0.0007	0.0059	1.1250	7.3750	1.0435	-0.0066	0.3820	-0.0063	0.3660
164	58.04	0.05	-0.0042	-0.0022	0.0045	0.5238	-1.0714	1.0506	-0.0083	0.3853	-0.0079	0.3667
165	58.20	0.00	-0.0125	0.0	0.0015	0.0	-0.1200	1.0926	-0.0064	0.3811	-0.0062	0.3658
166	58.36	0.00	-0.0146	-0.0012	0.0004	0.0822	-0.0411	1.0555	-0.0084	0.3870	-0.0080	0.3667
167	58.52	0.00	-0.0231	-0.0026	-0.0021	0.1126	0.0909	1.0612	-0.0086	0.3808	-0.0083	0.3657
168	58.67	0.00	-0.0332	-0.0040	-0.0053	0.1208	0.1601	1.0676	-0.0090	0.3824	-0.0086	0.3650
169	58.82	0.00	-0.0151	-0.0039	0.0010	0.2252	-0.0652	1.0947	-0.0096	0.3905	-0.0090	0.3668
170	58.97	0.00	-0.0174	-0.0040	0.0005	0.2299	-0.0517	1.0615	-0.0097	0.3892	-0.0092	0.3666
171	59.13	0.05	-0.0136	-0.0023	0.0024	0.1759	-0.2231	1.0793	-0.0095	0.3964	-0.0088	0.3673
172	59.29	0.00	-0.0230	-0.0035	-0.0004	0.1746	0.0194	1.0724	-0.0105	0.3946	-0.0098	0.3680
173	59.42	0.05	-0.0139	-0.0014	0.0020	0.0935	-0.1439	1.0691	-0.0095	0.3924	-0.0089	0.3670
174	59.58	0.05	-0.0143	-0.0028	0.0001	0.1421	-0.0055	1.0878	-0.0113	0.4013	-0.0104	0.3690
175	59.74	0.04	-0.0330	-0.0039	-0.0049	0.1279	0.1504	1.0841	-0.0109	0.3922	-0.0102	0.3672
176	59.88	0.04	-0.0013	-0.0032	0.0090	2.0815	-0.9231	1.1377	-0.0114	0.4067	-0.0103	0.3690
177	60.01	0.04	-0.0232	-0.0005	-0.0023	0.0259	0.0991	1.0685	-0.0095	0.3929	-0.0089	0.3677
178	60.02	0.04	0.0023	-0.0005	0.0004	-0.2174	3.6522	1.0551	-0.0103	0.4053	-0.0094	0.3701
179	60.03	0.02	-0.0177	-0.0015	0.0005	0.0847	-0.0282	1.0804	-0.0108	0.3973	-0.0100	0.3677

PAGE 3 OF 3
SHEET 1 OF 6

PARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RALO-6	PNT	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	90	0.60	1.7	0.0	BLADE31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-4.07	-0.02	0.0000	0.0000	0.0007	0.0000	0.7128	-0.5463	-0.0356	-0.2364	0.0651	0.4327
2	-4.05	-0.03	0.0112	0.0000	0.0005	0.0000	0.6373	-0.5479	-0.0357	-0.2376	0.0651	0.4336
3	-4.04	-0.03	0.0118	0.0000	0.0002	0.0000	0.6102	-0.5486	-0.0358	-0.2382	0.0649	0.4346
4	-3.97	-0.03	0.0120	0.0000	0.0004	0.0000	0.7442	-0.4880	-0.0362	-0.2136	0.0700	0.4378
5	-1.90	-0.02	0.0000	0.0000	0.0071	0.0000	0.7553	-0.3881	-0.0294	-0.1733	0.0731	0.4484
6	-0.07	-0.03	0.0110	0.0000	0.0072	0.0000	0.6545	-0.2982	-0.0231	-0.1333	0.0776	0.4469
7	1.02	-0.02	0.0102	0.0000	0.0089	0.0000	0.7120	-0.2125	-0.0178	-0.0947	0.0839	0.4455
8	3.07	-0.03	0.0045	0.0000	0.0069	0.0000	1.0471	-0.1337	-0.0117	-0.0562	0.0977	0.4205
9	5.06	-0.03	0.0165	0.0000	0.0106	0.0000	0.8320	-0.0728	-0.0064	-0.0217	0.0880	0.2985
10	7.01	-0.02	0.0157	0.0000	0.0091	0.0000	0.5796	-0.0228	-0.0013	-0.0007	0.0570	0.0307
11	9.36	-0.02	0.0158	0.0000	0.0096	0.0000	0.5181	0.0018	0.0006	0.0112	3.6667	6.2222
12	11.16	-0.02	0.0159	0.0000	0.0086	0.0000	0.5181	0.0442	0.0136	0.0310	0.3129	0.7007
13	13.07	-0.02	0.0160	0.0000	0.0087	0.0000	0.4036	0.0995	0.0287	0.0575	0.2085	0.5780
14	14.91	-0.02	0.0159	0.0000	0.0080	0.0000	0.3015	0.1606	0.0273	0.0876	0.1697	0.5465
15	16.83	-0.03	0.0200	0.0000	0.0080	0.0000	0.3042	0.2340	0.0382	0.1206	0.1460	0.5156
16	18.80	-0.03	0.0205	0.0000	0.0082	0.0000	0.2348	0.3155	0.0411	0.1498	0.1302	0.5065
17	20.74	-0.03	0.0205	0.0000	0.0069	0.0000	0.1856	0.4079	0.0461	0.2032	0.1130	0.4982
18	22.68	-0.03	0.0202	0.0000	0.0035	0.0000	0.1246	0.5073	0.0504	0.2492	0.0993	0.4912
19	24.60	-0.03	0.0179	0.0000	-0.0016	0.0000	-0.0787	0.5884	0.0513	0.2801	0.0872	0.4760
20	26.56	-0.03	0.0203	0.0000	-0.0001	0.0000	-0.0039	0.6977	0.0526	0.3199	0.0754	0.4584
21	28.49	-0.02	0.0209	0.0000	0.0021	0.0000	0.0735	0.7467	0.0554	0.3390	0.0740	0.4528
22	29.93	-0.01	0.0204	0.0000	0.0016	0.0000	0.0565	0.7776	0.0572	0.3510	0.0736	0.4514
23	29.98	-0.02	0.0207	0.0000	0.0053	0.0000	0.1532	0.7644	0.0577	0.3475	0.0755	0.4548
24	30.01	-0.00	0.0206	0.0000	0.0050	0.0000	0.1406	0.7728	0.0582	0.3521	0.0753	0.4557
25	30.02	-0.01	0.0202	0.0000	0.0067	0.0000	0.1806	0.7895	0.0597	0.3598	0.0756	0.4559
26	30.72	-0.00	0.0206	0.0000	0.0064	0.0000	0.0803	0.7903	0.0589	0.3613	0.0746	0.4572
27	30.99	0.01	0.0203	0.0000	0.0070	0.0000	0.1936	0.8053	0.0602	0.3673	0.0748	0.4589
28	31.31	0.00	0.0206	0.0000	0.0120	0.0000	0.2771	0.7941	0.0616	0.3627	0.0774	0.4568
29	31.59	0.02	0.0200	0.0000	0.0126	0.0000	0.2762	0.7935	0.0611	0.3639	0.0770	0.4586
30	31.87	0.00	0.0213	0.0000	0.0112	0.0000	0.2666	0.7897	0.0622	0.3623	0.0788	0.4588
31	32.13	0.05	0.0205	0.0000	0.0142	0.0000	0.2996	0.7774	0.0621	0.3576	0.0799	0.4597
32	32.41	0.00	0.0208	0.0000	0.0182	0.0000	0.3339	0.7803	0.0625	0.3589	0.0801	0.4600
33	32.70	0.05	0.0200	0.0000	0.0145	0.0000	0.3118	0.7929	0.0639	0.3638	0.0800	0.4589
34	32.98	0.07	0.0199	0.0000	0.0193	0.0000	0.3356	0.8043	0.0636	0.3686	0.0794	0.4582
35	33.26	0.06	0.0202	0.0000	0.0181	0.0000	0.3628	0.8188	0.0660	0.3741	0.0782	0.4569
36	33.51	0.06	0.0197	0.0000	0.0197	0.0000	0.3420	0.8247	0.0644	0.3771	0.0781	0.4572
37	33.78	0.08	0.0201	0.0000	0.0183	0.0000	0.3298	0.8209	0.0647	0.3752	0.0789	0.4571
38	34.05	0.09	0.0201	0.0000	0.0194	0.0000	0.3287	0.8329	0.0652	0.3796	0.0783	0.4557
39	34.30	0.07	0.0201	0.0000	0.0202	0.0000	0.3357	0.8454	0.0658	0.3853	0.0774	0.4557
40	34.59	0.06	0.0198	0.0000	0.0229	0.0000	0.3496	0.8678	0.0656	0.3930	0.0756	0.4529
41	34.83	0.09	0.0203	0.0000	0.0176	0.0000	0.3113	0.8720	0.0669	0.3961	0.0757	0.4520
42	35.08	0.07	0.0196	0.0000	0.0191	0.0000	0.3322	0.9025	0.0662	0.4055	0.0734	0.4493
43	35.36	0.07	0.0202	0.0000	0.0173	0.0000	0.3166	0.9109	0.0669	0.4096	0.0735	0.4484
44	35.58	0.07	0.0204	0.0000	0.0182	0.0000	0.3122	0.9087	0.0672	0.4092	0.0740	0.4460
45	35.84	0.08	0.0215	0.0000	0.0213	0.0000	0.3409	0.9291	0.0674	0.4089	0.0726	0.4400
46	36.08	0.07	0.0207	0.0000	0.0169	0.0000	0.2822	0.9292	0.0674	0.4078	0.0726	0.4389

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PRI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 90 0.80 1.7 3.0 81=CF31 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	36.32	0.07	0.0449	9.9999	0.0136	9.9999	0.2787	0.9411	0.0671	0.0099	0.0713	0.4356
48	36.57	0.07	0.0545	9.9999	0.0163	9.9999	0.2996	0.9459	0.0659	0.0098	0.0697	0.4301
49	36.81	0.06	0.0576	9.9999	0.0141	9.9999	0.3322	0.9334	0.0602	0.0076	0.0645	0.4258
50	37.05	0.07	0.0441	9.9999	0.0136	9.9999	0.2833	0.9313	0.0404	0.3964	0.0649	0.4257
51	37.27	0.06	0.0550	9.9999	0.0170	9.9999	0.3041	0.9104	0.0470	0.3848	0.0518	0.4225
52	37.53	0.07	0.0466	9.9999	0.0172	9.9999	0.3198	0.9014	0.0433	0.3828	0.0480	0.4246
53	37.76	0.07	0.0513	9.9999	0.0164	9.9999	0.3203	0.9324	0.0469	0.3965	0.0503	0.4253
54	37.98	0.05	0.0473	9.9999	0.0161	9.9999	0.3411	0.9314	0.0496	0.3929	0.0533	0.4218
55	38.23	0.06	0.0497	9.9999	0.0166	9.9999	0.3347	0.9395	0.0533	0.3967	0.0567	0.4222
56	38.46	0.06	0.0387	9.9999	0.0144	9.9999	0.2835	0.9309	0.0347	0.3956	0.0372	0.4250
57	38.69	0.06	0.0498	9.9999	0.0163	9.9999	0.3521	0.9360	0.0394	0.3979	0.0420	0.4262
58	38.95	0.05	0.0393	9.9999	0.0128	9.9999	0.3214	0.9192	0.0220	0.3935	0.0240	0.4281
59	39.17	0.06	0.0376	9.9999	0.0105	9.9999	0.2946	0.9198	0.0165	0.3936	0.0184	0.4279
60	39.40	0.07	0.0393	9.9999	0.0095	9.9999	0.2624	0.9111	0.0102	0.3905	0.0112	0.4286
61	39.64	0.06	0.0419	9.9999	0.0141	9.9999	0.3141	0.9142	0.0107	0.3919	0.0117	0.4287
62	39.86	0.07	0.0449	9.9999	0.0155	9.9999	0.3482	0.9035	0.0078	0.3885	0.0087	0.4300
63	40.09	0.06	0.0433	9.9999	0.0168	9.9999	0.3889	0.8954	0.0068	0.3859	0.0081	0.4329
64	40.33	0.07	0.0449	9.9999	0.0147	9.9999	0.4037	0.8963	0.0076	0.3869	0.0090	0.4312
65	40.55	0.07	0.0474	9.9999	0.0148	9.9999	0.4153	0.7930	0.0072	0.3844	0.0091	0.4343
66	40.75	0.07	0.0481	9.9999	0.0193	9.9999	0.4021	0.7932	0.0071	0.3847	0.0090	0.4346
67	40.98	0.06	0.0433	9.9999	0.0183	9.9999	0.4236	0.8003	0.0072	0.3866	0.0090	0.4331
68	41.19	0.07	0.0469	9.9999	0.0201	9.9999	0.4487	0.8299	0.0074	0.3887	0.0089	0.4317
69	41.34	0.07	0.0469	9.9999	0.0179	9.9999	0.4286	0.7994	0.0077	0.3829	0.0098	0.4338
70	41.62	0.07	0.0426	9.9999	0.0177	9.9999	0.4165	0.7906	0.0076	0.3826	0.0096	0.4333
71	41.82	0.07	0.0436	9.9999	0.0174	9.9999	0.4018	0.8561	0.0068	0.3861	0.0088	0.4299
72	42.02	0.06	0.0323	9.9999	0.0102	9.9999	0.3164	0.9675	0.0121	0.4119	0.0125	0.4258
73	42.22	0.07	0.0383	9.9999	0.0127	9.9999	0.3506	0.9195	0.0108	0.3962	0.0118	0.4267
74	42.42	0.07	0.0331	9.9999	0.0102	9.9999	0.3041	0.9620	0.0139	0.4097	0.0145	0.4259
75	42.65	0.07	0.0329	9.9999	0.0087	9.9999	0.2919	0.9517	0.0101	0.4074	0.0148	0.4281
76	42.86	0.06	0.0307	9.9999	0.0196	9.9999	0.3072	0.9840	0.0202	0.4188	0.0206	0.4256
77	43.05	0.07	0.0307	9.9999	0.0086	9.9999	0.2976	0.9802	0.0145	0.4145	0.0152	0.4269
78	43.25	0.05	0.0302	9.9999	0.0134	9.9999	0.3712	0.9729	0.0066	0.3965	0.0072	0.4296
79	43.49	0.06	0.0307	9.9999	0.0099	9.9999	0.3072	0.9929	0.0095	0.4235	0.0096	0.4285
80	43.63	0.03	0.0241	9.9999	0.0067	9.9999	0.3000	0.9247	0.0075	0.3976	0.0081	0.4300
81	43.83	0.04	0.0340	9.9999	0.0158	9.9999	0.4104	0.8895	0.0053	0.3839	0.0060	0.4316
82	44.02	0.02	0.0307	9.9999	0.0097	9.9999	0.3170	0.9382	0.0049	0.4025	0.0052	0.4290
83	44.21	0.04	0.0299	9.9999	0.0084	9.9999	0.2819	0.9779	0.0072	0.4177	0.0074	0.4271
84	44.39	0.03	0.0307	9.9999	0.0086	9.9999	0.2876	0.8851	0.0043	0.3805	0.0049	0.4299
85	44.56	0.03	0.0350	9.9999	0.0130	9.9999	0.3603	0.8712	0.0045	0.3745	0.0052	0.4298
86	44.74	0.04	0.0335	9.9999	0.0117	9.9999	0.3305	0.8570	0.0041	0.3694	0.0048	0.4310
87	44.91	0.04	0.0340	9.9999	0.0146	9.9999	0.3844	0.8408	0.0046	0.3625	0.0057	0.4312
88	45.10	0.03	0.0283	9.9999	0.0093	9.9999	0.2943	0.9177	0.0036	0.3921	0.0039	0.4273
89	45.28	0.01	0.0275	9.9999	0.0076	9.9999	0.2774	0.9137	0.0030	0.3910	0.0033	0.4279
90	45.46	0.01	0.0338	9.9999	0.0122	9.9999	0.3620	0.8381	0.0047	0.3606	0.0056	0.4303
91	45.64	0.02	0.0264	9.9999	0.0036	9.9999	0.1564	0.9054	0.0032	0.3877	0.0035	0.4282
92	45.80	0.02	0.0370	9.9999	0.0137	9.9999	0.3713	0.8994	0.0027	0.3858	0.0030	0.4289

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/10**6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 90 0.60 1.7 0.0 0.0E+31 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	HFTA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	46.00	0.01	0.0259	0.9999	0.0079	0.9999	0.2868	0.8962	0.0031	0.3868	0.0035	0.4284
94	46.19	0.01	0.0316	0.9999	0.0096	0.9999	0.3062	0.9076	0.0025	0.3873	0.0028	0.4268
95	46.38	0.01	0.0316	0.9999	0.0093	0.9999	0.3111	0.9059	0.0025	0.3865	0.0028	0.4267
96	46.55	0.01	0.0275	0.9999	0.0076	0.9999	0.2764	0.9055	0.0030	0.3856	0.0033	0.4259
97	46.72	-0.01	0.0242	0.9999	0.0070	0.9999	0.2543	0.9281	0.0022	0.3948	0.0024	0.4254
98	46.90	-0.00	0.0276	0.9999	0.0079	0.9999	0.2873	0.9376	0.0017	0.3991	0.0018	0.4256
99	47.05	0.01	0.0315	0.9999	0.0106	0.9999	0.3439	0.9005	0.0024	0.3848	0.0027	0.4273
100	47.20	-0.00	0.0260	0.9999	0.0062	0.9999	0.2396	0.9016	0.0022	0.3848	0.0024	0.4268
101	47.44	0.00	0.0308	0.9999	0.0094	0.9999	0.3062	0.9358	0.0009	0.3980	0.0010	0.4253
102	47.60	-0.01	0.0306	0.9999	0.0094	0.9999	0.3062	0.9254	0.0022	0.3943	0.0024	0.4261
103	47.78	-0.01	0.0276	0.9999	0.0079	0.9999	0.2873	0.9430	0.0016	0.4009	0.0011	0.4251
104	47.97	-0.01	0.0242	0.9999	0.0077	0.9999	0.3182	0.9575	0.0011	0.4050	0.0012	0.4230
105	48.13	-0.01	0.0227	0.9999	0.0056	0.9999	0.2467	0.9818	0.0016	0.4137	0.0016	0.4216
106	48.31	0.01	0.0259	0.9999	0.0078	0.9999	0.3023	0.9458	0.0008	0.4001	0.0006	0.4230
107	48.48	0.02	0.0283	0.9999	0.0086	0.9999	0.3050	0.9534	0.0016	0.4022	0.0017	0.4219
108	48.65	-0.00	0.0210	0.9999	0.0055	0.9999	0.2619	0.9961	0.0	0.4179	0.0	0.4203
109	48.83	-0.01	0.0257	0.9999	0.0078	0.9999	0.2932	1.0063	0.0016	0.4217	0.0016	0.4190
110	49.00	0.00	0.0276	0.9999	0.0079	0.9999	0.2873	0.9714	0.0008	0.4090	0.0008	0.4201
111	49.17	0.00	0.0171	0.9999	0.0023	0.9999	0.1365	1.0057	0.0004	0.4213	0.0004	0.4189
112	49.35	0.02	0.0219	0.9999	0.0040	0.9999	0.1826	1.0211	0.0014	0.4274	0.0014	0.4185
113	49.52	0.02	0.0275	0.9999	0.0092	0.9999	0.3358	0.9954	0.0014	0.4178	0.0014	0.4197
114	49.71	0.03	0.0275	0.9999	0.0089	0.9999	0.3246	1.0067	0.0003	0.4220	0.0003	0.4192
115	49.87	0.05	0.0275	0.9999	0.0092	0.9999	0.3358	0.9784	0.0002	0.4103	0.0002	0.4194
116	50.05	0.06	0.0226	0.9999	0.0064	0.9999	0.2788	0.9898	0.0007	0.4158	0.0007	0.4208
117	50.21	0.07	0.0367	0.9999	0.0132	0.9999	0.3615	0.9723	-0.0001	0.4098	-0.0001	0.4205
118	50.39	0.07	0.0291	0.9999	0.0103	0.9999	0.3552	0.9860	-0.0001	0.4149	-0.0001	0.4208
119	50.54	0.10	0.0426	0.9999	0.0147	0.9999	0.4490	0.9869	-0.0009	0.4158	-0.0009	0.4213
120	50.73	0.10	0.0407	0.9999	0.0209	0.9999	0.4485	1.0034	-0.0008	0.4214	-0.0008	0.4208
121	50.91	0.10	0.0451	0.9999	0.0202	0.9999	0.4489	0.9879	-0.0019	0.4151	-0.0019	0.4202
122	51.10	0.16	0.0395	0.9999	0.0175	0.9999	0.4430	0.9822	-0.0023	0.4133	-0.0023	0.4208
123	51.27	0.11	0.0443	0.9999	0.0205	0.9999	0.4638	0.9998	-0.0025	0.4206	-0.0025	0.4210
124	51.43	0.11	0.0396	0.9999	0.0158	0.9999	0.4341	1.0190	-0.0024	0.4279	-0.0024	0.4199
125	51.60	0.14	0.0428	0.9999	0.0210	0.9999	0.4497	1.0172	-0.0033	0.4271	-0.0033	0.4199
126	51.78	0.09	0.0426	0.9999	0.0204	0.9999	0.4778	1.0149	-0.0035	0.4266	-0.0035	0.4203
127	51.95	0.09	0.0372	0.9999	0.0158	0.9999	0.4259	1.0163	-0.0032	0.4275	-0.0032	0.4206
128	52.12	0.09	0.0357	0.9999	0.0131	0.9999	0.3480	1.0130	-0.0035	0.4251	-0.0035	0.4196
129	52.28	0.09	0.0377	0.9999	0.0162	0.9999	0.4175	1.0039	-0.0036	0.4217	-0.0036	0.4200
130	52.46	0.09	0.0335	0.9999	0.0119	0.9999	0.3584	1.0118	-0.0039	0.4246	-0.0039	0.4199
131	52.62	0.05	0.0341	0.9999	0.0129	0.9999	0.3794	1.0219	-0.0041	0.4282	-0.0040	0.4190
132	52.78	0.04	0.0341	0.9999	0.0128	0.9999	0.3706	1.0184	-0.0044	0.4272	-0.0043	0.4195
133	52.93	0.05	0.0253	0.9999	0.0071	0.9999	0.2617	1.0067	-0.0048	0.4230	-0.0046	0.4193
134	53.11	0.06	0.0281	0.9999	0.0085	0.9999	0.3209	0.9967	-0.0053	0.4187	-0.0053	0.4194
135	53.27	0.01	0.0212	0.9999	0.0042	0.9999	0.1981	1.0008	-0.0043	0.4192	-0.0043	0.4188
136	53.44	0.06	0.0253	0.9999	0.0071	0.9999	0.2817	1.0047	-0.0044	0.4215	-0.0044	0.4195
137	53.62	0.02	0.0265	0.9999	0.0059	0.9999	0.2377	1.0339	-0.0051	0.4319	-0.0049	0.4177
138	53.78	0.02	0.0264	0.9999	0.0048	0.9999	0.2353	1.0389	-0.0056	0.4341	-0.0054	0.4178

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH E+06 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 90 0.80 1.7 C.0 BINCF31 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
139	53.96	0.03	0.0228	9.9999	0.0063	9.9999	0.2783	1.0360	-0.0063	0.4323	-0.0061	0.4173
140	54.11	0.03	0.0294	9.9999	0.0061	9.9999	0.2765	1.0403	-0.0061	0.4348	-0.0059	0.4179
141	54.28	0.03	0.0426	9.9999	0.0096	9.9999	0.2954	1.0577	-0.0080	0.4408	-0.0057	0.4168
142	54.47	0.03	0.0270	9.9999	0.0064	9.9999	0.2454	1.0534	-0.0066	0.4396	-0.0063	0.4172
143	54.63	0.03	0.0413	9.9999	0.0099	9.9999	0.2285	1.0820	-0.0073	0.4503	-0.0068	0.4162
144	54.80	0.05	0.0404	9.9999	0.0151	9.9999	0.3728	1.0539	-0.0067	0.4431	-0.0063	0.4165
145	54.98	0.05	0.0444	9.9999	0.0106	9.9999	0.3183	1.0409	-0.0076	0.4347	-0.0073	0.4176
146	55.17	0.05	0.0342	9.9999	0.0120	9.9999	0.3519	1.0686	-0.0083	0.4464	-0.0078	0.4178
147	55.31	0.07	0.0423	9.9999	0.0162	9.9999	0.3839	1.0688	-0.0072	0.4309	-0.0070	0.4188
148	55.47	0.07	0.0415	9.9999	0.0162	9.9999	0.3913	9.9999	-0.0058	0.4193	-0.0058	0.4197
149	55.63	0.06	0.0491	9.9999	0.0140	9.9999	0.3590	1.0435	-0.0075	0.4362	-0.0070	0.4180
150	55.79	0.07	0.0415	9.9999	0.0165	9.9999	0.3986	1.0067	-0.0060	0.4218	-0.0060	0.4190
151	55.96	0.07	0.0455	9.9999	0.0197	9.9999	0.4339	0.9922	-0.0045	0.4158	-0.0045	0.4190
152	56.13	0.07	0.0439	9.9999	0.0196	9.9999	0.4475	0.9963	-0.0047	0.4169	-0.0047	0.4192
153	56.28	0.09	0.0424	9.9999	0.0152	9.9999	0.4303	0.9788	-0.0020	0.4100	-0.0020	0.4189
154	56.43	0.09	0.0449	9.9999	0.0220	9.9999	0.4504	0.9847	-0.0027	0.4122	-0.0027	0.4189
155	56.60	0.07	0.0350	9.9999	0.0145	9.9999	0.4039	0.9295	-0.0008	0.3914	-0.0009	0.4211
156	56.77	0.08	0.0338	9.9999	0.0127	9.9999	0.3791	0.9387	-0.0017	0.3949	-0.0018	0.4207
157	56.92	0.07	0.0320	9.9999	0.0113	9.9999	0.3542	0.9536	-0.0015	0.3994	-0.0016	0.4190
158	57.07	0.08	0.0343	9.9999	0.0140	9.9999	0.3776	0.9430	-0.0014	0.3956	-0.0015	0.4195
159	57.24	0.05	0.0313	9.9999	0.0099	9.9999	0.3173	0.9482	-0.0020	0.3975	-0.0021	0.4192
160	57.41	0.05	0.0402	9.9999	0.0151	9.9999	0.3766	0.9598	-0.0014	0.4009	-0.0015	0.4177
161	57.58	0.05	0.0320	9.9999	0.0123	9.9999	0.3761	0.9063	-0.0022	0.4024	-0.0023	0.4173
162	57.73	0.05	0.0393	9.9999	0.0151	9.9999	0.3852	0.9869	-0.0030	0.4034	-0.0031	0.4172
163	57.89	0.07	0.0491	9.9999	0.0158	9.9999	0.3950	0.9559	-0.0022	0.3983	-0.0023	0.4167
164	58.04	0.05	0.0377	9.9999	0.0133	9.9999	0.3537	0.9800	-0.0034	0.4076	-0.0035	0.4180
165	58.20	0.05	0.0334	9.9999	0.0141	9.9999	0.3588	0.9730	-0.0028	0.4045	-0.0029	0.4158
166	58.36	0.06	0.0353	9.9999	0.0129	9.9999	0.3636	0.9894	-0.0044	0.4110	-0.0045	0.4154
167	58.52	0.06	0.0378	9.9999	0.0127	9.9999	0.3369	0.9897	-0.0037	0.4102	-0.0037	0.4145
168	58.67	0.06	0.0378	9.9999	0.0127	9.9999	0.3369	1.0051	-0.0042	0.4146	-0.0042	0.4126
169	58.82	0.05	0.0369	9.9999	0.0130	9.9999	0.3533	1.0002	-0.0042	0.4129	-0.0042	0.4128
170	58.97	0.06	0.0365	9.9999	0.0105	9.9999	0.3052	1.0076	-0.0039	0.4134	-0.0039	0.4124
171	59.13	0.05	0.0370	9.9999	0.0142	9.9999	0.3733	1.0142	-0.0054	0.4173	-0.0053	0.4114
172	59.29	0.06	0.0393	9.9999	0.0128	9.9999	0.3265	1.0234	-0.0045	0.4207	-0.0044	0.4110
173	59.42	0.05	0.0364	9.9999	0.0105	9.9999	0.3001	1.0072	-0.0051	0.4137	-0.0051	0.4108
174	59.58	0.05	0.0342	9.9999	0.0127	9.9999	0.3268	1.0336	-0.0061	0.4229	-0.0059	0.4091
175	59.74	0.05	0.0328	9.9999	0.0086	9.9999	0.2509	1.0293	-0.0055	0.4214	-0.0054	0.4094
176	59.88	0.04	0.0423	9.9999	0.0149	9.9999	0.3531	1.0365	-0.0057	0.4244	-0.0055	0.4088
177	60.01	0.05	0.0310	9.9999	0.0076	9.9999	0.2960	1.0183	-0.0059	0.4184	-0.0058	0.4078
178	60.02	0.04	0.0406	9.9999	0.0141	9.9999	0.3481	1.0139	-0.0053	0.4141	-0.0052	0.4085
179	60.03	0.22	0.0334	9.9999	0.0044	9.9999	0.2823	1.0255	-0.0068	0.4176	-0.0066	0.4072

PAGE 1 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART EACH RIDGE PHI CONF L DEL1 DEL2 DEL3 DELA TRANSITION
7 91 0.90 1.7 0.0 01=0F31 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-0.18	-0.01	-2.1581	0.5516	0.1691	-0.1558	0.0061	0.5149	0.1149	0.4000	-2.9806
2	-0.19	-0.02	-2.2202	0.5583	0.1129	-0.1588	0.0060	0.5153	0.1145	0.4008	-2.9660
3	-0.18	-0.02	-2.2085	0.5531	0.0998	-0.1605	0.0060	0.5180	0.1139	0.4021	-2.9671
4	-0.19	-0.02	-2.2045	0.5536	0.1128	-0.1586	0.0060	0.5193	0.1151	0.4042	-2.9549
5	-0.15	-0.02	-2.0961	0.5522	0.1370	-0.2041	0.0062	0.5082	0.1093	0.3989	-2.9588
6	-0.16	-0.02	-1.5869	0.4038	0.0333	-0.1076	0.0066	0.4581	0.1014	0.3568	-3.0665
7	-0.32	-0.03	-1.0960	0.3503	0.0582	-0.1029	0.0074	0.4138	0.0893	0.3243	-3.3363
8	1.56	-0.03	-0.8582	0.7073	0.0362	-0.1187	0.0015	0.3700	0.0798	0.2902	-3.8778
9	3.13	-0.01	-0.4579	0.1302	0.1551	-0.1698	0.0065	0.3469	0.0766	0.2704	-4.6517
10	5.03	-0.03	-0.0917	1.3764	0.0455	-0.1210	0.0092	0.3122	0.0768	0.2353	-15.0238
11	6.05	-0.04	0.2153	0.8136	0.0110	-0.0215	0.0098	0.2905	0.0806	0.2098	3.7789
12	6.78	-0.04	0.4192	0.6107	-0.0304	-0.0269	0.0041	0.2825	0.0913	0.1912	1.4568
13	10.63	-0.04	0.6715	0.3977	-0.0196	-0.0042	0.0116	0.2718	0.1027	0.1692	0.4562
14	12.55	-0.02	0.9807	-0.1475	0.1110	-0.1604	0.0125	0.2483	0.1110	0.1354	-0.1504
15	14.47	-0.02	1.3231	-0.8378	0.1046	-0.0410	0.0132	0.2167	0.1177	0.0991	-0.5877
16	16.41	-0.04	1.7761	-1.5470	-0.0277	0.0251	0.0141	0.1738	0.1262	0.0496	-0.8935
17	15.41	-0.03	2.2659	-2.4723	-0.0653	0.0707	0.0216	0.1295	0.1325	-0.0030	-1.0913
18	20.40	-0.03	2.7371	-3.4725	-0.0948	0.2916	0.0471	0.0906	0.1459	-0.0552	-1.2697
19	22.39	-0.04	3.3784	-4.7133	-0.1248	0.4902	0.0539	0.0379	0.1657	-0.1278	-1.3968
20	24.38	-0.03	3.9522	-5.8271	-0.0875	0.3977	0.0165	-0.0191	0.1783	-0.1974	-1.5250
21	20.35	-0.03	4.5948	-6.5714	-0.3636	1.2716	0.0280	-0.0776	0.1833	-0.2609	-1.5157
22	24.35	-0.02	5.2391	-7.0196	0.0597	0.0413	-0.0240	-0.1563	0.1808	-0.3351	-1.4925
23	30.31	-0.01	5.8829	-8.1196	0.2370	-0.5396	-0.0169	-0.1958	0.1869	-0.3827	-1.4336
24	30.31	-0.01	5.8859	-8.1187	0.3612	-0.9865	0.0049	-0.1912	0.1865	-0.3797	-1.4279
25	30.29	-0.00	5.7373	-8.2714	0.3235	-0.5572	-0.0277	-0.2032	0.1837	-0.3929	-1.4418
26	30.56	0.02	5.8868	-8.3724	0.6023	-1.2927	0.0061	-0.2010	0.1909	-0.3919	-1.4228
27	30.91	0.02	5.9539	-8.4770	0.6620	-1.3311	0.0263	-0.2093	0.1926	-0.4021	-1.4239
28	31.19	0.03	6.1496	-8.8038	0.7294	-1.4594	0.0263	-0.2324	0.1933	-0.4257	-1.4323
29	31.68	0.06	6.1785	-8.8653	0.8413	-1.3435	0.0261	-0.2376	0.1908	-0.4324	-1.4401
30	31.78	0.05	6.2788	-9.0715	1.0296	-2.0094	0.0466	-0.2437	0.1985	-0.4422	-1.4448
31	32.08	0.05	6.3849	-9.2674	0.9896	-1.8934	0.0474	-0.2395	0.1996	-0.4389	-1.4479
32	32.33	0.07	6.4526	-9.1923	1.2293	-2.4274	0.0679	-0.2528	0.2011	-0.4539	-1.4016
33	32.60	0.10	6.7384	-9.2378	1.7217	-3.5116	0.0897	-0.2598	0.2061	-0.4659	-1.3712
34	32.90	0.09	6.8849	-9.3367	1.5883	-3.3335	0.0898	-0.2609	0.2103	-0.4712	-1.3597
35	33.10	0.07	6.9294	-9.3065	1.3113	-2.6912	0.0765	-0.2630	0.2115	-0.4745	-1.3633
36	33.44	0.09	7.0355	-9.3918	1.5225	-3.2375	0.1035	-0.2615	0.2119	-0.4734	-1.3349
37	33.72	0.08	7.2055	-9.4311	1.4405	-3.2185	0.1388	-0.2700	0.2148	-0.4855	-1.3063
38	33.99	0.08	7.3310	-9.4428	1.4132	-3.2035	0.1433	-0.2795	0.2169	-0.4965	-1.2949
39	34.26	0.09	7.5300	-9.6035	1.4995	-3.4683	0.1569	-0.2920	0.2182	-0.5102	-1.2706
40	34.52	0.09	7.6305	-9.5505	1.4280	-3.2943	0.1571	-0.2890	0.2203	-0.5093	-1.2506
41	34.79	0.09	7.7728	-9.6988	1.5020	-3.4213	0.1707	-0.2985	0.2245	-0.5190	-1.2216
42	35.05	0.09	7.8368	-9.6776	1.4128	-3.6031	0.1579	-0.3049	0.2232	-0.5280	-1.2094
43	35.30	0.08	8.0103	-9.8535	1.2653	-3.4747	0.1844	-0.3068	0.2256	-0.5324	-1.1927
44	35.56	0.06	8.1285	-9.8119	1.2571	-3.3015	0.1911	-0.3022	0.2285	-0.5307	-1.1825
45	35.84	0.07	8.2567	-9.7434	1.1246	-3.1368	0.1977	-0.3137	0.2311	-0.5448	-1.1798
46	36.09	0.04	8.3209	-9.9837	0.8181	-1.6776	0.1713	-0.3259	0.2285	-0.5544	-1.1509

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REID=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
/	91	0.60	1.7	0.0	BIAS31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
47	36.32	-0.01	8.4927	-9.5204	0.2075	-0.6329	0.1188	-0.3442	0.2239	-0.5681	-1.0975
48	36.64	0.00	8.4585	-9.5212	0.0352	-1.2642	0.1715	-0.3274	0.2240	-0.5534	-1.1256
49	36.78	0.01	8.5913	-9.3927	0.3507	-0.5741	0.1063	-0.3508	0.2226	-0.5734	-1.0933
50	37.04	-0.01	8.6600	-9.6685	0.0341	-0.2475	0.0995	-0.3561	0.2234	-0.5795	-1.0925
51	37.29	-0.01	8.7179	-9.3591	-0.0221	0.0853	0.0602	-0.3541	0.2200	-0.5741	-1.0735
52	37.51	-0.02	8.7603	-9.6379	-0.0801	0.3030	0.0432	-0.3620	0.2200	-0.5820	-1.0749
53	37.77	-0.00	8.8103	-9.6713	-0.3926	1.2015	-0.0008	-0.3686	0.2206	-0.5890	-1.0512
54	38.02	-0.00	8.8545	-9.6736	-0.4766	1.1650	-0.0197	-0.3751	0.2217	-0.5948	-1.0457
55	38.29	-0.00	8.9061	-9.6521	-0.5597	1.6437	-0.0598	-0.3764	0.2243	-0.6007	-1.0343
56	48.68	-0.00	8.9466	-9.6591	-0.7594	1.8468	-0.0600	-0.3712	0.2259	-0.5971	-1.0243
57	38.72	-0.00	8.9267	-9.6654	-0.7450	1.8614	-0.0458	-0.3782	0.2233	-0.6015	-1.0172
58	38.96	-0.00	8.8765	-9.6755	-0.5876	1.7135	-0.0593	-0.3697	0.2292	-0.5989	-1.0106
59	39.19	-0.01	8.8572	-9.6300	-0.8305	2.3517	-0.0575	-0.3811	0.2334	-0.6145	-1.0065
60	39.44	-0.00	8.8097	-9.6217	-0.7770	2.0651	-0.0333	-0.4005	0.2325	-0.6330	-0.9950
61	39.66	-0.00	8.7527	-9.6572	-0.6021	1.7258	-0.0071	-0.3832	0.2397	-0.6229	-0.9800
62	39.90	-0.01	8.8165	-9.6583	-0.8703	2.0526	-0.0368	-0.3876	0.2359	-0.6237	-0.9749
63	40.16	-0.00	8.9391	-9.6563	-0.7811	2.2561	-0.0589	-0.4000	0.2368	-0.6368	-0.9736
64	40.44	-0.00	10.0116	-9.6386	-0.7208	2.0947	-0.0650	-0.3940	0.2347	-0.6337	-0.9627
65	40.68	-0.00	10.0798	-9.6301	-0.7247	1.7714	-0.0084	-0.3933	0.2418	-0.6351	-0.9754
66	40.90	-0.00	10.1598	-9.6625	-0.7336	2.1297	-0.0163	-0.3827	0.2510	-0.6337	-0.9342
67	41.12	-0.00	10.3391	-9.6733	-0.7010	2.2156	-0.0448	-0.4007	0.2435	-0.6442	-0.9558
68	41.33	-0.00	10.4870	-9.6790	-0.6014	2.0276	0.0149	-0.3814	0.2603	-0.6417	-0.9493
69	41.57	-0.00	10.5776	-9.6936	-0.9246	2.6824	-0.0319	-0.3890	0.2662	-0.6552	-0.9447
70	41.76	-0.00	10.6325	-9.6719	-0.6086	2.0305	-0.0117	-0.3701	0.2818	-0.6519	-0.9379
71	41.98	-0.01	10.6774	-10.2259	-1.2206	3.3930	-0.0660	-0.3819	0.2751	-0.6570	-0.9364
72	42.19	-0.00	10.7836	-10.0981	-0.7061	2.9254	-0.0323	-0.3604	0.2847	-0.6511	-0.9337
73	42.37	-0.01	10.8458	-10.0292	-1.1623	3.4125	-0.0656	-0.3806	0.2843	-0.6649	-0.9309
74	42.60	-0.00	10.9422	-10.1448	-1.0734	3.5388	-0.0851	-0.3648	0.2894	-0.6541	-0.9229
75	42.79	-0.01	10.9920	-10.2136	-1.1327	3.4555	-0.0645	-0.3705	0.2946	-0.6652	-0.9109
76	43.00	-0.00	11.1240	-10.2307	-0.9395	3.2335	-0.0644	-0.3903	0.2949	-0.6852	-0.9197
77	43.22	-0.01	11.2440	-10.2945	-1.1478	4.0575	-0.1248	-0.3989	0.2983	-0.6972	-0.9158
78	43.41	-0.01	11.2993	-10.2701	-1.2618	3.9800	-0.1117	-0.3817	0.3055	-0.6872	-0.9045
79	43.61	-0.02	11.3544	-10.4424	-1.4899	4.0903	-0.1376	-0.3852	0.3106	-0.6958	-0.9106
80	43.81	-0.13	11.5005	-10.3131	-1.6019	4.3354	-0.1376	-0.3819	0.3177	-0.6996	-0.8961
81	44.02	-0.13	11.5525	-10.4774	-1.5153	4.3648	-0.1310	-0.3823	0.3242	-0.6865	-0.8982
82	44.22	-0.13	11.6992	-10.3487	-1.6565	4.5230	-0.1308	-0.3671	0.3243	-0.6964	-0.8898
83	44.39	-0.14	11.7406	-10.3590	-1.6341	4.6551	-0.1376	-0.3753	0.3394	-0.7147	-0.8829
84	44.58	-0.13	11.7449	-10.3284	-1.5903	4.6714	-0.1506	-0.3692	0.3420	-0.7112	-0.8779
85	44.77	-0.15	11.8524	-10.4294	-1.6071	4.8385	-0.1830	-0.3724	0.3428	-0.7152	-0.8795
86	44.94	-0.15	11.8356	-10.3780	-1.7444	4.7216	-0.1826	-0.3576	0.3478	-0.7054	-0.8768
87	45.12	-0.15	11.8963	-10.4234	-1.7162	4.5445	-0.2137	-0.3749	0.3496	-0.7155	-0.8636
88	45.30	-0.15	11.9675	-10.5541	-1.7374	4.5127	-0.1876	-0.3783	0.3439	-0.7222	-0.8819
89	45.50	-0.14	12.0157	-10.3008	-1.6791	4.2294	-0.2254	-0.3724	0.3491	-0.7190	-0.8572
90	45.68	-0.15	12.1420	-10.4465	-1.6541	4.6544	-0.2137	-0.3625	0.3608	-0.7433	-0.8589
91	45.83	-0.14	12.1574	-10.4724	-1.6146	4.8604	-0.2331	-0.3784	0.3566	-0.7355	-0.8614
92	46.04	-0.13	12.3970	-10.6753	-1.5148	4.6115	-0.2261	-0.3893	0.3668	-0.7561	-0.8611

PAGE 1 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 91 MACH .90 RX10-6 1.7 PHI 0.0 CONF A1-0F31 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	XCP
93	95.02	-0.16	12.3741	-10.3362	-1.7516	4.5603	-0.2378	-0.3696	0.3607	-0.7501	-0.8490
94	96.39	-0.18	12.4024	-10.4318	-1.7416	4.7967	-0.2256	-0.3769	0.3665	-0.7354	-0.8411
95	96.86	-0.15	12.5016	-10.4982	-1.7114	4.8825	-0.2372	-0.3691	0.3667	-0.7558	-0.8488
96	96.78	-0.14	12.5021	-10.5055	-1.8058	4.8941	-0.1920	-0.3805	0.3680	-0.7465	-0.8463
97	96.98	-0.14	12.7004	-10.5551	-1.8216	4.8360	-0.2082	-0.4057	0.3636	-0.7693	-0.8314
98	97.13	-0.10	12.6138	-10.4838	-1.7443	3.7735	-0.2455	-0.4031	0.3524	-0.7555	-0.8248
99	97.32	-0.14	12.7928	-10.5817	-1.8253	4.1102	-0.2087	-0.4197	0.3512	-0.7709	-0.8334
100	97.51	-0.14	12.8776	-10.6451	-1.8477	3.9461	-0.1615	-0.4314	0.3544	-0.7858	-0.8266
101	97.65	-0.14	12.9026	-10.6892	-1.8574	4.0152	-0.1885	-0.4173	0.3577	-0.7750	-0.8156
102	97.95	-0.11	13.0240	-10.7728	-1.9165	4.0561	-0.2076	-0.4410	0.3591	-0.8001	-0.8271
103	98.06	-0.16	13.0289	-10.8064	-1.9256	3.7838	-0.2051	-0.4407	0.3424	-0.7831	-0.8130
104	98.23	-0.15	13.0641	-10.8523	-1.9559	4.3772	-0.2230	-0.3952	0.3761	-0.7713	-0.8142
105	98.46	-0.16	13.1145	-10.9267	-1.9357	4.8352	-0.2347	-0.3752	0.4076	-0.7626	-0.8258
106	98.57	-0.15	13.2910	-10.9819	-1.9363	4.3729	-0.2540	-0.3667	0.3987	-0.7554	-0.8097
107	98.78	-0.15	13.4265	-10.9787	-1.8867	4.8095	-0.2345	-0.3793	0.4151	-0.7964	-0.8178
108	98.94	-0.15	13.4736	-10.9987	-1.8959	4.7896	-0.2710	-0.3509	0.4322	-0.7831	-0.8126
109	99.11	-0.16	13.5439	-11.0493	-1.8882	4.6071	-0.2626	-0.3843	0.4266	-0.8109	-0.8025
110	99.26	-0.12	13.4519	-11.1181	-1.8919	4.5475	-0.2702	-0.3409	0.4396	-0.7805	-0.8144
111	99.47	-0.15	13.7306	-11.1721	-1.9042	4.5227	-0.2816	-0.3345	0.4369	-0.7716	-0.7940
112	99.63	-0.12	13.7509	-11.2369	-1.9105	4.6017	-0.2744	-0.3326	0.4453	-0.7777	-0.8278
113	99.81	-0.15	13.8337	-11.2807	-1.8242	4.6680	-0.2803	-0.3792	0.4307	-0.8099	-0.7855
114	99.95	-0.13	14.0331	-11.3282	-1.8432	3.7467	-0.2778	-0.3917	0.4287	-0.8204	-0.7853
115	50.16	-0.12	13.9511	-11.3393	-1.8253	3.8774	-0.2651	-0.3950	0.4221	-0.8171	-0.7841
116	50.33	-0.10	14.0561	-11.3720	-1.8420	3.8716	-0.2643	-0.4113	0.3927	-0.8040	-0.7681
117	50.50	-0.07	14.0749	-11.4138	-1.8458	3.8944	-0.2771	-0.3739	0.4303	-0.8042	-0.7897
118	50.66	-0.08	14.1627	-11.4635	-1.8661	2.8776	-0.2623	-0.3599	0.4161	-0.7760	-0.7882
119	50.83	-0.08	14.1826	-11.5083	-1.8615	3.0327	-0.2629	-0.3896	0.4168	-0.8056	-0.7724
120	51.02	-0.07	14.3665	-11.5456	-1.8659	2.8637	-0.2395	-0.3507	0.4371	-0.7878	-0.7735
121	51.19	-0.08	14.3911	-11.6167	-1.8573	2.8612	-0.2353	-0.3436	0.4426	-0.7862	-0.7823
122	51.35	-0.06	14.4042	-11.6613	-1.8629	2.8729	-0.2251	-0.3374	0.4587	-0.7961	-0.7912
123	51.52	-0.02	14.3869	-11.6776	-1.8214	2.3368	-0.2161	-0.2986	0.4774	-0.7760	-0.7868
124	51.73	-0.05	14.5894	-11.5542	-1.8503	2.3113	-0.2148	-0.3265	0.4782	-0.8028	-0.7930
125	51.89	-0.06	14.6314	-11.8232	-1.8435	2.7652	-0.1848	-0.3270	0.4794	-0.8069	-0.7966
126	52.06	0.01	14.7765	-11.8709	0.3748	2.9053	-0.1330	-0.3658	0.4486	-0.8144	-0.7871
127	52.26	0.02	14.8737	-12.1352	0.3838	3.3314	-0.1145	-0.3475	0.4579	-0.8054	-0.8050
128	52.43	0.01	15.0492	-12.2376	0.3705	3.3965	-0.0461	-0.3592	0.4559	-0.8151	-0.7999
129	52.60	0.02	15.2606	-12.2325	0.3231	3.2701	-0.0306	-0.3456	0.5196	-0.8656	-0.8069
130	52.79	0.01	15.4494	-12.4550	0.3541	3.3725	-0.1049	-0.3009	0.5583	-0.8591	-0.8062
131	52.95	0.05	15.4977	-12.4824	0.3726	2.7175	-0.0915	-0.2221	0.6126	-0.8349	-0.7928
132	53.14	0.10	15.4929	-12.4453	1.3304	2.5266	-0.0719	-0.2047	0.6294	-0.8345	-0.7867
133	53.29	0.02	15.5071	-12.5244	0.3634	2.7014	-0.1216	-0.1984	0.6271	-0.8255	-0.7880
134	53.49	0.01	15.5266	-12.4249	0.3564	2.3754	-0.0747	-0.1900	0.6209	-0.8109	-0.7552
135	53.65	0.06	15.5429	-12.4197	1.3021	2.5574	-0.0635	-0.1794	0.6274	-0.8068	-0.7536
136	53.82	0.01	15.4870	-11.8585	0.4535	2.6483	-0.0696	-0.1779	0.6203	-0.7982	-0.7317
137	53.98	0.02	15.5535	-11.7132	0.4552	3.0715	-0.0195	-0.1954	0.6049	-0.8053	-0.7341
138	54.16	0.01	15.5223	-11.4969	0.4773	2.6524	-0.0311	-0.2012	0.6020	-0.8032	-0.7426

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	ALT=6	P=1	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	51	0.90	1.7	0.0	M1407P31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
134	54.31	0.04	16.0815	-12.2067	0.9116	2.3411	-0.0428	-0.2633	0.6031	-0.8064	-0.7591
140	54.56	0.05	16.1437	-11.8556	0.9954	2.6542	-0.0140	-0.1973	0.6069	-0.8047	-0.7326
141	54.69	0.00	15.1043	-12.5545	1.3002	2.2894	-0.0300	-0.2356	0.5976	-0.8332	-0.7796
142	54.80	0.06	16.1175	-12.4359	1.1479	2.2771	-0.0301	-0.2225	0.6001	-0.8226	-0.7716
143	55.03	0.03	16.3246	-12.0101	0.8703	2.4853	-0.0236	-0.2376	0.6109	-0.8043	-0.7600
144	55.17	0.04	16.2457	-12.3107	0.9165	2.2697	-0.0396	-0.2346	0.6037	-0.8433	-0.7578
145	55.30	0.03	16.1382	-12.2103	0.8883	2.3654	-0.0232	-0.2238	0.6057	-0.8295	-0.7566
146	55.46	0.07	16.3244	-12.4453	1.2259	2.1755	-0.0356	-0.2468	0.6151	-0.8619	-0.7654
147	55.63	0.05	16.2697	-12.3201	1.0970	2.3739	-0.0171	-0.2277	0.6114	-0.8391	-0.7634
148	55.86	0.03	16.2983	-12.5808	0.9403	2.1648	-0.0160	-0.2505	0.6161	-0.8667	-0.7719
149	55.99	0.04	16.3171	-12.6724	1.0635	1.9162	-0.0027	-0.2694	0.6063	-0.8708	-0.7767
150	56.10	0.06	16.3350	-12.7788	0.6858	2.1978	0.0034	-0.2526	0.6020	-0.8546	-0.7823
151	56.26	0.04	16.3713	-12.8364	0.9411	1.9127	-0.0023	-0.2781	0.6062	-0.8844	-0.7841
152	56.42	0.02	16.3789	-12.6690	0.7910	2.1042	0.0034	-0.2656	0.6037	-0.8694	-0.7869
153	56.56	0.06	16.3291	-12.7291	0.7298	1.9290	0.0045	-0.2330	0.5952	-0.8262	-0.7800
154	56.73	0.03	16.3445	-12.7639	0.8208	1.9631	0.0169	-0.2629	0.6063	-0.8693	-0.7809
155	56.88	0.00	16.4220	-12.7933	0.5929	2.2455	0.0102	-0.2628	0.5943	-0.8571	-0.7763
156	57.03	0.02	16.3535	-12.6598	0.6588	2.2348	0.0289	-0.2469	0.6036	-0.8846	-0.7760
157	57.20	0.03	16.4355	-12.8183	0.8175	1.9086	0.0175	-0.2612	0.5916	-0.8526	-0.7756
158	57.36	0.03	16.4540	-12.8349	0.8433	1.8133	0.0067	-0.2772	0.5967	-0.8740	-0.7738
159	57.49	0.02	16.5045	-12.8159	0.7260	1.9799	0.0116	-0.2704	0.6150	-0.8855	-0.7614
160	57.64	0.02	16.4853	-12.8247	0.7435	1.7946	-0.0069	-0.2630	0.6108	-0.8739	-0.7667
161	57.82	0.04	16.5538	-12.7083	0.6722	1.8414	0.0060	-0.2716	0.6235	-0.8952	-0.7677
162	57.98	0.01	16.5443	-12.8813	0.5591	1.6546	0.0065	-0.2715	0.6215	-0.8931	-0.7619
163	58.14	-0.02	16.6218	-12.8438	0.6627	1.8374	-0.0055	-0.2890	0.6185	-0.9079	-0.7607
164	58.28	0.00	16.5265	-12.9870	0.5461	1.5300	-0.0046	-0.2478	0.6157	-0.8830	-0.7569
165	58.44	0.01	16.6838	-12.7028	0.6459	1.4551	-0.0108	-0.2729	0.6173	-0.8903	-0.7615
166	58.60	-0.04	16.7219	-12.7928	0.1213	1.6648	-0.0044	-0.3012	0.6294	-0.9306	-0.7650
167	58.75	0.01	16.7496	-12.7367	0.6125	1.3275	-0.0037	-0.2631	0.6163	-0.8995	-0.7604
168	58.90	0.00	16.7487	-12.8883	0.5127	1.4695	-0.0041	-0.2963	0.6110	-0.9073	-0.7576
169	59.06	-0.02	16.7555	-12.8219	0.3600	1.3633	0.0095	-0.3142	0.6143	-0.9335	-0.7519
170	59.22	0.02	16.8318	-12.7971	0.6495	1.4524	0.0085	-0.3030	0.6218	-0.9248	-0.7603
171	59.37	-0.11	16.8475	-12.8192	-0.4174	0.5078	0.0023	-0.4071	0.5848	-0.9919	-0.7211
172	59.52	-0.11	16.8511	-12.8198	-0.5365	0.5185	-0.0163	-0.4270	0.5741	-1.0011	-0.7176
173	59.69	-0.11	16.7506	-11.8216	-0.6345	0.0241	-0.0162	-0.4709	0.5389	-1.0098	-0.7058
174	59.80	-0.15	17.0334	-12.8891	-0.9035	-0.1133	-0.0099	-0.3779	0.6082	-0.9861	-0.7469
175	59.96	-0.17	16.9542	-12.7363	-1.0287	-0.1526	-0.0103	-0.3497	0.6247	-0.9744	-0.7510
176	60.07	-0.19	16.8992	-12.8914	-1.0877	-0.1141	-0.0036	-0.3343	0.6461	-0.9804	-0.7628
177	60.24	-0.15	17.0263	-13.0367	-1.0389	-0.0903	0.0031	-0.3267	0.6597	-0.9864	-0.7657
178	60.32	-0.16	16.9961	-12.9010	-0.9557	-0.0798	0.0039	-0.3060	0.6656	-0.9714	-0.7591
179	60.32	-0.14	17.0225	-12.9215	-0.9521	-0.0951	0.0038	-0.3192	0.6607	-0.9799	-0.7591

MARTIN MISSILE TAILS EFFECTS DATA

TEST PAR: MACH REIC-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 91 0.96 1.7 0.0 n1-0F31 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-0.18	-0.01	-0.0035	0.0004	0.0002	-0.2246	-1.3714	-0.0206	-0.0285	-0.2569	0.0526	0.4753
2	-0.19	-0.02	-0.0016	0.0011	0.0057	-0.0675	-3.5625	-0.0377	-0.0284	-0.2560	0.0527	0.4761
3	-0.18	-0.02	-0.0025	0.0006	0.0049	-0.2857	-1.7500	-0.0376	-0.0282	-0.2566	0.0524	0.4774
4	-0.19	-0.02	0.0004	0.0013	0.0000	3.2500	15.0000	-0.0451	-0.0283	-0.2545	0.0518	0.4763
5	-0.15	-0.02	-0.0034	0.0007	0.0002	-0.2059	-1.2353	-0.0922	-0.0270	-0.2349	0.0548	0.4874
6	-0.16	-0.02	-0.0033	0.0016	0.0034	-0.3030	-1.0303	-0.0863	-0.0265	-0.1945	0.0633	0.5039
7	-0.32	-0.03	-0.0005	0.0025	0.0045	-2.2222	-5.0000	-0.2744	-0.0142	-0.1503	0.0688	0.5372
8	1.56	-0.03	-0.0020	0.0016	0.0032	-0.8000	-1.6000	-0.1935	-0.0157	-0.1077	0.0413	0.5567
9	3.03	-0.01	-0.0020	0.0012	0.0031	-0.6000	-1.5500	-0.1364	-0.0126	-0.0763	0.0926	0.5591
10	5.03	-0.03	0.0	0.0012	0.0036	0.0017	0.0036	-0.0601	-0.0076	-0.0348	0.1267	0.6450
11	8.85	-0.03	-0.0032	0.0023	0.0032	-0.0937	-1.0300	-0.0002	-0.0027	-0.0126	13.5000	63.0000
12	8.76	-0.04	-0.0026	0.0007	0.0037	-0.2542	-1.4231	0.0267	0.0063	0.0010	0.2203	0.0350
13	10.54	-0.04	-0.0012	0.0030	0.0035	-0.3333	-2.5167	0.0588	0.0134	0.0161	0.2283	0.2402
14	12.55	-0.04	0.0038	0.0011	0.0059	0.2495	1.8158	0.1093	0.0201	0.0365	0.1842	0.3336
15	14.47	-0.04	-0.0053	0.0042	0.0033	-0.0377	-0.6226	0.1710	0.0272	0.0456	0.1547	0.3860
16	16.41	-0.04	-0.0053	-0.0004	0.0043	0.0755	-0.8113	0.2373	0.0329	0.0441	0.1385	0.3965
17	18.41	-0.03	-0.0026	-0.0025	0.0115	0.3077	-0.4231	0.3049	0.0342	0.1261	0.1254	0.4141
18	20.40	-0.03	-0.0063	-0.0029	0.0156	0.3968	-2.4762	0.3769	0.0425	0.1594	0.1129	0.4235
19	22.39	-0.04	-0.0205	-0.0064	0.0192	0.3122	-0.6927	0.4676	0.0484	0.2065	0.0949	0.4287
20	24.36	-0.03	-0.0306	-0.0059	0.0248	0.1934	-0.1574	0.5747	0.0651	0.2426	0.0785	0.4225
21	26.35	-0.03	-0.0340	-0.0067	-0.0161	0.0637	0.1911	0.6800	0.0475	0.2646	0.0742	0.4135
22	28.35	-0.04	-0.0146	0.0023	-0.0039	-0.2260	0.2671	0.7852	0.0479	0.3206	0.0610	0.4082
23	30.01	-0.01	0.0233	0.0065	0.0060	0.1931	0.2575	0.8635	0.0505	0.3408	0.0599	0.4046
24	30.01	-0.01	0.0243	0.0059	0.0017	0.0702	0.4948	0.8563	0.0503	0.3454	0.0587	0.4034
25	30.24	-0.02	0.0227	0.0055	0.0151	0.1169	0.3044	0.8559	0.0513	0.3435	0.0599	0.4016
26	30.56	0.02	0.1079	0.0068	0.0462	0.0613	0.4280	0.8956	0.0523	0.3547	0.0591	0.4005
27	30.51	0.02	0.0836	0.0062	0.0321	0.0743	0.3837	0.8913	0.0531	0.3548	0.0596	0.3981
28	31.19	0.03	0.1147	0.0081	0.0550	0.0533	0.4795	0.9233	0.0519	0.3655	0.0562	0.3959
29	31.48	0.02	0.1358	0.0087	0.0652	0.0494	0.4804	0.9362	0.0517	0.3726	0.0551	0.3971
30	31.78	0.03	0.2003	0.0119	0.0991	0.0578	0.4803	0.9662	0.0517	0.3828	0.0535	0.3962
31	32.06	0.03	0.1866	0.0109	0.0879	0.0526	0.4683	0.9676	0.0522	0.3820	0.0546	0.3968
32	32.33	0.07	0.2091	0.0159	0.1247	0.0592	0.4633	0.9457	0.0514	0.3918	0.0516	0.3935
33	32.60	0.10	0.1385	0.0256	0.1501	0.0737	0.4935	1.0109	0.0496	0.3943	0.0498	0.3878
34	32.90	0.09	0.1360	0.0250	0.1484	0.0617	0.4667	1.0191	0.0498	0.3962	0.0489	0.3868
35	33.18	0.07	0.2051	0.0110	0.1292	0.0347	0.4524	1.0142	0.0514	0.3965	0.0507	0.3890
36	33.44	0.09	0.1943	0.0171	0.1464	0.0526	0.4521	1.0203	0.0515	0.3962	0.0505	0.3883
37	33.72	0.08	0.2013	0.0215	0.1546	0.0631	0.4513	1.0317	0.0510	0.4004	0.0494	0.3881
38	34.04	0.08	0.1905	0.0219	0.1545	0.0636	0.4541	1.0324	0.0513	0.4008	0.0497	0.3882
39	34.28	0.09	0.2215	0.0195	0.1492	0.0506	0.4652	1.0322	0.0519	0.4008	0.0503	0.3883
40	34.52	0.09	0.2129	0.0220	0.1645	0.0704	0.4661	1.0310	0.0535	0.4009	0.0519	0.3889
41	34.79	0.09	0.2251	0.0220	0.1598	0.0744	0.4615	1.0326	0.0537	0.3987	0.0520	0.3861
42	35.05	0.09	0.2445	0.0173	0.1394	0.0559	0.4733	1.0354	0.0537	0.4037	0.0519	0.3899
43	35.34	0.08	0.2187	0.0219	0.1696	0.0669	0.4695	1.0342	0.0546	0.4038	0.0520	0.3878
44	35.56	0.08	0.2186	0.0230	0.1690	0.0724	0.4709	1.0345	0.0548	0.4015	0.0530	0.3881
45	35.80	0.07	0.2435	0.0201	0.1493	0.0682	0.4761	1.0413	0.0547	0.4048	0.0525	0.3889
46	36.05	0.08	0.2449	0.0158	0.1260	0.0548	0.4756	1.0395	0.0555	0.4044	0.0536	0.3890

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH E310-6 RN1 CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 91 0.60 1.7 0.0 M1.6E31 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CPF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	35.32	-0.00	0.1617	0.0200	0.0779	0.0498	0.4838	1.0231	0.0576	0.3993	0.0563	0.3903
48	36.59	0.03	0.2103	0.0104	0.0495	0.0495	0.4961	1.0310	0.0586	0.4008	0.0549	0.3888
49	36.76	0.01	0.1136	0.0536	0.0534	0.0530	0.4700	1.0139	0.0583	0.3996	0.0575	0.3890
50	37.04	-0.01	0.0040	0.0055	0.0317	0.0798	0.4586	1.0157	0.0591	0.3957	0.0582	0.3898
51	37.29	-0.01	0.0329	0.0042	0.0141	0.1558	0.4578	1.0164	0.0603	0.3959	0.0594	0.3895
52	37.51	-0.02	0.0035	0.0056	0.0234	0.1294	0.5484	1.0150	0.0599	0.3951	0.0590	0.3893
53	37.77	-0.00	-0.2170	0.0096	-0.0066	-0.0392	0.5308	1.0059	0.0600	0.3923	0.0597	0.3900
54	38.02	-0.00	-0.0726	0.0060	-0.0406	-0.0451	0.5773	1.0056	0.0602	0.3920	0.0599	0.3898
55	38.24	-0.05	-0.1399	0.0051	-0.0775	-0.0395	0.5537	0.9910	0.0617	0.3843	0.0623	0.3878
56	38.48	-0.00	-0.1730	0.0078	-0.0577	-0.0739	0.5603	0.9933	0.0618	0.3854	0.0622	0.3880
57	38.72	-0.00	-0.1394	0.0091	-0.0731	-0.0652	0.5229	0.9868	0.0624	0.3810	0.0634	0.3869
58	38.94	-0.00	-0.1772	0.0078	-0.0923	-0.0441	0.5209	0.9794	0.0630	0.3779	0.0644	0.3858
59	39.19	-0.07	-0.1529	0.0097	-0.0721	-0.0636	0.5367	0.9847	0.0631	0.3801	0.0641	0.3860
60	39.44	-0.00	-0.1393	0.0111	-0.0701	-0.0749	0.5036	0.9923	0.0628	0.3828	0.0633	0.3857
61	39.66	-0.09	-0.1491	0.0138	-0.0573	-0.1267	0.5308	0.9861	0.0638	0.3785	0.0647	0.3838
62	39.90	-0.07	-0.1169	0.0151	-0.0843	-0.1294	0.5501	0.9883	0.0641	0.3793	0.0649	0.3838
63	40.10	-0.07	-0.1490	0.0118	-0.0632	-0.0770	0.5559	1.0014	0.0632	0.3834	0.0641	0.3828
64	40.44	-0.06	-0.1062	0.0140	-0.0569	-0.1338	0.5621	1.0006	0.0636	0.3821	0.0636	0.3818
65	40.68	-0.05	-0.1791	0.0100	-0.0629	-0.1050	0.5425	1.0128	0.0633	0.3879	0.0625	0.3830
66	40.90	-0.05	-0.1325	0.0110	-0.0693	-0.0877	0.5234	1.0052	0.0637	0.3837	0.0634	0.3817
67	41.16	-0.05	-0.1644	0.0124	-0.0877	-0.0739	0.5218	1.0068	0.0636	0.3832	0.0632	0.3806
68	41.33	-0.05	-0.1419	0.0142	-0.0834	-0.1549	0.4286	1.0011	0.0649	0.3796	0.0649	0.3791
69	41.57	-0.07	-0.1197	0.0139	-0.0825	-0.1139	0.4496	1.0066	0.0655	0.3830	0.0650	0.3797
70	41.78	-0.05	-0.1062	0.0144	-0.0875	-0.1565	0.4076	1.0031	0.0662	0.3802	0.0660	0.3790
71	41.96	-0.11	-0.1735	0.0107	-0.0811	-0.0630	0.4664	1.0002	0.0656	0.3784	0.0656	0.3783
72	42.19	-0.08	-0.1535	0.0107	-0.0642	-0.0698	0.4184	0.9975	0.0663	0.3765	0.0665	0.3774
73	42.37	-0.10	-0.2105	0.0092	-0.0959	-0.0437	0.4639	0.9961	0.0661	0.3758	0.0664	0.3772
74	42.60	-0.09	-0.2134	0.0048	-0.0966	-0.0395	0.4519	0.9983	0.0660	0.3757	0.0667	0.3763
75	42.79	-0.10	-0.2099	0.0105	-0.1120	-0.0224	0.4632	0.9918	0.0657	0.3724	0.0663	0.3754
76	43.00	-0.08	-0.1953	0.0082	-0.0864	-0.0421	0.4423	1.0037	0.0665	0.3775	0.0663	0.3761
77	43.22	-0.12	-0.2234	0.0081	-0.1482	-0.0198	0.4772	0.9953	0.0665	0.3747	0.0668	0.3764
78	43.41	-0.11	-0.2138	0.0016	-0.1435	-0.0046	0.4729	0.9969	0.0664	0.3740	0.0666	0.3751
79	43.61	-0.12	-0.2229	0.0081	-0.1399	-0.0093	0.4668	0.9984	0.0665	0.3741	0.0668	0.3746
80	43.81	-0.13	-0.2251	-0.0005	-0.1516	0.0015	0.4664	1.0006	0.0665	0.3755	0.0665	0.3742
81	44.02	-0.13	-0.2277	-0.0022	-0.1514	0.0080	0.4621	0.9975	0.0662	0.3736	0.0664	0.3745
82	44.22	-0.13	-0.2251	-0.0045	-0.1389	0.0151	0.4552	0.9970	0.0662	0.3734	0.0654	0.3745
83	44.39	-0.13	-0.2242	-0.0096	-0.1576	0.0187	0.4595	1.0067	0.0659	0.3773	0.0655	0.3748
84	44.58	-0.13	-0.2325	-0.0060	-0.1515	0.0259	0.4551	0.9964	0.0663	0.3717	0.0665	0.3728
85	44.77	-0.12	-0.2170	-0.0108	-0.1731	0.0282	0.4546	1.0060	0.0661	0.3752	0.0657	0.3729
86	44.94	-0.13	-0.2254	-0.0124	-0.1745	0.0330	0.4630	1.0037	0.0664	0.3732	0.0662	0.3714
87	45.12	-0.13	-0.2342	-0.0178	-0.1906	0.0404	0.4501	1.0073	0.0661	0.3739	0.0657	0.3712
88	45.30	-0.13	-0.2317	-0.0105	-0.1529	0.0317	0.4610	1.0110	0.0658	0.3751	0.0631	0.3710
89	45.50	-0.13	-0.2302	-0.0187	-0.1929	0.0452	0.4528	1.0220	0.0649	0.3743	0.0635	0.3711
90	45.68	-0.15	-0.2437	-0.0176	-0.1722	0.0465	0.4487	1.0170	0.0640	0.3779	0.0630	0.3716
91	45.84	-0.14	-0.2272	-0.0180	-0.1770	0.0474	0.4498	1.0267	0.0645	0.3809	0.0629	0.3719
92	46.04	-0.13	-0.2463	-0.0176	-0.1739	0.0457	0.4501	1.0274	0.0650	0.3801	0.0633	0.3699

PAGE 2 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIN=6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 51 0.90 1.7 0.0 BI=0P31 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
93	46.22	-0.15	-0.3993	-0.0132	-0.1797	0.0493	0.4578	1.0315	0.0657	0.3797	0.0637	0.3681
94	46.34	-0.15	-0.3770	-0.0157	-0.1736	0.0417	0.4599	1.0328	0.0662	0.3814	0.0641	0.3693
95	46.51	-0.15	-0.3930	-0.0217	-0.1812	0.0553	0.4610	1.0477	0.0659	0.3809	0.0629	0.3693
96	46.78	-0.14	-0.3810	-0.0173	-0.1847	0.0480	0.4563	1.0481	0.0667	0.3858	0.0618	0.3690
97	46.98	-0.14	-0.3310	-0.0137	-0.1563	0.0414	0.4716	1.0518	0.0651	0.3864	0.0619	0.3674
98	47.13	-0.15	-0.3460	-0.0197	-0.1636	0.0566	0.4688	1.0444	0.0651	0.3907	0.0612	0.3671
99	47.32	-0.13	-0.3310	-0.0164	-0.1582	0.0432	0.4765	1.0551	0.0662	0.3875	0.0628	0.3673
100	47.51	-0.14	-0.3097	-0.0113	-0.1507	0.0396	0.4866	1.0640	0.0657	0.3886	0.0618	0.3652
101	47.68	-0.14	-0.3275	-0.0161	-0.1565	0.0431	0.4718	1.0487	0.0664	0.3835	0.0633	0.3657
102	47.95	-0.11	-0.3335	-0.0150	-0.1558	0.0451	0.4672	1.0595	0.0647	0.3873	0.0611	0.3650
103	48.09	-0.16	-0.3279	-0.0137	-0.1556	0.0480	0.4740	1.0606	0.0662	0.3873	0.0625	0.3652
104	48.23	-0.15	-0.3451	-0.0207	-0.1591	0.0601	0.4611	1.0672	0.0653	0.3864	0.0615	0.3638
105	48.42	-0.12	-0.3670	-0.0193	-0.1641	0.0532	0.4606	1.0658	0.0625	0.3908	0.0587	0.3667
106	48.57	-0.15	-0.3467	-0.0235	-0.1720	0.0609	0.4667	1.0686	0.0636	0.3906	0.0595	0.3655
107	48.78	-0.15	-0.3735	-0.0202	-0.1656	0.0582	0.4435	1.0686	0.0618	0.3920	0.0579	0.3668
108	48.96	-0.15	-0.3414	-0.0229	-0.1651	0.0602	0.4337	1.0791	0.0619	0.3945	0.0574	0.3674
109	49.11	-0.16	-0.3575	-0.0225	-0.1531	0.0692	0.4283	1.1003	0.0604	0.4058	0.0569	0.3689
110	49.28	-0.12	-0.3470	-0.0220	-0.1689	0.0604	0.4291	1.0979	0.0582	0.4033	0.0530	0.3673
111	49.47	-0.13	-0.3534	-0.0252	-0.1597	0.0782	0.4187	1.0979	0.0593	0.4022	0.0546	0.3663
112	49.63	-0.12	-0.3605	-0.0197	-0.1303	0.0648	0.4278	1.1355	0.0539	0.4109	0.0475	0.3689
113	49.81	-0.15	-0.3600	-0.0356	-0.1618	0.1011	0.4696	1.1114	0.0600	0.4058	0.0545	0.3652
114	49.99	-0.13	-0.3335	-0.0355	-0.1363	0.1044	0.4047	1.1132	0.0583	0.4046	0.0524	0.3635
115	50.16	-0.12	-0.3507	-0.0273	-0.1485	0.0777	0.4234	1.1201	0.0571	0.4104	0.0514	0.3664
116	50.33	-0.13	-0.2952	-0.0333	-0.1218	0.1116	0.4086	1.1266	0.0565	0.4087	0.0502	0.3628
117	50.56	-0.17	-0.2969	-0.0330	-0.1213	0.1023	0.4087	1.1345	0.0563	0.4112	0.0498	0.3625
118	50.68	-0.08	-0.2727	-0.0314	-0.0934	0.1431	0.3744	1.1618	0.0495	0.4232	0.0426	0.3642
119	50.84	-0.09	-0.2744	-0.0275	-0.1057	0.1371	0.3919	1.1449	0.0545	0.4147	0.0476	0.3622
120	51.02	-0.07	-0.2100	-0.0322	-0.0815	0.1531	0.3884	1.1514	0.0478	0.4167	0.0415	0.3619
121	51.19	-0.06	-0.2135	-0.0342	-0.0913	0.1599	0.3756	1.1675	0.0499	0.4240	0.0427	0.3631
122	51.35	-0.00	-0.1524	-0.0252	-0.0666	0.1650	0.3978	1.1774	0.0446	0.4277	0.0379	0.3632
123	51.52	-0.02	-0.1729	-0.0259	-0.0859	0.1558	0.3816	1.1579	0.0420	0.4152	0.0363	0.3620
124	51.73	-0.03	-0.1577	-0.0229	-0.0829	0.1455	0.3990	1.1736	0.0402	0.4264	0.0342	0.3633
125	51.89	-0.02	-0.1611	-0.0219	-0.0767	0.1676	0.4123	1.1762	0.0390	0.4265	0.0331	0.3626
126	52.05	0.01	-0.1550	-0.0122	-0.0722	0.0736	0.4351	1.1308	0.0321	0.4056	0.0284	0.3587
127	52.22	0.02	-0.1618	-0.0143	-0.0752	0.0269	0.4458	1.1341	0.0350	0.4057	0.0308	0.3577
128	52.43	0.01	-0.1500	0.0063	-0.0703	-0.0421	0.4684	1.0937	0.0376	0.3956	0.0344	0.3527
129	52.56	0.02	-0.1063	0.0104	-0.0439	-0.0980	0.4694	1.1174	0.0406	0.3949	0.0363	0.3534
130	52.79	0.01	-0.1042	0.0065	-0.0465	-0.0450	0.4660	1.1559	0.0345	0.4130	0.0333	0.3573
131	52.95	0.03	-0.0639	0.0072	-0.0292	-0.1166	0.4708	1.1523	0.0367	0.4106	0.0316	0.3566
132	53.14	0.10	-0.0201	0.0078	-0.0099	-0.3661	0.4776	1.1705	0.0280	0.4179	0.0239	0.3570
133	53.29	0.02	-0.0399	-0.0046	-0.0143	0.1206	0.3593	1.2131	0.0191	0.4402	0.0158	0.3629
134	53.44	0.01	0.0761	-0.0056	0.0123	-0.2407	0.5104	1.1271	-0.0046	0.4172	-0.0041	0.3658
135	53.65	0.00	0.0038	-0.0038	0.0035	-1.0000	0.5722	1.0948	-0.0032	0.3956	-0.0029	0.3614
136	53.82	0.01	0.0139	-0.0035	0.0061	-0.2374	0.5827	1.0972	-0.0050	0.3943	-0.0046	0.3630
137	53.98	0.02	0.0026	-0.0026	0.0036	-1.9286	1.2857	1.0813	-0.0075	0.3913	-0.0070	0.3619
138	54.16	0.01	0.0066	-0.0037	0.0077	-0.5408	1.0909	1.0827	-0.0070	0.3920	-0.0065	0.3621

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH PX10-6 ONE CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 91 0.896 1.7 0.0 81.0F31 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	54.31	0.09	0.0127	-0.0012	0.0095	-0.0945	0.7480	1.1192	-0.0253	0.0055	-0.0047	0.3632
140	54.50	0.05	0.0010	-0.0015	0.0049	-1.0000	4.9000	1.0807	-0.0056	0.0093	-0.0052	0.3607
141	54.64	0.02	0.0045	0.0016	0.0050	0.9000	1.1111	1.1257	-0.0030	0.0073	-0.0027	0.3618
142	54.80	0.06	0.0046	0.0019	0.0066	0.1939	0.6939	1.1202	-0.0047	0.0052	-0.0042	0.3617
143	55.00	0.01	-0.0045	0.0021	0.0028	-2.2000	-5.0000	1.1065	-0.0057	0.0009	-0.0052	0.3623
144	55.17	0.04	0.0013	0.0021	0.0048	0.8462	3.6923	1.1026	-0.0065	0.0040	-0.0059	0.3619
145	55.30	0.04	-0.0035	-0.0009	0.0029	0.1111	-0.6667	1.1009	-0.0057	0.0093	-0.0052	0.3627
146	55.48	0.07	0.0040	0.0008	0.0055	0.1500	1.3750	1.1111	-0.0059	0.0039	-0.0053	0.3635
147	55.63	0.05	0.0006	0.0	0.0071	0.0	1.0758	1.1246	-0.0064	0.0065	-0.0057	0.3633
148	55.80	0.03	-0.0041	-0.0019	0.0026	0.3115	-0.4262	1.1084	-0.0069	0.0075	-0.0063	0.3619
149	55.96	0.04	-0.0106	0.0003	-0.0025	-0.0179	0.1598	1.0933	-0.0072	0.0078	-0.0066	0.3639
150	56.10	0.07	0.0031	0.0023	0.0052	0.6452	1.6774	1.1158	-0.0066	0.0066	-0.0059	0.3644
151	56.26	0.04	0.0056	0.0017	0.0072	0.3393	1.2857	1.1229	-0.0070	0.0098	-0.0062	0.3651
152	56.42	0.02	0.0049	0.0032	0.0052	0.6531	1.0617	1.1152	-0.0076	0.0078	-0.0066	0.3650
153	56.58	0.02	-0.0005	0.0	0.0028	0.0	-0.4348	1.1035	-0.0073	0.0028	-0.0066	0.3651
154	56.73	0.03	-0.0027	-0.0043	-0.0024	0.1846	0.1057	1.0824	-0.0086	0.3932	-0.0080	0.3633
155	56.88	0.04	-0.0108	-0.0020	0.0023	0.1852	-0.2130	1.0964	-0.0083	0.0009	-0.0080	0.3657
156	57.03	0.02	-0.0148	-0.0041	-0.0011	0.2191	0.0585	1.0768	-0.0103	0.3918	-0.0096	0.3639
157	57.20	0.03	-0.0120	-0.0024	0.0009	0.1395	-0.0714	1.1078	-0.0096	0.0049	-0.0087	0.3650
158	57.36	0.03	-0.0015	-0.0030	0.0056	3.1111	-3.6667	1.1146	-0.0111	0.0086	-0.0100	0.3664
159	57.49	0.02	0.2057	-0.0008	0.0099	-0.1404	1.7368	1.1020	-0.0096	0.0033	-0.0087	0.3660
160	57.64	0.02	-0.0070	0.0	0.0012	0.0	-0.1579	1.1040	-0.0097	0.0043	-0.0088	0.3663
161	57.82	0.01	-0.0034	-0.0010	0.0030	0.1200	-0.6000	1.1135	-0.0095	0.0075	-0.0085	0.3660
162	57.98	0.01	-0.0006	-0.0011	0.0068	1.6333	-11.3333	1.1242	-0.0108	0.0126	-0.0096	0.3671
163	58.19	-0.02	-0.0025	-0.0009	0.0053	0.3600	-2.1250	1.1249	-0.0115	0.0126	-0.0102	0.3668
164	58.26	0.00	0.0043	-0.0020	0.0064	-1.1304	2.9565	1.1211	-0.0113	0.0126	-0.0101	0.3681
165	58.44	0.01	-0.0057	-0.0020	0.0049	0.3509	-0.8596	1.1219	-0.0119	0.0117	-0.0103	0.3670
166	58.60	-0.04	0.0191	-0.0012	0.0116	-0.0795	0.7682	1.1233	-0.0122	0.0126	-0.0109	0.3674
167	58.79	0.01	0.2048	-0.0015	0.0091	-0.1875	1.1375	1.1338	-0.0127	0.0167	-0.0112	0.3675
168	58.96	0.00	-0.0010	-0.0027	0.0064	2.7000	-6.4000	1.1161	-0.0129	0.0104	-0.0116	0.3678
169	59.08	-0.02	-0.0040	-0.0032	0.0045	0.5806	-1.1250	1.1229	-0.0128	0.0124	-0.0112	0.3673
170	59.22	0.02	-0.0036	-0.0021	0.0051	0.5833	-1.4167	1.1223	-0.0131	0.0126	-0.0117	0.3677
171	59.37	-0.11	0.0004	0.0018	0.0049	4.5000	12.2500	1.1474	-0.0038	0.0191	-0.0031	0.3652
172	59.52	-0.11	-0.0039	0.0015	0.0018	-0.2712	-0.3051	1.1655	-0.0018	0.0260	-0.0015	0.3655
173	59.69	-0.11	-0.0131	0.00	-0.0073	0.00	0.2212	1.1586	-0.0145	0.0147	-0.0125	0.3580
174	59.90	-0.15	-0.0430	0.0006	-0.0104	-0.0140	0.2424	1.1599	-0.0052	0.0251	-0.0045	0.3665
175	59.94	-0.17	-0.0270	0.0053	-0.0046	-0.1970	0.1710	1.1737	-0.0066	0.0313	-0.0056	0.3675
176	60.07	-0.18	-0.0058	0.0013	0.0037	-0.1912	-0.5441	1.1453	-0.0140	0.0226	-0.0122	0.3689
177	60.24	-0.15	-0.0025	0.0023	0.0056	-0.9200	-2.2400	1.1490	-0.0136	0.0241	-0.0119	0.3691
178	60.32	-0.16	-0.0135	0.0007	0.0037	-0.0519	-0.2741	1.1298	-0.0142	0.0177	-0.0126	0.3697
179	60.32	-0.13	-0.0064	0.0029	0.0040	-0.3750	-2.7188	1.1438	-0.0135	0.0230	-0.0118	0.3698

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	E+10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	91	0.90	1.7	0.0	81.0F31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-4.18	-0.01	0.0047	9.9999	0.0086	9.9999	0.9085	-0.5649	-0.0336	-0.2488	0.0589	0.4366
2	-4.19	-0.02	0.0100	9.9999	0.0192	9.9999	0.9200	-0.5674	-0.0338	-0.2481	0.0595	0.4373
3	-4.19	-0.02	0.0143	9.9999	0.0179	9.9999	0.9570	-0.5684	-0.0335	-0.2475	0.0589	0.4355
4	-4.19	-0.02	0.0142	9.9999	0.0183	9.9999	0.7256	-0.5743	-0.0336	-0.2498	0.0588	0.4350
5	-4.19	-0.02	0.0100	9.9999	0.0086	9.9999	1.0233	-0.5166	-0.0325	-0.2290	0.0629	0.4433
6	-7.18	-0.02	0.0107	9.9999	0.0090	9.9999	0.8411	-0.4105	-0.0295	-0.1857	0.0718	0.4523
7	-0.32	-0.04	0.0121	9.9999	0.0099	9.9999	0.8182	-0.3123	-0.0242	-0.1440	0.0776	0.4618
8	1.56	-0.03	0.0100	9.9999	0.0087	9.9999	0.8700	-0.2237	-0.0194	-0.1040	0.0869	0.4651
9	3.23	-0.01	0.0107	9.9999	0.0095	9.9999	0.8879	-0.1507	-0.0152	-0.0727	0.0948	0.4526
10	5.03	-0.03	0.0107	9.9999	0.0100	9.9999	0.9007	-0.0914	-0.0097	-0.0362	0.1064	0.3739
11	6.85	-0.03	0.0092	9.9999	0.0110	9.9999	1.1957	-0.0330	-0.0042	-0.0075	0.1277	0.2280
12	8.78	-0.04	0.0109	9.9999	0.0114	9.9999	0.6746	-0.0030	0.0047	0.0062	-1.5667	-2.0667
13	10.53	-0.04	0.0130	9.9999	0.0110	9.9999	0.5789	0.0352	0.0132	0.0237	0.3761	0.6752
14	12.55	-0.04	0.0211	9.9999	0.0112	9.9999	0.5308	0.0880	0.0196	0.0496	0.2232	0.5524
15	14.47	-0.04	0.0123	9.9999	0.0053	9.9999	0.4309	0.1494	0.0269	0.0791	0.1797	0.5292
16	16.41	-0.04	0.0202	9.9999	0.0083	9.9999	0.3160	0.2239	0.0333	0.1135	0.1490	0.5085
17	18.41	-0.03	0.0297	9.9999	0.0060	9.9999	0.2703	0.2971	0.0397	0.1504	0.1336	0.5062
18	20.40	-0.03	0.0305	9.9999	0.0051	9.9999	0.1678	0.3955	0.0441	0.1987	0.1115	0.5024
19	22.34	-0.04	0.0360	9.9999	0.0062	9.9999	0.1829	0.5056	0.0477	0.2651	0.0943	0.4847
20	24.36	-0.03	0.0266	9.9999	0.0010	9.9999	0.0377	0.5870	0.0472	0.2757	0.0804	0.4696
21	26.35	-0.05	0.0397	9.9999	0.0019	9.9999	0.0621	0.6895	0.0481	0.3184	0.0698	0.4617
22	28.35	-0.02	0.0418	9.9999	0.0082	9.9999	0.1976	0.7325	0.0499	0.3325	0.0681	0.4537
23	30.01	-0.01	0.0402	9.9999	0.0092	9.9999	0.2294	0.7496	0.0512	0.3388	0.0683	0.4518
24	30.01	-0.01	0.0494	9.9999	0.0131	9.9999	0.2712	0.7363	0.0515	0.3353	0.0700	0.4554
25	30.24	-0.00	0.0457	9.9999	0.0118	9.9999	0.2568	0.7481	0.0518	0.3413	0.0692	0.4562
26	30.56	0.02	0.0493	9.9999	0.0152	9.9999	0.3154	0.7461	0.0522	0.3407	0.0700	0.4566
27	30.91	0.02	0.0491	9.9999	0.0148	9.9999	0.3020	0.7595	0.0529	0.3466	0.0698	0.4576
28	31.19	0.03	0.0457	9.9999	0.0126	9.9999	0.2763	0.7715	0.0538	0.3521	0.0697	0.4564
29	31.48	0.02	0.0456	9.9999	0.0137	9.9999	0.2938	0.7747	0.0542	0.3538	0.0700	0.4567
30	31.78	0.05	0.0554	9.9999	0.0175	9.9999	0.3165	0.7716	0.0543	0.3535	0.0704	0.4582
31	32.06	0.05	0.0539	9.9999	0.0162	9.9999	0.3039	0.7851	0.0547	0.3582	0.0697	0.4563
32	32.43	0.07	0.0582	9.9999	0.0185	9.9999	0.3184	0.7764	0.0545	0.3544	0.0704	0.4577
33	32.69	0.10	0.0557	9.9999	0.0224	9.9999	0.3415	0.7514	0.0548	0.3450	0.0729	0.4591
34	32.96	0.09	0.0694	9.9999	0.0227	9.9999	0.3424	0.7633	0.0555	0.3496	0.0727	0.4581
35	33.16	0.07	0.0672	9.9999	0.0231	9.9999	0.3443	0.7822	0.0559	0.3592	0.0715	0.4580
36	33.44	0.09	0.0727	9.9999	0.0258	9.9999	0.3540	0.7978	0.0561	0.3649	0.0703	0.4574
37	33.72	0.08	0.0695	9.9999	0.0230	9.9999	0.3469	0.8061	0.0557	0.3690	0.0691	0.4577
38	33.99	0.08	0.0685	9.9999	0.0237	9.9999	0.3465	0.8216	0.0559	0.3757	0.0681	0.4573
39	34.28	0.09	0.0692	9.9999	0.0240	9.9999	0.3226	0.8453	0.0560	0.3859	0.0666	0.4565
40	34.52	0.09	0.0685	9.9999	0.0237	9.9999	0.3465	0.8612	0.0586	0.3916	0.0681	0.4547
41	34.79	0.09	0.0642	9.9999	0.0243	9.9999	0.3517	0.8699	0.0593	0.3942	0.0682	0.4532
42	35.15	0.09	0.0638	9.9999	0.0206	9.9999	0.3234	0.8723	0.0599	0.3946	0.0687	0.4524
43	35.34	0.08	0.0616	9.9999	0.0205	9.9999	0.3323	0.8643	0.0595	0.3954	0.0673	0.4505
44	35.56	0.08	0.0665	9.9999	0.0221	9.9999	0.3432	0.8066	0.0593	0.4060	0.0654	0.4479
45	35.80	0.07	0.0582	9.9999	0.0184	9.9999	0.3280	0.8192	0.0601	0.4092	0.0659	0.4453
46	36.05	0.04	0.0507	9.9999	0.0169	9.9999	0.3340	0.8247	0.0607	0.4107	0.0657	0.4442

PAGE 3 OF 3
SHEET 2 OF 6

PANTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	91	0.90	1.7	0.0	BLOCK31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
47	36.32	-0.00	0.0631	9.9999	0.0133	9.9999	0.3033	0.9471	0.0502	0.0198	0.0636	0.4432
48	36.58	0.03	0.0417	9.9999	0.0132	9.9999	0.3173	0.9390	0.0504	0.0155	0.0643	0.4424
49	36.76	0.01	0.0399	9.9999	0.0131	9.9999	0.3038	0.9698	0.0595	0.0279	0.0614	0.4412
50	37.04	-0.01	0.0384	9.9999	0.0107	9.9999	0.3084	0.9743	0.0596	0.0297	0.0612	0.4410
51	37.29	-0.01	0.0321	9.9999	0.0099	9.9999	0.3094	0.9796	0.0599	0.0310	0.0612	0.4400
52	37.51	-0.02	0.0320	9.9999	0.0102	9.9999	0.3197	0.9860	0.0590	0.0332	0.0599	0.4393
53	37.77	-0.00	0.0135	9.9999	0.0068	9.9999	0.2359	0.9999	0.0580	0.0351	0.0581	0.4353
54	38.02	-0.04	0.0265	9.9999	0.0076	9.9999	0.2879	0.9999	0.0576	0.0376	0.0576	0.4376
55	38.29	-0.05	0.0259	9.9999	0.0072	9.9999	0.2852	1.0080	0.0573	0.0369	0.0569	0.4334
56	38.48	-0.06	0.0243	9.9999	0.0062	9.9999	0.3376	0.9976	0.0574	0.0315	0.0576	0.4325
57	38.72	-0.05	0.0272	9.9999	0.0069	9.9999	0.3321	1.0137	0.0563	0.0361	0.0556	0.4302
58	38.94	-0.05	0.0320	9.9999	0.0119	9.9999	0.3730	1.0138	0.0554	0.0343	0.0547	0.4284
59	39.19	-0.07	0.0156	9.9999	0.0039	9.9999	0.2163	1.0087	0.0550	0.0318	0.0545	0.4281
60	39.44	-0.06	0.0230	9.9999	0.0065	9.9999	0.2826	1.0133	0.0551	0.0345	0.0544	0.4288
61	39.66	-0.05	0.0240	9.9999	0.0077	9.9999	0.2760	1.0169	0.0530	0.0347	0.0521	0.4275
62	39.90	-0.07	0.0223	9.9999	0.0067	9.9999	0.3004	1.0097	0.0524	0.0322	0.0519	0.4280
63	40.16	-0.06	0.0192	9.9999	0.0062	9.9999	0.2308	1.0184	0.0539	0.0362	0.0529	0.4283
64	40.44	-0.06	0.0237	9.9999	0.0057	9.9999	0.2405	1.0141	0.0527	0.0341	0.0520	0.4281
65	40.68	-0.06	0.0234	9.9999	0.0065	9.9999	0.2826	1.0154	0.0529	0.0351	0.0521	0.4285
66	40.90	-0.05	0.0127	9.9999	0.0005	9.9999	0.0344	1.0120	0.0516	0.0330	0.0510	0.4279
67	41.12	-0.05	0.0247	9.9999	0.0063	9.9999	0.2656	1.0380	0.0524	0.0436	0.0505	0.4274
68	41.33	-0.05	0.0234	9.9999	0.0054	9.9999	0.2807	1.0174	0.0455	0.0358	0.0447	0.4281
69	41.57	-0.07	0.0189	9.9999	0.0030	9.9999	0.1769	1.0113	0.0420	0.0296	0.0415	0.4246
70	41.76	-0.05	0.0210	9.9999	0.0044	9.9999	0.2095	0.5913	0.0383	0.0198	0.0386	0.4234
71	41.98	-0.11	0.0161	9.9999	0.0	9.9999	0.0	1.0250	0.0417	0.0358	0.0407	0.4252
72	42.19	-0.08	0.0142	9.9999	0.0025	9.9999	0.1374	1.0120	0.0387	0.0267	0.0382	0.4236
73	42.37	-0.10	0.0134	9.9999	-0.0003	9.9999	-0.0224	1.0281	0.0399	0.0360	0.0388	0.4241
74	42.60	-0.09	0.0153	9.9999	0.0014	9.9999	0.0765	1.0313	0.0398	0.0365	0.0386	0.4232
75	42.79	-0.10	0.0156	9.9999	-0.0015	9.9999	-0.0962	1.0370	0.0420	0.0347	0.0405	0.4240
76	43.00	-0.08	0.0156	9.9999	-0.0007	9.9999	-0.0449	1.0194	0.0353	0.0307	0.0346	0.4225
77	43.22	-0.12	0.0107	9.9999	-0.0018	9.9999	-0.2806	1.0479	0.0421	0.0413	0.0402	0.4211
78	43.41	-0.10	0.0129	9.9999	-0.0020	9.9999	-0.1563	1.0512	0.0413	0.0415	0.0393	0.4200
79	43.61	-0.12	0.0104	9.9999	-0.0041	9.9999	-0.3796	1.0465	0.0388	0.0361	0.0371	0.4186
80	43.81	-0.13	0.0117	9.9999	-0.0057	9.9999	-0.9412	1.0598	0.0405	0.0428	0.0382	0.4178
81	44.02	-0.13	0.0095	9.9999	-0.0062	9.9999	-1.3778	1.0553	0.0392	0.0390	0.0371	0.4164
82	44.22	-0.13	0.0101	9.9999	-0.0044	9.9999	-0.4356	1.0520	0.0330	0.0372	0.0313	0.4156
83	44.39	-0.13	0.0109	9.9999	-0.0085	9.9999	-21.2500	1.0559	0.0370	0.0367	0.0350	0.4155
84	44.58	-0.13	0.0099	9.9999	-0.0084	9.9999	-1.0967	1.0510	0.0340	0.0351	0.0323	0.4140
85	44.77	-0.15	0.0119	9.9999	-0.0109	9.9999	-21.8050	1.0510	0.0365	0.0363	0.0344	0.4129
86	44.96	-0.15	0.0124	9.9999	-0.0076	9.9999	-0.7031	1.0562	0.0374	0.0393	0.0354	0.4131
87	45.12	-0.15	0.0090	9.9999	-0.0067	9.9999	-1.1167	1.0554	0.0403	0.0357	0.0362	0.4128
88	45.30	-0.15	0.0088	9.9999	-0.0079	9.9999	-1.7174	1.0532	0.0307	0.0345	0.0291	0.4126
89	45.50	-0.13	0.0099	9.9999	-0.0084	9.9999	-1.0847	1.0497	0.0412	0.0328	0.0392	0.4123
90	45.64	-0.15	0.0097	9.9999	-0.0043	9.9999	-0.4943	1.0525	0.0322	0.0343	0.0306	0.4126
91	45.83	-0.14	0.0093	9.9999	-0.0065	9.9999	-1.4444	1.0511	0.0336	0.0333	0.0319	0.4124
92	46.04	-0.13	0.0073	9.9999	-0.0052	9.9999	-0.7123	1.0692	0.0281	0.0398	0.0262	0.4113

PAGE 3 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/10**6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	91	0.60	1.7	0.0	81	0.31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	ACPF3	YCPF3	CNF4	CM4	CA4	ACPF4	YCPF4
93	46.22	-0.16	-0.0009	0.9999	-0.0057	0.9959	10.7778	1.0627	0.0373	0.4364	0.0351	0.4107
94	46.34	-0.16	0.0116	0.9999	-0.0027	0.9999	-0.2364	1.0595	0.0285	0.4361	0.0276	0.4116
95	46.49	-0.15	0.0052	0.9999	-0.0021	0.9999	-1.1731	1.0504	0.0399	0.4305	0.0327	0.4098
96	46.70	-0.16	0.0019	0.9999	-0.0044	0.9999	-0.9674	1.0592	0.0319	0.4350	0.0301	0.4107
97	46.96	-0.16	0.0142	0.9999	-0.0030	0.9999	-0.2113	1.0626	0.0366	0.4347	0.0344	0.4090
98	47.13	-0.16	0.0134	0.9999	-0.0027	0.9999	-0.1042	1.0691	0.0455	0.4286	0.0434	0.4085
99	47.32	-0.13	0.0135	0.9999	-0.0035	0.9999	-0.2067	1.0609	0.0363	0.4338	0.0342	0.4069
100	47.51	-0.16	0.0080	0.9999	-0.0059	0.9999	-0.7375	1.0679	0.0469	0.4347	0.0439	0.4071
101	47.68	-0.14	0.0158	0.9999	-0.0021	0.9999	-0.1419	1.0629	0.0368	0.4340	0.0346	0.4085
102	47.85	-0.11	0.0155	0.9999	-0.0029	0.9999	-0.1871	1.0679	0.0310	0.4340	0.0290	0.4111
103	48.06	-0.16	0.0113	0.9999	-0.0026	0.9999	-0.2391	1.0644	0.0422	0.4347	0.0396	0.4084
104	48.23	-0.15	0.0072	0.9999	-0.0051	0.9999	-0.7083	1.0660	0.0377	0.4273	0.0360	0.4085
105	48.42	-0.12	0.0077	0.9999	-0.0063	0.9999	-0.5993	1.0685	0.0149	0.4402	0.0178	0.4128
106	48.57	-0.15	0.0046	0.9999	-0.0062	0.9999	-0.6884	1.0525	0.0251	0.4342	0.0238	0.4125
107	48.76	-0.15	0.0039	0.9999	-0.0073	0.9999	-1.9211	1.0535	0.0175	0.4360	0.0167	0.4139
108	48.94	-0.15	0.0085	0.9999	-0.0069	0.9999	-0.7538	1.0359	0.0126	0.4297	0.0122	0.4148
109	49.11	-0.16	0.0127	0.9999	-0.0017	0.9999	-0.1339	1.0328	0.0116	0.4285	0.0113	0.4169
110	49.28	-0.17	0.0113	0.9999	-0.0018	0.9999	-0.1416	1.0311	0.0071	0.4286	0.0069	0.4158
111	49.47	-0.15	0.0252	0.9999	0.0065	0.9999	0.0245	1.0256	0.0129	0.4245	0.0126	0.4139
112	49.63	-0.16	0.0195	0.9999	0.0010	0.9999	0.0513	1.0263	0.0051	0.4246	0.0050	0.4165
113	49.81	-0.15	0.0049	0.9999	-0.0058	0.9999	-0.6170	1.0284	0.0257	0.4215	0.0244	0.4098
114	49.99	-0.13	0.0141	0.9999	0.0001	0.9999	0.0055	1.0306	0.0233	0.4227	0.0227	0.4101
115	50.16	-0.12	0.0128	0.9999	-0.0004	0.9999	-0.0476	1.0362	0.0157	0.4286	0.0152	0.4128
116	50.33	-0.10	0.0146	0.9999	-0.0006	0.9999	-0.0306	1.0143	0.0267	0.4167	0.0253	0.4104
117	50.50	-0.07	0.0209	0.9999	0.0051	0.9999	0.1939	1.0292	0.0229	0.4227	0.0223	0.4107
118	50.66	-0.08	0.0257	0.9999	0.0134	0.9999	0.1328	0.9770	0.0076	0.4073	0.0078	0.4169
119	50.83	-0.08	0.0242	0.9999	0.0060	0.9999	0.1171	1.0134	0.0232	0.4169	0.0229	0.4114
120	51.02	-0.07	0.0244	0.9999	0.0053	0.9999	0.2015	0.9917	0.0130	0.4117	0.0131	0.4152
121	51.19	-0.08	0.0218	0.9999	0.0044	0.9999	0.2056	0.9862	0.0097	0.4095	0.0099	0.4153
122	51.35	-0.08	0.0167	0.9999	0.0008	0.9999	0.0479	0.9690	0.0051	0.4038	0.0053	0.4168
123	51.52	-0.06	0.0359	0.9999	0.0116	0.9999	0.3296	0.9830	0.0059	0.4094	0.0060	0.4165
124	51.73	-0.05	0.0318	0.9999	0.0112	0.9999	0.3556	0.9496	0.0009	0.4112	0.0009	0.4172
125	51.89	-0.06	0.0214	0.9999	0.0067	0.9999	0.2196	1.0097	0.0009	0.4208	0.0009	0.4167
126	52.06	0.01	0.0337	0.9999	0.0116	0.9999	0.3652	1.0366	0.0048	0.4303	0.0046	0.4151
127	52.26	0.00	0.0343	0.9999	0.0090	0.9999	0.3113	1.0625	-0.0025	0.4413	-0.0029	0.4154
128	52.43	0.01	0.0316	0.9999	0.0106	0.9999	0.3395	1.0395	-0.0017	0.4504	-0.0016	0.4134
129	52.60	0.00	0.0352	0.9999	0.0107	0.9999	0.3401	1.0477	-0.0040	0.4521	-0.0037	0.4157
130	52.79	0.01	0.0437	0.9999	0.0191	0.9999	0.4381	1.0557	-0.0053	0.4605	-0.0050	0.4173
131	52.95	0.00	0.0454	0.9999	0.0192	0.9999	0.4274	1.0458	-0.0057	0.4573	-0.0055	0.4181
132	53.14	0.00	0.0518	0.9999	0.0233	0.9999	0.4507	0.9997	-0.0046	0.4185	-0.0046	0.4186
133	53.29	0.02	0.0409	0.9999	0.0153	0.9999	0.4104	0.9583	-0.0027	0.4011	-0.0026	0.4186
134	53.49	0.01	0.0442	0.9999	0.0197	0.9999	0.4467	0.9282	-0.0017	0.3902	-0.0013	0.4204
135	53.65	0.00	0.0455	0.9999	0.0201	0.9999	0.4418	0.9329	-0.0012	0.3910	-0.0013	0.4193
136	53.84	0.01	0.0430	0.9999	0.0185	0.9999	0.4253	0.9250	-0.0013	0.3878	-0.0014	0.4192
137	53.99	0.02	0.0427	0.9999	0.0134	0.9999	0.4110	0.9309	-0.0020	0.3903	-0.0022	0.4193
138	54.16	0.01	0.0438	0.9999	0.0185	0.9999	0.4253	0.9366	-0.0015	0.3926	-0.0016	0.4192

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNLG-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 91 0.60 1.7 0.0 01=0131 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CA4	YCPF4	YCPF4
139	54.31	[illegible]	0.0422	9.9999	0.0176	9.9999	0.4181	0.9582	-0.0026	0.4012	-0.0025	0.4187
140	54.50	0.05	0.0409	9.9999	0.0207	9.9999	0.4423	0.9490	-0.0025	0.3977	-0.0026	0.4191
141	54.84	0.20	0.0428	9.9999	0.0193	9.9999	0.4520	0.9733	-0.0037	0.4068	-0.0038	0.4180
142	54.40	0.06	0.0421	9.9999	0.0169	9.9999	0.4500	0.9700	-0.0043	0.4055	-0.0044	0.4181
143	55.00	0.03	0.0421	9.9999	0.0195	9.9999	0.4643	0.9767	-0.0037	0.4068	-0.0038	0.4174
144	55.17	0.04	0.0446	9.9999	0.0202	9.9999	0.4519	0.9749	-0.0036	0.4065	-0.0037	0.4172
145	55.30	0.05	0.0475	9.9999	0.0215	9.9999	0.4536	0.9792	-0.0037	0.4069	-0.0038	0.4176
146	55.48	0.07	0.0447	9.9999	0.0210	9.9999	0.4709	0.9738	-0.0046	0.4067	-0.0047	0.4177
147	55.93	0.05	0.0353	9.9999	0.0157	9.9999	0.4666	0.9805	-0.0051	0.4087	-0.0052	0.4169
148	55.90	0.03	0.0420	9.9999	0.0189	9.9999	0.4511	0.9846	-0.0046	0.4106	-0.0047	0.4171
149	55.99	0.09	0.0504	9.9999	0.0246	9.9999	0.4872	1.0243	-0.0044	0.4270	-0.0043	0.4168
150	56.10	0.02	0.0446	9.9999	0.0212	9.9999	0.4764	1.0167	-0.0047	0.4232	-0.0046	0.4162
151	56.20	0.08	0.0498	9.9999	0.0215	9.9999	0.4831	1.0267	-0.0055	0.4260	-0.0054	0.4169
152	56.42	0.06	0.0413	9.9999	0.0159	9.9999	0.4389	1.0220	-0.0054	0.4248	-0.0053	0.4156
153	56.58	0.06	0.0413	9.9999	0.0177	9.9999	0.4296	1.0292	-0.0046	0.4257	-0.0045	0.4136
154	56.73	0.03	0.0344	9.9999	0.0164	9.9999	0.4221	1.0367	-0.0036	0.4277	-0.0035	0.4125
155	56.88	0.04	0.0435	9.9999	0.0196	9.9999	0.4521	1.0366	-0.0049	0.4276	-0.0047	0.4125
156	57.03	0.02	0.0372	9.9999	0.0152	9.9999	0.4097	1.0347	-0.0050	0.4274	-0.0048	0.4138
157	57.20	0.04	0.0344	9.9999	0.0166	9.9999	0.4171	1.0531	-0.0049	0.4347	-0.0047	0.4128
158	57.36	0.03	0.0396	9.9999	0.0211	9.9999	0.4538	1.0575	-0.0032	0.4353	-0.0030	0.4116
159	57.49	0.02	0.0379	9.9999	0.0158	9.9999	0.4180	1.0154	-0.0063	0.4196	-0.0062	0.4130
160	57.64	0.02	0.0359	9.9999	0.0135	9.9999	0.3771	1.0227	-0.0064	0.4223	-0.0063	0.4129
161	57.82	0.01	0.0414	9.9999	0.0167	9.9999	0.3995	1.0339	-0.0069	0.4258	-0.0067	0.4118
162	57.98	0.01	0.0386	9.9999	0.0134	9.9999	0.3808	1.0300	-0.0068	0.4244	-0.0066	0.4120
163	58.19	-0.02	0.0419	9.9999	0.0177	9.9999	0.4236	1.0362	-0.0071	0.4266	-0.0069	0.4117
164	58.28	0.00	0.0399	9.9999	0.0157	9.9999	0.3965	1.0359	-0.0068	0.4264	-0.0066	0.4116
165	58.49	0.01	0.0352	9.9999	0.0132	9.9999	0.3761	1.0316	-0.0071	0.4243	-0.0069	0.4113
166	58.60	-0.04	0.0432	9.9999	0.0178	9.9999	0.4130	1.0310	-0.0076	0.4226	-0.0074	0.4099
167	58.75	0.01	0.0373	9.9999	0.0128	9.9999	0.3387	1.0361	-0.0081	0.4246	-0.0078	0.4098
168	58.90	0.00	0.0419	9.9999	0.0167	9.9999	0.3995	1.0412	-0.0078	0.4264	-0.0075	0.4095
169	59.08	-0.02	0.0373	9.9999	0.0137	9.9999	0.3643	1.0401	-0.0075	0.4300	-0.0072	0.4096
170	59.22	0.02	0.0343	9.9999	0.0169	9.9999	0.3401	1.0546	-0.0069	0.4301	-0.0065	0.4078
171	59.37	-0.11	0.0211	9.9999	0.0049	9.9999	0.2258	1.0620	-0.0051	0.4307	-0.0048	0.4055
172	59.52	-0.11	0.0334	9.9999	0.0096	9.9999	0.2843	1.0770	-0.0040	0.4346	-0.0037	0.4035
173	59.69	-0.11	0.0360	9.9999	0.0134	9.9999	0.3536	1.1044	-0.0068	0.4383	-0.0062	0.3969
174	59.80	-0.15	0.0253	9.9999	0.0052	9.9999	0.2063	1.1090	-0.0068	0.4461	-0.0061	0.4021
175	59.94	-0.17	0.0212	9.9999	0.0033	9.9999	0.1557	1.0926	-0.0104	0.4347	-0.0095	0.4024
176	60.07	-0.18	0.0244	9.9999	0.0069	9.9999	0.2355	1.0751	-0.0114	0.4324	-0.0106	0.4022
177	60.24	-0.15	0.0239	9.9999	0.0149	9.9999	0.1925	1.0710	-0.0111	0.4305	-0.0104	0.4019
178	60.32	-0.12	0.0267	9.9999	0.0161	9.9999	0.1667	1.0777	-0.0109	0.4325	-0.0101	0.4013
179	60.36	-0.14	0.0308	9.9999	0.0170	9.9999	0.2280	1.0791	-0.0108	0.4326	-0.0100	0.4009

PAGE 1 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIC=6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 92 1.60 1.7 0.0 61=0F31 0.0 6 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-6.19	-0.01	-2.3000	7.0779	0.0321	-0.0566	-0.0061	0.5855	0.1329	0.4526	-3.6766
2	-4.19	-0.04	-2.2775	7.1044	-0.0793	-0.0744	-0.0062	0.5841	0.1352	0.4439	-3.0917
3	-2.19	-0.03	-2.3219	7.1371	0.0036	-0.0919	-0.0001	0.5859	0.1359	0.4500	-3.0736
4	-0.24	-0.02	-2.1616	6.7403	0.0060	-0.1099	0.0	0.5748	0.1294	0.4504	-3.0904
5	1.76	-0.02	-1.8577	6.4020	0.0094	-0.1425	0.0006	0.5247	0.1094	0.4148	-3.2359
6	3.76	-0.03	-1.2270	6.1716	0.0187	-0.0956	-0.0049	0.4610	0.0880	0.3730	-3.3768
7	1.20	-0.02	-0.8201	3.1355	0.0013	-0.0986	-0.0102	0.4045	0.0701	0.3394	-3.8232
8	3.13	-0.03	-0.6142	2.8354	0.0087	-0.0561	-0.0097	0.3722	0.0654	0.3066	-5.2609
9	5.19	-0.02	-0.4732	1.4982	0.0360	-0.0690	-0.0031	0.3365	0.0612	0.2752	-19.7743
10	6.97	-0.02	0.2192	0.6779	0.0777	-0.1235	-0.0082	0.3159	0.0646	0.2512	4.0020
11	8.93	-0.03	0.4633	0.8878	0.0173	-0.0771	-0.0134	0.3189	0.0946	0.2262	1.0091
12	10.82	-0.03	0.7956	0.8805	0.0046	-0.0756	-0.0125	0.2927	0.0973	0.1954	0.0760
13	12.76	-0.03	1.1486	-0.0252	-0.0406	0.0076	-0.0056	0.2556	0.0985	0.1566	-0.6579
14	14.72	-0.03	1.5540	-1.2412	-0.0756	0.0505	0.0010	0.2333	0.1092	0.1242	-0.7987
15	16.69	-0.03	2.0100	-2.1112	-0.0270	0.0161	0.0000	0.1956	0.1160	0.0796	-1.0068
16	18.75	-0.03	2.5020	-3.0443	-0.0459	0.1256	0.0146	0.1535	0.1294	0.0241	-1.2055
17	20.77	-0.04	3.0201	-3.9906	-0.1364	0.2941	0.0211	0.1100	0.1426	-0.0326	-1.3619
18	22.91	-0.02	3.6967	-5.1309	-0.0517	0.2253	-0.0188	0.0817	0.1593	-0.0775	-1.3887
19	24.89	-0.03	4.4080	-6.3757	-0.1048	0.4056	-0.0484	0.0262	0.1647	-0.1405	-1.3618
20	26.86	-0.01	5.2762	-6.7756	0.1479	-0.4420	-0.0008	-0.0285	0.1477	-0.1962	-1.2836
21	24.86	0.00	6.1853	-7.0227	0.4322	-2.4435	0.0860	-0.0628	0.1684	-0.2512	-1.2039
22	30.15	0.00	6.5559	-7.7115	1.1354	-2.7905	0.1076	-0.0811	0.2016	-0.2829	-1.1756
23	30.15	0.00	6.5934	-7.7084	1.1354	-2.7966	0.1136	-0.0829	0.2006	-0.2835	-1.1862
24	30.39	0.00	6.6382	-7.8232	1.1100	-2.7970	0.1141	-0.0857	0.2022	-0.2879	-1.1487
25	30.71	1.07	6.2982	-7.1678	1.1013	-2.8662	0.1207	-0.1091	0.1995	-0.3086	-1.1416
26	31.68	0.00	6.9349	-7.8477	1.2078	-3.0796	0.1214	-0.1015	0.2006	-0.3021	-1.1388
27	31.34	0.01	6.9779	-7.9624	1.2318	-2.9925	0.1275	-0.1164	0.1955	-0.3119	-1.1411
28	31.63	0.00	7.0496	-7.9357	1.0464	-2.4602	0.1212	-0.1414	0.1890	-0.3304	-1.1239
29	31.48	0.05	7.2867	-8.0480	0.5345	-1.9691	0.0975	-0.1438	0.1831	-0.3269	-1.1082
30	32.22	0.03	7.3654	-8.1446	0.4865	-1.9825	0.0930	-0.1498	0.1922	-0.3420	-1.1057
31	32.50	0.05	7.5436	-8.1798	0.5548	-2.2963	0.1033	-0.1491	0.1934	-0.3429	-1.0706
32	32.75	0.06	7.5507	-8.1700	1.0377	-2.4449	0.1173	-0.1668	0.1911	-0.3579	-1.0820
33	33.05	0.06	7.7654	-8.3246	1.1252	-2.6607	0.1261	-0.1756	0.1911	-0.3669	-1.0715
34	33.41	0.06	7.7962	-8.1146	0.9924	-2.1969	0.1002	-0.1807	0.1916	-0.3723	-1.0471
35	33.56	0.05	7.8138	-8.1651	0.8624	-2.0526	0.1179	-0.1799	0.1840	-0.3639	-1.0458
36	33.86	0.07	7.9491	-8.3127	1.2752	-2.5246	0.1434	-0.1716	0.1966	-0.3682	-1.0655
37	34.19	0.04	8.1525	-8.3549	0.5716	-1.3207	0.0408	-0.1975	0.1869	-0.3624	-1.0217
38	34.41	0.03	8.2867	-8.4060	0.5268	-1.0200	0.0287	-0.2055	0.1908	-0.3963	-1.0294
39	34.66	0.02	8.3745	-8.4272	1.2419	-2.9519	0.0052	-0.2133	0.1850	-0.3983	-1.0063
40	34.93	-0.01	8.4588	-8.4180	0.0762	0.0332	-0.0071	-0.2237	0.1838	-0.4075	-0.9949
41	35.18	-0.02	8.5251	-8.5204	-0.1245	0.0848	-0.0455	-0.2258	0.1781	-0.4019	-0.9955
42	35.43	0.00	8.6940	-8.5363	0.1746	-0.1707	0.0351	-0.2211	0.1808	-0.4019	-0.9822
43	35.68	-0.01	8.7251	-8.5328	-0.0313	0.1552	0.0344	-0.2212	0.1808	-0.4020	-0.9779
44	35.94	-0.01	8.9312	-8.7193	0.0269	0.2727	0.0265	-0.2198	0.1897	-0.4095	-0.9763
45	36.19	-0.02	9.1319	-8.7851	0.3893	-0.4011	0.0608	-0.2267	0.1965	-0.4232	-0.9628
46	36.46	-0.02	9.3117	-8.9530	-0.1112	0.5700	0.0348	-0.2593	0.1872	-0.4465	-0.9615

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	42	1.60	1.7	0.0	81.0F31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
47	36.76	-0.02	9.2491	-8.4706	-0.1510	0.7774	0.0161	-0.2381	0.1916	-0.4297	-0.9591
48	36.94	0.02	9.4316	-8.6962	0.2705	0.0353	0.0420	-0.2396	0.1925	-0.4321	-0.9506
49	37.21	0.01	9.5744	-8.6038	0.1475	0.0160	0.0790	-0.2351	0.2018	-0.4369	-0.9462
50	37.45	-0.00	9.6553	-8.6123	0.0044	0.3990	0.0464	-0.2461	0.1941	-0.4402	-0.9231
51	37.68	-0.02	9.8221	-9.0349	-0.1993	0.7988	0.0243	-0.2649	0.1860	-0.4504	-0.9203
52	37.94	-0.01	9.8847	-9.1735	0.0125	0.0283	0.0624	-0.2542	0.1597	-0.4439	-0.9277
53	38.19	0.03	10.0852	-9.1982	0.0812	0.4278	0.0379	-0.2633	0.1926	-0.4561	-0.9118
54	39.41	-0.01	10.1895	-9.3296	-0.1029	0.7158	0.0257	-0.2530	0.1930	-0.4460	-0.9156
55	38.66	0.01	10.2926	-9.4194	0.1638	-0.0275	0.0874	-0.2576	0.1519	-0.4695	-0.8930
56	38.90	0.03	10.3287	-9.1466	0.4292	-0.3323	0.1059	-0.2653	0.1900	-0.4593	-0.8896
57	39.10	0.02	10.2677	-8.9527	0.1773	0.3581	0.0370	-0.2758	0.1915	-0.4573	-0.8729
58	39.36	-0.03	10.4478	-8.9084	-0.2443	0.7758	0.0449	-0.2599	0.1955	-0.4554	-0.8570
59	39.61	-0.02	10.5402	-9.0827	-0.2745	0.9222	0.0387	-0.2679	0.1891	-0.4770	-0.8617
60	39.62	-0.01	10.5117	-8.7344	-0.0251	0.5476	0.0576	-0.2545	0.1967	-0.4512	-0.8314
61	40.07	-0.02	10.7990	-9.0013	-0.2602	0.9027	0.0457	-0.2778	0.1914	-0.4692	-0.8393
62	40.32	-0.04	10.7403	-8.6635	-0.3395	0.9594	0.0224	-0.2619	0.1875	-0.4645	-0.8228
63	40.53	-0.04	10.9042	-8.8484	-0.3764	1.0237	-0.0250	-0.2826	0.1860	-0.4846	-0.8208
64	40.77	-0.01	11.0058	-8.1029	-0.0169	0.4549	0.0653	-0.3018	0.1846	-0.4864	-0.8271
65	41.04	-0.04	11.1138	-8.9570	-0.4292	1.1287	0.0056	-0.2864	0.1838	-0.4703	-0.8067
66	41.21	0.00	11.0329	-8.8153	0.1383	0.1004	0.0727	-0.3030	0.1794	-0.4624	-0.7990
67	41.45	-0.03	11.1491	-8.9819	-0.2781	0.6589	0.0431	-0.2899	0.1813	-0.4711	-0.7649
68	41.67	-0.03	11.2582	-8.9387	-0.3321	1.0446	-0.0164	-0.3047	0.1771	-0.4918	-0.7672
69	41.87	-0.04	11.3496	-8.9628	-0.3940	1.0405	-0.0157	-0.2852	0.1627	-0.4679	-0.7460
70	42.09	-0.03	11.4160	-8.5196	-0.3396	1.2036	0.0071	-0.2711	0.1866	-0.4597	-0.7463
71	42.31	-0.01	11.4211	-8.2117	0.1622	0.3063	0.0451	-0.2909	0.1903	-0.4818	-0.7190
72	42.50	-0.02	11.4341	-8.2111	-0.2246	0.9726	0.0141	-0.2655	0.1925	-0.4560	-0.7178
73	42.71	-0.01	11.5586	-8.4977	0.0479	1.0844	0.0427	-0.2815	0.1853	-0.4668	-0.7343
74	42.91	-0.01	11.5926	-8.2956	0.0734	0.0368	0.0700	-0.2689	0.1740	-0.4628	-0.7147
75	43.15	-0.03	11.9137	-8.7109	-0.1309	0.1351	0.0417	-0.3084	0.1599	-0.4782	-0.7303
76	43.34	-0.00	11.7124	-8.1231	0.1157	-0.1076	0.1002	-0.3121	0.1541	-0.4661	-0.6936
77	43.53	-0.02	11.9249	-8.5209	-0.2496	0.4506	0.0126	-0.3003	0.1716	-0.4720	-0.7147
78	43.75	-0.03	11.9369	-8.6379	-0.0401	0.2126	0.0420	-0.3004	0.1751	-0.4754	-0.6876
79	43.93	-0.04	11.9581	-8.6616	-0.1660	0.7585	0.0457	-0.2625	0.2309	-0.4634	-0.6798
80	44.14	-0.05	11.9742	-7.9154	-0.3123	0.9630	0.0394	-0.2626	0.2061	-0.4587	-0.6636
81	44.34	-0.06	12.1075	-7.9266	-0.4783	1.3296	-0.0012	-0.2627	0.2155	-0.4742	-0.6566
82	44.51	-0.07	12.1453	-7.9521	-0.4464	1.2135	-0.0126	-0.2745	0.2102	-0.4848	-0.6547
83	44.71	-0.05	12.1556	-7.9573	-0.3514	0.9675	0.0004	-0.2791	0.2068	-0.4860	-0.6458
84	44.89	-0.07	12.1776	-7.9375	-0.4410	1.3345	-0.0116	-0.2676	0.2182	-0.4658	-0.6190
85	45.07	-0.05	12.3231	-7.9550	-0.3724	0.9867	0.0264	-0.2729	0.2024	-0.4809	-0.6383
86	45.22	-0.04	12.1496	-7.6402	-0.2623	0.6772	0.0419	-0.2656	0.1975	-0.4631	-0.6161
87	45.41	-0.08	12.3501	-7.8844	-0.5131	1.5324	0.0234	-0.2536	0.2252	-0.4768	-0.6107
88	45.51	-0.07	12.3642	-7.8954	-0.5313	1.7756	-0.0003	-0.2618	0.2360	-0.4778	-0.6050
89	45.76	-0.06	12.3455	-7.9229	-0.4977	1.6815	0.0231	-0.2452	0.2390	-0.4643	-0.6073
90	45.94	-0.06	12.4021	-7.9545	-0.5061	1.5750	0.0181	-0.2299	0.2430	-0.4729	-0.6060
91	46.14	-0.07	12.5044	-7.9576	-0.5987	1.7277	0.0526	-0.2496	0.2347	-0.4864	-0.6095
92	46.31	-0.05	12.5433	-7.8912	-0.6012	1.6098	0.0010	-0.2297	0.2498	-0.4795	-0.5972

PAGE 1 OF 3
SHEET 3 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE/0-6	PHI	CURF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	92	1.60	1.7	0.0	MINUS31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	45.51	-0.07	12.8635	-7.7136	-0.4985	1.2384	0.0265	-0.2788	0.2135	-0.5124	-0.5987
94	46.72	-0.06	12.5514	-7.4356	-0.4103	1.2660	0.0499	-0.2434	0.2396	-0.4831	-0.5797
95	46.90	-0.07	13.0408	-7.8238	-0.3649	0.9324	-0.0072	-0.2837	0.2284	-0.5128	-0.6103
96	47.07	-0.06	13.0319	-7.8681	-0.1302	0.5188	0.0568	-0.2753	0.2210	-0.4944	-0.6050
97	47.29	-0.05	12.9859	-7.8701	-0.0953	0.1039	0.0074	-0.3266	0.1935	-0.5179	-0.5753
98	47.48	-0.04	13.1790	-7.7413	-0.1154	0.6442	0.0876	-0.3008	0.2156	-0.5164	-0.5889
99	47.68	-0.05	13.4171	-8.0128	-0.0346	-0.0005	0.0264	-0.3103	0.1946	-0.5049	-0.5972
100	47.79	-0.03	13.2879	-7.9568	0.1150	0.1200	0.1420	-0.3037	0.1965	-0.4982	-0.5898
101	47.99	-0.04	13.5116	-7.8293	-0.0908	0.4385	0.1244	-0.3121	0.2045	-0.5156	-0.5794
102	48.13	-0.04	13.2569	-7.6587	0.0047	0.3400	0.1296	-0.3118	0.1972	-0.5090	-0.5627
103	48.32	-0.04	13.4879	-7.9480	-0.0428	0.6543	0.1176	-0.2980	0.2067	-0.5027	-0.5525
104	48.51	-0.03	13.6426	-8.0405	0.0126	0.7576	0.1172	-0.2859	0.2345	-0.5004	-0.5927
105	48.90	-0.04	13.5155	-7.9232	0.0052	0.6892	0.1169	-0.2785	0.2593	-0.5359	-0.5506
106	48.95	-0.03	13.6541	-8.0591	0.0036	0.8592	0.0420	-0.1997	0.2852	-0.4850	-0.6170
107	49.09	-0.02	13.6247	-8.3499	0.2112	0.8116	0.3927	-0.1686	0.3318	-0.5006	-0.6076
108	49.19	-0.01	13.4512	-8.2108	0.2359	0.3706	0.0382	-0.1643	0.3385	-0.5028	-0.5928
109	49.38	-0.02	13.6516	-8.0744	0.1643	0.6549	0.0259	-0.1748	0.3456	-0.5204	-0.6223
110	49.58	0.00	14.0733	-8.3822	0.3820	0.6105	0.0088	-0.1304	0.3776	-0.5080	-0.5956
111	49.72	-0.02	14.0822	-8.3805	0.3024	0.3763	0.0267	-0.1508	0.3653	-0.5161	-0.6112
112	49.96	-0.02	14.1756	-8.4621	0.2577	0.5656	0.0324	-0.1360	0.3471	-0.5251	-0.6005
113	50.04	-0.02	13.9529	-8.3360	0.2691	0.0658	0.0134	-0.1266	0.3641	-0.4927	-0.5777
114	50.25	-0.01	14.1956	-8.4284	0.4478	0.4797	0.0213	-0.1551	0.3999	-0.5550	-0.5933
115	50.39	0.03	14.1535	-8.3852	0.7963	0.3701	-0.0039	-0.0751	0.4446	-0.5200	-0.6815
116	50.56	0.03	14.2668	-8.4515	0.7711	0.5908	-0.0093	-0.0822	0.4467	-0.5290	-0.6772
117	50.73	0.02	14.2156	-8.3109	0.6508	0.7184	0.0077	-0.0945	0.4493	-0.5439	-0.6550
118	50.91	0.02	14.5660	-10.0190	0.6272	0.6722	-0.0093	-0.0797	0.4468	-0.5266	-0.6077
119	51.08	0.01	14.5562	-9.9403	0.5872	1.0585	-0.0042	-0.0866	0.4408	-0.5335	-0.6028
120	51.26	0.01	14.6113	-9.8542	0.5386	1.2574	-0.0103	-0.1259	0.4053	-0.5312	-0.6744
121	51.41	-0.00	14.5329	-9.9578	0.4811	1.1151	-0.0156	-0.1365	0.4297	-0.5662	-0.6562
122	51.61	0.01	14.8835	-10.1495	0.4897	1.2764	-0.0272	-0.1238	0.4246	-0.5484	-0.6853
123	51.80	-0.00	14.7665	-9.9769	0.3508	1.3048	-0.0272	-0.1275	0.4103	-0.5378	-0.6636
124	51.96	0.00	14.8035	-9.9256	0.4486	1.1493	-0.0268	-0.1256	0.4183	-0.5439	-0.6702
125	52.12	-0.00	14.9070	-9.9285	0.3805	1.2060	-0.0265	-0.1366	0.4161	-0.5507	-0.6868
126	52.31	-0.03	15.0055	-10.0365	0.1820	1.2564	-0.0317	-0.1195	0.4235	-0.5430	-0.6685
127	52.48	-0.02	14.9726	-9.8793	0.2475	1.3395	-0.0231	-0.1306	0.4196	-0.5500	-0.6465
128	52.65	-0.03	15.0367	-9.9716	0.2203	1.2924	0.0032	-0.1097	0.4293	-0.5385	-0.6498
129	52.83	-0.03	15.1449	-9.9777	0.0870	1.3305	0.0033	-0.1367	0.4225	-0.5572	-0.6641
130	52.99	-0.02	15.1527	-9.9491	0.2000	1.2160	0.0155	-0.1270	0.4172	-0.5462	-0.6394
131	53.13	-0.04	14.8657	-9.8729	0.0192	1.4489	0.0313	-0.1518	0.4022	-0.5540	-0.6516
132	53.30	-0.04	14.8844	-9.7322	0.0397	1.3475	0.0259	-0.1555	0.3969	-0.5524	-0.6537
133	53.48	-0.03	15.2784	-10.0552	0.1368	1.2595	0.0561	-0.1336	0.4136	-0.5472	-0.6845
134	53.63	-0.03	14.9794	-9.7260	0.2386	0.9110	0.0566	-0.1384	0.4041	-0.5425	-0.6494
135	53.83	-0.04	15.3334	-10.0229	0.0862	1.3137	0.0564	-0.1245	0.4298	-0.5543	-0.6672
136	53.98	-0.05	15.1296	-9.8019	0.0841	1.0253	0.0516	-0.1094	0.4309	-0.5403	-0.6346
137	54.11	-0.04	14.9506	-9.8588	0.1471	0.8211	0.0451	-0.1161	0.4136	-0.5317	-0.6301
138	54.26	-0.04	14.7273	-9.6263	0.2512	0.6713	0.0398	-0.1351	0.3999	-0.5256	-0.6265

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART PALN RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 92 1.00 1.7 0.0 PI-0.0131 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAH	CAF	XCP
139	54.46	-0.03	15.0132	-9.7197	0.1636	0.8845	0.0957	-0.1172	0.4276	-0.5448	-0.6471
140	54.51	-0.06	15.0040	-9.5452	0.0209	0.9446	0.0457	-0.1012	0.4433	-0.5445	-0.6362
141	54.75	-0.03	14.9991	-9.3993	0.1304	0.7150	0.0387	-0.1005	0.4361	-0.5366	-0.6311
142	54.93	-0.04	14.9955	-9.1104	0.2067	0.7583	0.0342	-0.1221	0.4067	-0.5248	-0.6157
143	55.16	-0.02	14.9895	-9.0562	0.2150	0.8772	0.0345	-0.1287	0.4203	-0.5450	-0.6304
144	55.25	-0.06	15.0219	-8.8912	0.1513	0.8337	0.0295	-0.1340	0.4151	-0.5491	-0.6318
145	55.42	-0.03	14.9907	-8.1293	0.1523	0.8540	0.0294	-0.1286	0.4376	-0.5658	-0.6110
146	55.58	-0.02	14.9857	-8.9866	0.1778	0.8717	0.0282	-0.1281	0.4060	-0.5361	-0.6149
147	55.75	-0.03	14.9347	-8.2566	0.0986	0.7710	0.0289	-0.1349	0.4339	-0.5668	-0.6198
148	55.89	-0.04	15.0319	-8.8438	0.1397	0.8462	0.0294	-0.1297	0.4430	-0.5727	-0.6416
149	56.17	-0.03	15.2509	-8.9295	0.1179	0.7094	0.0295	-0.0979	0.4431	-0.5410	-0.6508
150	56.21	-0.04	14.9337	-8.1278	0.2223	0.5596	0.0236	-0.1251	0.4389	-0.5640	-0.6153
151	56.35	-0.03	14.9156	-8.3498	0.1152	0.7294	0.0289	-0.1404	0.4435	-0.5839	-0.6267
152	56.52	-0.04	14.9033	-8.3216	0.1408	0.6673	0.0241	-0.1368	0.4344	-0.5712	-0.6255
153	57.02	-0.03	15.0766	-8.9825	0.2657	0.4349	0.0197	-0.1309	0.4606	-0.5915	-0.6437
154	57.15	-0.04	15.0846	-8.3389	0.0381	0.5968	0.0303	-0.1384	0.4592	-0.5976	-0.6191
155	57.31	-0.05	15.2514	-8.4588	0.0991	0.5712	0.0247	-0.1688	0.4541	-0.6219	-0.6221
156	57.47	-0.03	15.2950	-8.5579	0.2929	0.4732	0.0250	-0.1608	0.4543	-0.6151	-0.6249

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/10**6 PHI CONF L DEL1 DEL2 DEL3 DELA TRANSITION
7 92 1.00 1.7 0.0 31.0F31 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	LM1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-4.14	-0.01	-0.0143	0.0043	0.0080	-0.0210	-0.5594	-0.5632	-0.0155	-0.2645	0.0280	0.4964
2	-4.15	-0.00	-0.0107	0.0008	0.0084	-0.0748	-0.8224	-0.5660	-0.0151	-0.2689	0.0278	0.4962
3	-4.16	-0.01	-0.0155	0.0009	0.0071	-0.0252	-0.4581	-0.5521	-0.0157	-0.2721	0.0285	0.4927
4	-4.23	-0.02	-0.0107	0.0007	0.0068	-0.0656	-0.8224	-0.5156	-0.0154	-0.2545	0.0299	0.5015
5	-2.49	-0.02	-0.0082	0.0005	0.0293	-0.0978	-1.1341	-0.4059	-0.0155	-0.2159	0.0343	0.5328
6	-0.68	-0.03	-0.0069	0.0006	0.0046	-0.1159	-1.2174	-0.3001	-0.0147	-0.1695	0.0491	0.5649
7	1.24	-0.02	-0.0084	0.0014	0.0043	-0.1868	-1.2024	-0.2101	-0.0121	-0.1256	0.0577	0.5925
8	3.13	-0.03	-0.0068	0.0012	0.0072	-0.1765	-1.0588	-0.1309	-0.0088	-0.0842	0.0674	0.6437
9	5.19	-0.02	-0.0054	0.0007	0.0072	-0.1296	-1.3333	-0.0493	-0.0065	-0.0473	0.0915	0.9593
10	6.97	-0.02	-0.0040	-0.0001	0.0071	0.0250	-1.7750	0.0045	-0.0006	-0.0149	-0.1333	-4.2000
11	8.93	-0.03	-0.0036	-0.0003	0.0074	0.0362	-2.1765	0.0470	0.0050	0.0001	0.1006	0.0021
12	10.92	-0.03	-0.0046	-0.0001	0.0070	0.0217	-1.5217	0.0839	0.0110	0.0176	0.1314	0.2103
13	12.78	-0.03	-0.0058	0.0	0.0069	0.0	-1.1595	0.1633	0.0177	0.0466	0.1238	0.3112
14	14.76	-0.03	-0.0038	0.0003	0.0102	-0.0799	-2.6842	0.2056	0.0234	0.0744	0.1140	0.3616
15	16.69	-0.03	-0.0036	0.0008	0.0083	-0.0550	-2.3058	0.2704	0.0298	0.1005	0.1041	0.3854
16	18.75	-0.03	-0.0130	-0.0003	0.0084	0.0231	-0.6769	0.3523	0.0432	0.1412	0.0941	0.4007
17	20.77	-0.04	-0.0245	-0.0005	0.0065	0.0203	-0.4128	0.4298	0.0341	0.1757	0.0793	0.4087
18	22.80	-0.04	-0.0310	-0.0006	-0.0056	0.0259	0.1812	0.5183	0.0329	0.2146	0.0634	0.4142
19	24.84	-0.03	-0.0308	0.0014	-0.0030	-0.0181	0.4229	0.5936	0.0328	0.2410	0.0552	0.4060
20	26.88	-0.01	0.0634	-0.0004	0.0410	-0.1090	0.6588	0.7132	0.0272	0.2846	0.0381	0.4019
21	29.00	0.00	0.2576	-0.0160	0.1389	-0.0645	0.5387	0.8320	0.0218	0.3304	0.0263	0.3971
22	30.15	0.00	0.3353	-0.0191	0.1664	-0.0451	0.5036	0.8807	0.0199	0.3494	0.0226	0.3967
23	30.15	0.00	0.3410	-0.0199	0.1729	-0.0423	0.5069	0.8796	0.0196	0.3484	0.0221	0.3943
24	30.39	0.00	0.3164	-0.0135	0.1643	-0.0419	0.5162	0.8828	0.0212	0.3470	0.0241	0.3932
25	30.71	0.00	0.2929	-0.0127	0.1531	-0.0434	0.5228	0.8823	0.0224	0.3457	0.0256	0.3918
26	31.00	0.00	0.3407	-0.0131	0.1733	-0.0365	0.5085	0.9077	0.0206	0.3562	0.0227	0.3925
27	31.34	0.00	0.3551	-0.0129	0.1791	-0.0364	0.5062	0.9192	0.0209	0.3603	0.0228	0.3920
28	31.63	0.00	0.3027	-0.0102	0.1559	-0.0336	0.5151	0.9060	0.0243	0.3541	0.0269	0.3909
29	31.89	0.00	0.2385	-0.0083	0.1233	-0.0352	0.5216	0.8995	0.0260	0.3524	0.0289	0.3918
30	32.22	0.00	0.2928	-0.0087	0.1238	-0.0116	0.5316	0.9092	0.0263	0.3550	0.0289	0.3909
31	32.50	0.00	0.3016	-0.0089	0.1508	-0.0129	0.4987	0.9371	0.0250	0.3675	0.0266	0.3921
32	32.75	0.00	0.2702	-0.0076	0.1406	-0.0123	0.5091	0.9306	0.0262	0.3631	0.0281	0.3902
33	33.05	0.00	0.2726	-0.0074	0.1398	-0.0125	0.5103	0.9450	0.0269	0.3689	0.0284	0.3903
34	33.31	0.00	0.2360	-0.0063	0.1177	-0.0163	0.4989	0.9318	0.0267	0.3613	0.0308	0.3878
35	33.58	0.00	0.2328	-0.0060	0.1098	-0.0260	0.4906	0.9555	0.0279	0.3708	0.0292	0.3880
36	33.86	0.01	0.3491	-0.0095	0.1733	-0.0129	0.4963	0.9779	0.0236	0.3805	0.0242	0.3891
37	34.19	0.03	0.1851	0.0035	0.0835	0.0109	0.4510	0.9487	0.0292	0.3663	0.0307	0.3861
38	34.41	0.03	0.1420	0.0045	0.0667	0.0318	0.4677	0.9512	0.0288	0.3668	0.0302	0.3855
39	34.66	0.02	0.0425	0.0068	0.0186	0.1604	0.4387	0.9412	0.0299	0.3635	0.0317	0.3862
40	34.93	-0.01	-0.0206	0.0087	-0.0090	-0.4367	0.4455	0.9265	0.0331	0.3547	0.0356	0.3837
41	35.16	-0.02	-0.0364	0.0084	-0.0198	-0.2656	0.4789	0.9250	0.0339	0.3545	0.0366	0.3833
42	35.43	0.00	0.0232	0.0056	0.0216	0.2328	0.9310	0.9335	0.0330	0.3582	0.0353	0.3837
43	35.54	-0.01	0.0723	0.0062	0.0404	0.0582	0.5582	0.9405	0.0332	0.3599	0.0353	0.3827
44	35.96	-0.01	-0.0352	0.0079	-0.0079	-0.2050	0.2237	0.9318	0.0348	0.3556	0.0373	0.3817
45	36.19	-0.02	0.0488	0.0080	0.0382	0.1285	0.7730	0.9518	0.0336	0.3624	0.0353	0.3808
46	36.46	-0.02	-0.0210	0.0052	0.0027	-0.2476	-0.1286	0.9441	0.0367	0.3582	0.0388	0.3794

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE/0-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	92	1.60	1.7	0.0	81.0831	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	Cm1	Cal	XCPF1	YCPF1	CNF2	Cm2	C92	XCPF2	YCPF2
47	36.76	-0.02	-0.0517	0.0043	-0.0156	-0.0833	0.3023	0.9371	0.0356	0.3553	0.0380	0.3792
48	36.96	0.02	-0.0160	0.0051	0.0024	-0.3643	-0.2071	0.9617	0.0344	0.3650	0.0357	0.3796
49	37.21	0.00	0.1049	0.0061	0.0058	0.0558	0.5310	0.9695	0.0315	0.3779	0.0316	0.3819
50	37.45	-0.00	0.0051	0.0067	0.0125	1.1311	2.0442	0.9603	0.0343	0.3636	0.0357	0.3787
51	37.58	-0.02	-0.0187	0.0084	0.0031	-0.3650	-0.1058	0.9710	0.0352	0.3677	0.0362	0.3788
52	37.94	-0.01	0.0760	0.0072	0.0521	0.0944	0.4969	0.9896	0.0331	0.3754	0.0334	0.3795
53	38.19	0.00	-0.0313	0.0071	-0.0075	-0.2276	0.2984	0.9777	0.0343	0.3691	0.0351	0.3775
54	38.41	-0.01	-0.0647	0.0093	-0.0147	-0.2085	0.3184	0.9779	0.0322	0.3698	0.0329	0.3781
55	38.66	0.01	0.0290	0.0094	0.0236	0.4757	1.1936	0.9897	0.0338	0.3743	0.0341	0.3782
56	38.90	0.03	0.0555	0.0080	0.0462	0.1170	0.6740	0.9948	0.0337	0.3758	0.0338	0.3777
57	39.10	0.02	-0.0337	0.0077	-0.0033	-0.2292	0.2992	0.9762	0.0370	0.3650	0.0379	0.3769
58	39.36	-0.03	0.0330	0.0086	0.0260	0.2432	0.8480	0.9846	0.0367	0.3726	0.0371	0.3768
59	39.51	-0.02	-0.0577	0.0071	-0.0164	-0.2233	0.2647	0.9744	0.0349	0.3648	0.0399	0.3744
60	39.82	-0.01	0.0076	0.0073	0.0167	0.9865	2.1892	0.9856	0.0343	0.3698	0.0398	0.3750
61	40.07	-0.02	-0.0436	0.0051	-0.0072	-0.1176	0.1693	0.9839	0.0388	0.3650	0.0396	0.3750
62	40.32	-0.04	-0.0072	0.0057	0.0069	-0.8144	-0.5972	0.9836	0.0404	0.3670	0.0411	0.3731
63	40.53	-0.05	-0.0982	0.0027	-0.0357	-0.0309	0.3767	0.9792	0.0401	0.3645	0.0409	0.3723
64	40.77	-0.01	-0.0004	0.0057	0.0151	-14.2500	-37.7500	0.9971	0.0393	0.3724	0.0396	0.3734
65	41.06	-0.04	-0.0261	0.0052	-0.0048	-0.1444	0.1333	0.9949	0.0402	0.3723	0.0404	0.3742
66	41.21	0.00	0.0349	0.0065	0.0285	0.1846	0.8161	0.9914	0.0434	0.3681	0.0443	0.3712
67	41.45	-0.03	0.0369	0.0079	0.0295	0.2147	0.7989	0.9911	0.0458	0.3676	0.0462	0.3708
68	41.67	-0.03	-0.0022	0.0037	-0.0178	-0.0596	0.2866	0.9863	0.0438	0.3660	0.0444	0.3711
69	41.97	-0.04	-0.0252	0.0053	-0.0015	-0.2112	0.2598	0.9780	0.0471	0.3608	0.0482	0.3690
70	42.09	-0.03	-0.0479	0.0035	-0.0323	-0.0354	0.3296	0.9626	0.0481	0.3515	0.0500	0.3652
71	42.31	-0.01	-0.0156	0.0087	0.0050	-1.2937	-1.6667	0.9845	0.0498	0.3524	0.0516	0.3653
72	42.50	-0.02	0.0036	0.0074	0.0104	2.0556	2.4884	0.9704	0.0492	0.3546	0.0507	0.3654
73	42.71	-0.01	0.1048	0.0046	0.0607	0.0629	0.5568	0.9957	0.0483	0.3642	0.0465	0.3658
74	42.91	-0.01	0.0755	0.0079	0.0456	0.0930	0.6069	0.9631	0.0520	0.3670	0.0540	0.3603
75	43.15	-0.03	0.0404	0.0025	0.0284	0.0620	0.7022	1.0066	0.0461	0.3696	0.0458	0.3642
76	43.34	-0.00	0.0954	0.0077	0.0499	0.0809	0.5231	0.9583	0.0550	0.3634	0.0574	0.3584
77	43.55	-0.04	0.0005	0.0027	0.0039	0.0592	0.5151	0.9859	0.0439	0.3557	0.0506	0.3608
78	43.74	-0.03	0.0518	0.0030	0.0310	0.0580	0.5977	0.9718	0.0522	0.3697	0.0537	0.3599
79	43.93	-0.03	-0.0231	-0.0020	0.0045	0.0945	-0.2239	0.9584	0.0533	0.3661	0.0556	0.3591
80	44.14	-0.05	0.0150	0.0025	0.0188	0.1750	1.1500	0.9449	0.0568	0.3540	0.0601	0.3556
81	44.34	-0.08	-0.0230	-0.0024	-0.0002	0.0934	0.0678	0.9052	0.0588	0.3569	0.0650	0.3523
82	44.51	-0.07	-0.1154	-0.0027	0.0027	0.1753	-0.1753	0.9191	0.0575	0.3247	0.0626	0.3532
83	44.71	-0.05	-0.0372	-0.0039	-0.0030	0.0990	0.2284	0.9564	0.0585	0.3356	0.0597	0.3548
84	44.89	-0.07	-0.0403	-0.0034	-0.0072	0.0970	0.1791	0.9078	0.0592	0.3186	0.0652	0.3509
85	45.17	-0.03	-0.0577	0.0061	-0.0012	0.0017	0.6873	0.9251	0.0606	0.3240	0.0655	0.3502
86	45.22	-0.04	-0.0048	-0.0037	0.0094	0.3776	-0.9592	0.9000	0.0606	0.3131	0.0674	0.3479
87	45.41	-0.05	-0.0500	-0.0050	-0.0142	0.0872	0.2135	0.9043	0.0601	0.3142	0.0665	0.3476
88	45.61	-0.07	-0.0300	-0.0020	-0.0027	0.0835	0.3403	0.8789	0.0610	0.3027	0.0694	0.3444
89	45.76	-0.08	-0.0409	-0.0075	-0.0265	0.0776	0.2730	0.8742	0.0606	0.3008	0.0693	0.3439
90	45.94	-0.10	-0.0933	-0.0095	-0.0224	0.1053	0.2406	0.8875	0.0605	0.3049	0.0682	0.3438
91	45.19	-0.07	-0.0912	-0.0042	-0.0005	0.1022	0.4122	0.8914	0.0611	0.3078	0.0660	0.3453
92	46.31	-0.06	-0.1052	-0.0041	-0.0297	0.0867	0.2819	0.8983	0.0594	0.3100	0.0661	0.3451

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REICO65	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	42	1.00	1.7	0.0	61=0F31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CN1	CA1	XCPF1	YCPF1	CNF2	CN2	CA2	XCPF2	YCPF2
93	46.51	-0.07	-0.0778	-0.0049	-0.0246	0.0631	0.3157	0.9180	0.0597	0.3160	0.0653	0.3458
94	46.72	-0.06	-0.0440	-0.0060	-0.0070	0.0835	0.1461	0.8789	0.0613	0.2943	0.0696	0.3394
95	46.98	-0.07	-0.0575	-0.0044	-0.0154	0.0854	0.2063	0.9307	0.0579	0.3298	0.0616	0.3456
96	47.07	-0.04	-0.0027	-0.0025	0.0105	0.9259	-3.8689	0.9199	0.0605	0.3149	0.0658	0.3446
97	47.29	-0.03	-0.0181	-0.0053	0.0025	0.2928	-0.1381	0.9141	0.0573	0.3111	0.0627	0.3404
98	47.44	-0.04	0.0122	0.0034	0.0131	0.2787	1.0738	0.9279	0.0576	0.3172	0.0623	0.3419
99	47.66	-0.05	0.0285	0.0029	0.0120	0.1615	0.5856	0.9278	0.0557	0.3261	0.0588	0.3440
100	47.79	-0.03	0.0038	0.0161	0.0022	0.1447	0.5036	0.8930	0.0596	0.3012	0.0668	0.3373
101	47.94	-0.04	0.0551	0.0107	0.0290	0.1965	0.5255	0.8846	0.0610	0.2963	0.0690	0.3350
102	48.13	-0.04	0.0740	0.0109	0.0379	0.1677	0.5127	0.8852	0.0612	0.2970	0.0692	0.3355
103	48.32	-0.04	0.2347	0.0071	0.0223	0.2052	0.6445	0.8741	0.0599	0.2921	0.0686	0.3342
104	48.51	-0.03	0.0281	0.0051	0.0232	0.1921	0.8266	0.9142	0.0593	0.3097	0.0649	0.3388
105	48.66	-0.04	0.0221	0.0041	0.0162	0.3665	0.7336	0.8852	0.0586	0.2866	0.0675	0.3312
106	48.88	-0.03	-0.0056	0.0053	0.0073	-0.7794	-1.0735	0.9376	0.0557	0.3210	0.0594	0.3422
107	49.04	-0.02	0.3197	0.0044	0.0199	0.2234	1.0102	0.9338	0.0521	0.3187	0.0558	0.3392
108	49.19	-0.01	0.0029	0.0037	0.0325	0.0873	0.7642	0.9525	0.0500	0.3262	0.0525	0.3424
109	49.38	-0.02	0.0049	0.0018	0.0173	0.1518	1.7475	0.9063	0.0515	0.3310	0.0543	0.3425
110	49.56	0.00	0.0191	0.0030	0.0196	0.1657	1.0829	0.9688	0.0477	0.3305	0.0492	0.3411
111	49.72	-0.02	0.0243	0.0041	0.0212	0.1760	0.9099	0.9638	0.0494	0.3292	0.0513	0.3418
112	49.90	-0.02	0.0374	0.0058	0.0259	0.1534	0.8425	0.9540	0.0496	0.3216	0.0520	0.3371
113	50.08	-0.01	0.0588	0.0128	0.0329	0.2211	0.5665	0.9603	0.0453	0.3269	0.0472	0.3425
114	50.25	-0.01	0.0063	0.0119	0.0071	1.8730	1.1270	0.9584	0.0479	0.3250	0.0500	0.3391
115	50.39	0.03	0.0309	0.0145	0.0151	0.4708	0.4923	0.9653	0.0469	0.3376	0.0455	0.3497
116	50.56	0.03	0.0295	0.0102	0.0145	0.4976	0.7073	0.9648	0.0458	0.3355	0.0464	0.3477
117	50.73	0.02	0.0143	0.0057	0.0162	0.2953	0.8396	0.9611	0.0201	0.3232	0.0214	0.3436
118	50.91	0.02	0.0139	0.0055	0.0132	0.4074	0.9778	0.9916	0.0148	0.3473	0.0150	0.3502
119	51.08	0.01	0.0045	0.0050	0.0104	1.2994	2.3111	0.9687	0.0201	0.3355	0.0208	0.3463
120	51.26	0.01	0.0039	0.0050	0.0107	1.4359	2.7436	0.9755	0.0200	0.3387	0.0205	0.3472
121	51.41	-0.00	-0.0151	0.0013	0.0049	-0.0861	-0.3179	0.9684	0.0207	0.3280	0.0296	0.3387
122	51.61	0.01	-0.0120	0.0054	0.0042	-0.4500	-0.3500	0.9907	0.0176	0.3430	0.0178	0.3462
123	51.80	-0.00	-0.0207	0.0153	0.0061	-0.4209	-0.9108	0.9428	0.0197	0.3451	0.0199	0.3476
124	51.96	0.00	-0.0060	0.0042	0.0056	-1.0500	-1.7000	0.9753	0.0091	0.3414	0.0093	0.3500
125	52.12	-0.00	-0.0106	0.0085	0.0034	-0.4285	-0.3585	0.9755	0.0099	0.3409	0.0102	0.3495
126	52.31	-0.01	-0.0094	0.0074	0.0063	-0.3617	-0.6702	0.9840	0.0111	0.3437	0.0113	0.3493
127	52.48	-0.02	0.0043	0.0014	0.0119	0.1566	1.3476	0.9333	-0.0007	0.3279	-0.0008	0.3513
128	52.65	-0.03	0.0045	0.0035	0.0122	0.4118	1.4353	0.9628	-0.0027	0.3423	-0.0028	0.3555
129	52.83	-0.04	0.0141	-0.0029	0.0113	-0.6829	2.7561	0.9522	-0.0036	0.3378	-0.0038	0.3547
130	52.99	-0.02	0.0100	-0.0029	0.0133	-0.2500	1.3330	0.9466	-0.0053	0.3344	-0.0056	0.3537
131	53.13	-0.04	-0.0218	-0.0006	-0.0001	0.2936	0.0049	0.9407	-0.0061	0.3304	-0.0065	0.3555
132	53.30	-0.04	-0.0112	-0.0058	0.0036	0.5179	-0.3214	0.9570	-0.0064	0.3419	-0.0067	0.3573
133	53.46	-0.03	-0.0193	-0.0052	0.0026	0.2594	-2.1347	0.9466	-0.0066	0.3377	-0.0070	0.3568
134	53.63	-0.03	-0.0119	-0.0026	0.0039	0.2017	-0.3277	0.9299	-0.0047	0.3284	-0.0051	0.3536
135	53.83	-0.04	-0.0225	-0.0026	-0.0007	0.1156	0.0311	0.9375	-0.0056	0.3341	-0.0060	0.3553
136	53.96	-0.03	-0.0131	0.0029	0.0024	-0.2871	-0.2375	0.9274	-0.0033	0.3295	-0.0036	0.3553
137	54.11	-0.04	-0.0118	0.0013	0.0028	-0.1102	-0.2373	0.9277	-0.0044	0.3292	-0.0048	0.3548
138	54.26	-0.04	-0.0049	0.0029	0.0051	-0.5918	-1.0408	0.9299	-0.0029	0.3314	-0.0031	0.3564

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 3 OF 4

PANTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	PRESS	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	42	1.00	1.7	0.0	81	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
135	56.98	-0.02	-0.0142	0.0115	0.0018	-0.1556	-0.1268	0.9396	-0.0046	0.3347	-0.0051	0.3562
136	56.81	-0.06	-0.0196	0.0117	-0.0008	-0.0967	0.0408	0.9196	-0.0036	0.3259	-0.0039	0.3544
137	56.70	-0.07	0.0042	0.0025	0.0075	-0.5982	1.8571	0.9401	-0.0041	0.3349	-0.0044	0.3562
138	56.93	-0.06	-0.0030	0.0033	0.0063	-1.1000	-1.6000	0.9331	-0.0044	0.3340	-0.0047	0.3578
139	55.10	-0.06	-0.0124	0.0025	0.0004	-0.2018	-0.0323	0.9238	-0.0039	0.3275	-0.0042	0.3545
140	55.28	-0.06	-0.0069	0.0010	0.0032	-0.2319	-0.4638	0.9445	-0.0047	0.3352	-0.0045	0.3581
141	55.42	-0.04	-0.0141	0.0012	0.0012	-0.0851	-0.0851	0.9187	-0.0042	0.3257	-0.0046	0.3545
142	55.58	-0.03	-0.0056	0.0033	0.0034	-0.5000	-0.5152	0.9336	-0.0040	0.3332	-0.0043	0.3569
143	55.75	-0.05	-0.0071	0.0027	0.0029	-0.3643	-0.4095	0.9271	-0.0051	0.3302	-0.0055	0.3561
144	55.89	-0.04	-0.0011	0.0015	0.0060	-1.7273	-5.4545	0.9587	-0.0062	0.3444	-0.0065	0.3593
145	56.07	-0.05	-0.0053	0.0013	0.0036	-0.2063	-0.5397	0.9750	-0.0070	0.3508	-0.0072	0.3598
150	56.21	-0.04	-0.0115	0.0024	0.0015	-0.2017	-0.1261	0.9239	-0.0045	0.3272	-0.0049	0.3541
151	56.35	-0.05	-0.0079	0.0012	0.0036	-0.1739	-0.5217	0.9502	-0.0060	0.3407	-0.0067	0.3585
152	56.56	-0.04	-0.0099	0.0030	0.0024	-0.0808	-0.2929	0.9469	-0.0056	0.3398	-0.0070	0.3588
153	56.72	-0.05	-0.0051	0.0010	0.0045	-0.1951	-0.6829	0.9792	-0.0077	0.3536	-0.0079	0.3611
154	56.86	-0.04	-0.0046	0.0010	0.0051	-0.2174	-1.1087	0.9474	-0.0063	0.3402	-0.0067	0.3591
155	57.02	-0.03	-0.0009	0.0004	0.0070	-0.4444	-7.7778	0.9642	-0.0071	0.3458	-0.0076	0.3587
156	57.15	-0.06	-0.0087	0.0010	0.0031	-0.1149	-0.3563	0.9280	-0.0061	0.3304	-0.0066	0.3560
157	57.31	-0.05	-0.0163	0.0013	0.0015	-0.1057	-0.1220	0.9218	-0.0057	0.3272	-0.0062	0.3549
158	57.47	-0.03	-0.0045	0.0010	0.0049	-0.2222	-1.0889	0.9404	-0.0065	0.3360	-0.0069	0.3573
159	57.53	-0.05	-0.0107	0.0010	0.0037	-0.0935	-0.3458	0.9420	-0.0071	0.3452	-0.0080	0.3589
160	57.81	-0.04	-0.0100	0.0011	0.0032	-0.1100	-0.3200	0.9553	-0.0068	0.3563	-0.0089	0.3616
161	58.06	-0.05	-0.0075	0.0006	0.0039	-0.0800	-0.5200	0.9726	-0.0085	0.3698	-0.0088	0.3597
162	58.18	-0.05	-0.0042	0.0010	0.0031	-0.1613	-0.5000	1.0013	-0.0100	0.3830	-0.0100	0.3626
163	58.29	-0.07	-0.0057	0.0011	0.0033	-0.1579	-0.4783	0.9849	-0.0088	0.3662	-0.0089	0.3622
164	58.43	-0.10	-0.0042	0.0003	0.0048	-0.0750	-0.5854	0.9886	-0.0087	0.3602	-0.0090	0.3616
165	58.58	-0.10	-0.0099	0.0002	0.0041	-0.0732	-0.4146	0.9593	-0.0083	0.3451	-0.0087	0.3598
166	58.62	-0.12	-0.0045	-0.0002	0.0069	0.0444	-1.5333	0.9996	-0.0098	0.3635	-0.0098	0.3637
167	58.97	-0.13	-0.0055	-0.0004	0.0068	0.0588	-0.7059	1.0093	-0.0107	0.3693	-0.0106	0.3656
168	59.12	-0.16	-0.0074	-0.0003	0.0050	0.0405	-0.6757	1.0009	-0.0105	0.3644	-0.0105	0.3641
169	59.25	-0.12	0.0044	-0.0001	0.0063	-0.0278	2.4412	1.0003	-0.0103	0.3656	-0.0108	0.3655
170	59.46	-0.16	-0.0051	0.0004	0.0054	-0.0714	-1.0568	1.0058	-0.0105	0.3651	-0.0105	0.3631
171	59.56	-0.10	-0.0042	0.0006	0.0050	-0.1778	-1.1111	1.0115	-0.0110	0.3695	-0.0109	0.3653
172	59.73	-0.11	-0.0010	0.0006	0.0070	-0.4000	-7.0000	1.0204	-0.0103	0.3704	-0.0101	0.3667
173	59.96	-0.06	-0.0045	0.0	0.0071	0.0	-7.8889	0.9780	-0.0099	0.3532	-0.0101	0.3612
174	60.00	-0.07	-0.0100	0.0009	0.0060	-0.0900	-0.4000	0.9703	-0.0093	0.3505	-0.0096	0.3613
175	60.10	-0.04	-0.0069	0.0007	0.0065	-0.1014	-0.5522	0.9689	-0.0096	0.3527	-0.0097	0.3641
176	60.29	-0.02	-0.0033	0.0004	0.0059	-0.2424	-1.7879	0.9956	-0.0109	0.3629	-0.0110	0.3645
177	60.44	-0.05	-0.0022	0.0001	0.0077	-0.0455	-3.5000	1.0092	-0.0135	0.3665	-0.0129	0.3684
178	60.39	-0.09	0.0026	0.0006	0.0081	0.0308	3.1154	0.9945	-0.0109	0.3644	-0.0110	0.3664
179	60.93	-0.07	0.0026	0.0012	0.0077	0.0615	2.9615	1.0369	-0.0116	0.3826	-0.0112	0.3697

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	R$10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	92	1.00	1.7	0.0	BLADE 31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
1	-4.14	-0.01	0.0236	9.9999	0.0036	9.9999	0.1525	-0.5907	-0.0209	-0.2674	0.0355	0.4189
2	-4.15	-0.06	0.0267	9.9999	0.0067	9.9999	0.1736	-0.5972	-0.0209	-0.2562	0.0351	0.4190
3	-4.16	-0.03	0.0249	9.9999	0.0039	9.9999	0.1653	-0.5950	-0.0210	-0.2493	0.0354	0.4190
4	-4.23	-0.02	0.0260	9.9999	0.0051	9.9999	0.1910	-0.5910	-0.0212	-0.2360	0.0379	0.4206
5	-2.69	-0.02	0.0262	9.9999	0.0046	9.9999	0.1752	-0.4598	-0.0206	-0.1950	0.0449	0.4241
6	-0.66	-0.03	0.0256	9.9999	0.0040	9.9999	0.1569	-0.3560	-0.0165	-0.1512	0.0518	0.4223
7	1.29	-0.02	0.0262	9.9999	0.0053	9.9999	0.2031	-0.2688	-0.0151	-0.1083	0.0564	0.4041
8	3.13	-0.03	0.0261	9.9999	0.0064	9.9999	0.2023	-0.1817	-0.0103	-0.0667	0.0568	0.3673
9	5.14	-0.02	0.0235	9.9999	0.0056	9.9999	0.2383	-0.1009	-0.0056	-0.0296	0.0556	0.2929
10	6.97	-0.02	0.0248	9.9999	0.0072	9.9999	0.2915	-0.0449	-0.0014	-0.0042	0.0312	0.0937
11	6.93	-0.04	0.0306	9.9999	0.0069	9.9999	0.2762	-0.0058	0.0040	0.0144	-0.6697	-2.9828
12	10.42	-0.03	0.0332	9.9999	0.0071	9.9999	0.2145	0.0424	0.0111	0.0356	0.2624	0.8392
13	12.78	-0.04	0.0332	9.9999	0.0055	9.9999	0.1782	0.1049	0.0162	0.0502	0.1738	0.6313
14	14.72	-0.03	0.0346	9.9999	0.0047	9.9999	0.1362	0.1729	0.0234	0.0696	0.1389	0.5774
15	16.57	-0.03	0.0337	9.9999	0.0056	9.9999	0.1364	0.2454	0.0300	0.1366	0.1221	0.5566
16	18.75	-0.03	0.0373	9.9999	0.0029	9.9999	0.0645	0.3272	0.0337	0.1743	0.1029	0.5324
17	20.77	-0.04	0.0436	9.9999	0.0066	9.9999	0.1011	0.4255	0.0394	0.2210	0.0808	0.5193
18	22.80	-0.02	0.0493	9.9999	0.0064	9.9999	0.1301	0.4905	0.0339	0.2460	0.0691	0.5015
19	24.84	-0.03	0.0624	9.9999	0.0019	9.9999	0.0449	0.5685	0.0319	0.2745	0.0561	0.4825
20	26.88	-0.01	0.0695	9.9999	0.0050	9.9999	0.1071	0.6096	0.0331	0.2874	0.0543	0.4716
21	28.90	0.04	0.0593	9.9999	0.0127	9.9999	0.2145	0.6314	0.0348	0.2960	0.0551	0.4658
22	31.15	0.06	0.0624	9.9999	0.0152	9.9999	0.2440	0.6413	0.0349	0.2977	0.0544	0.4642
23	30.15	0.06	0.0612	9.9999	0.0133	9.9999	0.2177	0.6315	0.0354	0.2950	0.0560	0.4672
24	30.39	0.06	0.0573	9.9999	0.0129	9.9999	0.2238	0.6478	0.0349	0.3027	0.0538	0.4673
25	30.71	0.07	0.0549	9.9999	0.0145	9.9999	0.2090	0.6665	0.0349	0.3149	0.0523	0.4665
26	31.06	0.08	0.0624	9.9999	0.0152	9.9999	0.2440	0.6542	0.0357	0.3085	0.0541	0.4680
27	31.34	0.07	0.0605	9.9999	0.0151	9.9999	0.2500	0.6671	0.0361	0.3122	0.0541	0.4681
28	31.63	0.08	0.0523	9.9999	0.0116	9.9999	0.2272	0.6884	0.0361	0.3198	0.0526	0.4658
29	31.99	0.05	0.0588	9.9999	0.0129	9.9999	0.2257	0.7195	0.0348	0.3352	0.0483	0.4659
30	32.22	0.09	0.0624	9.9999	0.0127	9.9999	0.2428	0.7188	0.0351	0.3351	0.0488	0.4662
31	32.50	0.08	0.0616	9.9999	0.0156	9.9999	0.2744	0.7372	0.0359	0.3505	0.0507	0.4673
32	32.75	0.06	0.0537	9.9999	0.0133	9.9999	0.2481	0.7217	0.0365	0.3345	0.0505	0.4663
33	33.05	0.08	0.0593	9.9999	0.0133	9.9999	0.2454	0.7398	0.0363	0.3431	0.0490	0.4638
34	33.31	0.08	0.0566	9.9999	0.0156	9.9999	0.2847	0.7492	0.0372	0.3493	0.0496	0.4622
35	33.58	0.05	0.0536	9.9999	0.0142	9.9999	0.2684	0.7419	0.0367	0.3430	0.0521	0.4623
36	33.88	0.07	0.0607	9.9999	0.0179	9.9999	0.2956	0.7431	0.0377	0.3418	0.0507	0.4600
37	34.16	0.03	0.0491	9.9999	0.0122	9.9999	0.2652	0.7994	0.0370	0.3611	0.0468	0.4569
38	34.41	0.03	0.0515	9.9999	0.0143	9.9999	0.2837	0.8086	0.0352	0.3673	0.0435	0.4542
39	34.66	0.02	0.0499	9.9999	0.0135	9.9999	0.2711	0.8316	0.0326	0.3746	0.0384	0.4529
40	34.93	-0.01	0.0499	9.9999	0.0082	9.9999	0.2065	0.8639	0.0318	0.3876	0.0368	0.4487
41	35.18	-0.02	0.0517	9.9999	0.0093	9.9999	0.2236	0.8716	0.0316	0.3905	0.0362	0.4481
42	35.43	0.00	0.0430	9.9999	0.0049	9.9999	0.2308	0.8646	0.0319	0.3879	0.0369	0.4487
43	35.69	-0.01	0.0526	9.9999	0.0086	9.9999	0.2168	0.8733	0.0325	0.3906	0.0372	0.4473
44	35.94	-0.01	0.0372	9.9999	0.0080	9.9999	0.2156	0.9034	0.0306	0.4018	0.0338	0.4445
45	36.19	0.02	0.0617	9.9999	0.0129	9.9999	0.2636	0.9018	0.0318	0.4015	0.0352	0.4452
46	36.46	-0.02	0.0389	9.9999	0.0044	9.9999	0.1429	0.9137	0.0337	0.4040	0.0369	0.4422

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE/0-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	52	1.00	1.7	0.0	81=0P31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	36.70	-0.02	0.0371	9.9999	0.0076	9.9999	0.2000	0.9296	0.0312	0.4115	0.0335	0.4428
48	36.96	0.02	0.0383	9.9999	0.0054	9.9999	0.1687	0.9267	0.0319	0.4100	0.0344	0.4425
49	37.21	0.01	0.0383	9.9999	0.0085	9.9999	0.2225	0.9200	0.0303	0.4075	0.0329	0.4430
50	37.45	-0.00	0.0357	9.9999	0.0073	9.9999	0.2051	0.9389	0.0304	0.4134	0.0323	0.4403
51	37.68	-0.02	0.0329	9.9999	0.0055	9.9999	0.1720	0.9377	0.0315	0.4118	0.0336	0.4392
52	37.94	-0.01	0.0351	9.9999	0.0137	9.9999	0.3000	0.9327	0.0304	0.4104	0.0326	0.4403
53	38.19	0.00	0.0340	9.9999	0.0063	9.9999	0.1807	0.9553	0.0298	0.4191	0.0307	0.4387
54	38.41	-0.01	0.0326	9.9999	0.0053	9.9999	0.1641	0.9669	0.0274	0.4229	0.0283	0.4374
55	38.66	0.01	0.0367	9.9999	0.0077	9.9999	0.2158	0.9562	0.0316	0.4170	0.0331	0.4378
56	38.90	0.03	0.0429	9.9999	0.0113	9.9999	0.2940	0.9489	0.0322	0.4159	0.0339	0.4382
57	39.14	0.02	0.0336	9.9999	0.0061	9.9999	0.1854	0.9564	0.0373	0.4164	0.0391	0.4343
58	39.38	-0.03	0.0336	9.9999	0.0056	9.9999	0.1782	0.9617	0.0385	0.4156	0.0400	0.4321
59	39.61	-0.02	0.0288	9.9999	0.0041	9.9999	0.1547	0.9661	0.0396	0.4136	0.0410	0.4309
60	39.82	-0.01	0.0285	9.9999	0.0012	9.9999	0.0484	0.9617	0.0413	0.4063	0.0438	0.4293
61	40.07	-0.02	0.0275	9.9999	0.0049	9.9999	0.1583	0.9699	0.0389	0.4156	0.0401	0.4285
62	40.32	-0.04	0.0329	9.9999	0.0056	9.9999	0.1768	0.9698	0.0402	0.4062	0.0423	0.4256
63	40.53	-0.04	0.0286	9.9999	0.0025	9.9999	0.0896	0.9683	0.0368	0.4104	0.0396	0.4239
64	40.77	-0.01	0.0320	9.9999	0.0065	9.9999	0.1968	0.9722	0.0395	0.4140	0.0406	0.4259
65	41.00	-0.04	0.0272	9.9999	0.0031	9.9999	0.1146	0.9639	0.0405	0.4079	0.0420	0.4234
66	41.21	0.00	0.0353	9.9999	0.0075	9.9999	0.2131	0.9320	0.0417	0.3931	0.0447	0.4218
67	41.45	-0.03	0.0271	9.9999	0.0051	9.9999	0.1889	0.9196	0.0432	0.3867	0.0478	0.4205
68	41.67	-0.03	0.0290	9.9999	0.0047	9.9999	0.1626	0.9398	0.0441	0.3955	0.0469	0.4208
69	41.87	-0.04	0.0265	9.9999	0.0033	9.9999	0.1250	0.9108	0.0450	0.3819	0.0496	0.4193
70	42.09	-0.03	0.0259	9.9999	0.0030	9.9999	0.1163	0.9272	0.0472	0.3887	0.0509	0.4192
71	42.31	-0.01	0.0327	9.9999	0.0054	9.9999	0.1779	0.8947	0.0445	0.3753	0.0497	0.4194
72	42.50	-0.02	0.0310	9.9999	0.0049	9.9999	0.1565	0.9072	0.0448	0.3803	0.0494	0.4192
73	42.71	-0.01	0.0362	9.9999	0.0086	9.9999	0.2337	0.9213	0.0455	0.3865	0.0494	0.4195
74	42.91	-0.01	0.0320	9.9999	0.0056	9.9999	0.1785	0.8947	0.0452	0.3794	0.0511	0.4189
75	43.15	-0.03	0.0341	9.9999	0.0065	9.9999	0.2167	0.9331	0.0484	0.3901	0.0519	0.4181
76	43.36	-0.00	0.0342	9.9999	0.0092	9.9999	0.2415	0.8814	0.0476	0.3687	0.0540	0.4181
77	43.55	-0.04	0.0293	9.9999	0.0053	9.9999	0.1803	0.9059	0.0449	0.3778	0.0540	0.4170
78	43.75	-0.03	0.0283	9.9999	0.0047	9.9999	0.1867	0.8953	0.0482	0.3732	0.0538	0.4168
79	43.93	-0.04	0.0342	9.9999	0.0053	9.9999	0.1761	0.8829	0.0485	0.3662	0.0527	0.4151
80	44.14	-0.05	0.0259	9.9999	0.0025	9.9999	0.0945	0.8852	0.0427	0.3675	0.0482	0.4151
81	44.34	-0.06	0.0327	9.9999	0.0055	9.9999	0.1587	0.8861	0.0409	0.3559	0.0475	0.4138
82	44.51	-0.07	0.0260	9.9999	0.0013	9.9999	0.0502	0.8713	0.0416	0.3595	0.0477	0.4127
83	44.71	-0.05	0.0253	9.9999	0.0016	9.9999	0.0347	0.8819	0.0373	0.3631	0.0536	0.4118
84	44.89	-0.07	0.0340	9.9999	0.0062	9.9999	0.1797	0.8706	0.0430	0.3570	0.0494	0.4101
85	45.07	-0.03	0.0284	9.9999	0.0042	9.9999	0.1131	0.8701	0.0385	0.3563	0.0442	0.4094
86	45.22	-0.08	0.0260	9.9999	0.0016	9.9999	0.0618	0.8551	0.0367	0.3500	0.0429	0.4094
87	45.41	-0.08	0.0218	9.9999	-0.0012	9.9999	-0.0558	0.8840	0.0356	0.3614	0.0402	0.4089
88	45.61	-0.07	0.0260	9.9999	0.0015	9.9999	0.0495	0.8703	0.0375	0.3560	0.0431	0.4068
89	45.78	-0.08	0.0234	9.9999	0.0	9.9999	0.0	0.8687	0.0363	0.3535	0.0418	0.4070
90	45.94	-0.08	0.0256	9.9999	0.0008	9.9999	0.0316	0.8752	0.0365	0.3562	0.0417	0.4070
91	46.15	-0.07	0.0229	9.9999	-0.0017	9.9999	-0.0316	0.8980	0.0376	0.3650	0.0418	0.4065
92	46.31	-0.08	0.0194	9.9999	-0.0035	9.9999	-0.1809	0.8666	0.0445	0.3511	0.0513	0.4052

PAGE 3 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RXIC=6	RMI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	92	1.00	1.7	0.0	81.0F31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CA3	CN3	XCPF3	YCPF3	CNF4	CN4	CA4	XCPF4	YCPF4
93	6.51	-0.07	0.0235	0.9999	0.0104	0.9999	0.0170	0.0803	0.0485	0.3554	0.0551	0.4038
94	6.72	-0.06	0.0305	0.9999	0.0026	0.9999	0.0749	0.0664	0.0405	0.3501	0.0467	0.4041
95	6.99	-0.07	0.0329	0.9999	0.0041	0.9999	0.1250	0.0998	0.0490	0.3620	0.0545	0.4024
96	7.07	-0.06	0.0267	0.9999	0.0106	0.9999	0.0226	0.0840	0.0363	0.3598	0.0408	0.4048
97	7.29	-0.05	0.0335	0.9999	0.0054	0.9999	0.1766	0.0639	0.0564	0.3372	0.0668	0.3995
98	7.44	-0.04	0.0326	0.9999	0.0060	0.9999	0.1835	0.0810	0.0518	0.3514	0.0568	0.3989
99	7.69	-0.03	0.0421	0.9999	0.0063	0.9999	0.1784	0.0926	0.0565	0.3558	0.0643	0.3985
100	7.74	-0.03	0.0351	0.9999	0.0065	0.9999	0.1457	0.0968	0.0495	0.3581	0.0552	0.3993
101	7.99	-0.04	0.0328	0.9999	0.0135	0.9999	0.2455	0.0921	0.0816	0.3604	0.0859	0.3995
102	8.13	-0.04	0.0360	0.9999	0.0062	0.9999	0.1944	0.0901	0.0359	0.3581	0.0403	0.4023
103	8.32	-0.04	0.0316	0.9999	0.0034	0.9999	0.1725	0.0865	0.0376	0.3551	0.0422	0.4006
104	8.51	-0.03	0.0293	0.9999	0.0005	0.9999	0.0194	0.0972	0.0163	0.3651	0.0182	0.4070
105	8.66	-0.04	0.0345	0.9999	0.0066	0.9999	0.1496	0.0830	0.0347	0.3526	0.0393	0.3993
106	8.80	-0.03	0.0307	0.9999	0.0041	0.9999	0.1340	0.0871	0.0026	0.3643	0.0029	0.4107
107	9.05	-0.02	0.0360	0.9999	0.0079	0.9999	0.2094	0.0807	0.0042	0.3535	0.0049	0.4108
108	9.14	-0.01	0.0362	0.9999	0.0076	0.9999	0.2229	0.0868	-0.0011	0.3650	-0.0013	0.4123
109	9.36	-0.02	0.0363	0.9999	0.0052	0.9999	0.1579	0.0735	0.0007	0.3563	0.0008	0.4102
110	9.56	0.00	0.0319	0.9999	0.0037	0.9999	0.1164	0.0811	-0.0019	0.3671	-0.0023	0.4127
111	9.72	-0.02	0.0362	0.9999	0.0066	0.9999	0.1844	0.0871	-0.0017	0.3517	-0.0020	0.4104
112	9.90	-0.02	0.0293	0.9999	0.0067	0.9999	0.0287	0.0825	-0.0012	0.3650	-0.0014	0.4095
113	10.04	-0.00	0.0373	0.9999	0.0076	0.9999	0.2097	0.0182	-0.0013	0.3359	-0.0016	0.4105
114	10.25	-0.01	0.0336	0.9999	0.0055	0.9999	0.1672	0.0876	-0.0011	0.3540	-0.0013	0.4081
115	10.39	0.00	0.0340	0.9999	0.0136	0.9999	0.3743	0.0598	-0.0035	0.3520	-0.0041	0.4094
116	10.56	0.03	0.0301	0.9999	0.0174	0.9999	0.3460	0.0611	-0.0033	0.3512	-0.0038	0.4079
117	10.74	0.02	0.0308	0.9999	0.0115	0.9999	0.2858	0.0317	-0.0017	0.3362	-0.0020	0.4066
118	10.91	0.02	0.0271	0.9999	0.0107	0.9999	0.3128	0.0790	-0.0028	0.3548	-0.0032	0.4060
119	11.06	0.01	0.0291	0.9999	0.0115	0.9999	0.2614	0.0733	-0.0026	0.3543	-0.0023	0.4057
120	11.20	0.01	0.0342	0.9999	0.0054	0.9999	0.2404	0.0686	-0.0015	0.3523	-0.0017	0.4056
121	11.41	-0.04	0.0345	0.9999	0.0120	0.9999	0.2765	0.0595	0.0001	0.3475	0.0001	0.4043
122	11.61	0.01	0.0335	0.9999	0.0104	0.9999	0.2673	0.0803	-0.0011	0.3545	-0.0012	0.4054
123	11.80	-0.02	0.0353	0.9999	0.0097	0.9999	0.2474	0.0773	0.0003	0.3560	0.0003	0.4058
124	11.96	0.01	0.0343	0.9999	0.0100	0.9999	0.2551	0.0674	0.0003	0.3512	0.0003	0.4049
125	12.12	-0.00	0.0463	0.9999	0.0121	0.9999	0.2738	0.0698	0.0010	0.3516	0.0012	0.4043
126	12.31	-0.03	0.0350	0.9999	0.0107	0.9999	0.2206	0.0623	0.0006	0.3481	0.0009	0.4037
127	12.46	-0.02	0.0363	0.9999	0.0073	0.9999	0.2017	0.0656	-0.0002	0.3425	-0.0002	0.4049
128	12.65	-0.03	0.0393	0.9999	0.0102	0.9999	0.2602	0.0717	-0.0014	0.3534	-0.0016	0.4054
129	12.83	-0.03	0.0367	0.9999	0.0136	0.9999	0.1830	0.0642	-0.0002	0.3498	-0.0002	0.4048
130	12.99	-0.02	0.0381	0.9999	0.0096	0.9999	0.2478	0.0646	-0.0006	0.3497	-0.0007	0.4045
131	13.13	-0.03	0.0377	0.9999	0.0091	0.9999	0.1485	0.0984	0.0020	0.3552	0.0022	0.4021
132	13.30	-0.04	0.0333	0.9999	0.0088	0.9999	0.0172	0.0987	0.0018	0.3626	0.0020	0.4035
133	13.46	-0.03	0.0339	0.9999	0.0071	0.9999	0.2191	0.0912	0.0004	0.3592	0.0004	0.4029
134	13.63	-0.03	0.0326	0.9999	0.0062	0.9999	0.1944	0.0954	0.0030	0.3675	0.0033	0.4014
135	13.83	-0.04	0.0345	0.9999	0.0076	0.9999	0.2209	0.0920	0.0003	0.3779	0.0003	0.4011
136	13.98	-0.04	0.0320	0.9999	0.0057	0.9999	0.1787	0.0949	-0.0019	0.3646	-0.0021	0.4030
137	14.11	-0.04	0.0284	0.9999	0.0045	0.9999	0.1562	0.0949	-0.0012	0.3645	-0.0013	0.4029
138	14.26	-0.04	0.0282	0.9999	0.0059	0.9999	0.2100	0.0949	-0.0019	0.3610	-0.0021	0.4034

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RUN	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	92	1.60	167	0.0	01=0F31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	ACNF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
134	59.02	-0.02	0.0351	0.9999	0.0082	0.9999	0.2343	0.9227	-0.0005	0.3714	-0.0005	0.4025
140	58.81	-0.05	0.0290	0.9999	0.0083	0.9999	0.2076	0.8996	-0.0025	0.3613	-0.0028	0.4031
141	58.78	-0.03	0.0378	0.9999	0.0100	0.9999	0.2827	0.8984	-0.0026	0.3616	-0.0029	0.4034
142	58.93	-0.00	0.0320	0.9999	0.0060	0.9999	0.1835	0.8921	-0.0025	0.3600	-0.0028	0.4036
143	55.10	-0.04	0.0314	0.9999	0.0052	0.9999	0.1688	0.8922	-0.0019	0.3599	-0.0021	0.4036
144	55.28	-0.04	0.0339	0.9999	0.0098	0.9999	0.2940	0.9135	-0.0030	0.3666	-0.0033	0.4035
145	55.02	-0.08	0.0353	0.9999	0.0049	0.9999	0.2542	0.8953	-0.0025	0.3596	-0.0028	0.4039
146	55.59	-0.03	0.0327	0.9999	0.0070	0.9999	0.2147	0.8943	-0.0030	0.3616	-0.0034	0.4044
147	55.75	-0.05	0.0328	0.9999	0.0065	0.9999	0.1988	0.8847	-0.0027	0.3575	-0.0031	0.4041
148	55.89	-0.04	0.0318	0.9999	0.0084	0.9999	0.7032	0.9131	-0.0042	0.3691	-0.0046	0.4042
149	56.07	-0.03	0.0287	0.9999	0.0124	0.9999	0.0902	0.9272	-0.0044	0.3752	-0.0048	0.4044
150	56.21	-0.04	0.0428	0.9999	0.0120	0.9999	0.2998	0.8995	-0.0032	0.3598	-0.0036	0.4045
151	56.32	-0.05	0.0354	0.9999	0.0082	0.9999	0.2350	0.8958	-0.0030	0.3602	-0.0044	0.4044
152	55.52	-0.04	0.0341	0.9999	0.0079	0.9999	0.2324	0.9134	-0.0041	0.3700	-0.0045	0.4050
153	55.72	-0.05	0.0323	0.9999	0.0063	0.9999	0.2073	0.9369	-0.0051	0.3786	-0.0055	0.4049
154	56.00	-0.04	0.0367	0.9999	0.0077	0.9999	0.2225	0.9054	-0.0040	0.3642	-0.0044	0.4045
155	57.02	-0.03	0.0429	0.9999	0.0107	0.9999	0.2672	0.9163	-0.0042	0.3710	-0.0048	0.4049
156	57.15	-0.06	0.0353	0.9999	0.0097	0.9999	0.2756	0.8875	-0.0036	0.3591	-0.0041	0.4047
157	57.31	-0.05	0.0341	0.9999	0.0075	0.9999	0.2328	0.8850	-0.0032	0.3572	-0.0036	0.4036
158	57.47	-0.03	0.0335	0.9999	0.0074	0.9999	0.2216	0.8984	-0.0038	0.3616	-0.0043	0.4041
159	57.63	-0.05	0.0341	0.9999	0.0071	0.9999	0.2048	0.9241	-0.0052	0.3738	-0.0056	0.4045
160	57.81	-0.04	0.0326	0.9999	0.0075	0.9999	0.2294	0.9428	-0.0055	0.3822	-0.0056	0.4054
161	58.09	-0.06	0.0379	0.9999	0.0099	0.9999	0.2626	0.9361	-0.0059	0.3776	-0.0063	0.4033
162	56.16	-0.05	0.0446	0.9999	0.0137	0.9999	0.3079	0.9066	-0.0060	0.3904	-0.0062	0.4047
163	58.25	-0.07	0.0341	0.9999	0.0086	0.9999	0.1961	0.8978	-0.0059	0.3639	-0.0062	0.4050
164	58.43	-0.10	0.0405	0.9999	0.0073	0.9999	0.2005	0.9257	-0.0052	0.3756	-0.0056	0.4053
165	58.60	-0.10	0.0369	0.9999	0.0069	0.9999	0.2000	0.9213	-0.0050	0.3718	-0.0054	0.4033
166	58.82	-0.12	0.0353	0.9999	0.0067	0.9999	0.1903	0.9594	-0.0063	0.3890	-0.0066	0.4055
167	58.97	-0.13	0.0324	0.9999	0.0056	0.9999	0.1713	0.9677	-0.0065	0.3923	-0.0067	0.4054
168	59.12	-0.12	0.0295	0.9999	0.0043	0.9999	0.1629	0.9589	-0.0069	0.3871	-0.0072	0.4037
169	59.26	-0.12	0.0302	0.9999	0.0106	0.9999	0.2643	0.9556	-0.0073	0.3872	-0.0077	0.4051
170	59.46	-0.10	0.0334	0.9999	0.0078	0.9999	0.2282	0.9534	-0.0072	0.3846	-0.0075	0.4034
171	59.58	-0.11	0.0352	0.9999	0.0072	0.9999	0.2051	0.9735	-0.0076	0.3931	-0.0078	0.4038
172	59.73	-0.11	0.0334	0.9999	0.0049	0.9999	0.1471	0.9847	-0.0069	0.3967	-0.0070	0.4025
173	59.88	-0.09	0.0257	0.9999	0.0003	0.9999	0.0116	0.9303	-0.0060	0.3732	-0.0065	0.4011
174	60.01	-0.07	0.0283	0.9999	0.0027	0.9999	0.0957	0.9307	-0.0058	0.3725	-0.0062	0.4002
175	60.16	-0.09	0.0332	0.9999	0.0061	0.9999	0.2201	0.9357	-0.0057	0.3748	-0.0061	0.4005
176	60.29	-0.02	0.0341	0.9999	0.0046	0.9999	0.1600	0.9496	-0.0070	0.3790	-0.0074	0.3991
177	60.44	-0.06	0.0337	0.9999	0.0071	0.9999	0.2113	1.2163	-0.0101	0.4052	-0.0100	0.3987
178	60.34	-0.09	0.0342	0.9999	0.0102	0.9999	0.2509	0.9566	-0.0077	0.3821	-0.0081	0.3995
179	60.43	-0.09	0.0378	0.9999	0.0094	0.9999	0.2574	0.9951	-0.0083	0.3973	-0.0090	0.3993

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REYN-6	PHI	CONF	I	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	99	1.10	1.7	0.0	81-0831	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-4.22	-0.01	-2.3167	7.2167	-0.0217	-0.0787	-0.0046	0.6264	0.2461	0.5403	-3.1162
2	-4.23	-0.01	-2.3497	7.2405	0.0965	-0.1585	-0.0045	0.6276	0.2463	0.5433	-3.0814
3	-4.23	-0.02	-2.2037	7.1370	0.0357	-0.0653	0.0006	0.6156	0.2460	0.5316	-3.0814
4	-4.23	-0.02	-2.3724	7.2902	0.0259	-0.0552	-0.0047	0.6249	0.2457	0.5431	-3.0726
5	-4.23	-0.01	-2.3343	7.1713	0.1273	-0.1273	-0.0045	0.6351	0.2470	0.5481	-3.0716
6	-2.78	-0.01	-1.4662	5.0077	0.0.26	-0.0437	0.0010	0.7769	0.2675	0.5094	-3.1978
7	-3.93	-0.01	-1.9131	6.7012	0.0587	-0.0663	0.0016	0.7175	0.2675	0.4699	-3.3766
8	0.97	-0.02	-0.0513	3.8187	0.0034	-0.0460	-0.0031	0.6719	0.2353	0.4366	-3.8021
9	2.46	-0.01	-0.5336	2.5559	0.1256	-0.1556	-0.0023	0.6313	0.2299	0.4014	-4.7893
10	4.89	-0.02	-0.1576	1.7861	0.0307	-0.1765	-0.0059	0.6066	0.2330	0.3736	-10.5133
11	6.75	-0.01	0.1392	1.1592	0.0001	-0.0896	-0.0062	0.5908	0.2401	0.3463	6.1930
12	8.73	-0.01	0.4558	0.8415	0.0371	-0.0235	-0.0107	0.5893	0.2440	0.3253	1.3771
13	10.69	-0.02	1.2398	0.1650	-0.0359	0.0624	-0.0108	0.5795	0.2829	0.2966	0.2154
14	12.52	-0.02	1.1569	-0.5774	-0.0265	0.0450	-0.0036	0.5600	0.2959	0.2641	-0.4991
15	14.60	-0.02	1.6101	-1.4531	-0.0208	0.0860	0.0076	0.5236	0.3060	0.2176	-0.9025
16	16.63	-0.02	2.1163	-2.4116	0.0085	0.0663	0.0083	0.4860	0.3085	0.1772	-1.1417
17	18.72	-0.02	2.6027	-3.3734	-0.0343	0.2038	0.0091	0.4615	0.3173	0.1243	-1.2637
18	20.79	-0.02	3.2221	-4.3365	-0.0434	0.1039	0.0001	0.4046	0.3295	0.0751	-1.3639
19	22.81	-0.03	3.8722	-5.3497	-0.1219	0.3076	-0.0192	0.3552	0.3371	0.0181	-1.3593
20	24.90	-0.01	4.5756	-6.3569	0.0434	-0.0432	-0.0215	0.3021	0.3364	-0.0343	-1.2951
21	27.10	-0.01	5.3545	-6.0785	0.0500	-0.0456	-0.0287	0.2609	0.3422	-0.0612	-1.1991
22	29.29	0.03	6.0002	-7.3496	0.5662	-1.2935	0.0491	0.2513	0.3537	-0.1024	-1.1545
23	30.23	0.04	6.2715	-7.8552	0.6804	-1.4086	0.0452	0.2338	0.3592	-0.1256	-1.1270
24	30.24	0.06	6.6818	-7.5946	0.4960	-0.9592	0.0268	0.2525	0.3599	-0.1068	-1.1372
25	30.55	0.03	6.5108	-7.7253	0.6165	-1.3576	0.0505	0.2242	0.3575	-0.1287	-1.1348
26	30.83	0.05	6.5876	-7.6736	0.5376	-1.2064	0.0821	0.2242	0.3594	-0.1352	-1.1270
27	31.20	0.06	7.1136	-7.9172	0.4959	-0.9167	0.0561	0.2261	0.3587	-0.1326	-1.1131
28	31.50	0.03	7.2505	-8.0472	0.5309	-1.1631	0.0257	0.2153	0.3586	-0.1433	-1.1122
29	31.79	0.05	7.3555	-8.3107	0.8593	-1.5939	0.0583	0.2090	0.3600	-0.1510	-1.1253
30	32.08	0.04	7.4146	-8.4659	0.7407	-1.6905	0.0586	0.2001	0.3628	-0.1627	-1.1144
31	32.37	0.05	7.5029	-8.6398	0.6421	-1.4737	0.0376	0.1969	0.3598	-0.1629	-1.1058
32	32.66	0.05	7.7297	-8.7235	0.7225	-1.5850	0.0746	0.2023	0.3631	-0.1608	-1.1199
33	32.91	0.06	7.9586	-8.9259	0.9059	-2.0284	0.1021	0.1860	0.3649	-0.1789	-1.1158
34	33.21	0.02	8.1756	-8.9524	0.6665	-0.9327	0.0365	0.1733	0.3615	-0.1882	-1.0969
35	33.49	0.01	8.3473	-9.1902	0.3000	-0.6030	0.0333	0.1661	0.3612	-0.1951	-1.0957
36	33.78	0.01	8.3750	-9.2309	0.2841	-0.5826	0.0364	0.1639	0.3617	-0.1973	-1.1022
37	34.08	0.03	8.3529	-9.2029	0.0625	-1.2175	0.1163	0.1727	0.3616	-0.1889	-1.0885
38	34.30	0.01	8.5874	-9.4396	0.4449	-0.9727	0.0761	0.1686	0.3700	-0.2014	-1.0958
39	34.59	0.06	8.7925	-9.5649	0.3709	-0.8192	0.0656	0.1522	0.3620	-0.2098	-1.0879
40	34.88	-0.01	8.9915	-9.7996	0.1935	-0.2320	0.0762	0.1573	0.3626	-0.2053	-1.0899
41	35.17	-0.02	9.2550	-9.9779	0.0115	0.0245	0.0913	0.1554	0.3677	-0.2123	-1.0826
42	35.36	0.00	9.1351	-9.8775	0.2942	-0.3423	0.1185	0.1452	0.3609	-0.2157	-1.0813
43	35.64	0.01	9.2559	-9.9958	0.1958	-0.5885	0.1860	0.1464	0.3579	-0.2095	-1.0766
44	35.89	-0.02	9.4458	-10.2489	0.0542	0.0347	0.1340	0.1236	0.3563	-0.2327	-1.0867
45	36.15	-0.01	9.6484	-10.4224	0.0561	-0.2926	0.1490	0.0901	0.3519	-0.2617	-1.0706
46	36.39	-0.03	9.7906	-10.5489	-0.1260	0.5685	0.1125	0.0983	0.3516	-0.2533	-1.0779

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RNLV-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	93	1.10	1.7	0.0	81×0F31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
47	36.66	-0.01	9.5092	-10.9995	0.1038	0.3500	0.1338	0.1038	0.3689	-0.2651	-1.0696
48	36.91	-0.02	9.9991	-10.9801	0.0002	0.2700	0.1712	0.0921	0.3508	-0.2586	-1.0624
49	37.16	-0.03	10.0535	-10.9995	-0.1395	0.6563	0.1650	0.0831	0.3462	-0.2630	-1.0632
50	37.40	-0.02	10.1335	-10.9834	0.0465	0.1938	0.1978	0.0969	0.3546	-0.2577	-1.0701
51	37.66	-0.03	10.3499	-10.9557	-0.0239	0.4595	0.1606	0.0773	0.3482	-0.2706	-1.0689
52	37.88	-0.03	10.3905	-10.7936	-0.1106	0.7731	0.1138	0.0647	0.3421	-0.2779	-1.0788
53	38.16	-0.04	10.4963	-10.9257	-0.1506	0.6556	0.1458	0.0605	0.3469	-0.2863	-1.0811
54	38.37	-0.03	10.6678	-10.9481	-0.0865	0.5197	0.1462	0.0778	0.3481	-0.2882	-1.0368
55	38.60	-0.03	10.8522	-11.0495	-0.2727	0.7511	0.1206	0.0403	0.3494	-0.3001	-1.0334
56	38.84	-0.03	10.7463	-11.0778	-0.3581	1.0271	0.0937	0.0445	0.3310	-0.2864	-1.0291
57	39.10	-0.03	10.8069	-11.1325	-0.1757	0.7196	0.0951	0.0403	0.3385	-0.2942	-1.0211
58	39.33	-0.03	10.9315	-11.0769	-0.1037	0.5202	0.0961	0.0501	0.3395	-0.2934	-1.0131
59	39.56	-0.03	10.9792	-11.0183	-0.2231	0.6507	0.0855	0.0257	0.3186	-0.2929	-1.0038
60	39.81	-0.03	11.0949	-11.0474	0.0035	0.0460	0.1398	0.0528	0.3435	-0.2907	-1.0003
61	40.02	-0.05	11.0597	-11.0655	-0.1081	0.3598	0.1026	0.0496	0.3284	-0.2747	-0.9978
62	40.29	-0.04	11.3042	-11.2462	-0.0866	0.5263	0.0453	0.0140	0.3170	-0.3030	-0.9944
63	40.53	-0.05	11.2826	-11.2439	-0.3764	0.7910	0.0503	0.0110	0.3042	-0.2932	-0.9696
64	40.77	-0.05	11.4143	-11.3427	-0.2196	0.7159	0.0143	-0.0234	0.2901	-0.3135	-0.9671
65	41.06	-0.03	11.4813	-11.4573	-0.0213	0.0718	0.0424	0.0136	0.3140	-0.3004	-0.9718
66	41.26	-0.03	11.5551	-11.4933	-0.0524	0.3359	0.0369	-0.0277	0.2814	-0.3092	-0.9514
67	41.45	-0.04	11.7305	-11.6155	-0.1279	0.3647	0.0479	-0.0532	0.2801	-0.3334	-0.9398
68	41.67	-0.05	11.7541	-11.3322	-0.2780	0.6602	0.0157	-0.0783	0.2642	-0.3426	-0.9611
69	41.90	-0.04	11.9273	-11.6407	-0.1545	0.2835	0.0544	-0.0388	0.2862	-0.3249	-0.9255
70	42.09	-0.07	12.0282	-11.5651	-0.3669	0.5746	-0.0143	-0.0768	0.2637	-0.3406	-0.9615
71	42.36	-0.06	11.9852	-11.6411	-0.2238	0.4922	0.0344	-0.0609	0.2671	-0.3280	-0.9269
72	42.52	-0.05	12.1547	-11.3845	-0.1642	0.3023	0.0341	-0.0867	0.2654	-0.3522	-0.9347
73	42.71	-0.04	12.2474	-11.4936	-0.0254	0.3713	0.0232	-0.0931	0.2534	-0.3466	-0.9304
74	42.93	-0.05	12.3179	-11.2609	-0.1224	0.2639	0.0348	-0.1182	0.2483	-0.3665	-0.9142
75	43.19	-0.05	12.3492	-11.3348	-0.1165	0.3889	0.0396	-0.0969	0.2476	-0.3626	-0.9182
76	43.32	-0.05	12.3447	-11.2180	-0.1058	0.1548	0.0459	-0.0909	0.2631	-0.3541	-0.9086
77	43.56	-0.04	12.4687	-11.1421	-0.0377	0.2033	0.0462	-0.0637	0.2577	-0.3215	-0.8937
78	43.76	-0.05	12.5834	-11.0704	-0.1223	0.2656	0.0047	-0.1356	0.2590	-0.3946	-0.8812
79	43.96	-0.06	12.5936	-10.9850	-0.1905	0.4662	0.0142	-0.0304	0.2678	-0.3583	-0.8751
80	44.15	-0.04	12.7267	-11.0237	-0.0529	0.3409	0.0257	-0.0805	0.2978	-0.3783	-0.8831
81	44.35	-0.03	12.7341	-11.0011	-0.0367	0.2119	0.0205	-0.0806	0.2744	-0.3351	-0.8636
82	44.56	-0.03	12.9057	-11.1424	-0.1309	0.3110	-0.0345	-0.1672	0.2647	-0.4119	-0.9074
83	44.72	-0.01	12.7316	-10.8620	0.1085	-0.0995	-0.0034	-0.0251	0.3088	-0.3337	-0.8476
84	44.92	-0.03	12.9625	-11.0378	-0.1195	0.3293	0.0059	-0.0823	0.2697	-0.3720	-0.8698
85	45.11	-0.02	13.1917	-11.1228	-0.2474	0.6383	-0.0157	-0.1495	0.2497	-0.3992	-0.8887
86	45.27	-0.04	13.0256	-11.1536	-0.0832	0.3963	-0.0049	-0.0956	0.2750	-0.3707	-0.8563
87	45.45	-0.04	13.2315	-10.8892	-0.1157	0.4194	-0.0241	-0.0938	0.2914	-0.3452	-0.8341
88	45.63	-0.05	13.1577	-11.2510	-0.2055	0.7368	-0.0356	-0.0648	0.2845	-0.3494	-0.8564
89	45.83	-0.05	13.3454	-11.0085	-0.1657	0.4394	-0.0396	-0.1413	0.2529	-0.3942	-0.8596
90	46.01	-0.05	13.3496	-11.5407	-0.1593	0.6369	-0.0350	-0.1108	0.2746	-0.3654	-0.8648
91	46.18	-0.05	13.2396	-11.1127	-0.1496	0.5792	-0.0455	-0.1005	0.2789	-0.3794	-0.8356
92	46.36	-0.04	13.3217	-10.8505	-0.0773	0.5250	-0.0445	-0.0617	0.2731	-0.3349	-0.8130

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 93 | MACH 1.10 | RATIO-6 1.7 | PHI 0.0 | CONF 81-0F31 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
93	96.59	-0.05	13.3965	-10.8863	-0.1185	0.5921	-0.0485	-0.0656	0.2560	-0.3197	-0.8127
94	96.72	-0.05	13.5317	-11.0356	-0.2272	0.6272	-0.0234	-0.1605	0.2502	-0.4107	-0.8389
95	96.83	-0.05	13.7346	-11.2332	-0.1784	0.5617	-0.0229	-0.1563	0.2667	-0.4258	-0.8441
96	97.12	-0.05	13.7765	-11.3101	-0.1849	0.6162	-0.0446	-0.1735	0.2592	-0.3827	-0.8211
97	97.27	-0.05	13.8215	-11.3634	-0.2436	0.6636	-0.0493	-0.1122	0.2569	-0.3711	-0.8137
98	97.44	-0.05	13.8291	-11.4111	-0.2174	0.6196	-0.0330	-0.1320	0.2635	-0.3955	-0.8179
99	97.66	-0.05	14.0635	-11.6337	-0.1279	0.6114	-0.0063	-0.1251	0.2557	-0.3608	-0.8413
100	97.83	-0.05	13.9081	-11.1731	-0.2184	0.5911	-0.0495	-0.1243	0.2616	-0.3859	-0.8035
101	97.99	-0.05	13.9827	-11.1532	-0.2436	0.7772	-0.0326	-0.1206	0.2757	-0.3963	-0.7976
102	98.16	-0.04	14.0138	-11.2698	-0.1560	0.5468	-0.0213	-0.1498	0.2742	-0.4240	-0.7993
103	98.34	-0.04	13.9832	-10.8838	-0.2132	0.7213	-0.0480	-0.0509	0.3036	-0.3940	-0.7768
104	98.50	-0.04	13.9514	-11.0173	-0.1438	0.7742	-0.0543	-0.0837	0.2864	-0.3702	-0.7748
105	98.68	-0.03	14.1335	-11.2476	-0.2538	0.8174	-0.0680	-0.0890	0.3236	-0.4126	-0.7840
106	98.85	-0.03	14.1273	-10.9509	-0.1011	0.7322	-0.0931	-0.0700	0.3256	-0.3956	-0.7661
107	99.03	-0.03	14.3311	-11.0287	-0.1510	0.8346	-0.1103	-0.0493	0.3588	-0.4081	-0.7680
108	99.22	-0.04	14.3934	-11.0472	-0.0821	0.8567	-0.0737	-0.0969	0.3448	-0.4416	-0.7928
109	99.38	-0.04	14.3454	-11.0484	-0.1463	0.7158	-0.1136	-0.0209	0.3642	-0.3851	-0.7715
110	99.56	-0.04	14.4196	-11.1152	-0.0554	0.5706	-0.1202	-0.0272	0.3772	-0.4044	-0.7714
111	99.72	-0.03	14.3815	-11.0113	-0.0149	0.3517	-0.1038	-0.0106	0.3877	-0.3983	-0.7587
112	99.91	-0.04	14.5946	-11.2076	-0.0394	0.4023	-0.1036	-0.0171	0.3923	-0.4094	-0.7677
113	96.08	-0.03	14.5726	-11.0968	-0.1324	0.2716	-0.0922	-0.0109	0.3940	-0.4049	-0.7625
114	90.22	-0.04	14.4651	-11.0872	-0.0141	0.2643	-0.0925	-0.0089	0.3998	-0.4087	-0.7678
115	90.42	-0.03	14.6035	-11.2515	-0.0847	0.2947	-0.0232	0.0472	0.4128	-0.3656	-0.7360
116	90.58	-0.03	14.4612	-10.9138	-0.1044	0.1540	-0.0549	0.0203	0.4150	-0.3947	-0.7446
117	90.75	-0.03	14.6267	-11.0220	-0.0217	0.3156	-0.0286	0.0171	0.4180	-0.4009	-0.7368
118	90.92	-0.03	14.6409	-11.0313	-0.0356	1.5354	0.0368	0.0196	0.4184	-0.3988	-0.7044
119	91.07	-0.02	14.6931	-10.9438	-0.2394	1.6263	0.0317	0.0226	0.4192	-0.3946	-0.7169
120	91.26	-0.03	14.7941	-10.9718	-0.1397	1.6170	0.0430	0.0169	0.4167	-0.3998	-0.7166
121	91.43	-0.03	14.7107	-10.8283	-0.0586	1.4459	0.0529	0.0285	0.4225	-0.3960	-0.6950
122	91.60	-0.03	14.7358	-10.8480	-0.1067	1.5267	0.0529	0.0250	0.4267	-0.4017	-0.7058
123	91.78	-0.02	14.7231	-10.8241	-0.1367	1.2821	0.0535	0.0427	0.4309	-0.3981	-0.6908
124	91.94	-0.03	14.6998	-10.6985	-0.0734	1.4865	0.0477	0.0367	0.4274	-0.3907	-0.6850
125	92.12	-0.03	14.7117	-9.6915	-0.0057	1.3673	0.0480	0.0222	0.4309	-0.4087	-0.5796
126	92.29	-0.02	14.7438	-9.6993	-0.1375	1.3764	0.0426	0.0376	0.4260	-0.3884	-0.6781
127	92.48	-0.02	14.6796	-9.8267	-0.0964	1.4149	0.0477	0.0151	0.4216	-0.4123	-0.6695
128	92.63	-0.02	14.8239	-9.6136	-0.2370	1.4774	0.0424	0.0436	0.4296	-0.3860	-0.6668
129	92.80	-0.03	15.0219	-10.2087	-0.1157	1.5339	0.0482	0.0214	0.4290	-0.4076	-0.6746
130	92.97	-0.02	14.9568	-9.9679	-0.2134	1.4611	0.0429	0.0123	0.4275	-0.4152	-0.6652
131	93.14	-0.02	14.9979	-9.9114	-0.2594	1.5049	0.0430	0.0200	0.4246	-0.4098	-0.6542
132	93.30	-0.02	15.0435	-9.9591	-0.1755	1.5954	0.0429	0.0083	0.4282	-0.4199	-0.6624
133	93.47	-0.02	15.1453	-9.9554	-0.2376	1.4840	0.0382	0.0076	0.4207	-0.4131	-0.6576
134	93.64	-0.04	15.2256	-10.0479	-0.0354	1.5163	0.0493	-0.0036	0.4162	-0.4218	-0.6632
135	93.81	-0.03	15.2296	-10.1780	-0.2115	1.4376	0.0332	0.0033	0.4238	-0.4205	-0.6683
136	93.98	-0.03	15.2436	-9.8568	-0.0981	1.4017	0.0336	-0.0062	0.4200	-0.4262	-0.6477
137	94.15	-0.04	15.5136	-10.4122	-0.1235	1.2337	0.0351	-0.0031	0.4214	-0.4265	-0.6709
138	94.34	-0.05	15.6505	-10.4721	-0.0253	1.0777	0.0343	0.0033	0.4276	-0.4243	-0.6691

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 9

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	ALTUDE	PRI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	93	1.10	1.7		0.0	81.0781	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
139	54.50	-1.04	15.2515	-10.3918	0.0571	1.0363	0.0308	-0.0095	0.4247	-0.4343	-0.6678
140	54.98	-0.04	15.7500	-10.7127	0.0195	1.1456	0.0361	-0.0201	0.4271	-0.4472	-0.6798
141	54.99	-0.09	15.7106	-10.6903	0.0249	1.0023	0.0319	-0.0249	0.4271	-0.4520	-0.6745
142	55.00	-0.04	15.8930	-10.8299	0.0099	1.0136	0.0367	-0.0179	0.4298	-0.4468	-0.6645
143	55.19	-0.09	15.8134	-10.8787	0.0129	0.8478	0.0207	-0.0341	0.4343	-0.4684	-0.6706
144	54.95	-0.03	15.8355	-10.8997	0.1450	0.9144	0.0321	-0.0256	0.4329	-0.4583	-0.6725
145	55.44	-0.04	15.8342	-10.8735	0.0257	0.8139	0.0295	-0.0269	0.4345	-0.4614	-0.6692
146	55.49	-0.09	15.9750	-10.9773	0.0259	0.8572	0.0278	-0.0591	0.4344	-0.4936	-0.6746
147	55.99	-0.04	15.9626	-10.9770	0.0262	0.7340	0.0332	-0.0326	0.4437	-0.4763	-0.6752
148	54.00	-0.04	15.8574	-10.8092	0.0727	0.8900	0.0322	-0.0465	0.4369	-0.4815	-0.6803
149	54.10	-0.09	15.8196	-10.8821	0.0249	0.8267	0.0319	-0.0486	0.4374	-0.4861	-0.6712
150	54.30	-0.04	15.8378	-10.7861	0.0045	0.7242	0.0327	-0.0498	0.4359	-0.5058	-0.6808
151	55.44	-0.09	15.9031	-10.7527	0.0764	0.7816	0.0285	-0.0569	0.4353	-0.4858	-0.6891
152	54.65	-0.04	15.1677	-11.2600	0.0579	0.5640	0.0162	-0.0736	0.4437	-0.5174	-0.6985
153	55.20	-0.09	15.1303	-11.1930	0.1195	0.5127	0.0192	-0.0552	0.4434	-0.4987	-0.6950
154	54.91	-0.05	15.7306	-10.8751	0.0228	0.5717	0.0172	-0.0685	0.4761	-0.4747	-0.6913
155	57.09	-0.05	16.0525	-11.0172	0.0297	0.6076	0.0177	-0.0710	0.4305	-0.5016	-0.7108
156	57.22	-0.05	15.9609	-11.2184	0.0233	0.5805	0.0172	-0.0668	0.4294	-0.4943	-0.7081
157	57.41	-0.05	16.1061	-11.3546	-0.0559	0.5877	0.0182	-0.0827	0.4370	-0.5198	-0.7166
158	57.55	-0.04	16.0447	-11.3900	0.1001	0.3196	0.0132	-0.0688	0.4370	-0.5059	-0.7226
159	57.69	-0.09	16.2631	-11.6673	-0.0491	0.4771	0.0078	-0.0795	0.4338	-0.5134	-0.7266
160	57.43	-0.05	15.7459	-11.6392	-0.0103	0.4567	0.0173	-0.0779	0.4283	-0.5063	-0.7369
161	58.01	-0.09	15.9671	-11.8099	-0.1006	0.3337	0.0184	-0.1010	0.4243	-0.5253	-0.7396
162	58.16	-0.06	15.8752	-11.7496	-0.1005	0.4377	0.0126	-0.0758	0.4212	-0.4971	-0.7401
163	54.35	-0.05	15.1525	-11.4702	-0.0303	0.3910	0.0185	-0.1075	0.4195	-0.5270	-0.7408
164	58.57	-0.06	16.0753	-12.2204	-0.0493	0.4550	0.0303	-0.1280	0.4429	-0.5709	-0.7371
165	58.73	-0.09	16.0583	-12.2136	-0.1256	-0.0122	0.0215	-0.1211	0.4402	-0.5673	-0.7378
166	58.90	-0.06	16.0187	-12.0214	-0.0626	-0.3559	0.0217	-0.1316	0.4472	-0.5788	-0.7478
167	59.01	-0.09	16.1614	-11.6952	-0.1925	-0.5943	0.0208	-0.1273	0.4263	-0.5536	-0.7206
168	59.18	-0.07	16.0534	-12.3363	0.0005	-0.1710	0.0267	-0.1417	0.4438	-0.5855	-0.7459
169	59.36	-0.11	16.1105	-11.7956	-0.1574	-0.0128	0.0302	-0.1237	0.4328	-0.5565	-0.7322
170	59.43	-0.07	15.9154	-11.6493	-0.0421	0.0517	0.0356	-0.1109	0.4195	-0.5304	-0.7193
171	59.58	-0.06	16.0525	-11.8424	0.0307	0.1053	0.0407	-0.1709	0.4226	-0.5935	-0.7278
172	59.74	-0.03	16.3221	-12.0347	0.2106	0.2542	0.0351	-0.1566	0.4401	-0.5967	-0.7373
173	59.89	-0.04	16.3583	-12.0667	0.1453	0.0746	0.0360	-0.1706	0.4389	-0.6096	-0.7380
174	60.04	-0.12	16.4027	-12.1937	-0.0315	-0.1220	0.0310	-0.1604	0.4501	-0.6105	-0.7435
175	60.20	-0.08	16.3626	-12.1727	-0.0607	0.2599	0.0307	-0.1605	0.4559	-0.6164	-0.7633
176	60.34	-0.09	16.4178	-12.3624	-0.0377	0.5663	0.0298	-0.1639	0.4573	-0.6012	-0.7542
177	60.49	-0.05	16.4971	-12.5252	-0.2198	0.1610	0.0310	-0.1390	0.4525	-0.5915	-0.7597
178	60.52	-0.05	16.2577	-11.9021	0.1953	0.3594	0.0397	-0.1910	0.4438	-0.6348	-0.7358
179	60.53	-0.02	16.3917	-12.1550	0.0972	0.4747	0.0196	-0.1837	0.4369	-0.6206	-0.7430

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	PXIO-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	99	1.10	1.7	0.0	81+0F31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
1	-0.02	-0.01	-0.0102	0.0021	0.0143	-0.1246	-0.6359	-0.5370	-0.0096	-0.2677	0.0157	0.4986
2	-0.03	-0.01	-0.0102	0.0016	0.0109	-0.1111	-0.6728	-0.5431	-0.0090	-0.2707	0.0148	0.4983
3	-0.03	-0.02	-0.0203	0.0016	0.0085	-0.0708	-0.4187	-0.5296	-0.0089	-0.2644	0.0168	0.4993
4	-0.03	-0.02	-0.0104	0.0029	0.0107	-0.1140	-0.6359	-0.5401	-0.0090	-0.2640	0.0146	0.4980
5	-0.03	-0.01	-0.0101	0.0017	0.0121	-0.1348	-0.8582	-0.5316	-0.0079	-0.2663	0.0149	0.5014
6	-2.78	-0.01	-0.0102	0.0029	0.0091	-0.1099	-0.5000	-0.4300	-0.0102	-0.2722	0.0238	0.5167
7	-0.03	-0.01	-0.0172	0.0023	0.0041	-0.1337	-0.5291	-0.3328	-0.0098	-0.1755	0.0295	0.5393
8	0.97	-0.02	-0.0104	0.0013	0.0086	-0.0793	-0.5122	-0.2374	-0.0098	-0.1362	0.0414	0.5737
9	2.08	-0.01	-0.0158	0.0016	0.0072	-0.1013	-0.6937	-0.1638	-0.0079	-0.0921	0.0551	0.6004
10	4.49	-0.02	-0.0165	0.0018	0.0085	-0.1440	-0.5800	-0.0634	-0.0041	-0.0552	0.0648	0.8705
11	6.75	-0.01	-0.0169	0.0012	0.0071	-0.0615	-0.3691	-0.0050	-0.0002	-0.0256	0.0400	5.1000
12	8.73	-0.01	-0.0200	0.0010	0.0067	-0.0386	-0.3359	0.0068	0.0054	-0.0026	0.1327	-0.0639
13	10.74	-0.02	-0.0203	0.0002	0.0045	-0.0267	-0.2696	0.0854	0.0122	0.0148	0.1432	0.1737
14	12.82	-0.02	-0.0207	0.0011	0.0099	-0.0414	-0.3722	0.1426	0.0162	0.0435	0.1138	0.3050
15	14.88	-0.02	-0.0201	0.0017	0.0108	-0.0646	-0.5373	0.2126	0.0203	0.0769	0.0957	0.3615
16	14.83	-0.02	-0.0203	0.0013	0.0099	-0.0466	-0.3043	0.2867	0.0243	0.1112	0.0851	0.3887
17	18.72	-0.02	-0.0203	0.0014	0.0142	-0.0353	-0.4186	0.3655	0.0283	0.1430	0.0718	0.3912
18	20.79	-0.02	-0.0207	0.0011	0.0056	-0.0309	-0.1573	0.4531	0.0286	0.1801	0.0590	0.3974
19	22.87	-0.03	-0.0209	0.0018	-0.0084	-0.0249	0.1492	0.5423	0.0260	0.2148	0.0479	0.3964
20	24.96	-0.01	-0.0150	0.0003	0.0077	-0.0192	-0.4936	0.6206	0.0238	0.2461	0.0384	0.3966
21	27.10	-0.01	-0.0207	-0.0020	0.0165	0.5465	-2.8378	0.6995	0.0209	0.2769	0.0299	0.3958
22	29.29	0.03	0.1507	-0.0018	0.0950	-0.0114	0.5985	0.7790	0.0136	0.3053	0.0175	0.3910
23	30.23	0.02	0.1287	0.0052	0.0758	0.0332	0.6050	0.7861	0.0150	0.3048	0.0191	0.3875
24	30.24	0.02	0.1038	0.0048	0.0663	0.0454	0.6402	0.7824	0.0153	0.3030	0.0196	0.3873
25	30.55	0.03	0.1119	0.0053	0.0709	0.0528	0.6407	0.7860	0.0152	0.3038	0.0198	0.3865
26	30.83	0.03	0.1408	0.0037	0.0916	0.0784	0.6524	0.7929	0.0147	0.3053	0.0186	0.3851
27	31.20	0.02	0.1298	0.0061	0.0866	0.0691	0.6496	0.7998	0.0149	0.3071	0.0187	0.3864
28	31.50	0.03	0.1229	0.0083	0.0729	0.0677	0.6938	0.8377	0.0133	0.3226	0.0159	0.3850
29	31.79	0.05	0.1498	0.0088	0.1123	0.0442	0.5628	0.8698	0.0097	0.3334	0.0112	0.3855
30	32.08	0.04	0.1702	0.0090	0.0997	0.0418	0.5725	0.8719	0.0103	0.3361	0.0118	0.3855
31	32.37	0.04	0.1598	0.0090	0.0933	0.0567	0.6675	0.8712	0.0112	0.3336	0.0129	0.3865
32	32.62	0.05	0.1872	0.0078	0.1092	0.0407	0.5835	0.8853	0.0101	0.3408	0.0114	0.3849
33	32.91	0.06	0.1937	0.0081	0.1120	0.0316	0.5784	0.8945	0.0099	0.3431	0.0111	0.3836
34	33.21	0.06	0.1265	0.0032	0.0811	0.0294	0.6410	0.8904	0.0115	0.3419	0.0129	0.3860
35	33.49	0.01	0.0994	0.0035	0.0837	0.0353	0.6411	0.8869	0.0127	0.3391	0.0143	0.3815
36	33.78	0.01	0.1423	0.0032	0.0829	0.0367	0.6819	0.8963	0.0123	0.3425	0.0138	0.3821
37	34.04	0.03	0.1316	0.0009	0.0871	0.0069	0.6616	0.8995	0.0117	0.3420	0.0130	0.3802
38	34.30	0.01	0.1301	-0.0006	0.0768	-0.0015	0.6055	0.8978	0.0114	0.3411	0.0127	0.3799
39	34.58	0.02	0.0998	0.0016	0.0505	0.0249	0.7836	0.8809	0.0137	0.3325	0.0156	0.3774
40	34.84	-0.01	0.0920	0.0021	0.0767	1.0000	13.3000	0.8879	0.0144	0.3361	0.0163	0.3785
41	35.12	-0.02	0.1782	0.0005	0.0599	0.0065	0.7742	0.8908	0.0138	0.3353	0.0151	0.3764
42	35.38	0.00	0.1282	0.0004	0.0721	0.0033	0.6825	0.8990	0.0121	0.3392	0.0135	0.3773
43	35.64	0.01	0.1119	0.0017	0.0941	0.2152	0.7511	0.8998	0.0122	0.3387	0.0136	0.3767
44	35.49	-0.02	0.1034	0.0007	0.0740	0.0068	0.7151	0.9040	0.0119	0.3413	0.0132	0.3776
45	36.15	-0.01	0.0930	0.0026	0.0435	0.0179	1.2955	0.8853	0.0161	0.3315	0.0160	0.3744
46	36.39	-0.03	0.0401	0.0024	0.0469	0.0100	1.1200	0.8987	0.0136	0.3374	0.0152	0.3754

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REID=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	93	1.10	1.7	0.0	81.0031	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
47	36.06	-0.01	0.0232	0.0009	0.0370	0.0259	1.5915	0.6902	0.0140	0.3329	0.0158	0.3739
48	36.41	-0.02	0.0214	0.0005	0.0419	0.0070	0.4648	0.9038	0.0128	0.3347	0.0142	0.3759
49	37.14	-0.03	0.0199	0.0	0.0711	0.0	0.7537	0.9057	0.0126	0.3359	0.0139	0.3752
50	37.40	-0.02	0.1539	0.0005	0.0478	0.0052	0.4334	0.9167	0.0100	0.3428	0.0109	0.3740
51	37.68	-0.02	0.0744	-0.0004	0.0665	-0.0051	0.8334	0.9008	0.0131	0.3351	0.0146	0.3720
52	37.88	-0.03	0.0314	-0.0006	0.0404	-0.0297	1.3330	0.9071	0.0125	0.3375	0.0138	0.3721
53	38.14	-0.03	0.0953	-0.0002	0.0520	-0.0025	0.7709	0.9157	0.0117	0.3408	0.0128	0.3722
54	38.37	-0.03	0.0694	-0.0001	0.0501	-0.0014	0.8081	0.9219	0.0114	0.3430	0.0124	0.3721
55	38.60	-0.03	0.0392	0.0002	0.0527	0.0050	1.0709	0.9278	0.0117	0.3447	0.0126	0.3715
56	38.84	-0.03	0.0143	-0.0001	0.0288	-0.0070	2.0070	0.9284	0.0119	0.3445	0.0128	0.3711
57	39.10	-0.03	0.0004	-0.0001	0.0265	-0.1667	2.9048	0.9383	0.0112	0.3469	0.0120	0.3715
58	39.33	-0.03	0.0038	0.0002	0.0084	0.0034	0.7956	0.9477	0.0122	0.3520	0.0129	0.3714
59	39.59	-0.03	0.0700	-0.0012	0.0530	-0.0172	2.7558	0.9413	0.0135	0.3487	0.0144	0.3704
60	39.81	-0.03	0.1213	-0.0015	0.0757	-0.0124	0.6235	0.9534	0.0138	0.3526	0.0145	0.3699
61	40.02	-0.03	0.0347	-0.0025	0.0490	-0.0723	1.1243	0.9528	0.0126	0.3566	0.0131	0.3704
62	40.29	-0.04	0.0345	-0.0025	0.0365	-0.0635	0.9239	0.9585	0.0129	0.3534	0.0135	0.3687
63	40.53	-0.05	0.0131	-0.0028	0.0269	-0.2137	2.1985	0.9638	0.0143	0.3557	0.0149	0.3692
64	40.77	-0.05	-0.0075	-0.0060	0.0136	0.7692	-1.7946	0.9842	0.0141	0.3434	0.0144	0.3693
65	41.04	-0.03	0.1128	-0.0018	0.0999	-0.0100	0.6210	0.9750	0.0169	0.3593	0.0174	0.3686
66	41.22	-0.03	-0.0074	-0.0007	0.0153	0.6451	-1.9367	0.9863	0.0156	0.3442	0.0158	0.3693
67	41.45	-0.04	0.0262	-0.0053	0.0313	-0.2031	1.1954	0.9914	0.0187	0.3653	0.0189	0.3685
68	41.67	-0.05	-0.0031	-0.0151	0.0164	1.6452	-4.8064	0.9995	0.0159	0.3698	0.0159	0.3699
69	41.90	-0.05	0.0525	-0.0058	0.0455	-0.1107	0.8693	0.9787	0.0222	0.3585	0.0227	0.3683
70	42.04	-0.07	-0.0175	-0.0078	0.0068	0.4457	-0.4914	1.0141	0.0170	0.3728	0.0168	0.3676
71	42.30	-0.06	0.0252	-0.0057	0.0253	-0.4528	0.2931	0.9857	0.0234	0.3592	0.0238	0.3644
72	42.52	-0.05	0.0210	-0.0062	0.0287	-0.2870	1.3241	1.0219	0.0219	0.3750	0.0215	0.3669
73	42.71	-0.06	0.0125	-0.0059	0.0253	-0.4435	2.0323	1.0027	0.0242	0.3639	0.0242	0.3625
74	42.93	-0.05	0.0005	-0.0044	0.0207	-0.8000	4.0000	1.0125	0.0258	0.3691	0.0254	0.3645
75	43.19	-0.05	0.0340	-0.0045	0.0354	-0.1314	1.0249	0.9941	0.0291	0.3602	0.0292	0.3624
76	43.32	-0.05	0.0586	-0.0025	0.0453	-0.0430	0.7780	1.0034	0.0311	0.3646	0.0310	0.3634
77	43.56	-0.06	0.0296	-0.0029	0.0353	-0.1649	1.2616	1.0117	0.0295	0.3674	0.0291	0.3631
78	43.76	-0.05	-0.0059	-0.0049	0.0142	0.8305	-2.4068	1.0169	0.0313	0.3646	0.0308	0.3632
79	43.95	-0.06	-0.0232	-0.0090	0.0083	0.1661	-0.3987	1.0073	0.0334	0.3654	0.0331	0.3629
80	44.15	-0.06	0.0241	-0.0052	0.0300	-0.1152	1.2305	1.0135	0.0348	0.3669	0.0343	0.3620
81	44.35	-0.03	-0.0191	-0.0024	0.0165	0.1859	-0.8543	1.0057	0.0347	0.3618	0.0345	0.3598
82	44.56	-0.03	-0.0403	-0.0001	-0.0098	0.0887	0.2121	1.0037	0.0272	0.3674	0.0255	0.3642
83	44.72	-0.01	0.0134	-0.0019	0.0292	-0.1022	1.5645	1.0169	0.0357	0.3669	0.0351	0.3608
84	44.92	-0.03	0.0147	0.0005	0.0269	0.0287	1.3262	1.0207	0.0350	0.3686	0.0343	0.3611
85	45.11	-0.00	-0.0323	-0.0021	0.0010	0.0652	-0.0311	1.0395	0.0354	0.3793	0.0340	0.3620
86	45.27	-0.04	0.0037	-0.0009	0.0218	-0.2437	5.6376	1.0024	0.0360	0.3540	0.0379	0.3542
87	45.45	-0.04	-0.0311	-0.0019	0.0032	0.0518	-0.1036	1.0207	0.0379	0.3659	0.0371	0.3585
88	45.63	-0.06	-0.0539	-0.0013	-0.0072	0.0242	0.1338	1.0398	0.0376	0.3741	0.0361	0.3597
89	45.84	-0.05	-0.0461	-0.0024	-0.0051	0.0522	0.1169	1.0706	0.0339	0.3877	0.0316	0.3621
90	46.01	-0.05	-0.0349	-0.0015	-0.0023	0.0377	0.0578	1.0342	0.0359	0.3712	0.0347	0.3580
91	46.16	-0.05	-0.0317	-0.0020	-0.0106	0.0388	0.2054	1.0471	0.0361	0.3762	0.0344	0.3592
92	46.36	-0.04	-0.0448	0.0009	-0.0033	-0.0201	0.0738	1.0142	0.0409	0.3586	0.0403	0.3536

PAGE 2 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NUMBER	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	93	1.10 1.7	0.0	81=OF31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	46.54	-0.05	-0.0411	0.0001	-0.0003	-0.002a	0.0073	1.0133	0.0426	0.3549	0.0420	0.3552
94	46.72	-0.05	-0.0469	-0.0016	-0.0142	0.0247	0.2191	1.0416	0.0392	0.3710	0.0376	0.3561
95	45.93	-0.05	-0.0827	-0.0015	-0.0043	0.0352	-0.1958	1.0648	0.0363	0.3806	0.0322	0.3577
96	47.12	-0.05	-0.0525	-0.0007	-0.0131	0.0134	0.2505	1.0496	0.0378	0.3720	0.0360	0.3544
97	47.27	-0.05	-0.0724	-0.0016	-0.0189	0.0220	0.2527	1.0269	0.0432	0.3606	0.0421	0.3512
98	47.44	-0.05	-0.0574	-0.0015	-0.0134	0.0262	0.2339	1.0512	0.0378	0.3719	0.0359	0.3538
99	47.66	-0.04	-0.0765	-0.0019	-0.0208	0.0256	0.2799	1.0643	0.0364	0.3771	0.0348	0.3563
100	47.83	-0.05	-0.0546	-0.0015	-0.0200	0.0716	0.2878	1.0398	0.0397	0.3672	0.0392	0.3531
101	47.99	-0.05	-0.0945	-0.0043	-0.0267	0.0474	0.2933	1.0292	0.0409	0.3593	0.0397	0.3491
102	48.16	-0.04	-0.0517	-0.0012	-0.0134	0.0237	0.2548	1.0357	0.0331	0.3637	0.0319	0.3509
103	48.34	-0.04	-0.0407	-0.0018	-0.0152	0.0558	0.1649	1.0301	0.0353	0.3595	0.0342	0.3498
104	48.50	-0.04	-0.0491	-0.0037	-0.0176	0.0661	0.2667	1.0333	0.0400	0.3602	0.0387	0.3486
105	48.65	-0.03	-0.0555	-0.0053	-0.0205	0.0618	0.3081	1.0397	0.0408	0.3618	0.0385	0.3488
106	48.85	-0.03	-0.0745	-0.0022	-0.0234	0.0277	0.2951	1.0280	0.0402	0.3566	0.0391	0.3469
107	49.04	-0.03	-0.0706	-0.0047	-0.0219	0.0617	0.2635	1.0628	0.0362	0.3725	0.0340	0.3505
108	49.22	-0.04	-0.0869	-0.0047	-0.0248	0.0562	0.3310	1.0572	0.0367	0.3691	0.0347	0.3491
109	49.38	-0.04	-0.1472	-0.0093	-0.0380	0.1975	0.1639	1.0797	0.0282	0.3811	0.0261	0.3529
110	49.54	-0.04	-0.0830	-0.0066	-0.0073	0.1958	0.1702	1.0925	0.0301	0.3815	0.0278	0.3524
111	43.72	-0.04	-0.0806	-0.0065	-0.0145	0.1078	0.2347	1.0663	0.0302	0.3729	0.0283	0.3503
112	49.51	-0.04	-0.0781	-0.0085	0.0002	0.3071	-0.0071	1.0822	0.0215	0.3828	0.0199	0.3537
113	50.06	-0.05	-1.0062	-0.0005	2.0238	-2.2619	1.0727	0.0132	0.3804	0.0123	0.3546
114	50.22	-0.04	0.0145	-0.0065	0.0167	-0.4483	1.1517	1.0665	0.0099	0.3773	0.0093	0.3538
115	50.42	-0.03	0.0393	-0.0074	0.0291	-0.2456	0.7980	1.0192	-0.0096	0.3649	-0.0094	0.3581
116	50.58	-0.03	0.0324	-0.0047	0.0242	-0.1464	0.7539	1.0410	-0.0038	0.3710	-0.0037	0.3563
117	50.75	-0.04	0.0424	-0.0051	0.0309	-0.1142	0.7196	1.0444	-0.0076	0.3770	-0.0076	0.3609
118	50.92	-0.03	-0.0542	-0.0071	-0.0109	0.1347	0.2068	0.9859	-0.0064	0.3273	-0.0074	0.3535
119	51.07	-0.04	-0.0611	-0.0073	-0.0128	0.1197	0.2098	0.9371	-0.0077	0.3341	-0.0082	0.3554
120	51.26	-0.04	-0.0507	-0.0038	-0.0097	0.0711	0.1917	0.9309	-0.0079	0.3320	-0.0085	0.3566
121	51.43	-0.04	-0.0422	-0.0030	-0.0063	0.0214	0.1971	0.9246	-0.0073	0.3291	-0.0079	0.3559
122	51.60	-0.05	-0.0357	-0.0005	-0.0058	0.0142	0.1652	0.9307	-0.0069	0.3319	-0.0074	0.3566
123	51.76	-0.04	-0.0328	-0.0004	-0.0071	-0.0106	0.1848	0.9268	-0.0065	0.3308	-0.0070	0.3567
124	51.94	-0.04	-0.0394	0.0015	-0.0046	-0.0378	0.2146	0.9157	-0.0063	0.3255	-0.0069	0.3554
125	52.12	-0.04	-0.0224	0.0021	-0.0018	-0.0936	0.0804	0.9243	-0.0062	0.3292	-0.0067	0.3561
126	52.28	-0.04	-0.0296	0.0012	-0.0045	-0.0410	0.1536	0.9354	-0.0070	0.3345	-0.0075	0.3575
127	52.44	-0.02	-0.0387	0.0005	-0.0071	-0.0130	0.1934	0.9049	-0.0059	0.3222	-0.0065	0.3565
128	52.63	-0.02	-0.0366	0.0004	-0.0059	-0.0110	0.1816	0.9267	-0.0065	0.3296	-0.0070	0.3558
129	52.80	-0.04	-0.0429	0.0005	-0.0106	-0.0128	0.2265	0.9162	-0.0060	0.3246	-0.0066	0.3563
130	52.97	-0.02	-0.0400	0.0021	-0.0061	-0.0519	0.2000	0.9236	-0.0060	0.3289	-0.0065	0.3561
131	53.13	-0.02	-0.0388	0.0025	-0.0074	-0.0727	0.1922	0.9224	-0.0056	0.3261	-0.0061	0.3557
132	53.31	-0.02	-0.0463	0.0022	-0.0073	-0.0519	0.1722	0.9264	-0.0059	0.3293	-0.0064	0.3554
133	53.47	-0.02	-0.0519	0.0024	-0.0079	-0.0574	0.1890	0.9295	-0.0062	0.3318	-0.0067	0.3569
134	53.64	-0.03	-0.0420	0.0026	-0.0071	-0.0621	0.1695	0.9220	-0.0059	0.3267	-0.0064	0.3565
135	53.80	-0.03	-0.0372	0.0030	-0.0050	-0.0809	0.1348	0.9359	-0.0067	0.3338	-0.0072	0.3566
136	54.98	-0.03	-0.0395	0.0034	-0.0054	-0.0863	0.1371	0.9264	-0.0063	0.3305	-0.0068	0.3567
137	54.15	-0.03	-0.0436	0.0035	-0.0024	-0.1064	0.0851	0.9579	-0.0077	0.3439	-0.0081	0.3590
138	54.34	-0.03	-0.0229	0.0028	0.0006	-0.1223	-0.0349	0.9680	-0.0084	0.3464	-0.0087	0.3599

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	M	RN/FT*E-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	93	1.15	1.7	0.0	MIXOF31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	54.50	-0.09	-0.0293	0.0031	-0.0092	-0.1183	0.0076	0.9861	-0.0045	0.3482	-0.0088	0.3604
140	54.66	-0.09	-0.0306	0.0032	-0.0091	-0.1049	0.1016	0.9723	-0.0084	0.3507	-0.0087	0.3607
141	54.79	-0.09	-0.0165	0.0024	0.0013	-0.1277	-0.0691	0.9779	-0.0085	0.3514	-0.0087	0.3594
142	55.00	-0.08	-0.0166	0.0019	0.0026	-0.1145	-0.1566	0.9768	-0.0081	0.3506	-0.0083	0.3597
143	55.18	-0.09	-0.0142	0.0020	0.0013	-0.1049	-0.0714	0.9805	-0.0088	0.3533	-0.0090	0.3603
144	55.35	-0.08	-0.0230	0.0018	0.0010	-0.0882	-0.0490	0.9639	-0.0091	0.3540	-0.0093	0.3598
145	55.49	-0.09	-0.0205	0.0019	0.0013	-0.0927	-0.0636	0.9824	-0.0076	0.3467	-0.0079	0.3603
146	55.49	-0.09	-0.0165	0.0016	0.0021	-0.0846	-0.1273	1.0025	-0.0099	0.3634	-0.0099	0.3626
147	55.69	-0.09	-0.0059	0.0008	0.0050	-0.1356	-0.0475	1.0029	-0.0097	0.3616	-0.0097	0.3606
148	56.01	-0.09	-0.0170	0.0012	0.0017	-0.0706	-0.1000	0.9958	-0.0096	0.3593	-0.0097	0.3608
149	56.16	-0.09	-0.0171	0.0009	0.0009	-0.0471	-0.0471	0.9907	-0.0096	0.3564	-0.0095	0.3598
150	56.30	-0.10	-0.0150	0.0009	0.0015	-0.0500	-0.0833	1.0083	-0.0101	0.3630	-0.0100	0.3601
151	56.49	-0.09	-0.0136	0.0007	0.0029	-0.0862	-0.2132	1.0162	-0.0102	0.3649	-0.0101	0.3613
152	56.65	-0.09	-0.0114	0.0003	0.0042	-0.0263	-0.3684	1.0248	-0.0111	0.3697	-0.0109	0.3607
153	56.80	-0.09	-0.0081	0.0002	0.0053	-0.0247	-0.6543	1.0336	-0.0118	0.3746	-0.0116	0.3624
154	56.91	-0.09	-0.0103	0.0003	0.0048	-0.0291	-0.4660	1.0153	-0.0106	0.3649	-0.0105	0.3613
155	57.09	-0.09	-0.0141	0.0005	0.0028	-0.0355	-0.1986	1.0366	-0.0118	0.3765	-0.0114	0.3632
156	57.22	-0.09	-0.0175	0.0003	0.0026	-0.0171	-0.1486	1.0211	-0.0115	0.3690	-0.0113	0.3613
157	57.41	-0.09	-0.0176	0.0007	0.0030	-0.0412	-0.1765	1.0308	-0.0120	0.3732	-0.0117	0.3620
158	57.55	-0.09	-0.0176	0.0002	0.0063	-0.0263	-0.2289	1.0457	-0.0125	0.3796	-0.0120	0.3630
159	57.69	-0.09	-0.0159	0.0002	0.0060	-0.0339	-1.0169	1.0433	-0.0126	0.3793	-0.0121	0.3635
160	57.83	-0.09	-0.0116	0.0001	0.0041	-0.0625	-5.0625	1.0482	-0.0133	0.3814	-0.0127	0.3638
161	58.01	-0.09	-0.0154	0.0002	0.0070	-0.0370	-1.2963	1.0574	-0.0135	0.3810	-0.0129	0.3637
162	58.16	-0.08	-0.0103	0.0007	0.0042	-0.0460	-0.4078	1.0375	-0.0132	0.3760	-0.0127	0.3624
163	58.29	-0.09	-0.0134	-0.0002	0.0056	0.0250	-0.7000	1.0582	-0.0143	0.3857	-0.0135	0.3645
164	58.47	-0.09	-0.0201	0.0	0.0020	0.0	-0.0945	1.0725	-0.0147	0.3910	-0.0137	0.3646
165	58.73	-0.09	-0.0027	0.0001	0.0084	-0.0370	-0.1111	1.0680	-0.0142	0.3891	-0.0133	0.3643
166	58.96	-0.08	-0.0070	0.0002	0.0061	-0.0286	-0.8714	1.0905	-0.0156	0.4000	-0.0143	0.3668
167	59.01	-0.09	-0.0032	0.0003	0.0075	-0.0937	-2.3437	1.0581	-0.0143	0.3878	-0.0135	0.3665
168	59.18	-0.07	-0.0093	0.0006	0.0064	-0.0630	-0.6882	1.0721	-0.0159	0.3910	-0.0149	0.3647
169	59.30	-0.11	-0.0125	-0.0002	0.0056	0.0160	-0.4320	1.0382	-0.0138	0.3773	-0.0133	0.3634
170	59.43	-0.07	-0.0136	-0.0001	0.0050	0.0074	-0.3676	1.0239	-0.0131	0.3711	-0.0126	0.3624
171	59.56	-0.08	-0.0152	0.0003	0.0034	-0.0156	-0.1771	1.0459	-0.0135	0.3772	-0.0131	0.3641
172	59.74	-0.09	-0.0171	-0.0001	0.0049	0.0058	-0.2865	1.0570	-0.0151	0.3857	-0.0143	0.3649
173	59.89	-0.09	-0.0137	-0.0008	0.0063	-0.0584	-0.4599	1.0493	-0.0145	0.3821	-0.0138	0.3641
174	60.06	-0.12	-0.0138	-0.0003	0.0067	0.0217	-0.4493	1.0540	-0.0153	0.3841	-0.0145	0.3644
175	60.20	-0.09	-0.0164	-0.0002	0.0057	0.0125	-0.3502	1.0709	-0.0168	0.3935	-0.0157	0.3675
176	60.34	-0.09	-0.0154	0.0004	0.0010	-0.0155	-0.0368	1.0451	-0.0161	0.3791	-0.0154	0.3627
177	60.49	-0.09	-0.0220	0.0001	0.0032	-0.0044	-0.1416	1.0456	-0.0166	0.3907	-0.0156	0.3667
178	60.62	-0.09	-0.0149	-0.0004	0.0056	0.0268	-0.3758	1.0396	-0.0156	0.3751	-0.0150	0.3636
179	60.53	-0.09	-0.0337	0.0008	-0.0010	-0.0119	0.0298	1.0536	-0.0162	0.3861	-0.0156	0.3665

MARTIN MISSILE TAILS EFFECTS DATA

ESI	PART	VALM	REY=6	PHI	CONF	I	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	99	1.1V	1.7	0.0	01.0831	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CM4	XCPF4	YCPF4
1	-4.26	-0.01	0.0336	9.9999	0.0035	9.9999	0.1051	-0.5639	-0.0148	-0.2594	0.0254	0.4447
2	-4.23	-0.01	0.0350	9.9999	0.0051	9.9999	0.1433	-0.5485	-0.0148	-0.2605	0.0252	0.4427
3	-4.24	-0.02	0.0312	9.9999	0.0027	9.9999	0.0863	-0.5742	-0.0153	-0.2581	0.0267	0.4443
4	-4.23	-0.02	0.0336	9.9999	0.0037	9.9999	0.1111	-0.5866	-0.0146	-0.2596	0.0253	0.4426
5	-4.23	-0.01	0.0350	9.9999	0.0059	9.9999	0.1408	-0.5793	-0.0146	-0.2574	0.0253	0.4446
6	-2.78	-0.01	0.0309	9.9999	0.0035	9.9999	0.1144	-0.6763	-0.0156	-0.2118	0.0330	0.4467
7	-0.93	-0.01	0.0295	9.9999	0.0028	9.9999	0.0952	-0.3744	-0.0154	-0.1647	0.0412	0.4507
8	0.97	-0.02	0.0351	9.9999	0.0068	9.9999	0.1371	-0.2776	-0.0134	-0.1273	0.0484	0.4585
9	2.98	-0.01	0.0351	9.9999	0.0145	9.9999	0.1286	-0.1811	-0.0058	-0.0637	0.0542	0.4621
10	4.69	-0.02	0.0437	9.9999	0.0067	9.9999	0.1650	-0.1088	-0.0056	-0.0457	0.0534	0.4199
11	6.75	-0.01	0.0365	9.9999	0.0036	9.9999	0.0981	-0.0474	-0.0004	-0.0183	0.0169	0.3836
12	8.73	-0.01	0.0346	9.9999	0.0038	9.9999	0.0972	-0.0027	0.0047	0.0048	-1.7407	-1.7778
13	10.64	-0.02	0.0343	9.9999	0.0064	9.9999	0.0930	0.0426	0.0115	0.0253	0.2706	0.5929
14	12.62	-0.02	0.0445	9.9999	0.0063	9.9999	0.0927	0.1100	0.0171	0.0540	0.1557	0.5364
15	14.60	-0.02	0.0427	9.9999	0.0014	9.9999	0.0282	0.1803	0.0219	0.0958	0.1217	0.5314
16	16.63	-0.02	0.0499	9.9999	0.0035	9.9999	0.0703	0.2570	0.0259	0.1376	0.1006	0.5353
17	18.72	-0.02	0.0521	9.9999	0.0053	9.9999	0.0962	0.3364	0.0285	0.1759	0.0846	0.5228
18	20.79	-0.02	0.0478	9.9999	0.0042	9.9999	0.0884	0.4164	0.0284	0.2085	0.0691	0.5008
19	22.87	-0.03	0.0408	9.9999	0.0037	9.9999	0.0999	0.5006	0.0257	0.2384	0.0532	0.4762
20	24.98	-0.01	0.0375	9.9999	0.0016	9.9999	0.0428	0.5823	0.0261	0.2537	0.0480	0.4678
21	27.14	-0.01	0.0418	9.9999	0.0062	9.9999	0.1497	0.6109	0.0255	0.2811	0.0417	0.4601
22	29.29	0.03	0.0479	9.9999	0.0065	9.9999	0.1947	0.6267	0.0280	0.2847	0.0446	0.4563
23	30.23	0.99	0.0693	9.9999	0.0169	9.9999	0.2281	0.6405	0.0298	0.2889	0.0418	0.4510
24	30.24	0.02	0.0532	9.9999	0.0106	9.9999	0.2750	0.6476	0.0262	0.2917	0.0404	0.4504
25	30.55	0.03	0.0496	9.9999	0.0123	9.9999	0.2935	0.6506	0.0265	0.2926	0.0407	0.4497
26	30.83	0.03	0.0490	9.9999	0.0118	9.9999	0.2927	0.6690	0.0259	0.2992	0.0386	0.4473
27	31.20	0.02	0.0493	9.9999	0.0119	9.9999	0.2943	0.6791	0.0252	0.3023	0.0370	0.4452
28	31.50	0.03	0.0459	9.9999	0.0124	9.9999	0.2707	0.6756	0.0262	0.3015	0.0387	0.4463
29	31.79	0.02	0.0554	9.9999	0.0169	9.9999	0.3056	0.6743	0.0275	0.3004	0.0407	0.4455
30	32.08	0.04	0.0531	9.9999	0.0165	9.9999	0.3113	0.6965	0.0261	0.3048	0.0374	0.4439
31	32.37	0.04	0.0545	9.9999	0.0170	9.9999	0.2586	0.7119	0.0259	0.3117	0.0368	0.4441
32	32.62	0.05	0.0536	9.9999	0.0163	9.9999	0.3047	0.7115	0.0256	0.3154	0.0362	0.4434
33	32.91	0.05	0.0543	9.9999	0.0159	9.9999	0.3208	0.7263	0.0255	0.3208	0.0350	0.4416
34	33.21	0.02	0.0428	9.9999	0.0108	9.9999	0.2541	0.7461	0.0239	0.3285	0.0321	0.4402
35	33.49	0.01	0.0419	9.9999	0.0114	9.9999	0.2727	0.7691	0.0218	0.3363	0.0289	0.4373
36	33.76	0.01	0.0414	9.9999	0.0110	9.9999	0.2663	0.7833	0.0214	0.3423	0.0274	0.4370
37	34.04	0.03	0.0458	9.9999	0.0124	9.9999	0.2713	0.7967	0.0216	0.3477	0.0274	0.4364
38	34.30	0.01	0.0535	9.9999	0.0179	9.9999	0.3352	0.8047	0.0230	0.3500	0.0259	0.4349
39	34.58	0.02	0.0459	9.9999	0.0133	9.9999	0.2910	0.8260	0.0184	0.3560	0.0223	0.4310
40	34.86	-0.01	0.0397	9.9999	0.0095	9.9999	0.2399	0.8547	0.0160	0.3662	0.0188	0.4285
41	35.12	-0.02	0.0330	9.9999	0.0072	9.9999	0.2198	0.8563	0.0166	0.3650	0.0194	0.4263
42	35.38	0.00	0.0448	9.9999	0.0129	9.9999	0.2899	0.8569	0.0173	0.3652	0.0202	0.4263
43	35.63	0.01	0.0413	9.9999	0.0103	9.9999	0.2540	0.8687	0.0168	0.3679	0.0196	0.4235
44	35.89	-0.02	0.0336	9.9999	0.0062	9.9999	0.1851	0.8827	0.0159	0.3724	0.0180	0.4218
45	36.15	-0.01	0.0413	9.9999	0.0112	9.9999	0.2718	0.9177	0.0130	0.3851	0.0142	0.4196
46	36.39	-0.03	0.0358	9.9999	0.0104	9.9999	0.2834	0.9295	0.0118	0.3891	0.0127	0.4186

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX1e-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	53	1.10	1.7	0.0	81	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CN3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	36.66	-0.01	0.0452	9.9999	0.0123	9.9939	0.2727	0.9330	0.0115	0.3914	0.0120	0.4195
48	36.91	-0.02	0.0397	9.9999	0.0090	9.9999	0.2526	0.9425	0.0120	0.3941	0.0128	0.4181
49	37.16	-0.03	0.0313	9.9999	0.0069	9.9999	0.2212	0.9384	0.0143	0.3908	0.0153	0.4162
50	37.40	-0.02	0.0370	9.9999	0.0104	9.9999	0.2484	0.9431	0.0139	0.3931	0.0148	0.4164
51	37.66	-0.03	0.0428	9.9999	0.0121	9.9999	0.2861	0.9450	0.0169	0.3909	0.0179	0.4136
52	37.90	-0.03	0.0344	9.9999	0.0093	9.9999	0.2527	0.9445	0.0167	0.3900	0.0172	0.4129
53	38.16	-0.04	0.0352	9.9999	0.0091	9.9999	0.2543	0.9513	0.0169	0.3930	0.0178	0.4131
54	38.37	-0.03	0.0346	9.9999	0.0082	9.9999	0.2377	0.9465	0.0167	0.3907	0.0177	0.4128
55	38.61	-0.05	0.0313	9.9999	0.0073	9.9999	0.2340	0.9484	0.0173	0.3899	0.0183	0.4111
56	38.84	-0.05	0.0303	9.9999	0.0057	9.9999	0.1887	0.9540	0.0167	0.3927	0.0175	0.4117
57	39.10	-0.03	0.0398	9.9999	0.0089	9.9999	0.2583	0.9597	0.0173	0.3944	0.0181	0.4118
58	39.33	-0.05	0.0362	9.9999	0.0110	9.9999	0.3047	0.9425	0.0175	0.3867	0.0186	0.4103
59	39.56	-0.05	0.0335	9.9999	0.0083	9.9999	0.2485	0.9473	0.0182	0.3891	0.0194	0.4108
60	39.81	-0.05	0.0329	9.9999	0.0090	9.9999	0.2764	0.9514	0.0190	0.3736	0.0209	0.4099
61	40.02	-0.05	0.0286	9.9999	0.0053	9.9999	0.1908	0.9360	0.0163	0.3837	0.0196	0.4099
62	40.25	-0.04	0.0500	9.9999	0.0175	9.9999	0.3507	0.9440	0.0160	0.3878	0.0170	0.4108
63	40.54	-0.05	0.0259	9.9999	0.0034	9.9999	0.1318	0.9200	0.0140	0.3783	0.0196	0.4112
64	40.77	-0.05	0.0324	9.9999	0.0063	9.9999	0.2570	0.9288	0.0195	0.3615	0.0210	0.4108
65	41.00	-0.04	0.0236	9.9999	0.0055	9.9999	0.1930	0.9021	0.0188	0.3704	0.0182	0.4105
66	41.22	-0.03	0.0242	9.9999	0.0044	9.9999	0.1684	0.9272	0.0190	0.3819	0.0205	0.4119
67	41.45	-0.04	0.0278	9.9999	0.0062	9.9999	0.1527	0.9267	0.0213	0.3822	0.0230	0.4124
68	41.67	-0.05	0.0270	9.9999	0.0063	9.9999	0.1599	0.9435	0.0196	0.3914	0.0208	0.4138
69	41.96	-0.04	0.0382	9.9999	0.0082	9.9999	0.2405	0.9284	0.0168	0.3742	0.0181	0.4119
70	42.09	-0.07	0.0259	9.9999	0.0036	9.9999	0.1318	0.9436	0.0191	0.3895	0.0203	0.4129
71	42.36	-0.06	0.0341	9.9999	0.0077	9.9999	0.2133	0.9275	0.0175	0.3832	0.0169	0.4131
72	42.52	-0.05	0.0224	9.9999	0.0036	9.9999	0.1696	0.9347	0.0209	0.3857	0.0224	0.4126
73	42.71	-0.04	0.0336	9.9999	0.0062	9.9999	0.1840	0.9319	0.0161	0.3893	0.0171	0.4133
74	42.93	-0.05	0.0315	9.9999	0.0069	9.9999	0.1911	0.9452	0.0204	0.3909	0.0216	0.4135
75	43.14	-0.05	0.0346	9.9999	0.0071	9.9999	0.2310	0.9282	0.0136	0.3840	0.0147	0.4137
76	43.32	-0.05	0.0220	9.9999	0.0023	9.9999	0.0909	0.9031	0.0108	0.3738	0.0120	0.4138
77	43.56	-0.04	0.0315	9.9999	0.0067	9.9999	0.2134	0.9322	0.0140	0.3856	0.0150	0.4136
78	43.76	-0.05	0.0370	9.9999	0.0105	9.9999	0.2873	0.9380	0.0170	0.3860	0.0182	0.4115
79	43.95	-0.06	0.0315	9.9999	0.0078	9.9999	0.2486	0.9438	0.0124	0.3887	0.0132	0.4118
80	44.15	-0.04	0.0260	9.9999	0.0034	9.9999	0.1467	0.9294	0.0104	0.3828	0.0112	0.4119
81	44.35	-0.03	0.0315	9.9999	0.0060	9.9999	0.1905	0.9280	0.0073	0.3830	0.0079	0.4127
82	44.56	-0.03	0.0327	9.9999	0.0077	9.9999	0.2362	0.9454	0.0267	0.4104	0.0268	0.4123
83	44.72	-0.01	0.0344	9.9999	0.0078	9.9999	0.2274	0.9057	0.0055	0.3750	0.0061	0.4140
84	44.92	-0.05	0.0315	9.9999	0.0076	9.9999	0.2420	0.8934	0.0028	0.3712	0.0031	0.4152
85	45.11	-0.06	0.0291	9.9999	0.0038	9.9999	0.1308	0.9044	0.0139	0.3962	0.0144	0.4108
86	45.27	-0.04	0.0342	9.9999	0.0114	9.9999	0.2992	0.8883	0.0021	0.3694	0.0024	0.4158
87	45.45	-0.04	0.0342	9.9999	0.0034	9.9999	0.2701	0.9391	0.0098	0.3874	0.0099	0.4125
88	45.63	-0.05	0.0253	9.9999	0.0005	9.9999	0.0215	0.9457	0.0060	0.3897	0.0065	0.4121
89	45.83	-0.05	0.0350	9.9999	0.0076	9.9999	0.2178	0.9835	0.0158	0.4050	0.0161	0.4118
90	46.01	-0.05	0.0265	9.9999	0.0015	9.9999	0.3615	0.9069	0.0013	0.3773	0.0014	0.4160
91	46.16	-0.05	0.0341	9.9999	0.0084	9.9999	0.2333	0.9581	0.0141	0.3967	0.0147	0.4120
92	46.36	-0.04	0.0244	9.9999	0.0005	9.9999	0.1590	0.9231	0.0098	0.3814	0.0104	0.4132

PAGE 3 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	93	1.10	1.7	0.0	BLAUF31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
93	46.59	-0.03	0.0376	9.9999	0.0100	9.9999	0.2695	0.8929	-0.0039	0.3726	-0.0366	0.4172
94	46.72	-0.05	0.0376	9.9999	0.0107	9.9999	0.2884	0.9066	0.0101	0.4003	0.0105	0.4162
95	46.93	-0.03	0.0226	9.9999	0.0	9.9999	0.0	0.9453	0.0259	0.4078	0.0260	0.4097
96	47.12	-0.05	0.0246	9.9999	0.0045	9.9999	0.1590	0.9627	0.0153	0.3969	0.0159	0.4123
97	47.27	-0.05	0.0326	9.9999	0.0075	9.9999	0.2294	0.9534	0.0087	0.3932	0.0091	0.4124
98	47.44	-0.05	0.0274	9.9999	0.0037	9.9999	0.1355	0.9722	0.0185	0.3997	0.0191	0.4117
99	47.66	-0.04	0.0341	9.9999	0.0051	9.9999	0.2436	0.9619	0.0039	0.3996	0.0041	0.4146
100	47.93	-0.03	0.0318	9.9999	0.0061	9.9999	0.1924	0.9280	0.0062	0.3863	0.0067	0.4163
101	47.99	-0.02	0.0264	9.9999	0.0027	9.9999	0.1051	0.9582	0.0040	0.3914	0.0042	0.4093
102	48.16	-0.04	0.0318	9.9999	0.0061	9.9999	0.1924	0.9974	0.0231	0.4018	0.0232	0.4029
103	48.34	-0.04	0.0227	9.9999	0.0031	9.9999	0.1211	0.9428	0.0135	0.3813	0.0144	0.4047
104	48.50	-0.04	0.0357	9.9999	0.0168	9.9999	0.2472	0.9201	0.0006	0.3752	0.0007	0.4078
105	48.69	-0.05	0.0330	9.9999	0.0059	9.9999	0.2432	0.9610	0.0010	0.3886	0.0010	0.4044
106	48.45	-0.03	0.0297	9.9999	0.0055	9.9999	0.1856	0.9510	0.0045	0.3831	0.0047	0.4028
107	49.09	-0.05	0.0274	9.9999	0.0046	9.9999	0.1985	0.9185	-0.0063	0.3742	-0.0069	0.4074
108	49.22	-0.04	0.0294	9.9999	0.0066	9.9999	0.2104	0.9749	0.0023	0.3936	0.0024	0.4021
109	49.38	-0.04	0.0314	9.9999	0.0074	9.9999	0.2327	0.8907	-0.0055	0.3610	-0.0062	0.4053
110	49.54	-0.04	0.0336	9.9999	0.0062	9.9999	0.2466	0.8445	-0.0061	0.3623	-0.0068	0.4050
111	49.72	-0.04	0.0353	9.9999	0.0095	9.9999	0.2599	0.9239	-0.0046	0.3730	-0.0050	0.4037
112	49.91	-0.04	0.0303	9.9999	0.0053	9.9999	0.1755	0.8965	-0.0056	0.3620	-0.0063	0.4038
113	50.08	-0.04	0.0297	9.9999	0.0166	9.9999	0.2230	0.8827	-0.0046	0.3554	-0.0052	0.4027
114	50.27	-0.04	0.0303	9.9999	0.0069	9.9999	0.2185	0.8864	-0.0034	0.3679	-0.0039	0.4014
115	50.42	-0.03	0.0295	9.9999	0.0084	9.9999	0.2155	0.8800	-0.0050	0.3545	-0.0057	0.4029
116	50.59	-0.03	0.0306	9.9999	0.0154	9.9999	0.2730	0.8783	-0.0041	0.3531	-0.0047	0.4021
117	50.75	-0.04	0.0299	9.9999	0.0155	9.9999	0.1846	0.8787	-0.0045	0.3533	-0.0051	0.4021
118	51.02	-0.07	0.0236	9.9999	0.0023	9.9999	0.0975	0.9292	-0.0047	0.3732	-0.0051	0.4016
119	51.01	-0.04	0.0292	9.9999	0.0024	9.9999	0.0992	0.9493	-0.0035	0.3805	-0.0037	0.4009
120	51.20	-0.04	0.0277	9.9999	0.0029	9.9999	0.1051	0.9730	-0.0022	0.3886	-0.0023	0.3994
121	51.43	-0.04	0.0375	9.9999	0.0097	9.9999	0.2573	0.9544	-0.0016	0.3798	-0.0017	0.3979
122	51.60	-0.05	0.0310	9.9999	0.0063	9.9999	0.2039	0.9532	-0.0024	0.3748	-0.0025	0.3974
123	51.78	-0.04	0.0369	9.9999	0.0098	9.9999	0.2736	0.9472	-0.0029	0.3768	-0.0031	0.3978
124	51.96	-0.04	0.0367	9.9999	0.0075	9.9999	0.2301	0.9321	-0.0039	0.3708	-0.0042	0.3978
125	52.12	-0.03	0.0255	9.9999	0.0043	9.9999	0.1029	0.9144	-0.0042	0.3631	-0.0046	0.3972
126	52.28	-0.02	0.0196	9.9999	0.0002	9.9999	0.0102	0.9266	-0.0041	0.3677	-0.0044	0.3968
127	52.44	-0.02	0.0268	9.9999	0.0150	9.9999	0.1742	0.9159	-0.0029	0.3643	-0.0032	0.3979
128	52.63	-0.02	0.0259	9.9999	0.0145	9.9999	0.1744	0.9309	-0.0040	0.3708	-0.0043	0.3983
129	52.80	-0.04	0.0277	9.9999	0.0092	9.9999	0.1522	0.9316	-0.0026	0.3698	-0.0030	0.3969
130	52.97	-0.02	0.0362	9.9999	0.0079	9.9999	0.2181	0.9265	-0.0041	0.3707	-0.0044	0.4001
131	53.13	-0.02	0.0333	9.9999	0.0176	9.9999	0.2349	0.9184	-0.0041	0.3670	-0.0045	0.3993
132	53.30	-0.02	0.0339	9.9999	0.0086	9.9999	0.2604	0.9327	-0.0042	0.3738	-0.0045	0.4007
133	53.47	-0.02	0.0362	9.9999	0.0101	9.9999	0.2796	0.9334	-0.0046	0.3755	-0.0052	0.4023
134	53.64	-0.04	0.0350	9.9999	0.0103	9.9999	0.2464	0.9324	-0.0052	0.3751	-0.0056	0.4023
135	53.80	-0.03	0.0346	9.9999	0.0084	9.9999	0.2140	0.9280	-0.0053	0.3736	-0.0057	0.4025
136	53.98	-0.03	0.0362	9.9999	0.0103	9.9999	0.2853	0.9244	-0.0055	0.3728	-0.0060	0.4033
137	54.15	-0.04	0.0373	9.9999	0.0124	9.9999	0.2796	0.9475	-0.0060	0.3810	-0.0063	0.4021
138	54.34	-0.05	0.0294	9.9999	0.0057	9.9999	0.1945	0.9436	-0.0060	0.3805	-0.0064	0.4032

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	RUN	MACH	REX10=6	PHI	CONE	L	DEL1	DEL2	DEL3	DELA	TRANSITION
F	93	1.10	1.07	0.0	-1.0F31	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	ACPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
139	54.51	-0.04	0.4344	9.9999	0.0063	9.9999	0.2500	0.9651	-0.0082	0.3811	-0.0066	0.4032
140	54.58	-0.04	0.0242	9.9999	0.0056	9.9999	0.1993	0.9563	-0.0063	0.3758	-0.0066	0.4030
141	54.59	-0.04	0.0263	9.9999	0.0050	9.9999	0.1896	0.9471	-0.0082	0.3814	-0.0066	0.4032
142	55.00	-0.04	0.0241	9.9999	0.0066	9.9999	0.1909	0.9413	-0.0061	0.3793	-0.0065	0.4029
143	55.16	-0.04	0.0231	9.9999	0.0074	9.9999	0.2395	0.9516	-0.0081	0.3836	-0.0064	0.4031
144	55.35	-0.03	0.0305	9.9999	0.0067	9.9999	0.2206	0.9536	-0.0059	0.3845	-0.0062	0.4032
145	55.44	-0.04	0.0322	9.9999	0.0064	9.9999	0.2118	0.9300	-0.0065	0.3768	-0.0053	0.4030
146	55.59	-0.04	0.0299	9.9999	0.0057	9.9999	0.1945	0.9661	-0.0065	0.3898	-0.0067	0.4035
147	55.66	-0.04	0.0249	9.9999	0.0062	9.9999	0.0867	0.9561	-0.0053	0.3833	-0.0056	0.4036
148	56.00	-0.04	0.0300	9.9999	0.0079	9.9999	0.2330	0.9606	-0.0081	0.3875	-0.0064	0.4034
149	56.12	-0.04	0.0231	9.9999	0.0073	9.9999	0.1000	0.9503	-0.0082	0.3827	-0.0065	0.4027
150	56.30	-0.04	0.0220	9.9999	0.0006	9.9999	0.0273	0.9657	-0.0066	0.3899	-0.0068	0.4038
151	56.44	-0.04	0.0278	9.9999	0.0051	9.9999	0.1855	0.9624	-0.0066	0.3877	-0.0069	0.4029
152	56.65	-0.04	0.0295	9.9999	0.0061	9.9999	0.2089	0.9782	-0.0076	0.3940	-0.0076	0.4028
153	56.68	-0.04	0.0311	9.9999	0.0056	9.9999	0.1836	0.9804	-0.0076	0.3945	-0.0078	0.4024
154	56.91	-0.05	0.0300	9.9999	0.0096	9.9999	0.2630	0.9863	-0.0076	0.3891	-0.0079	0.4027
155	57.04	-0.05	0.0278	9.9999	0.0053	9.9999	0.1927	0.9850	-0.0080	0.3961	-0.0081	0.4017
156	57.22	-0.05	0.0300	9.9999	0.0105	9.9999	0.2877	0.9834	-0.0080	0.3952	-0.0082	0.4019
157	57.41	-0.05	0.0294	9.9999	0.0051	9.9999	0.1711	0.9898	-0.0084	0.3961	-0.0085	0.4002
158	57.59	-0.04	0.0321	9.9999	0.0082	9.9999	0.2562	0.9934	-0.0094	0.3977	-0.0095	0.4003
159	57.69	-0.06	0.0287	9.9999	0.0050	9.9999	0.1798	0.9868	-0.0086	0.3949	-0.0087	0.4002
160	57.83	-0.05	0.0299	9.9999	0.0063	9.9999	0.1667	0.9902	-0.0096	0.3966	-0.0097	0.3985
161	58.01	-0.05	0.0317	9.9999	0.0087	9.9999	0.2589	0.9967	-0.0102	0.3994	-0.0103	0.4007
162	54.16	-0.06	0.0303	9.9999	0.0060	9.9999	0.1967	0.9897	-0.0097	0.3958	-0.0098	0.3999
163	58.35	-0.05	0.0224	9.9999	0.0018	9.9999	0.0804	1.0052	-0.0104	0.4024	-0.0104	0.4004
164	58.57	-0.06	0.0213	9.9999	0.0008	9.9999	0.0378	1.0325	-0.0108	0.4130	-0.0105	0.4000
165	58.73	-0.07	0.0320	9.9999	0.0068	9.9999	0.2132	1.0218	-0.0109	0.4073	-0.0107	0.3986
166	58.90	-0.06	0.0297	9.9999	0.0055	9.9999	0.1858	1.0396	-0.0114	0.4146	-0.0110	0.3988
167	59.01	-0.07	0.0296	9.9999	0.0061	9.9999	0.1980	1.0200	-0.0111	0.4043	-0.0109	0.3984
168	59.18	-0.07	0.0280	9.9999	0.0032	9.9999	0.1333	1.0307	-0.0121	0.4111	-0.0118	0.3989
169	59.30	-0.11	0.0246	9.9999	0.0015	9.9999	0.0607	1.0059	-0.0091	0.3989	-0.0091	0.3966
170	59.43	-0.07	0.0295	9.9999	0.0027	9.9999	0.1051	0.9927	-0.0088	0.3952	-0.0089	0.3981
171	59.58	-0.08	0.0153	9.9999	-0.0032	9.9999	-0.1963	1.0022	-0.0091	0.3979	-0.0091	0.3971
172	59.74	-0.08	0.0282	9.9999	-0.0004	9.9999	-0.0198	1.0251	-0.0106	0.4077	-0.0098	0.3978
173	59.89	-0.09	0.0359	9.9999	0.0041	9.9999	0.2578	1.0253	-0.0096	0.4058	-0.0094	0.3988
174	60.04	-0.12	0.0282	9.9999	0.0021	9.9999	0.0745	1.0265	-0.0102	0.4065	-0.0100	0.3960
175	60.24	-0.08	0.0314	9.9999	0.0047	9.9999	0.1521	1.0477	-0.0121	0.4159	-0.0116	0.3969
176	60.34	-0.09	0.0295	9.9999	0.0012	9.9999	0.0505	1.0225	-0.0117	0.4043	-0.0115	0.3954
177	60.44	-0.08	0.0284	9.9999	0.0018	9.9999	0.0845	1.0513	-0.0124	0.4164	-0.0123	0.3942
178	60.52	-0.09	0.0311	9.9999	0.0052	9.9999	0.1677	1.0172	-0.0114	0.3993	-0.0112	0.3926
179	60.53	-0.05	0.0288	9.9999	0.0023	9.9999	0.0864	1.0464	-0.0121	0.4123	-0.0116	0.3948

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	P&W	P&W-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	99	0.000	1.7	0.0	minus23	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.69	0.00	-0.8351	2.6737	-0.0539	-1.0847	-0.0004	0.3297	0.1336	0.1963	-2.7105
2	-5.76	0.00	-0.8359	2.7044	0.0659	-0.6742	-0.0304	0.3317	0.1320	0.1997	-2.7088
3	-5.83	-0.01	-0.8496	2.6923	-0.0072	-0.0969	-0.0004	0.3334	0.1329	0.2011	-2.6966
4	-5.80	-0.01	-0.8356	2.6967	-0.0055	-0.0707	-0.0003	0.3346	0.1296	0.2120	-2.7820
5	-4.89	0.01	-0.7276	2.4163	0.0297	-0.0862	0.0001	0.3317	0.1210	0.2107	-2.9692
6	-3.97	0.01	-0.6459	1.9780	0.0446	-0.1297	0.0008	0.3088	0.1068	0.2020	-3.5289
7	-1.20	0.01	-0.4372	1.1782	0.0607	-0.0756	0.0012	0.2895	0.0996	0.1913	-4.4160
8	0.58	0.00	-0.2106	1.0727	0.0563	-0.0775	0.0019	0.2716	0.0962	0.1774	-7.0498
9	2.52	0.01	-0.2172	1.1535	0.0398	-0.0598	0.0023	0.2599	0.0957	0.1633	-67.0278
10	4.33	0.00	0.1527	0.8811	0.0696	-0.0597	0.0029	0.2491	0.0996	0.1496	5.6400
11	6.17	0.00	0.3126	0.6854	0.0397	-0.0765	-0.0038	0.2491	0.1126	0.1322	2.1969
12	8.03	0.00	0.5184	0.4763	0.0668	-0.0470	0.0043	0.2333	0.1224	0.1110	0.9189
13	9.98	-0.01	0.7116	0.1964	-0.0053	-0.0211	0.0049	0.2217	0.1257	0.0960	0.2317
14	11.68	-0.00	0.8909	-0.0281	-0.0185	0.0049	0.0056	0.1919	0.1310	0.0609	-0.3008
15	13.47	-0.01	1.0263	-0.2071	-0.0212	-0.0313	0.0063	0.1820	0.1415	0.0405	-0.5776
16	15.34	0.00	1.1559	-0.3964	-0.0427	0.0553	0.0070	0.1625	0.1500	0.0125	-0.7062
17	17.23	-0.01	1.2714	-0.5864	-0.0674	0.2007	0.0074	0.1529	0.1510	-0.0081	-0.7630
18	19.17	-0.01	1.3735	-0.7802	-0.0897	0.4918	0.0076	0.1547	0.1777	-0.0230	-0.7615
19	20.92	-0.02	1.4631	-0.9778	-0.1256	0.5145	-0.0133	0.1645	0.2180	-0.0435	-0.6766
20	22.77	-0.02	1.5452	-1.1655	-0.1500	1.0409	-0.0359	0.1993	0.2520	-0.0527	-0.5972
21	24.60	-0.02	1.6220	-1.3521	-0.1797	1.0712	-0.0349	0.1642	0.2587	-0.1046	-0.5583
22	26.45	-0.01	1.6907	-1.5163	-0.1979	0.6046	-0.0319	0.1141	0.2496	-0.1356	-0.4315
23	28.13	-0.01	1.7477	-1.6827	-0.2134	0.5138	-0.0377	0.0920	0.2511	-0.1691	-0.3484
24	29.14	-0.01	1.7953	-1.7797	-0.2666	0.7033	-0.0456	0.0919	0.2621	-0.1702	-0.3461
25	26.15	0.01	1.8292	-1.8152	-0.1995	0.6092	-0.0336	0.0873	0.2621	-0.1742	-0.3611
26	28.25	-0.00	1.8510	-1.1796	-0.1044	0.5119	-0.0302	0.1004	0.2455	-0.1652	-0.3542
27	25.63	0.00	1.8740	-1.1655	-0.1470	0.5194	-0.0299	0.0812	0.2564	-0.1852	-0.3275
28	25.99	0.00	1.8985	-1.1155	-0.0772	0.4332	-0.0220	0.0860	0.2717	-0.1857	-0.3244
29	29.21	0.02	1.9200	-1.1273	-0.1907	-0.0369	0.0156	0.0864	0.2730	-0.1856	-0.3221
30	29.53	0.02	1.9403	-1.0677	0.2149	0.0396	0.0092	0.0800	0.2779	-0.1979	-0.2996
31	29.81	0.02	1.9588	-1.0359	0.1173	0.2507	-0.0135	0.0762	0.2838	-0.2046	-0.3022
32	30.10	0.03	1.9735	-1.0644	0.3146	-0.1870	0.0178	0.0802	0.2870	-0.2068	-0.2945
33	30.36	0.03	1.9872	-1.1194	0.4594	-0.4457	0.0337	0.0826	0.2886	-0.2059	-0.2945
34	30.62	0.04	1.9971	-1.1003	0.4176	-0.6826	0.0442	0.0817	0.2908	-0.2135	-0.2860
35	30.91	0.03	2.0156	-1.1014	0.4591	-0.6000	0.0568	0.0793	0.3124	-0.2230	-0.2813
36	31.16	0.04	2.0291	-1.0450	0.5972	-0.4656	0.0419	0.0862	0.3111	-0.2278	-0.2639
37	31.45	0.04	2.0414	-1.1134	0.5863	-0.5169	0.0573	0.0884	0.3241	-0.2316	-0.2748
38	31.72	0.05	2.0545	-1.0339	0.6304	-0.4450	0.0574	0.0892	0.3221	-0.2328	-0.2500
39	31.98	0.05	2.0655	-1.0435	0.6255	-0.5017	0.0499	0.1030	0.3449	-0.2419	-0.2240
40	32.25	0.06	2.0757	-1.0369	0.7467	-0.4923	0.0432	0.1057	0.3535	-0.2478	-0.2186
41	32.58	0.06	2.0879	-1.0165	0.7492	-0.5575	0.0433	0.1257	0.3576	-0.2419	-0.1656
42	32.77	0.06	2.0966	-1.0425	0.8364	-0.3335	0.0246	0.1454	0.3672	-0.2518	-0.1546
43	33.02	0.06	2.1052	-1.0434	0.8156	-0.4072	0.0436	0.1280	0.3759	-0.2674	-0.0665
44	33.28	0.06	2.1141	-1.0380	0.8137	-0.4442	0.0295	0.1391	0.3774	-0.2643	-0.0156
45	33.51	0.06	2.1239	-1.0437	0.8219	-0.2523	0.0295	0.1501	0.3797	-0.2796	0.0085
46	33.75	0.07	2.1329	-1.0429	0.8684	-0.1329	0.0241	0.1698	0.4446	-0.2748	0.0477

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RALG-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	94	0.60	1.7	0.0	81=0F23	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	30.01	0.07	4.5716	0.3776	0.4860	0.0946	0.0214	0.1746	0.4541	-0.2795	0.0826
48	30.26	0.07	4.6521	0.3853	0.4940	0.0918	0.0147	0.1721	0.4549	-0.2868	0.0789
49	30.49	0.07	4.7257	0.3675	0.5036	0.3045	0.0208	0.1754	0.4560	-0.2907	0.0783
50	30.76	0.07	4.7919	0.2639	0.4529	0.2383	0.0068	0.1714	0.4498	-0.2985	0.0551
51	35.00	0.08	4.9305	0.1116	1.0097	0.5098	0.0207	0.1760	0.4717	-0.3018	0.0226
52	35.23	0.06	4.9741	0.1160	0.9378	0.6171	0.0060	0.1720	0.4755	-0.3016	0.0233
53	35.47	0.08	5.0262	0.2734	0.9552	0.6633	-0.0082	0.1681	0.4754	-0.3074	0.0538
54	35.71	0.07	5.0773	0.4571	0.8116	0.5762	-0.0075	0.1665	0.4704	-0.3100	0.0909
55	35.96	0.08	5.1336	0.5087	0.7704	0.3935	-0.0063	0.1652	0.4726	-0.3174	0.0952
56	36.16	0.08	5.2032	0.3537	0.7146	0.5114	-0.0135	0.1562	0.4717	-0.3255	0.0672
57	36.41	0.08	5.3113	0.4081	0.7003	0.5571	-0.0212	0.1613	0.4846	-0.3233	0.0765
58	36.65	0.08	5.4000	0.3742	0.7252	0.6972	-0.0210	0.1683	0.4893	-0.3400	0.0693
59	36.87	0.07	5.5177	0.4054	0.7723	0.8554	-0.0213	0.1569	0.4930	-0.3370	0.0680
60	37.12	0.08	5.6200	0.1866	0.6753	1.2672	-0.0370	0.1680	0.4897	-0.3417	0.0332
61	37.35	0.07	5.7088	0.1174	0.6526	1.7121	-0.0531	0.1516	0.4939	-0.3423	0.0206
62	37.57	0.08	5.8577	0.1195	0.5469	1.5781	-0.0519	0.1417	0.4960	-0.3523	0.0204
63	37.82	0.08	5.9508	-0.0979	0.5562	1.9580	-0.0530	0.1393	0.4996	-0.3603	-0.0163
64	38.04	0.05	6.0537	-0.1076	0.4169	2.2724	-0.0537	0.1402	0.5001	-0.3601	-0.0177
65	38.28	0.05	6.2523	-0.2742	0.4124	2.4863	-0.0635	0.1344	0.5019	-0.3675	-0.0439
66	38.52	0.08	6.3535	-0.3587	0.3943	2.7317	-0.0766	0.1289	0.5046	-0.3759	-0.0565
67	38.74	0.08	6.4423	-0.3762	0.4611	2.6252	-0.0767	0.1385	0.5109	-0.3724	-0.0584
68	38.99	0.05	6.4614	-0.2841	0.3388	2.6249	-0.0669	0.1364	0.5065	-0.3721	-0.0409
69	39.18	0.08	6.6294	-0.4078	0.4082	3.0071	-0.0839	0.1380	0.5142	-0.3762	-0.0616
70	39.46	0.08	6.7246	-0.4754	0.4257	3.0364	-0.0766	0.1295	0.5185	-0.3890	-0.0708
71	39.58	0.08	6.8171	-0.4510	0.4565	2.3790	-0.0520	0.1294	0.5147	-0.3848	-0.0077
72	39.80	0.05	6.9276	0.1325	0.3539	1.9721	-0.0428	0.1219	0.5167	-0.3948	0.0203
73	40.00	0.05	6.9534	0.1427	0.4992	1.7199	-0.0365	0.1117	0.5181	-0.4064	0.0215
74	40.19	0.04	6.9556	0.1498	0.5177	1.7817	-0.0272	0.1205	0.5172	-0.3967	0.0284
75	40.39	0.04	6.8756	0.3021	0.4733	1.6943	-0.0258	0.1090	0.5200	-0.4110	0.0542
76	40.60	0.05	6.8684	0.0666	0.5654	2.0307	-0.0350	0.1186	0.5229	-0.4043	0.0097
77	40.82	0.05	6.8549	0.2188	0.5325	1.7672	-0.0190	0.1067	0.5238	-0.4171	0.0317
78	41.02	0.05	6.9859	0.1265	0.5504	1.9290	-0.0340	0.1070	0.5234	-0.4218	0.0175
79	41.21	0.05	7.0114	0.1141	0.5517	2.1066	-0.0347	0.1126	0.5300	-0.4174	0.0163
80	41.43	0.05	7.2405	-0.1097	0.4421	2.7386	-0.0508	0.1115	0.5353	-0.4238	-0.0206
81	41.62	0.08	7.3224	-0.1500	0.5005	2.6575	-0.0579	0.1014	0.5352	-0.4338	-0.0246
82	41.82	0.06	7.3536	-0.1309	0.5060	2.6493	-0.0497	0.0972	0.5338	-0.4366	-0.0178
83	42.01	0.06	7.4066	-0.2074	0.4754	2.7169	-0.0575	0.1062	0.5363	-0.4301	-0.0280
84	42.20	0.06	7.5465	-0.2692	0.4425	3.0540	-0.0584	0.1021	0.5367	-0.4346	-0.0326
85	42.37	0.05	7.6031	-0.3115	0.5299	2.8736	-0.0505	0.0961	0.5377	-0.4435	-0.0410
86	42.57	0.05	7.7143	-0.2709	0.4657	2.5952	-0.0566	0.0901	0.5434	-0.4532	-0.0351
87	42.75	0.05	7.7206	-0.3016	0.4190	2.7375	-0.0643	0.0863	0.5449	-0.4585	-0.0389
88	42.92	0.05	7.8032	-0.2569	0.5077	2.7327	-0.0639	0.0883	0.5457	-0.4573	-0.0339
89	43.11	0.07	7.5800	-0.4762	0.5382	2.9772	-0.0719	0.0931	0.5471	-0.4539	-0.0594
90	43.30	0.06	8.0613	-0.4564	0.6366	2.9255	-0.0641	0.0817	0.5490	-0.4672	-0.0580
91	43.47	0.07	8.0328	-0.4224	0.6061	2.6095	-0.0636	0.0794	0.5456	-0.4656	-0.0524
92	43.64	0.07	8.2222	-0.5517	0.8054	2.7492	-0.0559	0.0706	0.5509	-0.4802	-0.0671

PAGE 1 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RE/10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	94	0.60	1.7	0.0	41.0F23	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAM	CAF	ACP
93	43.43	0.07	8.1749	-0.1716	0.7322	2.5647	-0.0548	0.0707	0.5508	-0.4800	-0.0456
94	44.01	0.06	8.3906	-0.1709	0.8487	2.6790	-0.0632	0.0700	0.5527	-0.4827	-0.0459
95	44.18	0.07	8.3886	-0.1767	0.8113	2.6691	-0.0672	0.0838	0.5522	-0.4892	-0.0703
96	44.39	0.06	8.3857	-0.1916	0.7193	2.6429	-0.0670	0.0628	0.5508	-0.4880	-0.0506
97	44.56	0.07	8.5125	-0.1755	0.8067	2.7103	-0.0546	0.0660	0.5499	-0.4839	-0.0481
94	44.74	0.05	8.4009	-0.1502	0.6712	2.5957	-0.0537	0.0514	0.5469	-0.4551	-0.0425
98	44.92	0.05	8.5176	-0.1624	0.8267	2.6626	-0.0455	0.0557	0.5475	-0.4918	-0.0519
100	45.11	0.06	8.7376	-0.1742	0.7423	3.0648	-0.0770	0.0641	0.5504	-0.4863	-0.0891
101	45.29	0.07	8.8776	-0.1816	0.8550	2.8319	-0.0616	0.0567	0.5470	-0.4863	-0.0917
102	45.45	0.07	8.9911	-0.1775	0.8306	2.9606	-0.0607	0.0589	0.5475	-0.4886	-0.0886
103	45.65	0.07	9.0957	-0.1821	0.9067	3.2315	-0.0628	0.0689	0.5484	-0.4995	-0.1123
104	45.80	0.05	8.9508	-0.1721	0.8106	3.0561	-0.0684	0.0469	0.5471	-0.5022	-0.0806
105	45.99	0.06	9.1613	-0.1762	0.7422	3.1612	-0.0759	0.0680	0.5490	-0.5018	-0.1013
106	46.17	0.07	9.2633	-0.1817	0.8232	3.1256	-0.0691	0.0444	0.5485	-0.5041	-0.1099
107	46.32	0.07	9.3672	-0.1833	0.7966	3.2543	-0.0656	0.0506	0.5504	-0.4998	-0.1118
108	46.52	0.07	9.3511	-0.1824	0.8108	3.1930	-0.0680	0.0611	0.5490	-0.5079	-0.1101
109	46.69	0.06	9.5305	-0.1813	0.9353	3.2372	-0.0753	0.0371	0.5523	-0.5152	-0.1257
110	46.85	0.07	9.5467	-0.2266	0.7910	3.1035	-0.0742	0.0344	0.5513	-0.5169	-0.1279
111	47.03	0.08	9.6352	-0.1734	0.9116	3.0304	-0.0735	0.0326	0.5514	-0.5192	-0.1216
112	47.21	0.08	9.7340	-0.2709	0.8572	3.1945	-0.0668	0.0253	0.5480	-0.5227	-0.1305
113	47.36	0.09	9.8407	-0.1877	0.8865	3.1450	-0.0516	0.0312	0.5533	-0.5221	-0.1490
114	47.55	0.10	9.9190	-0.3940	1.0999	3.3882	-0.0452	0.0275	0.5504	-0.5229	-0.1406
115	47.73	0.09	10.0791	-0.3513	0.9556	3.1350	-0.0510	0.0225	0.5480	-0.5255	-0.1539
116	47.92	0.09	10.1873	-0.3826	0.9376	3.2246	-0.0435	0.0041	0.5475	-0.5434	-0.1534
117	48.09	0.10	10.2958	-0.3925	1.0387	3.2956	-0.0836	0.0063	0.5527	-0.5364	-0.1567
118	48.28	0.10	10.3183	-0.3620	1.0063	3.3467	-0.0511	0.0029	0.5466	-0.5438	-0.1611
119	48.42	0.10	10.4922	-0.4674	0.9978	3.4845	-0.0437	0.0206	0.5469	-0.5285	-0.1616
120	48.59	0.09	10.5169	-0.3409	0.9193	3.4830	-0.0433	0.0042	0.5485	-0.5443	-0.1656
121	48.77	0.08	10.5935	-0.3654	0.8812	3.5565	-0.0433	-0.0028	0.5484	-0.5512	-0.1636
122	48.93	0.08	10.5447	-0.3336	0.8652	3.3927	-0.0425	0.0055	0.5494	-0.5439	-0.1549
123	49.11	0.09	10.6811	-0.3780	0.8748	3.5126	-0.0529	-0.0092	0.5485	-0.5577	-0.1486
124	49.27	0.07	10.5383	-0.3556	0.6705	3.5164	-0.0498	-0.0042	0.5552	-0.5594	-0.1286
125	49.46	0.07	10.5269	-0.2369	0.8638	3.5374	-0.0571	-0.0171	0.5504	-0.5675	-0.1173
126	49.62	0.05	10.4209	-0.2734	0.8594	3.5490	-0.0640	-0.0304	0.5486	-0.5790	-0.0743
127	49.78	0.05	10.2937	-0.4387	0.8993	3.3605	-0.0743	-0.0312	0.5484	-0.5716	-0.0426
128	49.95	0.04	10.4321	-0.4376	0.8781	3.7792	-0.0869	-0.0216	0.5394	-0.5610	-0.0422
129	50.12	0.03	10.3329	-0.2616	0.8134	3.6566	-0.0760	-0.0449	0.5385	-0.5636	-0.0194
130	50.28	0.03	10.4423	-0.2595	0.8770	3.8092	-0.0740	-0.0329	0.5404	-0.5733	-0.0346
131	50.45	0.04	10.4407	-0.2189	0.8088	4.0056	-0.0858	-0.0321	0.5370	-0.5691	-0.0210
132	50.62	0.04	10.5145	-0.4476	0.8349	4.3010	-0.0877	-0.0393	0.5365	-0.5778	-0.0426
133	50.78	0.03	10.4811	-0.2582	-0.1416	4.1539	-0.0871	-0.0420	0.5381	-0.5801	-0.0246
134	50.95	0.02	10.5405	-0.2758	-0.1274	4.4435	-0.0793	-0.0439	0.5371	-0.5810	-0.0557
135	51.12	0.02	10.7264	-0.2760	-0.0679	4.3747	-0.0863	-0.0565	0.5391	-0.5956	-0.0624
136	51.30	0.02	10.7485	-0.2554	-0.1427	4.4450	-0.0863	-0.0633	0.5382	-0.5945	-0.0524
137	51.47	0.03	11.0774	-0.2194	0.3134	4.5164	-0.0867	-0.0505	0.5392	-0.5997	-0.1101
138	51.62	0.05	11.0869	-0.1871	0.2427	4.3112	-0.0836	-0.0741	0.5433	-0.6174	-0.1073

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/10**6	PHI	CONF	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	94	0.60	1.7	0.0	B1=0P23	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	ACP
139	51.21	0.06	11.2419	-1.4320	0.4356	4.9197	-0.0566	-0.0832	0.5531	-0.6165	-0.1274
140	51.42	0.06	11.3867	-1.4551	0.4513	4.9728	-0.0575	-0.0848	0.5634	-0.6282	-0.1452
141	52.16	0.06	11.4478	-1.4653	0.4509	4.9530	-0.0586	-0.0845	0.5648	-0.6293	-0.1437
142	52.32	0.07	11.5727	-1.4816	0.4564	5.1152	-0.0803	-0.0801	0.5394	-0.6195	-0.1427
143	52.98	0.07	11.5976	-1.4859	0.4564	5.0549	-0.0729	-0.0946	0.5356	-0.6302	-0.1471
144	52.65	0.07	11.6230	-1.4847	0.4614	5.2247	-0.0809	-0.0811	0.5395	-0.6206	-0.1579
145	52.63	0.06	11.6529	-1.4974	0.4665	4.8908	-0.0866	-0.0825	0.5426	-0.6253	-0.1631
146	52.98	0.06	11.7881	-1.4997	0.4619	5.0813	-0.0877	-0.0894	0.5410	-0.6304	-0.1696
147	53.15	0.06	11.9626	-2.1806	0.4758	4.8743	-0.0793	-0.0879	0.5439	-0.6309	-0.1625
148	53.34	0.05	12.0552	-2.1419	0.4706	4.9555	-0.0793	-0.1279	0.5395	-0.6674	-0.1772
149	53.50	0.14	12.2799	-2.3491	1.0326	4.8954	-0.0535	-0.0949	0.5456	-0.6402	-0.1880
150	53.45	0.14	12.2992	-2.2910	1.0078	3.8834	-0.0454	-0.1030	0.5382	-0.6411	-0.1869
151	53.42	0.13	12.3227	-2.3777	1.0357	3.8001	-0.0377	-0.1082	0.5409	-0.6551	-0.1930
152	54.01	0.11	12.6504	-2.5835	1.2759	3.1710	-0.0198	-0.1094	0.5509	-0.6802	-0.2042
153	54.15	0.12	12.6971	-2.6548	1.4495	2.8736	-0.0050	-0.1128	0.5533	-0.6854	-0.2088
154	54.34	0.13	12.9043	-2.6869	1.6286	2.3579	0.0206	-0.1021	0.5659	-0.6679	-0.2221
155	54.51	0.12	13.2082	-2.9380	1.5081	2.4755	0.0439	-0.1024	0.5945	-0.6668	-0.2225
156	54.65	0.11	13.1404	-2.9353	1.3624	2.5406	0.0362	-0.1020	0.5547	-0.6572	-0.2234
157	54.62	0.12	13.2662	-2.9604	1.4062	2.5767	0.0437	-0.1050	0.5522	-0.6577	-0.2232
158	54.97	0.11	13.1493	-2.9204	1.3246	2.6617	0.0359	-0.0987	0.5586	-0.6532	-0.2221
159	55.14	0.12	13.4521	-3.1038	1.4256	2.5446	0.0448	-0.1295	0.5599	-0.6896	-0.2295
160	55.26	0.13	13.4337	-3.2455	1.5263	2.6363	0.0364	-0.1138	0.5626	-0.6762	-0.2416
161	55.43	0.14	13.4025	-3.1130	1.3552	2.6773	0.0441	-0.1029	0.5592	-0.6615	-0.2322
162	55.61	0.10	13.3648	-3.0939	1.3426	2.7428	0.0290	-0.0883	0.5559	-0.6442	-0.2312
163	55.79	0.11	13.5156	-3.2873	1.4299	2.6656	0.0372	-0.1213	0.5586	-0.6799	-0.2415
164	55.95	0.09	13.4910	-3.0787	1.2356	2.2390	0.0389	-0.1270	0.5576	-0.6846	-0.2281
165	56.11	0.10	13.4856	-3.0356	1.3743	2.3353	0.0457	-0.1073	0.5527	-0.6599	-0.2256
166	56.28	0.10	13.5403	-2.8938	1.4006	2.4790	0.0456	-0.1283	0.5497	-0.6780	-0.2137
167	56.43	0.09	13.5362	-2.8859	1.3018	2.6908	0.0374	-0.1345	0.5545	-0.6890	-0.2134
168	56.60	0.10	13.4571	-3.1021	1.3471	2.6746	0.0458	-0.1257	0.5565	-0.6802	-0.2239
169	56.79	0.08	13.6475	-2.8729	1.1932	2.3968	0.0467	-0.1503	0.5564	-0.7067	-0.2170
170	56.90	0.10	13.7327	-2.9469	1.3667	2.4787	0.0462	-0.1378	0.5539	-0.6917	-0.2144
171	57.08	0.08	13.6643	-2.8923	1.1591	2.7117	0.0381	-0.1401	0.5548	-0.6949	-0.2160
172	57.14	0.07	13.9423	-2.9011	0.9849	2.3353	0.0399	-0.1529	0.5524	-0.7053	-0.2127
173	57.34	0.07	13.9517	-2.8702	1.0044	2.1098	0.0401	-0.1398	0.5432	-0.6778	-0.2007
174	57.50	0.08	13.7405	-2.9515	1.1794	2.2747	0.0477	-0.1633	0.5527	-0.7160	-0.2142
175	57.59	0.06	13.7320	-2.8747	0.9699	2.3821	0.0401	-0.1594	0.5499	-0.7053	-0.2093
176	57.78	0.08	13.7285	-2.8562	1.1495	2.5225	0.0456	-0.1533	0.5606	-0.7139	-0.2081
177	57.93	0.06	13.5483	-2.5336	0.9860	2.3275	0.0396	-0.1645	0.5429	-0.7074	-0.1870
178	58.08	0.05	13.5938	-2.5465	0.8263	2.3705	0.0402	-0.1623	0.5532	-0.7155	-0.1873
179	58.20	0.06	13.5735	-2.5126	0.9737	2.0590	0.0341	-0.1876	0.5498	-0.7174	-0.2018
180	58.21	0.06	13.6966	-2.6034	1.0013	2.4047	0.0474	-0.1573	0.5646	-0.7219	-0.1945

PAGE 2 OF 3
SHEET 1 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	REIG-6	FMI	CONF	I	DEL1	DEL2	DEL3	DEL4	TRANSITION
1	94	0.60	1.7	0.0	M1A0F23	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CN2	XCPF2	YCPF2
1	-5.04	0.00	0.0176	0.0	0.0655	0.0	0.3297	-0.7160	-0.0431	-0.3121	0.0602	0.4359
2	-4.70	0.00	0.0044	-0.0009	0.0022	-0.0978	0.2500	-0.7093	-0.0434	-0.3129	0.0612	0.4412
3	-5.04	-0.01	-0.0001	-0.0003	0.0013	0.0000	-13.0000	-0.7127	-0.0434	-0.3118	0.0609	0.4376
4	-5.00	-0.01	0.0001	-0.0009	0.0006	-0.1429	0.0952	-0.7026	-0.0445	-0.3097	0.0633	0.4409
5	-4.99	0.00	-0.0003	0.00	0.0022	0.0	-0.6765	-0.6591	-0.0491	-0.2970	0.0745	0.4506
6	-3.02	0.01	-0.0124	0.0009	0.0016	-0.0703	-0.1094	-0.5697	-0.0531	-0.2724	0.0932	0.4786
7	-1.26	0.00	-0.0153	0.0005	0.0013	-0.0314	-0.0629	-0.4693	-0.0498	-0.2560	0.1061	0.5454
8	0.00	0.00	-0.0123	0.0009	0.0001	-0.0709	-0.0079	-0.3345	-0.0395	-0.2034	0.1180	0.6080
9	2.52	0.00	-0.0123	0.0009	0.0001	-0.0709	-0.0079	-0.2007	-0.0265	-0.1351	0.1322	0.6731
10	4.33	0.01	-0.0091	0.0005	-0.0010	-0.0532	0.1064	-0.0695	-0.0152	-0.0788	0.2194	1.1347
11	6.17	0.00	-0.0116	-0.0006	-0.0028	0.0738	0.2213	0.0081	0.0056	-0.0427	0.6905	-5.2738
12	8.03	0.00	-0.0041	0.0016	-0.0004	-0.1489	0.0957	0.0823	0.0272	-0.0069	0.3306	-0.0832
13	9.80	-0.01	-0.0046	0.0018	0.0037	-0.5135	-1.0270	0.1798	0.0434	0.0460	0.2915	0.2468
14	11.60	-0.00	-0.0016	-0.0009	0.0115	0.6429	-0.5000	0.2971	0.0591	0.1045	0.1988	0.3517
15	13.47	-0.00	-0.0126	-0.0027	0.0162	0.2105	-0.4612	0.4148	0.0673	0.1647	0.1624	0.3971
16	15.34	0.00	-0.0104	-0.0045	0.0141	0.4273	-1.3273	0.4940	0.0694	0.1965	0.1404	0.3979
17	17.24	-0.00	-0.0113	-0.0066	0.0209	0.5641	-1.8034	0.5664	0.0648	0.2217	0.1148	0.3957
18	19.07	-0.01	-0.0107	-0.0159	0.0437	0.9538	-2.6185	0.5939	0.0574	0.2376	0.0967	0.4000
19	20.92	-0.12	-0.2348	-0.0200	0.0387	0.5221	-2.7748	0.6291	0.0469	0.2486	0.0785	0.3951
20	22.77	-0.02	-0.1217	-0.0301	0.0116	0.2966	-0.0967	0.6427	0.0449	0.2470	0.0598	0.3843
21	24.64	-0.02	-0.2384	-0.0394	-0.0019	0.1903	0.2010	0.6615	0.0383	0.2434	0.0579	0.3680
22	26.45	-0.01	-0.1775	-0.0203	-0.0621	0.1369	0.3498	0.6786	0.0370	0.2346	0.0545	0.3538
23	28.13	-0.01	-0.1798	-0.0233	-0.0713	0.1360	0.3971	0.7053	0.0370	0.2456	0.0524	0.3484
24	29.14	-0.04	-0.2455	-0.0307	-0.1045	0.1250	0.4269	0.7056	0.0370	0.2444	0.0524	0.3465
25	29.15	0.00	-0.1594	-0.0215	-0.0525	0.1350	0.3929	0.6987	0.0363	0.2452	0.0519	0.3509
26	29.25	-0.00	-0.1561	-0.0210	-0.0508	0.1302	0.3661	0.7067	0.0364	0.2476	0.0515	0.3504
27	29.84	0.00	-0.1784	-0.0225	-0.0729	0.1246	0.4092	0.7202	0.0357	0.2466	0.0498	0.3453
28	29.94	0.00	-0.0741	-0.0092	-0.0163	0.1237	0.2201	0.7134	0.0357	0.2494	0.0500	0.3496
29	29.21	0.00	-0.0116	-0.0010	0.0102	0.0847	-1.6017	0.7235	0.0350	0.2503	0.0484	0.3459
30	29.53	0.00	-0.0143	0.0018	0.0329	0.1284	2.3041	0.7269	0.0347	0.2505	0.0478	0.3446
31	29.81	0.00	-0.0612	-0.0105	-0.0261	0.1153	0.2857	0.7370	0.0343	0.2541	0.0466	0.3447
32	30.10	0.00	0.0627	0.0110	0.0707	0.1330	0.8553	0.7437	0.0343	0.2533	0.0462	0.3406
33	30.36	0.00	0.1720	0.0215	0.1150	0.1256	0.6685	0.7485	0.0344	0.2541	0.0460	0.3396
34	30.62	0.00	0.2209	0.0275	0.1401	0.1249	0.6343	0.7418	0.0351	0.2521	0.0473	0.3399
35	31.91	0.00	0.2259	0.0288	0.1464	0.1305	0.6332	0.7604	0.0343	0.2573	0.0452	0.3386
36	31.18	0.00	0.1507	0.0225	0.1112	0.1492	0.7387	0.7738	0.0343	0.2611	0.0444	0.3374
37	31.45	0.00	0.2424	0.0340	0.1562	0.1401	0.6529	0.7739	0.0347	0.2585	0.0449	0.3360
38	31.72	0.00	0.1934	0.0273	0.1400	0.1495	0.7146	0.7808	0.0350	0.2564	0.0449	0.3283
39	31.98	0.00	0.1872	0.0302	0.1324	0.1611	0.7072	0.7792	0.0349	0.2559	0.0448	0.3284
40	32.25	0.00	0.1930	0.0325	0.1374	0.1663	0.7025	0.8061	0.0346	0.2608	0.0430	0.3236
41	32.50	0.00	0.1946	0.0327	0.1436	0.1642	0.7345	0.8179	0.0329	0.2640	0.0402	0.3228
42	32.77	0.00	0.1965	0.0320	0.1434	0.1647	0.7376	0.8245	0.0339	0.2659	0.0411	0.3225
43	33.02	0.00	0.1922	0.0319	0.1264	0.1498	0.7755	0.8195	0.0328	0.2644	0.0400	0.3251
44	33.26	0.00	0.1944	0.0311	0.1112	0.2060	0.7442	0.8163	0.0335	0.2608	0.0410	0.3195
45	33.51	0.00	0.1370	0.0208	0.1137	0.2059	0.6298	0.7963	0.0345	0.2552	0.0437	0.3205
46	33.75	0.01	0.1505	0.0219	0.1273	0.1455	0.8455	0.8012	0.0341	0.2619	0.0425	0.3268

TEST	PART	MACH	REY-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	94	0.80	1.7	0.0	81>0P23	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	C92	XCPF2	YCPF2
47	34.01	0.07	0.0967	0.0104	0.0761	0.2615	1.2138	0.7732	0.0357	0.2500	0.0462	0.3233
48	34.26	0.07	0.1026	0.0072	0.0791	0.0704	0.9643	0.8194	0.0337	0.2698	0.0411	0.3290
49	34.49	0.07	0.0832	-0.0069	0.0596	-0.0101	1.0325	0.8195	0.0341	0.2656	0.0416	0.3241
50	34.74	0.07	0.0834	0.0077	0.0841	0.0926	1.0093	0.8192	0.0337	0.2722	0.0411	0.3323
51	35.00	0.08	0.0859	0.0116	0.0890	0.0157	1.0350	0.8309	0.0330	0.2761	0.0397	0.3299
52	35.23	0.08	0.0880	-0.0064	0.0713	-0.1384	1.5493	0.8375	0.0330	0.2772	0.0394	0.3310
53	35.47	0.08	0.0811	-0.0391	0.0464	-0.5455	+1.8182	0.8328	0.0338	0.2725	0.0403	0.3273
54	35.71	0.07	-0.0240	-0.0037	0.0255	0.1528	-1.0602	0.8226	0.0339	0.2704	0.0412	0.3286
55	35.99	0.06	-0.0869	-0.0627	0.0161	0.0576	-0.3006	0.8359	0.0336	0.2741	0.0402	0.3279
56	36.18	0.06	-0.0949	-0.0814	0.0057	0.0246	-0.1037	0.8425	0.0332	0.2746	0.0394	0.3259
57	36.41	0.06	-0.0919	-0.0896	-0.0194	0.1090	0.1134	0.8392	0.0326	0.2743	0.0389	0.3269
58	36.65	0.06	-0.0921	-0.0841	-0.0190	0.0440	0.1069	0.8294	0.0332	0.2709	0.0400	0.3267
59	36.87	0.07	-0.1036	-0.0956	-0.0142	0.0924	0.1371	0.8424	0.0319	0.2802	0.0370	0.3249
60	37.12	0.06	-0.1599	-0.0722	-0.0416	0.1348	0.2601	0.8657	0.0319	0.2805	0.0369	0.3240
61	37.35	0.07	-0.2115	-0.1375	-0.0565	0.1775	0.2765	0.8886	0.0310	0.2915	0.0349	0.3280
62	37.57	0.06	-0.2002	-0.1328	-0.0569	0.1629	0.2643	0.8772	0.0314	0.2857	0.0357	0.3257
63	37.82	0.06	-0.2201	-0.1431	-0.0643	0.1904	0.2843	0.9036	0.0300	0.2945	0.0332	0.3259
64	38.04	0.05	-0.2520	-0.1658	-0.0736	0.1819	0.2921	0.8970	0.0300	0.2926	0.0335	0.3262
65	38.28	0.05	-0.3032	-0.2554	-0.0962	0.1858	0.3205	0.9069	0.0267	0.2966	0.0316	0.3293
66	38.52	0.05	-0.3332	-0.2816	-0.1015	0.1853	0.3047	0.8987	0.0294	0.2945	0.0327	0.3277
67	38.74	0.05	-0.3499	-0.2922	-0.1092	0.1807	0.3172	0.9053	0.0290	0.2963	0.0321	0.3273
68	38.99	0.05	-0.3160	-0.2545	-0.0966	0.1725	0.3056	0.8921	0.0294	0.2925	0.0330	0.3279
69	39.18	0.06	-0.4017	-0.3677	-0.1337	0.1666	0.3329	0.8856	0.0294	0.2895	0.0332	0.3269
70	39.40	0.06	-0.3508	-0.3133	-0.1113	0.1854	0.3174	0.9170	0.0282	0.3004	0.0307	0.3275
71	39.56	0.06	-0.3268	-0.2954	-0.0981	0.1719	0.2988	0.8972	0.0291	0.2921	0.0325	0.3255
72	39.80	0.05	-0.2203	-0.1984	-0.0666	0.1651	0.2116	0.9270	0.0275	0.3025	0.0297	0.3263
73	40.00	0.05	-0.1748	-0.1305	-0.0233	0.1744	0.1330	0.9405	0.0275	0.3035	0.0292	0.3229
74	40.19	0.04	-0.1607	-0.0787	-0.0151	0.1753	0.0942	0.9339	0.0275	0.3004	0.0294	0.3216
75	40.39	0.04	-0.1521	-0.0260	-0.0127	0.1707	0.0838	0.9437	0.0271	0.3052	0.0287	0.3234
76	40.60	0.05	-0.1641	-0.0342	-0.0190	0.2015	0.1124	0.9538	0.0264	0.3060	0.0277	0.3208
77	40.82	0.05	-0.1752	-0.0342	-0.0184	0.1949	0.1052	0.9537	0.0264	0.3087	0.0277	0.3237
78	41.02	0.05	-0.1923	-0.0350	-0.0280	0.1821	0.1655	0.9539	0.0261	0.3040	0.0274	0.3208
79	41.21	0.05	-0.2234	-0.0410	-0.0436	0.1831	0.1939	0.9555	0.0259	0.3092	0.0271	0.3236
80	41.43	0.05	-0.2751	-0.0507	-0.0690	0.1841	0.2508	0.9690	0.0261	0.3077	0.0270	0.3175
81	41.62	0.05	-0.3045	-0.0592	-0.0813	0.1785	0.2677	0.9757	0.0249	0.3109	0.0255	0.3186
82	41.82	0.06	-0.2995	-0.0660	-0.0578	0.1781	0.2236	0.9724	0.0249	0.3106	0.0256	0.3194
83	42.01	0.06	-0.3247	-0.0552	-0.0648	0.1700	0.2612	0.9724	0.0252	0.3060	0.0259	0.3167
84	42.26	0.06	-0.3251	-0.0565	-0.0814	0.1724	0.2442	0.9690	0.0249	0.3090	0.0257	0.3188
85	42.39	0.05	-0.3040	-0.0559	-0.0728	0.1764	0.2361	0.9775	0.0249	0.3115	0.0255	0.3186
86	42.57	0.05	-0.2967	-0.0508	-0.0713	0.1711	0.2403	0.9843	0.0242	0.3120	0.0246	0.3170
87	42.75	0.05	-0.3431	-0.0559	-0.0984	0.1637	0.2711	0.9875	0.0246	0.3136	0.0249	0.3175
88	42.92	0.05	-0.3749	-0.0559	-0.1027	0.1586	0.2726	0.9909	0.0242	0.3152	0.0244	0.3181
89	43.11	0.07	-0.3802	-0.0626	-0.1069	0.1587	0.2612	1.0012	0.0235	0.3173	0.0235	0.3170
90	43.30	0.06	-0.4033	-0.0635	-0.1172	0.1574	0.2907	1.0044	0.0230	0.3163	0.0229	0.3149
91	43.47	0.07	-0.3908	-0.0580	-0.0928	0.1607	0.2573	1.0078	0.0230	0.3166	0.0228	0.3161
92	43.66	0.07	-0.3437	-0.0576	-0.0833	0.1576	0.2423	1.0211	0.0219	0.3216	0.0214	0.3149

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | EART 54 | MACH 0.80 | RA10-6 1.7 | PHI 0.0 | CONF 61-0F23 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
94	43.93	0.07	-0.3341	-0.0553	-0.0799	0.1635	0.2363	1.0264	0.0219	0.3232	0.0214	0.3155
95	44.01	0.06	-0.3356	-0.0570	-0.0733	0.1716	0.2146	1.0244	0.0219	0.3232	0.0214	0.3155
95	44.10	0.07	-0.3351	-0.0554	-0.0717	0.1645	0.2139	1.0278	0.0216	0.3222	0.0210	0.3135
96	44.34	0.06	-0.3244	-0.0530	-0.0679	0.1633	0.2094	1.0245	0.0219	0.3193	0.0214	0.3116
97	44.58	0.07	-0.3439	-0.0580	-0.0625	0.1619	0.2358	1.0312	0.0209	0.3238	0.0203	0.3140
98	44.74	0.05	-0.3444	-0.0565	-0.0781	0.1645	0.2267	1.0379	0.0206	0.3243	0.0198	0.3124
99	44.92	0.05	-0.3447	-0.0584	-0.0767	0.1690	0.2226	1.0285	0.0216	0.3219	0.0211	0.3142
100	45.11	0.06	-0.4106	-0.0935	-0.1063	0.1546	0.2589	1.0417	0.0209	0.3259	0.0201	0.3130
101	45.29	0.07	-0.4148	-0.0617	-0.1065	0.1690	0.2574	1.0379	0.0216	0.3217	0.0208	0.3099
102	45.45	0.07	-0.4139	-0.0617	-0.1053	0.1690	0.2543	1.0513	0.0196	0.3267	0.0186	0.3108
103	45.65	0.07	-0.4196	-0.0655	-0.1195	0.1657	0.2665	1.0446	0.0203	0.3249	0.0194	0.3110
104	45.80	0.05	-0.4341	-0.0635	-0.1140	0.1663	0.2625	1.0546	0.0196	0.3293	0.0186	0.3113
105	45.99	0.06	-0.4491	-0.0631	-0.1166	0.1605	0.2602	1.0579	0.0196	0.3312	0.0185	0.3131
106	46.17	0.07	-0.4540	-0.0645	-0.1201	0.1618	0.2642	1.0547	0.0196	0.3270	0.0186	0.3100
107	46.32	0.07	-0.4524	-0.0645	-0.1136	0.1625	0.2506	1.0645	0.0196	0.3318	0.0184	0.3117
108	46.52	0.07	-0.4554	-0.0629	-0.1145	0.1575	0.2521	1.0579	0.0196	0.3312	0.0185	0.3131
109	46.69	0.08	-0.4782	-0.0628	-0.1277	0.1510	0.2669	1.0712	0.0193	0.3337	0.0180	0.3115
110	46.85	0.07	-0.4556	-0.0613	-0.1148	0.1565	0.2521	1.0779	0.0182	0.3368	0.0169	0.3125
111	47.03	0.05	-0.4502	-0.0606	-0.1077	0.1570	0.2392	1.0846	0.0182	0.3362	0.0168	0.3099
112	47.21	0.06	-0.4502	-0.0598	-0.1096	0.1511	0.2403	1.0780	0.0182	0.3356	0.0169	0.3113
113	47.39	0.05	-0.4549	-0.0588	-0.0923	0.1586	0.2205	1.0881	0.0182	0.3351	0.0168	0.3080
114	47.55	0.10	-0.4041	-0.0535	-0.0893	0.1523	0.2211	1.0979	0.0170	0.3425	0.0155	0.3120
115	47.73	0.07	-0.3721	-0.0508	-0.0780	0.1564	0.2095	1.0979	0.0163	0.3438	0.0149	0.3131
116	47.92	0.09	-0.3692	-0.0489	-0.0776	0.1565	0.2101	1.1046	0.0163	0.3457	0.0148	0.3130
117	48.09	0.10	-0.3698	-0.0488	-0.0786	0.1526	0.2137	1.1013	0.0156	0.3441	0.0142	0.3124
118	48.26	0.11	-0.3922	-0.0508	-0.0879	0.1544	0.2241	1.1180	0.0150	0.3494	0.0134	0.3125
119	48.42	0.11	-0.3747	-0.0503	-0.0821	0.1542	0.2192	1.1181	0.0150	0.3468	0.0134	0.3101
120	48.59	0.09	-0.3696	-0.0489	-0.0737	0.1523	0.1994	1.1279	0.0136	0.3542	0.0121	0.3140
121	48.77	0.08	-0.3633	-0.0485	-0.0755	0.1533	0.2080	1.1346	0.0133	0.3560	0.0117	0.3138
122	48.93	0.06	-0.3647	-0.0460	-0.0615	0.1498	0.1804	1.1380	0.0133	0.3563	0.0117	0.3131
123	49.11	0.05	-0.3736	-0.0510	-0.0698	0.1537	0.2257	1.1381	0.0133	0.3550	0.0117	0.3119
124	49.27	0.07	-0.4273	-0.0535	-0.0983	0.1551	0.2301	1.1247	0.0147	0.3500	0.0130	0.3112
125	49.46	0.07	-0.4271	-0.0535	-0.0996	0.1551	0.2331	1.1314	0.0133	0.3518	0.0118	0.3109
126	49.62	0.05	-0.5341	-0.0598	-0.1450	0.1120	0.2715	1.1016	0.0150	0.3388	0.0136	0.3075
127	49.79	0.02	-0.5026	-0.0594	-0.1297	0.1056	0.2837	1.1082	0.0146	0.3419	0.0126	0.3085
128	49.95	0.04	-0.5436	-0.0618	-0.1727	0.1060	0.2959	1.0936	0.0150	0.3399	0.0137	0.3108
129	50.12	0.03	-0.5845	-0.0507	-0.1733	0.1033	0.2939	1.0903	0.0150	0.3383	0.0137	0.3103
130	50.28	0.03	-0.5835	-0.0627	-0.1702	0.1074	0.2915	1.1001	0.0143	0.3444	0.0130	0.3130
131	50.45	0.02	-0.6071	-0.0622	-0.1803	0.1025	0.2970	1.0936	0.0147	0.3399	0.0134	0.3108
132	50.62	0.04	-0.6134	-0.0622	-0.1784	0.1015	0.2909	1.1000	0.0147	0.3457	0.0133	0.3143
133	50.78	0.01	-0.6147	-0.0619	-0.1871	0.1000	0.3019	1.1023	0.0137	0.3466	0.0124	0.3143
134	50.95	0.04	-0.5967	-0.0605	-0.1755	0.1014	0.2941	1.1023	0.0140	0.3464	0.0127	0.3143
135	51.12	0.02	-0.6021	-0.0614	-0.1813	0.1013	0.3011	1.1155	0.0126	0.3541	0.0113	0.3174
136	51.30	0.02	-0.6105	-0.0628	-0.1875	0.1029	0.3071	1.1024	0.0137	0.3450	0.0124	0.3130
137	51.47	0.05	-0.5738	-0.0610	-0.1627	0.1063	0.2835	1.1391	0.0110	0.3586	0.0097	0.3148
138	51.62	0.04	-0.4908	-0.0567	-0.1339	0.1156	0.2729	1.1602	0.0096	0.3639	0.0083	0.3136

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	94	0.60	1.7	0.0	#14OF23	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
139	51.41	0.05	-0.0761	-0.0580	-0.1265	0.1230	0.2702	1.1769	0.0083	0.3679	0.0071	0.3125
140	51.98	0.05	-0.0599	-0.0599	-0.1299	0.1284	0.2764	1.1937	0.0047	0.3693	0.0073	0.3093
141	52.16	0.06	-0.0514	-0.0591	-0.1289	0.1112	0.2586	1.1871	0.0043	0.3673	0.0067	0.3094
142	52.32	0.07	-0.0638	-0.0627	-0.1413	0.1039	0.3003	1.1771	0.0083	0.3639	0.0070	0.3091
143	52.48	0.07	-0.0370	-0.0604	-0.1547	0.1134	0.2881	1.1904	0.0073	0.3703	0.0062	0.3111
144	52.65	0.07	-0.0599	-0.0599	-0.1418	0.1001	0.3051	1.1927	0.0076	0.3646	0.0064	0.3099
145	52.83	0.08	-0.0548	-0.0598	-0.1405	0.1021	0.3092	1.1959	0.0070	0.3758	0.0059	0.3149
146	53.00	0.08	-0.0595	-0.0592	-0.1476	0.0958	0.3129	1.1950	0.0070	0.3717	0.0059	0.3110
147	53.15	0.09	-0.0565	-0.0592	-0.1415	0.1046	0.3204	1.2116	0.0066	0.3797	0.0053	0.3134
148	53.34	0.08	-0.0737	-0.0585	-0.1525	0.1019	0.3180	1.2005	0.0070	0.3767	0.0059	0.3138
149	53.50	0.10	-0.0437	-0.0609	-0.1360	0.1049	0.3099	1.2207	0.0064	0.3824	0.0052	0.3133
150	53.65	0.10	-0.0621	-0.0598	-0.1116	0.1092	0.3063	1.2340	0.0060	0.3875	0.0048	0.3140
151	53.82	0.10	-0.0583	-0.0592	-0.1177	0.1064	0.3196	1.2298	0.0064	0.3835	0.0052	0.3119
152	54.01	0.11	-0.0760	-0.0263	-0.0744	0.0998	0.2818	1.2456	0.0057	0.3895	0.0046	0.3127
153	54.15	0.12	-0.0436	-0.0314	-0.0152	0.0144	0.1629	1.2524	0.0041	0.3927	0.0032	0.3136
154	54.34	0.13	-0.0542	0.0016	-0.0034	-0.0315	0.0550	1.2623	0.0041	0.3959	0.0032	0.3160
155	54.51	0.12	0.0254	0.0165	0.0361	0.7300	1.5019	1.2392	0.0030	0.3862	0.0024	0.3117
156	54.65	0.11	-0.0178	0.0120	0.0134	-0.6613	-0.7637	1.2365	0.0037	0.3855	0.0030	0.3117
157	54.82	0.12	0.0311	0.0154	0.0412	0.5932	1.3261	1.2535	0.0023	0.3916	0.0018	0.3100
158	54.97	0.11	-0.0290	0.0083	0.0080	-0.2857	-0.2757	1.2568	0.0027	0.3871	0.0021	0.3080
159	55.14	0.12	0.0171	0.0161	0.0304	0.9435	1.7797	1.2568	0.0023	0.3885	0.0018	0.3091
160	55.28	0.13	-0.0171	0.0101	0.0106	-0.5932	-0.6215	1.2710	0.0020	0.3916	0.0016	0.3081
161	55.43	0.14	-0.0122	0.0101	0.0204	-0.8333	-1.6796	1.2743	0.0010	0.3959	0.0008	0.3107
162	55.61	0.10	-0.0403	0.0059	0.0014	-0.1722	-0.0359	1.2878	0.0007	0.3970	0.0005	0.3083
163	55.79	0.11	-0.0359	0.0110	0.0171	-1.9655	-3.0517	1.2751	0.0007	0.3941	0.0005	0.3090
164	55.95	0.09	-0.0176	0.0101	0.0145	-0.5769	-0.8242	1.2851	0.0003	0.3962	0.0002	0.3083
165	56.11	0.10	0.0154	0.0124	0.0261	2.3750	4.8393	1.2824	0.0	0.4007	0.0	0.3125
166	56.28	0.10	-0.0204	0.0110	0.0129	-0.5403	-0.6351	1.2801	0.0003	0.3920	0.0002	0.3062
167	56.43	0.09	-0.0529	0.0050	0.0055	-0.0949	-2.1223	1.2701	0.0	0.3958	0.0	0.3049
168	56.60	0.10	-0.0093	0.0137	0.0207	-1.4792	-2.2396	1.2790	0.0	0.3924	0.0	0.3090
169	56.75	0.09	-0.0123	0.0128	0.0206	-1.0472	-1.6614	1.2866	-0.0007	0.3904	-0.0005	0.3112
170	56.90	0.10	-0.0410	0.0087	0.0110	-0.2098	-0.2944	1.2707	0.0	0.3906	0.0	0.3074
171	57.06	0.09	-0.0795	0.0023	0.0024	-0.0303	-0.0315	1.2575	0.0	0.3854	0.0	0.3066
172	57.19	0.07	-0.0662	0.0084	0.0186	-0.1320	-0.3860	1.2708	-0.0007	0.3876	-0.0005	0.3073
173	57.34	0.07	-0.0304	0.0062	0.0219	-0.2698	-0.7206	1.2813	-0.0014	0.3902	-0.0011	0.3092
174	57.50	0.06	-0.0362	0.0042	0.0200	-0.2267	-0.5520	1.2661	-0.0003	0.3848	-0.0002	0.3074
175	57.66	0.06	-0.0697	0.0054	0.0065	-0.0775	-0.0934	1.2617	-0.0014	0.3845	-0.0011	0.3064
176	57.78	0.06	-0.0713	0.0037	0.0096	-0.0514	-0.1340	1.2734	-0.0014	0.3867	-0.0011	0.3099
177	57.93	0.09	-0.0598	0.0255	0.0142	-0.0919	-0.2468	1.2705	-0.0020	0.3931	-0.0016	0.3094
178	58.08	0.05	-0.0661	0.0041	0.0179	-0.0413	-0.2701	1.2481	-0.0016	0.3847	-0.0013	0.3099
179	58.20	0.04	-0.0503	0.0355	0.0199	-0.0912	-0.3298	1.2544	-0.0033	0.3902	-0.0026	0.3116
180	58.21	0.06	-0.0751	0.0037	0.0169	-0.0488	-0.2249	1.2811	-0.0023	0.3947	-0.0018	0.3112

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RNLD*E6	PHI	LCG#	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
1	66	0.60	1.7	0.0	51.0923	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	ACPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.09	0.01	-0.0137	0.0000	0.0069	0.0000	-2.1127	-0.8188	-0.0437	-0.2847	0.0536	0.3477
2	-5.70	0.00	-0.0107	0.0000	0.0262	0.0000	-1.5723	-0.8166	-0.0437	-0.2860	0.0534	0.3493
3	-5.09	-0.01	-0.0198	0.0000	0.0251	0.0000	-1.5116	-0.8154	-0.0437	-0.2858	0.0536	0.3505
4	-5.10	-0.01	-0.0135	0.0000	0.0253	0.0000	-1.6714	-0.8094	-0.0444	-0.2815	0.0549	0.3482
5	-4.49	0.00	-0.0107	0.0000	0.0262	0.0000	-1.5723	-0.7489	-0.0407	-0.2609	0.0651	0.3484
6	-3.02	0.01	-0.0139	0.0000	0.0225	0.0000	-1.1478	-0.6452	-0.0520	-0.2257	0.0806	0.3498
7	-1.26	0.00	-0.0135	0.0000	0.0241	0.0000	-1.7357	-0.5543	-0.0527	-0.1991	0.0942	0.3559
8	0.48	0.00	-0.0135	0.0000	0.0267	0.0000	-2.5413	-0.4481	-0.0444	-0.1571	0.0991	0.3394
9	2.52	0.00	-0.0137	0.0000	0.0277	0.0000	-2.0211	-0.2936	-0.0308	-0.0875	0.1048	0.2981
10	4.33	0.01	-0.0197	0.0000	0.0272	0.0000	-1.3756	-0.1594	-0.0182	-0.0321	0.1144	0.2016
11	6.17	0.01	-0.0259	0.0000	0.0243	0.0000	-0.9403	-0.0686	0.0023	0.0015	-0.0338	-0.0225
12	8.03	0.00	-0.0259	0.0000	0.0269	0.0000	-0.9403	0.0257	0.0252	0.0433	1.0000	1.7203
13	9.90	-0.00	-0.0291	0.0000	0.0291	0.0000	-1.1185	0.1443	0.0430	0.0968	0.2981	0.6705
14	11.68	-0.00	-0.0074	0.0000	0.0256	0.0000	-3.4675	0.2735	0.0516	0.1484	0.2250	0.5425
15	13.47	-0.00	0.0142	0.0000	0.0203	0.0000	1.8571	0.3777	0.0719	0.2052	0.1903	0.5434
16	15.34	0.00	0.0235	0.0000	0.0234	0.0000	0.9959	0.4800	0.0742	0.2434	0.1546	0.5071
17	17.23	-0.00	0.0113	0.0000	0.0213	0.0000	1.8889	0.5469	0.0679	0.2698	0.1242	0.4926
18	19.07	-0.01	0.0167	0.0000	0.0168	0.0000	1.1447	0.5599	0.0589	0.2733	0.1017	0.4882
19	20.92	-0.00	0.0246	0.0000	0.0139	0.0000	2.5783	0.5015	0.0466	0.2561	0.0966	0.5106
20	22.77	-0.00	0.0156	0.0000	0.0048	0.0000	0.3165	0.4509	0.0452	0.2432	0.1001	0.5395
21	24.50	-0.02	0.0129	0.0000	-0.0002	0.0000	-0.0155	0.5048	0.0432	0.2648	0.0858	0.5238
22	26.45	-0.01	0.0139	0.0000	0.0068	0.0000	0.1691	0.5565	0.0405	0.2905	0.0728	0.5220
23	28.13	-0.01	0.0156	0.0000	0.0116	0.0000	0.2098	0.5669	0.0409	0.2990	0.0722	0.5275
24	28.14	-0.01	0.0432	0.0000	0.0022	0.0000	0.0513	0.5603	0.0402	0.3010	0.0718	0.5373
25	29.15	0.00	0.0525	0.0000	0.0041	0.0000	0.0790	0.5568	0.0405	0.3034	0.0728	0.5448
26	28.25	-0.00	0.0547	0.0000	0.0059	0.0000	0.1003	0.5615	0.0403	0.3093	0.0718	0.5510
27	28.63	0.00	0.0526	0.0000	0.0036	0.0000	0.0569	0.5615	0.0406	0.3119	0.0723	0.5556
28	28.94	0.00	0.0679	0.0000	0.0078	0.0000	0.1151	0.5684	0.0406	0.3175	0.0715	0.5586
29	29.21	0.00	0.0679	0.0000	0.0078	0.0000	0.1151	0.5685	0.0403	0.3175	0.0709	0.5586
30	29.53	0.00	0.0771	0.0000	0.0097	0.0000	0.1264	0.5754	0.0403	0.3219	0.0701	0.5594
31	29.81	0.00	0.0557	0.0000	0.0064	0.0000	0.1003	0.5722	0.0399	0.3216	0.0698	0.5621
32	30.10	0.00	0.0842	0.0000	0.0179	0.0000	0.2013	0.5693	0.0399	0.3267	0.0678	0.5544
33	30.38	0.00	0.0808	0.0000	0.0161	0.0000	0.1631	0.5906	0.0400	0.3311	0.0678	0.5607
34	30.62	0.00	0.0958	0.0000	0.0180	0.0000	0.1675	0.5908	0.0400	0.3311	0.0678	0.5607
35	30.91	0.00	0.0923	0.0000	0.0157	0.0000	0.1703	0.6032	0.0399	0.3341	0.0662	0.5539
36	31.18	0.00	0.0994	0.0000	0.0160	0.0000	0.1678	0.6102	0.0399	0.3385	0.0655	0.5547
37	31.45	0.00	0.0958	0.0000	0.0160	0.0000	0.1678	0.6056	0.0413	0.3372	0.0677	0.5530
38	31.72	0.00	0.0955	0.0000	0.0161	0.0000	0.1565	0.6168	0.0406	0.3390	0.0659	0.5495
39	31.98	0.00	0.0965	0.0000	0.0164	0.0000	0.1708	0.6190	0.0405	0.3367	0.0655	0.5488
40	32.25	0.00	0.1045	0.0000	0.0179	0.0000	0.1717	0.6259	0.0402	0.3327	0.0643	0.5315
41	32.50	0.00	0.1021	0.0000	0.0172	0.0000	0.1319	0.6141	0.0405	0.3236	0.0660	0.5269
42	32.77	0.00	0.1012	0.0000	0.0164	0.0000	0.1621	0.5933	0.0412	0.3107	0.0694	0.5237
43	33.02	0.00	0.0958	0.0000	0.0154	0.0000	0.1739	0.6128	0.0404	0.3166	0.0660	0.5166
44	33.26	0.00	0.1047	0.0000	0.0179	0.0000	0.1716	0.6164	0.0398	0.3161	0.0645	0.5161
45	33.51	0.00	0.1038	0.0000	0.0216	0.0000	0.2063	0.5710	0.0424	0.2944	0.0742	0.5226
46	33.75	0.01	0.0965	0.0000	0.0169	0.0000	0.1876	0.5592	0.0436	0.2908	0.0780	0.5200

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/FT	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	94	0.60	1.7	0.0	81A0F23	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CO3	XCPF3	YCPF3	CNF4	CM4	CO4	XCPF4	YCPF4
47	34.01	0.07	0.1043	9.9999	0.0211	9.9999	0.2104	0.5663	0.0439	0.2974	0.0772	0.5233
48	34.28	0.07	0.1125	9.9999	0.0244	9.9999	0.2170	0.5643	0.0452	0.2901	0.0815	0.5234
49	34.45	0.07	0.1083	9.9999	0.0199	9.9999	0.1979	0.5609	0.0465	0.2957	0.0829	0.5271
50	34.74	0.07	0.1157	9.9999	0.0235	9.9999	0.2035	0.5677	0.0462	0.2975	0.0814	0.5240
51	35.06	0.08	0.0943	9.9999	0.0171	9.9999	0.1881	0.5666	0.0458	0.2970	0.0826	0.5262
52	35.23	0.08	0.1042	9.9999	0.0234	9.9999	0.2252	0.5670	0.0464	0.3023	0.0791	0.5150
53	35.47	0.08	0.1091	9.9999	0.0240	9.9999	0.2108	0.5625	0.0463	0.3014	0.0795	0.5175
54	35.71	0.07	0.1061	9.9999	0.0199	9.9999	0.1986	0.5927	0.0460	0.3034	0.0776	0.5118
55	35.98	0.08	0.1121	9.9999	0.0232	9.9999	0.2065	0.6137	0.0490	0.3098	0.0717	0.5049
56	36.16	0.08	0.0941	9.9999	0.0170	9.9999	0.1805	0.6169	0.0444	0.3058	0.0720	0.5005
57	36.41	0.08	0.0932	9.9999	0.0115	9.9999	0.1348	0.6271	0.0449	0.3108	0.0708	0.4956
58	36.65	0.08	0.0972	9.9999	0.0160	9.9999	0.1645	0.6375	0.0436	0.3152	0.0681	0.4945
59	36.87	0.07	0.1042	9.9999	0.0186	9.9999	0.1859	0.6511	0.0446	0.3168	0.0667	0.4896
60	37.12	0.08	0.0973	9.9999	0.0149	9.9999	0.1528	0.6579	0.0434	0.3218	0.0660	0.4891
61	37.35	0.07	0.1031	9.9999	0.0169	9.9999	0.1950	0.6611	0.0440	0.3208	0.0665	0.4853
62	37.57	0.08	0.0968	9.9999	0.0111	9.9999	0.1173	0.6658	0.0441	0.3217	0.0662	0.4832
63	37.82	0.08	0.0965	9.9999	0.0123	9.9999	0.1297	0.6656	0.0448	0.3204	0.0673	0.4814
64	38.04	0.09	0.0963	9.9999	-0.0014	9.9999	-0.0232	0.6622	0.0445	0.3189	0.0672	0.4816
65	38.28	0.10	0.0930	9.9999	0.0005	9.9999	0.0769	0.6729	0.0441	0.3252	0.0649	0.4786
66	38.52	0.08	0.0968	9.9999	0.0077	9.9999	0.0935	0.6865	0.0445	0.3246	0.0654	0.4770
67	38.79	0.08	0.1003	9.9999	0.0096	9.9999	0.1264	0.6908	0.0442	0.3265	0.0640	0.4726
68	38.94	0.09	0.0970	9.9999	0.0056	9.9999	0.0795	0.6908	0.0442	0.3265	0.0640	0.4726
69	39.18	0.08	0.1003	9.9999	0.0096	9.9999	0.1269	0.7045	0.0439	0.3313	0.0623	0.4703
70	39.41	0.08	0.0975	9.9999	0.0061	9.9999	0.1614	0.7225	0.0440	0.3317	0.0626	0.4722
71	39.58	0.08	0.0969	9.9999	0.0051	9.9999	0.0795	0.7129	0.0429	0.3311	0.0602	0.4645
72	39.80	0.09	0.1030	9.9999	0.0054	9.9999	0.0746	0.7303	0.0423	0.3412	0.0579	0.4672
73	40.06	0.09	0.0967	9.9999	0.0110	9.9999	0.1351	0.7302	0.0426	0.3413	0.0584	0.4674
74	40.19	0.09	0.0964	9.9999	0.0051	9.9999	0.0795	0.7373	0.0417	0.3404	0.0565	0.4617
75	40.39	0.09	0.1029	9.9999	0.0067	9.9999	0.1091	0.7375	0.0420	0.3449	0.0562	0.4615
76	40.60	0.09	0.0964	9.9999	0.0051	9.9999	0.0795	0.7545	0.0410	0.3467	0.0543	0.4595
77	40.82	0.09	0.0994	9.9999	0.0063	9.9999	0.0975	0.7582	0.0410	0.3462	0.0541	0.4594
78	41.02	0.09	0.1035	9.9999	0.0095	9.9999	0.1291	0.7753	0.0399	0.3506	0.0515	0.4523
79	41.21	0.09	0.1033	9.9999	0.0095	9.9999	0.1286	0.7803	0.0396	0.3529	0.0509	0.4522
80	41.43	0.09	0.1024	9.9999	0.0084	9.9999	0.1110	0.7766	0.0404	0.3513	0.0521	0.4526
81	41.62	0.09	0.1038	9.9999	0.0082	9.9999	0.1116	0.7835	0.0404	0.3531	0.0516	0.4507
82	41.82	0.09	0.1020	9.9999	0.0101	9.9999	0.1224	0.7905	0.0398	0.3574	0.0503	0.4521
83	42.01	0.09	0.1030	9.9999	0.0088	9.9999	0.1030	0.8008	0.0394	0.3588	0.0492	0.4455
84	42.20	0.10	0.1023	9.9999	0.0030	9.9999	0.0572	0.8009	0.0391	0.3594	0.0488	0.4487
85	42.39	0.09	0.1031	9.9999	0.0064	9.9999	0.0980	0.8197	0.0386	0.3626	0.0473	0.4424
86	42.57	0.09	0.0981	9.9999	0.0078	9.9999	0.1041	0.8231	0.0392	0.3667	0.0476	0.4454
87	42.75	0.09	0.1026	9.9999	0.0125	9.9999	0.1515	0.8265	0.0392	0.3656	0.0474	0.4423
88	42.92	0.08	0.0939	9.9999	0.0102	9.9999	0.1233	0.8369	0.0385	0.3701	0.0460	0.4422
89	43.11	0.07	0.0971	9.9999	0.0094	9.9999	0.0954	0.8336	0.0392	0.3687	0.0470	0.4424
90	43.30	0.08	0.1017	9.9999	0.0083	9.9999	0.1126	0.8473	0.0385	0.3735	0.0454	0.4408
91	43.47	0.07	0.1004	9.9999	0.0073	9.9999	0.0959	0.8472	0.0388	0.3722	0.0458	0.4394
92	43.66	0.07	0.1004	9.9999	0.0096	9.9999	0.1256	0.8577	0.0381	0.3768	0.0444	0.4391

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RA10=0 PHI CW=F L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 54 0.20 1.7 0.0 RL=0F23 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	ACPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
93	43.03	0.07	0.0889	9.9999	0.0156	9.9999	0.1737	0.8646	0.0378	0.3785	0.0437	0.4378
94	44.01	0.06	0.0849	9.9999	0.0154	9.9999	0.1737	0.8679	0.0385	0.3813	0.0444	0.4394
95	44.18	0.07	0.0788	9.9999	0.0111	9.9999	0.1391	0.8769	0.0378	0.3844	0.0432	0.4393
96	44.39	0.06	0.0927	9.9999	0.0159	9.9999	0.1809	0.8715	0.0378	0.3815	0.0434	0.4378
97	44.56	0.07	0.0787	9.9999	0.0121	9.9999	0.1572	0.8784	0.0378	0.3846	0.0431	0.4378
98	44.74	0.05	0.0766	9.9999	0.0144	9.9999	0.1738	0.8853	0.0378	0.3844	0.0427	0.4369
99	44.92	0.05	0.0838	9.9999	0.0164	9.9999	0.1912	0.8956	0.0374	0.3897	0.0418	0.4351
100	45.11	0.06	0.0760	9.9999	0.0133	9.9999	0.1738	0.8991	0.0371	0.3886	0.0413	0.4323
101	45.29	0.07	0.0828	9.9999	0.0125	9.9999	0.1515	0.9060	0.0371	0.3962	0.0410	0.4351
102	45.45	0.07	0.0827	9.9999	0.0150	9.9999	0.1809	0.8992	0.0371	0.3912	0.0413	0.4350
103	45.65	0.07	0.0735	9.9999	0.0139	9.9999	0.1772	0.9164	0.0369	0.3975	0.0402	0.4338
104	45.86	0.05	0.0756	9.9999	0.0169	9.9999	0.2210	0.9104	0.0365	0.3949	0.0398	0.4309
105	45.99	0.06	0.0767	9.9999	0.0121	9.9999	0.1572	0.9095	0.0369	0.3999	0.0405	0.4337
106	46.17	0.07	0.0746	9.9999	0.0148	9.9999	0.1855	0.9233	0.0365	0.3980	0.0395	0.4311
107	46.32	0.07	0.0807	9.9999	0.0190	9.9999	0.2188	0.9302	0.0365	0.4024	0.0392	0.4325
108	46.52	0.07	0.0765	9.9999	0.0145	9.9999	0.1892	0.9268	0.0365	0.4008	0.0390	0.4325
109	46.69	0.06	0.0826	9.9999	0.0174	9.9999	0.2193	0.9301	0.0369	0.4036	0.0396	0.4339
110	46.85	0.07	0.0796	9.9999	0.0169	9.9999	0.2210	0.9373	0.0358	0.4066	0.0382	0.4338
111	47.03	0.06	0.0823	9.9999	0.0185	9.9999	0.2296	0.9405	0.0365	0.4044	0.0388	0.4300
112	47.21	0.08	0.0844	9.9999	0.0111	9.9999	0.1724	0.9511	0.0355	0.4076	0.0373	0.4285
113	47.38	0.09	0.0836	9.9999	0.0219	9.9999	0.2418	0.9377	0.0365	0.4106	0.0381	0.4289
114	47.55	0.10	0.0704	9.9999	0.0140	9.9999	0.1936	0.9646	0.0365	0.4137	0.0378	0.4289
115	47.73	0.09	0.0852	9.9999	0.0212	9.9999	0.2483	0.9782	0.0365	0.4122	0.0373	0.4214
116	47.92	0.09	0.0824	9.9999	0.0205	9.9999	0.2541	0.9782	0.0365	0.4147	0.0373	0.4239
117	48.09	0.10	0.0828	9.9999	0.0222	9.9999	0.2693	0.9869	0.0369	0.4127	0.0374	0.4190
118	48.26	0.10	0.0825	9.9999	0.0198	9.9999	0.2398	0.9956	0.0351	0.4172	0.0353	0.4190
119	48.42	0.10	0.0796	9.9999	0.0169	9.9999	0.2210	1.0093	0.0365	0.4208	0.0352	0.4169
120	48.59	0.09	0.0794	9.9999	0.0195	9.9999	0.2456	1.0265	0.0351	0.4258	0.0342	0.4148
121	48.77	0.09	0.0828	9.9999	0.0222	9.9999	0.2693	1.0266	0.0345	0.4232	0.0336	0.4122
122	48.93	0.09	0.0828	9.9999	0.0209	9.9999	0.2541	1.0266	0.0345	0.4207	0.0336	0.4098
123	49.11	0.10	0.0783	9.9999	0.0179	9.9999	0.2546	1.0337	0.0339	0.4262	0.0328	0.4123
124	49.27	0.07	0.0792	9.9999	0.0164	9.9999	0.2335	1.0406	0.0339	0.4293	0.0325	0.4125
125	49.50	0.07	0.0783	9.9999	0.0179	9.9999	0.2434	1.0339	0.0332	0.4262	0.0321	0.4122
126	49.62	0.05	0.0792	9.9999	0.0106	9.9999	0.1824	1.0063	0.0335	0.4140	0.0333	0.4114
127	49.78	0.05	0.0802	9.9999	0.0025	9.9999	0.0543	0.9994	0.0332	0.4109	0.0332	0.4112
128	49.95	0.06	0.0803	9.9999	0.0025	9.9999	0.0542	0.9874	0.0339	0.4095	0.0343	0.4147
129	50.12	0.03	0.0793	9.9999	0.0025	9.9999	0.0542	1.0019	0.0332	0.4168	0.0331	0.4162
130	50.28	0.03	0.0802	9.9999	-0.0004	9.9999	-0.0096	0.9911	0.0336	0.4174	0.0339	0.4211
131	50.45	0.03	0.0802	9.9999	-0.0004	9.9999	-0.0095	0.9947	0.0332	0.4189	0.0334	0.4211
132	50.62	0.02	0.0776	9.9999	-0.0018	9.9999	-0.0492	0.9982	0.0332	0.4230	0.0333	0.4238
133	50.78	0.01	0.0834	9.9999	-0.0002	9.9999	-0.0044	1.0072	0.0323	0.4243	0.0321	0.4212
134	50.95	0.02	0.0781	9.9999	-0.0035	9.9999	-0.1360	1.0109	0.0313	0.4257	0.0309	0.4211
135	51.12	0.02	0.0793	9.9999	-0.0009	9.9999	-0.0376	1.0110	0.0313	0.4262	0.0309	0.4236
136	51.30	0.02	0.0783	9.9999	-0.0021	9.9999	-0.0820	0.9934	0.0323	0.4193	0.0325	0.4221
137	51.47	0.03	0.0825	9.9999	0.0054	9.9999	0.1029	1.0318	0.0306	0.4349	0.0296	0.4215
138	51.62	0.03	0.0796	9.9999	0.0082	9.9999	0.1405	1.0436	0.0299	0.4375	0.0287	0.4192

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/I-6 PHI CONF DEL1 DEL2 DEL3 DEL4 TRANSITION
7 94 0.60 1.7 0.0 M1-CF23 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF3	CN3	CM3	XCPF3	YCPF3	CNF4	CN4	CM4	XCPF4	YCPF4
139	51.91	0.00	0.0555	9.9999	0.0044	9.9999	0.0000	1.0562	0.0289	0.4420	0.0275	0.4193
140	51.98	0.00	0.0605	9.9999	0.0111	9.9999	0.1722	1.0854	0.0279	0.4505	0.0257	0.4151
141	52.16	0.00	0.0603	9.9999	0.0074	9.9999	0.1560	1.0882	0.0272	0.4416	0.0255	0.4136
142	52.32	0.01	0.0586	9.9999	0.0082	9.9999	0.1435	1.0577	0.0279	0.4357	0.0264	0.4120
143	52.48	0.01	0.0553	9.9999	0.0092	9.9999	0.1658	1.0717	0.0265	0.4416	0.0251	0.4111
144	52.65	0.01	0.0524	9.9999	0.0078	9.9999	0.1492	1.0981	0.0260	0.4462	0.0256	0.4081
145	52.83	0.00	0.0736	9.9999	0.0179	9.9999	0.2425	1.0807	0.0266	0.4432	0.0246	0.4101
146	52.98	0.00	0.0585	9.9999	0.0107	9.9999	0.1829	1.0864	0.0261	0.4455	0.0240	0.4100
147	53.15	0.00	0.0554	9.9999	0.0103	9.9999	0.2046	1.0827	0.0270	0.4427	0.0250	0.4089
148	53.34	0.00	0.0555	9.9999	0.0117	9.9999	0.2104	1.0851	0.0261	0.4474	0.0240	0.4123
149	53.50	0.00	0.0610	9.9999	0.0115	9.9999	0.2582	1.0746	0.0267	0.4428	0.0249	0.4121
150	53.65	0.10	0.0737	9.9999	0.0200	9.9999	0.2762	1.0574	0.0267	0.4429	0.0253	0.4188
151	53.82	0.10	0.0665	9.9999	0.0173	9.9999	0.2672	1.0561	0.0261	0.4408	0.0248	0.4176
152	54.01	0.11	0.0770	9.9999	0.0243	9.9999	0.3156	1.0568	0.0261	0.4460	0.0246	0.4210
153	54.15	0.12	0.0831	9.9999	0.0272	9.9999	0.3275	1.0515	0.0259	0.4478	0.0246	0.4257
154	54.34	0.13	0.0830	9.9999	0.0256	9.9999	0.3570	1.0689	0.0261	0.4567	0.0245	0.4272
155	54.51	0.12	0.0787	9.9999	0.0291	9.9999	0.3799	1.0551	0.0261	0.4582	0.0248	0.4363
156	54.65	0.11	0.0797	9.9999	0.0273	9.9999	0.3690	1.0671	0.0248	0.4633	0.0232	0.4342
157	54.82	0.12	0.0676	9.9999	0.0235	9.9999	0.3491	1.0763	0.0248	0.4652	0.0231	0.4331
158	54.97	0.11	0.0730	9.9999	0.0262	9.9999	0.3726	1.0810	0.0244	0.4695	0.0228	0.4343
159	55.19	0.12	0.0729	9.9999	0.0274	9.9999	0.3696	1.0802	0.0248	0.4616	0.0236	0.4354
160	55.28	0.13	0.0735	9.9999	0.0278	9.9999	0.3763	1.0756	0.0237	0.4630	0.0221	0.4306
161	55.44	0.10	0.0574	9.9999	0.0278	9.9999	0.4775	1.0825	0.0234	0.4661	0.0216	0.4306
162	55.61	0.10	0.0572	9.9999	0.0271	9.9999	0.4037	1.0928	0.0233	0.4682	0.0214	0.4284
163	55.79	0.11	0.0731	9.9999	0.0312	9.9999	0.4267	1.0835	0.0233	0.4661	0.0215	0.4283
164	55.95	0.09	0.0730	9.9999	0.0312	9.9999	0.4267	1.0839	0.0220	0.4640	0.0203	0.4281
165	56.11	0.10	0.0759	9.9999	0.0334	9.9999	0.4453	1.0816	0.0227	0.4666	0.0210	0.4259
166	56.28	0.10	0.0560	9.9999	0.0304	9.9999	0.4594	1.0968	0.0216	0.4647	0.0197	0.4237
167	56.43	0.09	0.0538	9.9999	0.0255	9.9999	0.3994	1.0969	0.0212	0.4647	0.0196	0.4236
168	56.60	0.10	0.0637	9.9999	0.0267	9.9999	0.4147	1.1108	0.0206	0.4682	0.0185	0.4215
169	56.75	0.08	0.0575	9.9999	0.0274	9.9999	0.4765	1.1144	0.0199	0.4656	0.0178	0.4214
170	56.90	0.10	0.0573	9.9999	0.0273	9.9999	0.4764	1.1119	0.0203	0.4669	0.0182	0.4191
171	57.06	0.08	0.0536	9.9999	0.0342	9.9999	0.4786	1.0968	0.0199	0.4598	0.0182	0.4199
172	57.19	0.07	0.0496	9.9999	0.0307	9.9999	0.4411	1.1016	0.0203	0.4678	0.0184	0.4202
173	57.34	0.07	0.0576	9.9999	0.0285	9.9999	0.4975	1.1095	0.0205	0.4627	0.0186	0.4170
174	57.50	0.08	0.0510	9.9999	0.0283	9.9999	0.5082	1.1133	0.0192	0.4666	0.0172	0.4191
175	57.66	0.08	0.0561	9.9999	0.0283	9.9999	0.5223	1.1068	0.0195	0.4669	0.0176	0.4202
176	57.79	0.08	0.0511	9.9999	0.0281	9.9999	0.5091	1.1154	0.0192	0.4675	0.0172	0.4191
177	57.93	0.08	0.0511	9.9999	0.0281	9.9999	0.5091	1.0842	0.0202	0.4539	0.0186	0.4186
178	58.08	0.05	0.0462	9.9999	0.0269	9.9999	0.5931	1.0893	0.0185	0.4584	0.0170	0.4208
179	58.20	0.08	0.0511	9.9999	0.0268	9.9999	0.5255	1.0995	0.0192	0.4638	0.0175	0.4211
180	58.21	0.06	0.0499	9.9999	0.0287	9.9999	0.6387	1.1234	0.0192	0.4685	0.0171	0.4171

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RALU-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	55	0.90	1.7	0.0	81.0023	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CL=	CY	CLN	CLL	CA	CAB	CAF	ACP
1	-5.72	0.01	-1.6327	2.3653	0.1163	-0.1892	0.0002	0.3763	0.1485	0.2278	-2.8405
2	-5.72	0.03	-1.6372	2.3616	0.1365	-0.0755	-0.0001	0.3765	0.1494	0.2271	-2.7875
3	-5.72	-0.04	-1.6711	2.4164	-0.0860	-0.1023	-0.0002	0.3733	0.1482	0.2251	-2.7678
4	-4.52	0.00	-1.4210	2.1449	-0.0580	-0.0958	0.0003	0.3680	0.1276	0.2404	-3.1042
5	-2.63	0.02	-0.9339	1.9586	0.0457	-0.0514	0.0006	0.3352	0.1078	0.2274	-3.6682
6	-0.79	0.00	-0.3671	1.7186	0.0586	-0.1046	0.0015	0.3126	0.0947	0.2139	-4.6761
7	1.11	0.00	-0.1691	1.6811	0.0543	-0.0388	0.0019	0.2946	0.0916	0.2027	-8.0497
8	3.06	-0.00	0.0832	0.9362	-0.0255	0.0358	-0.0040	0.2760	0.0928	0.1812	14.7740
9	4.98	-0.06	0.2193	0.7202	-0.0819	0.0028	-0.0033	0.2735	0.1007	0.1729	3.5772
10	4.76	0.00	0.2007	0.5769	0.0077	-0.0507	-0.0025	0.2679	0.1114	0.1566	1.4219
11	8.63	-0.00	0.6171	0.3663	-0.0315	-0.0252	0.0045	0.2590	0.1208	0.1383	0.4964
12	10.59	-0.00	0.8598	-0.0803	0.0065	0.0079	0.0050	0.2392	0.1275	0.1118	-0.0935
13	12.61	-0.01	1.1548	-0.0599	-0.0675	0.0457	0.0057	0.2132	0.1338	0.0796	-0.5715
14	14.29	-0.04	1.4134	-1.0911	-0.0271	0.0596	0.0064	0.1941	0.1416	0.0525	-0.7693
15	16.24	-0.01	1.6574	-1.3158	-0.0262	0.0817	0.0011	0.1846	0.1501	0.0303	-0.7768
16	18.18	-0.02	1.9085	-1.4620	-0.1824	0.0558	0.0077	0.1930	0.1717	0.0213	-0.7660
17	20.19	-0.04	2.2130	-1.6316	-0.3407	0.0763	0.0008	0.1982	0.2070	-0.0068	-0.7370
18	21.99	-0.03	2.4838	-1.5183	-0.3283	0.1757	-0.0357	0.2150	0.2522	-0.0372	-0.6231
19	23.91	-0.04	2.7149	-1.4667	-0.4652	1.2468	-0.0543	0.2149	0.2855	-0.0706	-0.5336
20	25.90	-0.00	3.0310	-1.1794	-0.0486	0.5041	-0.0193	0.1533	0.2674	-0.1142	-0.3891
21	27.70	-0.01	3.3211	-0.8452	-0.0408	0.3549	-0.0042	0.1208	0.2869	-0.1582	-0.2892
22	28.20	-0.00	3.3955	-0.8554	0.0448	0.1773	0.0029	0.1285	0.2907	-0.1622	-0.1962
23	28.25	-0.01	3.4782	-0.5647	0.0208	0.2387	-0.0032	0.1313	0.2965	-0.1652	-0.1624
24	28.47	0.00	3.5009	-0.4736	0.1259	-0.0924	0.0175	0.1122	0.2981	-0.1859	-0.1330
25	28.43	0.02	3.4965	-0.3555	0.3060	-0.2740	0.0246	0.1273	0.3048	-0.1775	-0.0985
26	28.26	0.02	3.4793	-0.4021	0.2762	-0.3124	0.0248	0.1359	0.3057	-0.1698	-0.0998
27	28.56	0.03	3.7845	-0.5995	0.4923	-0.5715	0.0319	0.1176	0.2979	-0.1803	-0.1848
28	29.43	0.04	3.8429	-0.6374	0.5845	-0.6365	0.0514	0.1207	0.2991	-0.1784	-0.2180
29	30.12	0.05	3.9547	-0.6971	0.6782	-0.6532	0.0715	0.1241	0.3055	-0.1824	-0.2008
30	30.36	0.05	3.9855	-0.7311	0.8398	-1.1006	0.0765	0.1260	0.3119	-0.1859	-0.1835
31	31.06	0.04	4.1219	-0.8523	0.8935	-1.2472	0.0850	0.1316	0.3277	-0.1963	-0.1316
32	31.94	0.06	4.2109	-1.0259	0.8555	-1.2502	0.0991	0.1206	0.3152	-0.1946	-0.1486
33	31.21	0.06	4.3039	-0.8889	1.0958	-1.3850	0.1035	0.1357	0.3354	-0.1997	-0.1043
34	31.98	0.07	4.3928	-0.8850	1.0039	-1.3103	0.0935	0.1330	0.3376	-0.2046	-0.1114
35	31.76	0.07	4.3917	-0.8772	0.9775	-1.2736	0.0939	0.1387	0.3432	-0.2045	-0.0884
36	32.03	0.07	4.4900	-0.1121	0.9262	-1.1936	0.0942	0.1479	0.3445	-0.1966	-0.0251
37	32.30	0.07	4.5886	-0.9322	0.9246	-1.0665	0.0818	0.1357	0.3466	-0.2109	-0.0070
38	32.56	0.06	4.7043	0.0805	0.8711	-1.0364	0.0823	0.1420	0.3602	-0.2182	0.0171
39	32.82	0.07	4.5896	-0.8114	0.8722	-0.8892	0.0758	0.1450	0.3710	-0.2260	0.0878
40	33.08	0.07	4.7706	0.5009	0.9677	-0.8475	0.0577	0.1554	0.3718	-0.2160	0.1174
41	33.33	0.05	4.8792	0.5902	0.7197	-0.7338	0.0575	0.1317	0.3710	-0.2393	0.1201
42	33.58	0.05	5.0043	0.6657	0.6525	-0.6419	0.0501	0.1109	0.3739	-0.2630	0.1360
43	33.84	0.06	5.1241	0.9933	0.6923	-0.6257	0.0389	0.1314	0.3797	-0.2983	0.1842
44	34.09	0.05	5.1897	0.7373	0.6318	-0.7335	0.0446	0.1502	0.3883	-0.2381	0.1421
45	34.33	0.02	5.2672	1.1306	0.2377	-0.0230	0.0325	0.1211	0.3784	-0.2574	0.2259
46	34.58	0.02	5.3130	1.2952	0.2410	0.0427	0.0325	0.1045	0.3730	-0.2685	0.2438

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RA10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 55 0.60 1.7 0.0 BI=0F23 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.44	0.02	5.3949	1.3445	0.0027	0.0757	0.0265	0.1076	0.3747	-0.2671	0.2592
48	35.08	-0.01	5.4691	1.3714	-0.0389	0.1230	0.0270	0.0790	0.3623	-0.2932	0.2326
49	35.31	0.00	5.4874	1.3786	0.0259	0.0629	0.0148	0.1017	0.3706	-0.2689	0.2917
50	35.55	-0.01	5.5116	1.3883	-0.1117	0.2840	-0.0047	0.0853	0.3681	-0.2827	0.2574
51	35.74	-0.02	5.5285	1.3938	-0.1845	0.4442	-0.0067	0.0707	0.3706	-0.2999	0.2766
52	36.03	-0.02	5.5466	1.4002	-0.2756	0.5196	-0.0172	0.0426	0.3714	-0.2988	0.2957
53	36.23	-0.02	5.5619	1.4057	-0.3170	0.7746	-0.0245	0.0717	0.3726	-0.2949	0.2741
54	36.50	-0.02	5.5843	1.4134	-0.2774	0.7491	-0.0237	0.0468	0.3592	-0.3122	0.2663
55	36.73	-0.03	5.6009	1.4219	-0.2201	0.7359	-0.0235	0.0671	0.3586	-0.3115	0.2366
56	36.96	-0.02	5.6196	1.4282	-0.2904	0.9047	-0.0237	0.0571	0.3693	-0.3122	0.2757
57	37.21	-0.02	5.6393	1.4347	-0.2885	0.7965	-0.0356	0.0601	0.3743	-0.3142	0.2843
58	37.48	-0.03	5.6571	1.4384	-0.3424	0.7993	-0.0296	0.0426	0.3685	-0.3259	0.2744
59	37.69	-0.02	5.6545	1.4372	-0.2945	0.7831	-0.0349	0.0395	0.3673	-0.3278	0.2889
60	37.93	-0.01	5.6958	1.4472	-0.1928	0.9168	-0.0221	0.0475	0.3648	-0.3173	0.2740
61	38.17	-0.01	5.7049	1.4504	-0.2756	1.0563	-0.0191	0.0263	0.3652	-0.3389	0.2729
62	38.40	-0.03	5.7260	1.4577	-0.4743	1.1403	-0.0223	0.0322	0.3681	-0.3359	0.2743
63	38.64	-0.02	5.7407	1.4616	-0.1933	1.0711	-0.0351	0.0072	0.3636	-0.3564	0.2645
64	38.85	-0.01	5.7543	1.4649	-0.1602	1.3441	-0.0231	0.0487	0.3722	-0.3740	0.2606
65	39.07	-0.03	5.7637	1.4726	-0.3307	1.0199	-0.0426	0.0330	0.3809	-0.3479	0.2749
66	39.32	-0.03	5.7851	1.4786	-0.4493	1.4716	-0.0370	0.0364	0.3896	-0.3532	0.2737
67	39.53	-0.04	5.7987	1.4826	-0.5094	1.5706	-0.0367	0.0649	0.3995	-0.3346	0.2706
68	39.72	-0.02	7.0432	1.4879	-0.4307	2.2863	-0.0376	0.0641	0.4053	-0.3412	0.2609
69	39.96	-0.03	7.0438	1.4892	-0.3614	2.1030	-0.0492	0.0322	0.3945	-0.3623	0.2629
70	40.19	-0.02	7.1598	1.5238	-0.5383	2.3126	-0.0504	0.0429	0.4088	-0.3659	0.2576
71	40.36	-0.00	7.2254	1.5345	-0.4869	2.6191	-0.0628	0.0416	0.4092	-0.3676	0.2673
72	40.55	-0.05	7.3277	1.5644	-0.6135	2.7766	-0.0505	0.0663	0.4212	-0.3529	0.2442
73	40.75	-0.04	7.3821	1.5834	-0.6417	2.6845	-0.0566	0.0544	0.4167	-0.3623	0.2530
74	40.99	-0.06	7.5302	1.6062	-0.6774	2.8467	-0.0627	0.0506	0.4204	-0.3698	0.2394
75	41.17	-0.01	7.5699	1.6184	-0.8307	2.8911	-0.0748	0.0357	0.4171	-0.3814	0.2563
76	41.38	-0.06	7.6716	1.6457	-0.8746	2.9144	-0.0690	0.0461	0.4220	-0.3759	0.2382
77	41.54	-0.05	7.7216	1.6573	-1.0647	3.0458	-0.0689	0.0361	0.4187	-0.3826	0.2326
78	41.77	-0.00	7.7354	1.6624	-0.9941	2.9474	-0.0748	0.0358	0.4183	-0.3825	0.2278
79	41.97	-0.03	7.7809	1.6742	-1.0723	2.7115	-0.0607	0.0295	0.4241	-0.3946	0.2423
80	42.17	-0.04	7.8716	1.6961	-1.1363	3.0921	-0.0617	0.0451	0.4262	-0.3811	0.2305
81	42.42	-0.07	7.9092	1.7064	-1.0504	3.2725	-0.0641	0.0477	0.4282	-0.3805	0.2257
82	42.61	-0.04	7.9769	1.7228	-1.1548	3.1102	-0.0614	0.0351	0.4237	-0.3886	0.2292
83	42.79	-0.06	8.0420	1.7384	-1.0315	3.0188	-0.0606	0.0339	0.4270	-0.3936	0.2201
84	42.97	-0.04	8.1721	1.7694	-1.1905	3.3607	-0.0679	0.0441	0.4278	-0.3797	0.2092
85	43.15	-0.01	8.1902	1.7737	-1.2907	2.6052	-0.0592	0.0331	0.4156	-0.3827	0.2363
86	43.33	-0.10	8.2928	1.7954	-1.2294	3.1726	-0.0602	0.0224	0.4195	-0.3971	0.2152
87	43.53	-0.09	8.3096	1.7982	-1.0436	3.0613	-0.0540	0.0263	0.4208	-0.3945	0.2083
88	43.71	-0.10	8.4001	1.8169	-1.2379	3.2910	-0.0597	0.0102	0.4201	-0.4099	0.2037
89	43.90	-0.09	8.5016	1.8387	-1.1195	2.9313	-0.0439	-0.0077	0.4164	-0.4241	0.2123
90	44.10	-0.11	8.6510	1.8717	-1.2671	2.7909	-0.0371	-0.0087	0.4151	-0.4238	0.2117
91	44.25	-0.07	8.5322	1.8519	-0.9302	3.1982	-0.0527	0.0320	0.4214	-0.3894	0.1775
92	44.47	-0.08	8.7009	1.8590	-0.9240	1.8673	-0.0149	0.0071	0.4205	-0.4134	0.2137

PAGE 1 OF 3
SHEET 3 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART EACH RX10=6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 95 0.90 1.7 0.0 81a0.823 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	[illegible]	-0.00	8.5491	1.9614	-0.7377	1.4561	-0.0281	-0.0129	0.4115	-0.4244	0.2270
94	00.87	-0.00	8.7394	1.9117	-0.9179	1.4654	-0.0306	0.0029	0.4120	-0.4091	0.2187
95	05.02	-0.00	8.6357	1.9121	-0.8306	1.8374	-0.0147	-0.0018	0.4103	-0.4121	0.2165
96	05.20	-0.05	8.9537	1.8370	-0.8092	1.9955	-0.0279	-0.0119	0.4144	-0.4263	0.2052
97	05.30	-0.01	8.9502	1.8711	-0.8316	2.1159	-0.0341	-0.0032	0.4120	-0.4152	0.1999
98	05.55	-0.10	9.0446	1.9014	-1.1017	2.0250	-0.0350	0.0168	0.4260	-0.4092	0.1717
99	05.75	-0.04	9.1500	1.7822	-0.8706	2.0755	-0.0267	0.0036	0.4215	-0.4177	0.1924
100	05.91	-0.05	9.1045	1.7566	-0.8491	2.2101	-0.0272	0.0007	0.4304	-0.4297	0.1945
101	06.07	-0.07	9.1405	1.7378	-0.7568	1.9862	-0.0269	-0.0040	0.4271	-0.4311	0.1891
102	06.27	-0.04	9.3471	1.6558	-0.3468	1.6543	-0.0127	-0.0195	0.4222	-0.4417	0.1771
103	06.45	-0.12	9.4614	1.6594	-1.1454	2.0224	-0.0249	-0.0316	0.4371	-0.4689	0.1730
104	05.84	-0.05	9.5242	1.9466	-0.5716	1.8816	-0.0252	-0.0124	0.4256	-0.4380	0.1617
105	06.52	-0.05	9.5425	1.8259	-0.7616	1.8562	-0.0246	-0.0277	0.4191	-0.4468	0.1704
106	05.98	-0.05	9.6240	1.8594	-0.4048	1.8518	-0.0106	-0.0246	0.4221	-0.4467	0.1761
107	07.10	-0.10	9.6538	1.8349	-0.9885	1.7628	-0.0104	-0.0052	0.4250	-0.4302	0.1693
108	07.38	-0.07	9.6936	1.8964	-0.7427	2.1054	-0.0242	-0.0173	0.4367	-0.4560	0.1408
109	07.52	-0.08	9.6952	1.8503	-0.5548	1.7548	-0.0229	-0.0235	0.4356	-0.4589	0.1476
110	07.64	-0.06	9.6162	1.8342	-0.6376	1.8433	-0.0234	-0.0056	0.4371	-0.4425	0.1447
111	07.85	-0.08	9.6918	1.8232	-0.6538	2.1027	-0.0305	-0.0035	0.4420	-0.4458	0.1236
112	08.05	-0.08	10.1249	1.8140	-0.7764	1.7975	-0.0220	0.0070	0.4432	-0.4362	0.1297
113	08.21	-0.08	10.2043	1.8073	-0.8459	2.1538	-0.0247	0.0355	0.4662	-0.4307	0.0986
114	08.39	-0.06	10.3072	0.9431	-0.8041	2.0260	-0.0267	0.0187	0.4576	-0.4389	0.0964
115	08.57	-0.12	10.3158	0.8528	-0.9547	1.9622	-0.0343	0.0193	0.4546	-0.4503	0.0826
116	08.72	-0.07	10.4040	0.8531	-0.7036	1.5892	-0.0208	0.0117	0.4577	-0.4460	0.0916
117	08.91	-0.08	10.5222	0.7081	-0.8015	1.5776	-0.0271	0.0202	0.4687	-0.4485	0.0669
118	09.10	-0.06	10.6435	0.5219	-0.5799	1.8362	-0.0336	0.0045	0.4682	-0.4637	0.0488
119	09.25	-0.08	10.6844	0.5759	-0.2183	1.6186	-0.0286	0.0081	0.4715	-0.4316	0.0563
120	09.43	-0.04	10.6898	0.5998	-0.2578	1.6325	-0.0078	0.0037	0.4634	-0.4597	0.0655
121	09.61	-0.01	10.7547	0.4348	0.1028	1.3320	-0.0200	0.0363	0.4649	-0.4266	0.0480
122	09.79	0.02	10.8174	0.3403	0.5313	1.3324	-0.0076	0.0116	0.4636	-0.4520	0.0312
123	09.95	0.01	10.9178	0.3373	0.3859	1.1906	0.0062	-0.0146	0.4538	-0.4684	0.0309
124	50.13	0.00	11.0067	0.2567	0.6692	1.2961	-0.0076	0.0170	0.4547	-0.4377	0.0244
125	50.36	-0.03	11.7331	-1.3234	0.8428	1.3171	0.0206	0.0258	0.4869	-0.4618	-0.1129
126	50.55	-0.05	11.9301	-1.5020	-0.3955	1.6411	0.0085	0.0266	0.4934	-0.4647	-0.1260
127	50.71	-0.01	11.9417	-1.5280	-0.0110	1.6585	0.0009	0.0248	0.4955	-0.4706	-0.1280
128	50.90	-0.03	12.1769	-1.4352	-0.1970	2.3199	-0.0069	0.0357	0.5084	-0.4711	-0.1344
129	51.25	-0.01	12.1922	-1.4203	-0.0479	2.3765	-0.0188	0.0144	0.5015	-0.4871	-0.1411
130	51.22	-0.03	12.0844	-1.0112	-0.1107	2.0488	0.0002	0.0538	0.5043	-0.4504	-0.1333
131	51.48	-0.03	12.5062	-2.2752	-0.1712	2.4259	-0.0335	0.0427	0.5125	-0.4797	-0.1821
132	51.67	-0.01	12.6034	-2.4736	0.0039	2.5784	-0.0199	0.0312	0.5083	-0.4770	-0.1963
133	51.76	-0.02	12.7042	-2.4142	0.4113	2.4331	-0.0197	0.0341	0.5128	-0.4787	-0.1901
134	51.93	0.00	12.6425	-2.4174	0.8347	2.0485	0.0006	0.0445	0.5231	-0.4745	-0.2246
135	52.13	0.00	13.2417	-2.4243	1.0004	1.7645	0.0210	0.0034	0.5214	-0.5179	-0.2212
136	52.29	0.04	13.2401	-2.1403	0.4796	1.3892	0.0295	0.0212	0.5246	-0.5034	-0.2371
137	52.45	0.04	13.2208	-2.8614	0.6071	1.8250	0.0218	0.0156	0.5197	-0.5039	-0.2164
138	52.63	0.00	13.2344	-2.8202	1.1477	1.6803	0.0214	0.0116	0.5213	-0.5097	-0.2137

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 3 OF 3

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 RUN 45 MACH 0.60 ALPHA 1.7 PHI 0.0 CONE 0.0 L DELL 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CA	CLM	CY	CLN	CLL	CA	CAH	CAF	XCP
139	52.77	0.02	13.1893	-2.8733	0.7709	1.4381	0.0221	0.0326	0.5180	-0.4852	-0.2119
140	52.93	0.00	13.0972	-2.8759	0.6938	1.3491	0.0295	0.0313	0.5167	-0.4854	-0.2106
141	53.13	0.01	13.2242	-2.8466	0.9368	1.6038	0.0220	-0.0045	0.5187	-0.5102	-0.2077
142	53.28	0.03	13.2450	-2.8732	0.9292	1.3815	0.0293	0.0117	0.5135	-0.5018	-0.2245
143	53.45	0.02	13.0529	-2.8873	1.1732	1.4055	0.0421	-0.0070	0.5135	-0.5205	-0.2146
144	53.61	0.02	13.4038	-2.8533	0.9569	1.3140	0.0362	0.0003	0.5163	-0.5160	-0.2278
145	53.77	0.00	13.3295	-3.1587	1.0705	1.2818	0.0454	0.0105	0.5097	-0.4932	-0.2378
146	53.93	0.02	13.3579	-2.8871	1.0173	1.2868	0.0343	0.0433	0.5101	-0.4667	-0.2311
147	54.08	0.02	13.2918	-2.8853	0.8962	1.1172	0.0378	-0.0062	0.5090	-0.5152	-0.2141
148	54.25	0.04	13.5210	-2.9306	0.8618	1.0864	0.0443	0.0189	0.5043	-0.4855	-0.2172
149	54.41	0.07	13.4151	-2.9226	1.2295	0.9438	0.0374	0.0079	0.5072	-0.4998	-0.2182
150	54.56	0.04	13.4521	-2.9284	0.9366	1.0133	0.0379	0.0108	0.5052	-0.4944	-0.2161
151	54.72	0.05	13.5185	-2.8272	0.8571	1.0205	0.0446	0.0232	0.5035	-0.4807	-0.2093
152	54.87	0.06	13.4548	-2.8784	1.0791	0.9355	0.0443	-0.0035	0.5040	-0.5075	-0.2070
153	55.03	0.03	13.5981	-2.9367	0.7244	1.1412	0.0450	-0.0096	0.4987	-0.5083	-0.2157
154	55.17	0.05	13.5361	-2.8934	0.9556	0.8603	0.0451	-0.0187	0.4974	-0.5161	-0.2112
155	55.32	0.05	13.5120	-2.8979	1.0757	0.8706	0.0446	-0.0151	0.5010	-0.5161	-0.2181
156	55.48	0.06	13.5662	-3.1010	0.7722	0.6517	0.0400	-0.0194	0.4986	-0.5180	-0.2212
157	55.63	0.05	13.5635	-2.9301	1.2550	1.0354	0.0504	-0.0160	0.4994	-0.5178	-0.1953
158	55.78	0.06	13.4715	-2.7665	0.7314	0.9226	0.0388	-0.0046	0.4970	-0.5014	-0.2045
159	55.93	0.03	13.4902	-2.8367	0.7008	0.8172	0.0376	-0.0124	0.4957	-0.5085	-0.1955
160	56.11	0.01	13.5956	-2.7737	0.6293	0.9956	0.0343	-0.0248	0.4920	-0.5168	-0.2040
161	56.25	0.01	13.5206	-2.8911	0.9655	1.0366	0.0266	-0.0265	0.4896	-0.5161	-0.1916
162	56.40	0.02	13.5327	-2.8049	0.8699	1.1715	0.0348	-0.0447	0.4957	-0.5404	-0.1910
163	56.57	0.03	13.5780	-2.8413	0.8696	1.0359	0.0320	-0.0156	0.4969	-0.5125	-0.1872
164	56.71	0.01	13.4227	-2.8764	0.7110	1.0226	0.0394	-0.0141	0.5002	-0.5143	-0.1891
165	56.87	-0.03	13.7211	-3.2492	0.3043	0.6562	0.0439	-0.0174	0.4858	-0.5032	-0.2356
166	57.03	0.00	13.7402	-3.0320	0.5396	1.0396	0.0396	-0.0473	0.4930	-0.5303	-0.2207
167	57.18	-0.04	13.6959	-3.0109	0.4020	0.9441	0.0404	-0.0521	0.4850	-0.5371	-0.2198
168	57.33	0.01	13.6488	-2.9826	0.6226	1.0968	0.0347	-0.0674	0.4838	-0.5512	-0.2139
169	57.47	-0.01	13.7115	-2.8458	0.3665	1.0339	0.0400	-0.0592	0.4863	-0.5475	-0.2091
170	57.63	-0.04	13.8970	-2.8714	0.0971	0.9617	0.0354	-0.0693	0.4875	-0.5568	-0.1922
171	57.78	-0.11	13.7726	-2.1464	-0.5254	-0.1748	0.0389	-0.1081	0.4748	-0.5835	-0.1558
172	57.90	-0.07	13.9501	-1.7235	-0.0715	-0.0075	0.0333	-0.1206	0.4507	-0.5713	-0.1263
173	58.05	-0.06	13.7202	-2.2639	-0.1695	-0.3637	0.0331	-0.1262	0.4546	-0.5828	-0.1657
174	58.21	-0.11	13.8278	-2.2285	-0.3919	-0.9552	0.0211	-0.1139	0.4489	-0.5828	-0.1612
175	58.35	-0.16	13.9521	-2.4301	-0.3751	-1.1132	0.0213	-0.1002	0.4456	-0.5458	-0.1754
176	58.50	-0.11	13.9062	-2.4893	-0.4104	-1.2341	0.0212	-0.0716	0.4567	-0.5284	-0.1769
177	58.68	-0.09	13.7843	-2.3769	-0.1897	-0.9454	0.0273	-0.0897	0.4517	-0.5415	-0.1726
178	58.84	-0.09	13.8258	-2.5616	-0.1905	-1.3550	0.0215	-0.0932	0.4541	-0.5474	-0.1809

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH NUMBER	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	95	1.7	0.0	0.0023	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CH1	XCPF1	YCPF1	CNF2	CM2	CH2	XCPF2	YCPF2
1	-5.72	0.01	0.0136	0.0034	0.0051	0.2000	0.4585	-0.6908	-0.0424	-0.3316	0.0613	0.4800
2	-5.72	0.01	0.0170	0.0040	0.0099	0.2330	0.5852	-0.6908	-0.0424	-0.3339	0.0613	0.4834
3	-5.72	-0.01	0.0244	0.0052	0.0099	0.1899	0.3876	-0.6909	-0.0424	-0.3306	0.0613	0.4784
4	-5.72	0.00	-0.0136	0.0040	0.0014	-10.2500	-3.5000	-0.6102	-0.0499	-0.3058	0.0818	0.5011
5	-2.65	0.01	-0.0021	0.0083	-0.0065	-2.9545	3.0455	-0.5298	-0.0530	-0.2809	0.1008	0.5301
6	-0.75	0.01	-0.0021	0.0079	-0.0074	-3.7273	3.5000	-0.4088	-0.0521	-0.2464	0.1274	0.6028
7	1.11	0.01	-0.0119	0.0073	-0.0186	-0.1068	0.4500	-0.2556	-0.0441	-0.1610	0.1881	0.7087
8	3.06	-0.01	-0.0014	0.0067	-0.0067	-3.6316	0.7368	-0.0857	-0.0339	-0.1084	0.3941	1.2646
9	4.88	-0.01	0.0055	0.0087	-0.0055	1.5769	-1.0000	-0.0024	-0.0092	-0.0843	3.8000	26.6400
10	5.78	0.00	0.0028	0.0060	-0.0018	0.2754	-0.6552	0.0762	0.0175	-0.0271	0.2235	-0.3469
11	6.63	-0.01	0.0105	0.0069	-0.0019	0.3761	-2.1635	0.1672	0.0424	0.0163	0.2533	0.0975
12	10.50	-0.01	0.0131	0.0032	-0.0017	0.2426	-0.1324	0.2678	0.0815	0.0640	0.2295	0.2389
13	12.40	-0.01	0.0134	0.0025	0.0079	0.0921	0.2603	0.3963	0.0777	0.1435	0.1960	0.3621
14	14.29	-0.01	0.0106	0.0	-0.0011	0.0	-0.1000	0.5211	0.0803	0.1972	0.1540	0.3784
15	16.24	-0.01	0.0026	-0.0063	0.0010	-2.2414	0.3448	0.5869	0.0790	0.2210	0.1351	0.3778
16	18.18	-0.00	-0.0055	-0.0208	0.0102	3.7895	-1.8596	0.6146	0.0652	0.2754	0.1061	0.3667
17	20.09	-0.01	-0.0136	-0.0346	0.0042	0.9129	-0.2313	0.6671	0.0530	0.2365	0.0794	0.3575
18	21.99	-0.00	-0.0211	-0.0396	-0.0047	0.5442	0.0665	0.7311	0.0435	0.2505	0.0595	0.3428
19	23.91	-0.01	-0.0157	-0.0457	-0.0042	0.3681	0.2810	0.7716	0.0395	0.2628	0.0512	0.3407
20	25.80	-0.00	-0.0307	-0.0401	-0.0143	0.5474	0.3895	0.4090	0.0370	0.2671	0.0457	0.3301
21	27.76	-0.01	-0.0433	-0.0102	-0.0244	1.2361	0.6904	0.6175	0.0365	0.2661	0.0466	0.3255
22	29.20	-0.00	0.0001	-0.0035	-0.0052	-0.5873	-0.8571	0.9118	0.0359	0.2633	0.0442	0.3243
23	26.25	-0.01	0.0111	-0.0009	-0.0045	-0.0549	-2.4087	0.8102	0.0354	0.2623	0.0443	0.3238
24	2-.67	0.00	0.0090	0.0055	0.0180	0.0905	0.2968	0.8132	0.0356	0.2614	0.0438	0.3214
25	25.93	0.00	0.0150	0.0151	0.0546	0.1321	0.4793	0.8045	0.0359	0.2596	0.0448	0.3226
26	29.22	0.02	0.1488	0.0230	0.0099	0.1409	0.4766	0.8158	0.0355	0.2599	0.0435	0.3186
27	29.56	0.04	0.1735	0.0242	0.0085	0.1396	0.4983	0.8508	0.0355	0.2698	0.0418	0.3172
28	29.83	0.06	0.2551	0.0329	0.0295	0.1290	0.5076	0.8593	0.0349	0.2693	0.0406	0.3134
29	30.12	0.05	0.2475	0.0332	0.0080	0.1281	0.4917	0.8709	0.0343	0.2726	0.0394	0.3130
30	30.36	0.06	0.3473	0.0466	0.0717	0.1325	0.4943	0.8711	0.0341	0.2579	0.0391	0.3076
31	30.66	0.07	0.3818	0.0355	0.1525	0.1352	0.4831	0.8962	0.0329	0.2745	0.0368	0.3070
32	30.96	0.06	0.4350	0.0367	0.2066	0.1349	0.4749	0.8885	0.0326	0.2705	0.0367	0.3045
33	31.21	0.06	0.4421	0.0394	0.2405	0.1357	0.4828	0.8944	0.0323	0.2722	0.0361	0.3043
34	31.46	0.07	0.4475	0.0015	0.2115	0.1373	0.4726	0.9002	0.0315	0.2736	0.0349	0.3042
35	31.76	0.07	0.4232	0.0016	0.2097	0.1458	0.4959	0.9018	0.0311	0.2760	0.0345	0.3060
36	32.03	0.07	0.4056	0.0010	0.2063	0.1503	0.4988	0.8989	0.0314	0.2734	0.0349	0.3042
37	32.36	0.07	0.3958	0.0591	0.1972	0.1512	0.5049	0.9336	0.0302	0.2866	0.0328	0.3070
38	32.56	0.06	0.3695	0.0594	0.1962	0.1608	0.5308	0.9276	0.0302	0.2841	0.0326	0.3084
39	32.96	0.06	0.3225	0.0548	0.1769	0.1654	0.5359	0.9160	0.0302	0.2851	0.0330	0.3113
40	33.08	0.07	0.2497	0.0531	0.1603	0.1832	0.5533	0.9276	0.0305	0.2849	0.0329	0.3072
41	33.43	0.05	0.2522	0.0511	0.1438	0.2024	0.5700	0.9275	0.0302	0.2872	0.0326	0.3097
42	33.56	0.05	0.2546	0.0515	0.1452	0.2023	0.5703	0.9277	0.0299	0.2838	0.0322	0.3059
43	33.89	0.06	0.1969	0.0435	0.1134	0.2465	0.6157	0.9161	0.0311	0.2806	0.0339	0.3063
44	34.09	0.05	0.2043	0.0383	0.1272	0.2267	0.6226	0.9391	0.0293	0.2916	0.0312	0.3105
45	34.33	0.06	0.1310	0.0337	0.0926	0.2573	0.6303	0.9335	0.0296	0.2666	0.0317	0.3070
46	34.58	0.06	0.0490	0.0261	0.0614	0.2939	0.6952	0.9077	0.0308	0.2753	0.0339	0.3033

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	55	0.90	1.7	0.0	81-0F23	0.0	0	-10	0	-10	UNKNOWN

POINT	AL-MA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	34.89	0.02	0.0021	0.0192	0.0462	0.4183	0.7438	0.5394	0.0285	0.2870	0.0303	0.3056
48	35.06	-0.01	0.0022	0.0182	0.0368	0.3810	0.7186	0.5710	0.0274	0.2968	0.0282	0.3077
49	35.31	0.02	0.0062	0.0267	0.0114	1.4063	1.4935	0.9452	0.0285	0.2975	0.0301	0.3042
50	34.55	-0.01	-0.0079	-0.0004	-0.0184	0.0081	0.3491	0.5796	0.0274	0.3018	0.0260	0.3081
51	35.80	-0.02	-0.0026	-0.0020	-0.0270	0.6324	0.9316	0.5738	0.0274	0.3002	0.0281	0.3082
52	35.03	-0.02	-0.1032	-0.0041	-0.0483	0.0762	0.4604	0.5711	0.0274	0.2965	0.0282	0.3059
53	34.29	-0.02	-0.1223	-0.0103	-0.0581	0.0884	0.4624	0.5624	0.0274	0.2958	0.0285	0.3074
54	34.50	-0.02	-0.1006	-0.0170	-0.0862	0.1007	0.4997	0.5941	0.0262	0.3064	0.0264	0.3083
55	36.74	-0.03	-0.1031	-0.0162	-0.0559	0.0996	0.5266	1.0143	0.0248	0.3139	0.0244	0.3095
56	36.96	-0.02	-0.1008	-0.0202	-0.0953	0.1060	0.4566	0.9913	0.0264	0.3028	0.0271	0.3054
57	37.21	-0.02	-0.1026	-0.0175	-0.0972	0.0955	0.5303	1.0029	0.0257	0.3081	0.0256	0.3052
58	37.46	-0.02	-0.1004	-0.0158	-0.0911	0.0929	0.5345	1.0231	0.0251	0.3145	0.0245	0.3075
59	37.69	-0.02	-0.1077	-0.0151	-0.0919	0.0898	0.5476	1.0262	0.0248	0.3164	0.0243	0.3081
60	37.93	-0.01	-0.1555	-0.0143	-0.0838	0.0918	0.5385	1.0315	0.0245	0.3199	0.0238	0.3101
61	38.17	-0.01	-0.1510	-0.0143	-0.0777	0.0996	0.5144	1.0375	0.0242	0.3140	0.0233	0.3065
62	38.40	-0.03	-0.1766	-0.0182	-0.0965	0.0953	0.5556	1.0432	0.0236	0.3208	0.0227	0.3075
63	38.64	-0.02	-0.2043	-0.0222	-0.1036	0.1106	0.5173	1.0491	0.0228	0.3213	0.0217	0.3063
64	38.85	-0.01	-0.2111	-0.0201	-0.1004	0.1143	0.4758	1.0316	0.0236	0.3199	0.0229	0.3100
65	39.07	-0.03	-0.2551	-0.0281	-0.1274	0.1131	0.5011	1.0280	0.0245	0.3137	0.0239	0.3057
66	39.32	-0.03	-0.2009	-0.0344	-0.1338	0.1122	0.4360	1.0146	0.0251	0.3042	0.0247	0.3038
67	39.53	-0.04	-0.2693	-0.0309	-0.1195	0.1167	0.4936	1.0030	0.0256	0.3061	0.0253	0.3051
68	39.76	-0.02	-0.2779	-0.0378	-0.1751	0.1222	0.4065	0.9972	0.0254	0.3033	0.0254	0.3041
69	39.98	-0.03	-0.3380	-0.0388	-0.1685	0.1152	0.4411	1.0175	0.0242	0.3095	0.0238	0.3042
70	40.19	-0.03	-0.3409	-0.0408	-0.1941	0.1197	0.4042	1.0044	0.0251	0.3053	0.0250	0.3039
71	40.40	-0.03	-0.3401	-0.0472	-0.1659	0.1165	0.4166	1.0044	0.0251	0.3053	0.0250	0.3039
72	40.65	-0.05	-0.3914	-0.0484	-0.1561	0.1195	0.3988	0.9872	0.0257	0.2993	0.0260	0.3032
73	40.75	-0.03	-0.4256	-0.0492	-0.1735	0.1155	0.4071	1.0315	0.0251	0.3051	0.0250	0.3046
74	40.99	-0.06	-0.4144	-0.0504	-0.1711	0.1159	0.3938	0.9987	0.0251	0.3036	0.0251	0.3040
75	41.17	-0.07	-0.4537	-0.0500	-0.1666	0.1162	0.4113	1.0218	0.0242	0.3125	0.0237	0.3059
76	41.38	-0.05	-0.4817	-0.0496	-0.1863	0.1074	0.4036	1.0160	0.0245	0.3097	0.0241	0.3048
77	41.64	-0.06	-0.4974	-0.0511	-0.1772	0.1089	0.3988	1.0016	0.0245	0.3051	0.0245	0.3046
78	41.77	-0.05	-0.4790	-0.0519	-0.1595	0.1062	0.3951	1.0184	0.0239	0.3134	0.0235	0.3076
79	41.97	-0.08	-0.4362	-0.0480	-0.1752	0.1092	0.4005	1.0219	0.0236	0.3102	0.0231	0.3036
80	42.17	-0.09	-0.4729	-0.0532	-0.1794	0.1124	0.3803	1.0102	0.0242	0.3092	0.0240	0.3061
81	42.42	-0.07	-0.4871	-0.0488	-0.1812	0.1066	0.3965	1.0190	0.0233	0.3111	0.0229	0.3053
82	42.61	-0.09	-0.4946	-0.0504	-0.1768	0.1108	0.3935	1.0219	0.0228	0.3124	0.0223	0.3057
83	42.79	-0.09	-0.4871	-0.0492	-0.1757	0.1101	0.3930	1.0276	0.0228	0.3152	0.0222	0.3068
84	42.97	-1.07	-0.4848	-0.0524	-0.1812	0.1127	0.3849	1.0333	0.0222	0.3202	0.0215	0.3099
85	43.15	-0.07	-0.4836	-0.1675	-0.1121	0.6048	1.6420	0.0216	0.3233	0.0207	0.3103
86	43.33	-0.11	-0.4948	-0.0488	-0.1732	0.1058	0.3894	1.0334	0.0216	0.3190	0.0209	0.3077
87	43.53	-0.07	-0.4928	-0.0488	-0.1693	0.1137	0.3944	1.0333	0.0222	0.3202	0.0215	0.3099
88	43.71	-0.10	-0.4950	-0.0520	-0.1803	0.1103	0.3963	1.0290	0.0222	0.3179	0.0216	0.3090
89	43.91	-0.09	-0.4921	-0.0492	-0.1984	0.1106	0.3928	1.0290	0.0216	0.3179	0.0210	0.3090
90	44.10	-0.11	-0.3867	-0.0445	-0.1525	0.1206	0.4140	1.0463	0.0210	0.3263	0.0201	0.3119
91	44.25	-0.07	-0.4923	-0.0544	-0.1802	0.1203	0.3985	1.0318	0.0210	0.3216	0.0204	0.3117
92	44.47	-0.08	-0.2951	-0.0379	-0.1207	0.1248	0.4076	1.0694	0.0191	0.3373	0.0179	0.3154

PAGE 2 OF 3
SHEET 3 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10=6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	95	0.90	1.7	0.0	B1=0F23	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	44.64	-0.06	-0.3375	-0.0460	-0.1663	0.1166	0.4277	1.0018	0.0139	0.3293	0.0191	0.3113
94	44.82	-0.08	-0.1760	-0.0230	-0.0836	0.1301	0.4721	1.0793	0.0176	0.3377	0.0163	0.3129
95	45.02	-0.09	-0.2467	-0.0317	-0.1116	0.1287	0.4525	1.0705	0.0167	0.3359	0.0175	0.3137
96	45.20	-0.05	-0.3136	-0.0417	-0.1371	0.1304	0.4354	1.0619	0.0190	0.3317	0.0179	0.3124
97	45.38	-0.07	-0.2754	-0.0358	-0.1272	0.1291	0.4610	1.0658	0.0176	0.3373	0.0165	0.3165
98	45.55	-0.10	-0.3615	-0.0479	-0.1552	0.1323	0.4290	1.0666	0.0184	0.3302	0.0176	0.3149
99	45.75	-0.09	-0.2681	-0.0356	-0.1205	0.1338	0.4529	1.0641	0.0186	0.3445	0.0151	0.3180
100	45.91	-0.08	-0.2490	-0.0347	-0.1302	0.1372	0.4504	1.0615	0.0181	0.3382	0.0171	0.3167
101	46.07	-0.07	-0.2602	-0.0352	-0.1111	0.1462	0.4611	1.0857	0.0167	0.3458	0.0154	0.3185
102	46.27	-0.06	-0.2696	-0.0407	-0.1252	0.1422	0.4373	1.0771	0.0164	0.3439	0.0152	0.3193
103	46.45	-0.12	-0.2390	-0.0337	-0.1083	0.1427	0.4567	1.0885	0.0161	0.3495	0.0148	0.3211
104	46.64	-0.01	-0.2728	-0.0407	-0.1266	0.1493	0.4574	1.0982	0.0150	0.3532	0.0136	0.3216
105	46.82	-0.08	-0.2868	-0.0393	-0.1272	0.1492	0.4407	1.0925	0.0152	0.3493	0.0140	0.3197
106	46.98	-0.05	-0.2251	-0.0340	-0.1105	0.1530	0.4906	1.1144	0.0141	0.3550	0.0126	0.3185
107	47.18	-0.10	-0.1973	-0.0318	-0.0982	0.1664	0.4978	1.1268	0.0138	0.3612	0.0122	0.3206
108	47.36	-0.07	-0.2543	-0.0407	-0.1240	0.1601	0.4875	1.1153	0.0138	0.3560	0.0124	0.3210
109	47.52	-0.08	-0.2451	-0.0367	-0.1239	0.1572	0.5033	1.1249	0.0129	0.3617	0.0115	0.3216
110	47.69	-0.06	-0.2334	-0.0371	-0.1213	0.1567	0.5136	1.1249	0.0129	0.3607	0.0115	0.3206
111	47.85	-0.08	-0.2424	-0.0353	-0.1171	0.1535	0.5023	1.1134	0.0129	0.3551	0.0116	0.3189
112	48.05	-0.06	-0.2052	-0.0351	-0.1146	0.1711	0.5545	1.1420	0.0112	0.3466	0.0098	0.3210
113	48.21	-0.08	-0.2066	-0.0328	-0.1029	0.1595	0.5356	1.1258	0.0115	0.3612	0.0102	0.3209
114	48.39	-0.04	-0.2403	-0.0382	-0.1360	0.1617	0.5757	1.1401	0.0100	0.3682	0.0088	0.3230
115	48.57	-0.10	-0.2332	-0.0377	-0.1366	0.1618	0.5654	1.1611	0.0092	0.3760	0.0079	0.3221
116	48.72	-0.07	-0.1712	-0.0303	-0.1104	0.1770	0.6460	1.1668	0.0077	0.3778	0.0066	0.3238
117	48.91	-0.08	-0.1528	-0.0311	-0.1263	0.1612	0.6552	1.1603	0.0084	0.3750	0.0071	0.3231
118	49.10	-0.06	-0.1901	-0.0318	-0.1272	0.1675	0.6690	1.1753	0.0074	0.3785	0.0063	0.3221
119	49.25	-0.08	-0.1458	-0.0255	-0.1134	0.1760	0.7506	1.1904	0.0069	0.3868	0.0056	0.3243
120	49.43	-0.04	-0.1253	-0.0247	-0.0996	0.1971	0.7945	1.1818	0.0071	0.3831	0.0060	0.3241
121	49.61	-0.11	-0.0752	-0.0184	-0.0845	0.2452	1.1297	1.1988	0.0060	0.3864	0.0050	0.3206
122	49.79	0.03	-0.0856	-0.0180	-0.0821	0.2234	1.0167	1.2075	0.0054	0.3862	0.0045	0.3199
123	49.95	0.01	-0.0043	-0.0007	-0.0077	1.5333	10.9778	1.2218	0.0062	0.3909	0.0035	0.3199
124	50.13	0.04	-0.0657	-0.0152	-0.0784	0.2320	1.1703	1.2198	0.0042	0.3914	0.0035	0.3208
125	50.36	-0.03	-0.0069	-0.0007	-0.0240	0.9583	6.9028	1.2529	0.0037	0.4028	0.0029	0.3212
126	50.55	-0.05	-0.0203	-0.0110	-0.0560	0.4176	2.2015	1.2593	0.0037	0.4036	0.0029	0.3205
127	50.71	-0.01	-0.0062	-0.0103	-0.0878	0.2256	1.0571	1.2510	0.0031	0.3972	0.0025	0.3175
128	50.90	-0.03	-0.1215	-0.0192	-0.0798	0.1581	0.7345	1.2555	0.0034	0.4015	0.0027	0.3198
129	51.08	-0.07	-0.1395	-0.0211	-0.0983	0.1526	0.7101	1.2648	0.0026	0.4051	0.0021	0.3203
130	51.22	-0.03	-0.0135	-0.0093	-0.0372	0.3214	2.7571	1.2649	0.0026	0.4040	0.0021	0.3196
131	51.40	-0.03	-0.2252	-0.0249	-0.1360	0.1249	0.6037	1.2640	0.0042	0.3987	0.0034	0.3158
132	51.57	-0.01	-0.1655	-0.0227	-0.1060	0.1367	0.6510	1.2875	0.0026	0.4070	0.0020	0.3161
133	51.76	0.02	-0.1115	-0.0137	-0.0861	0.1225	0.7215	1.2817	0.0023	0.4076	0.0018	0.3180
134	51.93	0.00	-0.0859	-0.0090	-0.0764	0.1033	0.8800	1.2876	0.0020	0.4070	0.0016	0.3161
135	52.13	0.00	-0.0208	0.0006	-0.0432	-0.6370	2.0741	1.2815	0.0023	0.4052	0.0018	0.3162
136	52.29	0.00	0.0377	0.0119	-0.0161	0.2916	-0.3734	1.2816	0.0014	0.4052	0.0011	0.3167
137	52.45	0.04	0.0429	0.0101	-0.0187	0.2360	-0.3416	1.2909	0.0	0.4100	0.0	0.3176
138	52.63	0.08	0.0352	0.0079	-0.0135	0.2000	-0.3836	1.3014	0.0006	0.4102	0.0004	0.3152

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 6 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | MACH 0.60 1.7 | RN/L 6.10-6 6.23 | PHI 0.0 | CONF 0.0 | L 0 | DEL1 -10 | DEL2 0 | DEL3 -10 | DEL4 0 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CN1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
139	52.77	0.05	0.0354	0.0099	-0.0155	0.2850	-0.4349	1.2993	0.0012	0.4073	0.0009	0.3135
140	52.93	0.06	0.0348	0.0124	-0.0006	0.1784	-0.0053	1.2964	0.0	0.4081	0.0	0.3148
141	53.13	0.07	0.0499	0.0165	-0.0004	0.2108	-0.1003	1.2972	0.0003	0.4066	0.0002	0.3139
142	53.26	0.06	0.0765	0.0130	0.0069	0.1778	0.0495	1.2973	-0.0006	0.4046	-0.0004	0.3134
143	53.45	0.06	0.0791	0.0172	0.0093	0.2256	0.1217	1.3019	-0.0003	0.4097	-0.0002	0.3147
144	53.61	0.06	0.0816	0.0184	0.0174	0.2009	0.0934	1.3189	-0.0012	0.4167	-0.0009	0.3149
145	53.77	0.06	0.0839	0.0189	0.0229	0.2568	0.0378	1.3229	-0.0003	0.4154	-0.0002	0.3161
146	53.93	0.06	0.0859	0.0149	0.0050	0.2143	0.0728	1.3224	-0.0009	0.4165	-0.0007	0.3150
147	54.08	0.06	0.0852	0.0155	0.0124	0.2362	0.1908	1.3049	0.0006	0.4081	0.0004	0.3118
148	54.25	0.06	0.0922	0.0203	0.0245	0.2197	0.2657	1.3166	0.0	0.4104	0.0	0.3117
149	54.41	0.07	0.0999	0.0216	0.0275	0.2194	0.2767	1.3257	-0.0006	0.4139	-0.0004	0.3122
150	54.56	0.06	0.0949	0.0186	0.0252	0.2082	0.2616	1.3312	-0.0003	0.4178	-0.0002	0.3138
151	54.72	0.06	0.0793	0.0145	0.0231	0.2457	0.2908	1.3255	0.0006	0.4162	0.0004	0.3160
152	54.87	0.06	0.0789	0.0186	0.0262	0.2359	0.3325	1.3311	0.0	0.4189	0.0	0.3147
153	55.03	0.04	0.0540	0.0163	0.0179	0.3018	0.3336	1.3207	0.0	0.4119	0.0	0.3119
154	55.17	0.05	0.0747	0.0203	0.0274	0.2574	0.3460	1.3313	0.0	0.4155	0.0	0.3121
155	55.32	0.06	0.0511	0.0171	0.0284	0.3340	0.4094	1.3254	0.0	0.4116	0.0	0.3105
156	55.48	0.06	0.0633	0.0188	0.0268	0.2942	0.4238	1.3367	-0.0009	0.4171	-0.0006	0.3120
157	55.63	0.06	0.0505	0.0168	0.0283	0.3683	0.4809	1.3233	0.0003	0.4109	0.0002	0.3105
158	55.78	0.02	0.0259	0.0155	0.0159	0.6007	0.6157	1.3120	0.0	0.4078	0.0	0.3108
159	55.93	0.04	0.0355	0.0154	0.0214	0.4484	0.6033	1.3195	-0.0003	0.4110	-0.0002	0.3115
160	56.11	0.01	0.0211	0.0132	0.0131	0.6256	0.8210	1.3252	-0.0009	0.4149	-0.0007	0.3131
161	56.25	0.01	-0.0094	0.0126	0.0048	-2.0152	-0.7273	1.3139	0.0	0.4083	0.0	0.3108
162	56.40	0.02	-0.0105	0.0094	0.0017	-0.4974	-0.1026	1.2970	0.0	0.4024	0.0	0.3103
163	56.57	0.03	0.0232	0.0155	0.0168	0.6708	0.7256	1.3021	-0.0014	0.4197	-0.0011	0.3127
164	56.71	0.01	-0.0046	0.0113	0.0092	-2.6591	-2.1591	1.3365	-0.0020	0.4181	-0.0015	0.3124
165	56.87	-0.04	0.0329	0.0155	0.0223	0.4721	0.6774	1.3639	-0.0028	0.4265	-0.0021	0.3127
166	57.03	0.00	-0.0035	0.0132	0.0069	-3.5128	-1.3077	1.3272	-0.0014	0.4133	-0.0011	0.3114
167	57.19	-0.00	0.0077	0.0148	0.0162	1.9125	2.1000	1.3413	-0.0022	0.4189	-0.0017	0.3129
168	57.33	0.01	-0.0144	0.0121	0.0070	-0.8389	-0.4899	1.3273	-0.0017	0.4110	-0.0013	0.3097
169	57.47	-0.01	-0.0343	0.0108	0.0014	-0.2500	-0.0393	1.3385	-0.0020	0.4176	-0.0015	0.3120
170	57.63	-0.04	-0.0487	0.0074	-0.0079	-0.1525	0.1624	1.3356	-0.0012	0.4142	-0.0009	0.3117
171	57.78	-0.11	-0.0273	0.0096	0.0077	-0.3428	-0.2827	1.3611	-0.0017	0.4240	-0.0013	0.3115
172	57.90	-0.07	-0.0526	0.0070	-0.0017	-0.1354	0.0334	1.3555	-0.0014	0.4190	-0.0011	0.3091
173	58.05	-0.08	-0.0648	0.0063	0.0023	-0.1401	-0.0517	1.3661	-0.0031	0.4237	-0.0023	0.3101
174	58.21	-0.11	-0.0094	0.0098	0.0095	-1.0000	-1.0309	1.4030	-0.0048	0.4369	-0.0034	0.3114
175	58.35	-0.12	-0.0081	0.0101	0.0084	-2.5000	-1.9762	1.4030	-0.0051	0.4369	-0.0036	0.3114
176	58.46	-0.11	-0.0017	0.0101	0.0105	-5.8333	-6.5556	1.4029	-0.0063	0.4402	-0.0045	0.3138
177	58.46	-0.09	-0.0107	0.0090	0.0055	-0.5607	-0.3295	1.3683	-0.0040	0.4266	-0.0029	0.3118
178	58.59	-0.09	-0.0118	0.0101	0.0072	-0.8607	-0.6148	1.3627	-0.0048	0.4259	-0.0035	0.3102

PAGE 3 OF 3
SHEET 1 OF 1

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	R/10**6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	95	0.90	1.7	0.0	81=0F23	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
1	-5.72	0.01	-0.0264	0.0949	0.0361	0.9999	-1.2721	-0.0116	-0.0421	-0.3092	0.0525	0.3658
2	-5.72	0.01	-0.0264	0.0949	0.0371	0.9999	-1.3095	-0.7959	-0.0409	-0.3065	0.0514	0.3851
3	-5.72	-0.01	-0.0264	0.0949	0.0361	0.9999	-1.2721	-0.7958	-0.0424	-0.3066	0.0532	0.3854
4	-4.52	0.01	-0.0310	0.0949	0.0359	0.9999	-1.1584	-0.7951	-0.0478	-0.2675	0.0677	0.3793
5	-2.45	0.01	-0.0264	0.0949	0.0361	0.9999	-1.2721	-0.8023	-0.0575	-0.2476	0.0955	0.4111
6	-0.75	0.01	-0.0230	0.0949	0.0356	0.9999	-1.0420	-0.4958	-0.0574	-0.2109	0.1160	0.4261
7	1.11	0.01	-0.0334	0.0949	0.0338	0.9999	-1.0938	-0.3558	-0.0560	-0.1503	0.1518	0.4118
8	3.08	-0.01	-0.0783	0.0949	0.0354	0.9999	-0.9761	-0.1919	-0.0369	-0.0774	0.1921	0.4032
9	4.38	-0.01	-0.0285	0.0949	0.0361	0.9999	-1.3330	-0.2961	-0.0195	-0.0372	0.2202	0.4427
10	6.78	0.00	-0.0363	0.0949	0.0354	0.9999	-0.9761	0.0	0.0106	-0.0101	0.0106	-0.0101
11	8.53	-0.01	-0.0337	0.0949	0.0377	0.9999	-1.1203	0.1122	0.0356	0.0396	0.3156	0.3525
12	10.50	-0.01	-0.0468	0.0949	0.0440	0.9999	-0.9870	0.2369	0.0593	0.0880	0.2480	0.3689
13	12.49	-0.01	-0.0721	0.0949	0.0443	0.9999	-20.8638	0.3562	0.0813	0.1615	0.2053	0.4077
14	14.29	-0.00	0.0721	0.0949	0.0379	0.9999	1.7162	0.5025	0.0830	0.2177	0.1651	0.4332
15	16.24	-0.01	0.2199	0.0949	0.0305	0.9999	1.5388	0.5943	0.0737	0.2346	0.1354	0.4310
16	18.18	-0.02	-0.0014	0.0949	0.0279	0.9999	-20.6429	0.5727	0.0554	0.2494	0.0967	0.4355
17	20.19	-0.03	0.0014	0.0949	0.0192	0.9999	2.2260	0.6039	0.0497	0.2633	0.0823	0.4360
18	21.96	-0.03	0.0242	0.0949	0.0239	0.9999	0.8493	0.5461	0.0452	0.2521	0.0827	0.4617
19	23.91	-0.04	0.0150	0.0949	0.0128	0.9999	0.7112	0.5316	0.0440	0.2499	0.0828	0.4781
20	25.90	-0.04	0.0495	0.0949	0.0215	0.9999	0.4347	0.6163	0.0377	0.2842	0.0612	0.4611
21	27.70	-0.01	0.0366	0.0949	0.0170	0.9999	0.3810	0.6026	0.0367	0.3021	0.0571	0.4703
22	28.21	-0.00	0.0605	0.0949	0.0193	0.9999	0.3190	0.6395	0.0367	0.3052	0.0573	0.4772
23	28.25	-0.00	0.0641	0.0949	0.0216	0.9999	0.3625	0.6435	0.0368	0.3103	0.0571	0.4822
24	28.67	0.00	0.0659	0.0949	0.0198	0.9999	0.3001	0.6379	0.0373	0.3121	0.0586	0.4896
25	28.93	0.00	0.0664	0.0949	0.0206	0.9999	0.3135	0.6375	0.0373	0.3132	0.0586	0.4913
26	29.22	0.00	0.0618	0.0949	0.0273	0.9999	0.3337	0.6453	0.0380	0.3169	0.0589	0.4910
27	29.56	0.00	0.0623	0.0949	0.0316	0.9999	0.3396	0.6811	0.0380	0.3203	0.0558	0.4821
28	29.83	0.00	0.0950	0.0949	0.0325	0.9999	0.3421	0.6929	0.0380	0.3270	0.0569	0.4719
29	30.12	0.00	0.1002	0.0949	0.0391	0.9999	0.3337	0.6929	0.0383	0.3248	0.0553	0.4688
30	30.38	0.00	0.1185	0.0949	0.0393	0.9999	0.3451	0.6948	0.0386	0.3263	0.0564	0.4670
31	30.66	0.00	0.1187	0.0949	0.0427	0.9999	0.3602	0.7108	0.0377	0.3305	0.0531	0.4649
32	30.94	0.00	0.1050	0.0949	0.0343	0.9999	0.3327	0.7100	0.0380	0.3310	0.0530	0.4618
33	31.21	0.00	0.1188	0.0949	0.0397	0.9999	0.3339	0.7167	0.0378	0.3286	0.0522	0.4585
34	31.48	0.01	0.1188	0.0949	0.0397	0.9999	0.3339	0.7229	0.0369	0.3290	0.0510	0.4552
35	31.76	0.01	0.1185	0.0949	0.0396	0.9999	0.3336	0.7274	0.0368	0.3335	0.0505	0.4582
36	32.03	0.01	0.1186	0.0949	0.0395	0.9999	0.3334	0.7338	0.0365	0.3350	0.0497	0.4565
37	32.30	0.01	0.1247	0.0949	0.0453	0.9999	0.3558	0.7338	0.0362	0.3305	0.0493	0.4504
38	32.56	0.00	0.1185	0.0949	0.0417	0.9999	0.3518	0.7099	0.0365	0.3232	0.0514	0.4553
39	32.82	0.01	0.1401	0.0949	0.0361	0.9999	0.3607	0.7198	0.0359	0.3272	0.0499	0.4558
40	33.08	0.01	0.1053	0.0949	0.0396	0.9999	0.3666	0.7039	0.0368	0.3206	0.0522	0.4555
41	33.33	0.02	0.1139	0.0949	0.0400	0.9999	0.3621	0.7259	0.0356	0.3276	0.0491	0.4519
42	33.58	0.05	0.1050	0.0949	0.0388	0.9999	0.3592	0.7157	0.0368	0.3227	0.0514	0.4508
43	33.84	0.05	0.1098	0.0949	0.0371	0.9999	0.3707	0.7099	0.0365	0.3200	0.0518	0.4509
44	34.09	0.05	0.0993	0.0949	0.0352	0.9999	0.3962	0.6977	0.0373	0.3147	0.0535	0.4511
45	34.33	0.02	0.0908	0.0949	0.0329	0.9999	0.3789	0.7517	0.0356	0.3329	0.0474	0.4428
46	34.58	0.02	0.0868	0.0949	0.0329	0.9999	0.3789	0.7576	0.0356	0.3355	0.0470	0.4428

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 45 0.60 1.7 0.0 B1+DF23 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
47	34.86	0.02	0.0000	0.0000	0.0325	0.9999	0.3749	0.7648	0.0346	0.3396	0.0452	0.4398
48	35.06	-0.01	0.0002	0.0000	0.0316	0.9999	0.3757	0.7947	0.0345	0.3506	0.0432	0.4385
49	35.31	0.00	0.0003	0.0000	0.0329	0.9999	0.3769	0.7576	0.0356	0.3366	0.0470	0.4414
50	35.55	-0.01	0.0005	0.0000	0.0234	0.9999	0.3636	0.7906	0.0351	0.3478	0.0444	0.4400
51	35.46	-0.02	0.0005	0.0000	0.0250	0.9999	0.3736	0.7816	0.0351	0.3427	0.0449	0.4385
52	36.04	-0.02	0.0710	0.0000	0.0275	0.9999	0.3472	0.7908	0.0343	0.3477	0.0433	0.4397
53	36.25	-0.02	0.0551	0.0000	0.0232	0.9999	0.4203	0.8029	0.0336	0.3447	0.0416	0.4355
54	36.50	-0.02	0.0458	0.0000	0.0234	0.9999	0.3636	0.8296	0.0343	0.3561	0.0413	0.4294
55	36.73	-0.03	0.0352	0.0000	0.0210	0.9999	0.3611	0.8321	0.0356	0.3597	0.0428	0.4323
56	36.96	-0.02	0.0500	0.0000	0.0195	0.9999	0.3919	0.8298	0.0328	0.3560	0.0395	0.4291
57	37.21	-0.02	0.0554	0.0000	0.0200	0.9999	0.3613	0.8238	0.0334	0.3601	0.0405	0.4371
58	37.46	-0.03	0.0579	0.0000	0.0223	0.9999	0.3850	0.8356	0.0337	0.3632	0.0403	0.4346
59	37.69	-0.02	0.0605	0.0000	0.0225	0.9999	0.3716	0.8415	0.0328	0.3646	0.0390	0.4319
60	37.93	-0.01	0.0581	0.0000	0.0175	0.9999	0.3487	0.8596	0.0328	0.3715	0.0382	0.4321
61	38.17	-0.01	0.0605	0.0000	0.0225	0.9999	0.3716	0.8858	0.0319	0.3719	0.0369	0.4295
62	38.40	-0.03	0.0590	0.0000	0.0196	0.9999	0.3919	0.8530	0.0326	0.3715	0.0382	0.4321
63	38.64	-0.02	0.0599	0.0000	0.0246	0.9999	0.4134	0.8804	0.0328	0.3763	0.0373	0.4274
64	38.85	-0.01	0.0345	0.0000	0.0146	0.9999	0.3697	0.8746	0.0322	0.3736	0.0368	0.4272
65	39.07	-0.03	0.0348	0.0000	0.0187	0.9999	0.4246	0.8784	0.0316	0.3767	0.0362	0.4283
66	39.32	-0.03	0.0316	0.0000	0.0164	0.9999	0.4098	0.8717	0.0319	0.3722	0.0366	0.4271
67	39.53	-0.04	0.0315	0.0000	0.0140	0.9999	0.4448	0.8669	0.0322	0.3659	0.0381	0.4330
68	39.72	-0.02	0.0216	0.0000	0.0090	0.9999	0.4266	0.8538	0.0319	0.3654	0.0374	0.4280
69	39.96	-0.03	0.0246	0.0000	0.0102	0.9999	0.4327	0.8716	0.0325	0.3723	0.0373	0.4272
70	40.19	-0.03	0.0316	0.0000	0.0169	0.9999	0.4098	0.8700	0.0319	0.3726	0.0367	0.4283
71	40.36	-0.06	0.0157	0.0000	0.0075	0.9999	0.4765	0.8732	0.0311	0.3749	0.0356	0.4294
72	40.55	-0.05	0.0132	0.0000	0.0052	0.9999	0.2409	0.8593	0.0311	0.3684	0.0362	0.4292
73	40.75	-0.04	0.0053	0.0000	0.0024	0.9999	0.0727	0.8732	0.0311	0.3727	0.0356	0.4269
74	40.99	-0.06	0.0079	0.0000	0.0027	0.9999	0.3415	0.8763	0.0306	0.3741	0.0351	0.4269
75	41.17	-0.07	0.0210	0.0000	0.0079	0.9999	0.3761	0.8940	0.0311	0.3798	0.0368	0.4268
76	41.36	-0.06	0.0132	0.0000	0.0041	0.9999	0.3139	0.9028	0.0310	0.3816	0.0351	0.4227
77	41.60	-0.10	0.0263	0.0000	0.0110	0.9999	0.2048	0.8963	0.0316	0.3812	0.0353	0.4250
78	41.77	-0.06	0.0211	0.0000	0.0084	0.9999	0.3242	0.9118	0.0310	0.3856	0.0347	0.4229
79	41.97	-0.09	0.0106	0.0000	0.0023	0.9999	0.2727	0.9208	0.0314	0.3862	0.0341	0.4195
80	42.17	-0.09	0.0132	0.0000	0.0041	0.9999	0.3139	0.9205	0.0322	0.3840	0.0350	0.4172
81	42.42	-0.07	0.0132	0.0000	0.0041	0.9999	0.3139	0.9206	0.0322	0.3818	0.0350	0.4168
82	42.61	-0.09	0.0079	0.0000	0.0027	0.9999	0.3415	0.9295	0.0322	0.3840	0.0347	0.4174
83	42.79	-0.08	0.0132	0.0000	0.0041	0.9999	0.3139	0.9411	0.0326	0.3900	0.0349	0.4164
84	42.97	-0.09	0.0105	0.0000	0.0029	0.9999	0.2727	0.9443	0.0319	0.3868	0.0338	0.4098
85	43.15	-0.07	0.0131	0.0000	0.0064	0.9999	0.4779	0.9591	0.0322	0.3913	0.0336	0.4079
86	43.33	-0.10	0.0079	0.0000	0.0034	0.9999	0.4756	0.9502	0.0322	0.3845	0.0339	0.4084
87	43.53	-0.08	0.0052	0.0000	0.0025	0.9999	0.4815	0.9682	0.0319	0.3941	0.0330	0.4071
88	43.71	-0.10	-0.0001	0.0000	0.0011	0.9999	-11.0000	0.9515	0.0326	0.3868	0.0343	0.4066
89	43.90	-0.09	0.0052	0.0000	0.0025	0.9999	0.4815	0.9818	0.0309	0.3967	0.0316	0.4060
90	44.10	-0.11	0.0211	0.0000	0.0079	0.9999	0.3744	0.9933	0.0317	0.3965	0.0320	0.3991
91	44.25	-0.07	0.0132	0.0000	0.0041	0.9999	0.3139	0.9996	0.0306	0.4001	0.0306	0.4003
92	44.47	-0.08	0.0210	0.0000	0.0090	0.9999	0.4266	0.9933	0.0317	0.3953	0.0320	0.3980

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH HALO-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 95 0.90 1.7 0.0 BL=0F23 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CH3	XCPF3	YCPF3	CNF4	CM4	CH4	XCPF4	YCPF4
93	44.94	-0.06	0.0219	9.9999	0.0077	9.9999	0.3761	0.9827	0.0316	0.3929	0.0322	0.3998
94	44.82	-0.06	0.0235	9.9999	0.0114	9.9999	0.4776	0.9857	0.0316	0.3953	0.0321	0.4010
95	45.02	-0.06	0.0183	9.9999	0.0086	9.9999	0.4789	0.9977	0.0316	0.3996	0.0317	0.4005
96	45.20	-0.05	0.0131	9.9999	0.0063	9.9999	0.4779	0.9857	0.0316	0.3962	0.0321	0.4000
97	45.38	-0.07	0.0219	9.9999	0.0110	9.9999	0.5253	0.9863	0.0311	0.3957	0.0316	0.4020
98	45.55	-0.10	0.0026	9.9999	0.0023	9.9999	0.8849	0.9863	0.0305	0.3956	0.0306	0.4013
99	45.75	-0.08	0.0213	9.9999	0.0079	9.9999	0.3761	0.9863	0.0311	0.3946	0.0316	0.4009
100	45.91	-0.06	0.0236	9.9999	0.0102	9.9999	0.4327	0.9796	0.0316	0.3948	0.0323	0.4030
101	46.07	-0.07	0.0201	9.9999	0.0117	9.9999	0.4047	0.9869	0.0316	0.3970	0.0321	0.4023
102	46.27	-0.04	0.0183	9.9999	0.0088	9.9999	0.4789	0.9901	0.0311	0.4005	0.0314	0.4045
103	46.45	-0.12	0.0207	9.9999	0.0158	9.9999	0.5522	0.9929	0.0316	0.4029	0.0319	0.4059
104	46.64	-0.06	0.0130	9.9999	0.0083	9.9999	0.4815	1.0004	0.0310	0.4055	0.0302	0.4030
105	46.82	-0.09	0.0206	9.9999	0.0121	9.9999	0.5787	0.9942	0.0316	0.4025	0.0317	0.4049
106	46.98	-0.05	0.0342	9.9999	0.0142	9.9999	0.4153	1.0078	0.0305	0.4061	0.0303	0.4030
107	47.19	-0.14	0.0266	9.9999	0.0117	9.9999	0.4047	1.0241	0.0301	0.4155	0.0294	0.4057
108	47.38	-0.07	0.0138	9.9999	0.0072	9.9999	0.5556	1.0125	0.0289	0.4124	0.0286	0.4073
109	47.52	-0.08	0.0242	9.9999	0.0101	9.9999	0.4303	1.0047	0.0301	0.4113	0.0300	0.4094
110	47.69	-0.08	0.0361	9.9999	0.0141	9.9999	0.4146	1.0046	0.0301	0.4091	0.0300	0.4072
111	47.85	-0.06	0.0341	9.9999	0.0121	9.9999	0.3541	1.0047	0.0292	0.4112	0.0291	0.4093
112	48.05	-0.08	0.0210	9.9999	0.0089	9.9999	0.3257	0.9987	0.0295	0.4119	0.0296	0.4124
113	48.21	-0.08	0.0143	9.9999	0.0059	9.9999	0.3053	0.9910	0.0300	0.4097	0.0303	0.4134
114	48.39	-0.08	0.0316	9.9999	0.0087	9.9999	0.2752	1.0029	0.0297	0.4116	0.0298	0.4104
115	48.57	-0.10	0.0342	9.9999	0.0145	9.9999	0.3535	0.9956	0.0296	0.4128	0.0298	0.4147
116	48.72	-0.07	0.0145	9.9999	0.0139	9.9999	0.3124	1.0013	0.0294	0.4142	0.0294	0.4137
117	48.91	-0.06	0.0207	9.9999	0.0176	9.9999	0.3695	0.9925	0.0288	0.4146	0.0291	0.4178
118	49.10	-0.06	0.0342	9.9999	0.0145	9.9999	0.3695	1.0014	0.0286	0.4185	0.0285	0.4179
119	49.25	-0.06	0.0264	9.9999	0.0169	9.9999	0.3348	1.0057	0.0285	0.4216	0.0283	0.4192
120	49.43	-0.04	0.0497	9.9999	0.0152	9.9999	0.3068	1.0057	0.0285	0.4204	0.0283	0.4180
121	49.61	-0.01	0.0629	9.9999	0.0235	9.9999	0.3765	0.9878	0.0285	0.4146	0.0286	0.4197
122	49.79	0.03	0.0651	9.9999	0.0266	9.9999	0.3807	0.9994	0.0293	0.4189	0.0293	0.4191
123	49.95	0.01	0.0567	9.9999	0.0195	9.9999	0.3616	0.9997	0.0276	0.4155	0.0276	0.4156
124	50.13	0.04	0.0623	9.9999	0.0265	9.9999	0.3932	1.0009	0.0285	0.4194	0.0284	0.4191
125	50.30	-0.03	0.0567	9.9999	0.0208	9.9999	0.3810	1.0595	0.0239	0.4413	0.0226	0.4165
126	50.55	-0.05	0.0397	9.9999	0.0237	9.9999	0.3893	1.0757	0.0228	0.4473	0.0212	0.4158
127	50.71	-0.01	0.0701	9.9999	0.0272	9.9999	0.3879	1.0696	0.0235	0.4436	0.0220	0.4168
128	50.90	-0.03	0.0675	9.9999	0.0261	9.9999	0.4157	1.0685	0.0228	0.4451	0.0213	0.4166
129	51.08	-0.07	0.0545	9.9999	0.0218	9.9999	0.4000	1.0618	0.0213	0.4308	0.0197	0.4167
130	51.22	-0.03	0.0546	9.9999	0.0195	9.9999	0.3622	1.0549	0.0228	0.4402	0.0216	0.4173
131	51.40	-0.03	0.0549	9.9999	0.0223	9.9999	0.3720	1.0775	0.0210	0.4460	0.0195	0.4165
132	51.57	-0.01	0.0451	9.9999	0.0236	9.9999	0.3635	1.0726	0.0216	0.4448	0.0201	0.4166
133	51.76	0.02	0.0307	9.9999	0.0260	9.9999	0.3469	1.0694	0.0227	0.4456	0.0212	0.4167
134	51.93	0.04	0.0650	9.9999	0.0236	9.9999	0.3635	1.0648	0.0216	0.4463	0.0203	0.4184
135	52.13	0.00	0.0500	9.9999	0.0306	9.9999	0.3725	1.0813	0.0213	0.4495	0.0197	0.4157
136	52.29	0.04	0.0814	9.9999	0.0331	9.9999	0.4118	1.0784	0.0210	0.4482	0.0195	0.4156
137	52.45	0.04	0.0707	9.9999	0.0360	9.9999	0.3964	1.0677	0.0215	0.4496	0.0202	0.4164
138	52.63	0.06	0.0957	9.9999	0.0325	9.9999	0.3795	1.0752	0.0216	0.4479	0.0201	0.4166

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH NO. RN/L CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 55 0.60 1.7 0.0 BLAIR3 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF4	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
139	52.77	0.00	0.0000	0.0000	0.0312	0.0000	0.4466	1.0737	0.0202	0.4482	0.0188	0.4174
140	52.93	0.00	0.0000	0.0000	0.0370	0.0000	0.4079	1.0764	0.0209	0.4465	0.0195	0.4166
141	53.13	0.00	0.0000	0.0000	0.0287	0.0000	0.4439	1.0717	0.0209	0.4453	0.0195	0.4155
142	53.28	0.00	0.0000	0.0000	0.0328	0.0000	0.4356	1.0688	0.0209	0.4460	0.0196	0.4155
143	53.45	0.00	0.0000	0.0000	0.0337	0.0000	0.4092	1.0736	0.0202	0.4469	0.0188	0.4164
144	53.61	0.00	0.0000	0.0000	0.0325	0.0000	0.4350	1.0717	0.0199	0.4520	0.0182	0.4148
145	53.77	0.00	0.0000	0.0000	0.0346	0.0000	0.4032	1.0835	0.0198	0.4470	0.0183	0.4126
146	53.93	0.00	0.0000	0.0000	0.0377	0.0000	0.4297	1.0842	0.0201	0.4463	0.0185	0.4108
147	54.08	0.00	0.0000	0.0000	0.0365	0.0000	0.4625	1.0903	0.0201	0.4481	0.0184	0.4110
148	54.25	0.00	0.0000	0.0000	0.0336	0.0000	0.4490	1.0861	0.0198	0.4463	0.0182	0.4128
149	54.41	0.00	0.0000	0.0000	0.0336	0.0000	0.4778	1.0841	0.0206	0.4476	0.0188	0.4129
150	54.58	0.00	0.0000	0.0000	0.0323	0.0000	0.4485	1.0874	0.0192	0.4477	0.0177	0.4117
151	54.72	0.00	0.0000	0.0000	0.0345	0.0000	0.4631	1.1106	0.0195	0.4516	0.0175	0.4066
152	54.87	0.00	0.0000	0.0000	0.0327	0.0000	0.5048	1.0931	0.0192	0.4490	0.0176	0.4080
153	55.03	0.00	0.0000	0.0000	0.0331	0.0000	0.4777	1.1091	0.0180	0.4508	0.0163	0.4064
154	55.17	0.00	0.0000	0.0000	0.0343	0.0000	0.4772	1.0989	0.0186	0.4484	0.0169	0.4080
155	55.32	0.00	0.0000	0.0000	0.0337	0.0000	0.5248	1.1107	0.0180	0.4492	0.0162	0.4045
156	55.48	0.00	0.0000	0.0000	0.0343	0.0000	0.4772	1.1107	0.0183	0.4525	0.0165	0.4074
157	55.63	0.00	0.0000	0.0000	0.0346	0.0000	0.5015	1.1087	0.0183	0.4474	0.0165	0.4035
158	55.78	0.00	0.0000	0.0000	0.0343	0.0000	0.5096	1.1087	0.0183	0.4474	0.0165	0.4035
159	55.93	0.00	0.0000	0.0000	0.0347	0.0000	0.5422	1.1136	0.0180	0.4516	0.0162	0.4056
160	56.11	0.01	0.0042	0.0000	0.0327	0.0000	0.5048	1.1165	0.0175	0.4517	0.0156	0.4045
161	56.25	0.01	0.0015	0.0000	0.0335	0.0000	0.5447	1.1015	0.0183	0.4481	0.0166	0.4032
162	56.41	0.02	0.0038	0.0000	0.0318	0.0000	0.5935	1.1105	0.0175	0.4447	0.0157	0.4005
163	56.57	0.02	0.0064	0.0000	0.0341	0.0000	0.6055	1.1105	0.0178	0.4490	0.0160	0.4038
164	56.71	0.01	0.0038	0.0000	0.0339	0.0000	0.6324	1.1253	0.0167	0.4527	0.0148	0.4019
165	56.87	0.02	0.0038	0.0000	0.0340	0.0000	0.6331	1.1181	0.0173	0.4501	0.0154	0.4026
166	57.03	0.01	0.0014	0.0000	0.0347	0.0000	0.6305	1.1065	0.0164	0.4438	0.0148	0.4011
167	57.18	0.00	0.0015	0.0000	0.0315	0.0000	0.6681	1.1212	0.0166	0.4492	0.0146	0.4007
168	57.33	0.01	0.0039	0.0000	0.0307	0.0000	0.6071	1.1274	0.0150	0.4507	0.0133	0.3998
169	57.47	0.01	0.0063	0.0000	0.0336	0.0000	0.7365	1.1184	0.0155	0.4467	0.0139	0.3994
170	57.63	0.00	0.0039	0.0000	0.0323	0.0000	0.7053	1.1274	0.0144	0.4495	0.0128	0.3987
171	57.78	0.01	0.0039	0.0000	0.0278	0.0000	0.7898	1.1480	0.0141	0.4553	0.0123	0.3966
172	57.98	0.01	0.0039	0.0000	0.0331	0.0000	0.7656	1.1420	0.0141	0.4494	0.0123	0.3935
173	58.05	0.00	0.0015	0.0000	0.0305	0.0000	0.9597	1.1468	0.0133	0.4526	0.0116	0.3965
174	58.21	0.01	0.0039	0.0000	0.0335	0.0000	0.9508	1.1378	0.0142	0.4494	0.0125	0.3924
175	58.35	0.01	0.0062	0.0000	0.0301	0.0000	0.9968	1.1171	0.0128	0.4378	0.0132	0.3915
176	58.48	0.01	0.0039	0.0000	0.0327	0.0000	0.8804	1.1231	0.0142	0.4410	0.0126	0.3927
177	58.66	0.00	0.0015	0.0000	0.0288	0.0000	1.0918	1.1160	0.0148	0.4368	0.0132	0.3914
178	58.49	0.00	0.0039	0.0000	0.0339	0.0000	0.8909	1.1191	0.0142	0.4381	0.0127	0.3914

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 90 MACH 1.60 RXIO-6 1.7 PHI 0.0 CONF 81M0F23 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLA	CLL	CA	CAB	CAF	XCP
1	-5.77	0.02	-0.5960	3.0124	0.0433	-0.0803	0.0004	0.4920	0.1691	0.3229	-3.0627
2	-5.77	0.01	-0.5966	2.9986	0.0413	-0.1694	0.0004	0.4906	0.1688	0.3218	-3.0264
3	-5.78	0.01	-0.5787	2.9852	0.0433	-0.0803	0.0005	0.4907	0.1707	0.3200	-3.0543
4	-5.24	0.01	-0.8854	2.8145	0.0168	-0.0968	0.0007	0.4912	0.1562	0.3320	-3.1794
5	-3.29	0.01	-0.8854	2.4706	0.0312	-0.0691	0.0012	0.4586	0.1427	0.3160	-3.6039
6	-1.43	0.01	-0.4772	2.0784	0.0875	-0.0936	0.0017	0.4407	0.1329	0.3084	-4.3507
7	0.50	0.01	-0.2325	1.6676	0.0762	-0.1427	0.0024	0.4139	0.1231	0.2939	-7.1719
8	2.39	0.01	-0.0854	1.2538	0.0286	-0.0981	0.0027	0.4054	0.1189	0.2865	-19.7731
9	4.28	0.01	0.1979	0.8458	0.0085	-0.0736	-0.0025	0.3833	0.1162	0.2671	4.2739
10	6.26	0.01	0.4012	0.4464	0.0372	-0.0528	-0.0078	0.3788	0.1300	0.2488	1.2172
11	8.14	0.02	0.6152	0.1773	0.0450	-0.0414	-0.0072	0.3653	0.1429	0.2224	0.2864
12	10.00	0.01	0.8757	-0.2523	-0.0145	0.0247	-0.0007	0.3492	0.1551	0.1941	-0.2868
13	11.96	0.01	1.1386	-0.6852	-0.0352	0.1177	0.0056	0.3279	0.1624	0.1655	-0.5974
14	13.86	0.01	1.4468	-1.0861	0.0125	0.0729	0.0007	0.3128	0.1752	0.1374	-0.7920
15	15.85	0.01	1.7512	-1.4518	0.0050	0.1535	0.0014	0.2950	0.1661	0.1089	-0.8290
16	17.84	-0.00	2.0666	-1.7816	-0.1378	0.3193	0.0021	0.2837	0.1935	0.0702	-0.8530
17	19.78	0.00	2.4066	-1.9547	-0.1170	0.4500	-0.0033	0.2510	0.2069	0.0441	-0.8288
18	21.75	0.00	2.7528	-2.0581	-0.1042	0.4598	-0.0075	0.2220	0.2141	0.0079	-0.7362
19	23.76	-0.00	3.2471	-1.5125	-0.1566	0.4353	-0.0518	0.1941	0.2100	-0.0159	-0.4658
20	25.70	0.04	3.7670	-1.0317	0.0601	-0.7324	0.0056	0.1749	0.2220	-0.0471	-0.2739
21	27.71	0.06	4.3704	-0.4655	0.0720	-1.1651	0.0872	0.1528	0.2350	-0.0822	-0.0937
22	28.39	0.07	4.4360	-0.4349	0.0172	-1.5896	0.1117	0.1611	0.2423	-0.0812	-0.0979
23	28.34	0.06	4.3676	-0.3657	0.0566	-1.2437	0.0933	0.1462	0.2386	-0.0904	-0.0834
24	28.37	0.07	4.4372	-0.3235	0.0611	-1.4497	0.0998	0.1534	0.2409	-0.0875	-0.0729
25	28.79	0.05	4.5525	-0.2356	0.0726	-1.1436	0.0880	0.1467	0.2417	-0.0950	-0.0525
26	29.04	0.06	4.6255	-0.1547	0.0811	-0.8304	0.0702	0.1346	0.2358	-0.1013	-0.0334
27	29.35	0.06	4.7366	0.0018	0.0728	-1.0677	0.0771	0.1366	0.2376	-0.1011	0.0004
28	29.09	0.06	4.8503	0.0763	0.0676	-1.5048	0.1019	0.1373	0.2440	-0.1074	0.0164
29	29.97	0.08	4.9095	0.1447	0.0801	-1.4707	0.0903	0.1376	0.2439	-0.1064	0.0295
30	30.25	0.05	4.9582	0.2426	0.0627	-1.0698	0.0783	0.1297	0.2389	-0.1087	0.0486
31	30.53	0.05	5.0509	0.2573	0.0733	-0.9036	0.0783	0.1213	0.2335	-0.1123	0.0509
32	30.80	0.05	5.1483	0.3253	0.0356	-0.9208	0.0788	0.1174	0.2320	-0.1147	0.0640
33	31.07	0.04	5.2302	0.3525	0.0578	-0.5647	0.0434	0.1098	0.2253	-0.1158	0.0750
34	31.34	0.05	5.3019	0.3867	0.0463	-0.7545	0.0733	0.1231	0.2298	-0.1068	0.0634
35	31.64	0.06	5.4065	0.5307	0.0522	-0.8533	0.0741	0.1071	0.2330	-0.1230	0.0574
36	31.90	0.04	5.4593	0.6248	0.0415	-0.4605	0.0386	0.1056	0.2266	-0.1211	0.1145
37	32.16	0.04	5.5714	0.6532	0.0618	-0.6012	0.0743	0.1061	0.2285	-0.1225	0.1065
38	32.43	0.03	5.7142	0.7118	0.0452	-0.5097	0.0457	0.1012	0.2311	-0.1300	0.1246
39	32.70	0.02	5.7448	0.7561	0.0466	-0.1535	0.0275	0.1025	0.2290	-0.1266	0.1318
40	32.96	0.02	5.8045	0.7701	0.0360	-0.1524	0.0281	0.0978	0.2319	-0.1342	0.1313
41	33.22	0.01	5.9006	0.7678	0.0447	-0.0634	0.0103	0.1016	0.2319	-0.1304	0.1335
42	33.48	0.00	5.9612	0.8164	-0.0378	0.3043	-0.0016	0.1045	0.2365	-0.1321	0.1522
43	33.72	-0.01	6.1159	0.8426	-0.1057	0.4316	-0.0133	0.1017	0.2394	-0.1378	0.1541
44	33.99	0.00	6.1723	1.0357	-0.0554	0.0983	-0.0082	0.1202	0.2549	-0.1346	0.1684
45	34.24	-0.00	6.2668	1.0144	-0.1646	0.9885	-0.0145	0.1168	0.2561	-0.1394	0.1613
46	34.47	-0.01	6.3466	1.0355	-0.2127	1.0245	-0.0144	0.1246	0.2675	-0.1430	0.1632

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(ASHCC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MANTIA MISSILE TAILS EFFECTS DATA

TEST 1 PART 96 MACH 1.00 RNIG-6 1.7 PHI 0.0 CONF 81nOF23 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.73	-0.00	6.4043	1.1765	-0.1670	0.9500	-0.0021	0.1228	0.2746	-0.1519	0.1837
48	34.99	0.01	6.4559	1.2732	-0.0176	0.7304	0.0222	0.1288	0.2786	-0.1503	0.1972
49	35.22	0.02	6.5327	1.4065	0.1645	0.3883	0.0295	0.1259	0.2783	-0.1525	0.2153
50	35.46	0.01	6.5695	1.4467	-0.0193	0.0005	0.0172	0.1158	0.2844	-0.1687	0.2188
51	35.70	0.01	6.6435	1.5415	0.0503	0.5631	0.0178	0.1116	0.2809	-0.1694	0.2321
52	35.95	0.01	6.7354	1.5774	0.0559	0.4414	0.0187	0.0951	0.2751	-0.1800	0.2341
53	36.18	0.01	6.8255	1.5837	0.0121	0.5585	0.0039	0.0773	0.2689	-0.1916	0.2319
54	36.40	0.05	6.8112	1.6825	0.4533	-0.0834	0.0559	0.1313	0.2954	-0.1641	0.2470
55	36.65	0.02	6.9531	1.7065	0.1744	0.2505	0.0200	0.0732	0.2730	-0.1968	0.2458
56	36.88	0.04	7.0366	1.8003	0.2628	0.1045	0.0269	0.0614	0.2673	-0.2059	0.2360
57	37.11	0.05	7.0879	1.5711	0.4577	-0.2695	0.0455	0.1033	0.2749	-0.1717	0.2217
58	37.37	0.03	7.2143	1.8055	0.2548	-0.0226	0.0220	0.0493	0.2549	-0.2056	0.2225
59	37.58	0.03	7.2557	1.5036	0.2482	-0.0113	0.0102	0.0572	0.2644	-0.2072	0.2183
60	37.82	0.04	7.3741	1.9526	0.3741	-0.0024	0.0342	0.0080	0.2791	-0.2111	0.2161
61	38.06	0.03	7.4879	1.4625	0.3318	-0.1006	0.0231	0.0514	0.2605	-0.2091	0.1953
62	38.29	0.03	7.6116	1.9077	0.3047	-0.0000	0.0126	0.0365	0.2562	-0.2207	0.1981
63	38.53	0.03	7.6653	1.4851	0.3265	-0.2332	0.0124	0.0158	0.2516	-0.2358	0.1542
64	38.76	0.03	7.7403	1.5952	0.3303	-0.1516	0.0105	0.0449	0.2636	-0.2187	0.1791
65	38.99	0.04	7.8751	1.4145	0.4133	-0.2613	0.0131	0.0346	0.2682	-0.2336	0.1795
66	39.19	0.02	7.9030	1.4415	0.2650	-0.1909	0.0193	0.0282	0.2551	-0.2269	0.1824
67	39.44	0.02	8.0512	1.4887	0.2378	-0.2256	0.0149	0.0147	0.2570	-0.2423	0.1840
68	39.65	0.01	8.1173	1.4496	0.1665	0.1550	0.0077	0.0269	0.2579	-0.2350	0.1785
69	39.85	-0.00	8.1543	1.3521	-0.1334	0.6704	-0.0108	0.0108	0.2483	-0.2375	0.1618
70	40.09	-0.00	8.4519	1.3306	-0.0281	0.5126	-0.0099	0.0155	0.2511	-0.2356	0.1578
71	40.29	-0.01	8.4801	1.3078	-0.1110	0.8662	-0.0110	0.0012	0.2443	-0.2431	0.1542
72	40.50	-0.01	8.5824	1.2815	-0.2041	0.9544	-0.0227	-0.0054	0.2447	-0.2501	0.1494
73	40.71	-0.02	8.7108	1.2565	-0.2522	1.2461	-0.0111	0.0170	0.2432	-0.2262	0.1488
74	40.93	-0.01	8.7940	1.2364	-0.2416	1.2400	-0.0227	-0.0021	0.2326	-0.2347	0.1406
75	41.15	-0.02	8.8852	1.2136	-0.2902	1.2634	-0.0224	-0.0014	0.2376	-0.2390	0.1368
76	41.39	-0.04	8.9941	1.2076	-0.3501	1.2505	-0.0215	-0.0057	0.2397	-0.2454	0.1342
77	41.56	-0.03	9.0365	1.1178	-0.3623	1.3087	-0.0217	-0.0052	0.2301	-0.2353	0.1237
78	41.79	-0.01	9.1514	1.1417	-0.1805	1.4419	-0.0219	0.0100	0.2427	-0.2327	0.1242
79	41.96	-0.04	9.1865	1.1454	-0.4202	1.3628	-0.0212	-0.0059	0.2351	-0.2416	0.1251
80	42.16	-0.03	9.3056	1.0451	-0.3304	1.4232	-0.0211	-0.0170	0.2332	-0.2502	0.1123
81	42.36	-0.03	9.3511	1.1745	-0.3162	1.1588	-0.0198	-0.0275	0.2257	-0.2532	0.1256
82	42.55	-0.04	9.3810	1.0956	-0.3405	1.2010	-0.0196	-0.0293	0.2235	-0.2528	0.1166
83	42.74	-0.03	9.4923	1.0883	-0.2665	1.1825	-0.0077	-0.0249	0.2285	-0.2534	0.1125
84	42.92	-0.04	9.5367	1.0461	-0.2252	1.1894	-0.0193	-0.0149	0.2307	-0.2456	0.1099
85	43.10	-0.03	9.5926	0.9835	-0.3114	1.2874	-0.0194	-0.0103	0.2247	-0.2350	0.1005
86	43.27	-0.04	9.6765	1.0852	-0.1518	1.0011	-0.0065	-0.0340	0.2205	-0.2545	0.1121
87	43.45	-0.01	9.6873	1.0763	-0.0567	1.3585	-0.0196	-0.0003	0.2372	-0.2375	0.1111
88	43.64	-0.02	9.8659	1.0007	-0.2403	1.2105	-0.0102	-0.0399	0.2251	-0.2650	0.1224
89	43.82	-0.04	9.8351	1.0085	-0.3744	1.2512	-0.0181	-0.0323	0.2244	-0.2567	0.1025
90	44.02	-0.02	9.9168	1.0436	-0.1156	0.7161	-0.0101	-0.0401	0.2193	-0.2654	0.1152
91	44.18	-0.04	9.9448	1.0167	-0.3118	1.2765	-0.0238	-0.0326	0.2256	-0.2582	0.1024
92	44.34	-0.02	9.9440	1.0730	-0.0460	0.6306	-0.0040	-0.0501	0.2217	-0.2718	0.1280

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 9B HALF 1.0U AXIS-6 1.7 PHI 0.0 CONF 8 INCH 23 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.54	-0.02	9.9160	1.1621	-0.1546	0.5642	-0.0171	-0.0375	0.2288	-0.2863	0.1172
94	44.72	-0.02	10.0706	1.1715	-0.1273	1.0020	-0.0050	-0.0542	0.2310	-0.2832	0.1163
95	44.90	-0.03	10.1265	1.2476	-0.0566	-0.0415	0.0226	-0.0320	0.2340	-0.2660	0.1232
96	45.08	-0.02	10.1249	1.1972	-0.0666	0.4434	0.0091	-0.0304	0.2300	-0.2692	0.1182
97	45.28	-0.03	10.2704	1.2556	-0.1286	0.2455	0.0105	-0.0351	0.2429	-0.2780	0.1265
98	45.48	-0.01	10.1665	1.2865	0.0343	0.2413	0.0099	-0.0565	0.2375	-0.2941	0.1265
99	45.61	-0.02	10.3005	1.2697	0.0163	-0.2352	0.0353	-0.0276	0.2512	-0.2788	0.1233
100	45.80	-0.03	10.3810	1.2348	-0.0700	0.1597	0.0171	-0.0381	0.2530	-0.2912	0.1189
101	45.98	-0.02	10.3035	1.2767	-0.0077	0.4088	0.0157	-0.0309	0.2513	-0.2822	0.1239
102	46.13	-0.04	10.4545	1.2611	0.0353	0.4624	0.0168	-0.0348	0.2525	-0.2873	0.1206
103	46.32	-0.03	10.5664	1.2575	-0.1476	0.6257	0.0101	-0.0405	0.2556	-0.2984	0.1190
104	46.49	-0.02	10.5931	1.3095	-0.1020	0.7651	-0.0023	-0.0465	0.2623	-0.3089	0.1237
105	46.66	-0.01	10.6664	1.3016	0.0271	0.2885	0.0174	-0.0477	0.2543	-0.3021	0.1218
106	46.84	-0.01	10.6266	1.3587	0.0515	0.0777	0.0242	-0.0355	0.2533	-0.2909	0.1277
107	47.01	-0.02	10.7546	1.3572	-0.0786	0.7634	0.0043	-0.0456	0.2586	-0.3045	0.1262
108	47.17	-0.00	10.6610	1.3192	0.0423	0.9060	0.0150	-0.0370	0.2663	-0.3034	0.1427
109	47.33	-0.00	10.7561	1.4507	0.0068	0.7504	0.0278	-0.0095	0.2991	-0.3046	0.1349
110	47.53	0.00	10.9421	1.1771	0.1166	0.6343	0.0350	0.0527	0.3377	-0.2849	0.1076
111	47.70	0.02	11.0725	0.6915	0.3125	0.5247	0.0351	0.0960	0.3762	-0.2801	0.0580
112	47.87	0.03	11.2080	0.0037	0.4507	0.2000	0.0356	0.1059	0.4062	-0.3004	0.0003
113	48.05	0.04	11.2859	-0.3457	0.5547	0.5650	0.0106	0.1067	0.4063	-0.2997	-0.0306
114	48.23	0.05	11.5283	-0.7592	0.5564	0.0072	0.0048	0.0839	0.4056	-0.3217	-0.0655
115	48.40	0.05	11.5771	-0.7633	0.5835	0.6444	0.0110	0.0996	0.4040	-0.3045	-0.0659
116	48.60	0.05	11.8760	-1.0961	0.5525	1.0734	-0.0202	0.0829	0.4028	-0.3199	-0.1423
117	48.75	0.05	11.9685	-1.0357	0.5735	1.1891	-0.0205	0.0881	0.3975	-0.3094	-0.1537
118	48.94	0.06	12.0552	-1.0628	0.5698	1.3035	-0.0268	0.0774	0.3847	-0.3073	-0.1545
119	49.11	0.04	12.1864	-1.0754	0.5767	1.4872	-0.0149	0.0480	0.3711	-0.3231	-0.1378
120	49.28	0.05	12.3331	-1.1506	0.6587	1.3568	-0.0140	0.0531	0.3746	-0.3215	-0.1419
121	49.46	0.04	12.3120	-1.1464	0.5514	1.2519	-0.0013	0.0495	0.3694	-0.3199	-0.1251
122	49.64	0.04	12.3565	-1.1478	0.5651	1.1145	-0.0007	0.0422	0.3716	-0.3296	-0.1285
123	49.82	0.04	12.4350	-1.0952	0.6104	1.1558	-0.0007	0.0408	0.3679	-0.3271	-0.1366
124	49.98	0.03	12.4716	-1.0515	0.4540	1.3668	0.0106	0.0279	0.3643	-0.3364	-0.1357
125	50.16	0.04	12.5560	-1.0676	0.5372	1.2215	0.0114	0.0264	0.3662	-0.3398	-0.1303
126	50.34	0.03	12.5560	-1.1965	0.4761	1.2679	0.0055	0.0255	0.3627	-0.3372	-0.1433
127	50.52	0.02	12.6364	-1.1246	0.3765	1.1768	0.0190	0.0418	0.3800	-0.3382	-0.1500
128	50.69	0.02	12.6434	-2.1765	0.4086	1.1722	0.0310	0.0510	0.3701	-0.3391	-0.1682
129	50.86	0.03	12.6512	-2.0256	0.5136	0.9577	0.0255	0.0543	0.3825	-0.3282	-0.1575
130	51.05	0.04	12.7034	-2.3866	0.6286	0.7717	0.0449	0.0562	0.3884	-0.3322	-0.1809
131	51.20	0.02	13.1012	-2.5772	0.4366	0.7367	0.0510	0.0824	0.3973	-0.3149	-0.1967
132	51.35	0.02	13.0446	-2.4015	0.4246	0.7481	0.0509	0.0833	0.4005	-0.3172	-0.1841
133	51.53	0.01	13.0567	-2.4206	0.4023	0.5755	0.0516	0.0732	0.3980	-0.3248	-0.1854
134	51.70	0.01	12.8752	-1.8764	0.3218	0.9719	0.0502	0.0820	0.4031	-0.3211	-0.1302
135	51.86	0.02	12.9768	-1.8755	0.3736	1.0065	0.0503	0.0720	0.4092	-0.3372	-0.1252
136	52.02	0.02	12.7267	-1.3762	0.3306	1.1436	0.0375	0.0652	0.4027	-0.3495	-0.1073
137	52.18	0.01	12.6455	-1.2368	0.2488	1.0372	0.0437	0.0779	0.4333	-0.3554	-0.0973
138	52.35	0.02	12.7815	-1.3805	0.3825	0.9443	0.0501	0.0782	0.4334	-0.3552	-0.1080

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(RSHDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 96 MACH 1.60 RNIO-6 1.7 PHI 0.0 CONF B1B0F23 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.54	0.01	12.9101	-1.8951	0.1558	0.9805	0.0388	0.0608	0.4335	-0.3727	-0.1243
140	52.70	0.01	13.0701	-1.9962	0.1644	0.9947	0.0392	0.0642	0.4356	-0.3714	-0.1377
141	52.86	-0.01	13.1235	-1.9868	0.1775	1.1228	0.0449	0.0664	0.4341	-0.3677	-0.1507
142	53.03	0.00	12.8559	-1.9184	0.2593	0.7568	0.0394	0.0594	0.4324	-0.3730	-0.1177
143	53.23	-0.00	13.0014	-1.8456	0.2695	0.8984	0.0460	0.0598	0.4279	-0.3681	-0.1265
144	53.42	0.00	13.2123	-2.0217	0.3071	0.7640	0.0464	0.0599	0.4286	-0.3667	-0.1330
145	53.58	-0.00	13.1330	-1.9134	0.2628	0.8284	0.0517	0.0515	0.4271	-0.3756	-0.1457
146	53.75	-0.01	13.0866	-1.9785	0.1621	0.7143	0.0463	0.0420	0.4259	-0.3839	-0.1344
147	53.90	-0.00	13.1378	-1.8575	0.2577	0.7277	0.0404	0.0531	0.4235	-0.3704	-0.1414
148	54.06	-0.01	13.0455	-1.8154	0.1571	0.7176	0.0406	0.0631	0.4217	-0.3586	-0.1386
149	54.22	-0.02	13.3046	-2.1163	0.3035	0.6417	0.0528	0.0455	0.4269	-0.3814	-0.1561
150	54.40	-0.02	13.5329	-2.3066	0.3962	0.7037	0.0477	0.0435	0.4323	-0.3888	-0.1892
151	54.55	-0.01	13.3638	-2.2333	0.2216	0.5057	0.0536	0.0426	0.4286	-0.3842	-0.1686
152	54.71	-0.01	13.3981	-2.2975	0.2645	0.3809	0.0542	0.0508	0.4252	-0.3784	-0.1715
153	54.87	-0.01	13.4765	-2.4215	0.1783	0.6106	0.0536	0.0367	0.4347	-0.3960	-0.1798
154	55.03	-0.02	13.6452	-2.7335	0.1408	0.6533	0.0538	0.0374	0.4364	-0.3990	-0.2007
155	55.19	-0.02	13.5626	-2.6555	0.0797	0.6779	0.0536	0.0324	0.4258	-0.3934	-0.1958
156	55.34	-0.02	13.6159	-2.7137	0.1411	0.6023	0.0536	0.0376	0.4361	-0.3985	-0.1992
157	55.48	-0.01	13.6087	-2.7288	0.1755	0.6082	0.0480	0.0282	0.4224	-0.3952	-0.2005
158	55.65	-0.01	13.5743	-2.7116	0.1185	0.7127	0.0534	0.0408	0.4311	-0.3903	-0.1958
159	55.81	-0.01	13.7764	-3.0735	0.2566	0.6193	0.0539	0.0204	0.4123	-0.3919	-0.2232
160	55.98	-0.03	13.7314	-3.0936	0.1018	0.6319	0.0540	0.0317	0.4176	-0.3861	-0.2253
161	56.15	-0.04	13.7614	-3.1577	0.1163	0.7806	0.0478	0.0251	0.4137	-0.3886	-0.2295
162	56.31	-0.05	13.6421	-3.2841	-0.0596	0.4451	0.0495	0.0028	0.4013	-0.3969	-0.2373
163	56.48	-0.01	14.0010	-3.6313	0.1835	0.5428	0.0631	0.0085	0.4036	-0.3953	-0.2594
164	56.64	-0.05	14.4114	-4.1662	-0.1649	0.1581	0.0576	-0.0372	0.3781	-0.4153	-0.2887
165	56.84	-0.05	14.4675	-4.3381	-0.0162	-0.1813	0.0354	-0.0067	0.3709	-0.3778	-0.2992
166	57.00	-0.04	14.4549	-4.2731	0.0256	0.3357	0.0564	-0.0947	0.3787	-0.4234	-0.2956
167	57.17	-0.05	14.7101	-4.7126	-0.0288	-0.3735	0.0591	-0.0762	0.3623	-0.4385	-0.3203
168	57.35	-0.07	14.8581	-5.0525	-0.1756	-0.5095	0.0246	-0.0400	0.3513	-0.3913	-0.3427
169	57.51	-0.07	14.8578	-5.1382	-0.1588	-0.4501	0.0363	-0.0554	0.3501	-0.4059	-0.3449
170	57.66	-0.11	15.0036	-5.3394	-0.5138	-0.9342	0.0481	-0.0614	0.3383	-0.3997	-0.3556
171	57.78	-0.08	14.6366	-4.7022	-0.1601	-1.0231	0.0478	-0.0784	0.3312	-0.4096	-0.3212
172	57.92	-0.04	14.7029	-4.8274	0.3253	-1.0119	0.0543	-0.0842	0.3165	-0.4007	-0.3283
173	58.03	-0.01	14.3571	-4.2667	0.3514	-0.2817	0.0351	-0.0645	0.3021	-0.3668	-0.2972
174	58.21	-0.05	14.7556	-4.9950	0.1027	-0.2027	0.0360	-0.0723	0.2937	-0.3680	-0.3354
175	58.36	-0.04	14.9463	-5.2942	0.1616	-0.2919	0.0363	-0.1059	0.3036	-0.4090	-0.3517
176	58.51	-0.07	14.8421	-5.0526	-0.1363	-0.3640	0.0300	-0.1027	0.3008	-0.4034	-0.3406
177	58.64	-0.04	14.9171	-5.1986	0.0516	-0.1037	0.0536	-0.0764	0.3107	-0.3871	-0.3485
178	58.65	-0.05	14.6276	-5.0135	0.0594	-0.1756	0.0359	-0.0956	0.3104	-0.4060	-0.3381
179	58.67	-0.03	15.0641	-5.4349	0.1173	-0.0515	0.0479	-0.1112	0.3084	-0.4195	-0.3603

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 56 MACH 1.00 RADIO=6 1.7 PHI 0.0 CONF B1BOF23 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.77	0.02	-0.0788	0.0014	0.0086	-0.0188	-0.1118	-0.9008	-0.0418	-0.4446	0.0464	0.4938
2	-5.77	0.01	-0.0677	0.0025	0.0138	-0.0427	-0.2037	-0.8956	-0.0413	-0.4460	0.0461	0.4913
3	-5.78	0.01	-0.0723	0.0022	0.0112	-0.0307	-0.1549	-0.8954	-0.0413	-0.4441	0.0461	0.4900
4	-5.24	0.01	-0.0718	0.0061	0.0241	-0.1137	-0.2963	-0.8102	-0.0426	-0.4148	0.0526	0.5128
5	-3.29	0.01	-0.0718	0.0052	0.0242	-0.1331	-0.3374	-0.6854	-0.0413	-0.3763	0.0602	0.5463
6	-1.45	0.01	-0.0618	0.0084	0.0232	-0.1357	-0.3744	-0.4977	-0.0346	-0.2919	0.0696	0.5805
7	0.50	0.01	-0.0492	0.0084	0.0203	-0.1766	-0.4118	-0.3282	-0.0207	-0.2325	0.0632	0.7088
8	2.39	0.01	-0.0344	0.0066	0.0220	-0.2036	-0.6826	-0.1594	-0.0067	-0.1692	0.0418	1.0017
9	4.28	0.01	-0.0396	0.0047	0.0180	-0.1213	-0.4629	0.0041	0.0003	-0.0945	0.0714	-23.4288
10	6.20	0.01	-0.0675	0.0051	0.0115	-0.0757	-0.1757	0.1192	0.0104	-0.0310	0.0674	-0.2998
11	8.14	0.02	-0.0722	0.0022	0.0112	-0.0307	-0.1551	0.2156	0.0236	0.0251	0.1097	0.1184
12	10.00	0.01	-0.0632	0.0018	0.0174	-0.0290	-0.2746	0.3521	0.0360	0.0857	0.1080	0.2434
13	11.96	0.01	-0.0535	0.0008	0.0224	-0.0143	-0.4150	0.4725	0.0484	0.1511	0.1025	0.3198
14	13.86	0.01	-0.0644	-0.0018	0.0086	0.0265	-0.1334	0.6116	0.0532	0.2147	0.0869	0.3916
15	15.85	0.01	-0.0650	-0.0055	0.0078	0.0853	-0.1133	0.7422	0.0557	0.2661	0.0750	0.3588
16	17.84	-0.00	-0.1043	-0.0157	0.0014	0.1506	-0.0130	0.8793	0.0550	0.3155	0.0625	0.3588
17	19.78	0.00	-0.1466	-0.0252	-0.0131	0.1725	0.0899	0.9855	0.0529	0.3540	0.0537	0.3592
18	21.75	0.00	-0.1394	-0.0156	-0.0237	0.1105	0.1793	1.0943	0.0518	0.3916	0.0473	0.3579
19	23.76	-0.00	-0.2311	-0.0168	-0.0777	0.0806	0.3361	1.1034	0.0503	0.3722	0.0456	0.3574
20	25.70	0.00	0.1617	0.0307	0.1167	0.1689	0.0420	1.0805	0.0338	0.3420	0.0313	0.3164
21	27.71	0.00	0.3474	0.0504	0.1885	0.1450	0.5426	1.1261	0.0287	0.3521	0.0254	0.3127
22	28.35	0.07	0.4361	0.0627	0.2404	0.1456	0.5590	1.1412	0.0276	0.3468	0.0242	0.3038
23	28.34	0.06	0.3067	0.0445	0.1816	0.1463	0.5920	1.1466	0.0279	0.3451	0.0243	0.3016
24	28.37	0.07	0.3185	0.0466	0.1861	0.1473	0.6254	1.1562	0.0273	0.3435	0.0236	0.2971
25	28.79	0.05	0.2615	0.0386	0.1731	0.1476	0.6620	1.1776	0.0262	0.3474	0.0223	0.2956
26	29.04	0.06	0.2518	0.0378	0.1705	0.1502	0.6785	1.1843	0.0262	0.3498	0.0222	0.2953
27	29.35	0.06	0.2565	0.0375	0.1723	0.1464	0.6719	1.1923	0.0254	0.3504	0.0213	0.2939
28	29.69	0.06	0.2561	0.0455	0.2053	0.1473	0.6227	1.2019	0.0246	0.3457	0.0209	0.2878
29	29.57	0.08	0.3337	0.0494	0.2056	0.1481	0.6168	1.2087	0.0235	0.3480	0.0199	0.2875
30	30.25	0.05	0.2639	0.0414	0.1834	0.1466	0.6470	1.2218	0.0235	0.3533	0.0193	0.2892
31	30.53	0.05	0.2569	0.0338	0.1571	0.1500	0.7255	1.2205	0.0234	0.3529	0.0192	0.2892
32	30.80	0.05	0.2341	0.0330	0.1723	0.1410	0.7302	1.2232	0.0233	0.3531	0.0190	0.2887
33	31.07	0.04	0.0864	0.0196	0.0975	0.2268	1.1341	1.2297	0.0224	0.3566	0.0182	0.2901
34	31.34	0.05	0.2366	0.0316	0.1652	0.1394	0.7153	1.2299	0.0224	0.3554	0.0182	0.2874
35	31.64	0.05	0.2365	0.0304	0.1682	0.1272	0.7060	1.2286	0.0213	0.3552	0.0174	0.2891
36	31.90	0.04	0.1551	0.0232	0.1255	0.1493	0.8121	1.2284	0.0208	0.3561	0.0170	0.2899
37	32.16	0.04	0.2273	0.0261	0.1657	0.1148	0.7288	1.2287	0.0206	0.3541	0.0167	0.2882
38	32.45	0.03	0.1143	0.0196	0.1445	0.1713	0.9173	1.2391	0.0203	0.3591	0.0164	0.2898
39	32.70	0.02	0.0444	0.0101	0.0682	0.2283	1.9326	1.2430	0.0203	0.3603	0.0163	0.2898
40	32.98	0.02	-0.0055	0.0066	0.0430	-1.1930	-7.8248	1.2502	0.0195	0.3612	0.0156	0.2889
41	33.22	0.01	-0.0476	0.0	0.0155	0.0	-0.3253	1.2560	0.0192	0.3660	0.0153	0.2906
42	33.48	0.00	-0.0475	0.0	0.0135	0.0	-0.2846	1.2633	0.0187	0.3665	0.0148	0.2901
43	33.72	-0.01	-0.0668	-0.0022	0.0037	0.0385	-0.0803	1.2629	0.0179	0.3646	0.0142	0.2888
44	33.99	0.00	-0.0615	-0.0105	0.0103	0.1700	-0.2632	1.2624	0.0172	0.3688	0.0136	0.2921
45	34.24	-0.00	-0.0728	-0.0141	0.0077	0.1536	-0.1061	1.2654	0.0171	0.3608	0.0137	0.2897
46	34.47	-0.01	-0.1112	-0.0204	-0.0152	0.1632	0.1189	1.2288	0.0166	0.3556	0.0135	0.2894

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

PARTIAL MISSILE TAILS EFFECTS DATA

TEST 7 PART 96 MACH 1.60 RNIG-E 1.7 PHI 0.0 CONF B1B0F43 L- 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	34.73	-0.00	-0.0795	-0.0178	0.0113	0.2350	-0.1494	1.2103	0.0164	0.3498	0.0138	0.2898
48	34.99	0.01	-0.0672	-0.0127	0.0447	1.7600	-0.1733	1.1988	0.0156	0.3466	0.0136	0.2886
49	35.22	0.02	0.0929	-0.0033	0.0552	-0.0353	1.0249	1.1739	0.0156	0.3347	0.0133	0.2851
50	35.46	0.01	0.0451	-0.0065	0.0484	-1.0425	5.3936	1.2058	0.0153	0.3474	0.0127	0.2861
51	35.70	0.01	-0.0866	-0.0161	0.0028	0.2014	-0.0350	1.2142	0.0151	0.3467	0.0125	0.2872
52	35.95	0.01	-0.0158	-0.0114	0.0326	0.7204	-2.0488	1.1942	0.0154	0.3431	0.0129	0.2873
53	36.18	0.01	-0.0656	-0.0161	0.0029	0.2456	-0.0358	1.2186	0.0152	0.3501	0.0125	0.2873
54	36.40	0.05	0.1765	0.0086	0.1247	0.0407	0.7516	1.1732	0.0154	0.3388	0.0132	0.2886
55	36.65	0.02	-0.0624	-0.0163	0.0054	0.2437	-0.2210	1.2190	0.0158	0.3457	0.0130	0.2868
56	36.88	0.02	0.0314	-0.0033	0.0458	-0.1046	1.4015	1.2429	0.0145	0.3622	0.0116	0.2914
57	37.11	0.05	0.1322	0.0055	0.1022	0.0416	0.7730	1.2280	0.0139	0.3644	0.0113	0.2908
58	37.37	0.03	0.0003	-0.0018	0.0012	-0.0277	0.9229	1.2057	0.0139	0.3697	0.0110	0.2921
59	37.58	0.03	0.0042	-0.0076	0.0282	-1.0591	6.6364	1.2074	0.0139	0.3669	0.0110	0.2853
60	37.82	0.04	0.0645	0.0004	0.0728	0.0140	0.8007	1.2565	0.0131	0.3671	0.0104	0.2922
61	38.06	0.03	0.0265	-0.0073	0.0442	-0.2724	1.6418	1.2834	0.0131	0.3736	0.0102	0.2911
62	38.29	0.03	0.0434	-0.0059	0.0503	-0.1356	1.1576	1.2647	0.0134	0.3762	0.0104	0.2928
63	38.53	0.03	-0.0065	-0.0107	0.0164	1.0567	-2.5373	1.3056	0.0131	0.3763	0.0101	0.2898
64	38.76	0.03	0.0873	-0.0026	0.0552	-0.0367	0.8195	1.3107	0.0129	0.3873	0.0099	0.2953
65	38.99	0.04	0.0353	-0.0095	0.0453	-0.2531	1.1548	1.3108	0.0131	0.3841	0.0100	0.2936
66	39.19	0.02	0.0512	-0.0081	0.0616	-0.0116	0.6086	1.3028	0.0129	0.3813	0.0099	0.2927
67	39.44	0.02	-0.0024	-0.0076	0.0224	2.9200	-1.0000	1.3110	0.0131	0.3795	0.0100	0.2898
68	39.65	0.01	-0.0430	-0.0179	-0.0037	0.4036	0.0852	1.3157	0.0131	0.3806	0.0100	0.2893
69	39.85	-0.00	-0.0728	-0.0188	-0.0216	0.2586	0.2971	1.3210	0.0131	0.3831	0.0099	0.2906
70	40.09	-0.00	-0.0888	-0.0205	-0.0287	0.2359	0.3228	1.3121	0.0136	0.3829	0.0104	0.2918
71	40.25	-0.01	-0.1255	-0.0264	-0.0433	0.2100	0.3461	1.3149	0.0136	0.3809	0.0103	0.2857
72	40.50	-0.01	-0.1724	-0.0281	-0.0605	0.1511	0.4007	1.3038	0.0128	0.3729	0.0098	0.2860
73	40.71	-0.02	-0.1376	-0.0224	-0.0514	0.1634	0.3754	1.2930	0.0130	0.3731	0.0101	0.2888
74	40.93	-0.01	-0.1937	-0.0278	-0.0828	0.1434	0.4273	1.2939	0.0127	0.3718	0.0098	0.2873
75	41.15	-0.02	-0.1542	-0.0267	-0.0775	0.1376	0.3969	1.2872	0.0127	0.3688	0.0095	0.2865
76	41.35	-0.02	-0.1936	-0.0260	-0.0814	0.1341	0.4207	1.2828	0.0124	0.3669	0.0097	0.2868
77	41.56	-0.03	-0.2004	-0.0266	-0.0852	0.1295	0.4251	1.2827	0.0127	0.3691	0.0099	0.2877
78	41.79	-0.01	-0.2656	-0.0281	-0.0838	0.1309	0.4085	1.2729	0.0127	0.3658	0.0100	0.2873
79	41.96	-0.04	-0.2041	-0.0233	-0.0536	0.1144	0.4586	1.2863	0.0120	0.3696	0.0093	0.2868
80	42.16	-0.03	-0.1806	-0.0207	-0.0647	0.1148	0.4690	1.2950	0.0119	0.3725	0.0088	0.2877
81	42.36	-0.03	-0.1501	-0.0218	-0.0646	0.1147	0.4456	1.2831	0.0119	0.3681	0.0092	0.2865
82	42.55	-0.04	-0.1893	-0.0197	-0.0917	0.1040	0.4842	1.2937	0.0117	0.3711	0.0090	0.2868
83	42.74	-0.03	-0.1685	-0.0156	-0.0768	0.1173	0.4660	1.2839	0.0119	0.3698	0.0092	0.2881
84	42.92	-0.02	-0.1619	-0.0171	-0.0771	0.1055	0.4762	1.2891	0.0119	0.3735	0.0092	0.2897
85	43.10	-0.03	-0.1526	-0.0222	-0.0512	0.1145	0.4704	1.2734	0.0108	0.3658	0.0085	0.2872
86	43.27	-0.02	-0.1555	-0.0193	-0.0683	0.1241	0.4392	1.2765	0.0119	0.3684	0.0093	0.2881
87	43.45	-0.01	-0.1713	-0.0225	-0.0775	0.1335	0.4524	1.2731	0.0119	0.3760	0.0093	0.2908
88	43.64	-0.02	-0.1336	-0.0152	-0.0765	0.1141	0.5307	1.2866	0.0111	0.3700	0.0086	0.2876
89	43.82	-0.04	-0.1656	-0.0216	-0.0818	0.1246	0.4936	1.2846	0.0119	0.3717	0.0092	0.2893
90	44.02	-0.02	-0.1332	-0.0171	-0.0734	0.1202	0.5482	1.2965	0.0124	0.3772	0.0096	0.2906
91	44.18	-0.04	-0.1867	-0.0244	-0.0535	0.1293	0.4974	1.2927	0.0108	0.3750	0.0084	0.2901
92	44.34	-0.02	-0.0666	-0.0084	-0.0619	0.0967	0.7076	1.2636	0.0093	0.3713	0.0072	0.2892

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 9B MACH 1.00 REYNO-E 1.7 PHI 3.0 CONF B1B0F23 L C.C DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
93	44.34	-0.02	-0.1912	-0.0255	-0.0965	0.1352	0.5045	1.2954	0.0098	0.3821	0.0076	0.2949
94	44.72	-0.02	-0.1410	-0.0157	-0.0722	0.1356	0.5120	1.2903	0.0093	0.3753	0.0072	0.2908
95	44.50	-0.03	0.0023	0.0037	-0.0284	1.1176	-8.8471	1.2655	0.0093	0.3609	0.0073	0.2851
96	45.08	-0.02	-0.0917	-0.0113	-0.0634	0.1232	0.6916	1.2906	0.0091	0.3749	0.0070	0.2904
97	45.28	-0.03	-0.0131	-0.0004	-0.0325	0.0296	2.4779	1.2713	0.0096	0.3641	0.0075	0.2864
98	45.43	-0.01	-0.0540	-0.0077	-0.0466	0.1468	0.8882	1.2992	0.0096	0.3763	0.0074	0.2898
99	45.61	-0.02	-0.0183	-0.0026	-0.0251	0.1421	1.5855	1.2819	0.0096	0.3720	0.0075	0.2902
100	45.80	-0.03	0.0041	0.0011	-0.0335	0.2019	-8.3571	1.2756	0.0094	0.3664	0.0073	0.2872
101	45.96	-0.02	-0.0480	-0.0073	-0.0462	0.1529	0.9638	1.2875	0.0088	0.3741	0.0068	0.2903
102	46.13	-0.01	-0.0221	-0.0033	-0.0391	0.1465	1.7080	1.2903	0.0086	0.3721	0.0068	0.2884
103	46.32	-0.03	-0.0545	-0.0082	-0.0492	0.1599	0.8963	1.2917	0.0088	0.3758	0.0068	0.2910
104	46.49	-0.02	-0.0784	-0.0147	-0.0553	0.1876	0.7046	1.3077	0.0072	0.3634	0.0055	0.2932
105	46.66	-0.01	-0.0454	-0.0077	-0.0471	0.1699	1.0381	1.2998	0.0075	0.3775	0.0058	0.2904
106	46.84	-0.01	-0.0064	-0.0041	-0.0304	0.4628	3.6207	1.2853	0.0077	0.3713	0.0060	0.2885
107	47.01	-0.02	-0.0572	-0.0122	-0.0458	0.2125	0.8702	1.2985	0.0067	0.3798	0.0051	0.2925
108	47.17	-0.00	-0.0347	-0.0183	-0.0367	0.2434	0.9259	1.2785	0.0067	0.3752	0.0052	0.2935
109	47.35	-0.00	-0.0156	-0.0026	-0.0322	0.1607	2.0617	1.2639	0.0072	0.3690	0.0057	0.2919
110	47.53	0.00	0.0365	0.0140	-0.0245	0.2474	-0.0802	1.2521	0.0059	0.3524	0.0048	0.2860
111	47.73	0.02	0.0210	0.0103	-0.0149	0.4908	-0.7064	1.2026	0.0045	0.3446	0.0038	0.2869
112	47.87	0.03	0.0065	0.0074	-0.0186	1.0845	-2.7183	1.1837	0.0056	0.3408	0.0047	0.2879
113	48.05	0.04	-0.0595	-0.0070	-0.0535	0.1183	0.9360	1.1596	0.0051	0.3457	0.0043	0.2915
114	48.23	0.05	-0.0844	-0.0077	-0.0556	0.1199	0.8030	1.1877	0.0051	0.3457	0.0043	0.2911
115	48.40	0.05	-0.0717	-0.0107	-0.0545	0.1496	0.7604	1.1902	0.0051	0.3451	0.0043	0.2933
116	48.60	0.05	-0.0575	-0.0220	-0.0642	0.2093	0.6597	1.2518	0.0038	0.3746	0.0030	0.2992
117	48.75	0.05	-0.0595	-0.0211	-0.0585	0.2212	0.6162	1.2588	0.0016	0.3734	0.0013	0.2983
118	48.94	0.06	-0.1169	-0.0228	-0.0696	0.1940	0.5978	1.2882	0.0019	0.3875	0.0015	0.3008
119	49.11	0.06	-0.0726	-0.0185	-0.0458	0.2606	0.6316	1.3058	0.0008	0.3946	0.0006	0.3022
120	49.28	0.05	-0.0656	-0.0154	-0.0438	0.2426	0.6676	1.2789	0.0019	0.3849	0.0015	0.3006
121	49.46	0.04	-0.0336	-0.0053	-0.0293	0.2807	0.6889	1.2826	0.0016	0.3827	0.0013	0.2984
122	49.64	0.04	-0.0065	-0.0111	-0.0204	1.0197	2.9718	1.3147	0.0	0.3982	0.0	0.3025
123	49.82	0.04	-0.0147	-0.0074	-0.0185	0.5066	1.2395	1.3029	0.0016	0.3901	0.0013	0.2994
124	49.98	0.03	0.0015	-0.0107	-0.0121	-5.5500	-0.2500	1.3252	0.0	0.3990	0.0	0.3011
125	50.16	0.04	-0.0052	-0.0107	-0.0135	2.0556	2.6667	1.3305	0.0	0.4037	0.0	0.3034
126	50.34	0.03	0.0015	-0.0085	-0.0096	-5.5000	-6.3750	1.3403	0.0	0.4060	0.0	0.3016
127	50.52	0.02	0.0341	-0.0041	0.0054	-0.1190	0.1586	1.3194	-0.0006	0.3995	-0.0004	0.3028
128	50.69	0.02	0.0531	0.0	0.0098	0.0	0.1855	1.3129	-0.0011	0.3982	-0.0008	0.3033
129	50.86	0.03	0.0762	0.0074	0.0191	0.0979	0.2506	1.2788	-0.0016	0.3863	-0.0013	0.3021
130	51.05	0.04	0.0881	0.0165	0.0246	0.1424	0.2344	1.2572	-0.0011	0.3813	-0.0008	0.3033
131	51.20	0.02	0.1065	0.0162	0.0250	0.1516	0.2338	1.2662	-0.0027	0.3899	-0.0021	0.3047
132	51.35	0.02	0.0996	0.0144	0.0241	0.1441	0.2418	1.2580	-0.0016	0.3852	-0.0015	0.3062
133	51.53	0.01	0.1066	0.0170	0.0256	0.1563	0.2709	1.2748	-0.0016	0.3926	-0.0013	0.3080
134	51.70	0.01	-0.0019	0.0044	-0.0006	-2.3000	3.2000	1.2041	0.0024	0.3605	0.0020	0.2994
135	51.86	0.02	0.0	0.0070	-0.0026	0.0070	-0.0028	1.1993	0.0024	0.3608	0.0020	0.3008
136	52.02	0.04	-0.0426	0.0011	-0.0118	-0.0248	0.2748	1.1988	0.0032	0.3606	0.0027	0.3013
137	52.18	0.01	-0.0382	0.0022	-0.0058	-0.0613	0.1600	1.1978	0.0029	0.3603	0.0024	0.3008
138	52.35	0.02	-0.0465	0.0022	-0.0073	-0.0542	0.1792	1.1984	0.0030	0.3605	0.0025	0.3013

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 9B MACH 1.06 REIC-6 1.7 PHI 0.0 CONF BIBOF23 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	ACPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
139	52.54	0.01	-0.0623	0.0	-0.0116	0.0	0.1889	1.1949	0.0021	0.3578	0.0018	0.2594
140	52.70	0.01	-0.0556	0.0	-0.0125	0.0	0.2104	1.1771	0.0029	0.3506	0.0025	0.2976
141	52.88	-0.01	-0.0665	0.0	-0.0154	0.0	0.0893	1.1624	0.0029	0.3532	0.0024	0.2987
142	53.05	0.00	-0.0604	-0.0004	-0.0134	0.0063	0.0556	1.1767	0.0038	0.3537	0.0032	0.3006
143	53.23	-0.01	-0.0667	-0.0015	-0.0144	0.0127	0.0731	1.1760	0.0035	0.3541	0.0025	0.3006
144	53.42	0.00	-0.0627	-0.0008	-0.0026	0.0117	0.0426	1.1815	0.0038	0.3584	0.0032	0.3033
145	53.58	-0.00	-0.0704	-0.0008	-0.0034	0.0110	0.0479	1.1745	0.0040	0.3531	0.0034	0.3007
146	53.75	-0.01	-0.0639	0.0004	0.0026	-0.0060	-0.0408	1.1744	0.0040	0.3563	0.0034	0.3034
147	53.90	-0.00	-0.0708	0.0	-0.0002	0.0	0.0027	1.1580	0.0050	0.3506	0.0043	0.3028
148	54.06	-0.01	-0.0616	0.0	0.0035	0.0	-0.0627	1.1700	0.0040	0.3583	0.0034	0.3062
149	54.22	-0.03	-0.0553	0.0004	0.0022	-0.0065	-0.1041	1.1576	0.0045	0.3527	0.0035	0.3048
150	54.40	-0.02	-0.0618	0.0008	0.0065	-0.0125	-0.1123	1.1454	0.0059	0.3471	0.0051	0.3036
151	54.55	-0.01	-0.0536	0.0022	0.0143	-0.0419	-0.2696	1.1464	0.0050	0.3499	0.0044	0.3052
152	54.71	-0.01	-0.0545	0.0022	0.0132	-0.0420	-0.2500	1.1555	0.0035	0.3573	0.0030	0.3092
153	54.87	-0.01	-0.0601	0.0014	0.0134	-0.0241	-0.2231	1.1539	0.0040	0.3547	0.0034	0.3074
154	55.03	-0.02	-0.0626	0.0022	0.0142	-0.0354	-0.2265	1.1469	0.0045	0.3537	0.0040	0.3084
155	55.19	-0.02	-0.0675	0.0018	0.0137	-0.0273	-0.2037	1.1505	0.0045	0.3568	0.0035	0.3101
156	55.34	-0.02	-0.0677	0.0022	0.0178	-0.0328	-0.2021	1.1480	0.0040	0.3534	0.0034	0.3079
157	55.48	-0.01	-0.0720	0.0018	0.0131	-0.0255	-0.1823	1.1489	0.0040	0.3563	0.0034	0.3102
158	55.65	-0.01	-0.0705	0.0014	0.0116	-0.0169	-0.1513	1.1525	0.0042	0.3573	0.0037	0.3100
159	55.81	-0.01	-0.0695	0.0022	0.0144	-0.0319	-0.2369	1.1535	0.0040	0.3581	0.0034	0.3104
160	55.98	-0.03	-0.0654	0.0022	0.0144	-0.0320	-0.2072	1.1598	0.0044	0.3583	0.0038	0.3089
161	56.15	-0.04	-0.0712	0.0022	0.0151	-0.0312	-0.1274	1.1598	0.0044	0.3592	0.0038	0.3057
162	56.31	-0.05	-0.0640	0.0025	0.0158	-0.0452	-0.1538	1.1635	0.0040	0.3582	0.0034	0.3078
163	56.48	-0.01	-0.0704	0.0021	0.0151	-0.0301	-0.0712	1.1670	0.0040	0.3602	0.0034	0.3088
164	56.67	-0.05	-0.0655	0.0033	0.0156	-0.0501	-0.0545	1.1903	0.0018	0.3724	0.0015	0.3125
165	56.84	-0.05	-0.0745	0.0035	0.0107	-0.0773	-0.0090	1.2270	0.0006	0.3849	0.0006	0.3137
166	57.00	-0.04	-0.0651	0.0025	0.0114	-0.0444	-0.0222	1.1965	0.0015	0.3725	0.0013	0.3113
167	57.17	-0.05	-0.0581	0.0035	0.0114	-0.0597	-0.0249	1.2120	0.0003	0.3778	0.0002	0.3118
168	57.35	-0.07	-0.0345	0.0006	0.0086	-0.1851	-0.2293	1.2432	-0.0003	0.3919	-0.0002	0.3152
169	57.51	-0.07	-0.0507	0.0065	-0.0006	-0.1276	0.0152	1.2462	0.0	0.3892	0.0	0.3118
170	57.66	-0.11	-0.0455	0.0061	-0.0065	-0.1219	0.1373	1.2640	-0.0014	0.3968	-0.0011	0.3139
171	57.78	-0.08	-0.0358	0.0065	-0.0043	-0.1806	0.1213	1.2523	-0.0003	0.3909	-0.0002	0.3121
172	57.92	-0.04	-0.0220	0.0065	0.0002	-0.2534	-0.0088	1.2536	-0.0005	0.3914	-0.0004	0.3122
173	58.03	-0.01	-0.0169	0.0054	-0.0014	-0.3200	0.0857	1.2545	-0.0014	0.3930	-0.0011	0.3133
174	58.21	-0.05	-0.0211	0.0047	-0.0060	-0.2237	0.2831	1.2796	-0.0021	0.4007	-0.0017	0.3132
175	58.38	-0.04	-0.0057	0.0065	-0.0016	-0.6634	0.1683	1.2994	-0.0032	0.4069	-0.0025	0.3147
176	58.51	-0.07	-0.0210	0.0062	-0.0079	-0.2936	0.3761	1.2773	-0.0029	0.4011	-0.0023	0.3140
177	58.69	-0.04	-0.0165	0.0075	-0.0106	-0.4316	0.5789	1.2851	-0.0032	0.4039	-0.0025	0.3143
178	58.85	-0.05	-0.0225	0.0056	-0.0153	-0.2575	0.6824	1.2852	-0.0034	0.4039	-0.0026	0.3143
179	58.67	-0.03	-0.0168	0.0072	-0.0125	-0.6696	1.1964	1.2865	-0.0026	0.4064	-0.0020	0.3155

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 46 | MACH 1.00 | REIG-6 1.7 | PHI C.C | CONF BIBOF23 | L C.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	C83	XCPF3	YCPF3	CNF4	CM4	C84	XCPF4	YCPF4
1	-5.77	0.02	0.0236	9.9999	0.0231	9.9999	0.9755	-1.0476	-0.0516	-0.3811	0.0493	0.3638
2	-5.77	0.01	0.0315	9.9999	0.0275	9.9999	0.8906	-1.0504	-0.0510	-0.3633	0.0486	0.3648
3	-5.78	0.01	0.0316	9.9999	0.0265	9.9999	0.8567	-1.0448	-0.0519	-0.3789	0.0457	0.3627
4	-5.24	0.01	0.0283	9.9999	0.0271	9.9999	0.7078	-0.9729	-0.0530	-0.3563	0.0544	0.3463
5	-3.29	0.01	0.0717	9.9999	0.0715	9.9999	1.0316	-0.8401	-0.0535	-0.3124	0.0632	0.3693
6	-1.45	0.01	0.0262	9.9999	0.0213	9.9999	0.8125	-0.6770	-0.0465	-0.2494	0.0687	0.3684
7	0.50	0.01	0.0335	9.9999	0.0248	9.9999	0.7406	-0.5232	-0.0311	-0.1856	0.0594	0.3548
8	2.36	0.01	0.0456	9.9999	0.0215	9.9999	0.4769	-0.3716	-0.0194	-0.1144	0.0522	0.3080
9	4.26	0.01	0.0516	9.9999	0.0185	9.9999	0.3629	-0.2068	-0.0067	-0.0453	0.0322	0.2189
10	6.20	0.01	0.0666	9.9999	0.0166	9.9999	0.2544	-0.0952	0.0038	0.0252	-0.0404	-0.2702
11	8.14	0.02	0.0865	9.9999	0.0170	9.9999	0.2100	0.0522	0.0154	0.0894	0.2957	1.3256
12	10.00	0.01	0.0662	9.9999	0.0135	9.9999	0.2099	0.1775	0.0332	0.1382	0.1870	0.7783
13	11.96	0.01	0.0540	9.9999	0.0101	9.9999	0.1500	0.3208	0.0447	0.2068	0.1392	0.6445
14	13.80	0.01	0.0712	9.9999	0.0164	9.9999	0.1463	0.4544	0.0496	0.2738	0.1092	0.6027
15	15.65	0.01	0.1057	9.9999	0.0151	9.9999	0.1432	0.6057	0.0532	0.3407	0.0878	0.5624
16	17.64	-0.00	0.0663	9.9999	0.0145	9.9999	0.0570	0.7350	0.0512	0.3975	0.0657	0.5408
17	19.78	0.00	0.0512	9.9999	0.0103	9.9999	0.0086	0.8454	0.0505	0.4443	0.0597	0.5258
18	21.75	0.00	0.0561	9.9999	0.0087	9.9999	0.0093	0.9116	0.0507	0.4777	0.0556	0.5240
19	23.76	-0.00	0.1065	9.9999	0.0178	9.9999	0.0703	0.8141	0.0422	0.4118	0.0518	0.5059
20	25.70	0.00	0.1253	9.9999	0.0128	9.9999	0.1024	0.8797	0.0408	0.4477	0.0484	0.5089
21	27.71	0.00	0.1445	9.9999	0.0235	9.9999	0.1656	0.8923	0.0340	0.4435	0.0381	0.4975
22	28.35	0.01	0.1566	9.9999	0.0278	9.9999	0.1774	0.8940	0.0344	0.4467	0.0385	0.4957
23	28.34	0.00	0.1421	9.9999	0.0206	9.9999	0.1466	0.8859	0.0334	0.4431	0.0377	0.5001
24	28.37	0.01	0.1444	9.9999	0.0201	9.9999	0.1369	0.8851	0.0331	0.4446	0.0374	0.5023
25	28.79	0.00	0.1443	9.9999	0.0231	9.9999	0.1591	0.8912	0.0307	0.4448	0.0344	0.4991
26	29.04	0.00	0.1516	9.9999	0.0216	9.9999	0.1426	0.8849	0.0301	0.4449	0.0340	0.5028
27	29.35	0.00	0.1492	9.9999	0.0214	9.9999	0.1436	0.8905	0.0301	0.4504	0.0338	0.5058
28	29.69	0.00	0.1634	9.9999	0.0256	9.9999	0.1790	0.9057	0.0306	0.4562	0.0338	0.5037
29	29.97	0.00	0.1675	9.9999	0.0334	9.9999	0.1989	0.9051	0.0292	0.4556	0.0323	0.5034
30	30.25	0.00	0.1535	9.9999	0.0265	9.9999	0.1748	0.8996	0.0290	0.4521	0.0323	0.5026
31	30.53	0.00	0.1385	9.9999	0.0188	9.9999	0.1340	0.8968	0.0289	0.4537	0.0322	0.5048
32	30.80	0.00	0.1436	9.9999	0.0200	9.9999	0.1388	0.8940	0.0279	0.4526	0.0310	0.5035
33	31.07	0.00	0.1485	9.9999	0.0223	9.9999	0.1501	0.8901	0.0271	0.4494	0.0305	0.5045
34	31.34	0.00	0.1505	9.9999	0.0225	9.9999	0.1490	0.8928	0.0274	0.4527	0.0307	0.5071
35	31.64	0.00	0.1554	9.9999	0.0257	9.9999	0.1651	0.8810	0.0265	0.4454	0.0301	0.5055
36	31.90	0.00	0.1411	9.9999	0.0196	9.9999	0.1402	0.8646	0.0262	0.4411	0.0303	0.5101
37	32.18	0.00	0.1362	9.9999	0.0175	9.9999	0.1282	0.8651	0.0253	0.4400	0.0292	0.5086
38	32.45	0.00	0.1403	9.9999	0.0222	9.9999	0.1496	0.8788	0.0250	0.4461	0.0284	0.5076
39	32.70	0.02	0.1387	9.9999	0.0187	9.9999	0.1204	0.8641	0.0252	0.4378	0.0291	0.5064
40	32.96	0.02	0.1316	9.9999	0.0183	9.9999	0.1012	0.8661	0.0250	0.4393	0.0288	0.5061
41	33.22	0.01	0.1340	9.9999	0.0185	9.9999	0.1008	0.8571	0.0250	0.4325	0.0292	0.5048
42	33.48	0.00	0.1244	9.9999	0.0186	9.9999	0.0869	0.8763	0.0247	0.4389	0.0282	0.5009
43	33.72	-0.01	0.1158	9.9999	0.0176	9.9999	0.0636	0.8775	0.0245	0.4384	0.0279	0.4998
44	33.99	0.00	0.1003	9.9999	0.0213	9.9999	0.0125	0.8445	0.0253	0.4189	0.0299	0.4961
45	34.24	-0.00	0.1051	9.9999	0.0255	9.9999	0.0523	0.8543	0.0253	0.4172	0.0296	0.4884
46	34.47	-0.01	0.0976	9.9999	0.0240	9.9999	0.0404	0.8610	0.0250	0.4182	0.0290	0.4857

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

PARTIAL MISSILE TAILS EFFECTS DATA

TEST 7 PART 96 MACH 1.00 RAIG-E 1.7 PHI 0.0 CONF 81 OF 25 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	34.73	-0.00	0.1028	9.9999	0.0053	9.9999	0.0516	0.8582	0.0250	0.4139	0.0291	0.4823
48	34.95	0.01	0.1004	9.9999	0.0070	9.9999	0.0701	0.8513	0.0243	0.4108	0.0286	0.4826
49	35.22	0.02	0.1102	9.9999	0.0102	9.9999	0.0963	0.8413	0.0243	0.4053	0.0289	0.4818
50	35.46	0.01	0.1104	9.9999	0.0117	9.9999	0.1058	0.8652	0.0246	0.4121	0.0284	0.4763
51	35.70	0.01	0.1010	9.9999	0.0070	9.9999	0.0697	0.8784	0.0244	0.4160	0.0278	0.4735
52	35.95	0.01	0.1150	9.9999	0.0140	9.9999	0.1210	0.8822	0.0239	0.4165	0.0271	0.4722
53	36.18	0.01	0.1161	9.9999	0.0121	9.9999	0.1040	0.8901	0.0234	0.4211	0.0263	0.4731
54	36.40	0.05	0.1304	9.9999	0.0225	9.9999	0.1754	0.8540	0.0245	0.4062	0.0287	0.4757
55	36.65	0.02	0.1113	9.9999	0.0127	9.9999	0.1144	0.9117	0.0235	0.4266	0.0258	0.4675
56	36.88	0.02	0.1102	9.9999	0.0106	9.9999	0.1379	0.9200	0.0235	0.4282	0.0256	0.4654
57	37.11	0.05	0.1407	9.9999	0.0257	9.9999	0.1624	0.9044	0.0235	0.4234	0.0260	0.4682
58	37.37	0.03	0.1306	9.9999	0.0230	9.9999	0.1755	0.9295	0.0227	0.4303	0.0244	0.4630
59	37.58	0.03	0.1288	9.9999	0.0218	9.9999	0.1655	0.9415	0.0231	0.4336	0.0245	0.4605
60	37.82	0.04	0.1261	9.9999	0.0216	9.9999	0.1714	0.9189	0.0246	0.4260	0.0268	0.4636
61	38.06	0.03	0.1188	9.9999	0.0181	9.9999	0.1527	0.9414	0.0231	0.4296	0.0245	0.4563
62	38.29	0.03	0.1336	9.9999	0.0242	9.9999	0.1812	0.9426	0.0225	0.4279	0.0239	0.4540
63	38.53	0.03	0.1264	9.9999	0.0227	9.9999	0.1794	0.9661	0.0226	0.4353	0.0234	0.4506
64	38.76	0.03	0.1215	9.9999	0.0204	9.9999	0.1676	0.9544	0.0247	0.4315	0.0256	0.4521
65	38.99	0.04	0.1188	9.9999	0.0175	9.9999	0.1540	0.9626	0.0250	0.4260	0.0260	0.4467
66	39.19	0.02	0.1167	9.9999	0.0160	9.9999	0.1373	0.9597	0.0250	0.4206	0.0260	0.4383
67	39.44	0.02	0.1167	9.9999	0.0170	9.9999	0.1456	1.0042	0.0244	0.4330	0.0243	0.4312
68	39.65	0.01	0.1042	9.9999	0.0112	9.9999	0.1074	0.9960	0.0241	0.4253	0.0242	0.4276
69	39.85	-0.00	0.1050	9.9999	0.0145	9.9999	0.1327	1.0183	0.0231	0.4269	0.0226	0.4192
70	40.09	-0.00	0.1114	9.9999	0.0136	9.9999	0.1223	1.0156	0.0227	0.4238	0.0223	0.4172
71	40.29	-0.01	0.0917	9.9999	0.0063	9.9999	0.0686	1.0213	0.0224	0.4220	0.0219	0.4132
72	40.50	-0.01	0.0956	9.9999	0.0081	9.9999	0.0883	1.0404	0.0218	0.4291	0.0208	0.4101
73	40.71	-0.02	0.0963	9.9999	0.0086	9.9999	0.0892	1.0354	0.0213	0.4221	0.0206	0.4077
74	40.93	-0.01	0.0865	9.9999	0.0046	9.9999	0.0458	1.0448	0.0221	0.4254	0.0211	0.4072
75	41.15	-0.02	0.0835	9.9999	0.0028	9.9999	0.0333	1.0436	0.0218	0.4198	0.0205	0.4023
76	41.35	-0.02	0.0911	9.9999	0.0063	9.9999	0.0689	1.0421	0.0220	0.4214	0.0211	0.4044
77	41.56	-0.03	0.0887	9.9999	0.0051	9.9999	0.0577	1.0559	0.0217	0.4264	0.0208	0.4038
78	41.75	-0.01	0.0957	9.9999	0.0096	9.9999	0.0998	1.0269	0.0217	0.4126	0.0211	0.4018
79	41.96	-0.04	0.0880	9.9999	0.0065	9.9999	0.0797	1.0572	0.0214	0.4249	0.0203	0.4015
80	42.16	-0.03	0.0883	9.9999	0.0075	9.9999	0.0896	1.0694	0.0217	0.4245	0.0203	0.4016
81	42.36	-0.03	0.1003	9.9999	0.0128	9.9999	0.1077	1.0598	0.0222	0.4273	0.0209	0.4032
82	42.55	-0.04	0.0967	9.9999	0.0103	9.9999	0.0891	1.0762	0.0222	0.4306	0.0206	0.4001
83	42.74	-0.03	0.0857	9.9999	0.0059	9.9999	0.0687	1.0638	0.0222	0.4282	0.0209	0.4025
84	42.92	-0.02	0.0977	9.9999	0.0106	9.9999	0.1086	1.0639	0.0222	0.4292	0.0205	0.4034
85	43.10	-0.03	0.0784	9.9999	0.0043	9.9999	0.0534	1.0474	0.0222	0.4215	0.0212	0.4025
86	43.27	-0.02	0.0905	9.9999	0.0091	9.9999	0.1002	1.0667	0.0216	0.4294	0.0203	0.4025
87	43.45	-0.01	0.0858	9.9999	0.0087	9.9999	0.1015	1.0558	0.0211	0.4215	0.0200	0.3992
88	43.64	-0.02	0.0904	9.9999	0.0100	9.9999	0.1110	1.0694	0.0216	0.4275	0.0202	0.3998
89	43.82	-0.04	0.0951	9.9999	0.0124	9.9999	0.1298	1.0624	0.0213	0.4249	0.0201	0.3998
90	44.02	-0.02	0.1001	9.9999	0.0146	9.9999	0.1456	1.0695	0.0201	0.4314	0.0188	0.4034
91	44.18	-0.04	0.0783	9.9999	0.0091	9.9999	0.1159	1.0757	0.0211	0.4262	0.0198	0.3982
92	44.34	-0.02	0.0906	9.9999	0.0126	9.9999	0.1266	1.0634	0.0211	0.4287	0.0199	0.4031

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 66 MACH 1.00 RE1C-6 1.7 PHI 0.0 CONF B1b0F23 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
93	44.54	-0.02	0.0764	9.9999	0.0151	9.9999	0.1156	1.0534	0.0211	0.4213	0.0201	0.3999
94	44.72	-0.02	0.0832	9.9999	0.0124	9.9999	0.1465	1.0671	0.0211	0.4253	0.0198	0.3988
95	44.90	-0.03	0.1078	9.9999	0.0201	9.9999	0.1865	1.0857	0.0212	0.4317	0.0199	0.4051
96	45.08	-0.02	0.0853	9.9999	0.0154	9.9999	0.1802	1.0751	0.0212	0.4338	0.0197	0.4035
97	45.28	-0.03	0.0855	9.9999	0.0154	9.9999	0.1798	1.0603	0.0207	0.4261	0.0196	0.4038
98	45.43	-0.01	0.0957	9.9999	0.0161	9.9999	0.1895	1.0725	0.0202	0.4293	0.0188	0.4002
99	45.61	-0.02	0.0934	9.9999	0.0171	9.9999	0.1829	1.0684	0.0197	0.4304	0.0184	0.4029
100	45.80	-0.03	0.1007	9.9999	0.0206	9.9999	0.2040	1.0724	0.0197	0.4331	0.0184	0.4039
101	45.96	-0.02	0.0937	9.9999	0.0173	9.9999	0.2065	1.0708	0.0203	0.4303	0.0189	0.4019
102	46.13	-0.01	0.0902	9.9999	0.0175	9.9999	0.2027	1.0762	0.0206	0.4380	0.0191	0.4069
103	46.32	-0.03	0.0938	9.9999	0.0163	9.9999	0.1967	1.0719	0.0203	0.4319	0.0189	0.4025
104	46.49	-0.02	0.0913	9.9999	0.0161	9.9999	0.1981	1.0684	0.0203	0.4315	0.0190	0.4046
105	46.66	-0.01	0.0938	9.9999	0.0190	9.9999	0.2031	1.0773	0.0208	0.4353	0.0193	0.4041
106	46.84	-0.01	0.0886	9.9999	0.0177	9.9999	0.1989	1.0622	0.0198	0.4315	0.0186	0.4062
107	47.01	-0.02	0.0914	9.9999	0.0151	9.9999	0.1860	1.0734	0.0192	0.4344	0.0179	0.4047
108	47.17	-0.00	0.0915	9.9999	0.0161	9.9999	0.1976	1.0692	0.0190	0.4324	0.0178	0.4044
109	47.35	-0.00	0.0840	9.9999	0.0164	9.9999	0.1952	1.0875	0.0172	0.4381	0.0158	0.4028
110	47.53	0.00	0.0884	9.9999	0.0214	9.9999	0.2480	1.0577	0.0145	0.4316	0.0137	0.4080
111	47.70	0.02	0.1037	9.9999	0.0237	9.9999	0.2288	1.0195	0.0121	0.4183	0.0118	0.4103
112	47.87	0.03	0.1111	9.9999	0.0272	9.9999	0.2450	0.9913	0.0135	0.4092	0.0140	0.4128
113	48.05	0.04	0.1035	9.9999	0.0278	9.9999	0.2665	0.9805	0.0146	0.3988	0.0154	0.4152
114	48.23	0.05	0.1013	9.9999	0.0295	9.9999	0.2824	0.9872	0.0145	0.3965	0.0150	0.4099
115	48.40	0.05	0.1110	9.9999	0.0302	9.9999	0.2722	0.9869	0.0155	0.3976	0.0161	0.4112
116	48.60	0.05	0.1038	9.9999	0.0287	9.9999	0.2579	0.9723	0.0161	0.3960	0.0166	0.4073
117	48.75	0.05	0.1067	9.9999	0.0281	9.9999	0.2582	0.9738	0.0160	0.3932	0.0164	0.4037
118	48.94	0.06	0.1066	9.9999	0.0300	9.9999	0.2762	0.9956	0.0155	0.4000	0.0156	0.4018
119	49.11	0.04	0.1013	9.9999	0.0285	9.9999	0.2810	0.9967	0.0161	0.3996	0.0162	0.4009
120	49.28	0.05	0.1112	9.9999	0.0313	9.9999	0.2810	1.0051	0.0158	0.4032	0.0157	0.4012
121	49.46	0.04	0.1037	9.9999	0.0277	9.9999	0.2670	0.9955	0.0151	0.3978	0.0151	0.3998
122	49.64	0.04	0.1038	9.9999	0.0256	9.9999	0.2656	1.0231	0.0155	0.4092	0.0152	0.3999
123	49.82	0.04	0.1112	9.9999	0.0314	9.9999	0.2806	1.0075	0.0158	0.4023	0.0157	0.3993
124	49.98	0.03	0.0965	9.9999	0.0195	9.9999	0.2252	1.0503	0.0169	0.4133	0.0161	0.3935
125	50.16	0.04	0.0935	9.9999	0.0230	9.9999	0.2446	1.0506	0.0155	0.4153	0.0148	0.3953
126	50.34	0.03	0.1013	9.9999	0.0245	9.9999	0.2419	1.0559	0.0155	0.4176	0.0147	0.3955
127	50.52	0.02	0.0988	9.9999	0.0243	9.9999	0.2481	1.0277	0.0172	0.4095	0.0167	0.3985
128	50.69	0.02	0.0950	9.9999	0.0236	9.9999	0.2657	1.0373	0.0167	0.4106	0.0161	0.3958
129	50.86	0.03	0.1020	9.9999	0.0286	9.9999	0.2721	1.0498	0.0166	0.4192	0.0158	0.3994
130	51.05	0.04	0.1012	9.9999	0.0264	9.9999	0.2612	1.0555	0.0164	0.4227	0.0155	0.4005
131	51.20	0.02	0.0987	9.9999	0.0245	9.9999	0.2764	1.0763	0.0155	0.4308	0.0144	0.4003
132	51.35	0.02	0.0963	9.9999	0.0224	9.9999	0.2595	1.0703	0.0152	0.4277	0.0142	0.3974
133	51.53	0.01	0.0911	9.9999	0.0237	9.9999	0.2606	1.0916	0.0150	0.4365	0.0137	0.3999
134	51.70	0.01	0.0968	9.9999	0.0268	9.9999	0.2644	1.0653	0.0142	0.4277	0.0133	0.4015
135	51.86	0.02	0.0988	9.9999	0.0234	9.9999	0.2647	1.0641	0.0134	0.4292	0.0126	0.4033
136	52.02	0.02	0.0937	9.9999	0.0221	9.9999	0.2641	1.0750	0.0136	0.4321	0.0127	0.4019
137	52.18	0.01	0.0936	9.9999	0.0202	9.9999	0.2613	1.0706	0.0139	0.4312	0.0130	0.4028
138	52.35	0.02	0.0936	9.9999	0.0231	9.9999	0.2760	1.0745	0.0142	0.4309	0.0132	0.4010

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 96 MACH 1.7 REIC=E 6 PHI 0.0 CONF 81 DELTA 0.0 L 0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	ACPF3	YCPF3	CNF4	CM4	CB4	ACPF4	YCPF4
139	52.54	0.01	0.0811	9.9999	0.0225	9.9999	0.2825	1.0620	0.0142	0.4295	0.0134	0.4046
140	52.70	0.01	0.0834	9.9999	0.0221	9.9999	0.2630	1.0468	0.0140	0.4200	0.0133	0.4005
141	52.88	-0.01	0.0761	9.9999	0.0177	9.9999	0.2319	1.0603	0.0144	0.4258	0.0136	0.4016
142	53.03	0.00	0.0834	9.9999	0.0211	9.9999	0.2535	1.0543	0.0150	0.4222	0.0142	0.4005
143	53.23	-0.00	0.0836	9.9999	0.0240	9.9999	0.2882	1.0669	0.0139	0.4275	0.0130	0.4007
144	53.42	0.00	0.0833	9.9999	0.0230	9.9999	0.2750	1.0736	0.0150	0.4284	0.0140	0.4001
145	53.58	-0.00	0.0835	9.9999	0.0251	9.9999	0.2935	1.0664	0.0144	0.4255	0.0135	0.3998
146	53.75	-0.01	0.0843	9.9999	0.0228	9.9999	0.2823	1.0611	0.0138	0.4241	0.0130	0.3997
147	53.90	-0.00	0.0852	9.9999	0.0257	9.9999	0.3121	1.0550	0.0144	0.4195	0.0136	0.3977
148	54.06	-0.01	0.0765	9.9999	0.0261	9.9999	0.2830	1.0594	0.0127	0.4211	0.0120	0.3974
149	54.22	-0.03	0.0860	9.9999	0.0178	9.9999	0.2690	1.0633	0.0133	0.4240	0.0125	0.3987
150	54.40	-0.02	0.0853	9.9999	0.0264	9.9999	0.3156	1.0725	0.0138	0.4252	0.0129	0.3965
151	54.55	-0.01	0.0861	9.9999	0.0263	9.9999	0.2923	1.0574	0.0132	0.4164	0.0125	0.3938
152	54.71	-0.01	0.0828	9.9999	0.0245	9.9999	0.3112	1.0724	0.0133	0.4220	0.0124	0.3936
153	54.87	-0.01	0.0804	9.9999	0.0238	9.9999	0.2941	1.0763	0.0127	0.4208	0.0118	0.3909
154	55.03	-0.02	0.0775	9.9999	0.0206	9.9999	0.2659	1.0802	0.0132	0.4226	0.0122	0.3912
155	55.19	-0.02	0.0753	9.9999	0.0222	9.9999	0.2969	1.0676	0.0135	0.4172	0.0127	0.3908
156	55.34	-0.02	0.0842	9.9999	0.0226	9.9999	0.2816	1.0695	0.0132	0.4239	0.0121	0.3890
157	55.48	-0.01	0.0752	9.9999	0.0212	9.9999	0.2824	1.0772	0.0126	0.4193	0.0117	0.3893
158	55.65	-0.01	0.0751	9.9999	0.0222	9.9999	0.2956	1.1033	0.0111	0.4277	0.0101	0.3877
159	55.81	-0.01	0.0750	9.9999	0.0221	9.9999	0.2947	1.0823	0.0126	0.4198	0.0117	0.3876
160	55.98	-0.03	0.0699	9.9999	0.0227	9.9999	0.3246	1.0755	0.0116	0.4167	0.0108	0.3875
161	56.15	-0.04	0.0700	9.9999	0.0185	9.9999	0.2700	1.0808	0.0121	0.4171	0.0112	0.3859
162	56.31	-0.05	0.0747	9.9999	0.0221	9.9999	0.2959	1.0712	0.0118	0.4129	0.0110	0.3854
163	56.48	-0.01	0.0841	9.9999	0.0276	9.9999	0.3280	1.0641	0.0125	0.4100	0.0118	0.3853
164	56.64	-0.05	0.0833	9.9999	0.0214	9.9999	0.3185	1.0859	0.0105	0.4153	0.0097	0.3824
165	56.84	-0.05	0.0841	9.9999	0.0266	9.9999	0.3165	1.1020	0.0115	0.4226	0.0106	0.3833
166	57.00	-0.04	0.0850	9.9999	0.0196	9.9999	0.3167	1.1060	0.0107	0.4243	0.0097	0.3837
167	57.17	-0.05	0.0848	9.9999	0.0232	9.9999	0.3582	1.0980	0.0089	0.4205	0.0081	0.3838
168	57.35	-0.07	0.0850	9.9999	0.0150	9.9999	0.3167	1.0875	0.0113	0.4054	0.0106	0.3798
169	57.51	-0.07	0.0859	9.9999	0.0195	9.9999	0.3317	1.0870	0.0118	0.4053	0.0110	0.3799
170	57.66	-0.11	0.0743	9.9999	0.0258	9.9999	0.3468	1.0835	0.0110	0.4105	0.0102	0.3788
171	57.78	-0.08	0.0762	9.9999	0.0287	9.9999	0.3862	1.0762	0.0123	0.4074	0.0114	0.3785
172	57.92	-0.04	0.0847	9.9999	0.0251	9.9999	0.3875	1.0721	0.0118	0.4014	0.0110	0.3744
173	58.03	-0.01	0.0858	9.9999	0.0228	9.9999	0.3806	1.0510	0.0139	0.3936	0.0132	0.3745
174	58.21	-0.05	0.0851	9.9999	0.0224	9.9999	0.4063	1.0865	0.0136	0.3971	0.0127	0.3717
175	58.36	-0.04	0.0878	9.9999	0.0217	9.9999	0.3769	1.1000	0.0121	0.4087	0.0110	0.3715
176	58.51	-0.07	0.0847	9.9999	0.0270	9.9999	0.4173	1.1093	0.0124	0.4108	0.0111	0.3704
177	58.64	-0.04	0.0868	9.9999	0.0258	9.9999	0.4612	1.1288	0.0103	0.4182	0.0093	0.3709
178	58.65	-0.05	0.0826	9.9999	0.0251	9.9999	0.4771	1.1069	0.0108	0.4065	0.0098	0.3672
179	58.67	-0.03	0.0851	9.9999	0.0262	9.9999	0.4764	1.1218	0.0110	0.4131	0.0098	0.3682

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 97 MACH 1.10 RATIO-6 1.7 PHI 0.0 BLOCK 23 C.G. 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	LA	CAB	CAF	XCP
1	-5.75	0.02	-1.0194	2.5857	0.0314	-0.0273	-0.0159	0.6305	0.2388	0.3917	-2.9327
2	-5.75	0.01	-1.0369	2.5965	-0.0454	0.0645	-0.0161	0.6367	0.2360	0.3947	-2.9089
3	-5.75	0.02	-1.0258	2.6111	0.0546	-0.0294	-0.0159	0.6277	0.2359	0.3918	-2.9238
4	-5.21	0.02	-0.9068	2.8479	0.0651	-0.0493	-0.0100	0.6323	0.2263	0.4060	-3.1357
5	-3.23	0.02	-0.7265	2.6264	0.0550	-0.0400	-0.0150	0.6064	0.2116	0.3948	-3.6153
6	-1.38	0.01	-0.5078	2.2671	-0.0363	0.0044	-0.0146	0.5924	0.2116	0.3812	-4.4648
7	0.60	0.02	-0.3143	1.9143	0.0420	-0.0376	-0.0138	0.5826	0.2119	0.3707	-6.0915
8	2.52	0.02	-0.1240	1.5364	0.0316	-0.0176	-0.0134	0.5809	0.2175	0.3634	-12.4097
9	4.41	0.02	0.1112	1.1278	0.0664	-0.0706	-0.0071	0.5814	0.2240	0.3574	10.1445
10	6.35	0.02	0.4064	0.6783	-0.0446	0.0522	-0.0178	0.5699	0.2447	0.3252	1.4230
11	8.28	0.01	0.6151	0.1504	-0.0138	0.0335	-0.0171	0.5600	0.2643	0.2957	0.3055
12	10.17	0.02	0.9036	-0.2858	0.0218	0.0294	-0.0109	0.5496	0.2810	0.2665	-0.3163
13	12.14	0.02	1.2122	-0.7784	-0.0322	0.1492	0.0007	0.5324	0.2896	0.2428	-0.6422
14	14.08	0.02	1.5136	-1.1702	-0.0402	0.2260	-0.0042	0.5133	0.2992	0.2141	-0.7731
15	16.05	0.00	1.8311	-1.5364	-0.1706	0.4272	-0.0038	0.4693	0.3082	0.1811	-0.8390
16	18.11	0.01	2.2065	-1.7844	-0.1571	0.6004	-0.0085	0.4078	0.3183	0.1496	-0.8079
17	20.07	0.01	2.5344	-1.8833	-0.1818	0.6753	-0.0130	0.4526	0.3329	0.1200	-0.7431
18	22.09	0.01	3.0321	-1.7283	-0.1035	0.5837	-0.0455	0.4208	0.3401	0.0807	-0.5700
19	24.13	0.01	3.5272	-1.4715	-0.1404	0.5593	-0.0297	0.3943	0.3478	0.0467	-0.4103
20	26.12	0.02	4.1161	-1.1832	0.0762	0.1051	0.0018	0.3869	0.3508	0.0161	-0.2875
21	28.18	0.05	4.8133	-0.9374	0.4721	-0.9326	0.0842	0.3509	0.3626	-0.0117	-0.1948
22	28.43	0.06	4.8500	-1.0071	0.4554	-0.9396	0.0842	0.3428	0.3655	-0.0227	-0.2077
23	28.42	0.07	4.7778	-0.9535	0.5786	-1.0801	0.0897	0.3465	0.3663	-0.0198	-0.1956
24	28.75	0.06	4.8677	-0.9671	0.4405	-0.7095	0.0730	0.3422	0.3681	-0.0255	-0.1987
25	29.02	0.04	5.0342	-1.0035	0.1557	-0.1709	0.0507	0.3570	0.3775	-0.0205	-0.1954
26	29.36	0.06	5.0731	-0.9133	0.3916	-0.4215	0.0515	0.3515	0.3798	-0.0283	-0.1800
27	29.67	0.05	5.2114	-0.9353	0.3175	-0.2947	0.0463	0.3556	0.3857	-0.0301	-0.1802
28	29.96	0.06	5.2956	-0.9255	0.4714	-0.6129	0.0747	0.3541	0.3865	-0.0324	-0.1748
29	30.25	0.06	5.3612	-1.0558	0.4534	-0.7886	0.1027	0.3552	0.3916	-0.0366	-0.1969
30	30.54	0.07	5.5473	-1.0276	0.5105	-0.5730	0.0865	0.3474	0.3911	-0.0437	-0.1851
31	30.81	0.07	5.6656	-1.0674	0.5301	-0.4655	0.0866	0.3480	0.3947	-0.0467	-0.1877
32	31.08	0.06	5.7651	-1.0756	0.3365	-0.1461	0.0754	0.3516	0.4010	-0.0494	-0.1865
33	31.38	0.06	5.9124	-1.0835	0.2607	0.1425	0.0528	0.3474	0.4010	-0.0536	-0.1833
34	31.65	0.05	5.9877	-1.1546	0.1506	0.1005	0.0531	0.3482	0.4014	-0.0532	-0.1927
35	31.93	0.05	6.0668	-1.1882	0.2663	0.0871	0.0646	0.3567	0.4067	-0.0500	-0.1959
36	32.20	0.04	6.2018	-1.2656	0.0570	0.4232	0.0532	0.3632	0.4114	-0.0482	-0.2041
37	32.48	0.04	6.2564	-1.2311	0.1646	0.3798	0.0426	0.3441	0.4060	-0.0619	-0.1955
38	32.74	0.04	6.3860	-1.1745	0.0800	0.5482	0.0260	0.3429	0.4096	-0.0672	-0.1841
39	33.00	0.02	6.4510	-1.2455	-0.0650	0.8164	0.0037	0.3433	0.4127	-0.0694	-0.1919
40	33.28	0.02	6.6261	-1.3372	-0.1375	1.0676	0.0033	0.3369	0.4174	-0.0805	-0.2018
41	33.53	0.02	6.6613	-1.4207	-0.1450	1.0861	0.0308	0.3600	0.4193	-0.0593	-0.2133
42	33.78	0.01	6.8853	-1.4746	-0.2582	1.4445	-0.0060	0.3597	0.4284	-0.0687	-0.2147
43	34.04	0.02	6.9461	-1.5088	-0.2046	1.5814	-0.0193	0.3533	0.4313	-0.0760	-0.2171
44	34.28	0.00	7.0107	-1.5960	-0.3728	1.7093	-0.0084	0.3465	0.4313	-0.0848	-0.2276
45	34.53	0.00	7.1636	-1.6457	-0.3642	1.6846	-0.0167	0.3546	0.4356	-0.0810	-0.2296
46	34.81	0.01	7.3735	-1.8104	-0.3102	1.7980	-0.0186	0.3538	0.4391	-0.0853	-0.2455

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 97 MACH 1.10 1.7 RAIC-6 PHI C.C BlnOF2S L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CN	CLN	CY	CLA	CLL	CA	CAB	CAF	XCP
47	35.05	0.01	7.4020	-1.6984	-0.2122	1.6670	-0.0180	0.3550	0.4384	-0.0834	-0.2294
48	35.27	0.02	7.5316	-1.6917	-0.2672	1.7376	0.0041	0.3707	0.4451	-0.0744	-0.2512
49	35.54	0.01	7.5756	-1.8072	-0.2194	1.5265	-0.0058	0.3634	0.4444	-0.0810	-0.2384
50	35.79	0.01	7.7265	-1.8525	-0.2358	1.4525	0.0170	0.3660	0.4441	-0.0781	-0.2452
51	36.00	0.02	7.7144	-1.9400	-0.1477	1.3399	0.0172	0.3743	0.4476	-0.0733	-0.2519
52	36.25	0.02	7.8204	-1.9147	-0.1562	1.3973	0.0064	0.3618	0.4526	-0.0908	-0.2448
53	36.48	0.02	7.8834	-1.9864	-0.1165	1.2620	0.0070	0.3534	0.4434	-0.0900	-0.2522
54	36.72	0.02	8.0764	-2.1118	-0.1375	1.3108	0.0185	0.3649	0.4438	-0.0789	-0.2615
55	36.98	0.02	8.1687	-2.1022	-0.2043	1.3641	0.0133	0.3442	0.4462	-0.1021	-0.2573
56	37.21	0.02	8.2751	-2.2646	-0.0761	1.2671	0.0247	0.3646	0.4487	-0.0841	-0.2737
57	37.44	0.01	8.3251	-2.1882	-0.2275	1.3662	0.0194	0.3583	0.4424	-0.0841	-0.2604
58	37.68	0.01	8.4556	-2.2444	-0.1443	1.1707	0.0150	0.3485	0.4402	-0.0917	-0.2653
59	37.92	0.01	8.5731	-2.2918	-0.2321	1.2727	0.0206	0.3379	0.4420	-0.1042	-0.2673
60	38.15	0.01	8.6254	-2.3435	-0.1562	1.1625	0.0102	0.3462	0.4378	-0.0916	-0.2717
61	38.38	0.01	8.6733	-2.2861	-0.1174	1.0086	0.0109	0.3256	0.4324	-0.1069	-0.2636
62	38.63	0.01	8.7357	-2.3794	-0.2035	1.1376	0.0053	0.3305	0.4279	-0.0914	-0.2723
63	38.86	0.01	8.9355	-2.4241	-0.1824	1.0893	-0.0103	0.3257	0.4370	-0.1114	-0.2713
64	39.05	0.02	8.9643	-2.4586	-0.0555	1.0084	-0.0104	0.3269	0.4285	-0.1017	-0.2787
65	39.30	0.00	9.0389	-2.5018	-0.1577	1.2505	-0.0106	0.3361	0.4336	-0.0976	-0.2858
66	39.54	0.00	9.2031	-2.6791	-0.2126	1.1540	-0.0140	0.3126	0.4211	-0.1086	-0.2911
67	39.74	0.01	9.1787	-2.6457	-0.0533	1.0336	-0.0087	0.3355	0.4184	-0.0825	-0.2882
68	39.97	-0.00	9.3666	-2.5910	-0.2655	0.9116	-0.0071	0.2897	0.4106	-0.1210	-0.2766
69	40.18	0.01	9.4638	-2.6278	-0.0588	0.9318	-0.0181	0.2855	0.4169	-0.1314	-0.2771
70	40.34	-0.01	9.5533	-2.7866	-0.3526	1.4050	-0.0302	0.3114	0.4247	-0.1134	-0.2917
71	40.60	0.01	9.5868	-2.7464	-0.1485	1.0562	-0.0292	0.3007	0.4141	-0.1135	-0.2864
72	40.79	0.00	9.5752	-2.7206	-0.1529	0.7664	-0.0306	0.2910	0.4095	-0.1186	-0.2841
73	41.01	-0.01	9.7218	-2.8073	-0.3745	1.4458	-0.0352	0.3028	0.4018	-0.0991	-0.2888
74	41.23	0.01	9.7616	-2.7450	-0.0580	0.6556	-0.0161	0.2665	0.3922	-0.1237	-0.2806
75	41.41	-0.00	9.8315	-2.8348	-0.2404	0.8334	-0.0345	0.2618	0.3901	-0.1283	-0.2883
76	41.64	0.01	10.0260	-3.0556	-0.2133	1.4021	-0.0453	0.2975	0.4022	-0.1048	-0.3087
77	41.84	0.01	10.0218	-2.9553	-0.0647	0.9103	-0.0326	0.2790	0.3752	-0.0961	-0.2949
78	42.04	0.01	10.1464	-3.0115	-0.1112	1.1204	-0.0493	0.2800	0.3880	-0.1080	-0.2968
79	42.24	-0.00	10.2079	-3.0585	-0.2322	1.0186	-0.0431	0.2990	0.3882	-0.1272	-0.3033
80	42.43	-0.01	10.2657	-3.0097	-0.1888	0.7419	-0.0383	0.2507	0.3664	-0.1175	-0.2931
81	42.62	-0.01	10.2400	-3.0517	-0.1862	0.7794	-0.0366	0.2558	0.3636	-0.1078	-0.2980
82	42.81	0.00	10.3765	-3.0525	-0.0421	0.6442	-0.0356	0.2471	0.3562	-0.1091	-0.2980
83	43.01	-0.01	10.5066	-3.0837	-0.1762	0.7411	-0.0464	0.2347	0.3485	-0.1118	-0.2935
84	43.18	-0.01	10.5052	-3.2411	-0.2546	1.0396	-0.0385	0.2426	0.3611	-0.1185	-0.3085
85	43.36	-0.01	10.6618	-3.1656	-0.1501	0.5890	-0.0235	0.2253	0.3409	-0.1156	-0.2992
86	43.59	-0.00	10.6753	-3.1326	-0.0945	0.5172	-0.0177	0.2169	0.3416	-0.1247	-0.2934
87	43.72	-0.01	10.7559	-3.1885	-0.1855	1.0146	-0.0574	0.2304	0.3413	-0.1109	-0.2953
88	43.91	-0.01	10.7719	-3.2055	-0.2016	0.9313	-0.0407	0.2358	0.3427	-0.1069	-0.2976
89	44.10	0.00	10.9018	-3.1554	-0.0468	0.5505	-0.0171	0.2164	0.3285	-0.1121	-0.2939
90	44.26	0.00	10.9804	-3.2165	-0.0146	0.4655	-0.0103	0.2018	0.3211	-0.1193	-0.2932
91	44.45	-0.01	11.0152	-3.1283	-0.1014	0.6120	-0.0332	0.1974	0.3247	-0.1273	-0.2839
92	44.62	-0.01	11.1659	-3.2212	-0.1274	0.5578	-0.0217	0.1893	0.3204	-0.1311	-0.2900

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 97 | MACH 1.10 | RX10-6 1.7 | PHI 0.0 | CONF 81+GF23 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.81	-0.00	11.1461	-3.3053	-0.0019	0.2923	0.0065	0.1960	0.3168	-0.1208	-0.2965
94	45.00	-0.02	11.2464	-3.2432	-0.1366	0.5019	-0.0319	0.1906	0.3126	-0.1220	-0.2885
95	45.20	-0.02	11.2654	-3.3046	0.0322	0.0451	0.0025	0.2029	0.3112	-0.1083	-0.2932
96	45.37	-0.03	11.3565	-3.3062	-0.1716	0.0254	-0.0492	0.1958	0.3077	-0.1119	-0.2907
97	45.53	-0.01	11.3356	-3.2201	0.0255	0.1496	0.0079	0.1868	0.3036	-0.1171	-0.2840
98	45.72	-0.02	11.3853	-2.9859	0.0003	0.0954	-0.0079	0.1875	0.3065	-0.1210	-0.2608
99	45.90	-0.02	11.3525	-2.9555	0.0508	-0.0503	0.0090	0.1862	0.3052	-0.1190	-0.2555
100	46.06	-0.02	11.4325	-2.9865	-0.0796	0.3071	-0.0252	0.1963	0.3172	-0.1209	-0.2607
101	46.24	-0.02	11.4055	-3.0474	0.0424	0.0069	-0.0069	0.1996	0.3198	-0.1112	-0.2626
102	46.42	-0.01	11.5736	-2.7977	0.1546	-0.2534	0.0321	0.1692	0.3141	-0.1429	-0.2417
103	46.60	-0.02	11.7336	-2.5952	0.0263	0.2687	-0.0019	0.2118	0.3383	-0.1265	-0.2553
104	46.78	-0.02	11.7357	-2.6506	-0.0294	0.2025	-0.0370	0.2037	0.3284	-0.1247	-0.2428
105	46.96	-0.02	11.7455	-2.6565	-0.0114	0.0970	0.0045	0.1957	0.3340	-0.1383	-0.2431
106	47.12	-0.01	12.0056	-3.1545	0.0405	0.0914	0.0051	0.2183	0.3461	-0.1278	-0.2629
107	47.31	-0.02	12.0068	-3.0245	-0.0246	0.3067	0.0046	0.2361	0.3910	-0.1529	-0.2519
108	47.47	-0.02	12.0763	-3.1975	0.0365	0.1779	0.0051	0.2523	0.3789	-0.1266	-0.2648
109	47.63	-0.01	12.0655	-3.1351	0.0277	0.1885	0.0052	0.2627	0.3813	-0.1186	-0.2597
110	47.81	-0.02	12.0616	-2.9665	0.0057	0.0572	0.0108	0.2561	0.4009	-0.1448	-0.2461
111	48.01	-0.02	12.3468	-3.2485	0.0185	-0.0012	0.0400	0.2673	0.4156	-0.1485	-0.2631
112	48.18	-0.01	12.4640	-3.2715	0.0542	0.0142	0.0456	0.2687	0.4157	-0.1470	-0.2786
113	48.33	-0.00	12.4170	-3.2474	0.1542	-0.0895	0.0513	0.2706	0.4192	-0.1486	-0.2615
114	48.53	-0.01	12.6098	-3.3051	0.0533	-0.1210	0.0742	0.2725	0.4182	-0.1457	-0.2669
115	48.71	-0.01	12.6500	-3.3461	0.1368	-0.1538	0.0689	0.2658	0.4139	-0.1481	-0.2644
116	48.87	0.0	12.6946	-3.2823	0.1824	0.0019	0.0685	0.2592	0.4116	-0.1526	-0.2586
117	49.05	-0.00	12.7553	-3.3353	0.1533	-0.1068	0.0692	0.2634	0.4088	-0.1454	-0.2615
118	49.20	-0.00	12.7852	-3.3651	0.1085	-0.0343	0.0579	0.2601	0.4037	-0.1536	-0.2632
119	49.37	-0.01	12.8801	-2.7326	0.1107	0.6705	0.0552	0.2211	0.3609	-0.1398	-0.2155
120	49.55	0.00	12.7987	-2.8966	0.1189	0.6135	0.0613	0.2157	0.3577	-0.1420	-0.2258
121	49.72	0.00	12.7759	-2.9461	0.1008	0.7083	0.0553	0.2213	0.3544	-0.1331	-0.2306
122	49.89	0.00	12.8147	-2.8457	0.0686	0.6654	0.0434	0.2052	0.3487	-0.1435	-0.2224
123	50.09	-0.01	12.9760	-3.1961	0.0455	1.0506	0.0379	0.2036	0.3593	-0.1559	-0.2463
124	50.28	-0.00	12.9214	-3.0722	0.0402	1.0148	0.0491	0.2122	0.3579	-0.1457	-0.2378
125	50.42	0.00	13.0791	-3.3346	0.0605	1.0811	0.0327	0.2246	0.3614	-0.1374	-0.2550
126	50.60	0.01	13.1945	-3.4572	0.1882	0.8430	0.0227	0.1988	0.3549	-0.1561	-0.2620
127	50.79	0.01	13.2478	-3.5106	0.2657	0.7502	0.0231	0.2002	0.3530	-0.1528	-0.2650
128	50.95	0.01	13.3038	-3.6277	0.2253	0.8381	0.0175	0.1949	0.3501	-0.1552	-0.2727
129	51.12	0.01	13.3182	-3.5781	0.2436	1.0065	0.0168	0.1814	0.3494	-0.1680	-0.2687
130	51.26	0.02	13.2564	-3.4454	0.2292	0.9510	0.0280	0.1848	0.3472	-0.1624	-0.2600
131	51.45	-0.00	13.4258	-3.7252	0.2235	0.8381	0.0233	0.1797	0.3485	-0.1688	-0.2778
132	51.64	0.00	13.6171	-4.0455	0.2586	0.8449	0.0292	0.1771	0.3438	-0.1667	-0.2971
133	51.81	0.01	13.6374	-4.0662	0.3358	0.7528	0.0349	0.1759	0.3456	-0.1697	-0.2977
134	51.98	0.00	13.6006	-4.0481	0.2684	0.8058	0.0297	0.1708	0.3462	-0.1754	-0.3151
135	52.17	0.01	13.6957	-4.0874	0.3787	0.6828	0.0247	0.1639	0.3422	-0.1783	-0.3229
136	52.33	0.01	13.5655	-4.0569	0.4102	0.6136	0.0306	0.1547	0.3441	-0.1894	-0.3251
137	52.50	0.01	13.9506	-4.5753	0.3478	0.7692	0.0301	0.1494	0.3416	-0.1922	-0.3260
138	52.66	0.01	13.9276	-4.5108	0.3592	0.7593	0.0301	0.1557	0.3425	-0.1868	-0.3239

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 97 MACH 1.10 RX10-6 1.7 PHI 0.0 BLKF25 CLRF 0.0 L DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.82	0.00	13.9052	-4.4426	0.2551	0.7179	0.0248	0.1384	0.3354	-0.1970	-0.3182
140	53.00	0.01	13.9775	-4.5466	0.3581	0.6652	0.0252	0.1317	0.3337	-0.2020	-0.3252
141	53.15	-0.00	13.9662	-4.6841	0.2315	0.7629	0.0249	0.1246	0.3339	-0.2093	-0.3211
142	53.34	-0.00	14.1137	-4.7256	0.2607	0.6583	0.0202	0.1221	0.3327	-0.2106	-0.3348
143	53.51	0.01	13.9524	-4.4056	0.3515	0.5934	0.0256	0.1239	0.3340	-0.2101	-0.3158
144	53.67	0.00	13.9276	-4.3574	0.2671	0.6565	0.0140	0.1122	0.3305	-0.2183	-0.3129
145	53.84	-0.00	14.0225	-4.5044	0.2455	0.6507	0.0200	0.1128	0.3333	-0.2205	-0.3212
146	53.99	-0.01	13.9787	-4.3818	0.1335	0.6617	0.0201	0.1029	0.3297	-0.2268	-0.3135
147	54.19	-0.00	14.0505	-4.5258	0.2714	0.6015	0.0257	0.1125	0.3342	-0.2217	-0.3221
148	54.34	0.00	14.0864	-4.5734	0.2556	0.5655	0.0204	0.1079	0.3317	-0.2238	-0.3248
149	54.50	0.00	14.1535	-4.6508	0.2353	0.5870	0.0205	0.0874	0.3299	-0.2424	-0.3314
150	54.65	0.00	14.0355	-4.4366	0.2327	0.5309	0.0205	0.0913	0.3302	-0.2388	-0.3156
151	54.80	-0.01	14.0754	-4.5136	0.1778	0.5919	0.0260	0.0879	0.3284	-0.2404	-0.3207
152	54.97	-0.02	14.1051	-4.5477	0.2578	0.3874	0.0213	0.0901	0.3285	-0.2383	-0.3224
153	55.13	-0.03	14.1052	-4.6243	0.1151	0.5685	0.0206	0.0810	0.3254	-0.2443	-0.3278
154	55.28	-0.02	14.1739	-4.6535	0.0590	0.4286	0.0270	0.0694	0.3240	-0.2545	-0.3312
155	55.44	-0.03	14.1170	-4.5734	0.1025	0.2579	0.0165	0.0620	0.3171	-0.2550	-0.3240
156	55.60	-0.03	14.2660	-4.8054	0.0655	0.5914	0.0210	0.0562	0.3197	-0.2614	-0.3411
157	55.78	-0.03	14.2463	-4.8157	0.0857	0.3646	0.0162	0.0519	0.3138	-0.2618	-0.3383
158	55.92	-0.03	14.2501	-4.8665	0.0638	0.4149	0.0162	0.0474	0.3134	-0.2659	-0.3401
159	56.09	-0.03	14.3708	-5.2186	0.0656	0.4534	-0.0006	0.0391	0.3146	-0.2756	-0.3631
160	56.25	-0.03	14.2511	-4.9066	0.0117	0.3145	0.0165	0.0431	0.3083	-0.2651	-0.3481
161	56.40	-0.03	14.2841	-4.9673	0.0794	0.2517	0.0111	0.0312	0.3082	-0.2769	-0.3451
162	56.55	-0.05	14.2044	-4.7746	-0.0565	0.3702	0.0107	0.0311	0.3060	-0.2748	-0.3361
163	56.73	-0.05	14.5548	-5.3363	-0.0321	0.1468	0.0235	0.0261	0.3218	-0.2957	-0.3668
164	56.89	-0.05	14.7654	-5.7211	-0.0142	0.0298	0.0244	0.0256	0.3255	-0.2999	-0.3874
165	57.06	-0.06	14.8106	-5.8565	-0.0734	-0.3163	0.0304	0.0233	0.3247	-0.3014	-0.3954
166	57.18	-0.07	14.6682	-5.6367	-0.2126	-0.2536	0.0167	0.0349	0.3211	-0.2661	-0.3638
167	57.35	-0.03	14.8563	-5.8556	-0.1551	-0.5893	0.0479	0.0336	0.3323	-0.2989	-0.3946
168	57.48	-0.06	14.4421	-5.1441	-0.0634	-0.1701	0.0319	0.0224	0.3362	-0.3158	-0.3562
169	57.62	-0.06	14.5052	-5.2056	-0.1644	-0.2328	0.0464	0.0179	0.3444	-0.3265	-0.3589
170	57.77	-0.06	14.5169	-5.2253	-0.1147	-0.0340	0.0318	-0.0097	0.3471	-0.3568	-0.3608
171	57.92	-0.02	14.7053	-5.5225	0.1754	-0.2083	0.0528	0.0079	0.3466	-0.3387	-0.3756
172	58.05	-0.03	14.7442	-5.6466	0.3561	-0.5434	0.0591	0.0258	0.3444	-0.3186	-0.3831
173	58.20	-0.01	14.7485	-5.7341	0.4426	-0.1475	0.0521	0.0063	0.3404	-0.3341	-0.3888
174	58.33	-0.06	14.6054	-5.4464	-0.0116	-0.2887	0.0411	-0.0127	0.3376	-0.3505	-0.3730
175	58.48	0.01	14.7023	-5.6248	0.5476	0.2604	0.0502	0.0036	0.3429	-0.3393	-0.3828
176	58.63	-0.01	14.6566	-5.6303	0.4535	0.0751	0.0455	-0.0021	0.3418	-0.3439	-0.3831
177	58.68	-0.01	14.7073	-5.5826	0.3582	-0.1153	0.0578	0.0006	0.3411	-0.3405	-0.3798
178	58.67	-0.03	14.6619	-5.4506	0.1540	0.1178	0.0345	-0.0306	0.3279	-0.3585	-0.3745
179	58.67	-0.01	14.7781	-5.6450	0.3651	-0.3070	0.0588	-0.0019	0.3430	-0.3449	-0.3820
180	58.68	-0.01	14.6776	-5.4695	0.3214	-0.2247	0.0470	-0.0105	0.3349	-0.3454	-0.3726
181	58.69	-0.08	14.8307	-5.7116	-0.1734	0.1989	0.0467	0.0139	0.3407	-0.3272	-0.3851
182	58.69	-0.06	14.8425	-5.7075	-0.1266	0.1758	0.0416	-0.0270	0.3327	-0.3597	-0.3845
183	58.68	-0.06	14.7686	-5.5863	-0.1156	-0.2138	0.0528	-0.0111	0.3349	-0.3460	-0.3770

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 97 MACH 1.10 RX10-6 1.7 PHI C.C BLNOF23 C.C L CEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.75	0.02	-0.0662	0.0011	0.0180	-0.0156	-0.2645	-0.9243	-0.0149	-0.4642	0.0161	0.5622
2	-5.75	0.01	-0.0765	0.0011	0.0178	-0.0150	-0.2517	-0.9193	-0.0149	-0.4638	0.0162	0.5045
3	-5.75	0.02	-0.0760	-0.0004	0.0135	0.0049	-0.1758	-0.9345	-0.0144	-0.4651	0.0154	0.4577
4	-5.21	0.02	-0.0594	0.0027	0.0201	-0.0455	-0.3377	-0.8354	-0.0159	-0.4271	0.0191	0.5113
5	-3.23	0.02	-0.0574	0.0034	0.0713	-0.0586	-0.3714	-0.7078	-0.0147	-0.3753	0.0207	0.5303
6	-1.36	0.01	-0.0615	0.0027	0.0176	-0.0440	-0.2763	-0.5499	-0.0120	-0.3076	0.0218	0.5594
7	0.60	0.02	-0.0576	0.0031	0.0184	-0.0541	-0.3232	-0.4022	-0.0114	-0.2295	0.0283	0.5717
8	2.52	0.02	-0.0596	0.0026	0.0152	-0.0344	-0.2566	-0.2443	-0.0077	-0.1611	0.0316	0.6556
9	4.41	0.02	-0.0558	0.0041	0.0221	-0.0694	-0.3694	-0.0816	0.0008	-0.0929	-0.0095	1.1383
10	6.35	0.02	-0.0618	-0.0024	0.0105	0.0275	-0.1242	0.0957	0.0134	-0.0233	0.1401	-0.2429
11	8.28	0.01	-0.1080	-0.0024	0.0076	0.0223	-0.0724	0.2461	0.0251	0.0303	0.1019	0.1231
12	10.17	0.02	-0.0960	-0.0055	0.0194	0.0561	-0.1976	0.3914	0.0378	0.1015	0.0966	0.2588
13	12.14	0.02	-0.0742	-0.0027	0.0286	0.0364	-0.3888	0.5369	0.0430	0.1721	0.0862	0.3206
14	14.08	0.02	-0.0965	-0.0072	0.0246	0.0735	-0.2439	0.6754	0.0455	0.2314	0.0674	0.3426
15	16.09	0.00	-0.1227	-0.0108	0.0256	0.1368	-0.1698	0.8040	0.0471	0.2886	0.0586	0.3552
16	18.11	0.01	-0.1774	-0.0126	0.0221	0.1159	-0.0120	0.9423	0.0435	0.3447	0.0462	0.3658
17	20.07	0.01	-0.1675	-0.0168	-0.0054	0.0896	0.0495	1.0445	0.0396	0.3769	0.0379	0.3628
18	22.09	0.01	-0.2962	-0.0153	-0.0762	0.0518	0.2371	1.1057	0.0383	0.3996	0.0346	0.3613
19	24.13	0.01	-0.2158	-0.0031	-0.0425	0.0143	0.1987	1.1904	0.0341	0.4313	0.0286	0.3623
20	26.12	0.02	-0.1191	0.0055	0.0023	-0.0462	-0.0195	1.2715	0.0288	0.4604	0.0227	0.3621
21	28.18	0.05	0.1645	0.0155	0.1534	0.1162	0.9304	1.2979	0.0246	0.4721	0.0190	0.3637
22	28.43	0.06	0.3003	0.0252	0.2154	0.0771	0.7172	1.2970	0.0231	0.4717	0.0178	0.3637
23	28.42	0.07	0.1913	0.0154	0.1764	0.1014	0.9218	1.2960	0.0235	0.4674	0.0182	0.3606
24	28.75	0.06	0.1706	0.0184	0.1656	0.1080	0.9412	1.3110	0.0235	0.4696	0.0180	0.3582
25	29.02	0.04	0.1243	0.0150	0.1501	0.1203	1.0466	1.2947	0.0225	0.4635	0.0174	0.3583
26	29.36	0.06	0.0765	0.0109	0.1132	0.1465	1.4792	1.2943	0.0231	0.4577	0.0178	0.3542
27	29.67	0.05	0.0766	0.0125	0.1105	0.1683	1.4384	1.2924	0.0218	0.4598	0.0169	0.3557
28	29.96	0.06	0.1703	0.0143	0.1620	0.0859	0.9513	1.2948	0.0220	0.4619	0.0159	0.3567
29	30.25	0.06	0.2821	0.0160	0.2126	0.0568	0.7536	1.2975	0.0191	0.4621	0.0147	0.3561
30	30.54	0.07	0.2565	0.0163	0.1659	0.0706	0.8053	1.3050	0.0198	0.4627	0.0152	0.3545
31	30.81	0.07	0.2261	0.0112	0.1505	0.0495	0.8446	1.3149	0.0196	0.4635	0.0149	0.3525
32	31.08	0.06	0.1658	0.0062	0.1090	0.0304	0.9955	1.3150	0.0198	0.4605	0.0150	0.3502
33	31.36	0.06	0.0610	0.0017	0.0137	0.0285	1.6639	1.3285	0.0198	0.4634	0.0149	0.3487
34	31.63	0.05	0.1270	0.0041	0.1475	0.0319	1.1049	1.3315	0.0185	0.4627	0.0139	0.3475
35	31.93	0.05	0.1488	0.0027	0.1558	0.0182	1.0473	1.3390	0.0176	0.4642	0.0131	0.3467
36	32.20	0.04	0.1064	0.0020	0.1342	0.0187	1.2386	1.3591	0.0166	0.4658	0.0122	0.3428
37	32.48	0.04	0.0628	0.0011	0.1227	0.0129	1.4880	1.3941	0.0163	0.4664	0.0120	0.3444
38	32.74	0.04	-0.0171	-0.0007	0.0067	0.0395	-3.9039	1.3640	0.0168	0.4663	0.0123	0.3419
39	33.00	0.02	-0.1054	-0.0051	0.0250	0.0485	-0.2756	1.3690	0.0166	0.4667	0.0121	0.3409
40	33.26	0.02	-0.0960	-0.0051	0.0316	0.0569	-0.3297	1.3790	0.0155	0.4714	0.0113	0.3419
41	33.53	0.02	0.0034	-0.0024	0.0850	-0.7143	25.1714	1.3778	0.0144	0.4730	0.0104	0.3433
42	33.78	0.01	-0.1463	-0.0085	0.0138	0.0580	-0.0943	1.3928	0.0146	0.4742	0.0105	0.3405
43	34.04	0.02	-0.1529	-0.0112	-0.0125	0.0580	0.0690	1.3929	0.0141	0.4742	0.0101	0.3403
44	34.28	0.00	-0.1440	-0.0085	0.0131	0.0590	-0.0912	1.4078	0.0126	0.4784	0.0090	0.3358
45	34.53	0.00	-0.1885	-0.0112	-0.0089	0.0548	0.0476	1.4228	0.0121	0.4808	0.0085	0.3378
46	34.81	0.01	-0.1954	-0.0112	-0.0095	0.0573	0.0509	1.4277	0.0114	0.4830	0.0080	0.3383

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

PARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 97 | MACH 1.10 1.7 | RNIC-6 | PHI 0.0 | CONF 81NUF2S | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CH1	CB1	XCPF1	YCPF1	CNF2	CH2	CB2	XCPF2	YCPF2
47	35.05	0.01	-0.2123	-0.0105	-0.0204	0.0514	0.0959	1.4327	0.0109	0.4844	0.0078	0.3381
48	35.27	0.02	-0.1447	-0.0071	0.0185	0.0493	-0.1307	1.4352	0.0094	0.4865	0.0065	0.3390
49	35.54	0.01	-0.1135	-0.0044	0.0214	0.0391	-0.1888	1.4352	0.0092	0.4865	0.0064	0.3390
50	35.79	0.01	-0.0781	-0.0064	0.0064	0.0680	-1.2570	1.4366	0.0087	0.4874	0.0060	0.3392
51	36.00	0.02	-0.0347	-0.0007	0.0027	0.0194	-1.8056	1.4416	0.0076	0.4877	0.0053	0.3383
52	36.25	0.02	-0.1056	-0.0027	0.0311	0.0256	-0.2943	1.4417	0.0071	0.4877	0.0050	0.3383
53	36.48	0.02	-0.0495	-0.0004	0.0538	0.0078	-1.0619	1.4466	0.0062	0.4901	0.0043	0.3388
54	36.72	0.02	-0.0185	0.0024	0.0772	-0.1302	-0.1667	1.4467	0.0047	0.4901	0.0033	0.3387
55	36.96	0.02	-0.0503	0.0014	0.0593	-0.0269	-1.1804	1.4465	0.0047	0.4957	0.0032	0.3380
56	37.21	0.02	-0.0105	0.0027	0.0656	-0.2569	-0.1560	1.4592	0.0035	0.4950	0.0024	0.3392
57	37.44	0.01	-0.0424	0.0027	0.0875	-0.0658	-1.6036	1.4665	0.0042	0.4956	0.0029	0.3379
58	37.68	0.01	-0.0335	0.0031	0.0655	-0.0922	-2.0864	1.4704	0.0037	0.4984	0.0025	0.3375
59	37.92	0.01	-0.0332	0.0031	0.0671	-0.0950	-2.0205	1.4765	0.0032	0.4984	0.0022	0.3375
60	38.15	0.01	-0.0254	0.0027	0.0775	-0.1005	-3.0532	1.4716	0.0025	0.4959	0.0017	0.3370
61	38.36	0.01	-0.0505	0.0027	0.0842	-0.0530	-1.2595	1.4665	0.0030	0.4992	0.0020	0.3358
62	38.63	0.01	-0.0721	0.0014	0.0531	-0.0187	-0.7303	1.4804	0.0032	0.4964	0.0022	0.3353
63	38.88	0.01	-0.1061	-0.0007	0.0359	0.0064	-0.3382	1.4878	0.0022	0.5000	0.0015	0.3361
64	39.09	0.02	-0.0955	-0.0007	0.0418	0.0071	-0.4374	1.4904	0.0017	0.4992	0.0012	0.3356
65	39.30	0.00	-0.1059	0.0007	0.0341	-0.0064	-0.3215	1.4978	0.0022	0.5009	0.0015	0.3344
66	39.54	0.00	-0.1278	-0.0017	0.0234	0.0136	-0.1880	1.5003	0.0019	0.5020	0.0013	0.3346
67	39.74	0.01	-0.1222	0.0004	0.0417	-0.0043	-0.4696	1.5003	0.0022	0.5020	0.0015	0.3346
68	39.97	-0.00	-0.0948	0.0011	0.0349	-0.0112	-0.3625	1.5002	0.0035	0.5001	0.0023	0.3334
69	40.18	0.01	-0.1138	-0.0007	0.0226	0.0059	-0.1988	1.5003	0.0041	0.4982	0.0028	0.3320
70	40.39	-0.01	-0.1345	-0.0027	0.0124	0.0200	-0.0923	1.5053	0.0044	0.4966	0.0029	0.3299
71	40.60	0.01	-0.1212	-0.0014	0.0111	0.0111	-0.0916	1.5052	0.0055	0.4966	0.0039	0.3295
72	40.79	0.00	-0.0642	0.0007	0.0202	-0.0076	-0.2944	1.5054	0.0059	0.4917	0.0039	0.3266
73	41.01	-0.01	-0.1765	-0.0062	-0.0154	0.0519	0.0875	1.5053	0.0067	0.4938	0.0044	0.3280
74	41.23	0.01	-0.0802	0.0027	0.0221	-0.0408	-0.3338	1.5005	0.0071	0.4864	0.0048	0.3255
75	41.41	-0.00	-0.1268	-0.0044	0.0026	0.0350	-0.0205	1.5103	0.0071	0.4912	0.0047	0.3252
76	41.64	0.01	-0.2011	-0.0146	-0.0339	0.0725	0.1664	1.5154	0.0057	0.4906	0.0038	0.3238
77	41.84	0.01	-0.2010	-0.0132	-0.0357	0.0658	0.1776	1.5153	0.0059	0.4926	0.0039	0.3251
78	42.04	0.01	-0.2217	-0.0163	-0.0486	0.0827	0.2202	1.5180	0.0052	0.4908	0.0034	0.3233
79	42.24	-0.00	-0.1461	-0.0078	-0.0237	0.0535	0.1625	1.5109	0.0047	0.4823	0.0031	0.3192
80	42.43	-0.01	-0.2259	-0.0204	-0.0513	0.0901	0.2273	1.5084	0.0047	0.4831	0.0031	0.3203
81	42.62	-0.01	-0.1871	-0.0146	-0.0372	0.0779	0.1991	1.5157	0.0052	0.4857	0.0034	0.3205
82	42.81	0.00	-0.2149	-0.0204	-0.0482	0.0947	0.2245	1.5161	0.0022	0.4818	0.0015	0.3178
83	43.01	-0.01	-0.1665	-0.0150	-0.0385	0.0898	0.2335	1.5015	0.0010	0.4726	0.0006	0.3147
84	43.18	-0.01	-0.2375	-0.0258	-0.0652	0.1085	0.2759	1.5090	0.0005	0.4752	0.0003	0.3149
85	43.36	-0.01	-0.1546	-0.0221	-0.0472	0.1135	0.2424	1.4922	-0.0019	0.4639	-0.0013	0.3109
86	43.53	-0.00	-0.1501	-0.0165	-0.0241	0.0838	0.1855	1.4922	-0.0019	0.4639	-0.0013	0.3109
87	43.72	-0.01	-0.2385	-0.0258	-0.0707	0.1248	0.2960	1.4923	-0.0035	0.4649	-0.0023	0.3115
88	43.91	-0.01	-0.2650	-0.0298	-0.0586	0.1187	0.2802	1.4973	-0.0037	0.4643	-0.0024	0.3101
89	44.10	0.00	-0.1294	-0.0143	-0.0282	0.1104	0.2177	1.4899	-0.0040	0.4596	-0.0027	0.3086
90	44.28	0.00	-0.0921	-0.0078	-0.0265	0.0848	0.2272	1.4704	-0.0054	0.4531	-0.0037	0.3082
91	44.45	-0.01	-0.0816	-0.0061	-0.0145	0.0745	0.1820	1.4532	-0.0052	0.4448	-0.0036	0.3061
92	44.62	-0.01	-0.0749	-0.0065	-0.0142	0.0663	0.1894	1.4534	-0.0054	0.4405	-0.0037	0.3034

TEST 7 PART 97 MACH 1.10 RX10-6 1.7 PHI 0.0 CONF B160F23 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CH1	CB1	XCPF1	YCPF1	CNF2	CH2	CB2	XCPF2	YCPF2
93	44.81	-0.00	-0.1064	-0.0125	-0.0182	0.1156	0.1496	1.4533	-0.0059	0.4438	-0.0040	0.3054
94	45.00	-0.02	-0.1153	-0.0150	-0.0308	0.1254	0.3083	1.4606	-0.0052	0.4464	-0.0036	0.3057
95	45.20	-0.02	-0.1464	-0.0220	-0.0373	0.1346	0.2516	1.4660	-0.0059	0.4393	-0.0041	0.3038
96	45.37	-0.03	-0.1561	-0.0265	-0.0700	0.1492	0.3260	1.4582	-0.0059	0.4452	-0.0040	0.3053
97	45.53	-0.01	-0.1179	-0.0155	-0.0300	0.1350	0.2545	1.4323	-0.0047	0.4326	-0.0033	0.3020
98	45.72	-0.02	-0.0974	-0.0146	-0.0205	0.1007	0.2395	1.4063	-0.0030	0.4218	-0.0021	0.3008
99	45.90	-0.02	-0.0818	0.0027	0.0125	-1.6471	-7.6471	1.3951	-0.0025	0.4161	-0.0018	0.2983
100	46.06	-0.02	-0.0931	-0.0147	-0.0312	0.1575	0.3347	1.3937	-0.0032	0.4163	-0.0023	0.2987
101	46.24	-0.02	-0.1465	-0.0214	-0.0566	0.1462	0.3867	1.3641	-0.0027	0.4050	-0.0020	0.2965
102	46.42	-0.01	0.0346	0.0085	0.0343	0.2466	1.0028	1.3693	-0.0013	0.4060	-0.0009	0.2965
103	46.60	-0.02	-0.0958	-0.0126	-0.0323	0.1322	0.3380	1.3532	-0.0035	0.3959	-0.0026	0.2955
104	46.76	-0.02	-0.1056	-0.0160	-0.0464	0.1513	0.3620	1.3581	-0.0032	0.4019	-0.0024	0.2970
105	46.94	-0.02	-0.0826	-0.0113	-0.0280	0.1367	0.3386	1.3357	-0.0030	0.3995	-0.0022	0.2991
106	47.12	-0.01	-0.1046	-0.0186	-0.0511	0.1795	0.4669	1.3246	-0.0047	0.3917	-0.0036	0.2957
107	47.31	-0.02	-0.0982	-0.0179	-0.0453	0.1615	0.4714	1.3344	-0.0042	0.3975	-0.0032	0.2975
108	47.47	-0.02	-0.0866	-0.0157	-0.0436	0.1452	0.5413	1.3096	-0.0055	0.3895	-0.0042	0.2974
109	47.63	-0.01	-0.0888	-0.0164	-0.0503	0.1848	0.5663	1.2897	-0.0057	0.3859	-0.0044	0.2952
110	47.81	-0.02	-0.0179	-0.0082	-0.0185	0.4595	1.0595	1.3046	-0.0065	0.3930	-0.0050	0.3012
111	48.01	-0.02	0.0104	-0.0034	-0.0096	-0.3241	-0.5644	1.3015	-0.0069	0.3936	-0.0053	0.3024
112	48.18	-0.01	0.0265	0.0027	0.0104	0.0538	0.2045	1.3015	-0.0062	0.3937	-0.0047	0.3025
113	48.33	-0.00	0.0658	0.0038	0.0185	0.0572	0.2874	1.3014	-0.0069	0.3966	-0.0053	0.3047
114	48.53	-0.01	0.1379	0.0188	0.0560	0.1305	0.4246	1.2626	-0.0040	0.3828	-0.0031	0.3031
115	48.71	-0.01	0.1357	0.0191	0.0618	0.1367	0.4420	1.2650	-0.0038	0.3839	-0.0030	0.3035
116	48.87	0.00	0.1242	0.0215	0.0574	0.1764	0.4023	1.2399	-0.0020	0.3779	-0.0016	0.3048
117	49.05	-0.00	0.1413	0.0211	0.0658	0.1498	0.4658	1.2433	-0.0038	0.3848	-0.0030	0.3095
118	49.20	-0.00	0.1455	0.0248	0.0588	0.1745	0.4919	1.2294	-0.0032	0.3808	-0.0026	0.3058
119	49.37	-0.01	-0.0168	0.0082	0.0111	-0.7569	-1.0268	1.0838	0.0060	0.3252	0.0055	0.3066
120	49.55	0.00	-0.0171	0.0075	0.0065	-0.4407	-0.3785	1.0837	0.0057	0.3271	0.0053	0.3018
121	49.72	0.00	-0.0019	0.0058	0.0121	-5.1000	-6.2500	1.1244	0.0032	0.3489	0.0028	0.3103
122	49.89	0.00	-0.0382	0.0044	-0.0045	-0.1227	0.0960	1.0930	0.0062	0.3357	0.0056	0.3071
123	50.09	-0.01	-0.0534	0.0027	-0.0103	-0.0506	0.1955	1.1039	0.0047	0.3442	0.0043	0.3118
124	50.26	-0.01	-0.0342	0.0054	-0.0013	-0.1582	0.0367	1.1203	0.0040	0.3505	0.0035	0.3116
125	50.42	0.00	-0.0342	0.0041	-0.0014	-0.1186	0.0399	1.1545	0.0022	0.3633	0.0019	0.3147
126	50.60	0.01	-0.0038	0.0065	0.0097	-1.7179	-2.5897	1.1678	0.0022	0.3700	0.0019	0.3165
127	50.79	0.01	-0.0077	0.0065	0.0054	-0.8375	-0.7300	1.1703	0.0020	0.3693	0.0017	0.3159
128	50.95	0.01	-0.0248	0.0038	-0.0021	-0.1518	0.0934	1.1515	0.0037	0.3644	0.0032	0.3165
129	51.12	0.01	-0.0011	0.0069	0.0062	-6.0909	-5.6182	1.1973	0.0035	0.3691	0.0030	0.3189
130	51.28	0.02	0.0041	0.0054	0.0082	5.0909	7.7273	1.1548	0.0040	0.3669	0.0034	0.3178
131	51.45	-0.00	-0.0052	0.0051	0.0037	-0.9815	-0.7037	1.1494	0.0042	0.3644	0.0037	0.3176
132	51.64	0.00	-0.0012	0.0058	0.0071	-5.0000	-0.0833	1.1355	0.0047	0.3605	0.0042	0.3175
133	51.81	0.01	0.0030	0.0062	0.0104	2.0645	3.4839	1.1404	0.0049	0.3619	0.0043	0.3174
134	51.98	0.00	0.0141	0.0065	0.0125	0.4584	0.8904	1.1547	0.0042	0.3698	0.0037	0.3203
135	52.17	0.01	0.0093	0.0065	0.0097	1.2132	1.8384	1.1695	0.0042	0.3750	0.0038	0.3207
136	52.33	0.01	0.0077	0.0065	0.0056	0.8675	1.1625	1.1744	0.0040	0.3765	0.0034	0.3206
137	52.50	0.01	0.0024	0.0061	0.0075	1.8000	2.2286	1.1657	0.0040	0.3724	0.0034	0.3195
138	52.66	0.01	0.0059	0.0065	0.0045	1.1639	0.8361	1.1791	0.0032	0.3776	0.0027	0.3203

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIA MISSILE TAILS EFFECTS DATA

TEST 7 PART 97 MACH 1.10 RXIC=6 1.7 PHI 0.0 CONF 8 180F23 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CAF2	CM2	CB2	XCPF2	YCPF2
139	52.82	0.00	0.0103	0.0051	0.0063	0.4953	0.6375	1.1790	0.0032	0.3797	0.0027	0.3220
140	53.00	0.01	0.0102	0.0054	0.0072	0.5283	0.7075	1.1669	0.0030	0.3825	0.0025	0.3217
141	53.15	-0.00	0.0083	0.0055	0.0041	0.6620	0.5000	1.1835	0.0027	0.3795	0.0023	0.3206
142	53.34	-0.00	0.0044	0.0055	0.0027	1.3502	0.6429	1.2019	0.0025	0.3842	0.0021	0.3197
143	53.51	0.01	0.0041	0.0048	0.0027	1.1935	0.6667	1.1979	0.0022	0.3841	0.0019	0.3207
144	53.67	0.00	0.0018	0.0046	0.0015	2.6316	0.6421	1.1930	0.0038	0.3798	0.0032	0.3183
145	53.84	-0.00	-0.0004	0.0051	0.0013	-13.2500	-3.2500	1.2040	0.0022	0.3849	0.0018	0.3197
146	53.99	-0.01	-0.0043	0.0048	-0.0007	-0.5208	0.0729	1.1902	0.0038	0.3761	0.0032	0.3160
147	54.15	-0.00	-0.0026	0.0048	0.0011	-1.6516	-0.4074	1.2062	0.0027	0.3816	0.0022	0.3164
148	54.34	0.00	-0.0137	0.0055	-0.0026	-0.4014	0.1479	1.1913	0.0020	0.3764	0.0017	0.3159
149	54.50	0.00	-0.0115	0.0051	-0.0018	-0.4454	0.1597	1.2123	0.0005	0.3843	0.0004	0.3176
150	54.65	0.00	-0.0158	0.0055	-0.0033	-0.3476	0.2073	1.2058	0.0003	0.3840	0.0002	0.3185
151	54.80	-0.01	-0.0203	0.0062	-0.0046	-0.3048	0.2286	1.2083	0.0013	0.3842	0.0010	0.3180
152	54.97	-0.02	-0.0251	0.0051	-0.0067	-0.1755	0.2285	1.1984	0.0010	0.3794	0.0008	0.3166
153	55.13	-0.03	-0.0336	0.0055	-0.0081	-0.1638	0.2385	1.2094	0.0003	0.3845	0.0002	0.3179
154	55.28	-0.04	-0.0402	0.0044	-0.0097	-0.1103	0.2422	1.2205	0.0	0.3877	0.0	0.3177
155	55.44	-0.05	-0.0464	0.0044	-0.0089	-0.1098	0.2196	1.2015	0.0006	0.3794	0.0006	0.3157
156	55.60	-0.03	-0.0380	0.0044	-0.0096	-0.1168	0.2513	1.1965	0.0010	0.3780	0.0008	0.3156
157	55.78	-0.03	-0.0357	0.0038	-0.0103	-0.1056	0.2892	1.2142	0.0	0.3831	0.0	0.3155
158	55.92	-0.03	-0.0422	0.0041	-0.0140	-0.0984	0.3318	1.2078	0.0005	0.3798	0.0004	0.3144
159	56.09	-0.03	-0.0241	0.0041	-0.0111	-0.1720	0.4600	1.2353	-0.0003	0.3911	-0.0002	0.3166
160	56.25	-0.03	-0.0345	0.0041	-0.0156	-0.1401	0.4945	1.2258	0.0005	0.3872	0.0004	0.3160
161	56.40	-0.03	-0.0237	0.0041	-0.0150	-0.1748	0.6301	1.2275	0.0010	0.3859	0.0008	0.3144
162	56.55	-0.05	-0.0154	0.0048	-0.0135	-0.2486	0.6965	1.2227	0.0	0.3851	0.0	0.3149
163	56.73	-0.05	-0.0192	0.0052	-0.0154	-0.2714	0.8340	1.2413	-0.0005	0.3940	-0.0004	0.3174
164	56.89	-0.05	-0.0105	0.0056	-0.0105	-0.3598	1.0000	1.2463	-0.0010	0.3964	-0.0008	0.3180
165	57.06	-0.06	-0.0148	0.0056	-0.0146	-0.3791	0.9477	1.2324	-0.0003	0.3894	-0.0002	0.3160
166	57.18	-0.07	-0.0079	0.0063	-0.0132	-0.7527	1.6707	1.2426	-0.0005	0.3923	-0.0004	0.3157
167	57.35	-0.03	0.0005	0.0063	-0.0064	13.0000	-13.2000	1.2251	-0.0005	0.3864	-0.0004	0.3154
168	57.48	-0.06	0.0056	0.0041	-0.0037	0.4343	-0.3836	1.1744	0.0025	0.3671	0.0021	0.3126
169	57.62	-0.06	0.0103	0.0041	-0.0015	0.2544	-0.1183	1.1720	0.0028	0.3656	0.0024	0.3115
170	57.77	-0.06	0.0117	0.0041	-0.0024	0.3554	-0.2066	1.1771	0.0008	0.3679	0.0007	0.3125
171	57.92	-0.02	0.0073	0.0061	-0.0047	0.8158	-0.6447	1.2050	-0.0005	0.3830	-0.0004	0.3178
172	58.05	-0.03	0.0073	0.0069	-0.0057	0.9474	-0.7703	1.2304	-0.0015	0.3912	-0.0013	0.3179
173	58.20	-0.01	0.0072	0.0067	-0.0047	0.9230	-0.6533	1.2254	-0.0020	0.3886	-0.0017	0.3172
174	58.35	-0.06	0.0027	0.0052	-0.0053	1.9286	-1.9643	1.1855	-0.0005	0.3735	-0.0004	0.3148
175	58.48	0.01	0.0052	0.0045	-0.0061	0.8704	-1.1667	1.1937	-0.0003	0.3749	-0.0002	0.3140
176	58.63	-0.01	0.0028	0.0063	-0.0062	2.2414	-2.2069	1.2267	-0.0025	0.3907	-0.0020	0.3185
177	58.68	-0.01	0.0025	0.0063	-0.0072	2.1667	-2.5000	1.2245	-0.0020	0.3871	-0.0017	0.3161
178	58.87	-0.03	0.0005	0.0060	-0.0065	12.4000	-13.4000	1.2143	-0.0015	0.3822	-0.0013	0.3147
179	58.87	-0.01	0.0051	0.0056	-0.0061	1.0943	-1.1887	1.2128	-0.0008	0.3824	-0.0006	0.3153
180	58.88	-0.01	0.0054	0.0064	-0.0065	0.8004	-0.2000	1.2077	-0.0011	0.3815	-0.0009	0.3162
181	56.69	-0.08	0.0005	0.0056	-0.0055	6.4444	-13.8889	1.2155	-0.0011	0.3842	-0.0009	0.3161
182	58.69	-0.06	0.0016	0.0052	-0.0065	7.2500	-11.0000	1.2104	-0.0011	0.3818	-0.0009	0.3154
183	58.68	-0.06	0.0045	0.0058	-0.0041	1.1372	-0.8235	1.2002	-0.0005	0.3778	-0.0004	0.3148

PARTIAL MISSILE TAILS EFFECTS DATA

TEST 7 PART 97 HALF 1.10 RXIC-E 1.7 PHI C.C BLOCF2.5 C.C L C DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.75	C.02	C.C757	9.9999	C.C233	9.9999	0.2930	-1.0419	-0.0176	-0.4413	0.0169	0.4236
2	-5.75	0.01	C.C72A	9.9999	C.C215	9.9999	0.3007	-1.0393	-0.0176	-0.4402	0.0169	0.4235
3	-5.75	0.02	C.C7C5	9.9999	C.C22E	9.9999	0.2955	-1.0367	-0.0179	-0.4390	0.0172	0.4235
4	-5.24	0.02	C.C633	9.9999	C.C2C4	9.9999	0.4482	-0.9815	-0.0201	-0.4080	0.C2C9	0.4244
5	-3.23	C.02	C.C5E2	9.9999	C.C332	9.9999	0.5911	-0.8359	-0.0229	-0.3566	0.0274	0.4268
6	-1.36	0.01	C.C515	9.9999	C.C26E	9.9999	0.5130	-0.6684	-0.0240	-0.2901	0.0359	0.4341
7	0.60	0.02	C.C472	9.9999	C.C2CE	9.9999	0.4361	-0.5140	-0.0235	-0.2196	0.0458	0.4273
8	2.52	0.02	C.C66C	9.9999	C.C223	9.9999	0.3377	-0.3399	-0.0196	-0.1456	0.0576	0.4283
9	4.41	C.02	C.C73C	9.9999	C.C1E3	9.9999	0.2510	-0.1828	-0.0096	-0.0761	0.0528	C.4164
10	6.35	0.02	C.C86C	9.9999	C.C18C	9.9999	0.2256	-0.0013	0.0042	-0.0074	-3.3846	5.9231
11	8.28	0.01	C.C8E1	9.9999	C.CC8E	9.9999	0.1009	0.1230	C.0136	0.0516	0.1133	C.4317
12	10.17	0.02	C.C94E	9.9999	C.CC84	9.9999	0.0eee	0.2591	C.0281	0.1368	0.1084	C.5281
13	12.14	0.02	C.C994	9.9999	C.CC42	9.9999	0.0427	0.4352	C.0356	0.2143	0.C818	C.4925
14	14.08	C.02	C.C928	9.9999	C.CCC1	9.9999	0.0010	0.5865	0.0388	0.2772	0.0661	0.4726
15	16.09	0.0C	C.C999	9.9999	0.CC15	9.9999	0.0155	0.7482	0.0418	0.3409	0.C558	0.4556
16	18.11	0.01	0.C92E	9.9999	-0.CC1E	9.9999	-0.0177	0.e582	0.0425	0.3897	0.0495	C.4541
17	20.07	0.01	0.0E11	9.9999	-0.CC35	9.9999	-0.0428	0.9507	0.0429	0.4243	0.0452	0.4463
18	22.05	C.01	0.1062	9.9999	C.CC30	9.9999	0.0262	1.0068	0.0417	0.4451	0.0414	0.4421
19	24.13	C.01	0.1C2E	9.9999	-C.CC1C	9.9999	-0.0095	1.0744	0.0395	0.4728	0.0367	C.4461
20	26.12	C.02	0.1133	9.9999	-0.CC1E	9.9999	-0.0162	1.1331	0.0367	0.4879	0.0324	0.4306
21	28.18	0.05	C.1314	9.9999	0.CC41	9.9999	0.0316	1.1766	0.0347	0.4964	0.C295	C.4228
22	28.43	0.06	0.1467	9.9999	C.C1e3	9.9999	0.1015	1.1852	0.0354	0.4938	0.C299	C.4166
23	28.42	0.07	C.1540	9.9999	C.CC9E	9.9999	0.0820	1.1767	0.0349	0.4909	0.C297	0.4172
24	28.75	C.06	0.1404	9.9999	C.CC4C	9.9999	0.0282	1.1897	0.0342	0.4957	0.0287	0.4166
25	29.02	0.04	0.1357	9.9999	C.CC3E	9.9999	0.0265	1.1989	0.0324	0.4985	0.0270	0.4158
26	29.36	C.06	0.15E6	9.9999	C.C1CE	9.9999	0.0680	1.1969	0.0324	0.4976	0.0270	0.4156
27	29.67	0.05	C.1537	9.9999	0.0113	9.9999	0.0734	1.1937	0.0331	0.4991	0.0277	0.4181
28	29.96	C.06	C.1447	9.9999	C.0052	9.9999	0.0360	1.1908	0.0339	0.4952	0.C284	C.4158
29	30.25	C.06	0.144E	9.9999	C.CC35	9.9999	0.0240	1.1883	0.0336	0.4922	0.0283	0.4162
30	30.54	C.07	C.1424	9.9999	C.CC65	9.9999	0.0481	1.1780	0.0341	0.4886	0.0289	0.4148
31	30.81	C.07	C.1505	9.9999	C.CC5C	9.9999	0.0383	1.1890	0.0312	0.4949	0.0262	0.4162
32	31.08	C.06	C.1354	9.9999	C.CC5C	9.9999	0.0063	1.1999	0.0287	0.5002	0.0239	0.4169
33	31.36	C.06	C.1395	9.9999	C.CCE4	9.9999	0.0600	1.2070	0.0272	0.5050	0.0225	C.4184
34	31.65	0.05	C.1354	9.9999	0.CC63	9.9999	0.0463	1.2021	0.0264	0.5037	0.0220	C.4190
35	31.93	C.05	C.1332	9.9999	C.CC61	9.9999	0.0457	1.2076	0.0252	0.5059	0.0209	0.4185
36	32.20	0.04	0.12EE	9.9999	C.CC48	9.9999	0.0375	1.2207	0.0234	0.5086	0.0192	0.4166
37	32.48	C.04	0.1332	9.9999	0.CCC1	9.9999	0.0457	1.2103	0.0247	0.5079	0.0204	0.4196
38	32.74	C.04	C.1265	9.9999	C.CC57	9.9999	0.0443	1.2041	0.0247	0.5062	C.C206	0.4218
39	33.00	C.02	C.135E	9.9999	C.C13E	9.9999	0.0986	1.2158	0.0230	0.5062	0.C189	0.4180
40	33.28	0.04	0.1240	9.9999	C.CC3E	9.9999	0.0486	1.2213	0.0212	0.5084	0.0174	C.4163
41	33.53	C.02	0.1281	9.9999	C.CC65	9.9999	0.0513	1.2255	0.0207	0.5036	0.0169	0.4169
42	33.78	0.01	0.1284	9.9999	C.CC6E	9.9999	0.0511	1.2333	0.0200	0.5069	0.0162	0.4110
43	34.04	C.02	C.1352	9.9999	C.CC5C	9.9999	0.0664	1.2283	0.0198	0.5028	0.C161	C.4093
44	34.28	0.00	0.1164	9.9999	-0.CC11	9.9999	-0.0096	1.2313	0.0182	0.5076	0.0148	0.4123
45	34.53	C.00	C.1171	9.9999	C.CC21	9.9999	0.0161	1.2390	0.0178	0.5091	0.0143	0.4109
46	34.81	0.01	0.1165	9.9999	0.CC17	9.9999	0.0154	1.2417	0.0173	0.5093	0.C139	C.4101

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

PARTIAL MISSILE TAILS EFFECTS DATA

TEST 7 | PART 97 | MACH NO 1.10 | RNIG=E 1.7 | PHI 0.0 | CONF Blau F23 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	35.05	0.01	0.1239	9.9999	0.0044	9.9999	0.0358	1.2469	0.0166	0.5115	0.0139	0.4102
48	35.27	0.02	0.1148	9.9999	0.0055	9.9999	0.0480	1.2421	0.0158	0.5082	0.0127	0.4092
49	35.54	0.01	0.1260	9.9999	0.0051	9.9999	0.0720	1.2473	0.0153	0.5114	0.0123	0.4100
50	35.79	0.01	0.1215	9.9999	0.0056	9.9999	0.0796	1.2412	0.0155	0.5096	0.0125	0.4106
51	36.00	0.02	0.1167	9.9999	0.0064	9.9999	0.0715	1.2415	0.0141	0.5096	0.0113	0.4105
52	36.23	0.02	0.1257	9.9999	0.0126	9.9999	0.1005	1.2419	0.0148	0.5077	0.0119	0.4090
53	36.48	0.02	0.1212	9.9999	0.0114	9.9999	0.0935	1.2415	0.0143	0.5106	0.0115	0.4113
54	36.72	0.02	0.1234	9.9999	0.0133	9.9999	0.1079	1.2221	0.0098	0.4984	0.0081	0.4078
55	36.96	0.02	0.1053	9.9999	0.0083	9.9999	0.0788	1.2269	0.0138	0.5058	0.0112	0.4116
56	37.21	0.02	0.1119	9.9999	0.0116	9.9999	0.1034	1.2177	0.0074	0.4969	0.0061	0.4081
57	37.44	0.01	0.1075	9.9999	0.0085	9.9999	0.0790	1.2192	0.0116	0.5002	0.0095	0.4103
58	37.68	0.01	0.1051	9.9999	0.0116	9.9999	0.1047	1.2269	0.0114	0.5045	0.0093	0.4112
59	37.92	0.01	0.1051	9.9999	0.0115	9.9999	0.1129	1.2317	0.0124	0.5059	0.0100	0.4107
60	38.15	0.01	0.1141	9.9999	0.0144	9.9999	0.1260	1.2074	0.0074	0.4933	0.0062	0.4086
61	38.38	0.01	0.1050	9.9999	0.0148	9.9999	0.1368	1.2316	0.0133	0.5057	0.0108	0.4135
62	38.63	0.01	0.1054	9.9999	0.0136	9.9999	0.1446	1.2156	0.0119	0.5006	0.0098	0.4118
63	38.86	0.01	0.1048	9.9999	0.0154	9.9999	0.1473	1.2082	0.0108	0.4961	0.0089	0.4106
64	39.09	0.02	0.1053	9.9999	0.0167	9.9999	0.1527	1.2112	0.0089	0.4972	0.0073	0.4105
65	39.30	0.01	0.1026	9.9999	0.0152	9.9999	0.1486	1.2128	0.0133	0.5042	0.0110	0.4158
66	39.54	0.01	0.1063	9.9999	0.0139	9.9999	0.1327	1.2113	0.0089	0.4990	0.0073	0.4120
67	39.74	0.01	0.1072	9.9999	0.0135	9.9999	0.1296	1.1958	0.0098	0.4942	0.0082	0.4133
68	39.97	-0.00	0.1054	9.9999	0.0156	9.9999	0.1446	1.2057	0.0108	0.4969	0.0090	0.4121
69	40.18	0.01	0.1071	9.9999	0.0148	9.9999	0.1378	1.1961	0.0079	0.4922	0.0066	0.4115
70	40.39	-0.01	0.0968	9.9999	0.0164	9.9999	0.1082	1.1914	0.0064	0.4879	0.0053	0.4095
71	40.60	0.01	0.1026	9.9999	0.0146	9.9999	0.1402	1.2012	0.0084	0.4943	0.0070	0.4117
72	40.79	0.00	0.1055	9.9999	0.0140	9.9999	0.1278	1.2061	0.0094	0.4987	0.0078	0.4135
73	41.01	-0.01	0.1004	9.9999	0.0115	9.9999	0.1143	1.1816	0.0045	0.4852	0.0042	0.4107
74	41.23	0.01	0.1140	9.9999	0.0162	9.9999	0.1423	1.2108	0.0108	0.4992	0.0089	0.4123
75	41.41	-0.00	0.1026	9.9999	0.0135	9.9999	0.1317	1.2039	0.0076	0.4937	0.0063	0.4101
76	41.64	0.01	0.0914	9.9999	0.0081	9.9999	0.0887	1.1721	0.0019	0.4795	0.0016	0.4091
77	41.84	0.01	0.1071	9.9999	0.0148	9.9999	0.1378	1.1870	0.0035	0.4836	0.0029	0.4074
78	42.04	0.01	0.1071	9.9999	0.0165	9.9999	0.1541	1.1872	0.0027	0.4836	0.0023	0.4073
79	42.24	-0.00	0.0981	9.9999	0.0123	9.9999	0.1249	1.2020	0.0044	0.4876	0.0037	0.4057
80	42.43	-0.01	0.1116	9.9999	0.0165	9.9999	0.1513	1.1843	0.0035	0.4749	0.0029	0.4010
81	42.62	-0.01	0.1048	9.9999	0.0154	9.9999	0.1473	1.1965	0.0037	0.4842	0.0031	0.4053
82	42.81	0.00	0.1003	9.9999	0.0133	9.9999	0.1327	1.1872	0.0027	0.4807	0.0023	0.4049
83	43.01	-0.01	0.1048	9.9999	0.0154	9.9999	0.1473	1.1869	0.0035	0.4798	0.0029	0.4043
84	43.18	-0.01	0.1071	9.9999	0.0165	9.9999	0.1541	1.1820	0.0027	0.4756	0.0023	0.4024
85	43.36	-0.01	0.1071	9.9999	0.0165	9.9999	0.1541	1.1760	0.0037	0.4723	0.0031	0.4023
86	43.53	-0.00	0.1024	9.9999	0.0175	9.9999	0.1753	1.1970	0.0037	0.4806	0.0031	0.4015
87	43.72	-0.01	0.1047	9.9999	0.0181	9.9999	0.1733	1.1662	0.0040	0.4666	0.0034	0.3998
88	43.91	-0.01	0.0912	9.9999	0.0165	9.9999	0.1481	1.1660	0.0049	0.4680	0.0042	0.4013
89	44.10	0.00	0.1024	9.9999	0.0175	9.9999	0.1753	1.1842	0.0035	0.4710	0.0029	0.3978
90	44.28	0.00	0.0934	9.9999	0.0146	9.9999	0.1560	1.1944	0.0032	0.4738	0.0027	0.3966
91	44.45	-0.01	0.1023	9.9999	0.0157	9.9999	0.1925	1.1865	0.0041	0.4684	0.0035	0.3968
92	44.62	-0.01	0.0911	9.9999	0.0144	9.9999	0.1578	1.1891	0.0040	0.4696	0.0033	0.3949

TEST 7 PART PACK RATIO=6 PHI CONF C 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

FCINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
93	46.81	-0.00	0.0533	9.9999	0.C163	9.9999	0.1748	1.1816	0.0035	0.4671	0.0029	0.3953
94	45.00	-0.02	0.0572	9.9999	0.C17e	9.9999	0.1795	1.1713	0.0035	0.4598	0.0030	0.3925
95	45.20	-0.02	0.1052	9.9999	0.C2C3	9.9999	0.1855	1.1507	0.0040	0.4488	0.0034	0.3900
96	45.37	-0.03	0.0533	9.9999	0.C154	9.9999	0.1655	1.1402	0.0049	0.4443	0.0043	0.3897
97	45.53	-0.01	0.0534	9.9999	0.C163	9.9999	0.1746	1.1594	0.0035	0.4516	0.0030	0.3899
98	45.72	-0.02	0.0575	9.9999	0.C154	9.9999	0.1980	1.1525	0.0035	0.4485	0.0030	0.3891
99	45.90	-0.02	0.0534	9.9999	0.C15C	9.9999	0.2035	1.1534	0.0040	0.4489	0.0034	0.3892
100	46.06	-0.02	0.0558	9.9999	0.C2C2	9.9999	0.2107	1.1494	0.0030	0.4489	0.0026	0.3905
101	46.24	-0.02	0.1028	9.9999	0.C215	9.9999	0.2098	1.1287	0.0040	0.4417	0.0035	0.3913
102	46.42	-0.01	0.0EEE	9.9999	0.C177	9.9999	0.2033	1.1575	0.0010	0.4518	0.0008	0.3904
103	46.60	-0.02	0.0E45	9.9999	0.C193	9.9999	0.2283	1.1324	0.0025	0.4448	0.0022	0.3928
104	46.78	-0.02	0.0514	9.9999	0.C15E	9.9999	0.2165	1.1326	0.0014	0.4437	0.0013	0.3918
105	46.94	-0.02	0.053E	9.9999	0.C227	9.9999	0.2423	1.1272	0.0027	0.4435	0.0024	0.3934
106	47.12	-0.01	0.0537	9.9999	0.C227	9.9999	0.2420	1.1233	0.0014	0.4453	0.0013	0.3944
107	47.31	-0.02	0.0E4E	9.9999	0.C175	9.9999	0.2064	1.1339	0.0003	0.4465	0.0003	0.3941
108	47.47	-0.02	0.0537	9.9999	0.C227	9.9999	0.2420	1.1442	0.0	0.4515	0.0	0.3946
109	47.63	-0.01	0.0EEE	9.9999	0.C155	9.9999	0.2244	1.1287	0.0005	0.4456	0.0004	0.3948
110	47.81	-0.02	0.1CC5	9.9999	0.C241	9.9999	0.2499	1.1546	0.0	0.4570	0.0	0.3958
111	48.01	-0.02	0.053E	9.9999	0.C227	9.9999	0.2423	1.1800	-0.0008	0.4682	-0.0007	0.3967
112	48.18	-0.01	0.0E4E	9.9999	0.C183	9.9999	0.2166	1.1651	-0.0010	0.4695	-0.0008	0.3962
113	48.33	-0.00	0.0E4E	9.9999	0.C183	9.9999	0.2166	1.1802	-0.0017	0.4681	-0.0015	0.3966
114	48.53	-0.01	0.0583	9.9999	0.C231	9.9999	0.2345	1.1629	-0.0003	0.4625	-0.0002	0.3977
115	48.71	-0.01	0.0515	9.9999	0.C207	9.9999	0.2268	1.1636	-0.0008	0.4634	-0.0007	0.3985
116	48.87	0.0	0.0EEC	9.9999	0.C18C	9.9999	0.2256	1.1267	0.0005	0.4485	0.0004	0.3980
117	49.05	-0.00	0.053E	9.9999	0.C227	9.9999	0.2423	1.1329	0.0010	0.4543	0.0009	0.4010
118	49.20	-0.00	0.0915	9.9999	0.C155	9.9999	0.2173	1.1026	0.0020	0.4381	0.0018	0.3974
119	49.37	-0.01	0.C5E2	9.9999	0.C212	9.9999	0.2161	1.0912	0.0020	0.4397	0.0015	0.4036
120	49.55	0.00	0.0E45	9.9999	0.C1C3	9.9999	0.2169	1.0704	0.0025	0.4287	0.0023	0.4005
121	49.72	0.00	0.0E4Z	9.9999	0.C21C	9.9999	0.2497	1.0692	0.0025	0.4282	0.0023	0.4005
122	49.89	0.00	0.C75E	9.9999	0.C2CE	9.9999	0.2588	1.0389	0.0040	0.4188	0.0038	0.4031
123	50.09	-0.01	0.0757	9.9999	0.C15E	9.9999	0.2482	1.0321	0.0054	0.4151	0.0052	0.4022
124	50.26	-0.00	0.C775	9.9999	0.C187	9.9999	0.2416	1.0504	0.0037	0.4191	0.0035	0.3990
125	50.42	0.00	0.0725	9.9999	0.C175	9.9999	0.2394	1.0147	0.0062	0.4027	0.0061	0.3965
126	50.60	0.01	0.0765	9.9999	0.0173	9.9999	0.2449	0.9504	0.0119	0.3753	0.0125	0.3949
127	50.79	0.01	0.0757	9.9999	0.C18E	9.9999	0.2361	0.9609	0.0109	0.3798	0.0113	0.3952
128	50.95	0.01	0.0EE7	9.9999	0.C222	9.9999	0.2503	0.9727	0.0101	0.3821	0.0104	0.3928
129	51.12	0.01	0.0E46	9.9999	0.C23E	9.9999	0.2813	0.9394	0.0133	0.3679	0.0142	0.3916
130	51.28	0.02	0.0E05	9.9999	0.C17E	9.9999	0.2694	0.9466	0.0146	0.3675	0.0154	0.3882
131	51.45	-0.00	0.0704	9.9999	0.C15C	9.9999	0.2699	0.9620	0.0138	0.3779	0.0143	0.3929
132	51.64	0.00	0.0705	9.9999	0.0181	9.9999	0.2572	0.9650	0.0149	0.3776	0.0154	0.3913
133	51.81	0.01	0.0705	9.9999	0.C19C	9.9999	0.2695	0.9727	0.0146	0.3762	0.0150	0.3868
134	51.98	0.00	0.0704	9.9999	0.C19C	9.9999	0.2699	0.9644	0.0153	0.3718	0.0159	0.3855
135	52.17	0.01	0.0667	9.9999	0.C24C	9.9999	0.2709	0.9719	0.0158	0.3752	0.0163	0.3861
136	52.33	0.01	0.0755	9.9999	0.C215	9.9999	0.2706	0.9742	0.0163	0.3697	0.0167	0.3795
137	52.50	0.01	0.0749	9.9999	0.C211	9.9999	0.2822	0.9862	0.0151	0.3758	0.0153	0.3811
138	52.66	0.01	0.0755	9.9999	0.0224	9.9999	0.2816	0.9843	0.0158	0.3741	0.0161	0.3801

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

PARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 97 MACH 1.10 RATIO=C 1.7 PHI 0.C BLOCF23 CONF C.C L DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
139	52.82	0.00	0.0817	9.9999	0.0244	9.9999	0.2987	0.9711	0.0168	0.3675	0.0173	0.3784
140	53.00	0.01	0.0727	9.9999	0.0261	9.9999	0.2762	0.9704	0.0166	0.3688	0.0170	0.3777
141	53.15	-0.00	0.0751	9.9999	0.0212	9.9999	0.2826	0.9781	0.0161	0.3722	0.0165	0.3808
142	53.34	-0.01	0.0775	9.9999	0.0205	9.9999	0.2890	0.9843	0.0153	0.3757	0.0156	0.3817
143	53.51	0.01	0.0767	9.9999	0.0173	9.9999	0.2862	0.9847	0.0164	0.3706	0.0167	0.3762
144	53.67	0.00	0.0819	9.9999	0.0244	9.9999	0.2960	0.9898	0.0161	0.3704	0.0164	0.3761
145	53.84	-0.00	0.0821	9.9999	0.0235	9.9999	0.2867	0.9988	0.0149	0.3773	0.0145	0.3777
146	53.99	-0.01	0.0758	9.9999	0.0234	9.9999	0.2938	0.9969	0.0154	0.3736	0.0155	0.3748
147	54.19	-0.00	0.0830	9.9999	0.0218	9.9999	0.2702	0.9981	0.0144	0.3749	0.0144	0.3758
148	54.34	0.01	0.0844	9.9999	0.0247	9.9999	0.2926	1.0056	0.0151	0.3754	0.0151	0.3733
149	54.50	0.00	0.0820	9.9999	0.0234	9.9999	0.2931	1.0145	0.0139	0.3763	0.0137	0.3709
150	54.65	0.00	0.0801	9.9999	0.0234	9.9999	0.2928	1.0048	0.0145	0.3701	0.0144	0.3684
151	54.80	-0.01	0.0824	9.9999	0.0228	9.9999	0.2763	1.0152	0.0137	0.3718	0.0135	0.3662
152	54.97	-0.02	0.0865	9.9999	0.0246	9.9999	0.2803	1.0202	0.0142	0.3693	0.0139	0.3626
153	55.13	-0.03	0.0756	9.9999	0.0195	9.9999	0.2577	1.0212	0.0137	0.3724	0.0134	0.3647
154	55.28	-0.02	0.0779	9.9999	0.0225	9.9999	0.2667	1.0324	0.0135	0.3706	0.0131	0.3590
155	55.44	-0.03	0.0845	9.9999	0.0230	9.9999	0.2705	1.0255	0.0140	0.3704	0.0136	0.3612
156	55.60	-0.03	0.0804	9.9999	0.0217	9.9999	0.2701	1.0439	0.0127	0.3755	0.0122	0.3597
157	55.76	-0.03	0.0828	9.9999	0.0208	9.9999	0.2587	1.0279	0.0132	0.3702	0.0125	0.3602
158	55.92	-0.03	0.0829	9.9999	0.0224	9.9999	0.2759	1.0314	0.0127	0.3707	0.0123	0.3594
159	56.09	-0.03	0.0783	9.9999	0.0185	9.9999	0.2414	1.0394	0.0121	0.3741	0.0116	0.3595
160	56.25	-0.03	0.0852	9.9999	0.0222	9.9999	0.2605	1.0366	0.0130	0.3711	0.0126	0.3580
161	56.40	-0.03	0.0831	9.9999	0.0220	9.9999	0.2648	1.0333	0.0130	0.3714	0.0126	0.3594
162	56.55	-0.05	0.0716	9.9999	0.0178	9.9999	0.2446	1.0362	0.0103	0.3730	0.0100	0.3600
163	56.73	-0.05	0.0764	9.9999	0.0157	9.9999	0.2576	1.0609	0.0093	0.3807	0.0087	0.3585
164	56.89	-0.05	0.0717	9.9999	0.0194	9.9999	0.2705	1.0902	0.0066	0.3914	0.0060	0.3590
165	57.06	-0.06	0.0718	9.9999	0.0184	9.9999	0.2567	1.0861	0.0066	0.3923	0.0060	0.3612
166	57.18	-0.07	0.0716	9.9999	0.0194	9.9999	0.2702	1.0914	0.0061	0.3927	0.0056	0.3598
167	57.35	-0.03	0.0715	9.9999	0.0204	9.9999	0.2832	1.0990	0.0061	0.3940	0.0055	0.3585
168	57.48	-0.06	0.0715	9.9999	0.0212	9.9999	0.2953	1.1253	0.0050	0.4016	0.0045	0.3569
169	57.62	-0.06	0.0767	9.9999	0.0218	9.9999	0.2818	1.1302	0.0058	0.4037	0.0051	0.3572
170	57.77	-0.06	0.0811	9.9999	0.0275	9.9999	0.3389	1.1491	0.0038	0.4098	0.0033	0.3566
171	57.92	-0.02	0.0720	9.9999	0.0250	9.9999	0.3472	1.1305	0.0041	0.4024	0.0036	0.3555
172	58.05	-0.03	0.0766	9.9999	0.0272	9.9999	0.3552	1.1119	0.0051	0.3971	0.0046	0.3572
173	58.20	-0.01	0.0650	9.9999	0.0217	9.9999	0.3338	1.1253	0.0041	0.4020	0.0036	0.3572
174	58.33	-0.04	0.0767	9.9999	0.0272	9.9999	0.3547	1.1238	0.0041	0.4022	0.0036	0.3579
175	58.48	0.01	0.0698	9.9999	0.0267	9.9999	0.3831	1.1389	0.0036	0.4087	0.0031	0.3577
176	58.63	-0.01	0.0651	9.9999	0.0255	9.9999	0.3911	1.1105	0.0041	0.3990	0.0036	0.3563
177	58.68	-0.01	0.0651	9.9999	0.0283	9.9999	0.4341	1.1210	0.0036	0.4004	0.0032	0.3572
178	58.87	-0.03	0.0698	9.9999	0.0314	9.9999	0.4495	1.1207	0.0046	0.4004	0.0041	0.3573
179	58.87	-0.01	0.0628	9.9999	0.0281	9.9999	0.4470	1.1274	0.0033	0.4031	0.0029	0.3578
180	58.68	-0.01	0.0651	9.9999	0.0252	9.9999	0.4489	1.1221	0.0033	0.4007	0.0029	0.3571
181	58.69	-0.06	0.0582	9.9999	0.0278	9.9999	0.4776	1.1300	0.0036	0.4060	0.0032	0.3593
182	58.69	-0.06	0.0585	9.9999	0.0286	9.9999	0.4454	1.1272	0.0039	0.4028	0.0034	0.3574
183	58.68	-0.06	0.0582	9.9999	0.0287	9.9999	0.4925	1.1354	0.0031	0.4063	0.0027	0.3579

MARTIN MISSILE TAILS EFFECTS DATA

TEST # 98 PART 0.80 MACH 1.7 RX10-6 0.0 PHI 0.0 CONF 81604-11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLA	CLL	CA	CAB	CAF	XCP
1	0.01	0.01	-0.4684	2.2599	0.0242	-0.0855	0.0015	0.2873	0.0872	0.2001	-4.8154
2	0.01	-0.06	-0.5035	2.2677	0.0076	-0.0566	0.0014	0.2873	0.0867	0.2006	-4.5041
3	-0.09	0.0	-0.4753	2.2100	0.0094	-0.0717	0.0015	0.2960	0.0882	0.2077	-4.6452
4	0.04	0.00	-0.3645	1.9943	0.0224	-0.1098	0.0016	0.2929	0.0882	0.2042	-5.3344
5	2.52	0.06	-0.1126	1.4081	0.0221	-0.1096	0.0023	0.2746	0.0915	0.1831	-12.5102
6	4.97	0.06	0.1422	0.9426	0.0383	-0.0596	0.0030	0.2596	0.0978	0.1619	8.6260
7	6.30	0.00	0.3116	0.6666	0.0642	-0.1756	0.0037	0.2518	0.1060	0.1459	2.1459
8	8.21	0.01	0.5530	0.3044	0.0365	-0.1114	0.0044	0.2356	0.1150	0.1207	0.5504
9	10.06	0.06	0.8212	-0.1157	0.0227	-0.0853	0.0051	0.2178	0.1237	0.0972	-0.1405
10	11.93	0.06	1.1132	-0.6247	0.0366	-0.0749	0.0060	0.1986	0.1298	0.0688	-0.5612
11	13.87	-0.01	1.4341	-1.2113	-0.0778	0.0600	0.0065	0.1792	0.1346	0.0356	-0.8466
12	15.71	-0.00	1.7767	-1.8353	-0.0854	0.2241	0.0141	0.1478	0.1422	0.0054	-1.0352
13	17.65	-0.01	2.1318	-2.4946	-0.1411	0.3562	0.0292	0.1266	0.1551	-0.0285	-1.1699
14	19.53	-0.01	2.4702	-3.0554	-0.1595	0.4356	0.0378	0.1327	0.1768	-0.0461	-1.2385
15	21.49	-0.02	2.8078	-3.7823	-0.3620	0.8577	0.0375	0.1111	0.2008	-0.0897	-1.3097
16	23.47	-0.02	3.2370	-4.3516	-0.3735	1.0088	-0.0217	0.1001	0.2251	-0.1251	-1.3567
17	25.38	-0.01	3.6226	-4.7701	-0.1558	0.3554	-0.0330	0.0529	0.2280	-0.1751	-1.3168
18	27.34	0.01	3.9627	-4.8363	0.0703	0.0001	-0.0229	0.0248	0.2305	-0.2057	-1.1705
19	29.27	0.03	4.2576	-4.4543	0.3814	-0.4114	0.0166	-0.0094	0.2419	-0.2513	-1.0462
20	31.16	0.04	4.6438	-4.1781	0.6356	-0.6507	0.0637	-0.0059	0.2784	-0.2839	-0.8997
21	33.10	0.07	5.1EEC	-3.8933	0.8952	-0.5078	0.0213	0.0512	0.3471	-0.2959	-0.7534
22	33.97	0.07	5.2730	-3.7162	0.9627	-0.4505	0.0142	0.0595	0.3742	-0.3147	-0.7048
23	34.13	0.07	5.3352	-3.6547	0.9633	-0.4768	0.0221	0.0598	0.3788	-0.3190	-0.6850
24	34.37	0.07	5.4374	-3.6555	0.9390	-0.3460	0.0220	0.0501	0.3878	-0.3377	-0.6797
25	34.65	0.08	5.5105	-3.6562	1.0507	-0.3558	-0.0375	0.0658	0.3987	-0.3329	-0.6638
26	34.88	0.09	5.6064	-3.8224	1.1754	-0.4723	0.0152	0.0715	0.4106	-0.3391	-0.6818
27	35.11	0.09	5.6746	-3.8962	1.1734	-0.5625	0.0159	0.0734	0.4183	-0.3449	-0.6855
28	35.30	0.10	5.8165	-3.8713	1.2747	-0.4955	0.0160	0.0789	0.4307	-0.3518	-0.6858
29	35.59	0.10	5.8356	-3.9563	1.2564	-0.4970	0.0235	0.0813	0.4367	-0.3694	-0.6782
30	35.84	0.08	5.9EC7	-3.7026	1.1C34	-0.4673	0.0026	0.0756	0.4417	-0.3661	-0.6212
31	36.06	0.08	6.0069	-3.8815	1.0075	-0.4586	0.0095	0.0705	0.4466	-0.3761	-0.6129
32	36.24	0.07	6.0352	-3.8123	1.0267	-0.7189	0.0187	0.0669	0.4457	-0.3768	-0.5981
33	36.53	0.07	6.1725	-3.7654	0.9391	-0.5557	0.0186	0.0710	0.4501	-0.3791	-0.6107
34	36.77	0.07	6.2201	-3.7316	0.9069	-0.6359	0.0207	0.0730	0.4564	-0.3839	-0.5999
35	37.00	0.08	6.3679	-3.8801	0.9584	-0.3282	0.0108	0.0611	0.4637	-0.4026	-0.6074
36	37.24	0.08	6.4576	-3.8905	1.0104	-0.4068	0.0116	0.0670	0.4696	-0.3976	-0.5987
37	37.48	0.09	6.6502	-4.0274	0.9687	0.1127	-0.0125	0.0666	0.4714	-0.4048	-0.6056
38	37.71	0.09	6.7156	-3.9862	1.0025	0.0025	0.0107	0.0651	0.4756	-0.4107	-0.5936
39	37.94	0.08	6.8063	-4.2275	0.9643	0.5807	-0.0265	0.0763	0.4842	-0.4078	-0.6119
40	38.18	0.09	7.0331	-4.2861	1.0444	0.5862	-0.0283	0.0570	0.4842	-0.4271	-0.6054
41	38.42	0.09	7.2157	-4.4652	0.9213	1.3067	-0.0529	0.0511	0.4872	-0.4360	-0.6188
42	38.65	0.08	7.3331	-4.5906	0.7837	1.4247	-0.0676	0.0516	0.4920	-0.4403	-0.6258
43	38.88	0.10	7.3958	-4.5116	0.9735	1.0717	-0.0664	0.0523	0.4979	-0.4455	-0.6057
44	39.09	0.08	7.5329	-4.6721	0.7666	1.7333	-0.0905	0.0600	0.5056	-0.4455	-0.6202
45	39.31	0.09	7.6165	-4.6056	0.9358	1.6275	-0.0825	0.0606	0.5114	-0.4507	-0.6051
46	39.52	0.09	7.7076	-4.6626	0.8858	1.6157	-0.0744	0.0481	0.5104	-0.4622	-0.6049

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST # 98 MACH 0.80 RX10-6 1.7 PHI 0.0 CONF 11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	39.72	0.10	7.7446	-4.5431	1.0762	1.2896	-0.0306	0.0644	0.5202	-0.4557	-0.5867
48	39.92	0.09	7.7175	-4.3736	1.0300	0.7141	-0.0257	0.0530	0.5158	-0.4627	-0.5667
49	40.14	0.10	7.7976	-4.3633	1.1245	0.6526	-0.0029	0.0595	0.5186	-0.4590	-0.5556
50	40.33	0.10	7.8505	-4.3557	1.1940	0.2746	-0.0010	0.0460	0.5231	-0.4770	-0.5525
51	40.54	0.09	7.9024	-4.3666	1.2081	0.1443	0.0145	0.0469	0.5269	-0.4799	-0.5526
52	40.75	0.08	7.8615	-4.1301	1.0021	0.4022	0.0140	0.0482	0.5254	-0.4771	-0.5240
53	40.94	0.10	8.1288	-4.3563	1.2649	0.4077	0.0143	0.0548	0.5259	-0.4710	-0.5363
54	41.16	0.09	8.0815	-4.1776	1.1251	0.1258	0.0307	0.0526	0.5291	-0.4764	-0.5169
55	41.36	0.10	8.2812	-4.3711	1.1855	0.1455	0.0311	0.0498	0.5331	-0.4833	-0.5251
56	41.56	0.11	8.2956	-4.2416	1.2615	0.3694	0.0226	0.0466	0.5320	-0.4852	-0.5111
57	41.76	0.10	8.4211	-4.3166	1.2467	0.3837	0.0233	0.0521	0.5388	-0.4867	-0.5126
58	41.96	0.10	8.5625	-4.5242	1.1874	0.5532	0.0082	0.0598	0.5395	-0.4997	-0.5284
59	42.17	0.11	8.7838	-4.6458	1.3755	0.5360	0.0234	0.0273	0.5447	-0.5174	-0.5301
60	42.35	0.11	8.7532	-4.5675	1.4132	0.4537	0.0165	0.0290	0.5440	-0.5150	-0.5194
61	42.54	0.11	8.8883	-4.6225	1.3036	0.7691	0.0009	0.0418	0.5497	-0.5079	-0.5214
62	42.72	0.10	8.9367	-4.6742	1.3074	0.8451	0.0005	0.0454	0.5569	-0.5115	-0.5219
63	42.90	0.10	9.0292	-4.8475	1.2385	0.8224	-0.0132	0.0303	0.5590	-0.5287	-0.5147
64	43.08	0.09	9.0648	-4.7252	1.2688	0.8505	-0.0057	0.0322	0.5604	-0.5282	-0.5201
65	43.27	0.09	9.2182	-4.7663	1.2845	0.9030	-0.0128	0.0297	0.5639	-0.5342	-0.5171
66	43.46	0.10	9.2745	-4.8265	1.2584	0.9937	-0.0129	0.0313	0.5697	-0.5384	-0.5204
67	43.66	0.12	9.5232	-5.1165	1.4124	1.3294	-0.0065	0.0245	0.5737	-0.5492	-0.5373
68	43.81	0.12	9.5386	-5.0047	1.4607	0.6811	-0.0119	0.0215	0.5750	-0.5535	-0.5247
69	44.00	0.11	9.6461	-5.1066	1.3477	1.0188	-0.0045	0.0253	0.5787	-0.5534	-0.5250
70	44.21	0.10	9.7354	-5.1938	1.3362	0.8420	-0.0034	0.0155	0.5719	-0.5564	-0.5335
71	44.36	0.09	9.7382	-5.1061	1.3528	0.7364	0.0043	0.0142	0.5762	-0.5620	-0.5243
72	44.56	0.11	9.8733	-5.1641	1.4475	1.0256	0.0035	0.0210	0.5798	-0.5588	-0.5230
73	44.75	0.09	9.9248	-5.2532	1.3005	1.1063	-0.0109	0.0043	0.5779	-0.5736	-0.5253
74	44.93	0.10	10.0271	-5.2668	1.3335	1.2007	-0.0109	0.0079	0.5809	-0.5730	-0.5253
75	45.09	0.09	10.0546	-5.3882	1.3364	1.2507	-0.0182	0.0173	0.5833	-0.5660	-0.5338
76	45.28	0.10	10.1223	-5.3427	1.2805	1.4287	-0.0186	0.0043	0.5838	-0.5793	-0.5278
77	45.48	0.08	10.2378	-5.4258	1.2189	1.4085	-0.0252	0.0060	0.5856	-0.5796	-0.5304
78	45.65	0.09	10.3560	-5.6072	1.2511	1.6140	-0.0402	-0.0015	0.5865	-0.5880	-0.5393
79	45.81	0.09	10.4840	-5.5892	1.2172	1.7169	-0.0545	-0.0083	0.5825	-0.5908	-0.5331
80	45.99	0.09	10.5516	-5.7301	1.2305	2.0026	-0.0483	-0.0123	0.5853	-0.5976	-0.5431
81	46.16	0.08	10.5747	-5.5141	0.9505	1.8000	-0.0539	-0.0109	0.5914	-0.6023	-0.5214
82	46.35	0.08	10.6682	-5.6729	1.0505	2.0682	-0.0626	-0.0003	0.5947	-0.5950	-0.5368
83	46.51	0.08	10.7903	-5.7523	1.0326	2.3185	-0.0699	-0.0148	0.5947	-0.6099	-0.5331
84	46.68	0.09	10.7372	-5.7133	1.0581	2.2496	-0.0697	-0.0146	0.5959	-0.6105	-0.5321
85	46.87	0.08	10.8055	-5.6955	0.9157	2.4935	-0.0843	-0.0198	0.5981	-0.6199	-0.5275
86	47.06	0.07	10.8163	-5.7054	0.8675	2.4484	-0.0840	-0.0175	0.5962	-0.6137	-0.5275
87	47.20	0.07	10.8517	-5.7105	0.8458	2.6239	-0.0915	-0.0244	0.5999	-0.6243	-0.5243
88	47.36	0.07	10.9055	-5.8056	0.7535	2.8337	-0.0966	-0.0127	0.6006	-0.6135	-0.5195
89	47.55	0.08	10.9035	-5.8745	0.8678	2.7395	-0.0913	-0.0180	0.5980	-0.6160	-0.5178
90	47.73	0.06	11.0370	-5.8544	0.8566	2.8150	-0.1056	-0.0215	0.6036	-0.6251	-0.5159
91	47.88	0.06	11.0216	-5.7465	0.8359	2.7918	-0.0984	-0.0207	0.5958	-0.6205	-0.5195
92	48.06	0.06	11.1821	-5.7878	0.8046	2.9751	-0.0988	-0.0372	0.6064	-0.6436	-0.5176

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 98 MACH 0.80 REIC-6 1.7 PHI 0.0 CONF 81BCF11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
93	48.24	0.04	11.1086	-5.3756	0.4612	2.8826	-0.1051	-0.0524	0.6032	-0.6556	-0.4839
94	48.39	0.04	11.0653	-5.3762	0.4503	2.9706	-0.1127	-0.0463	0.6009	-0.6472	-0.4648
95	48.56	0.01	10.9173	-4.7813	0.1089	2.8782	-0.1045	-0.0407	0.5840	-0.6247	-0.4380
96	48.70	-0.00	10.7650	-4.3287	-0.0176	2.5054	-0.0813	-0.0339	0.5504	-0.6443	-0.4020
97	48.86	-0.00	10.7558	-4.1611	-0.0363	2.3636	-0.0806	-0.1078	0.5270	-0.6347	-0.3867
98	49.05	-0.01	10.8365	-4.3065	-0.2756	2.8526	-0.1036	-0.1021	0.5504	-0.6524	-0.3975
99	49.21	-0.01	10.8746	-4.1923	-0.1576	2.5717	-0.0950	-0.0995	0.5559	-0.6553	-0.3856
100	49.40	-0.01	11.0038	-4.5673	-0.1675	3.0000	-0.1110	-0.0740	0.5766	-0.6506	-0.4121
101	49.55	0.01	11.2273	-4.7311	0.0189	2.9113	-0.1032	-0.0706	0.5803	-0.6509	-0.4214
102	49.76	0.00	11.2065	-4.6788	-0.0103	2.8153	-0.1100	-0.0904	0.5746	-0.6650	-0.4174
103	49.92	-0.01	11.2151	-4.5413	-0.1226	2.8375	-0.0951	-0.0946	0.5817	-0.6764	-0.4049
104	50.10	-0.00	11.4466	-5.0356	-0.1260	3.3358	-0.1256	-0.0785	0.5962	-0.6748	-0.4400
105	50.29	-0.00	11.5810	-5.1061	-0.1741	3.6354	-0.1282	-0.0691	0.5980	-0.6871	-0.4469
106	50.46	0.00	11.6419	-5.5125	-0.1716	4.0017	-0.1345	-0.0873	0.6217	-0.6891	-0.4655
107	50.62	-0.00	11.7663	-5.3137	-0.2115	3.8526	-0.1270	-0.0792	0.6174	-0.6967	-0.4511
108	50.79	-0.01	11.8672	-5.2662	-0.2553	3.8807	-0.1267	-0.0711	0.6183	-0.6895	-0.4448
109	50.95	0.00	12.0043	-5.5970	-0.2322	4.3363	-0.1282	-0.0892	0.6240	-0.7133	-0.4661
110	51.13	-0.00	12.0956	-5.7117	-0.2724	4.4746	-0.1287	-0.0760	0.6265	-0.7046	-0.4721
111	51.30	0.01	12.1545	-5.7883	-0.1536	4.3890	-0.1284	-0.0814	0.6312	-0.7127	-0.4762
112	51.45	0.01	12.2363	-5.8428	-0.1417	4.3342	-0.1210	-0.0974	0.6255	-0.7229	-0.4775
113	51.63	0.02	12.3424	-6.1535	0.0356	4.2751	-0.0995	-0.1162	0.6125	-0.7287	-0.4983
114	51.79	0.04	12.5168	-6.0917	0.2565	4.2768	-0.0998	-0.1496	0.6077	-0.7373	-0.5346
115	51.97	0.05	12.5824	-6.0353	0.2815	4.1585	-0.0995	-0.1369	0.6116	-0.7485	-0.5277
116	52.14	0.04	12.6734	-6.0553	0.1565	4.4442	-0.1074	-0.1360	0.6106	-0.7466	-0.5251
117	52.29	0.04	12.6925	-6.0826	0.1777	4.5637	-0.0933	-0.1411	0.6094	-0.7505	-0.5264
118	52.47	0.04	12.7163	-6.0570	0.2026	4.4448	-0.0857	-0.1425	0.6169	-0.7594	-0.5234
119	52.64	0.03	12.8040	-6.0622	0.2182	4.7546	-0.0794	-0.1497	0.6119	-0.7616	-0.5219
120	52.80	0.04	12.8741	-6.0912	0.2114	4.9175	-0.1170	-0.1570	0.6145	-0.7715	-0.5197
121	52.98	0.06	13.0758	-6.7003	0.3157	5.5001	-0.1337	-0.1628	0.6176	-0.7804	-0.5124
122	53.14	0.05	13.1439	-6.8422	0.2655	5.4561	-0.1036	-0.1653	0.6172	-0.7825	-0.5206
123	53.31	0.05	13.2305	-6.8635	0.2661	5.4637	-0.1185	-0.1480	0.6285	-0.7765	-0.5188
124	53.48	0.06	13.4027	-6.9078	0.4413	5.4241	-0.1181	-0.1529	0.6391	-0.7920	-0.5154
125	53.64	0.05	13.3342	-6.8351	0.3881	5.3024	-0.1246	-0.1366	0.6362	-0.7728	-0.4976
126	53.80	0.07	13.5031	-6.8570	0.5537	5.6413	-0.1062	-0.1468	0.6387	-0.7875	-0.4930
127	53.97	0.08	13.7821	-7.0161	0.8219	6.5878	-0.0759	-0.1601	0.6247	-0.8048	-0.5092
128	54.14	0.08	13.9699	-7.2455	0.8085	6.3347	-0.0447	-0.1883	0.6285	-0.8168	-0.5182
129	54.29	0.08	13.8700	-7.0481	0.5214	6.0836	-0.0368	-0.1835	0.6237	-0.8072	-0.5080
130	54.46	0.09	14.0536	-7.0038	1.0492	3.7564	-0.0130	-0.1612	0.6378	-0.8190	-0.5026
131	54.63	0.09	14.0921	-6.9120	1.1291	3.4681	0.0106	-0.1704	0.6470	-0.8174	-0.4905
132	54.79	0.09	14.0454	-6.8639	1.0785	3.7142	0.0397	-0.1541	0.6591	-0.8152	-0.4716
133	54.95	0.08	14.2580	-7.0212	0.9430	3.5361	0.0187	-0.1319	0.6635	-0.7954	-0.4931
134	55.13	0.11	14.4140	-6.8363	1.2349	3.6870	0.0407	-0.1522	0.6712	-0.8234	-0.4743
135	55.28	0.09	14.1637	-6.8635	1.1345	3.6126	0.0405	-0.1263	0.6666	-0.7929	-0.4705
136	55.44	0.10	14.3558	-7.0483	1.1588	3.3264	0.0416	-0.1575	0.6623	-0.8198	-0.4968
137	55.61	0.10	14.3763	-6.9878	1.2196	3.4264	0.0415	-0.1529	0.6636	-0.8165	-0.4861
138	55.78	0.09	14.5320	-7.0604	1.1653	3.3229	0.0425	-0.1737	0.6629	-0.8366	-0.4859

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(ASRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 96 MACH 0.80 RX10-6 1.7 PHI 0.0 CONF 8 1HOF11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	55.94	0.09	14.6469	-7.4186	1.2233	3.2286	0.0355	-0.1693	0.6706	-0.8399	-0.5084
140	56.10	0.09	14.4556	-6.9150	1.1911	3.2507	0.0420	-0.1750	0.6564	-0.8314	-0.4784
141	56.26	0.09	14.5766	-6.9717	1.1762	3.2647	0.0430	-0.1813	0.6456	-0.8309	-0.4783
142	56.42	0.09	14.6157	-7.0346	1.1523	3.1020	0.0457	-0.1856	0.6452	-0.8348	-0.4813
143	56.58	0.08	14.6058	-7.0451	1.0542	3.0219	0.0516	-0.1937	0.6448	-0.8385	-0.4822
144	56.74	0.10	14.6171	-7.0778	1.0582	2.8857	0.0445	-0.1892	0.6506	-0.8398	-0.4912
145	56.88	0.08	14.6421	-6.9761	1.0201	3.0383	0.0444	-0.1882	0.6361	-0.8243	-0.4764
146	57.03	0.07	14.6141	-7.0764	0.9543	2.8384	0.0525	-0.1720	0.6437	-0.8157	-0.4842
147	57.20	0.06	14.6711	-7.1432	0.8335	2.7716	0.0532	-0.1850	0.6330	-0.8180	-0.4869
148	57.35	0.06	14.8024	-7.2763	0.8471	2.7327	0.0537	-0.1760	0.6264	-0.8044	-0.4918
149	57.49	0.07	14.6755	-7.0274	0.8761	2.7288	0.0532	-0.1876	0.6266	-0.8142	-0.4789
150	57.64	0.06	14.6620	-7.2118	0.8297	2.5436	0.0543	-0.1898	0.6166	-0.8064	-0.4872
151	57.78	0.04	14.8004	-7.3655	0.7499	2.3714	0.0478	-0.2160	0.6126	-0.8288	-0.4977
152	57.92	0.05	14.7154	-7.0672	0.8242	2.3618	0.0479	-0.2126	0.6002	-0.8188	-0.4815
153	58.09	0.05	14.8435	-7.3447	0.8215	2.5660	0.0544	-0.2154	0.6034	-0.8188	-0.4948
154	58.24	0.05	14.6859	-7.3564	0.8702	2.2845	0.0550	-0.2326	0.6002	-0.8388	-0.4942
155	58.25	0.04	14.5562	-7.1110	0.7851	2.1406	0.0701	-0.2256	0.5948	-0.8204	-0.4872
156	58.26	0.06	14.6756	-7.1578	0.8626	2.4465	0.0691	-0.2017	0.6024	-0.8041	-0.4877
157	58.26	0.05	14.7746	-7.3215	0.8663	2.2094	0.0555	-0.2183	0.6100	-0.8283	-0.4956
158	58.25	0.04	14.5657	-7.1063	0.8660	2.5282	0.0667	-0.2107	0.6005	-0.8112	-0.4879

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 9a MACH 0.60 REYNO-E 1.7 PHI 0.0 CONF BASEFIN L 6.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	0.01	0.01	0.0312	0.0032	0.0016	0.1025	0.0513	-0.3401	-0.0680	-0.1594	0.1999	0.4687
2	0.01	-0.00	0.0343	0.0034	0.0019	0.1106	0.0496	-0.3308	-0.0674	-0.1564	0.2001	0.4644
3	-0.09	0.0	0.0262	0.0026	0.0006	0.0922	0.0213	-0.3266	-0.0658	-0.1527	0.2014	0.4675
4	0.64	0.00	0.0313	0.0032	0.0003	0.1022	0.0096	-0.2661	-0.0567	-0.1233	0.2130	0.4634
5	2.52	0.00	0.0258	0.0025	0.0001	0.0973	0.0034	-0.1757	-0.0386	-0.0780	0.2196	0.4439
6	4.37	0.00	0.0313	0.0025	0.0004	0.0920	0.0288	-0.0907	-0.0197	-0.0338	0.2171	0.3727
7	6.30	0.00	0.0326	0.0037	0.0025	0.1135	0.0767	-0.0348	0.0012	-0.0056	-0.0345	0.1605
8	8.21	0.01	0.0259	0.0032	0.0021	0.1084	0.0712	0.0124	0.0236	0.0198	1.5027	1.5968
9	10.06	0.00	0.0315	0.0045	0.0037	0.1401	0.1201	0.0784	0.0448	0.0564	0.5713	0.7154
10	11.95	0.00	0.0341	0.0062	0.0054	0.1931	0.1682	0.1497	0.0837	0.0953	0.4254	0.6366
11	13.87	-0.01	0.0204	0.0028	-0.0005	0.1372	-0.0441	0.2337	0.0768	0.1365	0.3285	0.5526
12	15.71	-0.00	0.0213	0.0031	0.0055	0.1455	0.2488	0.3110	0.0822	0.1785	0.2637	0.5741
13	17.65	-0.01	0.0176	0.0013	0.0101	0.0736	0.5739	0.3819	0.0796	0.2134	0.2084	0.5588
14	19.53	-0.01	0.0107	0.0044	0.0137	0.4111	1.2604	0.4346	0.0645	0.2394	0.1484	0.5520
15	21.49	-0.02	-0.0362	0.0006	0.0005	-0.0155	-0.0298	0.5149	0.0600	0.2750	0.1165	0.5341
16	23.47	-0.02	-0.0785	-0.0026	-0.0167	0.0357	0.2127	0.5897	0.0642	0.3151	0.1088	0.5343
17	25.38	-0.01	0.0257	0.0057	0.0125	0.1519	0.4209	0.6626	0.0611	0.3550	0.0895	0.5201
18	27.34	0.01	-0.0010	0.0011	-0.0054	-1.0597	5.4000	0.7223	0.0595	0.3713	0.0824	0.5141
19	29.27	0.03	0.0676	0.0123	0.0326	0.1913	0.3678	0.7310	0.0597	0.3721	0.0816	0.5096
20	31.16	0.04	0.1784	0.0395	0.0756	0.2214	0.4236	0.7361	0.0624	0.3601	0.0847	0.4892
21	33.10	0.07	0.1565	0.0365	0.0663	0.2609	0.4236	0.7722	0.0653	0.3652	0.0845	0.4725
22	33.97	0.07	0.1516	0.0354	0.0622	0.2531	0.4114	0.8013	0.0655	0.3765	0.0817	0.4655
23	34.13	0.07	0.1573	0.0360	0.0655	0.2559	0.4189	0.7962	0.0654	0.3726	0.0821	0.4686
24	34.37	0.07	0.1476	0.0321	0.0515	0.2482	0.4036	0.7979	0.0647	0.3705	0.0811	0.4643
25	34.65	0.06	0.1448	0.0485	0.0552	0.2376	0.4088	0.8203	0.0654	0.3786	0.0797	0.4615
26	34.88	0.05	0.1443	0.0500	0.0724	0.2642	0.4107	0.8307	0.0650	0.3821	0.0782	0.4606
27	35.11	0.09	0.2275	0.0501	0.1045	0.2461	0.4585	0.8518	0.0648	0.3901	0.0781	0.4586
28	35.36	0.10	0.2235	0.0544	0.1054	0.2433	0.4716	0.8571	0.0637	0.3911	0.0743	0.4563
29	35.59	0.10	0.2248	0.0544	0.1082	0.2419	0.4813	0.8642	0.0627	0.3931	0.0725	0.4545
30	35.84	0.08	0.1324	0.0401	0.0573	0.3028	0.4328	0.8466	0.0628	0.3833	0.0740	0.4517
31	36.06	0.08	0.1257	0.0467	0.0552	0.3714	0.4391	0.8452	0.0624	0.3802	0.0738	0.4498
32	36.29	0.07	0.1351	0.0450	0.0581	0.3330	0.4301	0.8296	0.0620	0.3712	0.0747	0.4474
33	36.53	0.07	0.1215	0.0445	0.0511	0.3654	0.4206	0.8419	0.0614	0.3764	0.0729	0.4471
34	36.77	0.07	0.1204	0.0414	0.0486	0.3436	0.4037	0.8403	0.0612	0.3734	0.0728	0.4444
35	37.00	0.08	0.1222	0.0341	0.0515	0.2790	0.4214	0.8753	0.0610	0.3876	0.0697	0.4428
36	37.24	0.08	0.1341	0.0329	0.0502	0.2453	0.4489	0.8753	0.0614	0.3869	0.0701	0.4420
37	37.48	0.05	0.1242	0.0214	0.0352	0.1723	0.4444	0.9120	0.0612	0.4046	0.0671	0.4430
38	37.71	0.05	0.0951	0.0162	0.0447	0.1703	0.4700	0.8947	0.0609	0.3934	0.0680	0.4397
39	37.94	0.08	0.1037	0.0268	0.0460	0.0656	0.4438	0.9618	0.0612	0.4156	0.0650	0.4413
40	38.18	0.05	0.0826	0.0	0.0425	0.0	0.5084	0.9455	0.0604	0.4137	0.0639	0.4375
41	38.42	0.05	0.0541	-0.0116	0.0256	-0.2144	0.4769	0.9612	0.0600	0.4227	0.0624	0.4398
42	38.65	0.08	0.0422	-0.0154	0.0154	-0.3648	0.4597	0.9719	0.0594	0.4250	0.0611	0.4373
43	38.86	0.10	0.0495	-0.0161	0.0262	-0.3252	0.5293	0.9824	0.0598	0.4301	0.0607	0.4378
44	39.09	0.08	0.0123	-0.0271	0.0067	-2.2027	0.5447	0.9770	0.0591	0.4240	0.0605	0.4348
45	39.31	0.09	0.0012	-0.0255	0.0043	-21.5776	3.5833	0.9753	0.0586	0.4231	0.0601	0.4338
46	39.52	0.09	0.0055	-0.0262	0.0088	-4.7624	1.6000	0.9856	0.0580	0.4268	0.0588	0.4336

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 98 | MACH 0.86 | MX10-6 1.7 | PHI 0.0 | CONF 816F11 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	39.72	0.10	0.0253	-0.0219	0.0155	-0.8654	0.6126	0.9656	0.0580	0.4268	0.0588	0.4330
48	39.92	0.05	0.0056	-0.0016	0.0506	-0.0210	0.5911	0.9892	0.0560	0.4257	0.0586	0.4303
49	40.14	0.10	0.1265	0.0124	0.0655	0.1025	0.5749	0.9667	0.0573	0.4147	0.0593	0.4296
50	40.33	0.10	0.1566	0.0195	0.0877	0.1243	0.5593	0.9737	0.0568	0.4174	0.0583	0.4287
51	40.54	0.09	0.1836	0.0228	0.0938	0.1391	0.5711	0.9791	0.0561	0.4185	0.0573	0.4274
52	40.75	0.08	0.1966	0.0236	0.0941	0.1395	0.5581	0.9808	0.0560	0.4193	0.0587	0.4279
53	40.94	0.10	0.2010	0.0330	0.1125	0.1641	0.5617	0.9836	0.0555	0.4088	0.0576	0.4242
54	41.16	0.05	0.1916	0.0261	0.1105	0.1466	0.5767	0.9736	0.0555	0.4145	0.0570	0.4257
55	41.36	0.10	0.2154	0.0365	0.1273	0.1681	0.5802	0.9773	0.0543	0.4155	0.0555	0.4252
56	41.56	0.11	0.1748	0.0253	0.1022	0.1447	0.5847	0.9753	0.0547	0.4154	0.0561	0.4259
57	41.76	0.10	0.1782	0.0243	0.1011	0.1363	0.5873	0.9998	0.0544	0.4257	0.0544	0.4259
58	41.96	0.10	0.1566	0.0162	0.0882	0.1074	0.5845	1.0112	0.0538	0.4302	0.0532	0.4254
59	42.17	0.11	0.1741	0.0218	0.1034	0.1252	0.5939	1.0129	0.0533	0.4317	0.0526	0.4262
60	42.35	0.11	0.1486	0.0166	0.0855	0.1090	0.6097	1.0090	0.0531	0.4279	0.0526	0.4241
61	42.54	0.11	0.1265	0.0122	0.0825	0.0946	0.6400	1.0228	0.0521	0.4336	0.0509	0.4241
62	42.72	0.11	0.1065	0.0062	0.0702	0.0571	0.6470	1.0227	0.0519	0.4366	0.0507	0.4266
63	42.90	0.10	0.0961	0.0032	0.0626	0.0326	0.6449	1.0255	0.0519	0.4368	0.0506	0.4259
64	43.08	0.09	0.1021	0.0042	0.0684	0.0411	0.6699	1.0257	0.0510	0.4354	0.0497	0.4245
65	43.27	0.09	0.0851	-0.0045	0.0501	-0.0691	0.7660	1.0284	0.0509	0.4383	0.0495	0.4262
66	43.46	0.10	0.0705	-0.0005	0.0556	-0.0071	0.7601	1.0234	0.0505	0.4338	0.0491	0.4239
67	43.66	0.12	0.0665	0.0016	0.0575	0.0090	0.8565	1.0315	0.0501	0.4371	0.0486	0.4238
68	43.81	0.12	0.0713	0.0014	0.0578	0.0196	0.8107	1.0240	0.0497	0.4325	0.0485	0.4221
69	44.00	0.11	0.0654	0.0005	0.0550	0.0076	0.8410	1.0314	0.0489	0.4357	0.0474	0.4224
70	44.21	0.10	0.0657	0.0051	0.0645	0.0595	0.7573	1.0378	0.0486	0.4383	0.0468	0.4223
71	44.36	0.09	0.0772	0.0010	0.0602	0.0125	0.7796	1.0327	0.0479	0.4378	0.0464	0.4235
72	44.56	0.11	0.0615	0.0006	0.0565	0.0097	0.9128	1.0274	0.0481	0.4340	0.0468	0.4224
73	44.75	0.09	0.0565	-0.0024	0.0565	-0.0425	0.9009	1.0410	0.0478	0.4399	0.0455	0.4228
74	44.93	0.10	0.0416	-0.0064	0.0462	-0.1536	1.1106	1.0423	0.0477	0.4413	0.0458	0.4234
75	45.09	0.09	0.0373	-0.0080	0.0436	-0.2144	1.1689	1.0576	0.0464	0.4473	0.0439	0.4225
76	45.26	0.10	0.0154	-0.0131	0.0341	-0.8504	2.2143	1.0641	0.0466	0.4494	0.0438	0.4228
77	45.48	0.08	0.0125	-0.0120	0.0315	-0.9597	2.5520	1.0506	0.0467	0.4427	0.0444	0.4214
78	45.65	0.09	-0.0018	-0.0165	0.0250	10.2750	-13.8869	1.0726	0.0459	0.4533	0.0428	0.4226
79	45.81	0.09	-0.0373	-0.0306	0.0241	0.8255	-0.1095	1.0653	0.0460	0.4506	0.0432	0.4230
80	45.99	0.09	-0.0669	-0.0285	0.0120	1.1744	-0.5240	1.0823	0.0450	0.4560	0.0416	0.4232
81	46.16	0.08	-0.0822	-0.0362	-0.0050	0.5618	0.0804	1.0756	0.0450	0.4547	0.0418	0.4227
82	46.35	0.08	-0.0890	-0.0456	-0.0104	0.5363	0.1729	1.0925	0.0445	0.4615	0.0407	0.4224
83	46.51	0.08	-0.0945	-0.0483	-0.0236	0.5088	0.2487	1.1059	0.0443	0.4681	0.0400	0.4233
84	46.68	0.09	-0.1052	-0.0495	-0.0255	0.4704	0.2424	1.0988	0.0444	0.4654	0.0404	0.4236
85	46.87	0.08	-0.1521	-0.0633	-0.0503	0.4161	0.3307	1.1001	0.0436	0.4641	0.0398	0.4215
86	47.03	0.07	-0.1265	-0.0545	-0.0362	0.4335	0.2802	1.0951	0.0434	0.4610	0.0396	0.4216
87	47.20	0.07	-0.1551	-0.0664	-0.0547	0.4172	0.3436	1.1016	0.0435	0.4682	0.0395	0.4250
88	47.36	0.07	-0.1726	-0.0666	-0.0587	0.3823	0.3401	1.1016	0.0436	0.4682	0.0396	0.4250
89	47.55	0.06	-0.1810	-0.0678	-0.0644	0.3745	0.3558	1.0950	0.0438	0.4630	0.0400	0.4228
90	47.73	0.06	-0.1694	-0.0718	-0.0656	0.3790	0.3675	1.1050	0.0434	0.4685	0.0393	0.4240
91	47.86	0.06	-0.1870	-0.0703	-0.0648	0.3758	0.3455	1.1135	0.0429	0.4719	0.0385	0.4238
92	48.06	0.06	-0.1925	-0.0705	-0.0672	0.3654	0.3484	1.1103	0.0420	0.4696	0.0378	0.4229

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 9a MACH 0.80 1.7 RNIC=6 PHI 0.0 DELF 0.0 CONF 0.0 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
93	48.24	0.00	-0.2254	-0.0786	-0.0930	0.3425	0.4356	1.1119	0.0434	0.4691	0.0390	0.4219
94	48.39	0.00	-0.2443	-0.0873	-0.0973	0.3253	0.3963	1.1002	0.0429	0.4641	0.0390	0.4218
95	48.56	0.01	-0.2655	-0.0808	-0.1135	0.3042	0.4275	1.0952	0.0426	0.4603	0.0351	0.4203
96	48.70	-0.00	-0.2518	-0.0836	-0.1072	0.2005	0.4257	1.1016	0.0438	0.4676	0.0397	0.4245
97	48.86	-0.00	-0.2235	-0.0562	-0.1006	0.2509	0.4466	1.0900	0.0443	0.4592	0.0406	0.4213
98	49.03	-0.01	-0.2425	-0.0814	-0.1925	0.2782	0.4544	1.1002	0.0432	0.4634	0.0393	0.4212
99	49.21	-0.01	-0.2468	-0.0845	-0.1165	0.2613	0.4477	1.0851	0.0432	0.4554	0.0358	0.4197
100	49.40	-0.01	-0.2454	-0.0814	-0.1275	0.2851	0.4467	1.1170	0.0423	0.4722	0.0379	0.4227
101	49.55	0.01	-0.2515	-0.0903	-0.1344	0.3030	0.4512	1.1070	0.0413	0.4679	0.0373	0.4227
102	49.76	0.00	-0.2782	-0.0765	-0.1246	0.2657	0.4479	1.1187	0.0409	0.4743	0.0366	0.4240
103	49.92	-0.01	-0.2809	-0.0815	-0.1264	0.2915	0.4500	1.1070	0.0405	0.4679	0.0365	0.4227
104	50.10	-0.00	-0.2944	-0.0954	-0.1345	0.3240	0.4509	1.1222	0.0402	0.4745	0.0358	0.4228
105	50.29	-0.00	-0.3133	-0.0970	-0.1435	0.3095	0.4593	1.1268	0.0397	0.4804	0.0352	0.4256
106	50.46	0.00	-0.3003	-0.1026	-0.1381	0.3422	0.4599	1.1177	0.0390	0.4845	0.0343	0.4256
107	50.62	-0.00	-0.3055	-0.0977	-0.1383	0.3193	0.4521	1.1266	0.0394	0.4777	0.0350	0.4240
108	50.79	-0.01	-0.3145	-0.1017	-0.1466	0.3254	0.4672	1.1148	0.0397	0.4720	0.0356	0.4234
109	50.95	0.00	-0.3285	-0.1046	-0.1533	0.3163	0.4667	1.1062	0.0400	0.4720	0.0367	0.4267
110	51.13	-0.00	-0.3215	-0.1071	-0.1511	0.3330	0.4700	1.1151	0.0397	0.4741	0.0356	0.4252
111	51.30	0.01	-0.3251	-0.1045	-0.1536	0.3187	0.4667	1.1169	0.0395	0.4742	0.0354	0.4248
112	51.45	0.01	-0.3328	-0.1043	-0.1555	0.3133	0.4672	1.1040	0.0389	0.4691	0.0352	0.4249
113	51.63	0.02	-0.2415	-0.0786	-0.1161	0.3254	0.4607	1.1452	0.0382	0.4848	0.0333	0.4233
114	51.79	0.04	-0.1507	-0.0572	-0.0851	0.3795	0.4320	1.2296	0.0378	0.5491	0.0307	0.4303
115	51.97	0.05	-0.1930	-0.0707	-0.0991	0.3662	0.4617	1.2074	0.0377	0.5160	0.0312	0.4276
116	52.14	0.04	-0.2045	-0.0742	-0.0972	0.3935	0.4753	1.2229	0.0372	0.5207	0.0304	0.4258
117	52.29	0.04	-0.2036	-0.0747	-0.0991	0.3808	0.4622	1.1947	0.0368	0.5062	0.0308	0.4237
118	52.47	0.04	-0.1824	-0.0658	-0.0824	0.3906	0.4518	1.2057	0.0365	0.5120	0.0303	0.4246
119	52.64	0.03	-0.2178	-0.0746	-0.1013	0.3424	0.4551	1.1927	0.0363	0.5041	0.0304	0.4227
120	52.80	0.04	-0.2771	-0.0887	-0.1300	0.3200	0.4691	1.1713	0.0367	0.4909	0.0313	0.4191
121	52.98	0.06	-0.3136	-0.0878	-0.1474	0.2799	0.4700	1.1631	0.0370	0.4896	0.0318	0.4209
122	53.14	0.05	-0.2781	-0.0857	-0.1275	0.3061	0.4599	1.1787	0.0358	0.4970	0.0304	0.4217
123	53.31	0.05	-0.3265	-0.0953	-0.1478	0.2918	0.4527	1.1706	0.0358	0.4944	0.0306	0.4223
124	53.48	0.06	-0.3166	-0.0964	-0.1491	0.3107	0.4709	1.1551	0.0375	0.4863	0.0325	0.4227
125	53.64	0.05	-0.3253	-0.0995	-0.1548	0.3058	0.4759	1.1379	0.0372	0.4814	0.0327	0.4231
126	53.80	0.07	-0.2844	-0.0958	-0.1378	0.3303	0.4821	1.1344	0.0377	0.4804	0.0332	0.4235
127	53.97	0.06	-0.2713	-0.0863	-0.1110	0.3799	0.5253	1.1515	0.0377	0.4894	0.0327	0.4256
128	54.14	0.08	-0.2963	-0.0748	-0.1025	0.3625	0.4908	1.1402	0.0369	0.4871	0.0321	0.4242
129	54.29	0.08	-0.1526	-0.0648	-0.0845	0.4202	0.5586	1.1480	0.0377	0.4851	0.0328	0.4266
130	54.46	0.09	-0.1055	-0.0473	-0.0595	0.4465	0.5619	1.1320	0.0373	0.4811	0.0325	0.4256
131	54.63	0.09	-0.0841	-0.0376	-0.0425	0.5771	0.6630	1.1389	0.0366	0.4858	0.0321	0.4268
132	54.79	0.09	-0.0768	-0.0345	-0.0442	0.4491	0.5755	1.0820	0.0371	0.4575	0.0343	0.4228
133	54.95	0.08	-0.0558	-0.0255	-0.0375	0.5376	0.6745	1.1182	0.0365	0.4778	0.0326	0.4273
134	55.13	0.11	-0.0439	-0.0252	-0.0317	0.5739	0.7221	1.0905	0.0372	0.4637	0.0341	0.4252
135	55.28	0.09	-0.0617	-0.0362	-0.0388	0.4893	0.6288	1.0883	0.0366	0.4628	0.0336	0.4292
136	55.44	0.10	-0.0395	-0.0263	-0.0272	0.6656	0.8006	1.1230	0.0349	0.4815	0.0311	0.4286
137	55.61	0.10	-0.0551	-0.0276	-0.0290	0.5008	0.6263	1.1162	0.0347	0.4754	0.0311	0.4255
138	55.78	0.09	-0.0366	-0.0235	-0.0239	0.6493	0.8095	1.1314	0.0343	0.4815	0.0303	0.4256

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(TRANSDUCT 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RXIG-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 98 0.86 1.7 0.0 BIMOF11 6.6 0 -10 0 -10 UNKNOWN

PCINT	ALPHA	BETA	CNF1	CH1	CB1	XCPF1	YCPF1	CNF2	CH2	CB2	XCPF2	YCPF2
139	55.99	0.09	-0.0196	-0.0211	-0.0156	1.0523	0.8211	1.1568	0.0336	0.4968	0.0290	0.4287
140	56.10	0.05	-0.0938	-0.0278	-0.0247	0.9100	0.4591	1.1155	0.0339	0.4746	0.0304	0.4255
141	56.26	0.05	-0.0470	-0.0231	-0.0181	0.9514	0.3851	1.1223	0.0346	0.4765	0.0308	0.4248
142	56.42	0.05	-0.0376	-0.0197	-0.0067	0.5294	0.2359	1.1345	0.0332	0.4816	0.0293	0.4240
143	56.58	0.05	-0.0316	-0.0156	-0.0033	0.6011	0.1044	1.1620	0.0323	0.4949	0.0278	0.4259
144	56.74	0.10	-0.0261	-0.0146	0.0037	0.4595	-0.1321	1.1499	0.0335	0.4884	0.0291	0.4247
145	56.88	0.08	-0.0256	-0.0131	0.0056	0.4395	-0.1879	1.1472	0.0330	0.4855	0.0288	0.4238
146	57.03	0.07	-0.0331	-0.0186	0.0085	0.4633	-0.2089	1.1695	0.0319	0.4960	0.0273	0.4241
147	57.20	0.06	-0.0221	-0.0161	0.0163	0.3664	-0.6281	1.1610	0.0320	0.4956	0.0271	0.4230
148	57.35	0.06	-0.0463	-0.0128	0.0115	0.2704	-0.2570	1.1623	0.0324	0.4852	0.0277	0.4209
149	57.49	0.07	-0.0632	-0.0125	0.0101	0.2041	-0.1582	1.1564	0.0328	0.4854	0.0283	0.4196
150	57.64	0.06	-0.0377	-0.0048	0.0203	0.1473	-0.7507	1.1652	0.0321	0.4907	0.0275	0.4211
151	57.78	0.04	-0.0365	-0.0047	0.0298	0.1296	-0.8209	1.1875	0.0299	0.5007	0.0252	0.4218
152	57.92	0.05	-0.0310	-0.0044	0.0377	0.1419	-1.2101	1.1858	0.0306	0.4992	0.0260	0.4216
153	58.09	0.05	-0.0625	-0.0037	0.0284	0.0508	-0.4515	1.1721	0.0311	0.4940	0.0265	0.4213
154	58.24	0.05	-0.0673	-0.0062	0.0281	0.1218	-0.4175	1.1859	0.0300	0.4992	0.0253	0.4206
155	58.25	0.04	-0.0417	-0.0003	0.0457	0.0072	-1.0959	1.1858	0.0301	0.4999	0.0254	0.4216
156	58.26	0.06	-0.0502	0.0005	0.0426	-0.0098	-0.8425	1.1824	0.0301	0.4982	0.0254	0.4213
157	58.26	0.05	-0.0553	-0.0018	0.0421	0.0289	-0.7613	1.1859	0.0298	0.4992	0.0251	0.4209
158	58.25	0.04	-0.0745	-0.0018	0.0354	0.0240	-0.4726	1.1854	0.0310	0.4886	0.0260	0.4193

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 96 MACH 0.80 RATIO=0.7 PHI 0.0 BINORIL C.G DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNF3	CH3	CB3	XCPF3	YCPF3	CNF4	CH4	CB4	XCPF4	YCPF4
1	0.01	0.01	-0.0165	9.9999	0.0152	9.9999	-1.1361	-0.3066	-0.0682	-0.1573	0.2224	0.5130
2	0.01	-0.00	-0.0165	9.9999	0.0152	9.9999	-1.1361	-0.3014	-0.0675	-0.1562	0.2252	0.5162
3	-0.09	0.0	-0.013E	9.9999	0.0201	9.9999	-1.4565	-0.2646	-0.0652	-0.1480	0.2290	0.5200
4	0.04	0.00	-0.0165	9.9999	0.0192	9.9999	-1.1361	-0.2344	-0.0562	-0.1215	0.2397	0.5183
5	2.52	0.00	-0.0165	9.9999	0.0197	9.9999	-1.0645	-0.1482	-0.0376	-0.0881	0.2536	0.4460
6	4.37	0.00	-0.0218	9.9999	0.0207	9.9999	-0.9495	-0.0541	-0.0178	-0.0292	0.3252	0.5397
7	6.30	0.00	-0.0203	9.9999	0.0233	9.9999	-1.1476	0.0057	0.0021	-0.0037	0.2164	-0.3814
8	8.21	0.01	-0.0172	9.9999	0.0248	9.9999	-1.4419	0.0791	0.0260	0.0220	0.3286	0.2781
9	10.06	0.00	-0.0140	9.9999	0.0246	9.9999	-1.7629	0.1600	0.0479	0.0543	0.2953	0.3396
10	11.95	0.00	-0.0073	9.9999	0.0181	9.9999	-2.4794	0.2349	0.0677	0.0598	0.2881	0.4249
11	13.87	-0.01	0.0040	9.9999	0.0165	9.9999	4.1250	0.3128	0.0799	0.1538	0.2554	0.4917
12	15.71	-0.00	0.0005	9.9999	0.0136	9.9999	15.3333	0.4001	0.0831	0.2021	0.2036	0.4952
13	17.65	-0.01	0.0010	9.9999	0.0132	9.9999	13.2000	0.4801	0.0769	0.2403	0.1661	0.5005
14	19.53	-0.02	0.0057	9.9999	0.0142	9.9999	2.4912	0.5166	0.0509	0.2551	0.0985	0.4938
15	21.45	-0.02	0.0012	9.9999	0.0128	9.9999	7.3333	0.5969	0.0499	0.2551	0.0836	0.4944
16	23.47	-0.02	0.0060	9.9999	0.0196	9.9999	1.6333	0.6422	0.0532	0.3200	0.0828	0.4983
17	25.38	-0.01	0.0218	9.9999	0.0175	9.9999	0.8287	0.6855	0.0573	0.3454	0.0836	0.5039
18	27.34	0.01	0.0255	9.9999	0.0158	9.9999	0.6712	0.6988	0.0600	0.3527	0.0856	0.5047
19	29.27	0.03	0.0275	9.9999	0.0203	9.9999	0.7276	0.7256	0.0605	0.3693	0.0834	0.5090
20	31.16	0.04	0.0295	9.9999	0.0223	9.9999	0.7559	0.7437	0.0635	0.3789	0.0855	0.5095
21	33.10	0.07	0.0484	9.9999	0.0326	9.9999	0.6736	0.7169	0.0625	0.3661	0.0872	0.5107
22	33.97	0.07	0.0350	9.9999	0.0262	9.9999	0.7231	0.6790	0.0619	0.3465	0.0911	0.5103
23	34.13	0.07	0.0435	9.9999	0.0293	9.9999	0.6674	0.6843	0.0613	0.3494	0.0856	0.5108
24	34.37	0.07	0.0377	9.9999	0.0250	9.9999	0.6631	0.7035	0.0608	0.3601	0.0864	0.5116
25	34.65	0.08	0.0351	9.9999	0.0353	9.9999	0.6407	0.6708	0.0614	0.3456	0.0915	0.5152
26	34.88	0.09	0.0469	9.9999	0.0323	9.9999	0.6605	0.6700	0.0621	0.3448	0.0927	0.5146
27	35.11	0.09	0.0418	9.9999	0.0375	9.9999	0.6133	0.6549	0.0626	0.3357	0.0956	0.5126
28	35.36	0.10	0.0554	9.9999	0.0362	9.9999	0.6534	0.6633	0.0630	0.3376	0.0950	0.5090
29	35.59	0.10	0.0555	9.9999	0.0345	9.9999	0.6288	0.6688	0.0630	0.3413	0.0942	0.5103
30	35.84	0.08	0.0524	9.9999	0.0341	9.9999	0.6508	0.6979	0.0620	0.3547	0.0888	0.5082
31	36.06	0.08	0.0480	9.9999	0.0311	9.9999	0.6739	0.7163	0.0617	0.3641	0.0861	0.5083
32	36.29	0.07	0.0556	9.9999	0.0362	9.9999	0.6511	0.6997	0.0623	0.3589	0.0890	0.5129
33	36.53	0.07	0.0452	9.9999	0.0332	9.9999	0.6748	0.7254	0.0619	0.3709	0.0853	0.5113
34	36.77	0.07	0.0462	9.9999	0.0315	9.9999	0.6484	0.7217	0.0619	0.3686	0.0857	0.5107
35	37.00	0.08	0.0356	9.9999	0.0273	9.9999	0.6894	0.7215	0.0625	0.3653	0.0866	0.5063
36	37.24	0.08	0.0335	9.9999	0.0261	9.9999	0.6898	0.7270	0.0624	0.3677	0.0858	0.5058
37	37.48	0.09	0.0506	9.9999	0.0327	9.9999	0.6437	0.7248	0.0631	0.3642	0.0870	0.5025
38	37.71	0.09	0.0445	9.9999	0.0283	9.9999	0.6360	0.7396	0.0626	0.3733	0.0846	0.5047
39	37.94	0.08	0.0525	9.9999	0.0322	9.9999	0.6133	0.7286	0.0627	0.3672	0.0860	0.5046
40	38.18	0.09	0.0525	9.9999	0.0315	9.9999	0.6000	0.7303	0.0631	0.3673	0.0864	0.5029
41	38.42	0.09	0.0413	9.9999	0.0268	9.9999	0.6489	0.7298	0.0632	0.3686	0.0872	0.5017
42	38.65	0.08	0.0453	9.9999	0.0300	9.9999	0.6085	0.7322	0.0630	0.3695	0.0860	0.5046
43	38.88	0.10	0.0481	9.9999	0.0278	9.9999	0.6330	0.7212	0.0631	0.3646	0.0875	0.5035
44	39.09	0.08	0.0477	9.9999	0.0273	9.9999	0.5723	0.7231	0.0635	0.3642	0.0878	0.5037
45	39.31	0.09	0.0557	9.9999	0.0311	9.9999	0.5563	0.7453	0.0625	0.3758	0.0838	0.5042
46	39.52	0.09	0.0444	9.9999	0.0257	9.9999	0.5768	0.7478	0.0615	0.3766	0.0822	0.5036

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO-E PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 98 0.60 1.7 0.0 dimOFil 0.0 0 -10 0 -10 UNKNOWN

FLINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	39.72	0.10	0.0567	9.9999	0.0300	9.9999	0.5917	0.7475	0.0624	0.3766	0.0835	0.5038
48	39.92	0.09	0.0555	9.9999	0.0323	9.9999	0.5820	0.7530	0.0621	0.3784	0.0824	0.5025
49	40.14	0.10	0.0523	9.9999	0.0320	9.9999	0.6119	0.7623	0.0618	0.3844	0.0810	0.5043
50	40.33	0.10	0.0502	9.9999	0.0370	9.9999	0.6025	0.7605	0.0615	0.3822	0.0808	0.5026
51	40.54	0.09	0.0553	9.9999	0.0361	9.9999	0.6528	0.7694	0.0620	0.3849	0.0806	0.5003
52	40.75	0.08	0.0565	9.9999	0.0200	9.9999	0.6734	0.7819	0.0620	0.3811	0.0821	0.5002
53	40.94	0.10	0.0585	9.9999	0.0370	9.9999	0.6325	0.7639	0.0621	0.3839	0.0813	0.5026
54	41.16	0.09	0.0496	9.9999	0.0304	9.9999	0.6204	0.7622	0.0624	0.3831	0.0818	0.5026
55	41.36	0.10	0.0548	9.9999	0.0355	9.9999	0.6157	0.7745	0.0631	0.3854	0.0815	0.4976
56	41.56	0.11	0.0536	9.9999	0.0333	9.9999	0.6213	0.7786	0.0626	0.3904	0.0804	0.5014
57	41.76	0.10	0.0520	9.9999	0.0332	9.9999	0.6385	0.7880	0.0619	0.3943	0.0785	0.5004
58	41.96	0.10	0.0515	9.9999	0.0375	9.9999	0.6117	0.7974	0.0616	0.3983	0.0772	0.4995
59	42.17	0.11	0.0625	9.9999	0.0370	9.9999	0.5882	0.7991	0.0619	0.3985	0.0774	0.4987
60	42.35	0.11	0.0567	9.9999	0.0357	9.9999	0.5694	0.8068	0.0614	0.4036	0.0761	0.5002
61	42.54	0.11	0.0563	9.9999	0.0335	9.9999	0.6021	0.8177	0.0607	0.4070	0.0742	0.4977
62	42.72	0.10	0.0624	9.9999	0.0369	9.9999	0.5895	0.8285	0.0607	0.4104	0.0732	0.4954
63	42.90	0.10	0.0539	9.9999	0.0367	9.9999	0.6056	0.8335	0.0596	0.4118	0.0717	0.4958
64	43.08	0.09	0.0590	9.9999	0.0375	9.9999	0.5809	0.8269	0.0602	0.4117	0.0726	0.4967
65	43.27	0.09	0.0537	9.9999	0.0373	9.9999	0.5856	0.8420	0.0586	0.4170	0.0696	0.4952
66	43.46	0.11	0.0574	9.9999	0.0358	9.9999	0.6098	0.8420	0.0588	0.4170	0.0698	0.4952
67	43.66	0.12	0.0605	9.9999	0.0358	9.9999	0.5917	0.8495	0.0577	0.4187	0.0675	0.4929
68	43.81	0.12	0.0697	9.9999	0.0400	9.9999	0.5854	0.8406	0.0581	0.4161	0.0691	0.4950
69	44.00	0.11	0.0661	9.9999	0.0354	9.9999	0.5786	0.8513	0.0581	0.4222	0.0682	0.4955
70	44.21	0.10	0.0649	9.9999	0.0385	9.9999	0.5932	0.8531	0.0580	0.4222	0.0680	0.4949
71	44.38	0.09	0.0664	9.9999	0.0358	9.9999	0.5994	0.8533	0.0573	0.4215	0.0671	0.4940
72	44.58	0.11	0.0617	9.9999	0.0363	9.9999	0.5883	0.8588	0.0572	0.4238	0.0666	0.4935
73	44.75	0.09	0.0618	9.9999	0.0375	9.9999	0.6088	0.8639	0.0576	0.4269	0.0667	0.4942
74	44.93	0.10	0.0631	9.9999	0.0370	9.9999	0.5864	0.8677	0.0568	0.4283	0.0654	0.4936
75	45.09	0.09	0.0677	9.9999	0.0392	9.9999	0.5790	0.8748	0.0568	0.4321	0.0649	0.4939
76	45.28	0.10	0.0536	9.9999	0.0337	9.9999	0.6267	0.8802	0.0567	0.4344	0.0644	0.4935
77	45.48	0.08	0.0722	9.9999	0.0426	9.9999	0.5900	0.8912	0.0552	0.4376	0.0615	0.4910
78	45.65	0.09	0.0630	9.9999	0.0365	9.9999	0.5857	0.8925	0.0566	0.4385	0.0634	0.4913
79	45.81	0.09	0.0628	9.9999	0.0368	9.9999	0.5860	0.8851	0.0573	0.4347	0.0647	0.4911
80	45.99	0.09	0.0605	9.9999	0.0322	9.9999	0.6376	0.8850	0.0575	0.4354	0.0650	0.4920
81	46.18	0.08	0.0628	9.9999	0.0368	9.9999	0.5860	0.9027	0.0570	0.4425	0.0631	0.4902
82	46.33	0.08	0.0582	9.9999	0.0355	9.9999	0.6108	0.9061	0.0574	0.4454	0.0633	0.4916
83	46.51	0.08	0.0567	9.9999	0.0335	9.9999	0.5979	0.9171	0.0561	0.4493	0.0612	0.4899
84	46.68	0.09	0.0564	9.9999	0.0321	9.9999	0.6369	0.9175	0.0551	0.4491	0.0600	0.4895
85	46.87	0.08	0.0442	9.9999	0.0275	9.9999	0.6312	0.9242	0.0554	0.4502	0.0599	0.4871
86	47.03	0.07	0.0488	9.9999	0.0307	9.9999	0.6291	0.9166	0.0559	0.4499	0.0608	0.4897
87	47.20	0.07	0.0441	9.9999	0.0251	9.9999	0.6599	0.9241	0.0557	0.4502	0.0603	0.4872
88	47.36	0.07	0.0515	9.9999	0.0316	9.9999	0.6089	0.9369	0.0537	0.4588	0.0572	0.4887
89	47.55	0.06	0.0519	9.9999	0.0316	9.9999	0.6089	0.9441	0.0538	0.4599	0.0570	0.4871
90	47.73	0.06	0.0457	9.9999	0.0293	9.9999	0.6411	0.9459	0.0536	0.4600	0.0567	0.4863
91	47.88	0.06	0.0428	9.9999	0.0247	9.9999	0.5771	0.9494	0.0536	0.4615	0.0564	0.4861
92	48.06	0.06	0.0410	9.9999	0.0263	9.9999	0.6902	0.9530	0.0533	0.4617	0.0559	0.4845

PARTIAL MISSILE TAILS EFFECTS DATA

TEST 7 | PART 98 | MACH 0.80 | RATIO-E 1.7 | PHI 0.0 | CONF Simple | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CL3	XCPF3	YCPF3	CNF4	CM4	CL4	XCPF4	YCPF4
93	48.24	0.04	0.0365	5.9999	0.0249	5.9999	0.6822	0.9674	0.0521	0.4672	0.0538	0.4829
94	48.34	0.04	0.0441	5.9999	0.0251	5.9999	0.0599	0.9713	0.0511	0.4693	0.0526	0.4832
95	48.56	0.01	0.0258	5.9999	0.0151	5.9999	0.7403	0.9875	0.0497	0.4761	0.0503	0.4821
96	48.70	-0.00	0.0212	5.9999	0.0157	5.9999	0.7406	1.0032	0.0490	0.4956	0.0474	0.4797
97	48.86	-0.00	0.0226	5.9999	0.0158	5.9999	0.6930	1.0365	0.0494	0.4965	0.0476	0.4796
98	49.03	-0.01	0.0214	5.9999	0.0165	5.9999	0.7376	1.0243	0.0493	0.4911	0.0481	0.4794
99	49.21	-0.01	0.0226	5.9999	0.0164	5.9999	0.7193	1.0365	0.0493	0.4959	0.0476	0.4784
100	49.40	-0.01	0.0059	5.9999	0.0164	5.9999	1.4237	1.0252	0.0475	0.4889	0.0464	0.4778
101	49.55	0.01	0.0136	5.9999	0.0162	5.9999	0.7961	1.0142	0.0484	0.4857	0.0477	0.4785
102	49.76	0.00	0.0156	5.9999	0.0166	5.9999	0.8571	1.0250	0.0475	0.4909	0.0463	0.4789
103	49.92	-0.01	0.0121	5.9999	0.0161	5.9999	0.8347	1.0281	0.0485	0.4926	0.0472	0.4791
104	50.10	-0.00	0.0135	5.9999	0.0156	5.9999	1.0296	0.9969	0.0478	0.4779	0.0479	0.4794
105	50.25	-0.00	0.0104	5.9999	0.0118	5.9999	1.1346	1.0061	0.0468	0.4836	0.0465	0.4807
106	50.46	0.00	0.0166	5.9999	0.0148	5.9999	0.8916	0.9951	0.0484	0.4773	0.0486	0.4796
107	50.62	-0.00	0.0135	5.9999	0.0152	5.9999	1.1259	1.0186	0.0472	0.4868	0.0463	0.4779
108	50.79	-0.01	0.0083	5.9999	0.0116	5.9999	1.5690	1.0009	0.0476	0.4784	0.0475	0.4786
109	50.95	0.00	0.0042	5.9999	0.0101	5.9999	2.4048	1.0078	0.0480	0.4822	0.0476	0.4785
110	51.13	-0.00	0.0165	5.9999	0.0165	5.9999	1.1212	1.0062	0.0480	0.4809	0.0477	0.4779
111	51.30	0.01	0.0211	5.9999	0.0207	5.9999	0.9810	1.0205	0.0473	0.4890	0.0463	0.4792
112	51.45	0.01	0.0157	5.9999	0.0168	5.9999	0.9543	1.0226	0.0473	0.4881	0.0462	0.4773
113	51.63	0.02	0.0163	5.9999	0.0162	5.9999	1.5728	1.0413	0.0497	0.4944	0.0477	0.4748
114	51.79	0.04	0.0335	5.9999	0.0275	5.9999	0.8328	1.0573	0.0540	0.5006	0.0511	0.4735
115	51.97	0.05	0.0227	5.9999	0.0235	5.9999	1.0352	1.0520	0.0512	0.4989	0.0487	0.4742
116	52.14	0.04	0.0196	5.9999	0.0220	5.9999	1.1224	1.0520	0.0511	0.4976	0.0486	0.4736
117	52.29	0.04	0.0156	5.9999	0.0234	5.9999	1.2196	1.0595	0.0505	0.4995	0.0477	0.4714
118	52.47	0.04	0.0182	5.9999	0.0213	5.9999	1.1703	1.0684	0.0517	0.5012	0.0484	0.4691
119	52.64	0.03	0.0166	5.9999	0.0218	5.9999	1.3132	1.0743	0.0510	0.5037	0.0475	0.4685
120	52.80	0.04	0.0228	5.9999	0.0255	5.9999	1.1184	1.0468	0.0495	0.4918	0.0473	0.4698
121	52.98	0.06	0.0167	5.9999	0.0213	5.9999	1.2754	1.0654	0.0480	0.4997	0.0450	0.4690
122	53.14	0.05	0.0135	5.9999	0.0196	5.9999	1.4007	1.0703	0.0494	0.5015	0.0461	0.4686
123	53.31	0.05	0.0152	5.9999	0.0229	5.9999	1.1566	1.0643	0.0477	0.4998	0.0448	0.4696
124	53.48	0.06	0.0261	5.9999	0.0265	5.9999	1.0153	1.0811	0.0459	0.5061	0.0424	0.4681
125	53.64	0.05	0.0230	5.9999	0.0244	5.9999	1.0609	1.0724	0.0452	0.5027	0.0421	0.4688
126	53.80	0.07	0.0156	5.9999	0.0241	5.9999	1.2172	1.0379	0.0484	0.4877	0.0447	0.4699
127	53.97	0.08	0.0266	5.9999	0.0284	5.9999	1.0923	1.0710	0.0460	0.5025	0.0411	0.4692
128	54.14	0.06	0.0251	5.9999	0.0311	5.9999	1.0687	1.0834	0.0443	0.5074	0.0409	0.4683
129	54.29	0.08	0.0251	5.9999	0.0311	5.9999	1.0687	1.0782	0.0440	0.5037	0.0408	0.4672
130	54.46	0.09	0.0372	5.9999	0.0344	5.9999	0.9247	1.1006	0.0442	0.5170	0.0401	0.4657
131	54.63	0.09	0.0355	5.9999	0.0353	5.9999	1.0000	1.0878	0.0446	0.5108	0.0410	0.4696
132	54.79	0.09	0.0355	5.9999	0.0355	5.9999	1.0000	1.1250	0.0448	0.5283	0.0398	0.4693
133	54.95	0.08	0.0276	5.9999	0.0305	5.9999	1.1051	1.1078	0.0443	0.5223	0.0400	0.4715
134	55.13	0.11	0.0445	5.9999	0.0413	5.9999	0.9198	1.1150	0.0443	0.5254	0.0397	0.4712
135	55.28	0.09	0.0335	5.9999	0.0334	5.9999	0.9853	1.1097	0.0430	0.5227	0.0387	0.4710
136	55.44	0.10	0.0276	5.9999	0.0304	5.9999	1.1014	1.1207	0.0425	0.5275	0.0379	0.4707
137	55.61	0.10	0.0251	5.9999	0.0324	5.9999	1.1134	1.1351	0.0424	0.5338	0.0373	0.4703
138	55.78	0.09	0.0384	5.9999	0.0381	5.9999	0.9922	1.1332	0.0416	0.5334	0.0367	0.4707

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 48 MACH 0.60 RX10-6 2.7 PHI 0.0 CONF 61nOF11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
139	55.96	0.09	0.0448	0.9999	0.0392	0.9999	0.8750	1.1386	0.0415	0.5378	0.0364	0.4723
140	56.10	0.09	0.0384	0.9999	0.0366	0.9999	0.9583	1.1311	0.0412	0.5330	0.0364	0.4712
141	56.26	0.09	0.0384	0.9999	0.0368	0.9999	0.9583	1.1424	0.0398	0.5383	0.0348	0.4712
142	56.42	0.09	0.0364	0.9999	0.0366	0.9999	0.9583	1.1459	0.0399	0.5392	0.0348	0.4705
143	56.58	0.08	0.0353	0.9999	0.0355	0.9999	1.0170	1.1516	0.0391	0.5429	0.0339	0.4714
144	56.74	0.10	0.0415	0.9999	0.0402	0.9999	0.9087	1.1516	0.0391	0.5422	0.0339	0.4708
145	56.88	0.08	0.0367	0.9999	0.0365	0.9999	0.9965	1.1487	0.0394	0.5415	0.0343	0.4714
146	57.03	0.07	0.0331	0.9999	0.0334	0.9999	1.0028	1.1580	0.0382	0.5454	0.0330	0.4710
147	57.20	0.06	0.0443	0.9999	0.0420	0.9999	0.9481	1.1702	0.0377	0.5513	0.0322	0.4711
148	57.35	0.06	0.0351	0.9999	0.0351	0.9999	1.0030	1.1650	0.0374	0.5476	0.0321	0.4706
149	57.49	0.07	0.0272	0.9999	0.0313	0.9999	1.1507	1.1611	0.0371	0.5470	0.0319	0.4711
150	57.64	0.06	0.0334	0.9999	0.0361	0.9999	1.0308	1.1598	0.0361	0.5488	0.0311	0.4732
151	57.78	0.04	0.0318	0.9999	0.0348	0.9999	1.0943	1.1778	0.0354	0.5573	0.0300	0.4732
152	57.92	0.05	0.0345	0.9999	0.0375	0.9999	1.0745	1.1962	0.0362	0.5479	0.0313	0.4739
153	58.09	0.05	0.0272	0.9999	0.0325	0.9999	1.1948	1.1778	0.0355	0.5573	0.0301	0.4732
154	58.24	0.05	0.0241	0.9999	0.0304	0.9999	1.2614	1.1959	0.0343	0.5651	0.0287	0.4709
155	58.25	0.04	0.0255	0.9999	0.0343	0.9999	1.3451	1.1654	0.0354	0.5518	0.0304	0.4735
156	58.26	0.06	0.0269	0.9999	0.0368	0.9999	1.4737	1.1782	0.0343	0.5572	0.0291	0.4729
157	58.26	0.05	0.0348	0.9999	0.0387	0.9999	1.1121	1.1809	0.0343	0.5563	0.0291	0.4746
158	58.42	0.04	0.0255	0.9999	0.0343	0.9999	1.3451	1.1856	0.0335	0.5616	0.0282	0.4737

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 99 | MACH 0.60 | RX10-6 1.7 | PHI 0.0 | CONF BIMOFIL | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

FCINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.74	0.02	-1.3851	4.4334	0.0225	-0.0753	-0.0128	0.4285	0.1300	0.2986	-3.1915
2	-5.75	0.00	-1.3838	4.4816	-0.0162	-0.0388	-0.0064	0.4288	0.1287	0.3002	-3.2129
3	-5.74	0.02	-1.3869	4.4627	0.1282	-0.1627	-0.0126	0.4316	0.1295	0.3022	-3.2177
4	-4.62	0.01	-1.1166	3.8021	0.0930	-0.0617	-0.0120	0.4035	0.1121	0.2935	-3.3049
5	-3.01	0.01	-0.8026	3.2265	0.0819	-0.0697	-0.0355	0.3596	0.0870	0.2725	-3.6581
6	-1.19	0.01	-0.6746	2.7197	-0.0217	-0.0591	-0.0053	0.3372	0.0794	0.2577	-4.0319
7	0.71	0.02	-0.4052	2.0963	0.1263	-0.1737	-0.0045	0.3103	0.0772	0.2330	-5.1783
8	2.60	0.01	-0.1302	1.5126	0.1097	-0.2035	-0.0039	0.2928	0.0789	0.2138	-11.1083
9	4.41	0.01	0.0857	1.0604	0.0713	-0.1564	-0.0099	0.2805	0.0847	0.1958	12.6621
10	6.29	0.01	0.3372	0.7077	0.0713	-0.1335	-0.0091	0.2703	0.0965	0.1739	2.0588
11	8.18	0.01	0.5482	0.3731	-0.0146	-0.0410	-0.0022	0.2565	0.1053	0.1533	0.6805
12	9.99	0.01	0.7700	0.0151	-0.0641	-0.0182	0.0049	0.2589	0.1120	0.1270	0.0196
13	11.91	0.01	1.1119	-0.2235	0.0172	-0.1081	0.0058	0.2148	0.1153	0.0996	-0.5608
14	13.77	0.01	1.4426	-0.2712	-0.0153	0.0023	0.0004	0.1895	0.1220	0.0675	-0.8814
15	15.71	0.01	1.7512	-1.9871	0.0432	0.0569	0.0087	0.1702	0.1350	0.0352	-1.1094
16	17.70	-0.00	2.0147	-2.6965	-0.1513	0.0016	0.0073	0.1548	0.1500	0.0028	-1.2156
17	19.59	-0.01	2.5166	-3.1325	-0.1206	0.3658	-0.0178	0.1772	0.1933	-0.0161	-1.2438
18	21.53	-0.03	2.8886	-3.6376	-0.3757	0.7318	-0.0177	0.1787	0.2114	-0.0327	-1.2681
19	23.48	-0.02	3.2423	-4.1753	-0.3570	0.8186	-0.0494	0.1518	0.2277	-0.0759	-1.2878
20	25.38	-0.01	3.6772	-4.5035	-0.1656	0.6971	-0.0390	0.1142	0.2366	-0.1195	-1.2247
21	27.30	0.02	4.0768	-4.2956	0.2361	-0.3473	0.0090	0.0713	0.2240	-0.1527	-1.0537
22	28.24	0.02	4.2350	-4.1966	0.2786	-0.5221	0.0295	0.0415	0.2277	-0.1862	-0.9895
23	28.45	0.03	4.3026	-4.0875	0.4588	-0.7284	0.1015	0.0544	0.2352	-0.1808	-0.9501
24	28.77	0.03	4.3760	-4.0774	0.4367	-0.6491	0.0500	0.0507	0.2394	-0.1887	-0.9313
25	29.11	0.04	4.4080	-3.9240	0.4565	-0.7739	0.0764	0.0494	0.2486	-0.1992	-0.8902
26	29.40	0.05	4.5264	-4.0324	0.6488	-0.9850	0.0960	0.0359	0.2537	-0.2178	-0.8969
27	29.68	0.05	4.5407	-3.9302	0.6553	-0.9011	0.1096	0.0460	0.2558	-0.2098	-0.8655
28	29.98	0.07	4.6719	-4.0047	0.8515	-1.0860	0.1298	0.0437	0.2700	-0.2263	-0.8760
29	30.27	0.07	4.7957	-3.8575	0.9179	-1.1497	0.1762	0.0588	0.2842	-0.2254	-0.8044
30	30.53	0.08	4.8122	-3.7058	1.0093	-1.2359	0.1961	0.0660	0.2952	-0.2291	-0.7709
31	30.79	0.07	4.9001	-3.8072	0.9570	-1.1859	0.1704	0.0537	0.2965	-0.2427	-0.7770
32	31.09	0.08	5.0245	-3.7765	0.9781	-1.2738	0.1841	0.0555	0.3015	-0.2459	-0.7516
33	31.35	0.08	5.1103	-3.6568	1.0116	-1.1512	0.1714	0.0499	0.3052	-0.2552	-0.7240
34	31.64	0.07	5.2432	-3.5666	0.6179	-0.9872	0.1647	0.0509	0.3107	-0.2597	-0.6862
35	31.90	0.08	5.2565	-3.5255	0.9456	-1.0592	0.1788	0.0563	0.3120	-0.2556	-0.6661
36	32.18	0.07	5.4141	-3.4456	0.9244	-1.0643	0.1656	0.0457	0.3074	-0.2616	-0.6364
37	32.45	0.07	5.5475	-3.4674	1.0207	-1.2660	0.1413	0.0266	0.3057	-0.2790	-0.6250
38	32.70	0.07	5.5862	-3.3500	0.8667	-1.0045	0.1476	0.0347	0.3124	-0.2726	-0.6003
39	32.96	0.07	5.6161	-3.3296	0.8359	-0.9333	0.1218	0.0393	0.3145	-0.2751	-0.5925
40	33.23	0.08	5.7840	-3.2660	1.0161	-1.1242	0.1164	0.0416	0.3219	-0.2802	-0.5546
41	33.49	0.08	5.9254	-3.0842	1.0266	-1.1672	0.1043	0.0531	0.3304	-0.2772	-0.5202
42	33.75	0.06	6.0475	-2.9387	0.7536	-0.9141	0.0981	0.0662	0.3351	-0.2708	-0.4859
43	33.99	0.03	6.1486	-2.8253	0.4293	-0.5486	0.0784	0.0296	0.3345	-0.3049	-0.4595
44	34.23	0.07	6.1607	-2.7881	0.6735	-0.7731	0.0852	0.0365	0.3394	-0.3029	-0.4555
45	34.49	0.03	6.2614	-2.6853	0.3812	-0.4459	0.0594	0.0193	0.3357	-0.3164	-0.4295
46	34.73	0.03	6.3144	-2.6652	0.3019	-0.3645	0.0331	0.0125	0.3374	-0.3245	-0.4221

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 9% 0.90 1.7 0.0 BLKOFIL 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLA	CLL	CA	CAB	CAF	XCP
47	34.96	0.02	6.4412	-2.6050	0.2588	-0.2046	0.0274	-0.0080	0.3344	-0.3424	-0.4044
48	35.22	0.04	6.4721	-2.4066	0.2715	-0.2362	-0.0173	0.0093	0.3378	-0.3285	-0.3813
49	35.46	-0.00	6.5772	-2.4955	-0.0357	0.1785	-0.0503	0.0149	0.3403	-0.3258	-0.3800
50	35.69	-0.00	6.6432	-2.4096	-0.0706	0.3141	-0.0373	-0.0080	0.3389	-0.3469	-0.3711
51	35.94	-0.01	6.7241	-2.5674	-0.1311	0.4531	-0.0699	0.0044	0.3384	-0.3340	-0.3818
52	36.18	-0.00	6.8216	-2.5452	-0.0862	0.4534	-0.0568	-0.0070	0.3448	-0.3518	-0.3737
53	36.40	-0.01	6.8611	-2.5141	-0.2045	0.6153	-0.0826	0.0082	0.3473	-0.3391	-0.3664
54	36.65	-0.04	6.9542	-2.5865	-0.2613	0.7328	-0.0587	-0.0115	0.3481	-0.3596	-0.3698
55	36.91	-0.02	7.0182	-2.5545	-0.3388	0.8716	-0.0667	-0.0180	0.3460	-0.3646	-0.3589
56	37.14	0.01	7.2739	-2.5531	0.0157	0.3953	-0.0226	-0.0196	0.3498	-0.3694	-0.3510
57	37.36	0.0	7.3347	-2.6128	-0.0515	0.4017	-0.0416	-0.0246	0.3447	-0.3693	-0.3562
58	37.62	0.00	7.3443	-2.4487	-0.0493	0.4675	-0.0329	-0.0180	0.3635	-0.3795	-0.3334
59	37.83	-0.00	7.5114	-2.6068	-0.1151	0.5671	-0.0347	-0.0406	0.3696	-0.3960	-0.3471
60	38.08	-0.00	7.5787	-2.5470	-0.1775	0.6345	-0.0154	-0.0333	0.3619	-0.3952	-0.3426
61	38.32	-0.01	7.6126	-2.6355	-0.2452	0.6409	-0.0345	-0.0284	0.3573	-0.3857	-0.3462
62	38.55	-0.00	7.7306	-2.5345	-0.1595	0.8586	-0.0349	-0.0067	0.3685	-0.3752	-0.3285
63	38.79	-0.00	7.7145	-2.5425	-0.2125	1.0367	-0.0098	0.0048	0.3677	-0.3825	-0.3296
64	39.01	0.00	7.8546	-2.6216	-0.1462	0.9808	-0.0351	-0.0129	0.3832	-0.3961	-0.3336
65	39.22	-0.01	7.9713	-2.5852	-0.2400	1.0177	-0.0474	-0.0152	0.3840	-0.3992	-0.3218
66	39.44	0.01	8.0253	-2.5236	-0.0607	1.2025	-0.0352	-0.0065	0.3685	-0.3954	-0.3156
67	39.67	-0.01	8.1611	-2.5862	-0.3530	1.4534	-0.0547	-0.0173	0.3657	-0.4030	-0.3169
68	39.86	-0.03	8.1546	-2.5656	-0.5131	1.8512	-0.0493	0.0004	0.4670	-0.4066	-0.3148
69	40.08	-0.01	8.1715	-2.5625	-0.2584	1.7506	-0.0693	0.0084	0.3977	-0.3893	-0.3136
70	40.38	-0.01	8.2606	-2.5514	-0.2561	1.8205	-0.0426	0.0043	0.4127	-0.4084	-0.3081
71	40.57	-0.03	8.4038	-2.7046	-0.5505	1.9107	-0.0873	-0.0069	0.3969	-0.4058	-0.3218
72	40.78	-0.02	8.4736	-2.6866	-0.4541	1.9498	-0.0744	-0.0097	0.4065	-0.4162	-0.3163
73	40.99	-0.03	8.5510	-2.5843	-0.6274	2.2539	-0.0620	-0.0099	0.4090	-0.4189	-0.3008
74	41.19	-0.04	8.5776	-2.6017	-0.7126	1.9478	-0.0864	-0.0204	0.4011	-0.4215	-0.3103
75	41.40	-0.03	8.7427	-2.7138	-0.6457	2.1506	-0.0678	-0.0475	0.3998	-0.4473	-0.3106
76	41.61	-0.02	8.7634	-2.7418	-0.4698	1.6152	-0.0656	-0.0401	0.3911	-0.4312	-0.3129
77	41.82	-0.01	8.8440	-2.7737	-0.3545	1.7266	-0.0595	-0.0428	0.4038	-0.4464	-0.3136
78	42.01	-0.02	8.9163	-2.8512	-0.3524	2.0735	-0.0603	-0.0054	0.4206	-0.4260	-0.3018
79	42.24	-0.02	9.0350	-2.8900	-0.2606	1.4185	-0.0578	-0.0705	0.3758	-0.4461	-0.3197
80	42.44	-0.03	9.1145	-2.9457	-0.4227	1.4559	-0.0659	-0.0772	0.3645	-0.4607	-0.3232
81	42.60	-0.03	9.1035	-2.8884	-0.4296	1.6138	-0.0516	-0.0607	0.4084	-0.4691	-0.3151
82	42.79	-0.01	9.1666	-2.9151	-0.2232	1.3514	-0.0702	-0.0764	0.3649	-0.4613	-0.3180
83	43.01	-0.02	9.3073	-2.8328	-0.2715	0.8966	-0.0279	-0.0922	0.3812	-0.4734	-0.3044
84	43.18	-0.00	9.3431	-2.7720	-0.2137	1.8273	-0.0454	-0.0520	0.4201	-0.4721	-0.2947
85	43.35	-0.04	9.4957	-3.0442	-0.4667	1.3303	-0.0626	-0.1004	0.3963	-0.4967	-0.3204
86	43.53	-0.02	9.4258	-2.9121	-0.3647	2.0961	-0.0459	-0.0374	0.4347	-0.4719	-0.3089
87	43.74	-0.01	9.5842	-2.9676	-0.2106	1.0612	-0.0223	-0.1046	0.3871	-0.4917	-0.3056
88	43.92	-0.00	9.6475	-3.0842	-0.1551	1.9253	-0.0449	-0.0627	0.4097	-0.4724	-0.3155
89	44.08	-0.01	9.6930	-2.9324	-0.2676	1.1297	-0.0415	-0.0909	0.3961	-0.4871	-0.3029
90	44.27	-0.03	9.7547	-3.0752	-0.5467	2.1487	-0.0575	-0.0586	0.4366	-0.4953	-0.3140
91	44.45	-0.02	9.8836	-2.9706	-0.3531	1.7872	-0.0431	-0.0864	0.4099	-0.4964	-0.3008
92	44.61	-0.07	9.8541	-2.8947	-0.6396	6.6190	0.0007	-0.1091	0.4006	-0.5097	-0.2936

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RXIC-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 99 0.90 1.7 C.C B1&OF11 0.0 0 -10 0 -10 UNKNOWN

PCINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.82	-0.04	5.5539	-3.3514	-0.4295	1.3493	-0.0152	-0.1272	0.3944	-0.5216	-0.3065
94	45.01	-0.03	10.0694	-3.2053	-0.4826	2.2101	-0.0506	-0.0640	0.4158	-0.4798	-0.3183
95	45.19	-0.04	10.1883	-3.2475	-0.4780	1.7541	-0.0418	-0.1097	0.3885	-0.4982	-0.3187
96	45.38	-0.02	10.2201	-3.2284	-0.3787	2.1007	-0.0430	-0.0801	0.4040	-0.4892	-0.3145
97	45.55	-0.04	10.2362	-3.2500	-0.4118	1.7041	-0.0606	-0.0850	0.4082	-0.4933	-0.3175
98	45.74	-0.04	10.3752	-3.2040	-0.4537	1.9633	-0.0547	-0.0909	0.4140	-0.5106	-0.3087
99	45.90	-0.04	10.4646	-3.2523	-0.4505	1.7520	-0.0536	-0.1074	0.4082	-0.5156	-0.3162
100	46.08	-0.02	10.4970	-3.2535	-0.3285	2.1405	-0.0893	-0.0757	0.4261	-0.5019	-0.3290
101	46.27	-0.04	10.6386	-3.3556	-0.5466	2.2494	-0.0762	-0.1108	0.4185	-0.5293	-0.3154
102	46.43	-0.05	10.6565	-3.2555	-0.5520	1.7594	-0.0723	-0.0969	0.4181	-0.5150	-0.3073
103	46.62	-0.02	10.7250	-3.4692	-0.3101	2.3611	-0.0613	-0.0616	0.4240	-0.5057	-0.3235
104	46.79	-0.05	10.8956	-3.4162	-0.6677	2.6050	-0.0936	-0.0617	0.4600	-0.5418	-0.3118
105	46.97	-0.07	10.9238	-3.4205	-0.8624	2.3465	-0.0921	-0.0940	0.4137	-0.5078	-0.3132
106	47.15	-0.01	10.9854	-3.4653	-0.3105	2.3455	-0.0987	-0.1105	0.4374	-0.5479	-0.3158
107	47.31	-0.03	10.9555	-3.4263	-0.3272	1.7481	-0.0639	-0.1126	0.4211	-0.5337	-0.3127
108	47.47	-0.05	10.9861	-3.3768	-0.5422	2.3525	-0.0918	-0.0661	0.4297	-0.4959	-0.3076
109	47.66	-0.07	11.2400	-3.7311	-0.8492	2.8201	-0.1118	-0.1004	0.4481	-0.5485	-0.3319
110	47.84	-0.02	11.1974	-3.6452	-0.3235	2.6351	-0.1182	-0.0275	0.4662	-0.4938	-0.3255
111	48.02	-0.05	11.2152	-3.6135	-0.6544	2.6021	-0.1167	-0.0621	0.4703	-0.5325	-0.3340
112	48.18	-0.02	11.2543	-3.6041	-0.3283	2.5306	-0.1299	-0.0298	0.4965	-0.5261	-0.3468
113	48.36	0.01	11.2941	-3.7723	0.0112	2.4863	-0.1174	-0.0501	0.4824	-0.5325	-0.3282
114	48.53	-0.03	11.3527	-3.7757	-0.3271	2.5573	-0.1166	-0.0067	0.4903	-0.5570	-0.3268
115	48.70	0.02	11.4207	-3.8322	0.1043	2.7062	-0.1112	-0.0199	0.4986	-0.5167	-0.3298
116	48.88	-0.02	11.7227	-4.0777	-0.2562	2.6064	-0.1293	-0.0271	0.5004	-0.5275	-0.3478
117	49.05	0.01	11.9240	-4.3222	0.0303	2.5871	-0.1354	-0.0175	0.5488	-0.5663	-0.3625
118	49.21	0.01	11.8964	-4.1757	0.1893	2.4879	-0.1355	0.0105	0.5579	-0.5474	-0.3515
119	49.41	0.03	12.1772	-4.5611	0.3727	2.8693	-0.1302	-0.0131	0.5684	-0.5815	-0.3746
120	49.57	0.03	12.2255	-4.4521	0.3367	2.7134	-0.1223	0.0471	0.5653	-0.5382	-0.3640
121	49.74	0.03	12.1939	-4.3502	0.1880	3.0251	-0.0975	0.0561	0.5908	-0.5347	-0.3551
122	49.93	-0.00	12.2166	-4.3064	-0.0065	2.9591	-0.1163	0.0501	0.5925	-0.5424	-0.3574
123	50.12	0.11	12.4277	-4.5467	1.2012	2.5225	-0.1397	0.0196	0.5936	-0.5740	-0.3659
124	50.27	0.06	12.3815	-4.9155	0.7036	3.0597	-0.1042	0.0472	0.5935	-0.5463	-0.3907
125	50.46	0.03	12.7555	-5.1826	0.3462	3.1810	-0.1160	0.0320	0.5943	-0.5623	-0.4061
126	50.65	0.03	12.9246	-5.3856	0.3228	2.7300	-0.0026	-0.0297	0.5776	-0.6073	-0.4325
127	50.81	0.04	12.8641	-5.1685	0.4564	2.6842	-0.0495	-0.0025	0.5725	-0.5750	-0.4018
128	50.98	-0.02	12.9757	-5.1851	-0.1333	2.5946	-0.0540	-0.0018	0.5833	-0.5851	-0.3998
129	51.13	0.05	12.8654	-4.9757	0.5526	2.9284	-0.0249	-0.0161	0.5834	-0.5995	-0.3868
130	51.30	0.06	13.0707	-5.2241	0.7423	2.9146	-0.0311	-0.0242	0.5866	-0.6110	-0.4001
131	51.48	0.05	13.1559	-5.3664	0.7316	2.7124	-0.0363	0.0091	0.5920	-0.5629	-0.4078
132	51.64	0.06	13.1107	-5.2065	0.7316	2.4705	-0.0220	-0.0193	0.5924	-0.6117	-0.3967
133	51.83	0.03	13.5765	-5.1471	0.4387	2.8668	-0.0609	0.0036	0.5911	-0.5905	-0.4527
134	52.04	0.04	14.1420	-5.5138	0.4756	2.7464	-0.0273	-0.0317	0.5898	-0.6215	-0.4889
135	52.20	0.03	14.1660	-5.7922	0.4538	2.9082	-0.0273	-0.0079	0.5896	-0.5975	-0.4788
136	52.37	0.04	14.0429	-5.7716	0.5661	2.7553	-0.0340	-0.0304	0.5909	-0.6413	-0.4822
137	52.53	0.01	14.1060	-6.7856	0.3236	2.7440	-0.0396	-0.0554	0.5955	-0.6509	-0.4810
138	52.70	0.03	14.1170	-6.5503	0.4553	2.6623	-0.0333	-0.0505	0.5925	-0.6480	-0.4923

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RX10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	99	0.90	1.7	0.0	B1WCF11	0.0	0	-10	0	-10	UNKNOWN

PCINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.85	0.05	14.0225	-6.6561	0.6664	2.5631	-0.0202	-0.0269	0.5942	-0.6211	-0.4748
140	53.03	0.05	14.2965	-7.1208	0.7419	2.6828	-0.0333	-0.0351	0.5949	-0.6480	-0.4981
141	53.19	0.08	14.2178	-7.1145	1.6726	2.4812	-0.0464	-0.0487	0.5958	-0.6445	-0.5004
142	53.36	0.06	14.2552	-7.1465	0.8367	2.3601	-0.0192	-0.0178	0.5953	-0.6129	-0.5014
143	53.51	0.05	14.2834	-7.0724	0.8056	2.0715	-0.0181	-0.0212	0.5915	-0.6127	-0.4952
144	53.68	0.02	14.1962	-7.0058	0.4732	1.8519	-0.0161	-0.0307	0.5960	-0.6267	-0.4934
145	53.85	0.03	14.2612	-7.1033	0.8517	2.0051	-0.0175	-0.0275	0.5922	-0.6157	-0.4981
146	54.01	0.05	14.3415	-7.0362	0.9007	1.8092	0.0023	-0.0270	0.5947	-0.6267	-0.4906
147	54.15	0.05	14.3463	-7.1018	0.8850	1.7663	0.0089	-0.0324	0.5993	-0.6317	-0.4950
148	54.32	0.01	14.3956	-7.2437	0.4035	1.6503	0.0038	-0.0695	0.5956	-0.6651	-0.5030
149	54.47	0.04	14.3383	-7.1457	0.9001	1.5227	0.0097	-0.0667	0.5934	-0.6661	-0.4987
150	54.62	0.00	14.3283	-7.1242	0.4555	1.6069	0.0167	-0.0384	0.6042	-0.6426	-0.4972
151	54.79	0.07	14.4635	-7.2176	1.1004	1.4596	0.0229	-0.0328	0.6075	-0.6403	-0.4950
152	54.94	0.03	14.4771	-7.1304	0.6725	1.5979	0.0233	-0.0451	0.6071	-0.6522	-0.4925
153	55.07	-0.01	14.2877	-6.7626	0.4403	1.5864	0.0427	-0.0384	0.6009	-0.6393	-0.4733
154	55.23	0.03	14.4965	-6.9411	0.7572	1.4033	0.0497	-0.0485	0.6134	-0.6319	-0.4801
155	55.40	0.03	14.5504	-7.0633	0.6405	1.5042	0.0434	-0.0534	0.6109	-0.6643	-0.4855
156	55.57	-0.02	14.0630	-7.1184	0.2403	1.3636	0.0305	-0.0688	0.6117	-0.7006	-0.4854
157	55.68	0.01	14.4339	-6.7845	0.5753	1.2676	0.0507	-0.0310	0.6122	-0.6432	-0.4761
158	55.85	0.03	14.5975	-6.8518	0.7773	1.4905	0.0302	-0.0863	0.6059	-0.6925	-0.4694
159	56.02	-0.02	14.6577	-6.9085	0.3660	1.4291	0.0513	-0.0710	0.6138	-0.6849	-0.4700
160	56.17	0.04	14.5816	-6.8706	0.8536	1.5989	0.0622	-0.0556	0.6106	-0.6664	-0.4711
161	56.33	0.00	14.6543	-6.9365	0.4432	1.6038	0.0631	-0.0814	0.6103	-0.6918	-0.4734
162	56.47	0.03	14.6566	-6.9356	0.6765	1.2873	0.0571	-0.0729	0.6120	-0.6850	-0.4733
163	56.63	-0.01	14.7204	-6.9678	0.3955	1.7289	0.0696	-0.0593	0.6129	-0.6722	-0.4695
164	56.78	-0.00	14.6566	-6.9155	0.4754	1.2243	0.0582	-0.0795	0.6103	-0.6899	-0.4719
165	56.94	0.01	14.7771	-6.9550	0.6104	1.4008	0.0541	-0.0641	0.6112	-0.6754	-0.4734
166	57.08	-0.05	14.6638	-6.8756	-0.0267	1.2180	0.0530	-0.0627	0.6088	-0.6715	-0.4682
167	57.24	-0.02	14.7758	-6.8812	0.3562	1.1364	0.0593	-0.0694	0.6039	-0.6733	-0.4656
168	57.39	-0.02	14.7877	-7.1263	0.2753	1.2248	0.0591	-0.0748	0.6065	-0.6814	-0.4815
169	57.53	-0.03	14.7058	-7.0230	0.2761	1.2028	0.0589	-0.0703	0.6040	-0.6744	-0.4776
170	57.67	-0.06	14.6616	-6.9182	-0.1507	1.1454	0.0602	-0.1359	0.5955	-0.7314	-0.4383
171	57.82	-0.04	14.7649	-6.9250	0.1815	0.7124	0.0554	-0.1383	0.5655	-0.7238	-0.4278
172	57.97	-0.04	14.7845	-5.9571	0.2488	0.1305	0.0578	-0.1612	0.5715	-0.7327	-0.4056
173	58.11	-0.09	14.6956	-5.7883	-0.2652	-0.3514	0.0587	-0.1866	0.5677	-0.7563	-0.3937
174	58.26	-0.14	14.8440	-5.9542	-0.7087	-0.8127	0.0526	-0.1370	0.5869	-0.7239	-0.4038
175	58.39	-0.08	14.5611	-6.8849	-0.2359	-1.1659	0.0404	-0.1098	0.6084	-0.7180	-0.4662
176	58.48	-0.10	14.6115	-6.5033	-0.3588	-0.9115	0.0590	-0.1088	0.6050	-0.7138	-0.4431
177	58.48	-0.12	14.5021	-6.6961	-0.4705	-0.9566	0.0463	-0.1087	0.6016	-0.7103	-0.4453
178	58.48	-0.09	14.9520	-6.8846	-0.1315	-1.0509	0.0468	-0.1080	0.6104	-0.7189	-0.4604
179	58.48	-0.10	14.9354	-6.7082	-0.3657	-0.8747	0.0530	-0.0942	0.6078	-0.7021	-0.4650

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 99 MACH 0.90 RATIO 1.7 PHI 0.0 CONF 6 BLOCK 11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CAF1	CM1	CB1	XCPF1	YCPF1	CAF2	CM2	CB2	XCPF2	YCPF2
1	-5.74	0.02	-0.0008	-0.0001	0.0070	0.1250	-8.7500	-0.5919	-0.0636	-0.3303	0.1074	0.5580
2	-5.75	0.01	-0.0015	-0.0015	0.0050	0.4736	-2.6316	-0.5704	-0.0554	-0.3179	0.0971	0.5573
3	-5.74	0.02	-0.0007	-0.0007	0.0058	0.5997	-8.2857	-0.5397	-0.0578	-0.3263	0.0980	0.5533
4	-4.92	0.01	0.0065	0.0018	0.0087	0.2117	1.0235	-0.5068	-0.0807	-0.2898	0.1592	0.5718
5	-3.01	0.01	0.0052	-0.0006	0.0044	-0.0652	0.4783	-0.4236	-0.0690	-0.2477	0.2100	0.5647
6	-1.19	0.01	0.0150	0.0011	0.0027	0.0579	0.1421	-0.3298	-0.0654	-0.1976	0.2569	0.5992
7	0.71	0.02	0.0136	0.0001	0.0015	0.0074	0.1103	-0.2326	-0.0676	-0.1447	0.2905	0.6221
8	2.60	0.01	0.0141	-0.0010	-0.0021	-0.0709	-0.1469	-0.1266	-0.0461	-0.0895	0.3578	0.6949
9	4.41	0.01	0.0154	-0.0006	-0.0004	-0.0369	-0.0206	-0.0507	-0.0215	-0.0483	0.4239	0.6527
10	6.25	0.01	0.0168	-0.0018	-0.0008	-0.1071	-0.0476	0.0142	0.0025	-0.0107	0.1760	-1.1781
11	8.18	0.01	0.0155	-0.0013	-0.0004	-0.0666	-0.0205	0.0714	0.0293	0.0096	0.4103	0.1345
12	9.99	0.01	0.0248	0.0	0.0003	0.0	0.0121	0.1201	0.0510	0.0314	0.4245	0.2614
13	11.91	0.01	0.0171	-0.0007	-0.0041	-0.0409	-0.2398	0.1954	0.0726	0.0746	0.3714	0.3818
14	13.77	0.01	0.0171	0.0004	-0.0046	0.0234	-0.2690	0.2813	0.0918	0.1258	0.3263	0.4472
15	15.71	0.01	0.0061	-0.0021	-0.0037	-0.3442	-0.8066	0.3603	0.0954	0.1613	0.2647	0.4477
16	17.70	-0.00	0.0038	-0.0051	-0.0043	-1.4163	-1.1944	0.4512	0.0984	0.2069	0.2180	0.4586
17	19.59	-0.01	0.0085	0.0040	0.0123	0.6152	1.8923	0.5163	0.1024	0.2443	0.1983	0.4732
18	21.53	-0.03	-0.0314	-0.0072	-0.0005	0.1925	0.1738	0.5476	0.0720	0.2601	0.1314	0.4859
19	23.48	-0.02	-0.0771	-0.0183	-0.0275	0.2114	0.3567	0.6327	0.0738	0.3069	0.1163	0.4851
20	25.38	-0.01	0.0361	-0.0063	0.0112	-0.0037	0.3102	0.7279	0.0682	0.3446	0.0937	0.4734
21	27.30	0.02	0.0773	0.0006	0.0235	0.0078	0.3340	0.7551	0.0661	0.3552	0.0875	0.4704
22	28.24	0.02	0.1028	0.0155	0.0624	0.0552	0.3833	0.7374	0.0659	0.3417	0.0853	0.4634
23	28.45	0.03	0.2340	0.0355	0.1051	0.1534	0.4491	0.7176	0.0666	0.3285	0.0828	0.4578
24	28.77	0.03	0.1583	0.0148	0.0560	0.0935	0.3558	0.7506	0.0665	0.3439	0.0886	0.4582
25	29.11	0.04	0.1930	0.0230	0.0735	0.1191	0.3608	0.7389	0.0657	0.3335	0.0889	0.4519
26	29.40	0.05	0.2348	0.0355	0.0952	0.1512	0.4225	0.7479	0.0668	0.3335	0.0893	0.4459
27	29.68	0.05	0.2356	0.0423	0.1000	0.1795	0.4254	0.7418	0.0672	0.3318	0.0906	0.4473
28	29.98	0.07	0.2422	0.0435	0.1015	0.1812	0.4191	0.7568	0.0671	0.3350	0.0886	0.4479
29	30.27	0.07	0.3138	0.0751	0.1385	0.2394	0.4429	0.7163	0.0670	0.3114	0.0935	0.4347
30	30.53	0.06	0.3340	0.0856	0.1481	0.2562	0.4434	0.7104	0.0668	0.3094	0.0940	0.4295
31	30.79	0.07	0.3168	0.0827	0.1356	0.2595	0.4363	0.7283	0.0676	0.3154	0.0931	0.4331
32	31.09	0.08	0.3006	0.0751	0.1255	0.2496	0.4318	0.7525	0.0677	0.3234	0.0899	0.4298
33	31.35	0.08	0.3150	0.0800	0.1380	0.2539	0.4317	0.7385	0.0672	0.3263	0.0886	0.4302
34	31.64	0.07	0.3059	0.0751	0.1314	0.2585	0.4296	0.7540	0.0680	0.3218	0.0902	0.4268
35	31.90	0.08	0.3124	0.0827	0.1337	0.2647	0.4280	0.7662	0.0672	0.3292	0.0877	0.4244
36	32.18	0.07	0.3270	0.0938	0.1440	0.2864	0.4404	0.7724	0.0669	0.3245	0.0866	0.4201
37	32.49	0.07	0.2993	0.0808	0.1280	0.2699	0.4277	0.8119	0.0662	0.3440	0.0818	0.4239
38	32.70	0.07	0.3030	0.0854	0.1454	0.2618	0.4271	0.8159	0.0670	0.3462	0.0821	0.4243
39	32.96	0.07	0.2624	0.0781	0.1208	0.2765	0.4271	0.8324	0.0672	0.3530	0.0807	0.4241
40	33.23	0.08	0.3010	0.0864	0.1498	0.2870	0.4312	0.8537	0.0673	0.3616	0.0788	0.4236
41	33.49	0.08	0.2633	0.0800	0.1196	0.2823	0.4222	0.8687	0.0680	0.3665	0.0783	0.4219
42	33.75	0.06	0.2739	0.0830	0.1153	0.3029	0.4210	0.8538	0.0674	0.3592	0.0789	0.4207
43	33.99	0.03	0.2060	0.0557	0.0807	0.2893	0.3908	0.8778	0.0669	0.3702	0.0762	0.4217
44	34.23	0.07	0.2038	0.0553	0.0809	0.2713	0.3970	0.8811	0.0653	0.3698	0.0741	0.4197
45	34.49	0.03	0.1626	0.0445	0.0681	0.2436	0.3729	0.8960	0.0661	0.3771	0.0738	0.4209
46	34.73	0.03	0.1178	0.0233	0.0320	0.1577	0.2716	0.9141	0.0651	0.3858	0.0712	0.4221

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 99 | MACH 0.90 | RX10-6 1.7 | PHI 0.0 | CONF B1=CF11 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNF1	CH1	CB1	XCPF1	YCPF1	CNF2	CH2	CB2	XCPF2	YCPF2
47	34.98	0.02	-0.1166	-0.0235	-0.0345	0.2011	0.2904	0.9276	0.0649	0.3923	0.6695	0.4229
48	35.22	0.02	-0.0625	-0.0064	-0.0171	0.0671	-0.1476	0.9956	0.0645	0.4004	0.6682	0.4234
49	35.46	-0.00	-0.0224	-0.0175	-0.0455	0.7989	2.0313	0.9651	0.0647	0.4093	0.6670	0.4241
50	35.69	-0.00	-0.0360	-0.0184	-0.0451	0.6011	1.4739	0.9698	0.0637	0.4116	0.0657	0.4244
51	35.94	-0.01	-0.0676	-0.0365	-0.0783	0.4166	0.8936	0.9618	0.0637	0.4166	0.0649	0.4245
52	36.18	-0.00	-0.0617	-0.0224	-0.0600	0.3629	0.9724	0.9743	0.0634	0.4125	0.0651	0.4234
53	36.40	-0.01	-0.1070	-0.0375	-0.0882	0.3541	0.8243	0.9908	0.0631	0.4205	0.0637	0.4244
54	36.65	-0.02	-0.0744	-0.0237	-0.0645	0.3163	0.8011	0.9819	0.0627	0.4149	0.0638	0.4225
55	36.91	-0.02	-0.1065	-0.0322	-0.0840	0.3023	0.7887	0.9895	0.0627	0.4174	0.0633	0.4218
56	37.14	0.01	-0.0931	-0.0118	-0.0400	0.3504	1.2085	0.9905	0.0634	0.4175	0.0640	0.4213
57	37.38	0.0	-0.0268	-0.0105	-0.0418	0.3645	1.4514	0.9909	0.0631	0.4175	0.0637	0.4213
58	37.62	0.00	-0.0075	-0.0065	-0.0256	0.6664	3.4133	0.9881	0.0627	0.4142	0.0634	0.4192
59	37.83	-0.00	-0.0313	-0.0121	-0.0434	0.3865	1.3866	1.0105	0.0627	0.4251	0.0620	0.4207
60	38.08	-0.00	-0.0447	-0.0136	-0.0455	0.2952	1.0179	1.0060	0.0626	0.4229	0.0622	0.4204
61	38.32	-0.01	-0.0601	-0.0176	-0.0525	0.2978	0.8602	1.0106	0.0623	0.4239	0.0616	0.4195
62	38.55	-0.00	-0.0755	-0.0240	-0.0596	0.3178	0.7934	1.0121	0.0625	0.4241	0.0621	0.4190
63	38.79	-0.00	-0.0954	-0.0300	-0.0750	0.1694	0.9887	0.9763	0.0619	0.4060	0.0634	0.4156
64	39.01	0.00	-0.0574	-0.0285	-0.0703	0.2925	0.7218	1.0228	0.0615	0.4273	0.0601	0.4178
65	39.22	-0.01	-0.1265	-0.0350	-0.0853	0.2757	0.6722	1.0214	0.0613	0.4236	0.0606	0.4167
66	39.44	0.01	-0.0935	-0.0216	-0.0605	0.2310	0.6513	0.9825	0.0610	0.4065	0.0621	0.4137
67	39.67	-0.01	-0.1368	-0.0331	-0.0844	0.2419	0.6170	0.9767	0.0595	0.4018	0.0609	0.4114
68	39.88	-0.03	-0.1450	-0.0331	-0.0858	0.2282	0.5917	0.9649	0.0588	0.3953	0.0609	0.4097
69	40.08	-0.01	-0.1003	-0.0377	-0.0932	0.2351	0.5814	0.9753	0.0590	0.4010	0.0605	0.4112
70	40.30	-0.01	-0.1062	-0.0405	-0.1001	0.2460	0.6023	0.9978	0.0582	0.4131	0.0583	0.4140
71	40.57	-0.03	-0.2076	-0.0501	-0.1238	0.2420	0.5971	1.0217	0.0585	0.4241	0.0572	0.4151
72	40.78	-0.02	-0.1941	-0.0478	-0.1173	0.2402	0.6043	1.0277	0.0582	0.4270	0.0566	0.4155
73	40.99	-0.03	-0.2221	-0.0505	-0.1235	0.2291	0.5961	0.9630	0.0568	0.4052	0.0578	0.4122
74	41.19	-0.04	-0.2151	-0.0522	-0.1241	0.2426	0.5769	1.0278	0.0571	0.4275	0.0555	0.4156
75	41.40	-0.03	-0.1971	-0.0458	-0.1162	0.2323	0.5895	1.0308	0.0576	0.4284	0.0557	0.4156
76	41.61	-0.04	-0.1886	-0.0453	-0.1170	0.2401	0.5873	1.0221	0.0560	0.4198	0.0548	0.4107
77	41.82	-0.01	-0.1927	-0.0421	-0.1085	0.2184	0.5651	1.0193	0.0569	0.4177	0.0538	0.4098
78	42.01	-0.02	-0.2034	-0.0445	-0.1108	0.2177	0.5447	0.9963	0.0548	0.4094	0.0549	0.4101
79	42.24	-0.02	-0.1725	-0.0355	-0.0953	0.2312	0.6104	1.0715	0.0559	0.4432	0.0522	0.4136
80	42.44	-0.03	-0.1640	-0.0401	-0.1065	0.2204	0.5876	1.0523	0.0551	0.4301	0.0523	0.4087
81	42.60	-0.03	-0.1167	-0.0314	-0.0816	0.2690	0.6992	1.0808	0.0545	0.4450	0.0504	0.4117
82	42.79	-0.01	-0.1756	-0.0388	-0.1057	0.2205	0.6019	1.0749	0.0541	0.4404	0.0503	0.4102
83	43.01	-0.02	-0.1230	-0.0297	-0.0762	0.2414	0.6195	1.0824	0.0544	0.4443	0.0502	0.4107
84	43.18	-0.00	-0.1514	-0.0425	-0.1107	0.2220	0.5784	1.0645	0.0535	0.4370	0.0502	0.4105
85	43.35	-0.04	-0.1483	-0.0341	-0.0874	0.2330	0.5974	1.0974	0.0539	0.4518	0.0491	0.4117
86	43.53	-0.04	-0.2026	-0.0435	-0.1056	0.2147	0.5380	1.0346	0.0525	0.4224	0.0507	0.4083
87	43.74	-0.01	-0.1327	-0.0300	-0.0797	0.2243	0.5961	1.1051	0.0533	0.4530	0.0482	0.4095
88	43.92	-0.00	-0.2116	-0.0435	-0.1131	0.2150	0.5345	1.0452	0.0525	0.4263	0.0502	0.4079
89	44.06	-0.01	-0.1033	-0.0280	-0.0705	0.2710	0.6825	1.1218	0.0523	0.4621	0.0466	0.4115
90	44.27	-0.03	-0.2275	-0.0457	-0.1201	0.2184	0.5279	1.0468	0.0514	0.4269	0.0491	0.4078
91	44.45	-0.02	-0.1682	-0.0388	-0.1003	0.2306	0.5963	1.0932	0.0525	0.4483	0.0480	0.4101
92	44.61	-0.07	-0.0640	-0.0155	-0.0448	0.3046	0.7000	1.1040	0.0514	0.4509	0.0465	0.4084

MANTIA MISSILE TAILS EFFECTS DATA

TEST 7 | PART 55 | MACH 0.90 | RAIC-6 1.7 | PHI C.C | CONF 61hOF11 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CH1	CA1	XCPF1	YCPF1	CNF2	CH2	CA2	XCPF2	YCPF2
93	46.82	-0.04	-0.1116	-0.0277	-0.0815	0.2481	0.7339	1.1010	0.0509	0.4507	0.0462	0.4094
94	45.01	-0.03	-0.2056	-0.0457	-0.1157	0.2222	0.5622	1.0749	0.0506	0.4423	0.0468	0.4096
95	45.19	-0.04	-0.2186	-0.0472	-0.1260	0.2159	0.5764	1.0995	0.0510	0.4500	0.0464	0.4093
96	45.36	-0.04	-0.2315	-0.0531	-0.1266	0.2269	0.5520	1.0950	0.0499	0.4495	0.0456	0.4105
97	45.55	-0.04	-0.2265	-0.0514	-0.1272	0.2269	0.5616	1.0935	0.0504	0.4482	0.0461	0.4095
98	45.74	-0.04	-0.2096	-0.0429	-0.1456	0.2382	0.5939	1.0840	0.0494	0.4438	0.0455	0.4092
99	45.90	-0.04	-0.2258	-0.0526	-0.1321	0.2338	0.5646	1.1010	0.0501	0.4518	0.0459	0.4104
100	46.08	-0.04	-0.2957	-0.0736	-0.1615	0.2400	0.5402	1.0754	0.0483	0.4399	0.0449	0.4091
101	46.27	-0.04	-0.2667	-0.0610	-0.1483	0.2339	0.5689	1.1068	0.0492	0.4558	0.0444	0.4118
102	46.43	-0.05	-0.1516	-0.0451	-0.1186	0.2562	0.6190	1.1159	0.0487	0.4590	0.0436	0.4113
103	46.62	-0.04	-0.3006	-0.0764	-0.1636	0.2539	0.5439	1.1010	0.0476	0.4535	0.0432	0.4115
104	46.79	-0.05	-0.2757	-0.0701	-0.1578	0.2506	0.5642	1.1130	0.0478	0.4581	0.0429	0.4116
105	46.97	-0.07	-0.2666	-0.0726	-0.1626	0.2516	0.5669	1.1066	0.0475	0.4545	0.0429	0.4107
106	47.15	-0.01	-0.3000	-0.0782	-0.1647	0.2666	0.5490	1.1150	0.0471	0.4601	0.0422	0.4124
107	47.31	-0.03	-0.2043	-0.0558	-0.1218	0.2731	0.5952	1.1292	0.0471	0.4654	0.0417	0.4121
108	47.47	-0.05	-0.2923	-0.0774	-0.1634	0.2647	0.5590	1.1204	0.0459	0.4622	0.0410	0.4125
109	47.66	-0.07	-0.3267	-0.0845	-0.1731	0.2598	0.5298	1.1220	0.0449	0.4629	0.0406	0.4126
110	47.84	-0.02	-0.3206	-0.0875	-0.1696	0.2736	0.5206	1.1291	0.0446	0.4676	0.0395	0.4141
111	48.02	-0.05	-0.3105	-0.0835	-0.1657	0.2688	0.5337	1.1470	0.0444	0.4769	0.0387	0.4158
112	48.18	-0.04	-0.3014	-0.0862	-0.1621	0.2666	0.5378	1.1440	0.0440	0.4779	0.0385	0.4177
113	48.36	0.01	-0.3046	-0.0753	-0.1637	0.2603	0.5374	1.1352	0.0447	0.4717	0.0394	0.4155
114	48.53	-0.03	-0.2883	-0.0786	-0.1564	0.2733	0.5425	1.1483	0.0430	0.4799	0.0374	0.4179
115	48.70	0.02	-0.3117	-0.0845	-0.1654	0.2723	0.5306	1.1499	0.0426	0.4794	0.0376	0.4165
116	48.88	-0.02	-0.3024	-0.0878	-0.1606	0.2696	0.5311	1.1738	0.0415	0.4940	0.0353	0.4209
117	49.05	0.01	-0.2848	-0.0863	-0.1533	0.3100	0.5383	1.1778	0.0412	0.4960	0.0350	0.4211
118	49.21	0.01	-0.2825	-0.0922	-0.1507	0.3203	0.5335	1.1988	0.0402	0.4842	0.0347	0.4178
119	49.41	0.03	-0.2725	-0.0562	-0.1463	0.3524	0.5434	1.1799	0.0390	0.4555	0.0330	0.4206
120	49.57	0.03	-0.2665	-0.0563	-0.1439	0.3696	0.5524	1.1510	0.0395	0.4804	0.0341	0.4174
121	49.74	0.03	-0.2646	-0.0542	-0.1447	0.3559	0.5469	1.1104	0.0412	0.4633	0.0371	0.4172
122	49.93	-0.00	-0.2581	-0.0595	-0.1431	0.3696	0.5540	1.1314	0.0404	0.4752	0.0357	0.4200
123	50.12	0.11	-0.2555	-0.0548	-0.1406	0.3652	0.5418	1.1235	0.0400	0.4733	0.0398	0.4213
124	50.27	0.00	-0.2496	-0.0887	-0.1302	0.3605	0.5323	1.1323	0.0400	0.4814	0.0353	0.4250
125	50.46	0.03	-0.2291	-0.0633	-0.1268	0.3635	0.5273	1.1754	0.0391	0.4985	0.0333	0.4241
126	50.65	0.03	-0.1459	-0.0354	-0.0891	0.4572	0.6859	1.1488	0.0387	0.4807	0.0337	0.4184
127	50.81	0.04	-0.1152	-0.0525	-0.0705	0.4591	0.6675	1.1453	0.0395	0.4827	0.0345	0.4213
128	50.98	-0.02	-0.1265	-0.0567	-0.0664	0.4257	0.6238	1.1303	0.0397	0.4779	0.0351	0.4228
129	51.13	0.05	-0.1225	-0.0500	-0.0774	0.4081	0.6318	1.1096	0.0407	0.4694	0.0367	0.4194
130	51.30	0.06	-0.1306	-0.0565	-0.0663	0.4318	0.6445	1.1215	0.0399	0.4723	0.0356	0.4211
131	51.48	0.05	-0.1275	-0.0560	-0.0673	0.4391	0.6847	1.1302	0.0390	0.4788	0.0345	0.4217
132	51.64	0.06	-0.1464	-0.0545	-0.0885	0.4086	0.6345	1.1001	0.0407	0.4640	0.0370	0.4218
133	51.83	0.02	-0.1543	-0.0657	-0.1026	0.4516	0.6870	1.1610	0.0373	0.4952	0.0321	0.4265
134	52.04	0.04	-0.0971	-0.0535	-0.0767	0.5549	0.7099	1.1670	0.0373	0.4981	0.0320	0.4268
135	52.20	0.03	-0.0966	-0.0522	-0.0744	0.5282	0.7330	1.1683	0.0365	0.4974	0.0312	0.4297
136	52.37	0.04	-0.1222	-0.0542	-0.0946	0.4634	0.6923	1.1504	0.0373	0.4876	0.0324	0.4239
137	52.53	0.01	-0.0756	-0.0439	-0.0664	0.5805	0.8783	1.1639	0.0366	0.4947	0.0314	0.4250
138	52.70	0.03	-0.0650	-0.0433	-0.0634	0.6660	0.9754	1.1875	0.0352	0.5073	0.0296	0.4272

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYIG-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 99 0.90 1.7 0.0 BASEFIL 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
139	52.65	0.05	-0.0661	-0.0423	-0.0607	0.6210	0.8913	1.1712	0.0353	0.4981	0.0301	0.4253
140	53.03	0.05	-0.0732	-0.0426	-0.0641	0.5730	0.8757	1.2026	0.0350	0.5126	0.0279	0.4262
141	53.19	0.06	-0.0536	-0.0418	-0.0565	0.7796	1.0616	1.2104	0.0337	0.5151	0.0278	0.4256
142	53.38	0.06	-0.0466	-0.0345	-0.0500	0.7401	1.0730	1.1964	0.0336	0.5091	0.0281	0.4255
143	53.51	0.05	-0.0347	-0.0352	-0.0435	1.0141	1.3228	1.1930	0.0326	0.5067	0.0274	0.4256
144	53.68	0.02	-0.0115	-0.0266	-0.0344	2.2347	2.6908	1.2004	0.0325	0.5116	0.0271	0.4262
145	53.85	0.03	-0.0268	-0.0334	-0.0436	1.2459	1.6269	1.2079	0.0319	0.5164	0.0264	0.4275
146	54.01	0.05	-0.0148	-0.0275	-0.0370	2.1791	2.9375	1.2052	0.0320	0.5138	0.0270	0.4263
147	54.15	0.05	-0.0095	-0.0240	-0.0327	2.5256	3.4421	1.2097	0.0324	0.5154	0.0268	0.4261
148	54.32	0.01	0.0058	-0.0156	-0.0250	-1.9995	-2.5510	1.2142	0.0312	0.5187	0.0257	0.4272
149	54.47	0.04	0.0302	-0.0118	-0.0156	-0.3506	-0.5166	1.2068	0.0315	0.5133	0.0264	0.4253
150	54.64	0.00	0.0459	-0.0178	-0.0246	-3.2355	-4.3636	1.1990	0.0315	0.5120	0.0263	0.4276
151	54.79	0.07	0.0056	-0.0162	-0.0246	-1.6870	-2.5825	1.2124	0.0307	0.5196	0.0253	0.4288
152	54.94	0.03	0.0218	-0.0078	-0.0166	-0.3577	-0.7615	1.1856	0.0321	0.5061	0.0271	0.4265
153	55.07	-0.01	0.0013	-0.0132	-0.0204	-10.1511	-20.3077	1.1512	0.0331	0.4908	0.0287	0.4263
154	55.23	0.03	0.0284	-0.0073	-0.0135	-0.2588	-0.4787	1.1871	0.0315	0.5060	0.0264	0.4275
155	55.40	0.03	0.0112	-0.0103	-0.0186	-0.5194	-1.0607	1.1857	0.0320	0.5091	0.0270	0.4294
156	55.57	-0.02	0.0310	-0.0165	-0.0123	-0.2870	-0.3968	1.2022	0.0302	0.5182	0.0251	0.4310
157	55.66	0.01	0.0366	-0.0017	-0.0057	-0.0464	-0.1557	1.1798	0.0312	0.5080	0.0264	0.4306
158	55.85	0.03	0.0194	-0.0058	-0.0097	-0.2589	-0.5000	1.1768	0.0300	0.5083	0.0255	0.4319
159	56.02	-0.02	0.0284	-0.0037	-0.0056	-0.1302	-0.1761	1.1766	0.0301	0.5083	0.0256	0.4315
160	56.17	0.04	0.0308	-0.0004	-0.0032	-0.0130	-0.1039	1.1776	0.0296	0.5096	0.0251	0.4327
161	56.33	0.00	0.0044	-0.0028	-0.0122	-0.8362	-1.7727	1.1716	0.0301	0.5049	0.0257	0.4309
162	56.47	0.03	0.0213	-0.0016	-0.0036	-0.0751	-0.1784	1.1967	0.0278	0.5165	0.0232	0.4326
163	56.63	-0.01	-0.0101	-0.0047	-0.0168	0.4652	1.0634	1.1701	0.0296	0.5072	0.0253	0.4335
164	56.78	-0.00	0.0050	-0.0026	-0.0096	-0.3116	-0.5111	1.1842	0.0291	0.5031	0.0250	0.4321
165	56.94	0.01	0.0038	-0.0030	-0.0076	-0.7893	-1.8421	1.1746	0.0290	0.5081	0.0247	0.4328
166	57.06	-0.05	0.0113	-0.0016	-0.0013	-0.1416	-0.1150	1.1930	0.0274	0.5174	0.0230	0.4337
167	57.24	-0.02	0.0005	-0.0003	-0.0041	-0.5998	-0.2000	1.1936	0.0276	0.5158	0.0231	0.4321
168	57.39	-0.02	0.0072	-0.0016	-0.0018	-0.2222	-0.2500	1.1982	0.0262	0.5185	0.0219	0.4327
169	57.53	-0.03	0.0007	-0.0017	-0.0046	-2.4279	-6.8571	1.1907	0.0271	0.5137	0.0228	0.4314
170	57.67	-0.06	-0.0117	-0.0016	-0.0001	0.0854	0.5128	1.1967	0.0265	0.5160	0.0221	0.4312
171	57.82	-0.04	-0.0013	-0.0011	-0.0003	0.8459	0.2308	1.2255	0.0244	0.5285	0.0199	0.4313
172	57.97	-0.04	-0.0012	-0.0016	-0.0003	1.3330	0.2500	1.2363	0.0267	0.5339	0.0216	0.4319
173	58.11	-0.05	0.0001	-0.0027	0.0003	-26.5926	3.0000	1.2530	0.0250	0.5418	0.0195	0.4324
174	58.26	-0.14	-0.0074	-0.0061	-0.0044	0.8241	0.5946	1.2289	0.0252	0.5314	0.0205	0.4324
175	58.39	-0.08	-0.0239	-0.0116	-0.0138	0.4936	0.5774	1.2290	0.0240	0.5326	0.0195	0.4334
176	58.48	-0.10	-0.0317	-0.0107	-0.0126	0.3374	0.5000	1.2108	0.0261	0.5239	0.0216	0.4327
177	58.48	-0.12	-0.0451	-0.0145	-0.0205	0.3281	0.4545	1.2184	0.0252	0.5269	0.0207	0.4323
178	58.48	-0.09	-0.0373	-0.0114	-0.0161	0.3055	0.4853	1.2157	0.0246	0.5273	0.0202	0.4337
179	58.48	-0.10	-0.0372	-0.0116	-0.0163	0.3117	0.5186	1.2208	0.0249	0.5291	0.0204	0.4334

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
1 99 0.50 1.7 0.0 BLOFF11 0.0 0 -10 0 -10 UNKNOWN

PLINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.74	0.02	-0.0011	0.0000	0.0234	0.0000	-21.2727	-0.6654	-0.0647	-0.3028	0.0972	0.4551
2	-5.75	0.00	-0.0007	0.0000	0.0224	0.0000	-3.3433	-0.6583	-0.0626	-0.3003	0.0951	0.4562
3	-5.74	0.02	-0.0025	0.0000	0.0233	0.0000	-9.3200	-0.6658	-0.0635	-0.3033	0.0953	0.4559
4	-4.92	0.01	-0.0011	0.0000	0.0234	0.0000	-21.2727	-0.5966	-0.0622	-0.2734	0.1377	0.4583
5	-3.01	0.01	-0.0053	0.0000	0.0225	0.0000	-4.2453	-0.4962	-0.0500	-0.2266	0.1806	0.4548
6	-1.19	0.01	-0.0012	0.0000	0.0245	0.0000	-20.4167	-0.3974	-0.0674	-0.1783	0.2155	0.4487
7	0.71	0.02	-0.0012	0.0000	0.0255	0.0000	-21.2500	-0.2895	-0.0686	-0.1224	0.2376	0.4228
8	2.60	0.01	0.0019	0.0000	0.0279	0.0000	18.0000	-0.1806	-0.0465	-0.0655	0.2574	0.3627
9	4.41	0.01	0.0014	0.0000	0.0301	0.0000	21.5000	-0.0901	-0.0214	-0.0276	0.2374	0.3063
10	6.29	0.01	-0.0057	0.0000	0.0312	0.0000	-5.4737	-0.0146	0.0018	-0.0026	-0.1233	0.1781
11	8.18	0.01	-0.0096	0.0000	0.0303	0.0000	-3.0606	0.0555	0.0267	0.0222	0.4810	0.4000
12	9.99	0.01	-0.0071	0.0000	0.0316	0.0000	-4.4507	0.1266	0.0533	0.0502	0.4266	0.3665
13	11.91	0.01	-0.0015	0.0000	0.0315	0.0000	-21.0000	0.2177	0.0732	0.0957	0.3362	0.4398
14	13.77	0.01	0.0115	0.0000	0.0244	0.0000	2.1217	0.3068	0.0907	0.1546	0.2956	0.5039
15	15.71	0.01	0.0144	0.0000	0.0266	0.0000	1.4444	0.4063	0.0923	0.2019	0.2271	0.4965
16	17.70	-0.00	0.0172	0.0000	0.0210	0.0000	1.2209	0.4869	0.0946	0.2469	0.1942	0.5071
17	19.55	-0.01	0.0241	0.0000	0.0232	0.0000	0.9627	0.4693	0.0583	0.2401	0.1242	0.5116
18	21.53	-0.03	0.0242	0.0000	0.0221	0.0000	0.9132	0.5431	0.0577	0.2796	0.1062	0.5148
19	23.48	-0.02	0.0186	0.0000	0.0178	0.0000	0.9468	0.5907	0.0602	0.3059	0.1019	0.5179
20	25.38	-0.01	0.0340	0.0000	0.0229	0.0000	0.8735	0.6455	0.0662	0.3365	0.0932	0.5213
21	27.30	0.02	0.0257	0.0000	0.0155	0.0000	0.7586	0.6856	0.0613	0.3509	0.0921	0.5272
22	28.24	0.02	0.0407	0.0000	0.0276	0.0000	0.8430	0.7026	0.0625	0.3688	0.0889	0.5249
23	26.45	0.03	0.0505	0.0000	0.0313	0.0000	0.8196	0.7286	0.0630	0.3833	0.0864	0.5261
24	28.77	0.03	0.0492	0.0000	0.0296	0.0000	0.8294	0.7208	0.0630	0.3828	0.0874	0.5311
25	29.11	0.04	0.0588	0.0000	0.0338	0.0000	0.8714	0.7245	0.0618	0.3869	0.0853	0.5340
26	29.40	0.05	0.0626	0.0000	0.0361	0.0000	0.8739	0.7397	0.0631	0.3957	0.0853	0.5349
27	29.68	0.05	0.0615	0.0000	0.0355	0.0000	0.8772	0.7398	0.0630	0.3981	0.0851	0.5381
28	29.98	0.07	0.0656	0.0000	0.0374	0.0000	0.8701	0.7554	0.0632	0.4068	0.0836	0.5385
29	30.27	0.07	0.0665	0.0000	0.0388	0.0000	0.8664	0.7661	0.0650	0.4217	0.0829	0.5378
30	30.53	0.08	0.0712	0.0000	0.0406	0.0000	0.8702	0.7842	0.0649	0.4246	0.0827	0.5414
31	30.79	0.07	0.0657	0.0000	0.0375	0.0000	0.8708	0.7861	0.0639	0.4253	0.0813	0.5416
32	31.09	0.08	0.0712	0.0000	0.0396	0.0000	0.8562	0.7846	0.0636	0.4263	0.0813	0.5433
33	31.35	0.08	0.0643	0.0000	0.0374	0.0000	0.8616	0.7879	0.0635	0.4288	0.0806	0.5442
34	31.64	0.07	0.0561	0.0000	0.0324	0.0000	0.8758	0.7969	0.0647	0.4343	0.0812	0.5456
35	31.90	0.08	0.0616	0.0000	0.0355	0.0000	0.8763	0.7898	0.0633	0.4318	0.0801	0.5469
36	32.18	0.07	0.0602	0.0000	0.0343	0.0000	0.8696	0.7862	0.0638	0.4293	0.0811	0.5466
37	32.45	0.07	0.0657	0.0000	0.0369	0.0000	0.8616	0.7860	0.0646	0.4309	0.0822	0.5477
38	32.70	0.07	0.0643	0.0000	0.0375	0.0000	0.8894	0.7767	0.0641	0.4240	0.0825	0.5459
39	32.96	0.07	0.0657	0.0000	0.0380	0.0000	0.8784	0.7782	0.0643	0.4253	0.0826	0.5483
40	33.23	0.08	0.0683	0.0000	0.0398	0.0000	0.8827	0.7685	0.0655	0.4123	0.0875	0.5508
41	33.49	0.08	0.0697	0.0000	0.0410	0.0000	0.8882	0.7563	0.0653	0.4152	0.0863	0.5496
42	33.75	0.06	0.0683	0.0000	0.0398	0.0000	0.8827	0.7346	0.0647	0.4014	0.0881	0.5464
43	33.99	0.03	0.0587	0.0000	0.0347	0.0000	0.8911	0.7675	0.0646	0.4176	0.0841	0.5481
44	34.23	0.07	0.0533	0.0000	0.0310	0.0000	0.8816	0.7687	0.0655	0.4184	0.0852	0.5443
45	34.49	0.03	0.0464	0.0000	0.0282	0.0000	0.8878	0.7629	0.0643	0.4155	0.0843	0.5448
46	34.75	0.03	0.0546	0.0000	0.0327	0.0000	0.8989	0.7758	0.0631	0.4187	0.0813	0.5397

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 95 MACH 0.90 RX10-6 1.7 PHI 0.0 CONF 81bCF11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	34.96	0.02	0.0515	9.9999	0.0305	9.9999	0.5954	0.7758	0.0631	0.4187	0.0813	0.5357
48	35.22	0.02	0.0515	9.9999	0.0303	9.9999	0.5838	0.7730	0.0623	0.4172	0.0806	0.5347
49	35.48	-0.00	0.0484	9.9999	0.0277	9.9999	0.5970	0.7685	0.0617	0.4145	0.0803	0.5354
50	35.69	-0.00	0.0482	9.9999	0.0282	9.9999	0.6209	0.7757	0.0602	0.4172	0.0776	0.5378
51	35.94	-0.01	0.0354	9.9999	0.0260	9.9999	0.6599	0.7790	0.0555	0.4168	0.0764	0.5356
52	36.18	-0.00	0.0339	9.9999	0.0245	9.9999	0.7227	0.8089	0.0550	0.4293	0.0729	0.5307
53	36.40	-0.01	0.0325	9.9999	0.0238	9.9999	0.7323	0.7961	0.0586	0.4256	0.0734	0.5325
54	36.65	-0.02	0.0258	9.9999	0.0217	9.9999	0.8477	0.8199	0.0586	0.4324	0.0715	0.5274
55	36.91	-0.02	0.0311	9.9999	0.0237	9.9999	0.7621	0.8231	0.0584	0.4338	0.0705	0.5276
56	37.14	0.01	0.0354	9.9999	0.0271	9.9999	0.6878	0.8401	0.0592	0.4426	0.0704	0.5268
57	37.38	0.0	0.0407	9.9999	0.0285	9.9999	0.7101	0.8406	0.0562	0.4425	0.0692	0.5265
58	37.62	0.00	0.0283	9.9999	0.0265	9.9999	0.8304	0.8405	0.0575	0.4408	0.0685	0.5244
59	37.83	-0.00	0.0256	9.9999	0.0227	9.9999	0.8887	0.8560	0.0571	0.4477	0.0665	0.5218
60	38.08	-0.00	0.0201	9.9999	0.0201	9.9999	1.0000	0.8611	0.0571	0.4485	0.0663	0.5208
61	38.32	-0.01	0.0225	9.9999	0.0204	9.9999	0.8908	0.8741	0.0557	0.4528	0.0637	0.5186
62	38.55	-0.00	0.0324	9.9999	0.0255	9.9999	0.7870	0.8678	0.0556	0.4494	0.0643	0.5179
63	38.79	-0.00	0.0325	9.9999	0.0245	9.9999	0.7862	0.8775	0.0548	0.4523	0.0624	0.5154
64	39.01	0.00	0.0311	9.9999	0.0243	9.9999	0.7813	0.8900	0.0548	0.4567	0.0616	0.5131
65	39.22	-0.01	0.0258	9.9999	0.0217	9.9999	0.8477	0.8806	0.0548	0.4526	0.0622	0.5133
66	39.44	0.01	0.0325	9.9999	0.0238	9.9999	0.7323	0.8826	0.0537	0.4543	0.0608	0.5147
67	39.67	-0.01	0.0202	9.9999	0.0174	9.9999	0.8614	0.8936	0.0525	0.4591	0.0592	0.5136
68	39.86	-0.01	0.0161	9.9999	0.0145	9.9999	0.9255	0.8878	0.0522	0.4539	0.0588	0.5113
69	40.08	-0.01	0.0185	9.9999	0.0157	9.9999	0.8307	0.9046	0.0526	0.4628	0.0581	0.5113
70	40.38	-0.01	0.0147	9.9999	0.0148	9.9999	1.0000	0.9034	0.0521	0.4614	0.0577	0.5107
71	40.57	-0.03	0.0255	9.9999	0.0205	9.9999	0.8990	0.9254	0.0518	0.4705	0.0580	0.5084
72	40.78	-0.02	0.0135	9.9999	0.0114	9.9999	0.8444	0.9221	0.0521	0.4680	0.0565	0.5075
73	40.99	-0.03	0.0148	9.9999	0.0132	9.9999	0.8919	0.9225	0.0512	0.4668	0.0555	0.5066
74	41.19	-0.04	0.0202	9.9999	0.0174	9.9999	0.8614	0.9289	0.0506	0.4695	0.0545	0.5054
75	41.40	-0.03	0.0185	9.9999	0.0162	9.9999	0.8571	0.9361	0.0512	0.4737	0.0546	0.5056
76	41.61	-0.02	0.0148	9.9999	0.0132	9.9999	0.8919	0.9256	0.0512	0.4676	0.0553	0.5052
77	41.82	-0.01	0.0230	9.9999	0.0182	9.9999	0.7913	0.9445	0.0507	0.4784	0.0537	0.5044
78	42.01	-0.02	0.0217	9.9999	0.0155	9.9999	0.7327	0.9353	0.0504	0.4734	0.0539	0.5041
79	42.24	-0.02	0.0284	9.9999	0.0213	9.9999	0.7500	0.9693	0.0511	0.4884	0.0527	0.5018
80	42.44	-0.03	0.0257	9.9999	0.0195	9.9999	0.7588	0.9662	0.0511	0.4844	0.0525	0.5013
81	42.60	-0.03	0.0255	9.9999	0.0215	9.9999	0.7191	0.9701	0.0525	0.4872	0.0545	0.5022
82	42.79	-0.01	0.0339	9.9999	0.0245	9.9999	0.7227	0.9653	0.0500	0.4832	0.0507	0.5006
83	43.01	-0.02	0.0262	9.9999	0.0185	9.9999	0.9158	0.9884	0.0511	0.4940	0.0518	0.5008
84	43.16	-0.00	0.0178	9.9999	0.0145	9.9999	0.6239	0.9837	0.0499	0.4914	0.0507	0.4995
85	43.35	-0.04	0.0231	9.9999	0.0171	9.9999	0.7603	1.0036	0.0511	0.5005	0.0505	0.4987
86	43.53	-0.02	0.0185	9.9999	0.0152	9.9999	0.6042	0.9898	0.0500	0.4863	0.0516	0.5015
87	43.74	-0.01	0.0185	9.9999	0.0162	9.9999	0.8571	1.0089	0.0506	0.5019	0.0502	0.4977
88	43.92	-0.00	0.0340	9.9999	0.0225	9.9999	0.6735	0.9950	0.0490	0.4961	0.0492	0.4988
89	44.08	-0.01	0.0340	9.9999	0.0235	9.9999	0.6912	1.0008	0.0512	0.5008	0.0505	0.4973
90	44.27	-0.03	0.0178	9.9999	0.0145	9.9999	0.8239	1.0030	0.0483	0.5002	0.0481	0.4987
91	44.45	-0.02	0.0195	9.9999	0.0152	9.9999	0.8000	1.0214	0.0496	0.5068	0.0484	0.4962
92	44.61	-0.07	0.0513	9.9999	0.0222	9.9999	0.7093	1.0019	0.0514	0.5004	0.0513	0.4995

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 99 PACF 0.90 MACH 1.7 PHI 0.0 CONF 8 INDEX 11 L C.C DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
93	44.82	-0.04	0.0107	9.9999	0.0118	9.9999	1.1028	1.0208	0.0510	0.5070	0.0499	0.4967
94	45.01	-0.03	0.0203	9.9999	0.0175	9.9999	0.8021	1.0327	0.0484	0.5128	0.0469	0.4966
95	45.19	-0.04	0.0148	9.9999	0.0138	9.9999	0.9324	1.0277	0.0486	0.5228	0.0459	0.4963
96	45.36	-0.02	0.0126	9.9999	0.0136	9.9999	1.0833	1.0421	0.0486	0.5170	0.0466	0.4961
97	45.55	-0.04	0.0368	9.9999	0.0253	9.9999	0.6875	1.0408	0.0477	0.5168	0.0458	0.4965
98	45.74	-0.04	0.0175	9.9999	0.0167	9.9999	0.9543	1.0358	0.0486	0.5130	0.0469	0.4953
99	45.90	-0.04	0.0262	9.9999	0.0180	9.9999	0.6911	1.0544	0.0492	0.5214	0.0468	0.4949
100	46.06	-0.02	0.0175	9.9999	0.0156	9.9999	0.8914	1.0237	0.0467	0.5083	0.0456	0.4965
101	46.27	-0.04	0.0263	9.9999	0.0165	9.9999	0.8325	1.0608	0.0480	0.5228	0.0452	0.4928
102	46.43	-0.05	0.0340	9.9999	0.0235	9.9999	0.6912	1.0541	0.0493	0.5196	0.0468	0.4929
103	46.62	-0.02	0.0176	9.9999	0.0145	9.9999	0.8239	1.0298	0.0472	0.5096	0.0458	0.4947
104	46.79	-0.05	0.0150	9.9999	0.0152	9.9999	0.8000	1.0637	0.0487	0.5243	0.0458	0.4929
105	46.97	-0.07	0.0216	9.9999	0.0175	9.9999	0.6102	1.0572	0.0486	0.5195	0.0460	0.4914
106	47.15	-0.01	0.0285	9.9999	0.0206	9.9999	0.7298	1.0481	0.0477	0.5159	0.0455	0.4922
107	47.31	-0.03	0.0249	9.9999	0.0185	9.9999	0.7746	1.0739	0.0496	0.5244	0.0462	0.4883
108	47.47	-0.05	0.0149	9.9999	0.0127	9.9999	0.8525	1.0541	0.0481	0.5193	0.0456	0.4885
109	47.66	-0.07	0.0182	9.9999	0.0145	9.9999	0.9198	1.0434	0.0476	0.5121	0.0456	0.4908
110	47.84	-0.02	0.0165	9.9999	0.0151	9.9999	0.7989	1.0071	0.0479	0.4949	0.0475	0.4914
111	48.02	-0.05	0.0175	9.9999	0.0150	9.9999	0.8571	1.0496	0.0471	0.5135	0.0469	0.4892
112	48.18	-0.02	0.0312	9.9999	0.0221	9.9999	0.7083	1.0462	0.0477	0.5128	0.0456	0.4902
113	48.36	0.01	0.0285	9.9999	0.0215	9.9999	0.7684	1.0652	0.0472	0.5176	0.0463	0.4859
114	48.53	-0.03	0.0312	9.9999	0.0221	9.9999	0.7083	1.0497	0.0459	0.5092	0.0437	0.4851
115	48.70	0.02	0.0266	9.9999	0.0192	9.9999	1.3939	1.0523	0.0474	0.5102	0.0450	0.4848
116	48.88	-0.02	0.0262	9.9999	0.0174	9.9999	0.8614	1.0358	0.0455	0.5030	0.0439	0.4856
117	49.05	0.01	0.0147	9.9999	0.0148	9.9999	1.0068	1.0288	0.0488	0.4990	0.0455	0.4856
118	49.21	0.01	0.0407	9.9999	0.0285	9.9999	0.7101	1.0152	0.0456	0.4927	0.0449	0.4853
119	49.41	0.03	0.0230	9.9999	0.0167	9.9999	0.8130	1.0118	0.0462	0.4902	0.0456	0.4845
120	49.57	0.03	0.0283	9.9999	0.0224	9.9999	0.7915	1.0020	0.0468	0.4842	0.0467	0.4832
121	49.74	0.03	0.0324	9.9999	0.0254	9.9999	0.7840	1.0051	0.0468	0.4862	0.0468	0.4837
122	49.93	-0.00	0.0264	9.9999	0.0230	9.9999	0.8099	1.0050	0.0469	0.4839	0.0467	0.4815
123	50.12	0.01	0.0356	9.9999	0.0282	9.9999	0.6870	1.0216	0.0480	0.4926	0.0470	0.4822
124	50.27	0.00	0.0314	9.9999	0.0273	9.9999	0.7257	1.0343	0.0474	0.4970	0.0458	0.4805
125	50.46	0.03	0.0472	9.9999	0.0353	9.9999	0.7479	1.0592	0.0467	0.5066	0.0441	0.4783
126	50.65	0.03	0.0305	9.9999	0.0253	9.9999	0.8188	1.0523	0.0440	0.5001	0.0418	0.4752
127	50.81	0.04	0.0356	9.9999	0.0313	9.9999	0.8026	1.0582	0.0443	0.5027	0.0419	0.4751
128	50.98	-0.02	0.0456	9.9999	0.0351	9.9999	0.7664	1.0600	0.0438	0.5045	0.0413	0.4759
129	51.13	0.05	0.0305	9.9999	0.0265	9.9999	0.8705	1.0598	0.0441	0.5000	0.0416	0.4718
130	51.30	0.06	0.0254	9.9999	0.0260	9.9999	1.0236	1.0535	0.0444	0.5001	0.0421	0.4747
131	51.48	0.05	0.0378	9.9999	0.0318	9.9999	0.8457	1.0614	0.0435	0.5051	0.0410	0.4759
132	51.64	0.06	0.0376	9.9999	0.0323	9.9999	0.8590	1.0579	0.0445	0.5021	0.0421	0.4746
133	51.83	0.03	0.0321	9.9999	0.0280	9.9999	0.8723	1.0596	0.0435	0.5042	0.0410	0.4758
134	52.04	0.04	0.0389	9.9999	0.0324	9.9999	0.8529	1.0611	0.0435	0.5049	0.0410	0.4758
135	52.20	0.03	0.0376	9.9999	0.0308	9.9999	0.8138	1.0734	0.0436	0.5109	0.0404	0.4760
136	52.37	0.04	0.0470	9.9999	0.0384	9.9999	0.8170	1.0721	0.0426	0.5101	0.0397	0.4758
137	52.53	0.01	0.0324	9.9999	0.0305	9.9999	0.7729	1.0611	0.0429	0.5053	0.0404	0.4762
138	52.70	0.03	0.0442	9.9999	0.0371	9.9999	0.8394	1.0625	0.0427	0.5059	0.0402	0.4761

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 99 | MACH 0.90 | RATIO-E 1.7 | PHI 0.0 | CONF 81 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CAF4	CM4	CB4	XCPF4	YCPF4
139	52.85	0.05	0.0415	9.9999	0.0364	9.9999	0.8771	1.0842	0.0429	0.5077	0.0399	0.4771
140	53.03	0.05	0.0425	9.9999	0.0365	9.9999	0.8536	1.0814	0.0422	0.5158	0.0356	0.4770
141	53.19	0.08	0.0552	9.9999	0.0435	9.9999	0.7880	1.0658	0.0423	0.5084	0.0397	0.4770
142	53.36	0.06	0.0442	9.9999	0.0382	9.9999	0.8443	1.0830	0.0416	0.5175	0.0384	0.4778
143	53.51	0.05	0.0425	9.9999	0.0365	9.9999	0.8508	1.0813	0.0418	0.5157	0.0386	0.4765
144	53.68	0.06	0.0413	9.9999	0.0364	9.9999	0.9296	1.0624	0.0418	0.5084	0.0393	0.4785
145	53.85	0.03	0.0441	9.9999	0.0387	9.9999	0.8776	1.0716	0.0422	0.5132	0.0394	0.4789
146	54.01	0.05	0.0442	9.9999	0.0382	9.9999	0.8643	1.0750	0.0417	0.5151	0.0388	0.4792
147	54.15	0.05	0.0441	9.9999	0.0358	9.9999	0.9025	1.0828	0.0413	0.5191	0.0381	0.4794
148	54.32	0.01	0.0440	9.9999	0.0405	9.9999	0.9295	1.0926	0.0401	0.5237	0.0367	0.4793
149	54.47	0.04	0.0441	9.9999	0.0393	9.9999	0.8912	1.0722	0.0406	0.5142	0.0379	0.4798
150	54.62	0.00	0.0366	9.9999	0.0377	9.9999	0.9767	1.0936	0.0401	0.5248	0.0366	0.4798
151	54.79	0.07	0.0413	9.9999	0.0385	9.9999	0.9322	1.0985	0.0404	0.5275	0.0368	0.4802
152	54.94	0.03	0.0373	9.9999	0.0360	9.9999	0.9651	1.0972	0.0398	0.5262	0.0363	0.4796
153	55.07	-0.01	0.0355	9.9999	0.0376	9.9999	1.0306	1.1034	0.0398	0.5289	0.0361	0.4793
154	55.23	0.03	0.0395	9.9999	0.0370	9.9999	1.0306	1.1129	0.0392	0.5330	0.0352	0.4789
155	55.40	0.03	0.0440	9.9999	0.0420	9.9999	0.9545	1.1228	0.0381	0.5389	0.0339	0.4800
156	55.57	-0.02	0.0366	9.9999	0.0394	9.9999	1.0207	1.1115	0.0390	0.5330	0.0351	0.4795
157	55.68	0.01	0.0414	9.9999	0.0351	9.9999	0.9944	1.1134	0.0382	0.5330	0.0343	0.4787
158	55.85	0.03	0.0373	9.9999	0.0366	9.9999	0.9812	1.1308	0.0380	0.5417	0.0336	0.4791
159	56.02	-0.02	0.0413	9.9999	0.0407	9.9999	0.9855	1.1289	0.0382	0.5359	0.0338	0.4783
160	56.17	0.04	0.0315	9.9999	0.0357	9.9999	1.1191	1.1406	0.0370	0.5444	0.0324	0.4772
161	56.33	0.00	0.0256	9.9999	0.0329	9.9999	1.3000	1.1471	0.0368	0.5477	0.0321	0.4775
162	56.47	0.03	0.0332	9.9999	0.0375	9.9999	1.1295	1.1550	0.0366	0.5511	0.0317	0.4771
163	56.63	-0.01	0.0223	9.9999	0.0322	9.9999	1.4439	1.1710	0.0358	0.5591	0.0304	0.4773
164	56.78	-0.00	0.0287	9.9999	0.0406	9.9999	1.0491	1.1459	0.0358	0.5463	0.0312	0.4767
165	56.94	0.01	0.0245	9.9999	0.0348	9.9999	1.3898	1.1600	0.0356	0.5528	0.0307	0.4759
166	57.08	-0.05	0.0278	9.9999	0.0344	9.9999	1.2374	1.1632	0.0359	0.5535	0.0309	0.4758
167	57.24	-0.02	0.0252	9.9999	0.0362	9.9999	1.2397	1.1765	0.0350	0.5580	0.0297	0.4763
168	57.39	-0.02	0.0315	9.9999	0.0380	9.9999	1.1914	1.1876	0.0348	0.5629	0.0290	0.4760
169	57.53	-0.03	0.0191	9.9999	0.0284	9.9999	1.4194	1.1770	0.0335	0.5579	0.0289	0.4760
170	57.67	-0.06	0.0168	9.9999	0.0302	9.9999	1.4333	1.1830	0.0339	0.5584	0.0286	0.4720
171	57.82	-0.04	0.0319	9.9999	0.0375	9.9999	1.1755	1.1927	0.0332	0.5631	0.0278	0.4721
172	57.97	-0.04	0.0278	9.9999	0.0372	9.9999	1.3381	1.2012	0.0327	0.5656	0.0272	0.4709
173	58.11	-0.09	0.0250	9.9999	0.0355	9.9999	1.4360	1.2110	0.0316	0.5679	0.0261	0.4656
174	58.26	-0.14	0.0250	9.9999	0.0354	9.9999	1.4360	1.1947	0.0332	0.5617	0.0278	0.4702
175	58.39	-0.08	0.0223	9.9999	0.0335	9.9999	1.5022	1.1918	0.0327	0.5620	0.0274	0.4718
176	58.48	-0.10	0.0182	9.9999	0.0315	9.9999	1.7308	1.1953	0.0317	0.5627	0.0265	0.4708
177	58.48	-0.12	0.0188	9.9999	0.0320	9.9999	1.9048	1.2013	0.0324	0.5630	0.0270	0.4703
178	58.48	-0.09	0.0158	9.9999	0.0317	9.9999	1.8173	1.1953	0.0324	0.5624	0.0271	0.4705
179	58.48	-0.10	0.0100	9.9999	0.0270	9.9999	2.7100	1.2089	0.0320	0.5683	0.0269	0.4692

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	R1E-6	PHI	CONF	C	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	100	1.00	4.7	0.0	81=OF11	0.0	0	-10	0	-10	UNKNOWN

PCINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.86	0.01	-1.5766	5.3457	0.0065	-0.0050	0.0007	0.5444	0.1524	0.3920	-3.3908
2	-5.86	0.00	-1.5837	5.3497	0.0158	-0.0064	0.0008	0.5474	0.1505	0.3969	-3.4212
3	-5.87	-0.01	-1.5786	5.3457	0.0028	-0.0052	0.0007	0.5430	0.1506	0.3922	-3.3956
4	-5.87	0.00	-1.5800	5.3068	0.0312	-0.0079	0.0008	0.5475	0.1513	0.3962	-3.3808
5	-4.70	0.00	-1.2525	4.0138	0.0436	-0.0096	0.0012	0.5222	0.1385	0.3837	-3.5086
6	-2.83	0.01	-0.7678	2.4081	0.1621	-0.1552	0.0017	0.4604	0.1260	0.3624	-3.8551
7	-0.96	0.00	-0.2844	0.0048	0.0541	-0.1208	0.0020	0.4551	0.1128	0.3424	-4.3906
8	0.93	-0.00	-0.3415	2.2525	0.0047	-0.1155	-0.0034	0.4240	0.1082	0.3159	-5.7544
9	2.88	0.00	-0.1151	1.0015	0.0041	-0.1515	0.0030	0.4110	0.1101	0.3010	-13.4546
10	4.71	0.00	0.1467	1.0031	0.0026	-0.1706	-0.0023	0.4007	0.1191	0.2816	7.0306
11	6.63	0.00	0.4057	0.9125	0.0015	-0.1402	-0.0016	0.3870	0.1310	0.2560	1.2508
12	8.53	0.01	0.7115	-0.0034	0.1015	-0.1462	-0.0006	0.3659	0.1431	0.2208	-0.6048
13	10.40	0.01	0.9920	-0.4696	0.0681	-0.0847	-0.0003	0.3462	0.1469	0.1993	-0.4933
14	12.36	-0.00	1.3066	-1.1563	-0.0134	0.0014	0.0002	0.3254	0.1510	0.1744	-0.8640
15	14.31	-0.00	1.7529	-2.0045	-0.0250	0.0219	0.0070	0.3005	0.1545	0.1456	-1.1435
16	16.30	0.00	2.1505	-2.7283	-0.0345	0.0505	0.0078	0.2703	0.1604	0.1100	-1.2687
17	18.30	0.00	2.5368	-3.4062	-0.0622	0.2317	0.0138	0.2393	0.1650	0.0743	-1.3403
18	20.27	0.00	2.9379	-3.9086	-0.0755	0.2341	0.0092	0.2034	0.1654	0.0480	-1.3302
19	22.27	0.00	3.4912	-4.2965	-0.0861	0.2560	-0.0356	0.1995	0.1996	-0.0001	-1.2455
20	24.27	0.01	4.0666	-4.2194	0.0004	-0.0000	-0.0551	0.1600	0.2054	-0.0454	-1.0377
21	26.26	0.03	4.6305	-4.3035	0.3543	-0.6084	0.0236	0.1016	0.2031	-0.0986	-0.9307
22	28.30	0.07	5.2314	-4.2260	0.7759	-1.1994	0.1034	0.0781	0.2181	-0.1400	-0.8078
23	28.35	0.07	5.2452	-4.2105	0.6845	-1.0947	0.1093	0.0705	0.2150	-0.1445	-0.8021
24	28.40	0.06	5.2170	-4.1838	0.5624	-0.8877	0.0913	0.0648	0.2125	-0.1477	-0.8020
25	28.40	0.06	5.1943	-4.1378	0.5276	-0.8347	0.1029	0.0604	0.2121	-0.1517	-0.7986
26	28.40	0.07	5.2736	-4.2455	0.7314	-1.1706	0.1272	0.0668	0.2151	-0.1483	-0.8050
27	28.76	0.06	5.3503	-4.2454	0.6455	-1.1316	0.1334	0.0628	0.2134	-0.1506	-0.7935
28	29.03	0.07	5.4015	-4.2156	0.7084	-1.1498	0.1457	0.0547	0.2134	-0.1587	-0.7719
29	29.35	0.07	5.5546	-4.2163	0.7580	-1.1769	0.1639	0.0644	0.2182	-0.1538	-0.7591
30	29.66	0.07	5.6474	-4.1826	0.7583	-1.2407	0.1822	0.0801	0.2341	-0.1540	-0.7317
31	29.97	0.08	5.7767	-4.0763	0.6976	-1.3728	0.1831	0.0744	0.2367	-0.1623	-0.7053
32	30.25	0.07	5.7786	-4.0435	0.7170	-1.2093	0.1476	0.0572	0.2351	-0.1779	-0.6998
33	30.53	0.09	5.8620	-3.9566	0.9831	-1.5649	0.2309	0.1075	0.2571	-0.1497	-0.6823
34	30.80	0.09	5.9678	-3.9388	0.9174	-1.4295	0.1842	0.0697	0.2507	-0.1610	-0.6575
35	31.08	0.08	6.1081	-4.0005	0.8495	-1.4675	0.1847	0.0539	0.2360	-0.1801	-0.6550
36	31.36	0.08	6.2665	-3.9130	0.8251	-1.2889	0.1377	0.0292	0.2329	-0.2037	-0.6311
37	31.64	0.08	6.2743	-3.9542	0.8516	-1.6379	0.1734	0.0383	0.2341	-0.1958	-0.6284
38	31.92	0.10	6.3954	-3.8391	0.9700	-1.6275	0.1976	0.0492	0.2420	-0.1928	-0.6003
39	32.18	0.10	6.4157	-3.8988	1.0862	-1.6737	0.1802	0.0511	0.2405	-0.1894	-0.6073
40	32.46	0.09	6.5416	-3.8501	0.9306	-1.5401	0.1629	0.0372	0.2398	-0.2026	-0.5886
41	32.72	0.08	6.6155	-3.7744	0.9505	-1.1893	0.1041	0.0199	0.2326	-0.2127	-0.5705
42	32.98	0.08	6.7076	-3.7337	0.8176	-1.5554	0.1603	0.0202	0.2364	-0.2162	-0.5567
43	33.25	0.07	6.7951	-3.6711	0.7787	-1.3756	0.1112	0.0125	0.2322	-0.2197	-0.5403
44	33.51	0.06	6.9562	-3.6241	0.5504	-1.0308	0.0761	-0.0020	0.2307	-0.2387	-0.5208
45	33.75	0.08	6.9782	-3.6372	0.5851	-1.0895	0.0568	-0.0038	0.2383	-0.2421	-0.5212
46	34.01	0.05	7.0126	-3.5466	0.5245	-1.0020	0.0999	0.0061	0.2391	-0.2330	-0.5048

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(INSROC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 100 MACH 1.00 RX10-6 1.7 PHI C.C CONF 61 OF 11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.26	0.06	7.1116	-3.4836	0.5334	-C.5171	0.0592	-0.0072	0.2421	-0.2493	-0.4901
48	34.48	0.04	7.1590	-3.4923	0.2673	-C.3876	0.0061	-0.0020	0.2587	-0.2607	-0.4756
49	34.75	0.05	7.1953	-3.5456	0.4337	-C.5764	0.0038	-0.0014	0.2617	-0.2631	-0.4652
50	35.02	0.06	7.4515	-3.5415	0.6258	-1.0452	0.0785	-0.0034	0.2666	-0.2700	-0.4481
51	35.24	0.06	7.5135	-3.5676	0.6191	-0.9554	0.0377	-0.0044	0.2704	-0.2748	-0.4482
52	35.49	0.04	7.5169	-3.6229	0.3352	-C.4874	0.0079	-0.0041	0.2765	-0.2806	-0.4289
53	35.73	0.04	7.6173	-3.6869	0.3322	-C.4189	-0.0092	-0.0032	0.2828	-0.2826	-0.4184
54	35.97	0.04	7.6757	-3.6941	0.4302	-C.6142	0.0322	-0.0093	0.2858	-0.2765	-C.4159
55	36.21	0.05	7.8354	-3.7464	0.5706	-0.7672	0.0623	-0.0027	0.2863	-0.2890	-0.4016
56	36.44	0.06	7.8866	-3.8542	0.5814	-0.6441	0.0389	0.0092	0.2909	-0.2816	-0.4126
57	36.69	0.03	8.0444	-3.8887	0.3347	-C.5440	0.0101	-0.0052	0.2897	-0.2949	-0.4088
58	36.91	0.05	8.0980	-3.8913	0.4515	-0.5017	0.0395	-0.0108	0.2865	-0.2972	-C.3991
59	37.14	0.05	8.0929	-3.8260	0.5054	-0.6436	0.0222	-0.0170	0.2873	-0.3046	-C.3986
60	37.39	0.03	8.1990	-3.8888	0.3132	-0.3501	0.0048	-0.0194	0.2882	-0.3077	-0.3789
61	37.63	0.02	8.3542	-3.9122	0.2142	-0.1332	0.0046	-0.0086	0.2935	-0.3021	-0.3845
62	37.86	0.05	8.4501	-3.9278	0.5746	-0.7240	0.0354	-0.0254	0.2954	-0.3208	-0.3891
63	38.10	0.04	8.5314	-3.9275	0.4677	-0.4853	0.0178	-0.0221	0.2942	-0.3163	-0.3854
64	38.32	0.02	8.5783	-3.9542	0.3234	-C.3698	0.0179	-0.0005	0.2995	-0.3000	-0.3840
65	38.56	0.03	8.6639	-3.9875	0.3677	-C.2520	0.0062	-0.0197	0.3036	-0.3233	-0.3795
66	38.79	0.05	8.6865	-3.9549	0.5786	-0.6716	0.0481	0.0232	0.3042	-0.2849	-0.3733
67	39.02	0.03	8.7561	-3.9632	0.4714	-0.4375	0.0187	-0.0135	0.3018	-0.3153	-0.3818
68	39.24	C.04	8.9053	-3.9502	C.4024	-C.3296	-0.0101	-0.0500	0.2880	-0.3381	-0.3781
69	39.48	-0.01	9.1135	-3.9852	C.0473	-C.1907	-0.0273	-0.0465	0.2842	-0.3288	-0.3719
70	39.69	0.02	9.1568	-3.9057	C.2685	-0.2868	-0.0095	-0.0695	0.2872	-0.3568	-0.3718
71	39.90	C.02	9.2367	-3.9323	C.1837	-C.2179	0.0024	-0.0906	0.2918	-0.3424	-0.3718
72	40.11	0.03	9.2857	-3.9634	0.3011	-0.5475	0.0032	-0.0473	0.2908	-0.3381	-C.3728
73	40.33	0.06	9.4511	-3.9731	0.1151	-C.2957	-0.0086	-0.0699	0.2835	-0.3535	-0.3675
74	40.55	C.01	9.4862	-3.9716	0.1656	-0.2283	0.0035	-0.0485	0.2898	-0.3381	-0.3659
75	40.76	0.01	9.5700	-3.9919	0.2654	-0.4878	-0.0193	-0.0644	0.2819	-0.3464	-0.3648
76	40.98	0.04	9.6199	-3.9730	C.5552	-C.7704	-0.0185	-0.0689	0.2785	-0.3475	-0.3610
77	41.22	0.06	9.6763	-3.9891	0.2569	-0.6137	-0.0012	-0.0729	0.2837	-0.3562	-0.3600
78	41.41	0.01	9.6830	-3.9047	C.3172	-0.4641	-0.0246	-0.0536	0.2890	-0.3427	-0.3619
79	41.65	C.01	9.8803	-3.9861	0.2450	-0.3702	-0.0065	-0.0616	0.2845	-0.3462	-0.3535
80	41.86	0.00	9.9177	-3.9966	0.2491	-0.3226	-0.0177	-0.0607	0.2849	-0.3457	-0.3536
81	42.07	0.02	10.0872	-3.9955	0.5075	-0.6220	-0.0170	-0.0825	0.2803	-0.3629	-0.3564
82	42.26	0.00	10.0503	-3.9228	C.3203	-C.5896	-0.0113	-0.0781	0.2795	-0.3577	-0.3505
83	42.47	0.02	10.1965	-3.9264	0.5925	-0.6824	-0.0159	-0.0869	0.2825	-0.3675	-0.3493
84	42.65	-0.00	10.0506	-3.1631	0.3640	-C.8373	0.0080	-0.0295	0.2989	-0.3284	-C.3135
85	42.84	0.01	10.2774	-3.9119	C.4606	-0.3957	-0.0040	-0.0850	0.2897	-0.3747	-0.3417
86	43.03	-0.02	10.4056	-3.9053	0.1364	-0.3364	-0.0154	-0.0934	0.2855	-0.3790	-0.3429
87	43.25	0.00	10.5328	-3.9545	C.3318	-0.2633	-0.0207	-0.0882	0.2852	-0.3739	-0.3223
88	43.42	-0.01	10.5464	-3.9354	0.1635	-0.3000	-0.0322	-0.1072	0.2825	-0.3897	-0.3261
89	43.60	0.00	10.6234	-3.9959	0.2486	-0.1853	-0.0282	-0.0877	0.2902	-0.3779	-0.3200
90	43.79	0.00	10.7353	-3.9275	0.2366	-C.1741	-0.0199	-0.0714	0.2886	-0.3601	-0.3163
91	43.98	-0.00	10.7070	-3.9144	C.1540	-0.2361	-0.0370	-0.0848	0.2926	-0.3776	-0.3171
92	44.18	0.01	10.8817	-3.9060	0.3420	-C.0493	-0.0259	-0.0750	0.2980	-0.3730	-0.3125

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 100 MACH 1.60 REYNO=6 1.7 PHI 0.0 CONF 81 OF 11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.31	-0.01	10.8334	-3.4375	0.1248	0.0563	-0.0377	-0.0993	0.2697	-0.3889	-0.3173
94	44.50	-0.01	10.8459	-3.3851	0.1613	-0.1754	-0.0250	-0.0806	0.2987	-0.3653	-0.3125
95	44.72	-0.05	11.0224	-3.3353	-0.0522	-0.0494	-0.0129	-0.0601	0.2994	-0.3595	-0.3026
96	44.85	-0.01	11.1321	-3.3322	0.1481	0.0343	-0.0364	-0.0875	0.2964	-0.3636	-0.3173
97	45.07	-0.03	11.0756	-3.1659	0.0911	-0.4344	-0.0002	-0.0392	0.3081	-0.3473	-0.2877
98	45.27	-0.01	11.2411	-3.2253	0.1547	0.0111	-0.0300	-0.0904	0.2895	-0.3799	-0.3145
99	45.46	-0.03	11.3357	-3.3625	0.1475	0.0443	-0.0120	-0.0705	0.3034	-0.3705	-0.2913
100	45.63	-0.04	11.4169	-3.4834	-0.1164	0.1580	-0.0117	-0.0829	0.2910	-0.3739	-0.3051
101	45.80	-0.03	11.4451	-3.5405	0.0755	0.0802	-0.0117	-0.1158	0.2678	-0.4036	-0.3053
102	46.01	-0.04	11.4451	-3.4826	-0.0565	0.0131	0.0003	-0.1063	0.2940	-0.4022	-0.3042
103	46.18	-0.04	11.6555	-3.6472	0.0225	0.2340	-0.0173	-0.1364	0.2897	-0.4260	-0.3129
104	46.34	-0.01	11.6557	-3.5270	0.1572	0.0703	-0.0109	-0.1257	0.2844	-0.4101	-0.3015
105	46.53	-0.01	11.8476	-3.4651	0.2363	0.1153	0.0004	-0.1007	0.2832	-0.3839	-0.2979
106	46.70	-0.02	11.7000	-3.4984	0.1031	0.3849	-0.0175	-0.0974	0.2911	-0.3884	-0.2990
107	46.85	-0.01	11.9181	-3.6470	0.1631	0.6188	-0.0237	-0.1094	0.2899	-0.3992	-0.3061
108	47.06	-0.00	11.8845	-3.6469	0.2334	0.5036	-0.0169	-0.1135	0.2857	-0.3992	-0.3064
109	47.23	-0.04	11.9640	-3.6168	-0.1437	0.5746	-0.0166	-0.1221	0.2944	-0.4164	-0.3018
110	47.42	0.00	12.0626	-3.6703	0.1775	0.9135	-0.0243	-0.1044	0.3014	-0.4057	-0.3043
111	47.59	-0.03	12.1370	-3.8057	-0.1300	1.1194	-0.0185	-0.1019	0.3156	-0.4174	-0.3139
112	47.76	0.02	12.1926	-3.6973	0.1950	1.2650	0.0096	-0.0961	0.3382	-0.3963	-0.3032
113	47.91	-0.03	12.1138	-3.8216	-0.1403	0.9016	-0.0117	-0.0713	0.3467	-0.4180	-0.2990
114	48.09	0.03	12.1830	-4.2477	0.4395	0.8176	0.0222	0.0832	0.4326	-0.3494	-0.3487
115	48.29	0.03	12.4527	-5.3757	0.4777	1.0732	-0.0363	0.0934	0.4432	-0.3458	-0.4303
116	48.45	0.05	12.5563	-5.4834	0.5825	0.9744	-0.0356	0.0868	0.4440	-0.3752	-0.4353
117	48.64	0.06	12.7693	-5.7746	0.6724	1.3133	-0.0484	0.0901	0.4484	-0.3583	-0.4519
118	48.84	0.05	13.0079	-5.8610	0.6270	1.6030	-0.0487	0.0498	0.4395	-0.3947	-0.4506
119	48.99	0.01	13.1052	-6.0315	0.2425	1.7523	-0.0366	0.0505	0.4384	-0.3875	-0.4601
120	49.18	0.03	13.1535	-5.8684	0.3636	1.6405	-0.0361	0.0612	0.4332	-0.3720	-0.4473
121	49.36	0.04	13.1540	-5.7800	0.5226	1.5062	-0.0298	0.0585	0.4296	-0.3709	-0.4381
122	49.51	0.04	13.1557	-5.6132	0.3420	1.3108	-0.0265	0.0565	0.4234	-0.3649	-0.4253
123	49.70	0.02	13.2552	-5.5178	0.3196	1.3556	-0.0167	0.0139	0.4198	-0.4059	-0.4150
124	49.87	0.00	13.1879	-5.3756	0.1661	1.3581	-0.0109	0.0351	0.4191	-0.3840	-0.4076
125	50.05	0.04	13.3573	-5.6346	0.5546	1.2064	-0.0106	0.0319	0.4184	-0.3850	-0.4218
126	50.23	0.03	13.4866	-5.6032	0.5176	1.1803	-0.0099	0.0322	0.4235	-0.3913	-0.4157
127	50.43	0.04	13.6756	-5.4775	0.5531	1.2419	0.0077	0.0161	0.4276	-0.4095	-0.4006
128	50.59	-0.01	13.6266	-5.3538	0.0656	1.5337	0.0189	0.0270	0.4320	-0.4050	-0.3958
129	50.75	0.01	13.8880	-5.4281	0.2400	1.7060	0.0238	0.0170	0.4321	-0.4151	-0.3966
130	50.93	0.02	13.8059	-5.2814	0.3594	1.6055	0.0294	0.0315	0.4313	-0.3998	-0.3882
131	51.11	0.01	13.9095	-5.8562	0.2553	1.3567	0.0313	0.0363	0.4558	-0.4195	-0.4235
132	51.27	0.01	13.8775	-5.9027	0.2033	1.2182	0.0148	0.0298	0.4609	-0.4311	-0.4253
133	51.44	0.00	13.9520	-6.0568	0.2336	1.0972	0.0268	0.0244	0.4595	-0.4351	-0.4361
134	51.58	0.03	13.8048	-5.7022	0.5472	1.0601	0.0490	0.0419	0.4630	-0.4211	-0.4131
135	51.74	0.02	13.8445	-5.2274	0.4036	1.1027	0.0547	0.0520	0.4570	-0.4050	-0.3831
136	51.92	0.02	13.7565	-5.3700	0.3694	1.1265	0.0493	0.0510	0.4569	-0.4059	-0.3905
137	52.07	-0.00	13.7386	-5.3171	0.2207	1.3175	0.0468	0.0550	0.4565	-0.4019	-0.3870
138	52.24	0.02	13.7484	-5.3593	0.4027	1.0660	0.0552	0.0346	0.4585	-0.4239	-0.3898

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 100 MACH 1.00 RX10-6 4.7 PHI 0.0 CONF 81WGF11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.41	0.00	13.7758	-5.3535	0.3502	0.9872	0.0500	0.0574	0.4577	-0.4003	-0.3888
140	52.57	0.01	13.7957	-5.1978	0.3634	1.0003	0.0501	0.0641	0.4581	-0.3940	-0.3735
141	52.74	0.00	13.7326	-5.2045	0.2495	0.9308	0.0505	0.0734	0.4539	-0.3805	-0.3791
142	52.90	0.00	13.7233	-5.0715	0.1766	0.9078	0.0507	0.0496	0.4547	-0.4049	-0.3696
143	53.07	0.0	13.8536	-5.1257	0.1503	0.8911	0.0513	0.0375	0.4562	-0.4187	-0.3703
144	53.24	-0.02	13.8383	-5.2816	0.0614	0.8236	0.0459	0.0526	0.4573	-0.4047	-0.3817
145	53.39	-0.02	13.8656	-5.2176	0.1277	0.8671	0.0459	0.0608	0.4615	-0.4007	-0.3763
146	53.57	0.00	13.8978	-5.0038	0.2718	0.9330	0.0522	0.0479	0.4644	-0.4165	-0.3657
147	53.73	-0.01	13.8857	-5.0106	0.2142	0.9020	0.0474	0.0520	0.4666	-0.4146	-0.3614
148	53.89	-0.02	13.8621	-5.0765	0.0634	0.8191	0.0472	0.0473	0.4711	-0.4238	-0.3657
149	54.03	0.01	13.7753	-5.2908	0.3322	0.9187	0.0460	0.0466	0.4737	-0.4271	-0.3840
150	54.21	-0.01	14.0243	-5.2035	0.1118	0.8013	0.0531	0.0382	0.4757	-0.4375	-0.3767
151	54.36	-0.03	14.0679	-5.1331	0.0555	0.8263	0.0481	0.0323	0.4779	-0.4456	-0.3649
152	54.51	-0.01	13.9754	-5.1578	0.1628	0.8883	0.0539	0.0473	0.4783	-0.4290	-0.3690
153	54.67	-0.01	14.0231	-5.1666	0.2505	0.9055	0.0475	0.0389	0.4798	-0.4629	-0.3684
154	54.83	-0.02	14.0384	-5.2554	0.1432	0.8756	0.0536	0.0404	0.4777	-0.4613	-0.3772
155	54.97	-0.01	14.0512	-5.3667	0.2587	0.9069	0.0479	0.0375	0.4848	-0.4972	-0.3819
156	55.13	-0.01	14.0517	-5.4515	0.1506	0.8802	0.0541	0.0211	0.4829	-0.4617	-0.3869
157	55.25	-0.04	14.0067	-5.3906	-0.0884	0.5017	0.0539	0.0258	0.4831	-0.4563	-0.3849
158	55.45	-0.03	14.0040	-5.5055	0.0528	0.7191	0.0536	0.0097	0.4774	-0.4677	-0.3896
159	55.60	-0.02	14.3504	-5.5534	0.2365	0.3527	0.0432	0.0062	0.4786	-0.4726	-0.3858
160	55.76	-0.05	14.3715	-5.5256	-0.1191	0.6124	0.0469	-0.0008	0.4756	-0.4764	-0.3847
161	55.90	-0.03	14.2672	-5.5103	0.1241	0.5859	0.0482	0.0062	0.4747	-0.4665	-0.3862
162	56.06	-0.05	14.2737	-5.5411	-0.0077	0.6412	0.0540	0.0107	0.4744	-0.4637	-0.3882
163	56.22	-0.02	14.3361	-5.6315	0.2425	0.5250	0.0463	0.0080	0.4769	-0.4625	-0.3942
164	56.39	-0.04	14.4903	-5.5460	0.1088	0.5212	0.0550	-0.0093	0.4837	-0.4730	-0.3827
165	56.53	-0.03	14.2588	-5.7011	0.1565	0.3670	0.0434	0.0144	0.4675	-0.4531	-0.3987
166	56.73	-0.05	14.6012	-5.4762	0.0284	0.3306	0.0570	-0.0021	0.4474	-0.5096	-0.3700
167	56.87	-0.07	14.7904	-5.6051	-0.1186	-0.2562	0.0584	-0.0067	0.4365	-0.5033	-0.3790
168	57.06	-0.06	14.9833	-5.7525	-0.0106	-0.4867	0.0593	-0.0778	0.4346	-0.5127	-0.3840
169	57.20	-0.07	14.9555	-5.7056	-0.0515	-0.5537	0.0535	-0.0751	0.4403	-0.5215	-0.3814
170	57.33	-0.07	14.8854	-5.7130	-0.0515	-0.3597	0.0530	-0.0596	0.4575	-0.5172	-0.3843
171	57.50	-0.06	14.9524	-5.6573	-0.0111	-0.4882	0.0538	-0.0539	0.4557	-0.5057	-0.3773
172	57.66	-0.07	14.8503	-5.8418	-0.0116	-0.2967	0.0531	-0.0619	0.4575	-0.5195	-0.3799
173	57.77	-0.02	14.7358	-5.8531	0.3404	-0.2323	0.0582	-0.0769	0.4372	-0.5142	-0.3972
174	57.91	-0.03	14.8058	-5.8272	0.2591	-0.3492	0.0474	-0.1047	0.4341	-0.5148	-0.3800
175	58.04	-0.07	14.8449	-5.8852	-0.0268	-0.2609	0.0509	-0.0871	0.4353	-0.5225	-0.3964
176	58.20	-0.07	14.9846	-5.8086	-0.0506	0.0121	0.0587	-0.1154	0.4291	-0.5445	-0.3929
177	58.35	-0.08	14.9586	-5.7968	-0.1423	-0.0544	0.0586	-0.1082	0.4326	-0.5408	-0.3881
178	58.49	-0.08	14.9757	-5.7047	-0.1275	-0.0177	0.0587	-0.1235	0.4317	-0.5552	-0.3849
179	58.64	-0.06	15.1542	-5.8388	0.1601	0.0418	0.0569	-0.1114	0.4447	-0.5561	-0.3984
180	58.80	-0.06	15.1000	-5.6575	-0.1636	0.0056	0.0590	-0.1430	0.4309	-0.5539	-0.3948

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 100 MACH 4.00 REYNO.E. 1.7 PHI 0.0 CONF BIMCFIL L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.86	0.01	-0.0261	-0.0003	0.0117	0.0149	-0.5821	-0.6844	-0.0951	-0.3993	0.1389	0.5834
2	-5.00	0.00	-0.0248	-0.0012	0.0100	0.0404	-0.4032	-0.6952	-0.0949	-0.4040	0.1365	0.5811
3	-5.87	-0.01	-0.0260	-0.0013	0.0103	0.0500	-0.3577	-0.6910	-0.0956	-0.4037	0.1386	0.5842
4	-5.87	0.00	-0.0261	-0.0003	0.0111	0.0149	-0.5922	-0.6871	-0.0949	-0.4001	0.1381	0.5823
5	-4.70	0.00	-0.0246	-0.0014	0.0084	0.0565	-0.3415	-0.5687	-0.0884	-0.3482	0.1554	0.6123
6	-2.83	0.01	-0.0126	0.0006	0.0105	-0.0470	-0.0051	-0.4362	-0.0772	-0.2833	0.1769	0.6455
7	-0.96	0.00	-0.0143	-0.0010	0.0053	0.0695	-0.3706	-0.3220	-0.0614	-0.2186	0.1908	0.6785
8	0.93	-0.00	-0.0056	0.0003	0.0047	-0.0536	-0.8393	-0.2089	-0.0424	-0.1524	0.2049	0.7366
9	2.88	0.00	-0.0053	-0.0005	0.0031	0.1698	-0.5849	-0.1059	-0.0263	-0.1042	0.2483	0.9839
10	4.71	0.00	-0.0052	-0.0017	0.0025	0.3208	-0.4808	-0.0130	-0.0116	-0.0547	0.8921	4.2077
11	6.63	0.00	-0.0133	-0.0032	-0.0017	0.2405	0.1270	0.0581	0.0043	-0.0171	0.0740	-0.2543
12	8.53	0.01	-0.0116	-0.0042	0.0005	0.3817	-0.0455	0.1527	0.0273	0.0166	0.2057	0.1251
13	10.40	0.01	0.0	-0.0014	0.0005	-0.0014	0.0009	0.2035	0.0478	0.0493	0.2348	0.2423
14	12.36	-0.00	0.0001	-0.0010	-0.0001	-0.9673	-1.0000	0.2739	0.0655	0.1003	0.2391	0.3662
15	14.31	-0.00	-0.0034	-0.0004	-0.0025	0.1178	0.7353	0.3661	0.0788	0.1504	0.2140	0.4086
16	16.30	0.00	-0.0103	-0.0050	-0.0046	0.4853	0.4660	0.4612	0.0887	0.2019	0.1923	0.4378
17	18.30	0.00	-0.0248	-0.0058	-0.0057	0.3870	0.2296	0.5479	0.0971	0.2474	0.1772	0.4515
18	20.27	0.00	-0.0472	-0.0157	-0.0134	0.5771	0.1250	0.6260	0.1035	0.2906	0.1648	0.4627
19	22.27	0.00	-0.0932	-0.0265	-0.0445	0.2667	0.4744	0.7428	0.0940	0.3372	0.1285	0.4541
20	24.27	0.01	-0.0505	-0.0156	-0.0355	0.3880	0.7030	0.8346	0.0956	0.3705	0.1145	0.4444
21	26.26	0.03	0.0033	0.0167	0.0264	0.1284	0.3169	0.8920	0.0680	0.3827	0.0782	0.4290
22	28.30	0.07	0.2170	0.0346	0.0956	0.1594	0.4378	0.9396	0.0630	0.4026	0.0670	0.4278
23	26.39	0.07	0.1912	0.0315	0.0646	0.1647	0.4625	0.9366	0.0631	0.3994	0.0674	0.4264
24	28.40	0.06	0.2493	0.0416	0.1073	0.1608	0.4304	0.9472	0.0631	0.4028	0.0666	0.4253
25	28.40	0.06	0.2130	0.0362	0.0856	0.1695	0.4207	0.9364	0.0633	0.3959	0.0676	0.4228
26	28.40	0.07	0.2623	0.0452	0.1162	0.1716	0.4413	0.9295	0.0611	0.3945	0.0657	0.4244
27	28.78	0.06	0.2764	0.0494	0.1224	0.1767	0.4428	0.9387	0.0613	0.3968	0.0653	0.4227
28	29.03	0.07	0.3173	0.0556	0.1416	0.1859	0.4444	0.9281	0.0604	0.3877	0.0651	0.4177
29	29.35	0.07	0.3262	0.0578	0.1441	0.1771	0.4418	0.9292	0.0601	0.3886	0.0647	0.4182
30	29.66	0.07	0.3134	0.0533	0.1386	0.1700	0.4403	0.9455	0.0630	0.3971	0.0634	0.4206
31	29.97	0.08	0.3066	0.0516	0.1361	0.1683	0.4439	0.9535	0.0600	0.3981	0.0629	0.4175
32	30.25	0.07	0.3047	0.0505	0.1311	0.1670	0.4303	0.9399	0.0594	0.3909	0.0632	0.4159
33	30.53	0.05	0.3534	0.0606	0.1557	0.1714	0.4519	0.9115	0.0591	0.3749	0.0648	0.4113
34	30.80	0.05	0.2973	0.0463	0.1316	0.1624	0.4426	0.9522	0.0599	0.3942	0.0629	0.4140
35	31.08	0.08	0.3705	0.0616	0.1702	0.1660	0.4589	0.9469	0.0595	0.3893	0.0628	0.4111
36	31.36	0.08	0.2830	0.0445	0.1242	0.1572	0.4389	1.0066	0.0602	0.4190	0.0598	0.4163
37	31.64	0.08	0.3432	0.0568	0.1586	0.1655	0.4621	0.9728	0.0595	0.4009	0.0611	0.4121
38	31.92	0.10	0.2533	0.0385	0.1136	0.1535	0.4485	1.0107	0.0600	0.4193	0.0593	0.4149
39	32.18	0.10	0.3861	0.0652	0.1721	0.1690	0.4434	0.9635	0.0590	0.3920	0.0612	0.4068
40	32.46	0.09	0.2831	0.0446	0.1203	0.1554	0.4249	1.0150	0.0588	0.4181	0.0575	0.4119
41	32.72	0.06	0.2087	0.0311	0.0757	0.1496	0.3819	1.0474	0.0591	0.4369	0.0564	0.4152
42	32.98	0.08	0.2454	0.0370	0.1035	0.1507	0.4234	1.0327	0.0592	0.4234	0.0573	0.4100
43	33.25	0.07	0.1963	0.0278	0.0762	0.1416	0.4086	1.0651	0.0592	0.4413	0.0558	0.4143
44	33.51	0.06	0.1754	0.0245	0.0666	0.1419	0.3911	1.0814	0.0602	0.4471	0.0557	0.4134
45	33.75	0.06	0.1537	0.0218	0.0558	0.1181	0.3911	1.1010	0.0607	0.4575	0.0551	0.4153
46	34.01	0.05	0.2057	0.0319	0.0516	0.1526	0.4453	1.0854	0.0591	0.4480	0.0544	0.4128

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 100 | MACH 1.00 | REYNO=6 1.7 | PHI 0.0 | CONF BLOCK-11 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	34.26	0.06	0.1682	0.0234	0.0745	0.1391	0.4429	1.1058	0.0594	0.4562	0.0537	0.4128
48	34.48	0.04	0.0946	-0.0021	0.0745	-0.0267	0.1301	1.1353	0.0616	0.4702	0.0544	0.4142
49	34.75	0.05	0.0323	-0.0031	0.0736	-0.0959	0.1115	1.1379	0.0622	0.4737	0.0546	0.4163
50	35.02	0.06	0.1658	0.0216	0.0735	0.1272	0.4918	1.1316	0.0591	0.4654	0.0522	0.4113
51	35.24	0.06	0.1652	0.0201	0.0753	0.1210	0.4784	1.1372	0.0590	0.4653	0.0519	0.4092
52	35.49	0.04	0.1656	0.0180	0.0760	0.1145	0.4726	1.1420	0.0597	0.4726	0.0518	0.4102
53	35.73	0.04	0.0302	-0.0037	0.0108	-0.1225	0.3576	1.1055	0.0605	0.4770	0.0519	0.4053
54	35.97	0.04	0.1012	0.0062	0.0488	0.0810	0.4773	1.1576	0.0594	0.4714	0.0513	0.4072
55	36.21	0.05	0.1404	0.0177	0.0704	0.1260	0.5014	1.1443	0.0582	0.4632	0.0508	0.4048
56	36.44	0.06	0.1337	0.0167	0.0735	0.1249	0.5527	1.1558	0.0580	0.4656	0.0508	0.4035
57	36.69	0.03	0.1006	0.0108	0.0512	0.1073	0.5069	1.1666	0.0582	0.4750	0.0498	0.4065
58	36.91	0.05	0.0516	0.0056	0.0485	0.0969	0.5374	1.1605	0.0585	0.4711	0.0504	0.4059
59	37.14	0.05	0.0516	0.0085	0.0426	0.0569	0.4641	1.1634	0.0575	0.4702	0.0494	0.4042
60	37.39	0.03	0.0771	0.0055	0.0317	0.0765	0.4112	1.1667	0.0577	0.4739	0.0494	0.4055
61	37.63	0.02	0.0277	-0.0014	0.0052	-0.0505	0.3321	1.1742	0.0579	0.4754	0.0493	0.4045
62	37.86	0.05	0.0570	0.0104	0.0502	0.1143	0.5175	1.1742	0.0576	0.4734	0.0490	0.4049
63	38.10	0.04	0.0776	0.0075	0.0372	0.0966	0.4794	1.1864	0.0575	0.4801	0.0485	0.4047
64	38.32	0.02	0.0774	0.0082	0.0385	0.1059	0.5026	1.1877	0.0579	0.4808	0.0487	0.4048
65	38.56	0.03	0.0134	-0.0031	0.0048	-0.2238	0.3582	1.1959	0.0575	0.4836	0.0481	0.4044
66	38.79	0.05	0.1315	0.0153	0.0713	0.1407	0.5422	1.1624	0.0573	0.4771	0.0484	0.4035
67	39.02	0.03	0.0274	-0.0003	0.0115	-0.0105	0.4343	1.1919	0.0579	0.4795	0.0486	0.4023
68	39.24	0.04	0.0240	-0.0066	0.0145	-0.2749	0.5208	1.2162	0.0583	0.4935	0.0479	0.4058
69	39.48	-0.01	0.0009	-0.0131	-0.0103	-14.4466	-11.4444	1.2028	0.0572	0.4864	0.0475	0.4044
70	39.69	0.02	-0.0120	-0.0194	-0.0167	1.2830	1.3917	1.2042	0.0569	0.4858	0.0472	0.4034
71	39.90	0.02	0.0154	-0.0091	0.0023	-0.5508	0.1496	1.2110	0.0567	0.4897	0.0468	0.4044
72	40.11	0.03	0.0291	-0.0073	0.0115	-0.2508	0.4089	1.2110	0.0564	0.4902	0.0466	0.4048
73	40.33	0.01	0.0014	-0.0135	-0.0141	-9.0403	-10.0714	1.2044	0.0552	0.4863	0.0458	0.4038
74	40.55	0.01	0.0144	-0.0056	0.0	-0.0005	0.0	1.2178	0.0557	0.4945	0.0457	0.4061
75	40.76	0.01	-0.0062	-0.0132	-0.0115	65.5824	57.5000	1.2179	0.0557	0.4918	0.0457	0.4038
76	40.98	0.04	0.0069	-0.0123	-0.0091	-1.7821	-1.3188	1.2179	0.0554	0.4924	0.0455	0.4043
77	41.22	0.00	0.0343	-0.0063	0.0105	-0.1836	0.3061	1.2315	0.0553	0.5005	0.0445	0.4064
78	41.41	0.01	-0.0027	-0.0153	-0.0211	5.0651	7.8148	1.2162	0.0542	0.4948	0.0446	0.4068
79	41.65	0.01	-0.0120	-0.0168	-0.0264	1.3830	2.2000	1.2109	0.0540	0.4900	0.0446	0.4047
80	41.88	0.00	-0.0154	-0.0166	-0.0280	1.2075	1.6162	1.2132	0.0541	0.4907	0.0446	0.4045
81	42.07	0.02	0.0028	-0.0091	-0.0053	-1.0336	-0.6023	1.2428	0.0555	0.5085	0.0446	0.4092
82	42.26	0.00	-0.0003	-0.0128	-0.0211	42.0553	70.3333	1.2051	0.0541	0.4868	0.0445	0.4038
83	42.47	0.02	0.0035	-0.0150	-0.0116	-3.7133	-3.3143	1.2213	0.0542	0.4968	0.0444	0.4068
84	42.65	-0.00	-0.0026	-0.0153	-0.0206	7.6400	13.4000	1.1741	0.0519	0.4725	0.0442	0.4024
85	42.84	0.01	-0.0026	-0.0117	-0.0137	4.4588	5.2692	1.2249	0.0546	0.4997	0.0446	0.4080
86	43.03	-0.02	-0.0145	-0.0141	-0.0275	0.5722	1.0905	1.2101	0.0534	0.4925	0.0441	0.4076
87	43.25	0.00	-0.0382	-0.0181	-0.0357	0.4737	0.9346	1.2154	0.0543	0.4962	0.0447	0.4083
88	43.42	-0.01	-0.0502	-0.0225	-0.0478	0.4561	0.9402	1.2193	0.0531	0.4959	0.0435	0.4067
89	43.60	0.00	-0.0571	-0.0233	-0.0515	0.4079	0.9019	1.2044	0.0527	0.4905	0.0437	0.4076
90	43.79	0.00	-0.0566	-0.0199	-0.0475	0.3515	0.8403	1.2137	0.0535	0.4955	0.0441	0.4083
91	43.98	-0.00	-0.0584	-0.0257	-0.0491	0.4430	0.8510	1.2242	0.0527	0.5023	0.0430	0.4103
92	44.18	0.01	-0.0767	-0.0242	-0.0547	0.3154	0.7132	1.2106	0.0531	0.4978	0.0439	0.4112

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 100 MACH 1.60 RN/B=6 1.7 PHI 0.0 CONF BLANDELL B 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
93	44.31	-0.01	-0.0776	-0.0256	-0.0595	0.3221	0.7204	1.2197	0.0530	0.5007	0.0434	0.4105
94	44.50	-0.01	-0.0645	-0.0242	-0.0513	0.3751	0.7953	1.2117	0.0519	0.4978	0.0428	0.4108
95	44.72	-0.05	-0.0664	-0.0252	-0.0525	0.4171	0.8692	1.1859	0.0502	0.4853	0.0423	0.4092
96	44.89	-0.01	-0.0776	-0.0243	-0.0606	0.3155	0.7742	1.2099	0.0521	0.4977	0.0430	0.4114
97	45.07	-0.03	0.0038	-0.0134	-0.0243	-3.5254	-6.3947	1.1521	0.0484	0.4685	0.0420	0.4076
98	45.27	-0.01	-0.0404	-0.0213	-0.0446	0.5271	1.0891	1.1907	0.0503	0.4868	0.0422	0.4088
99	45.46	-0.03	-0.0376	-0.0182	-0.0387	0.4839	1.0292	1.1999	0.0510	0.4940	0.0425	0.4117
100	45.63	-0.04	-0.0546	-0.0217	-0.0496	0.3673	0.9121	1.1930	0.0497	0.4901	0.0416	0.4108
101	45.80	-0.03	-0.0524	-0.0211	-0.0473	0.4026	0.9027	1.2153	0.0506	0.5011	0.0418	0.4123
102	46.01	-0.04	-0.0425	-0.0172	-0.0396	0.4046	0.9176	1.2045	0.0507	0.4986	0.0421	0.4136
103	46.18	-0.04	-0.0455	-0.0158	-0.0365	0.6196	1.0314	1.2015	0.0505	0.4956	0.0420	0.4125
104	46.34	-0.01	-0.0207	-0.0196	-0.0355	0.7534	1.7150	1.2121	0.0515	0.5019	0.0425	0.4141
105	46.53	-0.01	-0.0061	-0.0118	-0.0245	1.9339	4.0164	1.2066	0.0504	0.4981	0.0418	0.4126
106	46.70	-0.02	-0.0468	-0.0156	-0.0416	0.4101	0.8889	1.2194	0.0520	0.5046	0.0426	0.4138
107	46.89	-0.01	-0.0478	-0.0212	-0.0515	0.3126	0.7596	1.2234	0.0523	0.5075	0.0427	0.4148
108	47.06	-0.00	-0.0350	-0.0166	-0.0380	0.4742	1.0857	1.2191	0.0514	0.5044	0.0422	0.4137
109	47.23	-0.04	-0.0279	-0.0147	-0.0365	0.5267	1.3082	1.2161	0.0519	0.5020	0.0427	0.4128
110	47.42	0.00	-0.0072	-0.0244	-0.0546	0.3332	0.8165	1.2268	0.0514	0.5082	0.0419	0.4142
111	47.59	-0.03	-0.0275	-0.0151	-0.0343	0.2829	0.8044	1.2136	0.0498	0.5016	0.0410	0.4133
112	47.78	0.02	-0.0554	-0.0151	-0.0314	0.2541	0.6653	1.1590	0.0445	0.4749	0.0384	0.4097
113	47.91	-0.03	-0.0512	-0.0163	-0.0471	0.3183	0.9199	1.1855	0.0470	0.4873	0.0398	0.4116
114	48.09	0.03	-0.0165	-0.0254	-0.0316	0.5574	1.9151	1.0668	0.0417	0.4332	0.0361	0.4061
115	48.25	0.03	-0.0251	-0.0267	-0.0432	1.0635	1.7211	1.1201	0.0411	0.4600	0.0367	0.4107
116	48.45	0.05	-0.0155	-0.0362	-0.0362	1.5483	1.8504	1.1413	0.0414	0.4725	0.0363	0.4146
117	48.64	0.06	-0.0813	-0.0443	-0.0689	0.5447	0.8473	1.1373	0.0411	0.4716	0.0361	0.4147
118	48.84	0.05	-0.0794	-0.0414	-0.0652	0.5218	0.8212	1.1387	0.0409	0.4728	0.0359	0.4152
119	48.99	0.01	-0.0634	-0.0372	-0.0556	0.5866	0.8770	1.1424	0.0410	0.4754	0.0355	0.4161
120	49.18	0.03	-0.0612	-0.0372	-0.0535	0.6077	0.8709	1.1411	0.0403	0.4769	0.0353	0.4179
121	49.36	0.04	-0.0498	-0.0342	-0.0475	0.6866	0.9538	1.1326	0.0406	0.4687	0.0357	0.4160
122	49.51	0.02	-0.0285	-0.0300	-0.0391	1.0378	1.3529	1.1226	0.0408	0.4658	0.0363	0.4145
123	49.70	0.02	-0.0268	-0.0281	-0.0371	1.0482	1.3843	1.1118	0.0405	0.4615	0.0360	0.4135
124	49.87	0.00	-0.0132	-0.0246	-0.0256	1.8031	2.1970	1.1224	0.0404	0.4651	0.0360	0.4179
125	50.05	0.04	-0.0026	-0.0253	-0.0233	5.0333	8.3214	1.1356	0.0396	0.4777	0.0349	0.4207
126	50.23	0.03	0.0057	-0.0227	-0.0165	-2.3556	-1.7010	1.1397	0.0392	0.4780	0.0344	0.4194
127	50.43	0.04	-0.0158	-0.0227	-0.0291	1.4383	1.8418	1.0866	0.0395	0.4517	0.0363	0.4157
128	50.59	-0.01	-0.0006	-0.0263	-0.0241	33.8243	40.1667	1.0865	0.0391	0.4545	0.0360	0.4187
129	50.75	0.04	-0.0235	-0.0260	-0.0344	0.8560	1.4393	1.0505	0.0402	0.4391	0.0383	0.4180
130	50.93	0.02	-0.0436	-0.0218	-0.0434	0.4599	0.9954	1.0331	0.0408	0.4324	0.0395	0.4185
131	51.11	0.01	-0.0014	-0.0160	-0.0300	11.4295	21.4286	1.0917	0.0389	0.4617	0.0353	0.4229
132	51.27	0.01	0.0057	-0.0175	-0.0273	-3.0694	-4.7895	1.0957	0.0376	0.4647	0.0343	0.4241
133	51.44	0.00	-0.0083	-0.0150	-0.0321	2.2885	3.8675	1.1077	0.0372	0.4715	0.0336	0.4257
134	51.58	0.03	0.0168	-0.0106	-0.0219	-0.6308	-1.2679	1.1036	0.0373	0.4694	0.0338	0.4253
135	51.79	0.02	0.0117	-0.0110	-0.0196	-0.8859	-1.6479	1.0973	0.0390	0.4665	0.0372	0.4245
136	51.92	0.02	0.0375	0.0014	-0.0053	0.0373	-0.1413	1.0757	0.0386	0.4591	0.0340	0.4268
137	52.07	-0.00	0.0020	-0.0064	-0.0208	-0.5565	-0.8000	1.0469	0.0362	0.4467	0.0369	0.4259
138	52.24	0.02	0.0021	0.0001	-0.0171	0.0476	-0.1429	1.0609	0.0371	0.4518	0.0350	0.4259

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 100 MACH 1.00 RNIJ-6 1.7 PHI 0.0 CONF 81nOF11 L C.C DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
139	52.41	0.00	-0.0033	-0.0026	-0.0226	0.6059	0.8485	1.0610	0.0367	0.4507	0.0346	0.4248
140	52.57	0.01	0.0073	-0.0033	-0.0179	-0.4519	-2.4520	1.0562	0.0371	0.4565	0.0351	0.4257
141	52.74	0.00	-0.0032	-0.0042	-0.0222	1.3121	6.9375	1.0570	0.0373	0.4516	0.0353	0.4272
142	52.90	0.00	-0.0065	-0.0044	-0.0235	8.7970	47.0000	1.0491	0.0365	0.4472	0.0348	0.4263
143	53.07	0.0	-0.0057	-0.0057	-0.0183	0.5875	2.9175	1.0477	0.0364	0.4476	0.0347	0.4272
144	53.24	-0.02	0.0018	-0.0044	-0.0223	-2.4436	-12.3889	1.0477	0.0364	0.4476	0.0347	0.4272
145	53.39	-0.02	-0.0027	-0.0057	-0.0255	2.1105	9.4444	1.0490	0.0367	0.4488	0.0350	0.4278
146	53.57	0.00	0.0121	-0.0042	-0.0184	-0.3470	-1.3554	1.0449	0.0374	0.4474	0.0358	0.4262
147	53.73	-0.01	0.0068	-0.0044	-0.0179	-0.5115	-2.0814	1.0504	0.0371	0.4505	0.0353	0.4285
148	53.89	-0.03	0.0122	-0.0047	-0.0206	-1.6781	-7.3571	1.0477	0.0377	0.4487	0.0360	0.4283
149	54.03	0.01	0.0030	-0.0047	-0.0222	-2.5662	-7.4000	1.0559	0.0351	0.4555	0.0331	0.4258
150	54.21	-0.01	0.0058	-0.0037	-0.0177	-0.3774	-1.8061	1.0638	0.0361	0.4573	0.0339	0.4299
151	54.36	-0.03	0.0085	-0.0024	-0.0177	-0.2823	-2.0823	1.0528	0.0376	0.4538	0.0355	0.4316
152	54.51	-0.01	0.0042	-0.0036	-0.0186	-0.4160	-2.3472	1.0517	0.0361	0.4520	0.0343	0.4296
153	54.67	-0.01	-0.0015	-0.0041	-0.0232	2.1573	12.2105	1.0516	0.0368	0.4526	0.0350	0.4304
154	54.85	-0.02	0.0178	-0.0023	-0.0131	-0.1452	-0.7360	1.0677	0.0354	0.4602	0.0331	0.4310
155	54.97	-0.01	0.0108	-0.0032	-0.0160	-0.2562	-1.4615	1.0732	0.0352	0.4638	0.0328	0.4322
156	55.13	-0.01	0.0175	-0.0032	-0.0132	-0.1787	-0.7374	1.0627	0.0336	0.4694	0.0316	0.4335
157	55.25	-0.04	0.0155	-0.0032	-0.0140	-0.2064	-0.9032	1.0798	0.0340	0.4688	0.0315	0.4334
158	55.45	-0.03	0.0026	-0.0036	-0.0212	-1.3925	-7.5714	1.0765	0.0345	0.4652	0.0326	0.4313
159	55.60	-0.02	0.0018	-0.0052	-0.0220	-2.6801	-12.2222	1.0745	0.0351	0.4655	0.0327	0.4332
160	55.78	-0.05	0.0026	-0.0044	-0.0255	1.7495	9.1071	1.0760	0.0352	0.4642	0.0327	0.4314
161	55.90	-0.03	-0.0040	-0.0061	-0.0247	1.4596	6.1750	1.0748	0.0347	0.4663	0.0323	0.4338
162	56.06	-0.05	-0.0065	-0.0055	-0.0245	0.8459	3.8306	1.0694	0.0348	0.4632	0.0325	0.4331
163	56.22	-0.02	-0.0018	-0.0060	-0.0223	3.3324	12.3889	1.0630	0.0335	0.4705	0.0305	0.4348
164	56.39	-0.04	-0.0065	-0.0068	-0.0225	13.9564	44.8000	1.0685	0.0328	0.4734	0.0297	0.4349
165	56.53	-0.03	-0.0065	-0.0062	-0.0226	12.3567	45.6000	1.0671	0.0329	0.4738	0.0303	0.4358
166	56.73	-0.05	-0.0029	-0.0065	-0.0236	2.0408	7.9310	1.1141	0.0293	0.4867	0.0263	0.4369
167	56.87	-0.07	-0.0127	-0.0058	-0.0240	0.4566	1.8898	1.1210	0.0283	0.4877	0.0252	0.4351
168	57.06	-0.06	-0.0068	-0.0060	-0.0218	0.8821	3.2059	1.1253	0.0284	0.4904	0.0252	0.4358
169	57.20	-0.07	0.0062	-0.0058	-0.0134	-0.7071	-1.6341	1.1444	0.0245	0.4956	0.0214	0.4367
170	57.39	-0.07	0.0032	-0.0067	-0.0152	-0.5303	-2.1111	1.1280	0.0285	0.4922	0.0253	0.4363
171	57.56	-0.06	0.0015	-0.0071	-0.0173	-0.5464	-2.3067	1.1362	0.0265	0.4960	0.0233	0.4365
172	57.63	-0.07	0.0054	-0.0077	-0.0197	-1.4255	-3.6481	1.1213	0.0284	0.4855	0.0253	0.4365
173	57.77	-0.02	0.0020	-0.0077	-0.0221	-3.8450	-11.0500	1.1132	0.0287	0.4839	0.0258	0.4367
174	57.91	-0.03	0.0056	-0.0106	-0.0200	-1.0523	-3.5714	1.1214	0.0274	0.4867	0.0244	0.4358
175	58.04	-0.07	0.0102	-0.0055	-0.0173	-0.5311	-1.6981	1.1443	0.0265	0.4997	0.0232	0.4367
176	58.20	-0.07	0.0041	-0.0058	-0.0202	-3.1604	-6.5161	1.1348	0.0262	0.4950	0.0231	0.4362
177	58.35	-0.08	0.0100	-0.0077	-0.0167	-0.7698	-1.6700	1.1420	0.0241	0.4988	0.0211	0.4368
178	58.49	-0.08	0.0220	-0.0066	-0.0137	-0.3090	-0.8227	1.1365	0.0253	0.4945	0.0223	0.4351
179	58.64	-0.06	0.0060	-0.0063	-0.0216	-0.7873	-2.6250	1.1339	0.0258	0.4949	0.0227	0.4365
180	58.80	-0.08	0.0101	-0.0073	-0.0177	-0.7226	-1.7525	1.1502	0.0244	0.5026	0.0212	0.4364

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 100 PACK 1.00 RATIO-B 1.7 PHI 0.0 CONF 81B0F11 L 6.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CAF4	CM4	CA4	XCPF4	YCPF4
1	-5.86	0.01	0.0195	9.9999	0.0204	9.9999	1.3161	-0.8074	-0.0964	-0.3665	0.1196	0.4564
2	-5.86	0.00	0.0155	9.9999	0.0166	9.9999	1.2839	-0.8157	-0.0969	-0.3718	0.1188	0.4558
3	-5.87	-0.01	0.0142	9.9999	0.0203	9.9999	1.4296	-0.8115	-0.0967	-0.3704	0.1191	0.4564
4	-5.87	0.00	0.0136	9.9999	0.0197	9.9999	1.5154	-0.8117	-0.0962	-0.3704	0.1185	0.4563
5	-4.70	0.00	0.0186	9.9999	0.0206	9.9999	1.1444	-0.8961	-0.0880	-0.3103	0.1264	0.4458
6	-2.83	0.01	0.0205	9.9999	0.0213	9.9999	1.0390	-0.5740	-0.0788	-0.2512	0.1372	0.4376
7	-0.96	0.00	0.0225	9.9999	0.0235	9.9999	1.0262	-0.4357	-0.0634	-0.1829	0.1455	0.4198
8	0.93	-0.00	0.0226	9.9999	0.0255	9.9999	1.1300	-0.3168	-0.0454	-0.1230	0.1433	0.3883
9	2.88	0.00	0.0228	9.9999	0.0264	9.9999	1.1579	-0.2105	-0.0277	-0.0688	0.1316	0.3268
10	4.71	0.00	0.0262	9.9999	0.0287	9.9999	1.4208	-0.1174	-0.0121	-0.0194	0.1030	0.1652
11	6.63	0.00	0.0262	9.9999	0.0282	9.9999	1.2970	-0.0321	0.0047	0.0134	-0.1464	-0.4174
12	8.53	0.01	0.0196	9.9999	0.0261	9.9999	1.3737	0.0511	0.0205	0.0449	0.5185	0.8787
13	10.40	0.01	0.0275	9.9999	0.0238	9.9999	0.8530	0.1293	0.0473	0.0828	0.3857	0.6464
14	12.36	-0.00	0.0356	9.9999	0.0171	9.9999	0.4777	0.2224	0.0664	0.1373	0.2985	0.6174
15	14.31	-0.00	0.0470	9.9999	0.0205	9.9999	0.4447	0.3330	0.0797	0.1923	0.2393	0.5775
16	16.30	0.00	0.0447	9.9999	0.0178	9.9999	0.3982	0.4401	0.0878	0.2511	0.1994	0.5708
17	18.30	0.00	0.0534	9.9999	0.0205	9.9999	0.3914	0.5531	0.0914	0.3125	0.1652	0.5650
18	20.27	0.00	0.0457	9.9999	0.0177	9.9999	0.3561	0.6001	0.0804	0.3372	0.1436	0.5619
19	22.27	0.00	0.0523	9.9999	0.0174	9.9999	0.3327	0.6652	0.0859	0.3701	0.1291	0.5584
20	24.27	0.01	0.0557	9.9999	0.0214	9.9999	0.3585	0.6753	0.0829	0.3754	0.0931	0.5559
21	26.26	0.03	0.0584	9.9999	0.0213	9.9999	0.3647	0.7560	0.0879	0.4170	0.0898	0.5561
22	28.30	0.07	0.0776	9.9999	0.0302	9.9999	0.3922	0.8301	0.0892	0.4577	0.0827	0.5474
23	28.39	0.07	0.0711	9.9999	0.0244	9.9999	0.3432	0.8267	0.0867	0.4566	0.0807	0.5523
24	28.40	0.06	0.0761	9.9999	0.0258	9.9999	0.3390	0.8238	0.0895	0.4577	0.0843	0.5556
25	28.40	0.06	0.0737	9.9999	0.0246	9.9999	0.3338	0.8246	0.0881	0.4613	0.0826	0.5598
26	28.40	0.07	0.0850	9.9999	0.0256	9.9999	0.3412	0.8310	0.0883	0.4659	0.0822	0.5608
27	28.78	0.06	0.0868	9.9999	0.0302	9.9999	0.3468	0.8379	0.0877	0.4720	0.0808	0.5633
28	29.03	0.07	0.0862	9.9999	0.0306	9.9999	0.3550	0.8551	0.0871	0.4795	0.0784	0.5608
29	29.35	0.07	0.0864	9.9999	0.0301	9.9999	0.3484	0.8686	0.0878	0.4873	0.0780	0.5610
30	29.68	0.07	0.0826	9.9999	0.0288	9.9999	0.3487	0.8898	0.0883	0.4974	0.0785	0.5604
31	29.97	0.08	0.0940	9.9999	0.0332	9.9999	0.3532	0.8854	0.0875	0.4968	0.0762	0.5611
32	30.25	0.07	0.0852	9.9999	0.0306	9.9999	0.3521	0.8855	0.0873	0.4958	0.0780	0.5599
33	30.53	0.05	0.0852	9.9999	0.0300	9.9999	0.3521	0.9058	0.0899	0.5081	0.0771	0.5665
34	30.80	0.05	0.0815	9.9999	0.0328	9.9999	0.3690	0.9099	0.0868	0.5080	0.0732	0.5583
35	31.08	0.08	0.0935	9.9999	0.0342	9.9999	0.3642	0.9193	0.0881	0.5146	0.0741	0.5598
36	31.36	0.08	0.0901	9.9999	0.0324	9.9999	0.3596	0.9132	0.0855	0.5101	0.0717	0.5586
37	31.64	0.08	0.0975	9.9999	0.0369	9.9999	0.3785	0.9205	0.0849	0.5132	0.0705	0.5579
38	31.92	0.10	0.0929	9.9999	0.0350	9.9999	0.3784	0.9151	0.0844	0.5101	0.0704	0.5574
39	32.18	0.10	0.0960	9.9999	0.0373	9.9999	0.3885	0.9308	0.0871	0.5229	0.0716	0.5582
40	32.46	0.05	0.0861	9.9999	0.0335	9.9999	0.3891	0.9404	0.0849	0.5219	0.0690	0.5550
41	32.72	0.06	0.0811	9.9999	0.0311	9.9999	0.3835	0.9318	0.0828	0.5173	0.0674	0.5555
42	32.98	0.08	0.0910	9.9999	0.0365	9.9999	0.4055	0.9381	0.0835	0.5195	0.0677	0.5538
43	33.25	0.07	0.0758	9.9999	0.0315	9.9999	0.3947	0.9429	0.0821	0.5223	0.0658	0.5535
44	33.51	0.06	0.0848	9.9999	0.0335	9.9999	0.3998	0.9492	0.0802	0.5230	0.0634	0.5510
45	33.75	0.08	0.0835	9.9999	0.0343	9.9999	0.4108	0.9426	0.0790	0.5192	0.0626	0.5508
46	34.01	0.05	0.0735	9.9999	0.0285	9.9999	0.3878	0.9467	0.0795	0.5221	0.0628	0.5515

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

PARTIAL PASSIVE TAILS EFFECTS DATA

TEST 7 PART 100 MACH 1.00 MAXIC-E 1.7 PHI 0.0 CONF BlbcF11 L C.C DELI 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	ACPF3	YCPF3	CNF4	CM4	CA4	ACPF4	YCPF4
47	34.26	0.06	0.0834	9.9999	0.0342	9.9999	0.4101	0.9429	0.0583	0.5180	0.0618	0.5494
48	34.48	0.04	0.0665	9.9999	0.0262	9.9999	0.3625	0.9080	0.0567	0.4970	0.0624	0.5474
49	34.75	0.05	0.0722	9.9999	0.0294	9.9999	0.4072	0.9086	0.0567	0.4963	0.0625	0.5474
50	35.02	0.06	0.0771	9.9999	0.0327	9.9999	0.4241	0.9488	0.0572	0.5147	0.0603	0.5425
51	35.24	0.06	0.0822	9.9999	0.0362	9.9999	0.4463	0.9415	0.0566	0.5099	0.0601	0.5414
52	35.49	0.04	0.0795	9.9999	0.0345	9.9999	0.4390	0.9250	0.0564	0.4992	0.0610	0.5397
53	35.73	0.04	0.0858	9.9999	0.0257	9.9999	0.4267	0.9162	0.0569	0.4929	0.0621	0.5380
54	35.97	0.04	0.0733	9.9999	0.0334	9.9999	0.4557	0.9250	0.0561	0.4950	0.0606	0.5351
55	36.21	0.05	0.0858	9.9999	0.0312	9.9999	0.4483	0.9319	0.0566	0.4971	0.0607	0.5334
56	36.44	0.06	0.0733	9.9999	0.0325	9.9999	0.4486	0.9418	0.0562	0.4999	0.0597	0.5308
57	36.69	0.03	0.0883	9.9999	0.0311	9.9999	0.4553	0.9478	0.0555	0.5029	0.0585	0.5308
58	36.91	0.05	0.0832	9.9999	0.0307	9.9999	0.4838	0.9520	0.0554	0.5016	0.0582	0.5269
59	37.14	0.05	0.0732	9.9999	0.0354	9.9999	0.4836	0.9420	0.0554	0.4951	0.0588	0.5256
60	37.39	0.03	0.0558	9.9999	0.0261	9.9999	0.4077	0.9418	0.0558	0.4931	0.0552	0.5236
61	37.63	0.02	0.0505	9.9999	0.0238	9.9999	0.4876	0.9591	0.0552	0.5026	0.0575	0.5240
62	37.86	0.05	0.0682	9.9999	0.0330	9.9999	0.4839	0.9590	0.0553	0.5011	0.0576	0.5225
63	38.10	0.04	0.0662	9.9999	0.0341	9.9999	0.5000	0.9716	0.0548	0.5039	0.0564	0.5188
64	38.32	0.02	0.0682	9.9999	0.0341	9.9999	0.5000	0.9626	0.0561	0.4998	0.0583	0.5192
65	38.56	0.03	0.0583	9.9999	0.0293	9.9999	0.5026	0.9765	0.0552	0.5071	0.0564	0.5182
66	38.79	0.05	0.0657	9.9999	0.0325	9.9999	0.5008	0.9510	0.0565	0.4932	0.0594	0.5186
67	39.02	0.03	0.0633	9.9999	0.0317	9.9999	0.5008	0.9870	0.0549	0.5088	0.0556	0.5155
68	39.24	0.04	0.0657	9.9999	0.0325	9.9999	0.5008	0.9971	0.0544	0.5131	0.0545	0.5140
69	39.48	-0.01	0.0707	9.9999	0.0362	9.9999	0.5120	1.0015	0.0538	0.5128	0.0537	0.5126
70	39.69	0.02	0.0583	9.9999	0.0303	9.9999	0.5197	0.9970	0.0539	0.5109	0.0540	0.5124
71	39.90	0.02	0.0505	9.9999	0.0263	9.9999	0.5167	0.9993	0.0545	0.5101	0.0545	0.5104
72	40.11	0.03	0.0606	9.9999	0.0315	9.9999	0.5181	1.0025	0.0543	0.5113	0.0542	0.5100
73	40.33	0.00	0.0583	9.9999	0.0303	9.9999	0.5197	1.0238	0.0541	0.5202	0.0528	0.5081
74	40.55	0.01	0.0583	9.9999	0.0303	9.9999	0.5197	1.0062	0.0556	0.5123	0.0552	0.5091
75	40.76	0.01	0.0657	9.9999	0.0355	9.9999	0.5464	1.0107	0.0549	0.5131	0.0543	0.5077
76	40.98	0.04	0.0615	9.9999	0.0341	9.9999	0.5509	1.0121	0.0548	0.5121	0.0541	0.5060
77	41.22	0.00	0.0583	9.9999	0.0318	9.9999	0.5493	1.0160	0.0549	0.5134	0.0540	0.5053
78	41.41	0.01	0.0555	9.9999	0.0315	9.9999	0.5361	1.0219	0.0542	0.5158	0.0536	0.5047
79	41.65	0.01	0.0508	9.9999	0.0273	9.9999	0.5374	1.0200	0.0554	0.5137	0.0543	0.5038
80	41.80	0.00	0.0507	9.9999	0.0277	9.9999	0.5464	1.0271	0.0553	0.5172	0.0538	0.5036
81	42.07	0.02	0.0608	9.9999	0.0365	9.9999	0.5524	1.0305	0.0538	0.5183	0.0522	0.5030
82	42.26	0.00	0.0608	9.9999	0.0364	9.9999	0.5449	1.0345	0.0542	0.5182	0.0524	0.5009
83	42.47	0.02	0.0717	9.9999	0.0393	9.9999	0.5481	1.0274	0.0542	0.5140	0.0527	0.5009
84	42.65	-0.00	0.0760	9.9999	0.0377	9.9999	0.5340	1.0168	0.0555	0.5107	0.0546	0.5023
85	42.84	0.01	0.0616	9.9999	0.0325	9.9999	0.5429	1.0362	0.0526	0.5183	0.0507	0.5004
86	43.03	-0.02	0.0544	9.9999	0.0300	9.9999	0.5515	1.0471	0.0538	0.5226	0.0514	0.4991
87	43.25	0.00	0.0581	9.9999	0.0317	9.9999	0.5456	1.0459	0.0530	0.5198	0.0507	0.4976
88	43.42	-0.01	0.0581	9.9999	0.0312	9.9999	0.5370	1.0511	0.0539	0.5217	0.0513	0.4963
89	43.60	0.00	0.0620	9.9999	0.0334	9.9999	0.5206	1.0499	0.0531	0.5205	0.0508	0.4938
90	43.79	0.00	0.0554	9.9999	0.0316	9.9999	0.5363	1.0570	0.0533	0.5247	0.0504	0.4964
91	43.98	-0.00	0.0667	9.9999	0.0343	9.9999	0.5142	1.0443	0.0529	0.5183	0.0508	0.4948
92	44.18	0.01	0.0515	9.9999	0.0263	9.9999	0.5067	1.0571	0.0520	0.5234	0.0492	0.4951

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 100 MACH 1.60 RATIO-E 1.7 PHI 0.0 CONF BIBOFLI L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
93	44.31	-0.01	0.0265	9.9999	0.0304	9.9999	0.5025	1.0473	0.0514	0.5162	0.0491	0.4929
94	44.50	-0.01	0.0257	9.9999	0.0223	9.9999	0.4880	1.0526	0.0522	0.5193	0.0496	0.4933
95	44.72	-0.05	0.0536	9.9999	0.0283	9.9999	0.5340	1.0494	0.0530	0.5175	0.0505	0.4931
96	44.89	-0.01	0.0555	9.9999	0.0286	9.9999	0.5045	1.0599	0.0514	0.5233	0.0485	0.4937
97	45.07	-0.03	0.0496	9.9999	0.0342	9.9999	0.5313	1.0214	0.0523	0.5023	0.0512	0.4918
98	45.27	-0.01	0.0464	9.9999	0.0344	9.9999	0.5151	1.0568	0.0520	0.5188	0.0492	0.4910
99	45.46	-0.03	0.0551	9.9999	0.0302	9.9999	0.5110	1.0660	0.0525	0.5226	0.0492	0.4902
100	45.63	-0.04	0.0442	9.9999	0.0231	9.9999	0.5226	1.0606	0.0516	0.5164	0.0486	0.4888
101	45.80	-0.03	0.0553	9.9999	0.0274	9.9999	0.4955	1.0747	0.0510	0.5244	0.0474	0.4879
102	46.04	-0.04	0.0430	9.9999	0.0226	9.9999	0.5116	1.0581	0.0504	0.5164	0.0476	0.4880
103	46.18	-0.04	0.0526	9.9999	0.0272	9.9999	0.5152	1.0687	0.0512	0.5192	0.0479	0.4858
104	46.34	-0.01	0.0492	9.9999	0.0230	9.9999	0.4975	1.0761	0.0524	0.5231	0.0484	0.4852
105	46.53	-0.01	0.0527	9.9999	0.0266	9.9999	0.5047	1.0645	0.0507	0.5146	0.0478	0.4834
106	46.70	-0.02	0.0551	9.9999	0.0278	9.9999	0.5045	1.0689	0.0498	0.5168	0.0466	0.4835
107	46.85	-0.01	0.0465	9.9999	0.0195	9.9999	0.4869	1.0732	0.0489	0.5170	0.0456	0.4817
108	47.06	-0.06	0.0566	9.9999	0.0245	9.9999	0.4960	1.0673	0.0494	0.5166	0.0463	0.4835
109	47.23	-0.04	0.0513	9.9999	0.0225	9.9999	0.5244	1.0794	0.0502	0.5210	0.0465	0.4827
110	47.42	0.00	0.0477	9.9999	0.0238	9.9999	0.4990	1.0743	0.0483	0.5173	0.0445	0.4815
111	47.59	-0.03	0.0453	9.9999	0.0231	9.9999	0.5099	1.0673	0.0471	0.5217	0.0433	0.4798
112	47.76	0.02	0.0416	9.9999	0.0156	9.9999	0.4760	1.0713	0.0451	0.5171	0.0421	0.4827
113	47.91	-0.05	0.0535	9.9999	0.0262	9.9999	0.4861	1.0749	0.0458	0.5159	0.0426	0.4806
114	48.09	0.03	0.0478	9.9999	0.0242	9.9999	0.5084	0.9890	0.0442	0.4794	0.0447	0.4847
115	48.29	0.03	0.0423	9.9999	0.0332	9.9999	0.5329	0.9664	0.0444	0.4706	0.0459	0.4863
116	48.45	0.05	0.0456	9.9999	0.0377	9.9999	0.5417	0.9608	0.0442	0.4649	0.0460	0.4839
117	48.64	0.06	0.0422	9.9999	0.0351	9.9999	0.5643	0.9752	0.0432	0.4731	0.0443	0.4851
118	48.84	0.05	0.0422	9.9999	0.0351	9.9999	0.5643	0.9889	0.0438	0.4783	0.0443	0.4837
119	48.99	0.01	0.0445	9.9999	0.0362	9.9999	0.5612	0.9979	0.0428	0.4830	0.0429	0.4840
120	49.18	0.03	0.0372	9.9999	0.0317	9.9999	0.5542	1.0004	0.0434	0.4801	0.0434	0.4799
121	49.36	0.04	0.0458	9.9999	0.0367	9.9999	0.5595	0.9964	0.0435	0.4784	0.0436	0.4801
122	49.51	0.02	0.0421	9.9999	0.0365	9.9999	0.5784	0.9821	0.0444	0.4702	0.0452	0.4788
123	49.70	0.02	0.0454	9.9999	0.0337	9.9999	0.5673	0.9939	0.0440	0.4740	0.0444	0.4784
124	49.87	0.00	0.0441	9.9999	0.0385	9.9999	0.6006	0.9936	0.0442	0.4731	0.0445	0.4761
125	50.05	0.04	0.0466	9.9999	0.0345	9.9999	0.6074	0.9979	0.0436	0.4734	0.0437	0.4744
126	50.23	0.03	0.0477	9.9999	0.0416	9.9999	0.6080	0.9980	0.0434	0.4729	0.0435	0.4738
127	50.43	0.04	0.0465	9.9999	0.0363	9.9999	0.6000	1.0066	0.0425	0.4754	0.0422	0.4723
128	50.59	-0.01	0.0496	9.9999	0.0305	9.9999	0.6145	1.0036	0.0431	0.4732	0.0429	0.4715
129	50.75	0.01	0.0435	9.9999	0.0283	9.9999	0.6166	1.0011	0.0425	0.4724	0.0422	0.4719
130	50.93	0.02	0.0463	9.9999	0.0314	9.9999	0.6501	1.0194	0.0417	0.4788	0.0409	0.4697
131	51.11	0.01	0.0515	9.9999	0.0341	9.9999	0.6570	1.0484	0.0415	0.4912	0.0400	0.4685
132	51.27	0.01	0.0451	9.9999	0.0386	9.9999	0.6531	1.0419	0.0408	0.4876	0.0391	0.4680
133	51.46	0.00	0.0446	9.9999	0.0302	9.9999	0.6861	1.0613	0.0407	0.4962	0.0383	0.4675
134	51.58	0.03	0.0416	9.9999	0.0283	9.9999	0.7049	1.0613	0.0400	0.4950	0.0377	0.4664
135	51.74	0.02	0.0455	9.9999	0.0340	9.9999	0.6869	1.0560	0.0394	0.4935	0.0373	0.4673
136	51.92	0.02	0.0366	9.9999	0.0268	9.9999	0.7401	1.0458	0.0408	0.4883	0.0390	0.4665
137	52.07	-0.00	0.0373	9.9999	0.0267	9.9999	0.7694	1.0565	0.0382	0.4919	0.0361	0.4658
138	52.24	0.02	0.0358	9.9999	0.0294	9.9999	0.7387	1.0712	0.0393	0.4987	0.0367	0.4656

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 100 MACH 1.00 RNIG=6 1.7 PHI 0.0 CONF 11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
139	52.41	0.00	0.0434	9.9999	0.0321	9.9999	0.7396	1.0739	0.0400	0.4977	0.0373	0.4647
140	52.57	0.01	0.0410	9.9999	0.0305	9.9999	0.7439	1.0397	0.0416	0.4838	0.0400	0.4653
141	52.74	0.00	0.0433	9.9999	0.0330	9.9999	0.7021	1.0584	0.0404	0.4908	0.0382	0.4637
142	52.90	0.00	0.0275	9.9999	0.0245	9.9999	0.8909	1.0360	0.0411	0.4820	0.0397	0.4653
143	53.07	0.00	0.0373	9.9999	0.0296	9.9999	0.7936	1.0572	0.0400	0.4901	0.0378	0.4638
144	53.24	-0.02	0.0405	9.9999	0.0315	9.9999	0.7800	1.0574	0.0400	0.4848	0.0382	0.4626
145	53.39	-0.02	0.0384	9.9999	0.0317	9.9999	0.8255	1.0501	0.0404	0.4880	0.0385	0.4628
146	53.57	0.00	0.0364	9.9999	0.0312	9.9999	0.8125	1.0350	0.0418	0.4790	0.0404	0.4625
147	53.73	-0.01	0.0373	9.9999	0.0302	9.9999	0.8097	1.0358	0.0414	0.4779	0.0400	0.4614
148	53.89	-0.01	0.0405	9.9999	0.0325	9.9999	0.8044	1.0515	0.0405	0.4846	0.0385	0.4608
149	54.03	0.01	0.0465	9.9999	0.0356	9.9999	0.8000	1.0630	0.0394	0.4890	0.0371	0.4600
150	54.21	-0.01	0.0348	9.9999	0.0310	9.9999	0.8908	1.0594	0.0410	0.4853	0.0387	0.4581
151	54.36	-0.03	0.0361	9.9999	0.0318	9.9999	0.8753	1.0569	0.0407	0.4838	0.0388	0.4590
152	54.51	-0.01	0.0251	9.9999	0.0244	9.9999	0.9721	1.0628	0.0400	0.4854	0.0376	0.4568
153	54.67	-0.01	0.0373	9.9999	0.0322	9.9999	0.8633	1.0625	0.0401	0.4854	0.0377	0.4568
154	54.83	-0.02	0.0337	9.9999	0.0295	9.9999	0.8754	1.0566	0.0404	0.4835	0.0382	0.4570
155	54.97	-0.01	0.0388	9.9999	0.0328	9.9999	0.8497	1.0627	0.0396	0.4863	0.0373	0.4576
156	55.13	-0.01	0.0373	9.9999	0.0332	9.9999	0.8401	1.0700	0.0397	0.4915	0.0369	0.4565
157	55.25	-0.04	0.0387	9.9999	0.0325	9.9999	0.8501	1.0793	0.0394	0.4937	0.0365	0.4574
158	55.45	-0.03	0.0325	9.9999	0.0295	9.9999	0.9077	1.0835	0.0394	0.4940	0.0364	0.4558
159	55.60	-0.02	0.0320	9.9999	0.0312	9.9999	0.7923	1.0876	0.0401	0.4970	0.0369	0.4570
160	55.76	-0.05	0.0357	9.9999	0.0305	9.9999	0.9050	1.0923	0.0392	0.4978	0.0359	0.4557
161	55.90	-0.03	0.0346	9.9999	0.0320	9.9999	0.9195	1.0884	0.0390	0.4966	0.0358	0.4563
162	56.06	-0.05	0.0287	9.9999	0.0281	9.9999	0.9791	1.0887	0.0382	0.4965	0.0351	0.4560
163	56.22	-0.02	0.0421	9.9999	0.0355	9.9999	0.8432	1.0889	0.0381	0.4981	0.0350	0.4574
164	56.39	-0.04	0.0323	9.9999	0.0306	9.9999	0.9536	1.0916	0.0376	0.5010	0.0341	0.4548
165	56.53	-0.03	0.0405	9.9999	0.0335	9.9999	0.8289	1.0963	0.0370	0.5011	0.0337	0.4571
166	56.73	-0.05	0.0324	9.9999	0.0298	9.9999	0.9198	1.1337	0.0336	0.5164	0.0298	0.4555
167	56.87	-0.07	0.0373	9.9999	0.0317	9.9999	0.8699	1.1591	0.0332	0.5290	0.0288	0.4564
168	57.06	-0.06	0.0367	9.9999	0.0338	9.9999	0.8514	1.1554	0.0328	0.5278	0.0284	0.4568
169	57.20	-0.07	0.0336	9.9999	0.0314	9.9999	0.9365	1.1487	0.0323	0.5257	0.0281	0.4578
170	57.33	-0.07	0.0283	9.9999	0.0285	9.9999	1.0228	1.1203	0.0335	0.5134	0.0299	0.4583
171	57.50	-0.06	0.0336	9.9999	0.0309	9.9999	0.9196	1.1291	0.0323	0.5165	0.0286	0.4574
172	57.69	-0.07	0.0323	9.9999	0.0308	9.9999	0.9536	1.1178	0.0328	0.5111	0.0293	0.4572
173	57.77	-0.02	0.0325	9.9999	0.0285	9.9999	0.6892	1.1206	0.0324	0.5127	0.0289	0.4573
174	57.91	-0.03	0.0410	9.9999	0.0350	9.9999	0.8537	1.1163	0.0326	0.5099	0.0292	0.4568
175	58.04	-0.07	0.0374	9.9999	0.0322	9.9999	0.8770	1.1233	0.0317	0.5144	0.0282	0.4579
176	58.20	-0.07	0.0350	9.9999	0.0322	9.9999	0.9200	1.1320	0.0313	0.5186	0.0276	0.4581
177	58.35	-0.08	0.0400	9.9999	0.0341	9.9999	0.8923	1.1479	0.0307	0.5260	0.0287	0.4582
178	58.49	-0.08	0.0350	9.9999	0.0337	9.9999	0.9029	1.1294	0.0307	0.5152	0.0272	0.4562
179	58.64	-0.08	0.0327	9.9999	0.0308	9.9999	0.9358	1.1492	0.0313	0.5257	0.0272	0.4574
180	58.80	-0.08	0.0253	9.9999	0.0266	9.9999	1.0514	1.1494	0.0303	0.5261	0.0264	0.4577

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 101 MACH 1.10 RX10-6 1.07 PHI 0.0 ALPHA OF 11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSATION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	CA	CAB	CAF	XCP
2	-5.74	0.01	-1.5561	5.1913	-0.0344	0.0159	-0.0045	0.6924	0.2333	0.4590	-3.3361
3	-5.75	0.03	-1.5651	5.1745	0.1537	-0.1007	-0.0043	0.6865	0.2319	0.4545	-3.2977
4	-5.75	0.01	-1.5464	5.1521	0.0200	-0.0448	-0.0045	0.6882	0.2326	0.4555	-3.3144
5	-5.85	0.01	-1.4864	4.9569	-0.0042	-0.0406	-0.0099	0.6946	0.2263	0.4682	-3.3578
6	-3.88	0.01	-1.2046	4.3164	-0.0443	0.0436	-0.0041	0.6597	0.2149	0.4448	-3.5832
7	-2.02	0.01	-0.8517	3.4067	0.0360	-0.0557	-0.0033	0.6284	0.2145	0.4139	-4.0866
8	-0.13	0.01	-0.5766	2.7763	0.0405	-0.0753	-0.0083	0.6166	0.2177	0.3989	-4.8149
9	1.76	0.00	-0.3096	2.1147	-0.0275	-0.0497	-0.0025	0.5927	0.2226	0.3701	-6.8311
10	3.79	0.01	-0.0462	1.5323	0.0523	-0.1722	-0.0071	0.5942	0.2382	0.3560	-38.0965
11	5.61	0.01	0.2516	0.9306	0.0090	-0.0085	-0.0067	0.5909	0.2539	0.3370	3.6941
12	7.60	0.01	0.5458	0.3950	0.0121	0.0478	-0.0062	0.5825	0.2734	0.3091	0.7311
13	9.48	0.01	0.8390	-0.1336	0.0543	-0.0314	0.0008	0.5724	0.2855	0.2868	-0.1592
14	11.47	0.01	1.2064	-0.5768	0.0314	-0.0205	0.0065	0.5475	0.2973	0.2502	-0.8057
15	13.40	0.01	1.6147	-1.7960	0.0018	0.0751	0.0009	0.5208	0.2991	0.2277	-1.1122
16	15.42	0.01	2.0423	-2.6422	0.0186	0.1570	0.0074	0.4972	0.2943	0.2029	-1.2938
17	17.47	0.00	2.4576	-3.4974	-0.0371	0.2079	0.0082	0.4621	0.2900	0.1716	-1.3527
18	19.46	-0.00	2.8612	-3.8357	-0.1215	0.3751	0.0069	0.4254	0.2859	0.1395	-1.3420
19	21.49	-0.00	3.3541	-4.1941	-0.1360	0.5001	-0.0000	0.3801	0.2789	0.1016	-1.2486
20	23.54	0.01	3.9670	-4.3207	-0.1348	0.2560	-0.0138	0.3413	0.2783	0.0629	-1.0837
21	25.57	0.01	4.6086	-4.3627	0.0723	0.0881	-0.0107	0.3040	0.2756	0.0281	-0.9467
22	27.66	0.04	5.3746	-4.4132	0.4772	-1.0144	0.0713	0.2798	0.2794	0.0004	-0.8212
23	28.45	0.04	5.6729	-4.5526	0.5376	-1.1676	0.0942	0.2752	0.2912	-0.0159	-0.8165
24	28.66	0.04	5.7190	-4.6222	0.4333	-0.7504	0.0668	0.2638	0.2692	-0.0054	-0.8082
25	29.00	0.04	5.8515	-4.6556	0.4126	-0.5884	0.0506	0.2776	0.2957	-0.0180	-0.8025
26	29.34	0.04	5.9085	-4.6723	0.4554	-0.7431	0.0730	0.2806	0.3024	-0.0217	-0.7908
27	29.62	0.03	6.0332	-4.8205	0.3163	-0.4560	0.0510	0.2823	0.3043	-0.0219	-0.7990
28	29.93	0.03	6.2165	-4.9673	0.6616	-1.2442	0.1130	0.2824	0.3121	-0.0296	-0.7950
29	30.24	0.06	6.3469	-5.0876	0.6625	-1.6339	0.1468	0.2871	0.3189	-0.0317	-0.7903
30	30.51	0.08	6.4561	-5.0979	0.8742	-1.6543	0.1472	0.2874	0.3204	-0.0329	-0.7921
31	30.79	0.06	6.5759	-5.1223	0.6523	-1.2436	0.1252	0.2799	0.3211	-0.0411	-0.7789
32	31.06	0.06	6.6750	-5.2261	0.6752	-1.2606	0.1416	0.2706	0.3216	-0.0511	-0.7829
33	31.35	0.06	6.7946	-5.3722	0.6510	-1.2622	0.1422	0.2789	0.3243	-0.0453	-0.7907
34	31.61	0.07	6.9079	-5.5957	0.7275	-1.3524	0.1589	0.2776	0.3251	-0.0474	-0.8100
35	31.91	0.05	7.0665	-5.4570	0.4516	-0.7776	0.1043	0.2694	0.3255	-0.0560	-0.7722
36	32.18	0.05	7.1470	-5.4378	0.4612	-0.7106	0.0935	0.2674	0.3286	-0.0611	-0.7609
37	32.45	0.04	7.2744	-5.0560	0.3685	-0.6817	0.1102	0.2651	0.3297	-0.0645	-0.7776
38	32.73	0.06	7.4026	-5.6083	0.5143	-0.7886	0.0945	0.2545	0.3332	-0.0786	-0.7576
39	32.98	0.05	7.4158	-5.7365	0.3772	-0.5749	0.1051	0.2679	0.3382	-0.0702	-0.7736
40	33.25	0.05	7.5557	-5.6651	0.3857	-0.4666	0.0564	0.2413	0.3360	-0.0946	-0.7503
41	33.52	0.04	7.7417	-5.8761	0.2466	-0.0751	0.0561	0.2621	0.3455	-0.0833	-0.7370
42	33.76	0.02	7.8238	-5.7425	0.1635	0.1206	0.0286	0.2468	0.3507	-0.1039	-0.7340
43	34.02	0.00	7.8735	-5.8324	-0.0272	0.4563	0.0169	0.2616	0.3585	-0.0969	-0.7408
44	34.26	0.02	7.9568	-5.9513	0.1694	-0.0024	0.0513	0.2487	0.3588	-0.1101	-0.7478
45	34.51	0.04	8.1372	-6.0899	0.0705	0.4581	0.0284	0.2484	0.3659	-0.1175	-0.7484
46	34.79	0.02	8.2175	-6.0574	0.1406	0.1131	0.0464	0.2467	0.3684	-0.1217	-0.7371
47	35.03	0.02	8.3560	-6.0965	0.1124	0.2466	0.0574	0.2717	0.3751	-0.1034	-0.7299

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/D=6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 101 1.10 1.7 0.0 BASEOF11 0.0 0 -10 0 -10 UNKNOWN

PCINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
48	35.25	0.03	8.37E3	-6.0613	0.1397	0.3294	0.0298	0.2482	0.3853	-0.1371	-0.7235
49	35.53	0.02	8.59EC	-6.2556	0.1078	0.2784	0.0036	0.2546	0.3920	-0.1374	-0.7326
50	35.75	0.03	8.3718	-6.4478	0.1544	0.1586	0.0582	0.2559	0.3921	-0.1362	-0.7522
51	36.00	0.04	8.7799	-6.3170	0.2020	0.1854	0.0371	0.2383	0.3910	-0.1527	-0.7195
52	36.25	0.03	8.8661	-6.3556	0.1158	0.3135	0.0316	0.2423	0.3875	-0.1452	-0.7214
53	36.49	0.04	8.9360	-6.4050	0.2102	0.1163	0.0397	0.2393	0.3815	-0.1422	-0.7262
54	36.70	0.04	8.9400	-6.4502	0.2224	0.1451	0.0377	0.2202	0.3758	-0.1556	-0.7213
55	36.96	0.04	9.1552	-6.4556	0.2206	0.0884	0.0333	0.2235	0.3793	-0.1558	-0.7095
56	37.20	0.02	9.2557	-6.5316	0.0795	0.2708	0.0113	0.2209	0.3790	-0.1581	-0.7057
57	37.42	0.01	9.2732	-6.5706	-0.0457	0.3572	0.0113	0.2145	0.3822	-0.1677	-0.7085
58	37.68	0.03	9.4723	-6.7641	0.1552	0.1097	0.0069	0.2124	0.3791	-0.1667	-0.7141
59	37.91	0.03	9.5050	-6.7757	0.1747	0.0525	0.0291	0.2226	0.3836	-0.1610	-0.7128
60	38.13	0.02	9.6235	-6.9725	0.0788	0.2614	0.0125	0.2296	0.3910	-0.1614	-0.7245
61	38.37	0.04	9.6694	-6.8701	0.3056	-0.0685	-0.0191	0.2134	0.3857	-0.1723	-0.7109
62	38.62	0.02	9.7536	-7.0355	0.0246	0.3318	-0.0069	0.2098	0.3928	-0.1830	-0.7184
63	38.85	0.03	9.9071	-7.1165	0.0543	0.3344	-0.0192	0.2143	0.3829	-0.1766	-0.7142
64	39.08	0.01	9.9354	-7.1674	-0.0215	0.3366	-0.0190	0.2252	0.3867	-0.1815	-0.7151
65	39.31	0.01	10.1121	-7.1357	-0.0226	0.2900	-0.0102	0.2048	0.3880	-0.1832	-0.7057
66	39.53	0.03	10.1161	-7.0954	0.2911	0.1202	-0.0289	0.2127	0.3920	-0.1793	-0.7018
67	39.76	0.01	10.2555	-7.2311	0.1043	0.0822	-0.0386	0.2038	0.3856	-0.1818	-0.7051
68	39.97	-0.01	10.2464	-7.1055	-0.0648	0.2006	-0.0225	0.1868	0.3690	-0.1822	-0.6934
69	40.18	-0.01	10.3508	-7.3024	-0.0666	0.1969	-0.0392	0.2245	0.3817	-0.1572	-0.7056
70	40.42	-0.00	10.5164	-7.2556	-0.0575	0.3021	-0.0382	0.2140	0.3795	-0.1655	-0.6963
71	40.64	0.01	10.6672	-7.4976	0.1901	-0.0571	-0.0369	0.2086	0.3886	-0.1800	-0.7015
72	40.82	0.01	10.6813	-7.3474	0.2271	-0.0042	-0.0478	0.2149	0.3914	-0.1765	-0.6879
73	41.03	-0.03	10.7066	-7.4995	-0.0790	0.3317	-0.0376	0.2092	0.3900	-0.1808	-0.6953
74	41.24	-0.01	10.8566	-7.3946	0.1172	0.1095	-0.0689	0.2260	0.3923	-0.1663	-0.6817
75	41.44	-0.04	10.8427	-7.5678	-0.0827	0.2376	-0.0367	0.2078	0.3919	-0.1841	-0.6998
76	41.67	-0.03	10.9800	-7.4041	0.0704	0.0865	-0.0465	0.1999	0.3856	-0.1857	-0.6756
77	41.86	-0.01	11.0224	-7.4773	-0.0036	0.2223	-0.0575	0.2188	0.3863	-0.1675	-0.6784
78	42.06	-0.02	11.0706	-7.4891	-0.0403	0.1682	-0.0192	0.1864	0.3650	-0.1966	-0.6783
79	42.26	-0.01	11.1461	-7.4775	-0.0153	0.2036	-0.0461	0.1974	0.3811	-0.1837	-0.6721
80	42.46	-0.00	11.1885	-7.2720	0.1173	0.3228	-0.0952	0.2365	0.3957	-0.1592	-0.6511
81	42.67	-0.04	11.3453	-7.3536	-0.0892	0.5653	-0.0898	0.2310	0.3933	-0.1623	-0.6493
82	42.86	-0.00	11.3568	-7.2800	0.0315	0.4618	-0.1058	0.2391	0.3971	-0.1580	-0.6414
83	43.04	-0.03	11.4137	-7.3002	-0.0526	0.4803	-0.0783	0.2223	0.3827	-0.1604	-0.6571
84	43.22	-0.02	11.4828	-7.4023	-0.0675	0.3522	-0.0721	0.2181	0.3820	-0.1639	-0.6499
85	43.40	-0.03	11.5506	-7.4555	-0.1393	0.2706	-0.0490	0.1816	0.3789	-0.1973	-0.6459
86	43.58	-0.03	11.7007	-7.2875	-0.1607	0.5238	-0.0782	0.2107	0.3921	-0.1814	-0.6229
87	43.76	-0.03	11.7230	-7.2767	-0.1363	0.5588	-0.0855	0.1962	0.3841	-0.1859	-0.6209
88	43.95	-0.03	11.8574	-7.2135	-0.1704	0.5621	-0.0710	0.1872	0.3805	-0.1933	-0.6169
89	44.14	-0.03	11.8531	-7.4537	-0.0955	0.4429	-0.0649	0.1978	0.3743	-0.1765	-0.6322
90	44.28	-0.03	11.8696	-7.3175	-0.1051	0.5008	-0.0998	0.1932	0.3731	-0.1799	-0.6176
91	44.50	-0.04	11.9701	-7.2270	-0.0705	0.2744	-0.0420	0.1708	0.3795	-0.2027	-0.6038
92	44.68	-0.01	12.0420	-7.3477	-0.0594	0.4967	-0.0644	0.1804	0.3700	-0.1896	-0.6102
93	44.85	-0.02	12.0918	-7.2666	-0.0277	0.2045	-0.0252	0.1660	0.3620	-0.1960	-0.6021

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 101 MACH 1.10 MACH 1.7 PHI 0.0 BLOCK 11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
94	45.05	-0.00	12.1135	-7.0722	0.1622	-0.2723	0.0034	0.1687	0.3629	-0.1942	-0.5838
95	45.24	-0.01	12.2316	-7.2762	0.1171	-0.4295	0.0303	0.1808	0.3692	-0.1884	-0.5944
96	45.41	-0.01	12.2124	-7.2224	-0.0115	0.2786	-0.0737	0.1876	0.3706	-0.1830	-0.5914
97	45.58	-0.01	12.2563	-7.1764	0.0201	-0.0677	-0.0126	0.1911	0.3665	-0.1774	-0.5849
98	45.77	-0.02	12.3055	-7.0755	-0.0536	0.3655	-0.0571	0.1852	0.3639	-0.1787	-0.5748
99	45.96	-0.03	12.4032	-6.8725	-0.0677	0.3875	-0.0403	0.1778	0.3607	-0.1831	-0.5541
100	46.12	-0.02	12.3562	-6.9552	0.0208	-0.1381	0.0044	0.1642	0.3557	-0.1555	-0.5614
101	46.29	-0.02	12.4252	-6.7313	-0.1375	0.5315	-0.0405	0.2130	0.3772	-0.1642	-0.5416
102	46.47	-0.01	12.4477	-6.7705	0.0555	0.1226	-0.0177	0.1764	0.3652	-0.1868	-0.5439
103	46.64	-0.00	12.5106	-6.6852	0.1326	-0.0232	-0.0116	0.1758	0.3614	-0.1856	-0.5471
104	46.83	-0.01	12.5205	-6.5650	0.0115	0.3235	-0.0266	0.2095	0.3662	-0.1567	-0.5227
105	47.00	-0.02	12.6582	-6.4543	-0.1115	0.3533	-0.0442	0.2187	0.3736	-0.1549	-0.5099
106	47.17	-0.01	12.6462	-6.4033	-0.0187	0.1597	-0.0490	0.1939	0.3750	-0.1811	-0.5063
107	47.36	-0.02	12.7746	-6.4114	-0.1126	0.3439	-0.0274	0.2165	0.3769	-0.1624	-0.5019
108	47.51	-0.01	12.8665	-6.2631	-0.0257	0.2431	-0.0274	0.2002	0.3736	-0.1734	-0.4937
109	47.69	-0.03	12.8779	-6.2265	-0.1347	0.3647	-0.0218	0.2009	0.3739	-0.1730	-0.5068
110	47.87	-0.01	12.9339	-6.1538	0.0206	0.2682	-0.0269	0.2119	0.3798	-0.1679	-0.5036
111	48.06	-0.01	13.0422	-6.0546	-0.0600	0.4966	-0.0056	0.1944	0.3812	-0.1868	-0.4949
112	48.21	-0.02	13.0151	-6.0782	-0.1685	0.4371	-0.0106	0.2006	0.3840	-0.1754	-0.5053
113	48.39	-0.04	13.1183	-6.0123	-0.0875	0.6209	0.0160	0.2130	0.3980	-0.1850	-0.4964
114	48.57	-0.03	13.1555	-6.0367	-0.1716	0.5538	0.0167	0.1970	0.3850	-0.1880	-0.4949
115	48.73	-0.01	13.1456	-6.0491	-0.1185	0.5209	0.0423	0.2111	0.3837	-0.1726	-0.4750
116	48.91	-0.01	13.1318	-5.9164	-0.0842	1.1501	0.0579	0.2003	0.3710	-0.1707	-0.4507
117	49.08	-0.00	13.1751	-5.7665	-0.1004	1.0682	0.0693	0.1818	0.3629	-0.1811	-0.4377
118	49.22	-0.00	13.0922	-5.7154	-0.0874	1.0854	0.0744	0.1809	0.3562	-0.1753	-0.4362
119	49.42	-0.01	13.2516	-5.7230	-0.1234	1.0723	0.0589	0.1802	0.3656	-0.1854	-0.4319
120	49.57	0.00	13.1256	-5.4455	-0.0565	1.2339	0.0687	0.1418	0.3462	-0.2044	-0.4152
121	49.75	-0.02	13.2548	-5.5132	-0.0641	1.1819	0.0533	0.1634	0.3589	-0.1955	-0.4147
122	49.90	0.01	13.1213	-5.2145	0.1177	1.0527	0.0475	0.1608	0.3581	-0.1973	-0.3974
123	50.11	-0.00	13.3159	-5.4578	0.0439	1.1797	0.0532	0.1664	0.3676	-0.2012	-0.4099
124	50.29	-0.01	13.3851	-5.5526	-0.0224	1.2522	0.0478	0.1724	0.3700	-0.1976	-0.4147
125	50.44	-0.00	13.4513	-5.6461	0.0434	1.1716	0.0483	0.1718	0.3806	-0.2088	-0.4183
126	50.62	0.00	13.5455	-5.7737	0.0204	1.1737	0.0485	0.1761	0.3778	-0.2017	-0.4262
127	50.81	-0.01	13.5926	-5.8153	0.1238	1.1643	0.0483	0.1633	0.3755	-0.2120	-0.4352
128	50.97	-0.01	13.6625	-5.8553	0.1115	1.1468	0.0485	0.1634	0.3757	-0.1923	-0.4334
129	51.13	-0.01	13.5490	-5.5868	0.1625	1.0113	0.0490	0.1467	0.3778	-0.2311	-0.4123
130	51.31	-0.01	13.6782	-5.7355	0.2505	0.9385	0.0496	0.1428	0.3767	-0.2339	-0.4196
131	51.49	-0.01	13.6574	-5.6646	0.1853	1.0192	0.0498	0.1560	0.3732	-0.2172	-0.4232
132	51.65	-0.00	13.8305	-5.6832	0.2527	0.8406	0.0499	0.1316	0.3686	-0.2370	-0.4109
133	51.82	-0.00	13.9625	-5.8533	0.3239	0.7743	0.0455	0.1321	0.3700	-0.2379	-0.4186
134	52.00	0.01	14.0737	-5.8524	0.2753	0.8154	0.0403	0.1315	0.3706	-0.2391	-0.4158
135	52.18	0.01	14.1751	-5.9043	0.2841	0.9083	0.0457	0.1195	0.3739	-0.2544	-0.4165
136	52.31	0.01	14.0802	-5.7557	0.2833	0.8905	0.0455	0.1287	0.3699	-0.2412	-0.4122
137	52.52	0.01	14.2248	-5.8596	0.3652	0.8528	0.0461	0.1167	0.3760	-0.2593	-0.4119
138	52.65	0.03	14.0220	-5.4132	0.5306	0.2517	0.0256	0.0912	0.3590	-0.2677	-0.3860
139	52.83	0.02	14.1250	-5.6117	0.4668	0.3702	0.0257	0.1015	0.3675	-0.2660	-0.3973

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER/NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 101 1.10 1.7 RALF RATIO=E PHI 0.0 BIBOFII CONF C 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAN	CAF	XCP
140	53.01	0.00	14.3552	-5.5071	0.3115	0.7306	0.0471	0.1105	0.3706	-0.2601	-0.4115
141	53.16	0.01	14.2002	-5.0042	0.3543	0.5362	0.0419	0.1098	0.3607	-0.2554	-0.3989
142	53.33	0.00	14.3787	-5.0562	0.2924	0.8078	0.0469	0.1116	0.3749	-0.2633	-0.4207
143	53.46	-0.00	14.0432	-5.3027	0.3466	0.2679	0.0263	0.0931	0.3710	-0.2776	-0.3819
144	53.63	0.01	13.8531	-5.1337	0.4070	0.3093	0.0254	0.0886	0.3597	-0.2911	-0.3706
145	53.82	0.00	14.0268	-5.3067	0.3497	0.3240	0.0260	0.0720	0.3657	-0.2937	-0.3784
146	53.99	-0.01	14.2355	-5.6714	0.1816	0.6598	0.0364	0.0861	0.3761	-0.2879	-0.3984
147	54.17	-0.01	14.3713	-5.7302	0.2182	0.4086	0.0321	0.0778	0.3895	-0.3117	-0.3987
148	54.30	-0.02	14.1448	-5.4565	0.2542	0.1228	0.0217	0.0634	0.3676	-0.3042	-0.3858
149	54.48	-0.01	14.1175	-5.4665	0.2678	0.2950	0.0210	0.0762	0.3746	-0.2984	-0.3868
150	54.65	-0.03	14.2713	-5.6045	0.1517	0.1697	0.0221	0.0620	0.3704	-0.3064	-0.3927
151	54.80	-0.01	14.2745	-5.6715	0.3562	-0.0330	0.0005	0.0401	0.3686	-0.3285	-0.3973
152	54.96	-0.03	14.1768	-5.5477	0.2085	0.0463	0.0002	0.0382	0.3662	-0.3300	-0.3915
153	55.10	-0.02	14.2658	-5.6391	0.2294	-0.0121	0.0005	0.0478	0.3682	-0.3204	-0.3948
154	55.25	-0.03	14.2562	-5.6466	0.1587	0.2310	0.0162	0.0415	0.3761	-0.3346	-0.3962
155	55.40	-0.02	14.1365	-5.6058	0.2555	-0.0538	0.0005	0.0238	0.3644	-0.3406	-0.3968
156	55.57	-0.01	14.2851	-5.7007	0.3713	0.0121	0.0167	0.0104	0.3604	-0.3500	-0.3950
157	55.72	-0.03	14.1638	-5.6461	0.2171	-0.0358	0.0117	0.0230	0.3566	-0.3336	-0.3958
158	55.88	-0.02	14.3845	-5.7936	0.2478	0.1088	0.0114	0.0265	0.3676	-0.3411	-0.4028
159	56.03	-0.04	14.3265	-5.7954	0.2065	-0.0583	0.0012	0.0069	0.3494	-0.3425	-0.4047
160	56.21	-0.02	14.5776	-6.0767	0.1744	0.2855	0.0333	0.0083	0.3665	-0.3582	-0.4169
161	56.37	-0.03	14.5561	-6.2963	0.0537	0.3114	0.0443	0.0342	0.3783	-0.3441	-0.4310
162	56.50	-0.04	14.1067	-5.9040	0.1308	-0.2807	0.0117	0.0125	0.3405	-0.3284	-0.4185
163	56.70	-0.03	14.5068	-6.0763	0.1134	0.2145	0.0447	-0.0033	0.3725	-0.3758	-0.4169
164	56.88	-0.05	14.8484	-6.5268	-0.0585	0.2962	0.0565	0.0328	0.3890	-0.3582	-0.4398
165	57.01	-0.07	14.6365	-6.1957	-0.1166	-0.0542	0.0570	0.0116	0.3793	-0.3677	-0.4235
166	57.17	-0.03	14.8485	-6.5648	0.1408	0.0702	0.0569	-0.0106	0.3894	-0.4000	-0.4408
167	57.31	-0.06	14.6016	-6.4525	-0.1331	-0.1744	0.0574	0.0065	0.3926	-0.3861	-0.4386
168	57.47	-0.08	14.6545	-6.7068	-0.0415	-0.0437	0.0630	0.0057	0.3905	-0.3848	-0.4515
169	57.61	-0.13	14.7733	-6.5216	-0.6422	-0.0314	0.0365	-0.0090	0.3773	-0.3863	-0.4414
170	57.76	-0.08	14.7626	-6.5915	-0.1263	0.3502	0.0616	-0.0302	0.3751	-0.4053	-0.4438
171	57.88	-0.04	14.6277	-6.5827	0.0426	0.2011	0.0726	-0.0466	0.3709	-0.4235	-0.4482
172	58.01	-0.12	14.8085	-6.4515	-0.5774	0.0720	0.0560	-0.0145	0.3755	-0.3900	-0.4446
173	58.18	-0.05	14.6023	-6.7033	0.2281	0.4027	0.0001	-0.0396	0.3760	-0.4176	-0.4583
174	58.32	-0.07	14.7014	-6.7628	-0.0230	0.3128	0.0557	-0.0198	0.3740	-0.3936	-0.4600
175	56.47	-0.04	14.5467	-7.2658	0.2472	0.5036	0.0001	-0.0296	0.3776	-0.4072	-0.4881
176	58.63	-0.01	14.5014	-7.1003	0.3195	0.5948	0.0653	-0.0358	0.3769	-0.4127	-0.4783
177	58.70	-0.06	15.0435	-7.3448	0.3775	0.5015	0.0057	-0.0411	0.3914	-0.4325	-0.4882
178	58.71	-0.03	15.1657	-7.4930	0.2292	0.6614	0.0603	-0.0521	0.3899	-0.4420	-0.4941

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 101 MACH 1.10 REYIG=6 1.7 PHI 0.0 CONF BIBOFIL L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
2	-5.74	0.01	-0.0230	-0.0014	0.0085	0.0605	-0.3300	-0.6864	-0.0746	-0.3837	0.1087	0.5590
3	-5.75	0.03	-0.0266	-0.0023	0.0074	0.0804	-0.2782	-0.6852	-0.0744	-0.3831	0.1086	0.5591
4	-5.75	0.01	-0.0305	-0.0033	0.0065	0.1068	-0.1586	-0.6827	-0.0742	-0.3808	0.1087	0.5578
5	-5.85	0.01	-0.0230	-0.0018	0.0064	0.0782	-0.2763	-0.6660	-0.0733	-0.3629	0.1134	0.5618
6	-3.88	0.01	-0.0342	-0.0037	0.0030	0.1082	-0.0877	-0.5501	-0.0681	-0.3114	0.1238	0.5661
7	-2.02	0.01	-0.0278	-0.0013	0.0034	0.0471	-0.1757	-0.4036	-0.0597	-0.2411	0.1479	0.5974
8	-0.13	0.01	-0.0207	-0.0011	0.0062	0.0531	-0.2395	-0.2780	-0.0483	-0.1814	0.1737	0.6525
9	1.78	0.00	-0.0216	-0.0013	0.0046	0.0602	-0.2130	-0.1725	-0.0308	-0.1282	0.2104	0.7432
10	3.79	0.01	-0.0231	-0.0014	0.0065	0.0606	-0.2967	-0.0763	-0.0220	-0.0752	0.2883	0.9856
11	5.81	0.01	-0.0258	-0.0034	0.0050	0.1141	-0.1678	0.0101	-0.0039	-0.0437	-0.3660	-4.3267
12	7.80	0.01	-0.0341	-0.0052	0.0025	0.1525	-0.0850	0.0836	0.0214	-0.0033	0.2555	-0.0395
13	9.48	0.01	-0.0294	-0.0039	0.0020	0.1190	-0.0680	0.1487	0.0430	0.0316	0.2891	0.2125
14	11.47	0.01	-0.0066	-0.0025	0.0056	0.2850	-0.6591	0.2730	0.0626	0.0821	0.2252	0.3007
15	13.40	0.01	-0.0241	-0.0061	-0.0004	0.3560	0.0186	0.3613	0.0736	0.1450	0.2037	0.4013
16	15.42	0.01	-0.0246	-0.0082	0.0040	0.3332	-0.1626	0.4529	0.0782	0.1992	0.1726	0.4358
17	17.47	0.00	-0.0466	-0.0114	-0.0041	0.2435	0.0876	0.5448	0.0828	0.2421	0.1519	0.4444
18	19.46	-0.00	-0.0667	-0.0163	-0.0122	0.2443	0.1829	0.6511	0.0890	0.2875	0.1367	0.4416
19	21.49	-0.00	-0.0952	-0.0143	-0.0336	0.2018	0.3515	0.7448	0.0940	0.3256	0.1270	0.4372
20	23.54	0.01	-0.0530	-0.0124	-0.0155	0.2339	0.3755	0.8369	0.0855	0.3607	0.1021	0.4310
21	25.57	0.01	-0.0265	-0.0055	-0.0145	0.1616	0.3473	0.9424	0.0847	0.4098	0.0859	0.4348
22	27.66	0.04	0.1941	0.0215	0.0591	0.1107	0.5106	1.0197	0.0856	0.4463	0.0839	0.4371
23	26.45	0.04	0.2523	0.0267	0.1203	0.1058	0.5065	1.0364	0.0856	0.4513	0.0826	0.4354
24	28.66	0.04	0.1727	0.0163	0.0505	0.1059	0.5263	1.0371	0.0876	0.4508	0.0844	0.4367
25	29.00	0.04	0.0945	0.0086	0.0525	0.0906	0.5511	1.0343	0.0906	0.4487	0.0876	0.4338
26	29.34	0.04	0.1345	0.0129	0.0774	0.0956	0.5738	1.0384	0.0873	0.4514	0.0846	0.4367
27	29.62	0.03	0.1165	0.0113	0.0618	0.0966	0.5287	1.0302	0.0883	0.4552	0.0841	0.4334
28	29.93	0.08	0.2843	0.0260	0.1453	0.0914	0.5251	1.0757	0.0859	0.4679	0.0795	0.4356
29	30.24	0.08	0.3406	0.0291	0.1729	0.0894	0.5076	1.0784	0.0884	0.4700	0.0820	0.4358
30	30.51	0.08	0.3327	0.0273	0.1713	0.0820	0.5149	1.0973	0.0891	0.4792	0.0812	0.4367
31	30.79	0.08	0.3004	0.0266	0.1519	0.0884	0.5048	1.1106	0.0869	0.4835	0.0782	0.4353
32	31.06	0.08	0.3250	0.0257	0.1736	0.0914	0.5342	1.1250	0.0823	0.4901	0.0731	0.4358
33	31.35	0.08	0.3313	0.0314	0.1760	0.0948	0.5373	1.1427	0.0819	0.4981	0.0717	0.4359
34	31.61	0.07	0.3596	0.0338	0.1915	0.0960	0.5325	1.1471	0.0807	0.4992	0.0703	0.4352
35	31.91	0.05	0.2200	0.0216	0.1209	0.0991	0.5760	1.1473	0.0796	0.4966	0.0694	0.4328
36	32.18	0.05	0.2030	0.0155	0.1149	0.0960	0.5639	1.1599	0.0793	0.5037	0.0683	0.4343
37	32.45	0.04	0.2306	0.0220	0.1305	0.0956	0.5691	1.1777	0.0786	0.5108	0.0667	0.4337
38	32.73	0.06	0.1641	0.0175	0.1001	0.1068	0.6100	1.1829	0.0791	0.5097	0.0669	0.4309
39	32.98	0.05	0.2167	0.0223	0.1284	0.1058	0.5999	1.1981	0.0779	0.5170	0.0650	0.4315
40	33.25	0.05	0.1110	0.0113	0.0693	0.1010	0.6201	1.1917	0.0803	0.5120	0.0674	0.4298
41	33.52	0.02	0.0531	0.0066	0.0401	0.1243	0.7552	1.1938	0.0809	0.5135	0.0677	0.4301
42	33.78	0.02	0.0202	0.0023	0.0243	0.1435	1.2030	1.2117	0.0788	0.5225	0.0649	0.4312
43	34.02	0.00	0.0700	0.0079	0.0446	0.1128	0.6286	1.2192	0.0788	0.5272	0.0646	0.4324
44	34.28	0.02	0.1244	0.0152	0.0795	0.1070	0.6950	1.2251	0.0780	0.5285	0.0638	0.4310
45	34.51	0.02	0.0252	0.0046	0.0305	0.1825	1.2103	1.2397	0.0764	0.5370	0.0616	0.4332
46	34.79	0.02	0.0536	0.0132	0.0645	0.1419	0.6955	1.2406	0.0774	0.5345	0.0622	0.4310
47	35.03	0.02	0.1268	0.0175	0.0838	0.1448	0.6937	1.2462	0.0775	0.5391	0.0622	0.4326

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

PART A MISSILE TAILS EFFECTS DATA

TEST 7 PART 101 MACH 1.10 RX10-6 1.7 PHI 0.0 CONF 11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
48	35.25	0.03	0.0295	0.0062	0.0363	0.2027	1.2917	1.2514	0.0757	0.5415	0.0605	0.4327
49	35.53	0.02	0.1221	0.0162	0.1425	0.1490	0.6757	1.2603	0.0761	0.5446	0.0604	0.4323
50	35.75	0.03	0.1716	0.0238	0.1963	0.1387	0.6195	1.2655	0.0771	0.5468	0.0605	0.4321
51	36.00	0.04	0.2743	0.0321	0.2984	0.1628	0.7591	1.2722	0.0737	0.5458	0.0579	0.4322
52	36.25	0.03	0.1674	0.0166	0.0705	0.1545	0.6601	1.2837	0.0733	0.5553	0.0571	0.4326
53	36.49	0.04	0.1330	0.0159	0.0889	0.1496	0.6884	1.2863	0.0727	0.5502	0.0565	0.4326
54	36.70	0.04	0.0751	0.0126	0.0551	0.1677	0.7870	1.2941	0.0702	0.5596	0.0542	0.4324
55	36.96	0.04	0.1015	0.0167	0.0685	0.1638	0.6762	1.3045	0.0694	0.5626	0.0530	0.4314
56	37.20	0.02	0.0466	0.0065	0.0343	0.1501	0.7329	1.3123	0.0679	0.5650	0.0517	0.4305
57	37.42	0.01	0.0546	0.0088	0.0362	0.1605	0.6606	1.3101	0.0654	0.5626	0.0499	0.4294
58	37.68	0.03	0.0644	0.0113	0.0425	0.1754	0.6661	1.3333	0.0620	0.5736	0.0465	0.4302
59	37.91	0.03	0.0525	0.0155	0.0066	0.1675	0.6973	1.3358	0.0627	0.5749	0.0469	0.4304
60	38.13	0.02	0.0446	0.0065	0.0331	0.1995	0.7422	1.3426	0.0603	0.5770	0.0449	0.4298
61	38.37	0.04	0.0651	0.0121	0.0445	0.1858	0.6836	1.3526	0.0600	0.5815	0.0443	0.4299
62	38.62	0.02	0.0350	0.0051	0.0300	0.2333	0.7692	1.3606	0.0574	0.5836	0.0422	0.4289
63	38.85	0.03	0.0026	0.0037	0.0104	4.6238	13.6250	1.3710	0.0524	0.5889	0.0382	0.4295
64	39.08	0.01	0.0169	0.0061	0.0153	0.3715	0.9329	1.3697	0.0535	0.5878	0.0390	0.4291
65	39.31	0.01	-0.0005	0.0031	-0.0031	-3.7990	-0.2000	1.3685	0.0493	0.5865	0.0360	0.4286
66	39.53	0.03	0.0206	0.0057	0.0151	0.2766	0.9272	1.3761	0.0511	0.5899	0.0371	0.4287
67	39.76	0.01	0.0047	0.0018	0.0081	0.3829	1.7234	1.3764	0.0479	0.5898	0.0348	0.4285
68	39.97	-0.01	-0.0201	-0.0027	-0.0148	0.1343	0.7363	1.3524	0.0458	0.5765	0.0339	0.4283
69	40.18	-0.01	0.0168	0.0037	0.0126	0.2202	0.7500	1.3800	0.0455	0.5929	0.0330	0.4296
70	40.42	-0.00	-0.0006	-0.0012	-0.0023	0.1818	0.3405	1.3689	0.0458	0.5947	0.0330	0.4282
71	40.64	0.01	-0.0005	-0.0008	-0.0017	0.8867	1.8889	1.3923	0.0452	0.5977	0.0324	0.4284
72	40.82	0.01	0.0012	-0.0008	0.0005	-0.6685	0.4167	1.3800	0.0437	0.5898	0.0317	0.4274
73	41.03	-0.03	0.0168	0.0021	0.0083	0.1060	0.4192	1.3814	0.0428	0.5893	0.0310	0.4266
74	41.24	-0.01	0.0064	-0.0031	-0.0005	-0.3685	-0.1071	1.3736	0.0415	0.5861	0.0302	0.4267
75	41.44	-0.04	0.0013	-0.0026	0.0003	-2.2302	0.2308	1.3974	0.0416	0.5968	0.0298	0.4284
76	41.67	-0.03	-0.0178	-0.0052	-0.0102	0.5167	0.5730	1.3797	0.0405	0.5907	0.0293	0.4281
77	41.86	-0.01	-0.0002	-0.0056	-0.0045	27.9525	42.5000	1.3773	0.0403	0.5884	0.0293	0.4272
78	42.06	-0.02	0.0053	-0.0021	-0.0025	-1.1506	-0.4717	1.3613	0.0390	0.5889	0.0291	0.4261
79	42.26	-0.01	0.0030	-0.0020	-0.0135	0.5210	0.5870	1.3763	0.0391	0.5895	0.0284	0.4283
80	42.46	-0.00	-0.0245	-0.0062	-0.0151	1.0519	0.7671	1.3560	0.0391	0.5791	0.0288	0.4271
81	42.67	-0.04	-0.0061	-0.0021	-0.0247	0.5816	0.8842	1.3449	0.0383	0.5716	0.0285	0.4250
82	42.84	-0.00	-0.0294	-0.0075	-0.0188	0.5487	0.6395	1.3537	0.0382	0.5763	0.0282	0.4257
83	43.04	-0.03	-0.0054	-0.0026	-0.0033	0.7407	0.6490	1.3533	0.0377	0.5777	0.0279	0.4265
84	43.22	-0.02	-0.0456	-0.0097	-0.0325	0.5586	0.8552	1.3409	0.0372	0.5716	0.0277	0.4263
85	43.40	-0.03	-0.0165	-0.0135	-0.0177	0.7333	0.9305	1.3259	0.0369	0.5633	0.0278	0.4248
86	43.58	-0.03	-0.0570	-0.0165	-0.0345	0.6472	0.8053	1.3120	0.0378	0.5567	0.0288	0.4243
87	43.78	-0.03	-0.0165	-0.0128	-0.0187	1.0159	1.0108	1.3071	0.0369	0.5537	0.0282	0.4238
88	43.95	-0.03	-0.0613	-0.0155	-0.0372	0.5866	0.8169	1.3105	0.0378	0.5559	0.0288	0.4242
89	44.14	-0.03	-0.0354	-0.0175	-0.0266	0.7766	0.7571	1.3031	0.0372	0.5522	0.0285	0.4238
90	44.28	-0.03	-0.0178	-0.0155	-0.0236	1.0952	1.3258	1.2651	0.0383	0.5323	0.0303	0.4268
91	44.50	-0.02	-0.0100	-0.0177	-0.0128	1.7695	1.2800	1.2777	0.0378	0.5389	0.0296	0.4218
92	44.68	-0.01	-0.0534	-0.0315	-0.0356	0.5897	0.7303	1.2714	0.0376	0.5358	0.0297	0.4214
93	44.89	-0.02	0.0259	-0.0042	-0.0067	-0.1621	-0.0270	1.2413	0.0374	0.5227	0.0301	0.4211

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 101 PACF 1.10 RX10=6 1.7 PHI 0.0 CONF WINCFIL C.G L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
94	45.05	-0.00	0.0176	-0.0125	-0.0044	-0.7326	-0.2500	1.2337	0.0362	0.5173	0.0293	0.4193
95	45.24	-0.01	0.0324	-0.0068	0.0047	-0.2098	0.1451	1.2411	0.0357	0.5235	0.0288	0.4218
96	45.41	-0.01	-0.0755	-0.0444	-0.0575	0.5848	0.7576	1.2461	0.0369	0.5239	0.0256	0.4206
97	45.58	-0.01	-0.0478	-0.0365	-0.0350	0.7634	0.7822	1.2372	0.0361	0.5207	0.0292	0.4205
98	45.77	-0.02	-0.0718	-0.0356	-0.0546	0.5542	0.7604	1.2271	0.0360	0.5163	0.0293	0.4207
99	45.96	-0.03	-0.0262	-0.0250	-0.0280	0.9539	1.0087	1.2121	0.0326	0.5085	0.0294	0.4195
100	46.12	-0.02	0.0012	-0.0153	-0.0116	-12.7466	-9.0000	1.1964	0.0349	0.5033	0.0291	0.4206
101	46.29	-0.02	-0.0486	-0.0305	-0.0394	0.6248	0.8074	1.1805	0.0349	0.4940	0.0256	0.4185
102	46.47	-0.01	-0.0524	-0.0352	-0.0412	0.6239	0.7305	1.1842	0.0346	0.4989	0.0292	0.4213
103	46.64	-0.00	-0.0545	-0.0330	-0.0388	0.6053	0.7119	1.1704	0.0352	0.4902	0.0301	0.4188
104	46.83	-0.01	-0.0555	-0.0425	-0.0473	0.7093	0.7896	1.1537	0.0355	0.4820	0.0308	0.4178
105	47.00	-0.02	-0.0576	-0.0468	-0.0445	0.8123	0.7726	1.1411	0.0349	0.4769	0.0306	0.4179
106	47.17	-0.01	-0.0352	-0.0413	-0.0386	1.0533	0.9337	1.1449	0.0345	0.4798	0.0301	0.4191
107	47.36	-0.02	-0.0260	-0.0417	-0.0368	1.0634	1.1040	1.1411	0.0349	0.4769	0.0306	0.4179
108	47.51	-0.01	-0.0422	-0.0436	-0.0391	1.0378	0.9265	1.1348	0.0353	0.4749	0.0311	0.4185
109	47.69	-0.03	-0.0455	-0.0448	-0.0406	0.9844	0.8923	1.1293	0.0350	0.4752	0.0310	0.4208
110	47.87	-0.01	-0.0334	-0.0428	-0.0382	1.2811	1.0838	1.1377	0.0354	0.4753	0.0311	0.4213
111	48.06	-0.01	-0.0435	-0.0365	-0.0406	0.9078	0.9379	1.1099	0.0364	0.4644	0.0328	0.4184
112	48.21	-0.02	-0.0352	-0.0383	-0.0388	0.9768	0.9898	1.1200	0.0360	0.4708	0.0321	0.4204
113	48.39	-0.02	-0.0440	-0.0355	-0.0395	0.8066	0.8977	1.1099	0.0359	0.4679	0.0323	0.4216
114	48.57	-0.03	-0.0054	-0.0245	-0.0180	4.6099	3.3333	1.1036	0.0361	0.4675	0.0327	0.4241
115	48.73	-0.01	-0.0664	-0.0233	-0.0436	0.3508	0.6500	1.0340	0.0382	0.4339	0.0369	0.4156
116	48.91	-0.01	-0.0764	-0.0155	-0.0445	0.1977	0.5676	0.9808	0.0411	0.4104	0.0419	0.4184
117	49.08	-0.00	-0.0645	-0.0072	-0.0336	0.1144	0.5342	0.9643	0.0425	0.4030	0.0441	0.4179
118	49.22	-0.01	-0.0711	-0.0104	-0.0402	0.1462	0.5736	0.9638	0.0416	0.4062	0.0434	0.4194
119	49.42	-0.01	-0.0558	-0.0044	-0.0321	0.0736	0.5388	0.9543	0.0433	0.4011	0.0454	0.4203
120	49.57	0.00	-0.0640	-0.0044	-0.0370	0.0687	0.5781	0.9474	0.0438	0.3978	0.0462	0.4195
121	49.75	-0.02	-0.0477	-0.0015	-0.0285	0.0398	0.5975	0.9705	0.0426	0.4139	0.0436	0.4239
122	49.90	0.01	-0.0332	-0.0032	-0.0227	0.0564	0.6837	0.9659	0.0416	0.4097	0.0443	0.4242
123	50.11	-0.00	-0.0454	-0.0025	-0.0264	0.0551	0.6256	0.9734	0.0425	0.4139	0.0434	0.4252
124	50.29	-0.01	-0.0255	-0.0035	-0.0185	0.1529	0.7255	0.9889	0.0393	0.4216	0.0397	0.4263
125	50.44	-0.00	-0.0354	-0.0044	-0.0236	0.1243	0.6667	0.9922	0.0398	0.4227	0.0401	0.4260
126	50.62	0.00	-0.0267	-0.0050	-0.0204	0.1742	0.7108	0.9972	0.0394	0.4266	0.0395	0.4278
127	50.81	-0.01	-0.0196	-0.0044	-0.0185	0.2244	0.9643	1.0124	0.0386	0.4334	0.0381	0.4281
128	50.97	-0.01	-0.0241	-0.0044	-0.0199	0.1825	0.8297	1.0137	0.0388	0.4336	0.0383	0.4277
129	51.13	-0.01	-0.0176	-0.0017	-0.0175	0.2566	1.0170	1.0009	0.0406	0.4275	0.0406	0.4271
130	51.31	-0.01	-0.0156	-0.0020	-0.0161	0.2810	0.9466	1.0098	0.0394	0.4293	0.0392	0.4272
131	51.49	-0.01	-0.0153	-0.0025	-0.0168	0.1634	1.0980	1.0176	0.0383	0.4349	0.0376	0.4274
132	51.65	-0.00	-0.0065	-0.0013	-0.0127	0.1595	1.9538	1.0150	0.0384	0.4347	0.0378	0.4283
133	51.82	-0.00	0.0012	-0.0015	-0.0085	-1.5829	-7.0833	1.0220	0.0374	0.4398	0.0366	0.4301
134	52.00	0.01	0.0212	-0.0013	-0.0025	-0.0643	-0.1238	1.0361	0.0369	0.4468	0.0358	0.4312
135	52.18	0.01	-0.0006	-0.0025	-0.0126	4.1656	21.3333	1.0260	0.0370	0.4404	0.0361	0.4292
136	52.31	0.01	0.0038	-0.0018	-0.0080	-0.3103	-1.3793	1.0294	0.0367	0.4419	0.0358	0.4293
137	52.52	0.01	0.0047	-0.0025	-0.0087	-0.5318	-1.8511	1.0263	0.0374	0.4414	0.0364	0.4301
138	52.65	0.03	0.0124	-0.0045	0.0192	-0.6546	0.2330	1.0692	0.0363	0.4610	0.0339	0.4312
139	52.83	0.02	0.0167	-0.0015	0.0180	-0.0241	0.2363	1.0805	0.0361	0.4686	0.0334	0.4337

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 101 1.10 1.7 MACH MACH-6 0.0 PHI 0.0 CONF SINGLE L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
140	53.01	0.00	0.0063	-0.0012	-0.0126	-0.1904	-2.0476	1.0586	0.0362	0.4564	0.0342	0.4314
141	53.16	0.01	0.0254	-0.0017	-0.0058	-0.0669	-0.2165	1.0575	0.0361	0.4537	0.0341	0.4296
142	53.33	0.00	0.0017	-0.0022	-0.0125	-1.2536	-7.3529	1.0612	0.0355	0.4581	0.0334	0.4317
143	53.46	-0.00	0.0737	-0.0052	0.0143	-0.0705	0.1940	1.0692	0.0361	0.4696	0.0331	0.4311
144	53.63	0.01	0.0738	-0.0055	0.0132	-0.0745	0.1769	1.0739	0.0360	0.4632	0.0335	0.4313
145	53.82	0.00	0.0362	-0.0048	0.0062	-0.0756	0.1065	1.0625	0.0357	0.4577	0.0336	0.4308
146	53.99	-0.01	0.0371	-0.0034	-0.0035	-0.0516	-0.1051	1.0711	0.0347	0.4637	0.0324	0.4325
147	54.17	-0.01	0.0467	-0.0034	0.0040	-0.0728	0.0969	1.0697	0.0351	0.4736	0.0322	0.4348
148	54.30	-0.02	0.0676	-0.0064	0.0065	-0.0954	0.1257	1.1052	0.0337	0.4811	0.0305	0.4353
149	54.48	-0.01	0.0492	-0.0035	-0.0021	-0.0774	-0.0065	1.0772	0.0346	0.4650	0.0321	0.4317
150	54.65	-0.03	0.0776	-0.0071	0.0094	-0.0922	0.1221	1.1206	0.0322	0.4875	0.0287	0.4356
151	54.80	-0.01	0.0826	-0.0069	0.0115	-0.0835	0.1392	1.1233	0.0314	0.4877	0.0279	0.4342
152	54.96	-0.03	0.0796	-0.0060	0.0072	-0.0825	0.0909	1.1194	0.0318	0.4858	0.0284	0.4346
153	55.10	-0.02	0.0770	-0.0062	0.0086	-0.0727	0.1117	1.1315	0.0306	0.4938	0.0270	0.4363
154	55.25	-0.03	0.0761	-0.0065	0.0085	-0.0854	0.1170	1.1330	0.0306	0.4942	0.0270	0.4362
155	55.40	-0.02	0.0752	-0.0052	0.0054	-0.0691	0.0716	1.1331	0.0299	0.4921	0.0264	0.4343
156	55.57	-0.01	0.0673	-0.0052	0.0021	-0.0772	0.0312	1.1306	0.0298	0.4914	0.0264	0.4346
157	55.72	-0.03	0.0731	-0.0045	0.0033	-0.0815	0.0491	1.1315	0.0296	0.4918	0.0262	0.4346
158	55.88	-0.02	0.0554	-0.0048	-0.0002	-0.0808	-0.0036	1.1430	0.0285	0.4999	0.0249	0.4376
159	56.03	-0.04	0.0615	-0.0051	-0.0015	-0.0824	-0.0242	1.1445	0.0278	0.4990	0.0243	0.4386
160	56.21	-0.02	0.0530	-0.0048	-0.0059	-0.0905	-0.1113	1.1174	0.0289	0.4886	0.0259	0.4373
161	56.37	-0.03	0.0658	-0.0062	-0.0052	-0.0845	-1.9592	1.0931	0.0294	0.4768	0.0269	0.4362
162	56.50	-0.04	0.0621	-0.0044	0.0072	-0.0536	0.0877	1.1278	0.0284	0.4914	0.0252	0.4357
163	56.70	-0.03	0.0603	-0.0057	-0.0156	-0.9045	-3.1111	1.0796	0.0293	0.4702	0.0271	0.4359
164	56.88	-0.05	0.0068	-0.0064	-0.0222	-7.9979	-27.7500	1.0976	0.0288	0.4788	0.0262	0.4382
165	57.01	-0.07	-0.0073	-0.0058	-0.0245	0.7943	3.3562	1.0744	0.0297	0.4667	0.0278	0.4362
166	57.17	-0.02	-0.0025	-0.0065	-0.0216	2.0684	7.4483	1.0976	0.0289	0.4798	0.0263	0.4371
167	57.31	-0.06	-0.0121	-0.0047	-0.0250	0.3883	2.0001	1.0859	0.0297	0.4753	0.0273	0.4377
168	57.47	-0.06	-0.0165	-0.0052	-0.0275	0.3151	1.6667	1.0924	0.0292	0.4789	0.0267	0.4384
169	57.61	-0.13	-0.0150	-0.0044	-0.0267	0.4315	1.4053	1.0796	0.0290	0.4722	0.0269	0.4374
170	57.76	-0.06	-0.0223	-0.0050	-0.0281	0.2242	1.2601	1.0880	0.0294	0.4661	0.0275	0.4384
171	57.88	-0.04	-0.0304	-0.0055	-0.0300	0.1809	0.9868	1.0804	0.0295	0.4647	0.0277	0.4358
172	58.01	-0.12	-0.0371	-0.0052	-0.0328	0.1671	0.8841	1.0890	0.0292	0.4665	0.0273	0.4384
173	58.18	-0.05	-0.0462	-0.0056	-0.0357	0.1259	0.7727	1.0976	0.0292	0.4556	0.0279	0.4348
174	58.32	-0.07	-0.0571	-0.0061	-0.0324	0.1805	0.8733	1.0717	0.0277	0.4692	0.0258	0.4378
175	58.47	-0.04	-0.0363	-0.0061	-0.0267	0.1886	0.8162	1.0909	0.0285	0.4805	0.0243	0.4405
176	58.63	-0.01	-0.0333	-0.0064	-0.0274	0.1804	0.7293	1.0910	0.0282	0.4800	0.0240	0.4406
177	58.70	-0.06	-0.0421	-0.0057	-0.0316	0.1354	0.7553	1.0971	0.0283	0.4854	0.0240	0.4408
178	58.71	-0.03	-0.0257	-0.0071	-0.0256	0.2390	0.8620	1.1140	0.0293	0.4905	0.0227	0.4403

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 101 | MACH 0.10 | RX1C-6 1.7 | PHI 0.0 | CONF 8180F11 | L C.C | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CAF4	CM4	CB4	XCPF4	YCPF4
2	-5.74	0.01	0.0071	0.0000	0.0260	0.0000	3.0620	-0.7866	-0.0788	-0.3664	0.1002	0.4658
3	-5.75	0.03	0.0071	0.0000	0.0265	0.0000	3.7324	-0.7768	-0.0784	-0.3606	0.1006	0.4634
4	-5.75	0.01	0.0067	0.0000	0.0254	0.0000	5.4043	-0.7735	-0.0782	-0.3575	0.1011	0.4622
5	-5.05	0.01	0.0055	0.0000	0.0259	0.0000	4.3898	-0.7466	-0.0773	-0.3443	0.1032	0.4596
6	-3.68	0.01	0.0055	0.0000	0.0248	0.0000	2.6105	-0.6394	-0.0736	-0.2820	0.1104	0.4416
7	-2.02	0.01	0.0147	0.0000	0.0238	0.0000	1.4132	-0.5094	-0.0628	-0.2126	0.1232	0.4174
8	-0.15	0.01	0.0263	0.0000	0.0234	0.0000	1.1527	-0.3904	-0.0522	-0.1576	0.1337	0.4037
9	1.78	0.00	0.0167	0.0000	0.0254	0.0000	1.5210	-0.2759	-0.0389	-0.1059	0.1410	0.3838
10	3.79	0.01	0.0335	0.0000	0.0228	0.0000	0.8746	-0.1756	-0.0226	-0.0538	0.1287	0.3064
11	5.81	0.01	0.0326	0.0000	0.0165	0.0000	0.5061	-0.0801	-0.0051	-0.0207	0.0637	0.2584
12	7.80	0.01	0.0315	0.0000	0.0155	0.0000	0.4921	-0.0025	0.0183	0.0172	-7.3180	-6.8800
13	9.48	0.01	0.0444	0.0000	0.0180	0.0000	0.4254	0.0829	0.0419	0.0543	0.5053	0.6550
14	11.47	0.01	0.0410	0.0000	0.0152	0.0000	0.3854	0.1799	0.0605	0.1197	0.3384	0.6654
15	13.48	0.01	0.0366	0.0000	0.0142	0.0000	0.2648	0.2965	0.0689	0.1769	0.2323	0.5966
16	15.42	0.01	0.0317	0.0000	0.0157	0.0000	0.3037	0.4140	0.0738	0.2365	0.1782	0.5713
17	17.47	0.00	0.0367	0.0000	0.0167	0.0000	0.2845	0.5283	0.0765	0.2966	0.1448	0.5614
18	19.46	-0.02	0.0420	0.0000	0.0158	0.0000	0.3292	0.6281	0.0794	0.3474	0.1264	0.5531
19	21.49	-0.00	0.0460	0.0000	0.0171	0.0000	0.3654	0.7014	0.0786	0.3831	0.1120	0.5462
20	23.54	0.01	0.0420	0.0000	0.0177	0.0000	0.4214	0.7528	0.0813	0.4036	0.1080	0.5361
21	25.57	0.01	0.0442	0.0000	0.0211	0.0000	0.4774	0.8300	0.0835	0.4370	0.0998	0.5224
22	27.60	0.04	0.0465	0.0000	0.0275	0.0000	0.4135	0.8770	0.0888	0.4538	0.1012	0.5174
23	28.45	0.04	0.0469	0.0000	0.0267	0.0000	0.3875	0.8872	0.0898	0.4561	0.1012	0.5141
24	28.60	0.04	0.0477	0.0000	0.0243	0.0000	0.3589	0.9167	0.0882	0.4678	0.0962	0.5108
25	29.00	0.04	0.0770	0.0000	0.0287	0.0000	0.3727	0.9344	0.0868	0.4743	0.0929	0.5076
26	29.34	0.04	0.0748	0.0000	0.0258	0.0000	0.3649	0.9454	0.0857	0.4779	0.0906	0.5055
27	29.62	0.03	0.0690	0.0000	0.0214	0.0000	0.3072	0.9539	0.0855	0.4797	0.0896	0.5029
28	29.93	0.06	0.0755	0.0000	0.0256	0.0000	0.3347	0.9647	0.0847	0.4823	0.0878	0.4999
29	30.24	0.06	0.1013	0.0000	0.0394	0.0000	0.3689	0.9808	0.0819	0.4877	0.0835	0.4972
30	30.51	0.06	0.0966	0.0000	0.0381	0.0000	0.3964	0.9955	0.0814	0.4931	0.0817	0.4953
31	30.79	0.06	0.0968	0.0000	0.0325	0.0000	0.3579	1.0103	0.0820	0.4958	0.0811	0.4947
32	31.06	0.06	0.0828	0.0000	0.0273	0.0000	0.3297	1.0188	0.0805	0.5042	0.0790	0.4965
33	31.35	0.06	0.0921	0.0000	0.0317	0.0000	0.3442	1.0431	0.0791	0.5146	0.0758	0.4933
34	31.61	0.07	0.0967	0.0000	0.0330	0.0000	0.3413	1.0507	0.0775	0.5171	0.0737	0.4921
35	31.91	0.05	0.0776	0.0000	0.0231	0.0000	0.3000	1.0506	0.0775	0.5122	0.0737	0.4875
36	32.18	0.05	0.0782	0.0000	0.0237	0.0000	0.3031	1.0656	0.0763	0.5205	0.0716	0.4885
37	32.45	0.04	0.0782	0.0000	0.0226	0.0000	0.2916	1.0819	0.0749	0.5269	0.0692	0.4870
38	32.73	0.06	0.0770	0.0000	0.0231	0.0000	0.3000	1.0841	0.0725	0.5240	0.0669	0.4861
39	32.98	0.05	0.0763	0.0000	0.0252	0.0000	0.3178	1.1004	0.0712	0.5317	0.0647	0.4832
40	33.25	0.05	0.0822	0.0000	0.0226	0.0000	0.3196	1.0888	0.0689	0.5259	0.0614	0.4829
41	33.52	0.02	0.0763	0.0000	0.0270	0.0000	0.3405	1.1076	0.0579	0.5325	0.0523	0.4811
42	33.76	0.02	0.0818	0.0000	0.0220	0.0000	0.3198	1.1172	0.0568	0.5374	0.0508	0.4818
43	34.02	0.00	0.0758	0.0000	0.0254	0.0000	0.3351	1.1261	0.0558	0.5410	0.0495	0.4796
44	34.26	0.02	0.0687	0.0000	0.0243	0.0000	0.3537	1.1294	0.0559	0.5406	0.0495	0.4787
45	34.51	0.02	0.0525	0.0000	0.0171	0.0000	0.3257	1.1363	0.0550	0.5430	0.0484	0.4778
46	34.75	0.02	0.0641	0.0000	0.0235	0.0000	0.3660	1.1396	0.0534	0.5445	0.0468	0.4774
47	35.03	0.02	0.0675	0.0000	0.0201	0.0000	0.3867	1.1498	0.0508	0.5484	0.0442	0.4778

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 101 MACH 1.10 RX10-6 1.7 PHI 0.0 CONF 11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
48	35.25	0.03	0.0565	9.9999	0.0205	9.9999	0.3515	1.1391	0.0511	0.5433	0.0448	0.4770
49	35.53	0.02	0.0543	9.9999	0.0217	9.9999	0.4149	1.1538	0.0507	0.5492	0.0439	0.4760
50	35.75	0.02	0.0538	9.9999	0.0244	9.9999	0.3873	1.1555	0.0498	0.5503	0.0431	0.4762
51	36.00	0.04	0.0547	9.9999	0.0223	9.9999	0.4077	1.1509	0.0496	0.5498	0.0429	0.4752
52	36.25	0.03	0.0571	9.9999	0.0235	9.9999	0.4116	1.1574	0.0484	0.5492	0.0418	0.4745
53	36.49	0.04	0.0548	9.9999	0.0219	9.9999	0.3996	1.1534	0.0484	0.5480	0.0420	0.4751
54	36.70	0.04	0.0541	9.9999	0.0254	9.9999	0.3963	1.1415	0.0484	0.5432	0.0424	0.4759
55	36.98	0.04	0.0572	9.9999	0.0240	9.9999	0.4196	1.1587	0.0474	0.5492	0.0409	0.4740
56	37.20	0.02	0.0571	9.9999	0.0244	9.9999	0.4273	1.1652	0.0478	0.5531	0.0410	0.4747
57	37.46	0.01	0.0618	9.9999	0.0262	9.9999	0.4239	1.1685	0.0487	0.5554	0.0417	0.4751
58	37.68	0.03	0.0559	9.9999	0.0241	9.9999	0.4050	1.1695	0.0470	0.5548	0.0402	0.4744
59	37.91	0.03	0.0560	9.9999	0.0234	9.9999	0.4179	1.1604	0.0464	0.5501	0.0400	0.4741
60	38.13	0.02	0.0588	9.9999	0.0313	9.9999	0.4563	1.1782	0.0459	0.5584	0.0389	0.4739
61	38.37	0.04	0.0744	9.9999	0.0322	9.9999	0.4328	1.1574	0.0457	0.5491	0.0395	0.4744
62	38.62	0.02	0.0585	9.9999	0.0257	9.9999	0.4517	1.1788	0.0451	0.5564	0.0382	0.4720
63	38.85	0.03	0.0464	9.9999	0.0263	9.9999	0.4375	1.1844	0.0447	0.5578	0.0377	0.4710
64	39.08	0.01	0.0522	9.9999	0.0235	9.9999	0.4502	1.1792	0.0449	0.5575	0.0381	0.4728
65	39.31	0.01	0.0475	9.9999	0.0212	9.9999	0.4463	1.1923	0.0447	0.5632	0.0375	0.4724
66	39.53	0.03	0.0648	9.9999	0.0295	9.9999	0.4552	1.1557	0.0450	0.5461	0.0389	0.4723
67	39.76	0.01	0.0515	9.9999	0.0244	9.9999	0.4214	1.1701	0.0451	0.5540	0.0385	0.4735
68	39.97	-0.01	0.0543	9.9999	0.0240	9.9999	0.4420	1.1912	0.0449	0.5642	0.0377	0.4738
69	40.18	-0.01	0.0428	9.9999	0.0185	9.9999	0.4322	1.1625	0.0443	0.5508	0.0381	0.4738
70	40.42	-0.00	0.0585	9.9999	0.0251	9.9999	0.4523	1.1449	0.0456	0.5424	0.0396	0.4738
71	40.64	0.01	0.0682	9.9999	0.0302	9.9999	0.4428	1.1861	0.0445	0.5623	0.0375	0.4741
72	40.82	0.01	0.0457	9.9999	0.0214	9.9999	0.4306	1.1505	0.0446	0.5465	0.0388	0.4730
73	41.03	-0.03	0.0469	9.9999	0.0208	9.9999	0.4289	1.1742	0.0442	0.5565	0.0378	0.4739
74	41.24	-0.01	0.0585	9.9999	0.0242	9.9999	0.4283	1.1585	0.0440	0.5509	0.0380	0.4735
75	41.44	-0.04	0.0458	9.9999	0.0222	9.9999	0.4476	1.1545	0.0442	0.5477	0.0383	0.4744
76	41.67	-0.03	0.0587	9.9999	0.0261	9.9999	0.4446	1.1368	0.0439	0.5396	0.0395	0.4747
77	41.86	-0.01	0.0552	9.9999	0.0245	9.9999	0.4511	1.1446	0.0436	0.5431	0.0381	0.4745
78	42.08	-0.02	0.0463	9.9999	0.0186	9.9999	0.3970	1.1388	0.0428	0.5408	0.0378	0.4749
79	42.28	-0.01	0.0460	9.9999	0.0196	9.9999	0.4201	1.1280	0.0435	0.5333	0.0388	0.4728
80	42.48	-0.00	0.0518	9.9999	0.0224	9.9999	0.4324	1.0582	0.0416	0.5015	0.0394	0.4748
81	42.67	-0.04	0.0495	9.9999	0.0206	9.9999	0.4202	1.1057	0.0425	0.5246	0.0384	0.4745
82	42.84	-0.00	0.0565	9.9999	0.0237	9.9999	0.4195	1.0639	0.0422	0.5045	0.0397	0.4742
83	43.04	-0.03	0.0463	9.9999	0.0196	9.9999	0.4194	1.0838	0.0416	0.5127	0.0384	0.4731
84	43.22	-0.02	0.0493	9.9999	0.0206	9.9999	0.4262	1.0895	0.0408	0.5159	0.0373	0.4731
85	43.40	-0.03	0.0495	9.9999	0.0206	9.9999	0.4202	1.1405	0.0418	0.5420	0.0384	0.4727
86	43.58	-0.03	0.0518	9.9999	0.0215	9.9999	0.4151	1.0580	0.0403	0.4999	0.0381	0.4721
87	43.76	-0.03	0.0449	9.9999	0.0177	9.9999	0.3942	1.1203	0.0416	0.5284	0.0371	0.4717
88	43.95	-0.03	0.0553	9.9999	0.0231	9.9999	0.4177	1.0852	0.0398	0.5124	0.0387	0.4722
89	44.14	-0.03	0.0484	9.9999	0.0207	9.9999	0.4277	1.1002	0.0400	0.5232	0.0362	0.4730
90	44.28	-0.03	0.0502	9.9999	0.0241	9.9999	0.4269	1.1109	0.0400	0.5254	0.0380	0.4711
91	44.50	-0.02	0.0464	9.9999	0.0208	9.9999	0.4298	1.1187	0.0401	0.5273	0.0358	0.4714
92	44.68	-0.01	0.0490	9.9999	0.0213	9.9999	0.3844	1.0980	0.0393	0.5170	0.0358	0.4709
93	44.85	-0.02	0.0507	9.9999	0.0222	9.0980	0.4356	1.1317	0.0403	0.5317	0.0356	0.4696

TEST 7 PART 101 PACF 1.2C RX10-6 1.7 PHI 0.C BLOCF11 0.C L DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
94	45.05	-0.00	0.0462	9.9999	0.0188	9.9999	0.4069	1.1142	0.0403	0.5215	0.0362	0.4680
95	45.24	-0.01	0.0515	9.9999	0.0225	9.9999	0.4012	1.1355	0.0393	0.5306	0.0346	0.4675
96	45.41	-0.01	0.0519	9.9999	0.0221	9.9999	0.4239	1.0691	0.0381	0.4998	0.0356	0.4673
97	45.58	-0.04	0.0506	9.9999	0.0206	9.9999	0.3937	1.0818	0.0393	0.5050	0.0363	0.4668
98	45.77	-0.02	0.0507	9.9999	0.0205	9.9999	0.4122	1.0876	0.0377	0.5072	0.0347	0.4663
99	45.96	-0.03	0.0566	9.9999	0.0246	9.9999	0.4218	1.0690	0.0384	0.5095	0.0349	0.4636
100	46.12	-0.02	0.0633	9.9999	0.0286	9.9999	0.4550	1.1030	0.0382	0.5122	0.0346	0.4644
101	46.29	-0.02	0.0518	9.9999	0.0225	9.9999	0.4421	1.0895	0.0381	0.5052	0.0350	0.4637
102	46.47	-0.01	0.0427	9.9999	0.0186	9.9999	0.4215	1.0738	0.0382	0.4983	0.0356	0.4641
103	46.64	-0.00	0.0611	9.9999	0.0259	9.9999	0.4239	1.0750	0.0383	0.4965	0.0350	0.4622
104	46.83	-0.01	0.0516	9.9999	0.0210	9.9999	0.4134	1.0262	0.0396	0.4723	0.0387	0.4611
105	47.00	-0.02	0.0736	9.9999	0.0325	9.9999	0.4458	1.0097	0.0396	0.4654	0.0392	0.4605
106	47.17	-0.01	0.0623	9.9999	0.0274	9.9999	0.4398	1.0083	0.0398	0.4639	0.0395	0.4601
107	47.36	-0.02	0.0568	9.9999	0.0244	9.9999	0.4213	0.9907	0.0394	0.4591	0.0395	0.4608
108	47.51	-0.01	0.0611	9.9999	0.0268	9.9999	0.4366	1.0058	0.0394	0.4637	0.0392	0.4610
109	47.69	-0.03	0.0542	9.9999	0.0245	9.9999	0.4594	1.0044	0.0384	0.4628	0.0382	0.4608
110	47.87	-0.01	0.0635	9.9999	0.0285	9.9999	0.4551	1.0181	0.0389	0.4690	0.0382	0.4607
111	48.06	-0.01	0.0520	9.9999	0.0211	9.9999	0.4058	1.0255	0.0403	0.4707	0.0393	0.4598
112	48.21	-0.02	0.0496	9.9999	0.0227	9.9999	0.4577	1.0329	0.0380	0.4734	0.0368	0.4588
113	48.39	-0.02	0.0485	9.9999	0.0205	9.9999	0.4051	1.0576	0.0387	0.4845	0.0366	0.4581
114	48.57	-0.03	0.0565	9.9999	0.0269	9.9999	0.4761	1.0639	0.0395	0.4875	0.0371	0.4582
115	48.73	-0.01	0.0473	9.9999	0.0212	9.9999	0.4482	1.0687	0.0371	0.4885	0.0347	0.4571
116	48.91	-0.01	0.0381	9.9999	0.0163	9.9999	0.4278	1.0790	0.0378	0.4947	0.0350	0.4585
117	49.08	-0.00	0.0507	9.9999	0.0237	9.9999	0.4675	1.0764	0.0377	0.4935	0.0350	0.4585
118	49.22	-0.00	0.0515	9.9999	0.0243	9.9999	0.4682	1.0532	0.0372	0.5004	0.0340	0.4577
119	49.42	-0.01	0.0554	9.9999	0.0265	9.9999	0.4856	1.0609	0.0378	0.4848	0.0356	0.4576
120	49.57	0.00	0.0520	9.9999	0.0253	9.9999	0.4865	1.0618	0.0378	0.4857	0.0358	0.4574
121	49.75	-0.02	0.0543	9.9999	0.0294	9.9999	0.4878	1.0496	0.0379	0.4763	0.0364	0.4577
122	49.90	0.01	0.0536	9.9999	0.0308	9.9999	0.4843	1.0135	0.0388	0.4640	0.0383	0.4578
123	50.11	-0.00	0.0475	9.9999	0.0214	9.9999	0.4463	1.0337	0.0378	0.4751	0.0366	0.4598
124	50.29	-0.01	0.0417	9.9999	0.0185	9.9999	0.4532	1.0162	0.0387	0.4657	0.0381	0.4589
125	50.44	-0.00	0.0550	9.9999	0.0255	9.9999	0.5000	1.0369	0.0384	0.4743	0.0370	0.4574
126	50.62	0.00	0.0482	9.9999	0.0236	9.9999	0.4856	1.0327	0.0389	0.4726	0.0377	0.4578
127	50.81	-0.01	0.0543	9.9999	0.0265	9.9999	0.4954	1.0420	0.0389	0.4757	0.0373	0.4565
128	50.97	-0.01	0.0520	9.9999	0.0258	9.9999	0.4962	1.0308	0.0385	0.4782	0.0367	0.4554
129	51.13	-0.01	0.0459	9.9999	0.0233	9.9999	0.5053	1.0430	0.0394	0.4734	0.0378	0.4535
130	51.31	-0.01	0.0526	9.9999	0.0263	9.9999	0.5177	1.0431	0.0392	0.4734	0.0376	0.4536
131	51.49	-0.01	0.0550	9.9999	0.0268	9.9999	0.4997	1.0509	0.0392	0.4749	0.0373	0.4515
132	51.65	-0.00	0.0543	9.9999	0.0278	9.9999	0.5120	1.0362	0.0399	0.4686	0.0385	0.4522
133	51.82	-0.00	0.0543	9.9999	0.0282	9.9999	0.5193	1.0333	0.0405	0.4684	0.0392	0.4533
134	52.00	0.01	0.0566	9.9999	0.0284	9.9999	0.5194	1.0142	0.0410	0.4586	0.0404	0.4522
135	52.16	0.01	0.0578	9.9999	0.0295	9.9999	0.5173	1.0371	0.0397	0.4684	0.0383	0.4516
136	52.31	0.01	0.0555	9.9999	0.0284	9.9999	0.5117	1.0324	0.0404	0.4660	0.0391	0.4514
137	52.52	0.01	0.0568	9.9999	0.0290	9.9999	0.5106	1.0304	0.0405	0.4658	0.0397	0.4521
138	52.65	0.03	0.0566	9.9999	0.0295	9.9999	0.5196	0.9584	0.0441	0.4313	0.0460	0.4506
139	52.83	0.02	0.0418	9.9999	0.0213	9.9999	0.5096	0.9666	0.0435	0.4357	0.0450	0.4508

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(INSROC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 101 MACH 1.10 RX10-6 1.7 PHI 0.0 CONF B1&OF11 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CH3	CB3	XCPF3	YCPF3	CNF4	CH4	CB4	XCPF4	YCPF4
140	53.01	0.00	0.0557	0.9999	0.0294	0.9999	0.5278	1.0670	0.0398	0.4841	0.0373	0.4537
141	53.16	0.01	0.0478	0.9999	0.0246	0.9999	0.5168	1.0214	0.0412	0.4623	0.0403	0.4526
142	53.33	0.00	0.0551	0.9999	0.0324	0.9999	0.5482	1.0710	0.0398	0.4859	0.0372	0.4537
143	53.49	-0.00	0.0522	0.9999	0.0282	0.9999	0.5402	0.9703	0.0427	0.4407	0.0436	0.4505
144	53.63	0.01	0.0463	0.9999	0.0263	0.9999	0.5080	0.9586	0.0423	0.4333	0.0441	0.4526
145	53.82	0.00	0.0591	0.9999	0.0334	0.9999	0.5651	0.9733	0.0420	0.4385	0.0431	0.4503
146	53.99	-0.01	0.0430	0.9999	0.0238	0.9999	0.5335	1.0052	0.0405	0.4550	0.0403	0.4528
147	54.17	-0.01	0.0453	0.9999	0.0245	0.9999	0.5497	1.0112	0.0408	0.4567	0.0403	0.4516
148	54.30	-0.02	0.0511	0.9999	0.0296	0.9999	0.5793	1.0017	0.0413	0.4522	0.0412	0.4514
149	54.48	-0.01	0.0534	0.9999	0.0302	0.9999	0.5655	1.0085	0.0400	0.4531	0.0398	0.4515
150	54.65	-0.03	0.0380	0.9999	0.0205	0.9999	0.5094	0.9950	0.0413	0.4487	0.0415	0.4510
151	54.80	-0.01	0.0523	0.9999	0.0301	0.9999	0.5755	0.9831	0.0412	0.4424	0.0419	0.4508
152	54.96	-0.03	0.0523	0.9999	0.0292	0.9999	0.5583	0.9833	0.0406	0.4429	0.0413	0.4504
153	55.10	-0.02	0.0512	0.9999	0.0291	0.9999	0.5684	0.9909	0.0402	0.4451	0.0406	0.4492
154	55.25	-0.03	0.0477	0.9999	0.0280	0.9999	0.5870	0.9972	0.0398	0.4488	0.0399	0.4501
155	55.40	-0.02	0.0477	0.9999	0.0286	0.9999	0.5870	0.9930	0.0403	0.4466	0.0408	0.4497
156	55.57	-0.01	0.0465	0.9999	0.0284	0.9999	0.6108	1.0013	0.0396	0.4510	0.0395	0.4504
157	55.72	-0.03	0.0430	0.9999	0.0272	0.9999	0.6326	0.9929	0.0393	0.4463	0.0396	0.4495
158	55.88	-0.02	0.0465	0.9999	0.0295	0.9999	0.6033	1.0131	0.0388	0.4571	0.0383	0.4512
159	56.03	-0.04	0.0477	0.9999	0.0284	0.9999	0.6059	1.0051	0.0388	0.4540	0.0386	0.4517
160	56.21	-0.02	0.0512	0.9999	0.0311	0.9999	0.6074	1.0190	0.0374	0.4598	0.0367	0.4512
161	56.37	-0.03	0.0442	0.9999	0.0273	0.9999	0.6176	1.0012	0.0353	0.4903	0.0326	0.4535
162	56.50	-0.04	0.0513	0.9999	0.0301	0.9999	0.5867	0.9948	0.0379	0.4507	0.0381	0.4531
163	56.70	-0.03	0.0443	0.9999	0.0264	0.9999	0.5959	1.0876	0.0341	0.4548	0.0313	0.4549
164	56.88	-0.05	0.0478	0.9999	0.0256	0.9999	0.6151	1.1107	0.0330	0.5038	0.0297	0.4536
165	57.01	-0.07	0.0432	0.9999	0.0258	0.9999	0.5972	1.1111	0.0320	0.5027	0.0288	0.4524
166	57.17	-0.03	0.0432	0.9999	0.0263	0.9999	0.6088	1.1232	0.0319	0.5105	0.0284	0.4545
167	57.31	-0.06	0.0526	0.9999	0.0303	0.9999	0.5760	1.1285	0.0323	0.5139	0.0286	0.4554
168	57.47	-0.06	0.0362	0.9999	0.0225	0.9999	0.6215	1.1596	0.0295	0.5262	0.0254	0.4540
169	57.61	-0.13	0.0406	0.9999	0.0260	0.9999	0.6520	1.1346	0.0301	0.5156	0.0265	0.4544
170	57.76	-0.06	0.0406	0.9999	0.0257	0.9999	0.6299	1.1390	0.0292	0.5173	0.0256	0.4542
171	57.88	-0.04	0.0457	0.9999	0.0285	0.9999	0.6420	1.1468	0.0289	0.5217	0.0252	0.4549
172	58.01	-0.12	0.0475	0.9999	0.0295	0.9999	0.6159	1.1602	0.0289	0.5281	0.0249	0.4552
173	58.16	-0.05	0.0356	0.9999	0.0256	0.9999	0.6465	1.1334	0.0297	0.5150	0.0262	0.4544
174	58.32	-0.07	0.0406	0.9999	0.0281	0.9999	0.6397	1.1505	0.0298	0.5245	0.0259	0.4559
175	58.47	-0.04	0.0451	0.9999	0.0281	0.9999	0.6907	1.1663	0.0288	0.5322	0.0246	0.4555
176	58.63	-0.01	0.0432	0.9999	0.0263	0.9999	0.6088	1.1711	0.0285	0.5393	0.0245	0.4571
177	58.70	-0.06	0.0362	0.9999	0.0235	0.9999	0.6492	1.1805	0.0281	0.5394	0.0238	0.4569
178	58.71	-0.03	0.0445	0.9999	0.0274	0.9999	0.6137	1.1724	0.0282	0.5398	0.0240	0.4576

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 102 | MACH 0.80 | RNIO-6 1.7 | PHI 0.0 | CONF 14 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.21	0.00	-1.2069	3.6771	0.0145	-0.0252	-0.0003	0.3564	0.1139	0.2445	-3.0467
2	-5.20	0.02	-1.1776	3.6356	-0.0014	-0.0094	-0.0002	0.3562	0.1159	0.2423	-3.0889
3	-5.20	0.01	-1.2056	3.6541	0.0135	-0.0233	-0.0002	0.3602	0.1156	0.2444	-3.0641
4	-5.29	0.01	-1.1853	3.5724	0.0145	-0.0253	-0.0002	0.3627	0.1115	0.2512	-3.0657
5	-5.36	0.02	-1.0054	3.2465	0.0147	-0.0252	0.0002	0.3551	0.1061	0.2490	-3.2294
6	-2.49	0.02	-0.7415	2.0033	0.0286	-0.0217	0.0007	0.3297	0.0975	0.2322	-3.5613
7	-0.67	0.02	-0.4676	1.1256	0.0554	-0.0075	0.0014	0.3056	0.0930	0.2149	-4.3680
8	1.21	0.01	-0.2449	1.6367	0.0281	-0.0518	0.0019	0.2872	0.0895	0.1977	-6.8656
9	3.06	0.01	-0.0062	1.1691	-0.0104	-0.0744	0.0026	0.2681	0.0910	0.1771	**********
10	4.86	0.02	0.1655	0.8046	-0.0097	-0.0725	0.0031	0.2564	0.0956	0.1626	4.6620
11	6.70	0.02	0.3755	0.4421	0.0005	-0.0758	0.0035	0.2440	0.1050	0.1391	1.7187
12	8.56	0.02	0.5773	0.3055	-0.0515	-0.0166	0.0044	0.2391	0.1137	0.1255	0.6331
13	10.33	0.01	0.8355	0.0056	-0.0184	0.0155	0.0053	0.2253	0.1223	0.1031	0.0060
14	12.21	0.01	1.1025	-0.0157	-0.0306	0.0825	0.0058	0.2080	0.1308	0.0772	-0.3770
15	14.01	0.01	1.3551	-0.0756	-0.0466	0.0435	0.0065	0.1829	0.1365	0.0464	-0.6258
16	15.89	0.01	1.6951	-0.3354	-0.0895	0.1365	0.0149	0.1576	0.1427	0.0149	-0.7878
17	17.78	0.02	2.0248	-1.0555	-0.0656	0.2386	0.0301	0.1377	0.1548	-0.0171	-0.9383
18	19.84	-0.00	2.3762	-2.4773	-0.2534	0.0600	0.0594	0.1160	0.1702	-0.0542	-1.0452
19	21.53	-0.01	2.7556	-3.1071	-0.5650	1.4475	0.0891	0.0959	0.1961	-0.1002	-1.1259
20	23.40	-0.03	3.1605	-3.7815	-0.7586	2.1075	0.0860	0.0578	0.2076	-0.1498	-1.1963
21	25.26	0.00	3.4864	-4.0555	-0.8644	1.1811	0.0364	0.0159	0.2043	-0.1864	-1.1632
22	27.15	0.03	3.8751	-4.2360	0.2495	-0.2704	0.0369	-0.0396	0.1933	-0.2329	-1.0920
23	28.71	0.02	4.1815	-4.4815	0.0586	0.2812	0.0215	-0.0755	0.1966	-0.2721	-1.0670
24	26.73	0.01	4.2572	-4.5366	-0.0322	0.3605	0.0141	-0.0883	0.2016	-0.2701	-1.0661
25	29.12	0.03	4.3535	-4.6322	0.1686	0.0340	0.0302	-0.0753	0.2042	-0.2795	-1.0641
26	29.36	0.04	4.3961	-4.6642	0.3075	-0.4204	0.0465	-0.0822	0.2037	-0.2859	-1.0610
27	29.68	0.03	4.4555	-4.7805	0.2681	0.1214	0.0377	-0.0767	0.2085	-0.2832	-1.0625
28	29.96	0.04	4.5869	-4.8454	0.2726	0.1405	0.0453	-0.0865	0.2129	-0.2995	-1.0588
29	30.22	0.04	4.6813	-4.9226	0.3524	-0.1478	0.0539	-0.0915	0.2139	-0.3059	-1.0559
30	30.48	0.03	4.7210	-4.9315	0.2661	0.3755	0.0450	-0.1002	0.2182	-0.3184	-1.0445
31	30.75	0.03	4.7518	-5.0765	0.1818	0.5162	0.0371	-0.1075	0.2216	-0.3291	-1.0353
32	31.04	0.04	4.8501	-5.1265	0.2507	0.3171	0.0526	-0.1113	0.2249	-0.3362	-1.0358
33	31.30	0.02	4.9233	-5.1167	0.1653	0.5911	0.0226	-0.1326	0.2211	-0.3537	-1.0397
34	31.57	0.03	4.9807	-5.1805	0.1542	0.6251	0.0226	-0.1248	0.2250	-0.3498	-1.0401
35	31.85	0.04	5.1325	-5.2956	0.3648	0.4558	0.0456	-0.1322	0.2340	-0.3662	-1.0324
36	32.12	0.04	5.2886	-5.2715	0.2785	0.6000	0.0460	-0.1365	0.2370	-0.3739	-0.9968
37	32.38	0.04	5.3326	-5.2673	0.4256	0.3702	0.0543	-0.1362	0.2422	-0.3764	-0.9878
38	32.64	0.05	5.4524	-5.2766	0.4553	0.3665	0.0697	-0.1367	0.2413	-0.3780	-0.9810
39	32.90	0.06	5.5918	-5.2863	0.5761	0.2665	0.0701	-0.1285	0.2427	-0.3712	-0.9522
40	33.16	0.05	5.6121	-5.2158	0.5246	0.1696	0.0716	-0.1421	0.2375	-0.3796	-0.9301
41	33.41	0.06	5.7586	-5.2356	0.7054	-0.0011	0.0795	-0.1484	0.2480	-0.3964	-0.9029
42	33.66	0.07	5.8565	-5.2458	0.6954	0.4357	0.0707	-0.1525	0.2597	-0.3880	-0.8953
43	33.90	0.06	5.9322	-5.2618	0.6564	0.2841	0.0791	-0.1400	0.2629	-0.4029	-0.8904
44	34.14	0.06	6.0546	-5.3024	0.7056	0.3547	0.0716	-0.1455	0.2605	-0.4064	-0.8758
45	34.41	0.07	6.0667	-5.2726	0.7246	0.3807	0.0717	-0.1507	0.2740	-0.4247	-0.8691
46	34.66	0.07	6.2336	-5.3635	0.7591	0.4546	0.0720	-0.1512	0.2716	-0.4228	-0.8636

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 102 | MACH 0.80 | RX10-6 1.7 | PHI 0.0 | CONF 81NOF14 | L C.C | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	34.88	0.09	6.3674	-5.5422	0.9314	0.4658	0.0571	-0.1307	0.2918	-0.4224	-0.8704
48	35.13	0.09	6.4405	-5.5676	0.9492	0.7465	0.0416	-0.0974	0.3116	-0.4087	-0.8692
49	35.38	0.09	6.4874	-5.4868	0.9865	0.6403	0.0421	-0.1184	0.3058	-0.4241	-0.8495
50	35.61	0.09	6.0268	-5.4441	1.0134	0.5223	0.0433	-0.1046	0.3155	-0.4200	-0.8215
51	35.84	0.08	6.5232	-5.3821	0.9538	0.2727	0.0519	-0.1328	0.3052	-0.4417	-0.8126
52	36.06	0.08	6.7435	-5.3757	1.0725	-0.1835	0.0466	-0.1326	0.3102	-0.4427	-0.7978
53	36.30	0.09	6.8170	-5.4351	1.2265	-0.5678	0.0629	-0.1514	0.3044	-0.4557	-0.7973
54	36.54	0.10	6.6802	-5.3364	1.1704	0.0390	0.0313	-0.1159	0.3289	-0.4424	-0.7756
55	36.78	0.08	6.5511	-5.3277	1.0477	-0.0396	0.0247	-0.1169	0.3386	-0.4574	-0.7751
56	37.01	0.09	7.0761	-5.3556	1.1423	-0.0081	0.0250	-0.1112	0.3554	-0.4665	-0.7569
57	37.23	0.08	7.1062	-5.3655	0.9598	0.6043	0.0085	-0.0862	0.3775	-0.4637	-0.7472
58	37.48	0.09	7.2031	-5.2714	1.1623	0.3801	-0.0149	-0.0566	0.3929	-0.4495	-0.7318
59	37.71	0.09	7.2761	-5.0923	1.1413	0.5927	-0.0354	-0.0316	0.4289	-0.4605	-0.6959
60	37.94	0.09	7.3123	-4.6636	1.1452	0.3391	-0.1005	0.0014	0.4765	-0.4451	-0.6378
61	38.19	0.10	7.4050	-4.8307	1.3178	0.3094	-0.0927	0.0425	0.4939	-0.4513	-0.6250
62	38.41	0.10	7.4670	-4.8105	1.2514	0.5577	-0.0934	0.0469	0.5030	-0.4560	-0.6169
63	38.64	0.10	7.5938	-4.8632	1.3581	0.4864	-0.1003	0.0449	0.5069	-0.4619	-0.6142
64	38.84	0.09	7.5930	-4.9887	1.1676	0.5383	-0.1000	0.0540	0.5127	-0.4586	-0.6043
65	39.07	0.09	7.7457	-4.8889	1.2456	0.4440	-0.1067	0.0449	0.5112	-0.4662	-0.6028
66	39.29	0.08	7.7736	-4.8962	1.1245	0.5437	-0.0895	0.0233	0.5102	-0.4869	-0.6033
67	39.50	0.08	7.8355	-4.9537	1.1645	0.4003	-0.0909	0.0279	0.5169	-0.4890	-0.5860
68	39.70	0.10	7.9538	-4.9523	1.2398	0.2796	-0.0754	0.0330	0.4963	-0.4632	-0.5723
69	39.92	0.07	8.0544	-4.9361	0.9872	0.2003	-0.0004	-0.0885	0.4703	-0.5589	-0.6129
70	40.12	0.07	8.0246	-4.9009	1.0460	0.1947	-0.0520	0.0242	0.5117	-0.4875	-0.5691
71	40.31	0.09	8.0719	-4.9484	1.2429	0.0235	-0.0441	0.0082	0.5127	-0.5045	-0.5635
72	40.51	0.08	8.1413	-4.9350	1.1269	-0.0816	-0.0433	-0.0094	0.5137	-0.5231	-0.5653
73	40.73	0.10	8.2408	-4.9560	1.3452	-0.1261	-0.0430	0.0194	0.5228	-0.5034	-0.5543
74	40.92	0.09	8.3373	-4.9143	1.1904	-0.0467	-0.0426	0.0157	0.5277	-0.5120	-0.5415
75	41.15	0.08	8.3703	-4.9484	1.2109	0.0269	-0.0426	0.0277	0.5295	-0.5018	-0.5314
76	41.35	0.10	8.4634	-4.9490	1.3612	-0.1268	-0.0443	0.0305	0.5368	-0.5063	-0.5253
77	41.54	0.09	8.5761	-4.9062	1.3153	-0.1217	-0.0441	0.0245	0.5459	-0.5214	-0.5138
78	41.74	0.10	8.6657	-4.8752	1.3813	-0.0393	-0.0564	0.0237	0.5483	-0.5246	-0.5164
79	41.94	0.10	8.7613	-4.8677	1.4393	-0.1729	-0.0720	0.0246	0.5512	-0.5266	-0.5256
80	42.15	0.11	8.9199	-4.8865	1.4928	-0.0236	-0.0633	0.0183	0.5608	-0.5425	-0.5256
81	42.31	0.10	8.8758	-4.9113	1.3256	-0.1332	-0.0487	0.0170	0.5618	-0.5448	-0.5080
82	42.50	0.11	8.9713	-4.9044	1.3765	-0.0859	-0.0561	0.0187	0.5642	-0.5255	-0.5088
83	42.69	0.12	9.1729	-4.8668	1.4530	-0.0366	-0.0479	0.0348	0.5782	-0.5434	-0.5088
84	42.87	0.12	9.2935	-4.8764	1.4726	-0.1158	-0.0554	0.0420	0.5777	-0.5357	-0.5065
85	43.06	0.11	9.2660	-4.8201	1.4526	-0.0525	-0.0401	0.0292	0.5685	-0.5393	-0.4955
86	43.23	0.12	9.4351	-4.8683	1.7677	-0.0674	-0.0542	0.0265	0.5830	-0.5565	-0.5178
87	43.42	0.13	9.4735	-4.8717	1.7225	-0.0567	-0.0474	0.0319	0.5822	-0.5503	-0.5142
88	43.62	0.14	9.6721	-5.0687	1.8806	-0.1106	-0.0537	0.0276	0.5856	-0.5580	-0.5176
89	43.77	0.14	9.7557	-5.1058	1.9319	-0.1926	-0.0534	0.0262	0.5885	-0.5643	-0.5236
90	43.96	0.13	9.8153	-5.1173	1.7786	-0.0490	-0.0532	0.0129	0.5842	-0.5713	-0.5211
91	44.14	0.13	9.8775	-5.1618	1.8402	-0.0800	-0.0530	0.0297	0.5879	-0.5582	-0.5226
92	44.32	0.14	9.9626	-5.2565	1.8866	-0.0973	-0.0526	0.0180	0.5855	-0.5675	-0.5318

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 102 MACH 0.80 1.7 RNIO-6 PHI 0.0 BODY 0.0 CONF 814 CEL1 0 CEL2 -10 CEL3 0 CEL4 -10 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.51	0.13	9.9757	-5.2265	1.8473	-0.0159	-0.0492	0.0164	0.5822	-0.5658	-0.5230
94	44.71	0.14	10.1600	-5.3551	1.8463	0.0013	-0.0527	0.0195	0.5875	-0.5680	-0.5310
95	44.89	0.12	10.2012	-5.3750	1.7771	-0.0107	-0.0519	0.0027	0.5868	-0.5841	-0.5269
96	45.05	0.13	10.2620	-5.4043	1.8886	0.0174	-0.0445	0.0123	0.5893	-0.5770	-0.5266
97	45.24	0.12	10.3523	-5.4357	1.7559	0.0516	-0.0516	0.0086	0.5898	-0.5812	-0.5251
98	45.43	0.13	10.4541	-5.4867	1.8913	0.0683	-0.0441	0.0002	0.5903	-0.5841	-0.5327
99	45.60	0.13	10.5501	-5.5332	1.8188	0.1901	-0.0515	-0.0027	0.5908	-0.5935	-0.5265
100	45.75	0.13	10.6455	-5.5328	1.8286	0.0815	-0.0511	-0.0061	0.5931	-0.5992	-0.5255
101	45.94	0.12	10.8073	-5.5385	1.7746	0.2580	-0.0440	-0.0097	0.5937	-0.6034	-0.5221
102	46.11	0.12	10.7853	-5.6791	1.8237	0.2915	-0.0511	0.0018	0.6004	-0.5991	-0.5264
103	46.30	0.13	10.8639	-5.7367	1.8335	0.4553	-0.0517	-0.0022	0.6007	-0.6089	-0.5280
104	46.46	0.13	10.8709	-5.7674	1.8130	0.1850	-0.0501	-0.0184	0.6022	-0.6206	-0.5250
105	46.63	0.11	10.9036	-5.8556	1.8856	0.4312	-0.0507	-0.0123	0.6017	-0.6140	-0.5150
106	46.82	0.13	11.0517	-5.8254	1.7465	0.7000	-0.0515	-0.0070	0.6104	-0.6174	-0.5275
107	46.99	0.13	11.1255	-5.8662	1.8008	0.5493	-0.0581	-0.0143	0.6143	-0.6286	-0.5273
108	47.15	0.12	11.2269	-5.8898	1.8775	0.8291	-0.0513	-0.0139	0.6199	-0.6353	-0.5241
109	47.33	0.12	11.2757	-5.9554	1.8763	0.8038	-0.0586	-0.0200	0.6281	-0.6547	-0.5315
110	47.51	0.10	11.2374	-5.8346	1.5266	0.9845	-0.0516	-0.0414	0.6242	-0.6656	-0.5192
111	47.68	0.10	11.3858	-5.9333	1.4554	1.1176	-0.0515	-0.0464	0.6297	-0.6721	-0.5209
112	47.85	0.11	11.5233	-6.0918	1.6188	1.2305	-0.0593	-0.0256	0.6320	-0.6576	-0.5286
113	48.02	0.10	11.5252	-5.9311	1.4030	1.2704	-0.0515	-0.0399	0.6315	-0.6714	-0.5144
114	48.19	0.08	11.6267	-5.9648	1.4591	1.4063	-0.0521	-0.0428	0.6373	-0.6802	-0.5133
115	48.36	0.05	11.6828	-5.9765	1.3305	1.7803	-0.0527	-0.0501	0.6344	-0.6846	-0.5116
116	48.54	0.06	11.8629	-5.9355	1.1484	1.9123	-0.0678	-0.0648	0.6349	-0.6998	-0.5093
117	48.69	0.07	11.7881	-5.9839	1.2158	2.1794	-0.0681	-0.0618	0.6388	-0.7067	-0.5059
118	48.87	0.07	11.7727	-5.8768	1.0580	1.9972	-0.0674	-0.0634	0.6416	-0.7051	-0.4992
119	49.04	0.07	11.8551	-5.9317	0.9395	2.1148	-0.0676	-0.0743	0.6319	-0.7063	-0.5004
120	49.20	0.07	11.8152	-5.8067	0.9130	2.2410	-0.0828	-0.0907	0.6128	-0.7036	-0.4967
121	49.37	0.03	11.7767	-5.8165	0.4511	2.4617	-0.0829	-0.1837	0.4975	-0.6812	-0.4770
122	49.55	0.02	11.7443	-5.5341	0.2982	2.5521	-0.0831	-0.2381	0.5072	-0.7453	-0.4712
123	49.73	0.02	11.7020	-5.6148	0.2583	2.6509	-0.1133	-0.2116	0.5062	-0.7178	-0.4766
124	49.89	0.03	11.8777	-5.5961	0.3308	2.6895	-0.1130	-0.1880	0.5342	-0.7222	-0.4713
125	50.06	0.02	11.9099	-5.5456	0.2383	2.9288	-0.1136	-0.1911	0.5506	-0.7417	-0.4660
126	50.24	0.02	11.9450	-5.5832	0.1878	2.8639	-0.1128	-0.2148	0.5352	-0.7500	-0.4657
127	50.41	0.03	12.0614	-5.7255	0.3624	2.8804	-0.1129	-0.1826	0.5790	-0.7616	-0.4747
128	50.58	0.03	12.1482	-5.8285	0.4546	2.8529	-0.1126	-0.1596	0.5819	-0.7415	-0.4798
129	50.75	0.02	12.2152	-5.9316	0.2570	3.0295	-0.1005	-0.1474	0.6079	-0.7568	-0.4855
130	50.90	0.04	12.2418	-6.0448	0.3647	3.2683	-0.0914	-0.1330	0.6267	-0.7603	-0.4938
131	51.09	0.04	12.3526	-6.0626	0.3526	3.3275	-0.0989	-0.1504	0.6188	-0.7692	-0.4892
132	51.25	0.04	12.5051	-6.0951	0.4756	3.3534	-0.0840	-0.1425	0.6332	-0.7757	-0.5034
133	51.40	0.03	12.4736	-6.2125	0.2558	3.5386	-0.0919	-0.1527	0.6261	-0.7788	-0.4981
134	51.59	0.04	12.5661	-6.4083	0.5251	3.3252	-0.0914	-0.1967	0.6304	-0.7871	-0.5092
135	51.75	0.05	12.7345	-6.5977	0.6231	3.6654	-0.0925	-0.1640	0.6313	-0.7953	-0.5181
136	51.92	0.06	12.7782	-6.7662	0.6493	3.5788	-0.0999	-0.1641	0.6321	-0.7962	-0.5299
137	52.09	0.06	12.8014	-6.7525	0.6180	3.5655	-0.0996	-0.1594	0.6370	-0.7964	-0.5271
138	52.25	0.06	12.8509	-6.7839	0.6721	3.6761	-0.1000	-0.1702	0.6469	-0.8111	-0.5279

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NASRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 102 MACH 0.60 REIG-6 1.7 PHI 0.0 CONF 81-0F14 -L 0.0 DELI 0 DELZ -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.43	0.06	13.0041	-0.8853	0.6104	4.0538	-0.1084	-0.1886	0.6327	-0.8213	-0.5294
140	52.59	0.06	13.1748	-7.0581	0.6421	4.3104	-0.1170	-0.2137	0.6144	-0.8281	-0.5357
141	52.76	0.06	13.2102	-7.2121	0.6366	4.5162	-0.1178	-0.2094	0.6158	-0.8252	-0.5459
142	52.94	0.07	13.3754	-7.2782	0.7256	4.3894	-0.1171	-0.2054	0.6365	-0.8419	-0.5442
143	53.10	0.09	13.4271	-7.1656	1.0071	3.9774	-0.1063	-0.2027	0.6346	-0.8373	-0.5355
144	53.27	0.10	13.5216	-7.1656	1.1556	3.7398	-0.0899	-0.2252	0.6063	-0.8255	-0.5299
145	53.43	0.09	13.5644	-7.1164	1.0235	3.9135	-0.0703	-0.2166	0.6192	-0.8358	-0.5246
146	53.58	0.08	13.5117	-7.0068	0.9011	4.0295	-0.1011	-0.2238	0.6030	-0.8268	-0.5409
147	53.74	0.10	13.6343	-7.1253	1.1934	3.7629	-0.0473	-0.2306	0.5786	-0.8072	-0.5226
148	53.90	0.10	13.8431	-6.8666	1.1537	3.9739	-0.0079	-0.2188	0.5368	-0.7556	-0.4837
149	54.11	0.10	13.7851	-6.8263	1.1232	4.0023	-0.0005	-0.2436	0.5306	-0.7742	-0.4801
150	54.28	0.08	13.9768	-6.7025	1.0754	4.2879	0.0067	-0.2494	0.5341	-0.7695	-0.4795
151	54.44	0.08	14.0743	-6.8814	1.0686	4.4269	0.0140	-0.2485	0.5283	-0.7768	-0.4875
152	54.58	0.07	14.0922	-6.7615	1.0395	4.1827	0.0151	-0.2430	0.5179	-0.7609	-0.4798
153	54.76	0.06	14.3272	-7.0372	0.9362	4.3512	0.0229	-0.2610	0.5357	-0.7807	-0.4912
154	54.91	0.08	14.4263	-6.9688	1.1370	4.1445	0.0391	-0.2516	0.5382	-0.7908	-0.4826
155	55.07	0.08	14.5153	-7.1074	1.1352	4.0714	0.0395	-0.2582	0.5427	-0.8009	-0.4898
156	55.23	0.07	14.5114	-7.0049	1.0046	3.9749	0.0325	-0.2414	0.5368	-0.7802	-0.4868
157	55.39	0.06	14.6048	-7.3817	1.0546	3.7844	0.0333	-0.2379	0.5456	-0.7835	-0.5054
158	55.54	0.07	14.6937	-6.9783	1.0186	3.7239	0.0260	-0.2459	0.5133	-0.7762	-0.4815
159	55.72	0.07	14.5450	-7.1461	1.0894	3.7825	0.0333	-0.2477	0.5391	-0.7866	-0.4913
160	55.89	0.07	14.8163	-7.2654	1.1275	3.9742	0.0258	-0.2560	0.5357	-0.7917	-0.4903
161	56.05	0.09	14.8245	-7.3445	1.4091	3.7909	0.0259	-0.2537	0.5431	-0.7968	-0.4956
162	56.22	0.08	14.8975	-7.3974	1.2432	3.7161	0.0268	-0.2540	0.5360	-0.8080	-0.4980
163	56.36	0.07	14.8177	-7.3625	1.1778	3.9013	0.0355	-0.2538	0.5431	-0.7969	-0.4928
164	56.52	0.05	14.6568	-7.2361	1.3415	3.9887	0.0426	-0.2544	0.5322	-0.7866	-0.4868
165	56.69	0.07	15.0742	-7.3423	1.1454	3.4504	0.0364	-0.2485	0.5498	-0.7983	-0.4871
166	56.82	0.08	14.8750	-6.9539	1.1997	3.2813	0.0441	-0.2464	0.5404	-0.7868	-0.4702
167	56.99	0.07	14.9737	-7.2566	1.1775	3.1993	0.0370	-0.2487	0.5330	-0.7837	-0.4848
168	57.14	0.06	15.0313	-7.3063	1.0194	3.2206	0.0373	-0.2815	0.5359	-0.8174	-0.4857
169	57.29	0.05	15.0071	-7.3038	1.0049	2.8684	0.0395	-0.2734	0.5387	-0.8121	-0.4867
170	57.44	0.06	15.1526	-7.3731	1.2683	2.8884	0.0387	-0.2778	0.5357	-0.8115	-0.4866
171	57.58	0.05	15.0517	-7.4687	1.0822	2.8536	0.0471	-0.2683	0.5400	-0.8083	-0.4938
172	57.71	0.03	14.8623	-6.8655	0.9208	2.8704	0.0405	-0.2707	0.5233	-0.7940	-0.4956
173	57.86	0.04	14.9162	-7.0526	1.0482	2.8845	0.0393	-0.2734	0.5306	-0.8060	-0.4728
174	58.02	0.05	15.0076	-7.1054	1.1738	2.6549	0.0469	-0.2705	0.5398	-0.8103	-0.4734
175	58.15	0.03	14.8135	-6.9118	0.9593	2.6796	0.0412	-0.2672	0.5195	-0.8027	-0.4865
176	58.20	0.02	14.8140	-6.9234	0.8381	1.5726	0.0422	-0.2856	0.5268	-0.8124	-0.4814
177	58.21	0.04	14.8540	-7.2106	0.9740	2.6867	0.0474	-0.2810	0.5297	-0.8107	-0.4861
178	58.22	0.03	15.0135	-7.3376	0.9718	2.1144	0.0418	-0.2674	0.5329	-0.7999	-0.4887
179	58.23	0.03	15.1054	-7.1515	0.8712	2.3160	0.0417	-0.2748	0.5374	-0.8120	-0.4781

TEST 7 | PART NO.2 | MACH 0.60 | RNIE-6 1.7 | PHI 0.0 | CONF 814 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.21	0.00	-0.0113	0.0	0.0045	0.0	-0.4153	-0.5615	0.0004	-0.1961	-0.0007	0.3492
2	-5.20	0.02	-0.0102	0.0	0.0056	0.0	-0.4902	-0.5586	0.0005	-0.1951	-0.0005	0.3496
3	-5.20	0.01	-0.0071	0.0	0.0061	0.0	-0.8451	-0.5632	0.0005	-0.1969	-0.0005	0.3498
4	-5.29	0.01	-0.0065	0.0	0.0045	0.0	-0.5294	-0.5441	0.0003	-0.1905	-0.0006	0.3501
5	-4.36	0.02	-0.0117	0.0	0.0042	0.0	-0.3590	-0.4795	0.0019	-0.1822	-0.0040	0.3800
6	-2.49	0.02	-0.0022	-0.0001	0.0052	0.0454	-2.3038	-0.3005	0.0060	-0.1567	-0.0163	0.4307
7	-0.67	0.02	-0.0005	0.0	0.0041	0.0	-8.0330	-0.2724	0.0071	-0.1261	-0.0261	0.4763
8	1.21	0.01	-0.0019	0.0	0.0025	0.0	-1.3156	-0.1911	0.0066	-0.0923	-0.0345	0.4830
9	3.06	0.01	-0.0003	-0.0001	0.0027	0.3333	-9.0000	-0.1066	0.0056	-0.0603	-0.0547	0.5685
10	4.80	0.02	-0.0002	-0.0006	0.0026	2.9990	-13.0000	-0.0492	0.0047	-0.0293	-0.1165	0.7289
11	6.70	0.02	-0.0005	-0.0011	0.0052	2.1597	-10.4000	0.0046	0.0049	-0.0082	1.0651	-1.7826
12	8.50	0.02	-0.0019	-0.0023	0.0048	1.2104	-2.5203	0.0348	0.0062	0.0200	0.1781	0.5747
13	10.33	0.01	-0.0033	-0.0027	0.0038	0.8181	-1.1515	0.0882	0.0072	0.0480	0.0835	0.5568
14	12.21	0.01	0.0026	-0.0053	0.0067	-1.8920	3.1071	0.1550	0.0087	0.0731	0.0561	0.4716
15	14.01	0.01	-0.0058	-0.0058	0.0018	0.5555	-0.2759	0.2309	0.0109	0.0548	0.0472	0.4106
16	15.89	0.01	-0.0123	-0.0060	0.0034	0.5265	-0.2764	0.2928	0.0131	0.1108	0.0447	0.3985
17	17.76	0.02	-0.0174	-0.0101	0.0103	0.5804	-0.5920	0.3529	0.0167	0.1325	0.0473	0.3755
18	19.64	-0.00	-0.0263	-0.0167	0.0127	0.6361	-0.4334	0.3904	0.0207	0.1461	0.0530	0.3585
19	21.53	-0.01	-0.0782	-0.0305	0.0057	0.3551	-0.1240	0.4196	0.0233	0.1414	0.0555	0.3376
20	23.40	-0.03	-0.1342	-0.0306	-0.0123	0.2198	0.0884	0.4033	0.0259	0.1594	0.0536	0.3298
21	25.26	0.00	-0.1351	-0.0136	-0.0256	0.0562	0.1910	0.3792	0.0310	0.1534	0.0535	0.3335
22	27.15	0.03	0.0411	-0.0048	0.0338	-0.1108	0.8224	0.7446	0.0390	0.2328	0.0524	0.3127
23	28.71	0.02	-0.0010	-0.0027	0.0109	2.6996	-10.9000	0.7660	0.0442	0.2345	0.0575	0.3053
24	28.73	0.01	-0.0058	-0.0031	0.0058	0.3163	-0.5916	0.7667	0.0437	0.2274	0.0570	0.2966
25	29.12	0.03	-0.0055	-0.0031	0.0130	0.5254	-2.2034	0.7716	0.0442	0.2268	0.0573	0.2939
26	29.36	0.04	0.0072	-0.0030	0.0411	-0.0446	0.6116	0.7942	0.0457	0.2341	0.0572	0.2929
27	29.66	0.03	0.0140	-0.0032	0.0156	-0.2285	1.4143	0.7820	0.0457	0.2250	0.0584	0.2877
28	29.96	0.04	0.0160	-0.0016	0.0225	-0.0504	1.3554	0.7939	0.0466	0.2295	0.0587	0.2891
29	30.22	0.04	0.0061	-0.0022	0.0295	-0.0731	0.9934	0.8095	0.0474	0.2323	0.0585	0.2876
30	30.48	0.03	-0.0013	-0.0007	0.0112	0.5384	-0.0154	0.8058	0.0484	0.2307	0.0601	0.2863
31	30.75	0.03	-0.0581	0.0003	-0.0074	-0.0052	0.1274	0.8160	0.0498	0.2330	0.0610	0.2855
32	31.04	0.04	0.0124	0.0	0.0224	0.0	1.6970	0.8160	0.0497	0.2323	0.0605	0.2847
33	31.30	0.02	-0.0578	0.0011	-0.0106	-0.0190	0.1836	0.8381	0.0516	0.2413	0.0616	0.2879
34	31.57	0.03	-0.0561	0.0021	-0.0058	-0.0361	0.1087	0.8282	0.0507	0.2307	0.0612	0.2786
35	31.85	0.04	-0.0246	0.0012	0.0044	-0.0438	-0.1789	0.8693	0.0536	0.2434	0.0617	0.2800
36	32.12	0.04	-0.0413	0.0026	-0.0044	-0.0702	0.1085	0.8455	0.0527	0.2295	0.0623	0.2714
37	32.38	0.04	0.0125	0.0030	0.0170	0.2222	1.2593	0.8661	0.0540	0.2348	0.0623	0.2711
38	32.64	0.05	0.0186	0.0042	0.0177	0.2343	0.9033	0.8594	0.0533	0.2311	0.0620	0.2689
39	32.90	0.06	0.0287	0.0047	0.0203	0.1637	0.7073	0.8628	0.0546	0.2288	0.0633	0.2652
40	33.16	0.05	0.0346	0.0060	0.0234	0.1734	0.6705	0.8732	0.0548	0.2297	0.0627	0.2631
41	33.41	0.06	0.0357	0.0070	0.0311	0.1257	0.5583	0.8818	0.0556	0.2306	0.0630	0.2613
42	33.66	0.07	0.0327	0.0056	0.0216	0.2535	0.6422	0.8765	0.0560	0.2287	0.0639	0.2605
43	33.90	0.06	0.0462	0.0065	0.0251	0.1948	0.6299	0.8781	0.0563	0.2309	0.0641	0.2630
44	34.14	0.06	0.0449	0.0057	0.0257	0.2106	0.5724	0.8902	0.0570	0.2333	0.0640	0.2621
45	34.41	0.07	0.0450	0.0103	0.0303	0.2102	0.6184	0.8866	0.0566	0.2318	0.0637	0.2605
46	34.66	0.07	0.0400	0.0117	0.0245	0.2925	0.6225	0.8866	0.0577	0.2303	0.0651	0.2598

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART HACH A X10-E PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
102 0.dd 1.7 C.C 81mOF14 C.C 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CA1	XCPF1	YCPF1	CNF2	CM2	CA2	XCPF2	YCPF2
47	34.83	0.05	0.0334	C.0111	0.0266	0.3323	0.8024	0.8903	0.0582	0.2327	0.0654	0.2615
48	35.13	0.05	0.0456	C.0102	0.0216	0.5110	2.4000	0.8825	0.0590	0.2294	0.0668	0.2598
49	35.38	0.05	-0.0019	C.0110	0.0183	-5.7867	-0.5789	0.8967	0.0599	0.2320	0.0668	0.2587
50	35.61	0.05	-0.0019	C.0067	0.0215	-3.5298	-11.3190	0.8823	0.0620	0.2255	0.0709	0.2556
51	35.84	0.06	0.0300	C.0095	0.0305	0.3166	1.0300	0.9069	0.0610	0.2344	0.0673	0.2585
52	36.08	0.06	0.0422	0.0050	0.0292	0.3554	0.6919	0.9291	0.0637	0.2358	0.0686	0.2536
53	36.30	0.05	0.0325	C.0137	0.0287	0.4164	0.8723	0.9236	0.0647	0.2319	0.0700	0.2510
54	36.54	0.10	-0.0017	C.0122	0.0139	-7.1755	-0.1765	0.9024	0.0673	0.2262	0.0746	0.2507
55	36.76	0.08	-0.0096	C.0146	0.0114	-1.4581	-1.1875	0.9130	0.0665	0.2284	0.0728	0.2502
56	37.01	0.09	-0.0263	C.0116	0.0117	-0.9658	-0.5707	0.8988	0.0678	0.2246	0.0754	0.2495
57	37.23	0.08	-0.1103	0.0062	-0.0156	-0.0562	0.1432	0.8866	0.0679	0.2215	0.0766	0.2498
58	37.48	0.09	-0.1136	C.0071	-0.0153	-0.0625	0.1347	0.8849	0.0681	0.2193	0.0769	0.2478
59	37.71	0.09	-0.1575	0.0025	-0.0257	-0.0158	0.1028	0.8795	0.0684	0.2127	0.0777	0.2417
60	37.94	0.09	-0.1596	C.0050	-0.0272	-0.0360	0.1957	0.9028	0.0668	0.2186	0.0740	0.2461
61	38.19	0.10	-0.1585	0.0026	-0.0283	-0.0168	0.2043	0.8940	0.0677	0.2145	0.0757	0.2395
62	38.41	0.10	-0.1582	-0.0003	-0.0276	0.0022	0.1997	0.8880	0.0666	0.2159	0.0765	0.2425
63	38.64	0.10	-0.1471	-0.0014	-0.0314	0.0095	0.2135	0.8976	0.0666	0.2175	0.0742	0.2423
64	38.84	0.09	-0.1321	-0.0004	-0.0256	0.0030	0.1936	0.8958	0.0673	0.2193	0.0751	0.2403
65	39.07	0.09	-0.1753	0.0014	-0.0368	-0.0080	0.2202	0.9046	0.0668	0.2174	0.0738	0.2403
66	39.29	0.08	-0.1525	0.0014	-0.0298	-0.0026	0.1936	0.9030	0.0661	0.2179	0.0732	0.2413
67	39.50	0.08	-0.1217	0.0002	-0.0203	-0.0018	0.1666	0.9188	0.0652	0.2226	0.0710	0.2423
68	39.74	0.10	-0.1052	0.0018	-0.0145	-0.0152	0.1418	0.9188	0.0659	0.2229	0.0717	0.2426
69	39.92	0.07	-0.1126	0.0054	-0.0168	-0.0480	0.0959	0.9295	0.0658	0.2218	0.0708	0.2386
70	40.12	0.07	-0.0859	0.0031	-0.0051	-0.0301	0.0594	0.9156	0.0651	0.2212	0.0711	0.2416
71	40.31	0.05	-0.0832	0.0037	-0.0015	-0.0445	0.0226	0.9070	0.0648	0.2170	0.0714	0.2392
72	40.51	0.06	-0.0832	0.0036	0.0042	-0.0570	-0.0005	0.9158	0.0643	0.2191	0.0702	0.2392
73	40.73	0.10	-0.0773	0.0044	0.0015	-0.0569	-0.0194	0.9155	0.0656	0.2199	0.0716	0.2402
74	40.92	0.09	-0.0477	0.0025	0.0040	-0.0524	-0.1867	0.9194	0.0632	0.2235	0.0687	0.2431
75	41.15	0.08	-0.0522	0.0015	0.0070	-0.0364	-0.1494	0.9198	0.0619	0.2206	0.0673	0.2398
76	41.35	0.10	-0.0457	0.0013	0.0078	-0.0264	-0.1003	0.9207	0.0610	0.2234	0.0657	0.2406
77	41.54	0.09	-0.0734	0.0007	-0.0002	-0.0095	0.0027	0.9423	0.0616	0.2301	0.0654	0.2442
78	41.74	0.10	-0.0488	0.00	0.0071	0.0	-0.1578	0.9326	0.0500	0.2249	0.0628	0.2412
79	41.96	0.10	-0.0627	0.0020	0.0019	-0.0319	-0.0303	0.9432	0.0578	0.2285	0.0613	0.2423
80	42.15	0.11	-0.0495	0.0026	0.0075	-0.0566	-0.1721	0.9362	0.0570	0.2266	0.0607	0.2415
81	42.31	0.10	-0.0460	0.0033	0.0080	-0.0717	-0.1735	0.9208	0.0573	0.2183	0.0622	0.2371
82	42.50	0.11	-0.0460	0.0026	0.0075	-0.1500	-0.1975	0.9263	0.0584	0.2188	0.0605	0.2360
83	42.69	0.12	-0.0325	0.0070	0.0102	-0.2154	-0.3136	0.9320	0.0545	0.2190	0.0585	0.2356
84	42.87	0.12	-0.0371	0.0062	0.0075	-0.2210	-0.2129	0.9308	0.0552	0.2196	0.0588	0.2335
85	43.06	0.11	-0.0357	0.0078	0.0100	-0.2129	-0.2801	0.9222	0.0512	0.2158	0.0555	0.2340
86	43.23	0.12	-0.0328	0.0115	0.0077	-0.3500	-0.2348	0.9406	0.0515	0.2206	0.0544	0.2330
87	43.42	0.13	-0.0373	0.0107	0.0057	-0.2808	-0.1528	0.9491	0.0495	0.2196	0.0521	0.2314
88	43.62	0.14	-0.0269	0.0132	0.0077	-0.4414	-0.2375	0.9599	0.0479	0.2231	0.0495	0.2324
89	43.77	0.14	-0.0314	0.0121	0.0068	-0.3853	-0.2548	0.9674	0.0446	0.2277	0.0461	0.2354
90	43.96	0.13	-0.0311	0.0125	0.0054	-0.4019	-0.1736	0.9679	0.0425	0.2275	0.0435	0.2350
91	44.14	0.13	-0.0282	0.0145	0.0055	-0.5283	-0.1950	0.9623	0.0406	0.2300	0.0413	0.2341
92	44.32	0.14	-0.0257	0.0137	0.0058	-0.4612	-0.1953	0.9694	0.0350	0.2270	0.0361	0.2342

PAGE 2 OF 3
SHEET 3 OF 4

MARTIA MISSILE TAILS EFFECTS DATA

TEST 7 PART 102 MACH 0.60 RX10-6 1.7 PHI 0.0 CONF 14 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
93	44.51	0.13	-0.0264	0.0125	0.0006	-0.4734	-0.2500	0.9799	0.0353	0.2293	0.0360	0.2340
94	44.71	0.14	-0.0355	0.0145	0.0033	-0.4038	-0.2916	0.9949	0.0320	0.2355	0.0323	0.2377
95	44.89	0.12	-0.0340	0.0115	0.0043	-0.3500	-0.1265	0.9891	0.0316	0.2323	0.0319	0.2345
96	45.05	0.13	-0.0357	0.0116	0.0034	-0.3249	-0.1513	0.9959	0.0326	0.2343	0.0327	0.2353
97	45.24	0.12	-0.0322	0.0092	0.0033	-0.2857	-0.1646	1.0044	0.0337	0.2358	0.0335	0.2368
98	45.43	0.13	-0.0389	0.0119	0.0031	-0.3059	-0.1311	1.0065	0.0306	0.2380	0.0303	0.2380
99	45.60	0.13	-0.0431	0.0111	0.0023	-0.2320	-0.0534	1.0001	0.0288	0.2364	0.0288	0.2364
100	45.75	0.13	-0.0417	0.0105	0.0032	-0.2516	-0.0767	1.0052	0.0301	0.2356	0.0299	0.2344
101	45.96	0.12	-0.0454	0.0106	0.0016	-0.2145	-0.0202	1.0074	0.0278	0.2370	0.0276	0.2353
102	46.11	0.12	-0.0570	0.0100	-0.0013	-0.1754	0.0228	1.0077	0.0262	0.2376	0.0260	0.2358
103	46.30	0.13	-0.0535	0.0091	0.0002	-0.1688	-0.0037	1.0149	0.0246	0.2408	0.0242	0.2378
104	46.46	0.13	-0.0553	0.0077	0.0012	-0.1392	-0.0217	1.0201	0.0239	0.2416	0.0234	0.2388
105	46.63	0.11	-0.0560	0.0055	0.0006	-0.1042	-0.0106	1.0283	0.0263	0.2425	0.0256	0.2398
106	46.82	0.13	-0.0726	0.0056	-0.0030	-0.0819	0.0417	1.0235	0.0240	0.2432	0.0234	0.2376
107	46.99	0.13	-0.0765	0.0052	-0.0016	-0.0737	0.0227	1.0403	0.0272	0.2456	0.0261	0.2381
108	47.15	0.12	-0.0769	0.0051	-0.0025	-0.0561	0.0049	1.0222	0.0236	0.2455	0.0231	0.2402
109	47.33	0.12	-0.0851	0.0034	-0.0053	-0.0382	0.0595	1.0566	0.0264	0.2500	0.0250	0.2368
110	47.51	0.10	-0.1042	0.0014	-0.0086	-0.0148	0.0788	1.0663	0.0302	0.2511	0.0283	0.2355
111	47.68	0.10	-0.1274	0.0004	-0.0154	-0.0031	0.1209	1.0594	0.0256	0.2505	0.0279	0.2369
112	47.85	0.11	-0.1159	0.0018	-0.0136	-0.0156	0.1084	1.0720	0.0277	0.2542	0.0258	0.2371
113	48.02	0.10	-0.1368	-0.0015	-0.0141	0.0110	0.1031	1.0596	0.0288	0.2505	0.0272	0.2364
114	48.19	0.08	-0.1135	0.0011	-0.0084	-0.0097	0.0737	1.0598	0.0278	0.2504	0.0262	0.2363
115	48.36	0.09	-0.1538	-0.0047	-0.0152	0.0306	0.0988	1.0801	0.0314	0.2531	0.0291	0.2363
116	48.54	0.06	-0.1044	-0.0033	-0.0215	0.0201	0.1308	1.0903	0.0324	0.2575	0.0297	0.2362
117	48.65	0.07	-0.1768	-0.0002	-0.0181	0.0381	0.1060	1.1107	0.0350	0.2608	0.0315	0.2348
118	48.87	0.07	-0.1678	-0.0053	-0.0175	0.0316	0.1043	1.0872	0.0310	0.2543	0.0285	0.2339
119	49.04	0.07	-0.1752	-0.0061	-0.0182	0.0340	0.1016	1.0985	0.0301	0.2589	0.0276	0.2361
120	49.20	0.07	-0.2140	-0.0057	-0.0267	0.0453	0.1248	1.1321	0.0301	0.2664	0.0318	0.2347
121	49.37	0.03	-0.2858	-0.0081	-0.0516	0.0211	0.1782	1.1339	0.0444	0.2621	0.0392	0.2312
122	49.55	0.02	-0.3166	-0.0064	-0.0644	0.0129	0.2021	1.1310	0.0490	0.2548	0.0433	0.2288
123	49.73	0.02	-0.3425	-0.0067	-0.0653	0.0254	0.2021	1.1303	0.0469	0.2638	0.0408	0.2318
124	49.89	0.03	-0.3308	-0.0088	-0.0646	0.0266	0.1935	1.1742	0.0426	0.2722	0.0365	0.2322
125	50.06	0.02	-0.3336	-0.0100	-0.0655	0.0300	0.1975	1.1692	0.0433	0.2688	0.0372	0.2307
126	50.24	0.02	-0.3356	-0.0102	-0.0682	0.0304	0.2031	1.1769	0.0426	0.2736	0.0362	0.2325
127	50.41	0.03	-0.3281	-0.0123	-0.0637	0.0375	0.1941	1.1780	0.0372	0.2753	0.0316	0.2337
128	50.58	0.03	-0.2655	-0.0140	-0.0452	0.0483	0.1697	1.1854	0.0346	0.2799	0.0292	0.2361
129	50.75	0.02	-0.3127	-0.0132	-0.0581	0.0499	0.1791	1.1862	0.0311	0.2790	0.0262	0.2352
130	50.90	0.04	-0.2606	-0.0148	-0.0465	0.0527	0.1650	1.1731	0.0258	0.2802	0.0220	0.2389
131	51.09	0.04	-0.2545	-0.0164	-0.0372	0.0643	0.1459	1.1817	0.0218	0.2830	0.0183	0.2395
132	51.25	0.04	-0.2536	-0.0167	-0.0344	0.0658	0.1350	1.1867	0.0210	0.2863	0.0177	0.2409
133	51.40	0.03	-0.2504	-0.0200	-0.0313	0.0799	0.1250	1.1783	0.0209	0.2827	0.0177	0.2395
134	51.59	0.04	-0.2355	-0.0154	-0.0274	0.0654	0.1163	1.1889	0.0217	0.2848	0.0183	0.2400
135	51.75	0.05	-0.2653	-0.0166	-0.0312	0.0594	0.1361	1.1862	0.0252	0.2823	0.0212	0.2386
136	51.92	0.06	-0.2855	-0.0169	-0.0352	0.0592	0.1373	1.2098	0.0243	0.2895	0.0201	0.2393
137	52.09	0.05	-0.2721	-0.0157	-0.0327	0.0577	0.1202	1.2098	0.0243	0.2894	0.0201	0.2392
138	52.25	0.06	-0.2537	-0.0162	-0.0254	0.0636	0.1001	1.2150	0.0245	0.2920	0.0202	0.2403

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 102 MACH 0.80 RATIO-6 1.7 PHI 0.0 BLNCF14 CONF 6.C L 0.C DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
139	52.43	0.06	-0.3475	-0.0263	-0.0532	0.0584	0.1532	1.2126	0.0287	0.2859	0.0237	0.2358
140	52.59	0.06	-0.3451	-0.0155	-0.0512	0.0554	0.1467	1.2140	0.0301	0.2866	0.0247	0.2351
141	52.76	0.06	-0.3691	-0.0154	-0.0586	0.0526	0.1593	1.2212	0.0274	0.2900	0.0226	0.2375
142	52.94	0.07	-0.3668	-0.0157	-0.0586	0.0614	0.1185	1.2522	0.0252	0.2984	0.0201	0.2383
143	53.10	0.05	-0.2543	-0.0203	-0.0154	0.0798	0.0606	1.2460	0.0214	0.2955	0.0172	0.2372
144	53.27	0.10	-0.1564	-0.0191	0.0115	0.1200	-0.0726	1.2052	0.0095	0.2866	0.0079	0.2378
145	53.43	0.09	-0.1743	-0.0210	0.0077	0.1147	-0.0442	1.2059	0.0092	0.2870	0.0076	0.2380
146	53.58	0.08	-0.2327	-0.0220	-0.0141	0.0945	0.0636	1.2278	0.0144	0.2920	0.0117	0.2378
147	53.74	0.10	-0.1145	-0.0177	0.0200	0.1540	-0.1761	1.1761	0.0014	0.2835	0.0012	0.2411
148	53.90	0.10	-0.0990	-0.0165	0.0211	0.1707	-0.2181	1.0868	-0.0027	0.2602	-0.0025	0.2394
149	54.11	0.10	-0.1045	-0.0152	0.0147	0.1449	-0.1401	1.0849	-0.0025	0.2615	-0.0023	0.2410
150	54.28	0.08	-0.1066	-0.0257	0.0195	0.2300	-0.1372	1.0896	-0.0029	0.2583	-0.0027	0.2398
151	54.44	0.08	-0.1512	-0.0356	0.0092	0.2713	-0.0701	1.0398	-0.0033	0.2513	-0.0032	0.2417
152	54.58	0.07	-0.0766	-0.0224	0.0168	0.2044	-0.2137	1.0468	-0.0026	0.2526	-0.0025	0.2413
153	54.76	0.06	-0.0546	-0.0286	0.0127	0.2576	-0.1351	1.0510	-0.0033	0.2550	-0.0031	0.2426
154	54.91	0.06	-0.0666	-0.0182	0.0176	0.2732	-0.2043	1.0490	-0.0019	0.2528	-0.0018	0.2410
155	55.07	0.08	-0.0716	-0.0186	0.0151	0.2528	-0.2121	1.0544	-0.0027	0.2567	-0.0026	0.2435
156	55.23	0.07	-0.0666	-0.0177	0.0176	0.2550	-0.2033	1.0687	-0.0028	0.2608	-0.0026	0.2440
157	55.39	0.06	-0.0597	-0.0186	0.0156	0.3015	-0.2013	1.0827	-0.0033	0.2637	-0.0030	0.2436
158	55.54	0.07	-0.0426	-0.0126	0.0164	0.2957	-0.3050	1.0826	-0.0030	0.2651	-0.0028	0.2445
159	55.72	0.07	-0.0507	-0.0121	0.0150	0.2386	-0.2959	1.0791	-0.0031	0.2620	-0.0029	0.2428
160	55.86	0.07	-0.0569	-0.0176	0.0141	0.3014	-0.2500	1.0645	-0.0037	0.2659	-0.0034	0.2452
161	56.05	0.05	-0.0527	-0.0126	0.0135	0.2346	-0.2586	1.0917	-0.0036	0.2651	-0.0035	0.2428
162	56.22	0.06	-0.0536	-0.0107	0.0125	0.1989	-0.2398	1.0916	-0.0033	0.2651	-0.0030	0.2429
163	56.36	0.07	-0.0465	-0.0143	0.0142	0.3049	-0.3028	1.1037	-0.0041	0.2707	-0.0037	0.2453
164	56.52	0.05	-0.0467	-0.0135	0.0170	0.3415	-0.4177	1.1070	-0.0048	0.2705	-0.0043	0.2444
165	56.69	0.07	-0.0457	-0.0117	0.0155	0.2560	-0.3392	1.1158	-0.0039	0.2706	-0.0035	0.2429
166	56.82	0.06	-0.0472	-0.0114	0.0147	0.2415	-0.3114	1.0956	-0.0036	0.2672	-0.0033	0.2439
167	56.99	0.07	-0.0393	-0.0115	0.0166	0.2926	-0.4275	1.1149	-0.0045	0.2719	-0.0044	0.2439
168	57.14	0.06	-0.0411	-0.0056	0.0103	0.2335	-0.3986	1.1113	-0.0049	0.2723	-0.0044	0.2456
169	57.29	0.05	-0.0154	-0.0087	0.0212	0.3453	-1.0926	1.1230	-0.0046	0.2757	-0.0035	0.2455
170	57.44	0.06	-0.0257	-0.0050	0.0181	0.1945	-0.7043	1.1172	-0.0037	0.2721	-0.0033	0.2436
171	57.58	0.05	-0.0316	-0.0064	0.0172	0.2012	-0.5409	1.1314	-0.0044	0.2767	-0.0039	0.2446
172	57.71	0.03	-0.0363	-0.0057	0.0112	0.1133	-0.2227	1.0742	-0.0035	0.2609	-0.0033	0.2429
173	57.86	0.04	-0.0443	-0.0060	0.0125	0.0503	-0.2912	1.1057	-0.0041	0.2657	-0.0037	0.2435
174	58.02	0.05	-0.0366	-0.0071	0.0176	0.2306	-0.5933	1.1162	-0.0045	0.2747	-0.0040	0.2461
175	58.15	0.03	-0.0313	-0.0024	0.0145	0.0752	-0.4595	1.1094	-0.0047	0.2707	-0.0042	0.2460
176	58.20	0.04	-0.0266	-0.0048	0.0184	0.1666	-0.6389	1.1127	-0.0044	0.2737	-0.0040	0.2466
177	58.21	0.04	-0.0271	-0.0045	0.0173	0.1686	-0.6384	1.1216	-0.0051	0.2758	-0.0045	0.2459
178	58.22	0.03	-0.0137	0.0004	0.0156	-0.0292	-1.4453	1.1353	-0.0039	0.2806	-0.0034	0.2472
179	58.23	0.03	-0.0257	-0.0024	0.0166	0.0934	-0.6459	1.1251	-0.0050	0.2768	-0.0044	0.2460

PAGE 3 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RN/D-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	102	0.60	1.7	0.0	BLKUP14	0.0	0	-10	0	-10	UNKNOWN

PCANT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.21	0.00	-0.0165	0.0000	0.0150	0.0000	-0.8876	-0.5636	-0.0049	-0.1953	0.0087	0.3465
2	-5.20	0.02	-0.0165	0.0000	0.0153	0.0000	-0.9290	-0.5674	-0.0046	-0.1955	0.0081	0.3468
3	-5.20	0.01	-0.0165	0.0000	0.0157	0.0000	-0.9290	-0.5708	-0.0049	-0.1965	0.0086	0.3463
4	-5.29	0.01	-0.0165	0.0000	0.0157	0.0000	-0.9290	-0.5517	-0.0040	-0.1929	0.0072	0.3498
5	-4.36	0.02	-0.0202	0.0000	0.0154	0.0000	-0.7624	-0.4910	-0.0011	-0.1811	0.0022	0.3688
6	-2.49	0.02	-0.0217	0.0000	0.0134	0.0000	-0.3175	-0.3925	0.0017	-0.1546	-0.0043	0.3939
7	-0.67	0.02	-0.0169	0.0000	0.0163	0.0000	-0.9645	-0.2886	0.0031	-0.1197	-0.0107	0.4148
8	1.21	0.01	-0.0165	0.0000	0.0163	0.0000	-0.9645	-0.1937	0.0036	-0.0880	-0.0186	0.4543
9	3.06	0.01	-0.0121	0.0000	0.0173	0.0000	-1.4297	-0.1074	0.0037	-0.0563	-0.0344	0.5242
10	4.88	0.02	-0.0072	0.0000	0.0164	0.0000	-2.2778	-0.0360	0.0021	-0.0228	-0.0583	0.6333
11	6.70	0.02	-0.0041	0.0000	0.0185	0.0000	-4.5122	0.0052	0.0027	0.0030	-0.5192	0.5765
12	8.50	0.02	-0.0046	0.0000	0.0187	0.0000	-4.1750	0.0629	0.0050	0.0271	-0.0795	0.4308
13	10.33	0.01	-0.0073	0.0000	0.0170	0.0000	-2.3288	0.1267	0.0060	0.0542	0.0466	0.4211
14	12.21	0.01	-0.0088	0.0000	0.0144	0.0000	-1.6364	0.1942	0.0075	0.0822	0.0376	0.4127
15	14.01	0.01	-0.0067	0.0000	0.0144	0.0000	-20.5714	0.2750	0.0092	0.1081	0.0335	0.3931
16	15.89	0.01	-0.0066	0.0000	0.0115	0.0000	-19.8333	0.3507	0.0113	0.1374	0.0322	0.3918
17	17.76	0.02	-0.0065	0.0000	0.0113	0.0000	-22.6000	0.4519	0.0149	0.1670	0.0330	0.3696
18	19.64	-0.00	-0.0065	0.0000	0.0106	0.0000	-21.2000	0.5525	0.0193	0.1960	0.0349	0.3548
19	21.53	-0.01	-0.0131	0.0000	0.0048	0.0000	-0.3511	0.6640	0.0235	0.2291	0.0356	0.3450
20	23.40	-0.03	-0.0228	-0.0000	-0.0009	0.0000	0.0221	0.7679	0.0238	0.2506	0.0303	0.3263
21	25.26	0.00	-0.0067	0.0000	0.0091	0.0000	-0.7612	0.7994	0.0252	0.2596	0.0365	0.3247
22	27.15	0.03	0.0164	0.0000	0.0116	0.0000	0.9355	0.7748	0.0379	0.2512	0.0489	0.3242
23	28.71	0.02	0.0168	0.0000	0.0098	0.0000	0.8869	0.8238	0.0418	0.2603	0.0507	0.3160
24	29.73	0.01	0.0173	0.0000	0.0102	0.0000	0.5896	0.8135	0.0409	0.2589	0.0501	0.3175
25	29.12	0.03	0.0173	0.0000	0.0102	0.0000	0.5896	0.8296	0.0433	0.2615	0.0522	0.3152
26	29.30	0.04	0.0220	0.0000	0.0131	0.0000	0.5935	0.8243	0.0433	0.2638	0.0525	0.3200
27	29.66	0.03	0.0172	0.0000	0.0121	0.0000	0.7035	0.8458	0.0434	0.2694	0.0513	0.3185
28	29.96	0.04	0.0168	0.0000	0.0104	0.0000	1.0093	0.8616	0.0439	0.2740	0.0509	0.3180
29	30.22	0.04	0.0124	0.0000	0.0104	0.0000	0.8387	0.8702	0.0444	0.2754	0.0510	0.3165
30	30.48	0.03	0.0172	0.0000	0.0127	0.0000	0.7384	0.8894	0.0450	0.2796	0.0506	0.3144
31	30.75	0.03	0.0172	0.0000	0.0114	0.0000	0.6628	0.9229	0.0482	0.2875	0.0522	0.3115
32	31.04	0.04	0.0220	0.0000	0.0143	0.0000	0.6500	0.9169	0.0466	0.2806	0.0508	0.3126
33	31.30	0.02	0.0168	0.0000	0.0128	0.0000	0.6809	0.9366	0.0492	0.2927	0.0525	0.3125
34	31.57	0.03	0.0140	0.0000	0.0112	0.0000	0.8000	0.9230	0.0481	0.2894	0.0521	0.3135
35	31.85	0.04	0.0188	0.0000	0.0122	0.0000	0.6689	0.9524	0.0519	0.2965	0.0545	0.3113
36	32.14	0.04	0.0172	0.0000	0.0121	0.0000	0.7035	0.9403	0.0489	0.2936	0.0520	0.3122
37	32.38	0.04	0.0204	0.0000	0.0138	0.0000	0.6667	0.9551	0.0508	0.2977	0.0532	0.3117
38	32.64	0.05	0.0141	0.0000	0.0096	0.0000	0.7021	0.9427	0.0481	0.2965	0.0510	0.3145
39	32.90	0.06	0.0236	0.0000	0.0132	0.0000	0.5593	0.9508	0.0516	0.2965	0.0543	0.3118
40	33.16	0.05	0.0205	0.0000	0.0110	0.0000	0.5366	0.9521	0.0499	0.2989	0.0524	0.3139
41	33.41	0.06	0.0203	0.0000	0.0156	0.0000	0.5442	0.9512	0.0511	0.2991	0.0537	0.3146
42	33.66	0.07	0.0221	0.0000	0.0112	0.0000	0.5068	0.9503	0.0546	0.2986	0.0574	0.3121
43	33.90	0.06	0.0252	0.0000	0.0133	0.0000	0.5278	0.9578	0.0542	0.2983	0.0566	0.3114
44	34.14	0.06	0.0172	0.0000	0.0114	0.0000	0.6028	0.9536	0.0548	0.2983	0.0573	0.3122
45	34.41	0.07	0.0205	0.0000	0.0104	0.0000	0.5073	0.9497	0.0554	0.2954	0.0583	0.3110
46	34.66	0.07	0.0255	0.0000	0.0162	0.0000	0.5418	0.9540	0.0550	0.2986	0.0573	0.3114

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NASRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 102 PACF 0.80 RX10-6 1.7 PHI 0.0 CONF 14 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	34.88	0.09	0.0330	9.9999	0.0177	9.9999	0.5364	0.9529	0.0536	0.2925	0.0560	0.3070
48	35.13	0.09	0.0330	9.9999	0.0186	9.9999	0.5727	0.9506	0.0497	0.2840	0.0534	0.3052
49	35.38	0.09	0.0235	9.9999	0.0157	9.9999	0.6681	0.9421	0.0511	0.2898	0.0542	0.3076
50	35.61	0.09	0.0246	9.9999	0.0181	9.9999	0.6074	0.9063	0.0439	0.2795	0.0484	0.3084
51	35.84	0.08	0.0256	9.9999	0.0181	9.9999	0.6074	0.9213	0.0478	0.2842	0.0519	0.3085
52	36.08	0.08	0.0346	9.9999	0.0197	9.9999	0.5694	0.9467	0.0521	0.2924	0.0550	0.3089
53	36.30	0.09	0.0330	9.9999	0.0185	9.9999	0.5727	0.9408	0.0505	0.2922	0.0537	0.3108
54	36.54	0.10	0.0282	9.9999	0.0173	9.9999	0.6135	0.9193	0.0457	0.2842	0.0497	0.3091
55	36.78	0.08	0.0377	9.9999	0.0218	9.9999	0.5782	0.9182	0.0448	0.2839	0.0488	0.3092
56	37.01	0.09	0.0362	9.9999	0.0192	9.9999	0.5304	0.9074	0.0424	0.2806	0.0467	0.3092
57	37.23	0.08	0.0381	9.9999	0.0217	9.9999	0.6011	0.8834	0.0296	0.2717	0.0343	0.3147
58	37.48	0.09	0.0405	9.9999	0.0214	9.9999	0.5282	0.8318	0.0264	0.2653	0.0317	0.3188
59	37.71	0.09	0.0353	9.9999	0.0215	9.9999	0.5573	0.8053	0.0212	0.2588	0.0263	0.3214
60	37.94	0.09	0.0467	9.9999	0.0277	9.9999	0.5686	0.8848	0.0147	0.2458	0.0215	0.3297
61	38.19	0.10	0.0518	9.9999	0.0305	9.9999	0.5886	0.8798	0.0140	0.2227	0.0206	0.3278
62	38.41	0.10	0.0423	9.9999	0.0255	9.9999	0.6123	0.8711	0.0137	0.2186	0.0204	0.3257
63	38.64	0.10	0.0518	9.9999	0.0305	9.9999	0.5888	0.8641	0.0131	0.2208	0.0191	0.3228
64	38.84	0.09	0.0470	9.9999	0.0255	9.9999	0.6277	0.8748	0.0134	0.2142	0.0199	0.3174
65	39.07	0.09	0.0470	9.9999	0.0295	9.9999	0.6277	0.8408	0.0137	0.2304	0.0189	0.3110
66	39.29	0.08	0.0352	9.9999	0.0244	9.9999	0.6224	0.7161	0.0132	0.2224	0.0184	0.3164
67	39.50	0.08	0.0435	9.9999	0.0273	9.9999	0.6219	0.7066	0.0139	0.2193	0.0197	0.3104
68	39.70	0.10	0.0456	9.9999	0.0281	9.9999	0.6162	0.6905	0.0134	0.2156	0.0194	0.3122
69	39.92	0.07	0.0393	9.9999	0.0245	9.9999	0.6234	0.8839	0.0235	0.2621	0.0266	0.2965
70	40.12	0.07	0.0378	9.9999	0.0244	9.9999	0.6489	0.7321	0.0131	0.2273	0.0179	0.3105
71	40.31	0.09	0.0458	9.9999	0.0265	9.9999	0.6495	0.7449	0.0133	0.2309	0.0179	0.3101
72	40.51	0.08	0.0487	9.9999	0.0303	9.9999	0.6222	0.7485	0.0128	0.2304	0.0168	0.3078
73	40.73	0.10	0.0455	9.9999	0.0288	9.9999	0.6330	0.7742	0.0143	0.2373	0.0185	0.3065
74	40.92	0.09	0.0467	9.9999	0.0303	9.9999	0.6222	0.7327	0.0121	0.2258	0.0165	0.3082
75	41.15	0.08	0.0534	9.9999	0.0332	9.9999	0.6217	0.7206	0.0116	0.2241	0.0161	0.3110
76	41.35	0.10	0.0455	9.9999	0.0288	9.9999	0.6340	0.7040	0.0121	0.2190	0.0172	0.3111
77	41.54	0.09	0.0533	9.9999	0.0330	9.9999	0.6567	0.7168	0.0118	0.2232	0.0165	0.3114
78	41.74	0.10	0.0466	9.9999	0.0321	9.9999	0.6005	0.7096	0.0119	0.2214	0.0168	0.3120
79	41.94	0.10	0.0502	9.9999	0.0325	9.9999	0.6594	0.7132	0.0119	0.2223	0.0167	0.3117
80	42.15	0.11	0.0550	9.9999	0.0345	9.9999	0.6273	0.7199	0.0126	0.2249	0.0175	0.3124
81	42.31	0.10	0.0518	9.9999	0.0318	9.9999	0.6139	0.7128	0.0125	0.2231	0.0175	0.3130
82	42.50	0.11	0.0544	9.9999	0.0351	9.9999	0.6071	0.7050	0.0133	0.2220	0.0189	0.3145
83	42.69	0.12	0.0561	9.9999	0.0360	9.9999	0.6198	0.7084	0.0133	0.2218	0.0191	0.3128
84	42.87	0.12	0.0545	9.9999	0.0364	9.9999	0.6630	0.7143	0.0131	0.2232	0.0184	0.3134
85	43.06	0.11	0.0518	9.9999	0.0330	9.9999	0.6371	0.7139	0.0134	0.2233	0.0188	0.3128
86	43.23	0.12	0.0567	9.9999	0.0366	9.9999	0.6164	0.7151	0.0141	0.2243	0.0197	0.3137
87	43.42	0.13	0.0503	9.9999	0.0317	9.9999	0.6302	0.7219	0.0143	0.2249	0.0198	0.3110
88	43.62	0.14	0.0576	9.9999	0.0388	9.9999	0.5723	0.7272	0.0145	0.2269	0.0199	0.3120
89	43.77	0.14	0.0595	9.9999	0.0363	9.9999	0.6060	0.7310	0.0141	0.2269	0.0193	0.3098
90	43.96	0.13	0.0647	9.9999	0.0373	9.9999	0.5765	0.7305	0.0140	0.2295	0.0190	0.3116
91	44.14	0.13	0.0646	9.9999	0.0375	9.9999	0.5867	0.7343	0.0145	0.2275	0.0197	0.3098
92	44.32	0.14	0.0631	9.9999	0.0359	9.9999	0.5689	0.7456	0.0139	0.2308	0.0186	0.3095

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 102 ALF 0.00 RX10-6 1.7 PHI 0.0 CONF 8 ABOF14 DEL 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
93	44.51	0.13	0.0882	5.9999	0.0388	5.9999	0.5031	0.7532	0.0133	0.2326	0.0177	0.3088
94	44.71	0.14	0.0831	5.9999	0.0359	5.9999	0.5594	0.7545	0.0140	0.2321	0.0186	0.3078
95	44.89	0.12	0.0836	5.9999	0.0358	5.9999	0.5663	0.7624	0.0134	0.2343	0.0176	0.3073
96	45.09	0.13	0.0856	5.9999	0.0356	5.9999	0.5953	0.7697	0.0133	0.2374	0.0173	0.3084
97	45.24	0.12	0.0846	5.9999	0.0355	5.9999	0.5464	0.7698	0.0132	0.2361	0.0171	0.3067
98	45.43	0.13	0.0845	5.9999	0.0372	5.9999	0.5767	0.7808	0.0128	0.2386	0.0164	0.3058
99	45.60	0.13	0.0814	5.9999	0.0357	5.9999	0.5814	0.7808	0.0126	0.2408	0.0164	0.3084
100	45.75	0.13	0.0813	5.9999	0.0376	5.9999	0.6134	0.7812	0.0123	0.2360	0.0157	0.3047
101	45.94	0.12	0.0782	5.9999	0.0346	5.9999	0.5979	0.7920	0.0122	0.2415	0.0154	0.3048
102	46.11	0.12	0.0830	5.9999	0.0358	5.9999	0.5883	0.7992	0.0122	0.2440	0.0153	0.3053
103	46.30	0.13	0.0858	5.9999	0.0345	5.9999	0.5836	0.7917	0.0126	0.2422	0.0159	0.3059
104	46.46	0.13	0.0844	5.9999	0.0377	5.9999	0.5854	0.7996	0.0120	0.2436	0.0150	0.3047
105	46.63	0.11	0.0345	5.9999	0.0335	5.9999	0.6175	0.8038	0.0115	0.2451	0.0143	0.3056
106	46.82	0.13	0.0861	5.9999	0.0335	5.9999	0.5766	0.8126	0.0111	0.2491	0.0137	0.3065
107	46.99	0.13	0.0845	5.9999	0.0326	5.9999	0.5938	0.8168	0.0107	0.2495	0.0131	0.3059
108	47.15	0.12	0.0864	5.9999	0.0310	5.9999	0.5908	0.8326	0.0109	0.2535	0.0131	0.3045
109	47.33	0.12	0.0855	5.9999	0.0324	5.9999	0.5409	0.8365	0.0105	0.2544	0.0126	0.3041
110	47.51	0.14	0.0868	5.9999	0.0290	5.9999	0.5943	0.8522	0.0088	0.2584	0.0103	0.3032
111	47.68	0.10	0.0866	5.9999	0.0278	5.9999	0.5697	0.8664	0.0090	0.2622	0.0104	0.3028
112	47.85	0.11	0.0864	5.9999	0.0316	5.9999	0.5308	0.8680	0.0093	0.2630	0.0107	0.3030
113	48.02	0.10	0.0866	5.9999	0.0278	5.9999	0.5697	0.8741	0.0083	0.2639	0.0095	0.3015
114	48.19	0.08	0.0820	5.9999	0.0293	5.9999	0.5035	0.8888	0.0084	0.2629	0.0097	0.3027
115	48.36	0.09	0.0846	5.9999	0.0268	5.9999	0.6091	0.8965	0.0072	0.2706	0.0080	0.3018
116	48.54	0.08	0.0853	5.9999	0.0245	5.9999	0.6234	0.8985	0.0069	0.2714	0.0077	0.3021
117	48.69	0.07	0.0845	5.9999	0.0225	5.9999	0.6638	0.9078	0.0064	0.2726	0.0070	0.3003
118	48.87	0.07	0.0841	5.9999	0.0245	5.9999	0.5846	0.9111	0.0068	0.2729	0.0075	0.2995
119	49.04	0.07	0.0878	5.9999	0.0238	5.9999	0.6296	0.9150	0.0065	0.2749	0.0071	0.3004
120	49.20	0.07	0.0882	5.9999	0.0192	5.9999	0.6809	0.9336	0.0056	0.2777	0.0060	0.2975
121	49.37	0.03	0.0886	5.9999	0.0157	5.9999	0.7406	0.9910	0.0057	0.2892	0.0058	0.2918
122	49.55	0.02	0.0867	5.9999	0.0155	5.9999	0.8203	1.0433	0.0100	0.3014	0.0096	0.2889
123	49.73	0.02	0.0867	5.9999	0.0141	5.9999	1.3176	1.0091	0.0055	0.2938	0.0054	0.2912
124	49.89	0.03	0.0870	5.9999	0.0156	5.9999	0.9294	0.9947	0.0056	0.2935	0.0056	0.2951
125	50.08	0.02	0.0874	5.9999	0.0138	5.9999	1.8649	0.9996	0.0062	0.2946	0.0062	0.2941
126	50.24	0.02	0.0870	5.9999	0.0164	5.9999	0.9647	1.0088	0.0056	0.2947	0.0056	0.2921
127	50.41	0.03	0.0868	5.9999	0.0147	5.9999	1.3868	1.0002	0.0052	0.2934	0.0052	0.2933
128	50.56	0.03	0.0866	5.9999	0.0172	5.9999	0.9247	0.9869	0.0038	0.2887	0.0038	0.2925
129	50.75	0.02	0.0822	5.9999	0.0142	5.9999	1.1639	1.0113	0.0047	0.2940	0.0046	0.2907
130	50.90	0.04	0.0822	5.9999	0.0154	5.9999	1.2623	1.0090	0.0036	0.2920	0.0036	0.2905
131	51.09	0.04	0.0815	5.9999	0.0162	5.9999	0.7397	0.9938	0.0045	0.2878	0.0045	0.2898
132	51.25	0.04	0.0867	5.9999	0.0147	5.9999	0.7661	1.0011	0.0043	0.2883	0.0043	0.2880
133	51.40	0.03	0.0870	5.9999	0.0165	5.9999	0.9706	0.9922	0.0042	0.2850	0.0042	0.2872
134	51.59	0.04	0.0854	5.9999	0.0170	5.9999	1.1039	1.0020	0.0030	0.2874	0.0030	0.2868
135	51.75	0.05	0.0835	5.9999	0.0163	5.9999	0.6936	1.0265	0.0036	0.2928	0.0035	0.2867
136	51.92	0.06	0.0836	5.9999	0.0151	5.9999	0.6398	1.0415	0.0035	0.2942	0.0034	0.2825
137	52.09	0.06	0.0836	5.9999	0.0157	5.9999	0.6653	1.0340	0.0038	0.2924	0.0037	0.2828
138	52.25	0.06	0.0855	5.9999	0.0181	5.9999	0.6054	1.0338	0.0041	0.2904	0.0040	0.2809

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 102 MACH 0.80 REIC-6 1.7 PHI 0.C CONF BIAGF14 L C.C DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

FCIAT	ALPHA	BETA	CNF3	Cm3	CB3	XCPF3	YCPF3	CNF4	Cm4	CB4	XCPF4	YCPF4
139	52.43	C.06	C.0215	S.9999	C.C175	S.9999	0.7991	1.0725	0.0052	0.2582	0.0048	0.2788
140	52.59	0.06	C.C2C5	S.9999	0.C173	S.9999	0.6431	1.0747	0.0057	0.2580	0.C053	C.2773
141	52.76	0.06	0.0236	S.9999	0.C177	S.9999	0.7500	1.0880	0.0046	0.3008	0.0044	C.2765
142	52.94	0.07	C.C284	S.9999	C.C154	S.9999	0.6431	1.0606	0.0055	0.2533	0.0052	C.2765
143	53.10	0.09	0.0353	S.9999	0.C151	S.9999	0.5736	1.0287	0.0069	0.2839	0.0067	0.2760
144	53.27	0.10	0.0334	S.9999	C.C162	S.9999	0.5748	0.9951	0.0064	0.2771	0.0064	0.2785
145	53.43	C.09	0.0318	S.9999	C.C21C	S.9999	0.6604	1.0073	0.0048	0.2800	0.0048	0.2780
146	53.58	0.08	0.0363	S.9999	0.0215	S.9999	0.5614	1.0451	0.0053	0.2883	0.C051	0.2759
147	53.74	0.10	0.0385	S.9999	0.C190	S.9999	0.4935	0.9976	0.0058	0.2752	0.0058	C.2759
148	53.90	0.10	0.0352	S.9999	C.C187	S.9999	0.5313	0.9756	0.0060	0.2703	0.0061	0.2771
149	54.11	0.10	0.0335	S.9999	C.C195	S.9999	0.5940	0.9798	0.0052	0.2704	0.0053	0.2780
150	54.26	0.08	0.0352	S.9999	C.C201	S.9999	0.5710	0.9881	0.0114	0.2688	0.0115	0.2720
151	54.44	C.08	C.C3C4	S.9999	0.C151	S.9999	0.6283	1.0115	0.0192	0.2700	0.C190	0.2665
152	54.58	C.07	0.0337	S.9999	0.C143	S.9999	0.5727	0.9808	0.0139	0.2645	0.0142	0.2697
153	54.76	0.06	0.0371	S.9999	0.C19C	S.9999	0.5121	1.0189	0.0173	0.2722	0.0170	0.2672
154	54.91	0.06	C.04C3	S.9999	0.C231	S.9999	0.5732	1.0273	0.0135	0.2760	0.0131	0.2687
155	55.07	0.08	0.0335	S.9999	C.C168	S.9999	0.4956	1.0352	0.0152	0.2763	0.C147	0.2665
156	55.23	C.07	C.C387	S.9999	C.C211	S.9999	0.5452	1.0213	0.0118	0.2759	0.0116	0.2701
157	55.39	C.06	C.C387	S.9999	C.C151	S.9999	0.4935	1.0438	0.0131	0.2795	0.C125	0.2678
158	55.54	0.07	C.C367	S.9999	0.C196	S.9999	0.5116	1.0139	0.0091	0.2750	0.C09C	0.2712
159	55.72	0.07	C.C388	S.9999	0.C172	S.9999	0.4633	1.0295	0.0103	0.2771	0.0100	C.2692
160	55.89	0.07	C.C4C4	S.9999	C.C186	S.9999	0.4004	1.0323	0.0114	0.2769	0.0110	0.2682
161	56.05	C.09	0.0388	S.9999	0.0166	S.9999	0.4278	1.0350	0.0079	0.2796	0.0078	0.2701
162	56.22	0.08	0.0465	S.9999	C.C2C4	S.9999	0.4350	1.0395	0.0068	0.2811	0.0065	0.2704
163	56.36	C.07	C.C371	S.9999	C.C176	S.9999	0.4582	1.0535	0.0097	0.2837	0.C092	0.2693
164	56.52	0.09	C.0337	S.9999	C.C174	S.9999	0.5163	1.0536	0.0092	0.2839	0.0087	0.2695
165	56.69	0.07	C.C33E	S.9999	0.C155	S.9999	0.4586	1.0607	0.0096	0.2845	0.0089	0.2682
166	56.82	0.08	C.C336	S.9999	0.C173	S.9999	0.5149	1.0557	0.0081	0.2834	0.0077	0.2684
167	56.99	C.07	C.C4C1	S.9999	C.C185	S.9999	0.4613	1.0635	0.0072	0.2867	0.0068	0.2696
168	57.14	0.06	0.0402	S.9999	0.C155	S.9999	0.3955	1.0617	0.0072	0.2852	0.0068	0.2688
169	57.29	0.05	C.C4C1	S.9999	0.0135	S.9999	0.3965	1.0528	0.0064	0.2839	0.0061	0.2697
170	57.44	0.06	C.C336	S.9999	0.C147	S.9999	0.4375	1.0517	0.0050	0.2838	0.C048	0.2698
171	57.58	C.05	C.C352	S.9999	0.0135	S.9999	0.4403	1.0766	0.0056	0.2898	0.C052	C.2692
172	57.71	0.03	0.0367	S.9999	0.C143	S.9999	0.3896	1.0470	0.0055	0.2814	0.0053	C.2688
173	57.86	0.04	0.0447	S.9999	C.C162	S.9999	0.3624	1.0567	0.0045	0.2847	0.0042	0.2689
174	58.02	0.05	0.0395	S.9999	0.C15E	S.9999	0.3960	1.0704	0.0057	0.2878	0.0053	0.2689
175	58.15	C.03	C.C43C	S.9999	C.C188	S.9999	0.4326	1.0583	0.0026	0.2862	0.0025	0.2704
176	58.26	0.02	C.C46C	S.9999	0.C133	S.9999	0.3325	1.0635	0.0053	0.2852	0.C050	0.2682
177	58.21	C.04	C.C432	S.9999	C.C14E	S.9999	0.3426	1.0672	0.0050	0.2854	0.C047	0.2674
178	58.22	0.03	0.0415	S.9999	0.C153	S.9999	0.3667	1.0623	0.0021	0.2864	0.0020	0.2696
179	58.23	0.02	C.C3E7	S.9999	C.C145	S.9999	0.4060	1.0687	0.0030	0.2871	0.C028	0.2688

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RA10-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	103	0.90	1.7	0.0	81e0F14	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.73	0.02	-1.3225	4.0857	-0.0725	-0.3546	-0.0002	0.3976	0.1139	0.2787	-3.0894
2	-5.75	0.01	-1.3257	4.0576	0.0198	-0.0122	-0.0002	0.3964	0.1172	0.2792	-3.0603
3	-5.75	0.02	-1.3209	4.1632	0.0775	-0.1164	-0.0001	0.4029	0.1181	0.2848	-3.0592
4	-5.75	0.02	-1.3126	4.0466	0.0651	-0.0535	0.0	0.3962	0.1180	0.2782	-3.0839
5	-5.26	0.01	-1.1377	3.8565	-0.0356	0.0277	0.0	0.3920	0.1067	0.2853	-3.2140
6	-3.33	0.02	-0.9015	3.0960	0.0364	-0.0691	0.0007	0.3648	0.0952	0.2695	-3.4277
7	-1.54	0.02	-0.6523	2.5118	0.0665	-0.0620	0.0011	0.3385	0.0859	0.2530	-3.8501
8	0.38	0.02	-0.3625	1.9525	0.0356	-0.0401	0.0016	0.3135	0.0821	0.2313	-5.3870
9	2.25	0.02	-0.1262	1.4684	0.0124	-0.1295	0.0024	0.2894	0.0795	0.2098	-11.6387
10	4.09	0.03	0.1494	1.0049	0.1542	-0.2166	0.0032	0.2730	0.0821	0.1909	8.0803
11	5.97	0.00	0.3612	0.7413	-0.1743	0.0839	0.0032	0.2603	0.0895	0.1768	2.4615
12	7.87	0.02	0.5831	0.4756	-0.0026	-0.0260	0.0042	0.2551	0.1026	0.1526	0.9459
13	9.67	0.02	0.7837	0.1176	0.0120	-0.0228	0.0051	0.2473	0.1139	0.1335	0.1504
14	11.01	0.01	1.0269	-0.0057	-0.1457	0.1616	0.0055	0.2297	0.1224	0.1074	-0.2970
15	13.45	0.02	1.2127	-0.2748	-0.0145	0.0130	0.0130	0.2093	0.1303	0.0790	-0.5902
16	15.38	0.02	1.4597	-1.2924	0.0412	0.0105	0.0074	0.1871	0.1385	0.0486	-0.7787
17	17.35	0.02	2.0265	-1.8662	-0.0444	0.2490	0.0270	0.1529	0.1498	0.0031	-0.9155
18	19.26	0.01	2.3651	-2.2485	-0.2203	0.3519	0.0400	0.1410	0.1662	-0.0252	-1.0124
19	21.21	-0.00	2.7755	-2.9827	-0.4427	1.0737	0.0460	0.1190	0.1859	-0.0669	-1.0746
20	23.14	-0.00	3.1818	-3.5006	-0.4709	1.3085	0.0540	0.0776	0.1955	-0.1179	-1.1002
21	25.05	0.01	3.5851	-3.8362	-0.3224	0.7292	0.0503	0.0366	0.1926	-0.1560	-1.0694
22	26.99	0.05	4.1468	-4.0386	0.2473	-0.3266	0.0410	-0.0179	0.1875	-0.2054	-0.9739
23	28.23	0.05	4.2754	-4.1340	0.2471	-0.2454	0.0357	-0.0405	0.1912	-0.2317	-0.9660
24	28.25	0.05	4.4112	-4.1755	0.3821	-0.7020	0.0265	-0.0443	0.1924	-0.2367	-0.9466
25	28.30	0.05	4.4844	-4.2828	0.4234	-0.9129	0.0698	-0.0557	0.1926	-0.2485	-0.9593
26	28.71	0.06	4.4860	-4.2841	0.4254	-0.8040	0.0634	-0.0506	0.1949	-0.2255	-0.9505
27	26.98	0.06	4.5345	-4.3317	0.4595	-0.4347	0.0500	-0.0417	0.1957	-0.2374	-0.9552
28	29.21	0.05	4.6568	-4.5104	0.4403	-0.6769	0.0766	-0.0566	0.1977	-0.2563	-0.9681
29	29.81	0.06	4.8221	-4.4516	0.5524	-0.9010	0.0779	-0.0564	0.1994	-0.2556	-0.9313
30	29.89	0.07	4.8740	-4.4842	0.7028	-1.1301	0.0789	-0.0614	0.2023	-0.2637	-0.9195
31	30.17	0.07	4.9357	-4.4566	0.7067	-1.0650	0.0787	-0.0527	0.2036	-0.2563	-0.9107
32	30.44	0.07	5.0306	-4.5832	0.5550	-0.8159	0.0766	-0.0753	0.2032	-0.2785	-0.9112
33	30.71	0.07	5.1910	-4.6424	0.6028	-0.8033	0.0789	-0.0845	0.2061	-0.2907	-0.8943
34	30.98	0.06	5.2038	-4.6741	0.5827	-0.4085	0.0766	-0.0872	0.2062	-0.2935	-0.8782
35	31.25	0.07	5.3657	-4.8134	0.6245	-0.4497	0.0791	-0.0867	0.2069	-0.2937	-0.8600
36	31.54	0.07	5.5003	-4.8767	0.5914	-0.2904	0.0761	-0.1031	0.2100	-0.3131	-0.8492
37	31.81	0.07	5.6504	-4.8242	0.5875	-0.3443	0.0930	-0.1067	0.2121	-0.3206	-0.8184
38	32.09	0.05	5.7446	-4.9463	0.3401	-0.0650	0.0795	-0.1190	0.2108	-0.3296	-0.7919
39	32.36	0.06	5.8131	-4.9053	0.4533	-0.0338	0.0798	-0.1221	0.2137	-0.3358	-0.7750
40	32.61	0.05	5.8534	-4.9378	0.3676	0.1413	0.0735	-0.1155	0.2134	-0.3369	-0.7581
41	32.88	0.06	6.0353	-4.9755	0.4586	-0.1519	0.0814	-0.1312	0.2137	-0.3449	-0.7246
42	33.15	0.06	6.0717	-4.9296	0.4706	-0.4542	0.0829	-0.1283	0.2129	-0.3412	-0.6983
43	33.40	0.06	6.2717	-4.9233	0.7781	-0.8804	0.1107	-0.1161	0.2166	-0.3327	-0.6734
44	33.66	0.05	6.4279	-4.9555	0.9257	-1.3830	0.1184	-0.1410	0.2155	-0.3365	-0.6371
45	33.92	0.06	6.5681	-4.9811	0.8657	-1.2631	0.1186	-0.1494	0.2169	-0.3658	-0.6183
46	34.17	0.05	6.6469	-5.0956	0.5647	-0.6781	0.0967	-0.1001	0.2151	-0.3732	-0.5868

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 103 MACH 0.90 RNIC=6 1.7 PHI C.C DELTA 0 DELF -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN CONF 61OF14 C.C

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	LAD	CAF	XCP
47	34.40	0.05	6.8697	-3.7593	0.4881	-0.4104	0.0982	-0.1582	0.2156	-0.3738	-0.5687
48	34.00	0.03	6.8258	-3.8063	0.2932	-0.1210	0.0720	-0.1658	0.2081	-0.3739	-0.5422
49	34.92	0.04	6.8759	-3.8553	0.3675	-0.0303	0.0526	-0.1731	0.2068	-0.3799	-0.5031
50	35.14	0.01	6.8334	-3.8934	0.1162	0.1475	0.0356	-0.1702	0.2044	-0.3746	-0.4966
51	35.41	0.00	7.0213	-3.9525	-0.1265	0.3169	0.0057	-0.1775	0.2086	-0.3861	-0.4974
52	35.65	-0.00	7.0564	-3.9136	-0.2655	0.4672	0.0003	-0.1919	0.2123	-0.4042	-0.4655
53	35.91	0.01	7.1262	-3.2875	-0.1703	1.0325	-0.0136	-0.1760	0.2124	-0.3964	-0.4614
54	36.13	0.01	7.1363	-3.9336	-0.1175	0.9923	0.0165	-0.1953	0.2126	-0.4081	-0.4603
55	36.37	0.03	7.1815	-3.9239	0.0841	0.8292	0.0272	-0.1738	0.2174	-0.3912	-0.4367
56	36.64	0.01	7.1561	-3.9546	-0.1522	0.8408	-0.0054	-0.1821	0.2149	-0.3970	-0.4453
57	36.85	0.00	7.1979	-3.9282	-0.1462	0.8851	-0.0044	-0.1932	0.2132	-0.4064	-0.4306
58	37.07	-0.01	7.1860	-3.1972	-0.2524	0.7501	0.0024	-0.2039	0.2146	-0.4179	-0.4218
59	37.34	0.02	7.2183	-3.9322	0.0825	0.8414	0.0426	-0.2063	0.2146	-0.4239	-0.4188
60	37.57	0.04	7.2062	-3.9648	0.0592	0.6214	0.0256	-0.2071	0.2154	-0.4225	-0.4116
61	37.80	0.02	7.2100	-3.1857	0.0101	0.2597	0.0371	-0.1904	0.2156	-0.4062	-0.4084
62	38.05	0.03	7.2139	-3.0862	0.2162	0.0064	0.0512	-0.1939	0.2221	-0.4160	-0.3894
63	38.27	0.03	7.2764	-3.0584	0.2027	0.0130	0.0365	-0.2163	0.2204	-0.4367	-0.3883
64	38.51	0.04	8.1118	-3.2038	0.3339	0.1745	0.0573	-0.2120	0.2235	-0.4353	-0.3950
65	38.77	0.01	8.1754	-3.1262	-0.0341	0.4528	0.0251	-0.2111	0.2206	-0.4319	-0.3822
66	39.01	0.03	8.2357	-3.1480	0.1089	0.7065	0.0625	-0.1969	0.2263	-0.4332	-0.3822
67	39.22	0.03	8.3171	-3.1145	0.2286	0.9382	0.0441	-0.2220	0.2305	-0.4525	-0.3745
68	39.46	-0.01	8.3767	-3.1553	-0.3474	1.2481	0.0296	-0.2110	0.2475	-0.4565	-0.3771
69	39.67	-0.00	8.3671	-3.0541	-0.2104	1.0317	0.0240	-0.2352	0.2421	-0.4773	-0.3650
70	39.87	-0.01	8.5186	-3.0414	-0.3648	1.5014	0.0036	-0.2112	0.2433	-0.4545	-0.3570
71	40.12	0.01	8.5568	-3.2918	-0.1215	1.4567	0.0357	-0.1760	0.2647	-0.4607	-0.3847
72	40.33	-0.02	8.7024	-3.0849	-0.4133	1.3401	-0.0142	-0.2347	0.2376	-0.4723	-0.3545
73	40.52	-0.01	8.8035	-3.2771	-0.2331	1.8773	0.0165	-0.2508	0.2538	-0.5047	-0.3722
74	40.72	-0.03	8.8365	-3.0532	-0.3524	1.4822	-0.0207	-0.2491	0.2371	-0.4803	-0.3500
75	40.93	-0.00	8.8802	-3.1273	-0.1392	1.3595	-0.0142	-0.2424	0.2400	-0.4825	-0.3530
76	41.14	-0.03	8.8496	-3.0066	-0.3205	1.4406	-0.0075	-0.2211	0.2447	-0.4658	-0.3357
77	41.35	-0.02	8.9332	-3.1471	-0.2954	1.2412	-0.0195	-0.2272	0.2371	-0.4643	-0.3523
78	41.55	-0.00	8.9542	-3.1213	-0.1787	1.0497	0.0036	-0.1972	0.2626	-0.4598	-0.3476
79	41.76	-0.02	9.1747	-3.0367	-0.2796	1.2835	0.0071	-0.2412	0.2396	-0.4808	-0.3310
80	41.97	-0.02	9.2631	-3.0456	-0.1214	1.0284	0.0067	-0.2000	0.2337	-0.4936	-0.3342
81	42.16	-0.01	9.3253	-2.9813	-0.0097	0.8737	0.0160	-0.2037	0.2325	-0.4963	-0.3206
82	42.36	-0.01	9.2764	-3.0282	-0.1161	0.9376	0.0008	-0.2529	0.2433	-0.4963	-0.3262
83	42.55	-0.03	9.4896	-3.2101	-0.3495	1.6235	0.0328	-0.2610	0.2547	-0.5158	-0.3383
84	42.74	-0.02	9.4760	-3.0550	-0.0756	0.7242	0.0100	-0.2674	0.2484	-0.5164	-0.3223
85	42.93	-0.02	9.5562	-2.9110	0.0505	0.5243	0.0305	-0.2466	0.2555	-0.5022	-0.3046
86	43.11	-0.04	9.7154	-3.1430	-0.0746	-0.2512	0.0200	-0.2643	0.2517	-0.5161	-0.3234
87	43.26	-0.03	9.6174	-3.1154	-0.0625	0.5794	0.0435	-0.2740	0.2434	-0.5225	-0.3243
88	43.47	-0.04	9.8167	-3.2756	-0.3725	1.6896	0.0200	-0.2514	0.2615	-0.5128	-0.3340
89	43.64	-0.01	9.7327	-2.9711	0.1279	0.1511	0.0494	-0.2594	0.2430	-0.5025	-0.3033
90	43.83	-0.01	9.8360	-3.0210	0.1416	0.1308	0.0456	-0.2643	0.2459	-0.5103	-0.3071
91	44.01	-0.05	9.9917	-3.1835	-0.3545	0.5814	0.0389	-0.3028	0.2506	-0.5532	-0.3187
92	44.21	-0.02	10.0552	-3.2153	-0.0150	0.5746	0.0388	-0.2717	0.2546	-0.5264	-0.3196

PARTIAL MISSILE TAILS EFFECTS DATA

TEST 7 | PART 103 | MACH 0.90 | RX10-6 1.7 | PHI 0.0 | CONF 0 INCH 14 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLN	CY	CLN	CLL	LA	CAB	CAF	XCP
93	44.38	0.00	10.00743	-3.16603	0.2512	0.4284	0.0452	-0.2767	0.2525	-0.5313	-0.3157
94	44.59	0.01	10.02043	-3.02331	0.4724	-0.5499	0.0426	-0.3080	0.2508	-0.5588	-0.3163
95	44.78	-0.00	10.02323	-3.18315	0.2024	0.5542	0.0390	-0.2567	0.2500	-0.5068	-0.3111
96	44.99	-0.01	10.03776	-3.22866	0.0e27	0.e057	0.0316	-0.2997	0.2596	-0.5593	-0.3161
97	45.13	0.02	10.05063	-3.24063	0.3145	0.1522	0.0306	-0.3090	0.2579	-0.5669	-0.3264
98	45.31	-0.04	10.04260	-3.24668	-0.2697	0.7363	0.0347	-0.2774	0.2602	-0.5437	-0.3116
99	45.53	-0.04	10.07702	-3.30652	-0.2014	1.1067	0.0263	-0.3174	0.2576	-0.5752	-0.3158
100	45.66	-0.01	10.08385	-3.33376	0.2760	0.5249	0.0340	-0.2731	0.2658	-0.5390	-0.3137
101	45.80	-0.02	10.09950	-3.39507	-0.0476	1.5505	0.0352	-0.2882	0.2667	-0.5570	-0.3234
102	46.03	-0.04	10.10713	-3.36951	-0.1166	0.6547	0.0347	-0.2901	0.2682	-0.5563	-0.3129
103	46.14	-0.02	10.11154	-3.41100	0.0537	1.1192	0.0370	-0.2637	0.2766	-0.5624	-0.3159
104	46.36	-0.04	10.13463	-3.44216	-0.4291	1.6762	-0.0124	-0.2508	0.2610	-0.5323	-0.3125
105	46.57	-0.04	11.00802	-3.00812	-0.2471	2.1554	-0.0526	-0.2449	0.3145	-0.5594	-0.3322
106	46.73	-0.06	11.02485	-3.06813	-0.5470	2.4803	-0.0657	-0.2620	0.3175	-0.5795	-0.3455
107	46.91	-0.04	11.04402	-3.04918	-0.3256	2.2570	-0.0481	-0.2766	0.3031	-0.5847	-0.3134
108	47.07	-0.05	11.06388	-3.04384	-0.3138	1.9474	-0.0572	-0.2578	0.3107	-0.5665	-0.3060
109	47.26	-0.06	11.08583	-3.71068	-0.5232	2.4030	-0.0837	-0.2677	0.3519	-0.6156	-0.3227
110	47.43	-0.06	11.10438	-3.73062	-0.5356	2.0341	-0.0846	-0.2400	0.3340	-0.5790	-0.3265
111	47.61	-0.06	11.12754	-3.51668	-0.4351	1.4521	-0.0693	-0.2825	0.3169	-0.5994	-0.3064
112	47.78	-0.01	11.14431	-3.57737	0.1844	1.5017	-0.0103	-0.2842	0.3237	-0.6029	-0.3069
113	47.96	-0.01	11.16338	-3.56670	0.1030	2.0506	-0.0360	-0.2881	0.3283	-0.6144	-0.3136
114	48.13	-0.00	11.17282	-3.57371	0.2506	2.0415	-0.0251	-0.2436	0.3241	-0.5677	-0.3203
115	48.31	0.00	11.19241	-4.01711	0.1077	2.7402	-0.0784	-0.2255	0.4002	-0.6257	-0.3457
116	48.48	-0.05	11.20691	-4.04413	-0.3424	2.7362	-0.0846	-0.2137	0.3814	-0.5851	-0.3395
117	48.65	0.01	12.02726	-4.27716	0.1976	2.8865	-0.0765	-0.2398	0.3760	-0.6158	-0.3527
118	48.80	0.02	12.04934	-4.24565	0.3746	2.8808	-0.0789	-0.2265	0.3770	-0.6041	-0.3555
119	48.99	-0.04	12.06810	-4.05171	-0.3665	3.3024	-0.0914	-0.2149	0.3880	-0.6029	-0.3678
120	49.17	0.03	12.08560	-4.06041	0.3e04	3.1473	-0.0904	-0.2231	0.4136	-0.6369	-0.3717
121	49.32	0.04	12.10041	-4.08735	0.5233	3.1495	-0.1181	-0.1971	0.4584	-0.5455	-0.3561
122	49.50	0.02	12.12526	-4.06165	0.3148	3.0e31	-0.1167	-0.1826	0.4799	-0.5825	-0.3921
123	49.68	-0.01	12.15085	-4.08921	0.0304	3.1114	-0.1099	-0.1961	0.4983	-0.5884	-0.3912
124	49.86	0.05	12.17594	-3.97562	0.6321	2.8963	-0.0941	-0.0500	0.5153	-0.5739	-0.4117
125	50.03	0.06	12.19372	-3.98036	0.8030	3.0279	-0.0952	-0.0731	0.5414	-0.6145	-0.4085
126	50.20	0.05	12.20351	-3.96222	0.7151	2.8672	-0.0931	-0.0393	0.5504	-0.5957	-0.4147
127	50.41	0.05	13.01737	-3.97323	0.7700	2.8575	-0.0814	-0.0783	0.5e89	-0.6472	-0.4351
128	50.58	0.07	13.03313	-3.98659	0.8e39	2.9e52	-0.0804	-0.0719	0.6195	-0.6814	-0.4568
129	50.74	0.03	13.05152	-3.95145	0.5911	2.8155	-0.0863	-0.1737	0.4802	-0.6039	-0.4481
130	50.91	0.05	13.06956	-3.79622	0.5e34	2.3605	-0.0219	-0.1352	0.4446	-0.5780	-0.4356
131	51.07	0.05	13.08318	-3.90810	0.6044	2.5581	0.0026	-0.1284	0.4464	-0.5728	-0.4426
132	51.26	0.06	13.09764	-3.89346	1.0076	2.5266	-0.0101	-0.1027	0.4659	-0.6266	-0.4345
133	51.42	0.07	13.09615	-3.92550	0.8754	2.8692	0.0085	-0.1452	0.4951	-0.6402	-0.4369
134	51.59	0.04	13.10933	-3.82519	0.5446	2.4508	-0.0056	-0.1104	0.4984	-0.6167	-0.4562
135	51.79	0.03	13.12660	-3.82575	0.5110	2.5362	-0.0025	-0.0975	0.5087	-0.6061	-0.4502
136	51.96	-0.02	14.13460	-3.80631	0.0512	3.2019	0.0038	-0.1056	0.5124	-0.6179	-0.4672
137	52.14	0.05	14.14504	-3.86655	0.7387	3.4211	0.0156	-0.0905	0.5220	-0.6125	-0.4751
138	52.30	0.01	14.21108	-3.74944	0.3726	3.1078	0.0107	-0.0687	0.5194	-0.5891	-0.4749

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 6

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 103 MACH 0.90 RX10-6 1.7 PHI 0.0 CONF 81BLF14 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.48	0.02	14.4758	-0.7041	0.4737	2.7520	0.0191	-0.1243	0.5120	-0.6359	-0.4631
140	52.64	0.01	14.3618	-0.7065	0.4404	2.6272	0.0127	-0.1374	0.5131	-0.6504	-0.4708
141	52.79	0.03	14.3349	-0.5385	0.6092	2.8257	0.0181	-0.0922	0.5123	-0.6045	-0.4562
142	52.97	0.05	14.5137	-0.8542	0.7447	2.8795	0.0190	-0.1148	0.5118	-0.6265	-0.4565
143	53.15	0.06	14.4439	-0.8067	0.8118	2.8274	0.0367	-0.1096	0.5076	-0.6171	-0.4712
144	53.49	0.03	14.3557	-0.8548	0.7243	2.8141	0.0136	-0.0901	0.5092	-0.5993	-0.4594
145	53.45	0.07	14.4026	-0.7264	1.0834	2.7826	0.0196	-0.1052	0.5063	-0.6114	-0.4670
146	53.63	0.05	14.3085	-0.7167	0.8232	2.8599	0.0211	-0.1348	0.5096	-0.6443	-0.4625
147	53.79	0.03	14.4440	-0.7457	0.8655	1.9435	0.0218	-0.1108	0.5038	-0.6145	-0.4673
148	53.93	0.04	14.4024	-0.8065	0.8873	2.8799	0.0328	-0.1092	0.5055	-0.6146	-0.4629
149	54.09	0.08	14.4262	-0.8835	1.1485	2.8463	0.0269	-0.1171	0.5025	-0.6195	-0.4633
150	54.25	0.07	14.4656	-0.8054	1.1571	1.9401	0.0273	-0.1196	0.5021	-0.6216	-0.4706
151	54.41	0.07	14.3578	-0.8567	1.0584	1.8516	0.0210	-0.1184	0.5033	-0.6216	-0.4733
152	54.56	0.06	14.5422	-0.8042	1.0831	1.8197	0.0283	-0.0944	0.5013	-0.5957	-0.4718
153	54.72	0.06	14.6031	-0.8968	1.0028	1.8311	0.0286	-0.1082	0.4992	-0.6073	-0.4724
154	54.88	0.05	14.5303	-0.8546	0.9267	1.7445	0.0225	-0.1242	0.5013	-0.6214	-0.4717
155	55.03	0.02	14.7046	-0.8273	0.8211	1.8236	0.0296	-0.1436	0.4995	-0.6230	-0.4779
156	55.19	0.02	14.7635	-0.8247	0.7102	1.8501	0.0306	-0.1241	0.4992	-0.6232	-0.4694
157	55.34	0.04	14.7054	-0.8148	0.8863	1.8783	0.0374	-0.1302	0.5017	-0.6318	-0.4702
158	55.49	0.05	14.8334	-0.8566	0.9010	1.9110	0.0377	-0.1419	0.5006	-0.6426	-0.4623
159	55.64	0.05	14.8221	-0.8866	0.8872	1.8661	0.0366	-0.1627	0.5025	-0.6651	-0.4715
160	55.79	0.05	14.7758	-0.8214	0.8140	1.8585	0.0440	-0.1517	0.4992	-0.6508	-0.4683
161	55.94	0.05	14.7470	-0.8246	0.8754	1.8602	0.0378	-0.1492	0.4941	-0.6432	-0.4696
162	56.13	0.03	14.8020	-0.8475	0.8582	1.8584	0.0445	-0.1451	0.4992	-0.6442	-0.4626
163	56.26	0.02	14.7335	-0.8320	0.9852	1.8758	0.0440	-0.1484	0.4987	-0.6456	-0.4705
164	56.40	0.02	14.7735	-0.8503	0.7018	1.8431	0.0451	-0.1275	0.4950	-0.6224	-0.4691
165	56.56	0.01	14.8568	-0.7406	0.5617	1.1775	0.0454	-0.1573	0.5030	-0.6572	-0.4587
166	56.73	0.02	14.8241	-0.8058	0.8337	0.9598	0.0466	-0.1427	0.5039	-0.6465	-0.4497
167	56.89	-0.00	14.9030	-0.8117	0.4356	1.1793	0.0399	-0.1598	0.5067	-0.6664	-0.4571
168	57.03	0.04	14.9266	-0.8533	0.5604	0.9591	0.0462	-0.1651	0.5059	-0.6709	-0.4725
169	57.18	-0.00	14.8853	-0.7225	0.3666	1.0594	0.0535	-0.1343	0.5021	-0.6363	-0.4516
170	57.33	0.03	14.8854	-0.8125	0.8481	0.8095	0.0534	-0.1609	0.5064	-0.6873	-0.4644
171	57.49	-0.00	15.0323	-0.7391	0.5180	0.8185	0.0463	-0.1762	0.5116	-0.6896	-0.4683
172	57.64	-0.02	15.0381	-0.8450	0.4865	0.9834	0.0500	-0.1670	0.5263	-0.7073	-0.4219
173	57.78	-0.01	14.9480	-0.8555	0.3521	0.7508	0.0468	-0.1635	0.5179	-0.6814	-0.4255
174	57.91	-0.01	14.9223	-0.7578	0.4995	0.8300	0.0524	-0.1458	0.4817	-0.7271	-0.3885
175	58.05	-0.08	14.7537	-0.5887	-0.1537	-0.5720	0.0330	-0.2543	0.4467	-0.7011	-0.3774
176	58.22	-0.05	15.0313	-0.6741	-0.2556	-1.1262	0.0411	-0.2119	0.4833	-0.6952	-0.3969
177	58.36	-0.11	15.0373	-0.2918	-0.5441	-1.3882	0.0342	-0.1663	0.5335	-0.7018	-0.4184
178	58.47	-0.09	15.0256	-0.3164	-0.2212	-1.3494	0.0411	-0.1656	0.5402	-0.7058	-0.4202
179	58.46	-0.09	15.0740	-0.4923	-0.3050	-1.1571	0.0406	-0.1573	0.5458	-0.7031	-0.4307
180	58.49	-0.10	15.0865	-0.2134	-0.3309	-1.5310	0.0283	-0.2017	0.5234	-0.7251	-0.4120
181	58.46	-0.09	15.0372	-0.4164	-0.2257	-1.4250	0.0345	-0.1857	0.5432	-0.7289	-0.4267

PAGE 2 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 103 MACH 0.90 REIC-6 1.7 PRT 0.0 CONF BIBOFIN CG 0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PLANT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.73	0.02	-0.0171	-0.0016	0.0163	0.0936	-0.9532	-0.5793	0.0056	-0.2129	-0.0097	0.3675
2	-5.75	0.01	-0.0225	-0.0018	0.0193	0.0711	-0.8444	-0.5716	0.0054	-0.2116	-0.0094	0.3762
3	-5.75	0.02	-0.0220	-0.0018	0.0171	0.0900	-0.8550	-0.5838	0.0054	-0.2145	-0.0092	0.3674
4	-5.75	0.02	-0.0218	-0.0016	0.0156	0.0755	-0.7453	-0.5777	0.0054	-0.2140	-0.0093	0.3764
5	-5.28	0.01	-0.0253	-0.0016	0.0148	0.0632	-0.5850	-0.5166	0.0052	-0.2004	-0.0101	0.3875
6	-3.30	0.02	-0.0150	-0.0017	0.0146	0.1097	-0.9419	-0.4076	0.0082	-0.1631	-0.0201	0.4455
7	-1.54	0.02	-0.0140	-0.0016	0.0138	0.1145	-0.9714	-0.3003	0.0100	-0.1526	-0.0333	0.5082
8	0.38	0.02	-0.0136	-0.0015	0.0101	0.1163	-0.7426	-0.2124	0.0095	-0.1180	-0.0447	0.5556
9	2.25	0.02	-0.0081	-0.0015	0.0113	0.1652	-1.3951	-0.1227	0.0080	-0.0840	-0.0652	0.6846
10	4.09	0.03	-0.0027	-0.0022	0.0135	0.6147	-5.0000	-0.0362	0.0062	-0.0485	-0.1712	1.3398
11	5.97	0.00	-0.0121	-0.0031	0.0117	0.2562	-0.9869	0.0028	0.0052	-0.0193	1.8569	-6.8525
12	7.87	0.02	-0.0215	-0.0049	0.0066	0.1301	-0.3099	0.0264	0.0060	0.0001	0.1259	0.0019
13	9.87	0.02	-0.0079	-0.0052	0.0135	0.6581	-1.7089	0.0939	0.0076	0.0320	0.0805	0.3408
14	11.81	0.01	-0.0038	-0.0058	0.0132	1.6105	-3.0007	0.1003	0.0083	0.0552	0.0516	0.3444
15	13.43	0.02	-0.0078	-0.0062	0.0158	1.0511	-2.0256	0.2359	0.0092	0.0803	0.0356	0.3404
16	15.38	0.02	-0.0021	-0.0071	0.0193	0.2612	-0.4897	0.3077	0.0110	0.1063	0.0357	0.3455
17	17.35	0.02	-0.0254	-0.0117	0.0104	0.4008	-0.8378	0.3709	0.0134	0.1257	0.0361	0.3385
18	19.26	0.01	-0.0463	-0.0150	0.0101	0.3540	-0.6388	0.4218	0.0108	0.1381	0.0398	0.3274
19	21.21	-0.00	-0.0525	-0.0246	0.0028	0.2477	-0.0284	0.4640	0.0191	0.1454	0.0412	0.3134
20	23.14	-0.00	-0.1332	-0.0267	-0.0145	0.1554	0.0956	0.5305	0.0201	0.1643	0.0379	0.3057
21	25.05	0.01	-0.0872	-0.0265	-0.0046	0.1021	0.0528	0.6280	0.0243	0.1564	0.0387	0.3127
22	26.99	0.05	0.0766	-0.0245	-0.0440	-0.0022	0.5564	0.7004	0.0295	0.2220	0.0388	0.2926
23	28.23	0.05	0.0018	-0.0068	0.0135	-2.0552	7.5000	0.7635	0.0304	0.2169	0.0398	0.2841
24	28.25	0.05	0.0921	-0.0091	0.0302	-0.0524	0.5421	0.7907	0.0305	0.2223	0.0383	0.2796
25	28.30	0.05	0.1426	-0.0102	0.0264	-0.0404	0.4603	0.8056	0.0315	0.2264	0.0390	0.2800
26	28.71	0.06	0.1512	-0.0045	0.0084	-0.0524	0.4524	0.8178	0.0320	0.2266	0.0391	0.2771
27	28.96	0.06	0.1491	-0.0048	0.0075	-0.0440	0.4390	0.8116	0.0330	0.2226	0.0407	0.2743
28	29.27	0.05	0.1736	-0.0064	0.0109	-0.0370	0.4416	0.8298	0.0322	0.2261	0.0388	0.2725
29	29.61	0.06	0.1729	-0.0042	0.0744	-0.0243	0.4303	0.8475	0.0338	0.2277	0.0399	0.2685
30	29.85	0.07	0.2481	-0.0025	0.0508	-0.0102	0.3090	0.8663	0.0336	0.2311	0.0388	0.2668
31	30.17	0.07	0.2330	-0.0037	0.0245	-0.0155	0.3627	0.8770	0.0335	0.2332	0.0382	0.2659
32	30.44	0.07	0.1885	-0.0031	0.0710	-0.0104	0.3767	0.8892	0.0349	0.2278	0.0401	0.2621
33	30.71	0.07	0.1265	-0.0037	0.0536	-0.0292	0.4237	0.8983	0.0362	0.2246	0.0422	0.2617
34	30.98	0.06	0.1174	-0.0042	0.0456	-0.0358	0.4174	0.8839	0.0371	0.2353	0.0420	0.2662
35	31.25	0.07	0.1254	-0.0045	0.0537	-0.0348	0.4150	0.8869	0.0364	0.2273	0.0419	0.2618
36	31.54	0.07	0.1340	-0.0046	0.0553	-0.0193	0.4106	0.8883	0.0383	0.2327	0.0431	0.2620
37	31.81	0.07	0.1395	-0.0021	0.0565	-0.0150	0.4039	0.8929	0.0380	0.2393	0.0428	0.2637
38	32.09	0.05	0.1313	-0.0026	0.0423	-0.0257	0.4176	0.8958	0.0389	0.2352	0.0434	0.2626
39	32.38	0.06	0.0564	0.0	0.0365	0.0	0.4078	0.8834	0.0400	0.2306	0.0453	0.2610
40	32.61	0.05	0.0725	-0.0016	0.0360	-0.0218	0.4175	0.9045	0.0411	0.2361	0.0454	0.2610
41	32.86	0.06	0.1255	0.0007	0.0455	0.0056	0.3625	0.9108	0.0410	0.2348	0.0450	0.2578
42	33.15	0.06	0.1664	0.0016	0.0462	0.0057	0.3575	0.9245	0.0407	0.2402	0.0440	0.2598
43	33.40	0.08	0.1830	0.0017	0.0455	0.0093	0.3579	0.9292	0.0409	0.2382	0.0440	0.2563
44	33.66	0.05	0.2556	0.0025	0.0466	0.0152	0.3471	0.9643	0.0407	0.2460	0.0422	0.2551
45	33.92	0.06	0.2611	0.0025	0.0516	0.0111	0.3508	0.9665	0.0407	0.2452	0.0420	0.2531
46	34.17	0.05	0.1916	0.0013	0.0678	0.0068	0.3539	0.9700	0.0421	0.2463	0.0434	0.2536

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/10**6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 103 0.90 1.67 0.0 0 1&OF14 0.0 0 -10 0 -10 UNKNOWN

PLANT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	34.40	0.05	0.1436	0.0016	0.0493	0.0125	0.3426	0.9730	0.0427	0.2490	0.0429	0.2556
48	34.66	0.03	0.0952	0.0001	0.0344	0.0010	0.3591	0.9545	0.0415	0.2402	0.0435	0.2515
49	34.92	0.04	0.0336	0.0004	0.0085	0.0149	0.2649	0.9519	0.0423	0.2376	0.0444	0.2498
50	35.19	0.01	0.0225	0.0001	0.0054	0.0144	0.2358	0.9523	0.0422	0.2430	0.0438	0.2525
51	35.41	0.00	-0.0017	0.0013	-0.0295	-0.0211	0.4846	0.9530	0.0437	0.2376	0.0456	0.2453
52	35.69	-0.00	-0.0158	0.0012	-0.0436	-0.0121	0.4953	0.9394	0.0434	0.2352	0.0462	0.2504
53	35.91	0.01	-0.1571	0.0004	-0.0655	-0.0025	0.4169	0.9547	0.0425	0.2406	0.0445	0.2520
54	36.15	0.01	-0.0778	0.0003	-0.0518	-0.0018	0.4067	0.9422	0.0450	0.2423	0.0478	0.2466
55	36.37	0.03	-0.0531	-0.0013	-0.0171	0.0245	0.3220	0.9238	0.0467	0.2249	0.0505	0.2435
56	36.64	0.01	-0.1067	-0.0004	-0.0443	0.0037	0.4152	0.9421	0.0458	0.2305	0.0486	0.2447
57	36.85	0.00	-0.0772	0.0007	-0.0375	-0.0091	0.4058	0.9541	0.0467	0.2304	0.0485	0.2415
58	37.07	-0.01	-0.1069	0.0021	-0.0457	-0.0197	0.4071	0.9431	0.0472	0.2324	0.0490	0.2413
59	37.34	0.02	-0.0088	-0.0011	-0.0059	0.1250	0.6705	0.9627	0.0489	0.2299	0.0508	0.2388
60	37.57	0.02	-0.0137	0.0008	-0.0136	-0.0304	0.9009	0.9673	0.0488	0.2315	0.0504	0.2353
61	37.80	0.02	0.0113	0.0004	-0.0022	0.0354	-0.1947	0.9580	0.0501	0.2272	0.0523	0.2372
62	38.05	0.03	0.0511	-0.0023	0.0137	-0.0458	0.2661	0.9636	0.0513	0.2284	0.0532	0.2370
63	38.27	0.03	0.0067	-0.0008	-0.0027	-0.0698	-0.3103	0.9635	0.0509	0.2283	0.0528	0.2368
64	38.51	0.04	0.0263	-0.0003	0.0095	-0.1100	0.3498	0.9517	0.0522	0.2262	0.0548	0.2345
65	38.77	0.01	-0.0135	-0.0032	-0.0103	0.2370	0.7630	0.9684	0.0513	0.2276	0.0530	0.2350
66	39.01	0.03	0.0044	-0.0032	0.0133	-0.1817	0.7955	0.9440	0.0522	0.2223	0.0553	0.2355
67	39.22	0.03	-0.0020	-0.0030	-0.0036	0.4999	0.6000	0.9590	0.0527	0.2254	0.0549	0.2350
68	39.46	-0.01	-0.0020	-0.0044	-0.0239	0.0751	0.4010	0.9513	0.0526	0.2248	0.0555	0.2363
69	39.67	-0.00	-0.0732	-0.0033	-0.0256	0.0451	0.4044	0.9619	0.0523	0.2287	0.0544	0.2378
70	39.87	-0.01	-0.1438	-0.0047	-0.0504	0.0522	0.3808	0.9603	0.0528	0.2293	0.0546	0.2373
71	40.12	0.01	-0.0781	0.0002	-0.0282	-0.0026	0.3611	0.9375	0.0530	0.2233	0.0565	0.2382
72	40.33	-0.02	-0.1632	-0.0057	-0.0602	0.0345	0.3089	0.9602	0.0533	0.2293	0.0552	0.2373
73	40.52	-0.01	-0.1321	-0.0055	-0.0476	0.0413	0.3531	0.9419	0.0541	0.2219	0.0574	0.2356
74	40.72	-0.03	-0.1724	-0.0045	-0.0656	0.0201	0.3005	0.9540	0.0544	0.2242	0.0570	0.2350
75	40.93	-0.00	-0.1203	-0.0052	-0.0478	0.0288	0.3760	0.9555	0.0543	0.2255	0.0568	0.2360
76	41.14	-0.03	-0.1410	-0.0027	-0.0664	0.0184	0.4095	0.9760	0.0545	0.2322	0.0557	0.2374
77	41.35	-0.02	-0.1455	-0.0042	-0.0598	0.0269	0.4110	0.9870	0.0547	0.2348	0.0554	0.2375
78	41.55	-0.00	-0.1950	-0.0035	-0.0743	0.0179	0.3810	0.9431	0.0555	0.2226	0.0568	0.2362
79	41.78	-0.02	-0.1301	0.00	-0.0545	0.0	0.4220	0.9565	0.0568	0.2240	0.0554	0.2342
80	41.97	-0.02	-0.0574	0.0001	-0.0420	-0.0016	0.4383	0.9609	0.0578	0.2228	0.0601	0.2319
81	42.18	-0.01	-0.0718	-0.0003	-0.0385	0.0042	0.5098	0.9728	0.0584	0.2257	0.0600	0.2320
82	42.38	-0.01	-0.1447	-0.0004	-0.0551	0.0032	0.4419	0.9603	0.0581	0.2259	0.0600	0.2333
83	42.55	-0.03	-0.1224	0.00	-0.0518	0.0	0.4232	0.9395	0.0593	0.2146	0.0631	0.2284
84	42.74	-0.02	-0.0677	0.0007	-0.0172	-0.0909	2.2336	0.9999	0.0591	0.2322	0.0591	0.2322
85	42.93	-0.02	-0.0425	0.0003	-0.0233	-0.0070	0.5431	0.9786	0.0601	0.2263	0.0614	0.2312
86	43.11	-0.04	0.0519	-0.0003	0.0054	-0.0038	0.1340	1.0329	0.0610	0.2381	0.0590	0.2305
87	43.28	-0.03	-0.0070	0.0013	-0.0118	-0.1857	1.6571	0.9814	0.0611	0.2222	0.0622	0.2264
88	43.47	-0.04	-0.1105	0.0008	-0.0335	-0.0069	0.4575	0.9496	0.0610	0.2125	0.0642	0.2242
89	43.64	-0.01	-0.0305	0.0003	-0.0191	-0.0097	0.6181	0.9678	0.0621	0.2151	0.0642	0.2223
90	43.83	-0.01	0.0156	0.0005	-0.0041	0.0577	-0.2628	0.9963	0.0627	0.2224	0.0625	0.2232
91	44.01	-0.05	-0.1172	-0.0011	-0.0456	0.0094	0.3891	0.9860	0.0608	0.2243	0.0617	0.2275
92	44.21	-0.02	-0.0435	0.0006	-0.0203	-0.0182	0.5491	0.9947	0.0631	0.2225	0.0634	0.2237

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 103 0.00 | MACH 1.7 | REIC-E | PHI 0.0 | CONF 010CF14 | L C.C | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

PLANT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
93	44.38	0.00	-0.0040	0.0001	-0.0015	-0.0016	0.4922	0.9767	0.0632	0.2138	0.0647	0.2189
94	44.59	0.01	0.0042	0.0016	-0.0016	0.0007	-0.0011	1.0333	0.0641	0.2334	0.0620	0.2256
95	44.76	-0.00	-0.0035	0.0010	-0.0020	-0.0418	0.8368	1.0064	0.0639	0.2239	0.0635	0.2225
96	44.94	-0.01	-0.0028	0.0032	-0.0143	-1.1427	5.1371	1.0136	0.0644	0.2276	0.0635	0.2245
97	45.13	0.02	-0.0056	0.0021	-0.0036	-0.0376	0.6043	1.0108	0.0645	0.2255	0.0638	0.2231
98	45.31	-0.04	-0.0089	0.0025	-0.0240	-0.0510	0.5083	1.0106	0.0653	0.2262	0.0646	0.2238
99	45.50	-0.04	-0.0013	0.0036	-0.0346	-0.0555	0.5546	1.0270	0.0655	0.2345	0.0638	0.2287
100	45.66	-0.01	0.0077	0.0023	-0.0036	0.0030	-0.1300	1.0495	0.0655	0.2378	0.0624	0.2266
101	45.86	-0.02	-0.1955	0.0011	-0.0016	-0.0056	0.4185	1.0059	0.0644	0.2298	0.0640	0.2285
102	46.03	-0.04	-0.0085	0.0013	-0.0112	-0.1529	1.3176	1.0446	0.0664	0.2357	0.0635	0.2256
103	46.19	-0.02	-0.1353	-0.0012	-0.0535	0.0089	0.3939	1.0432	0.0651	0.2354	0.0624	0.2255
104	46.36	-0.04	-0.1768	-0.0042	-0.0941	0.0240	0.3753	1.0311	0.0644	0.2389	0.0624	0.2317
105	46.57	-0.04	-0.2383	-0.0035	-0.1281	0.0147	0.3697	1.0392	0.0611	0.2441	0.0588	0.2349
106	46.73	-0.06	-0.3029	-0.0041	-0.1646	0.0135	0.3433	1.0463	0.0607	0.2480	0.0579	0.2368
107	46.91	-0.04	-0.1663	-0.0028	-0.0835	0.0154	0.3773	1.0643	0.0626	0.2487	0.0588	0.2337
108	47.07	-0.03	-0.2356	-0.0044	-0.1295	0.0107	0.3558	1.0537	0.0629	0.2466	0.0597	0.2340
109	47.26	-0.06	-0.2693	-0.0062	-0.1569	0.0214	0.3619	1.0555	0.0616	0.2469	0.0584	0.2335
110	47.43	-0.06	-0.3508	-0.0081	-0.1951	0.0231	0.3483	1.0544	0.0585	0.2502	0.0555	0.2373
111	47.61	-0.08	-0.2319	-0.0052	-0.1226	0.0224	0.3131	1.0677	0.0613	0.2497	0.0574	0.2339
112	47.78	-0.01	-0.1770	-0.0034	-0.0965	0.0191	0.3181	1.0555	0.0629	0.2416	0.0596	0.2289
113	47.96	-0.01	-0.2252	-0.0023	-0.0766	0.0100	0.3438	1.0494	0.0632	0.2419	0.0602	0.2305
114	48.15	-0.00	-0.3142	-0.0063	-0.1622	0.0200	0.3253	1.0621	0.0589	0.2510	0.0554	0.2363
115	48.31	0.00	-0.3214	-0.0075	-0.1645	0.0246	0.3264	1.0835	0.0561	0.2559	0.0518	0.2362
116	48.48	-0.05	-0.3015	-0.0057	-0.1612	0.0107	0.3357	1.0630	0.0580	0.2484	0.0545	0.2335
117	48.65	0.01	-0.3566	-0.0056	-0.1145	0.0273	0.3193	1.0989	0.0536	0.2636	0.0496	0.2399
118	48.80	0.02	-0.3545	-0.0064	-0.1115	0.0237	0.3142	1.0972	0.0544	0.2561	0.0496	0.2352
119	48.99	-0.04	-0.3875	-0.0117	-0.1204	0.0302	0.3104	1.1157	0.0511	0.2684	0.0458	0.2406
120	49.17	0.03	-0.3613	-0.0171	-0.1126	0.0446	0.2937	1.1418	0.0486	0.2764	0.0427	0.2421
121	49.32	0.04	-0.3571	-0.0181	-0.1007	0.0507	0.2820	1.1335	0.0429	0.2755	0.0378	0.2431
122	49.50	0.02	-0.3156	-0.0177	-0.0962	0.0555	0.2628	1.1242	0.0273	0.2788	0.0261	0.2462
123	49.68	-0.01	-0.3323	-0.0222	-0.1091	0.0668	0.2681	1.1949	0.0338	0.2852	0.0293	0.2469
124	49.86	0.05	-0.2933	-0.0126	-0.0882	0.0518	0.2603	1.1114	0.0245	0.2703	0.0220	0.2432
125	50.03	0.06	-0.2744	-0.0123	-0.0762	0.0448	0.2777	1.0913	0.0206	0.2643	0.0185	0.2422
126	50.20	0.05	-0.2588	-0.0122	-0.0636	0.0511	0.2636	1.1005	0.0274	0.2644	0.0252	0.2396
127	50.41	0.05	-0.1828	-0.0233	-0.0360	0.1268	0.1959	1.1447	0.0238	0.2706	0.0208	0.2364
128	50.58	0.07	-0.2180	-0.0224	-0.0456	0.1024	0.1965	1.1401	0.0254	0.2667	0.0222	0.2327
129	50.74	0.03	-0.1572	-0.0216	-0.0299	0.1371	0.1867	1.1178	0.0090	0.2638	0.0081	0.2360
130	50.91	0.03	-0.1656	-0.0225	-0.0270	0.1303	0.1650	1.1357	0.0158	0.2662	0.0139	0.2344
131	51.07	0.05	-0.0518	-0.0174	-0.0063	0.1895	0.0686	1.1348	0.0046	0.2699	0.0041	0.2378
132	51.26	0.06	-0.1364	-0.0248	-0.0161	0.1616	0.1160	1.0814	0.0035	0.2603	0.0005	0.2407
133	51.42	0.07	-0.1182	-0.0196	-0.0131	0.1656	0.1106	1.1006	0.0003	0.2673	0.0003	0.2425
134	51.59	0.04	-0.1064	-0.0213	-0.0213	0.1427	0.1312	1.0755	-0.0022	0.2626	-0.0020	0.2442
135	51.79	0.03	-0.0025	-0.0100	0.0091	0.4788	-0.0798	1.0815	-0.0027	0.2666	-0.0029	0.2469
136	51.96	-0.02	-0.0065	-0.0087	-0.0034	0.4591	-0.0512	1.0736	-0.0033	0.2662	-0.0031	0.2479
137	52.14	0.05	-0.0718	-0.0324	-0.0058	0.4512	-0.0529	1.0832	-0.0030	0.2644	-0.0028	0.2487
138	52.30	0.01	-0.0848	-0.0325	-0.0012	0.3879	0.0142	1.0648	-0.0035	0.2651	-0.0033	0.2490

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 6 OF 8
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNLG-E PHI CONF E DEL1 DEL2 DEL3 DEL4 TRANSITION
7 1.03 0.90 1.0 0.0 0.1000E+14 0.0 0 -10 0 -10 UNKNOWN

PLINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
139	52.48	0.02	-0.0026	-0.0272	0.0037	0.4065	-0.0553	1.0813	-0.0032	0.2695	-0.0030	0.2492
140	52.89	0.01	-0.0027	-0.0226	0.0043	0.4174	-0.0854	1.0828	-0.0028	0.2694	-0.0026	0.2493
141	52.79	0.03	-0.0041	-0.0201	0.0030	0.3715	-0.0555	1.0786	-0.0022	0.2685	-0.0020	0.2498
142	52.97	0.03	-0.0073	-0.0144	0.0060	0.7651	-0.4624	1.0978	-0.0021	0.2739	-0.0019	0.2495
143	53.15	0.02	-0.0249	-0.0101	0.0075	0.0465	-0.3012	1.0914	-0.0026	0.2754	-0.0026	0.2523
144	53.29	0.03	-0.0052	-0.0104	0.0091	1.9613	-1.7590	1.0974	-0.0022	0.2748	-0.0020	0.2504
145	53.45	0.07	-0.0131	-0.0125	0.0086	0.9646	-0.6716	1.0974	-0.0020	0.2736	-0.0018	0.2493
146	53.63	0.05	-0.0053	-0.0119	0.0111	2.2450	-2.0943	1.1035	-0.0025	0.2764	-0.0023	0.2505
147	53.79	0.03	-0.0051	-0.0121	0.0098	2.3722	-1.9216	1.1066	-0.0031	0.2778	-0.0028	0.2516
148	53.93	0.04	-0.0065	-0.0144	0.0081	0.4721	-0.2000	1.0993	-0.0031	0.2734	-0.0028	0.2492
149	54.09	0.06	-0.0211	-0.0141	0.0078	0.6682	-0.3697	1.1063	-0.0032	0.2764	-0.0029	0.2494
150	54.25	0.07	-0.0171	-0.0134	0.0066	0.8126	-0.5146	1.1055	-0.0037	0.2760	-0.0033	0.2515
151	54.41	0.07	-0.0333	-0.0134	0.0054	0.4025	-0.1622	1.0916	-0.0035	0.2715	-0.0032	0.2487
152	54.56	0.06	-0.0155	-0.0134	0.0096	0.8427	-0.6038	1.1116	-0.0047	0.2790	-0.0042	0.2516
153	54.72	0.06	-0.0042	-0.0105	0.0121	2.4597	-2.0805	1.1238	-0.0035	0.2822	-0.0035	0.2511
154	54.88	0.05	-0.0429	-0.0133	0.0074	0.4506	-0.2407	1.1059	-0.0047	0.2782	-0.0042	0.2516
155	55.03	0.02	-0.0177	-0.0105	0.0094	0.0157	-0.5311	1.1316	-0.0042	0.2843	-0.0037	0.2512
156	55.19	0.04	-0.0115	-0.0086	0.0139	4.0626	-7.3156	1.1369	-0.0031	0.2862	-0.0027	0.2513
157	55.34	0.04	0.0019	-0.0055	0.0177	-4.5993	9.3158	1.1271	-0.0043	0.2827	-0.0038	0.2506
158	55.49	0.05	-0.0075	-0.0075	0.0136	0.9999	-1.7333	1.1240	-0.0034	0.2813	-0.0035	0.2503
159	55.64	0.05	-0.0107	-0.0066	0.0126	0.5149	-0.6347	1.1272	-0.0045	0.2827	-0.0043	0.2508
160	55.79	0.05	-0.0003	-0.0067	0.0156	1.3668	-2.5074	1.1303	-0.0052	0.2870	-0.0046	0.2526
161	55.94	0.05	-0.0037	-0.0068	0.0153	1.8376	-3.1351	1.1361	-0.0043	0.2859	-0.0038	0.2516
162	56.13	0.04	-0.0053	-0.0028	0.0125	0.4565	-2.3585	1.1319	-0.0032	0.2823	-0.0028	0.2494
163	56.26	0.02	-0.0237	-0.0070	0.0090	0.2953	-0.3797	1.1214	-0.0040	0.2814	-0.0036	0.2505
164	56.40	0.02	0.0016	-0.0025	0.0101	-2.0831	13.4107	1.1350	-0.0042	0.2861	-0.0037	0.2521
165	56.56	0.01	-0.0054	-0.0037	0.0140	0.6851	-2.5926	1.1195	-0.0021	0.2796	-0.0019	0.2498
166	56.73	0.02	-0.0025	-0.0024	0.0141	0.3478	-2.0435	1.1212	-0.0030	0.2808	-0.0027	0.2504
167	56.89	-0.00	-0.0055	-0.0041	0.0141	0.4315	-1.4842	1.1243	-0.0030	0.2820	-0.0027	0.2508
168	57.03	0.04	-0.0071	-0.0025	0.0104	0.4104	-2.3099	1.1306	-0.0042	0.2871	-0.0037	0.2526
169	57.18	-0.00	-0.0270	-0.0024	0.0075	0.0869	-0.2926	1.1234	-0.0036	0.2822	-0.0032	0.2512
170	57.33	0.03	-0.0264	-0.0031	0.0114	0.1519	-0.5968	1.1249	-0.0038	0.2823	-0.0034	0.2516
171	57.49	0.00	-0.0020	0.0010	0.0154	-0.4595	-7.7000	1.1383	-0.0029	0.2877	-0.0025	0.2527
172	57.64	-0.02	-0.0035	-0.0067	0.0178	0.2000	-5.0837	1.1155	-0.0023	0.2798	-0.0021	0.2508
173	57.78	-0.01	-0.0143	-0.0003	0.0145	-0.0210	-1.0140	1.1217	-0.0011	0.2820	-0.0010	0.2514
174	57.91	-0.01	-0.0007	-0.0002	0.0212	0.6298	-3.1642	1.1516	0.0029	0.2830	0.0025	0.2457
175	58.05	-0.08	-0.0226	-0.0005	0.0147	0.0221	-0.6504	1.1678	0.0060	0.2840	0.0051	0.2432
176	58.22	-0.05	-0.0174	0.0011	0.0156	-0.0652	-0.8960	1.1540	-0.0022	0.2870	-0.0019	0.2492
177	58.36	-0.11	-0.0174	0.0012	0.0158	-0.0690	-0.8966	1.1486	-0.0024	0.2859	-0.0021	0.2485
178	58.47	-0.09	-0.0227	-0.0025	0.0178	0.1277	-0.7841	1.1398	-0.0042	0.2850	-0.0037	0.2500
179	58.48	-0.09	-0.0364	0.0005	0.0117	-0.0137	-0.3214	1.1361	-0.0039	0.2855	-0.0034	0.2505
180	58.49	-0.10	-0.0265	-0.0017	0.0124	-0.0525	-0.3015	1.1470	-0.0016	0.2847	-0.0014	0.2482
181	58.48	-0.09	-0.0245	-0.0010	0.0186	0.0408	-0.7592	1.1367	-0.0041	0.2848	-0.0036	0.2505

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYN-6 PHI CONF L DELT DELZ DEL3 DEL4 TRANSITION
7 103 0.90 1.7 0.0 81B0F14 0.C 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF2	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.73	0.02	-0.0122	0.0000	0.0183	0.0000	-1.5000	-0.0126	0.0027	-0.2115	-0.0011	0.3452
2	-5.75	0.01	-0.0130	0.0000	0.0170	0.0000	-1.1333	-0.0060	0.0003	-0.1082	-0.0005	0.3436
3	-5.75	0.02	-0.0122	0.0000	0.0183	0.0000	-1.5000	-0.0171	0.0035	-0.2115	-0.0008	0.3434
4	-5.75	0.02	-0.0116	0.0000	0.0190	0.0000	-1.7556	-0.0093	0.0005	-0.2096	-0.0008	0.3440
5	-5.76	0.01	-0.0150	0.0000	0.0170	0.0000	-1.1333	-0.0483	0.0007	-0.1975	-0.0013	0.3602
6	-5.75	0.02	-0.0142	0.0000	0.0180	0.0000	-1.5410	-0.0521	0.0044	-0.1750	-0.0097	0.3871
7	-1.54	0.02	-0.0150	0.0000	0.0160	0.0000	-1.2000	-0.3440	0.0054	-0.1457	-0.0157	0.4235
8	0.38	0.02	-0.0138	0.0000	0.0176	0.0000	-1.2941	-0.2418	0.0053	-0.1097	-0.0219	0.4537
9	2.25	0.02	-0.0123	0.0000	0.0216	0.0000	-1.7561	-0.1436	0.0044	-0.0763	-0.0313	0.5427
10	4.09	0.03	-0.0035	0.0000	0.0233	0.0000	-5.9744	-0.0541	0.0024	-0.0366	-0.0444	0.6765
11	5.97	0.02	-0.0037	0.0000	0.0164	0.0000	-4.9730	-0.0079	0.0019	-0.0129	-0.0405	1.6329
12	7.87	0.02	-0.0005	0.0000	0.0166	0.0000	-20.0667	0.0465	0.0047	0.0086	0.1011	0.1845
13	9.87	0.02	0.0020	0.0000	0.0183	0.0000	9.1500	0.1120	0.0055	0.0392	0.0491	0.3500
14	11.81	0.01	0.0004	0.0000	0.0205	0.0000	52.2500	0.1810	0.0057	0.0687	0.0315	0.3756
15	13.45	0.02	0.0005	0.0000	0.0181	0.0000	37.4000	0.2621	0.0064	0.0992	0.0244	0.3785
16	15.30	0.04	0.0034	0.0000	0.0187	0.0000	4.9118	0.3377	0.0075	0.1281	0.0222	0.3793
17	17.33	0.04	0.0035	0.0000	0.0156	0.0000	4.9571	0.4422	0.0100	0.1590	0.0226	0.3596
18	19.20	0.01	0.0062	0.0000	0.0132	0.0000	10.5000	0.5209	0.0119	0.1860	0.0226	0.3530
19	21.21	-0.00	0.0065	0.0000	0.0095	0.0000	11.0000	0.6335	0.0138	0.2192	0.0218	0.3460
20	23.14	-0.00	-0.0003	0.0000	0.0071	0.0000	-20.0667	0.6999	0.0147	0.2318	0.0210	0.3312
21	25.05	0.01	0.0053	0.0000	0.0128	0.0000	1.3763	0.7565	0.0200	0.2472	0.0264	0.3259
22	26.99	0.05	0.0069	0.0000	0.0123	0.0000	0.5742	0.7750	0.0279	0.2483	0.0360	0.3201
23	28.23	0.05	0.0233	0.0000	0.0145	0.0000	0.6223	0.7896	0.0301	0.2504	0.0381	0.3171
24	28.43	0.05	0.0261	0.0000	0.0164	0.0000	0.6284	0.7908	0.0302	0.2474	0.0393	0.3218
25	28.30	0.05	0.0230	0.0000	0.0157	0.0000	0.5970	0.7748	0.0305	0.2515	0.0394	0.3246
26	28.31	0.06	0.0315	0.0000	0.0264	0.0000	0.6381	0.7793	0.0312	0.2498	0.0403	0.3224
27	28.98	0.06	0.0330	0.0000	0.0157	0.0000	0.5970	0.7978	0.0312	0.2556	0.0391	0.3204
28	29.47	0.05	0.0261	0.0000	0.0165	0.0000	0.6479	0.7910	0.0314	0.2549	0.0397	0.3222
29	29.61	0.06	0.0282	0.0000	0.0232	0.0000	0.5681	0.8068	0.0314	0.2607	0.0389	0.3231
30	29.89	0.07	0.0310	0.0000	0.0277	0.0000	0.5431	0.8026	0.0307	0.2602	0.0382	0.3242
31	30.17	0.07	0.0355	0.0000	0.0230	0.0000	0.5784	0.8096	0.0316	0.2610	0.0393	0.3224
32	30.44	0.07	0.0422	0.0000	0.0282	0.0000	0.5421	0.8261	0.0323	0.2646	0.0390	0.3198
33	30.71	0.07	0.0428	0.0000	0.0234	0.0000	0.5421	0.8726	0.0314	0.2756	0.0360	0.3156
34	30.98	0.06	0.0401	0.0000	0.0268	0.0000	0.5187	0.8907	0.0326	0.2823	0.0366	0.3169
35	31.25	0.07	0.0373	0.0000	0.0184	0.0000	0.4933	0.8784	0.0321	0.2768	0.0365	0.3149
36	31.54	0.07	0.0426	0.0000	0.0216	0.0000	0.5047	0.9207	0.0323	0.2873	0.0351	0.3120
37	31.81	0.07	0.0457	0.0000	0.0212	0.0000	0.4639	0.9139	0.0330	0.2870	0.0361	0.3140
38	32.09	0.05	0.0415	0.0000	0.0153	0.0000	0.4651	0.9203	0.0333	0.2915	0.0359	0.3147
39	32.36	0.06	0.0458	0.0000	0.0223	0.0000	0.4390	0.9400	0.0338	0.2943	0.0360	0.3131
40	32.61	0.05	0.0401	0.0000	0.0157	0.0000	0.4913	0.9326	0.0334	0.2923	0.0401	0.3134
41	32.88	0.06	0.0457	0.0000	0.0218	0.0000	0.4770	0.9383	0.0341	0.2972	0.0363	0.3167
42	33.15	0.06	0.0457	0.0000	0.0218	0.0000	0.4770	0.9177	0.0344	0.2934	0.0375	0.3157
43	33.40	0.08	0.0425	0.0000	0.0210	0.0000	0.4895	0.9163	0.0347	0.2919	0.0379	0.3188
44	33.66	0.09	0.0385	0.0000	0.0235	0.0000	0.4552	0.9014	0.0334	0.2895	0.0393	0.3212
45	33.92	0.08	0.0552	0.0000	0.0258	0.0000	0.4674	0.9140	0.0353	0.2927	0.0386	0.3202
46	34.17	0.03	0.0469	0.0000	0.0207	0.0000	0.4614	0.9397	0.0385	0.2984	0.0410	0.3175

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(TASRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 103 MACH 0.90 RXIC-6 1.7 PRI 0.0 CONF 0 BLOCK 14 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	ACPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
47	34.40	0.05	0.03EE	0.0000	0.0173	0.0000	0.4482	0.9403	0.0378	0.3012	0.0402	0.3203
48	34.66	0.03	0.0355	0.0000	0.0170	0.0000	0.4912	0.9280	0.0387	0.2948	0.0417	0.3175
49	34.92	0.04	0.0400	0.0000	0.0165	0.0000	0.4625	0.9160	0.0403	0.2903	0.0439	0.3162
50	35.14	0.01	0.0316	0.0000	0.0160	0.0000	0.5127	0.9341	0.0396	0.2956	0.0424	0.3165
51	35.41	0.00	0.0273	0.0000	0.0133	0.0000	0.5708	0.9439	0.0410	0.2966	0.0434	0.3162
52	35.65	-0.00	0.0344	0.0000	0.0153	0.0000	0.4448	0.9346	0.0410	0.2948	0.0439	0.3154
53	35.91	0.01	0.0149	0.0000	0.0121	0.0000	0.8121	0.9412	0.0426	0.2951	0.0453	0.3135
54	36.13	0.01	0.0232	0.0000	0.0133	0.0000	0.5733	0.9448	0.0417	0.2971	0.0441	0.3145
55	36.37	0.03	0.0343	0.0000	0.0165	0.0000	0.4927	0.9363	0.0426	0.2932	0.0457	0.3131
56	36.62	0.01	0.0301	0.0000	0.0160	0.0000	0.5316	0.9306	0.0443	0.2930	0.0473	0.3128
57	36.85	0.00	0.0150	0.0000	0.0130	0.0000	0.8042	0.9171	0.0455	0.2872	0.0496	0.3132
58	37.07	-0.01	0.014E	0.0000	0.0126	0.0000	0.8514	0.9161	0.0466	0.2857	0.0511	0.3119
59	37.34	0.02	0.0205	0.0000	0.0103	0.0000	0.5024	0.9162	0.0466	0.2859	0.0509	0.3120
60	37.57	0.02	0.0325	0.0000	0.0162	0.0000	0.4924	0.9242	0.0461	0.2891	0.0500	0.3138
61	37.80	0.02	0.0365	0.0000	0.0153	0.0000	0.5230	0.9290	0.0462	0.2908	0.0497	0.3130
62	38.05	0.03	0.0341	0.0000	0.0191	0.0000	0.5001	0.9260	0.0480	0.2876	0.0518	0.3106
63	38.27	0.03	0.02EE	0.0000	0.0164	0.0000	0.5734	0.9214	0.0479	0.2868	0.0520	0.3118
64	38.52	0.04	0.0315	0.0000	0.0154	0.0000	0.6196	0.9044	0.0486	0.2865	0.0504	0.3079
65	38.77	0.01	0.0203	0.0000	0.0147	0.0000	0.7241	0.9454	0.0493	0.2909	0.0518	0.3077
66	39.01	0.05	0.0258	0.0000	0.0173	0.0000	0.6705	0.9714	0.0514	0.2934	0.0525	0.3041
67	39.22	0.03	0.0244	0.0000	0.0166	0.0000	0.6803	0.9583	0.0502	0.2918	0.0524	0.3045
68	39.46	-0.01	0.0077	0.0000	0.0142	0.0000	1.8442	0.9610	0.0527	0.2897	0.0548	0.3015
69	39.67	-0.00	0.0052	0.0000	0.0127	0.0000	1.3804	0.9567	0.0523	0.2887	0.0547	0.3018
70	39.87	-0.01	0.0133	0.0000	0.0147	0.0000	1.1053	0.9696	0.0550	0.2884	0.0573	0.2974
71	40.12	0.01	0.0174	0.0000	0.0166	0.0000	0.9560	0.9941	0.0520	0.2952	0.0523	0.3010
72	40.33	-0.02	0.0216	0.0000	0.0175	0.0000	0.8102	0.9715	0.0571	0.2972	0.0588	0.2956
73	40.52	-0.01	0.0161	0.0000	0.0160	0.0000	0.9938	0.9588	0.0580	0.2940	0.0581	0.2944
74	40.72	-0.03	0.0284	0.0000	0.0206	0.0000	0.7324	0.9697	0.0576	0.2898	0.0582	0.2928
75	40.93	-0.00	0.0203	0.0000	0.0152	0.0000	0.7408	0.9922	0.0585	0.2908	0.0590	0.2931
76	41.14	-0.03	0.0105	0.0000	0.0135	0.0000	1.3256	0.9660	0.0561	0.2830	0.0601	0.2936
77	41.35	-0.02	0.0175	0.0000	0.0155	0.0000	0.8857	0.9730	0.0592	0.2843	0.0608	0.2922
78	41.55	-0.00	0.0110	0.0000	0.0145	0.0000	0.8286	0.9997	0.0605	0.2890	0.0605	0.2891
79	41.78	-0.02	0.0175	0.0000	0.0145	0.0000	0.8286	0.9852	0.0595	0.2861	0.0602	0.2895
80	41.97	-0.02	0.0244	0.0000	0.0166	0.0000	0.7705	0.9650	0.0597	0.2862	0.0606	0.2906
81	42.16	-0.01	0.0244	0.0000	0.0168	0.0000	0.7705	0.9673	0.0604	0.2798	0.0624	0.2893
82	42.36	-0.01	0.0174	0.0000	0.0167	0.0000	0.9598	0.9826	0.0607	0.2833	0.0618	0.2883
83	42.55	-0.03	0.0051	0.0000	0.0145	0.0000	1.6374	1.0127	0.0619	0.2870	0.0611	0.2834
84	42.74	-0.02	0.0184	0.0000	0.0165	0.0000	1.0107	0.9510	0.0614	0.2742	0.0646	0.2883
85	42.93	-0.02	0.0146	0.0000	0.0175	0.0000	1.1986	0.9678	0.0619	0.2756	0.0640	0.2848
86	43.11	-0.04	0.0264	0.0000	0.0230	0.0000	0.8099	0.9407	0.0625	0.2697	0.0664	0.2867
87	43.28	-0.03	0.0228	0.0000	0.0214	0.0000	0.9386	0.9769	0.0617	0.2782	0.0632	0.2848
88	43.47	-0.04	-0.0034	0.0000	0.0134	0.0000	-3.9116	1.0203	0.0615	0.2872	0.0607	0.2815
89	43.64	-0.01	0.0201	0.0000	0.0150	0.0000	0.9751	0.9938	0.0622	0.2795	0.0628	0.2813
90	43.83	-0.01	0.0117	0.0000	0.0164	0.0000	1.5726	0.9896	0.0631	0.2722	0.0651	0.2807
91	44.01	-0.05	0.0050	0.0000	0.0171	0.0000	1.9000	1.0112	0.0635	0.2829	0.0628	0.2798
92	44.21	-0.02	0.0256	0.0000	0.0226	0.0000	0.8906	1.0031	0.0639	0.2803	0.0637	0.2794

TEST 7 PART MACH RX10-6 PHI CCAF C DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CAF3	CH3	CD3	ACPF3	YCPF3	CAF4	CH4	CD4	XCPF4	YCPF4
93	44.38	0.00	0.0104	0.0000	0.0172	0.9999	1.0538	1.0375	0.0642	0.2807	0.0637	0.2766
94	44.63	0.01	0.0103	0.0000	0.0171	0.9999	0.9681	0.9890	0.0639	0.2790	0.0646	0.2821
95	44.76	-0.00	0.0117	0.0000	0.0184	0.9999	1.0726	0.9927	0.0650	0.2760	0.0655	0.2786
96	44.94	-0.01	0.0096	0.0000	0.0170	0.9999	1.0255	0.9929	0.0648	0.2778	0.0653	0.2798
97	45.13	0.02	0.0134	0.0000	0.0171	0.9999	1.0294	1.0146	0.0649	0.2828	0.0646	0.2787
98	45.31	-0.04	0.0149	0.0000	0.0191	0.9999	1.0172	1.0087	0.0664	0.2787	0.0658	0.2763
99	45.50	-0.04	0.0145	0.0000	0.0191	0.9999	1.0172	1.0343	0.0656	0.2853	0.0634	0.2797
100	45.68	-0.01	0.0117	0.0000	0.0169	0.9999	1.0726	0.9919	0.0658	0.2779	0.0663	0.2802
101	45.86	-0.02	0.0085	0.0000	0.0152	0.9999	2.1573	1.0451	0.0653	0.2920	0.0625	0.2794
102	46.03	-0.04	0.0116	0.0000	0.0203	0.9999	1.7574	1.0002	0.0671	0.2794	0.0671	0.2793
103	46.19	-0.02	0.0144	0.0000	0.0207	0.9999	1.4375	1.0275	0.0677	0.2852	0.0655	0.2776
104	46.38	-0.04	0.0062	0.0000	0.0202	0.9999	2.7097	1.0216	0.0673	0.2853	0.0659	0.2793
105	46.57	-0.04	0.0085	0.0000	0.0188	0.9999	2.0399	1.0273	0.0639	0.2895	0.0622	0.2818
106	46.73	-0.06	0.0061	0.0000	0.0184	0.9999	2.9333	1.0283	0.0634	0.2858	0.0616	0.2816
107	46.91	-0.04	0.0007	0.0000	0.0150	0.9999	19.4286	1.0384	0.0680	0.2786	0.0674	0.2763
108	47.07	-0.05	0.0063	0.0000	0.0194	0.9999	2.9175	1.0105	0.0674	0.2827	0.0667	0.2798
109	47.26	-0.06	0.0146	0.0000	0.0185	0.9999	1.1575	1.0164	0.0676	0.2800	0.0665	0.2755
110	47.43	-0.06	0.0115	0.0000	0.0181	0.9999	1.4069	1.0248	0.0627	0.2864	0.0612	0.2795
111	47.61	-0.06	0.0115	0.0000	0.0151	0.9999	1.2665	1.0256	0.0600	0.2854	0.0588	0.2758
112	47.78	-0.01	0.0161	0.0000	0.0134	0.9999	0.9305	1.0416	0.0652	0.2876	0.0626	0.2761
113	47.96	-0.01	0.0168	0.0000	0.0162	0.9999	0.8617	1.0439	0.0663	0.2877	0.0635	0.2756
114	48.13	-0.00	0.0133	0.0000	0.0156	0.9999	1.1429	1.0612	0.0495	0.3020	0.0429	0.2846
115	48.31	0.00	0.0082	0.0000	0.0165	0.9999	2.0290	1.0515	0.0394	0.2978	0.0375	0.2832
116	48.48	-0.00	0.0201	0.0000	0.0175	0.9999	0.8905	1.0869	0.0492	0.2991	0.0466	0.2758
117	48.65	0.01	0.0146	0.0000	0.0158	0.9999	1.0822	1.0706	0.0367	0.3020	0.0343	0.2821
118	48.80	0.02	0.0201	0.0000	0.0179	0.9999	0.8905	1.0901	0.0381	0.3077	0.0304	0.2823
119	48.99	-0.00	0.0119	0.0000	0.0135	0.9999	1.1344	1.0808	0.0245	0.3052	0.0230	0.2861
120	49.17	0.03	0.0160	0.0000	0.0160	0.9999	1.0000	1.0699	0.0269	0.3048	0.0251	0.2849
121	49.32	0.04	0.0218	0.0000	0.0158	0.9999	0.7315	1.0505	0.0134	0.3056	0.0128	0.2869
122	49.50	0.02	0.0264	0.0000	0.0167	0.9999	0.6937	1.0247	0.0044	0.3045	0.0043	0.2852
123	49.63	-0.01	0.0174	0.0000	0.0166	0.9999	0.9540	1.0194	0.0072	0.2976	0.0071	0.2919
124	49.80	0.03	0.0258	0.0000	0.0162	0.9999	0.6943	0.9870	0.0008	0.2934	0.0008	0.2876
125	50.03	0.06	0.0257	0.0000	0.0185	0.9999	0.7354	1.0120	0.0004	0.2994	0.0004	0.2958
126	50.20	0.05	0.0258	0.0000	0.0205	0.9999	0.8008	0.9932	0.0006	0.2941	0.0006	0.2961
127	50.41	0.05	0.0335	0.0000	0.0211	0.9999	0.6224	0.9930	0.0190	0.2867	0.0191	0.2827
128	50.58	0.07	0.0256	0.0000	0.0194	0.9999	0.7578	1.0294	0.0199	0.2871	0.0193	0.2789
129	50.76	0.03	0.0325	0.0000	0.0226	0.9999	0.6726	1.0248	0.0216	0.2840	0.0213	0.2771
130	50.91	0.03	0.0354	0.0000	0.0227	0.9999	0.5761	1.0200	0.0197	0.2857	0.0193	0.2801
131	51.07	0.05	0.0345	0.0000	0.0216	0.9999	0.6046	1.0283	0.0165	0.2890	0.0164	0.2801
132	51.26	0.08	0.0339	0.0000	0.0211	0.9999	0.6224	1.0084	0.0188	0.2846	0.0186	0.2822
133	51.42	0.07	0.0225	0.0000	0.0181	0.9999	0.7904	1.0166	0.0157	0.2868	0.0154	0.2821
134	51.59	0.04	0.0224	0.0000	0.0196	0.9999	0.6701	1.0074	0.0157	0.2849	0.0156	0.2828
135	51.79	0.03	0.0366	0.0000	0.0224	0.9999	0.6120	0.9452	0.0118	0.2697	0.0125	0.2853
136	51.96	-0.02	0.0338	0.0000	0.0206	0.9999	0.6045	0.9503	0.0152	0.2694	0.0160	0.2835
137	52.14	0.05	0.0201	0.0000	0.0175	0.9999	0.8905	0.9603	0.0215	0.2661	0.0246	0.2770
138	52.30	0.01	0.0256	0.0000	0.0181	0.9999	0.6074	0.9740	0.0226	0.2714	0.0232	0.2784

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

FACE 3 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RX10-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 103 0.96 1.7 0.0 BINOF14 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CD3	XCPF3	YCPF3	CNF4	CM4	CD4	XCPF4	YCPF4
139	52.46	0.02	0.0355	0.0000	0.0196	0.9999	0.6911	0.9841	0.0174	0.2755	0.0177	0.2800
140	52.69	0.01	0.0464	0.0000	0.0238	0.0000	0.5124	0.9920	0.0131	0.2787	0.0132	0.2805
141	52.79	0.03	0.0408	0.0000	0.0233	0.9999	0.5711	0.9818	0.0101	0.2786	0.0103	0.2838
142	52.97	0.05	0.0452	0.0000	0.0240	0.0000	0.4878	0.9847	0.0069	0.2738	0.0072	0.2868
143	53.15	0.06	0.0476	0.0000	0.0233	0.0000	0.4374	0.9818	0.0075	0.2730	0.0078	0.2838
144	53.29	0.03	0.0436	0.0000	0.0225	0.0000	0.5101	0.9921	0.0049	0.2800	0.0052	0.2851
145	53.45	0.07	0.0356	0.0000	0.0194	0.0000	0.4895	0.9860	0.0070	0.2713	0.0073	0.2838
146	53.63	0.05	0.0437	0.0000	0.0214	0.0000	0.4897	0.9880	0.0064	0.2707	0.0067	0.2826
147	53.79	0.03	0.0451	0.0000	0.0204	0.0000	0.4523	0.9734	0.0086	0.2747	0.0088	0.2822
148	53.93	0.04	0.0405	0.0000	0.0212	0.0000	0.5103	0.9800	0.0093	0.2744	0.0094	0.2781
149	54.09	0.08	0.0410	0.0000	0.0207	0.0000	0.5049	0.9861	0.0100	0.2756	0.0101	0.2795
150	54.25	0.07	0.0362	0.0000	0.0216	0.0000	0.5497	0.9871	0.0086	0.2742	0.0087	0.2778
151	54.41	0.07	0.0395	0.0000	0.0195	0.0000	0.4924	1.0043	0.0106	0.2783	0.0106	0.2771
152	54.56	0.06	0.0356	0.0000	0.0211	0.0000	0.5328	0.9931	0.0089	0.2754	0.0090	0.2778
153	54.72	0.06	0.0301	0.0000	0.0186	0.0000	0.5316	0.9939	0.0080	0.2749	0.0080	0.2766
154	54.88	0.05	0.0465	0.0000	0.0226	0.0000	0.4903	1.0129	0.0096	0.2778	0.0095	0.2743
155	55.03	0.02	0.0357	0.0000	0.0206	0.0000	0.5169	1.0165	0.0082	0.2754	0.0080	0.2743
156	55.19	0.02	0.0364	0.0000	0.0185	0.0000	0.4922	1.0153	0.0083	0.2780	0.0082	0.2738
157	55.34	0.04	0.0342	0.0000	0.0186	0.0000	0.5263	1.0151	0.0086	0.2769	0.0085	0.2728
158	55.49	0.03	0.0384	0.0000	0.0178	0.0000	0.4835	1.0301	0.0073	0.2806	0.0071	0.2724
159	55.64	0.05	0.0358	0.0000	0.0195	0.0000	0.4339	1.0262	0.0063	0.2795	0.0061	0.2724
160	55.79	0.03	0.0370	0.0000	0.0186	0.0000	0.5001	1.0336	0.0086	0.2789	0.0085	0.2698
161	55.94	0.05	0.0370	0.0000	0.0177	0.0000	0.4784	1.0245	0.0078	0.2763	0.0076	0.2698
162	56.13	0.03	0.0316	0.0000	0.0151	0.0000	0.4778	1.0371	0.0065	0.2789	0.0063	0.2689
163	56.28	0.02	0.0315	0.0000	0.0178	0.0000	0.5851	1.0539	0.0090	0.2819	0.0085	0.2675
164	56.40	0.02	0.0364	0.0000	0.0200	0.0000	0.5208	1.0383	0.0047	0.2792	0.0045	0.2689
165	56.56	0.01	0.0357	0.0000	0.0187	0.0000	0.5238	1.0378	0.0056	0.2782	0.0052	0.2681
166	56.73	0.02	0.0365	0.0000	0.0196	0.0000	0.4762	1.0571	0.0068	0.2816	0.0064	0.2664
167	56.89	-0.00	0.0385	0.0000	0.0184	0.0000	0.4779	1.0495	0.0065	0.2795	0.0062	0.2663
168	57.03	0.04	0.0441	0.0000	0.0205	0.0000	0.4049	1.0362	0.0052	0.2810	0.0049	0.2655
169	57.18	-0.00	0.0260	0.0000	0.0183	0.0000	0.6269	1.0664	0.0046	0.2849	0.0043	0.2667
170	57.33	0.03	0.0428	0.0000	0.0187	0.0000	0.4309	1.0754	0.0035	0.2851	0.0051	0.2651
171	57.49	0.00	0.0343	0.0000	0.0192	0.0000	0.5596	1.0577	0.0021	0.2812	0.0020	0.2655
172	57.64	-0.02	0.0351	0.0000	0.0183	0.0000	0.4924	1.0440	0.0016	0.2772	0.0015	0.2655
173	57.78	-0.01	0.0400	0.0000	0.0198	0.0000	0.4900	1.0642	0.0021	0.2820	0.0020	0.2656
174	57.91	-0.01	0.0317	0.0000	0.0157	0.0000	0.4953	1.0719	0.0062	0.2785	0.0058	0.2602
175	58.05	-0.08	0.0317	0.0000	0.0182	0.0000	0.5110	1.0553	0.0103	0.2799	0.0096	0.2999
176	58.22	-0.05	0.0176	0.0000	0.0182	0.0000	0.9203	1.0635	0.0029	0.2781	0.0027	0.2615
177	58.36	-0.11	0.0250	0.0000	0.0155	0.0000	0.5345	1.0559	0.0008	0.2777	0.0008	0.2630
178	58.47	-0.05	0.0281	0.0000	0.0184	0.0000	0.6264	1.0621	0.0010	0.2788	0.0009	0.2625
179	58.48	-0.09	0.0234	0.0000	0.0145	0.0000	0.6197	1.0667	0.0006	0.2809	0.0006	0.2628
180	58.49	-0.10	0.0374	0.0000	0.0184	0.0000	0.4920	1.0614	0.0018	0.2760	0.0017	0.2600
181	58.48	-0.09	0.0285	0.0000	0.0188	0.0000	0.6305	1.0585	0.0	0.2784	0.0	0.2618

PAGE 1 OF 3
SHEET 1 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RXIC-6	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	104	1.00	1.7		0.0	81HDF14	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.76	0.04	-1.3664	4.2226	0.0345	-0.0406	-0.0116	0.5058	0.1593	0.3465	-3.0932
2	-5.76	0.04	-1.3551	4.2035	0.0167	-0.0471	-0.0116	0.5058	0.1581	0.3477	-3.1020
3	-5.76	0.02	-1.3562	4.1029	0.0467	-0.0517	-0.0115	0.5058	0.1574	0.3484	-3.0766
4	-4.41	0.03	-1.0771	3.0131	0.0346	-0.0504	-0.0111	0.4802	0.1342	0.3461	-3.2618
5	-2.55	0.02	-0.6052	2.0129	-0.0403	-0.0116	-0.0049	0.4454	0.1204	0.3251	-3.6176
6	-0.04	0.02	-0.0066	0.0735	0.0318	-0.0091	-0.0041	0.4077	0.1055	0.3023	-4.5479
7	1.26	0.03	-0.2066	1.7338	0.0103	-0.0189	-0.0037	0.3885	0.0968	0.2916	-6.5024
8	3.25	0.02	-0.6058	1.2037	-0.0743	0.0503	-0.0034	0.3872	0.0922	0.2749	-42.3831
9	5.09	0.03	0.2221	0.0534	0.0105	0.0122	-0.0026	0.3815	0.1025	0.2590	3.8423
10	7.03	0.02	0.4950	0.0054	-0.0144	0.0048	-0.0077	0.3503	0.1160	0.2323	1.1231
11	8.90	0.02	0.8547	0.1762	-0.0365	0.0771	-0.0013	0.3415	0.1302	0.2113	0.2547
12	10.84	0.01	1.0812	-0.2048	-0.0624	0.0508	-0.0006	0.3237	0.1386	0.1851	-0.2811
13	12.77	0.02	1.2530	-0.7423	-0.0844	0.0897	0.0004	0.3036	0.1424	0.1612	-0.5741
14	14.72	0.02	1.4216	-1.2225	-0.0590	0.1398	0.0071	0.2829	0.1484	0.1346	-0.7538
15	16.73	0.02	1.5704	-1.6347	-0.0431	0.2087	0.0078	0.2525	0.1515	0.1011	-0.8256
16	18.73	0.01	1.6793	-2.1237	-0.1734	0.5938	0.0078	0.2352	0.1671	0.0681	-0.8926
17	20.71	0.02	2.0735	-2.5036	-0.1272	0.7497	0.0063	0.2066	0.1770	0.0296	-0.9276
18	22.70	0.00	2.2033	-2.7033	-0.2004	0.8448	-0.0134	0.1858	0.1800	-0.0142	-0.8529
19	24.68	0.02	2.3727	-2.8435	-0.1405	0.9513	0.0025	0.1206	0.1696	-0.0484	-0.7343
20	26.70	0.01	2.5567	-2.9768	-0.0106	1.2109	0.0090	0.0870	0.1774	-0.1103	-0.6473
21	28.35	0.04	2.6267	-2.9865	-0.0177	1.5517	0.0034	0.0306	0.1806	-0.1420	-0.5949
22	28.36	0.04	2.6267	-2.9962	0.7041	-1.3748	0.0757	0.0309	0.1777	-0.1418	-0.5731
23	26.42	0.07	2.6112	-2.9243	0.6112	-1.1405	0.0756	0.0231	0.1765	-0.1534	-0.5721
24	26.65	0.07	2.6214	-2.9455	0.5637	-1.0123	0.0701	0.0234	0.1794	-0.1560	-0.5777
25	29.12	0.07	2.5063	-2.8671	0.5727	-1.1768	0.0940	0.0116	0.1805	-0.1689	-0.5818
26	29.41	0.07	2.4334	-2.8088	0.5481	-1.1717	0.0946	0.0148	0.1792	-0.1644	-0.5464
27	29.75	0.07	2.3688	-2.8063	0.5150	-1.1145	0.0893	-0.0049	0.1759	-0.1635	-0.5388
28	30.04	0.08	2.3065	-2.8296	0.5032	-1.1194	0.0857	-0.0039	0.1818	-0.1857	-0.5222
29	30.31	0.08	2.2712	-2.8525	0.4982	-1.0322	0.0840	-0.0002	0.1845	-0.1847	-0.5065
30	30.58	0.07	2.2592	-2.8804	0.4862	-1.0865	0.0902	-0.0058	0.1820	-0.1804	-0.5036
31	30.86	0.08	2.2250	-2.8154	0.5255	-1.0331	0.0766	-0.0100	0.1811	-0.1575	-0.4745
32	31.13	0.08	2.1784	-2.7851	0.7183	-1.2047	0.1036	-0.0123	0.1851	-0.1974	-0.4626
33	31.40	0.07	2.1051	-2.8503	0.5843	-1.0529	0.0796	-0.0336	0.1859	-0.2157	-0.4734
34	31.70	0.09	2.0490	-2.8058	0.6332	-1.0021	0.1290	-0.0177	0.1905	-0.2062	-0.4465
35	31.97	0.09	2.0326	-2.7885	0.6726	-1.1930	0.1413	-0.0127	0.1950	-0.2077	-0.4372
36	32.23	0.10	2.0058	-2.7858	0.6723	-1.0134	0.1390	-0.0029	0.1932	-0.1961	-0.4318
37	32.51	0.09	2.0573	-2.7185	0.8562	-1.0744	0.0939	-0.0321	0.1906	-0.2227	-0.4211
38	32.77	0.06	2.0157	-2.7145	0.5066	-1.0129	0.0642	-0.0265	0.1902	-0.2167	-0.4098
39	33.03	0.07	2.0448	-2.6337	0.5488	-0.9666	0.0703	-0.0439	0.1854	-0.2253	-0.3813
40	33.30	0.07	2.0105	-2.6045	0.6134	-1.1200	0.0653	-0.0476	0.1903	-0.2379	-0.3677
41	33.56	0.05	1.9507	-2.5230	0.3235	-0.4026	0.0293	-0.0367	0.1855	-0.2262	-0.3774
42	33.79	0.05	1.9693	-2.5077	0.2998	-0.5569	0.0414	-0.0698	0.1873	-0.2571	-0.3598
43	34.05	0.06	1.9279	-2.5567	0.0447	-0.2119	0.0840	-0.0443	0.1926	-0.2369	-0.3698
44	34.30	0.06	1.9081	-2.5040	0.3763	-0.5167	0.0597	-0.0513	0.1874	-0.2387	-0.3523
45	34.55	0.06	1.8139	-2.4133	0.3541	-0.3497	0.0599	-0.0556	0.1915	-0.2471	-0.3345
46	34.80	0.06	1.8015	-2.4023	0.0032	-0.9147	0.1025	-0.0601	0.1965	-0.2566	-0.3671

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 104 | MACH 1.00 | RX10-6 1.7 | PHI 0.0 | CONF 814 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

PLOT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	35.06	0.06	7.6349	-2.4836	0.3965	-0.2419	0.0003	-0.0641	0.1981	-0.2622	-0.3340
48	35.30	0.06	7.5525	-2.4622	0.3956	-0.4009	0.0731	-0.0671	0.2027	-0.2698	-0.3446
49	35.56	0.07	7.7413	-2.6651	0.4572	-0.6395	0.0977	-0.0705	0.2077	-0.2782	-0.3448
50	35.79	0.07	7.7927	-2.6765	0.4607	-0.5106	0.0359	-0.0667	0.2107	-0.2794	-0.3345
51	36.04	0.08	7.8761	-2.6564	0.5868	-0.6406	0.0664	-0.0692	0.2130	-0.2822	-0.3373
52	36.28	0.08	7.9496	-2.6425	0.5254	-0.3631	0.0369	-0.0696	0.1991	-0.2885	-0.3325
53	36.51	0.07	8.0088	-2.7317	0.5884	-0.6193	0.0867	-0.0735	0.2139	-0.2874	-0.3412
54	36.76	0.02	8.1193	-2.8765	0.6611	-0.1816	0.0265	-0.0857	0.1962	-0.2815	-0.3297
55	37.02	0.08	8.2312	-2.8523	0.5315	-0.4546	0.0463	-0.0791	0.2075	-0.2866	-0.3271
56	37.25	0.05	8.3118	-2.7873	0.3480	-0.3997	0.0522	-0.0920	0.2035	-0.2956	-0.3353
57	37.52	0.08	8.3581	-2.7822	0.5376	-0.3739	0.0405	-0.0944	0.2034	-0.2979	-0.3313
58	37.75	0.03	8.6142	-2.7496	0.4234	-0.2651	0.0530	-0.1079	0.1974	-0.3053	-0.3192
59	37.99	0.05	8.6161	-2.8765	0.4204	-0.2226	0.0526	-0.1011	0.2036	-0.3047	-0.3331
60	38.26	0.03	8.7013	-2.7956	0.1006	-0.1756	0.0360	-0.1332	0.1933	-0.3269	-0.3184
61	38.55	0.04	8.9126	-2.8743	0.3266	-0.6847	0.0370	-0.1030	0.2013	-0.3043	-0.3225
62	38.77	0.05	8.8271	-2.7830	0.3691	-0.3279	0.0306	-0.1236	0.1870	-0.3106	-0.3130
63	39.04	0.04	9.1297	-2.9552	0.3425	-0.4596	0.0376	-0.1502	0.1855	-0.3357	-0.3237
64	39.25	0.06	9.1665	-2.9056	0.5435	-0.0267	0.0361	-0.1541	0.1871	-0.3412	-0.3169
65	39.44	0.04	9.1231	-2.7542	0.2591	-0.5096	0.0263	-0.1304	0.1806	-0.3110	-0.3019
66	39.70	0.05	9.4069	-2.9418	0.3745	-0.5169	0.0308	-0.1669	0.1837	-0.3496	-0.3129
67	39.96	0.05	9.3618	-2.8873	0.4454	-0.7483	0.0275	-0.1475	0.1857	-0.3352	-0.3084
68	40.09	0.04	9.4062	-2.9021	0.2157	-0.4412	0.0388	-0.1207	0.1836	-0.3103	-0.3085
69	40.33	0.03	9.5104	-2.8553	0.2726	-0.7198	0.0512	-0.1458	0.1851	-0.3305	-0.3002
70	40.53	0.03	9.5327	-2.8196	0.2395	-0.6361	0.0336	-0.1253	0.1845	-0.3098	-0.2958
71	40.73	0.08	9.6527	-2.8845	0.6167	-0.5695	0.0406	-0.1606	0.1909	-0.3515	-0.2989
72	40.95	0.06	9.8217	-2.9516	0.5736	-0.7050	0.0406	-0.1622	0.1831	-0.3453	-0.3005
73	41.14	0.06	9.7959	-2.8425	0.6346	-1.0487	0.0306	-0.1501	0.1548	-0.3445	-0.2902
74	41.38	0.06	9.9554	-2.8557	0.6115	-0.8047	0.0483	-0.1673	0.1870	-0.3549	-0.2909
75	41.58	0.04	9.8818	-2.9558	0.4914	-0.7717	0.0420	-0.1407	0.1919	-0.3326	-0.2991
76	41.77	0.03	10.0960	-2.9378	0.3611	-0.8419	0.0312	-0.1436	0.1915	-0.3351	-0.2910
77	42.00	0.05	10.2374	-3.0216	0.6509	-1.0033	0.0553	-0.1635	0.1874	-0.3709	-0.2952
78	42.17	0.04	10.2138	-2.9446	0.4808	-1.0864	0.0379	-0.1507	0.1941	-0.3448	-0.2883
79	42.39	0.03	10.3555	-2.9533	0.4583	-1.0440	0.0384	-0.1744	0.1946	-0.3650	-0.2879
80	42.56	0.05	10.2643	-2.8344	0.6270	-0.9598	0.0614	-0.1366	0.1905	-0.3271	-0.2761
81	42.76	0.05	10.3959	-2.8926	0.6155	-1.0917	0.0501	-0.1633	0.1901	-0.3534	-0.2782
82	42.95	0.04	10.4017	-2.8842	0.5726	-1.1520	0.0451	-0.1429	0.1994	-0.3423	-0.2750
83	43.15	0.04	10.5808	-2.8538	0.3857	-0.3378	0.0848	-0.1425	0.1927	-0.3352	-0.2657
84	43.33	0.01	10.6137	-2.8765	0.1907	-0.6108	0.0619	-0.1656	0.1936	-0.3596	-0.2711
85	43.50	0.03	10.6740	-2.8262	0.3512	-0.6196	0.0740	-0.1526	0.1930	-0.3456	-0.2648
86	43.69	0.05	10.7061	-2.8071	0.6251	-0.9303	0.0517	-0.1634	0.1975	-0.3605	-0.2605
87	43.88	0.06	10.8585	-2.7811	0.2853	-0.8616	0.0515	-0.1716	0.1932	-0.3650	-0.2552
88	44.05	0.02	10.9115	-2.7047	0.4114	-0.8273	0.0464	-0.1511	0.1970	-0.3481	-0.2479
89	44.22	0.02	10.8820	-2.7363	0.3708	-0.8807	0.0462	-0.1733	0.2023	-0.3756	-0.2515
90	44.41	0.03	10.9734	-2.8465	0.3686	-0.6459	0.0502	-0.1736	0.2010	-0.3746	-0.2424
91	44.58	0.04	11.0674	-2.7176	0.5559	-0.7606	0.0586	-0.1749	0.2002	-0.3751	-0.2455
92	44.79	0.01	11.2611	-2.7737	0.1786	-0.2639	0.0467	-0.2100	0.2069	-0.4169	-0.2463

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 104 MACH 1.60 REIC=6 1.7 PHI 0.0 CONF BIMWF14 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	44.97	-0.01	11.1648	-2.7203	-0.0568	-0.0632	0.0461	-0.1742	0.2023	-0.3765	-0.2438
94	45.15	0.03	11.2029	-2.6082	0.4185	0.0281	0.0031	-0.1811	0.2133	-0.3944	-0.2312
95	45.35	0.02	11.3157	-2.7468	0.4176	-0.5476	0.0656	-0.1651	0.2198	-0.3799	-0.2427
96	45.51	0.01	11.4188	-2.7607	0.3476	-0.7095	0.0948	-0.1648	0.2135	-0.3783	-0.2418
97	45.70	0.03	11.4452	-2.8800	0.5045	-0.9269	0.0720	-0.1844	0.2173	-0.4017	-0.2342
98	45.87	0.03	11.5371	-2.8126	0.0852	-1.3181	0.0787	-0.1758	0.2260	-0.4038	-0.2440
99	46.08	0.03	11.6036	-2.7656	0.6856	-1.2405	0.0790	-0.1697	0.2160	-0.3857	-0.2335
100	46.24	0.04	11.6866	-2.8856	0.6035	-1.2498	0.0944	-0.2051	0.2230	-0.4287	-0.2305
101	46.40	0.03	11.6917	-2.8254	0.5287	-1.5015	0.0725	-0.1806	0.2226	-0.4032	-0.2246
102	46.58	0.02	11.7438	-2.8533	0.3820	0.1034	0.0705	-0.1670	0.2276	-0.4246	-0.2297
103	46.77	0.03	11.9158	-2.8378	0.5174	0.0094	0.0714	-0.1685	0.2341	-0.4026	-0.2214
104	46.92	0.02	11.8671	-2.8945	0.3354	0.3267	0.0586	-0.1425	0.2417	-0.3842	-0.2113
105	47.12	0.02	11.9502	-2.8267	0.1544	0.7192	0.0752	-0.1528	0.2466	-0.3994	-0.2193
106	47.28	0.01	11.9825	-2.5716	0.0977	0.7574	0.0754	-0.1597	0.2537	-0.4134	-0.2150
107	47.47	0.01	12.0533	-2.8742	0.1424	0.8635	0.0763	-0.1502	0.2692	-0.4194	-0.2048
108	47.63	0.03	12.1261	-2.8475	0.3530	0.6948	0.0582	-0.0959	0.2873	-0.3833	-0.2348
109	47.82	0.02	12.2738	-3.4175	0.3737	0.4034	0.0537	-0.0162	0.3575	-0.3737	-0.2784
110	47.97	0.05	12.1749	-3.2062	0.4932	0.5813	0.0699	-0.0353	0.3571	-0.3924	-0.2634
111	48.16	0.06	12.4446	-3.7885	0.6527	0.3536	0.0361	0.0055	0.4046	-0.3991	-0.3044
112	48.32	0.05	12.5235	-4.3802	0.5444	0.1597	0.0140	0.0649	0.4313	-0.3664	-0.3458
113	48.51	0.06	12.7357	-4.9469	0.6474	0.5187	0.0011	0.0625	0.4578	-0.3953	-0.3884
114	48.67	0.07	12.7495	-4.9151	0.8564	0.8208	0.0058	0.0804	0.4532	-0.3728	-0.3856
115	48.87	0.03	12.8804	-4.8715	0.3473	0.5043	0.0008	0.0785	0.4547	-0.3762	-0.3788
116	49.02	0.07	12.9572	-4.7365	0.6411	0.8778	-0.0108	0.0726	0.4435	-0.3711	-0.3656
117	49.19	0.07	12.9443	-4.8954	0.7835	0.7832	0.0087	0.0756	0.4381	-0.3623	-0.3623
118	49.38	0.05	13.0821	-4.8228	0.4660	1.0196	0.0010	0.0501	0.4314	-0.3613	-0.3687
119	49.54	0.10	13.1153	-4.8547	1.0716	0.5067	0.0003	0.0314	0.4239	-0.3925	-0.3700
120	49.72	0.07	13.1891	-4.8832	0.8883	1.0799	0.0006	0.0239	0.4138	-0.3895	-0.3687
121	49.91	0.06	13.3035	-4.9593	0.8100	1.0697	-0.0109	0.0059	0.4026	-0.3567	-0.3753
122	50.09	0.04	13.3478	-4.7266	0.4305	1.0945	-0.0099	-0.0099	0.3962	-0.4061	-0.3546
123	50.25	0.07	13.4083	-4.9489	0.7427	0.9282	-0.0058	-0.0149	0.4005	-0.4154	-0.3691
124	50.42	0.05	13.4745	-4.7568	0.8500	1.1549	0.0010	-0.0071	0.3984	-0.4055	-0.3531
125	50.61	0.07	13.5555	-4.8785	0.8266	1.0593	0.0021	-0.0151	0.3976	-0.4127	-0.3556
126	50.78	0.05	13.6500	-4.8158	0.4580	1.3734	0.0132	-0.0082	0.4044	-0.4126	-0.3531
127	50.94	0.07	13.6962	-5.0135	0.9271	1.5259	0.0242	0.0154	0.4158	-0.4044	-0.3660
128	51.13	0.01	13.8539	-5.2565	0.6575	1.7172	0.0247	0.0020	0.4352	-0.4332	-0.3795
129	51.29	0.06	13.8945	-5.3655	0.5619	1.9777	0.0345	0.0039	0.4388	-0.4349	-0.3865
130	51.47	0.04	14.0578	-5.0005	0.1660	1.8771	0.0243	0.0169	0.4448	-0.4279	-0.4027
131	51.62	0.04	14.0218	-5.0359	0.3600	1.6497	0.0364	0.0114	0.4397	-0.4283	-0.4022
132	51.85	0.21	13.9552	-5.5534	0.0633	1.5870	0.0378	-0.0175	0.4299	-0.4474	-0.3979
133	51.94	0.02	13.7756	-4.8722	0.1824	1.2623	0.0554	-0.0099	0.4233	-0.4332	-0.3538
134	52.11	0.05	13.7667	-4.7245	0.5954	1.1604	0.0553	0.0107	0.4256	-0.4149	-0.3426
135	52.25	0.02	13.8247	-4.8071	0.2953	1.8821	0.0507	-0.0022	0.4241	-0.4263	-0.3235
136	52.43	0.01	13.8606	-4.2754	0.1572	1.0548	0.0506	0.0149	0.4234	-0.4085	-0.3128
137	52.59	0.04	13.7467	-4.4012	0.4453	0.8388	0.0511	0.0046	0.4222	-0.4176	-0.3202
138	52.77	0.01	13.6551	-4.2514	0.2227	0.6382	0.0514	0.0234	0.4191	-0.3957	-0.3112

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RN/D-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 104 1.60 6.7 0.0 DIMPLE 0.0 0 -10 0 -10 UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	52.92	0.01	13.6752	-4.1162	0.1410	0.4145	0.0315	0.0157	0.4145	-0.3988	-0.3043
140	53.09	0.03	13.7026	-4.1035	0.4036	0.5625	0.0471	0.0340	0.4221	-0.3881	-0.2961
141	53.27	0.02	13.6437	-4.1776	0.3677	0.4231	0.0477	0.0346	0.4251	-0.3905	-0.3018
142	53.43	0.02	13.6153	-4.2356	0.3194	0.3615	0.0524	0.0379	0.4210	-0.4151	-0.3069
143	53.58	0.03	13.6155	-4.2138	0.2356	0.5585	0.0472	0.0332	0.4222	-0.3850	-0.3050
144	53.75	0.05	13.6044	-4.3063	0.3566	0.5301	0.0467	0.0374	0.4264	-0.4150	-0.3166
145	53.93	0.02	13.5838	-4.4544	0.2697	0.5350	0.0478	0.0316	0.4314	-0.4298	-0.3185
146	54.08	0.02	13.5523	-4.3826	0.1756	0.3839	0.0427	0.0177	0.4332	-0.4155	-0.3146
147	54.23	0.02	13.5984	-4.4357	0.2217	0.5803	0.0536	0.0212	0.4320	-0.4108	-0.3172
148	54.37	0.04	13.5763	-4.4864	0.4626	0.4183	0.0476	0.0335	0.4381	-0.4346	-0.3225
149	54.54	0.03	13.5674	-4.5556	0.3574	0.3078	0.0426	0.0253	0.4415	-0.4162	-0.3250
150	54.70	0.01	14.0754	-4.6356	0.1516	0.3562	0.0466	0.0074	0.4452	-0.4378	-0.3293
151	54.86	0.02	14.0761	-4.7002	0.2515	0.4086	0.0486	0.0124	0.4429	-0.4305	-0.3335
152	55.01	0.02	14.0695	-4.6846	0.2237	0.3593	0.0490	0.0296	0.4506	-0.4210	-0.3311
153	55.17	0.02	14.1362	-4.8037	0.3301	0.2695	0.0435	0.0229	0.4522	-0.4293	-0.3386
154	55.32	-0.02	14.1574	-4.9026	-0.0320	0.4321	0.0435	0.0147	0.4523	-0.4396	-0.3495
155	55.46	0.02	14.1877	-4.9135	0.3110	0.3809	0.0468	0.0096	0.4542	-0.4446	-0.3464
156	55.63	0.02	14.2625	-5.0341	0.2656	0.2152	0.0439	0.0108	0.4485	-0.4377	-0.3544
157	55.78	-0.00	14.2153	-5.0782	0.1221	0.3078	0.0437	0.0119	0.4582	-0.4463	-0.3572
158	55.94	-0.00	14.3265	-5.2223	0.1344	0.3085	0.0439	0.0010	0.4596	-0.4588	-0.3644
159	56.10	0.01	14.3938	-5.1061	0.2320	0.2775	0.0500	-0.0056	0.4559	-0.4615	-0.3549
160	56.27	0.01	14.4060	-5.2465	0.3225	0.1198	0.0445	-0.0245	0.4611	-0.4657	-0.3635
161	56.41	0.01	14.3505	-5.2537	0.2525	0.1504	0.0384	-0.0066	0.4438	-0.4524	-0.3661
162	56.55	0.01	14.4063	-5.2979	0.2038	0.1752	0.0445	-0.0040	0.4491	-0.4581	-0.3677
163	56.76	-0.03	14.7819	-5.8640	-0.0803	-0.2242	0.0474	-0.0066	0.4189	-0.4856	-0.3302
164	56.91	-0.02	14.7052	-5.8222	0.0705	-0.3592	0.0478	-0.0087	0.4136	-0.5093	-0.3266
165	57.07	-0.02	14.8467	-5.9462	0.0037	-0.0790	0.0533	-0.0046	0.4226	-0.5173	-0.3331
166	57.20	-0.07	14.8883	-5.9262	-0.4877	-0.3426	0.0524	-0.0046	0.4275	-0.5222	-0.3350
167	57.37	-0.02	14.8760	-5.8864	0.0023	-0.4058	0.0481	-0.0097	0.4359	-0.5257	-0.3286
168	57.49	-0.03	14.7876	-5.8843	-0.2736	-0.5025	0.0351	-0.0020	0.4329	-0.5150	-0.3661
169	57.65	-0.05	14.7315	-5.8358	-0.3082	-0.6159	0.0412	-0.0067	0.4335	-0.5207	-0.3557
170	57.78	-0.03	14.8056	-5.9456	-0.0072	-0.4181	0.0355	-0.0066	0.4296	-0.5282	-0.3748
171	57.93	-0.01	14.7476	-5.8725	0.1288	-0.0935	0.0350	-0.0138	0.4115	-0.5433	-0.3643
172	58.08	0.04	14.8963	-5.9512	0.0443	-0.2312	0.0469	-0.0145	0.4081	-0.5556	-0.3525
173	58.25	0.00	15.1017	-6.1715	0.3459	-0.4311	0.0372	-0.0173	0.4159	-0.5632	-0.3543
174	58.41	-0.05	15.2158	-6.4973	-0.2485	-0.0995	0.0363	-0.0163	0.4105	-0.5468	-0.3613
175	58.54	0.02	15.0284	-6.5756	0.4025	-0.3401	0.0305	-0.0145	0.4173	-0.5318	-0.3711
176	58.68	-0.00	15.1674	-6.5269	0.1951	-0.0698	0.0384	-0.0146	0.4106	-0.5512	-0.3645
177	58.87	-0.02	15.2794	-6.7575	0.0863	-0.1569	0.0368	-0.0165	0.4108	-0.5573	-0.3768
178	58.17	-0.04	14.7169	-6.4655	-0.1323	-0.2294	0.0349	-0.0194	0.4103	-0.5257	-0.3674

PAGE 2 OF 3
SHEET 1 OF 4

PARTIAL MISSILE TAILS EFFECTS DATA

TEST 7 | PART 104 | MACH 1.60 | RX10-6 1.7 | PHI 0.0 | CONF 61 OF 14 | C 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
1	-5.76	0.04	-0.0358	-0.0015	0.0167	0.0531	-0.4665	-0.5565	0.0156	-0.2249	-0.0284	0.4041
2	-5.76	0.02	-0.0376	-0.0021	0.0166	0.0567	-0.4466	-0.5505	0.0163	-0.2260	-0.0293	0.4061
3	-5.76	0.02	-0.0368	-0.0015	0.0162	0.0466	-0.3971	-0.5428	0.0161	-0.2210	-0.0297	0.4071
4	-4.41	0.03	-0.0359	-0.0017	0.0168	0.0473	-0.4000	-0.4491	0.0171	-0.2027	-0.0381	0.4513
5	-2.55	0.02	-0.0333	-0.0014	0.0161	0.0426	-0.4835	-0.3445	0.0179	-0.1763	-0.0520	0.5116
6	-0.04	0.02	-0.0331	-0.0019	0.0163	0.0563	-0.4361	-0.2458	0.0163	-0.1450	-0.0668	0.5547
7	1.26	0.03	-0.0316	-0.0012	0.0142	0.0392	-0.4641	-0.1456	0.0127	-0.1070	-0.0871	0.7335
8	3.23	0.02	-0.0341	-0.0016	0.0127	0.0409	-0.3724	-0.0574	0.0062	-0.0714	-0.1603	1.2435
9	5.05	0.03	-0.0326	-0.0026	0.0153	0.0528	-0.5464	0.0072	0.0062	-0.0350	0.8610	-4.8611
10	7.03	0.02	-0.0379	-0.0033	0.0146	0.0871	-0.3652	0.0761	0.0049	-0.0149	0.0644	-0.1695
11	8.90	0.02	-0.0400	-0.0057	0.0144	0.1425	-0.3600	0.1333	0.0046	0.0143	0.0368	0.1073
12	10.89	0.01	-0.0456	-0.0045	0.0125	0.1000	-0.2776	0.1933	0.0050	0.0429	0.0255	0.2219
13	12.77	0.02	-0.0428	-0.0043	0.0126	0.1005	-0.3305	0.2448	0.0054	0.0751	0.0221	0.3068
14	14.72	0.02	-0.0363	-0.0037	0.0083	0.0727	-0.1031	0.3243	0.0066	0.0972	0.0203	0.2957
15	16.73	0.02	-0.0263	-0.0031	0.0021	0.0514	-0.0346	0.3983	0.0074	0.1193	0.0186	0.2955
16	18.73	0.01	-0.0113	-0.0056	-0.0103	0.0553	0.1017	0.4544	0.0096	0.1319	0.0211	0.2903
17	20.71	0.02	-0.1359	-0.0094	-0.0217	0.0692	0.1597	0.4970	0.0105	0.1382	0.0211	0.2781
18	22.70	0.00	-0.1797	-0.0066	-0.0445	0.0033	0.2495	0.5044	0.0102	0.1542	0.0181	0.2821
19	24.68	0.02	-0.0951	0.0035	-0.0178	-0.0353	0.1796	0.6612	0.0102	0.1648	0.0159	0.2882
20	26.70	0.07	0.1746	-0.0108	0.0508	-0.0618	0.5200	0.7741	0.0117	0.2137	0.0151	0.2761
21	28.35	0.05	0.2358	-0.0124	0.1162	-0.0517	0.4846	0.8180	0.0162	0.2214	0.0195	0.2713
22	28.36	0.05	0.1892	-0.0050	0.0556	-0.0470	0.5021	0.8112	0.0173	0.2213	0.0213	0.2728
23	28.42	0.07	0.1871	-0.0057	0.0537	-0.0518	0.5008	0.8065	0.0169	0.2227	0.0210	0.2761
24	28.85	0.07	0.1716	-0.0077	0.0501	-0.0450	0.4804	0.8294	0.0184	0.2260	0.0222	0.2725
25	29.12	0.07	0.2121	-0.0057	0.0585	-0.0457	0.4844	0.8348	0.0191	0.2254	0.0229	0.2700
26	29.41	0.07	0.2316	-0.0054	0.1045	-0.0405	0.4508	0.8441	0.0188	0.2307	0.0220	0.2733
27	29.75	0.07	0.2126	-0.0075	0.0542	-0.0372	0.4431	0.8505	0.0185	0.2324	0.0222	0.2731
28	30.04	0.08	0.2255	-0.0086	0.1014	-0.0305	0.4298	0.8551	0.0190	0.2328	0.0222	0.2722
29	30.31	0.08	0.2020	-0.0070	0.0883	-0.0346	0.4272	0.8521	0.0202	0.2315	0.0237	0.2717
30	30.58	0.07	0.1994	-0.0075	0.0875	-0.0376	0.4330	0.8521	0.0201	0.2315	0.0236	0.2717
31	30.85	0.08	0.2180	-0.0080	0.0892	-0.0275	0.4092	0.8572	0.0231	0.2289	0.0265	0.2670
32	31.13	0.08	0.2035	-0.0085	0.1065	-0.0336	0.4042	0.8644	0.0240	0.2303	0.0277	0.2663
33	31.40	0.07	0.1674	-0.0029	0.0857	-0.0173	0.3925	0.8580	0.0246	0.2259	0.0284	0.2633
34	31.70	0.09	0.1934	-0.0087	0.1203	-0.0201	0.3788	0.8774	0.0250	0.2281	0.0285	0.2666
35	31.97	0.05	0.1565	-0.0066	0.1342	-0.0241	0.3764	0.8775	0.0247	0.2276	0.0281	0.2594
36	32.23	0.10	0.2639	-0.0054	0.1126	-0.0196	0.3900	0.8830	0.0254	0.2270	0.0288	0.2571
37	32.51	0.09	0.2306	-0.0023	0.0854	-0.0100	0.3703	0.8791	0.0252	0.2242	0.0287	0.2556
38	32.77	0.06	0.0706	0.0031	0.0291	0.0436	0.4110	0.8645	0.0259	0.2256	0.0293	0.2553
39	33.03	0.07	0.1130	0.0022	0.0463	0.0195	0.4097	0.8832	0.0261	0.2244	0.0295	0.2541
40	33.30	0.07	0.1575	-0.0020	0.0553	-0.0127	0.3765	0.8807	0.0274	0.2248	0.0305	0.2538
41	33.56	0.05	0.0254	0.0010	0.0071	0.0340	0.2415	0.8643	0.0283	0.2205	0.0320	0.2498
42	33.79	0.05	0.0725	0.0005	0.0271	0.0069	0.3738	0.8696	0.0276	0.2257	0.0312	0.2537
43	34.05	0.08	0.1265	-0.0018	0.0342	-0.0265	0.5112	0.8911	0.0280	0.2284	0.0314	0.2541
44	34.30	0.06	0.0466	-0.0025	0.0405	-0.0300	0.5052	0.9119	0.0279	0.2323	0.0306	0.2541
45	34.55	0.06	0.0052	0.0003	0.0087	1.4998	43.5000	0.8976	0.0294	0.2279	0.0327	0.2538
46	34.80	0.08	0.0048	-0.0055	0.0077	-0.0269	0.4282	0.9314	0.0278	0.2372	0.0298	0.2547

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REIC-6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 104 1.00 1.7 0.0 BLANK14 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	35.06	0.00	0.0135	-0.0065	0.0192	-0.3629	1.4222	0.8893	0.0314	0.2213	0.0353	0.2488
48	35.30	0.00	0.0062	-0.0058	0.0098	-0.0873	0.9204	0.9004	0.0313	0.2235	0.0348	0.2487
49	35.56	0.07	0.1262	-0.0018	0.0834	-0.0143	0.9024	0.9239	0.0308	0.2333	0.0333	0.2525
50	35.79	0.07	0.0930	-0.0015	0.0496	-0.0095	0.9221	0.9322	0.0303	0.2356	0.0325	0.2527
51	36.04	0.08	0.0575	0.0002	0.0372	0.0035	0.9492	0.9294	0.0310	0.2332	0.0334	0.2505
52	36.28	0.08	0.0516	0.0041	0.0320	0.0804	0.9275	0.9472	0.0315	0.2384	0.0333	0.2517
53	36.51	0.07	0.1559	0.0013	0.1266	0.0084	0.9283	0.9627	0.0295	0.2428	0.0306	0.2522
54	36.78	0.06	-0.0028	0.0035	0.0090	-1.2498	-3.2143	0.9540	0.0321	0.2382	0.0336	0.2497
55	37.02	0.06	0.0515	0.0005	0.0312	0.0097	0.8058	0.9665	0.0319	0.2393	0.0330	0.2476
56	37.25	0.05	0.0765	0.0023	0.0409	0.0291	0.9120	0.9829	0.0318	0.2453	0.0323	0.2496
57	37.52	0.06	0.0465	0.0025	0.0295	0.0626	0.8371	0.9766	0.0334	0.2402	0.0341	0.2455
58	37.75	0.05	0.0765	0.0018	0.0405	0.0209	0.9294	0.9935	0.0343	0.2453	0.0345	0.2486
59	37.99	0.05	0.0367	-0.0001	0.0264	-0.0027	0.7736	0.9892	0.0357	0.2405	0.0361	0.2431
60	38.26	0.03	0.0345	0.0006	0.0252	0.0232	0.7304	0.9948	0.0370	0.2419	0.0370	0.2422
61	38.55	0.04	0.0319	0.0004	0.0199	0.0127	0.8178	1.0104	0.0369	0.2464	0.0363	0.2424
62	38.77	0.05	0.0362	0.0015	0.0183	0.0298	0.8000	0.9908	0.0390	0.2395	0.0391	0.2403
63	39.04	0.04	0.0553	-0.0003	0.0296	-0.0054	0.5369	1.0118	0.0398	0.2425	0.0393	0.2357
64	39.25	0.06	-0.0007	0.00	0.0156	0.00	-0.2857	1.0198	0.0396	0.2421	0.0392	0.2383
65	39.49	0.04	-0.0005	-0.0001	0.0042	0.2000	-0.4300	1.0132	0.0398	0.2402	0.0393	0.2371
66	39.70	0.05	0.0149	-0.0001	0.0120	-0.0071	0.8024	1.0198	0.0415	0.2393	0.0407	0.2347
67	39.90	0.05	0.0247	0.0001	0.0113	0.0025	0.4575	1.0349	0.0410	0.2414	0.0396	0.2333
68	40.09	0.04	0.0023	-0.0002	0.0225	-0.0038	0.4302	1.0180	0.0429	0.2343	0.0421	0.2302
69	40.35	0.03	0.0316	-0.0001	0.0366	-0.0085	0.4236	1.0123	0.0442	0.2318	0.0437	0.2296
70	40.53	0.03	0.0140	0.0000	0.0224	0.0124	0.3407	1.0255	0.0441	0.2343	0.0430	0.2284
71	40.73	0.00	0.0477	0.0019	0.0165	0.0293	0.3959	1.0341	0.0445	0.2340	0.0430	0.2263
72	40.95	0.00	0.0026	0.0020	0.0204	0.0419	0.3290	1.0379	0.0459	0.2342	0.0442	0.2256
73	41.14	0.00	0.0425	0.0045	0.0113	0.1049	0.2634	1.0337	0.0466	0.2312	0.0453	0.2237
74	41.38	0.00	0.0038	0.0027	0.0205	0.0323	0.3218	1.0180	0.0478	0.2257	0.0469	0.2216
75	41.56	0.04	0.0505	0.0026	0.0306	0.0267	0.3403	1.0236	0.0493	0.2261	0.0482	0.2205
76	41.77	0.05	0.0019	0.0020	0.0162	0.0408	0.2322	1.0426	0.0494	0.2314	0.0474	0.2219
77	42.00	0.05	0.0766	0.0027	0.0248	0.0393	0.3147	1.0256	0.0515	0.2259	0.0506	0.2203
78	42.17	0.04	0.0559	0.0030	0.0160	0.0501	0.2071	1.0352	0.0512	0.2282	0.0495	0.2204
79	42.39	0.03	0.0058	0.0034	0.0172	0.0517	0.2614	1.0322	0.0522	0.2268	0.0506	0.2197
80	42.56	0.05	0.0715	0.0028	0.0206	0.0189	0.1992	1.0341	0.0541	0.2188	0.0541	0.2190
81	42.76	0.05	0.0061	0.0027	0.0250	0.0314	0.2906	1.0061	0.0541	0.2186	0.0538	0.2175
82	42.93	0.04	0.0054	0.0021	0.0121	0.0230	0.2603	1.0029	0.0555	0.2161	0.0553	0.2155
83	43.15	0.04	0.0771	-0.0006	0.0308	-0.0078	0.3995	0.9795	0.0569	0.2103	0.0581	0.2147
84	43.33	0.01	0.0144	0.0022	0.0375	0.0211	0.3030	0.9932	0.0561	0.2152	0.0565	0.2167
85	43.50	0.03	0.0524	0.0025	0.0338	0.0314	0.3038	0.9928	0.0564	0.2151	0.0568	0.2167
86	43.65	0.03	0.0026	0.0031	0.0207	0.0385	0.3261	0.9913	0.0574	0.2124	0.0575	0.2143
87	43.88	0.00	0.0562	0.0033	0.0352	0.0333	0.3667	0.9600	0.0586	0.2064	0.0598	0.2127
88	44.05	0.02	0.0021	0.0021	0.0241	0.0502	0.2900	1.0100	0.0573	0.2200	0.0567	0.2178
89	44.22	0.02	0.0563	0.0027	0.0261	0.0275	0.2575	1.0102	0.0566	0.2200	0.0560	0.2178
90	44.41	0.03	-0.0054	0.0031	0.0041	-0.5740	-0.0105	0.9730	0.0594	0.2078	0.0612	0.2142
91	44.58	0.04	0.0565	0.0042	0.0230	0.0713	0.3905	0.9809	0.0592	0.2092	0.0603	0.2133
92	44.79	0.01	0.0462	0.0000	0.0091	0.2035	0.3116	1.0025	0.0586	0.2171	0.0586	0.2166

MARTIN MISSILE TAILS EFFECTS DATA

TEST / 104 PART 1.66 MACH 1.7 RXIG-6 PHI 0.0 CONF 14 L 6.6 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
93	44.97	-0.01	0.0295	0.0047	0.0089	0.1593	0.3017	0.9820	0.0591	0.2105	0.0602	0.2144
94	45.15	0.03	0.0044	0.0033	0.0012	0.7495	0.2727	0.9531	0.0615	0.1966	0.0645	0.2084
95	45.35	0.02	0.0912	0.0073	0.0313	0.0800	0.3432	1.0012	0.0595	0.2122	0.0596	0.2115
96	45.51	0.01	0.1356	0.0078	0.0487	0.0501	0.3504	0.9657	0.0606	0.2068	0.0617	0.2098
97	45.70	0.03	0.1067	0.0066	0.0325	0.0764	0.2963	0.9630	0.0603	0.2076	0.0613	0.2112
98	45.87	0.03	0.1454	0.0104	0.0457	0.0715	0.3143	0.9566	0.0598	0.2083	0.0606	0.2096
99	46.06	0.03	0.1238	0.0085	0.0405	0.0686	0.3304	0.9758	0.0616	0.2029	0.0631	0.2075
100	46.24	0.04	0.0968	0.0065	0.0342	0.0700	0.3469	0.9621	0.0623	0.1975	0.0647	0.2053
101	46.40	0.03	0.0755	0.0073	0.0275	0.0918	0.3459	0.9813	0.0600	0.2055	0.0611	0.2094
102	46.58	0.02	0.0426	0.0054	0.0128	0.2673	0.6337	0.9522	0.0622	0.1968	0.0653	0.2067
103	46.77	0.03	-0.0134	0.0030	0.0045	-0.2239	-0.3358	0.9321	0.0621	0.1906	0.0666	0.2045
104	46.92	0.02	-0.0383	0.0024	-0.0057	-0.0574	0.1488	0.9281	0.0617	0.1897	0.0665	0.2044
105	47.12	0.02	-0.0191	0.0010	0.0015	-0.0523	-0.0995	0.9224	0.0626	0.1882	0.0679	0.2040
106	47.28	0.01	-0.0065	0.0026	0.0025	-0.4057	-0.3023	0.9282	0.0614	0.1875	0.0661	0.2020
107	47.47	0.01	0.0285	0.0032	0.0180	0.1119	0.6294	0.9257	0.0601	0.1877	0.0645	0.2028
108	47.63	0.03	-0.0218	0.0047	-0.0024	-0.2178	0.1111	0.9239	0.0541	0.2108	0.0554	0.2160
109	47.82	0.02	-0.0134	0.0105	-0.0035	-0.8133	0.2910	0.9733	0.0191	0.2294	0.0196	0.2306
110	47.97	0.03	-0.0063	0.0116	-0.0026	-1.8410	0.5175	0.9802	0.0339	0.2206	0.0346	0.2251
111	48.16	0.06	-0.0354	0.0075	-0.0138	-0.2231	0.3898	0.9909	0.0219	0.2301	0.0221	0.2322
112	48.32	0.05	0.0055	0.0026	0.0032	0.4727	0.5018	0.9904	0.0187	0.2339	0.0189	0.2362
113	48.51	0.06	-0.0063	0.0001	0.0021	-0.3333	-7.0000	1.0030	0.0164	0.2370	0.0163	0.2363
114	48.67	0.07	-0.0106	-0.0045	-0.0017	0.2733	0.1304	1.0078	0.0124	0.2342	0.0123	0.2373
115	48.87	0.03	-0.0047	0.0031	0.0010	0.6555	-0.2126	0.9967	0.0081	0.2404	0.0081	0.2412
116	49.02	0.07	-0.0001	-0.0026	0.0021	19.9973	-27.0000	0.9960	0.0103	0.2364	0.0103	0.2379
117	49.19	0.07	0.0045	-0.0018	0.0035	-0.3999	1.3111	0.9885	0.0070	0.2294	0.0072	0.2365
118	49.38	0.05	-0.0065	-0.0016	0.0021	0.0874	-0.2360	0.9867	0.0148	0.2306	0.0150	0.2332
119	49.54	0.10	-0.0025	-0.0012	0.0007	0.4137	-1.6207	0.9798	0.0126	0.2270	0.0129	0.2317
120	49.72	0.07	-0.0188	-0.0018	0.0034	0.0957	-0.1809	0.9929	0.0220	0.2267	0.0222	0.2283
121	49.91	0.08	-0.0351	-0.0031	-0.0011	0.0793	0.0261	1.0050	0.0226	0.2278	0.0225	0.2267
122	50.09	0.04	-0.0059	-0.0023	0.0021	0.0641	-0.0505	0.9853	0.0192	0.2253	0.0195	0.2287
123	50.25	0.07	-0.0152	-0.0021	0.0005	0.1042	-0.3385	1.0070	0.0196	0.2311	0.0195	0.2295
124	50.44	0.05	-0.0218	-0.0033	0.0070	0.1528	-0.3519	0.9992	0.0142	0.2292	0.0143	0.2305
125	50.61	0.07	-0.0123	-0.0010	0.0101	0.0813	-0.8211	0.9866	0.0111	0.2294	0.0112	0.2325
126	50.78	0.05	-0.0115	-0.0060	0.0125	0.0641	-1.0336	0.9853	0.0044	0.2291	0.0046	0.2378
127	50.94	0.07	-0.0340	-0.0140	0.0083	0.4117	-0.2461	0.9867	0.0034	0.2328	0.0004	0.2408
128	51.13	0.01	-0.0466	-0.0152	0.0064	0.3799	-0.2000	0.9709	-0.0006	0.2352	-0.0006	0.2422
129	51.29	0.06	-0.0521	-0.0162	0.0061	0.3109	-0.1152	0.9765	-0.0012	0.2370	-0.0012	0.2427
130	51.47	0.04	-0.0391	-0.0143	0.0093	0.3657	-0.2379	0.9582	-0.0009	0.2426	-0.0009	0.2430
131	51.62	0.04	-0.0325	-0.0098	0.0098	0.2925	-0.2925	0.9979	-0.0010	0.2438	-0.0010	0.2443
132	51.85	0.01	-0.0229	-0.0083	0.0111	0.2751	-0.4847	0.9681	0.0006	0.2399	0.0006	0.2428
133	51.94	0.02	-0.0147	-0.0035	0.0121	0.2361	-0.8231	0.9810	0.0022	0.2375	0.0022	0.2421
134	52.11	0.05	-0.0316	-0.0065	0.0085	0.0647	-0.2871	0.9516	0.0034	0.2248	0.0036	0.2413
135	52.25	0.02	-0.0154	0.0003	0.0133	-0.0195	-0.8636	0.9331	0.0028	0.2254	0.0030	0.2418
136	52.43	0.01	-0.0256	-0.0003	0.0096	0.0101	-0.3020	0.9125	0.0031	0.2220	0.0034	0.2433
137	52.59	0.04	-0.0250	-0.0001	0.0106	0.0040	-0.4240	0.9236	0.0025	0.2240	0.0027	0.2425
138	52.77	0.01	-0.0403	-0.0007	0.0072	0.0172	-0.1709	0.9048	0.0028	0.2190	0.0031	0.2420

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 104 MACH 1.60 REYNOLDS NO. 1.7 PHI 0.0 CONFIG 14 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
139	52.92	0.01	-0.0393	-0.0016	0.0072	0.0407	-0.1832	0.9061	0.0022	0.2218	0.0024	0.2448
140	53.09	0.03	-0.0421	-0.0017	0.0111	0.0295	-0.4084	0.9144	0.0015	0.2246	0.0016	0.2456
141	53.27	0.02	-0.0115	-0.0011	0.0124	0.0573	-1.0973	0.9281	0.0010	0.2295	0.0011	0.2473
142	53.43	0.00	-0.0158	-0.0013	0.0146	0.0151	-0.6345	0.9254	0.0011	0.2288	0.0012	0.2472
143	53.58	0.03	-0.0170	-0.0014	0.0113	0.0227	-0.8420	0.9253	0.0011	0.2290	0.0012	0.2475
144	53.75	0.05	-0.0187	-0.0015	0.0160	0.0374	-0.5888	0.9321	0.0010	0.2311	0.0011	0.2479
145	53.93	0.02	-0.0145	-0.0011	0.0105	0.0671	-0.7047	0.9403	0.0007	0.2345	0.0007	0.2494
146	54.08	0.02	-0.0101	-0.0010	0.0120	0.0990	-1.1001	0.9403	0.0005	0.2350	0.0005	0.2499
147	54.23	0.02	-0.0111	-0.0012	0.0103	0.1081	-0.9275	0.9500	0.0001	0.2355	0.0001	0.2475
148	54.37	0.04	-0.0074	-0.0015	0.0111	0.2027	-1.5000	0.9417	0.0002	0.2354	0.0002	0.2506
149	54.56	0.03	-0.0074	-0.0006	0.0107	0.1081	-1.4459	0.9555	0.0	0.2376	0.0	0.2487
150	54.70	0.01	-0.0148	-0.0006	0.0095	0.0405	-0.8419	0.9527	0.0002	0.2379	0.0002	0.2497
151	54.86	0.02	-0.0184	-0.0008	0.0085	0.0435	-0.9520	0.9517	0.0	0.2371	0.0	0.2491
152	55.01	0.02	-0.0165	-0.0008	0.0080	0.0437	-0.9372	0.9544	-0.0002	0.2400	-0.0002	0.2515
153	55.17	0.02	-0.0245	-0.0004	0.0074	0.0165	-0.3020	0.9561	-0.0002	0.2389	-0.0002	0.2499
154	55.32	-0.02	-0.0182	-0.0007	0.0076	0.0365	-0.3896	0.9605	-0.0002	0.2431	-0.0002	0.2514
155	55.48	0.02	-0.0215	-0.0007	0.0066	0.0320	-0.3014	0.9615	-0.0004	0.2415	-0.0004	0.2512
156	55.63	0.02	-0.0233	-0.0004	0.0070	0.0172	-0.3004	0.9753	-0.0005	0.2453	-0.0009	0.2515
157	55.78	-0.00	-0.0209	-0.0005	0.0065	0.0239	-0.3971	0.9742	-0.0008	0.2451	-0.0008	0.2516
158	55.94	-0.00	-0.0220	-0.0003	0.0072	0.0136	-0.3479	0.9880	-0.0017	0.2488	-0.0017	0.2518
159	56.10	0.01	-0.0222	-0.0003	0.0067	0.0135	-0.3919	0.9838	-0.0014	0.2467	-0.0014	0.2528
160	56.27	0.01	-0.0235	-0.0005	0.0091	0.0213	-0.3872	0.9810	-0.0013	0.2480	-0.0013	0.2526
161	56.41	0.01	-0.0159	-0.0004	0.0101	0.0201	-0.5025	0.9693	-0.0018	0.2497	-0.0018	0.2524
162	56.55	0.01	-0.0223	-0.0003	0.0059	0.0135	-0.4170	0.9935	-0.0021	0.2517	-0.0021	0.2533
163	56.76	-0.03	-0.0286	-0.0004	0.0054	0.0140	-0.3357	0.9878	-0.0008	0.2491	-0.0008	0.2522
164	56.91	-0.02	-0.0260	-0.0001	0.0092	0.0035	-0.3217	0.9890	-0.0002	0.2493	-0.0002	0.2521
165	57.07	-0.02	-0.0325	-0.0011	0.0112	0.0336	-0.3446	0.9967	-0.0009	0.2530	-0.0009	0.2533
166	57.20	-0.07	-0.0335	-0.0013	0.0100	0.0308	-0.2965	0.9905	-0.0008	0.2512	-0.0008	0.2536
167	57.37	-0.02	-0.0376	0.00	0.0105	0.00	-0.2699	1.0096	-0.0021	0.2573	-0.0021	0.2545
168	57.49	-0.05	-0.0301	0.0007	0.0098	-0.0233	-0.3250	1.0103	-0.0029	0.2607	-0.0029	0.2565
169	57.65	-0.05	-0.0288	0.0008	0.0094	-0.0278	-0.3264	1.0201	-0.0024	0.2601	-0.0024	0.2550
170	57.76	-0.03	-0.0326	0.0012	0.0086	-0.0368	-0.2636	1.0242	-0.0032	0.2615	-0.0031	0.2557
171	57.93	-0.01	-0.0353	0.0014	0.0094	-0.0397	-0.2663	1.0157	-0.0017	0.2592	-0.0017	0.2552
172	58.08	0.04	-0.0281	-0.0001	0.0141	0.0036	-0.5016	1.0238	-0.0010	0.2605	-0.0010	0.2544
173	58.25	0.00	-0.0180	0.0008	0.0172	-0.0500	-1.0750	1.0420	-0.0021	0.2665	-0.0020	0.2558
174	58.41	-0.05	-0.0267	0.0008	0.0148	-0.0386	-0.8763	1.0336	-0.0014	0.2637	-0.0014	0.2551
175	58.54	0.02	-0.0250	0.0012	0.0163	-0.0999	-3.2600	1.0640	-0.0025	0.2732	-0.0023	0.2568
176	58.68	-0.00	-0.0253	0.0006	0.0095	-0.0790	-0.3755	1.0448	-0.0021	0.2657	-0.0020	0.2543
177	58.87	-0.02	-0.0107	0.0020	0.0137	-0.1867	-1.2804	1.0725	-0.0041	0.2766	-0.0038	0.2575
178	58.17	-0.04	-0.0325	0.0010	0.0097	-0.0488	-0.2946	1.0146	-0.0026	0.2587	-0.0026	0.2550

MARTIN MISSILE TAILS EFFECTS DATA

TEST	PART	MACH	RAIC-E	PHI	CONF	L	DEL1	DEL2	DEL3	DEL4	TRANSITION
7	104	1.00	1.7	0.0	BINOF14	0.0	0	-10	0	-10	UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
1	-5.76	0.04	0.0301	9.9999	0.0128	9.9999	0.4252	-0.6524	0.0113	-0.2122	-0.0173	0.3253
2	-5.76	0.02	0.0283	9.9999	0.0121	9.9999	0.4503	-0.6541	0.0116	-0.2139	-0.0177	0.3270
3	-5.76	0.02	0.0283	9.9999	0.0120	9.9999	0.4503	-0.6543	0.0116	-0.2103	-0.0183	0.3315
4	-4.41	0.03	0.0282	9.9999	0.0131	9.9999	0.4902	-0.5427	0.0124	-0.1897	-0.0228	0.3495
5	-2.55	0.02	0.0283	9.9999	0.0120	9.9999	0.4563	-0.4333	0.0123	-0.1607	-0.0284	0.3705
6	-0.09	0.02	0.0287	9.9999	0.0118	9.9999	0.4979	-0.3269	0.0107	-0.1256	-0.0327	0.3848
7	1.26	0.03	0.0283	9.9999	0.0125	9.9999	0.4753	-0.2244	0.0087	-0.0898	-0.0368	0.4002
8	3.25	0.02	0.0283	9.9999	0.0087	9.9999	0.4065	-0.1290	0.0066	-0.0580	-0.0512	0.4496
9	5.09	0.03	0.0314	9.9999	0.0124	9.9999	0.3949	-0.0584	0.0038	-0.0240	-0.0651	0.4110
10	7.03	0.02	0.0301	9.9999	0.0113	9.9999	0.3754	0.0065	0.0022	0.0037	0.3188	0.5362
11	8.90	0.02	0.0315	9.9999	0.0095	9.9999	0.3143	0.0632	0.0014	0.0387	0.0221	0.6123
12	10.84	0.01	0.0417	9.9999	0.0093	9.9999	0.2230	0.0915	0.0014	0.0713	0.0095	0.5039
13	12.77	0.02	0.0431	9.9999	0.0075	9.9999	0.1633	0.2195	0.0017	0.1013	0.0077	0.4615
14	14.72	0.02	0.0491	9.9999	0.0065	9.9999	0.1601	0.3046	0.0019	0.1318	0.0062	0.4327
15	16.73	0.02	0.0354	9.9999	0.0041	9.9999	0.1041	0.3646	0.0030	0.1548	0.0078	0.4025
16	18.73	0.01	0.0369	9.9999	0.0001	9.9999	0.0026	0.4614	0.0025	0.1818	0.0052	0.3776
17	20.71	0.02	0.0555	9.9999	0.0055	9.9999	0.1055	0.5661	0.0032	0.2092	0.0057	0.3655
18	22.70	0.00	0.0446	9.9999	0.0016	9.9999	0.0329	0.6021	0.0044	0.2189	0.0073	0.3638
19	24.68	0.02	0.0435	9.9999	-0.0010	9.9999	-0.0230	0.6235	0.0078	0.2192	0.0125	0.3516
20	26.70	0.07	0.0729	9.9999	0.0117	9.9999	0.1010	0.6406	0.0124	0.2217	0.0194	0.3461
21	28.35	0.09	0.0695	9.9999	0.0105	9.9999	0.1502	0.6829	0.0148	0.2359	0.0217	0.3454
22	28.36	0.09	0.0736	9.9999	0.0108	9.9999	0.1463	0.6893	0.0150	0.2414	0.0218	0.3502
23	28.42	0.07	0.0689	9.9999	0.0075	9.9999	0.1086	0.6955	0.0156	0.2433	0.0224	0.3466
24	28.85	0.07	0.0726	9.9999	0.0108	9.9999	0.1488	0.7272	0.0159	0.2512	0.0219	0.3454
25	29.12	0.07	0.0726	9.9999	0.0106	9.9999	0.1486	0.7233	0.0173	0.2496	0.0239	0.3451
26	29.41	0.07	0.0753	9.9999	0.0110	9.9999	0.1461	0.7271	0.0172	0.2522	0.0237	0.3469
27	29.75	0.07	0.0752	9.9999	0.0120	9.9999	0.1596	0.7357	0.0171	0.2544	0.0232	0.3458
28	30.04	0.08	0.0778	9.9999	0.0114	9.9999	0.1440	0.7428	0.0172	0.2560	0.0232	0.3446
29	30.31	0.08	0.0752	9.9999	0.0130	9.9999	0.1729	0.7531	0.0167	0.2588	0.0222	0.3436
30	30.56	0.07	0.0753	9.9999	0.0110	9.9999	0.1401	0.7587	0.0169	0.2608	0.0223	0.3437
31	30.86	0.08	0.0752	9.9999	0.0135	9.9999	0.1795	0.7591	0.0163	0.2612	0.0215	0.3441
32	31.13	0.08	0.0728	9.9999	0.0118	9.9999	0.1621	0.7587	0.0169	0.2619	0.0223	0.3461
33	31.40	0.07	0.0714	9.9999	0.0127	9.9999	0.1779	0.7827	0.0166	0.2696	0.0212	0.3444
34	31.70	0.09	0.0815	9.9999	0.0170	9.9999	0.2006	0.7819	0.0196	0.2624	0.0257	0.3444
35	31.97	0.09	0.0751	9.9999	0.0160	9.9999	0.2130	0.7820	0.0194	0.2635	0.0255	0.3458
36	32.23	0.10	0.0778	9.9999	0.0177	9.9999	0.2281	0.7940	0.0187	0.2668	0.0242	0.3447
37	32.51	0.09	0.0801	9.9999	0.0168	9.9999	0.2097	0.7716	0.0185	0.2668	0.0240	0.3458
38	32.77	0.06	0.0555	9.9999	0.0107	9.9999	0.1700	0.7797	0.0191	0.2665	0.0245	0.3418
39	33.03	0.07	0.0672	9.9999	0.0158	9.9999	0.2351	0.7769	0.0194	0.2666	0.0250	0.3432
40	33.30	0.07	0.0736	9.9999	0.0173	9.9999	0.2351	0.7875	0.0204	0.2687	0.0259	0.3412
41	33.56	0.05	0.0621	9.9999	0.0145	9.9999	0.2399	0.7932	0.0204	0.2685	0.0257	0.3385
42	33.79	0.05	0.0665	9.9999	0.0153	9.9999	0.2184	0.6948	0.0220	0.2729	0.0273	0.3391
43	34.05	0.08	0.0857	9.9999	0.0175	9.9999	0.2511	0.8195	0.0214	0.2771	0.0261	0.3381
44	34.30	0.06	0.0672	9.9999	0.0143	9.9999	0.2126	0.8233	0.0223	0.2762	0.0271	0.3355
45	34.55	0.06	0.0621	9.9999	0.0145	9.9999	0.2399	0.8308	0.0235	0.2770	0.0283	0.3334
46	34.80	0.08	0.0626	9.9999	0.0169	9.9999	0.2726	0.8380	0.0215	0.2797	0.0257	0.3338

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 9 OF 3
SHEET 2 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART MACH 1.00 RX10-6 1.7 PHI C.C BODCF14 C.0 CONF 1 DELT 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	35.06	0.06	0.0582	9.9999	0.0151	9.9999	0.2594	0.8343	0.0245	0.2749	0.0294	0.3295
48	35.36	0.06	0.0615	9.9999	0.0174	9.9999	0.2611	0.8330	0.0245	0.2763	0.0294	0.3317
49	35.56	0.07	0.0626	9.9999	0.0172	9.9999	0.2638	0.8497	0.0251	0.2800	0.0295	0.3295
50	35.76	0.07	0.0504	9.9999	0.0154	9.9999	0.3056	0.8490	0.0261	0.2792	0.0307	0.3289
51	36.04	0.08	0.0568	9.9999	0.0164	9.9999	0.2887	0.8528	0.0267	0.2801	0.0313	0.3284
52	36.28	0.08	0.0542	9.9999	0.0162	9.9999	0.2989	0.8516	0.0263	0.2792	0.0335	0.3258
53	36.51	0.07	0.0542	9.9999	0.0162	9.9999	0.2989	0.8579	0.0256	0.2831	0.0301	0.3306
54	36.76	0.02	0.0463	9.9999	0.0146	9.9999	0.3140	0.8571	0.0271	0.2751	0.0348	0.3262
55	37.02	0.06	0.0528	9.9999	0.0171	9.9999	0.3239	0.8535	0.0294	0.2787	0.0344	0.3284
56	37.25	0.05	0.0502	9.9999	0.0164	9.9999	0.3267	0.8525	0.0296	0.2778	0.0347	0.3259
57	37.52	0.06	0.0585	9.9999	0.0178	9.9999	0.3150	0.8545	0.0306	0.2776	0.0358	0.3249
58	37.75	0.03	0.0514	9.9999	0.0170	9.9999	0.3307	0.8659	0.0306	0.2821	0.0353	0.3258
59	37.99	0.05	0.0528	9.9999	0.0170	9.9999	0.3232	0.8691	0.0321	0.2819	0.0369	0.3244
60	38.26	0.03	0.0465	9.9999	0.0157	9.9999	0.3211	0.8717	0.0324	0.2827	0.0372	0.3243
61	38.55	0.04	0.0550	9.9999	0.0187	9.9999	0.3400	0.8647	0.0326	0.2819	0.0377	0.3260
62	38.77	0.05	0.0550	9.9999	0.0182	9.9999	0.3339	0.8713	0.0332	0.2836	0.0381	0.3255
63	39.04	0.04	0.0511	9.9999	0.0195	9.9999	0.3894	0.8811	0.0333	0.2864	0.0378	0.3256
64	39.25	0.06	0.0474	9.9999	0.0171	9.9999	0.3608	0.8650	0.0342	0.2815	0.0395	0.3254
65	39.44	0.04	0.0500	9.9999	0.0163	9.9999	0.3260	0.8677	0.0345	0.2833	0.0398	0.3265
66	39.70	0.05	0.0424	9.9999	0.0157	9.9999	0.3703	0.8783	0.0353	0.2854	0.0402	0.3245
67	39.90	0.05	0.0523	9.9999	0.0185	9.9999	0.3514	0.8677	0.0365	0.2825	0.0421	0.3256
68	40.09	0.04	0.0486	9.9999	0.0183	9.9999	0.3739	0.8740	0.0368	0.2817	0.0421	0.3223
69	40.33	0.03	0.0536	9.9999	0.0186	9.9999	0.3670	0.8884	0.0364	0.2863	0.0410	0.3223
70	40.53	0.03	0.0497	9.9999	0.0192	9.9999	0.3803	0.8716	0.0384	0.2821	0.0441	0.3237
71	40.73	0.06	0.0511	9.9999	0.0178	9.9999	0.3483	0.8706	0.0396	0.2792	0.0453	0.3207
72	40.95	0.06	0.0360	9.9999	0.0137	9.9999	0.3306	0.8714	0.0406	0.2792	0.0466	0.3204
73	41.14	0.06	0.0497	9.9999	0.0182	9.9999	0.3062	0.8577	0.0420	0.2743	0.0490	0.3158
74	41.38	0.06	0.0571	9.9999	0.0227	9.9999	0.3975	0.8672	0.0424	0.2741	0.0489	0.3161
75	41.56	0.04	0.0355	9.9999	0.0156	9.9999	0.4345	0.8747	0.0419	0.2784	0.0479	0.3183
76	41.77	0.02	0.0356	9.9999	0.0164	9.9999	0.4141	0.8834	0.0457	0.2722	0.0525	0.3153
77	42.00	0.05	0.0558	9.9999	0.0216	9.9999	0.3871	0.8711	0.0463	0.2750	0.0531	0.3157
78	42.17	0.04	0.0495	9.9999	0.0211	9.9999	0.4263	0.8821	0.0471	0.2703	0.0546	0.3135
79	42.39	0.03	0.0426	9.9999	0.0174	9.9999	0.4265	0.8824	0.0487	0.2694	0.0565	0.3124
80	42.56	0.05	0.0432	9.9999	0.0191	9.9999	0.4421	0.8703	0.0475	0.2723	0.0546	0.3129
81	42.76	0.05	0.0432	9.9999	0.0196	9.9999	0.4537	0.8700	0.0498	0.2702	0.0572	0.3108
82	42.95	0.04	0.0456	9.9999	0.0193	9.9999	0.4214	0.8761	0.0504	0.2710	0.0575	0.3093
83	43.15	0.04	0.0397	9.9999	0.0175	9.9999	0.4902	0.8878	0.0516	0.2719	0.0581	0.3063
84	43.33	0.01	0.0456	9.9999	0.0206	9.9999	0.4561	0.8796	0.0514	0.2696	0.0584	0.3065
85	43.50	0.03	0.0382	9.9999	0.0187	9.9999	0.4895	0.8733	0.0519	0.2661	0.0594	0.3047
86	43.69	0.05	0.0444	9.9999	0.0197	9.9999	0.4437	0.8719	0.0537	0.2639	0.0616	0.3027
87	43.88	0.06	0.0432	9.9999	0.0196	9.9999	0.4537	0.8622	0.0548	0.2589	0.0635	0.3003
88	44.05	0.06	0.0416	9.9999	0.0204	9.9999	0.5025	0.8578	0.0557	0.2516	0.0665	0.3003
89	44.22	0.02	0.0356	9.9999	0.0203	9.9999	0.5132	0.8498	0.0549	0.2560	0.0646	0.3013
90	44.41	0.03	0.0333	9.9999	0.0174	9.9999	0.5225	0.8972	0.0561	0.2656	0.0625	0.2960
91	44.58	0.04	0.0371	9.9999	0.0172	9.9999	0.4636	0.8827	0.0568	0.2606	0.0643	0.2952
92	44.79	0.01	0.0371	9.9999	0.0172	9.9999	0.4636	0.8737	0.0589	0.2580	0.0674	0.2953

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 104 | MACH 1.00 | RX10-6 1.7 | PHI 0.0 | CONF DIBUFIN | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

PCENT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
93	44.97	-0.01	0.0358	9.9999	0.0176	9.9999	0.4516	0.8974	0.0573	0.2640	0.0638	0.2942
94	45.19	0.03	0.0358	9.9999	0.0176	9.9999	0.4516	0.8950	0.0583	0.2638	0.0644	0.2915
95	45.35	0.02	0.0333	9.9999	0.0164	9.9999	0.4525	0.8741	0.0583	0.2566	0.0647	0.2915
96	45.51	0.01	0.0356	9.9999	0.0176	9.9999	0.4503	0.8780	0.0581	0.2547	0.0662	0.2901
97	45.70	0.03	0.0332	9.9999	0.0245	9.9999	0.4080	0.8663	0.0583	0.2574	0.0658	0.2904
98	45.87	0.03	0.0333	9.9999	0.0217	9.9999	0.3914	0.8616	0.0582	0.2552	0.0660	0.2894
99	46.06	0.03	0.0358	9.9999	0.0214	9.9999	0.4672	0.8843	0.0585	0.2533	0.0661	0.2864
100	46.24	0.04	0.0349	9.9999	0.0167	9.9999	0.5405	0.8935	0.0575	0.2564	0.0643	0.2870
101	46.40	0.03	0.0364	9.9999	0.0183	9.9999	0.4786	0.8906	0.0590	0.2557	0.0662	0.2871
102	46.59	0.02	0.0347	9.9999	0.0171	9.9999	0.4926	0.9216	0.0587	0.2610	0.0637	0.2831
103	46.77	0.03	0.0322	9.9999	0.0155	9.9999	0.4936	0.9131	0.0574	0.2562	0.0629	0.2866
104	46.92	0.02	0.0334	9.9999	0.0174	9.9999	0.5210	0.9245	0.0576	0.2596	0.0615	0.2868
105	47.12	0.02	0.0358	9.9999	0.0168	9.9999	0.5008	0.9278	0.0566	0.2602	0.0610	0.2804
106	47.28	0.01	0.0325	9.9999	0.0145	9.9999	0.5753	0.9150	0.0567	0.2546	0.0620	0.2783
107	47.47	0.01	0.0357	9.9999	0.0137	9.9999	0.4613	0.8911	0.0567	0.2471	0.0636	0.2773
108	47.63	0.03	0.0322	9.9999	0.0145	9.9999	0.4027	0.8532	0.0494	0.2680	0.0518	0.2812
109	47.82	0.02	0.0364	9.9999	0.0168	9.9999	0.4375	0.9166	0.0130	0.2746	0.0142	0.2956
110	47.97	0.05	0.0363	9.9999	0.0168	9.9999	0.4386	0.9013	0.0339	0.2734	0.0353	0.2844
111	48.16	0.06	0.0362	9.9999	0.0205	9.9999	0.4253	0.9200	0.0094	0.2738	0.0102	0.2978
112	48.32	0.05	0.0369	9.9999	0.0236	9.9999	0.4148	0.8920	0.0019	0.2547	0.0023	0.3061
113	48.51	0.06	0.0349	9.9999	0.0215	9.9999	0.3952	0.8354	0.0017	0.2547	0.0020	0.3049
114	48.67	0.07	0.0318	9.9999	0.0227	9.9999	0.4382	0.8404	0.0025	0.2536	0.0030	0.3018
115	48.87	0.03	0.0318	9.9999	0.0222	9.9999	0.4286	0.8330	0.0030	0.2506	0.0036	0.3008
116	49.02	0.07	0.0331	9.9999	0.0211	9.9999	0.4105	0.8224	0.0035	0.2449	0.0047	0.2978
117	49.15	0.07	0.0361	9.9999	0.0204	9.9999	0.4241	0.8098	0.0046	0.2403	0.0057	0.2967
118	49.30	0.05	0.0454	9.9999	0.0201	9.9999	0.4069	0.8213	0.0042	0.2421	0.0051	0.2948
119	49.54	0.10	0.0318	9.9999	0.0222	9.9999	0.4286	0.8177	0.0052	0.2400	0.0064	0.2935
120	49.72	0.07	0.0342	9.9999	0.0235	9.9999	0.4410	0.8195	0.0064	0.2383	0.0078	0.2908
121	49.91	0.08	0.0454	9.9999	0.0196	9.9999	0.3966	0.8298	0.0076	0.2393	0.0092	0.2884
122	50.09	0.09	0.0343	9.9999	0.0214	9.9999	0.3991	0.8214	0.0076	0.2377	0.0093	0.2894
123	50.25	0.07	0.0358	9.9999	0.0225	9.9999	0.4047	0.8255	0.0074	0.2382	0.0090	0.2886
124	50.42	0.06	0.0367	9.9999	0.0207	9.9999	0.4063	0.8205	0.0077	0.2355	0.0094	0.2870
125	50.61	0.07	0.0367	9.9999	0.0207	9.9999	0.4063	0.8214	0.0066	0.2368	0.0080	0.2883
126	50.78	0.05	0.0465	9.9999	0.0201	9.9999	0.4061	0.8319	0.0076	0.2399	0.0091	0.2884
127	50.94	0.07	0.0405	9.9999	0.0150	9.9999	0.3667	0.8695	0.0132	0.2440	0.0152	0.2806
128	51.13	0.01	0.0433	9.9999	0.0174	9.9999	0.3972	0.8707	0.0140	0.2404	0.0159	0.2804
129	51.29	0.06	0.0335	9.9999	0.0125	9.9999	0.3731	0.8954	0.0176	0.2472	0.0157	0.2761
130	51.47	0.04	0.0435	9.9999	0.0143	9.9999	0.3207	0.9198	0.0187	0.2518	0.0203	0.2738
131	51.62	0.04	0.0435	9.9999	0.0153	9.9999	0.3517	0.9337	0.0186	0.2561	0.0157	0.2743
132	51.83	0.01	0.0360	9.9999	0.0137	9.9999	0.3806	0.9445	0.0171	0.2581	0.0181	0.2733
133	51.99	0.02	0.0382	9.9999	0.0117	9.9999	0.3232	0.9224	0.0110	0.2569	0.0119	0.2785
134	52.11	0.05	0.0346	9.9999	0.0131	9.9999	0.3764	0.8992	0.0045	0.2547	0.0050	0.2833
135	52.25	0.02	0.0461	9.9999	0.0160	9.9999	0.3471	0.8828	0.0039	0.2497	0.0044	0.2828
136	52.43	0.01	0.0366	9.9999	0.0134	9.9999	0.3471	0.8726	0.0043	0.2475	0.0045	0.2836
137	52.59	0.04	0.0367	9.9999	0.0115	9.9999	0.3075	0.8707	0.0033	0.2467	0.0038	0.2856
138	52.77	0.01	0.0424	9.9999	0.0137	9.9999	0.3231	0.8820	0.0037	0.2499	0.0042	0.2833

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 3 OF 3
SHEET 4 OF 4

PARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART MACH 1.CC RX1C-6 1.7 PHI 0.0 BODY14 CONF 6.C DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCANT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
139	52.92	0.01	0.0366	9.9999	0.0137	9.9999	0.3836	0.8849	0.0035	0.2506	0.0040	0.2832
140	53.09	0.03	0.0496	9.9999	0.0184	9.9999	0.3253	0.8500	0.0038	0.2446	0.0044	0.2851
141	53.27	0.02	0.0412	9.9999	0.0111	9.9999	0.2694	0.8538	0.0039	0.2432	0.0046	0.2848
142	53.43	0.00	0.0361	9.9999	0.0117	9.9999	0.3241	0.8670	0.0031	0.2456	0.0036	0.2833
143	53.58	0.03	0.0412	9.9999	0.0131	9.9999	0.3180	0.8622	0.0035	0.2430	0.0041	0.2818
144	53.73	0.05	0.0385	9.9999	0.0154	9.9999	0.4030	0.8770	0.0026	0.2464	0.0030	0.2810
145	53.93	0.02	0.0387	9.9999	0.0115	9.9999	0.3075	0.8784	0.0026	0.2471	0.0030	0.2813
146	54.08	0.02	0.0367	9.9999	0.0114	9.9999	0.2946	0.8725	0.0029	0.2446	0.0033	0.2803
147	54.23	0.02	0.0337	9.9999	0.0116	9.9999	0.3462	0.8814	0.0021	0.2464	0.0024	0.2796
148	54.37	0.04	0.0387	9.9999	0.0134	9.9999	0.3592	0.8741	0.0024	0.2449	0.0027	0.2802
149	54.54	0.03	0.0412	9.9999	0.0131	9.9999	0.3180	0.8894	0.0026	0.2481	0.0025	0.2790
150	54.70	0.01	0.0425	9.9999	0.0137	9.9999	0.3224	0.8934	0.0021	0.2511	0.0023	0.2804
151	54.86	0.02	0.0425	9.9999	0.0127	9.9999	0.2988	0.8986	0.0022	0.2501	0.0024	0.2783
152	55.01	0.02	0.0424	9.9999	0.0142	9.9999	0.3349	0.9026	0.0024	0.2509	0.0027	0.2780
153	55.17	0.02	0.0424	9.9999	0.0127	9.9999	0.2995	0.9090	0.0015	0.2532	0.0021	0.2785
154	55.34	-0.02	0.0424	9.9999	0.0137	9.9999	0.3231	0.9144	0.0022	0.2536	0.0024	0.2773
155	55.48	0.02	0.0436	9.9999	0.0146	9.9999	0.3394	0.9162	0.0016	0.2536	0.0017	0.2768
156	55.63	0.02	0.0411	9.9999	0.0131	9.9999	0.3167	0.9241	0.0013	0.2555	0.0014	0.2750
157	55.78	-0.00	0.0426	9.9999	0.0133	9.9999	0.3050	0.9252	0.0014	0.2551	0.0015	0.2757
158	55.94	-0.00	0.0411	9.9999	0.0136	9.9999	0.3309	0.9300	0.0012	0.2574	0.0013	0.2748
159	56.10	0.01	0.0356	9.9999	0.0087	9.9999	0.2686	0.9325	0.0008	0.2552	0.0009	0.2737
160	56.27	0.01	0.0414	9.9999	0.0121	9.9999	0.2937	0.9353	0.0008	0.2549	0.0009	0.2725
161	56.41	0.01	0.0536	9.9999	0.0171	9.9999	0.3190	0.9435	0.0006	0.2570	0.0006	0.2723
162	56.59	0.01	0.0437	9.9999	0.0153	9.9999	0.3043	0.9466	0.0005	0.2577	0.0005	0.2722
163	56.76	-0.03	0.0436	9.9999	0.0153	9.9999	0.3509	0.9605	0.0008	0.2578	0.0008	0.2684
164	56.91	-0.02	0.0510	9.9999	0.0184	9.9999	0.3666	0.9706	0.0020	0.2593	0.0021	0.2671
165	57.07	-0.02	0.0513	9.9999	0.0165	9.9999	0.2843	0.9737	0.0015	0.2587	0.0020	0.2657
166	57.20	-0.07	0.0437	9.9999	0.0133	9.9999	0.3043	0.9854	0.0013	0.2615	0.0013	0.2654
167	57.37	-0.02	0.0312	9.9999	0.0114	9.9999	0.3654	0.9753	-0.0007	0.2600	-0.0007	0.2668
168	57.49	-0.05	0.0386	9.9999	0.0126	9.9999	0.3093	0.9780	-0.0010	0.2598	-0.0010	0.2656
169	57.65	-0.05	0.0414	9.9999	0.0122	9.9999	0.2967	0.9760	-0.0006	0.2589	-0.0006	0.2653
170	57.76	-0.03	0.0396	9.9999	0.0110	9.9999	0.2821	0.9850	-0.0018	0.2606	-0.0018	0.2648
171	57.93	-0.01	0.0428	9.9999	0.0128	9.9999	0.2991	0.9797	-0.0004	0.2576	-0.0004	0.2629
172	58.08	0.04	0.0490	9.9999	0.0154	9.9999	0.3159	0.9792	0.0002	0.2572	0.0002	0.2627
173	58.25	0.00	0.0525	9.9999	0.0156	9.9999	0.2949	0.9808	0.0	0.2575	0.0	0.2625
174	58.41	-0.05	0.0452	9.9999	0.0156	9.9999	0.2805	0.9821	0.0	0.2560	0.0	0.2607
175	58.59	0.02	0.0366	9.9999	0.0095	9.9999	0.2703	0.9774	-0.0013	0.2594	-0.0013	0.2613
176	58.66	-0.00	0.0429	9.9999	0.0156	9.9999	0.2949	0.9938	-0.0006	0.2576	-0.0006	0.2594
177	58.87	-0.02	0.0451	9.9999	0.0146	9.9999	0.3014	1.0051	-0.0023	0.2624	-0.0023	0.2611
178	58.17	-0.04	0.0428	9.9999	0.0133	9.9999	0.3107	0.9799	-0.0009	0.2551	-0.0009	0.2603

PARTIA MISSILE TAILS EFFECTS DATA

TEST 7 PART NUM 1.10 MACH 1.7 RNIC-6 PHI 0.0 CONF 6 DELF G.C DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSATION UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
1	-5.76	0.05	-1.3824	4.1348	C.0681	-0.0029	0.0004	0.6937	0.2789	0.4147	-2.9910
2	-5.77	0.03	-1.3c46	4.1104	-C.0021	-0.0056	0.0005	0.6911	0.2789	0.4121	-2.9886
3	-5.77	0.03	-1.3736	4.1016	-C.0102	C.0006	0.0003	0.6913	0.2782	0.4130	-2.9869
4	-5.75	0.03	-1.2561	3.8766	-C.0121	C.0232	0.0007	0.6795	0.2672	0.4122	-3.0861
5	-3.74	0.04	-0.9957	3.3e55	C.1237	-C.0554	0.0013	0.6448	0.2426	0.4022	-3.4045
6	-1.e9	0.04	-0.711c	2.8155	C.0575	C.0239	0.0017	0.6211	0.2329	0.3882	-3.9287
7	0.04	0.05	-0.4243	2.1765	C.2006	-C.1063	0.0025	0.6006	0.2283	0.3723	-5.1302
8	1.98	0.03	-0.203E	1.7352	C.0205	-C.0C65	0.0030	0.5921	0.2343	0.3578	-8.5335
9	3.90	0.03	C.3017	1.2666	-C.0795	C.0663	-0.0020	0.5740	0.2436	0.3304	26.5173
10	5.81	0.03	0.c241	C.8e65	-C.0203	0.1178	0.0039	0.5934	0.2605	0.3329	3.0979
11	7.80	0.02	0.5267	C.4806	-C.0334	C.1110	-0.0063	0.5835	0.2839	0.2970	0.9129
12	9.07	0.04	0.8261	C.0493	C.0165	C.0492	-0.0053	0.5865	0.2987	0.2878	0.0597
13	11.89	0.03	1.1617	-C.5425	-C.0505	C.2239	0.0060	0.5581	0.3044	0.2537	-0.4670
14	13.86	0.04	1.5442	-1.1303	C.0524	C.1557	0.0069	0.5421	0.3065	0.2256	-0.7320
15	15.84	0.03	1.8595	-1.5785	-C.0442	C.3747	0.0075	0.5101	0.3117	0.1984	-C.8308
16	17.88	0.04	2.2550	-2.1Cee	C.0012	C.331C	0.0140	0.4957	0.3187	0.1750	-0.9351
17	19.86	0.03	2.6504	-2.4242	-C.0750	C.4323	0.0096	0.4549	0.3226	0.1324	-0.9146
18	21.70	0.03	3.1e8a	-2.5775	-C.0987	C.4263	-0.0046	0.4158	0.3209	0.0949	-0.8084
19	23.75	0.04	3.5000	-2.7784	C.0537	-C.0009	0.0157	0.3759	0.3166	0.0593	-0.7312
20	25.77	0.04	4.4046	-2.e266	C.0292	-C.0C62	0.0166	0.3433	0.3156	0.0277	-C.6302
21	27.63	0.09	5.1359	-2.7ec7	C.5508	-1.2255	0.0946	0.3272	0.3219	0.0053	-0.5376
22	28.42	0.07	5.2536	-2.7282	C.4721	-1.0e3e	0.0730	0.3359	0.3225	0.0134	-0.5153
23	28.70	0.07	5.4172	-2.72C1	C.4236	-C.7512	0.0622	0.3059	0.3232	-0.0173	-0.5021
24	28.99	0.07	5.4550	-2.7353	C.3537	-C.4352	0.0347	0.3150	0.3246	-0.0096	-0.4981
25	29.35	0.08	5.6312	-2.8064	C.3841	-0.5027	0.0517	0.3232	0.3246	-0.0014	-0.5094
26	29.64	0.07	5.6557	-2.9364	C.3759	-C.4566	0.0518	0.3078	0.3260	-0.0182	-0.5145
27	29.94	0.08	5.8808	-3.0238	C.4595	-C.6813	0.0586	0.3159	0.3282	-0.0123	-0.5154
28	30.23	0.11	6.0040	-3.1185	C.7528	-1.3071	0.0873	0.3096	0.3353	-0.0257	-C.5195
29	30.53	0.10	6.2108	-3.2545	C.7685	-1.5374	0.1267	0.3151	0.3405	-0.0254	-0.5241
30	30.79	0.09	6.2220	-3.3355	C.8153	-1.6744	0.0966	0.3078	0.3423	-0.0345	-0.5367
31	31.07	0.05	6.3665	-3.3801	C.6080	-1.0026	0.1045	0.3012	0.3437	-0.0425	-0.5314
32	31.36	0.08	6.4534	-3.4945	C.4326	-C.6906	0.1096	0.3031	0.3466	-0.0435	-0.5382
33	31.63	0.09	6.5521	-3.4954	C.5342	-0.7317	0.1045	0.2841	0.3452	-0.0610	-0.5298
34	31.92	0.09	6.7022	-3.6766	C.5171	-0.8293	0.1102	0.2697	0.3538	-0.0841	-C.5425
35	32.19	0.06	6.8024	-3.8244	C.1919	-0.2175	0.0882	0.2912	0.3535	-0.0623	-0.5328
36	32.47	0.07	7.0056	-3.7546	C.2725	-0.2545	0.0779	0.2734	0.3586	-0.0853	-0.5359
37	32.73	0.05	7.0721	-3.7760	C.1315	-0.0532	0.0722	0.2883	0.3599	-0.0715	-0.5342
38	33.00	0.07	7.2336	-3.8563	C.3026	-C.1249	0.0728	0.3056	0.3669	-0.0613	-0.5323
39	33.26	0.05	7.2652	-3.9063	C.5072	-0.4262	0.0955	0.3043	0.3738	-0.0695	-C.5374
40	33.52	0.05	7.4056	-3.8792	C.0062	C.4674	0.0442	0.2e96	0.3784	-0.0988	-0.5236
41	33.77	0.05	7.5612	-4.1185	C.0051	C.4466	0.0503	0.3059	0.3801	-0.0742	-0.5433
42	34.03	0.05	7.6511	-4.1200	C.0126	C.5982	0.0554	0.2982	0.3829	-0.0847	-0.5385
43	34.27	0.06	7.7425	-4.1506	C.0555	C.6771	0.0670	0.2937	0.3869	-0.0932	-0.5361
44	34.53	0.05	7.9042	-4.3e5C	C.0326	C.7563	0.0556	0.3002	0.3847	-0.0695	-0.5527
45	34.79	0.05	7.9479	-4.3886	C.0505	C.5141	0.0765	0.3065	0.3921	-0.0856	-0.5522
46	35.03	0.08	8.0546	-4.3506	C.1213	C.6826	0.0508	0.2e70	0.3926	-0.1056	-0.5401

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 105 MACH 1.10 RX10-6 1.7 PHI 0.0 CONF 14 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
47	35.27	0.05	8.2493	-4.8213	0.0806	0.5537	0.0793	0.2953	0.3932	-0.1030	-0.5602
48	35.53	0.04	8.3211	-4.5554	-0.0734	0.7373	0.0883	0.2697	0.3904	-0.1008	-0.5474
49	35.78	0.05	8.4371	-4.8478	0.1325	0.4455	0.0584	0.2845	0.4016	-0.1171	-0.5509
50	36.00	0.05	8.5450	-4.8123	0.0541	0.4978	0.1025	0.2770	0.4033	-0.1257	-0.5632
51	36.27	0.07	8.6835	-4.8118	0.3321	0.2678	0.0650	0.2728	0.3955	-0.1267	-0.5541
52	36.50	0.04	8.7648	-4.7767	0.0612	0.5596	0.0371	0.2570	0.3935	-0.1365	-0.5481
53	36.74	0.05	8.8235	-4.9305	0.1375	0.3132	0.0760	0.2733	0.3913	-0.1180	-0.5588
54	36.99	0.04	8.9351	-4.9604	0.0449	0.3130	0.0553	0.2444	0.3840	-0.1396	-0.5552
55	37.24	0.06	8.9723	-5.1113	0.2276	0.2576	0.0825	0.2336	0.3762	-0.1426	-0.5656
56	37.48	0.05	9.1185	-5.1525	0.0854	0.2710	0.0723	0.2205	0.3794	-0.1589	-0.5651
57	37.72	0.05	9.2556	-5.3456	0.0751	0.2613	0.0453	0.2165	0.3731	-0.1566	-0.5780
58	37.97	0.04	9.3164	-5.2615	0.0311	0.2682	0.0348	0.2248	0.3650	-0.1402	-0.5678
59	38.19	0.06	9.4121	-5.3116	0.2067	0.2665	0.0403	0.2123	0.3678	-0.1555	-0.5643
60	38.44	0.05	9.4611	-5.4665	0.1433	0.1916	0.0517	0.1997	0.3586	-0.1589	-0.5769
61	38.68	0.06	9.5554	-5.4567	0.1626	0.2825	0.0353	0.1844	0.3557	-0.1753	-0.5722
62	38.94	0.05	9.7331	-5.5025	0.1116	0.2517	0.0252	0.1971	0.3548	-0.1577	-0.5653
63	39.18	0.05	9.7637	-5.5243	0.1374	0.0708	0.0369	0.1821	0.3496	-0.1677	-0.5658
64	39.40	0.05	9.8457	-5.5217	0.0885	0.1874	0.0532	0.1437	0.3357	-0.1920	-0.5608
65	39.61	0.04	9.9523	-5.6257	0.0506	0.1915	0.0373	0.1862	0.3456	-0.1594	-0.5656
66	39.84	0.03	10.0525	-5.6525	0.0591	0.1248	0.0378	0.1630	0.3436	-0.1808	-0.5662
67	40.06	0.03	10.0973	-5.6767	0.0474	-0.0877	0.0278	0.1594	0.3328	-0.1734	-0.5618
68	40.26	0.03	10.2554	-5.7275	0.0704	-0.1000	0.0392	0.1162	0.3234	-0.2072	-0.5583
69	40.48	0.05	10.3777	-5.8858	0.3273	-0.3125	0.0400	0.1383	0.3215	-0.1832	-0.5671
70	40.69	0.04	10.3950	-5.8486	0.2073	0.0646	0.0554	0.1141	0.3144	-0.2003	-0.5460
71	40.88	0.02	10.4316	-5.8835	-0.0366	0.0582	0.0450	0.1241	0.3074	-0.1833	-0.5641
72	41.10	0.03	10.4787	-5.5377	0.0624	0.3481	0.0356	0.1107	0.2992	-0.1885	-0.5285
73	41.34	0.04	10.6822	-5.6512	0.2372	0.1936	0.0448	0.0884	0.2968	-0.2083	-0.5478
74	41.53	0.02	10.7325	-5.9133	0.0866	0.0582	0.0458	0.0857	0.2874	-0.2017	-0.5510
75	41.75	0.03	10.8225	-5.7716	0.1425	0.3563	0.0401	0.0857	0.2856	-0.1999	-0.5333
76	41.99	0.05	10.8862	-5.8695	0.3558	-0.0175	0.0470	0.0752	0.2814	-0.2062	-0.5362
77	42.14	0.02	10.9536	-6.0245	0.0415	0.0624	0.0477	0.0867	0.2832	-0.1965	-0.5500
78	42.35	0.01	10.9953	-6.0825	-0.0478	0.2315	0.0527	0.0869	0.2757	-0.2088	-0.5532
79	42.53	0.01	11.0241	-5.8126	-0.0562	0.5857	0.0406	0.0960	0.2757	-0.1797	-0.5273
80	42.74	0.01	11.1489	-5.8260	-0.1455	0.6121	0.0411	0.0763	0.2835	-0.2042	-0.5226
81	42.93	0.01	11.2748	-5.9060	-0.1042	0.5736	0.0416	0.0468	0.2709	-0.2241	-0.5238
82	43.10	0.01	11.2839	-5.8571	-0.1534	0.6937	0.0436	0.0775	0.2835	-0.2030	-0.5260
83	43.29	0.00	11.3764	-5.8625	-0.1734	0.8063	0.0383	0.0441	0.2645	-0.2204	-0.5153
84	43.48	0.01	11.4345	-6.0004	-0.0746	0.4706	0.0369	0.0542	0.2723	-0.2201	-0.5305
85	43.65	0.01	11.5855	-6.1025	-0.0858	0.5716	0.0261	0.0355	0.2553	-0.2198	-0.5267
86	43.83	0.01	11.6258	-6.1576	-0.1536	0.5122	0.0211	0.0329	0.2556	-0.2227	-0.5297
87	44.02	0.01	11.6520	-6.2715	-0.1436	0.7191	0.0203	0.0379	0.2599	-0.2220	-0.5382
88	44.21	-0.00	11.7527	-6.2271	-0.1711	0.6167	0.0266	0.0297	0.2569	-0.2292	-0.5298
89	44.35	0.01	11.7152	-6.1461	-0.0626	0.5087	0.0102	0.0453	0.2571	-0.2118	-0.5244
90	44.50	0.01	11.8960	-6.2474	-0.0890	0.5010	0.0107	0.0214	0.2518	-0.2304	-0.5293
91	44.74	0.01	11.9509	-6.3358	-0.0128	0.0651	0.0236	0.0363	0.2521	-0.2138	-0.5301
92	44.91	0.01	11.9853	-6.3215	-0.0121	0.3114	0.0064	0.0230	0.2444	-0.2214	-0.5274

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 105 | MACH 1.10 | REYIC-E 1.7 | PHI 0.0 | CONF 81MUF14 | L 0.0 | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
93	45.12	0.00	12.0613	-5.4216	-0.0184	0.1886	0.0181	0.0352	0.2551	-0.2199	-0.5324
94	45.32	0.01	12.1600	-5.3241	0.0365	0.1271	0.0132	0.0412	0.2566	-0.2354	-0.5200
95	45.48	0.02	12.3071	-5.4235	0.1422	-0.0598	0.0144	0.0117	0.2548	-0.2431	-0.5219
96	45.65	0.01	12.2417	-5.4778	-0.0296	0.2096	0.0080	0.0429	0.2576	-0.2147	-0.5128
97	45.84	-0.00	12.2327	-5.1750	-0.1131	0.3868	-0.0060	0.0220	0.2541	-0.2321	-0.5048
98	46.03	0.00	12.3660	-5.3606	0.0297	-0.3612	0.0480	0.0243	0.2512	-0.2269	-0.5144
99	46.19	0.01	12.4320	-5.3913	-0.0307	0.1715	0.0033	0.0140	0.2633	-0.2493	-0.5161
100	46.37	-0.00	12.4648	-5.4582	-0.0137	0.5105	-0.0199	0.0418	0.2596	-0.2178	-0.5021
101	46.55	-0.01	12.5068	-5.2044	-0.0266	0.2282	0.0035	0.0396	0.2620	-0.2224	-0.4963
102	46.74	-0.01	12.6231	-5.4857	-0.1235	0.4074	-0.0290	0.0304	0.2680	-0.2296	-0.4978
103	46.91	-0.01	12.6662	-5.1428	-0.0508	0.2306	-0.0123	0.0136	0.2744	-0.2608	-0.4850
104	47.07	0.00	12.6493	-5.5553	-0.1476	0.5239	-0.0407	0.0404	0.3023	-0.2059	-0.4740
105	47.24	0.01	12.7200	-5.0165	0.0073	0.2589	-0.0453	0.0839	0.3137	-0.2297	-0.4736
106	47.42	-0.01	12.7264	-5.0215	-0.0264	0.2105	-0.0204	0.0424	0.3030	-0.2605	-0.4731
107	47.59	-0.00	12.7424	-5.5226	-0.0240	0.0396	-0.0364	0.1156	0.3226	-0.2068	-0.4648
108	47.75	0.01	12.7524	-5.6077	0.0605	-0.0148	-0.0326	0.1191	0.3265	-0.2074	-0.4587
109	47.93	0.00	12.8462	-5.7343	0.0468	-0.1141	-0.0321	0.0985	0.3151	-0.2166	-0.4464
110	48.12	0.01	12.9120	-5.7844	0.1285	-0.2904	-0.0371	0.1040	0.3222	-0.2182	-0.4480
111	48.28	0.00	12.9552	-5.7004	0.0527	-0.0433	-0.0152	0.0861	0.3151	-0.2269	-0.4439
112	48.44	0.00	13.0150	-5.5417	-0.0747	0.7066	0.0096	0.1317	0.3353	-0.2036	-0.4568
113	48.63	-0.00	13.1069	-5.6585	-0.1498	0.8478	0.0040	0.1253	0.3610	-0.2357	-0.4500
114	48.80	-0.02	13.3263	-5.1763	-0.3260	1.3095	0.0252	0.1486	0.3745	-0.2459	-0.4634
115	48.98	0.01	13.4207	-5.2215	-0.0592	1.1654	0.0368	0.1537	0.3781	-0.2244	-0.4638
116	49.14	-0.01	13.3136	-5.0155	-0.2133	1.2352	0.0305	0.1575	0.3942	-0.2417	-0.4522
117	49.30	0.00	13.4221	-5.5531	-0.1131	1.1318	0.0483	0.1752	0.4032	-0.2280	-0.4465
118	49.48	-0.01	13.5164	-5.1158	-0.1950	1.1191	0.0467	0.1600	0.4010	-0.2410	-0.4527
119	49.65	0.01	13.3722	-5.0116	-0.0686	1.1397	0.0482	0.1801	0.3982	-0.2181	-0.4346
120	49.81	0.01	13.4566	-5.0961	-0.0886	1.3475	0.0532	0.1655	0.3907	-0.2252	-0.4158
121	49.99	0.02	13.3365	-4.8141	0.0685	1.2409	0.0482	0.1635	0.3867	-0.2232	-0.3609
122	50.17	0.01	13.2644	-4.7015	-0.0016	1.4528	0.0474	0.1666	0.3896	-0.2230	-0.3605
123	50.33	0.03	13.2502	-4.7158	0.0624	1.3463	0.0477	0.1663	0.3885	-0.2206	-0.3551
124	50.48	0.01	13.3271	-4.8266	-0.0471	1.2021	0.0465	0.1706	0.3906	-0.2200	-0.3622
125	50.66	0.02	13.2840	-4.7115	0.0684	1.2315	0.0482	0.1693	0.3936	-0.2243	-0.3547
126	50.84	0.03	13.4017	-4.8621	0.1553	1.0535	0.0469	0.1612	0.3936	-0.2324	-0.3626
127	50.99	0.03	13.4181	-4.8816	0.1767	1.0809	0.0489	0.1690	0.3955	-0.2265	-0.3638
128	43.92	-1.07	13.6741	-5.1445	0.2106	1.0111	0.0496	0.2773	0.3983	-0.1210	-0.3763
129	51.34	0.04	13.5545	-4.9012	0.2621	0.7864	0.0450	0.1702	0.3959	-0.2297	-0.3605
130	51.49	0.04	13.5155	-4.7061	0.2593	0.6648	0.0503	0.1483	0.3974	-0.2491	-0.3526
131	51.70	0.05	13.6382	-4.9855	0.3216	0.8302	0.0511	0.1373	0.3970	-0.2597	-0.3606
132	51.87	0.02	14.0151	-5.1428	0.3059	0.7646	0.0520	0.1452	0.3953	-0.2501	-0.3668
133	52.04	0.04	14.1120	-5.0716	0.3552	0.8100	0.0465	0.1361	0.3983	-0.2622	-0.3554
134	52.20	0.04	13.9479	-4.8647	0.3401	0.5870	0.0415	0.1438	0.3982	-0.2544	-0.3490
135	52.38	0.03	13.9645	-4.8825	0.4046	0.8533	0.0515	0.1342	0.3918	-0.2576	-0.3496
136	52.55	0.05	14.1136	-4.9737	0.3394	0.7173	0.0470	0.1309	0.3964	-0.2675	-0.3524
137	52.71	0.05	14.1502	-4.9328	0.4416	0.6316	0.0418	0.1357	0.3995	-0.2638	-0.3466
138	52.87	0.05	14.1550	-5.1268	0.4357	0.7365	0.0468	0.1245	0.3944	-0.2699	-0.3622

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(ASRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 1 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 109 MACH 1.10 RX10-6 1.7 PHI 0.0 CONF a1aGF14 D 0.0 DELT 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CN	CLM	CY	CLN	CLL	CA	CAB	CAF	XCP
139	53.03	0.05	14.0945	-4.7441	0.4115	0.5003	0.0423	0.1117	0.3954	-0.2837	-0.3368
140	53.19	0.04	14.1411	-4.8040	0.4016	0.5023	0.0426	0.1089	0.3992	-0.2905	-0.3388
141	53.35	0.03	14.1321	-4.7155	0.2828	0.5131	0.0483	0.1194	0.3967	-0.2773	-0.3337
142	53.53	0.03	14.1049	-4.7116	0.3621	0.4249	0.0431	0.1157	0.3975	-0.2818	-0.3326
143	53.68	0.03	14.1786	-4.8529	0.3450	0.5656	0.0480	0.1089	0.3989	-0.2901	-0.3423
144	53.86	0.04	14.2346	-4.8888	0.4115	0.4639	0.0429	0.1080	0.4004	-0.2925	-0.3435
145	54.01	0.03	14.2075	-4.8598	0.3133	0.3960	0.0432	0.0919	0.4015	-0.3096	-0.3421
146	54.17	0.04	14.2470	-4.9647	0.4331	0.4047	0.0432	0.0995	0.4098	-0.3104	-0.3473
147	54.31	0.03	14.2655	-4.9546	0.3170	0.4552	0.0432	0.1022	0.4015	-0.2998	-0.3472
148	54.48	0.01	14.3127	-4.9545	0.1076	0.4852	0.0491	0.0945	0.4149	-0.3204	-0.3490
149	54.64	0.02	14.4320	-5.2188	0.1268	0.7178	0.0564	0.0793	0.4153	-0.3360	-0.3616
150	54.79	0.01	14.3815	-5.1867	0.1716	0.6804	0.0438	0.0646	0.4150	-0.3504	-0.3610
151	54.95	0.01	14.3751	-5.2288	0.1843	0.7085	0.0438	0.0710	0.4121	-0.3411	-0.3636
152	55.06	0.00	14.1169	-5.1565	0.1468	0.2574	0.0436	0.0615	0.4070	-0.3451	-0.3655
153	55.22	0.01	14.1775	-5.3321	0.1285	0.2651	0.0493	0.0770	0.4140	-0.3370	-0.3761
154	55.39	0.02	14.3278	-5.2547	0.2315	0.3902	0.0435	0.0478	0.4083	-0.3587	-0.3694
155	55.54	0.01	14.3382	-5.4503	0.1632	0.4704	0.0432	0.0426	0.4119	-0.3693	-0.3801
156	55.71	-0.01	14.3063	-5.4241	-0.0445	0.3421	0.0503	0.0401	0.4004	-0.3603	-0.3738
157	55.85	0.00	14.3750	-5.5526	0.0690	0.4585	0.0497	0.0060	0.3931	-0.3871	-0.3810
158	56.03	-0.03	14.0666	-5.7166	-0.2170	0.2606	0.0456	-0.0155	0.4005	-0.4160	-0.3897
159	56.22	0.00	14.0613	-5.6375	0.0771	0.4209	0.0446	0.0158	0.4009	-0.3851	-0.3845
160	56.37	-0.00	14.0405	-5.7625	-0.0086	0.3893	0.0504	0.0062	0.3976	-0.3894	-0.3895
161	56.53	0.02	14.7023	-5.0664	0.2203	0.1544	0.0455	0.0030	0.4056	-0.4028	-0.3854
162	56.68	-0.03	14.6035	-5.7055	-0.2575	0.4501	0.0508	0.0078	0.4111	-0.4033	-0.3927
163	56.85	-0.03	14.5326	-5.6628	-0.0245	-0.3088	0.0417	0.0169	0.4191	-0.4022	-0.4073
164	57.02	-0.02	14.5306	-5.6522	0.1615	-0.4240	0.0477	-0.0028	0.4089	-0.4117	-0.4054
165	57.17	-0.04	15.0255	-5.2621	-0.1145	-0.2040	0.0417	-0.0014	0.4162	-0.4176	-0.4168
166	57.31	-0.01	14.9134	-5.0577	0.1652	-0.3578	0.0475	-0.0239	0.4202	-0.4201	-0.4089
167	57.44	-0.02	14.7428	-5.8813	0.0455	-0.3442	0.0412	-0.0457	0.3867	-0.4324	-0.3976
168	57.60	-0.05	14.8004	-5.8117	-0.4085	-0.7103	0.0554	-0.0246	0.3926	-0.4152	-0.4062
169	57.73	-0.01	14.5949	-5.7755	0.1656	0.0224	0.0513	-0.0429	0.3834	-0.4263	-0.3960
170	57.88	-0.03	14.8175	-5.1356	-0.0083	-0.1700	0.0467	-0.0309	0.3969	-0.4358	-0.4143
171	58.05	-0.01	14.9510	-5.2966	0.1251	-0.0817	0.0470	-0.0508	0.4029	-0.4537	-0.4212
172	58.20	-0.06	14.9637	-5.3703	-0.3506	0.0854	0.0406	-0.0005	0.4070	-0.4675	-0.4251
173	58.34	-0.00	15.0144	-5.4445	0.1883	0.0713	0.0465	-0.0317	0.4167	-0.4564	-0.4292
174	58.49	-0.03	15.0044	-5.3880	-0.0037	0.0152	0.0471	-0.0491	0.4092	-0.4583	-0.4372
175	58.63	-0.00	14.9650	-5.3165	0.1022	0.4396	0.0447	-0.0214	0.4196	-0.4610	-0.4371
176	58.89	-0.03	15.0177	-5.2575	-0.0693	0.1566	0.0406	-0.0300	0.4133	-0.4433	-0.4353
177	58.66	-0.05	14.8463	-5.8131	-0.1866	0.0102	0.0460	-0.0743	0.4226	-0.4970	-0.3969

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 | PART 105 1.16 1.7 | MACH RXIC=6 | PHI 0.0 B1=OF14 | CONF | L G.C | DEL1 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

PLINT	ALPHA	BETA	CAF1	Cm1	CB1	XCPF1	YCPF1	CAF2	Cm2	CB2	XCPF2	YCPF2
1	-5.76	G.05	-G.0623	-G.0007	G.0193	G.0112	-G.3398	-G.5425	G.0206	-G.2222	-G.0380	G.4096
2	-5.77	G.03	-G.0625	-G.0006	G.0192	G.0126	-G.3024	-G.5411	G.0203	-G.2226	-G.0375	G.4114
3	-5.77	G.03	-G.0585	-G.0007	G.0202	G.0119	-G.3430	-G.5411	G.0204	-G.2216	-G.0377	G.4095
4	-5.75	G.03	-G.0594	-G.0010	G.0214	G.0104	-G.3893	-G.4974	G.0205	-G.2113	-G.0412	G.4248
5	-3.74	G.04	-G.0575	-G.0008	G.0188	G.0135	-G.3270	-G.4231	G.0199	-G.1905	-G.0474	G.4535
6	-1.69	G.04	-G.0573	-G.0006	G.0178	G.0140	-G.3106	-G.3215	G.0184	-G.1622	-G.0572	G.5045
7	G.04	G.05	-G.0555	-G.0010	G.0165	G.0108	-G.2773	-G.2107	G.0155	-G.1266	-G.0736	G.6005
8	1.98	G.03	-G.0523	-G.0011	G.0157	G.0210	-G.3002	-G.1221	G.0133	-G.0933	-G.1089	G.7641
9	3.90	G.03	-G.0555	-G.0005	G.0155	G.0161	-G.2894	-G.0265	G.0098	-G.0852	-G.3658	2.4604
10	5.81	G.03	-G.0700	-G.0011	G.0164	G.0157	-G.2343	G.0426	G.0067	-G.0280	G.1573	-G.6573
11	7.80	G.02	-G.0778	-G.0027	G.0142	G.0347	-G.1625	G.1055	G.0042	G.0005	G.0358	G.0047
12	9.87	G.04	-G.0848	-G.0038	G.0162	G.0448	-G.1910	G.1653	G.0048	G.0239	G.0250	G.1448
13	11.89	G.03	-G.0821	-G.0033	G.0221	G.0402	-G.2052	G.2576	G.0039	G.0545	G.0151	G.2116
14	13.82	G.04	-G.0961	-G.0055	G.0226	G.0610	-G.2531	G.3384	G.0025	G.0821	G.0074	G.2426
15	15.64	G.03	-G.1128	-G.0054	G.0185	G.0479	-G.1498	G.4200	G.0023	G.1093	G.0055	G.2602
16	17.68	G.04	-G.1156	-G.0087	G.0265	G.0726	-G.1711	G.4709	G.0042	G.1208	G.0089	G.2565
17	19.66	G.03	-G.1274	-G.0070	G.0130	G.0549	-G.1020	G.5508	G.0060	G.1367	G.0113	G.2575
18	21.70	G.03	-G.1311	-G.0110	-G.0021	G.0670	G.0106	G.5697	G.0068	G.1504	G.0115	G.2550
19	23.75	G.04	-G.0714	-G.0002	G.0184	G.0028	-G.2577	G.6563	G.0067	G.1687	G.0102	G.2570
20	25.77	G.04	-G.0432	G.0020	G.0246	-G.0405	-G.5741	G.7139	G.0069	G.1852	G.0097	G.2594
21	27.83	G.05	G.1675	-G.0042	G.1056	-G.0250	G.6540	G.7637	G.0063	G.1961	G.0109	G.2568
22	28.42	G.07	G.1277	-G.0025	G.0945	-G.0227	G.7275	G.7526	G.0090	G.1918	G.0120	G.2548
23	26.70	G.07	G.0673	-G.0008	G.0750	-G.0092	G.6591	G.7512	G.0099	G.1918	G.0132	G.2553
24	28.99	G.07	G.0455	-G.0011	G.0526	-G.0242	1.1560	G.7465	G.0110	G.1850	G.0147	G.2532
25	29.35	G.06	G.0273	-G.0015	G.0623	-G.0262	1.0873	G.7516	G.0113	G.1895	G.0150	G.2521
26	29.64	G.07	G.0535	-G.0011	G.0005	-G.0204	1.1224	G.7695	G.0115	G.1951	G.0149	G.2535
27	29.96	G.08	G.1360	-G.0025	G.0825	-G.0184	G.6096	G.7981	G.0096	G.2024	G.0120	G.2536
28	30.23	G.11	G.1886	-G.0033	G.1056	-G.0175	G.5010	G.7921	G.0079	G.1997	G.0100	G.2521
29	30.53	G.10	G.2504	-G.0038	G.1385	-G.0124	G.4769	G.8092	G.0056	G.2051	G.0065	G.2535
30	30.79	G.05	G.1542	-G.0023	G.1071	-G.0110	G.5515	G.8168	G.0073	G.2068	G.0086	G.2532
31	31.07	G.09	G.1908	-G.0025	G.1062	-G.0131	G.5566	G.8178	G.0076	G.2070	G.0093	G.2531
32	31.36	G.08	G.1944	-G.0025	G.1056	-G.0124	G.5432	G.8319	G.0075	G.2132	G.0090	G.2563
33	31.63	G.09	G.1738	-G.0043	G.1025	-G.0247	G.5898	G.8266	G.0086	G.2108	G.0102	G.2550
34	31.92	G.09	G.2079	-G.0061	G.1127	-G.0295	G.5421	G.8413	G.0082	G.2150	G.0097	G.2556
35	32.19	G.08	G.1368	-G.0057	G.0961	-G.0436	G.6888	G.8361	G.0090	G.2126	G.0108	G.2543
36	32.47	G.07	G.0961	-G.0064	G.0736	-G.0266	G.8102	G.8386	G.0097	G.2118	G.0116	G.2526
37	32.73	G.05	G.0743	-G.0035	G.0691	-G.0471	G.9300	G.8412	G.0094	G.2120	G.0112	G.2520
38	33.00	G.07	G.0481	-G.0025	G.0555	-G.0531	1.0033	G.8424	G.0100	G.2122	G.0115	G.2519
39	33.26	G.05	G.1197	-G.0057	G.0839	-G.0476	G.7009	G.8458	G.0098	G.2123	G.0116	G.2511
40	33.52	G.05	-G.0326	-G.0011	G.0278	G.0337	-G.8528	G.8428	G.0110	G.2112	G.0130	G.2506
41	33.77	G.05	-G.0053	-G.0026	G.0373	G.4905	-7.0377	G.8660	G.0102	G.2151	G.0118	G.2530
42	34.03	G.05	G.0067	-G.0055	G.0475	-G.8208	7.0695	G.8506	G.0109	G.2118	G.0128	G.2490
43	34.27	G.06	-G.0100	-G.0038	G.0386	G.3799	-3.8600	G.8583	G.0109	G.2139	G.0127	G.2487
44	34.53	G.05	G.0023	-G.0057	G.0456	-2.4779	19.5052	G.8666	G.0106	G.2174	G.0122	G.2503
45	34.79	G.05	G.0258	-G.0040	G.0533	-G.1550	2.0659	G.8713	G.0102	G.2155	G.0117	G.2473
46	35.03	G.06	-G.0021	-G.0034	G.0406	1.5236	-19.3333	G.8762	G.0112	G.2170	G.0128	G.2477

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH REYNO-6 PHI CONF L DEC1 DEC2 DEC3 DEC4 TRANSITION
1 103 1.10 1.7 0.0 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
47	35.27	0.05	0.0434	-0.0032	0.0614	-0.0737	1.4147	0.0816	0.0101	0.2184	0.0115	0.2477
48	35.53	0.04	0.0481	-0.0026	0.0673	-0.0566	1.4368	0.0840	0.0108	0.2192	0.0122	0.2486
49	35.78	0.05	0.0423	-0.0024	0.0602	-0.1076	1.2511	0.0828	0.0100	0.2240	0.0111	0.2481
50	36.00	0.05	0.0446	-0.0028	0.0631	-0.0902	1.0412	0.0877	0.0095	0.2186	0.0107	0.2463
51	36.27	0.07	0.0178	-0.0021	0.0286	-0.1160	2.7416	0.0896	0.0085	0.2254	0.0093	0.2478
52	36.50	0.04	0.0281	-0.0013	0.0399	-0.1851	5.5493	0.0923	0.0088	0.2285	0.0095	0.2477
53	36.74	0.05	0.0459	-0.0028	0.0588	-0.0500	1.2767	0.0903	0.0078	0.2303	0.0084	0.2486
54	36.99	0.04	0.0409	-0.0015	0.0426	-0.1108	47.5333	0.0981	0.0080	0.2352	0.0084	0.2481
55	37.24	0.06	0.0516	-0.0040	0.0614	-0.0775	1.1899	0.0962	0.0075	0.2344	0.0084	0.2483
56	37.48	0.05	0.0288	-0.0027	0.0334	-0.0937	1.9238	0.0933	0.0078	0.2392	0.0081	0.2483
57	37.72	0.05	0.0156	-0.0029	0.0185	-0.1859	3.1090	0.0936	0.0074	0.2421	0.0076	0.2487
58	37.97	0.04	-0.0154	-0.0010	0.0181	0.0515	-1.8093	0.0908	0.0074	0.2454	0.0075	0.2477
59	38.19	0.06	-0.0145	-0.0015	0.0175	0.1007	-2.5168	0.0857	0.0080	0.2416	0.0081	0.2465
60	38.44	0.05	0.0156	-0.0026	0.0185	-0.1315	2.0212	0.0895	0.0084	0.2423	0.0085	0.2469
61	38.68	0.06	-0.0215	-0.0005	0.0256	0.0233	-1.5349	1.0036	0.0083	0.2456	0.0083	0.2467
62	38.94	0.05	-0.0376	-0.0016	0.0436	0.0270	-0.8973	1.0163	0.0087	0.2487	0.0086	0.2467
63	39.18	0.05	-0.0168	-0.0021	0.0347	0.1250	-2.0655	0.9854	0.0102	0.2376	0.0103	0.2411
64	39.40	0.05	-0.0011	-0.0031	0.0141	2.8170	-37.8182	0.9898	0.0132	0.2294	0.0136	0.2366
65	39.61	0.04	-0.0252	-0.0027	0.0301	0.1055	-1.1753	0.9942	0.0116	0.2374	0.0117	0.2388
66	39.84	0.03	-0.0277	-0.0020	0.0276	0.0722	-0.9904	1.0158	0.0126	0.2429	0.0124	0.2391
67	40.08	0.03	-0.0183	-0.0017	0.0278	0.0529	-1.5082	1.0216	0.0156	0.2416	0.0153	0.2365
68	40.26	0.03	-0.0060	-0.0033	0.0336	0.5499	-5.6000	1.0086	0.0104	0.2382	0.0163	0.2362
69	40.48	0.05	-0.0087	-0.0034	0.0366	-0.3908	4.4366	1.0238	0.0179	0.2391	0.0175	0.2335
70	40.69	0.04	-0.0062	-0.0052	0.0402	-1.7929	13.0021	1.0015	0.0211	0.2306	0.0211	0.2305
71	40.88	0.02	-0.0127	-0.0033	0.0305	0.2598	-2.4331	1.0131	0.0201	0.2353	0.0198	0.2323
72	41.10	0.03	-0.0081	-0.0058	0.0349	0.7160	-4.3066	0.9895	0.0240	0.2295	0.0243	0.2269
73	41.34	0.04	-0.0126	-0.0045	0.0317	0.3571	-2.5159	1.0149	0.0244	0.2334	0.0240	0.2300
74	41.53	0.02	-0.0040	-0.0052	0.0339	1.1303	-7.3696	1.0029	0.0209	0.2275	0.0208	0.2268
75	41.75	0.03	-0.0043	-0.0036	0.0160	0.0626	-0.2947	0.9793	0.0259	0.2197	0.0305	0.2243
76	41.95	0.05	-0.0317	-0.0037	0.0234	0.1107	-0.7302	0.9738	0.0316	0.2155	0.0327	0.2213
77	42.14	0.02	-0.0184	-0.0045	0.0306	0.2445	-1.6630	0.9944	0.0311	0.2232	0.0313	0.2245
78	42.33	0.01	-0.0216	-0.0034	0.0288	0.1650	-1.3803	1.0213	0.0307	0.2321	0.0301	0.2273
79	42.53	0.01	-0.0260	-0.0015	0.0257	0.0214	-0.0643	0.9745	0.0341	0.2172	0.0350	0.2229
80	42.74	0.01	-0.0236	-0.0055	0.0302	0.0802	-0.2547	0.9827	0.0357	0.2182	0.0363	0.2220
81	42.93	0.01	-0.0220	-0.0044	0.0110	0.0537	-0.1341	0.9541	0.0364	0.2219	0.0366	0.2232
82	43.10	0.01	-0.1478	0.0002	-0.0130	-0.0014	0.1055	0.9811	0.0360	0.2193	0.0375	0.2235
83	43.25	0.00	-0.1437	-0.0044	-0.0151	0.0306	0.1351	0.9963	0.0361	0.2217	0.0382	0.2225
84	43.40	0.01	-0.0743	-0.0035	0.0145	0.0525	-0.2005	1.0326	0.0365	0.2336	0.0353	0.2264
85	43.65	0.01	-0.1022	-0.0046	-0.0014	0.0423	0.0129	1.0039	0.0388	0.2244	0.0386	0.2235
86	43.83	0.01	-0.1066	-0.0031	-0.0041	0.0265	0.0378	1.0092	0.0378	0.2298	0.0375	0.2228
87	44.02	0.01	-0.1321	-0.0040	-0.0133	0.0303	0.1307	1.0128	0.0398	0.2242	0.0393	0.2214
88	44.21	-0.00	-0.0870	-0.0026	0.0146	0.0696	-0.0529	1.0207	0.0408	0.2256	0.0400	0.2210
89	44.35	0.01	-0.1265	-0.0045	-0.0106	0.0360	0.0822	1.0208	0.0398	0.2275	0.0390	0.2225
90	44.56	0.01	-0.1426	-0.0056	-0.0163	0.0413	0.1269	1.0322	0.0413	0.2291	0.0400	0.2220
91	44.74	0.01	-0.0517	-0.0021	0.0111	0.0406	-0.2147	1.0556	0.0403	0.2351	0.0382	0.2227
92	44.91	0.01	-0.0665	-0.0057	-0.0007	0.0708	0.0087	1.0554	0.0413	0.2341	0.0391	0.2218

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RATIO=E PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 105 1.10 1.7 0.0 0 1=CF14 6.0 0 -10 0 -10 UNKNOWN

FLIHT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
93	45.12	0.00	-0.1355	-0.0005	-0.0106	0.0509	0.0797	1.0556	0.0416	0.2349	0.0393	0.2217
94	45.32	0.01	-0.0724	-0.0002	0.0	0.0845	0.0	1.0649	0.0416	0.2338	0.0391	0.2196
95	45.48	0.02	-0.0443	-0.0044	0.0105	0.0693	-0.2370	1.0715	0.0403	0.2384	0.0376	0.2225
96	45.63	0.01	-0.0726	-0.0045	0.0115	0.0620	-0.0262	1.0677	0.0396	0.2376	0.0373	0.2220
97	45.84	-0.00	-0.1346	-0.0065	-0.0101	0.0861	0.1196	1.0535	0.0431	0.2281	0.0410	0.2171
98	46.03	0.00	-0.0564	-0.0045	0.0105	0.0776	-0.1666	1.0651	0.0375	0.2344	0.0356	0.2205
99	46.19	0.01	-0.0918	-0.0076	-0.0013	0.0850	0.0142	1.0703	0.0403	0.2367	0.0376	0.2212
100	46.37	-0.00	-0.1015	-0.0126	-0.0237	0.0760	0.1467	1.0541	0.0392	0.2338	0.0372	0.2218
101	46.55	-0.01	-0.0752	-0.0072	0.0007	0.0509	-0.0086	1.0569	0.0342	0.2374	0.0323	0.2242
102	46.72	-0.01	-0.0956	-0.0065	-0.0068	0.0691	0.0037	1.0617	0.0329	0.2395	0.0310	0.2256
103	46.91	-0.01	-0.1251	-0.0135	-0.0121	0.1111	0.0967	1.0602	0.0340	0.2385	0.0321	0.2250
104	47.07	0.00	-0.1160	-0.0108	-0.0072	0.1005	0.0016	1.0562	0.0137	0.2498	0.0130	0.2365
105	47.24	0.01	-0.1006	-0.0177	-0.0048	0.1755	0.0476	1.0713	0.0150	0.2549	0.0140	0.2375
106	47.42	-0.01	-0.0862	-0.0134	-0.0039	0.1554	0.0452	1.0400	0.0183	0.2388	0.0176	0.2298
107	47.59	-0.00	-0.0472	-0.0172	0.0050	0.3644	-0.1907	1.0567	0.0068	0.2542	0.0064	0.2401
108	47.75	0.01	-0.0270	-0.0173	0.0136	0.0267	-0.4928	1.0627	0.0002	0.2555	0.0058	0.2404
109	47.93	0.00	0.0041	-0.0157	0.0223	-3.8288	5.4390	1.0763	0.0027	0.2590	0.0025	0.2406
110	48.12	0.01	-0.0084	-0.0172	0.0201	2.0473	-2.3929	1.0685	0.0027	0.2566	0.0025	0.2422
111	48.28	0.00	-0.0200	-0.0166	0.0275	-0.7999	1.3950	1.0689	0.0006	0.2582	0.0006	0.2416
112	48.44	0.00	-0.0560	-0.0225	0.0104	0.4009	-0.1857	0.9805	-0.0046	0.2376	-0.0047	0.2423
113	48.63	-0.00	-0.0140	-0.0165	0.0185	1.3212	-1.3500	1.0233	-0.0016	0.2490	-0.0018	0.2433
114	48.80	-0.02	-0.0007	-0.0174	0.0225	0.2008	-0.0435	0.9729	-0.0045	0.2364	-0.0046	0.2430
115	48.98	0.01	-0.0465	-0.0120	0.0064	0.2454	-0.1309	0.9586	-0.0042	0.2327	-0.0044	0.2427
116	49.14	-0.01	-0.0567	-0.0146	0.0046	0.2810	-0.0811	0.9671	-0.0045	0.2352	-0.0047	0.2432
117	49.30	0.00	-0.0482	-0.0053	0.0061	0.1929	-0.1266	0.9444	-0.0037	0.2294	-0.0039	0.2429
118	49.48	-0.01	-0.0379	-0.0002	0.0004	0.2163	-0.2216	0.9470	-0.0042	0.2306	-0.0044	0.2435
119	49.65	0.01	-0.0377	-0.0053	0.0077	0.2467	-0.2042	0.9456	-0.0041	0.2297	-0.0043	0.2425
120	49.81	0.01	-0.0438	-0.0045	0.0046	0.1119	-0.0913	0.9297	-0.0026	0.2259	-0.0028	0.2430
121	49.99	0.02	-0.0627	0.00	-0.0028	0.00	0.0415	0.8643	0.0009	0.2036	0.0010	0.2358
122	50.17	0.01	-0.0671	-0.0002	-0.0051	0.0030	0.0760	0.8799	0.0003	0.2090	0.0003	0.2375
123	50.33	0.03	-0.0592	-0.0002	-0.0018	0.0034	0.0304	0.8681	0.0007	0.2075	0.0008	0.2390
124	50.48	0.01	-0.0466	0.0004	0.0012	-0.0066	-0.0256	0.8715	0.0009	0.2080	0.0010	0.2362
125	50.66	0.02	-0.0466	-0.0002	0.0021	0.0043	-0.0451	0.8772	0.0004	0.2098	0.0005	0.2392
126	50.84	0.03	-0.0510	-0.0001	0.0033	0.0034	-0.1077	0.8947	0.0002	0.2152	0.0002	0.2405
127	50.99	0.03	-0.0352	-0.0002	0.0054	0.0057	-0.1536	0.8921	0.0001	0.2150	0.0001	0.2410
128	43.92	-1.07	-0.0305	-0.0006	0.0006	0.0197	-0.2230	0.9090	0.0001	0.2195	0.0001	0.2415
129	51.34	0.04	-0.0165	-0.0002	0.0086	0.0106	-0.4350	0.9167	0.0003	0.2198	0.0003	0.2398
130	51.49	0.04	-0.0166	-0.0008	0.0005	0.0425	-0.4521	0.9031	0.0004	0.2157	0.0004	0.2386
131	51.70	0.05	-0.0185	-0.0006	0.0086	0.0317	-0.4550	0.9149	0.0003	0.2187	0.0003	0.2396
132	51.87	0.04	-0.0143	-0.0004	0.0101	0.0260	-0.7063	0.9240	0.0001	0.2221	0.0001	0.2404
133	52.04	0.04	-0.0120	-0.0003	0.0105	0.0250	-0.9083	0.9239	0.0	0.2207	0.0	0.2389
134	52.20	0.04	-0.0120	-0.0004	0.0106	0.0263	-0.9000	0.9213	0.0002	0.2185	0.0002	0.2378
135	52.36	0.05	-0.0150	-0.0003	0.0098	0.0283	-0.9053	0.9251	0.0004	0.2213	0.0004	0.2392
136	52.55	0.05	-0.0144	-0.0002	0.0107	0.0139	-0.7431	0.9324	0.0	0.2217	0.0	0.2378
137	52.71	0.05	-0.0110	-0.0002	0.0120	0.0182	-1.0909	0.9311	0.0002	0.2216	0.0002	0.2386
138	52.87	0.05	-0.0056	-0.0003	0.0110	0.0306	-1.1857	0.9284	0.0005	0.2214	0.0005	0.2385

NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER(NSRDC) 7 BY 10 FOOT TRANSONIC WIND TUNNEL FACILITY

PAGE 2 OF 3
SHEET 4 OF 4

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 105 MACH 1.10 REYIC-6 1.7 PHI C.C DELTA 0.0 CONF 14 L DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF1	CM1	CB1	XCPF1	YCPF1	CNF2	CM2	CB2	XCPF2	YCPF2
139	53.03	0.05	-0.0006	-0.0004	0.0153	-0.0666	25.5000	0.9292	0.0003	0.2216	0.0003	0.2385
140	53.19	0.04	-0.0011	-0.0001	0.0141	0.0588	-0.2941	0.9390	0.0000	0.2238	0.0006	0.2383
141	53.35	0.03	-0.0006	0.0	0.0114	0.0	-1.3250	0.9390	0.0003	0.2248	0.0003	0.2394
142	53.51	0.03	0.0006	0.0002	0.0145	0.3333	24.0333	0.9430	0.0002	0.2256	0.0002	0.2392
143	53.68	0.03	-0.0012	-0.0004	0.0114	0.0331	-0.9421	0.9398	0.0004	0.2260	0.0004	0.2405
144	53.86	0.04	-0.0011	-0.0004	0.0121	0.0303	-1.1000	0.9459	0.0004	0.2277	0.0004	0.2407
145	54.01	0.03	-0.0002	-0.0004	0.0137	0.0769	-2.8346	0.9468	0.0002	0.2285	0.0002	0.2396
146	54.17	0.04	-0.0005	-0.0001	0.0157	0.0159	-2.1077	0.9529	0.0002	0.2309	0.0002	0.2417
147	54.31	0.03	-0.0016	0.0	0.0128	0.0	-1.2800	0.9594	0.0004	0.2307	0.0004	0.2405
148	54.48	0.01	-0.0015	-0.0002	0.0124	0.0148	-0.9185	0.9524	0.0002	0.2281	0.0002	0.2395
149	54.64	0.02	-0.0014	-0.0004	0.0107	0.0208	-0.5515	0.9757	-0.0003	0.2370	-0.0003	0.2425
150	54.79	0.01	-0.0005	0.0002	0.0130	-0.0225	-1.4667	0.9694	-0.0001	0.2345	-0.0001	0.2418
151	54.95	0.01	-0.0007	-0.0002	0.0112	0.0097	-0.5411	0.9815	-0.0011	0.2387	-0.0011	0.2432
152	55.06	0.00	-0.0005	-0.0003	0.0132	0.0144	-0.8316	0.9695	-0.0005	0.2346	-0.0005	0.2420
153	55.22	0.01	-0.0015	-0.0002	0.0145	0.0132	-0.9868	0.9793	-0.0009	0.2378	-0.0009	0.2428
154	55.39	0.02	-0.0025	-0.0007	0.0145	0.0298	-0.8340	0.9801	-0.0010	0.2396	-0.0010	0.2445
155	55.54	0.01	-0.0023	-0.0004	0.0135	0.0141	-0.4912	0.9881	-0.0015	0.2428	-0.0015	0.2457
156	55.71	-0.01	-0.0024	-0.0010	0.0174	0.0584	-0.8350	0.9810	-0.0004	0.2383	-0.0004	0.2429
157	55.85	0.00	-0.0020	-0.0007	0.0151	0.0189	-0.4081	0.9939	-0.0011	0.2436	-0.0011	0.2451
158	56.03	-0.03	-0.0026	-0.0017	0.0192	0.0567	-0.6400	0.9993	-0.0015	0.2456	-0.0015	0.2458
159	56.22	0.00	-0.0036	-0.0011	0.0186	0.0278	-0.4242	0.9961	-0.0015	0.2461	-0.0015	0.2471
160	56.37	-0.00	-0.0037	-0.0016	0.0185	0.0475	-0.5008	0.9988	-0.0014	0.2463	-0.0014	0.2466
161	56.53	0.02	-0.0031	-0.0013	0.0178	0.0096	-0.5687	1.0068	-0.0019	0.2490	-0.0019	0.2473
162	56.68	-0.03	-0.0030	-0.0010	0.0172	0.0278	-0.4778	1.0082	-0.0019	0.2500	-0.0019	0.2486
163	56.85	-0.03	-0.0031	-0.0006	0.0166	0.0193	-0.5402	1.0350	-0.0037	0.2595	-0.0036	0.2507
164	57.02	-0.02	-0.0032	0.0005	0.0136	-0.0279	-0.4286	1.0390	-0.0034	0.2603	-0.0038	0.2505
165	57.17	-0.04	-0.0035	0.0002	0.0144	-0.0065	-0.4660	1.0378	-0.0043	0.2586	-0.0041	0.2492
166	57.31	-0.01	-0.0272	0.0	0.0142	0.0	-0.5221	1.0364	-0.0037	0.2583	-0.0036	0.2492
167	57.44	-0.02	-0.0247	-0.0006	0.0143	0.0243	-0.5789	1.0161	-0.0035	0.2520	-0.0034	0.2486
168	57.60	-0.05	-0.0237	0.0005	0.0137	-0.0360	-0.5781	1.0343	-0.0039	0.2584	-0.0038	0.2496
169	57.73	-0.01	-0.0271	0.0002	0.0127	-0.0074	-0.4086	1.0085	-0.0031	0.2522	-0.0031	0.2506
170	57.88	-0.03	-0.0246	0.0001	0.0124	-0.0041	-0.5041	1.0385	-0.0039	0.2604	-0.0038	0.2512
171	58.05	-0.01	-0.0247	0.0002	0.0124	-0.0081	-0.5020	1.0419	-0.0043	0.2624	-0.0041	0.2518
172	58.20	-0.00	-0.0265	0.0001	0.0096	-0.0027	-0.2630	1.0283	-0.0045	0.2577	-0.0044	0.2506
173	58.36	-0.00	-0.0330	0.0001	0.0111	-0.0030	-0.3333	1.0400	-0.0051	0.2619	-0.0049	0.2518
174	58.49	-0.03	-0.0289	-0.0001	0.0134	0.0026	-0.4916	1.0396	-0.0049	0.2616	-0.0047	0.2516
175	58.63	-0.00	-0.0475	-0.0001	0.0090	0.0021	-0.1895	1.0420	-0.0052	0.2630	-0.0050	0.2524
176	58.69	-0.03	-0.0451	-0.0004	0.0092	0.0085	-0.2040	1.0336	-0.0049	0.2603	-0.0047	0.2518
177	58.86	-0.05	-0.0416	-0.0008	0.0111	0.0144	-0.2668	0.9998	-0.0042	0.2482	-0.0042	0.2482

MARTIN MISSILE TAILS EFFECTS DATA

TEST 7 PART 105 MACH 1.10 1.7 PHI 0.0 CONF 814UF14 L 0.0 DEL1 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

PCANT	ALPHA	BETA	CNF3	CM3	CA3	XCPF3	YCPF3	CNF4	CM4	CA4	XCPF4	YCPF4
1	-5.76	0.05	0.0476	9.9999	0.0042	9.9999	0.3582	-0.6334	0.0143	-0.2144	-0.0226	0.3385
2	-5.77	0.03	0.0452	9.9999	0.0045	9.9999	0.3996	-0.6330	0.0145	-0.2143	-0.0225	0.3382
3	-5.77	0.03	0.0487	9.9999	0.0048	9.9999	0.3986	-0.6335	0.0144	-0.2153	-0.0227	0.3395
4	-5.75	0.03	0.0440	9.9999	0.0044	9.9999	0.1000	-0.6005	0.0145	-0.2080	-0.0241	0.3464
5	-3.74	0.04	0.0463	9.9999	0.0062	9.9999	0.1469	-0.5056	0.0133	-0.1860	-0.0263	0.3674
6	-1.89	0.04	0.0414	9.9999	0.0001	9.9999	0.1473	-0.4061	0.0126	-0.1550	-0.0310	0.3817
7	0.04	0.05	0.0415	9.9999	0.0056	9.9999	0.1349	-0.2905	0.0109	-0.1185	-0.0375	0.4074
8	1.98	0.03	0.0415	9.9999	0.0047	9.9999	0.1133	-0.2092	0.0099	-0.0847	-0.0473	0.4049
9	3.90	0.03	0.0451	9.9999	0.0046	9.9999	0.0387	-0.1206	0.0067	-0.0540	-0.0555	0.4478
10	5.81	0.03	0.0466	9.9999	0.0025	9.9999	0.0512	-0.0410	0.0033	-0.0175	-0.0805	0.4268
11	7.80	0.02	0.0501	9.9999	-0.0002	9.9999	-0.0340	0.0119	0.0020	0.0107	0.1680	0.8592
12	9.87	0.04	0.0467	9.9999	0.0011	9.9999	0.0181	0.0804	0.0025	0.0355	0.0283	0.4468
13	11.89	0.03	0.0500	9.9999	-0.0007	9.9999	-0.0125	0.1836	0.0015	0.0790	0.0080	0.4189
14	13.82	0.04	0.0485	9.9999	-0.0015	9.9999	-0.0325	0.2706	-0.0002	0.1117	-0.0007	0.4009
15	15.84	0.03	0.0538	9.9999	-0.0013	9.9999	-0.0245	0.3558	-0.0010	0.1446	-0.0028	0.4064
16	17.88	0.04	0.0532	9.9999	-0.0015	9.9999	-0.0332	0.4458	0.0006	0.1712	0.0013	0.3840
17	19.86	0.03	0.0538	9.9999	-0.0018	9.9999	-0.0336	0.4689	0.0046	0.1836	0.0098	0.3755
18	21.76	0.03	0.0577	9.9999	0.0026	9.9999	0.0384	0.5371	0.0073	0.1882	0.0136	0.3504
19	23.75	0.04	0.0567	9.9999	0.0002	9.9999	0.0033	0.5750	0.0094	0.1934	0.0163	0.3363
20	25.77	0.04	0.0562	9.9999	0.0018	9.9999	0.0309	0.6270	0.0105	0.2066	0.0167	0.3298
21	27.83	0.05	0.0568	9.9999	0.0041	9.9999	0.0596	0.6155	0.0134	0.2063	0.0218	0.3254
22	28.92	0.07	0.0735	9.9999	0.0066	9.9999	0.0925	0.6225	0.0116	0.2025	0.0190	0.3253
23	28.70	0.07	0.0723	9.9999	0.0076	9.9999	0.1051	0.6271	0.0110	0.2021	0.0175	0.3223
24	28.59	0.07	0.0665	9.9999	0.0062	9.9999	0.0932	0.6404	0.0098	0.2074	0.0153	0.3239
25	29.35	0.08	0.0760	9.9999	0.0074	9.9999	0.1057	0.6470	0.0096	0.2098	0.0151	0.3243
26	29.64	0.07	0.0664	9.9999	0.0035	9.9999	0.0844	0.6496	0.0107	0.2107	0.0165	0.3247
27	29.56	0.08	0.0658	9.9999	0.0111	9.9999	0.1590	0.6599	0.0120	0.2133	0.0182	0.3232
28	30.23	0.11	0.0792	9.9999	0.0146	9.9999	0.1643	0.6552	0.0130	0.2117	0.0198	0.3231
29	30.53	0.10	0.0803	9.9999	0.0156	9.9999	0.1943	0.6569	0.0142	0.2111	0.0216	0.3214
30	30.79	0.09	0.0835	9.9999	0.0162	9.9999	0.1590	0.6835	0.0123	0.2200	0.0186	0.3215
31	31.07	0.09	0.0822	9.9999	0.0115	9.9999	0.1837	0.6950	0.0112	0.2245	0.0161	0.3230
32	31.36	0.08	0.0791	9.9999	0.0098	9.9999	0.1636	0.7140	0.0105	0.2306	0.0147	0.3230
33	31.63	0.09	0.0826	9.9999	0.0115	9.9999	0.1837	0.7233	0.0105	0.2333	0.0145	0.3225
34	31.92	0.09	0.0837	9.9999	0.0126	9.9999	0.1804	0.7485	0.0096	0.2411	0.0128	0.3221
35	32.19	0.06	0.0867	9.9999	0.0096	9.9999	0.1693	0.7440	0.0103	0.2390	0.0138	0.3212
36	32.47	0.07	0.0854	9.9999	0.0113	9.9999	0.2040	0.7585	0.0106	0.2377	0.0144	0.3216
37	32.73	0.05	0.0845	9.9999	0.0135	9.9999	0.2080	0.7574	0.0101	0.2425	0.0133	0.3207
38	33.00	0.07	0.0848	9.9999	0.0144	9.9999	0.2222	0.7628	0.0100	0.2442	0.0131	0.3201
39	33.26	0.05	0.0811	9.9999	0.0126	9.9999	0.2097	0.7645	0.0104	0.2453	0.0136	0.3209
40	33.52	0.05	0.0855	9.9999	0.0144	9.9999	0.2202	0.7801	0.0109	0.2417	0.0143	0.3180
41	33.77	0.05	0.0815	9.9999	0.0126	9.9999	0.2042	0.7688	0.0096	0.2503	0.0122	0.3173
42	34.03	0.05	0.0831	9.9999	0.0098	9.9999	0.1846	0.8015	0.0098	0.2538	0.0122	0.3165
43	34.27	0.06	0.0831	9.9999	0.0098	9.9999	0.1846	0.7987	0.0105	0.2522	0.0131	0.3158
44	34.53	0.05	0.0856	9.9999	0.0072	9.9999	0.1692	0.8291	0.0105	0.2613	0.0127	0.3152
45	34.79	0.05	0.0886	9.9999	0.0075	9.9999	0.1550	0.8170	0.0107	0.2576	0.0131	0.3153
46	35.03	0.06	0.0831	9.9999	0.0088	9.9999	0.1657	0.8220	0.0111	0.2580	0.0135	0.3139

MARTIN MISSILE TAILS EFFECTS DATA

TEST PART MACH RNLD=6 PHI CONF L DEL1 DEL2 DEL3 DEL4 TRANSITION
7 105 1.10 1.7 0.0 0160F14 0.0 0 -10 0 -10 UNKNOWN

POINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
47	35.27	0.05	0.0473	9.9999	0.0076	9.9999	0.1480	0.8376	0.0114	0.2627	0.0136	0.3136
48	35.53	0.04	0.0461	9.9999	0.0064	9.9999	0.1386	0.8347	0.0116	0.2611	0.0141	0.3128
49	35.78	0.05	0.0424	9.9999	0.0066	9.9999	0.1557	0.8352	0.0124	0.2604	0.0148	0.3118
50	36.04	0.05	0.0506	9.9999	0.0096	9.9999	0.1697	0.8460	0.0129	0.2643	0.0152	0.3117
51	36.27	0.07	0.0658	9.9999	0.0145	9.9999	0.2264	0.8548	0.0126	0.2667	0.0147	0.3120
52	36.50	0.04	0.0471	9.9999	0.0075	9.9999	0.1677	0.8405	0.0141	0.2621	0.0168	0.3118
53	36.74	0.05	0.0446	9.9999	0.0077	9.9999	0.1719	0.8606	0.0137	0.2689	0.0159	0.3125
54	36.99	0.04	0.0483	9.9999	0.0094	9.9999	0.1946	0.8535	0.0144	0.2661	0.0169	0.3118
55	37.24	0.06	0.0525	9.9999	0.0107	9.9999	0.2023	0.8775	0.0174	0.2710	0.0198	0.3088
56	37.48	0.05	0.0471	9.9999	0.0107	9.9999	0.2272	0.8713	0.0166	0.2696	0.0190	0.3094
57	37.72	0.05	0.0466	9.9999	0.0088	9.9999	0.1920	0.8903	0.0177	0.2757	0.0199	0.3097
58	37.97	0.04	0.0518	9.9999	0.0110	9.9999	0.2124	0.8774	0.0180	0.2712	0.0205	0.3091
59	38.19	0.06	0.0508	9.9999	0.0114	9.9999	0.2253	0.8755	0.0186	0.2706	0.0215	0.3093
60	38.44	0.05	0.0552	9.9999	0.0127	9.9999	0.2501	0.8961	0.0220	0.2751	0.0245	0.3063
61	38.68	0.06	0.0462	9.9999	0.0103	9.9999	0.2137	0.8866	0.0195	0.2738	0.0224	0.3088
62	38.94	0.05	0.0516	9.9999	0.0110	9.9999	0.2124	0.8801	0.0198	0.2716	0.0225	0.3088
63	39.18	0.05	0.0530	9.9999	0.0107	9.9999	0.2019	0.8900	0.0205	0.2722	0.0230	0.3058
64	39.40	0.05	0.0460	9.9999	0.0088	9.9999	0.2075	0.8970	0.0233	0.2700	0.0260	0.3010
65	39.61	0.04	0.0520	9.9999	0.0107	9.9999	0.2019	0.9080	0.0211	0.2727	0.0232	0.3003
66	39.84	0.03	0.0483	9.9999	0.0094	9.9999	0.1946	0.9073	0.0220	0.2726	0.0242	0.3007
67	40.06	0.03	0.0482	9.9999	0.0103	9.9999	0.2137	0.9018	0.0223	0.2720	0.0247	0.3016
68	40.26	0.03	0.0484	9.9999	0.0085	9.9999	0.1756	0.9074	0.0234	0.2734	0.0258	0.3013
69	40.48	0.05	0.0554	9.9999	0.0116	9.9999	0.2130	0.9117	0.0246	0.2740	0.0270	0.3005
70	40.69	0.04	0.0463	9.9999	0.0103	9.9999	0.2134	0.9107	0.0276	0.2714	0.0303	0.2978
71	40.88	0.02	0.0482	9.9999	0.0112	9.9999	0.2324	0.9263	0.0283	0.2765	0.0284	0.2985
72	41.10	0.03	0.0424	9.9999	0.0094	9.9999	0.2217	0.9333	0.0287	0.2685	0.0318	0.2972
73	41.34	0.04	0.0378	9.9999	0.0087	9.9999	0.1772	0.9090	0.0297	0.2713	0.0327	0.2985
74	41.53	0.02	0.0507	9.9999	0.0114	9.9999	0.2249	0.9095	0.0325	0.2691	0.0357	0.2959
75	41.75	0.03	0.0531	9.9999	0.0107	9.9999	0.2015	0.9095	0.0290	0.2722	0.0315	0.2993
76	41.95	0.05	0.0414	9.9999	0.0137	9.9999	0.2231	0.9169	0.0313	0.2725	0.0341	0.2972
77	42.14	0.02	0.0542	9.9999	0.0140	9.9999	0.2583	0.9214	0.0322	0.2721	0.0349	0.2953
78	42.33	0.01	0.0521	9.9999	0.0096	9.9999	0.1851	0.9103	0.0293	0.2736	0.0319	0.2979
79	42.53	0.01	0.0437	9.9999	0.0086	9.9999	0.1968	0.9257	0.0266	0.2780	0.0287	0.3003
80	42.74	0.01	0.0526	9.9999	0.0111	9.9999	0.2135	0.9167	0.0342	0.2705	0.0373	0.2959
81	42.93	0.01	0.0473	9.9999	0.0098	9.9999	0.2072	0.9305	0.0350	0.2733	0.0376	0.2937
82	43.10	0.01	0.0375	9.9999	0.0081	9.9999	0.2137	0.9019	0.0149	0.2739	0.0165	0.3037
83	43.29	0.00	0.0482	9.9999	0.0092	9.9999	0.1991	0.9119	0.0321	0.2683	0.0352	0.2944
84	43.46	0.01	0.0375	9.9999	0.0072	9.9999	0.1900	0.9345	0.0348	0.2716	0.0372	0.2908
85	43.65	0.01	0.0482	9.9999	0.0083	9.9999	0.1797	0.9377	0.0342	0.2791	0.0365	0.2934
86	43.83	0.01	0.0508	9.9999	0.0115	9.9999	0.2264	0.9512	0.0350	0.2779	0.0374	0.2922
87	44.02	0.01	0.0351	9.9999	0.0086	9.9999	0.1739	0.9425	0.0348	0.2736	0.0365	0.2903
88	44.21	-0.06	0.0356	9.9999	0.0091	9.9999	0.2333	0.9313	0.0395	0.2681	0.0424	0.2879
89	44.35	0.01	0.0473	9.9999	0.0107	9.9999	0.2262	0.9478	0.0336	0.2758	0.0394	0.2916
90	44.56	0.01	0.0482	9.9999	0.0092	9.9999	0.2264	0.9507	0.0350	0.2754	0.0368	0.2857
91	44.74	0.01	0.0351	9.9999	0.0086	9.9999	0.1739	0.9439	0.0386	0.2713	0.0409	0.2874
92	44.91	0.01	0.0505	9.9999	0.0105	9.9999	0.2303	0.9469	0.0351	0.2727	0.0412	0.2874

PARTIAL MISSILE TAILS EFFECTS DATA

TEST 7 | PART 105 | MACH 1.10 1.7 | RNIC-6 | PHI 0.0 | CONF 81WDF14 | C.C | DELT 0 | DEL2 -10 | DEL3 0 | DEL4 -10 | TRANSITION UNKNOWN

POINT	ALPHA	BETA	CNF2	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
93	45.12	0.00	0.0466	0.9999	0.0113	0.9999	0.2335	0.9662	0.0397	0.2764	0.0411	0.2861
94	45.32	0.01	0.0473	0.9999	0.0058	0.9999	0.2072	0.9470	0.0422	0.2692	0.0446	0.2843
95	45.48	0.02	0.0485	0.9999	0.0066	0.9999	0.2041	0.9524	0.0422	0.2716	0.0443	0.2852
96	45.65	0.01	0.0496	0.9999	0.0105	0.9999	0.2196	0.9476	0.0397	0.2707	0.0415	0.2857
97	45.84	-0.00	0.0481	0.9999	0.0102	0.9999	0.2213	0.9392	0.0385	0.2673	0.0410	0.2846
98	46.03	0.00	0.0495	0.9999	0.0105	0.9999	0.2196	0.9367	0.0433	0.2697	0.0453	0.2819
99	46.19	0.01	0.0485	0.9999	0.0095	0.9999	0.2041	0.9466	0.0375	0.2656	0.0396	0.2848
100	46.37	-0.00	0.0485	0.9999	0.0095	0.9999	0.2041	0.9501	0.0317	0.2661	0.0341	0.2861
101	46.55	-0.01	0.0318	0.9999	0.0057	0.9999	0.1549	0.9329	0.0332	0.2657	0.0356	0.2848
102	46.72	-0.01	0.0482	0.9999	0.0078	0.9999	0.1888	0.9216	0.0272	0.2654	0.0295	0.2880
103	46.91	-0.01	0.0474	0.9999	0.0085	0.9999	0.1878	0.9144	0.0261	0.2607	0.0285	0.2851
104	47.07	0.00	0.0483	0.9999	0.0094	0.9999	0.1938	0.8996	0.0085	0.2523	0.0100	0.2976
105	47.24	0.01	0.0515	0.9999	0.0106	0.9999	0.2083	0.8449	0.0072	0.2505	0.0085	0.2976
106	47.42	-0.01	0.0481	0.9999	0.0094	0.9999	0.1934	0.8822	0.0176	0.2551	0.0195	0.2892
107	47.59	-0.00	0.0522	0.9999	0.0102	0.9999	0.1954	0.8171	0.0036	0.2436	0.0044	0.2981
108	47.75	0.01	0.0486	0.9999	0.0094	0.9999	0.1934	0.7992	0.0027	0.2356	0.0034	0.2998
109	47.93	0.00	0.0516	0.9999	0.0101	0.9999	0.1960	0.7771	0.0020	0.2329	0.0026	0.2997
110	48.12	0.01	0.0503	0.9999	0.0103	0.9999	0.1932	0.8000	0.0050	0.2367	0.0062	0.2959
111	48.28	0.00	0.0509	0.9999	0.0106	0.9999	0.2083	0.7636	0.0044	0.2307	0.0056	0.2955
112	48.44	0.00	0.0428	0.9999	0.0071	0.9999	0.1659	0.8027	0.0125	0.2482	0.0145	0.2877
113	48.63	-0.00	0.0466	0.9999	0.0076	0.9999	0.1557	0.8302	0.0085	0.2393	0.0102	0.2882
114	48.80	-0.02	0.0523	0.9999	0.0126	0.9999	0.0805	0.9035	0.0159	0.2544	0.0176	0.2814
115	48.96	0.01	0.0417	0.9999	0.0081	0.9999	0.1463	0.9202	0.0137	0.2601	0.0145	0.2827
116	49.14	-0.01	0.0513	0.9999	0.0107	0.9999	0.1696	0.9136	0.0143	0.2556	0.0157	0.2798
117	49.30	0.00	0.0505	0.9999	0.0104	0.9999	0.1899	0.9307	0.0086	0.2637	0.0092	0.2833
118	49.48	-0.01	0.0496	0.9999	0.0072	0.9999	0.1409	0.9290	0.0091	0.2612	0.0098	0.2812
119	49.65	0.01	0.0535	0.9999	0.0080	0.9999	0.1484	0.9239	0.0085	0.2604	0.0092	0.2818
120	49.81	0.01	0.0536	0.9999	0.0045	0.9999	0.1136	0.9277	0.0053	0.2629	0.0057	0.2834
121	49.99	0.02	0.0514	0.9999	0.0092	0.9999	0.1790	0.8572	0.0012	0.2446	0.0014	0.2851
122	50.17	0.04	0.0514	0.9999	0.0108	0.9999	0.1712	0.8850	0.0015	0.2524	0.0017	0.2852
123	50.33	0.03	0.0431	0.9999	0.0072	0.9999	0.1671	0.8839	0.0012	0.2458	0.0014	0.2845
124	50.48	0.01	0.0536	0.9999	0.0104	0.9999	0.1933	0.8557	0.0012	0.2413	0.0014	0.2820
125	50.66	0.02	0.0550	0.9999	0.0105	0.9999	0.1909	0.8613	0.0010	0.2446	0.0012	0.2840
126	50.84	0.03	0.0535	0.9999	0.0106	0.9999	0.2004	0.8578	0.0009	0.2437	0.0010	0.2841
127	50.99	0.03	0.0528	0.9999	0.0112	0.9999	0.2129	0.8658	0.0010	0.2448	0.0012	0.2827
128	43.92	-1.07	0.0444	0.9999	0.0073	0.9999	0.1044	0.0062	0.0013	0.2440	0.0015	0.2817
129	51.34	0.04	0.0535	0.9999	0.0105	0.9999	0.2022	0.8607	0.0019	0.2419	0.0022	0.2810
130	51.49	0.04	0.0480	0.9999	0.0100	0.9999	0.1867	0.8453	0.0016	0.2375	0.0019	0.2814
131	51.70	0.05	0.0540	0.9999	0.0105	0.9999	0.2019	0.8585	0.0022	0.2395	0.0026	0.2796
132	51.87	0.02	0.0505	0.9999	0.0082	0.9999	0.1824	0.8638	0.0023	0.2414	0.0027	0.2795
133	52.04	0.04	0.0505	0.9999	0.0113	0.9999	0.1919	0.8554	0.0024	0.2393	0.0028	0.2784
134	52.20	0.04	0.0500	0.9999	0.0110	0.9999	0.1967	0.8554	0.0024	0.2395	0.0028	0.2800
135	52.36	0.05	0.0573	0.9999	0.0093	0.9999	0.1921	0.8651	0.0020	0.2421	0.0023	0.2799
136	52.55	0.05	0.0518	0.9999	0.0093	0.9999	0.1795	0.8641	0.0022	0.2414	0.0025	0.2794
137	52.71	0.05	0.0505	0.9999	0.0122	0.9999	0.2071	0.8615	0.0021	0.2402	0.0024	0.2788
138	52.87	0.05	0.0513	0.9999	0.0134	0.9999	0.2166	0.8641	0.0021	0.2399	0.0024	0.2776

TEST 7 PART 105 MACH 1.10 RXIC=6 1.7 PHI 0.0 CONF 816DF14 L 6.6 DELT 0 DEL2 -10 DEL3 0 DEL4 -10 TRANSITION UNKNOWN

FLINT	ALPHA	BETA	CNF3	CM3	CB3	XCPF3	YCPF3	CNF4	CM4	CB4	XCPF4	YCPF4
139	53.03	0.05	0.0567	9.9999	0.0083	9.9999	0.1637	0.8430	0.0025	0.2341	0.0030	0.2777
140	53.19	0.04	0.0615	9.9999	0.0134	9.9999	0.2179	0.8696	0.0020	0.2391	0.0023	0.2786
141	53.35	0.03	0.0615	9.9999	0.0134	9.9999	0.2179	0.8695	0.0020	0.2418	0.0023	0.2781
142	53.53	0.03	0.0495	9.9999	0.0051	9.9999	0.1036	0.8532	0.0021	0.2371	0.0025	0.2776
143	53.68	0.03	0.0495	9.9999	0.0106	9.9999	0.2141	0.8705	0.0017	0.2425	0.0020	0.2786
144	53.86	0.04	0.0488	9.9999	0.0155	9.9999	0.2311	0.8819	0.0020	0.2455	0.0023	0.2784
145	54.01	0.03	0.0588	9.9999	0.0121	9.9999	0.2130	0.8692	0.0018	0.2412	0.0021	0.2775
146	54.17	0.04	0.0653	9.9999	0.0147	9.9999	0.2251	0.8810	0.0016	0.2457	0.0018	0.2789
147	54.31	0.03	0.0553	9.9999	0.0118	9.9999	0.1990	0.8695	0.0012	0.2477	0.0013	0.2785
148	54.48	0.01	0.0570	9.9999	0.0112	9.9999	0.1965	0.8673	0.0014	0.2448	0.0016	0.2759
149	54.64	0.02	0.0534	9.9999	0.0104	9.9999	0.1948	0.9158	0.0008	0.2539	0.0009	0.2772
150	54.79	0.01	0.0554	9.9999	0.0132	9.9999	0.2259	0.8998	0.0014	0.2485	0.0016	0.2762
151	54.95	0.01	0.0608	9.9999	0.0110	9.9999	0.1809	0.9175	0.0006	0.2546	0.0007	0.2773
152	55.08	0.00	0.0620	9.9999	0.0116	9.9999	0.1871	0.9093	0.0008	0.2523	0.0009	0.2779
153	55.22	0.01	0.0488	9.9999	0.0077	9.9999	0.1576	0.9140	0.0002	0.2508	0.0002	0.2744
154	55.39	0.02	0.0621	9.9999	0.0135	9.9999	0.2174	0.9257	0.0003	0.2545	0.0003	0.2754
155	55.56	0.01	0.0525	9.9999	0.0085	9.9999	0.1619	0.9344	-0.0004	0.2574	-0.0004	0.2755
156	55.71	-0.01	0.0518	9.9999	0.0084	9.9999	0.1735	0.9346	0.0	0.2557	0.0	0.2735
157	55.85	0.00	0.0395	9.9999	0.0057	9.9999	0.1606	0.9444	-0.0005	0.2579	-0.0005	0.2731
158	56.03	-0.02	0.0562	9.9999	0.0107	9.9999	0.1904	0.9583	-0.0006	0.2624	-0.0008	0.2738
159	56.22	0.00	0.0538	9.9999	0.0095	9.9999	0.1766	0.9592	-0.0009	0.2616	-0.0009	0.2727
160	56.37	-0.00	0.0538	9.9999	0.0100	9.9999	0.1859	0.9605	-0.0007	0.2623	-0.0007	0.2731
161	56.53	0.02	0.0550	9.9999	0.0111	9.9999	0.2018	0.9590	-0.0007	0.2631	-0.0007	0.2712
162	56.68	-0.03	0.0446	9.9999	0.0068	9.9999	0.1545	0.9692	-0.0013	0.2625	-0.0013	0.2708
163	56.85	-0.03	0.0525	9.9999	0.0099	9.9999	0.1866	0.9890	-0.0021	0.2694	-0.0021	0.2724
164	57.02	-0.02	0.0465	9.9999	0.0091	9.9999	0.1861	0.9809	-0.0024	0.2676	-0.0024	0.2713
165	57.17	-0.04	0.0452	9.9999	0.0074	9.9999	0.1637	0.9851	-0.0025	0.2665	-0.0025	0.2705
166	57.31	-0.01	0.0478	9.9999	0.0081	9.9999	0.1734	0.9845	-0.0016	0.2643	-0.0016	0.2685
167	57.44	-0.02	0.0477	9.9999	0.0078	9.9999	0.1593	0.9858	-0.0008	0.2588	-0.0008	0.2680
168	57.60	-0.09	0.0537	9.9999	0.0105	9.9999	0.1955	0.9639	-0.0020	0.2630	-0.002C	0.2673
169	57.73	-0.01	0.0502	9.9999	0.0093	9.9999	0.1805	0.9585	-0.0010	0.2538	-0.0010	0.2668
170	57.88	-0.03	0.0495	9.9999	0.0085	9.9999	0.1835	0.9926	-0.0016	0.2639	-0.0016	0.2659
171	58.05	-0.01	0.0453	9.9999	0.0084	9.9999	0.1856	0.9982	-0.0018	0.2648	-0.0018	0.2653
172	58.20	-0.00	0.0562	9.9999	0.0097	9.9999	0.1932	0.9900	-0.0020	0.2643	-0.0020	0.2652
173	58.34	-0.00	0.0491	9.9999	0.0073	9.9999	0.1487	1.0048	-0.0026	0.2666	-0.0026	0.2647
174	58.49	-0.03	0.0552	9.9999	0.0111	9.9999	0.2011	1.0183	-0.0029	0.2691	-0.0028	0.2643
175	58.63	-0.00	0.0490	9.9999	0.0082	9.9999	0.1581	1.0257	-0.0040	0.2716	-0.0039	0.2648
176	58.69	-0.02	0.0452	9.9999	0.0078	9.9999	0.1565	1.0130	-0.0024	0.2666	-0.0024	0.2632
177	58.66	-0.05	0.0492	9.9999	0.0092	9.9999	0.1870	0.9785	-0.0010	0.2594	-0.0010	0.2616

Listing of Part Numbers for the Tabulated Data of Test No. 7

CONF	L	DELI	DEL2	DEL3	DEL4	PHI	TRANSITION	R x 10^{-6}	α	β	Part Number			
											M_∞ 0.80	M_∞ 0.90	M_∞ 1.00	M_∞ 1.10
BIWOF23	0	0	0	0	0	0	Unknown	1.7	Vary	0	(2)	(5)	(8)	(10)
↓						45					4	6	9	11
BIWOF11						0					(28)	(30)	(33) 34	(37)
↓						45					29	32	35	36
BIWOF34						0					(39)	(41)	(44)	(45)
↓						45					40	42	43	46
BIWOF14						0					(47)	(50)	(51)	(54)
↓						45					48	49	52	53
BIWOF15						0					(55)	(58)	(59)	(62)
↓						45					56	57	60	61
BIWOF13						0					(63)	(66)	(67)	(70)
↓						45					64	65	68	69
BIWOF31						0					(71)	(74)	(75)	(79)
↓		↓	↓	↓	↓	45					72	73	76	77
BIWOF0		OFF	OFF	OFF	OFF	0					85	86	87	
BIWOF31		0	-10	0	-10						(90)	(91)	(92)	(93)
BIWOF23											(94)	(95)	(96)	(97)
BIWOF11											(98)	(99)	(100)	(101)
BIWOF14			↓		↓						(102)	(103)	104	(105)
↓			-30		-30						(106)	(107)	(108)	(109)
BIWOF15											(110)	(111)	(112)	(113)
BIWOF13											(114)	(115)	(116)	(117)
BIWOF31											(118)	(119)	(120)	(121)
BIWOF34											(122)	(123)	(124)	(125)
BIWOF23											(126)	(127)	(128)	(129)
BIWOF11			↓		↓						(130)	(131)	(132)	(133)
↓			-20		-20						(135)	(136)	(137)	(138)
BIWOF14											(140)	(141)	(142)	(143)
BIWOF15											(144)	(145)	(146)	(147)
BIWOF23											(148)	(149)	(150)	(151)
BIWOF13											(152)	(153)	(154)	(155)
BIWOF31											(156)	(157)	(158)	(159)
BIWOF34			↓		↓						(160)	(161)	(162)	(163)
↓			-10		-10						(164)	(165)	(166)	(167)
BIWOF13											(168)	(169)	(170)	(171)
BIWOF15	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	(172)	(173)	(174)	(175)

NOMENCLATURE

A	Streamwise length of beveled portion of fin leading edge, in. (see Fig. 6)
ALPHA (α)	Model angle of attack, deg
AR	Fin aspect ratio, b^2/S_F
B	Streamwise length of beveled portion of fin trailing edge, in. (see Fig. 6)
BETA (β)	Model angle of sideslip, deg
b	Tail fin span, measured from the root chord to the tip, in. (see Fig. 6)
CA	Axial-force coefficient, measured axial force/$q_\infty S$
CAB	Base axial-force coefficient, $(p_\infty - p_b)/q_\infty$
CAF	Forebody axial-force coefficient, CA - CAB
CB	Splitter plate tail fin root bending-moment coefficient, fin bending moment/$q_\infty S_F b$
CB1, CB2, CB3, CB4	Root bending-moment coefficient of tail fins No. 1, 2, 3, and 4, respectively, fin bending moment/$q_\infty S_F b$
CH	Splitter plate tail fin hinge-moment coefficient, hinge moment/$q_\infty S_F C_R$
CH1, CH2, CH3, CH4	Hinge-moment coefficients of tail fins No. 1, 2, 3, and 4, respectively, fin hinge moment/$q_\infty S_F C_R$
CLL	Rolling-moment coefficient, rolling moment/$q_\infty Sd$
CLM	Pitching-moment coefficient, pitching moment/$q_\infty Sd$ (moment reference point located on centerline at 50 percent of model body length)
CLN	Yawing-moment coefficient, yawing moment/$q_\infty Sd$
CN	Normal-force coefficient, normal force/$q_\infty S$

CNF	Splitter plate tail fin normal-force coefficient, fin normal force/$q_\infty S_F$
CNF1, CNF2, CNF3, CNF4	Normal-force coefficient of tail fins No. 1, 2, 3, and 4, respectively, fin normal force/$q_\infty S_F$
CONF	Model configuration identification
C_R	Tail fin root chord, in. (see Fig. 6)
C_T	Tail fin tip chord, in. (see Fig. 6)
C_Y	Side-force coefficient, side force/$q_\infty S$
d	Model body maximum diameter, in. (see Fig. 3)
DEL1, DEL2, DEL3, DEL4	Deflection of tail fins No. 1, 2, 3, and 4, respectively, deg
L	Distance between model nose and the intersection of the wing leading edge with the body (measured parallel to the body centerline), in.
MACH (M_∞)	Nominal free-stream Mach number
PART	Data indexing number
PHI	Model roll angle, deg
POINT	Data indexing number per part number
p_b	Average static pressure at model base, psfa
p_∞	Free-stream static pressure, psfa
q_∞	Free-stream dynamic pressure, psf
R	Nominal Reynolds number per foot
S	Maximum body cross-sectional area, ft^2
S_F	Tail fin planform area, ft^2 (see Fig. 6)
TEST	Test identification number
T_R	Tail fin root thickness, in. (see Fig. 6)

TRANSITION	Transition identification
X	Distance from fin root chord leading edge to fin hinge line, in. (see Fig. 6)
XCP	Missile body center-of-pressure location, CLM/CN
XCPF	Splitter plate fin longitudinal center-of-pressure location, CH/CNF
XCPF1, XCPF2 XCPF3, XCPF4	Longitudinal center-of-pressure location of tail fins No. 1, 2, 3, and 4, respectively, hinge moment/fin normal force
YCPF	Splitter plate fin lateral center-of-pressure location, CB/CNF
YCPF1, YCPF2 YCPF3, YCPF4	Lateral center-of-pressure location of tail fins No. 1 2, 3, and 4, respectively, foot bending moment/fin normal force
Λ	Tail fin leading-edge sweep angle (see Fig. 6)
λ	Tail fin taper ratio, C_T/C_R