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METEOROLOGICAL DATA REPORT

NIKE-HYDAC MK 12 STV (SR-042)
(15 November 1966)

BY

STANLEY KUBINSKI

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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(15 November 1966)**

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DA Task IV650212A127-02

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ABSTRACT

Metecrological data gathered for the launching of Mike-Hydac MK 12 STV (SR-042) are presented for the Air Force Ballistic Missile Re-entry Systems Office, Avco Corporation and for ballistic studies. The data appear, along with calculated ballistic data, in tabular form.

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INTRODUCTION

Nike-Hydrac, MK 12 STV (SR-042) was launched from Launch Complex 33, L-314, White Sands Missile Range (WSMR), New Mexico, at 0645 hours MST, 15 November 1966.

Meteorological data used in conjunction with theoretical calculations to predict rocket impact were collected by the Meteorological Support Division, Atmospheric Sciences Laboratory (ASL), WSMR, New Mexico. The Ballistics Meteorologists for this firing were Stanley Kubiński and Dennis Hulse.

DISCUSSION

Wind data for the first 216 feet above the surface were obtained from a system composed of five Aerovanes mounted on a 200-foot tower and cabled to wind component indicators.

From 216 to 4,000 feet above the surface, wind data were obtained from double-theodolite-observed Balloon ascents.

Temperature, pressure, and humidity data, along with upper wind data from 4,000 to 73,497 feet above the surface, were obtained from standard rawinsonde observations.

Mean wind component values in each ballistic zone were determined from vertical cross sections by the equal-area method.

Theoretical rocket performance values and ballistic factors as a function of altitude were provided by ASL, and are the basis for data appearing in Table VIII.

PAYLOAD		233.0	Pounds
CORIOLIS DISPLACEMENT	WEST	4.9	Miles
SECOND-STAGE IGNITION	TIME	20.2	Seconds
	ALTITUDE	36,673.0	Feet NSL
PFAX	TIME	236.2	Seconds
	ALTITUDE	718,586	Feet NSL
UNIT WIND EFFECT			Miles/MPH
		2.575	Miles/MPH
			Miles/MPH
TOWER TILT EFFECT		14.08	Miles/Degree

TABLE I. THEORETICAL ROCKET PERFORMANCE VALUES
NIKE-HYDAC MK 12 STV (SR-042)

LAYERS IN FEET ABOVE GROUND	BALLISTIC FACTORS
0- 11	.0000
11- 60	.1482
60- 108	.1028
108- 148	.0671
148- 184	.0344
184- 216	.0315
216- 300	.0835
300- 400	.0681
400- 600	.0727
600- 800	.0503
800-1000	.0432

LAYERS IN FEET ABOVE GROUND	BALLISTIC FACTORS
1000- 1400	.0703
1400- 2000	.0363
2000- 2500	.0299
2500- 3000	.0166
3000- 3500	.0203
3500- 4000	.0041
4000- 4263	-.0067
4263- 9000	-.0109
9000-15000	-.0124
15000-21000	-.0104
21000-26000	-.0072

LAYERS IN FEET ABOVE GROUND	BALLISTIC FACTORS
26000-32647	-.0037
32647-34000	.0413
34000-36000	.0315
36000-41000	.0345
41000-46000	.0126
46000-51000	.0033
51000-56000	.0033
56000-61000	.0024
61000-66000	.0019
66000-73497	.0009

TABLE II. BALLISTIC FACTORS
NIKE-HYDAC MK 12 3TV (SR-042)

AERO- VANE NO. *	MEAN WIND COMPONENTS IN MILES PER HOUR							
	1 0650 MST		2 0715 MST		3 0742 MST		4 0800 MST	
	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W
1	5.0N	3.0E	3.5N	3.0E	4.0N	1.0E	3.0N	1.5E
2	7.0	5.0	6.0	4.0	6.0	1.0	8.0	0.0
3	8.0	2.0	10.0	2.5	8.0	2.0	7.0	0.5E
4	6.0	1.0	6.5	1.5	10.0	1.0	8.0	1.0
5	5.0	0.0	6.5	1.0	10.0	0.0	10.0	0.0

AERO- VANE NO. *	MEAN WIND COMPONENTS IN MILES PER HOUR							
	6 0825 MST		7 0835 MST		8 0845 MST			
	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W
1	5.0N	2.0E	6.0N	2.0E	5.0N	1.0E		
2	4.0	2.5	8.0	3.0	5.0	2.0		
3	5.0	1.5	9.0	2.5	5.0	1.0		
4	8.0	1.0	7.0	2.5	5.0	2.0		
5	9.0	1.0	9.5	2.0	8.0	2.0		

TABLE III. ANEMOMETER WIND SPEED AND DIRECTION
NIKE-HYDAC MK 12 STV (SR-042)

* Heights corresponding to Aerovane Numbers: 1 = 35 Feet 3 = 120 Feet 5 = 200 Feet
2 = 80 Feet 4 = 160 Feet

LAYERS IN FEET ABOVE GROUND	MEAN WIND COMPONENTS IN MILES PER HOUR									
	1 0650 MST		2 0715 MST		3 0745 MST		4 0800 MST		5 0815 MST	
	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W
216- 300	4.9N	1.0E	6.0N	1.0E	9.0N	0.0	9.5N	0.0	7.5N	2.0E
300- 400	4.5	2.0	5.5	1.0	7.0	0.5E	6.0	0.5E	6.5	2.5
400- 600	3.0	3.0	3.5	1.5	4.0	1.5	3.5	1.0	5.0	3.0
600- 800	1.0	4.0	1.5	2.5	2.0	2.0	1.0	1.0	3.0	3.0
800-1000	1.0S	4.5	0.0	3.5	0.0	2.5	1.0S	1.0	0.0	2.5
1000-1400	3.0	3.0	1.5S	3.0	3.5S	3.0	2.5	3.5	2.5S	3.0
1400-2000	4.5	1.0	4.0	2.0	9.0	1.5	5.0	1.5	5.5	0.5
2000-2500	9.5	1.0	7.5	1.5	9.5	1.0N	10.5	0.0	9.5	0.5W
2500-3000	14.0	1.5W	14.0	2.0W	15.0	2.5	14.5	0.5E	13.5	1.0
3000-3500	13.5	3.5	13.5	3.0	15.0	2.0	15.0	2.0W	13.0	4.5
3500-4000	14.5	1.5	15.5	1.0	15.0	0.0	13.5	3.0	11.5	4.0

TABLE IV. PILOT-BALLOON-MEASURED WIND DATA
NIKE-HYDAC MK 12 STV (SR-042)

LAYERS IN FEET ABOVE GROUND	MEAN WIND COMPONENTS IN MILES PER HOUR									
	6		7		8		MST		MST	
	0825 MST		0835 MST		0845 MST					
	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W
216- 300	8.0N	1.0E	8.5N	2.0E	7.0N	2.0E				
300- 400	6.5	1.0	7.0	1.5	5.5	2.0				
400- 600	4.5	1.5	5.0	1.0	3.0	2.0				
600- 800	2.5	1.5	3.0	1.0	1.0	2.0				
800-1000	0.0	1.5	1.0	1.0	1.5S	2.0				
1000-1400	2.0S	1.5	2.5S	1.0	3.0	1.0				
1400-2000	6.0	1.5	6.0	0.0	6.5	0.5W				
2000-2500	11.5	1.5	11.0	2.0W	10.5	1.5				
2500-3000	14.0	2.0W	12.5	2.0	13.0	1.5				
3000-3500	13.5	5.0	13.0	3.0	18.5	1.5H				
3500-4000	12.5	6.5	14.5	3.5	21.5	3.0				

TABLE IV. PILOT-BALLOON-MEASURED WIND DATA (Cont)
NINU-HYDAC MK 12 STV (8R-042)

LAYERS IN FEET ABOVE (GROUND)	MEAN WIND COMPONENTS IN KNOTS					
	1 0545 MST		2 0830 MST			
	N-S	E-W	N-S	E-W	N-S	E-W
4000-4263	11.05	2.0W	8.55	7.0W		
4263-9000	7.5	9.0	6.5	11.0		
9000-15000	2.0	12.0	1.5	10.0		
15000-21000	2.0N	12.0	1.5N	9.0		
21000-26000	10.5	4.0	14.0	0.0		
26000-32647	16.5	3.0	25.0	0.0		
32647-34000	21.5	4.0	29.0	0.0		
34000-36000	19.5	3.5	24.0	9.0W		
36000-41000	19.0	16.0	14.0	17.0		
41000-46000	9.0	15.5	5.0	16.5		
46000-51000	2.0	12.0	0.0	15.0		
51000-56000	2.0	12.0	0.0	15.0		
56000-61000	5.0	13.0	2.5N	13.0		
61000-66000	6.5	11.0	4.0	10.5		
66000-73497	7.5	9.0	6.0	7.0		
73497-76000	7.5	13.0	4.0	7.0		

TABLE V. RAWINSONDE-MEASURED WIND DATA
NIKI-HYDAC MK 12 STV (RR-042)

STATION ALTITUDE 3989.0 FEET MSL

15 NOV. 66

ASCENSION NO. 898

UPPER AIR DATA

04900003902

WHITE SANDS SITE

TABLE VI

WSM SITE COORDINATES

E 486,580 FEET

N 185,145 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES	DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED DEGREES KNOTS	INDEX OF REFRACTION
3989.0	884.9	5.6	0.2	68.0	1103.1	651.0	0.	1.000276
4000.0	884.5	5.8	0.4	68.2	1101.8	651.3	359.1	1.000276
4500.0	868.5	12.4	7.8	73.0	1054.8	659.3	319.2	1.000284
5000.0	853.0	13.1	8.4	73.0	1033.1	660.4	279.2	1.000281
5500.0	837.7	13.8	9.1	73.0	1011.9	661.3	239.2	1.000279
6000.0	822.7	12.9	8.5	74.3	997.0	660.2	199.3	1.000273
6500.0	807.9	11.5	7.4	75.8	984.3	658.3	182.7	1.000267
7000.0	793.3	11.2	6.9	74.3	967.4	658.2	185.2	1.000262
7500.0	779.0	11.0	6.3	72.0	950.8	657.9	190.1	1.000257
8000.0	765.0	10.8	5.8	71.3	934.6	657.6	196.1	1.000252
8500.0	751.2	10.1	5.6	73.3	919.8	656.8	201.8	1.000248
9000.0	737.5	9.4	2.2	60.3	906.1	655.7	207.3	1.000236
9500.0	723.9	8.4	0.3	56.5	892.9	654.4	216.2	1.000229
10000.0	710.5	7.3	-0.9	55.9	879.9	653.1	226.4	1.000224
10500.0	697.3	6.2	-2.1	55.3	867.2	651.7	233.4	1.000219
11000.0	684.4	5.1	-3.2	54.7	854.6	650.4	244.1	1.000214
11500.0	671.7	4.0	-4.4	54.2	842.2	649.1	250.5	1.000209
12000.0	659.2	2.9	-5.6	53.6	830.0	647.7	256.4	1.000205
12500.0	647.0	1.8	-6.8	53.0	818.0	646.4	259.2	1.000201
13000.0	635.0	0.7	-7.9	52.4	806.2	645.1	261.7	1.000197
13500.0	623.2	-0.4	-9.1	51.0	794.3	643.7	263.3	1.000193
14000.0	611.7	-1.4	-10.3	51.2	783.0	642.4	263.9	1.000189
14500.0	600.1	-2.3	-12.8	44.6	771.0	641.2	262.2	1.000184
15000.0	588.7	-3.1	-16.5	35.1	758.8	640.2	260.1	1.000178
15500.0	577.5	-3.9	-20.9	25.6	746.8	639.1	257.2	1.000172
16000.0	566.4	-4.9	-23.9	21.1	735.3	637.9	253.9	1.000168
16500.0	555.4	-6.2	-23.6	23.9	724.5	636.4	250.2	1.000164
17000.0	544.7	-7.5	-23.5	26.6	713.9	634.9	249.3	1.000164
17500.0	534.1	-8.8	-23.5	29.4	703.4	633.3	250.7	1.000162
18000.0	523.7	-10.1	-23.6	32.2	693.1	631.8	253.0	1.000159

STATION ALTITUDE 3989.0 FEET MSL
15 NOV. 66 0545 HRS MST
ASCENSION NO. 898

UPPER AIR DATA
0490003902
WHITE SANDS SITE
TABLE VI (Cont)

WSTM SITE COORDINATES
E 488,580 FEET
N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			SOUND KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS		
18500.0	513.5	-11.3	-23.9	34.9	683.0	630.3	255.7	10.6	1.000157	
19000.0	503.5	-12.6	-24.2	37.8	673.0	628.7	259.6	10.6	1.000155	
19500.0	493.4	-14.0	-24.5	41.2	663.0	627.0	264.0	10.6	1.000152	
20000.0	483.5	-15.4	-24.8	44.6	653.2	625.3	269.7	10.8	1.000150	
20500.0	473.9	-16.8	-25.3	47.9	643.6	623.7	274.5	11.1	1.000148	
21000.0	464.4	-18.1	-25.9	51.3	634.1	622.0	278.1	11.4	1.000146	
21500.0	455.1	-19.5	-26.5	54.6	624.8	620.3	281.3	11.7	1.000143	
22000.0	446.0	-20.9	-27.1	57.8	615.6	618.6	284.2	11.9	1.000141	
22500.0	436.9	-21.4	-28.5	20.0	604.5	617.9	287.1	12.2	1.000136	
23000.0	427.6	-22.4	-39.4	19.8	594.2	616.7	290.7	12.2	1.000134	
23500.0	418.9	-23.3	-40.3	19.6	584.1	615.5	294.3	12.2	1.000131	
24000.0	410.2	-24.3	-41.2	19.4	574.1	614.3	297.1	11.1	1.000129	
24500.0	401.7	-25.2	-42.1	19.2	564.4	613.2	301.2	10.0	1.000127	
25000.0	393.3	-26.1	-43.1	18.9	554.8	612.0	312.1	9.5	1.000124	
25500.0	385.2	-27.1	-44.0	18.7	545.4	610.8	324.8	9.2	1.000122	
26000.0	377.2	-28.0	-44.9	18.5	536.1	609.6	342.8	9.6	1.000120	
26500.0	369.3	-29.0	-45.8	18.3	527.0	608.5	356.2	10.5	1.000118	
27000.0	361.7	-29.9	-46.7	18.1	518.1	607.3	3.3	12.2	1.000116	
27500.0	354.1	-31.1	-47.7	18.0	509.6	605.9	8.1	13.2	1.000114	
28000.0	346.5	-32.4	-48.8	18.0	501.4	604.2	11.5	13.8	1.000112	
28500.0	339.0	-33.7	-50.3	17.2**	493.2	602.6	10.3	14.0	1.000110	
29000.0	331.5	-35.0	-52.2	15.7**	485.0	600.9	8.2	14.0	1.000108	
29500.0	324.2	-36.3	-54.1	14.2**	476.9	599.3	6.7	13.8	1.000106	
30000.0	317.1	-37.6	-56.1	12.7**	469.0	597.6	5.2	13.5	1.000105	
30500.0	310.1	-38.9	-58.2	11.2**	461.2	596.0	0.3	13.6	1.000103	
31000.0	303.2	-40.2	-60.4	9.6**	453.5	594.3	355.6	13.6	1.000101	
31500.0	296.5	-41.5	-62.8	8.1**	446.0	592.6	351.7	14.2	1.000099	
32000.0	290.0	-42.8	-65.3	6.6**	438.6	591.0	347.9	14.8	1.000098	
32500.0	283.6	-44.1	-68.2	5.1**	431.4	589.3	347.6	16.8	1.000096	
33000.0	277.3	-45.4	-71.6	3.6**	424.3	587.6	347.3	18.8	1.000095	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL
15 NOV. 66 0545 HRS MST
ASCENSION NO. 898

UPPER AIR DATA
0490003902
WHITE SANDS SITE
TABLE VI (Cont)

MSTM SITE COORDINATES
E 488.580 FEET
N 185.045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
33500.0	271.2	-46.7	-76.1	2.1**	417.3	585.9		349.8	19.6	1.000093
34000.0	265.2	-48.0	-84.8	0.6**	410.4	584.3		352.2	20.5	1.000091
34500.0	259.2	-49.3	0.	-0. **	403.5	582.5		353.6	20.4	1.000090
35000.0	253.3	-50.7	0.	-0. **	396.7	580.8		354.9	20.3	1.000088
35500.0	247.4	-51.1	0.	-0. **	388.3	580.2		353.2	20.4	1.000086
36000.0	241.7	-51.0	0.	-0. **	379.1	580.4		351.4	20.8	1.000084
36500.0	236.2	-51.1	0.	-0. **	370.6	580.2		349.8	22.3	1.000083
37000.0	230.7	-51.9	0.	-0. **	363.2	579.2		348.1	23.4	1.000081
37500.0	225.3	-52.6	0.	-0. **	356.0	578.3		346.6	23.0	1.000079
38000.0	220.1	-53.4	0.	-0. **	348.9	577.2		345.2	22.3	1.000078
38500.0	214.9	-54.5	0.	-0. **	342.3	575.8		343.9	21.2	1.000076
39000.0	209.8	-55.5	0.	-0. **	335.9	574.4		340.9	20.2	1.000075
39500.0	204.8	-56.6	0.	-0. **	329.6	573.0		336.7	19.3	1.000073
40000.0	200.0	-57.7	0.	-0. **	323.4	571.6		334.2	20.2	1.000072
40500.0	195.3	-58.7	0.	-0. **	317.3	570.2		332.5	21.8	1.000071
41000.0	190.6	-59.8	0.	-0. **	311.3	568.7		329.4	22.7	1.000069
41500.0	186.1	-60.6	0.	-0. **	305.0	567.7		326.0	23.4	1.000068
42000.0	181.6	-61.1	0.	-0. **	298.4	566.9		320.7	23.0	1.000066
42500.0	177.2	-61.7	0.	-0. **	291.9	566.2		315.2	22.6	1.000065
43000.0	172.9	-62.3	0.	-0. **	285.7	565.4		310.2	22.3	1.000064
43500.0	168.7	-62.9	0.	-0. **	279.5	564.6		305.6	22.2	1.000062
44000.0	164.6	-63.4	0.	-0. **	273.5	563.9		303.4	22.9	1.000061
44500.0	160.6	-63.8	0.	-0. **	267.2	563.4		301.8	23.8	1.000060
45000.0	156.6	-64.1	0.	-0. **	261.0	563.0		302.5	25.0	1.000058
45500.0	152.8	-64.4	0.	-0. **	255.0	562.5		302.7	26.0	1.000057
46000.0	149.0	-64.8	0.	-0. **	249.2	562.1		302.1	26.5	1.000055
46500.0	145.4	-65.1	0.	-0. **	243.5	561.6		302.1	25.3	1.000054
47000.0	141.8	-65.4	0.	-0. **	237.9	561.2		302.6	22.8	1.000053
47500.0	138.3	-65.8	0.	-0. **	232.4	560.7		301.6	19.8	1.000052
48000.0	134.9	-66.4	0.	-0. **	227.3	559.9		300.2	16.7	1.000051

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL

15 NOV. 66

ASCENSION NO. 898

UPPER AIR DATA

0490003902

WHITE SANDS SITE

TABLE VI (Cont)

WSYM SITE COORDINATES

E 488,580 FEET

N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL.HUM. PERCENT	DENSITY GM/CUBIC MEYER	SPEED OF SOUND KNOTS		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			DIRECTION DEGREES(TN)	SPEED KNOTS			
48500.0	131.5	-67.0	0.	-0.4*	222.3	559.0	298.7	14.5	1.000049	
49000.0	128.2	-67.6	0.	-0.4**	217.3	558.2	297.2	12.4	1.000048	
49500.0	125.0	-68.2	0.	-0.4**	212.5	557.4	294.9	12.0	1.000047	
50000.0	121.9	-68.8	0.	-0.4**	207.8	556.6	292.4	11.7	1.000046	
50500.0	118.8	-69.4	0.	-0.4**	203.2	555.8	287.7	11.7	1.000045	
51000.0	115.9	-70.0	0.	-0.4**	198.8	554.9	283.5	11.7	1.000044	
51500.0	113.0	-70.6	0.	-0.4**	194.4	554.1	281.7	11.5	1.000043	
52000.0	110.1	-71.3	0.	-0.4**	190.1	553.3	279.6	11.4	1.000042	
52500.0	107.4	-71.6	0.	-0.4**	185.6	552.8	276.9	11.9	1.000041	
53000.0	104.6	-71.7	0.	-0.4**	181.0	552.6	275.0	12.3	1.000040	
53500.0	102.0	-71.9	0.	-0.4**	176.5	552.4	276.7	12.2	1.000039	
54000.0	99.4	-72.0	0.	-0.4**	172.2	552.2	277.3	12.1	1.000038	
54500.0	96.9	-72.2	0.	-0.4**	167.9	552.0	274.6	12.4	1.000037	
55000.0	94.4	-72.1	0.	-0.4**	163.6	552.1	273.1	12.5	1.000036	
55500.0	92.0	-72.0	0.	-0.4**	159.4	552.2	275.0	12.4	1.000035	
56000.0	89.7	-71.9	0.	-0.4**	155.3	552.3	276.6	12.3	1.000035	
56500.0	87.4	-71.8	0.	-0.4**	151.3	552.5	277.7	12.2	1.000034	
57000.0	85.2	-71.7	0.	-0.4**	147.4	552.6	277.7	12.2	1.000033	
57500.0	83.0	-71.6	0.	-0.4**	143.6	552.7	276.1	12.3	1.000032	
58000.0	80.9	-71.5	0.	-0.4**	139.8	552.9	273.0	12.8	1.000031	
58500.0	78.9	-71.1	0.	-0.4**	136.0	553.5	268.6	13.6	1.000030	
59000.0	76.9	-70.3	0.	-0.4**	132.1	554.6	269.2	14.5	1.000029	
59500.0	75.0	-69.5	0.	-0.4**	128.3	555.7	271.8	13.4	1.000029	
60000.0	73.1	-68.7	0.	-0.4**	124.6	556.8	275.6	15.4	1.000028	
60500.0	71.3	-67.9	0.	-0.4**	121.0	557.8	279.6	15.3	1.000027	
61000.0	69.5	-67.1	0.	-0.4**	117.5	558.9	284.9	14.7	1.000026	
61500.0	67.8	-66.7	0.	-0.4**	114.4	559.4	290.3	14.0	1.000025	
62000.0	66.1	-66.5	0.	-0.4**	111.4	559.8	291.2	13.3	1.000025	
62500.0	64.5	-66.2	0.	-0.4**	108.6	560.1	291.2	12.6	1.000024	
63000.0	62.9	-66.0	0.	-0.4**	105.8	560.5	292.3	12.7	1.000024	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL.
15 NOV. 66 0545 HRS MST
ASCENSION NO. 898

UPPER AIR DATA
0450003902
WHITE SANDS SITE
TABLE VI (Cont)

WSTM SITE COORDINATES
E 488,580 FEET
N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
63500.0	61.4	-65.7	0.	-0. **	103.1	560.8		294.1	13.3	1.000023
64000.0	59.9	-65.5	0.	-0. **	100.4	561.1		295.5	13.6	1.000022
64500.0	58.4	-65.2	0.	-0. **	97.8	561.5		296.3	13.7	1.000022
65000.0	57.0	-65.0	0.	-0. **	95.3	561.8		298.7	13.6	1.000021
65500.0	55.6	-64.7	0.	-0. **	92.9	562.2		304.5	13.5	1.000021
66000.0	54.2	-64.5	0.	-0. **	90.5	562.5		308.1	12.9	1.000020
66500.0	52.9	-64.2	0.	-0. **	88.2	562.8		304.6	11.1	1.000020
67000.0	51.6	-64.0	0.	-0. **	85.9	563.2		299.6	9.7	1.000019
67500.0	50.3	-63.7	0.	-0. **	83.7	563.5		287.5	9.9	1.000019
68000.0	49.1	-63.5	0.	-0. **	81.5	563.9		275.9	10.3	1.000018
68500.0	47.9	-63.2	0.	-0. **	79.5	564.2		269.5	11.7	1.000018
69000.0	46.7	-63.0	0.	-0. **	77.4	564.5		263.2	13.2	1.000017
69500.0	45.6	-62.5	0.	-0. **	75.4	565.1		269.7	13.8	1.000017
70000.0	44.5	-61.9	0.	-0. **	73.3	566.0		276.4	14.4	1.000016
70500.0	43.4	-61.2	0.	-0. **	71.3	566.9		286.6	14.0	1.000016
71000.0	42.4	-60.5	0.	-0. **	69.4	567.8		298.0	13.2	1.000015
71500.0	41.3	-59.8	0.	-0. **	67.5	568.7		307.4	12.4	1.000015
72000.0	40.3	-59.1	0.	-0. **	65.7	569.6		313.7	11.7	1.000015
72500.0	39.4	-59.0	0.	-0. **	64.1	569.8		319.7	11.0	1.000014
73000.0	38.4	-59.1	0.	-0. **	62.6	569.7		320.4	10.7	1.000014
73500.0	37.5	-59.2	0.	-0. **	61.1	569.5		321.1	10.4	1.000014
74000.0	36.6	-59.3	0.	-0. **	59.7	569.4		318.8	10.7	1.000013
74500.0	35.8	-59.3	0.	-0. **	58.3	569.4		315.2	11.2	1.000013
75000.0	34.9	-58.9	0.	-0. **	56.8	569.9		312.4	12.0	1.000013
75500.0	34.1	-58.5	0.	-0. **	55.3	570.4		311.6	13.1	1.000012
76000.0	33.3	-58.2	0.	-0. **	53.9	570.9		310.8	14.3	1.000012
76500.0	32.5	-57.8	0.	-0. **	52.6	571.4		310.7	15.2	1.000012
77000.0	31.7	-57.4	0.	-0. **	51.2	571.9		311.0	16.0	1.000011
77500.0	31.0	-57.1	0.	-0. **	49.9	572.4		311.2	16.8	1.000011
78000.0	30.2	-56.7	0.	-0. **	48.7	572.9		309.4	17.6	1.000011

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL

15 NOV. 66

ASCENSION NO. 898

UPPER AIR DATA

0490003902

WHITE SANDS SITE

TABLE VI (Cont)

WSTM SITE COORDINATES

E 488,580 FEET

N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
78500.0	29.5	-56.3	0.	-0. **	47.4	573.4	307.6	307.6	18.3	1.000011
79000.0	28.8	-55.9	0.	-0. **	46.2	573.9	306.1	306.1	19.0	1.000010
79500.0	28.2	-55.6	0.	-0. **	45.1	574.4	306.6	306.6	19.3	1.000010
80000.0	27.5	-55.2	0.	-0. **	43.9	574.9	307.1	307.1	19.7	1.000010
80500.0	26.8	-54.9	0.	-0. **	42.8	575.3	306.7	306.7	19.7	1.000010
81000.0	26.2	-54.7	0.	-0. **	41.8	575.5	304.7	304.7	19.0	1.000009
81500.0	25.6	-54.5	0.	-0. **	40.8	575.8	302.7	302.7	18.3	1.000009
82000.0	25.0	-54.3	0.	-0. **	39.8	576.0	300.0	300.0	17.6	1.000009
82500.0	24.4	-54.1	0.	-0. **	38.9	576.3	296.6	296.6	16.9	1.000009
83000.0	23.9	-53.9	0.	-0. **	38.0	576.5	293.3	293.3	16.2	1.000008
83500.0	23.3	-53.7	0.	-0. **	37.0	576.8	287.6	287.6	16.2	1.000008
84000.0	22.8	-53.6	0.	-0. **	36.2	577.0	280.5	280.5	16.6	1.000008
84500.0	22.3	-53.4	0.	-0. **	35.3	577.2	273.5	273.5	17.1	1.000008
85000.0	21.8	-53.2	0.	-0. **	34.5	577.5	271.5	271.5	18.6	1.000008
85500.0	21.2	-53.0	0.	-0. **	33.6	577.7	271.5	271.5	20.7	1.000007
86000.0	20.8	-52.8	0.	-0. **	32.8	578.0	271.6	271.6	22.8	1.000007
86500.0	20.3	-52.6	0.	-0. **	32.0	578.2	272.5	272.5	24.2	1.000007
87000.0	19.8	-52.4	0.	-0. **	31.3	578.5	273.9	273.9	25.3	1.000007
87500.0	19.4	-52.3	0.	-0. **	30.5	578.7	275.3	275.3	26.5	1.000007
88000.0	18.9	-52.1	0.	-0. **	29.8	578.9	277.0	277.0	27.4	1.000007
88500.0	18.5	-51.9	0.	-0. **	29.1	579.2	279.1	279.1	28.1	1.000006
89000.0	18.0	-51.7	0.	-0. **	28.4	579.4	281.3	281.3	28.9	1.000006
89500.0	17.6	-51.5	0.	-0. **	27.7	579.7	282.8	282.8	29.1	1.000006
90000.0	17.2	-51.3	0.	-0. **	27.0	579.9	283.3	283.3	28.5	1.000006
90500.0	16.8	-51.2	0.	-0. **	26.4	580.2	283.8	283.8	27.9	1.000006
91000.0	16.4	-51.0	0.	-0. **	25.8	580.4	284.3	284.3	27.5	1.000006
91500.0	16.1	-50.8	0.	-0. **	25.2	580.6	285.2	285.2	28.2	1.000006
92000.0	15.7	-50.6	0.	-0. **	24.5	580.9	286.1	286.1	28.9	1.000005
92500.0	15.3	-50.4	0.	-0. **	24.0	581.1	287.0	287.0	29.7	1.000005
93000.0	15.0	-50.2	0.	-0. **	23.4	581.4	288.3	288.3	31.0	1.000005

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL
15 NOV. 66 0545 HRS MST
ASCENSION NO. 898

UPPER AIR DATA
0490003902
WHITE SANDS SITE
TABLE VI (Cont)

WSTM SITE COORDINATES
E 488,580 FEET
N 185,043 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL-HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE			SPEED KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS		
93500.0	14.6	-50.0	0.	-0. **	22.8	581.6	289.6	32.3	1.000005	
94000.0	14.3	-49.9	0.	-0. **	22.3	581.8	290.9	33.6	1.000005	
94500.0	14.0	-49.7	0.	-0. **	21.8	582.1	292.2	34.4	1.000005	
95000.0	13.6	-49.4	0.	-0. **	21.2	582.5	293.5	35.1	1.000005	
95500.0	13.3	-49.1	0.	-0. **	20.7	582.8	294.8	35.8	1.000005	
96000.0	13.0	-48.8	0.	-0. **	20.2	583.2	295.1	35.6	1.000005	
96500.0	12.7	-48.5	0.	-0. **	19.8	583.6	294.9	34.8	1.000004	
97000.0	12.4	-48.3	0.	-0. **	19.3	583.9	294.8	34.1	1.000004	
97500.0	12.2	-48.0	0.	-0. **	18.8	584.3	293.6	32.9	1.000004	
98000.0	11.9	-47.7	0.	-0. **	18.4	584.6	291.1	31.2	1.000004	
98500.0	11.6	-47.4	0.	-0. **	17.9	585.0	288.6	29.5	1.000004	
99000.0	11.4	-47.2	0.	-0. **	17.5	585.4	285.9	27.9	1.000004	
99500.0	11.1	-46.9	0.	-0. **	17.1	585.7	282.6	26.9	1.000004	
100000.0	10.9	-46.6	0.	-0. **	16.7	586.1	279.3	25.9	1.000004	
100500.0	10.6	-46.3	0.	-0. **	16.3	586.4	276.4	25.0	1.000004	
101000.0	10.4	-46.0	0.	-0. **	15.9	586.8	276.4	24.5	1.000004	
101500.0	10.1	-45.8	0.	-0. **	15.5	587.2	276.3	24.0	1.000003	
102000.0	9.9	-45.7	0.	-0. **	15.2	587.2	275.7	24.0	1.000003	
102500.0	9.7	-46.0	0.	-0. **	14.8	586.9	270.8	26.7	1.000003	
103000.0	9.5	-46.3	0.	-0. **	14.5	586.5	265.8	29.5	1.000003	
103500.0	9.2	-46.5	0.	-0. **	14.2	586.1	261.6	32.2	1.000003	
104000.0	9.0	-46.8	0.	-0. **	13.9	585.8	262.0	34.4	1.000003	
104500.0	8.8	-47.1	0.	-0. **	13.6	585.4	262.4	36.5	1.000003	
105000.0	8.6	-47.4	0.	-0. **	13.3	585.1	262.6	38.8	1.000003	
105500.0	8.4	-47.6	0.	-0. **	13.0	584.7	261.5	41.7	1.000003	
106000.0	8.3	-47.9	0.	-0. **	12.8	584.4	260.4	44.6	1.000003	
106500.0	8.1	-48.2	0.	-0. **	12.5	584.0	260.0	46.9	1.000003	
107000.0	7.9	-48.1	0.	-0. **	12.2	584.1	263.4	46.7	1.000003	
107500.0	7.7	-47.8	0.	-0. **	11.9	584.5	266.8	46.4	1.000003	
108000.0	7.5	-47.5	0.	-0. **	11.6	584.9	269.7	46.3	1.000003	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL
15 NOV. 66
ASCENSION NO. 898

UPPER AIR DATA
0490003902
WHITE SANDS SITE
TABLE VI (Cont)

WSYM SITE COORDINATES
E 488,580 FEET
N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
108500.0	7.4	-47.2	0.	-0. **	11.4	585.3	269.9	47.0	1.000003
109000.0	7.2	-46.9	0.	-0. **	11.1	585.7	270.1	47.7	1.000002
109500.0	7.0	-46.6	0.	-0. **	10.8	586.1			1.000002
110000.0	6.9	-46.3	0.	-0. **	10.6	586.5			1.000002
110500.0	6.7	-46.0	0.	-0. **	10.3	586.9			1.000002
111000.0	6.6	-45.6	0.	-0. **	10.1	587.3			1.000002
111500.0	6.4	-45.3	0.	-0. **	9.8	587.7			1.000002
112000.0	6.3	-45.0	0.	-0. **	9.6	588.1			1.000002
112500.0	6.1	-44.7	0.	-0. **	9.4	588.5			1.000002
113000.0	6.0	-44.4	0.	-0. **	9.1	588.9			1.000002

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL
15 NOV. 66 0830 HRS MST
ASCENSION NO. 899

UPPER AIR DATA
04900003903
WHITE SANDS SITE
TABLE VII

WSTM SITE COORDINATES
E 488,980 FEET
N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TM)	SPEED KNOTS	
3989.0	885.8	11.0	2.1	54.0	1082.9	657.4	30.0		4.1	1.000275
4000.0	885.4	11.1	2.2	54.4	1082.2	657.4	30.8		4.1	1.000273
4500.0	869.5	12.7	6.2	64.5	1055.6	659.7	65.2		5.0	1.000279
5000.0	853.9	13.1	6.9	65.8	1034.8	660.2	99.6		6.0	1.000277
5500.0	838.6	13.4	7.5	67.2	1014.9	660.7	134.1		6.9	1.000274
6000.0	823.6	12.4	7.1	69.9	1000.4	659.4	168.5		7.8	1.000270
6500.0	808.8	11.3	6.6	72.5	986.1	658.2	188.6		9.0	1.000265
7000.0	794.2	11.6	5.9	67.7	967.5	658.5	195.1		10.3	1.000259
7500.0	779.9	12.2	5.0	61.1	948.2	659.2	202.6		11.1	1.000252
8000.0	765.9	12.4	3.5	54.6	930.8	659.3	210.4		11.6	1.000244
8500.0	752.1	11.9	1.3	47.9	916.2	658.5	220.0		11.6	1.000235
9000.0	738.5	11.0	-0.4	45.0	902.7	657.4	228.5		11.8	1.000229
9500.0	724.9	9.6	-1.0	47.5	890.8	655.7	235.7		12.1	1.000223
10000.0	711.6	8.1	-1.7	50.0	879.0	653.9	241.0		12.7	1.000222
10500.0	698.6	6.6	-2.4	52.5	867.5	652.2	245.8		13.3	1.000218
11000.0	685.8	5.2	-3.1	55.0	856.1	650.5	246.5		13.7	1.000215
11500.0	673.2	3.7	-3.9	57.5	844.9	648.8	246.5		14.1	1.000211
12000.0	660.9	2.3	-4.7	59.9	833.9	647.0	246.8		14.1	1.000207
12500.0	648.5	2.2	-7.5	48.9	819.0	646.8	247.0		13.9	1.000200
13000.0	636.3	1.7	-10.0	41.7	805.4	646.0	250.0		13.0	1.000194
13500.0	624.2	0.5	-11.3	40.9	793.5	644.6	253.7		12.1	1.000190
14000.0	612.2	-0.7	-12.7	40.0	781.8	643.2	261.9		11.6	1.000186
14500.0	600.5	-1.9	-14.0	39.2	770.3	641.7	268.3		11.2	1.000182
15000.0	589.0	-3.1	-15.3	38.4	759.0	640.3	270.8		11.1	1.000179
15500.0	577.8	-4.2	-16.6	37.6	747.8	638.9	269.7		10.9	1.000175
16000.0	566.7	-5.4	-18.0	36.8	736.8	637.4	264.9		10.5	1.000172
16500.0	555.9	-6.6	-19.3	35.9	726.0	636.0	260.2		10.1	1.000169
17000.0	545.3	-7.8	-20.6	35.1	715.3	634.6	255.7		9.6	1.000166
17500.0	534.9	-9.0	-21.9	34.3	704.8	633.1	252.7		9.5	1.000163
18000.0	524.6	-10.1	-23.3	33.5	694.5	631.7	250.3		9.5	1.000160

STATION ALTITUDE 3989.0 FEET MSL
15 NOV. 66 0830 HRS MST
ASCENSION NO. 899

UPPER AIR DATA
04900003903
WHITE SANDS SITE
TABLE VII (Cont)

WSYM SITE COORDINATES
E 462.580 FEET
N 185.045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
18500.0	514.4	-11.4	-24.7	32.5	684.2	630.2	256.5	256.5	9.2	1.000197
19000.0	504.2	-12.6	-26.2	31.3	673.8	628.7	262.8	262.8	9.1	1.000154
19500.0	494.1	-13.9	-27.7	30.2	663.6	627.2	267.6	267.6	9.5	1.000151
20000.0	484.3	-15.1	-29.3	29.0	653.6	625.6	271.6	271.6	9.7	1.000149
20500.0	474.6	-16.4	-30.8	27.8	643.8	624.1	274.9	274.9	9.9	1.000146
21000.0	465.2	-17.6	-32.3	26.7	634.1	622.5	277.3	277.3	9.7	1.000144
21500.0	455.9	-18.9	-33.9	25.5	624.5	621.0	279.3	279.3	9.5	1.000141
22000.0	446.7	-19.8	-35.2	24.3	614.2	619.8	284.4	284.4	8.5	1.000139
22500.0	437.6	-20.6	-36.3	23.1	603.5	618.9	291.0	291.0	7.1	1.000136
23000.0	428.7	-21.3	-37.5	22.0	592.9	618.0	308.4	308.4	6.7	1.000133
23500.0	419.9	-22.1	-38.7	20.8	582.5	617.1	328.8	328.8	6.5	1.000131
24000.0	411.3	-22.9	-39.9	19.6	572.4	616.2	346.1	346.1	8.1	1.000129
24500.0	402.9	-23.5	-41.1	18.4	562.3	615.2	1.9	1.9	9.8	1.000126
25000.0	394.5	-24.6	-42.2	18.1	552.9	613.9	4.2	4.2	11.5	1.000124
25500.0	386.2	-25.8	-43.1	18.2	543.9	612.5	6.6	6.6	13.1	1.000122
26000.0	378.1	-27.0	-44.1	18.3	535.1	611.0	9.1	9.1	14.3	1.000120
26500.0	370.1	-28.2	-45.1	18.4	526.4	609.5	10.8	10.8	15.1	1.000118
27000.0	362.3	-29.4	-46.0	18.5	517.8	608.0	11.4	11.4	15.2	1.000116
27500.0	354.7	-30.6	-47.0	18.6	509.4	606.5	12.2	12.2	15.6	1.000114
28000.0	347.2	-31.8	-48.0	18.7	501.2	605.0	12.9	12.9	16.0	1.000112
28500.0	339.9	-33.0	-48.9	18.8	493.1	603.5	12.2	12.2	16.6	1.000110
29000.0	332.8	-34.2	-49.9	18.9	485.2	601.9	10.9	10.9	17.3	1.000108
29500.0	325.7	-35.4	-51.4	18.0**	477.3	600.4	8.5	8.5	18.2	1.000107
30000.0	318.5	-36.8	-54.2	14.8**	469.5	598.7	5.9	5.9	19.1	1.000105
30500.0	311.6	-38.1	-57.2	11.7**	461.8	597.0	3.3	3.3	20.3	1.000103
31000.0	304.7	-39.5	-60.8	8.5**	454.3	595.2	0.7	0.7	21.5	1.000101
31500.0	298.1	-40.8	-65.3	5.4**	446.9	593.5	357.4	357.4	22.4	1.000100
32000.0	291.5	-42.2	-72.4	2.2**	439.7	591.8	354.0	354.0	23.3	1.000098
32500.0	285.1	-43.4	0.	-0. **	432.4	590.2	353.3	353.3	24.4	1.000096
33000.0	278.6	-44.6	0.	-0. **	424.7	588.7	352.8	352.8	25.6	1.000095

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL
15 NOV. 66 0930 HRS MST
ASCENSION NO. 899

UPPER AIR DATA
04900003903
WHITE SANDS SITE
TABLE VII (Cont)

WSTM SITE COORDINATES
E 48W, 580 FEET
N 185, 045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
33500.0	272.3	-45.7	0.	-0. **	417.2	507.2	353.1	353.1	26.5	1.000093
34000.0	266.1	-46.9	0.	-0. **	409.8	505.7	353.5	353.5	27.4	1.000091
34500.0	260.1	-48.0	0.	-0. **	402.6	504.2	354.7	354.7	28.7	1.000090
35000.0	254.2	-49.2	0.	-0. **	395.5	502.8	356.1	356.1	29.9	1.000088
35500.0	248.5	-50.2	0.	-0. **	388.3	501.4	356.2	356.2	30.6	1.000086
36000.0	242.8	-50.5	0.	-0. **	379.8	501.1	355.9	355.9	31.0	1.000085
36500.0	237.2	-50.7	0.	-0. **	371.4	500.8	355.8	355.8	31.1	1.000083
37000.0	231.7	-51.0	0.	-0. **	363.3	500.4	355.7	355.7	30.8	1.000081
37500.0	226.3	-52.0	0.	-0. **	356.5	579.0	355.7	355.7	30.3	1.000079
38000.0	221.0	-53.1	0.	-0. **	349.8	577.7	356.0	356.0	29.3	1.000078
38500.0	215.8	-54.1	0.	-0. **	343.3	576.3	355.6	355.6	28.4	1.000076
39000.0	210.8	-55.2	0.	-0. **	336.9	574.9	354.5	354.5	27.7	1.000075
39500.0	205.8	-56.2	0.	-0. **	330.6	573.5	352.1	352.1	26.9	1.000074
40000.0	201.0	-57.3	0.	-0. **	324.4	572.1	348.6	348.6	24.4	1.000072
40500.0	196.2	-58.0	0.	-0. **	317.8	571.1	341.7	341.7	22.5	1.000071
41000.0	191.5	-58.7	0.	-0. **	311.1	570.2	332.5	332.5	20.6	1.000069
41500.0	186.9	-59.4	0.	-0. **	304.6	569.3	322.7	322.7	19.5	1.000068
42000.0	182.4	-60.1	0.	-0. **	298.2	568.4	312.7	312.7	18.9	1.000066
42500.0	178.0	-60.8	0.	-0. **	292.0	567.5	307.8	307.8	19.8	1.000065
43000.0	173.7	-61.5	0.	-0. **	285.8	566.5	304.9	304.9	21.3	1.000064
43500.0	169.5	-62.1	0.	-0. **	279.8	565.6	305.5	305.5	22.8	1.000062
44000.0	165.4	-62.8	0.	-0. **	274.0	564.7	307.0	307.0	24.2	1.000061
44500.0	161.4	-63.5	0.	-0. **	268.3	563.8	309.7	309.7	24.8	1.000060
45000.0	157.5	-64.1	0.	-0. **	262.6	562.9	312.6	312.6	25.1	1.000058
45500.0	153.7	-64.4	0.	-0. **	256.5	562.6	312.3	312.3	23.8	1.000057
46000.0	149.9	-64.7	0.	-0. **	250.6	562.1	311.1	311.1	22.1	1.000056
46500.0	146.2	-65.9	0.	-0. **	245.8	560.5	311.3	311.3	20.6	1.000055
47000.0	142.6	-67.1	0.	-0. **	241.1	558.9	311.9	311.9	19.1	1.000054
47500.0	139.0	-67.5	0.	-0. **	235.5	558.4	309.0	309.0	17.3	1.000052
48000.0	135.6	-67.7	0.	-0. **	229.9	558.1	302.9	302.9	15.2	1.000051

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL

15 NOV. 66

ASCENSION NO. 899

UPPER AIR DATA

04900003903

WHITE SANDS SITE

TABLE VII (Cont)

WSTM SITE COORDINATES

E 408,500 FEET

N 135,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
48500.0	132.2	-68.0	0.	-0. **	224.5	557.8		297.4	13.5	1.000050
49000.0	128.9	-68.2	0.	-0. **	219.1	557.5		292.9	12.9	1.000049
49500.0	125.7	-68.5	0.	-0. **	213.9	557.1		288.0	12.2	1.000048
50000.0	122.5	-69.0	0.	-0. **	209.1	556.4		279.8	11.6	1.000047
50500.0	119.5	-69.5	0.	-0. **	204.4	555.7		271.6	11.1	1.000046
51000.0	116.5	-70.0	0.	-0. **	199.7	555.0		273.0	11.9	1.000044
51500.0	113.5	-70.5	0.	-0. **	195.2	554.3		275.1	12.8	1.000043
52000.0	110.7	-70.9	0.	-0. **	190.7	553.7		275.2	13.8	1.000042
52500.0	107.9	-71.1	0.	-0. **	186.0	553.4		274.3	14.8	1.000041
53000.0	105.1	-71.4	0.	-0. **	181.5	553.1		273.2	15.8	1.000040
53500.0	102.5	-71.6	0.	-0. **	177.1	552.8		271.6	16.8	1.000039
54000.0	99.9	-71.8	0.	-0. **	172.8	552.5		270.2	17.8	1.000038
54500.0	97.4	-71.5	0.	-0. **	168.3	552.9		269.3	18.9	1.000037
55000.0	95.0	-71.2	0.	-0. **	163.8	553.3		268.4	20.0	1.000036
55500.0	92.6	-70.9	0.	-0. **	159.5	553.7		269.9	19.6	1.000036
56000.0	90.3	-70.6	0.	-0. **	155.3	554.1		271.6	19.0	1.000035
56500.0	88.0	-70.3	0.	-0. **	151.2	554.5		271.6	17.9	1.000034
57000.0	85.8	-70.0	0.	-0. **	147.2	554.9		270.9	16.7	1.000033
57500.0	83.7	-69.7	0.	-0. **	143.3	555.3		271.0	15.2	1.000032
58000.0	81.6	-69.4	0.	-0. **	139.5	555.7		271.9	13.7	1.000031
58500.0	79.5	-69.2	0.	-0. **	135.9	556.1		271.7	12.5	1.000030
59000.0	77.6	-68.9	0.	-0. **	132.3	556.5		269.5	12.2	1.000029
59500.0	75.6	-68.6	0.	-0. **	128.8	556.9		267.9	12.0	1.000029
60000.0	73.7	-68.3	0.	-0. **	125.4	557.3		274.4	12.0	1.000028
60500.0	71.9	-68.0	0.	-0. **	122.1	557.7		281.0	12.0	1.000027
61000.0	70.1	-67.7	0.	-0. **	118.9	558.1		281.8	11.8	1.000026
61500.0	68.3	-67.4	0.	-0. **	115.7	558.5		281.4	11.5	1.000026
62000.0	66.6	-67.1	0.	-0. **	112.7	558.9		282.4	11.3	1.000025
62500.0	65.0	-66.8	0.	-0. **	109.7	559.3		285.2	11.0	1.000024
63000.0	63.4	-66.5	0.	-0. **	106.8	559.7		286.7	11.0	1.000024

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL
15 NOV. 66 0830 HRS MST
ASCENSION NO. 899

UPPER AIR DATA
0490003903
WHITE SANDS SITE
TABLE VII (Cont)

WSTM SITE COORDINATES
E 488.580 FEET
N 183.045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL-HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
63500.0	61.8	-66.2	0.	-0. **	104.0	560.1		284.5	11.7	1.000023
64000.0	60.2	-65.9	0.	-0. **	101.3	560.5		282.2	12.4	1.000023
64500.0	58.7	-65.6	0.	-0. **	98.6	560.9		287.1	12.3	1.000022
65000.0	57.3	-65.4	0.	-0. **	96.0	561.3		280.6	12.1	1.000021
65500.0	55.9	-64.8	0.	-0. **	93.4	562.0		289.4	11.7	1.000021
66000.0	54.5	-64.3	0.	-0. **	90.9	562.0		287.7	11.0	1.000020
66500.0	53.2	-63.7	0.	-0. **	88.5	563.5		285.9	10.4	1.000020
67000.0	51.9	-63.1	0.	-0. **	86.1	564.3		283.5	10.5	1.000019
67500.0	50.7	-62.5	0.	-0. **	83.8	565.1		281.2	10.5	1.000019
68000.0	49.4	-62.0	0.	-0. **	81.6	565.8		281.4	11.2	1.000018
68500.0	48.3	-61.4	0.	-0. **	79.4	566.6		282.9	12.3	1.000018
69000.0	47.1	-60.8	0.	-0. **	77.3	567.4		285.9	13.4	1.000017
69500.0	46.0	-60.3	0.	-0. **	75.2	568.1		294.4	14.2	1.000017
70000.0	44.8	-59.7	0.	-0. **	73.2	568.9		303.0	15.1	1.000016
70500.0	43.8	-59.1	0.	-0. **	71.2	569.6		310.9	14.2	1.000016
71000.0	42.7	-58.6	0.	-0. **	69.3	570.4		318.7	12.6	1.000015
71500.0	41.7	-58.0	0.	-0. **	67.5	571.2		326.2	11.0	1.000015
72000.0	40.7	-57.6	0.	-0. **	65.8	571.7		333.2	9.3	1.000015
72500.0	39.7	-57.6	0.	-0. **	64.2	571.7		340.1	7.5	1.000014
73000.0	38.8	-57.6	0.	-0. **	62.7	571.6		334.6	6.6	1.000014
73500.0	37.9	-57.6	0.	-0. **	61.2	571.6		325.7	5.8	1.000014
74000.0	37.0	-57.6	0.	-0. **	59.8	571.6		317.3	5.3	1.000013
74500.0	36.1	-57.7	0.	-0. **	58.3	571.6		310.0	5.4	1.000013
75000.0	35.2	-57.7	0.	-0. **	57.0	571.6		302.7	5.5	1.000013
75500.0	34.4	-57.7	0.	-0. **	55.6	571.6		298.4	6.5	1.000012
76000.0	33.6	-57.7	0.	-0. **	54.3	571.5		295.2	7.9	1.000012
76500.0	32.8	-57.6	0.	-0. **	53.0	571.6		292.5	8.9	1.000012
77000.0	32.0	-57.4	0.	-0. **	51.7	572.0		291.9	8.7	1.000012
77500.0	31.3	-57.1	0.	-0. **	50.5	572.3		291.3	8.4	1.000011
78000.0	30.6	-56.8	0.	-0. **	49.2	572.7		292.6	8.9	1.000011

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL
 15 NOV. 66 0830 HRS MST
 ASCENSION NO. 899
 UPPER AIR DATA
 0490003903
 WHITE SANDS SITE
 TABLE VII (Cont)
 WSTM SITE COORDINATES
 E 488,580 FEET
 N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL-HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
78500.0	29.9	-56.6	0.	-0. **	48.1	573.0		294.9	9.7	1.000011
79000.0	29.2	-56.3	0.	-0. **	46.9	573.4		297.3	10.4	1.000010
79500.0	28.5	-56.1	0.	-0. **	45.7	573.7		299.7	9.8	1.000010
80000.0	27.8	-55.8	0.	-0. **	44.6	574.0		302.1	9.2	1.000010
80500.0	27.2	-55.5	0.	-0. **	43.6	574.4		301.0	8.9	1.000010
81000.0	26.6	-55.3	0.	-0. **	42.5	574.7		295.3	8.9	1.000009
81500.0	26.0	-55.0	0.	-0. **	41.5	575.1		289.5	9.0	1.000009
82000.0	25.4	-54.8	0.	-0. **	40.5	575.4		286.4	9.7	1.000009
82500.0	24.8	-54.5	0.	-0. **	39.5	575.8		284.0	10.6	1.000009
83000.0	24.2	-54.2	0.	-0. **	38.5	576.1		281.8	11.6	1.000009
83500.0	23.6	-54.0	0.	-0. **	37.6	576.5		280.3	14.1	1.000008
84000.0	23.1	-53.7	0.	-0. **	36.7	576.8		278.9	16.5	1.000008
84500.0	22.6	-53.5	0.	-0. **	35.8	577.1		278.9	18.7	1.000008
85000.0	22.0	-53.2	0.	-0. **	34.9	577.5		280.7	20.7	1.000008
85500.0	21.5	-52.9	0.	-0. **	34.1	577.8		282.5	22.6	1.000008
86000.0	21.0	-52.7	0.	-0. **	33.2	578.2		284.5	22.9	1.000007
86500.0	20.6	-52.4	0.	-0. **	32.4	578.5		286.6	22.8	1.000007
87000.0	20.1	-52.2	0.	-0. **	31.7	578.9		288.6	22.5	1.000007
87500.0	19.6	-51.9	0.	-0. **	30.9	579.2		290.4	21.1	1.000007
88000.0	19.2	-51.6	0.	-0. **	30.1	579.5		292.1	19.6	1.000007
88500.0	18.7	-51.4	0.	-0. **	29.4	579.9		292.7	18.3	1.000007
89000.0	18.3	-51.1	0.	-0. **	28.7	580.2		291.9	17.1	1.000006
89500.0	17.9	-50.8	0.	-0. **	28.0	580.6		291.2	16.0	1.000006
90000.0	17.5	-50.6	0.	-0. **	27.3	580.9		288.5	16.6	1.000006
90500.0	17.1	-50.3	0.	-0. **	26.7	581.2		285.3	17.6	1.000006
91000.0	16.7	-50.1	0.	-0. **	26.0	581.6		282.6	18.8	1.000006
91500.0	16.3	-49.8	0.	-0. **	25.4	581.9		282.4	20.6	1.000006
92000.0	15.9	-49.5	0.	-0. **	24.8	582.3		282.3	22.4	1.000006
92500.0	15.5	-49.3	0.	-0. **	24.2	582.6		282.1	24.2	1.000005
93000.0	15.2	-49.0	0.	-0. **	23.6	582.9		283.0	25.4	1.000005

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL
15 NOV. 66 0830 HRS MST
ASCENSION NO. 899

UPPER AIR DATA
0490003903
WHITE SANDS SITE
TABLE VII (Cont)

WSTM SITE COORDINATES
E 488,580 FEET
N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES (TN)	SPEED KNOTS	
93500.0	14.8	-48.8	0.	-0. **	23.0	583.3	284.0	26.6	1.000005	
94000.0	14.5	-48.5	0.	-0. **	22.5	583.6	285.0	27.7	1.000005	
94500.0	14.1	-48.2	0.	-0. **	21.9	584.0	286.0	28.9	1.000005	
95000.0	13.8	-48.0	0.	-0. **	21.4	584.3	286.7	30.0	1.000005	
95500.0	13.5	-47.7	0.	-0. **	20.9	584.6	287.3	31.1	1.000005	
96000.0	13.2	-47.5	0.	-0. **	20.4	585.0	287.9	32.2	1.000005	
96500.0	12.9	-47.2	0.	-0. **	19.9	585.3	288.6	33.3	1.000004	
97000.0	12.6	-46.9	0.	-0. **	19.4	585.6	288.1	33.4	1.000004	
97500.0	12.3	-46.7	0.	-0. **	18.9	586.0	287.6	33.3	1.000004	
98000.0	12.0	-46.4	0.	-0. **	18.5	586.3	287.0	33.3	1.000004	
98500.0	11.7	-46.4	0.	-0. **	18.0	586.3	286.5	33.3	1.000004	
99000.0	11.5	-46.4	0.	-0. **	17.6	586.3	285.7	33.2	1.000004	
99500.0	11.2	-46.4	0.	-0. **	17.2	586.3	284.8	33.0	1.000004	
100000.0	11.0	-46.4	0.	-0. **	16.9	586.3	283.9	32.9	1.000004	
100500.0	10.7	-46.4	0.	-0. **	16.5	586.3	283.0	32.7	1.000004	
101000.0	10.5	-46.4	0.	-0. **	16.1	586.3	281.8	33.3	1.000004	
101500.0	10.2	-46.4	0.	-0. **	15.7	586.3	280.5	34.3	1.000004	
102000.0	10.0	-46.4	0.	-0. **	15.4	586.3	279.3	35.3	1.000003	
102500.0	9.8	-46.2	0.	-0. **	15.0	586.6	278.0	36.3	1.000003	
103000.0	9.6	-46.0	0.	-0. **	14.7	586.9	277.4	37.4	1.000003	
103500.0	9.4	-45.8	0.	-0. **	14.3	587.1	277.7	38.8	1.000003	
104000.0	9.2	-45.6	0.	-0. **	14.0	587.4	277.9	40.2	1.000003	
104500.0	8.9	-45.4	0.	-0. **	13.7	587.7	278.2	41.6	1.000003	
105000.0	8.7	-45.2	0.	-0. **	13.4	587.9	278.5	42.9	1.000003	
105500.0	8.6	-45.0	0.	-0. **	13.1	588.2	279.0	44.0	1.000003	
106000.0	8.4	-44.7	0.	-0. **	12.8	588.5	279.4	45.1	1.000003	
106500.0	8.2	-44.5	0.	-0. **	12.5	588.7	279.9	46.3	1.000003	
107000.0	8.0	-44.3	0.	-0. **	12.2	589.0	280.4	47.4	1.000003	
107500.0	7.8	-44.1	0.	-0. **	11.9	589.3	281.0	47.4	1.000003	
108000.0	7.6	-43.9	0.	-0. **	11.6	589.6	281.7	47.4	1.000003	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.0 FEET MSL
15 NOV. 66 0830 HRS MST
ASCENSION NO. 899

UPPER AIR DATA
0490003903
WHITE SANDS SITE
TABLE VII (Cont)

WSTM SITE COORDINATES
E 488,580 FEET
N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL-HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
108500.0	7.5	-43.7	0.	-0. **	11.3	589.8		282.3	47.4	1.000002
109000.0	7.3	-43.5	0.	-0. **	11.1	590.1		283.0	47.4	1.000002
109500.0	7.1	-43.3	0.	-0. **	10.8	590.4		283.0	47.4	1.000002
110000.0	7.0	-43.1	0.	-0. **	10.6	590.6		282.9	47.3	1.000002
110500.0	6.8	-42.9	0.	-0. **	10.3	590.9		282.7	47.3	1.000002
111000.0	6.7	-42.7	0.	-0. **	10.1	591.2		282.6	47.3	1.000002
111500.0	6.5	-42.4	0.	-0. **	9.9	591.4		282.2	47.5	1.000002
112000.0	6.4	-42.6	0.	-0. **	9.6	591.2		281.6	47.9	1.000002
112500.0	6.2	-42.8	0.	-0. **	9.4	590.9		280.9	48.3	1.000002
113000.0	6.1	-43.1	0.	-0. **	9.2	590.6		280.3	48.6	1.000002
113500.0	6.0	-43.3	0.	-0. **	9.0	590.3		279.8	49.0	1.000002
114000.0	5.8	-43.5	0.	-0. **	8.9	590.0		279.3	49.1	1.000002
114500.0	5.7	-43.8	0.	-0. **	8.7	589.7		278.8	49.3	1.000002
115000.0	5.6	-44.0	0.	-0. **	8.5	589.4		278.4	49.5	1.000002
115500.0	5.5	-44.2	0.	-0. **	8.3	589.1				1.000002
116000.0	5.3	-44.5	0.	-0. **	8.1	588.8				1.000002
116500.0	5.2	-44.7	0.	-0. **	8.0	588.5				1.000002
117000.0	5.1	-45.0	0.	-0. **	7.8	588.2				1.000002
117500.0	5.0	-45.2	0.	-0. **	7.6	587.9				1.000002
118000.0	4.9	-45.4	0.	-0. **	7.5	587.6				1.000002
118500.0	4.8	-45.7	0.	-0. **	7.3	587.3				1.000002
119000.0	4.7	-45.9	0.	-0. **	7.1	587.0				1.000002
119500.0	4.6	-46.1	0.	-0. **	7.0	586.7				1.000002
120000.0	4.5	-46.4	0.	-0. **	6.8	586.4				1.000002

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

RELEASE TIME (MST)		SECOND-STAGE IMPACT DISPLACEMENT IN MILES DUE TO WIND										AZI- MUTH (DEG- REES)	THEORETICAL IMPACT FROM LAUNCHER (IN MILES)				
		11-216 FT				216-4000 FT				4000-73497 FT						TOTAL	
		N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W						
RAWIN- SONDE	PTRAL	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W		RANGE	K-S	E-W		
0545	0650	6.4N	2.9E	1.0S	2.7E	6.9N	2.4W	12.3N	3.2E	359.4	68.7	68.6N	0.7W				
0545	0715	6.6N	2.9E	0.1N	2.1E	6.9N	2.4W	13.6N	2.6E	358.9	69.9	69.9N	1.3W				
0545	0745	6.7N	1.1E	0.1S	2.2E	6.9N	2.4W	13.5N	0.9E	357.5	69.9	69.8N	3.0W				
0545	0800	6.3N	0.8E	0.1N	1.3E	6.9N	2.4W	13.3N	0.3E	357.0	69.7	69.6N	3.6W				
0545	0815	5.4N	1.9E	0.7N	2.4E	6.9N	2.4W	13.0N	1.9E	358.3	69.4	69.3N	2.0W				
0545	0825	5.7N	1.9E	0.5N	1.2E	6.9N	2.4W	13.1N	0.7E	357.4	69.5	69.4N	3.2W				
0545	0835	6.4N	2.5E	1.2N	0.9E	6.9N	2.4W	14.5N	1.0E	357.6	70.9	70.8N	2.9W				
0545	0845	5.7N	1.5E	1.2S	1.7E	6.9N	2.4W	11.4N	0.8E	357.4	67.8	67.7N	3.3W				
0830	0845	5.7N	1.5E	1.2S	1.7E	7.1N	2.8W	11.6N	0.4E	357.0	68.0	67.9N	3.5W				

	AZIMUTH (DEG- REES)	MILES FROM LAUNCHER		
		RANGE	N-S	E-W
LAUNCHER SETTING (ELEVATION 86.0 DEGREES QE)	001.0	56.3	56.3N	1.0E
NO WIND IMPACT	356.0	56.6	56.3N	3.9W
PREDICTED SECOND-STAGE IMPACT	358.0	70.0	69.9N	2.4W
SECOND-STAGE IMPACT, RADAR TRACK	358.0	80.4	80.4N	1.7W
PREDICTED BOOSTER IMPACT	000.5	0.9	0.9N	0.1E
ACTUAL BOOSTER IMPACT	N/A	N/A	N/A	N/A

TABLE VIII. IMPACT PREDICTION DATA
NIKE-HYDAC MK 12 STV (SR-042)

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R&D		
(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)		
1. ORIGINATING ACTIVITY (Corporate author) U.S. Army Electronics Command Fort Monmouth, New Jersey		2a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED
		2b. GROUP
3. REPORT TITLE METEOROLOGICAL DATA REPORT, NIKE-HYDAC MK 12 STV (SR-042)		
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)		
5. AUTHOR(S) (Last name, first name, initial) KUBINSKI, Stanley		
6. REPORT DATE December 1966	7a. TOTAL NO. OF PAGES 24	7b. NO. OF REFS
8a. CONTRACT OR GRANT NO.	9a. ORIGINATOR'S REPORT NUMBER(S) DR-124	
b. PROJECT NO.		
c. DA Task IV650212A127-02	9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
d.		
10. AVAILABILITY/LIMITATION NOTICES Distribution of this document is unlimited.		
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY U.S. Army Electronics Command Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico
13. ABSTRACT Meteorological data gathered for the launching of Nike-Hydac Mk 12 STV (SR-042) are presented for the Air Force Ballistic Missile Re-Entry Systems Office, AVCO Corporation and for ballistic studies. The data appear, along with calculated ballistic data, in tabular form.		

DD FORM 1473
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UNCLASSIFIED

Security Classification

UNCLASSIFIED
Security Classification

KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	ROLE	WT	ROLE	WT
1. Ballistics 2. Meteorology 3. Winds						

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