AD/A-005 152

TRANSONIC WIND TUNNEL INVESTIGATION OF THRUST EFFECTS ON THE LONGITUDINAL STABILITY CHARACTERISTICS OF SEVERAL BODY-FIN CONFIGURATIONS (STING-MOUNTED MODEL WITH NORMAL-JET PLUME SIMULATOR)

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Prepared for:

Army Missile Research, Development and Engineering Laboratory

31 December 1974

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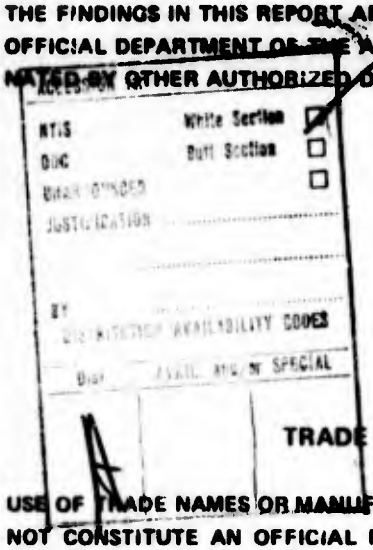

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REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER: Technical Report RD-75-14	2. GOVT ACCESSION NO.
3. RECIPIENT'S CATALOG NUMBER: AD/A-005152	
4. TITLE (and Subtitle): TRANSONIC WIND TUNNEL INVESTIGATION OF THRUST EFFECTS ON THE LONGITUDINAL STABILITY CHARACTERISTICS OF SEVERAL BODY-FIN CONFIGURATIONS (STING-MOUNTED MODEL WITH NORMAL-JET PLUME SIMULATOR)	5. TYPE OF REPORT & PERIOD COVERED: Technical Report
	6. PERFORMING ORG. REPORT NUMBER: DMS-AR-1021
7. AUTHOR(s): J. H. Henderson	8. CONTRACT OR GRANT NUMBER(s): DAAH03-74-C-0405
9. PERFORMING ORGANIZATION NAME AND ADDRESS: Chrysler Corporation Space Division, Data Management Services, P. O. Box 29200, New Orleans, La. 70189	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS: D Project No.(DA) 1M262303A214, AMC Management Structure Code No. 632303.11.21405
11. CONTROLLING OFFICE NAME AND ADDRESS: Aeroballistics Directorate, US Army Missile, Res., Dev. & Eng. Lab., US Army Missile Command, Redstone Arsenal, Alabama 35809	12. REPORT DATE: 31 December 1974
	13. NUMBER OF PAGES: 437
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office)	15. SECURITY CLASS. (of this report): Unclassified
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release, distribution unlimited.

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

18. SUPPLEMENTARY NOTES

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Thrust Effects
Longitudinal Stability
Plume Effects
Base Pressure
Jet Plume

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

Transonic wind tunnel tests were conducted on a sting-mounted model to determine thrust effects on longitudinal stability characteristics of several body-fin combinations. The plume was simulated by cold air ejected from a series of sonic jets normal to the missile axis. One fin configuration was tested at several longitudinal positions. Adverse plume effects on stability were reduced by location of fins a distance forward of the base.

The test was conducted at the Calspan Corporations' 8 foot Transonic Wind

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20. (Continued)

Tunnel at Mach numbers ranging from 0.4 to 1.25. Angles of attack ranged from -4° to 12°. Data were also obtained at roll angles of 22.5° and 45° for one configuration.

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Total Normal Force of Fins for Tail Position = 3	CRT MACH	(E)	382-391
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PLOTTED COEFFICIENTS SCHEDULE

(A) CNP, CLMP versus ALPHA

(B) PPFAFO versus CRT

(C) CNF1, CNF2, CNF3, CNF4 versus ALPHA
CLMH1, CLMH2, CLMH3, CLMH4 versus ALPHA
CLMR1, CLMR2, CLMR3, CLMR4 versus ALPHA

(D) CLMI, CNI versus ALPHA

(E) CNFT versus ALPHA

(F) DCNIFT versus ALPHA

(G) CNP, CLMP versus ALPHA
CYP, CYNP, CBL versus ALPHA
CNF1, CNF2, CNF3, CNF4 versus ALPHA
CLMH1, CLMH2, CLMH3, CLMH4 versus ALPHA
CLMR1, CLMR2, CLMR3, CLMR4 versus ALPHA

INTRODUCTION

During the past few years the Army Missile Command has become increasingly involved with the adverse effects of the propulsive jet plume on missile aerodynamics. These effects are associated with the large jet plume on the flow immediately ahead of the missile base. In this region, either flow separation or change in the flow field can result in catastrophic pitch up or loss in accuracy of missiles because of loss in stability or degradation of control effectiveness. Other effects that can occur are excessive control hinge moments, loss in roll rate, unsymmetrical lift forces, and hysteresis in the variation of aerodynamic forces and moments with angle of attack. Because of the large number of experimental development programs consisting of high impulse free-rockets, one of the primary concerns presently is the adverse plume effect on longitudinal stability. A research program was established years ago by the Army Missile Command to investigate thrust effects on missile aerodynamics (see reference 1). The ultimate objective of this research is to establish an understanding of the flow phenomena sufficiently to allow prediction of critical flight environments and to allow knowledgeable design tradeoffs between aerodynamics and propulsion.

The present investigation can be divided into two parts. One part is concerned with an in-house high-impulse free rocket technology flight demonstration program (LONGBOW). The objective of this part of the investigation was to insure that the effectiveness of stabilizing fins could be maintained by attaching them at a location forward of the missile base.

Fins were tested at three longitudinal positions. Because of the lack of available test time, thrust was simulated primarily at the level to be encountered during flight. The second part of the investigation was more general. One fin-body configuration was investigated at various levels of thrust in order to determine the onset of adverse plume effects on missile stability.

The LONGBOW Missile is the flight demonstration vehicle for an artillery rocket experimental research program. The missile is a high acceleration, fin-stabilized free rocket. Using the prediction technique of reference 1, it was estimated that the LONGBOW stability characteristics would be severely affected by the jet plume. A method previously used (see references 2 and 3) to alleviate adverse effects was the location of the stabilizing fins a distance ahead of the missile base. In this case, the missile body is still affected by the plume but the forward located fin retains enough effectiveness for longitudinal stability.

A previous wind tunnel test has been made of the LONGBOW afterbody configuration using a strut-mounted model (see reference 4). In this test the 3-in diameter model consisted of a metric afterbody with the plume simulated with an axial jet using unheated air. Fins having an aspect ratio of 2 were located at three longitudinal positions: fin trailing edge at zero, 1/2, and 1 1/2 calibers ahead of the base. In the first part of the present test the same afterbody fin configurations were investigated using a 5-in diameter sting-mounted model. For the second part of the investigation a fin having an aspect ratio of one

and with its trailing edge located flush with the base was tested at various thrust levels and roll positions. A normal jet plume simulator similar to the one reported in references 5, 6, and 7 was used. The investigation was conducted over a Mach number range from 0.40 to 1.25. Model angle of attack was varied from -4 to 12 deg. The tunnel was operated at a wind-off static pressure of 0.5 atmospheres for all Mach numbers. Effect of thrust level was varied by changing the plume simulator chamber pressures.

APPARATUS AND TESTS

The basic sting-mounted model used for these tests was 52 inches in length, 5 inches in diameter, and consisted of a 3-caliber tangent ogive nose and a cylindrical afterbody. The model was tested in combination with 2 different sets of cruciform rectangular fins with each fin having a 3-component strain gage balance. The model had a 6-component main balance. The plume simulator consisted of 24 normal sonic jets arranged circumferentially in 2 rows with a common air chamber. For this test the simulator was located 2.5 inches aft of the base. The combined exit area of the 24 jets represented 6 per cent of the model base (reference) area.

The LONGBOW fins (T1), which were tested at 3 longitudinal locations, had an exposed semispan of 4 inches and a chord of 4 inches. The fins had an aspect ratio of 2. The second set of fins (T2) were tested at one longitudinal location (trailing edge flush with the base) but were tested

at roll positions of 0°, 22.5°, and 45°. These fins had an exposed semi-span of 2.5 inches, a chord of 5 inches, and an aspect ratio of one.

The model installation and assembly drawings are shown in figures 2 and 4. Fin geometry is shown in figure 3 (sketch). A photograph of the model mounted in the tunnel is shown in figure 5. The model and plume simulator with the LONGBOW Fin (T1) mounted in the three test positions is presented in figure 6. The second fin (T2) in the 45 degree roll position is shown in figure 7. The preceding two figures also show the plume simulator and the base pressure orifices. (The same model and tunnel entry were also used to investigate canard controls. The canard tests used various nose bluntnesses and had the plume simulator stored in a position 19 inches aft of the base.)

PLUME SIMULATION

In the past, the Army Missile Command has used base pressure p_b/p_∞ as an indication of the onset and the severity of plume effects on missile aerodynamics (see reference 1). One of the parameters that can be conveniently used to correlate base pressure is thrust coefficient, C_T, where C_T is axial thrust non-dimensionalized by dynamic pressure (q) and body cross-sectional area, (S_{ref}). For the normal jet simulator a similar parameter is radial thrust coefficient, C_{RT}, where

$$C_{RT} = \frac{\text{Radial Thrust}}{q\ S_{ref}}$$

C_{RT} can be considered as the thrust component normal to the axial jet

plume. The ratio of radial to axial thrust required for similar base pressure characteristics depends upon the axial jet nozzle geometry and the free stream Mach number. For example, the axial jet nozzle tested with the Longbow configuration in reference 4 had a jet Mach number of 2.7, a jet to base diameter ratio of .833, and an exit half-angle of 20 degrees. In this case, a radial thrust coefficient of one is equivalent to a thrust coefficient of 10 for an axial jet at a free stream Mach number of one. For other Mach numbers and nozzle characteristics this ratio varies. Having a general idea of this ratio is helpful in test planning, especially when trying to match flight conditions. However, further research is needed in order to determine accurate relationships between axial and normal jet plume simulators.

TEST CONDITIONS

The tests were conducted in the Calspan Corporation 8-foot Transonic Wind Tunnel. A detailed description of this facility is presented in reference 8. The test was conducted at Mach numbers of 0.4 to 1.25 with the amount of air in the tunnel circuit equivalent to a wind-off static pressure of 0.5 atmospheres. Plume effect or value of C_{RJ} was varied by changing simulator chamber pressure. Normally, angle of attack varied during a run while keeping configuration, C_{RT}, and tunnel operating conditions constant. For the LONGBOW configurations (B1N1T1) values of C_{RT} varied from a maximum of 37.5 at a Mach number of 0.4 to a maximum of 5 at a Mach number of 1.25 in an attempt to match expected flight levels.

Variations in C_{RT} for the LONGBOW were restricted because of the lack of test time available. For the configuration with fins with aspect ratio of one (B1N1T2) more values of C_{RT} were tested at each Mach number and values of C_{RT} were generally constant through the Mach number range. Air was supplied to the plume simulator at flow rates up to 15 lbs. per sec. and at chamber pressures up to 6000 psi.

PRESENTATION OF DATA

Data have been tabulated in reference 9 (available from Defense Documentation Center). In the plots presented aerodynamic moments were transferred to station 26.500 for the LONGBOW CONFIGURATION so that moment characteristics would appear more representative for a long missile. For the B1N1T2 configuration, the moment center remained at station 32.500. Body alone (B1N1) data are presented referenced for both moment centers. Coefficients from the main balance and the fins are based on body diameter (LREF = 5.0 IN) and body cross-sectional area (SREF = 19.635 IN^2). The aerodynamic data for the fin balances were resolved in individual body axis systems, having origins located at the intersection of the fin hinge lines and the balance centerlines. Fin axis systems and sign conventions are shown in figure 1.

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NOMENCLATURE

General

SYMBOL	PLOT SYMBOL	DEFINITION
M	MACH	Mach number; V/a
p		pressure, psf
q	Q(PSF)	dynamic pressure; $1/2\rho V^2$, psf
ℓ_{REF}	LREF	reference length
S_{ref}	SREF	body cross-sectional area or reference area; m^2, ft^2
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis
α	ALPHA	angle of attack, degrees

NOMENCLATURE
(Continued)

SYMBOL	MISSILE-PRIME AXIS SYMBOL	DEFINITION
C_A		total axial force coefficient in the body axis system
C_{A_b}		base axial force coefficient (same in both missile and body axis systems)
C_{A_m}	CA	total axial force coefficient in the missile axis system, $F_{A_m}/q_\infty S_{ref}$
C_Y		side force coefficient in the body axis system
C_{Y_m}	CYP	side force coefficient in the missile axis system, $F_{Y_m}/q_\infty S_{ref}$
C_n		yawing moment coefficient in the body axis system
C_{n_m}	CYNP	yawing moment coefficient in the missile axis system, $M_{Z_m}/q_\infty S_{ref} \ell_{ref}$
C_ℓ		rolling moment coefficient in the body axis system
C_{ℓ_m}	CBL	rolling moment coefficient in the missile axis system, $M_{X_m}/q_\infty S_{ref} \ell_{ref}$
$C_{N_{F_x}}$	CNFX	fin normal force coefficient, $\frac{\text{fin normal force}}{qS_{ref}}$
$C_{m_{H_x}}$	CLMHX	fin hinge moment coefficient, $\frac{\text{fin hinge moment}}{qS_{ref}\,\ell_{ref}}$

NOMENCLATURE
(Continued)

SYMBOL	PLOT SYMBOL	DEFINITION
ϕ	PHI	roll angle, i.e., angle between the missile Y_m-axis and the body Y-axis (from a pilot's viewpoint in an airplane, a positive roll angle is a clockwise rotation)
ϕ_C	PHICND	angle of roll of canards relative to body, degrees
ϕ_T	PHITAL	angle of roll of tail relative to body, degrees (for this test $\phi = \phi_T$)
	TALPOS	fin longitudinal location
		TALPOS = 1.0, fin trailing edge flush with base
		TALPOS = 2.0, fin trailing edge 0.75 calibers from base
		TALPOS = 3.0, fin trailing edge 1.5 calibers from base

MISSILE-PRIME AXIS SYSTEM
DEFINED IN TERMS OF BODY AXIS

SYMBOL	MISSILE-PRIME AXIS SYMBOL	DEFINITION
C_N		normal force coefficient in the body axis system
C_{N_m}	CNP	normal force coefficient in the missile axis system, $F_{N_m}/q_\infty S_{ref}$
C_m		pitching moment coefficient in the body axis system
C_{m_m}	CLMP	pitching moment coefficient in the missile axis system, $M_{Y_m}/q_\infty S_{ref} \ell_{ref}$

NOMENCLATURE
(Continued)

SYMBOL	MISSILE-PRIME AXIS SYMBOL	DEFINITION
$C_{m_{R_X}}$	CLMRX	root bending moment coefficient, $\frac{\text{Fin Root Bending Moment}}{qS_{ref}\,\ell_{ref}}$
C_{m_I}	CLMI	fin-body interference pitching moment coefficient, $C_{m_{Fin\text{-}Body}} - C_{m_{Body}}$
C_{N_I}	CNI	fin-body interference normal force coefficient, $C_{N_{Fin\text{-}Body}} - C_{N_{Body}}$
$C_{N_{F_T}}$	CNFT	total fin-normal force coefficient, $C_{N_{F_T}} = \sum_{X=1}^{4} C_{N_{F_X}}$
	DCNIFT	normal force coefficient difference between fin-body interference and total fin normal force coefficient, $C_{N_I} - C_{N_{F_T}}$
CT	CT	thrust coefficient, $\frac{\text{axial thrust}}{qS_{ref}}$
CRT	CRT	radial thrust coefficient, $\frac{\text{radial thrust}}{qS_{ref}}$
P_B/P_∞	PB/PF	ratio of base pressure to freestream pressure
$(P_B/P_\infty)_{\alpha=0}$	PPFAFO	base pressure ratio at zero angle of attack
FY_m		side force in the missile axis system, positive in the positive direction of Y_m lb
F_{A_m}		total axial force in the missile axis system, positive in the negative direction of X_m lb

NOMENCLATURE
(Concluded)

SYMBOL	MISSILE-PRIME AXIS SYMBOL	DEFINITION
FN_m		normal force in the missile axis system, positive in the negative direction of Z_m lb
MX_m		rolling moment in the missile axis system, i.e., moment about the X_m-axis (a positive rolling moment tends to rotate the positive Y_m-axis toward the positive Z_m-axis) in.-lb
MY_m		pitching moment in the missile axis system i.e., moment about the Y_m-axis (a positive pitching moment tends to rotate the positive Z_m-axis toward the positive X_m-axis) in.-lb
MZ_m		yawing moment in the missile axis system, i.e., moment about the Z_m-axis (a positive yawing moment tends to rotate the positive X_m-axis toward the positive Y_m-axis) in.-lb
CAC		corrected axial force coefficient in the body axis system
CAF		forebody axial force coefficient in the body axis system
CPC		balance cavity pressure coefficient
CPBX		base pressure coefficient at location X
WA		flow weight of air, lb/sec

TABLE I.

TEST: CAL T17-093 (THRUST) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: May 18, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES ϕ_C	ϕ_T	CNB FAS	TAL FAS	C_{RT}	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) .4	.6	.8	.9	.95	1.0	1.05	1.10	1.25	TEST RUN NUMBERS
( )*UE136	B1N1	C	0	0	0	-	-	37.5	183									
137		D	0	0	0	-	-	12.0				192		193				
138		C	0	0	0	-	-	10.3			178							
139		C	0	0	0	-	-	8.5				191						
140		D	0	0	0	-	-	7.2	184		179	190		194		199	203	
141		C	0	0	0	-	-	6.0								200		
142		C	0	0	0	-	-	5.2									204	
143		D	0	0	0	-	-	4.2				189		195			205	
144		C	0	0	0	-	-	3.6			180	188						
146		D	0	0	0	-	-	2.5			181	187		196		201	206	
147		D	0	0	0	-	-	1.5						197			207	
148		D	0	0	0	-	-	0	185		182	186		198		202	208	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES — COEFFICIENTS

A) -3° → 12° C) -4° → 4° E) -4° → 8°

B) -3° → 4° D) -4° → 12°

( )* Coefficients:
A datasets: CNP, CLMP, CYP, CYNP, CBL, CAF, CA, PB/PF, CRT, WA
B datasets: CNF1, CNF2, CNF3, CNF4, CPC, CAC, CPB2, CAB
C datasets: CLMH1, CLMH2, CLMH3, CLMH4, CLMR1, CLMR2, CLMR3, CLMR4

TABLE I. (Continued)

TEST : CAL T17-093 (THRUST) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE : May 18, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES ϕ_c	PARAMETERS/VALUES ϕ_T	PARAMETERS/VALUES CND POS	PARAMETERS/VALUES TAIL POS	C_{RT}	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) .4	.8	.9	.95	.975	1.0	1.05	1.1	1.25	TEST RUN NUMBERS
(*)UE149	$B_1N_1T_2$	D	0	0	0	-	1	12			224	916		223				
150		D	0	0	0	-	1	7.2	232	231	225	919	918	222	917	217	210	
151		D	0	0	0	-	1	4.2	939	937	226	920		221			211	
152		D	0	0	0	-	1	2.5		230	227	935	930	220	921	216	212	
153		D	0	0	0	-	1	1.5		938	936	934	931	219	922	923	213	
154		D	0	0	0	-	1	0	233	229	228	935	929	218	927	215	214	
155		C	0	22.5	0	-	1	7.2						239			235	
156		C	0	22.5	0	-	1	2.5						240			236	
157		C	0	22.5	0	-	1	0						238			237	
158		C	0	45	0	-	1	7.2	955	951	947			245			242	
159		C	0	45	0	-	1	2.5	956	952	948			246		945	243	
160		C	0	45	0	-	1	0	957	954	950			247		942	244	
161	$B_1N_1T_1$	C	0	0	0	-	1	37.5	129									
162		C	0	0	0	-	1	10.3		130								
163		C	0	0	0	-	1	8.5			914							
164		C	0	0	0	-	1	7.2			125			915				
165		C	0	0	0	-	1	6.0								128		
166		C	0	0	0	-	1	5.0									132	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES

A) -3° → 12°
B) -3° → 4°
C) -4° → 4°
D) -4° → 12°
E) -4° → 8°

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

(*) See page 18 for coefficients.

TABLE I. (Continued)

TEST : CAL T17-093 (THRUST) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE : May 18, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES ΦC	ΦT	[illegible]	[illegible]	C_{RT}	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) .4	.8	.9	.95	.975	1.0	1.05	1.1	1.25	TEST RUN NUMBERS
( )UE167	$B_1N_1T_1$	C	C	0	0	-	1	4.2						117				
168		C	0	0	0	-	1	3.6		131								
170		C	0	0	0	-	1	2.5									133	
171		C	0	0	0	-	1	1.5									134	
172		C	0	0	0	-	1	0	126	111	122			115		114	113	
173		C	0	0	0	-	2	37.5	175									
174		C	0	0	0	-	2	10.3		171								
175		C	0	0	0	-	2	8.5			167							
176		C	0	0	0	-	2	7.2						164				
177		C	0	0	0	-	2	6.0								163		
178		C	0	0	0	-	2	5.0									157	
179		C	0	0	0	-	2	4.2						165				
180		C	0	0	0	-	2	3.6		172	168							
182		C	0	0	0	-	2	2.5		173	169			166			158	
183		C	0	0	0	-	2	1.5									159	
184		C	0	0	0	-	2	0	176	174	170			162		161	160	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES

A) -3° → 12°
B) -3° → 4°
C) -4° → 4°
D) -4° → 12°
E) -4° → 8°

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

( )* See page 18 for coefficients.

TABLE I. (Continued)

TEST : CAL T17-093 (THRUST) | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE : May 18, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES ϕ_C	PARAMETERS/VALUES ϕ_T	PARAMETERS/VALUES CHG PRO	PARAMETERS/VALUES TAL PTS	C_{RT}	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) .4	.8	.9	.95	.975	1.0	1.05	1.1	1.25	TEST RUN NUMBERS
( )*UE185	$B_1N_1T_1$	C	0	0	0	-	3	37.5	155									
186		C	0	0	0	-	3	10.3		150								
187		C	0	0	0	-	3	8.5			147							
188		C	0	0	0	-	3	7.2						143				
189		C	0	0	0	-	3	6.0								140		
190		C	0	0	0	-	3	5.0									136	
191		C	0	0	0	-	3	4.2						144				
192		C	0	0	0	-	3	3.6		151								
193		C	0	0	0	-	3	3.0			148							
194		C	0	0	0	-	3	2.5		152	149			145			137	
195		C	0	0	0	-	3	1.5									138	
196		C	0	0	0	-	3	0	154	153	146			142		141	139	
197	$B_1N_1T_2$	D	0	0	0	-	1	1					932	928	926	924	925	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES: A) -3° → 12° B) -3° → 4° C) -4° → 4° D) -4° → 12° E) -4° → 8°

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

( )* See page 18 for coefficients.

TABLE I. (Concluded)

TEST : CAL T17-093 (THRUST) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE : May 18, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES ΦC	ΦT	CND PRS	TAL PRS	C RT	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) .4	.8	.9	.95	.975	1.0	1.05	1.1	1.25	TEST RUN NUMBERS
( )*UE304	$B_1N_1T_3$	D	0	0	0	-	1	12				890						
305		D	0	0	0	-	1	7.2				893	892		891			
306		D	0	0	0	-	1	4.2	913	911		894						
307		D	0	0	0	-	1	2.5				907	903		898			
308		D	0	0	0	-	1	1.5		912	910	908	904		899	896		
309		D	0	0	0	-	1	1					905	902	900	897	895	
310		D	0	0	0	-	1	0				909	906		901			
311	$B_1N_1T_2$	C	0	0	-45	-	1	1.5		953	949					944	940	
( )*UE312	$B_1N_1T_2$	C	0	0	-45	-	1	1.0						946		943	941	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES

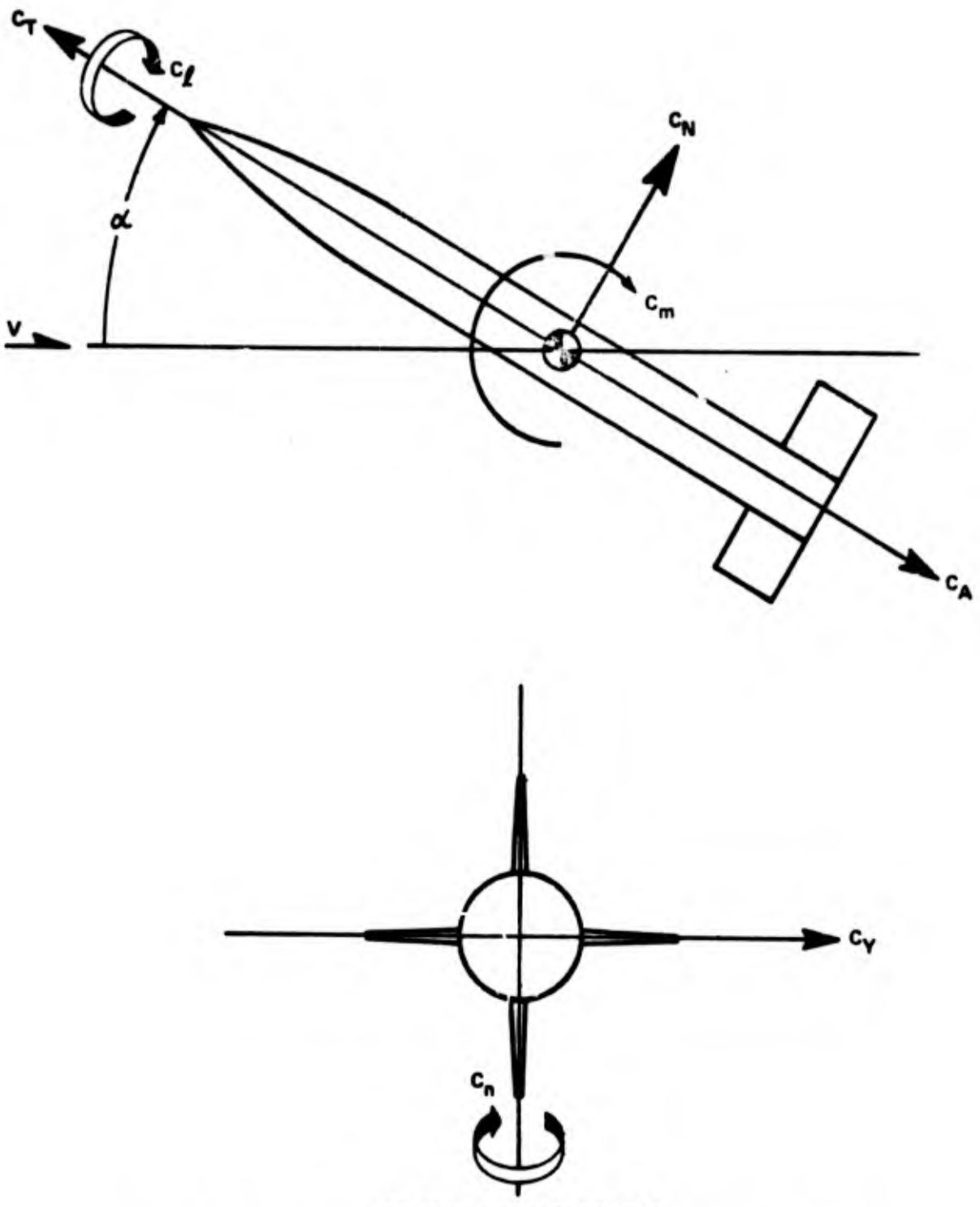
A) -3° → 12°
B) -3° → 4°
C) -4° → 4°
D) -4° → 12°

COEFFICENTS

E) -4° → 8°
T3 = T2 REVERSED

IDVAR (1) IDVAR (2) NDV

( )* See page 18 for coefficients.



(VIEW LOOKING FORWARD)

Figure 1a. Axis System Sign Convention for Main Balance

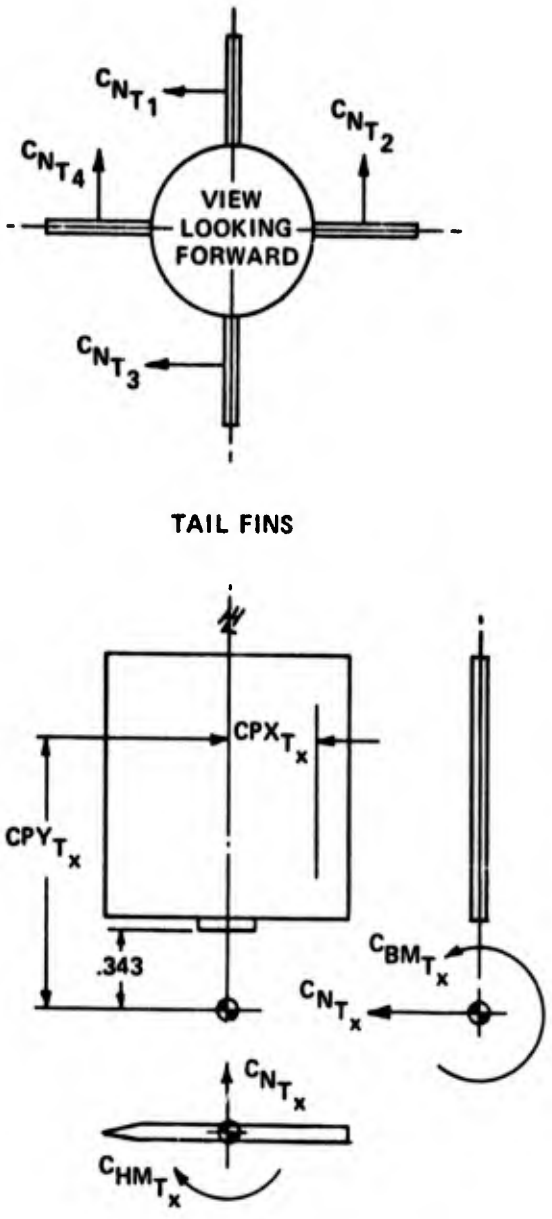


Figure 1b. - Axis System and Positive Sign Convention for Fins

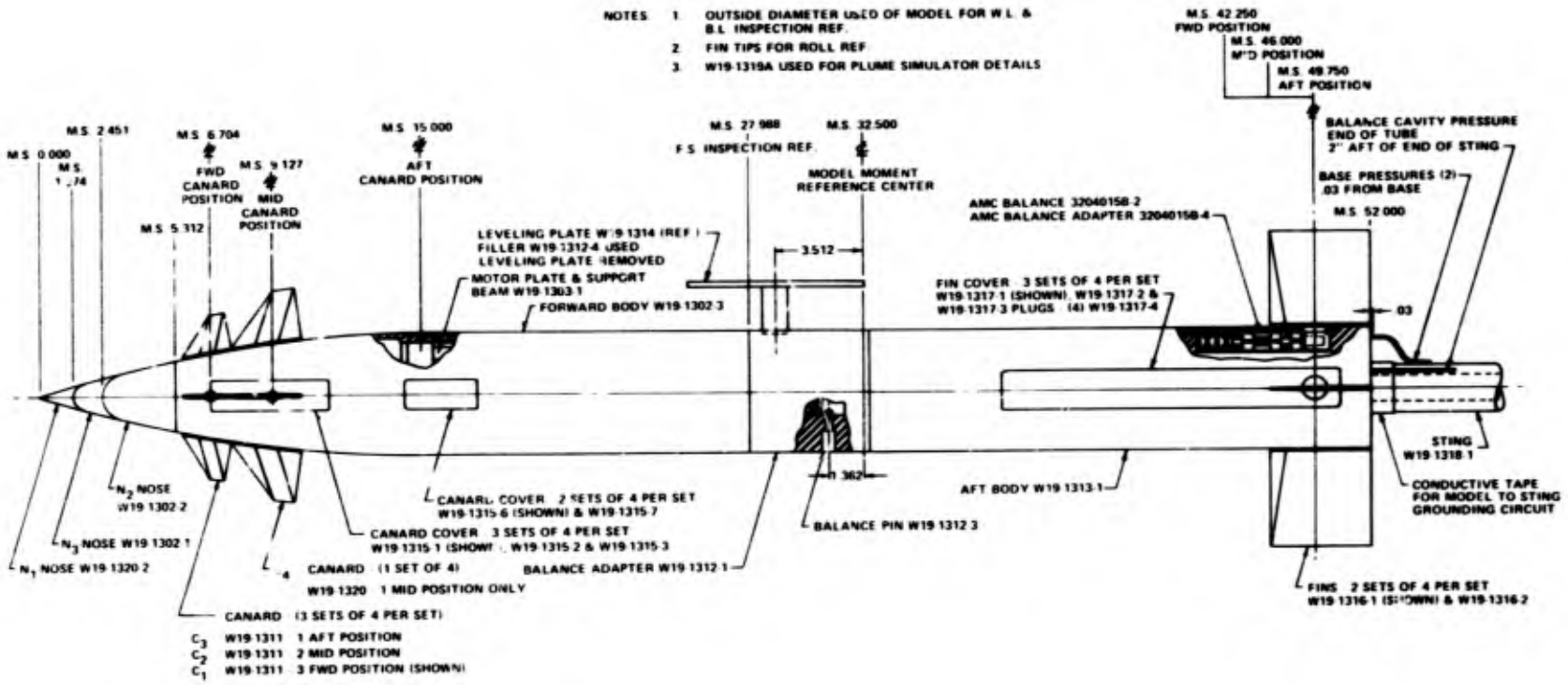


Figure 2. - Model Assembly Drawing

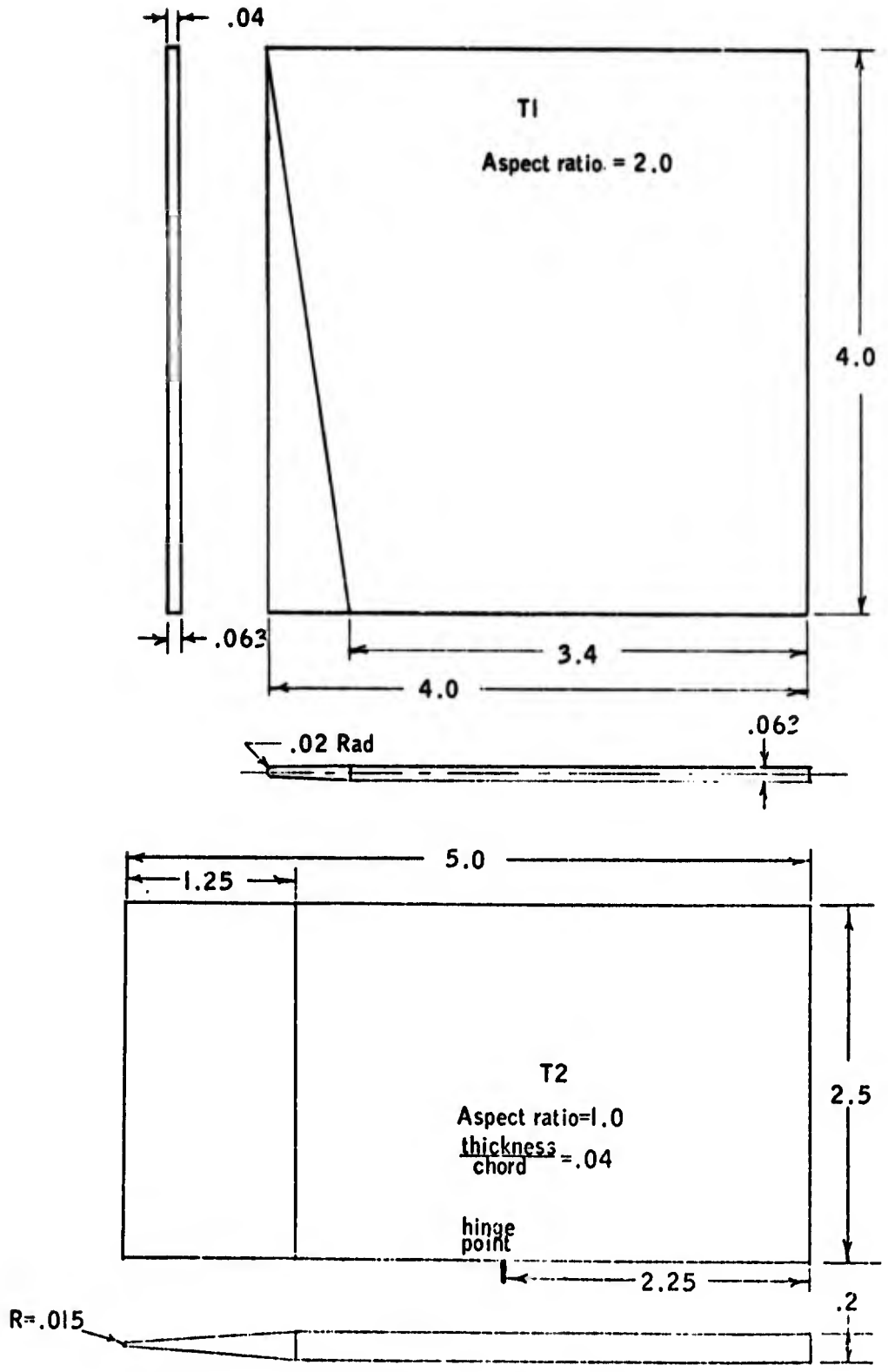


Figure 3. - Fin Geometry

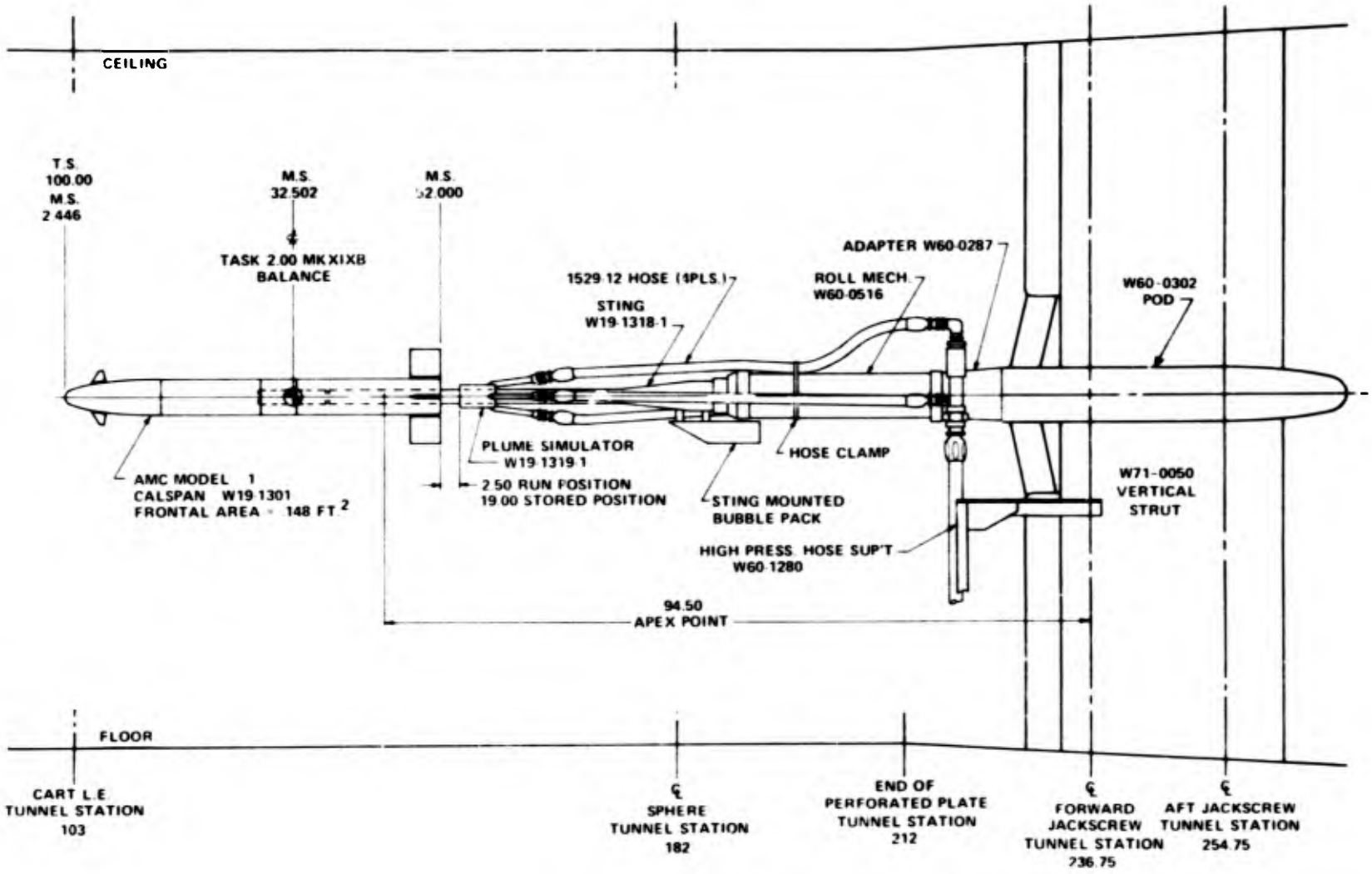


Figure 4. - Installation Drawing

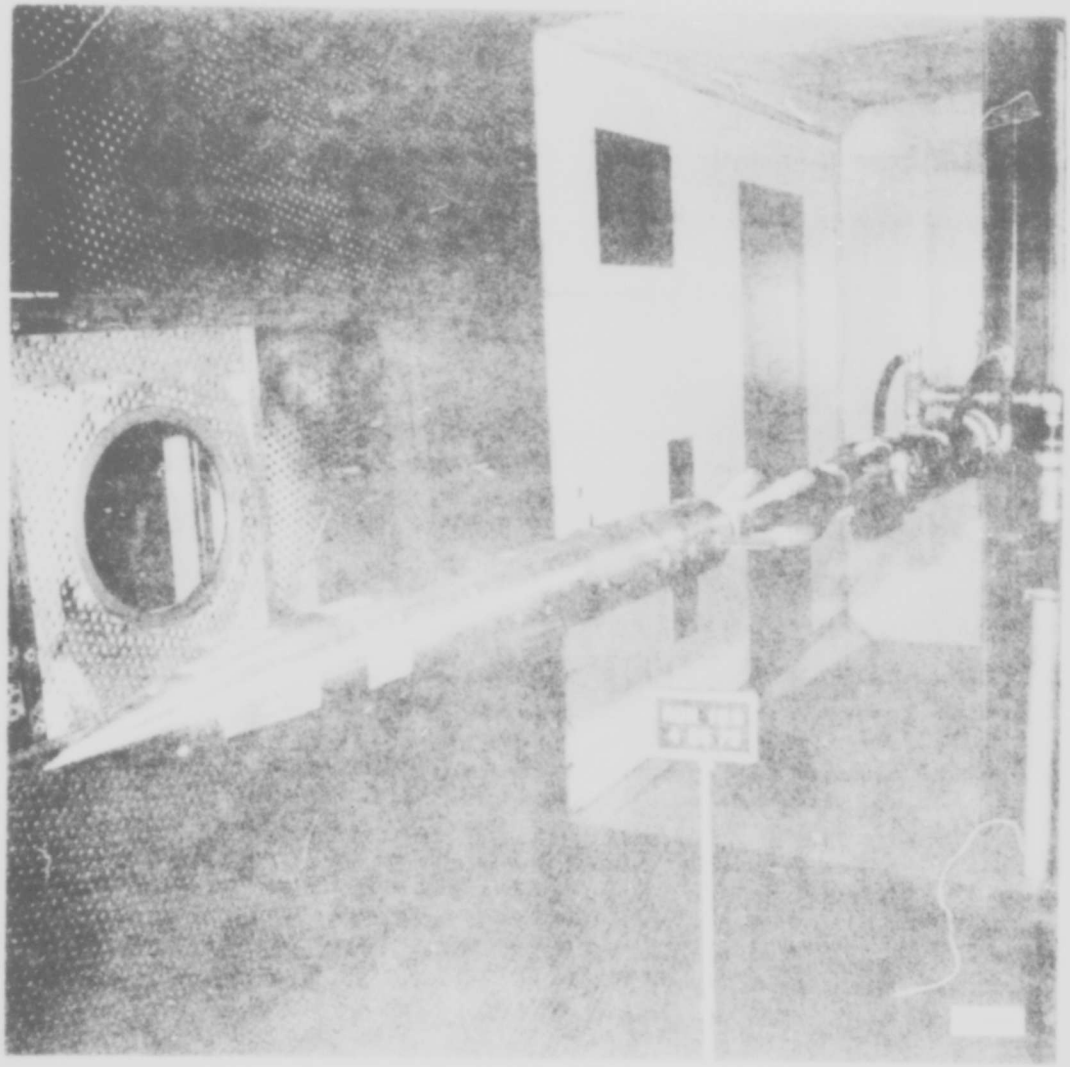


Figure 5. - Photograph of Tunnel Installation

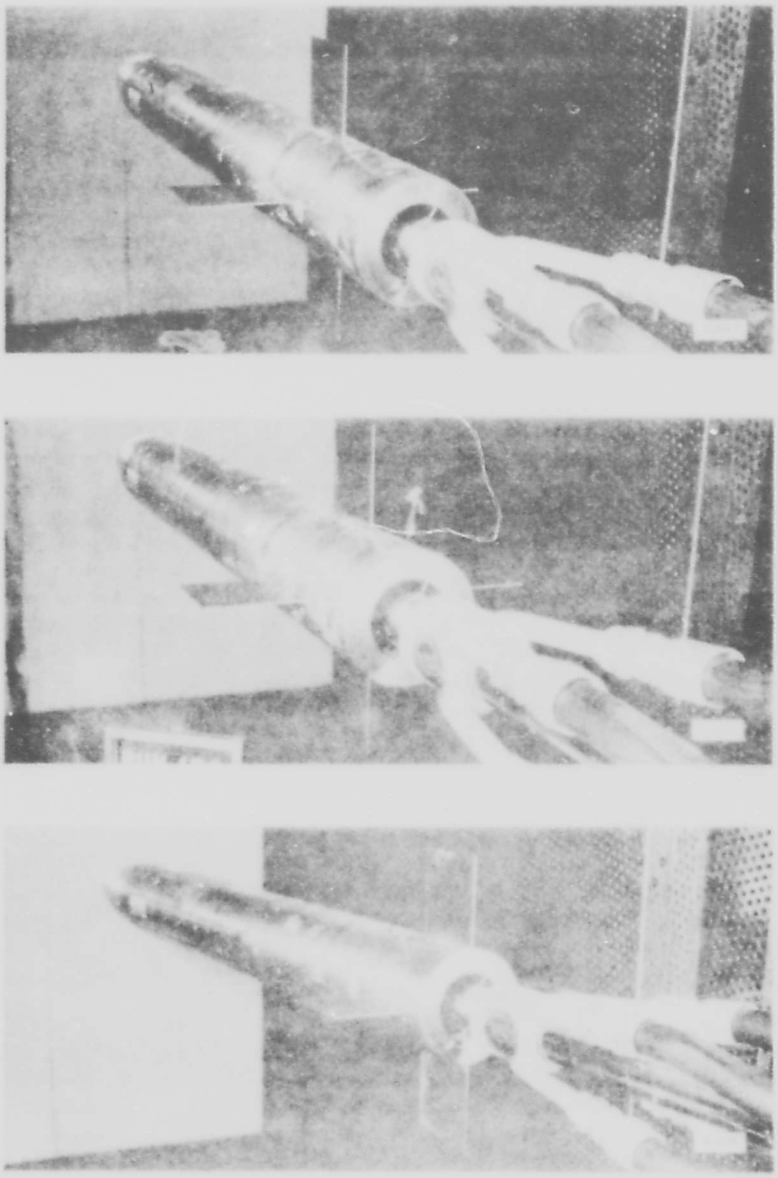


Figure 6. - Photograph of LONGBOW at Three Tail Positions

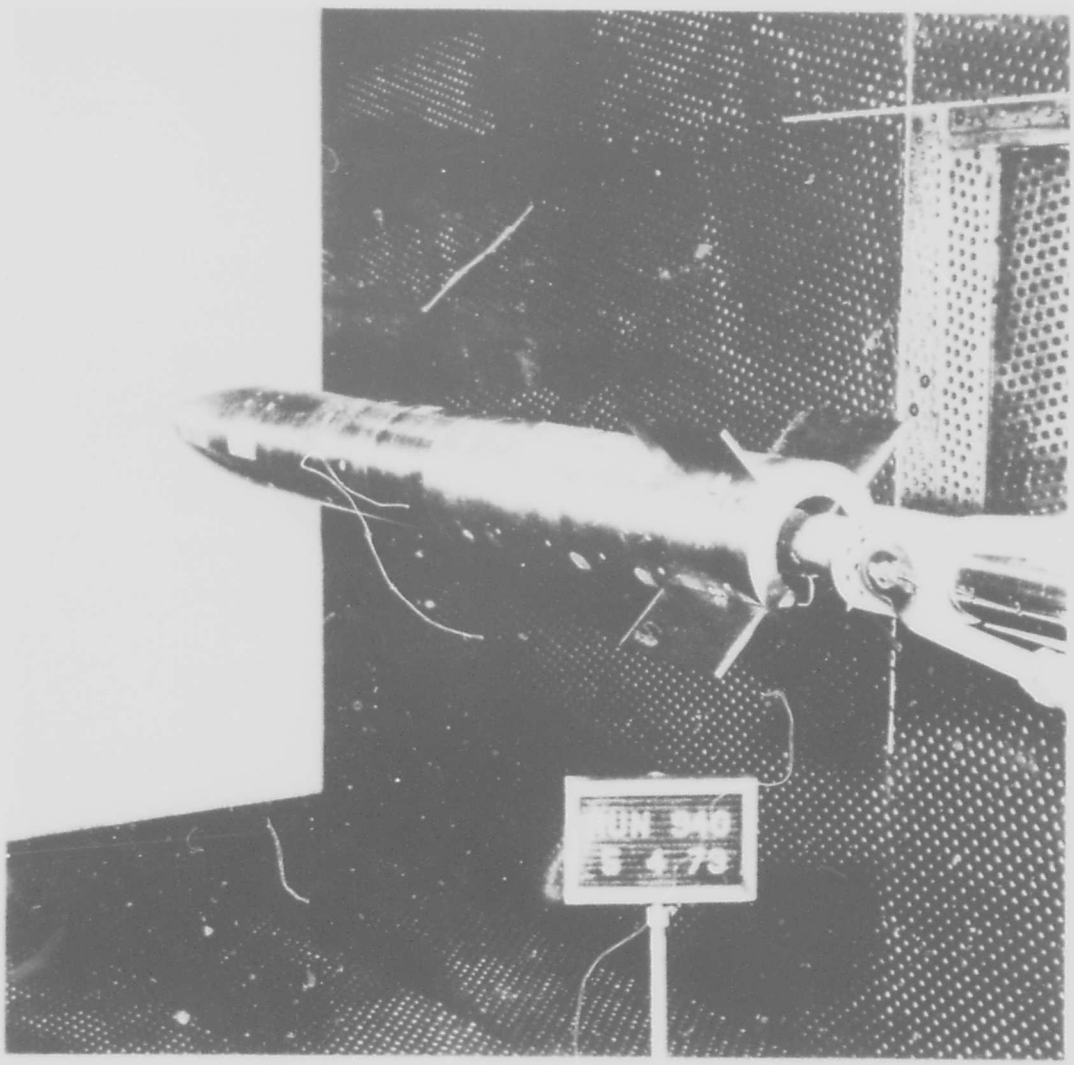


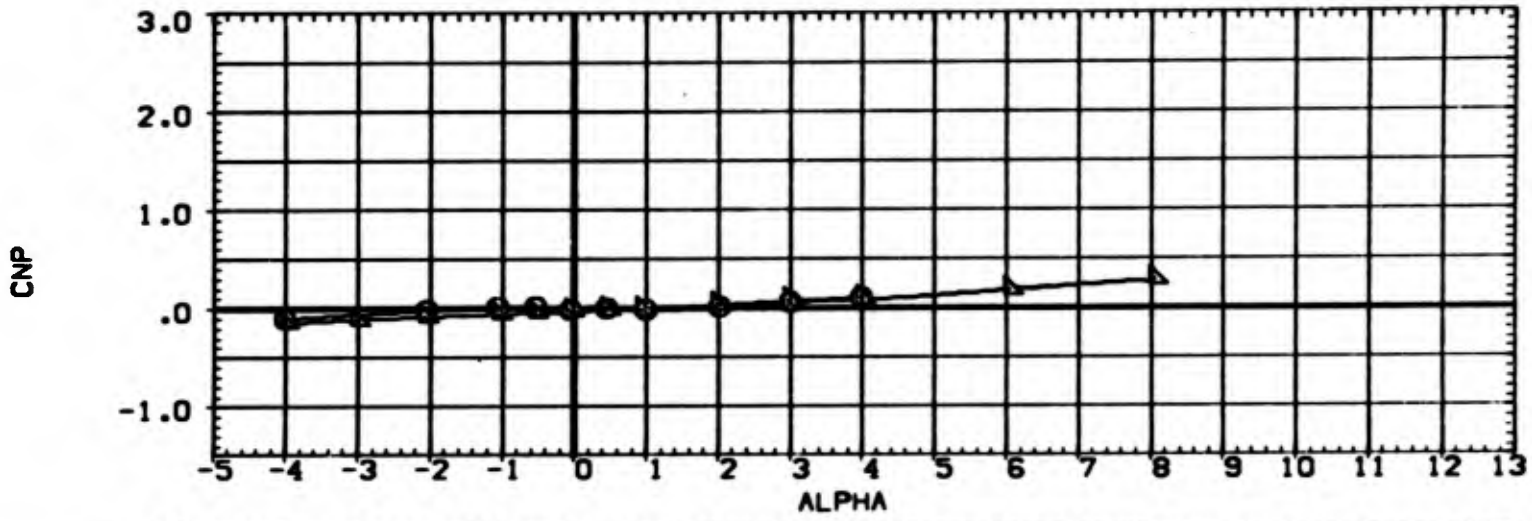
Figure 7. - Photograph of Model with Fin T2 in 45° Roll Position

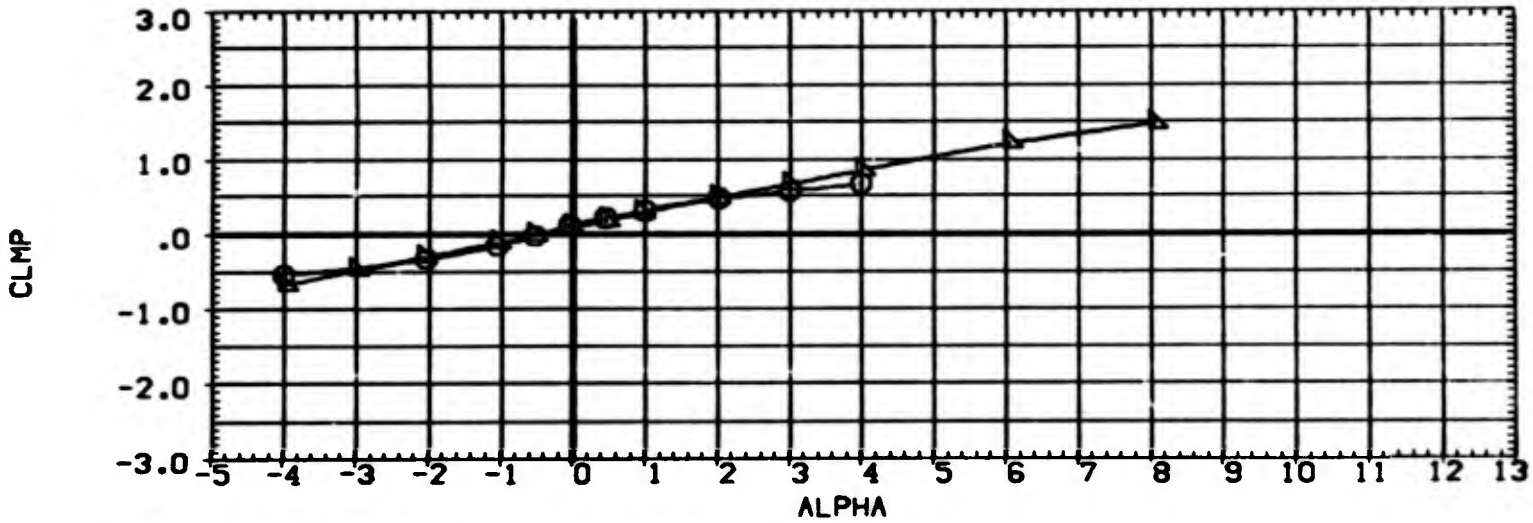
PLOTTED DATA

Tabulations of the plotted data and corresponding source data are available from Data Management Services Operations.

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(D2E136)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	37.500
(D2E137)		DATA NOT AVAILABLE	.000	.000	.000	12.000
(D2E138)		DATA NOT AVAILABLE	.000	.000	.000	10.300
(D2E139)		DATA NOT AVAILABLE	.000	.000	.000	8.500
(D2E140)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	7.200
(D2E141)		DATA NOT AVAILABLE	.000	.000	.000	6.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	37.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



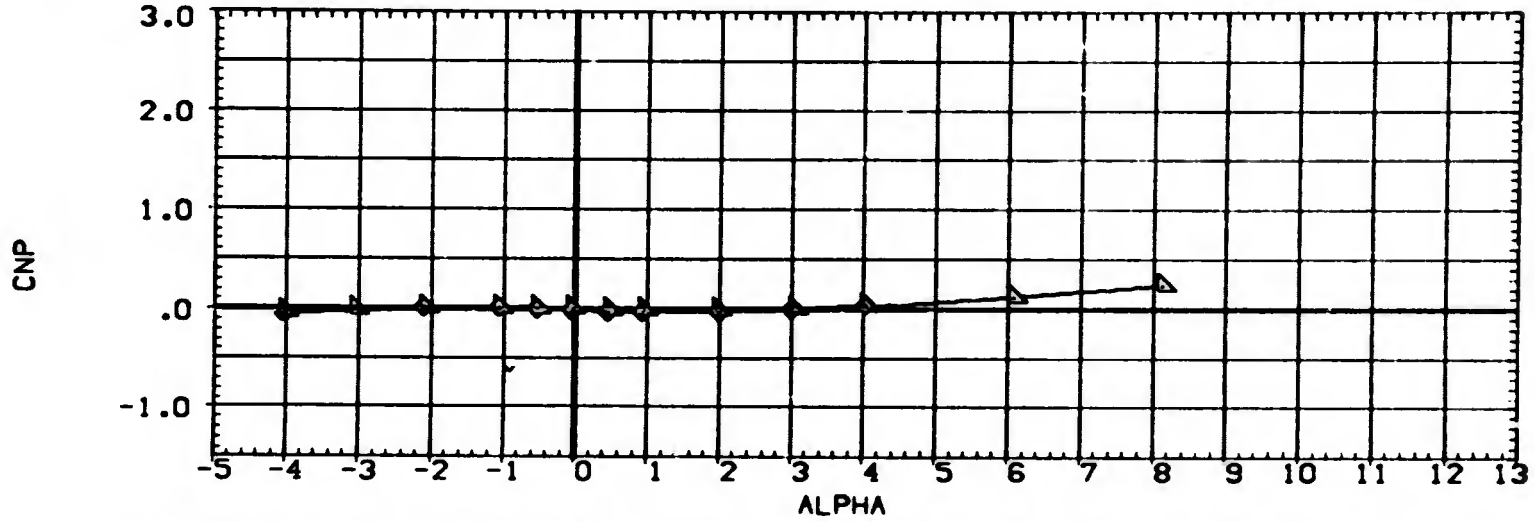


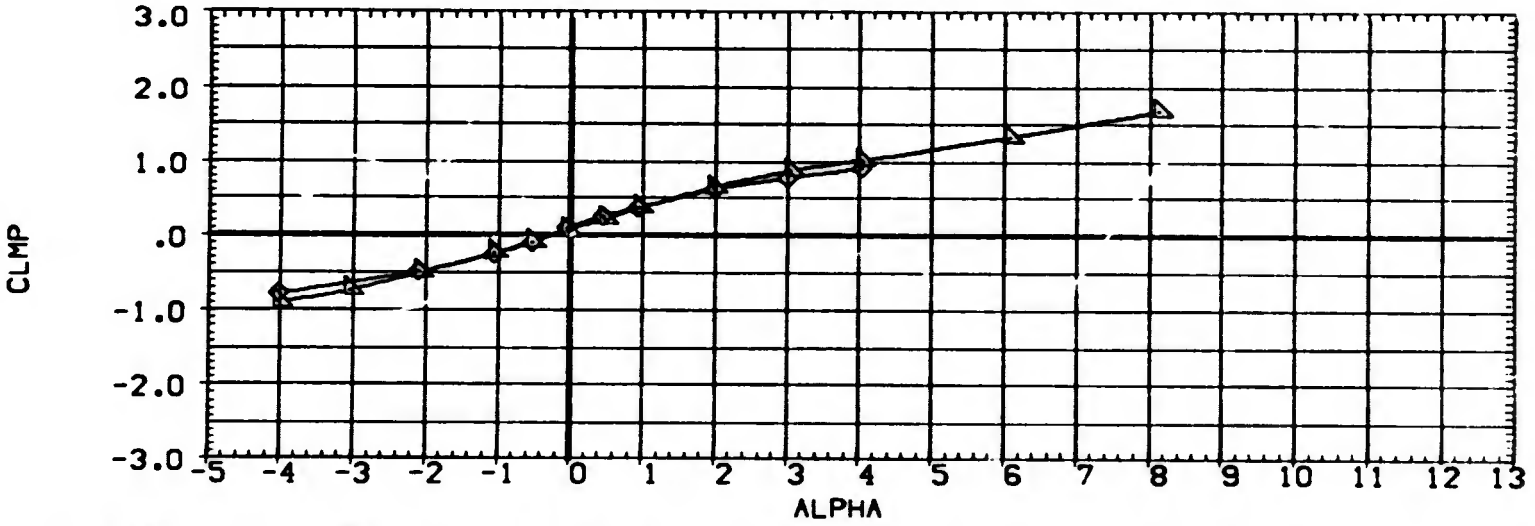
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(RUE136)	□	DATA NOT AVAILABLE	.000	.000	.000	37.500
(RUE137)	◇	DATA NOT AVAILABLE	.000	.000	.000	12.000
(RUE138)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BIN1)	.000	.000	.000	10.300
(RUE139)	▽	DATA NOT AVAILABLE	.000	.000	.000	8.500
(RUE140)	◁	CALSPAN THRUST EFFECTS STING MOUNTED NW (BIN1)	.000	.000	.000	7.200
(RUE141)	▷	DATA NOT AVAILABLE	.000	.000	.000	6.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



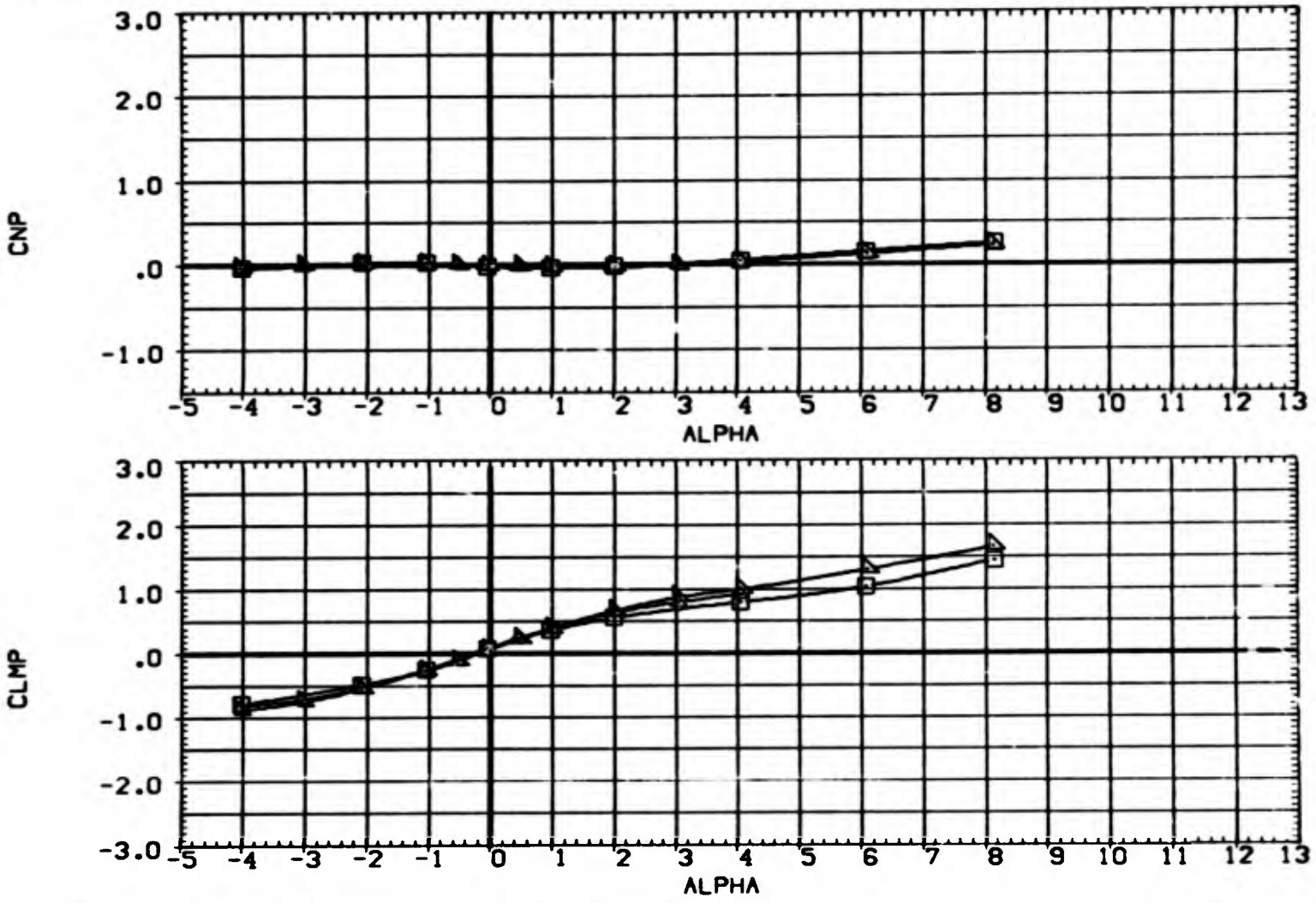


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE136)	□	DATA NOT AVAILABLE	.000	.000	.000	37.500
(DUE137)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	12.000
(DUE138)	⊠	DATA NOT AVAILABLE	.000	.000	.000	10.300
(DUE139)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	8.500
(DUE140)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	7.200
(DUE141)	⊡	DATA NOT AVAILABLE	.000	.000	.000	6.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

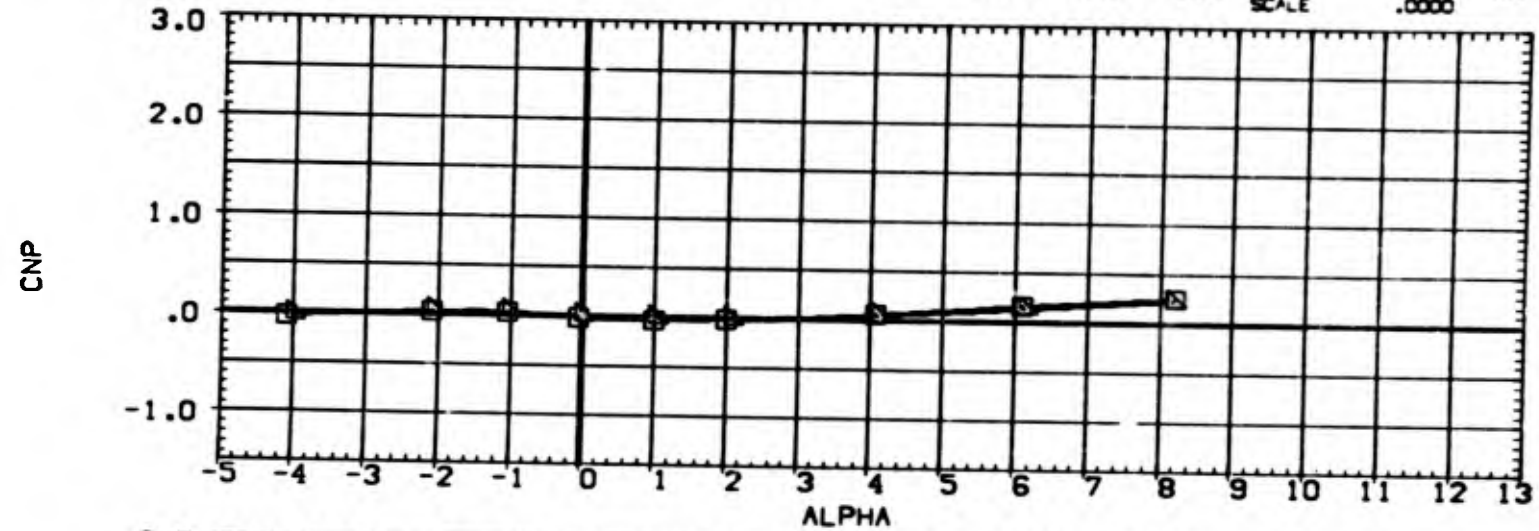


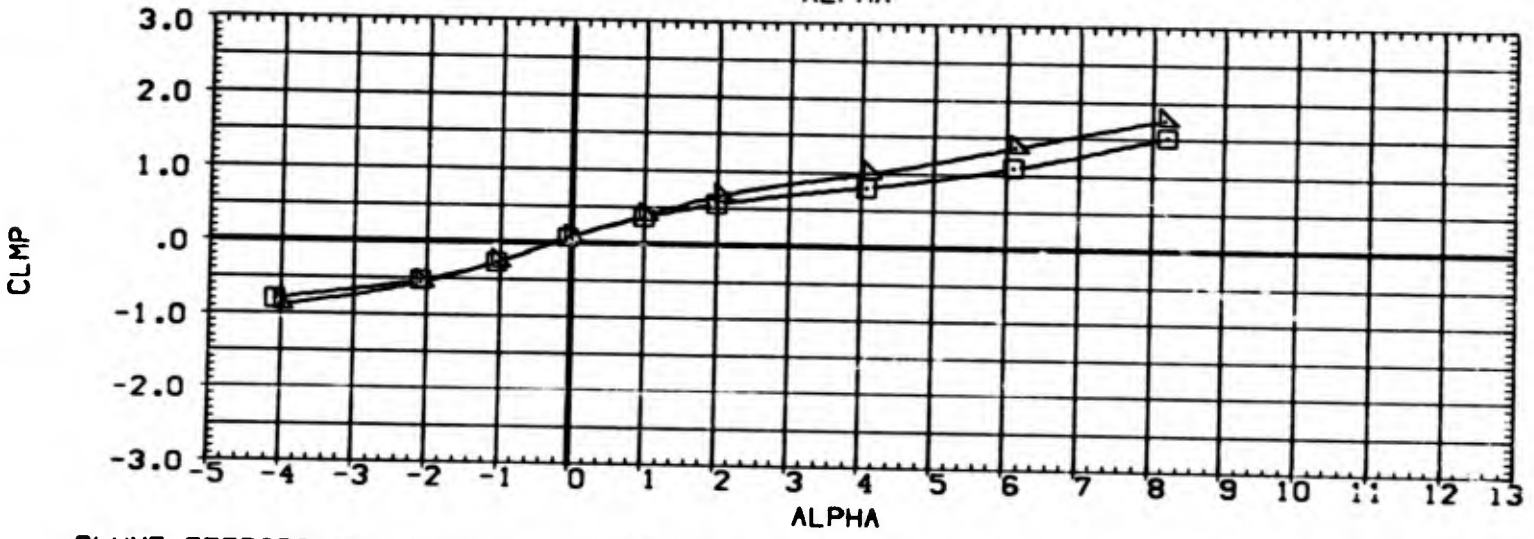
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MACH = .90

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DUE136)		DATA NOT AVAILABLE				
(DUE137)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINI)	.000	.000	.000	37.500
(DUE138)		DATA NOT AVAILABLE	.000	.000	.000	12.000
(DUE139)		DATA NOT AVAILABLE	.000	.000	.000	10.300
(DUE140)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINI)	.000	.000	.000	8.500
(DUE141)		DATA NOT AVAILABLE	.000	.000	.000	7.200
			.000	.000	.000	6.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



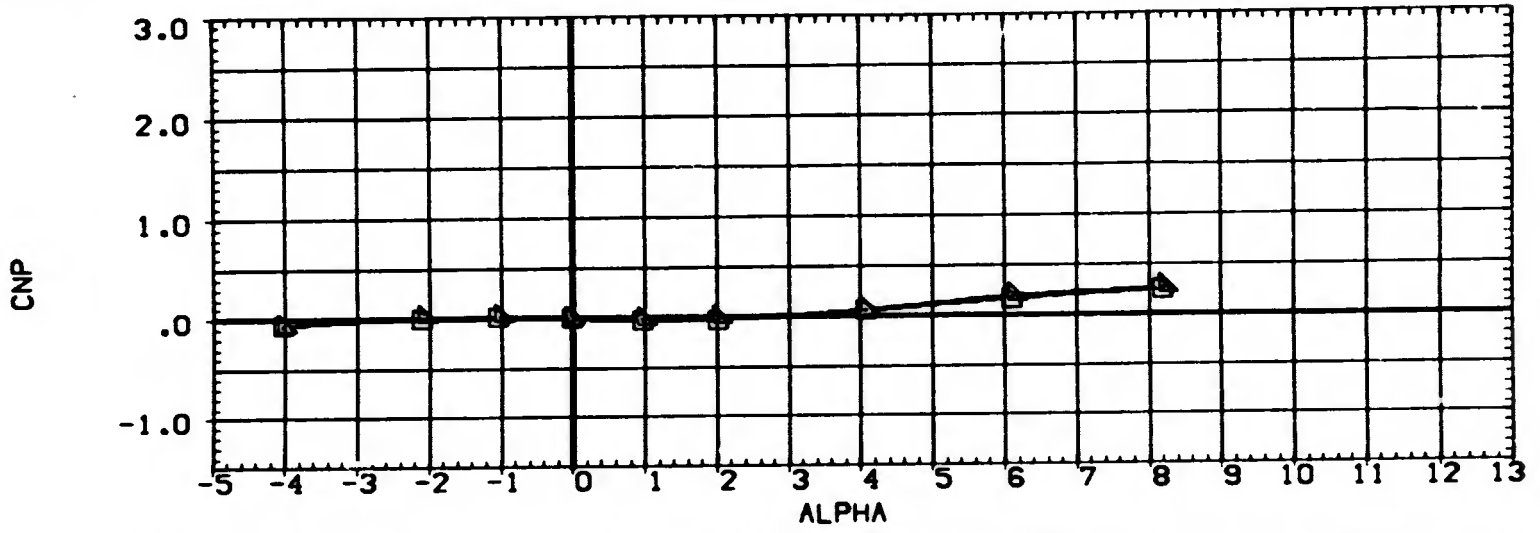


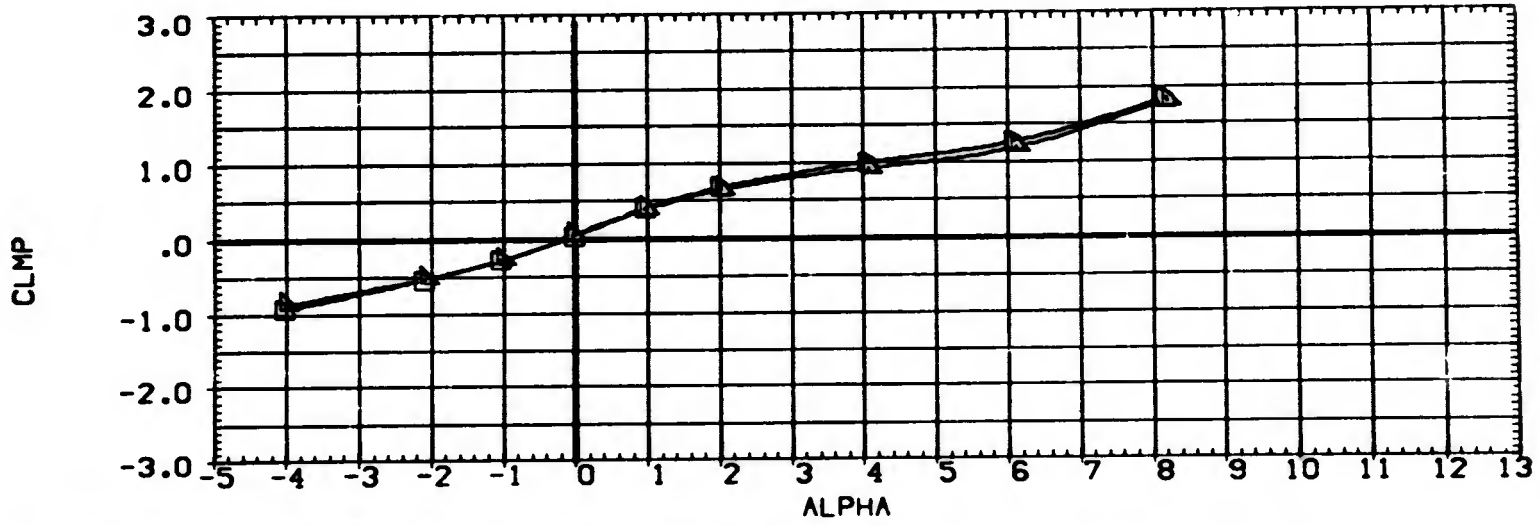
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DUE136)	□	DATA NOT AVAILABLE	.000	.000	.000	37.500
(DUE137)	◇	DATA NOT AVAILABLE	.000	.000	.000	12.000
(DUE138)	⊠	DATA NOT AVAILABLE	.000	.000	.000	10.300
(DUE139)	▽	DATA NOT AVAILABLE	.000	.000	.000	8.500
(DUE140)	⊿	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	7.200
(DUE141)	▷	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	6.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



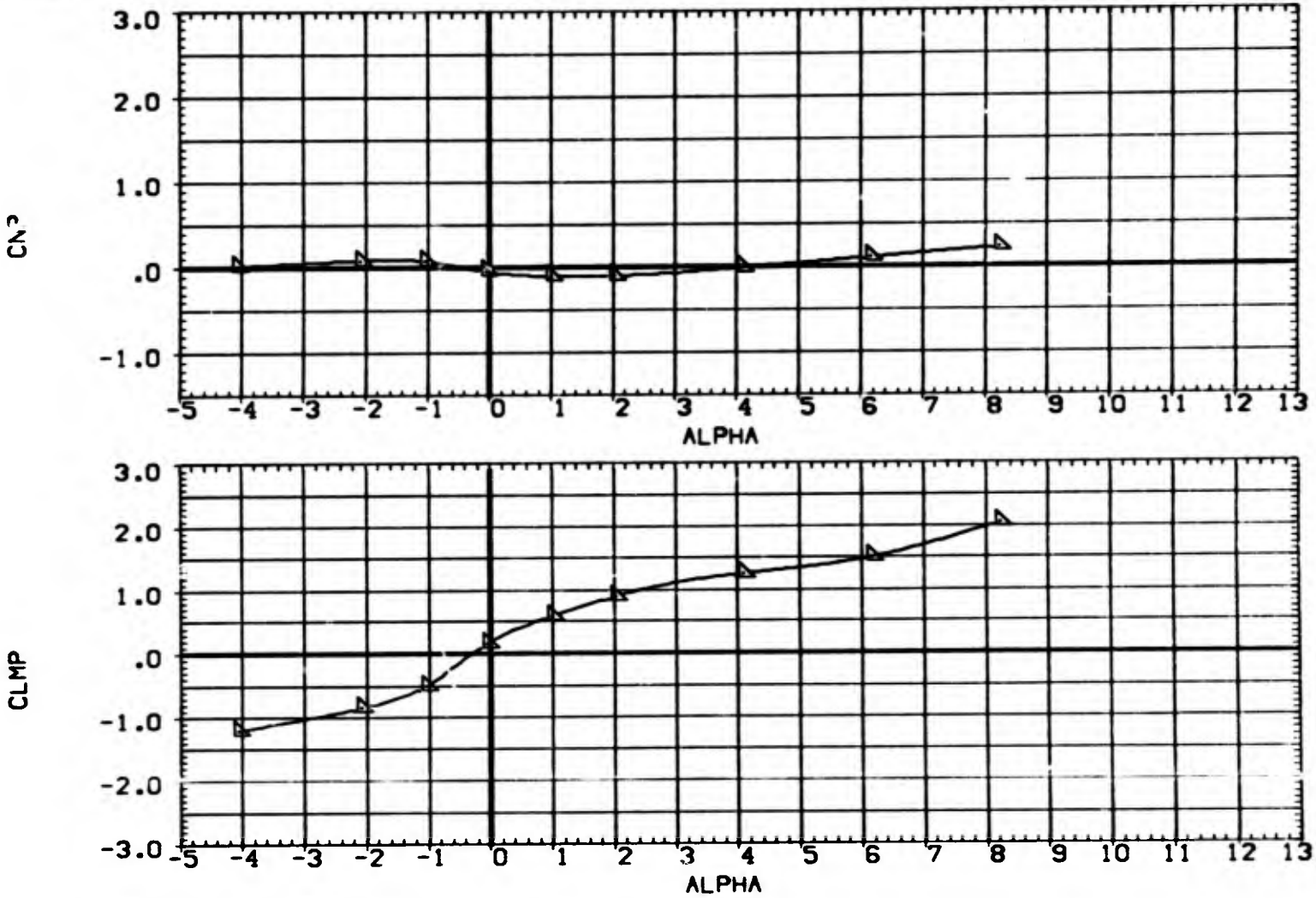


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DUE136)		DATA NOT AVAILABLE	.000	.000	.000	37.500
(DUE137)		DATA NOT AVAILABLE	.000	.000	.000	12.000
(DUE138)		DATA NOT AVAILABLE	.000	.000	.000	10.300
(DUE139)		DATA NOT AVAILABLE	.000	.000	.000	8.500
(DUE140)		CALSPAN THRUST EFFECTS STING MOUNTED NW (BIN1)	.000	.000	.000	7.200
(DUE141)		DATA NOT AVAILABLE	.000	.000	.000	6.000

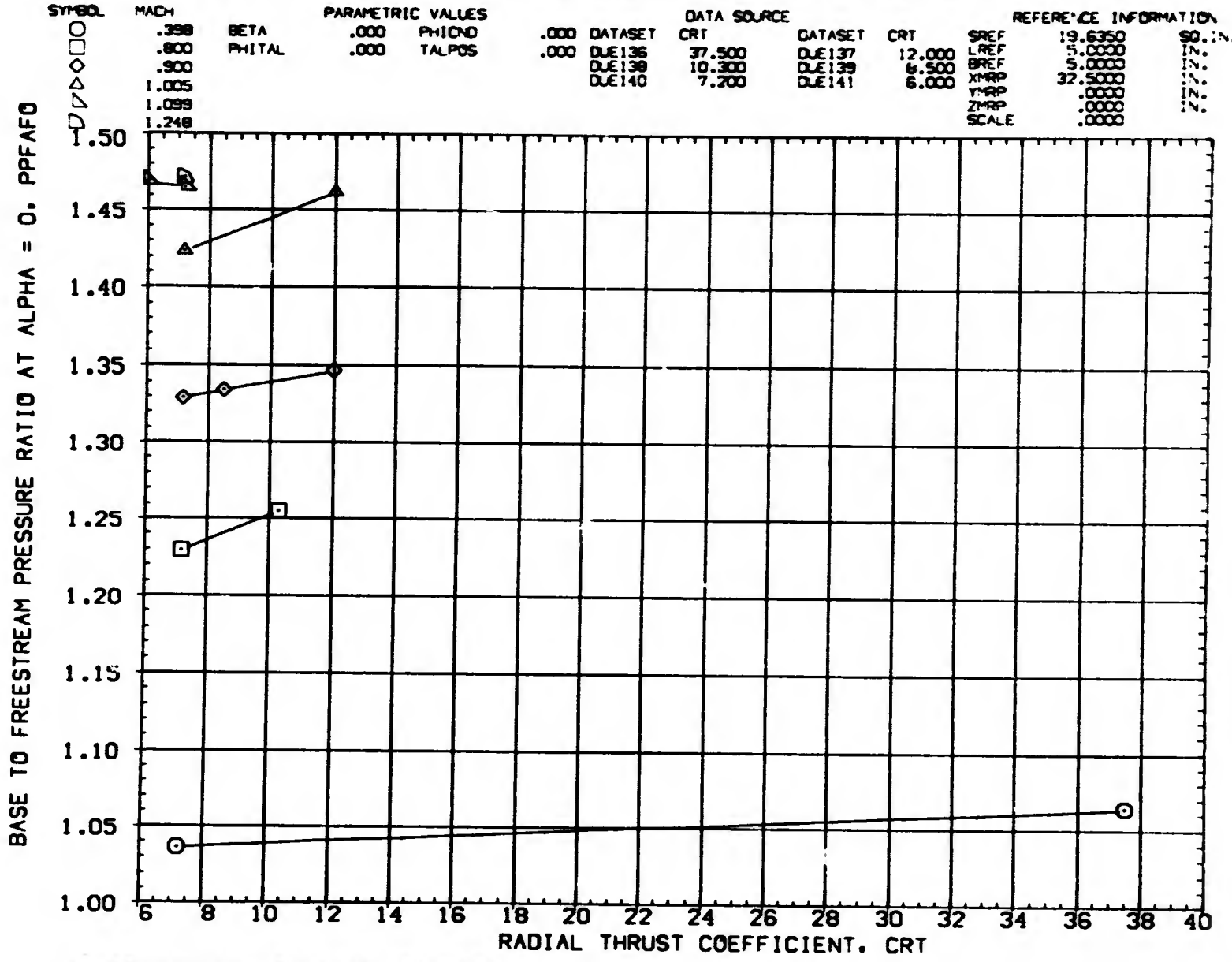
REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



PLUME EFFECTS ON STABILITY CHARACTERISTICS

(F)MACH = 1.25

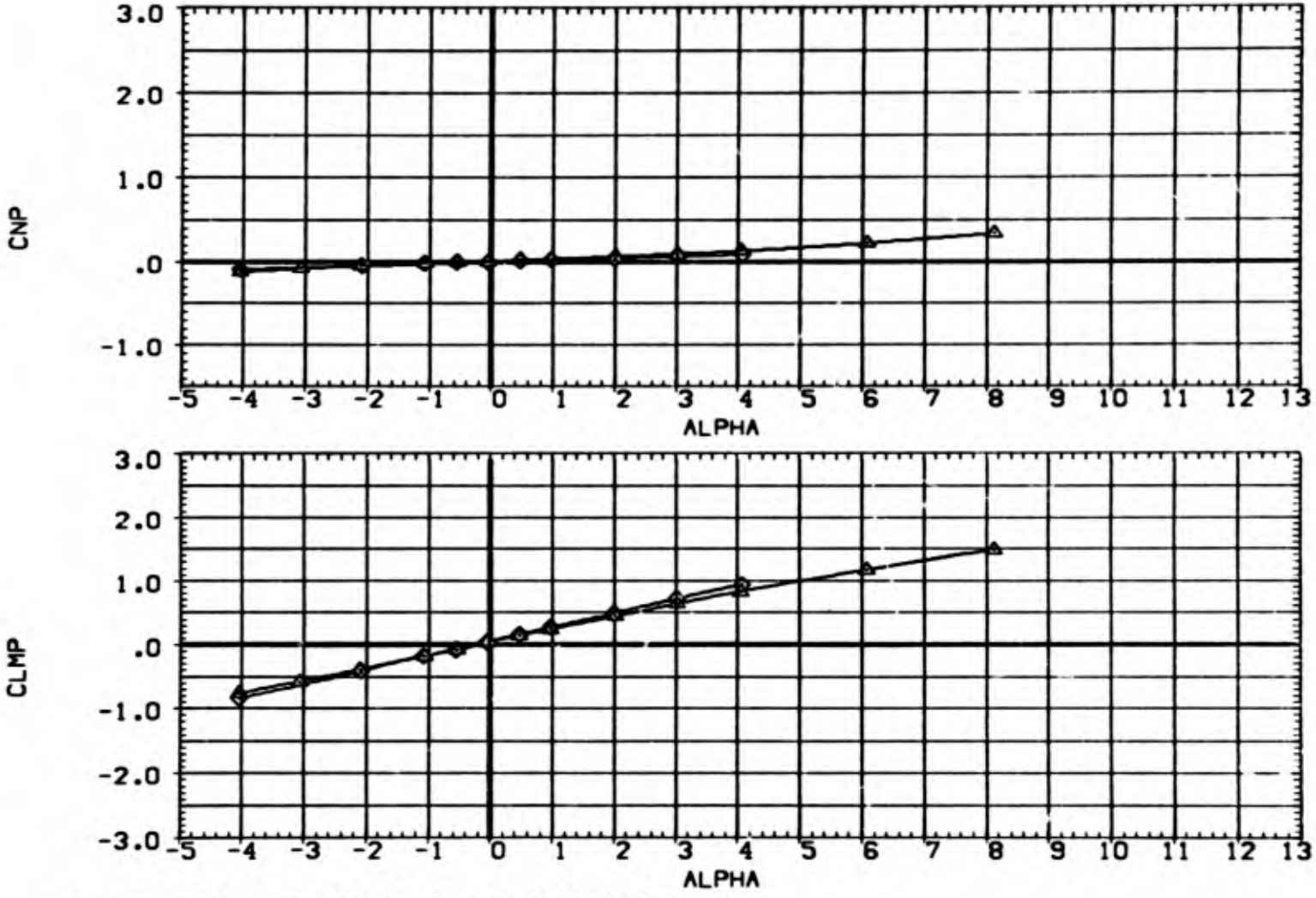
CALSPAN THRUST EFFECTS STING MOUNTED NJ (B1N1) (DUE136)



PLUME EFFECTS ON BASE PRESSURE

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DJE142)	○	DATA NOT AVAILABLE	.000	.000	.000	5.000
(DJE143)	□	DATA NOT AVAILABLE	.000	.000	.000	4.200
(DJE144)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINI)	.000	.000	.000	3.600
(DJE146)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINI)	.000	.000	.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

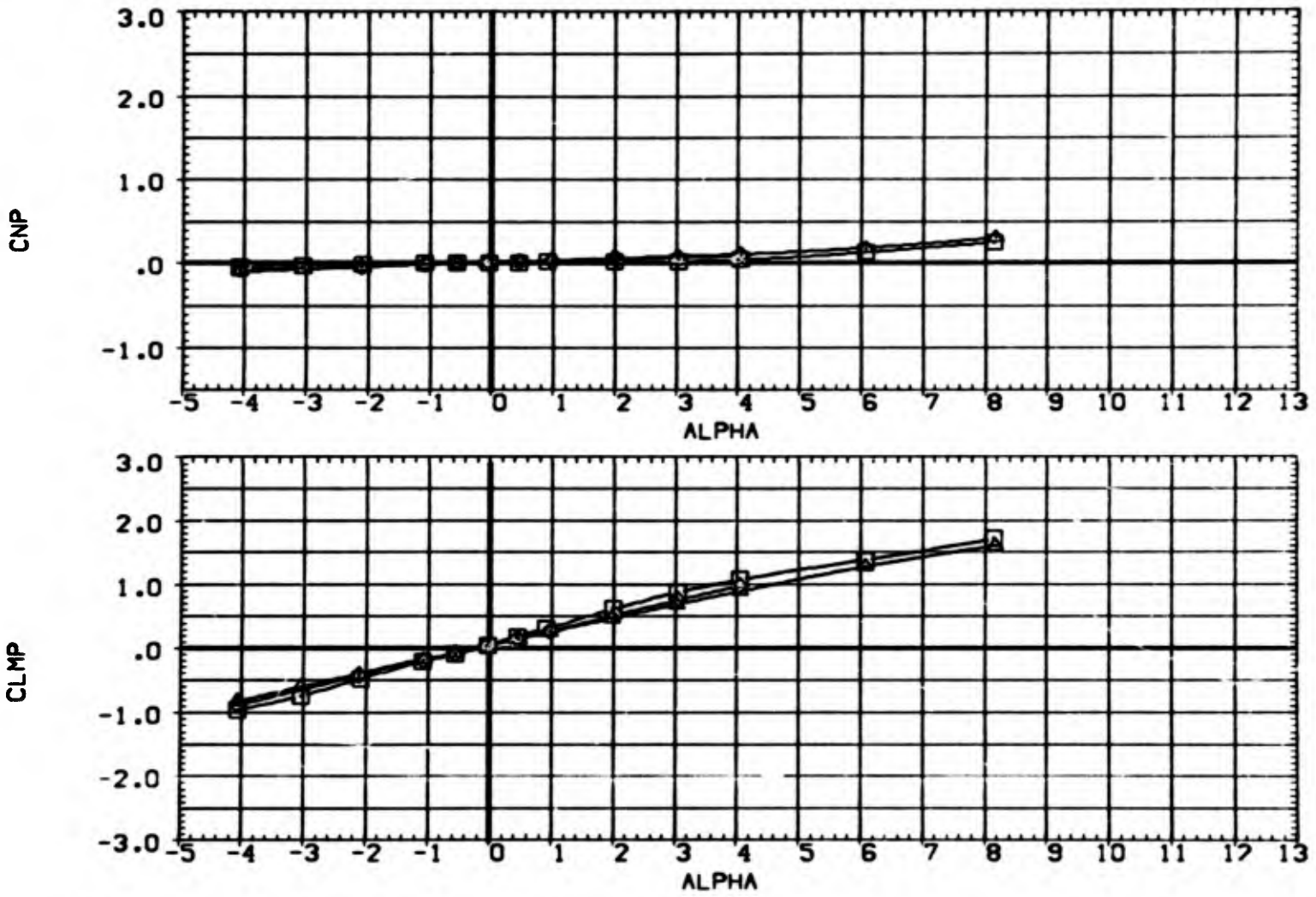


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DUE142)	□	DATA NOT AVAILABLE	.000	.000	.000	5.000
(DUE143)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BIN1)	.000	.000	.000	4.200
(DUE144)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NW (BIN1)	.000	.000	.000	3.600
(DUE146)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BIN1)	.000	.000	.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

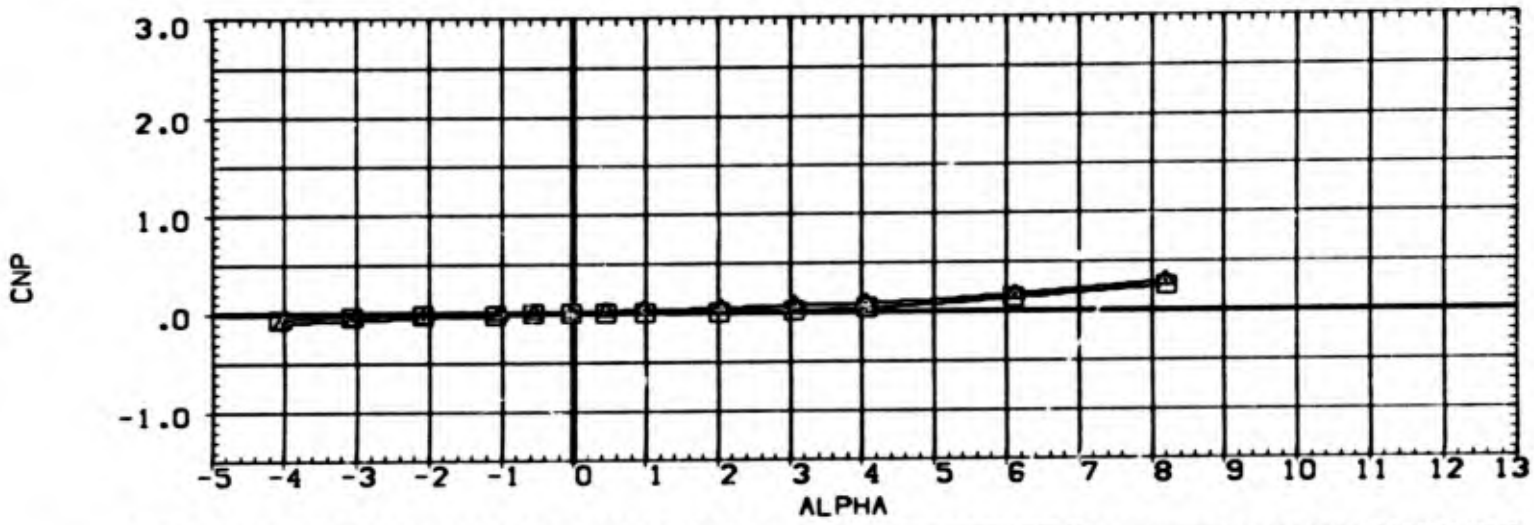


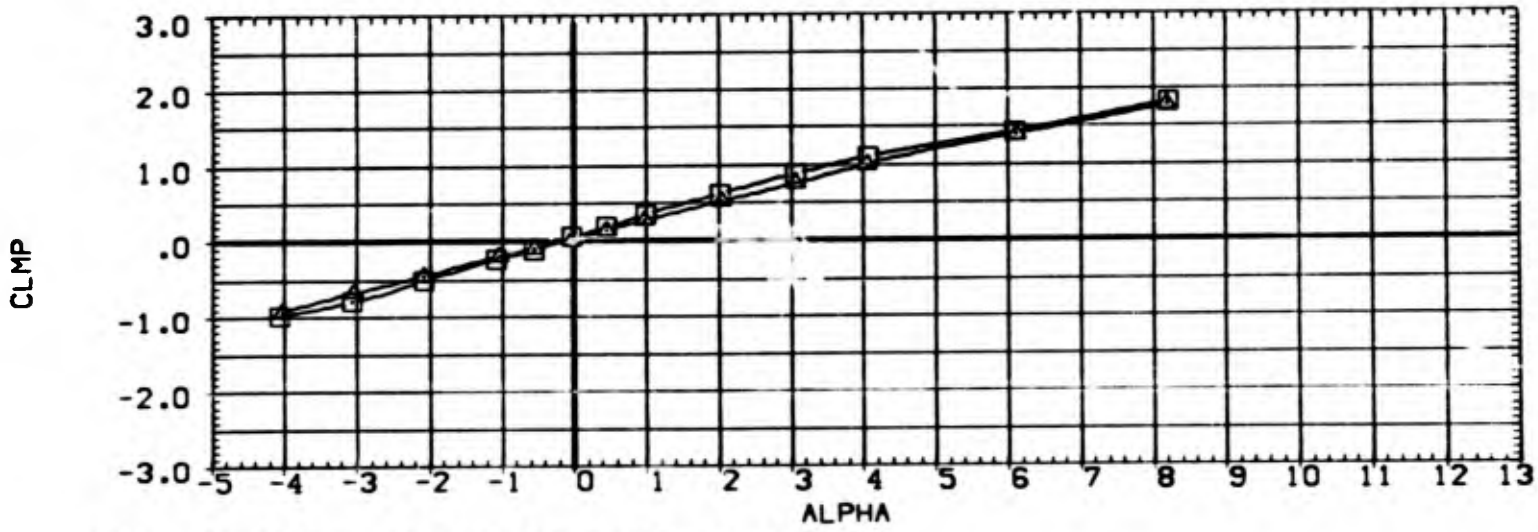
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MAC = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[DUE142]	□	DATA NOT AVAILABLE	.000	.000	.000	5.000
[DUE143]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	4.200
[DUE144]	⊠	DATA NOT AVAILABLE	.000	.000	.000	3.600
[DUE146]	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



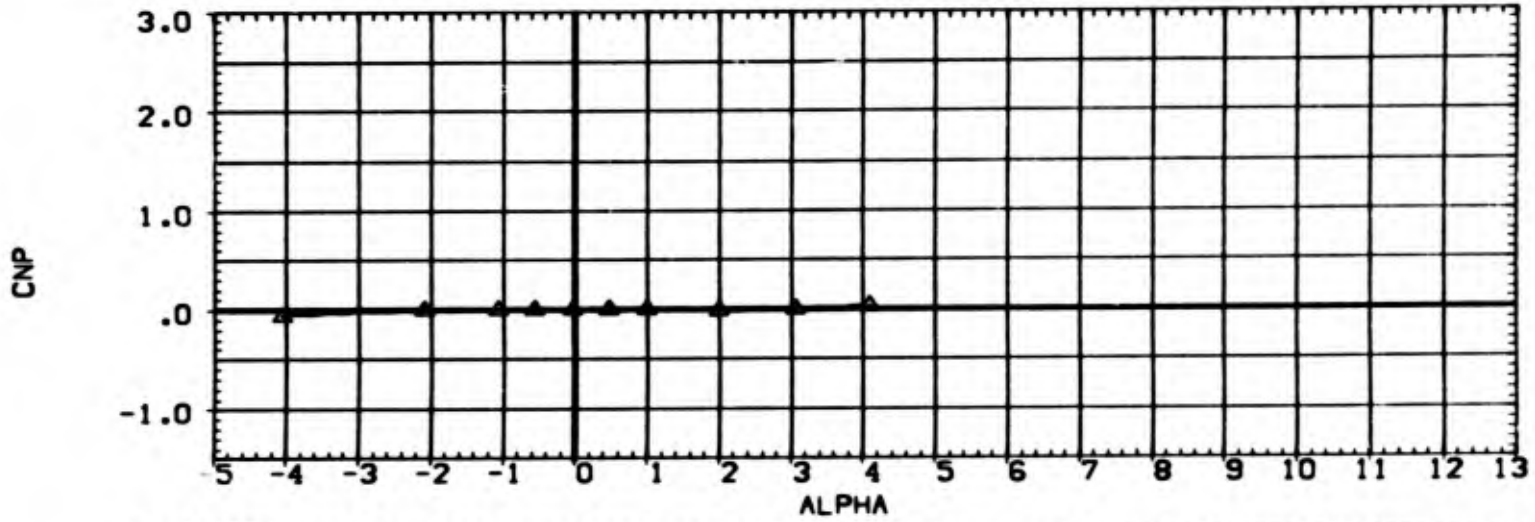


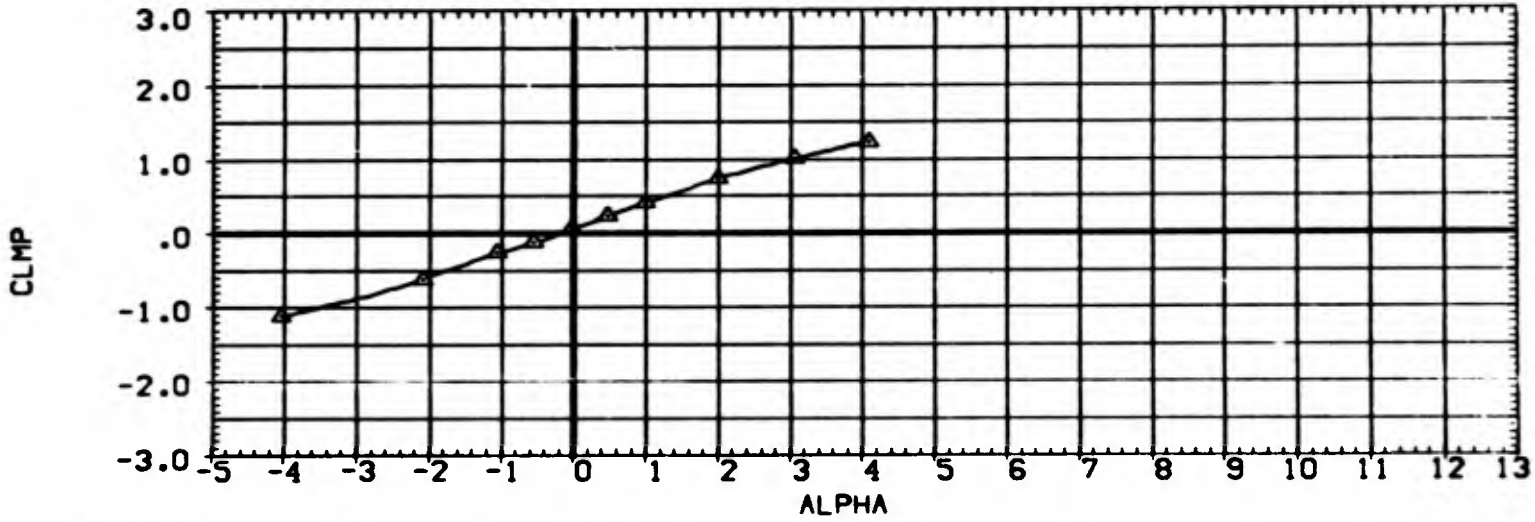
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MAC = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE142)	□	DATA NOT AVAILABLE	.000	.000	.000	5.000
(DUE143)	◇	DATA NOT AVAILABLE	.000	.000	.000	4.200
(DUE144)	⊠	DATA NOT AVAILABLE	.000	.000	.000	3.600
(DUE146)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINI)	.000	.000	.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



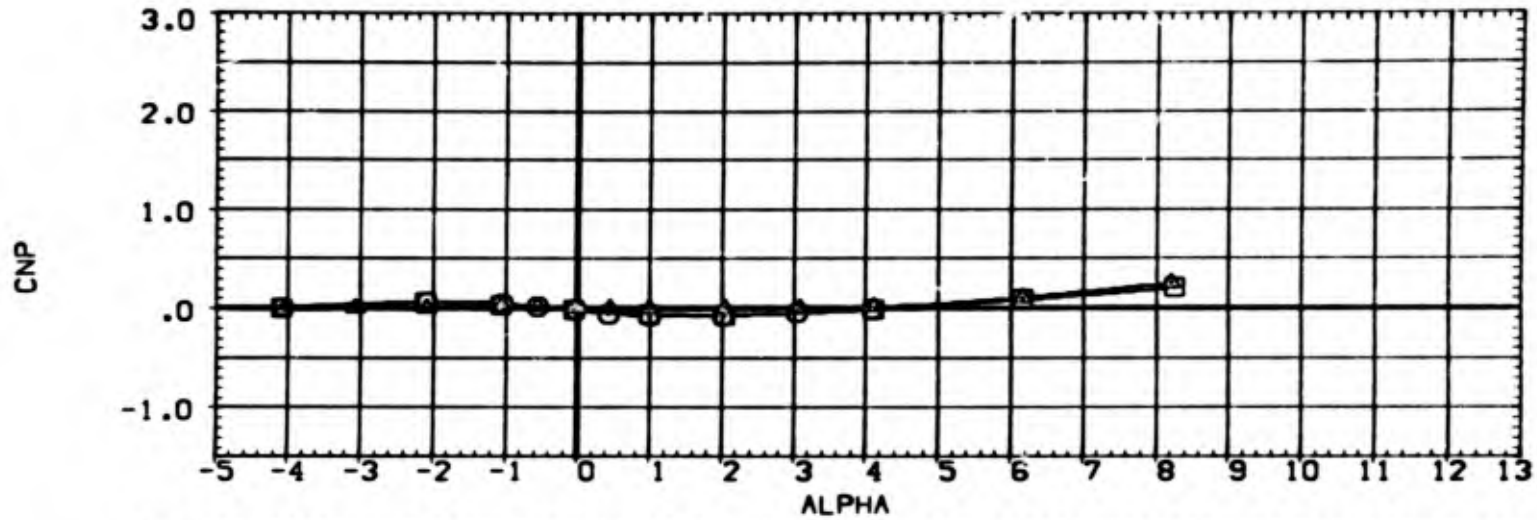


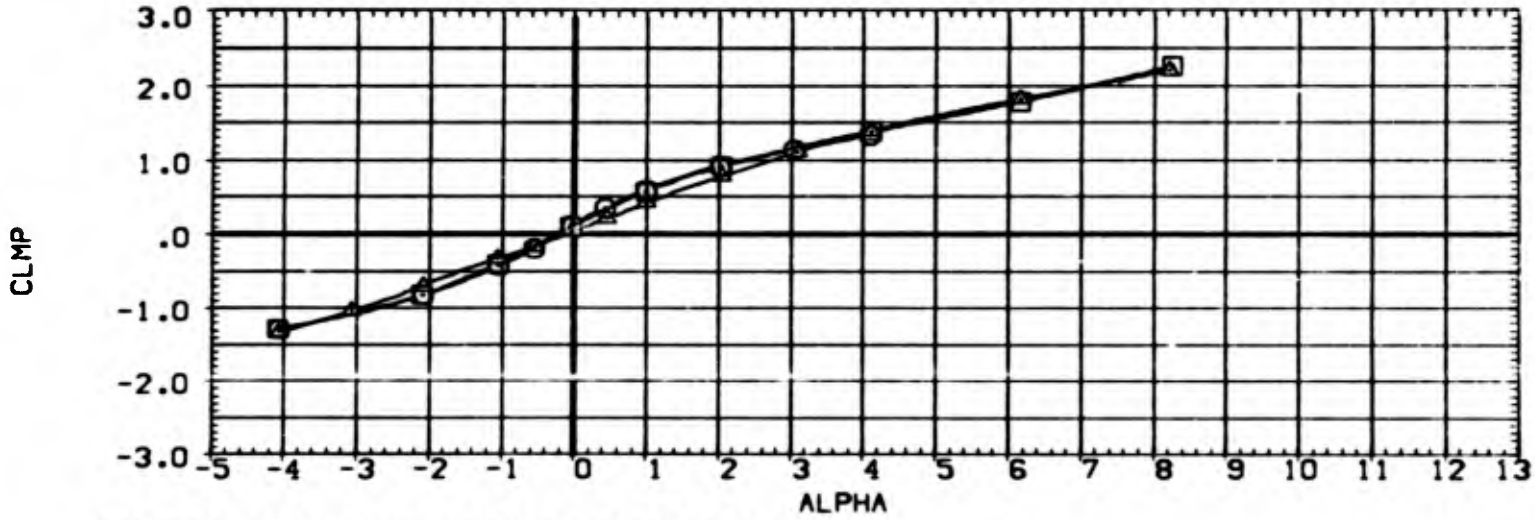
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(D)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DUE142)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BIN1)	.000	.000	.000	5.000
(DUE143)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NW (BIN1)	.000	.000	.000	4.700
(DUE144)	⊠	DATA NOT AVAILABLE	.000	.000	.000	3.600
(DUE146)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BIN1)	.000	.000	.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

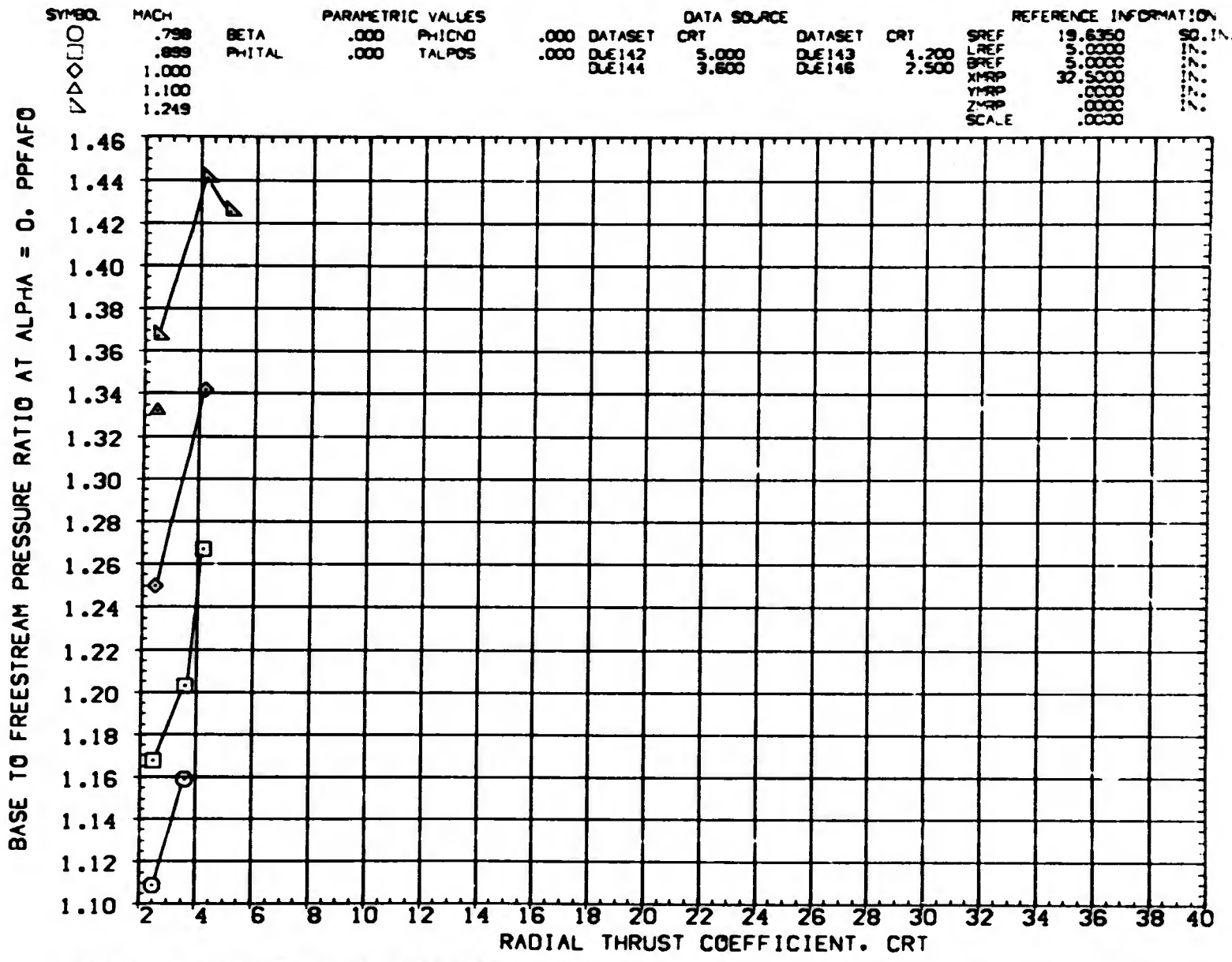




PLUME EFFECTS ON STABILITY CHARACTERISTICS

(E)MAC- = 1.25

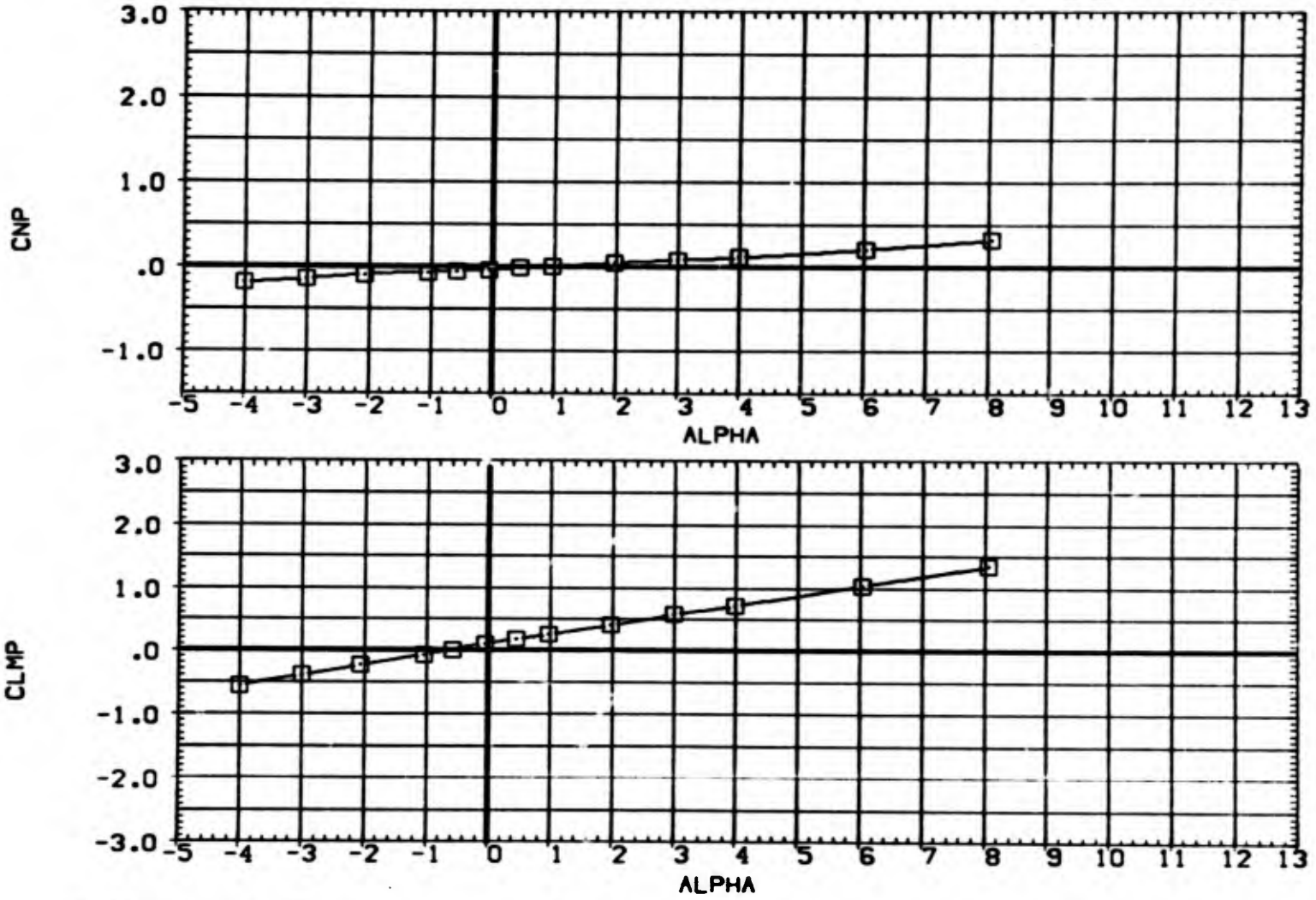
CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1) (DUE142)



PLUME EFFECTS ON BASE PRESSURE

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNC	PHITAL	TALPOS	CRT
[DUE147] ○	DATA NOT AVAILABLE	.000	.000	.000	1.500
[DUE148] □	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

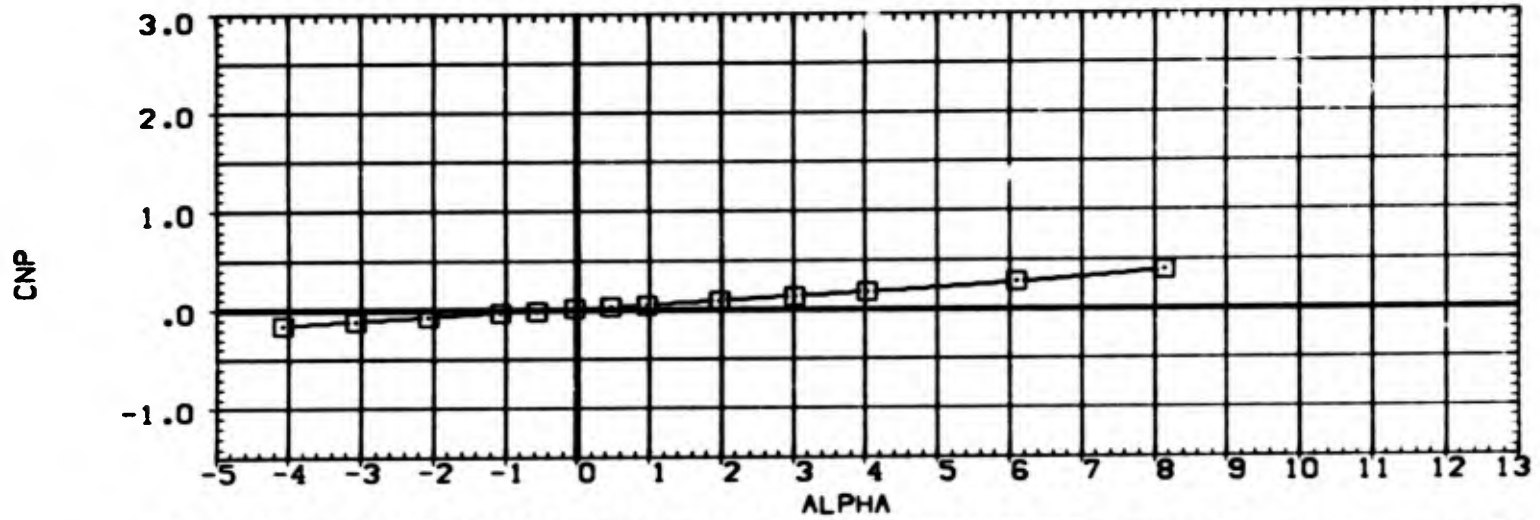


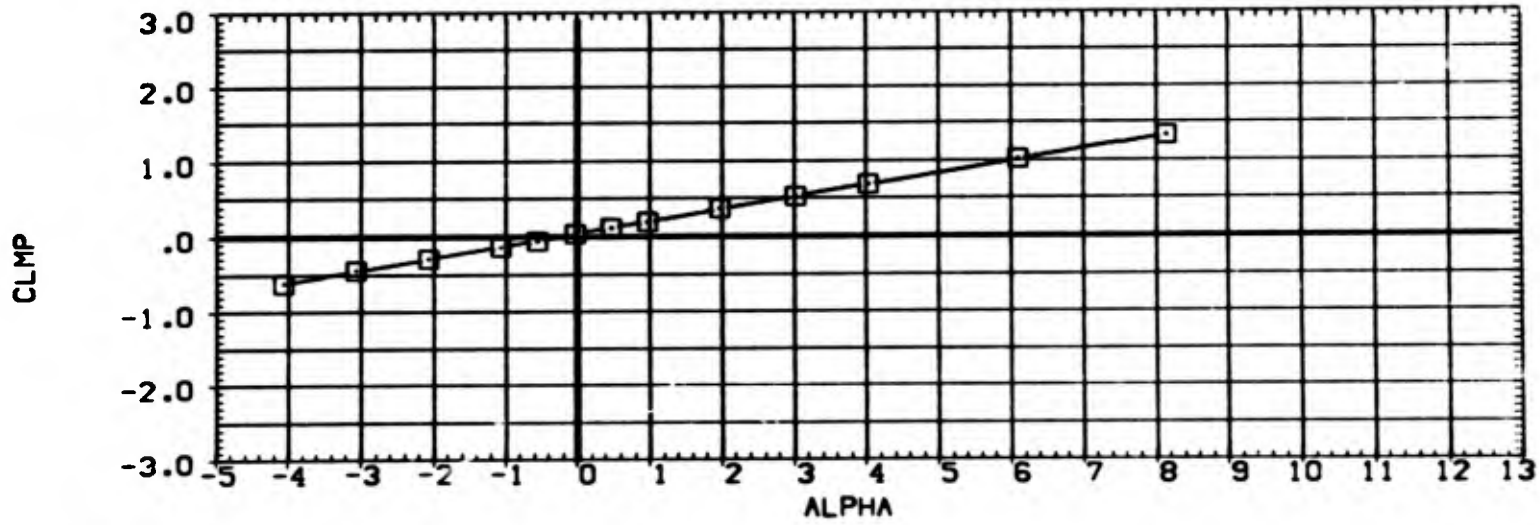
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MACH = .40

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[DUE147]	□	DATA NOT AVAILABLE	.000	.000	.000	1.500
[DUE148]	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINI)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	





PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

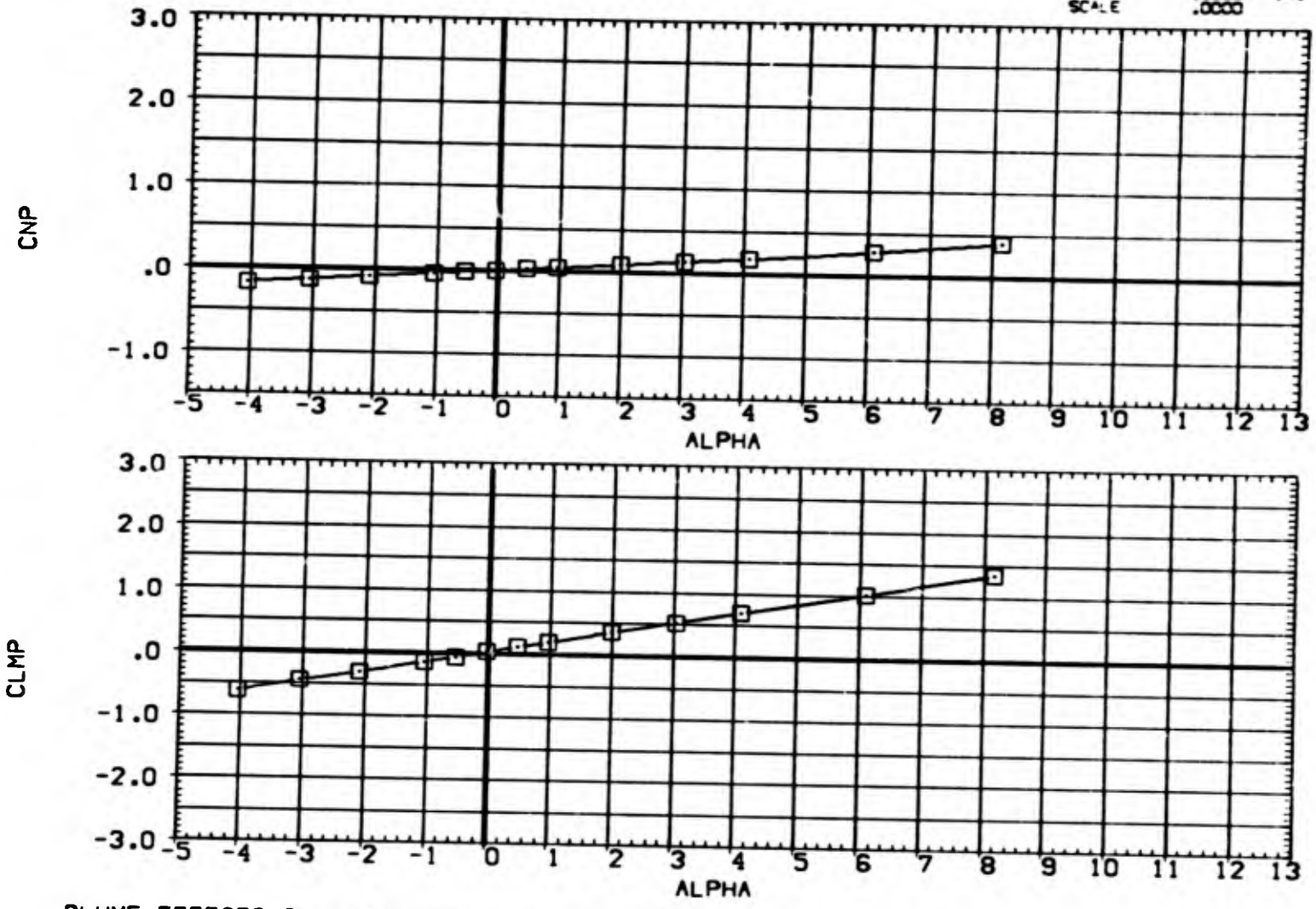
[DUE147] ○ DATA NOT AVAILABLE

[DUE148] □ CALSPAN THRUST EFFECTS STING MOUNTED NW (BINI)

PHICND	PHITAL	TALPOS	CRT
.000	.000	.000	1.500
.000	.000	.000	.000

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

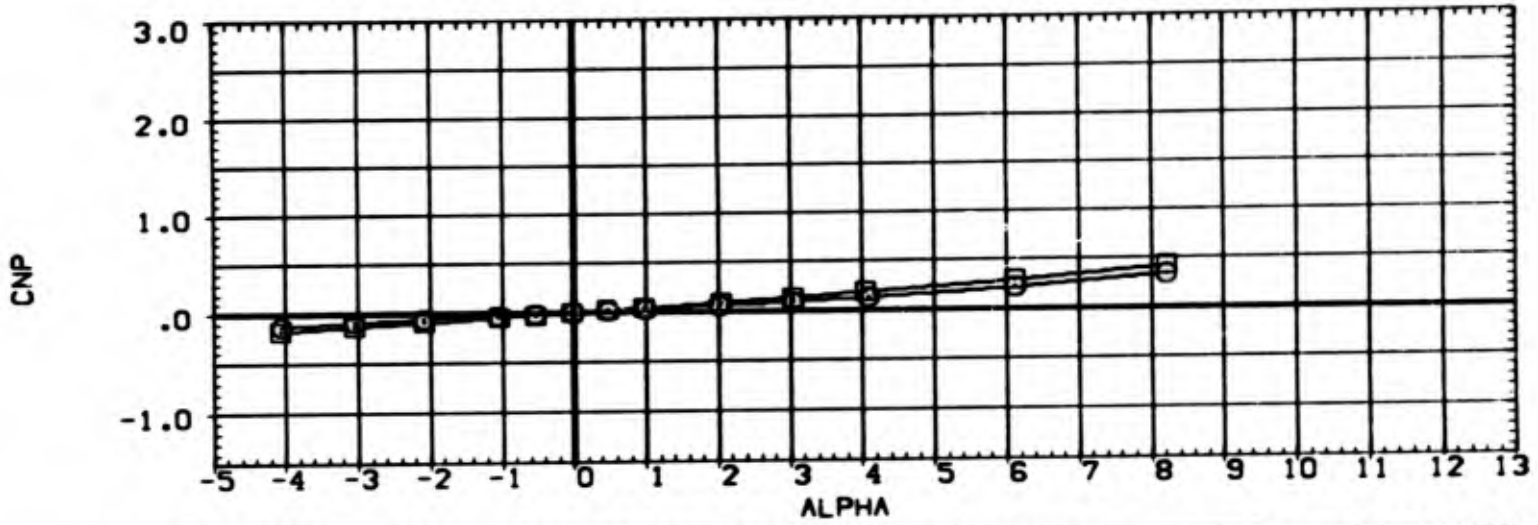


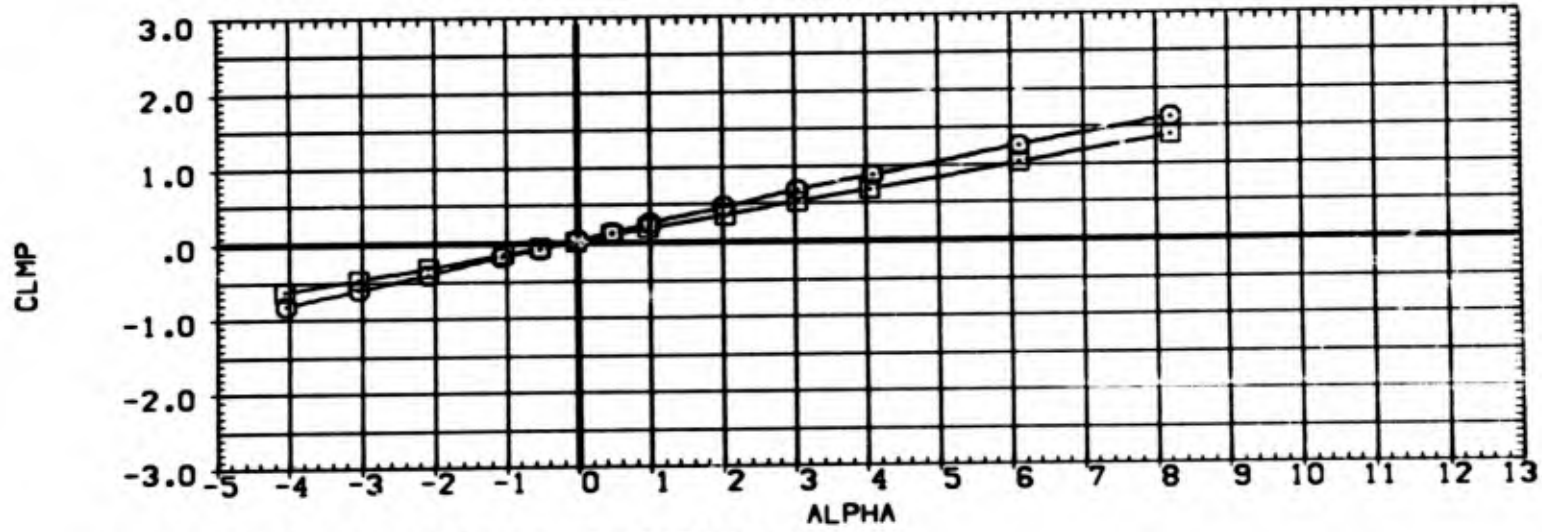
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DJE147) ○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	1.500
(DJE148) □	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



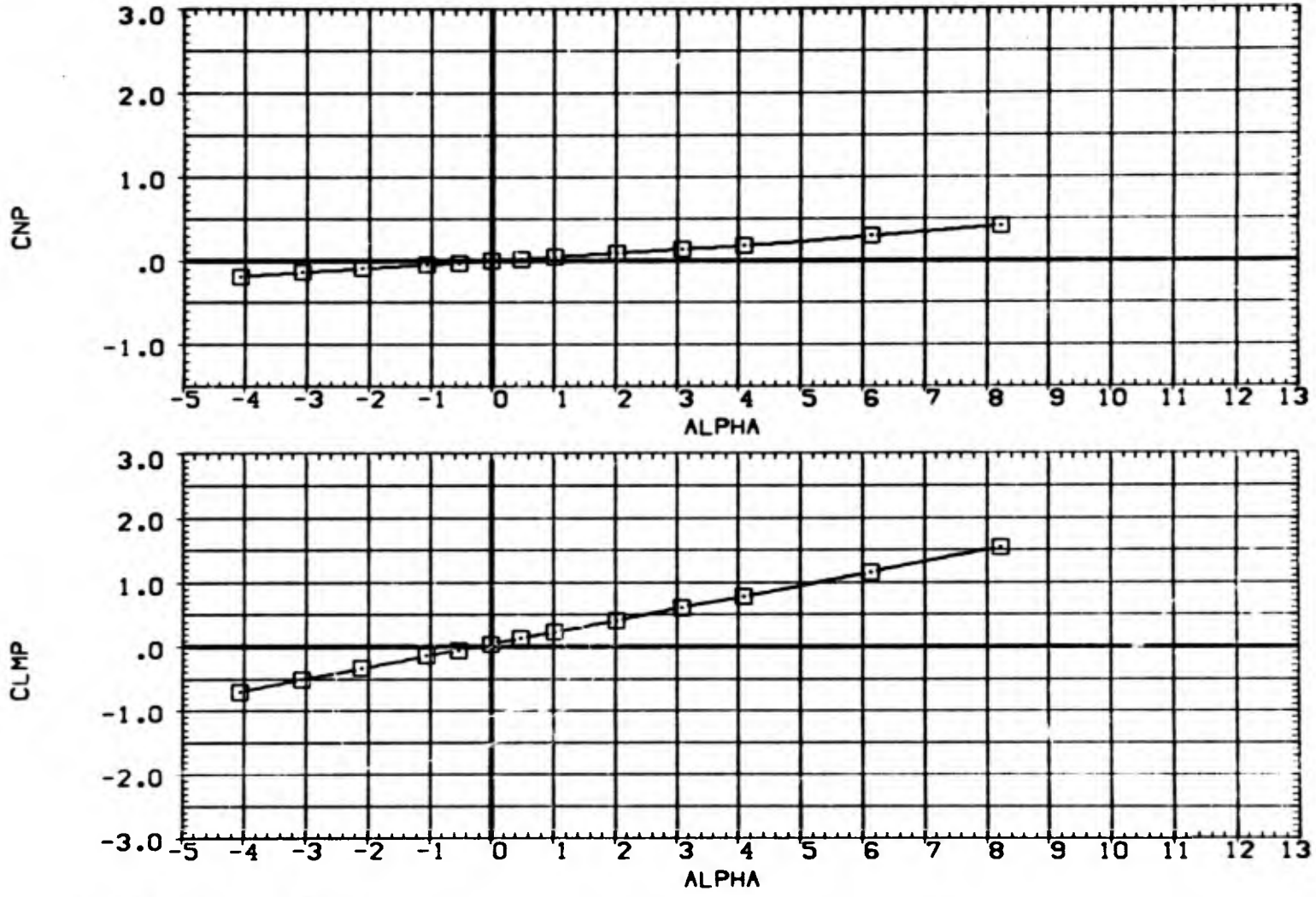


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE147)	○	DATA NOT AVAILABLE	.000	.000	.000	1.500
(DUE148)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	37.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



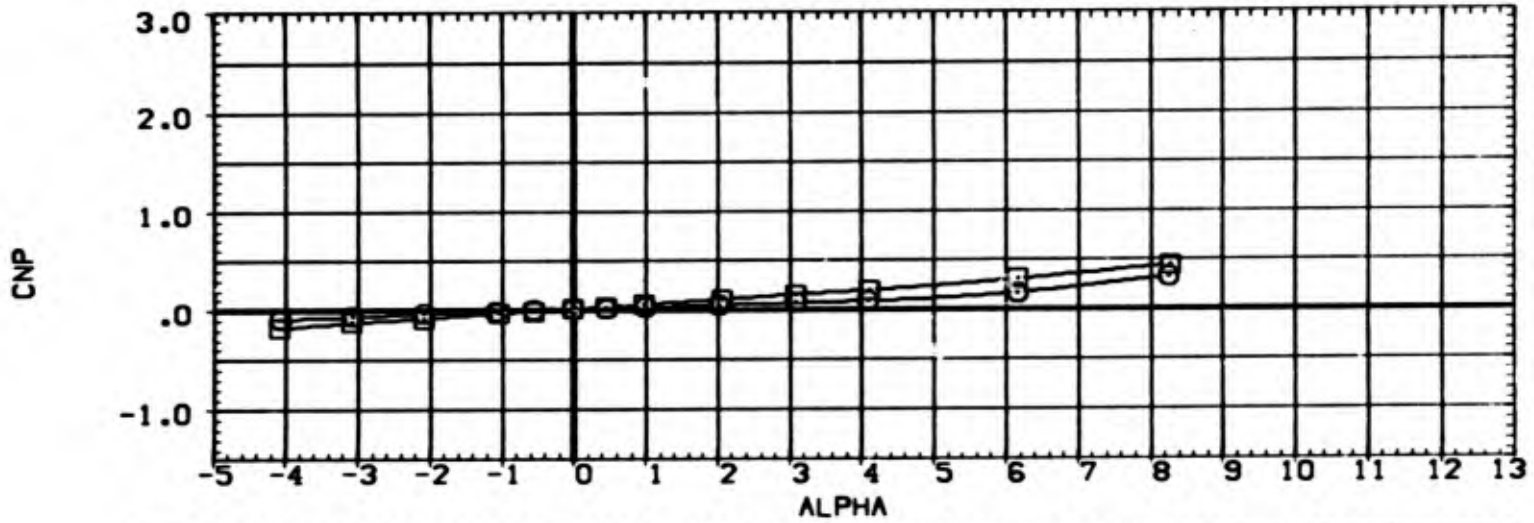
PLUME EFFECTS ON STABILITY CHARACTERISTICS

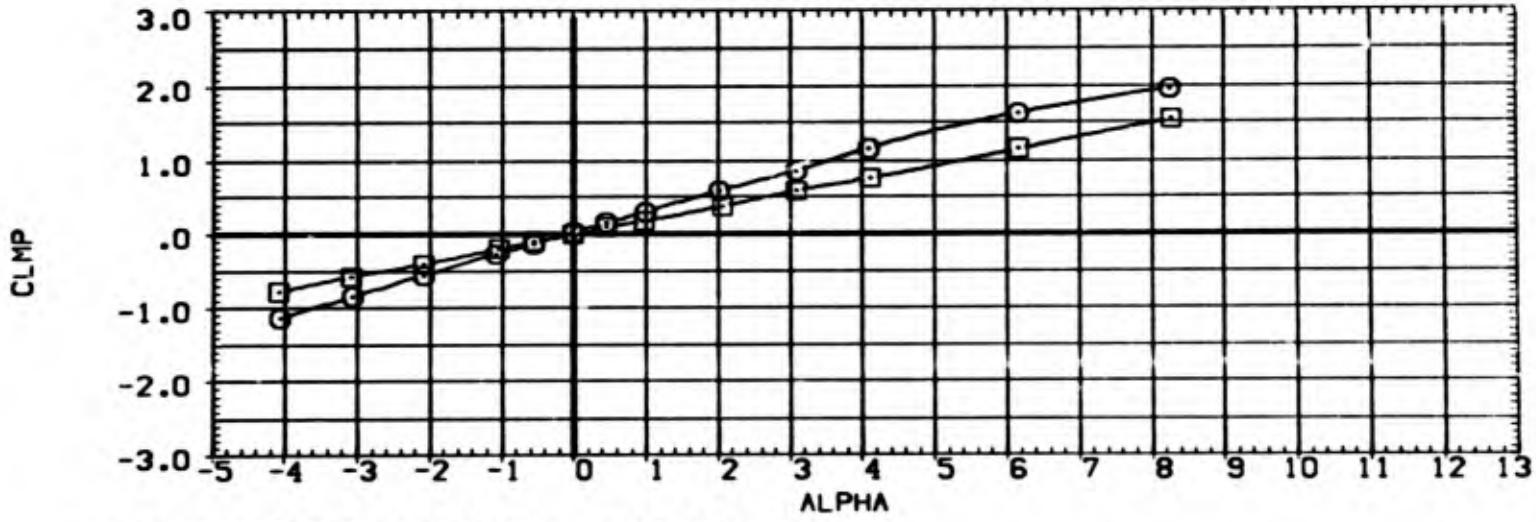
(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DJE147)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	1.500
(DJE148)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	.000

REFERENCE INFORMATION

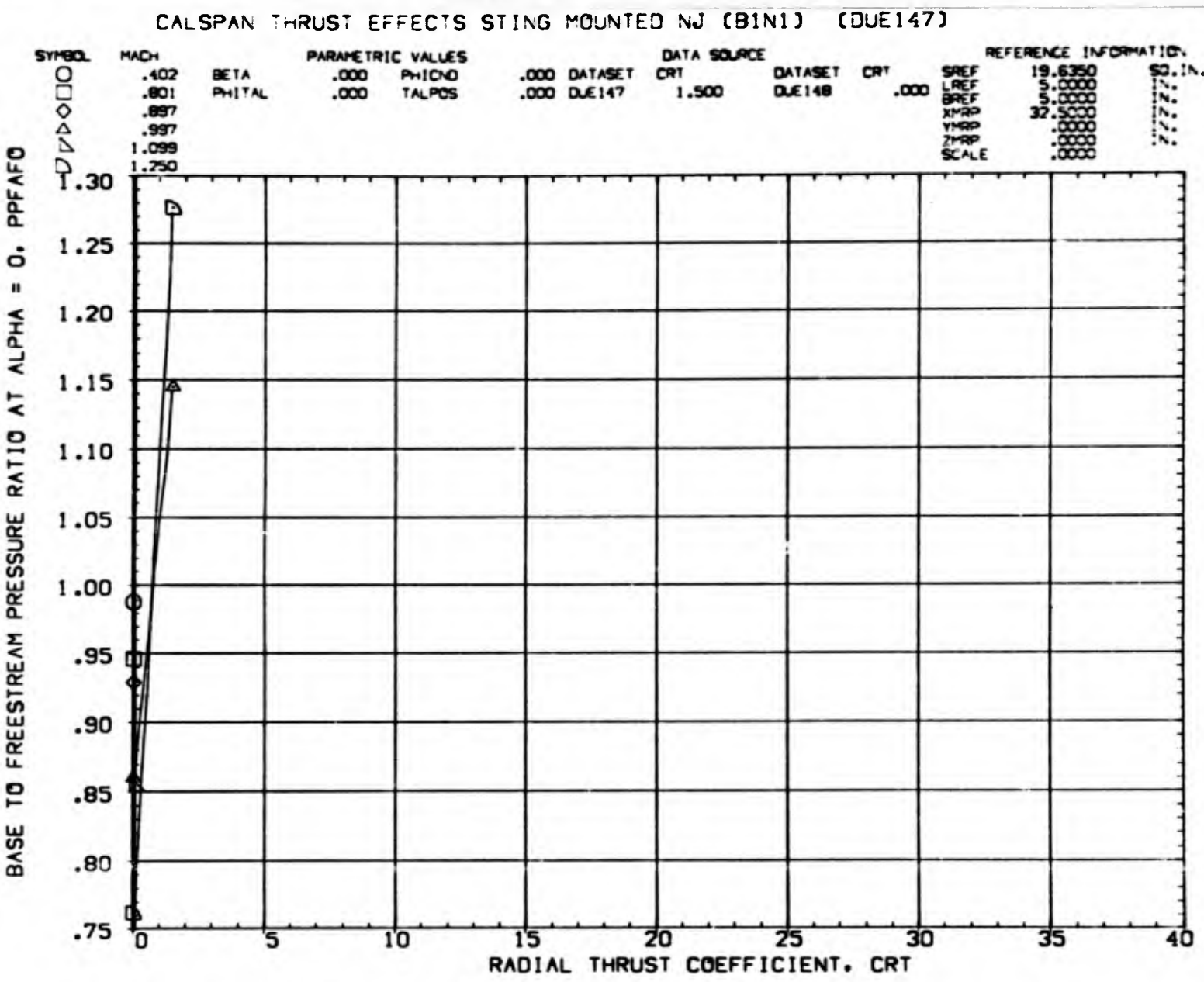
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000





PLUME EFFECTS ON STABILITY CHARACTERISTICS

(F)MACH = 1.25

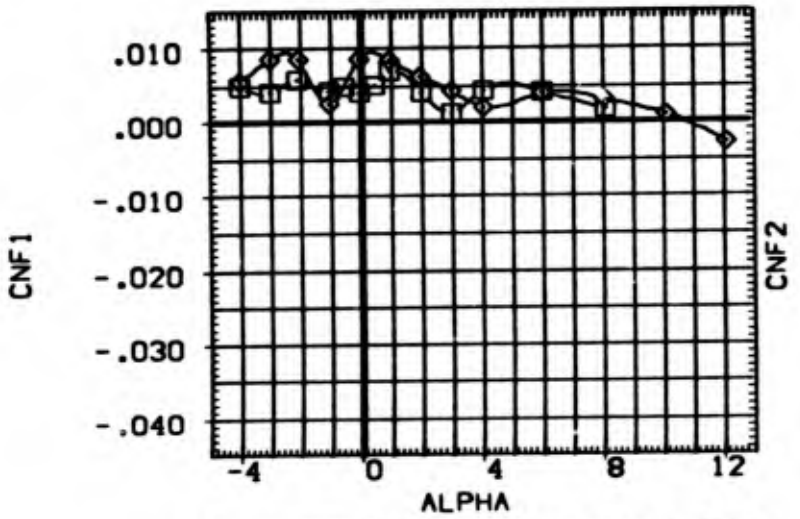


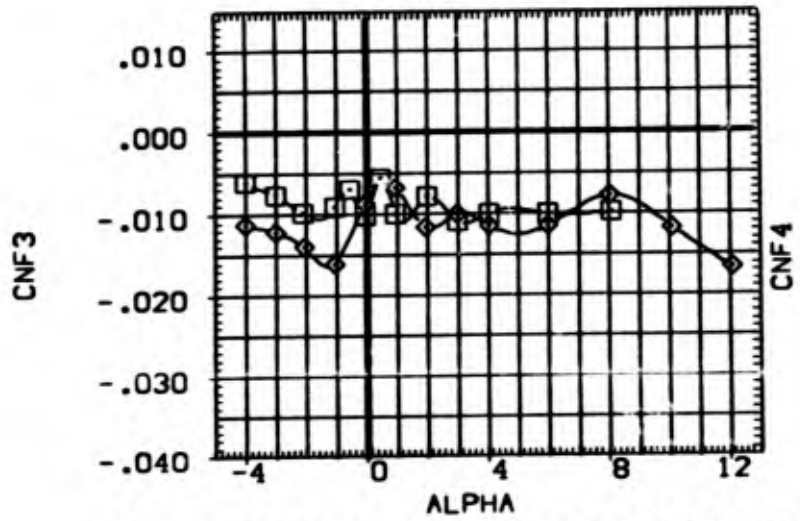
PLUME EFFECTS ON BASE PRESSURE

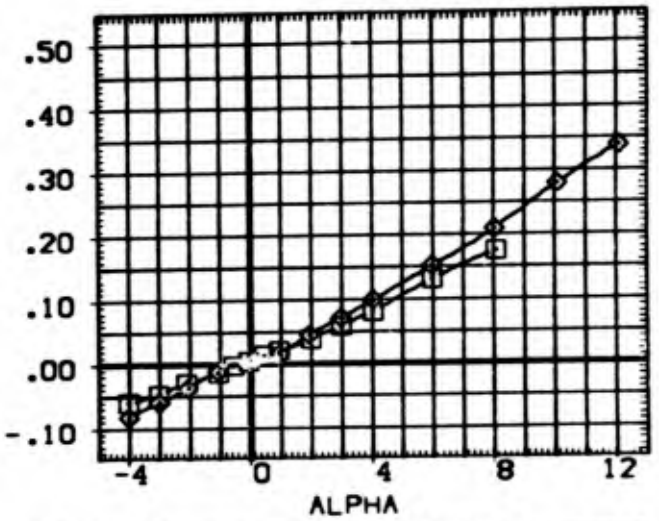
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BJE149)	○	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(BJE150)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(BJE151)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	4.200
(BJE152)	△	DATA NOT AVAILABLE	.000	.000	1.000	2.500

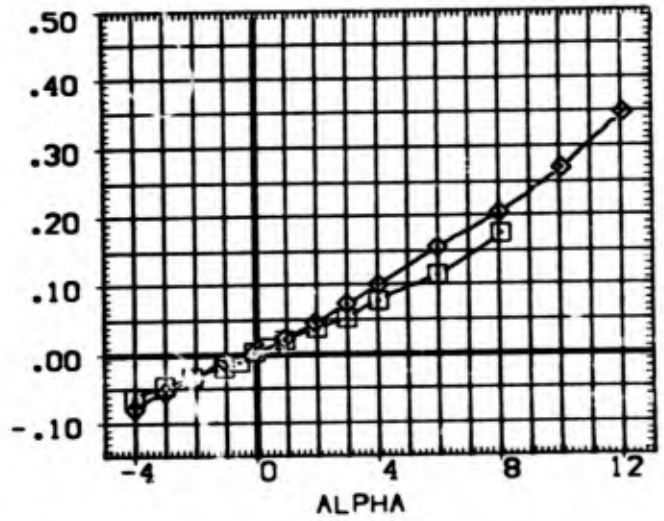
REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	







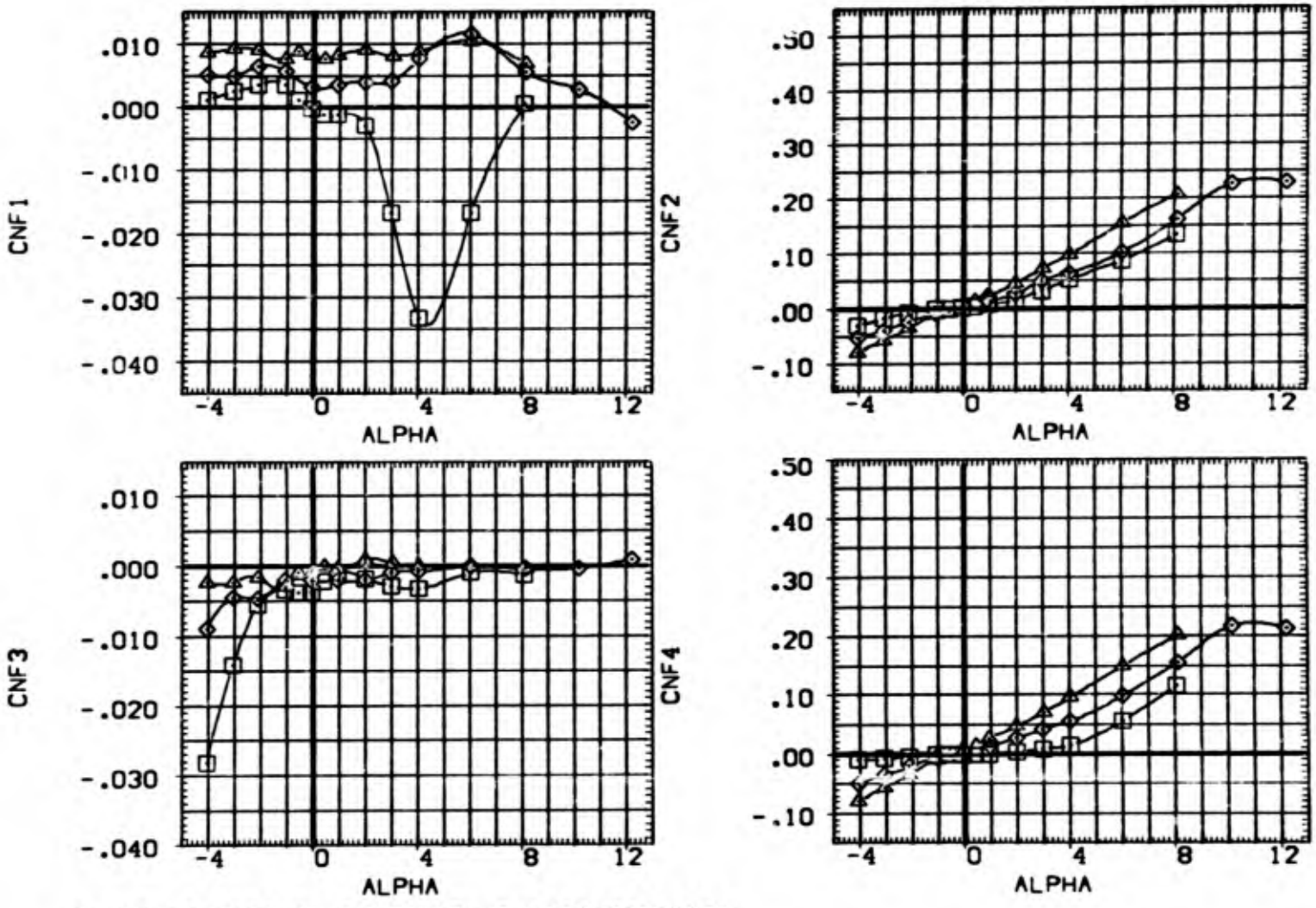


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MAC-- = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(BLE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(BLE151)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	4.200
(BLE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



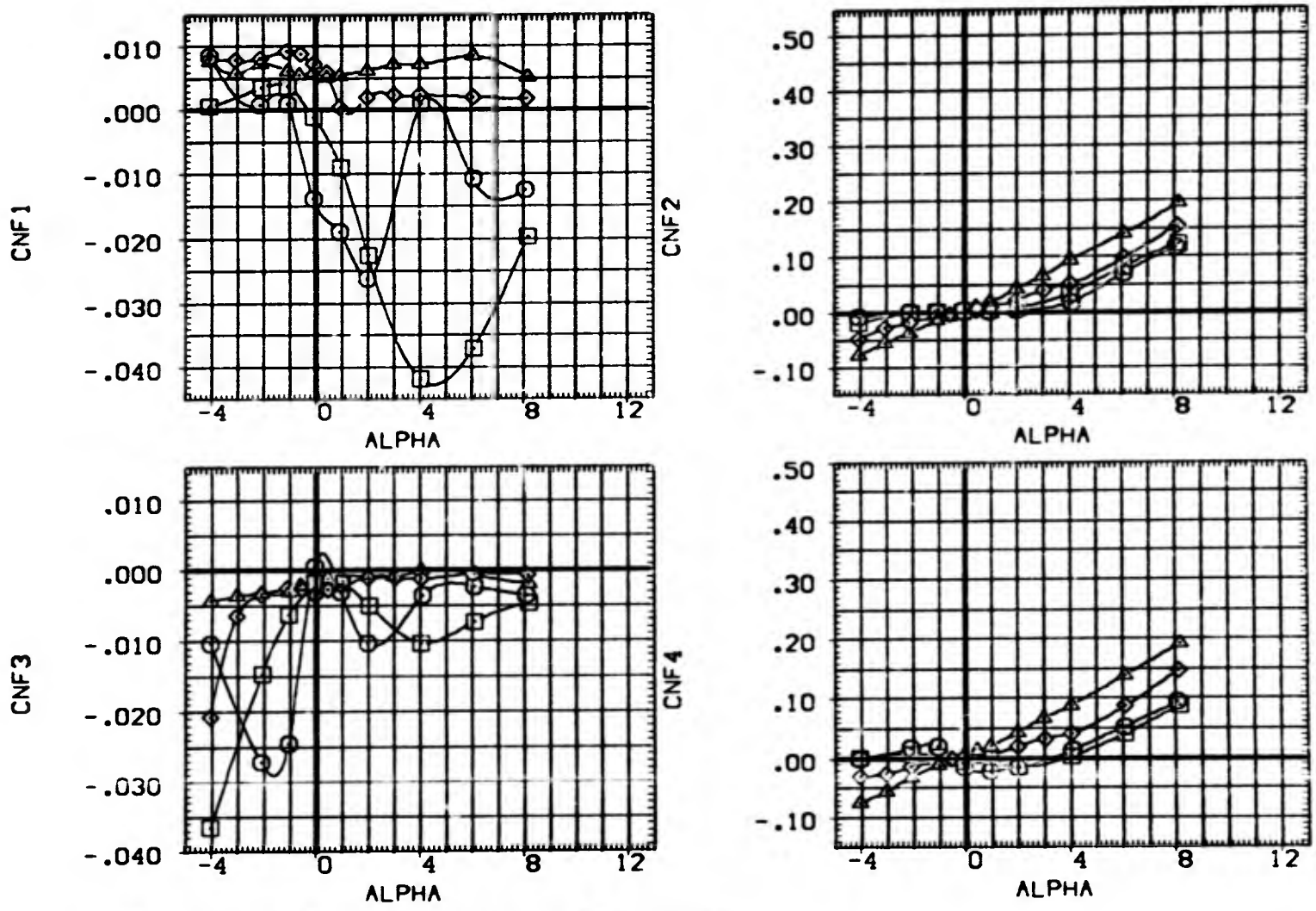
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BUE149)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	12.000
(BUE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	7.200
(BUE151)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	4.200
(BUE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

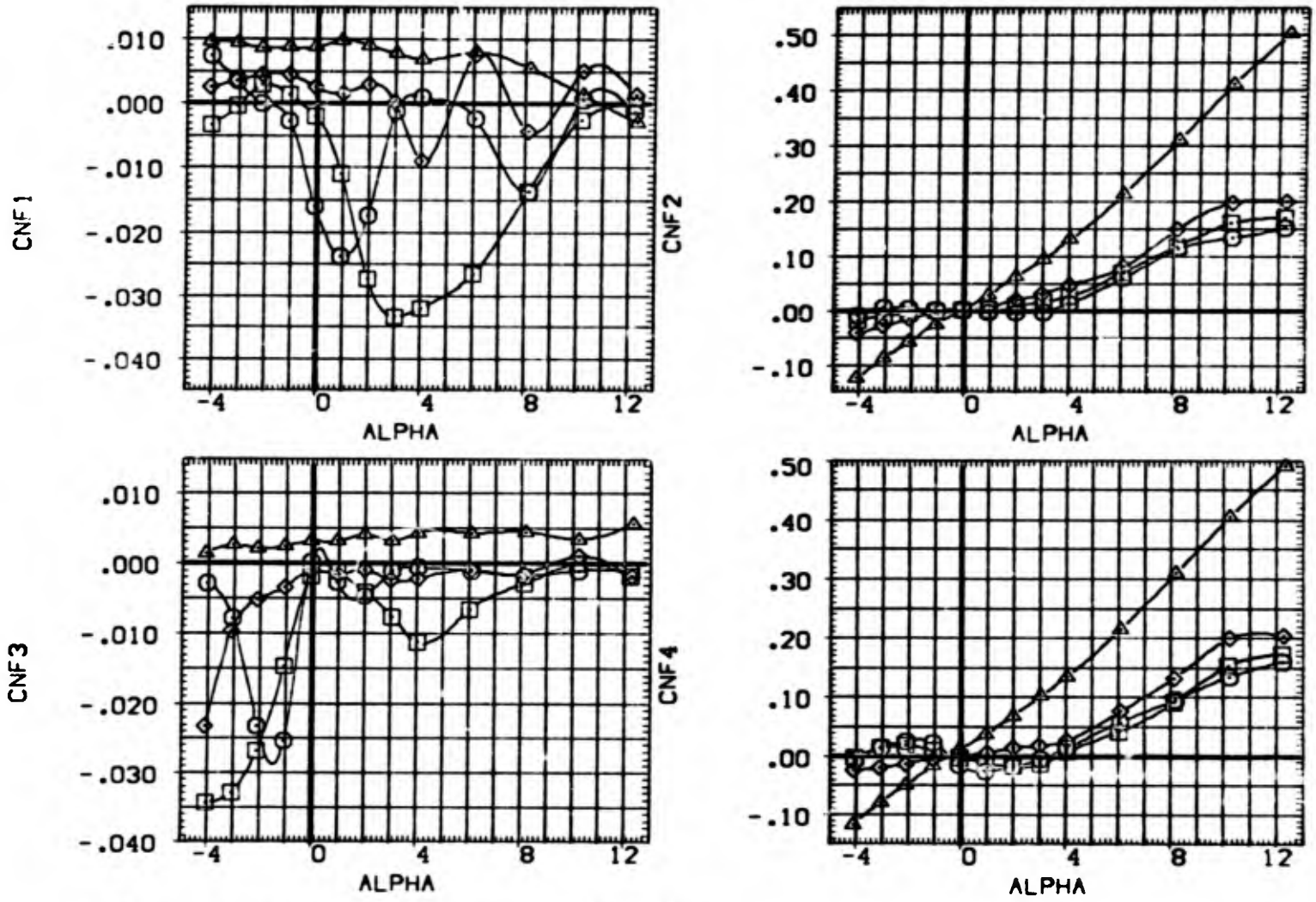


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE149)	○	CALSPAN THRUST EFFECTS STING MOUNTED N[illegible] (BINIT2)	.000	.000	1.000	12.000
(BLE150)	□	CALSPAN THRUST EFFECTS STING MOUNTED N[illegible] (BINIT2)	.000	.000	1.000	7.200
(BLE151)	◇	CALSPAN THRUST EFFECTS STING MOUNTED N[illegible] (BINIT2)	.000	.000	1.000	4.200
(BLE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED [illegible] (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



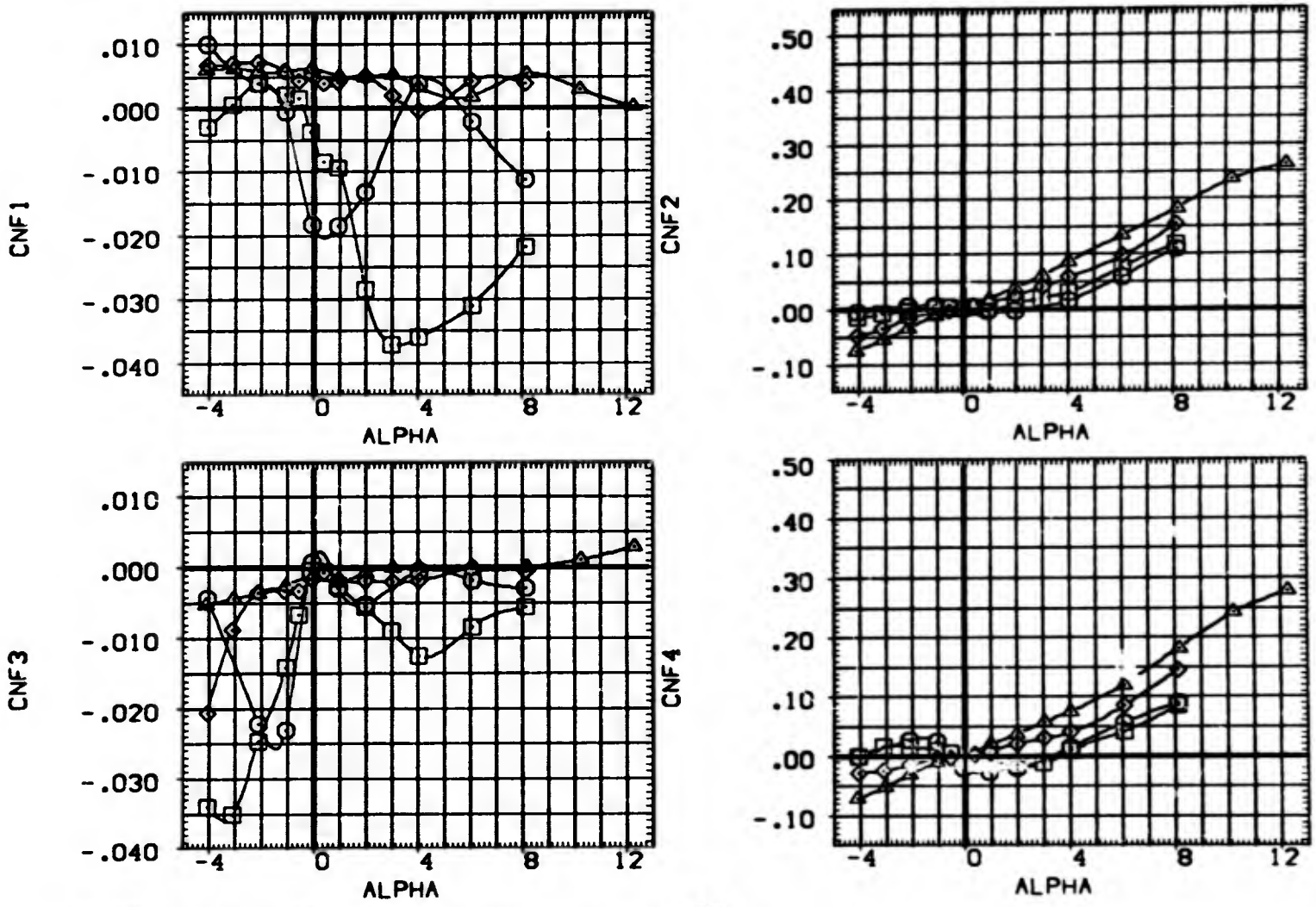
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(D)MAC- = .95

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE149)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	12.000
(BLE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(BLE151)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	4.200
(BLE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

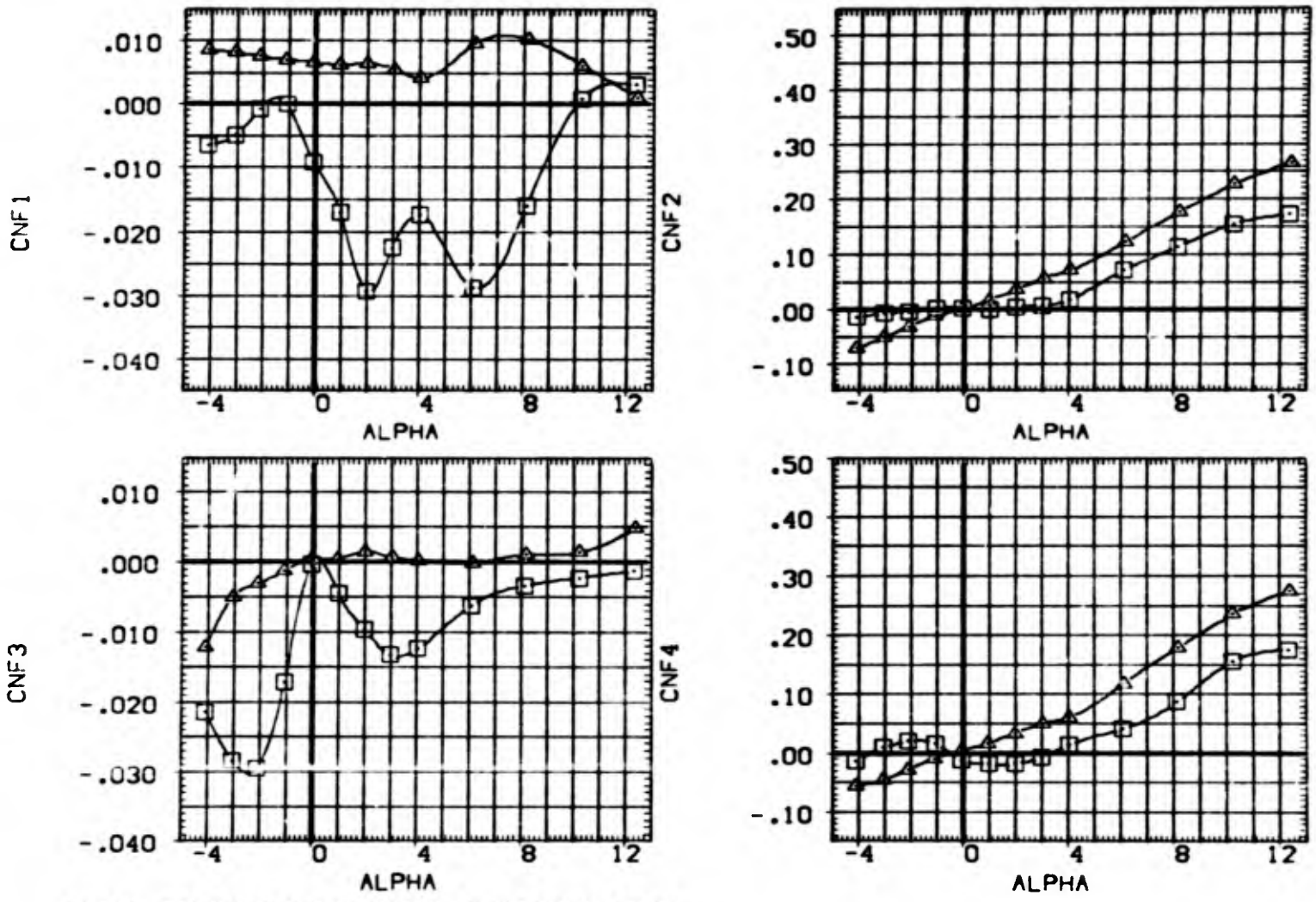


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(E)MAC = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BJE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(BJE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT2)	.000	.000	1.000	7.200
(BJE151)	⋈	DATA NOT AVAILABLE	.000	.000	1.000	4.200
(BJE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



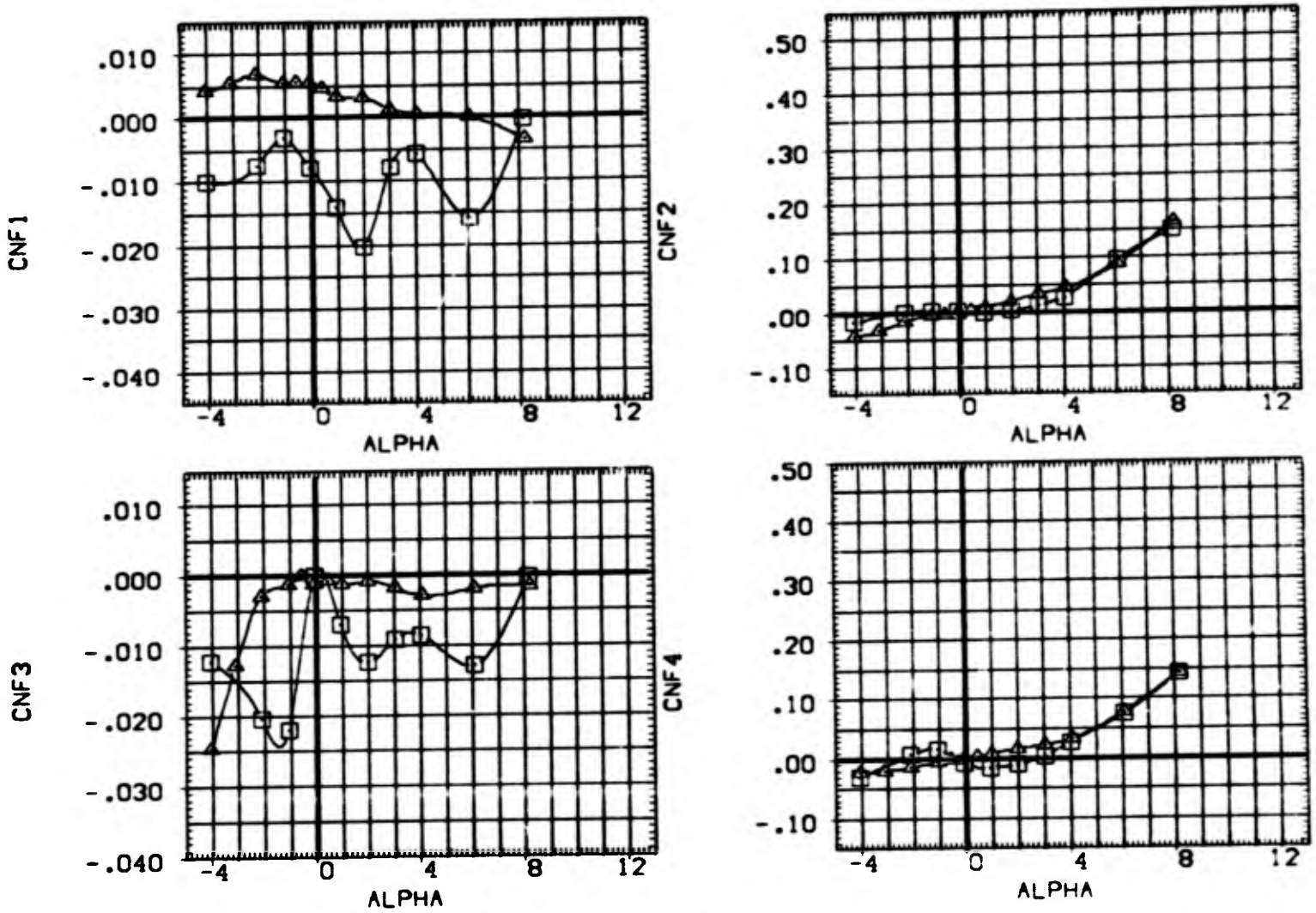
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(F)MACH = .05

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(BUE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
(BUE151)	⊠	DATA NOT AVAILABLE	.000	.000	1.000	4.200
(BUE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

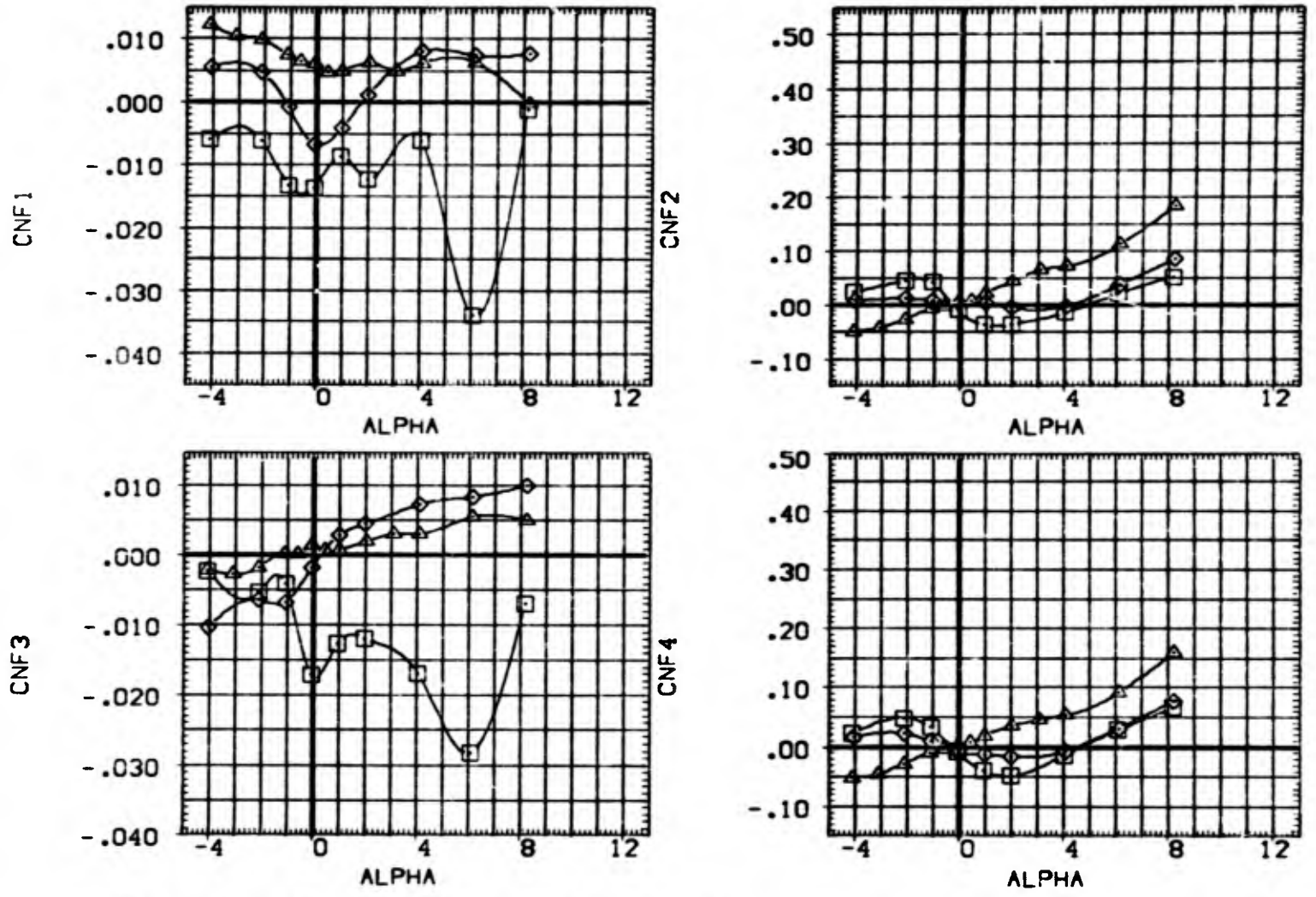


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(G)MAC = 1.09

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BLE149)	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(BLE150)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
(BLE151)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200
(BLE152)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



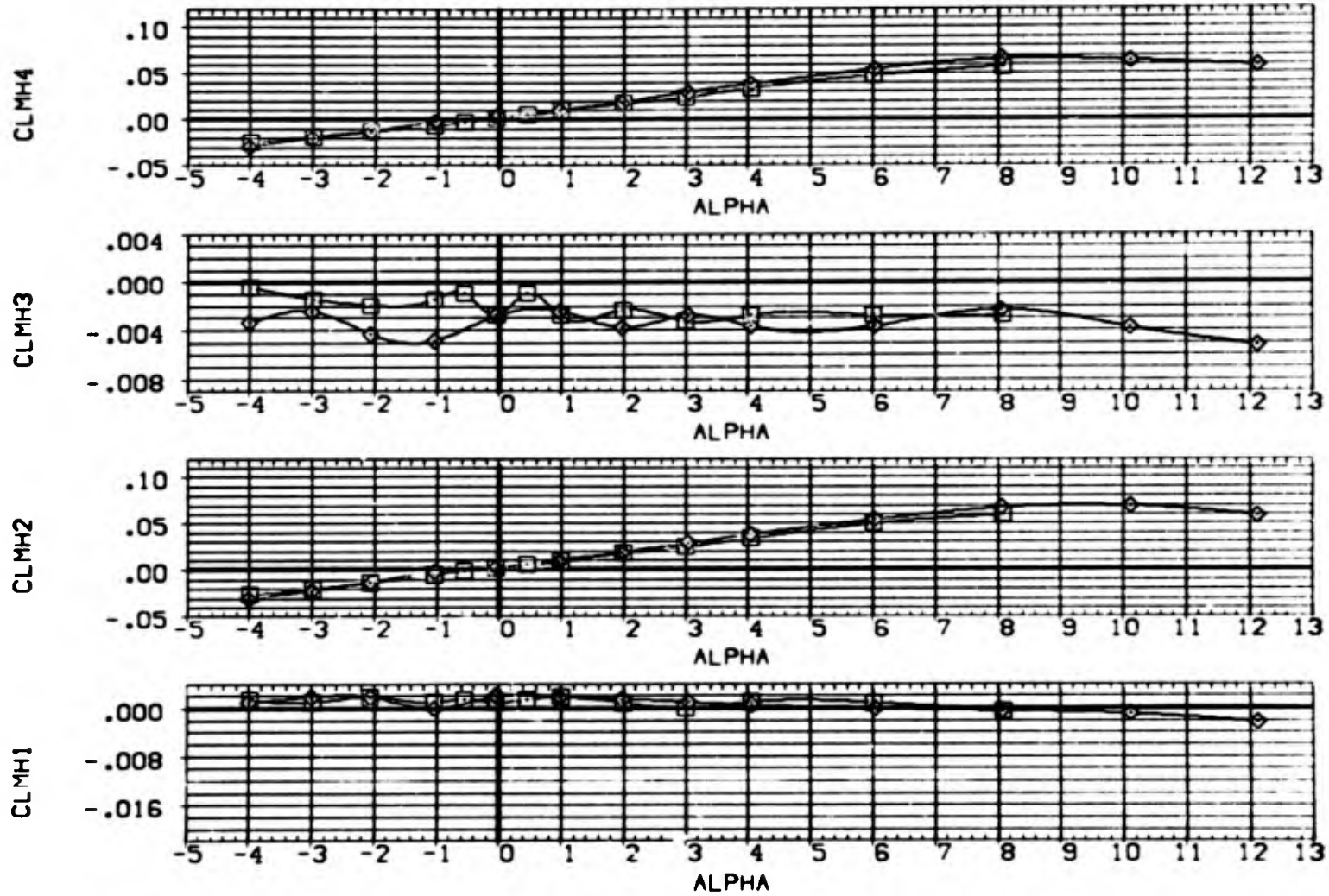
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(H)MAC = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(CUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(CUE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
(CUE151)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200
(CUE152)	△	DATA NOT AVAILABLE	.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

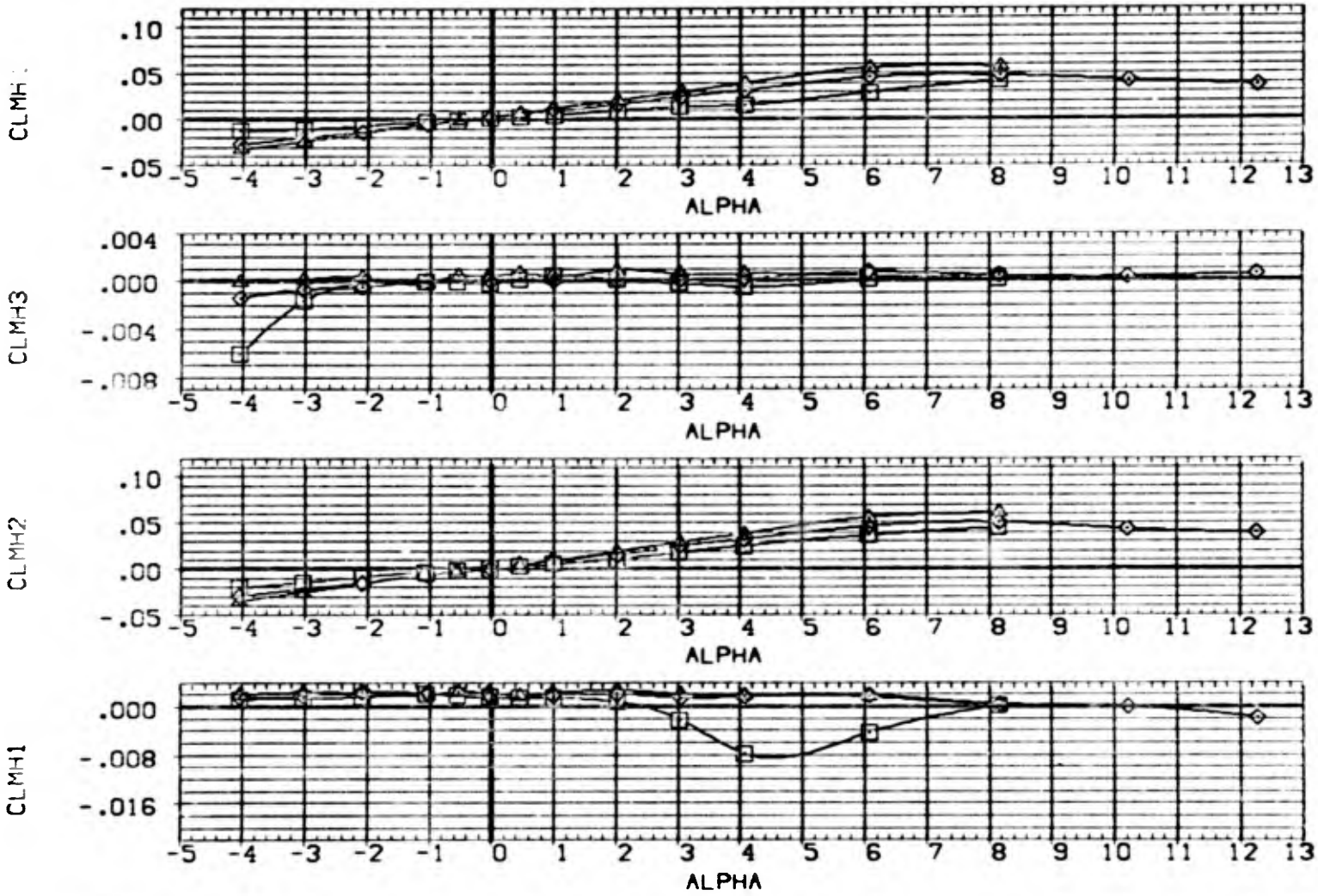


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[02E149]	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
[02E150]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
[02E151]	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200
[02E152]	▽	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



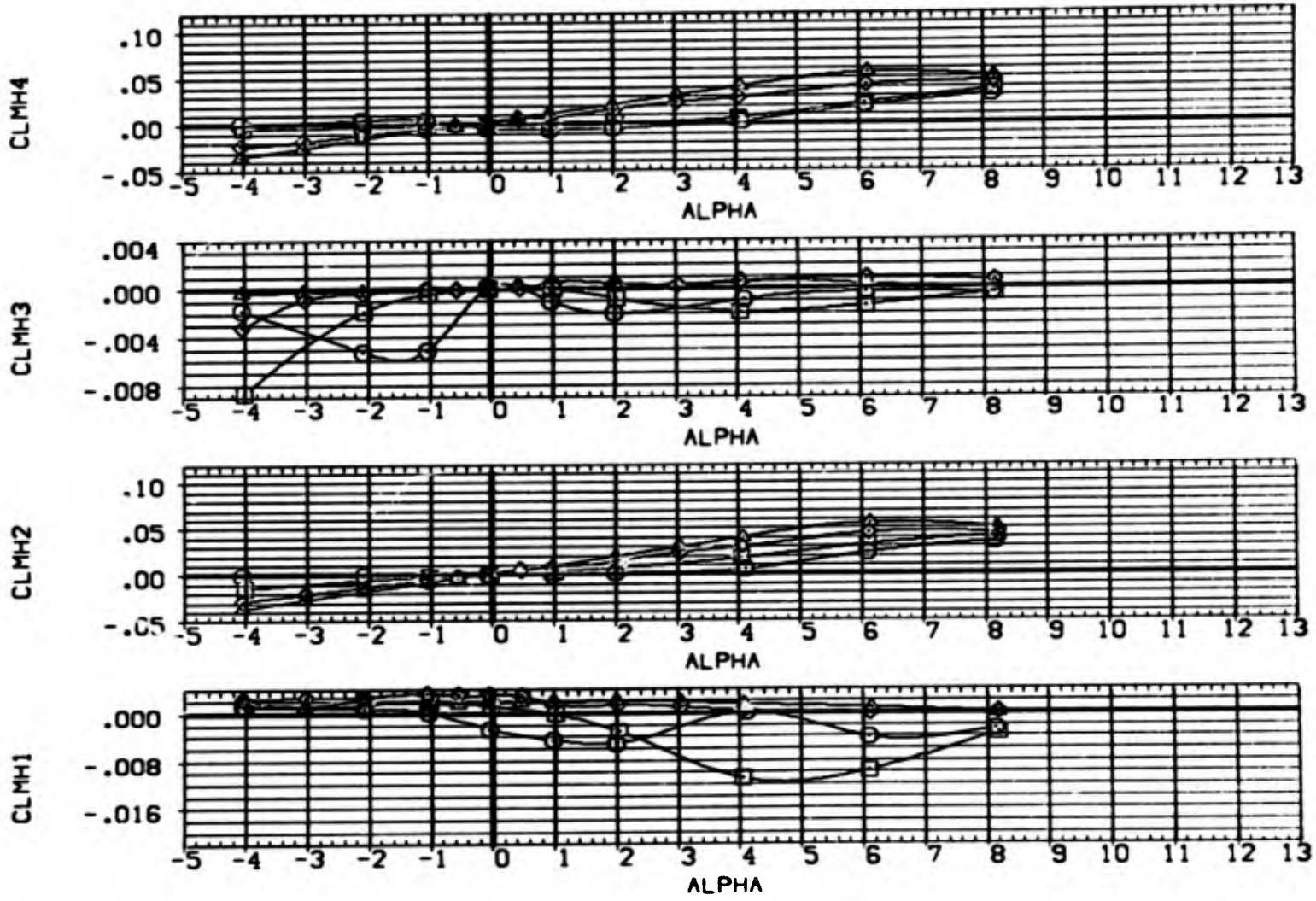
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MAC = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE149)	□	CALSPAN THRUST EFFFCTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	12.000
(CUE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(CUE151)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	4.200
(CUE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

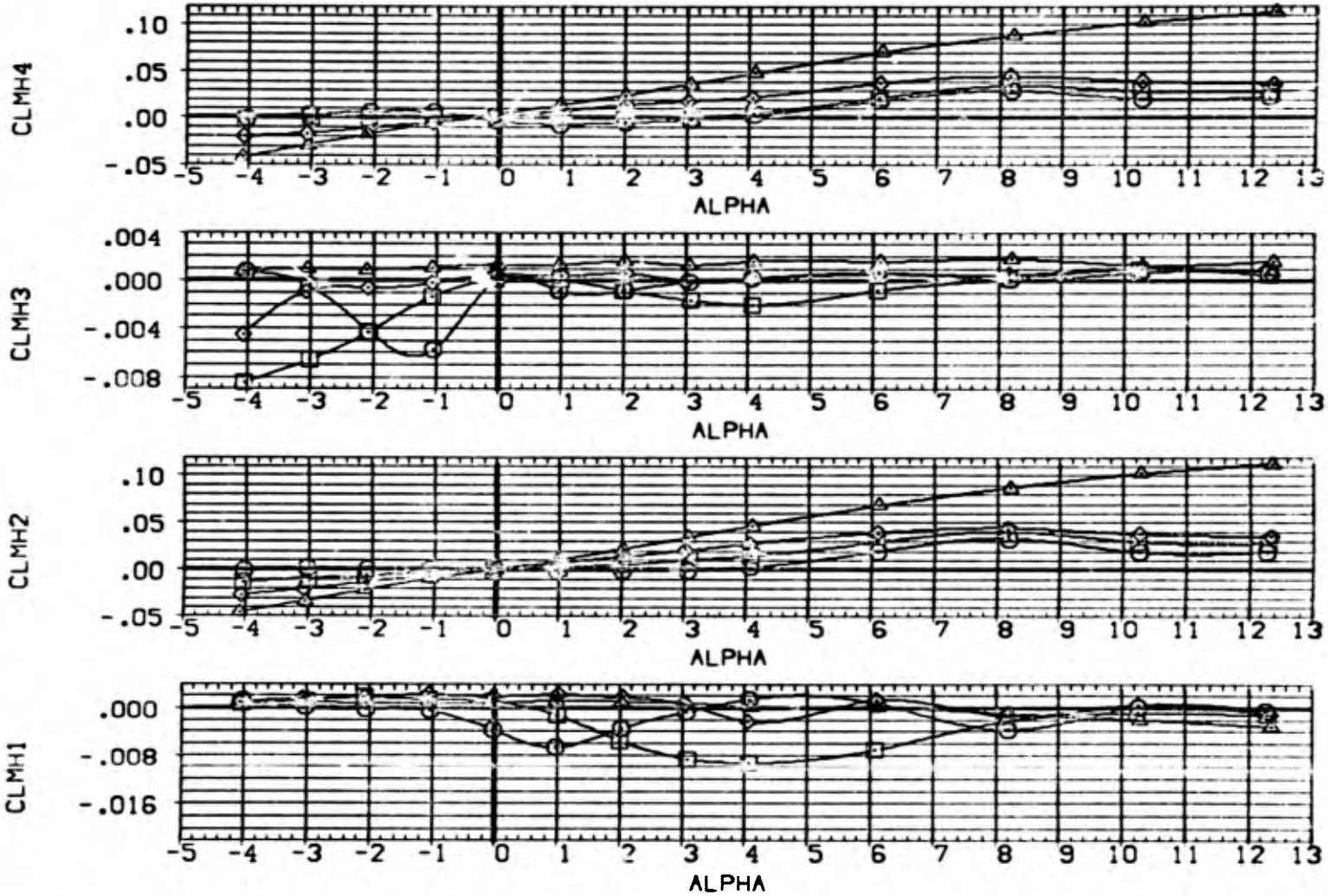


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MAC- = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[CUE149]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW [BINIT2]	.000	.000	1.000	12.000
[CUE150]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW [BINIT2]	.000	.000	1.000	7.200
[CUE151]	△	CALSPAN THRUST EFFECTS STING MOUNTED NW [BINIT2]	.000	.000	1.000	4.200
[CUE152]	▽	CALSPAN THRUST EFFECTS STING MOUNTED NW [BINIT2]	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

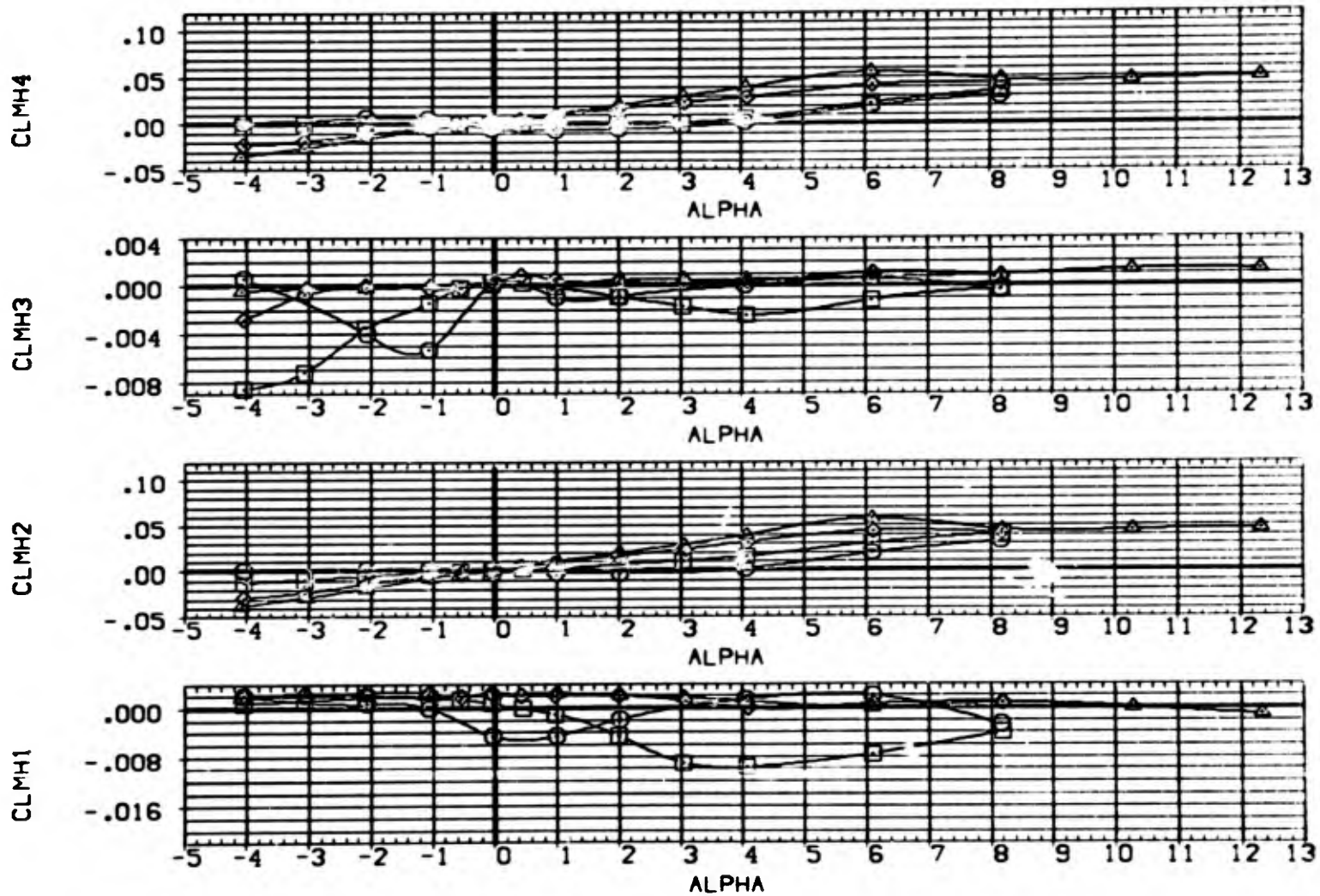


PLUME EFFECTS ON STABILITY CHARACTERISTICS

[D]MACH = .95

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(CUE149)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	12.000
(CUE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(CUE151)	⊗	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	4.200
(CUE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

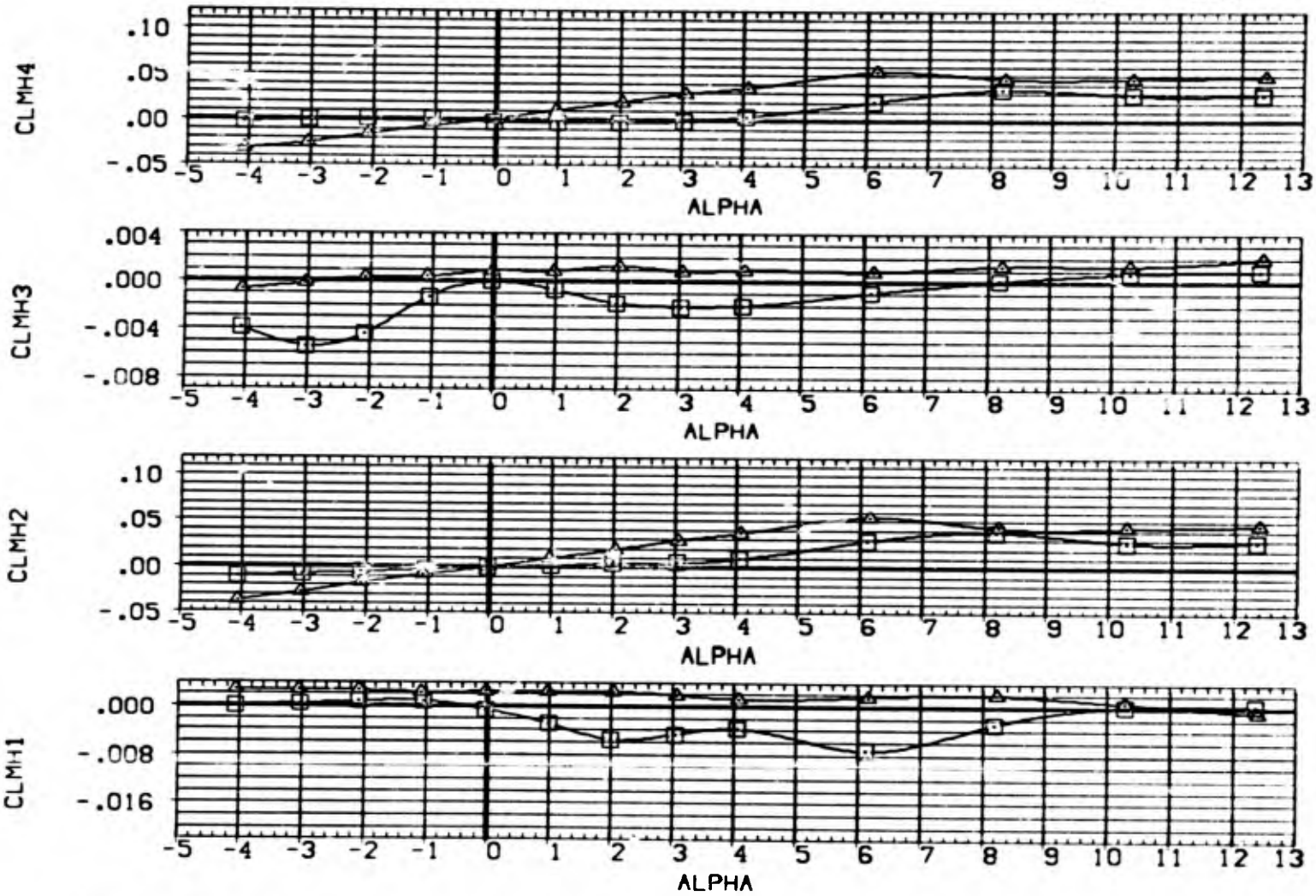


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(E)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(CUE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(CUE151)	⊠	DATA NOT AVAILABLE	.000	.000	1.000	4.200
(CUE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

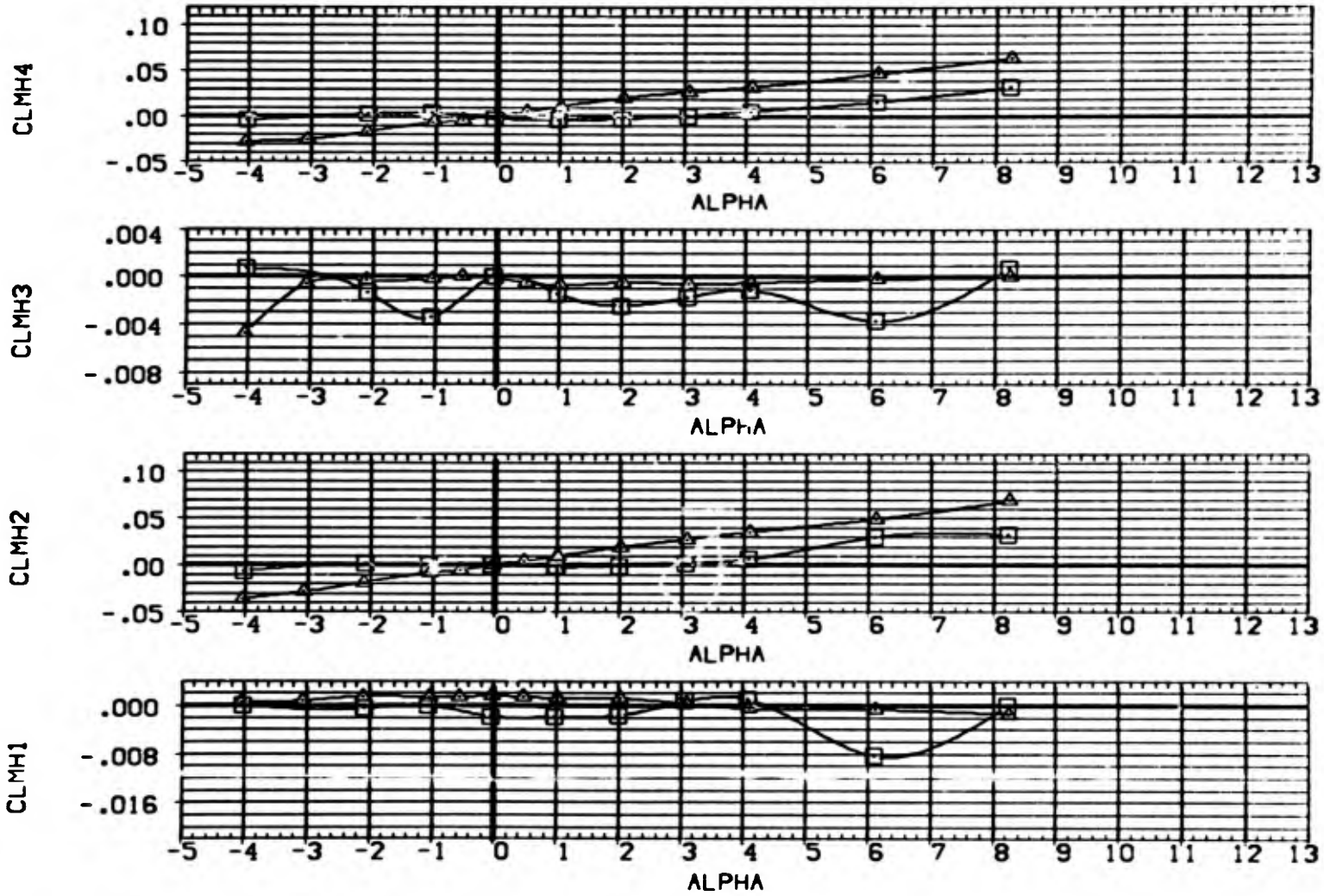


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(F)MAC.. = .05

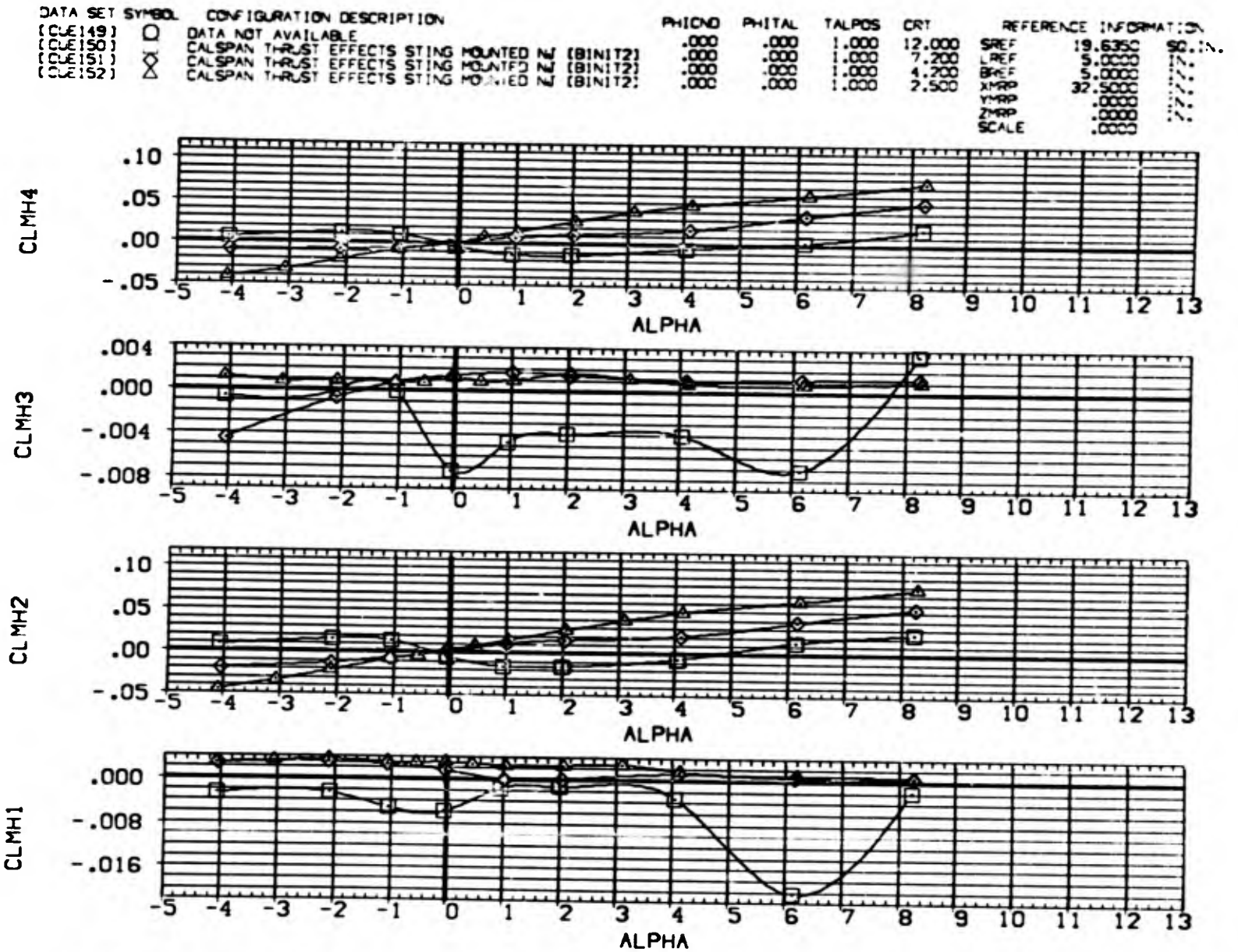
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[D6149]	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
[D6150]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINIT2]	.000	.000	1.000	7.200
[D6151]	⊠	DATA NOT AVAILABLE	.000	.000	1.000	4.200
[D6152]	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINIT2]	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



PLUME EFFECTS ON STABILITY CHARACTERISTICS

(G)MACH = 1.09

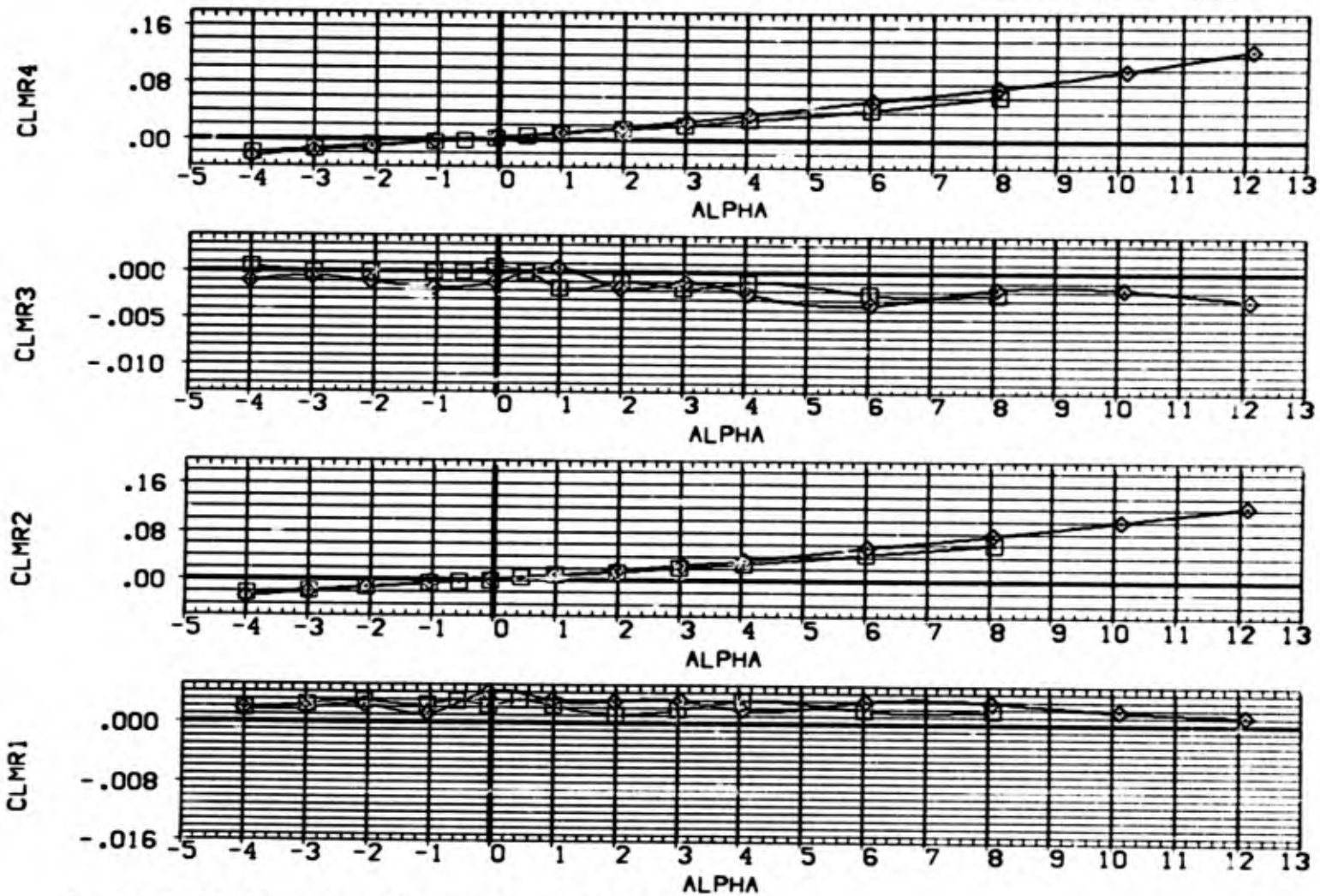


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(H)MAC- = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(CUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(CUE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(CUE151)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	4.200
(CUE152)	▽	DATA NOT AVAILABLE	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

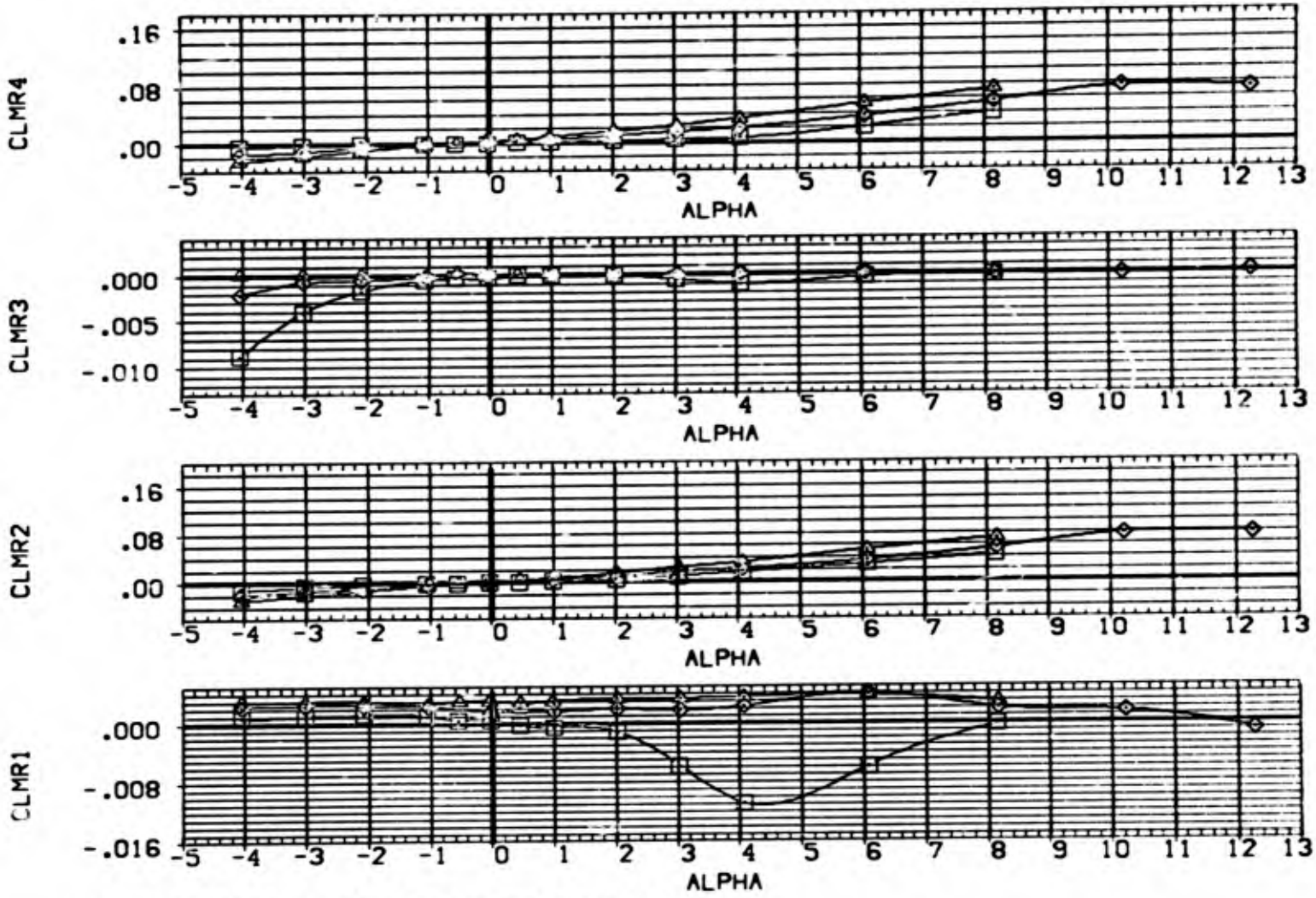


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MAC = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[CUE149]	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
[CUE150]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
[CUE151]	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200
[CUE152]	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

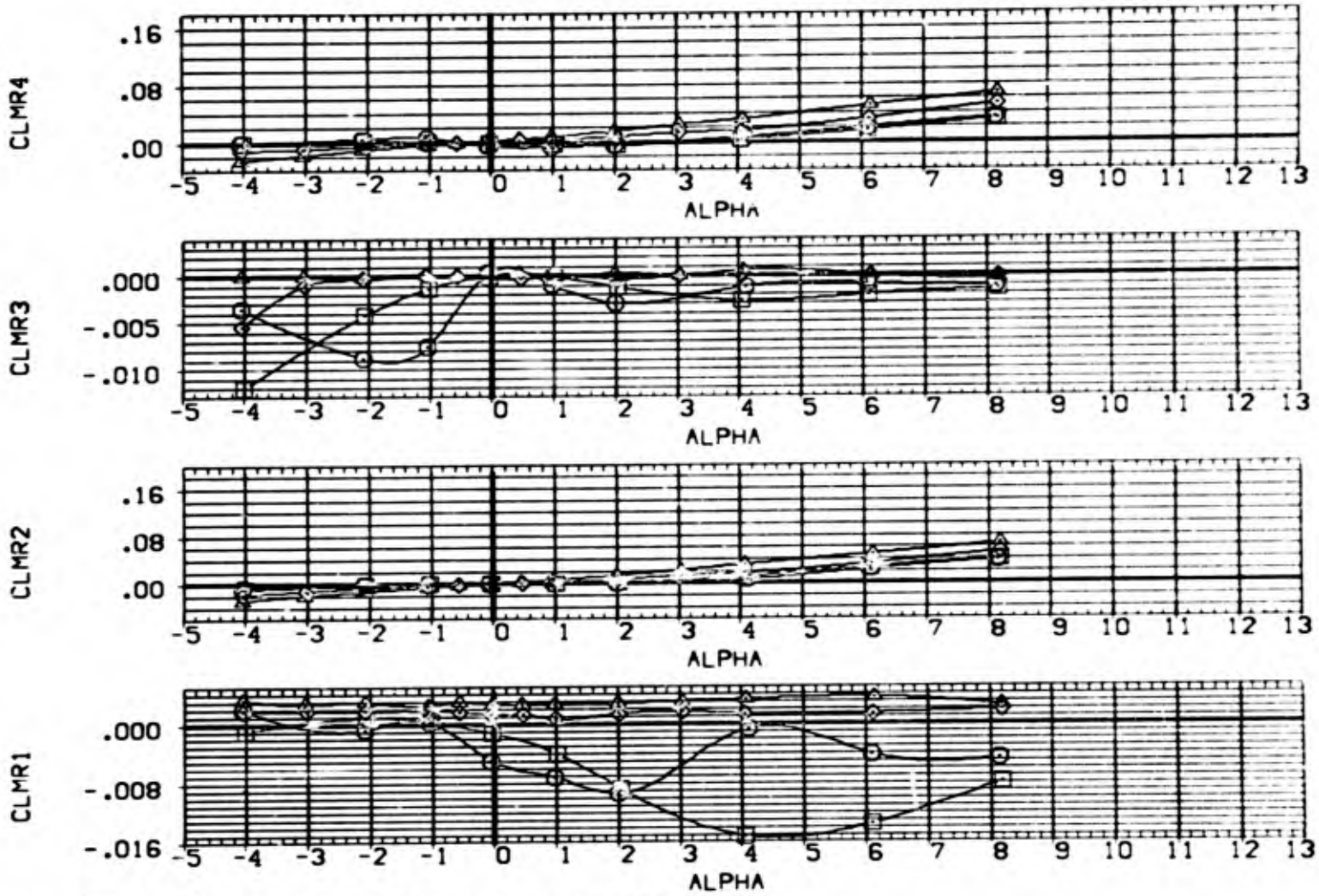


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[CLE149]	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT2]	.000	.000	1.000	12.000
[CLE150]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT2]	.000	.000	1.000	7.200
[CLE151]	△	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT2]	.000	.000	1.000	4.200
[CLE152]	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT2]	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

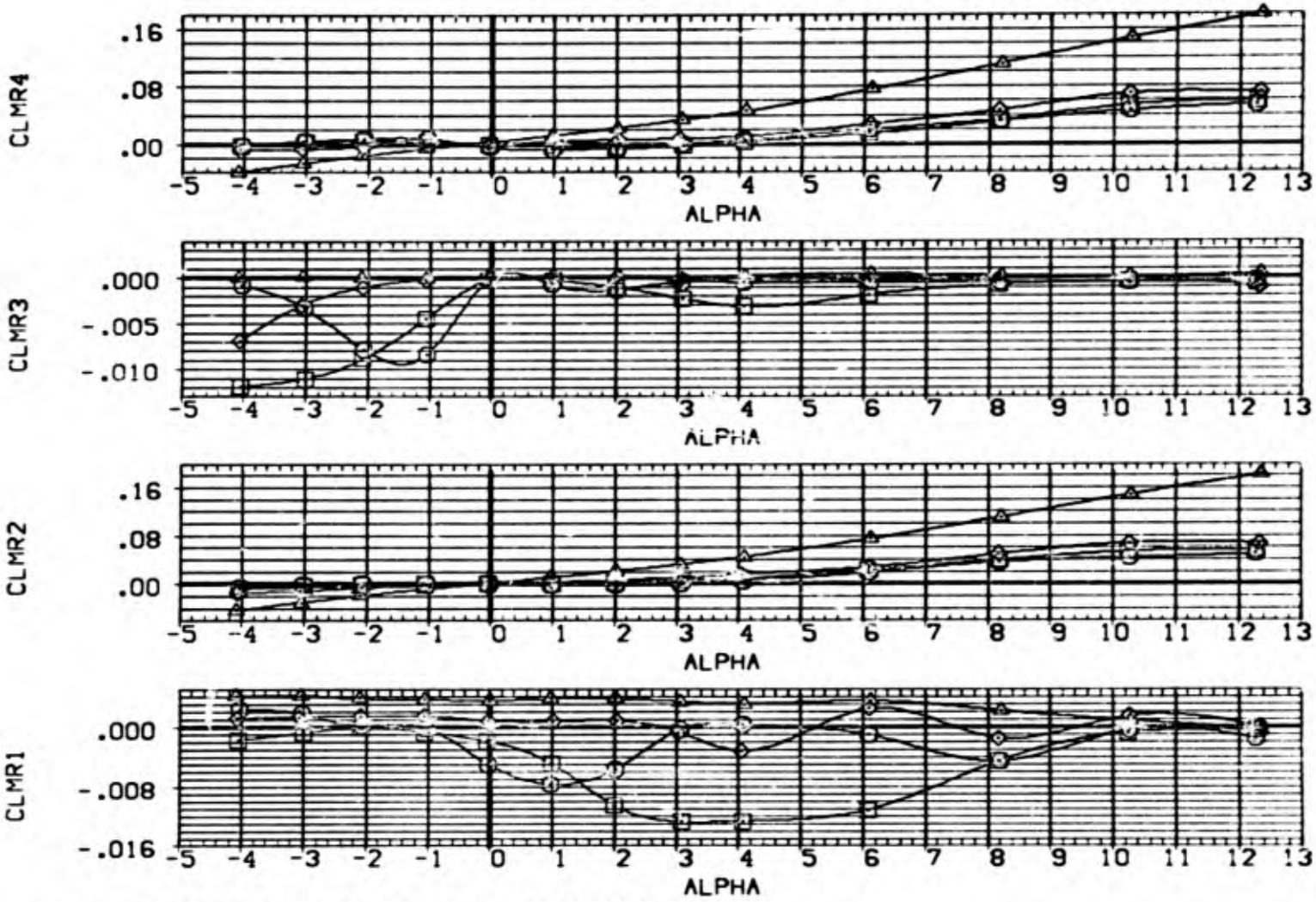


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MACH = .90

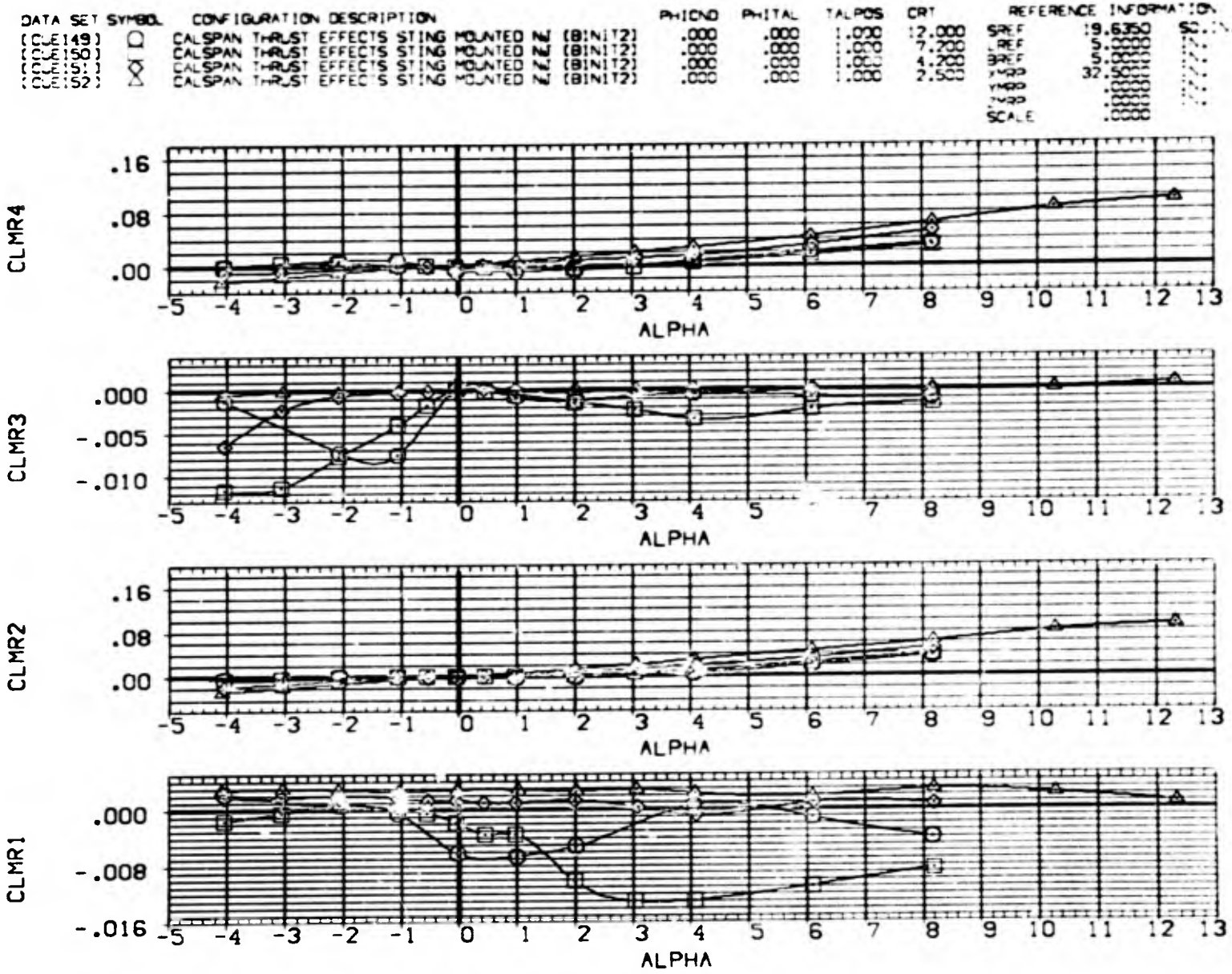
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(CUE149)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	12.000
(CUE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	7.200
(CUE151)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	4.200
(CUE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		SQ.IN.
SREF	19.6350	
LREF	5.0000	
BREF	5.0000	
XMRP	37.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



PLUME EFFECTS ON STABILITY CHARACTERISTICS

(D)MACH = .95



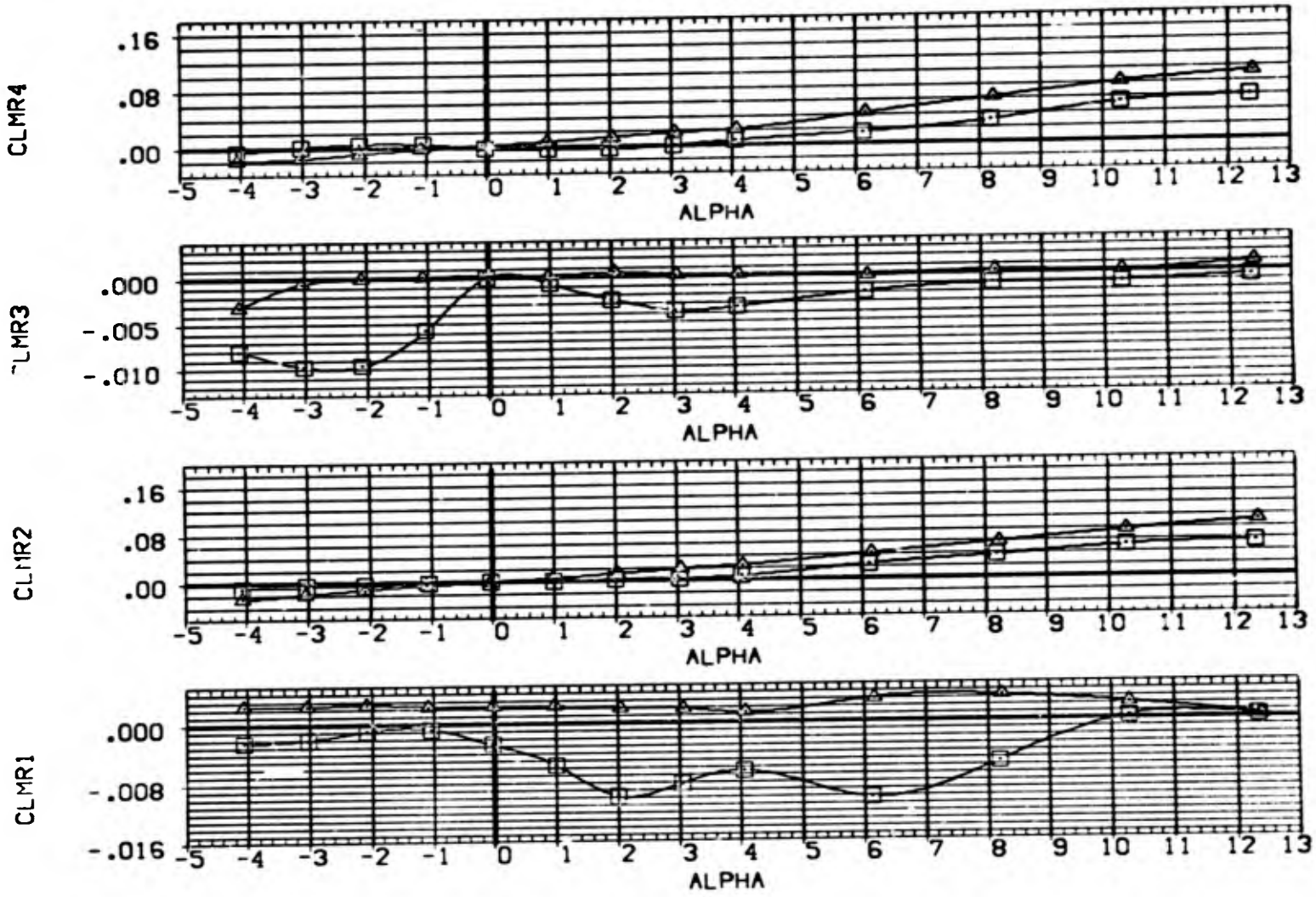
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(E)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(CE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
(CE151)		DATA NOT AVAILABLE	.000	.000	1.000	4.200
(CE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	9.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

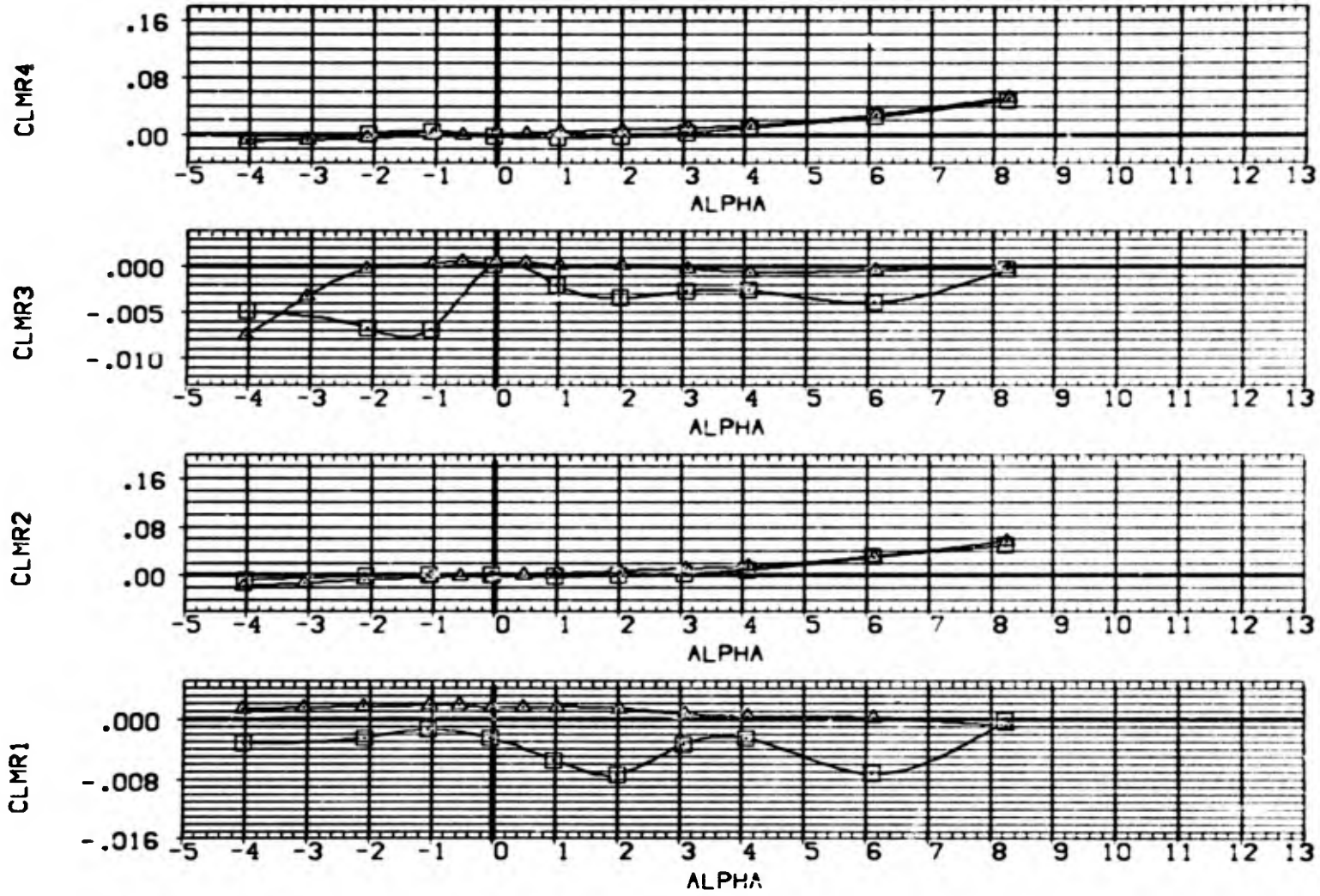


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(F)MAC- = 1.05

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(CUE149)	○	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(CUE150)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
(CUE151)	◇	DATA NOT AVAILABLE	.000	.000	1.000	4.200
(CUE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

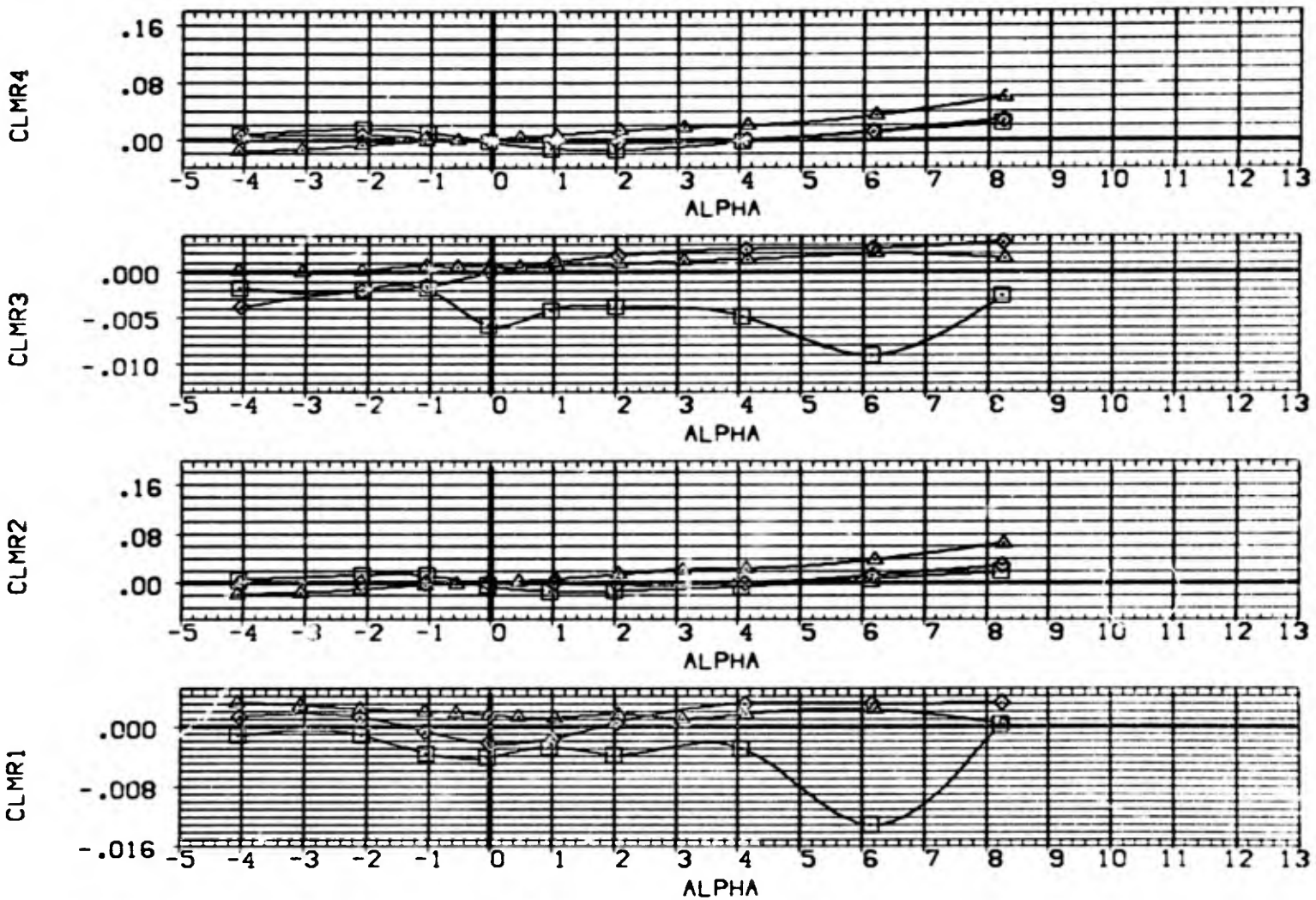


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(G)MACH = 1.09

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CLE149)	○	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(CLE150)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
(CLE151)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200
(CLE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

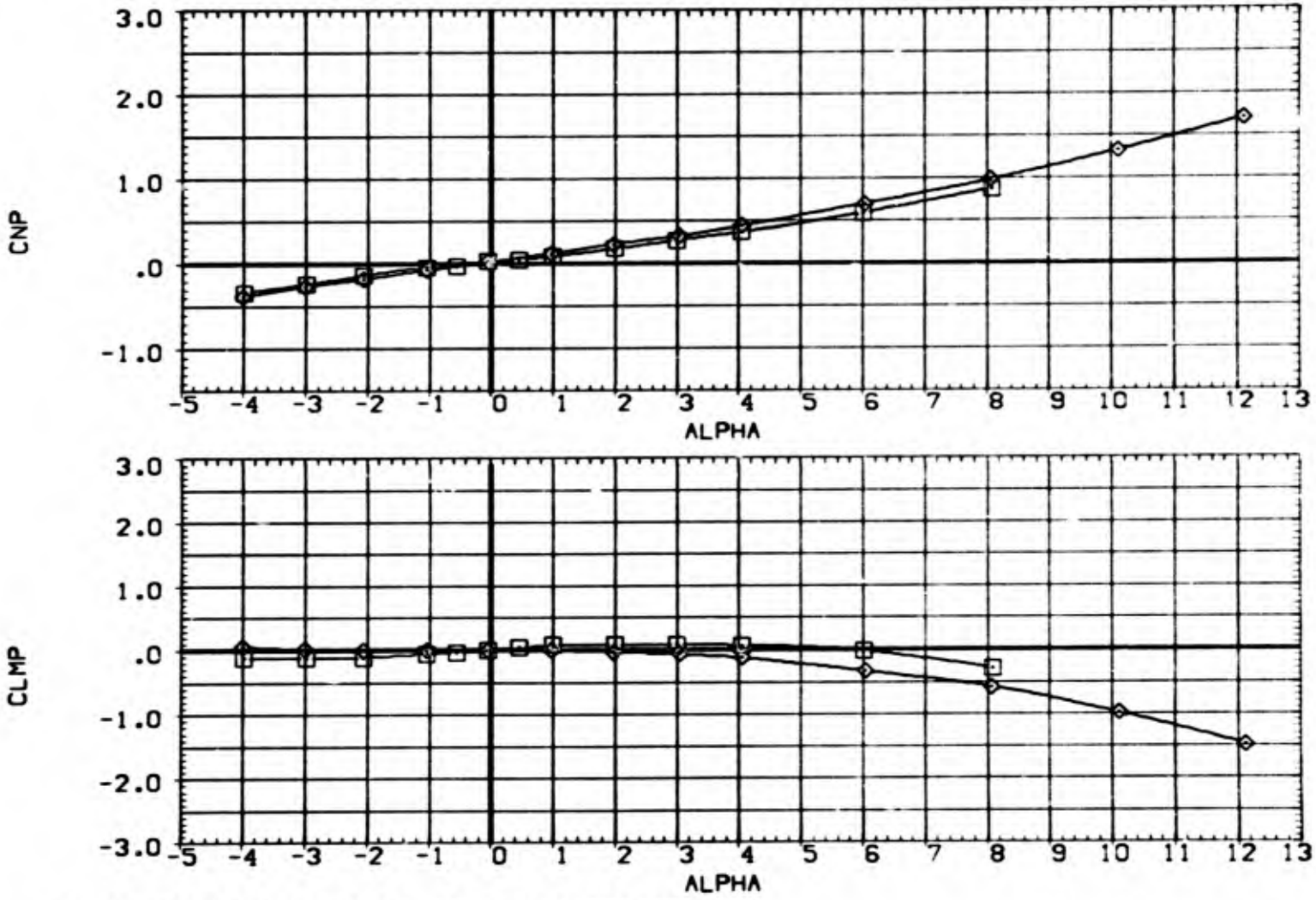


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(-)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(DUE150)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
(DUE151)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200
(DUE152)	△	DATA NOT AVAILABLE	.000	.000	1.000	2.500

REFERENCE INFORMATION		SOURCE
SREF	19.6350	SOURCE
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

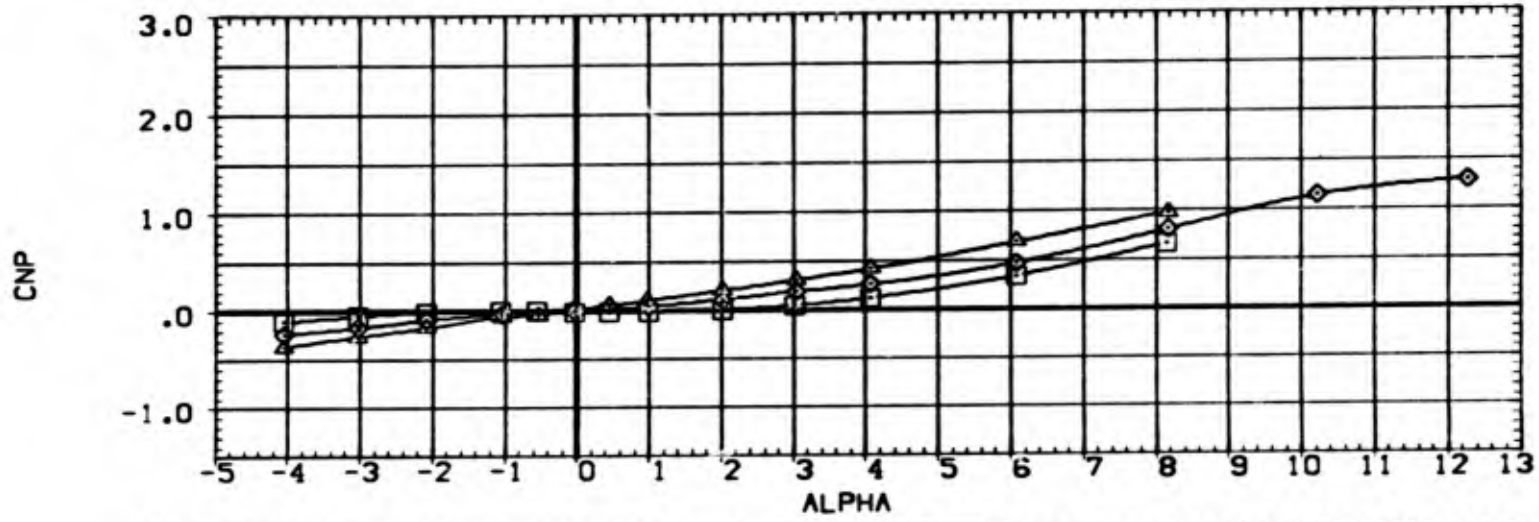


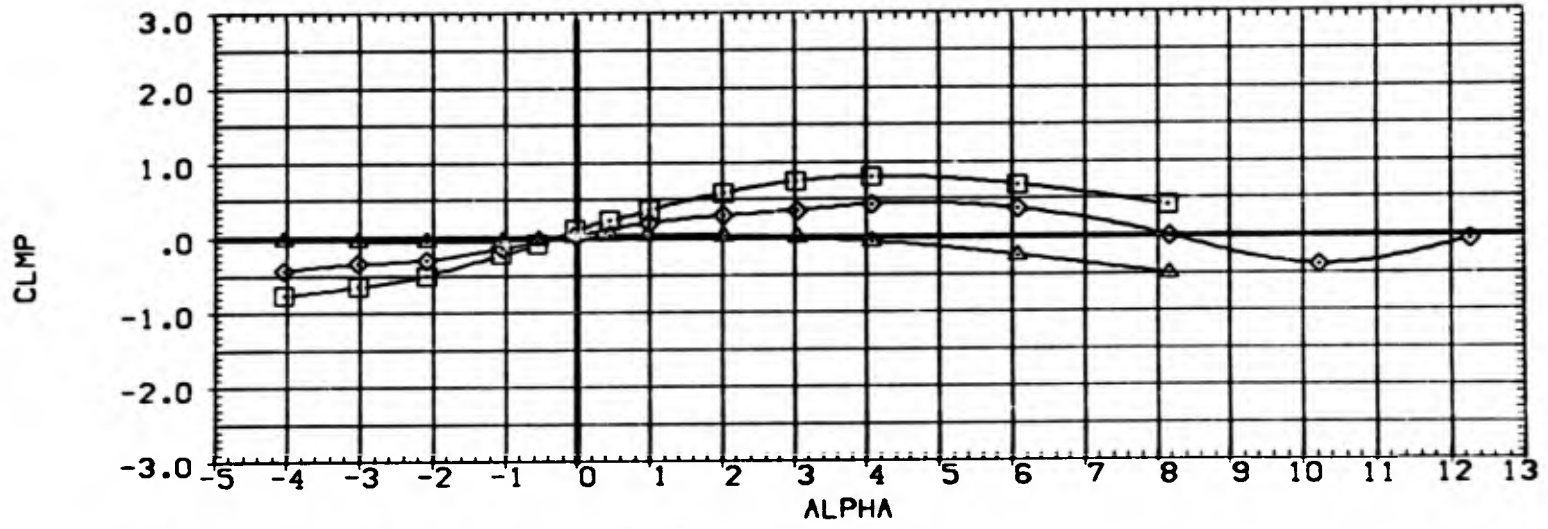
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(DUE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
(DUE151)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200
(DUE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.FT.
LREF	5.0000	FT.
BREF	5.0000	FT.
XMRP	32.5000	FT.
YMRP	.0000	FT.
ZMRP	.0000	FT.
SCALE	.0000	





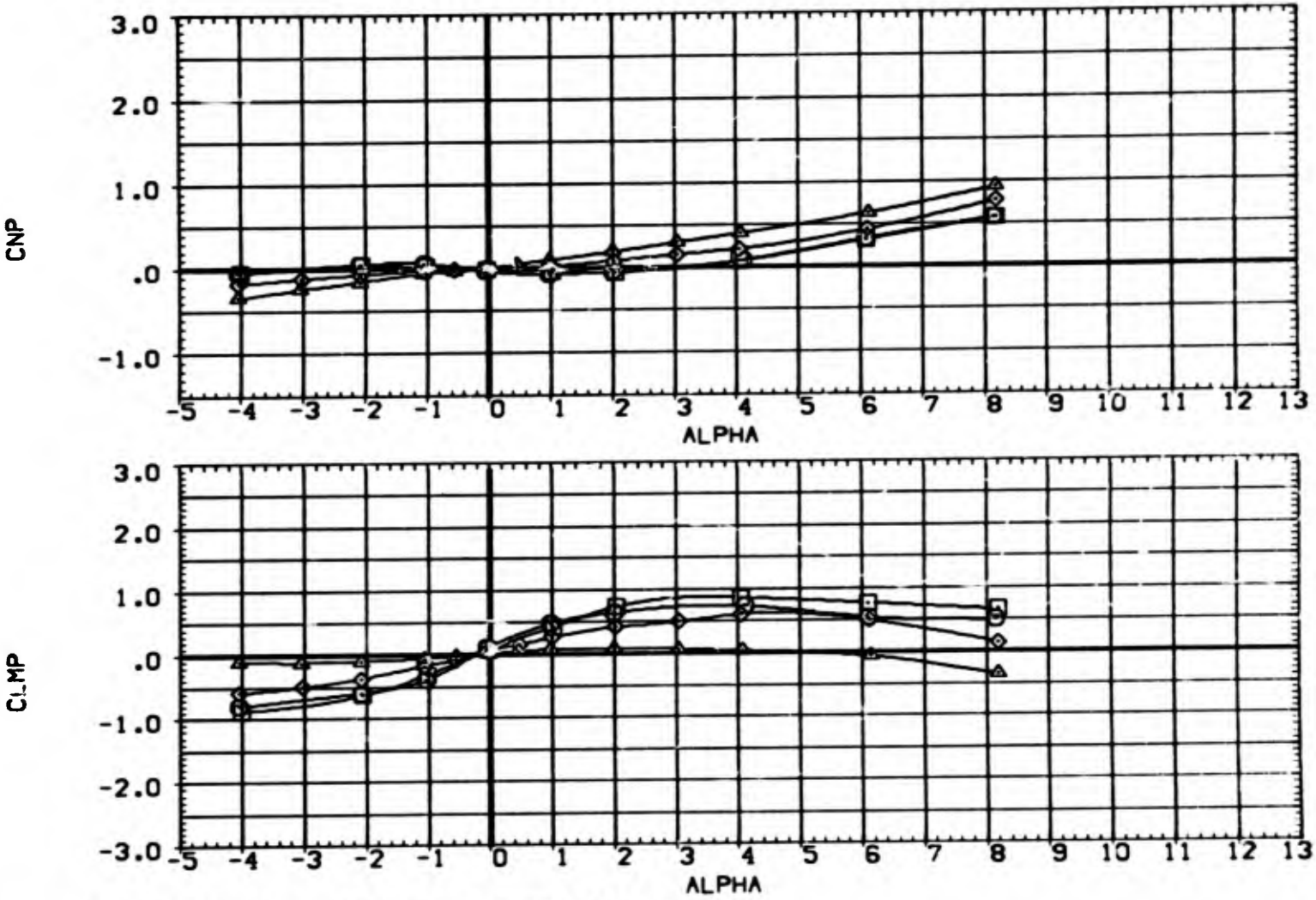
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MAC = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DUE149)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	12.000
(DUE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	7.200
(DUE151)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	4.200
(DUE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



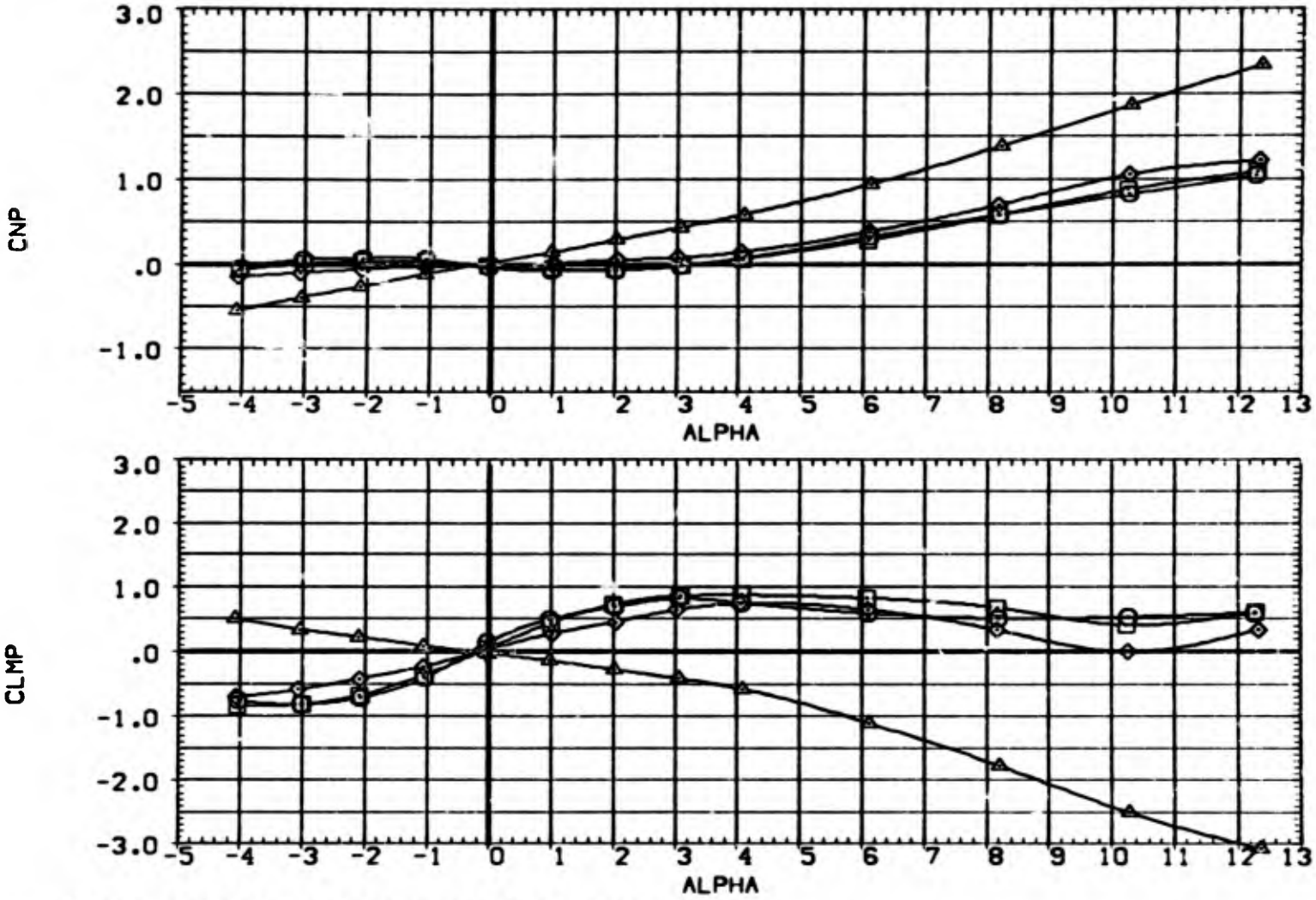
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MAC- = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE149)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	12.000
(DUE150)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(DUE151)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	4.200
(DUE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



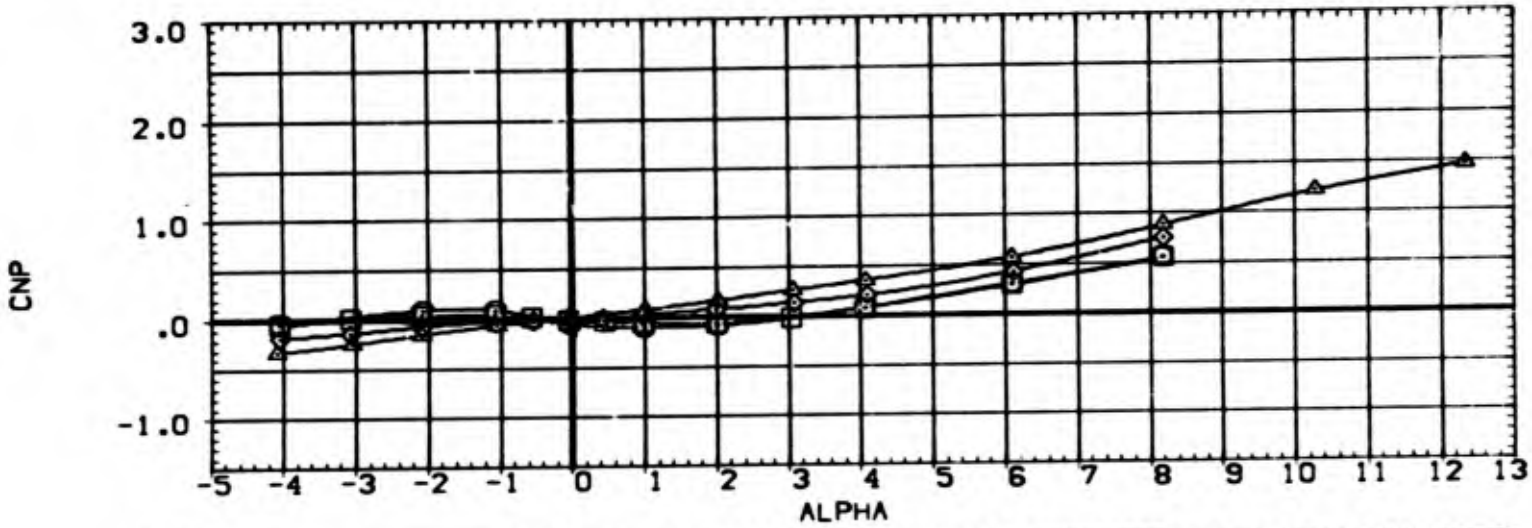
PLUME EFFECTS ON STABILITY CHARACTERISTICS

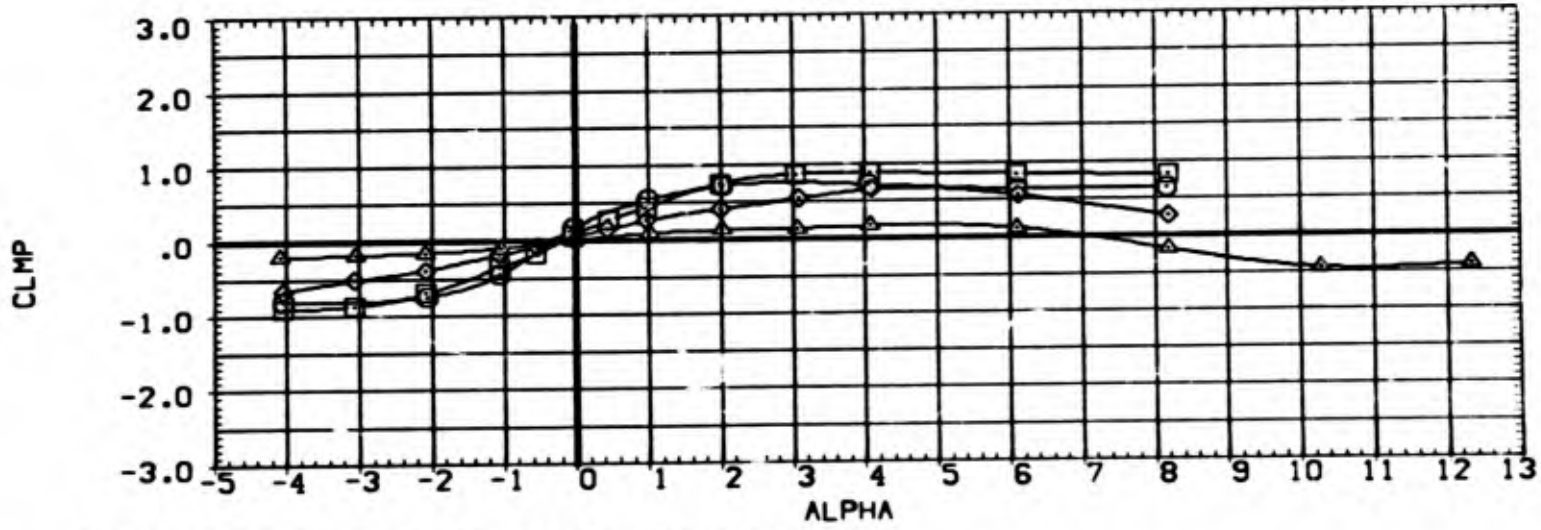
(D)MAC= = .35

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE149)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	12.000
(DUE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(DUE151)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	4.200
(DUE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



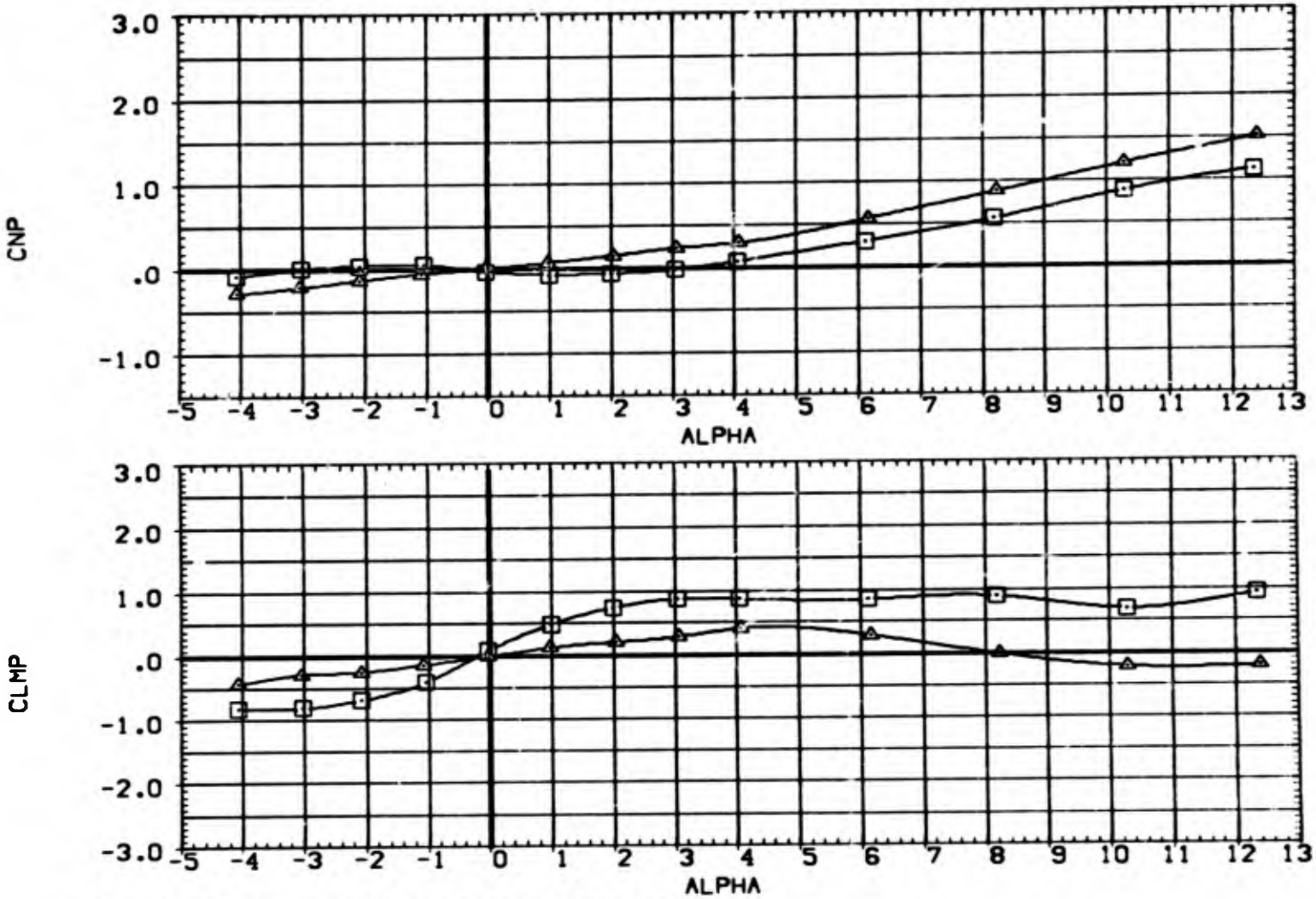


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(E)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DJE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(DJE150)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(DJE151)	⊠	DATA NOT AVAILABLE	.000	.000	1.000	4.200
(DJE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		SC
SREF	19.6350	
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



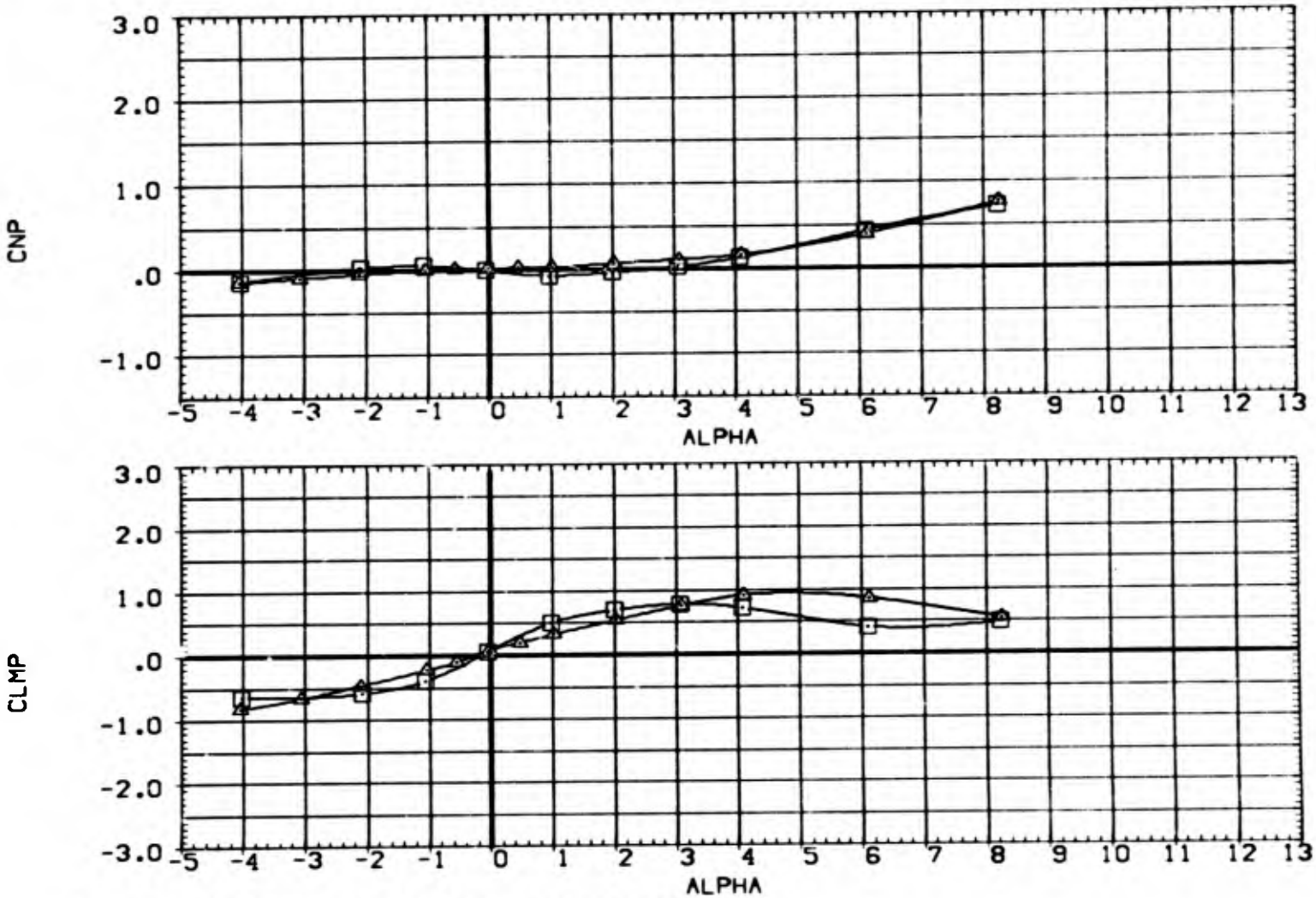
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(F)MACH = 1.05

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[DUE149]	□	DATA NOT AVAILABLE				
[DUE150]	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINIT2]	.000	.000	1.000	12.000
[DUE151]	⊠	DATA NOT AVAILABLE	.000	.000	1.000	7.200
[DUE152]	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINIT2]	.000	.000	1.000	4.200
			.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	37.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

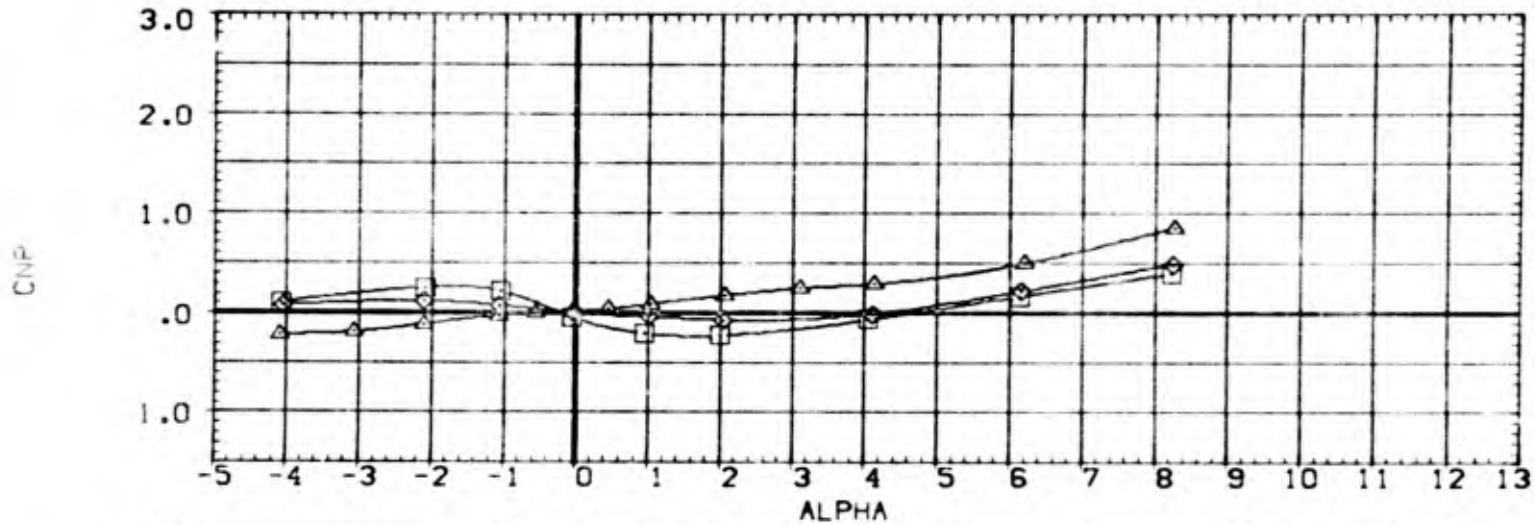


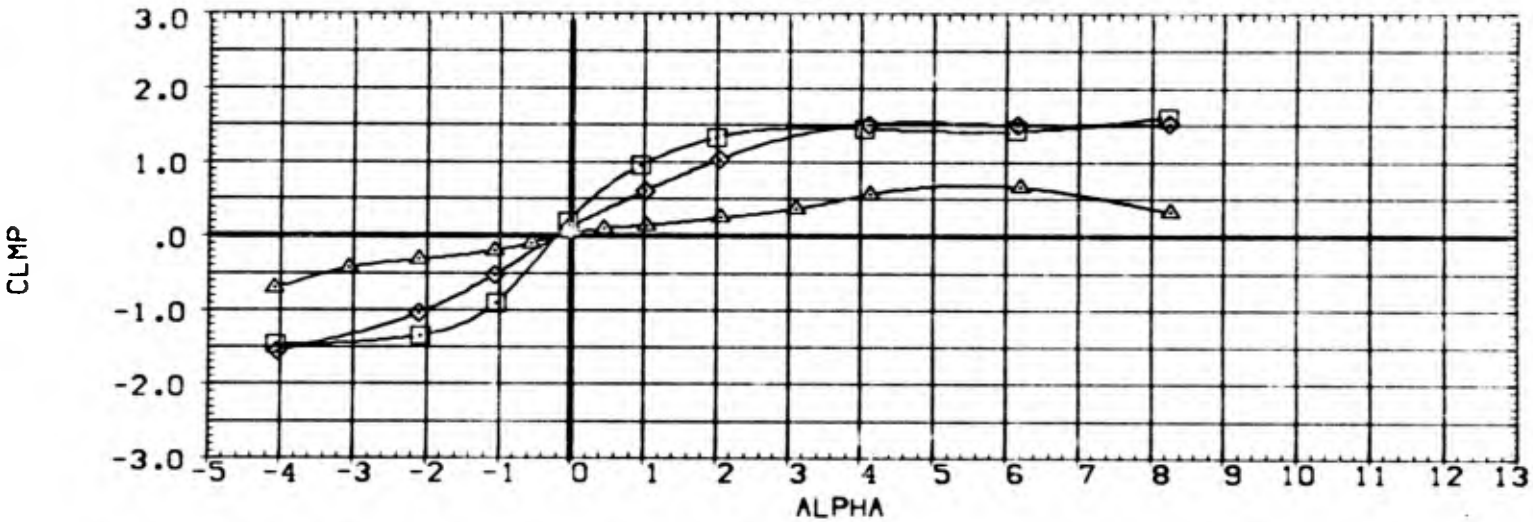
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(G)MACH = .09

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(DUE150)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(DUE151)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	4.200
(DUE152)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	2.500

REFERENCE INFORMATION		SC.IN.
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	





PLUME EFFECTS ON STABILITY CHARACTERISTICS

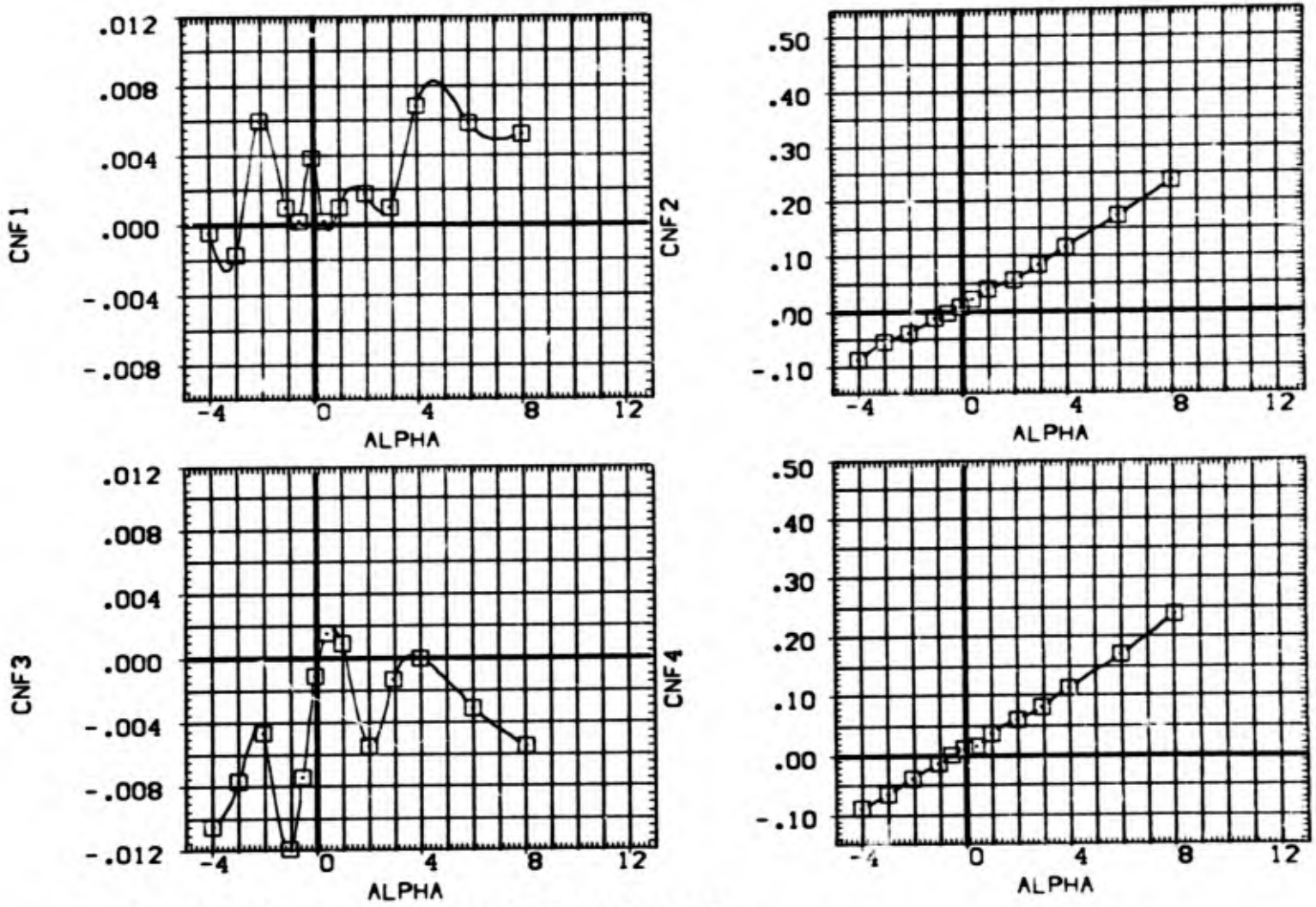
(-)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BJE153)	□	DATA NOT AVAILABLE
(BJE154)	◇	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT2)
(BJE197)	◇	DATA NOT AVAILABLE

PHICND	PHITAL	TALPOS	CRT
.000	.000	1.000	1.500
.000	.000	1.000	.000
.000	.000	3.000	1.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

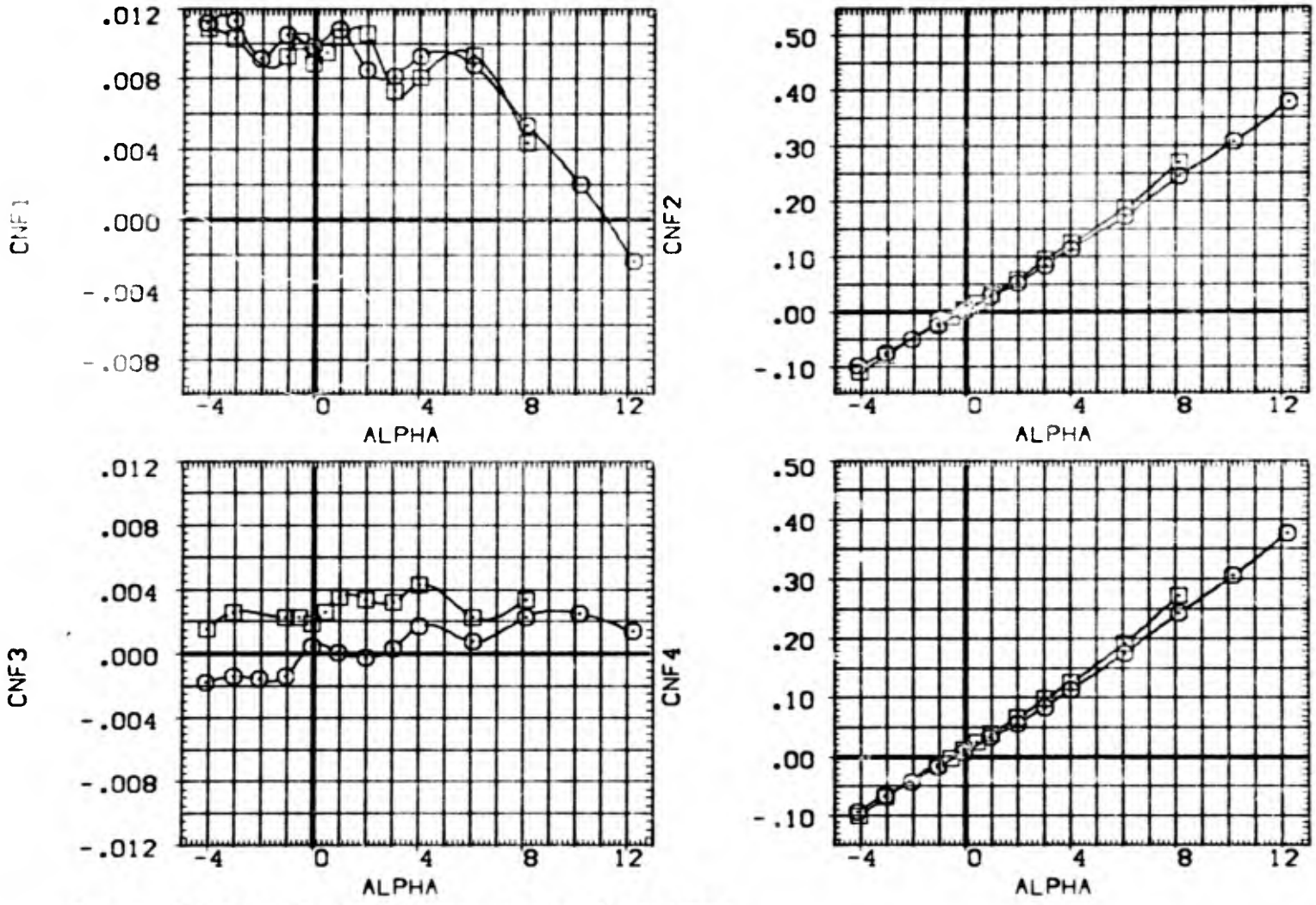


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
(BLE154)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
(BLE197)	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



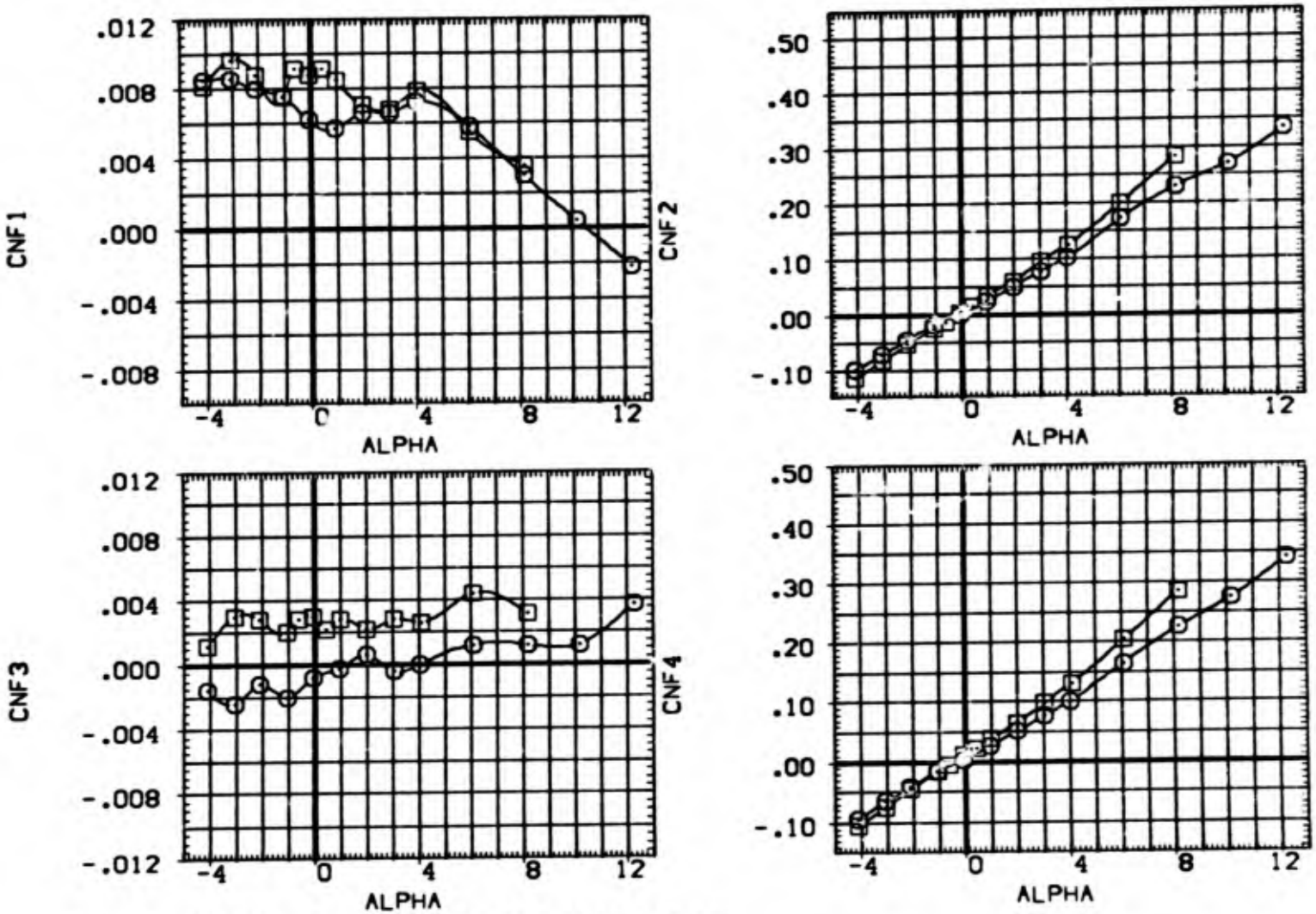
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MAC = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BLE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
(BLE154)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
(BLE197)	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	37.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



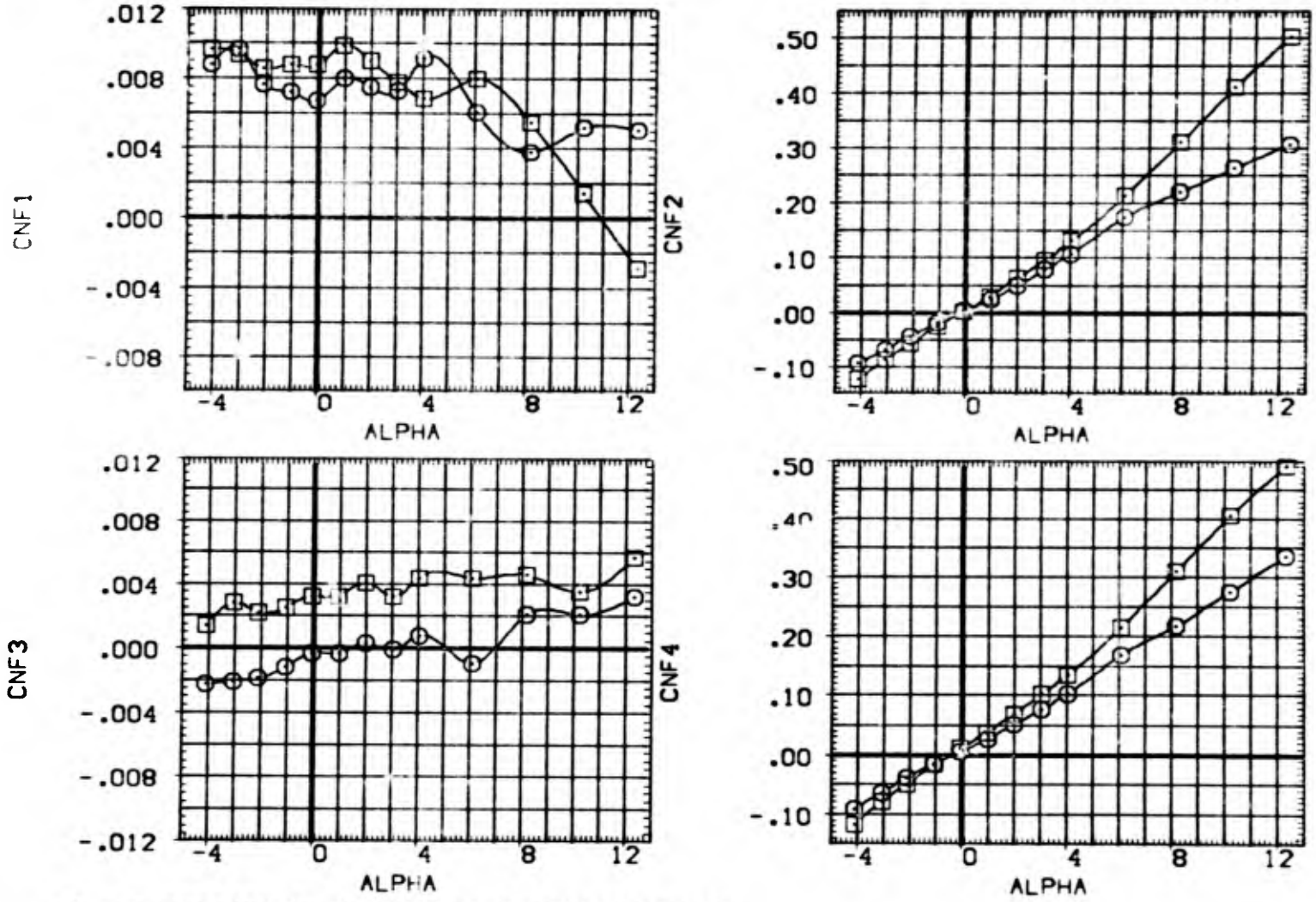
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
(BLE154)	▭	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
(BLE197)	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

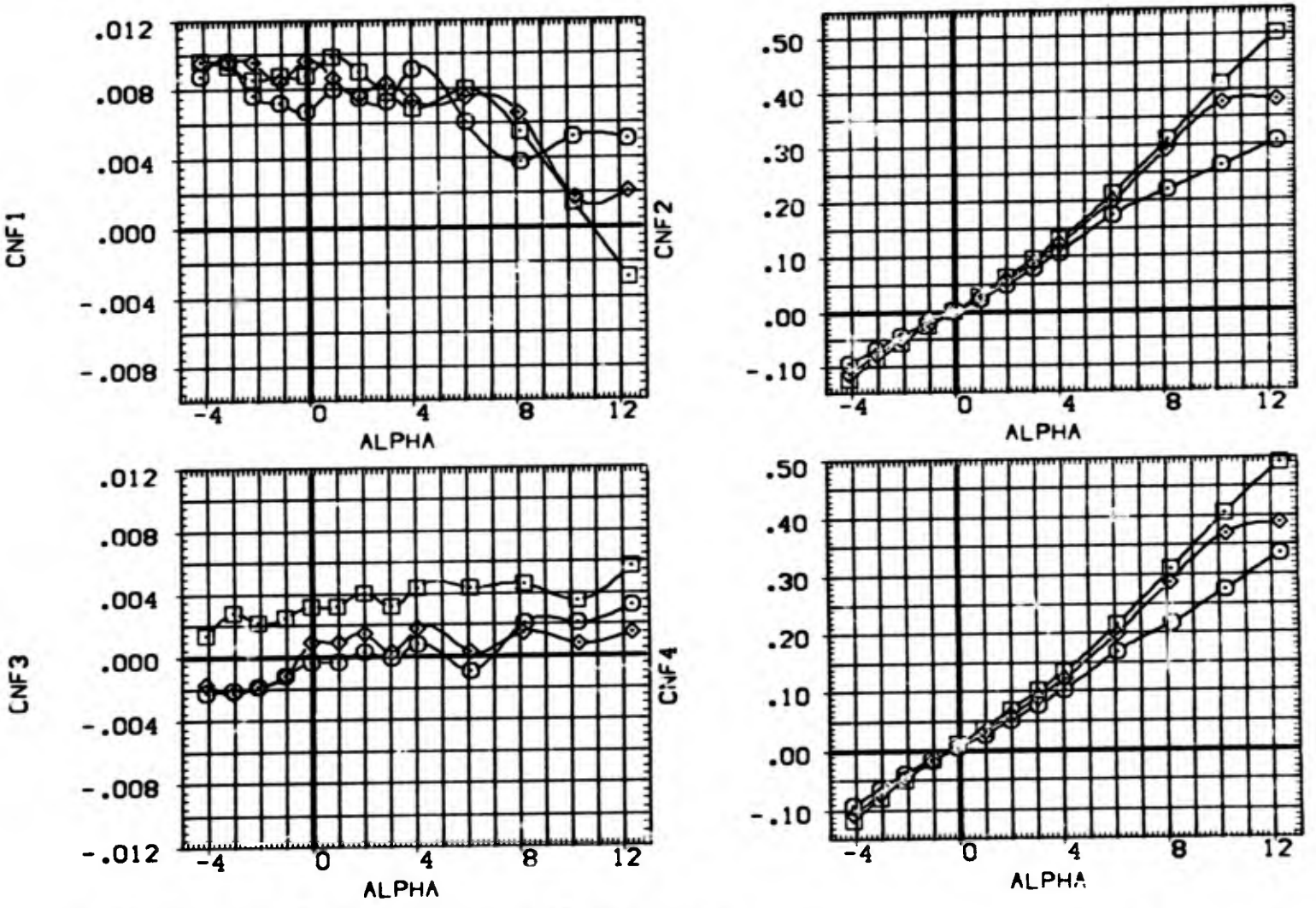


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(D)MACH = .95

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[BLE,53]	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT2]	.000	.000	1.000	1.500
[BLE154]	○	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT2]	.000	.000	1.000	.000
[BLE197]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT2]	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



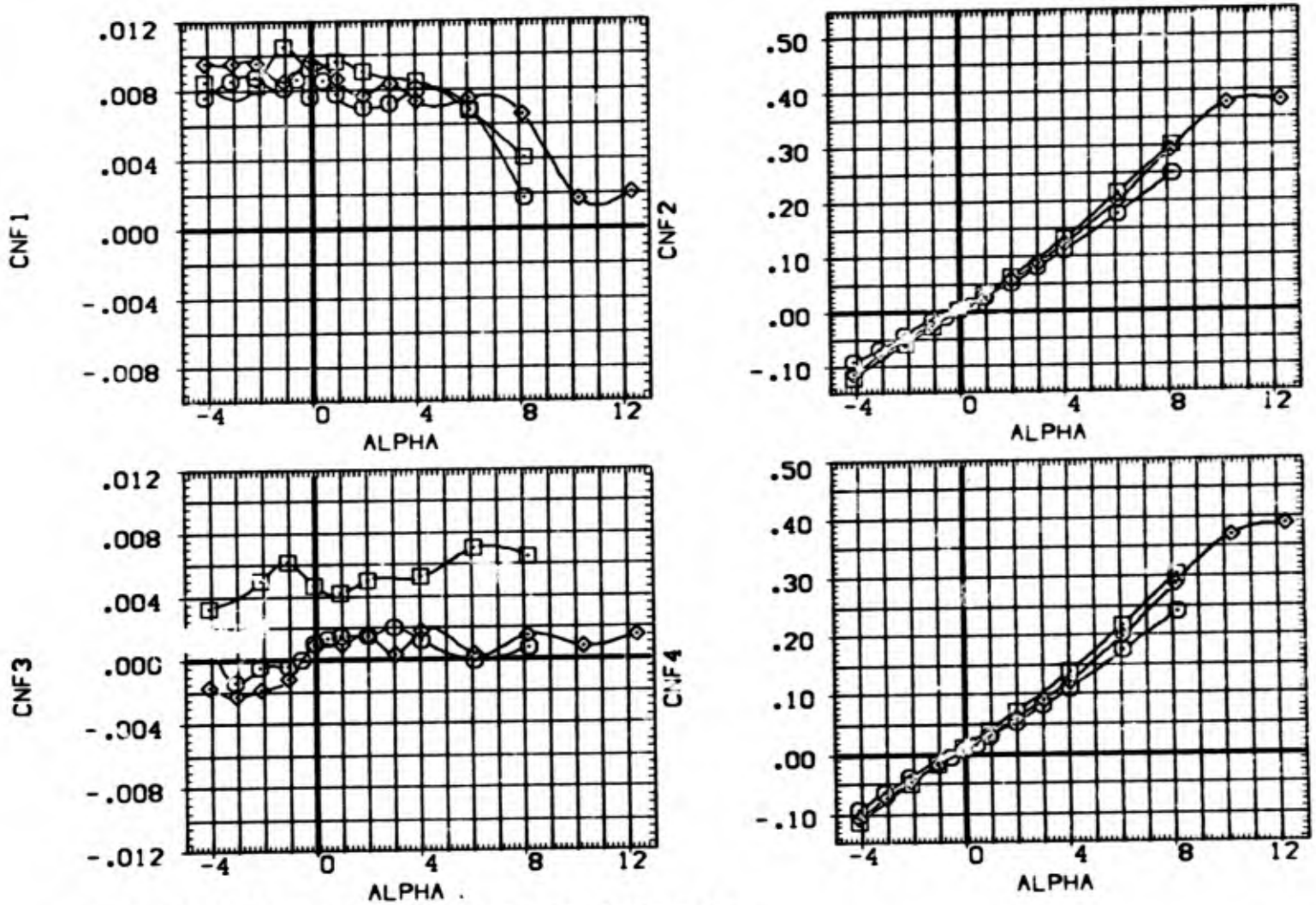
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(E)MAC = .97

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
(BLE154)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
(BLE197)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

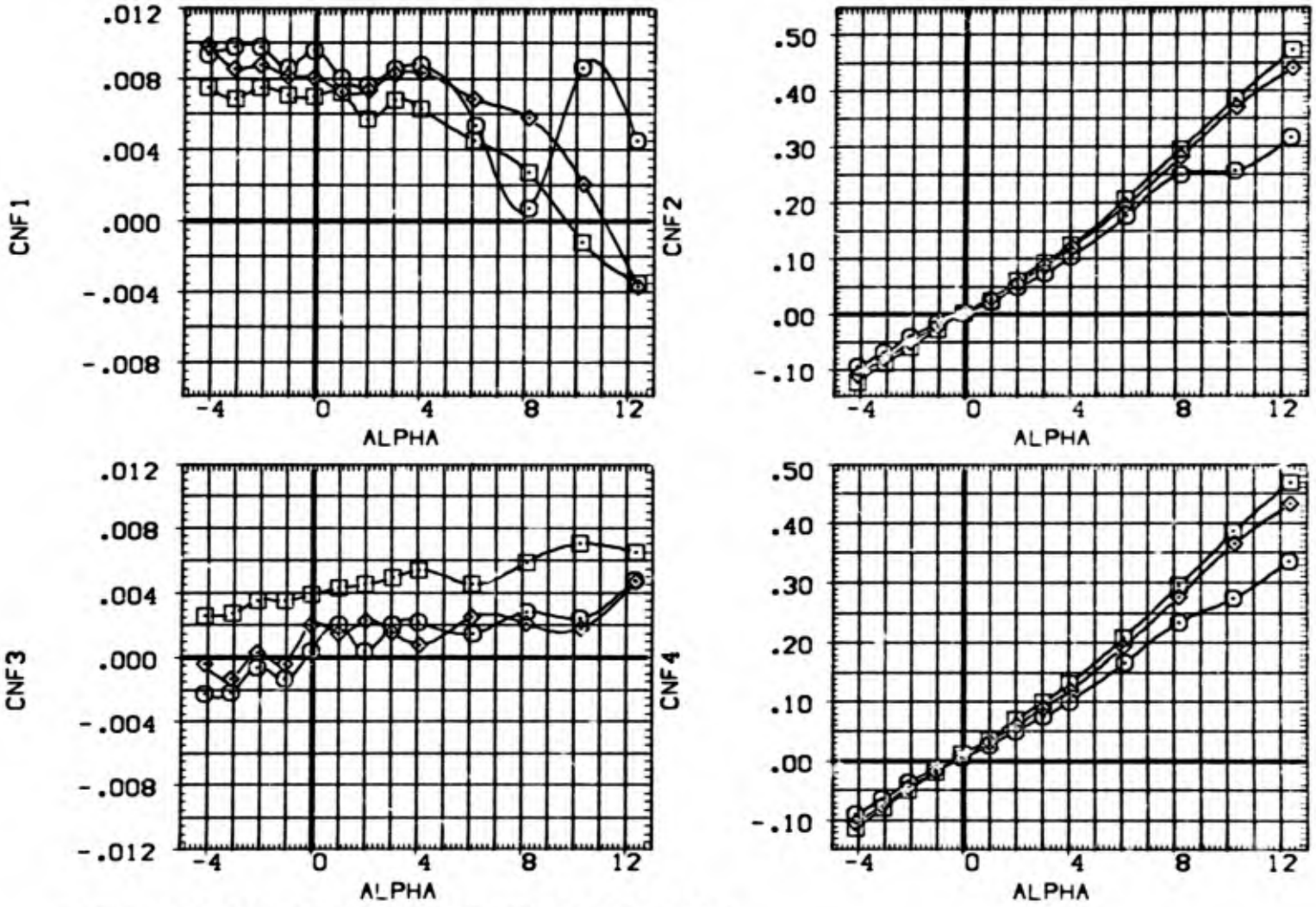


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(F)MACH = 1.00

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
(BLE154)	◁	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
(BLE197)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



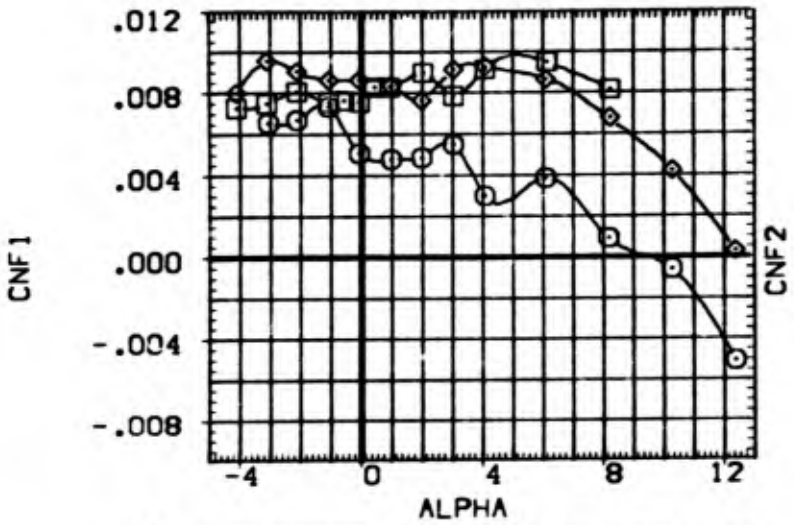
PLUME EFFECTS ON STABILITY CHARACTERISTICS

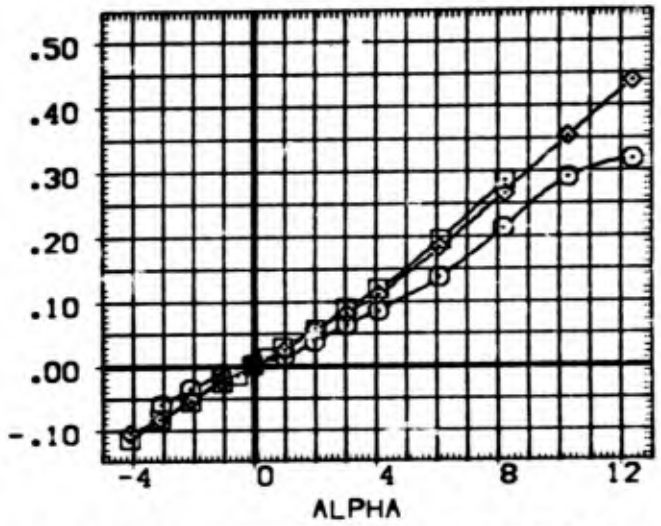
(G)MACH = 1.05

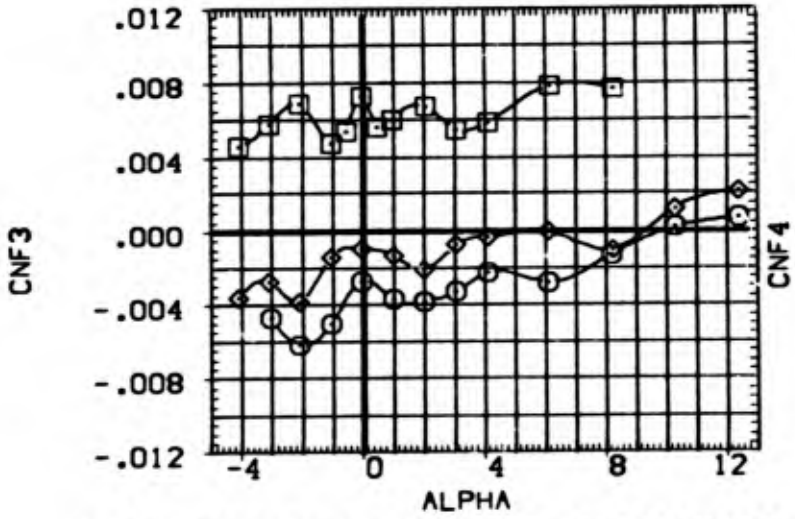
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BUE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	1.500
(BUE154)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	.000
(BUE197)	△	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	3.000	1.000

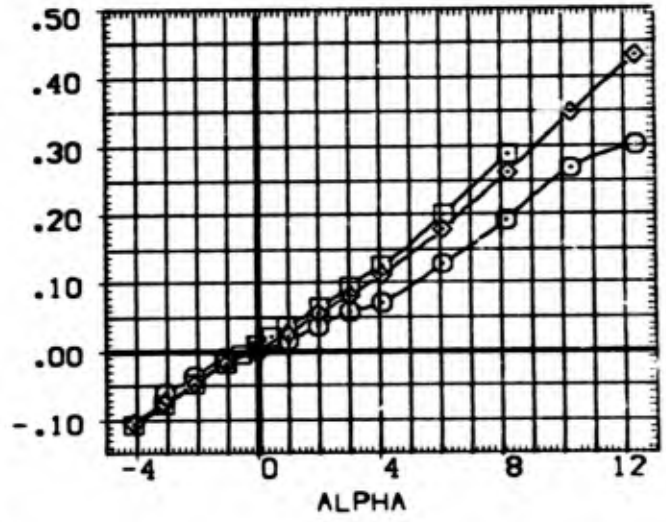
REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	37.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000









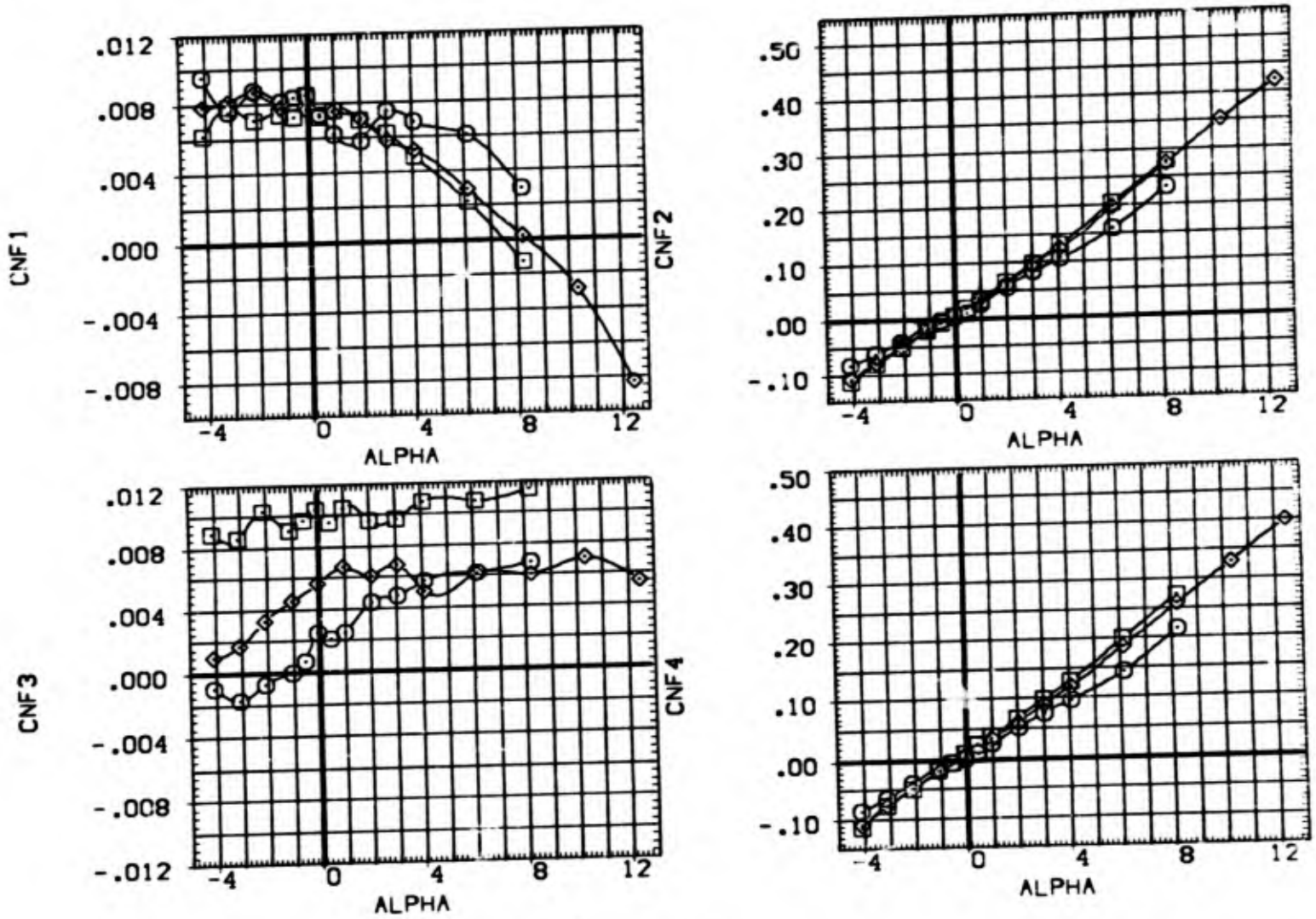
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(M)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BJE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	1.500
(BJE154)	△	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	1.000
(BJE197)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

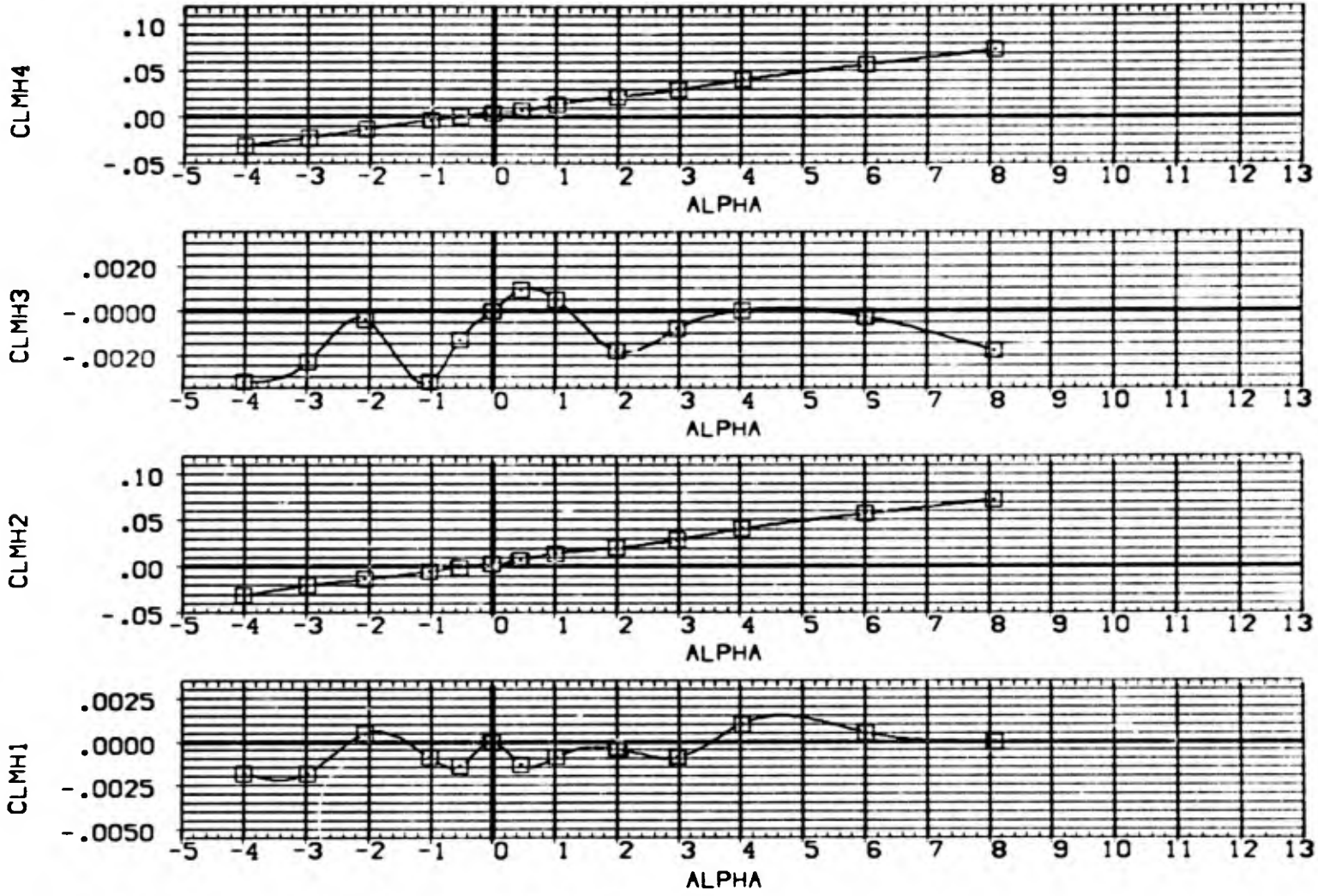


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(DMAC = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[CUE153]	□	DATA NOT AVAILABLE	.000	.000	1.000	1.500
[CUE154]	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	.000
[CUE197]	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



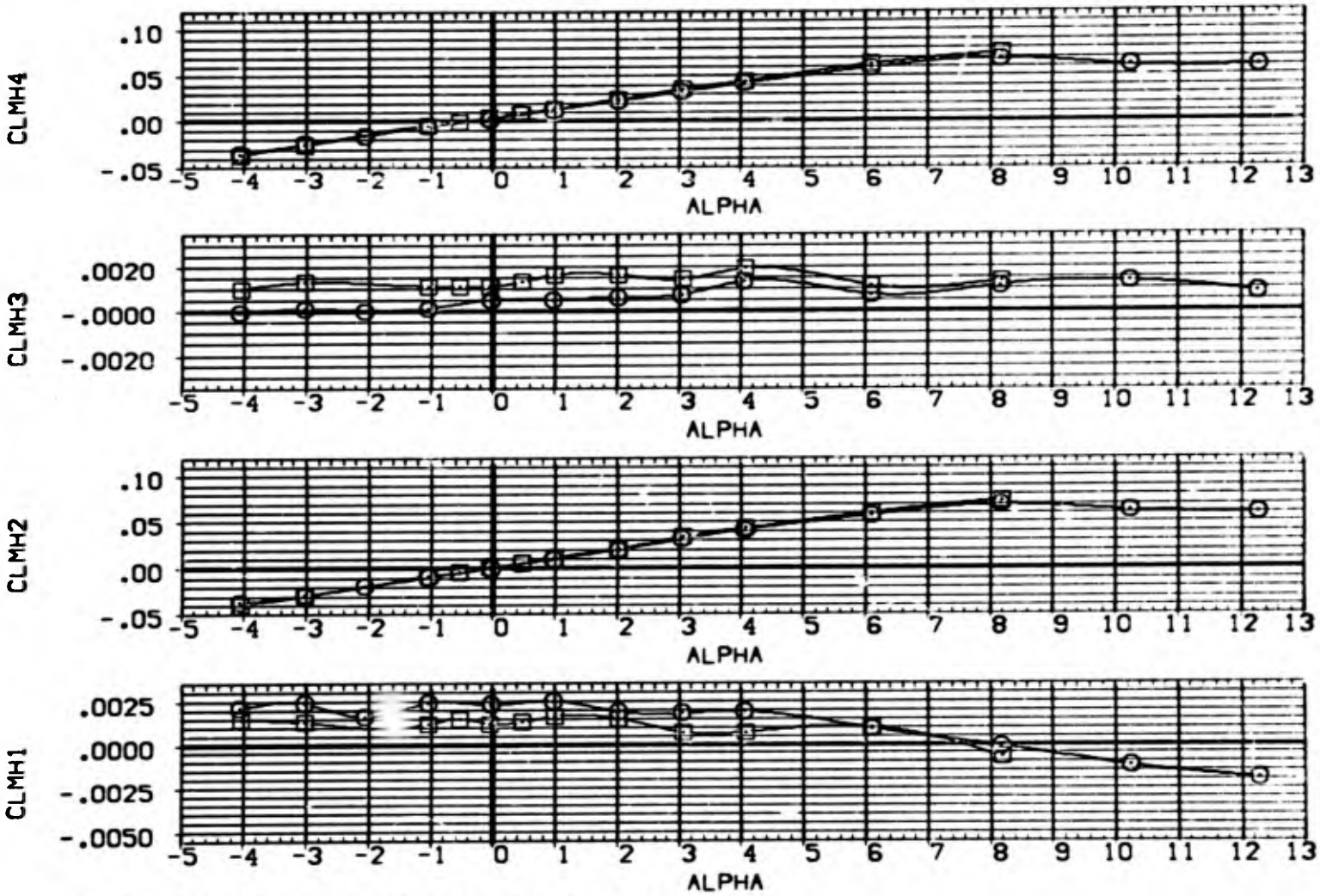
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MAC- = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	1.500
(CUE154)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	.000
(CUE197)	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION

SREF	19.63	SQ. IN.
LREF	5.00	IN.
BREF	5.00	IN.
XMRP	32.50	IN.
YMRP	.00	IN.
ZMRP	.00	IN.
SCALE	.00	



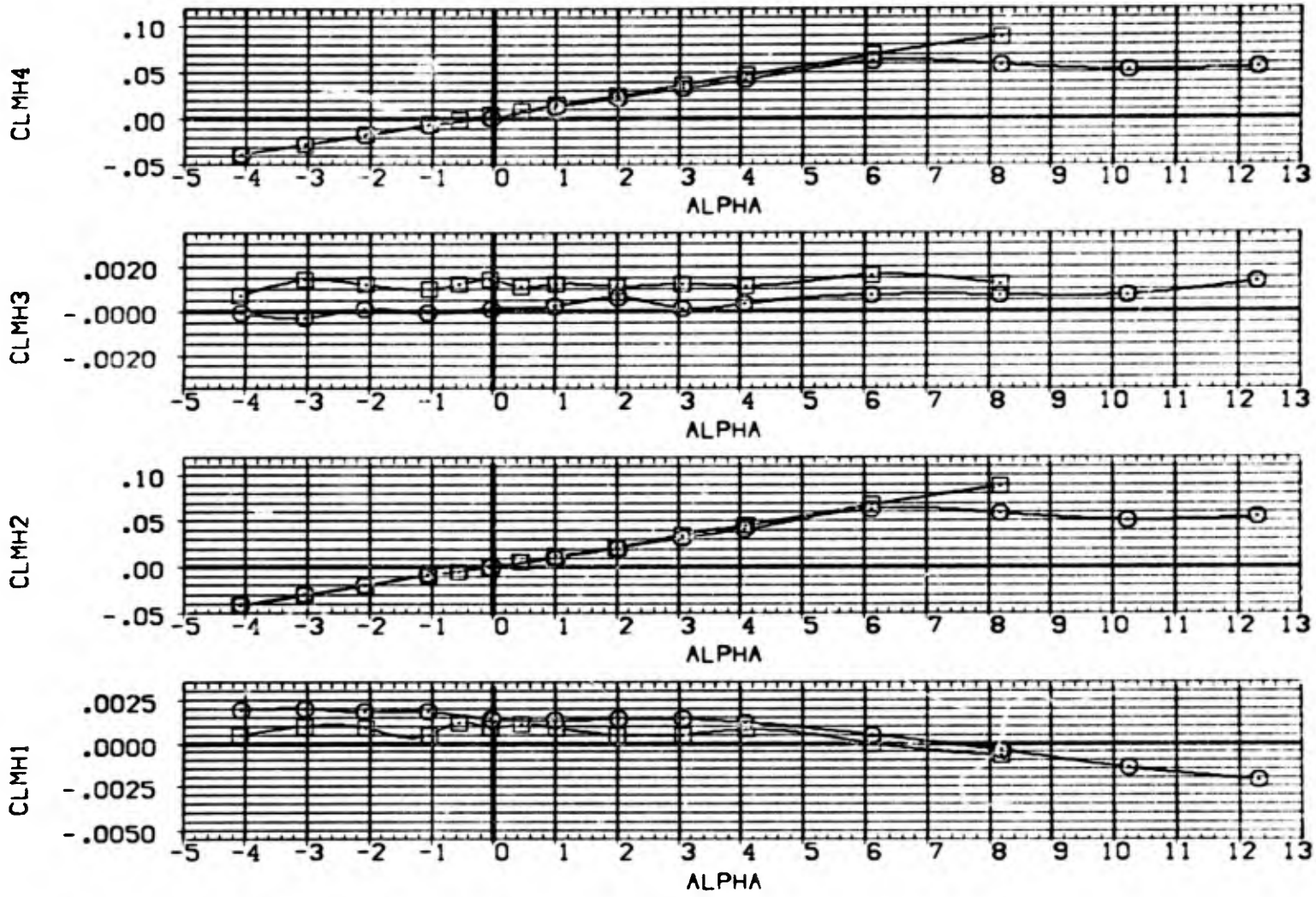
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(CLE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	1.500
(CLE154)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	.000
(CLE197)	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

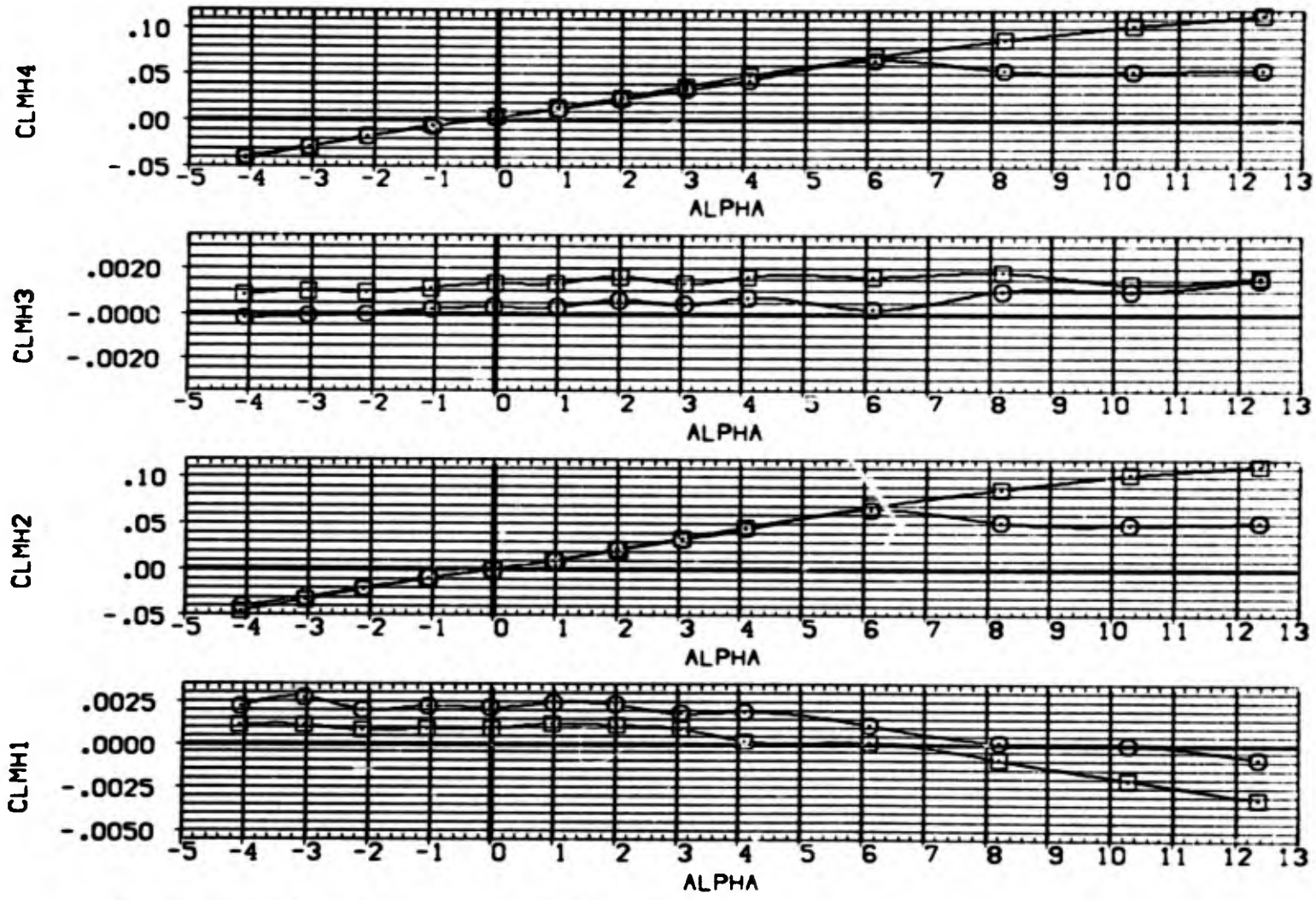


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MAC- = .90

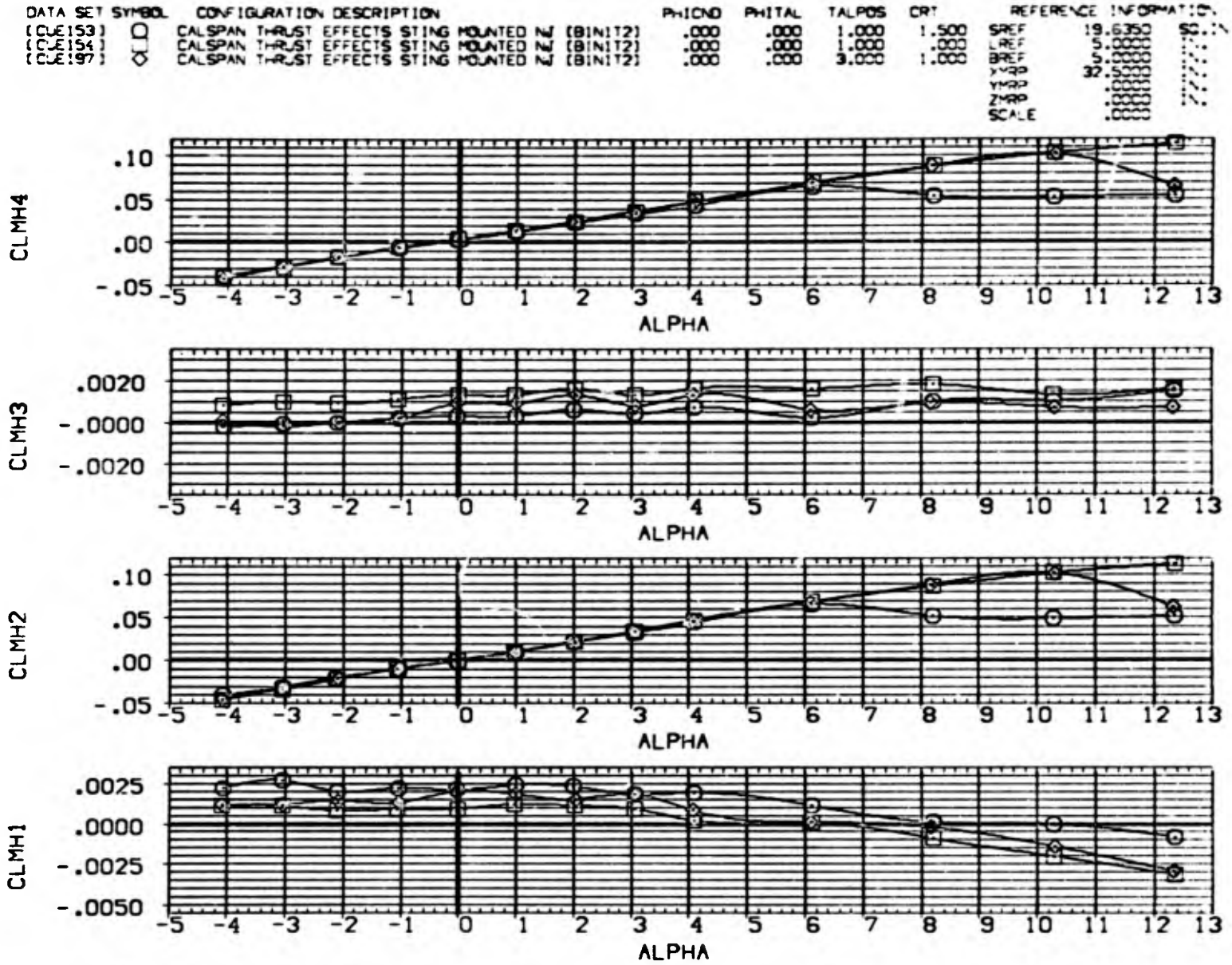
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	1.500
(CUE154)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	.000
(CUE197)	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



PLUME EFFECTS ON STABILITY CHARACTERISTICS

(D)MACH = .95



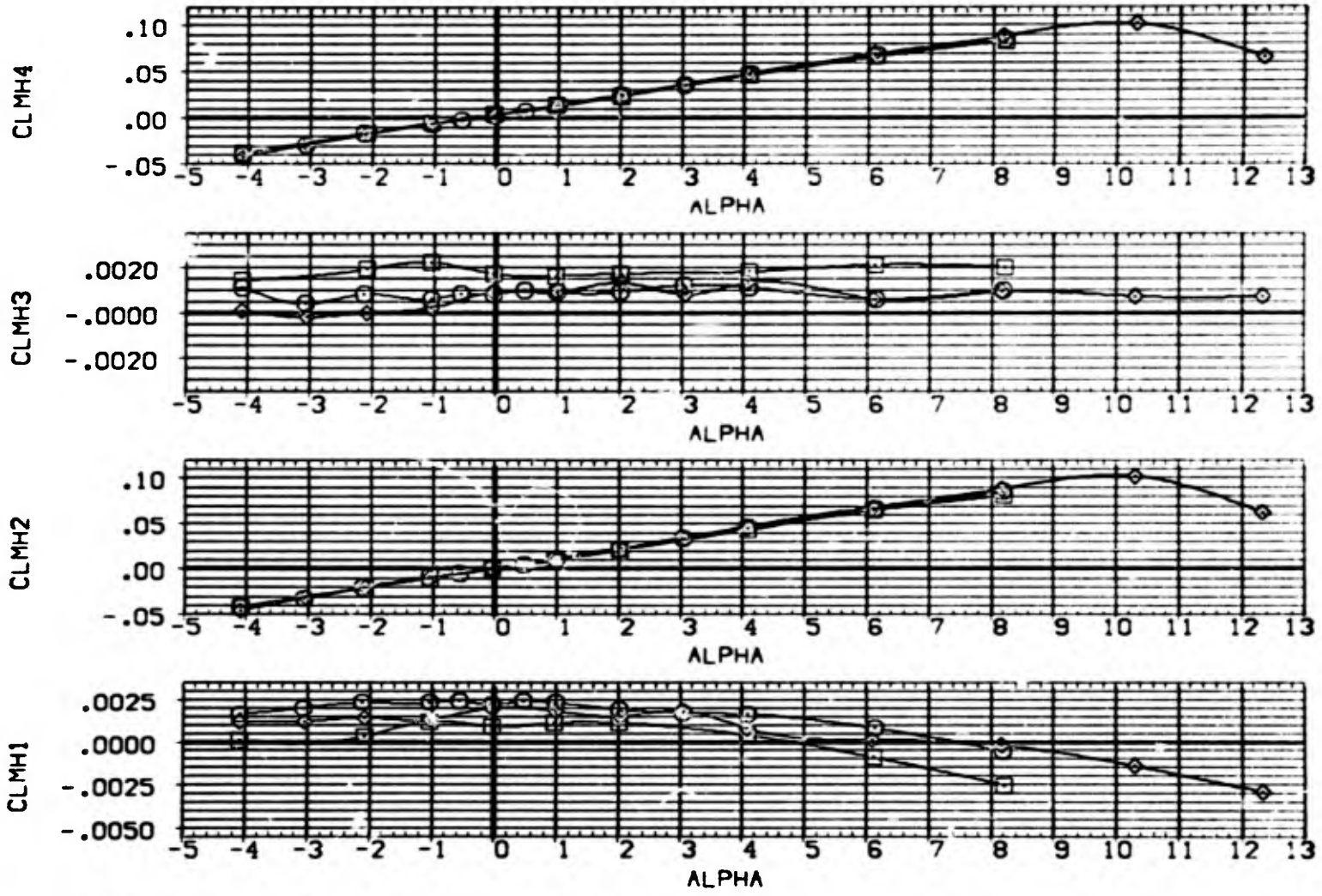
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(E)MACH = .97

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NEW (BINIT2)	.000	.000	1.000	1.500
(CUE154)	◁	CALSPAN THRUST EFFECTS STING MOUNTED NEW (BINIT2)	.000	.000	1.000	.000
(CUE197)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NEW (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	37.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

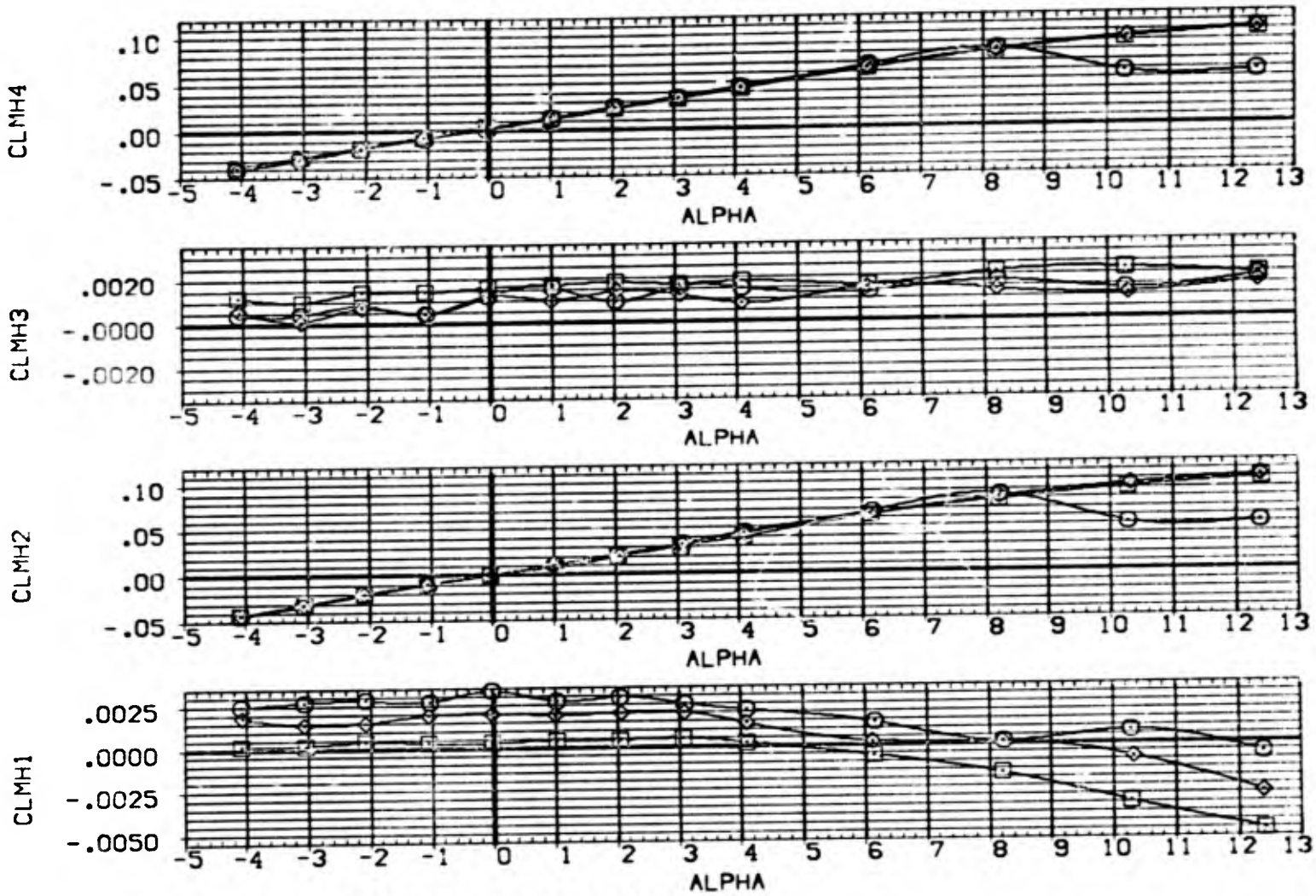


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(F)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[CUE153]	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	1.500
[CUE154]	○	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	.000
[CUE197]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



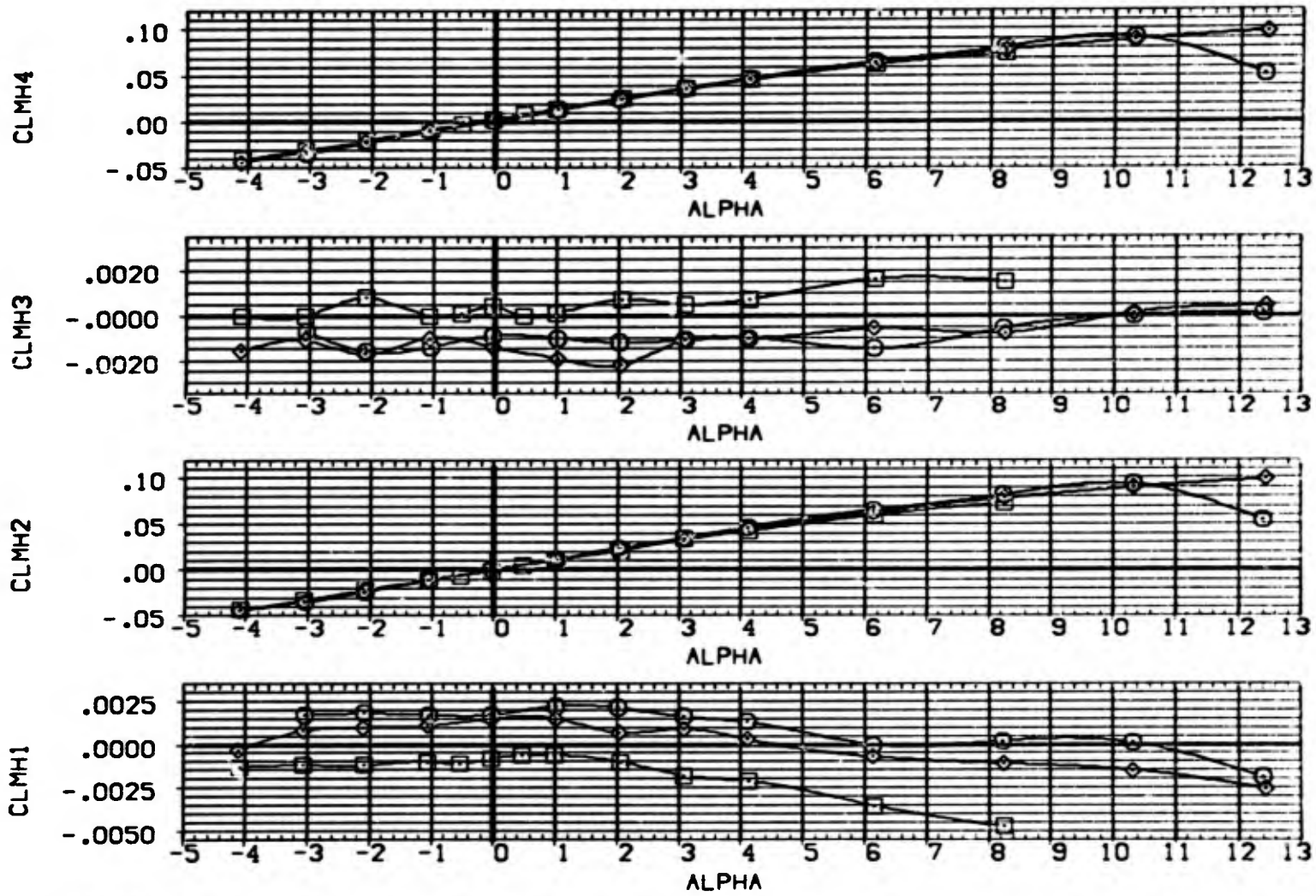
PLUME EFFECTS ON STABILITY CHARACTERISTICS

[illegible]MACH = 1.05

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(CJE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	1.500
(CJE154)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	.000
(CJE197)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	3.000	1.000

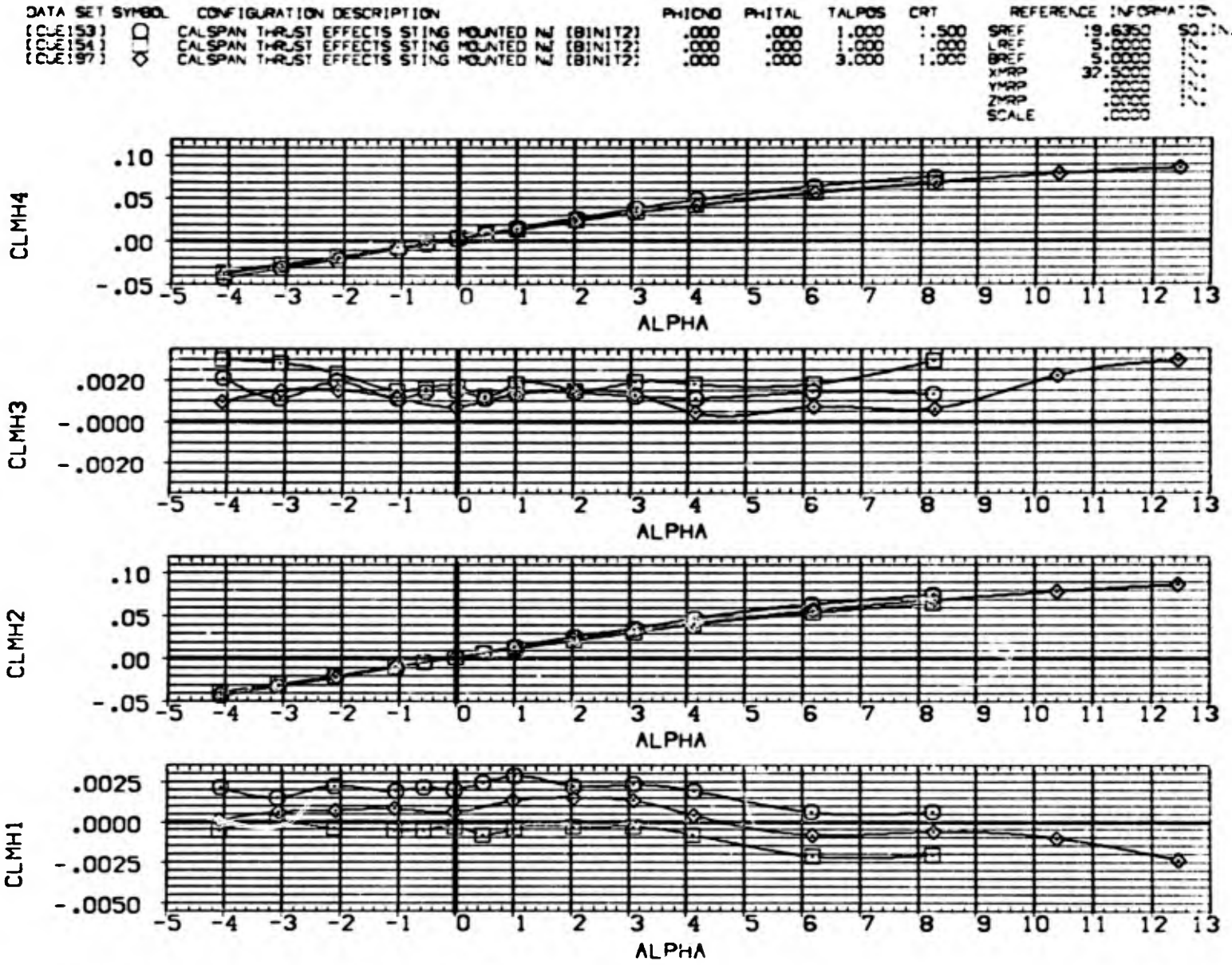
REFERENCE INFORMATION

SREF	19.6350 SQ. IN.
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



PLUME EFFECTS ON STABILITY CHARACTERISTICS

(M)MACH = 1.10



PLUME EFFECTS ON STABILITY CHARACTERISTICS

[]MACH = 1.25

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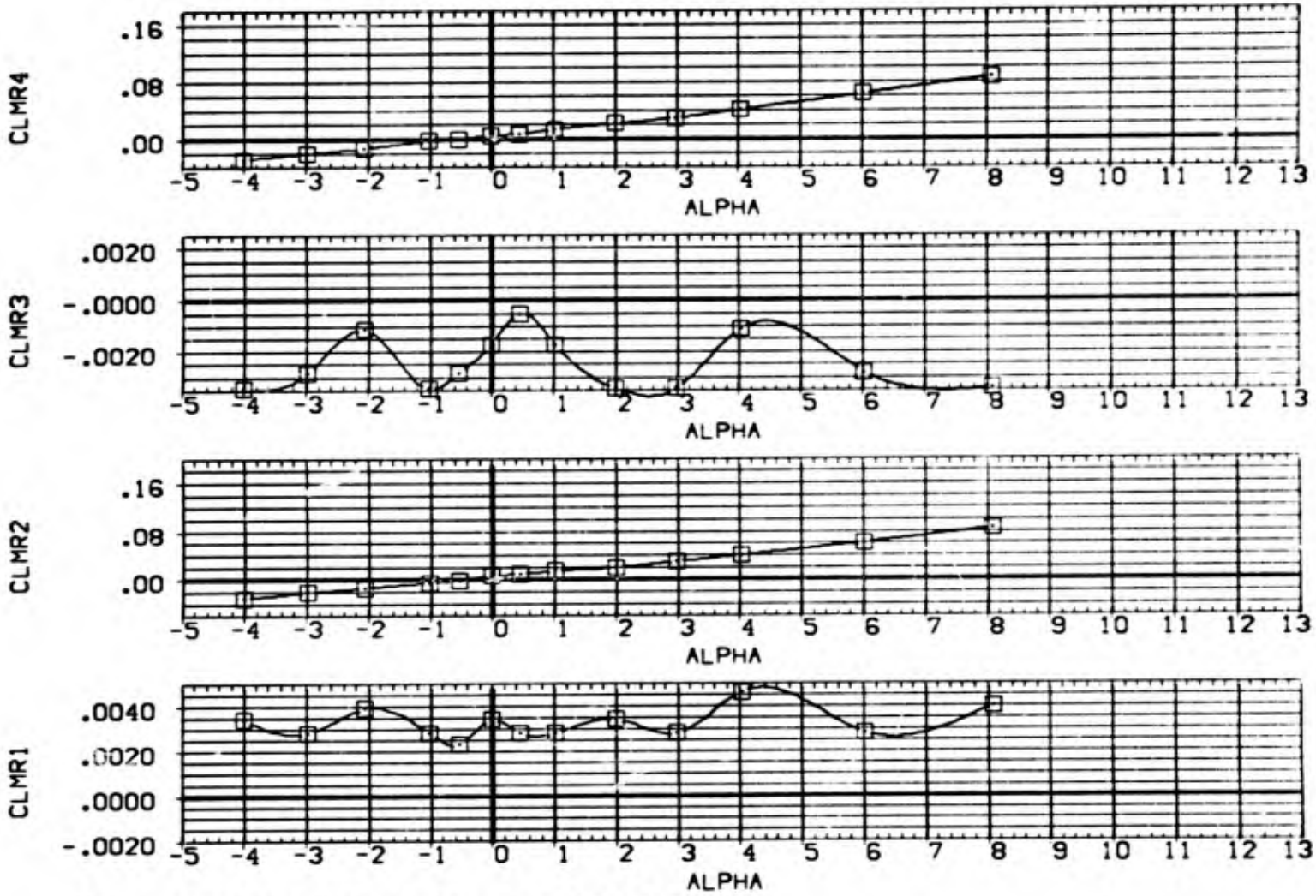
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DWE153)	□	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(DWE154)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
(DWE197)	△	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

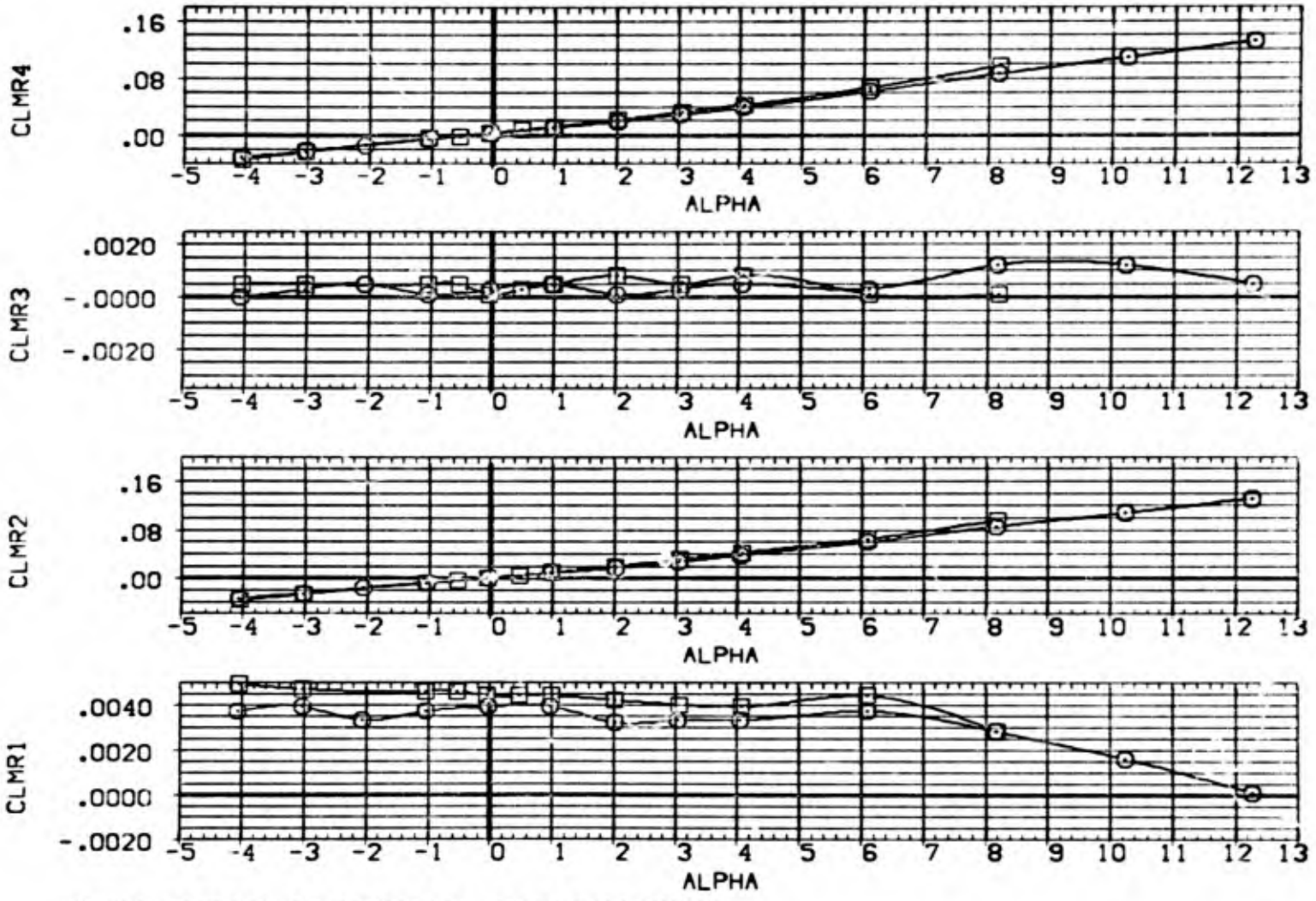


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	1.500
(CUE154)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	.000
(CUE197)	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

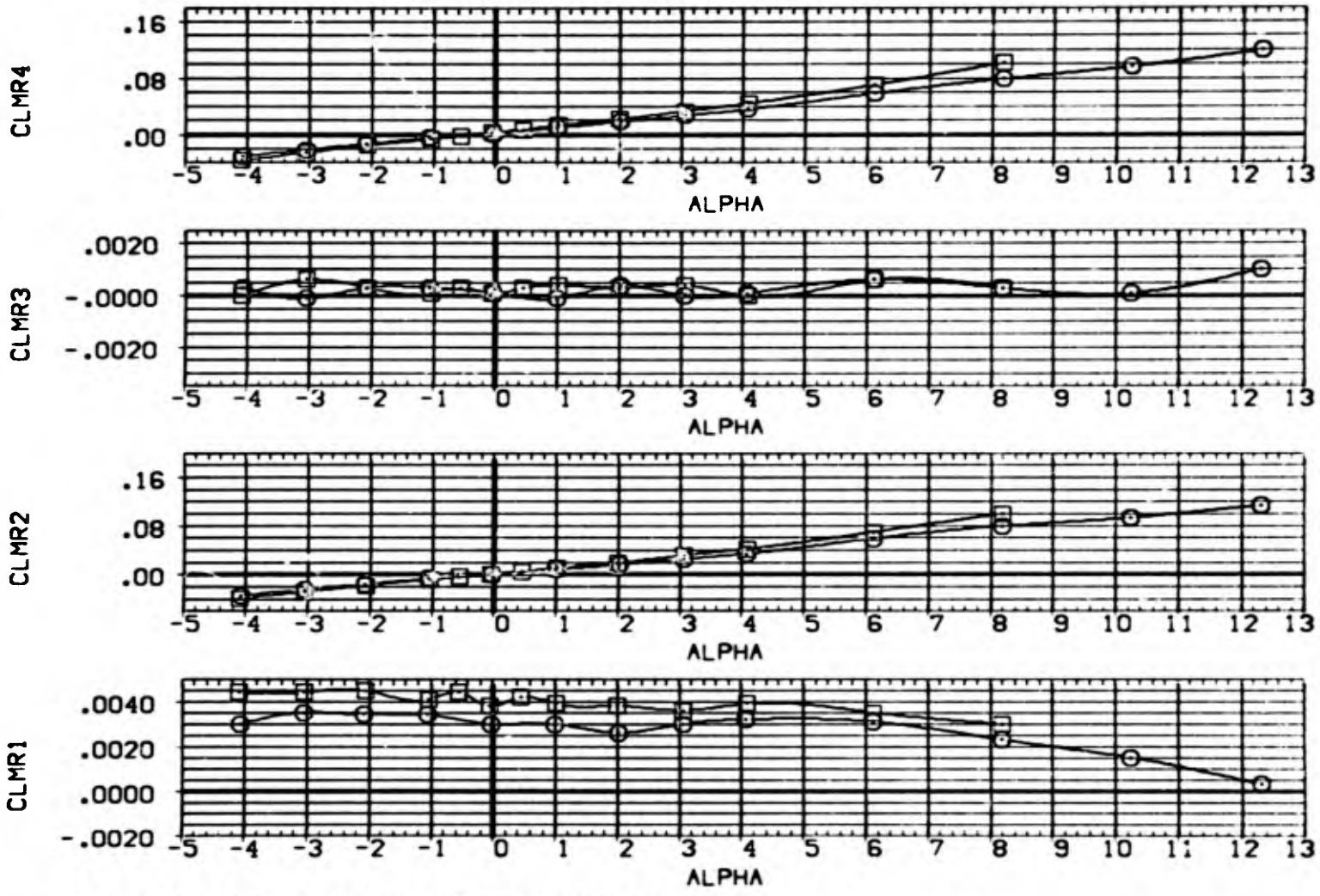


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[illegible]	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	1.500
[illegible]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	1.000
[illegible]		DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



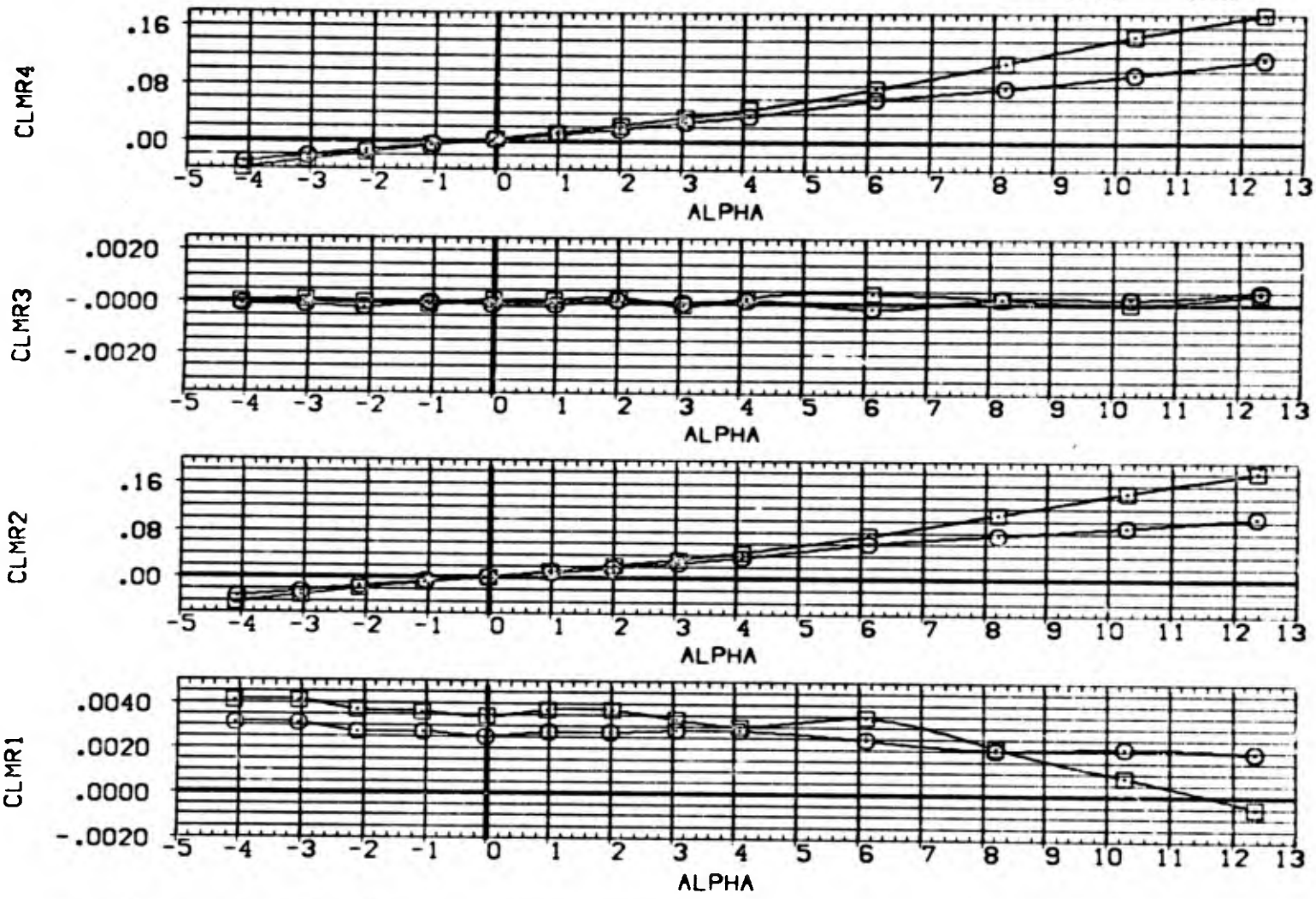
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MAC- = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
CCLE153	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
CCLE154	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
CCLE197	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION

SREF	19.6350 SQ. IN.
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



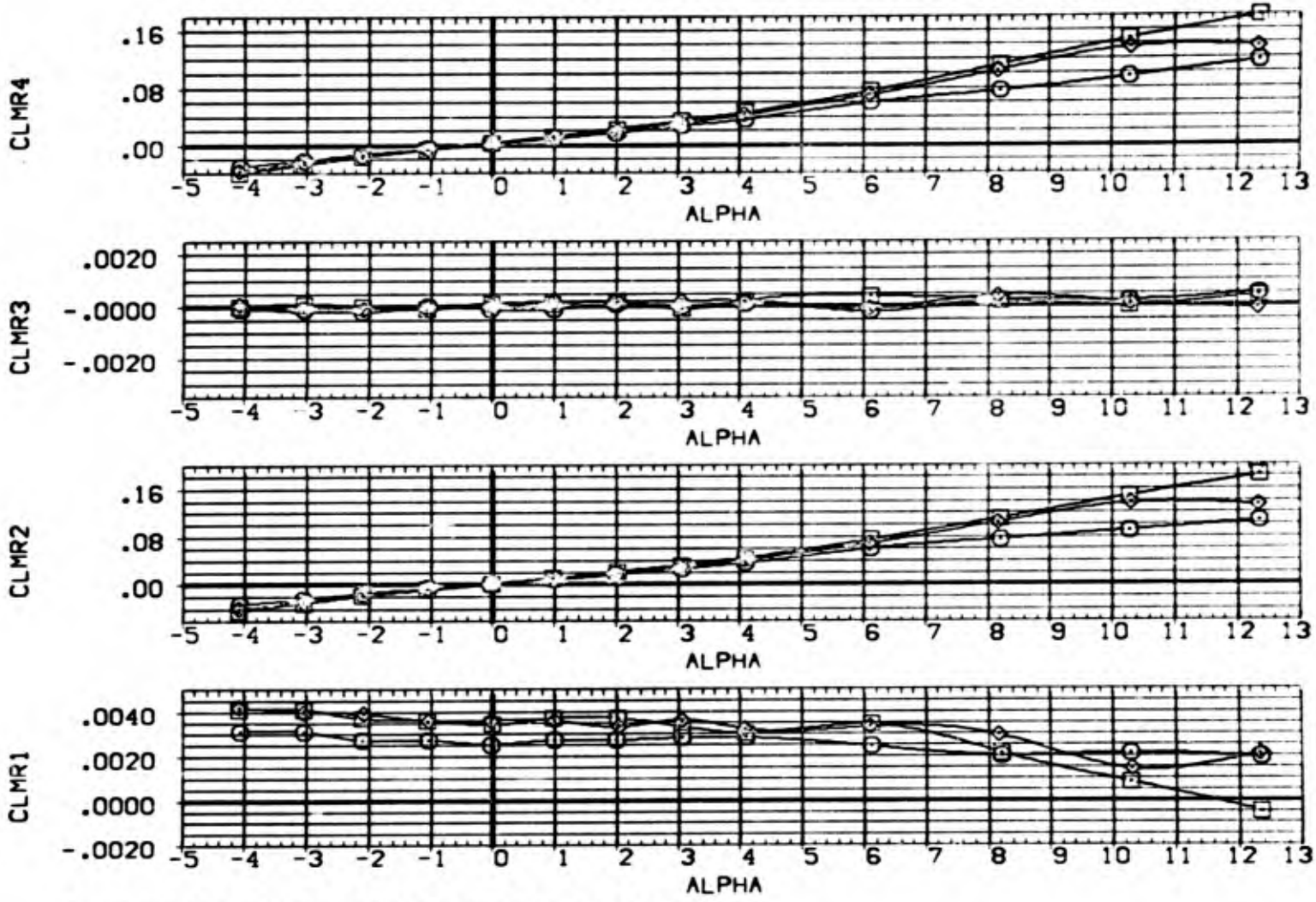
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(D)MACH = .95

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
(CUE154)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
(CUE197)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	1.0000

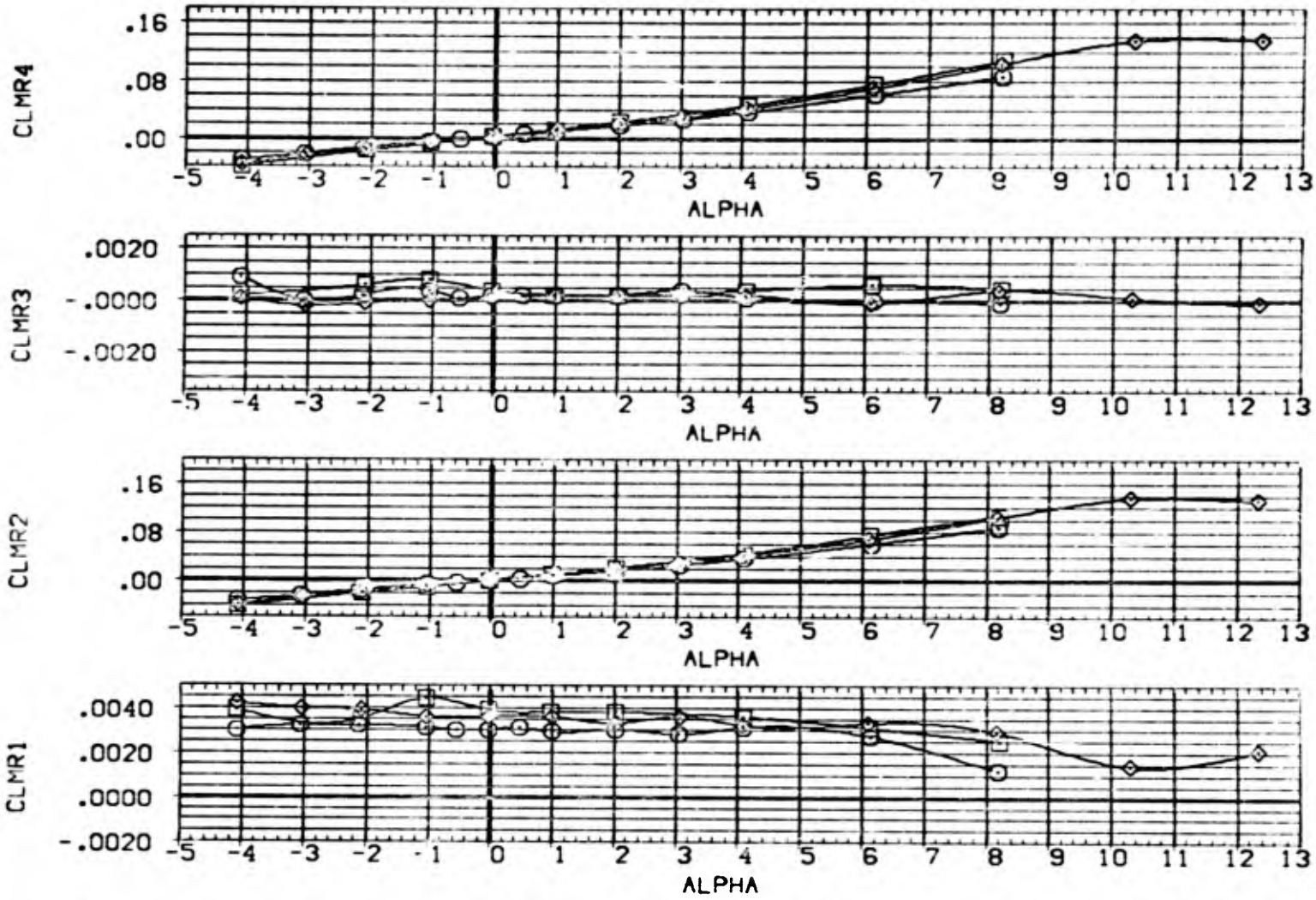


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(E)MACH = .97

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	1.500
(CUE154)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	.000
(CUE197)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION		SC
SREF	19.6350	
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

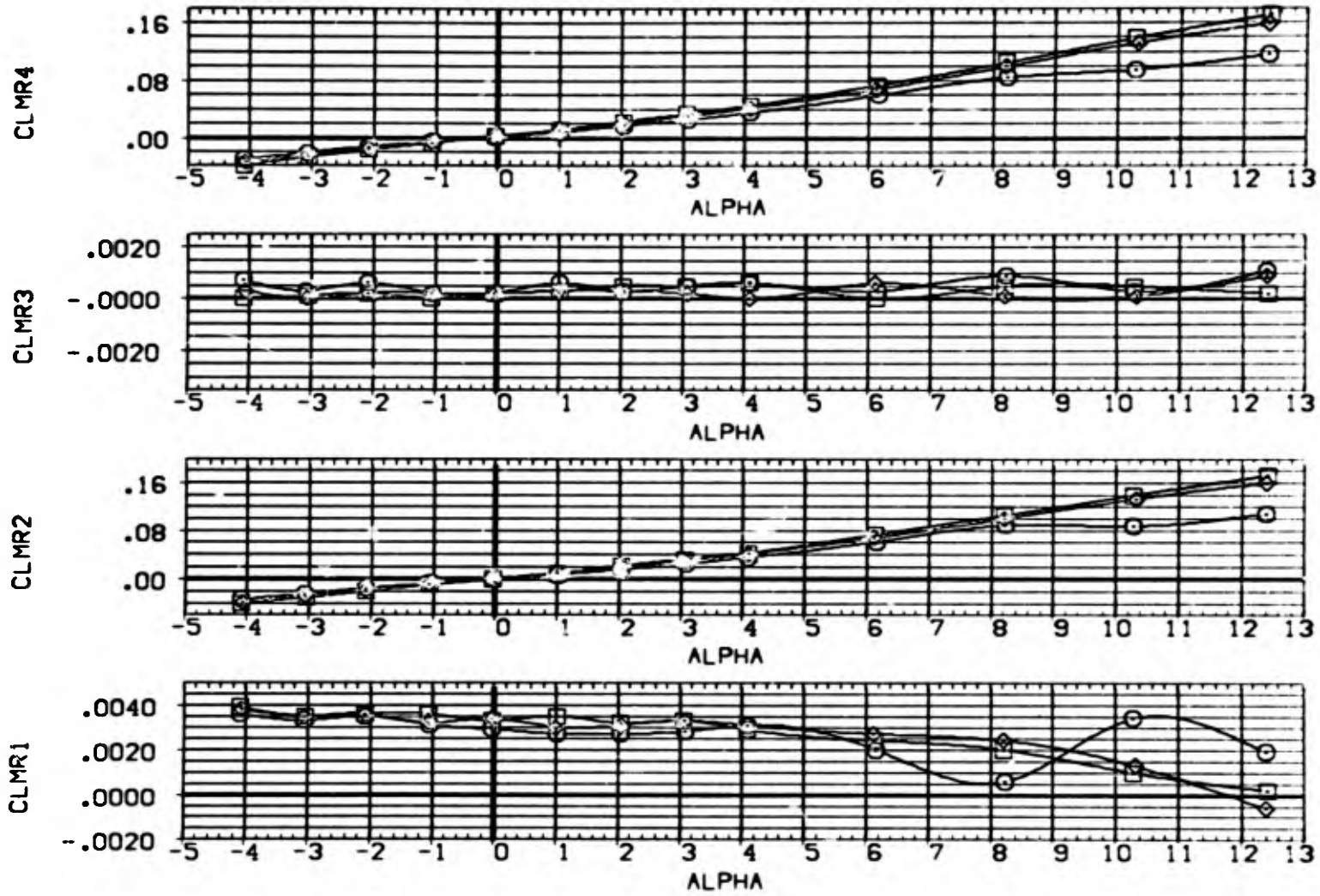


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(F)MAC- = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[illegible]	□	CALSPAN THRUST EFFECTS STING MOUNTED NA (BINIT2)	.000	.000	1.000	1.500
[illegible]	△	CALSPAN THRUST EFFECTS STING MOUNTED NA (BINIT2)	.000	.000	2.000	1.000
[illegible]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NA (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

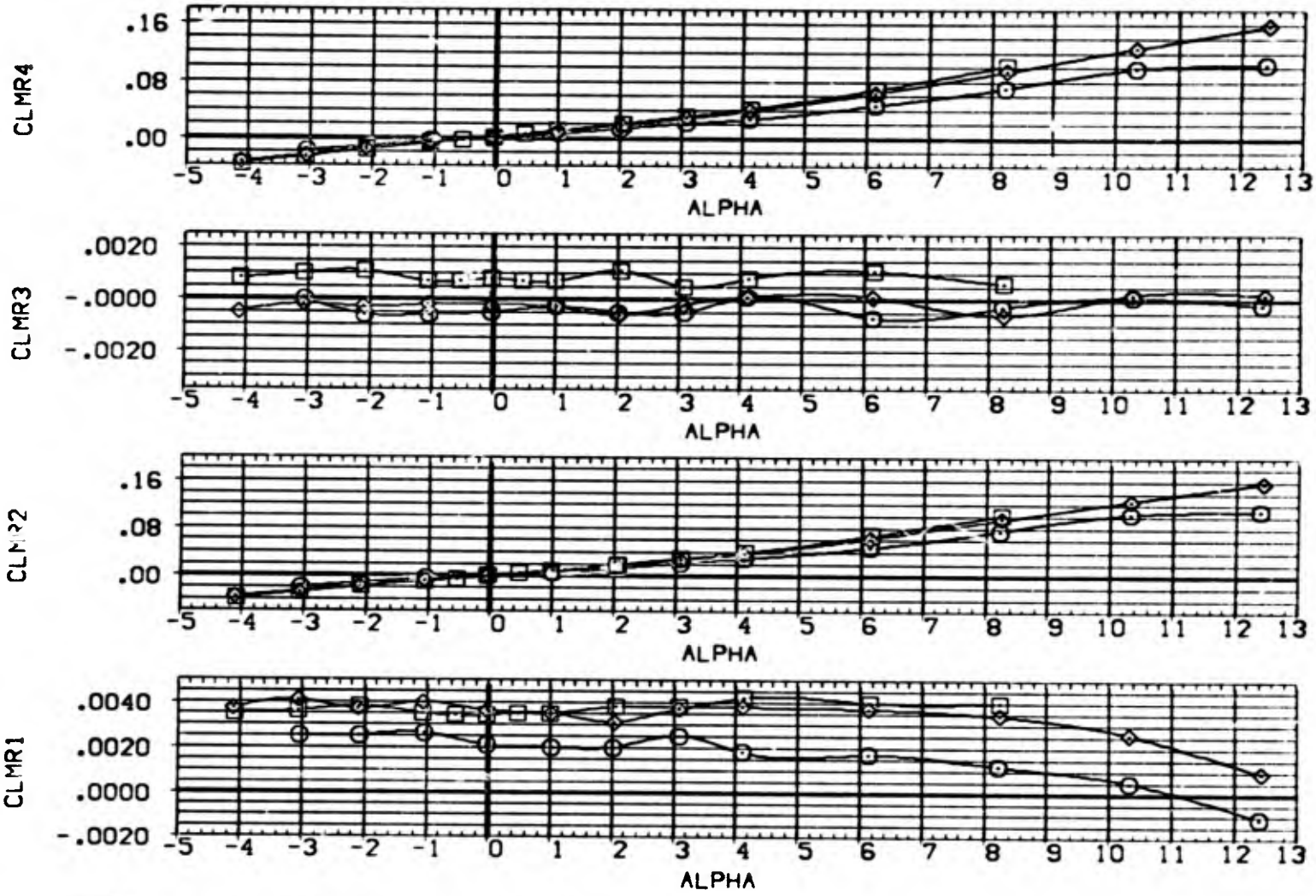


PLUME EFFECTS ON STABILITY CHARACTERISTICS

[illegible]MAC- = 1.05

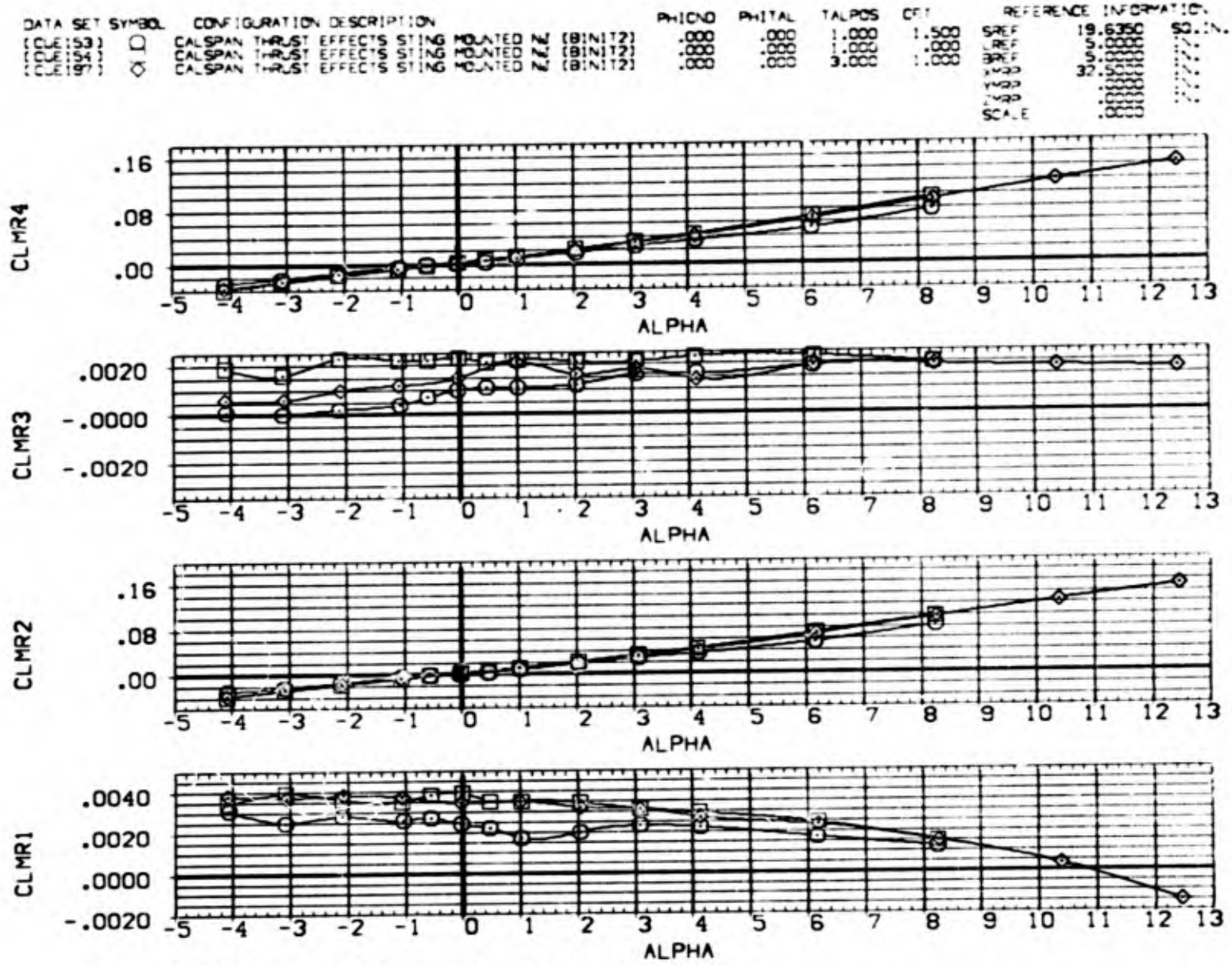
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[illegible]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
[illegible]	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
[illegible]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	IN.



PLUME EFFECTS ON STABILITY CHARACTERISTICS

[illegible]MACH = 1.10



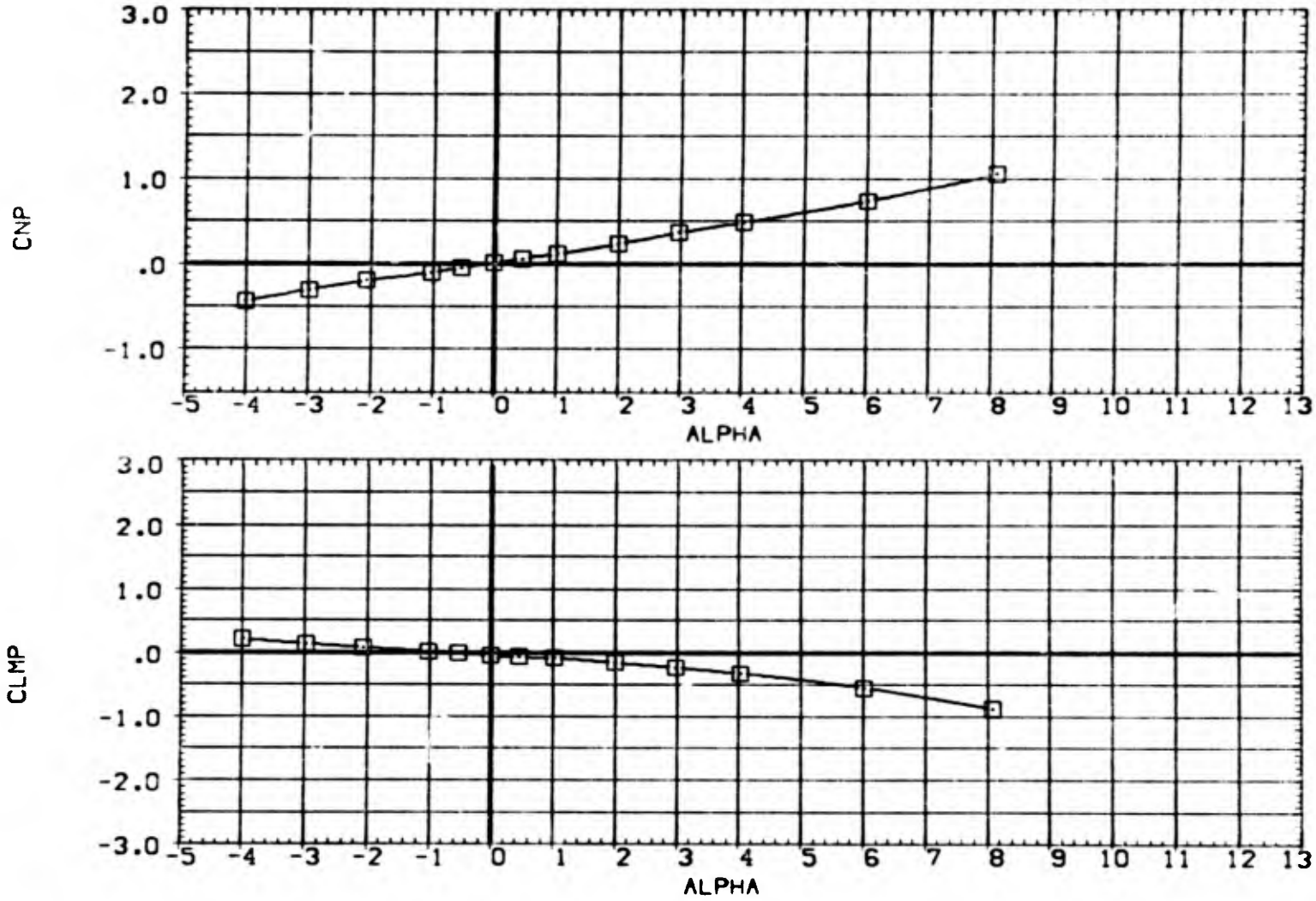
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(I)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[DE153]	□	DATA NOT AVAILABLE	.000	.000	1.000	1.500
[DE154]	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
[DE197]	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

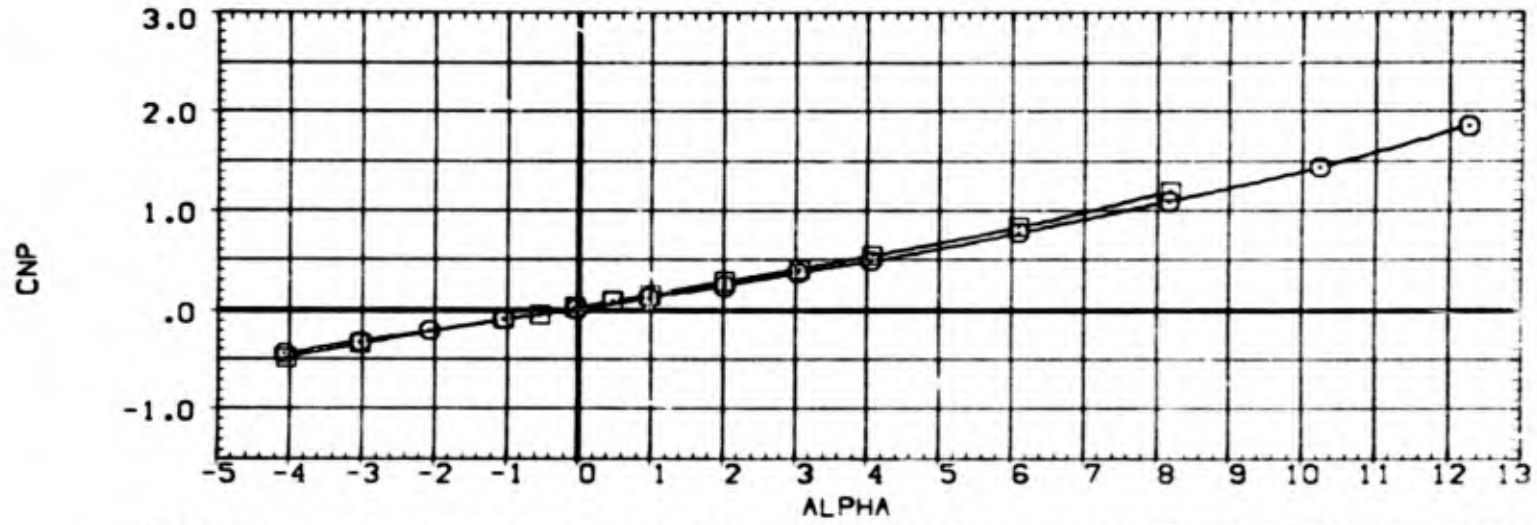


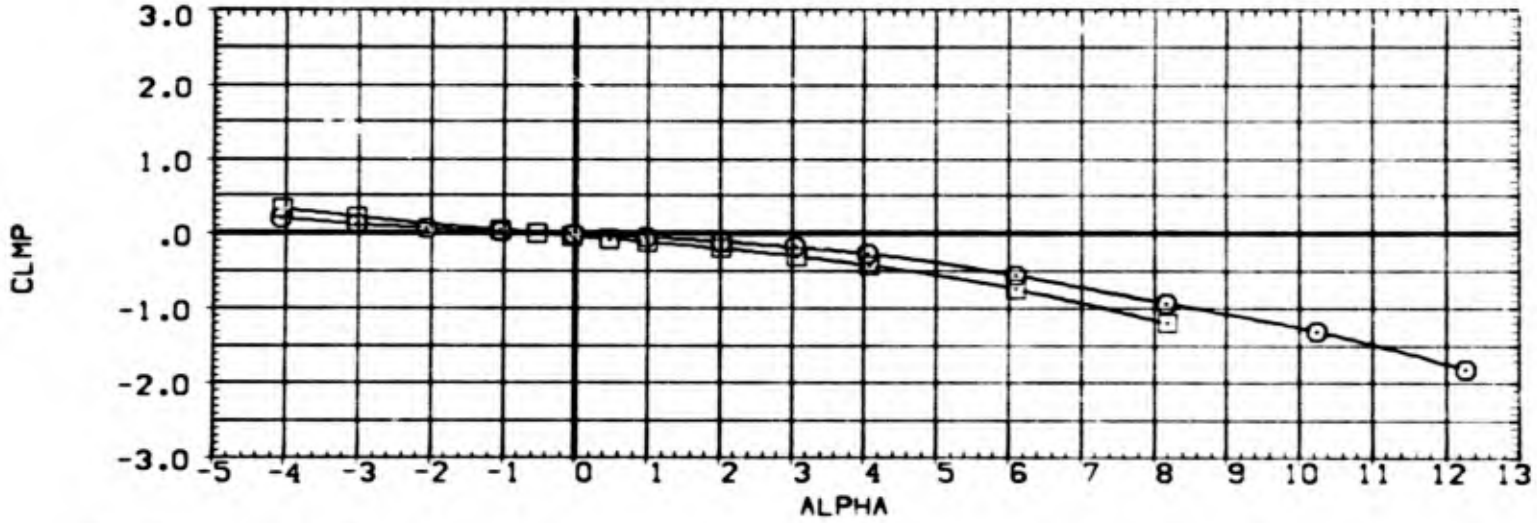
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MAC- = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DUE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT2)	.000	.000	1.000	1.500
(DUE154)	○	CALSPAN THRUST EFFECTS STING MOUNTED W/ (9INIT2)	.000	.000	1.000	.000
(DUE197)	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



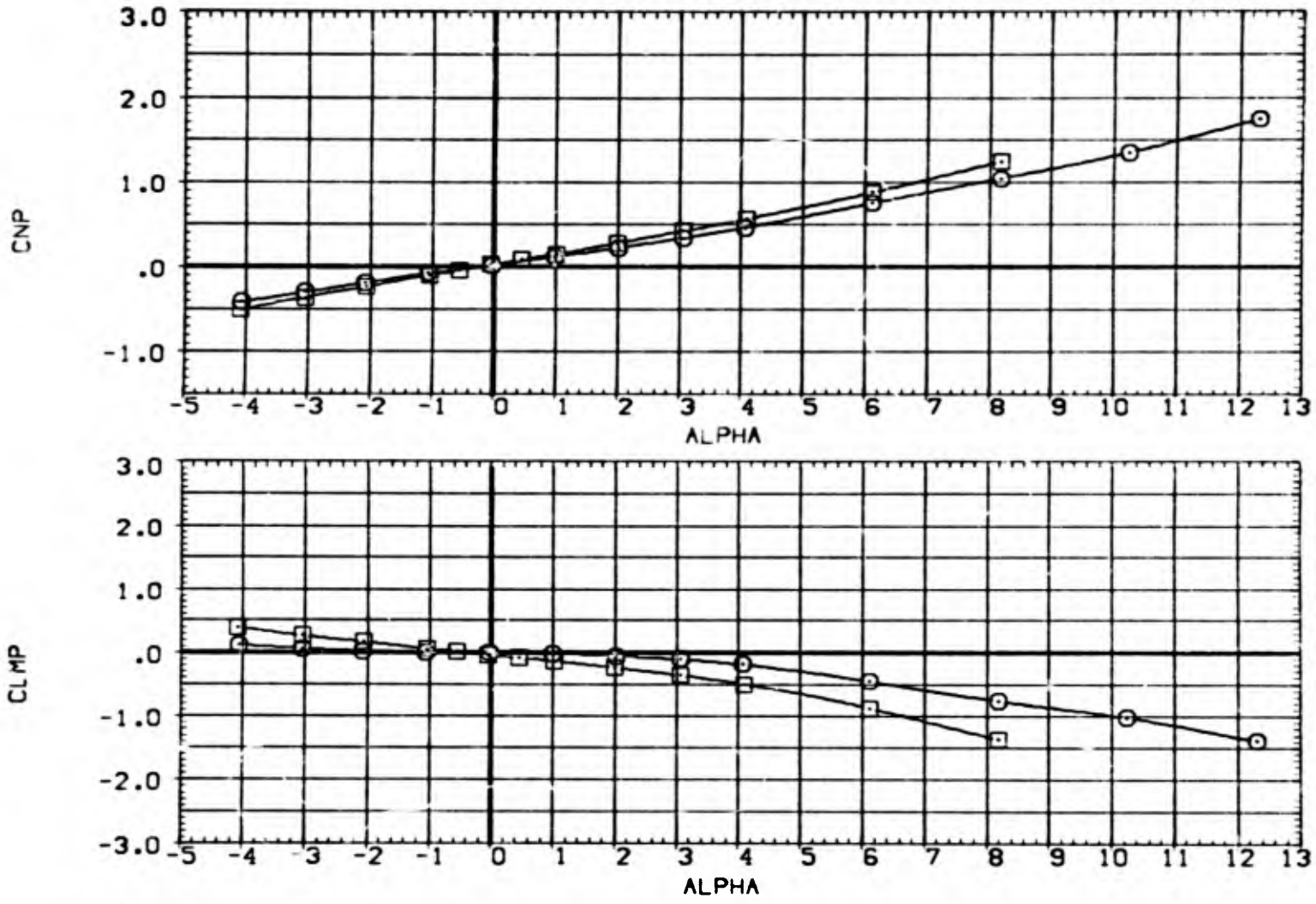


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[DJE153]	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINIT2]	.000	.000	1.000	1.500
[DJE154]	◁	CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINIT2]	.000	.000	1.000	.000
[DJE197]	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION	
SREF	19.6350 SQ.IN.
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

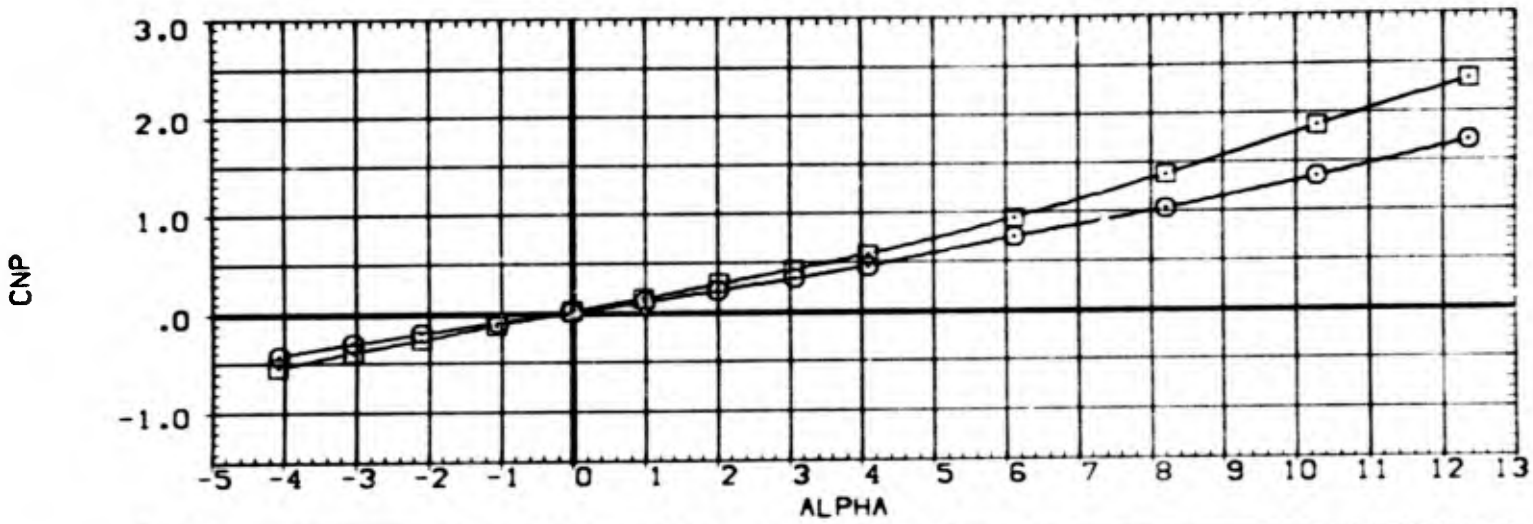


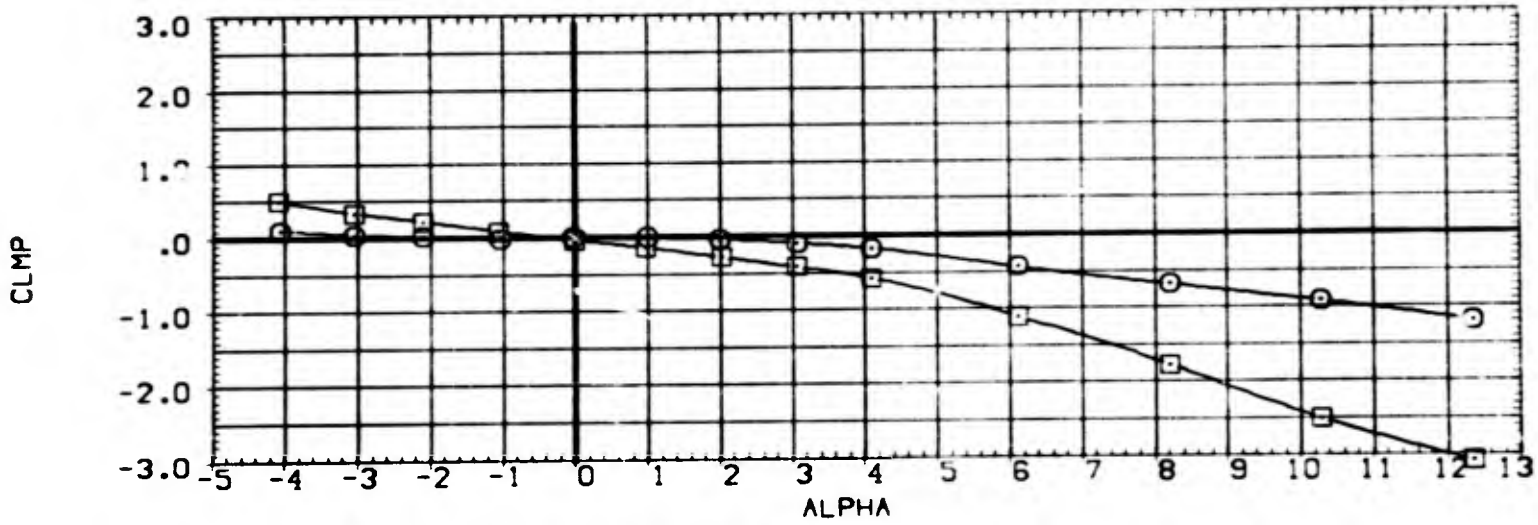
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MAC = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[illegible]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
[illegible]	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
[illegible]	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	





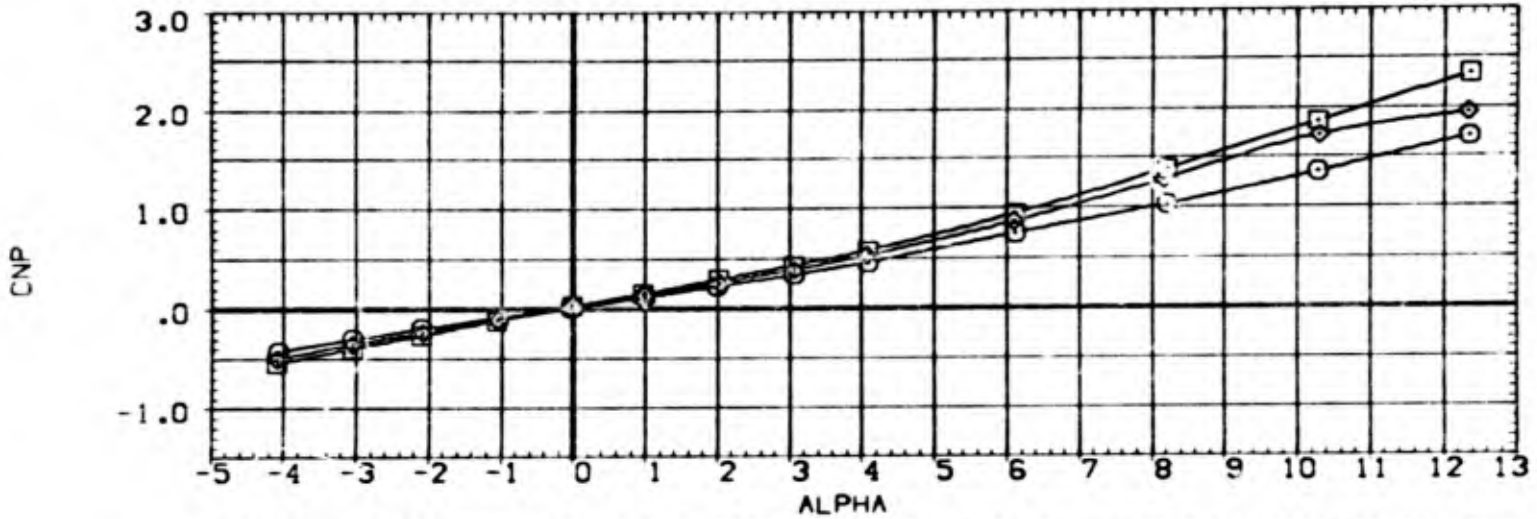
PLUME EFFECTS ON STABILITY CHARACTERISTICS

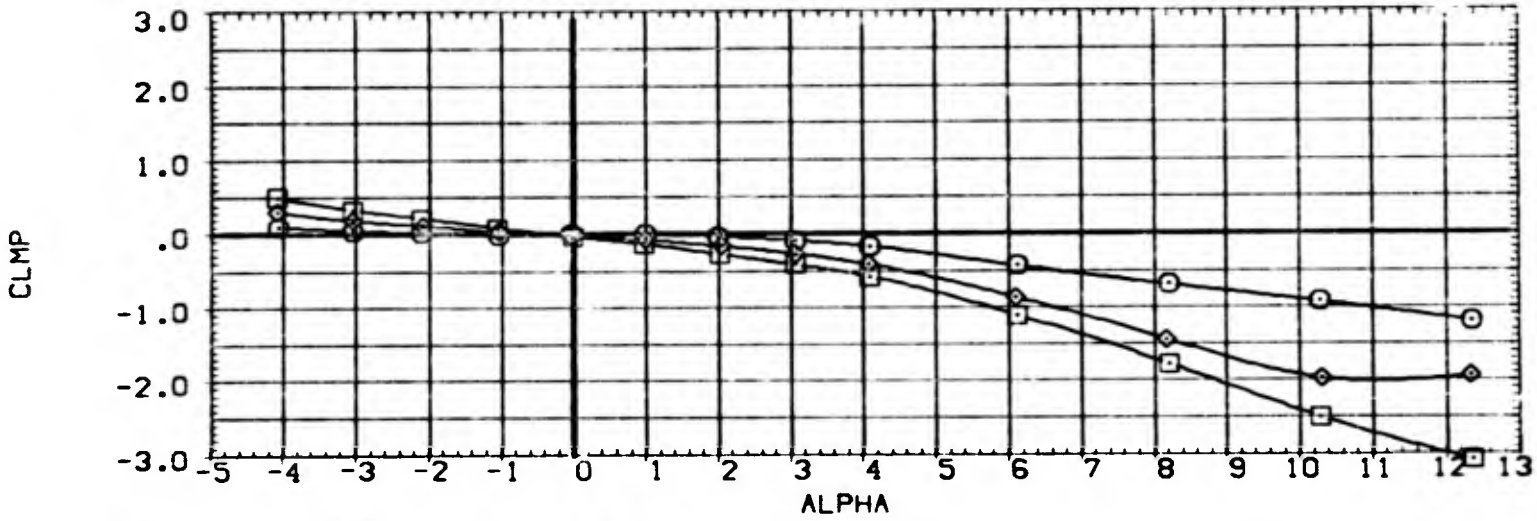
[illegible]MAC = .95

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DUE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	1.500
(DUE154)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	.000
(DUE197)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000





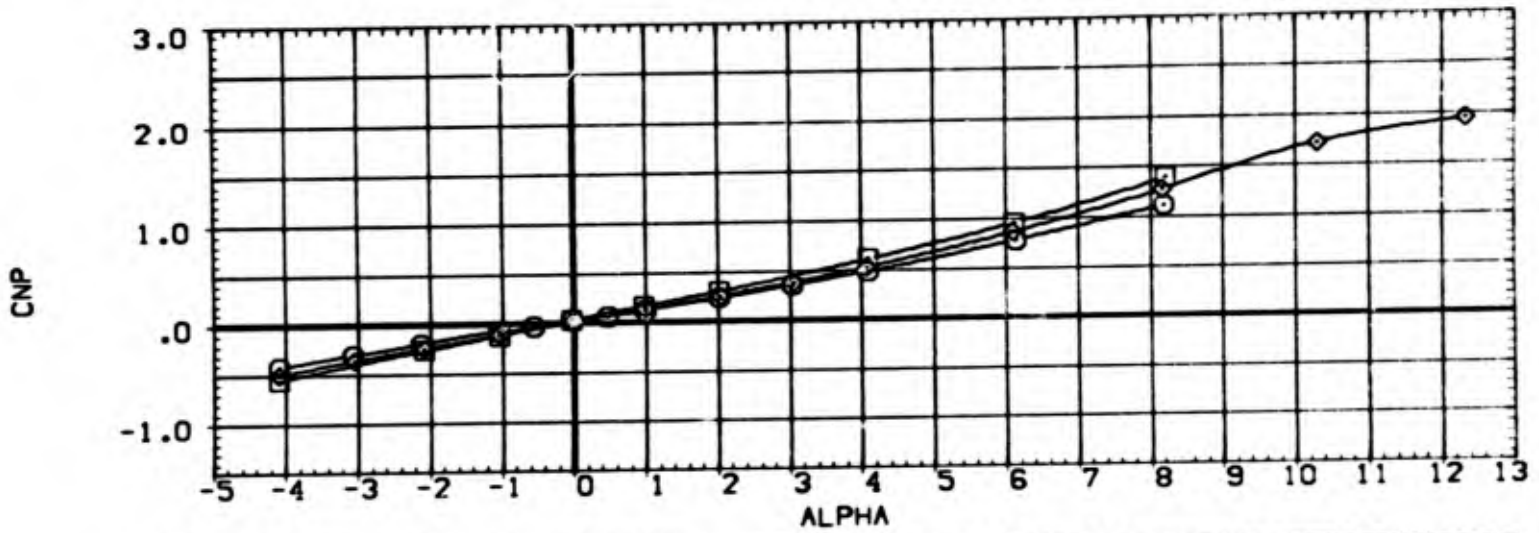
PLUME EFFECTS ON STABILITY CHARACTERISTICS

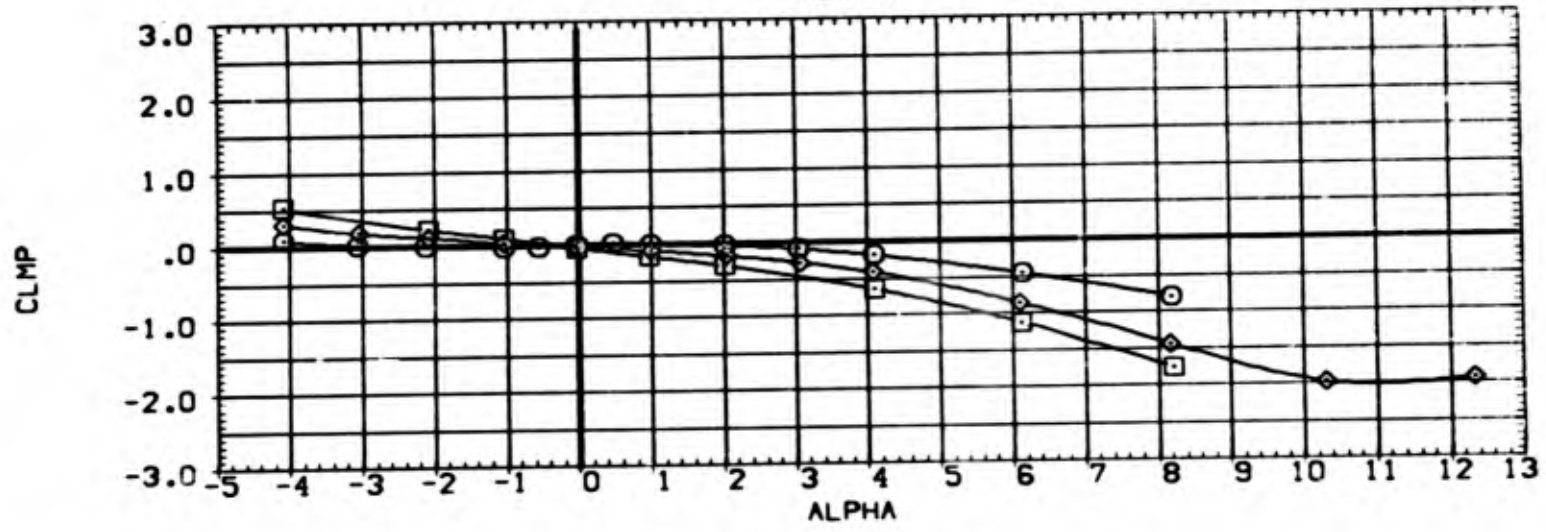
(E)MAC = .97

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DUE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
(DUE154)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	2.000	.000
(DUE197)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION

SREF	19.6350	SQ. IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



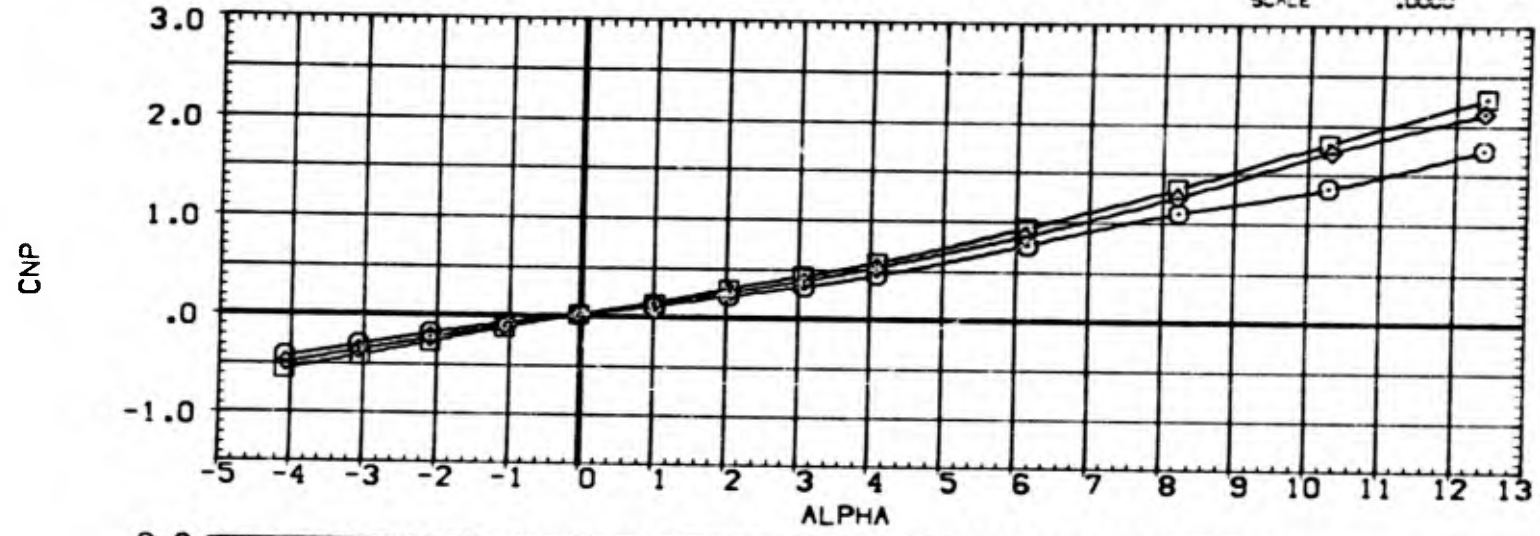


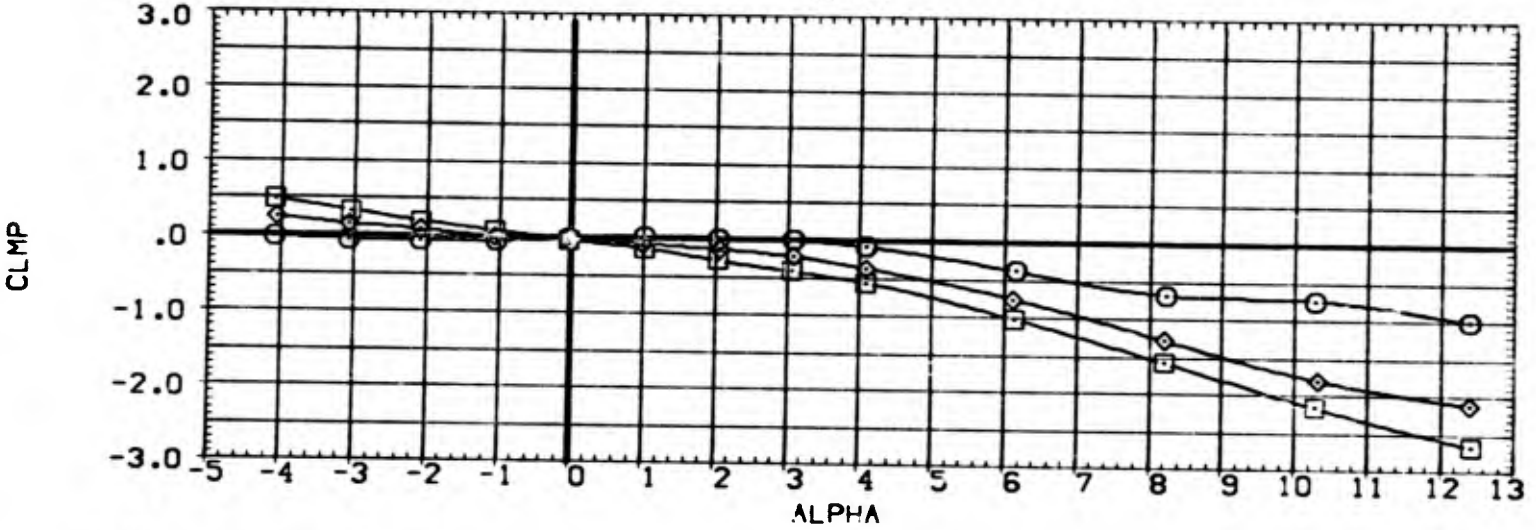
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(F)MAC- = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[DUE153]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
[DUE154]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
[DUE197]	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



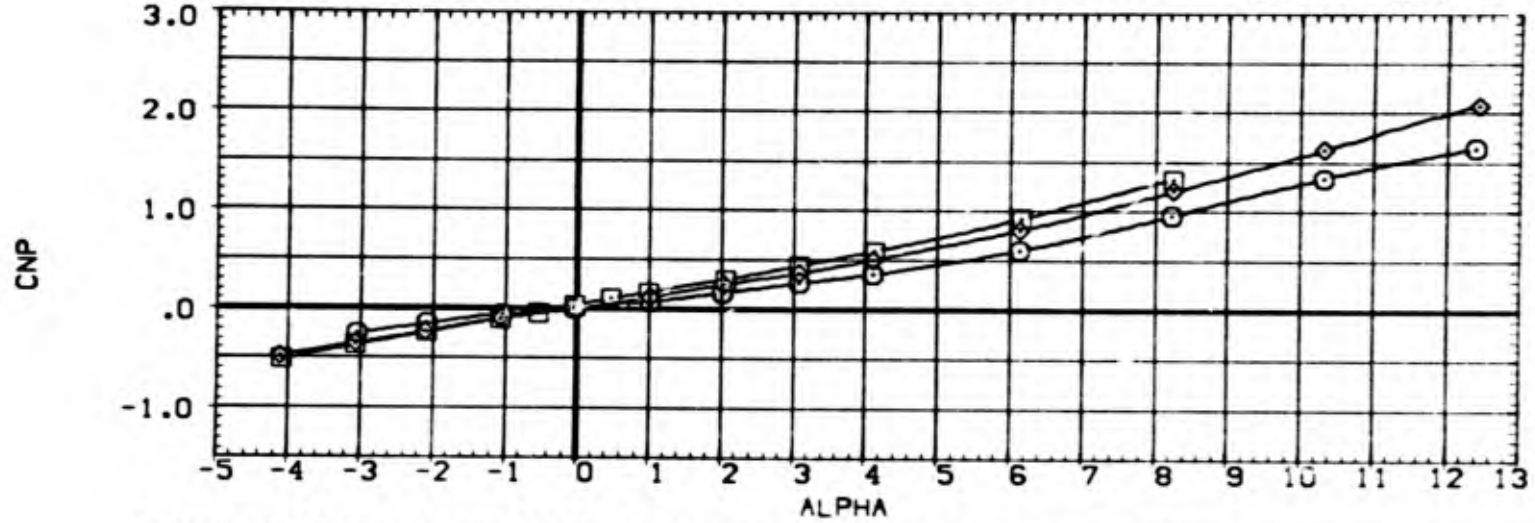


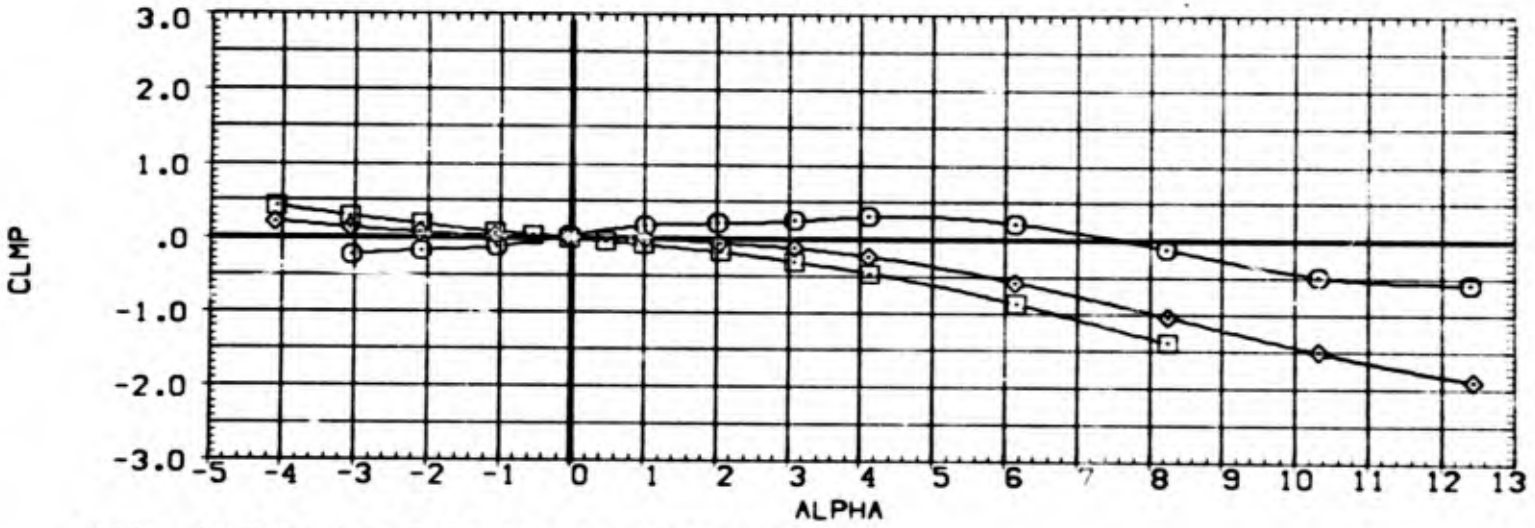
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(G)MAC = 1.05

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE153)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
(DUE154)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
(DUE197)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	3.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	





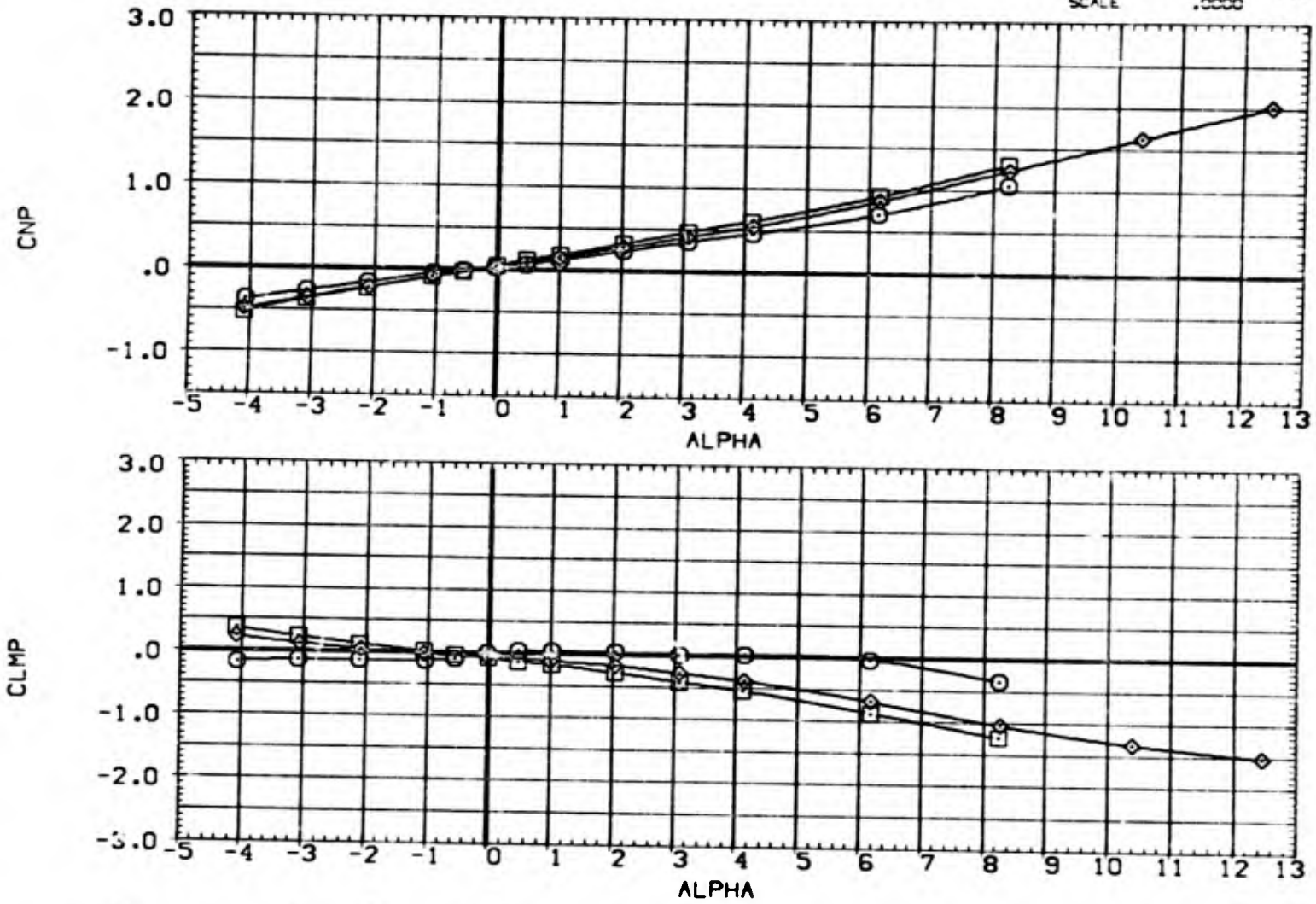
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(H)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[DUE153]	□	CALSPAN THRUST EFFECTS STING MOUNTED NA (BINIT2)	.000	.000	1.000	1.500
[DUE154]	○	CALSPAN THRUST EFFECTS STING MOUNTED NA (BINIT2)	.000	.000	1.000	.000
[DUE197]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NA (BINIT2)	.000	.000	3.000	1.000

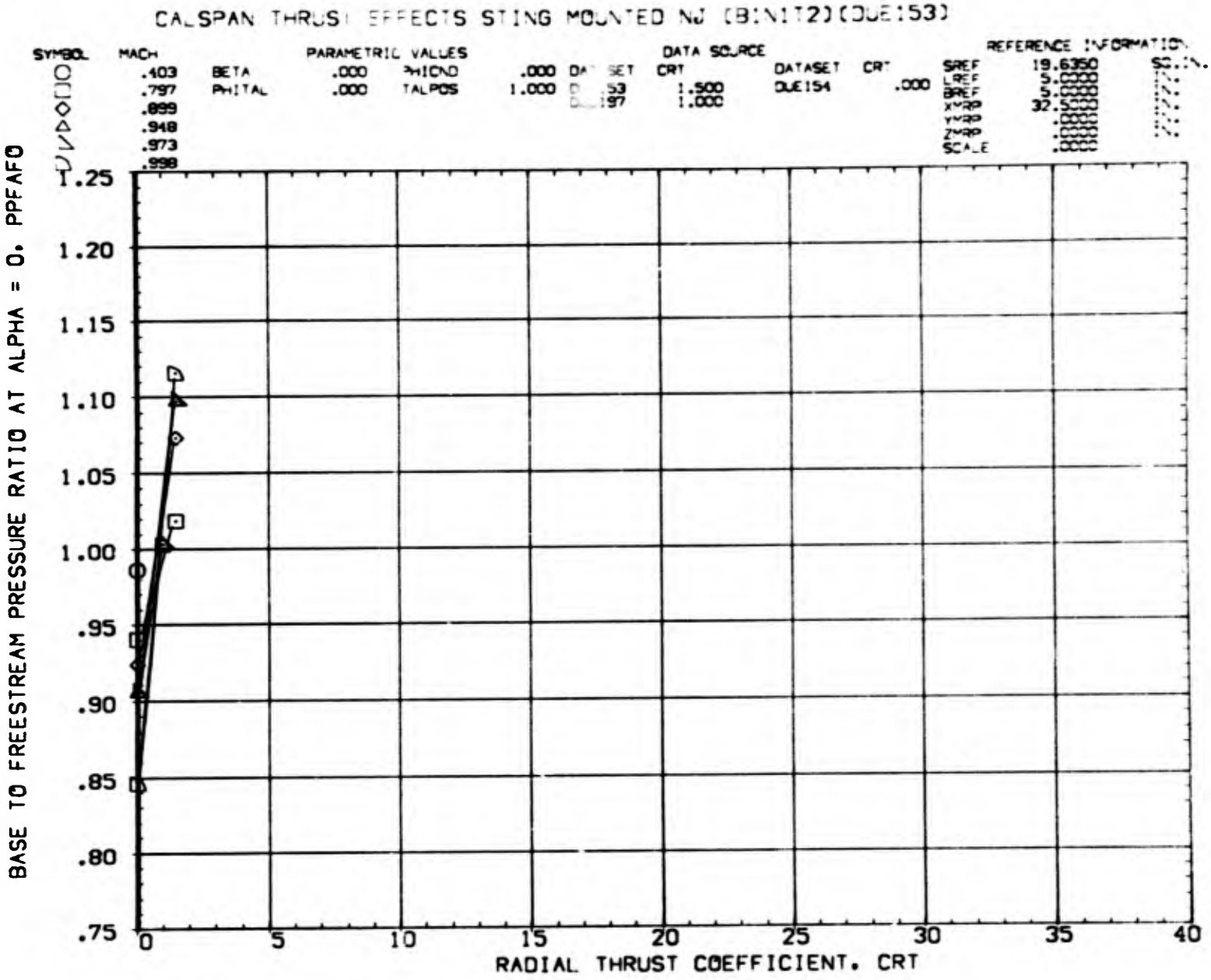
REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

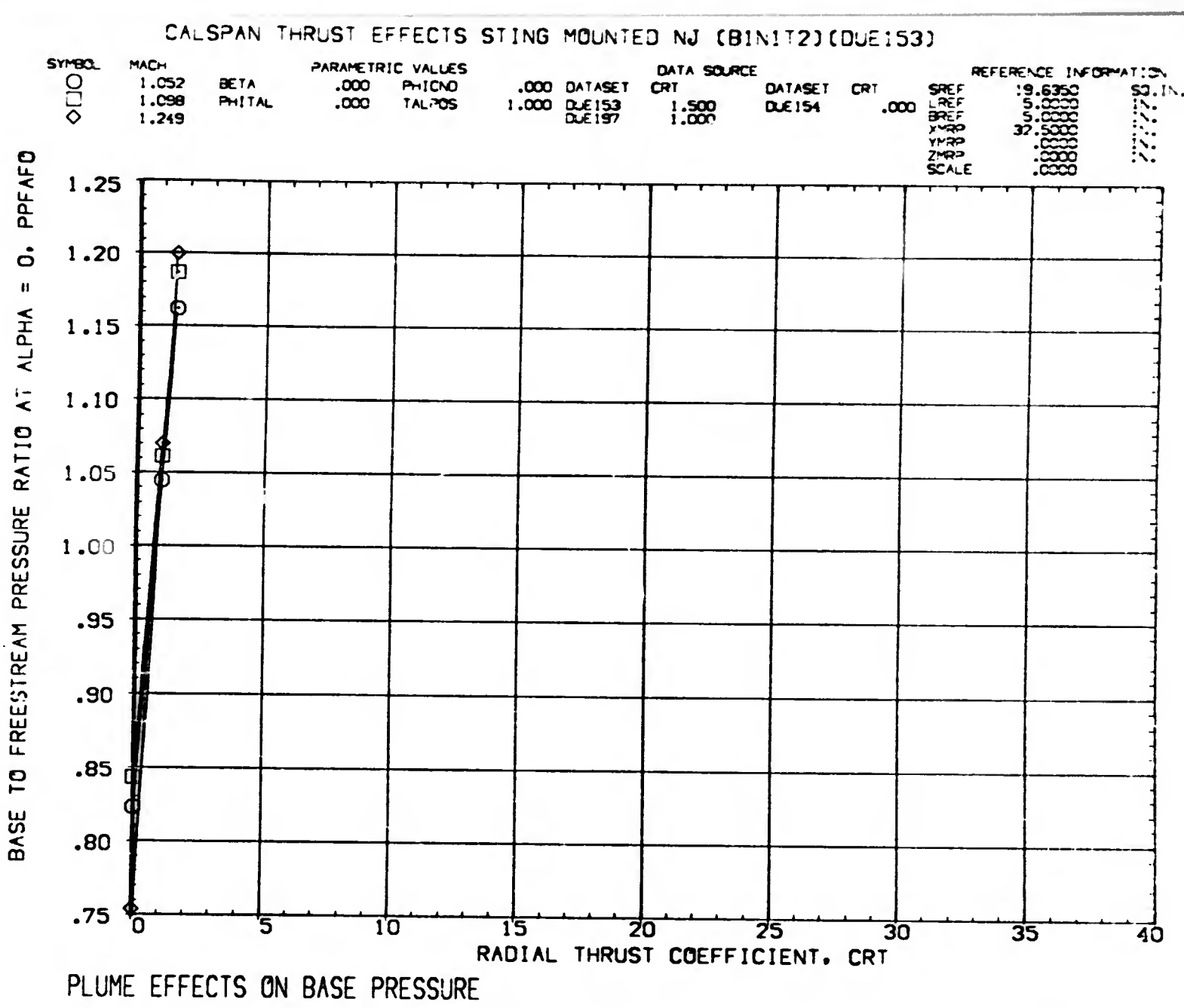


PLUME EFFECTS ON STABILITY CHARACTERISTICS

[]MACH = 1.25



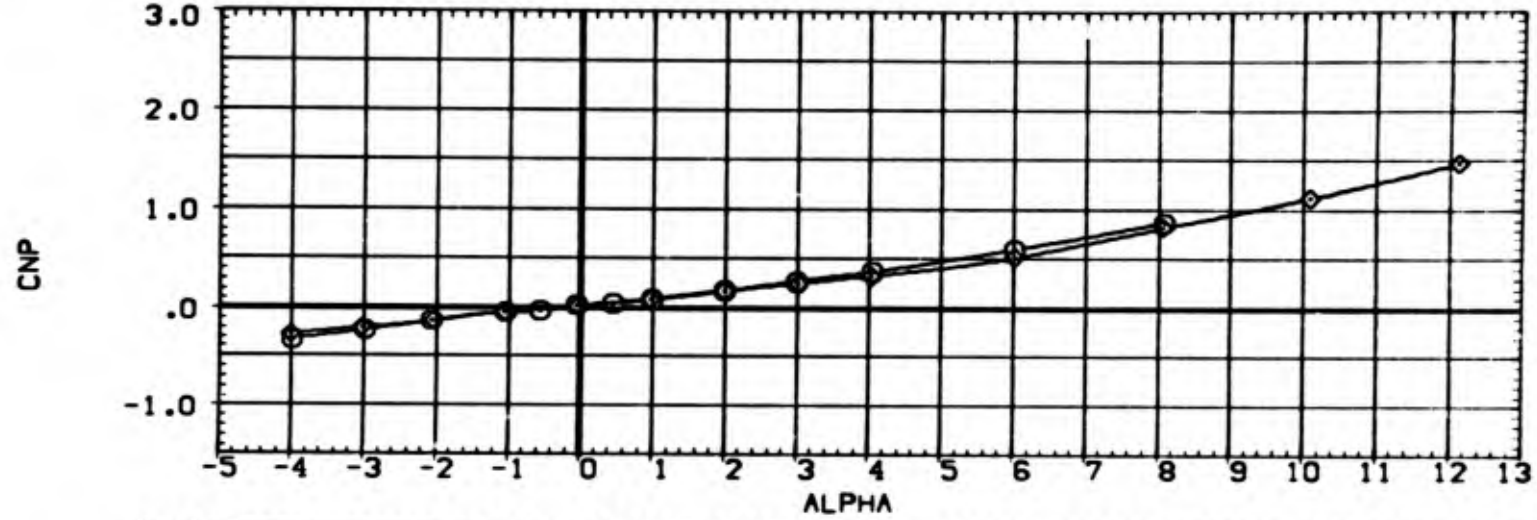
PLUME EFFECTS ON BASE PRESSURE

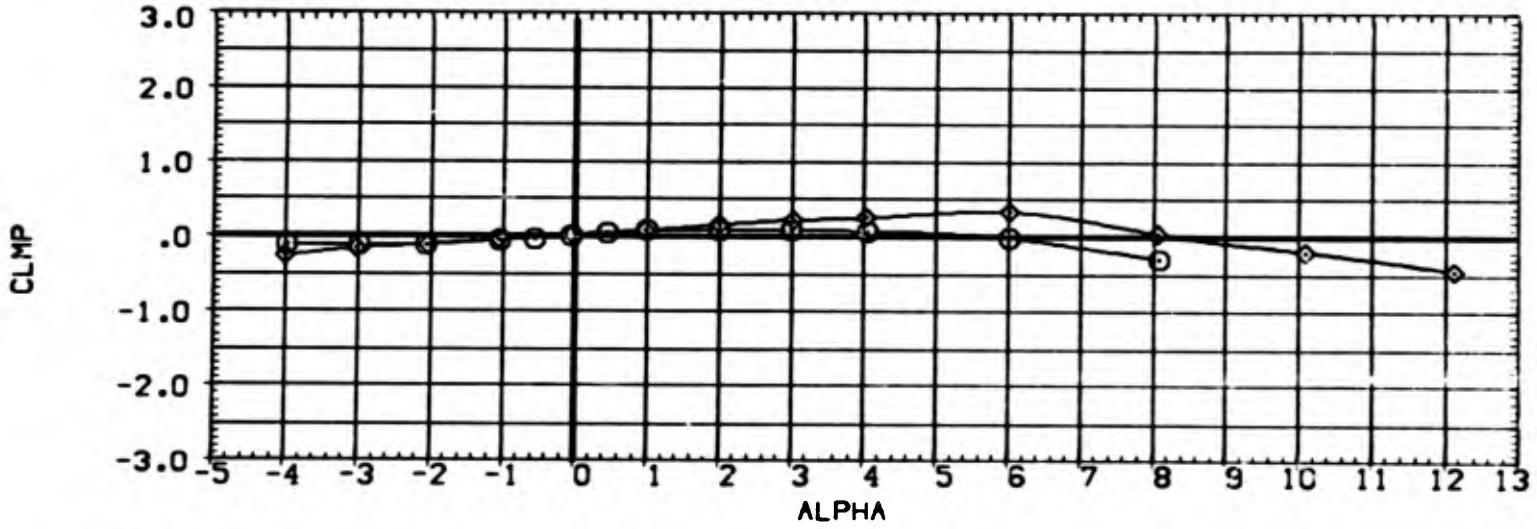


PLUME EFFECTS ON BASE PRESSURE

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[DUE150]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
[DUE155]	◇	DATA NOT AVAILABLE	22.500	.000	1.000	7.200
[DUE158]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	45.000	.000	1.000	7.200

REFERENCE INFORMATION		SC.IN.
SREF	19.6350	
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



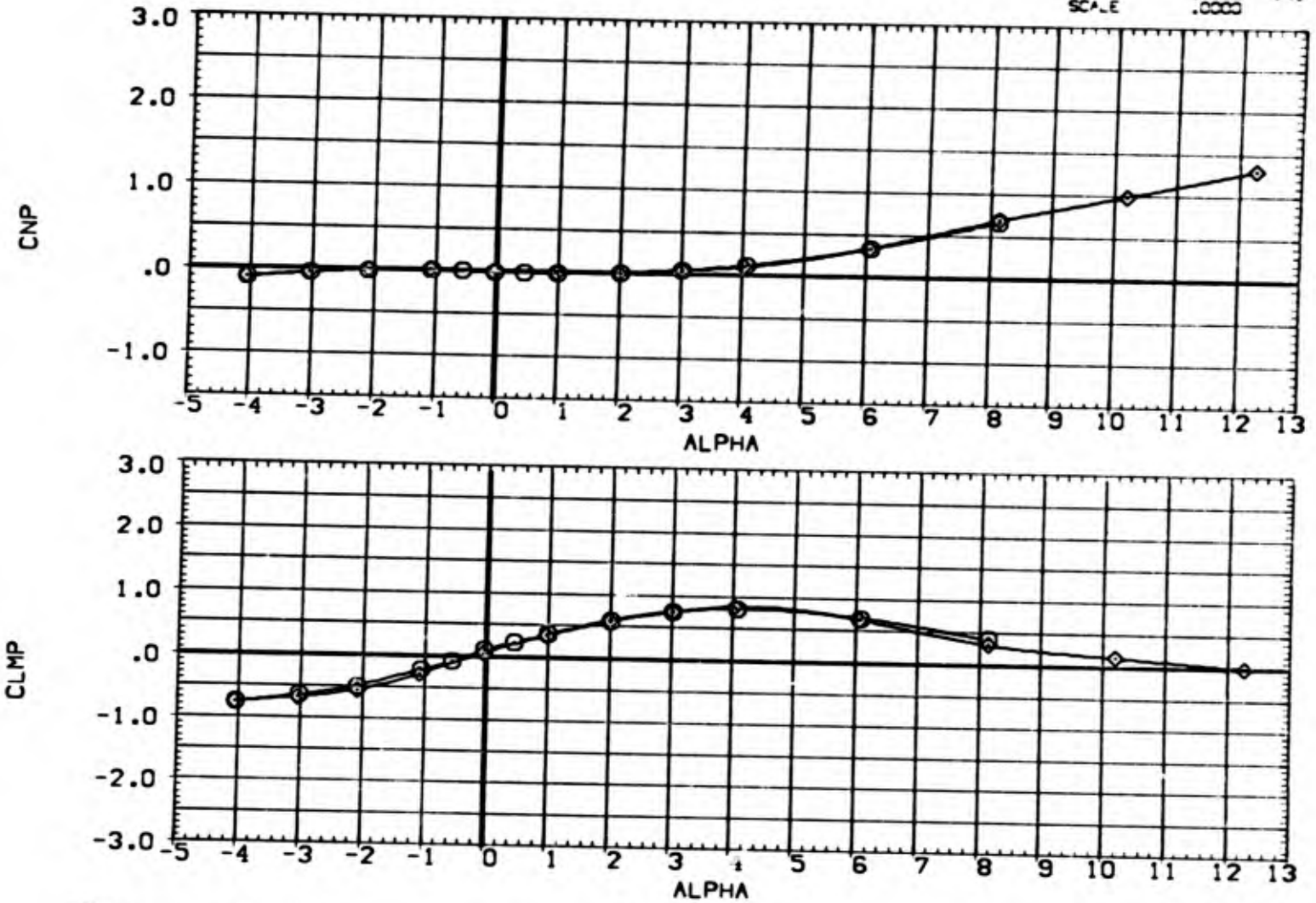


COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(A)MAC = .40

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[DUE150]	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
[DUE155]		DATA NOT AVAILABLE	22.500	.000	1.000	7.200
[DUE158]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	45.000	.000	1.000	7.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



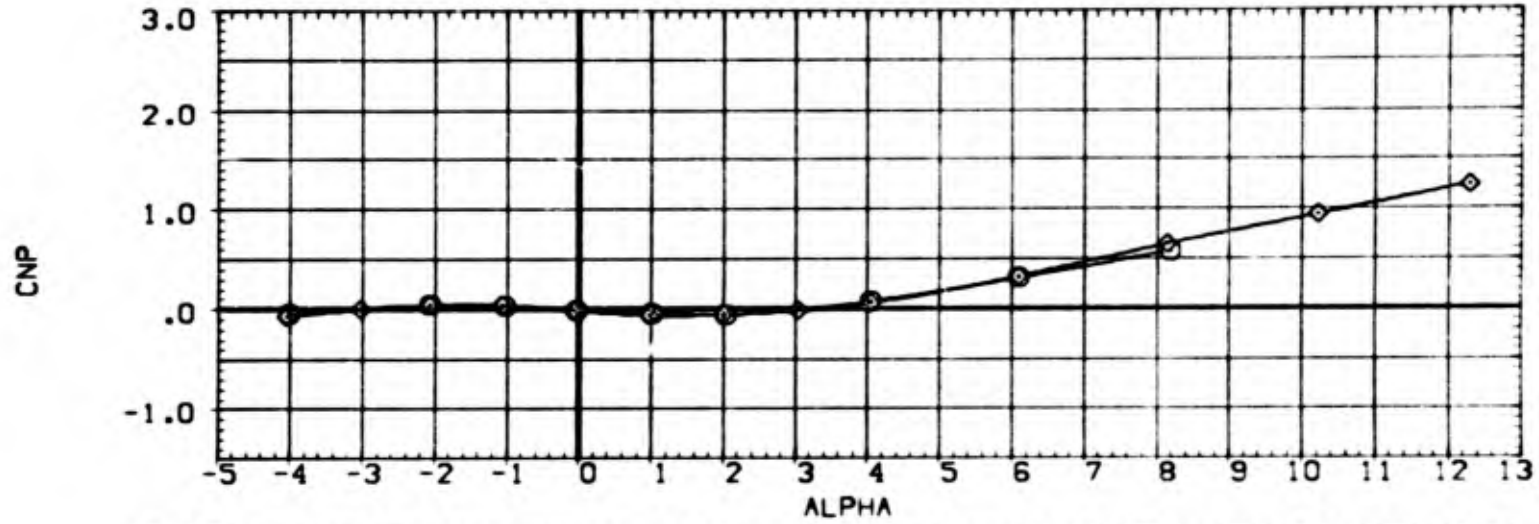
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

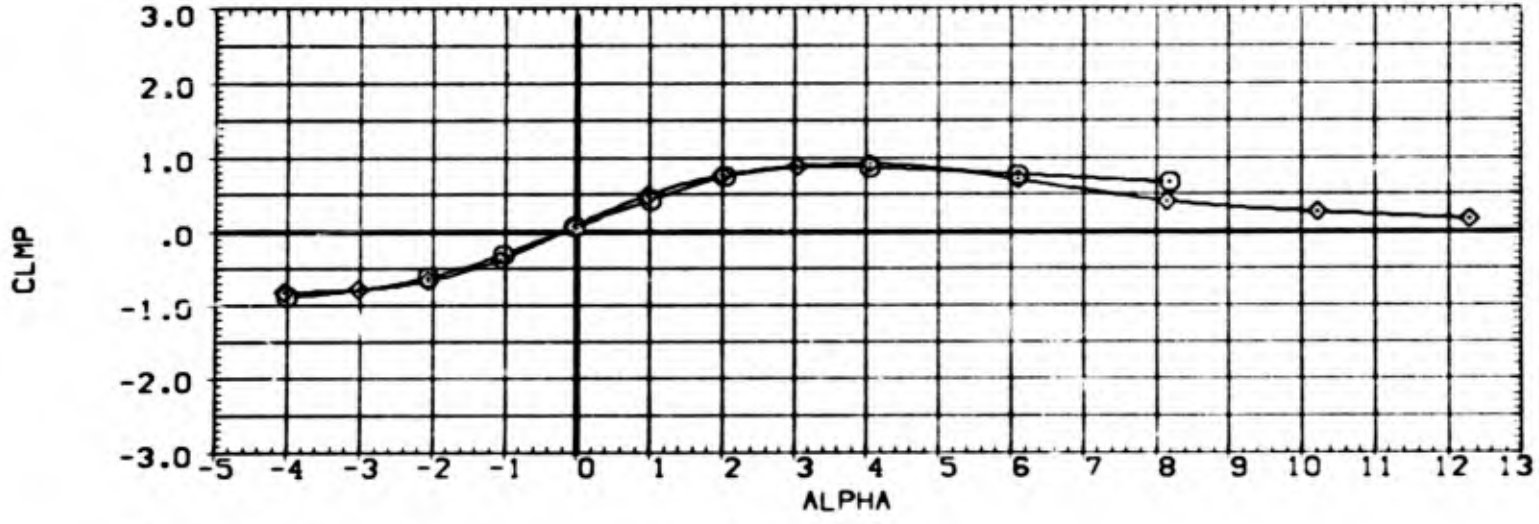
(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(QUE150)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
(QUE155)		DATA NOT AVAILABLE	22.500	.000	1.000	7.200
(QUE158)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	45.000	.000	1.000	7.200

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



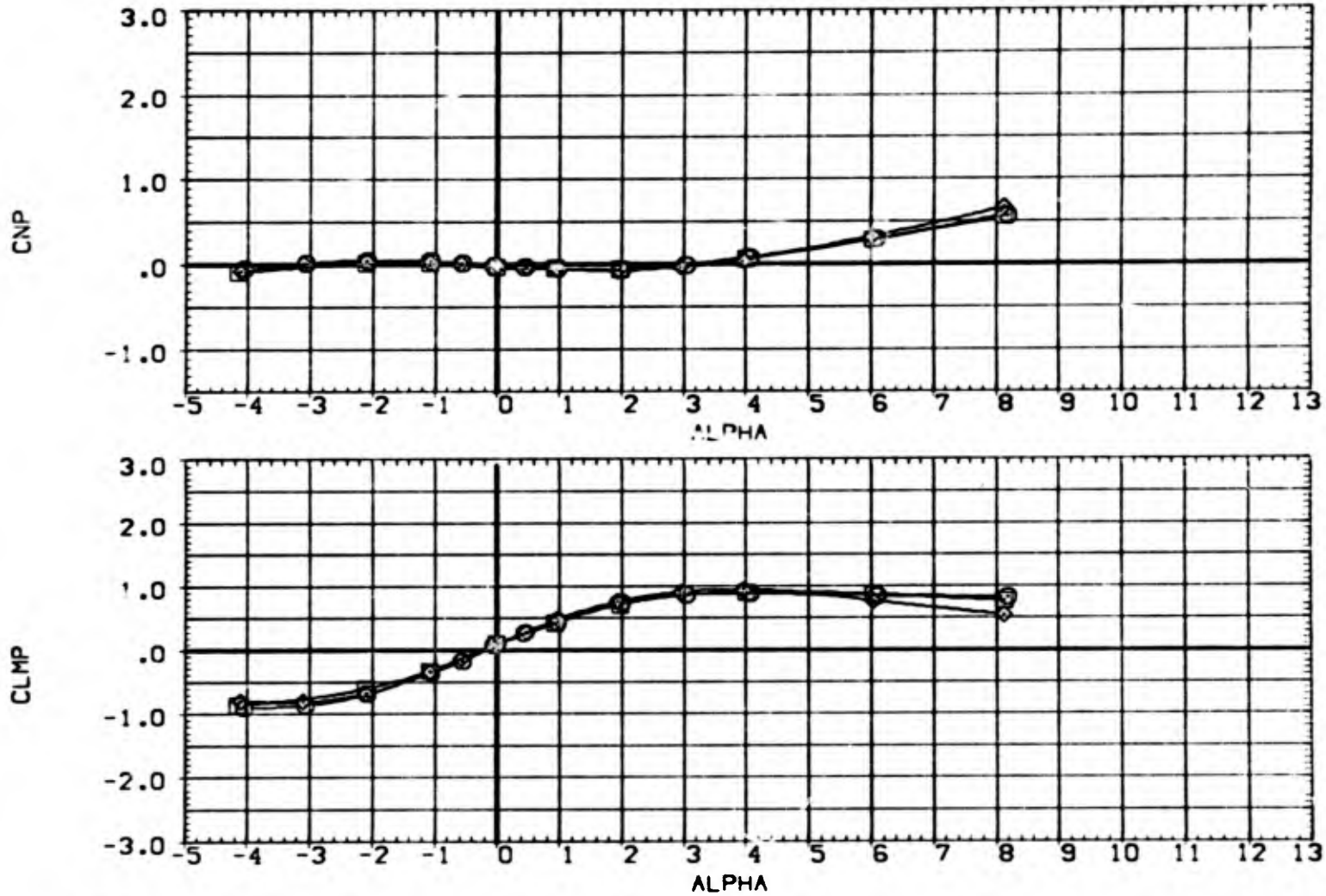


COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[DUE150]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
[DUE155]	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	22.500	.000	1.000	7.200
[DUE158]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	45.000	.000	1.000	7.200

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



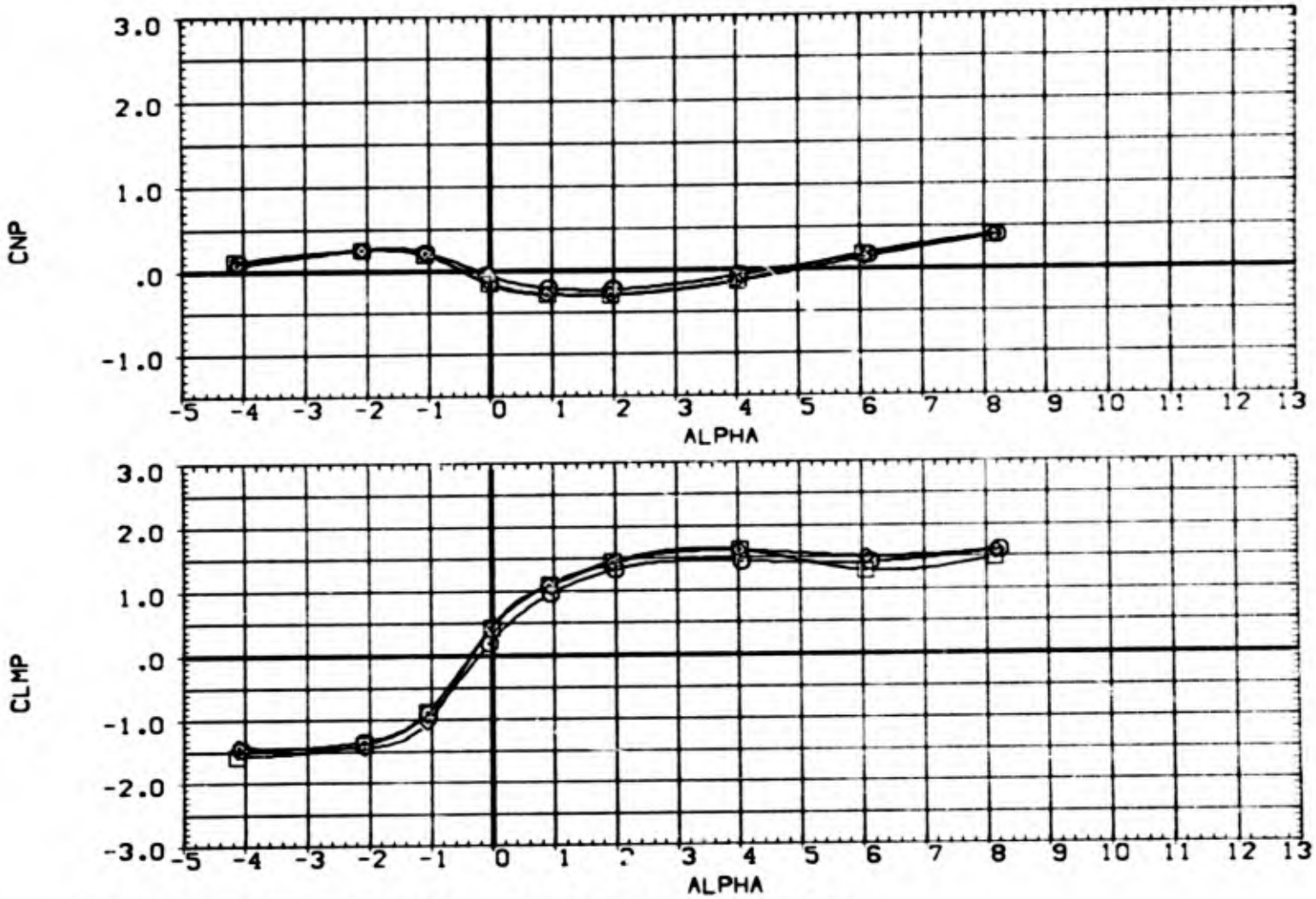
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

[D]MAC- = .99

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(QUE150)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	7.200
(QUE155)	○	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	22.500	.000	1.000	7.200
(QUE158)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	45.000	.000	1.000	7.200

REFERENCE INFORMATION

SREF	9.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

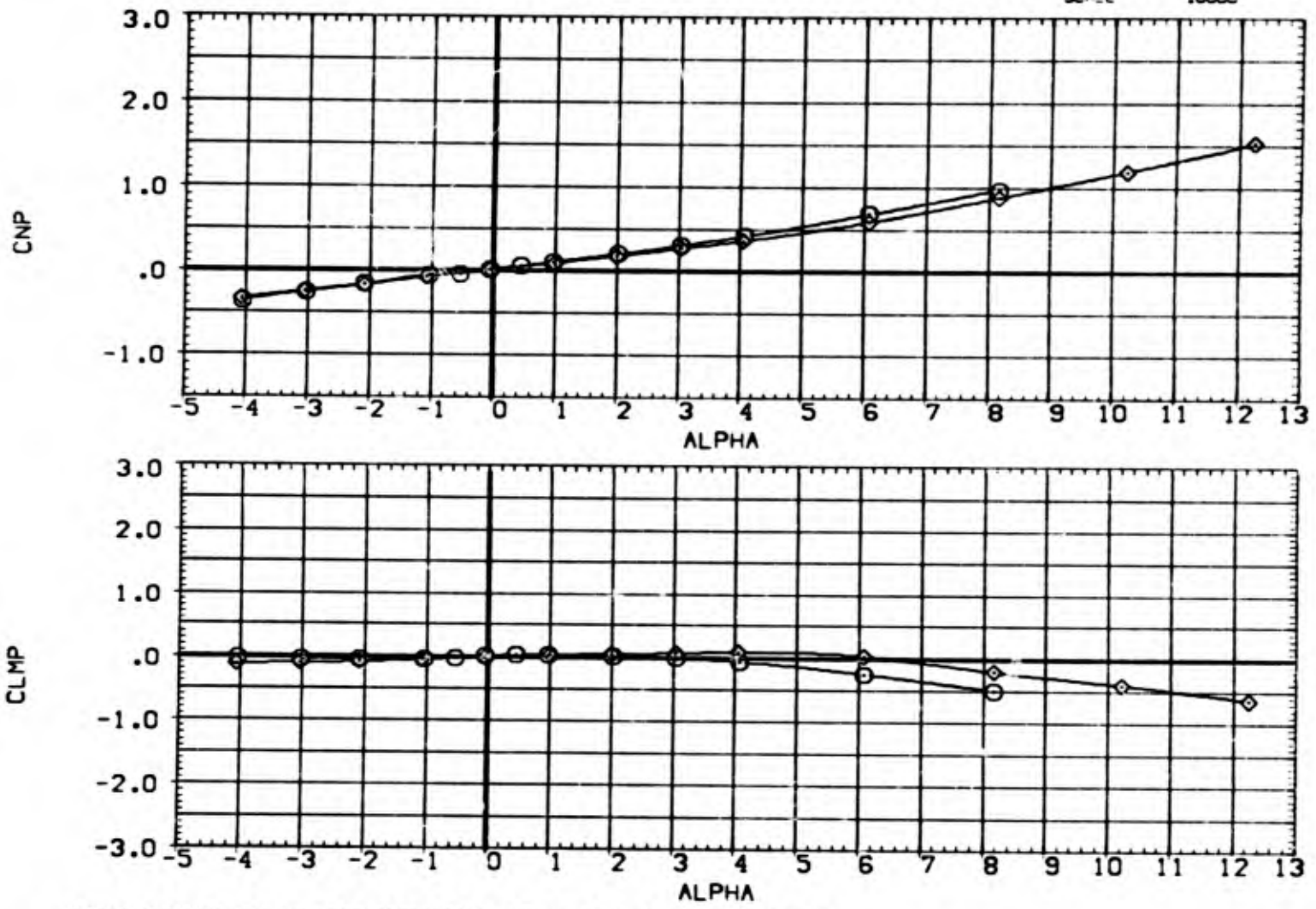


COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(E)MAC- = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE152)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	2.500
(DJE156)		DATA NOT AVAILABLE				
(FJE159)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	45.000	.000	1.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



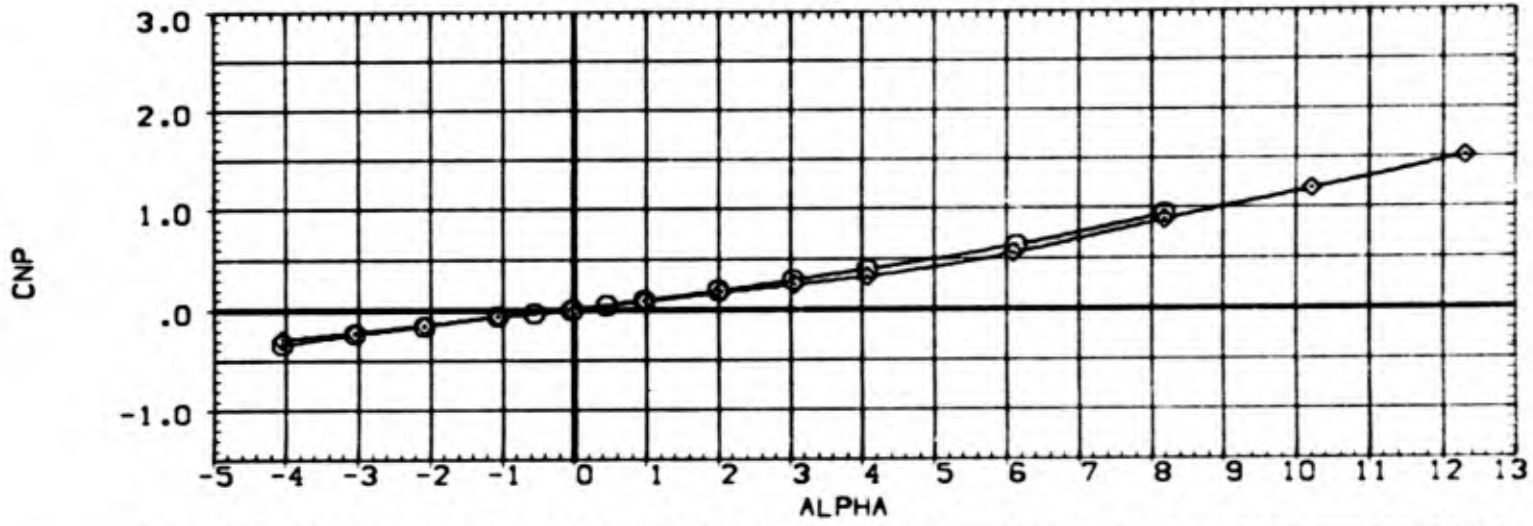
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

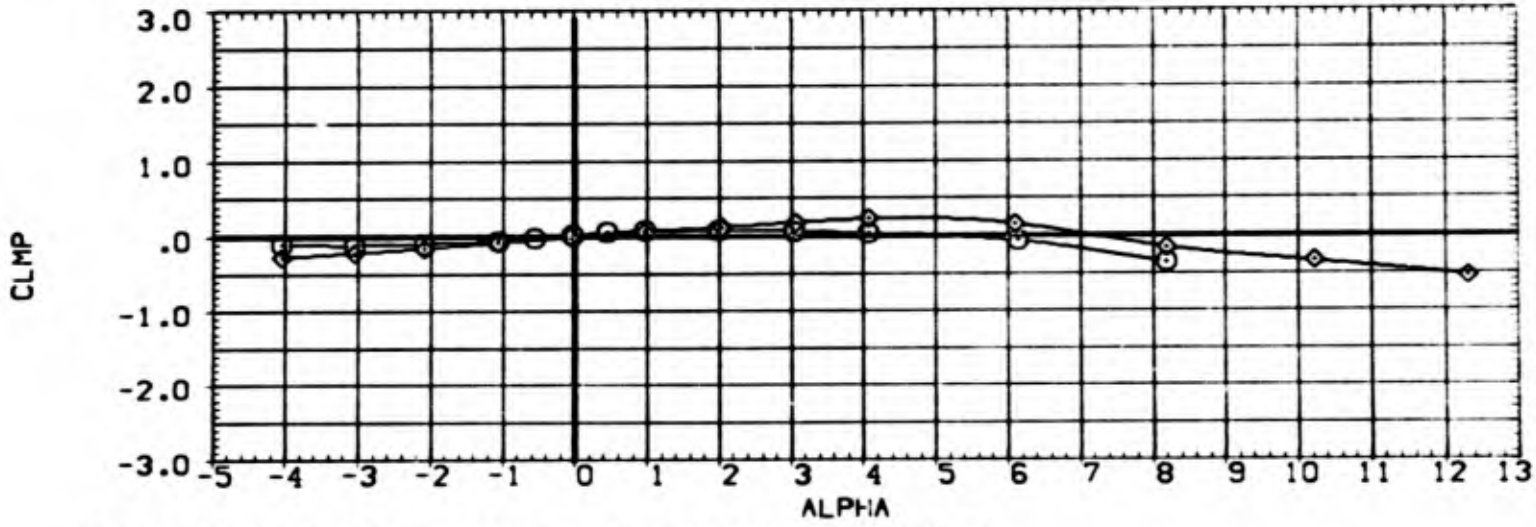
(A)MAC = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GUE152)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500
(DUE156)		DATA NOT AVAILABLE	22.500	.000	1.000	2.500
(FUE159)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	45.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	1.0000





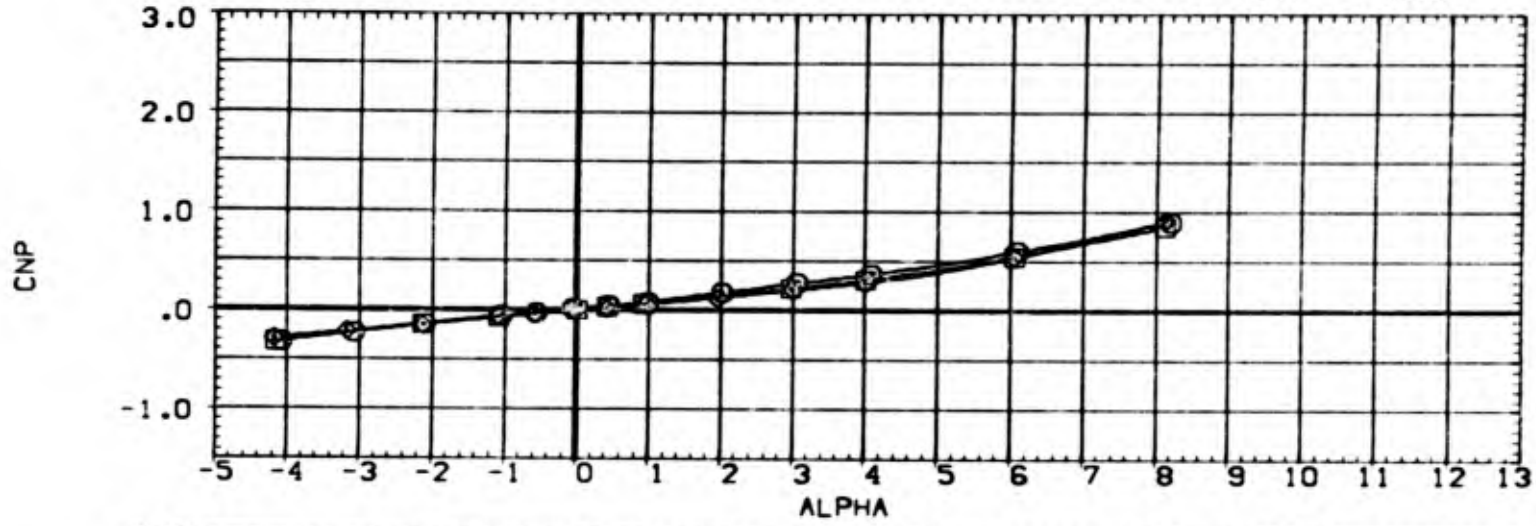
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

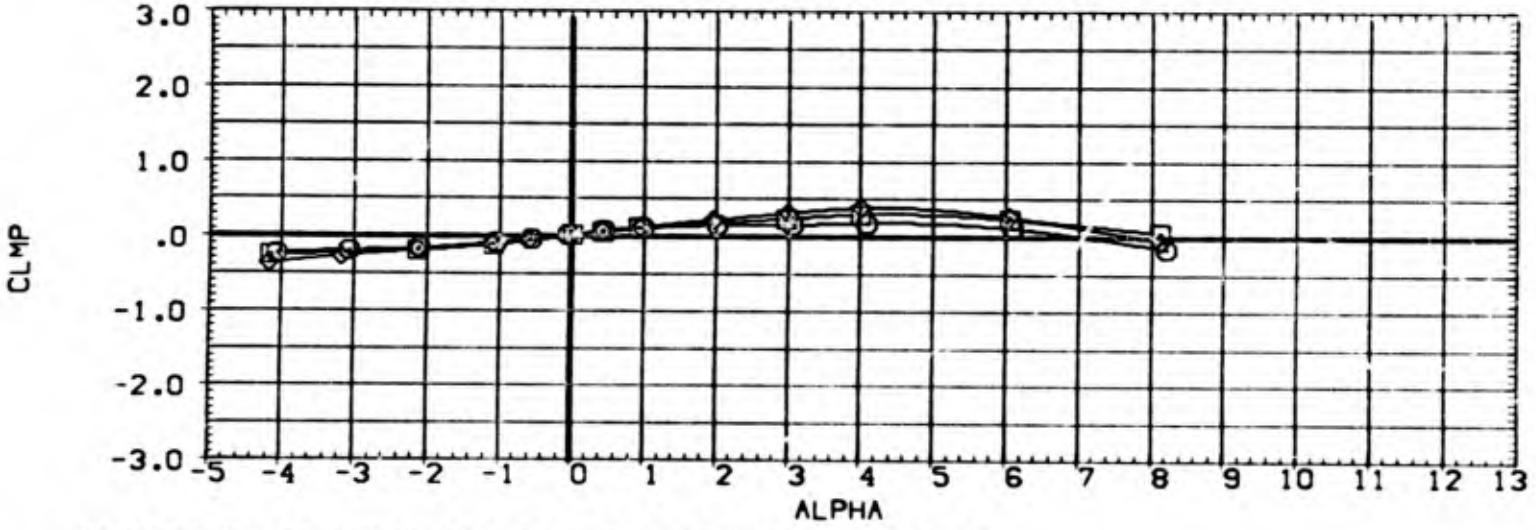
(B)MAC = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE152)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500
(DUE156)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	22.500	.000	1.000	2.500
(DUE158)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	45.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6[illegible]
LREF	5.[illegible]
BREF	3.[illegible]
XMRP	32.[illegible]
YMRP	.[illegible]
ZMRP	.[illegible]
SCALE	.[illegible]





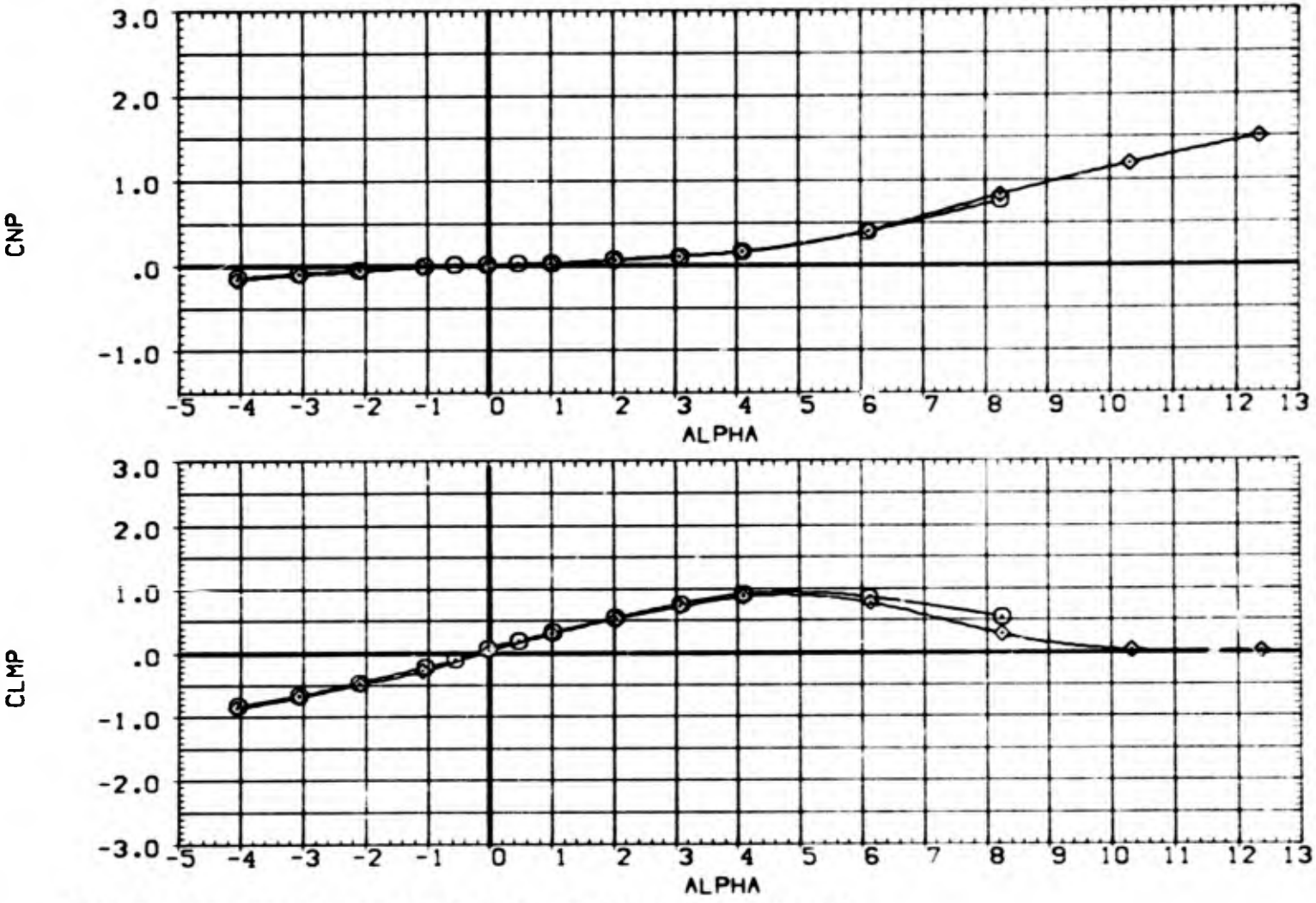
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(C)YMC- = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[D]E152]	□	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT2)	.000	.000	1.000	2.500
[D]E156]		DATA NOT AVAILABLE	22.500	.000	1.000	2.500
[D]E159]	◇	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT2)	45.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



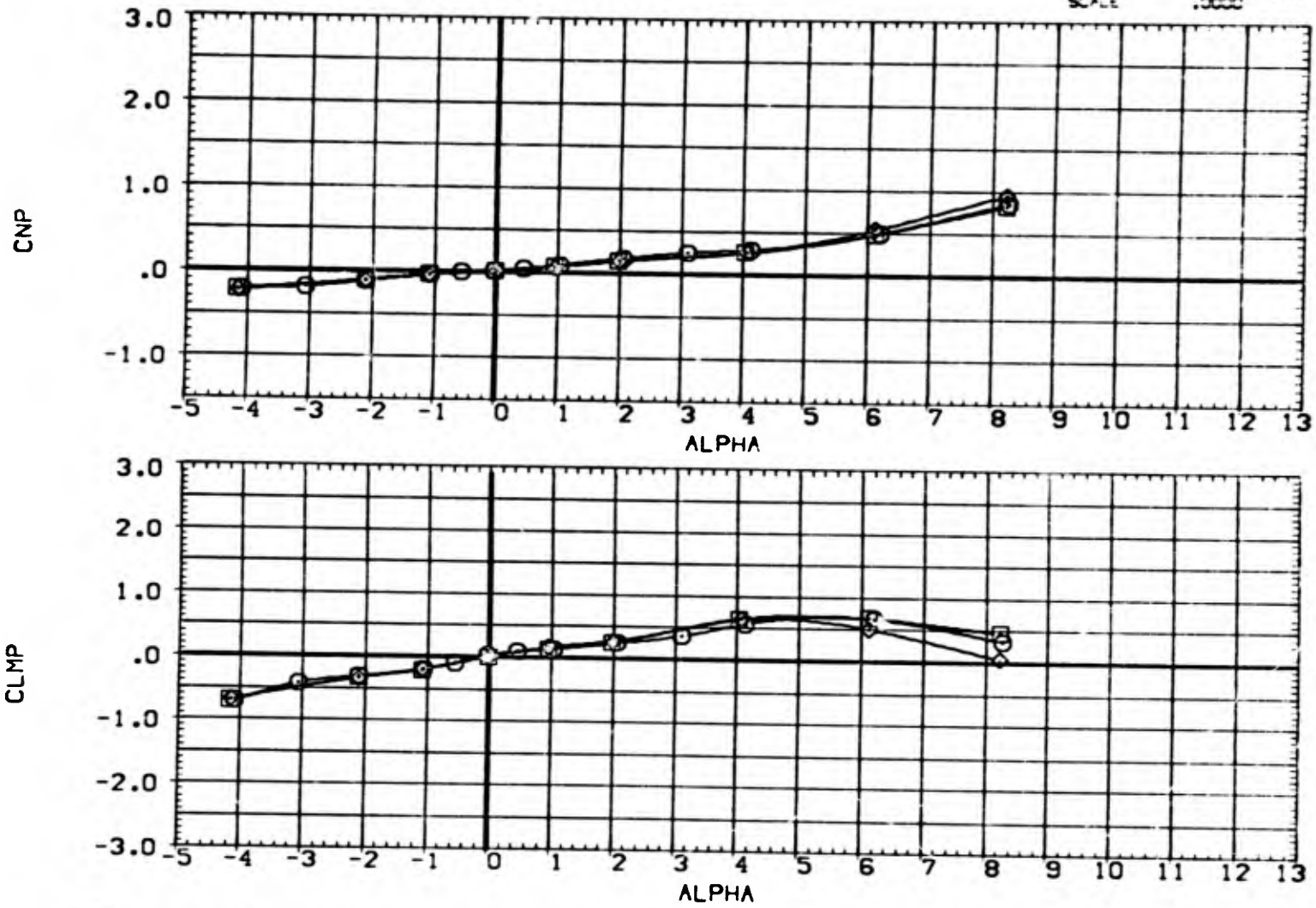
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

[D]MAC- = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[BJE152]	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINIT2]	.000	.000	1.000	2.500
[BJE156]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINIT2]	22.500	.000	1.000	2.500
[BJE158]	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINIT2]	45.000	.000	1.000	2.500

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	1.0000	

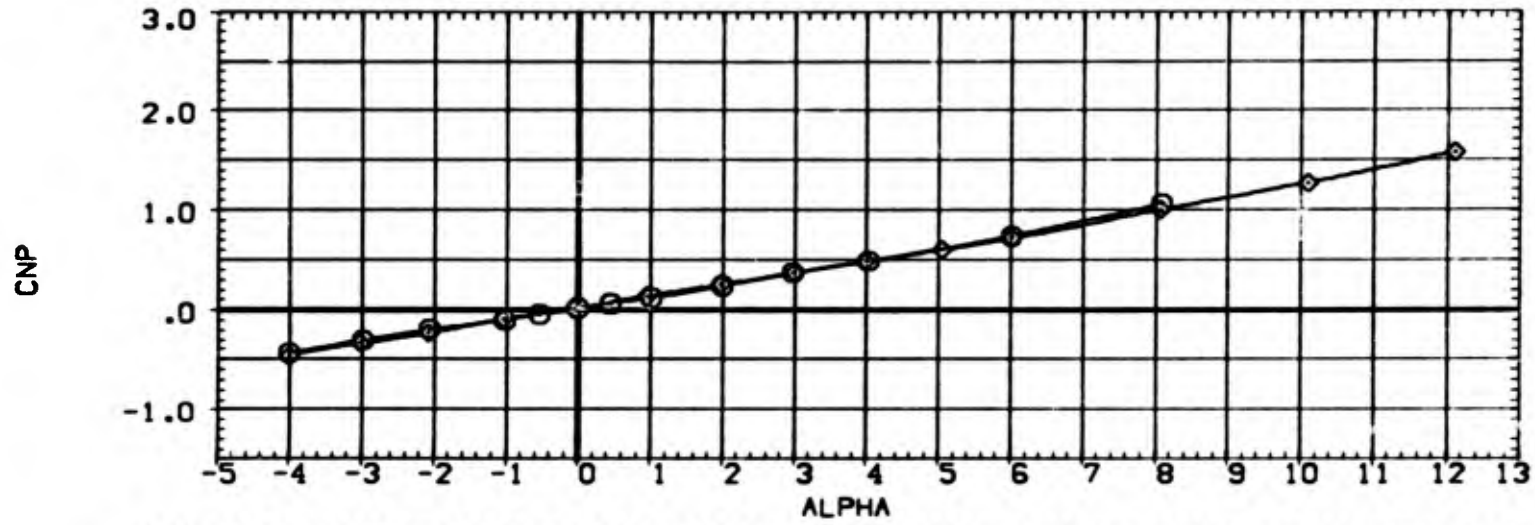


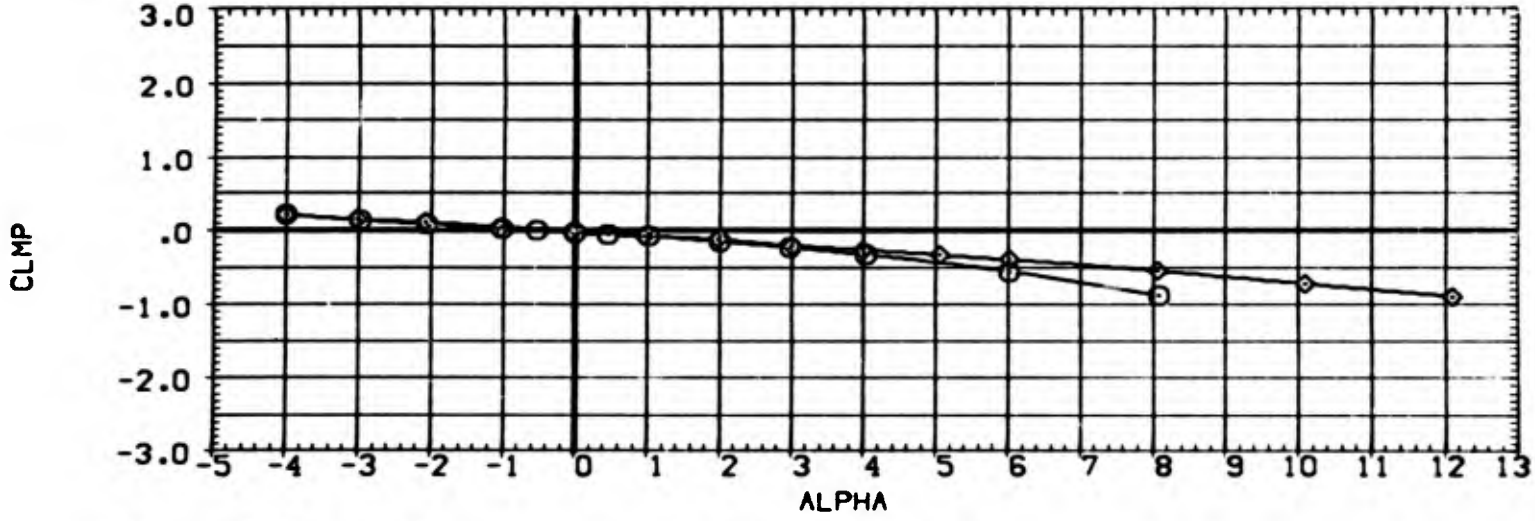
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

[E]MAC- = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DUE154)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	.000
(DUE157)	◇	DATA NOT AVAILABLE	22.500	.000	1.000	.000
(DUE160)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	45.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



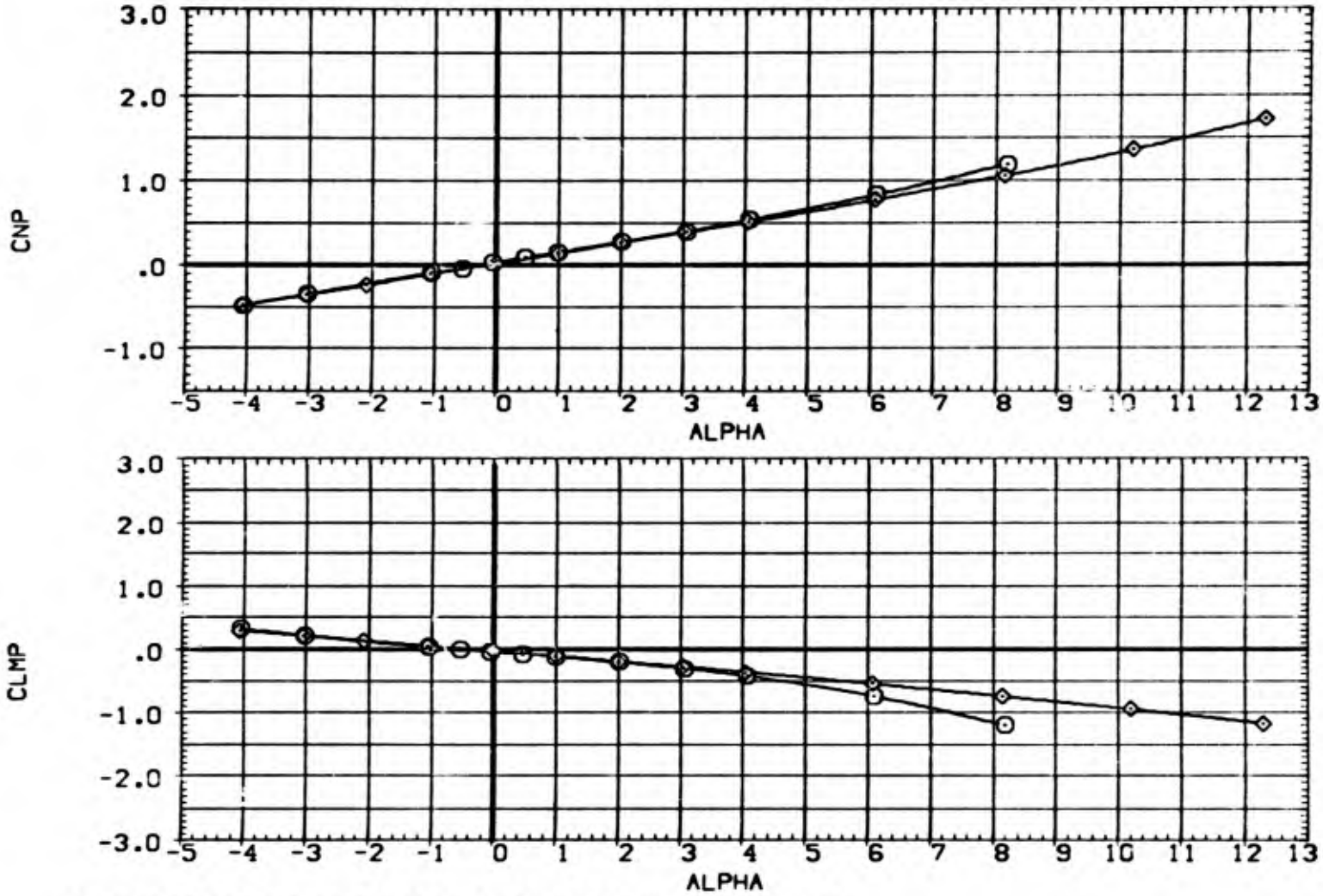


COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GUE154)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	.000
(DUE157)	◇	DATA NOT AVAILABLE	22.500	.000	1.000	.000
(DUE160)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	45.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



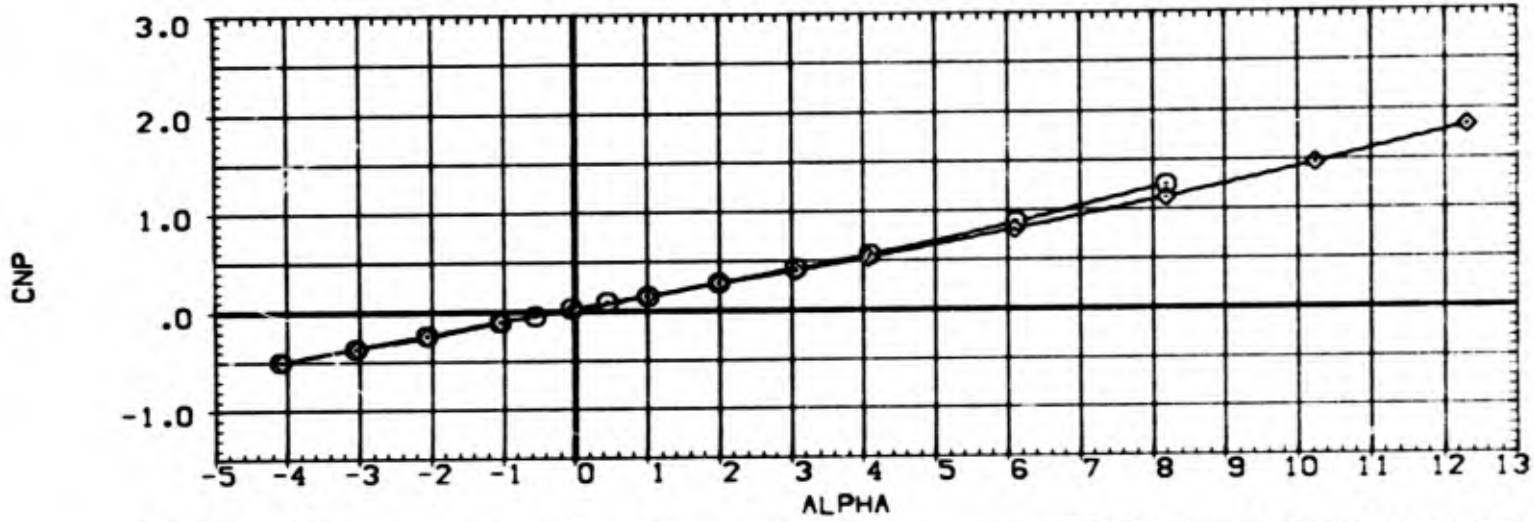
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

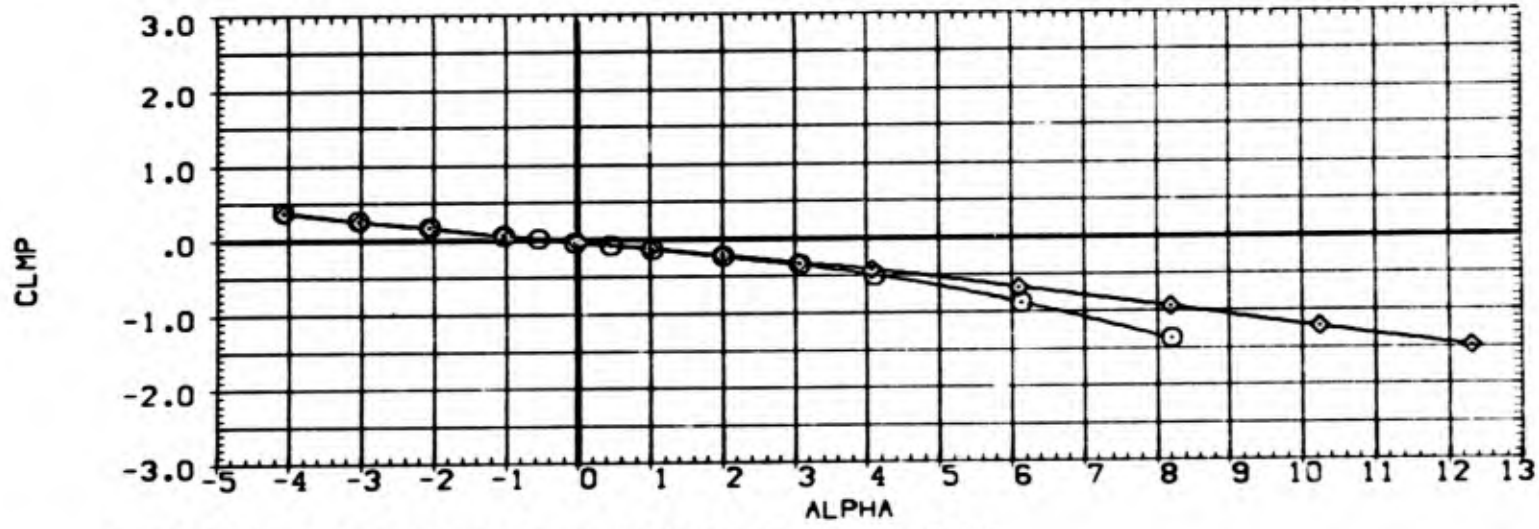
(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE154)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
(DUE157)	◁	DATA NOT AVAILABLE	22.500	.000	1.000	.000
(DUE160)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	45.000	.000	1.000	.000

REFERENCE INFORMATION

		SC..N.
SREF	19.6350	
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



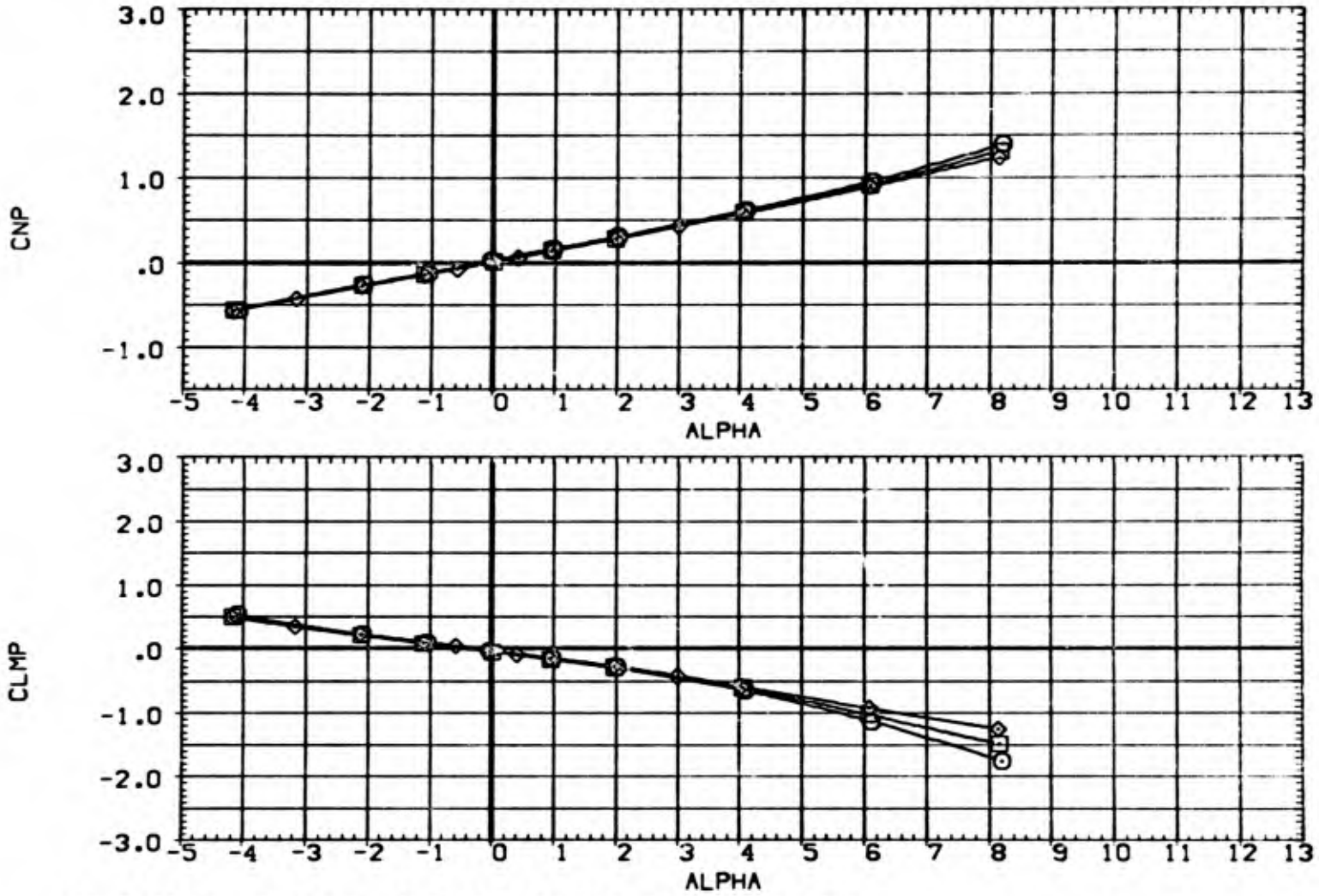


COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(C)MAC- = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE154)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000
(DUE157)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	22.500	.000	1.000	.000
(DUE160)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	45.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

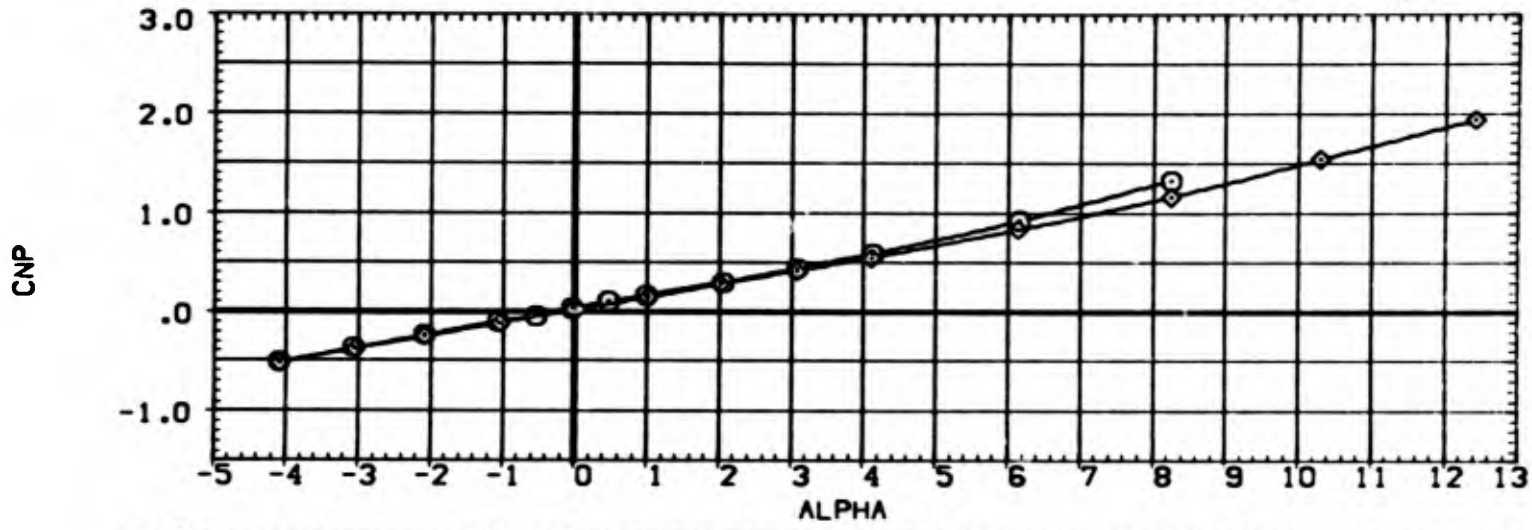


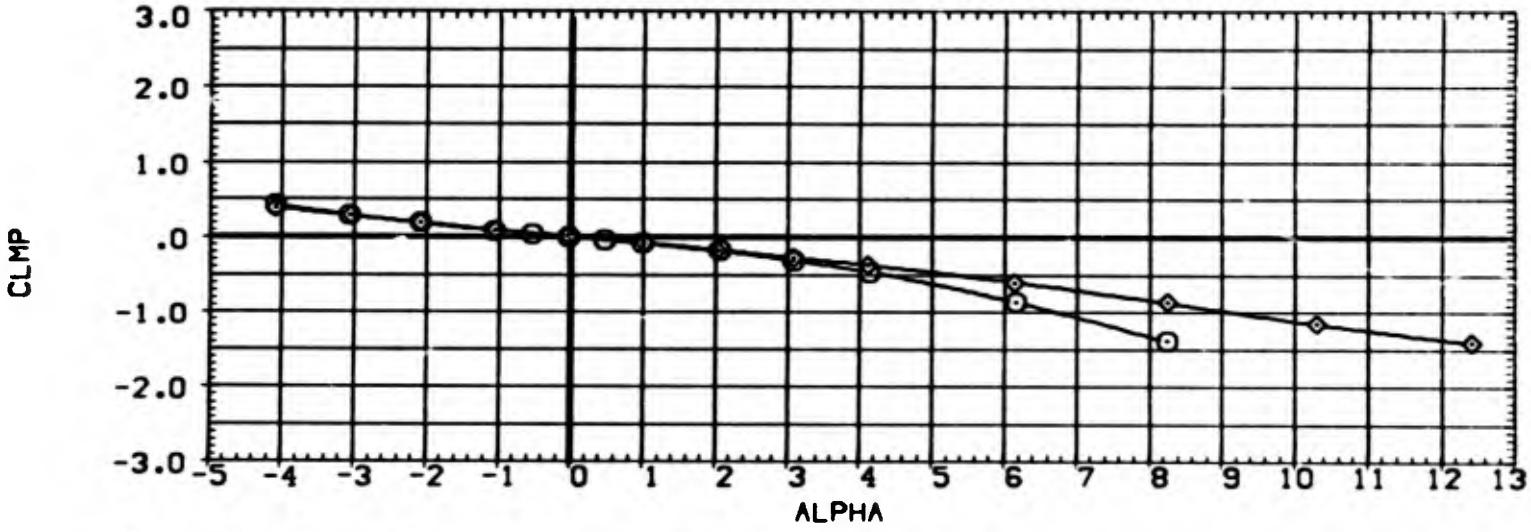
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DJE154)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	.000
(DJE157)	△	DATA NOT AVAILABLE	22.500	.000	1.000	.000
(DJE160)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	45.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



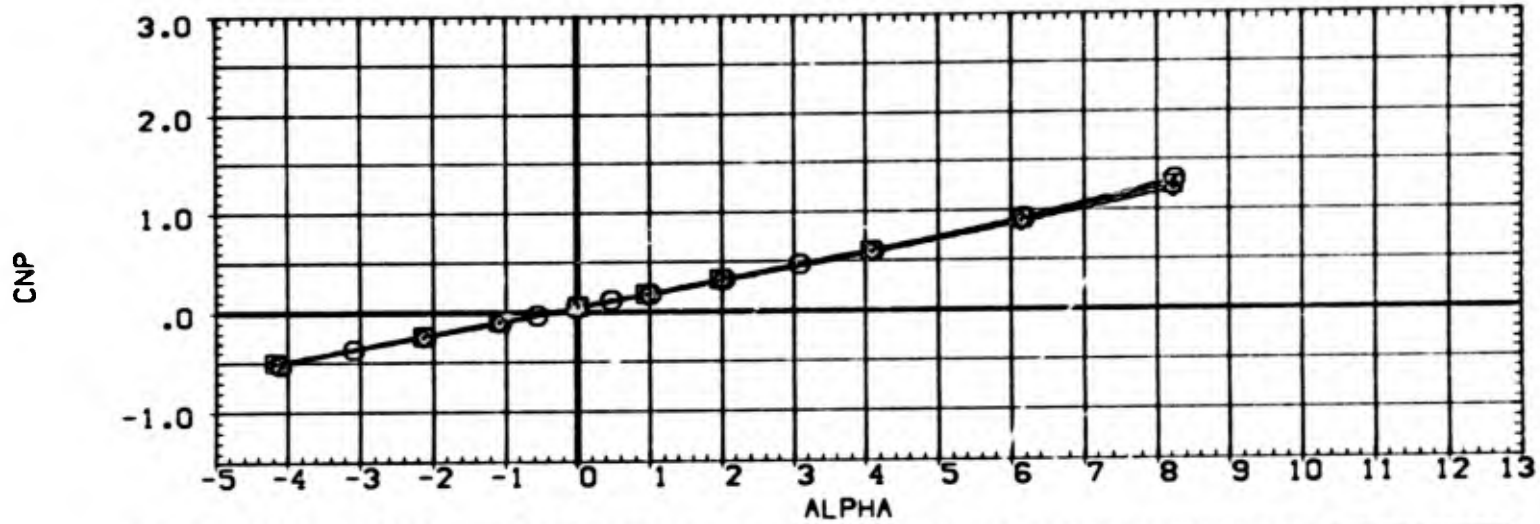


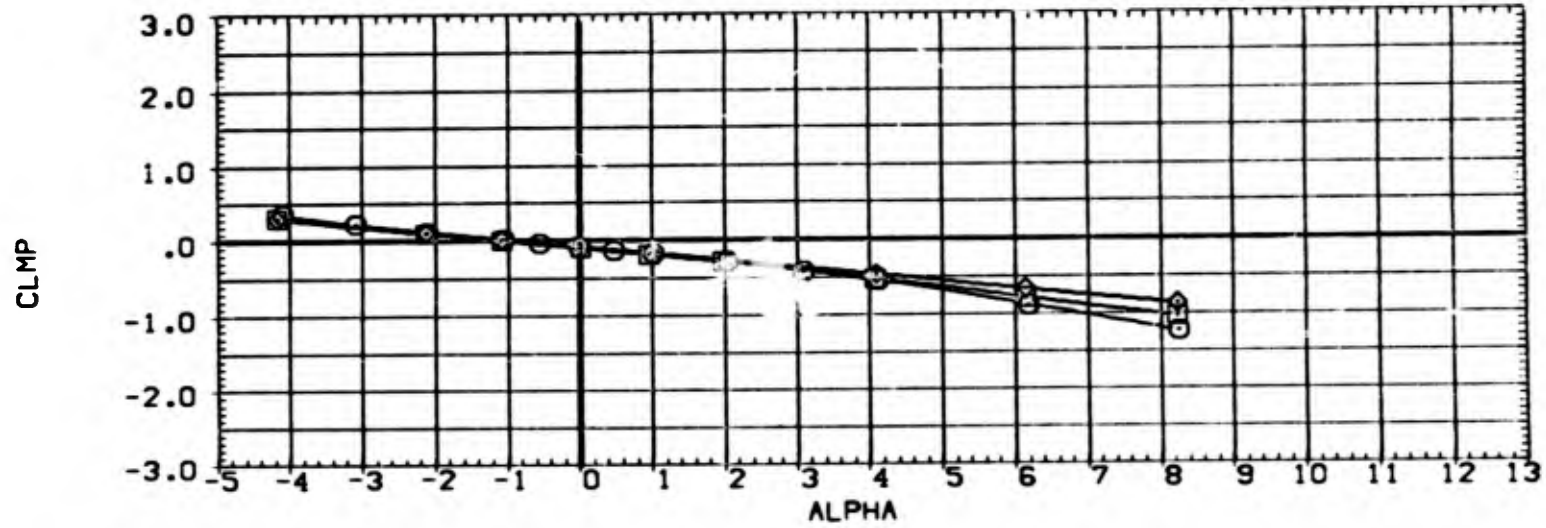
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[illegible]	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	.000
[illegible]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	22.500	.000	1.000	.000
[illegible]	△	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	45.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



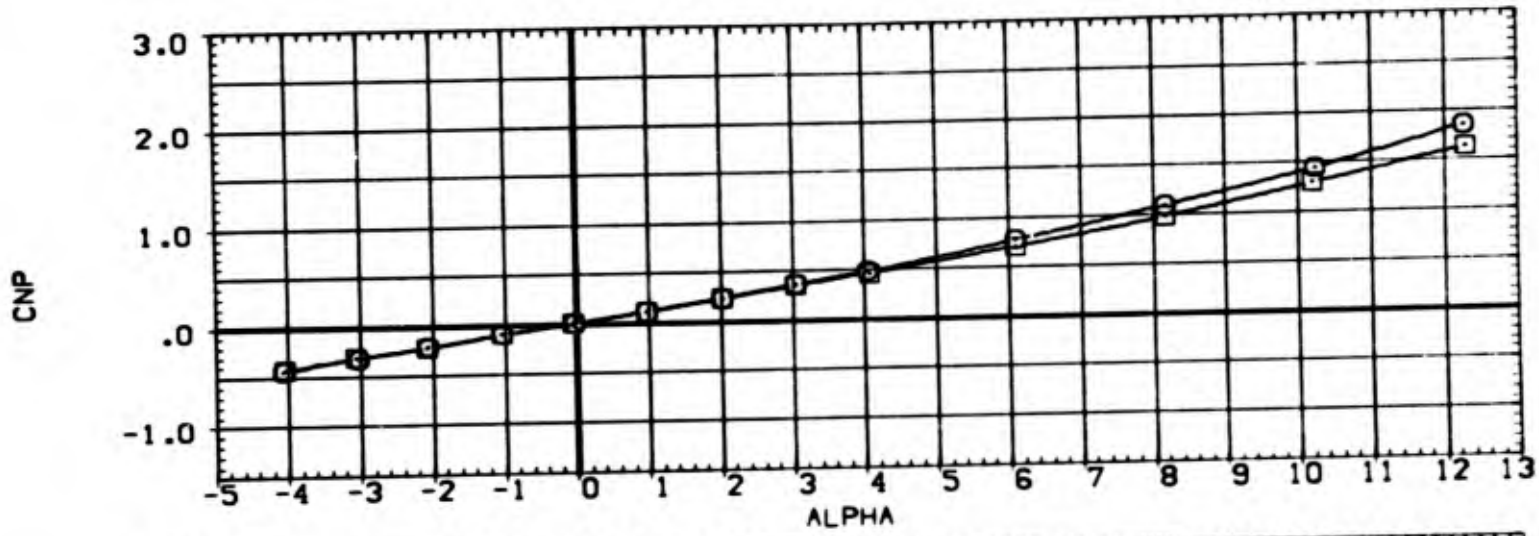


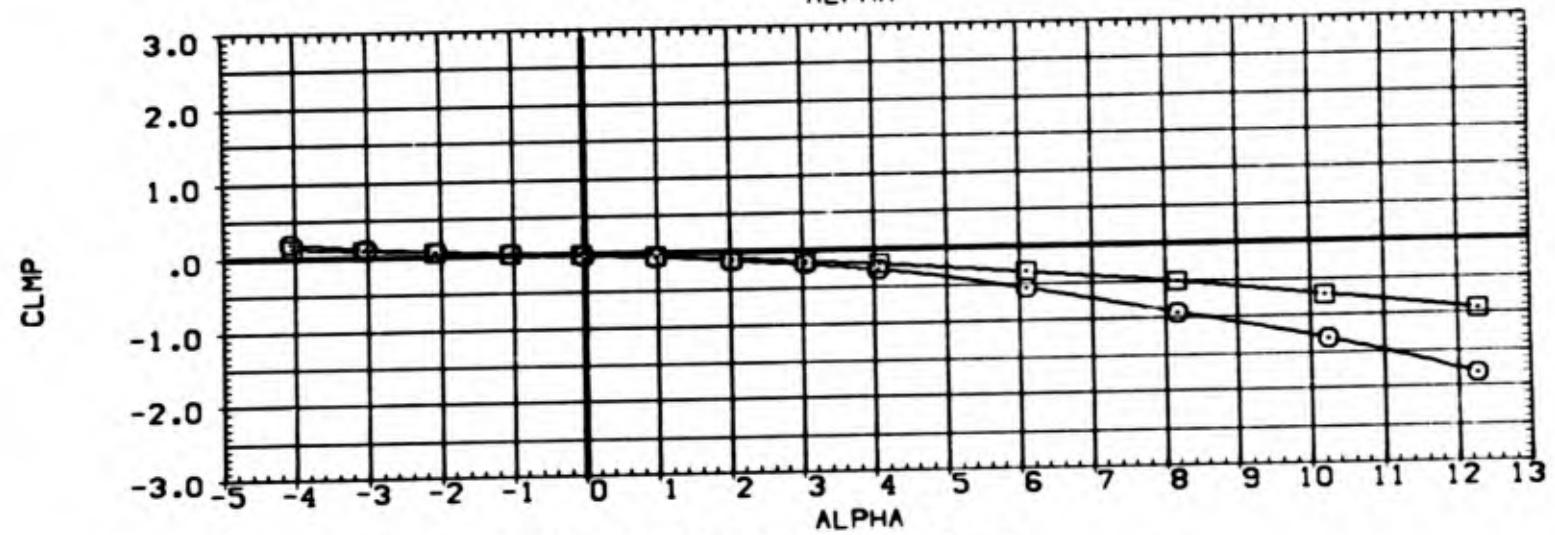
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(F)MAC- = 1.25

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE153) ○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	1.500
(DJE311) □	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	-45.000	.000	1.000	1.500

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000





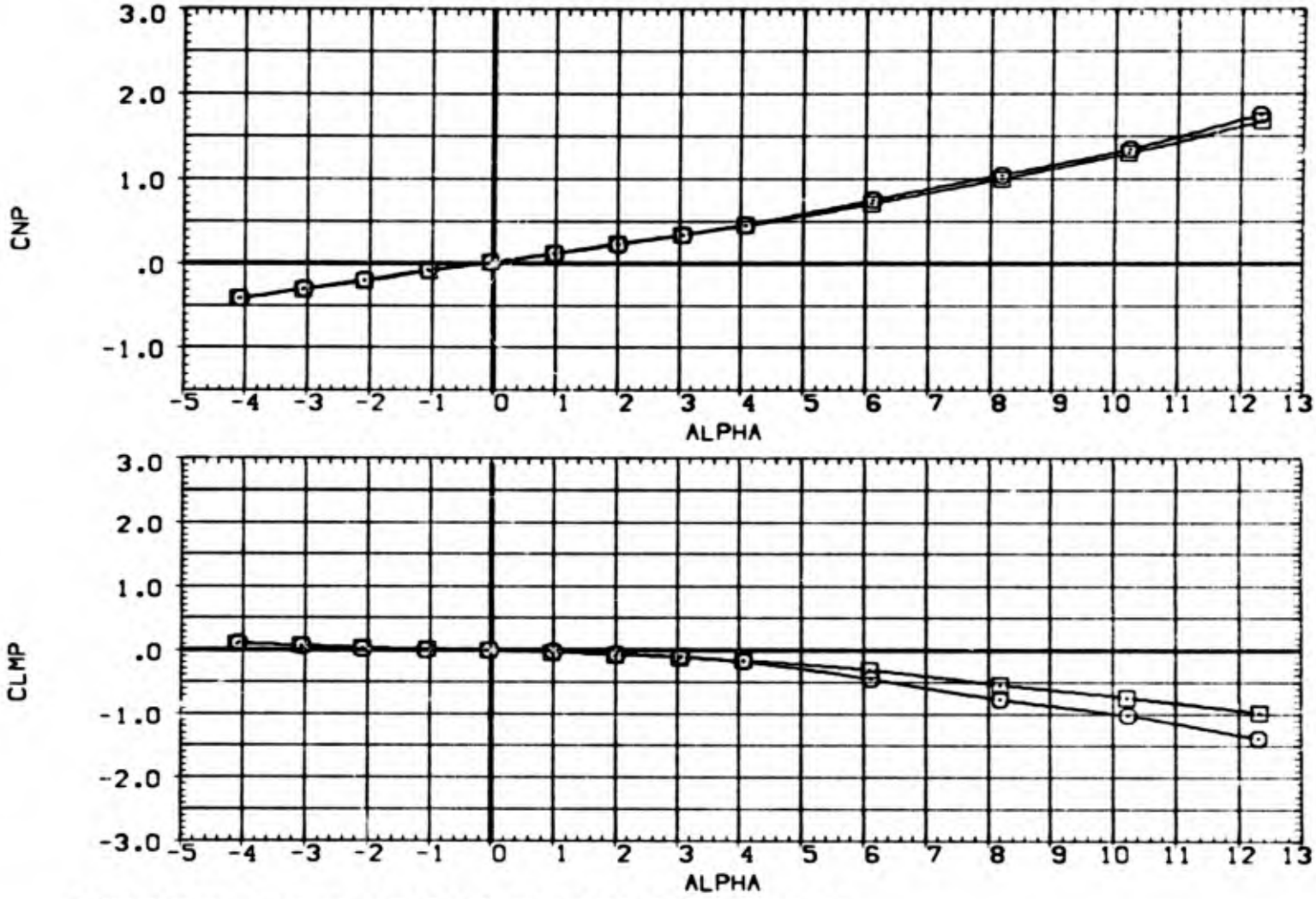
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(A)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE153)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	1.500
(DUE311)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	-45.000	.000	1.000	1.500

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



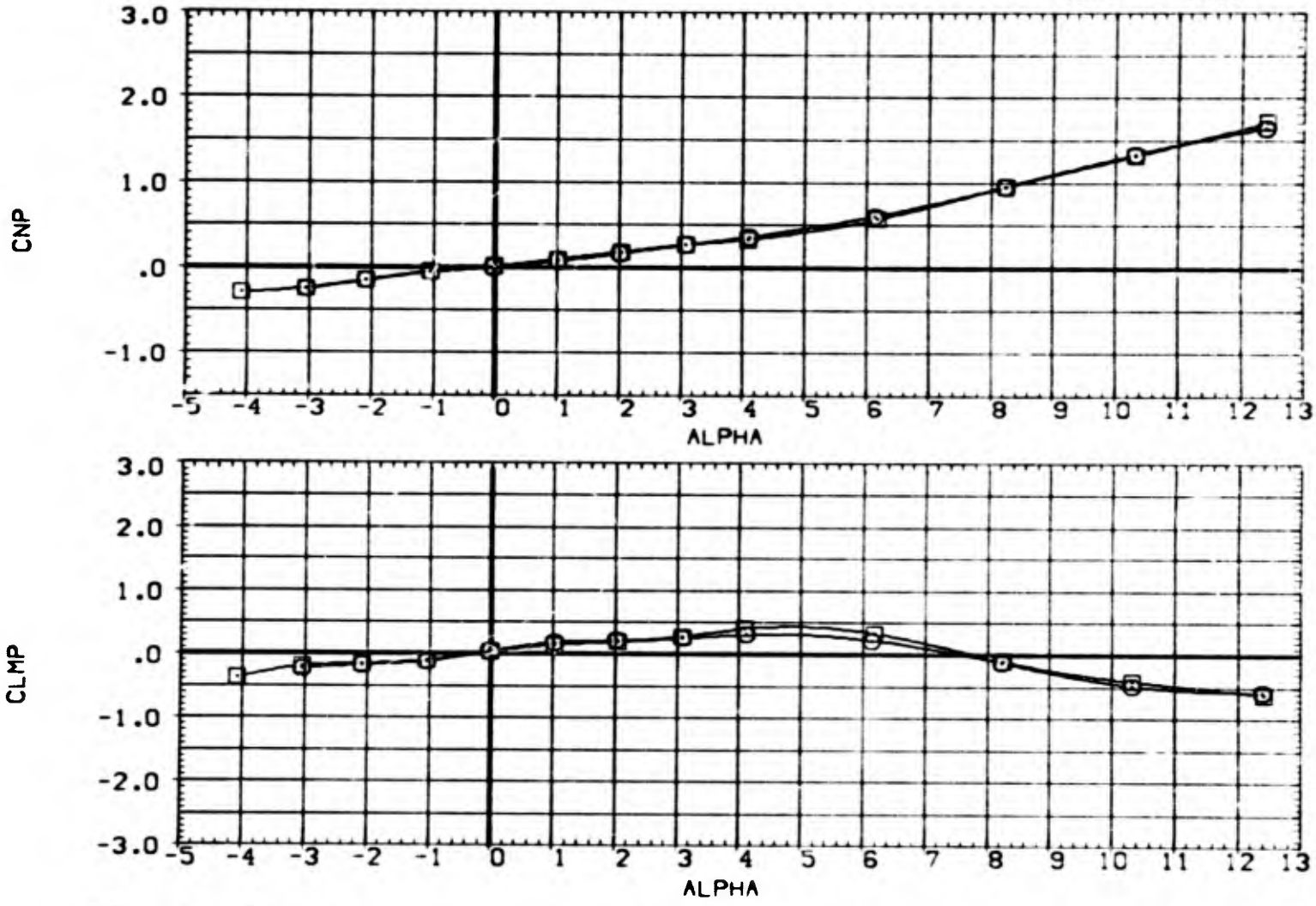
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(B)MAC- = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE153)	CALSPAN THRUST EFFECTS STING MOUNTED NAV (BINIT2)	.000	.000	1.000	1.500
(GJE311)	CALSPAN THRUST EFFECTS STING MOUNTED NAV (BINIT2)	-45.000	.000	1.000	1.500

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



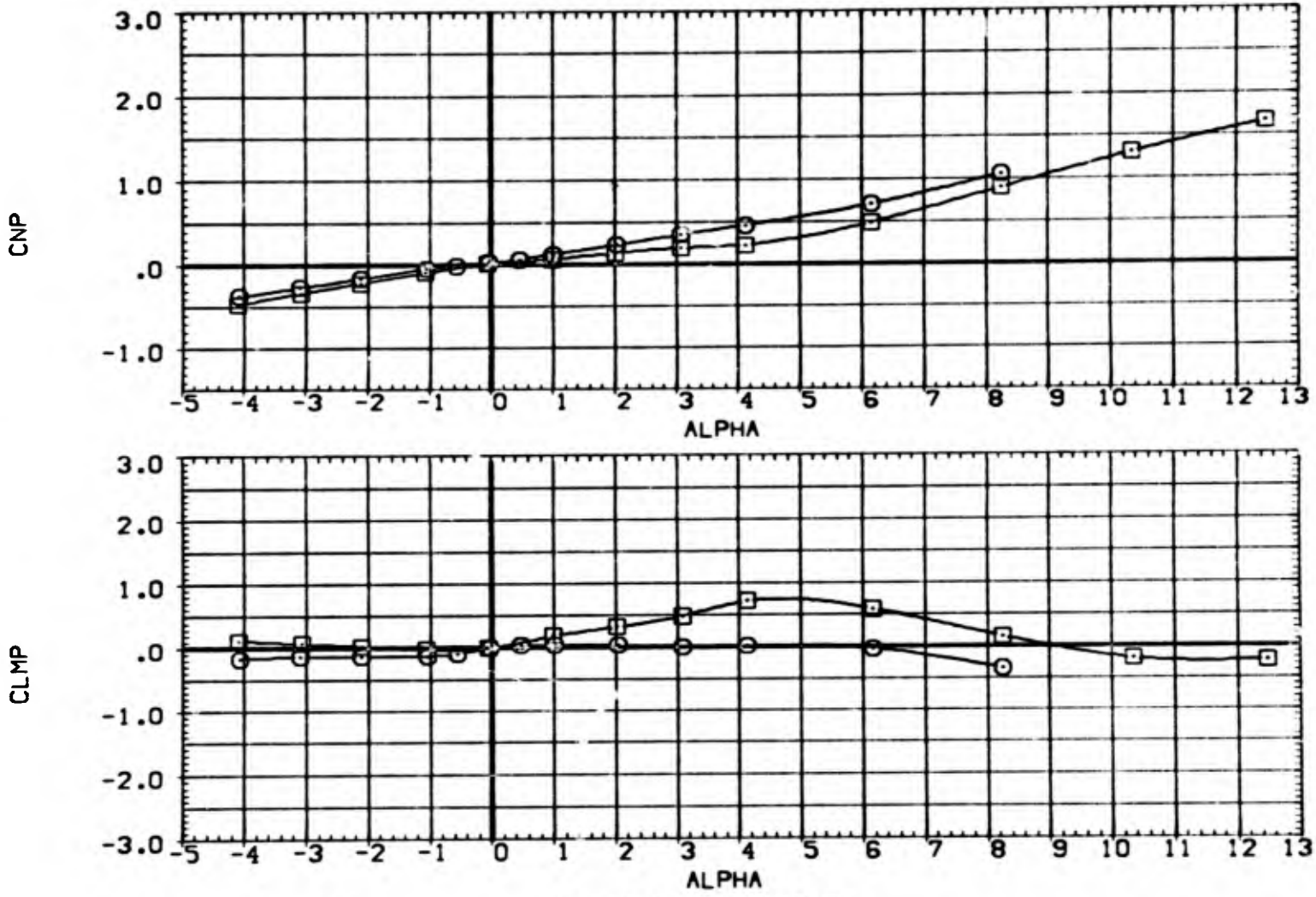
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(C)MAC- = 1.10

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[GJE153]	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
[DJE311]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	-45.000	.000	1.000	1.500

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



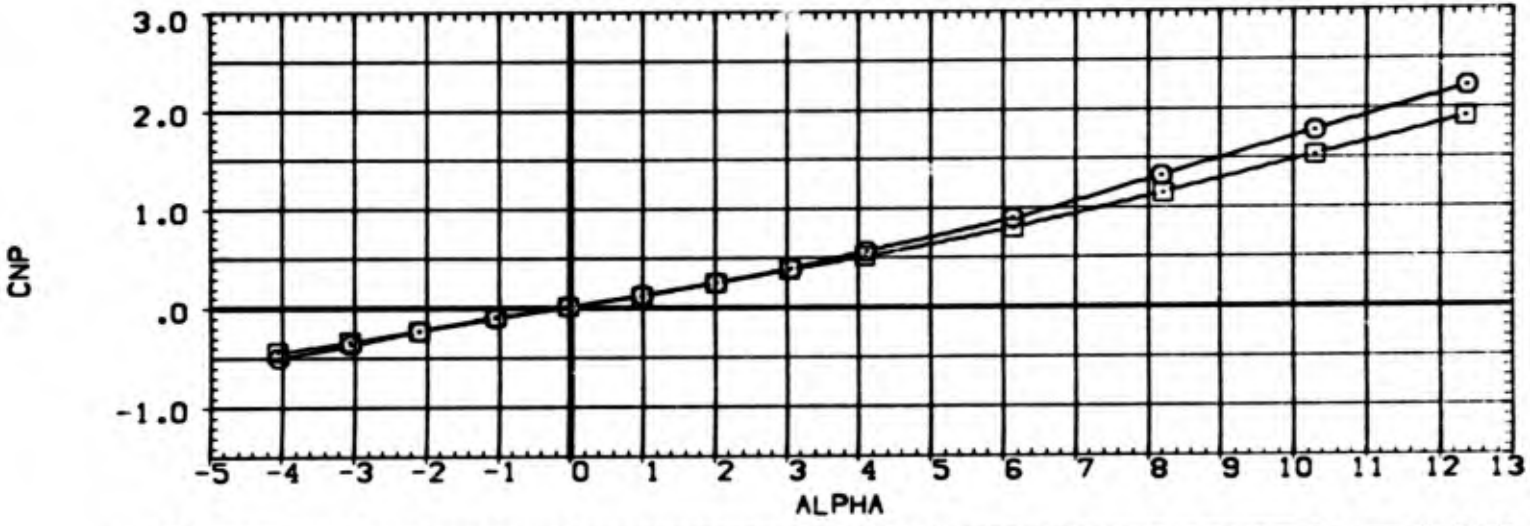
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

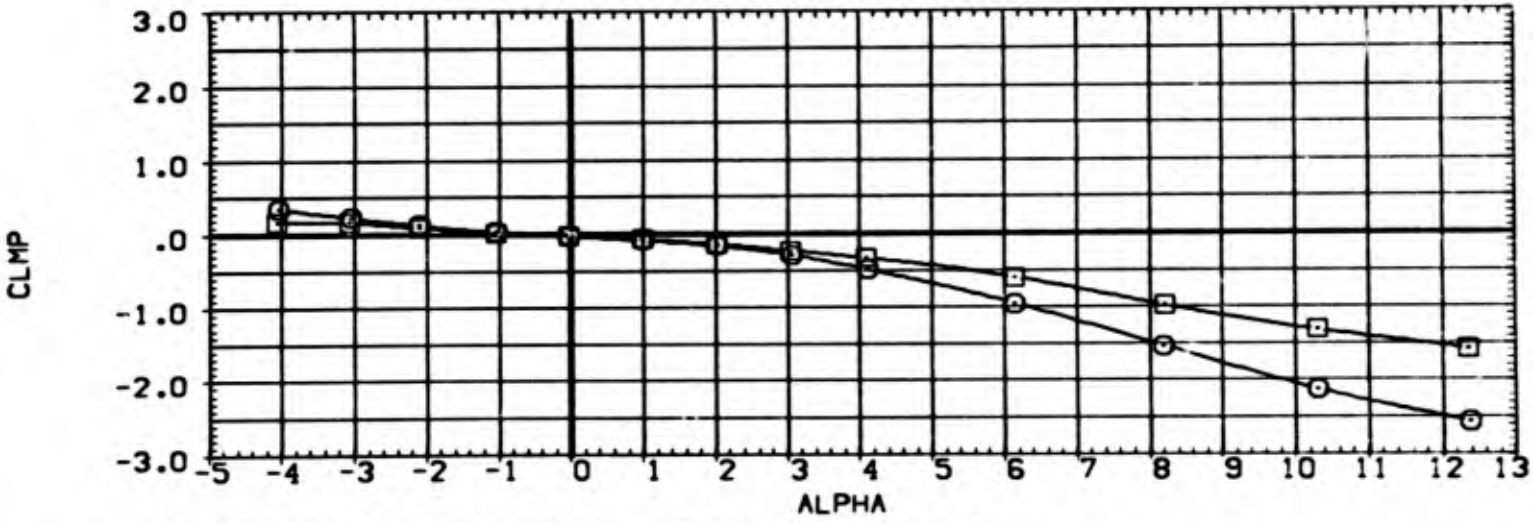
(D)MACH = 1.25

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE197)	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	3.000	1.000
(DJE312)	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	-45.000	.000	1.000	1.000

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



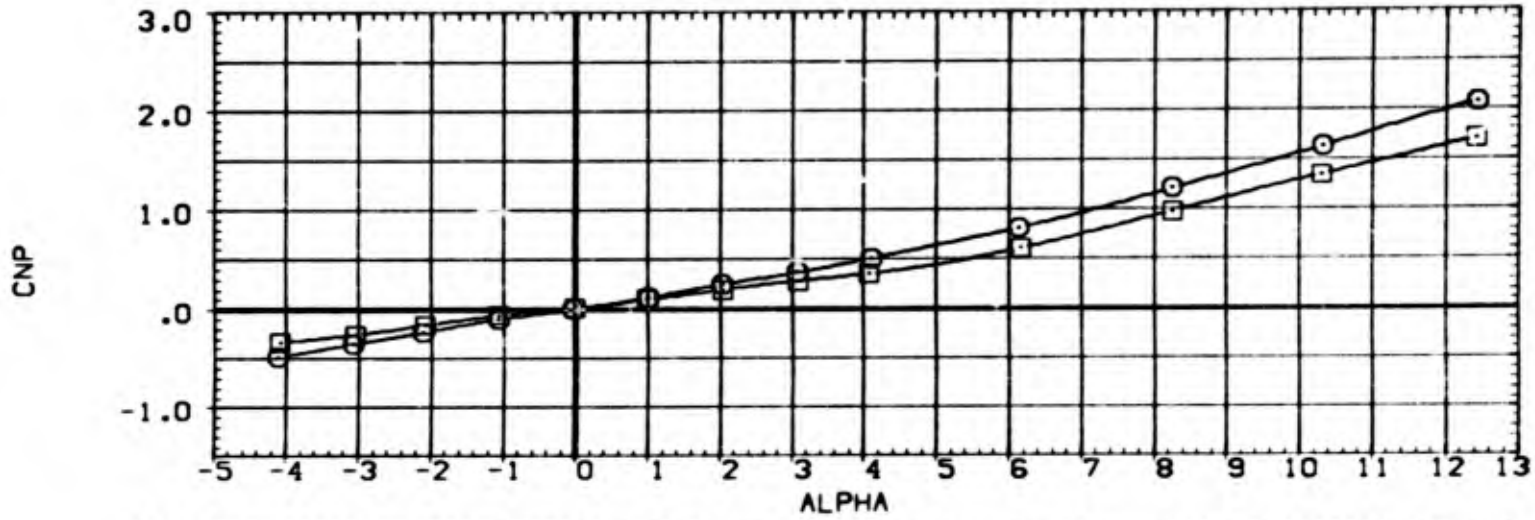


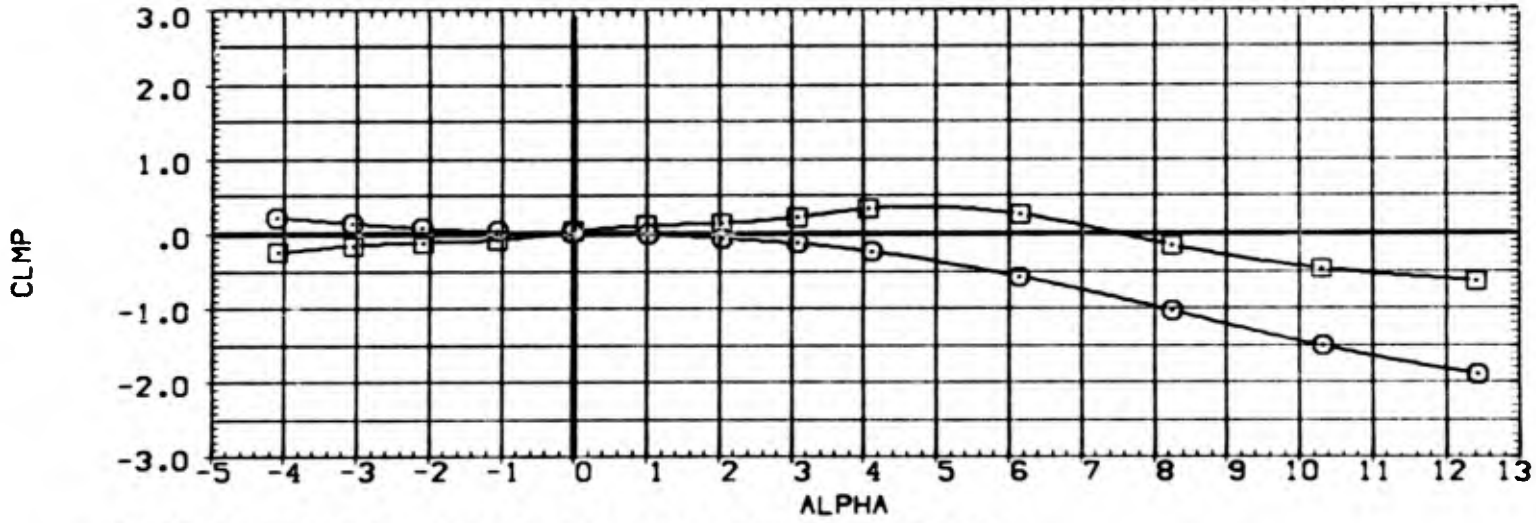
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(A)MAC- = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE197)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	3.000	1.000
(DJE312)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	-45.000	.000	1.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	





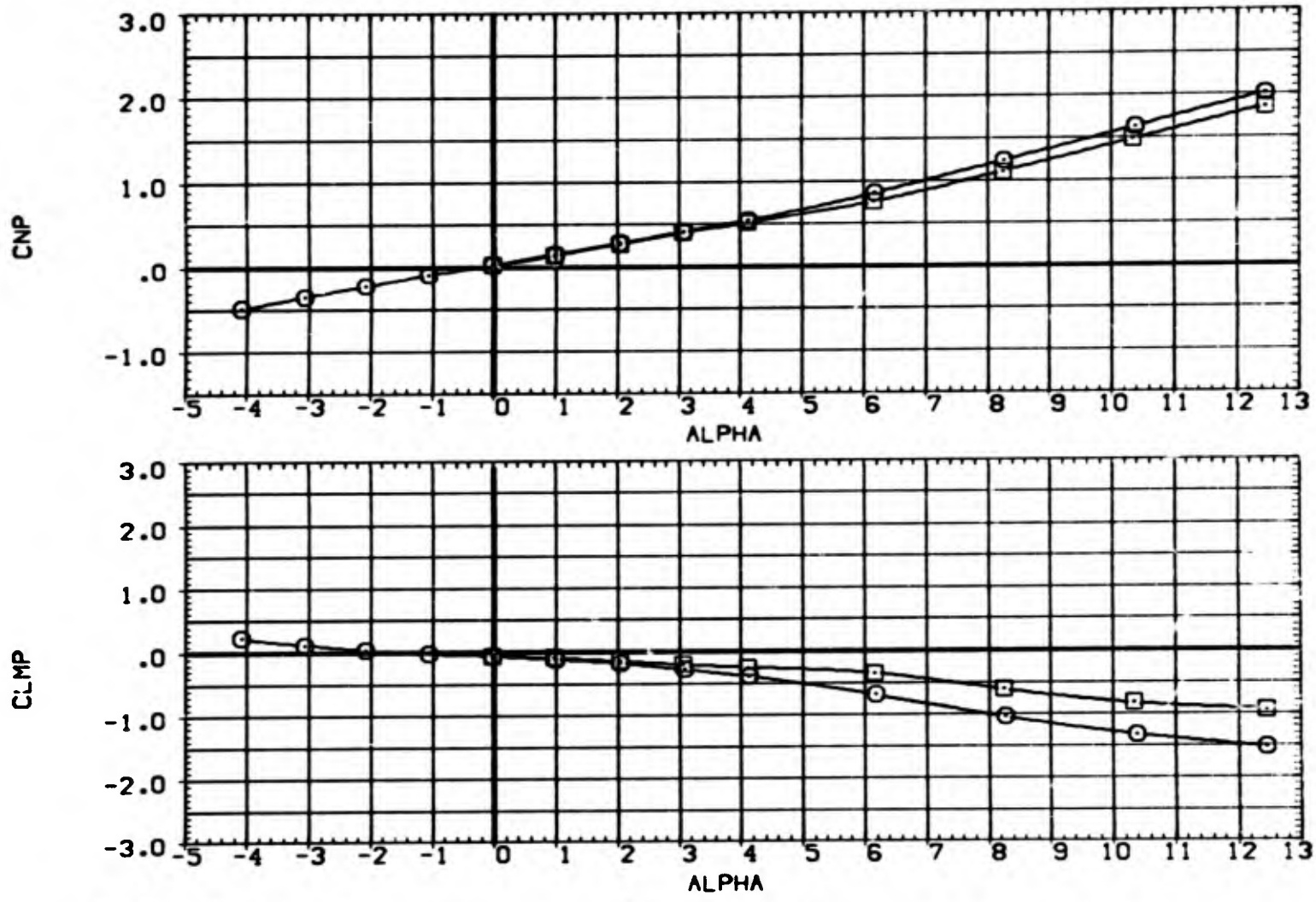
COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(B)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE197)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	3.000	1.000
(DUE312)	—	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	-45.000	.000	1.000	1.000

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

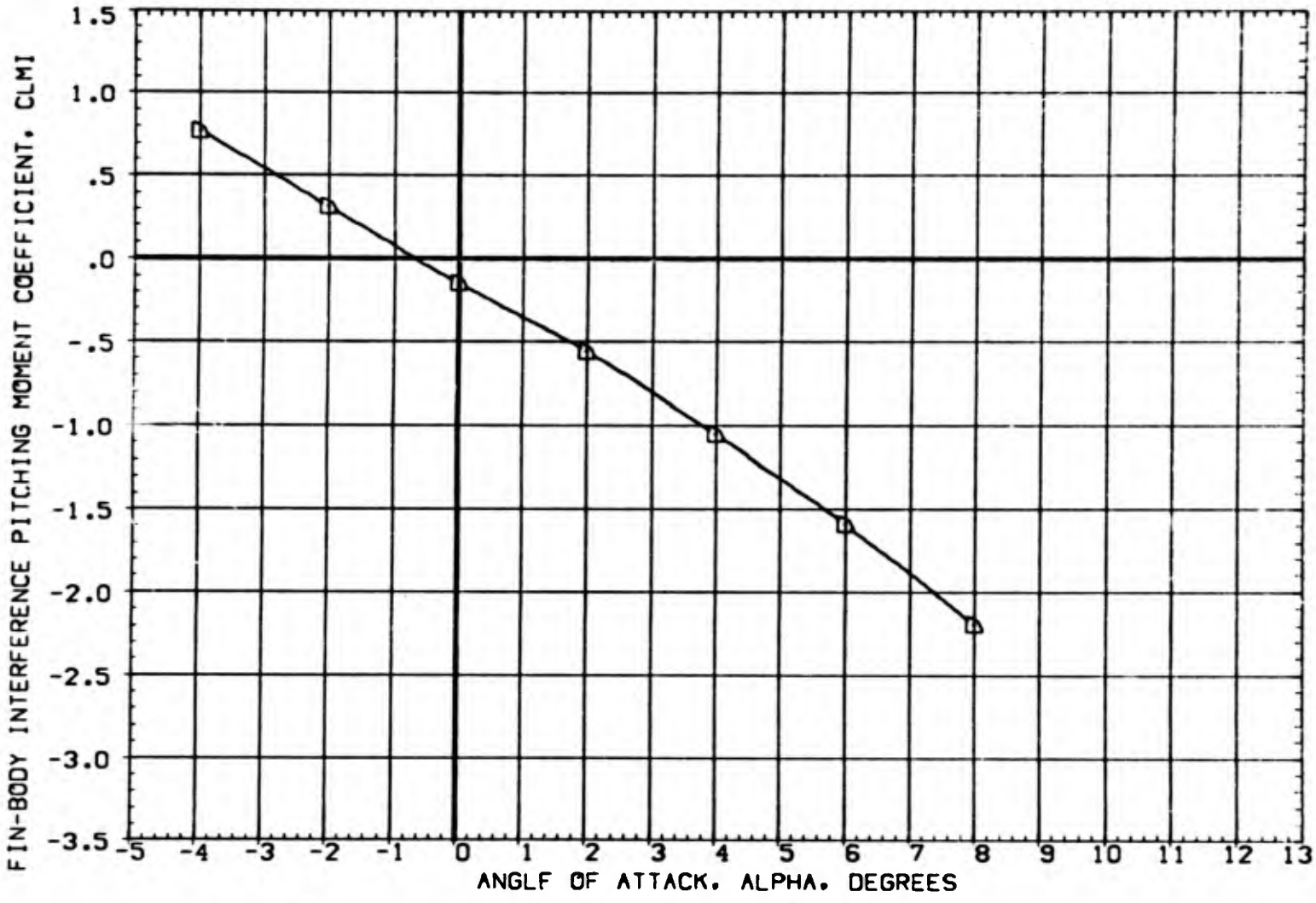


COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

(C)MAC- = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(16E149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(16E150)	◇	DATA NOT AVAILABLE	.000	.000	1.000	7.200
(16E151)	△	DATA NOT AVAILABLE	.000	.000	1.000	4.200
(16E152)	○	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(16E153)	▽	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(16E154)	⊔	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



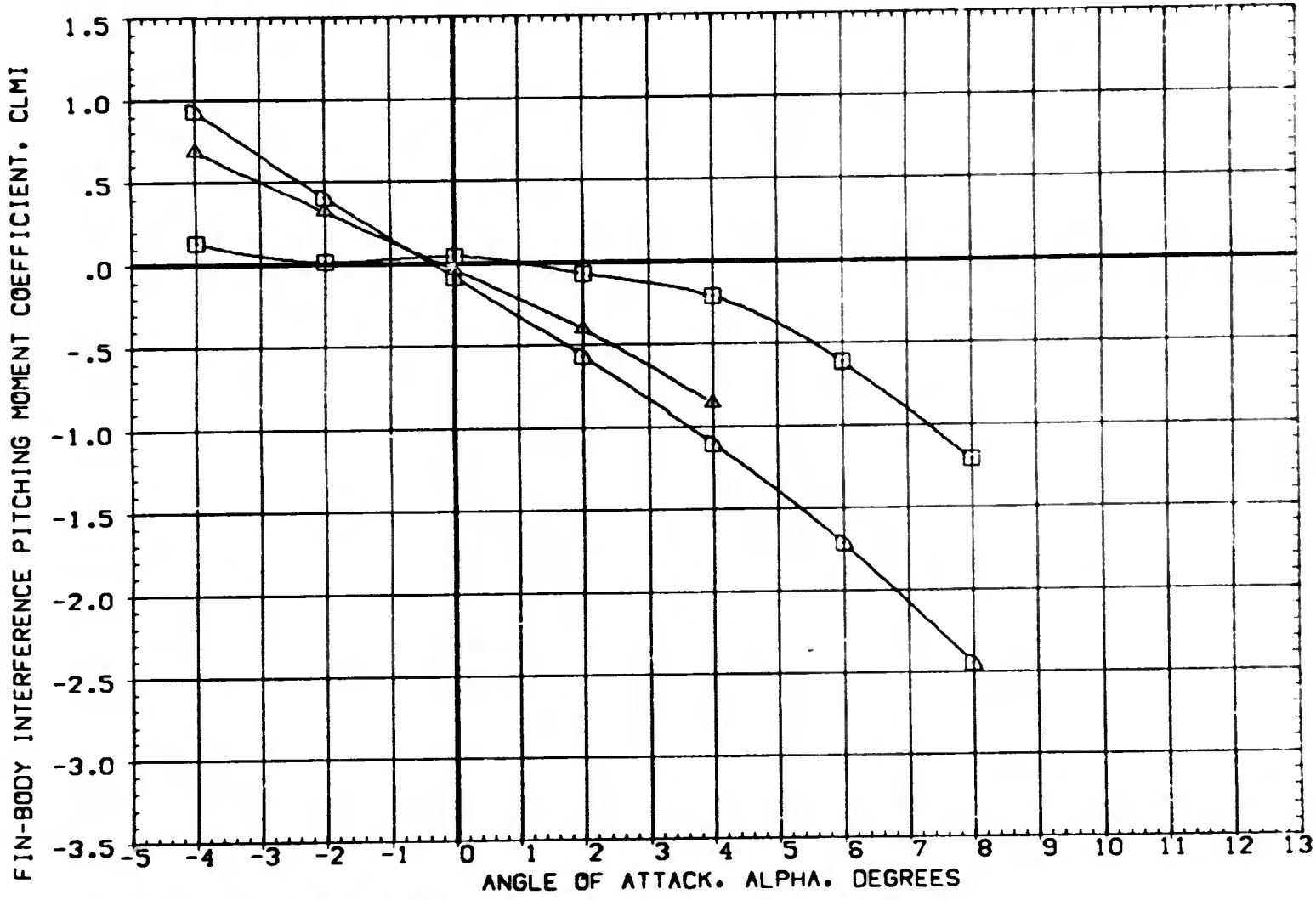
PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[illegible]		DATA NOT AVAILABLE	.000	.000	1.000	12.000
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
[illegible]		DATA NOT AVAILABLE	.000	.000	1.000	4.200
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500
[illegible]		DATA NOT AVAILABLE	.000	.000	1.000	.500
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000

REFERENCE INFORMATION

SREF	19.6350
BREF	5.0000
XMRP	32.0000
YMRP	.0000
ZMRP	.0000
SCALE	1.0000

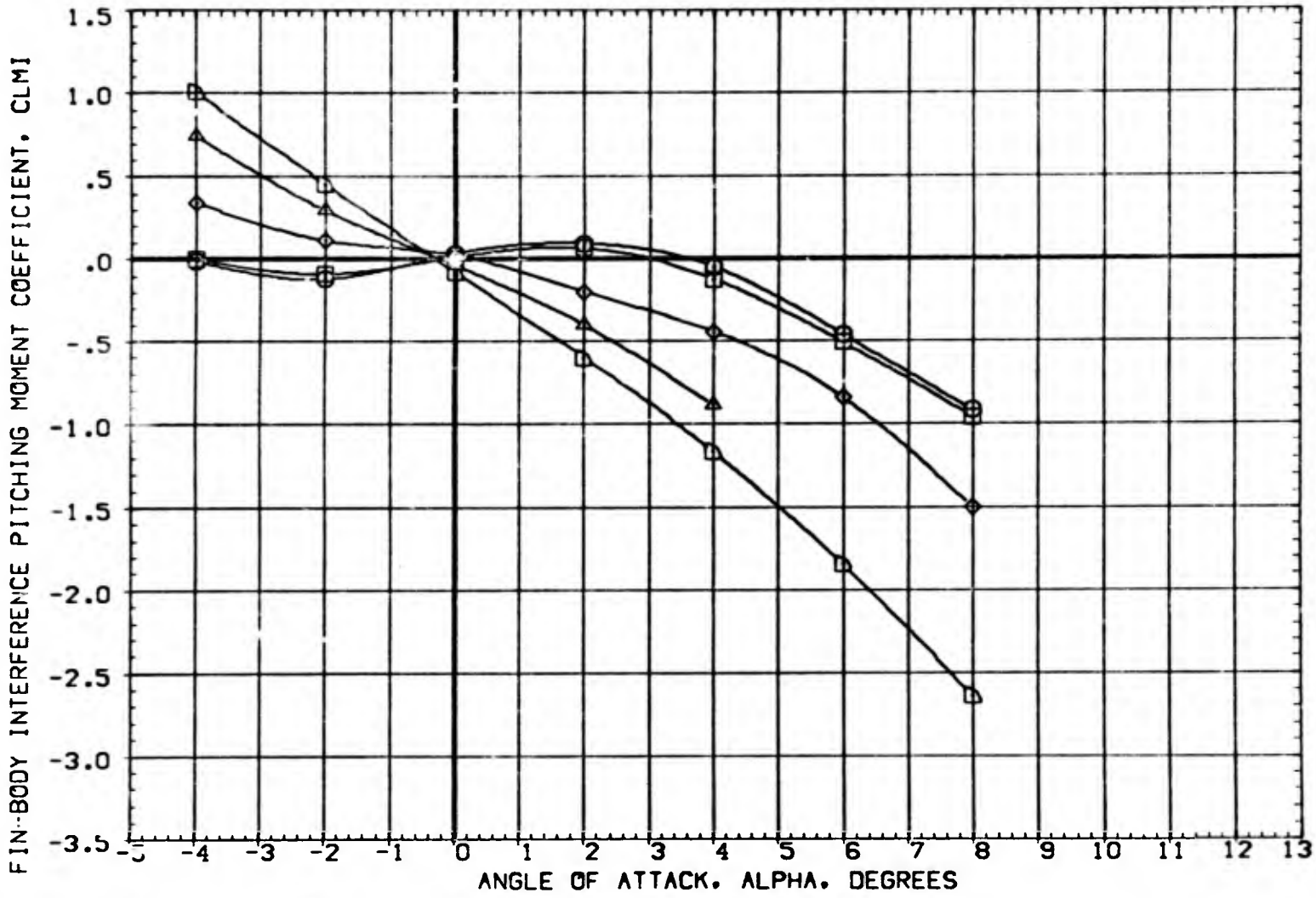


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPCS	CRT
[ISE149]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	12.000
[ISE150]	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
[ISE151]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200
[ISE152]	⊞	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500
[ISE153]		DATA NOT AVAILABLE	.000	.000	1.000	1.500
[ISE154]	⊟	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

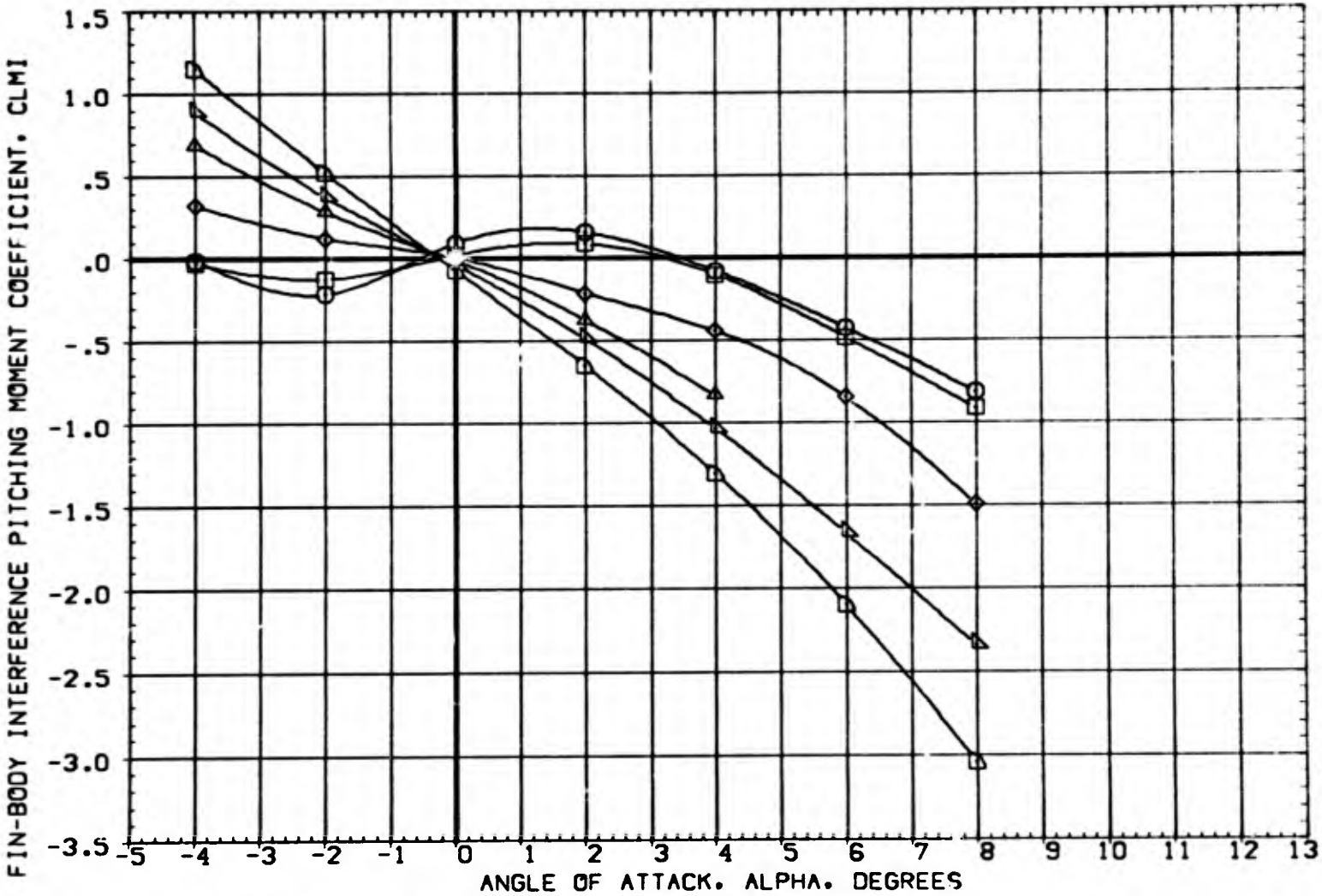


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MAC = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(16E149)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BIN1T2)	.000	.000	1.000	12.000
(16E150)	△	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BIN1T2)	.000	.000	1.000	7.200
(16E151)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BIN1T2)	.000	.000	1.000	4.200
(16E152)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BIN1T2)	.000	.000	1.000	2.500
(16E153)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BIN1T2)	.000	.000	1.000	1.500
(16E154)	⊗	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BIN1T2)	.000	.000	1.000	.000

REFERENCE INFORMATION	
SREF	19.6350 SQ. IN.
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

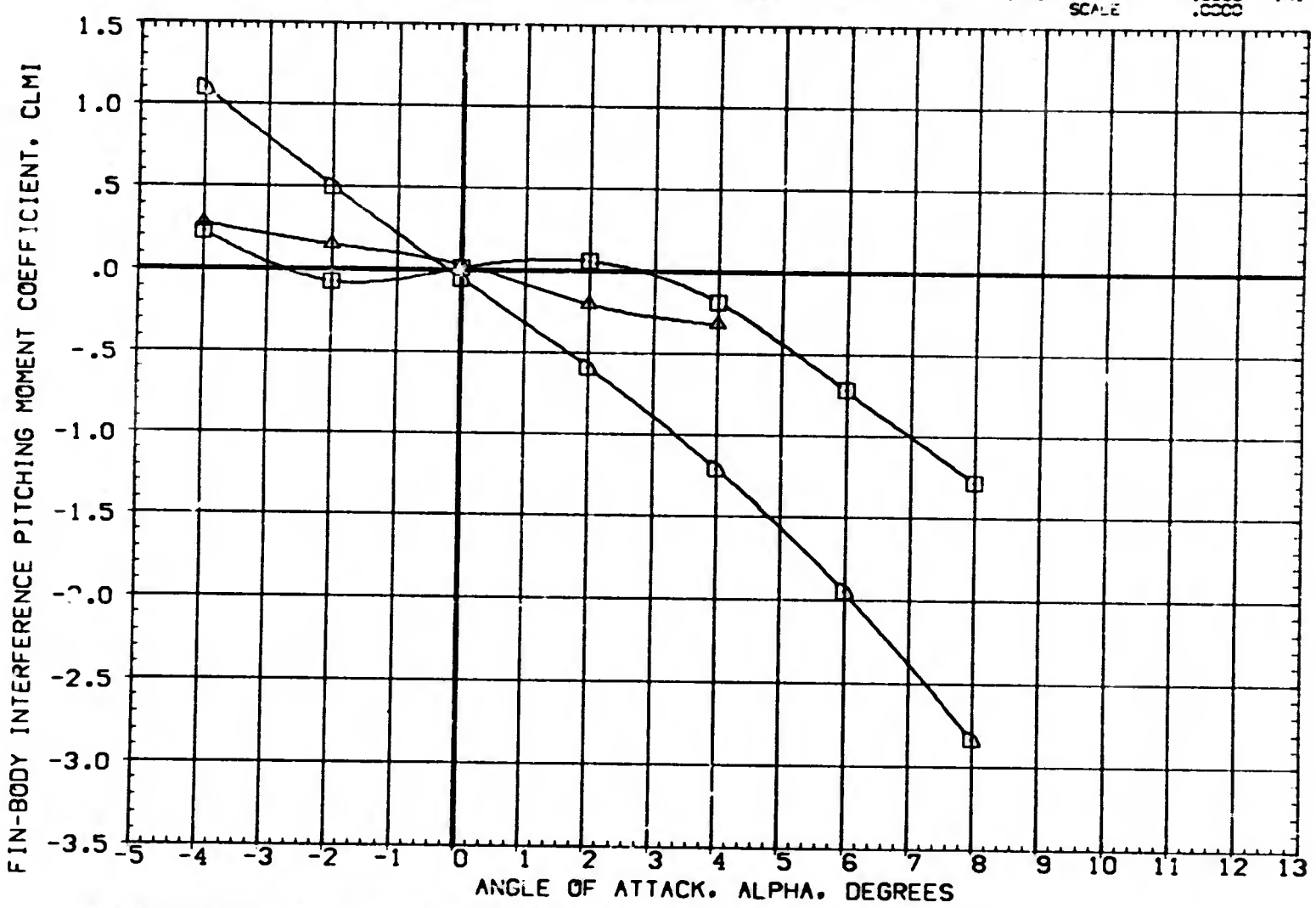


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(D)MAC- = 1.00

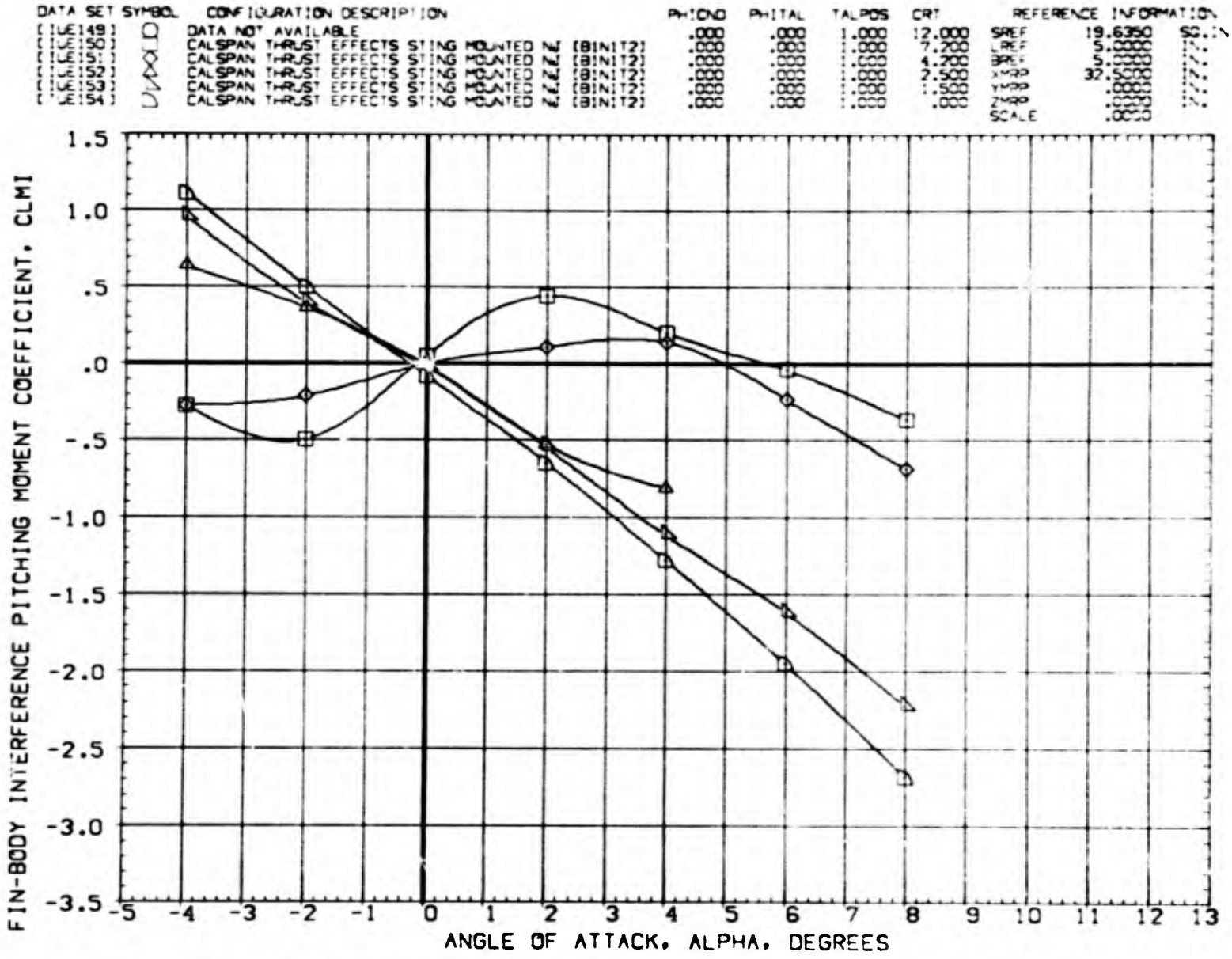
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[1UE149]		DATA NOT AVAILABLE				
[1UE150]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	12.000
[1UE151]		DATA NOT AVAILABLE				
[1UE152]	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200
[1UE153]		DATA NOT AVAILABLE				
[1UE154]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MACH = 1.10



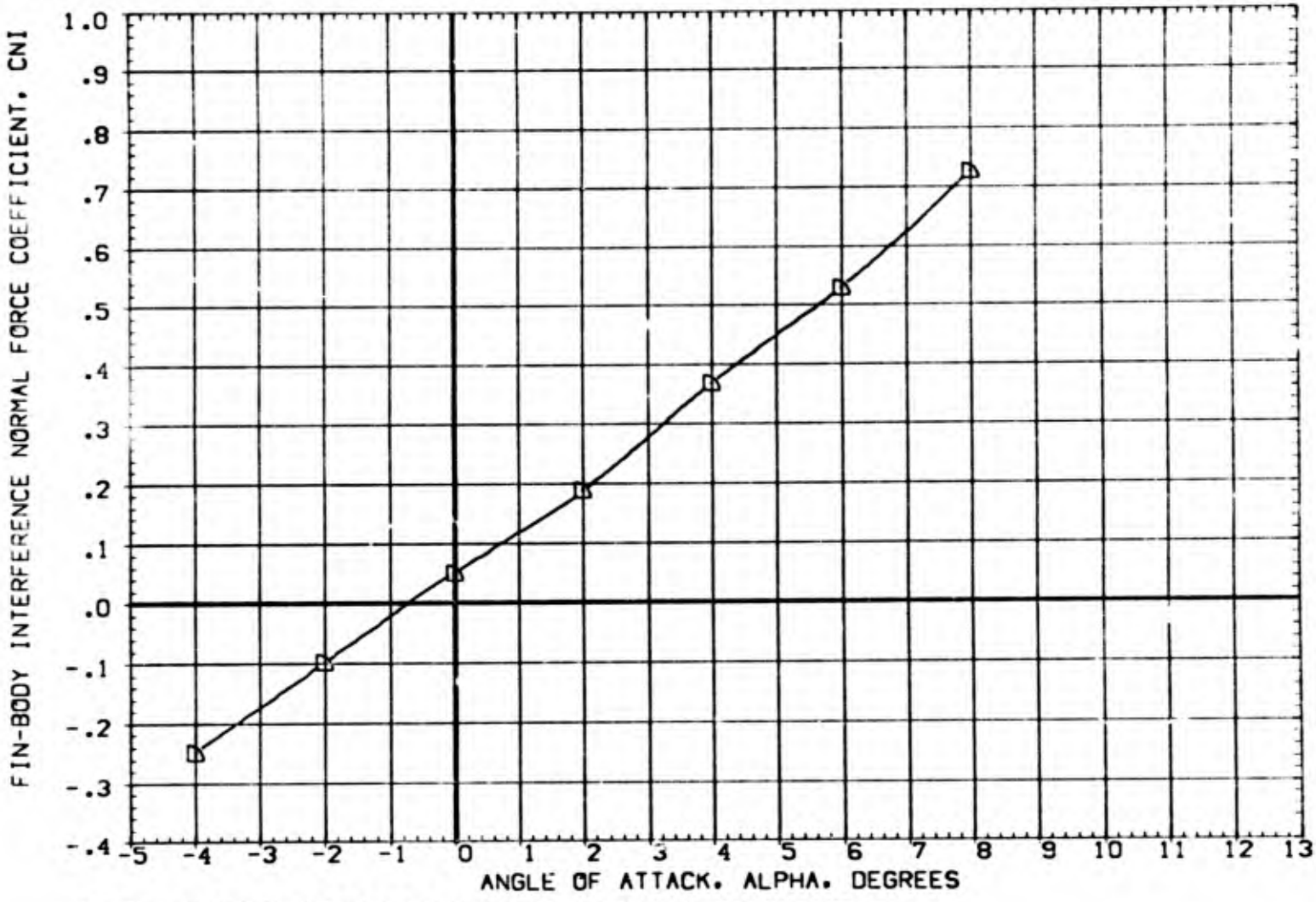
PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[illegible]		DATA NOT AVAILABLE	.000	.000	1.000	12.000
[illegible]		DATA NOT AVAILABLE	.000	.000	1.000	7.200
[illegible]		DATA NOT AVAILABLE	.000	.000	1.000	4.200
[illegible]		DATA NOT AVAILABLE	.000	.000	1.000	2.500
[illegible]		DATA NOT AVAILABLE	.000	.000	1.000	1.500
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	.000

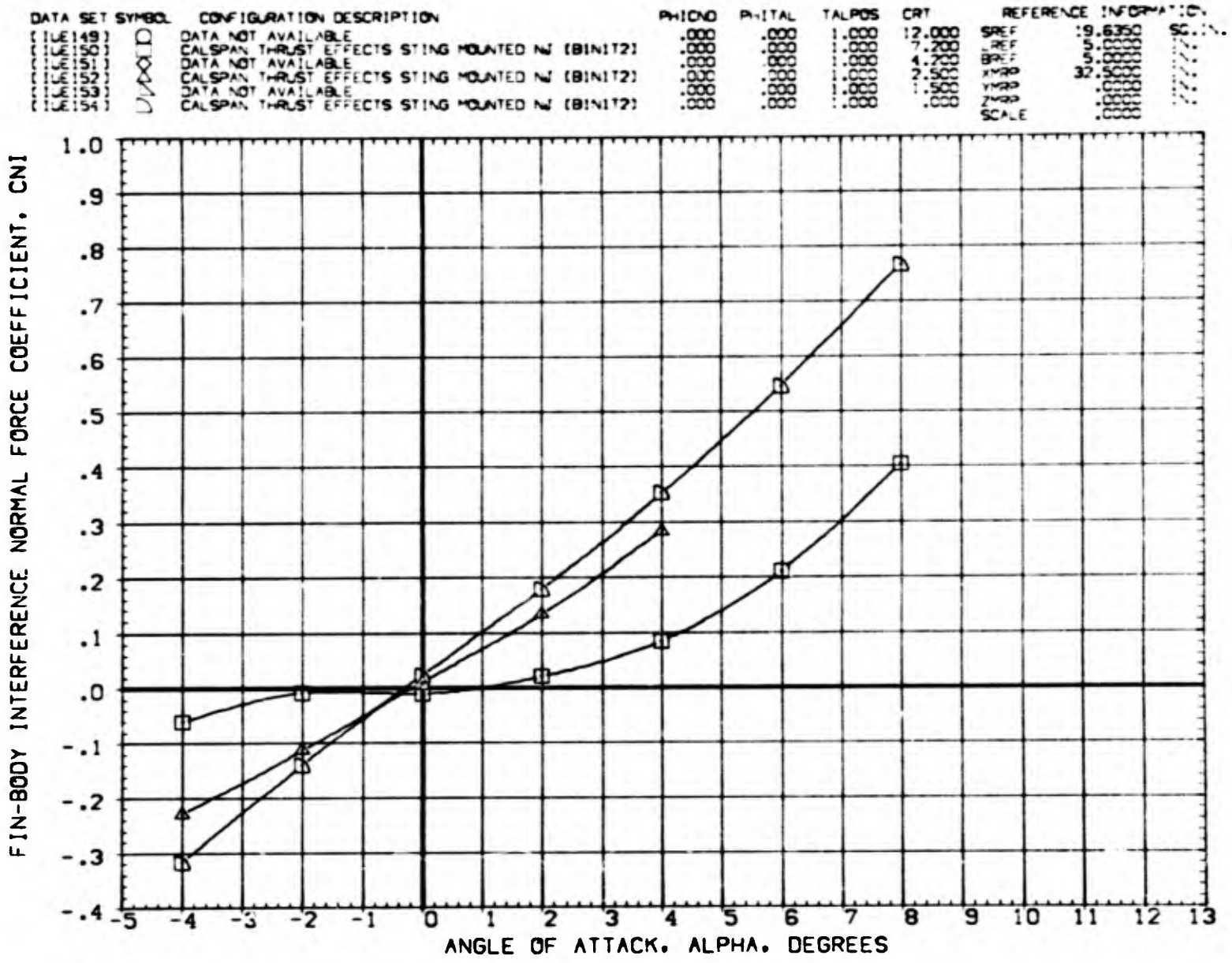
REFERENCE INFORMATION

SREF	9.635
LREF	5.000
BREF	5.000
XMRP	3.500
YMRP	.000
ZMRP	.000
SCALE	1.000



PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

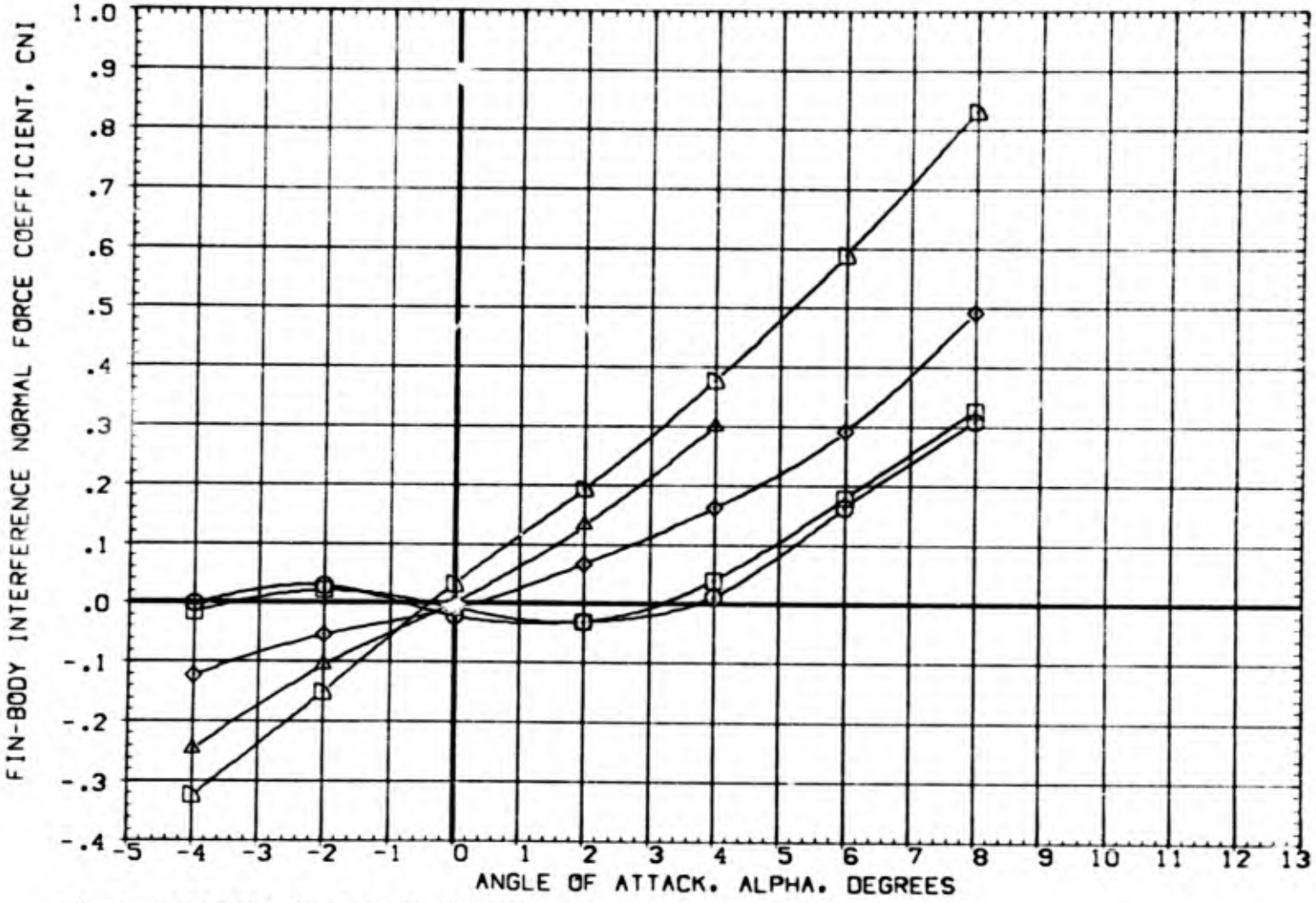
(A)MAC- = .40



PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MAC- = .80

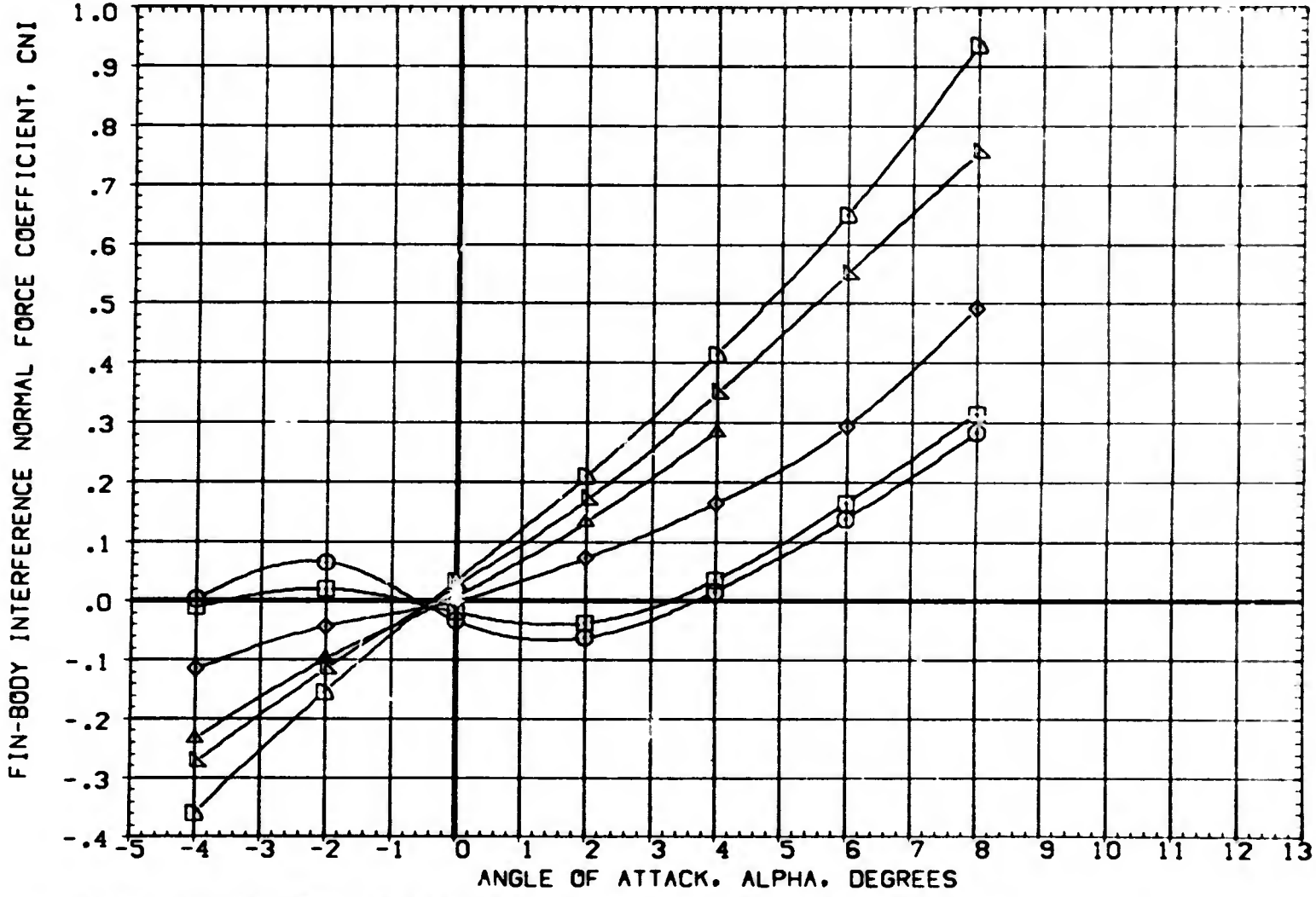
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT	REFERENCE INFORMATION		
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	12.000	SREF	19.6350	SQ.
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.0000	.0000	1.0000	7.2000	CREF	5.0000	
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.0000	.0000	1.0000	4.2000	BREF	5.0000	
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.0000	.0000	1.0000	2.5000	XMRP	32.5000	
[illegible]		DATA NOT AVAILABLE	.0000	.0000	1.0000	.5000	YMRP	.0000	
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	.000	ZMRP	.0000	
							SCALE	1.000	



PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MAC- = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT	REFERENCE INFORMATION
[1:6149]	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	12.000	SREF 19.6350 SCALE
[1:6150]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	7.200	BREF 5.0000
[1:6151]	△	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	4.200	BREF 5.0000
[1:6152]	◁	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	2.500	XMRP 32.5000
[1:6153]	○	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	.500	YMRP .0000
[1:6154]	▷	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	.000	ZMRP .0000



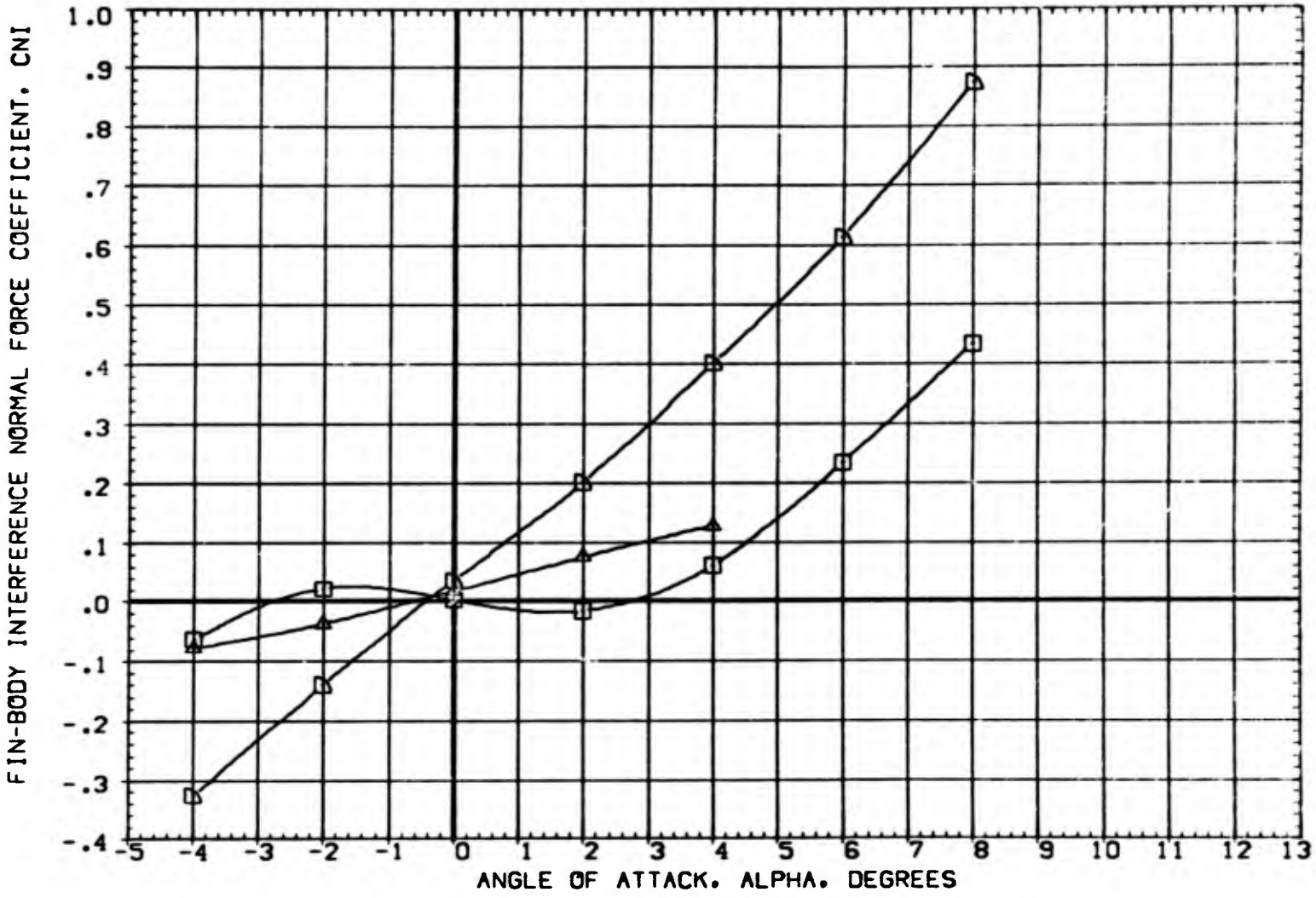
PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(IGE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(IGE150)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(IGE151)	◇	DATA NOT AVAILABLE	.000	.000	1.000	4.200
(IGE152)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	2.500
(IGE153)	⊲	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(IGE154)	▷	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	.000

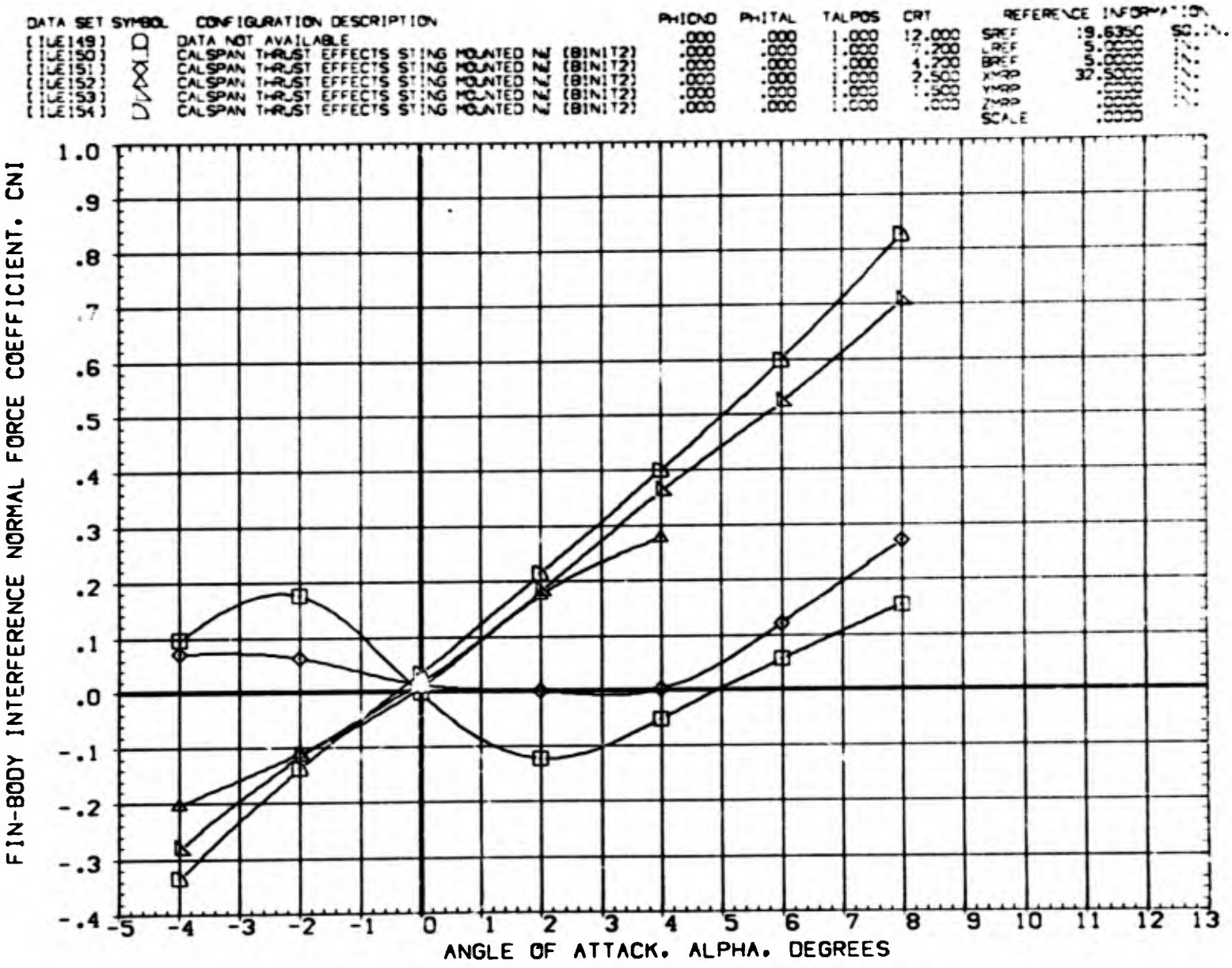
REFERENCE INFORMATION

SREF	19.6350 SQ.IN.
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MACH = 1.10



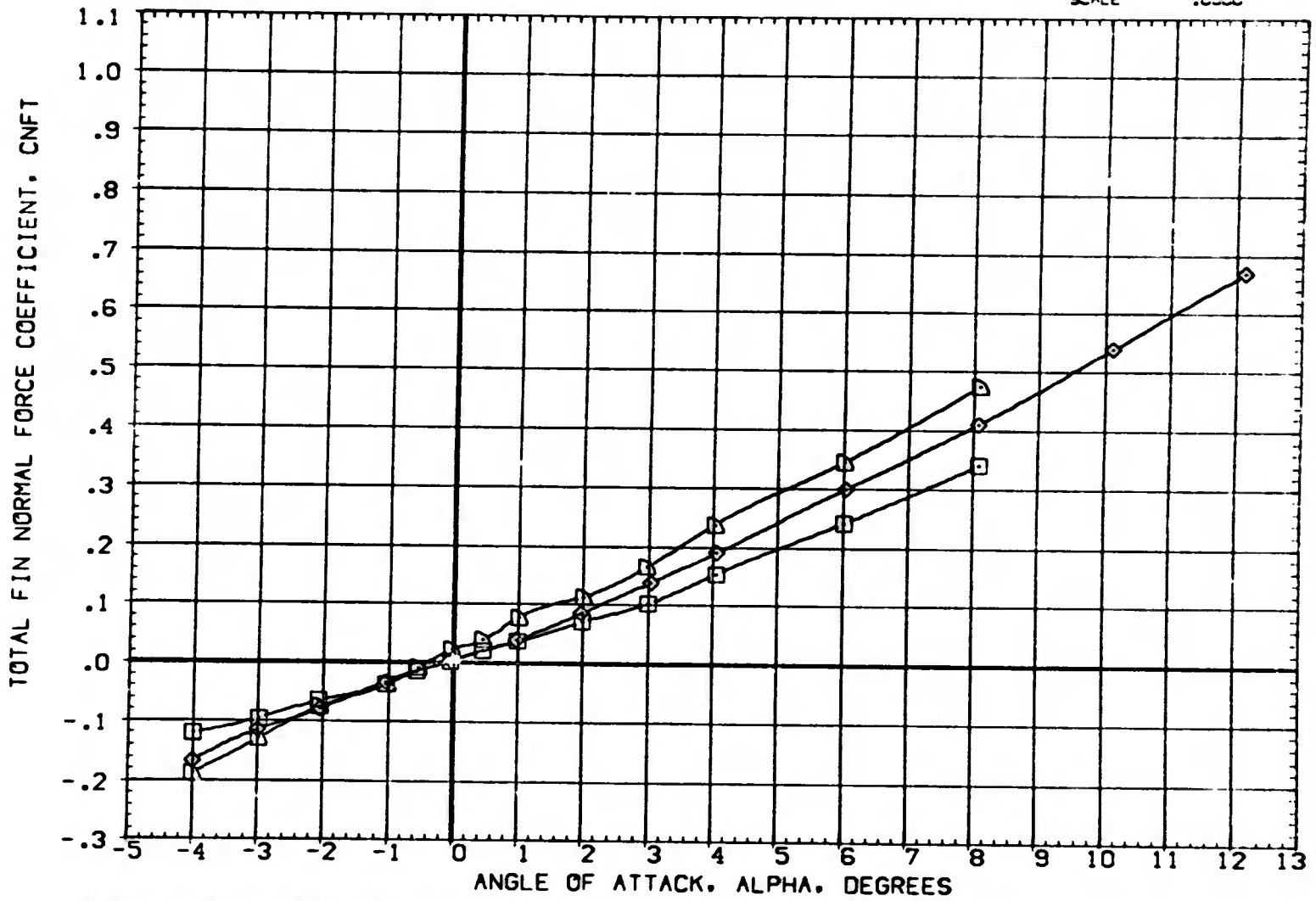
PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(LUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(LUE150)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
(LUE151)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200
(LUE152)	▽	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(LUE153)	▷	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(LUE154)	◁	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	30.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

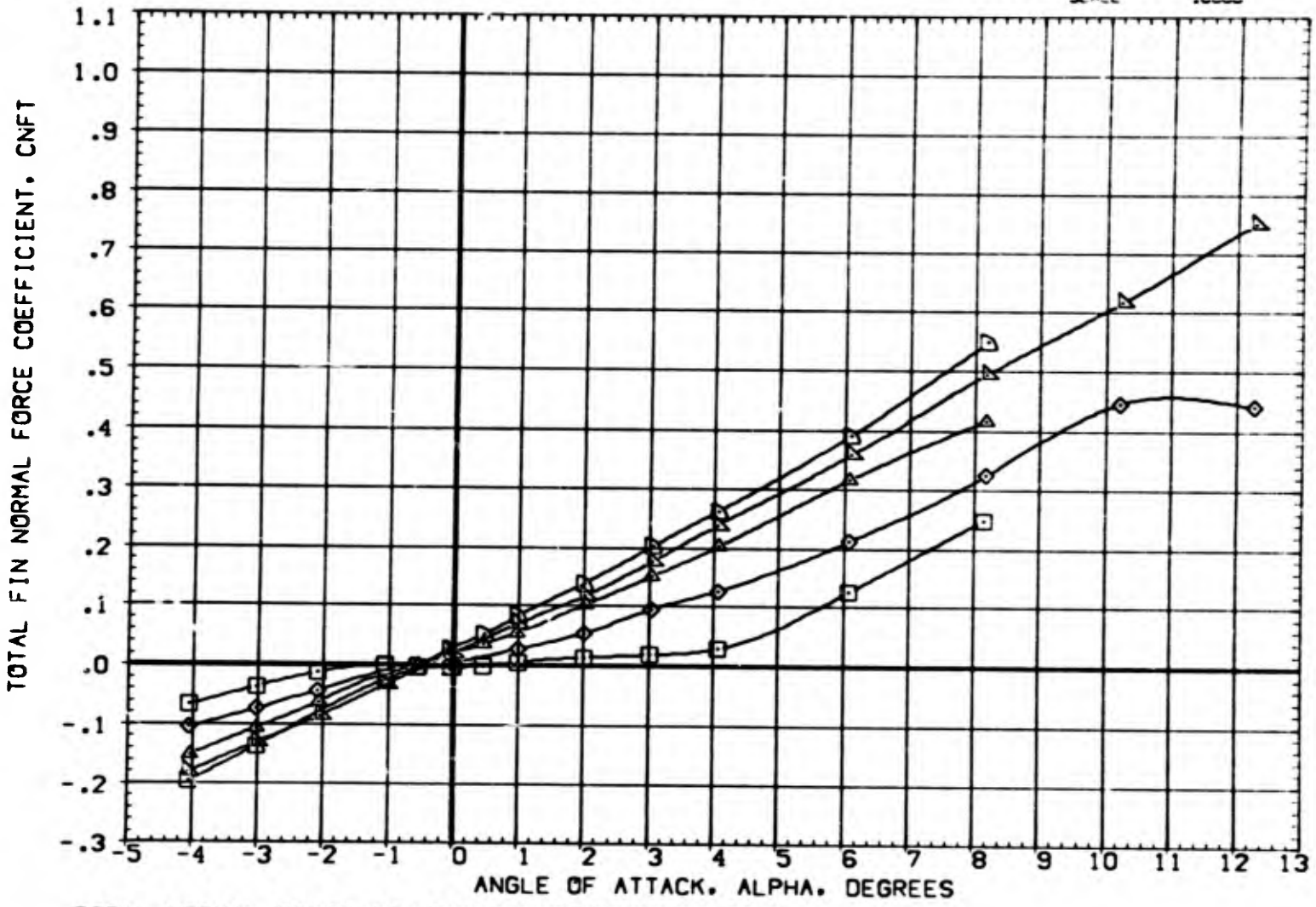


TOTAL NORMAL FORCE OF FINS IN PRESENCE OF BODY

(A)MAC = .40

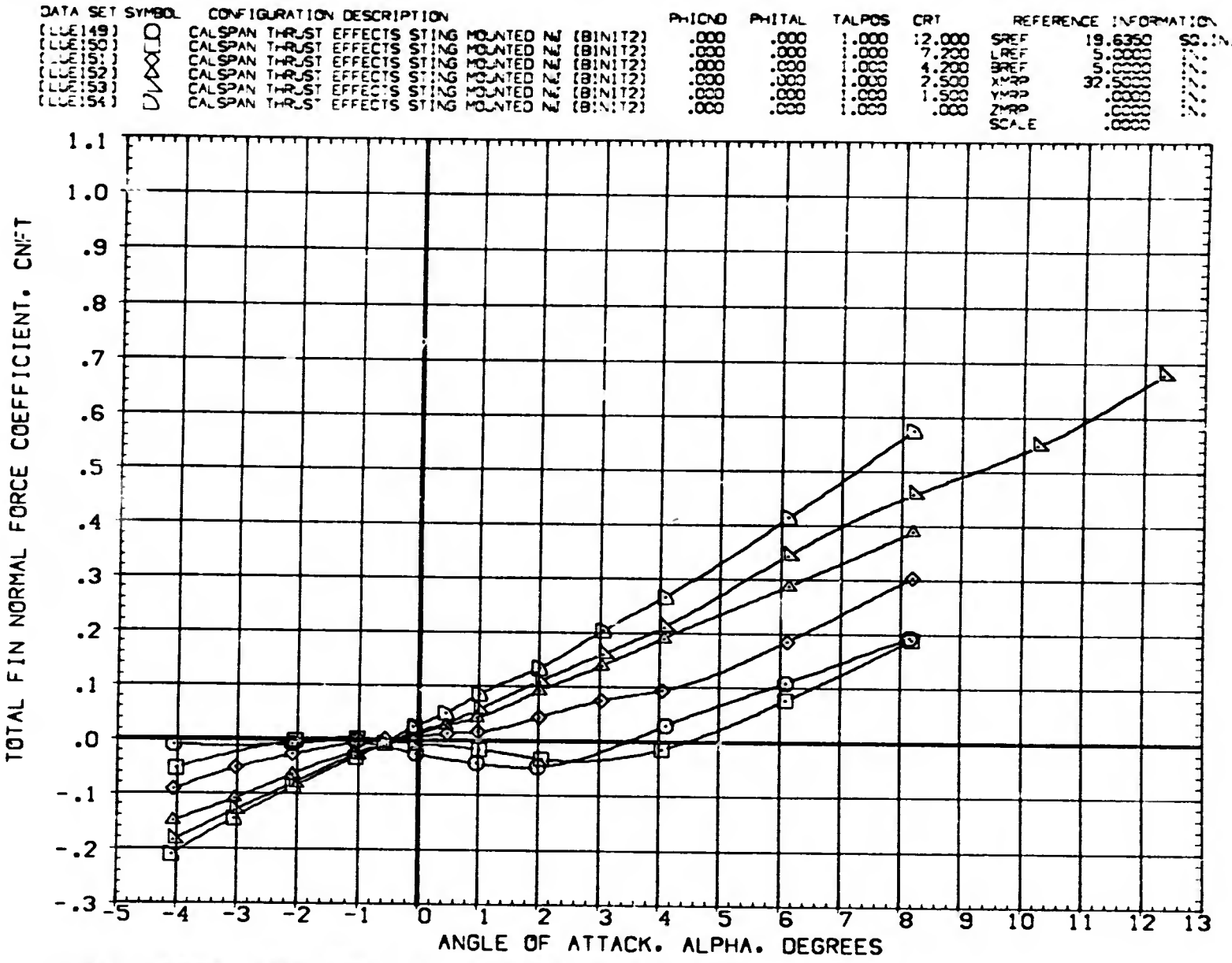
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(LUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(LUE150)	△	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	7.200
(LUE151)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	4.200
(LUE152)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	2.500
(LUE153)	◁	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	.500
(LUE154)	▷	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



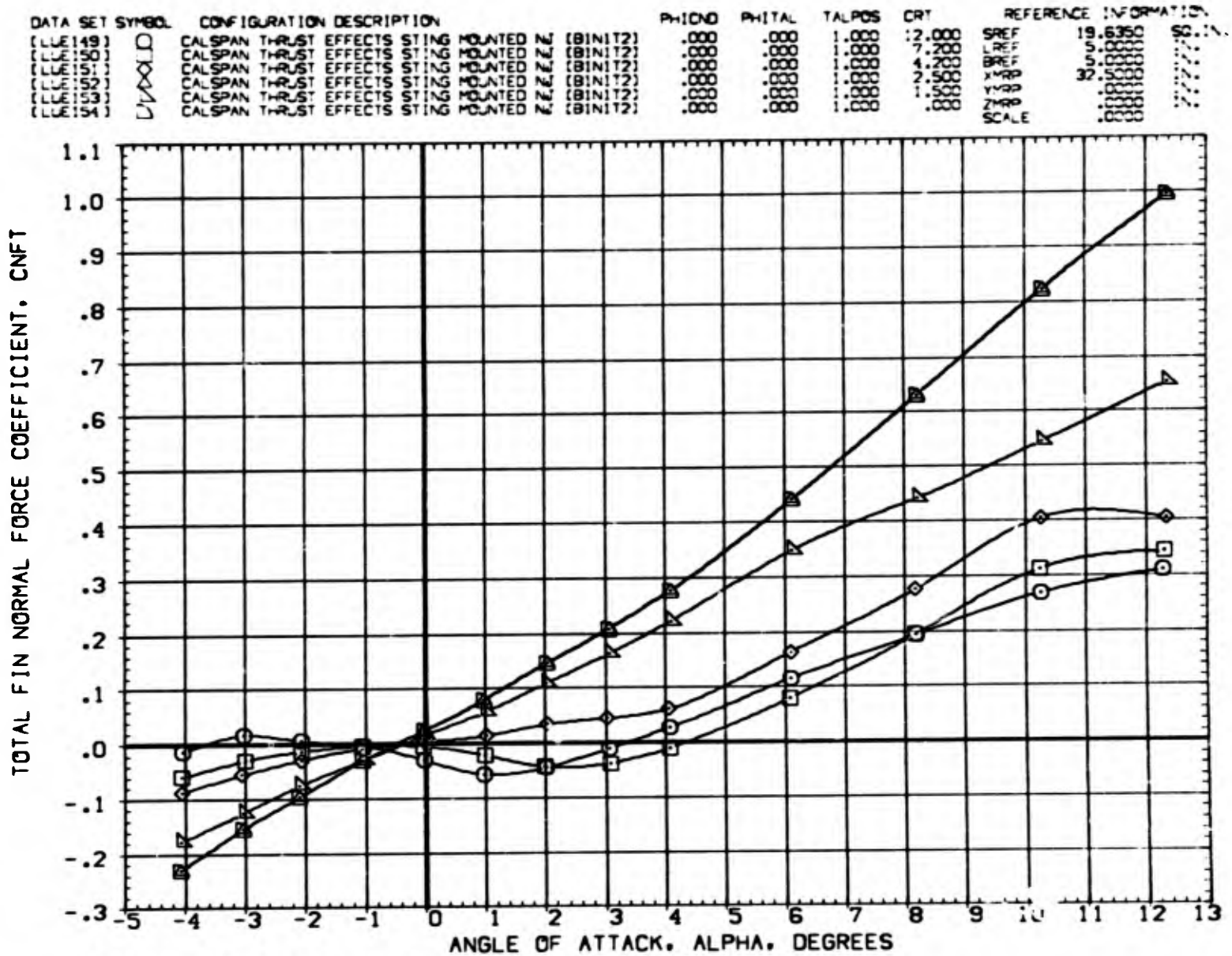
TOTAL NORMAL FORCE OF FINS IN PRESENCE OF BODY

(B)MAC- = .80



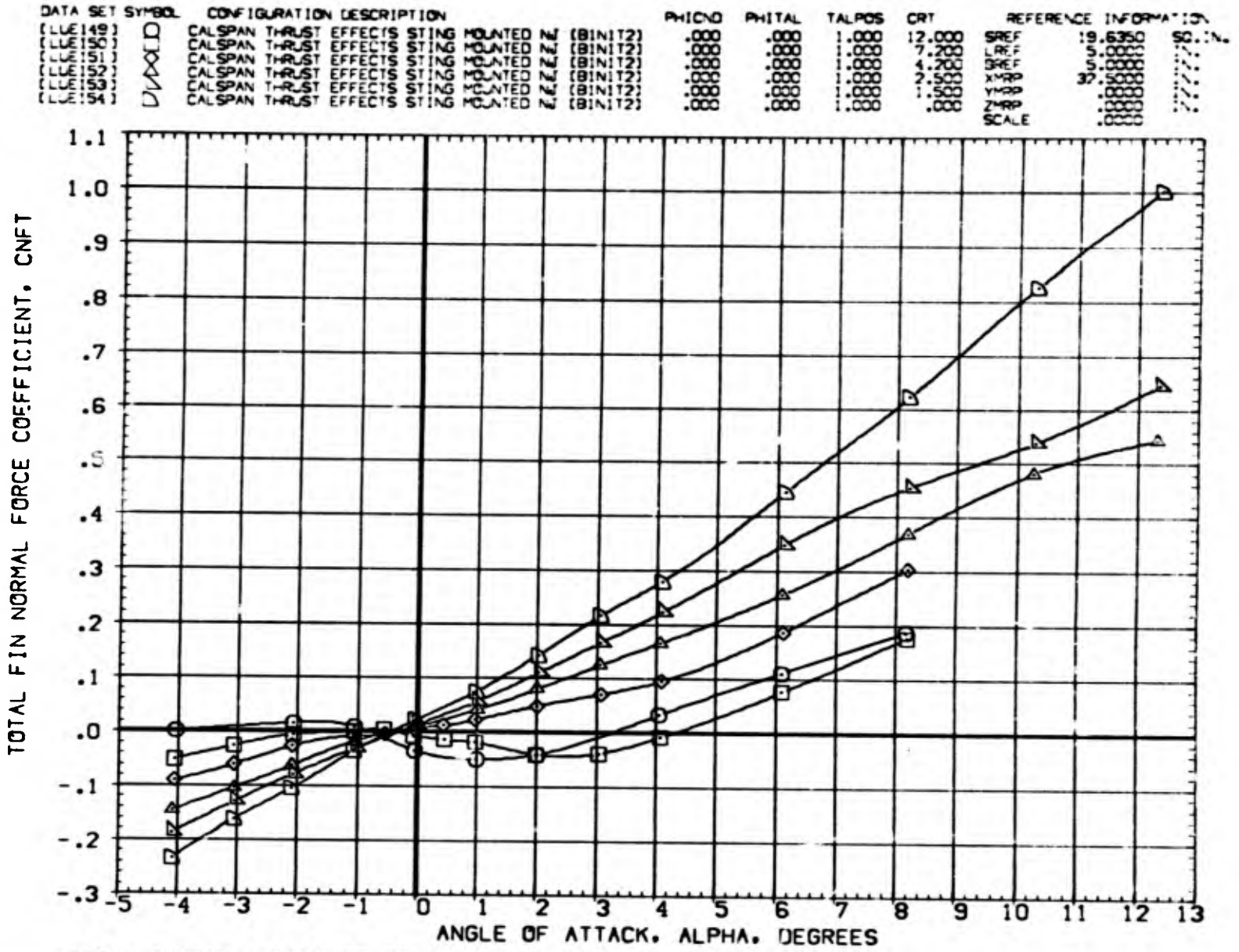
TOTAL NORMAL FORCE OF FINS IN PRESENCE OF BODY

(C)MAC- = .90



TOTAL NORMAL FORCE OF FINS IN PRESENCE OF BODY

(D)MACH = .95



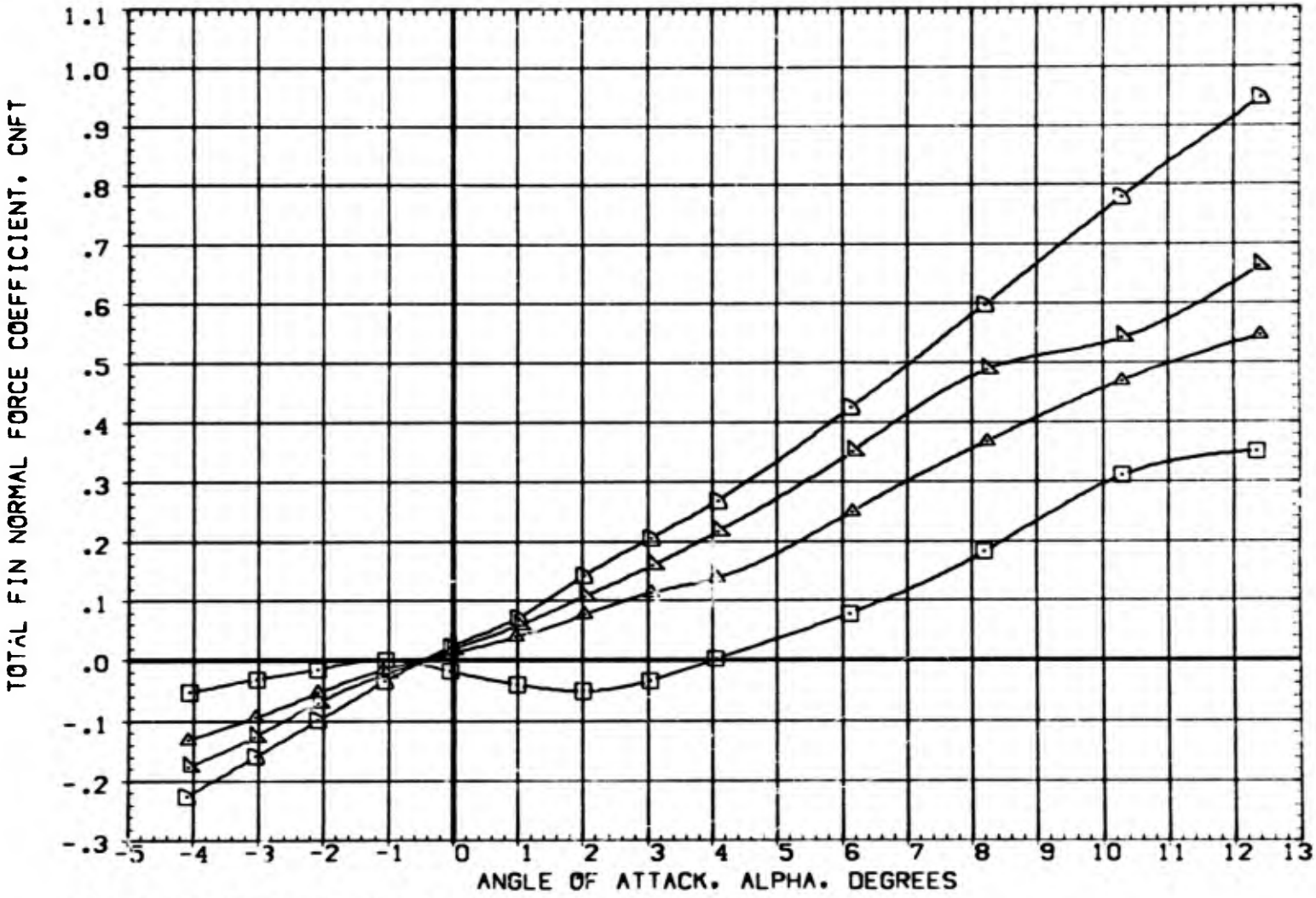
TOTAL NORMAL FORCE OF FINS IN PRESENCE OF BODY

(E)MAC = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(LUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(LUE150)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200
(LUE151)	◇	DATA NOT AVAILABLE	.000	.000	1.000	4.200
(LUE152)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	2.500
(LUE153)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
(LUE154)	⊡	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

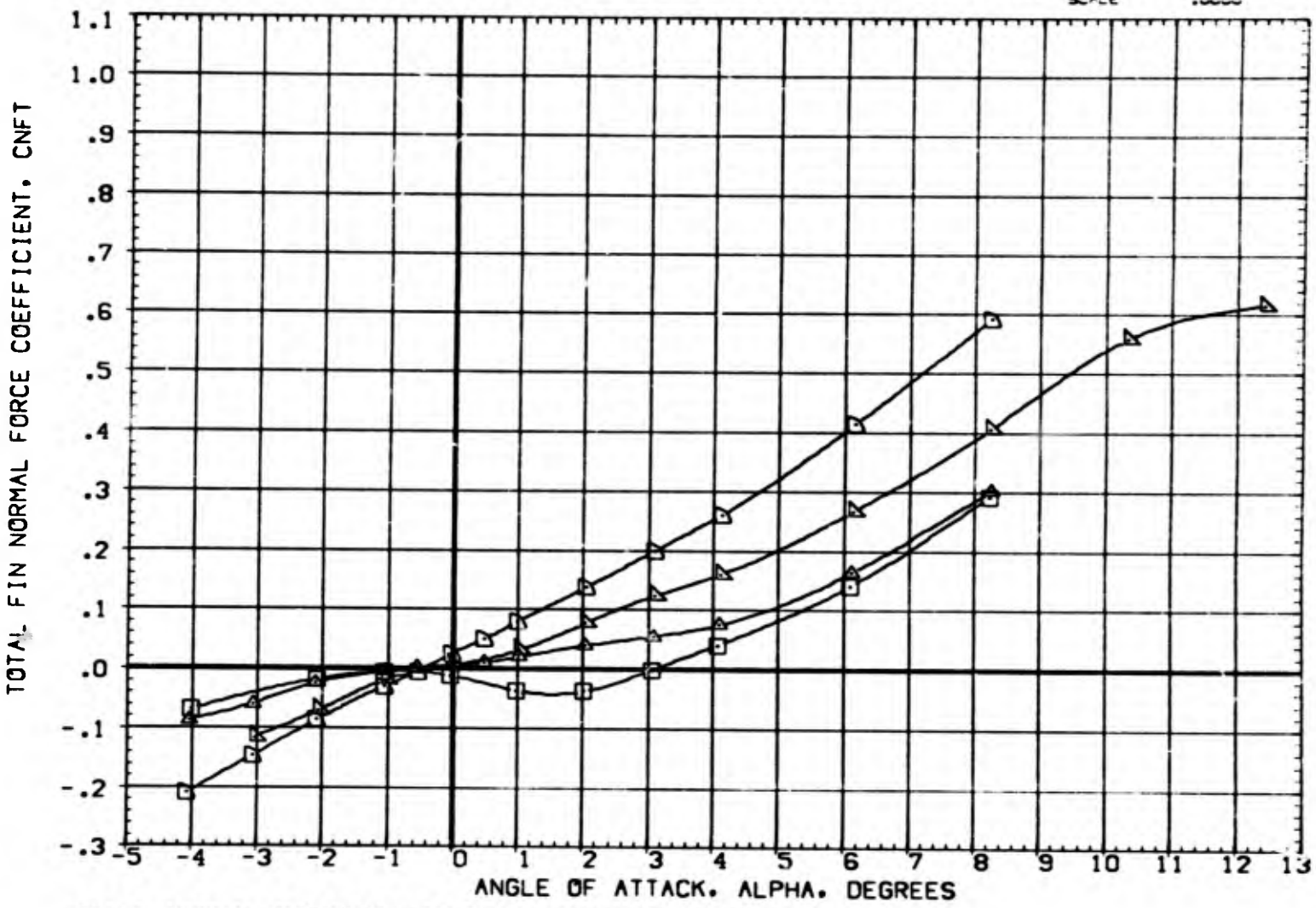


TOTAL NORMAL FORCE OF FINS IN PRESENCE OF BODY

(F)MACH = 1.05

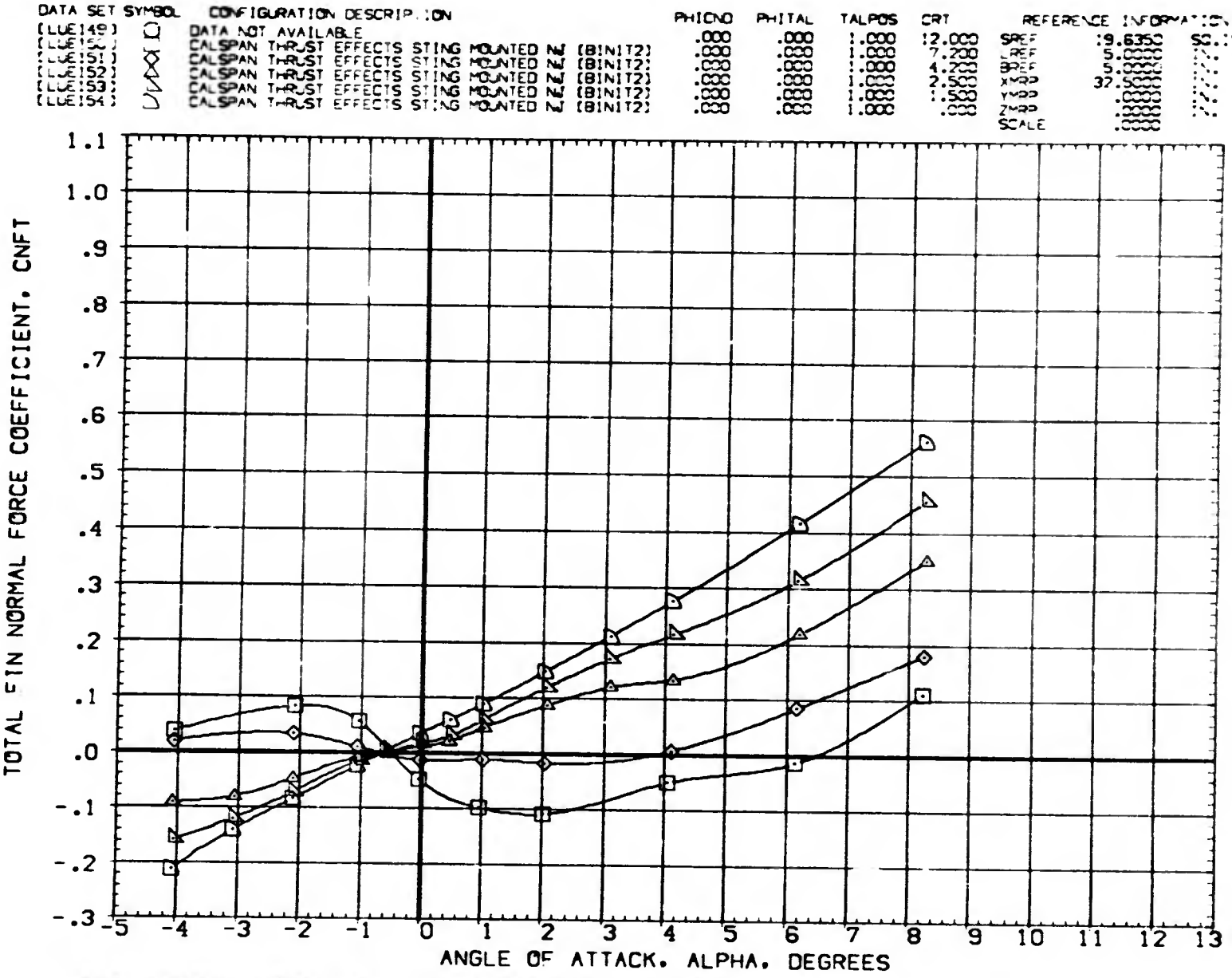
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(LUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(LUE150)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(LUE151)	◇	DATA NOT AVAILABLE	.000	.000	1.000	4.200
(LUE152)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	2.500
(LUE153)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	1.500
(LUE154)	⊡	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	IN.



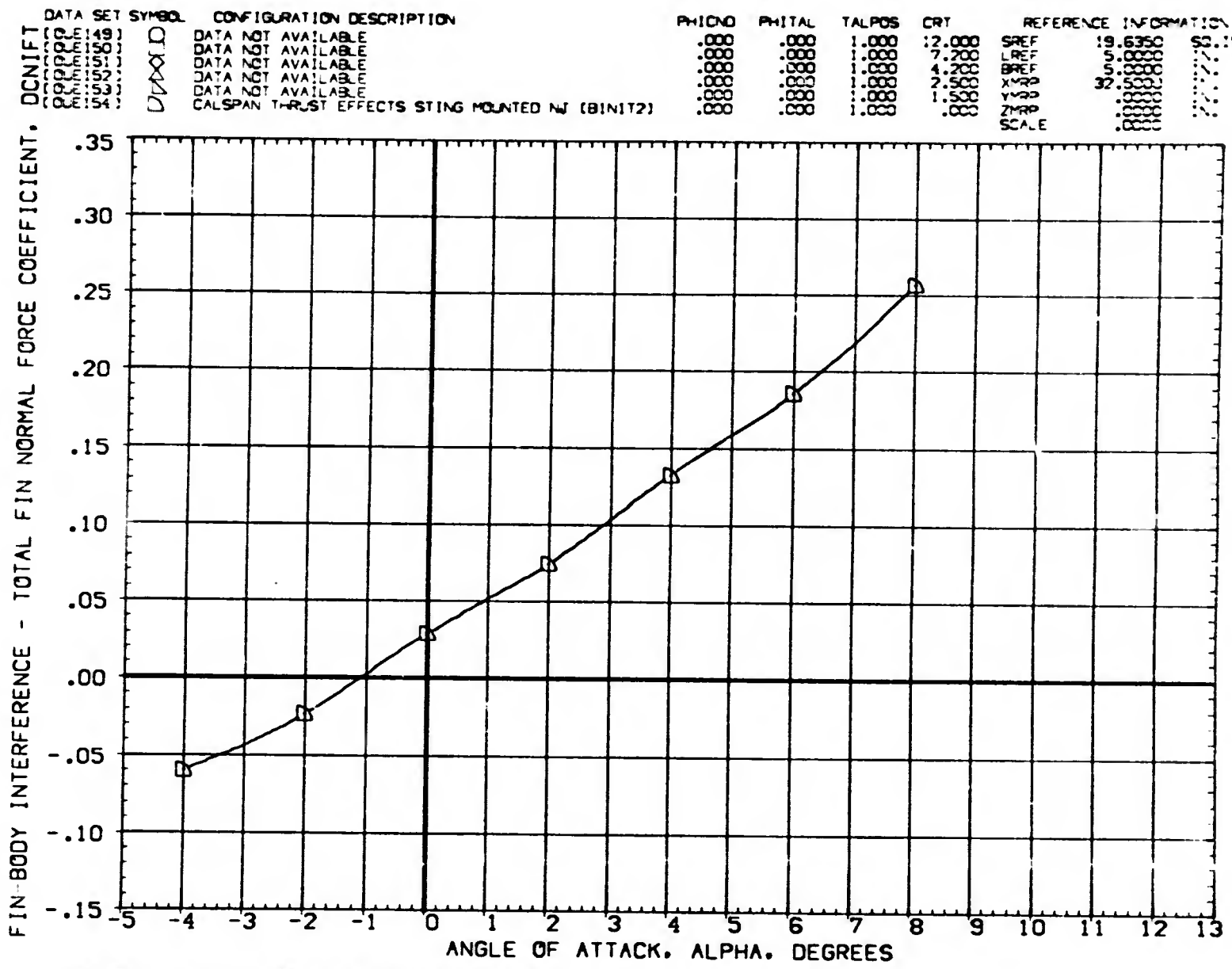
TOTAL NORMAL FORCE OF FINS IN PRESENCE OF BODY

(G)MAC = 1.09



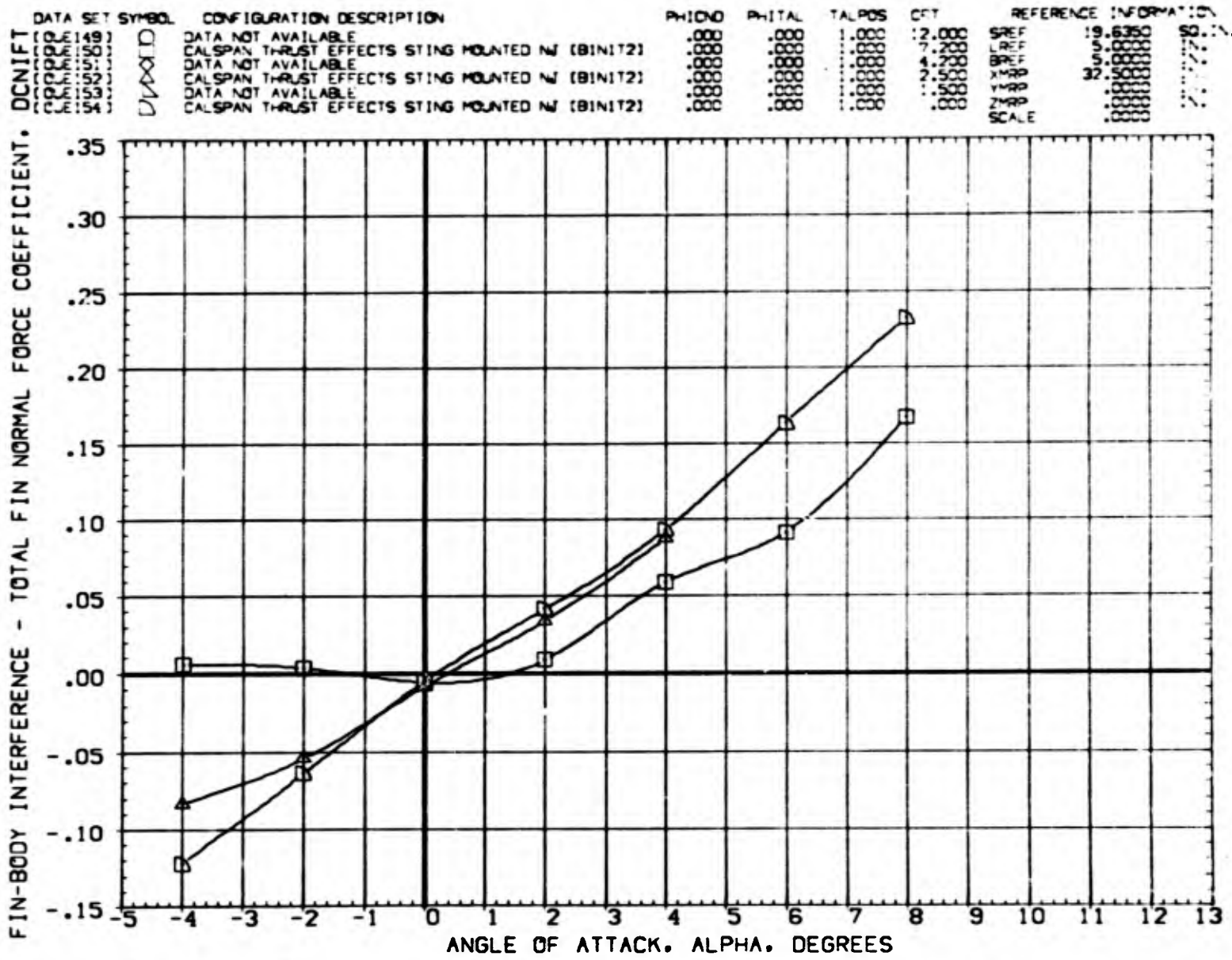
TOTAL NORMAL FORCE OF FINS IN PRESENCE OF BODY

(H)MACH = 1.25



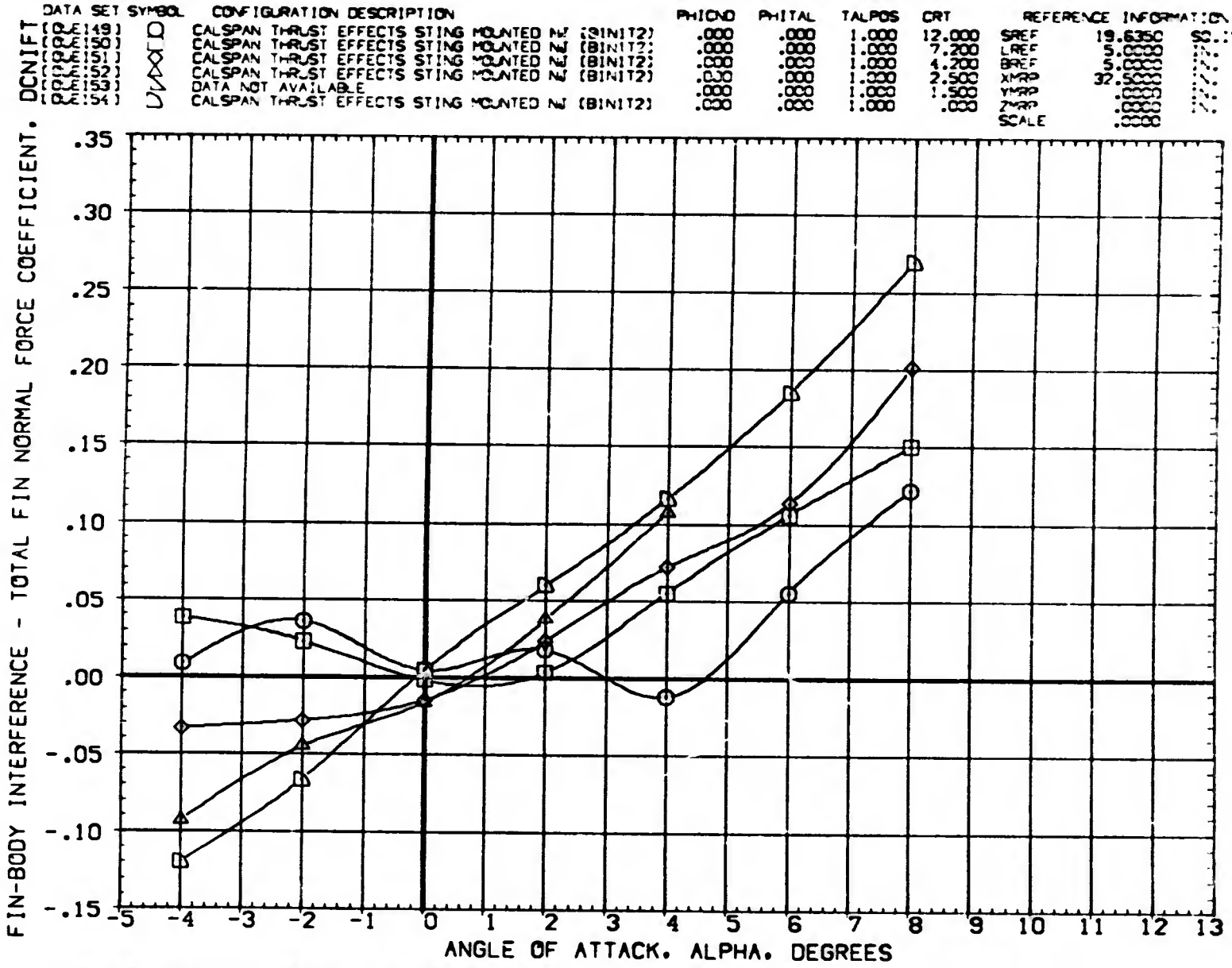
PLUME EFFECTS ON FIN INTERFERENCE

(A)MACH = .40



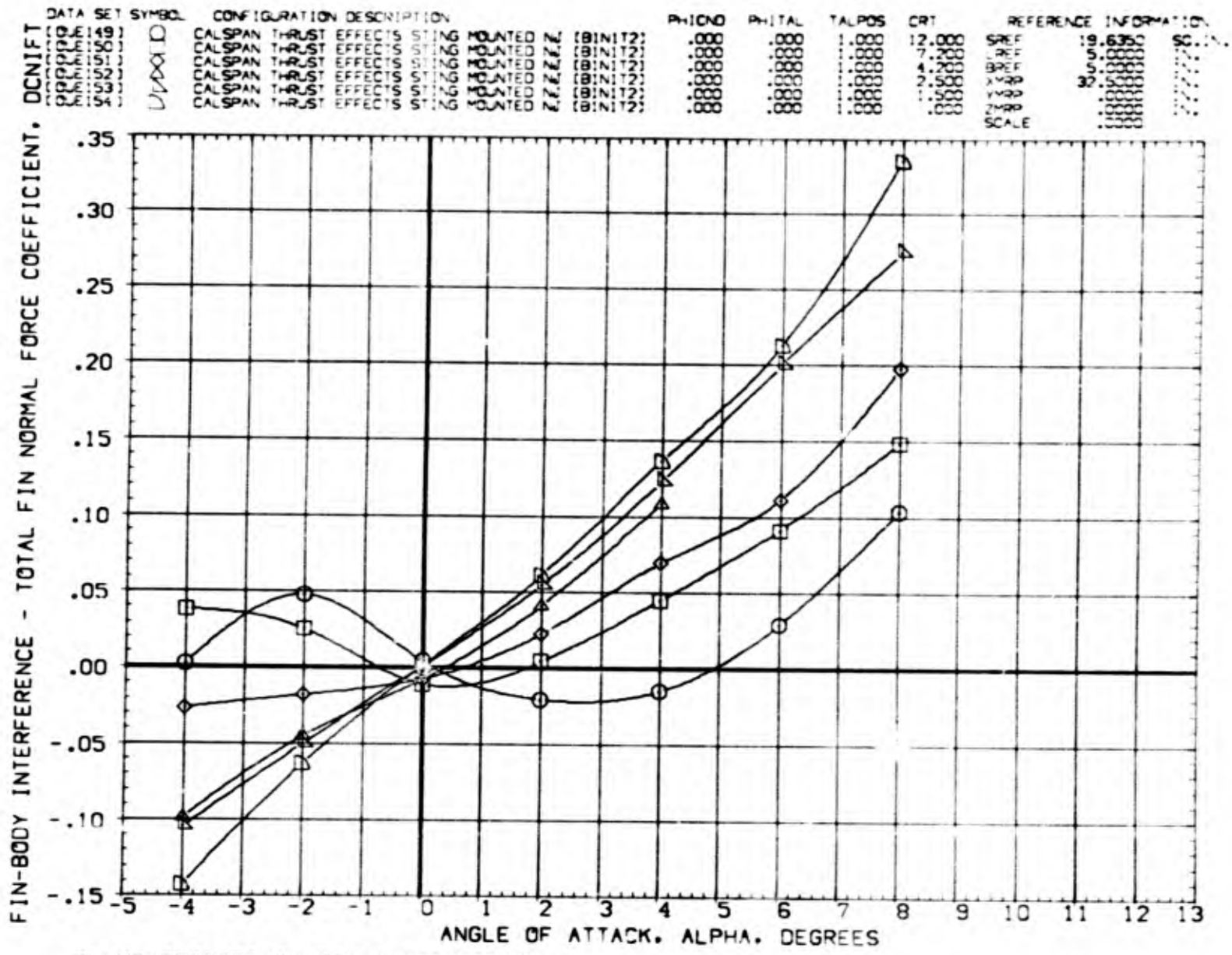
PLUME EFFECTS ON FIN INTERFERENCE

(B)MACH = .80



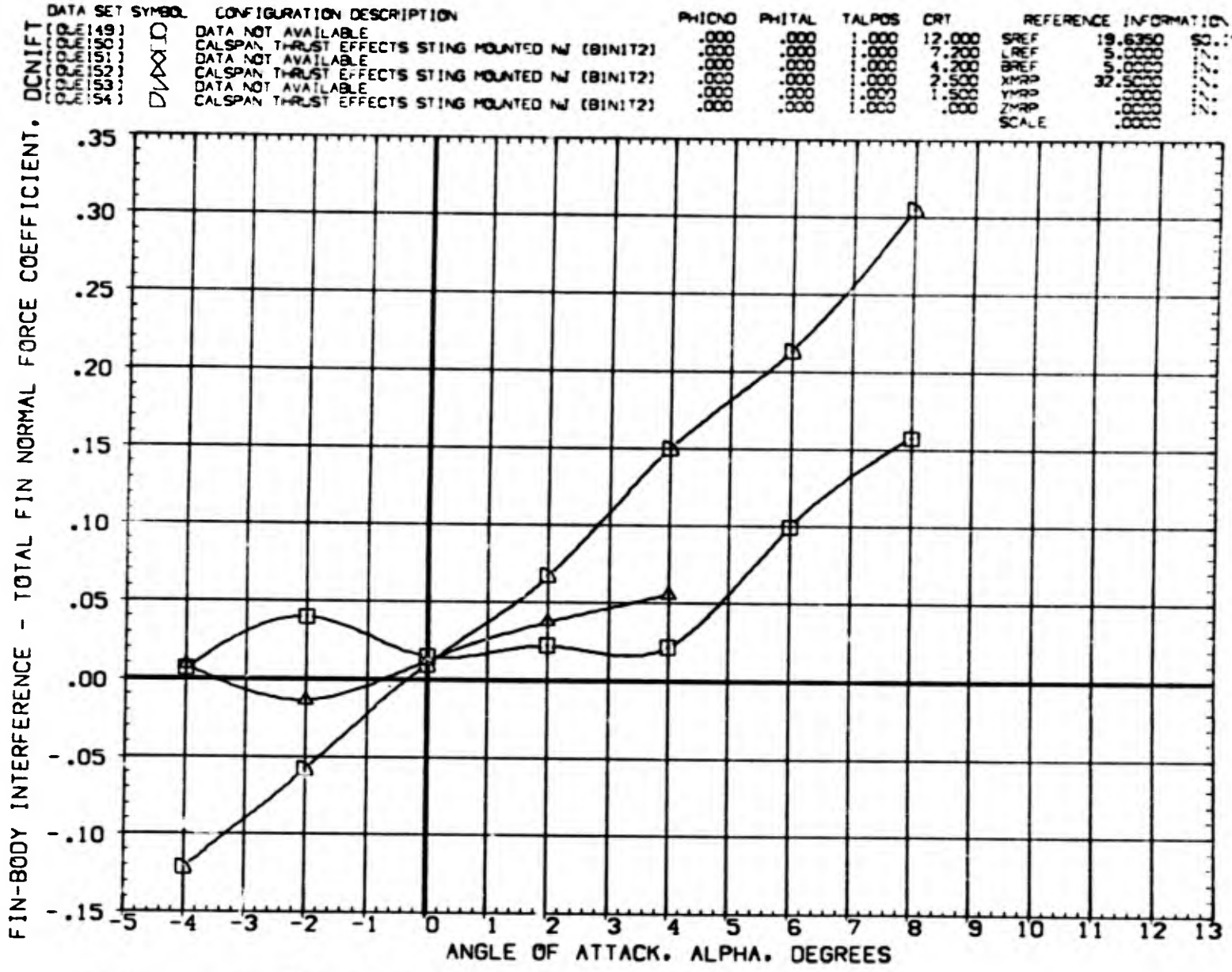
PLUME EFFECTS ON FIN INTERFERENCE

(C)MAC = .90



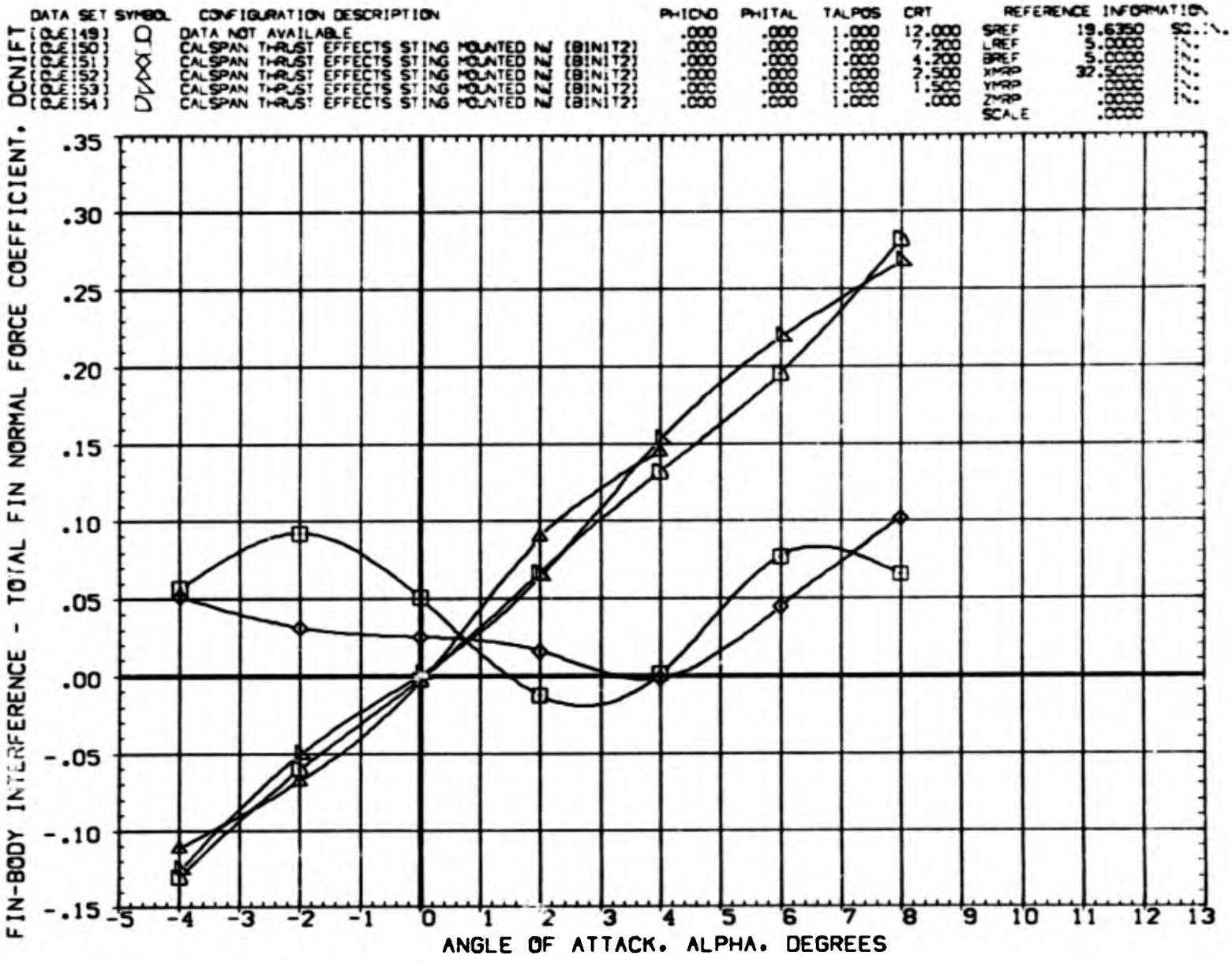
PLUME EFFECTS ON FIN INTERFERENCE

(D)MACH = 1.00



PLUME EFFECTS ON FIN INTERFERENCE

(E)MAC- = 1.10

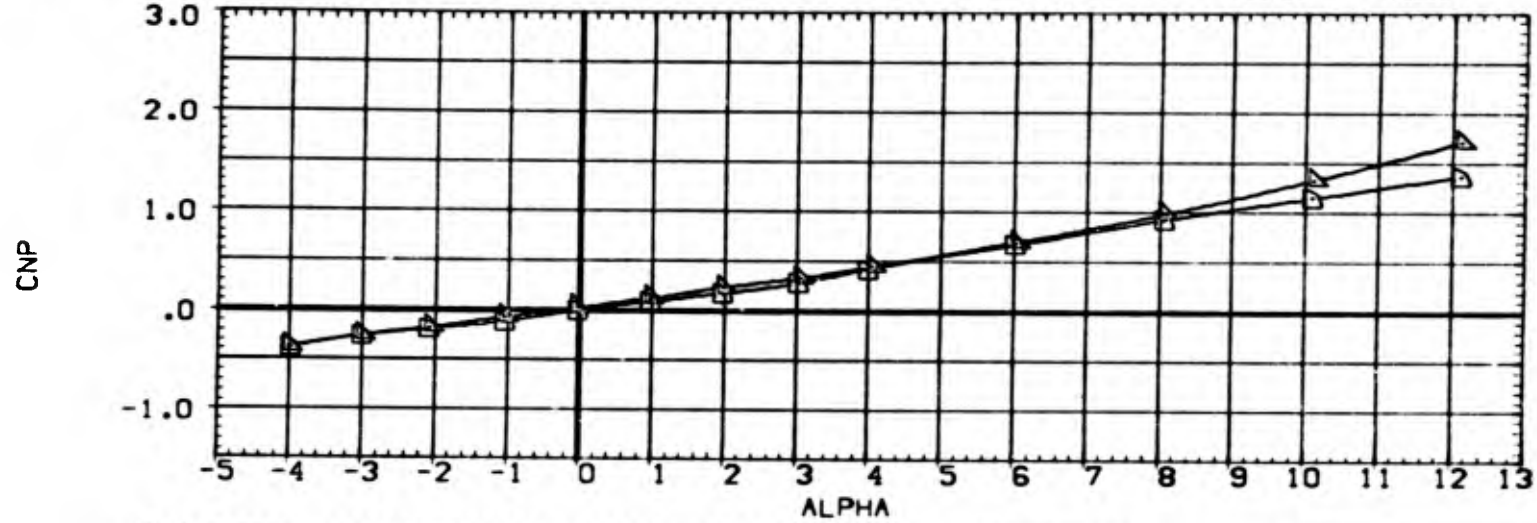


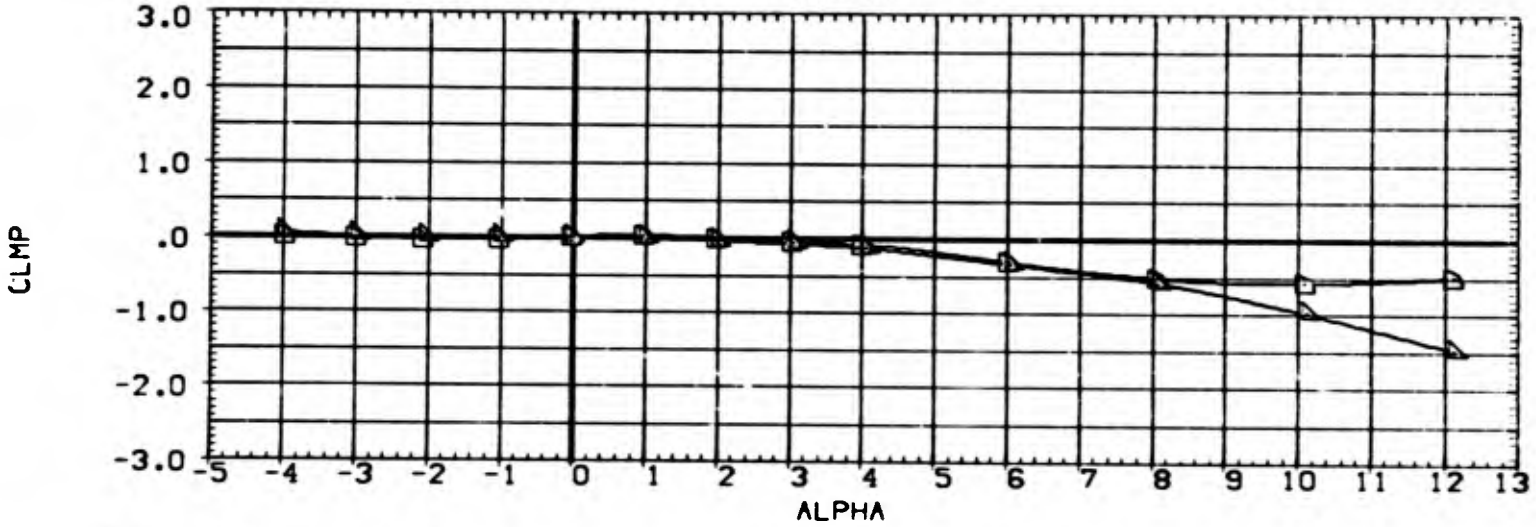
PLUME EFFECTS ON FIN INTERFERENCE

(F)MAC- = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(XUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(XUE304)	◇	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(XUE150)	△	DATA NOT AVAILABLE	.000	.000	1.000	7.200
(XUE305)	○	DATA NOT AVAILABLE	.000	.000	1.000	7.200
(XUE151)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200
(XUE306)	⊲	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT3)	.000	.000	1.000	4.200

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



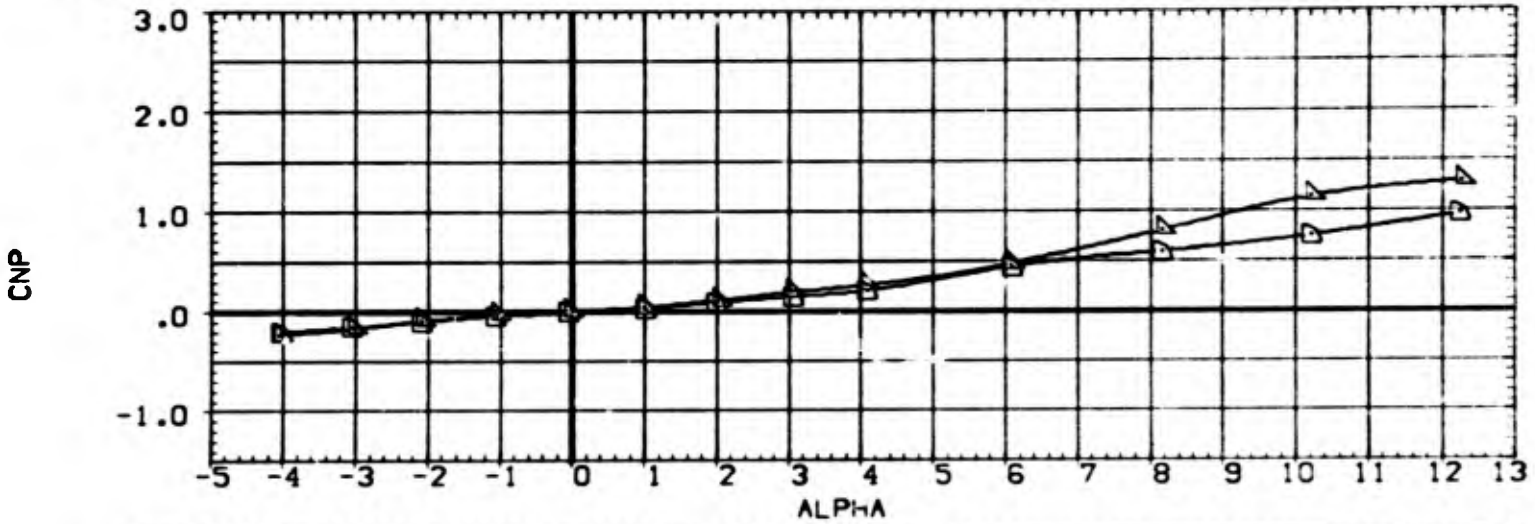


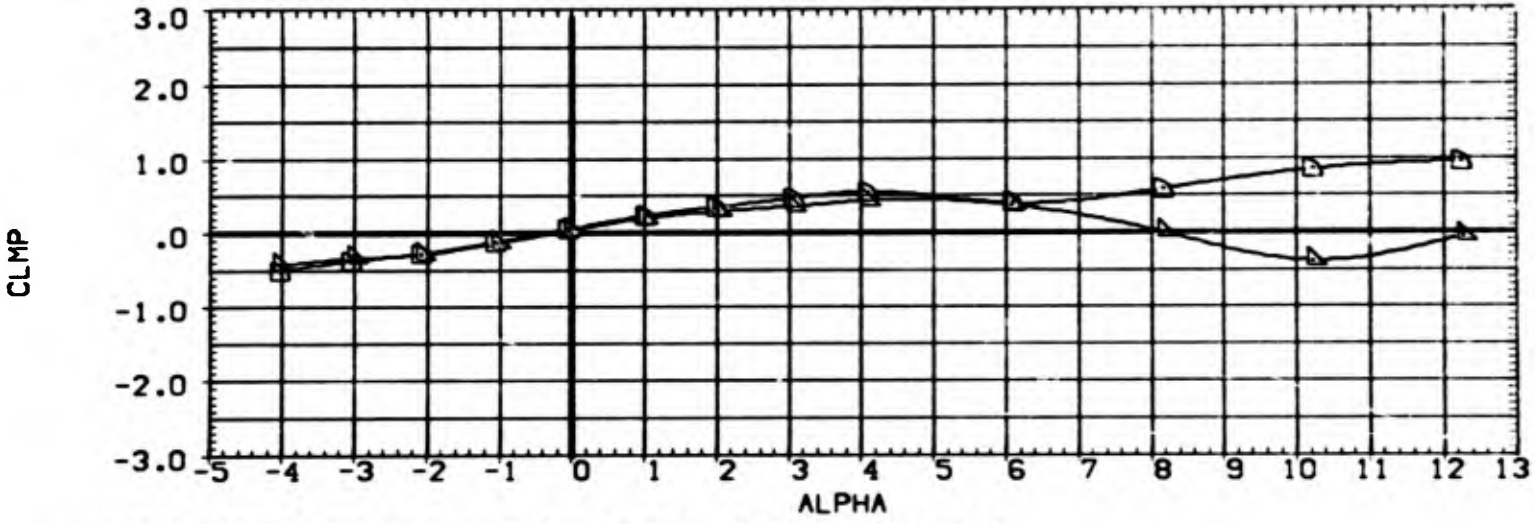
COMPARISON BETWEEN BLUNT AND SHARP LEADING EDGE FIN

(A)MACH = .39

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(XUE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(XUE304)	◇	DATA NOT AVAILABLE	.0000	.0000	1.0000	12.0000
(XUE150)	△	DATA NOT AVAILABLE	.0000	.0000	1.0000	7.2000
(XUE305)	▽	DATA NOT AVAILABLE	.0000	.0000	1.0000	7.2000
(XUE151)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200
(XUE306)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT3)	.000	.000	1.000	4.200

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

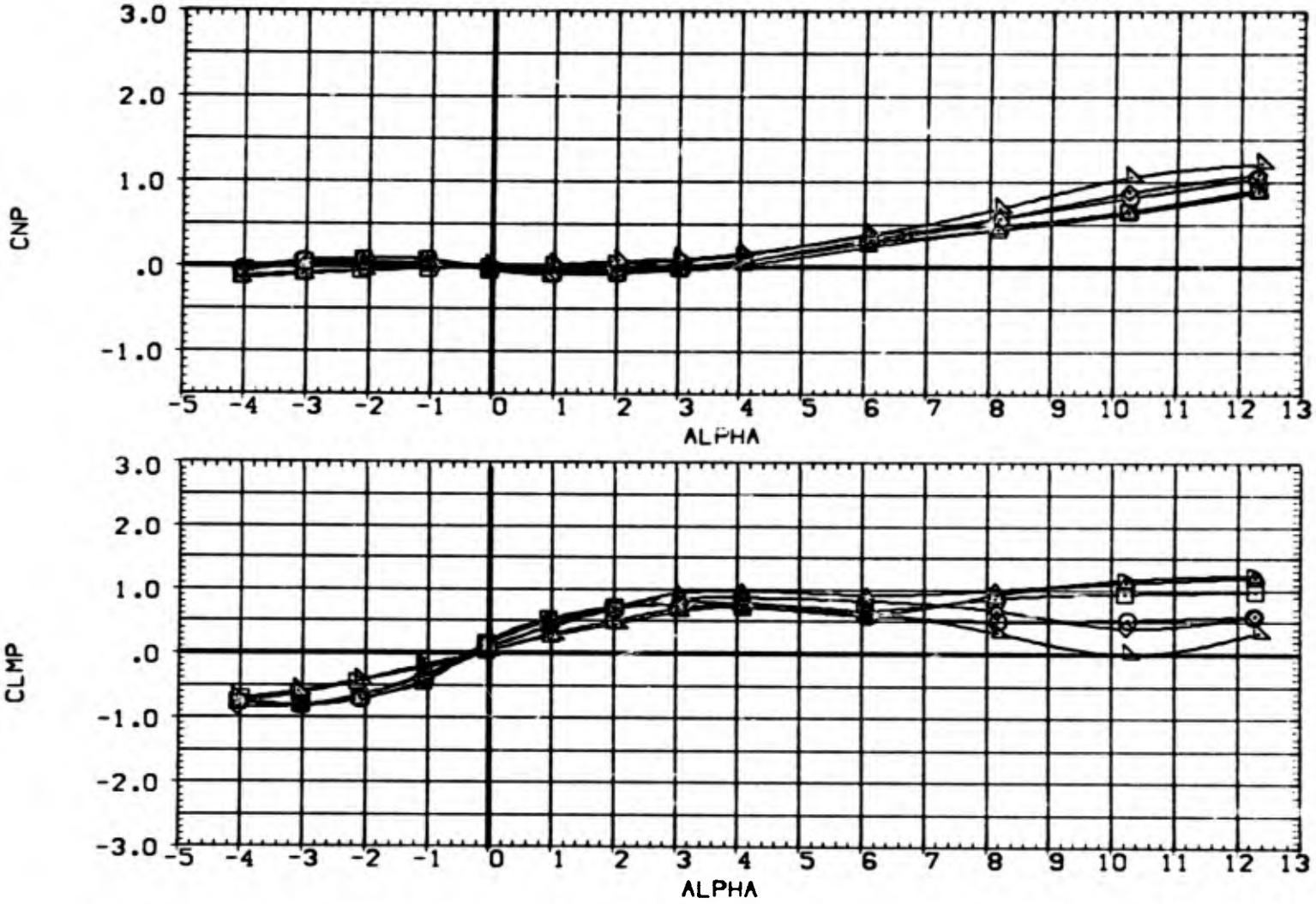




COMPARISON BETWEEN BLUNT AND SHARP LEADING EDGE FIN

(B)MAC- = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT	REFERENCE INFORMATION		
(XUE149)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	12.000	SREF	19.6350	SQ.IN.
(XUE304)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT3)	.000	.000	1.000	12.000	LREF	5.0000	IN.
(XUE150)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	7.200	BREF	5.0000	IN.
(XUE305)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT3)	.000	.000	1.000	7.200	XMRP	32.5000	IN.
(XUE151)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	4.200	YMRP	.0000	IN.
(XUE306)	⬡	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT3)	.000	.000	1.000	4.200	ZMRP	.0000	IN.
							SCALE	.0000	

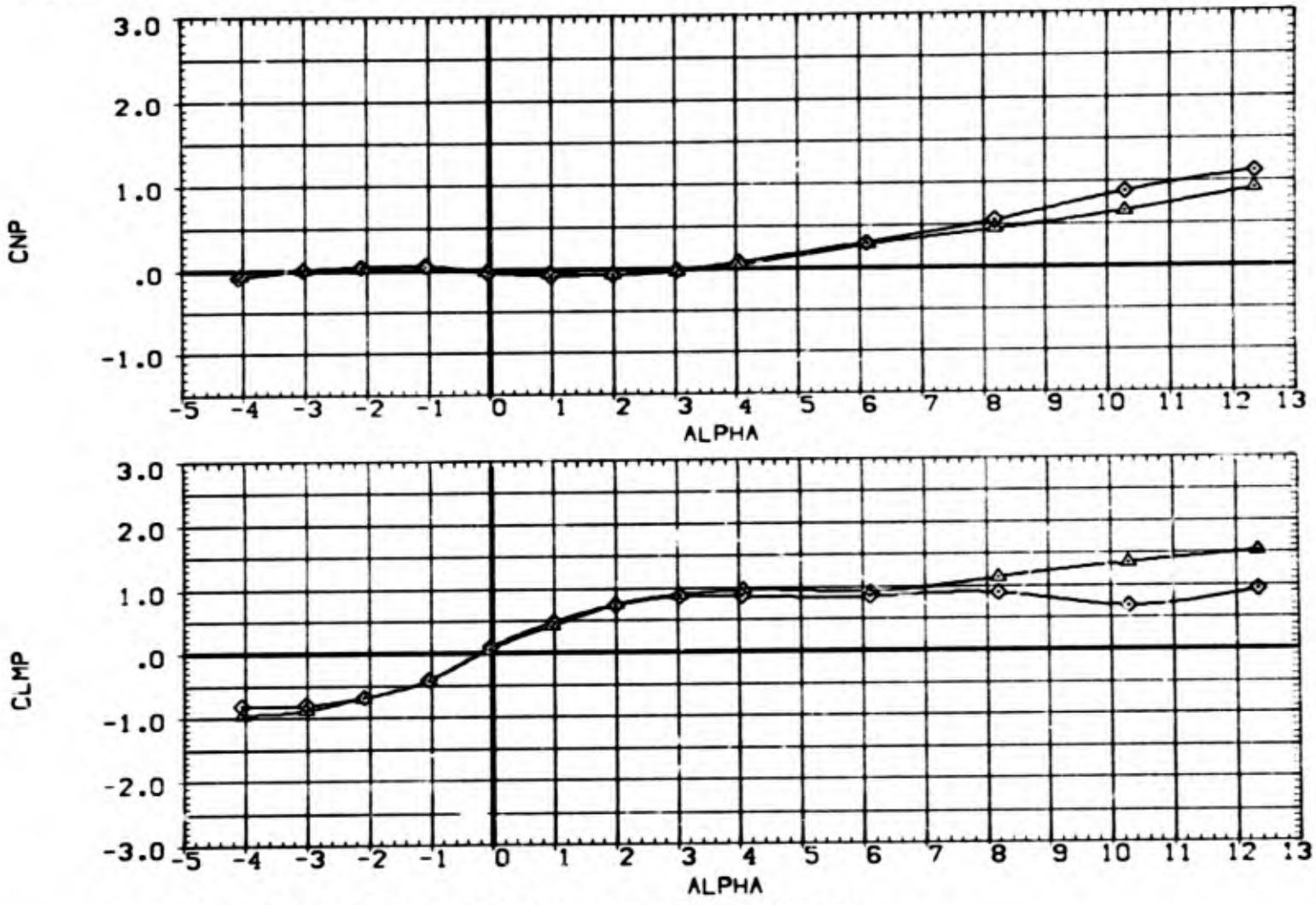


COMPARISON BETWEEN BLUNT AND SHARP LEADING EDGE FIN

(C)MAC- = .95

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(XJE149)	□	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(XJE304)	◇	DATA NOT AVAILABLE	.000	.000	1.000	12.000
(XJE150)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	7.200
(XJE305)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT3)	.000	.000	1.000	7.200
(XJE151)	○	DATA NOT AVAILABLE	.000	.000	1.000	4.200
(XJE306)	⬡	DATA NOT AVAILABLE	.000	.000	1.000	4.200

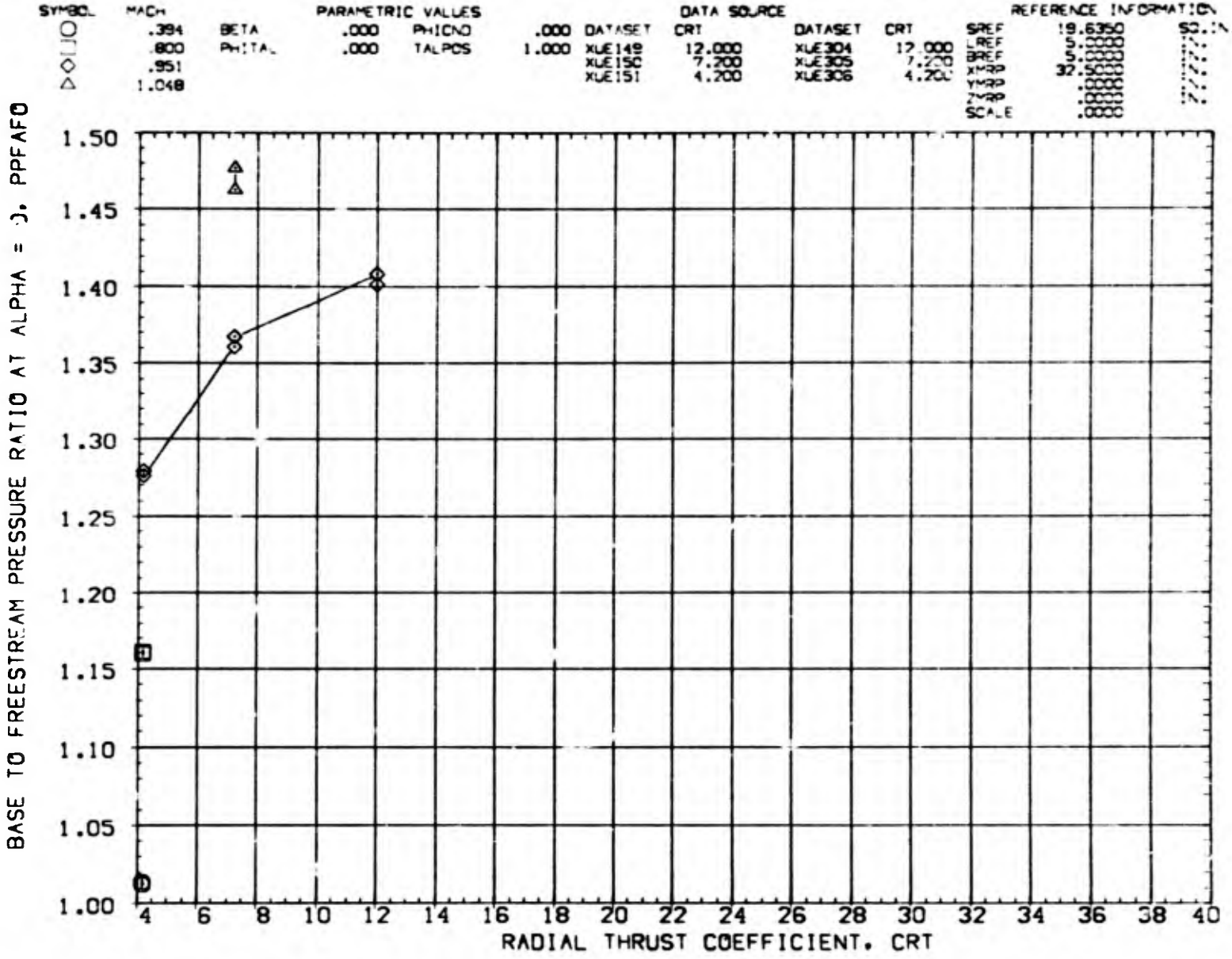
REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



COMPARISON BETWEEN BLUNT AND SHARP LEADING EDGE FIN

(D)MACH = 1.05

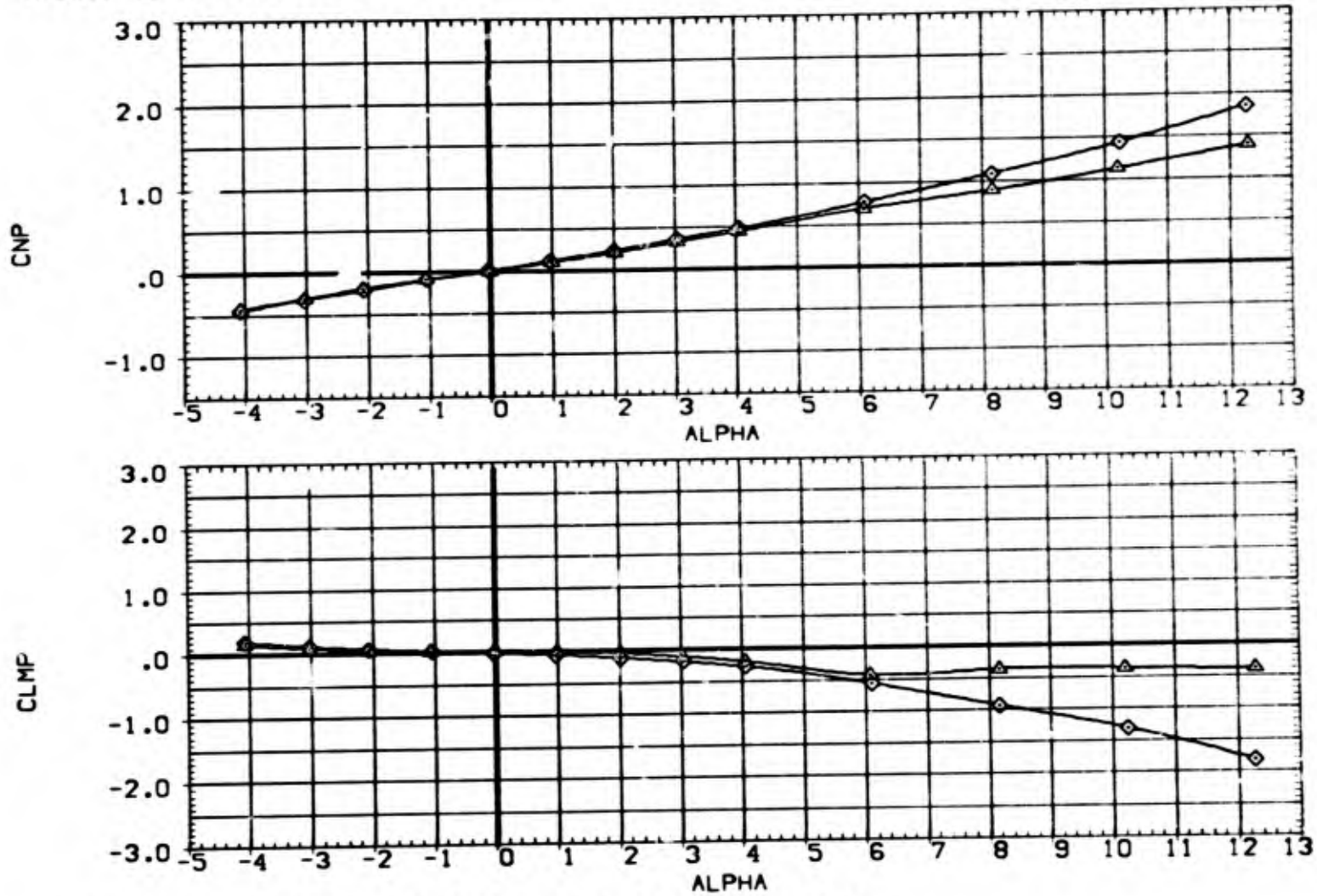
CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)(XUE149)



COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

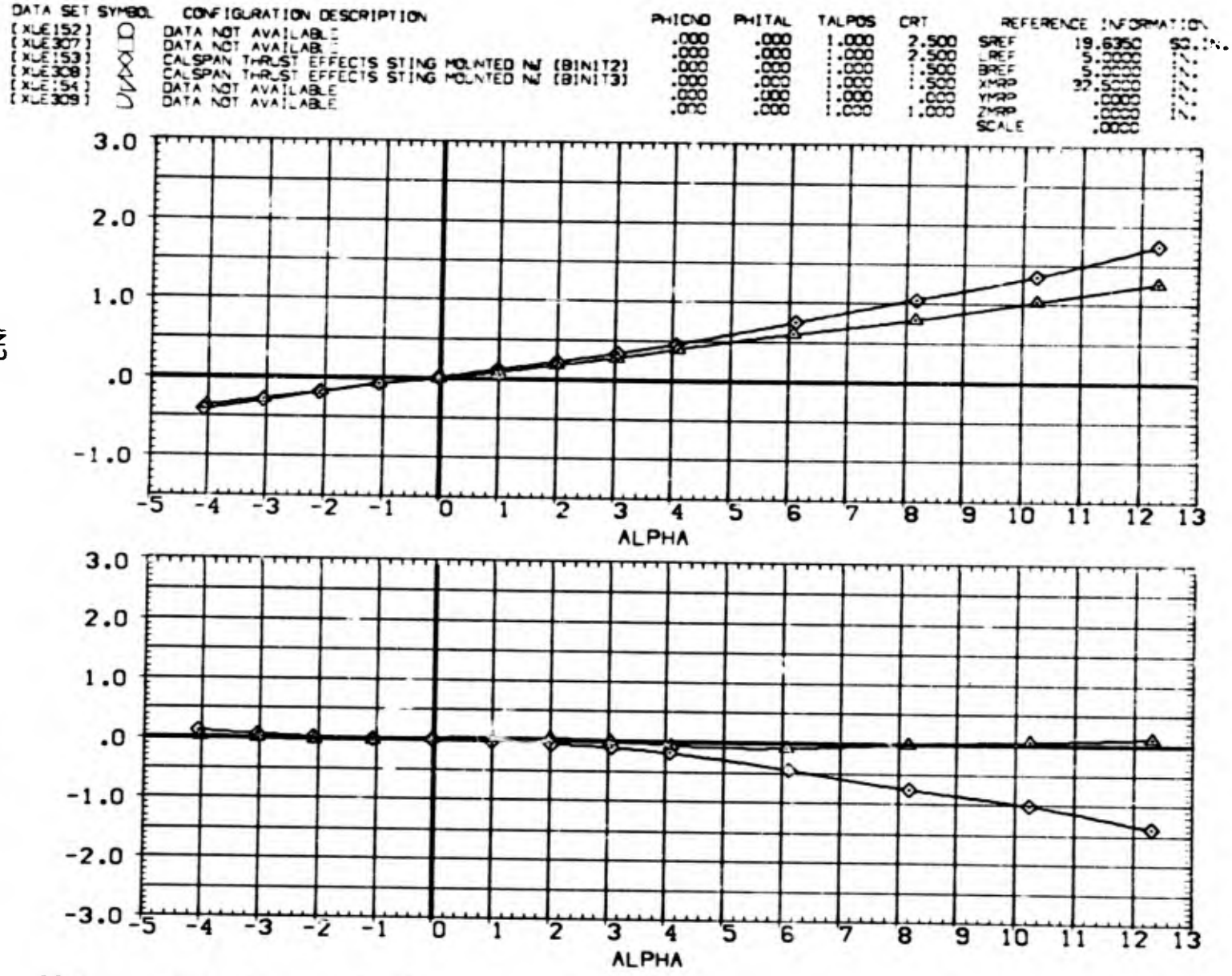
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[XUE152]	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
[XUE307]		DATA NOT AVAILABLE	.000	.000	1.000	2.500
[XUE153]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT2)	.000	.000	1.000	1.500
[XUE308]		CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT3)	.000	.000	1.000	1.500
[XUE154]	△	DATA NOT AVAILABLE	.000	.000	1.000	1.000
[XUE309]		DATA NOT AVAILABLE				

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



COMPARISON BETWEEN BLUNT AND SHARP LEADING EDGE FIN

(A)MAC- = .80



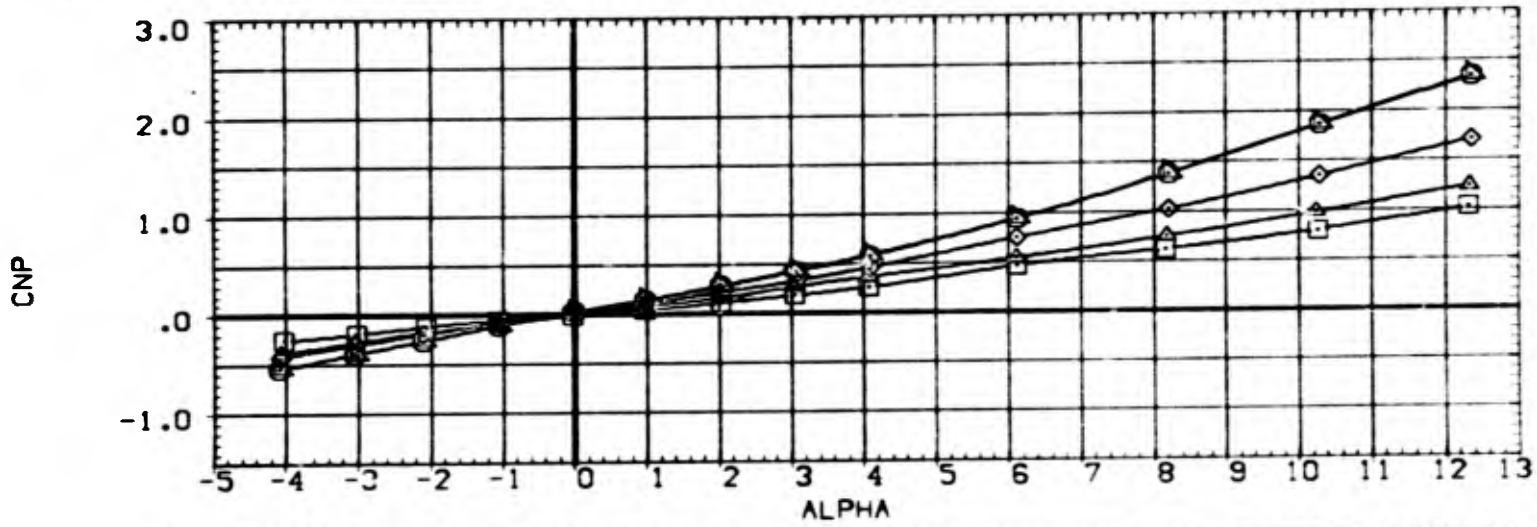
COMPARISON BETWEEN BLUNT AND SHARP LEADING EDGE FIN

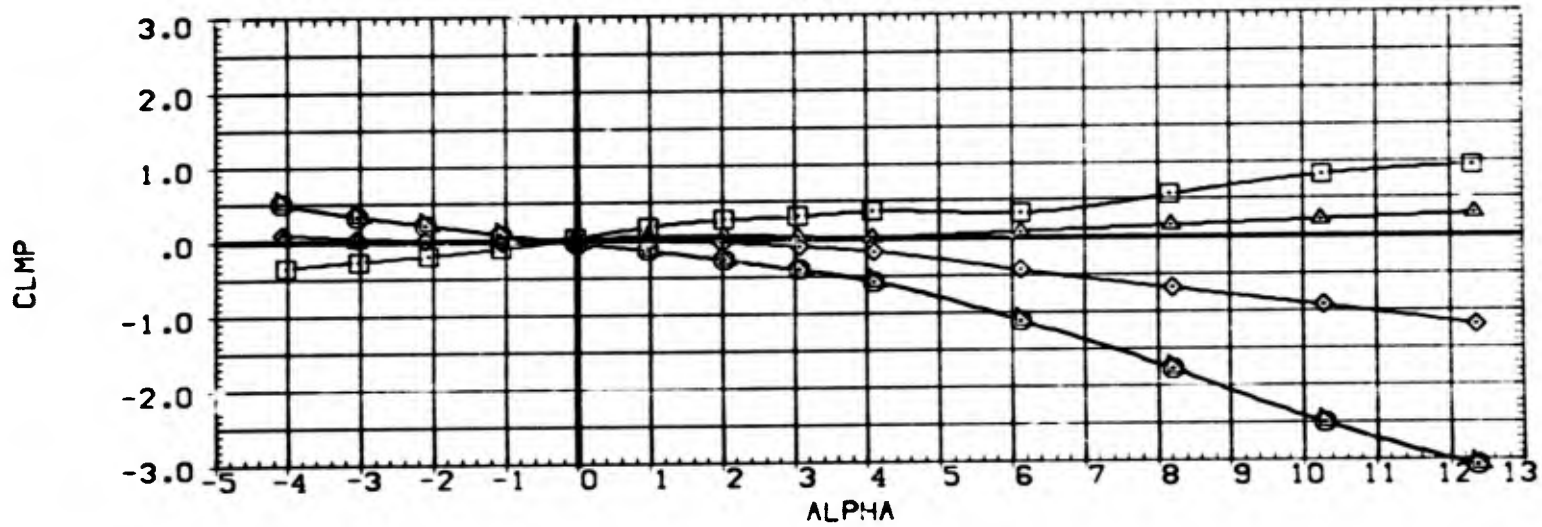
(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(XUE152)		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.000	.000	1.000	2.500
(XUE307)		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT3)	.0000	.0000	1.0000	2.5000
(XUE153)		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.0000	.0000	1.0000	2.5000
(XUE308)		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT3)	.0000	.0000	1.0000	2.5000
(XUE154)		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT2)	.0000	.0000	1.0000	2.5000
(XUE309)		DATA NOT AVAILABLE	.0000	.0000	1.0000	2.5000

REFERENCE INFORMATION

SREF	19.6350
CREF	5.0000
BREF	5.0000
XMOM	32.0000
YMOM	.0000
ZMOM	.0000
SCALE	.0000

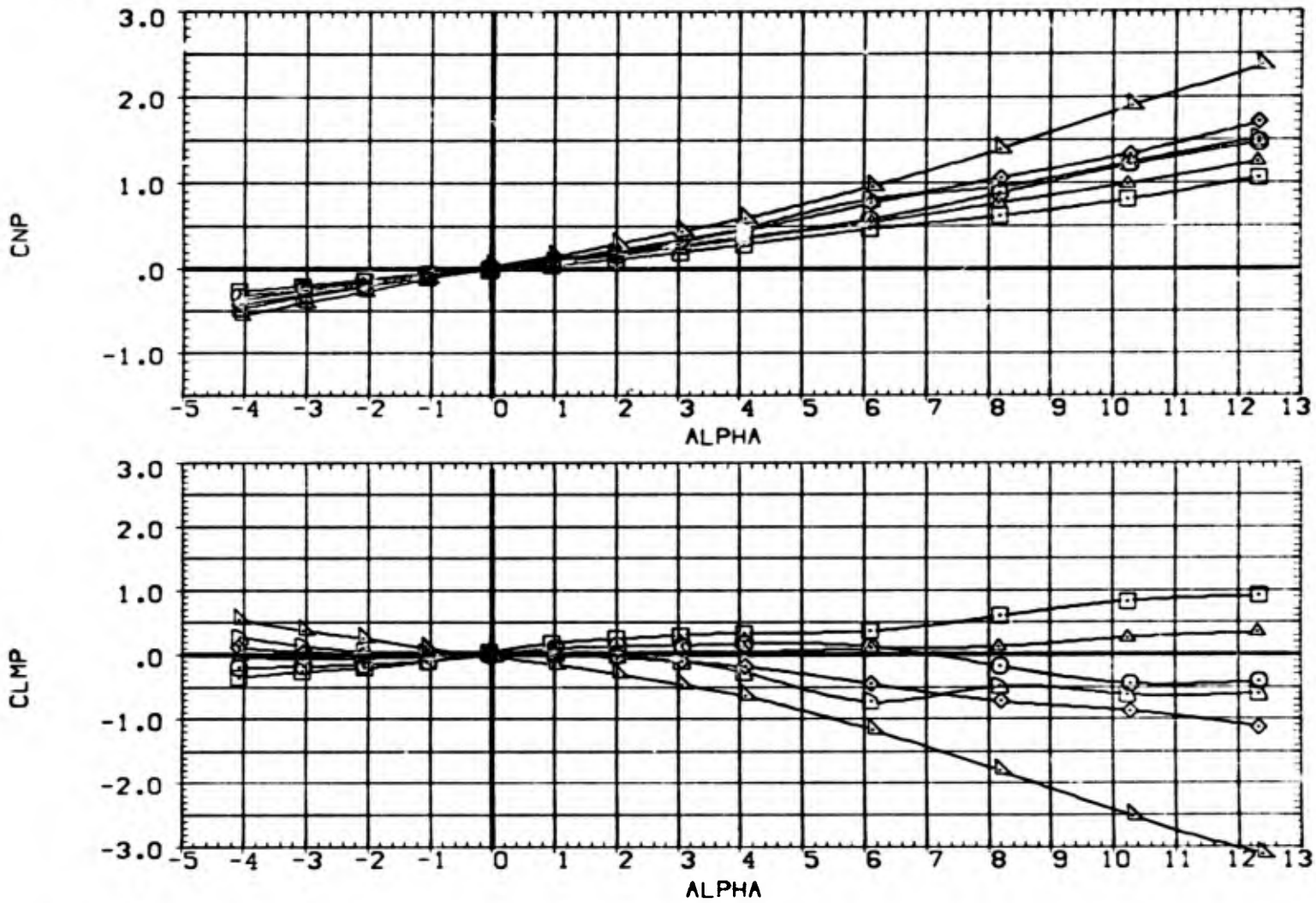




COMPARISON BETWEEN BLUNT AND SHARP LEADING EDGE FIN

(C)MACH = .95

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		PHICNO	PHITAL	TALPOS	CRT	REFERENCE INFORMATION	
(XUE152)		CALSPAN THRUST EFFECTS STING MOUNTED NZ	(BINIT2)	.000	.000	1.000	2.500	SREF	19.6350
(XUE307)		CALSPAN THRUST EFFECTS STING MOUNTED NZ	(BINIT3)	.000	.000	1.000	2.500	LREF	5.0000
(XUE153)		CALSPAN THRUST EFFECTS STING MOUNTED NZ	(BINIT2)	.000	.000	1.000	1.500	BREF	5.0000
(XUE308)		CALSPAN THRUST EFFECTS STING MOUNTED NZ	(BINIT3)	.000	.000	1.000	1.500	XMRP	32.5000
(XUE154)		CALSPAN THRUST EFFECTS STING MOUNTED NZ	(BINIT2)	.000	.000	1.000	1.000	YMRP	.0000
(XUE309)		CALSPAN THRUST EFFECTS STING MOUNTED NZ	(BINIT3)	.000	.000	1.000	1.000	ZMRP	.0000
								SCALE	.0000

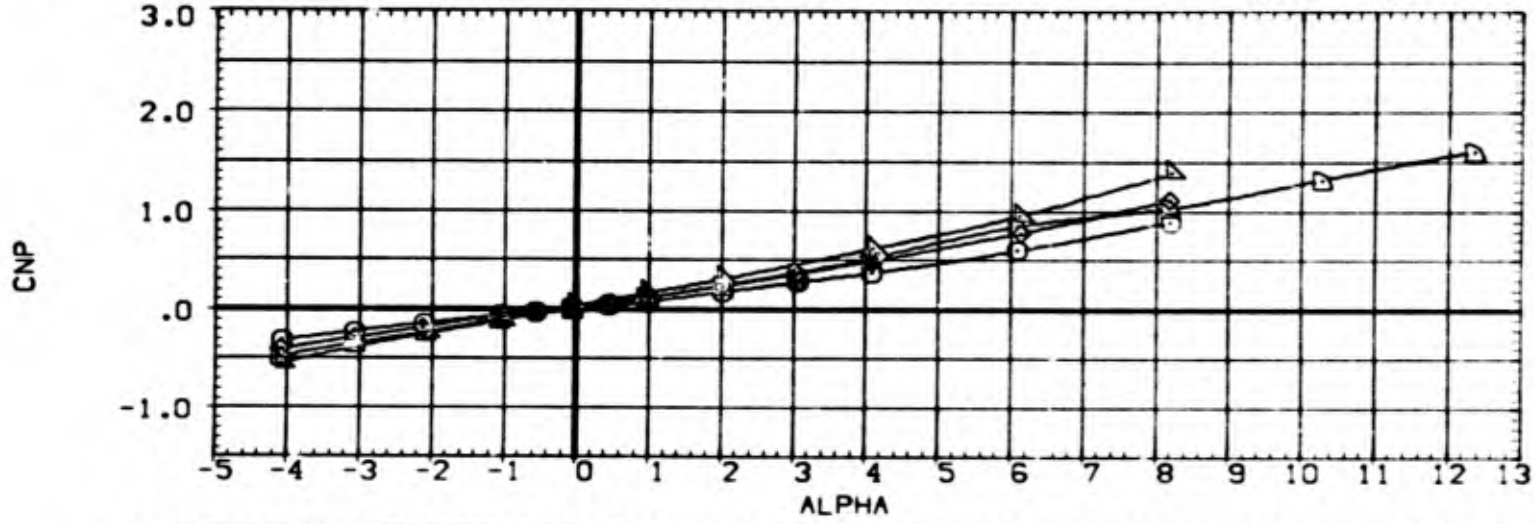


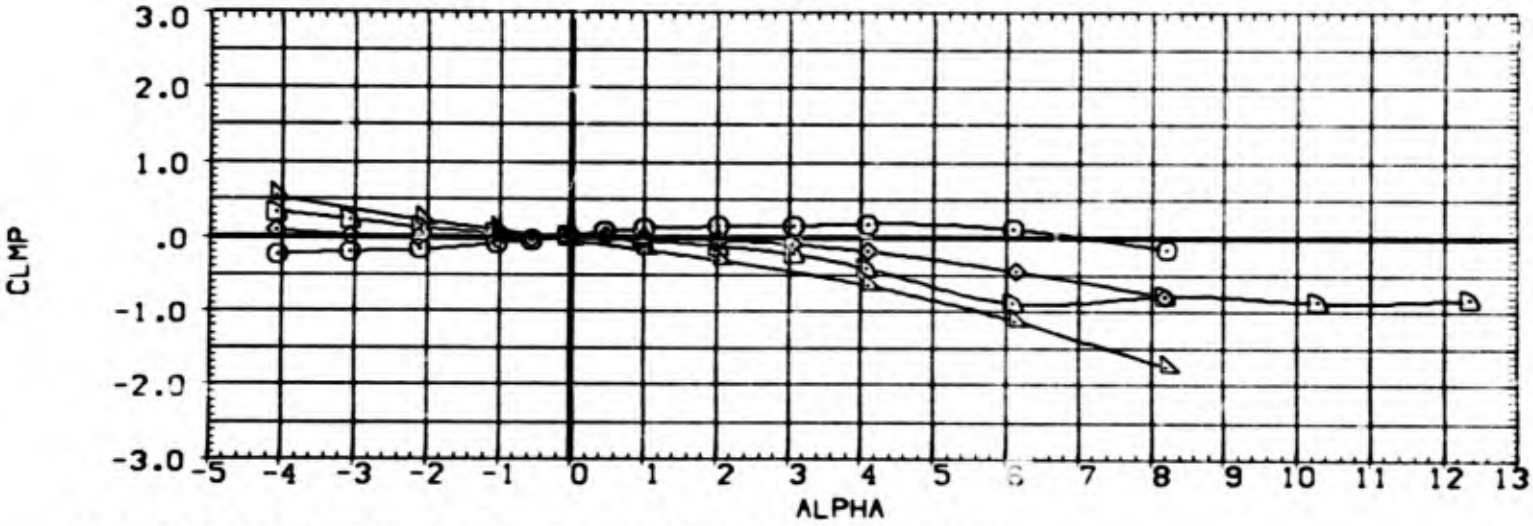
COMPARISON BETWEEN BLUNT AND SHARP LEADING EDGE FIN

(D)MAC- = .97

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(XJE152)	□	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT2)	.000	.000	1.000	2.500
(XJE307)	◇	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(XJE153)	⋈	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT2)	.000	.000	1.000	1.500
(XJE308)	△	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(XJE154)	◁	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT2)	.000	.000	1.000	.000
(XJE309)	▷	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT3)	.000	.000	1.000	1.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

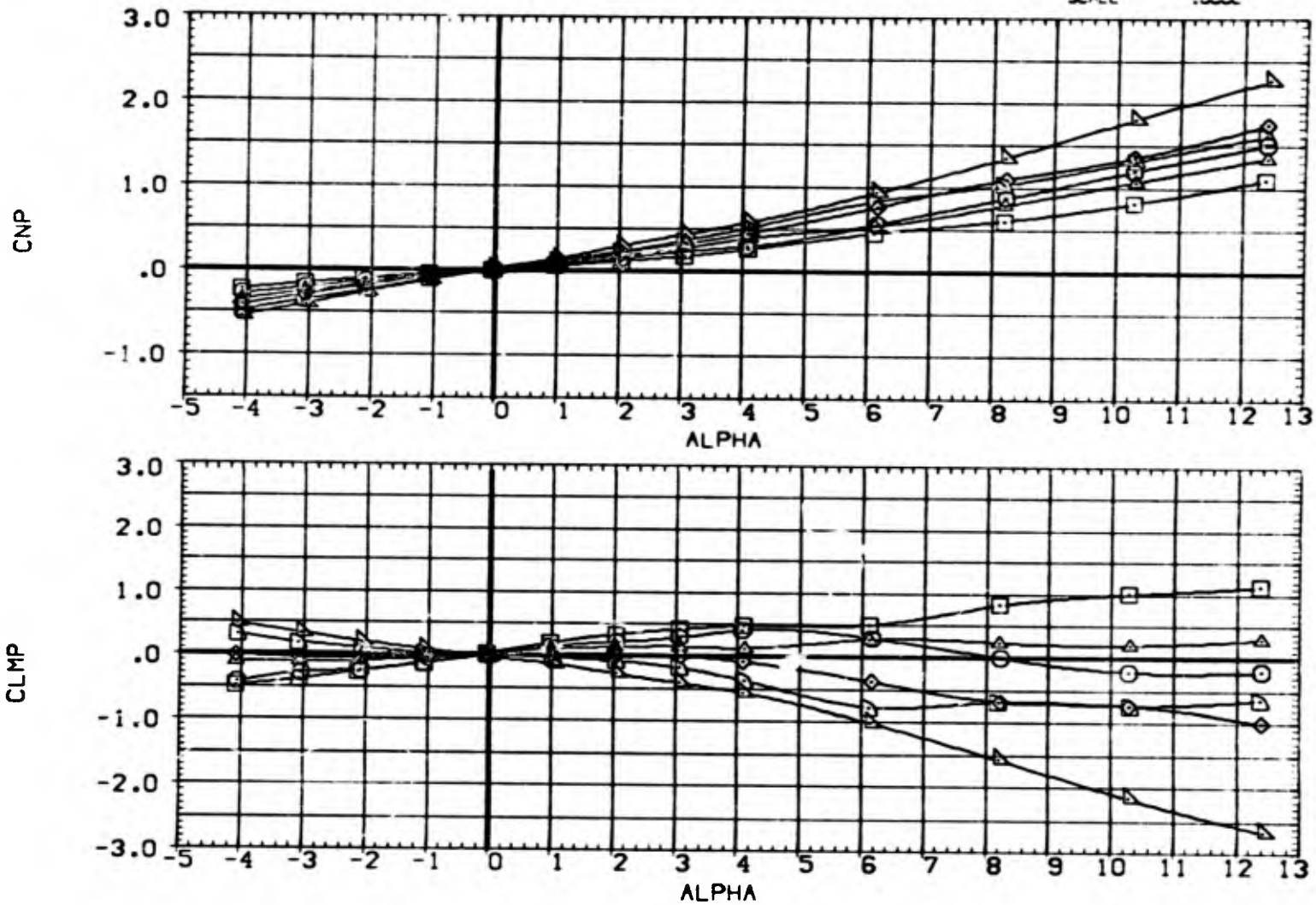




COMPARISON BETWEEN BLUNT AND SHARP LEADING EDGE FIN

(E)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT	REFERENCE INFORMATION		
[XC152]	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT2]	.000	.000	1.000	2.500	SREF	19.6350	SQ.IN.
[XC307]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT3]	.000	.000	1.000	2.500	LREF	5.0000	IN.
[XC153]	△	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT2]	.000	.000	1.000	1.500	BREF	5.0000	IN.
[XC308]	▽	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT3]	.000	.000	1.000	1.500	XMRP	32.5000	IN.
[XC154]	○	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT2]	.000	.000	1.000	1.000	YMRP	.0000	IN.
[XC309]	⊡	CALSPAN THRUST EFFECTS STING MOUNTED NZ [BINIT3]	.000	.000	1.000	1.000	ZMRP	.0000	IN.
							SCALE	.0000	



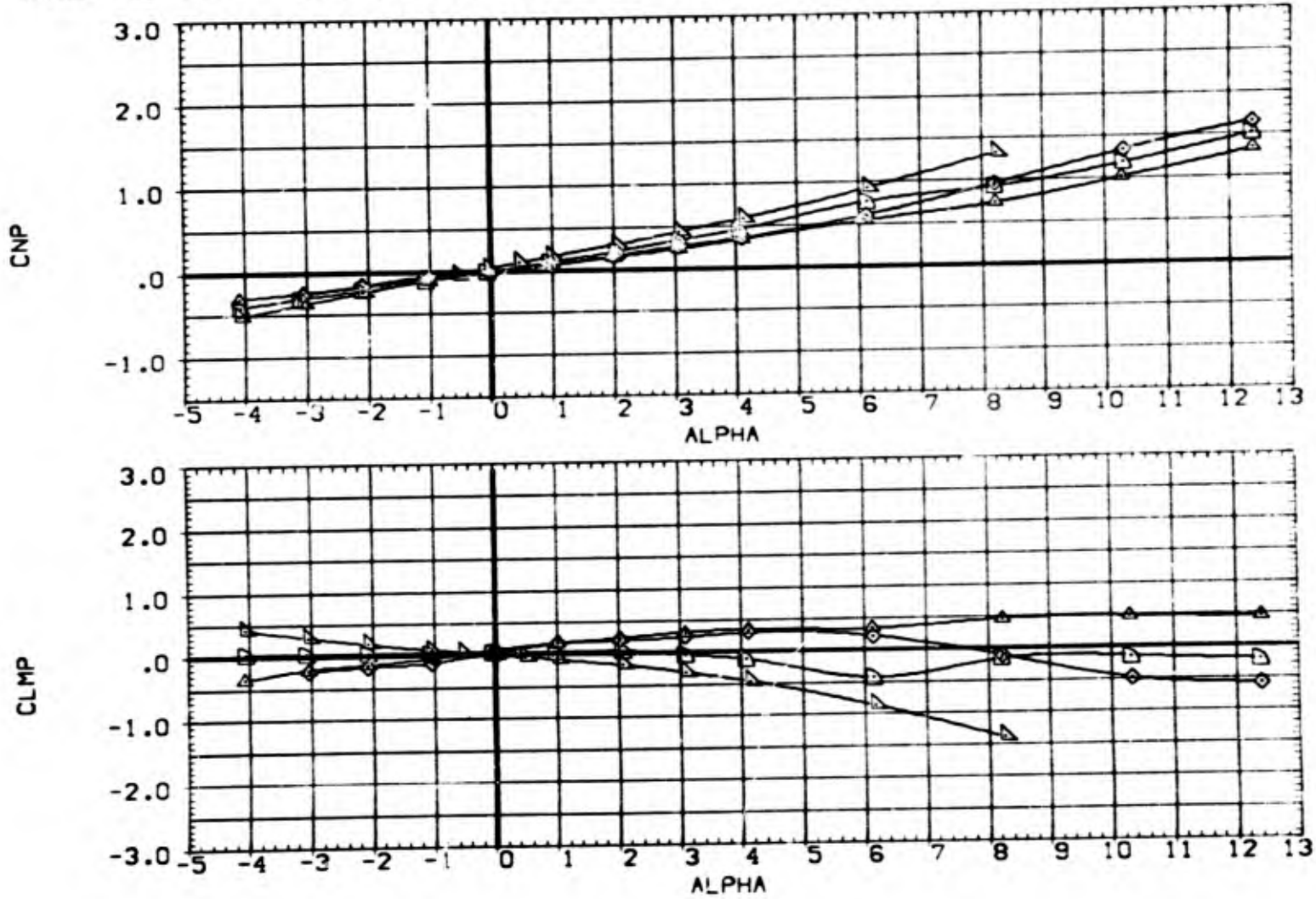
COMPARISON BETWEEN BLUNT AND SHARP LEADING EDGE FIN

(F)MAC- = 1.05

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(XJE152)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(XJE307)	◇	DATA NOT AVAILABLE	.0000	.0000	1.0000	2.5000
(XJE153)	△	CALSPAN THRUST EFFECTS STING MOUNTED NLE (BINIT2)	.0000	.0000	1.0000	1.5000
(XJE308)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NLE (BINIT3)	.0000	.0000	1.0000	1.5000
(XJE154)	⊲	CALSPAN THRUST EFFECTS STING MOUNTED NLE (BINIT2)	.0000	.0000	1.0000	1.0000
(XJE309)	⊳	CALSPAN THRUST EFFECTS STING MOUNTED NLE (BINIT3)	.0000	.0000	1.0000	1.0000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

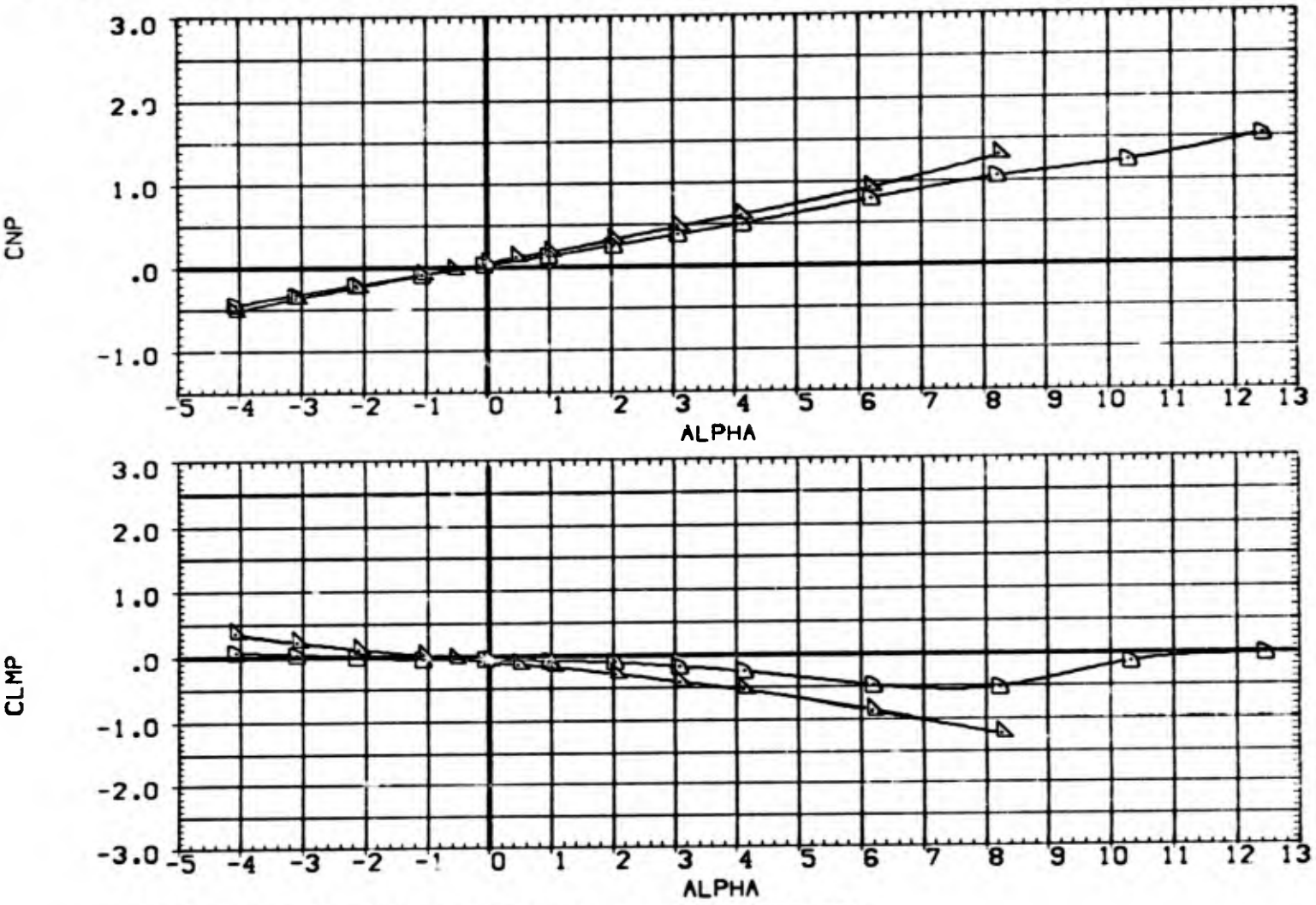


COMPARISON BETWEEN BLUNT AND SHARP LEADING EDGE FIN

(G)MAC- = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(XUE152)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(XUE307)	◇	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(XUE153)	⊠	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(XUE308)	⊞	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(XUE154)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)	.000	.000	1.000	1.000
(XUE309)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT3)	.000	.000	1.000	1.000

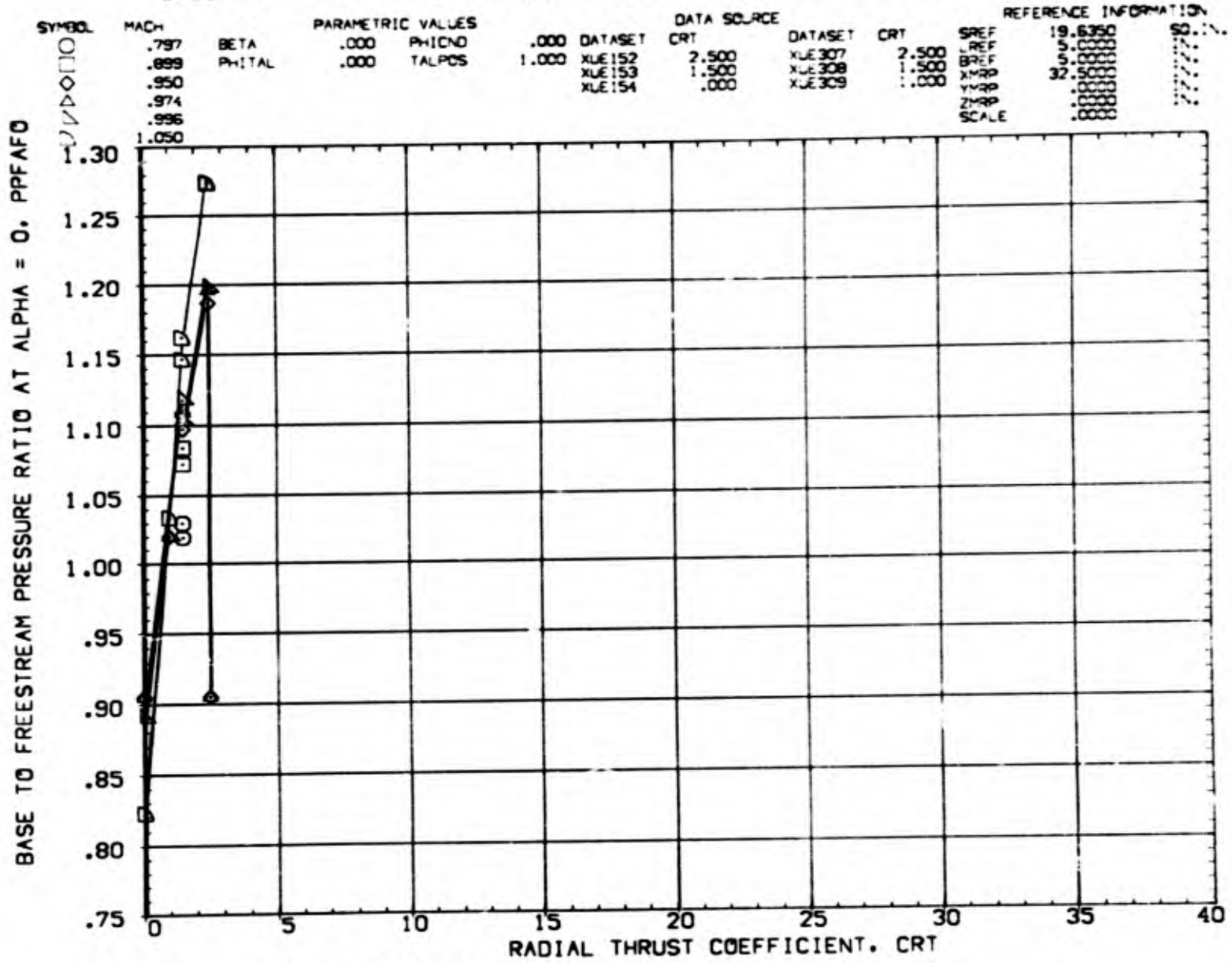
REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



COMPARISON BETWEEN BLUNT AND SHARP LEADING EDGE FIN

(H)MAC = 1.25

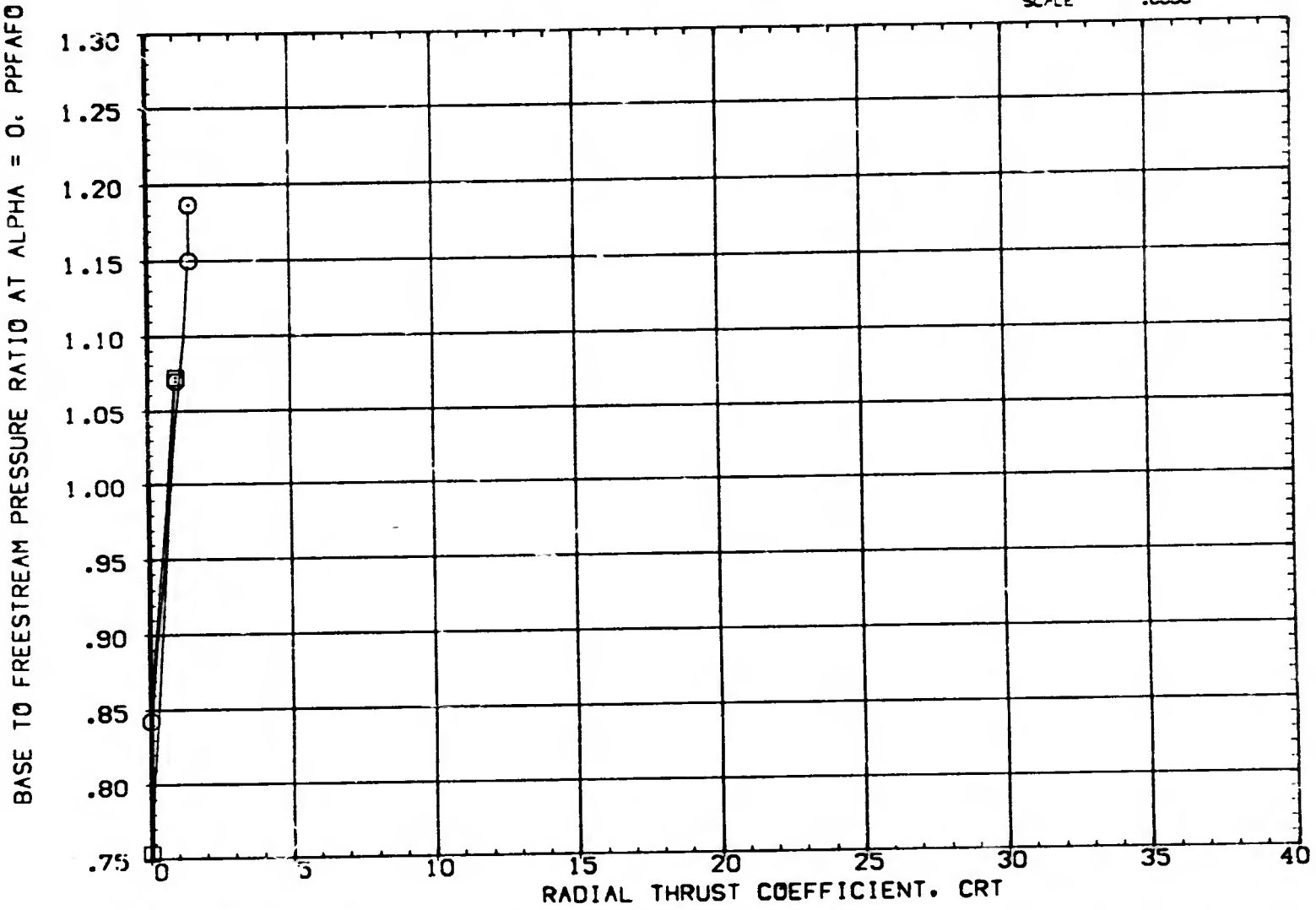
CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT2)(XJE152)



COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

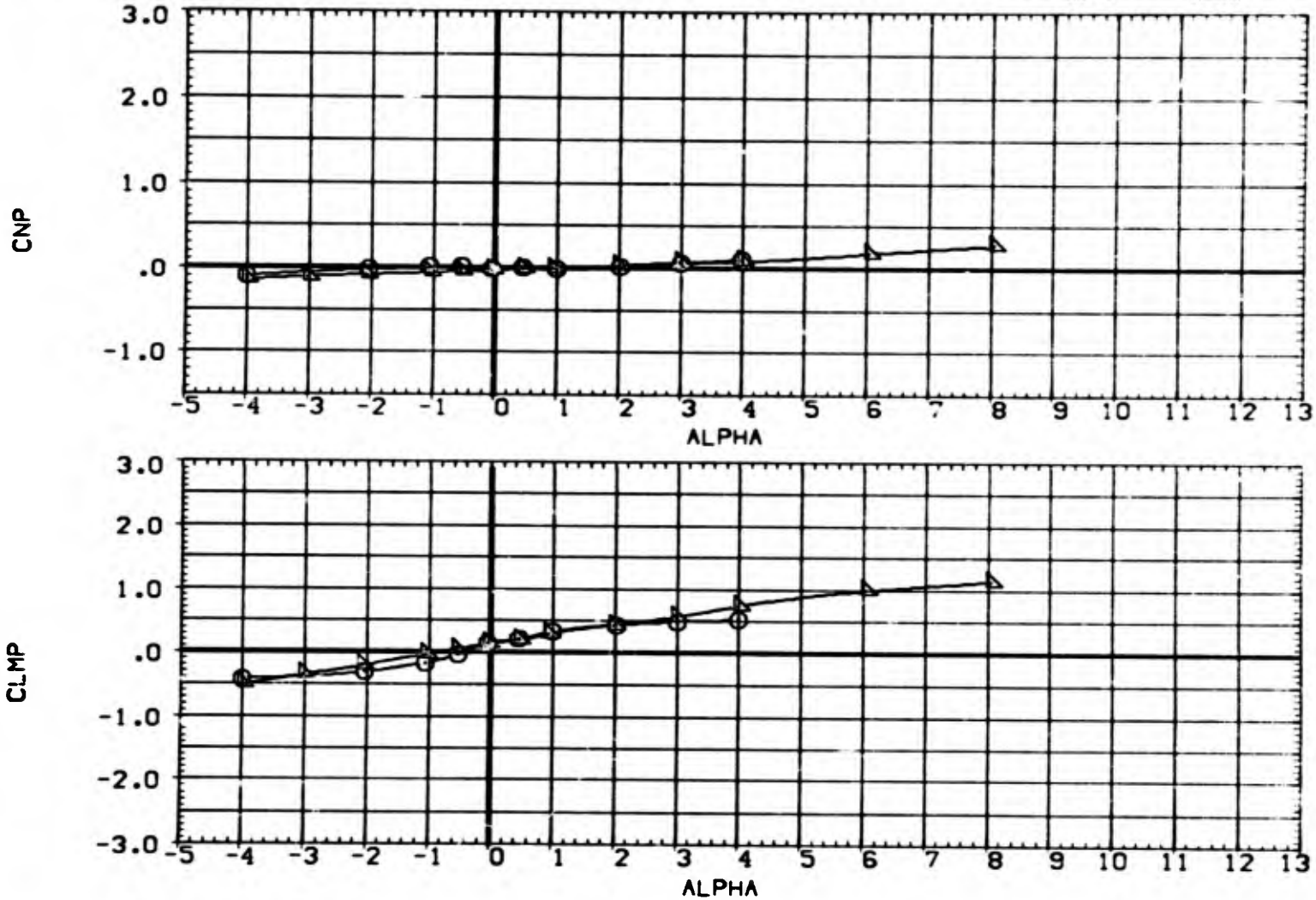
CALSPAN THRUST EFFECTS STING MOUNTED NJ (B1N1T2)(XUE152)

SYMBOL	MACH		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION	
○	1.098	BETA	.000	PHICND	.000	DATASET	CRT	DATASET	CRT	SREF	19.6350
□	1.250	PHITAL	.000	TALPOS	1.000	XUE152	2.500	XUE307	2.500	LREF	5.0000
						XUE153	1.500	XUE308	1.500	BREF	5.0000
						XUE154	.000	XUE309	1.000	XMRP	32.5000
										YMRP	.0000
										ZMRP	.0000
										SCALE	.0000



COMPARISON OF PLUME EFFECTS AT VARIOUS ROLL ANGLES

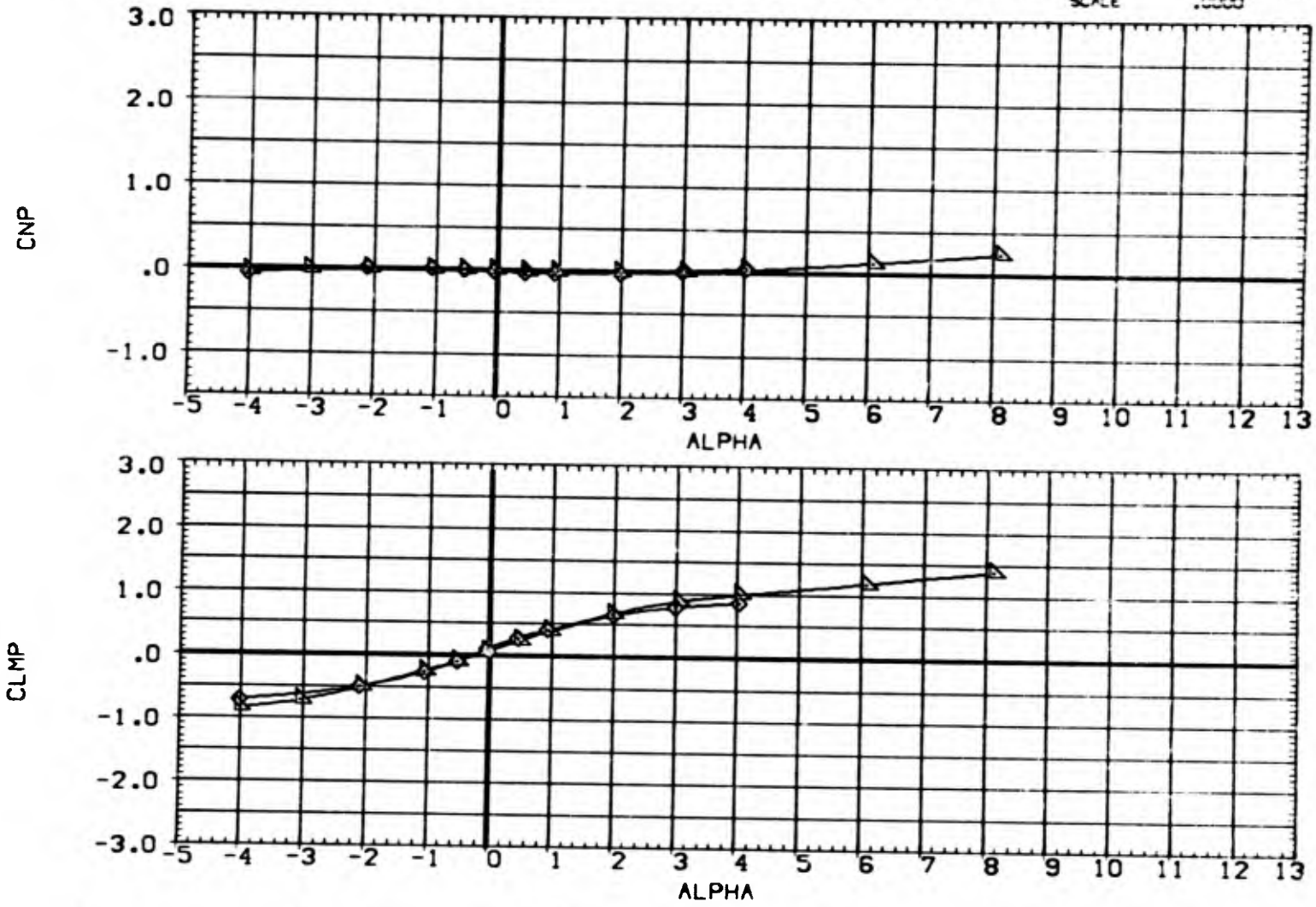
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT	REFERENCE INFORMATION		
[RUN 136]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW [BIN1]	.000	.000	.000	37.500	SREF	19.6350	SQ.IN.
[RUN 137]		DATA NOT AVAILABLE	.000	.000	.000	12.000	LREF	5.0000	
[RUN 138]		DATA NOT AVAILABLE	.000	.000	.000	10.300	BREF	5.0000	
[RUN 139]		DATA NOT AVAILABLE	.000	.000	.000	8.500	XMRP	26.5000	
[RUN 140]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW [BIN1]	.000	.000	.000	7.200	YMRP	.0000	
[RUN 141]		DATA NOT AVAILABLE	.000	.000	.000	6.000	ZMRP	.0000	
							SCALE	.0000	



PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT	REFERENCE INFORMATION		
[illegible]		DATA NOT AVAILABLE	.000	.000	.000	37.500	SREF	19.6350	SQ. IN.
[illegible]		DATA NOT AVAILABLE	.000	.000	.000	12.000	LREF	5.0000	
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	10.300	BREF	5.0000	
[illegible]		DATA NOT AVAILABLE	.000	.000	.000	8.500	XMRP	26.5000	
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	7.200	YMRP	.0000	
[illegible]		DATA NOT AVAILABLE	.000	.000	.000	6.000	ZMRP	.0000	
							SCALE	.0000	

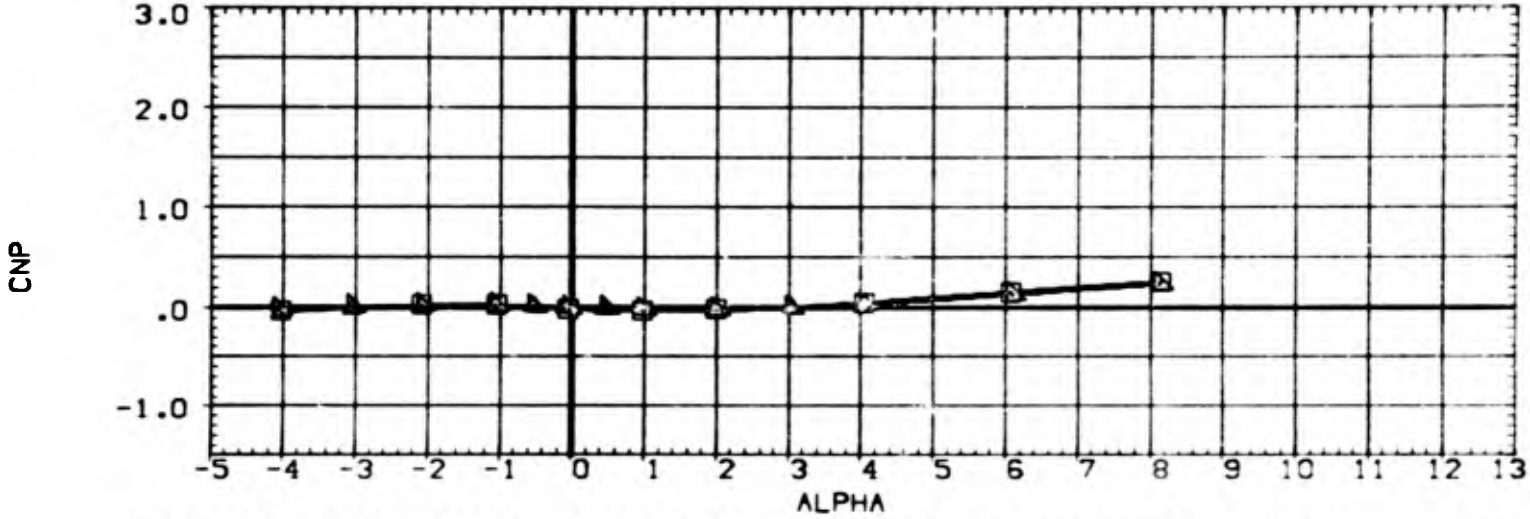


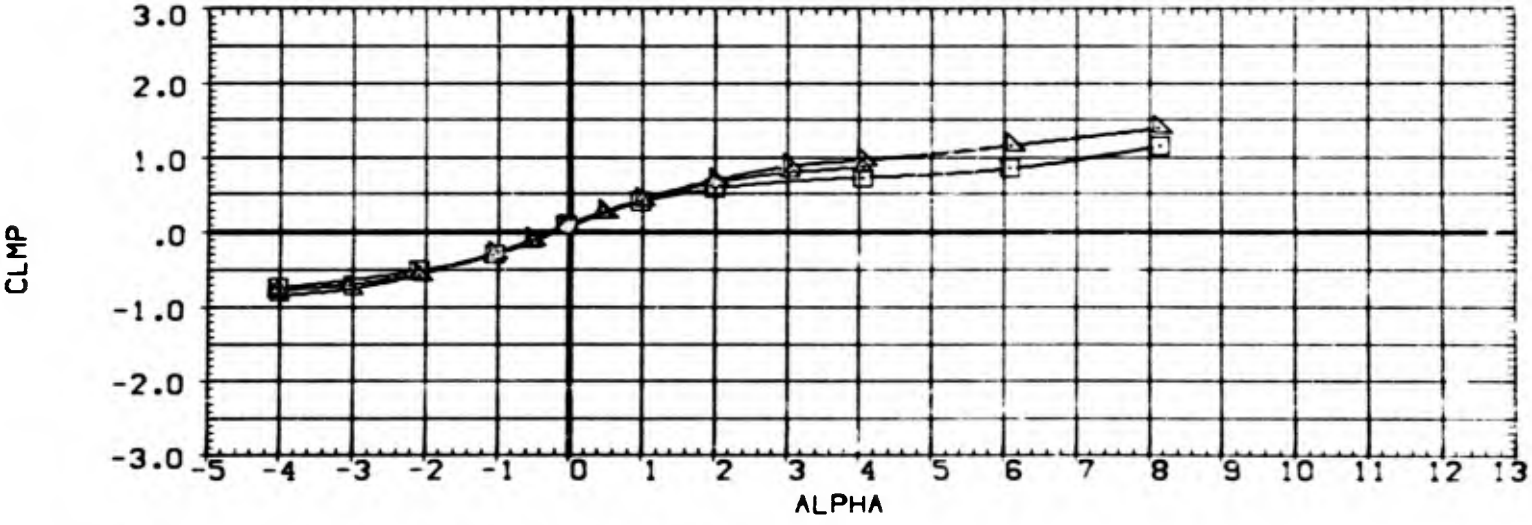
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(QUE136)		DATA NOT AVAILABLE	.000	.000	.000	37.500
(QUE137)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	12.000
(QUE138)		DATA NOT AVAILABLE	.000	.000	.000	10.300
(QUE139)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	8.500
(QUE140)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	7.200
(QUE141)		DATA NOT AVAILABLE	.000	.000	.000	6.000

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



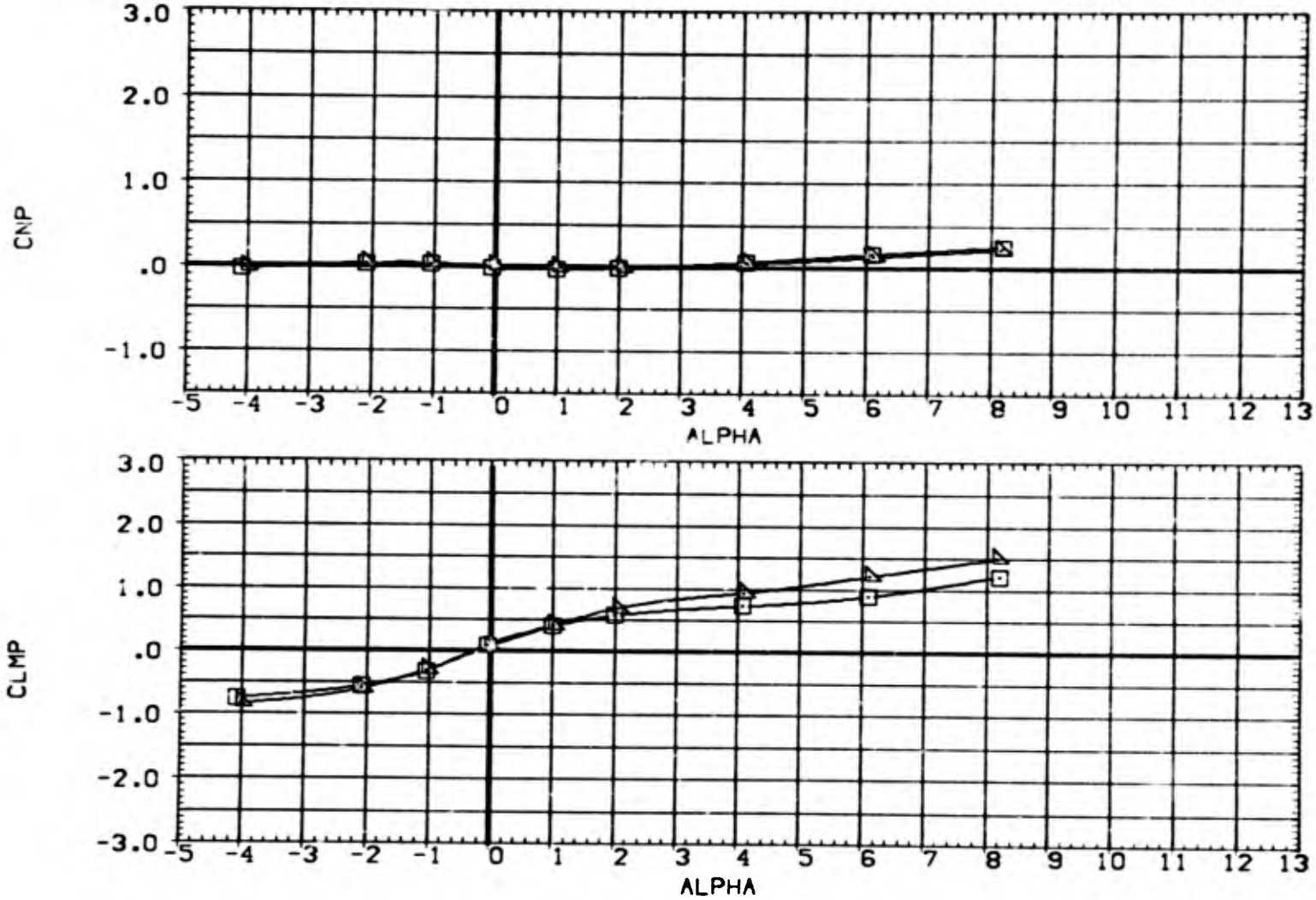


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(QE136)		DATA NOT AVAILABLE	.000	.000	.000	37.500
(QE137)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	12.000
(QE138)		DATA NOT AVAILABLE	.000	.000	.000	10.300
(QE139)		DATA NOT AVAILABLE	.000	.000	.000	8.500
(QE140)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	7.200
(QE141)		DATA NOT AVAILABLE	.000	.000	.000	6.000

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

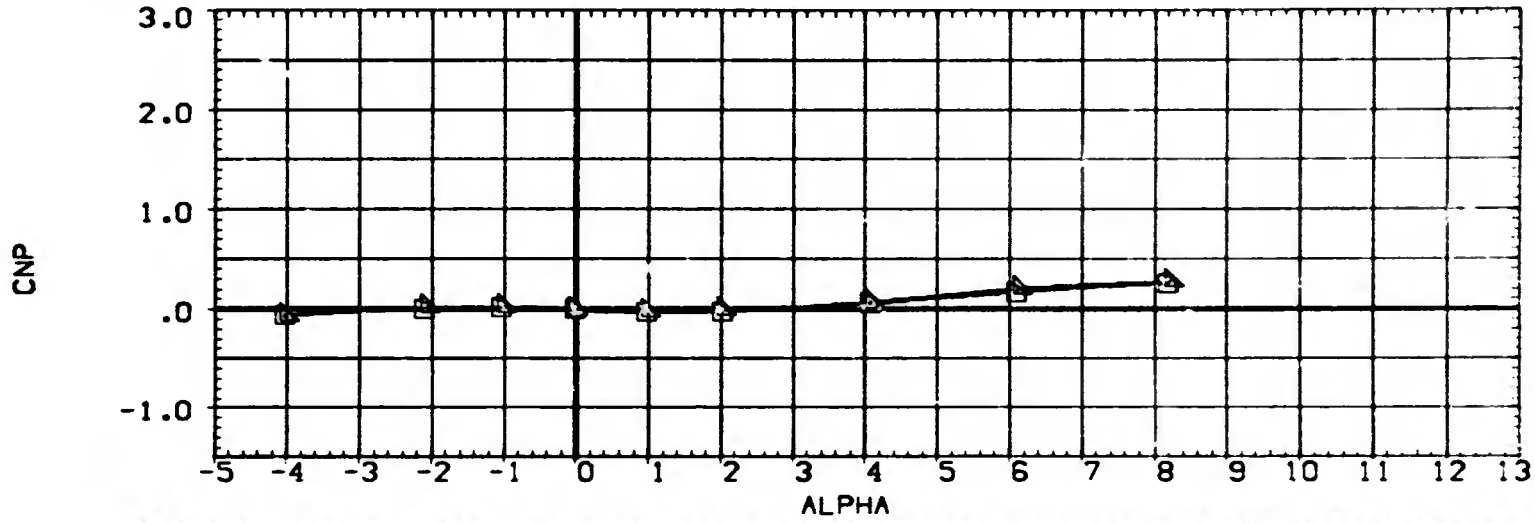


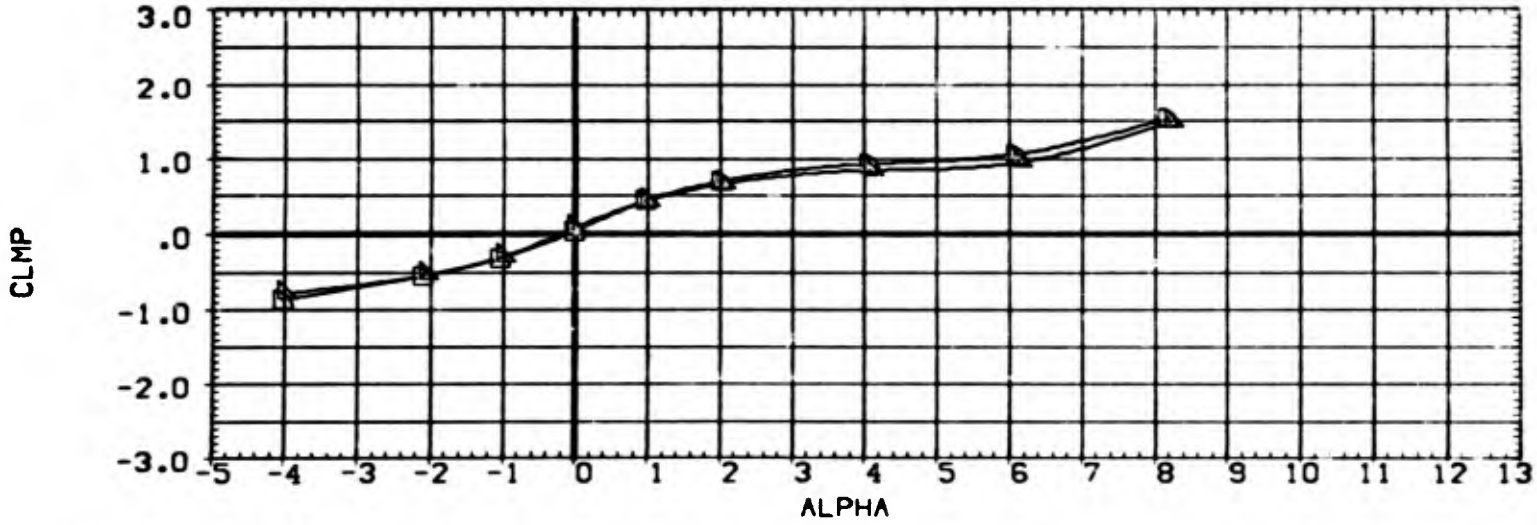
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(QUE136)	□	DATA NOT AVAILABLE	.000	.000	.000	37.500
(QUE137)	◇	DATA NOT AVAILABLE	.000	.000	.000	12.000
(QUE138)	△	DATA NOT AVAILABLE	.000	.000	.000	10.300
(QUE139)	▽	DATA NOT AVAILABLE	.000	.000	.000	8.500
(QUE140)	▷	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	7.200
(QUE141)	◁	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	6.000

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



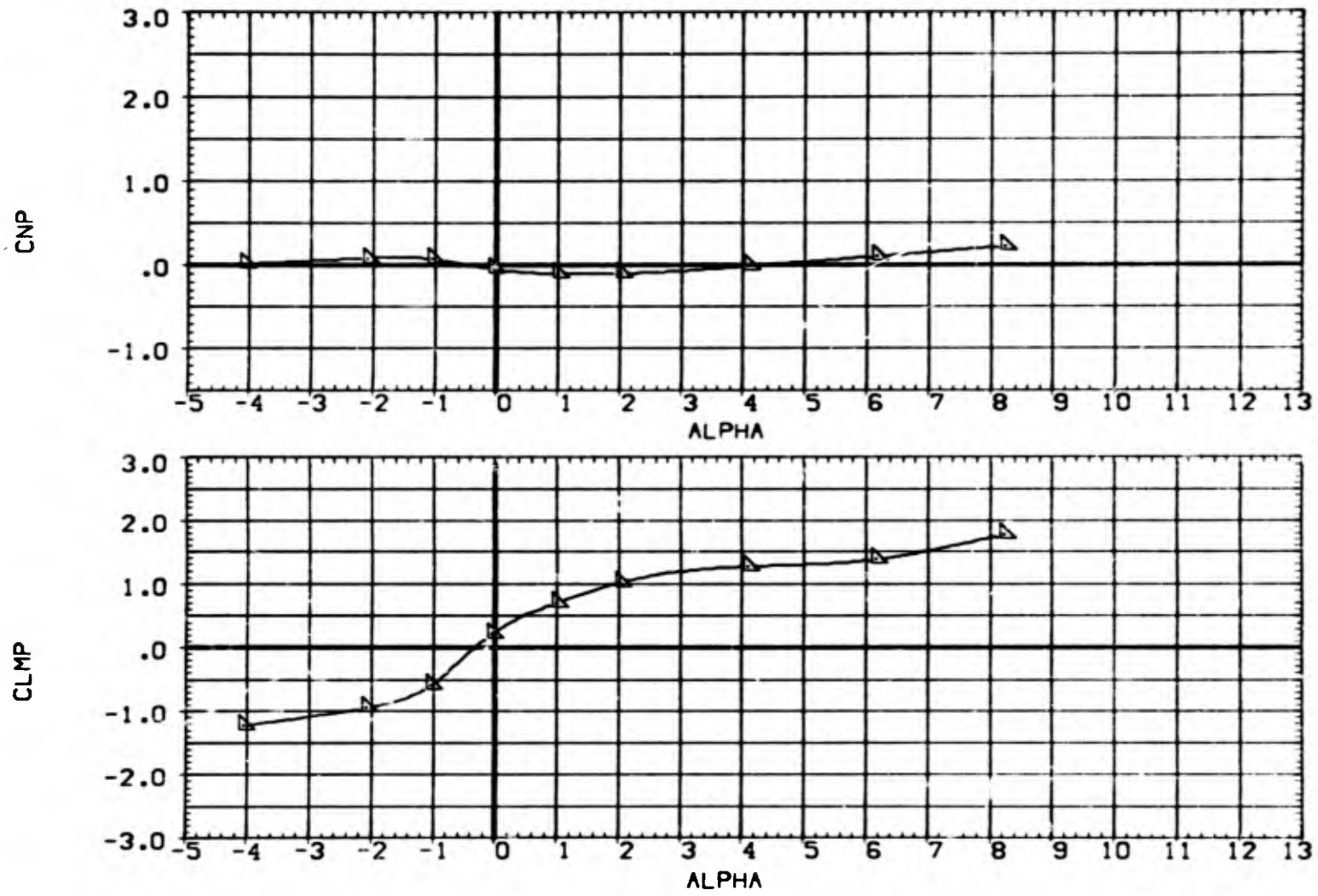


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(RE136)		DATA NOT AVAILABLE	.000	.000	.000	37.500
(RE137)		DATA NOT AVAILABLE	.000	.000	.000	12.000
(RE138)		DATA NOT AVAILABLE	.000	.000	.000	10.300
(RE139)		DATA NOT AVAILABLE	.000	.000	.000	8.500
(RE140)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	7.200
(RE141)		DATA NOT AVAILABLE	.000	.000	.000	6.000

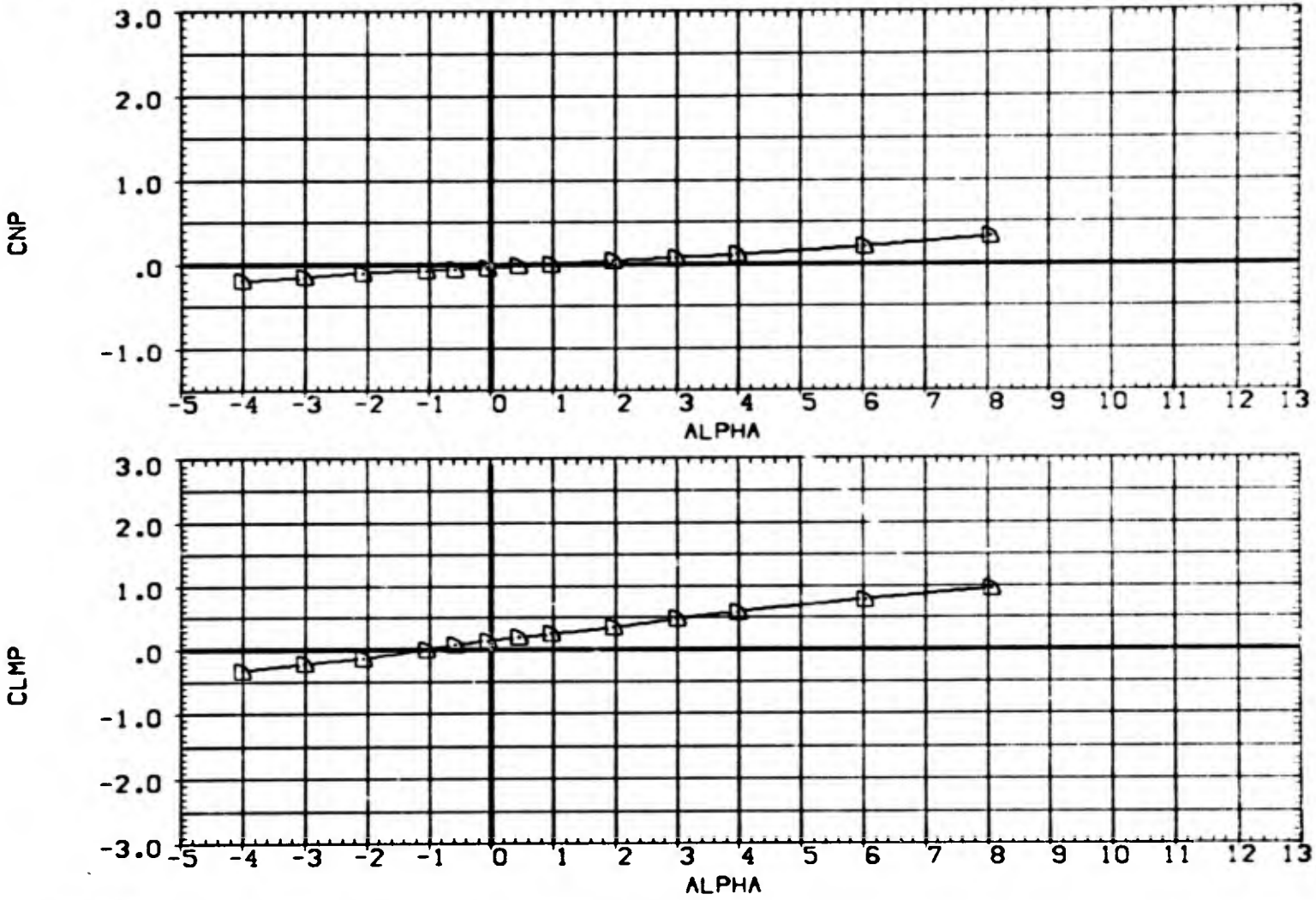
REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



PLUME EFFECTS ON STABILITY CHARACTERISTICS

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CR	REFERENCE INFORMATION
(RUN 42)		DATA NOT AVAILABLE	.000	.000	.000	5.000	SREF 19.6350
(RUN 43)		DATA NOT AVAILABLE	.000	.000	.000	4.000	LREF 5.0000
(RUN 44)		DATA NOT AVAILABLE	.000	.000	.000	3.000	BREF 5.0000
(RUN 46)		DATA NOT AVAILABLE	.000	.000	.000	2.000	XMRP 26.5000
(RUN 47)		DATA NOT AVAILABLE	.000	.000	.000	1.000	YMRP .0000
(RUN 48)		CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINI)	.000	.000	.000	.000	ZMRP .0000
							SCALE .0000



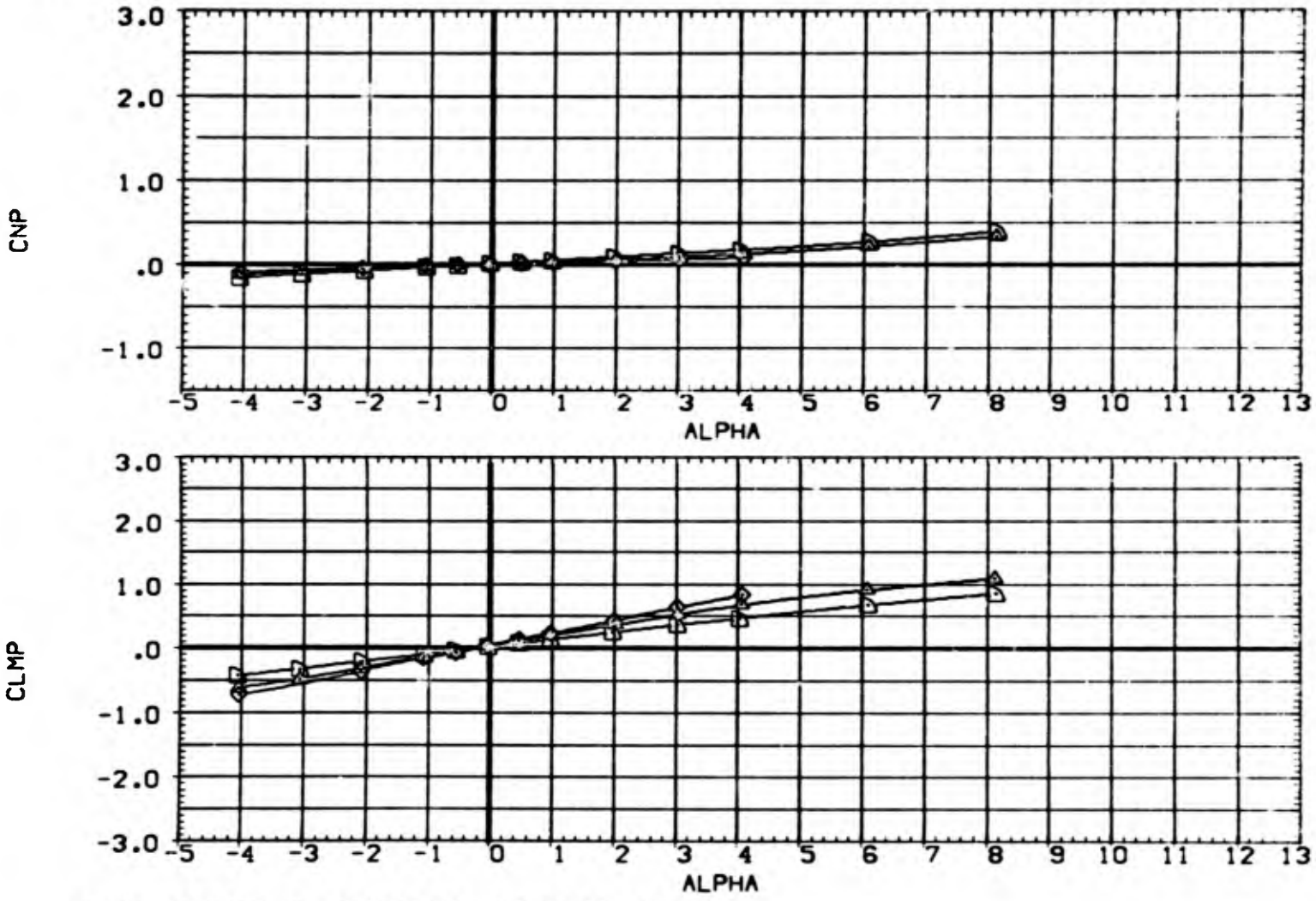
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(A)MAC- = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(QE142)	□	DATA NOT AVAILABLE	.000	.000	.000	5.000
(QE143)	△	DATA NOT AVAILABLE	.000	.000	.000	4.200
(QE144)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BIN1)	.000	.000	.000	3.600
(QE146)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NW (BIN1)	.000	.000	.000	2.500
(QE147)	⊞	DATA NOT AVAILABLE	.000	.000	.000	1.500
(QE148)	⊡	CALSPAN THRUST EFFECTS STING MOUNTED NW (BIN1)	.000	.000	.000	.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

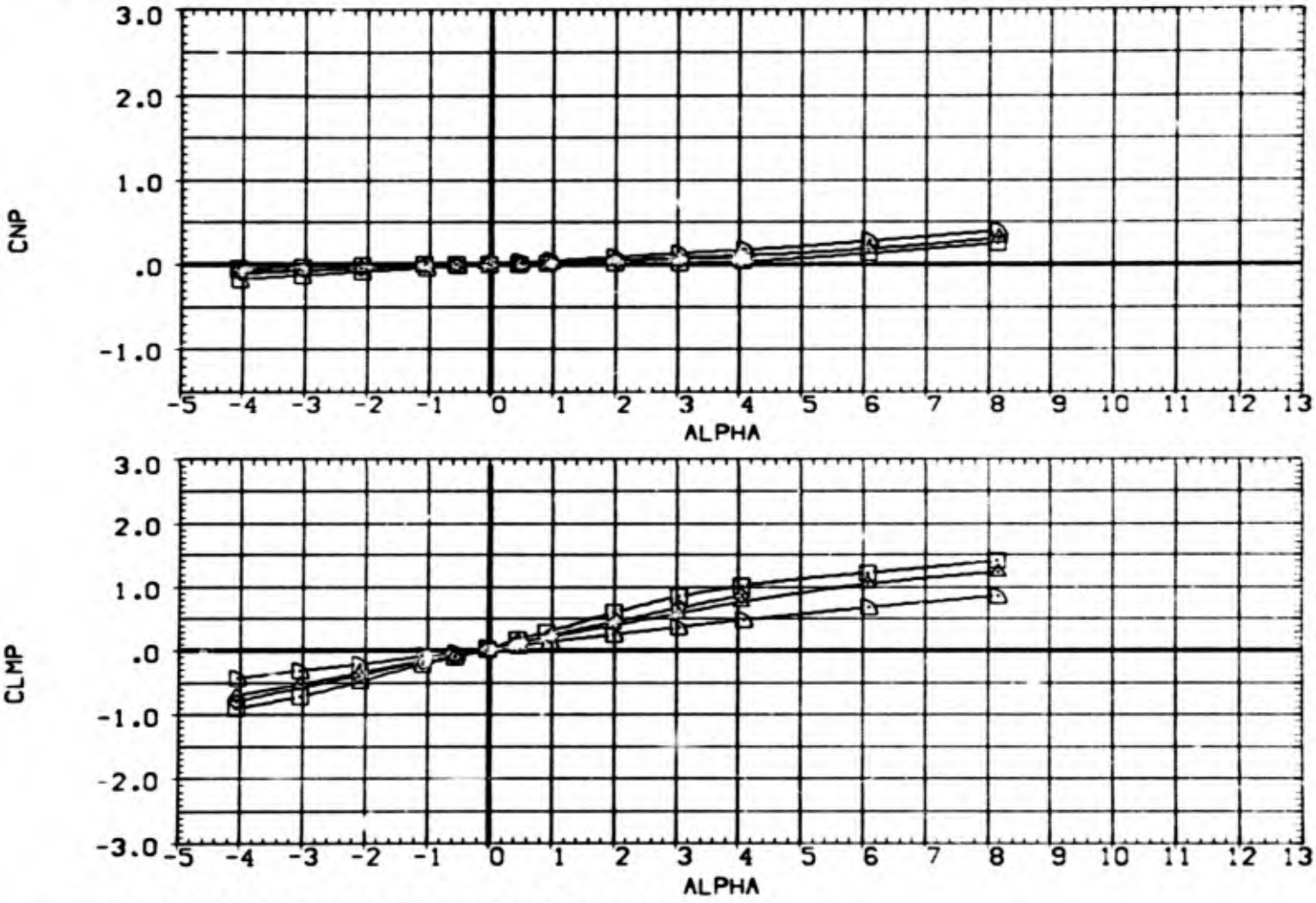


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(OJE142)		DATA NOT AVAILABLE	.000	.000	.000	5.000
(OJE143)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	4.200
(OJE144)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	3.600
(OJE146)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	4.500
(OJE147)		DATA NOT AVAILABLE	.000	.000	.000	5.000
(OJE148)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

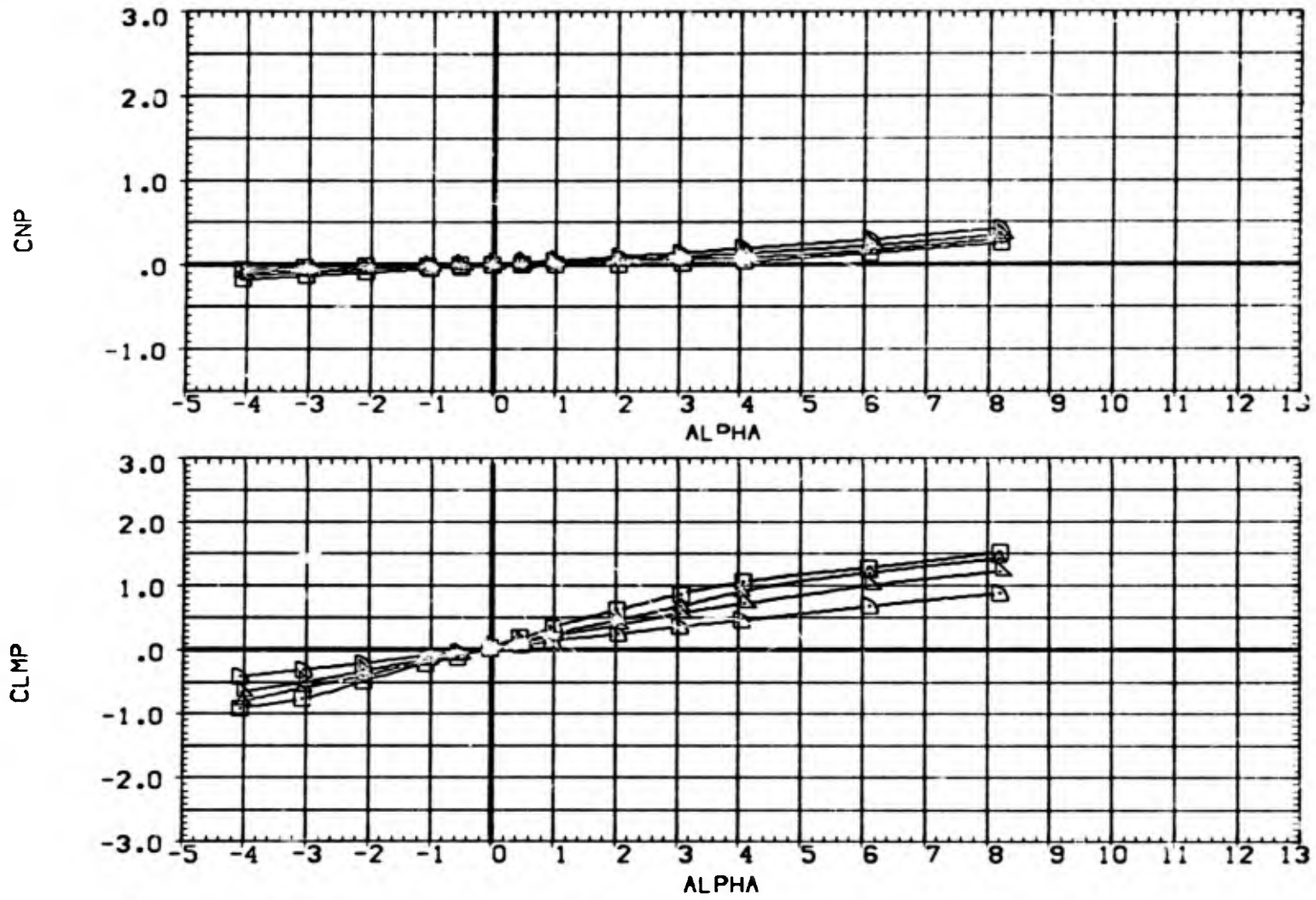


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[redacted]		DATA NOT AVAILABLE	.000	.000	.000	5.000
[redacted]		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	4.200
[redacted]		DATA NOT AVAILABLE	.000	.000	.000	3.600
[redacted]		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	2.500
[redacted]		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	.500
[redacted]		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



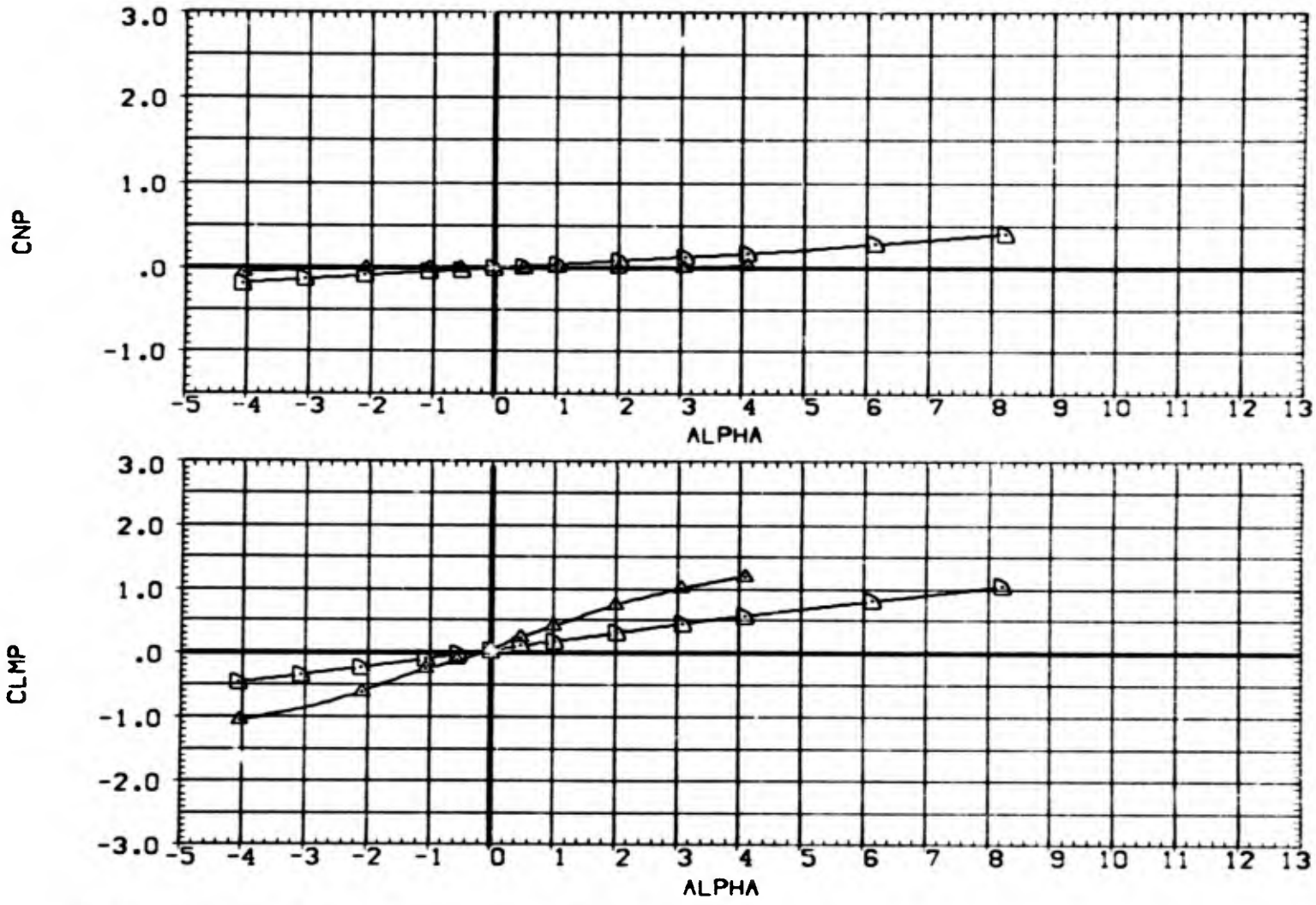
PLUME EFFECTS ON STABILITY CHARACTERISTICS

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[QUE142]	□	DATA NOT AVAILABLE	.000	.000	.000	5.000
[QUE143]	◇	DATA NOT AVAILABLE	.000	.000	.000	4.200
[QUE144]	△	DATA NOT AVAILABLE	.000	.000	.000	3.600
[QUE146]	▽	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	2.500
[QUE147]	◁	DATA NOT AVAILABLE	.000	.000	.000	1.500
[QUE148]	▷	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BIN1)	.000	.000	.000	.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

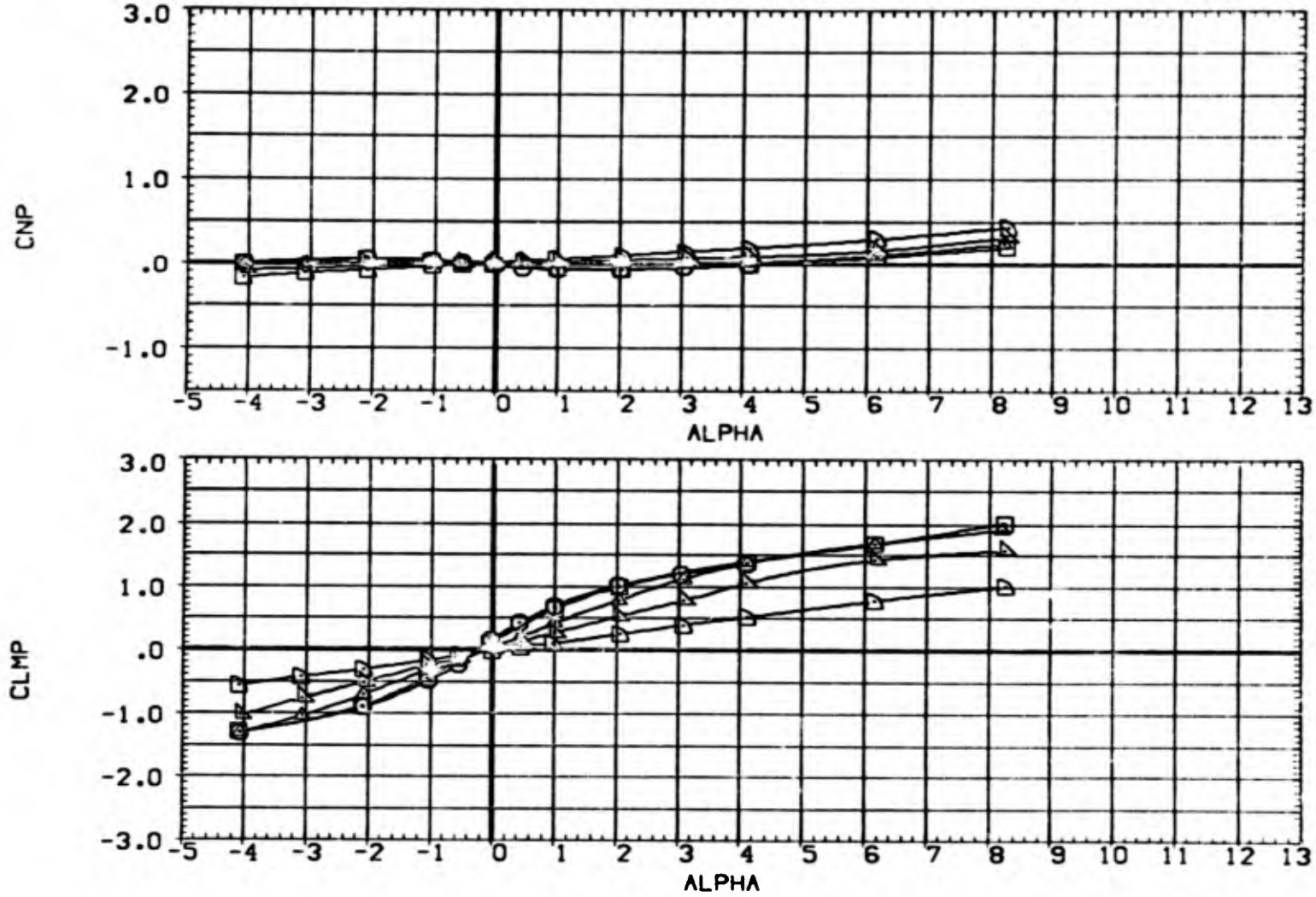


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(RUE142)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINI)	.000	.000	.000	5.000
(RUE143)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINI)	.000	.000	.000	4.200
(RUE144)		DATA NOT AVAILABLE	.000	.000	.000	3.600
(RUE146)		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINI)	.000	.000	.000	2.500
(RUE147)		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINI)	.000	.000	.000	1.500
(RUE148)		CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINI)	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

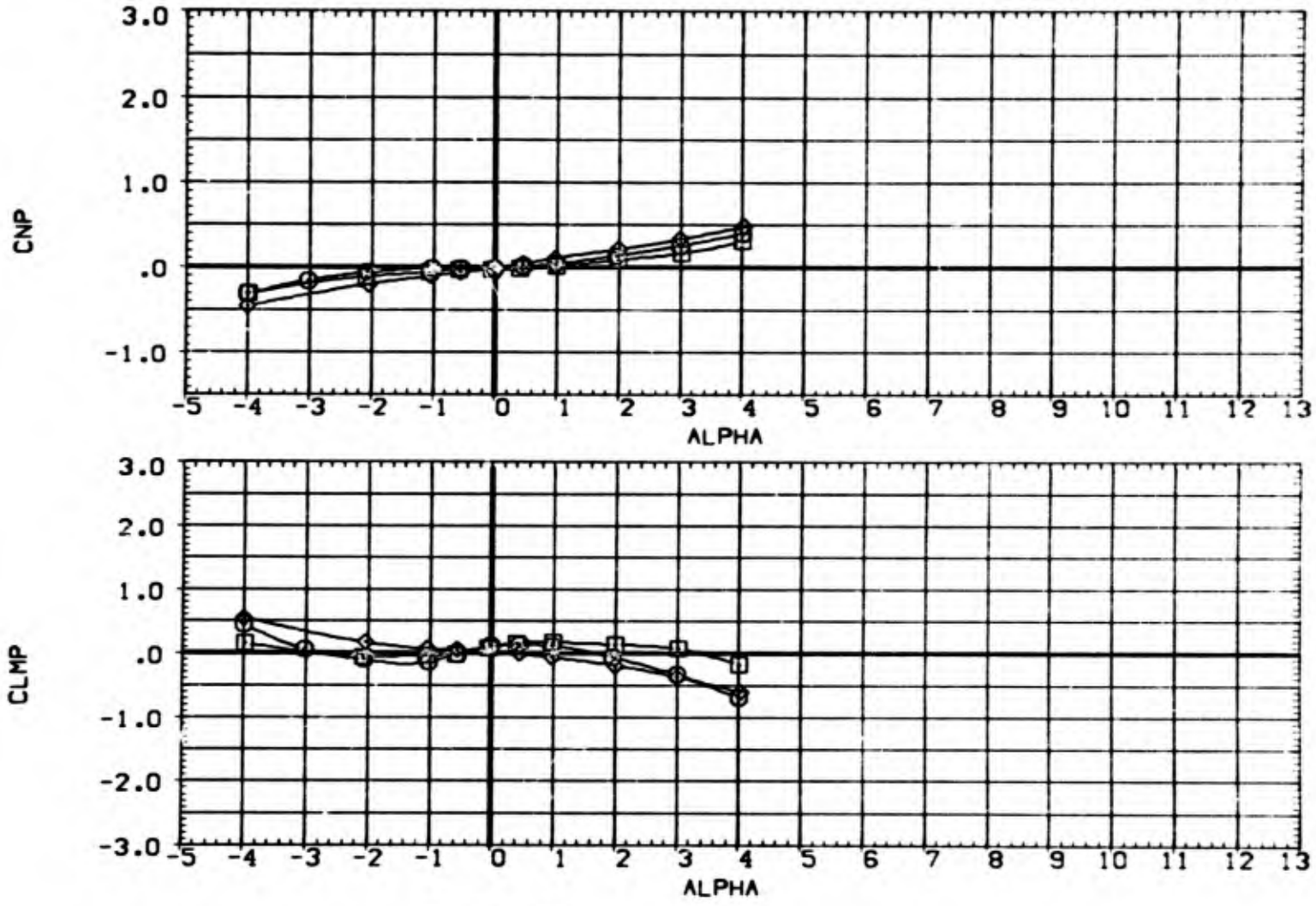


PLUME EFFECTS ON STABILITY CHARACTERISTICS

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(EVE161)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	37.500
(EVE173)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	37.500
(EVE185)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	37.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



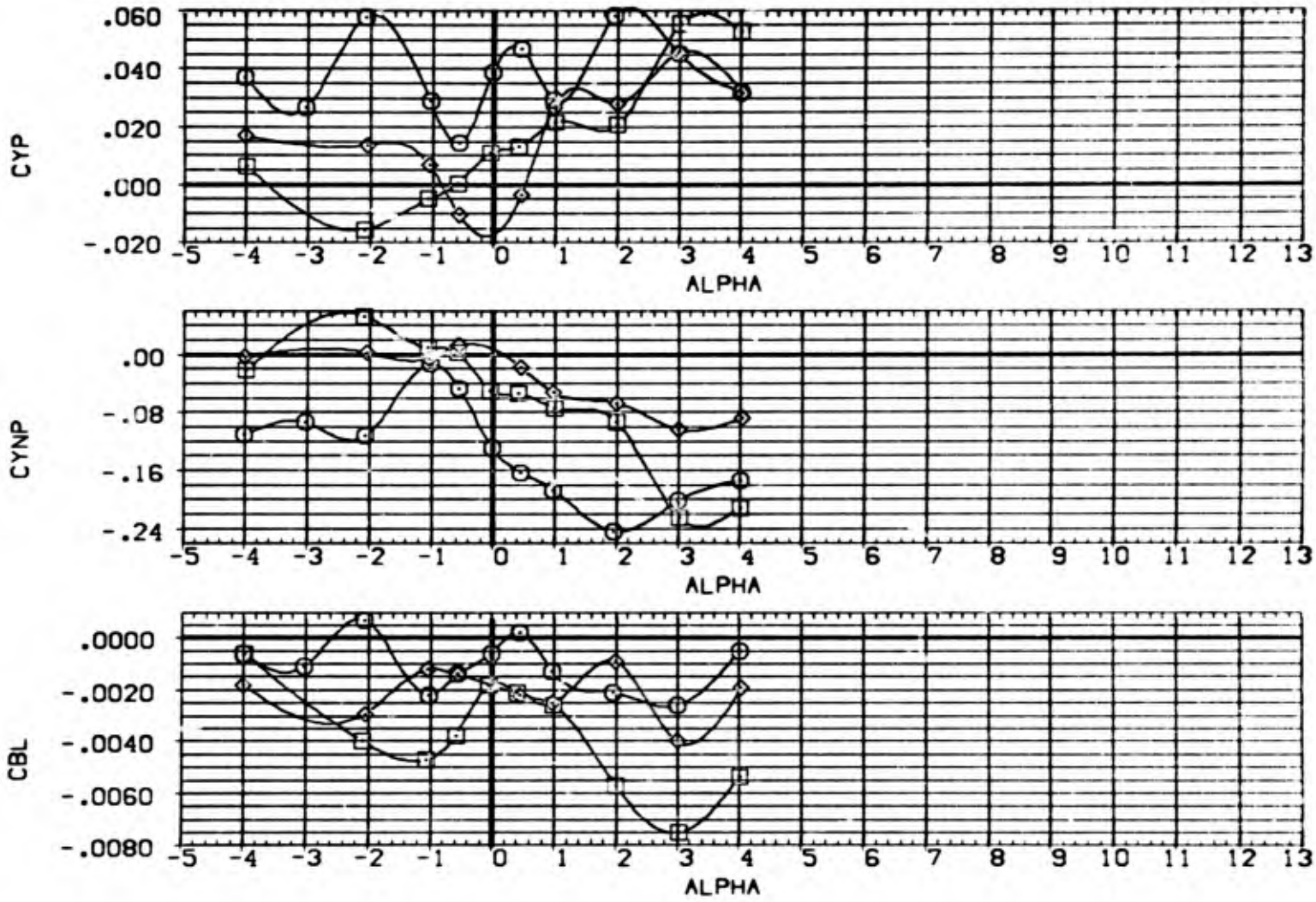
BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .40

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[ELE161]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW [BINIT1]	.000	.000	1.000	37.500
[ELE173]	○	CALSPAN THRUST EFFECTS STING MOUNTED NW [BINIT1]	.000	.000	2.000	37.500
[ELE185]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW [BINIT1]	.000	.000	3.000	37.500

REFERENCE INFORMATION

SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



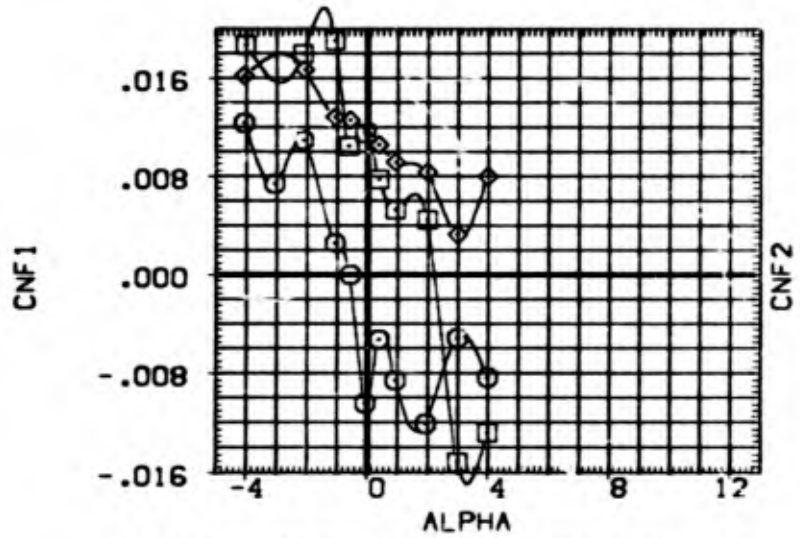
BASIC CHARACTERISTICS OF LONGBOW

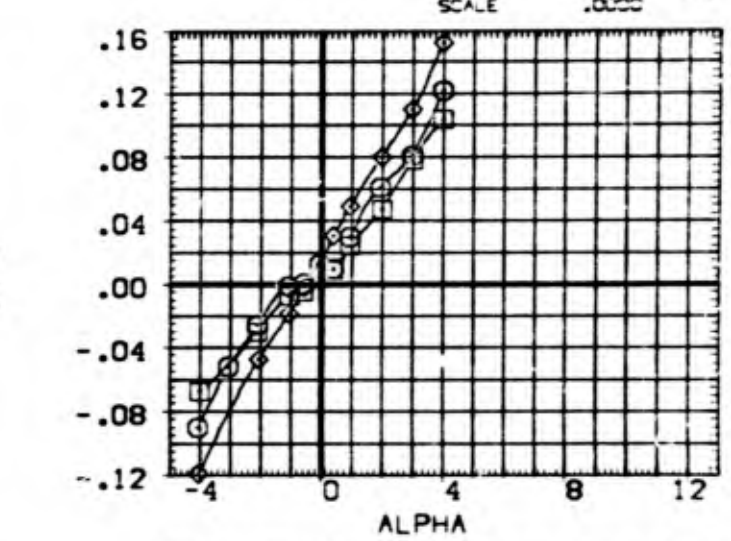
(A)MACH = .40

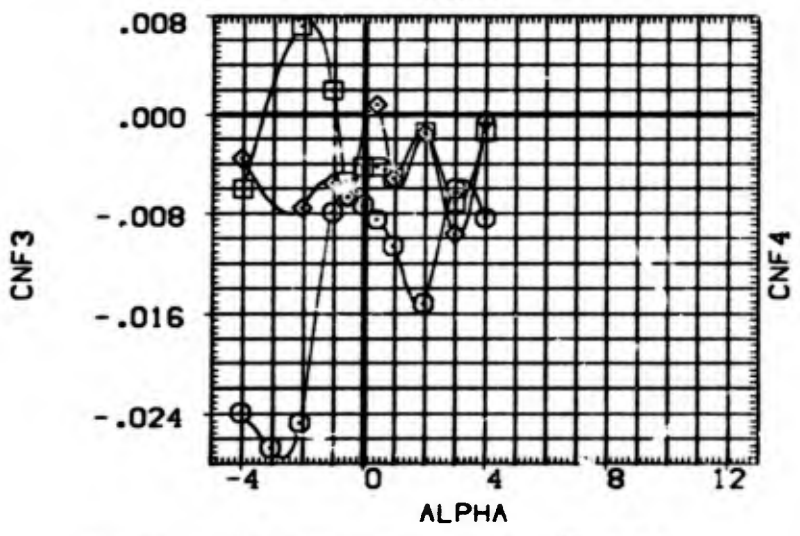
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BLE16)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT)	.000	.000	1.000	37.500
(BLE17)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT)	.000	.000	2.000	37.500
(YLE18)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT)	.000	.000	3.000	37.500

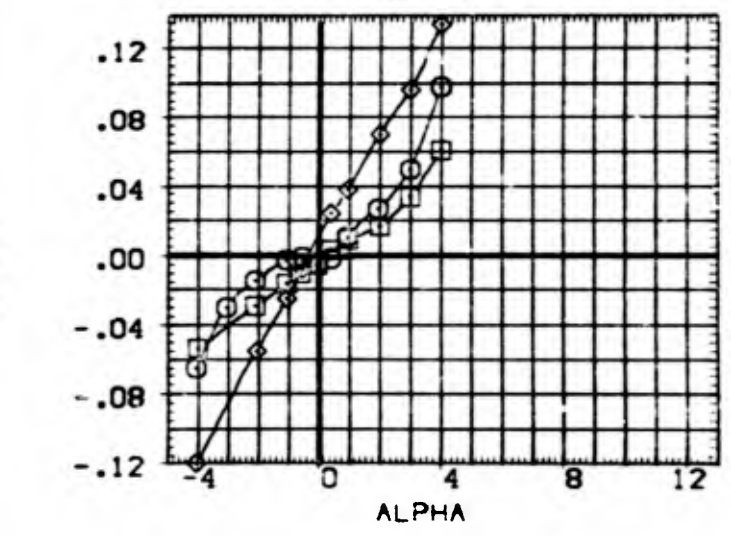
REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	1.0000	







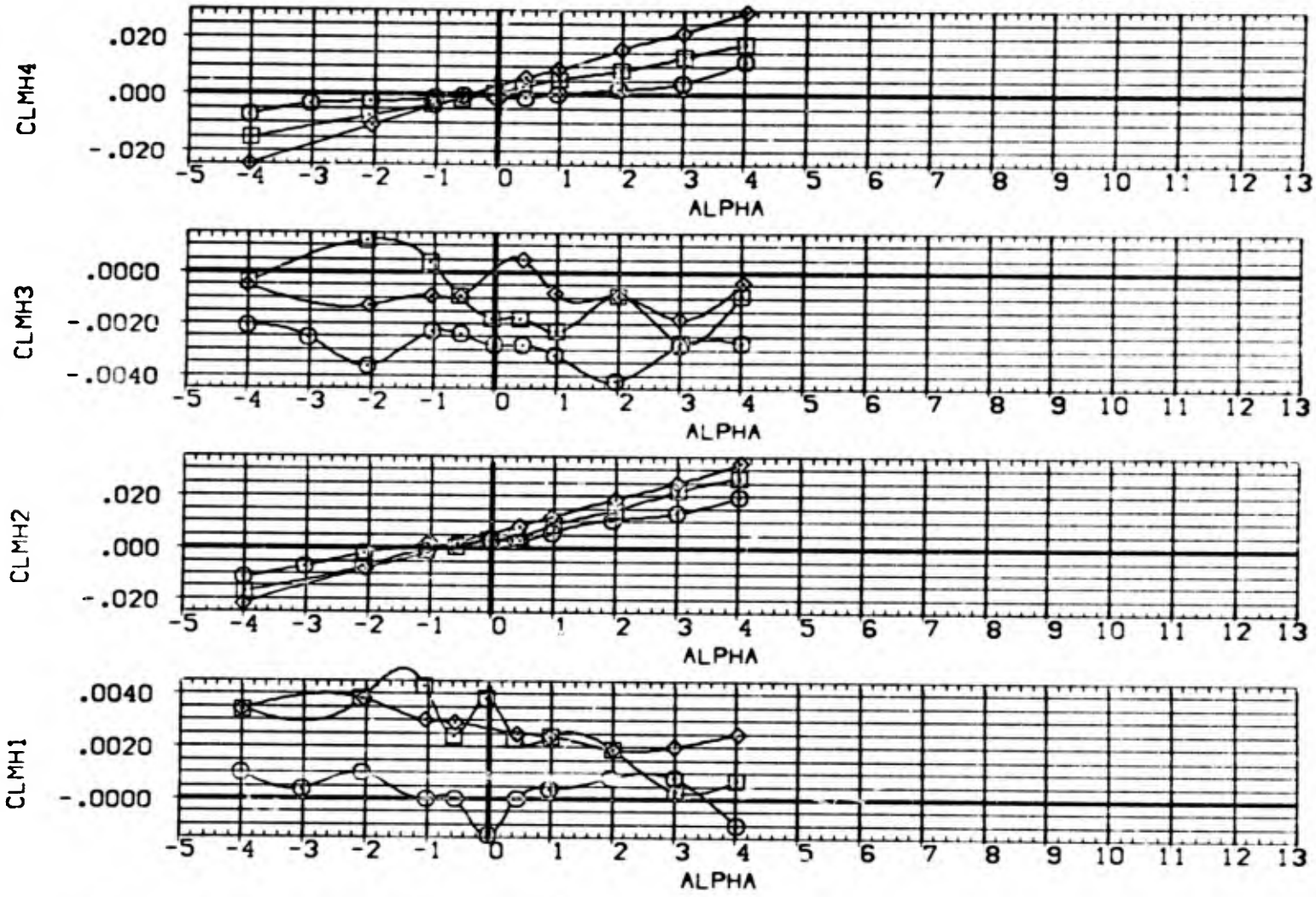


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .40

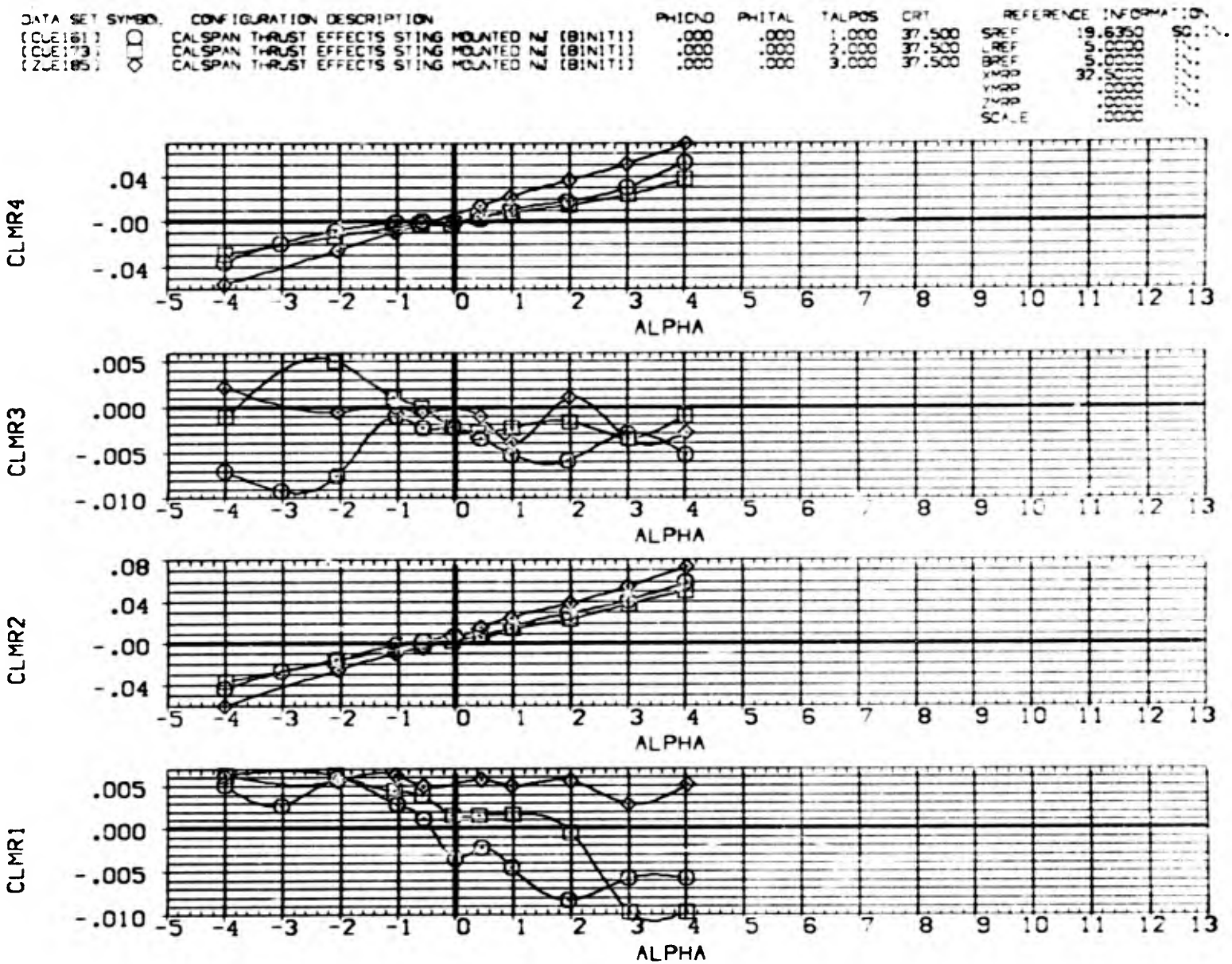
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[CASE161]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	37.500
[CASE173]	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	37.500
[CASE185]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	37.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



BASIC CHARACTERISTICS OF LONGBOW

(A)MAC- = .40



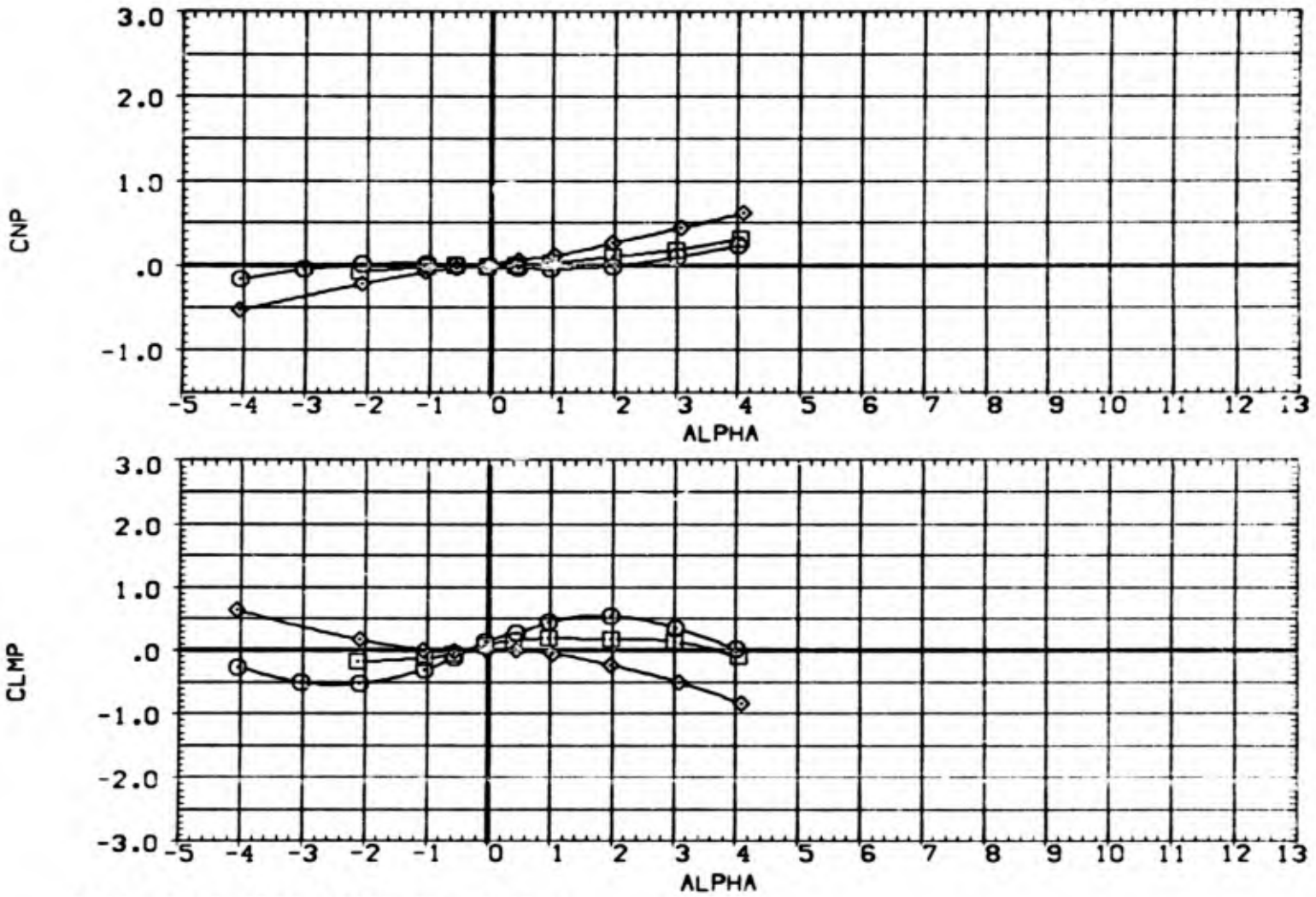
BASIC CHARACTERISTICS OF LONGBOW

(A)MAC- = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE162)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	10.300
(EUE174)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	10.300
(EUE186)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	10.300

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



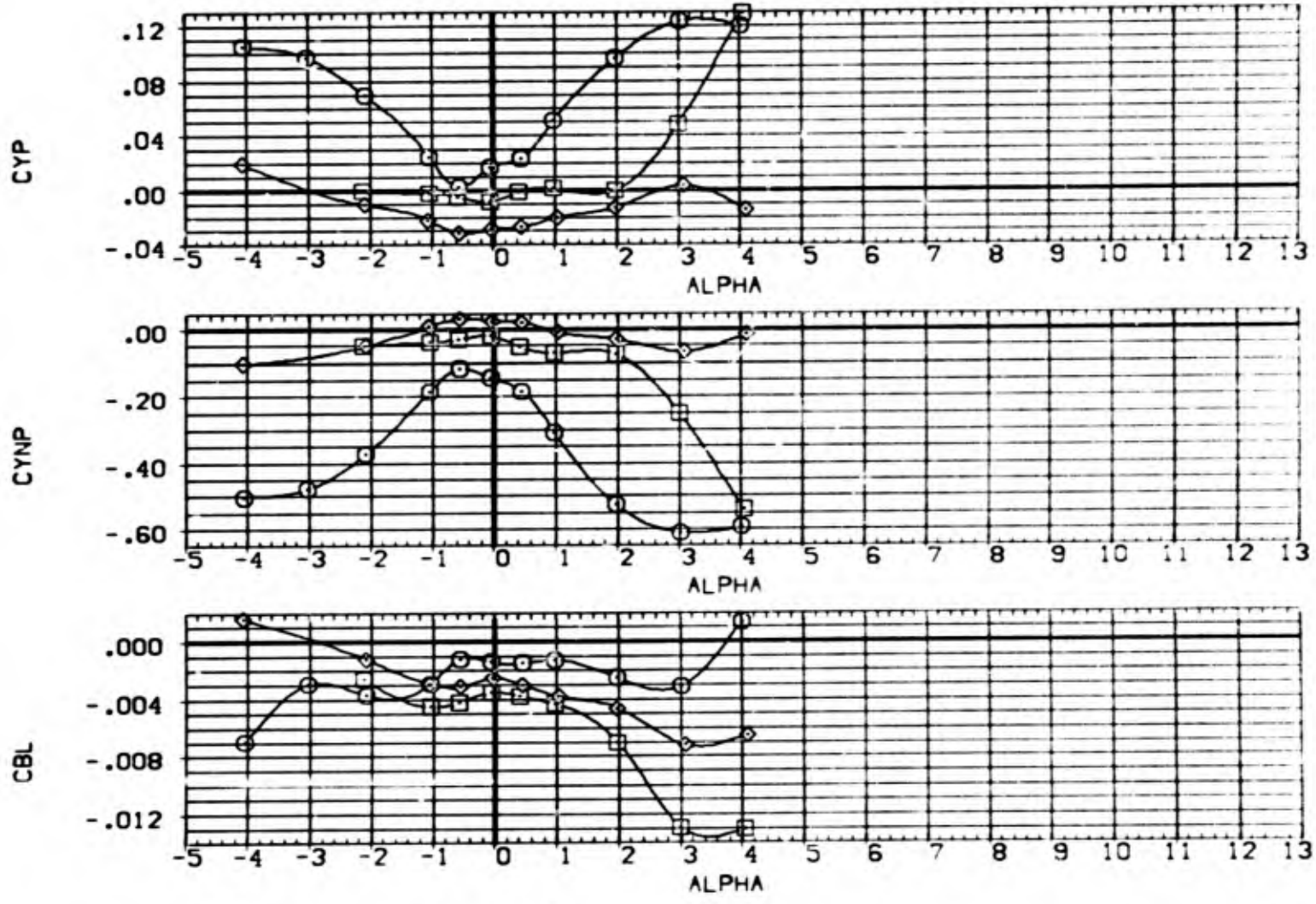
BASIC CHARACTERISTICS OF LONGBOW

(A)MAC- = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(ELE162)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	10.300
(ELE174)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	10.300
(ELE186)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	10.300

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



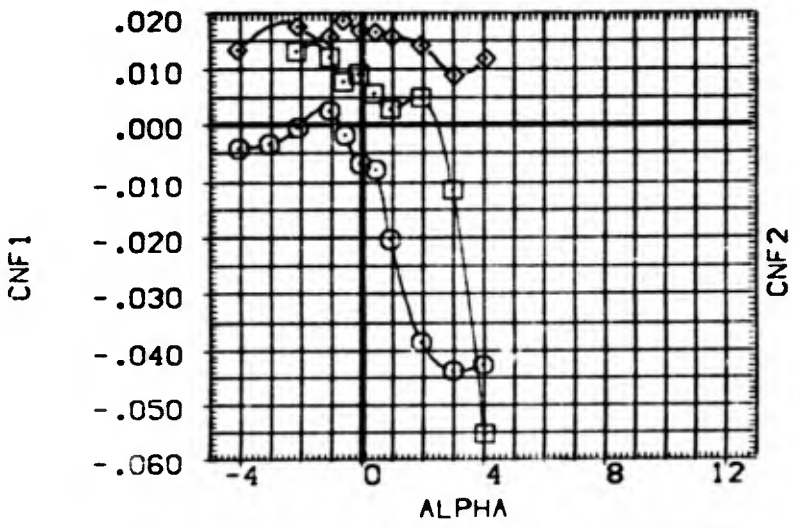
BASIC CHARACTERISTICS OF LONGBOW

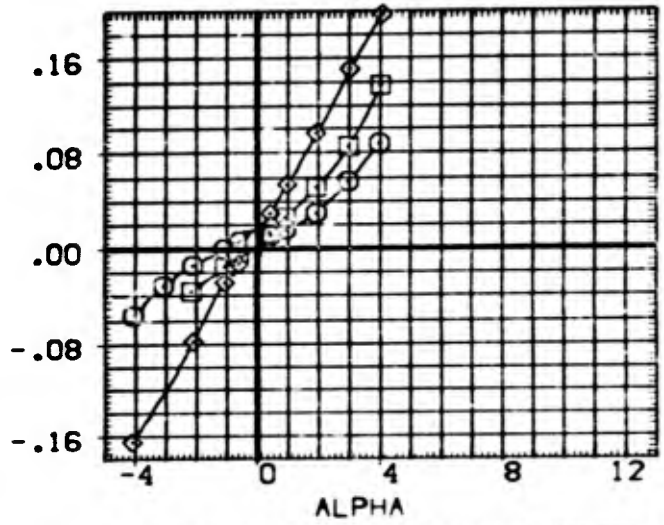
(A)MACH = .80

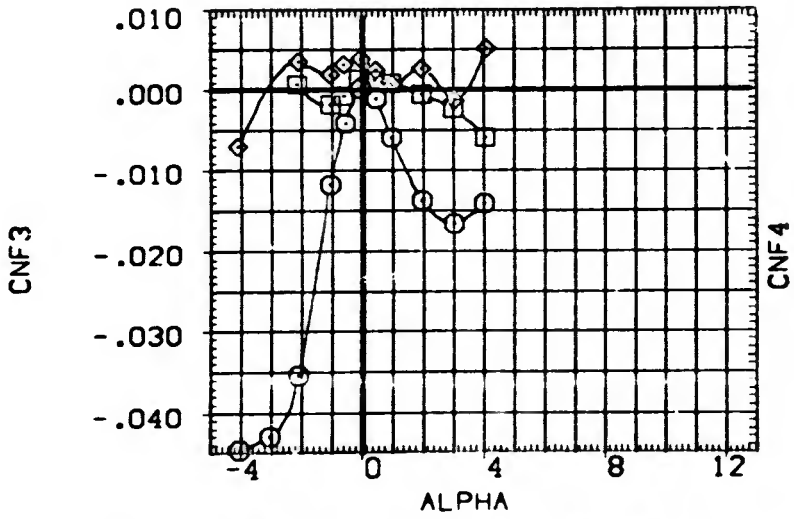
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BLUE162)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	10.300
(BLUE174)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	10.300
(BLUE186)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	10.300

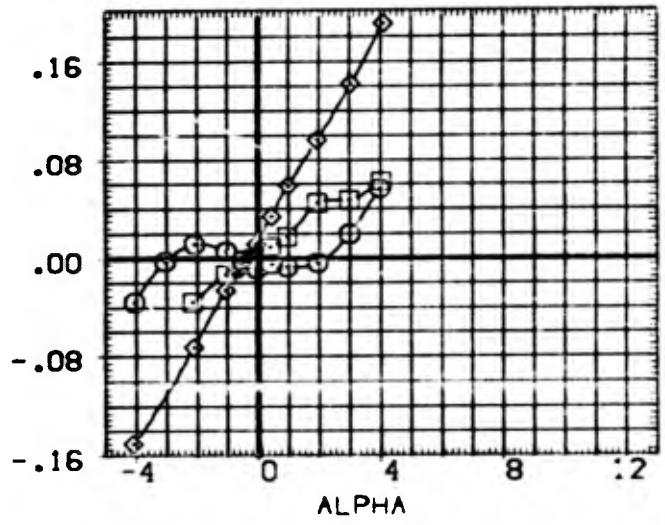
REFERENCE INFORMATION

SREF	9.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



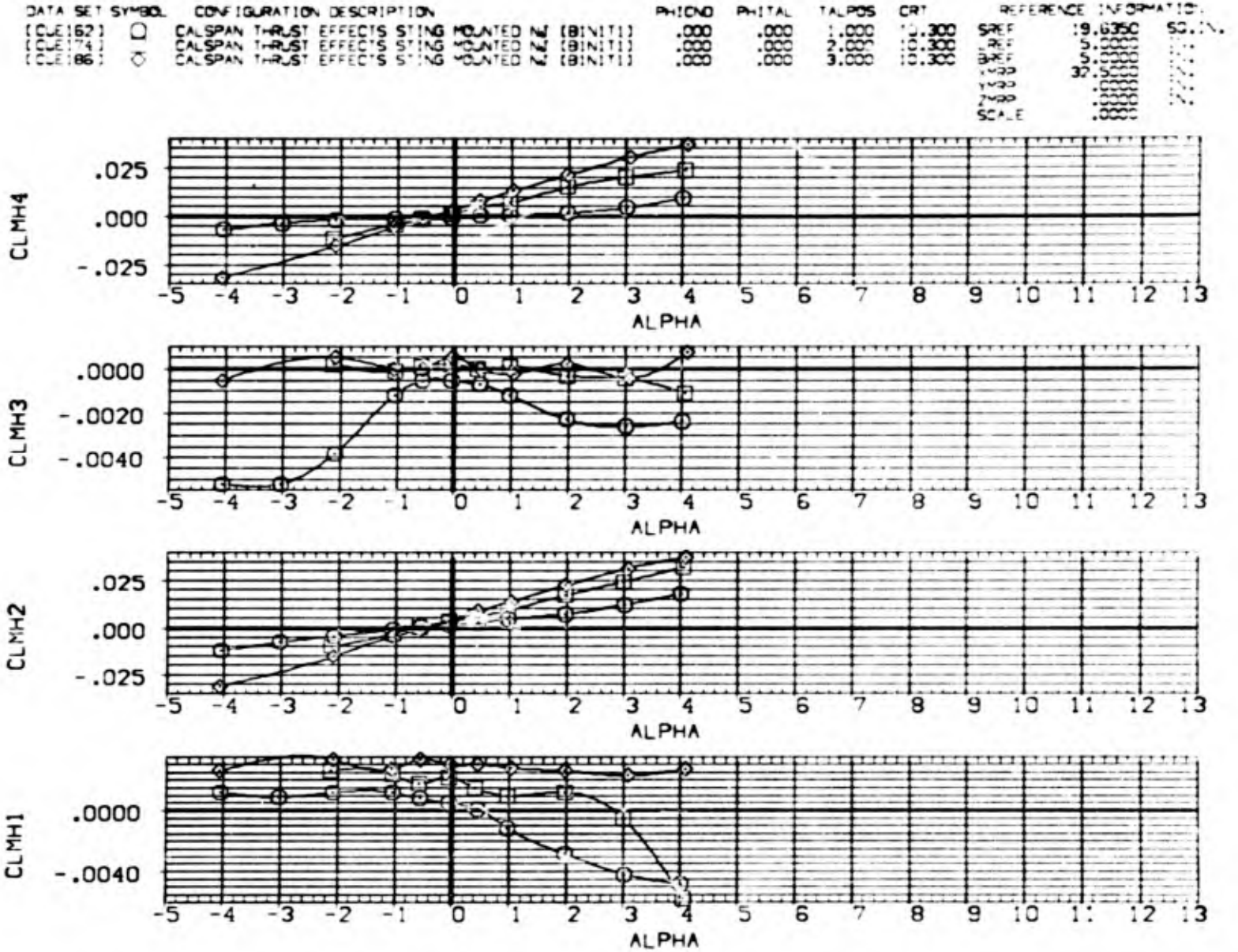






BASIC CHARACTERISTICS OF LONGBOW

(A)MAC = .80

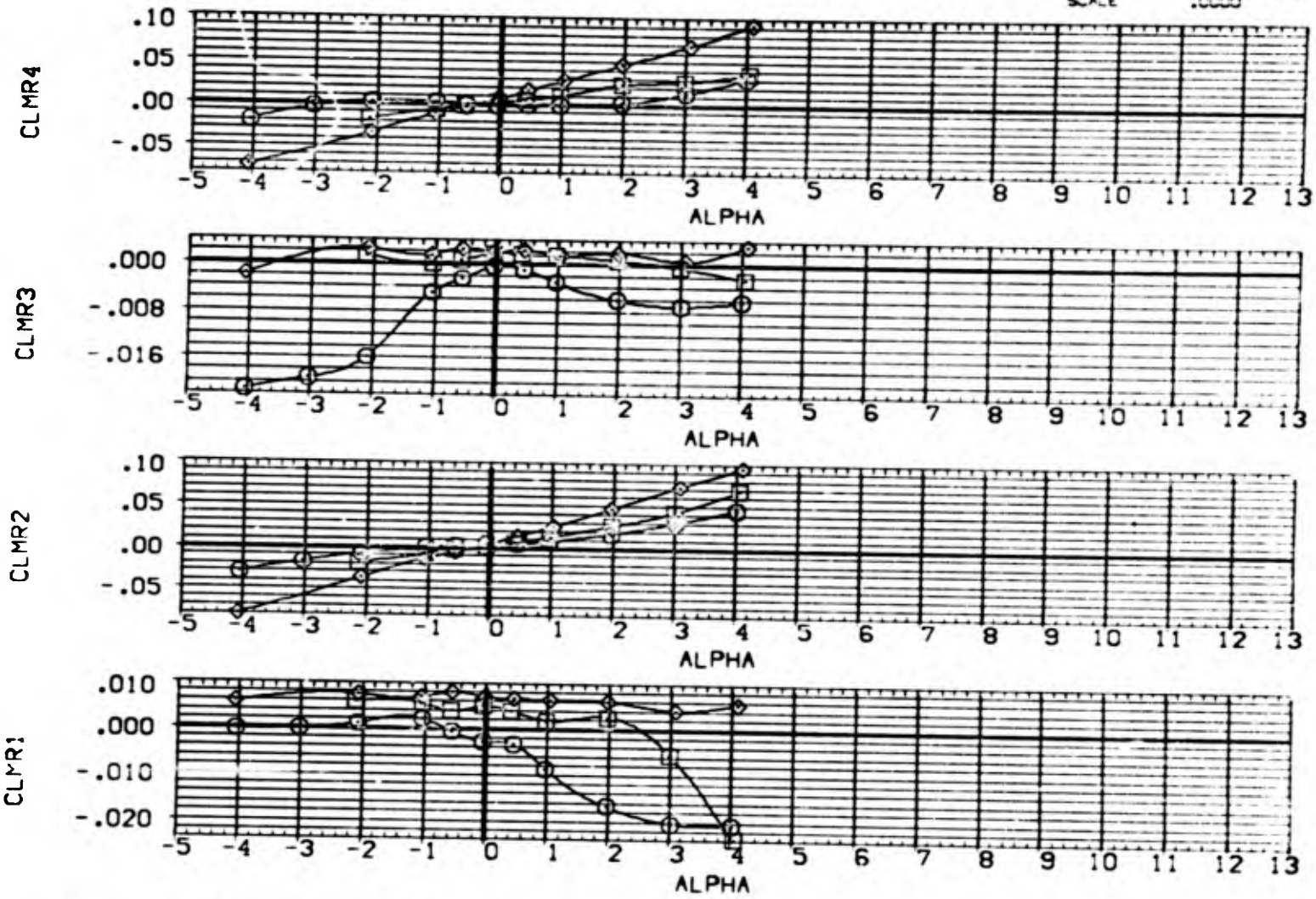


BASIC CHARACTERISTICS OF LONGBOW

CA)MAC- = .8C

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE162)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT1)	.000	.000	1.000	10.300
(CUE174)	△	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT1)	.000	.000	2.000	10.300
(CUE186)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT1)	.000	.000	3.000	10.300

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

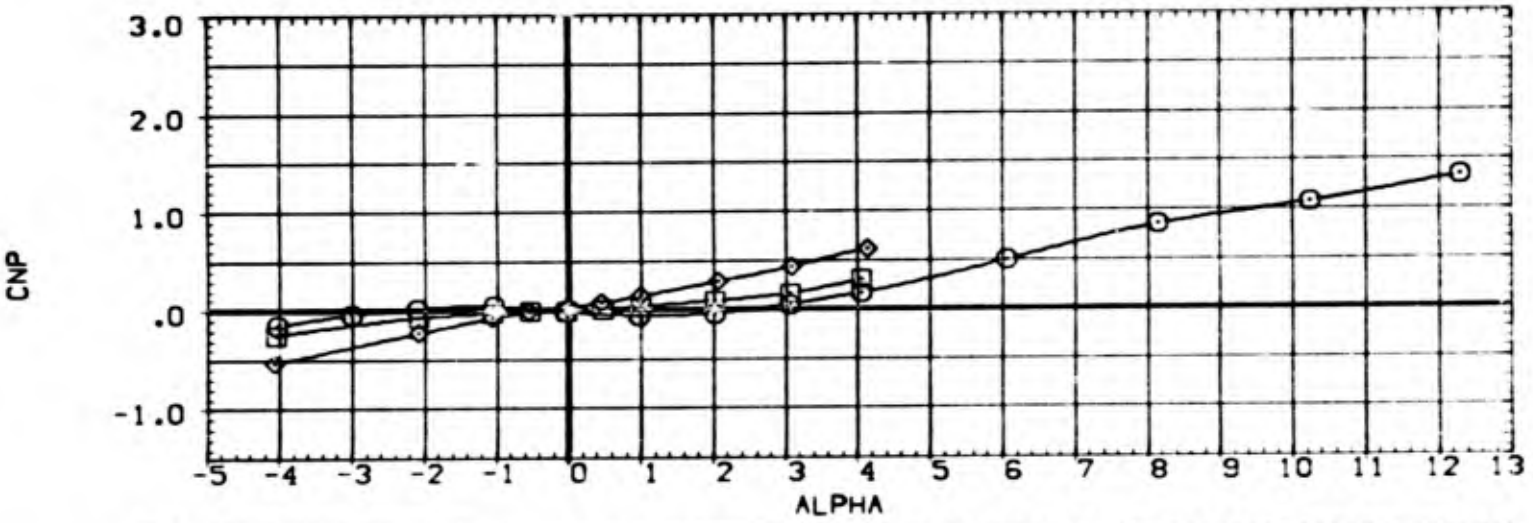


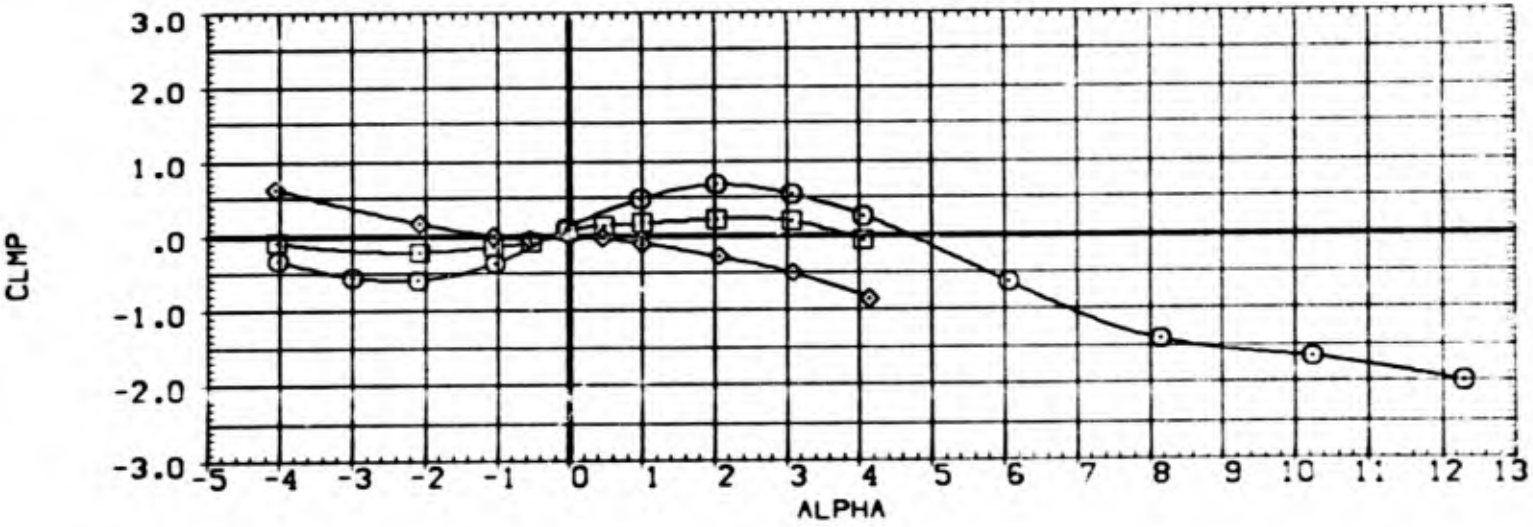
BASIC CHARACTERISTICS OF LONGBOW

(A)MAC = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(ELE163)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	8.500
(ELE175)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	8.500
(ELE187)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	8.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	





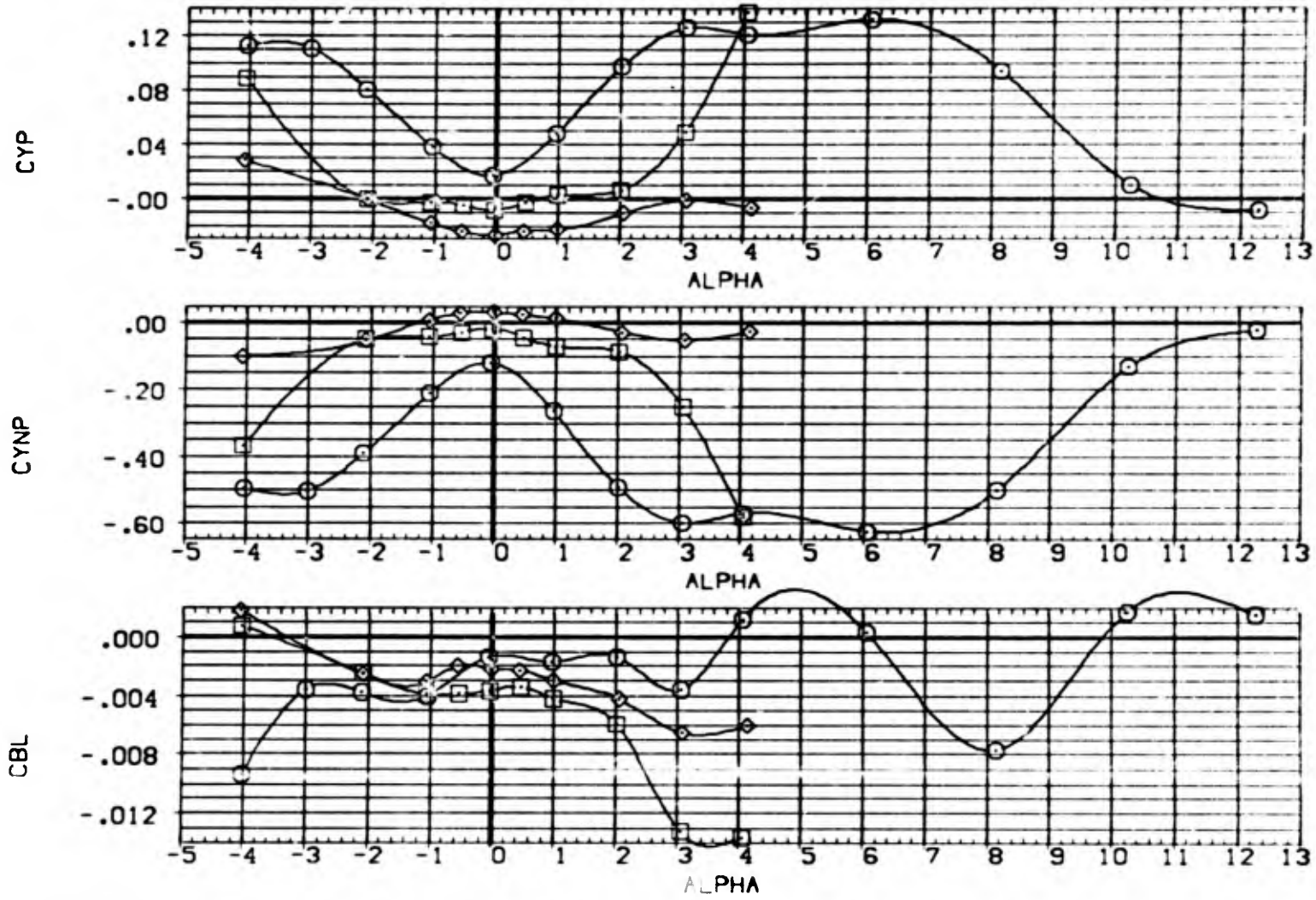
BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(EUE163)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	8.500
(EUE175)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	8.500
(EUE187)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	8.500

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	20.5000
YMRP	.0000
ZMRP	.0000
SCALE	.8000



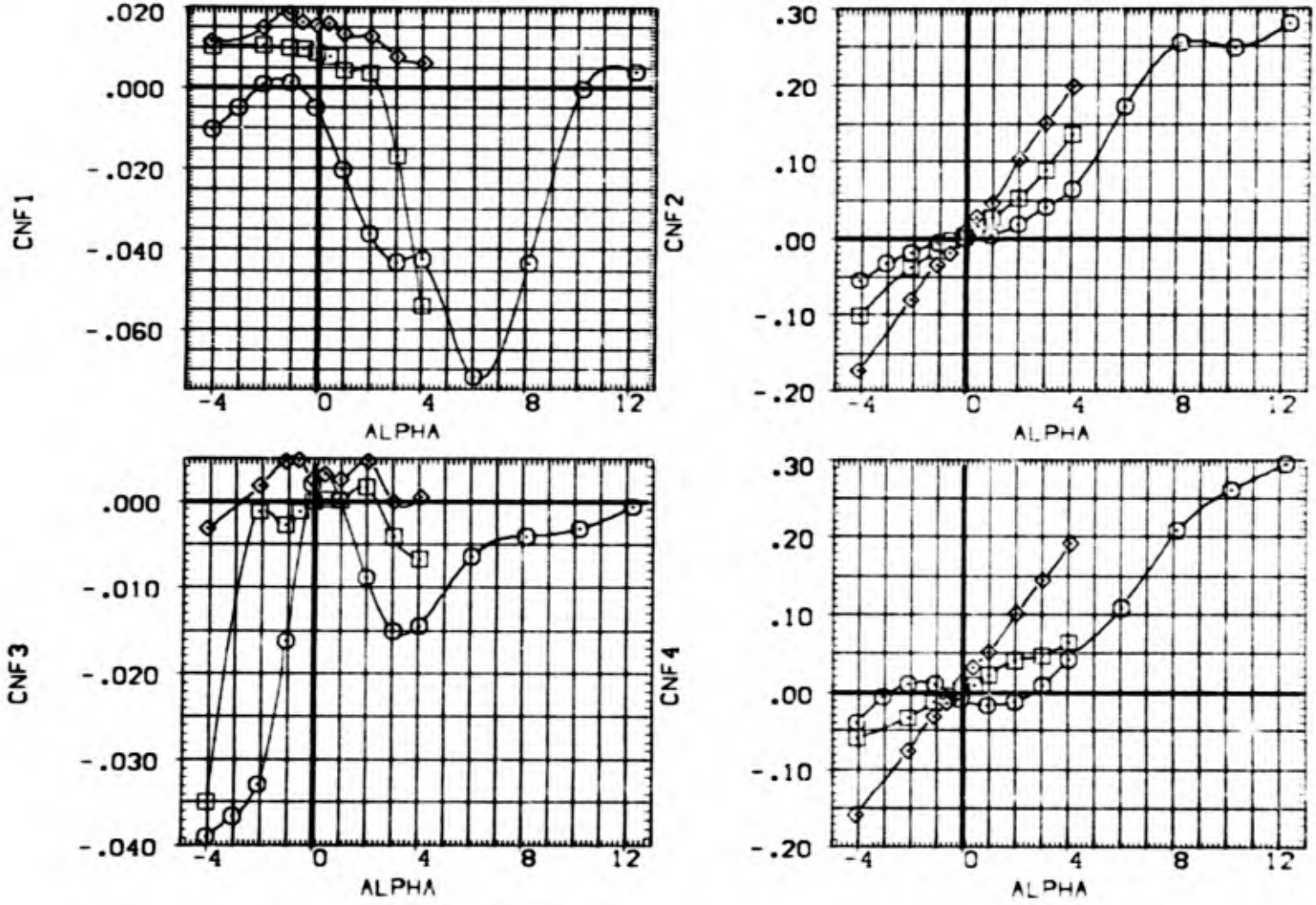
BASIC CHARACTERISTICS OF LONGBOW

(A)MAC- = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE163)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT1)	.000	.000	1.000	8.500
(BLE175)	○	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT1)	.000	.000	2.000	8.500
(BLE187)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT1)	.000	.000	3.000	8.500

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



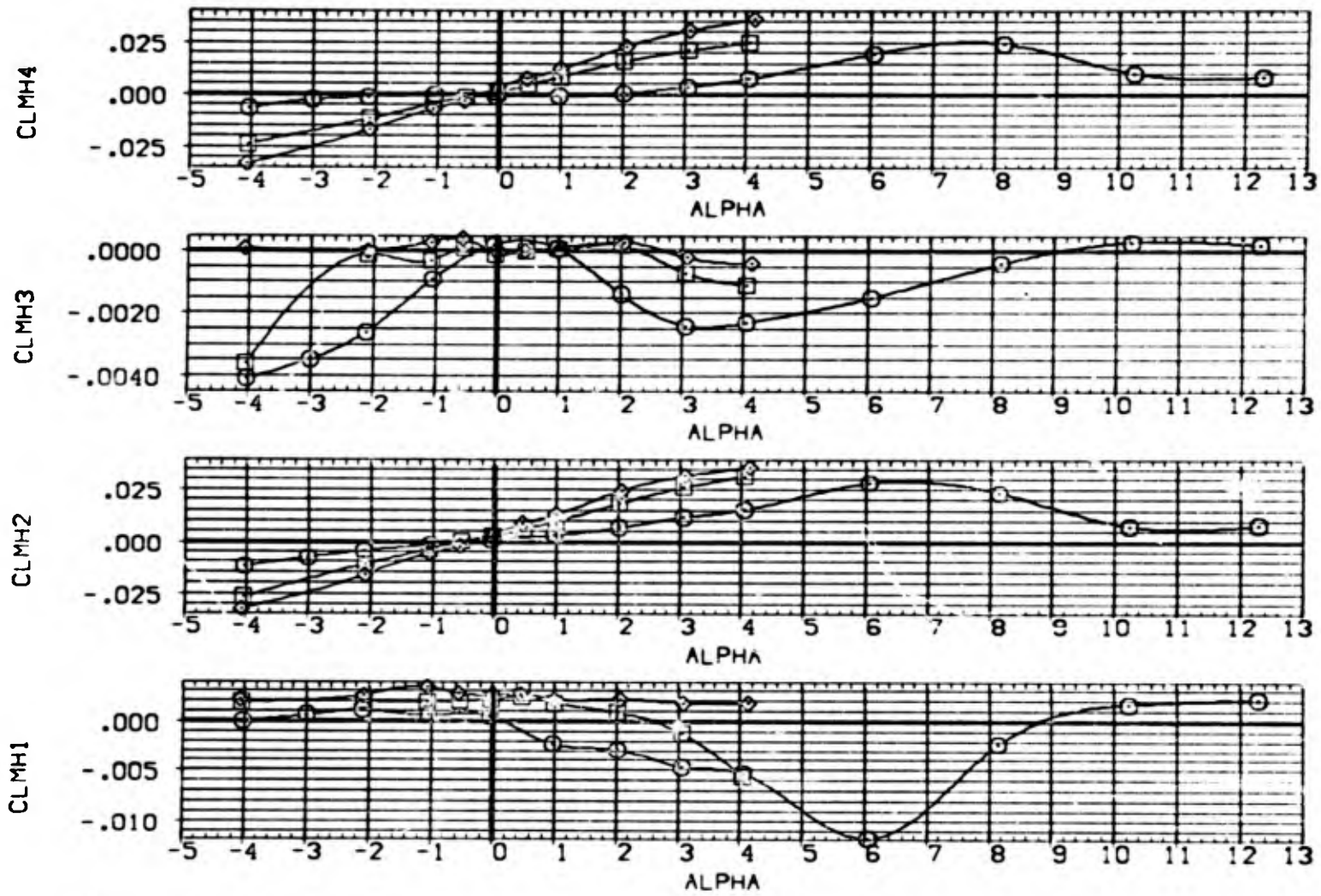
BASIC CHARACTERISTICS OF LONGBOW

(A)MAC-- = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[illegible]E163]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	8.500
[illegible]E175]	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	8.500
[illegible]E187]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	8.500

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

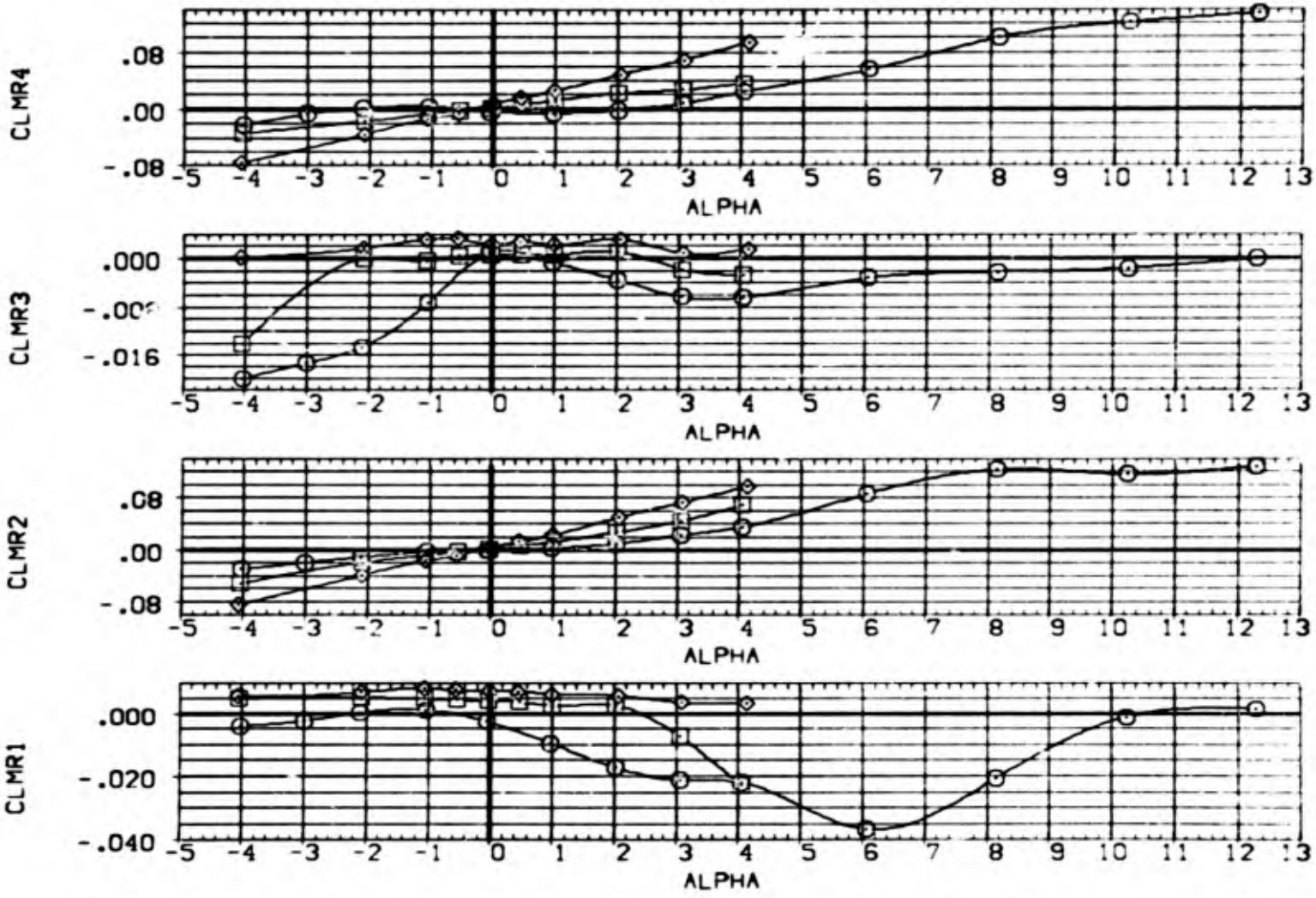


BASIC CHARACTERISTICS OF LONGBOW

(A)MAC- = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	THITAL	TALPOS	CRT
[CLE163]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	8.500
[CLE175]	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	8.500
[CLE187]	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	8.500

REFERENCE INFORMATION		
SREF	19.6350	SQ. FT.
CREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	1.0000	

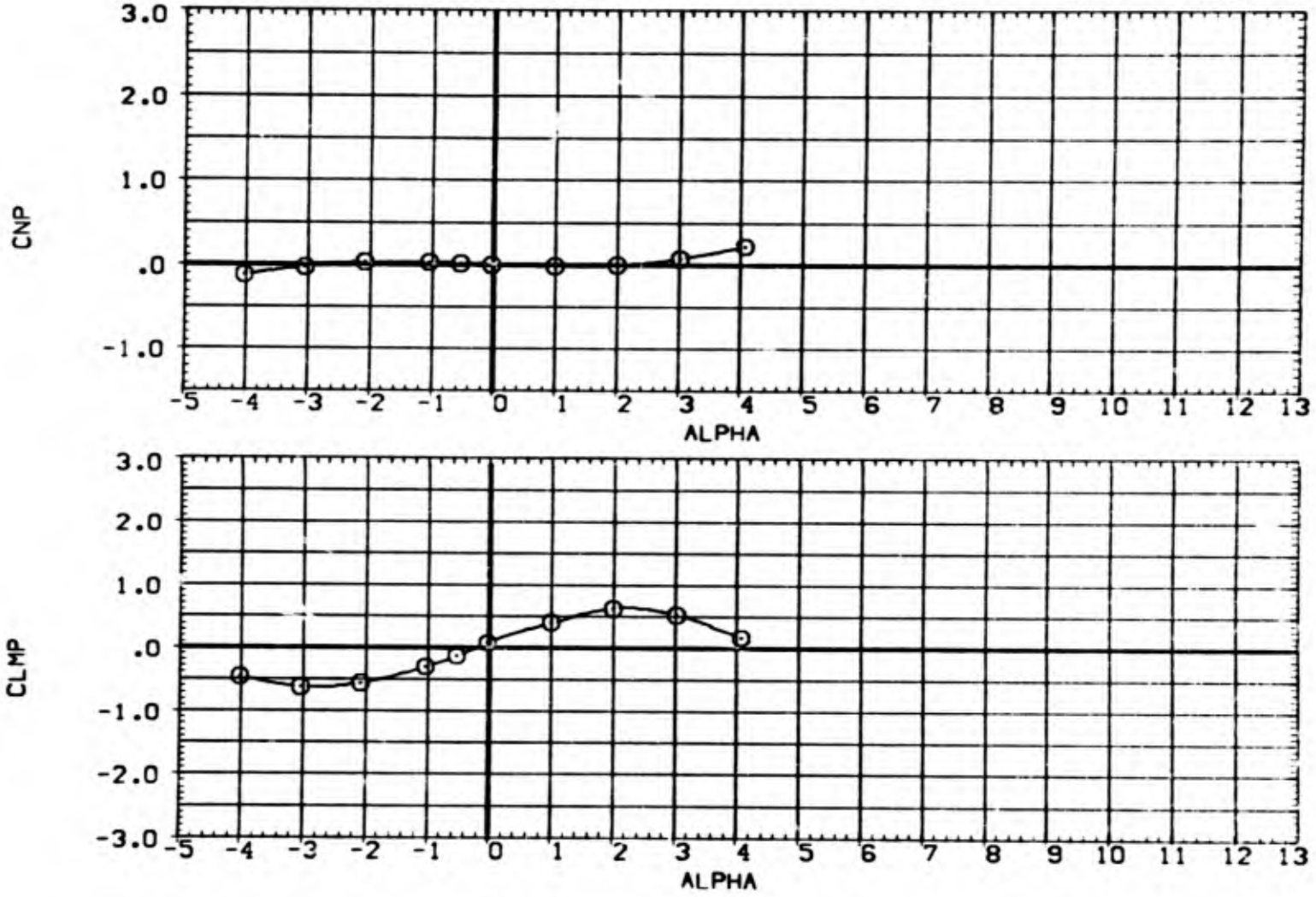


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE164)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	7.200
(EUE176)		DATA NOT AVAILABLE	.000	.000	2.000	7.200
(EUE188)	◇	DATA NOT AVAILABLE	.000	.000	3.000	7.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



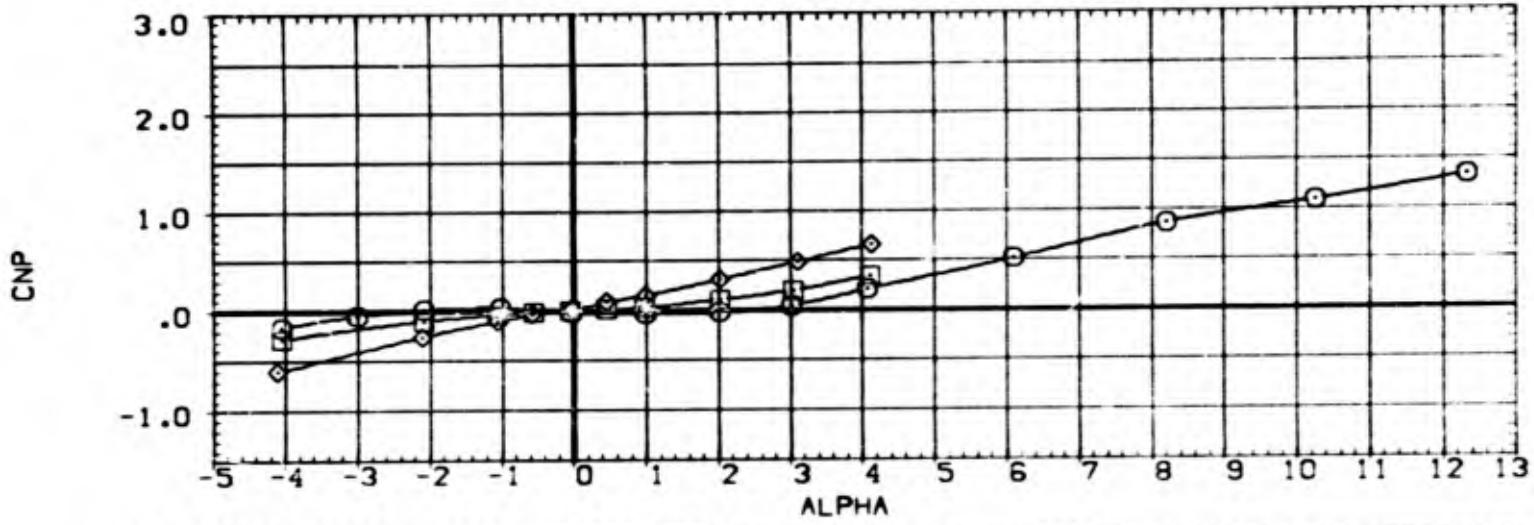
BASIC CHARACTERISTICS OF LONGBOW

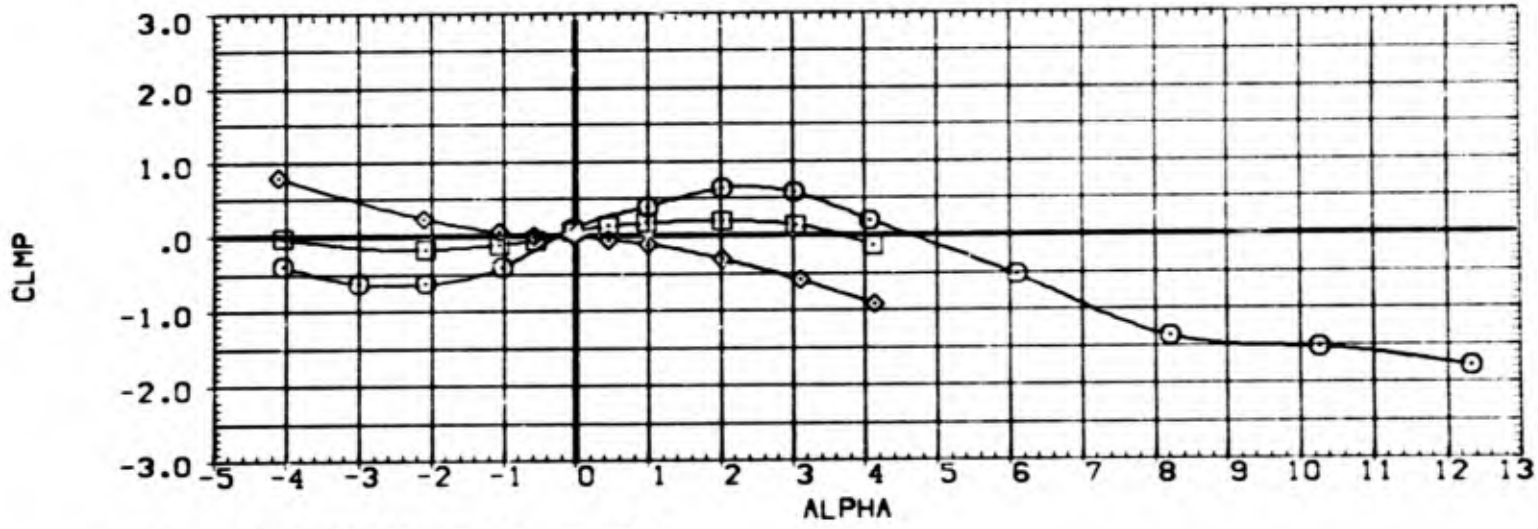
(A)MAC- = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(ELE164)	□	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT)	.000	.000	1.000	7.200
(ELE176)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT)	.000	.000	2.000	7.200
(ELE188)	○	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT)	.000	.000	3.000	7.200

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	76.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0050





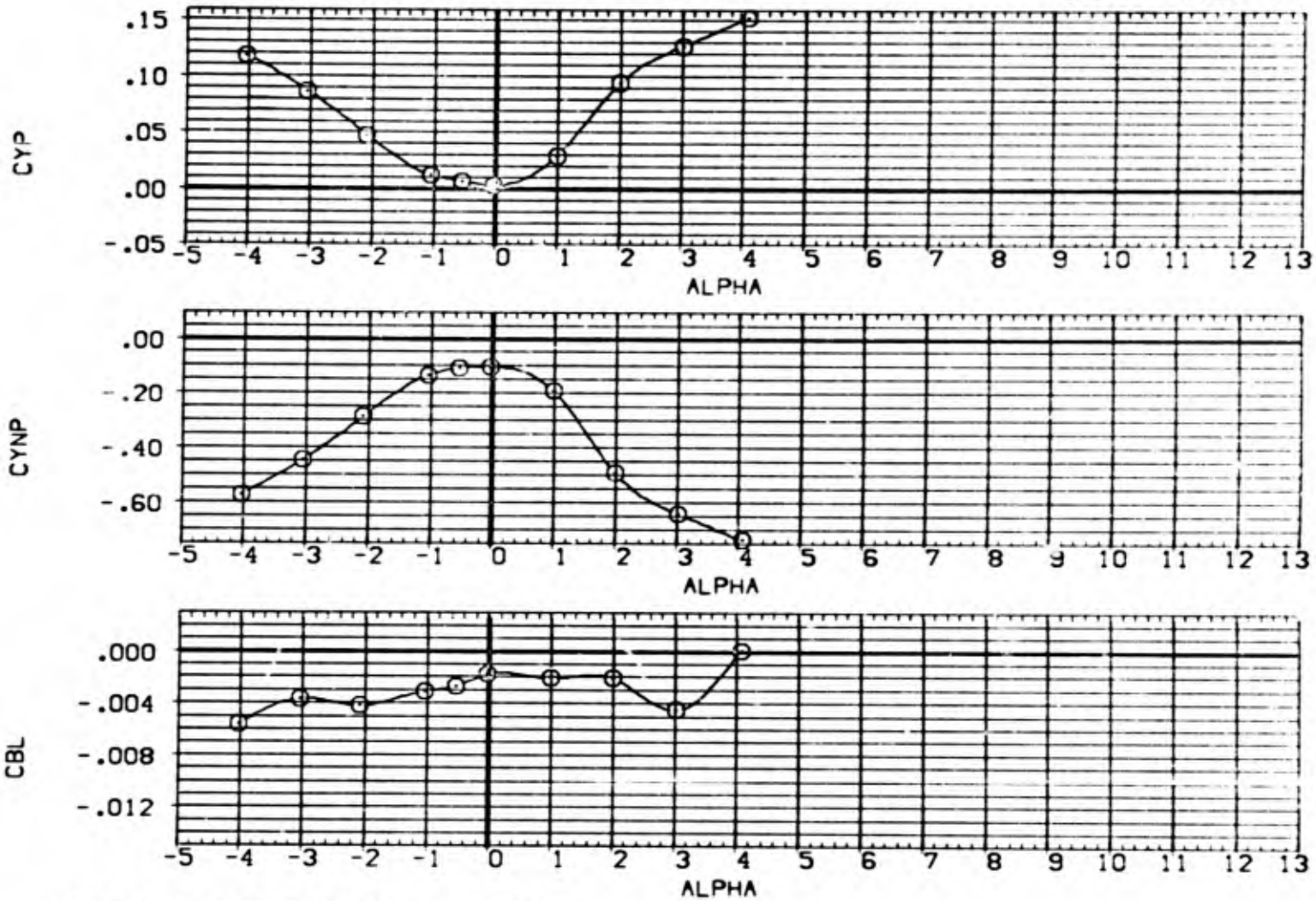
BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .99

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE164)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	7.200
(EUE176)	△	DATA NOT AVAILABLE	.000	.000	2.000	7.200
(EUE188)	◇	DATA NOT AVAILABLE	.000	.000	3.000	7.200

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	IN.



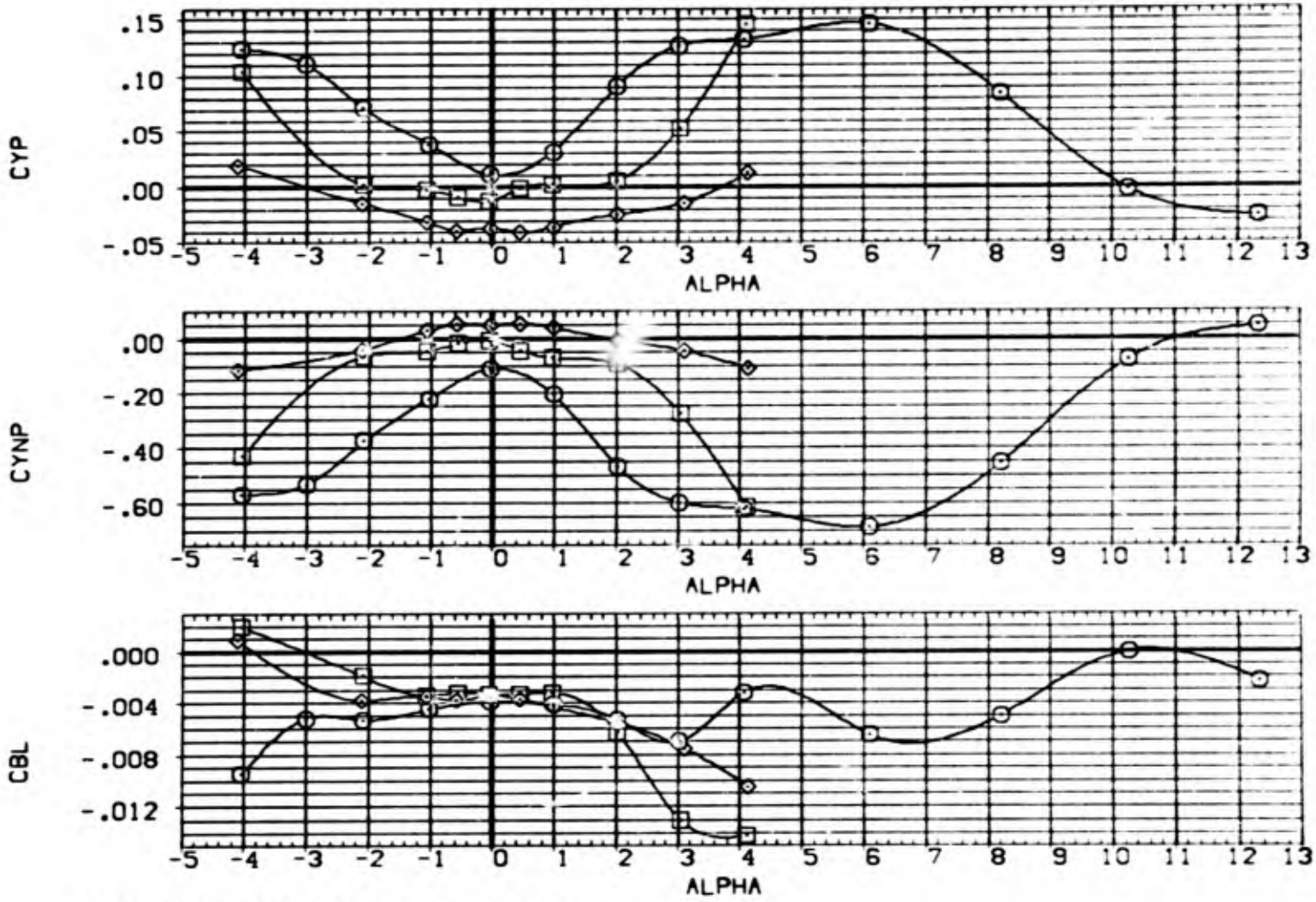
BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(EUE164)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	7.200
(EUE176)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	7.200
(EUE188)		CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	7.200

REFERENCE INFORMATION

SREF	9.6350 SQ. IN.
LREF	5.0000 IN.
BREF	5.0000 IN.
XMRP	26.5000 IN.
YMRP	.0000 IN.
ZMRP	.0000 IN.
SCALE	.0000

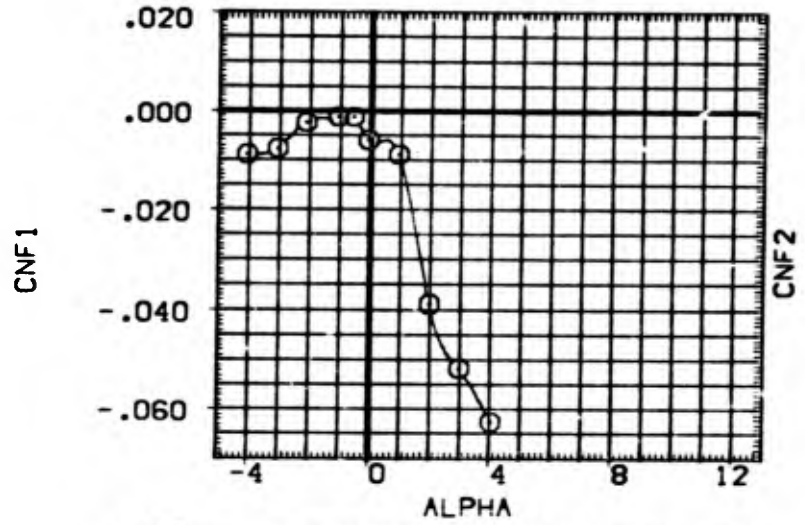


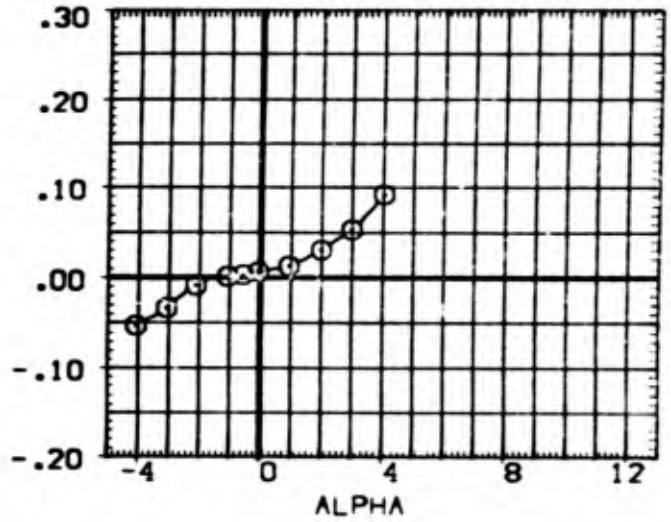
BASIC CHARACTERISTICS OF LONGBOW

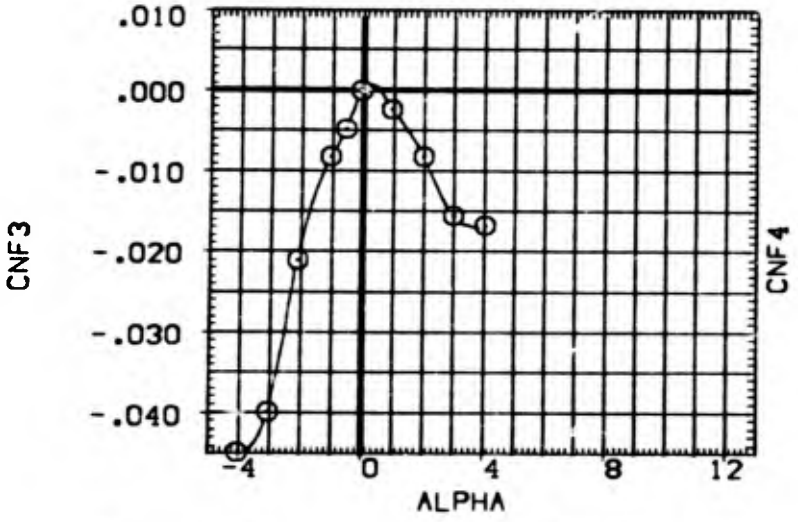
(B)MACH = .99

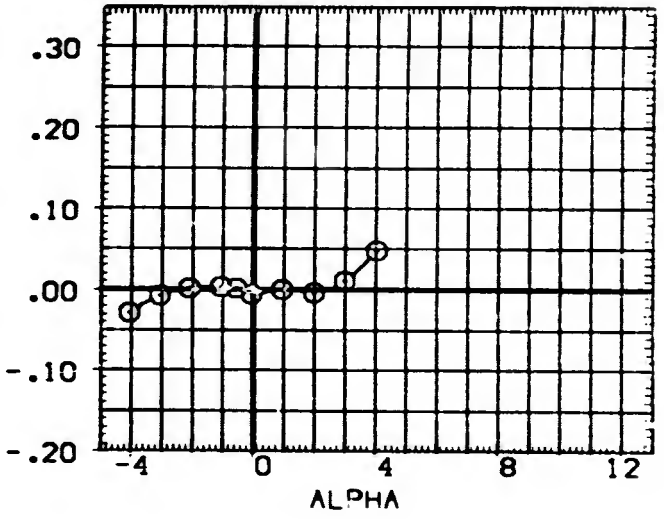
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BJE164)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	7.200
(BJE176)	△	DATA NOT AVAILABLE	.000	.000	2.000	7.200
(BJE188)	◇	DATA NOT AVAILABLE	.000	.000	3.000	7.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	32.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	









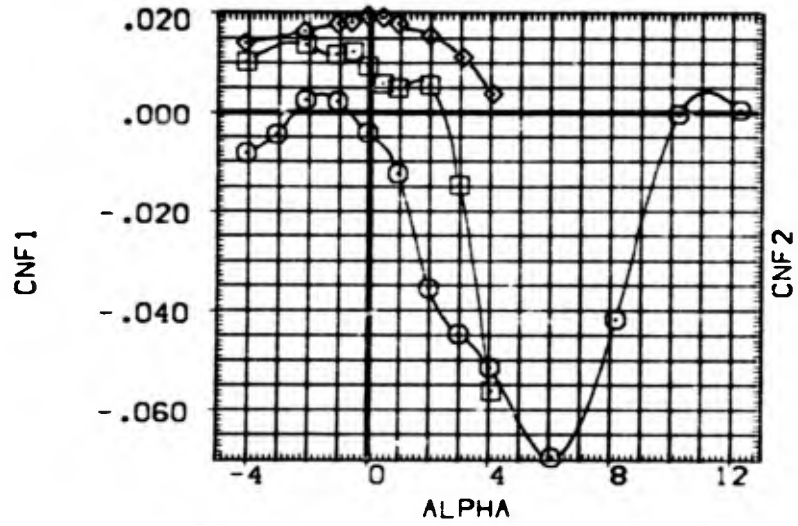
BASIC CHARACTERISTICS OF LONGBOW

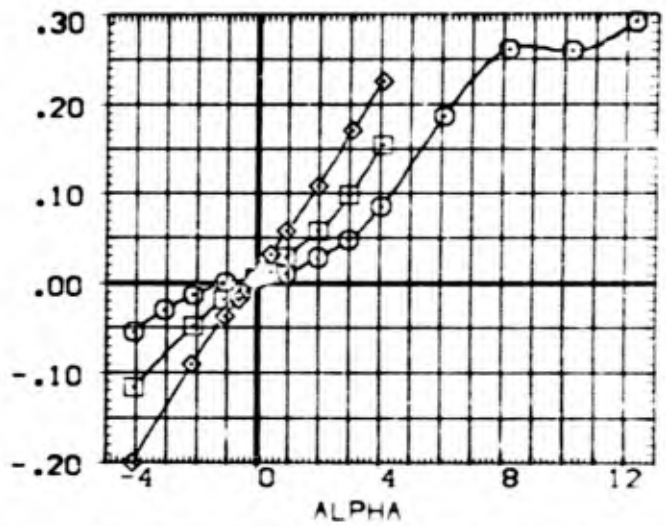
(A)MAC- = .90

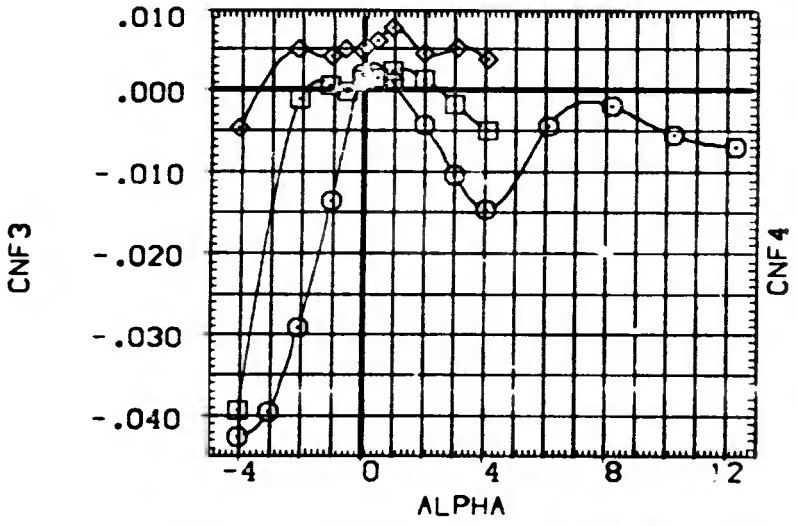
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE164)	□	CALSPAN THRUST EFFECTS STING MOUNTED N.E. (BINIT)	.000	.000	1.000	7.200
(BLE176)	△	CALSPAN THRUST EFFECTS STING MOUNTED N.E. (BINIT)	.000	.000	2.000	7.200
(BLE188)	◇	CALSPAN THRUST EFFECTS STING MOUNTED N.E. (BINIT)	.000	.000	3.000	7.200

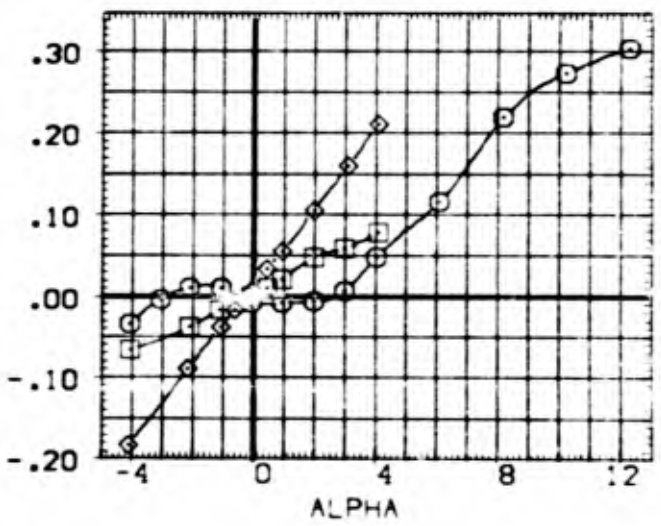
REFERENCE INFORMATION

SREF	19.6350 SQ. IN.
LREF	5.0000
BREF	5.0000
XMRP	32.5000
YMRP	.0000
ZMRP	.0000
SCALE	1.0000









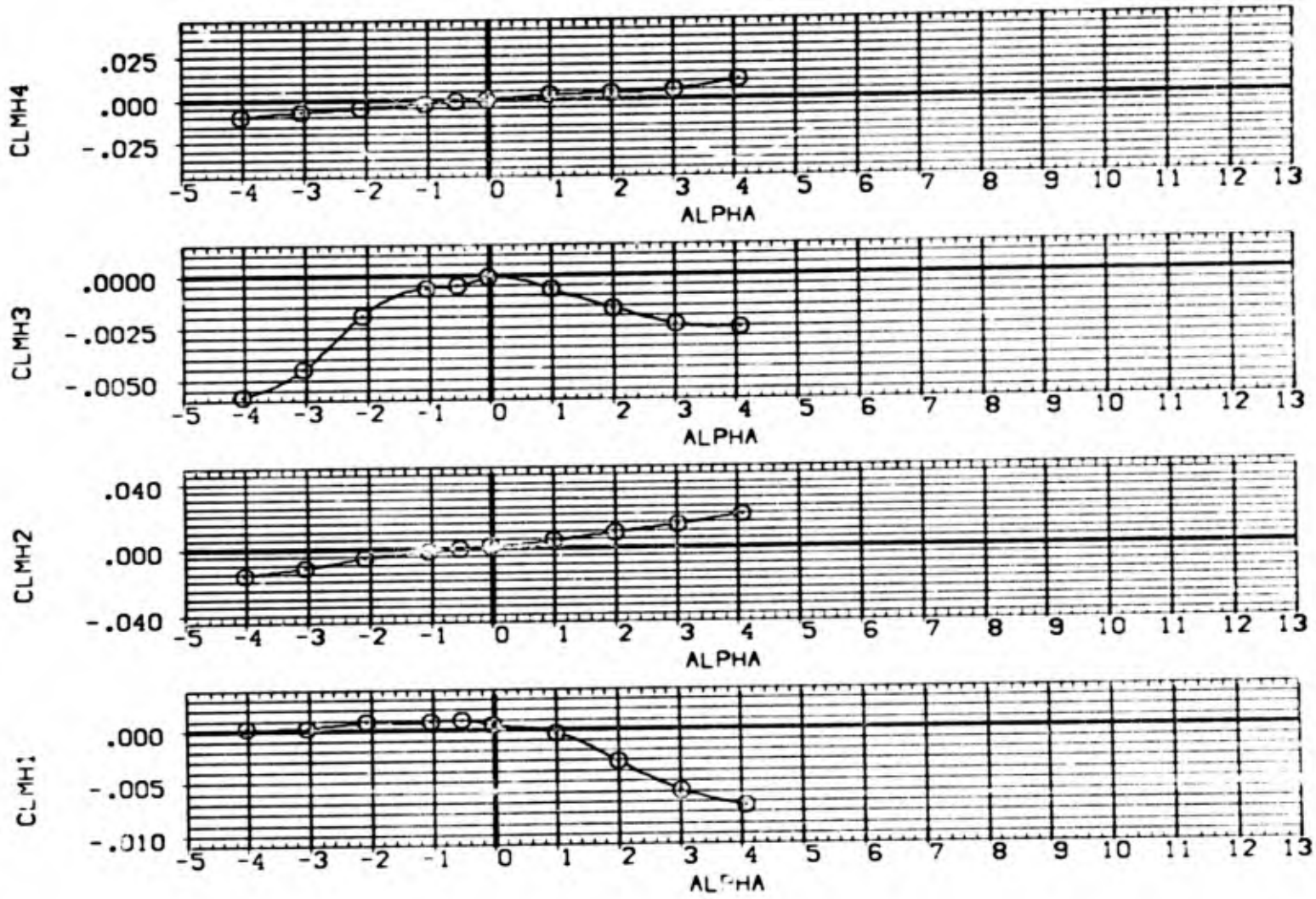
BASIC CHARACTERISTICS OF LONGBOW

(B)MAC- = .99

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DE164)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	7.200
(DE176)	○	DATA NOT AVAILABLE	.000	.000	2.000	7.200
(DE188)	◇	DATA NOT AVAILABLE	.000	.000	3.000	7.200

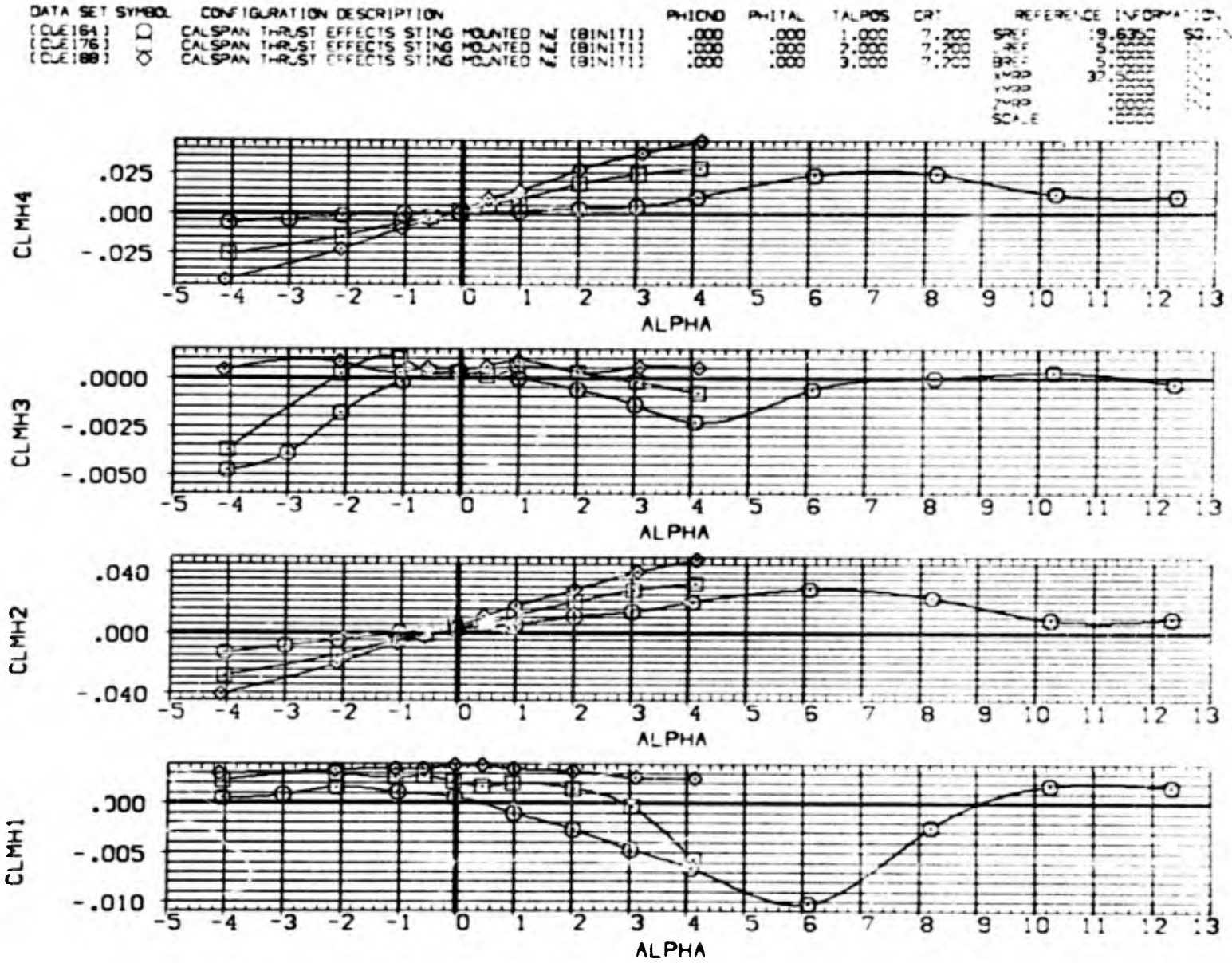
REFERENCE INFORMATION

SREF	19.6350	SQ. FT.
CREF	5.0000	FT.
BREF	5.0000	FT.
XMRC	32.5000	FT.
YMRC	.0000	FT.
ZMRC	.0000	FT.
SCALE	1.0000	



BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .90



BASIC CHARACTERISTICS OF LONGBOW

(B)MAC- = .99

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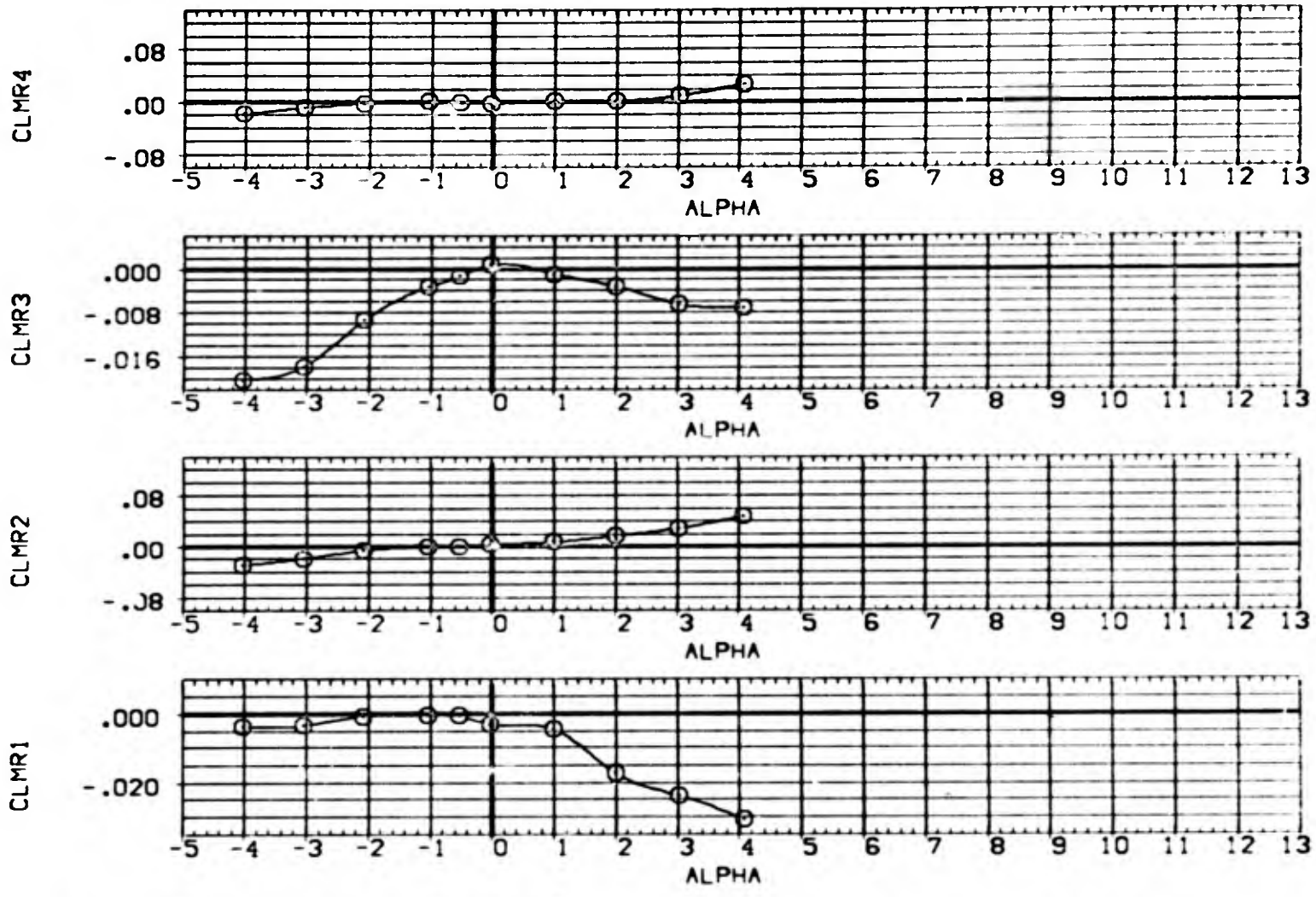
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CJE164)	□	CALSPAN THRUST EFFECTS STING MOUNTED NF (BINIT1)	.000	.000	1.000	7.200
(CJE176)	◇	DATA NOT AVAILABLE	.000	.000	2.000	7.200
(CJE188)	◇	DATA NOT AVAILABLE	.000	.000	3.000	7.200

REFERENCE INFORMATION

		SOURCE
SREF	19.6350	
LREF	5.0000	
BREF	5.0000	
XMRP	37.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



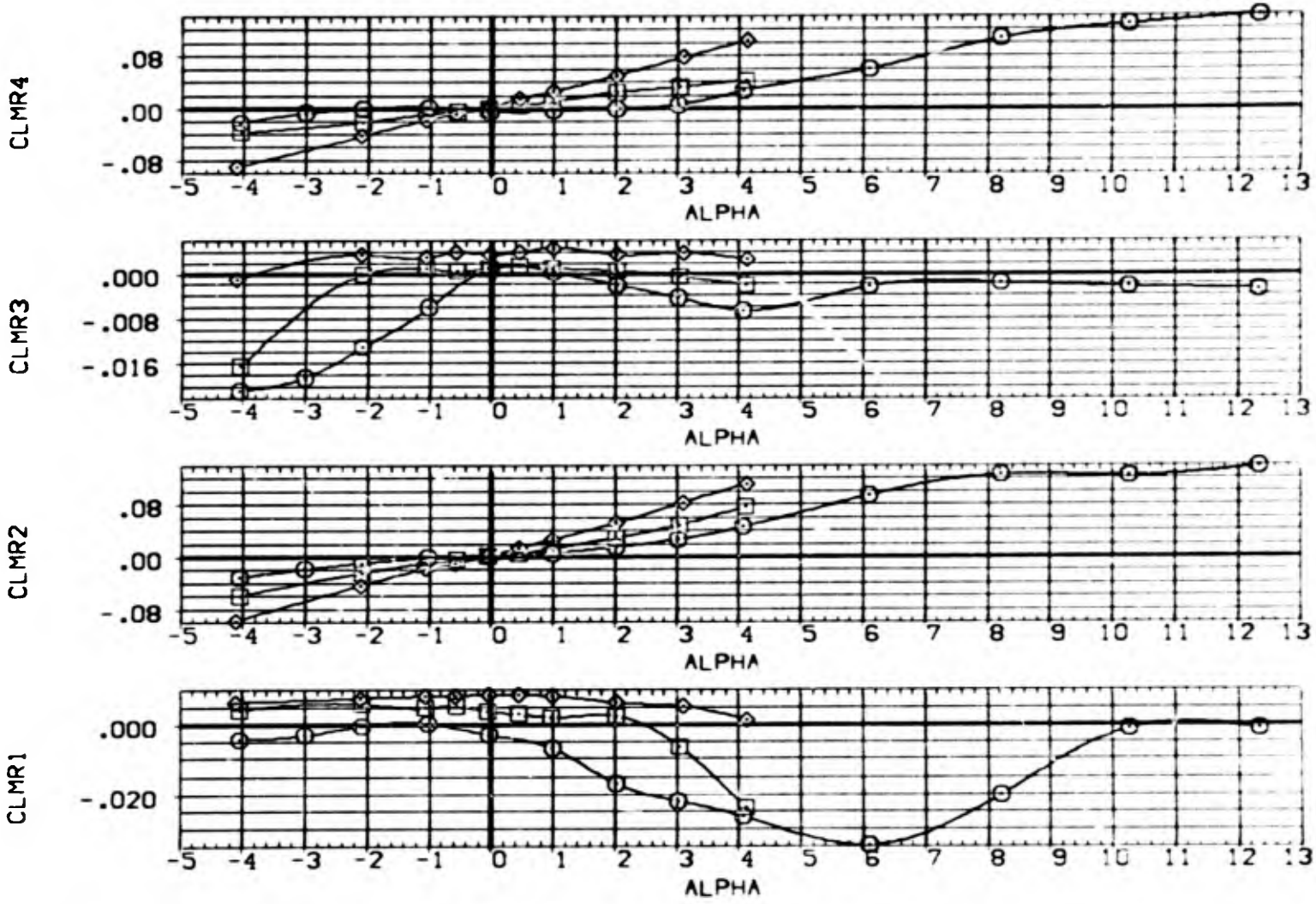
BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(CUE164)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	7.200
(CUE176)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	7.200
(CUE188)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	7.200

REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	1.0000	



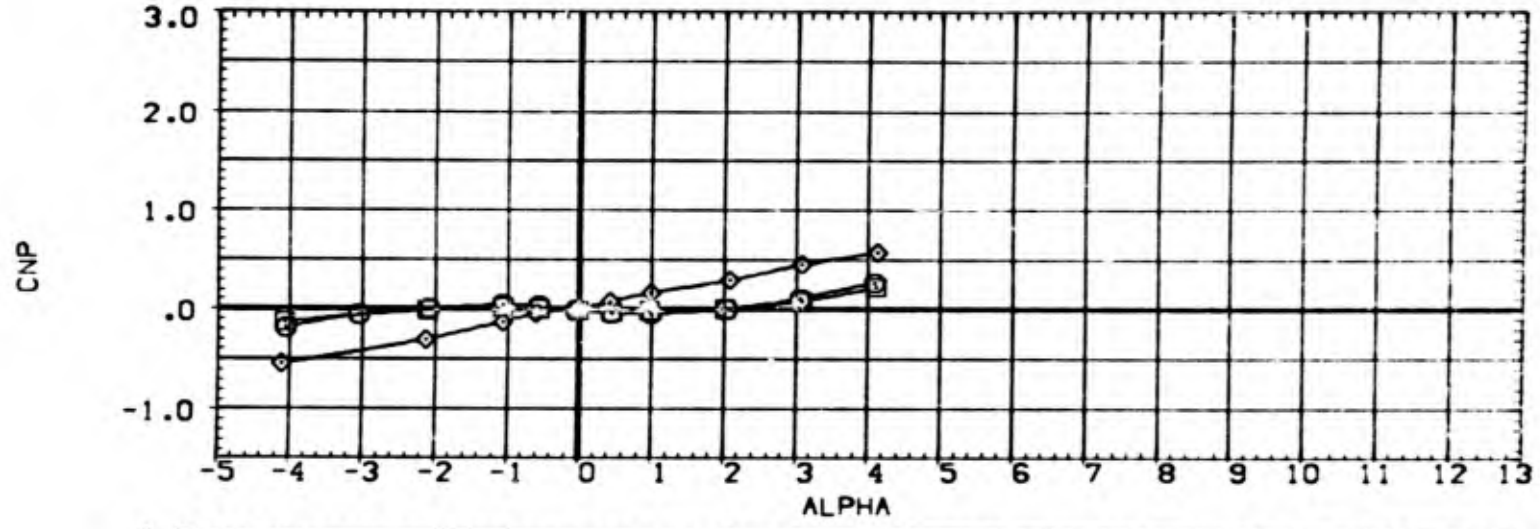
BASIC CHARACTERISTICS OF LONGBOW

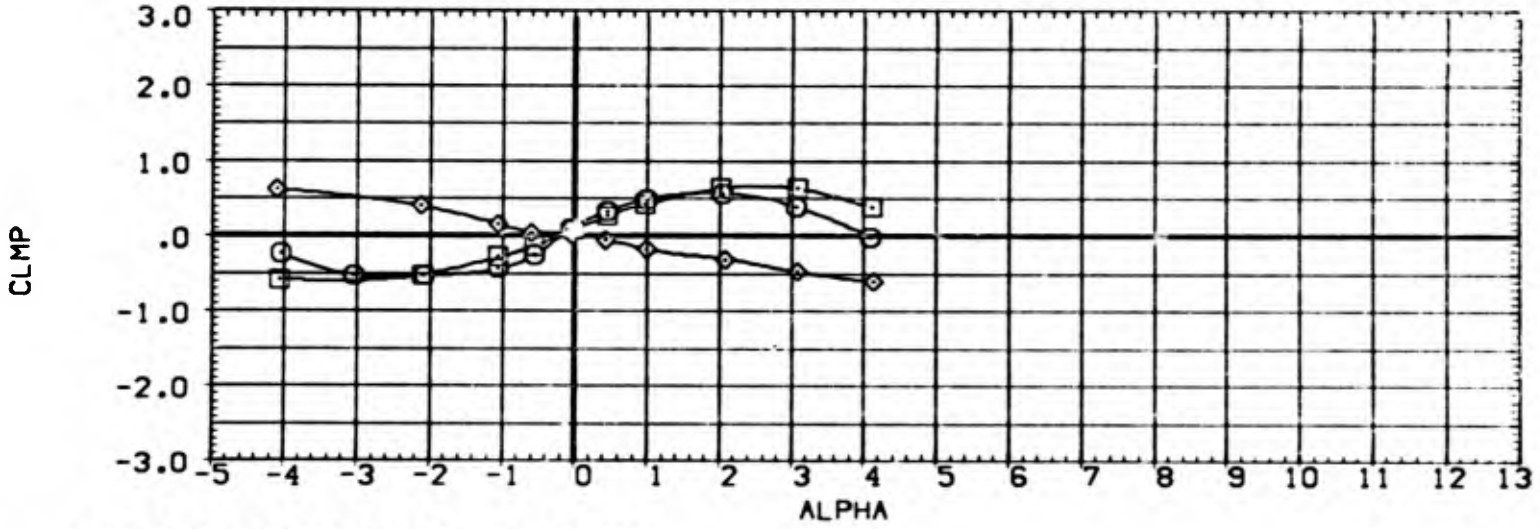
(B)MACH = .99

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(ELE165)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	6.000
(ELE177)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	6.000
(ELE189)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	6.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



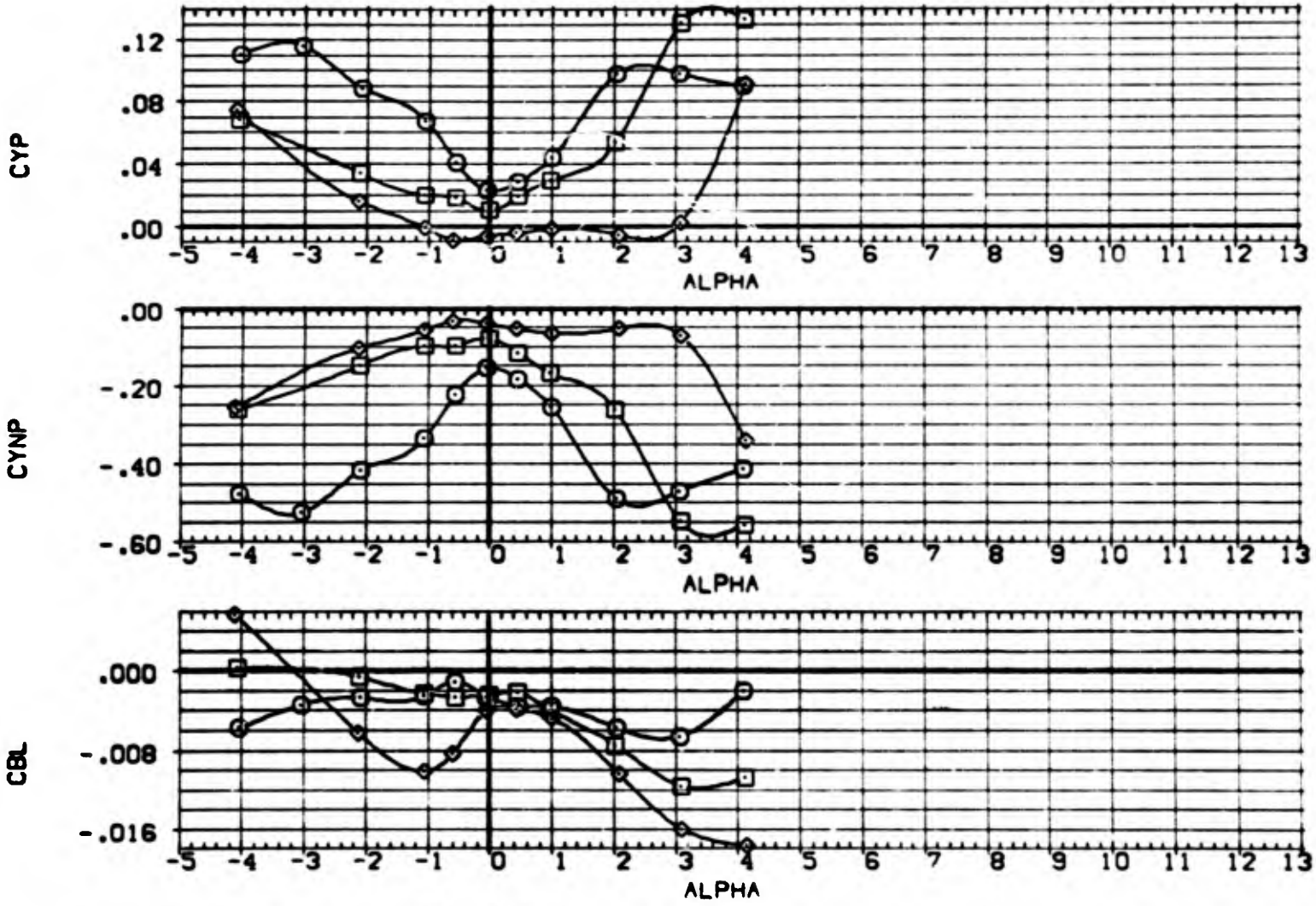


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(EUE165)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	1.000	6.000
(EUE177)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	2.000	6.000
(EUE189)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	3.000	6.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

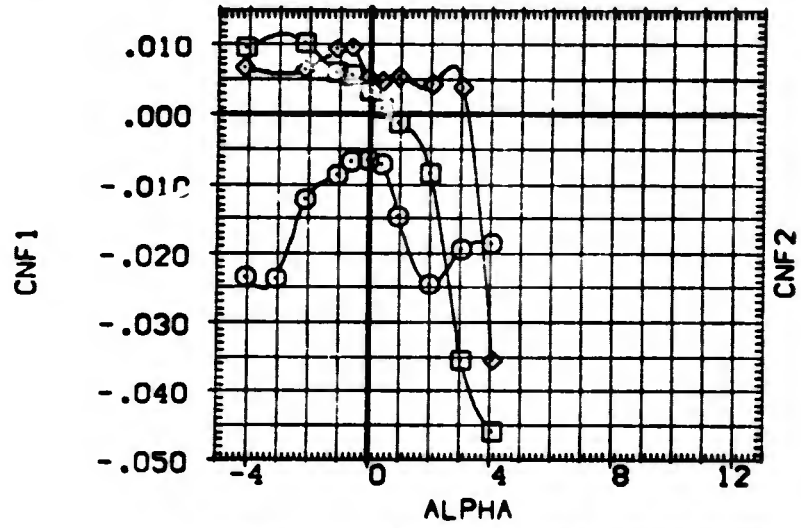


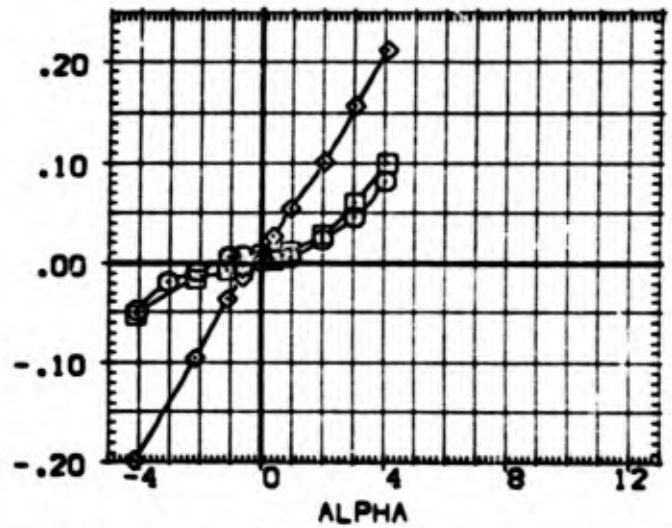
BASIC CHARACTERISTICS OF LONGBOW

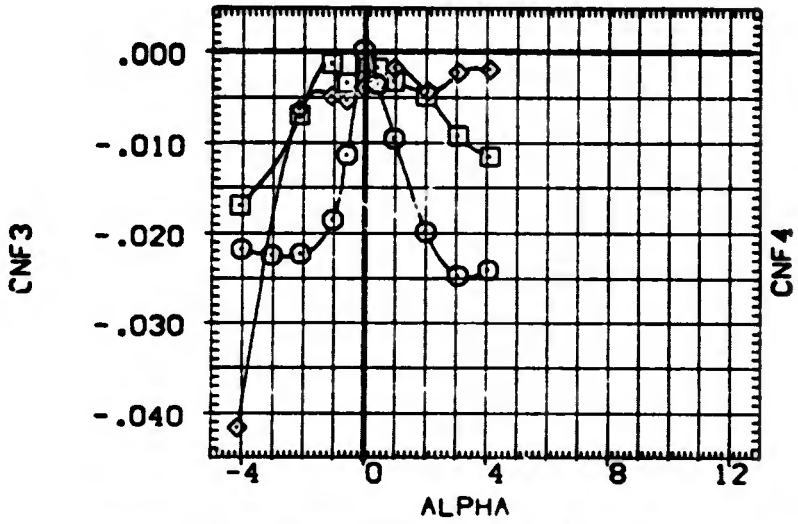
(A)MACH = 1.10

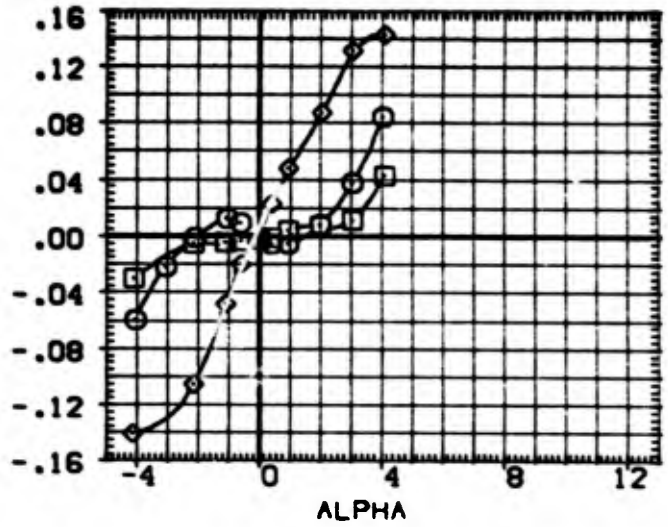
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BLE165)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT)	.000	.000	1.000	6.000
(BLE177)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT)	.000	.000	2.000	6.000
(BLE189)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT)	.000	.000	3.000	6.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	







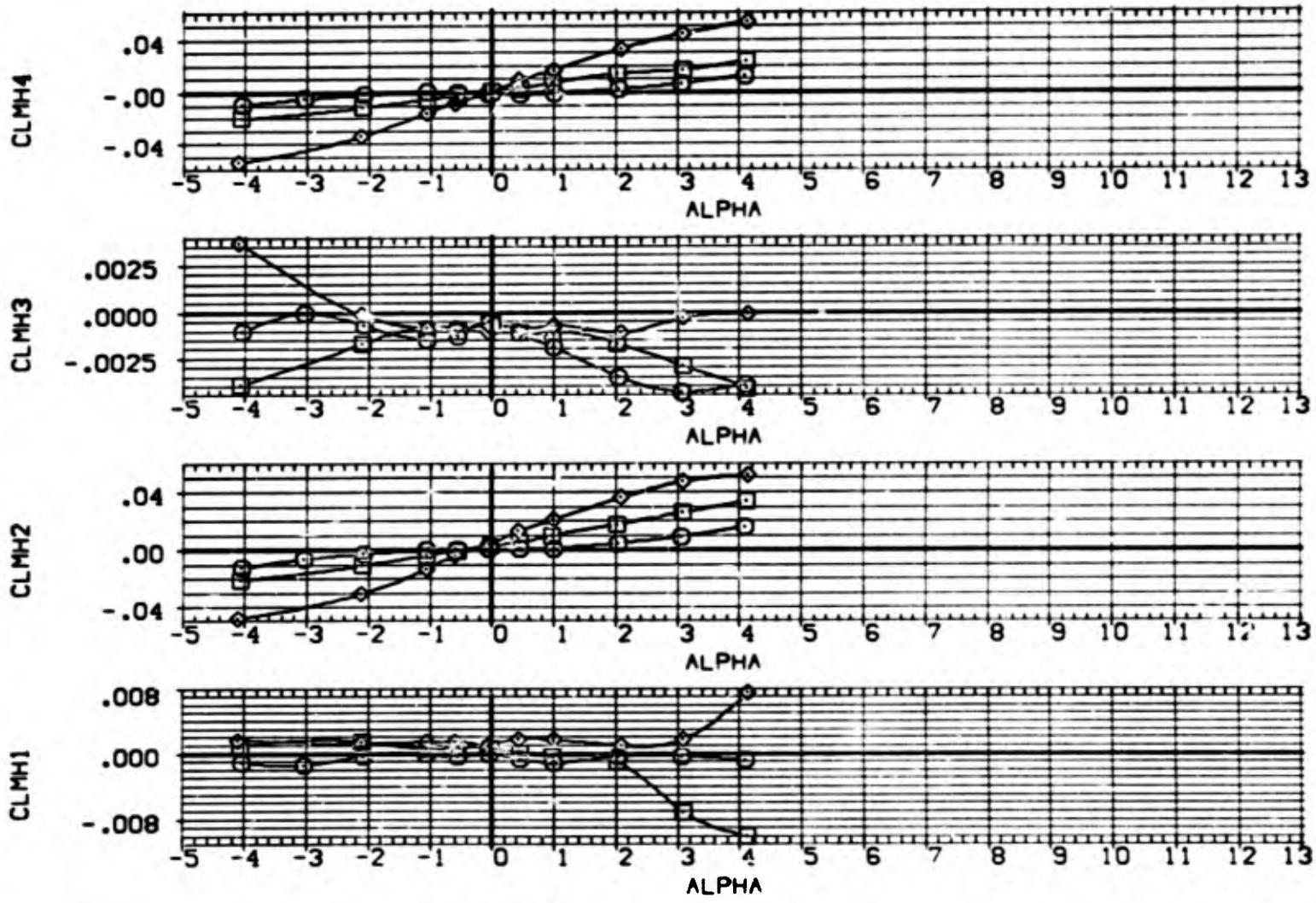


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DE165)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	1.000	6.000
(DE177)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	2.000	6.000
(DE189)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	3.000	6.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

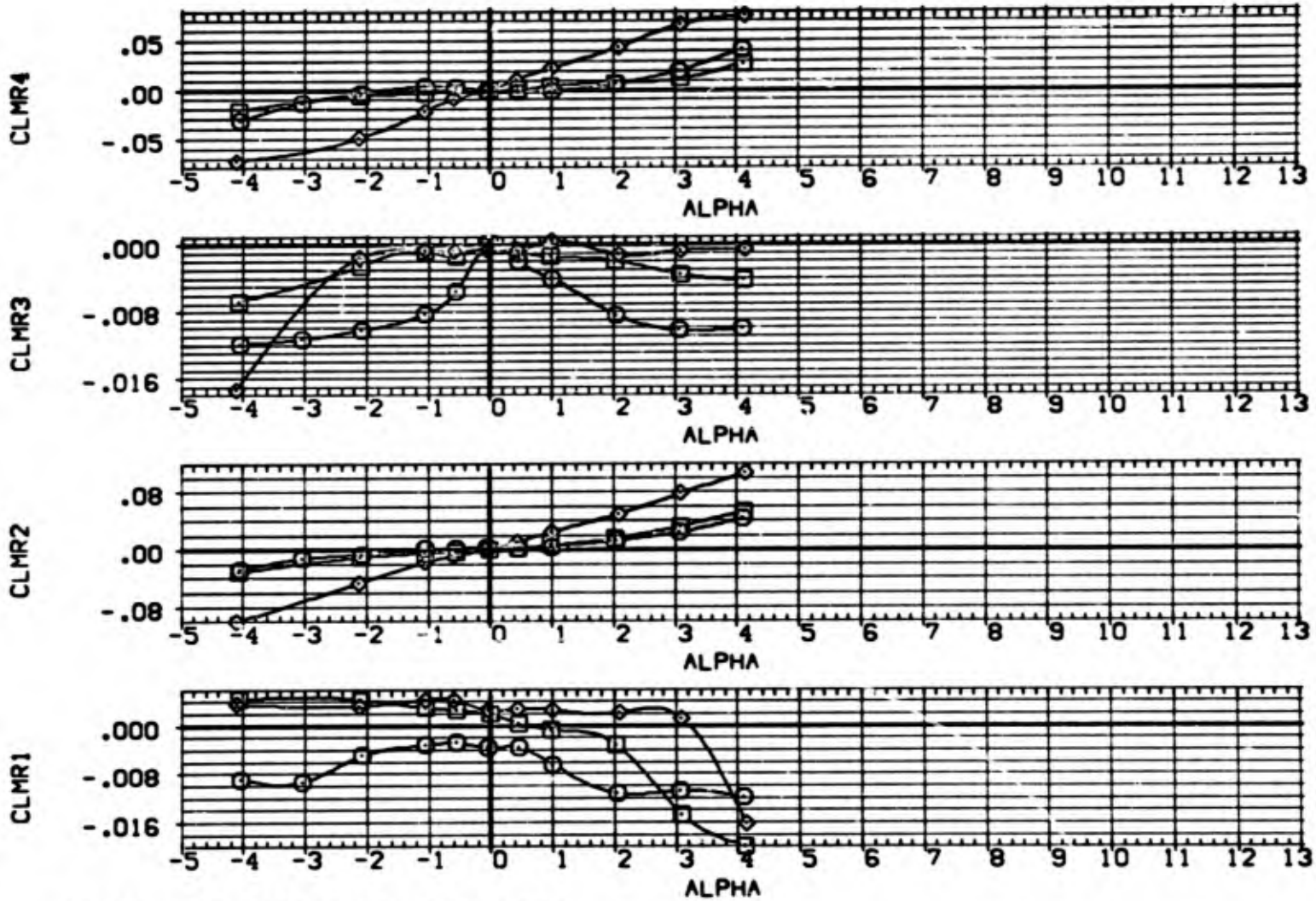


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE165)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	6.000
(CUE177)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	6.000
(CUE189)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	6.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

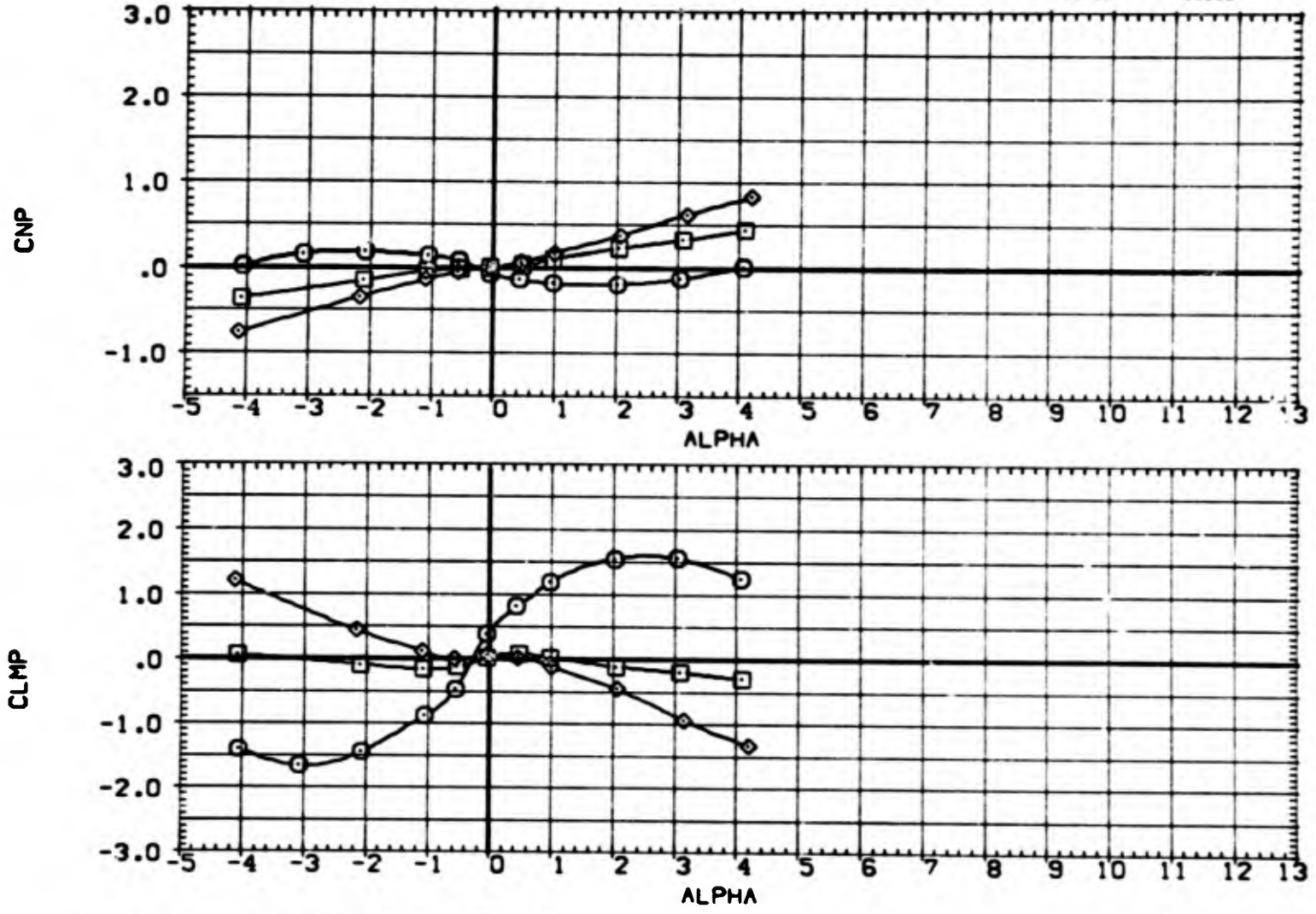


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(EUE166)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	5.000
(EUE178)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	5.000
(EUE190)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	5.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

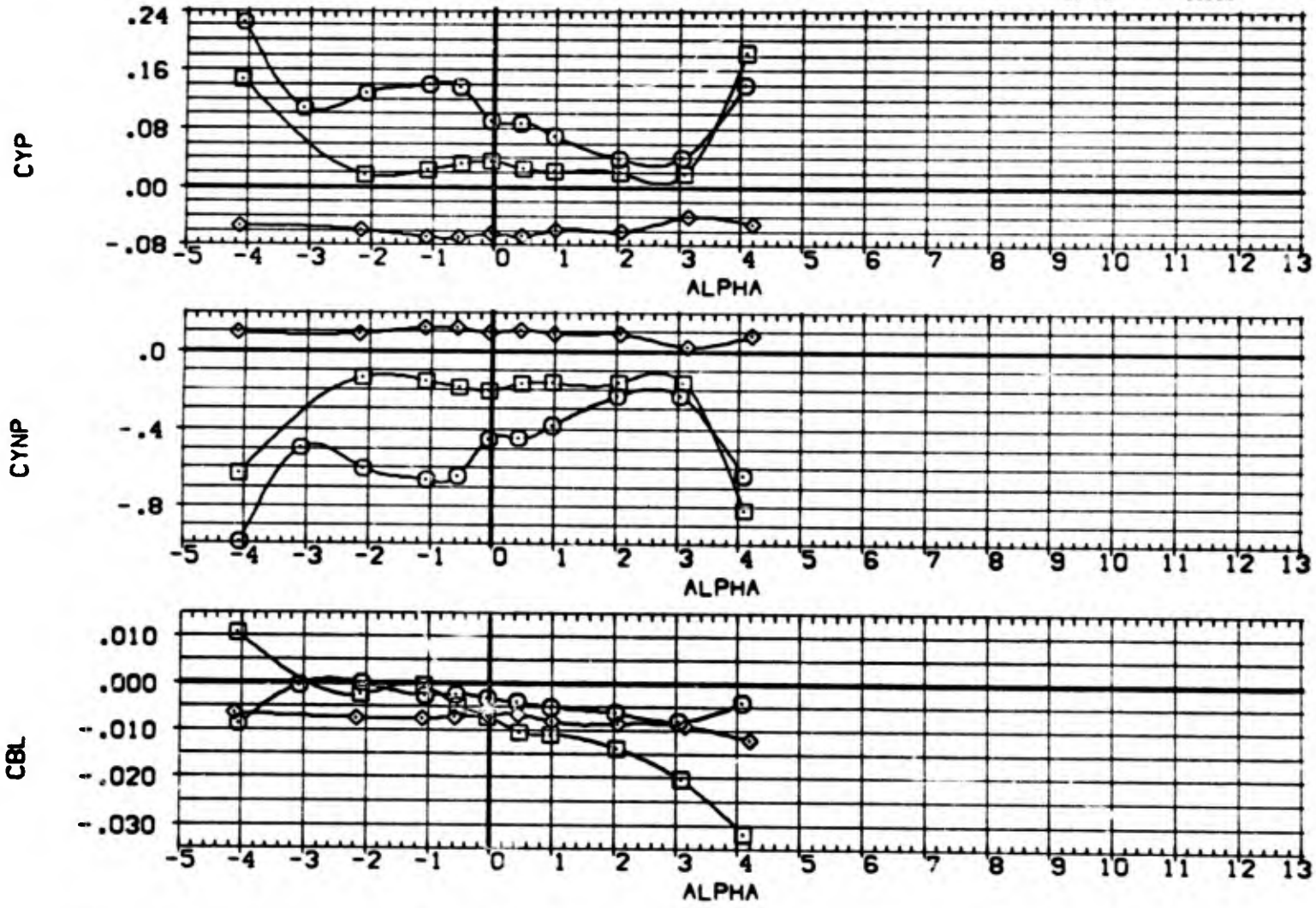


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(E6E166)	○	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT1)	.000	.000	1.000	5.000
(E6E178)	□	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT1)	.000	.000	2.000	5.000
(E6E190)	◇	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT1)	.000	.000	3.000	5.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

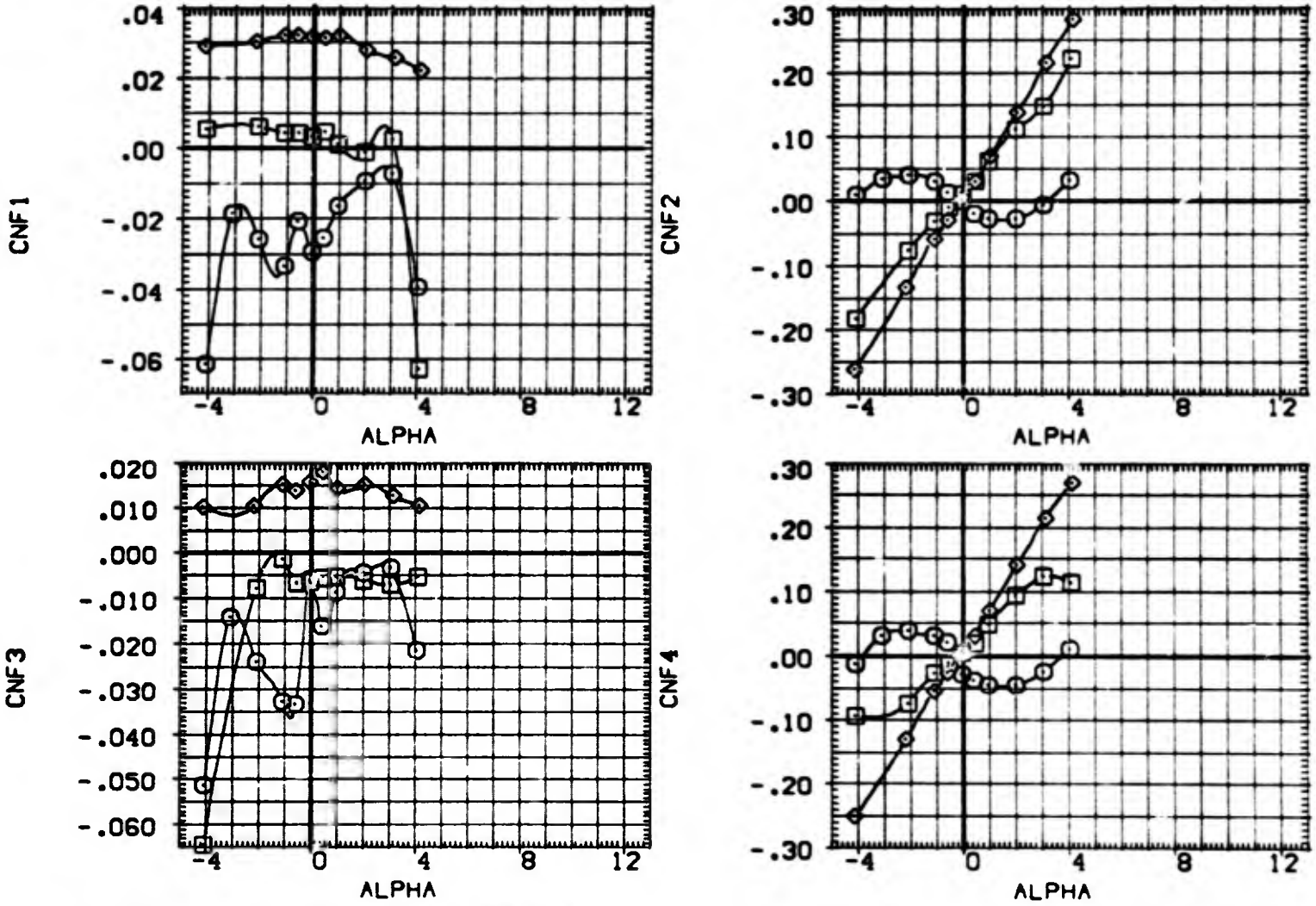


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.25

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BUE166) ○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	5.000
(BUE178) □	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	5.000
(BUE190) ◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	5.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

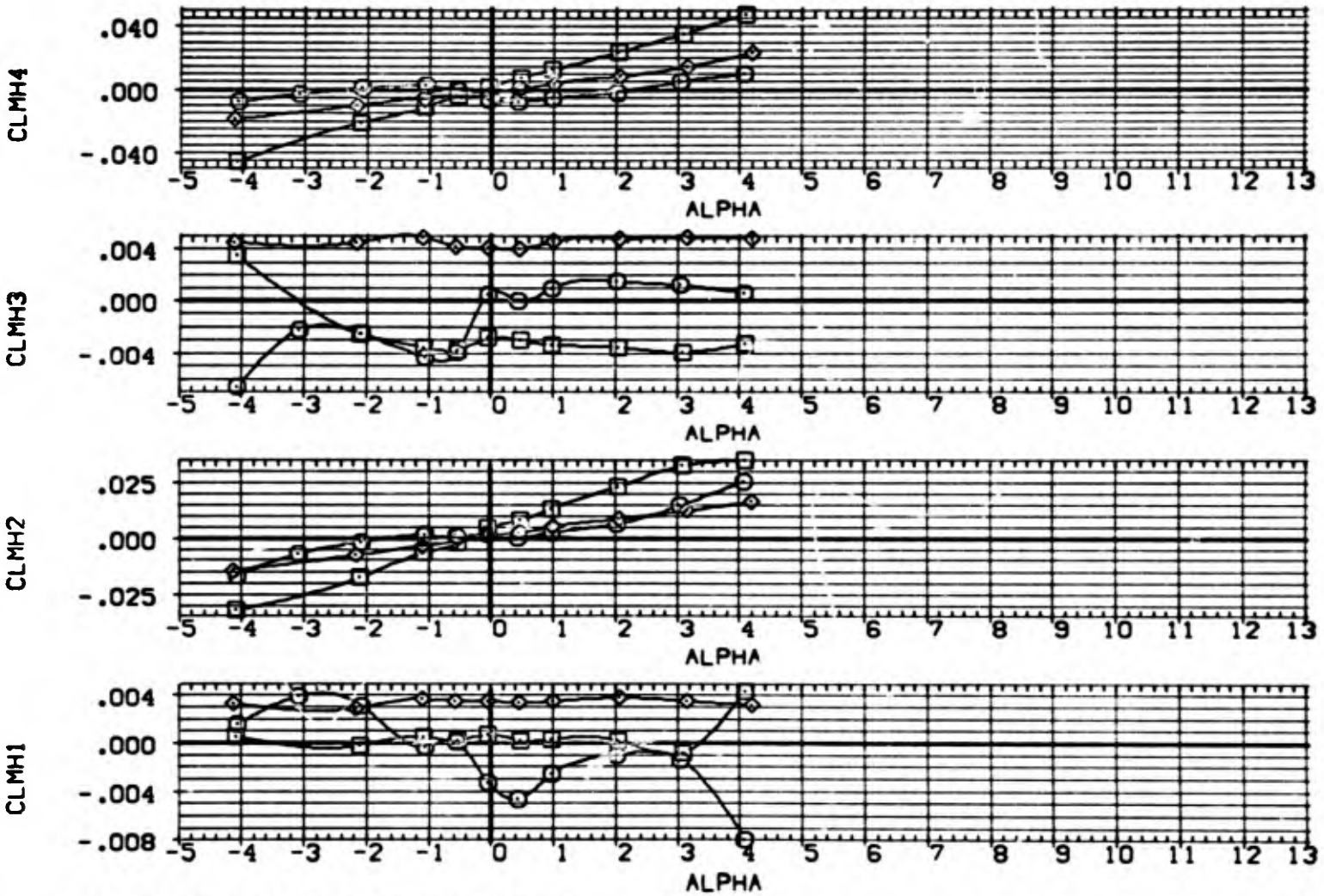


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	ORT
(CUE166)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	5.000
(CUE178)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	5.000
(CUE190)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	5.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

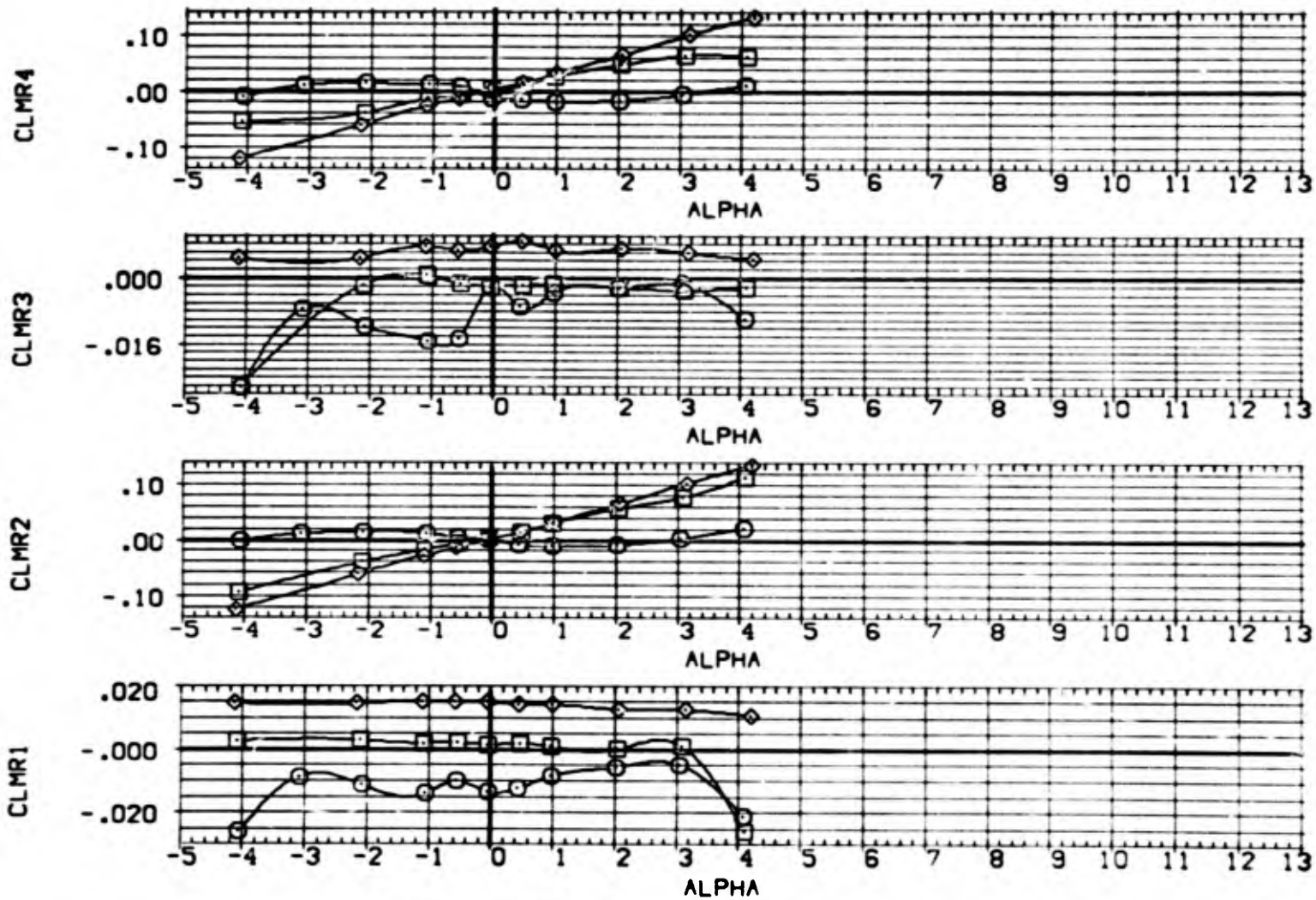


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.25

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	MHITAL	TALPOS	CRT
(CUE166)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	5.000
(CUE178)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	5.000
(CUE190)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	5.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

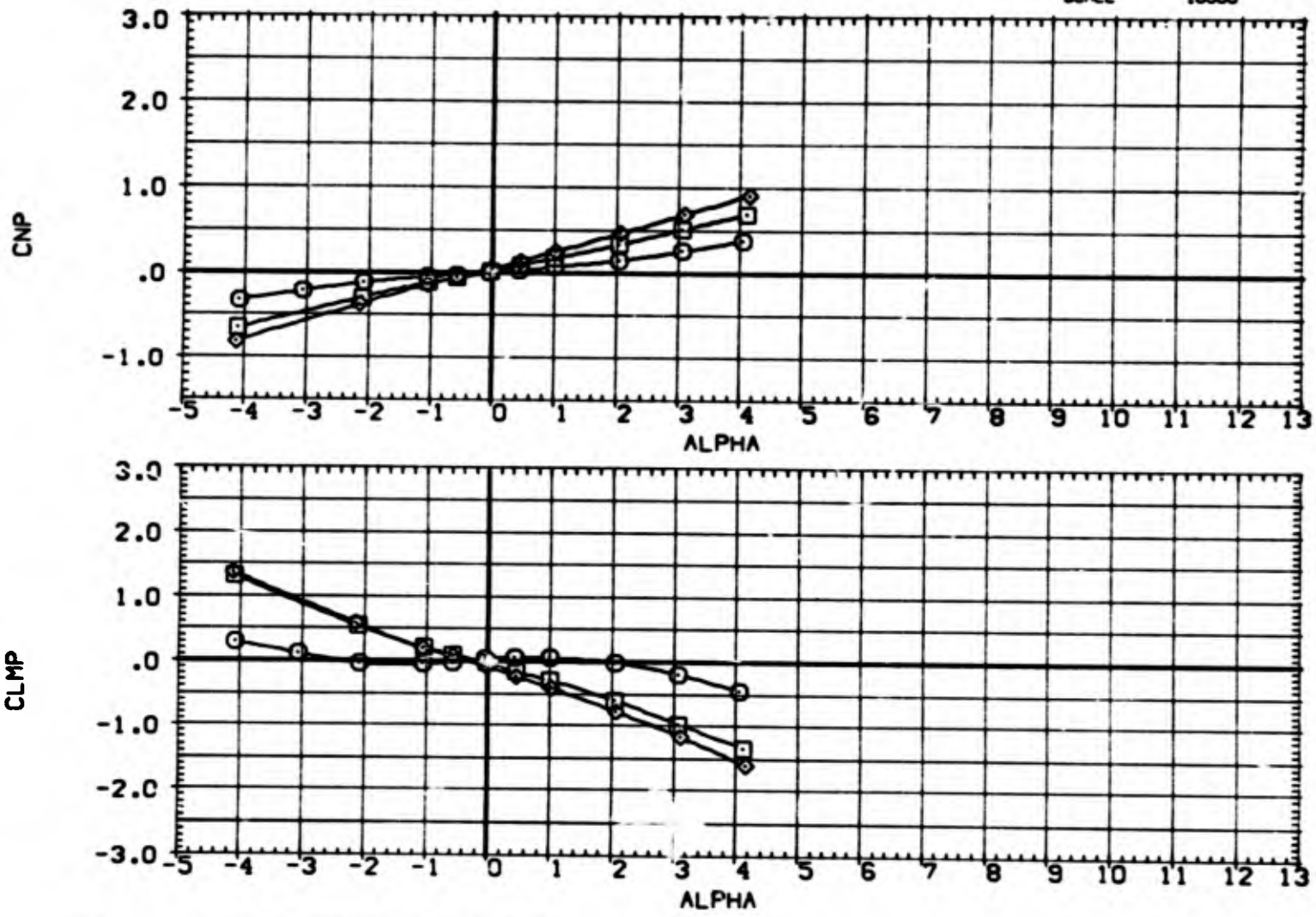


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHIDNO	PHITAL	TALPOS	CRT
(ELE167)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	1.000	4.200
(ELE179)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	2.000	4.200
(ELE191)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

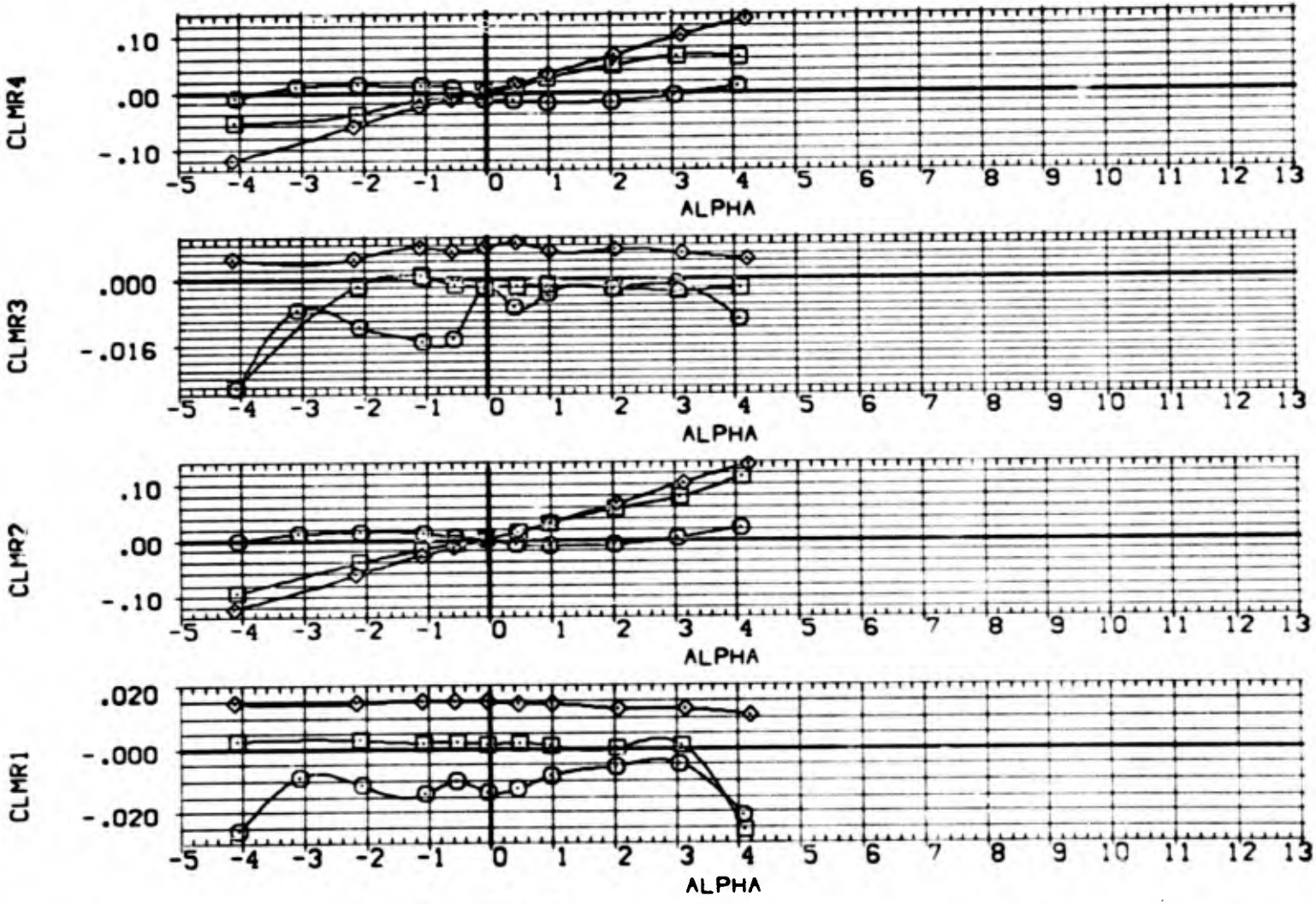


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(OUE166)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	5.000
(OUE178)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	5.000
(OUE190)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	5.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

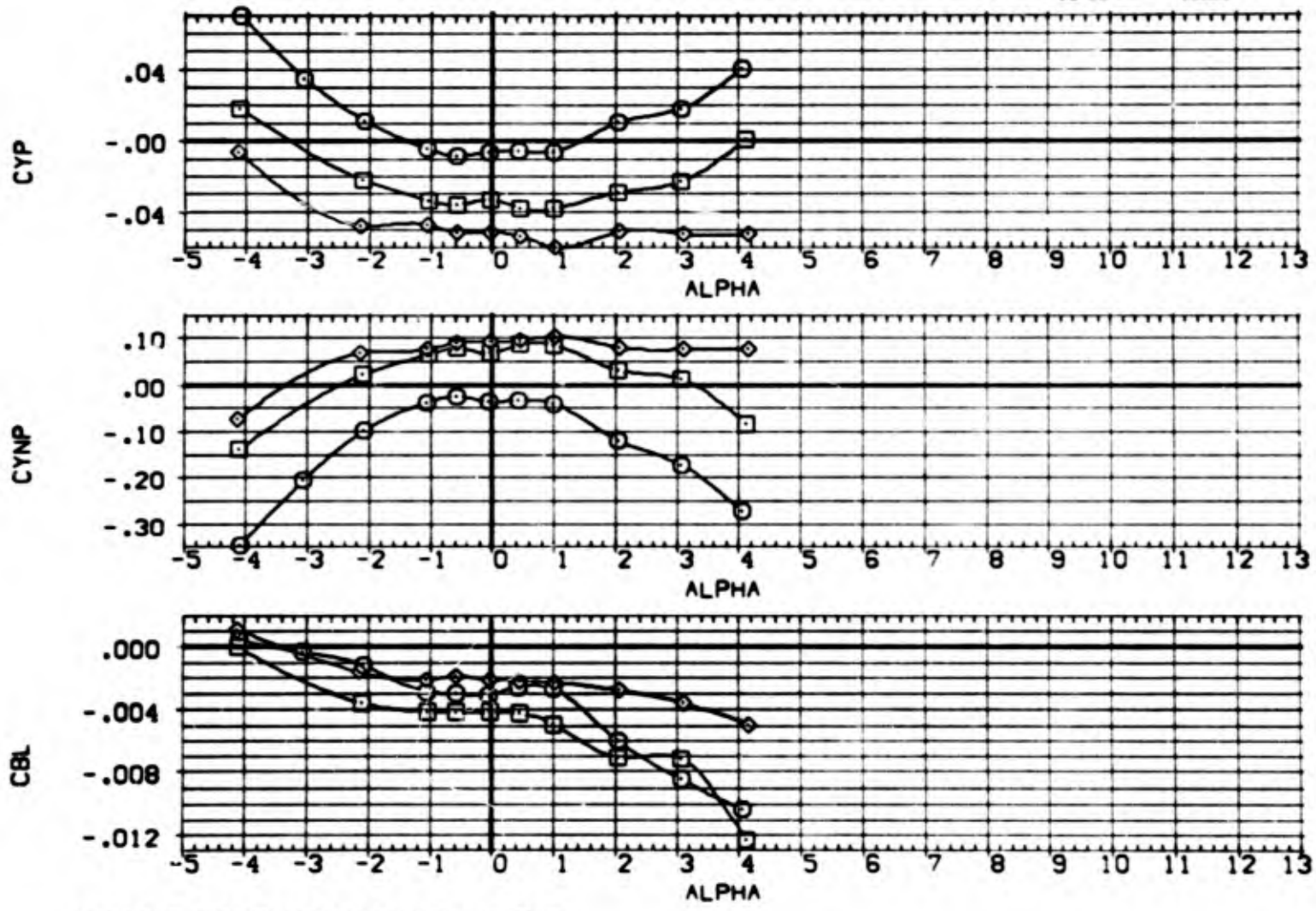


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE167)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	4.200
(EUE179)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	4.200
(EUE191)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

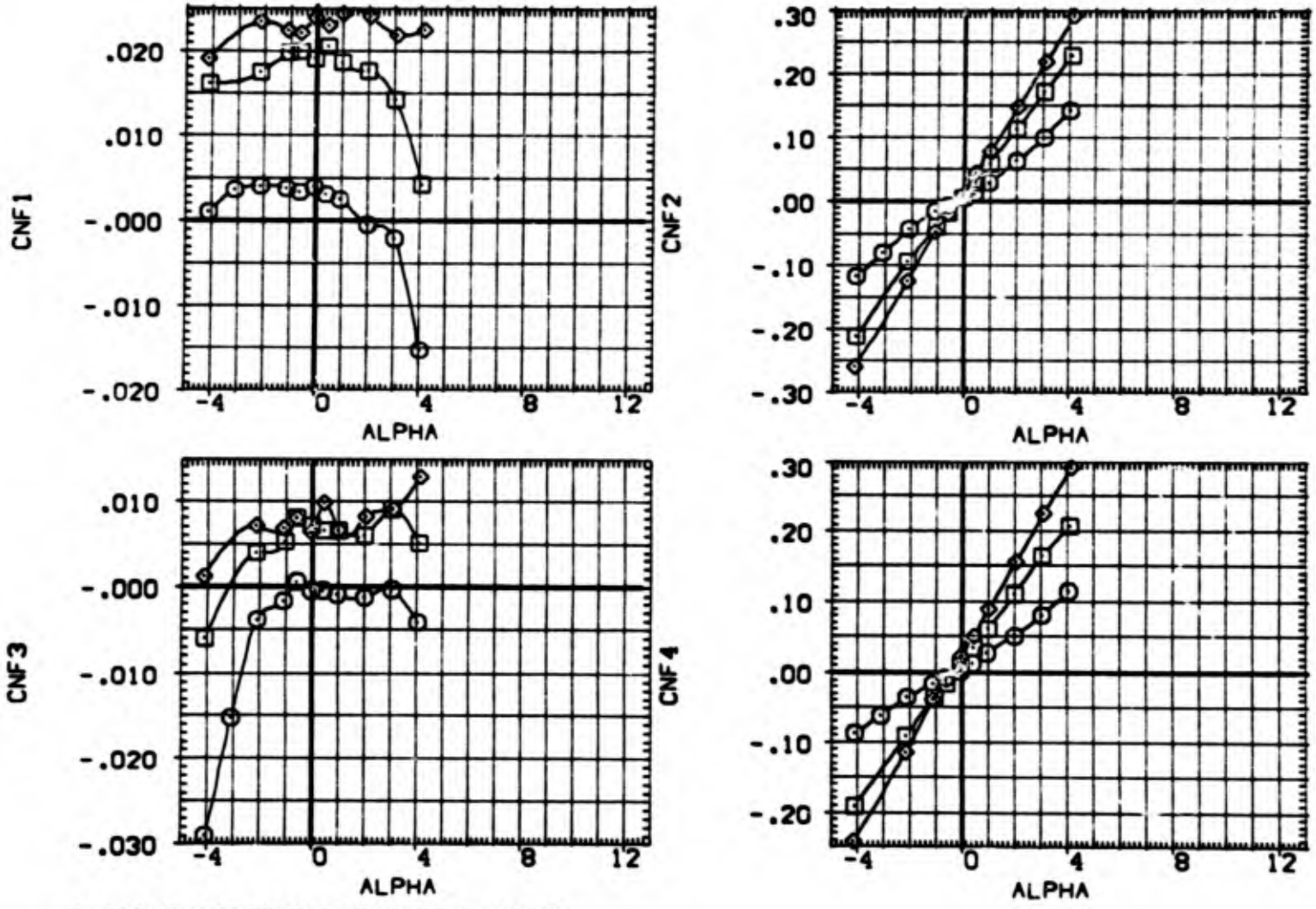


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.00

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BLE157)	○	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT)	.000	.000	1.000	4.200
(BLE179)	□	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT)	.000	.000	2.000	4.200
(BLE191)	◇	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT)	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

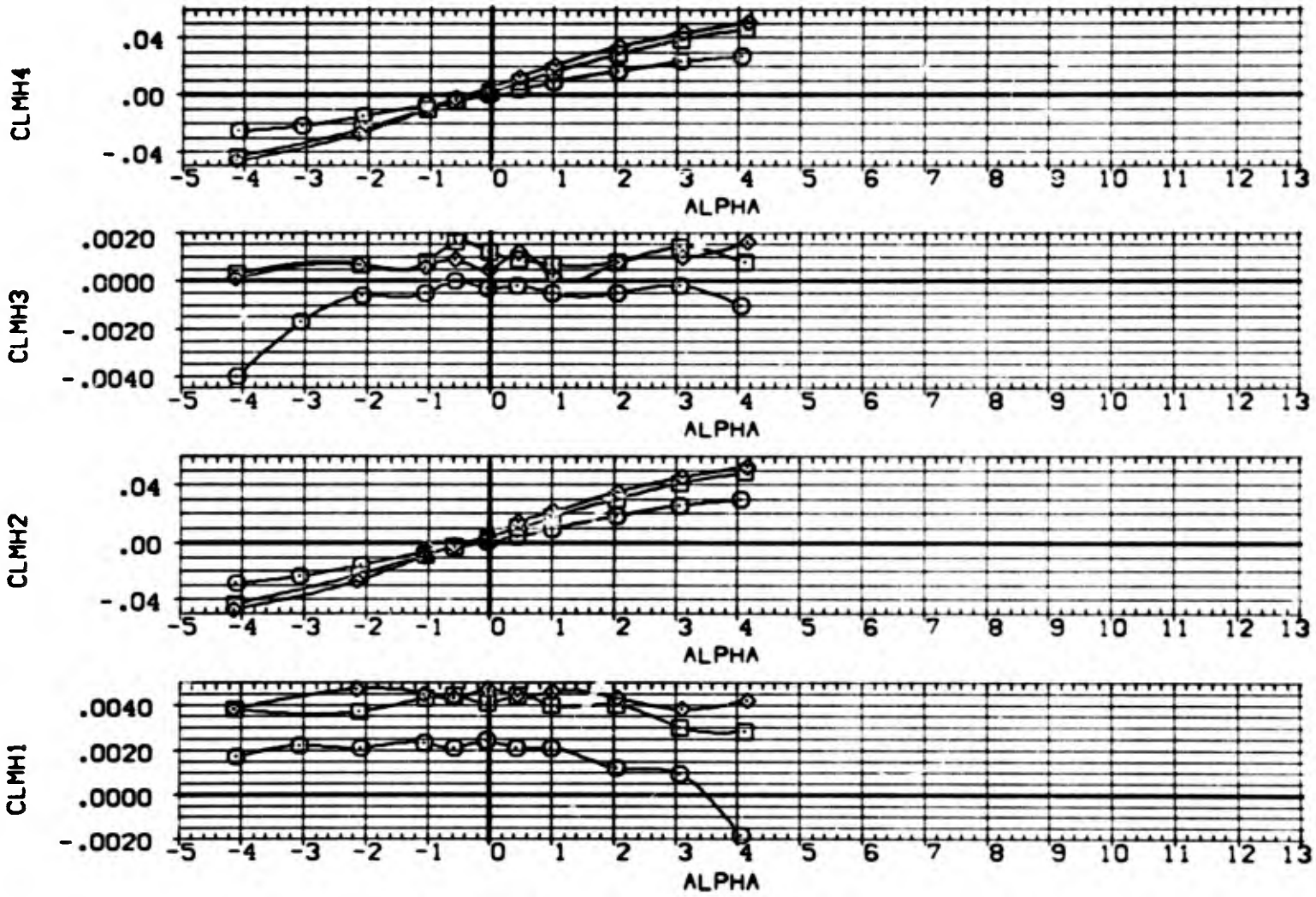


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPSS	CRT
(DE167)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	4.200
(DE179)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	4.200
(DE191)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

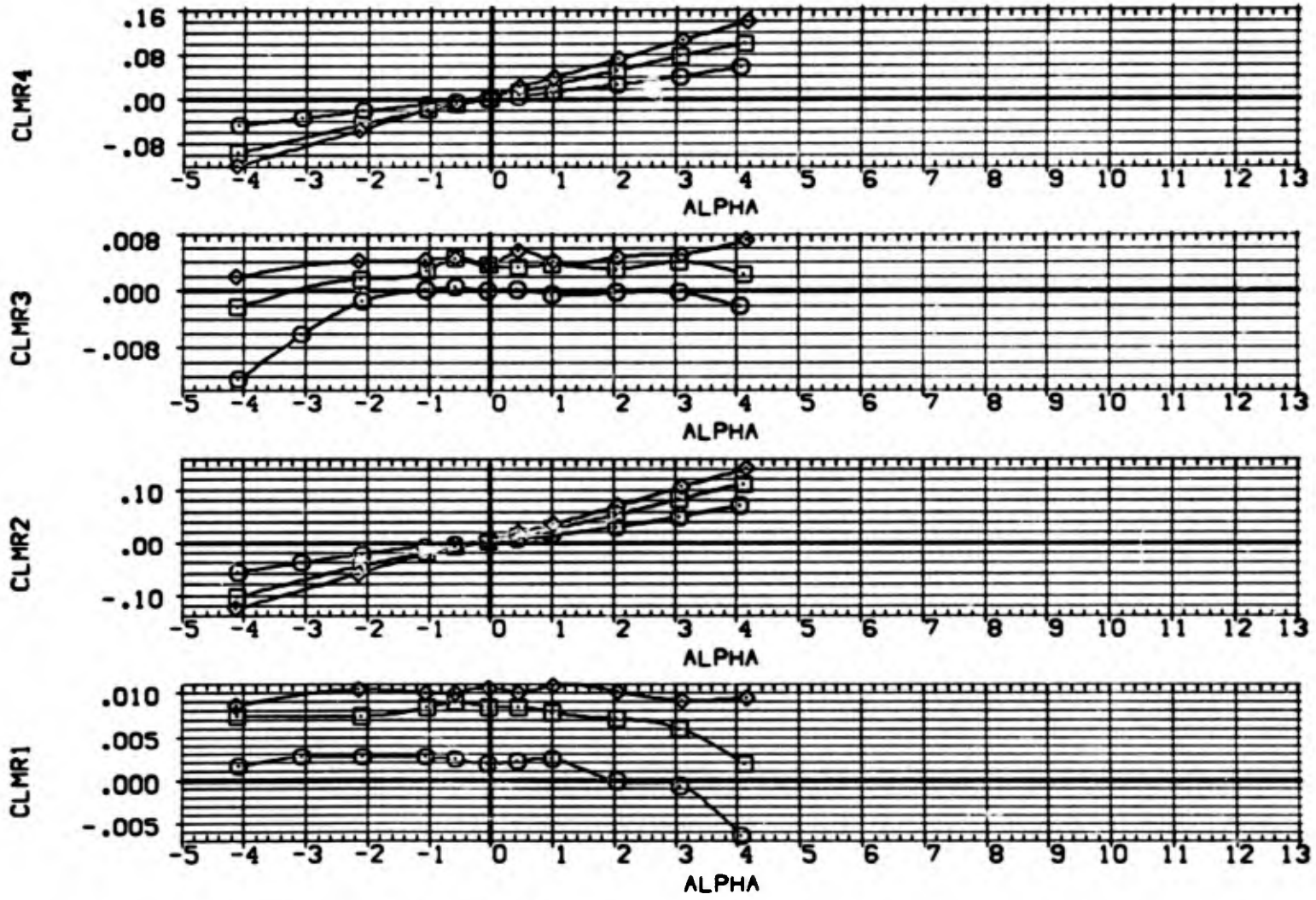


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DE167)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	1.000	4.200
(DE179)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	2.000	4.200
(DE191)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	13.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

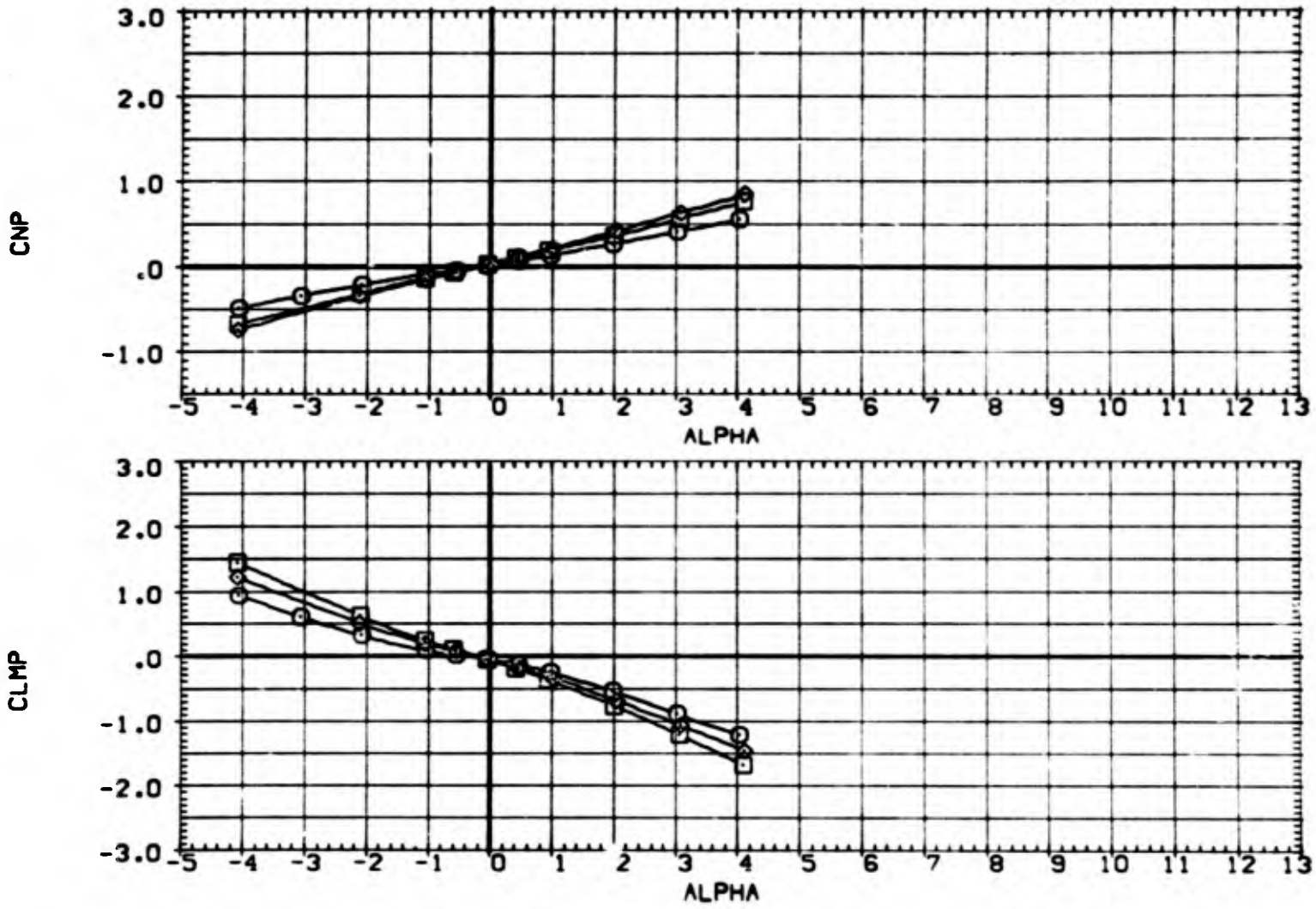


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(EVE168)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	3.600
(EVE180)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	3.600
(EVE192)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	3.600

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

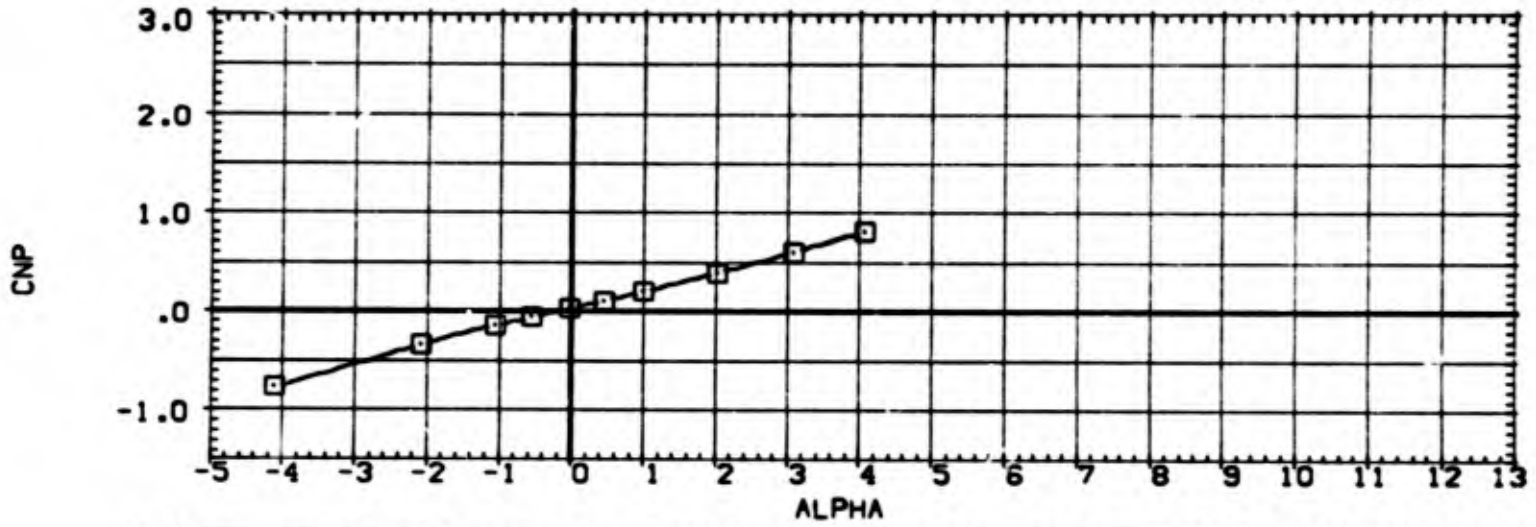


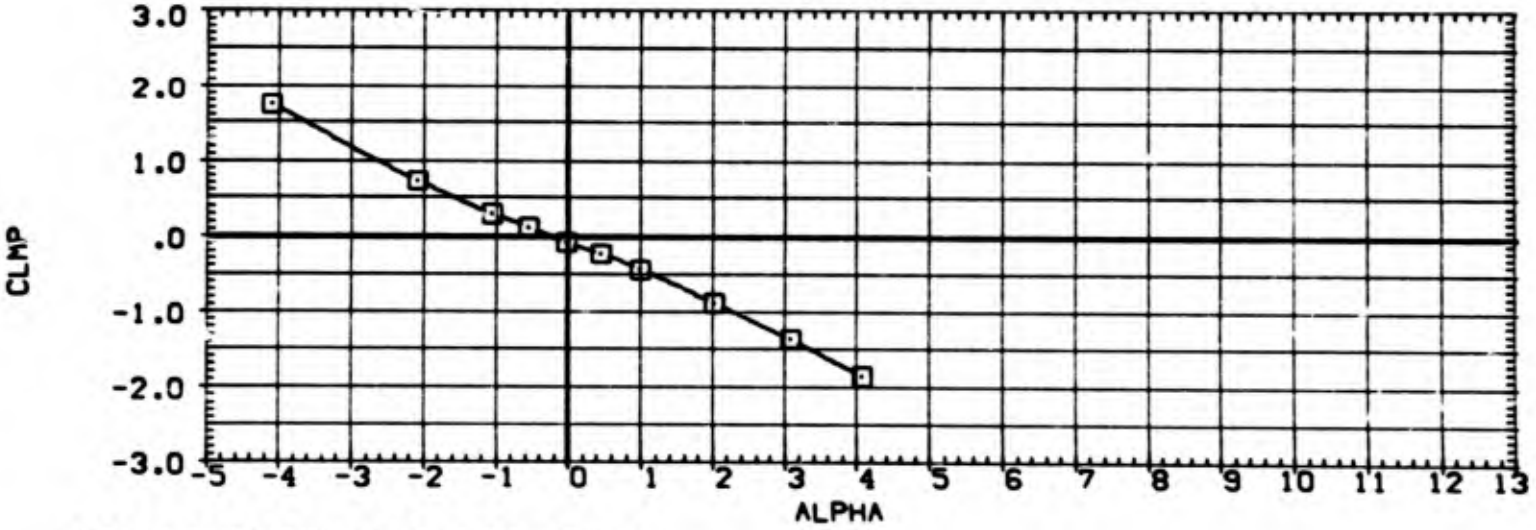
BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .80

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(EUE198)	○	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(EUE180)	□	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	2.000	3.600
(EUE192)	◇	DATA NOT AVAILABLE	.000	.000	3.000	3.600

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



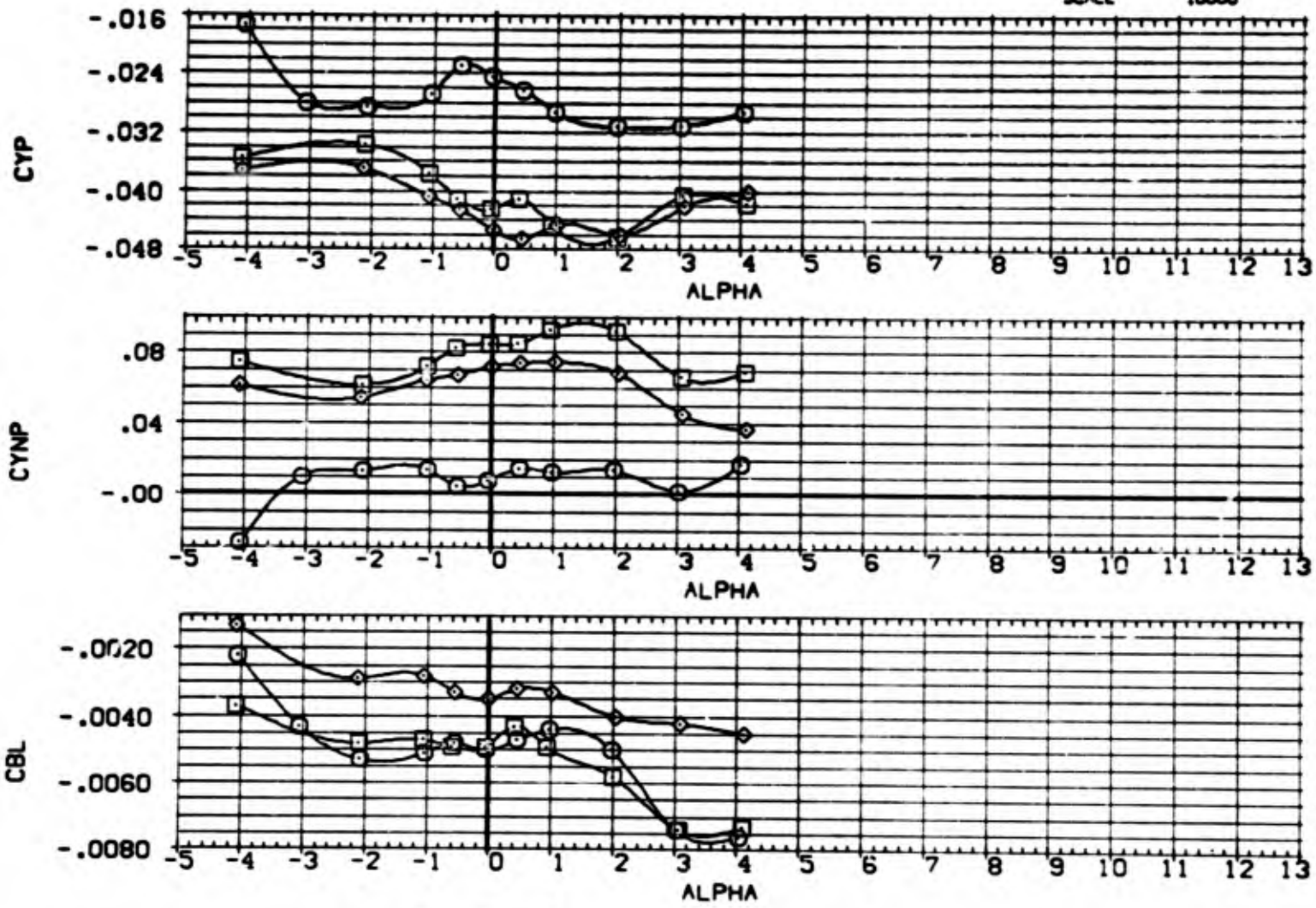


BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(EVE168)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	3.600
(EVE180)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	3.600
(EVE192)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	3.600

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

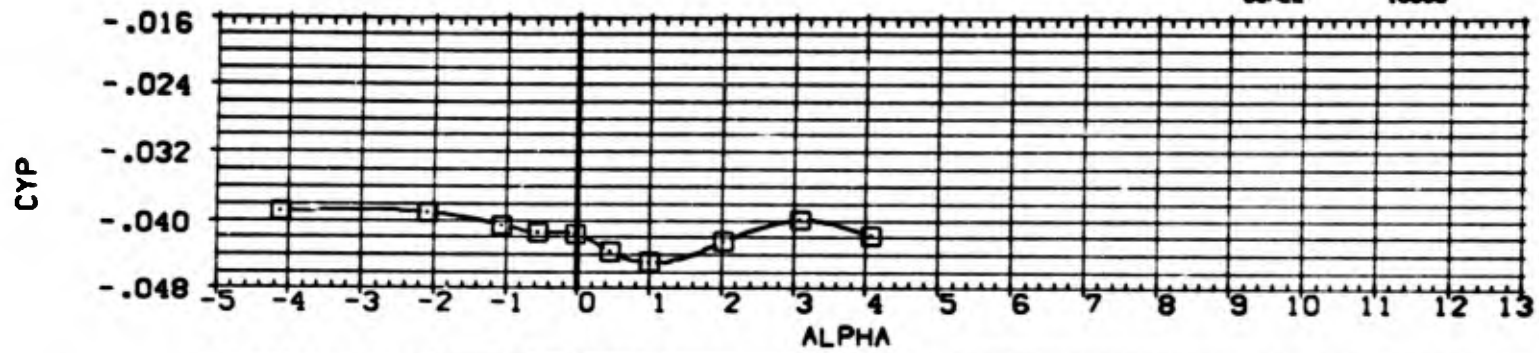


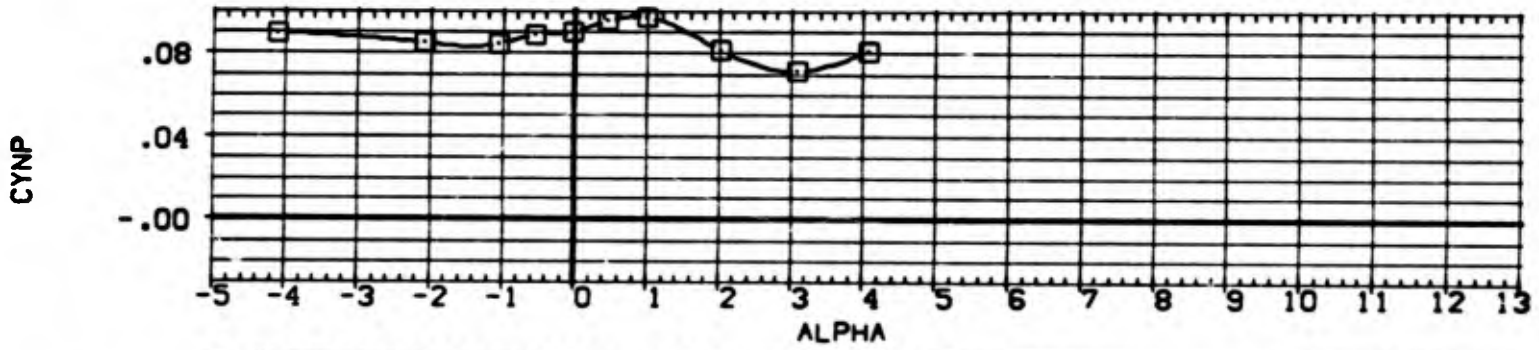
BASIC CHARACTERISTICS OF LONGBOW

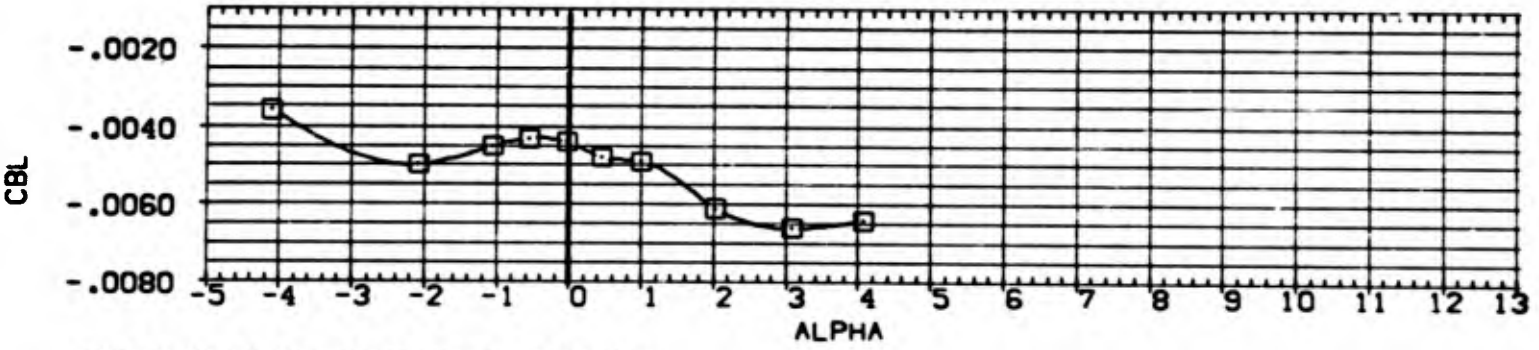
(A)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(EJE168)	DATA NOT AVAILABLE				
(EJE180)	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	1.000	3.600
(EJE192)	DATA NOT AVAILABLE	.000	.000	3.000	3.600

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	





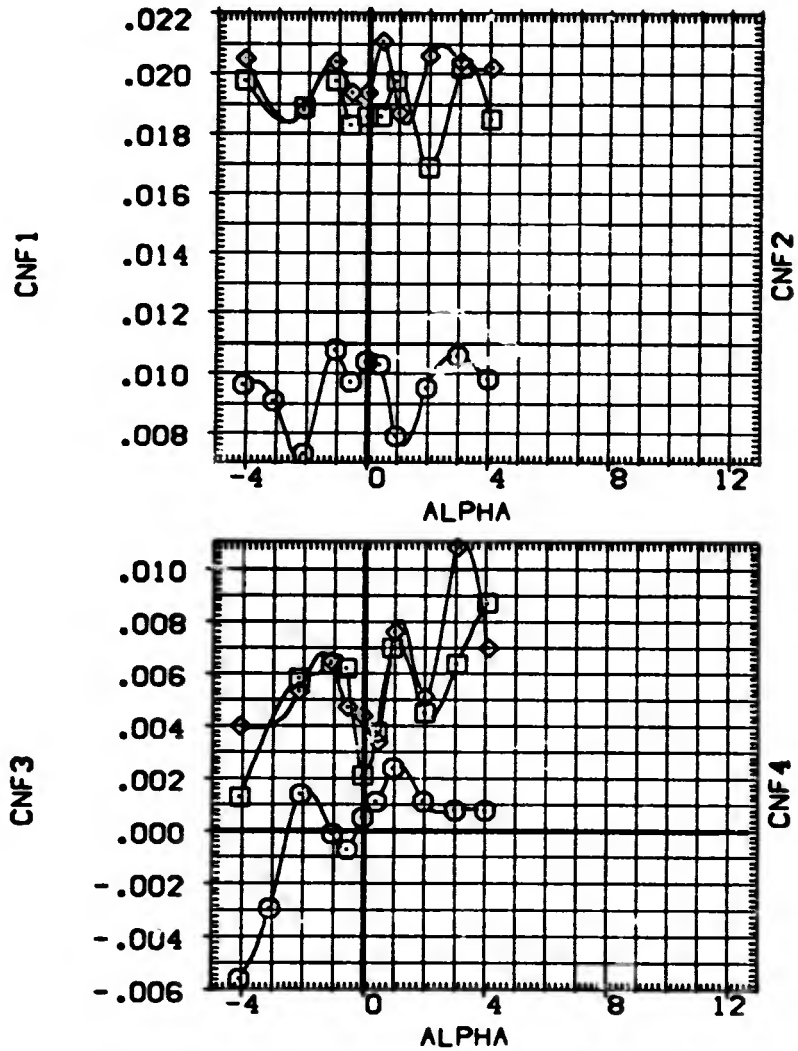


BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BUE168)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	3.600
(BUE180)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	3.600
(BUE192)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	3.600

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

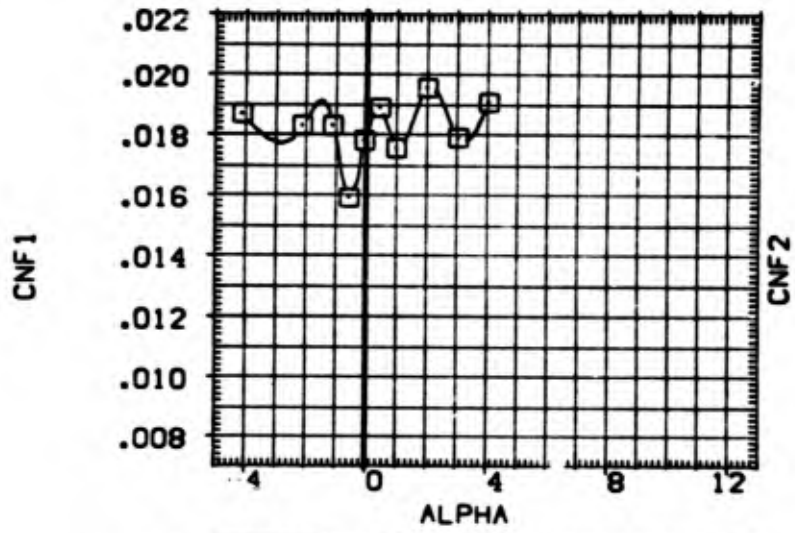


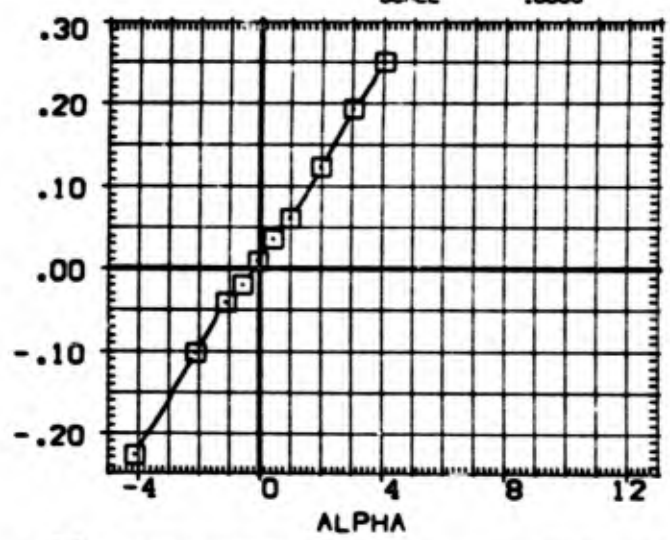
BASIC CHARACTERISTICS OF LONGBOW

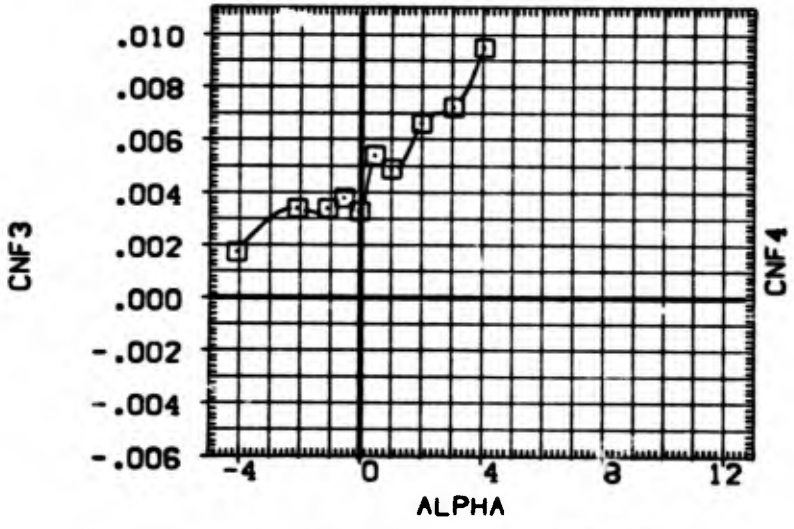
(A)MACH = .80

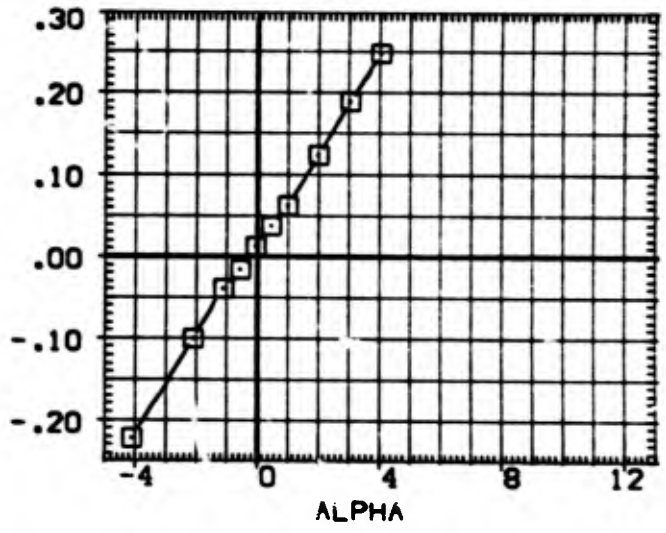
DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLK168)	□	DATA NOT AVAILABLE				
(BLK180)	△	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINITI)	.000	.000	1.000	3.600
(BLK192)	◇	DATA NOT AVAILABLE	.000	.000	2.000	3.600
			.000	.000	3.000	3.600

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	







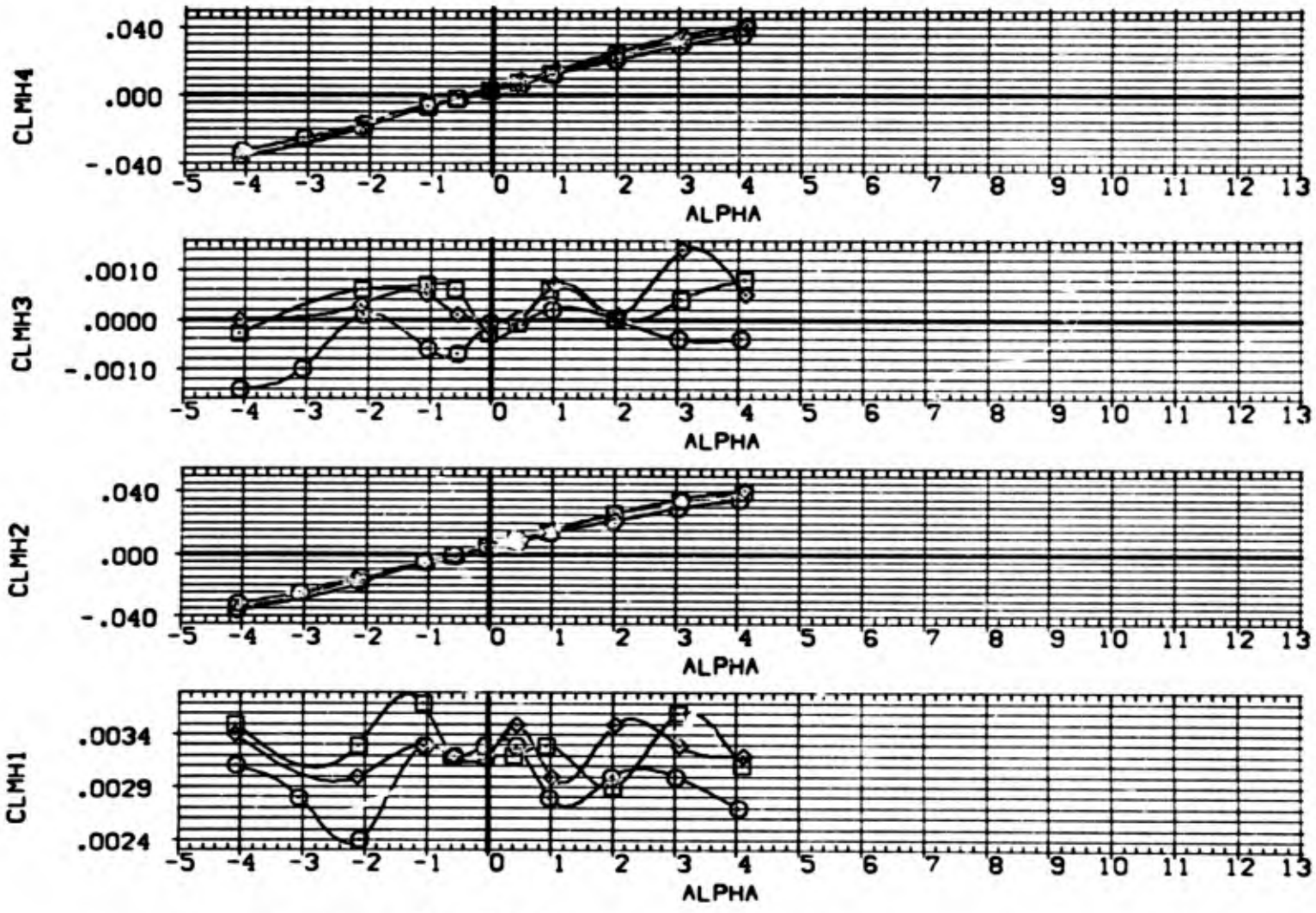


BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE168)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	1.000	3.600
(CUE180)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	2.000	3.600
(CUE192)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	3.000	3.600

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

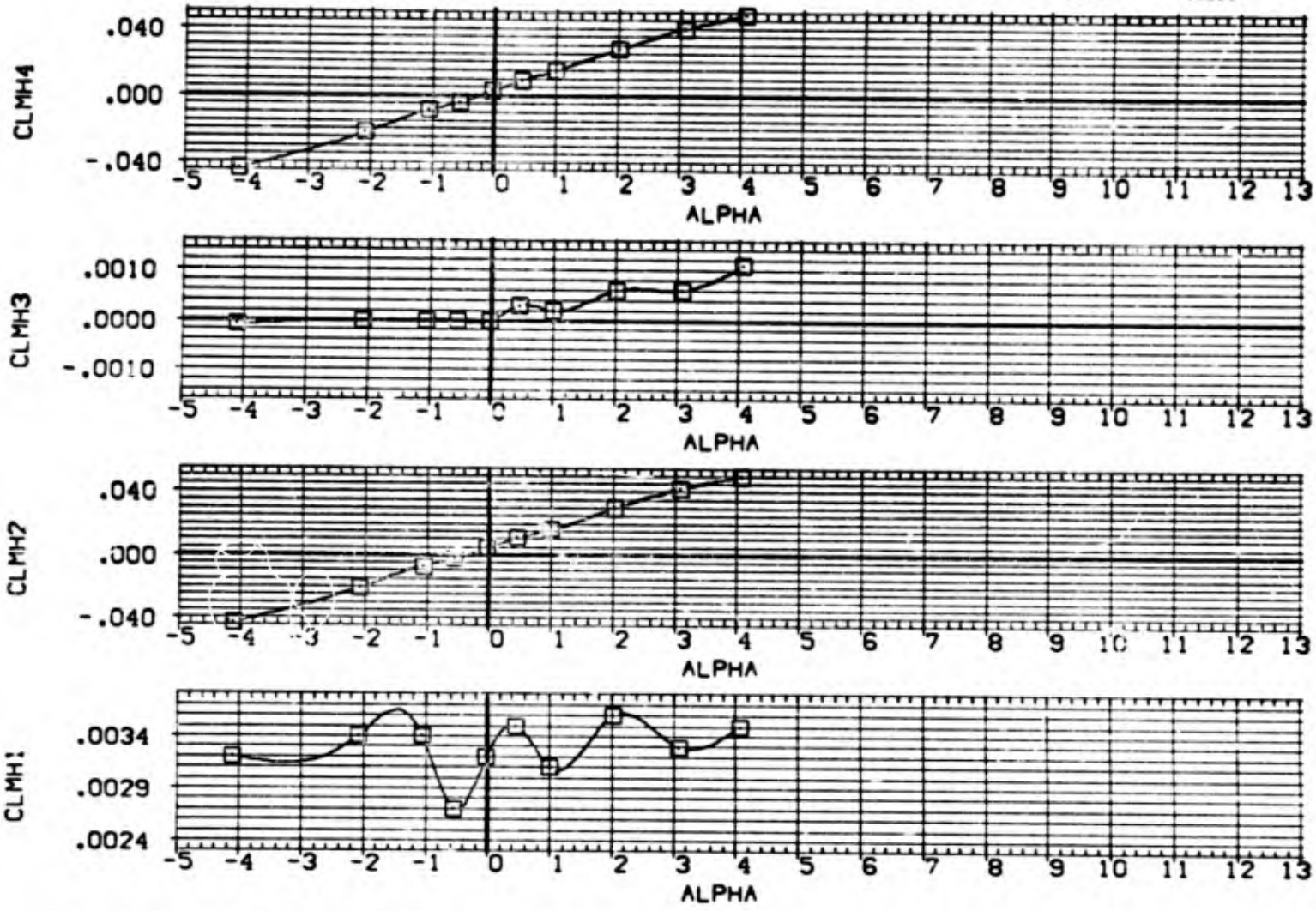


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE168)	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(CUE180)	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	3.600
(CUE192)	DATA NOT AVAILABLE	.000	.000	3.000	3.600

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

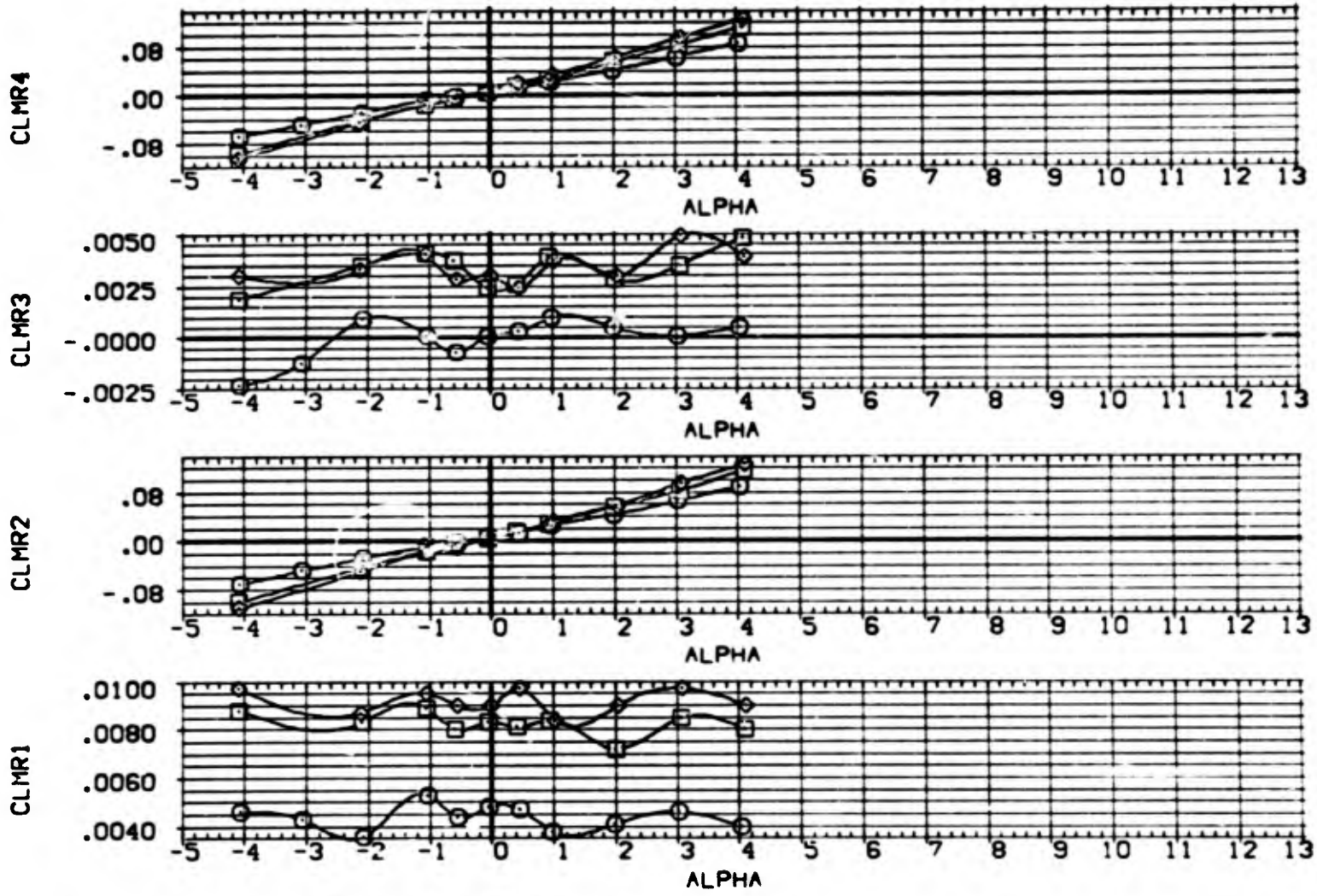


BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	ORT
(DE168)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (UINIT1)	.000	.000	1.000	3.600
(DE180)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	3.600
(DE192)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	3.600

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

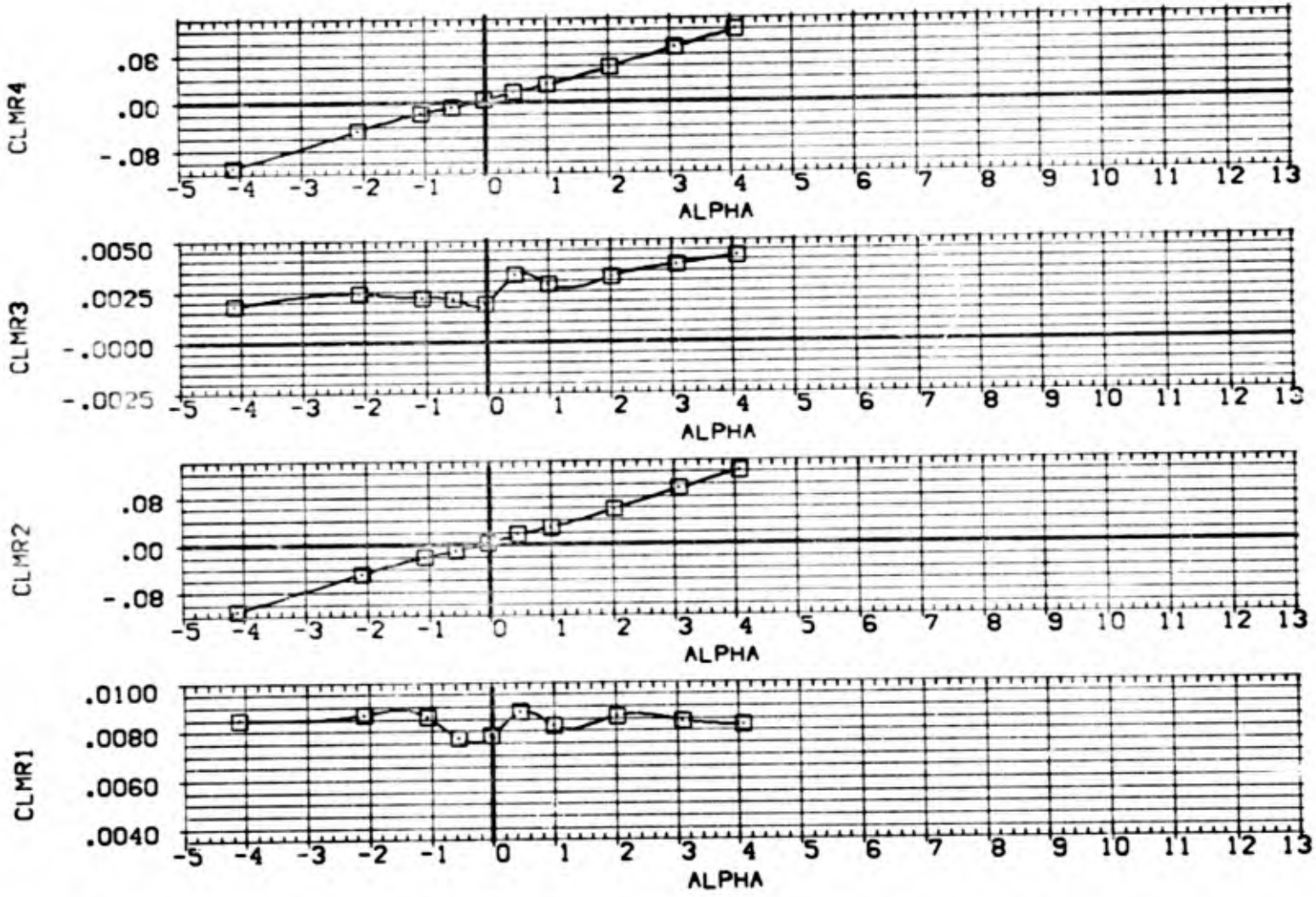


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE168)	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(CUE180)	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	2.000	3.600
(CUE192)	DATA NOT AVAILABLE	.000	.000	3.000	3.600

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

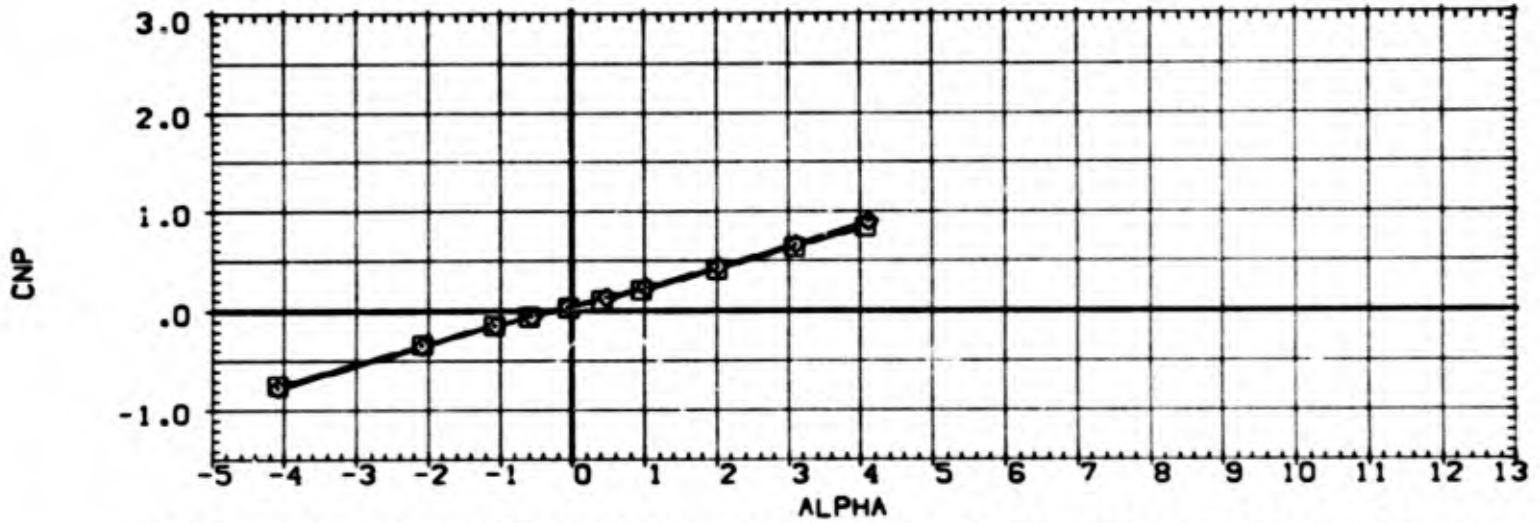


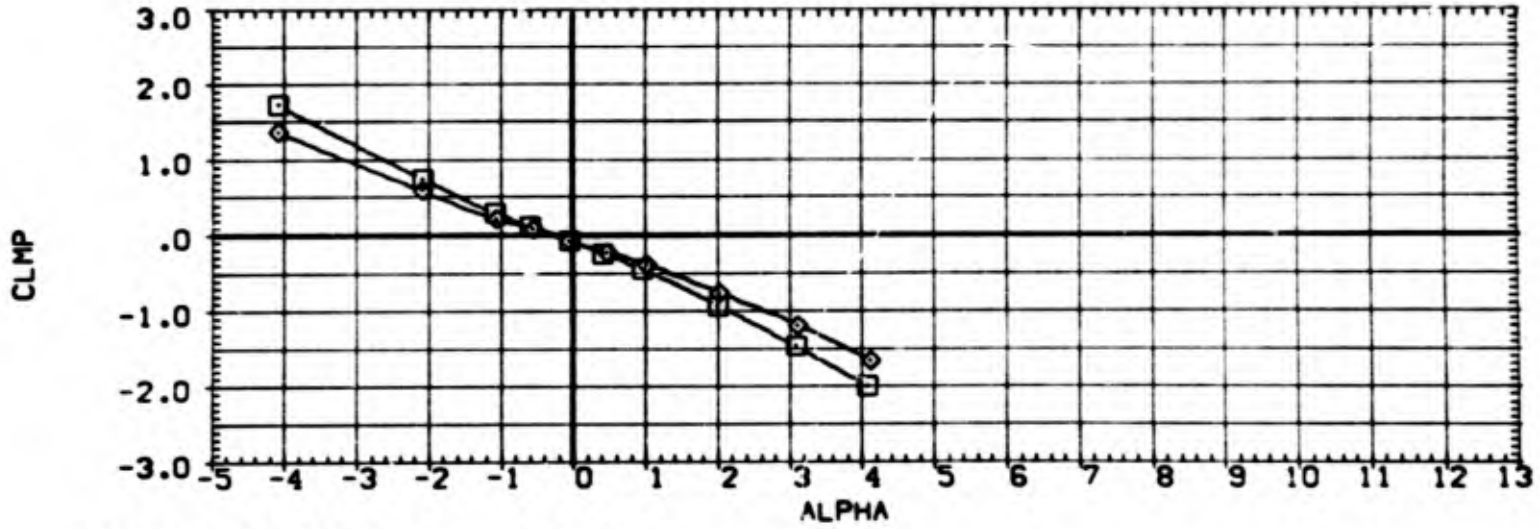
BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE170)	○	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(EUE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	2.500
(EUE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



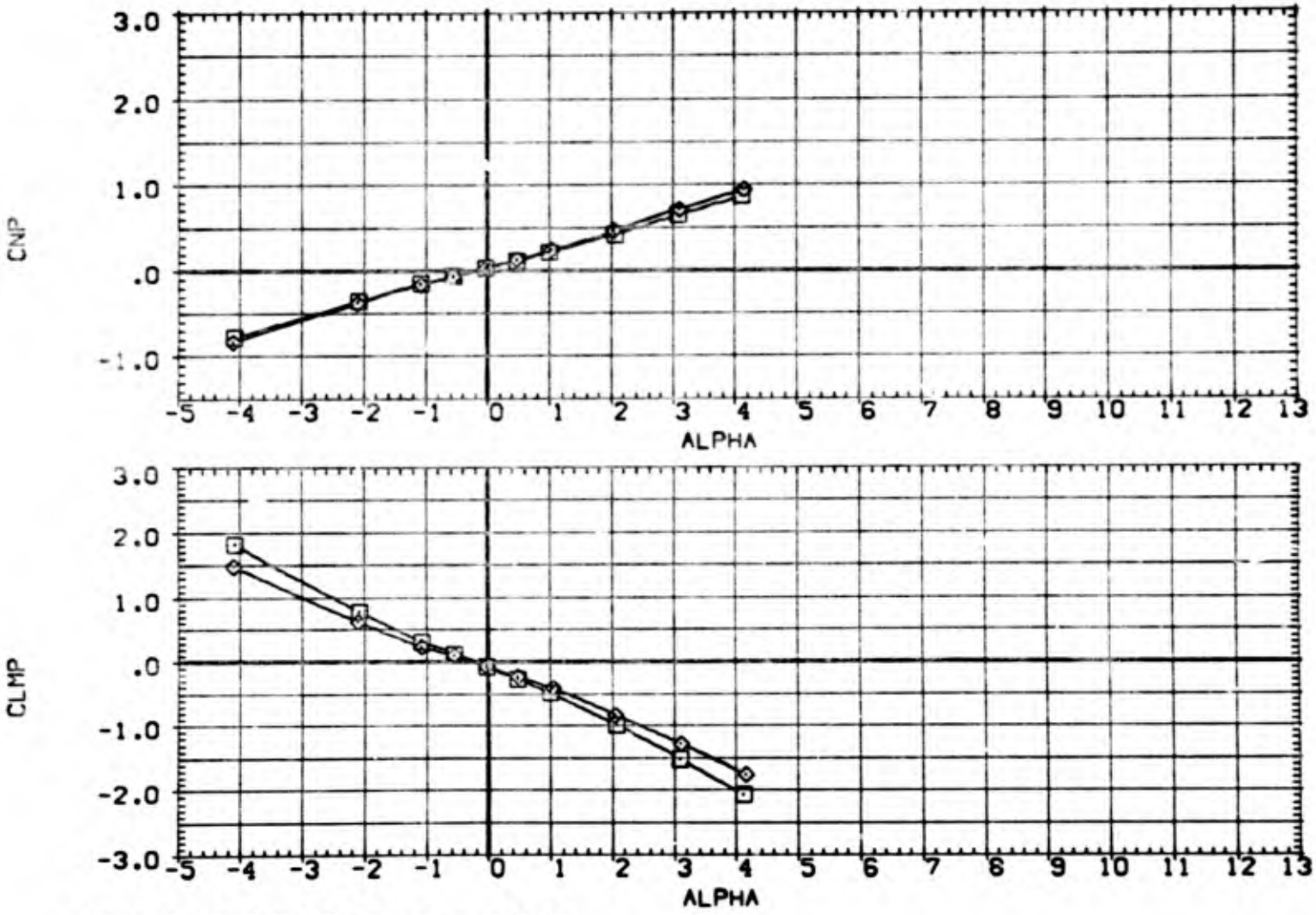


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE170)	○	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(EUE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (B;NITI)	.000	.000	2.000	2.500
(EUE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

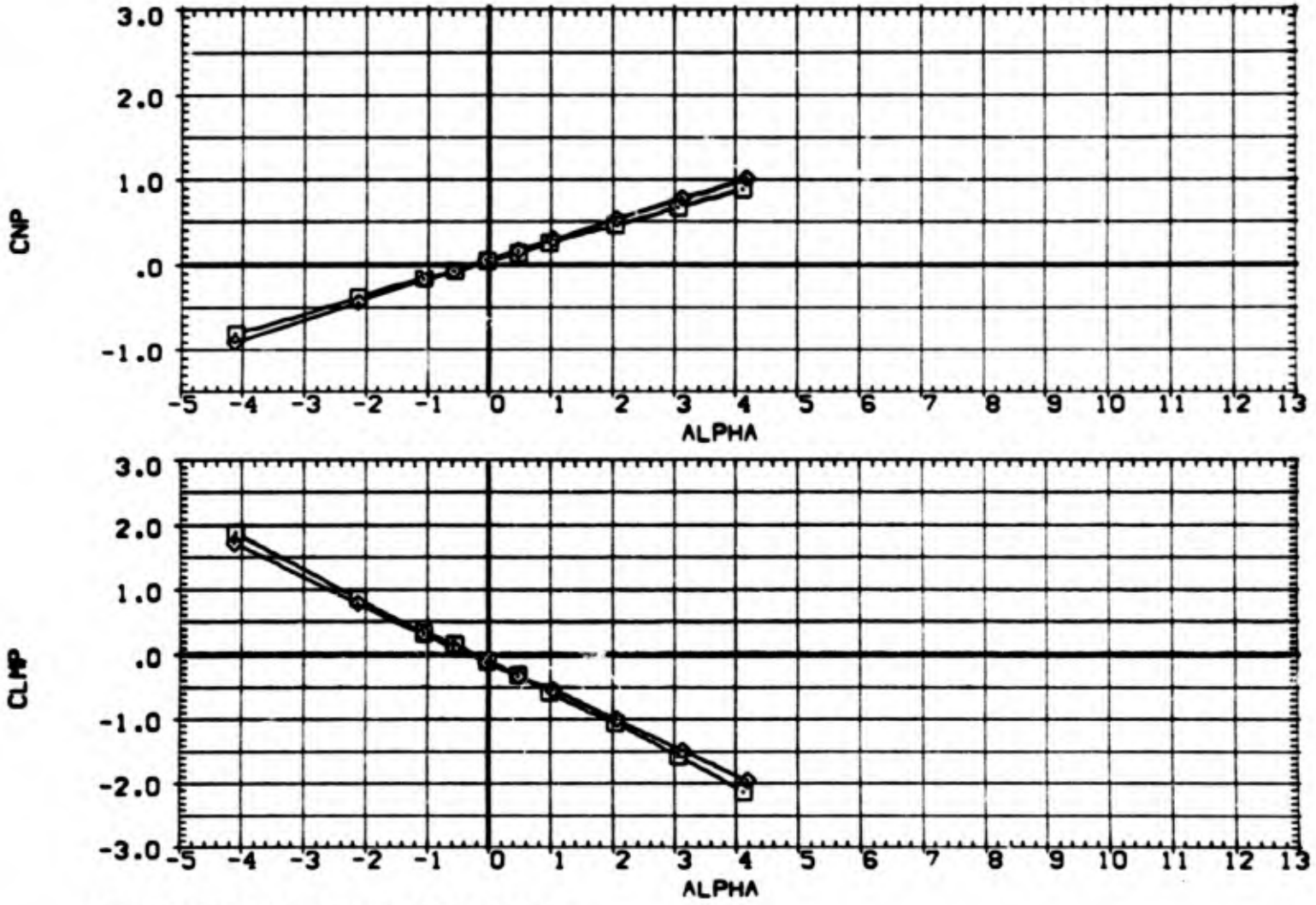


BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(ELE170)	○	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(ELE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	2.500
(ELE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	4.0000	IN.
XMRP	26.0000	IN.
YMRP	.0100	IN.
ZMRP	.0020	IN.
SCALE	.0000	

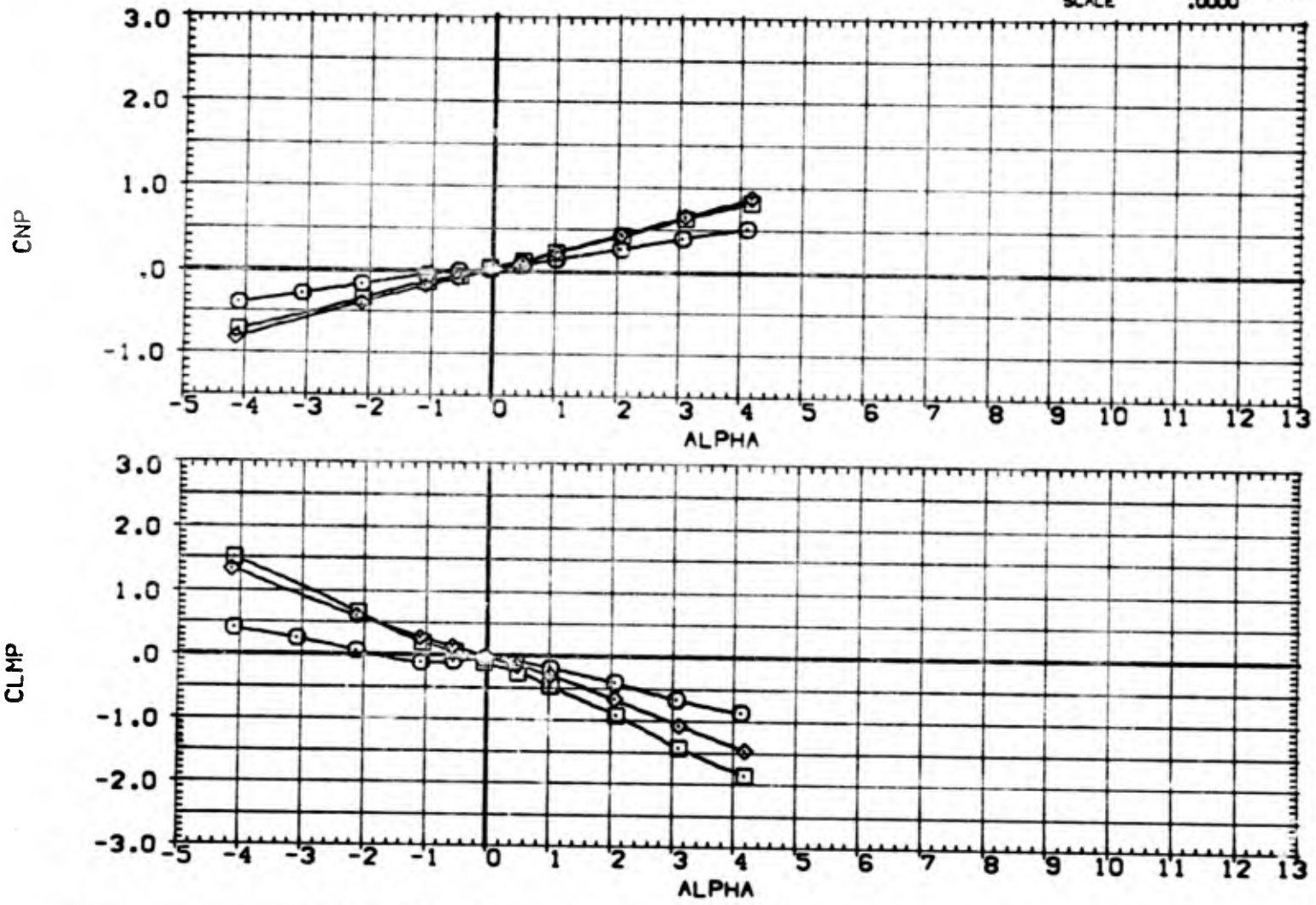


BASIC CHARACTERISTICS OF LONGBOW

(C)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE170)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	1.000	2.500
(EUE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	2.000	2.500
(EUE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

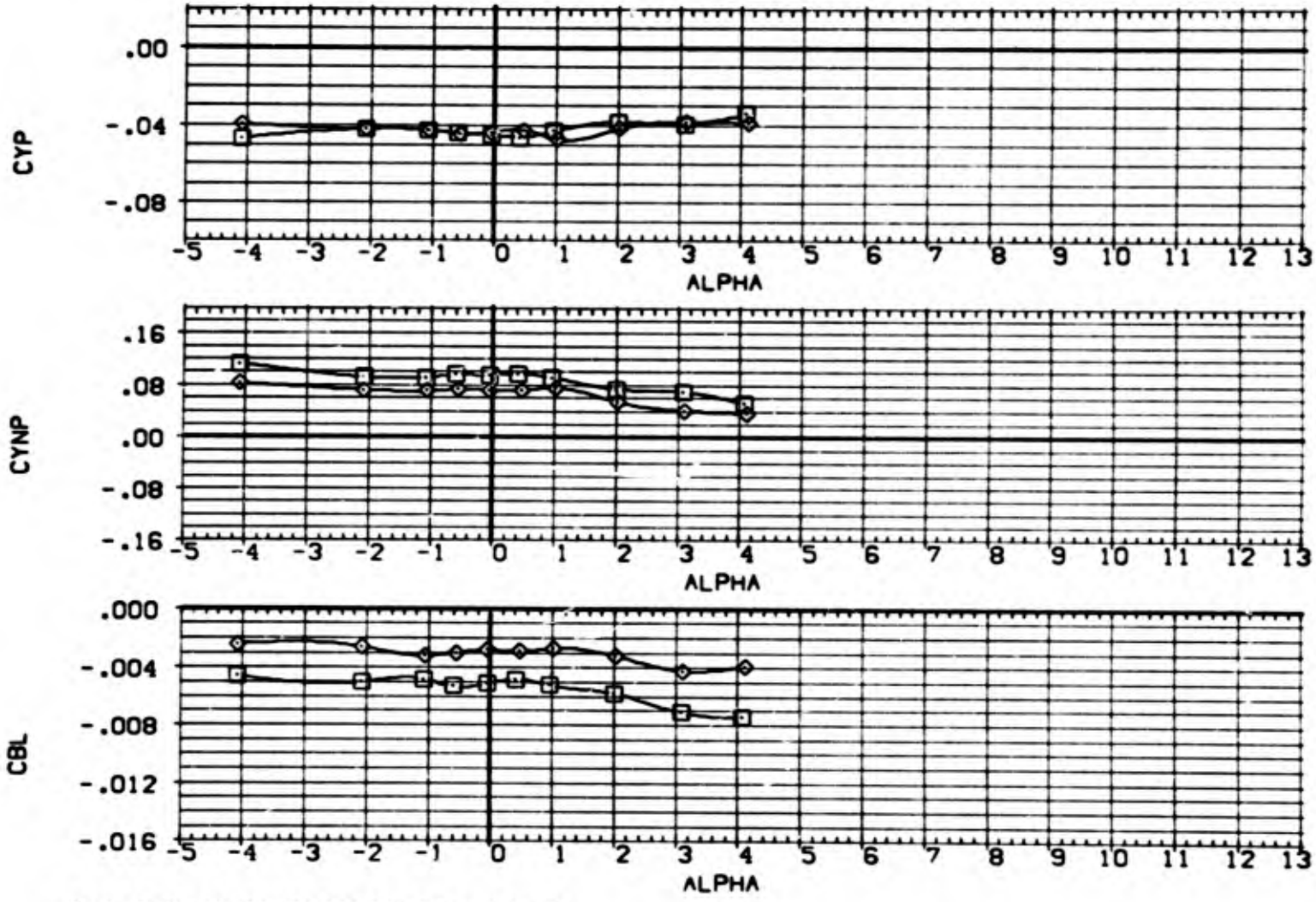


BASIC CHARACTERISTICS OF LONGBOW

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE170)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(EUE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	2.500
(EUE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

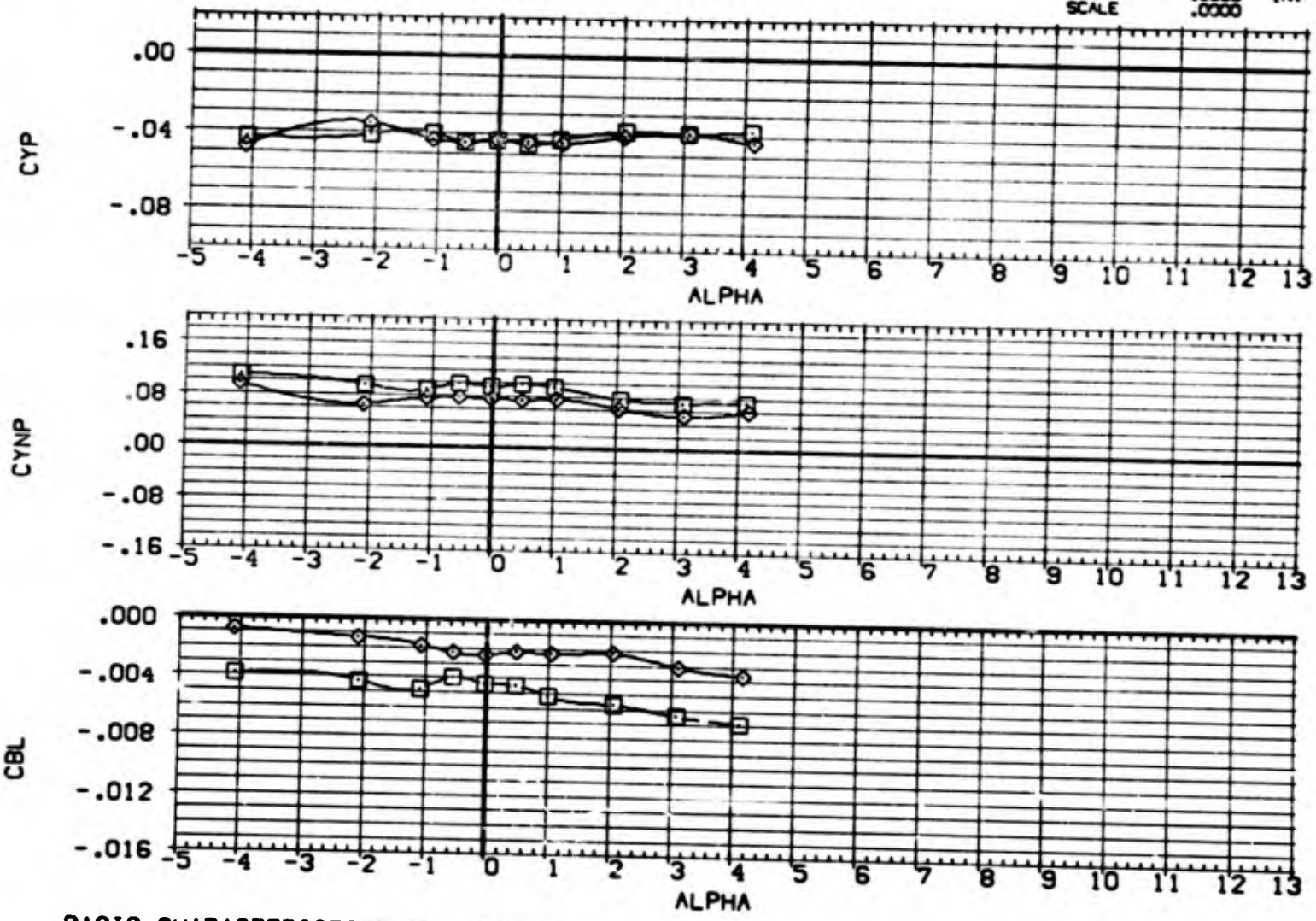


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .80

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(EUE170)	□	DATA NOT AVAILABLE				
(EUE182)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	2.500
(EUE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

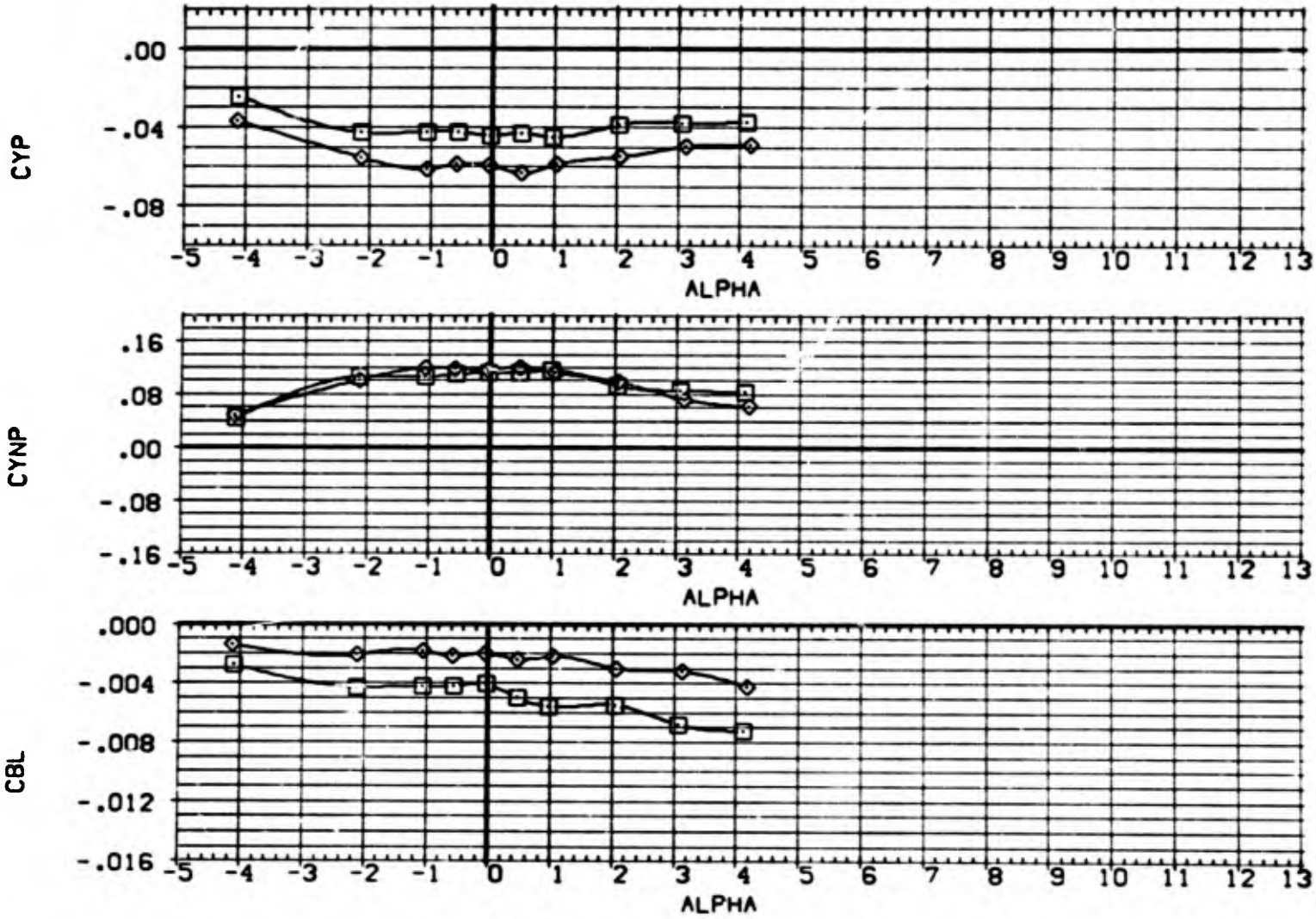


BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE170)	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(EUE182)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	2.500
(EUE194)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

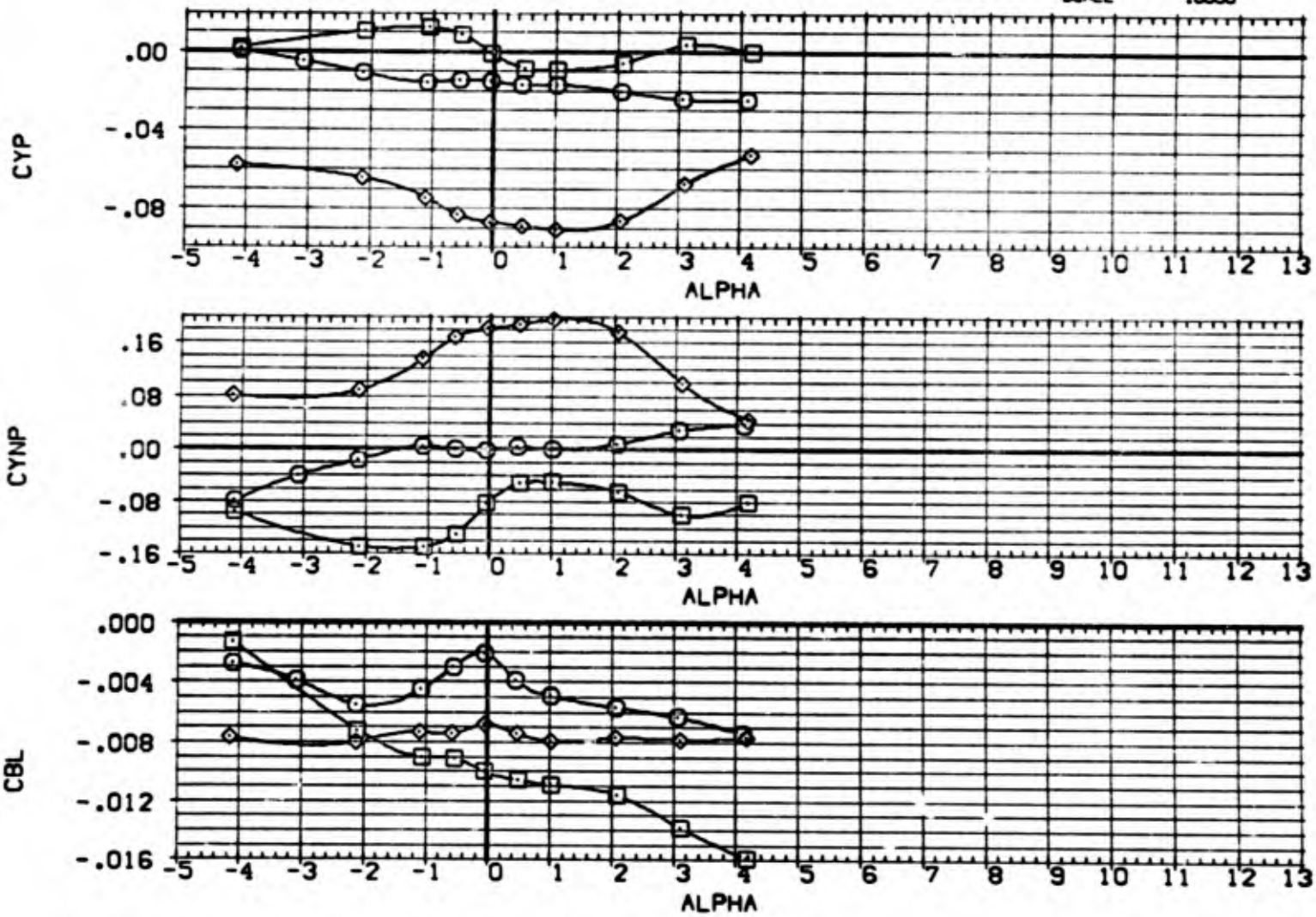


BASIC CHARACTERISTICS OF LONGBOW

(C)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EVE170)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	2.500
(EVE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	2.500
(EVE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

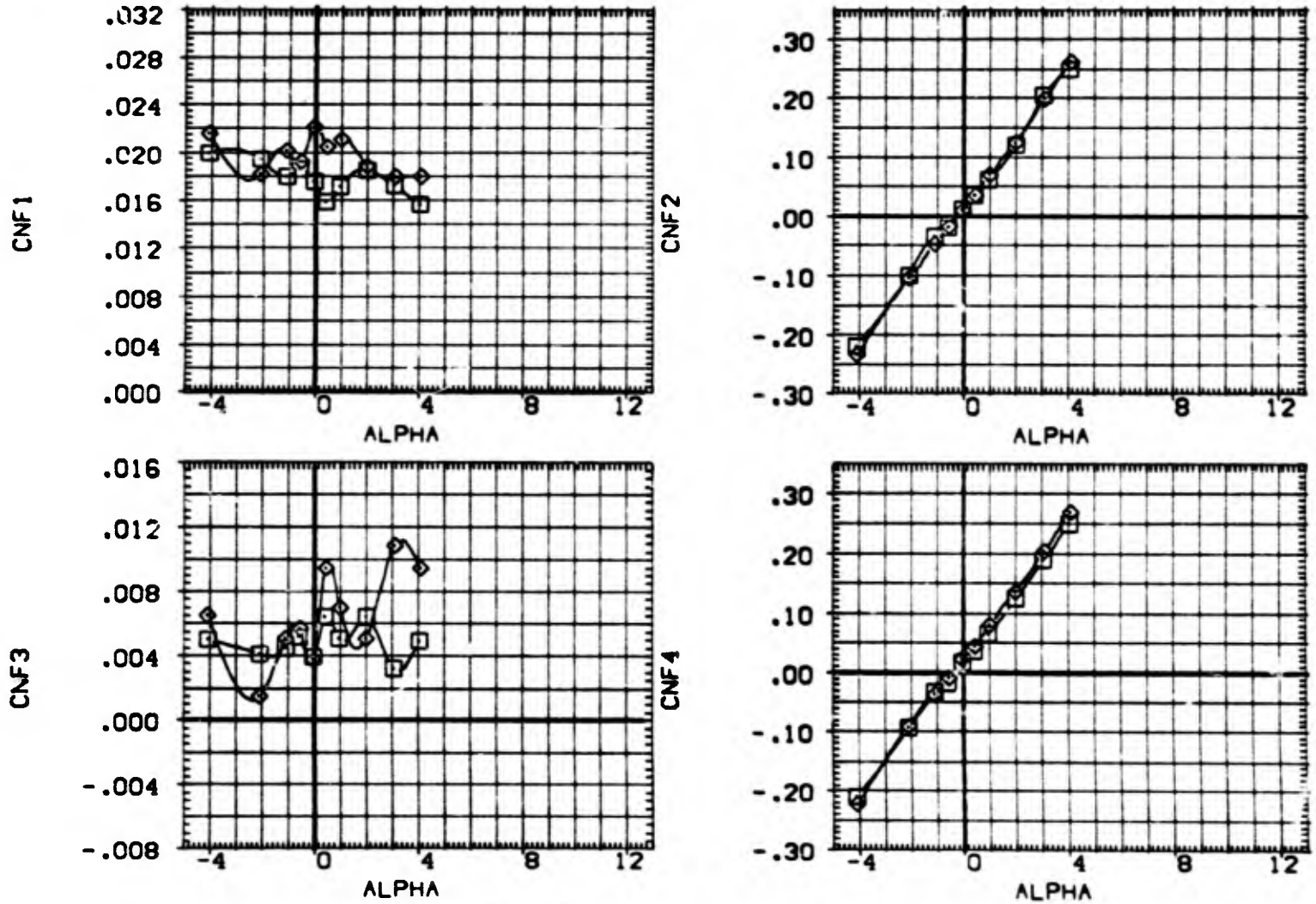


BASIC CHARACTERISTICS OF LONGBOW

(D)MACH = 1.25

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE170)	○	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(BLE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	2.500
(BLE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



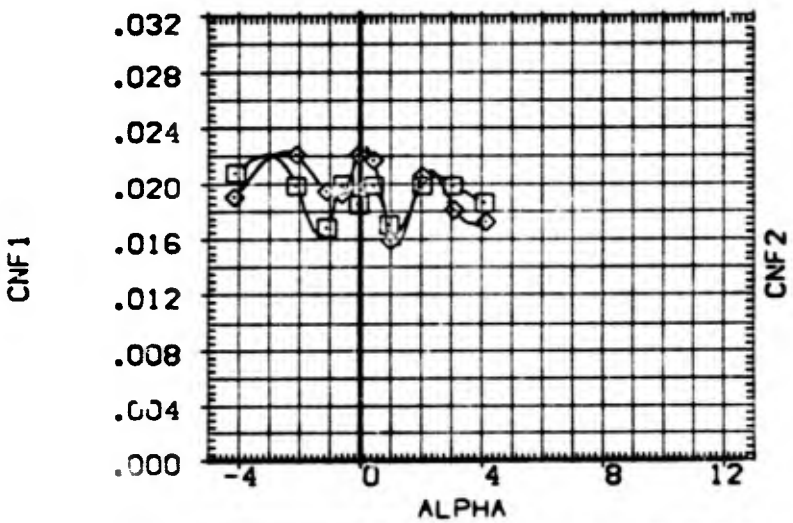
BASIC CHARACTERISTICS OF LONGBOW

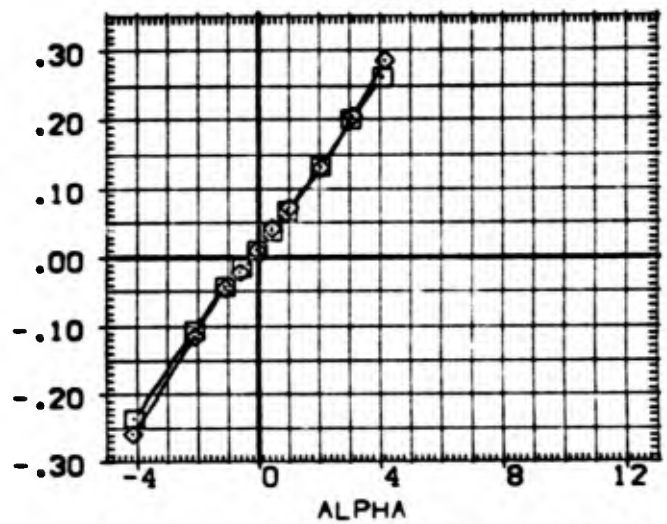
(A)MACH = .80

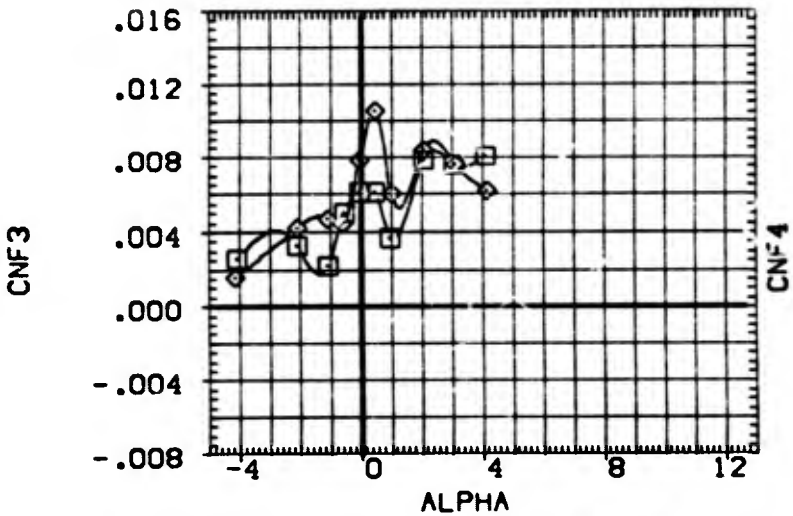
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE170)	○	DATA NOT AVAILABLE				
(BLE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	2.500
(BLE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	2.500
			.000	.000	3.000	2.500

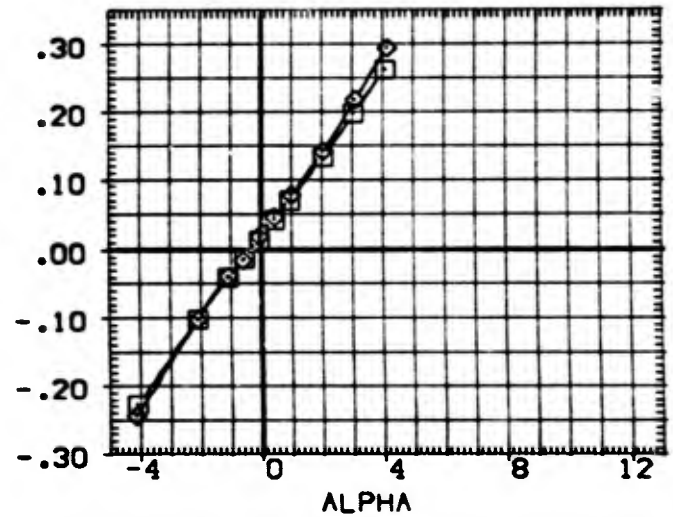
REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	







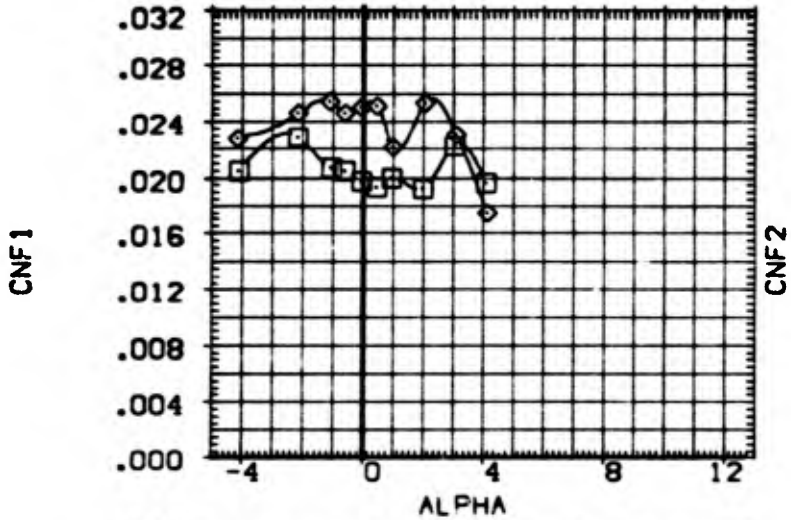


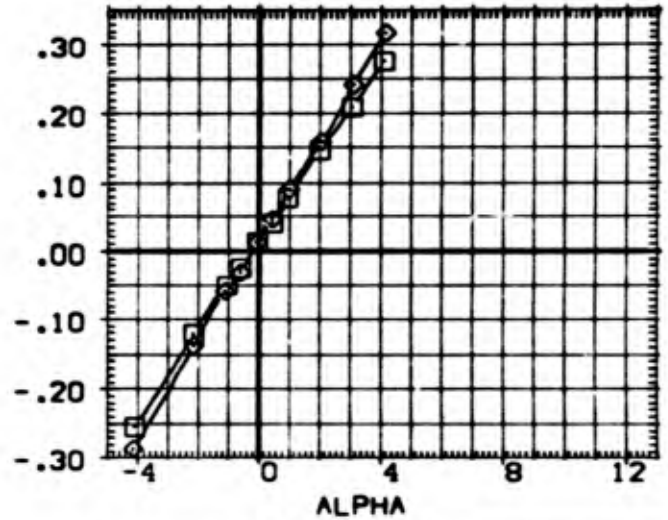
BASIC CHARACTERISTICS OF LONGBOW

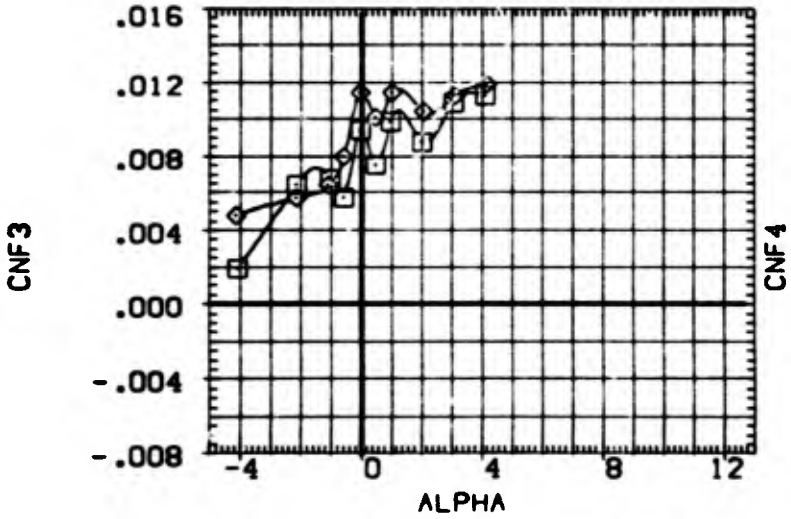
(B)MACH = .90

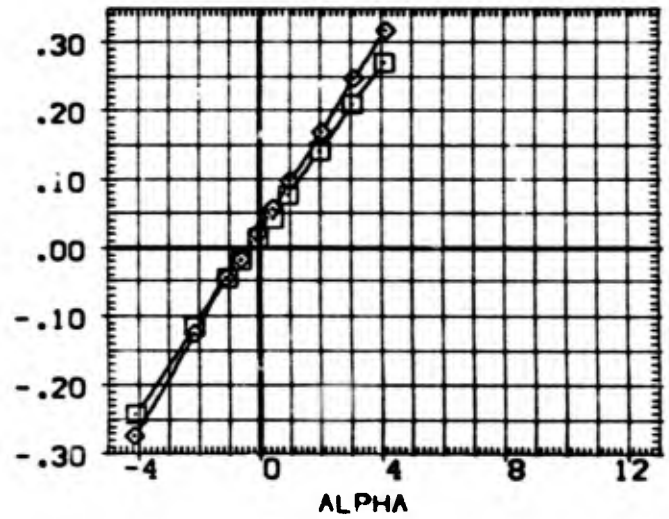
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BLE170)	○	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(BLE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	2.500
(BLE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	









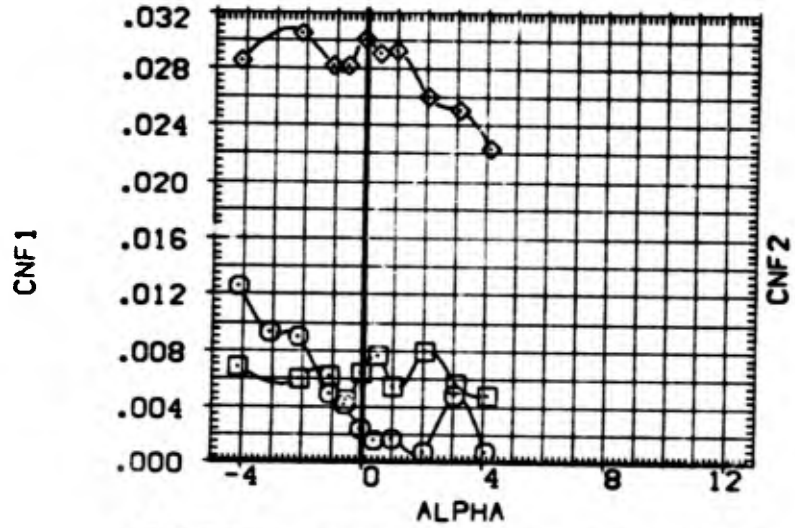
BASIC CHARACTERISTICS OF LONGBOW

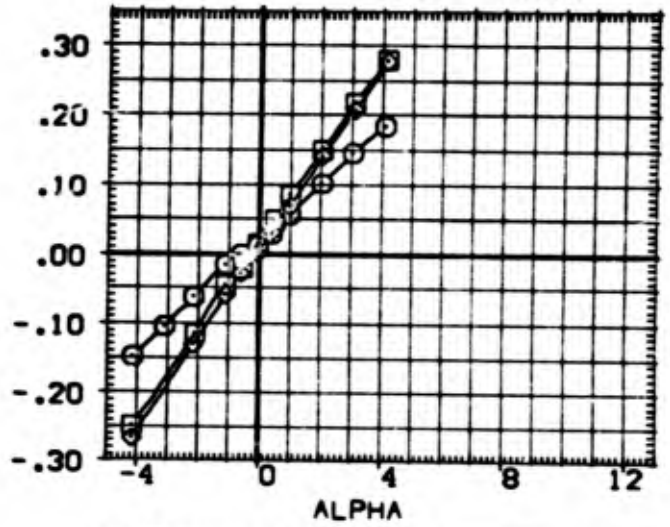
(C)MACH = 1.00

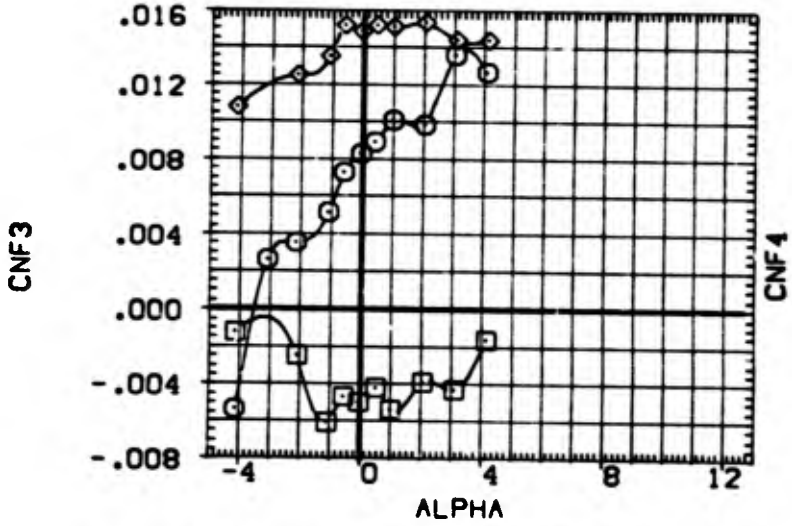
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BUE170)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	2.500
(BUE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	2.500
(BUE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500

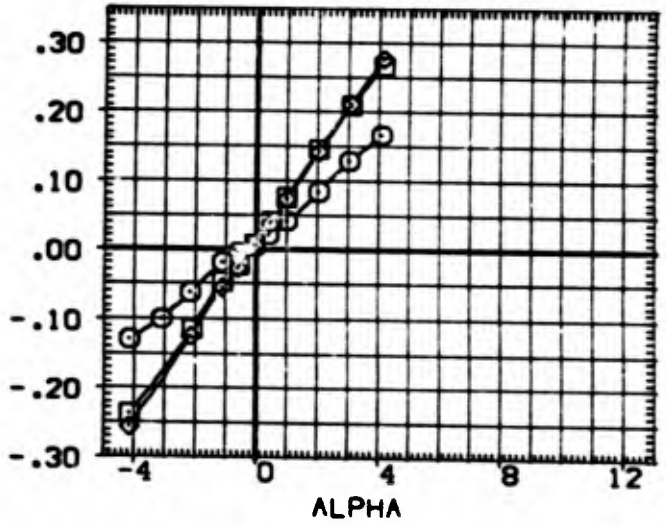
REFERENCE INFORMATION

SREF	19.635	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	







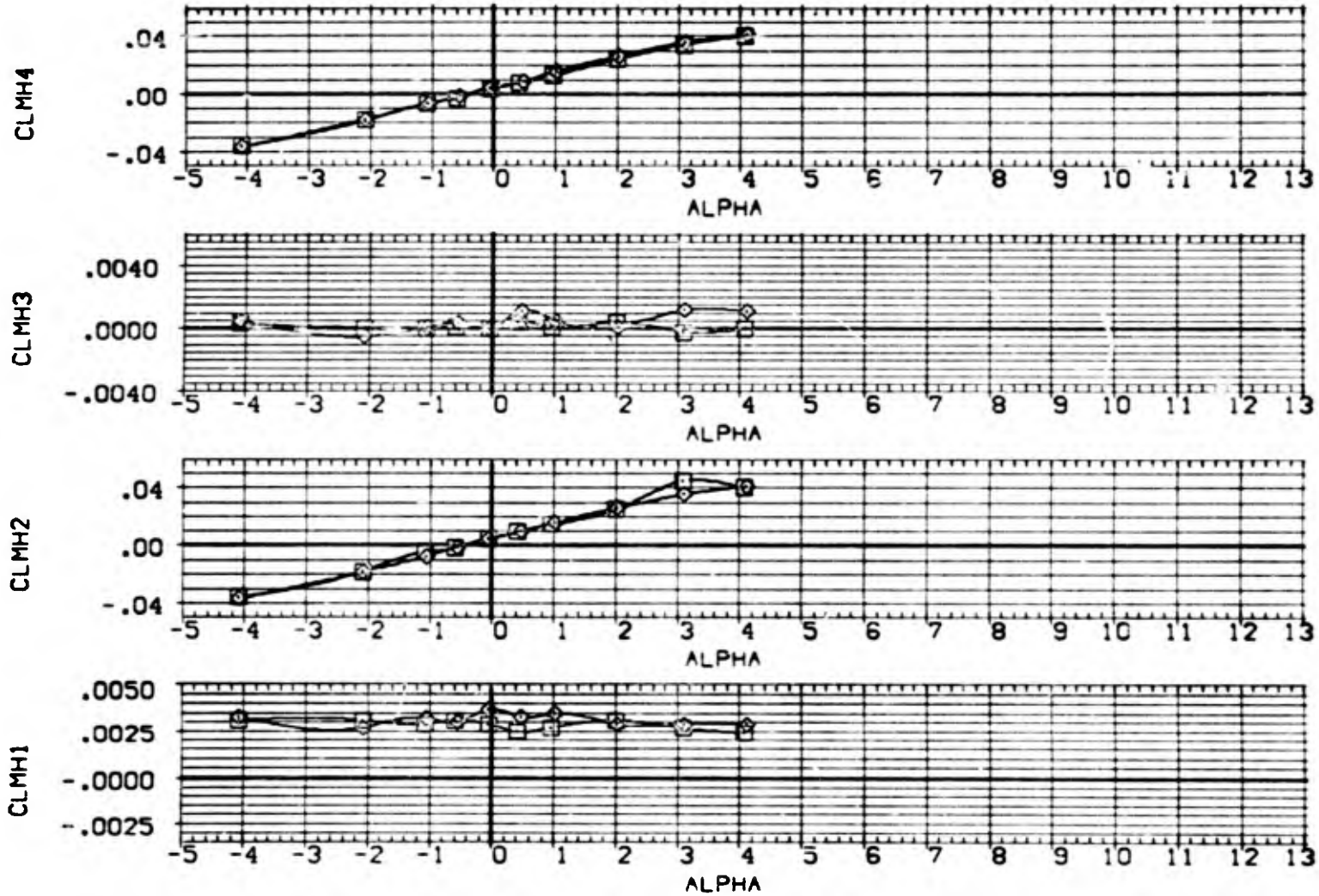


BASIC CHARACTERISTICS OF LONGBOW

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DUE170)	○	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(DUE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	2.500
(DUE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

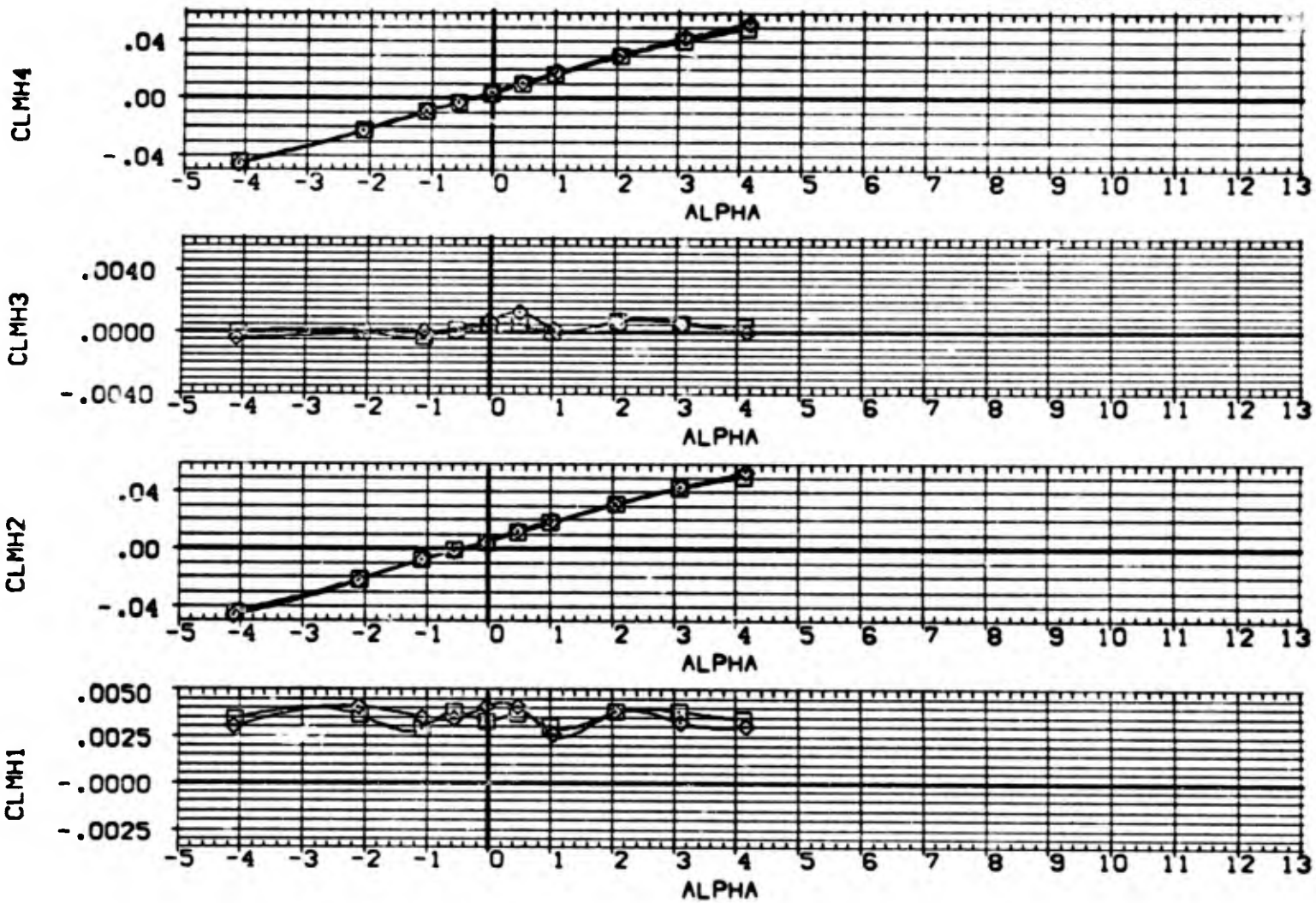


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CLE170)	□	DATA NOT AVAILABLE				
(CLE182)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	2.500
(CLE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

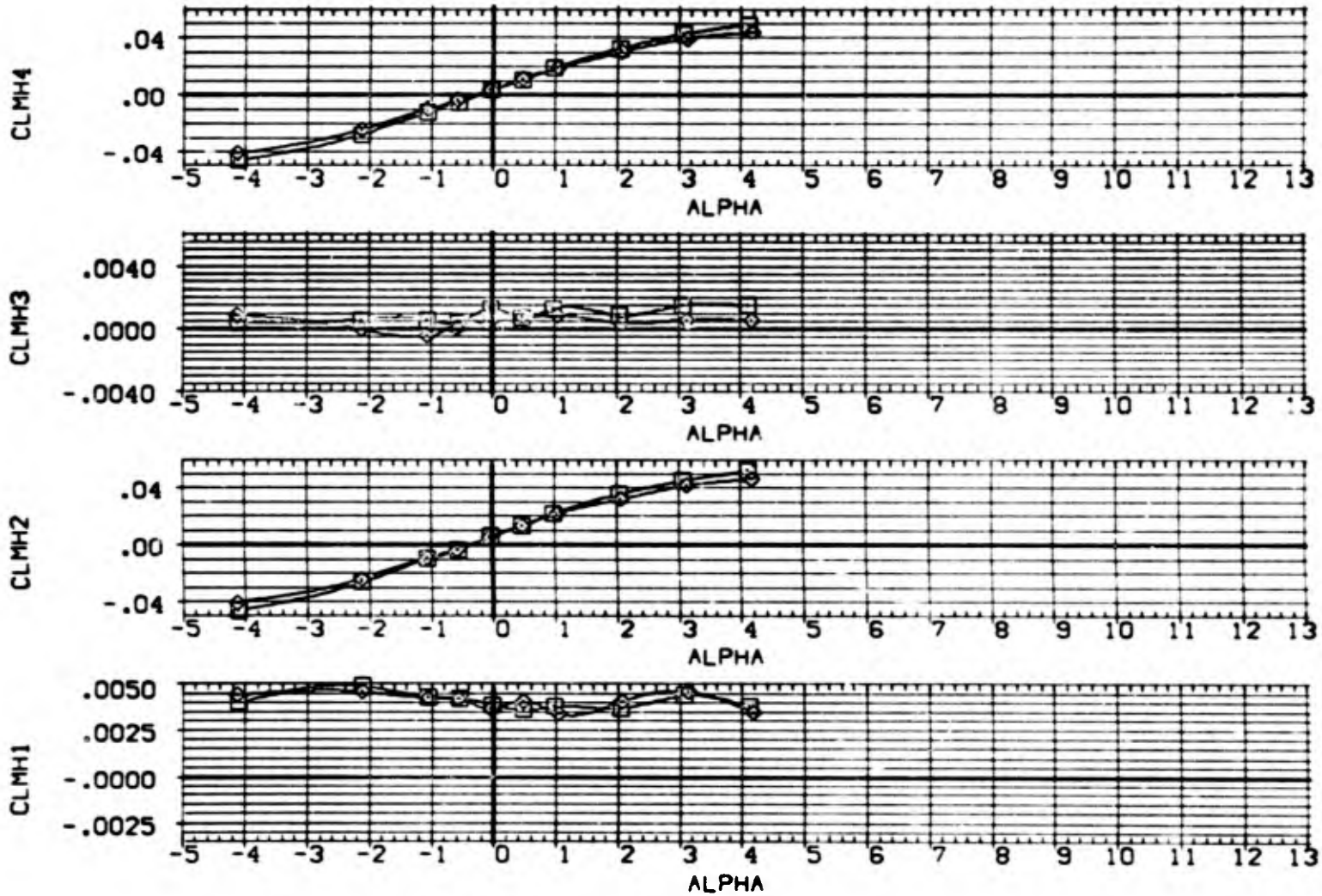


BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(CUE170)	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(CUE182)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	2.500
(CUE194)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

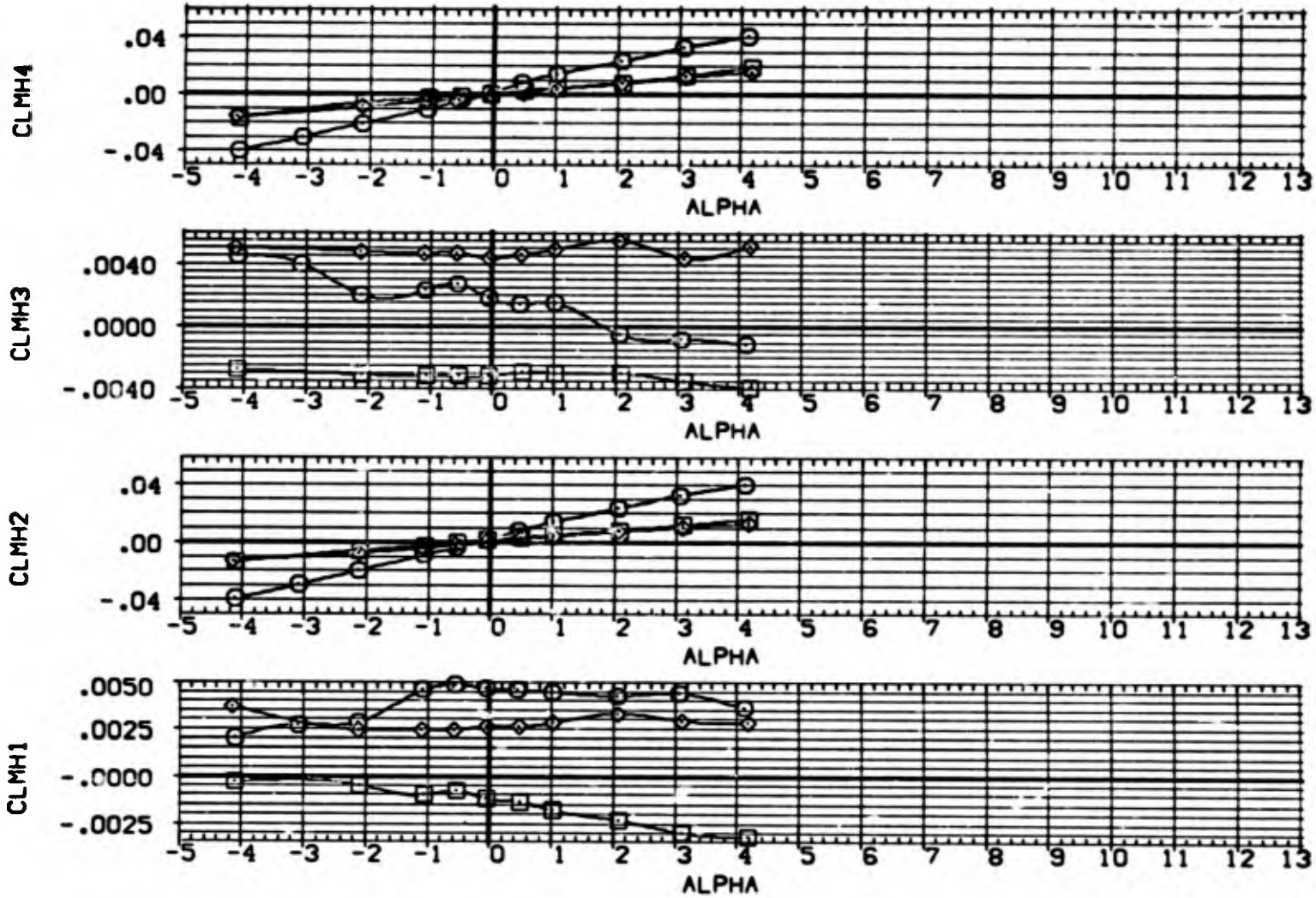


BASIC CHARACTERISTICS OF LONGBOW

(C)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CYE170)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	2.500
(CYE182)	⊡	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	2.500
(CYE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

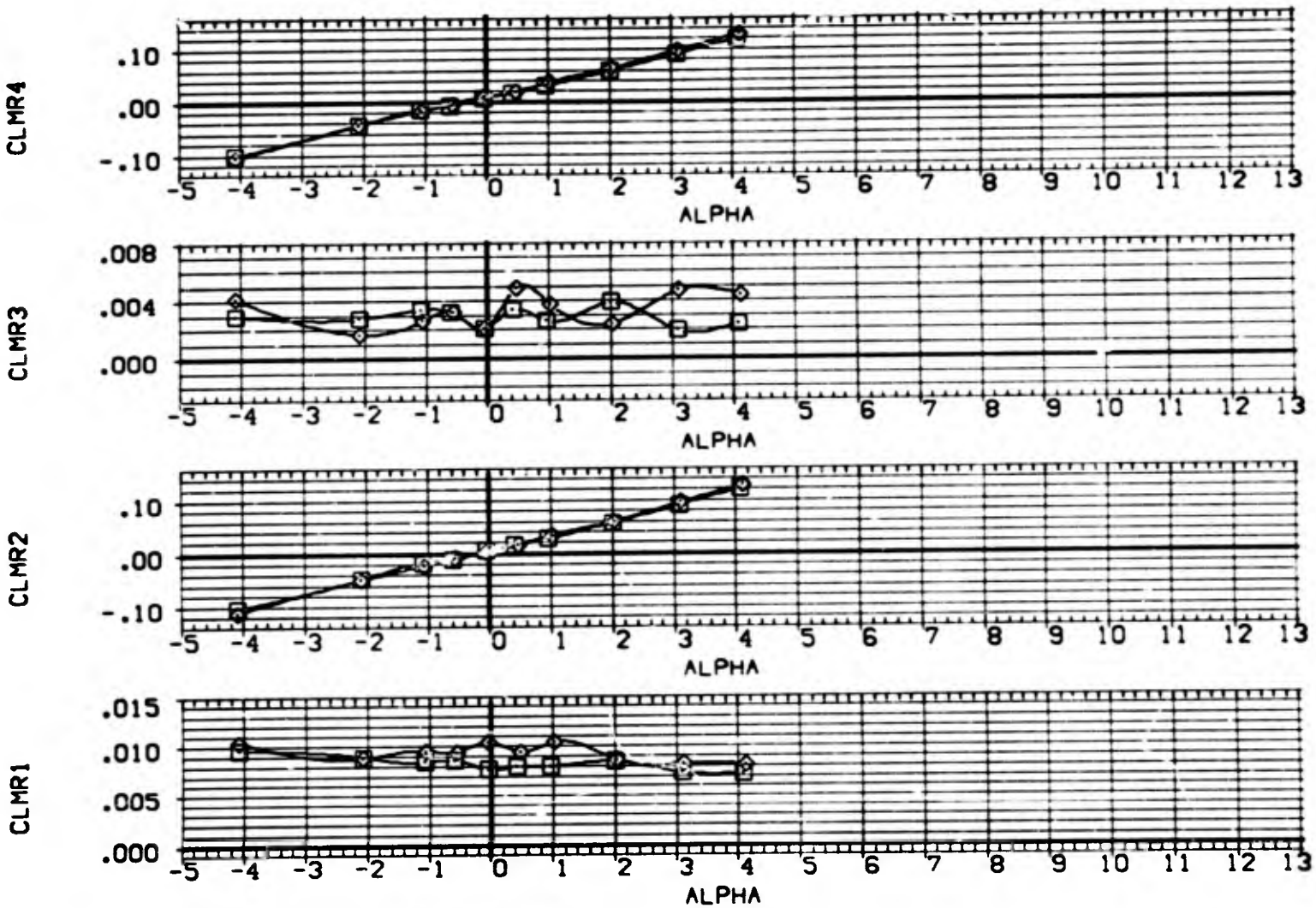


BASIC CHARACTERISTICS OF LONGBOW

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(CLE170)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(CLE182)	⊡	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	2.500
(CLE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

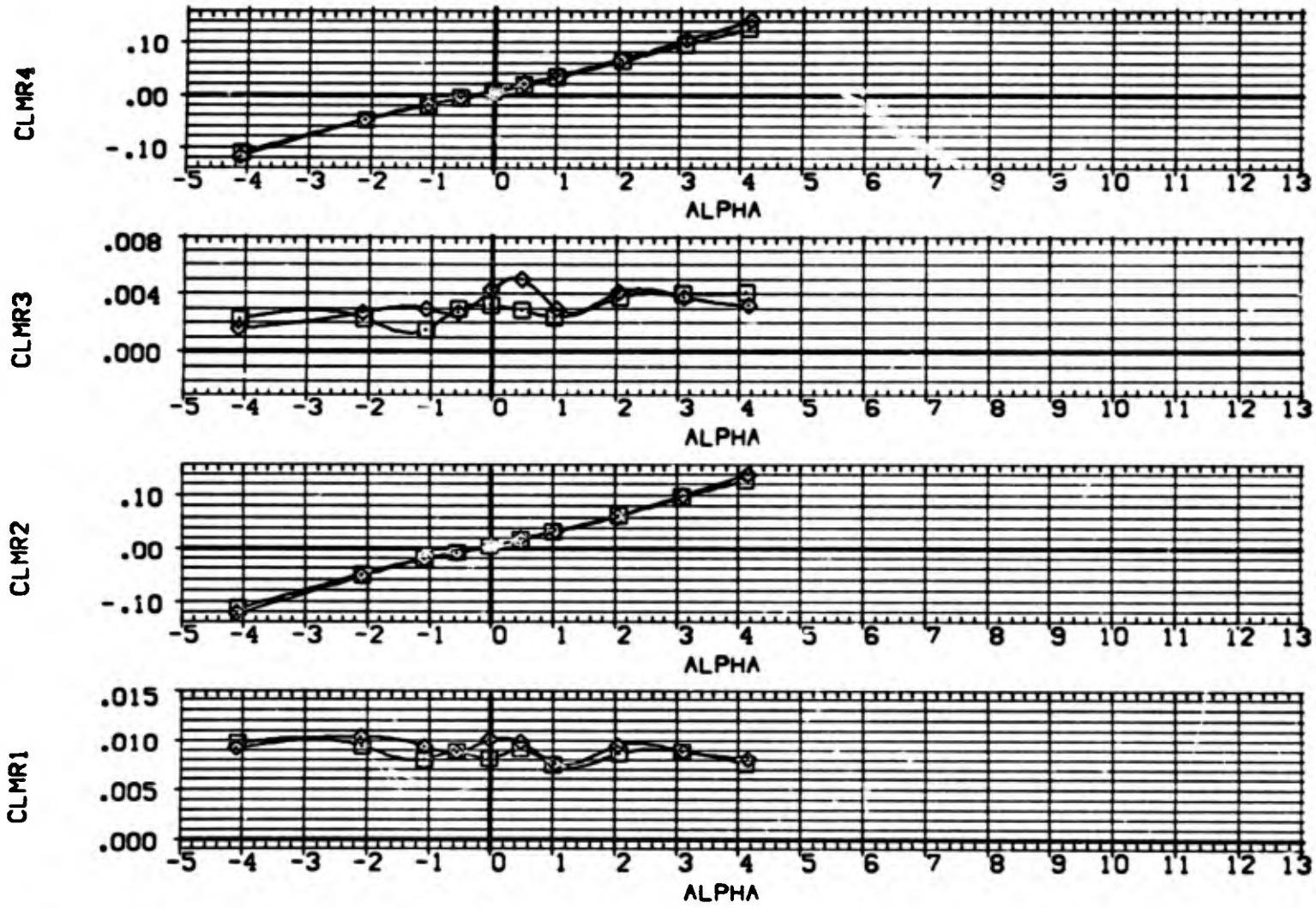


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(82E170)	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(82E182)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	2.000	2.500
(82E194)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

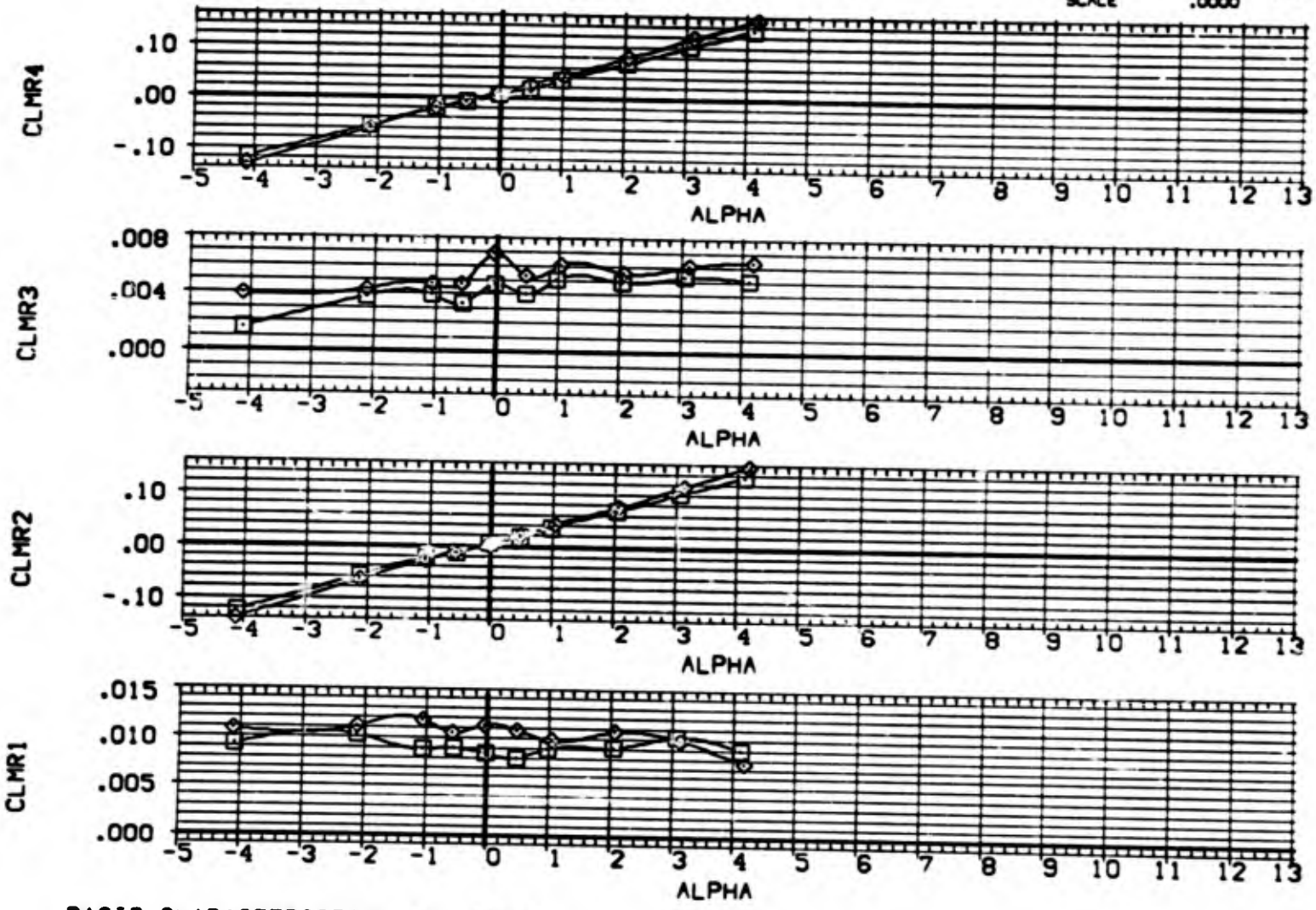


BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE170)	DATA NOT AVAILABLE				
(CUE182)	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	2.500
(CUE194)	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

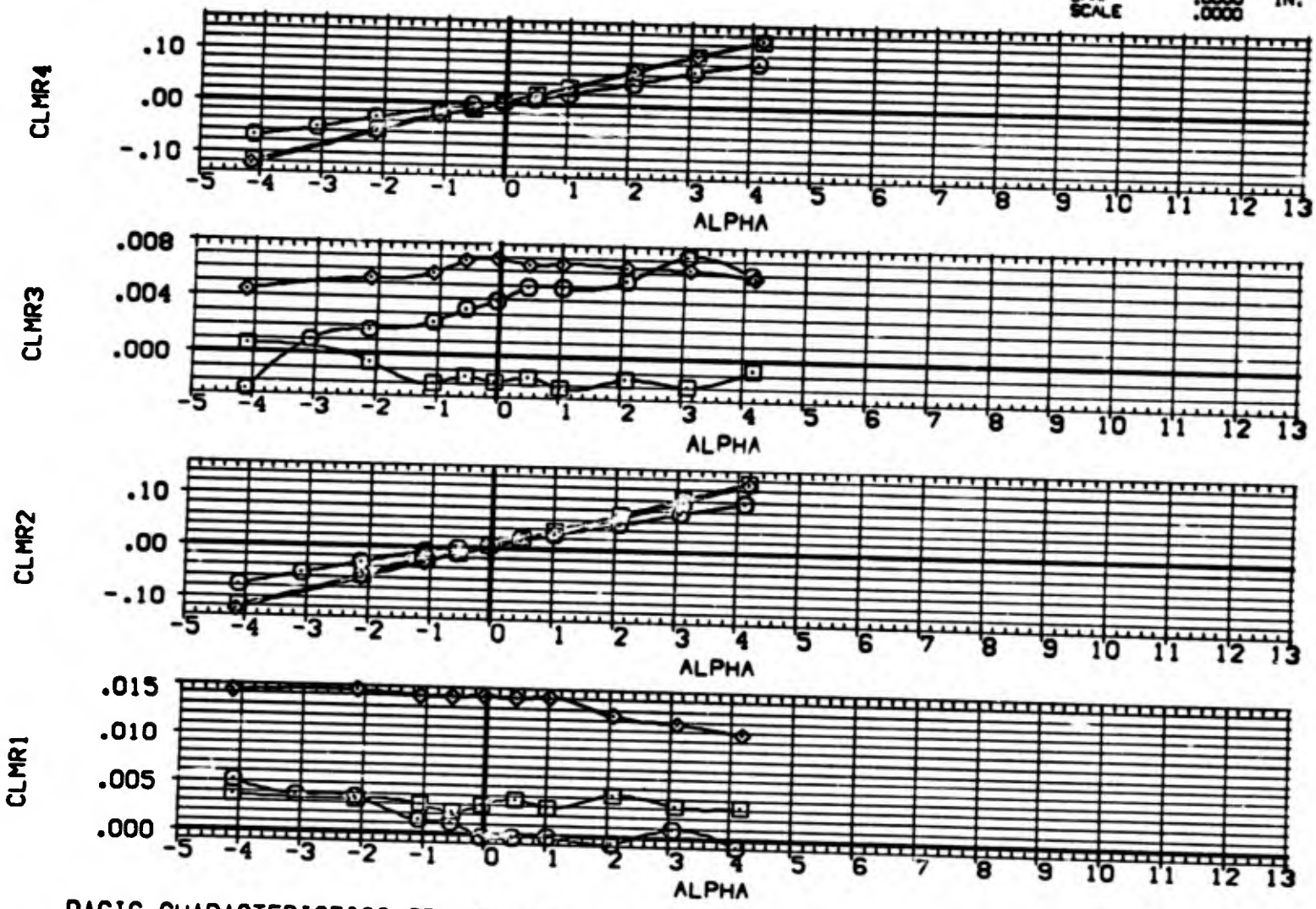


BASIC CHARACTERISTICS OF LONGBOW

(C)MACH = 1.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(DE170)	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT)	.000	.000	1.000	2.500
(DE182)	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT)	.000	.000	2.000	2.500
(DE194)	CALSPAN THRUST EFFECTS STING MOUNTED NZ (BINIT)	.000	.000	3.000	2.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

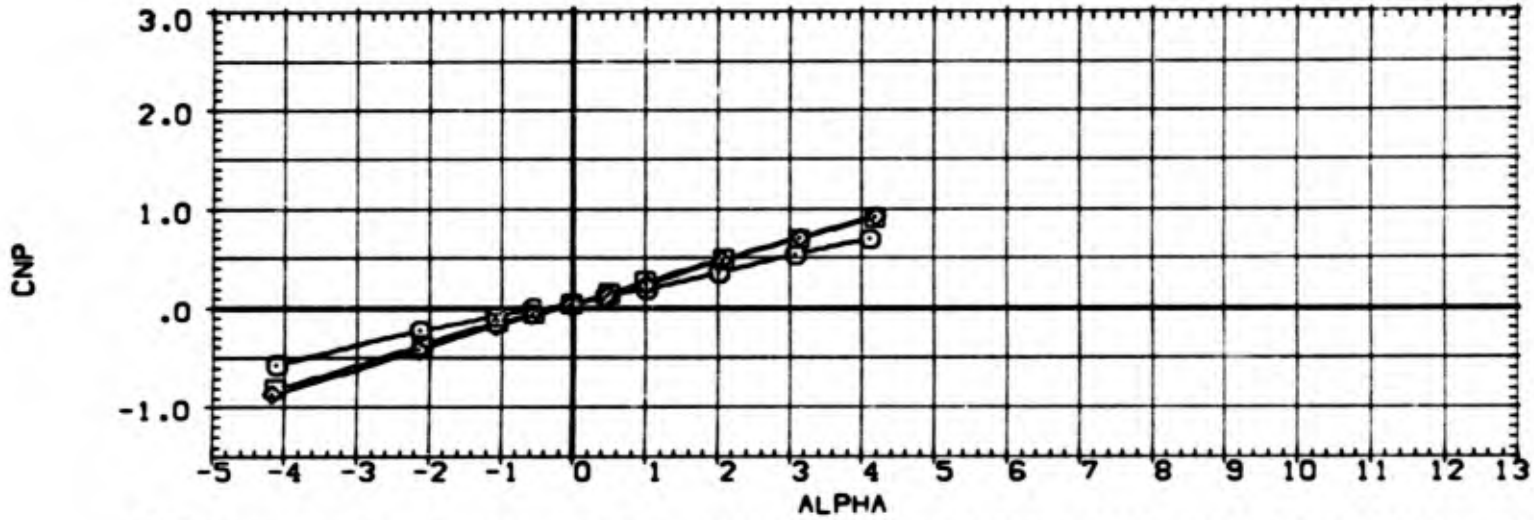


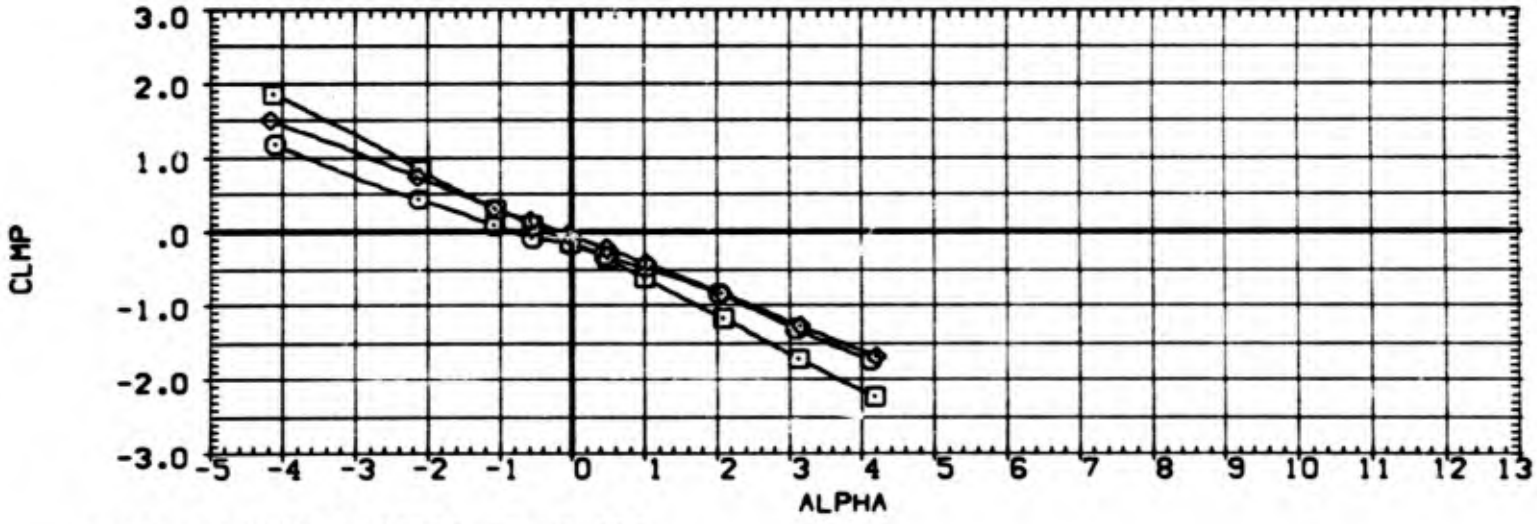
BASIC CHARACTERISTICS OF LONGBOW

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE171)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	1.500
(EUE183)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	1.500
(EUE195)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	1.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



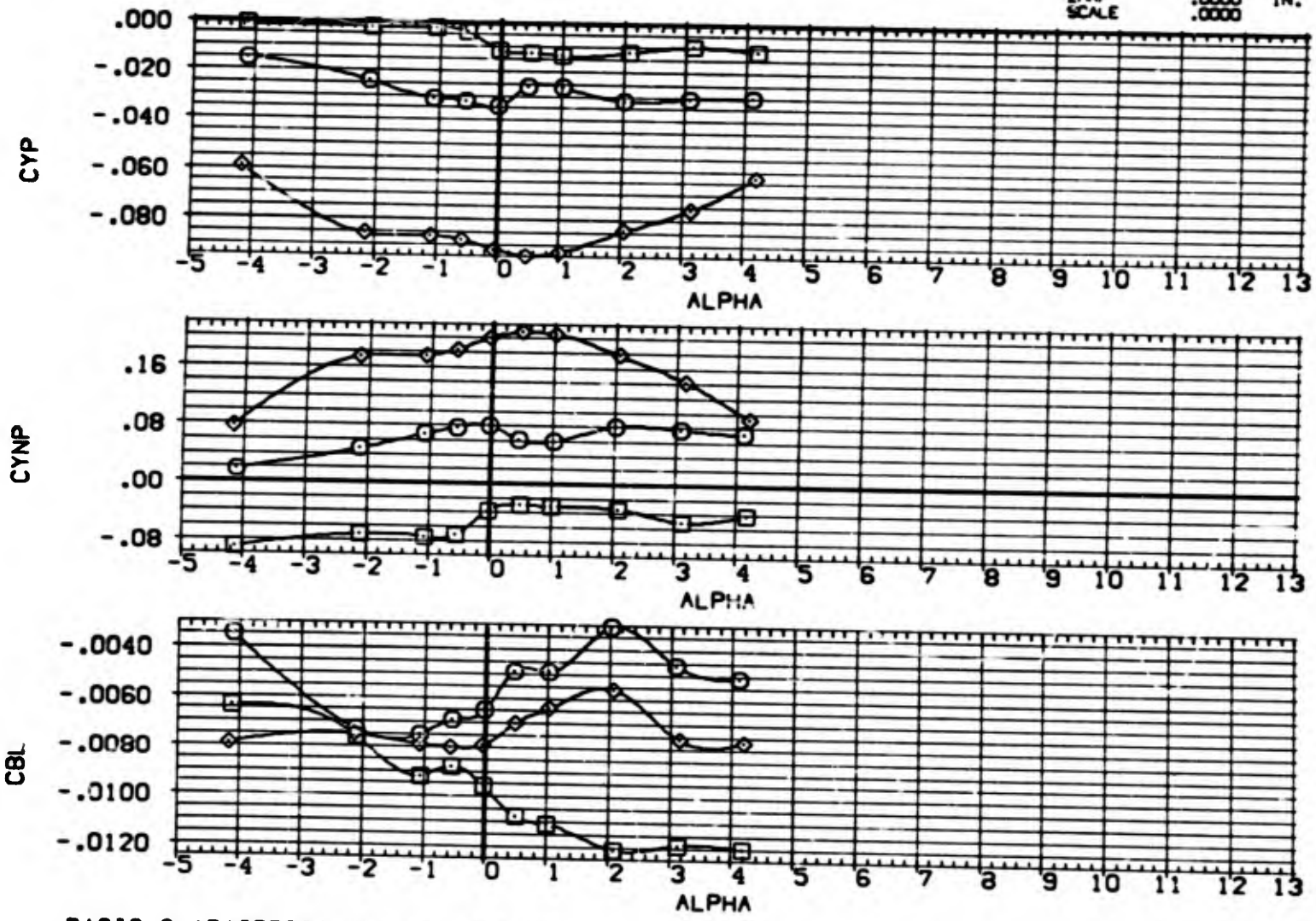


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.25

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE171)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	1.000	1.500
(EUE183)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	2.000	1.500
(EUE195)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	3.000	1.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

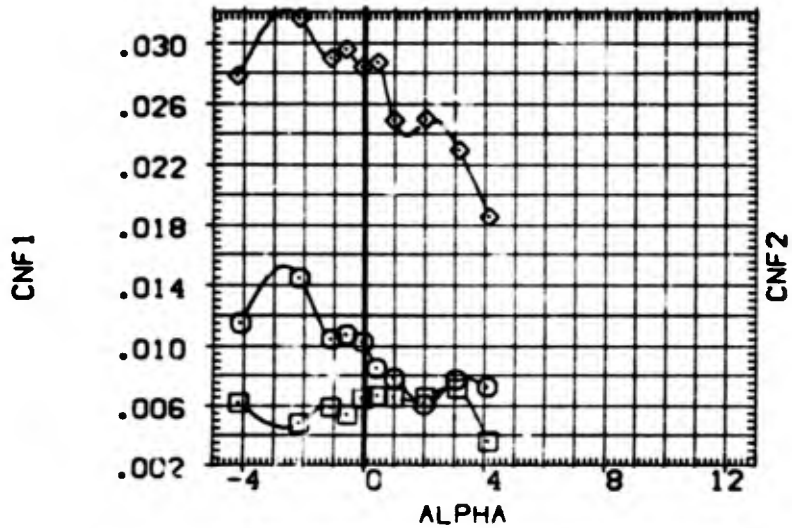


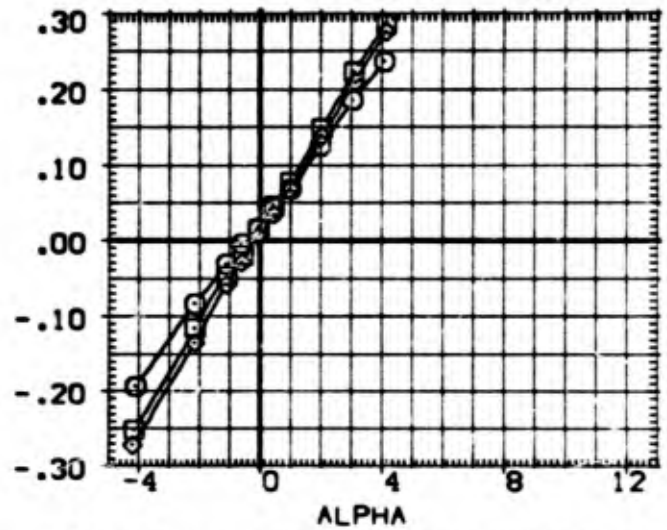
BASIC CHARACTERISTICS OF LONGBOW

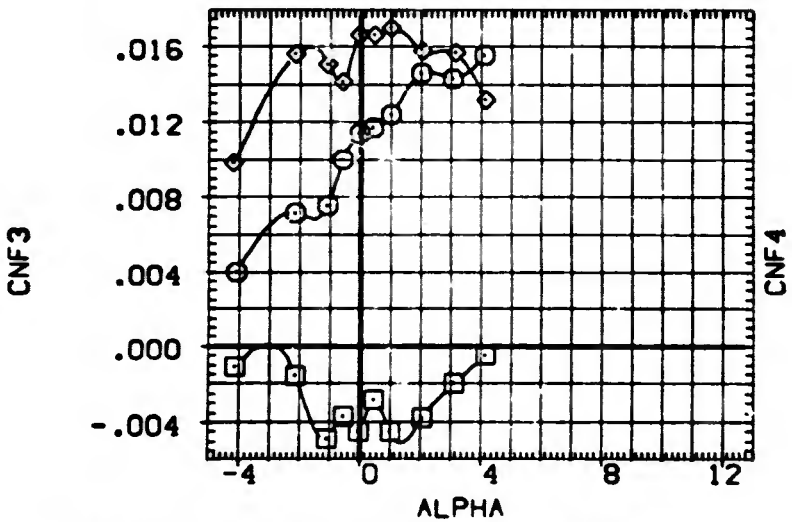
(A)MACH = 1.25

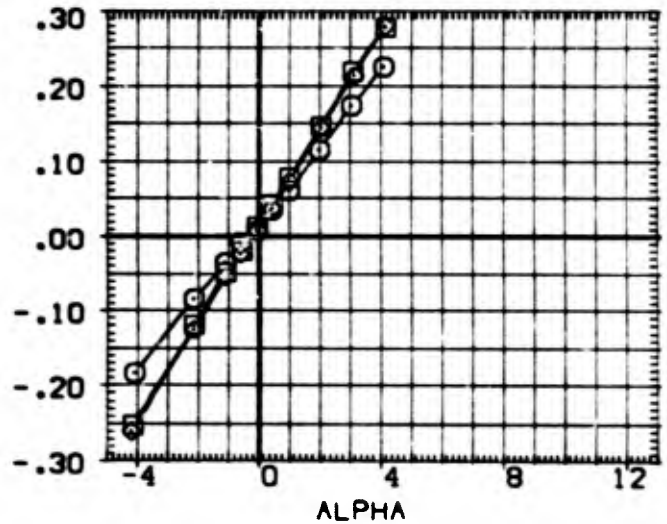
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE171)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	1.500
(BLE183)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	1.500
(BLE195)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	1.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	







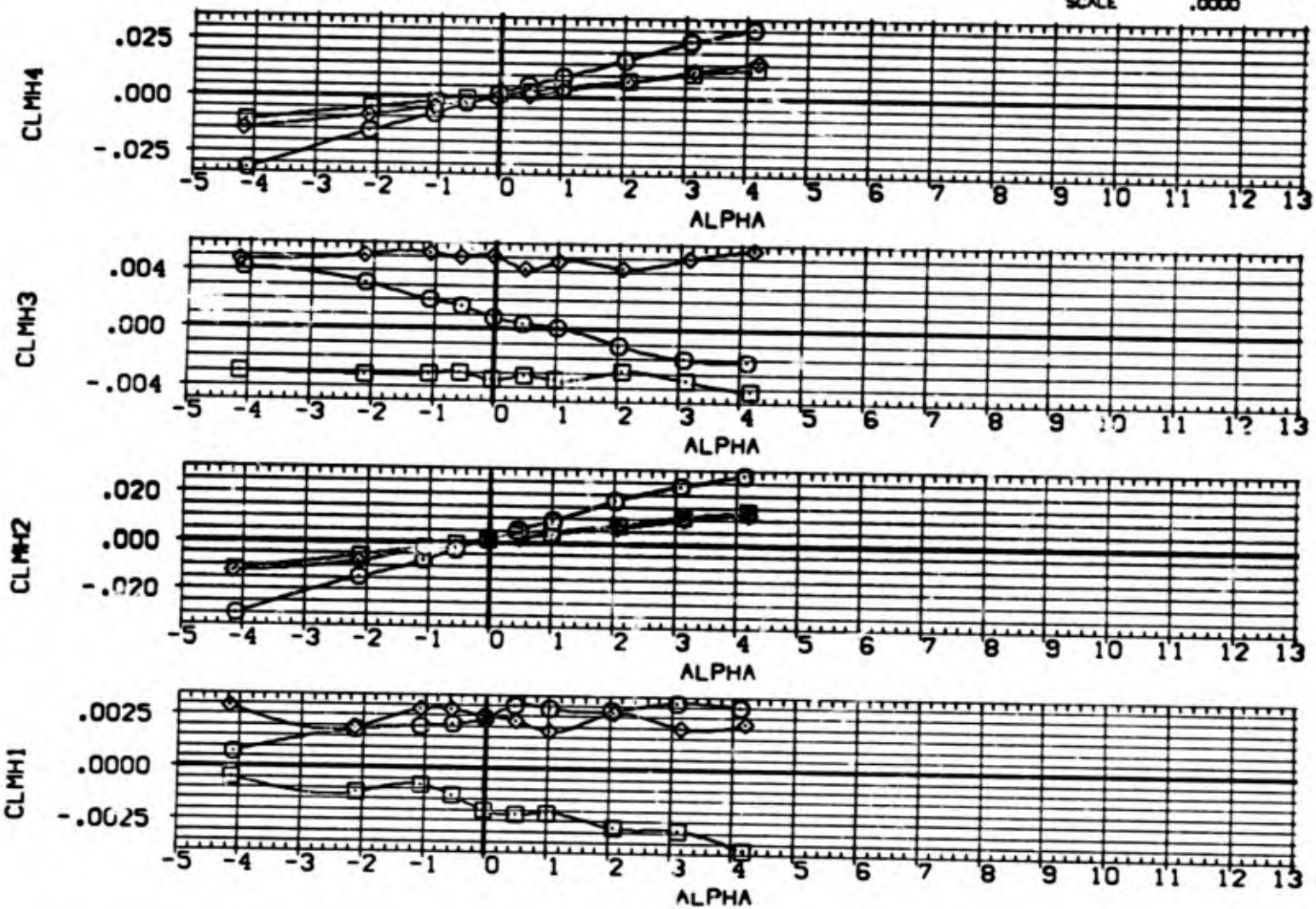


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.25

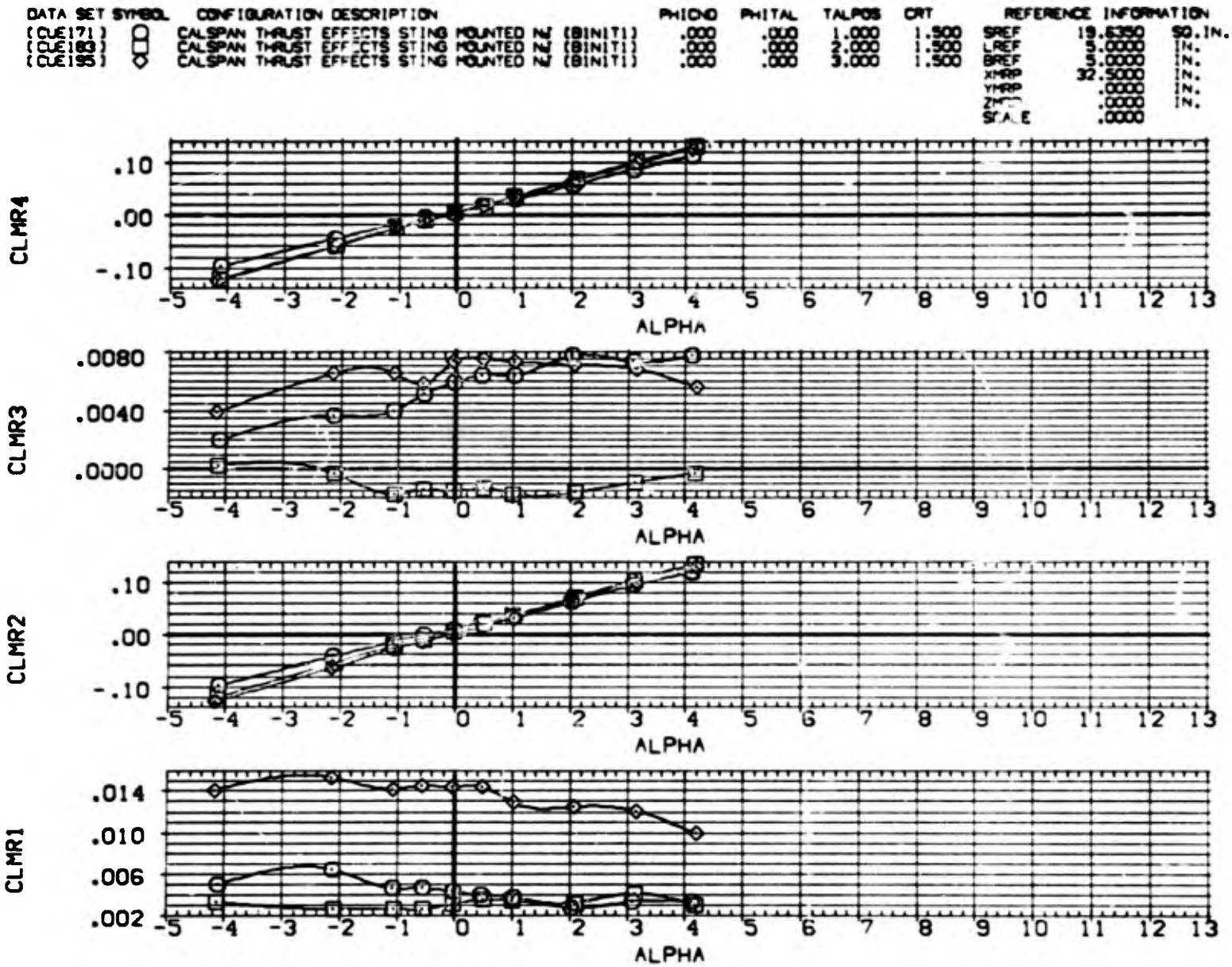
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE171)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	1.500
(DUE183)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	1.500
(DUE195)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	1.500

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	37.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.25

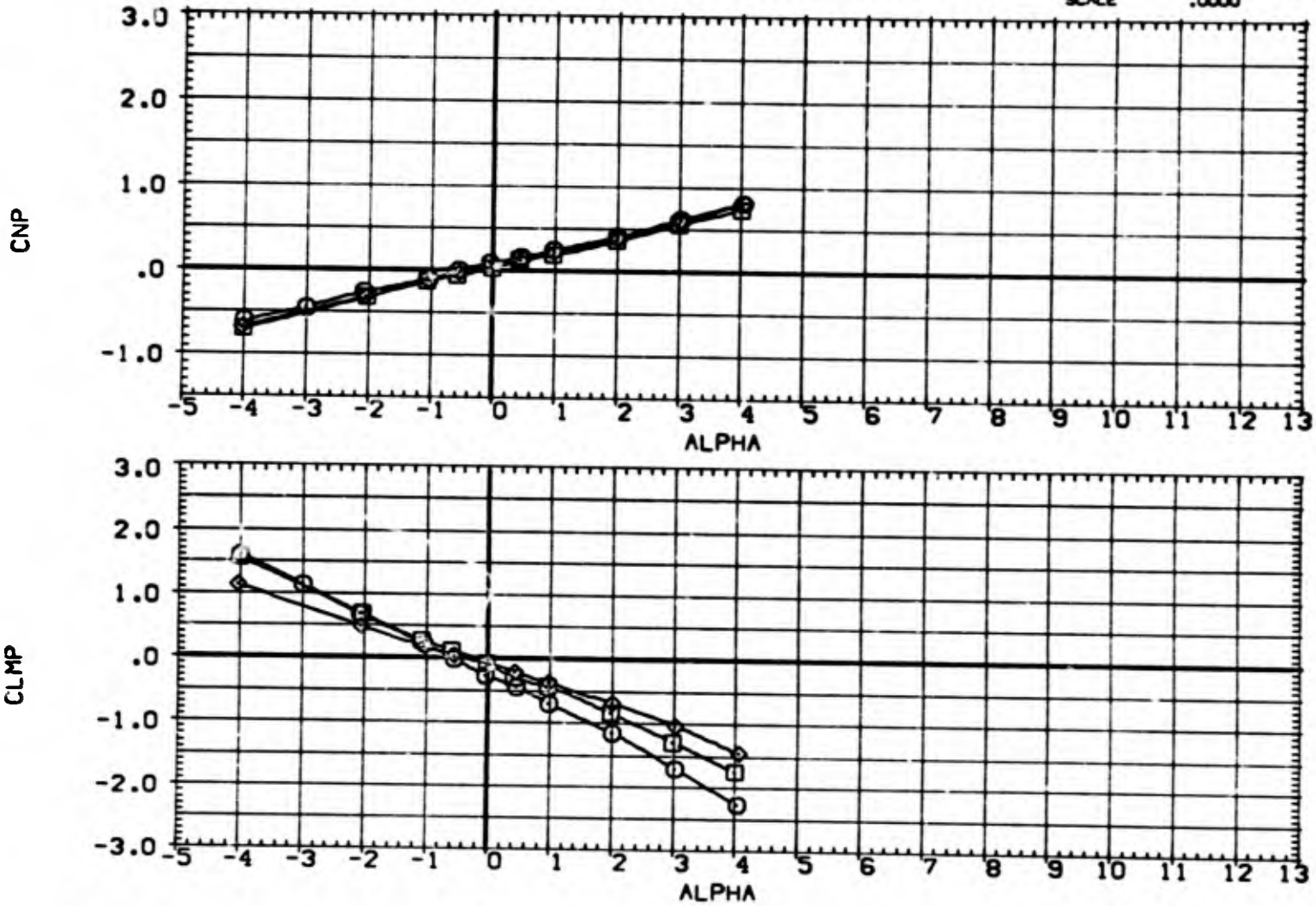


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	ORT
(EUE172)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	1.000	.000
(EUE184)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	2.000	.000
(EUE196)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

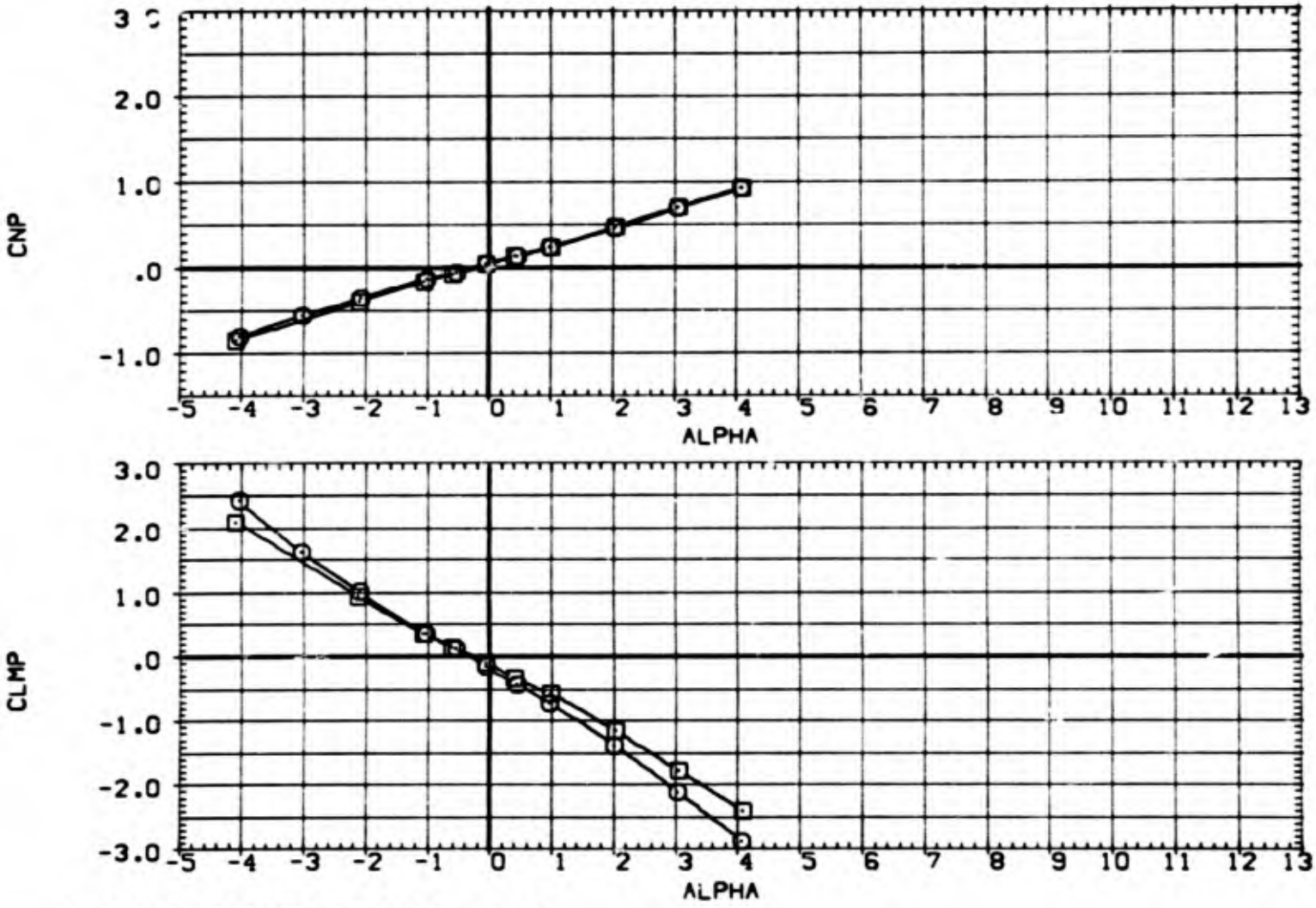


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	ORT
(EUE172)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000
(EUE184)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000
(EUE196)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

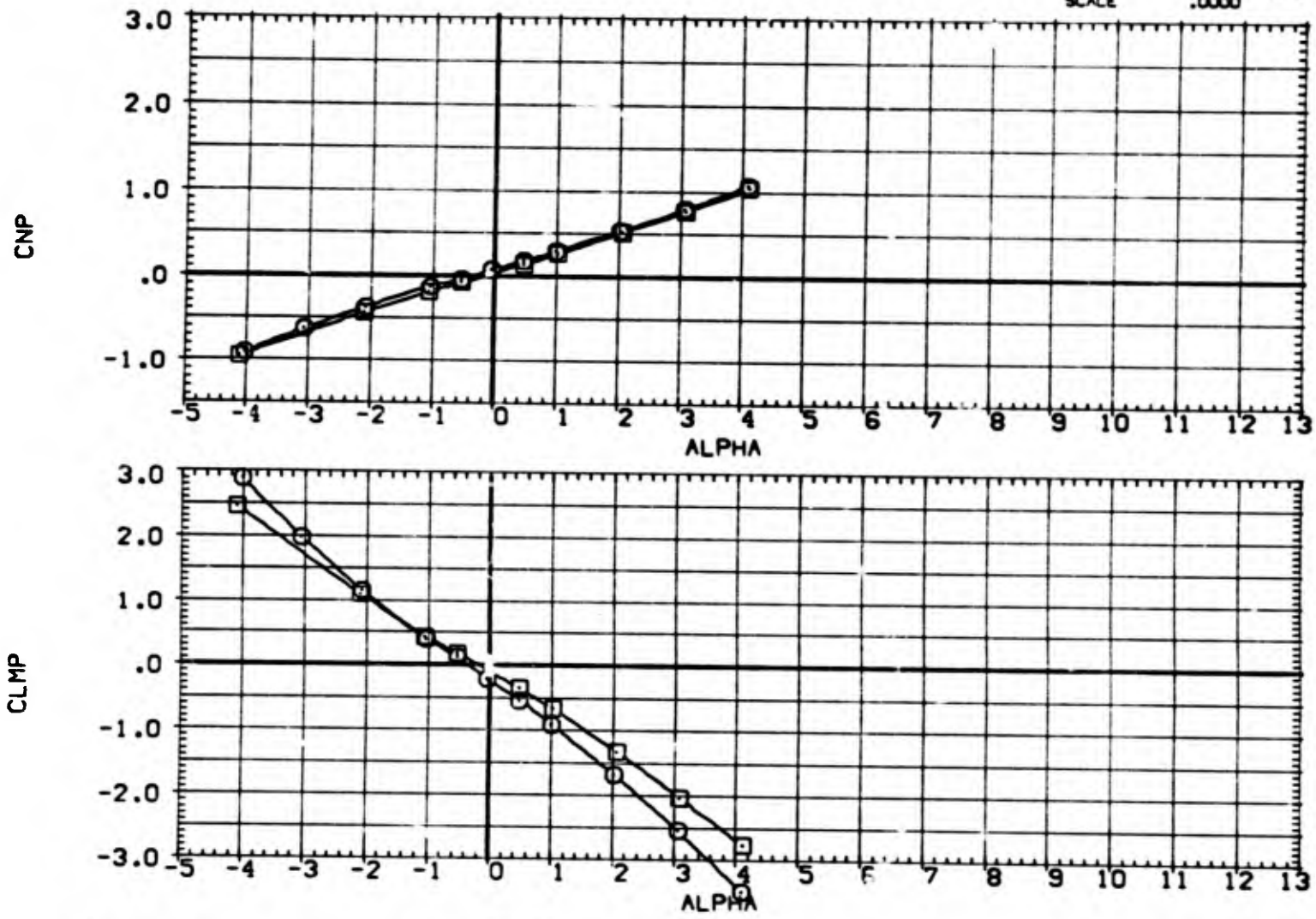


BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .79

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICNO	PHIT...	TALPOS	CRT
(EUE172)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT)	.000	.000	1.000	.000
(EUE184)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT)	.000	.000	2.000	.000
(EUE196)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	15.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

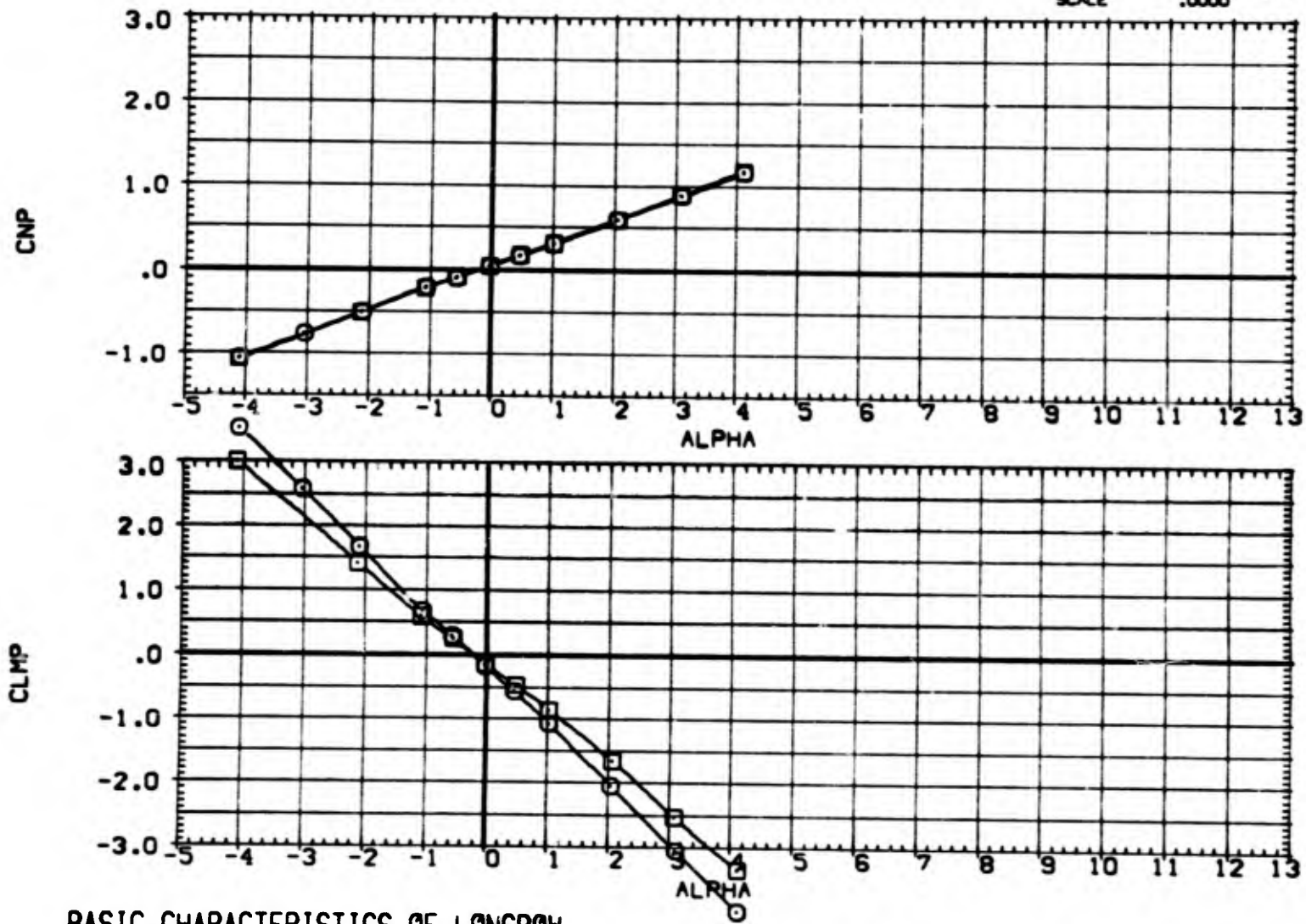


BASIC CHARACTERISTICS OF LONGBOW

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(ELE172)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	.000
(ELE184)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000
(ELE196)	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

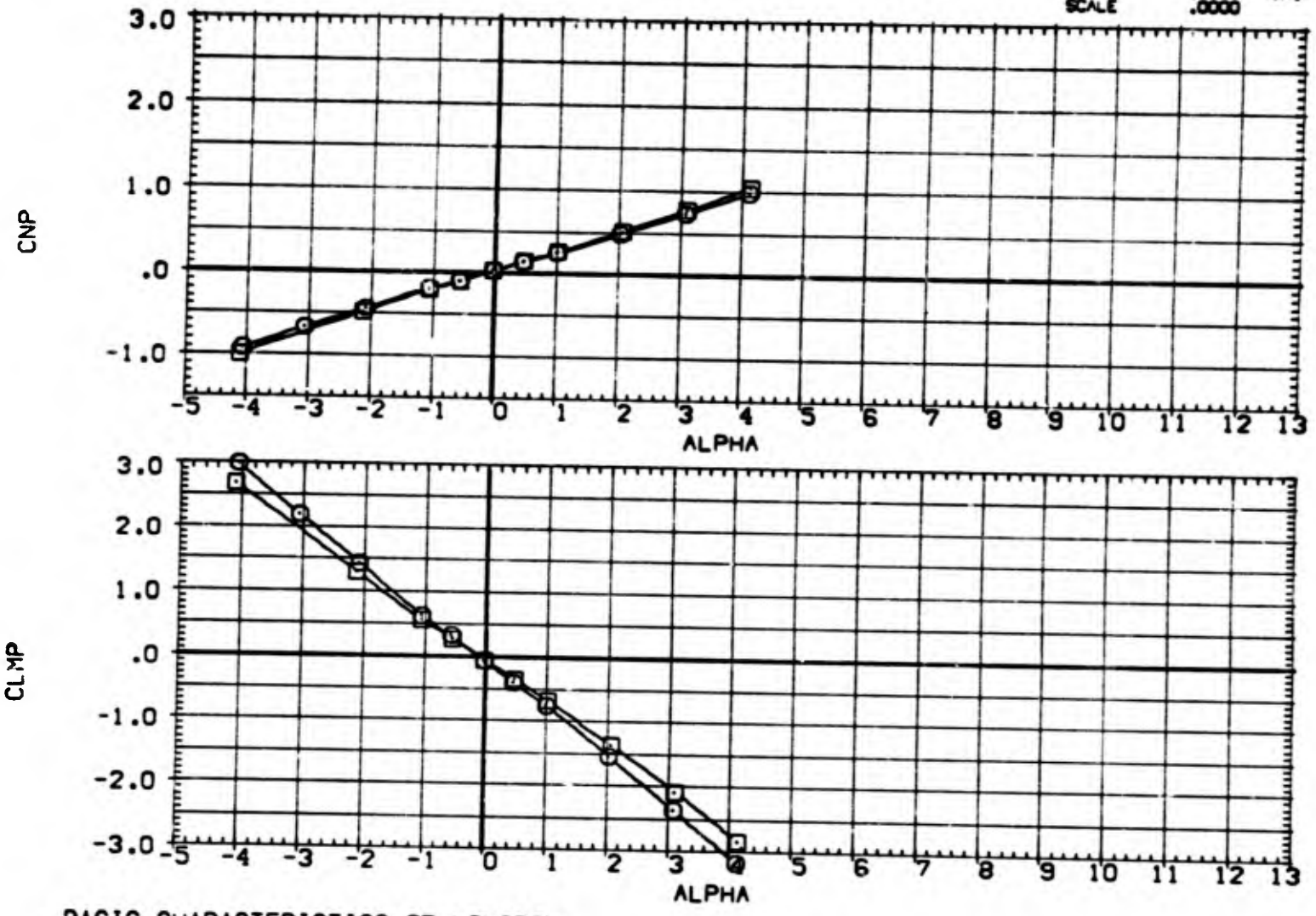


BASIC CHARACTERISTICS OF LONGBOW

(D)MACH = 1.00

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(ELE172)	○	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT)	.000	.000	1.000	.000
(ELE184)	□	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT)	.000	.000	2.000	.000
(ELE196)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

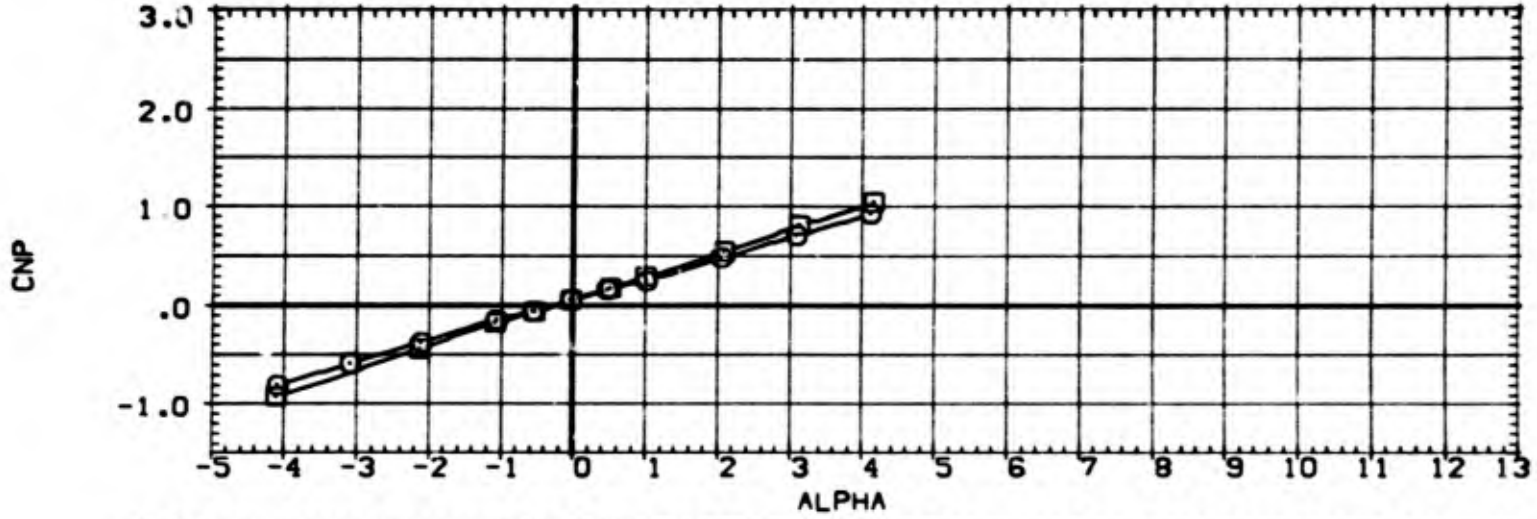


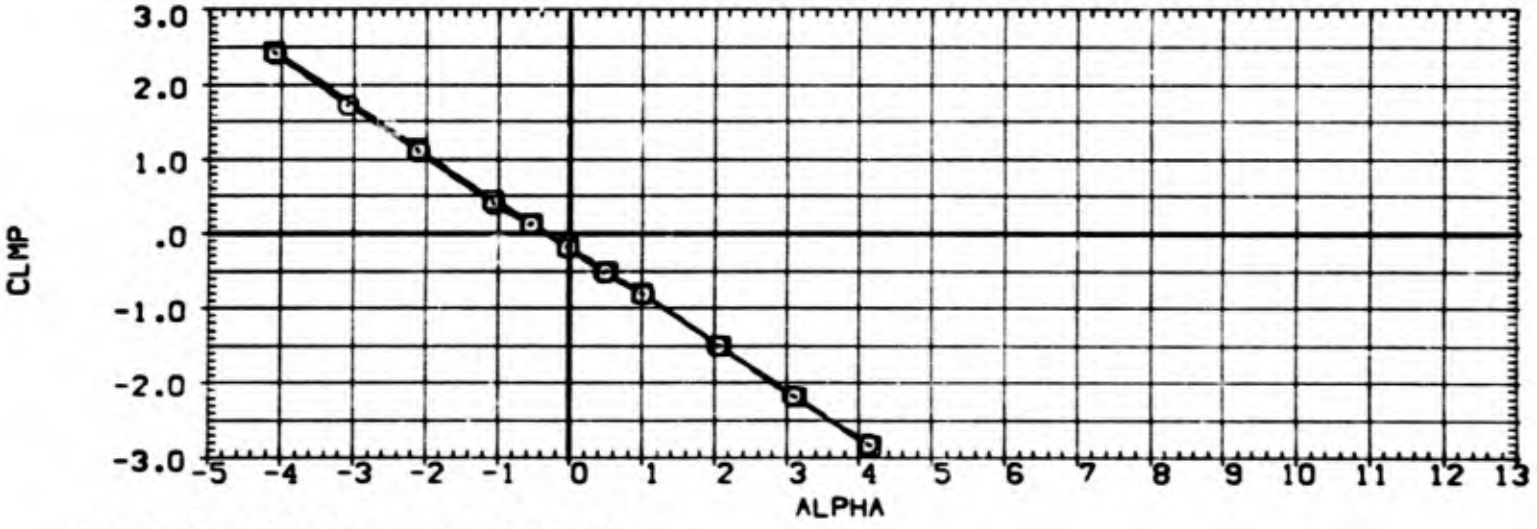
BASIC CHARACTERISTICS OF LONGBOW

(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(EUE172)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	1.000	.000
(EUE184)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	2.000	.000
(EUE196)	○	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



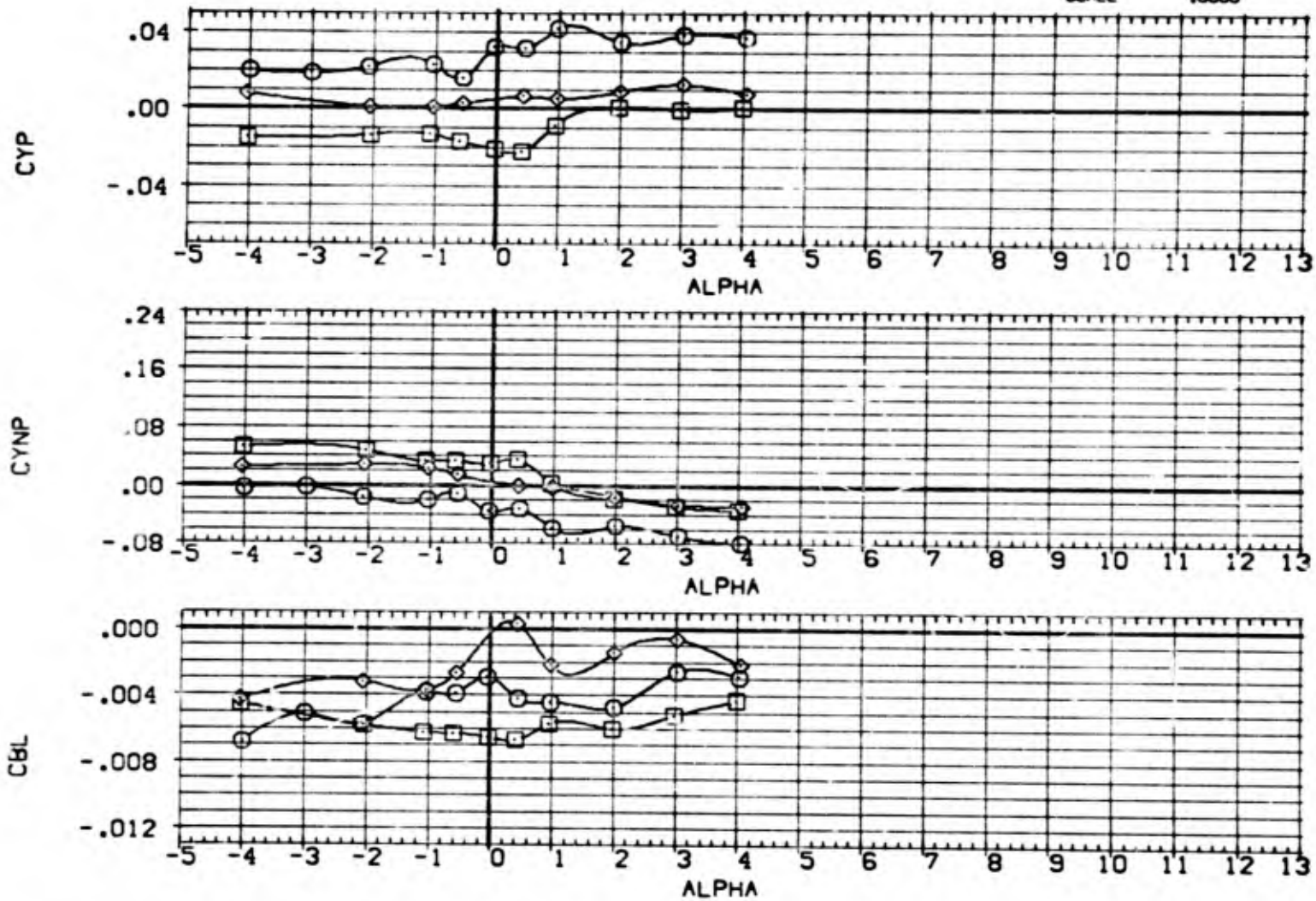


BASIC CHARACTERISTICS OF LONGBOW

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(ELE172)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	.000
(ELE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000
(ELE196)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

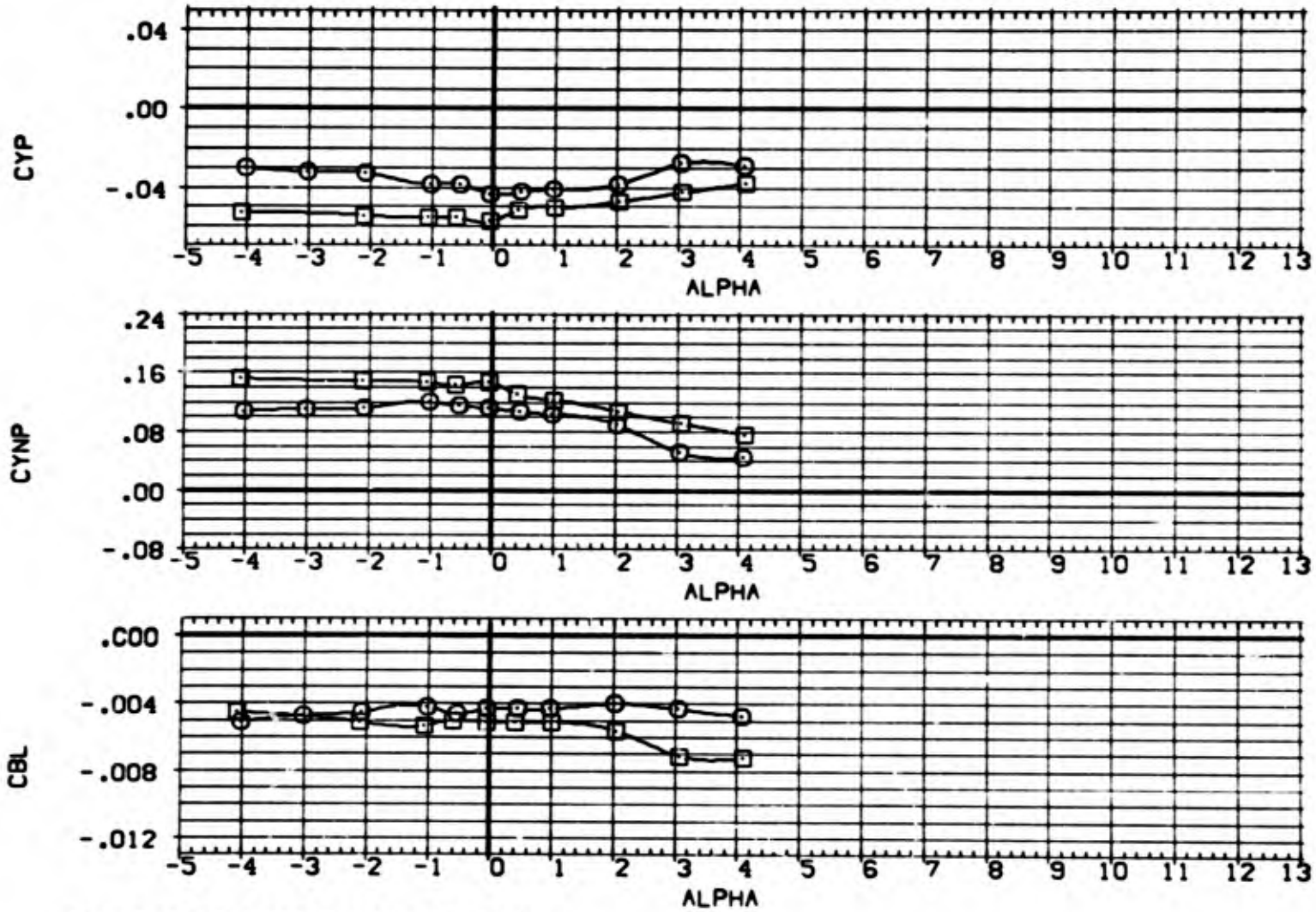


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(ELE172)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000
(ELE184)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000
(ELE195)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

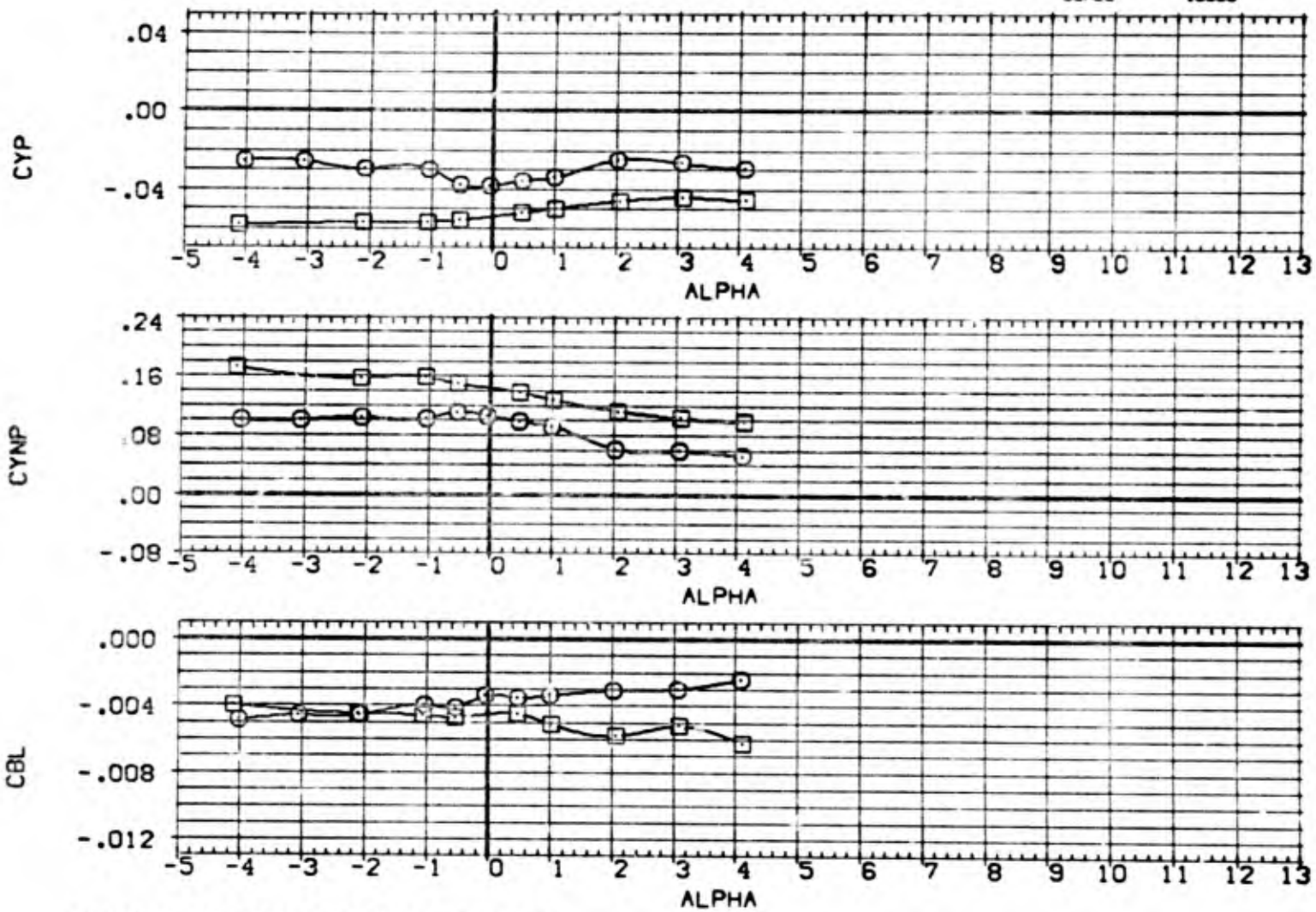


BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .79

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE172)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	1.000	.000
(EUE184)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	2.000	.000
(EUE196)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

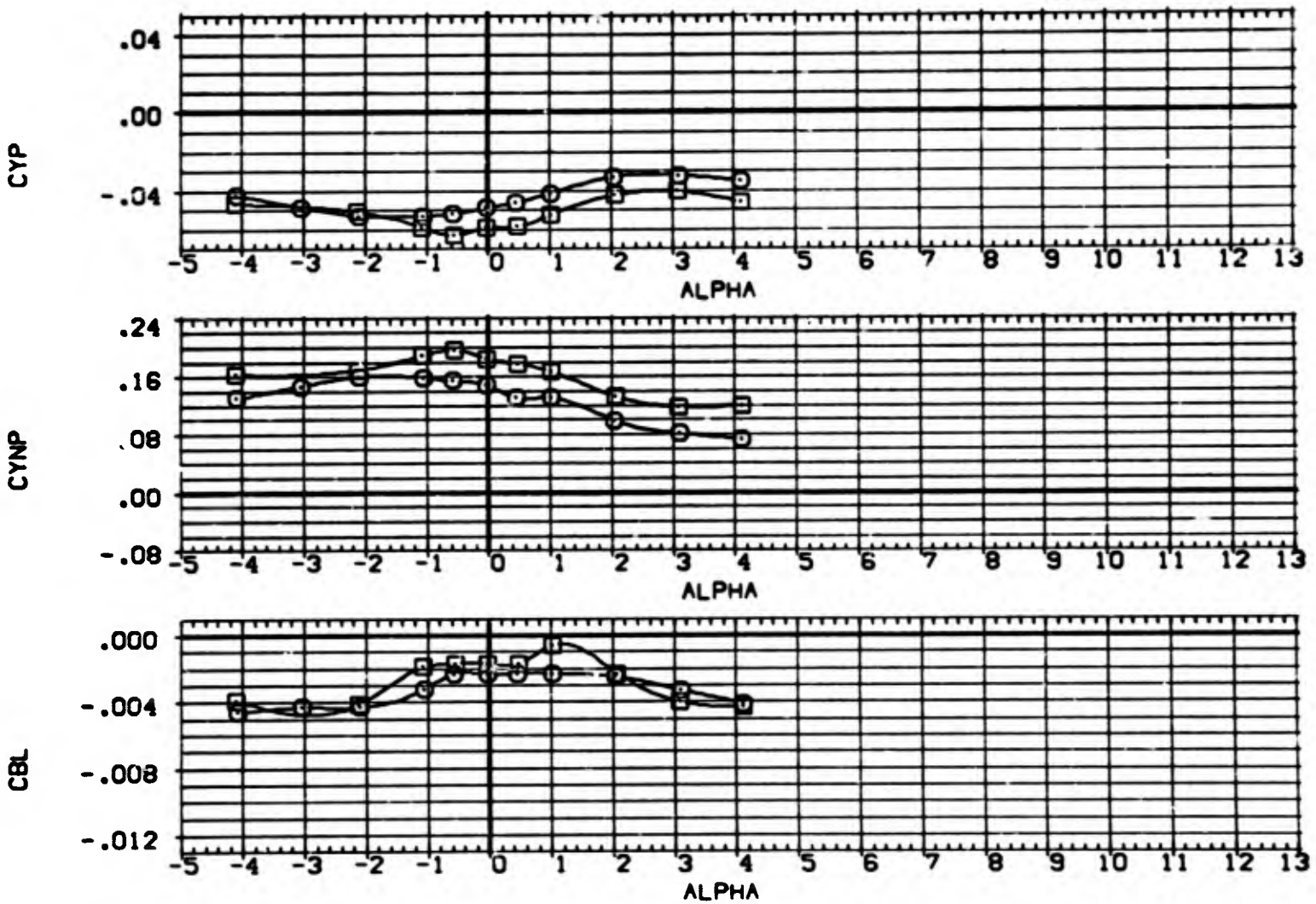


BASIC CHARACTERISTICS OF LONGBOW

(C)MACH = .30

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EVE172)	○	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT1)	.000	.000	1.000	.000
(EVE184)	□	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT1)	.000	.000	2.000	.000
(EVE196)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

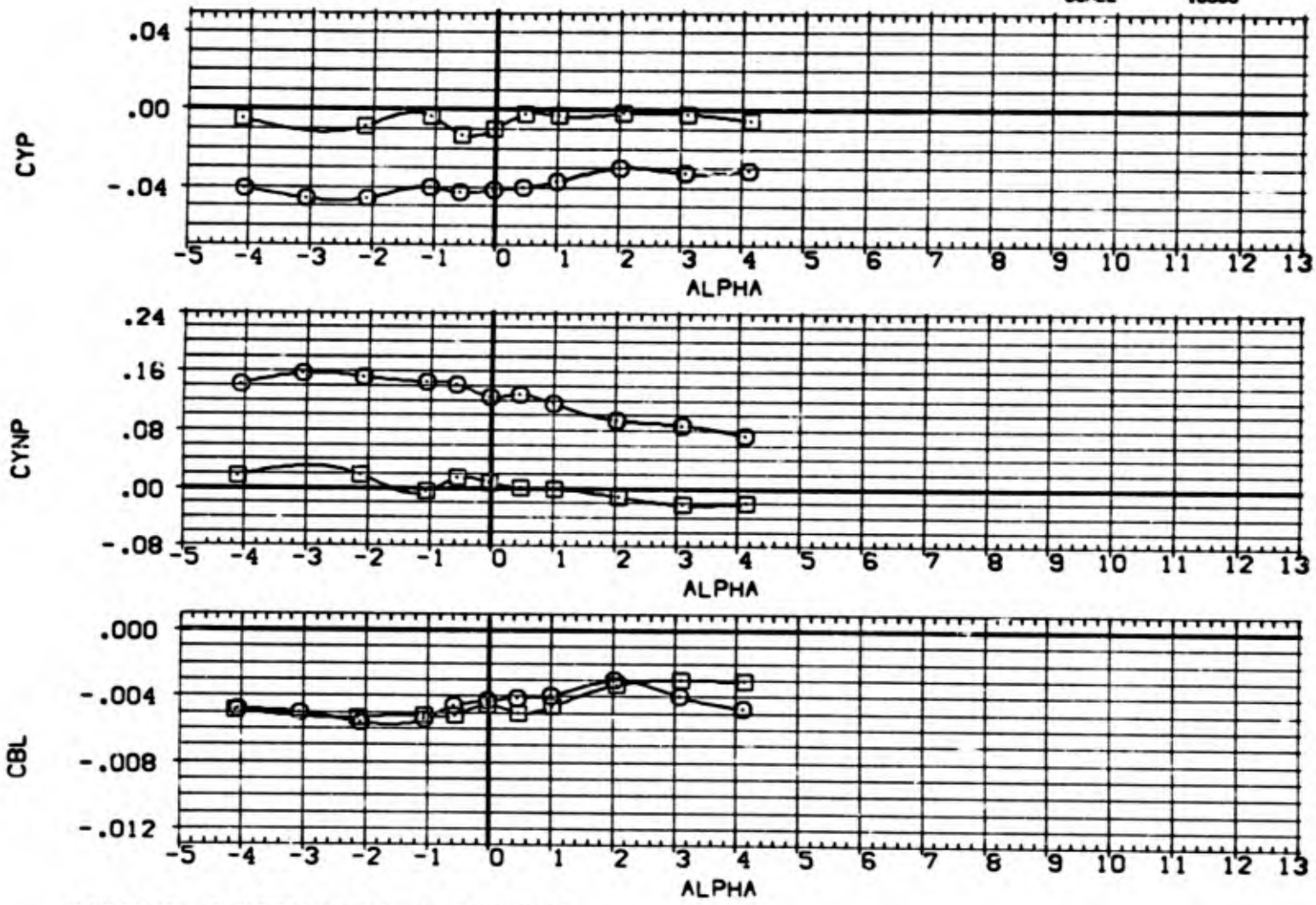


BASIC CHARACTERISTICS OF LONGBOW

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(EUE172)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000
(EUE184)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000
(EUE196)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

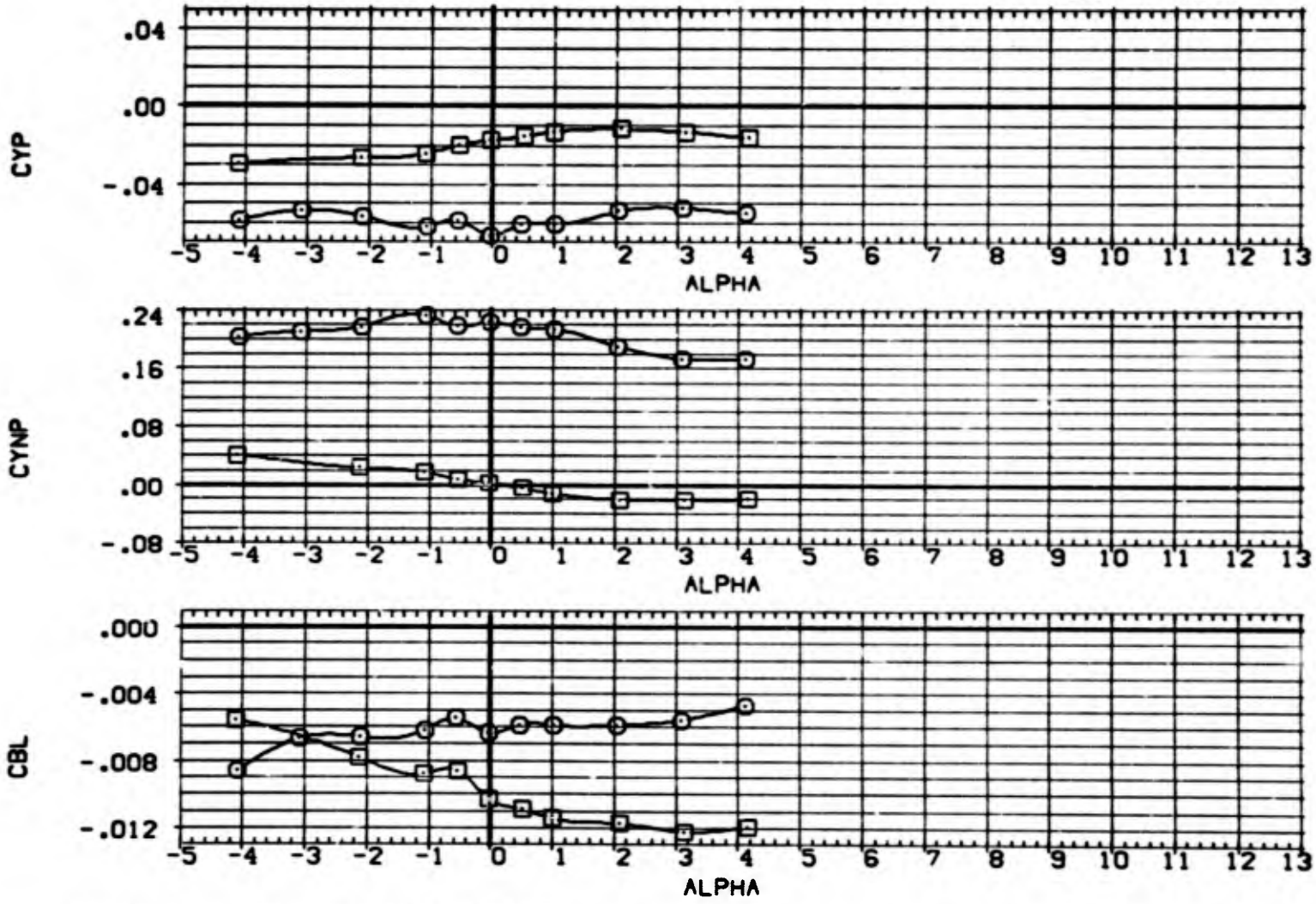


BASIC CHARACTERISTICS OF LONGBOW

(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(ELE172)	○	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	1.000	.000
(ELE184)	□	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	2.000	.000
(ELE196)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	92.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

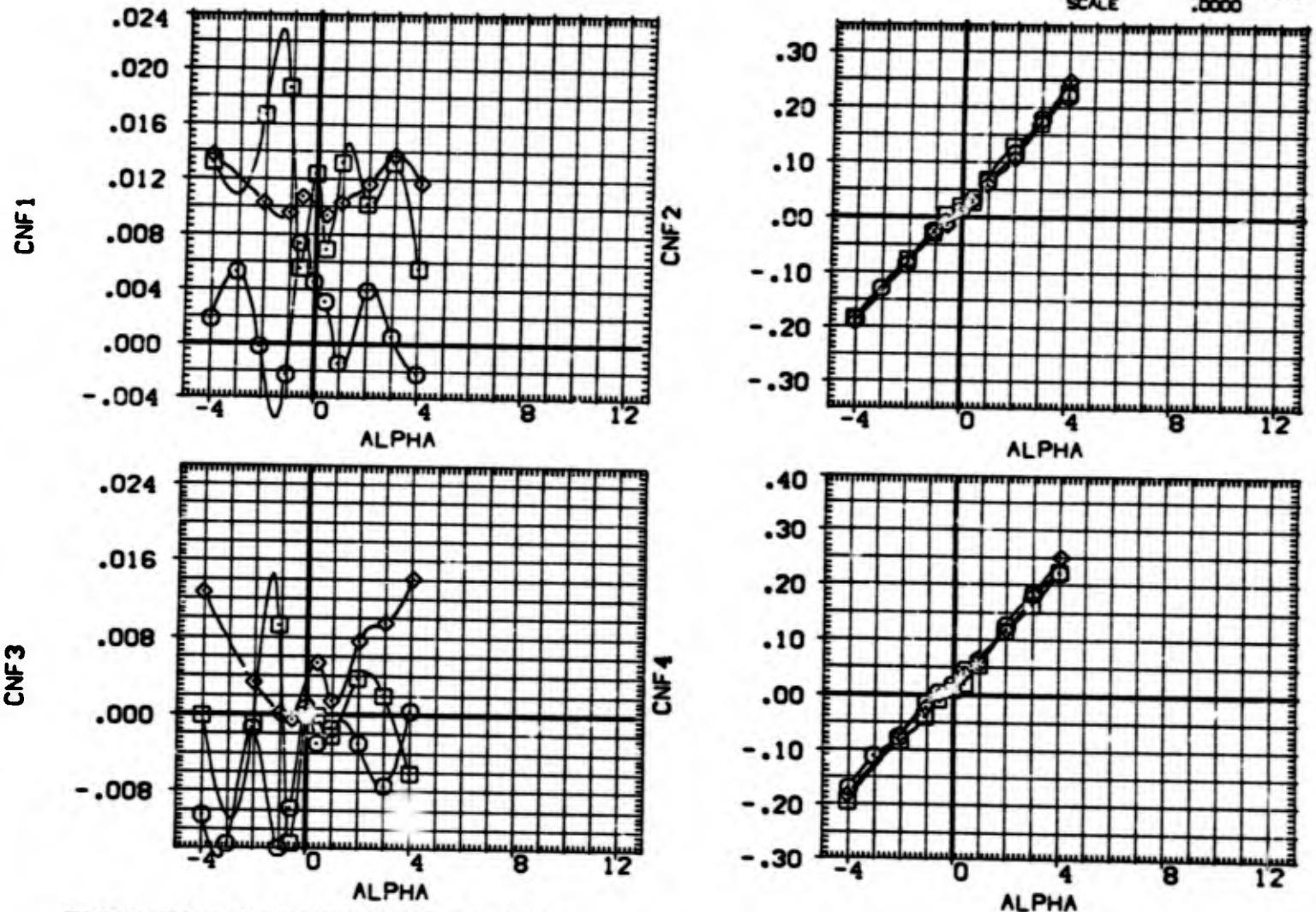


BASIC CHARACTERISTICS OF LONGBOW

(F)MACH = 1.25

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE172) ○	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	1.000	.000
(BLE184) □	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	2.000	.000
(YUE196) ◇	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

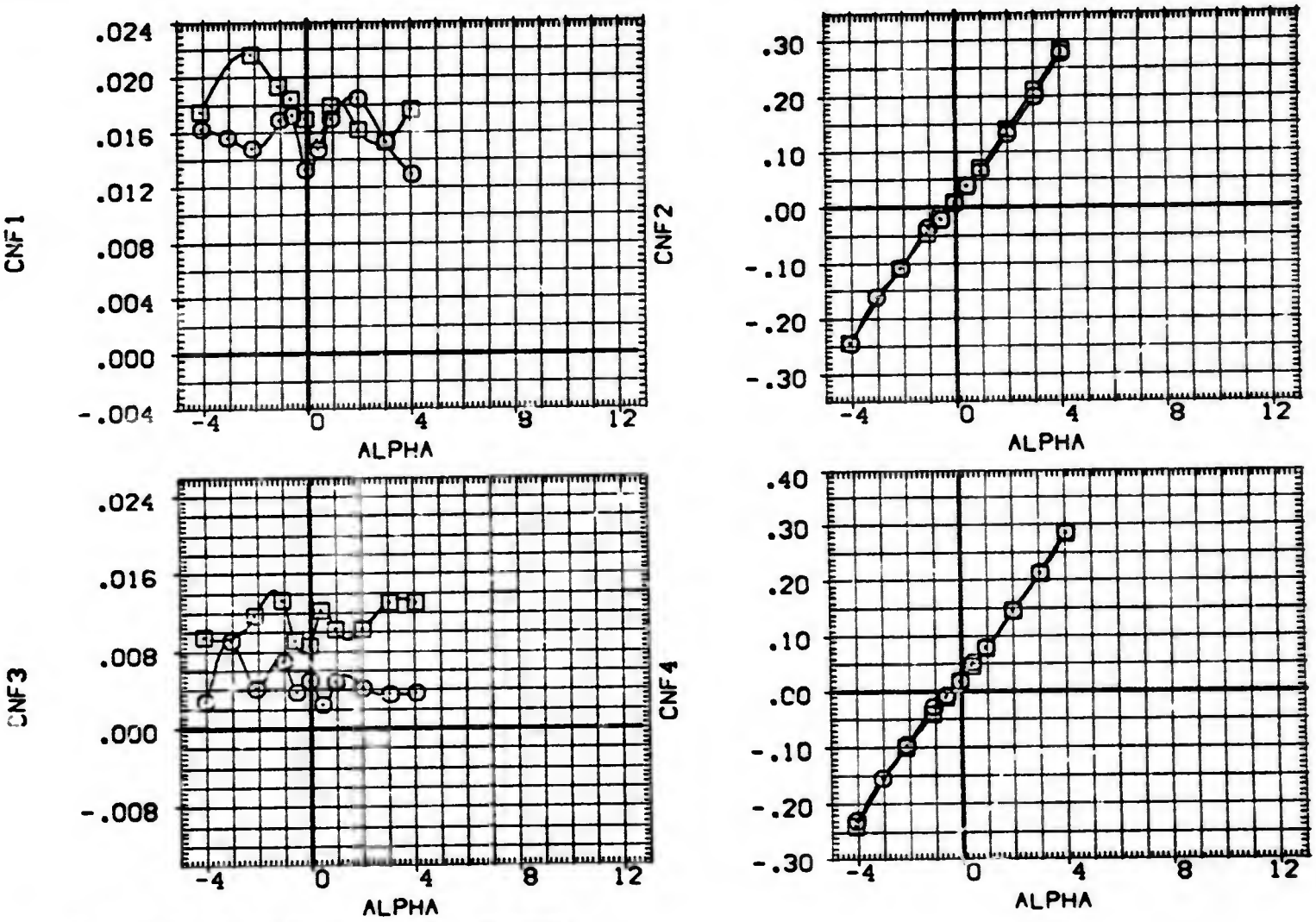


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .40

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BLE172) ○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	1.000	.000
(BLE184) □	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINITI)	.000	.000	2.000	.000
(YUE196) ◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

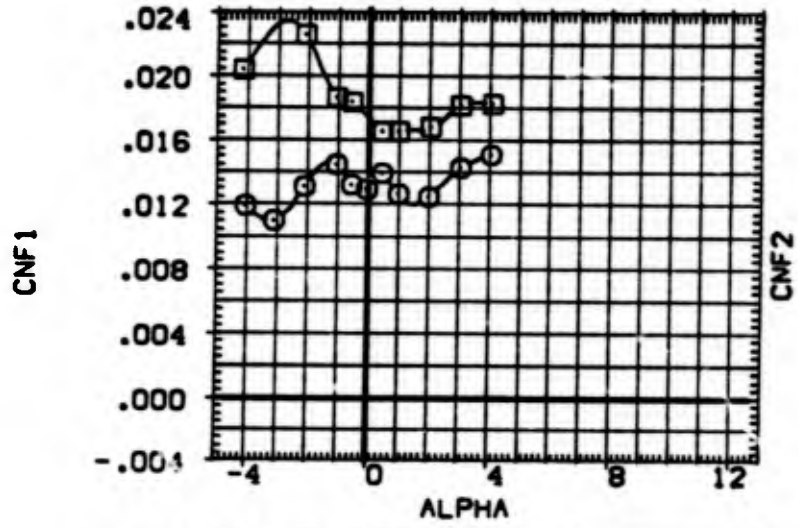


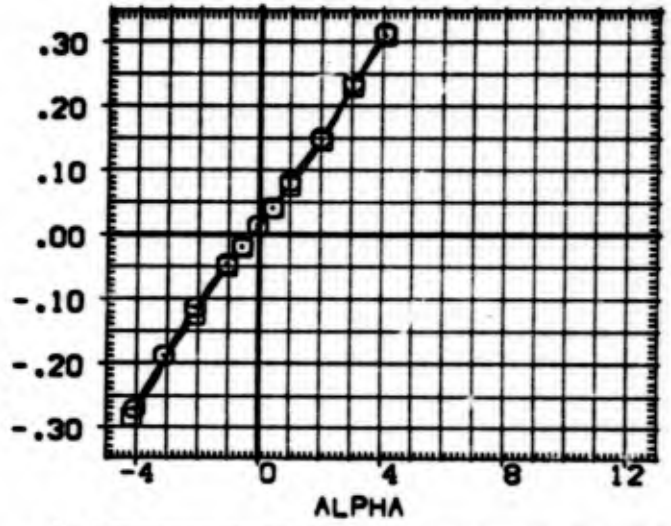
BASIC CHARACTERISTICS OF LONGBOW

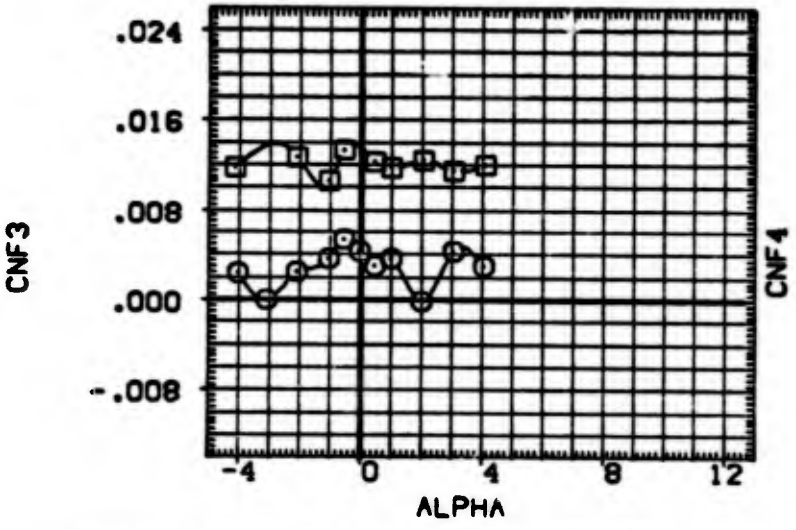
(B)MACH = .79

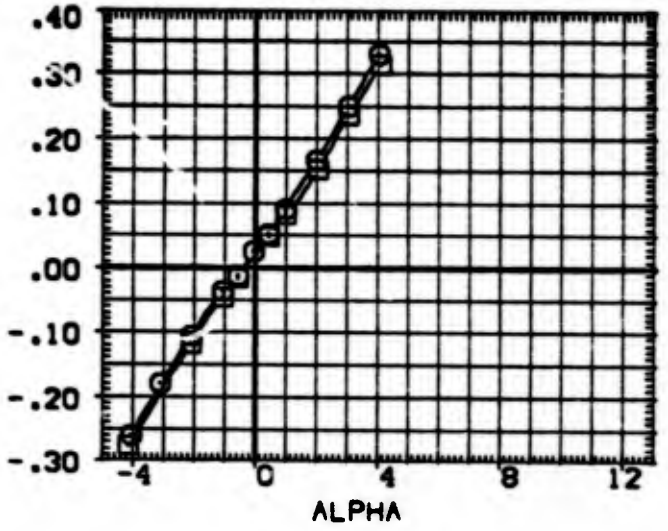
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BLUE172) □	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.030	1.000	.000
(BLUE184) □	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000
(YLE196) ◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	







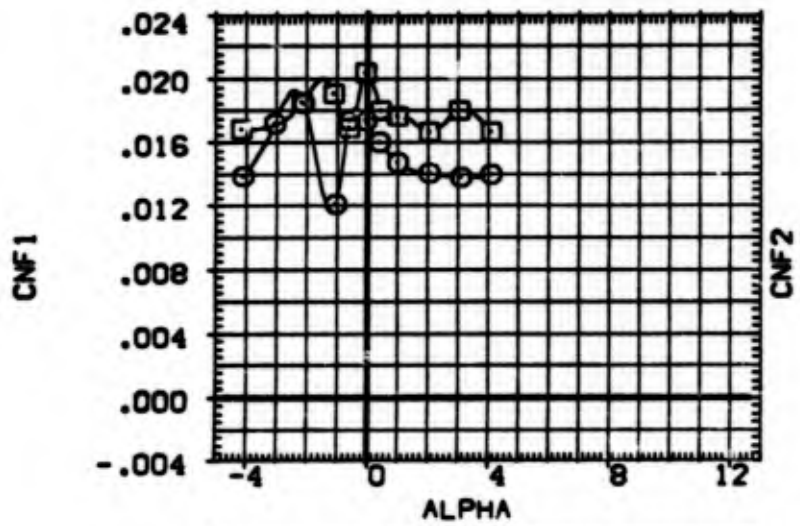


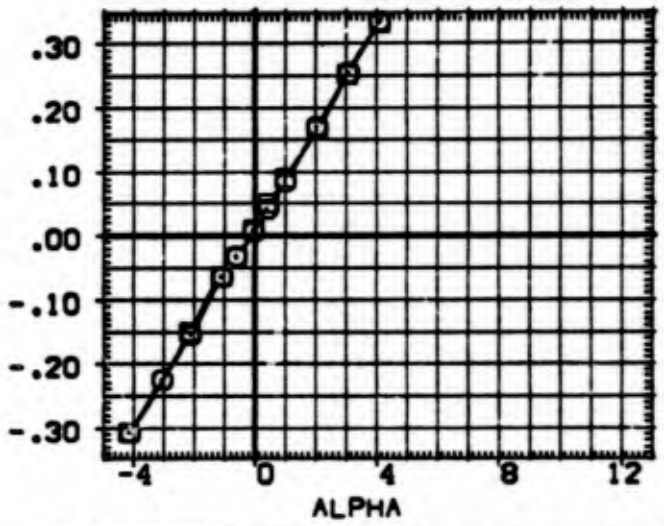
BASIC CHARACTERISTICS OF LONGBOW

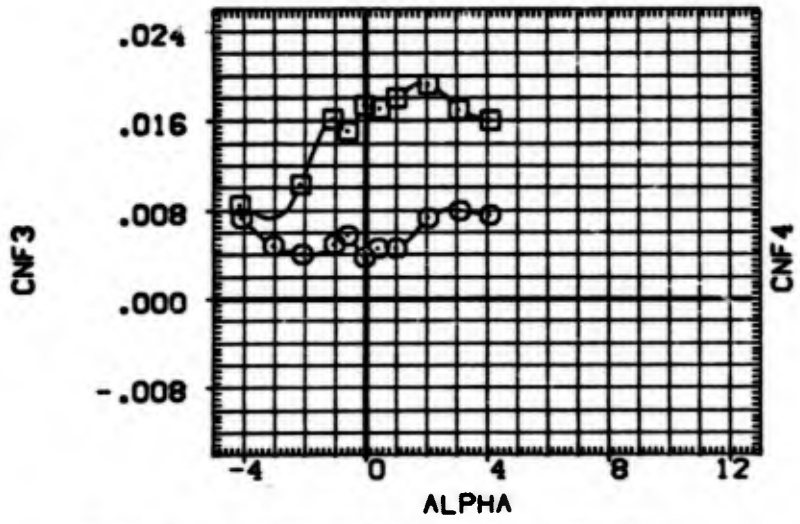
(C)MACH = .90

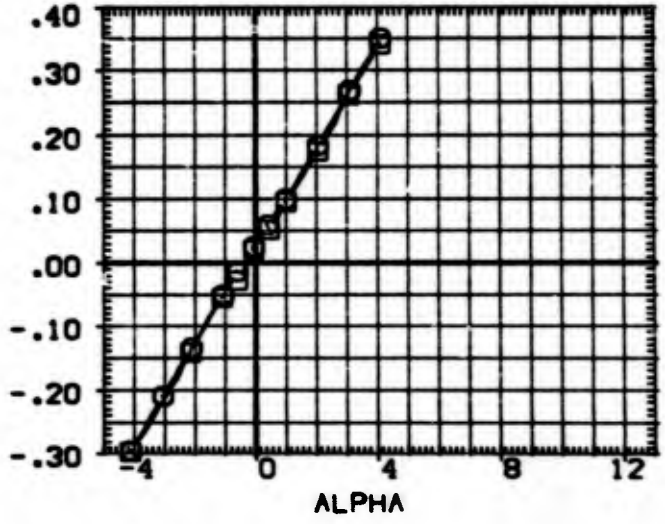
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(BJE172)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000
(BJE184)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000
(YJE196)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	







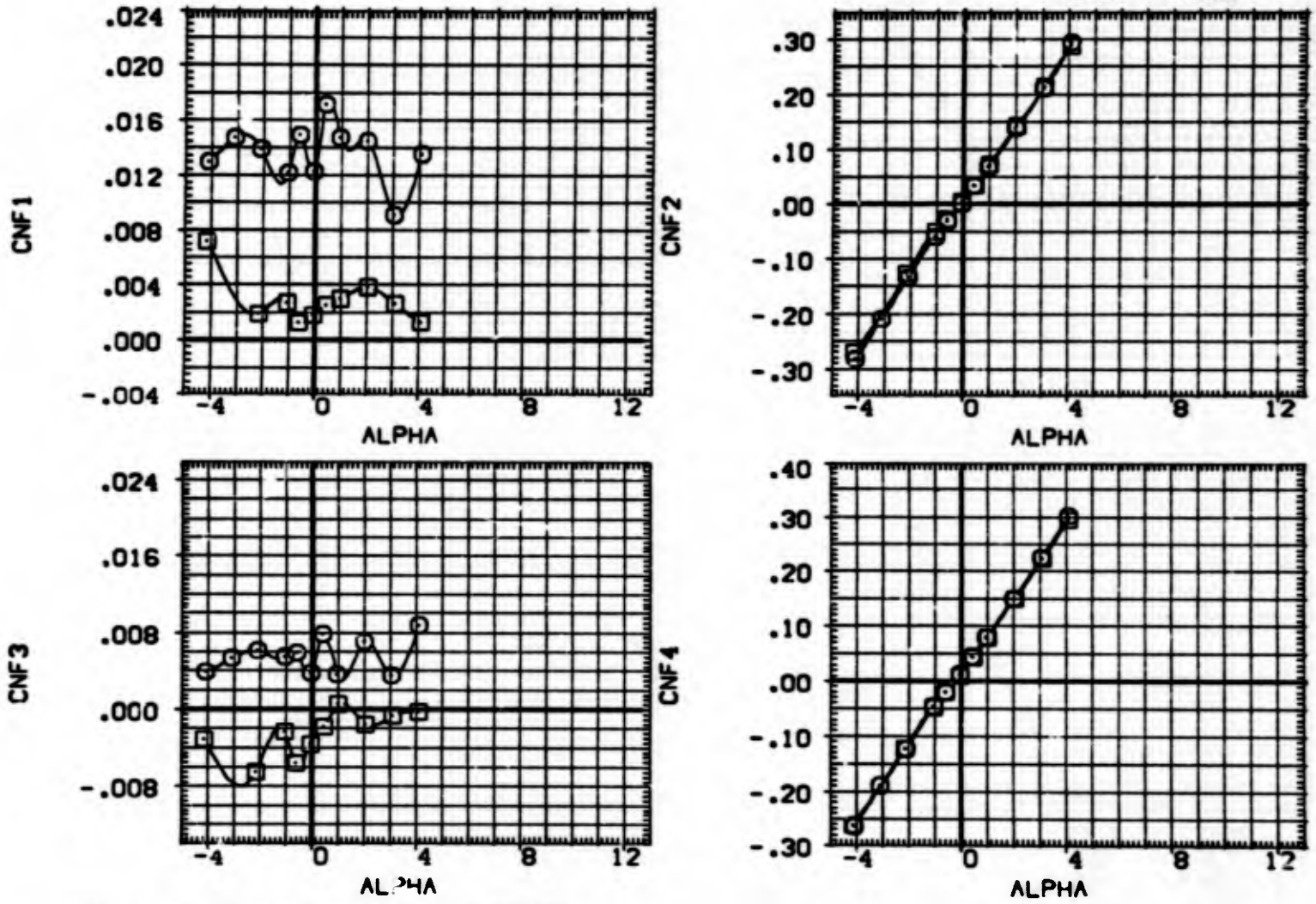


BASIC CHARACTERISTICS OF LONGBOW

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE172)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	.000
(BLE184)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000
(YLE196)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

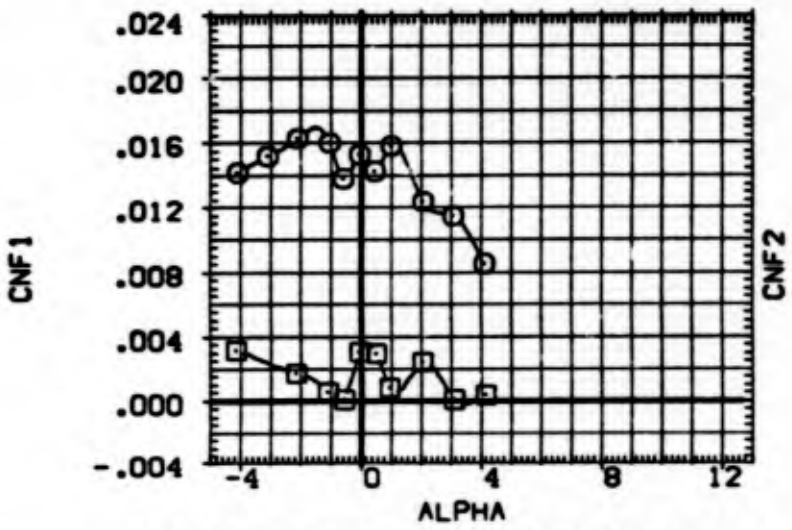


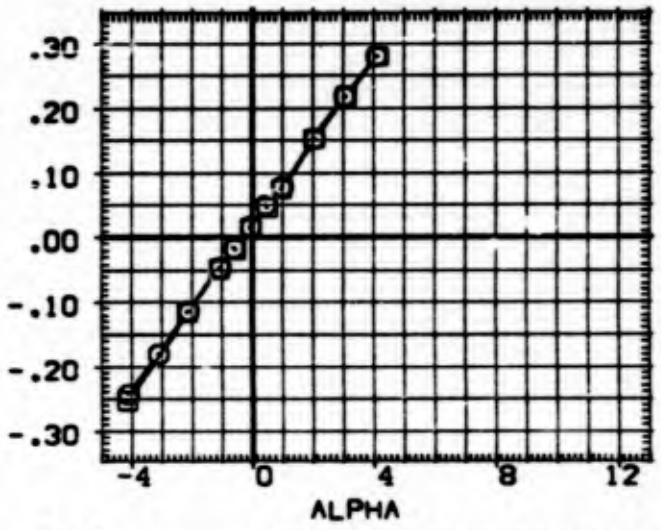
BASIC CHARACTERISTICS OF LONGBOW

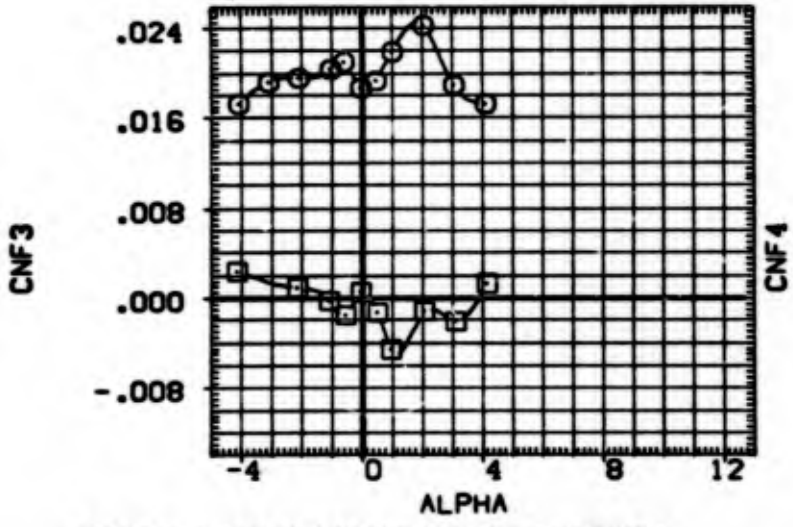
(E)MACH = 1.10

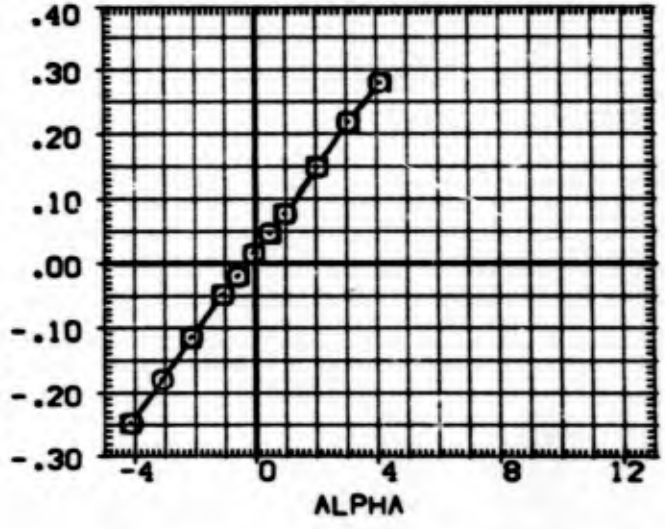
DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(BLE172)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000
(BLE184)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000
(YLE196)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	







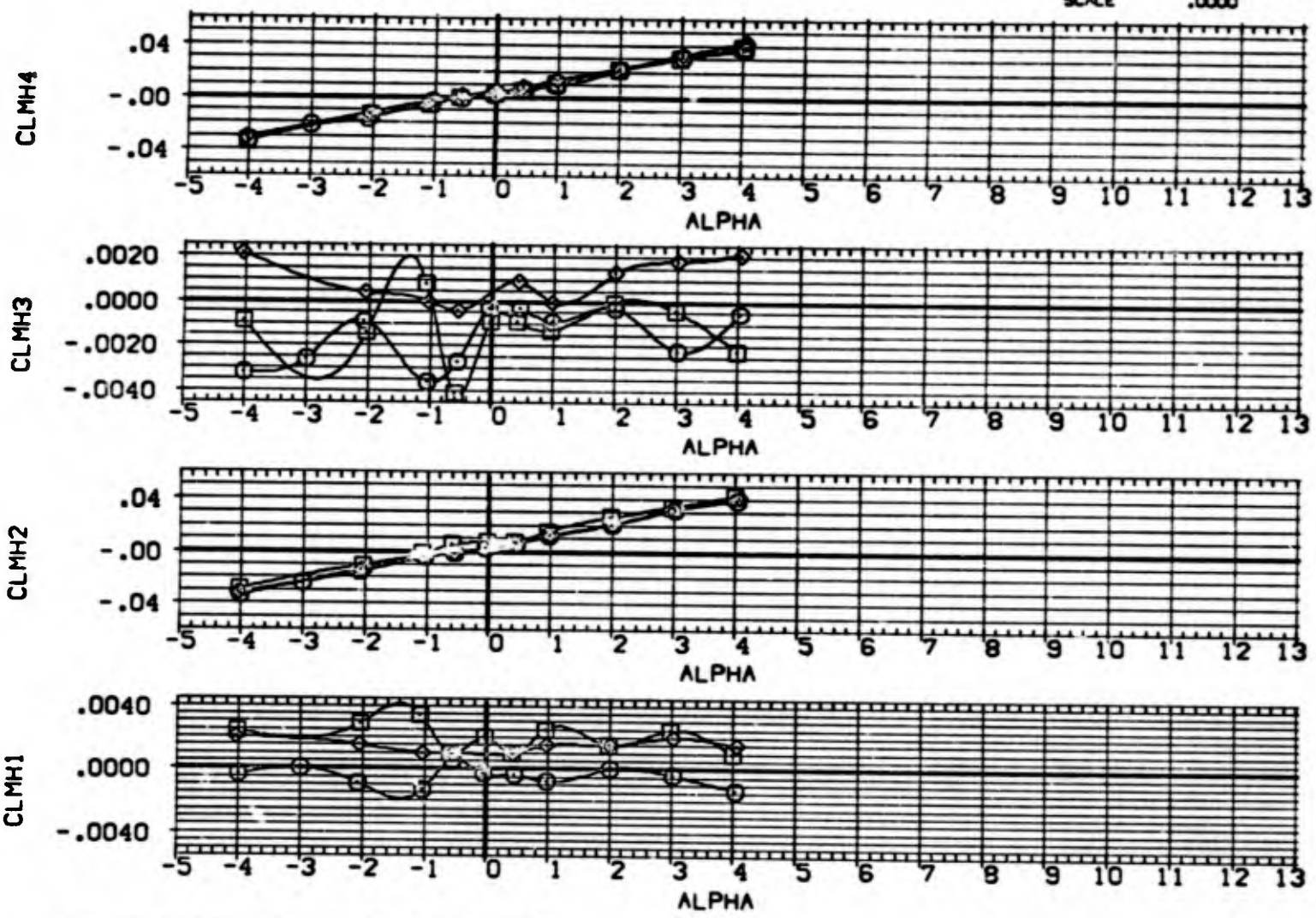


BASIC CHARACTERISTICS OF LONGBOW

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(22E172)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	.000
(22E184)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000
(22E195)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

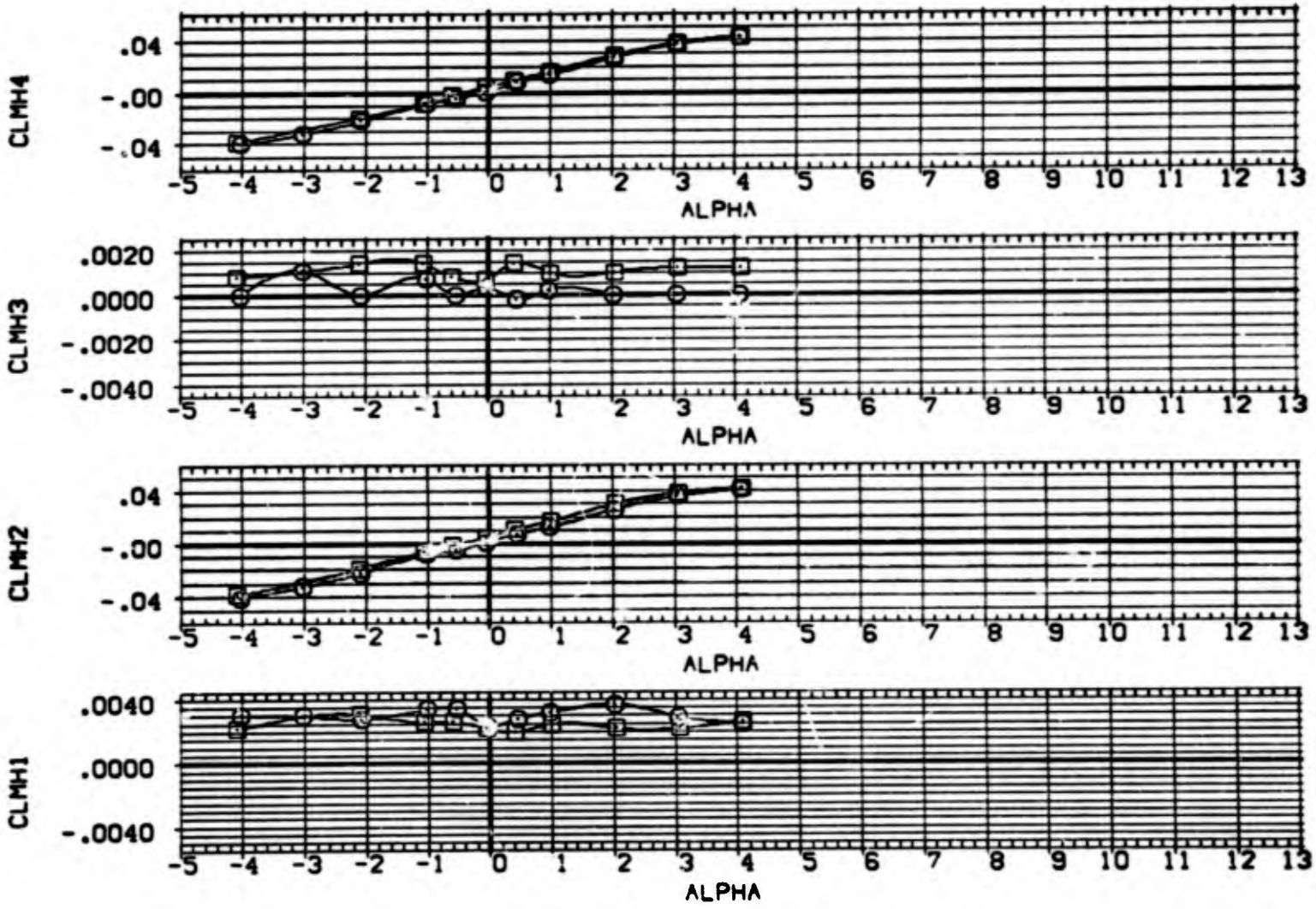


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE172)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	.000
(CUE184)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000
(CUE196)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

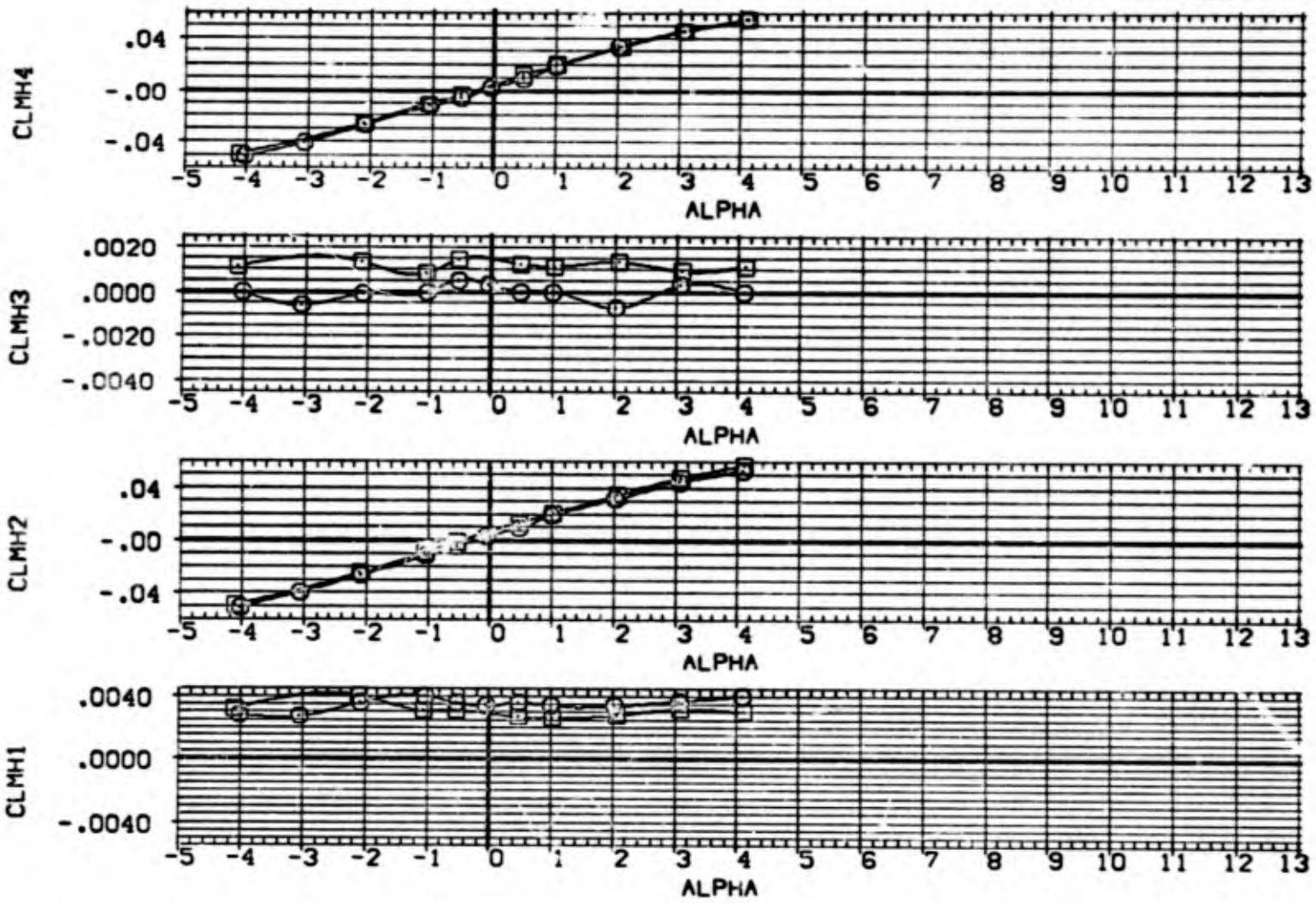


BASIC CHARACTERISTICS OF LONGBOW

(B)MACH = .79

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPHS	CRT
(DUE172)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	1.000	.000
(DUE184)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	2.000	.000
(ZUE196)		DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

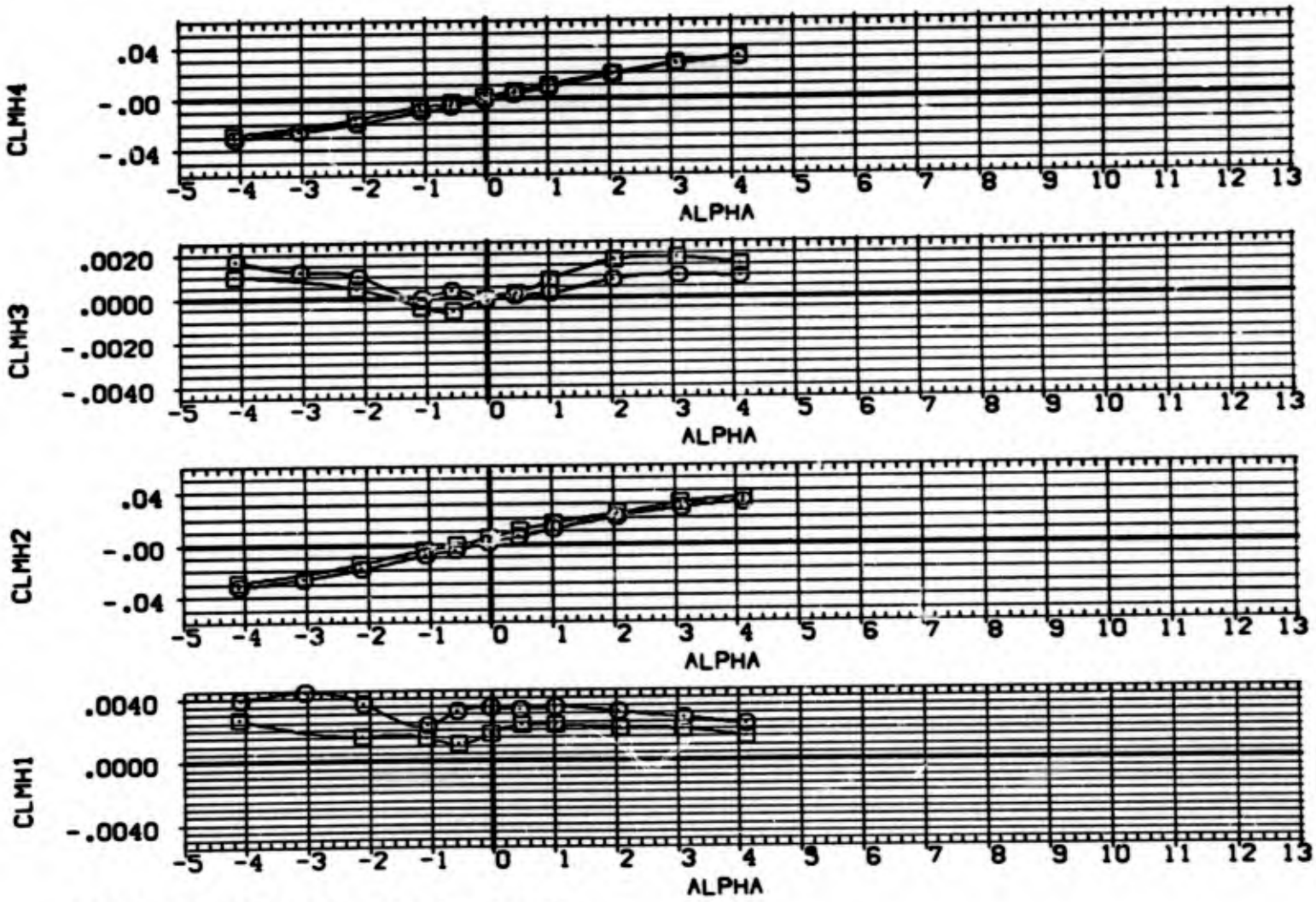


BASIC CHARACTERISTICS OF LONGBOW

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DUE172)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	.000
(DUE184)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000
(DUE196)	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

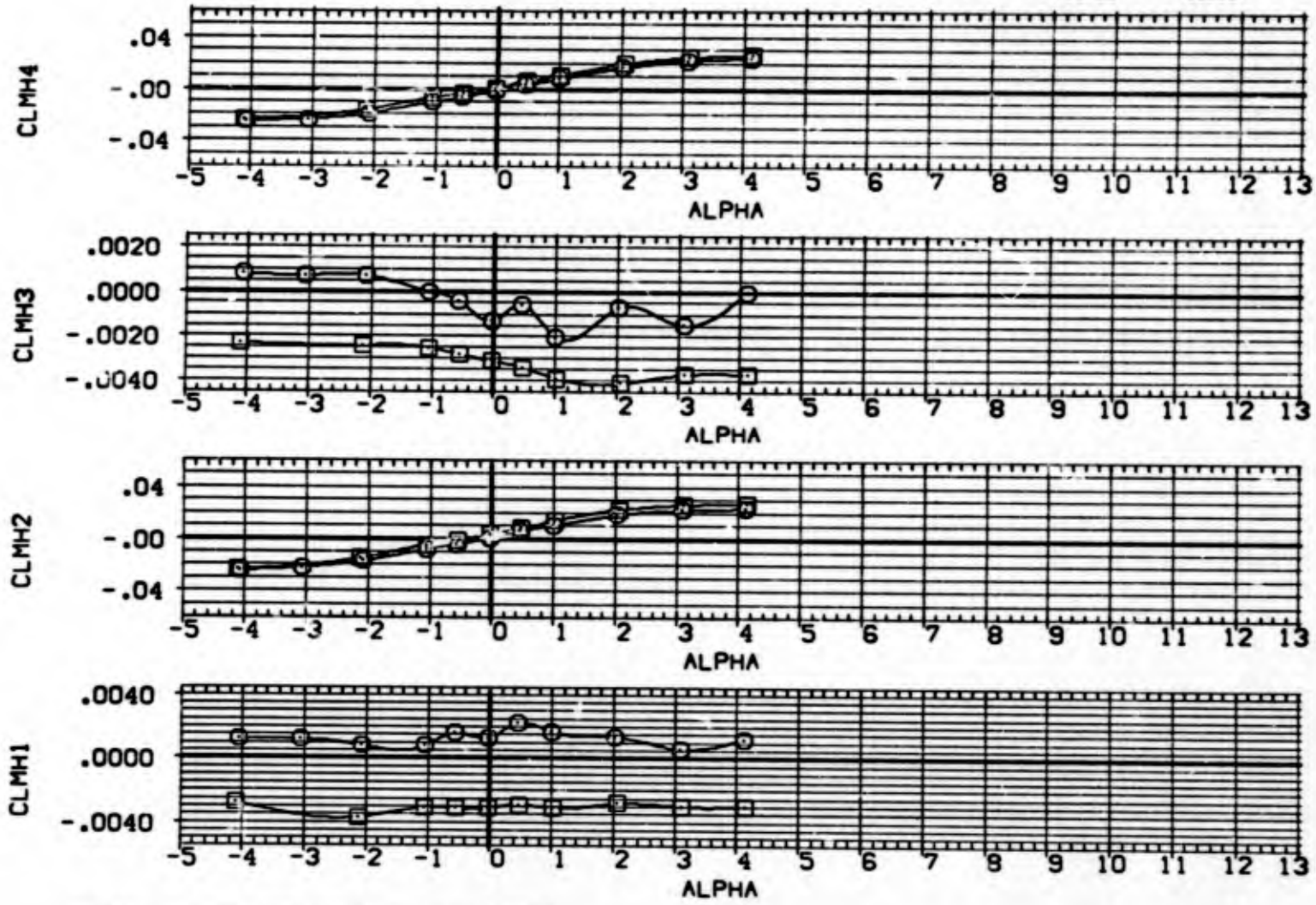


BASIC CHARACTERISTICS OF LONGBOW

(D)MACH = 1.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE172)	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000
(CUE184)	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000
(ZUE196)	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

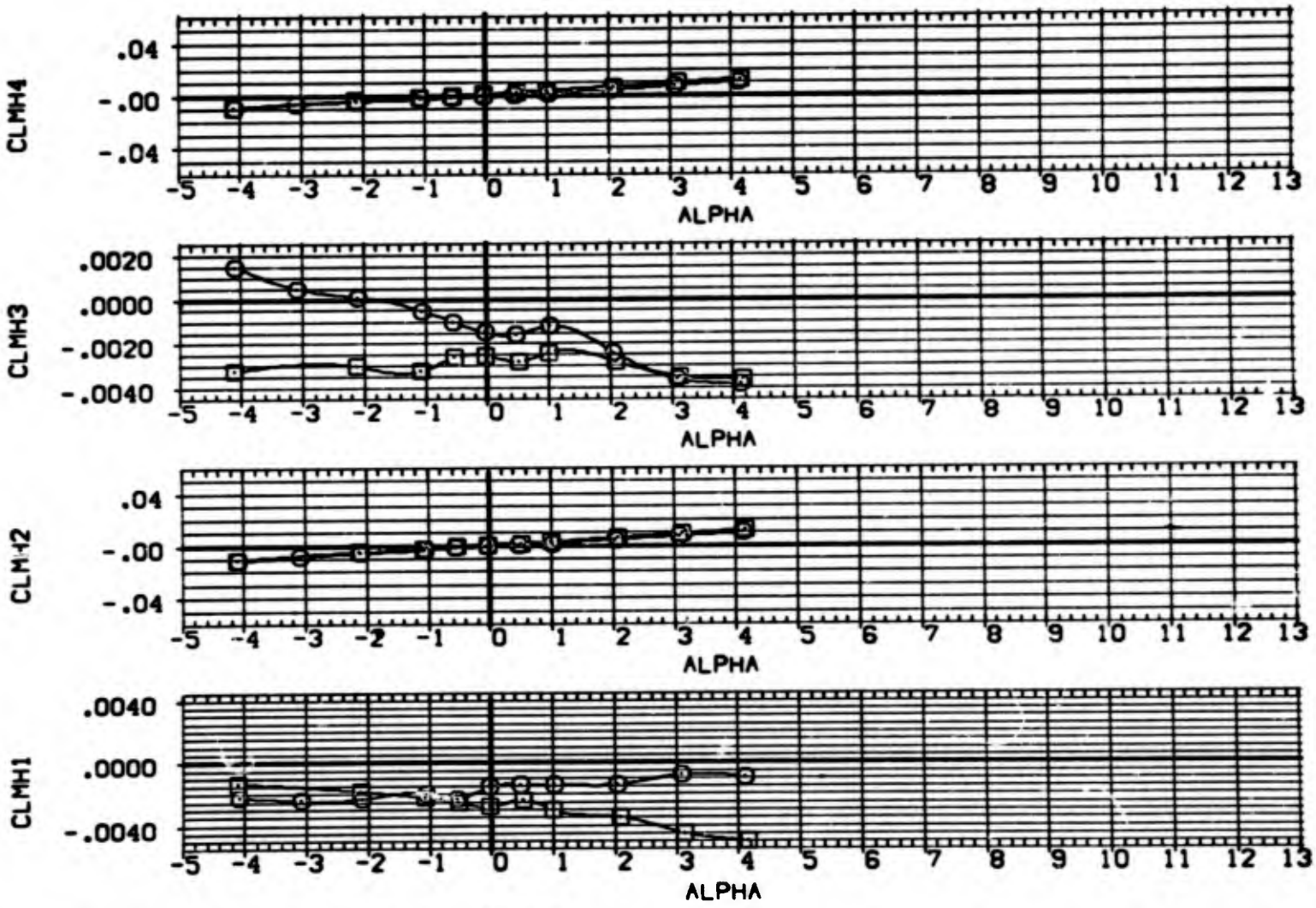


BASIC CHARACTERISTICS OF LONGBOW

(E)MACH = 1.10

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(ZUE172)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	.000
(ZUE194)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000
(ZUE196)	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

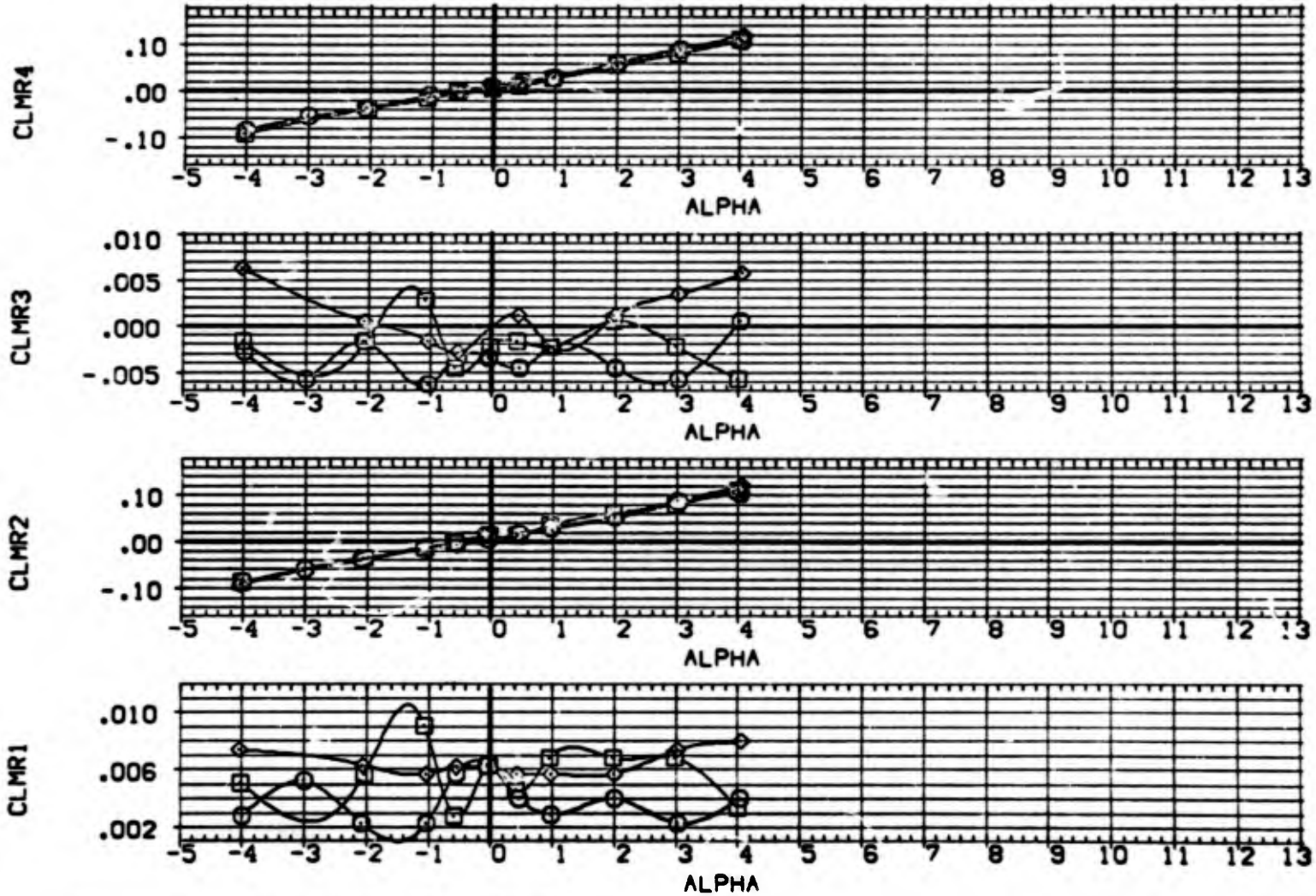


BASIC CHARACTERISTICS OF LONGBOW

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(CUE172)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	1.000	.000
(CUE184)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	2.000	.000
(ZUE196)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

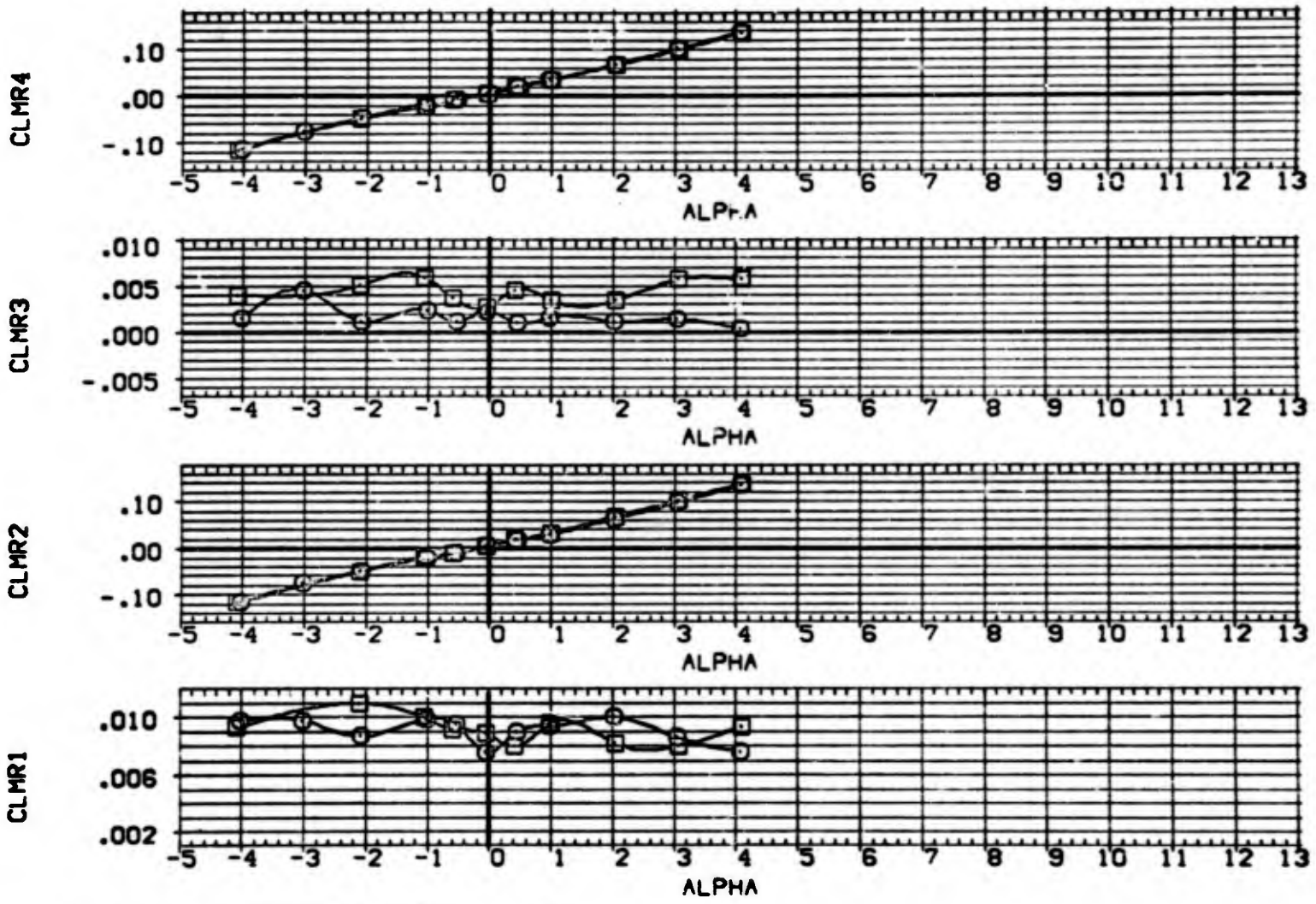


BASIC CHARACTERISTICS OF LONGBOW

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000
[illegible]		DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

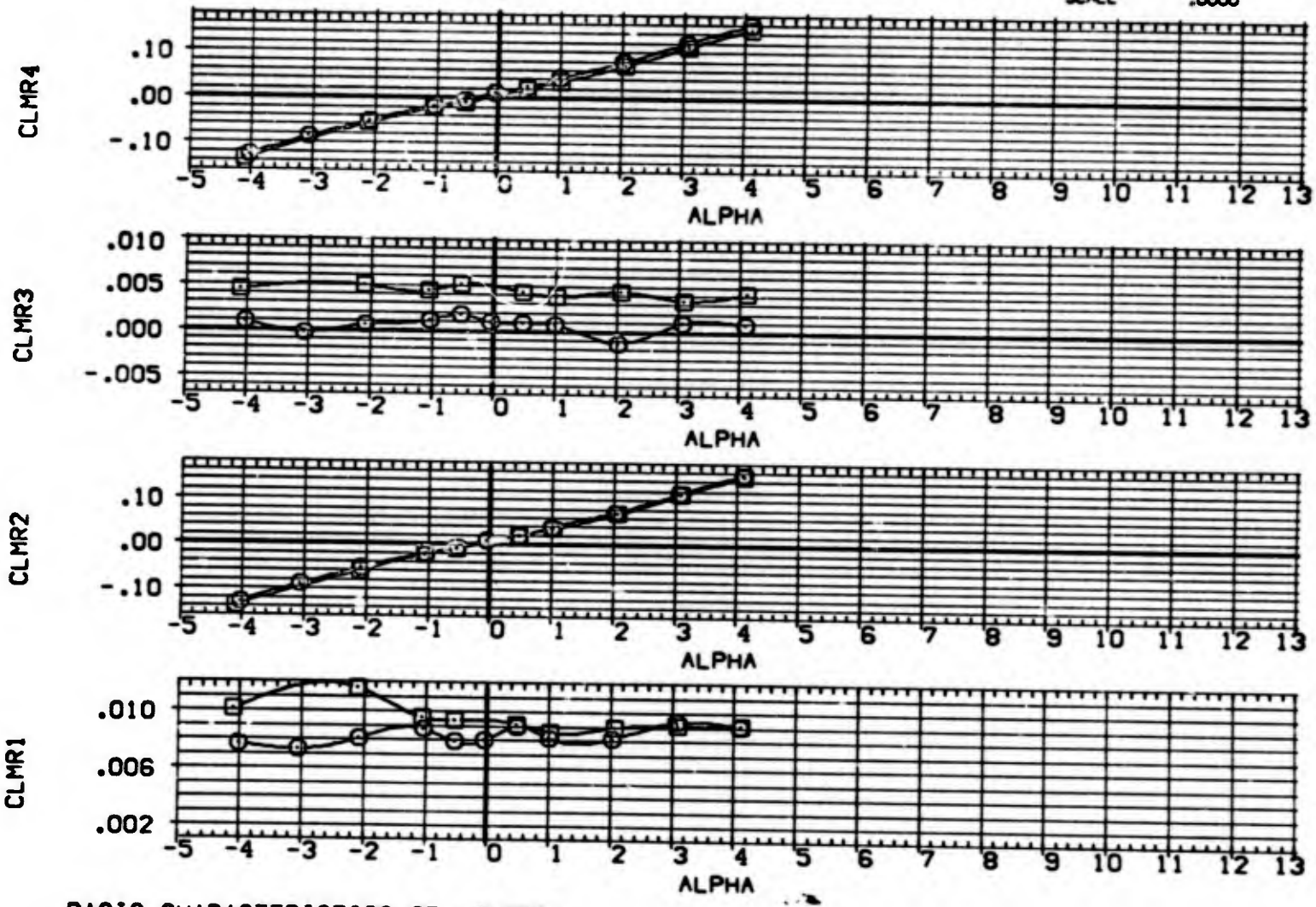


BASIC CHARACTERISTICS OF LUNGBOW

(B)MACH = .79

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(DE172)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	.000
(DE184)	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000
(ZE196)	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

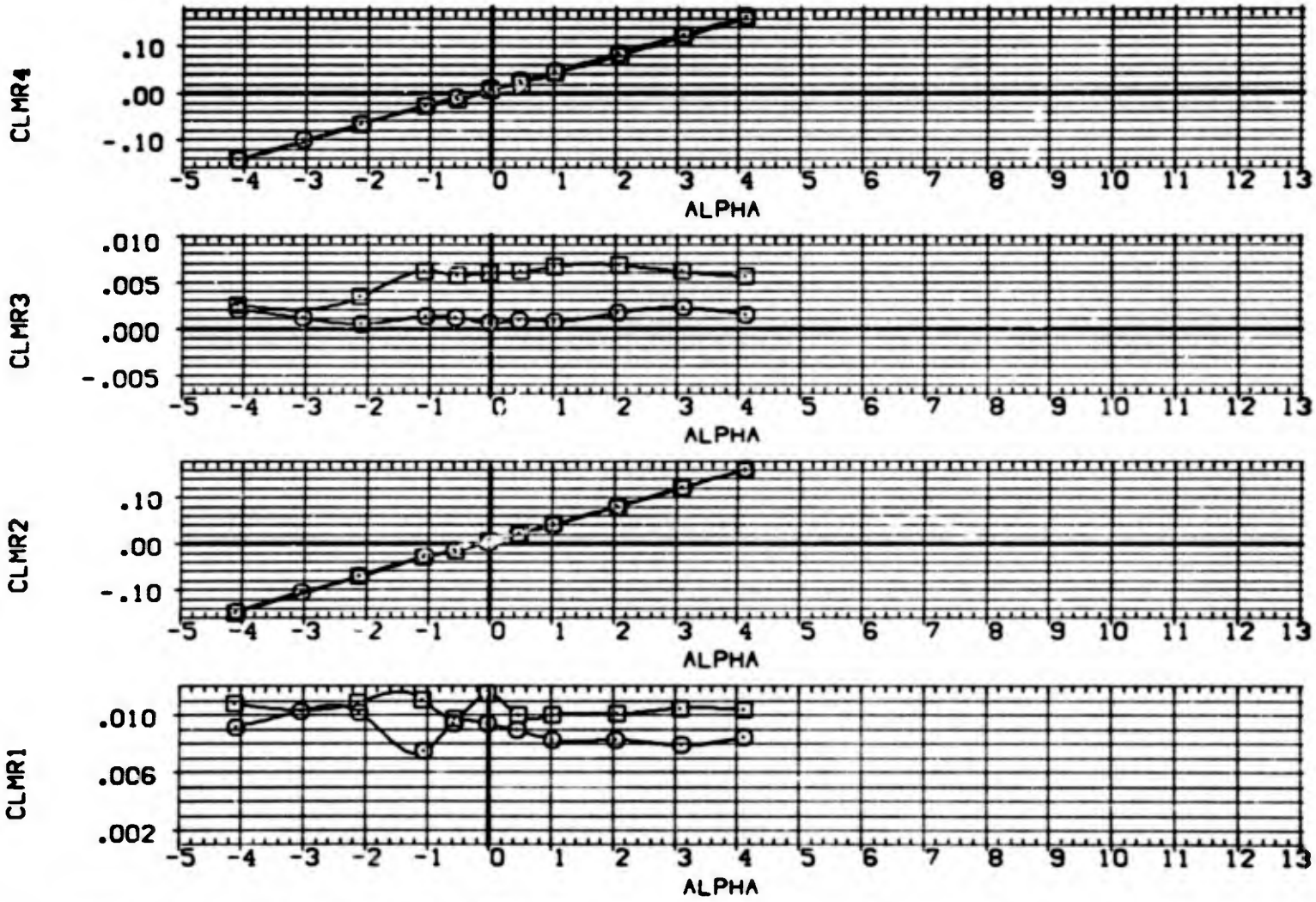


BASIC CHARACTERISTICS OF LONGBOW

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(2D)E172]	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	.000
(2D)184]	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000
(2D)196]	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

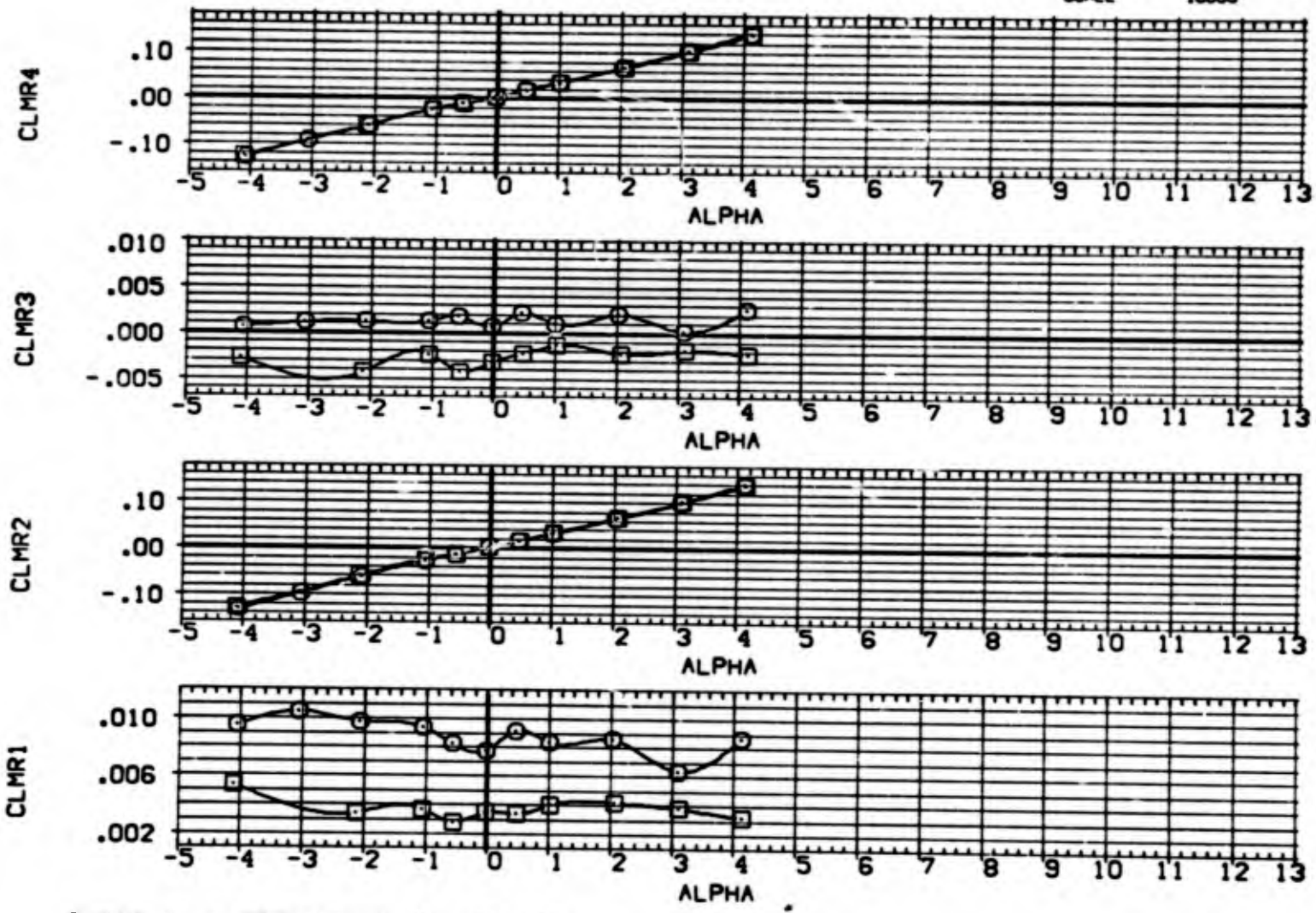


BASIC CHARACTERISTICS OF LONGBOW

(D)MACH = 1.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(CUE172) ○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000
(CUE184) □	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000
(ZUE196) ◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

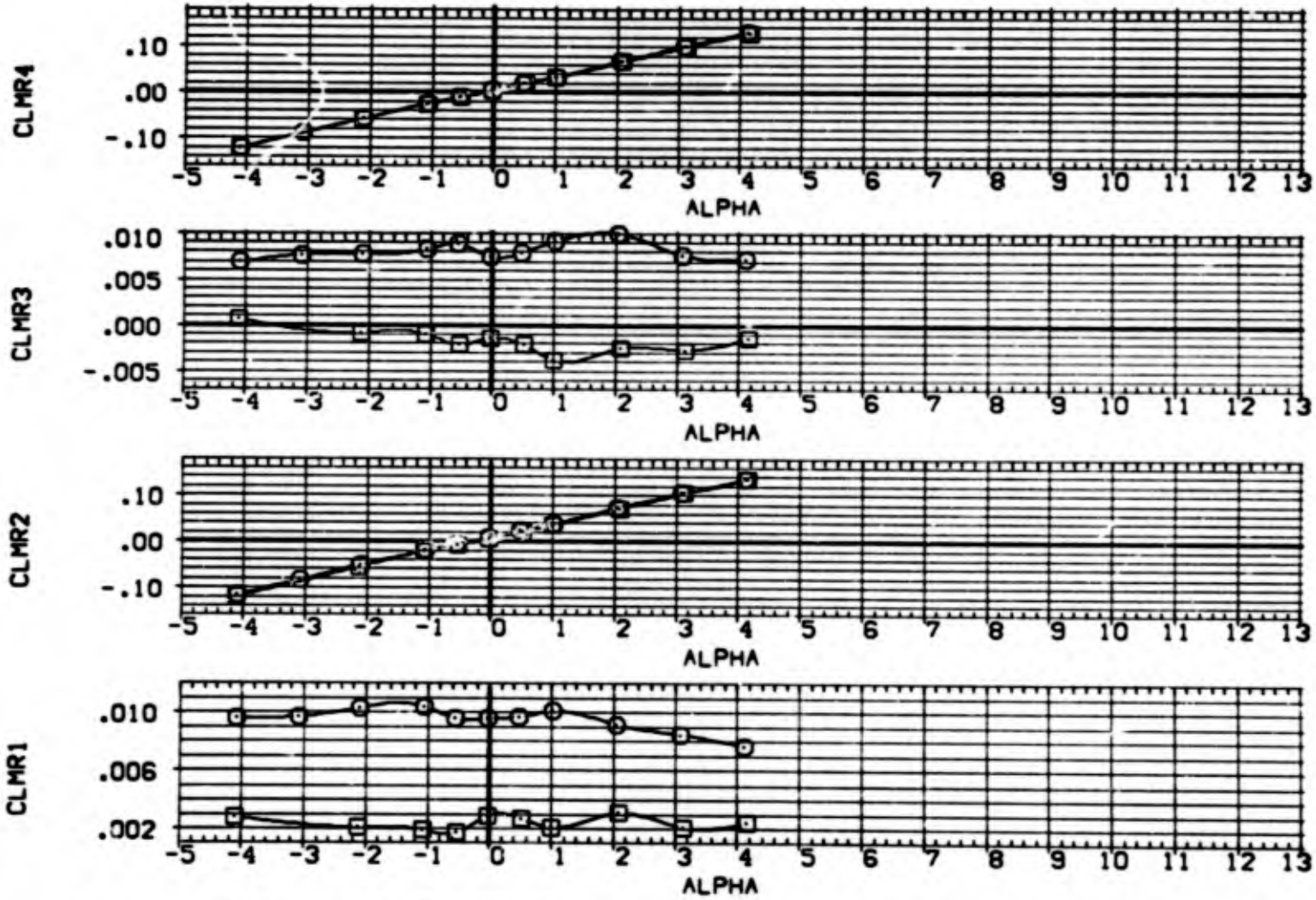


BASIC CHARACTERISTICS OF LONGBOW

(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(QUE172)	□	CAL SPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000
(QUE184)	○	CAL SPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000
(ZUE196)	◇	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	32.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



BASIC CHARACTERISTICS OF LONGBOW

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT	REFERENCE INFORMATION		
(FLE161)		CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT)	.000	.000	1.000	37.500	SREF	19.6350	SQ.IN.
(FLE162)		DATA NOT AVAILABLE	.0000	.0000	1.0000	10.3000	LREF	5.0000	IN.
(FLE163)		DATA NOT AVAILABLE	.0000	.0000	1.0000	8.5000	BREF	5.0000	IN.
(FLE164)		DATA NOT AVAILABLE	.0000	.0000	1.0000	7.2000	XMRP	26.5000	IN.
(FLE165)		DATA NOT AVAILABLE	.0000	.0000	1.0000	5.0000	YMRP	.0000	IN.
(FLE167)		DATA NOT AVAILABLE	.000	.000	1.000	4.200	ZMRP	.0000	IN.
							SCALE	.0000	

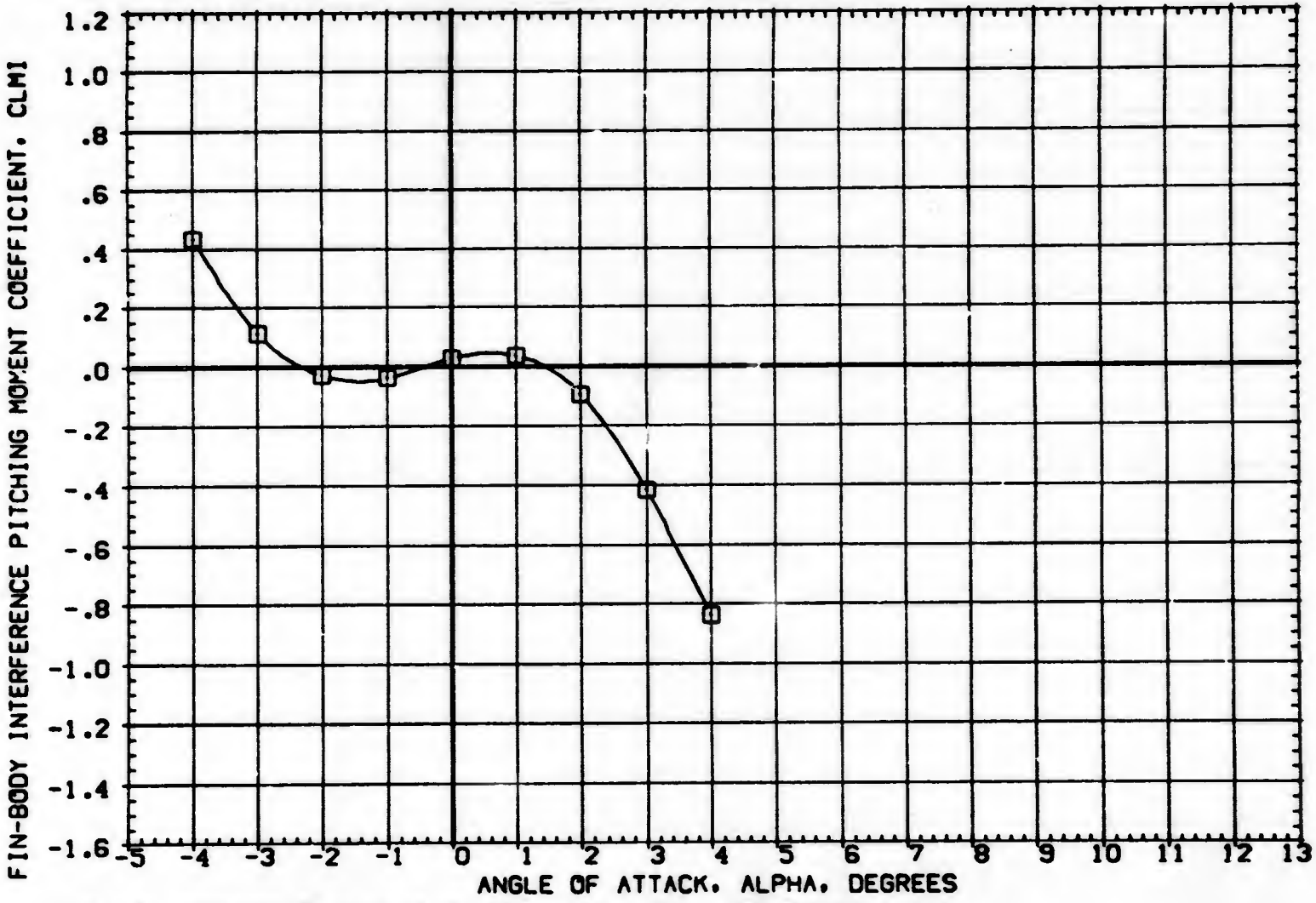
PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CNT
(FUE161)	□	DATA NOT AVAILABLE	.000	.000	1.000	37.300
(FUE162)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	1.000	10.300
(FUE163)	△	DATA NOT AVAILABLE	.000	.000	1.000	8.500
(FUE164)	▽	DATA NOT AVAILABLE	.000	.000	1.000	7.200
(FUE166)	◁	DATA NOT AVAILABLE	.000	.000	1.000	5.000
(FUE167)	▷	DATA NOT AVAILABLE	.000	.000	1.000	4.200

REFERENCE INFORMATION

SREF	19.6350	90.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

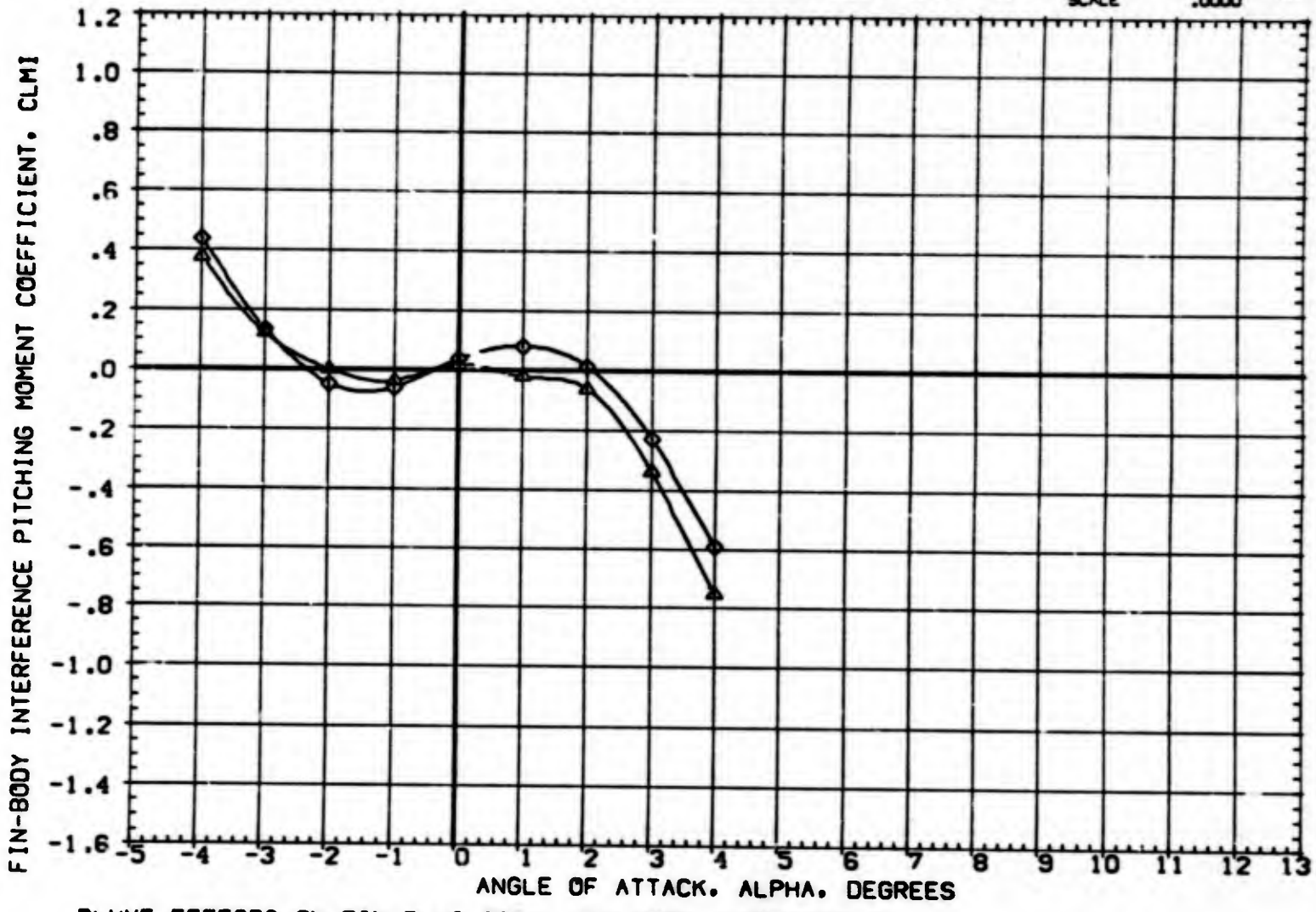


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE161)	□	DATA NOT AVAILABLE	.000	.000	1.000	37.500
(FUE162)	◇	DATA NOT AVAILABLE	.000	.000	1.000	10.300
(FUE163)	△	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	1.000	8.500
(FUE164)	○	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	1.000	7.200
(FUE165)		DATA NOT AVAILABLE	.000	.000	1.000	5.000
(FUE167)		DATA NOT AVAILABLE	.000	.000	1.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

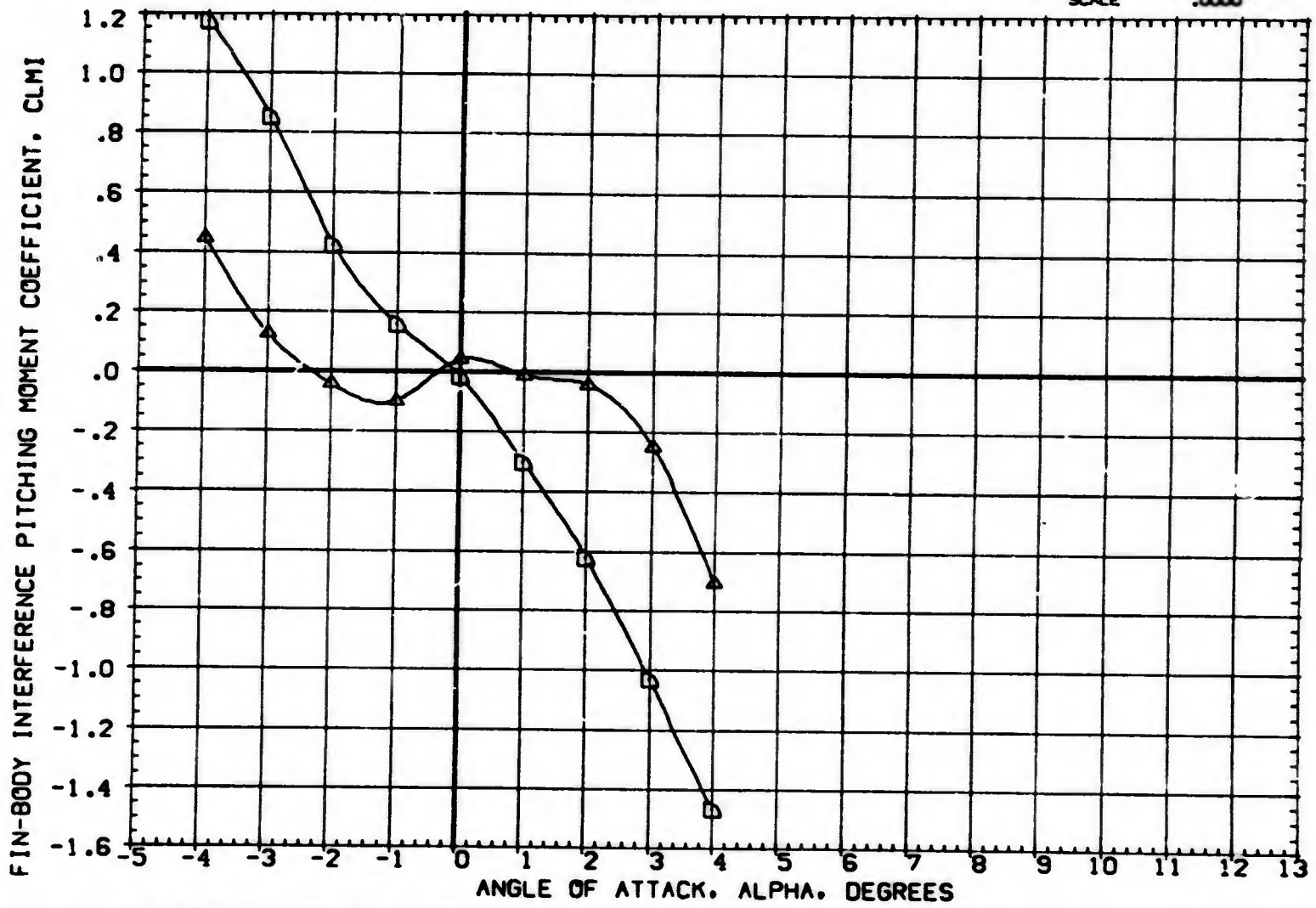


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE161)	□	DATA NOT AVAILABLE	.000	.000	1.000	37.500
(FUE162)	◇	DATA NOT AVAILABLE	.000	.000	1.000	10.300
(FUE163)	△	DATA NOT AVAILABLE	.000	.000	1.000	8.500
(FUE164)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	7.200
(FUE165)	▽	DATA NOT AVAILABLE	.000	.000	1.000	5.000
(FUE167)	▷	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

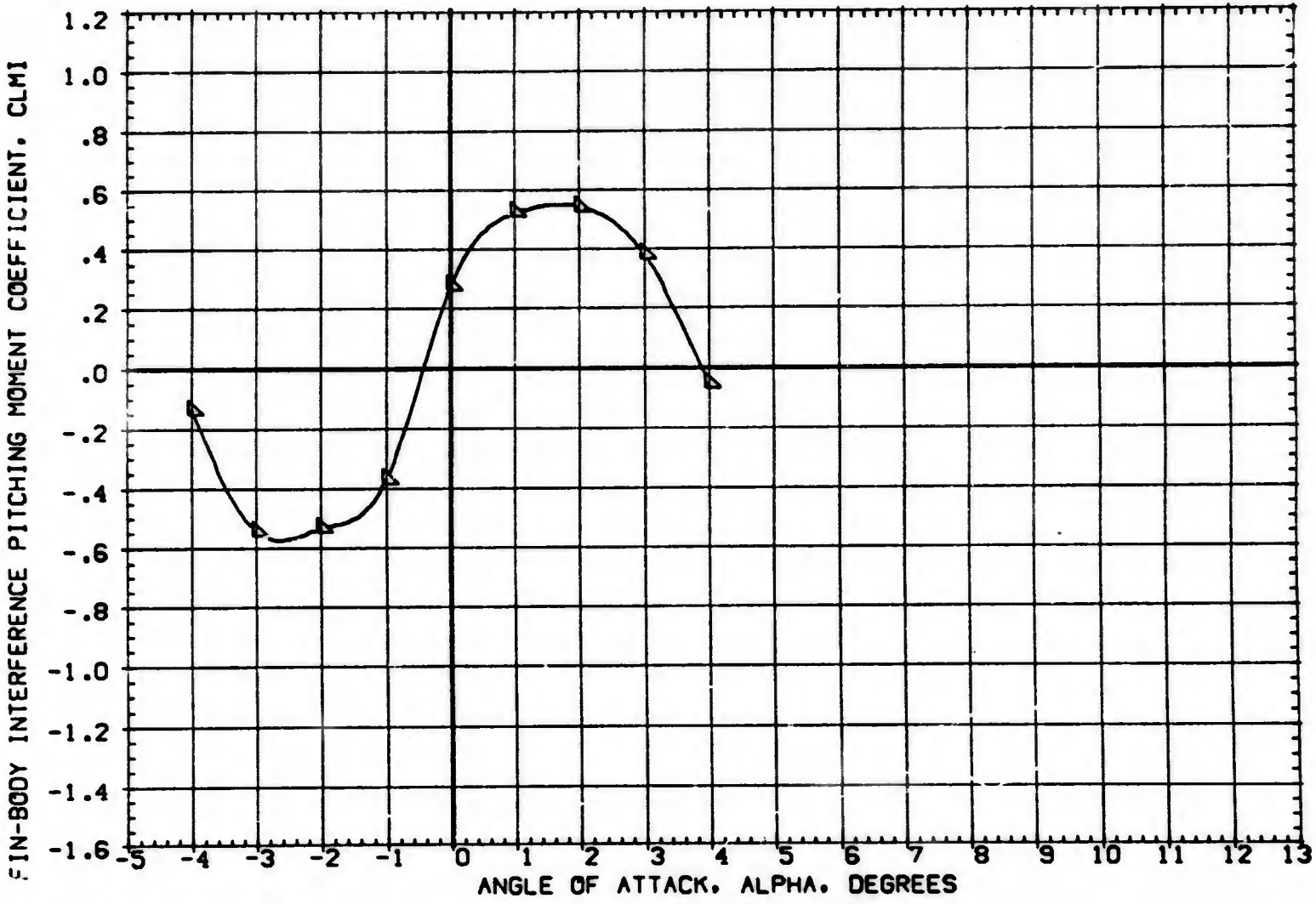


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FLE161)		DATA NOT AVAILABLE	.000	.000	1.000	37.500
(FLE162)		DATA NOT AVAILABLE	.000	.000	1.000	10.300
(FLE163)		DATA NOT AVAILABLE	.000	.000	1.000	8.500
(FLE164)		DATA NOT AVAILABLE	.000	.000	1.000	7.200
(FLE166)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	5.000
(FLE167)		DATA NOT AVAILABLE	.000	.000	1.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

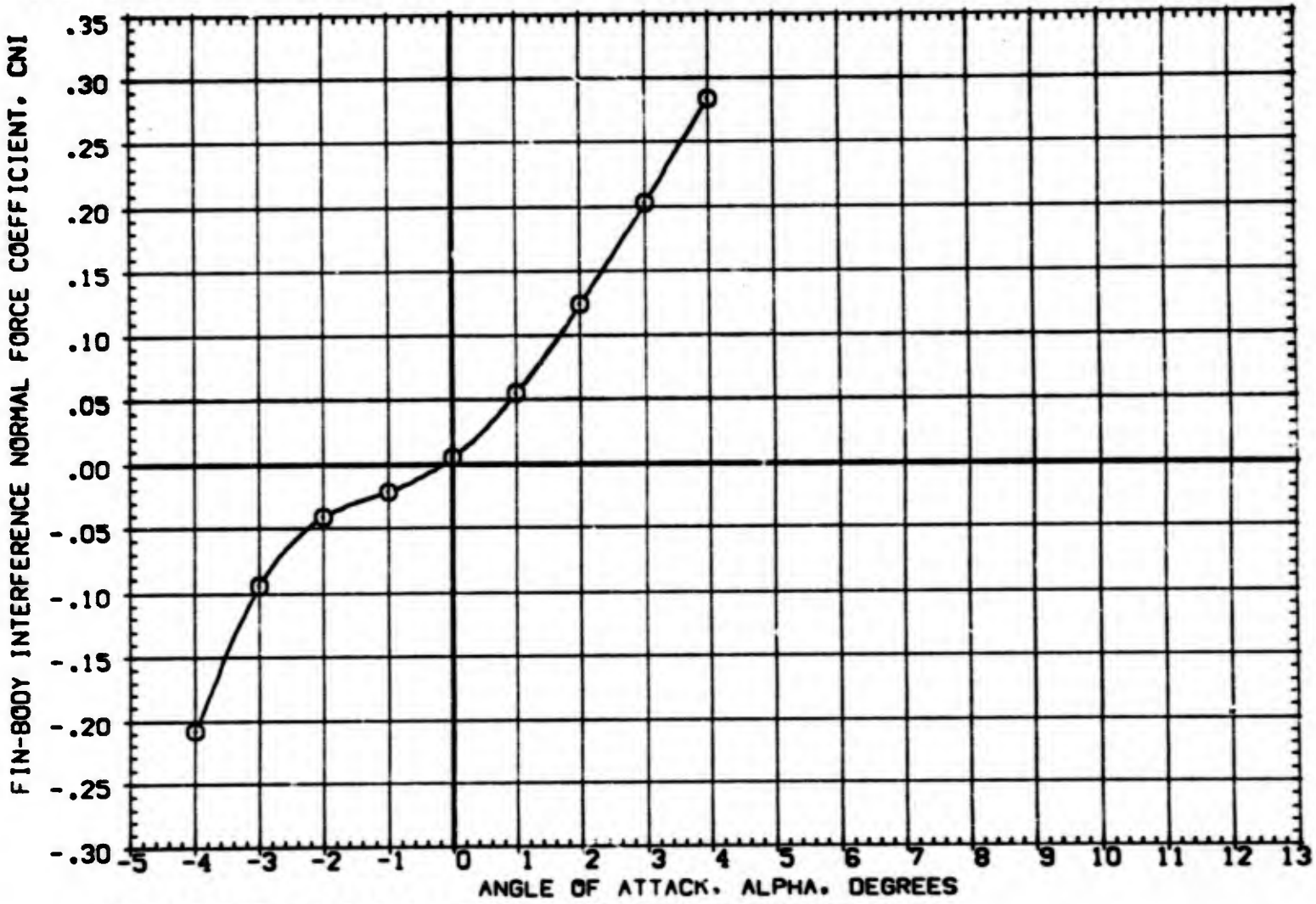


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FZ6181)	□	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	1.000	37.500
(FZ6182)	▷	DATA NOT AVAILABLE	.000	.000	1.000	10.300
(FZ6183)	◇	DATA NOT AVAILABLE	.000	.000	1.000	8.900
(FZ6184)	△	DATA NOT AVAILABLE	.000	.000	1.000	7.200
(FZ6185)	○	DATA NOT AVAILABLE	.000	.000	1.000	5.000
(FZ6187)	□	DATA NOT AVAILABLE	.000	.000	1.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	3.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

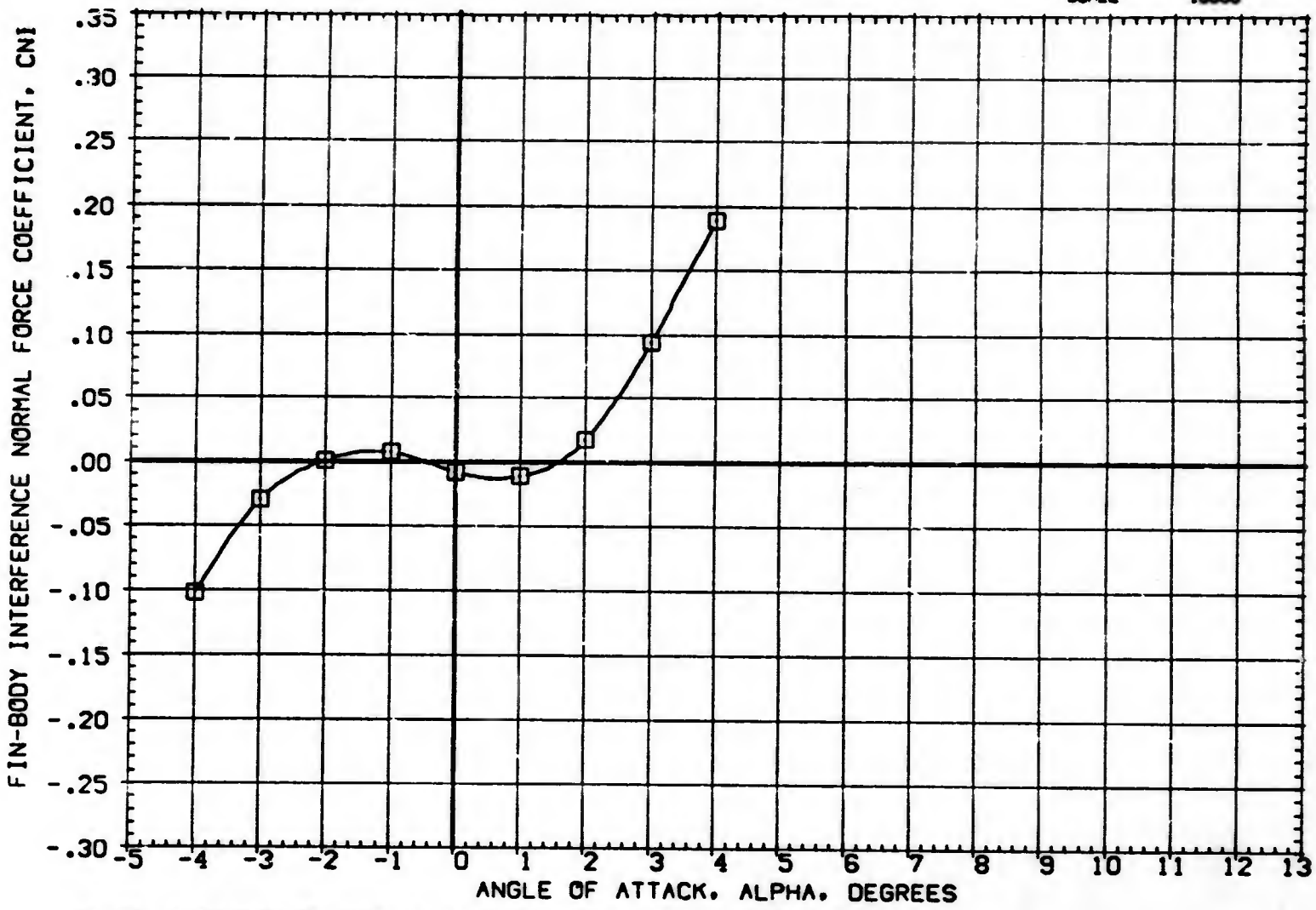


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE161)		DATA NOT AVAILABLE	.000	.000	1.000	37.500
(FUE162)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	10.300
(FUE163)		DATA NOT AVAILABLE	.000	.000	1.000	8.500
(FUE164)		DATA NOT AVAILABLE	.000	.000	1.000	7.200
(FUE166)		DATA NOT AVAILABLE	.000	.000	1.000	5.000
(FUE167)		DATA NOT AVAILABLE	.000	.000	1.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

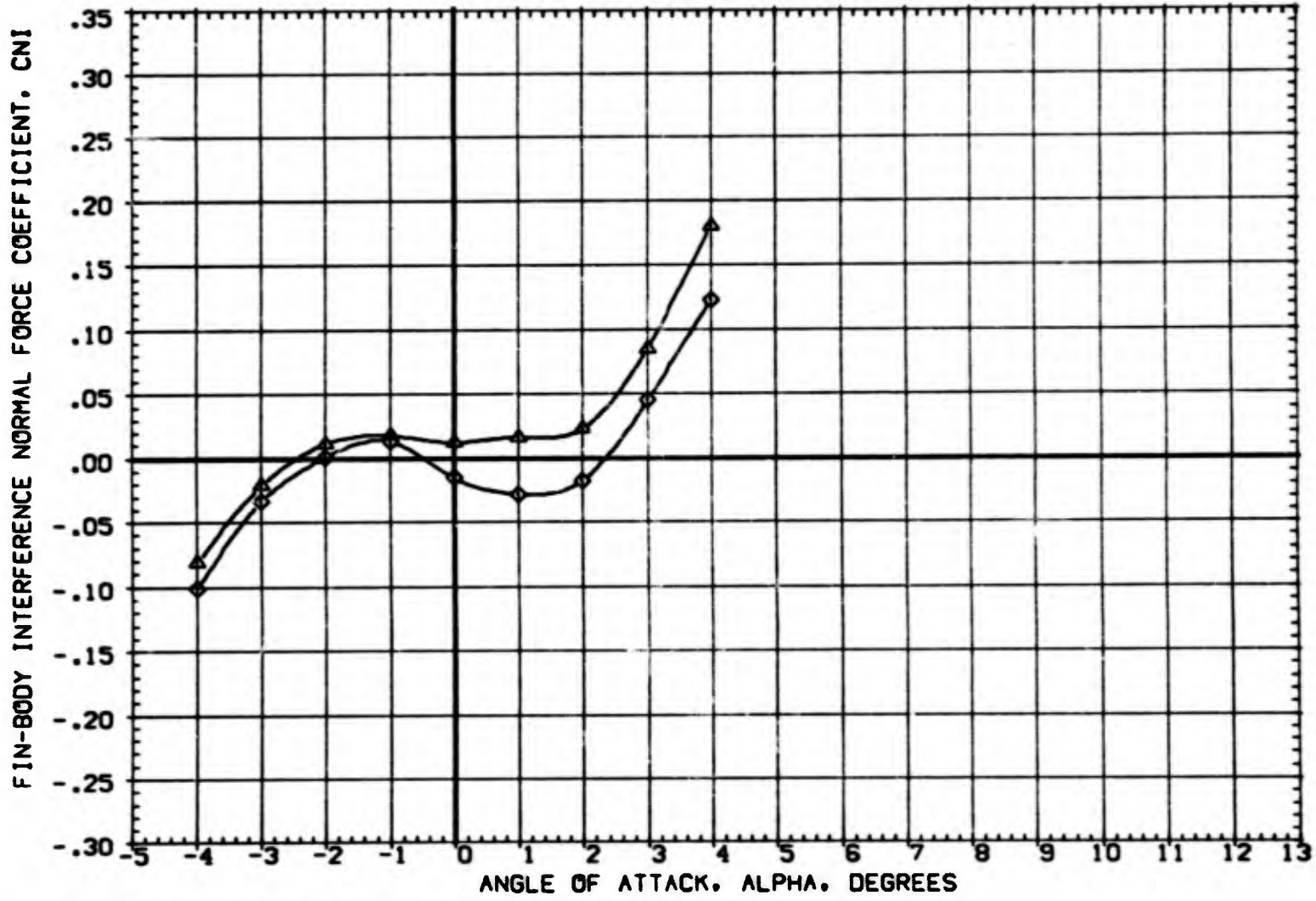


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE161)	□	DATA NOT AVAILABLE	.000	.000	1.000	37.500
(FUE162)	◇	DATA NOT AVAILABLE	.000	.000	1.000	10.300
(FUE163)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	8.500
(FUE164)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	7.200
(FUE166)	◁	DATA NOT AVAILABLE	.000	.000	1.000	5.000
(FUE167)	▷	DATA NOT AVAILABLE	.000	.000	1.000	4.200

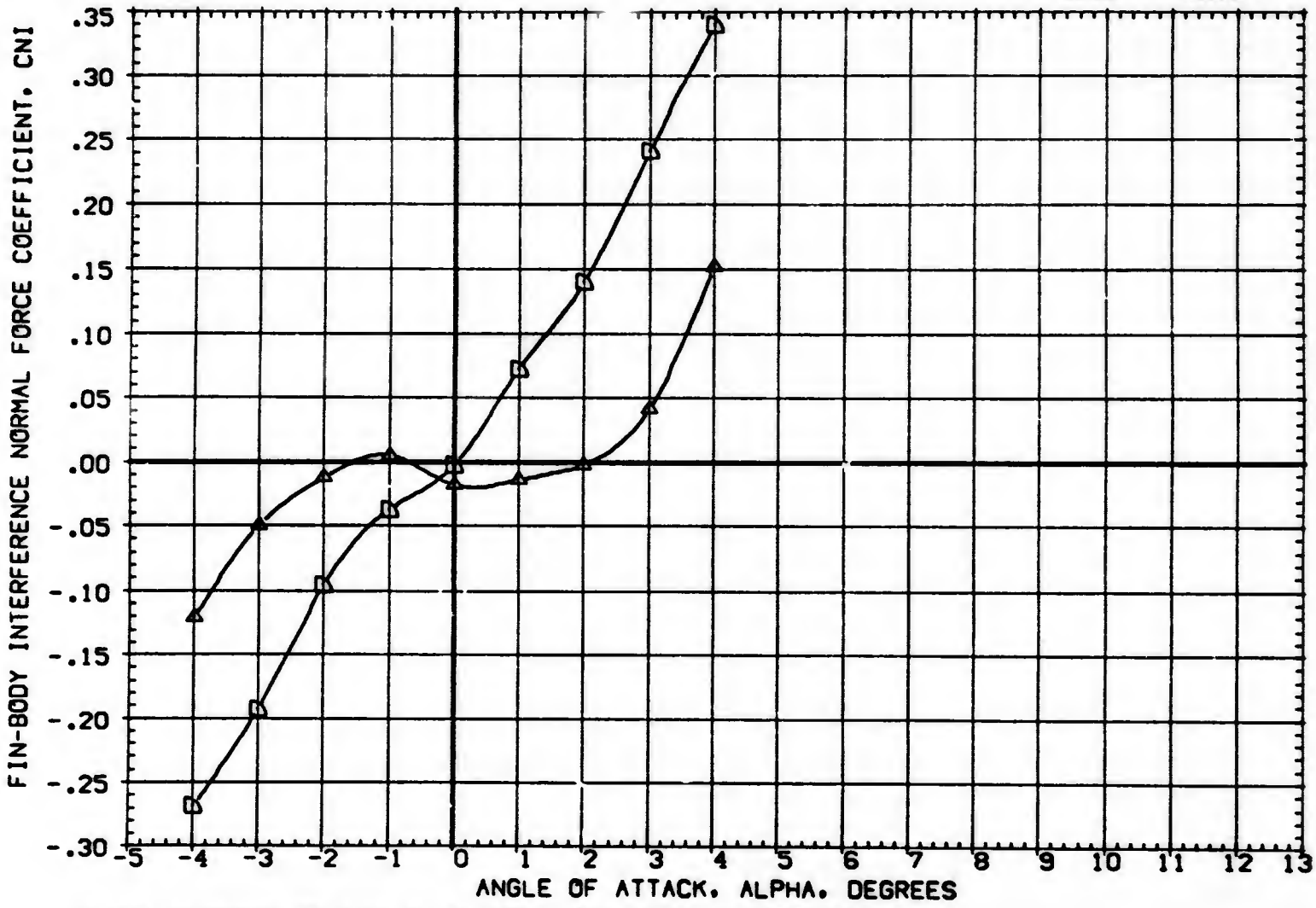
REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT	REFERENCE INFORMATION		
(FUE161)	□	DATA NOT AVAILABLE	.000	.000	1.000	37.500	SREF	19.6350	SQ.IN.
(FUE162)	⊡	DATA NOT AVAILABLE	.000	.000	1.000	10.300	LREF	5.0000	IN.
(FUE163)	◇	DATA NOT AVAILABLE	.000	.000	1.000	8.500	BREF	5.0000	IN.
(FUE164)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	7.200	XMRP	26.5000	IN.
(FUE166)	▽	DATA NOT AVAILABLE	.000	.000	1.000	5.000	YMRP	.0000	IN.
(FUE167)	▷	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	4.200	ZMRP	.0000	IN.
							SCALE	.0000	

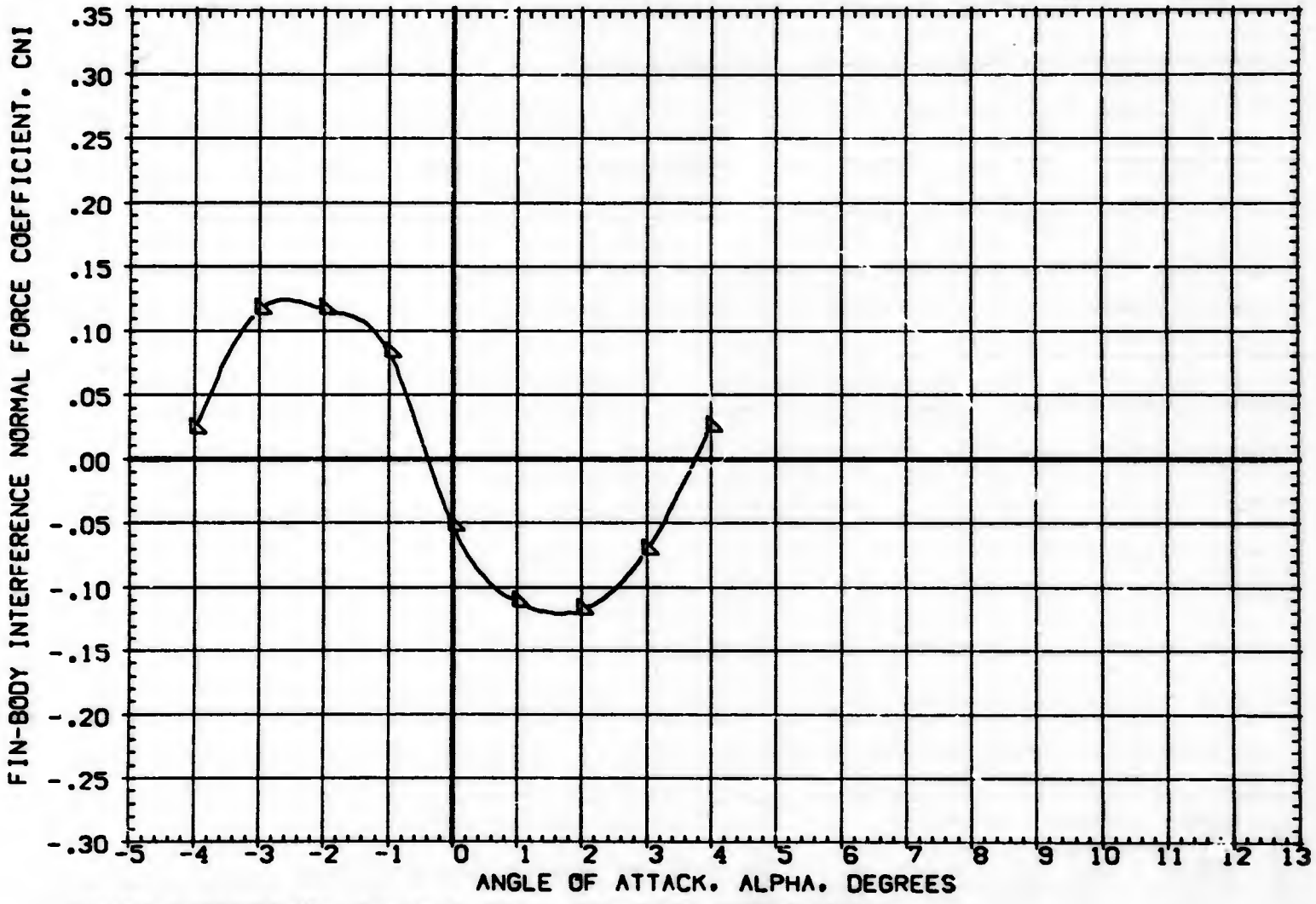


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE161)	□	DATA NOT AVAILABLE	.000	.000	1.000	37.500
(FUE162)	◇	DATA NOT AVAILABLE	.000	.000	1.000	10.300
(FUE163)	△	DATA NOT AVAILABLE	.000	.000	1.000	8.500
(FUE164)	▽	DATA NOT AVAILABLE	.000	.000	1.000	7.200
(FUE166)	◁	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	5.000
(FUE167)	▷	DATA NOT AVAILABLE	.000	.000	1.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

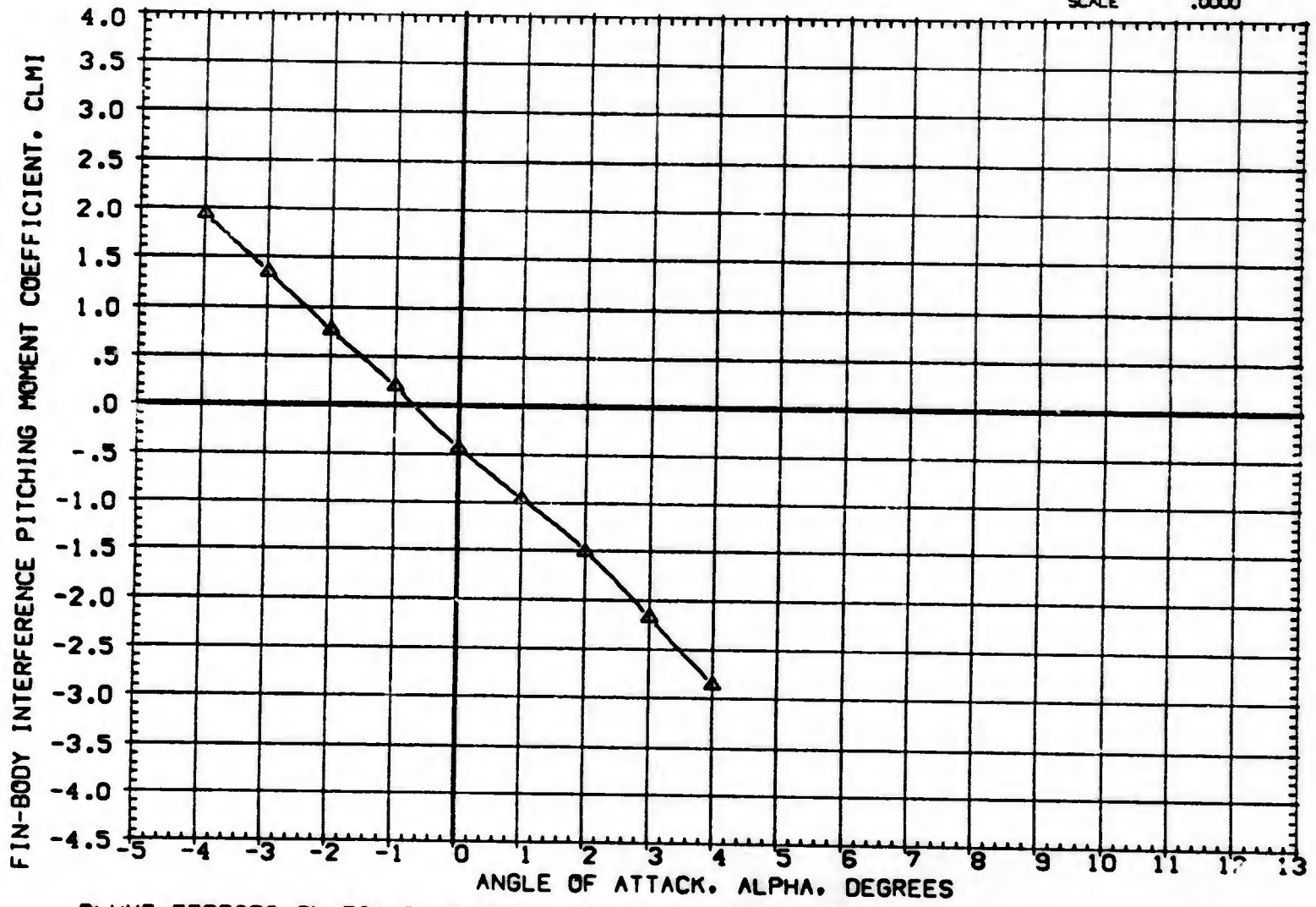


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE168)	○	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(FUE170)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(FUE171)	⊠	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(FUE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

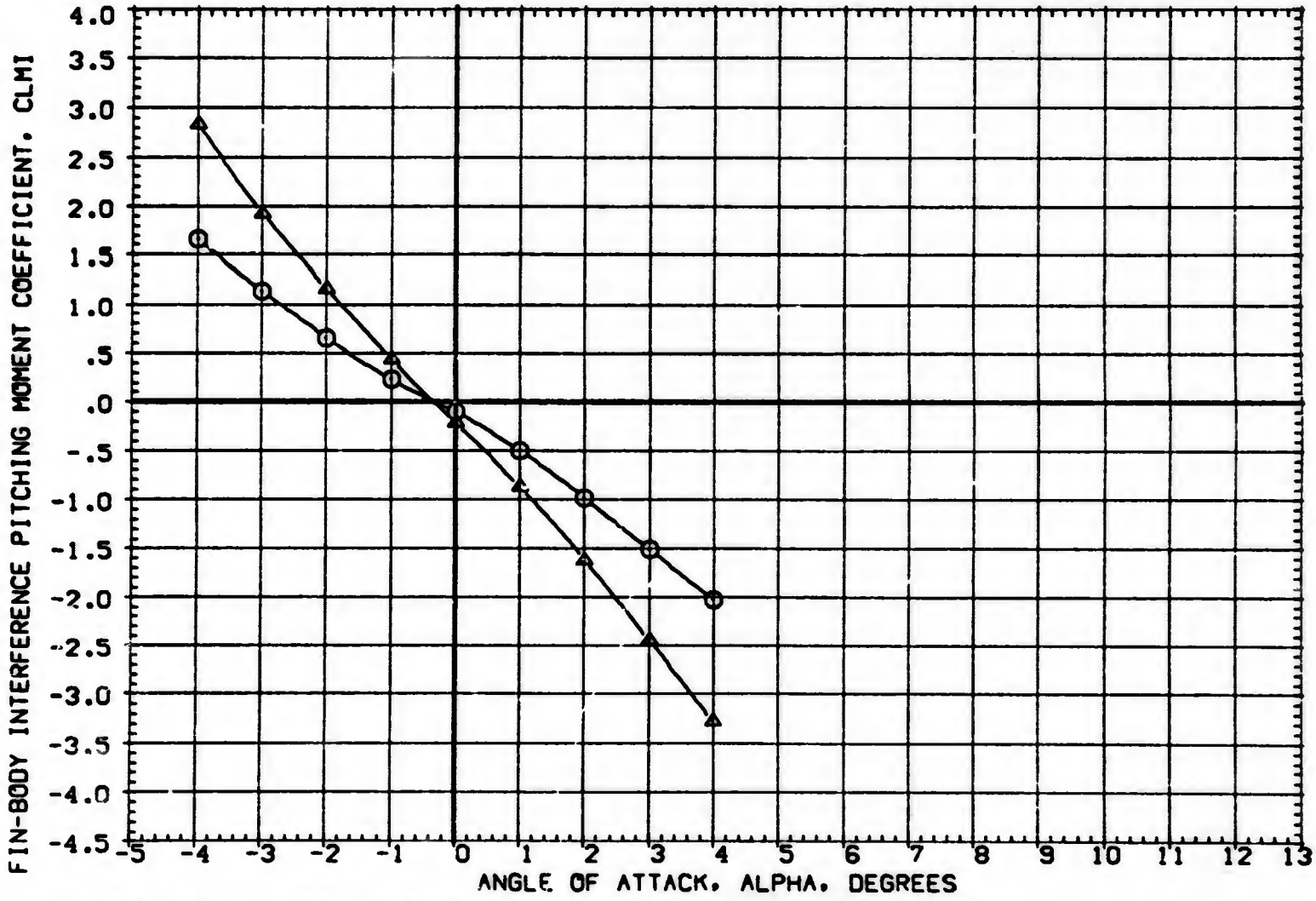


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE168)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	3.000
(FUE170)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(FUE171)	⊠	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(FUE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

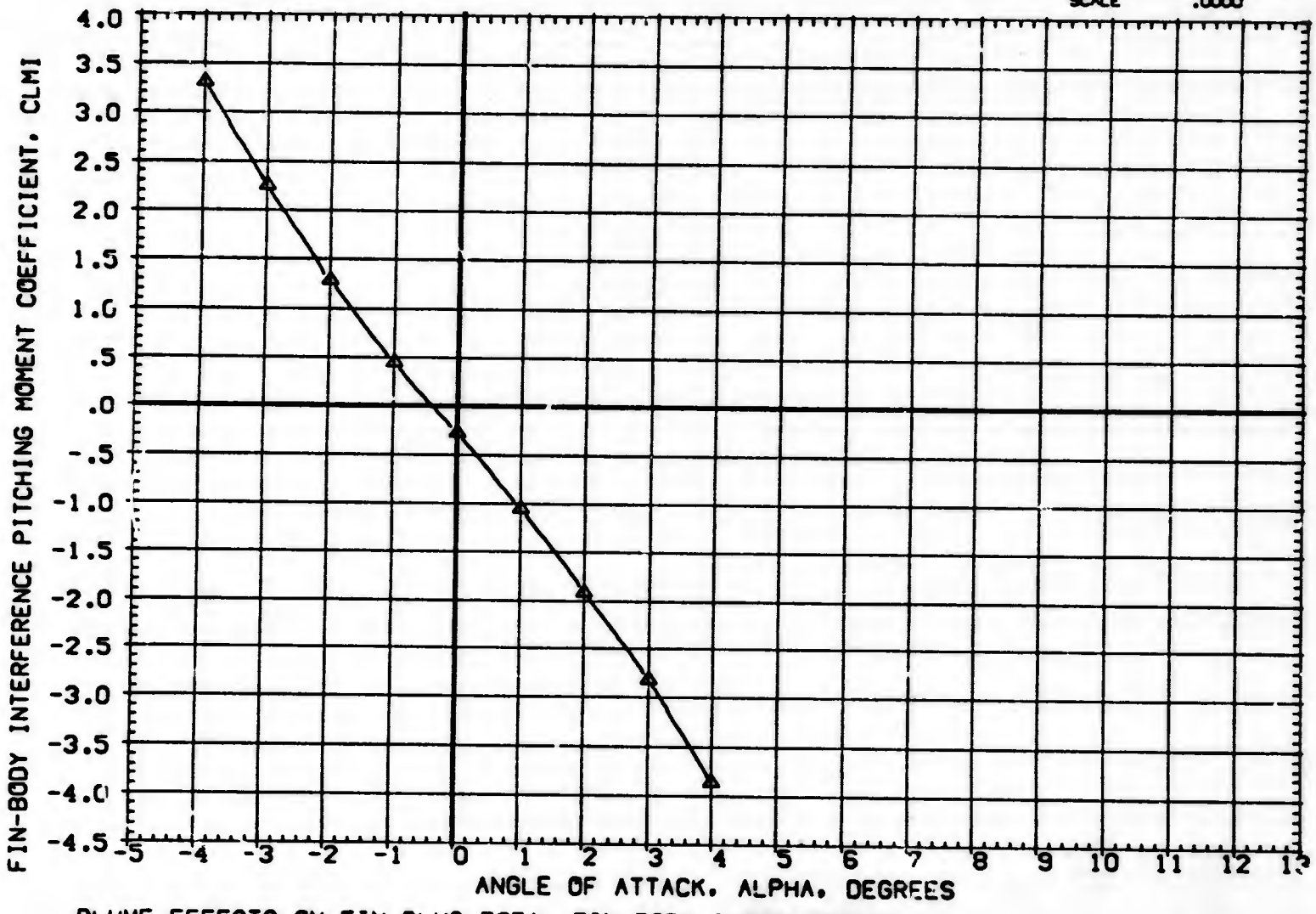


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE168)	○	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(FUE170)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(FUE171)	◇	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(FUE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

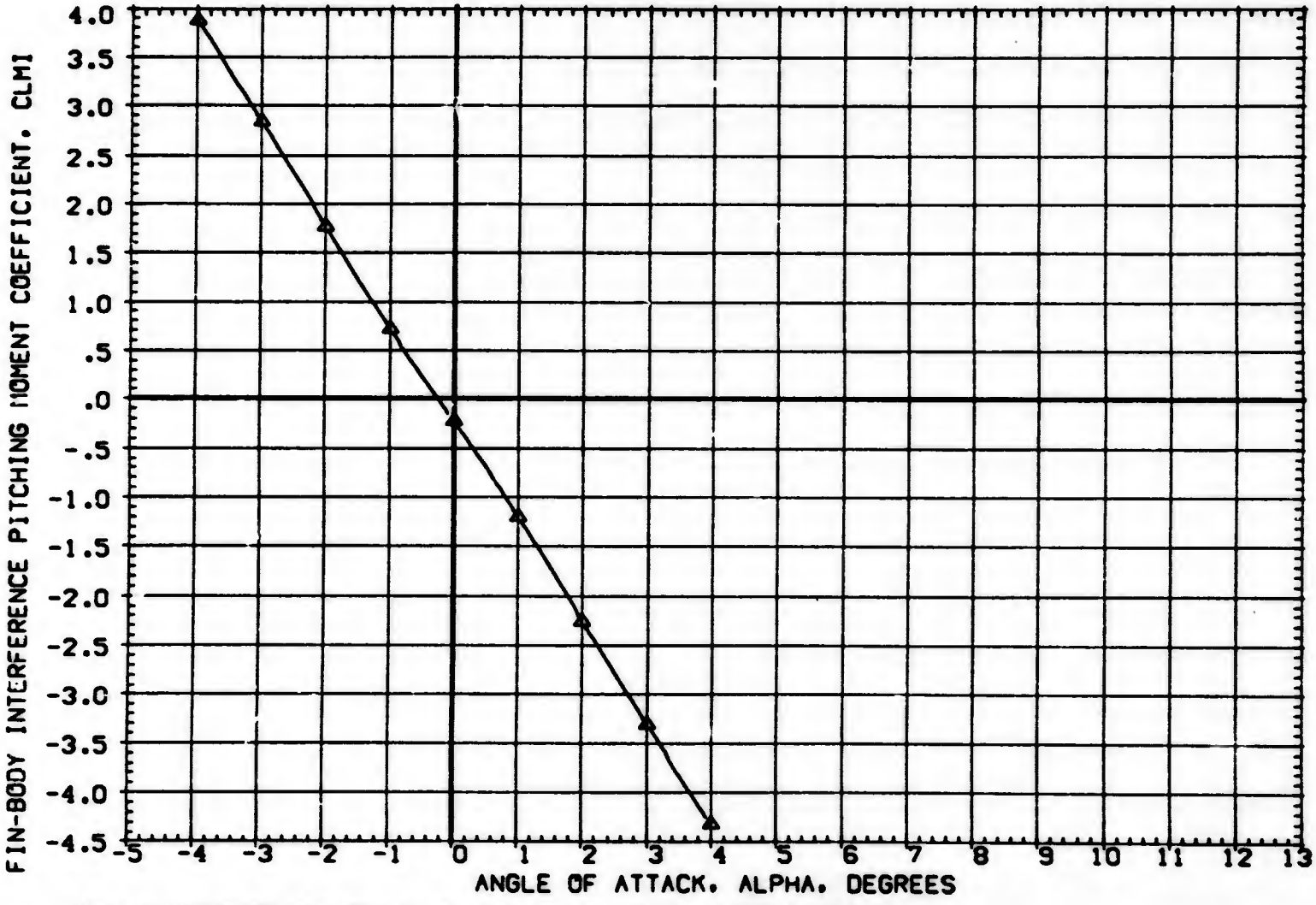


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE168)	□	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(FUE170)	◇	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(FUE171)	⊠	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(FUE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

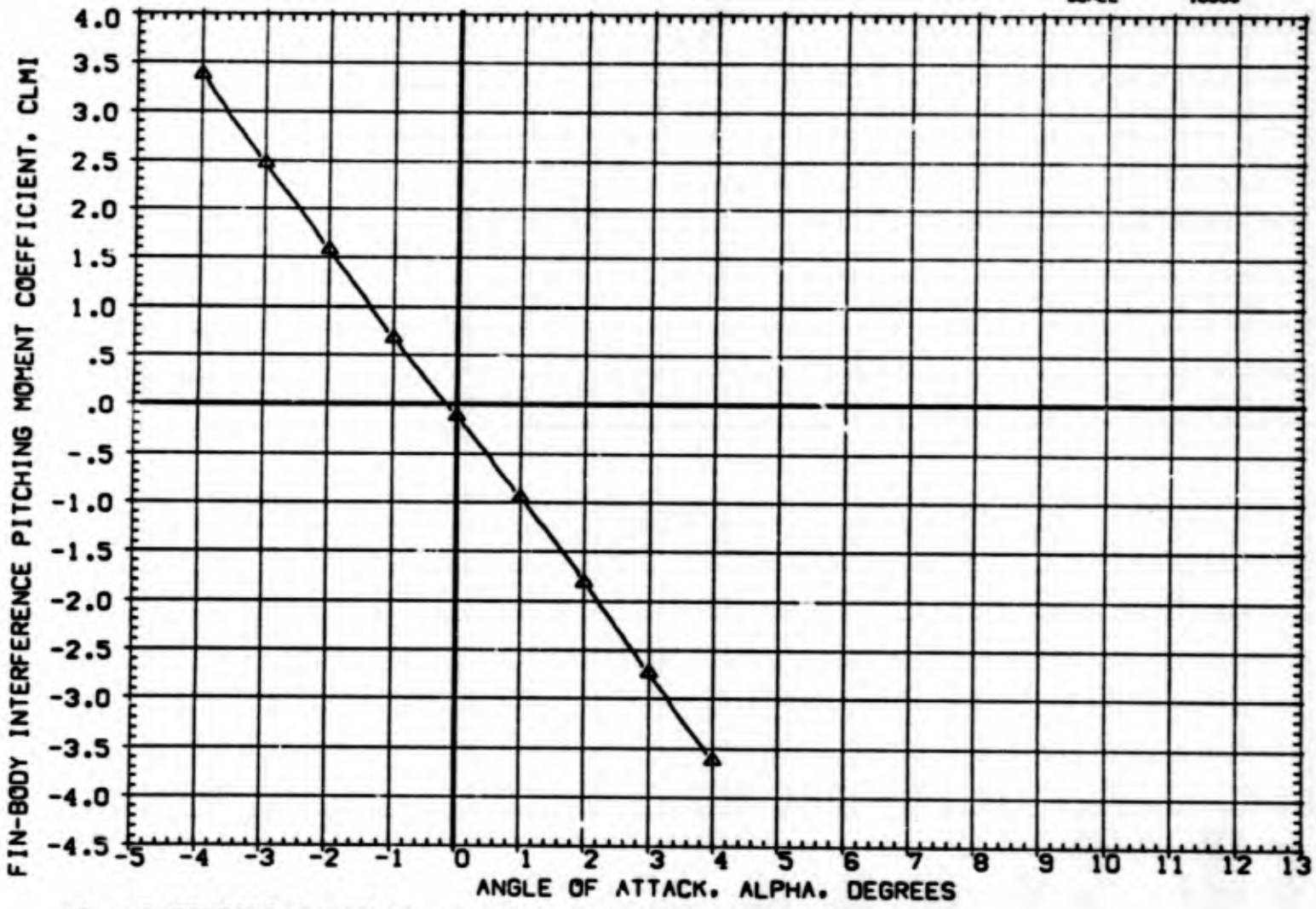


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE168)	□	DATA NOT AVAILABLE	.000	.000	1.000	3.800
(FUE170)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(FUE171)	◇	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(FUE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

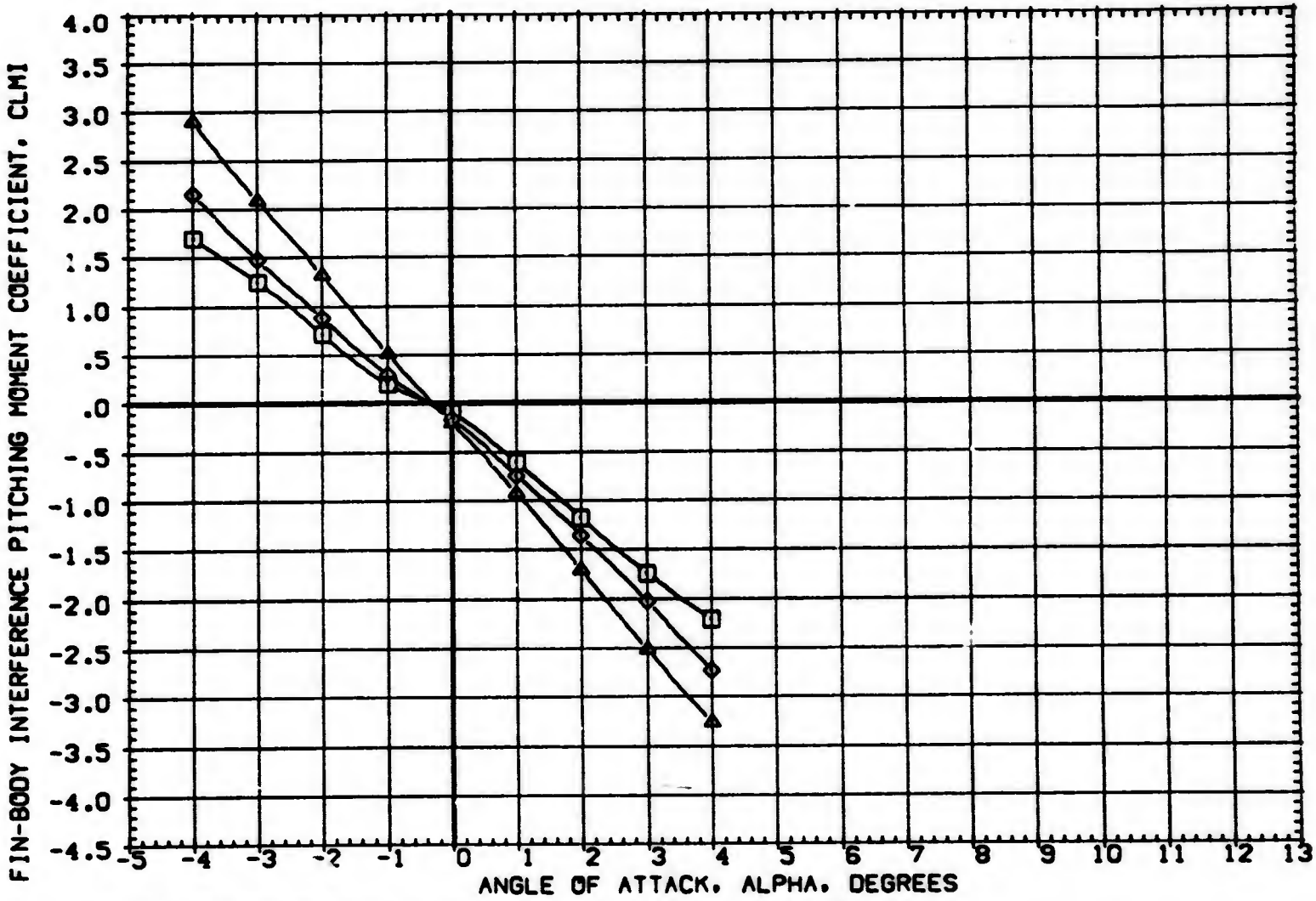


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPSS	CRT
(FLE168)	□	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(FLE170)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	2.500
(FLE171)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	1.500
(FLE172)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

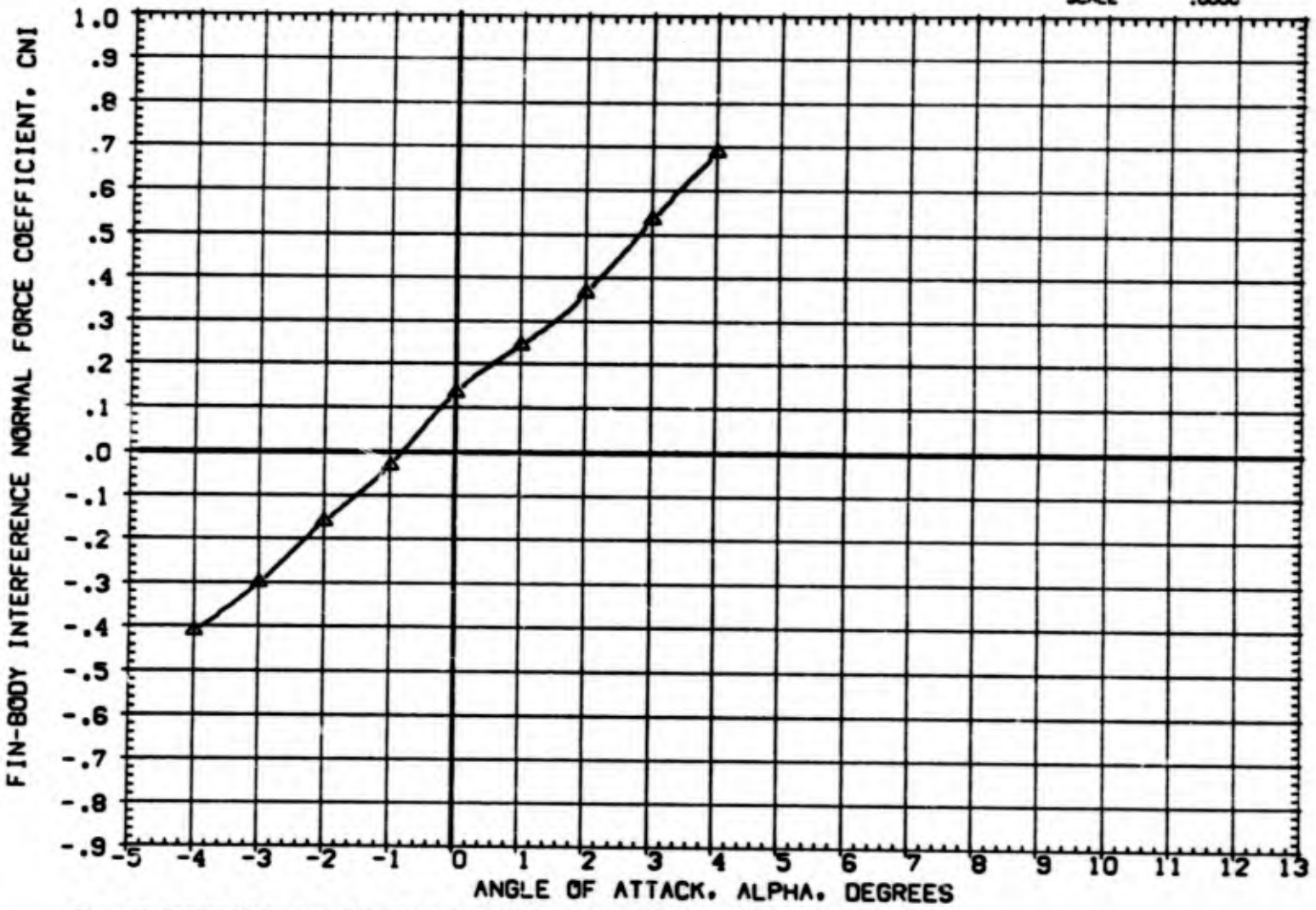


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE168)	○	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(FUE170)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(FUE171)	◇	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(FUE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

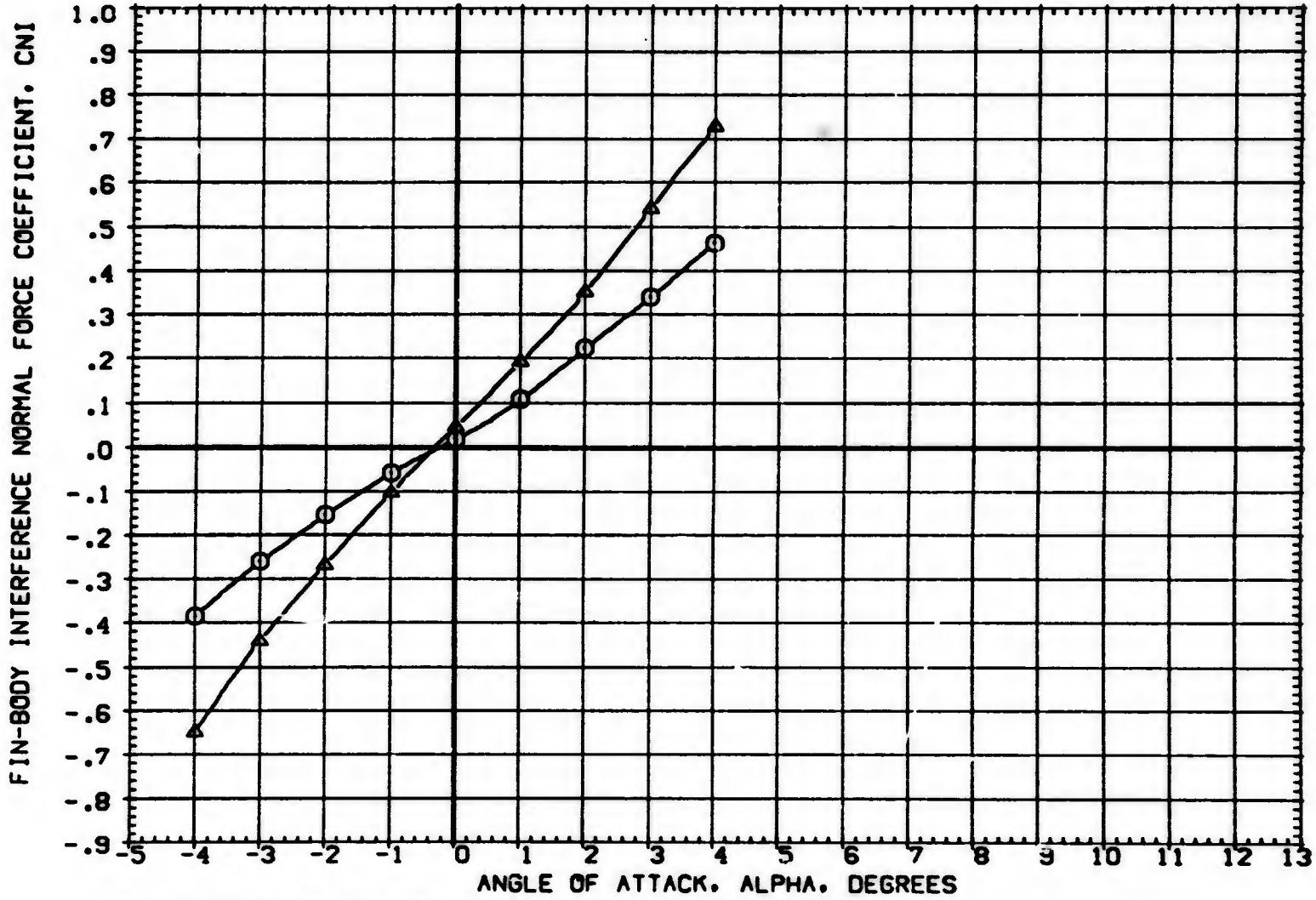


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE168)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	3.800
(FUE170)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(FUE171)	◇	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(FUE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

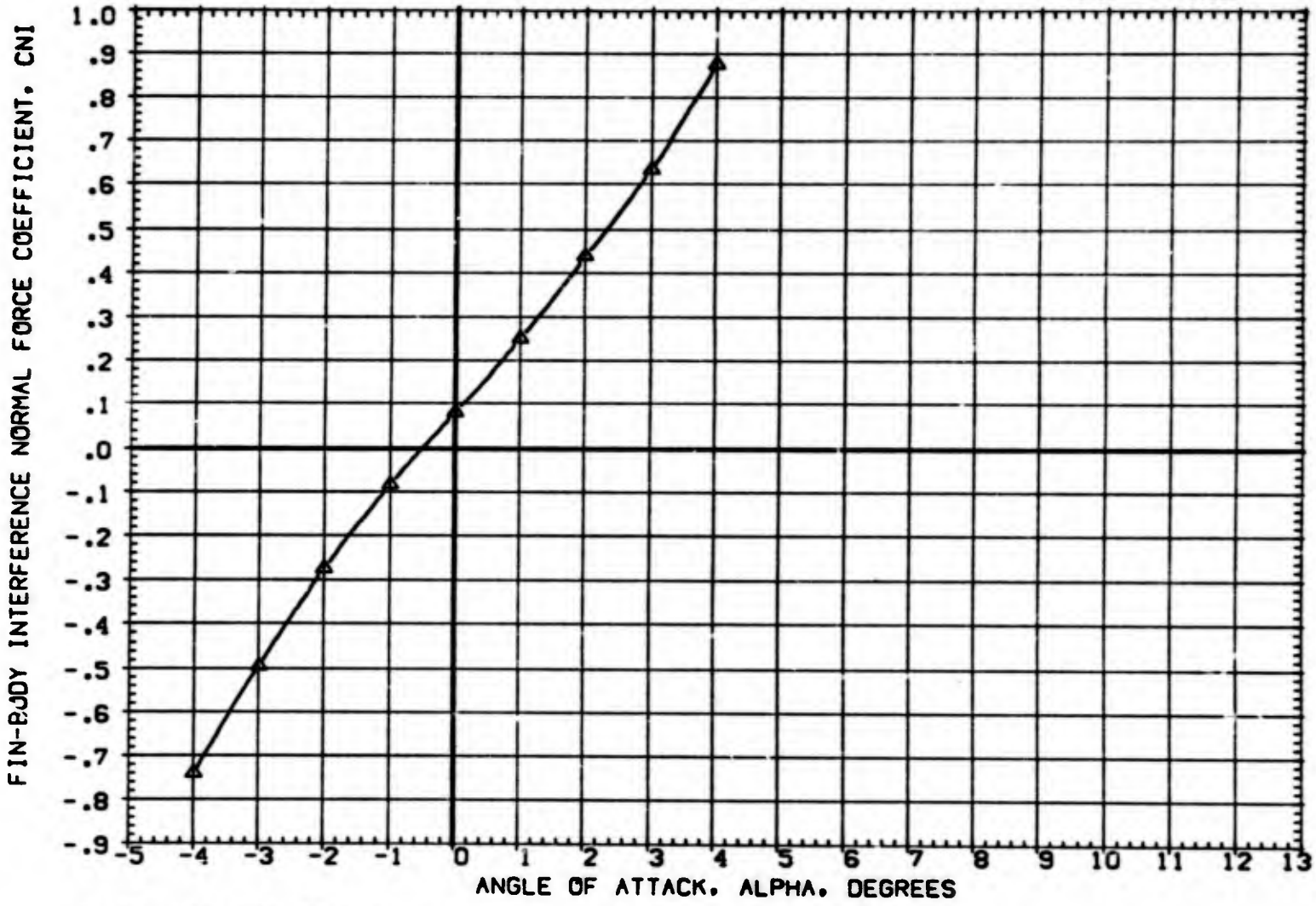


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE168)	□	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(FUE170)	⊡	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(FUE171)	◇	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(FUE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

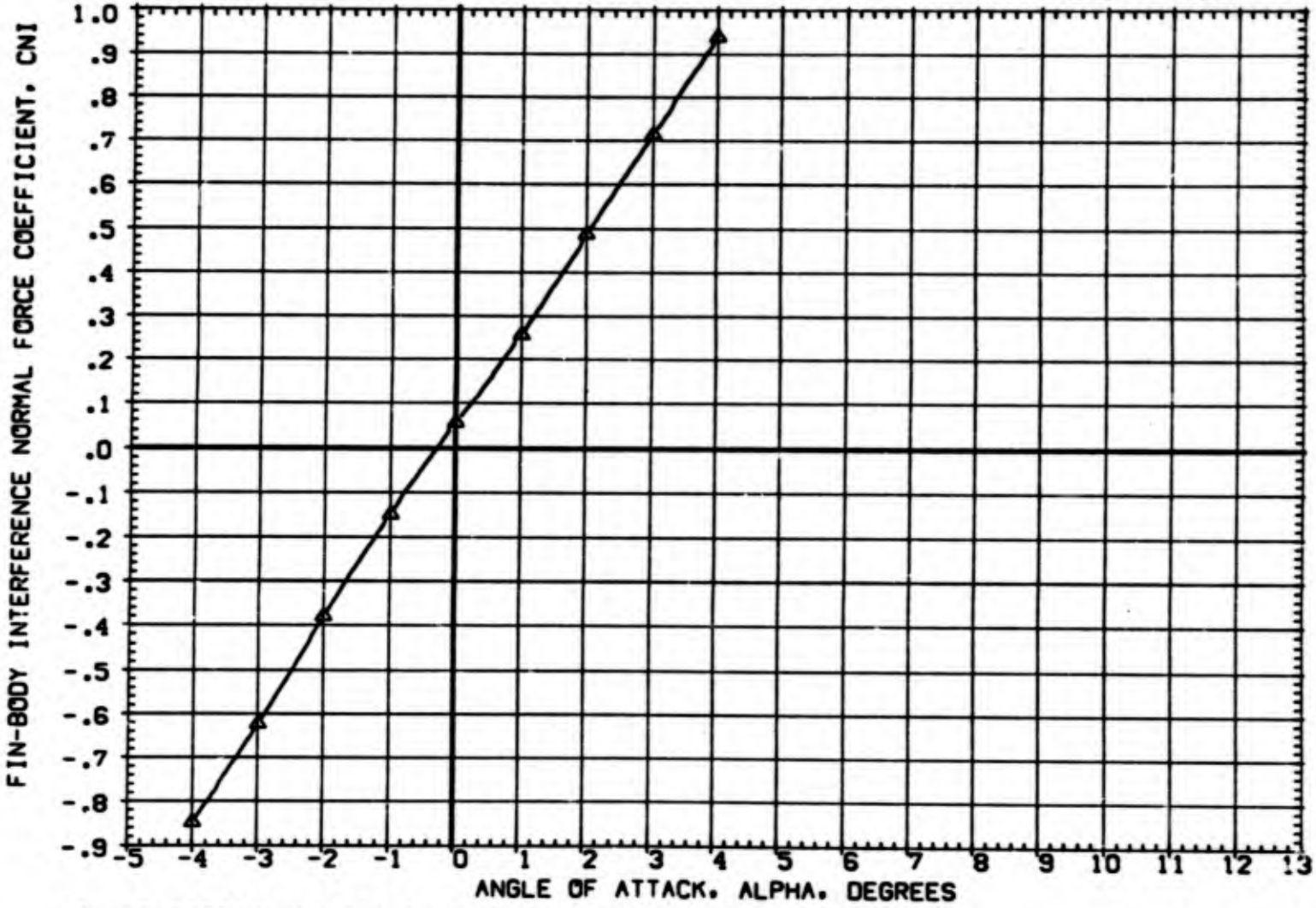


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE168)	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(FUE170)	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(FUE171)	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(FUE172)	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

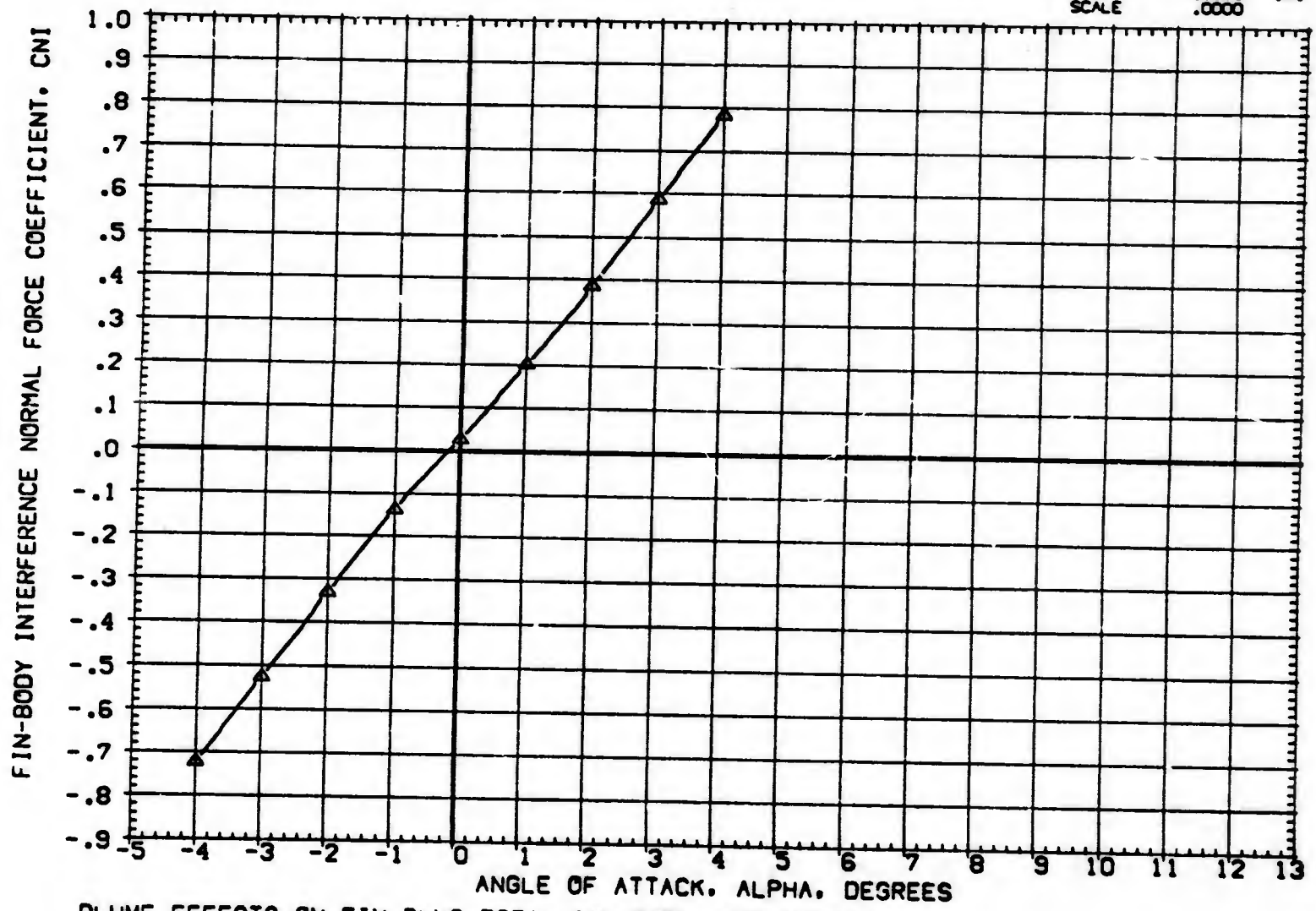


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(D)MACH = 1.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE168)	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(FUE170)	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(FUE171)	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(FUE172)	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

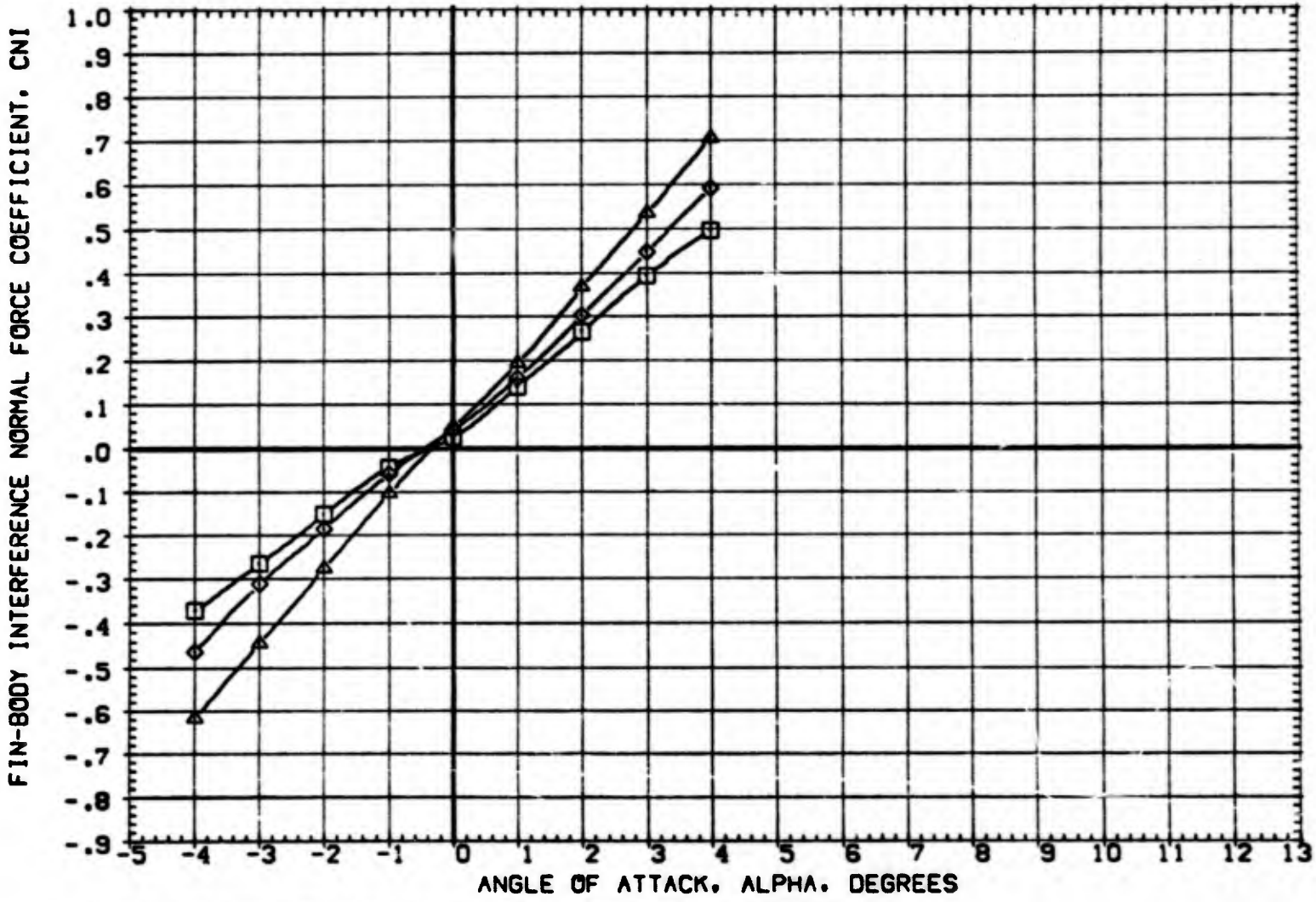


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE168)	□	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(FUE170)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	2.500
(FUE171)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	1.500
(FUE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

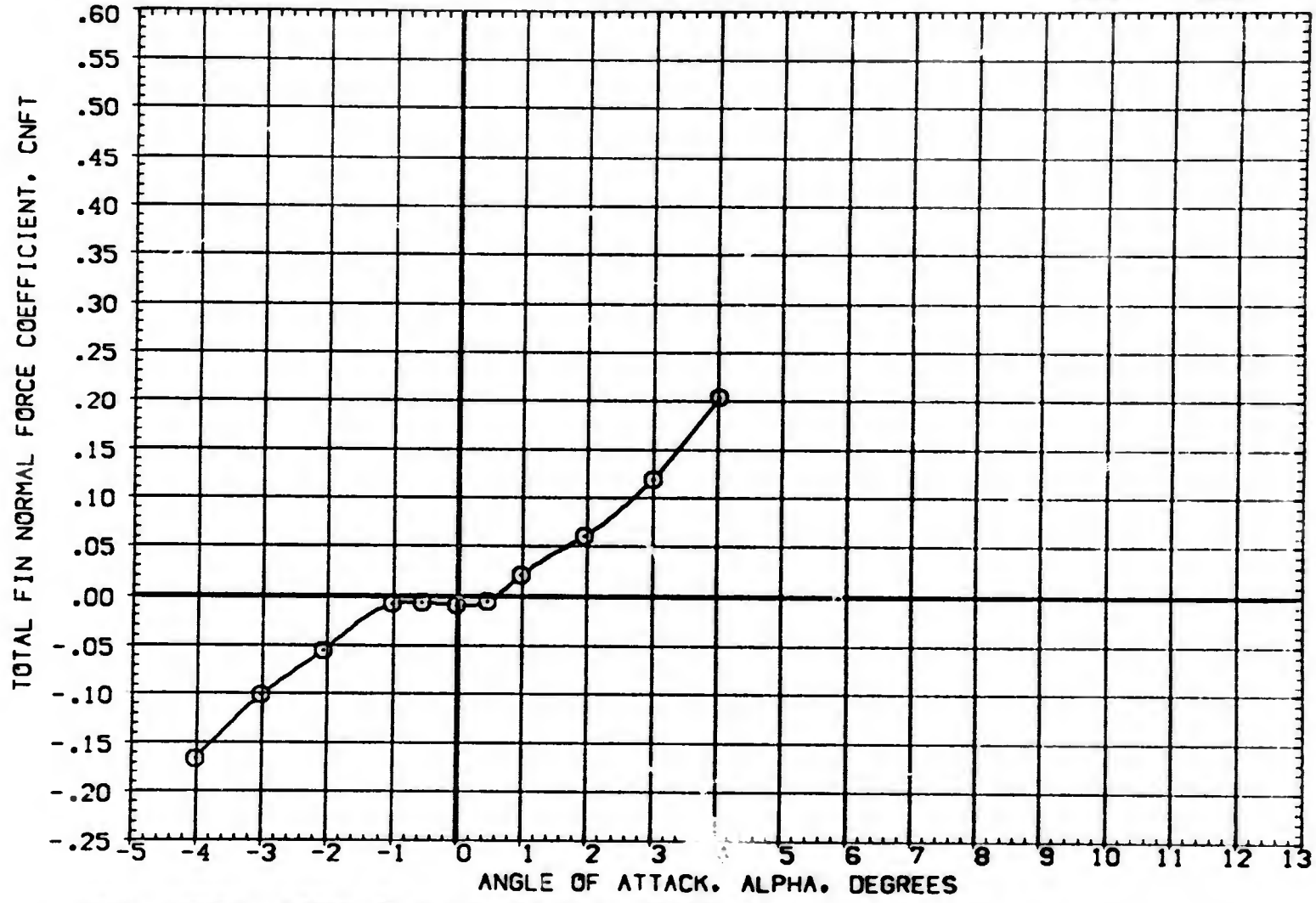


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GUE161)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.600	.000	1.000	37.500
(GUE162)	◇	DATA NOT AVAILABLE	.000	.000	1.000	10.300
(GUE163)	△	DATA NOT AVAILABLE	.000	.000	1.000	8.500
(GUE164)	▽	DATA NOT AVAILABLE	.000	.000	1.000	7.200
(GUE166)	▷	DATA NOT AVAILABLE	.000	.000	1.000	5.000
(GUE167)	◁	DATA NOT AVAILABLE	.000	.000	1.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

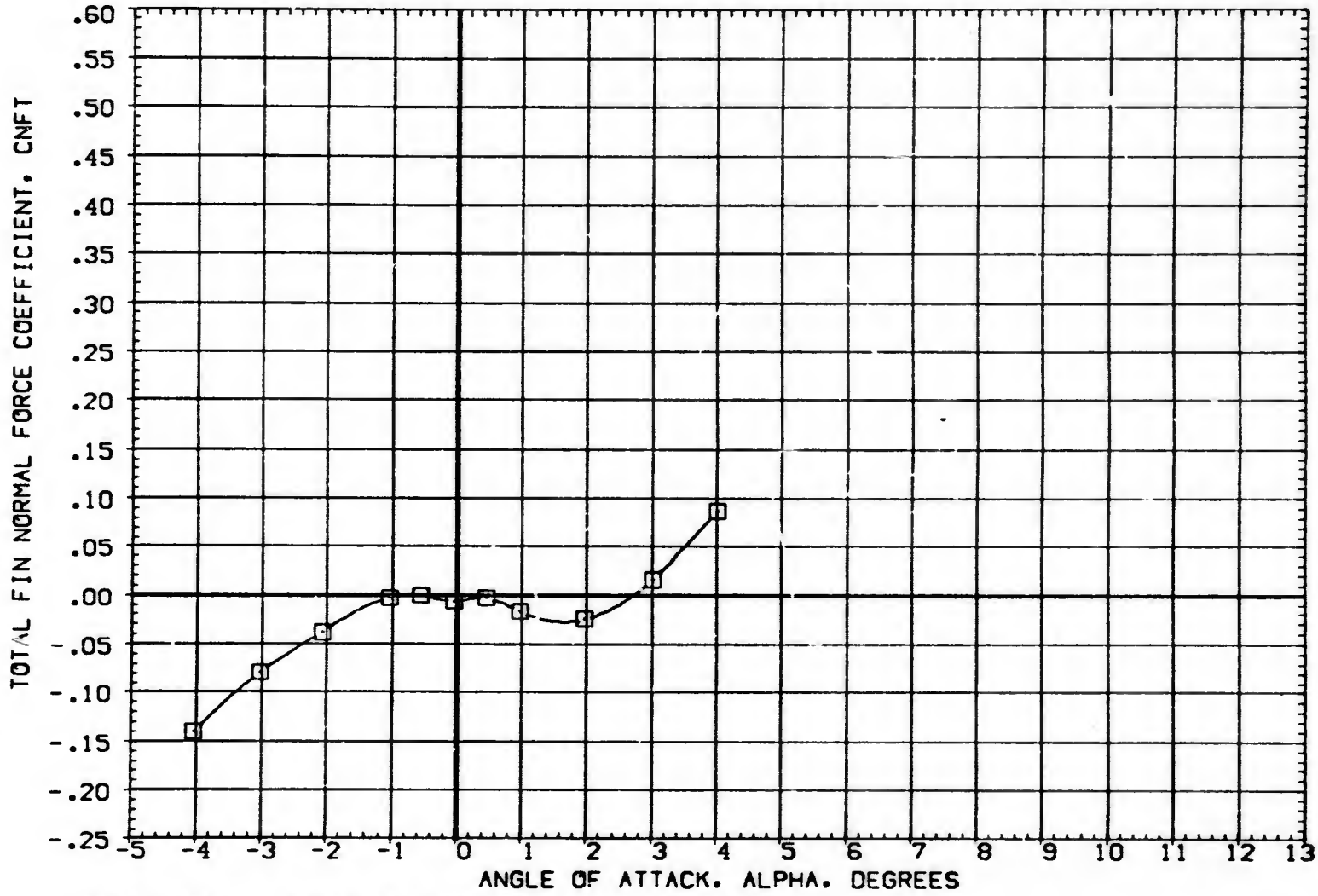


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 1

(A)MACH = .40

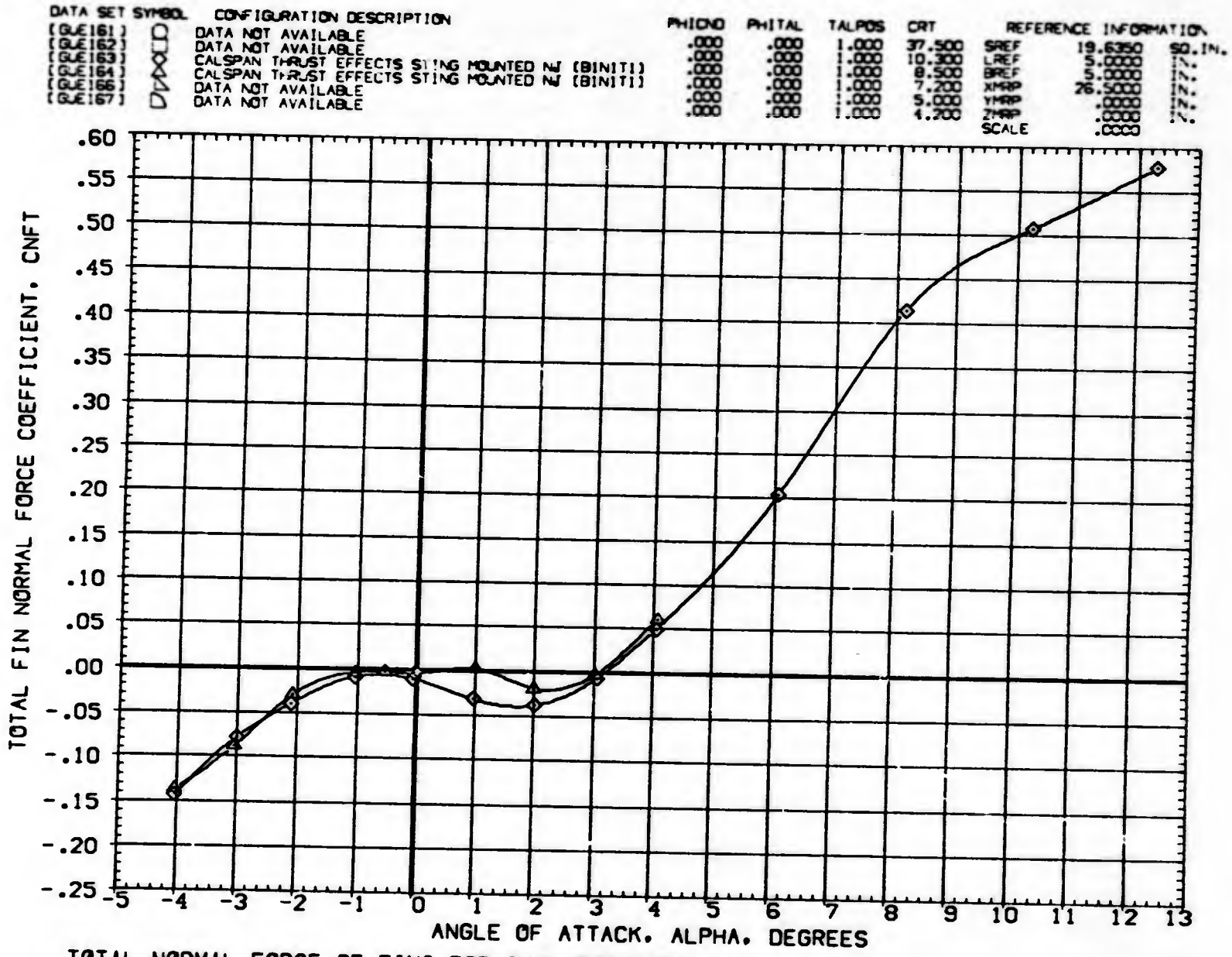
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(QUE161)		DATA NOT AVAILABLE	.000	.000	1.000	37.500
(QUE162)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	10.300
(QUE163)		DATA NOT AVAILABLE	.000	.000	1.000	8.500
(QUE164)		DATA NOT AVAILABLE	.000	.000	1.000	7.200
(QUE166)		DATA NOT AVAILABLE	.000	.000	1.000	5.000
(QUE167)		DATA NOT AVAILABLE	.000	.000	1.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 1

(B)MACH = .80

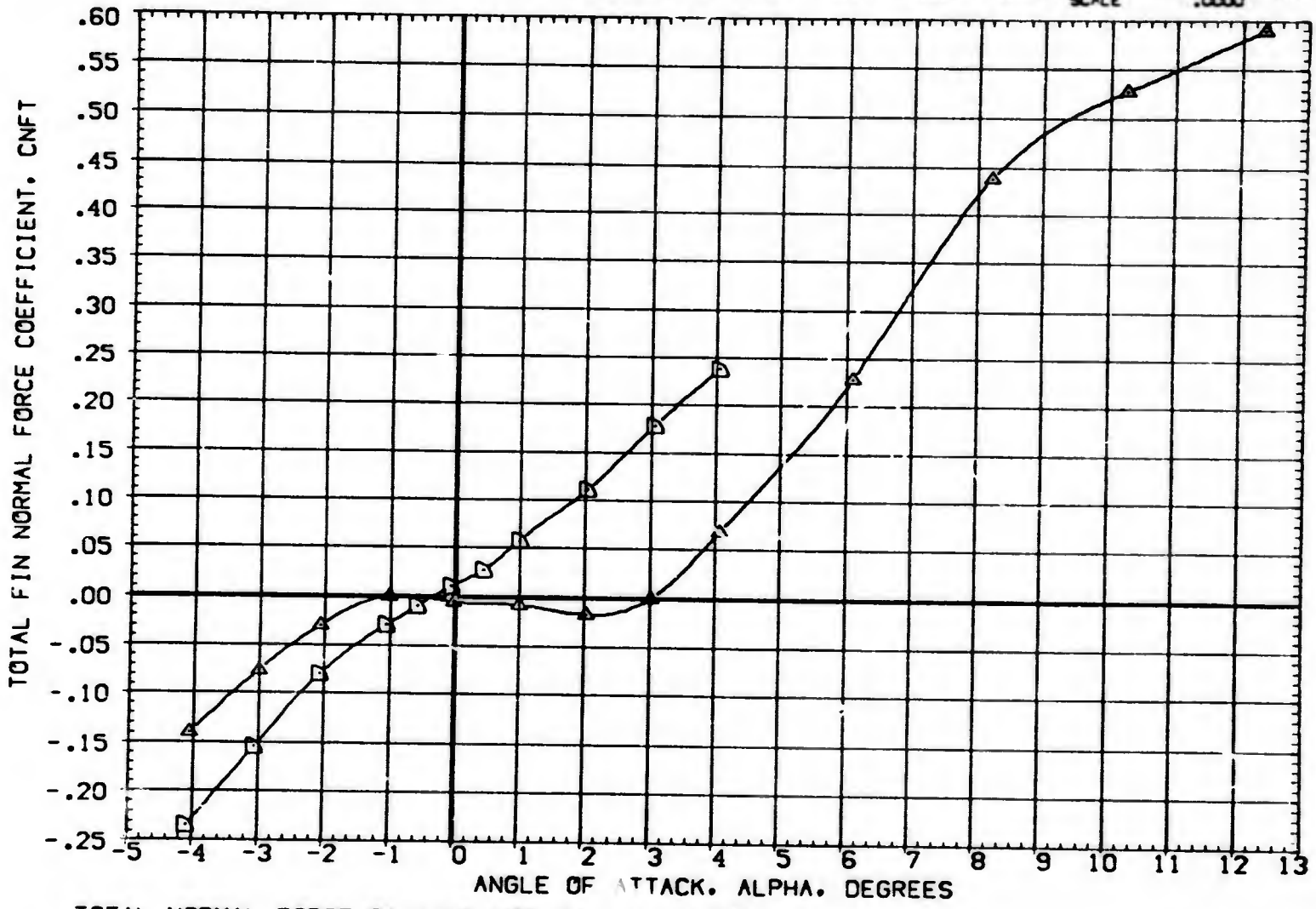


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 1

(C)MACH = .90

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(QUE161)		DATA NOT AVAILABLE	.000	.000	1.000	37.500
(QUE162)		DATA NOT AVAILABLE	.000	.000	1.000	10.300
(QUE163)		DATA NOT AVAILABLE	.000	.000	1.000	8.500
(QUE164)		CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	7.200
(QUE166)		DATA NOT AVAILABLE	.000	.000	1.000	5.000
(QUE167)		CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

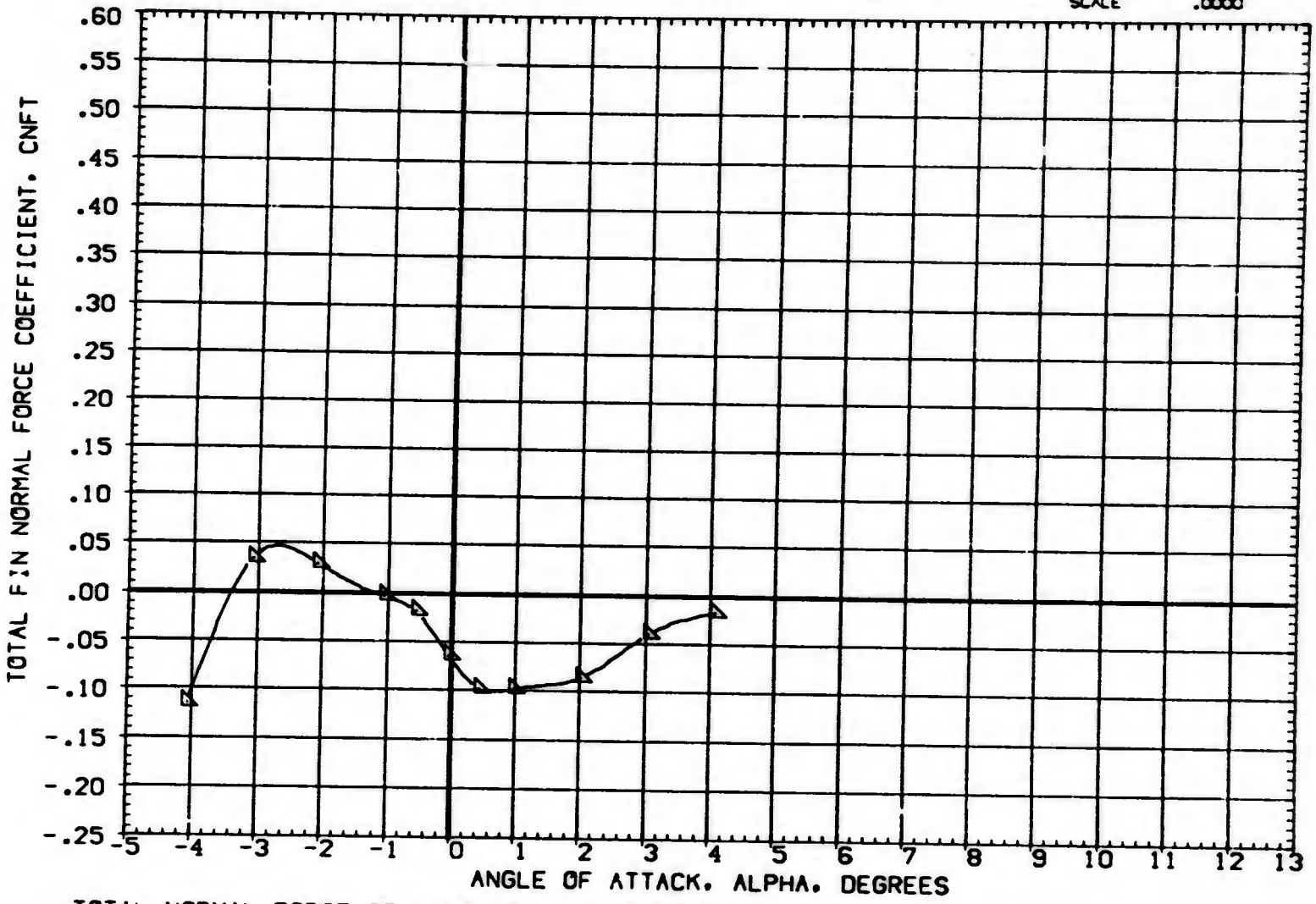


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 1

(D)MACH = .99

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE161)		DATA NOT AVAILABLE	.000	.000	1.000	37.500
(GJE162)		DATA NOT AVAILABLE	.000	.000	1.000	10.300
(GJE163)		DATA NOT AVAILABLE	.000	.000	1.000	8.500
(GJE164)		DATA NOT AVAILABLE	.000	.000	1.000	7.200
(GJE166)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	5.000
(GJE167)		DATA NOT AVAILABLE	.000	.000	1.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

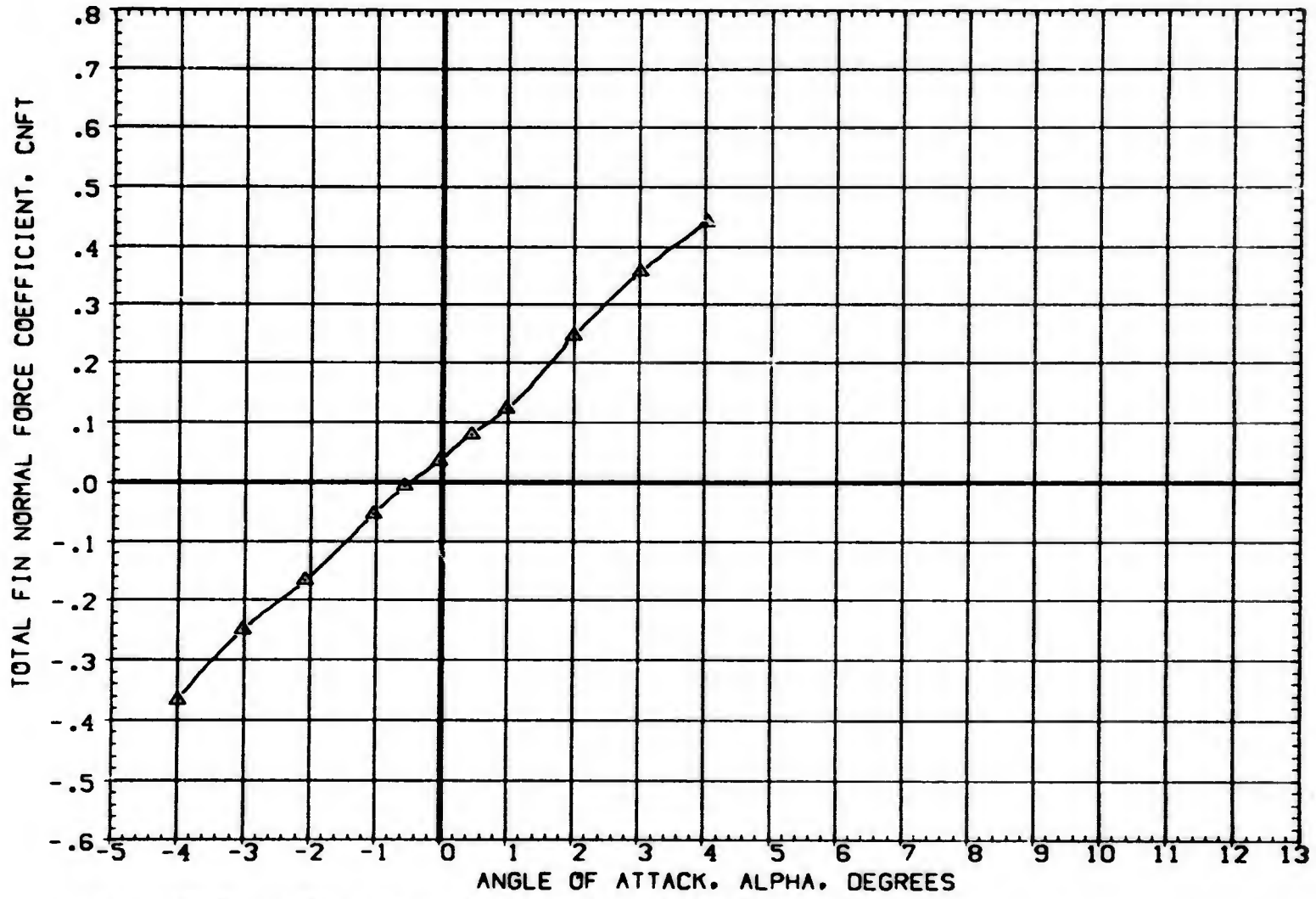


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 1

(E)MAC = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[GUE168]	○	DATA NOT AVAILABLE	.000	.000	1.000	3.600
[GUE170]	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
[GUE171]	◇	DATA NOT AVAILABLE	.000	.000	1.000	1.500
[GUE172]	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

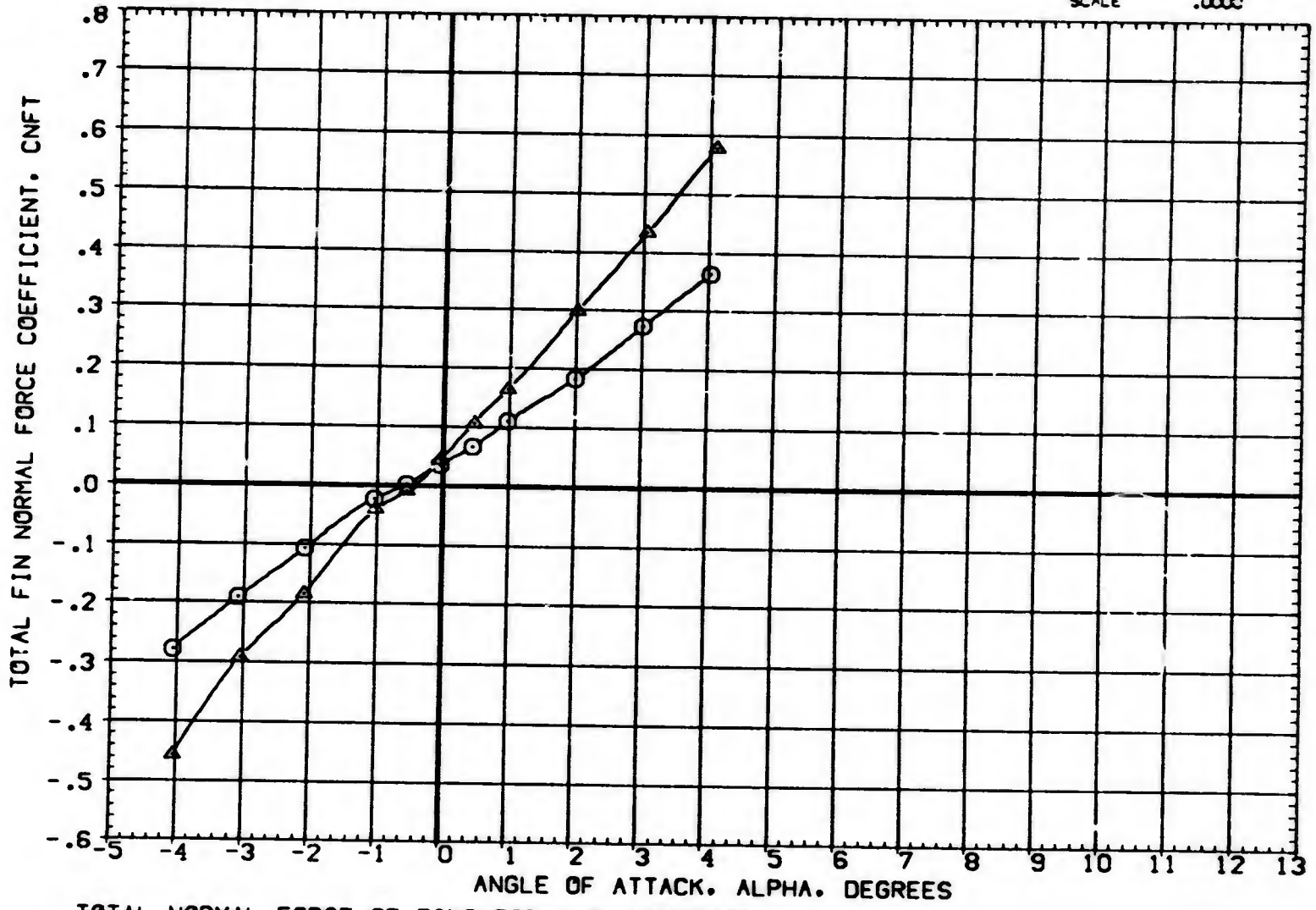


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 1

(A)MACH = .40

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE168)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	3.600
(GJE170)		DATA NOT AVAILABLE	.000	.000	1.000	2.500
(GJE171)	⊠	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(GJE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

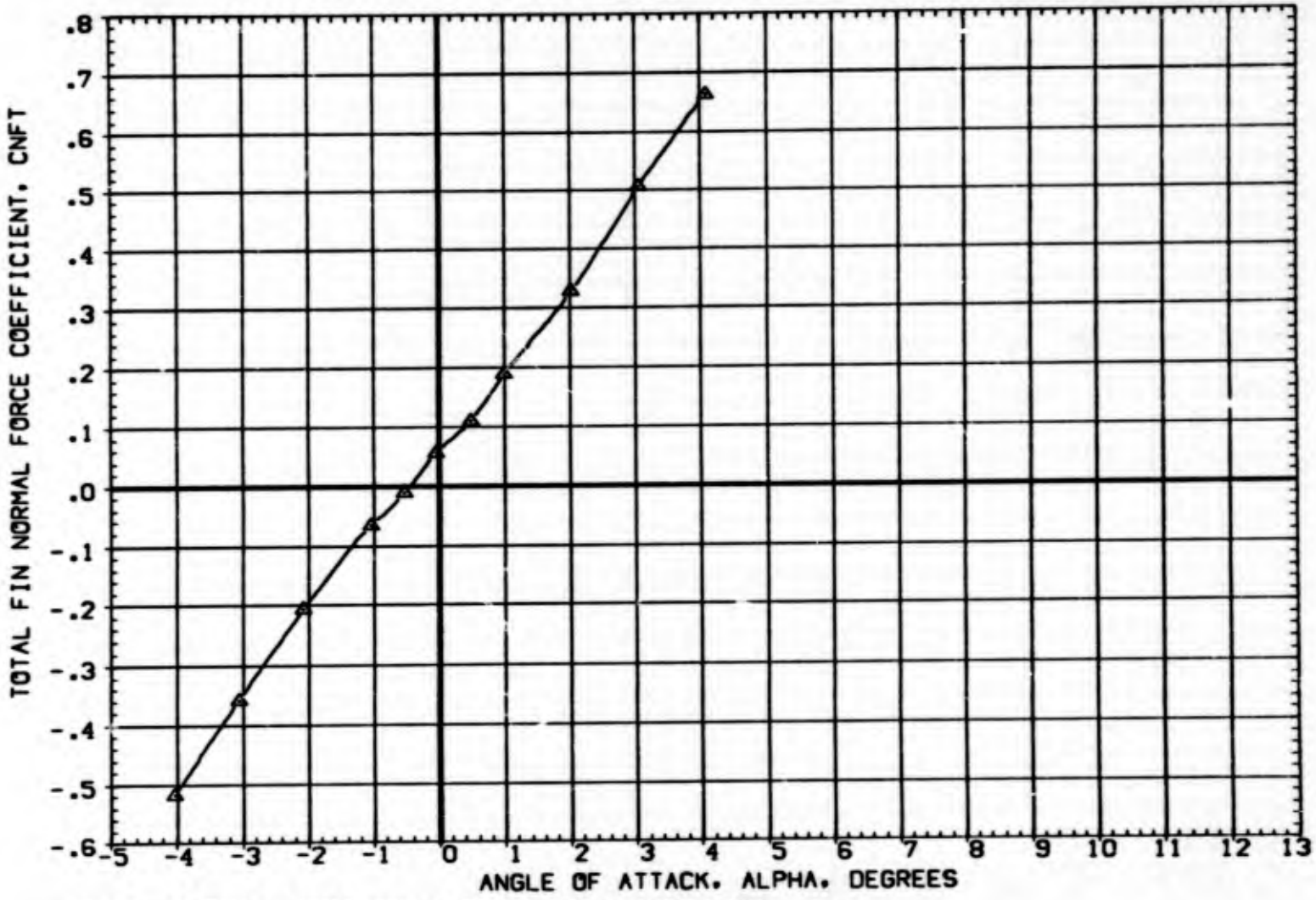


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 1

(B)MAC = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE168)	□	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(GJE170)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(GJE171)	⊠	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(GJE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

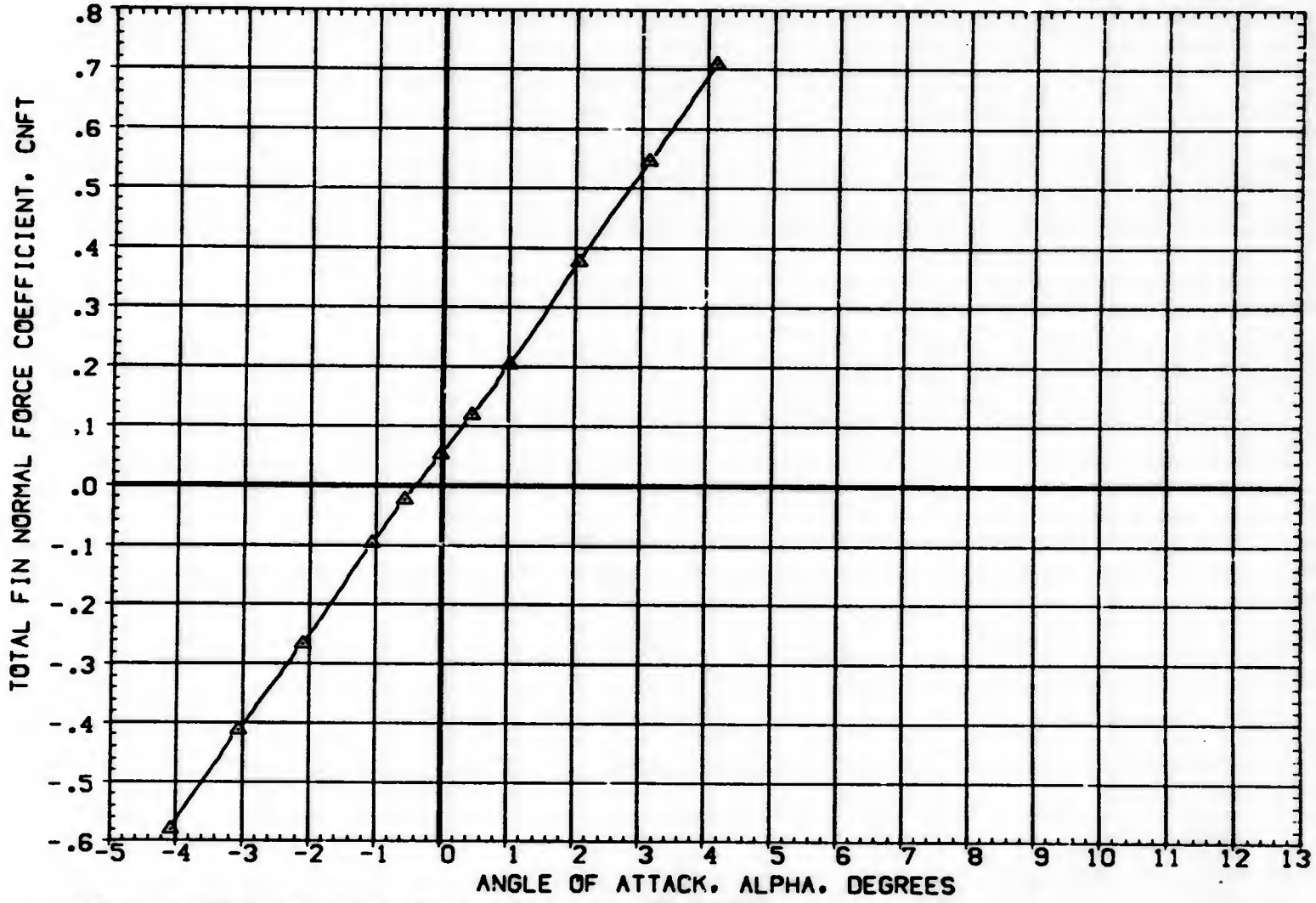


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 1

(C)MAC = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE168)	○	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(GJE170)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(GJE171)	◇	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(GJE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0030	

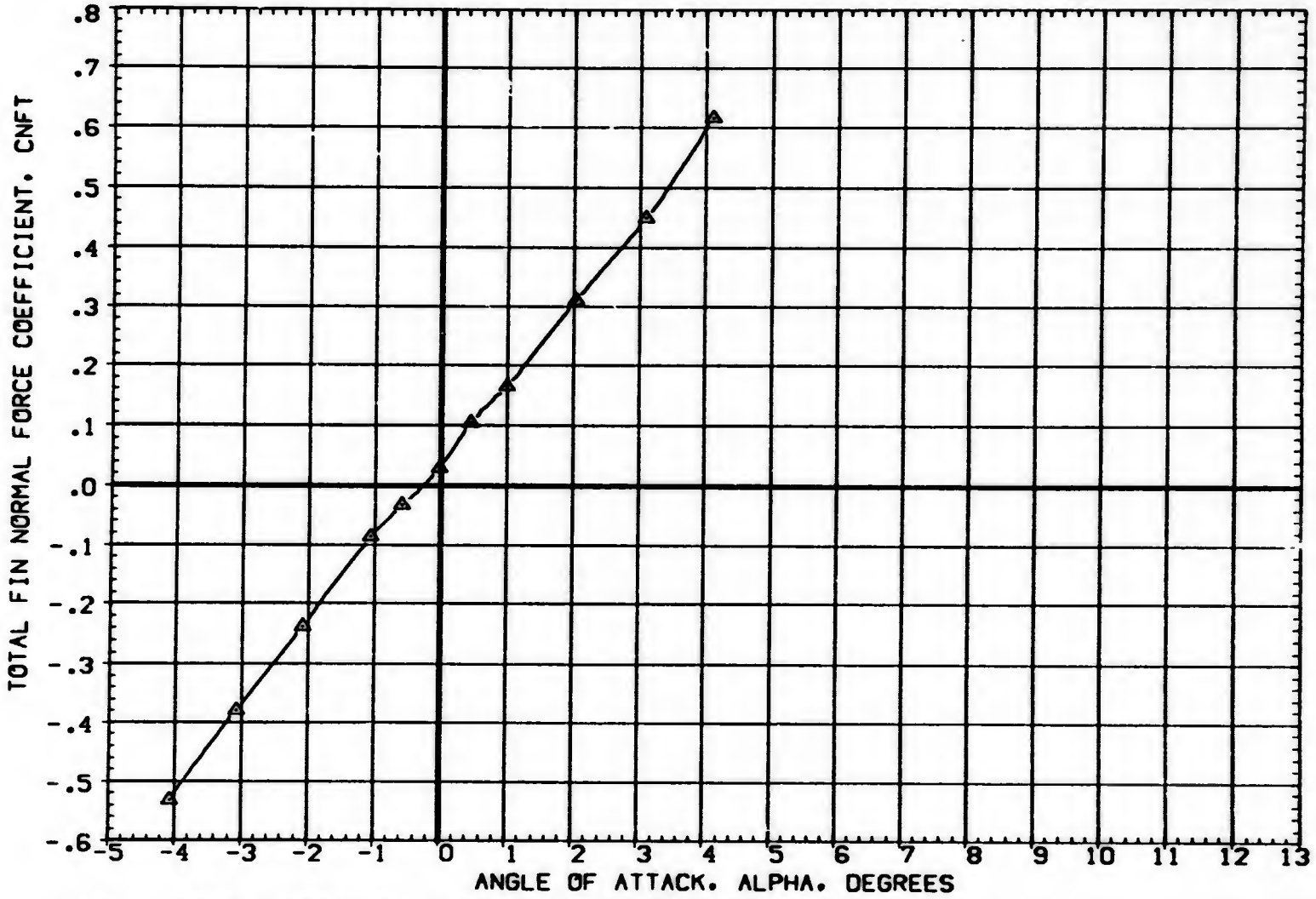


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 1

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(GUE168)	○	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(GUE170)	□	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(GUE171)	◇	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(GUE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

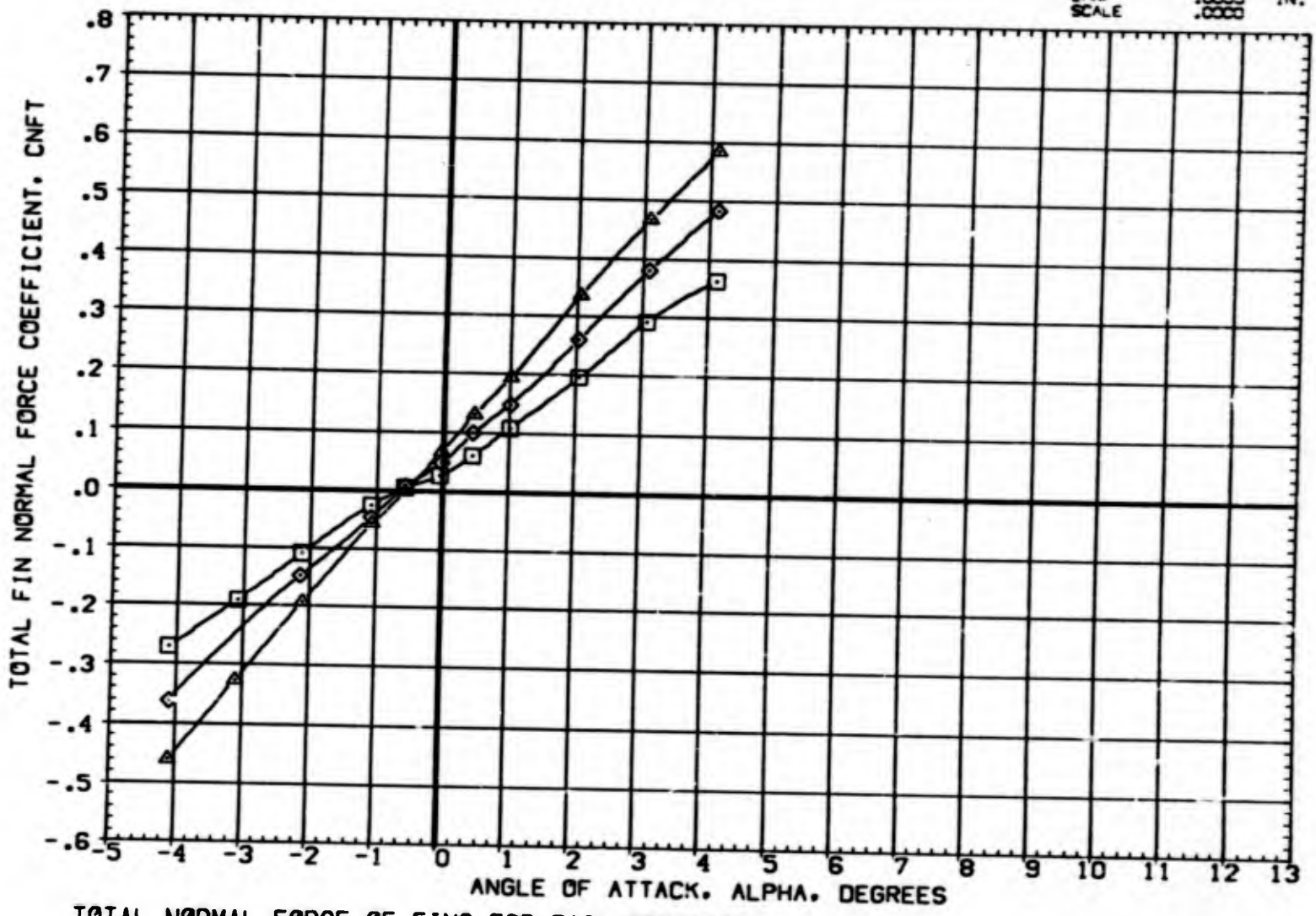


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 1

(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(QUE168)	□	DATA NOT AVAILABLE				
(QUE170)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	3.600
(QUE171)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	2.500
(QUE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	1.500
						.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

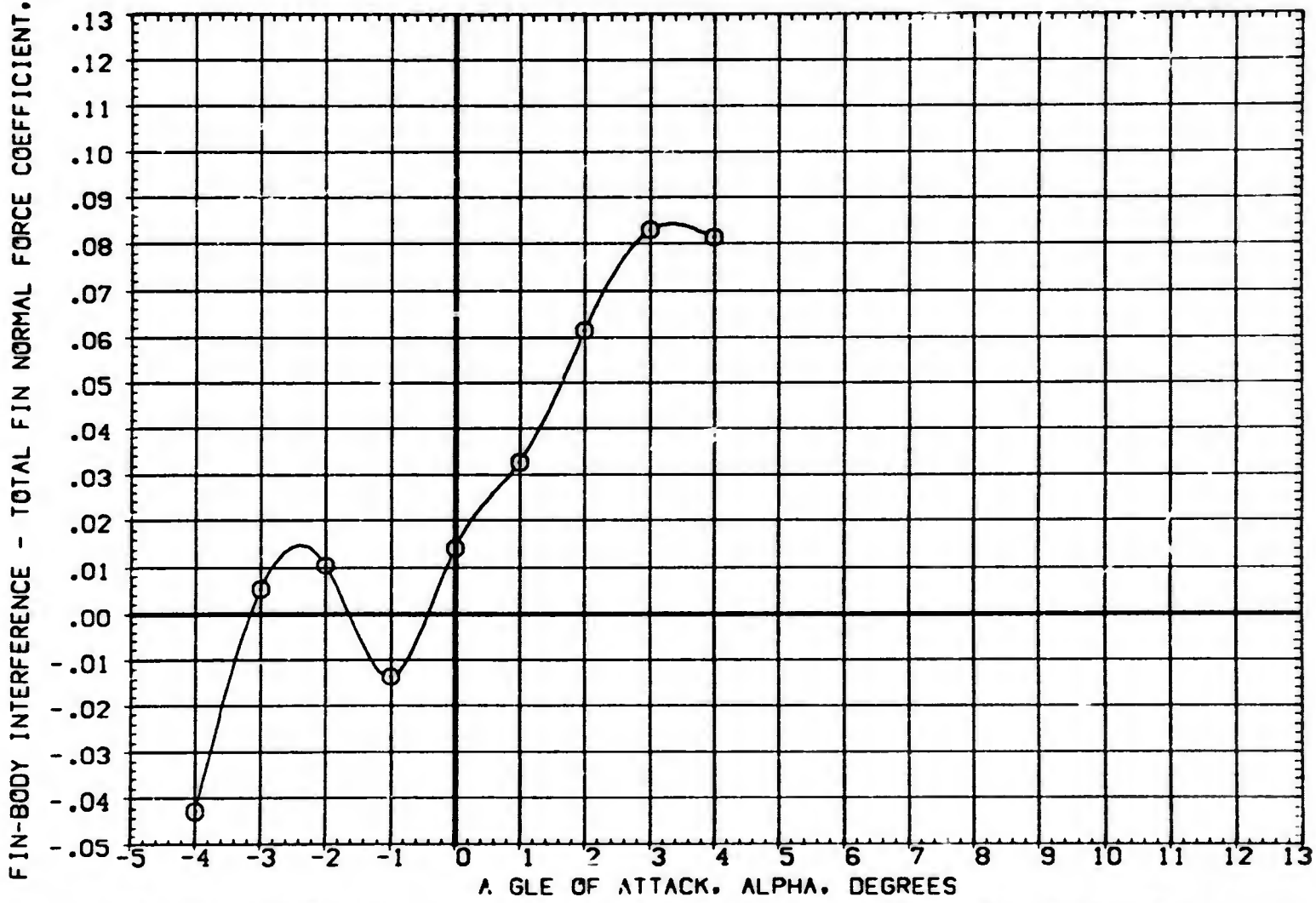


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 1

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(JUE161)	DIAMOND	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	1.000	37.500
(JUE162)		DATA NOT AVAILABLE	.000	.000	1.000	10.300
(JUE163)		DATA NOT AVAILABLE	.000	.000	1.000	8.500
(JUE164)		DATA NOT AVAILABLE	.000	.000	1.000	7.200
(JUE166)		DATA NOT AVAILABLE	.000	.000	1.000	5.000
(JUE167)		DATA NOT AVAILABLE	.000	.000	1.000	4.200

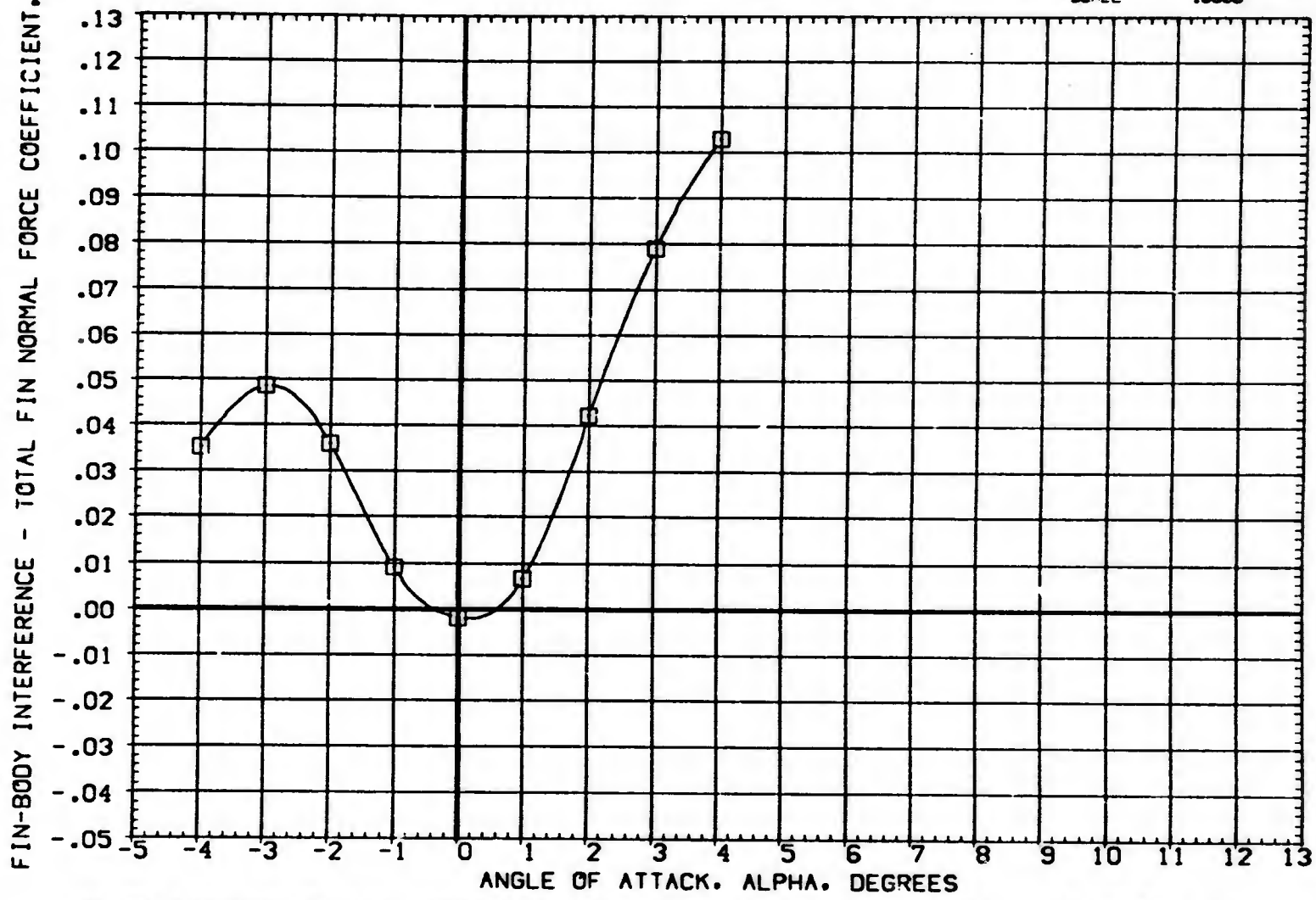
REFERENCE INFORMATION		SOURCE
SREF	19.6350	
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 1

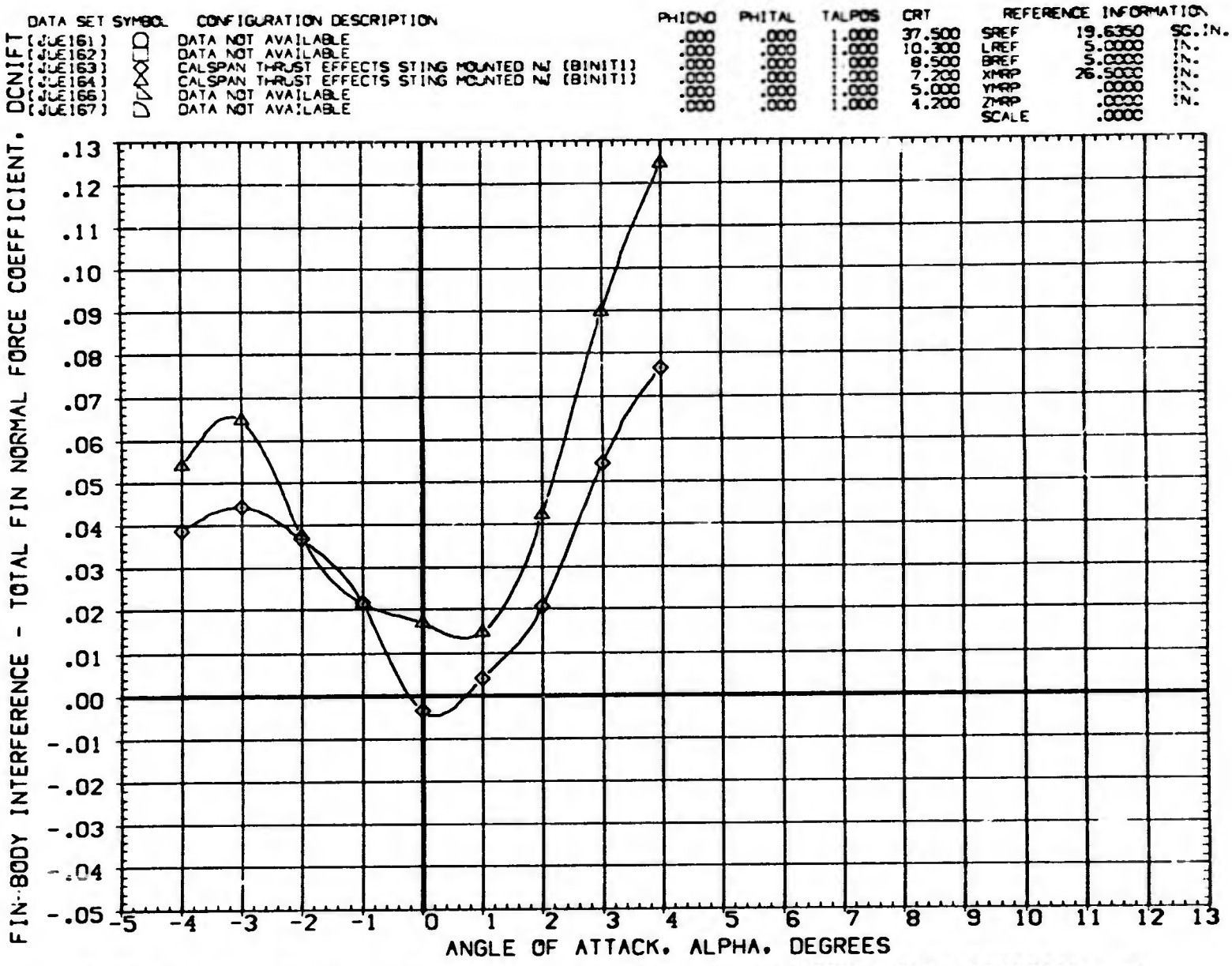
(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT	REFERENCE INFORMATION		
(JLE161)		DATA NOT AVAILABLE	.000	.000	1.000	37.500	SREF	19.6350	SQ.IN.
(JLE162)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	10.300	LREF	5.0000	IN.
(JLE163)		DATA NOT AVAILABLE	.000	.000	1.000	8.500	BREF	5.0000	IN.
(JLE164)		DATA NOT AVAILABLE	.000	.000	1.000	7.200	XMRP	26.5000	IN.
(JLE166)		DATA NOT AVAILABLE	.000	.000	1.000	5.000	YMRP	.0000	IN.
(JLE167)		DATA NOT AVAILABLE	.000	.000	1.000	4.200	ZMRP	.0000	IN.
							SCALE	.0000	



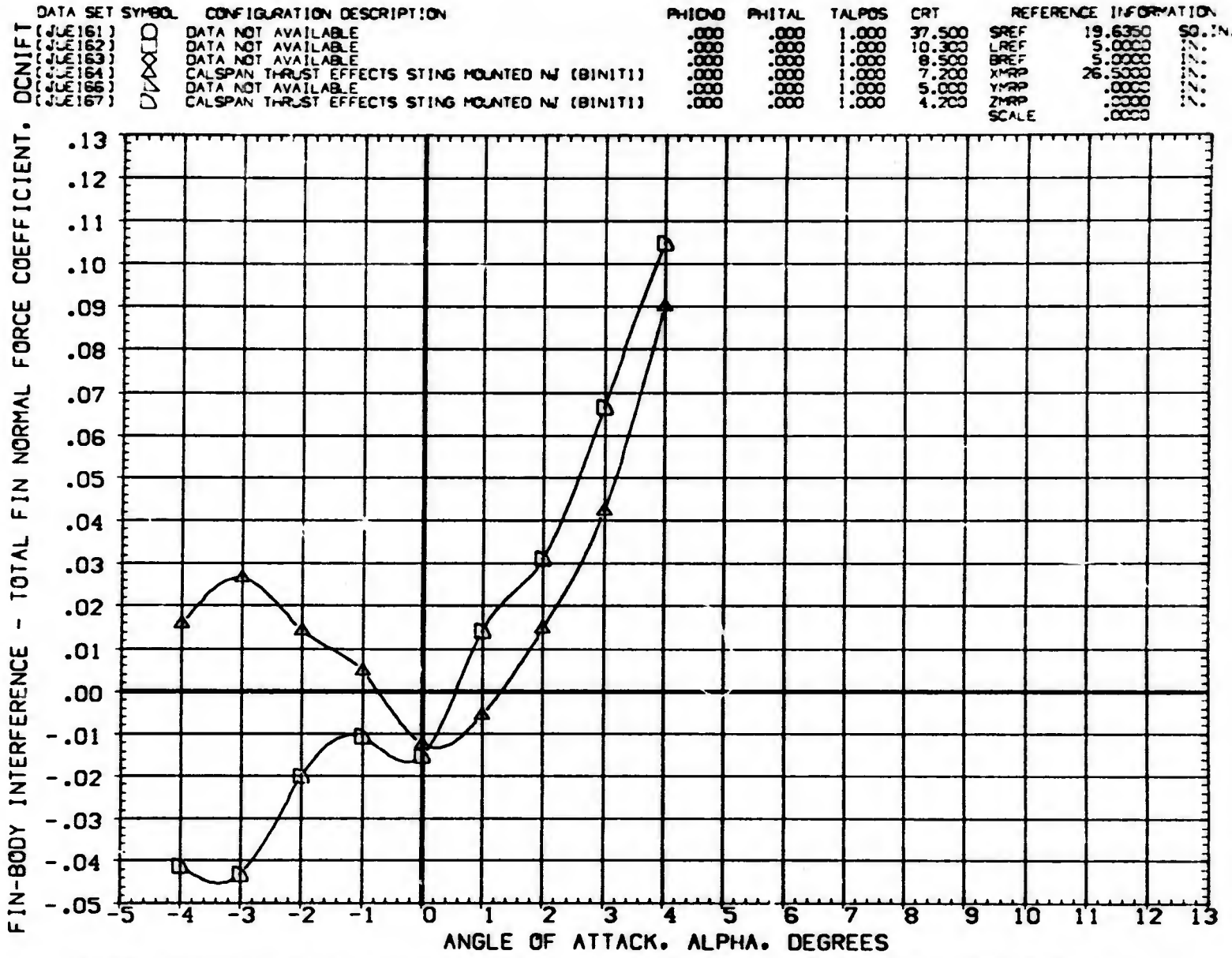
PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 1

(B)MACH = .80



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 1

(C)MACH = .90

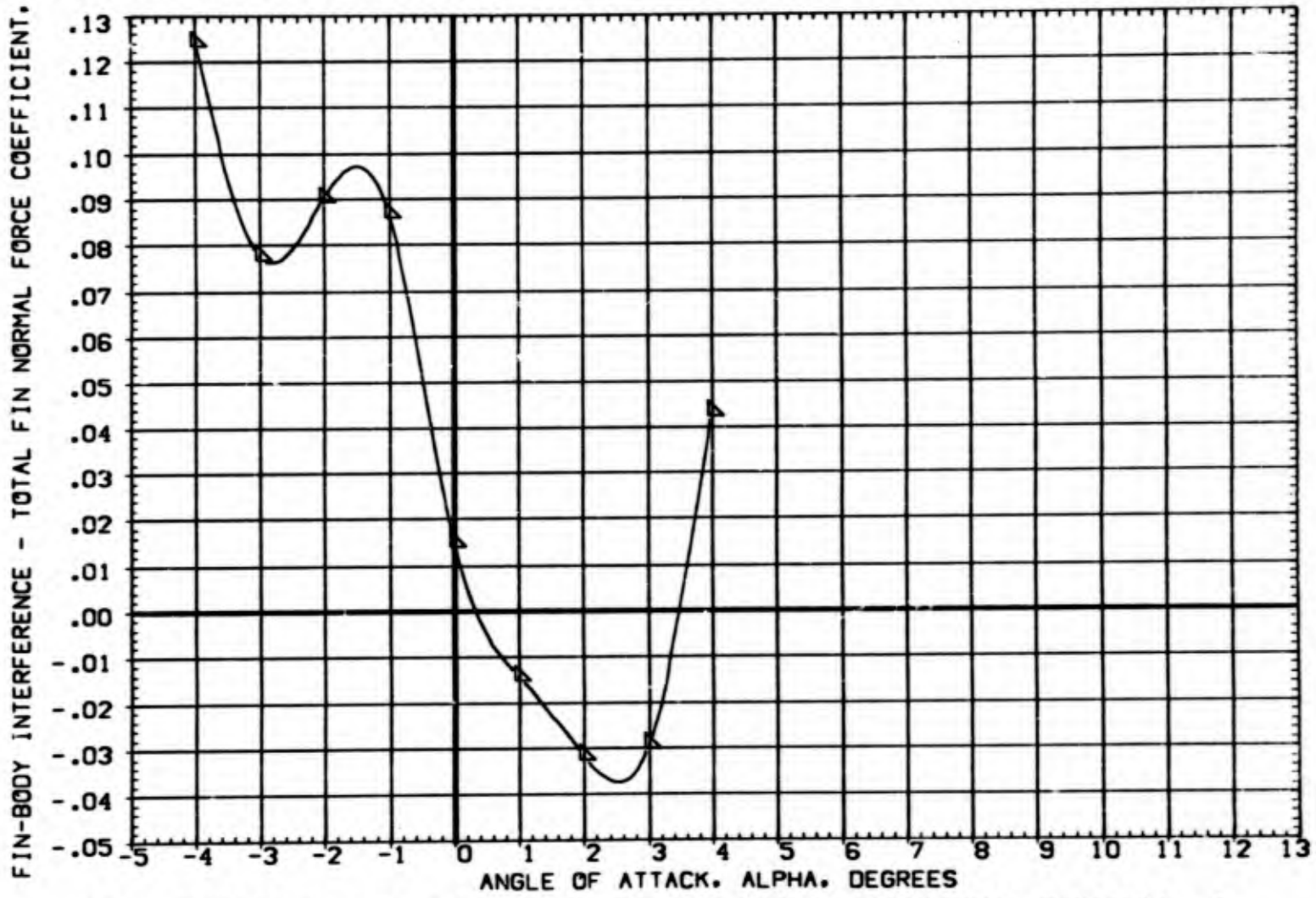


PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 1

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(JUE161)	□	DATA NOT AVAILABLE	.000	.000	1.000	37.500
(JUE162)	△	DATA NOT AVAILABLE	.000	.000	1.000	10.300
(JUE163)	◇	DATA NOT AVAILABLE	.000	.000	1.000	8.500
(JUE164)	⊲	DATA NOT AVAILABLE	.000	.000	1.000	7.200
(JUE166)	⊳	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	5.000
(JUE167)	○	DATA NOT AVAILABLE	.000	.000	1.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 1

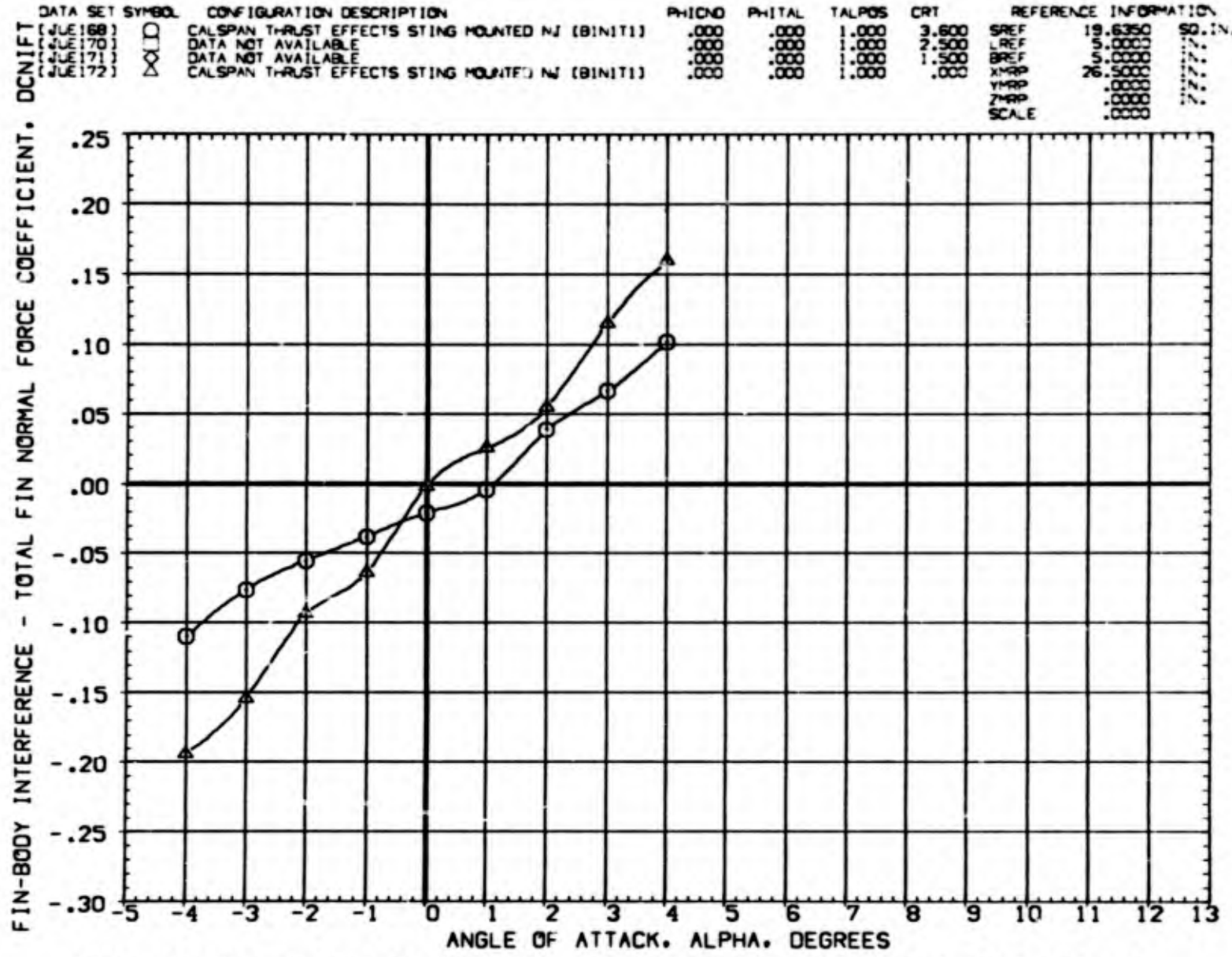
(E)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(JUE168)	□	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(JUE170)	◇	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(JUE171)	⊠	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(JUE172)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

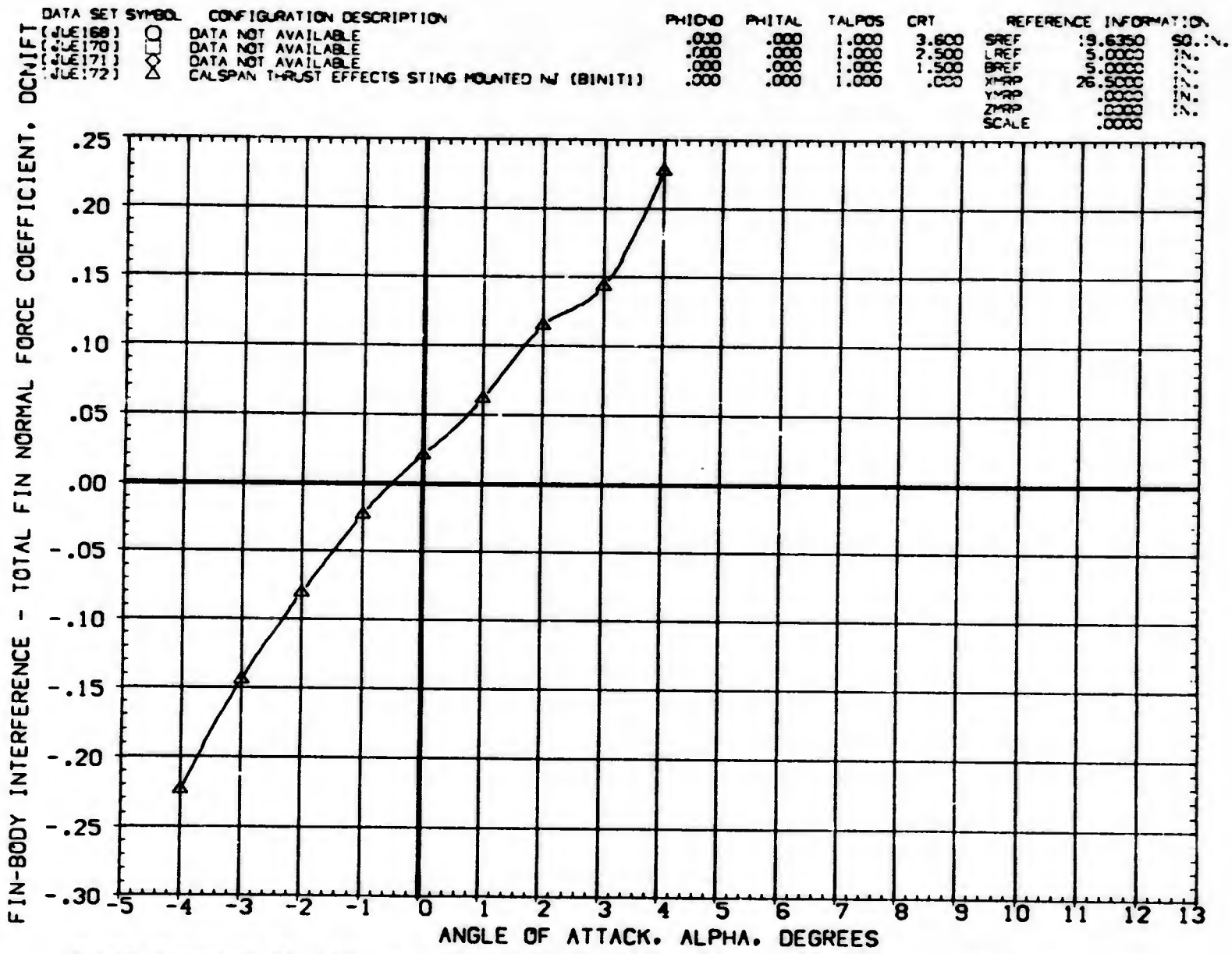
PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 1

(A)MACH = .40



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 1

(B)MACH = .80

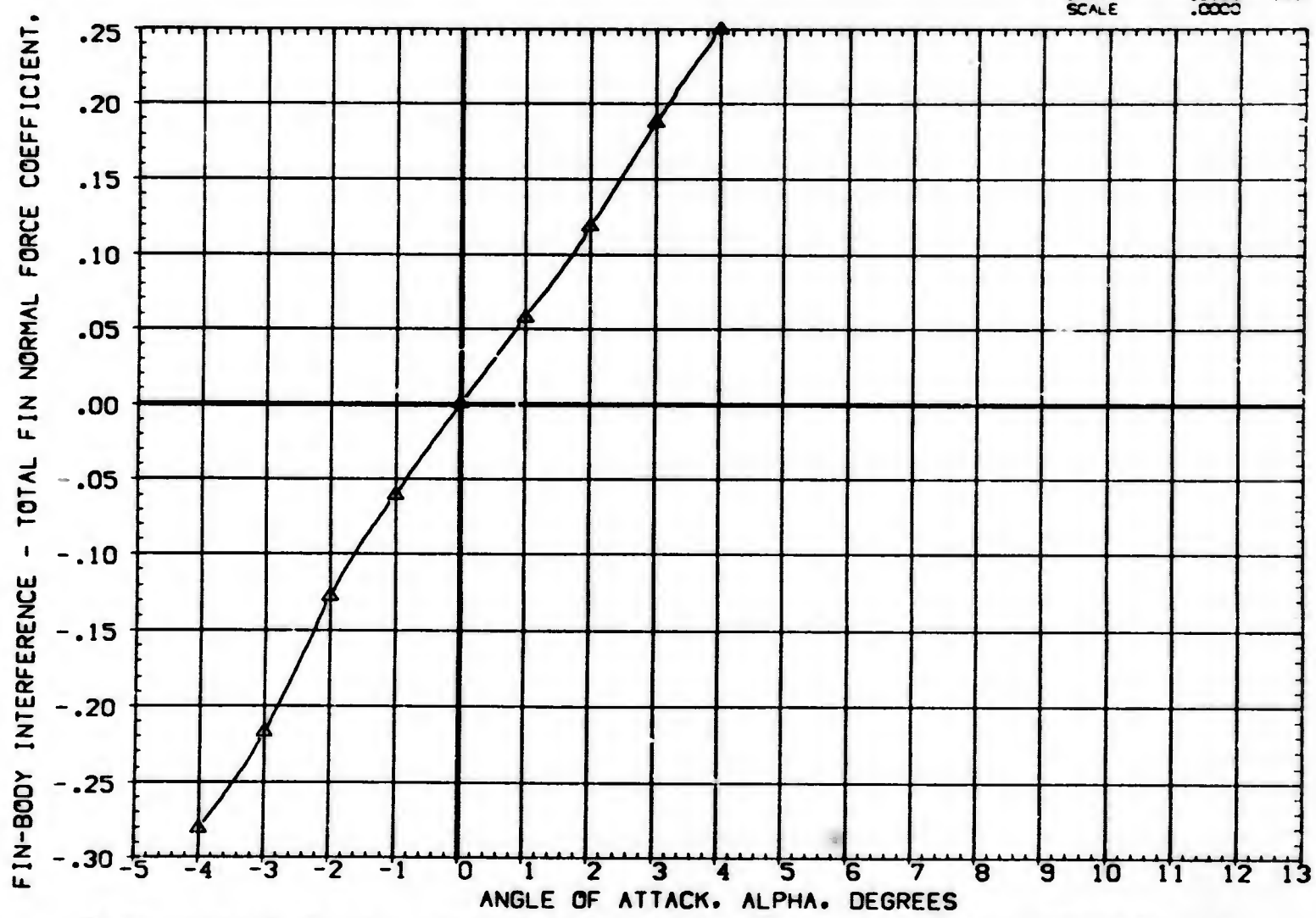


PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 1

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[JUE168]	DATA NOT AVAILABLE	.000	.000	1.000	3.600
[JUE170]	DATA NOT AVAILABLE	.000	.000	1.000	2.500
[JUE171]	DATA NOT AVAILABLE	.000	.000	1.000	1.500
[JUE172]	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



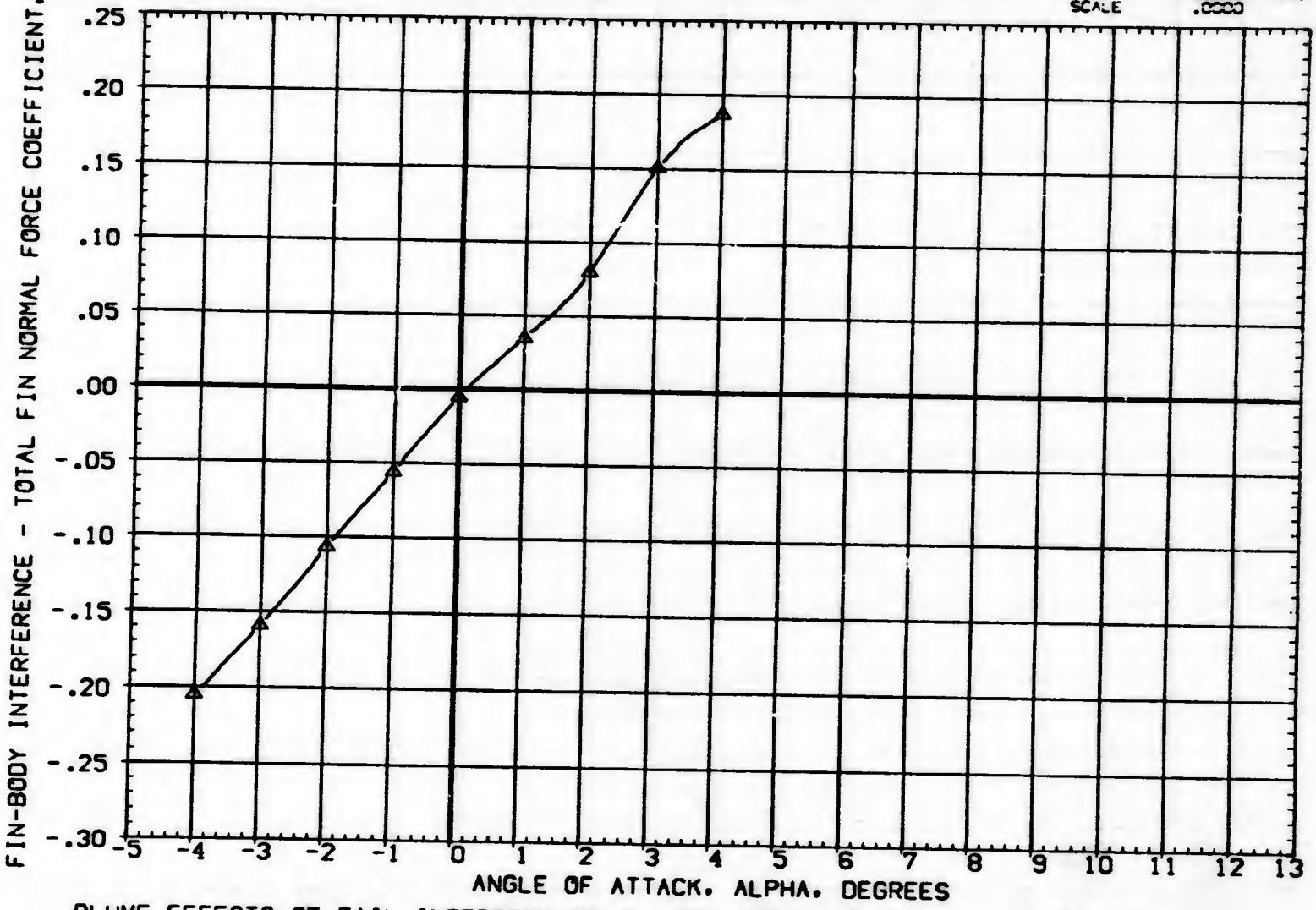
PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 1

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(JUE168)	◇	DATA NOT AVAILABLE	.000	.000	1.000	3.600
(JUE170)	△	DATA NOT AVAILABLE	.000	.000	1.000	2.500
(JUE171)	▽	DATA NOT AVAILABLE	.000	.000	1.000	1.500
(JUE172)	⋈	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	1.000	.000

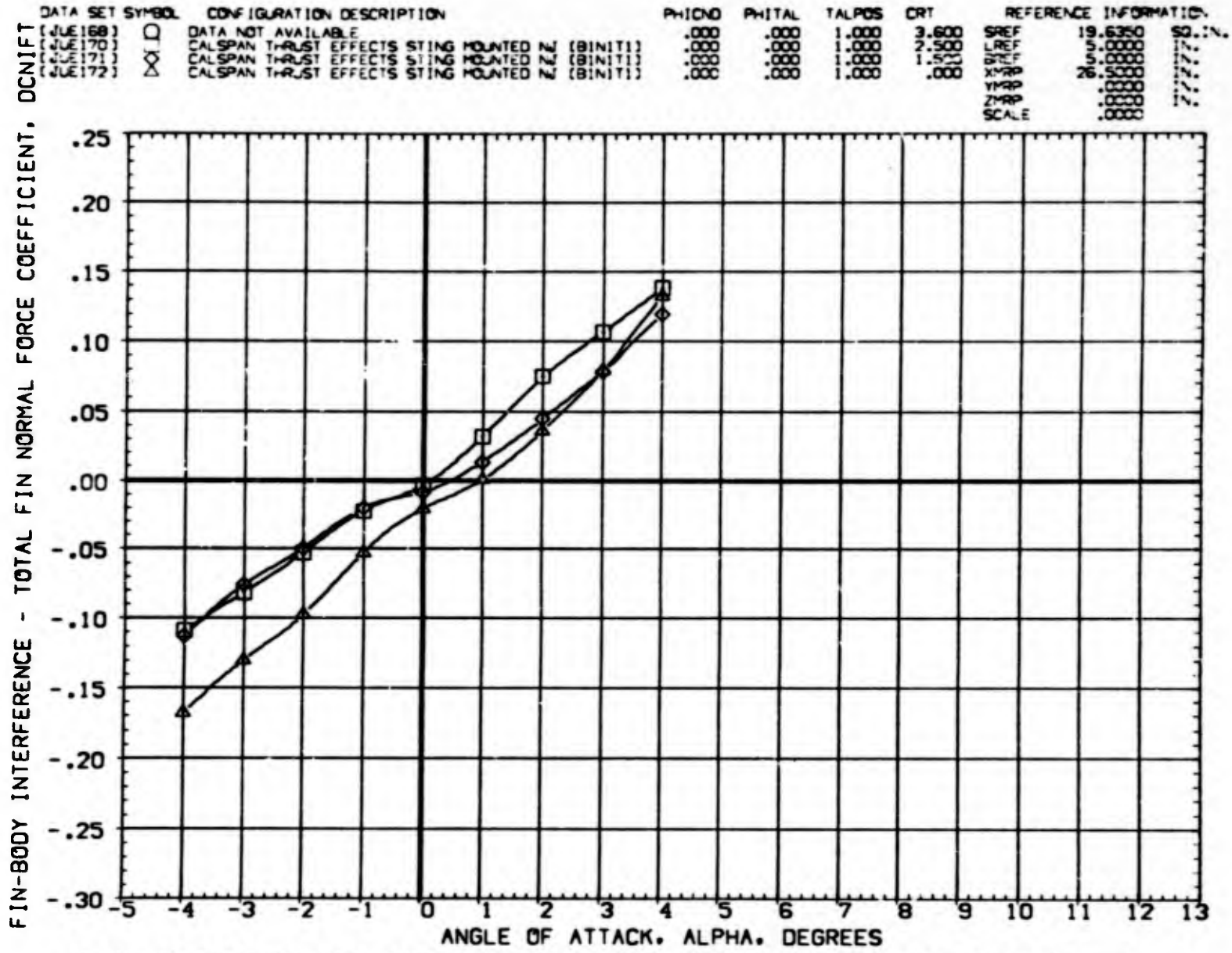
REFERENCE INFORMATION

SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 1

(E)MACH = 1.10

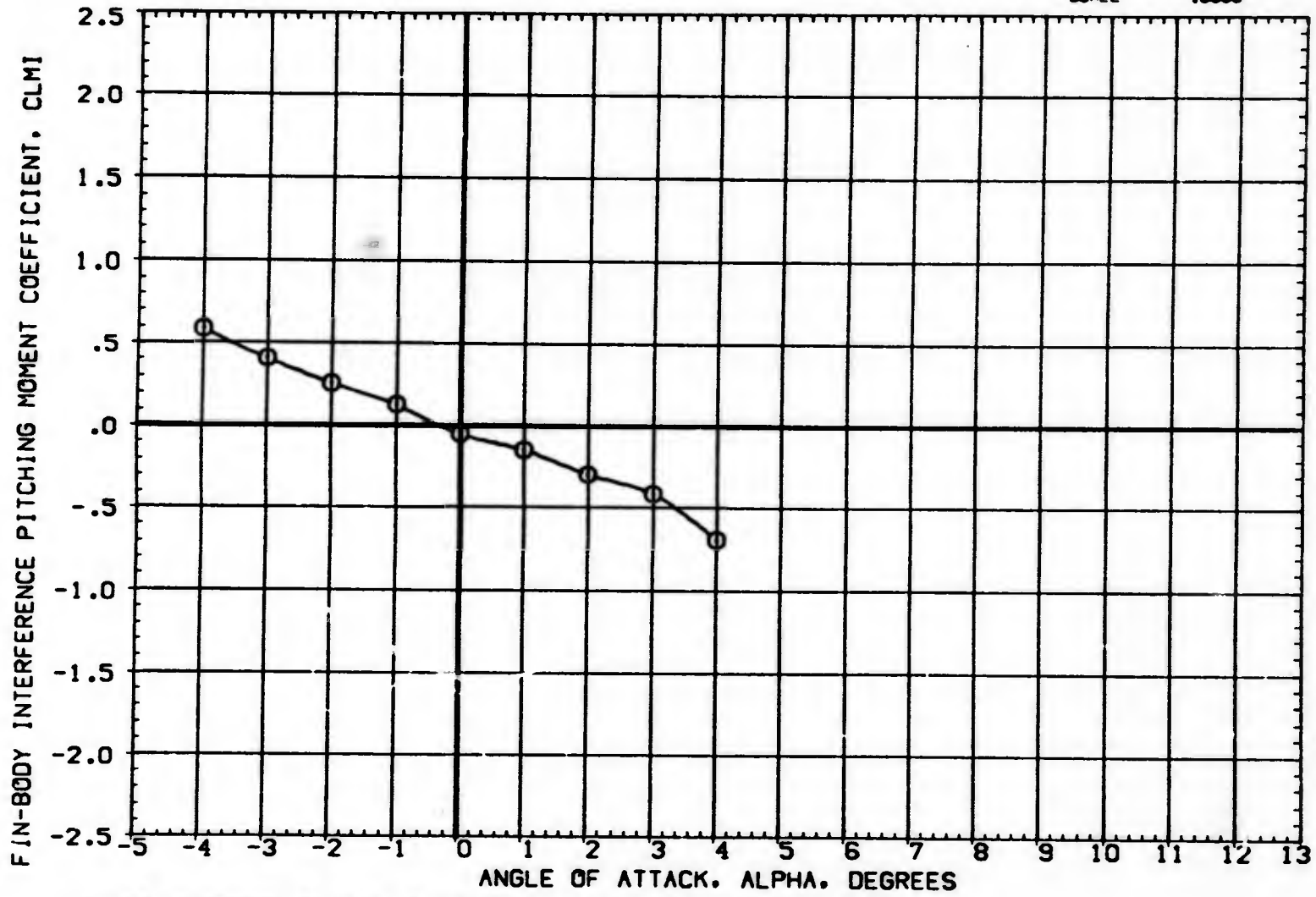


PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 1

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE173)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	37.500
(FUE174)	○	DATA NOT AVAILABLE	.000	.000	2.000	10.300
(FUE175)	◇	DATA NOT AVAILABLE	.000	.000	2.000	8.500
(FUE176)	△	DATA NOT AVAILABLE	.000	.000	2.000	7.200
(FUE178)	▽	DATA NOT AVAILABLE	.000	.000	2.000	5.000
(FUE179)	▷	DATA NOT AVAILABLE	.000	.000	2.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

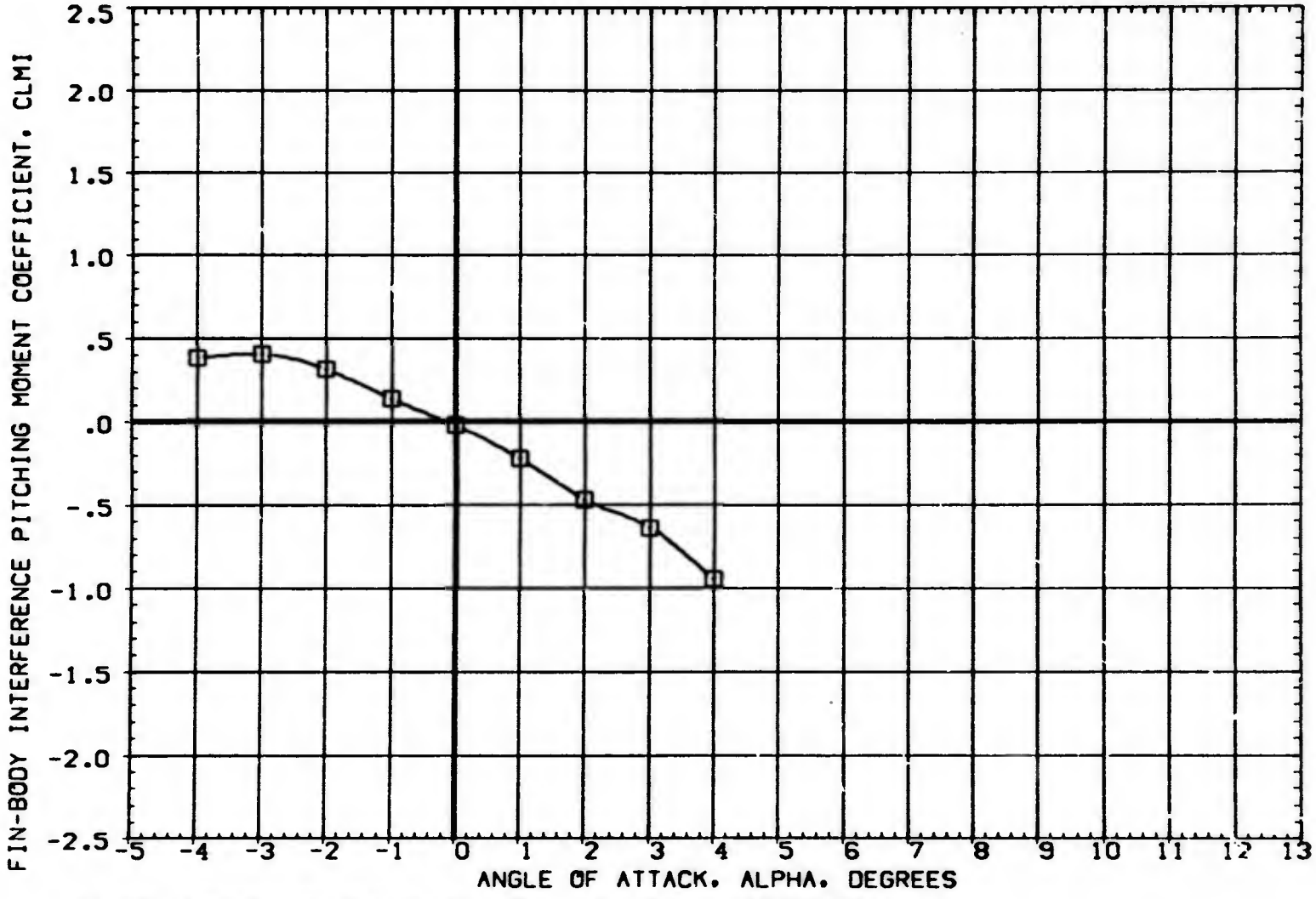


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE173)	□	DATA NOT AVAILABLE	.000	.000	2.000	37.500
(FUE174)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	10.300
(FUE175)	△	DATA NOT AVAILABLE	.000	.000	2.000	8.500
(FUE176)	▽	DATA NOT AVAILABLE	.000	.000	2.000	7.200
(FUE178)	⊲	DATA NOT AVAILABLE	.000	.000	2.000	5.000
(FUE179)	⊳	DATA NOT AVAILABLE	.000	.000	2.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

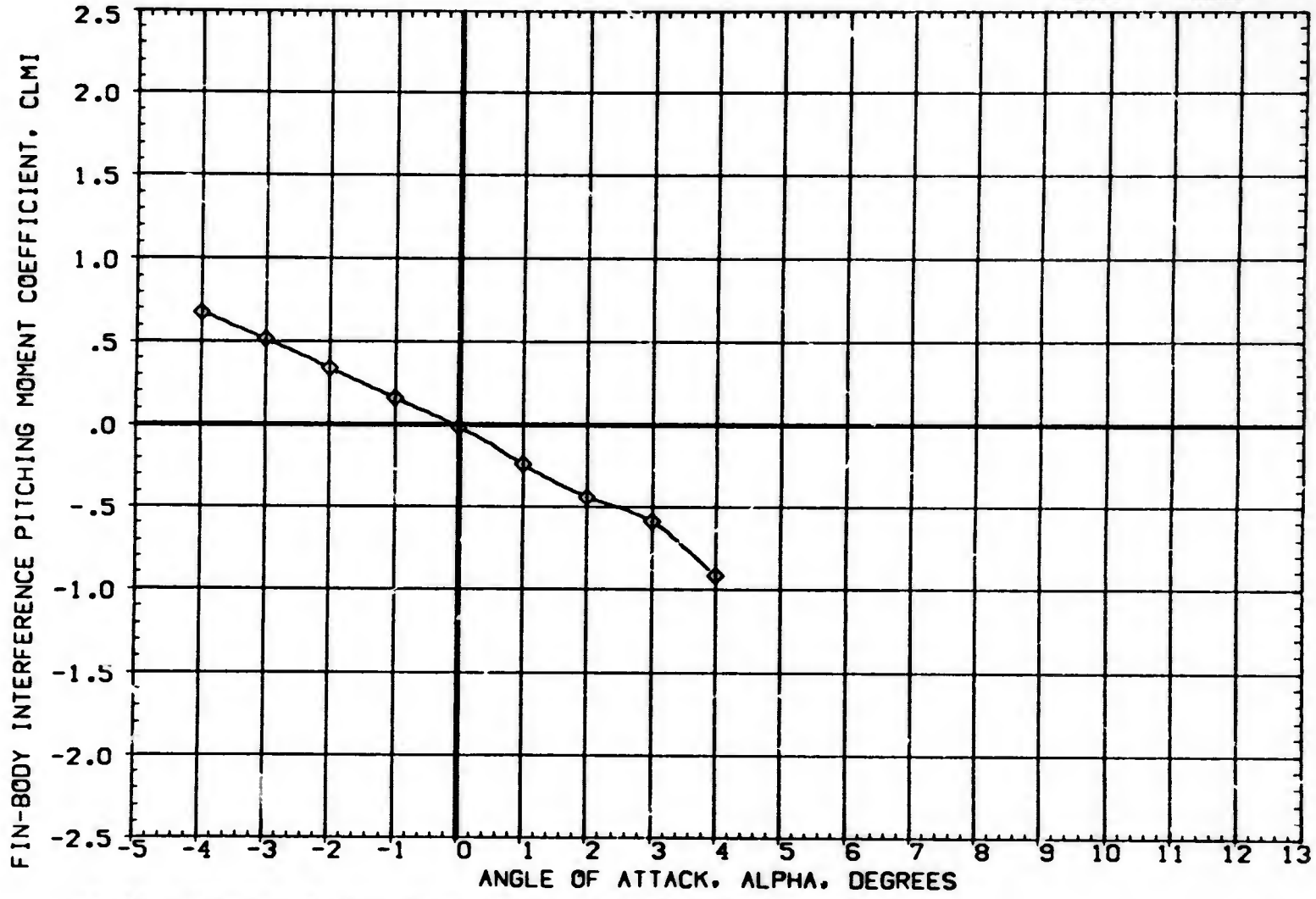


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE173)	□	DATA NOT AVAILABLE	.000	.000	2.000	37.500
(FUE174)	□	DATA NOT AVAILABLE	.000	.000	2.000	10.300
(FUE175)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	8.500
(FUE176)	△	DATA NOT AVAILABLE	.000	.000	2.000	7.200
(FUE178)	△	DATA NOT AVAILABLE	.000	.000	2.000	5.000
(FUE179)	△	DATA NOT AVAILABLE	.000	.000	2.000	4.200

REFERENCE INFORMATION		S.N.
SREF	19.6350	
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

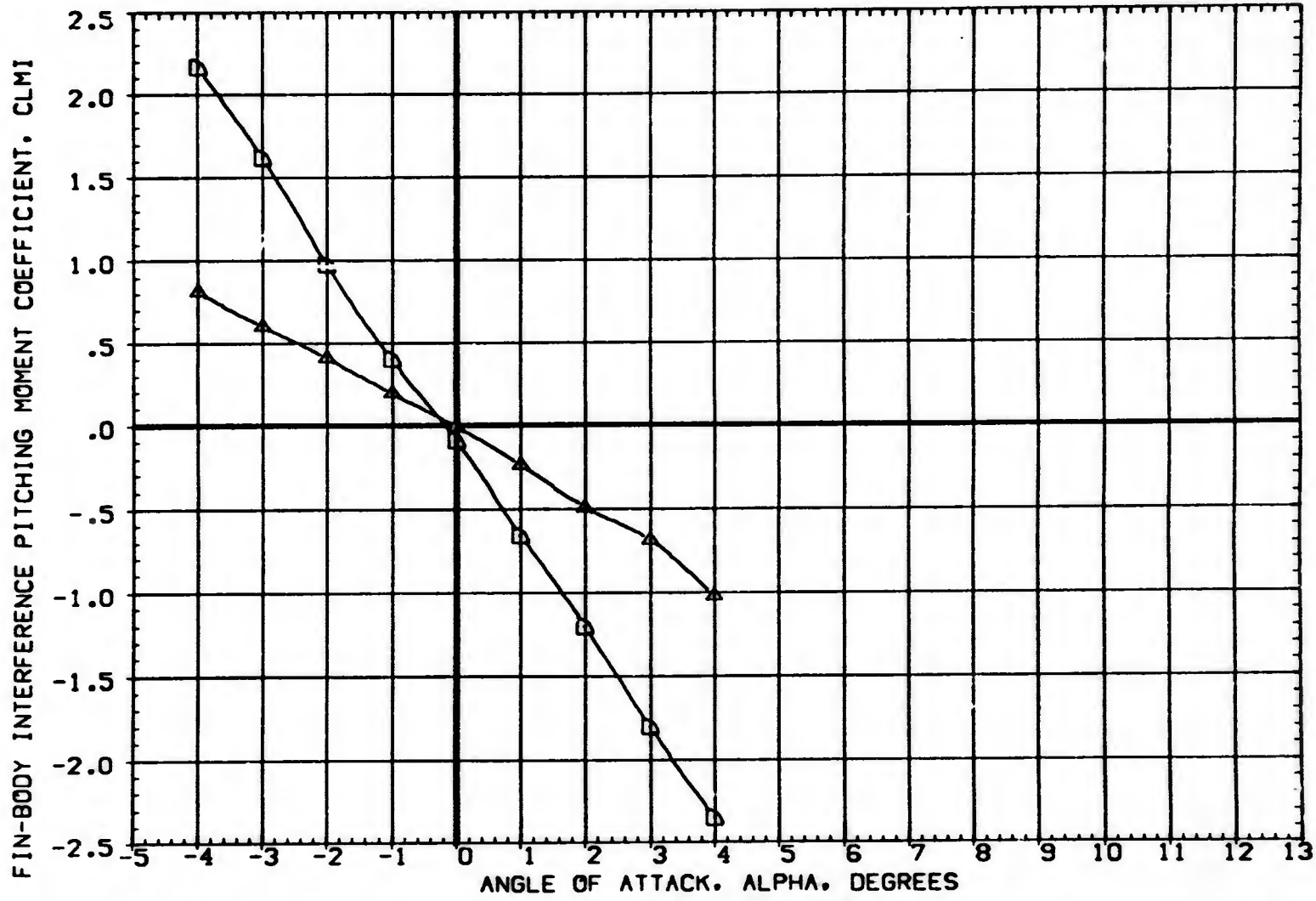


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FILE173)	□	DATA NOT AVAILABLE	.000	.000	2.000	37.500
(FILE174)	⊠	DATA NOT AVAILABLE	.000	.000	2.000	10.300
(FILE175)	△	DATA NOT AVAILABLE	.000	.000	2.000	8.500
(FILE176)	◁	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	7.200
(FILE178)		DATA NOT AVAILABLE	.000	.000	2.000	5.000
(FILE179)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

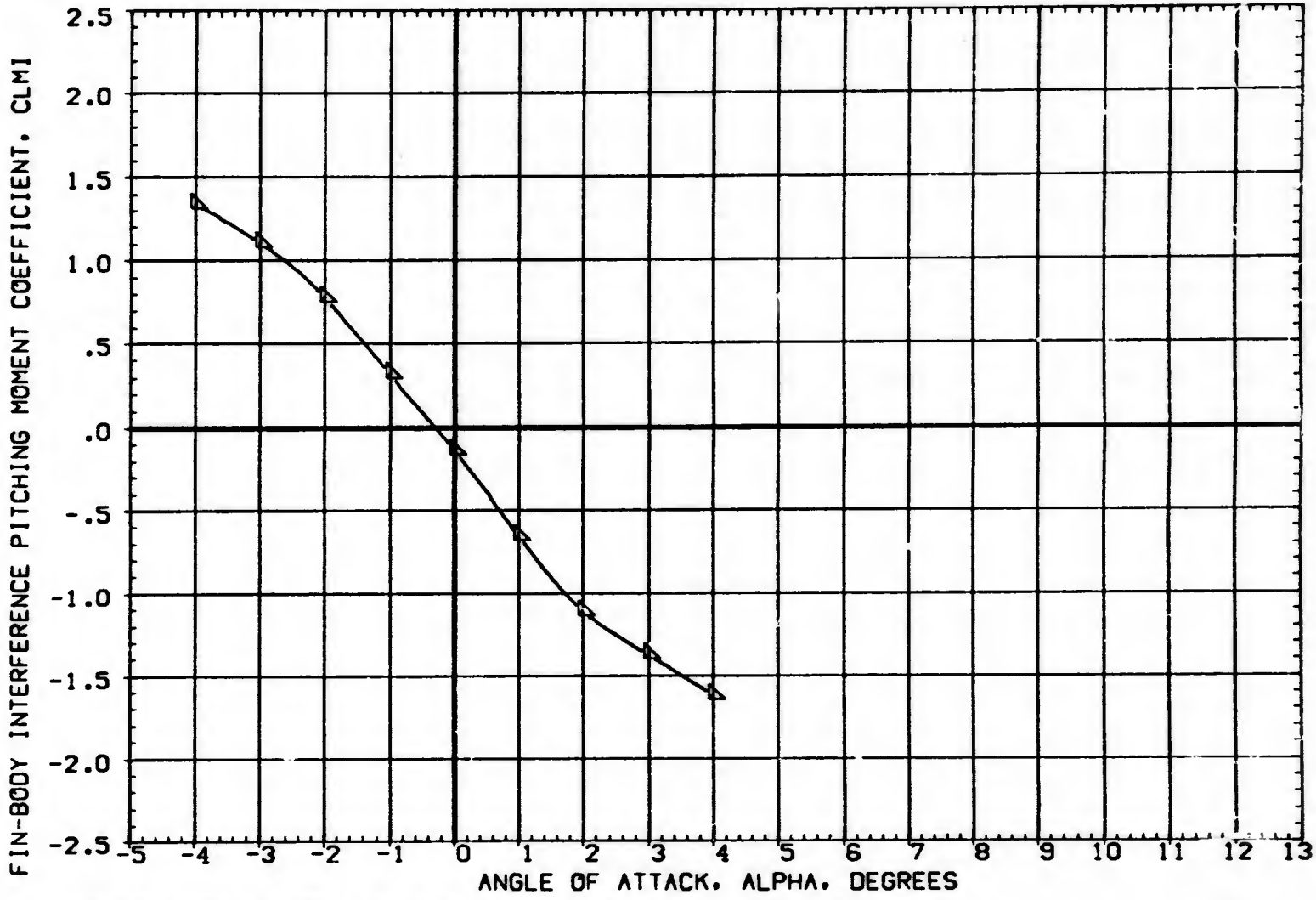


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE173)	□	DATA NOT AVAILABLE	.000	.000	2.000	37.500
(FUE174)	△	DATA NOT AVAILABLE	.000	.000	2.000	10.300
(FUE175)	⊠	DATA NOT AVAILABLE	.000	.000	2.000	8.500
(FUE176)	◁	DATA NOT AVAILABLE	.000	.000	2.000	7.200
(FUE178)	▷	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINITI)	.000	.000	2.000	5.000
(FUE179)	⊠	DATA NOT AVAILABLE	.000	.000	2.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

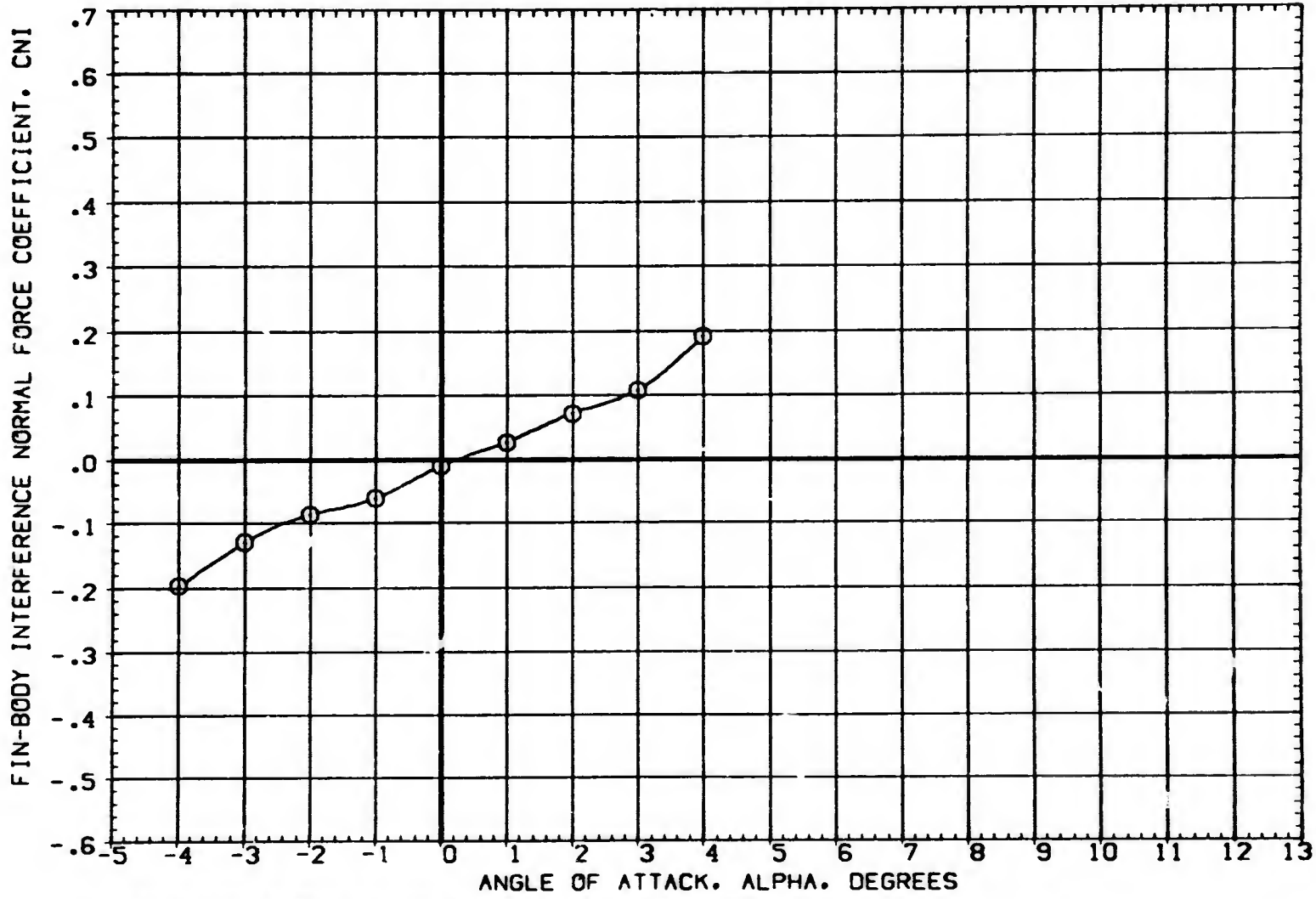


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE173)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	27.500
(FUE174)	◇	DATA NOT AVAILABLE	.000	.000	2.000	10.300
(FUE175)	△	DATA NOT AVAILABLE	.000	.000	2.000	8.500
(FUE176)	▽	DATA NOT AVAILABLE	.000	.000	2.000	7.200
(FUE178)	◁	DATA NOT AVAILABLE	.000	.000	2.000	5.000
(FUE179)	▷	DATA NOT AVAILABLE	.000	.000	2.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

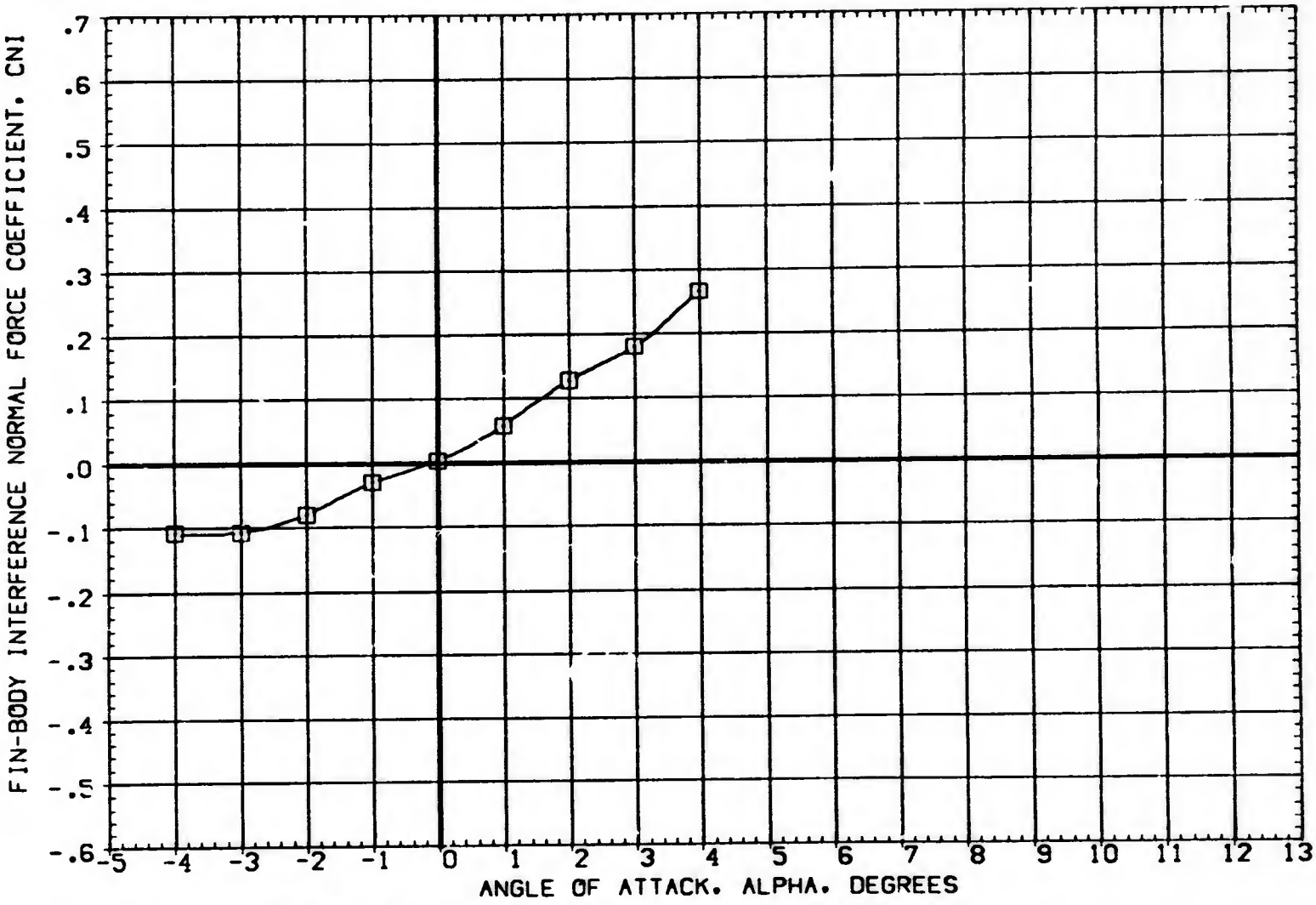


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE:73)	○	DATA NOT AVAILABLE	.000	.000	2.000	37.500
(FUE:74)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	10.300
(FUE:75)	◇	DATA NOT AVAILABLE	.000	.000	2.000	8.500
(FUE:76)	△	DATA NOT AVAILABLE	.000	.000	2.000	7.200
(FUE:78)	▽	DATA NOT AVAILABLE	.000	.000	2.000	5.000
(FUE:79)	⊲	DATA NOT AVAILABLE	.000	.000	2.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

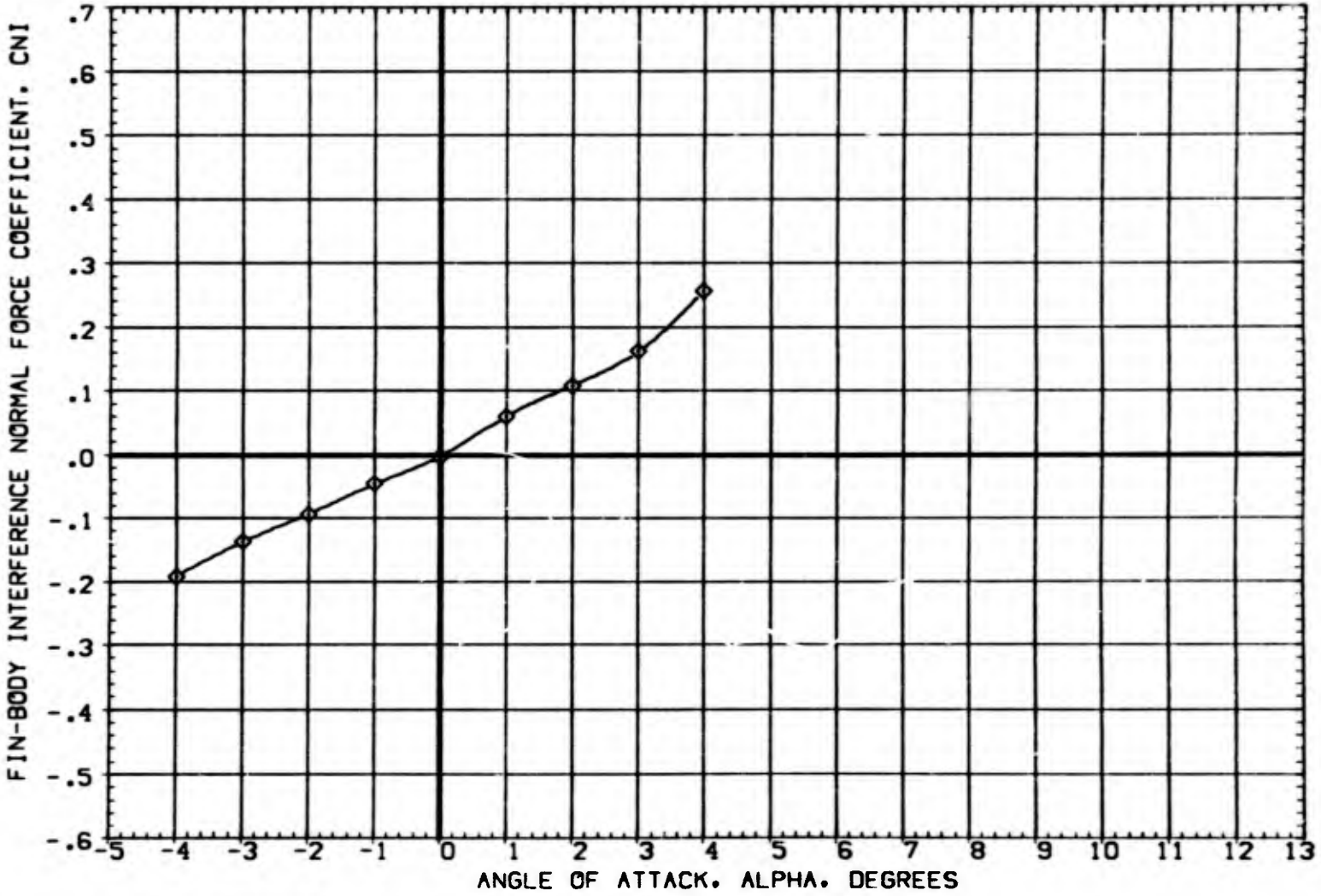


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[FUE173]		DATA NOT AVAILABLE	.000	.000	2.000	37.500
[FUE174]		DATA NOT AVAILABLE	.000	.000	2.000	10.300
[FUE175]		CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINIT1]	.000	.000	2.000	8.500
[FUE176]		DATA NOT AVAILABLE	.000	.000	2.000	7.200
[FUE178]		DATA NOT AVAILABLE	.000	.000	2.000	5.000
[FUE179]		DATA NOT AVAILABLE	.000	.000	2.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

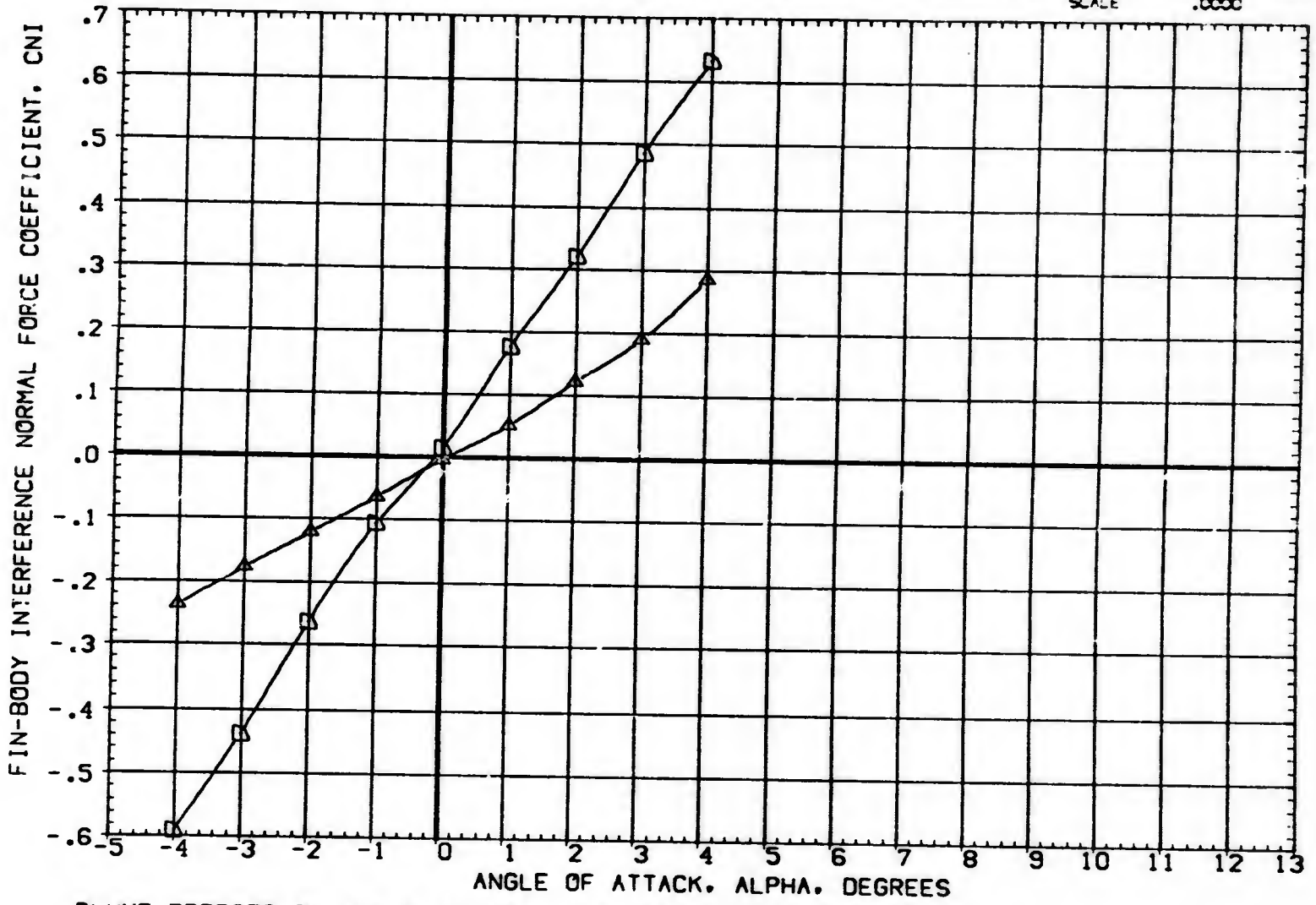


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE173)		DATA NOT AVAILABLE	.000	.000	2.000	37.500
(FUE174)		DATA NOT AVAILABLE	.000	.000	2.000	10.300
(FUE175)		DATA NOT AVAILABLE	.000	.000	2.000	8.500
(FUE176)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	7.200
(FUE178)		DATA NOT AVAILABLE	.000	.000	2.000	5.000
(FUE179)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

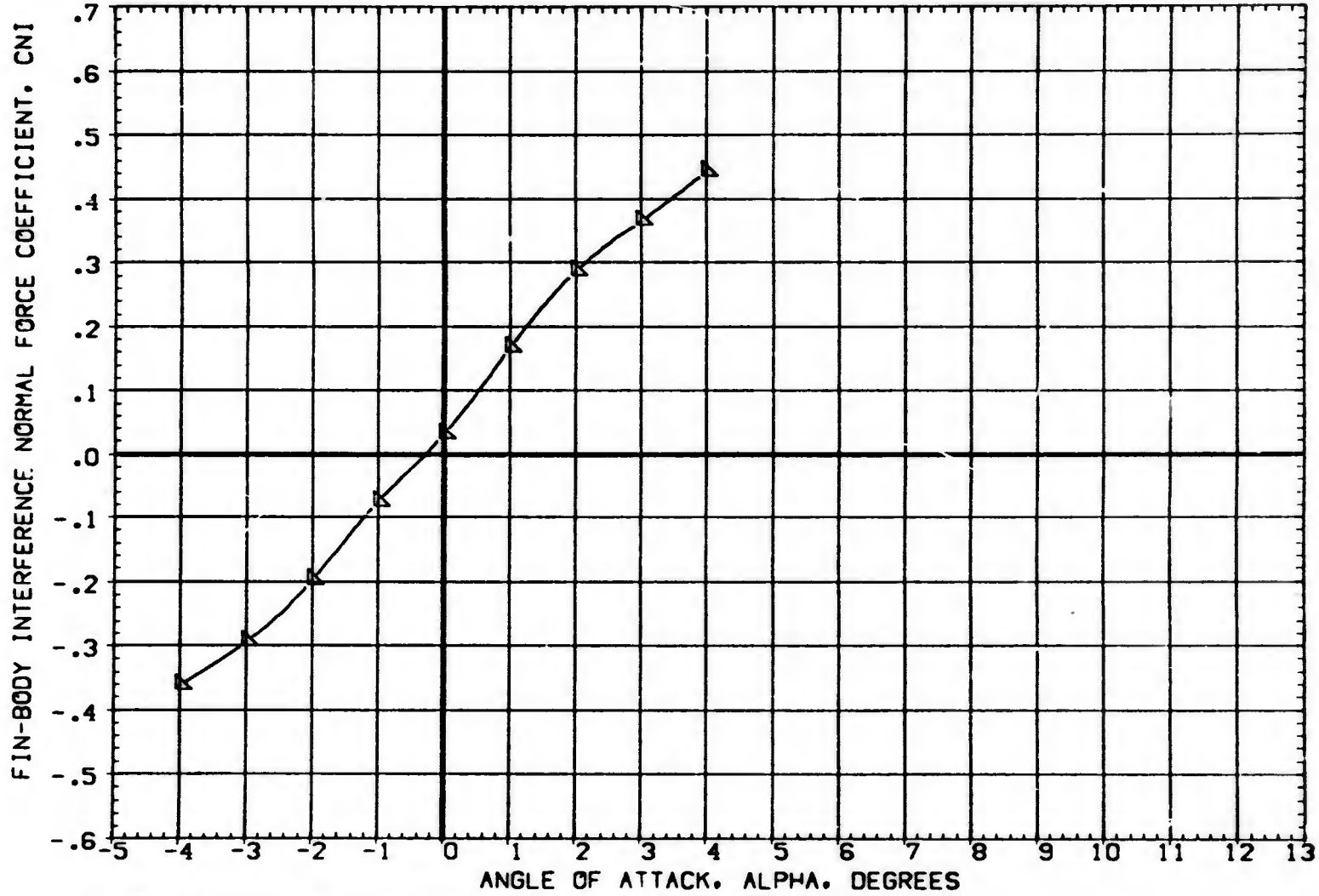


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE173)	□	DATA NOT AVAILABLE	.000	.000	2.000	37.500
(FUE174)	◇	DATA NOT AVAILABLE	.000	.000	2.000	10.300
(FUE175)	△	DATA NOT AVAILABLE	.000	.000	2.000	8.500
(FUE176)	▷	DATA NOT AVAILABLE	.000	.000	2.000	7.200
(FUE178)	⊲	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	5.000
(FUE179)	⊳	DATA NOT AVAILABLE	.000	.000	2.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

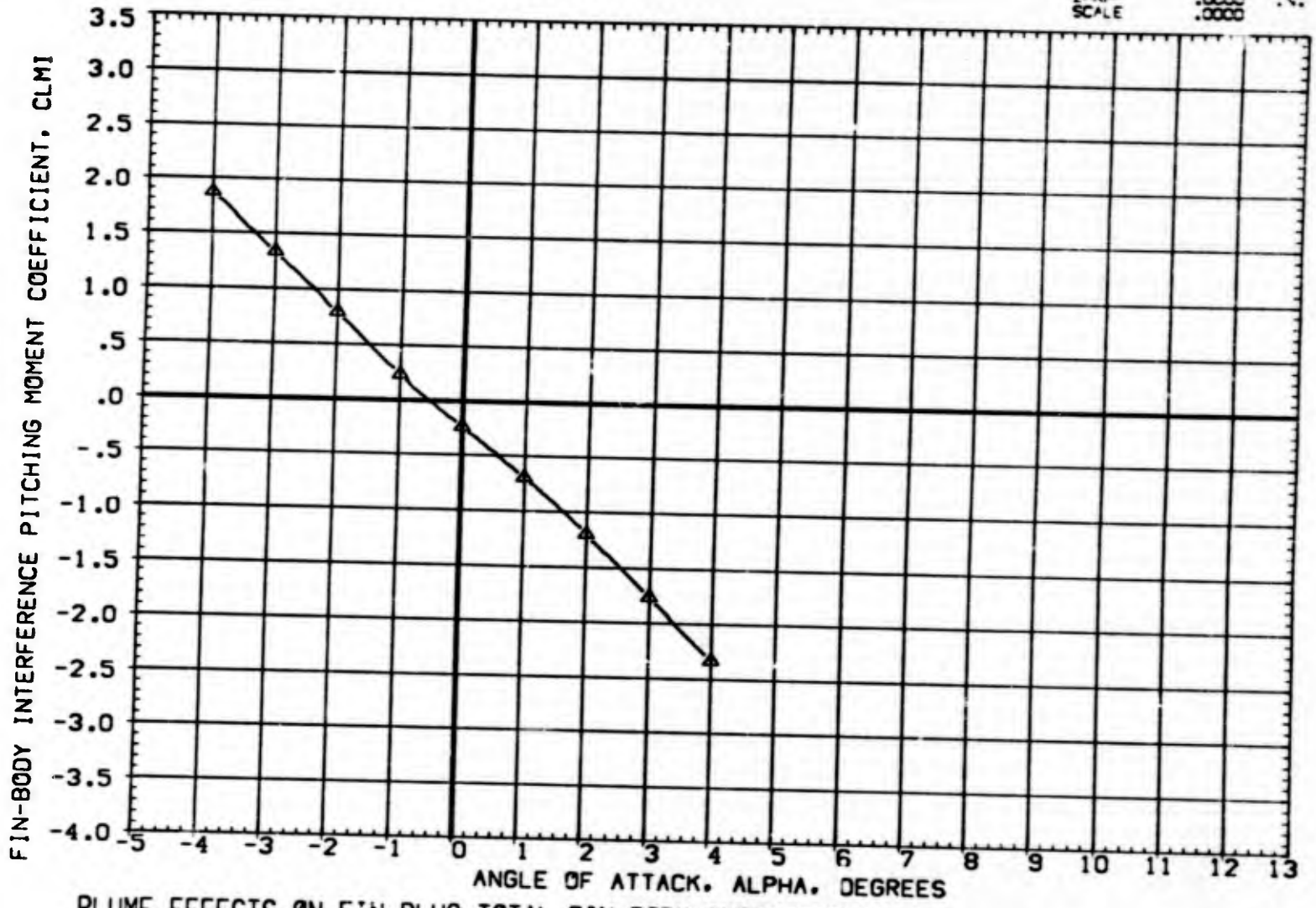


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MACH = 1.25

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[FUE180]	DATA NOT AVAILABLE	.000	.000	2.000	3.600
[FUE182]	DATA NOT AVAILABLE	.000	.000	2.000	2.500
[FUE183]	DATA NOT AVAILABLE	.000	.000	2.000	1.500
[FUE184]	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		SO.IV.
SREF	19.6350	
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

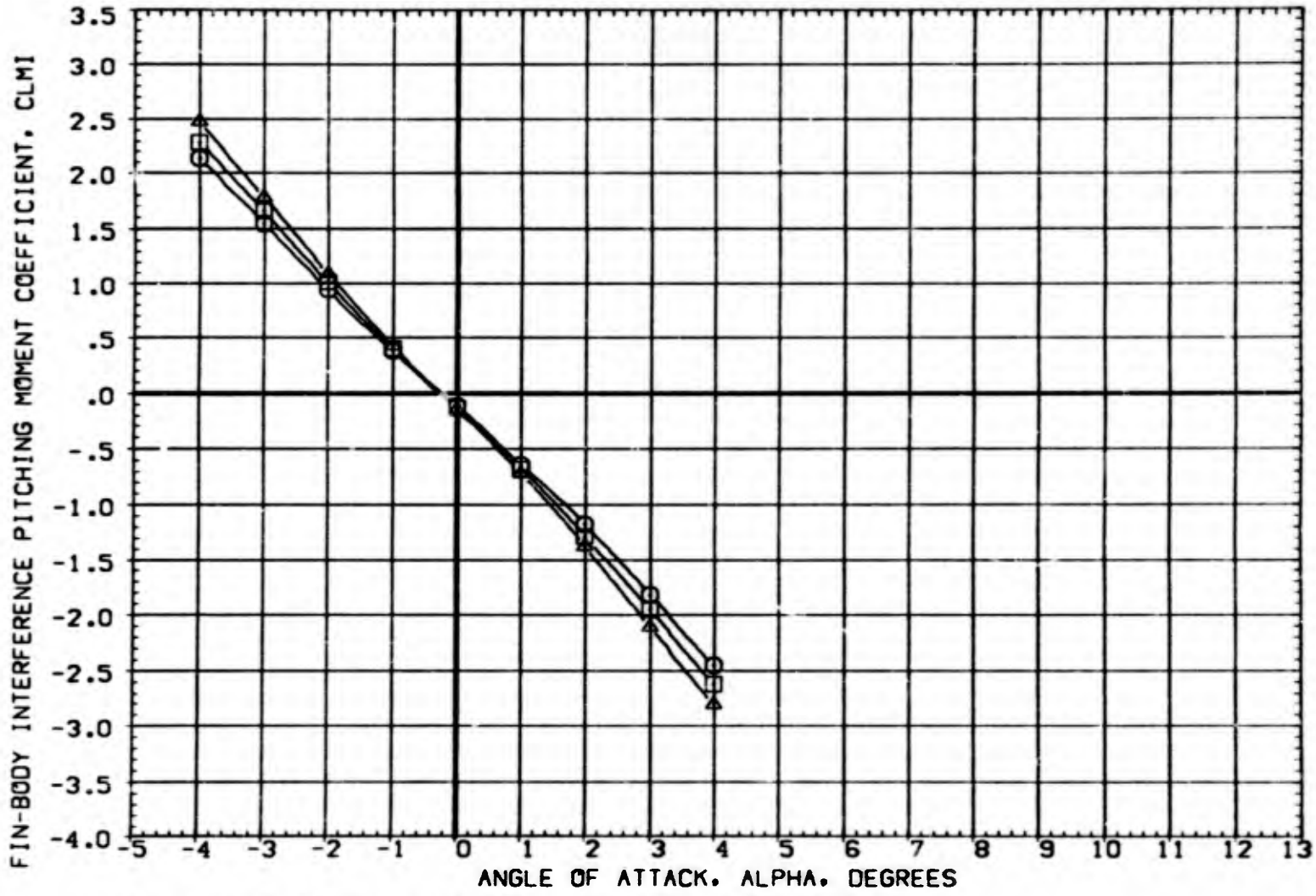


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(A)MAC = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE180)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	3.600
(FUE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	2.500
(FUE183)	⊗	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(FUE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

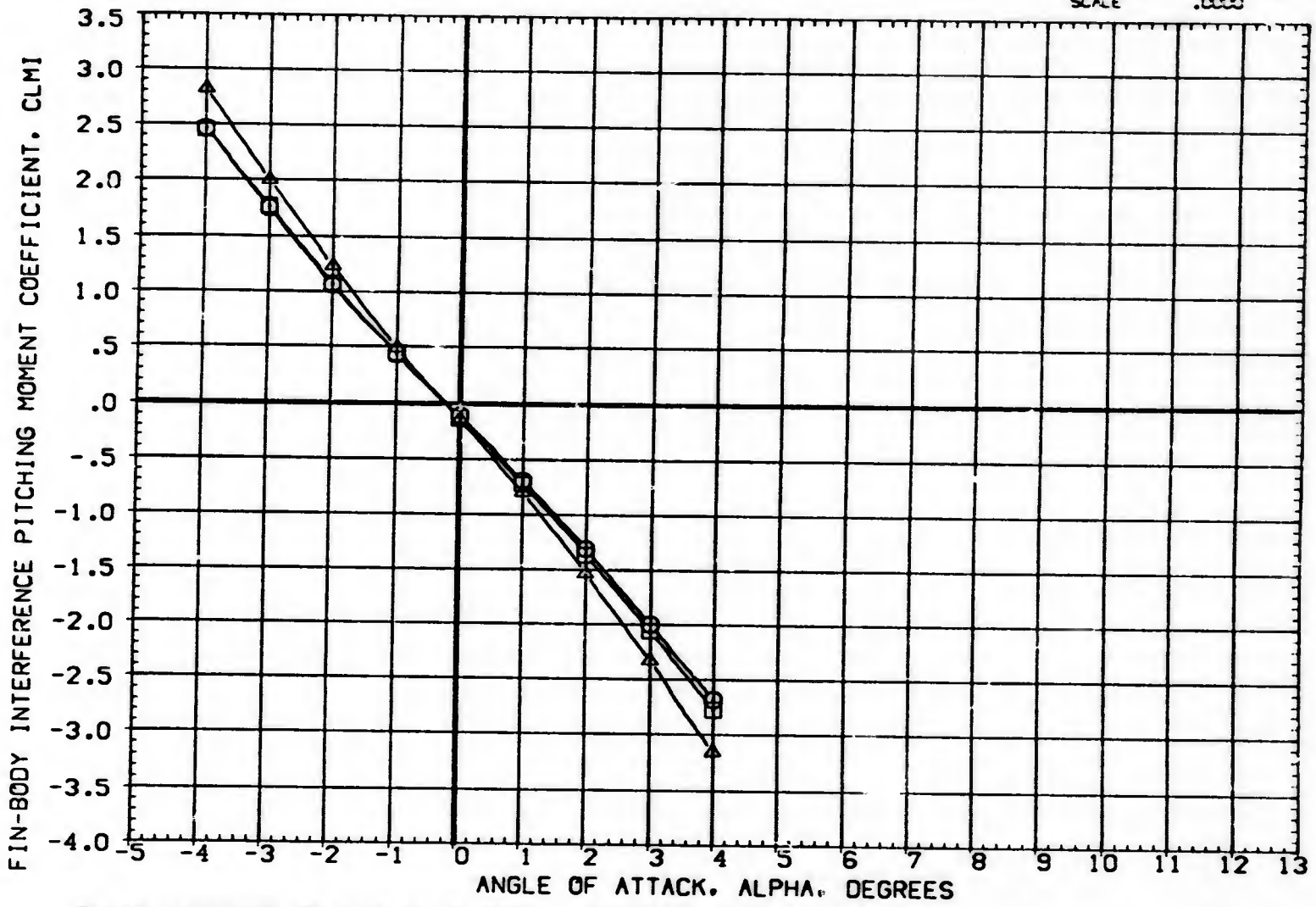


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE180)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	3.600
(FUE182)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	2.500
(FUE183)		DATA NOT AVAILABLE	.000	.000	2.000	1.500
(FUE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

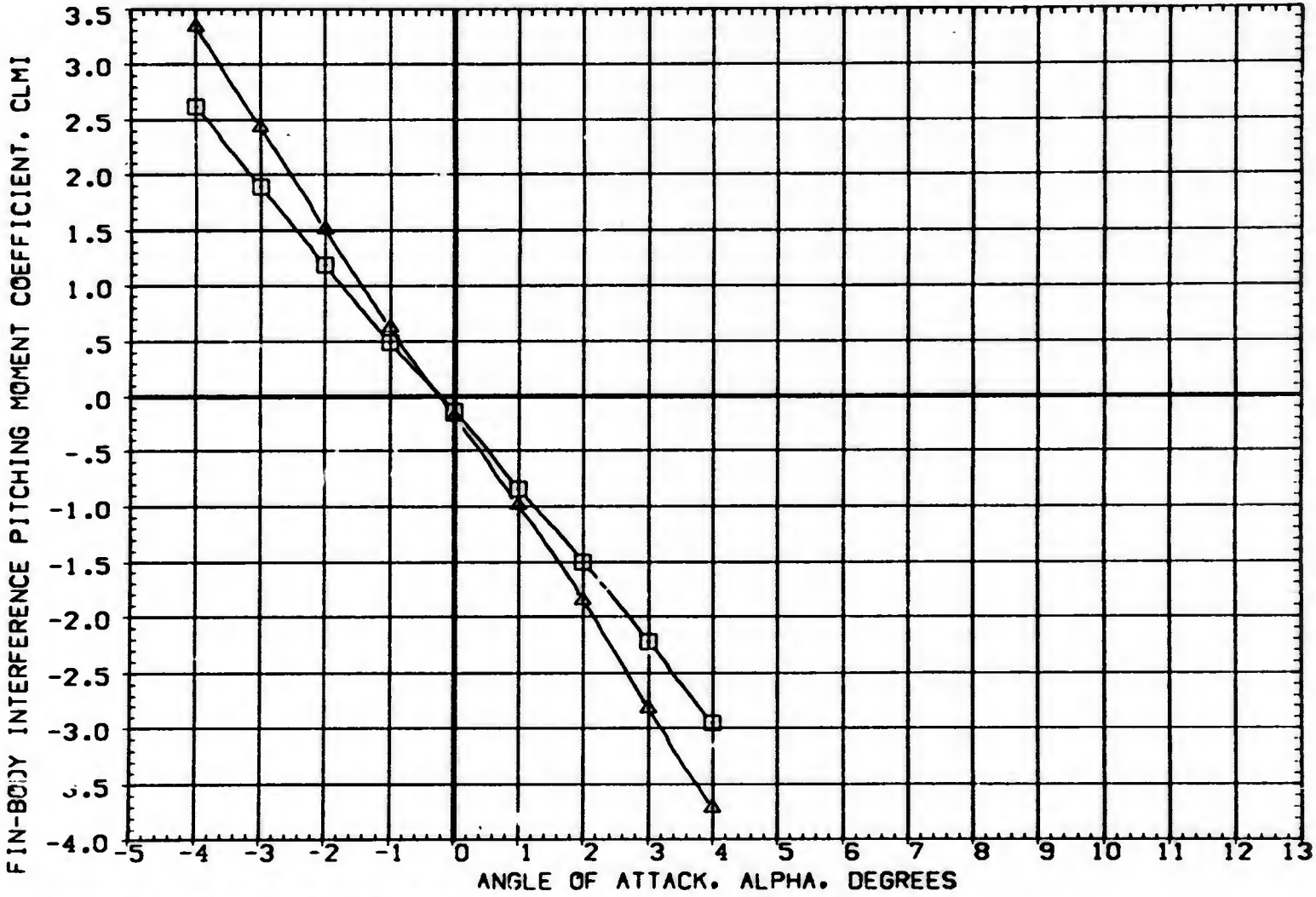


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE180)	□	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(FUE182)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	2.500
(FUE183)	⊠	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(FUE1P4)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

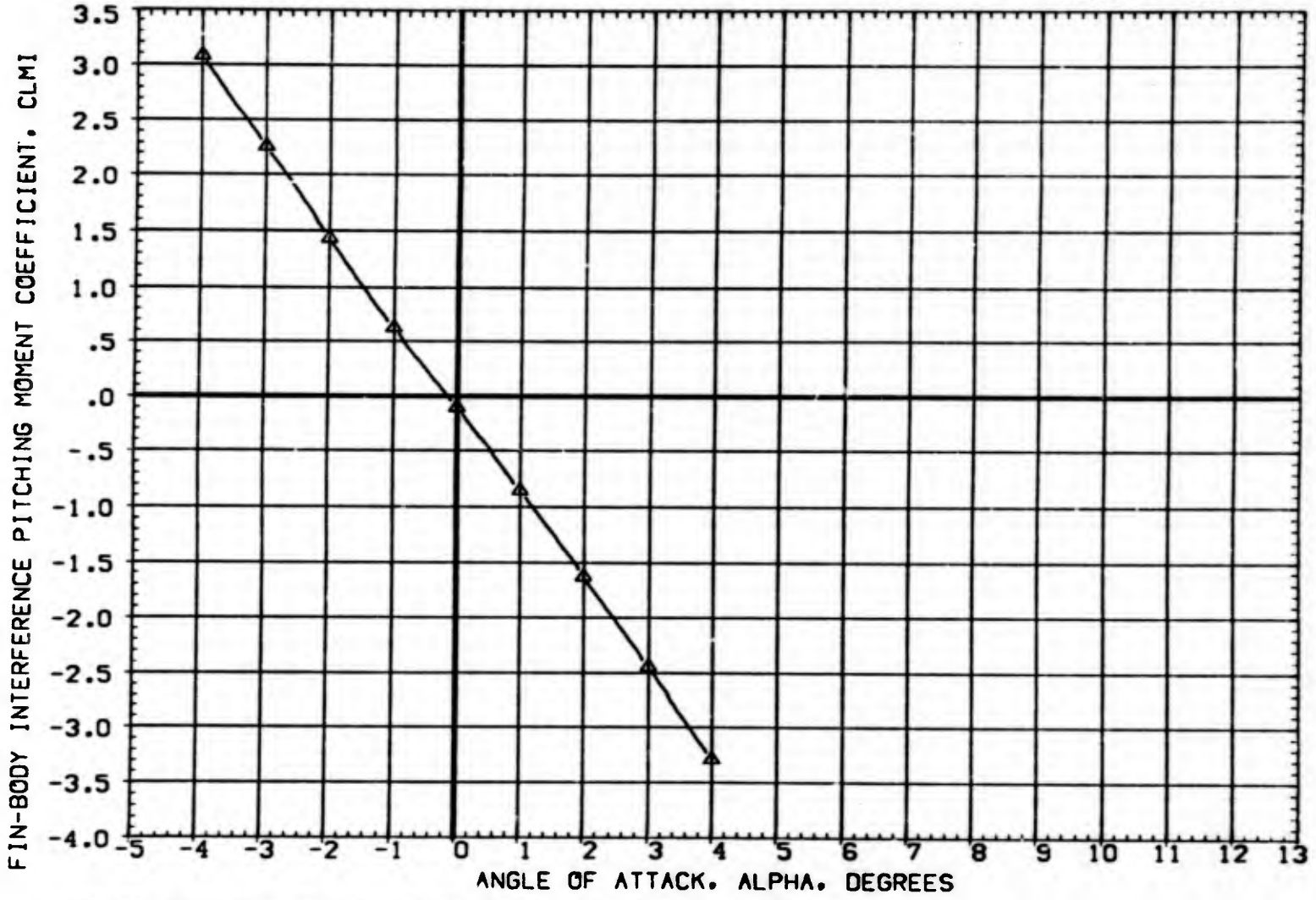


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE180)	□	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(FUE182)	◇	DATA NOT AVAILABLE	.000	.000	2.000	2.500
(FUE183)	⊠	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(FUE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

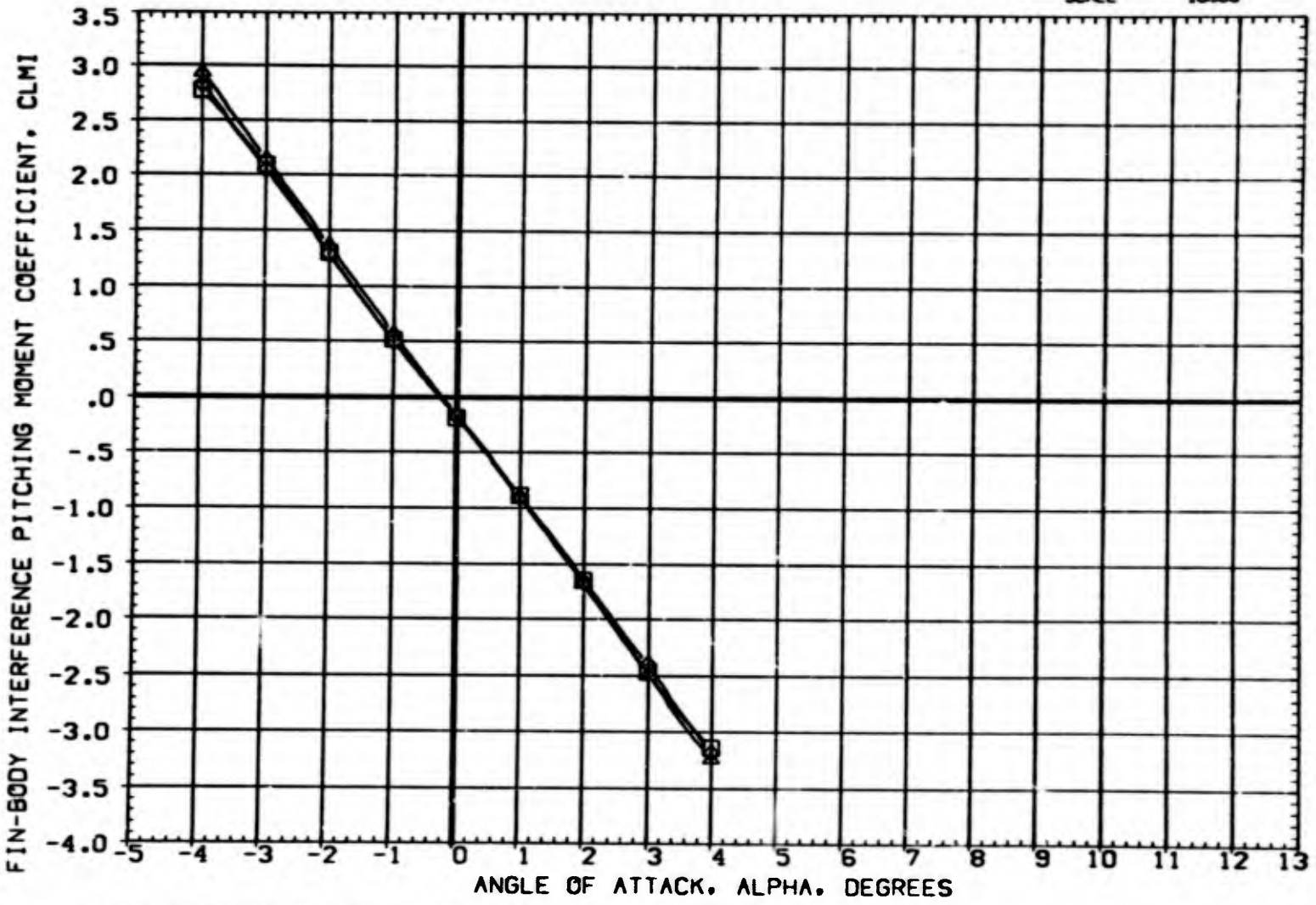


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FLE180)	□	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(FLE182)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	2.500
(FLE183)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	1.500
(FLE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

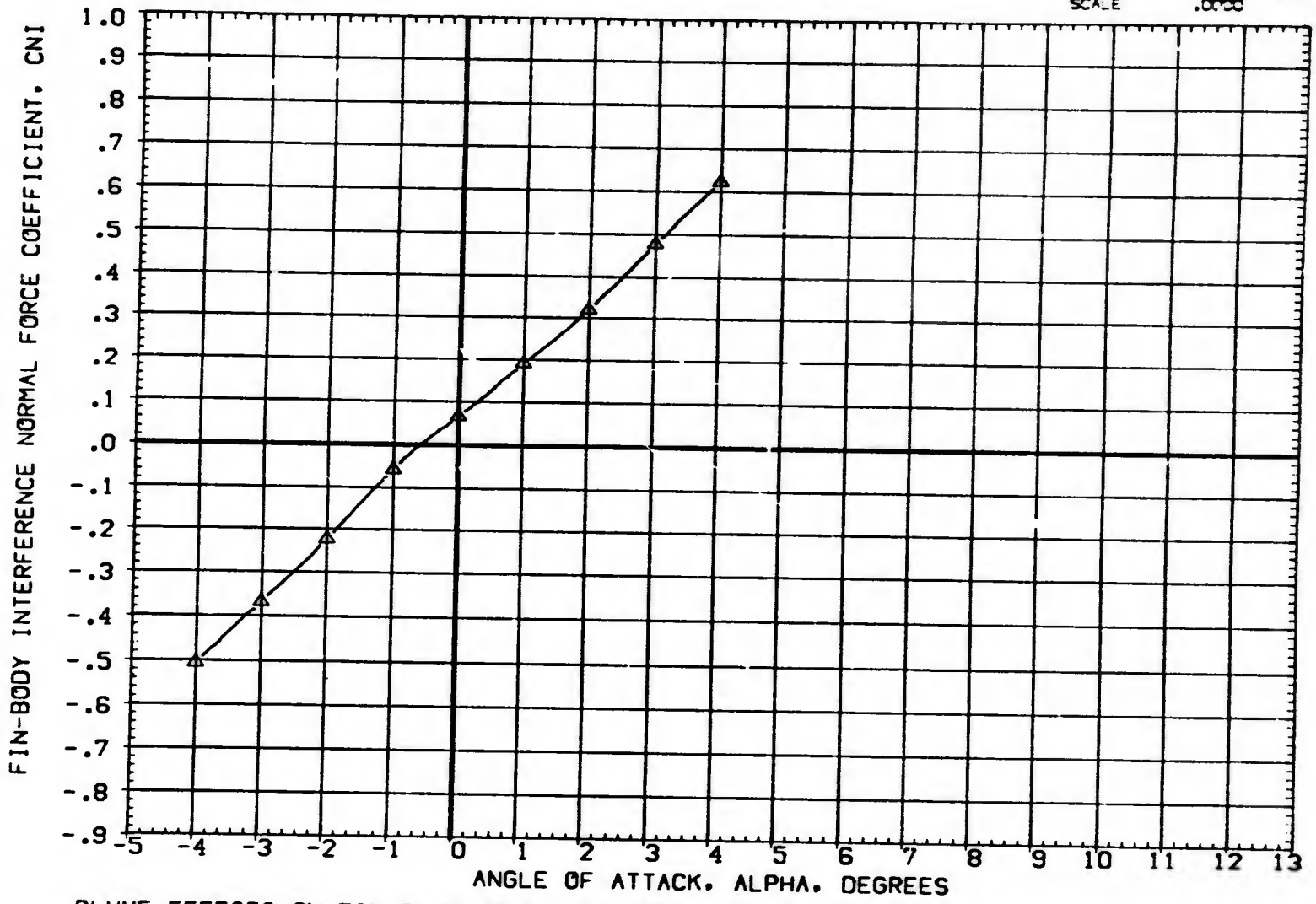


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(F)MACH = 1.25

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE180)	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(FUE182)	DATA NOT AVAILABLE	.000	.000	2.000	2.500
(FUE183)	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(FUE184)	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

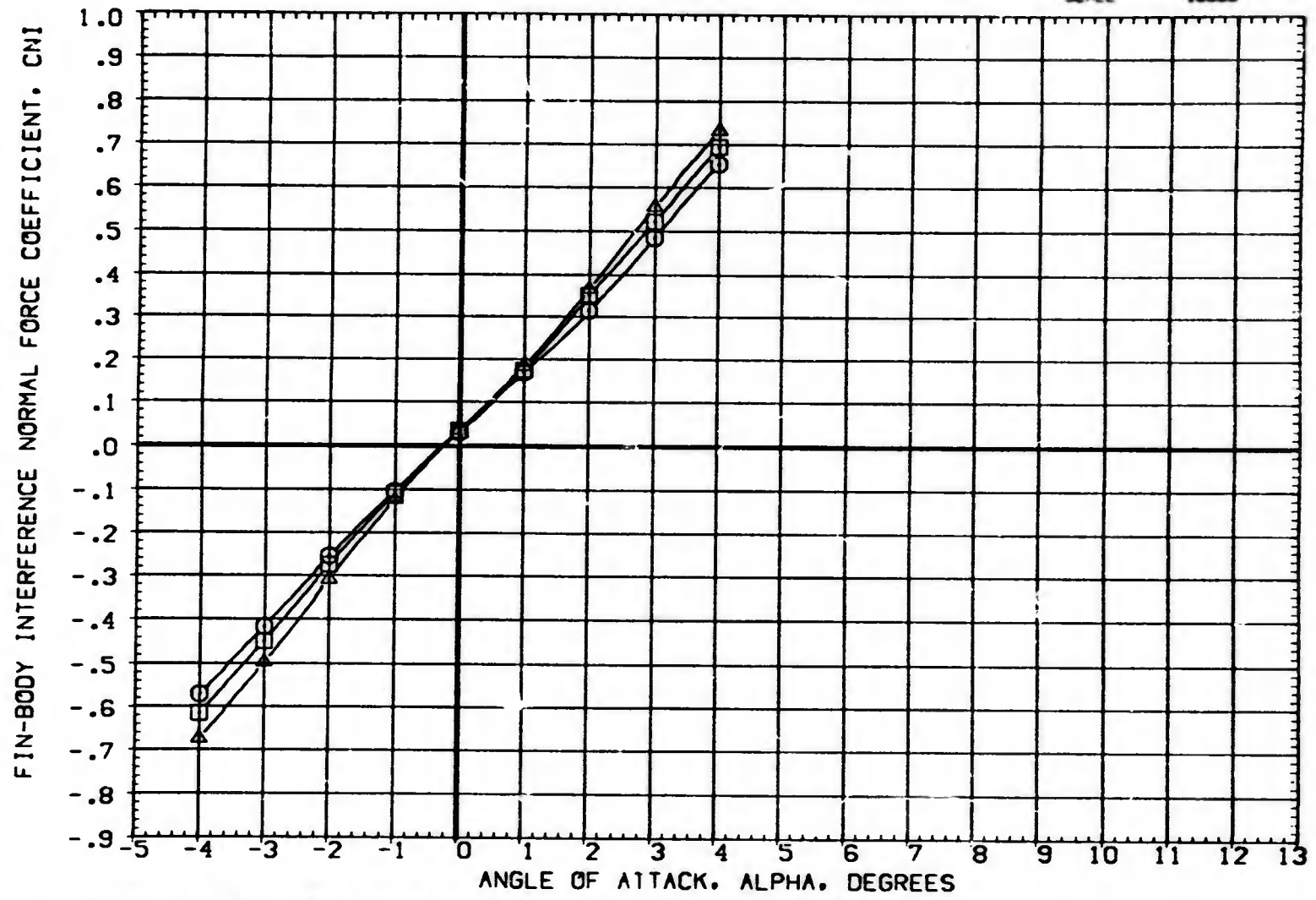


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(A)MACH = .40

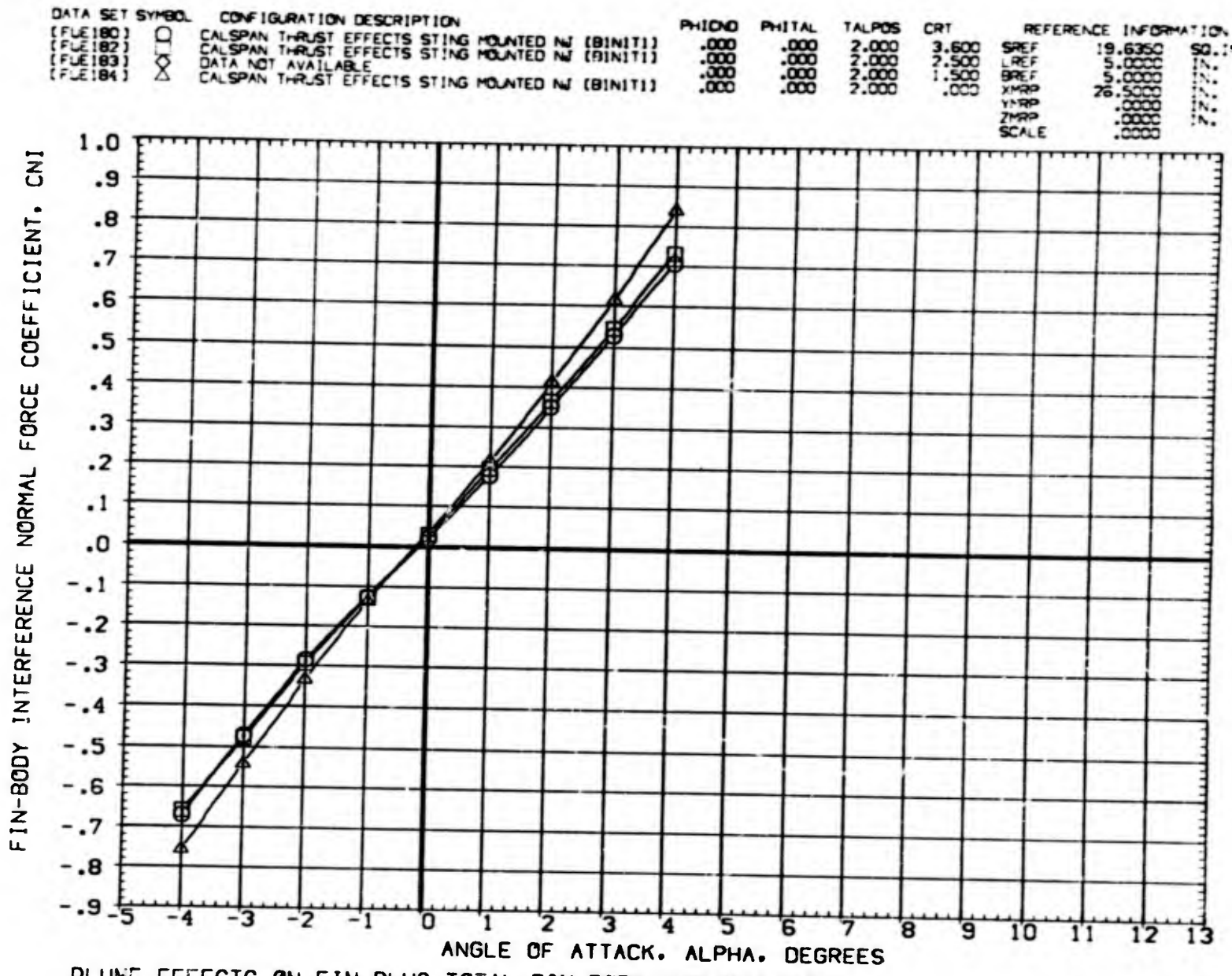
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE180)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	3.600
(FUE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	2.500
(FUE183)	⊗	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(FUE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MACH = .80

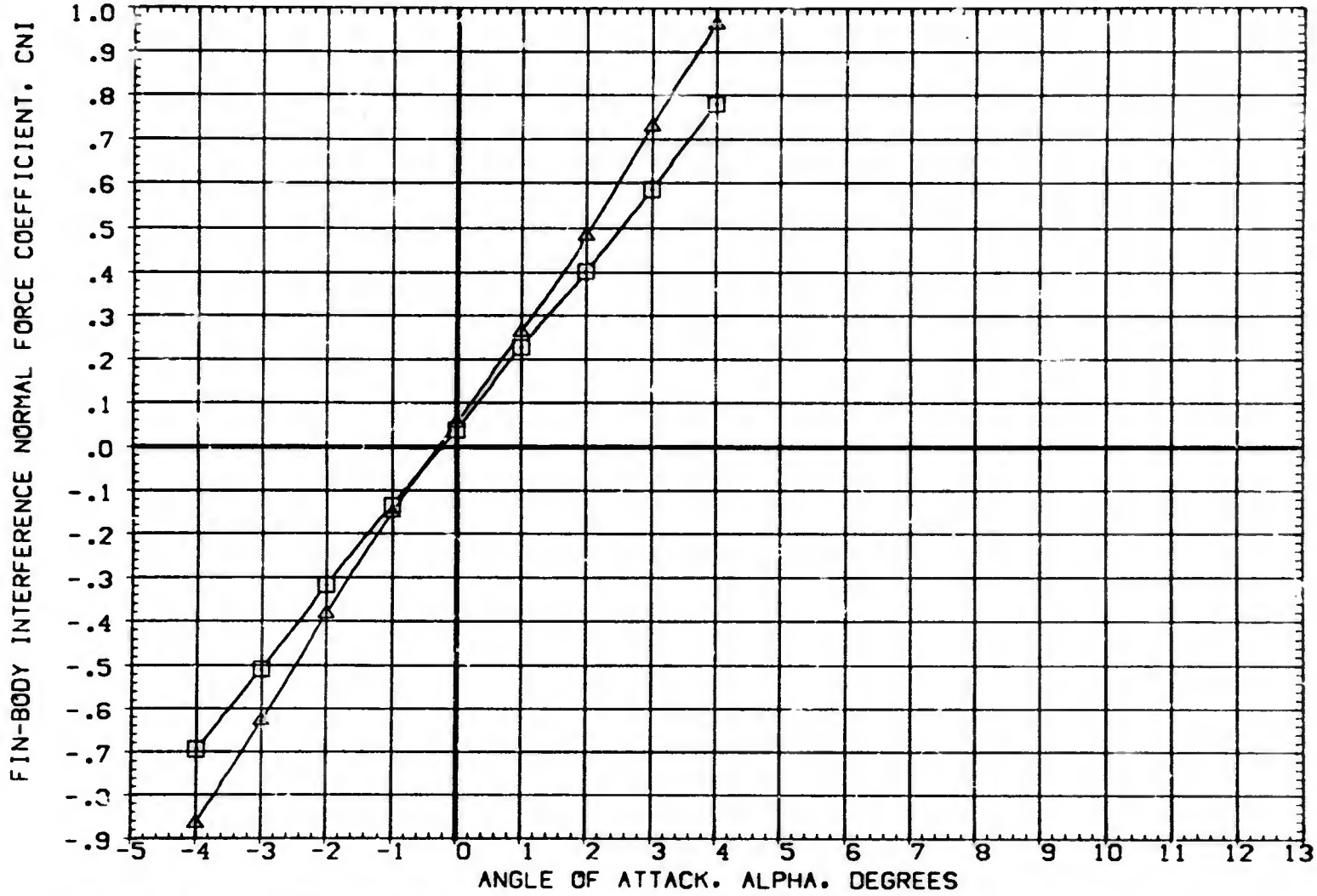


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MAC = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE180)	□	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(FUE182)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	2.500
(FUE183)	⊠	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(FUE184)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

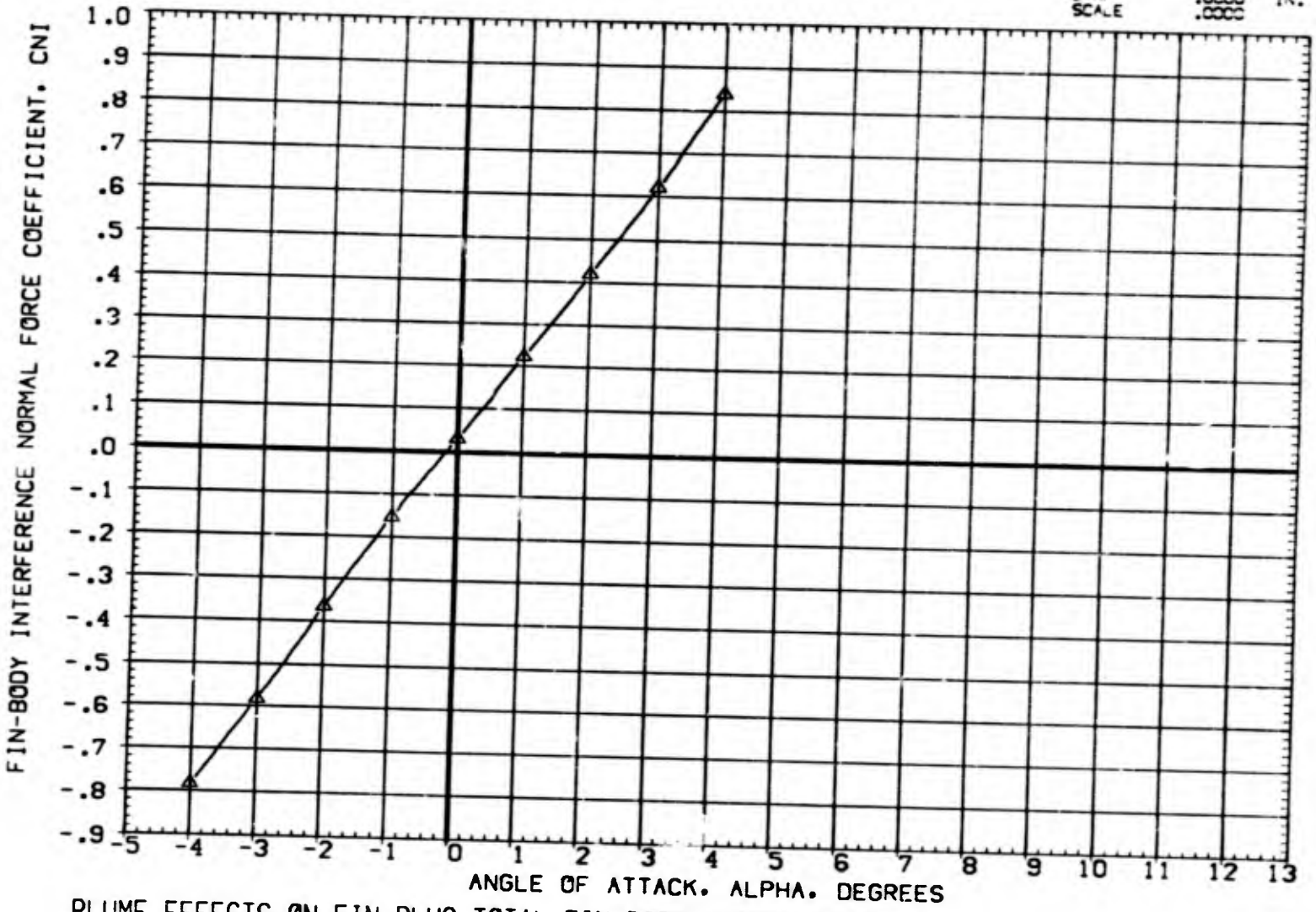


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(□)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE180)	□	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(FUE187)	◇	DATA NOT AVAILABLE	.000	.000	2.000	2.500
(FUE183)	⋈	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(FUE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



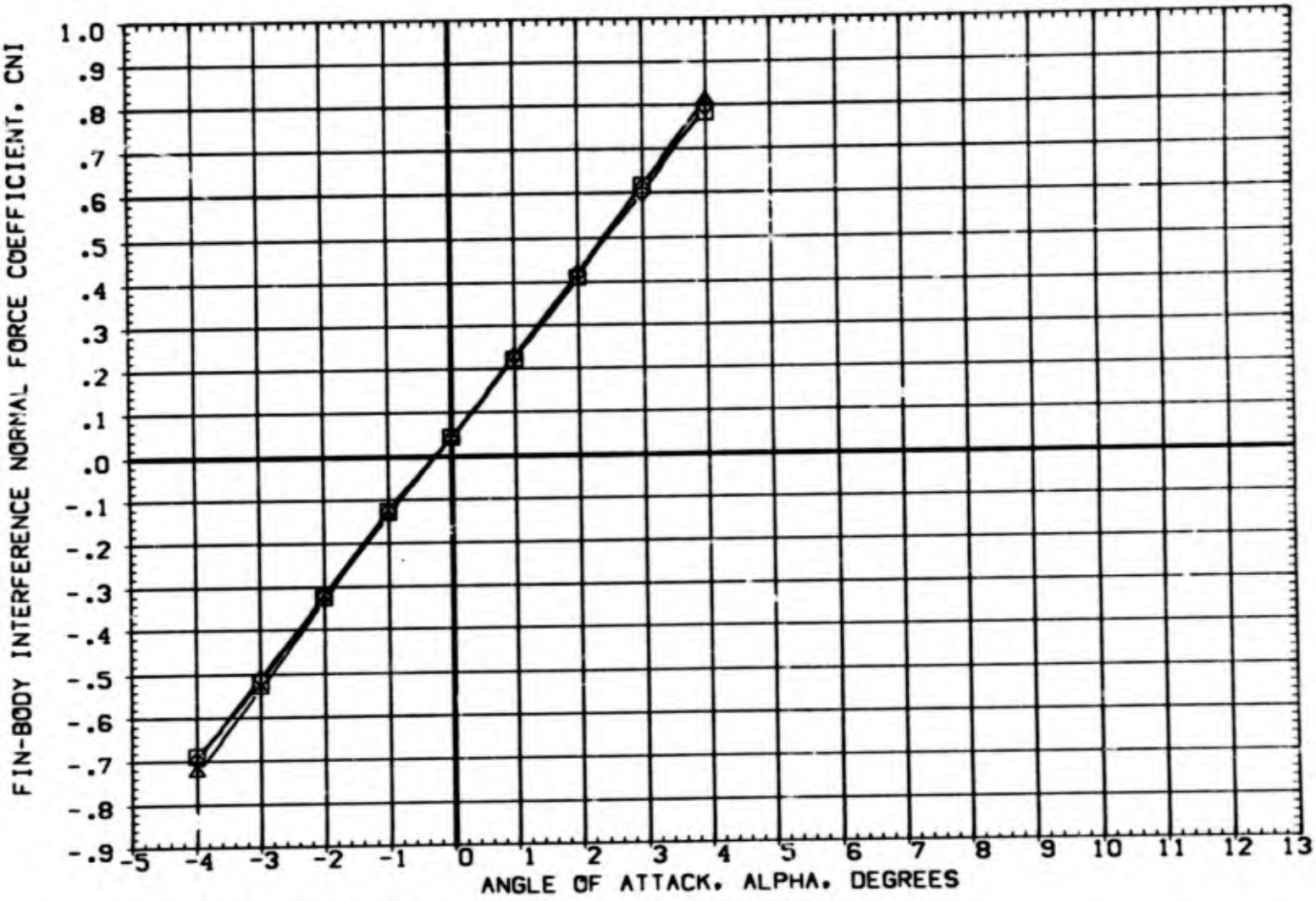
PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE180)	□	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(FUE182)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	2.500
(FUE183)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	1.500
(FUE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION

SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

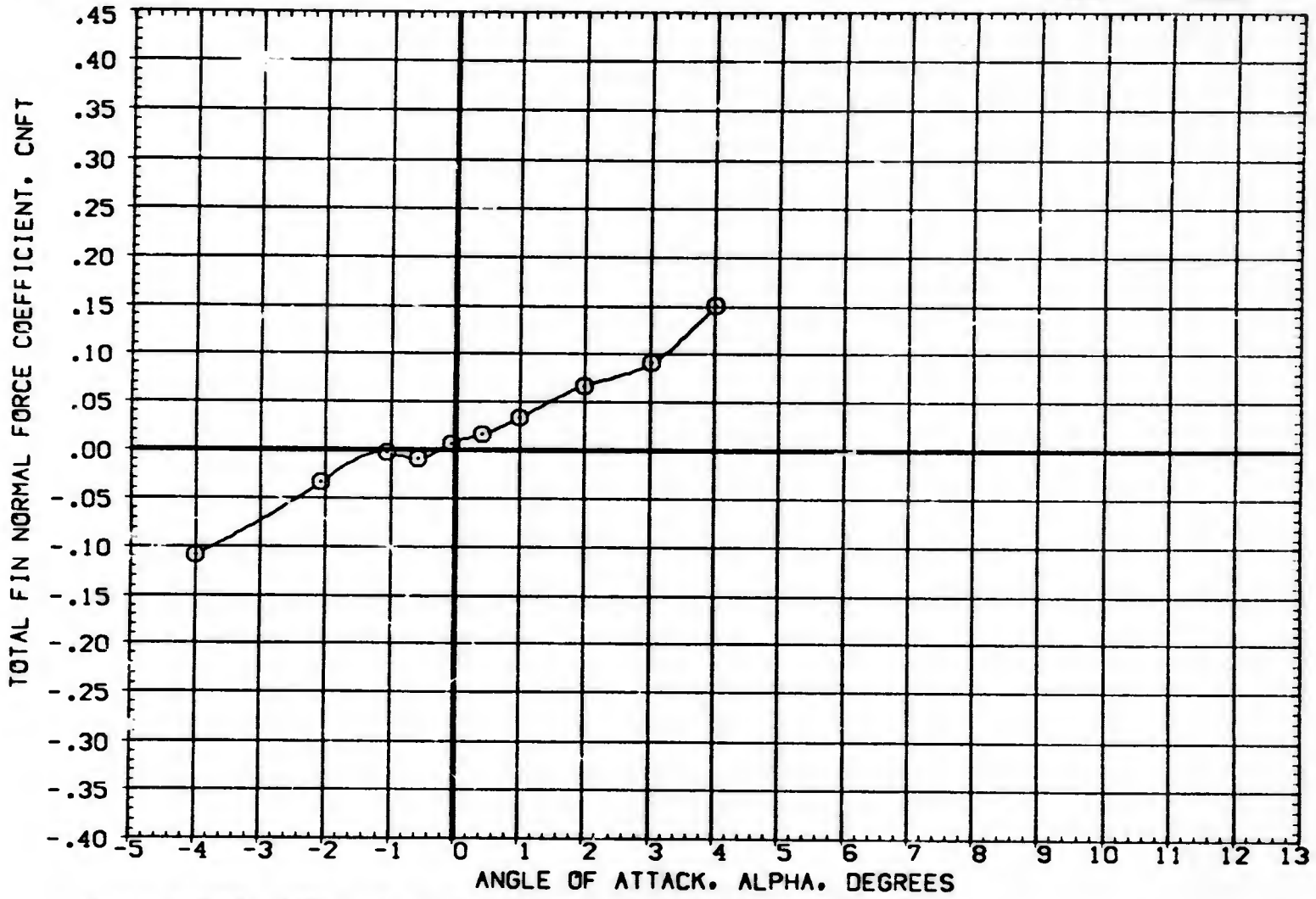


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[GJE173]	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	37.500
[GJE174]	△	DATA NOT AVAILABLE	.000	.000	2.000	10.300
[GJE175]	◇	DATA NOT AVAILABLE	.000	.000	2.000	8.500
[GJE176]	▽	DATA NOT AVAILABLE	.000	.000	2.000	7.200
[GJE178]	⊲	DATA NOT AVAILABLE	.000	.000	2.000	5.000
[GJE179]	⊳	DATA NOT AVAILABLE	.000	.000	2.000	4.200

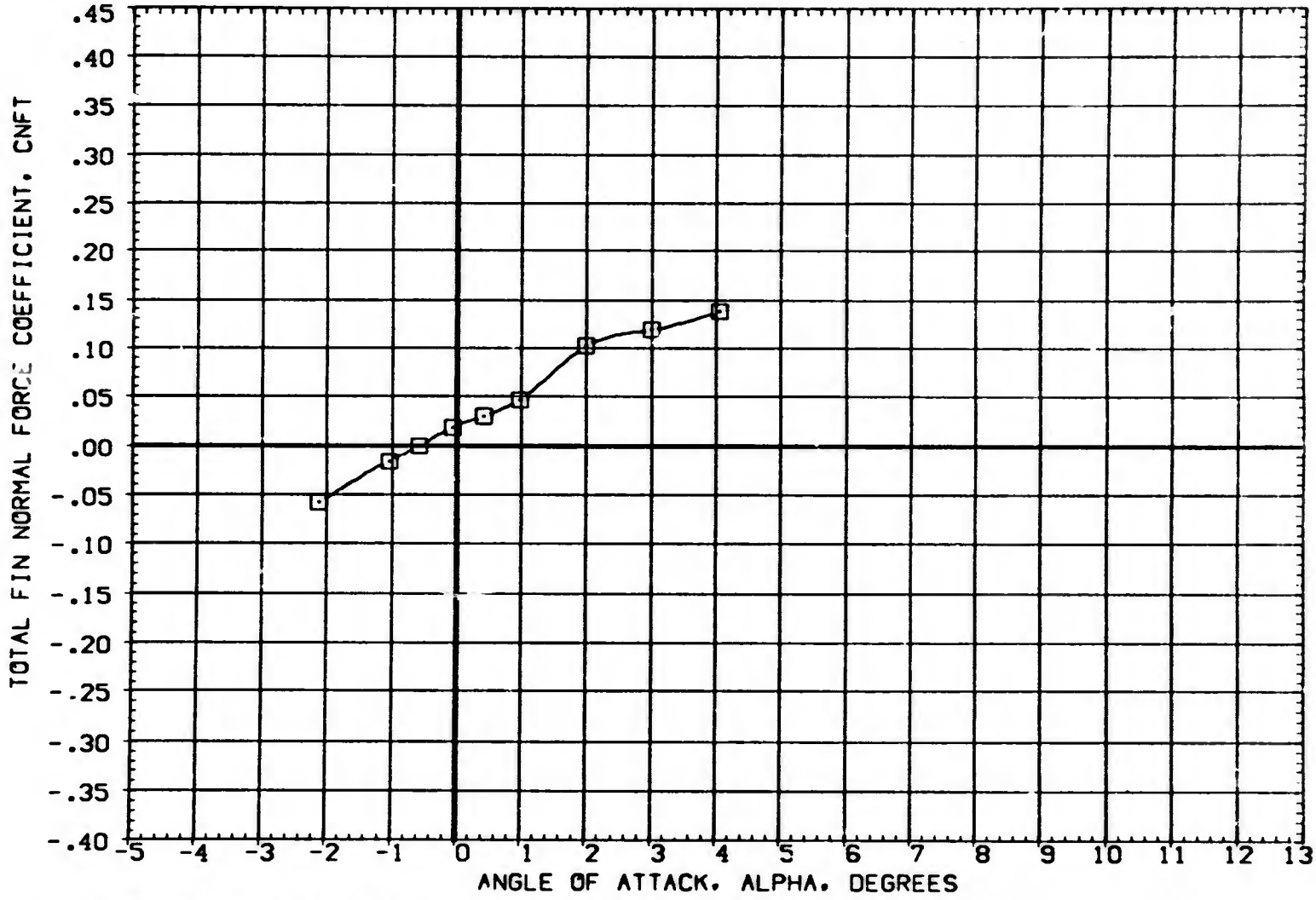
REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 2

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT	REFERENCE INFORMATION		
(GLE173)	□	DATA NOT AVAILABLE	.000	.000	2.000	37.500	SREF	19.6350	SQ. IN.
(GLE174)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	10.300	LREF	5.0000	IN.
(GLE175)	△	DATA NOT AVAILABLE	.000	.000	2.000	8.500	BREF	5.0000	IN.
(GLE176)	▽	DATA NOT AVAILABLE	.000	.000	2.000	7.200	XMRP	26.5000	IN.
(GLE178)	◁	DATA NOT AVAILABLE	.000	.000	2.000	5.000	YMRP	.0000	IN.
(GLE179)	▷	DATA NOT AVAILABLE	.000	.000	2.000	4.200	ZMRP	.0000	IN.
							SCALE	.0000	

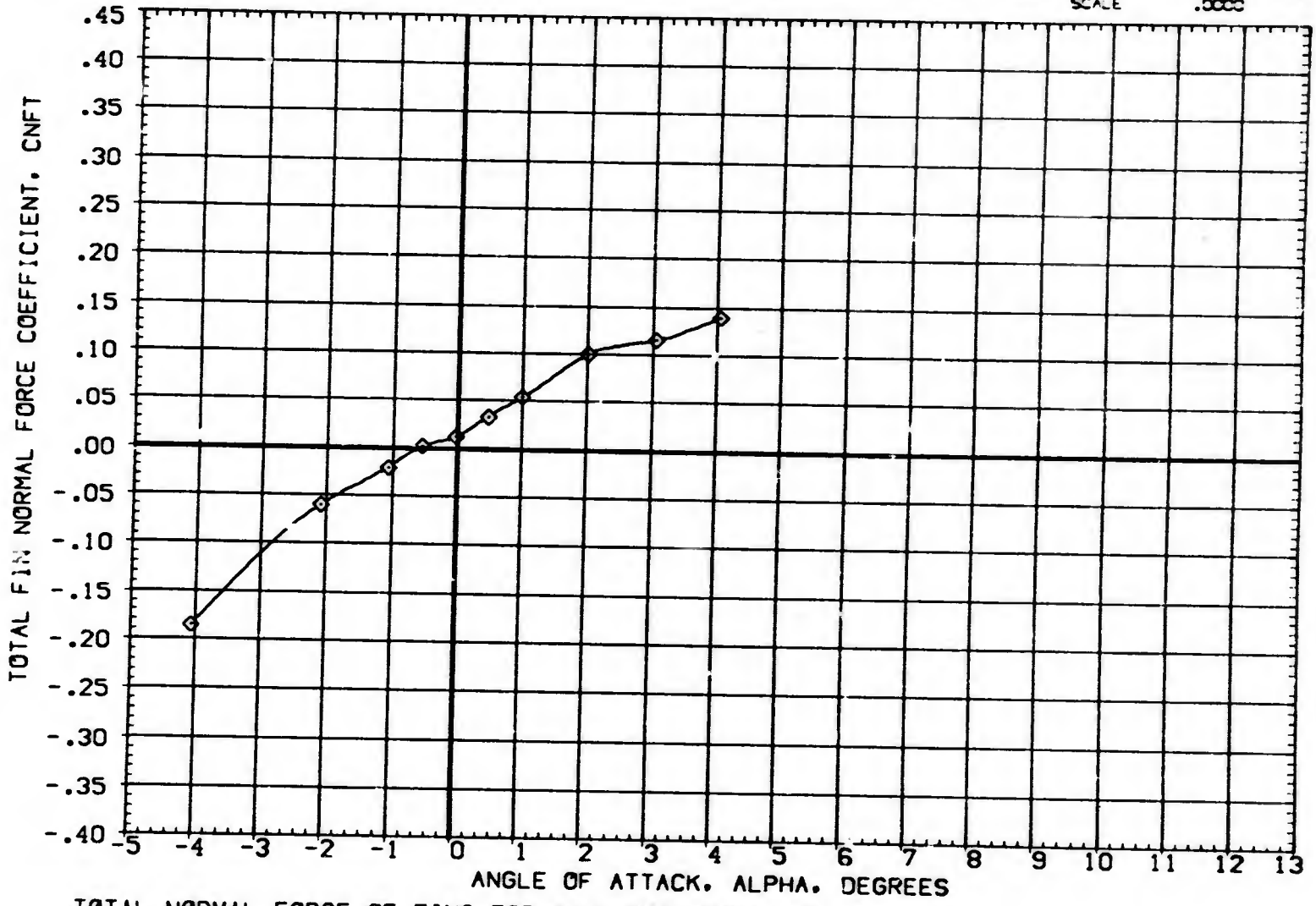


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 2

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[GJE173]	□	DATA NOT AVAILABLE	.000	.000	2.000	37.500
[GJE174]	◇	DATA NOT AVAILABLE	.000	.000	2.000	10.300
[GJE175]	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	8.500
[GJE176]	▷	DATA NOT AVAILABLE	.000	.000	2.000	7.200
[GJE178]	○	DATA NOT AVAILABLE	.000	.000	2.000	5.000
[GJE179]	⊠	DATA NOT AVAILABLE	.000	.000	2.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

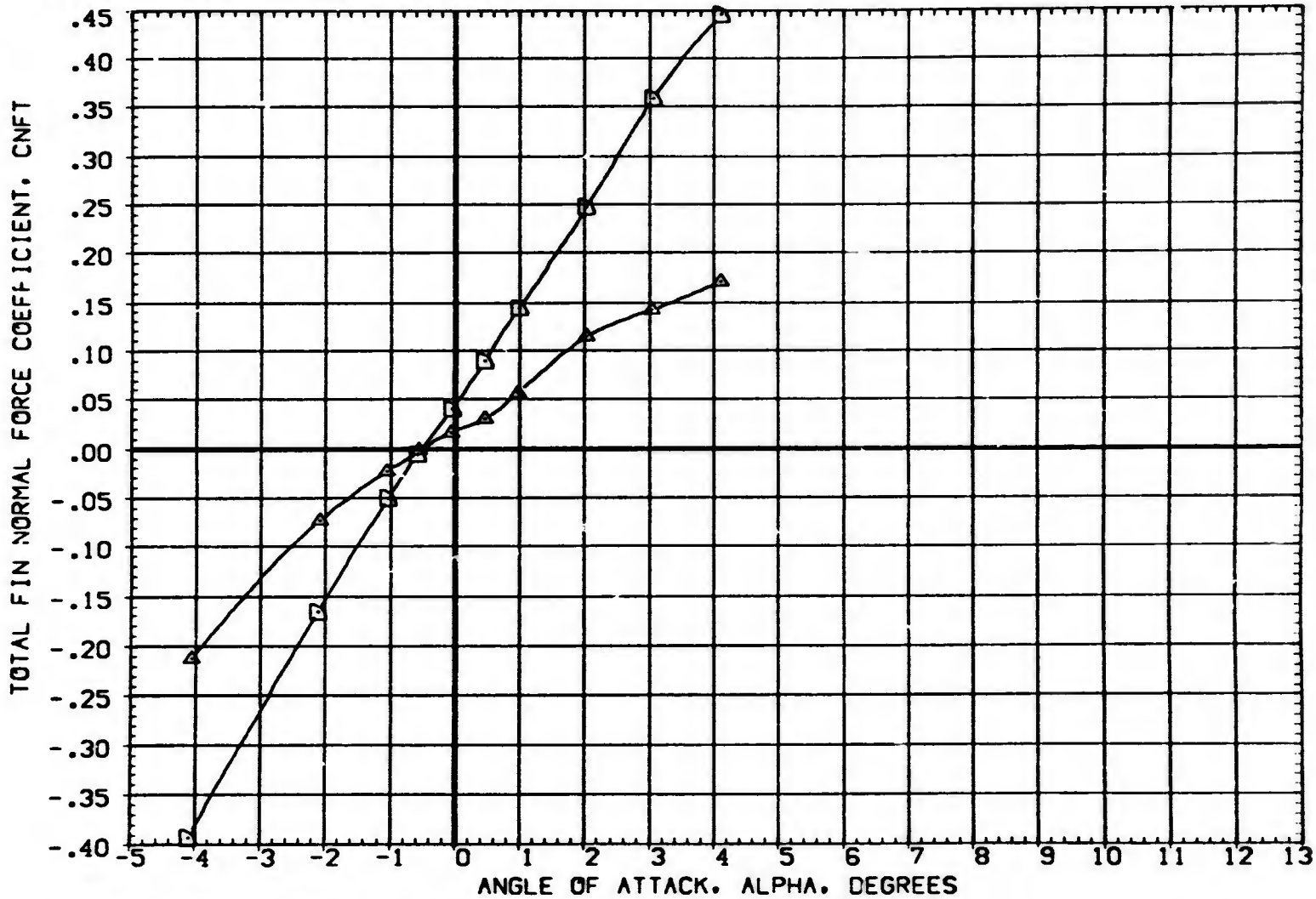


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 2

(C)MAC = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE173)	□	DATA NOT AVAILABLE	.000	.000	2.000	37.500
(GJE174)	◇	DATA NOT AVAILABLE	.000	.000	2.000	10.300
(GJE175)	△	DATA NOT AVAILABLE	.000	.000	2.000	8.500
(GJE176)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	7.200
(GJE178)	◁	DATA NOT AVAILABLE	.000	.000	2.000	5.000
(GJE179)	▷	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	4.200

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

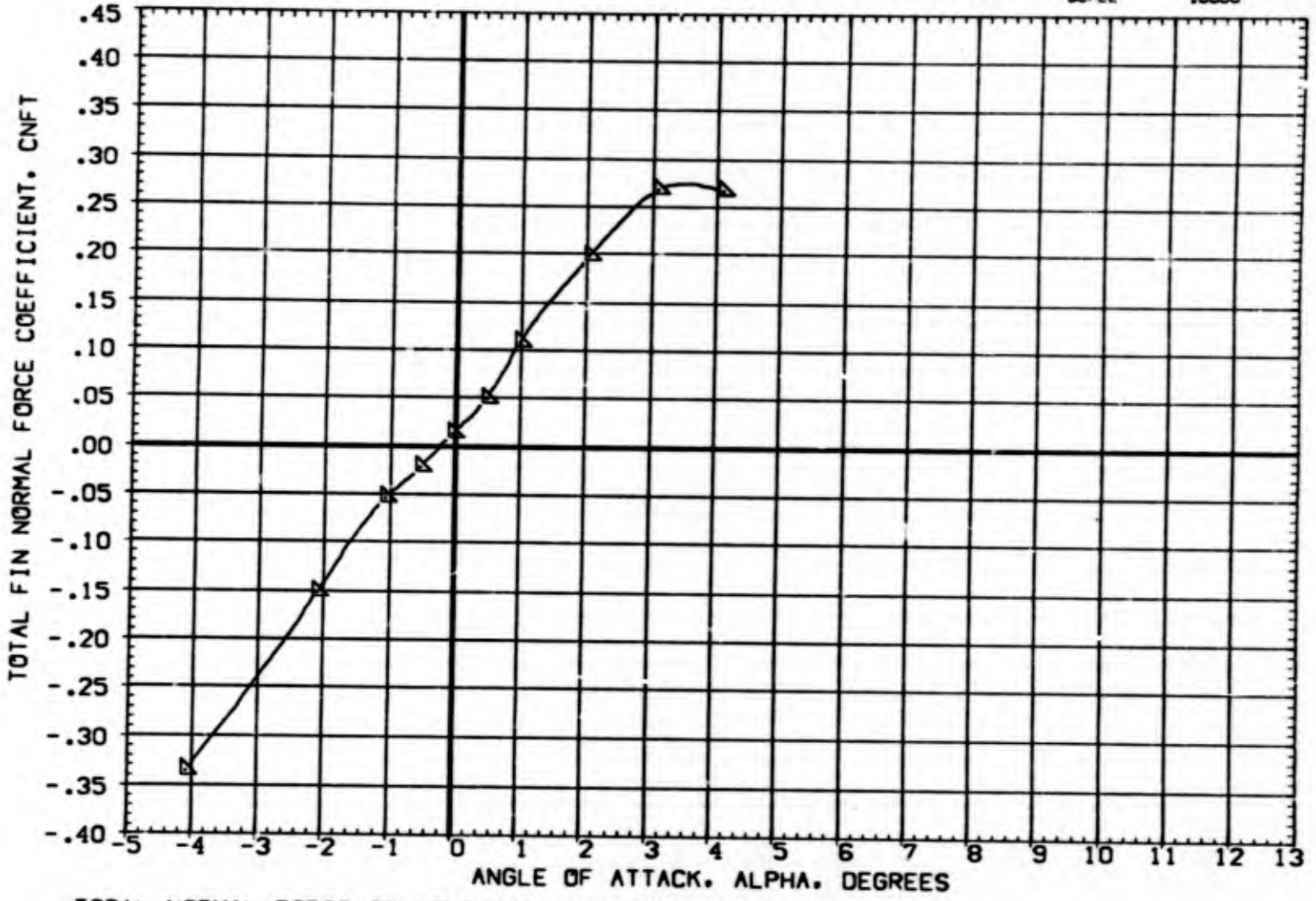


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 2

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GLE173)		DATA NOT AVAILABLE	.000	.000	2.000	37.500
(GLE174)		DATA NOT AVAILABLE	.000	.000	2.000	10.300
(GLE175)		DATA NOT AVAILABLE	.000	.000	2.000	8.500
(GLE176)		DATA NOT AVAILABLE	.000	.000	2.000	7.200
(GLE178)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	5.000
(GLE179)		DATA NOT AVAILABLE	.000	.000	2.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

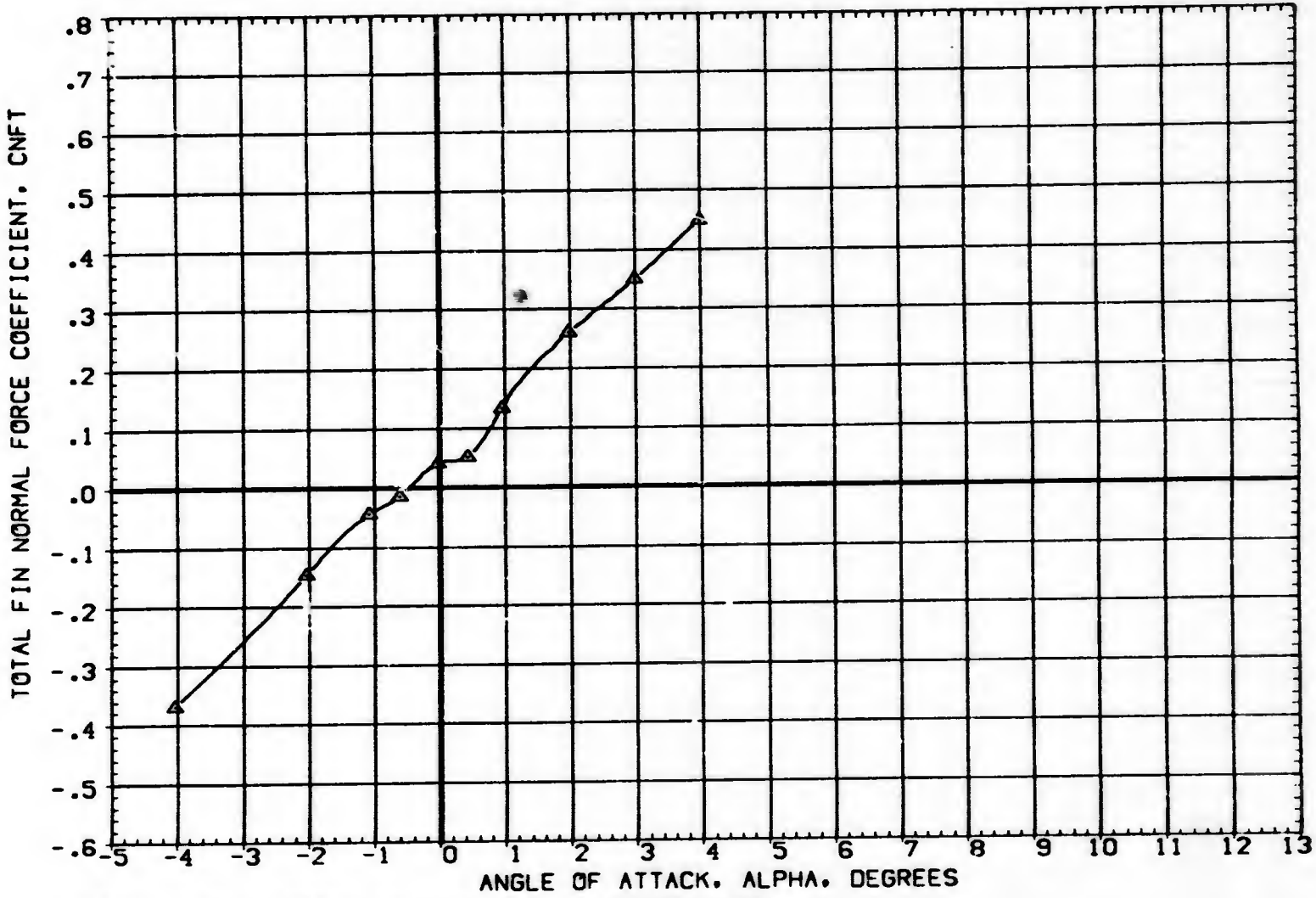


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 2

(E)MAC-- = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE180)	□	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(GJE182)	◇	DATA NOT AVAILABLE	.000	.000	2.000	2.500
(GJE183)	⊠	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(GJE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

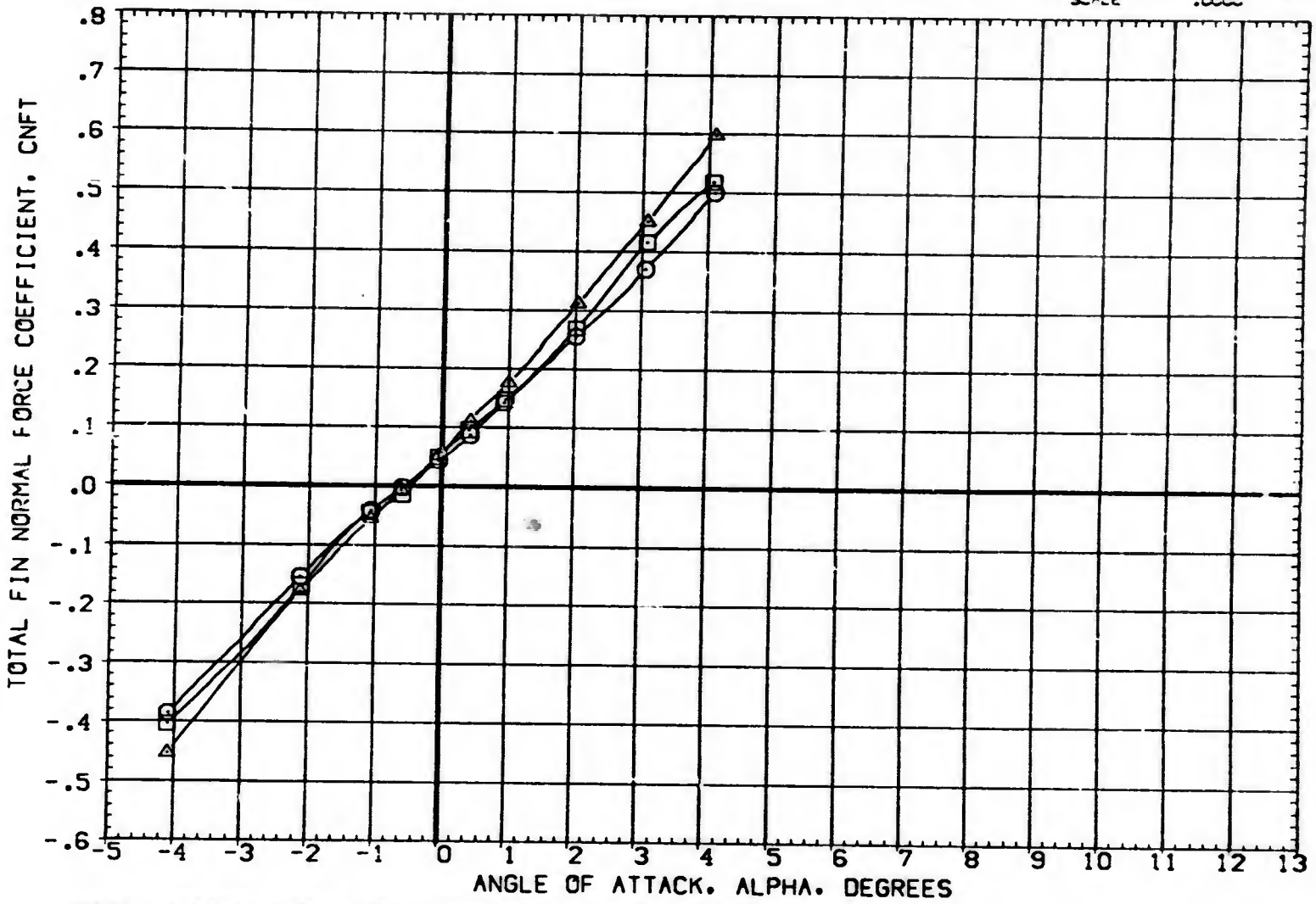


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 2

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE180)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	3.600
(GJE182)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	2.500
(GJE183)	⋈	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(GJE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

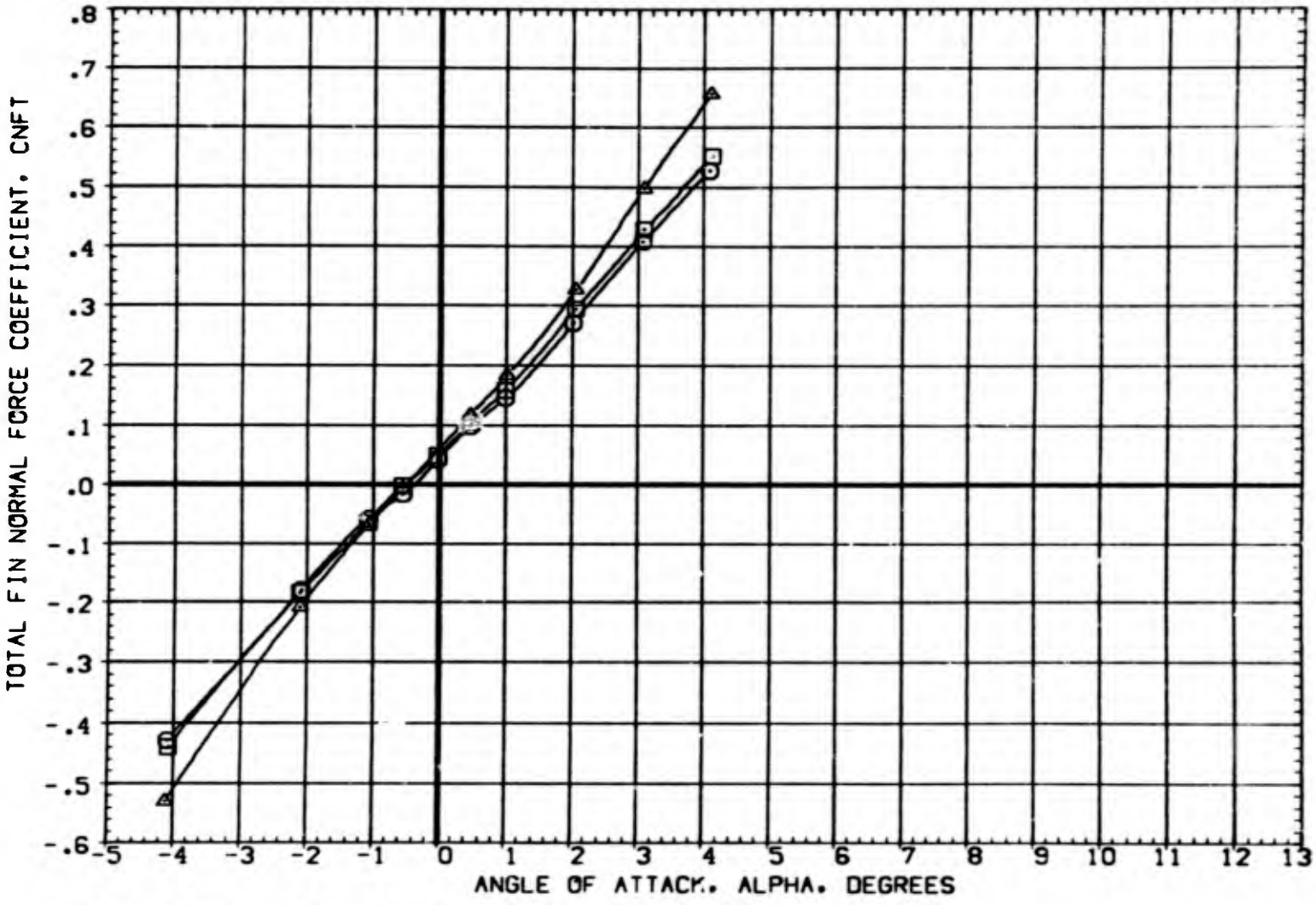


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 2

(B)MAC- = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE180)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	3.600
(GJE182)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	2.500
(GJE183)	◇	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(GJE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

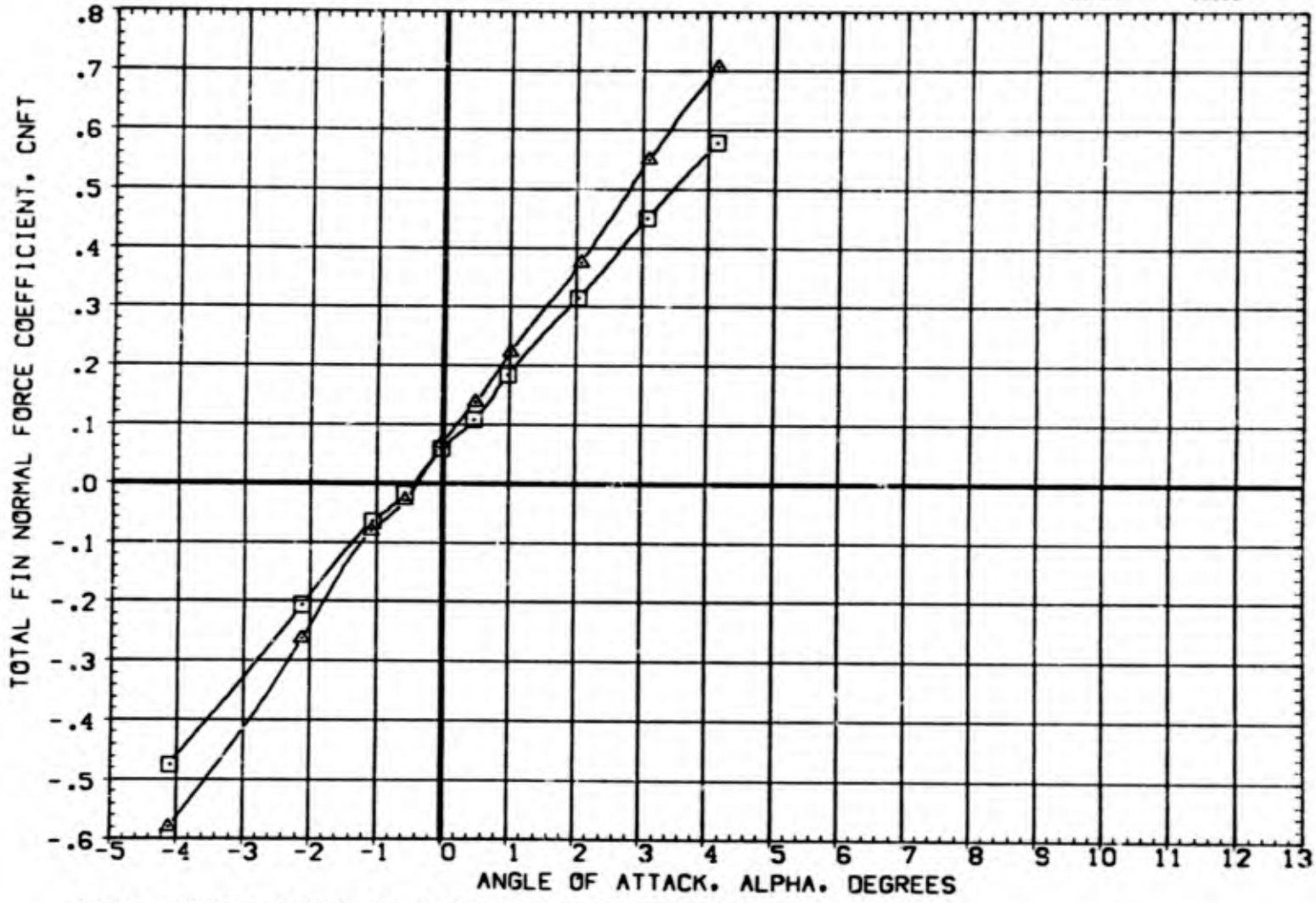


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 2

(C)MAC = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE180)	□	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(GJE182)	◇□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	2.500
(GJE183)	⊠	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(GJE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

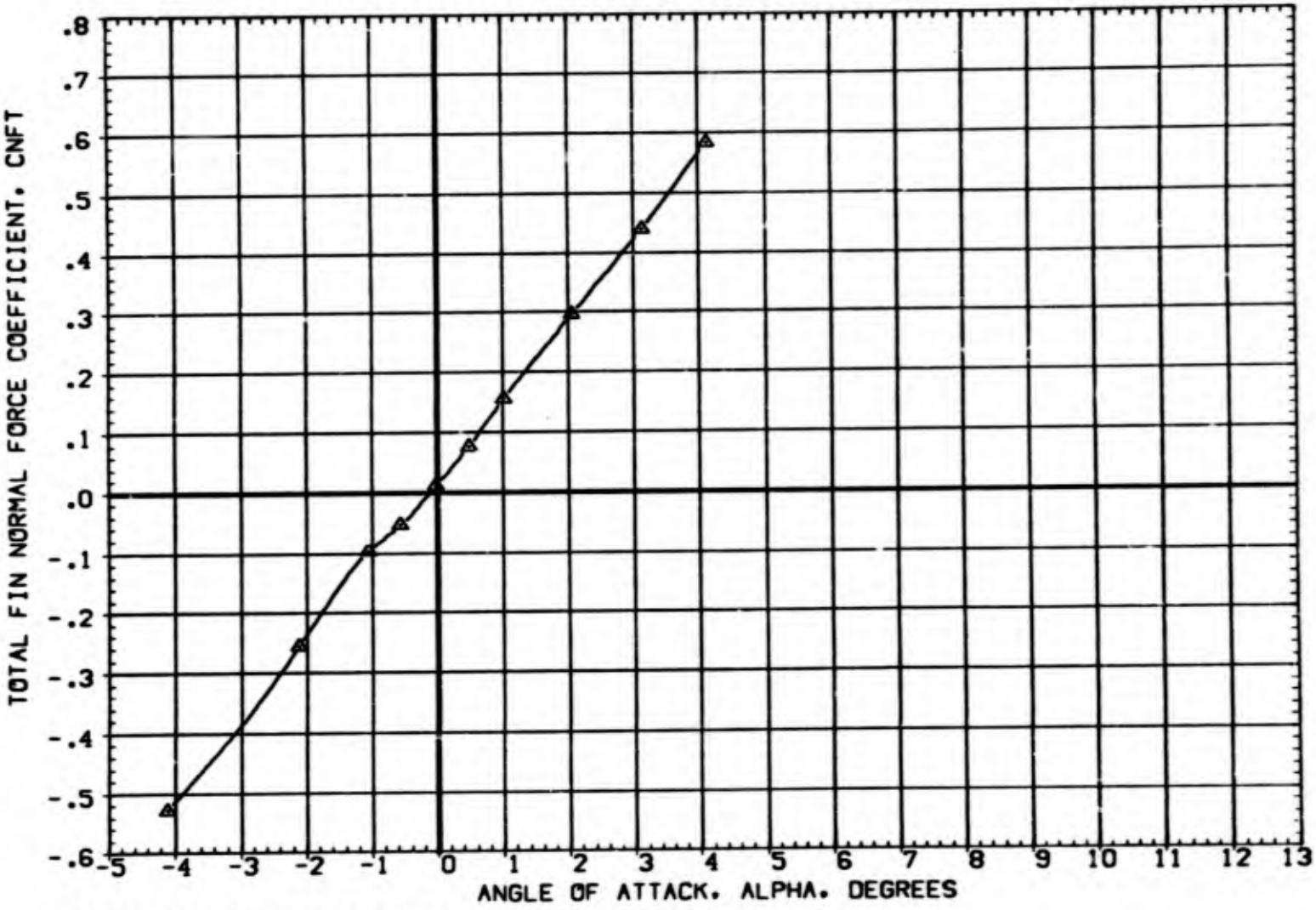


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 2

(□)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GUE180)	□	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(GUE182)	◇	DATA NOT AVAILABLE	.000	.000	2.000	2.500
(GUE183)	⋈	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(GUE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		SOURCE
SREF	19.6350	
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

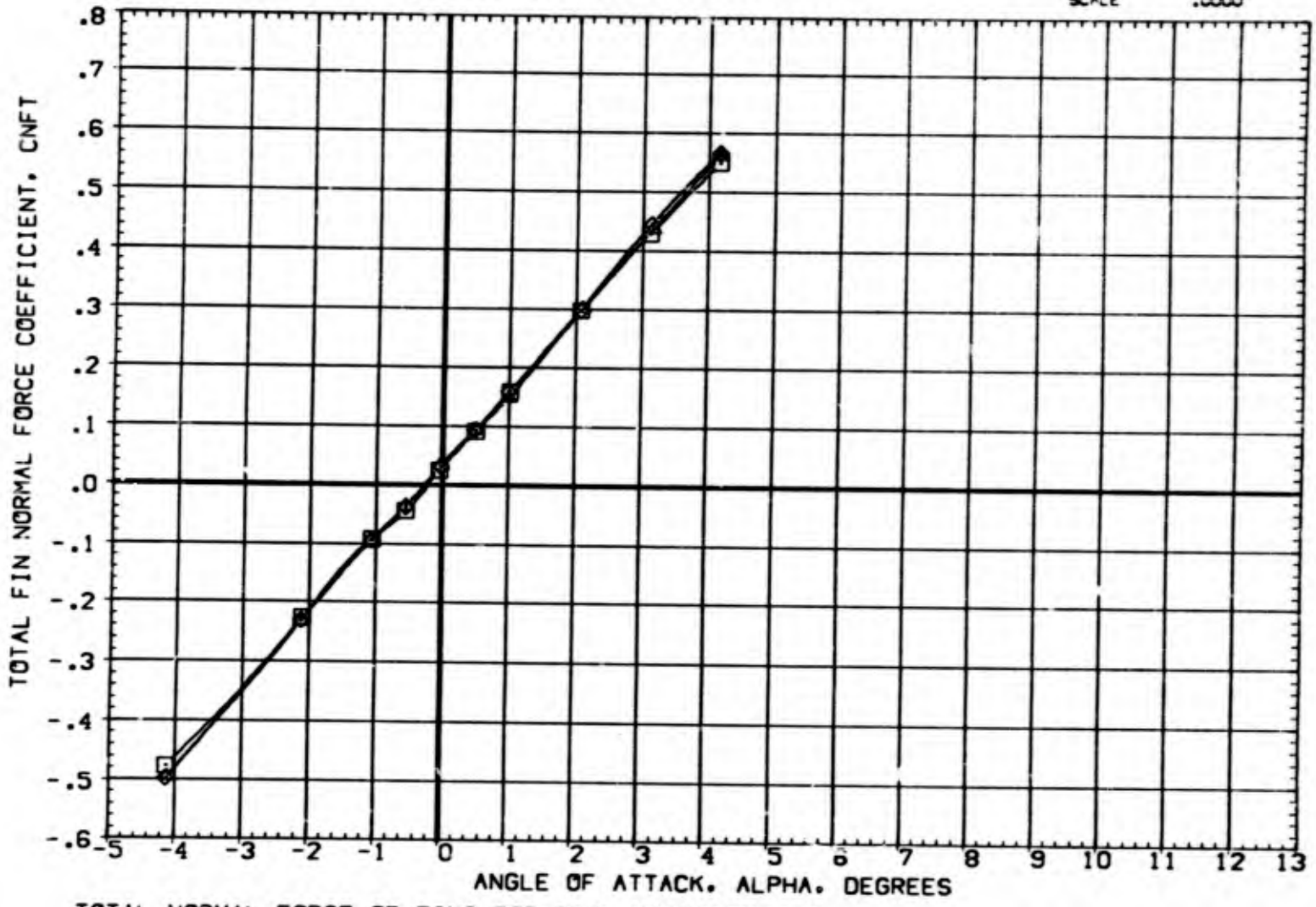


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 2

(E)MAC- = 1.10

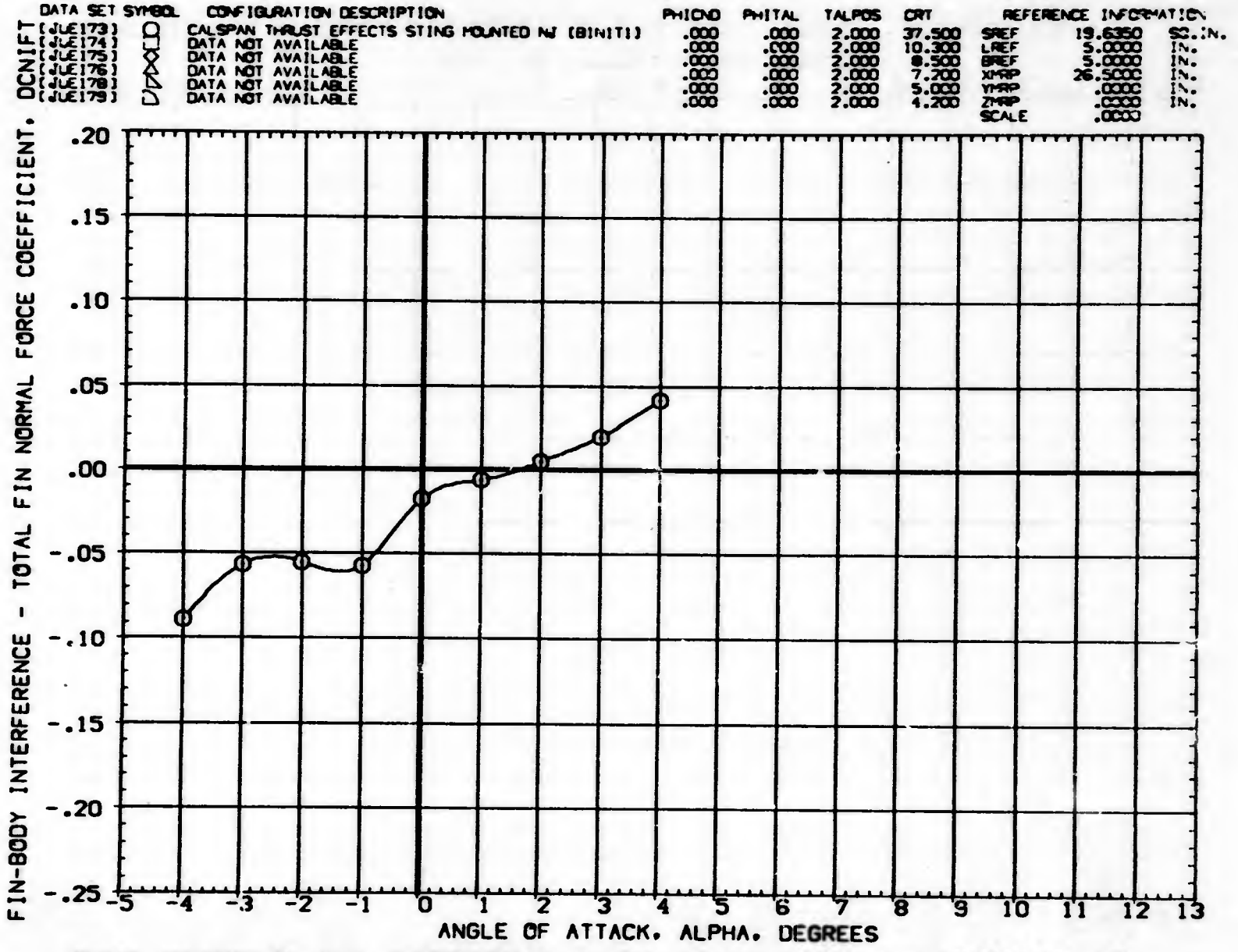
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(QUE180)	□	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(QUE182)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	2.500
(QUE183)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	1.500
(QUE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	



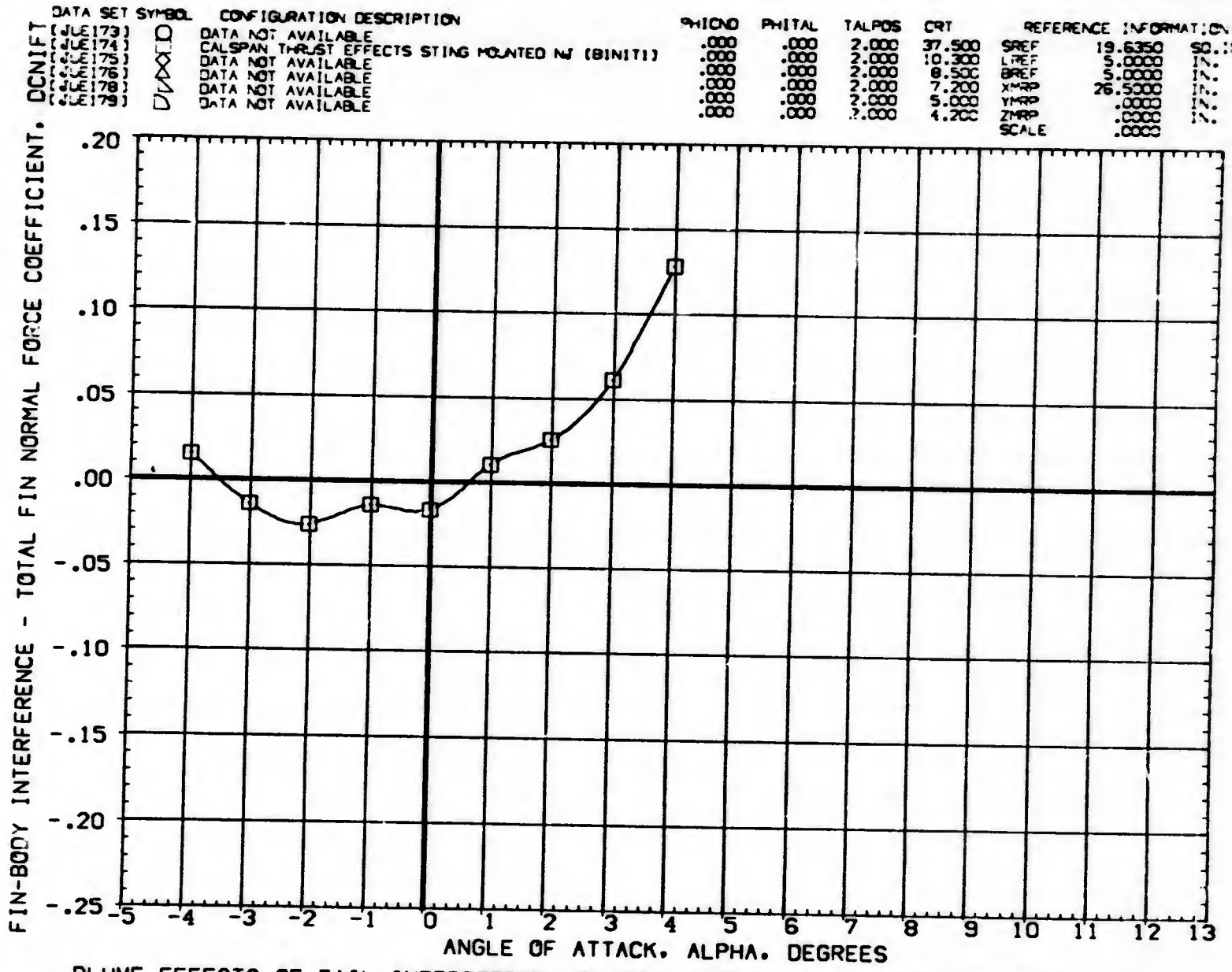
TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 2

(F)MACH = 1.25



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 2

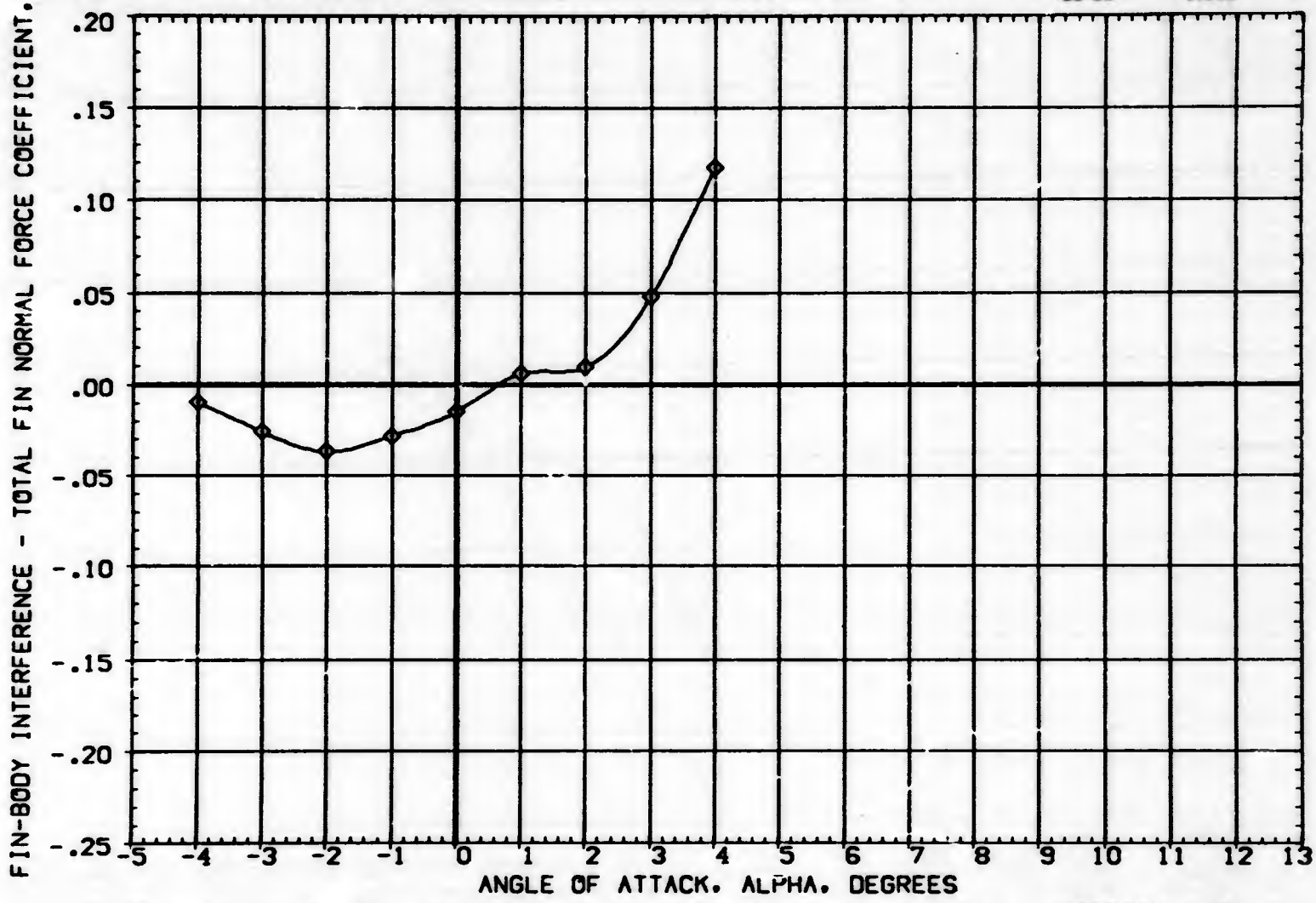
(A)MACH = .40



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 2

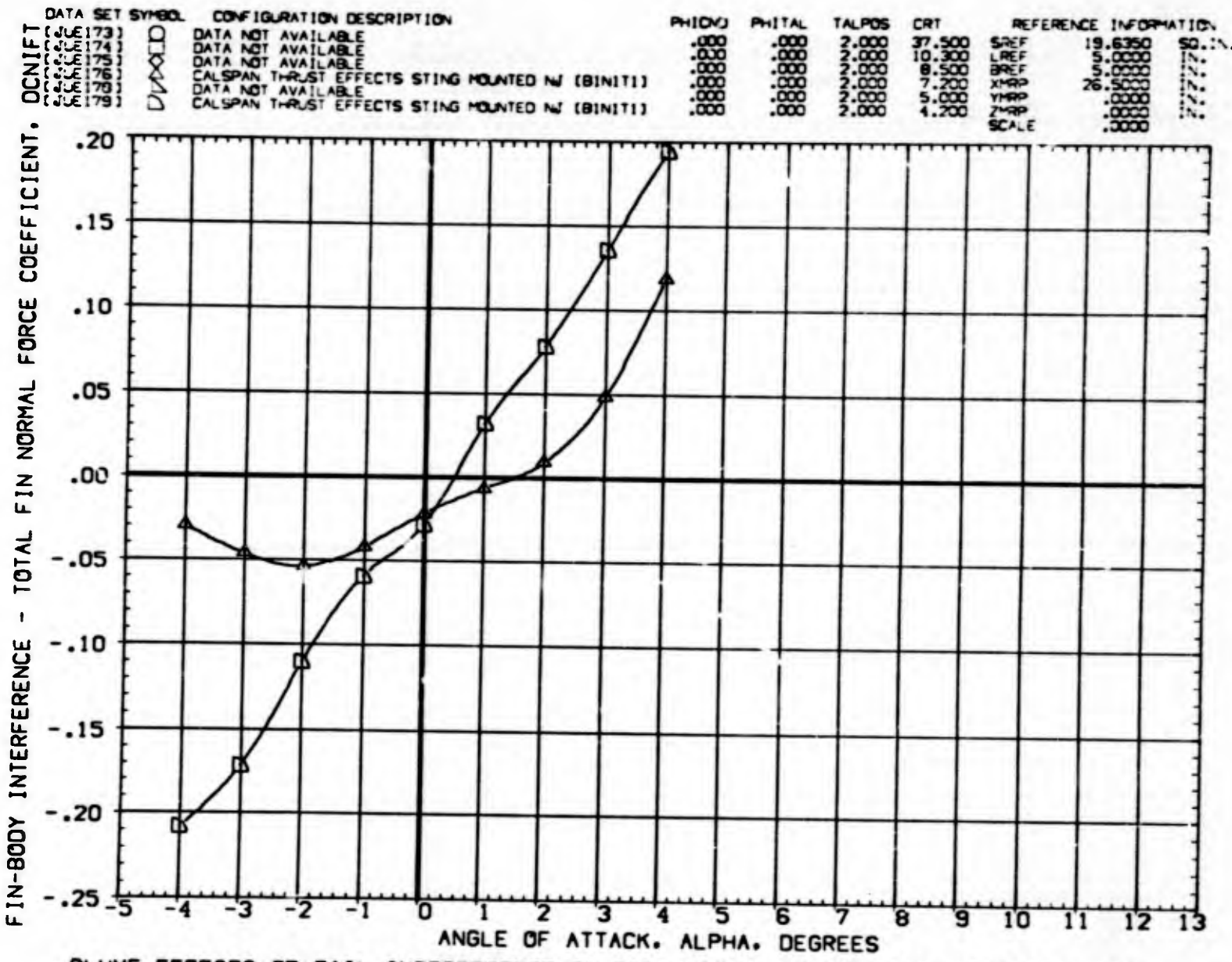
(B)MAC = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT	REFERENCE INFORMATION		
(JUE173)		DATA NOT AVAILABLE	.000	.000	2.000	37.500	SREF	19.6350	SQ.IN.
(JUE174)		DATA NOT AVAILABLE	.000	.000	2.000	10.300	LREF	5.0000	
(JUE175)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	8.500	BREF	5.0000	
(JUE176)		DATA NOT AVAILABLE	.000	.000	2.000	7.200	XMRP	26.5000	
(JUE178)		DATA NOT AVAILABLE	.000	.000	2.000	5.000	YMRP	.0000	
(JUE179)		DATA NOT AVAILABLE	.000	.000	2.000	4.200	ZMRP	.0000	
							SCALE	.0000	



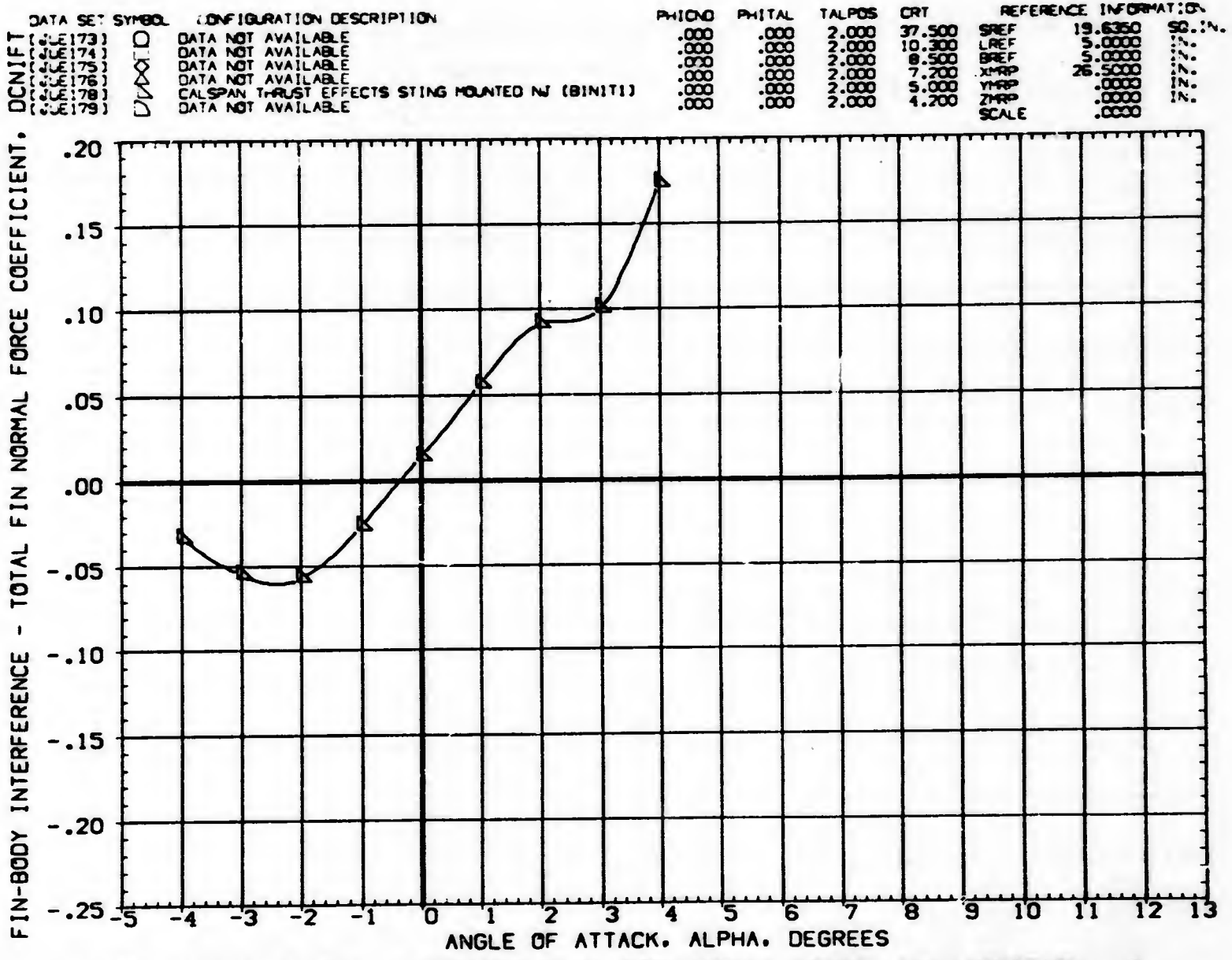
PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 2

(C)MACH = .90



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 2

(D)MACH = 1.00



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 2

(E)MACH = .25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(JUE180)	□	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(JUE182)	◇	DATA NOT AVAILABLE	.000	.000	2.000	2.500
(JUE183)	⊠	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(JUE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	2.000	.000

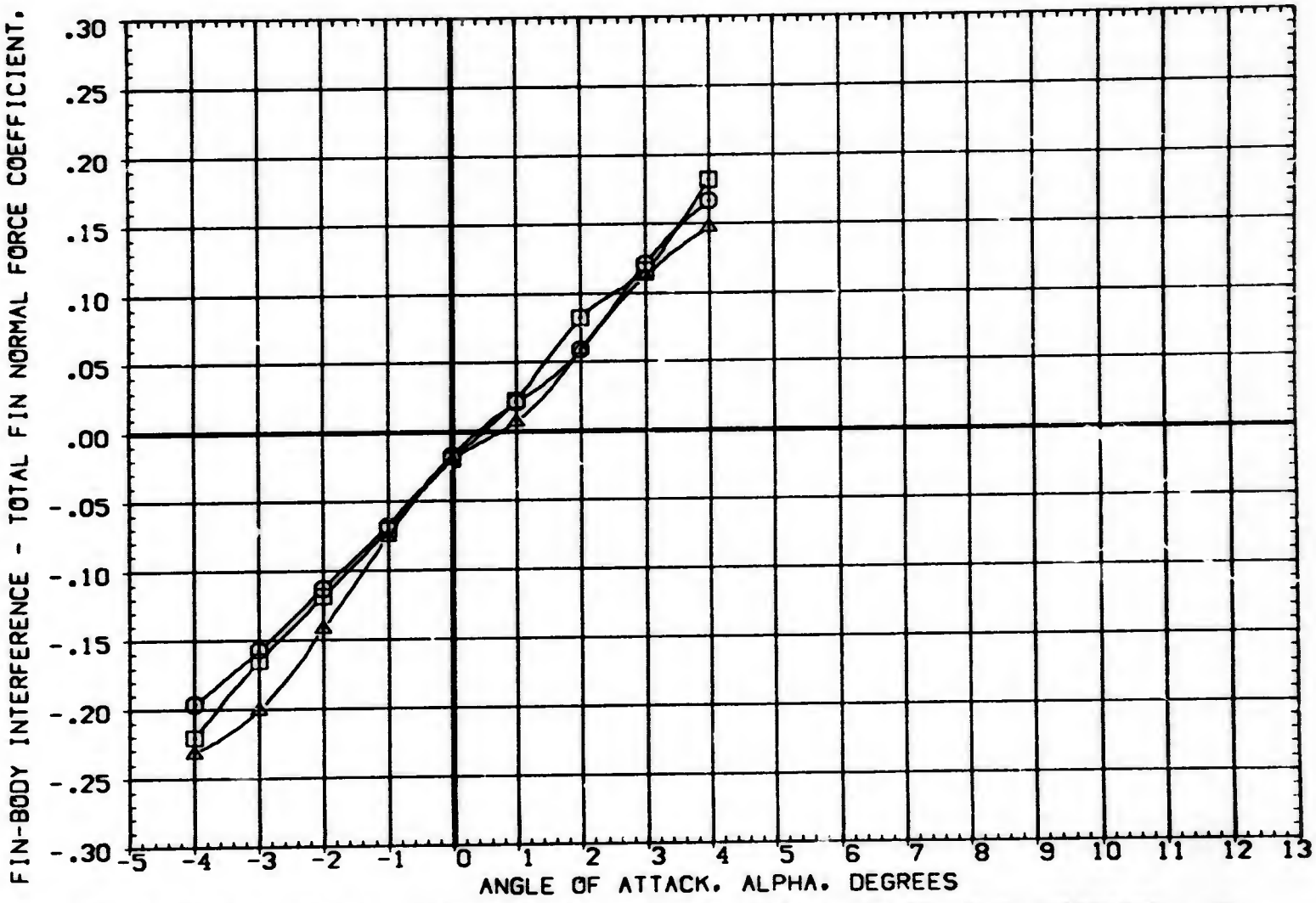
REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 2

(A)MACH = .40

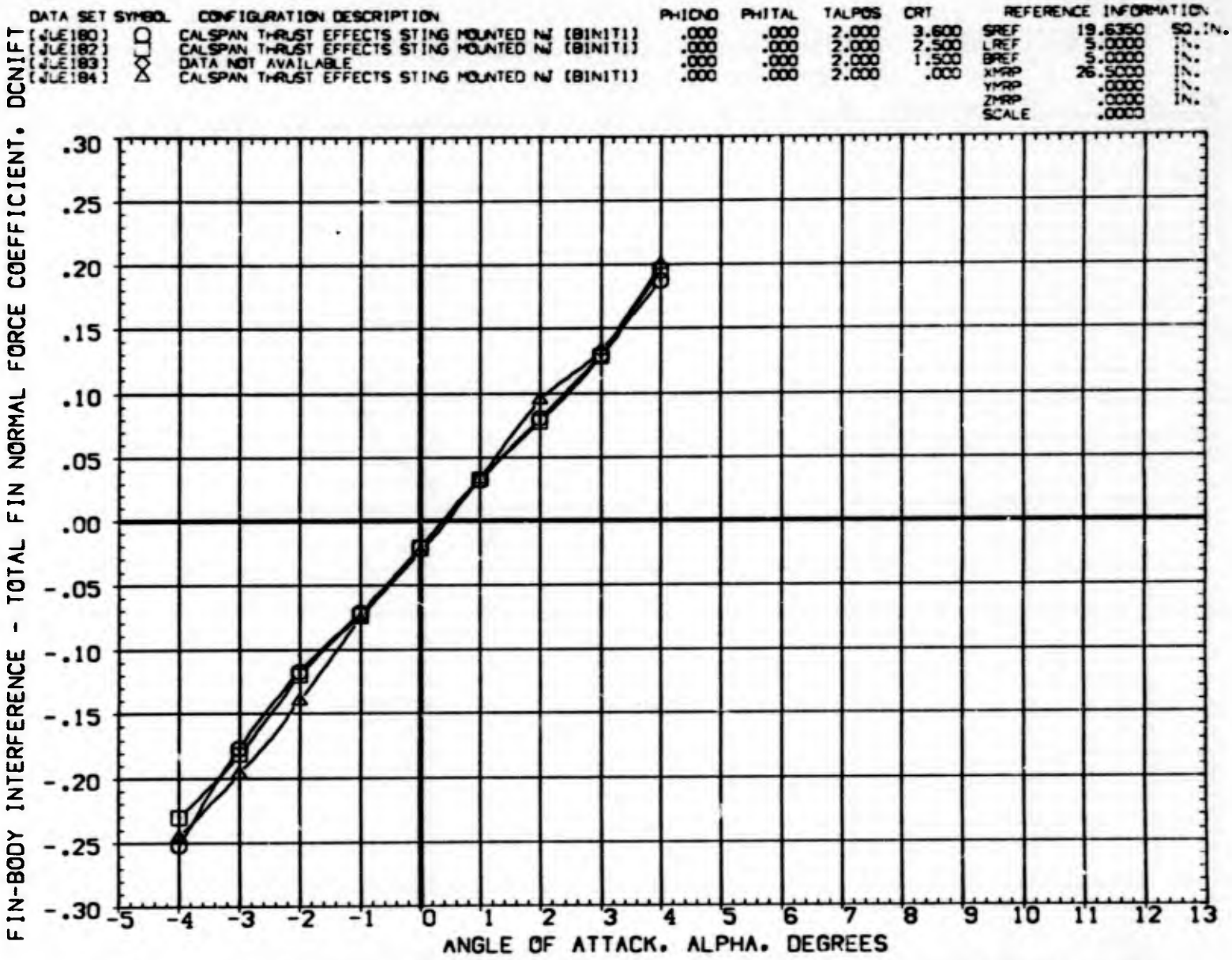
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[JUE180]	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINITI]	.000	.000	2.000	3.600
[JUE182]	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINITI]	.000	.000	2.000	2.500
[JUE183]	⊠	DATA NOT AVAILABLE	.000	.000	2.000	1.500
[JUE184]	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ [BINITI]	.000	.000	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



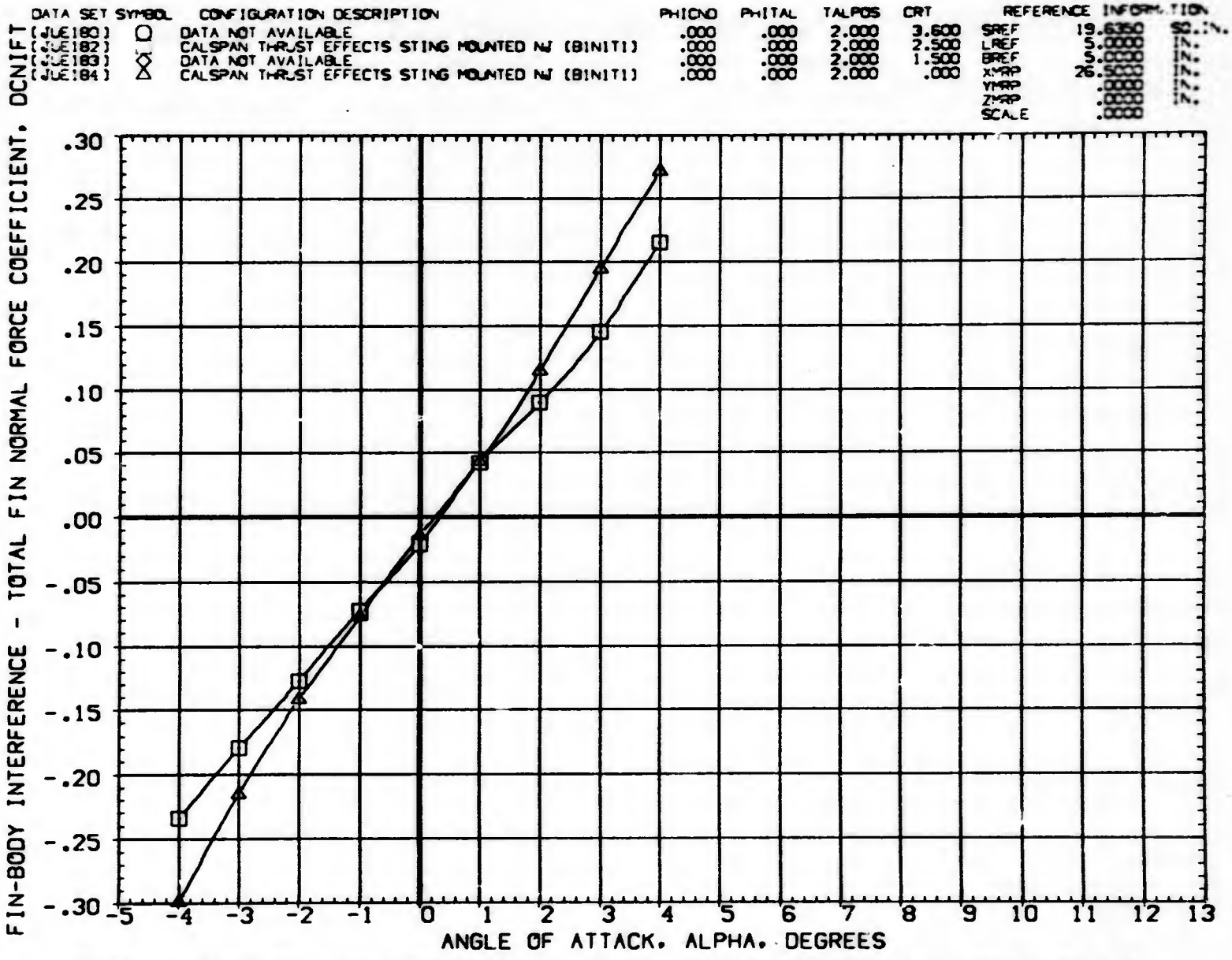
PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 2

(B)MACH = .80



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 2

(C)MACH = .90

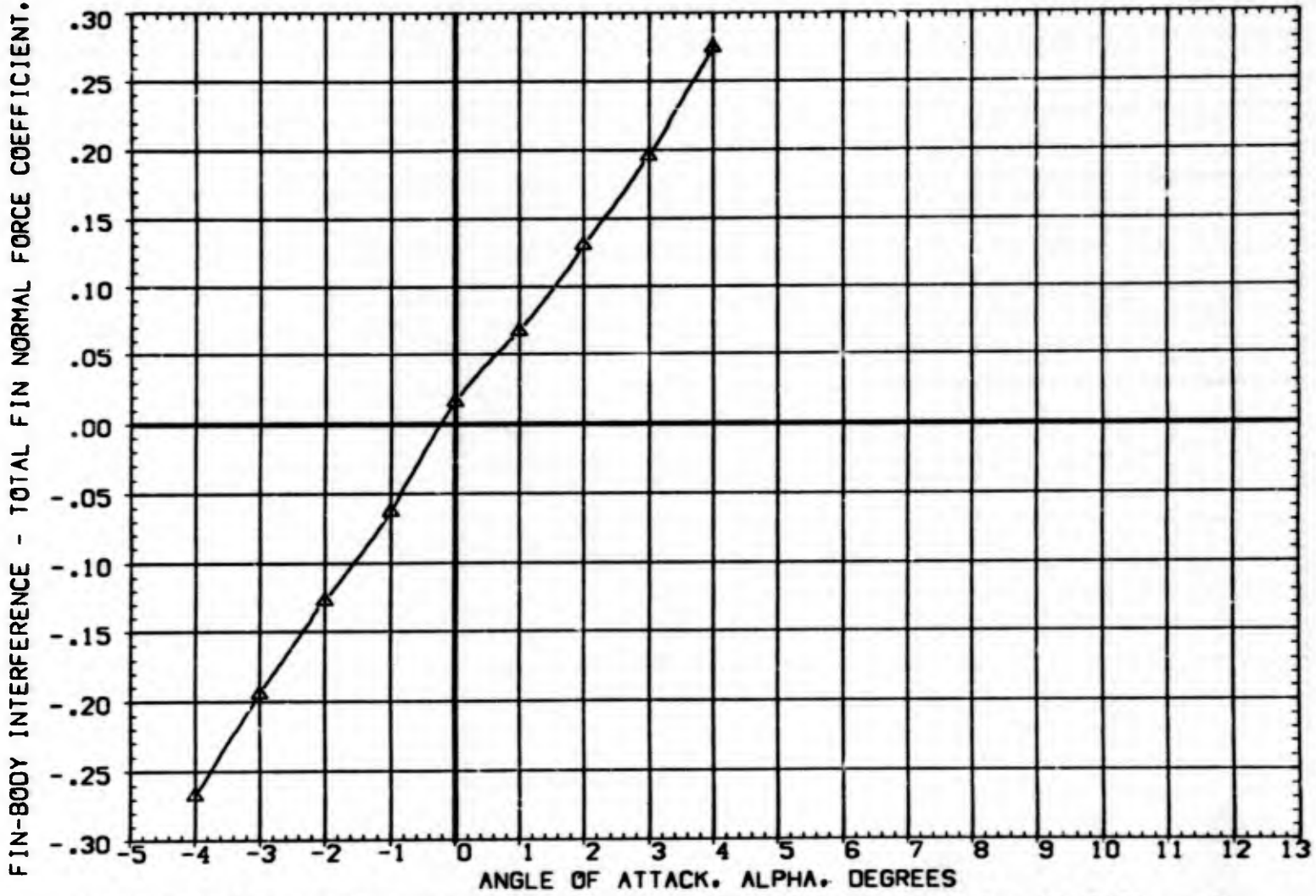


PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 2

(D)MACH = 1.00

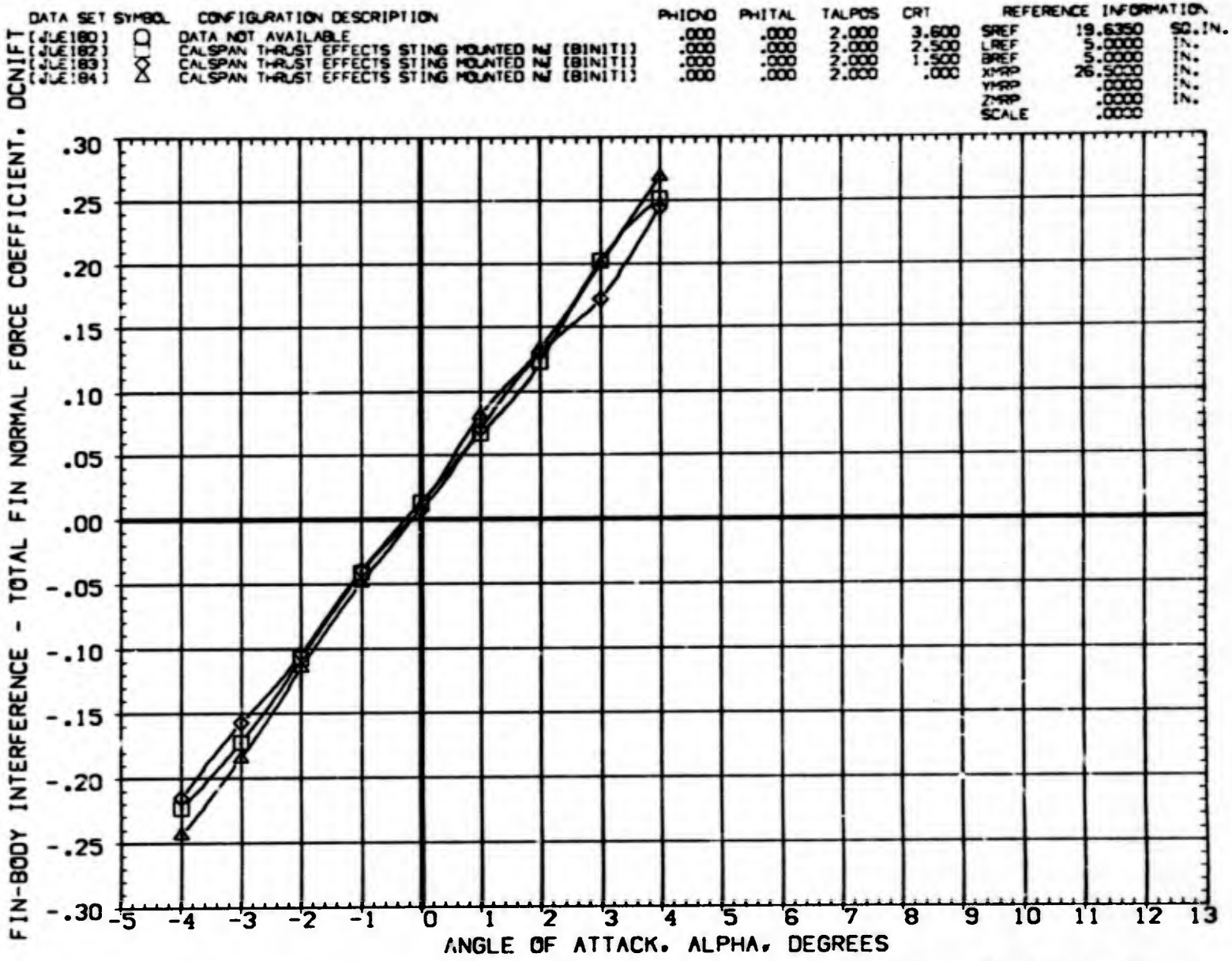
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(JUE180)	○	DATA NOT AVAILABLE	.000	.000	2.000	3.600
(JUE182)	□	DATA NOT AVAILABLE	.000	.000	2.000	2.500
(JUE183)	◇	DATA NOT AVAILABLE	.000	.000	2.000	1.500
(JUE184)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.010	2.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 2

(E)MACH = 1.10

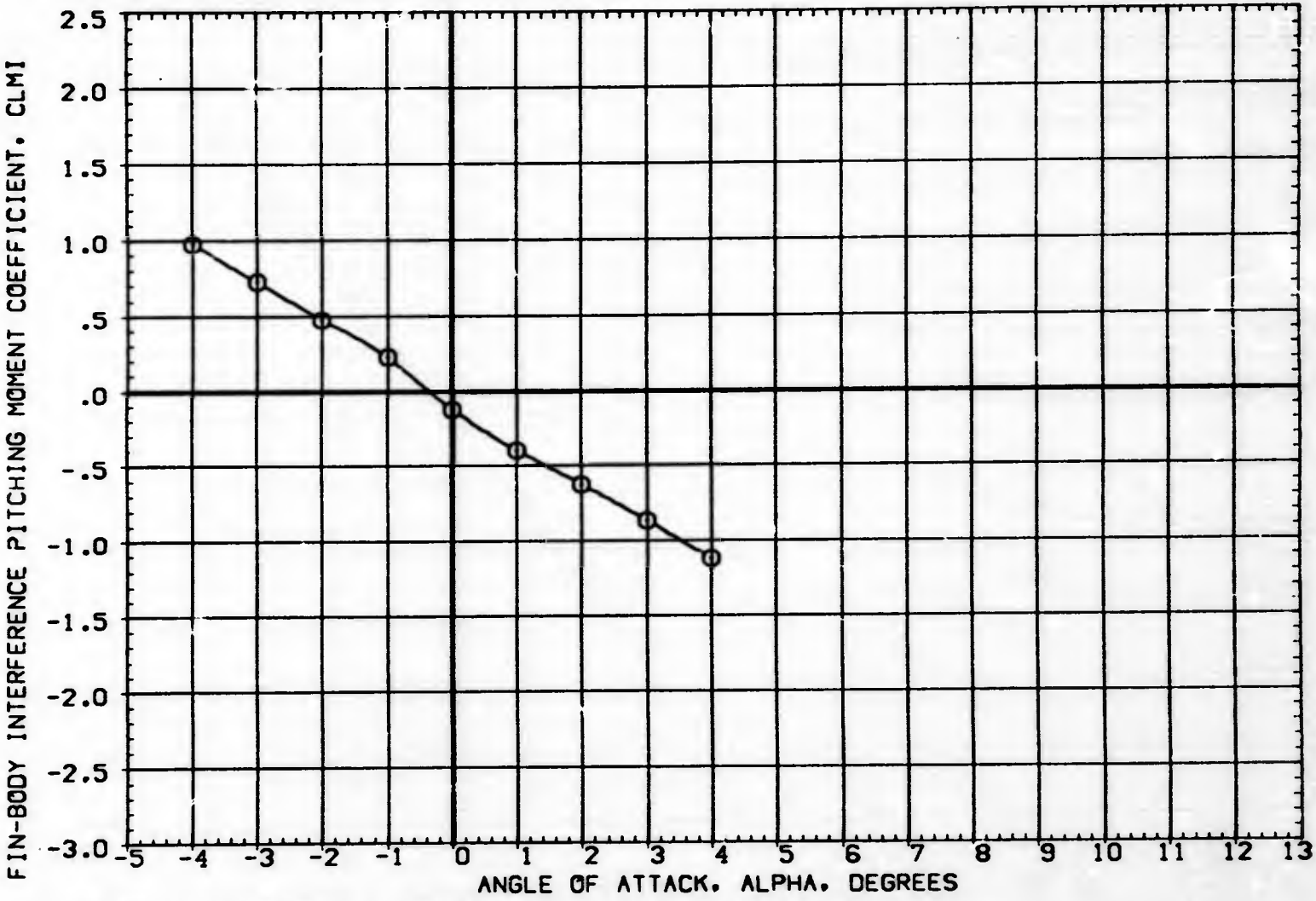


PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 2

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE185)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT)	.000	.000	3.000	37.500
(FUE186)		DATA NOT AVAILABLE	.000	.000	3.000	10.300
(FUE187)		DATA NOT AVAILABLE	.000	.000	3.000	8.500
(FUE188)		DATA NOT AVAILABLE	.000	.000	3.000	7.200
(FUE190)		DATA NOT AVAILABLE	.000	.000	3.000	5.000
(FUE191)		DATA NOT AVAILABLE	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

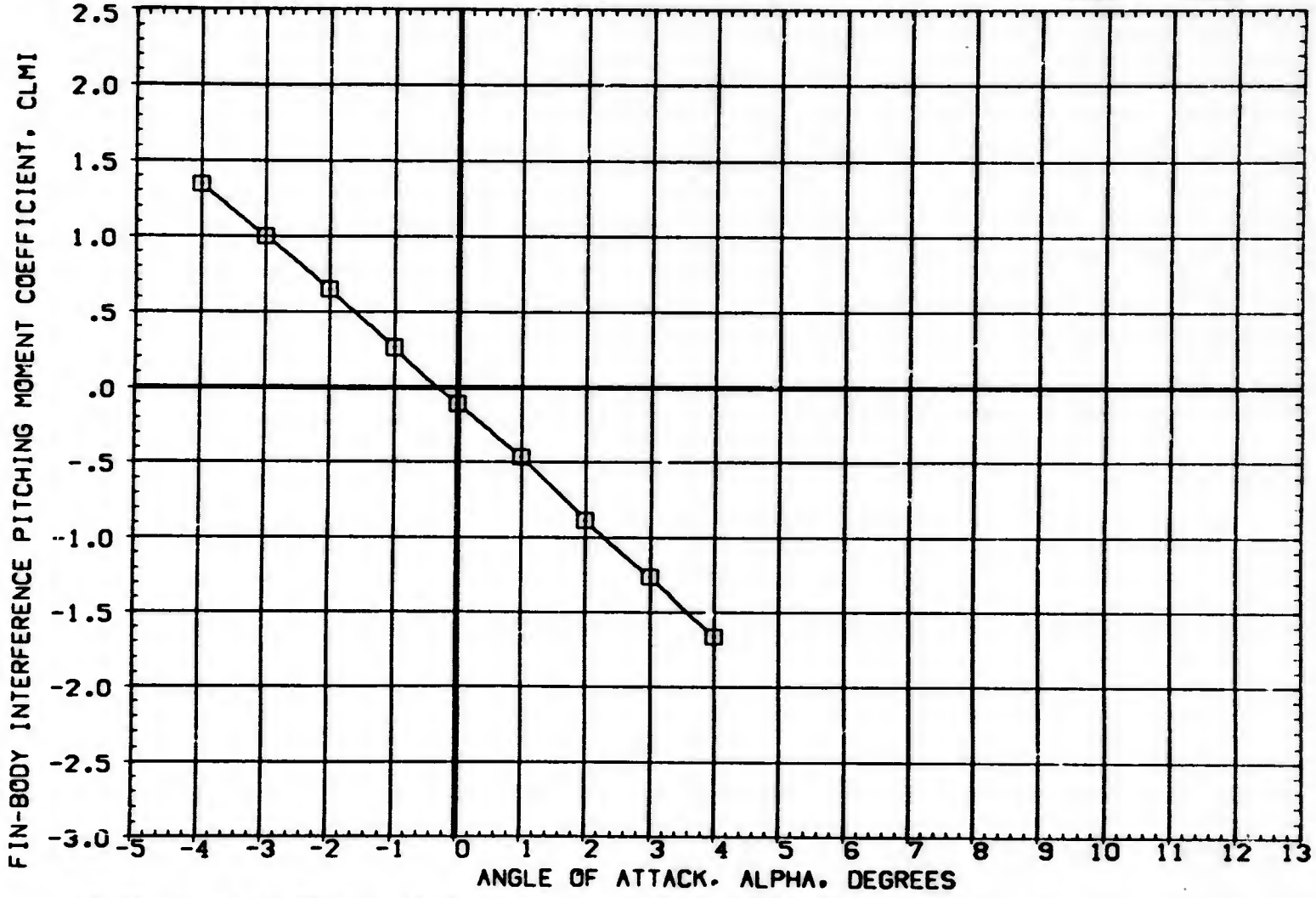


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FLE185)	□	DATA NOT AVAILABLE	.000	.000	3.000	37.500
(FLE186)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	10.300
(FLE187)	△	DATA NOT AVAILABLE	.000	.000	3.000	8.500
(FLE188)	▽	DATA NOT AVAILABLE	.000	.000	3.000	7.200
(FLE190)	◁	DATA NOT AVAILABLE	.000	.000	3.000	5.000
(FLE191)	▷	DATA NOT AVAILABLE	.000	.000	3.000	4.200

REFERENCE INFORMATION		SOURCE
SREF	19.6350	SOURCE
LREF	5.0000	SOURCE
BREF	5.0000	SOURCE
XMRP	26.5000	SOURCE
YMRP	.0000	SOURCE
ZMRP	.0000	SOURCE
SCALE	.0000	

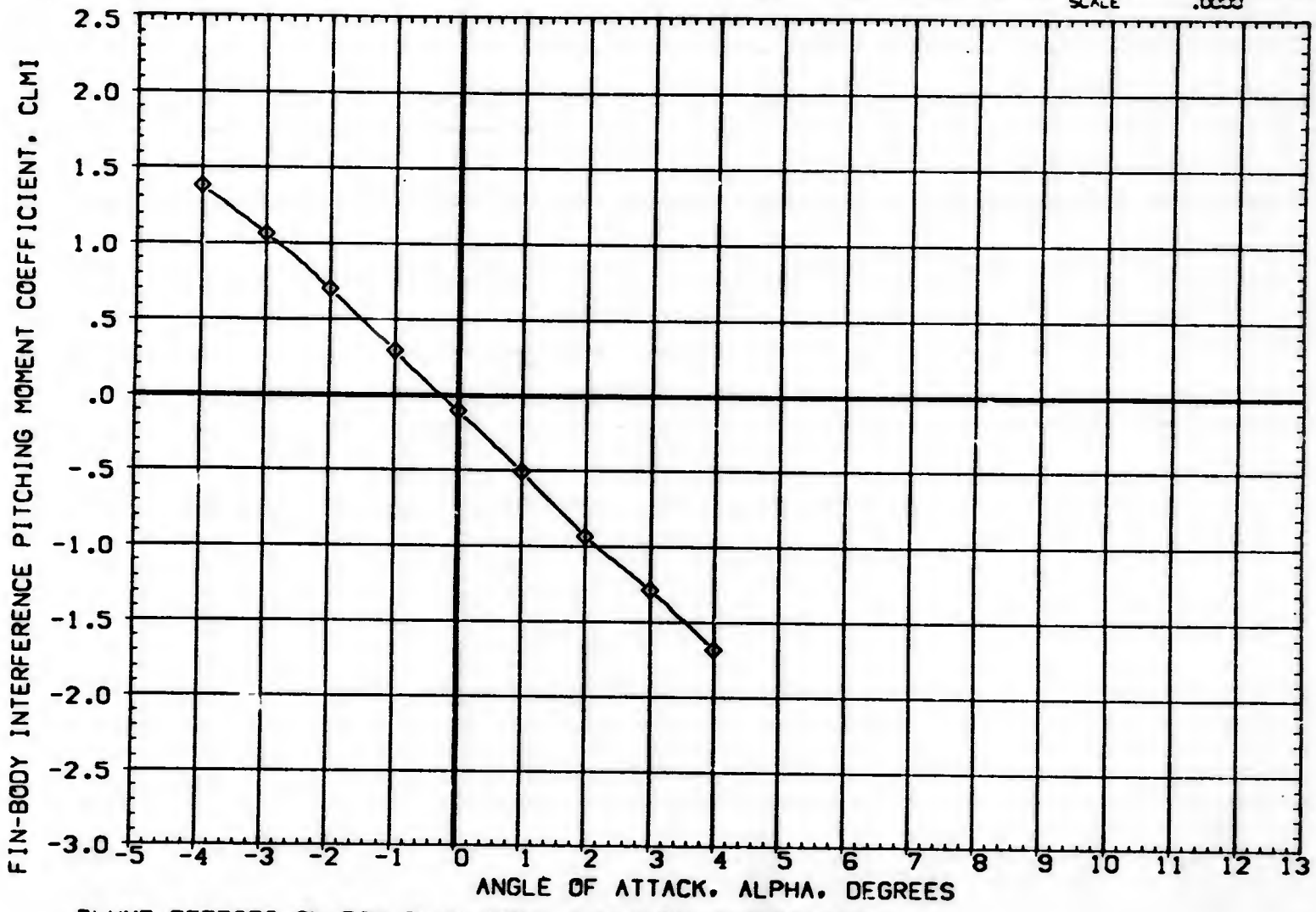


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE185)		DATA NOT AVAILABLE	.000	.000	3.000	37.500
(FUE186)		DATA NOT AVAILABLE	.000	.000	3.000	10.300
(FUE187)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	8.500
(FUE188)		DATA NOT AVAILABLE	.000	.000	3.000	7.200
(FUE190)		DATA NOT AVAILABLE	.000	.000	3.000	5.000
(FUE191)		DATA NOT AVAILABLE	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

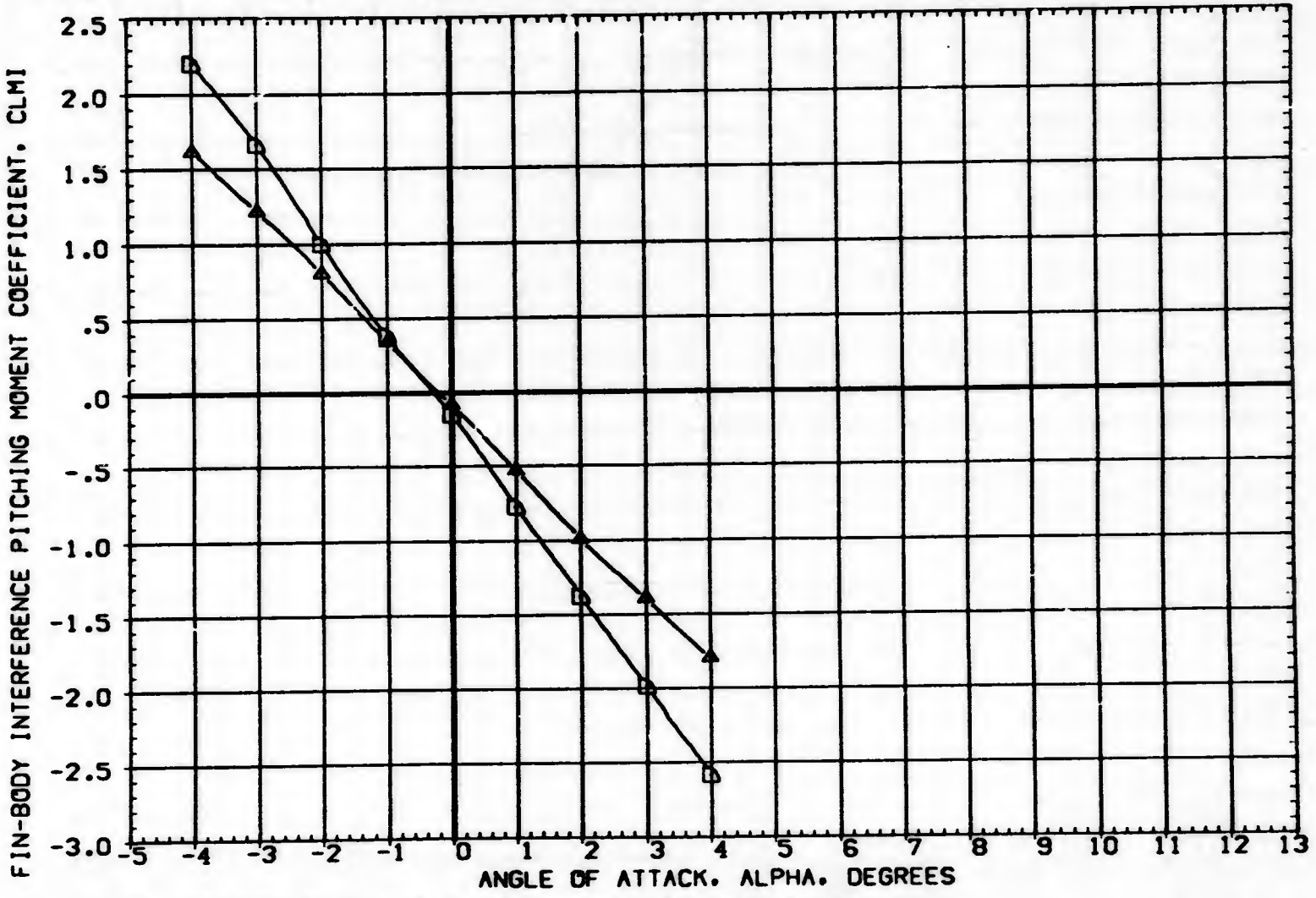


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE185)	□	DATA NOT AVAILABLE	.000	.000	3.000	37.500
(FUE186)	▽	DATA NOT AVAILABLE	.000	.000	3.000	10.300
(FUE187)	◇	DATA NOT AVAILABLE	.000	.000	3.000	8.500
(FUE188)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	7.200
(FUE190)	○	DATA NOT AVAILABLE	.000	.000	3.000	5.000
(FUE191)	▷	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	4.200

REFERENCE INFORMATION		SO.IN.
SREF	19.6350	
LREF	5.0000	
BREF	5.0000	
XMRP	7.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

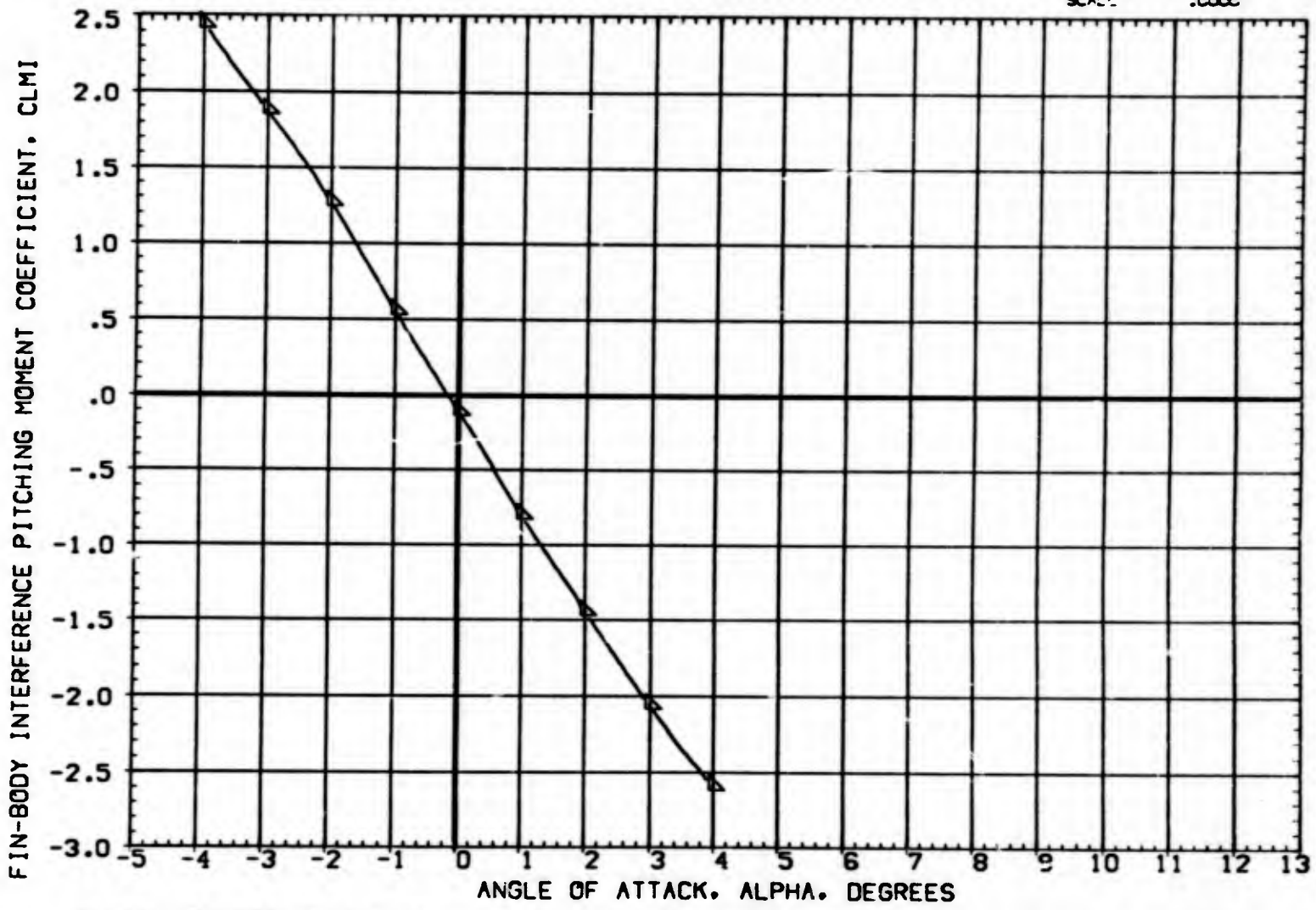


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(□)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE185)		DATA NOT AVAILABLE	.000	.000	3.000	37.500
(FUE186)		DATA NOT AVAILABLE	.000	.000	3.000	10.300
(FUE187)		DATA NOT AVAILABLE	.000	.000	3.000	8.500
(FUE188)		DATA NOT AVAILABLE	.000	.000	3.000	7.200
(FUE190)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	5.000
(FUE191)		DATA NOT AVAILABLE	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

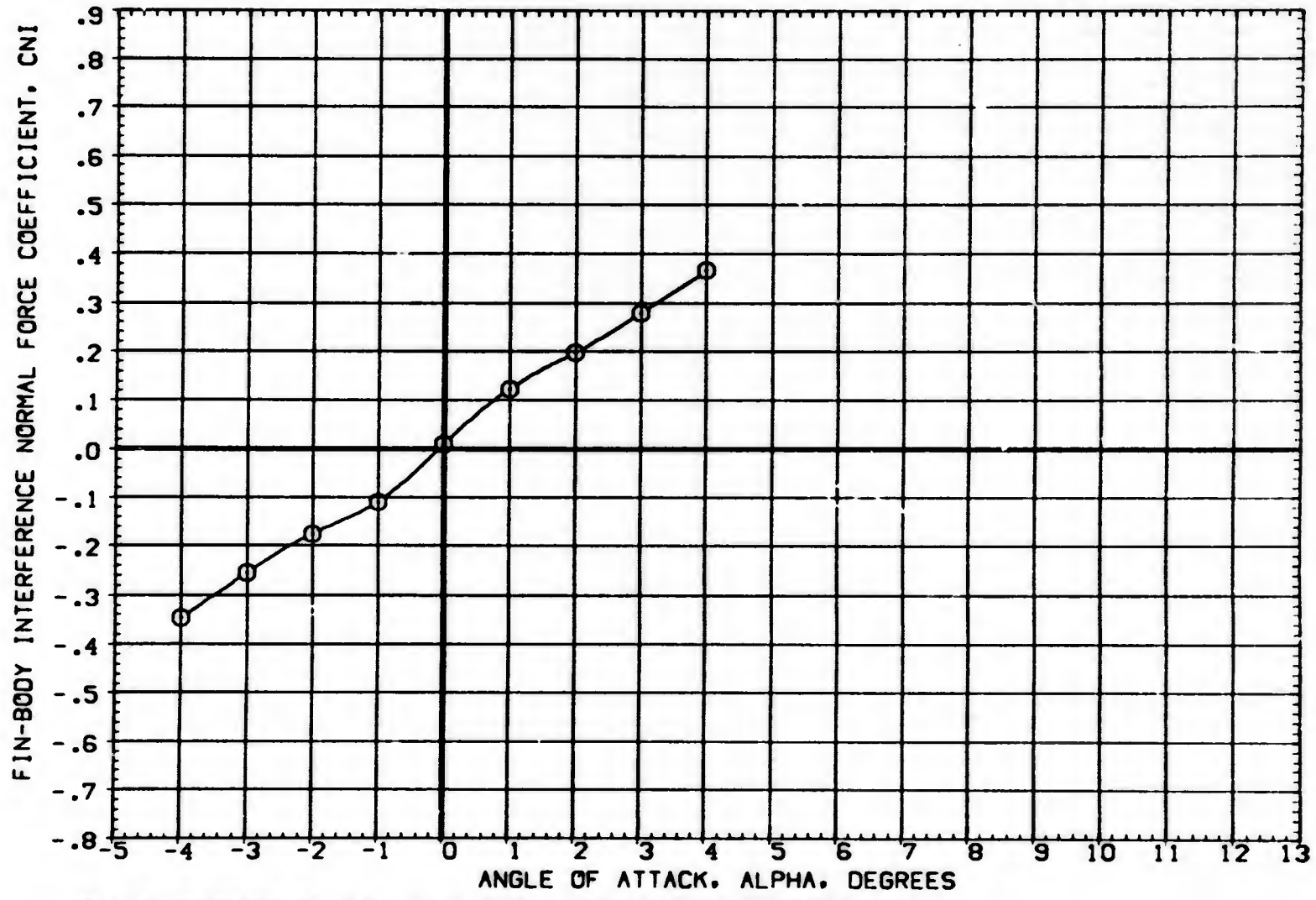


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE185)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	37.500
(FUE186)	◇	DATA NOT AVAILABLE	.000	.000	3.000	10.300
(FUE187)	△	DATA NOT AVAILABLE	.000	.000	3.000	8.500
(FUE188)	▽	DATA NOT AVAILABLE	.000	.000	3.000	7.200
(FUE190)	◁	DATA NOT AVAILABLE	.000	.000	3.000	5.000
(FUE191)	▷	DATA NOT AVAILABLE	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

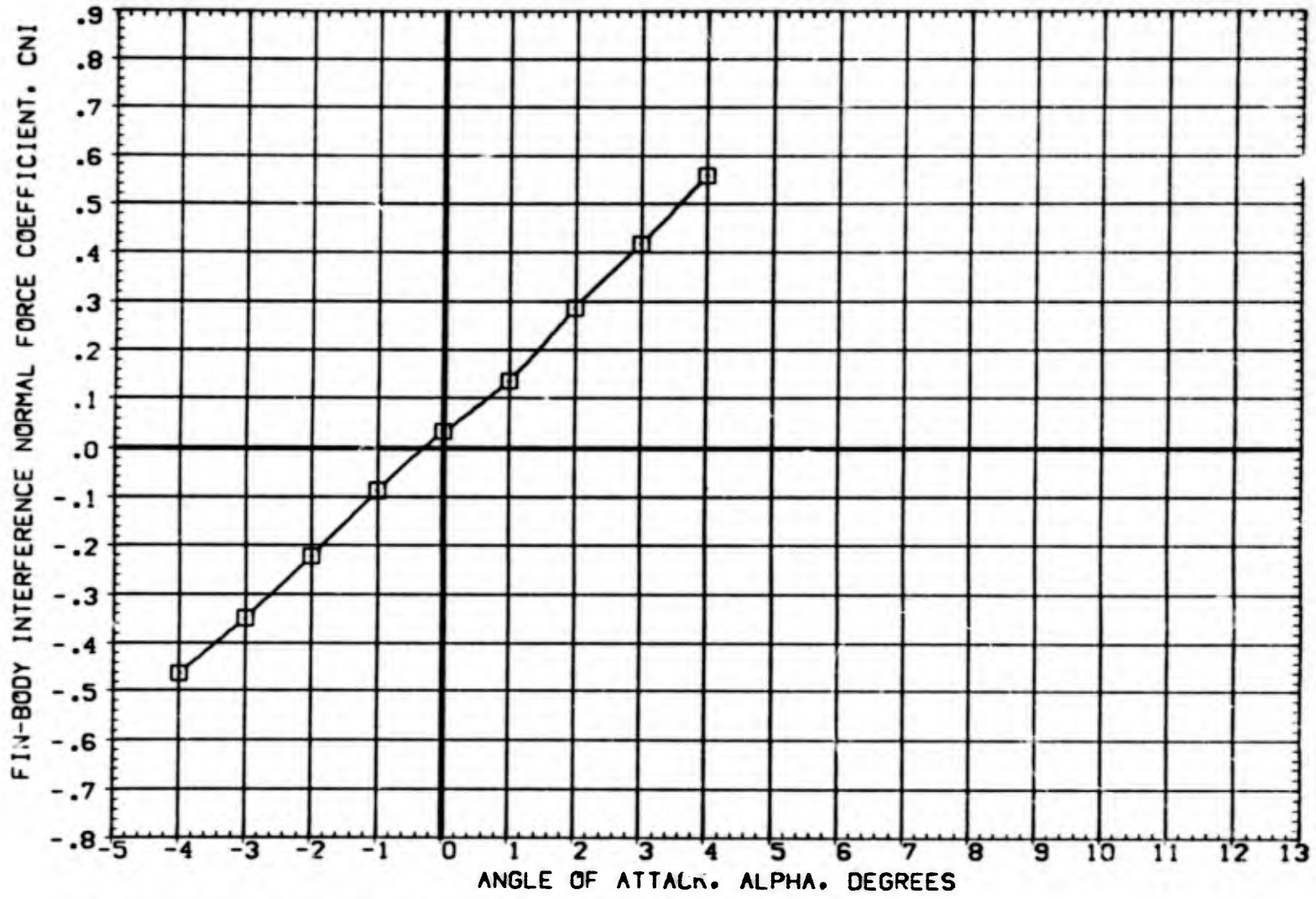


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE185)		DATA NOT AVAILABLE	.000	.000	3.000	37.500
(FUE186)		CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	10.300
(FUE187)		DATA NOT AVAILABLE	.000	.000	3.000	8.500
(FUE188)		DATA NOT AVAILABLE	.000	.000	3.000	7.200
(FUE190)		DATA NOT AVAILABLE	.000	.000	3.000	5.000
(FUE191)		DATA NOT AVAILABLE	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

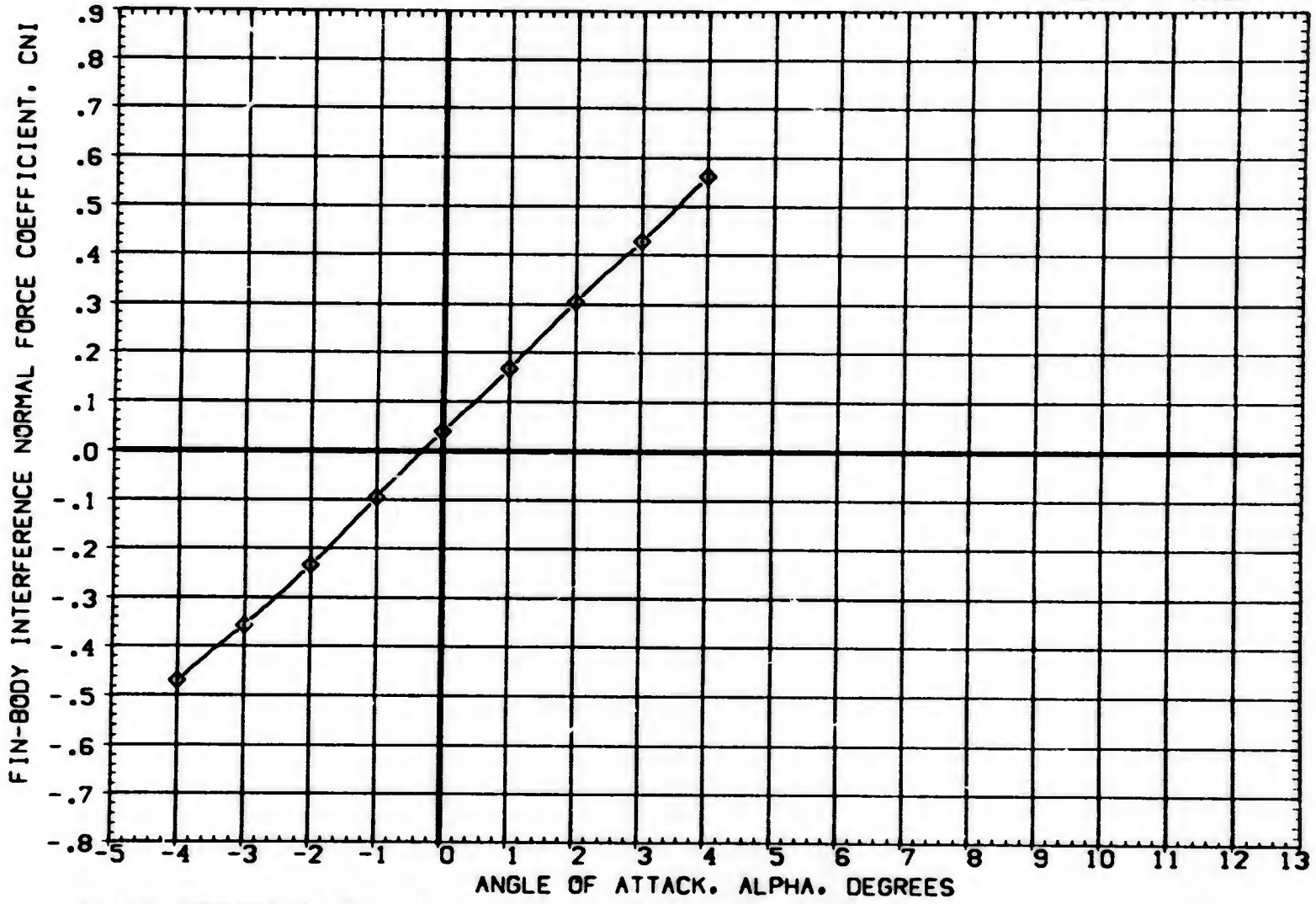


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE185)	DATA NOT AVAILABLE	.000	.000	3.000	37.500
(FUE186)	DATA NOT AVAILABLE	.000	.000	3.000	10.300
(FUE187)	CALSPAN THRUST EFFECTS STING MOUNTED NJ (DINIT1)	.000	.000	3.000	8.500
(FUE188)	DATA NOT AVAILABLE	.000	.000	3.000	7.200
(FUE190)	DATA NOT AVAILABLE	.000	.000	3.000	5.000
(FUE191)	DATA NOT AVAILABLE	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

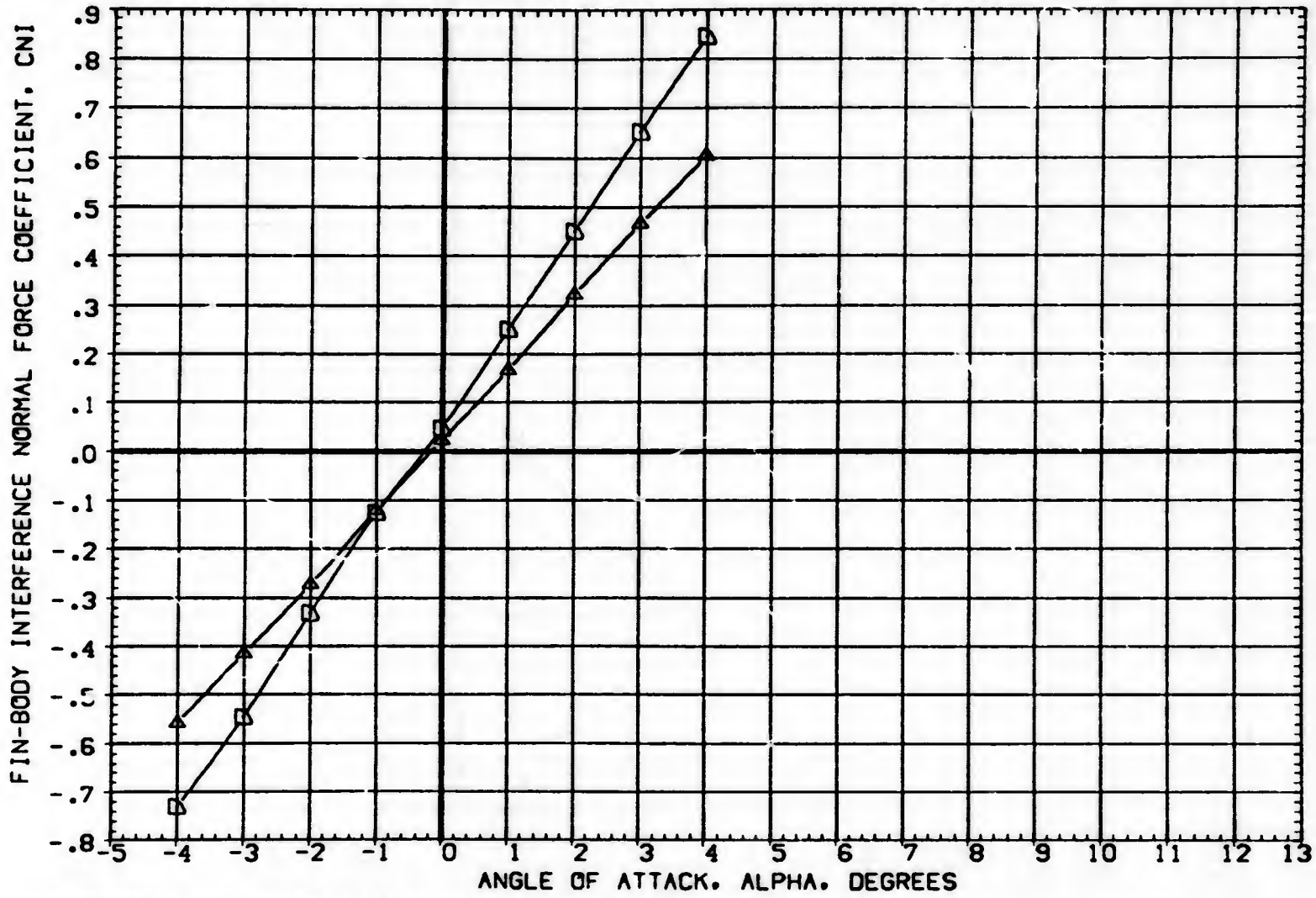


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE185) □	DATA NOT AVAILABLE	.000	.000	3.000	37.500
(FUE186) ◇	DATA NOT AVAILABLE	.000	.000	3.000	10.300
(FUE187) ⊠	DATA NOT AVAILABLE	.000	.000	3.000	8.500
(FUE188) △	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	7.200
(FUE190) ▽	DATA NOT AVAILABLE	.000	.000	3.000	5.000
(FUE191) ▷	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	4.200

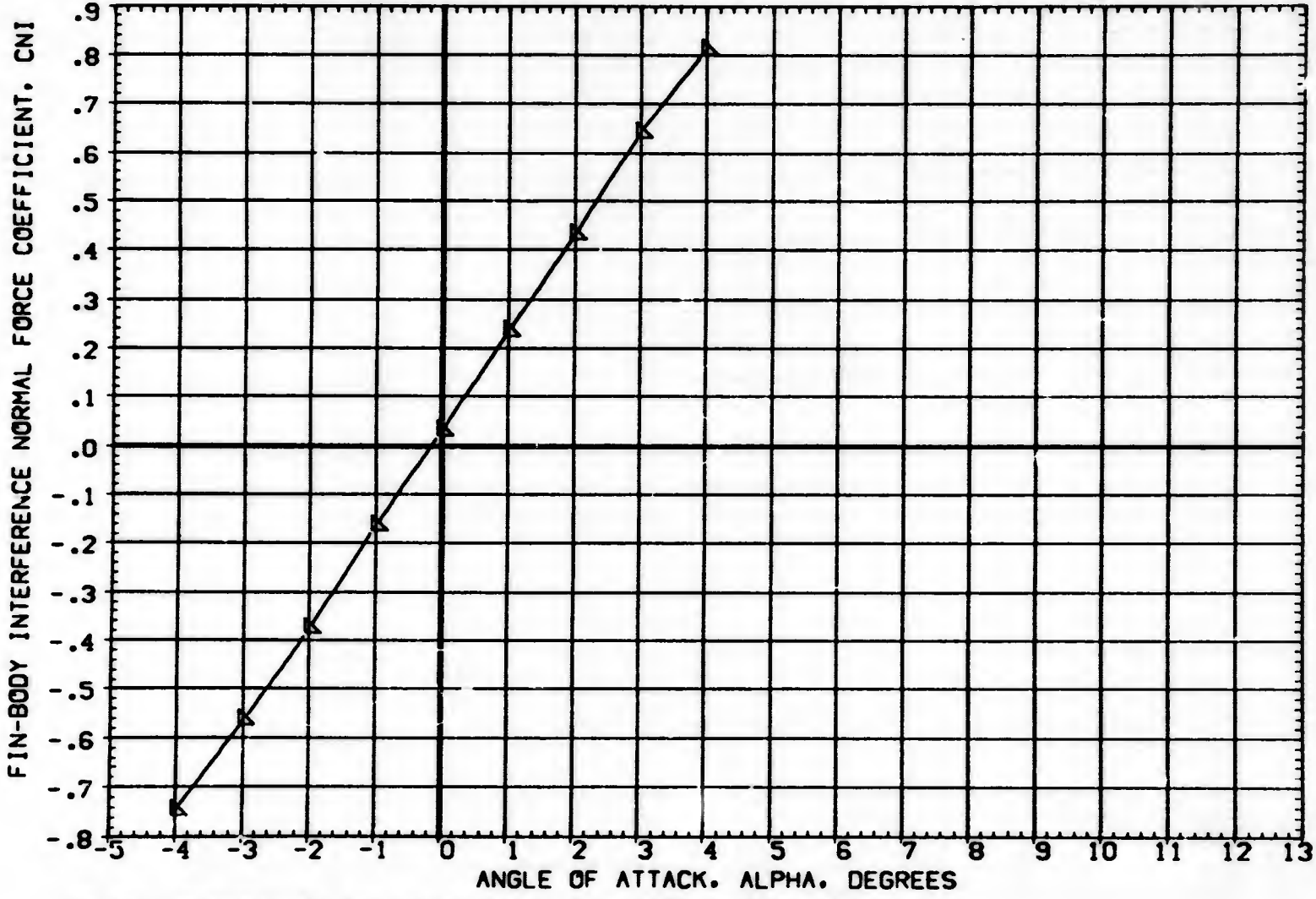
REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT	REFERENCE INFORMATION		
(FILE185)	□	DATA NOT AVAILABLE	.000	.000	3.000	37.500	SREF	19.6350	SQ.IN.
(FILE186)	◇	DATA NOT AVAILABLE	.000	.000	3.000	10.300	LREF	5.0000	IN.
(FILE187)	△	DATA NOT AVAILABLE	.000	.000	3.000	8.500	BREF	5.0000	IN.
(FILE188)	▽	DATA NOT AVAILABLE	.000	.000	3.000	7.200	XMRP	26.5000	IN.
(FILE190)	◁	CALSPAN THRUST EFFECTS STING MOUNTED W/ (BINIT1)	.000	.000	3.000	5.000	YMRP	.0000	IN.
(FILE191)	▷	DATA NOT AVAILABLE	.000	.000	3.000	4.200	ZMRP	.0000	IN.
							SCALE	.0000	

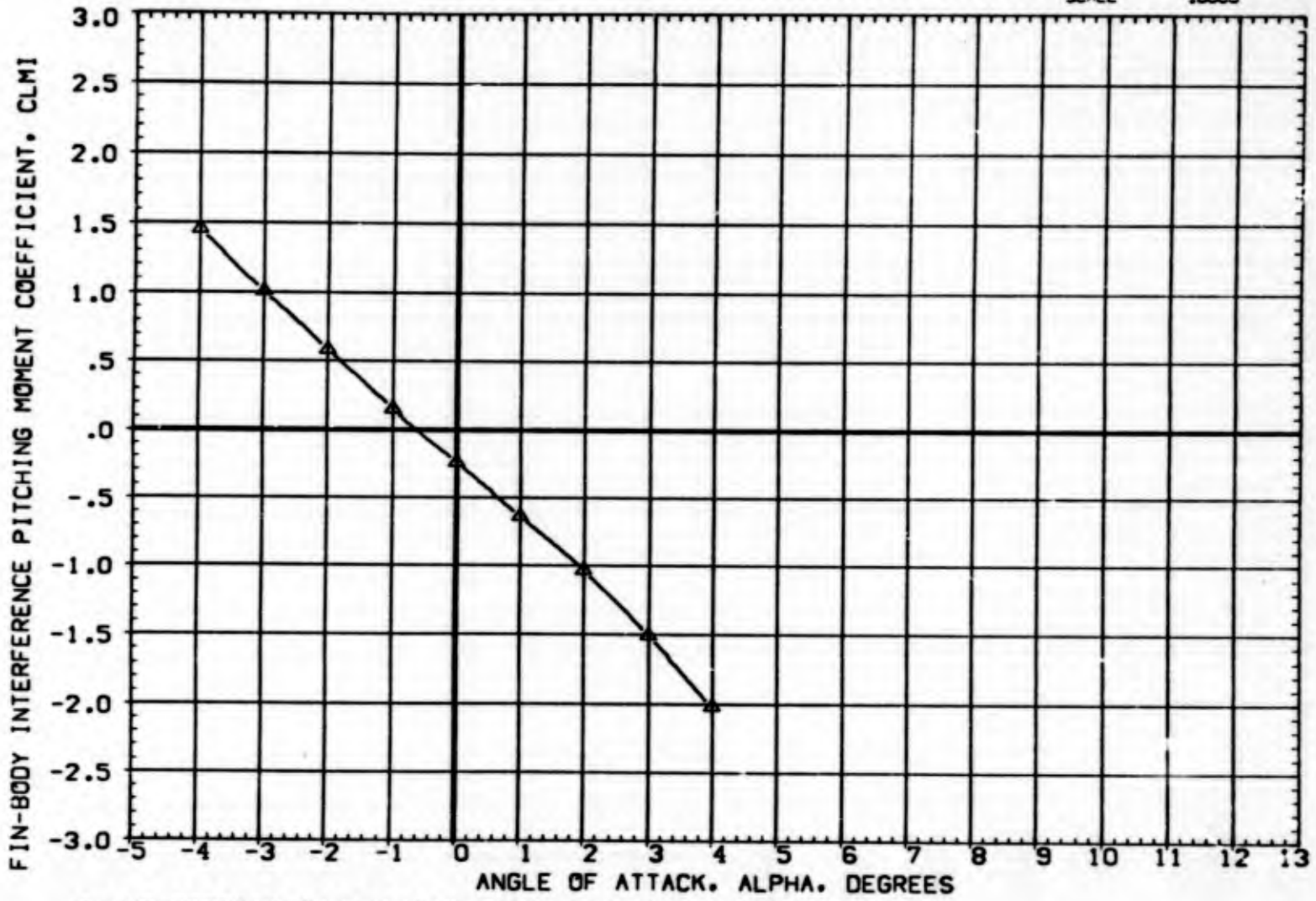


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FLE192)	□	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(FLE194)	⊠	DATA NOT AVAILABLE	.000	.000	3.000	2.500
(FLE195)	⊠	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(FLE196)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

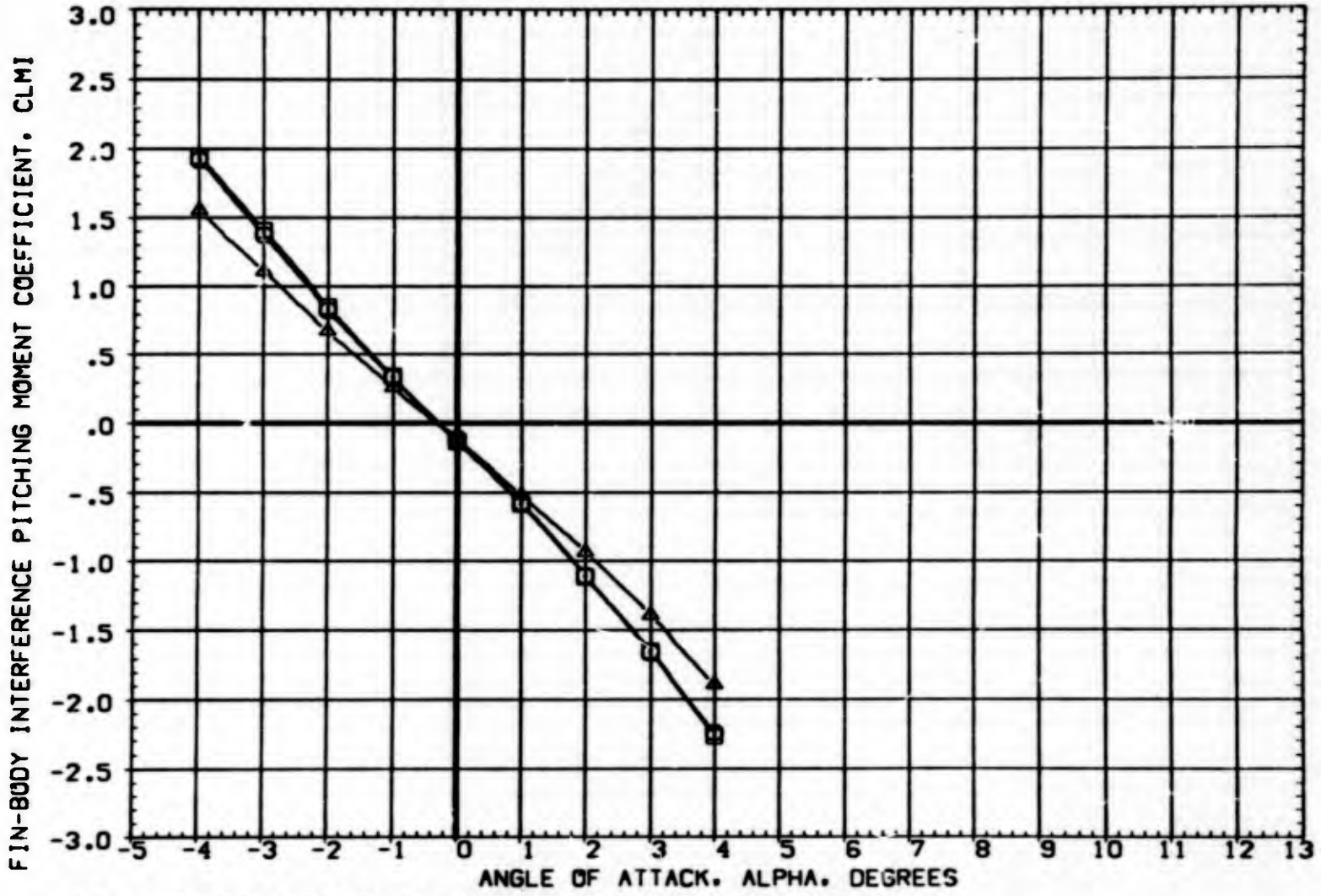


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE192)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	3.600
(FUE194)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500
(FUE195)	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(FUE196)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

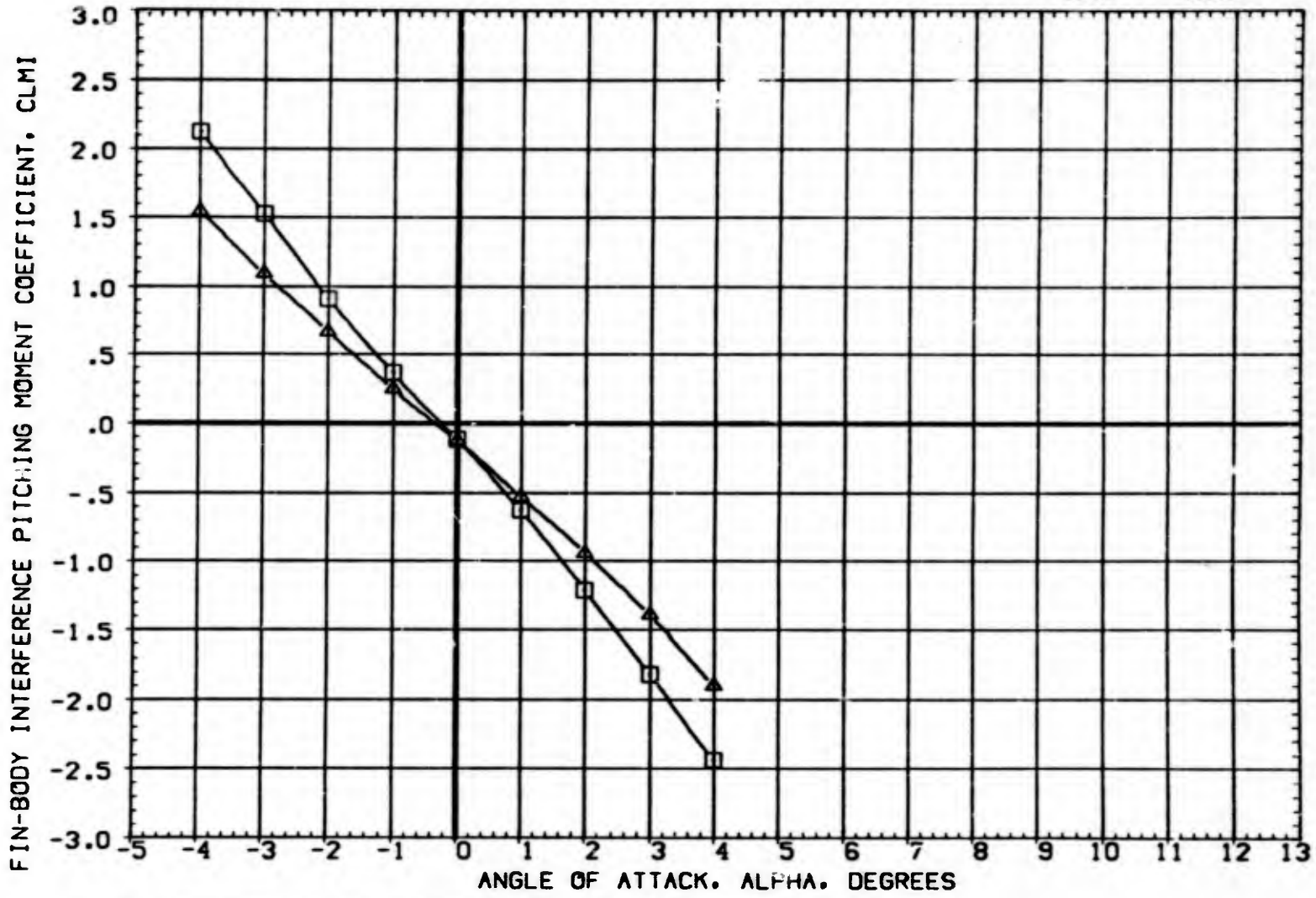


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE192)	□	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(FUE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	2.500
(FUE195)	△	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(FUE196)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

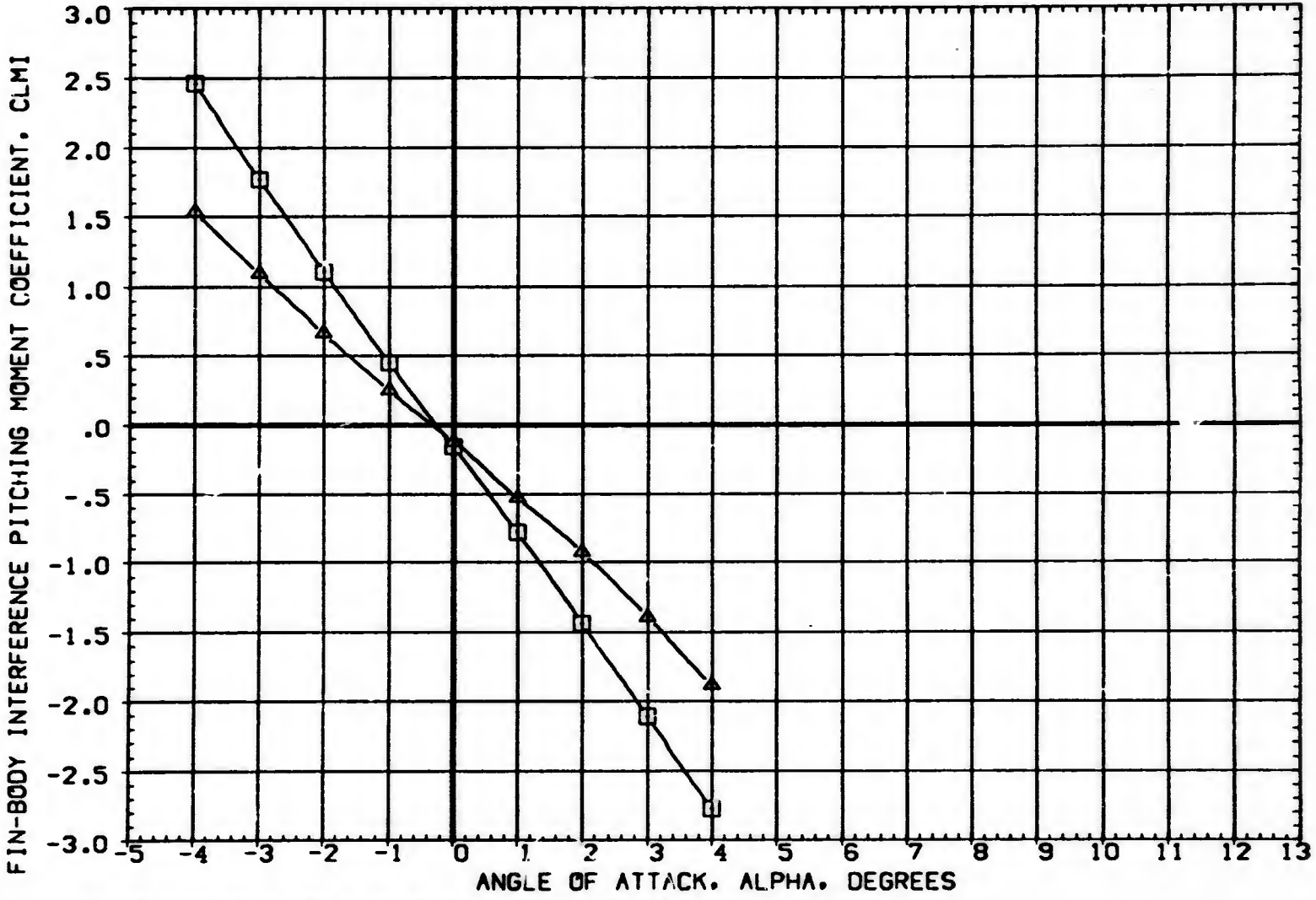


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE192)	□	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(FUE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT)	.000	.000	3.000	2.500
(FUE195)	⊠	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(FUE196)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

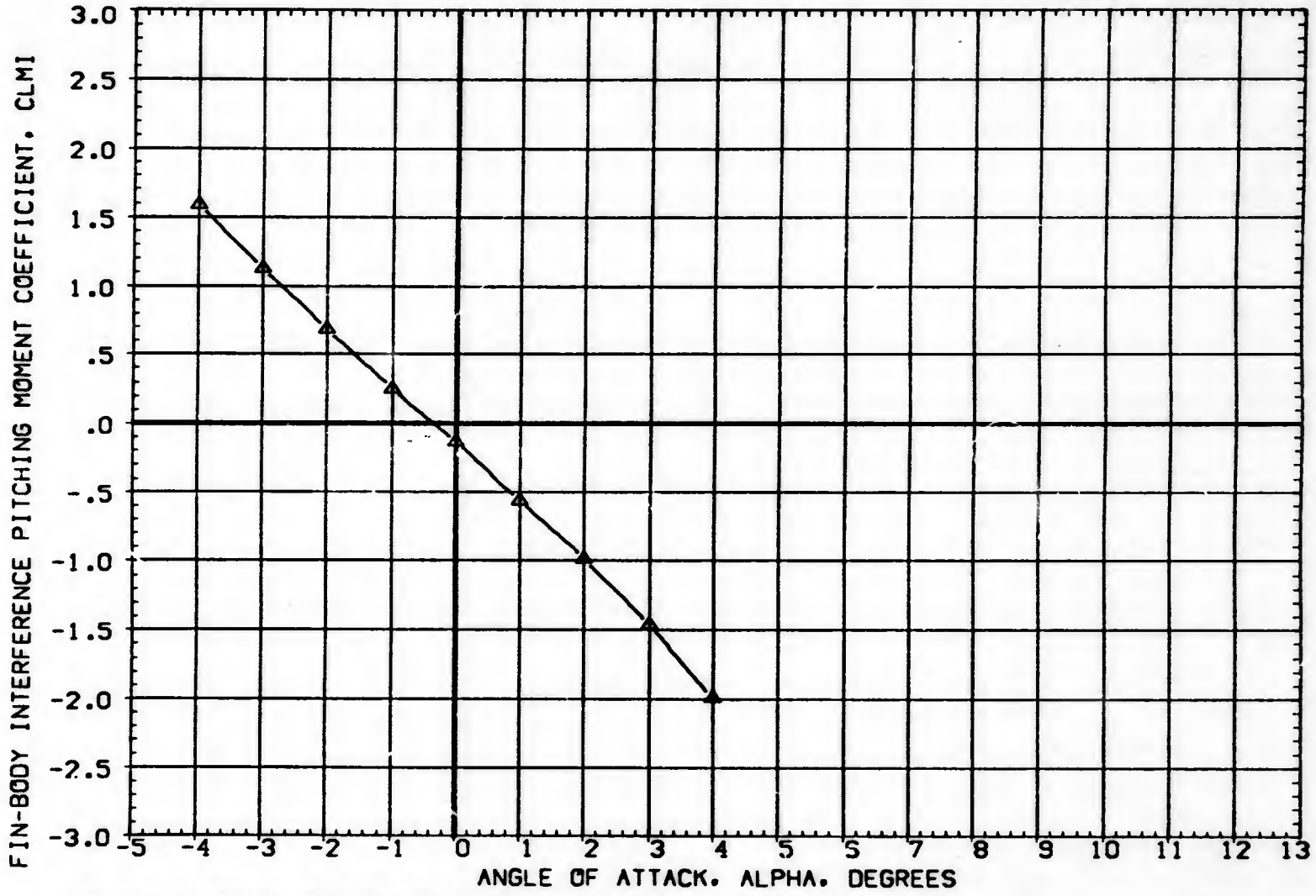


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FLE192)	◇	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(FLE194)	△	DATA NOT AVAILABLE	.000	.000	3.000	2.500
(FLE195)	⊠	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(FLE196)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED N/ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

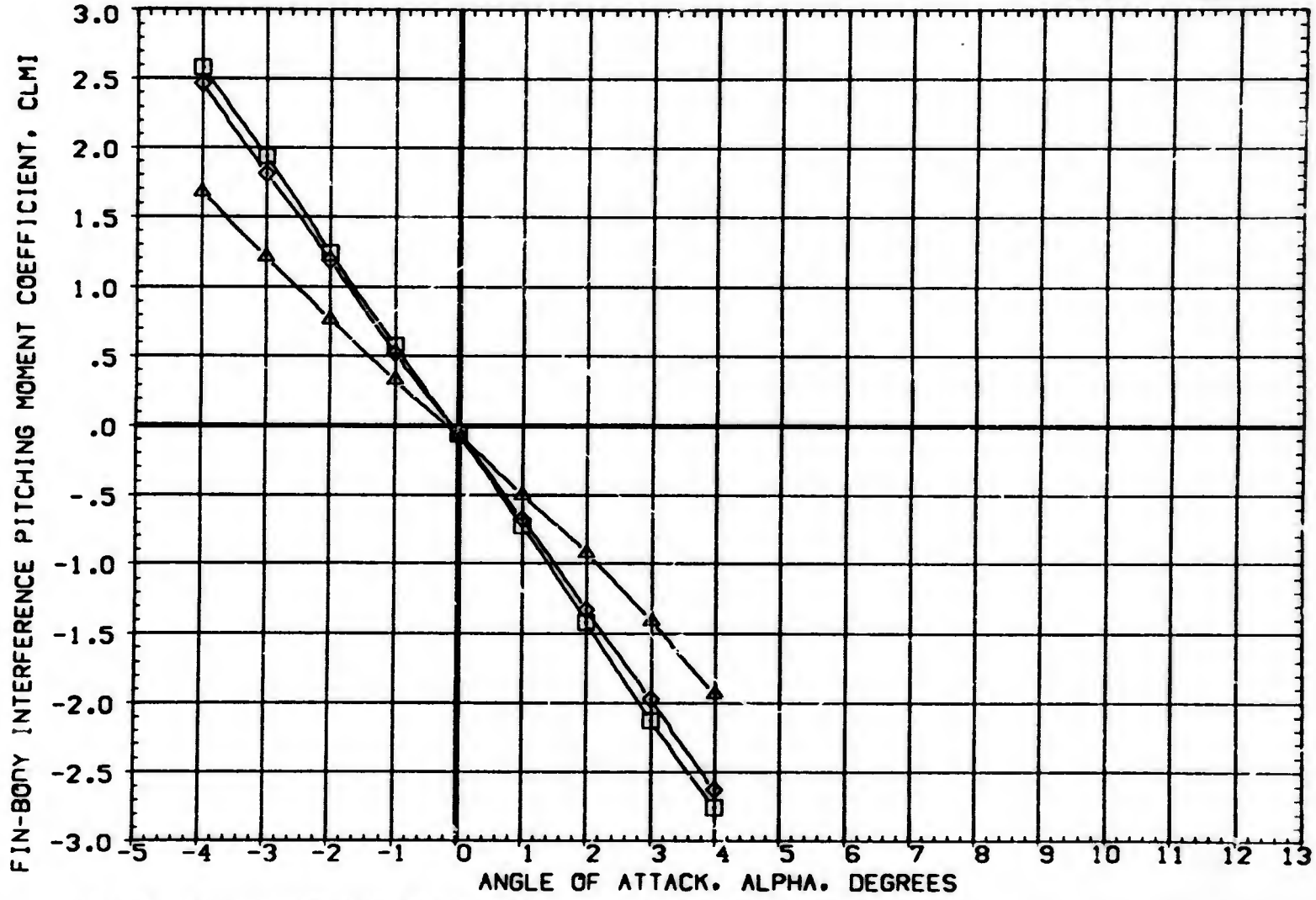


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MAC- = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE192)	□	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(FUE194)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	2.500
(FUE195)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	1.500
(FUE196)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

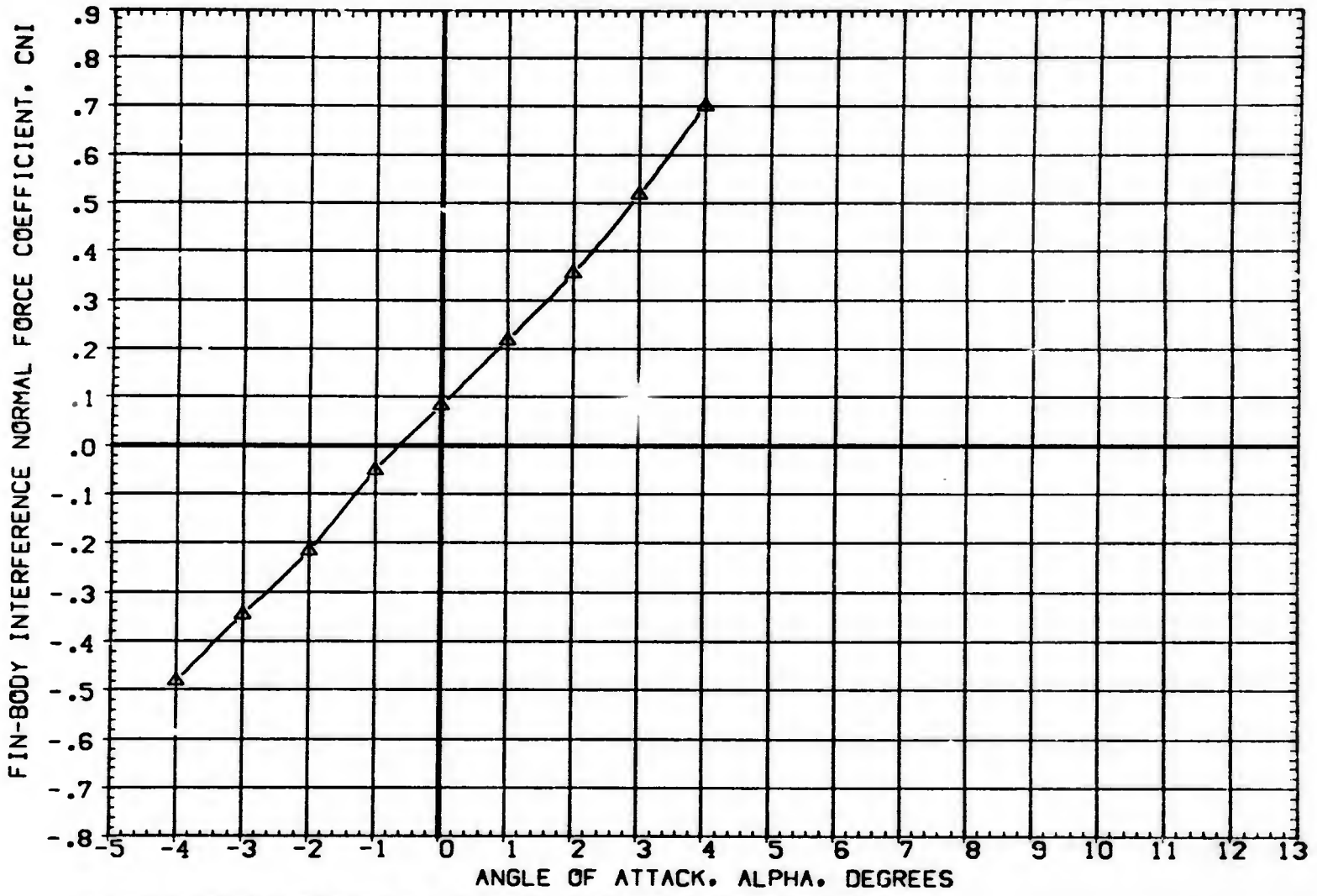


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
[FUE192]	○	DATA NOT AVAILABLE	.000	.000	3.000	3.600
[FUE194]	□	DATA NOT AVAILABLE	.000	.000	3.000	2.500
[FUE195]	⊠	DATA NOT AVAILABLE	.000	.000	3.000	1.500
[FUE196]	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

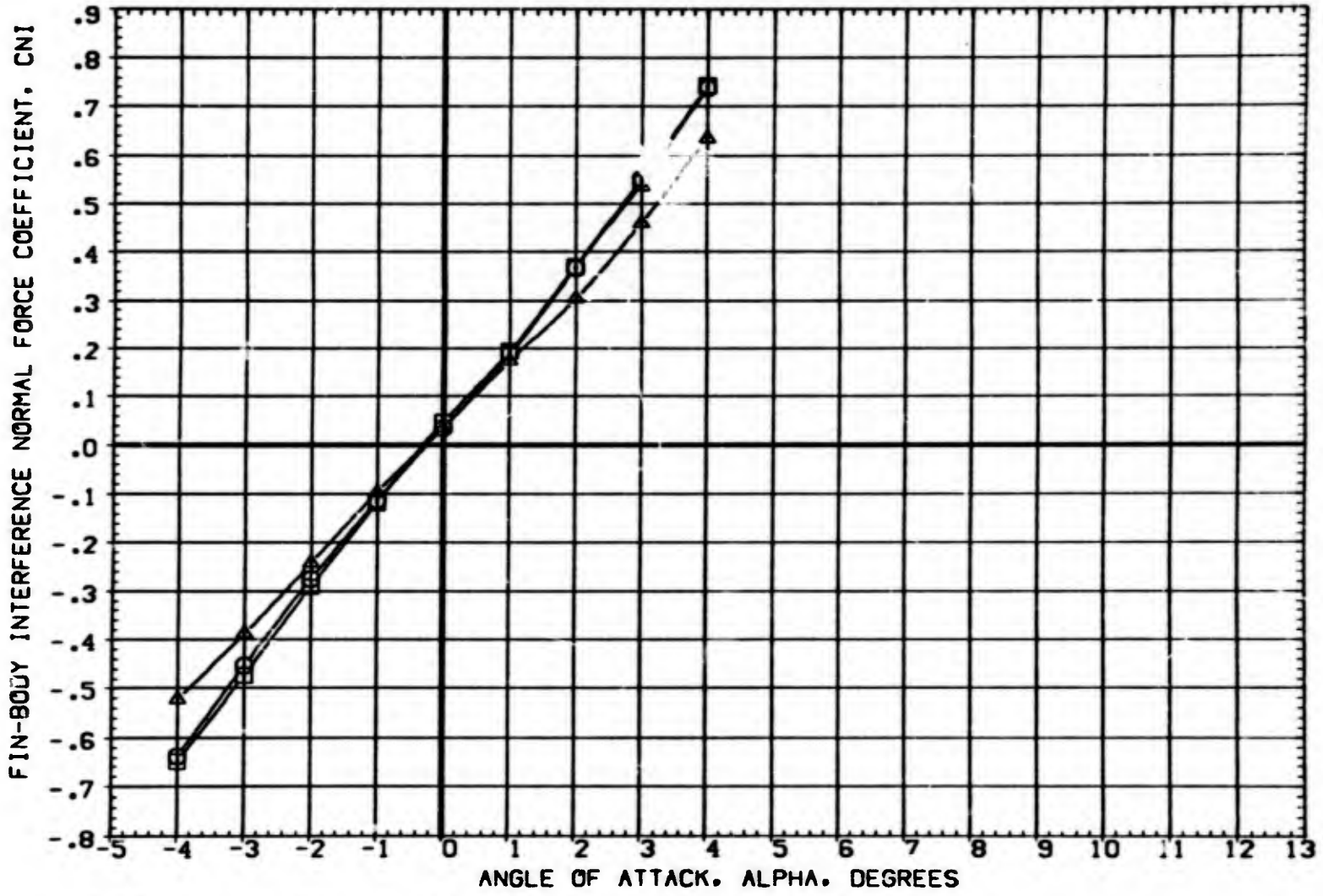


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

[A]MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE192)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	3.600
(FUE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500
(FUE195)	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(FUE196)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

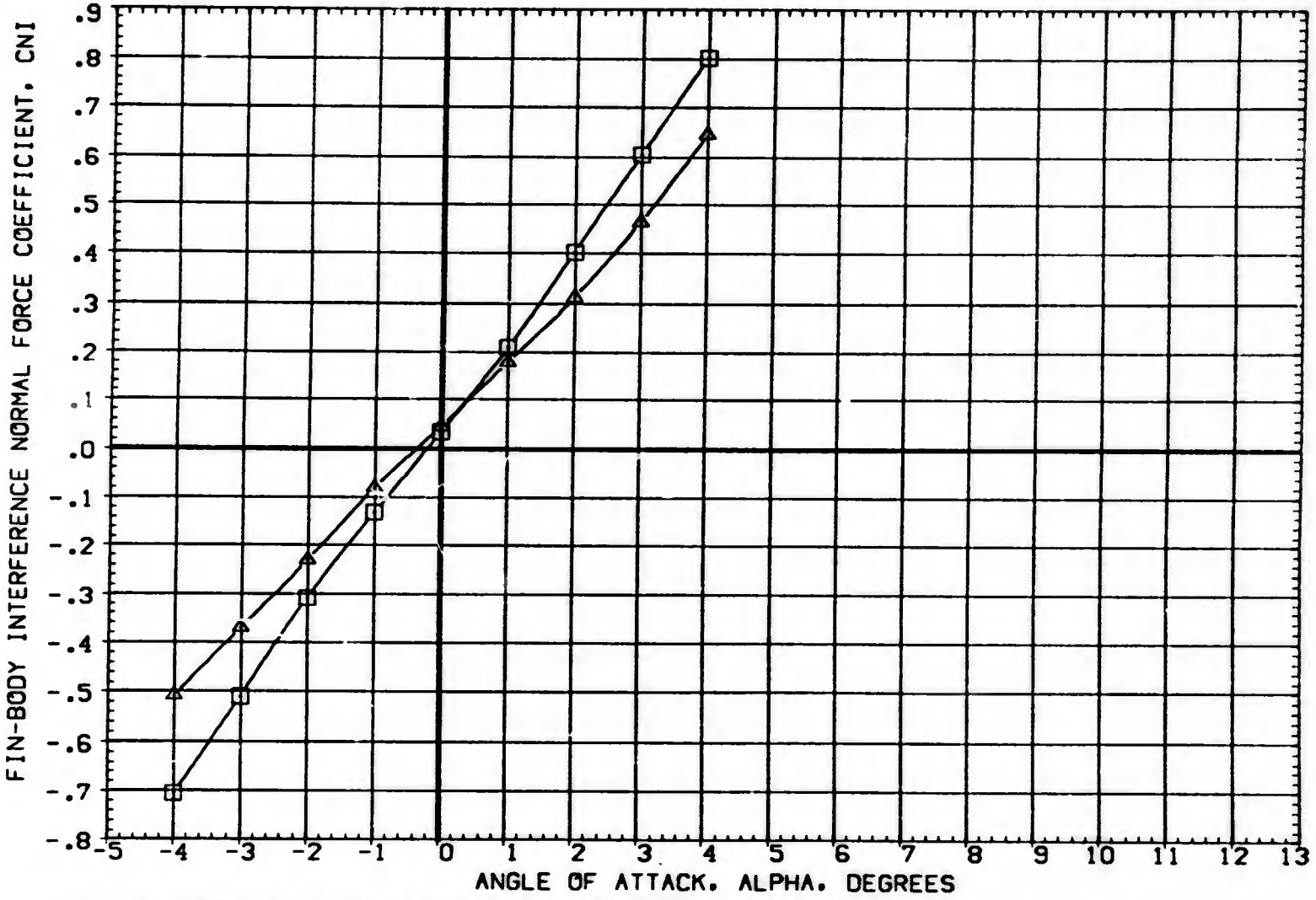


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE192)	□	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(FUE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500
(FUE195)	⊠	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(FUE196)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

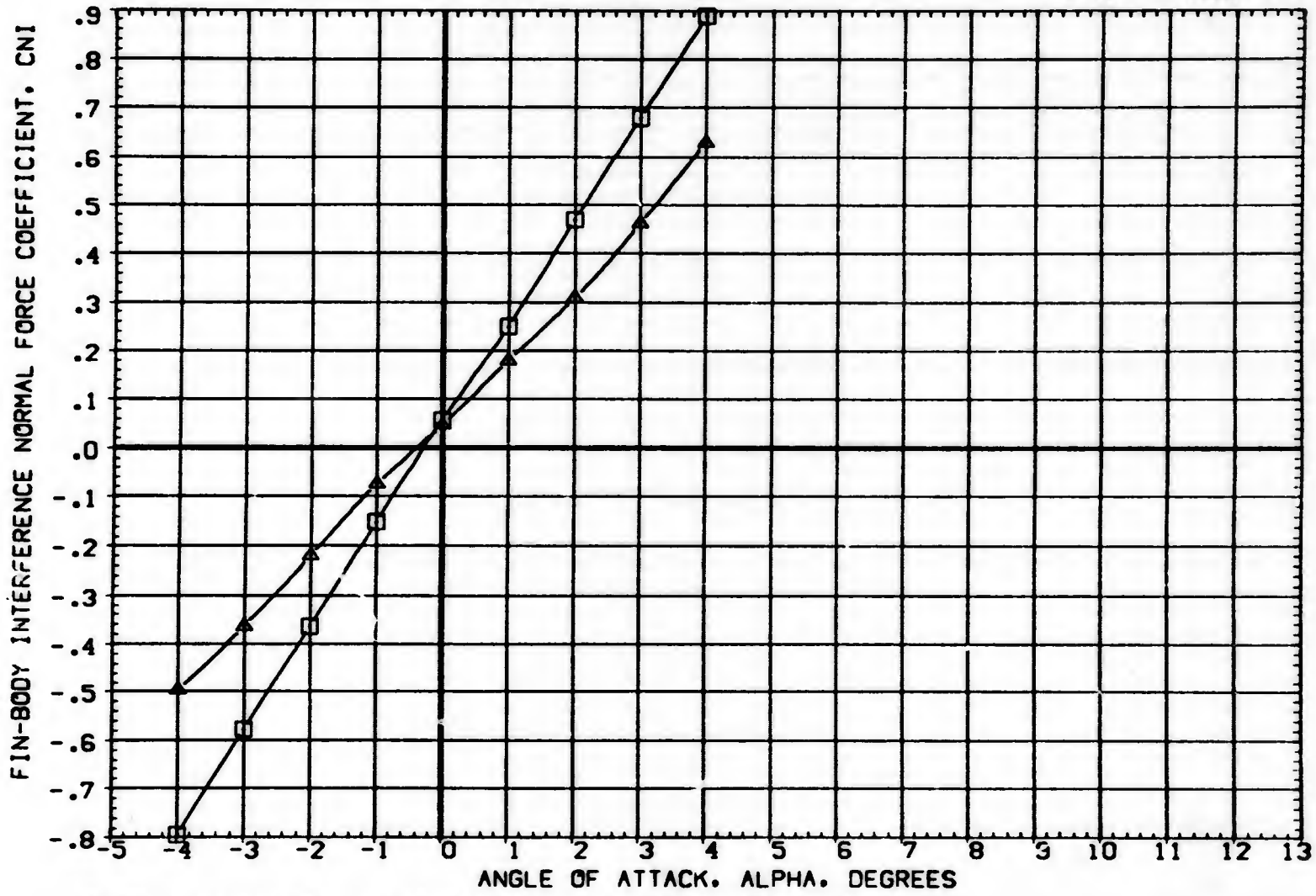


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(C)MAC = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FILE192)	□	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(FILE194)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500
(FILE195)	⋈	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(FILE196)	⋈	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

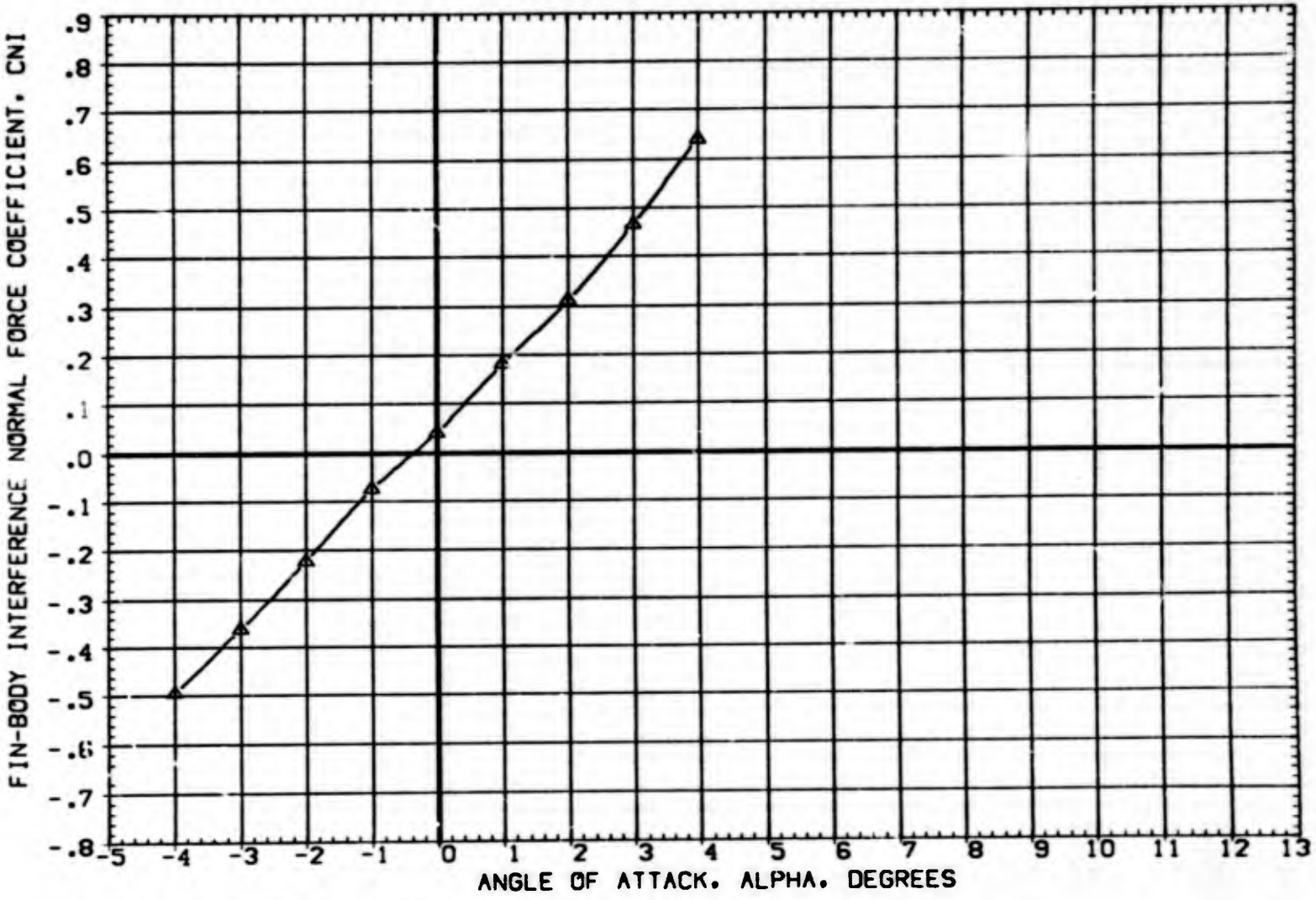


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(D)MACH = 1.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(FUE192) □	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(FUE194) ◇	DATA NOT AVAILABLE	.000	.000	3.000	2.500
(FUE195) ⊠	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(FUE196) △	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	
BREF	5.0000	
XMRP	26.5000	
YMRP	.0000	
ZMRP	.0000	
SCALE	.0000	

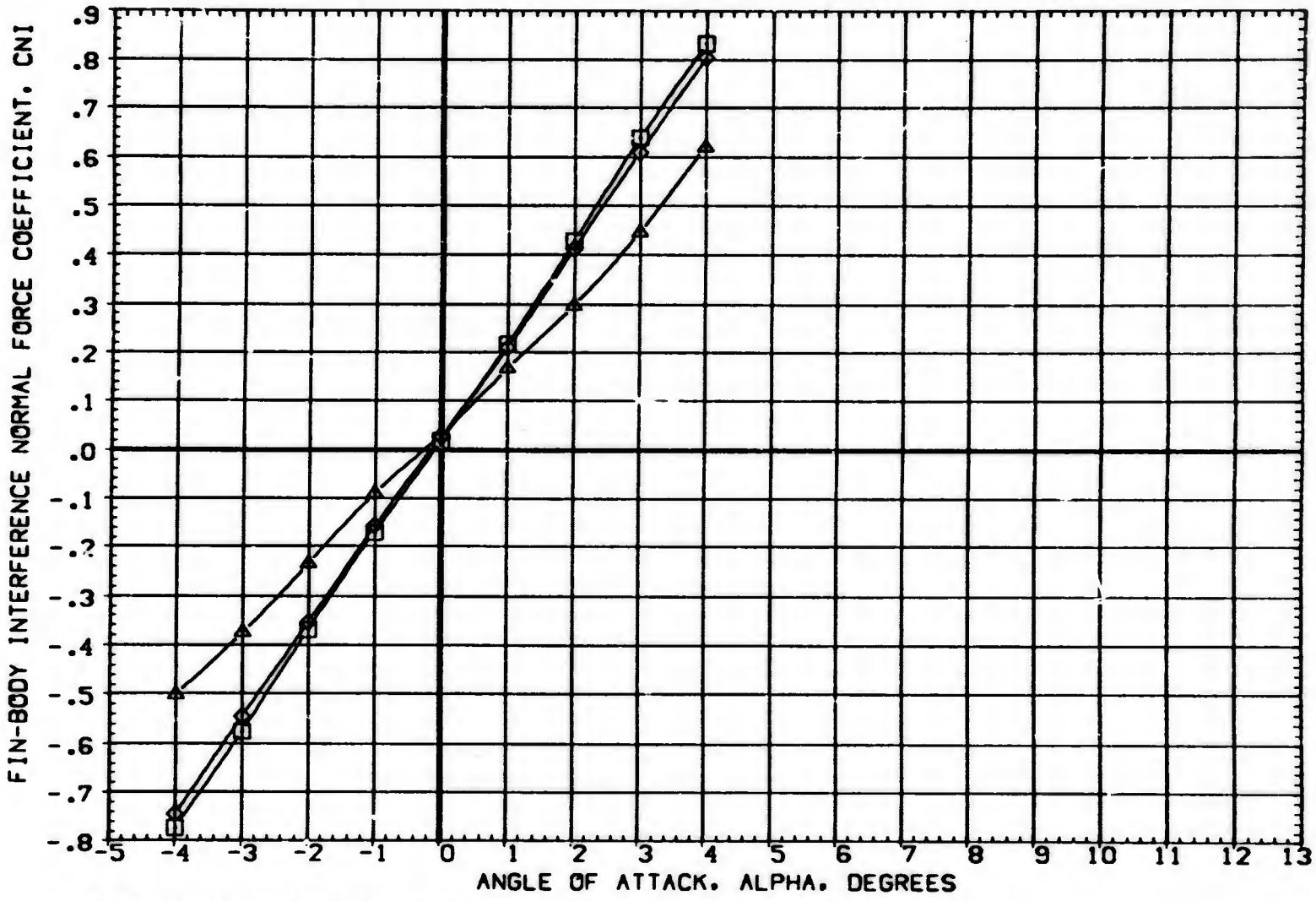


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(E)MAC- = 1.10

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(FUE192)	□	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(FUE194)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500
(FUE195)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	1.500
(FUE196)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

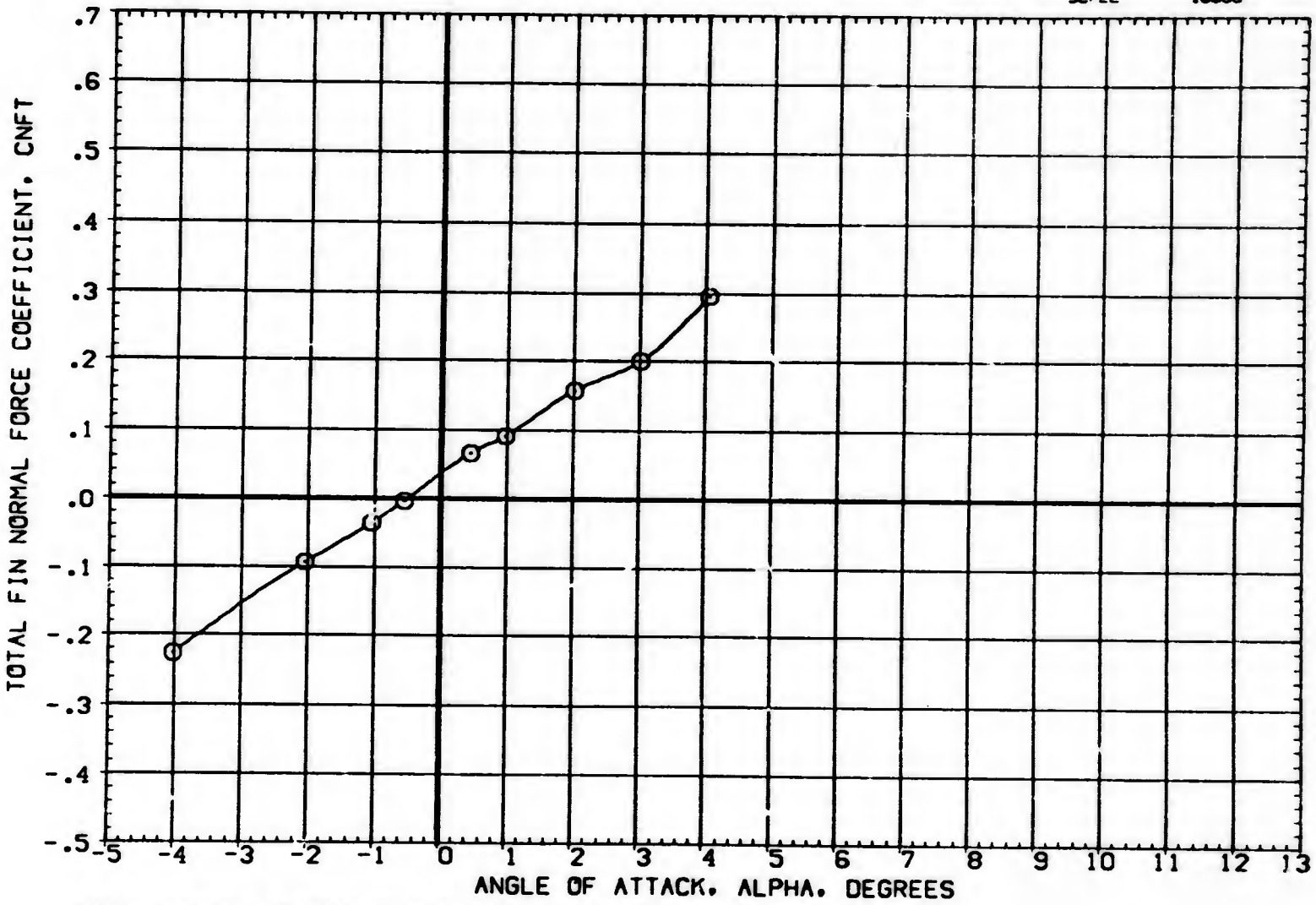


PLUME EFFECTS ON FIN PLUS TOTAL FIN-BODY INTERFERENCE

(F)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(GUE185)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT)	.000	.000	3.000	37.500
(GUE186)		DATA NOT AVAILABLE	.000	.000	3.000	10.300
(GUE187)		DATA NOT AVAILABLE	.000	.000	3.000	8.500
(GUE188)		DATA NOT AVAILABLE	.000	.000	3.000	7.200
(GUE189)		DATA NOT AVAILABLE	.000	.000	3.000	5.000
(GUE19:)		DATA NOT AVAILABLE	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

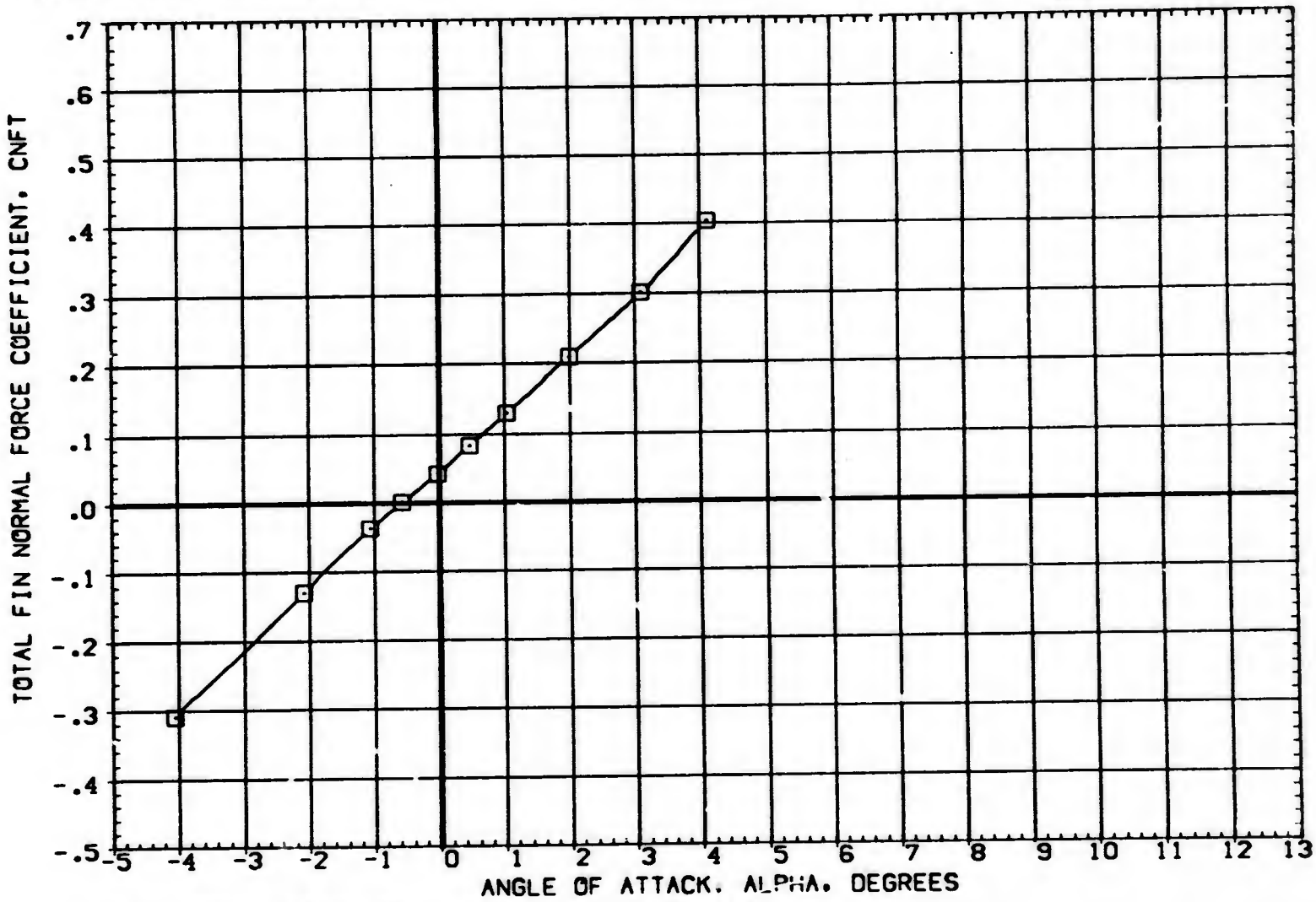


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 3

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(GJE185)	□	DATA NOT AVAILABLE	.000	.000	3.000	37.500
(GJE186)	○	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	10.300
(GJE187)	◇	DATA NOT AVAILABLE	.000	.000	3.000	8.500
(GJE188)	△	DATA NOT AVAILABLE	.000	.000	3.000	7.200
(GJE190)	▷	DATA NOT AVAILABLE	.000	.000	3.000	5.000
(GJE191)	⬠	DATA NOT AVAILABLE	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

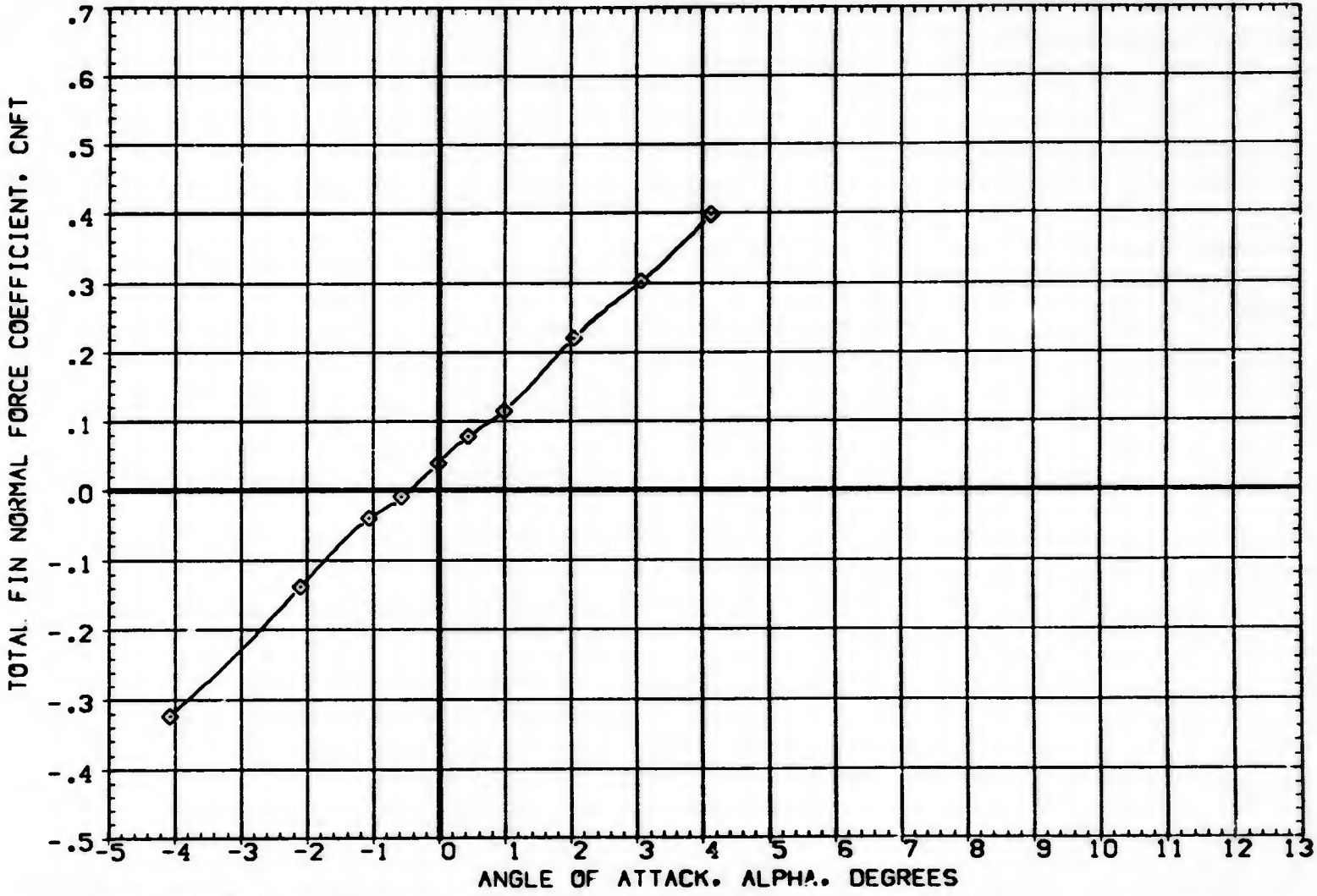


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 3

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(QJE185)		DATA NOT AVAILABLE	.000	.000	3.000	37.500
(QJE186)		DATA NOT AVAILABLE	.000	.000	3.000	10.300
(QJE187)		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	8.500
(QJE188)		DATA NOT AVAILABLE	.000	.000	3.000	7.200
(QJE190)		DATA NOT AVAILABLE	.000	.000	3.000	5.000
(QJE191)		DATA NOT AVAILABLE	.000	.000	3.000	4.200

REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000

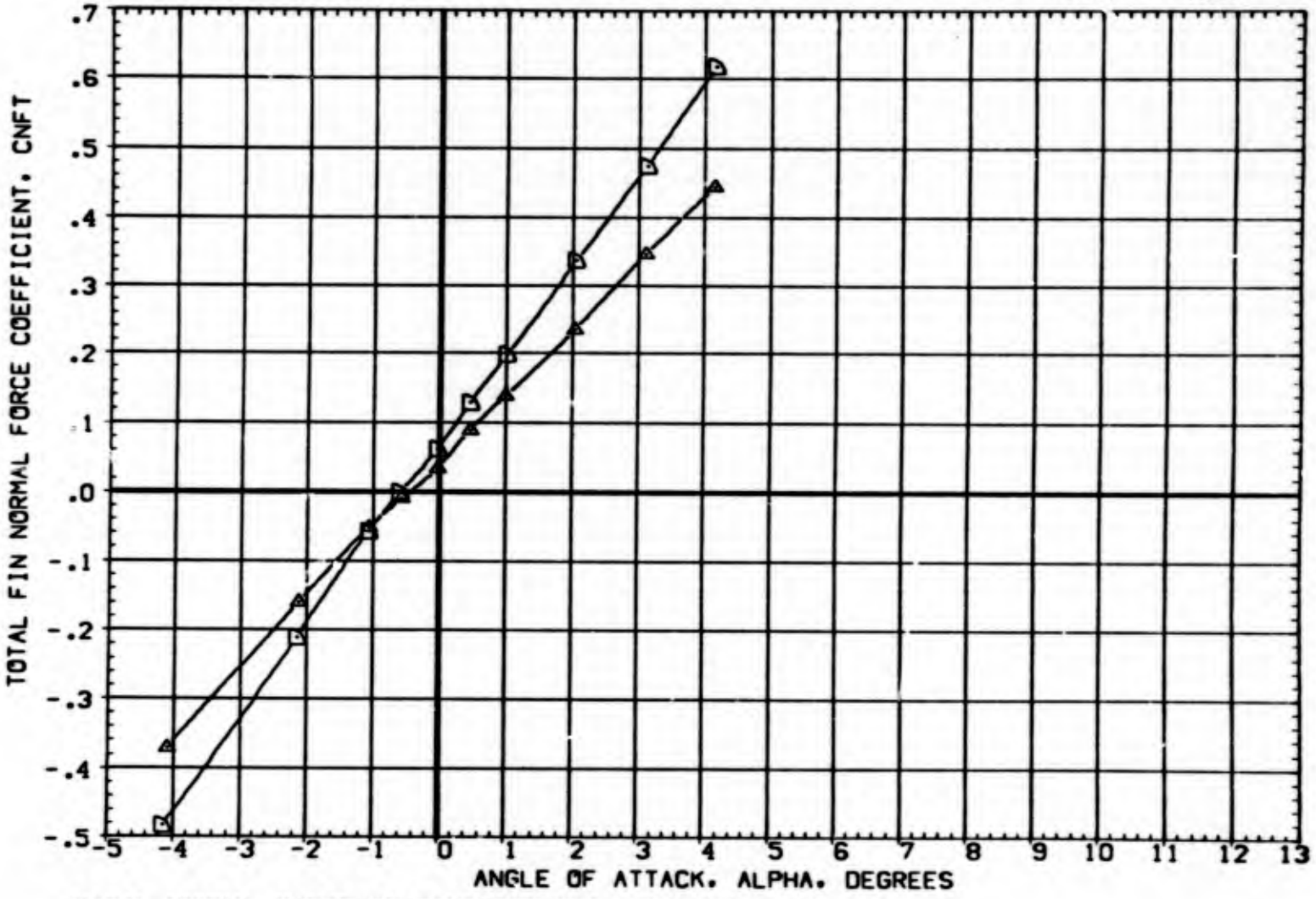


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 3

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE185)	□	DATA NOT AVAILABLE	.000	.000	3.000	27.500
(GJE186)	◇	DATA NOT AVAILABLE	.000	.000	3.000	10.300
(GJE187)	△	DATA NOT AVAILABLE	.000	.000	3.000	8.500
(GJE188)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	7.200
(GJE190)	▷	DATA NOT AVAILABLE	.000	.000	3.000	5.000
(GJE191)	◁	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

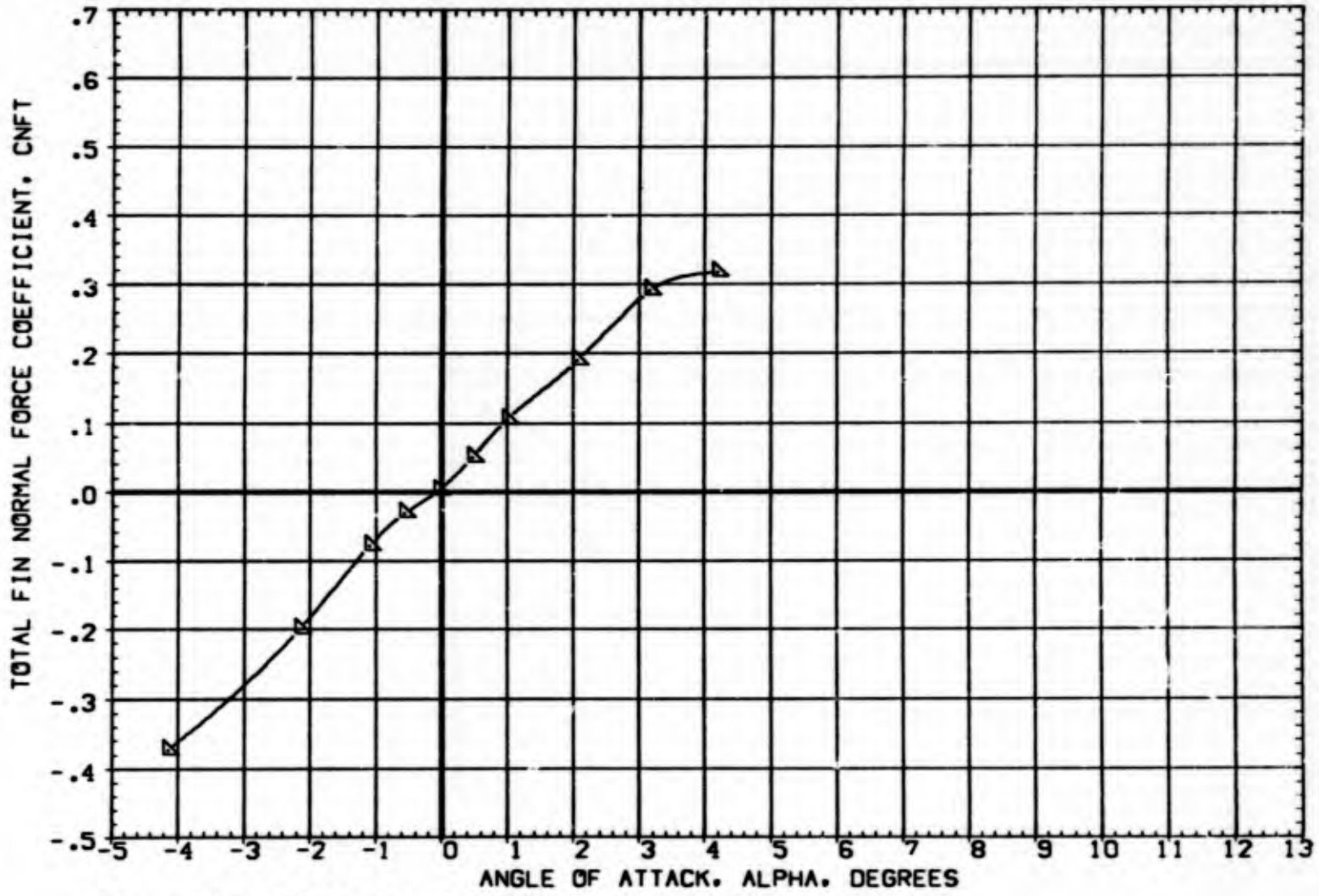


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 3

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE185)	□	DATA NOT AVAILABLE	.000	.000	3.000	37.500
(GJE186)	◇	DATA NOT AVAILABLE	.000	.000	3.000	10.300
(GJE187)	△	DATA NOT AVAILABLE	.000	.000	3.000	8.500
(GJE188)	○	DATA NOT AVAILABLE	.000	.000	3.000	7.200
(GJE190)	▽	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	5.000
(GJE191)	⊲	DATA NOT AVAILABLE	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

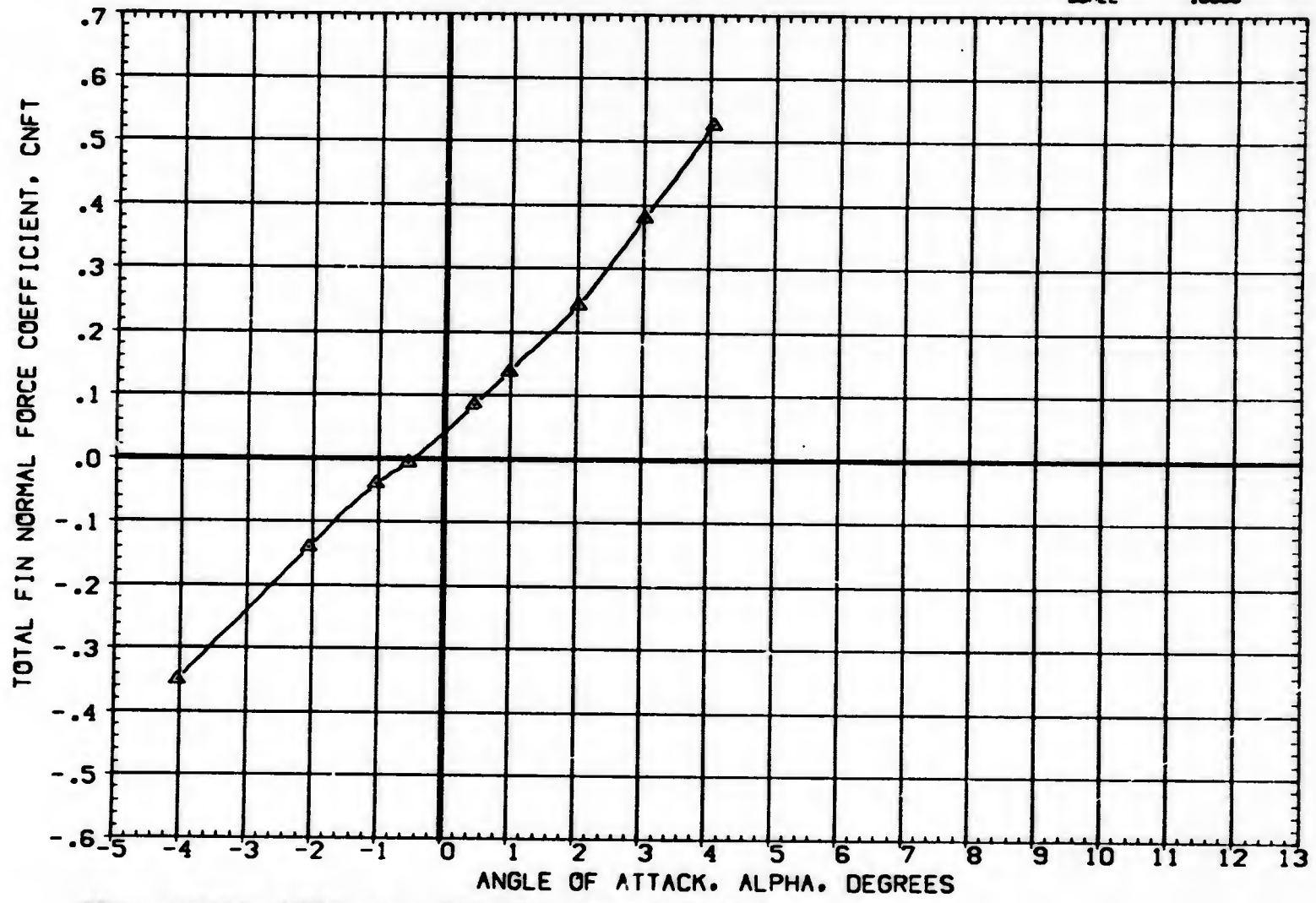


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 3

(E)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GJE192)	□	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(GJE194)	◇	DATA NOT AVAILABLE	.000	.000	3.000	2.500
(GJE195)	⊠	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(GJE196)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.3000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

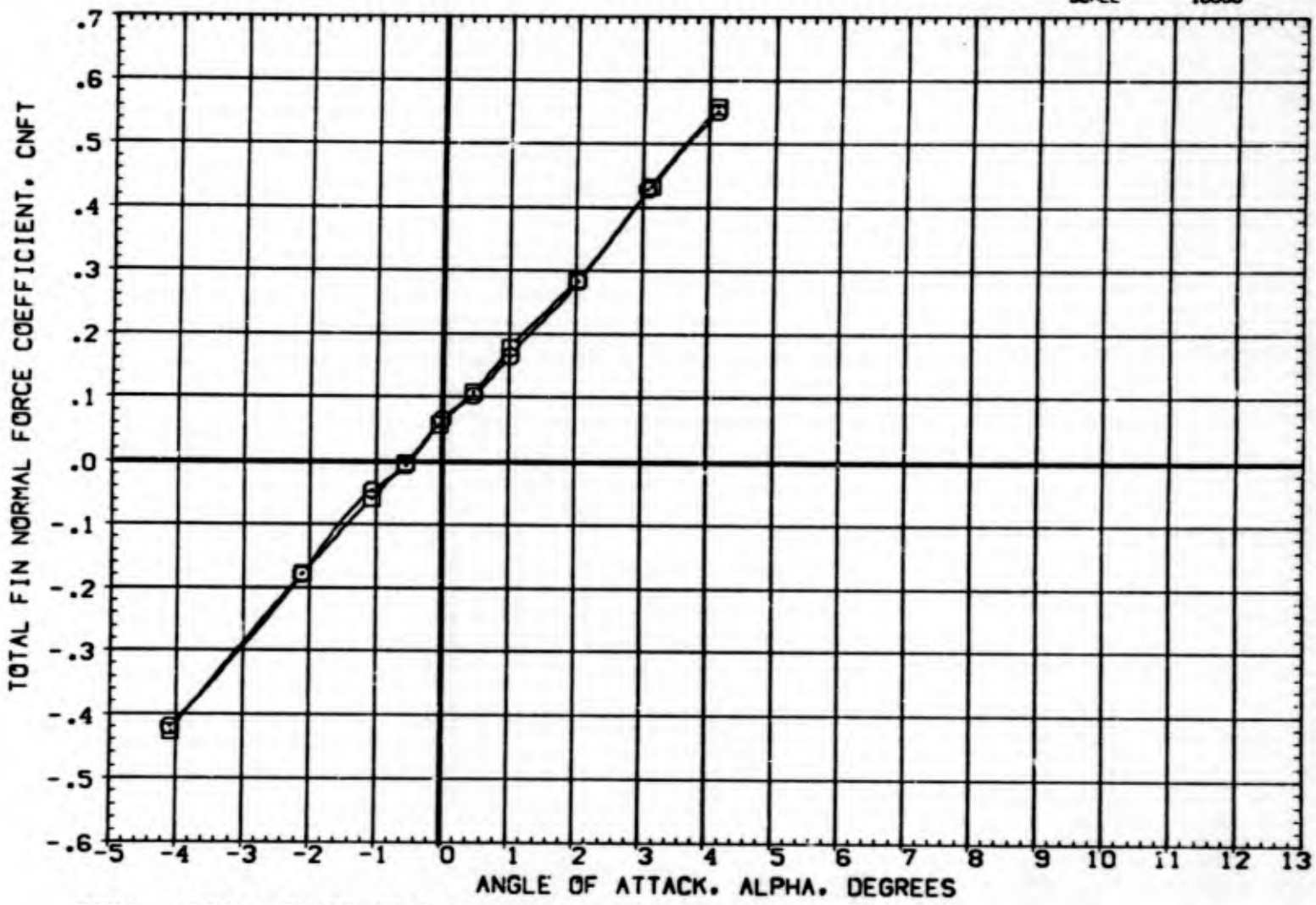


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 3

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(QUE192)	○	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT)	.000	.000	3.000	3.600
(QUE194)	□	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT)	.000	.000	3.000	2.500
(QUE195)	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(QUE196)	△	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

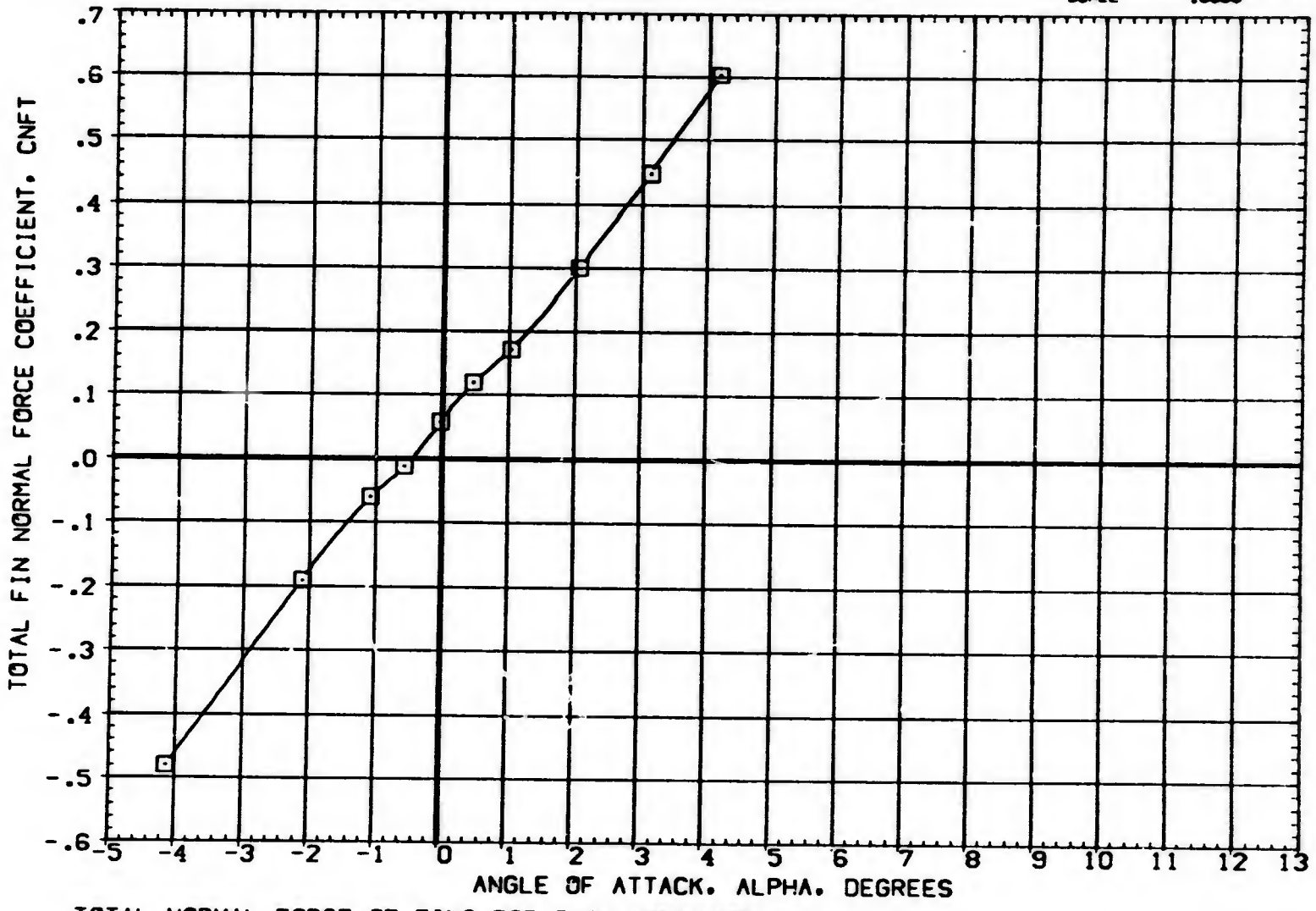


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 3

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(GJE192)	○	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(GJE194)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500
(GJE195)	◇	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(GJE196)	△	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ. IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

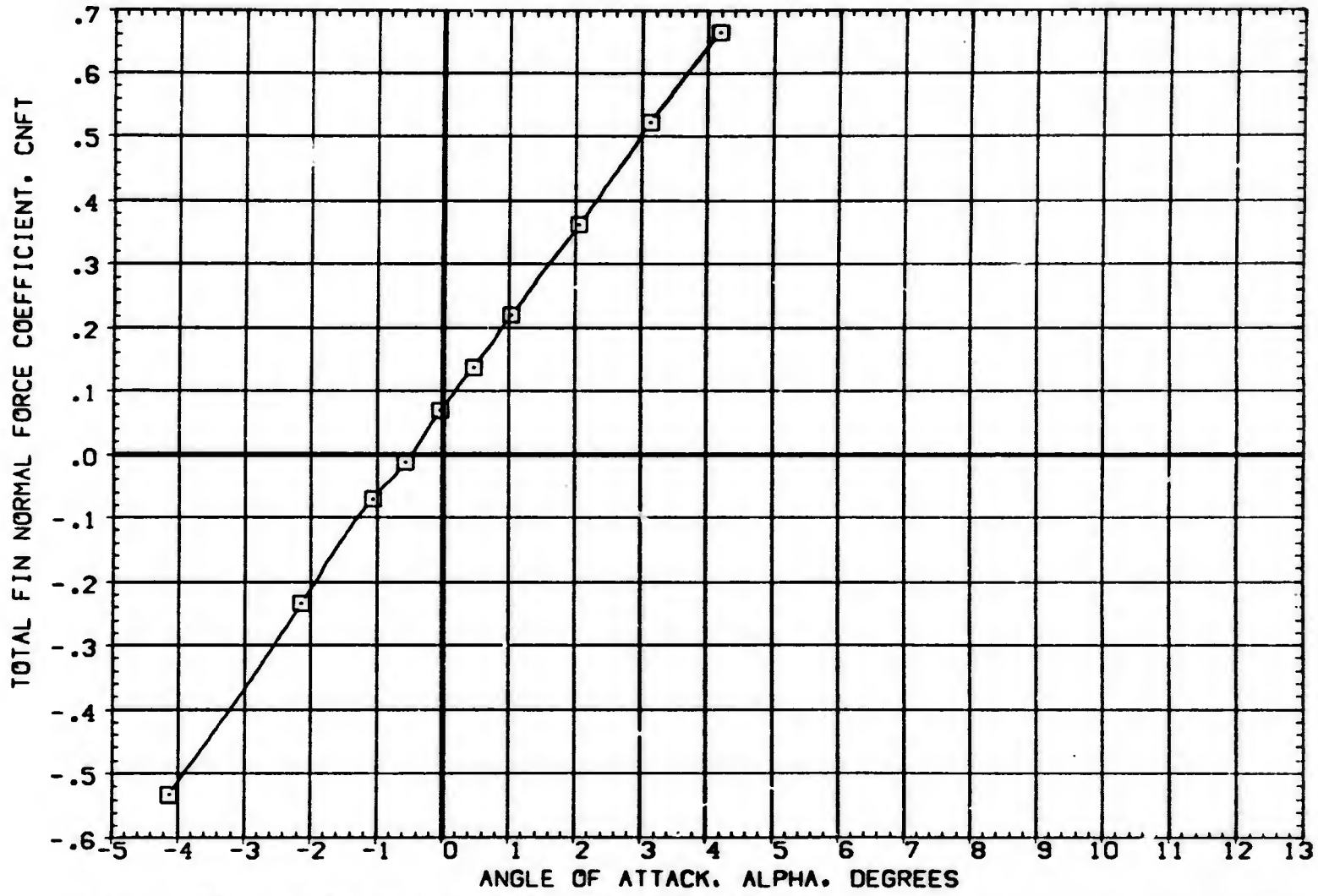


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 3

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[GJE192]	□	DATA NOT AVAILABLE	.000	.000	3.000	3.600
[GJE194]	◇	CALSPAN THRUST EFFECTS STING MOUNTED W/ [BINIT]	.000	.000	3.000	2.500
[GJE195]	⊠	DATA NOT AVAILABLE	.000	.000	3.000	1.500
[GJE196]	△	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

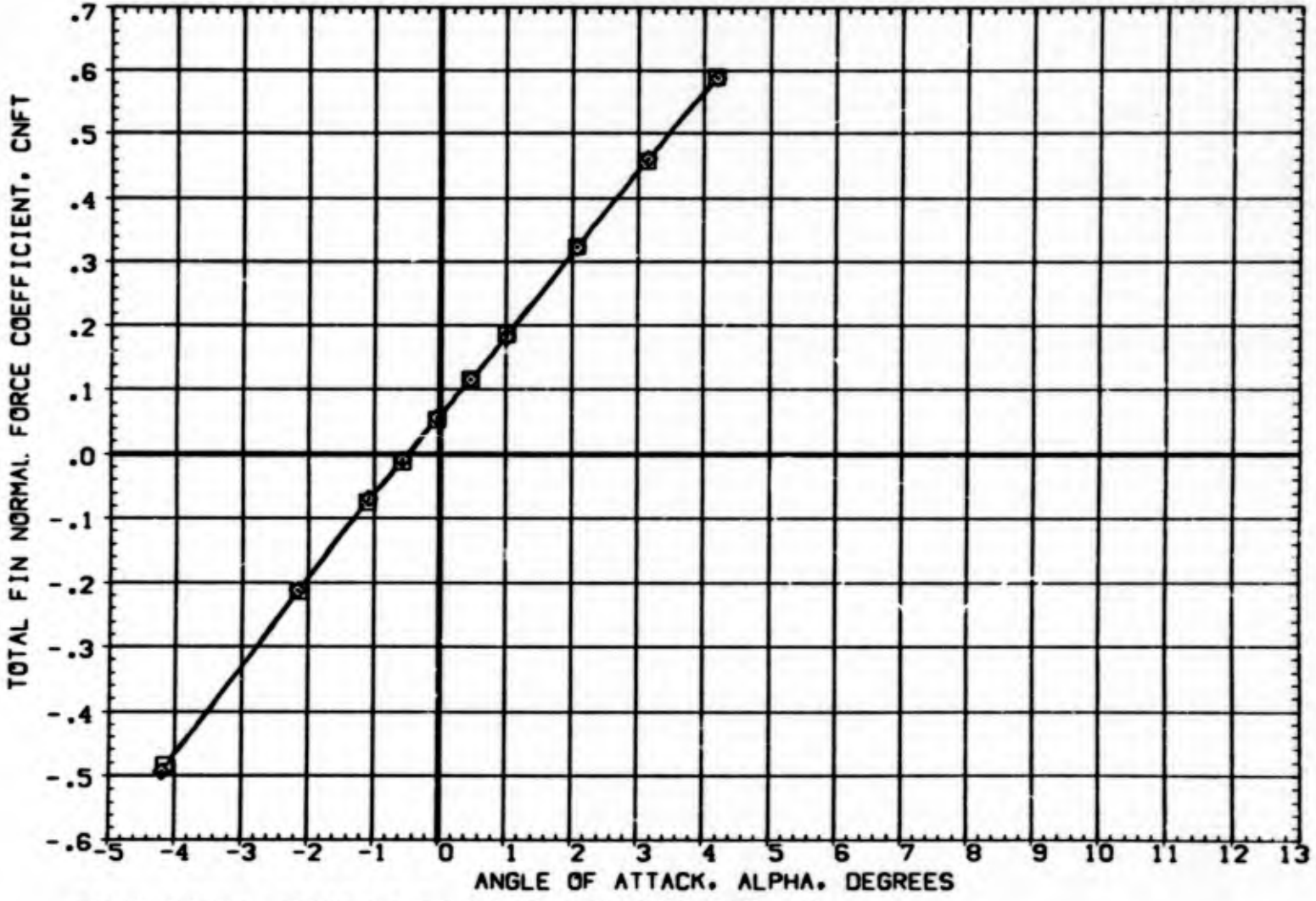


TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 3

[D]MACH = 1.00

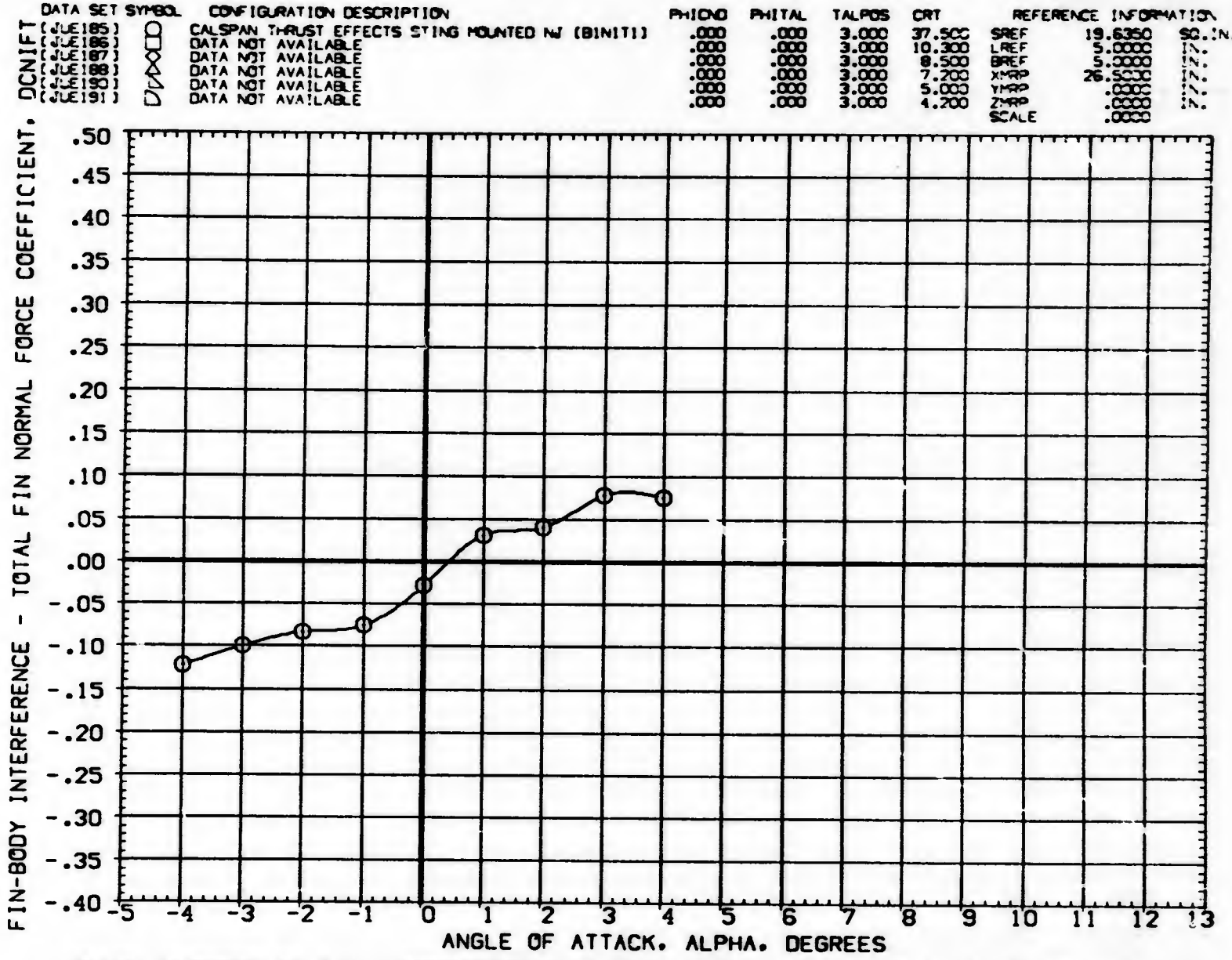
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(GLE192)	□	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(GLE194)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500
(GLE195)	⊠	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	1.500
(GLE196)	△	DATA NOT AVAILABLE	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



TOTAL NORMAL FORCE OF FINS FOR TAIL POSITION = 3

(E)MACH = 1.25

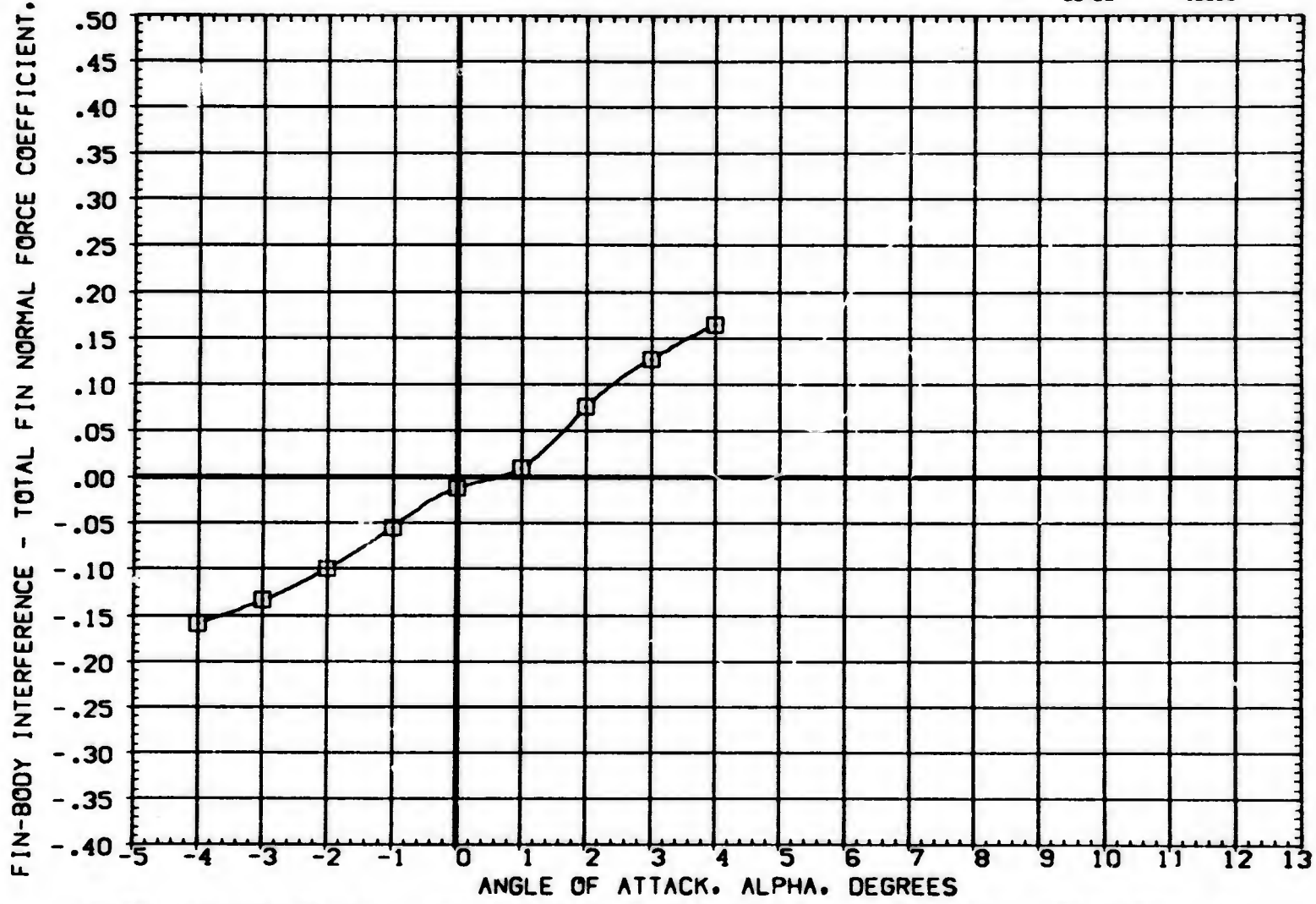


PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 3

(A)MACH = .40

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(JUE185)	□	DATA NOT AVAILABLE	.000	.000	3.000	37.500
(JUE186)	◇	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	10.300
(JUE187)	⊠	DATA NOT AVAILABLE	.000	.000	3.000	8.500
(JUE188)	⊞	DATA NOT AVAILABLE	.000	.000	3.000	7.200
(JUE190)	▽	DATA NOT AVAILABLE	.000	.000	3.000	5.000
(JUE191)	▷	DATA NOT AVAILABLE	.000	.000	3.000	4.200

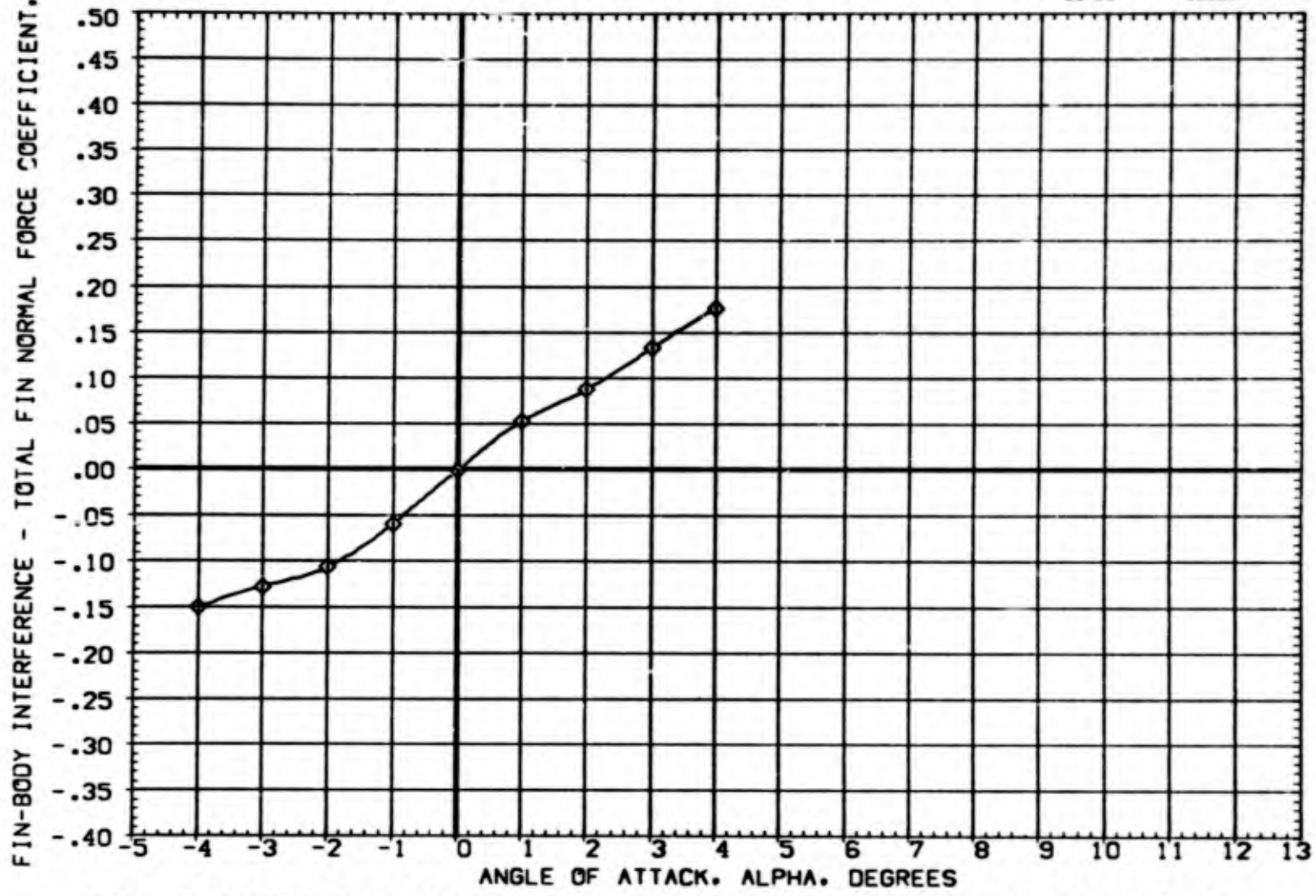
REFERENCE INFORMATION	
SREF	19.6350
LREF	5.0000
BREF	5.0000
XMRP	26.5000
YMRP	.0000
ZMRP	.0000
SCALE	.0000



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 3

(B)MACH = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT	REFERENCE INFORMATION		
(JUE185)		DATA NOT AVAILABLE	.000	.000	3.000	37.500	SREF	19.6350	SQ. IN.
(JUE186)		DATA NOT AVAILABLE	.000	.000	3.000	10.300	LREF	5.0000	IN.
(JUE187)	D	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	8.500	BREF	5.0000	IN.
(JUE188)		DATA NOT AVAILABLE	.000	.000	3.000	7.200	XMRP	26.5000	IN.
(JUE190)		DATA NOT AVAILABLE	.000	.000	3.000	5.000	YMRP	.0000	IN.
(JUE191)		DATA NOT AVAILABLE	.000	.000	3.000	4.750	ZMRP	.0000	IN.
							SCALE	.0000	

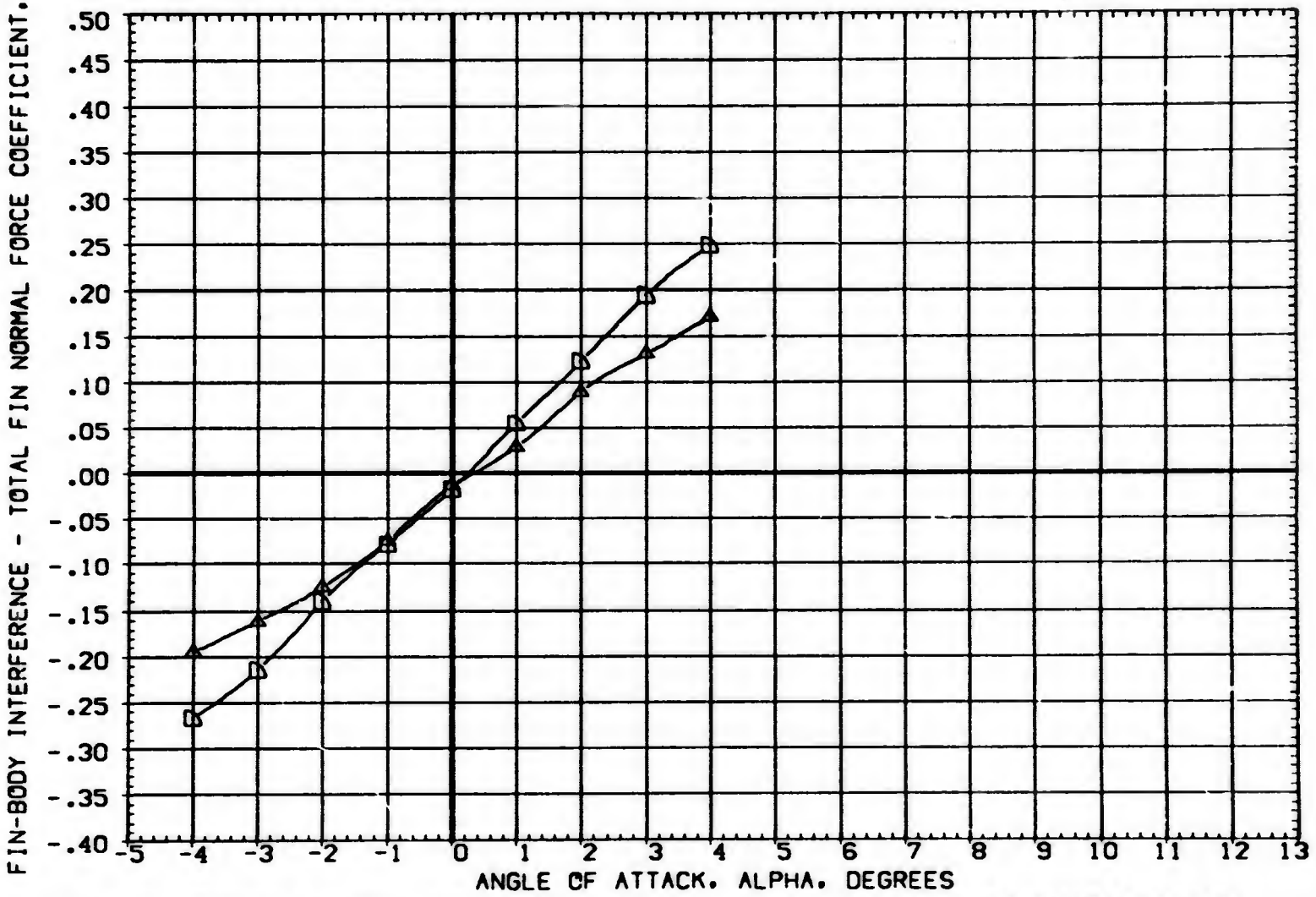


PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 3

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(JUE185)	□	DATA NOT AVAILABLE	.000	.000	3.000	37.500
(JUE186)	▽	DATA NOT AVAILABLE	.000	.000	3.000	10.300
(JUE187)	◇	DATA NOT AVAILABLE	.000	.000	3.000	8.500
(JUE188)	△	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	7.200
(JUE190)	○	DATA NOT AVAILABLE	.000	.000	3.000	5.000
(JUE191)	▷	CALSPAN THRUST EFFECTS STING MOUNTED NW (BINIT1)	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

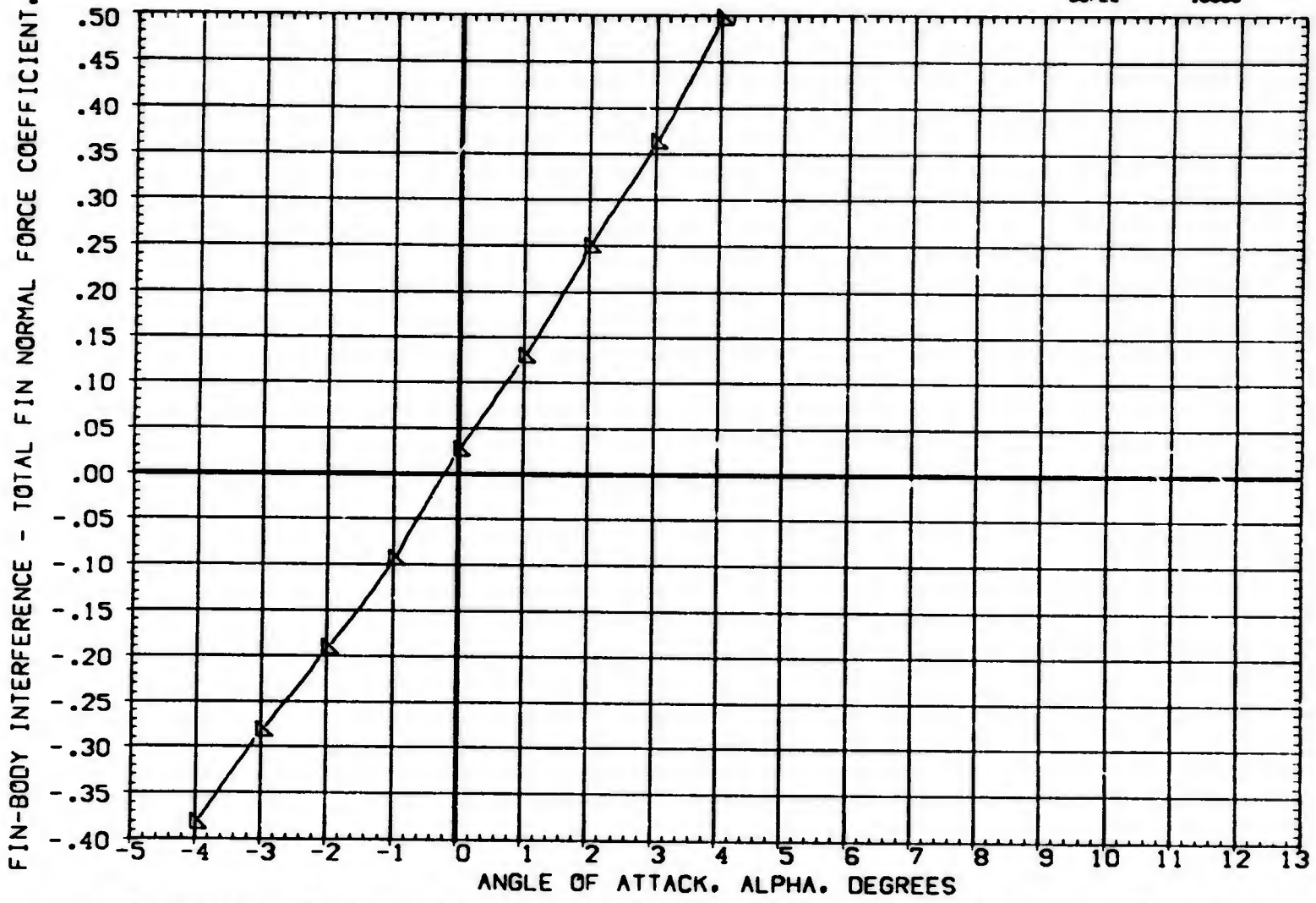


PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 3

(D)MACH = 1.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
[illegible]		DATA NOT AVAILABLE	.000	.000	3.000	37.500
[illegible]		DATA NOT AVAILABLE	.000	.000	3.000	10.300
[illegible]		DATA NOT AVAILABLE	.000	.000	3.000	8.500
[illegible]		DATA NOT AVAILABLE	.000	.000	3.000	7.200
[illegible]		CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	5.000
[illegible]		DATA NOT AVAILABLE	.000	.000	3.000	4.200

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

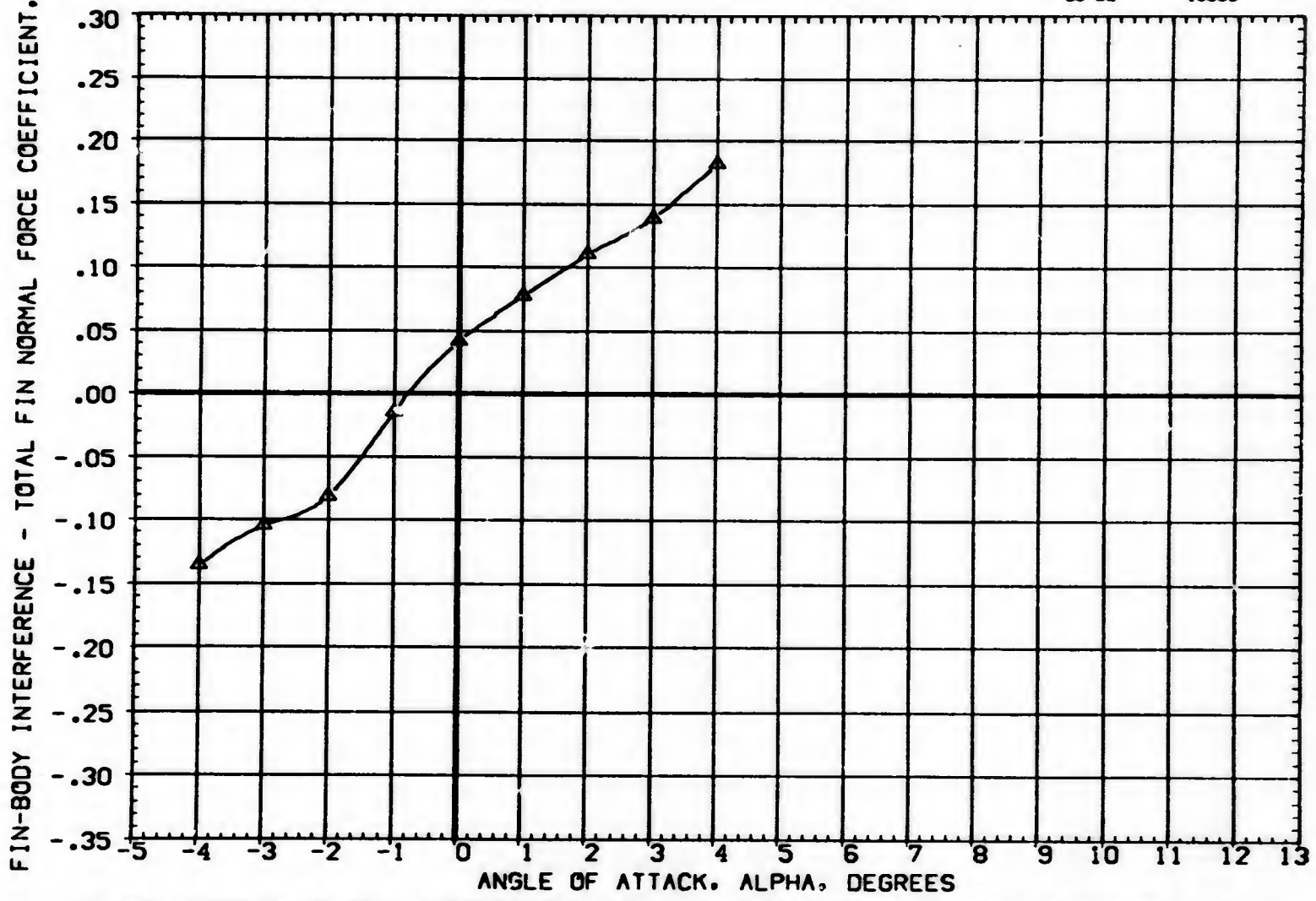


PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 3

(E)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICNO	PHITAL	TALPOS	CRT
(JUE192)	○	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(JUE194)	□	DATA NOT AVAILABLE	.000	.000	3.000	2.500
(JUE195)	⊠	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(JUE196)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	

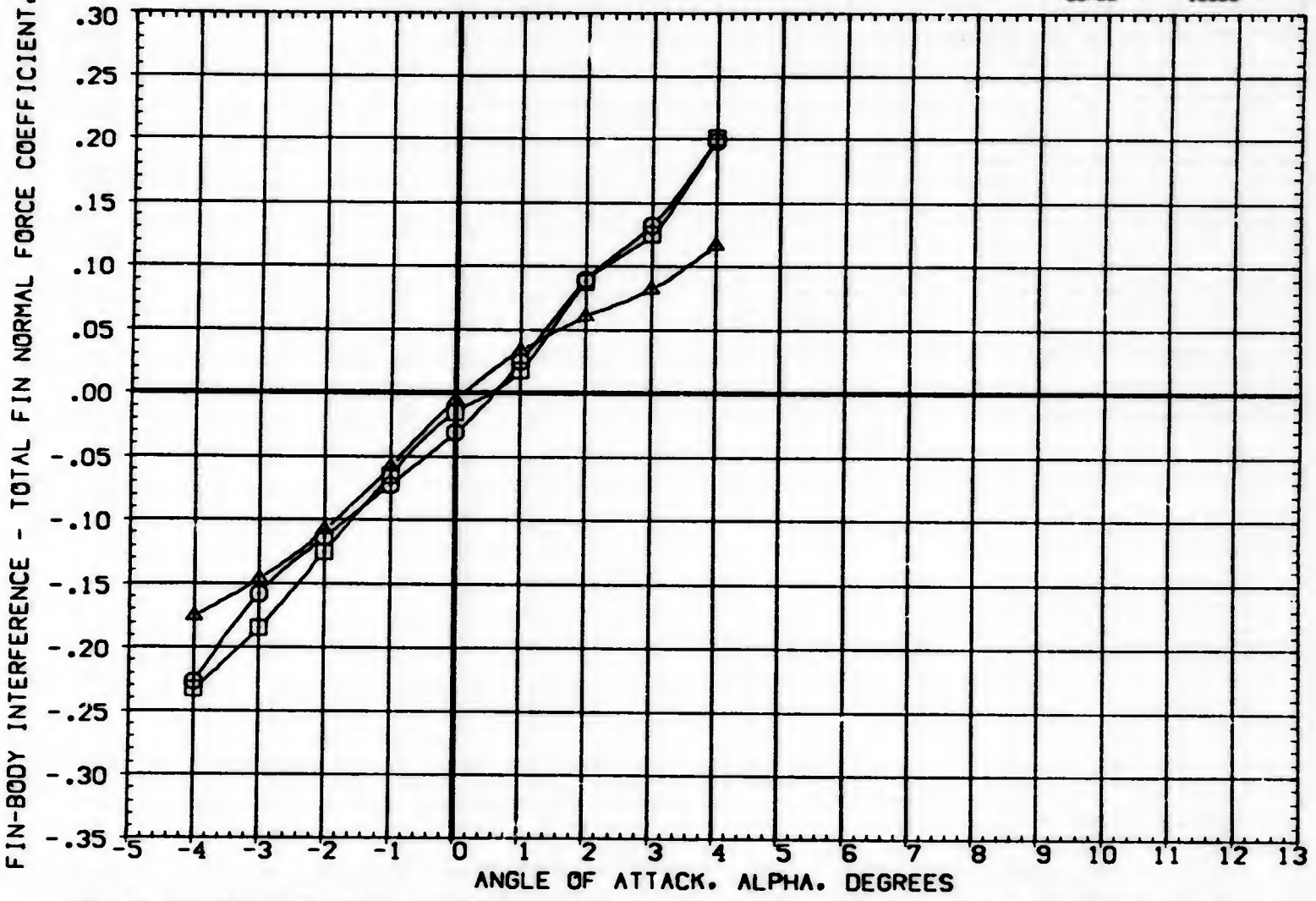


PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 3

(A)MACm = .40

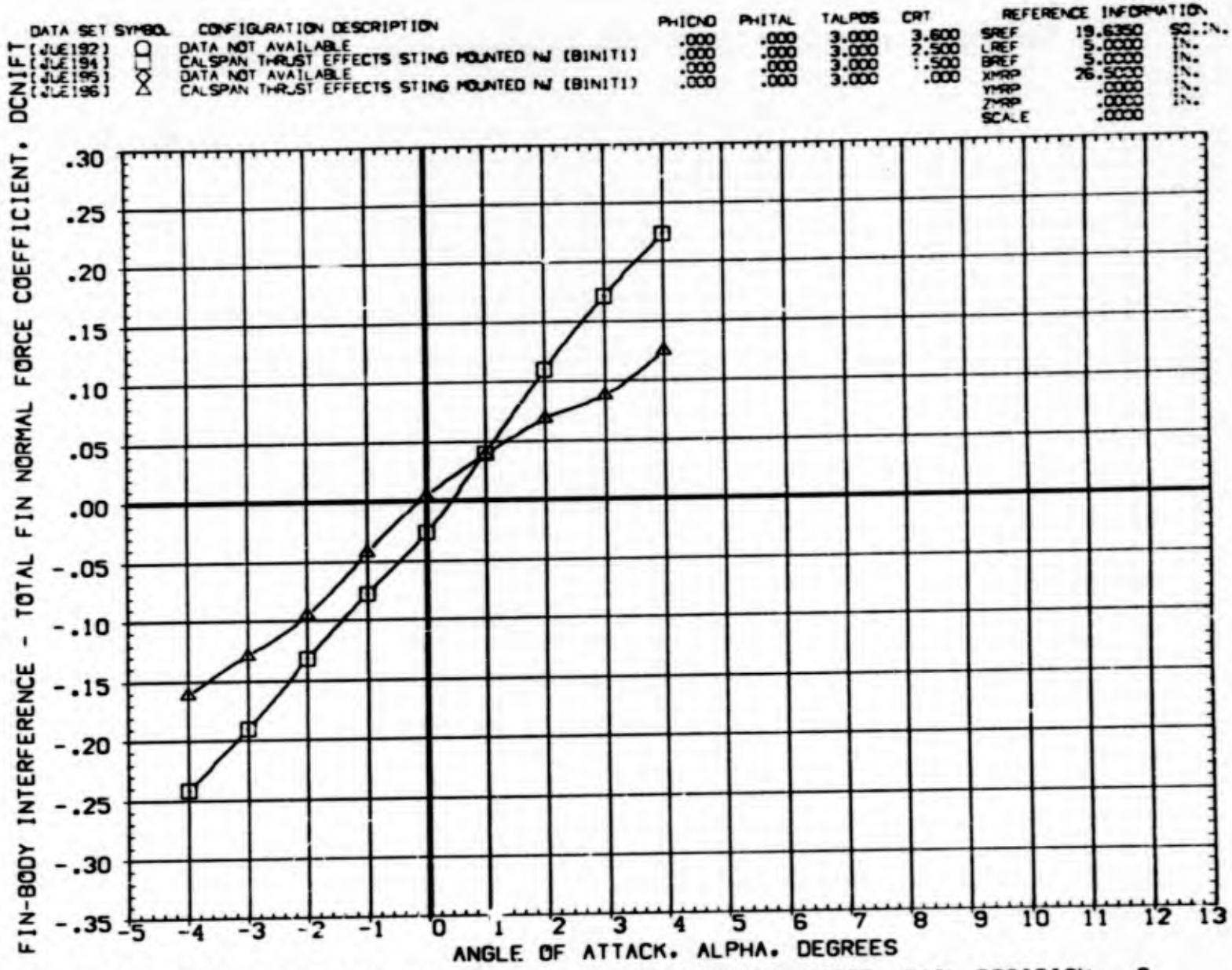
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(JUE192)	□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	3.600
(JUE194)	◇□	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	2.500
(JUE195)	⊠	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(JUE196)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



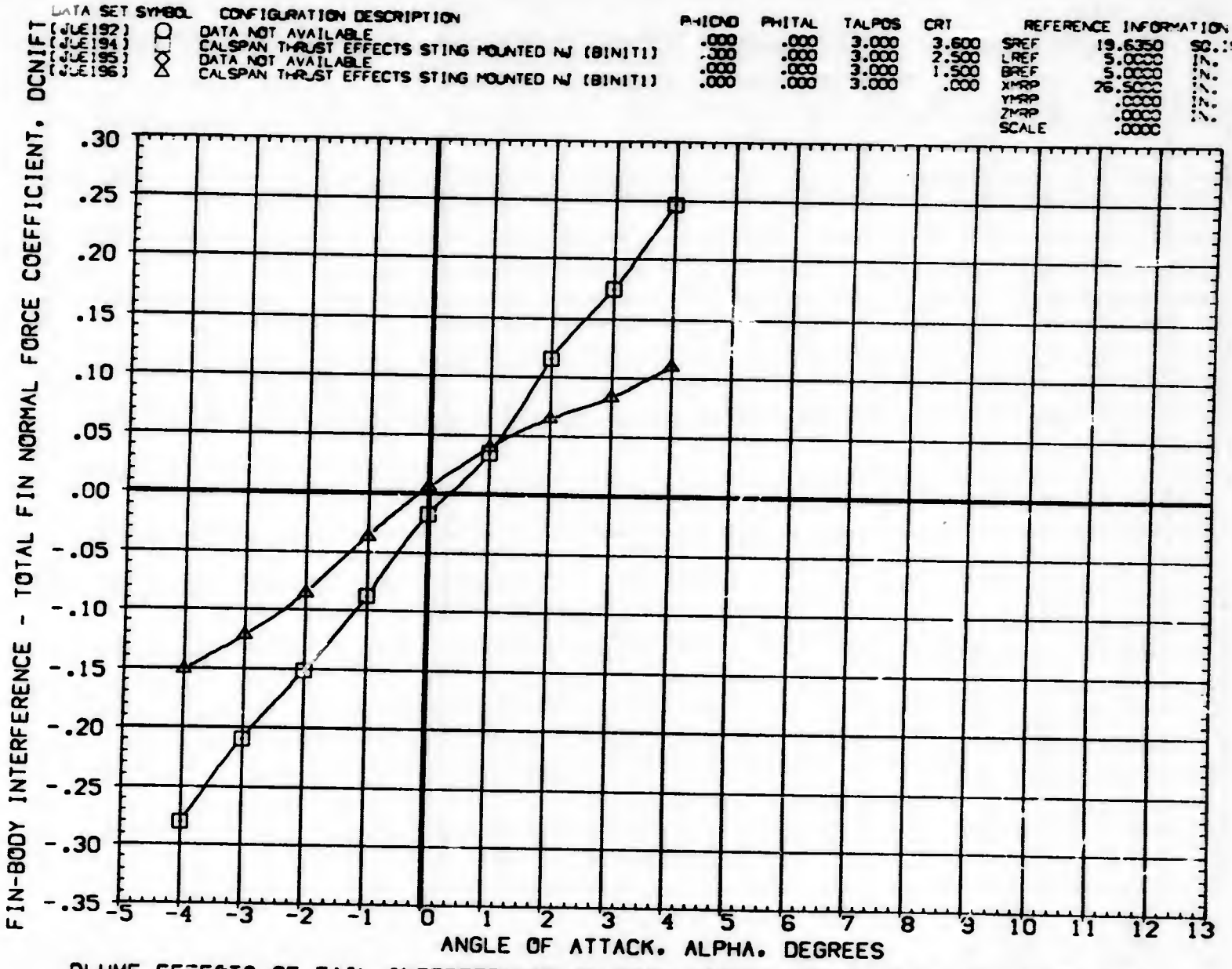
PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE. TAIL POSITION = 3

(B)MACH = .80



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 3

(C)MACH = .90

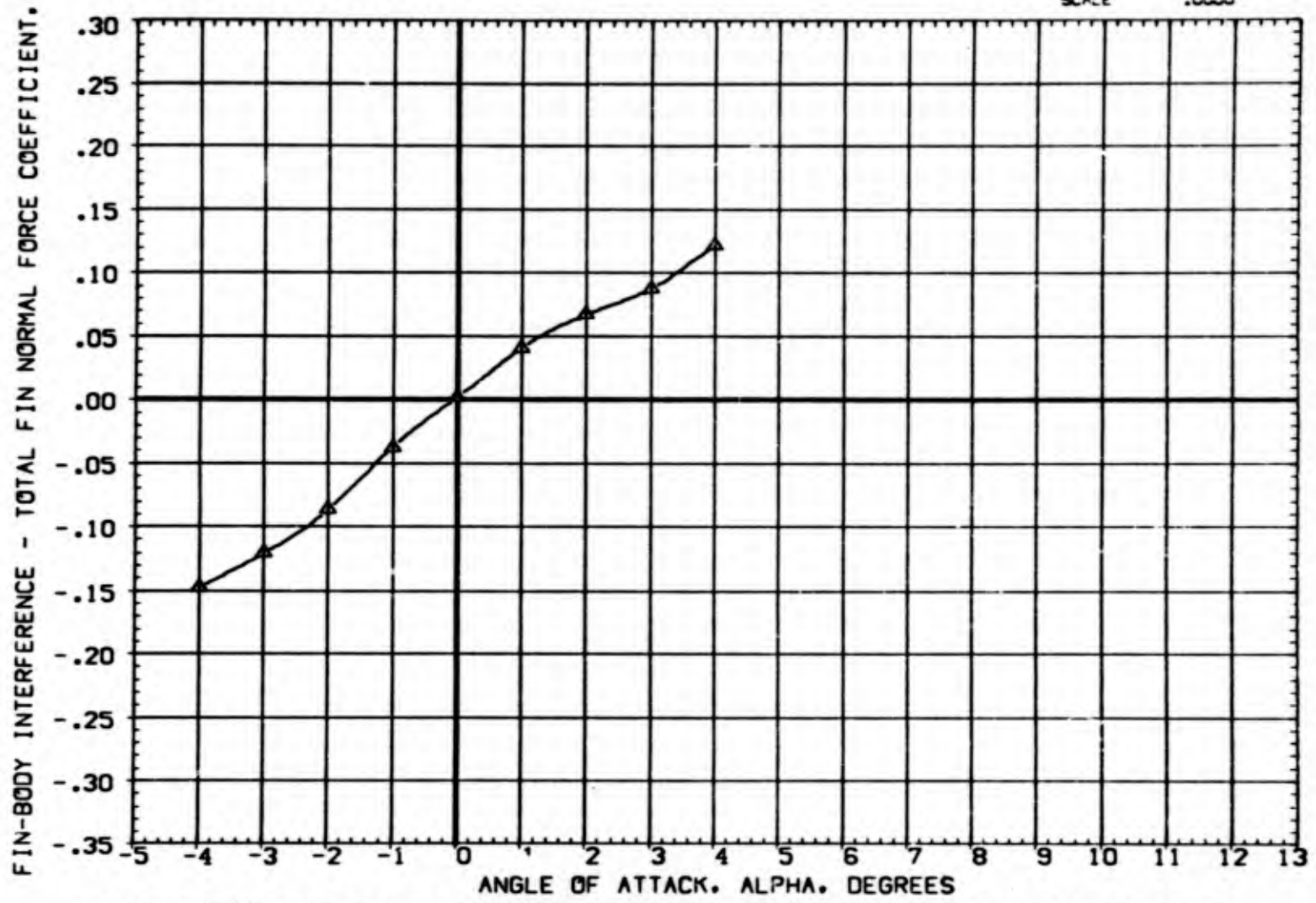


PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 3

(D)MACH = 1.00

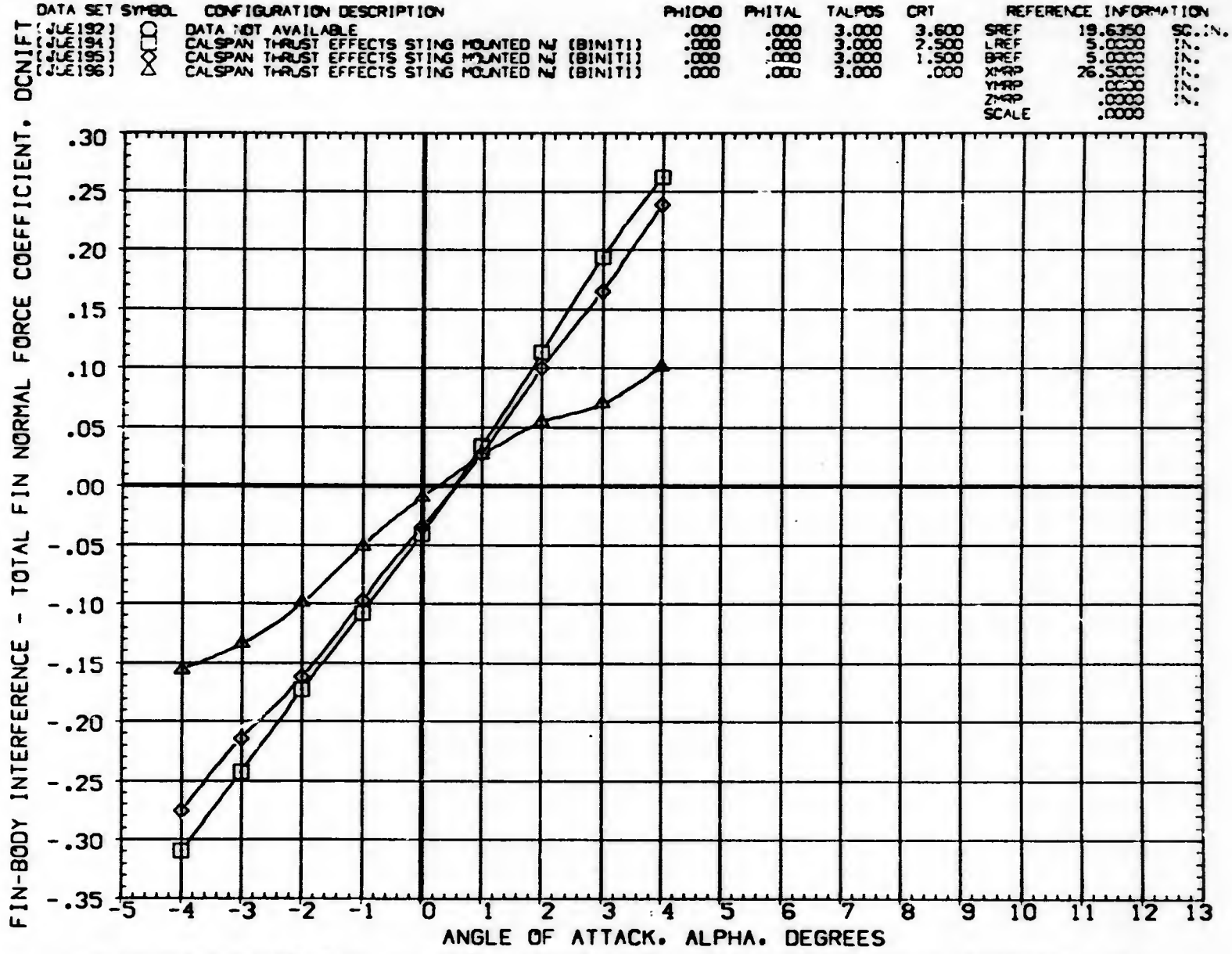
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	PHICND	PHITAL	TALPOS	CRT
(4JE192)	□	DATA NOT AVAILABLE	.000	.000	3.000	3.600
(4JE194)	◇	DATA NOT AVAILABLE	.000	.000	3.000	2.500
(4JE195)	⊠	DATA NOT AVAILABLE	.000	.000	3.000	1.500
(4JE196)	△	CALSPAN THRUST EFFECTS STING MOUNTED NJ (BINIT1)	.000	.000	3.000	.000

REFERENCE INFORMATION		
SREF	19.6350	SQ.IN.
LREF	5.0000	IN.
BREF	5.0000	IN.
XMRP	26.5000	IN.
YMRP	.0000	IN.
ZMRP	.0000	IN.
SCALE	.0000	



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 3

(E)MACH = 1.10



PLUME EFFECTS OF TAIL INTERFERENCE ON BODY NORMAL FORCE, TAIL POSITION = 3

(F)MACH = 1.25