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AUGUST 1971
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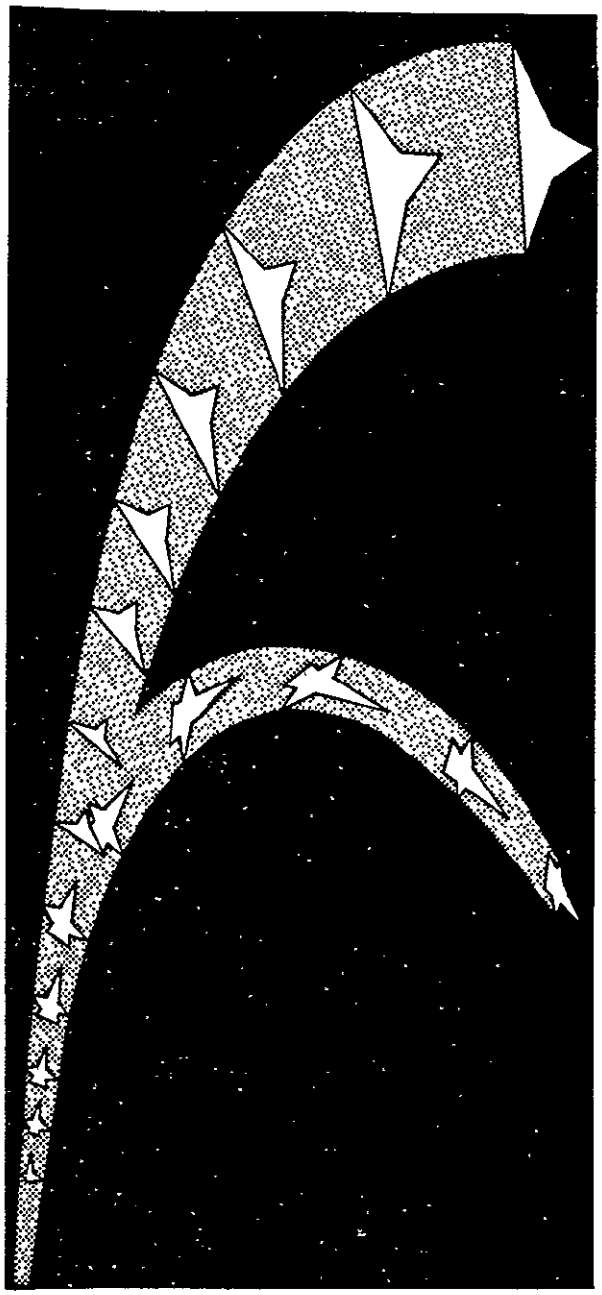

—SPACE SHUTTLE—

STATIC STABILITY AND CONTROL CHARACTERISTICS OF THE NR DELTA WING (134D) SPACE SHUTTLE ORBITER M=0.6 – 5.0

by

E. C. Allen, NR

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NASA STI FACILITY
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MSFC 14-INCH
TRISONIC WIND TUNNEL

MARSHALL
SPACE FLIGHT CENTER

N A S A

SADSAC SPACE SHUTTLE
AEROTHERMODYNAMIC
DATA MANAGEMENT SYSTEM

CONTRACT NAS8-4016
MARSHALL SPACE FLIGHT CENTER

SPACE DIVISION CHRYSLER CORPORATION

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AUGUST, 1971

SADSAC/SPACE SHUTTLE

WIND TUNNEL TEST DATA REPORT

CONFIGURATION: NR Delta Wing (134D) Orbiter Shuttle Model; 0.0035 Scale

TEST PURPOSE: Investigation of Static Stability and Control Characteristics at Mach Numbers of 0.6 to 5.0

TEST FACILITY: NASA/MSFC 14 Inch-TWT

TESTING AGENCY: North American Rockwell

TEST NO. & DATE: MSFC TWT 484; 11 through 17 March, 1971

FACILITY COORDINATOR: Mr. Jim Weaver - MSFC

PROJECT ENGINEER(S): Mr. E. C. Allen - NR

DATA MANAGEMENT SERVICES

LIAISON: N/A

DATA OPERATIONS: John Hord
John Hord
Aero Thermo Data Group

RELEASE APPROVAL: J. T. Glynn
FOR N. D. Kemp, Supervisor
Aero Thermo Data Group

CONTRACT NAS 8-4016 AMENDMENT 153 DRL 184 - 58

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ABSTRACT

Experimental aerodynamic investigations were made on a 0.0035 scale model of the North American Rockwell Delta Wing (134D) Space Shuttle Orbiter in the Marshall Space Flight Center 14 inch Trisonic Wind Tunnel during the period March 11-17, 1971. Tests were conducted over a Mach number range from 0.6 to 4.96 at Reynolds numbers from 4.4 to 8.9 x 10^6 per unit length. The test primary objectives were control evaluations, therefore the delta wing elevon was deflected symmetrically over a range from -20° to +20° and unsymmetrically (aileron control about some elevator setting) at selected positions for aileron deflections of 0°, -20°, and -40°. The above conditions were evaluated at 0° and 6° sideslip angle over an angle of attack range from -10° to 30°, and over an angle of sideslip range from -10° to 10° at angles of attack of 0°, -6°, and 6°.

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TABLE OF CONTENTS

	PAGE NUMBER
LIST OF FIGURES	2
LIST OF TABLES	3
SUMMARY	4
NOMENCLATURE SUMMARY	5
CONFIGURATIONS INVESTIGATED	6
DATASET COLLATIONS	7
TEST FACILITY DESCRIPTION	9
TEST CONDITIONS	10
DATA REDUCTION	11
SUMMARY DATA PLOT INDEX	13
FIGURES	16
MODEL COMPONENT DESCRIPTION SHEETS	24
NOMENCLATURE	29
TABULATED DATA LISTING	34
PLOTTED DATA	35

LIST OF FIGURES

FIGURE NUMBER	TITLE	PAGE NUMBER
1.	Axis System, Showing Direction and Sense of Force and Moment Coefficients, Angle of Attack, and Sideslip Angle	16
2.	Delta Wing SSV Orbiter	17
3.	Body B_5	18
4.	Delta Wing W_{17}	19
5.	Elevon, E_{10}	20
6.	Vertical Stabilizer V_{17}	21
7.	Drag Brake, J_2	22
8.	Typical Tunnel Installation of Delta Wing Orbiter	23

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
I	SADSAC Nomenclature of Aerodynamic Coefficients	5
II	Test TWT 484 Dataset Collation Sheet	7
III	Test Conditions	10
IV	Summary Data Plot Index	13
V	Model Component: Body - B_5	24
VI	Model Component: Wing - W_{17}	25
VII	Model Component: Elevon - E_{10}	26
VIII	Model Component: Vertical Stabilizer-V_{17}	27
IX	Model Component: Drag Brake - J_2	28

SUMMARY

Experimental aerodynamic investigations were made on a 0.0035 scale model of the North American Rockwell Delta Wing (134D) Space Shuttle Orbiter in the Marshall Space Flight Center 14 inch Trisonic Wing Tunnel during the period March 11-17, 1971. Tests were conducted over a Mach number range from 0.6 to 4.96 at Reynolds numbers from 4.4 to 8.9 x 10^6 per unit length. The test primary objectives were control evaluations, therefore the delta wing elevon was deflected symmetrically over a range from -20° to +20° and unsymmetrically (aileron control about some elevator setting) at selected positions for aileron deflections at 0°, -20°, and -40°. The above conditions were evaluated at 0° and 6° sideslip angle over an angle of attack range from -10° to 30°, and over an angle of sideslip range from -10° to 10° at angles of attack of 0°, -6°, and 6°.

Detailed descriptions of the model components are contained in the sections titled Configurations Investigated and Model Component Description Sheets.

TABLE I. SADSAC NOMENCLATURE OF AERODYNAMIC COEFFICIENTS

COEFFICIENT	COEFFICIENT NAME	SADSAC NOMENCLATURE		
		BODY AXIS	STABILITY AXIS	WIND AXIS
C_A	Total Axial Force	CA	-	-
C_{AB}	Base Axial Force	CAB	--	-
C_{AF}	Forebody Axial Force	CAF	-	-
C_D	Total Drag Force	-	CD	CDTOTL
C_{DB}	Base Drag Force	-	CDB	CDBASE
C_{DF}	Forebody Drag Force	-	CDF	CDFORE
C_L	Lift Force	-	CL	CL
C_N	Normal Force	CN	-	-
C_Y	Side Force	CY	CY	CC
C_ℓ	Rolling Moment	CBL	CSL	CWL
C_m	Pitching Moment	CLM	CLM	CPM
C_n	Yawing Moment	CYN	CLN	CLN
L/D	Lift-To-Drag Force Ratio	-	L/D	CL/CD
L/D	Lift-To-Forebody Drag Force Ratio	-	L/DF	CL/CDF
N/A	Normal-To-Axial Force Ratio	N/A	-	-
N/A	Normal-To-Forebody Axial Force Ratio	CN/CAF	-	-

CONFIGURATIONS INVESTIGATED

NOMENCLATURE - Delta Wing Orbiter

B_5	9992-134D body. Delta wing orbiter body including a canopy on the upper surface aft of the nose.
W_{17}	9992-134D delta wing with -5° twist and rounded wing tips. Used with body B_5. Wing blends into body.
E_{10}	Full span, constant chord elevon located on delta wing W_{17}.
V_{17}	Centerline vertical stabilizer with the 5° (half angle) wedge trailing edge; used with body B_5.
J_2	Drag brake - J_2 is the deflectable side panels of vertical tail V_{17} hinged @ 60% element line and extending to the trailing edge.
X	Straight sting extension

Refer to the section titled Model Component Description Sheets for dimensional data and the section titled Figures for drawings on the above components. See the dataset collation sheets for a complete run summary on the configurations tested.

TABLE II. TEST TWT-484 DATA SET COLLATION SHEET

Force-Delta Wing Orbiter, 0.0035-Scale Stability & Control

☐ PRETEST

☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δE	CONTROL DEFLECTION δA			NO. of RUNS	MACH NUMBERS 0.6	0.9	1.0	1.1	1.2	1.46	1.96	2.99	4.0	4.96		
R2901A	B5X	A	0					5	048/0	047/0		046/0		070/0	071/0					
02A	B5W17E10X		↓	0	0			5	043/0	044/1		045/0		069/0	072/0					
03A	B5W17E10		6	↓	↓			5	096/0	095/0		094/0		109/0	112/0					
04A	B5V17J2							5	097/0	098/0		099/0		110/0	111/0					
05A	B5W17E10V17J2		↓	0	0			5	091/0	092/0		093/0		108/0	113/0					
06A	B5W17E10V17J2X	↓	0					5	001/0	002/0		003/0		055/0	073/0					
06B		B		↓				5	006/0	005/0		004/0		056/0	074/0					
07A		A		-20				5	012/0	011/0		010/0		058/0	076/0					
07B		B		↓				5	007/0	008/0		009/0		057/0	075/0					
08A		A		-10				5	013/0	014/0		015/0		059/0	077/0					
08B		B		↓				5	018/0	017/0		016/0		060/0	078/0					
09A		A		10				5	024/0	023/0		022/0		062/0	080/0					
09B		B		↓				5	019/0	020/0		021/0		061/0	079/0					
10A		A		20				5	025/0	026/0		027/0		063/0	084/0					
10B		B		↓	↓			5	030/0	029/0		028/0		064/0	083/0					
11A		A		0	-20			5	036/0	035/0		034/0		066/0	081/0					
11B		B			↓			5	031/0	032/0		033/0		065/0	082/0					
12A		A			-40			5	037/0	038/0		039/0		067/0	085/0					
12B		B	↓		↓			5	042/0	041/0		040/0		068/0	086/0					
06C		0	C	↓	0			10	049/0	050/0	051/0	052/0	053/0	054/0	087/0	090/0	089/0	088/0		

1	7	13	19	25	31	37	43	49	55	61	67	75 76
CLM	CL	CLN	CY	CSL	CDB	CDF	L/D	KCP				9

COEFFICIENTS: → IDPVAR(1) | IDPVAR(2) | NDV

α or β SCHEDULES

αA = -10, -8, -6, -4, -2, 0, 2, 4, 6, 8, 10

αB = 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30

βC = -10, -8, -6, -4, -2, 0, 2, 4, 6, 8, 10

δE (+) T.E. DOWN

$\delta A = (\delta E)_L - (\delta E)_R$

TABLE II. (Con't) TEST TWT-484 DATA SET COLLATION SHEET

Force-Delta Wing Orbiter, 0.0035-Scale Stability & Control

☐ PRETEST
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δE	CONTROL DEFLECTION δA			NO. of RUNS	MACH NUMBERS 0.6	0.9	1.0	1.1	1.2	1.46	1.96	2.99	4.0	4.96		
229 13C	BSW17E10V17J2	-6	C	0	0			5	103/0	104/0		105/0		107/0	114/0					
↓ 14C	↓	6	↓	↓	↓			5	102/0	101/0		100/0		106/0	115/0					

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

C_LM KL KLN KY KSL KAB CDF L/D KCP 9

COEFFICIENTS: → IDPVAR(1) | IDPVAR(2) | NDV

α or β SCHEDULES: βC = -10, -8, -6, -4, -2, 0, 2, 4, 6, 8, 10

TEST FACILITY DESCRIPTION

The Marshall Space Flight Center 14" x 14" Trisonic Wind Tunnel is an intermittent blowdown tunnel which operates by high pressure air flowing from storage to either vacuum or atmospheric conditions. A Mach number range from .2 to 5.85 is covered by utilizing two interchangeable test sections. The transonic section permits testing at Mach 0.20 through 2.50, and the supersonic section permits testing at Mach 2.74 through 5.85. Mach numbers between .2 and .9 are obtained by using a controllable diffuser. The range from .95 to 1.3 is achieved through the use of plenum suction and perforated walls. Mach numbers of 1.44, 1.93 and 2.50 are produced by interchangeable sets of fixed contour nozzle blocks. Above Mach 2.50 a set of fixed contour nozzle blocks are tilted and translated automatically to produce any desired Mach number in .25 increments.

Air is supplied to a 6000 cubic foot storage tank at approximately $-40^{\circ}F$ dew point and 500 psi. The compressor is a three-stage reciprocating unit driven by a 1500 hp motor.

The tunnel flow is established and controlled with a servo actuated gate valve. The controlled air flows through the valve diffuser into the stilling chamber and heat exchanger where the air temperature can be controlled from ambient to approximately $180^{\circ}F$. The air then passes through the test section which contains the nozzle blocks and test region.

Downstream of the test section is a hydraulically controlled pitch sector that provides a total angle of attack range of 20° ($\pm 10^{\circ}$). Sting offsets are available for obtaining various maximum angles of attack up to 25°.

TABLE III

TEST CONDITIONS
TEST TWT-484

MACH NUMBER	REYNOLDS NUMBER per unit length	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.6	6.5×10^6	5.58	97
0.9	6.9×10^6	7.96	95
1.0	6.7×10^6	8.33	98
1.1	6.7×10^6	8.73	96
1.2	6.6×10^6	8.98	97
1.46	6.6×10^6	9.56	99
1.96	8.9×10^6	12.80	96
2.99	4.4×10^6	4.95	98
4.0	4.6×10^6	3.68	100
4.96	6.1×10^6	3.40	99

BALANCE UTILIZED: Task 0.7-inch MK 1-A Six Component

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	400 lbs		0.3%
SF	100 lbs		0.3%
AF	15 lbs		0.3%
PM			
YM			
RM	70 in lbs		0.3%

COMMENTS:

No satisfactory method is known for determining the absolute accuracy of the final data coefficients.

DATA REDUCTION

Measured data were reduced about the body and stability axis systems. The reference data used to reduce the data for the delta wing orbiter are listed below:

Delta Wing Orbiter (B_5)

$S_{ref} = S_w$ = wing area = 10.732 in^2 = 6084.0 ft^2 full scale

$\ell_{ref} = \bar{c}$ = wing MAC = 2.874 in = 821.2 in full scale

$b_{ref} = b_w$ = wing span = 4.980 in = 1422.8 in. full scale

The model moment reference point for the Delta Wing Orbiter is 4.979 inches aft of the nose (1422.5 in. full scale), on the lateral centerline, and 0.4550 inches above the Fuselage Reference Plane (FRP) (130.0 in. full scale).

Angle of attack and angle of sideslip were corrected for sting and balance deflections, and axial force was corrected for weight tares.

Base pressure measurements were made during the tests at several locations on the vehicle base and have been used to calculate a base axial force which was applied to the data to obtain a forebody axial force. This forebody axial force was then utilized in calculating stability axis data and determining L/D. The equations used were

$$C_{A_F} = C_A - C_{A_B}$$

DATA REDUCTION
(Continued)

where C_A = measured axial force coefficients minus tares

$$C_{A_B} = \left\{\left[p_\infty - (p_1+p_2)/2\right]/q_\infty\right\} A_b/S_{ref}$$

where p_∞ = free stream static pressure

p_1 & p_2 = body base static pressure

q_∞ = freestream dynamic pressure

A_b = base area = model base + balance cavity area

= 0.005488 ft^2 - delta wing orbiter

$C_L = C_N \cos \alpha - C_{A_F} \sin \alpha$

$C_{D_F} = C_{A_F} \cos \alpha + C_N \sin \alpha$

$L/D = C_L/C_{D_F}$

The center of pressure data are presented as a percent of body length and were determined by the following equation:

$$Xc.p./\ell = \left[Xc.g. - (Cm/C_N)\,\bar{c}\right]/\ell$$

Where incremental coefficients are presented these values were calculated by subtracting the value of the coefficient obtained with the controls neutral from the value obtained with the control at some deflected setting:

$$\Delta C_{(x)} = C_{(x)\delta=y} - C_{(x)\,\delta=o}$$

TABLE IV.
SUMMARY DATA PLOT INDEX

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	PAGES
Component Buildup Effects	A	Configuration, Mach Number	1-70
Beta Effects On Component Buildup	A & B	Mach Number, Angle of Sideslip	71-120
Effects of Sideslip Variation On Configuration B5W17E10	C	Mach Number, Angle of Sideslip	121-125
Beta Effects On Component Buildup	A & B	Mach Number, Angle of Sideslip	126-175
Effects Of Sideslip Variation On Configuration B5W17E10V17J2	C	Mach Number, Angle of Sideslip	176-180
Incremental Aerodynamic Characteristics	D	Mach Number	181-195
Incremental Aerodynamic Characteristics	E	Mach Number, Configuration	196-255
Effects of Mach No. On the Orbiter Alone	F	Mach Number	256-259
Effects of Mach No. on Configuration B5W17J2	F	Mach Number	260-263
Effects of Elevator Angle Variation On The Complete Orbiter B5W17E10V17J2X	A & C	Elevator Deflection, Mach Number	264-303
Elevator Effectiveness At Various Angles Of Attack	G	Angle of Attack, Mach Number	304-318

TABLE IV.
(Continued)

SUMMARY DATA PLOT INDEX

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	PAGES
Elevator Effectiveness Derivatives	H	Mach Number	319-333
Elevator Effectiveness At Various Angles Of Attack	I	Angle of Attack, Mach Number	334-348
Elevator Effectiveness Derivatives	J	Mach Number	349-351
Effects of Aileron Variation	A & K	Aileron Deflection, Mach Number	352-411
Aileron Effectiveness At Various Angles Of Attack	L	Angle of Attack, Mach Number	412-431
Aileron Effectiveness Derivatives	M	Mach Number	432-435
Lateral Directional Stability	N	Angle of Attack, Mach Number	436-450
Lateral Directional Stability	O	Mach Number	451-465
Lateral Directional Stability	N	Mach Number	466-471
Lateral Directional Stability	P	Angle of Attack, Mach Number	472-486
Lateral Directional Stability Derivatives	Q	Angle of Attack	487-489
L/D Max Variation With Mach Number	R	Mach Number	490-492

TABLE IV. (Cont)

PLOTTED COEFFICIENTS SCHEDULE:

(A) CN, CAF, CL, CDF, CIM, L/D, XCP/L vs. Alpha

(B) CY, CLN, CSL vs. Alpha

(C) CN vs. CIM

(D) DELCN, DELCAF vs. Alpha, DELCN vs. DELCIM

(E) DELCY, DELCBL, DELCAF vs. Alpha, DELCY vs. DELCYN

(F) CN, CAF, CIM vs. Alpha, CN vs. CIM

(G) DELCIM, DELCDF, DELCL vs. ELVATR

(H) DCLMDE, DCDFDE, DCL/DE vs. Alpha

(I) CN, CIM, CAF vs. ELVATR

(J) DCN/DE, DCLMDE, DCAFDE vs. Mach Number

(K) CY, CLN, CSL, CYN, CBL vs. Alpha

(L) CY, CYN, CBL, CAF vs. Ailron

(M) DCY/DA, DCYNDA, DCBLDA, DCAFDA vs. Mach Number

(N) CY, CLN, CSL vs. Beta

(O) DCY, DCLN, DCSL vs. Alpha

(P) CYN, CBL vs. Beta, CY vs. CYN

(Q) DCY, DCYN, DCBL vs. Mach Number

(R) L/D(MAX), ALFLDX, CLLDMX vs. Mach Number

Notes:

1. Positive directions of force coefficients moment coefficients, and angles are indicated by arrows.

2. For clarity, origins of wind and stability axes have been displaced from the center of gravity.

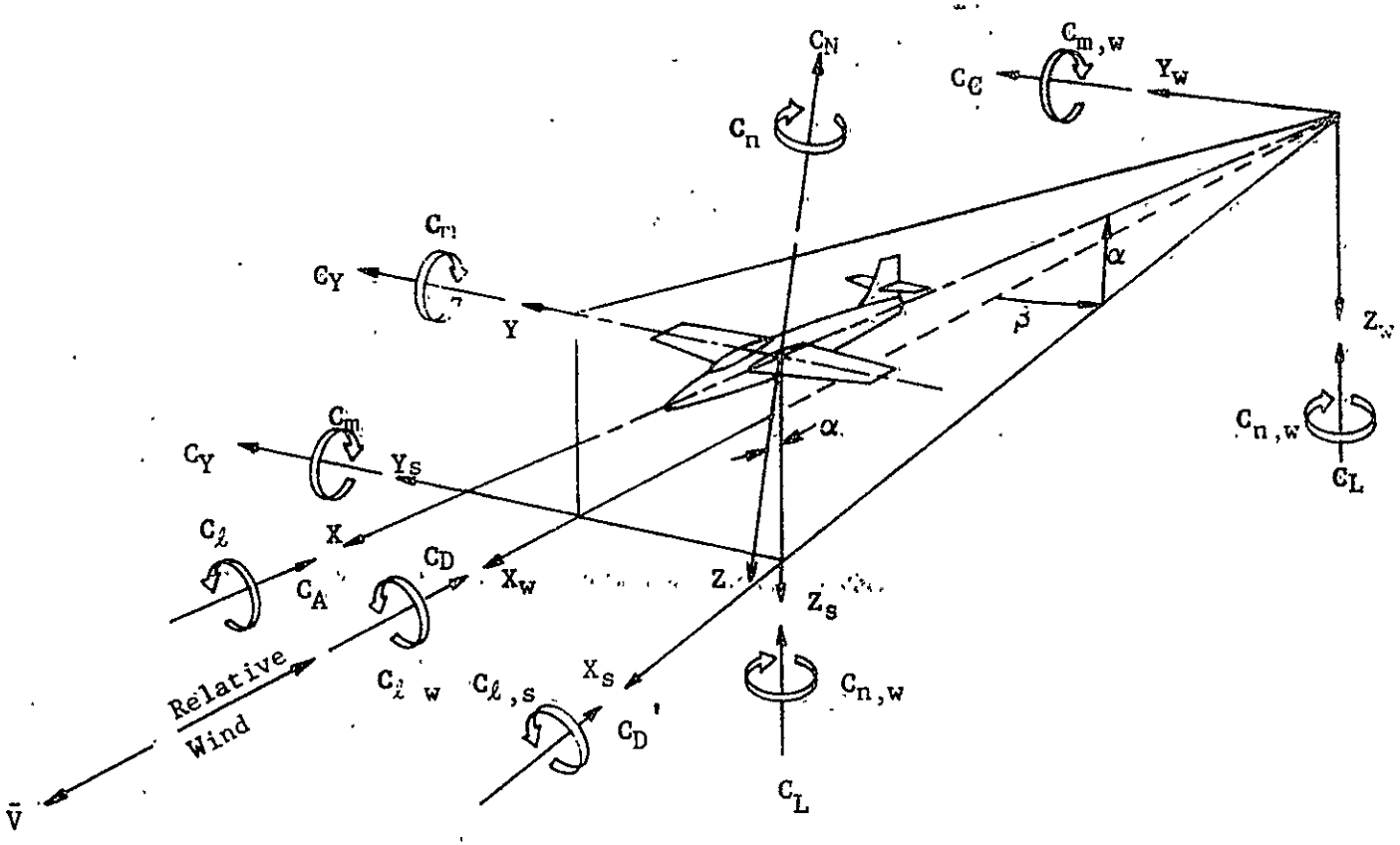


Figure 1. Axis systems, showing direction and sense of force and moment coefficients, angle of attack, and sideslip angle.

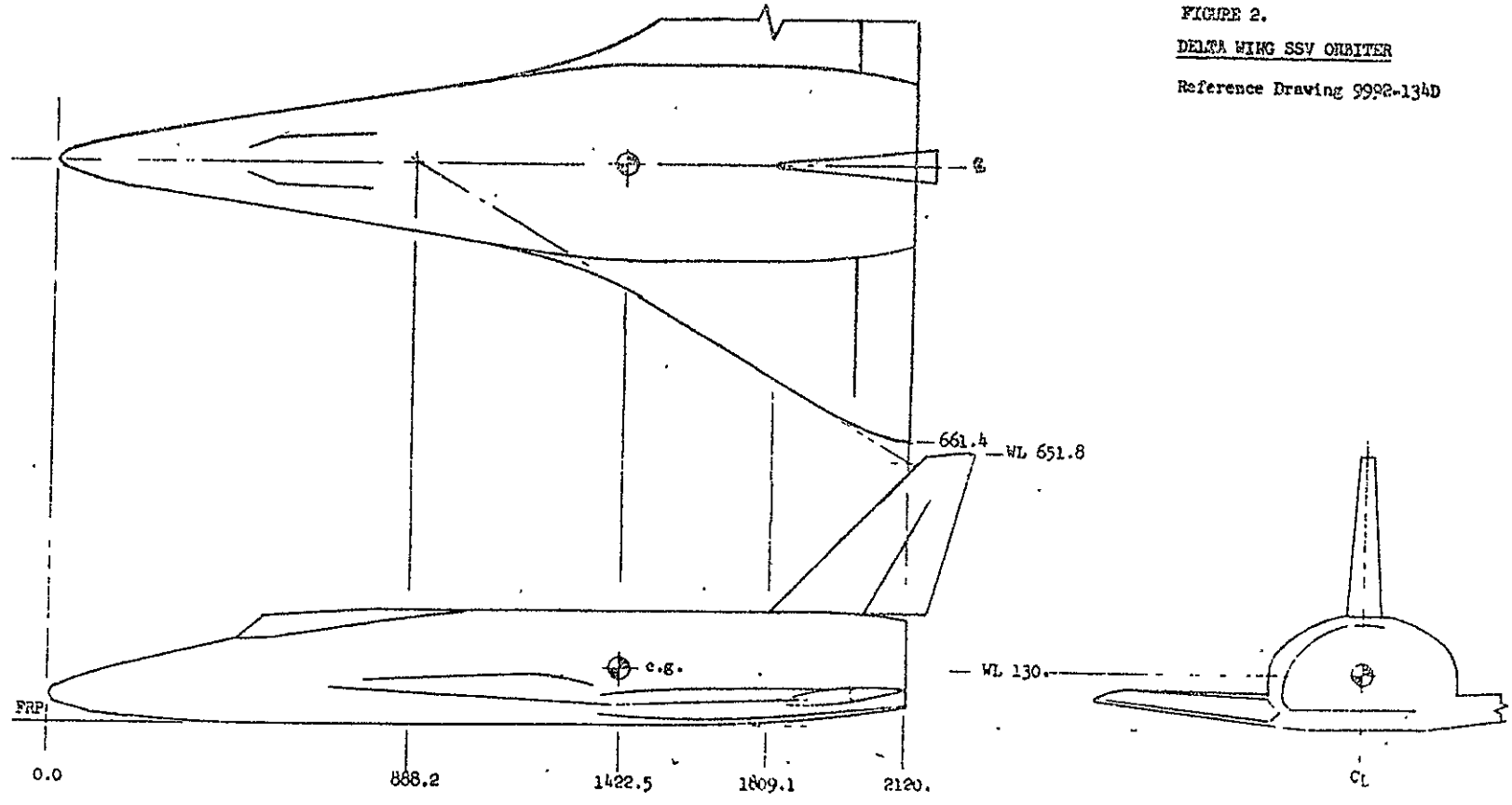


FIGURE 2.

DELTA WING SSV ORBITER

Reference Drawing 9992-134D

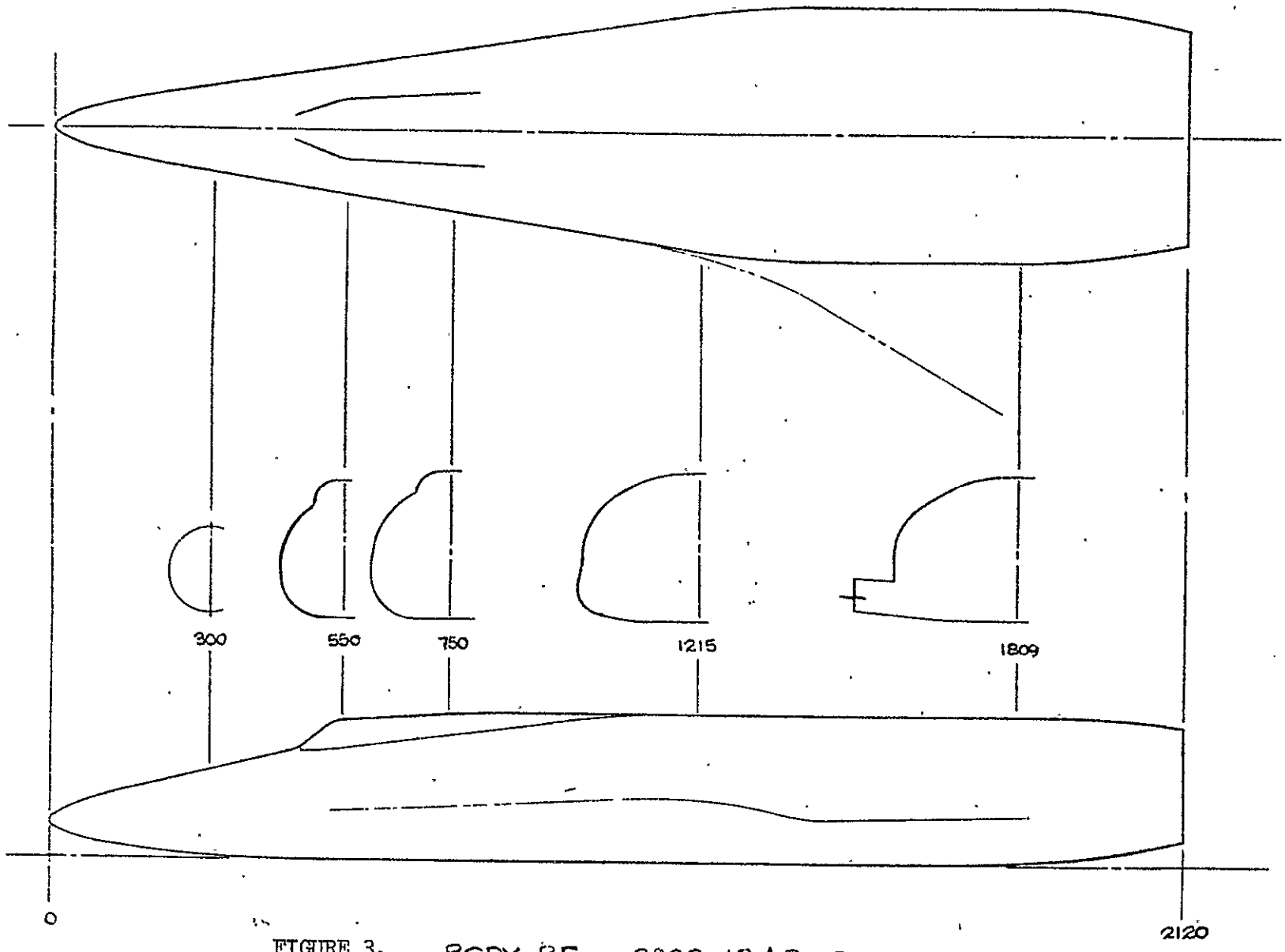


FIGURE 3. BODY B5 9992-134B CONFIGURATION

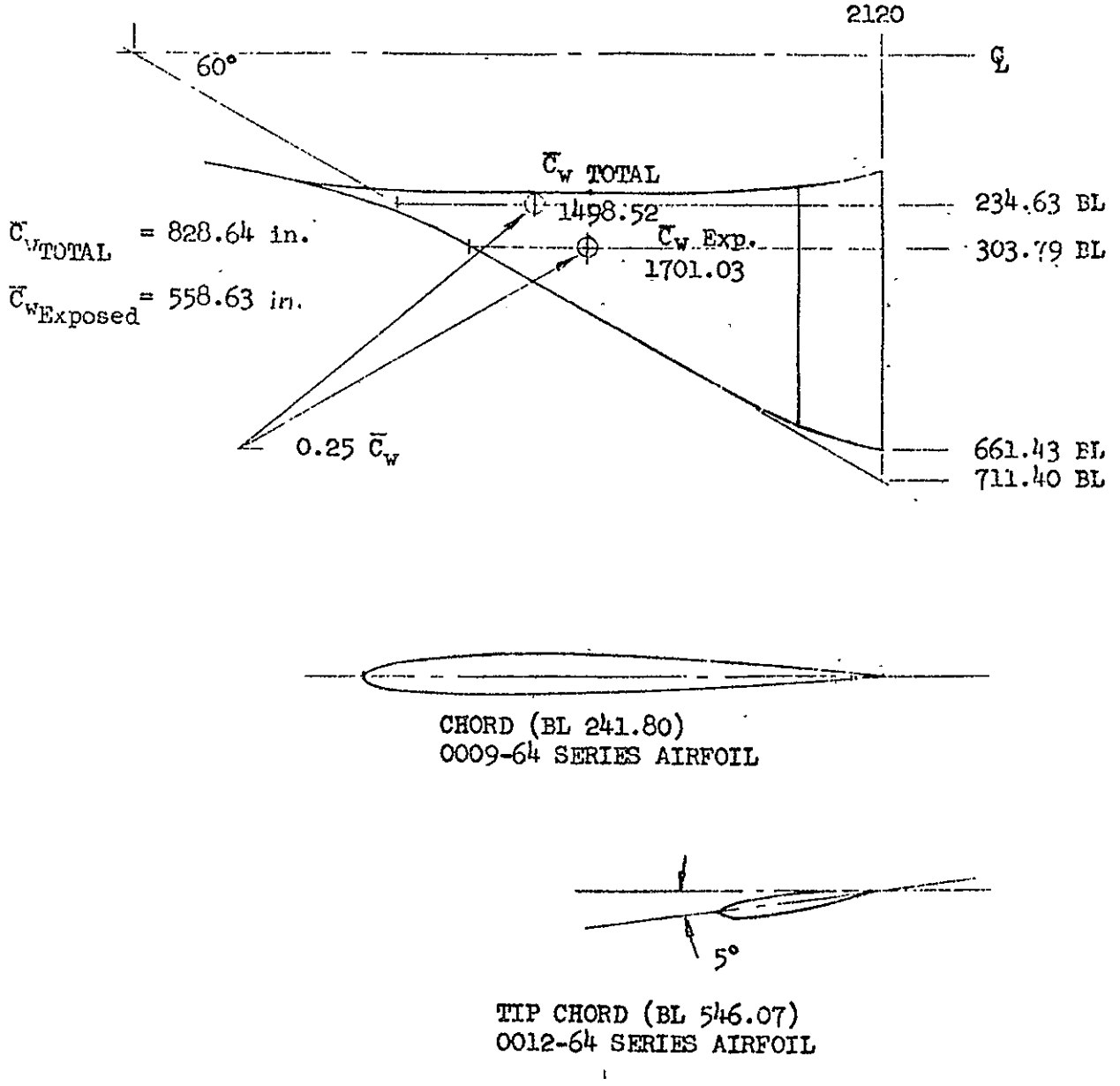


FIGURE 4. WING W_{17} 9992-134 D Configuration

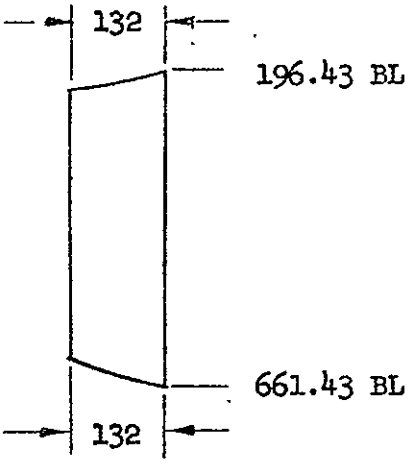


FIGURE 5. ELEVON, E 10-ELEVON USED WITH WING W17

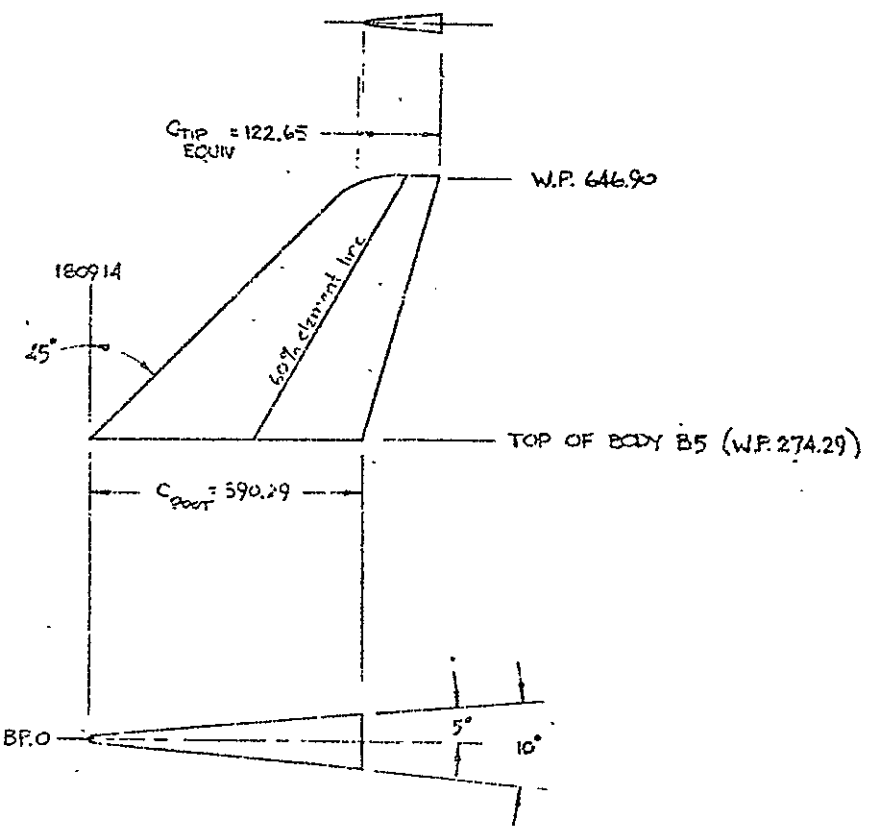
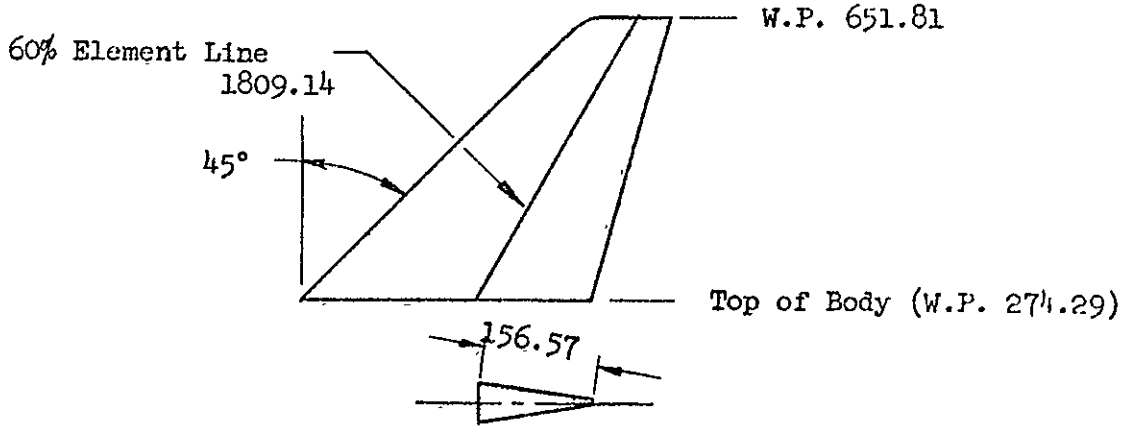
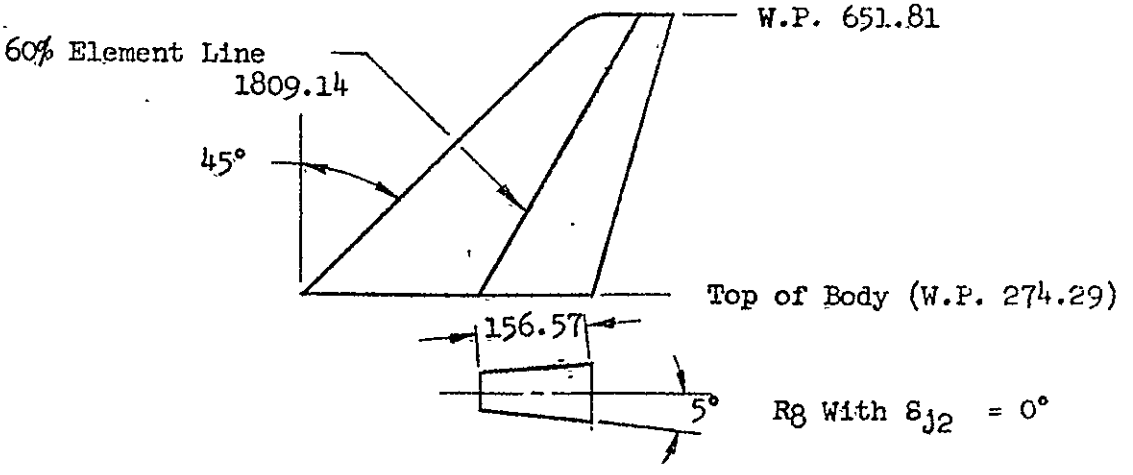


FIGURE 6.

VERTICAL STABILIZER V17



VERTICAL TAIL V 16



VERTICAL TAIL V 17

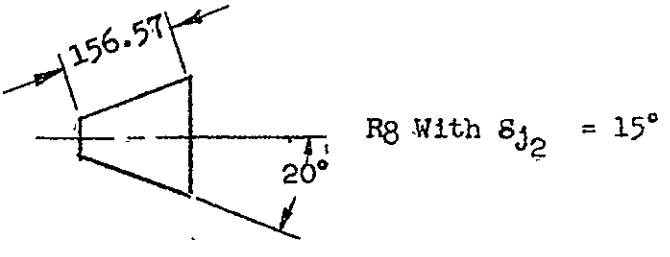


FIGURE 7. DRAG BRAKE J 2

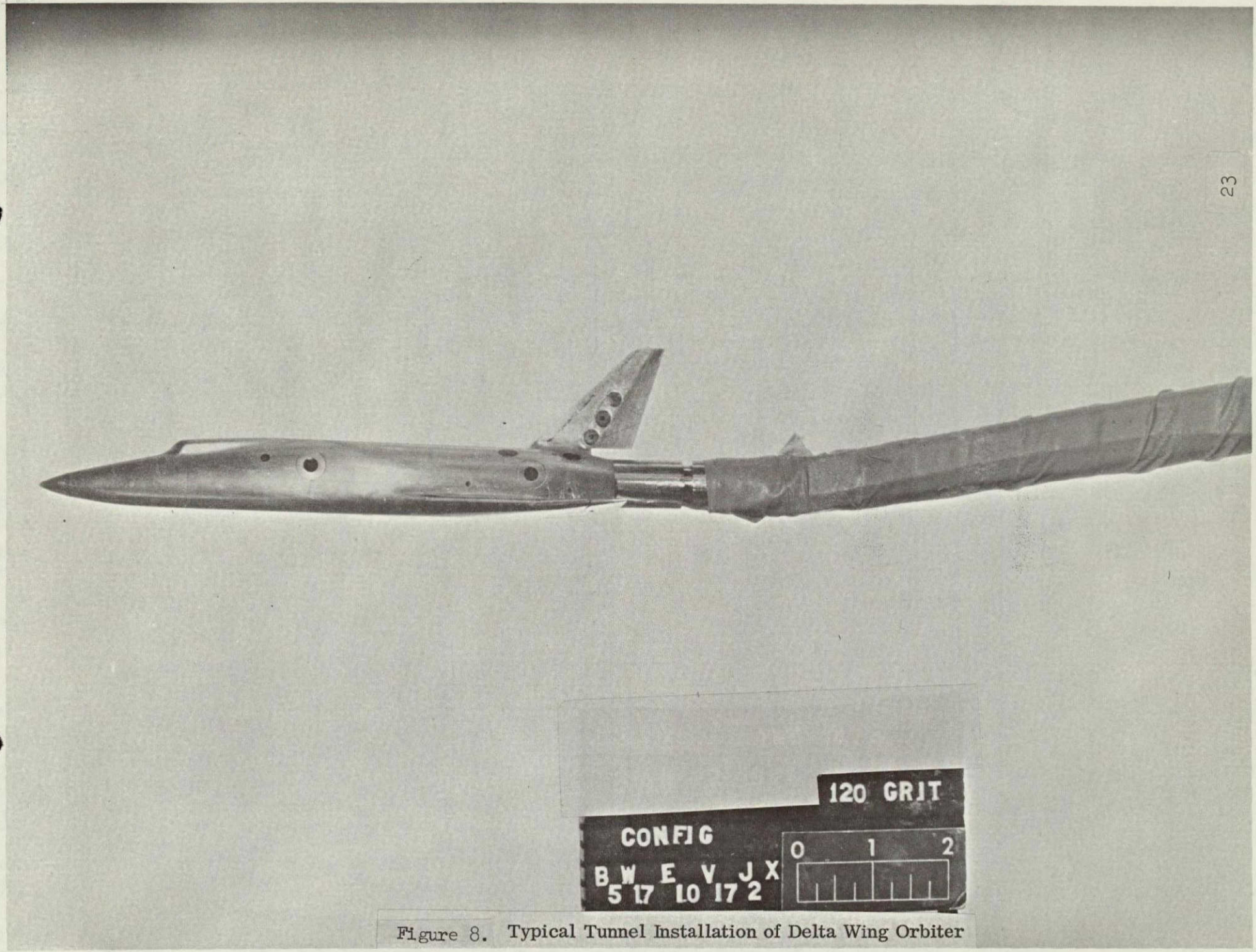


Figure 8. Typical Tunnel Installation of Delta Wing Orbiter

TABLE V.

MODEL COMPONENT: BODY - B_5

GENERAL DESCRIPTION: 9992-134B body. Delta wing orbiter body including a canopy on the upper surface aft of the nose. The model scale factor is 0.0035.

DRAWING NUMBER: Lines Dwg. 9992-134B

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length , in.	2120.00	7.420
Max. Width, in.	462.86	1.620
Max. Depth, in.	274.29	0.960
Fineness Ratio	5.906	5.906
Area		
Max. Cross-Sectional , ft^2 (Fus. Sta. 1215.0 to 1809.0 in.)	702.75	0.00860
Planform	-	-
Wetted	-	-
Base		

TABLE VI.

MODEL COMPONENT: Wing-W17

GENERAL DESCRIPTION: Delta wing with -5° twist and rounded wing tips. Wing blends into body. Follows NR lines drawing 9992-134D.

Model Scale = 0.0035

DRAWING NUMBER: S-865-13, -14, -55 thru -60

DIMENSIONS:

	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area, ft^2		
Planform	6026.60	0.07383
Wetted		
Span (equivalent), in.	1286.28	4.502
Aspect Ratio	1.892	1.892
Rate of Taper	1.723	1.723
Taper Ratio	0.094	0.094
Diehedral Angle, degrees	7.0	7.0
Incidence Angle, degrees	0.0	0.0
Aerodynamic Twist, degrees(about T.E)	-5.0	-5.0
Toe-In Angle	-	-
Cant Angle	-	-
Sweep Back Angles, degrees		
Leading Edge	60.056	60.056
Trailing Edge	0.000	0.000
0.25 Element Line	52.473	52.473
Chords: in.		
Root (Wing Sta. 0.0)	1232.91	4.315
Tip, (equivalent) (W.S. 647.97)	116.45	0.408
MAC (W.S. 234.63)	828.64	2.900
Fus. Sta. of .25 MAC	1498.52	5.245
W.P. of .25 MAC	46.27	0.162
B.L. of .25 MAC	232.88	0.815
Airfoil Section		
Root (W.S. 241.80)	NACA 0009-64	
Tip (W.S. 546.07)	NACA 0012-64	
EXPOSED DATA		
Area, ft^2	2658.68	0.03257
Span, (equivalent) in.	814.61	2.851
Aspect Ratio	1.720	1.720
Taper Ratio	0.141	0.141
Chords: in.		
Root, (Equiv.) (W.S. 237.61)	823.51	2.882
Tip, (Equiv.) (W.S. 647.97)	116.45	0.408
MAC (W.S. 391.34)	558.63	1.955
Fus. Sta. of .25 MAC	1701.03	5.954
W.P. of .25 MAC	65.37	0.229
B.L. of .25 MAC	388.43	1.359
LEADING EDGE CUFF		
Planform area, ft^2	46.13	0.00057
Leading edge intersects Fus. M.L @ Sta., in.	1182.86	4.140
Leading edge intersects wing L.E. @ Sta., in.	1425.73	4.990

TABLE VII.

MODEL COMPONENT: Elevon-E10 (Data for one of two sides)

GENERAL DESCRIPTION: Full span, constant chord elevon located on delta wing W17.

Model Scale = 0.0035

DRAWING NUMBER: S-865-57, - 58

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area, ft^2	393.10	0.00482
Span (equivalent), in.	428.83	1.501
Inb'd equivalent chord, in. (W.S. 223.41)	132.00	0.462
Outb'd equivalent chord, in. (W.S. 652.25)	132.00	0.462
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.116	0.116
At Outb'd equiv. chord	1.210	1.210
Sweep Back Angles, degrees		
Leading Edge	0.000	0.000
Tailing Edge	0.000	0.000
Hingeline	0.000	0.000
Area Moment (Normal to hinge line), ft^3 (Product of area and mean chord)	4314.87	0.00019

TABLE VIII

MODEL COMPONENT: Vertical Stabilizer - V_{17}

GENERAL DESCRIPTION: Centerline vertical stabilizer with the 5° (half angle) wedge trailing edge. Used with delta wing orbiter body B_5 (configuration 9992-134B).

The model scale factor is 0.0035.

DRAWING NUMBER: S-867-47, -50

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area		
Planform, ft^2	663.63	0.00813
Theoretical Span, in.	380.421	
Span (equivalent), in.	372.61	1.304
Aspect Ratio	1.453	1.453
Rate of Taper	0.718	0.718
Taper Ratio	0.314	0.314
Dihedral Angle, degrees	-	-
Incidence Angle, degrees	-	-
Aerodynamic Twist, degrees	-	-
Toe-In Angle, degrees	0.0	0.0
Cant Angle, degrees	0.0	0.0
Sweep Back Angles, degrees		
Leading Edge	45.0	45.0
Trailing Edge	15.734	15.734
0.25 Element Line	39.367	39.367
Chords: Theoretical Tip, in.	117.053	
Root (~~Equivalent~~) W.P. 274.29 in	390.29	1.366
Tip, (equivalent), (W.P. 646.90 in), in	122.65	0.429
MAC (W.P. 428.19 in), in	279.74	0.979
Fus. Sta. of .25 MAC, in	2032.98	7.115
W.P. of .25 MAC, in	428.19	1.499
B.L. of .25 MAC, in	0.0	0.0
Airfoil Section, Wedge shape with L.E.R. and flat T.E.		
L.E. Radius, in. (1.6% chord)	6.29	0.022
EXPOSED DATA		
Area		
Span, (equivalent)		
Aspect Ratio		
Taper Ratio		
Chords		
Root		
Tip		
MAC		
Fus. Sta. of .25 MAC		
W.P. of .25 MAC		
B.L. of .25 MAC		

TABLE IX.

MODEL COMPONENT: Drag brake-J2 (Data for one of two sides)

GENERAL DESCRIPTION: Drag Brake-J2 is the deflectable side panels of vertical tail-V17 hinged at the 60% element line and extending to the trailing edge.

Model Scale = 0.0035

DRAWING NUMBER: S-865-51 (Modified)

All dimensions are measured in the drag brake reference plane.

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area (True), ft.^{2}	270.27	0.00331
Span (equivalent), in	382.09	1.337
Inb'd equivalent chord, in. (W.P. 274.29)	156.57	0.548
Outb'd equivalent chord (W.P. 654.57)	47.14	0.165
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	-	-
At Outb'd equiv. chord	-	-
Sweep Back Angles, degrees		
Leading Edge	29.237	29.237
Tailing Edge	15.288	15.288
Hingeline	29.237	29.237
Area Moment (Normal to hinge line), Ft ^{3} (Product of area and mean chord)	2430.35	0.00010

NOMENCLATURE

(General)

SYMBOL	SADSAC SYMBOL	DEFINITION
α	ALPHA	angle of attack, angle between the projection of the wind X_w-axis on the body X, Z-plane and the body X-axis; degrees
β	BETA	sideslip angle, angle between the wind X_w-axis and the projection of this axis on the body X-Z-plane; degrees
ψ	PSI	yaw angle, angle of rotation about the body Z-axis, positive when the positive X-axis is rotated toward the positive Y-axis; degrees
ϕ	PHI	roll angle, angle of rotation about the body X-axis, positive when the positive Y-axis is rotated toward the positive Z-axis; degrees
ρ		air density; K_g/m^3; slugs/ft^3
a		speed of sound; m/sec, ft/sec
V		speed of vehicle relative to surrounding atmosphere; m/sec, ft/sec
q	Q(PSI) Q(PSF)	dynamic pressure; $1/2\rho V^2$, psi, psf
M	MACH	Mach number; V/a
RN/L	RN/L	Reynolds number per unit length; million/ft
p		static pressure; psi
P		total pressure; psi
C_p	CP	pressure coefficient; $(p-p_\infty)/q$

NOMENCLATURE (Continued)

Reference & C. G. Definitions

SYMBOL	SADSAC SYMBOL	DEFINITION
S		wing area; m^2, ft^2
S_{ref}	SREF	reference area; m^2, ft^2
$\bar{c}$		wing mean aerodynamic chord or reference chord; m, ft, in (see ℓ_{ref} or LREF)
ℓ_{ref}	LREF	reference length; m, ft, in.; (see $\bar{c}$)
b_{ref}	BREF	wing span or reference span; m, ft, in
A_b		base area; m^2, ft^2, in^2
c. g.		center of gravity
MRP	MRP	abbreviation for moment reference point
	XMRP	abbreviation for moment reference point on X-axis
	YMRP	abbreviation for moment reference point on Y-axis
	ZMRP	abbreviation for moment reference point on Z-axis

NOMENCLATURE (Continued)

Axis System General

SYMBOL	DEFINITION
F	force; F, lbs
M	moment; M, in-lb

Subscript	Definition
N	normal force
A	axial force
L	lift force
D	drag force
Y	force or moment about the Y axis
Z	moment about the Z axis
X	moment about the X axis
s	stability axis system
w	wind axis system
ref	reference conditions
∞	free stream conditions
t	total conditions
b	base

NOMENCLATURE (Continued)

Body & Stability Axis System

SYMBOL	SADSAC SYMBOL	DEFINITION
		Body Axis System
C_N	CN	normal force coefficient; F_N/qS
C_A	CA	axial force coefficient; F_A/qS
C_{A_b}	CAB	base axial force coefficient; $\left[-1\right]\ \left[(p_b - p_\infty)/q\right]\ (A_b/S)$
C_{A_f}	CAF	forebody axial force coefficient; $C_A - C_{A_b}$
C_n	CYN	yawing moment coefficient; $M_Z/qS\ b_{ref}$
C_ℓ	CBL	rolling moment coefficient; $M_X/qS\ b_{ref}$
		Common to Both Axis Systems
C_m	CLM	pitching moment coefficient; $M_Y/qS\ \ell_{ref}$
C_y	CY	side force coefficient; F_Y/qS
		Stability Axis System
C_L	CL	lift force coefficient; F_L/qS
C_D	CD	drag force coefficient; F_D/qS
C_{D_b}	CDB	base drag coefficient
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_n	CLN	yawing moment coefficient; $M_{Z,s}/qS\ b_{ref}$
C_ℓ	CSL	rolling moment coefficient; $M_{X,s}/qS\ b_{ref}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D_f	L/DF	lift to forebody drag ratio; C_L/C_{D_f}

NOMENCLATURE (Continued)

Surface Definitions

SYMBOL	SADSAC SYMBOL	DEFINITION
i_t	HORIZT	horizontal tail incidence; positive when trailing edge down; degrees
δ		symmetrical surface deflection angle; degrees; positive deflections are:
	AILRON	aileron - total aileron deflection; (left aileron - right aileron)/2
	CANARD	canard - trailing edge down
	ELEVON	elevon - trailing edge down
	ELVATR	elevator - trailing edge down
	FLAP	flap - trailing edge down
	RUDDER	rudder - trailing edge to the left
	SPOILR	spoiler - trailing edge down
	TAB	tab - trailing edge down with respect to control surface
δ		antisymmetrical surface deflection angle, degrees; positive trailing edge down:
	AIL-L	left aileron - trailing edge down
	AIL-R	right aileron - trailing edge down
	ELVN-L	left elevon - trailing edge down
	ELVN-R	right elevon - trailing edge down
	SPLR-L	left spoiler - trailing edge down
	SPLR-R	right spoiler - trailing edge down

SURFACE SUBSCRIPTS	DEFINITION
a	aileron
b	base
c	canard
e	elevator or elevon
f	flap
r	rudder or ruddervator
s	spoiler
t	tail

TABULATED DATA LISTING

A tabulated data listing, consisting of all aero data sets, both original and those created in arriving at the plotted material to be presented subsequently, is available as an addendum to this report. The tabular listing is made up in two sections:

(a) a brief summary list of all data sets containing the identifier, the descriptor, and the resident dependent variables.

(b) a full list of all data sets containing all resident or selected aerodynamic coefficients of the data sets as well as the above mentioned information.

The listing is currently sent on limited distribution to the following organizations:

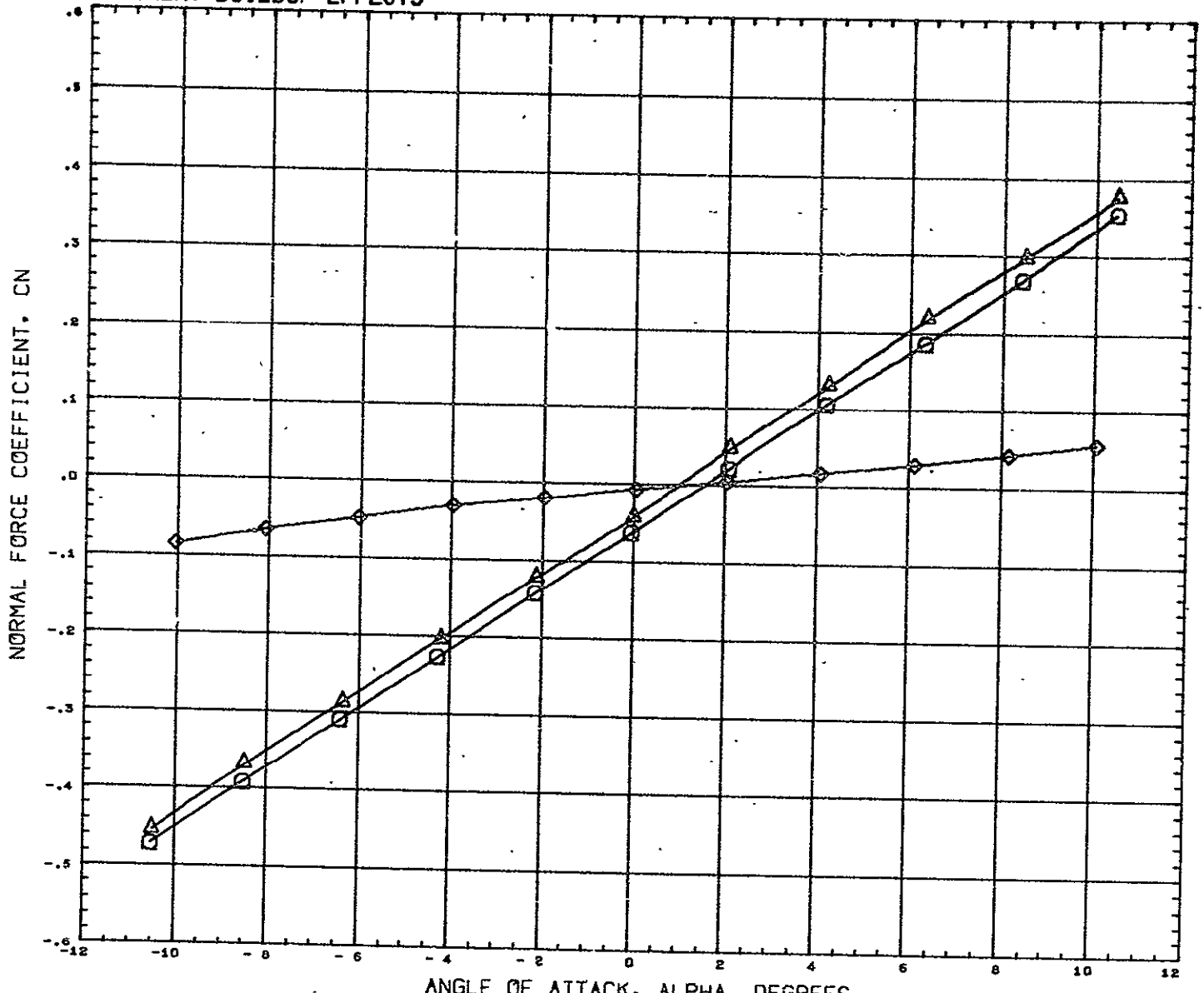
NASA AMES	Mr. V. Stevens
NASA MSC	Mr. Ray Nelson
NASA MSFC	Mr. Jim Weaver
NR	Mr. C. R. Leef

If copies of this listing are desired, please contact the above or the cognizant SADSAC personnel who, for this data, is:

Mr. John Hord
Department 2780
Chrysler Corporation Space Division
New Orleans, La. 70129

(504) 255-2304

COMPONENT BUILDUP EFFECTS



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(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X

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MACH 0.605

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XMRP	1422.5040	INCHES
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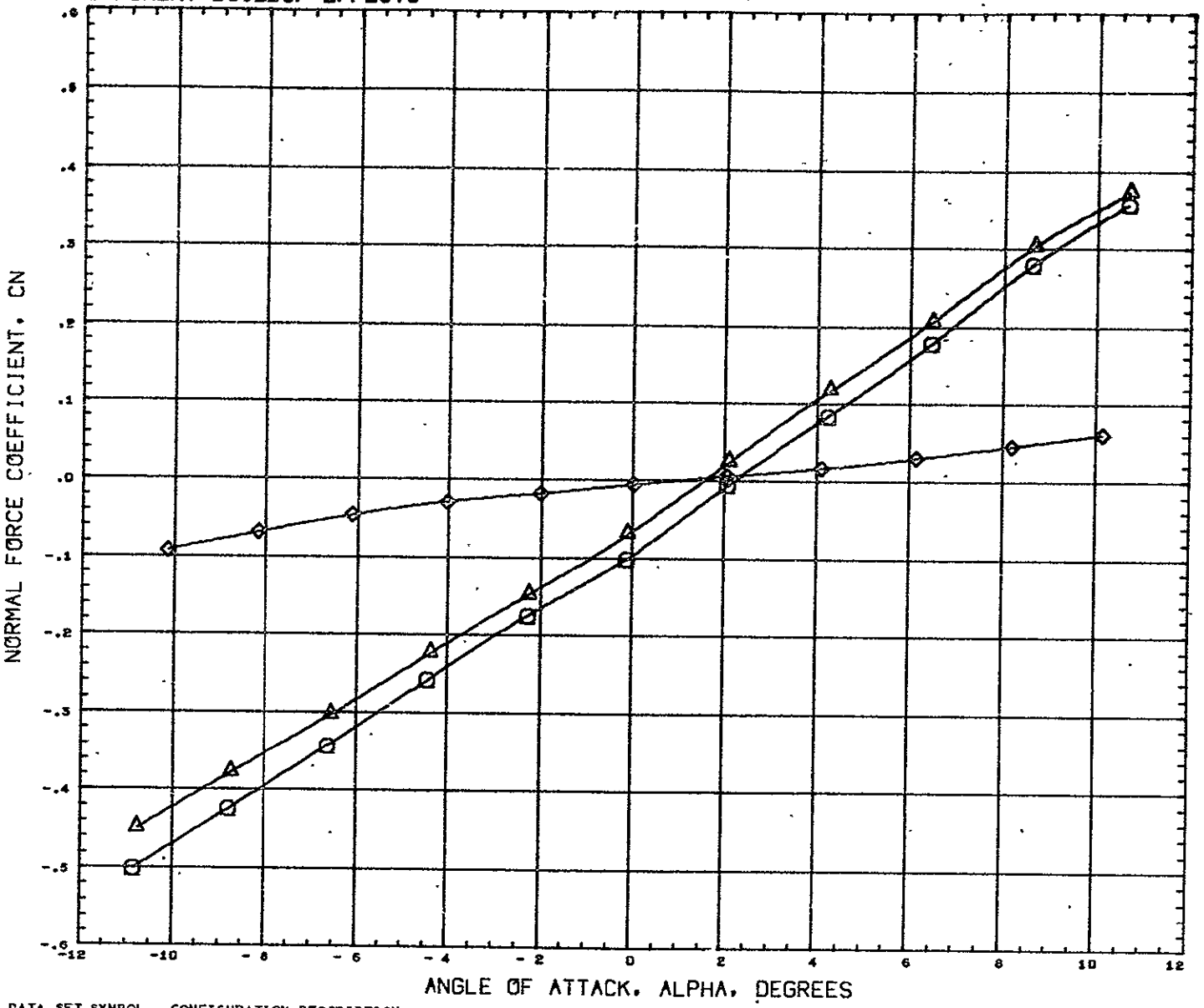
COMPONENT BUILDUP EFFECTS



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MACH 0.904

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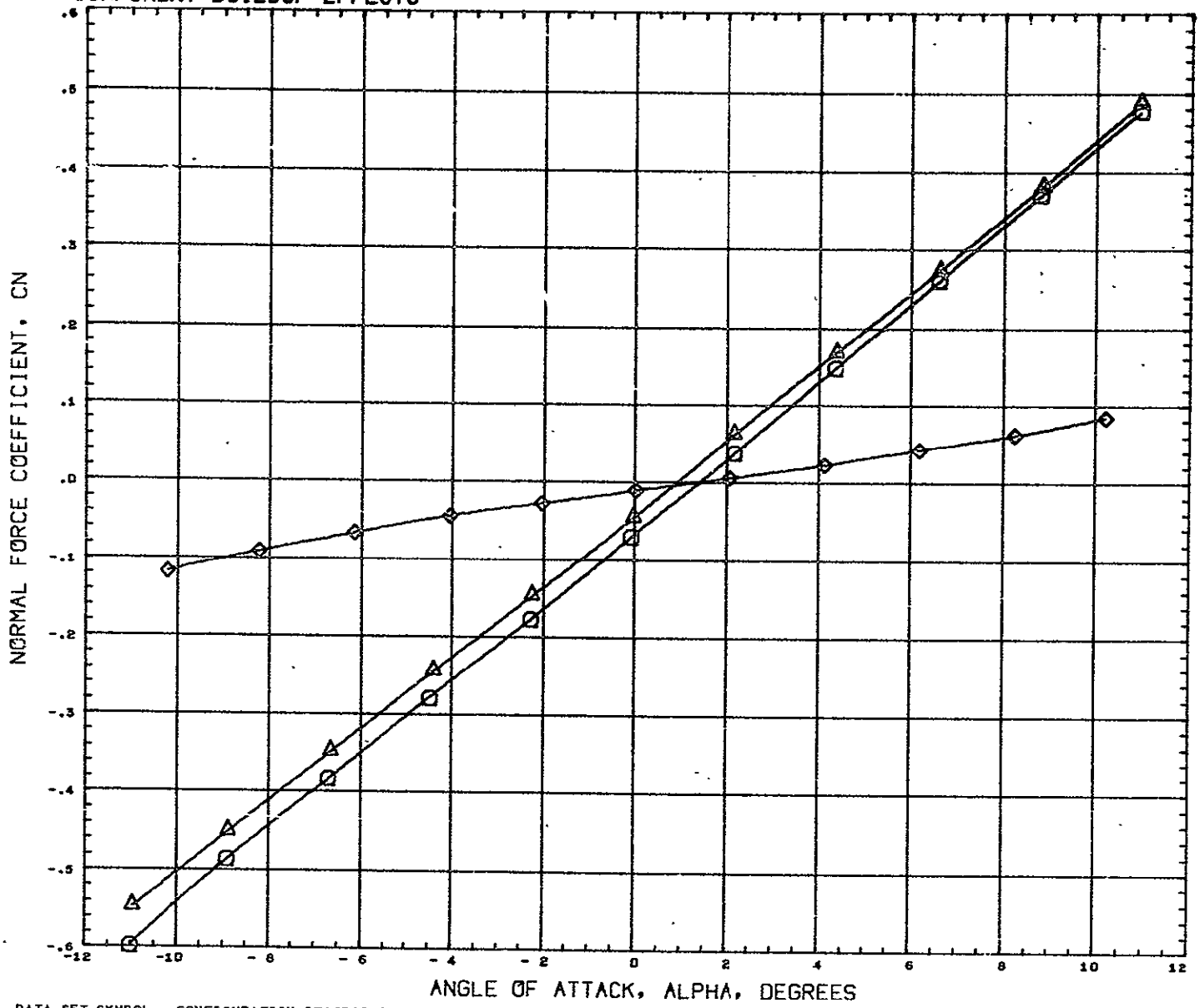
COMPONENT BUILDUP EFFECTS



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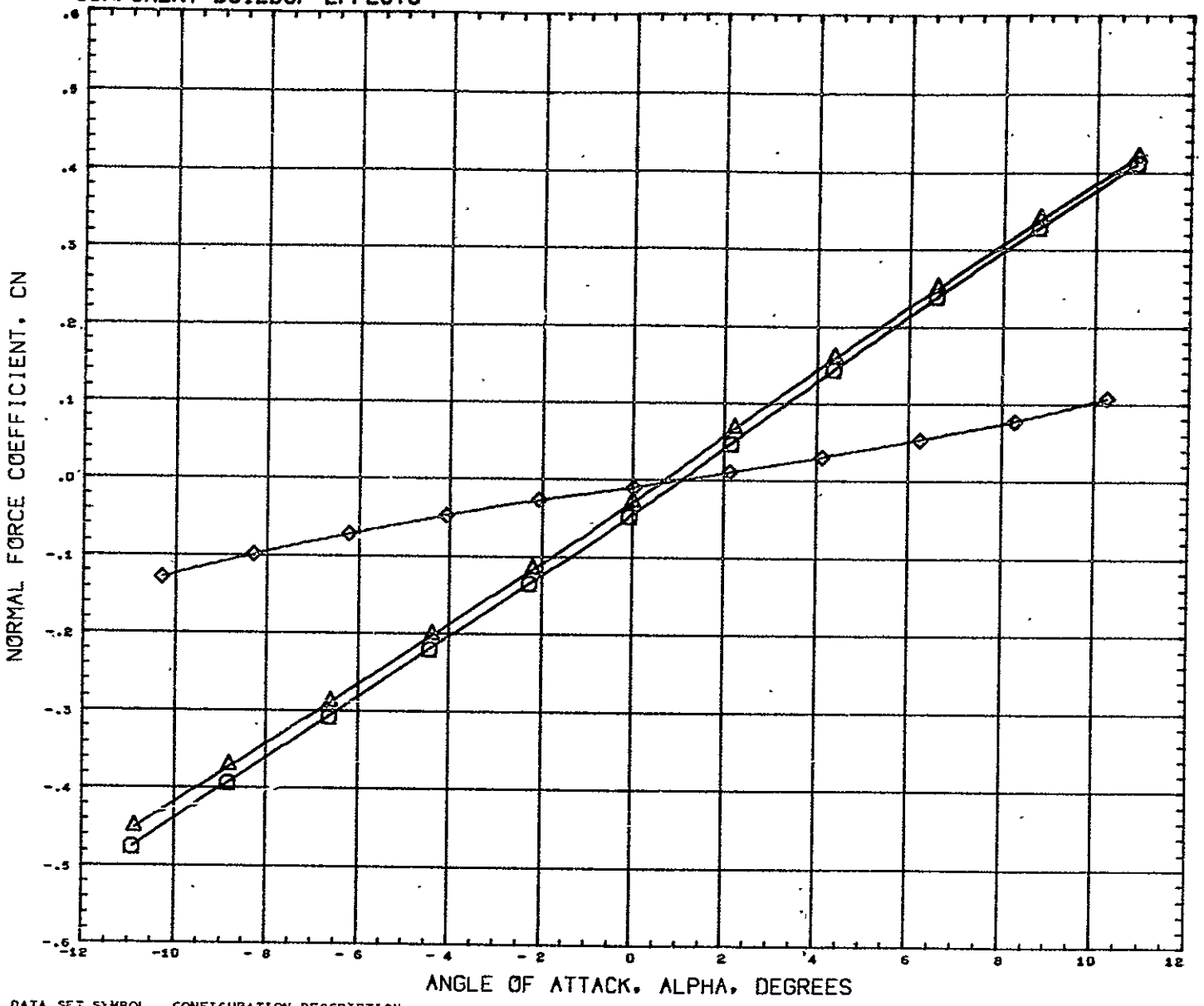
MACH 1.102

COMPONENT BUILDUP EFFECTS



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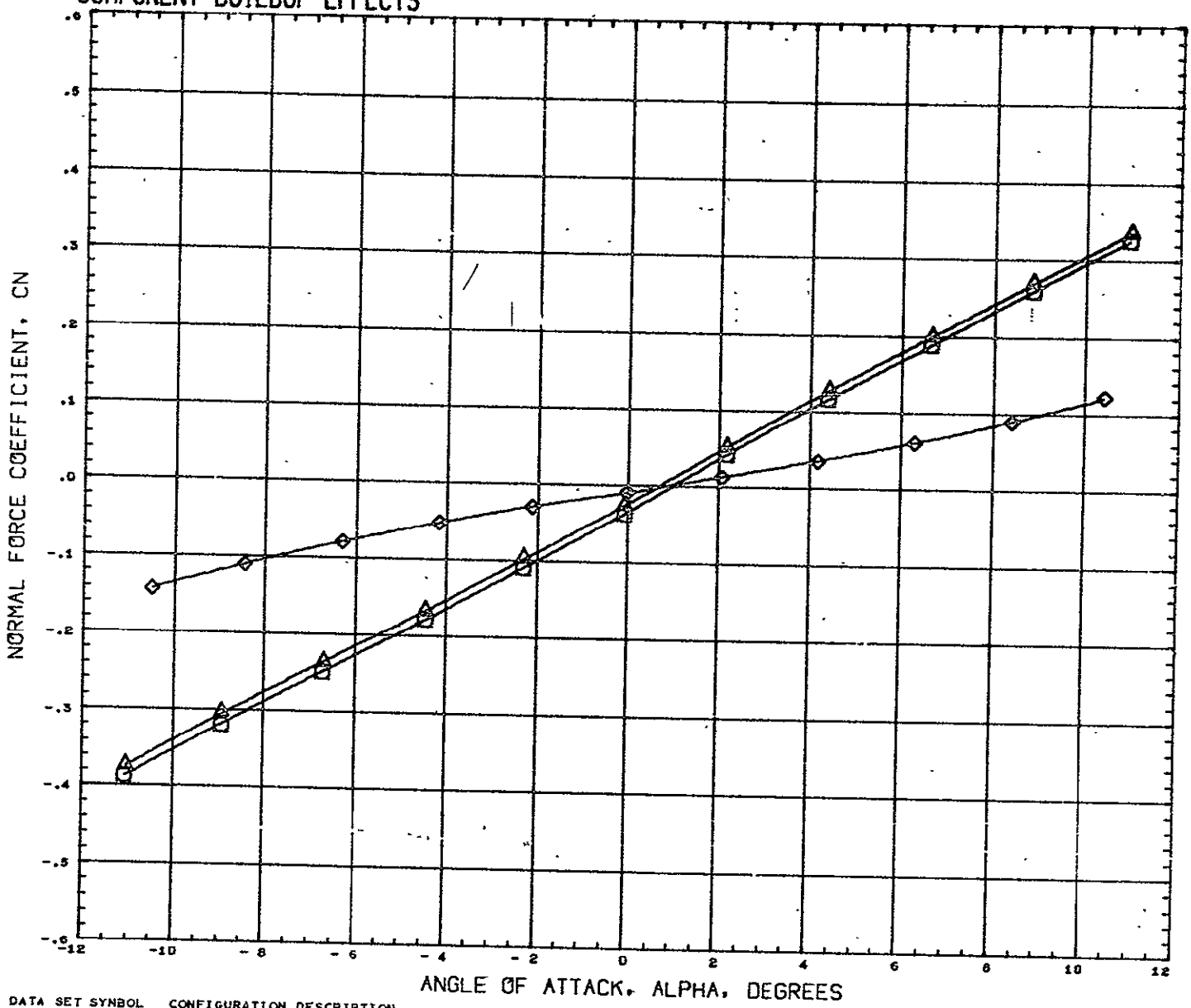
MACH 1.463

COMPONENT BUILDUP EFFECTS



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MACH 1.965

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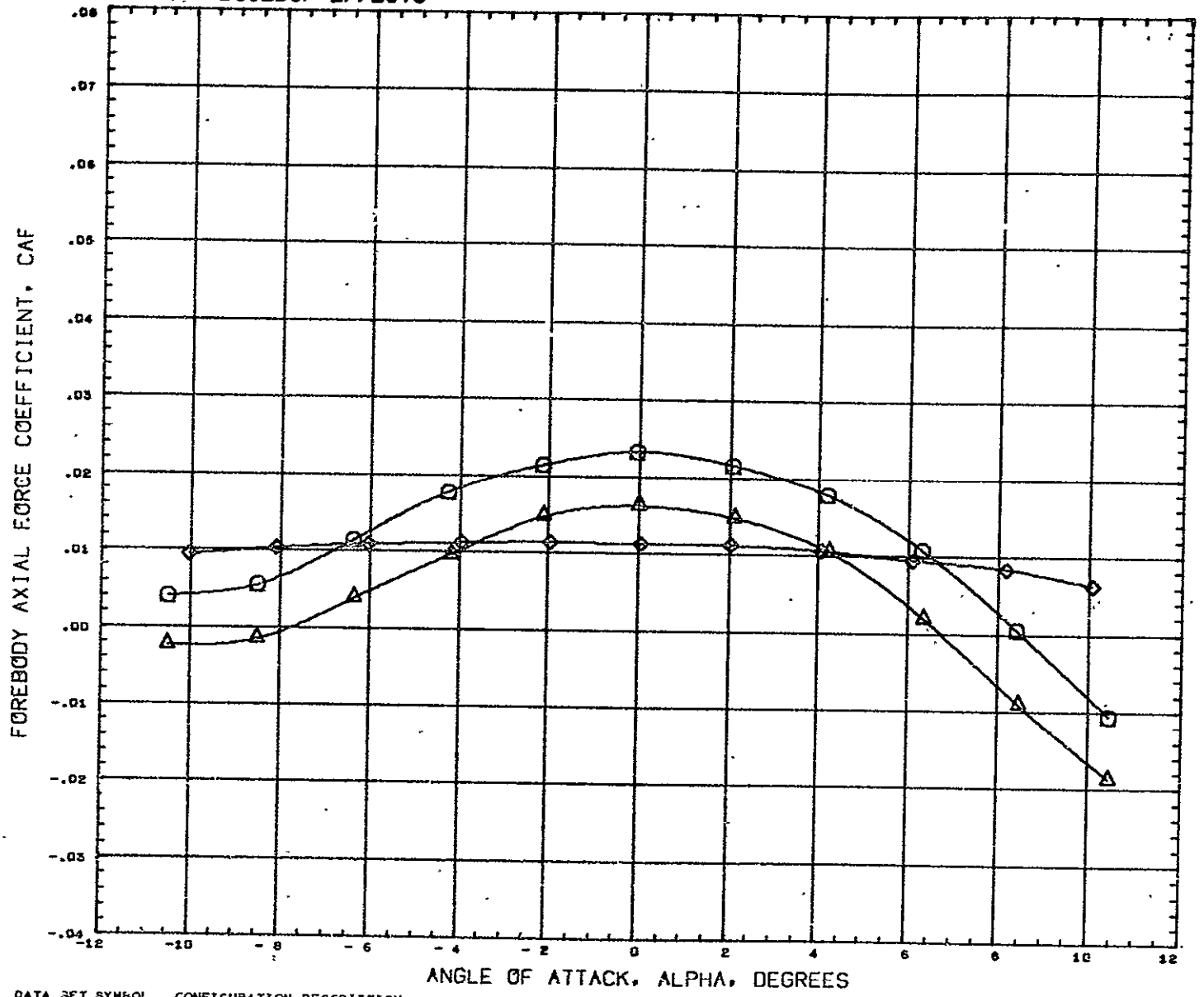
COMPONENT BUILDUP EFFECTS



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MACH 0.605

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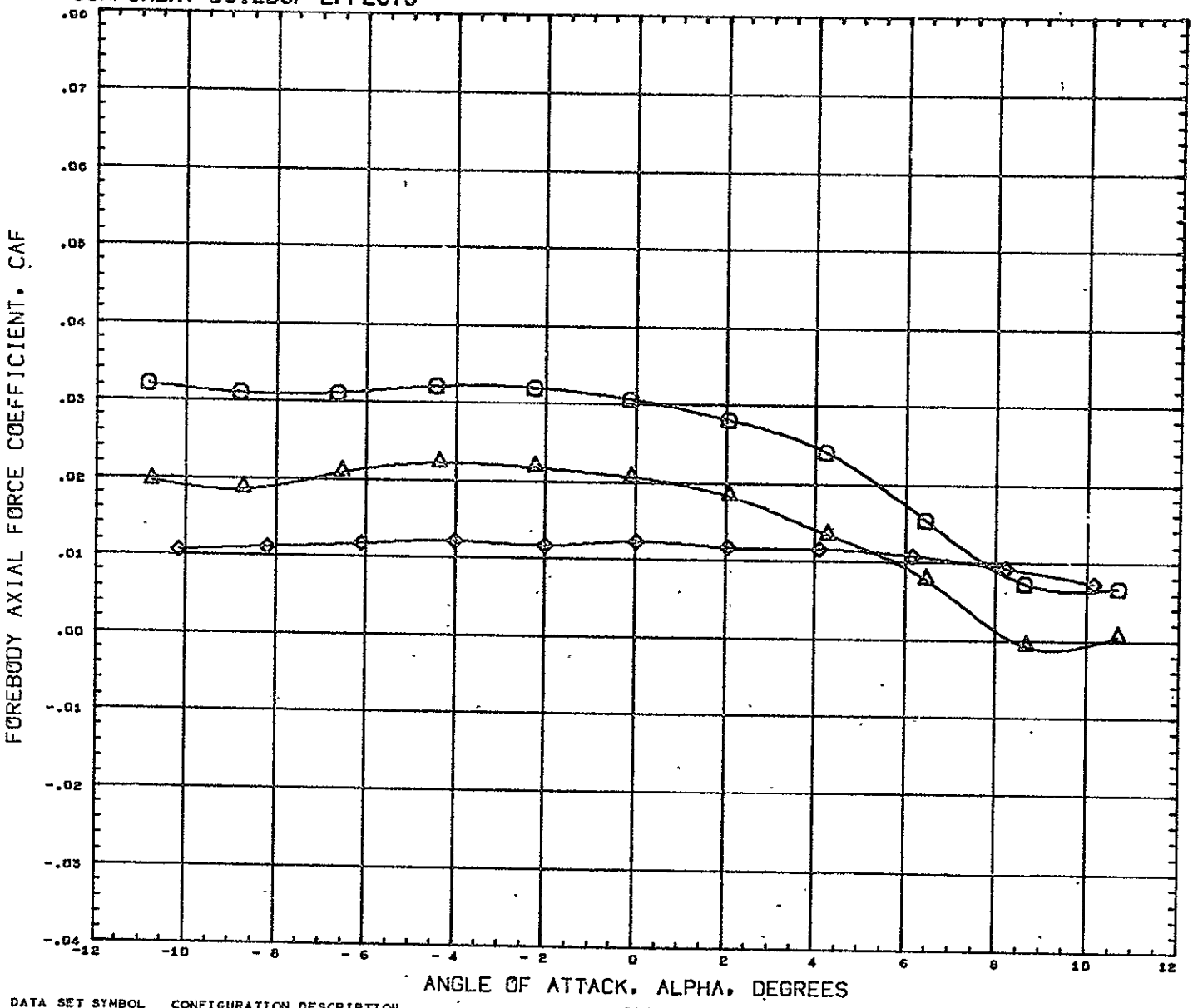
COMPONENT BUILDUP EFFECTS



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MACH 0.904

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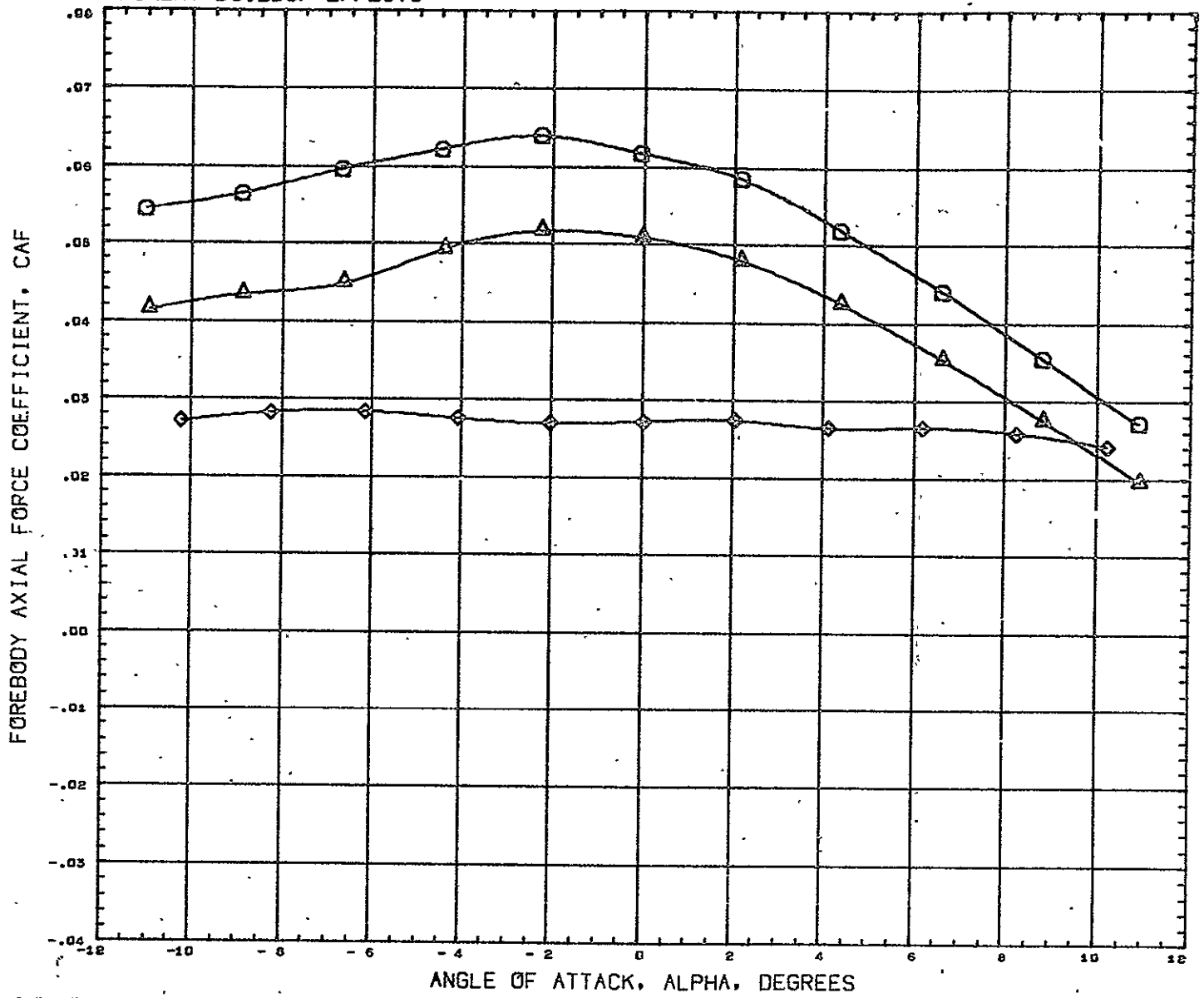
COMPONENT BUILDUP EFFECTS



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MACH 1.102

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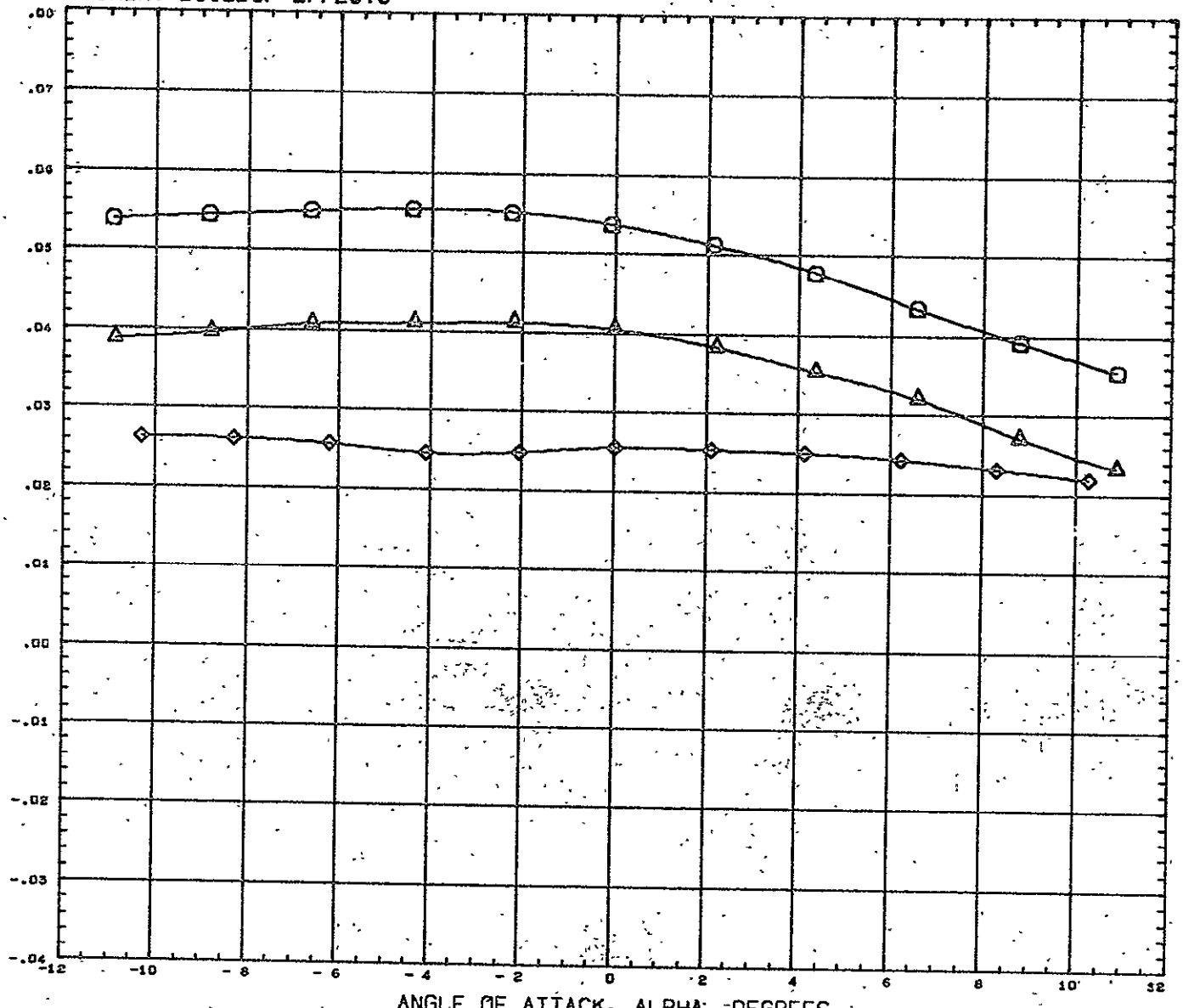
COMPONENT BUILDUP EFFECTS



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MACH 1.463

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XMRP	1422.5040	INCHES
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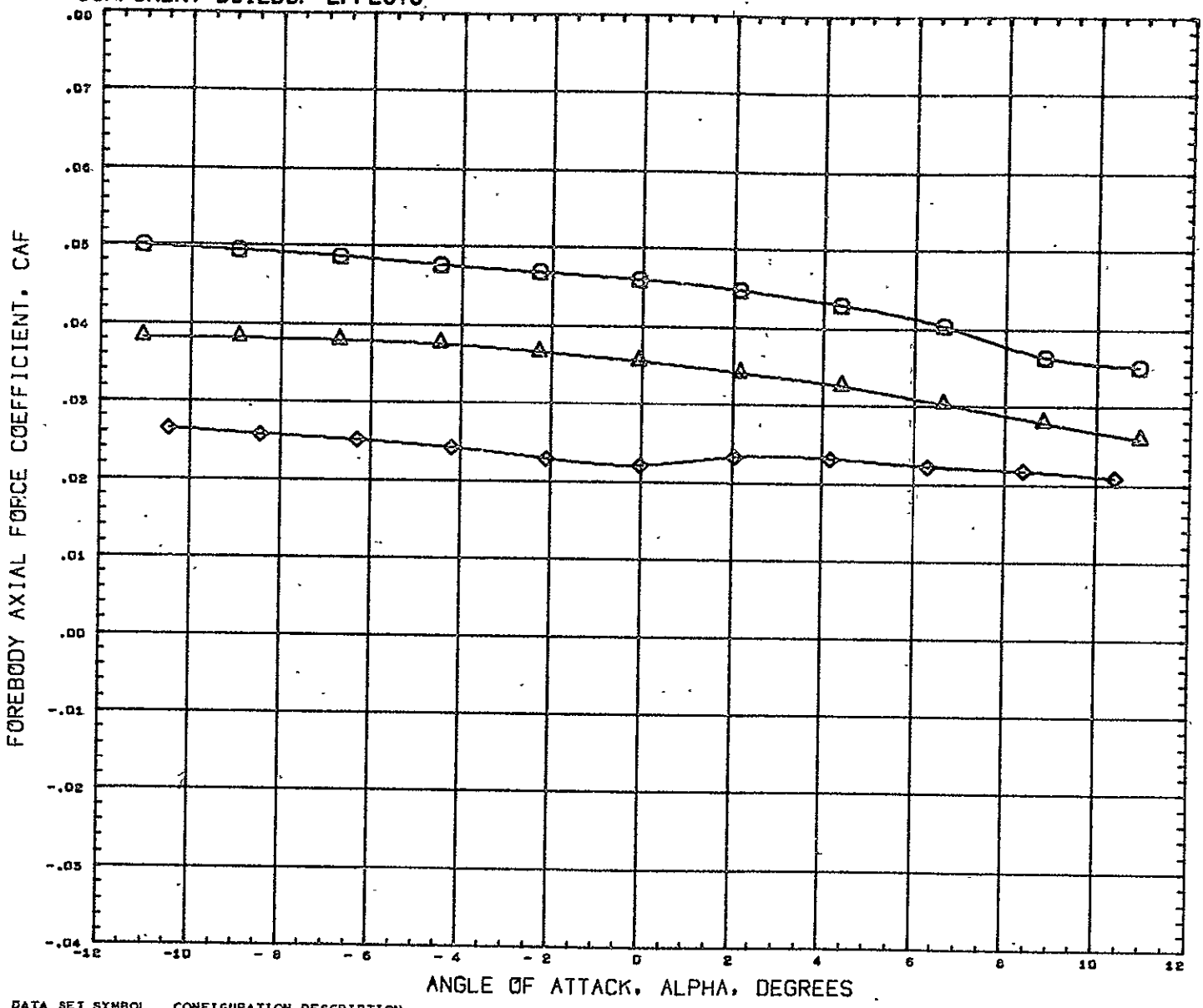
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



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(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X

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0.000	0.000	0.000
0.000		

MACH 1.965

REFERENCE INFORMATION

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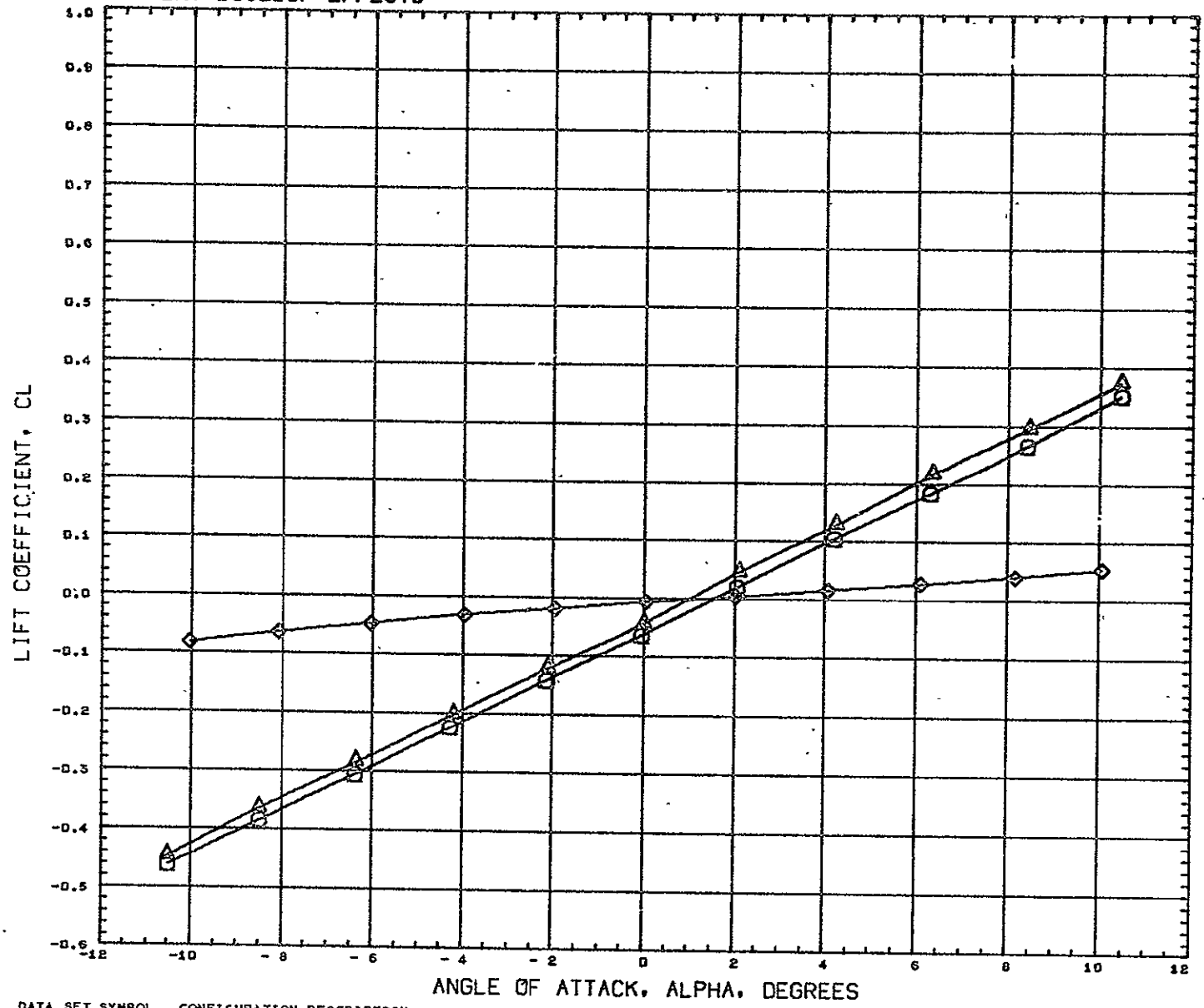
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



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BETA	ELVATR	AILRON
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0.000	0.000	0.000
0.000		

MACH 0.605

REFERENCE INFORMATION

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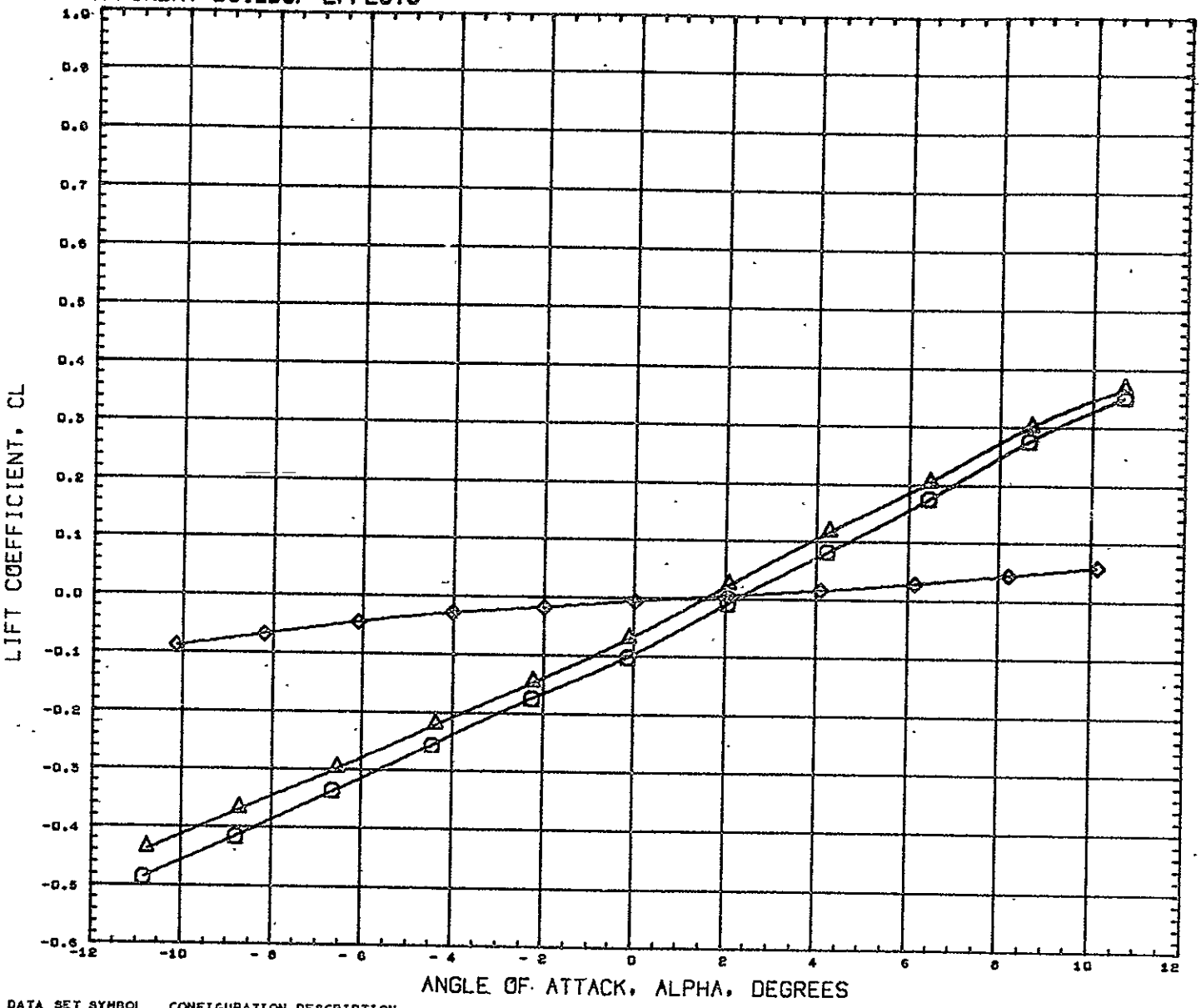
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



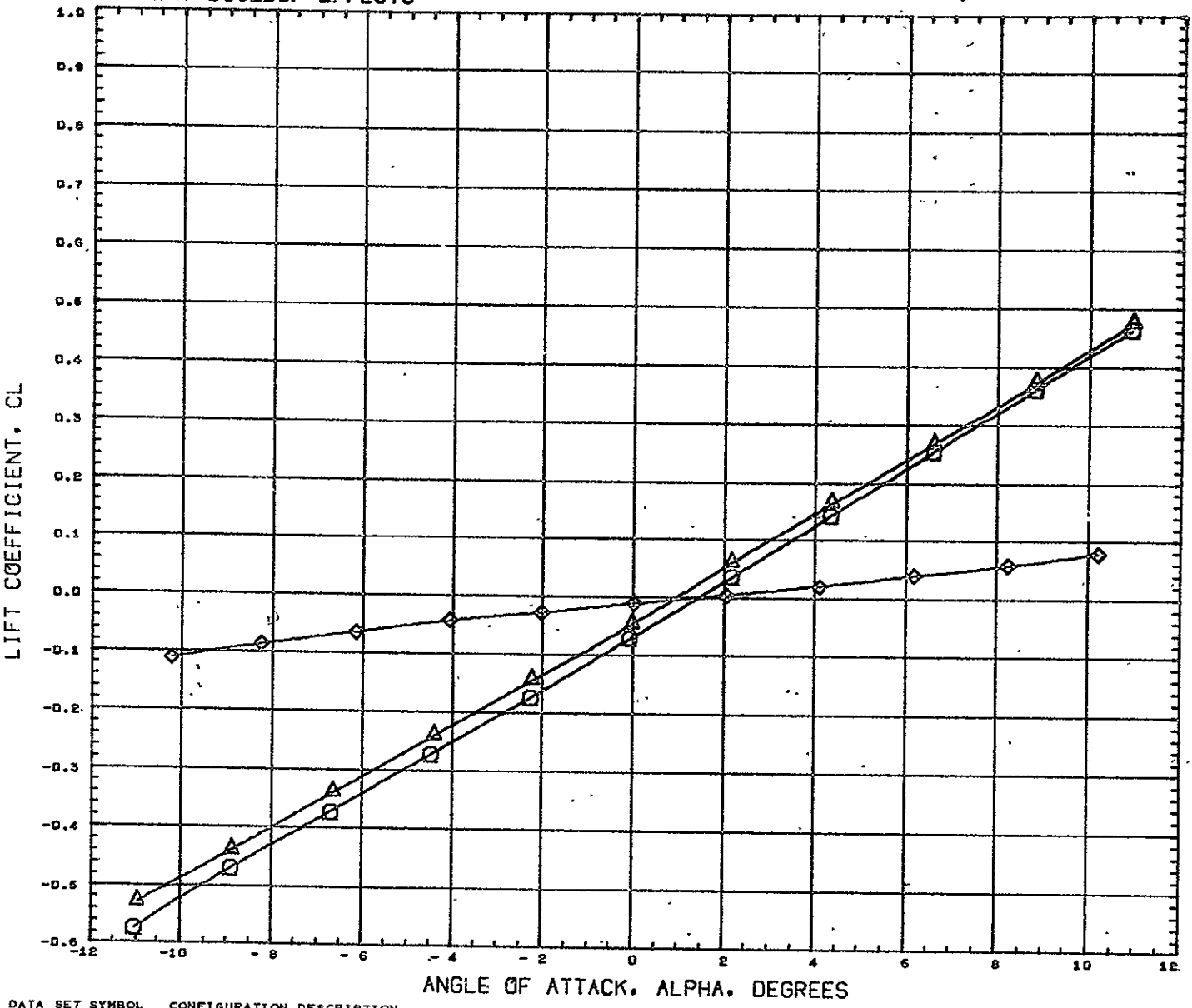
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17L10V17J2X
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X

BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

MACH 0.904

COMPONENT BUILDUP EFFECTS



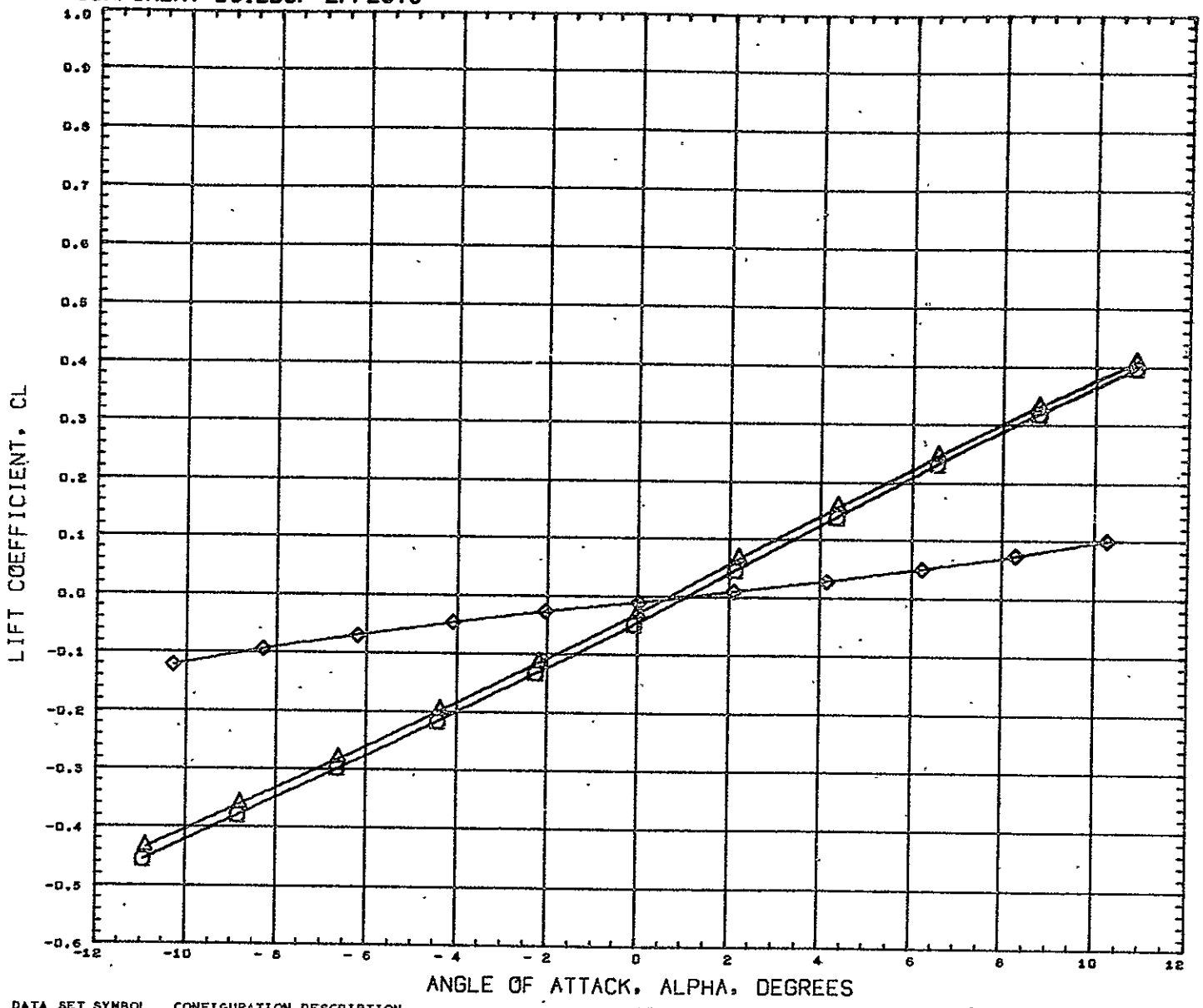
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17L10V17J2X
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X

BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

MACH 1.102

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17F10V17J2X
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X

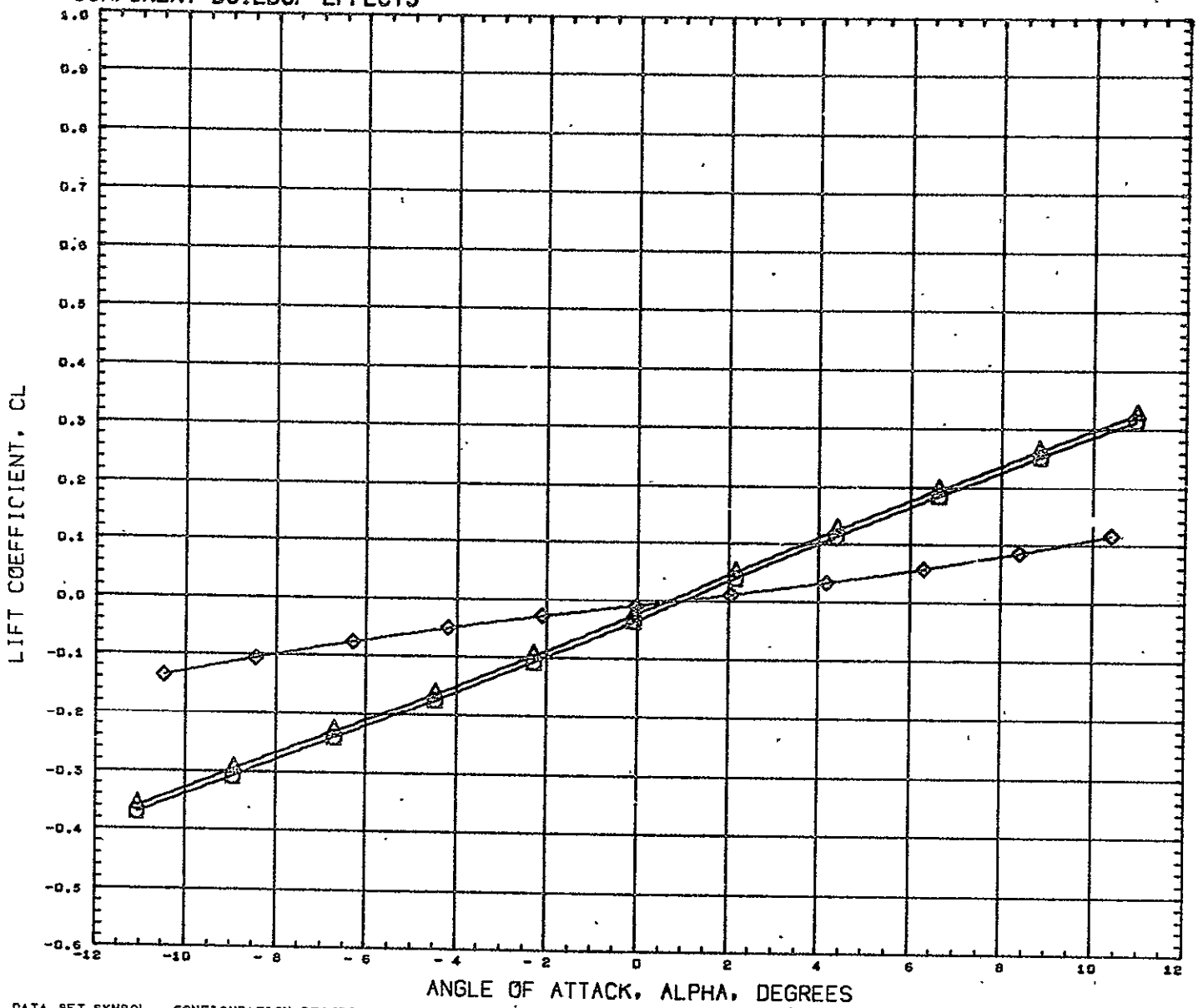
BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

MACH 1.463

COMPONENT BUILDUP EFFECTS



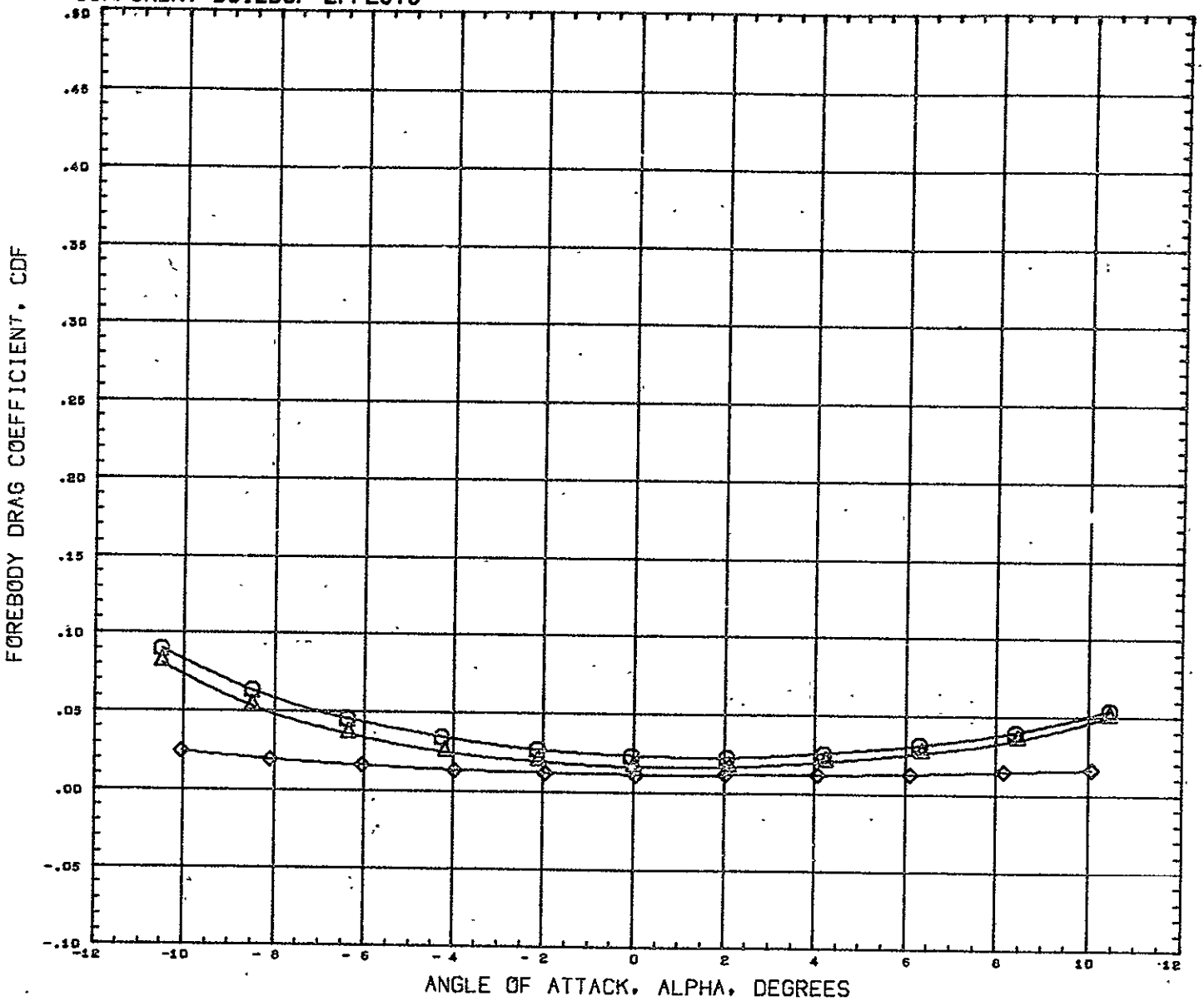
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(V2906A)	MSFC484 NR DELTA ORBITER B5W17C10V17J2X
(V2902A)	MSFC484 NR DELTA ORBITER B5W17E10X
(V2901A)	MSFC484 NR DELTA ORBITER B5X

BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

MACH 1.965

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17L10V17J2X
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W1/E10X
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X

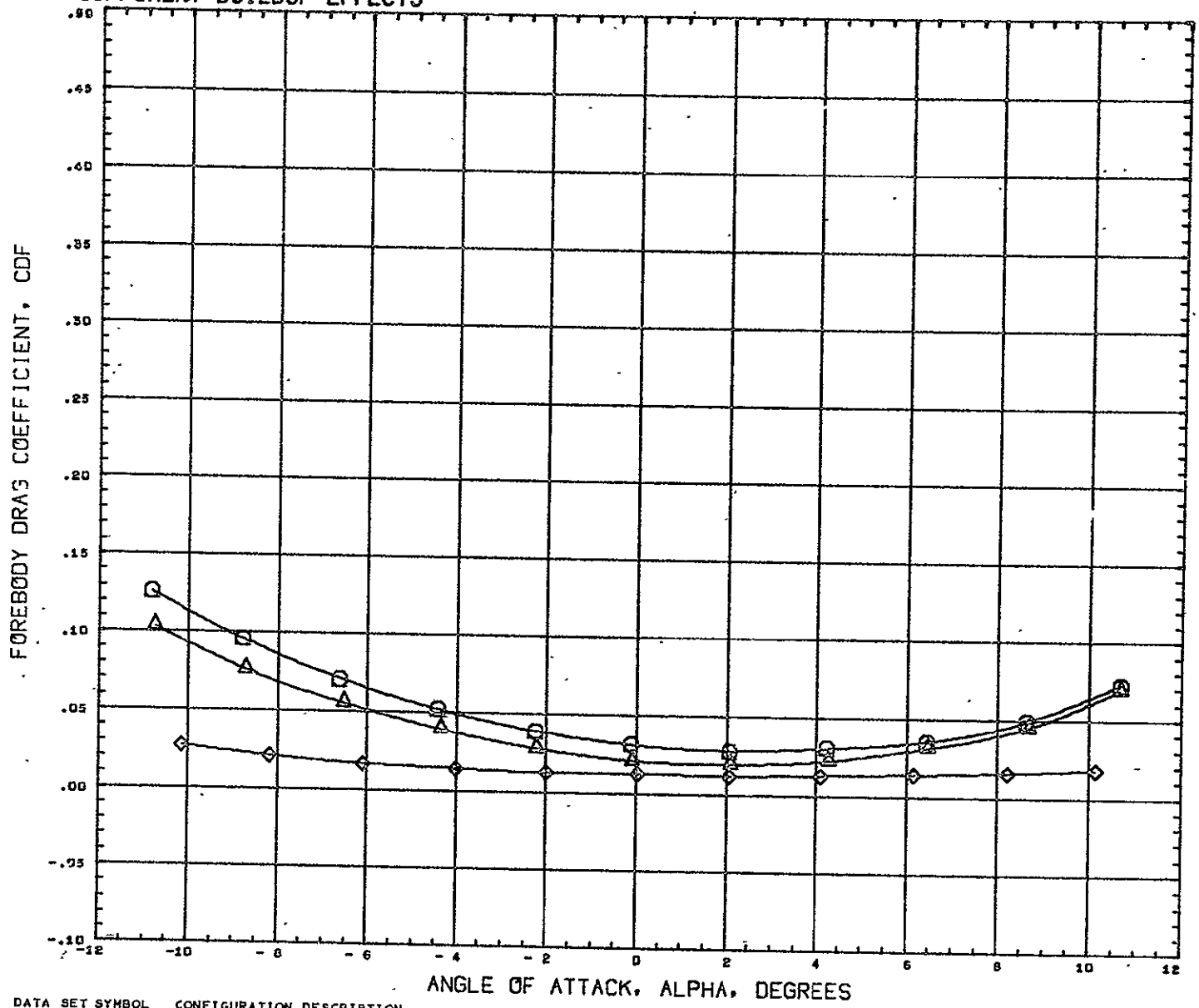
BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

MACH 0.605

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X

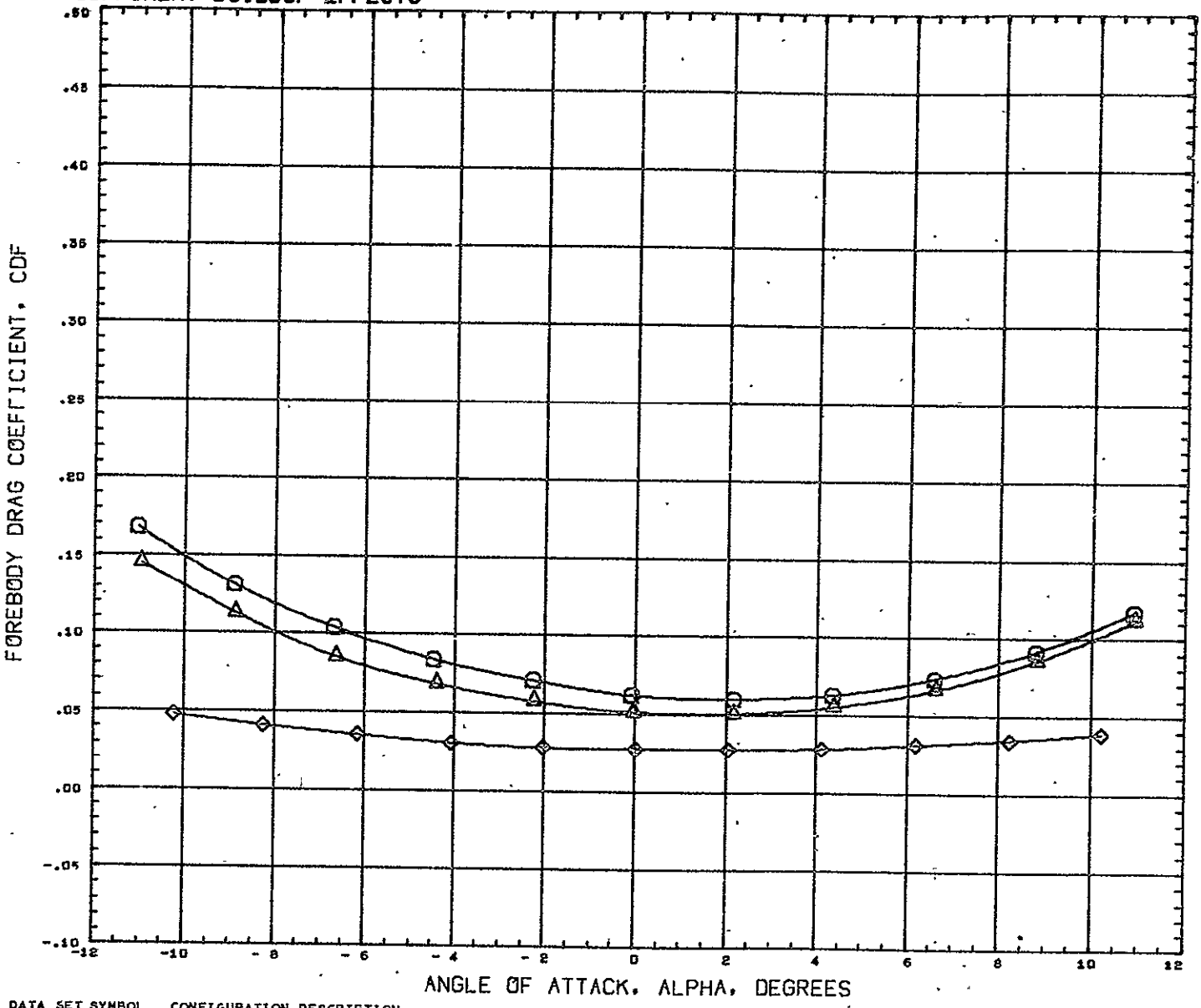
BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

MACH 0.904

COMPONENT BUILDUP EFFECTS



DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X

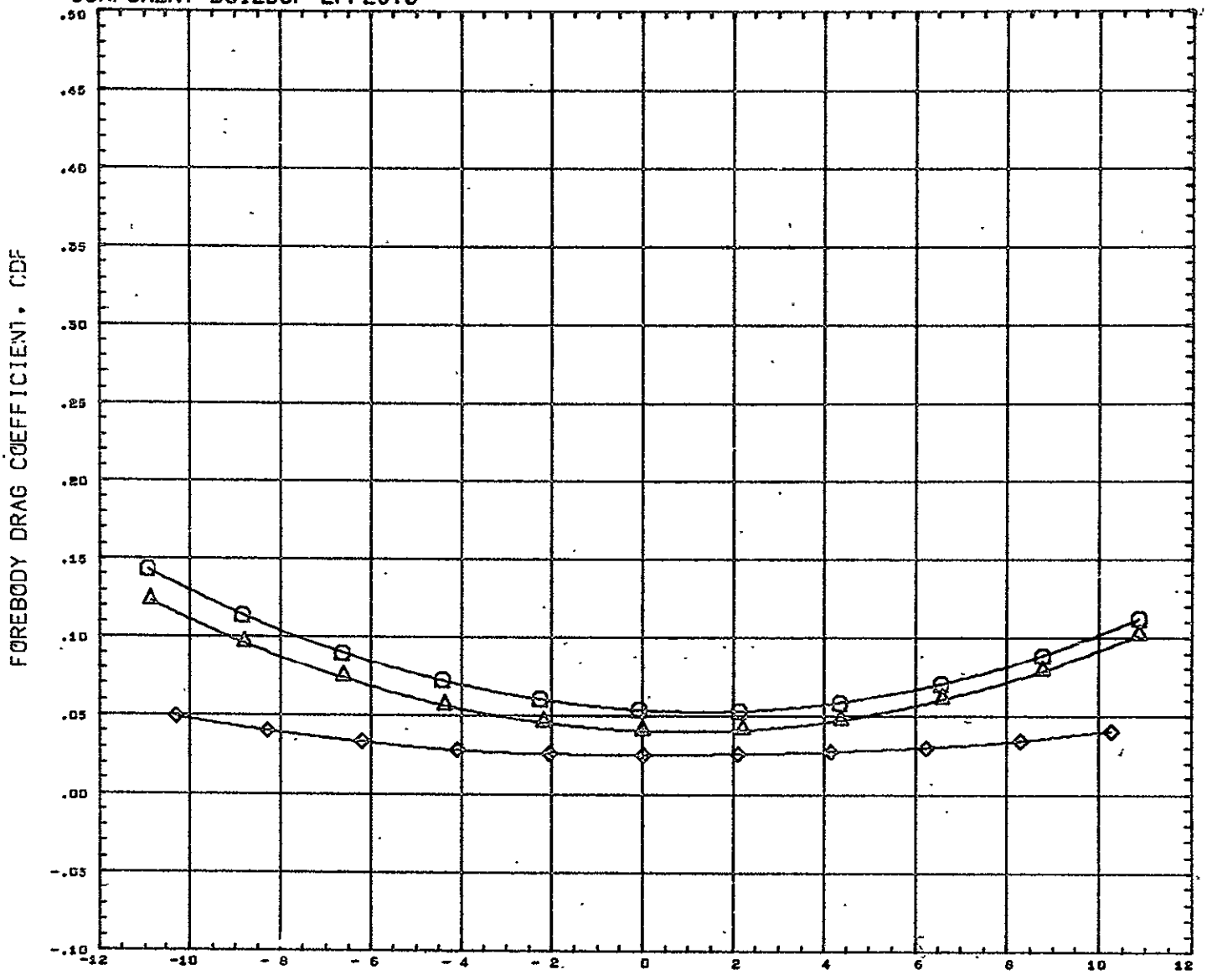
BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

REFERENCE INFORMATION

REFS	6064.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

MACH 1.102

COMPONENT BUILDUP EFFECTS

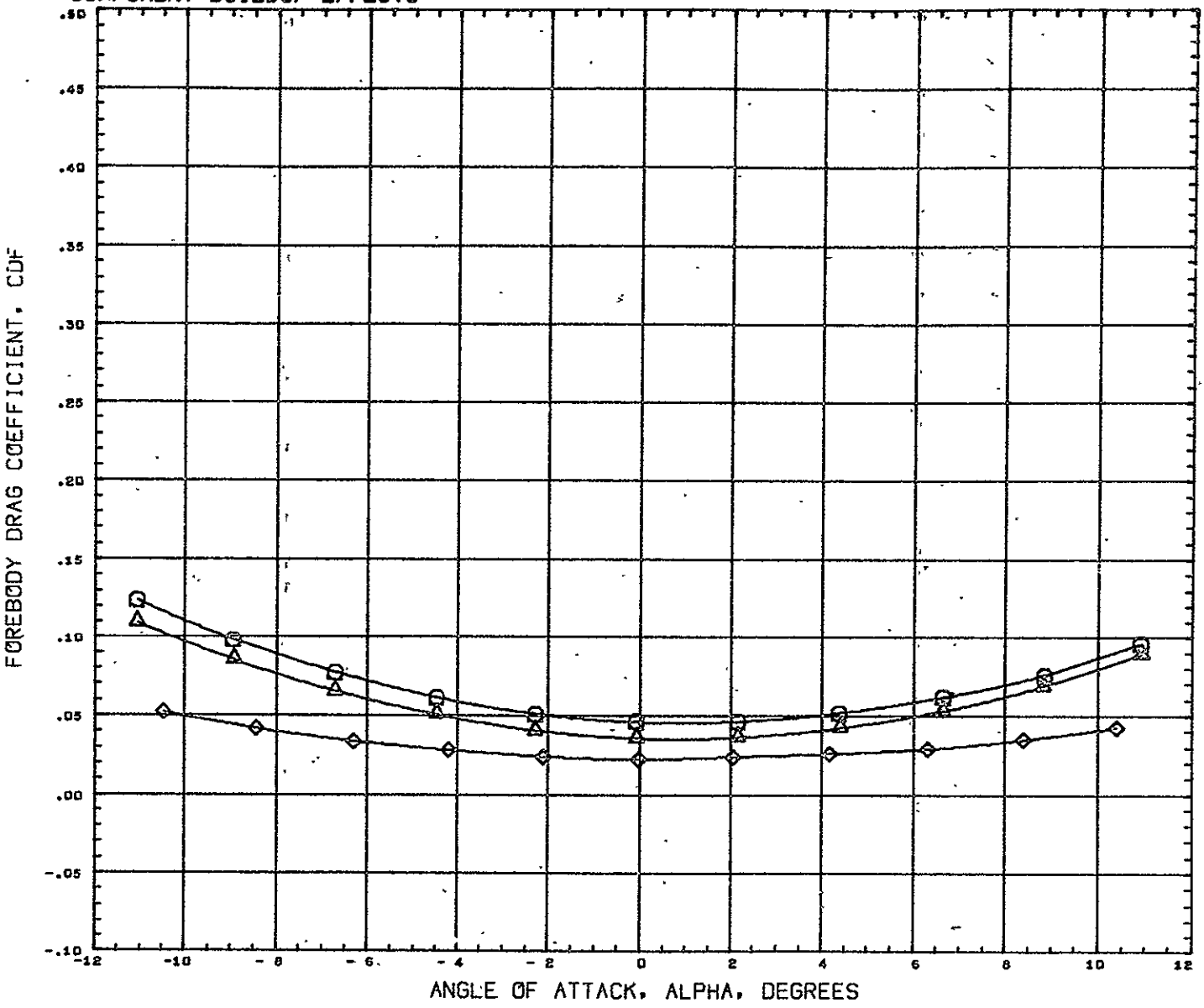


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2906A)	○	NSFC484 NR DELTA ORBITER B5W17E10V17J2X	0.000	0.000	0.000
(V2902A)	△	NSFC484 NR DELTA ORBITER B5W17E10X	0.000	0.000	0.000
(V2901A)	◇	NSFC484 NR DELTA ORBITER B5X	0.000		

MACH 1.463

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



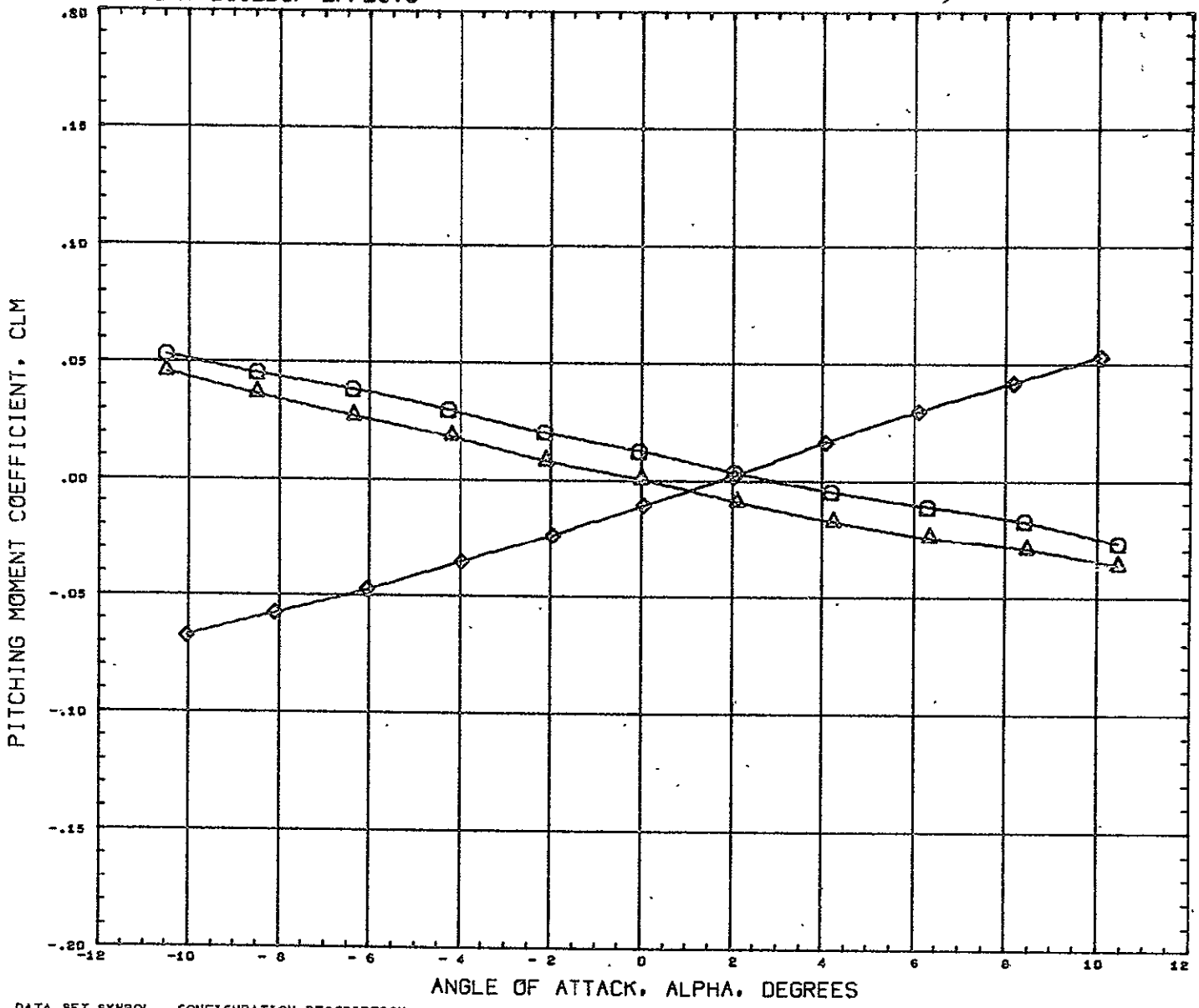
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2906A) ○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X	0.000	0.000	0.000
(V2902A) △	MSFC484 NR DELTA ORBITER B5W17E10X	0.000	0.000	0.000
(V2901A) ◇	MSFC484 NR DELTA ORBITER B5X	0.000		

MACH 1.965

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X

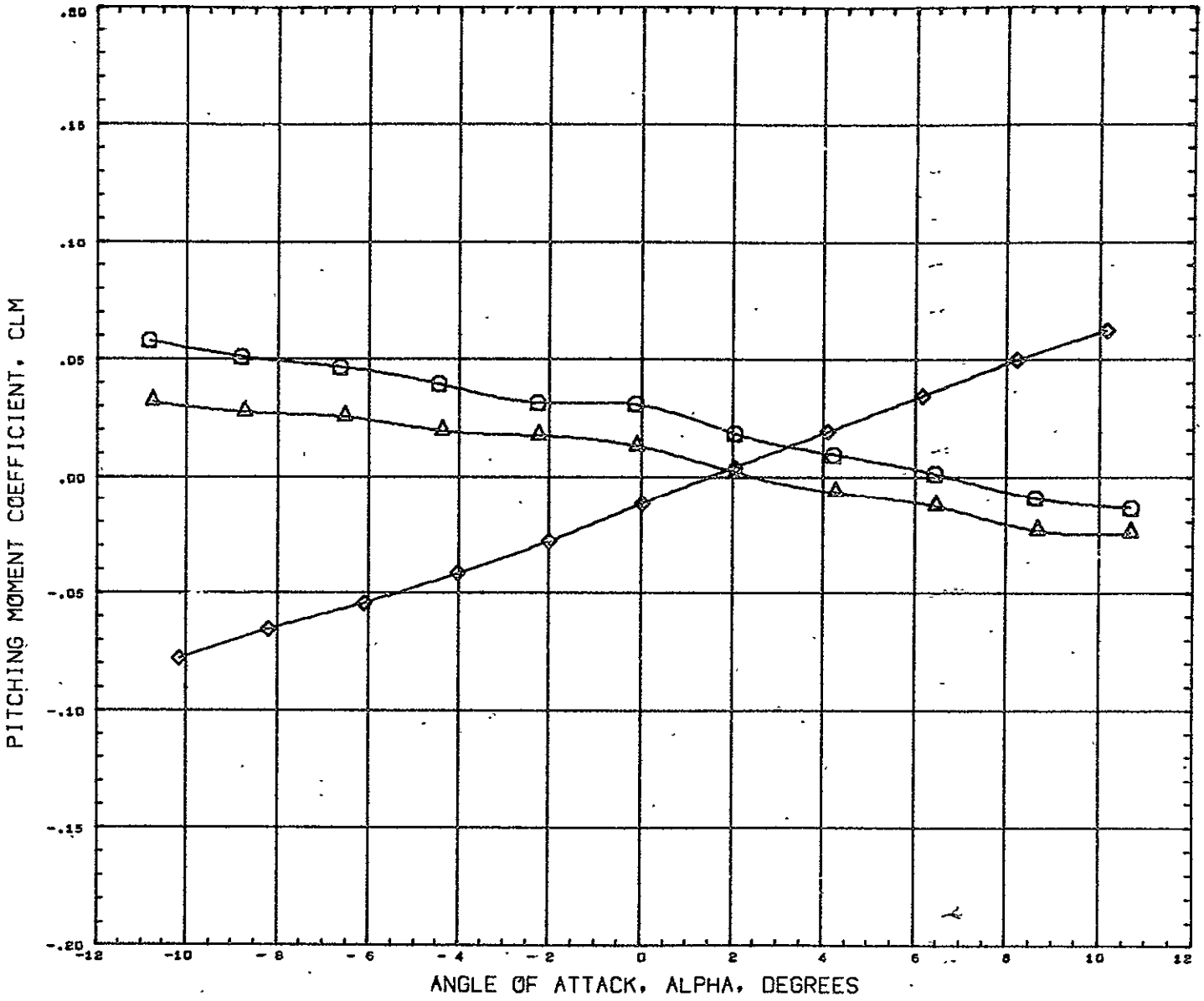
BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

MACH 0.605

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



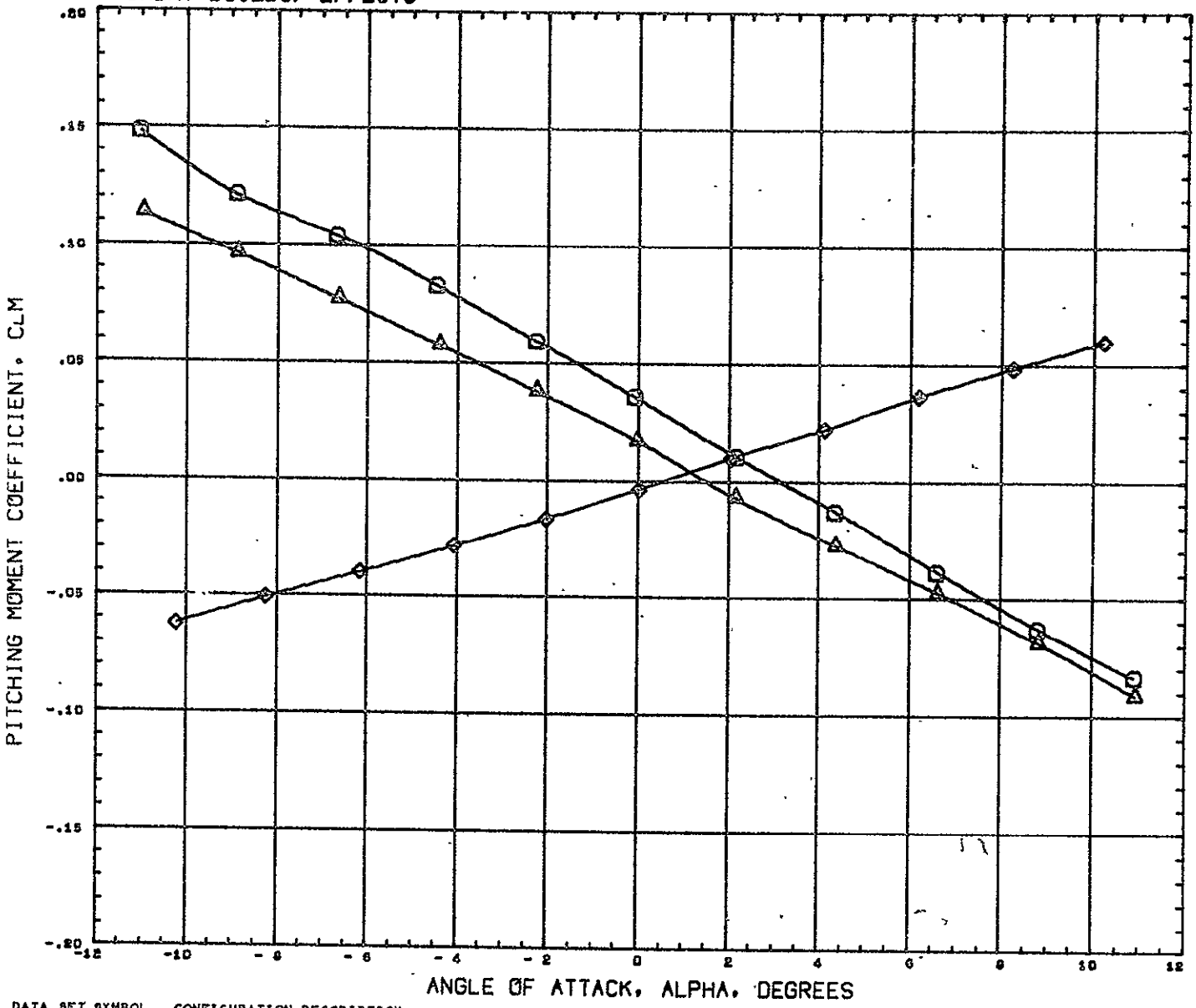
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X	0.000	0.000	0.000
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X	0.000	0.000	0.000
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X	0.000		

MACH 0.904

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



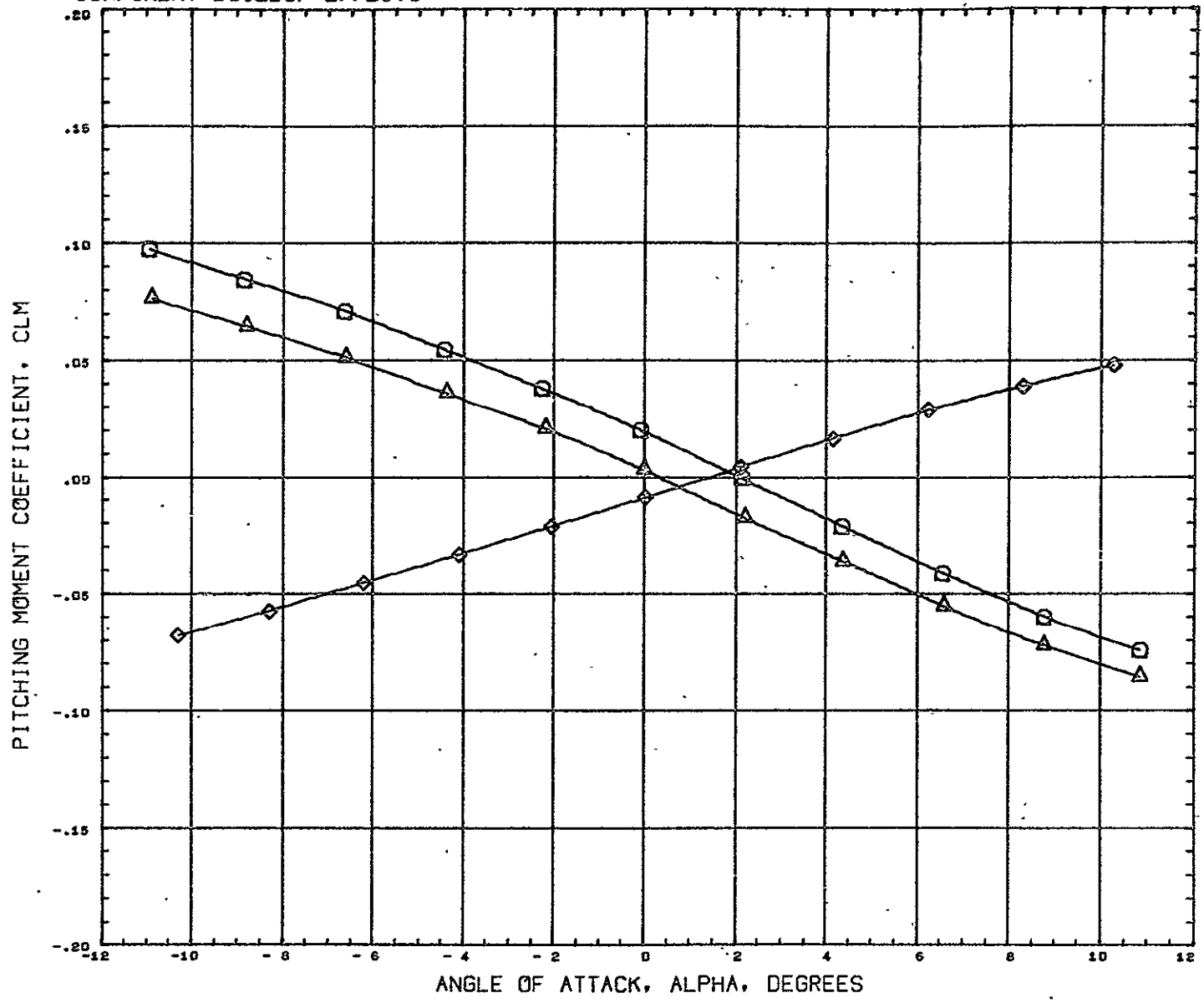
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(V2906A)	○	M3FC484 NR DELTA ORBITER B5W17E10V17J2X
(V2902A)	△	M3FC484 NR DELTA ORBITER B5W17E10X
(V2901A)	◇	M3FC484 NR DELTA ORBITER B5X

BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

MACH 1.102

REFERENCE INFORMATION		
REFS	6064.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

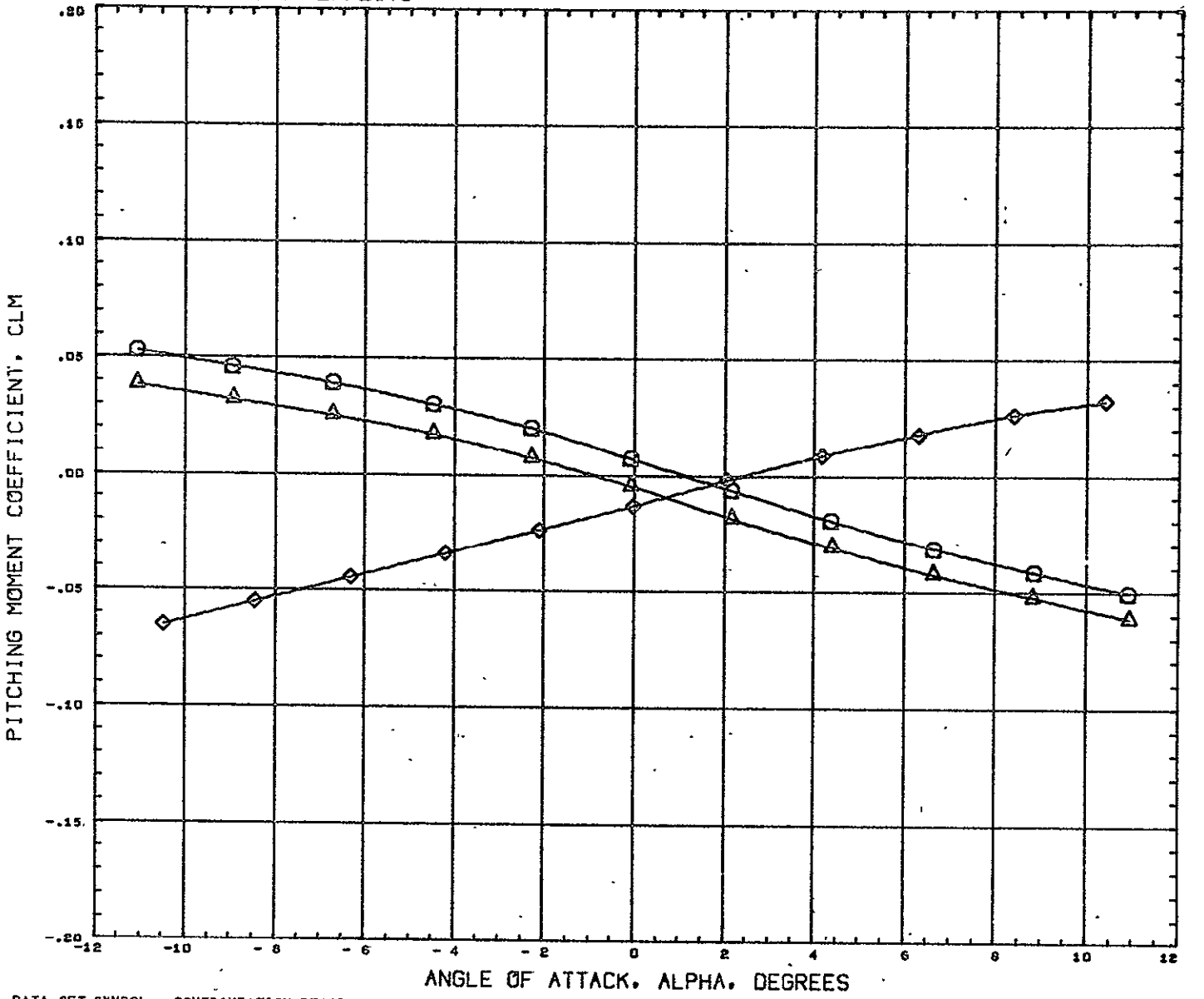


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X	0.000	0.000	0.000
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X	0.000	0.000	0.000
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X	0.000		

MACH 1.463

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(V29D6A)	○	NSFC484 NR DELTA ORBITER B5WI7E10V17J2X
(V2902A)	△	NSFC484 NR DELTA ORBITER B5WI7E10X
(V2901A)	◇	NSFC484 NR DELTA ORBITER B5X

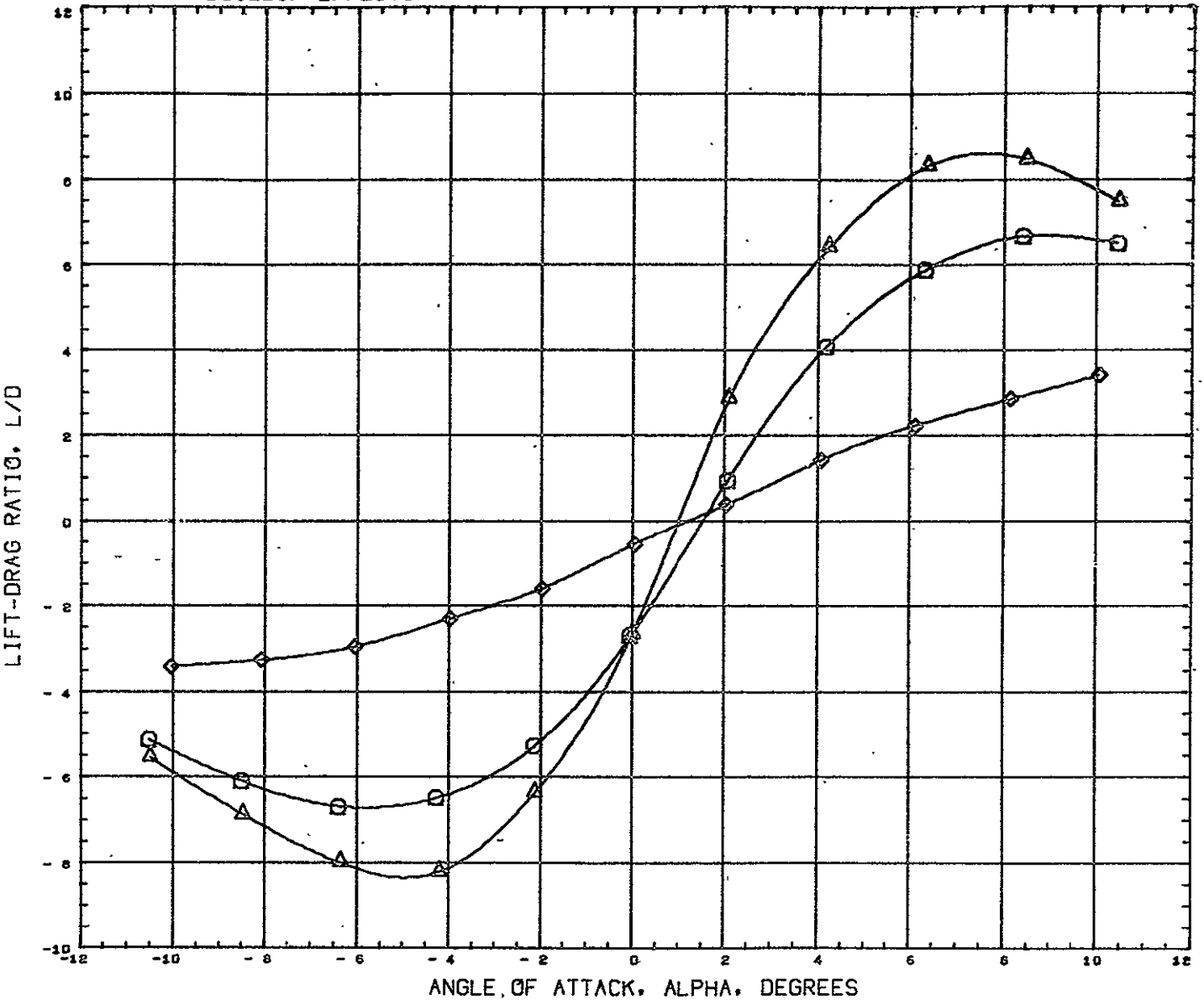
BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

MACH 1.965

REFERENCE INFORMATION

REFS	6084.5240	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

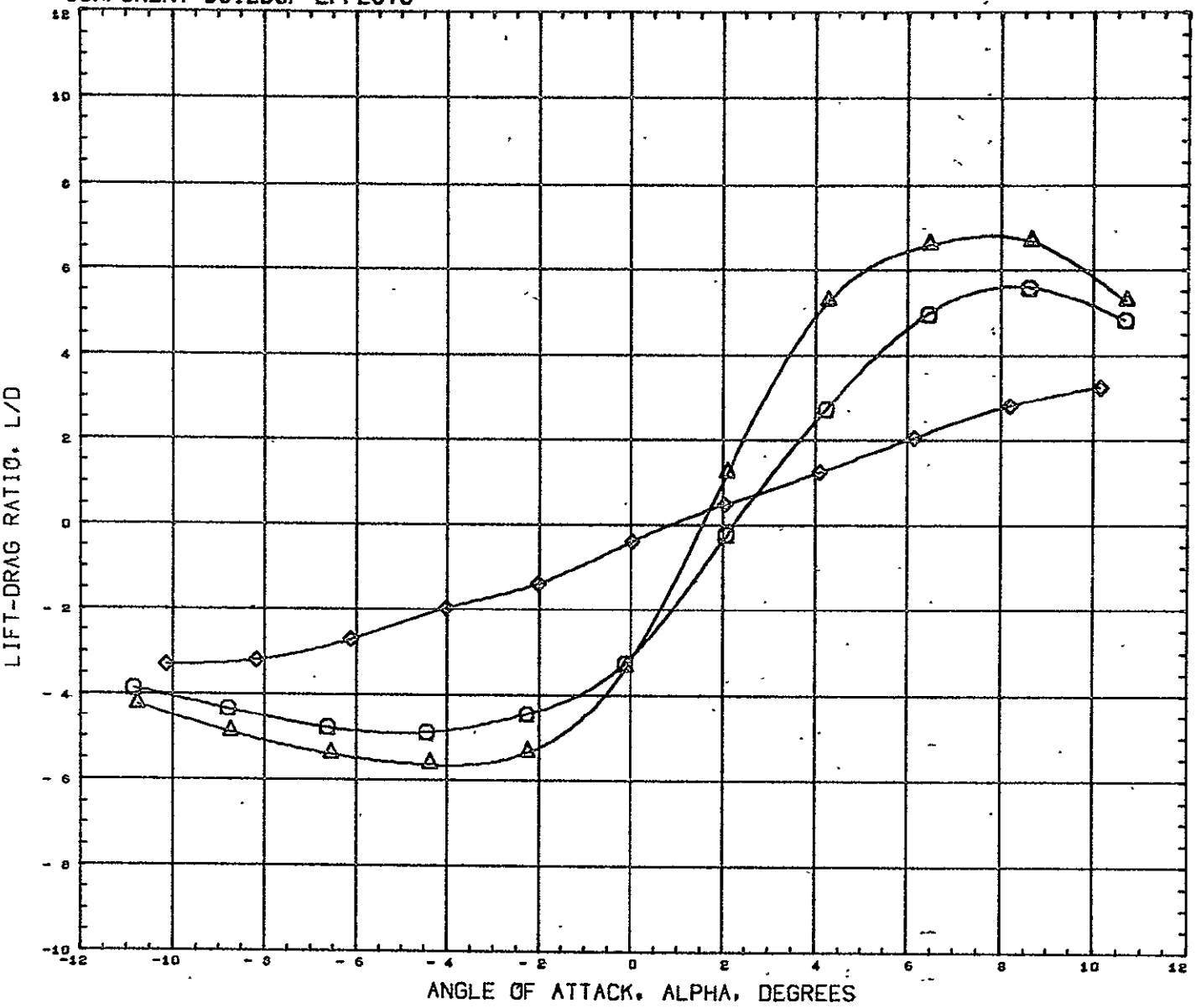


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2906A) ○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X	0.000	0.000	0.000
(V2902A) △	MSFC484 NR DELTA ORBITER B5W17E10X	0.000	0.000	0.000
(V2901A) ◇	MSFC484 NR DELTA ORBITER B5X	0.000		

MACH 0.605

REFERENCE INFORMATION		
REFS	6084.2040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



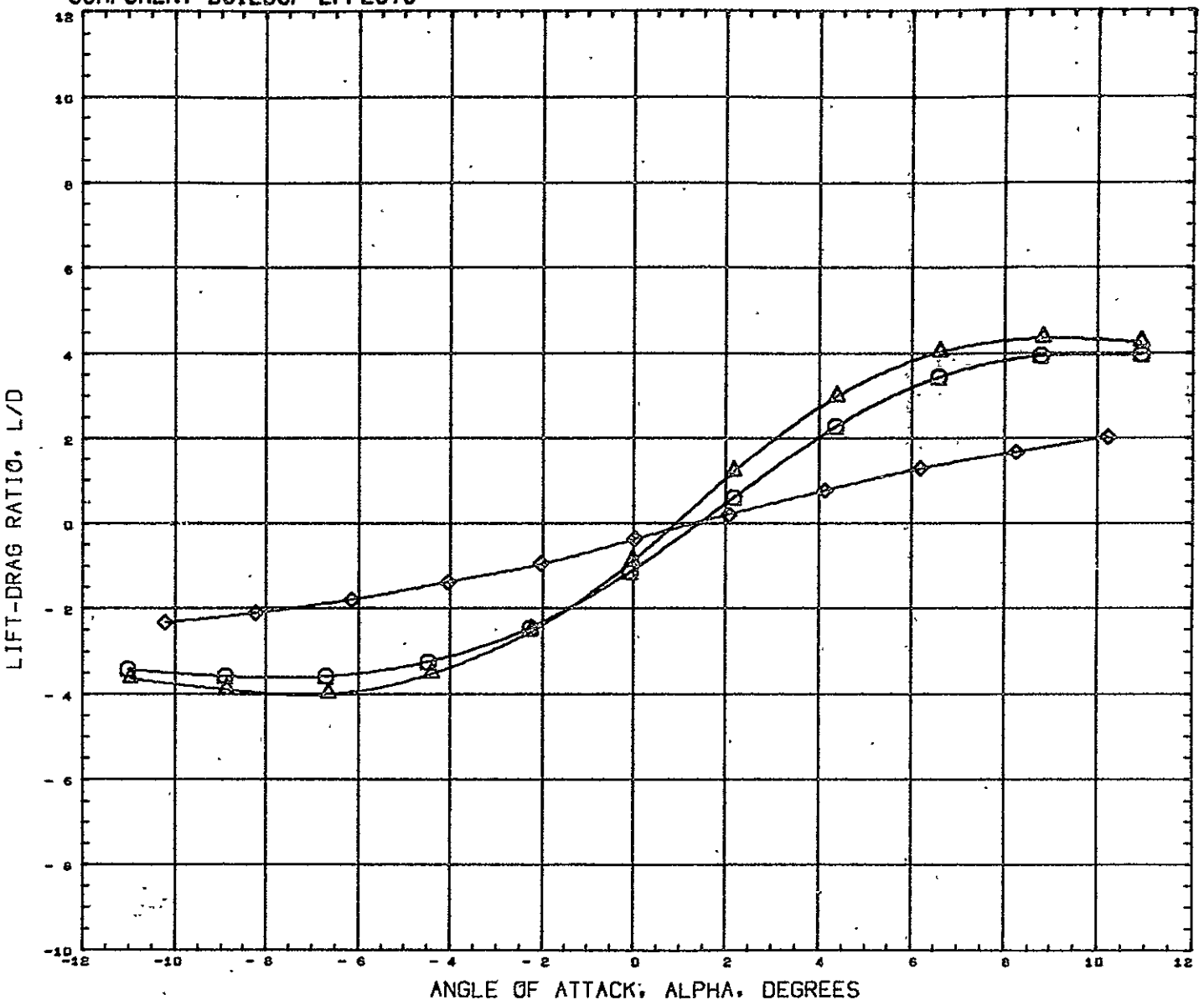
DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X

BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

MACH 0.904

COMPONENT BUILDUP EFFECTS

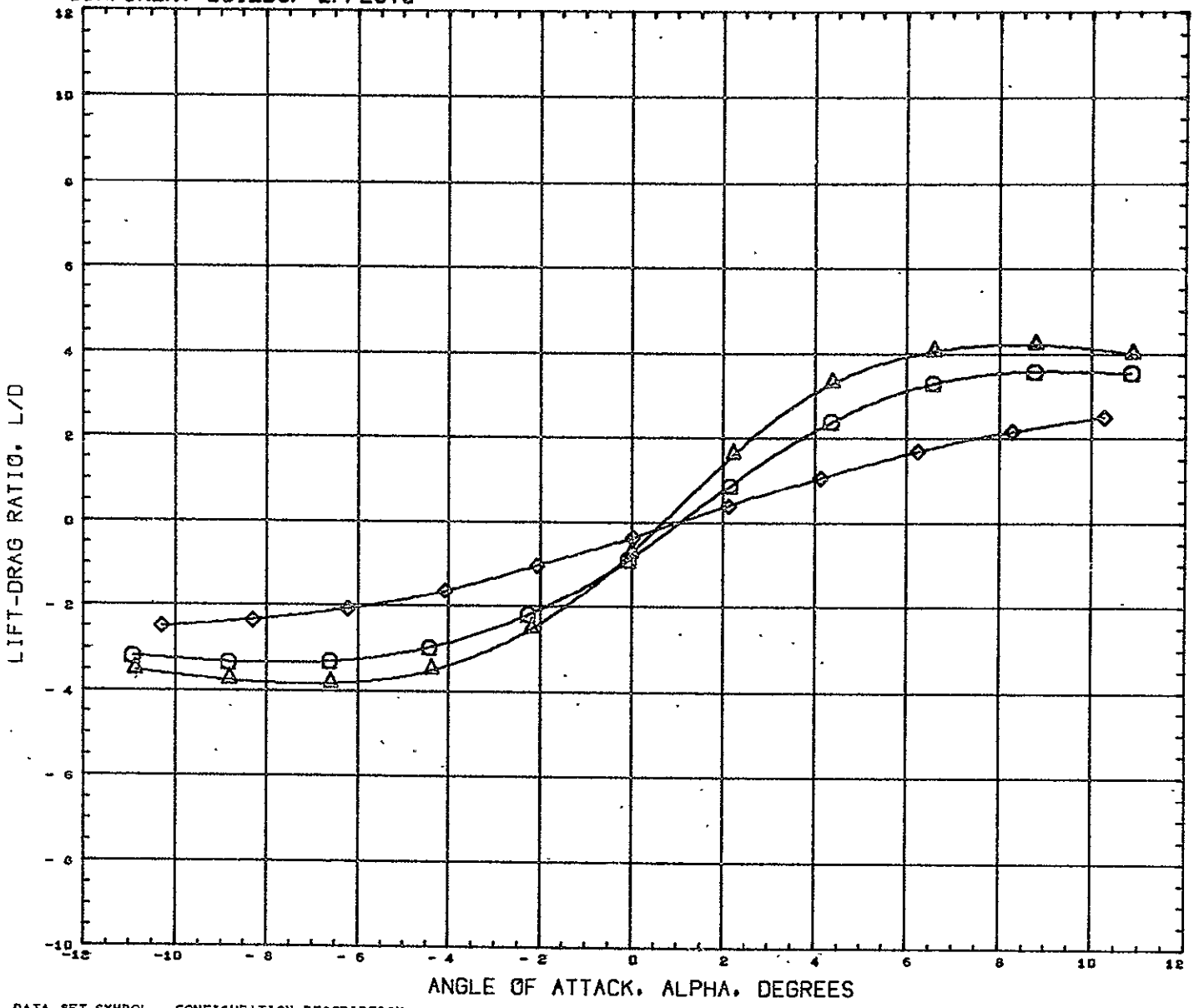


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X	0.000	0.000	0.000
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X	0.000	0.000	0.000
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X	0.000		

MACH 1.102

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



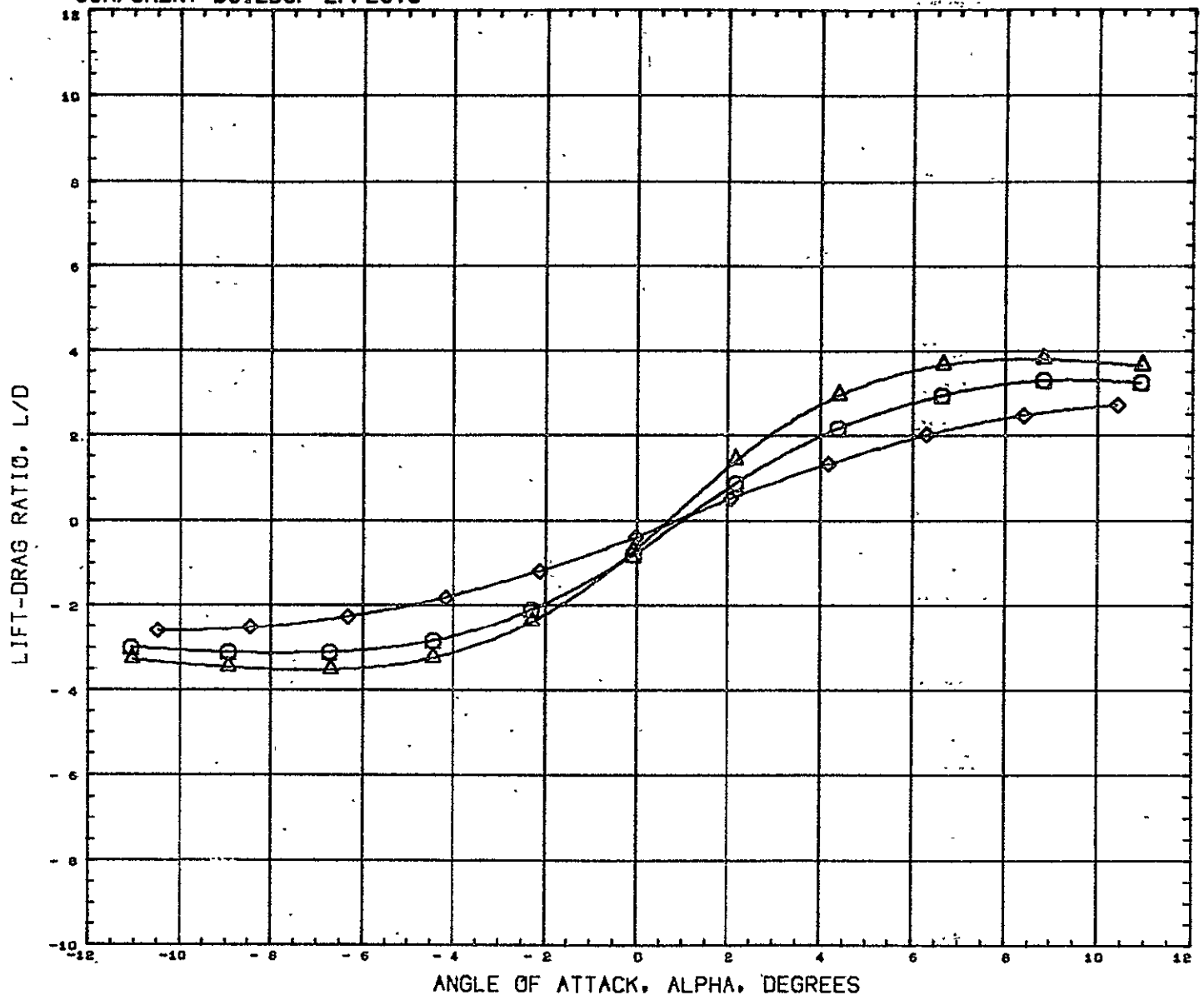
DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X

BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

MACH 1.463

COMPONENT BUILDUP EFFECTS



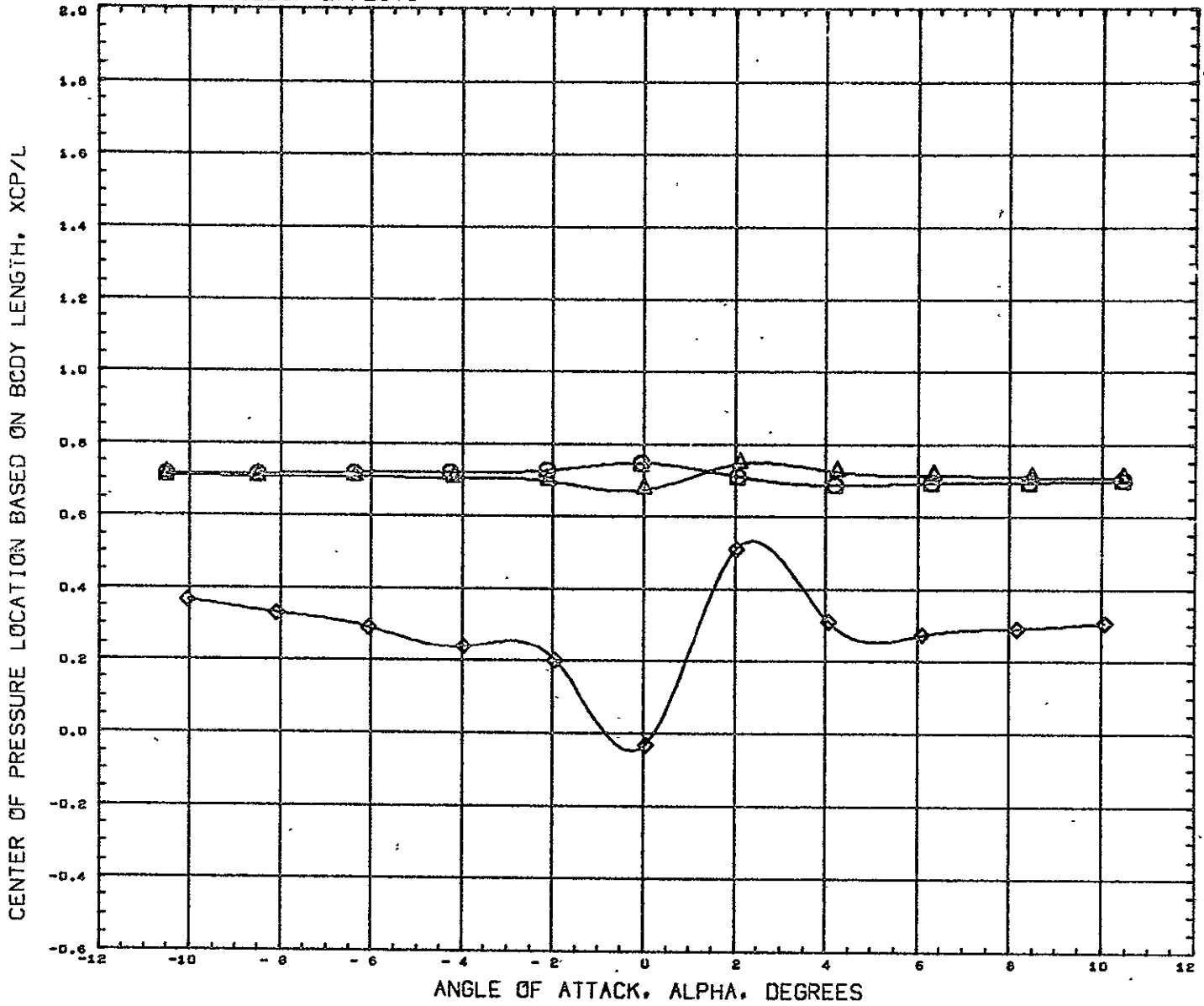
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X	0.000	0.000	0.000
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X	0.000	0.000	0.000
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X	0.000		

MACH 1.965

REFERENCE INFORMATION

REFS	6084.[illegible]040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

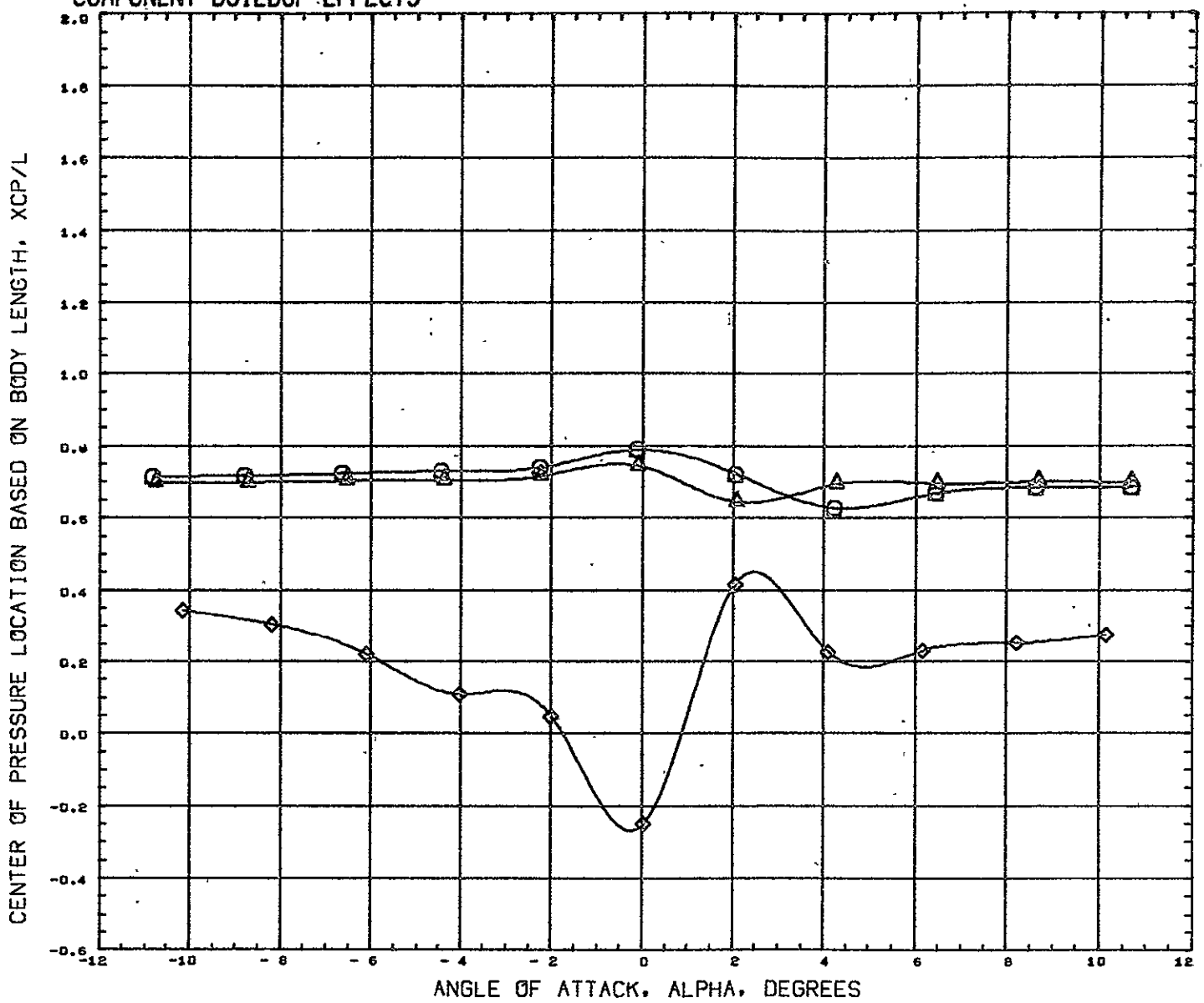


DATA SET SYMBOL		CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X	0.000	0.000	0.000
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X	0.000	0.000	0.000
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X	0.000		

MACH 0.605

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

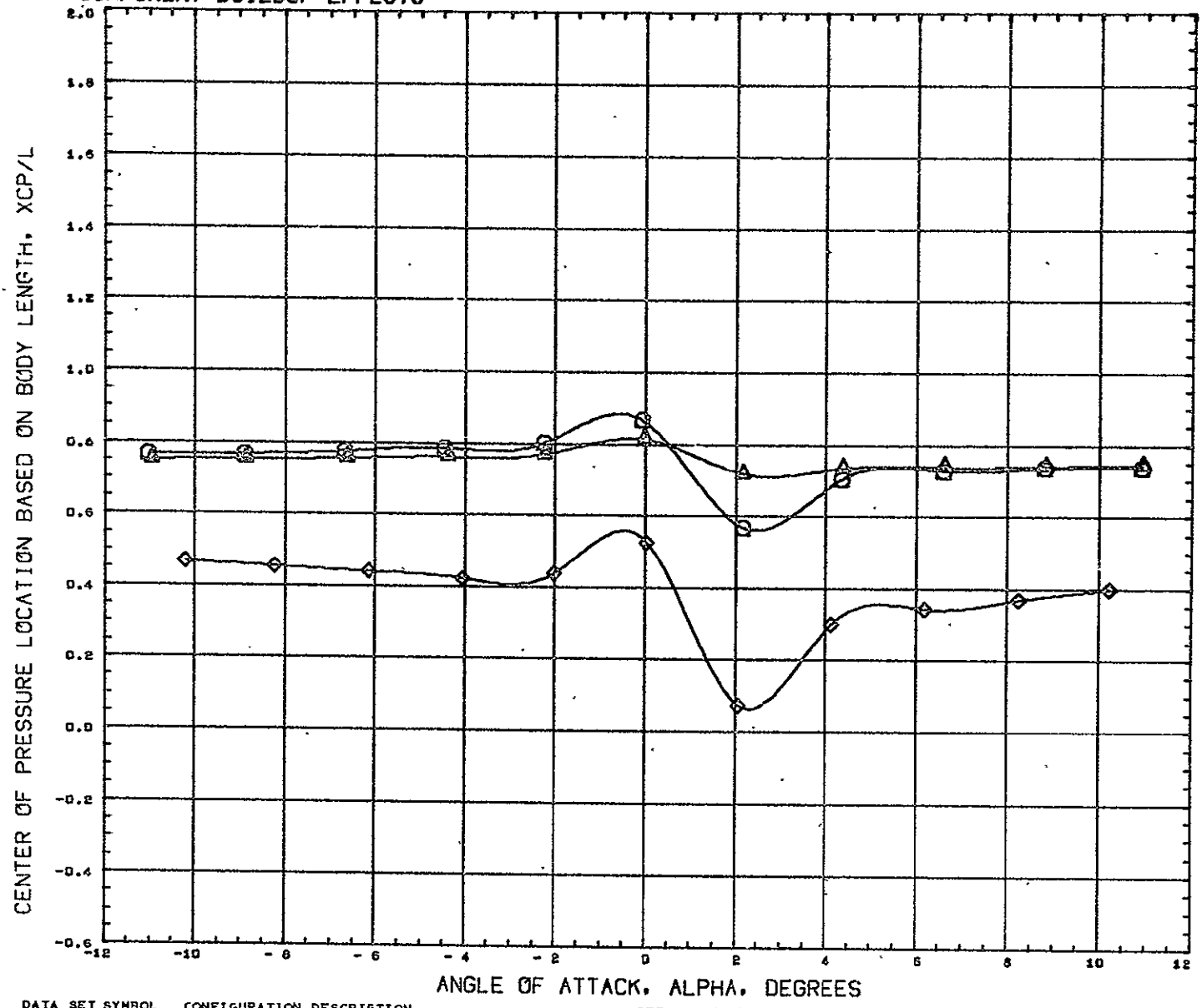


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2906A)	○	HSFC484 NR DELTA ORBITER B5W17E10V17J2X	0.000	0.000	0.000
(V2902A)	△	HSFC484 NR DELTA ORBITER B5W17E10X	0.000	0.000	0.000
(V2901A)	◇	HSFC484 NR DELTA ORBITER B5X	0.000		

MACH 0.904

REFERENCE INFORMATION		
REFS	6084.2040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRF	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(V2906A)	○	HSFC484 NR DELTA ORBITER B5W17E10V17J2X
(V2902A)	△	HSFC484 NR DELTA ORBITER B5W17E10X
(V2901A)	◇	HSFC484 NR DELTA ORBITER B5X

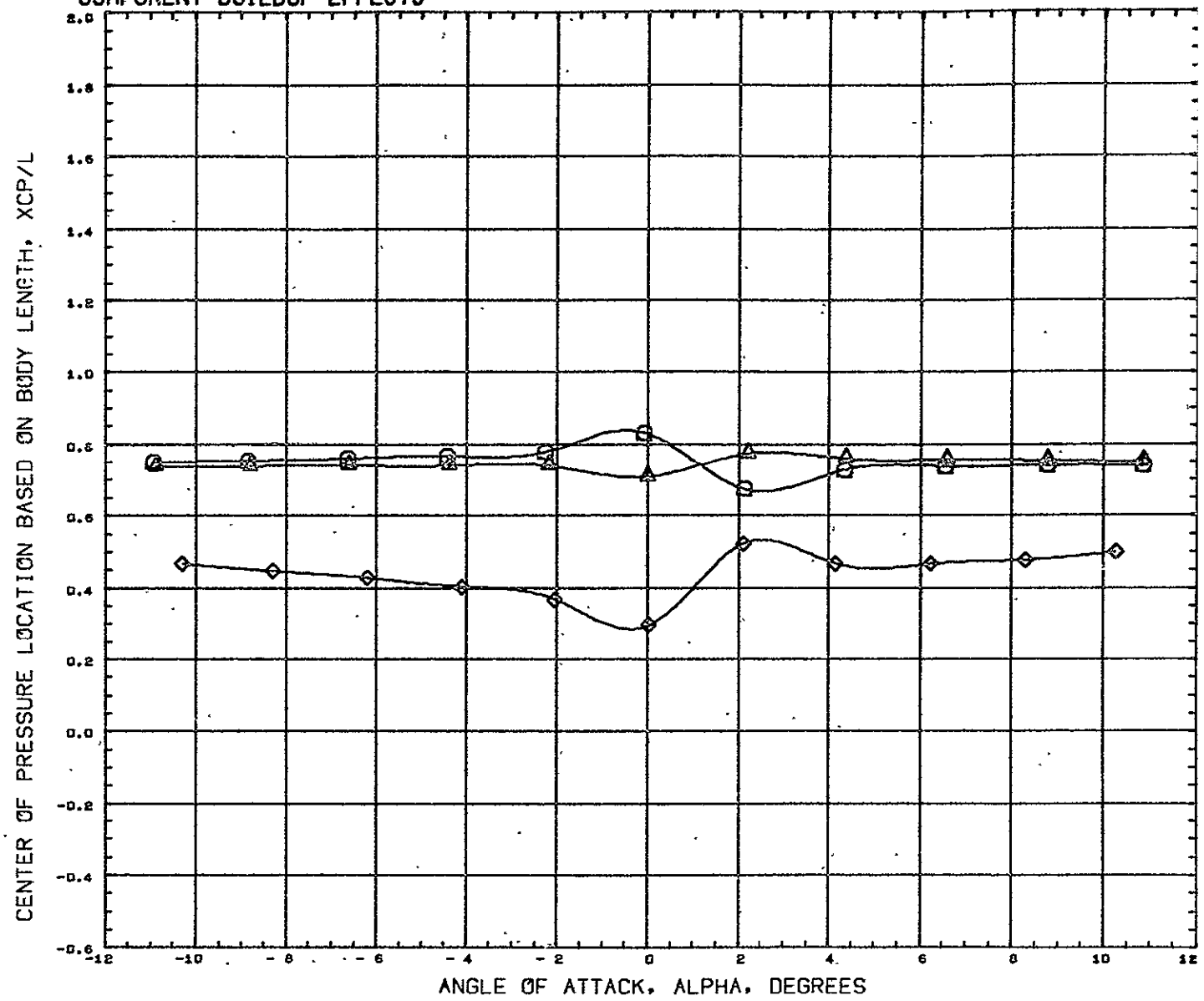
BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

MACH 1.102

COMPONENT BUILDUP EFFECTS

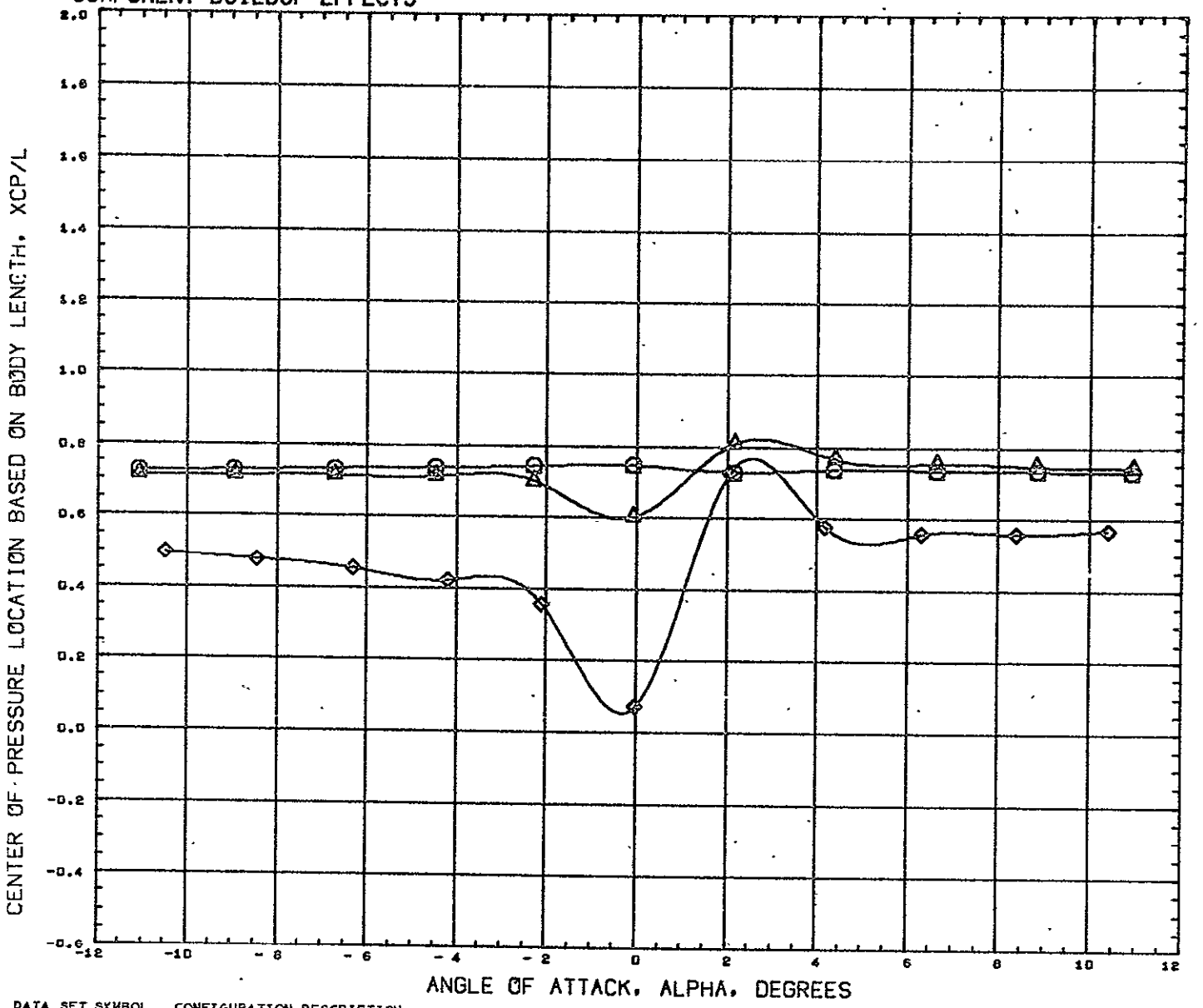


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2906A) ○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X	0.000	0.000	0.000
(V2902A) △	MSFC484 NR DELTA ORBITER B5W17E10X	0.000	0.000	0.000
(V2901A) ◇	MSFC484 NR DELTA ORBITER B5X	0.000		

MACH 1.463

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(V2906A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2X
(V2902A)	△	MSFC484 NR DELTA ORBITER B5W17E10X
(V2901A)	◇	MSFC484 NR DELTA ORBITER B5X

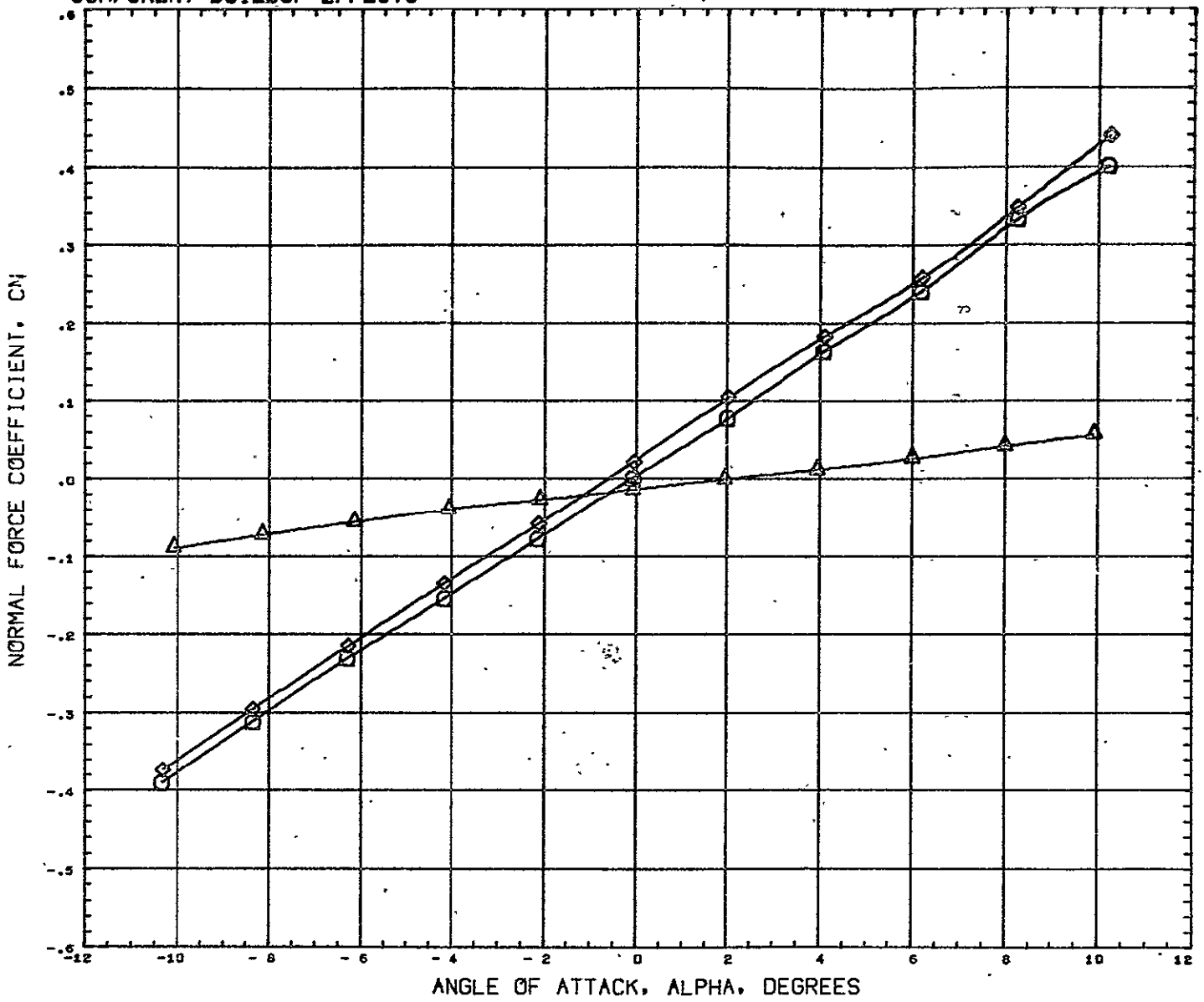
BETA	ELVATR	AILRON
0.000	0.000	0.000
0.000	0.000	0.000
0.000		

MACH 1.965

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

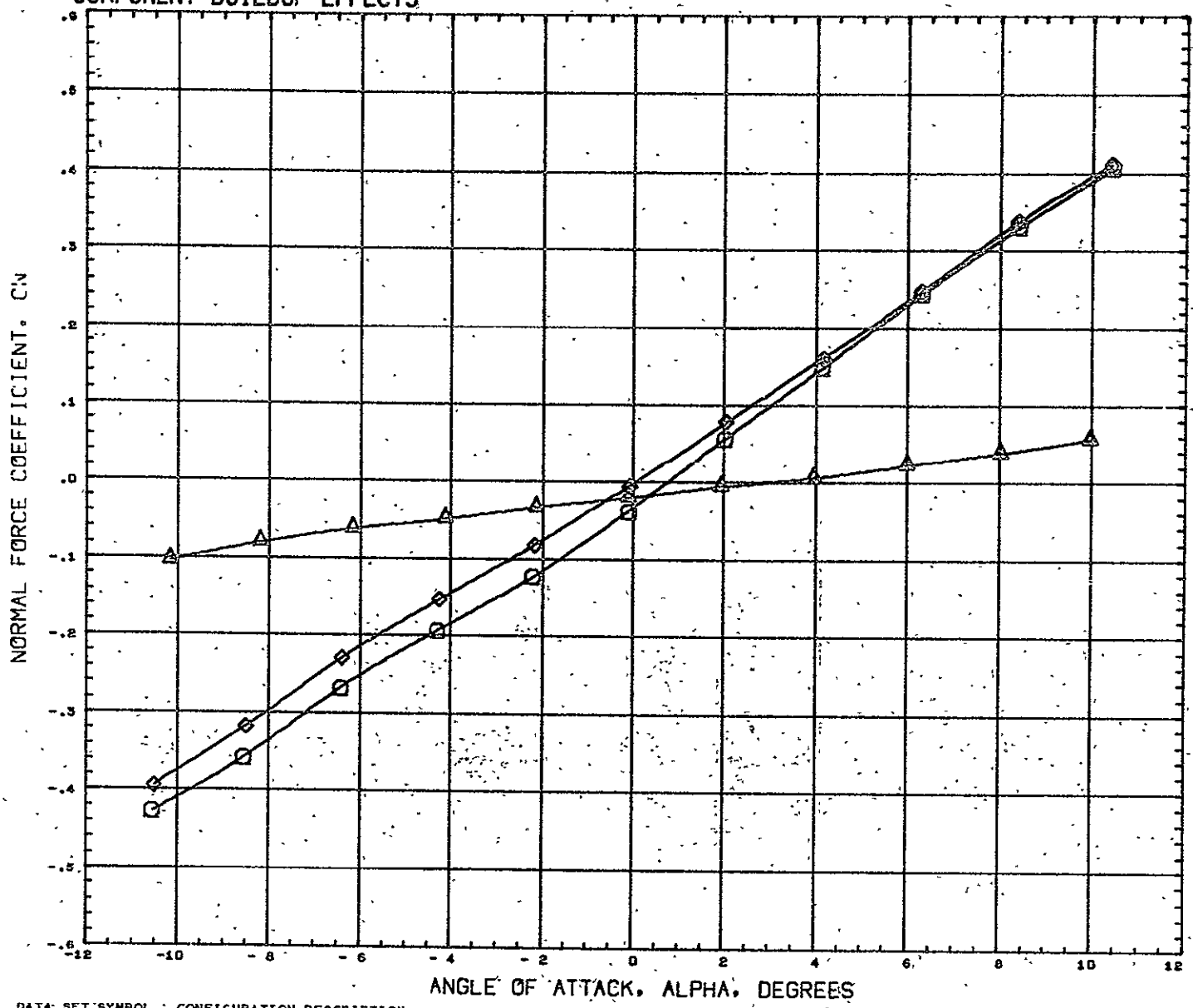


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 0.607

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



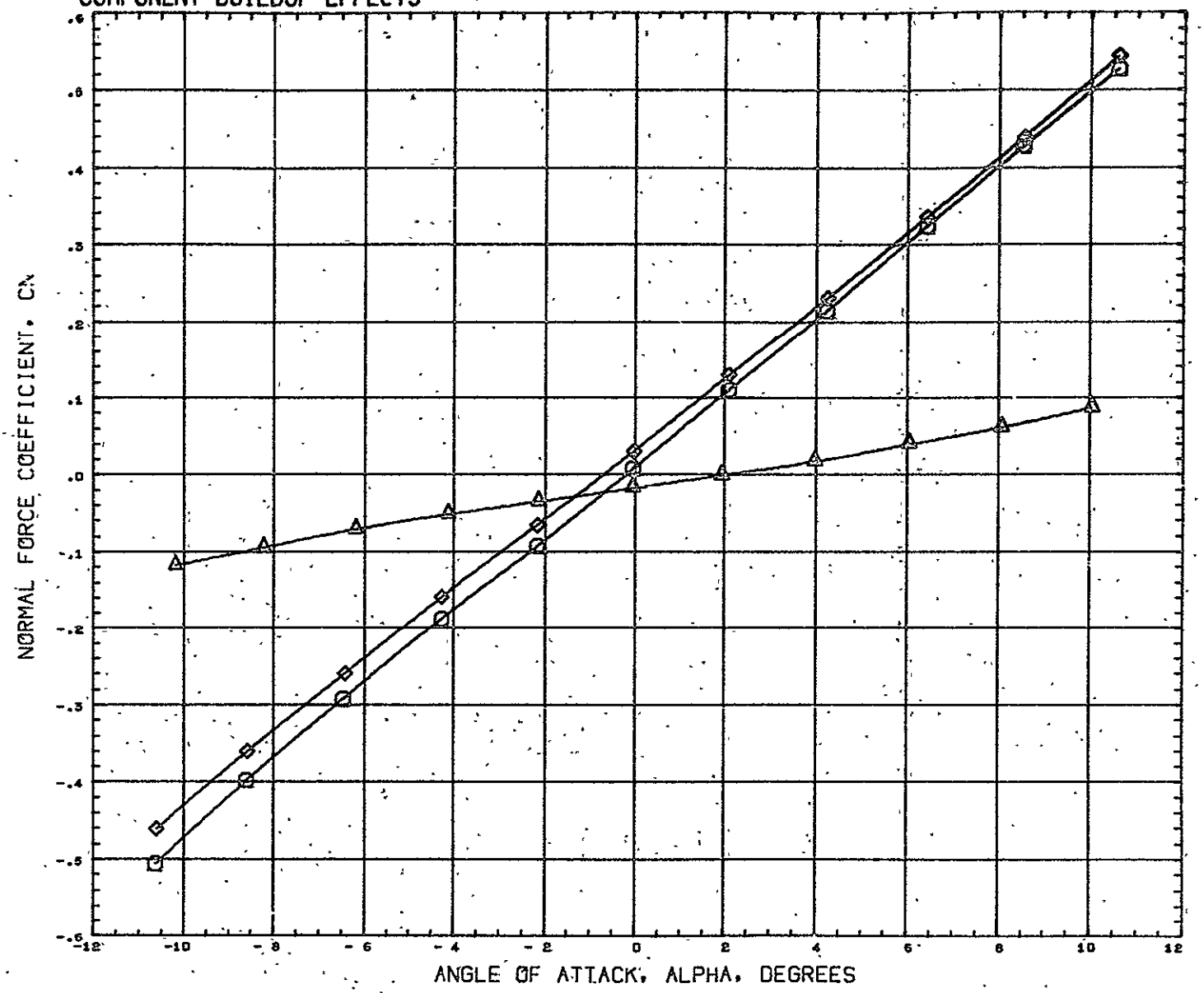
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(V2905A)	○	HSFC484 NR DELTA ORBITER B5W17E10V17J2
(V2904A)	△	HSFC484 NR DELTA ORBITER B5V17J2
(V2903A)	◇	HSFC484 NR DELTA ORBITER B5W17E10

BETA	ELVATR	AILRON
6.000	0.000	0.000
6.000		
6.000	0.000	0.000

MACH 0.908

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

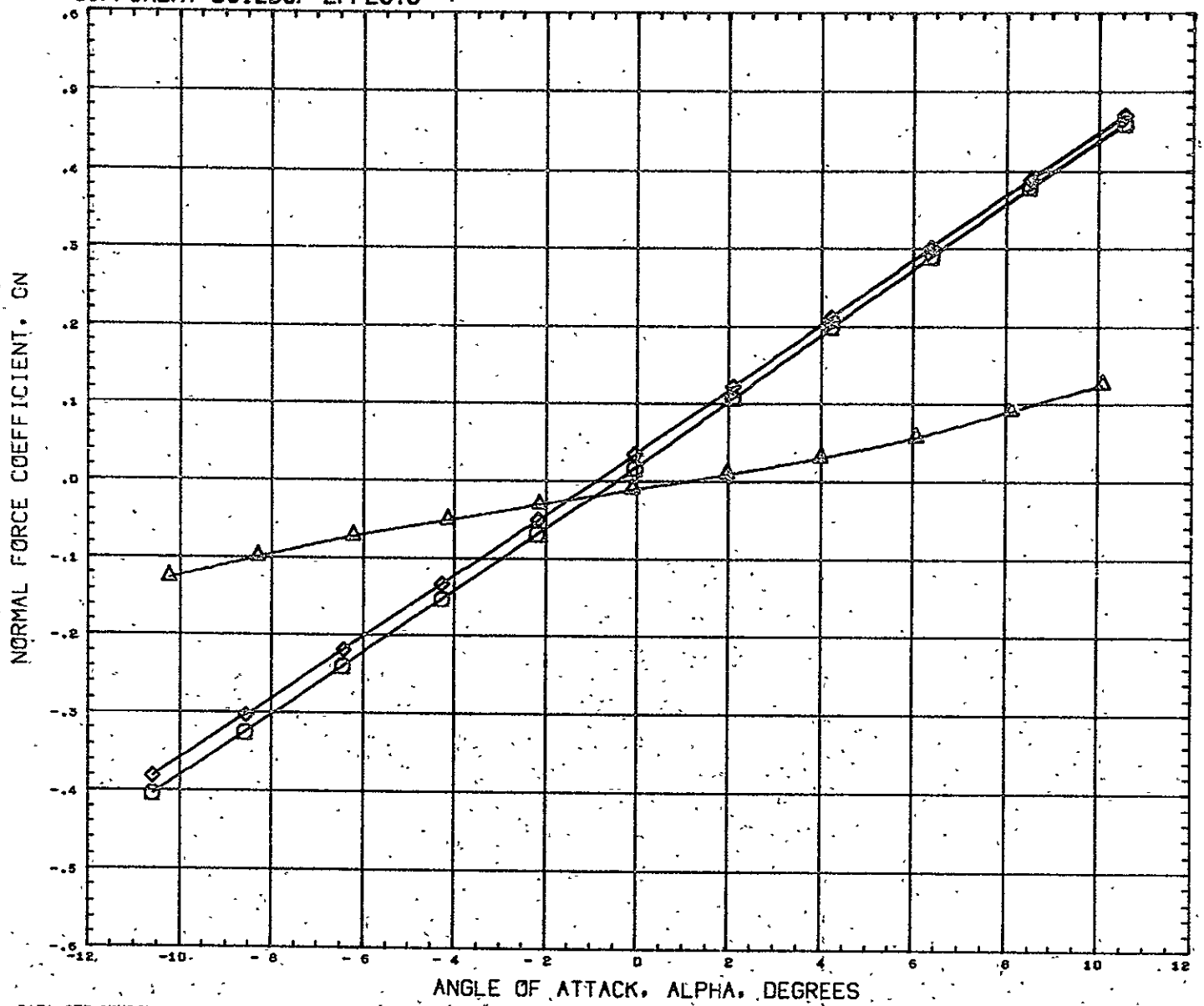


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A) ○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A) △	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A) ◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.100

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	.0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

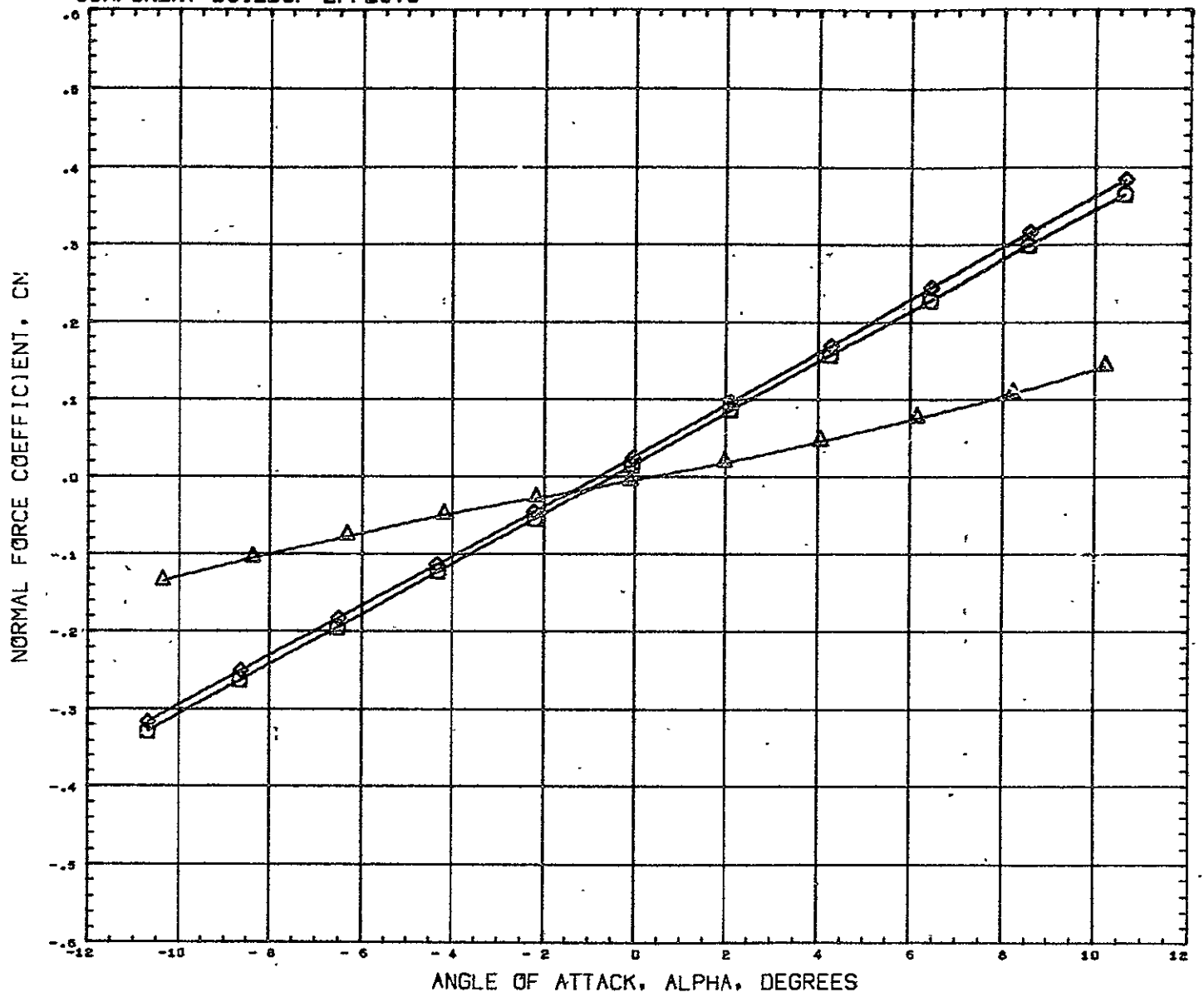


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.466

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



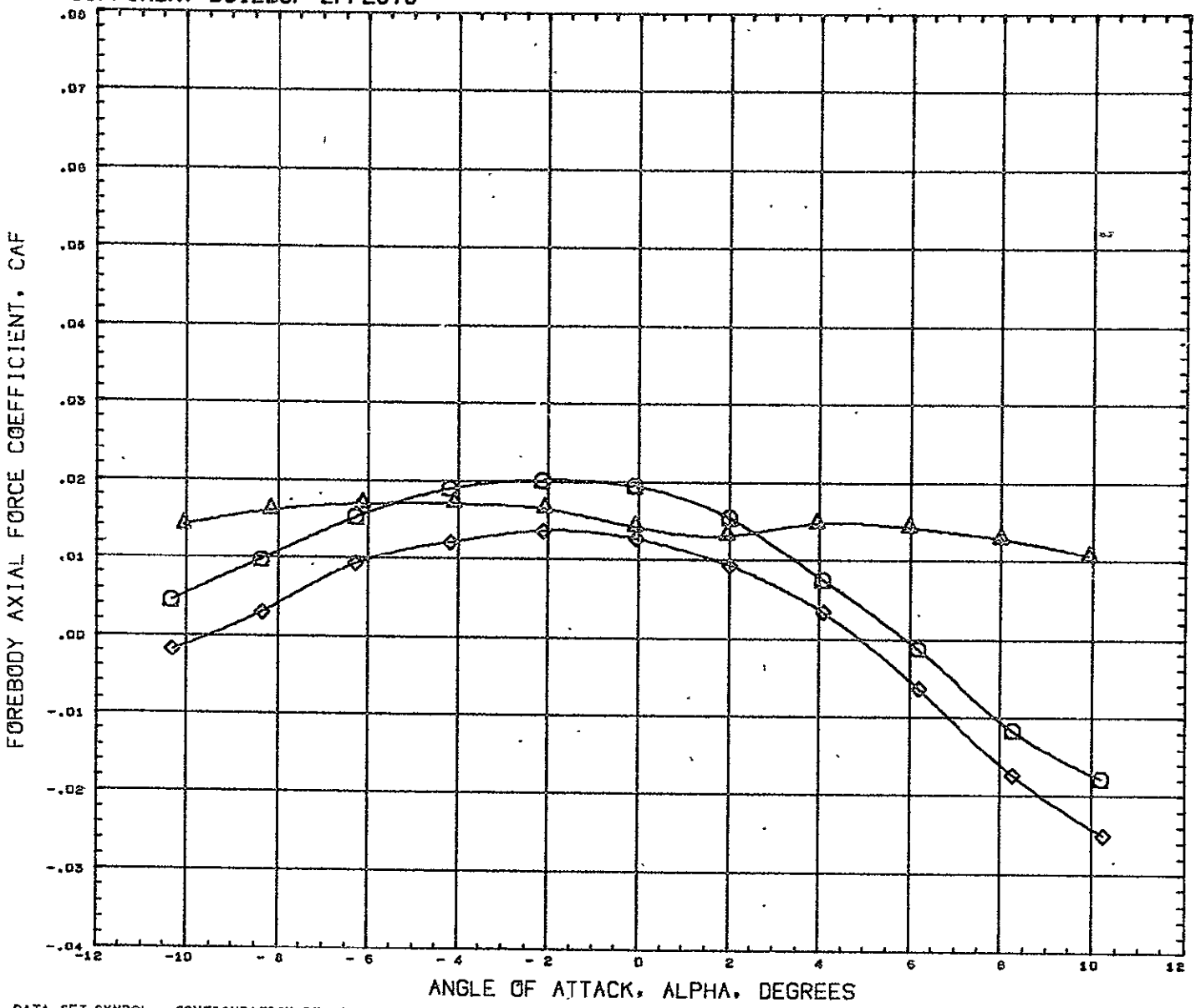
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10 , ,	6.000	0.000	0.000

MACH 1.969

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10

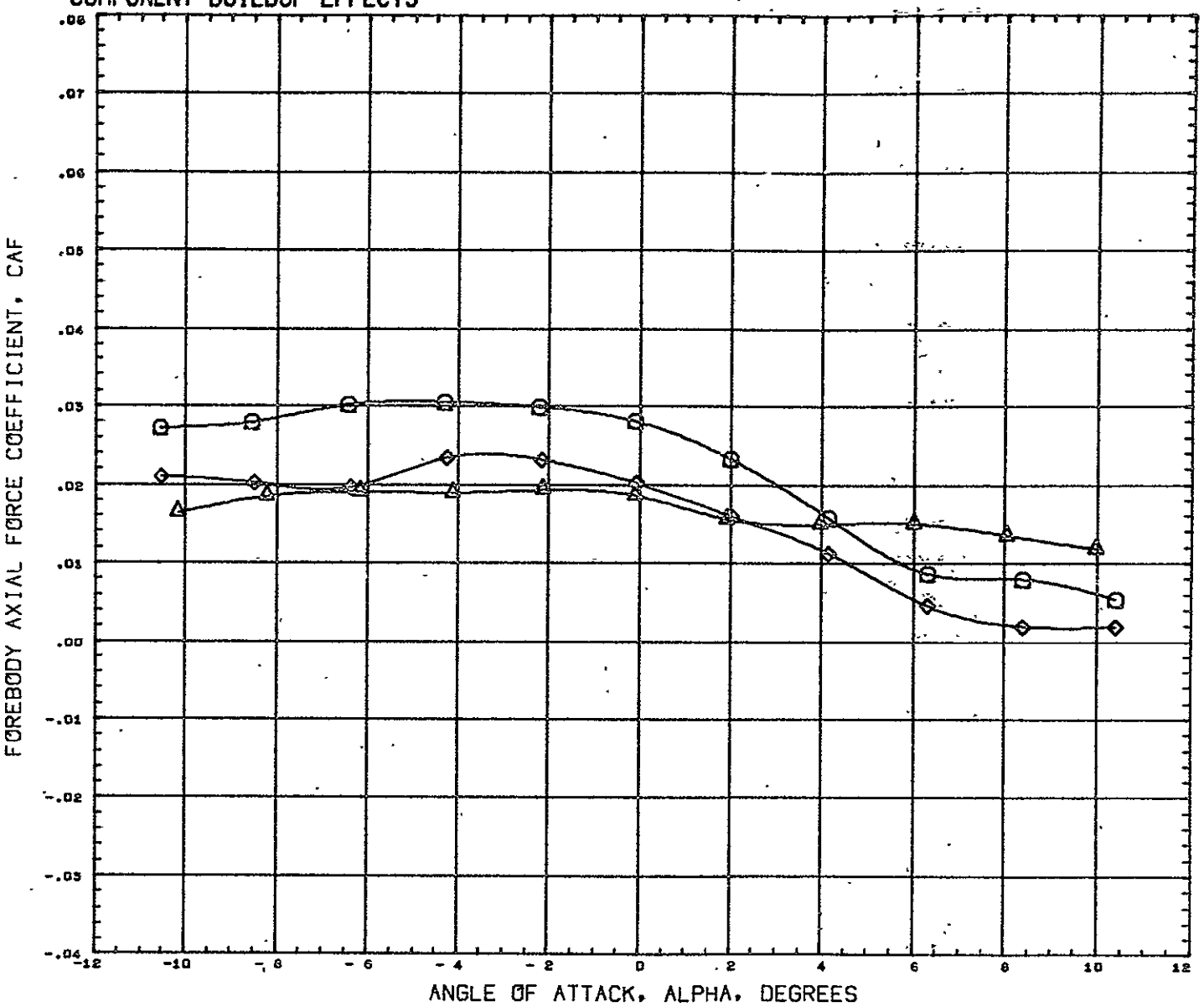
BETA	ELVATR	AILRON
6.000	0.000	0.000
6.000		
6.000	0.000	0.000

MACH 0.607

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

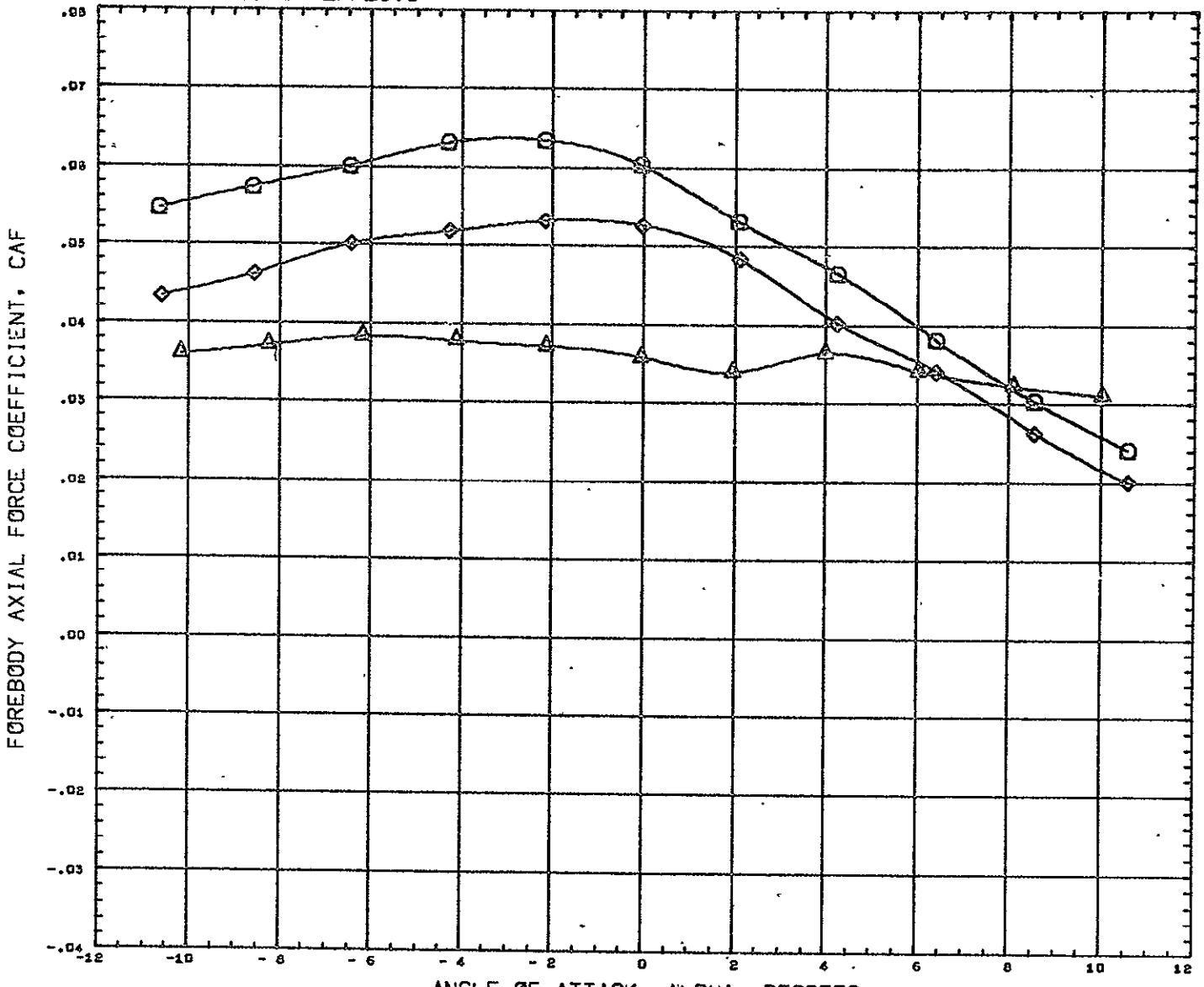


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	HSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	HSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	HSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 0.908

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2604	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



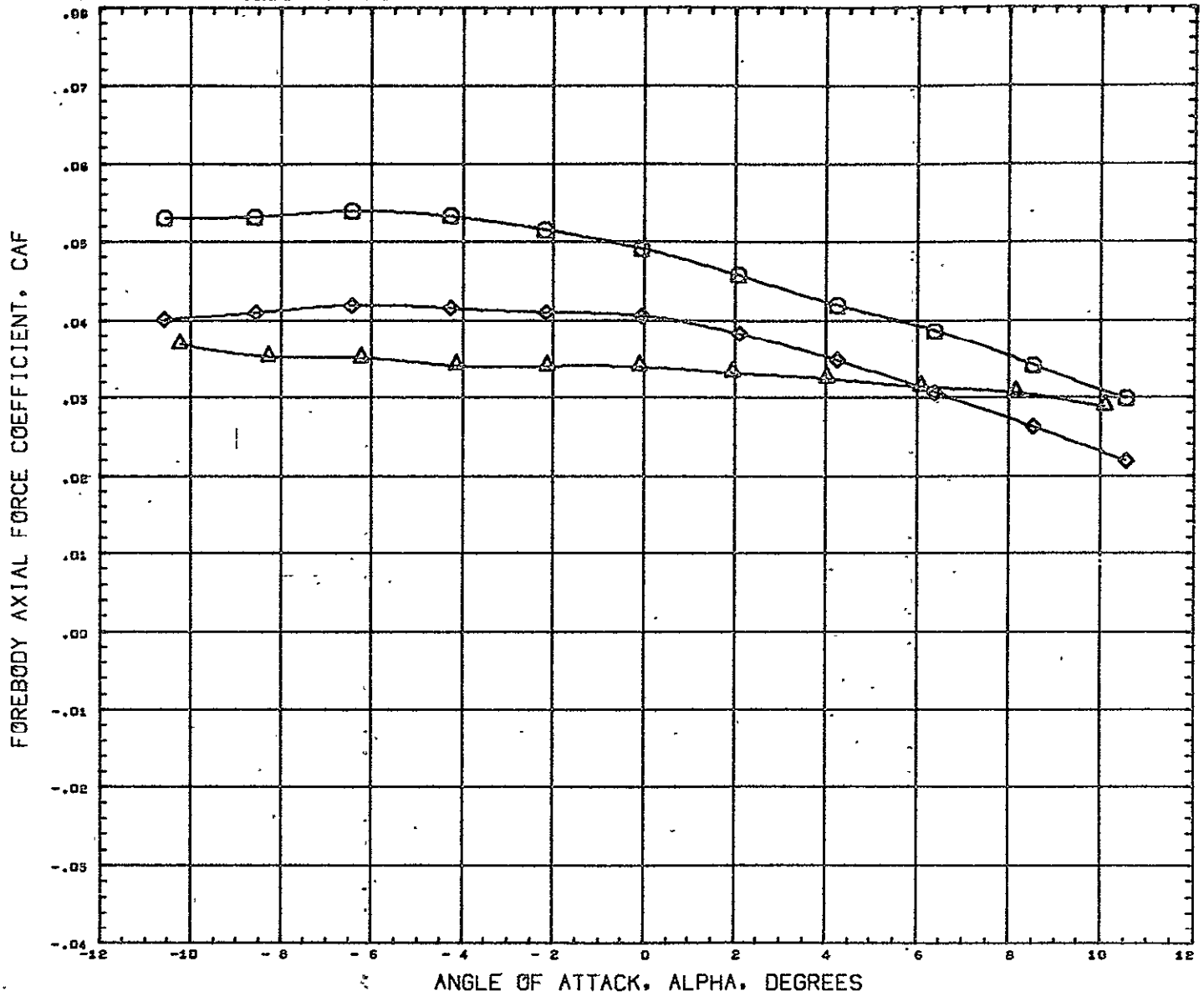
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

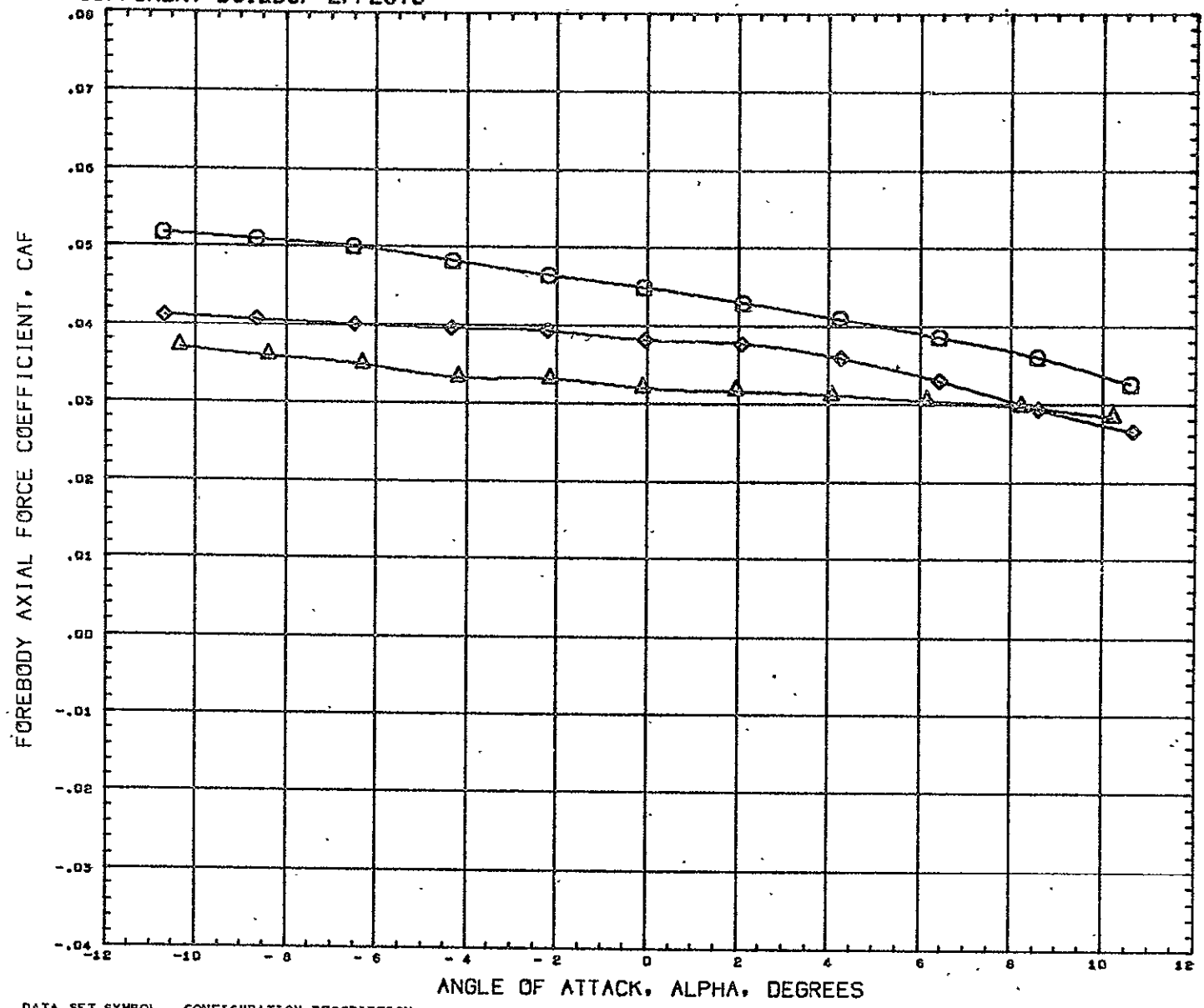


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.466

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10

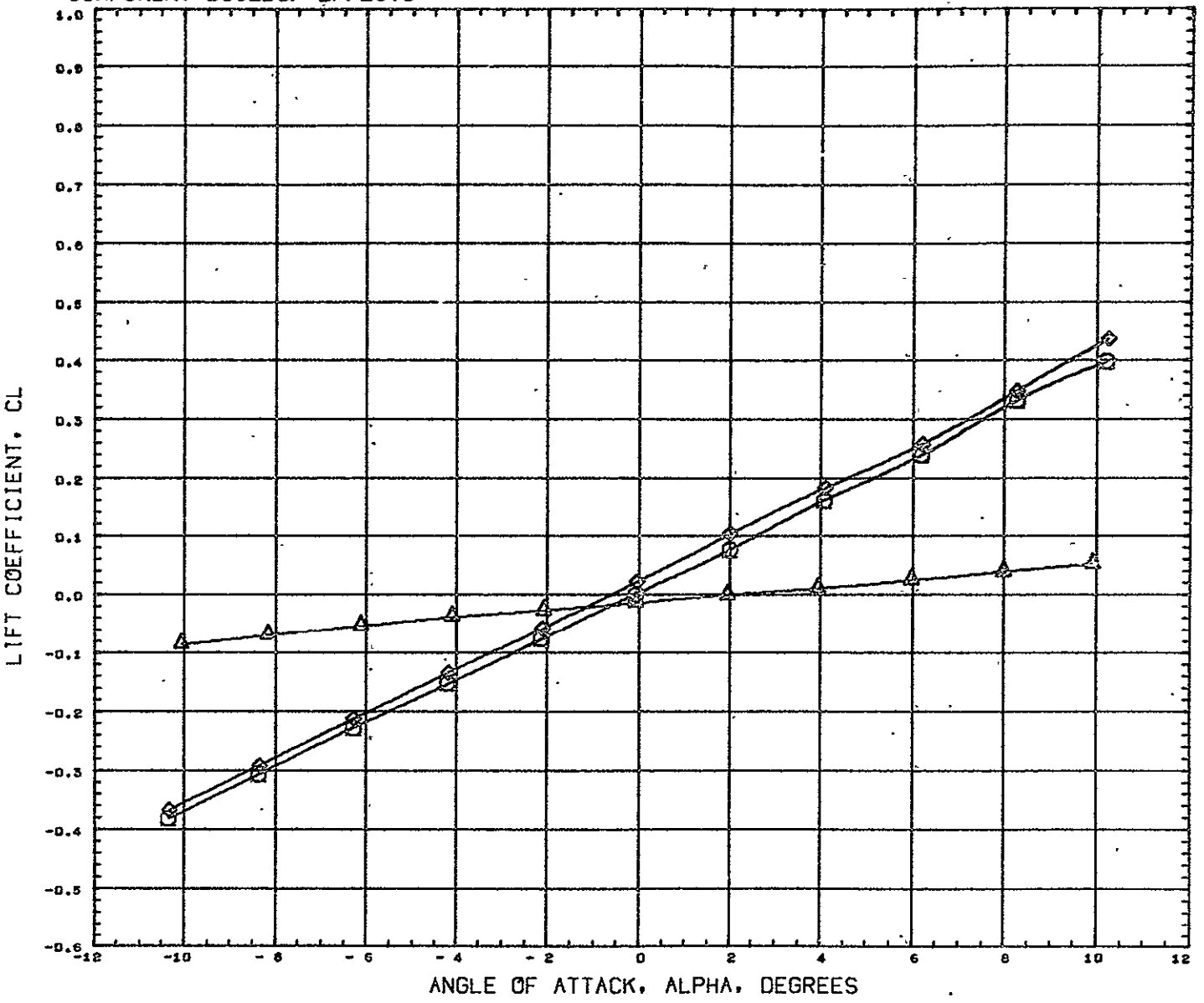
BETA	ELVATR	AILRON
6.000	0.000	0.000
6.000		
6.000	0.000	0.000

MACH 1.969

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

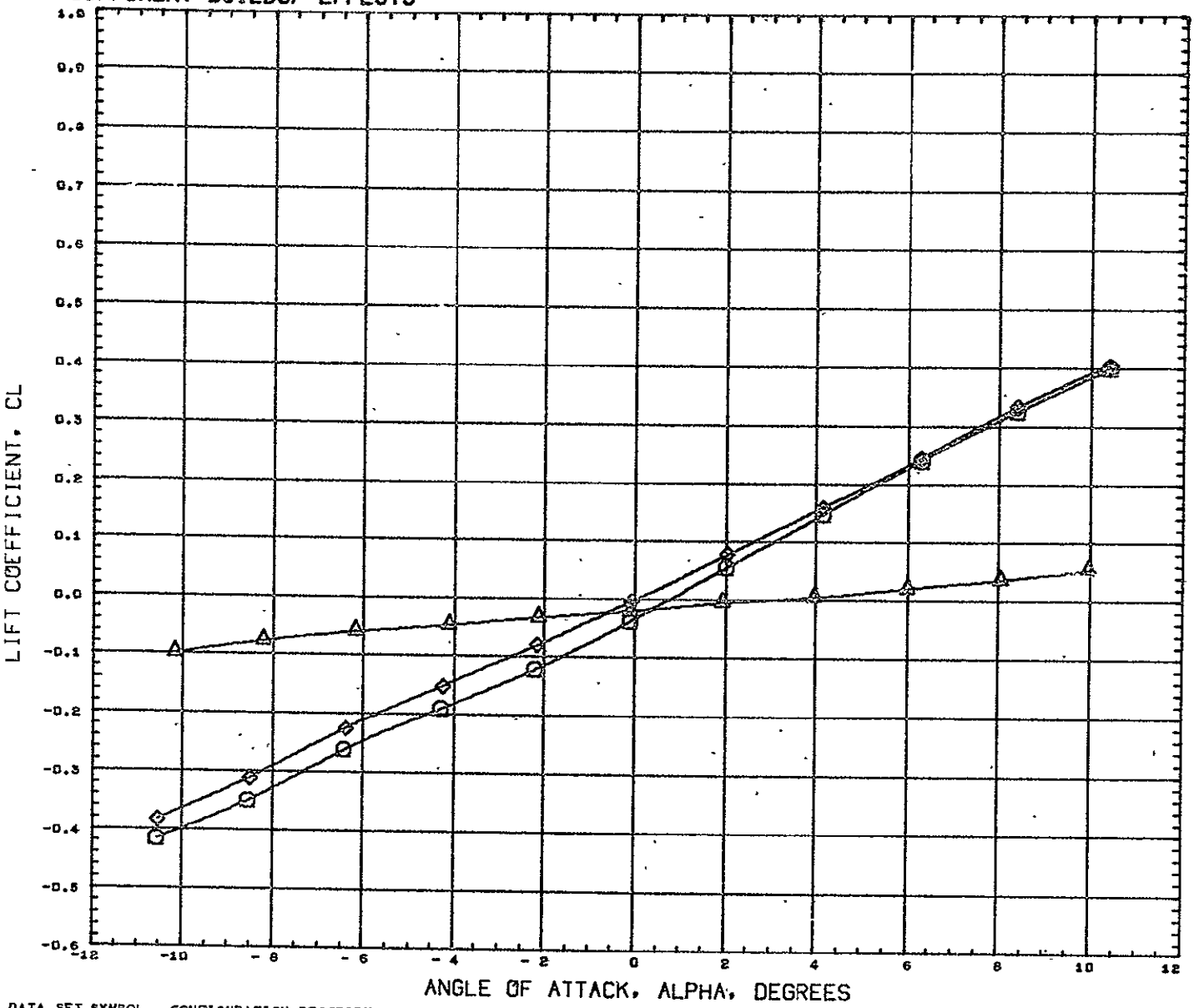


DATA SET SYMBOL		CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	HSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	⧖	HSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	HSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 0.607

REFERENCE INFORMATION		
REFS	6084.2040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10

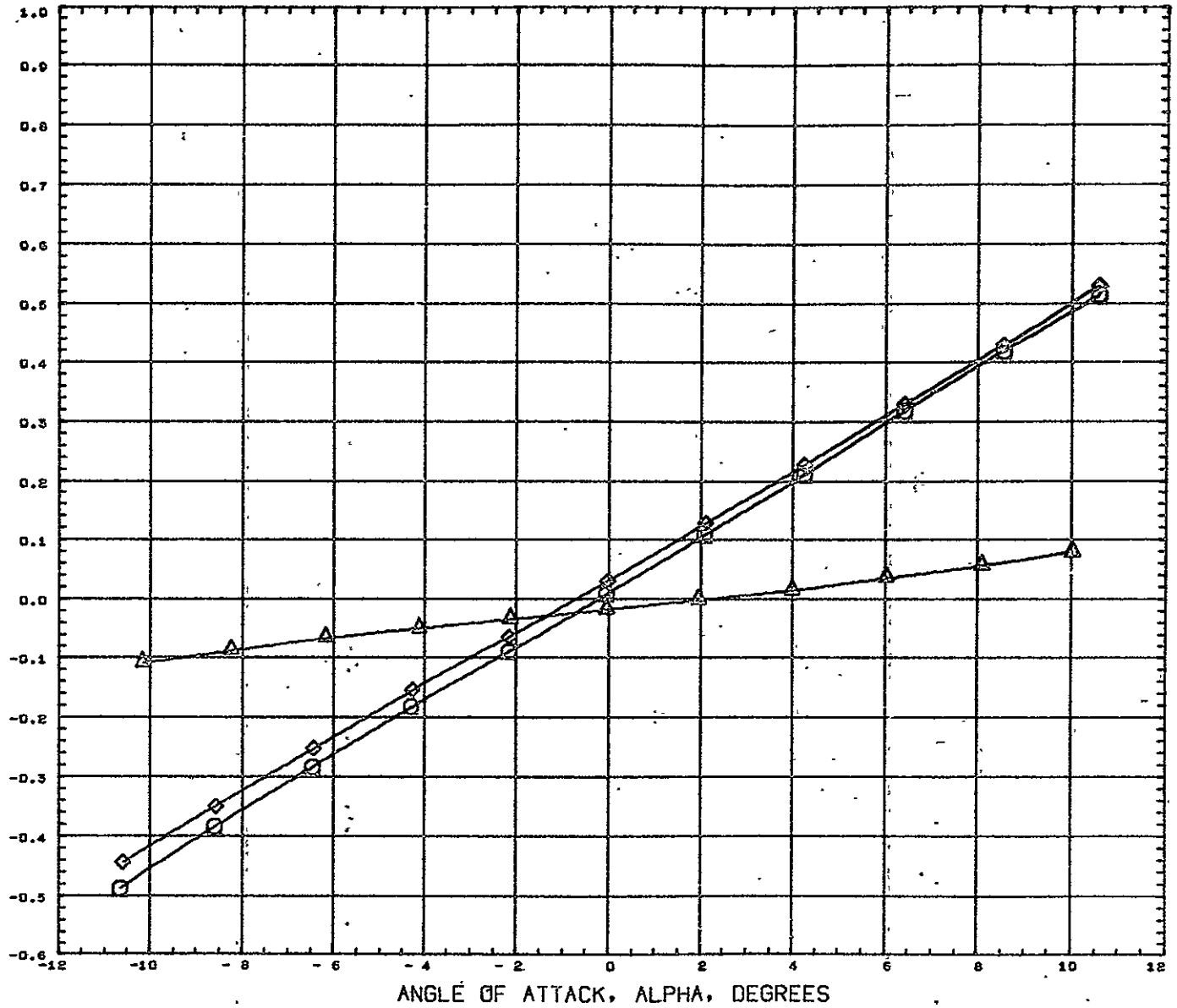
BETA	ELVATR	AILRON
6.000	0.000	0.000
6.000		
6.000	0.000	0.000

MACH 0.908

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



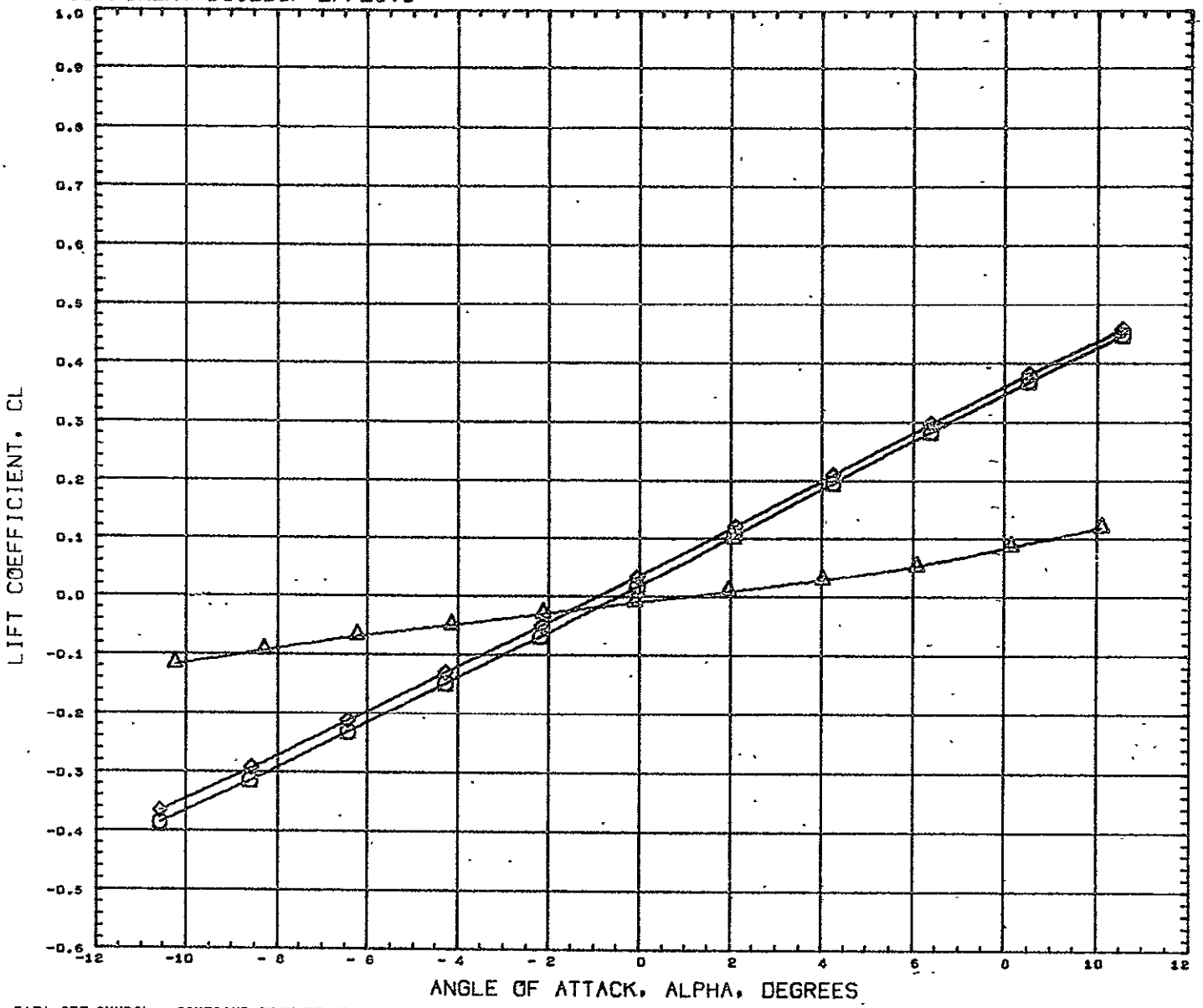
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

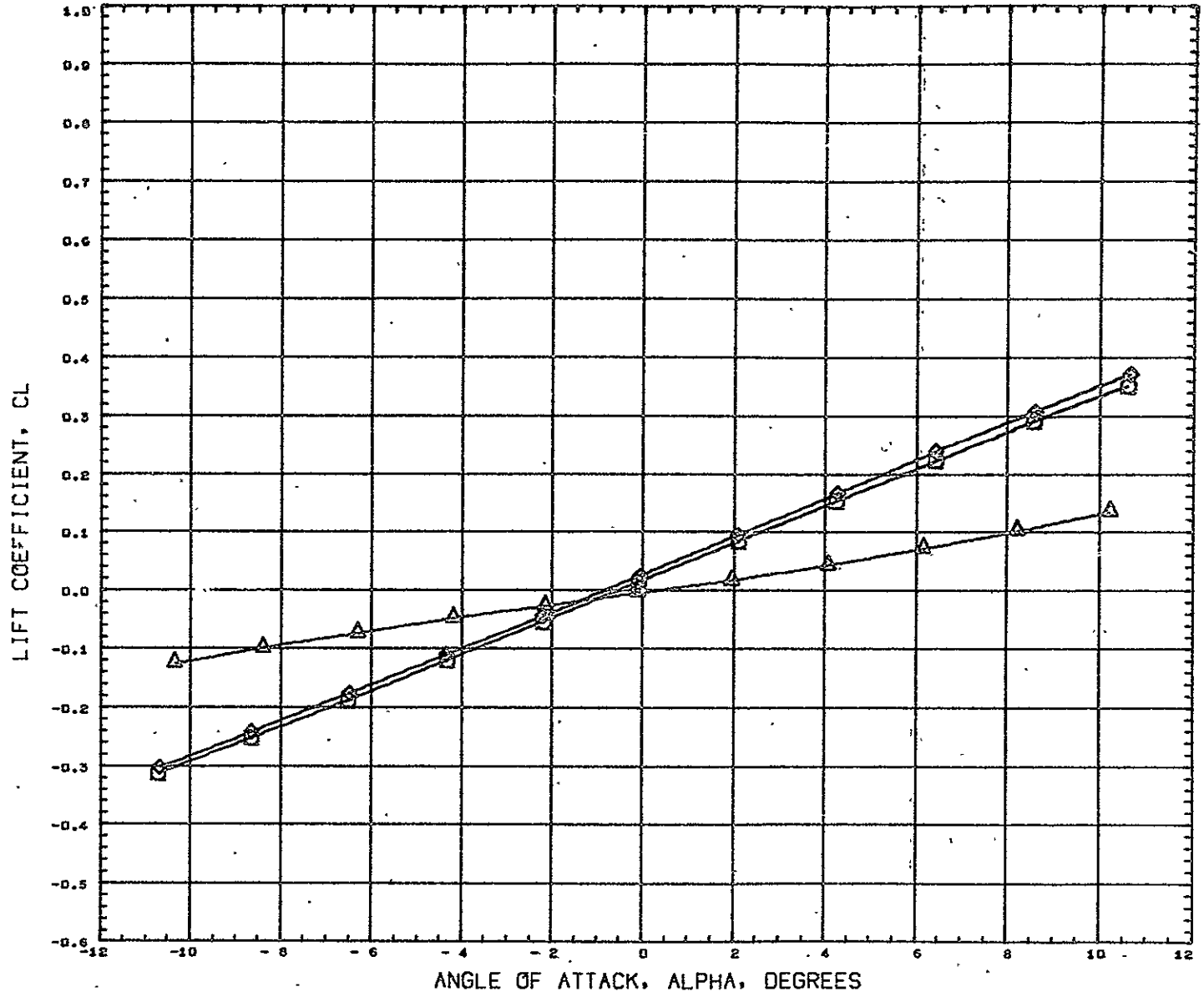


DATA SET SYMBOL		CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.466

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



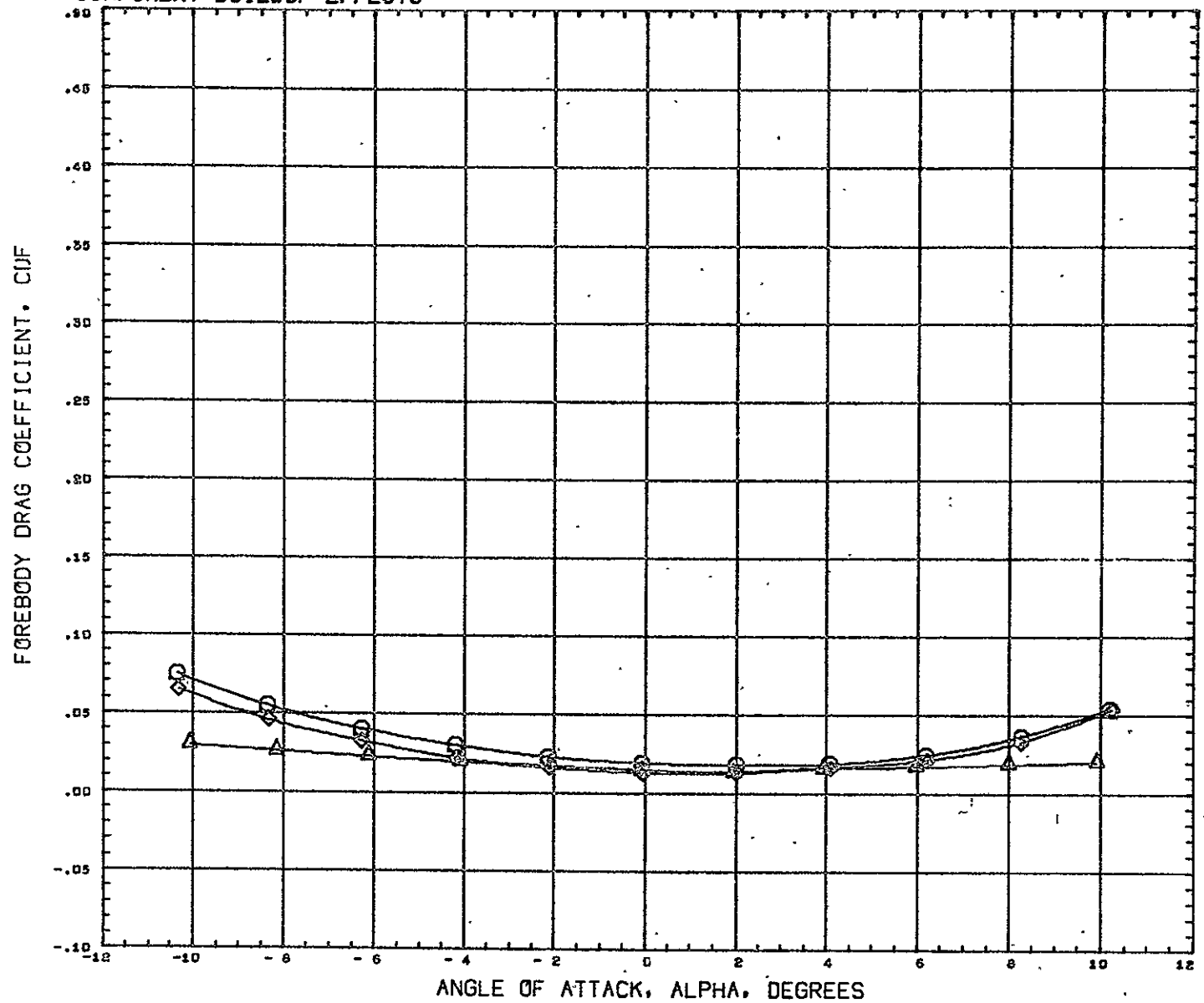
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.969

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

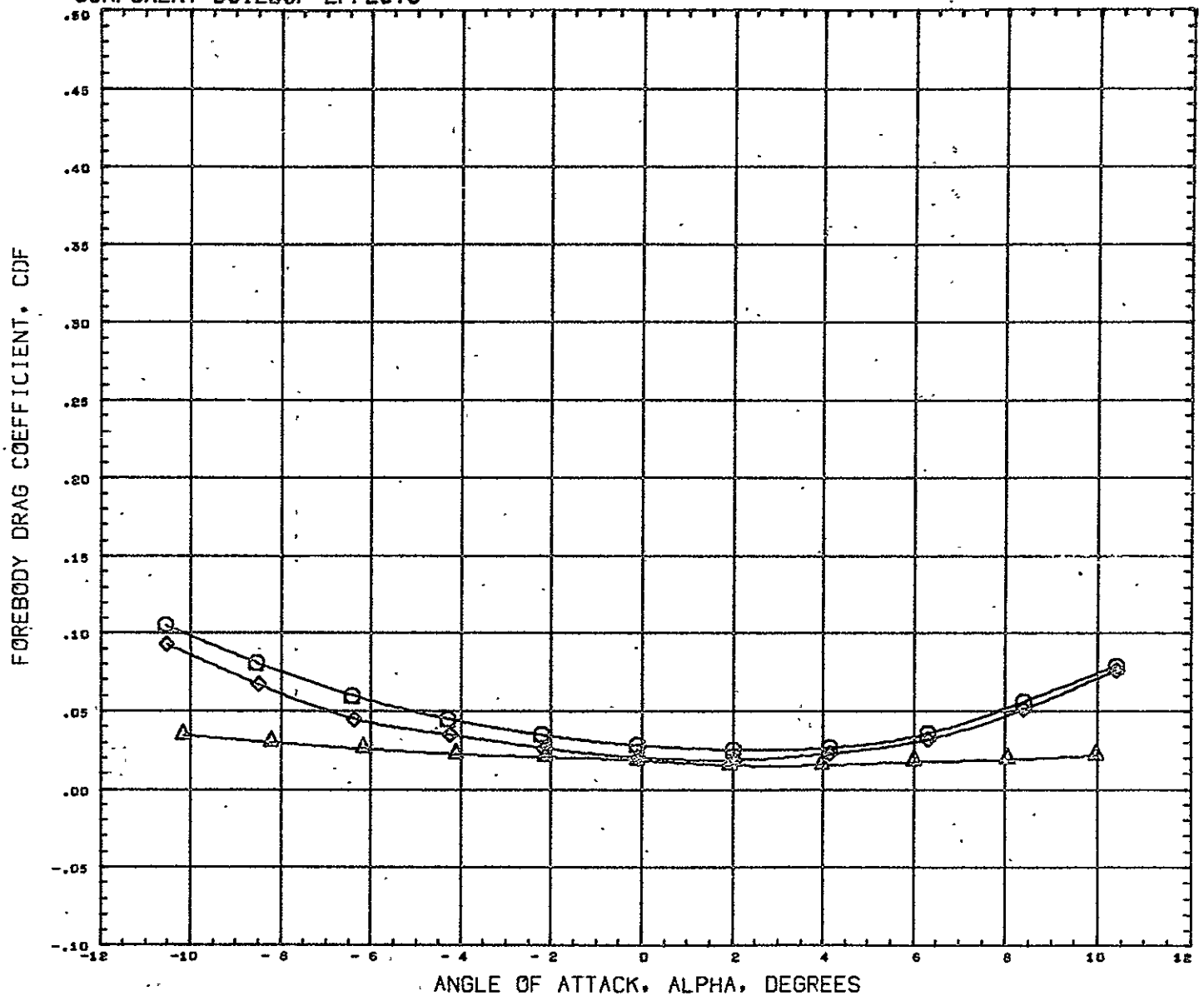


DATA SET SYMBOL		CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 0.607

REFERENCE INFORMATION		
REFS	6084.0030	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

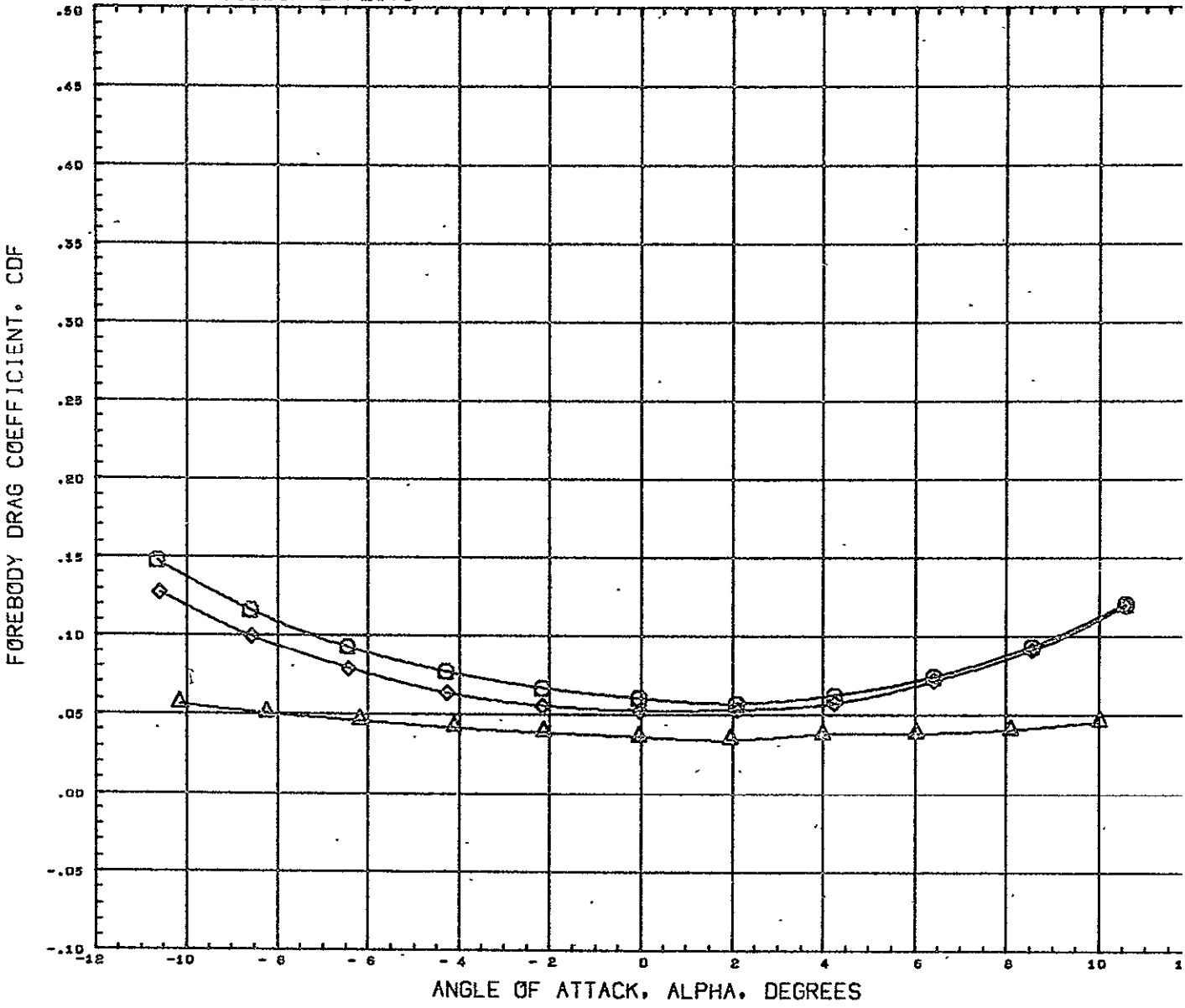


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 0.908

REFERENCE INFORMATION		
REFS	6084.5030	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

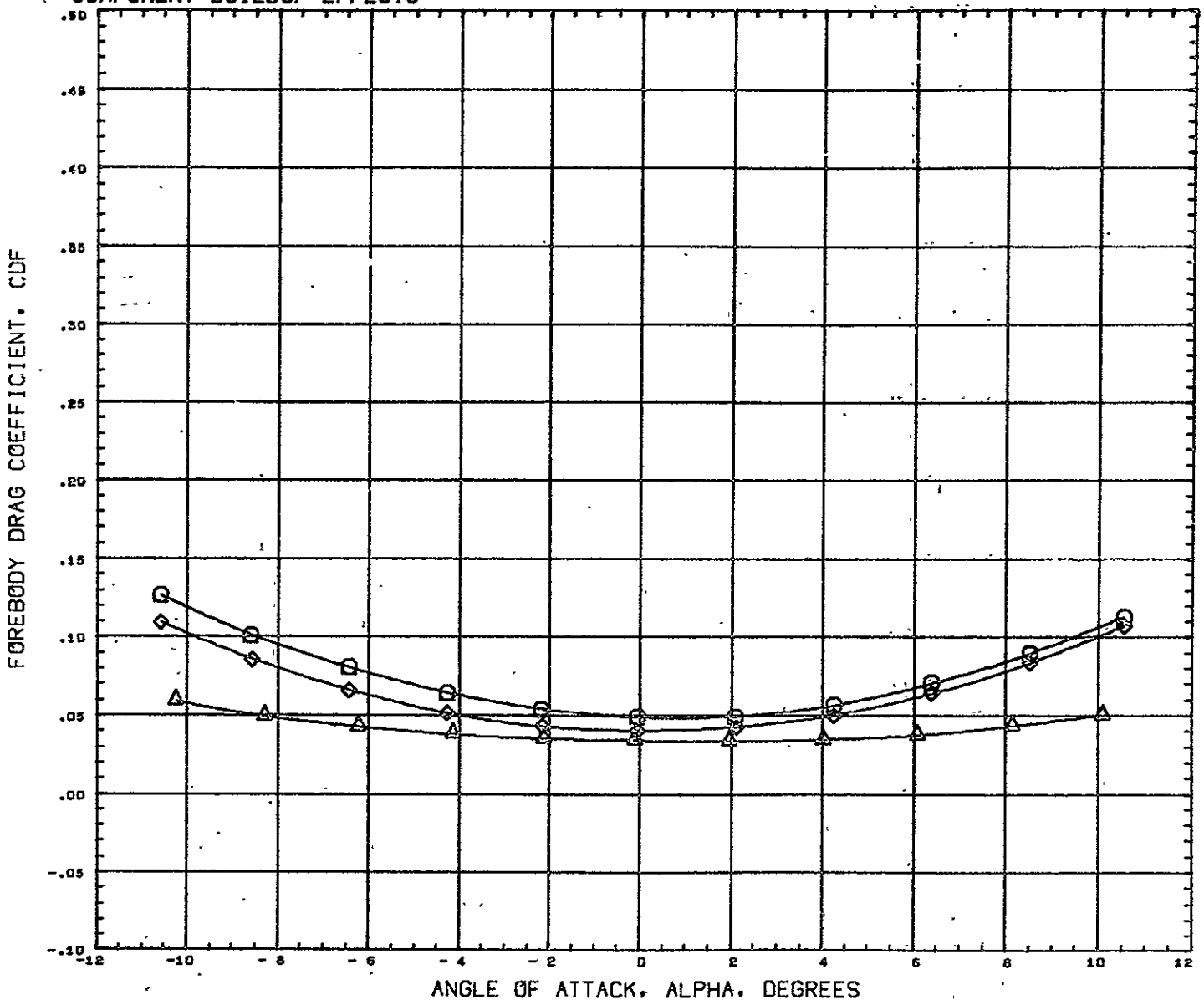


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A) ○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A) △	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A) ◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.100

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

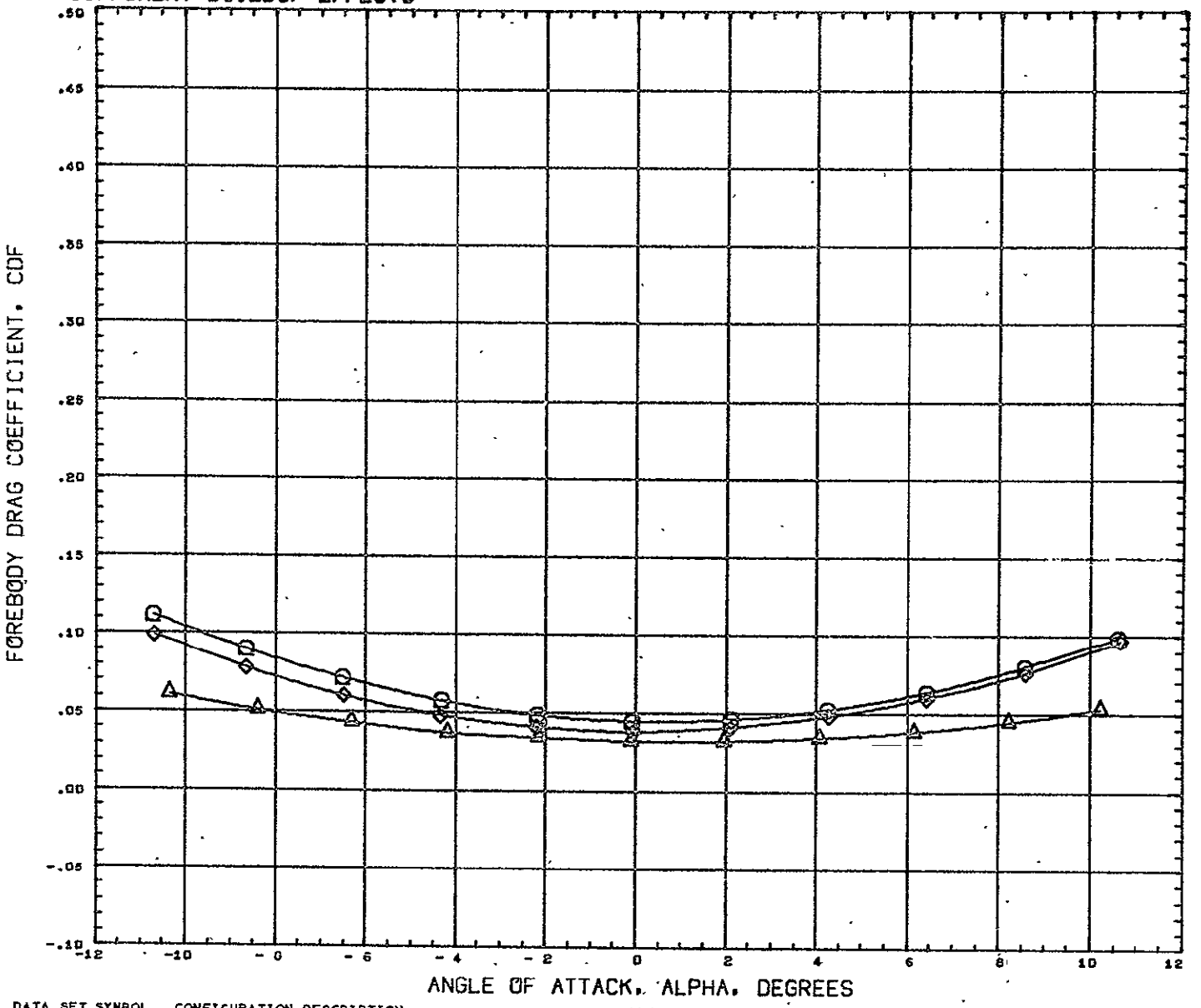


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.466

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

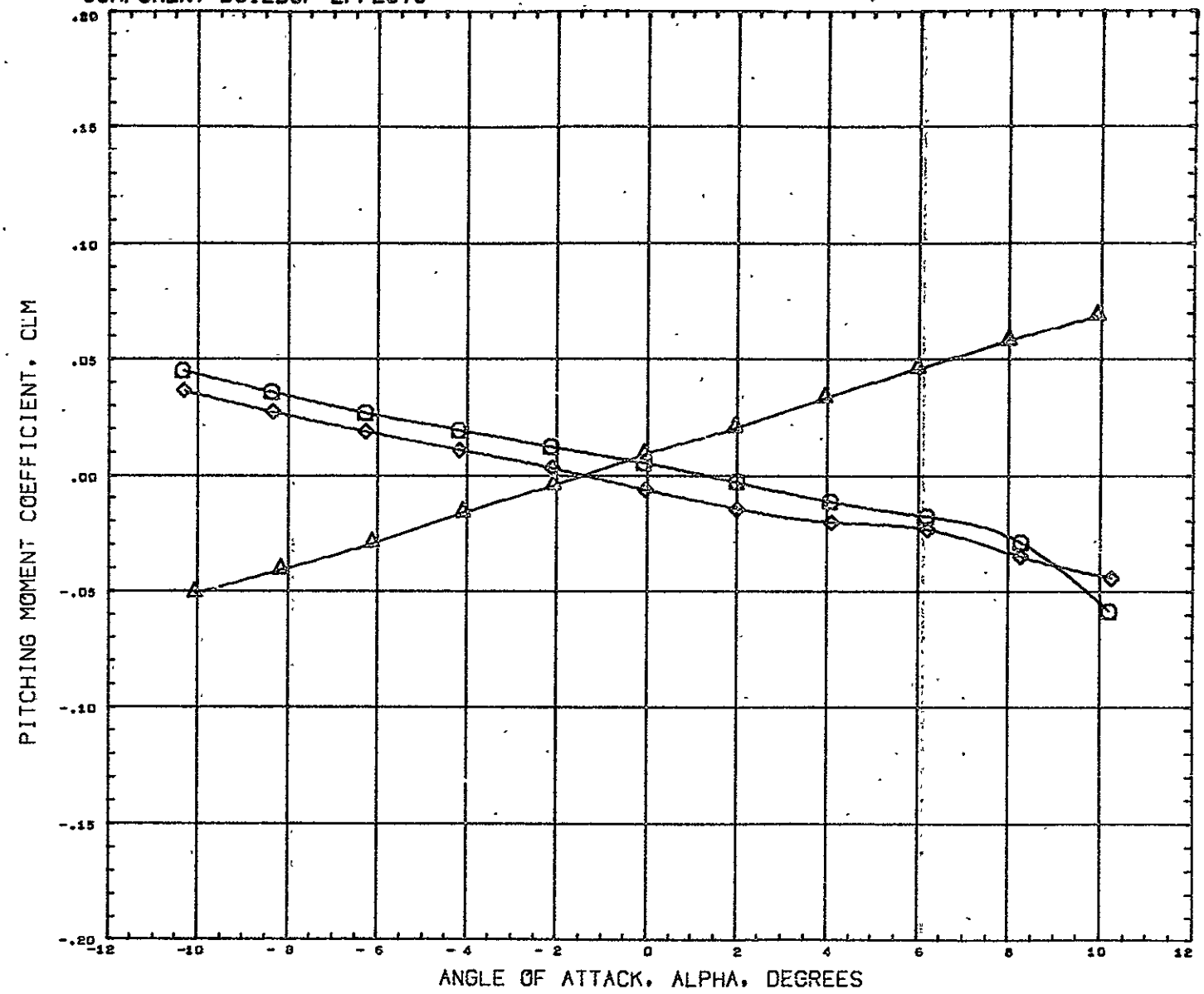


DATA SET SYMBOL		CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.969

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

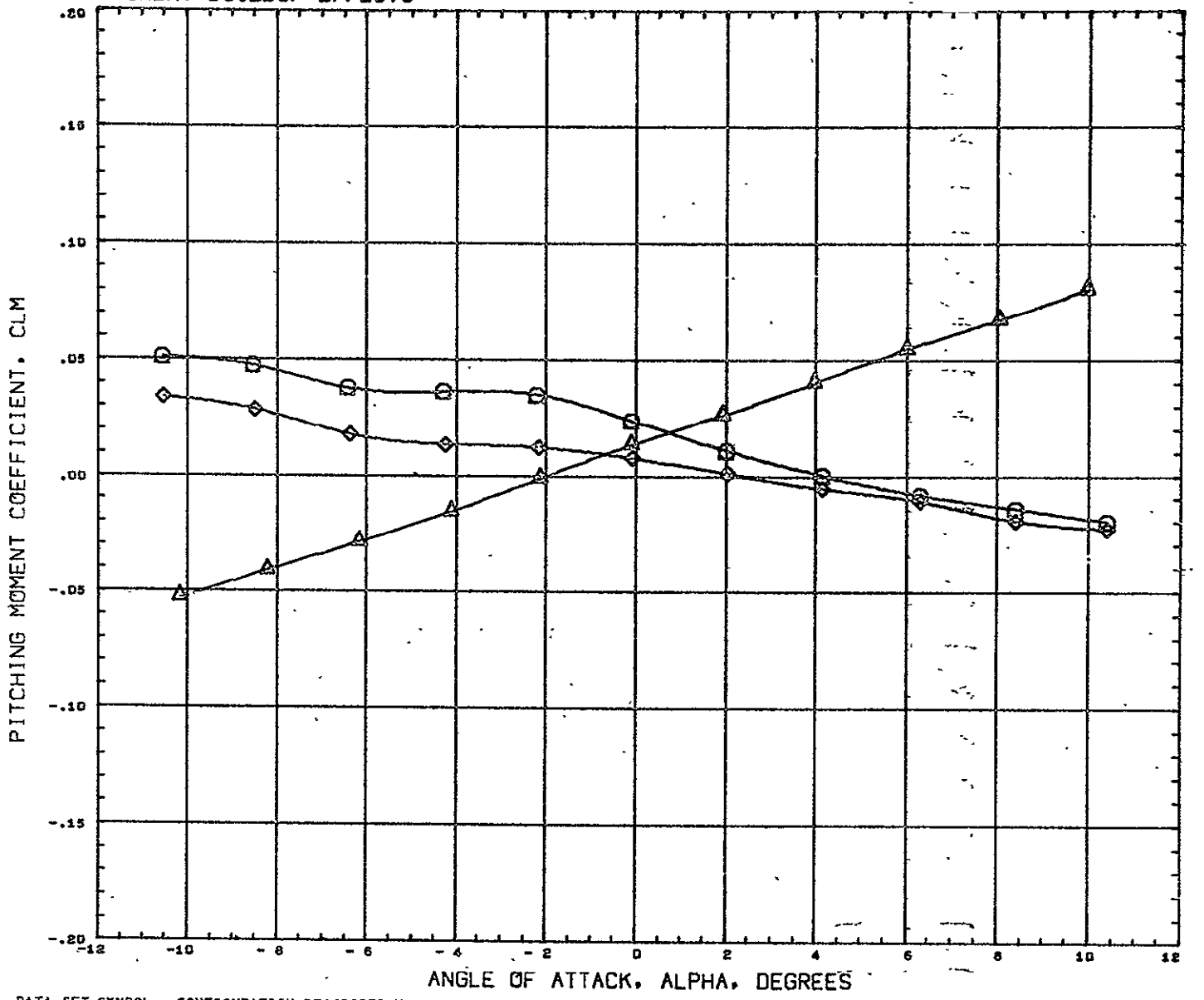


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 0.607

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

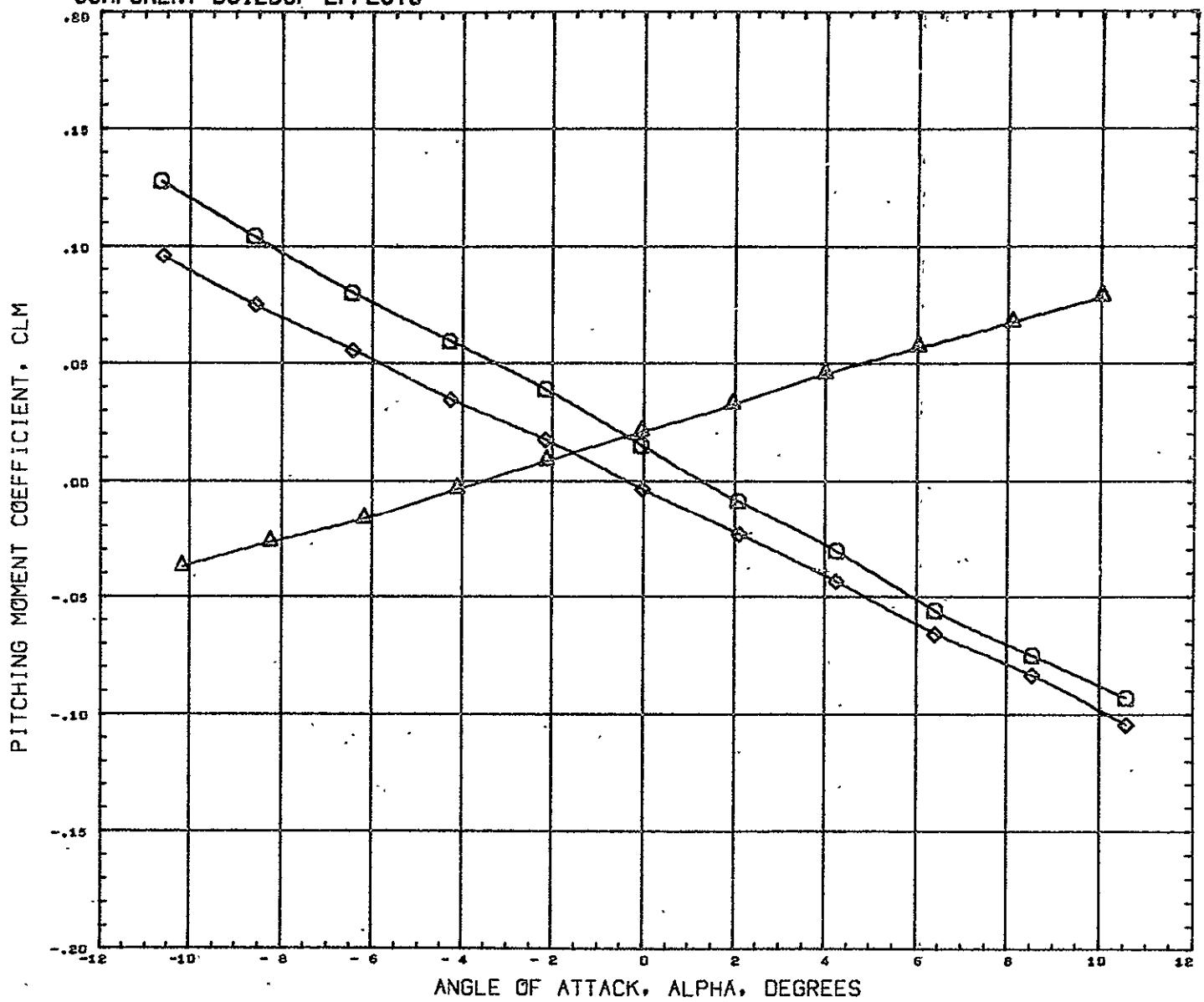


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A) ○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A) △	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A) ◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 0.908

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

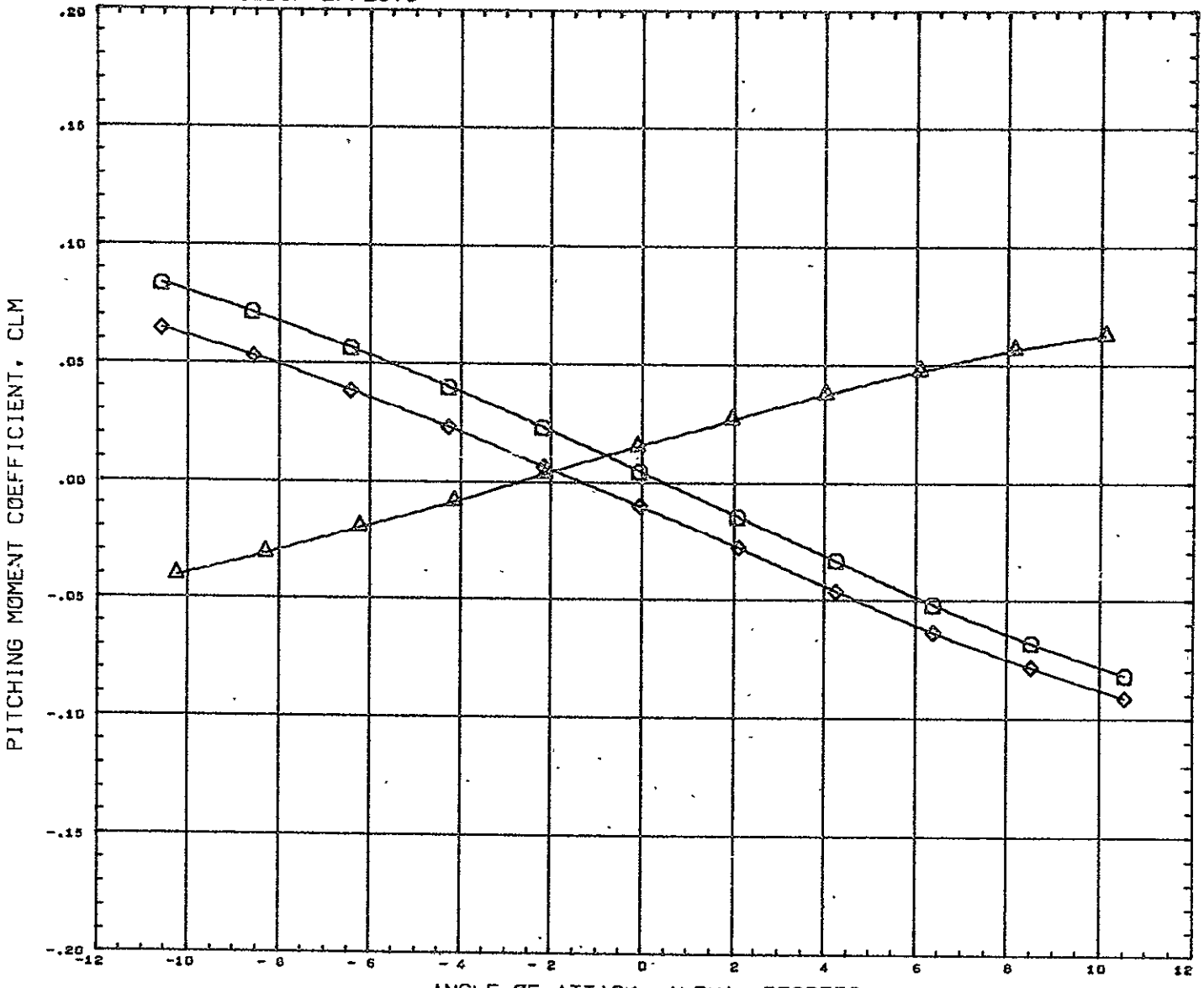


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.100

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

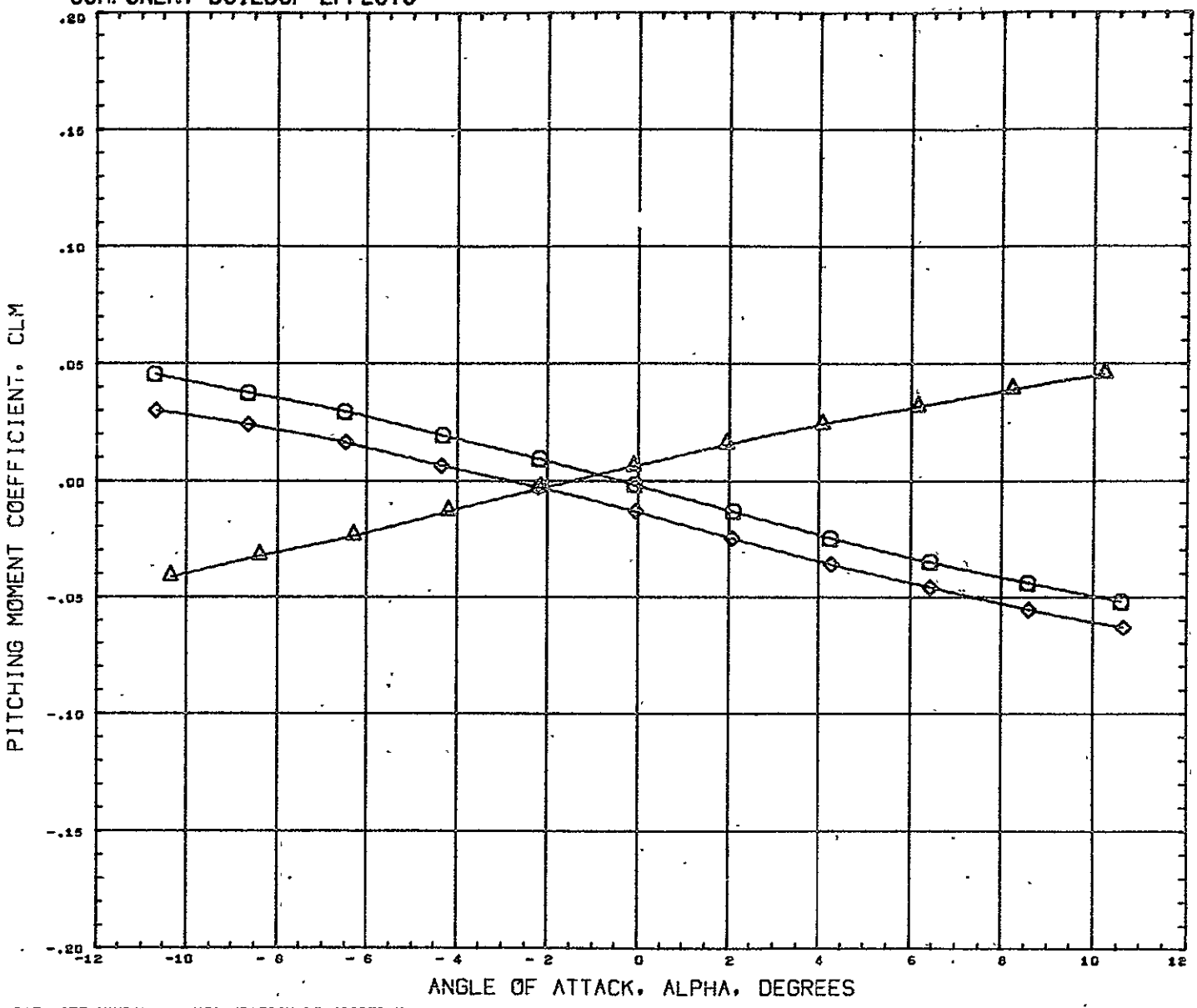


DATA SET SYMBOL		CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.466

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

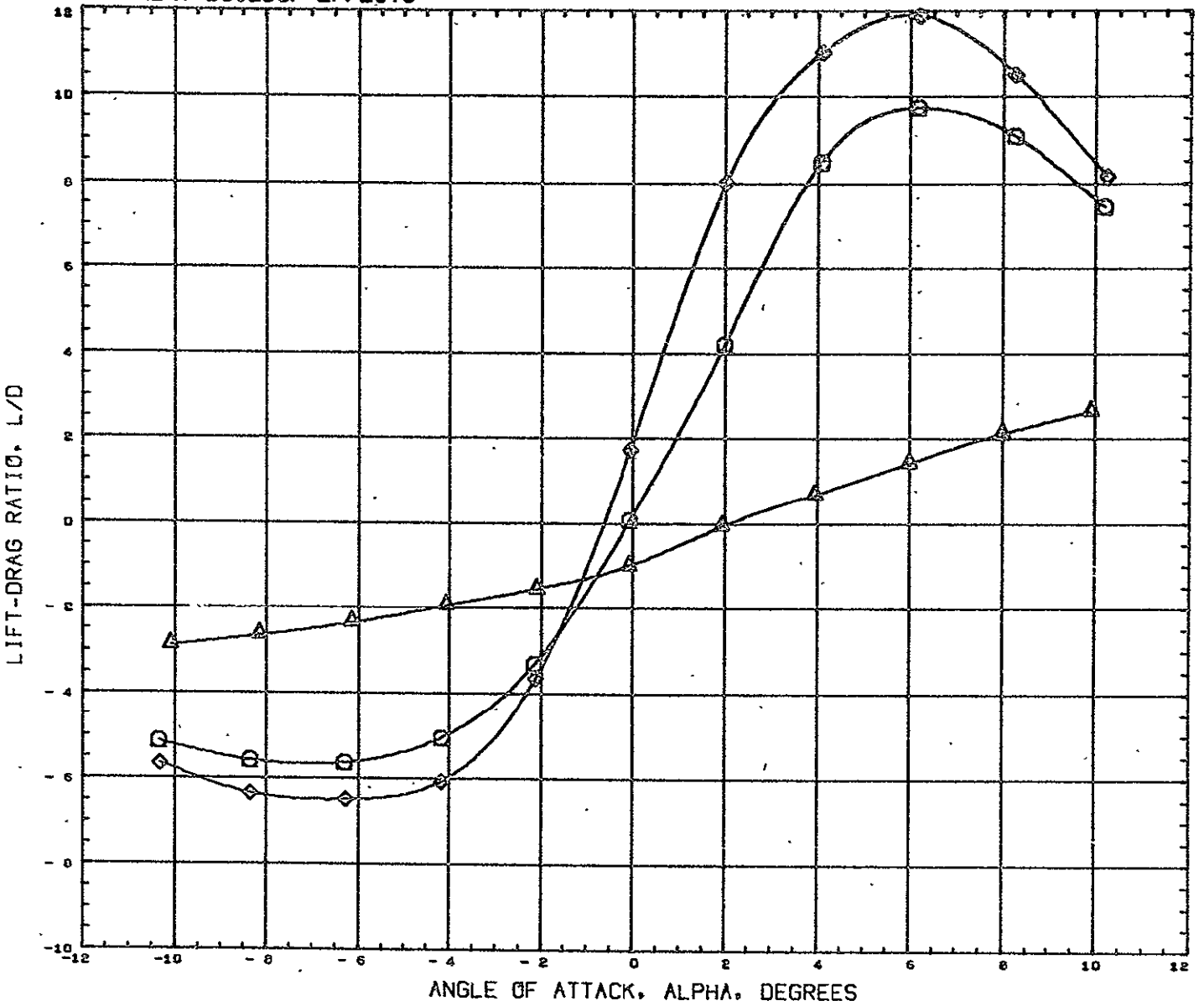
COMPONENT BUILDUP EFFECTS



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10

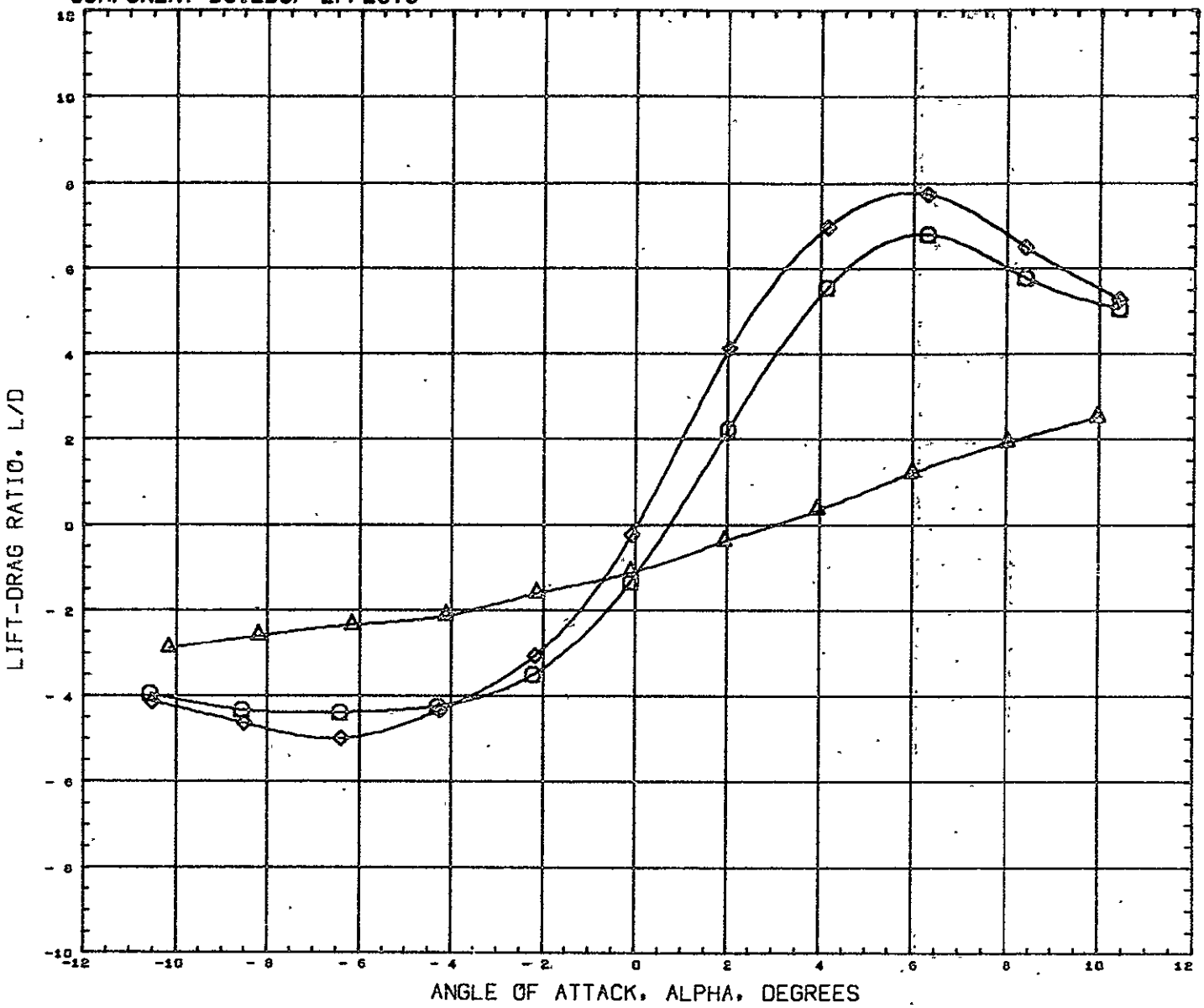
BETA	ELVATR	AILRON
6.000	0.000	0.000
6.000		
6.000	0.000	0.000

MACH 0.607

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	150.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

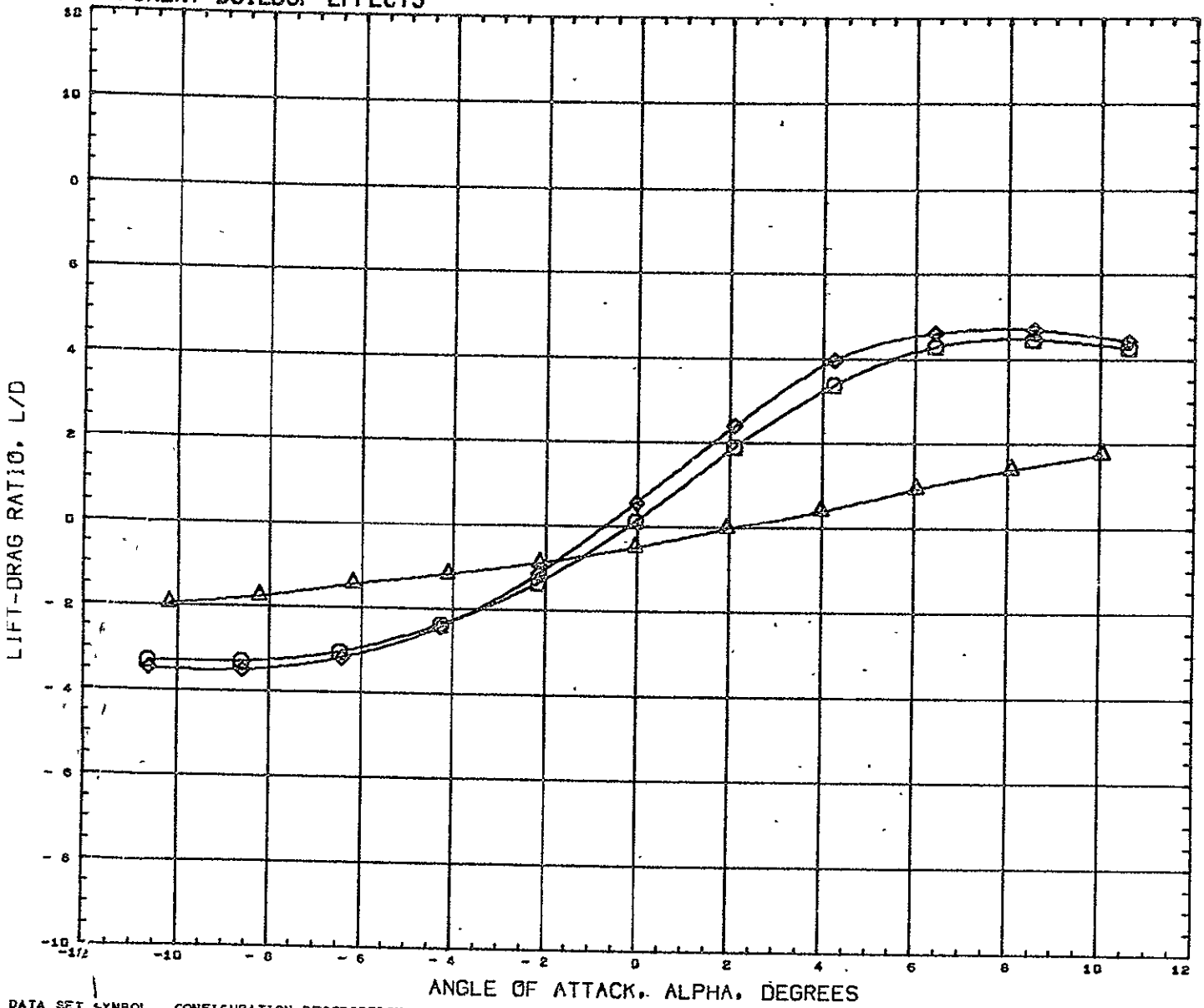


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 0.908

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10

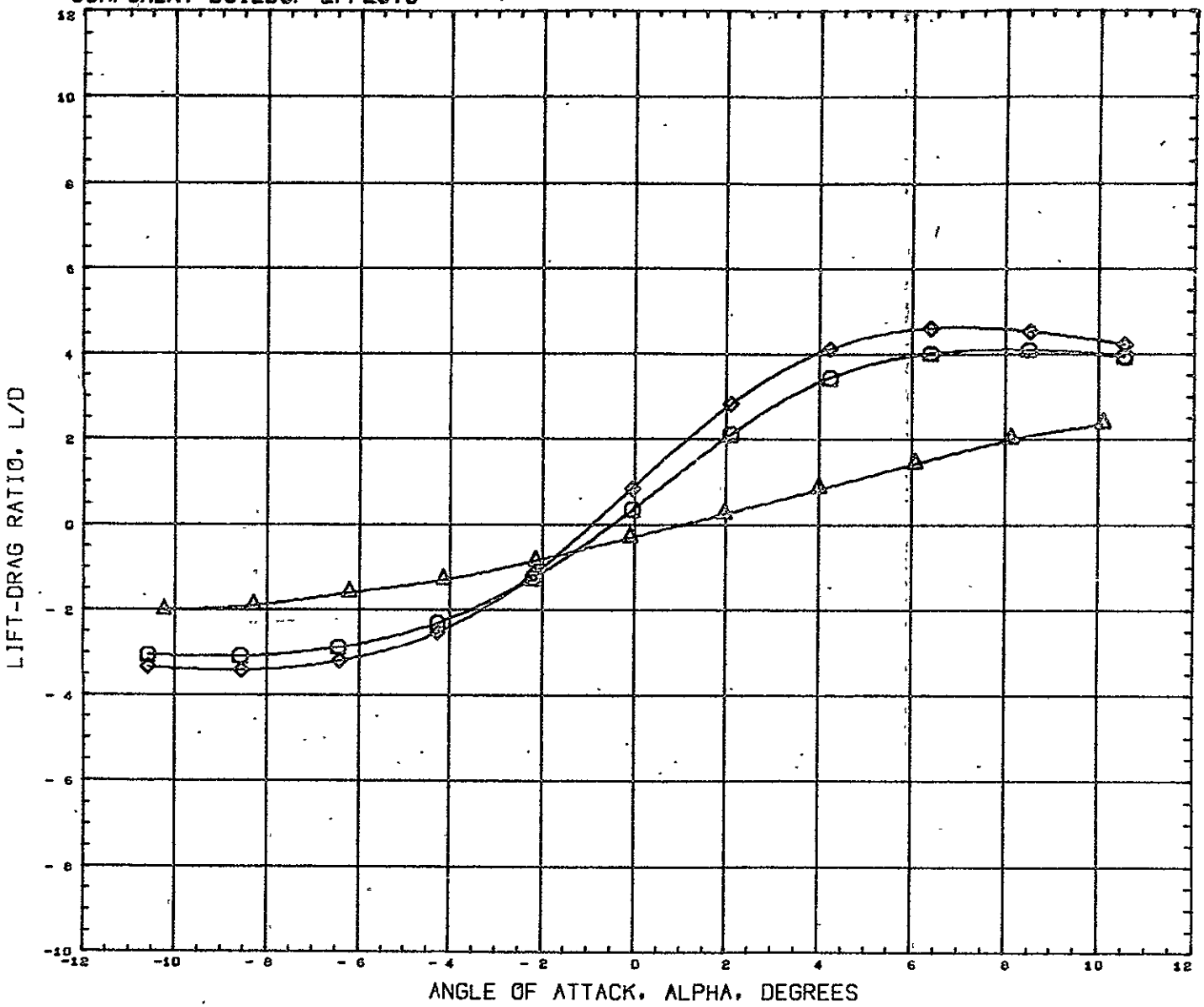
BETA	ELVATR	AILRON
6.000	0.000	0.000
6.000		
6.000	0.000	0.000

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

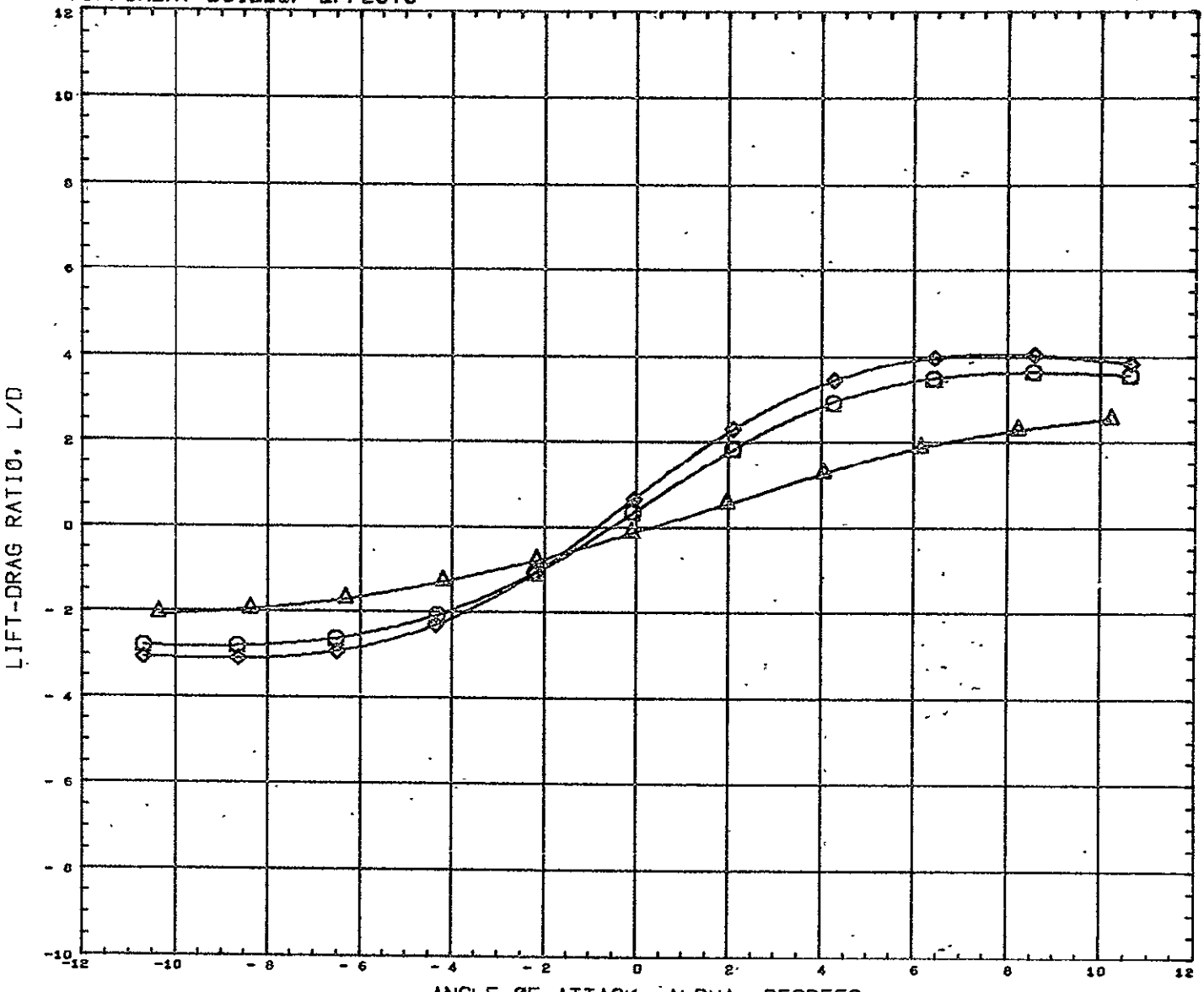


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.466

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

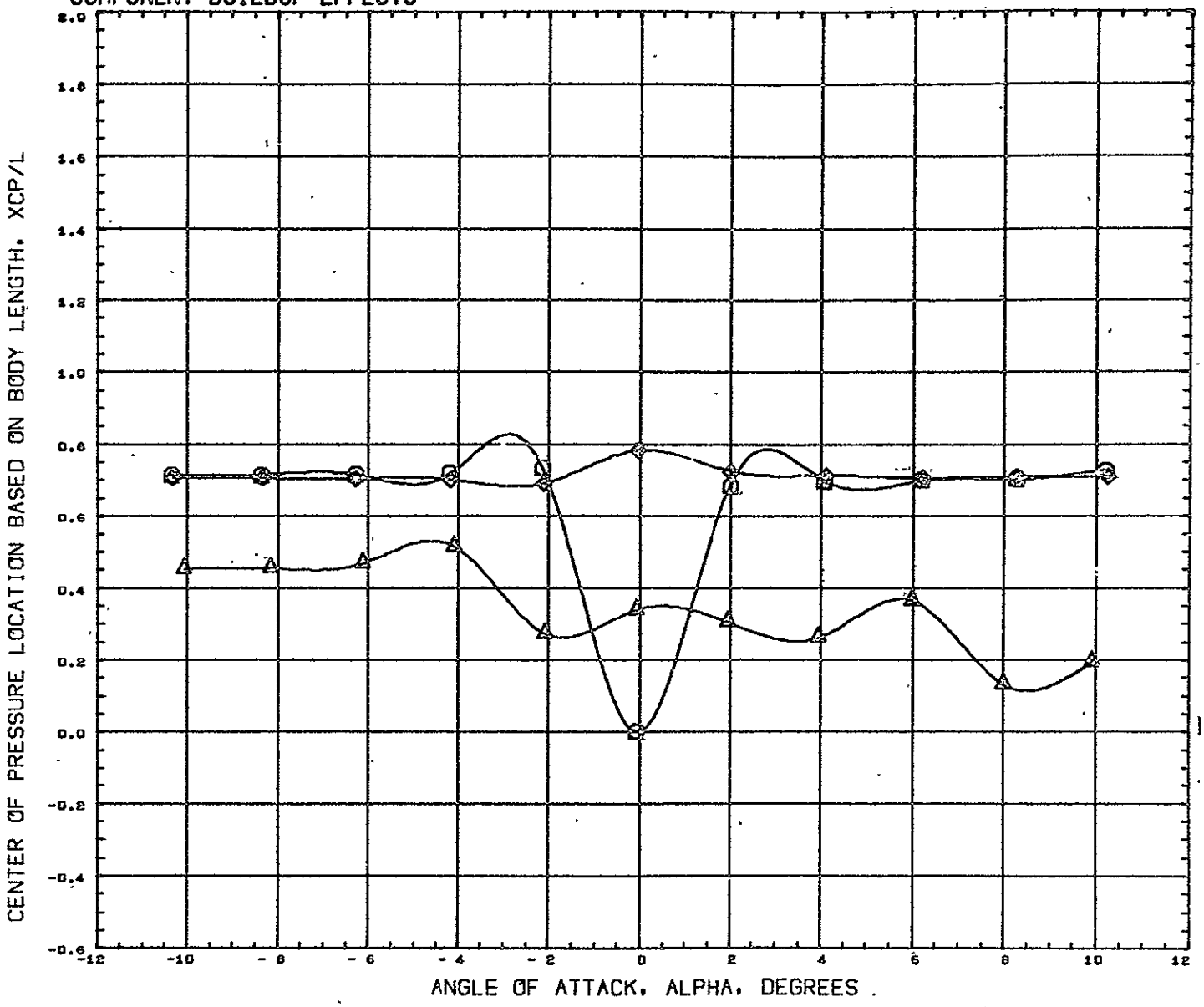


DATA SET SYMBOL		CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.969

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2304	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

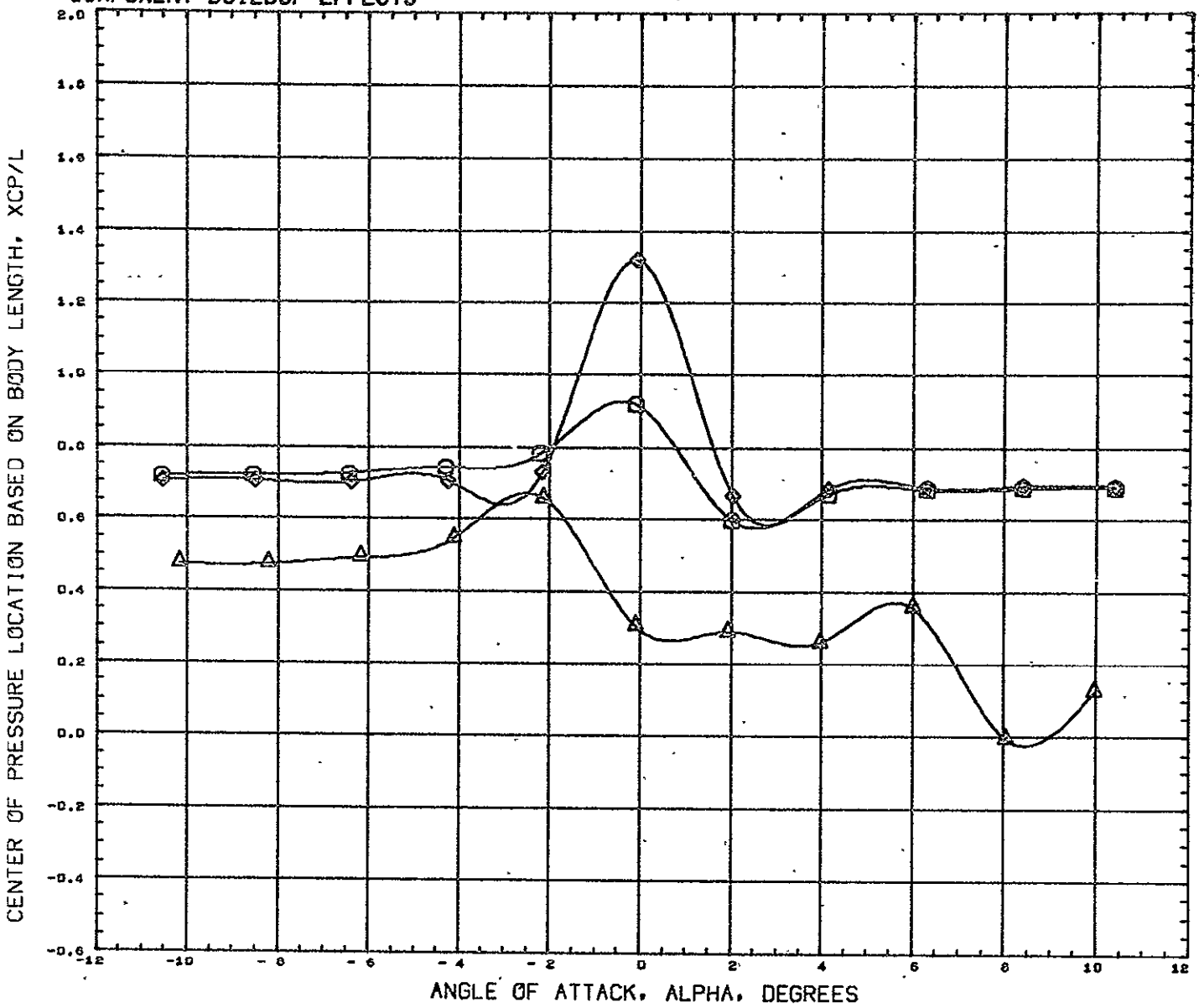


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A) ○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A) △	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A) ◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 0.607

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

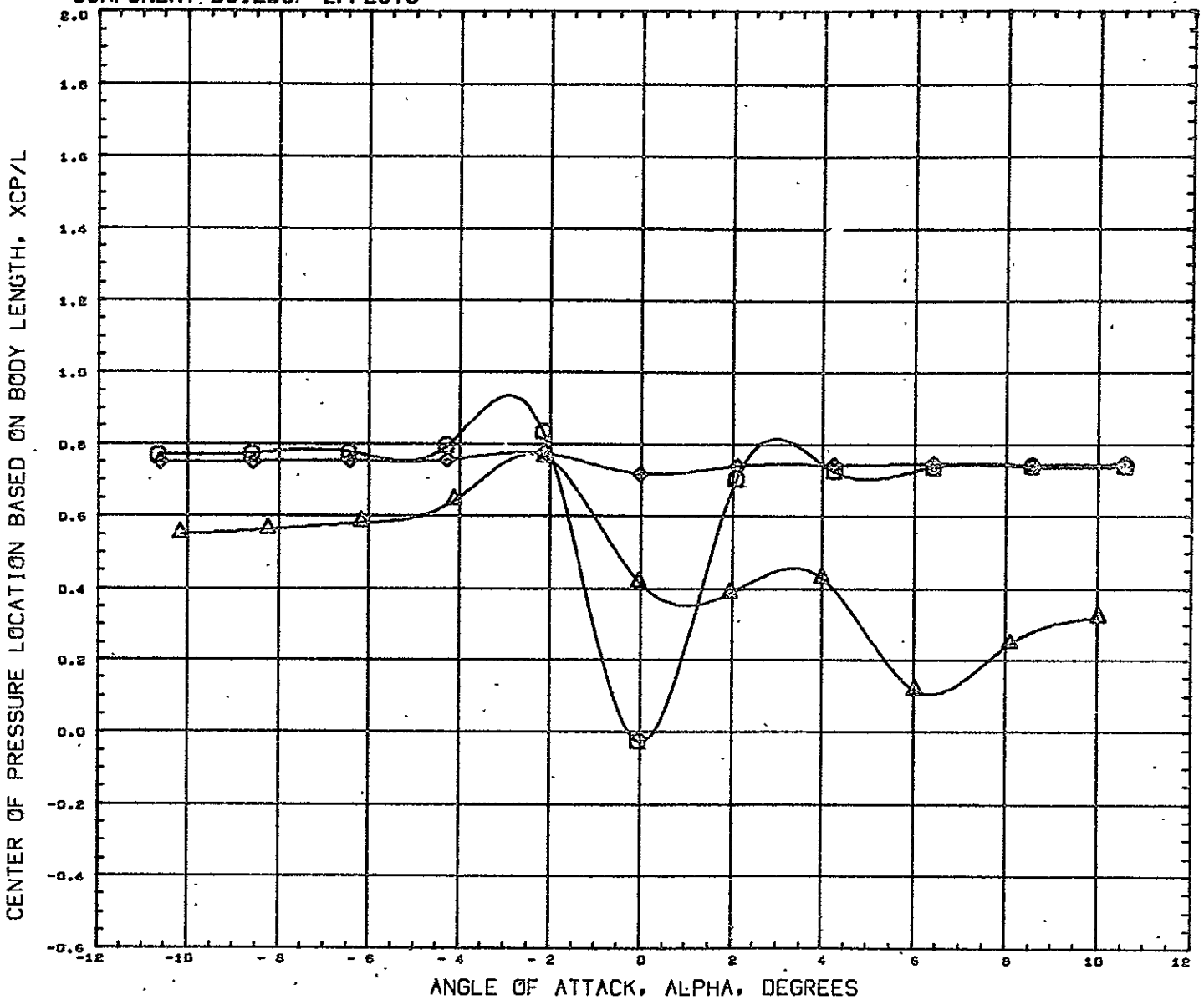


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 0.908

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

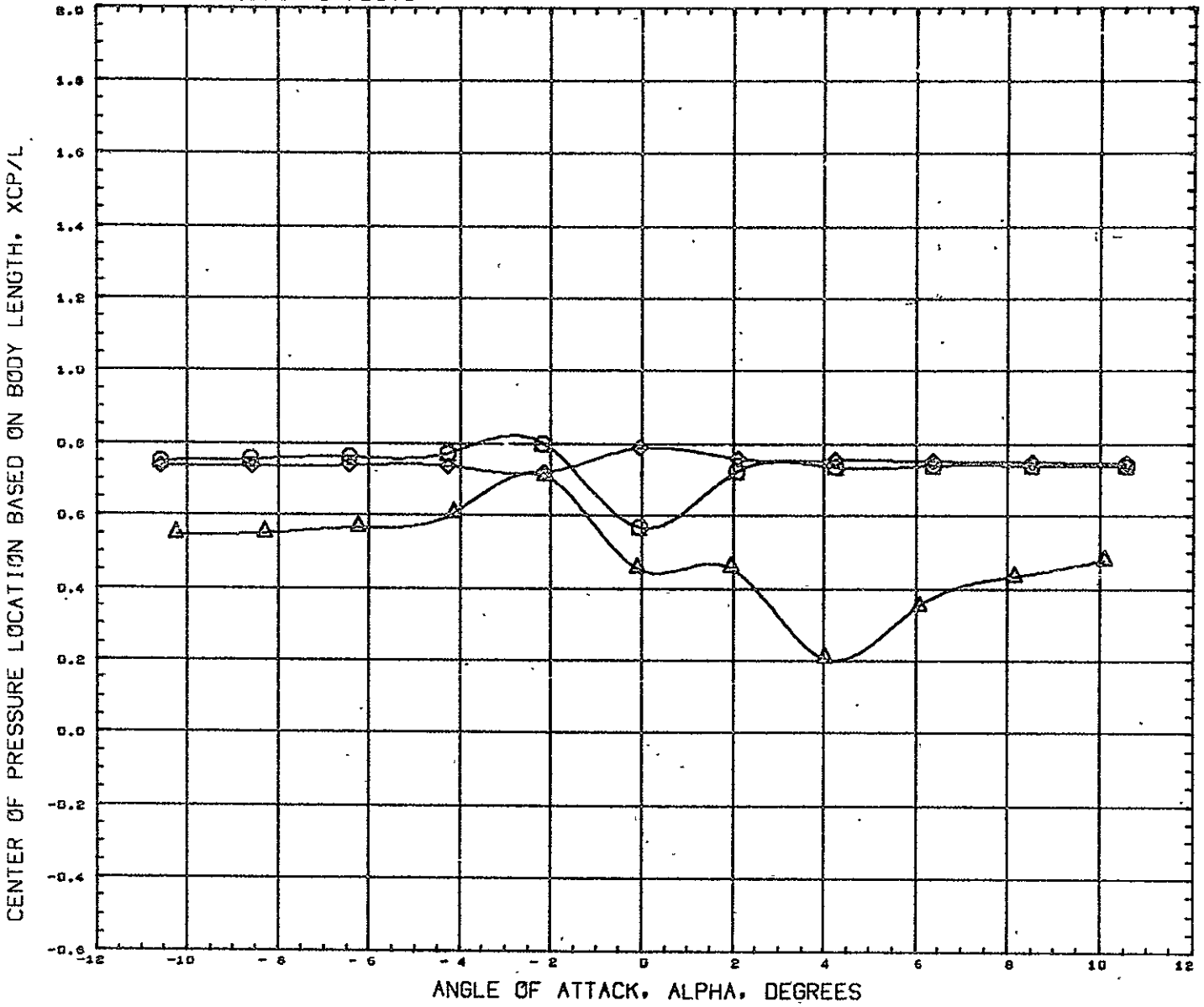


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.100

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS



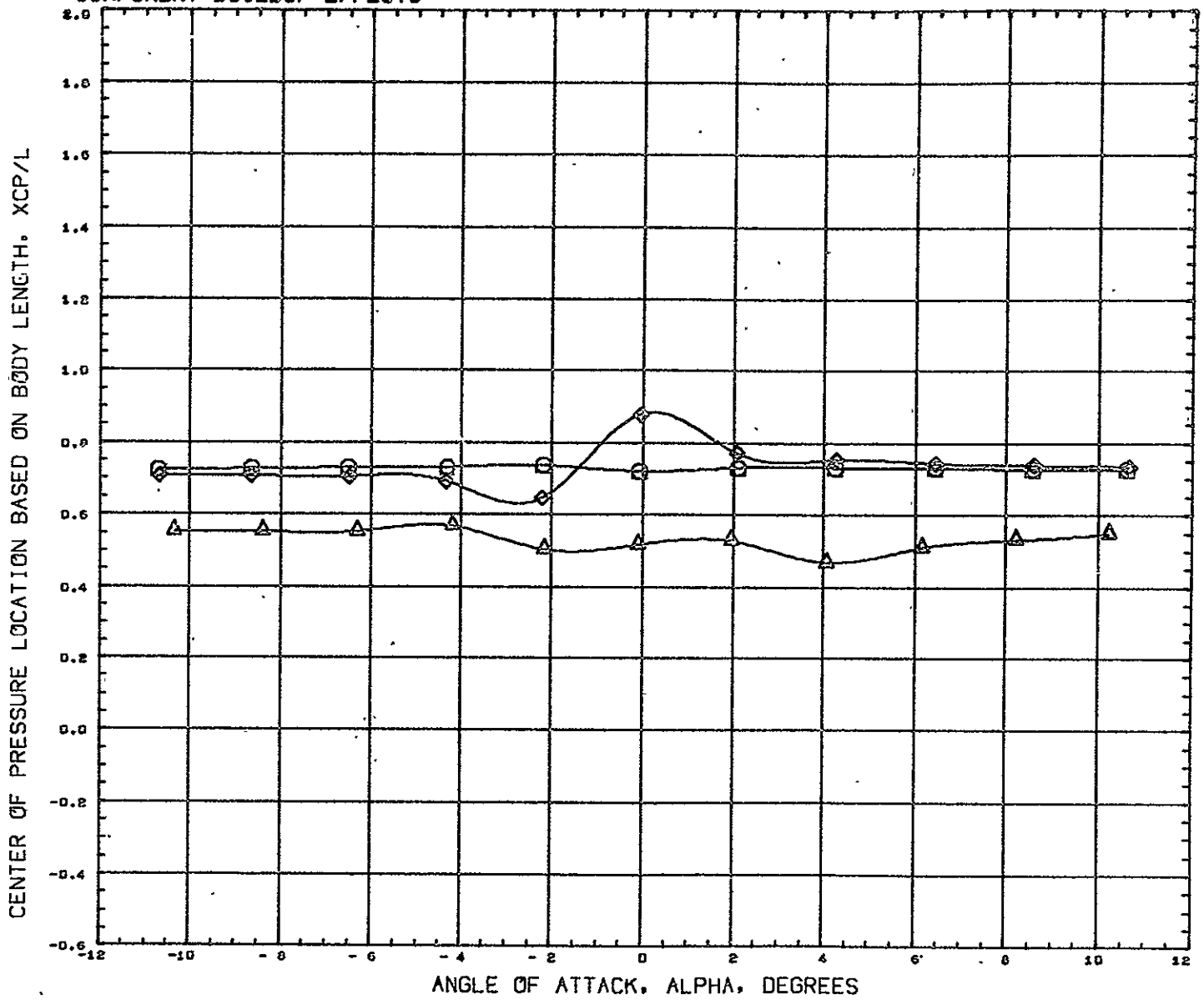
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	○	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.466

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

COMPONENT BUILDUP EFFECTS

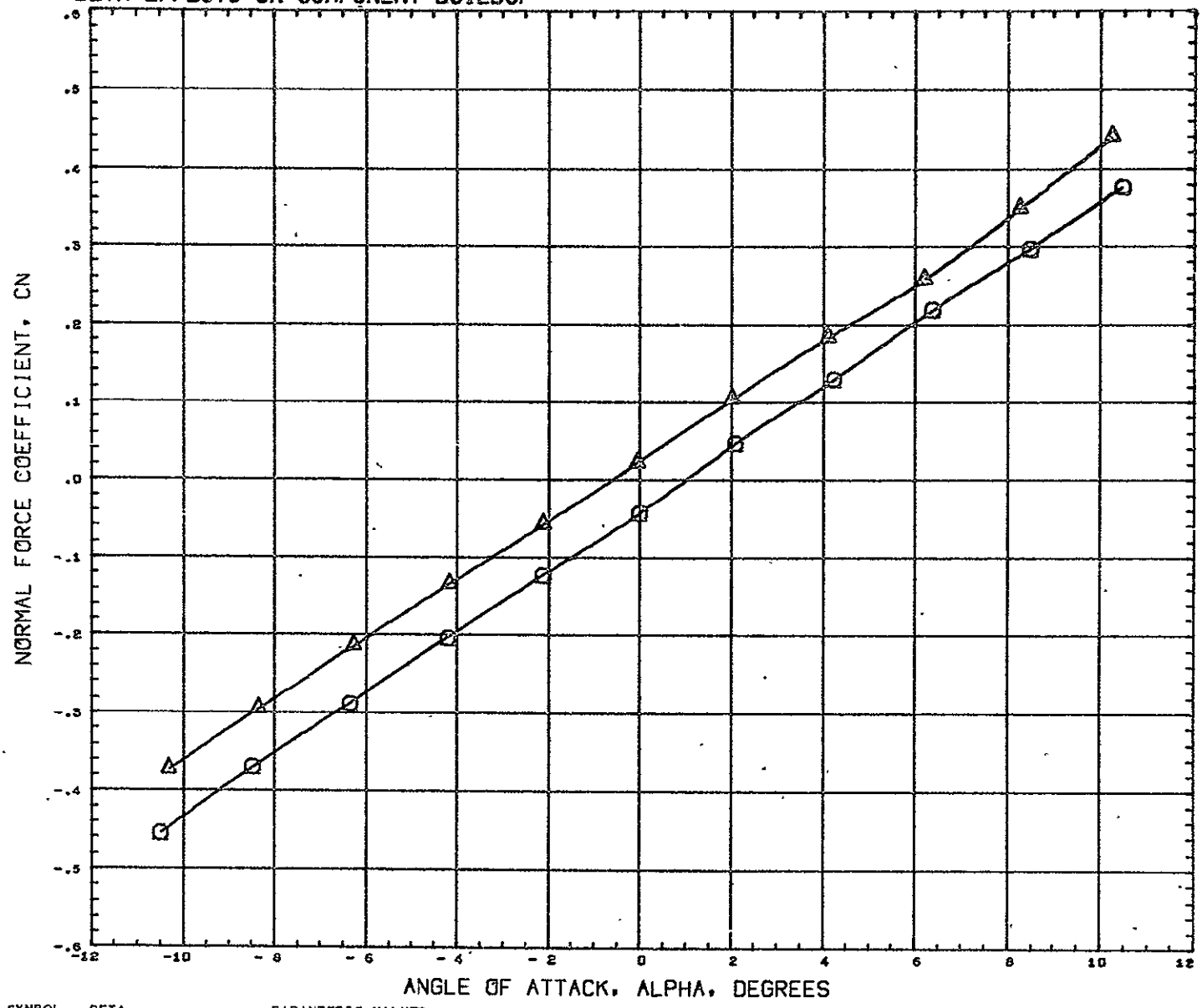


DATA SET SYMBOL		CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(V2905A)	□	MSFC484 NR DELTA ORBITER B5W17E10V17J2	6.000	0.000	0.000
(V2904A)	△	MSFC484 NR DELTA ORBITER B5V17J2	6.000		
(V2903A)	◇	MSFC484 NR DELTA ORBITER B5W17E10	6.000	0.000	0.000

MACH 1.969

REFERENCE INFORMATION		
REFS	6084.0040	Sq FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

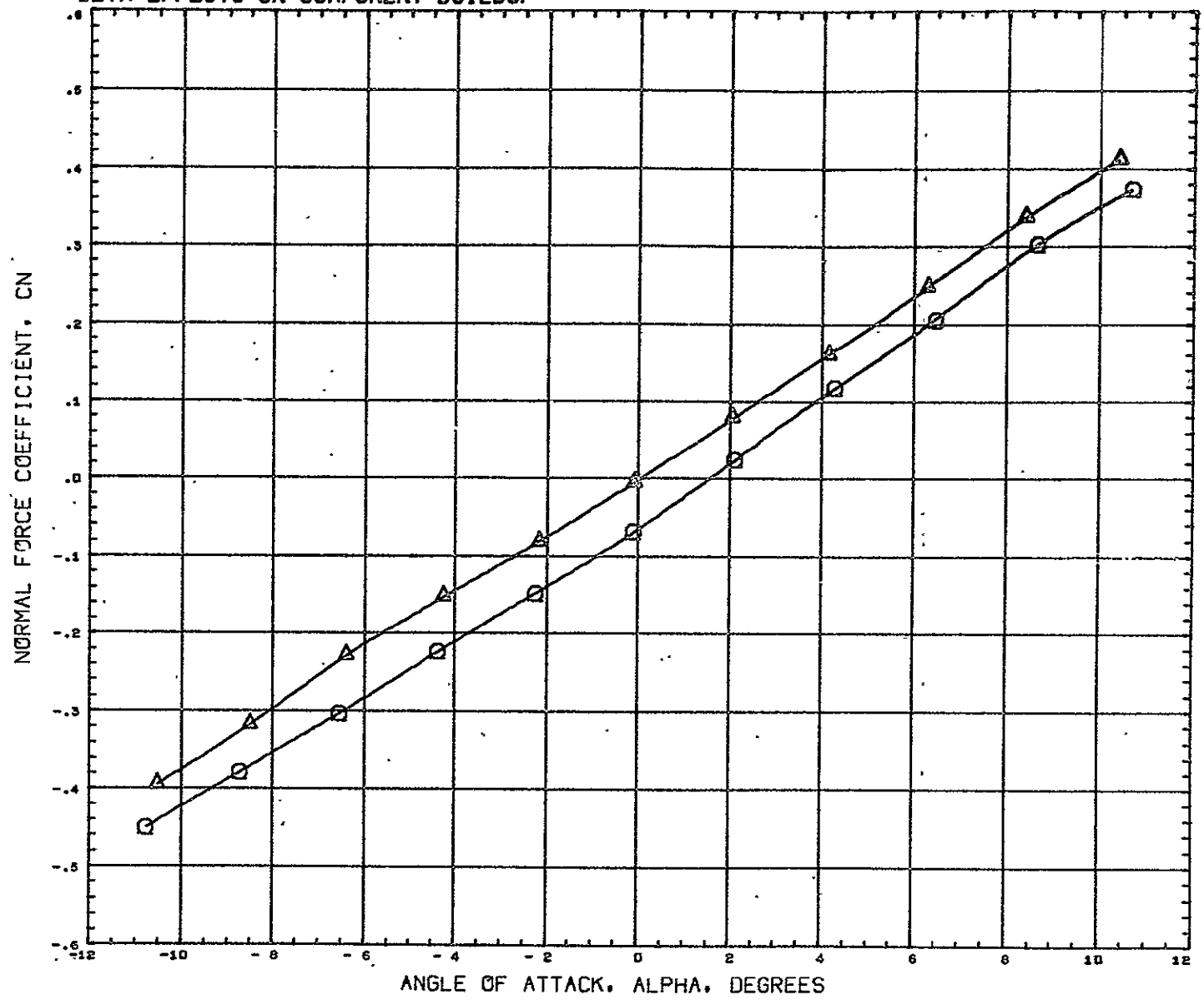


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	0.608	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

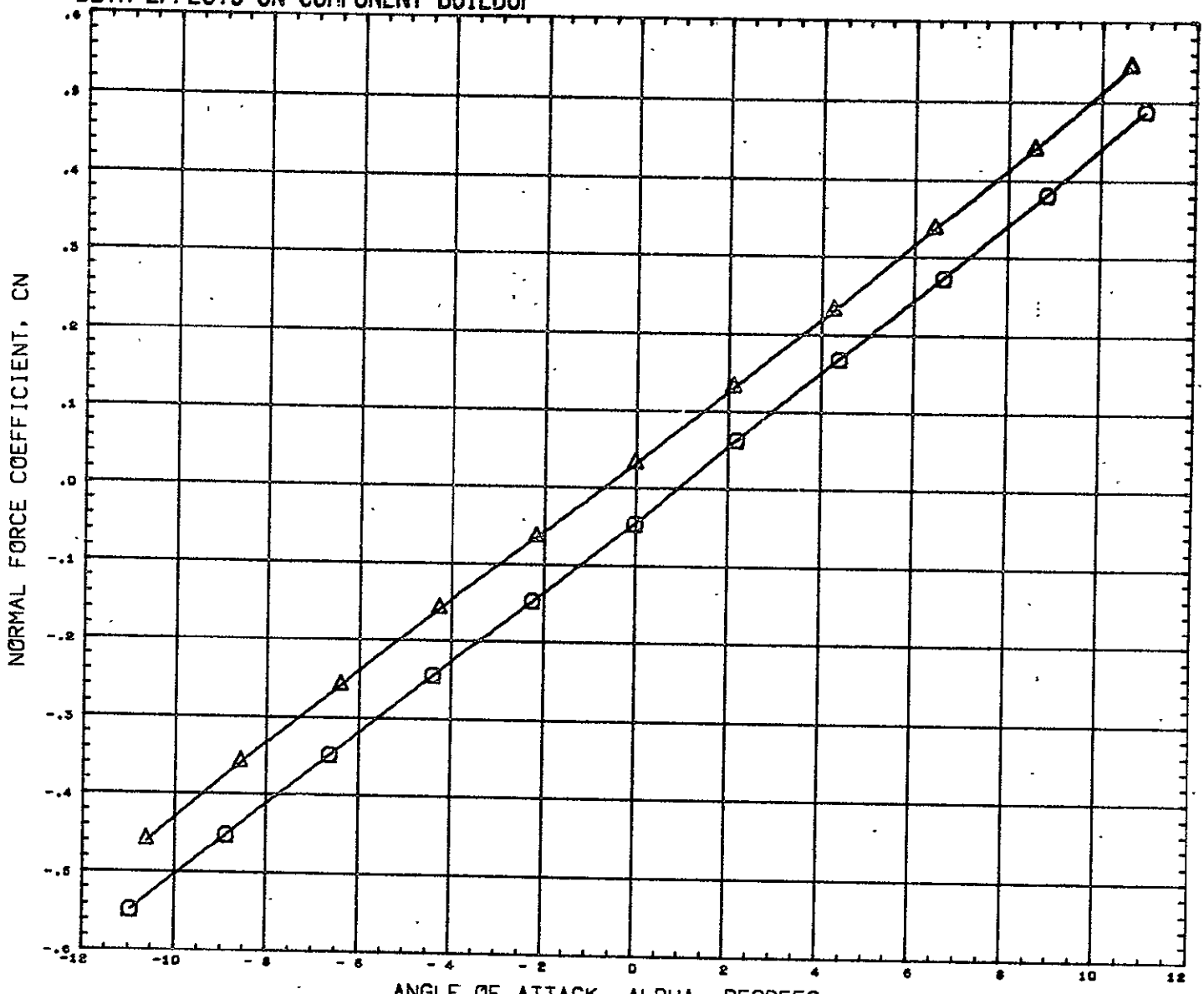


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	0.904	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA
△	6.000
○	0.000

PARAMETRIC VALUES

MACH	1.104	ELVATR	0.000		
AILRON	0.000				

DATA SOURCE

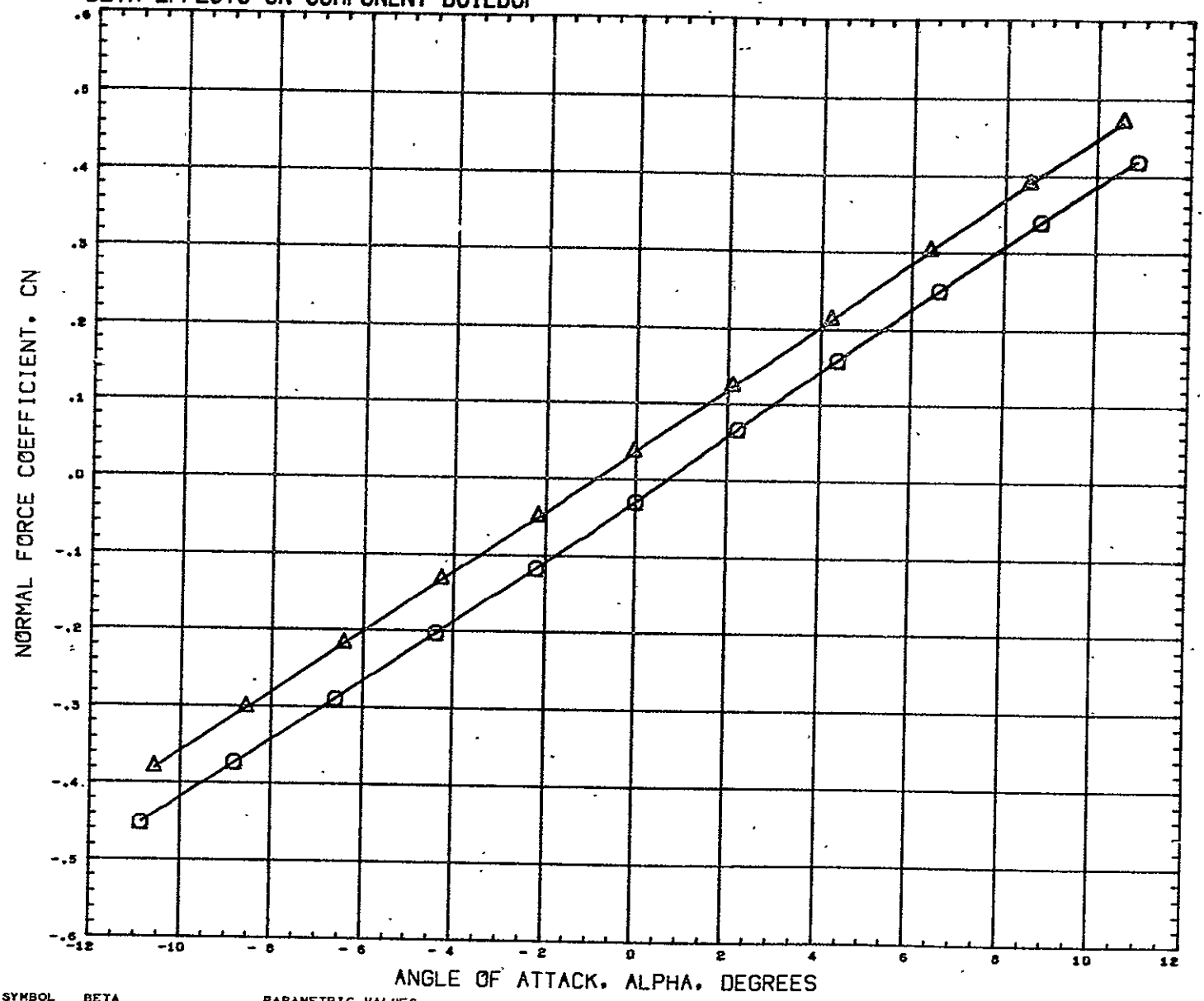
DATASET	BETA	DATASET	BETA
V2902A	0.000	V2903A	6.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP

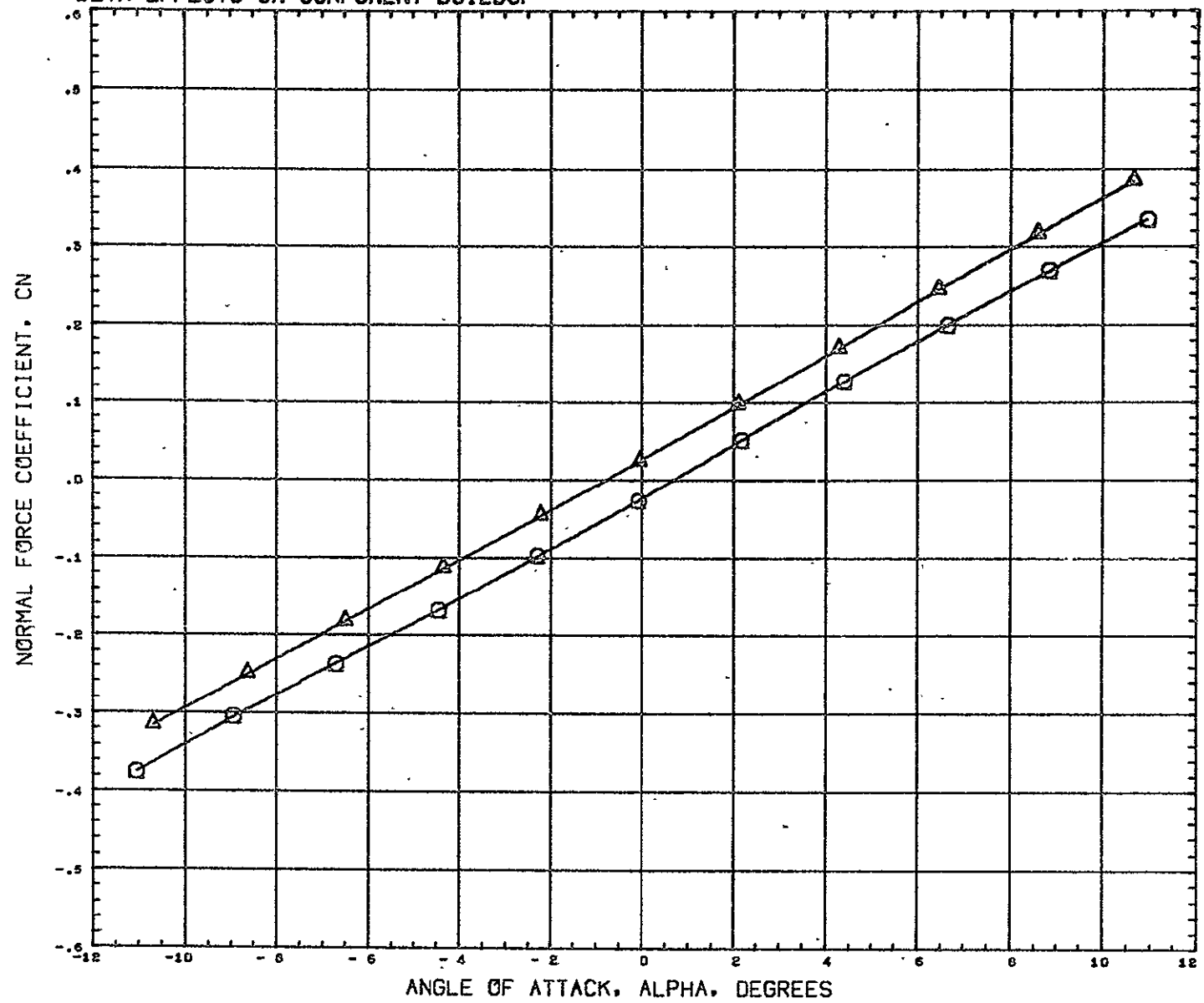


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.464	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA
○	0.000
△	6.000

PARAMETRIC VALUES

MACH	1.963	ELVATR	0.000	
AILRON	0.000			

DATA SOURCE

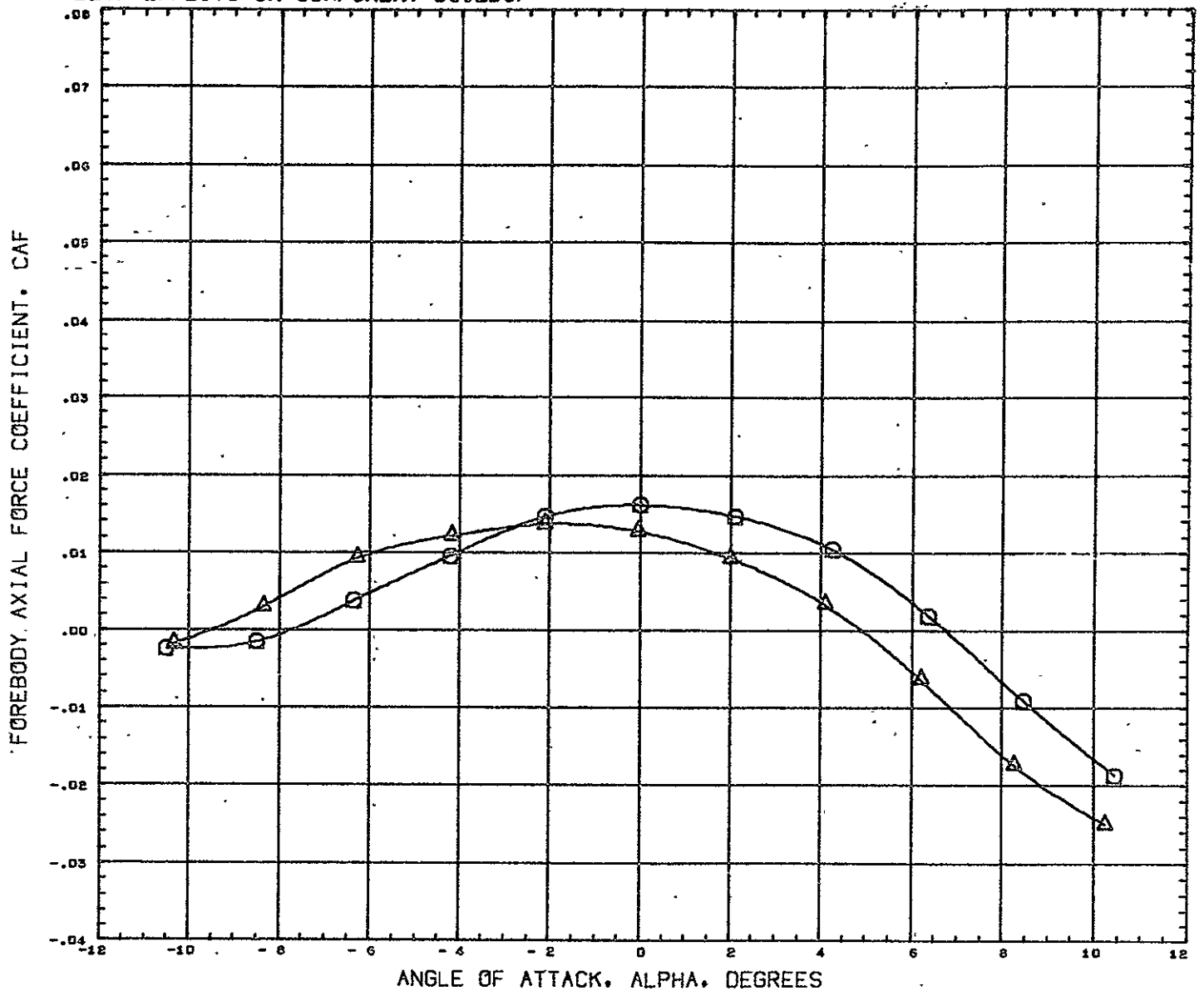
DATASET	BETA	DATASET	BETA
V2902A	0.000	V2903A	6.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
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△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
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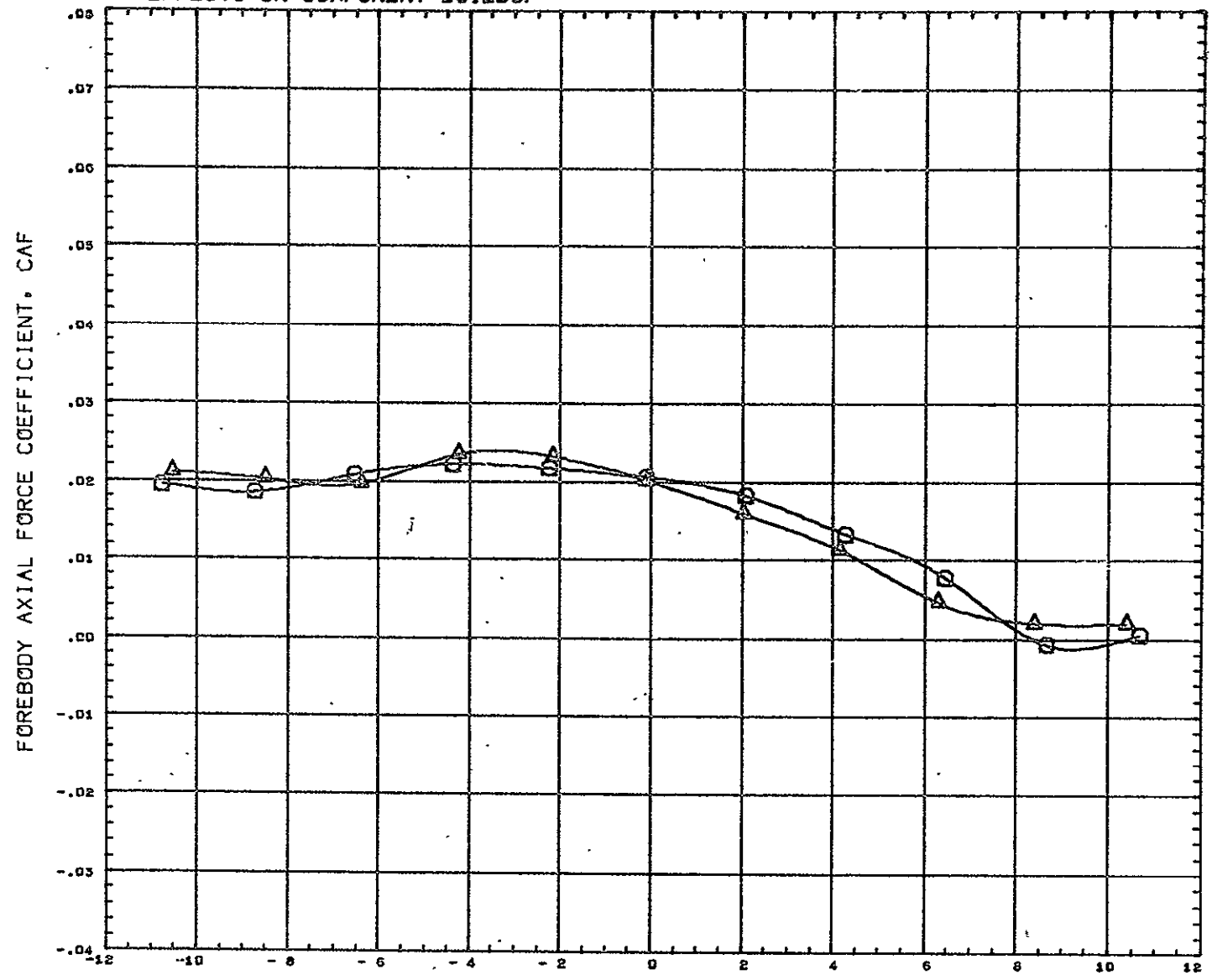
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
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										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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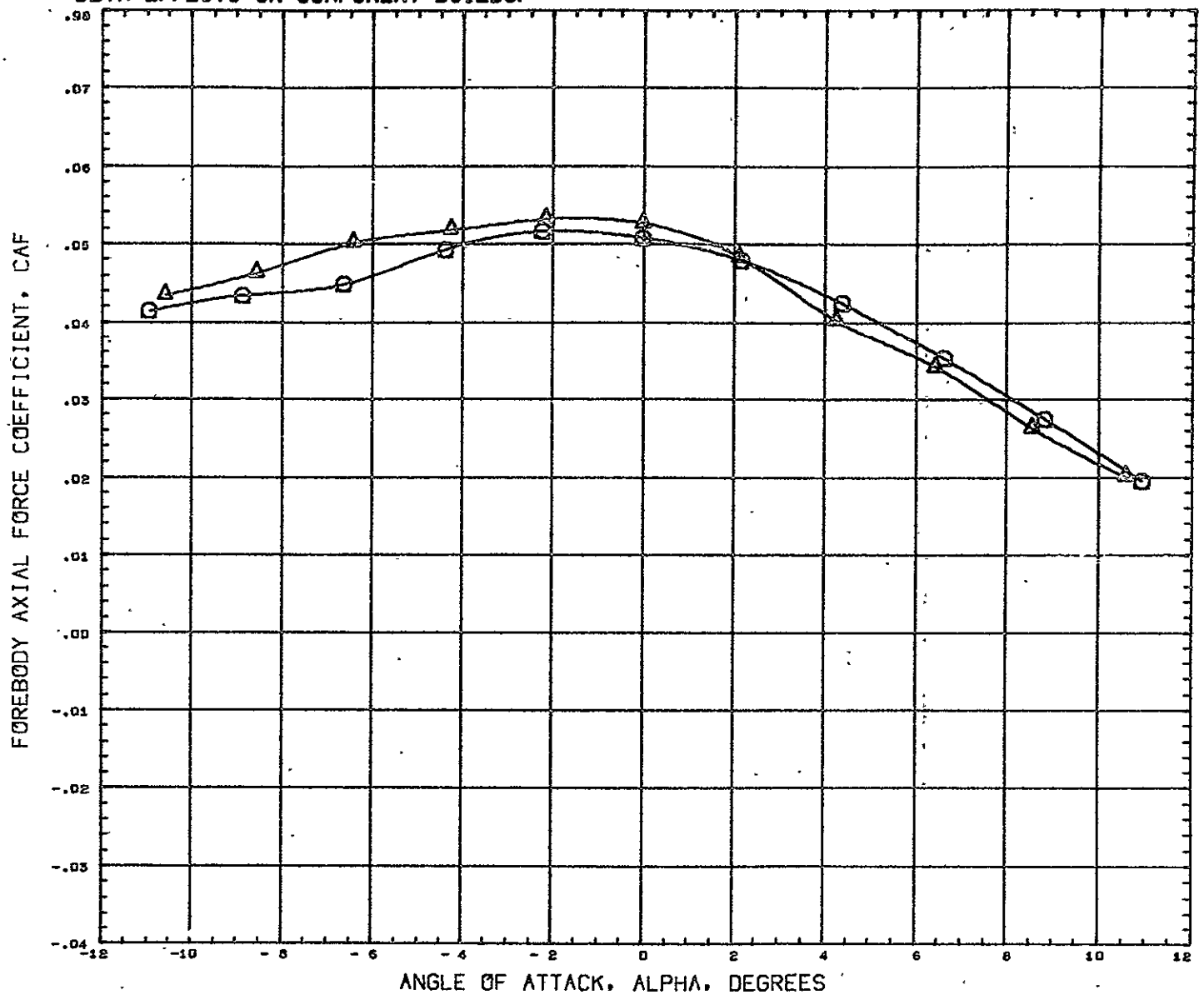
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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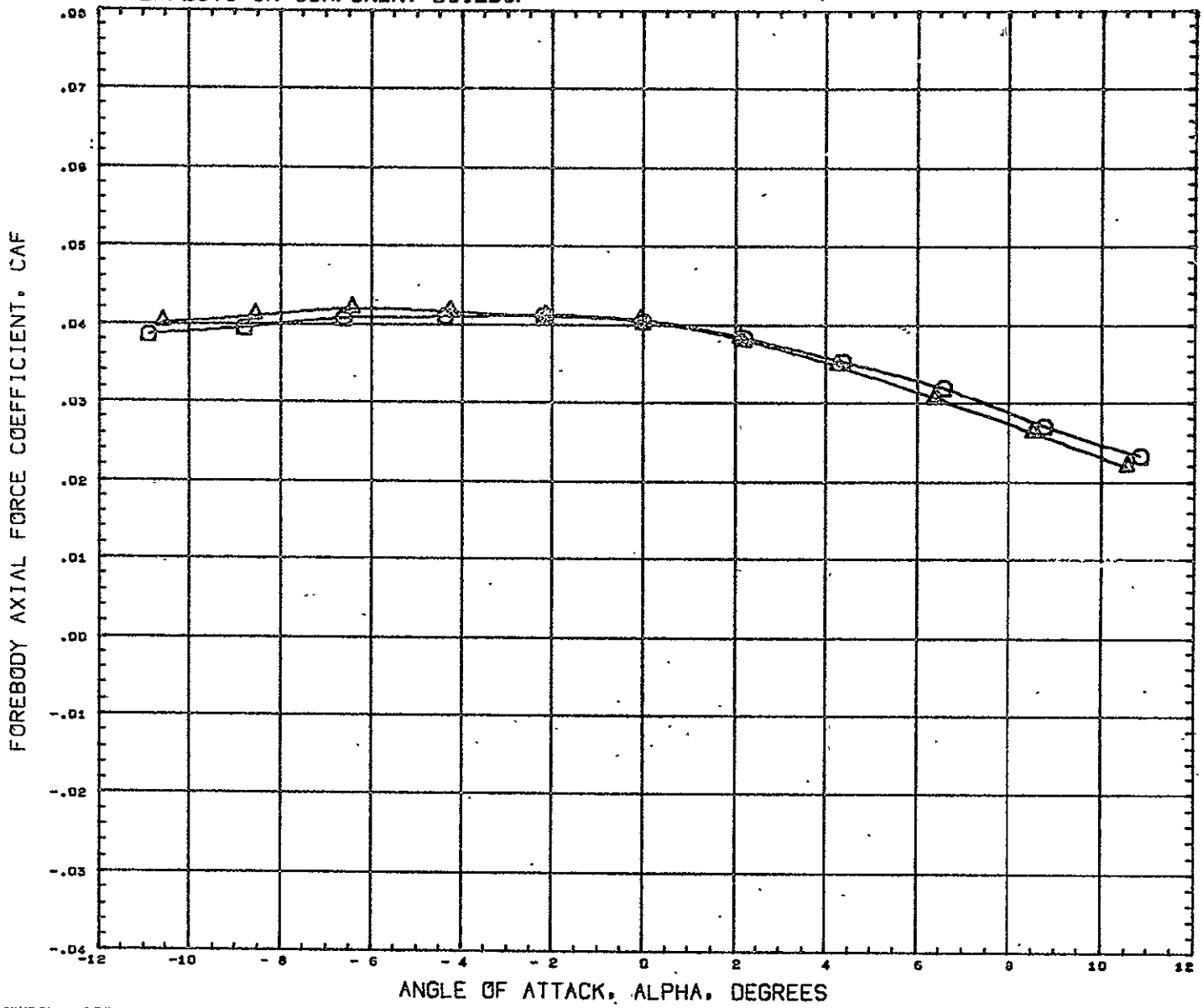
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP

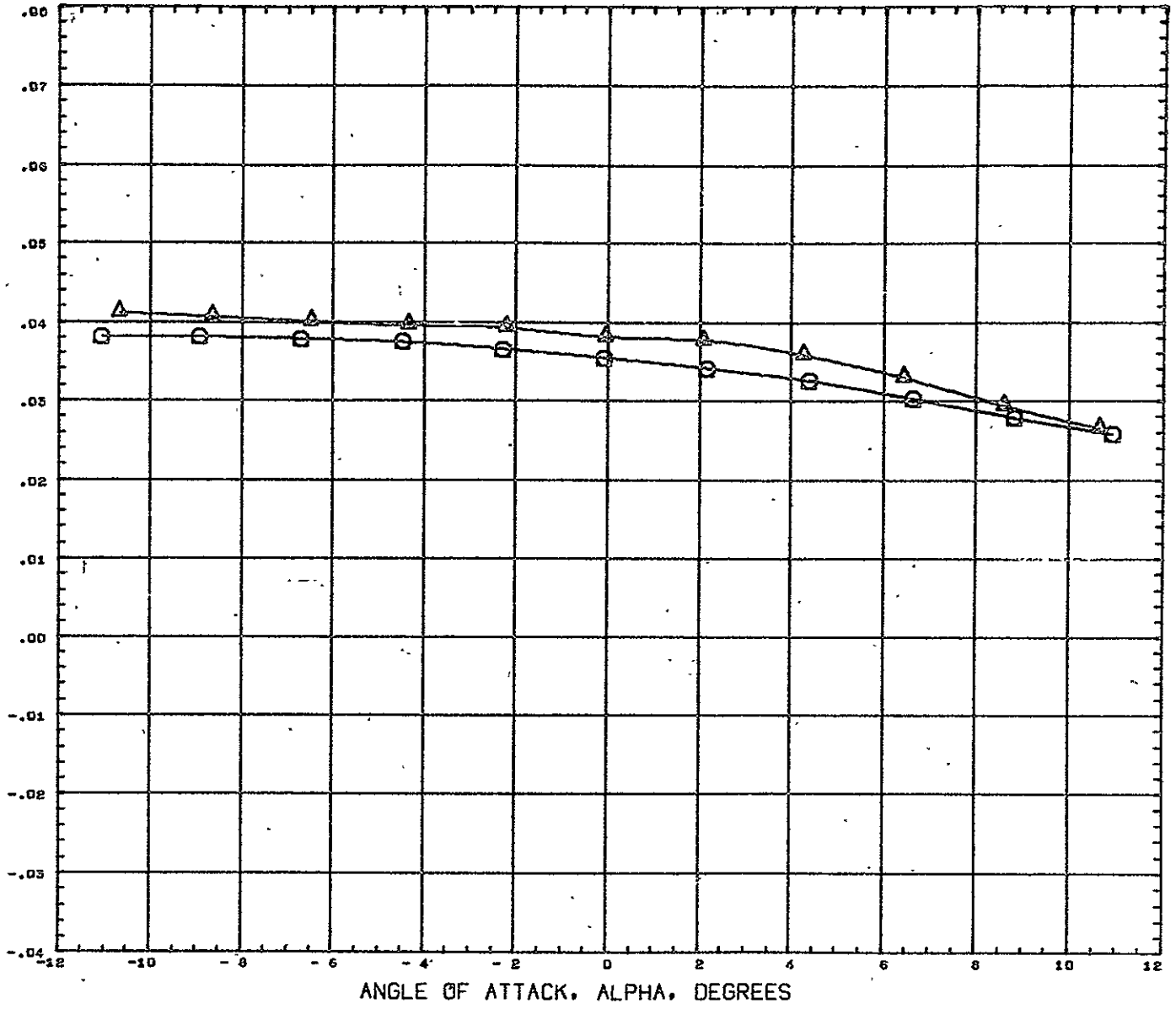


SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
○	0.000	MACH	1.464	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0004	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

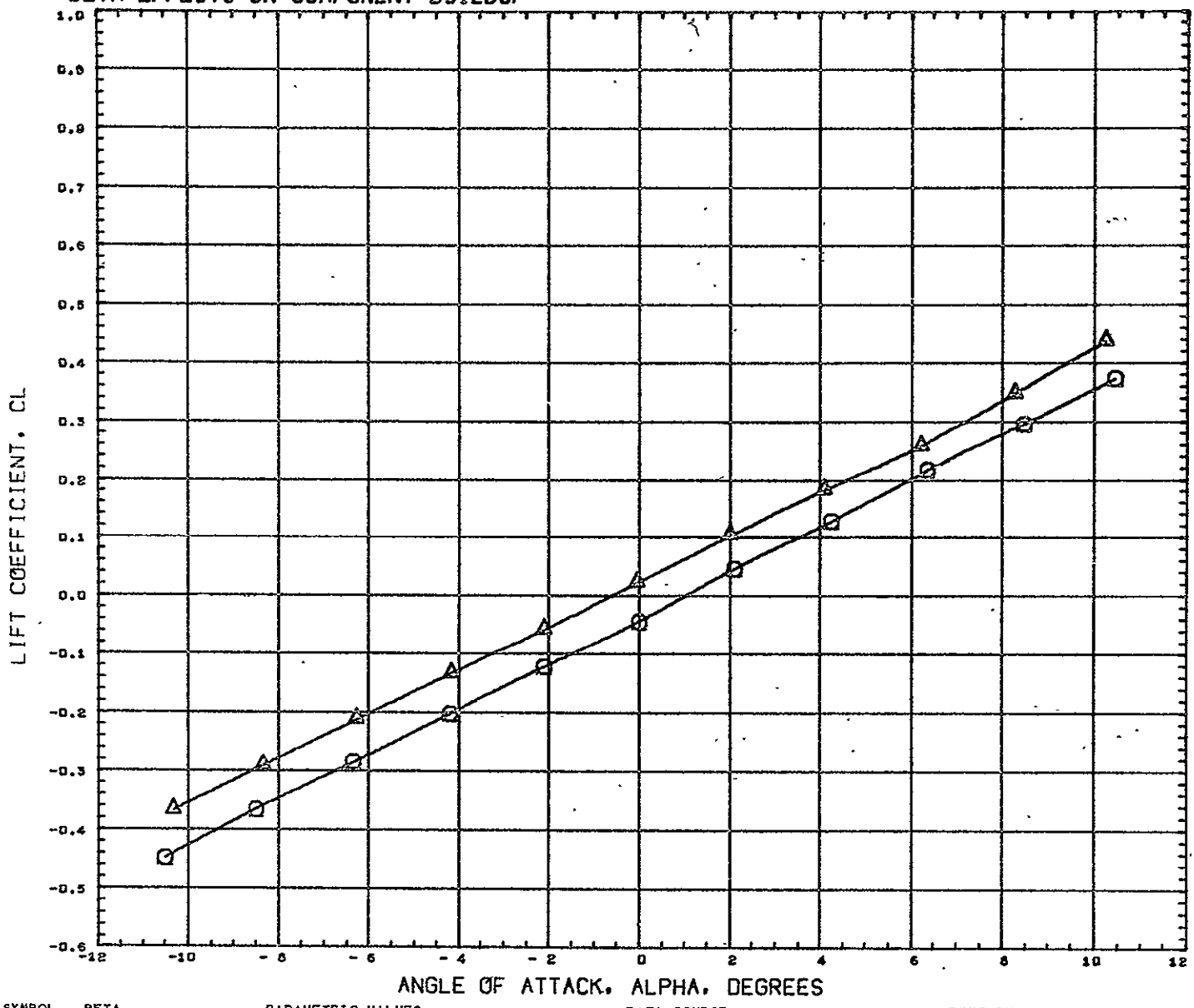


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.963	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
○	0.000	MACH	0.608	ELVATR	0.000	DATASET	BETA	DATASET	BETA	REFS	6084.0040	SQ FT
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										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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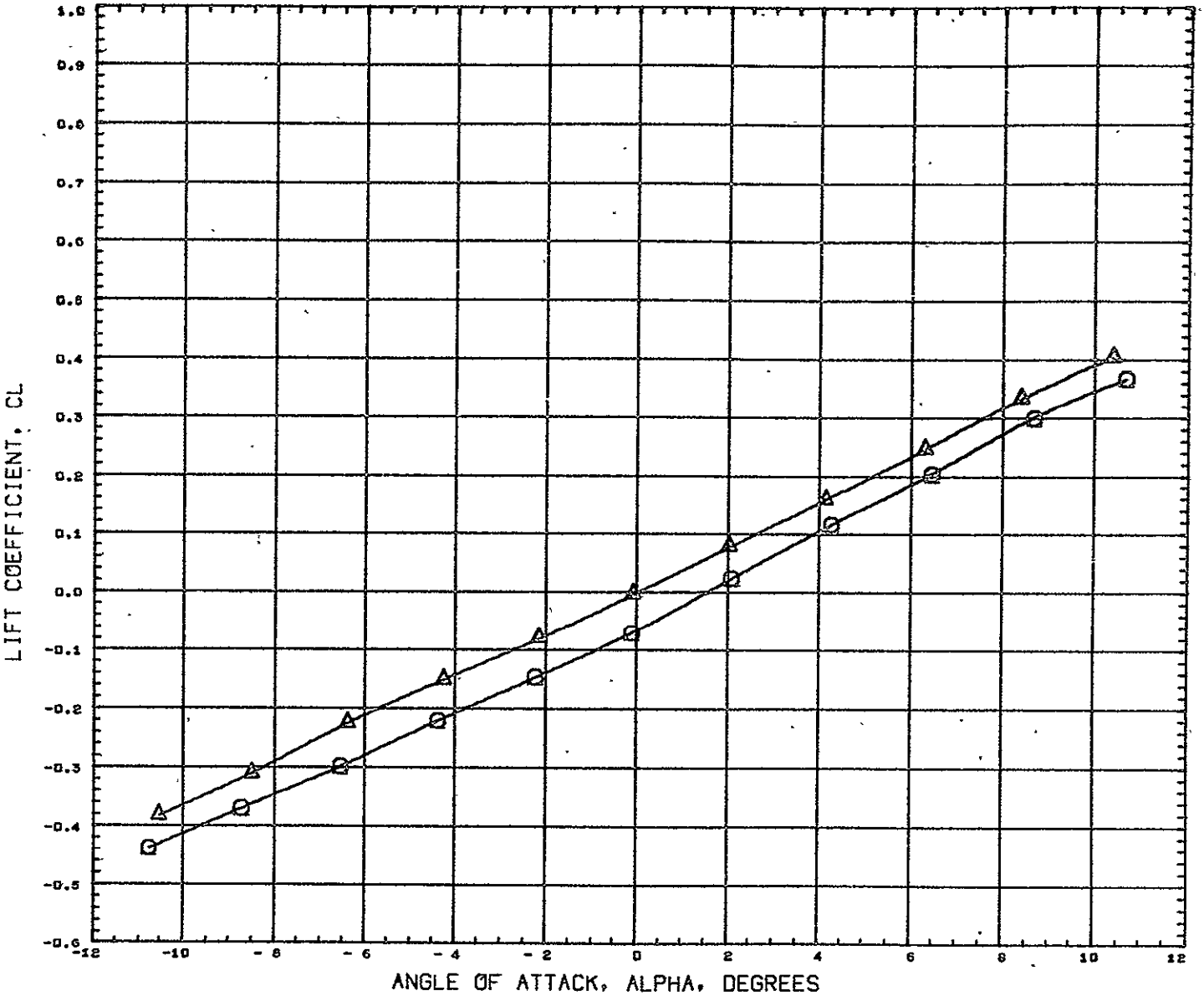
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP

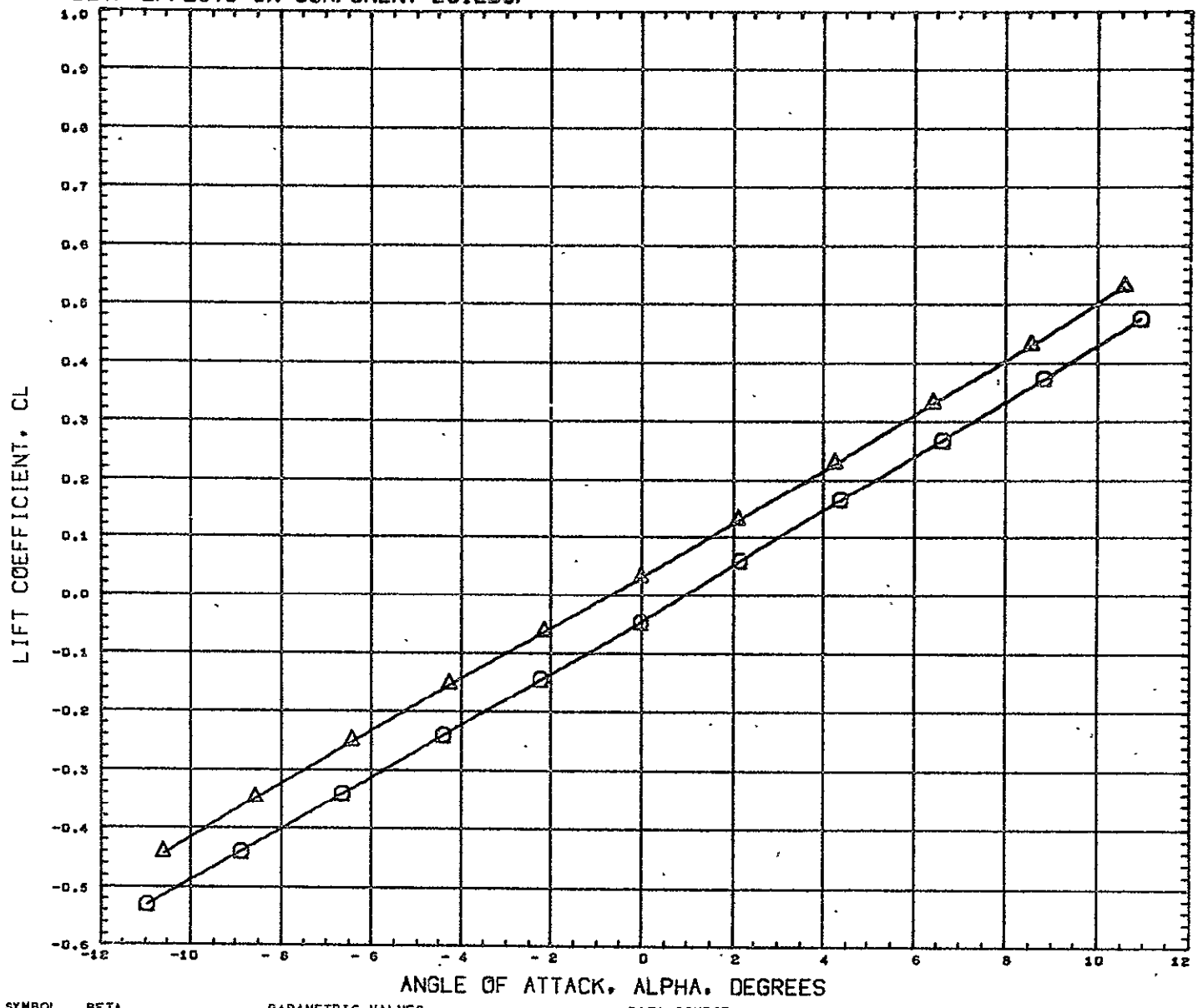


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	0.904	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
○	0.000	MACH	1.104	ELVATR	0.000	DATASET	BETA	DATASET	BETA	REFS	6084.0040	SQ FT
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										REFB	1422.8040	INCHES
										XHRP	1422.5040	INCHES
										YHRP	0.0000	INCHES
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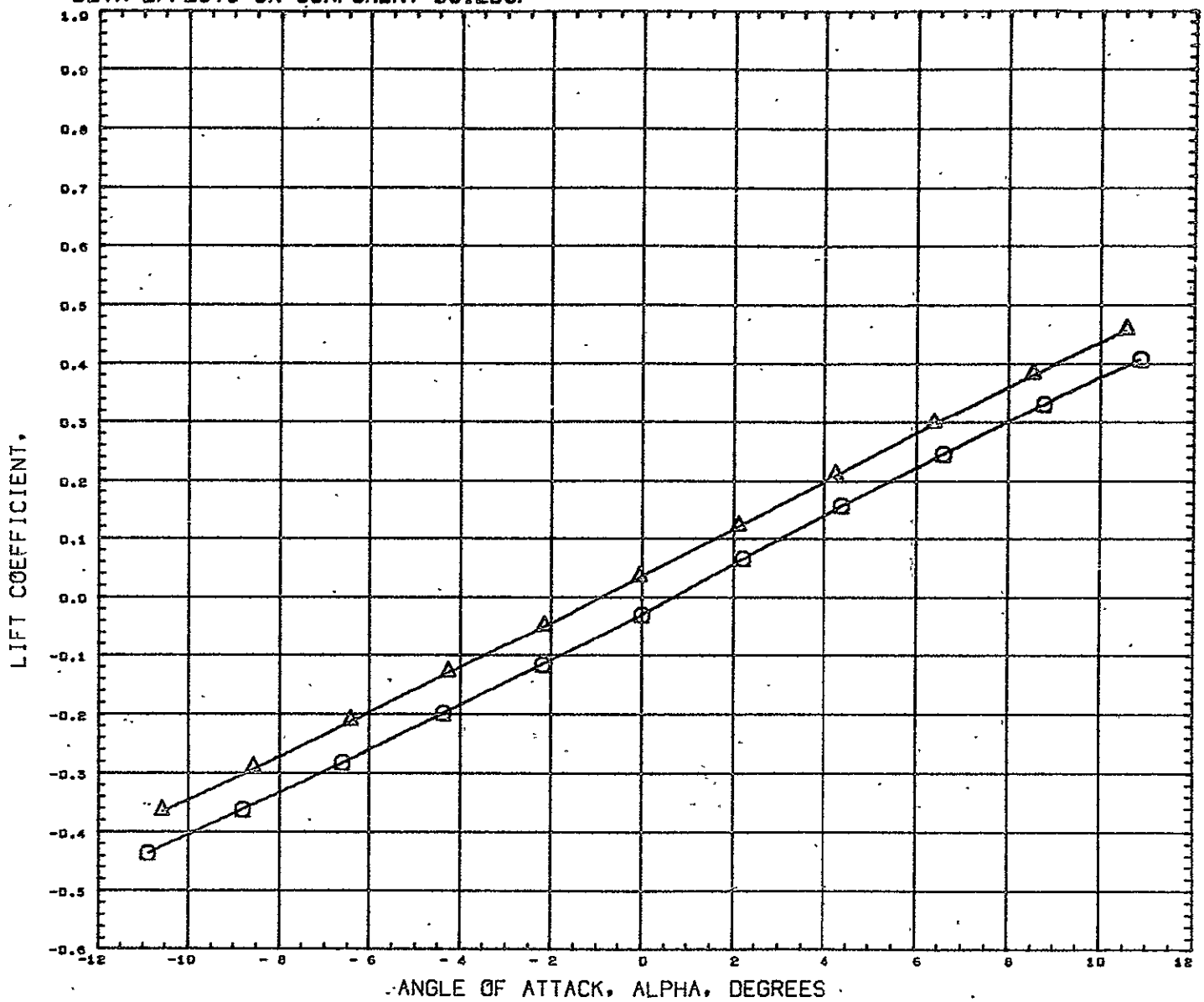
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP

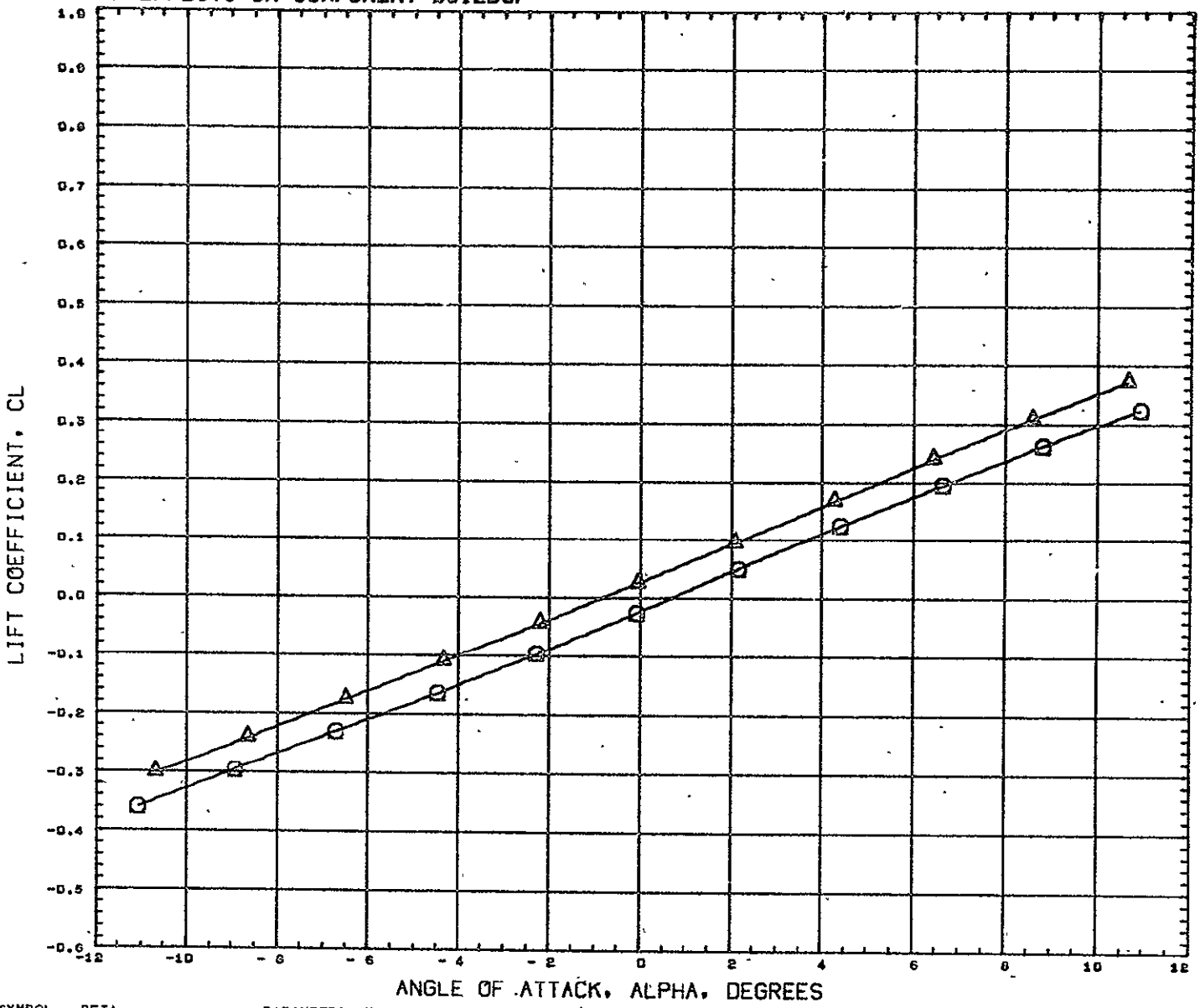


SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
○	0.000	MACH	1.464	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

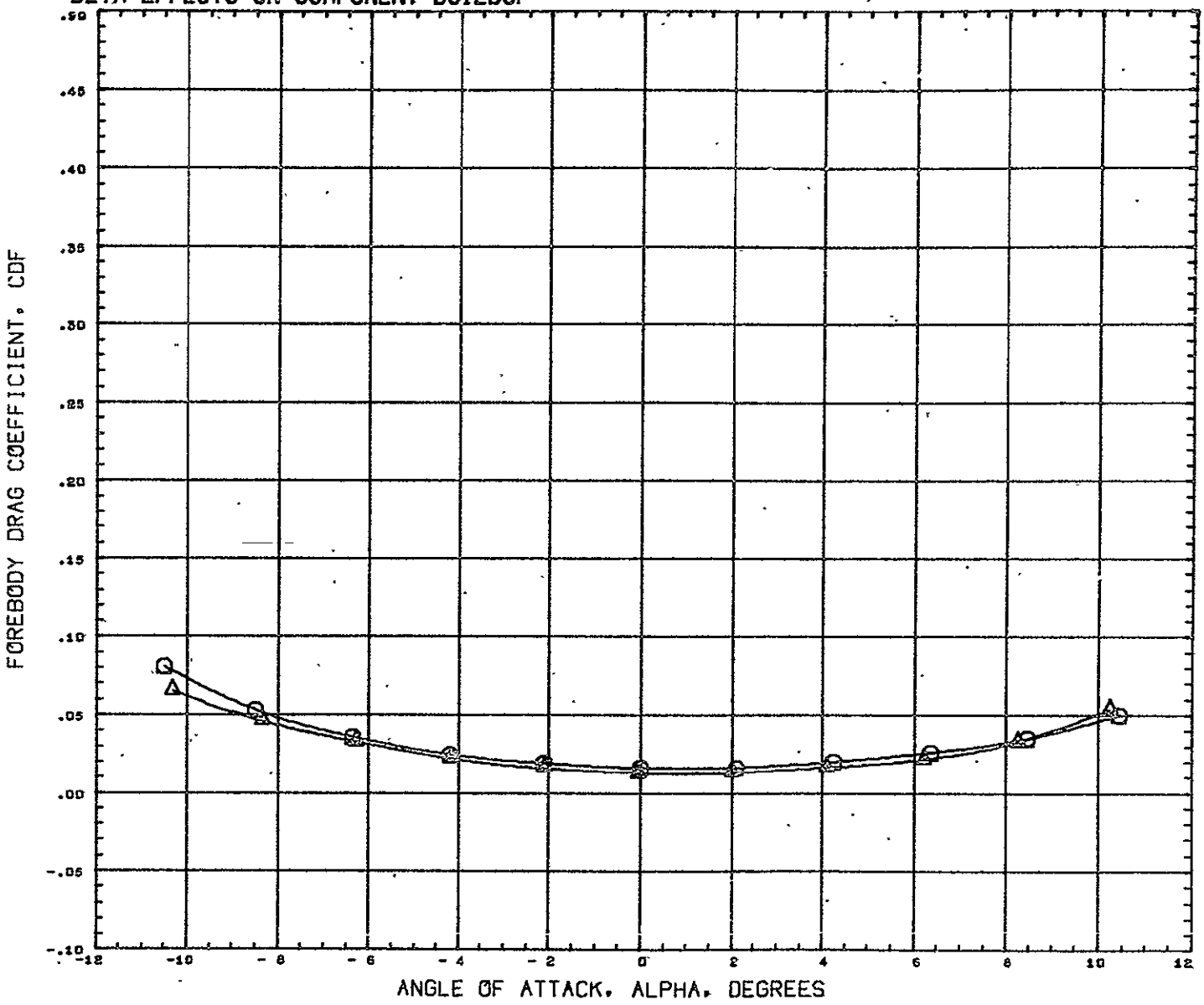


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.963	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
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										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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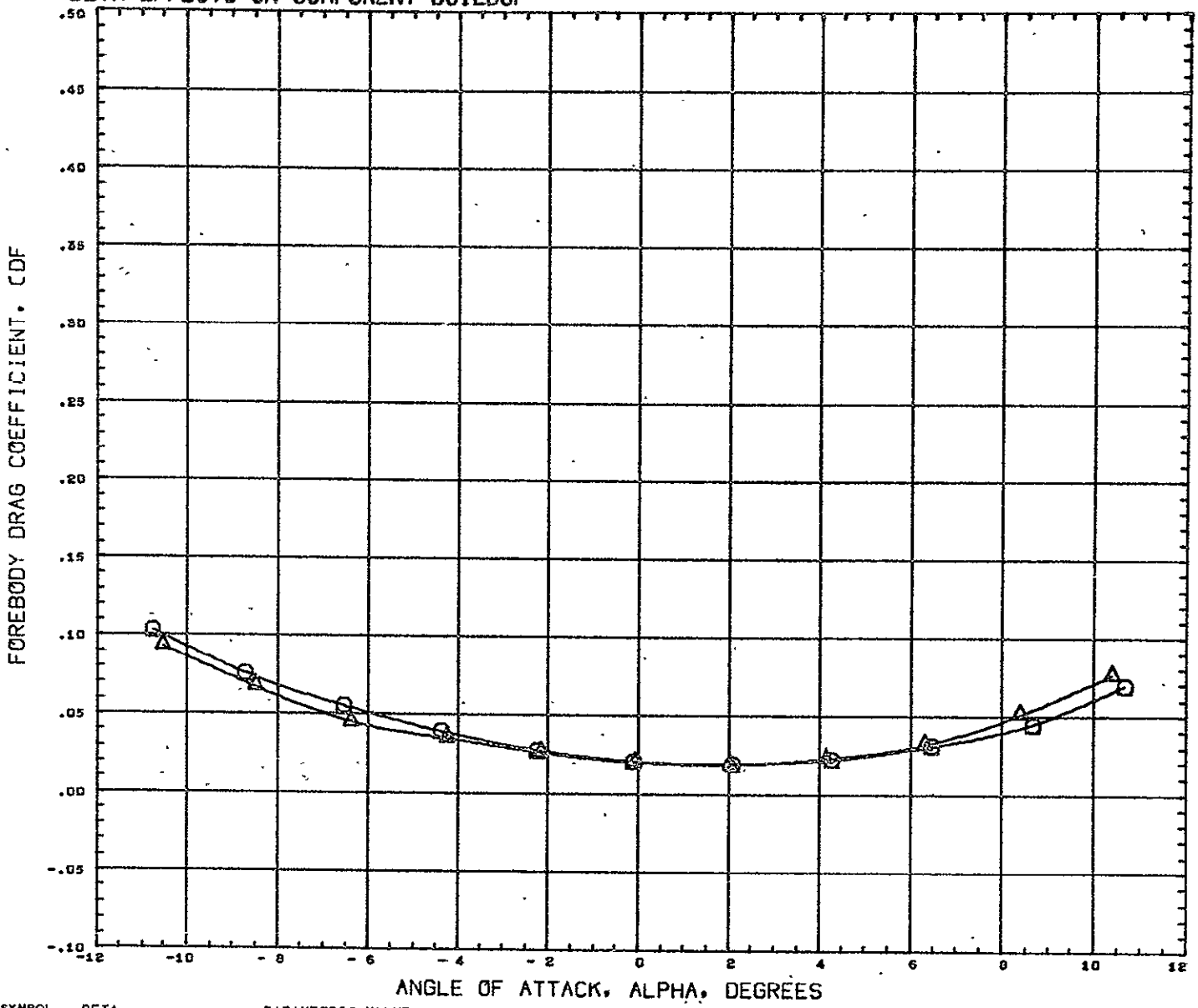
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	0.000	MACH	0.904	ELVATR	0.000	DATASET	BETA	DATASET	BETA	REFS	6084.0040	SQ FT
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										REFB	1422.6040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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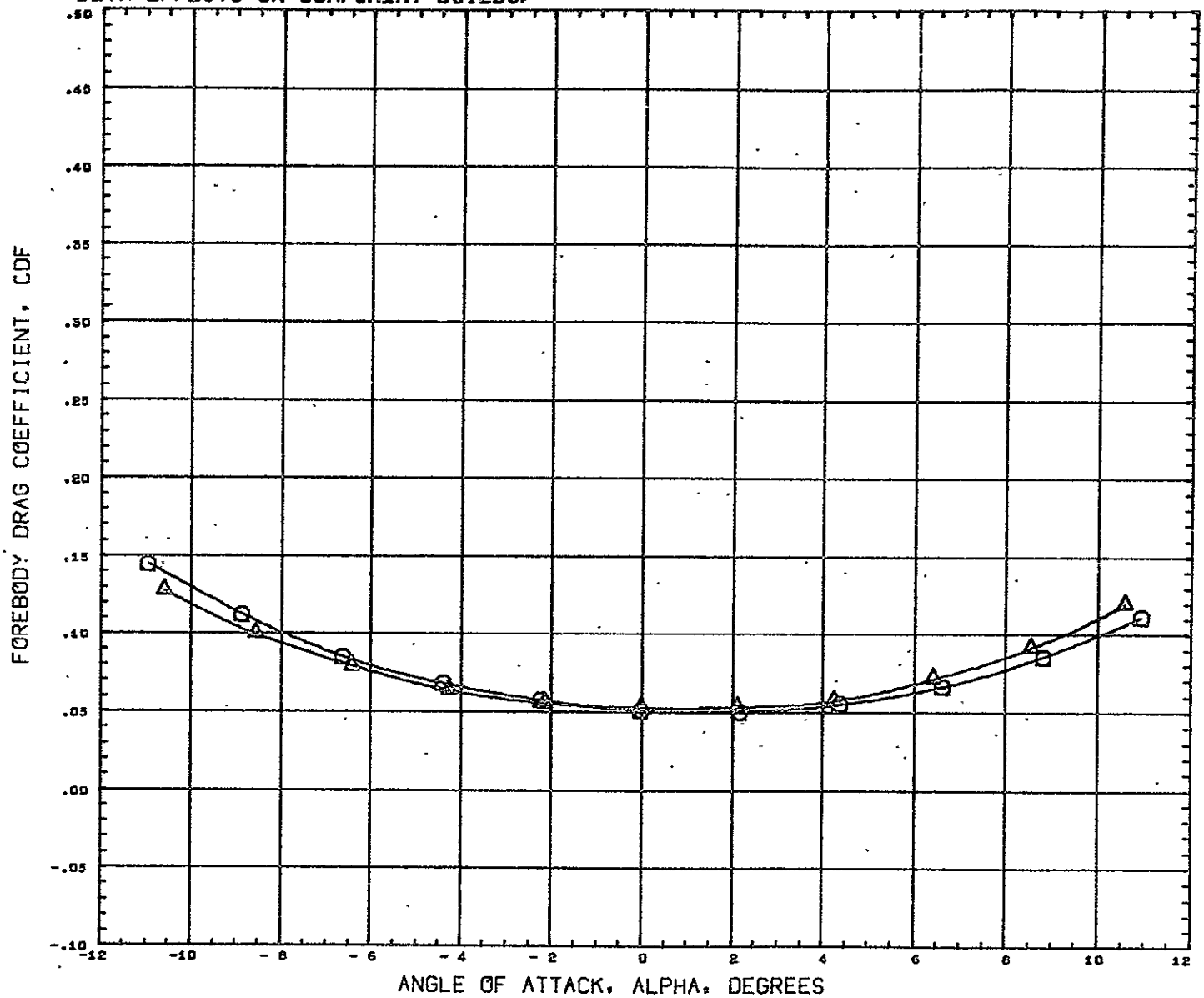
DATA HIST. CODE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
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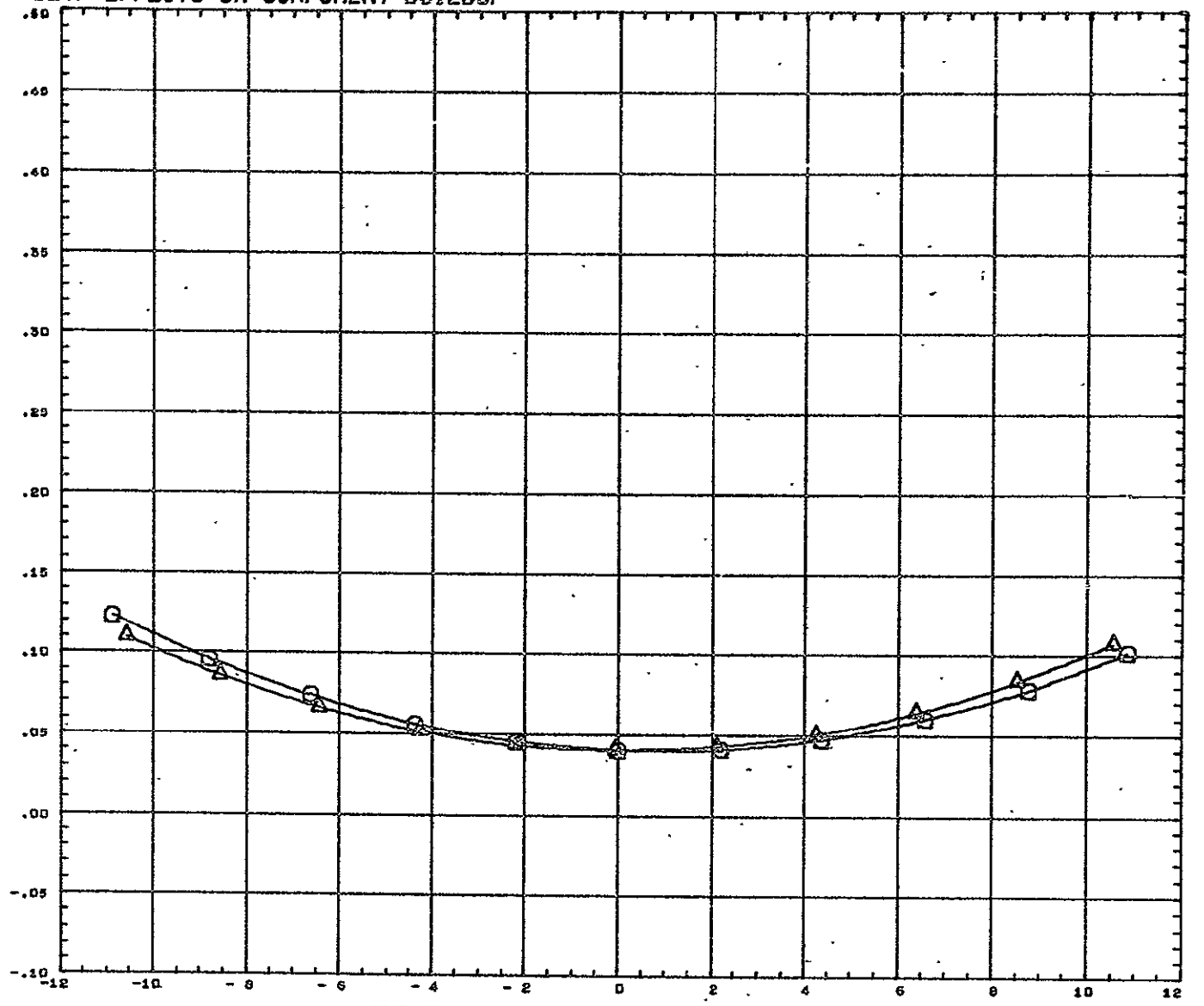
	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

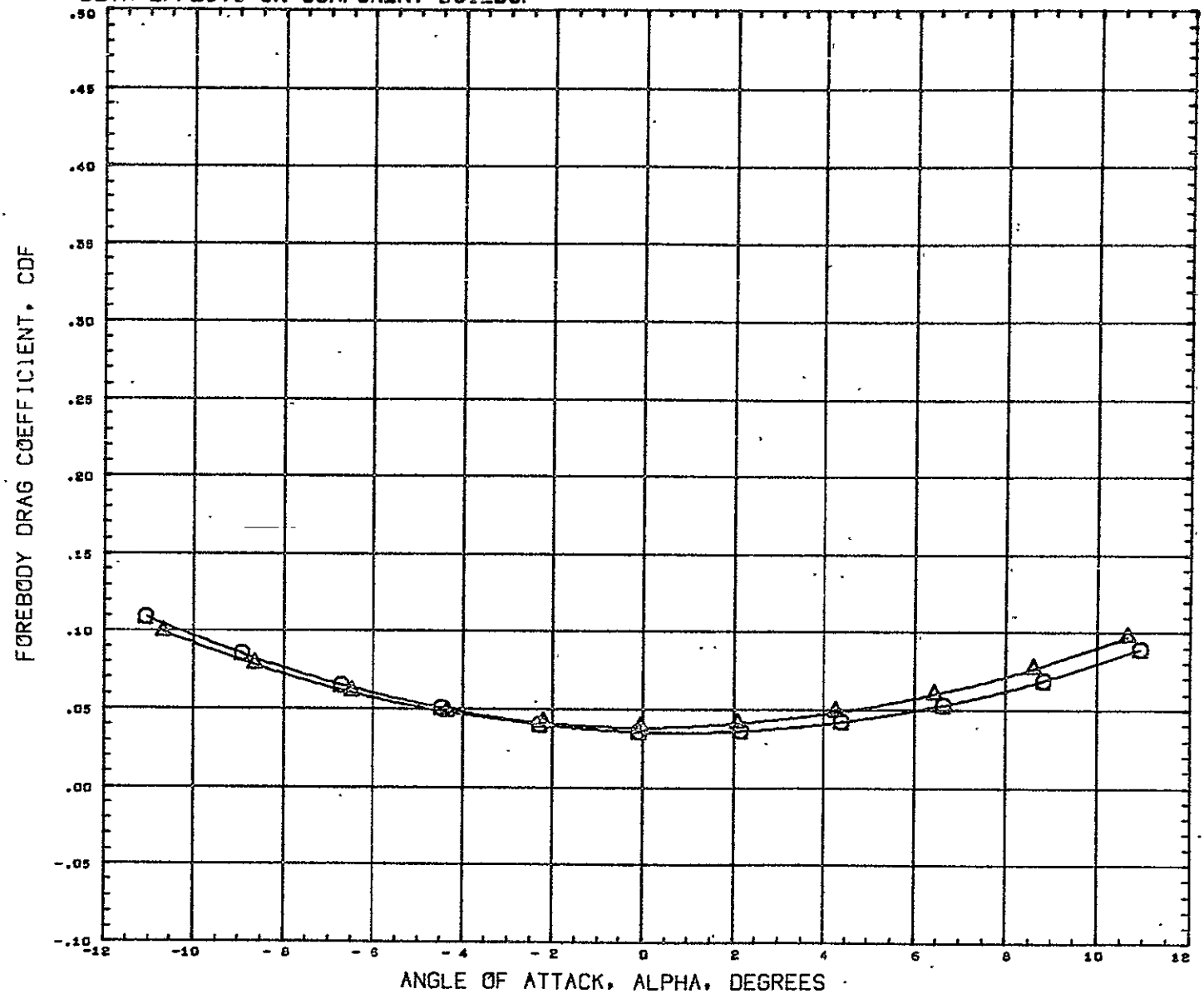


SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
○	0.000	MACH	1.464	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

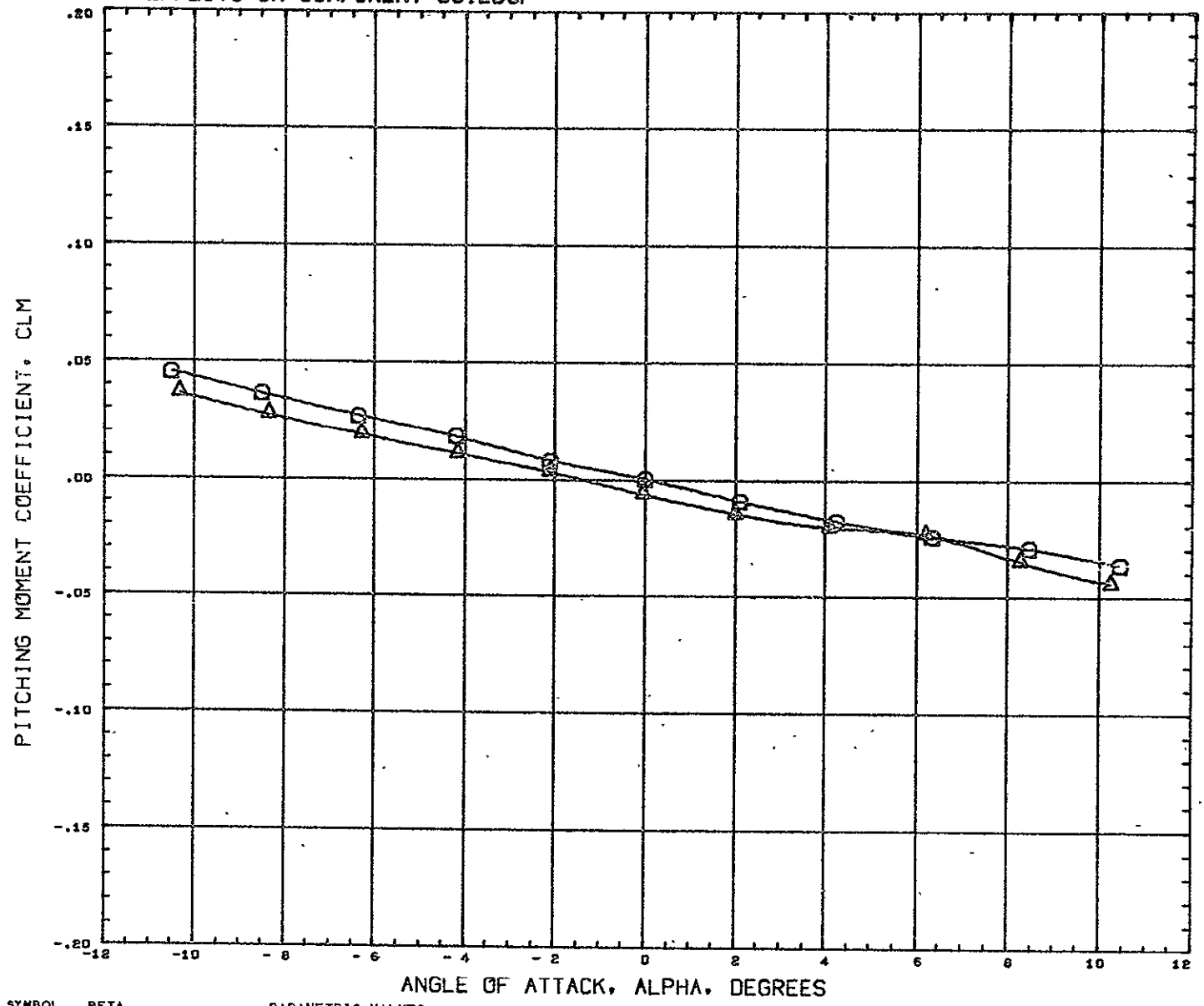


SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
○	0.000	MACH	1.963	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE 4E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	0.000	MACH	0.608	ELVATR	0.000	DATASET	BETA	DATASET	BETA	REFS	6084.0040	SQ FT
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										REFB	1422.8040	INCHES
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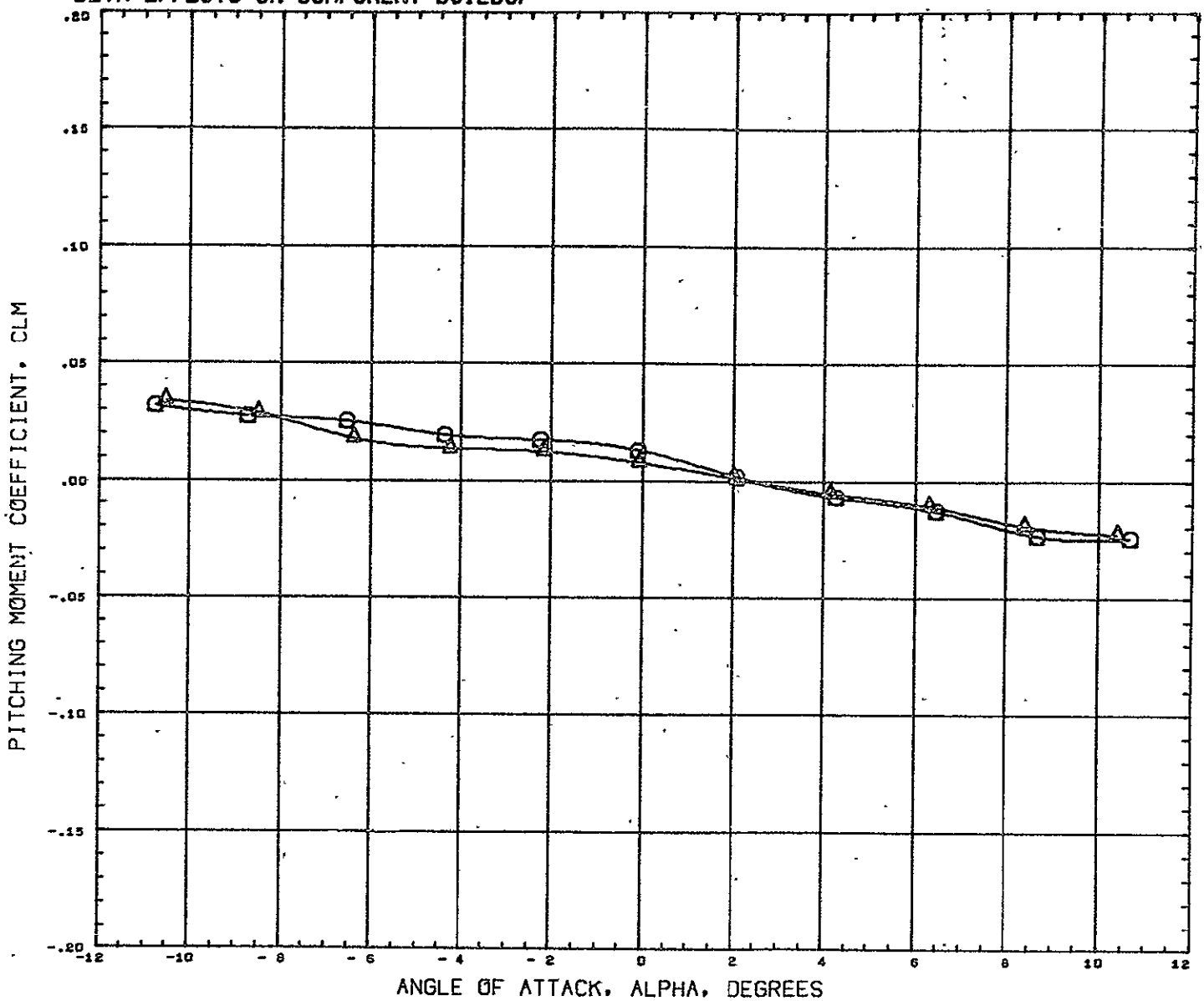
DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
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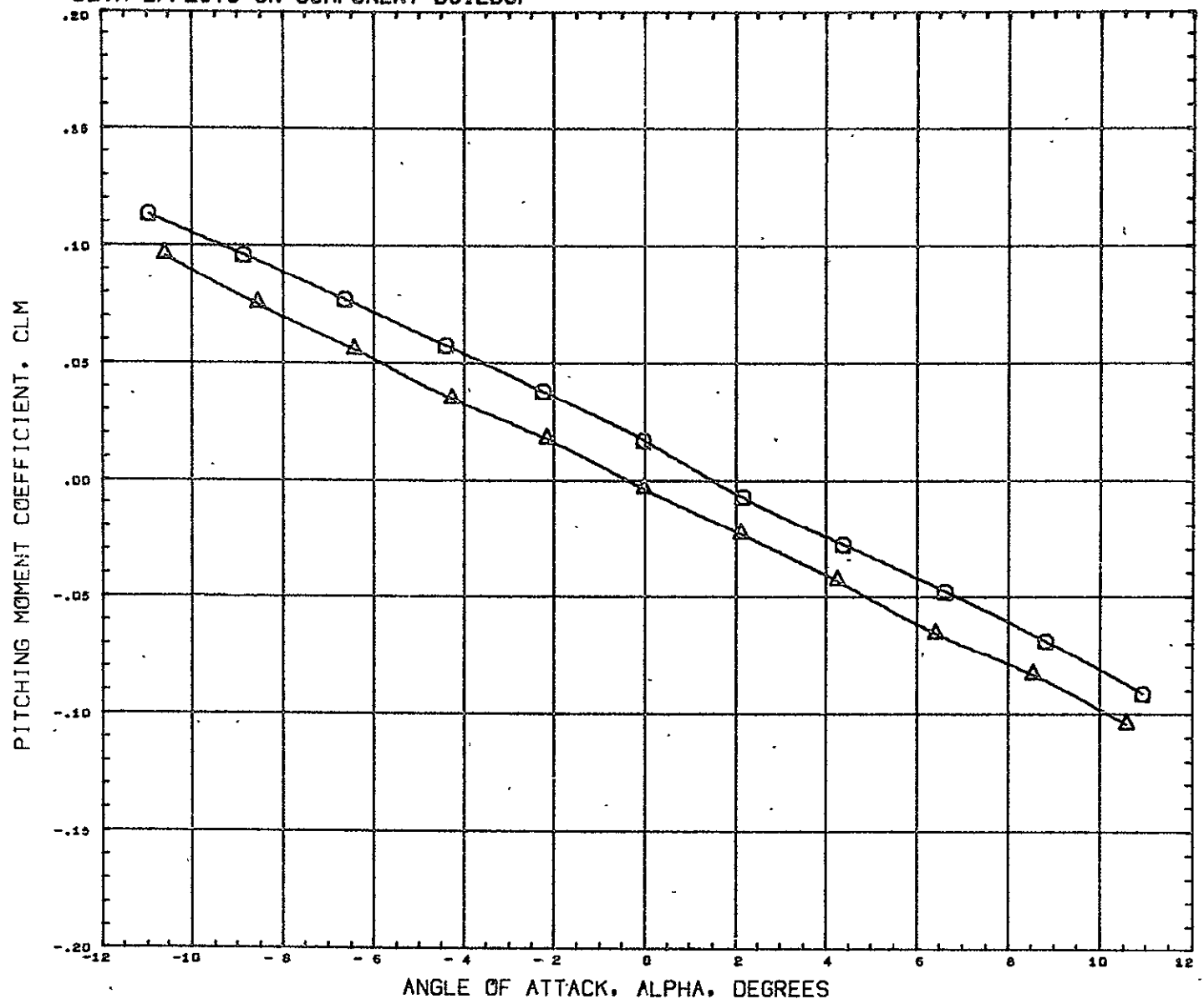
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000	REFL	821.2004	INCHES
										REFB	1422.6040	INCHES
										XMRP	1422.5040	INCHES
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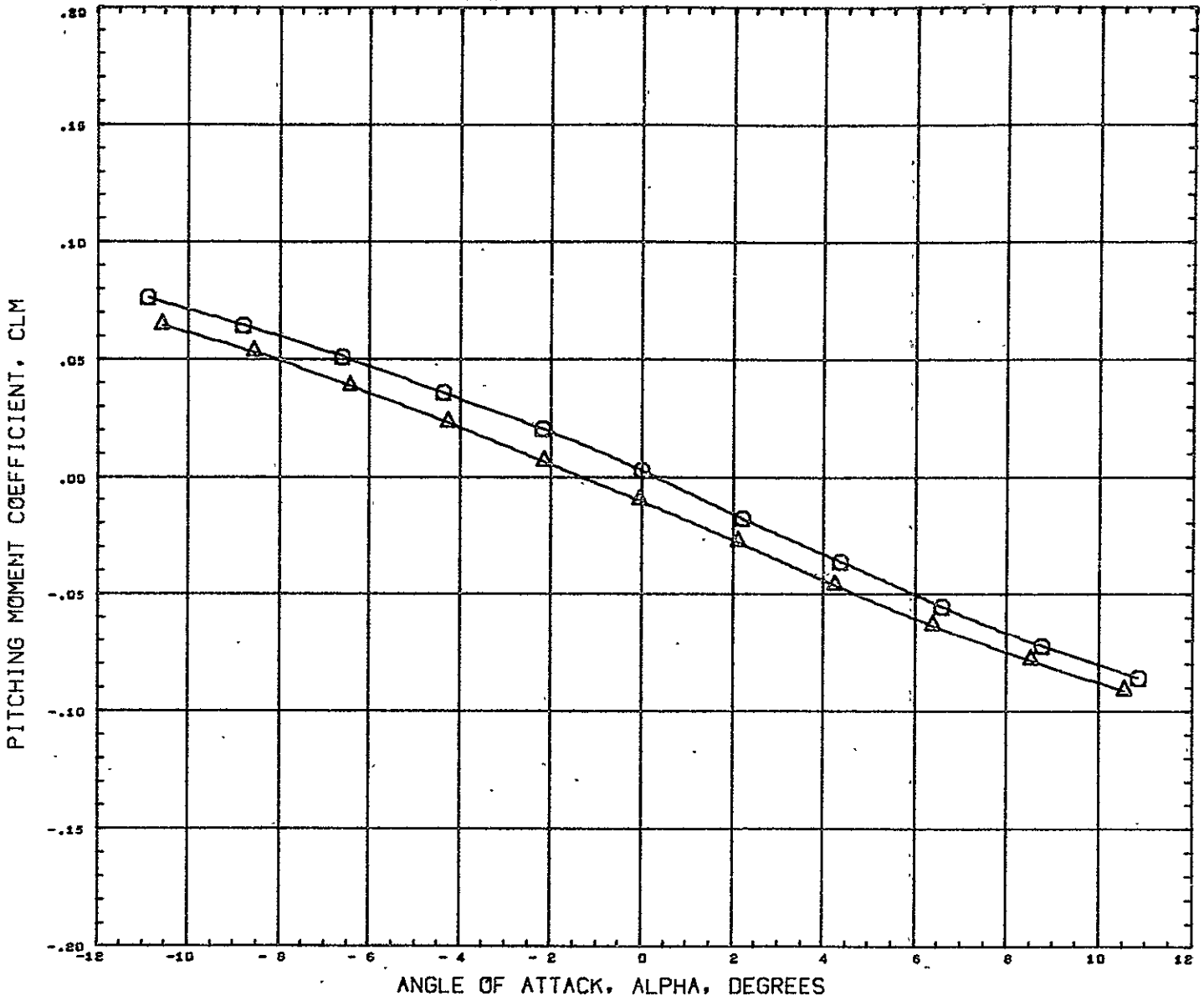
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.464	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
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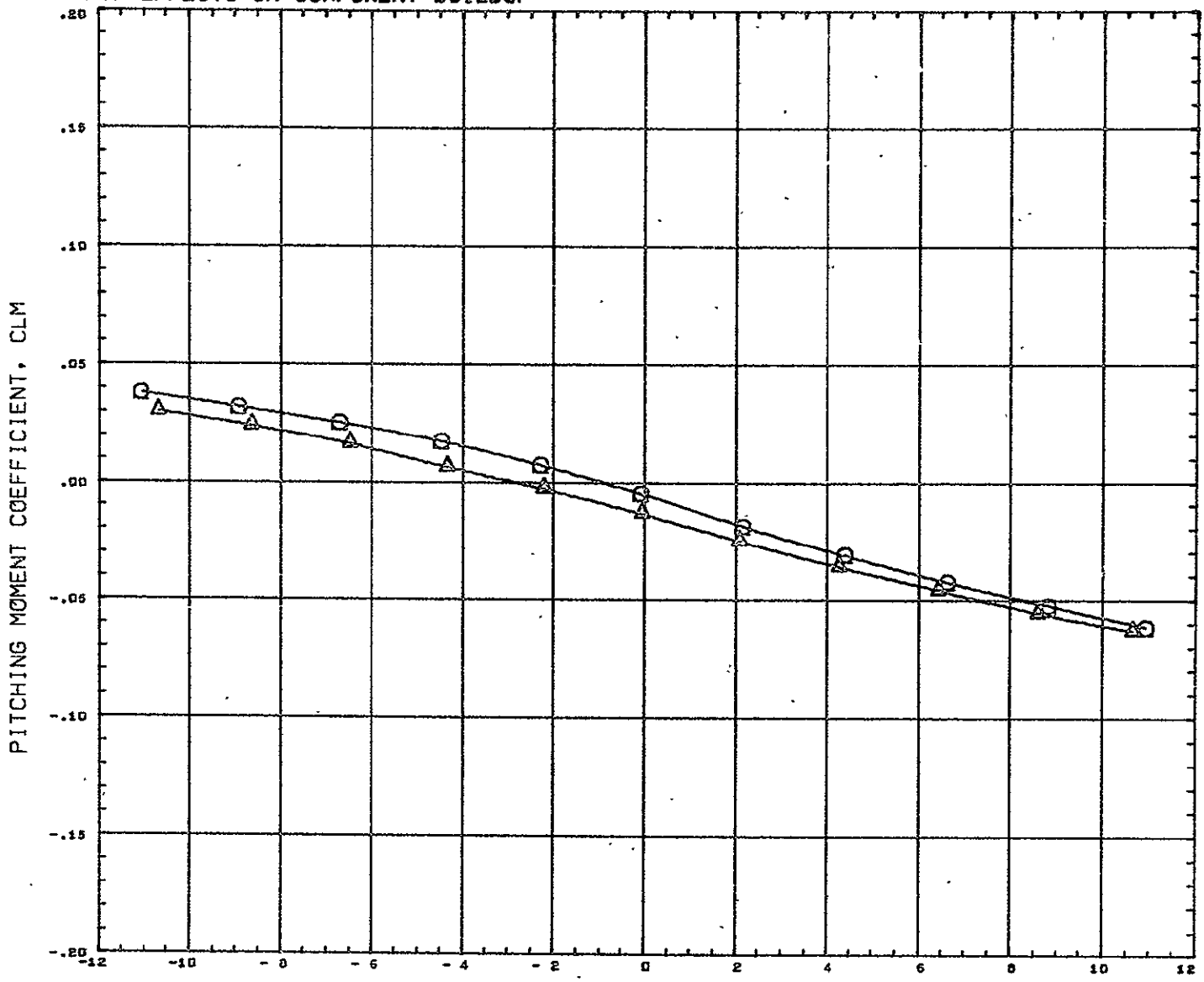
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
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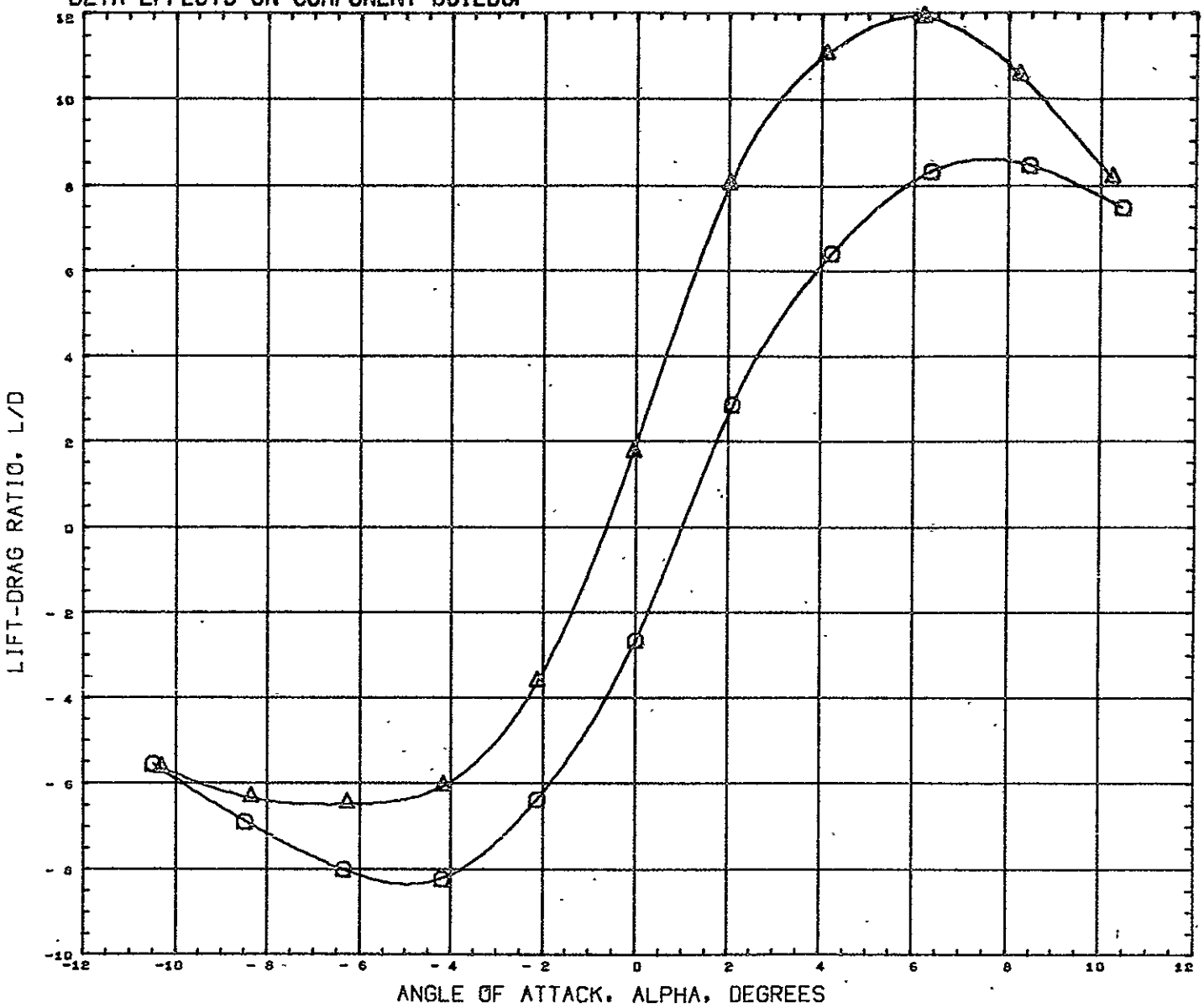
SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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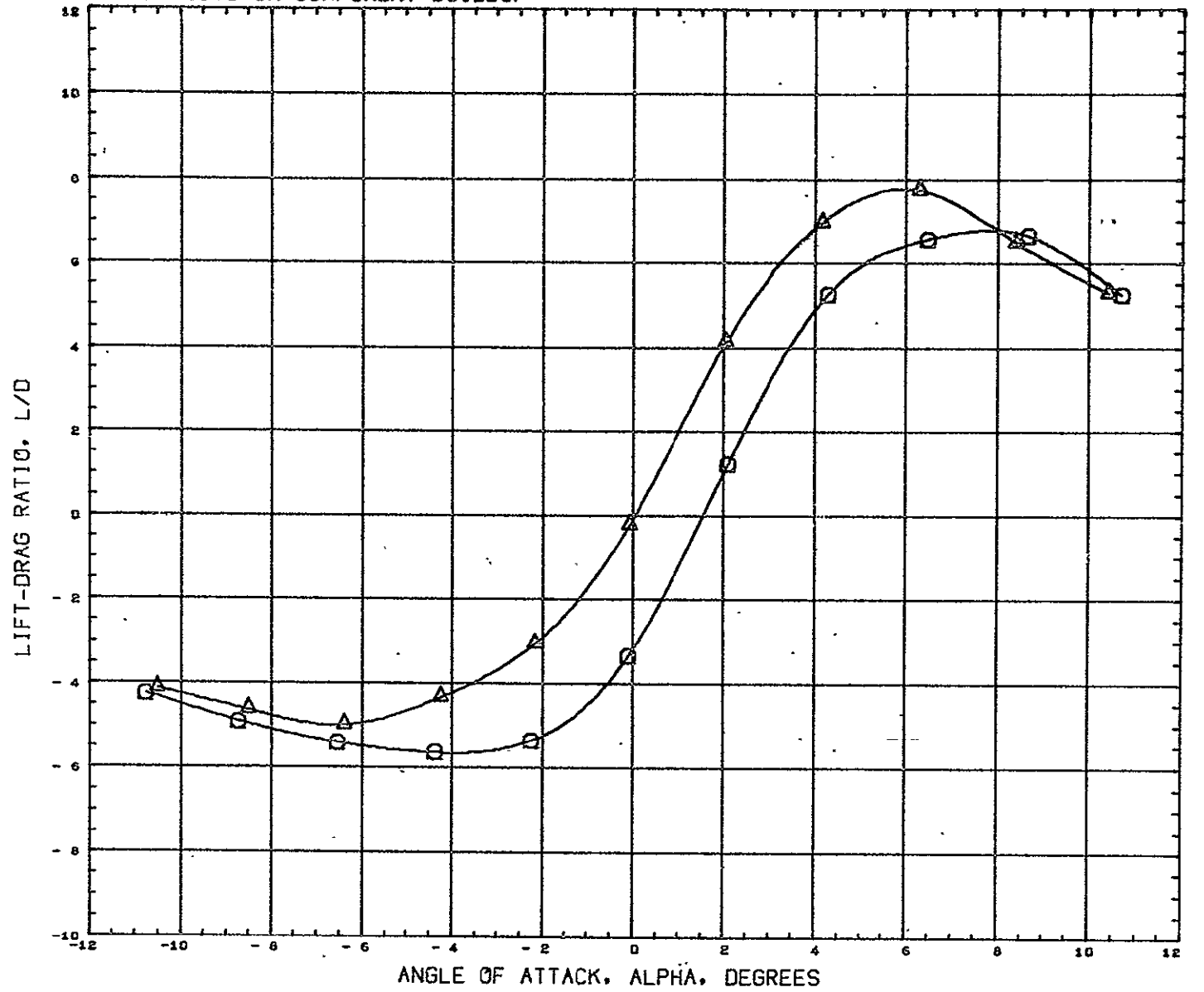
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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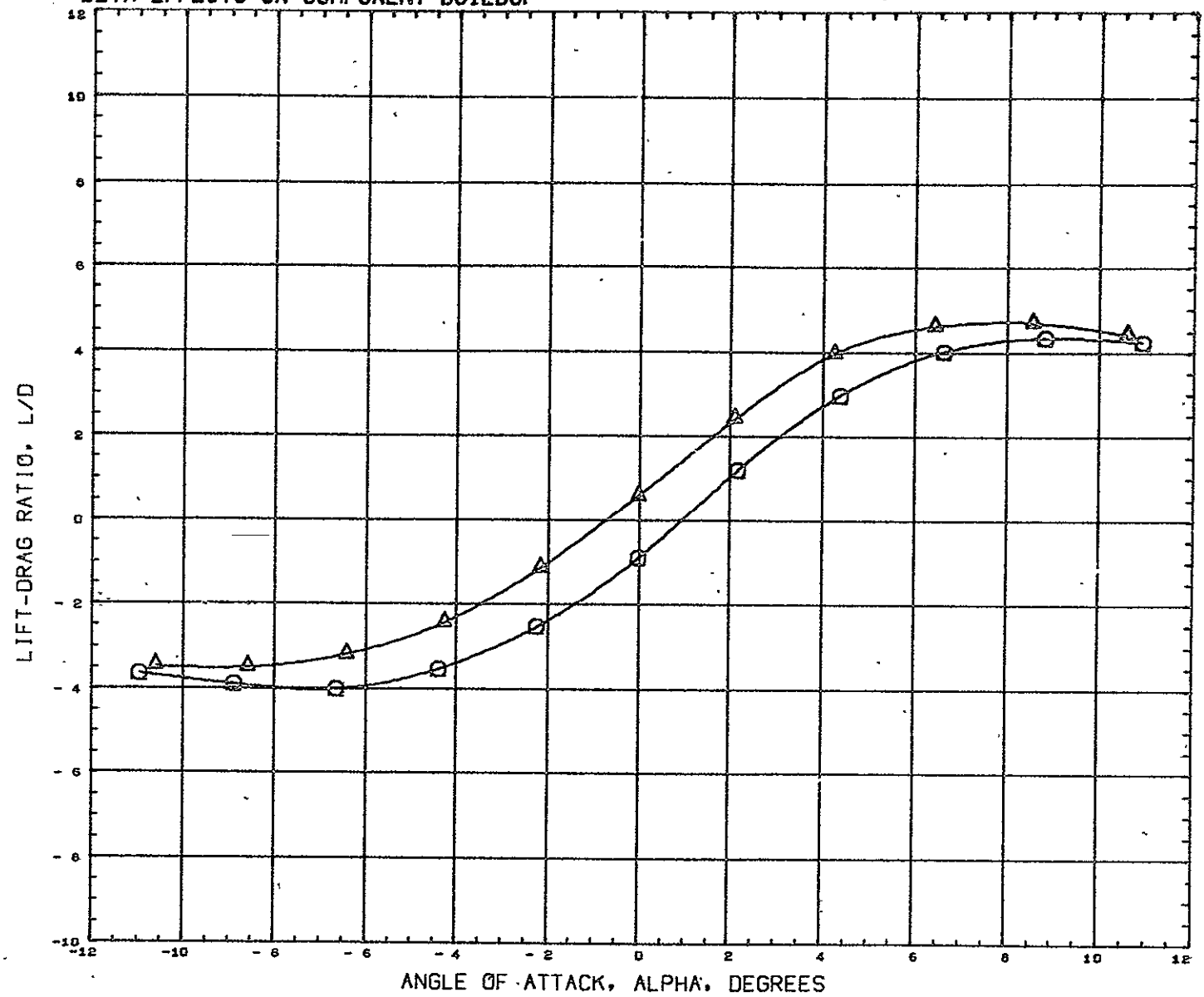
										SCALE	0.0035	SCALE

DATA HIST. CODE #E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
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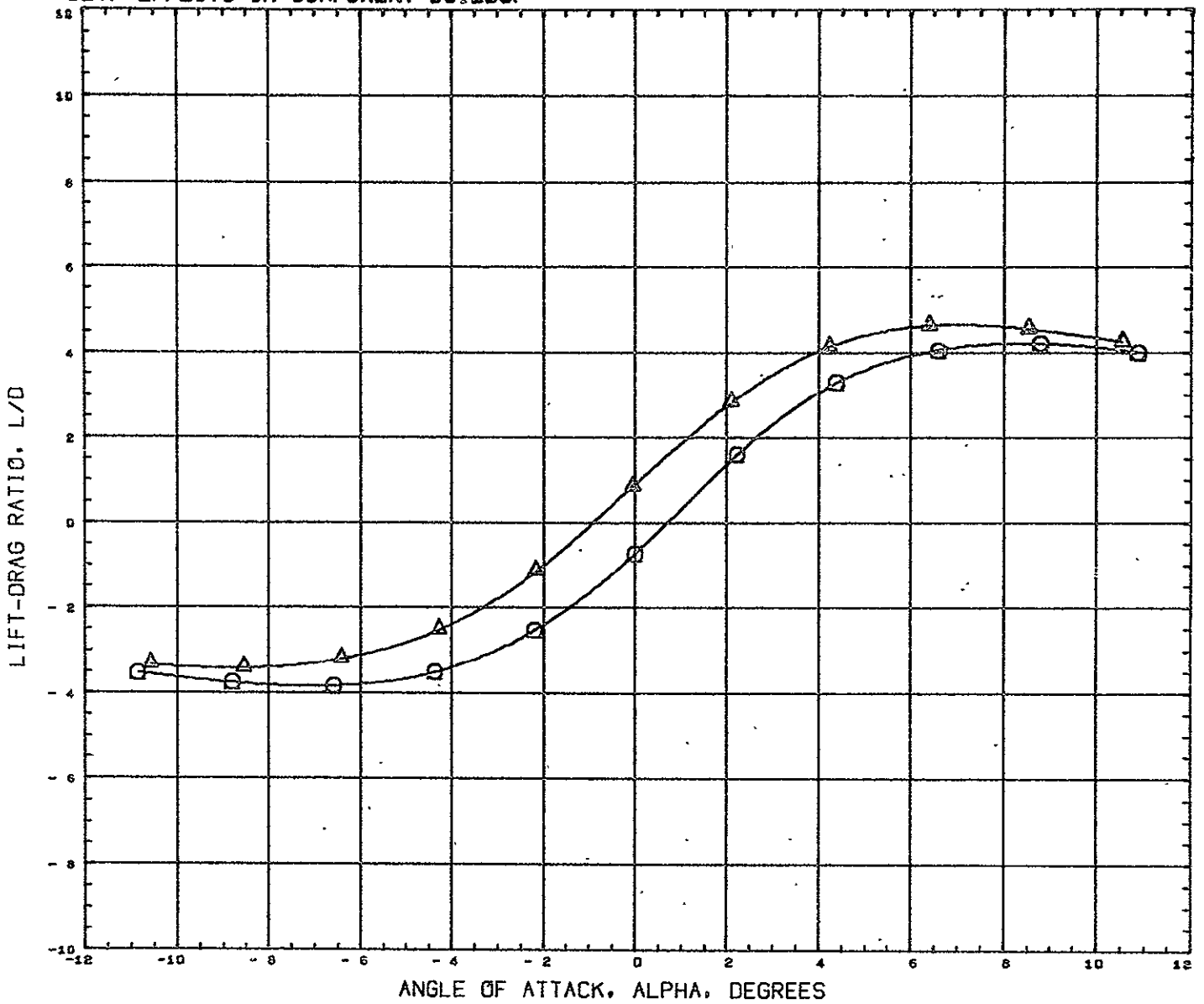
REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
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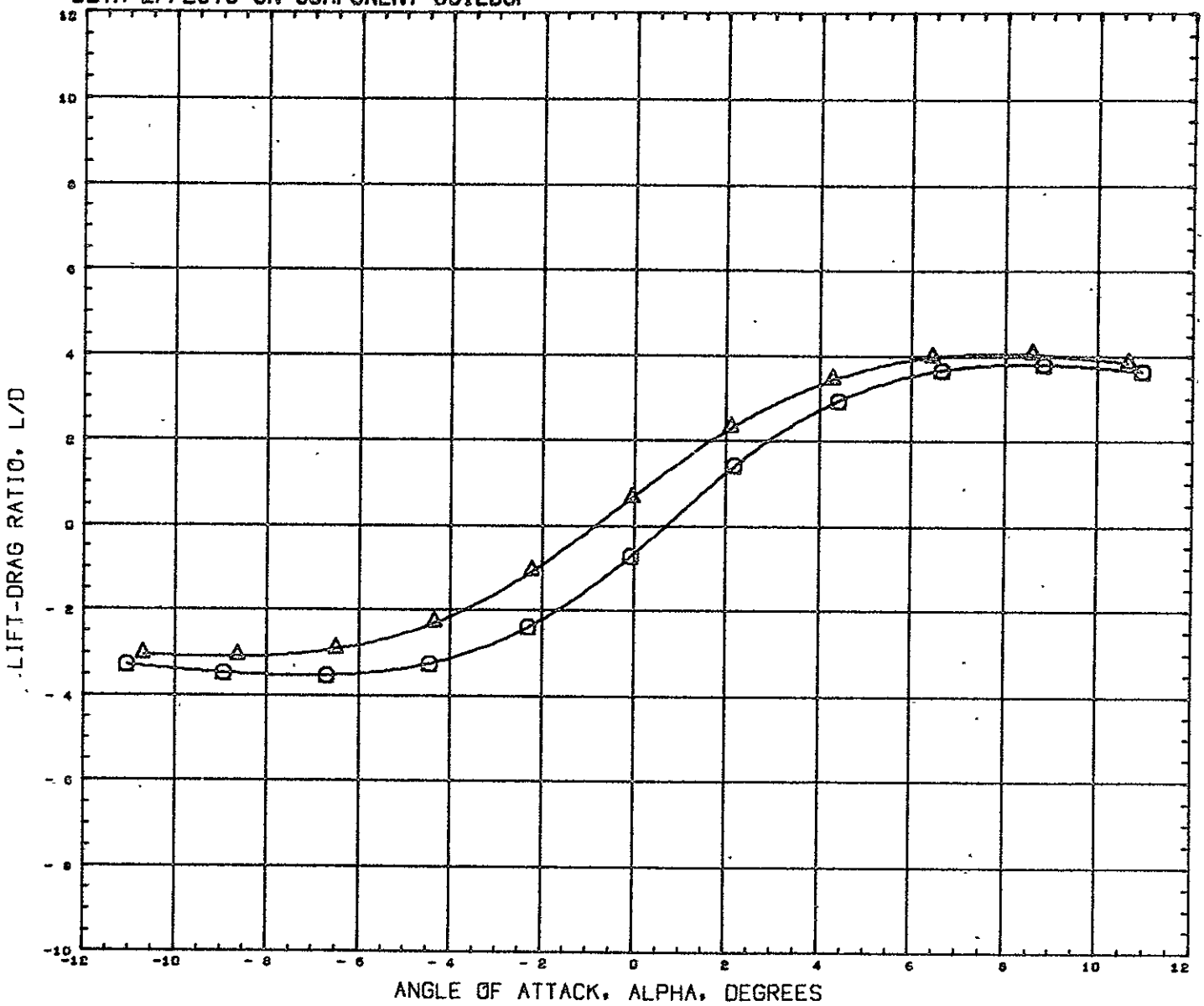
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
○	0.000	MACH	1.963	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
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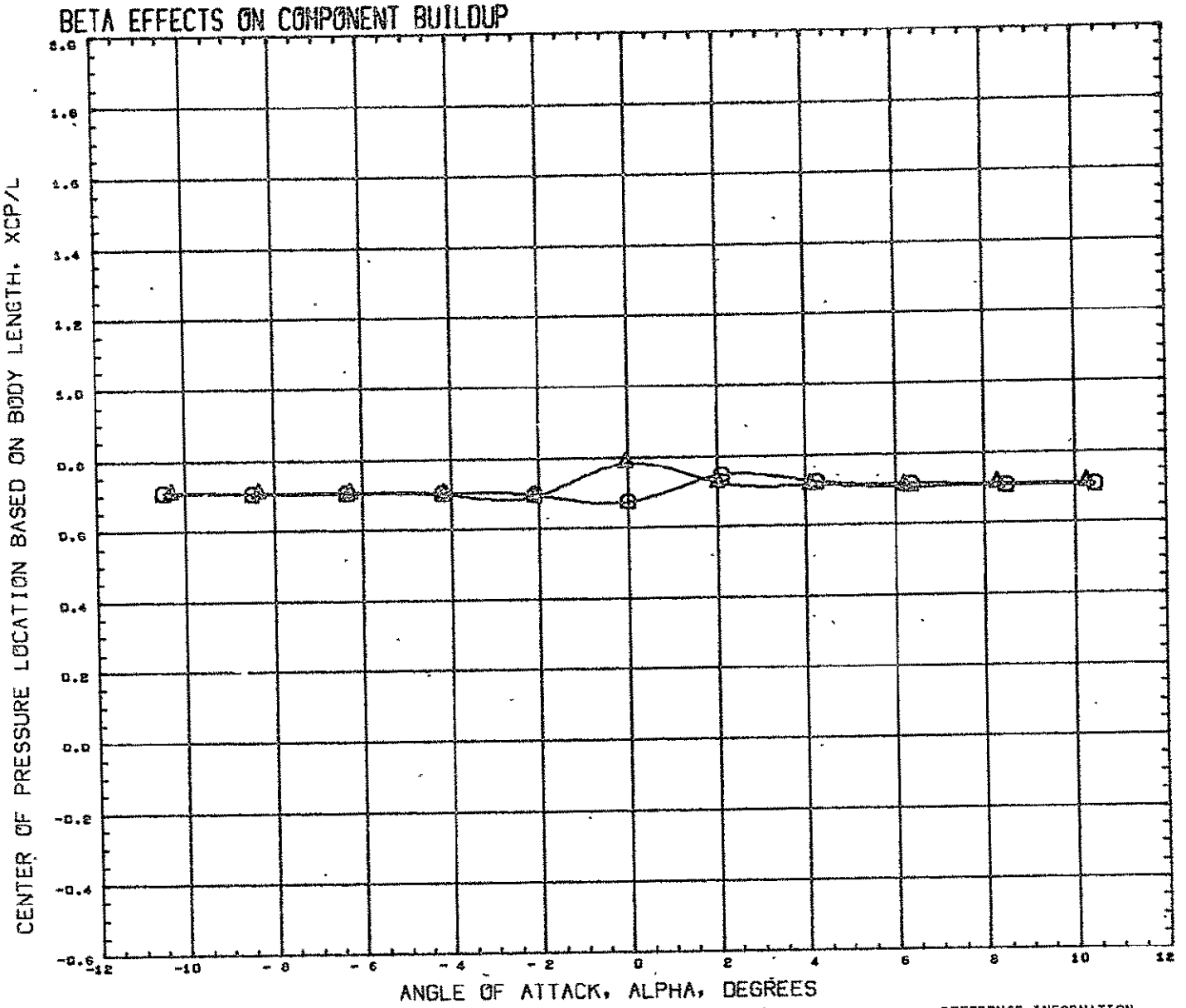
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION

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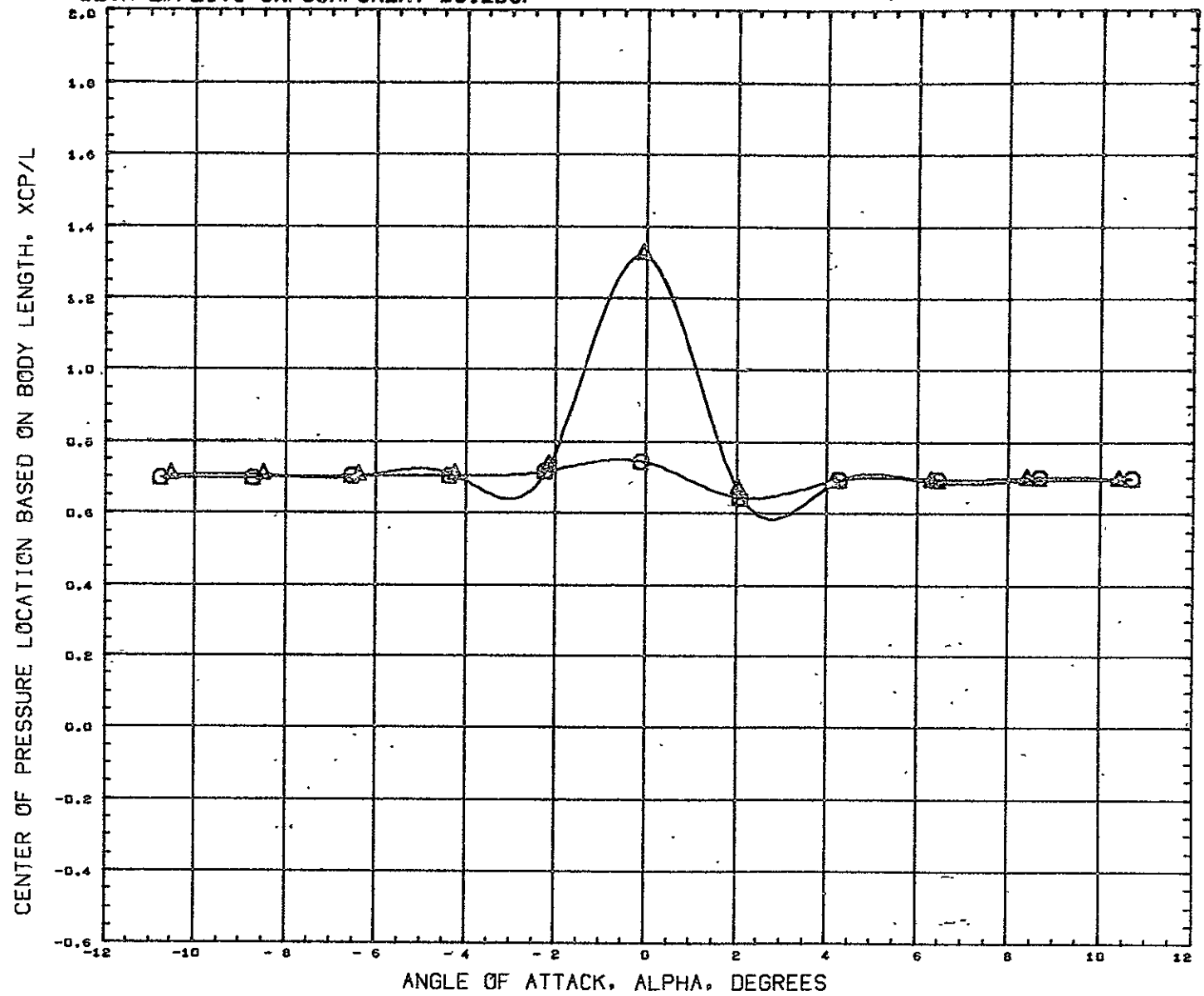
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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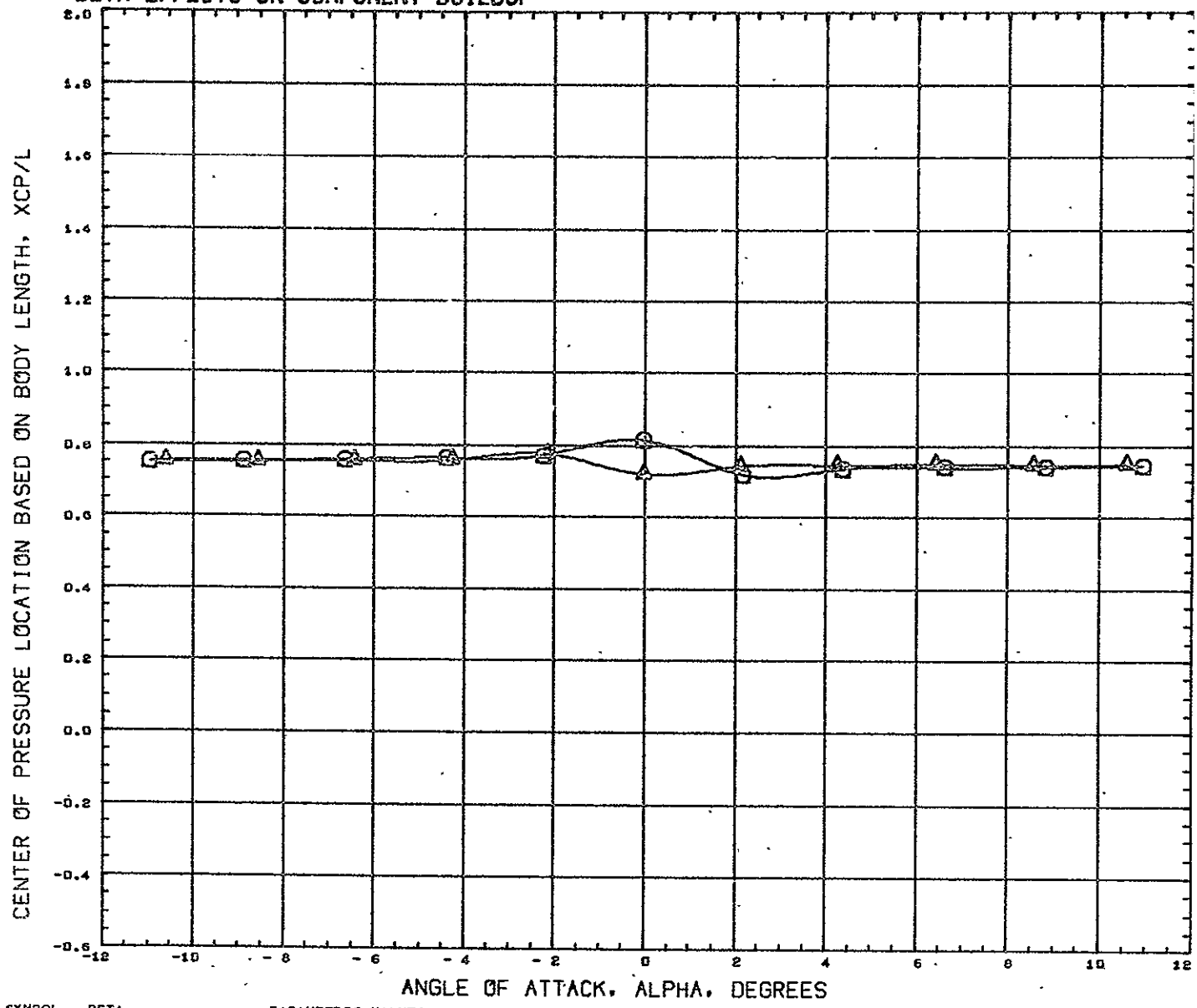
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST..CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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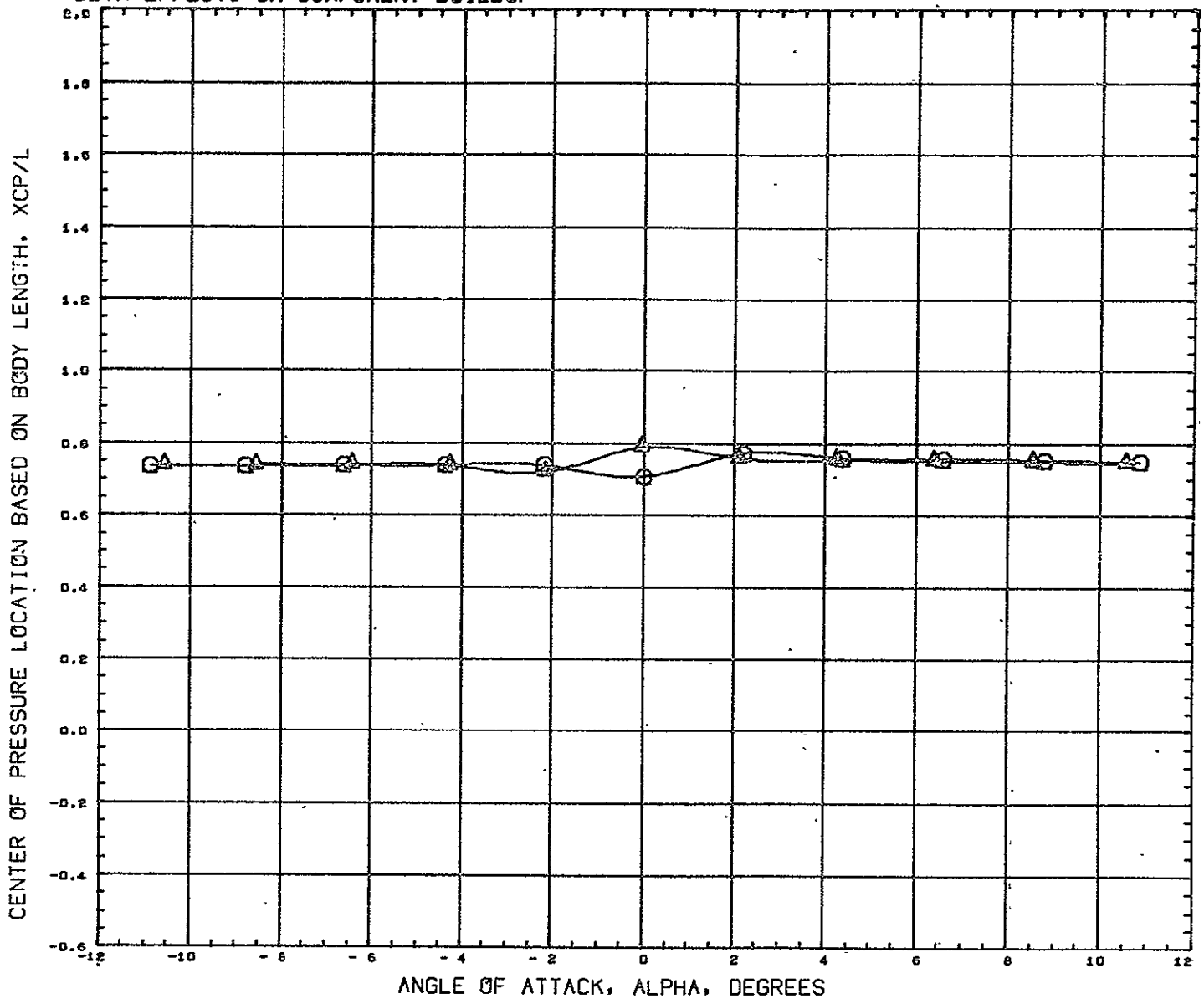
DATA HIST. CODE #E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
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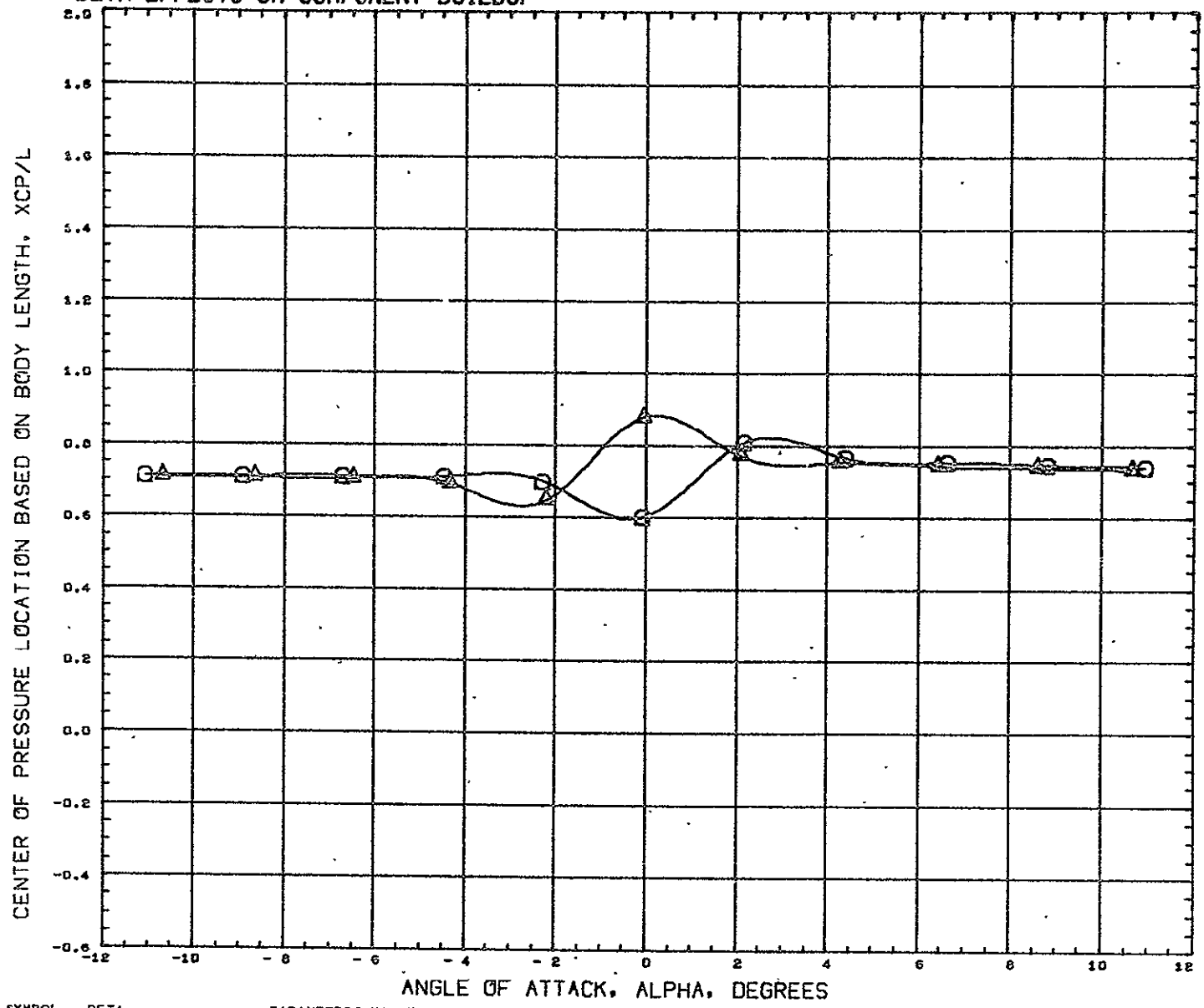
	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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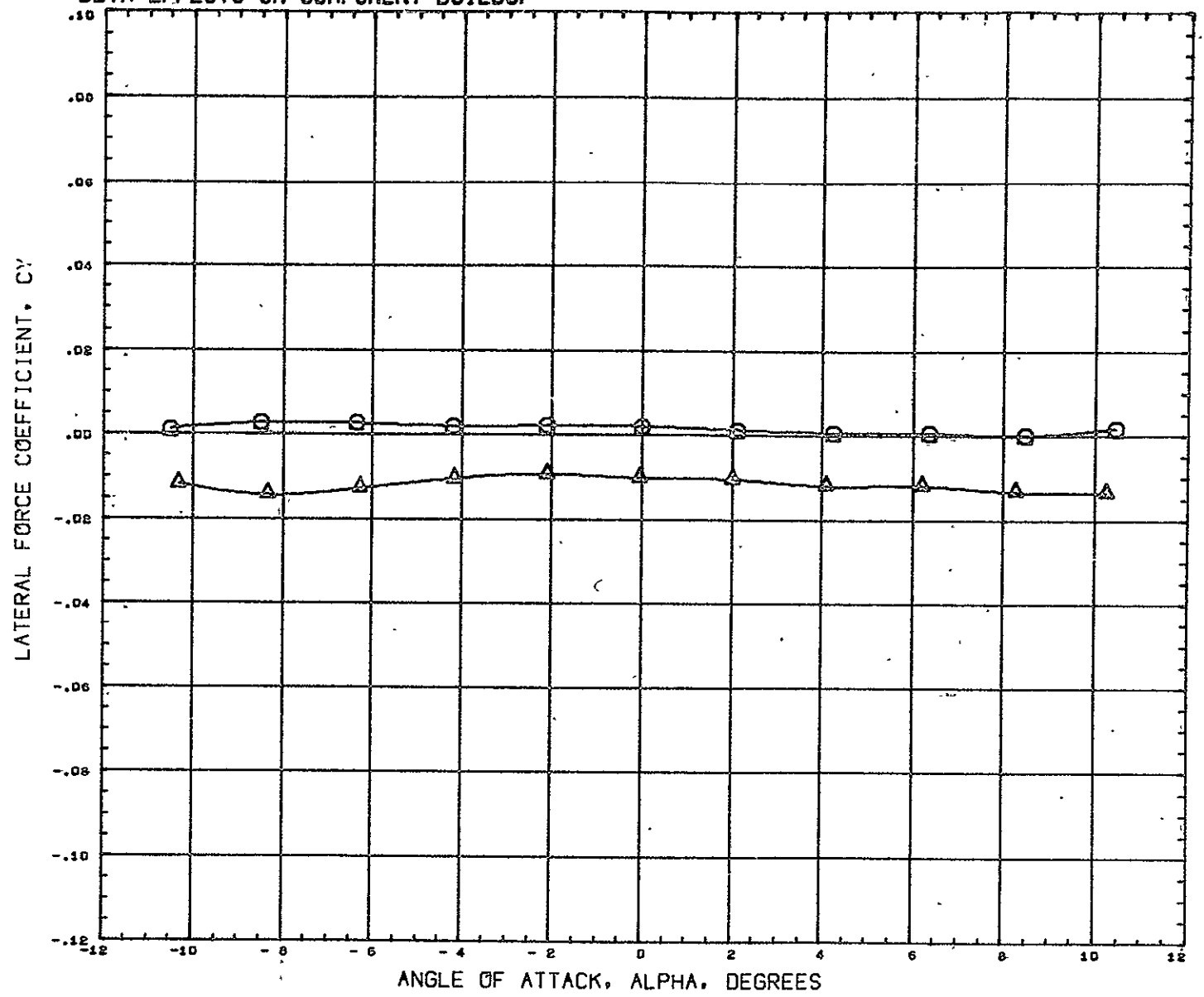
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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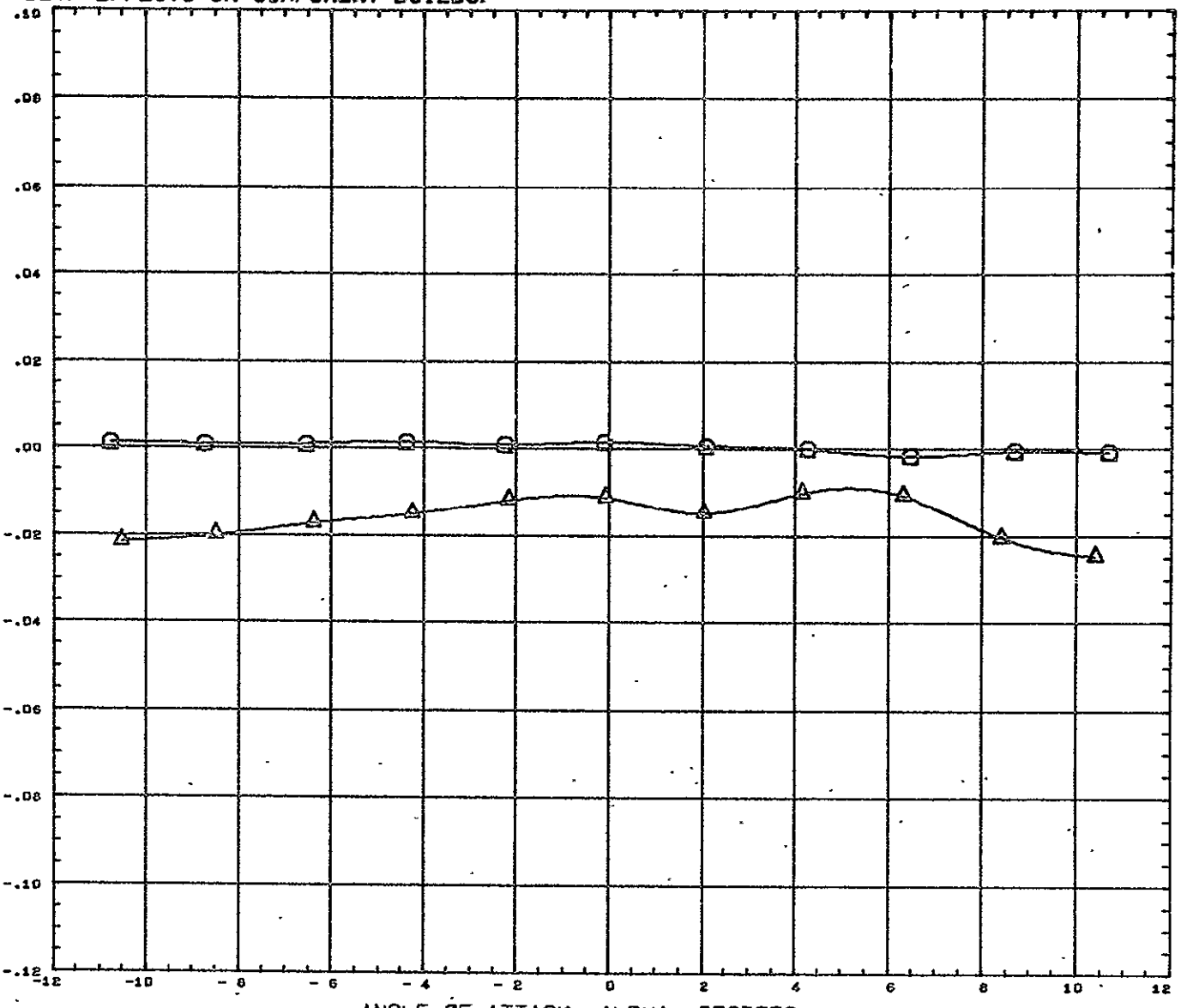
DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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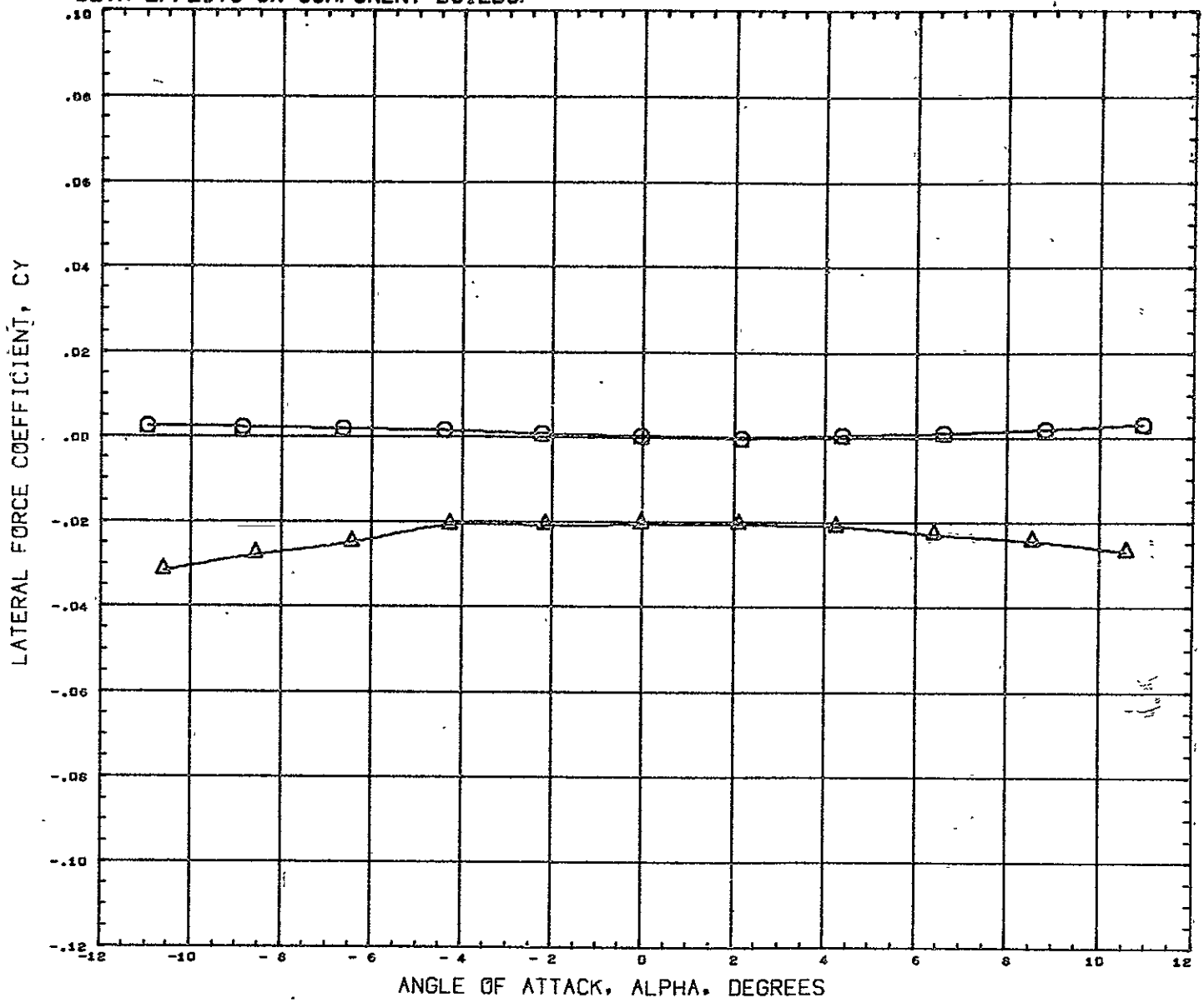
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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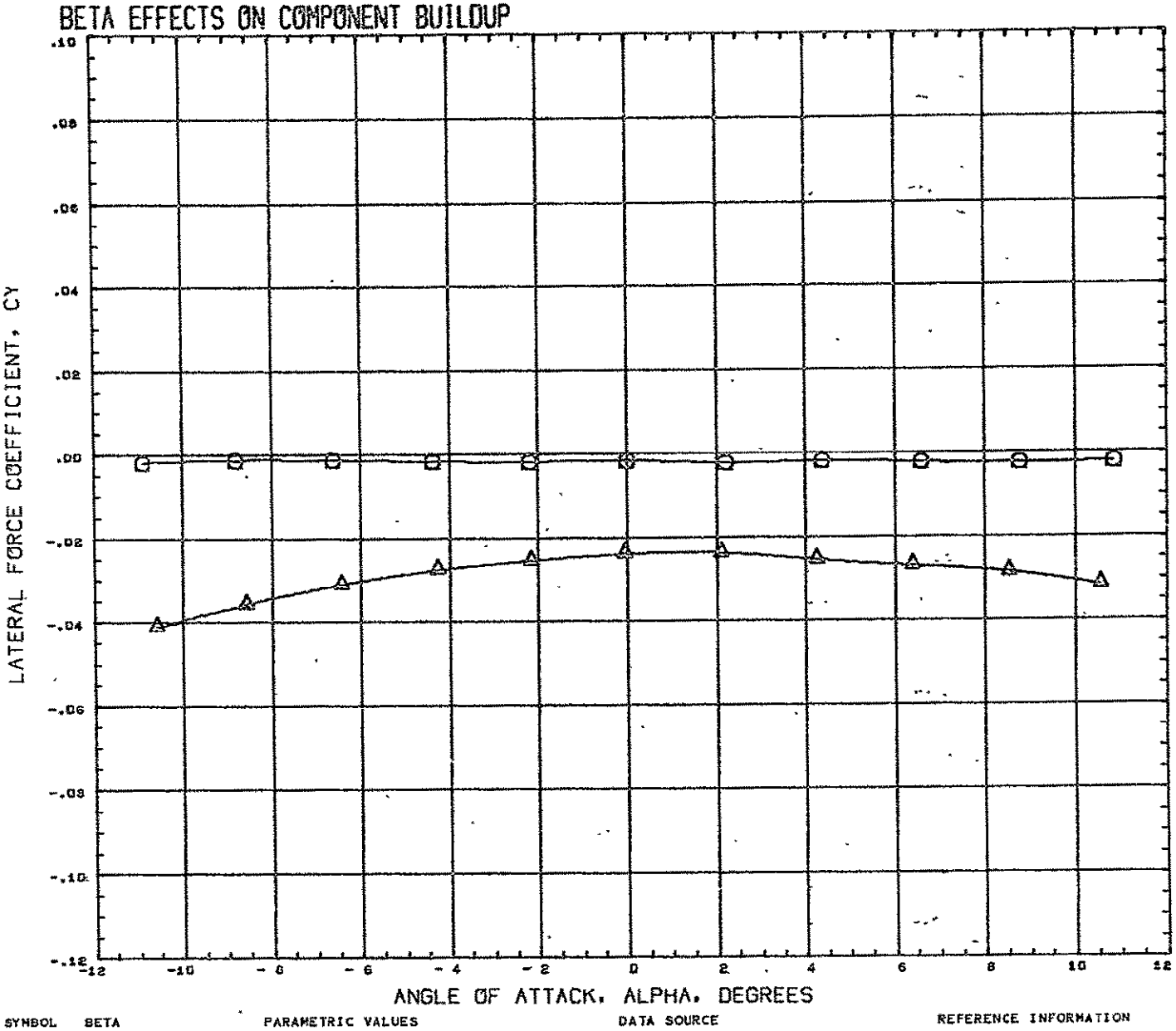
DATA HIST. CODE #E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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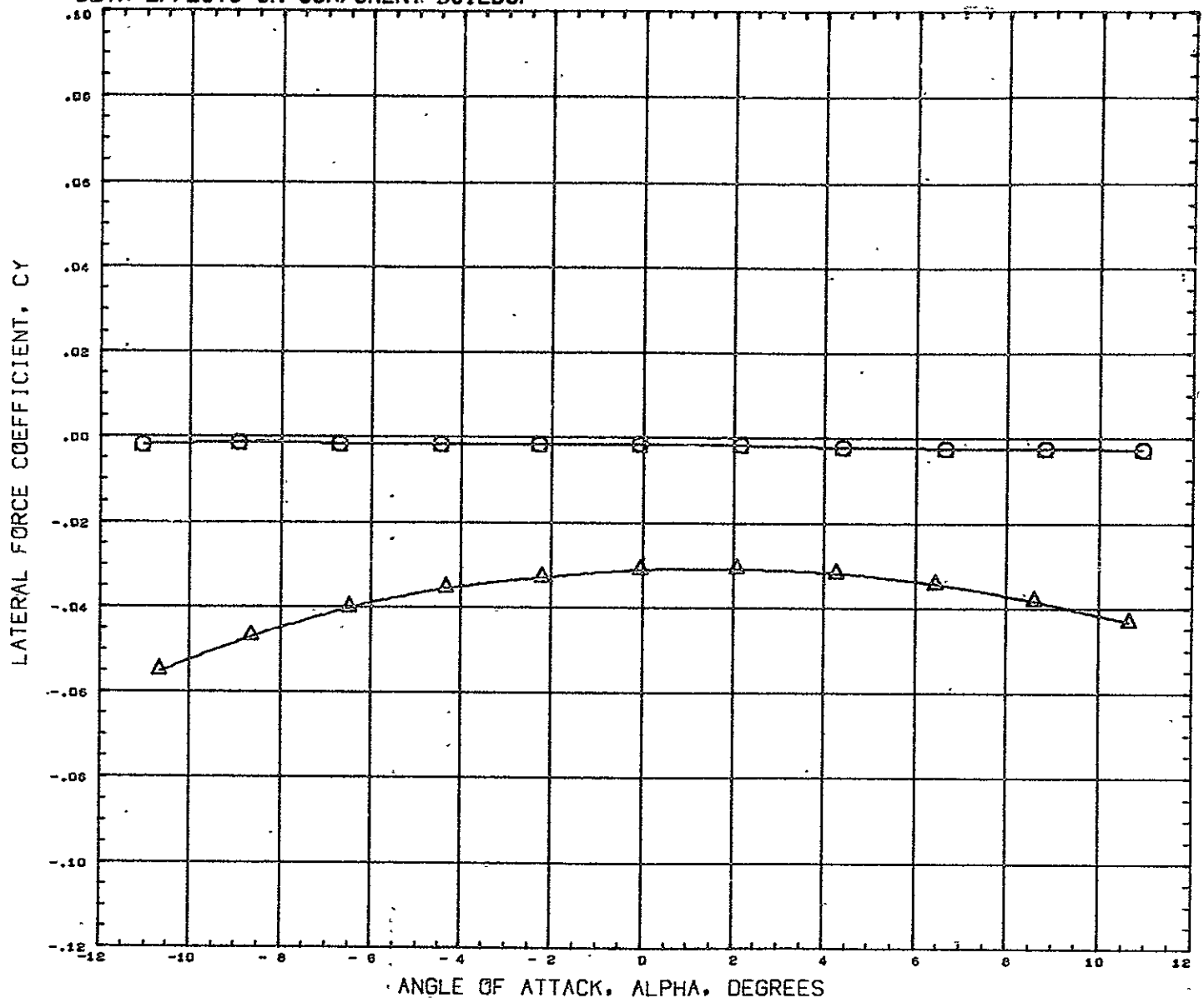
DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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DATA HIST. CODE *E

REFERENCE INFORMATION		
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REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
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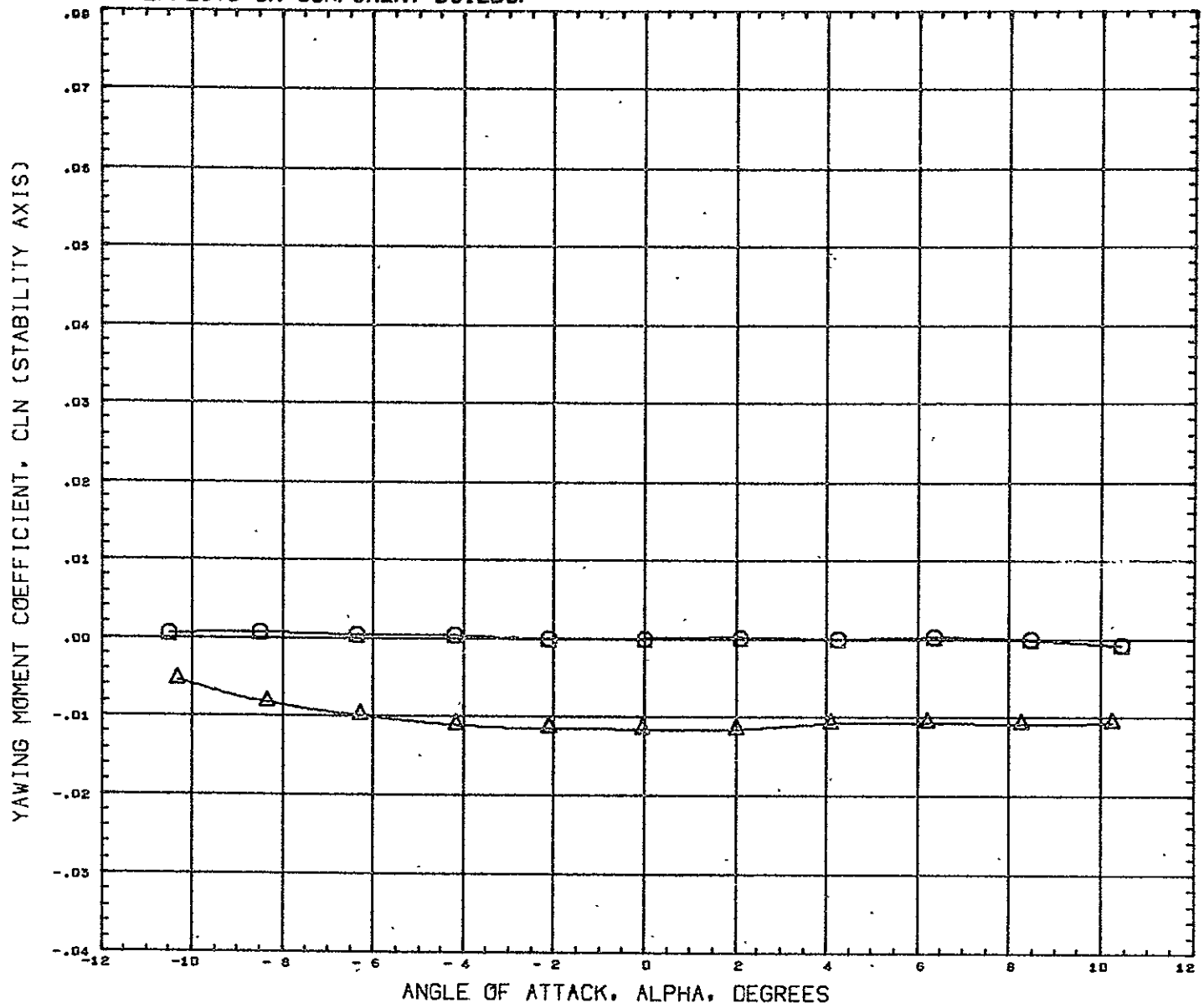
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
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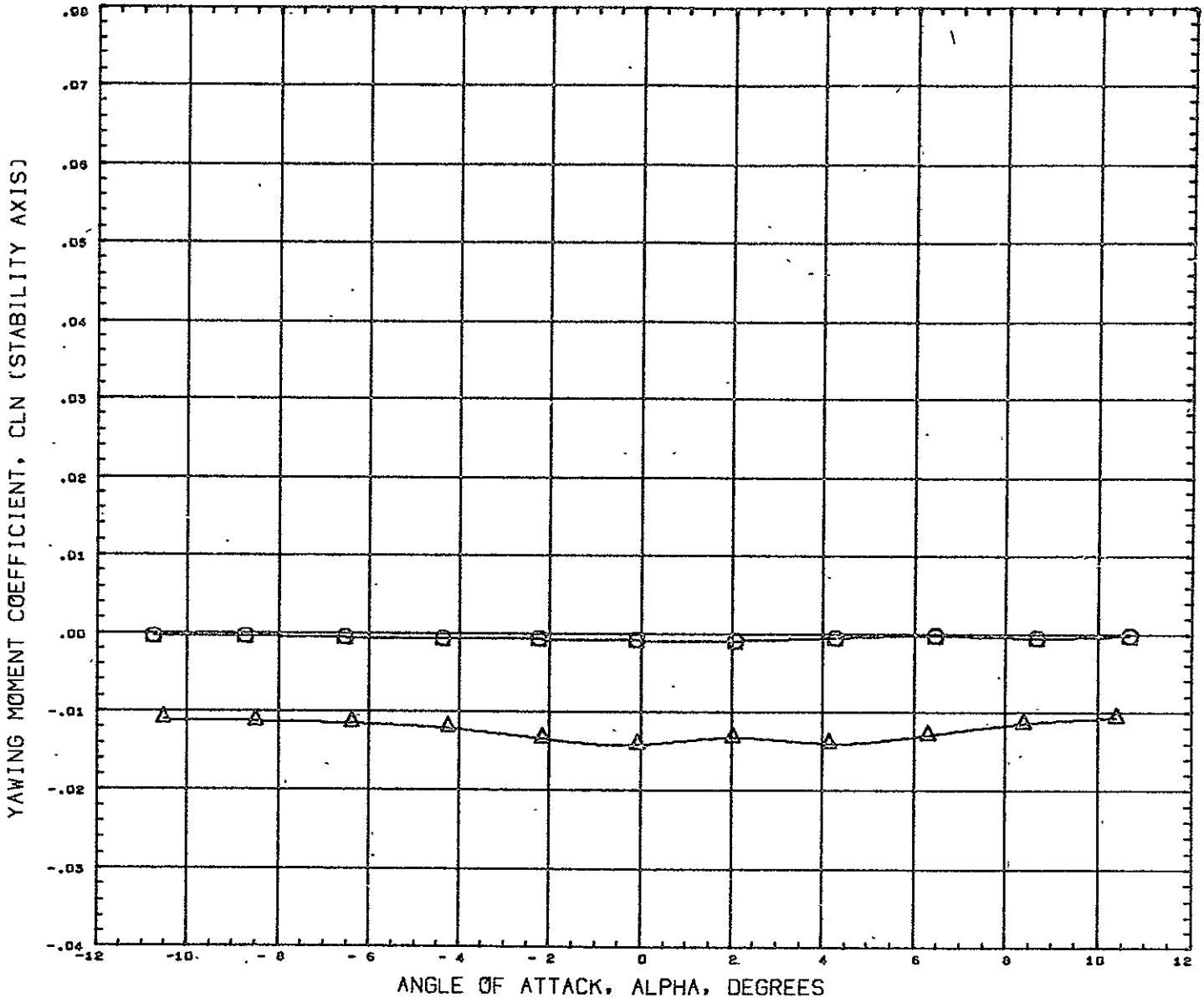
DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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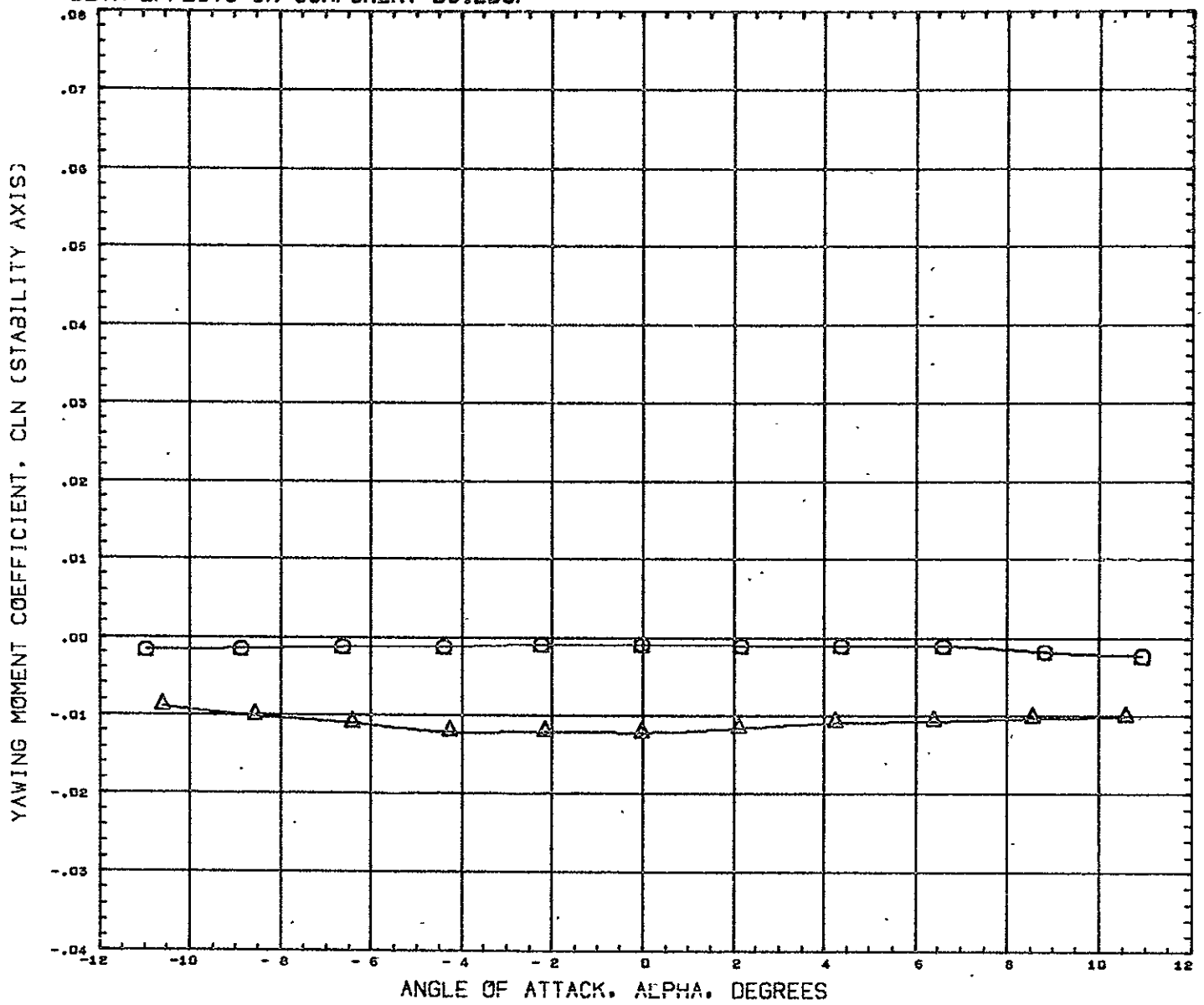
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
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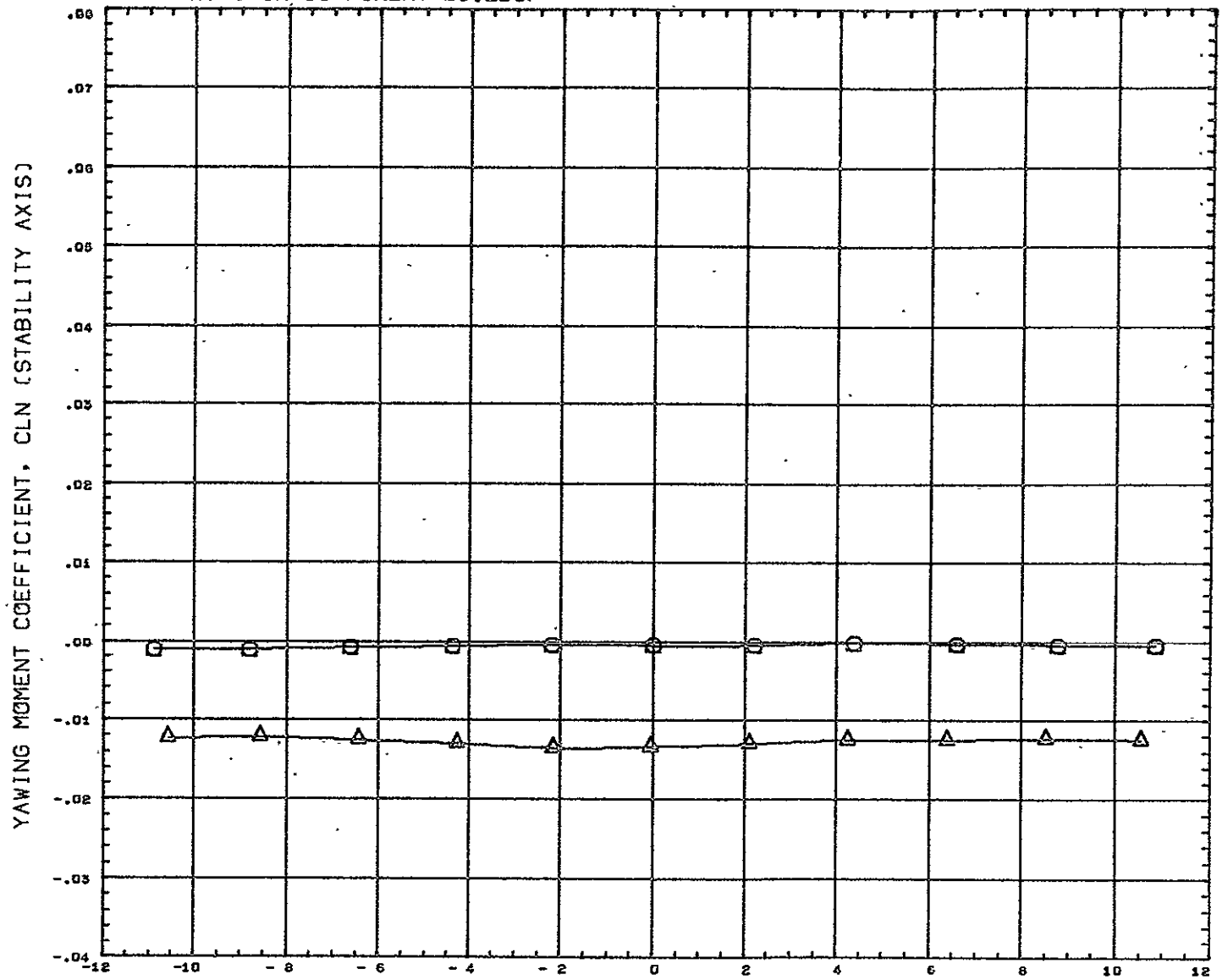
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
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DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
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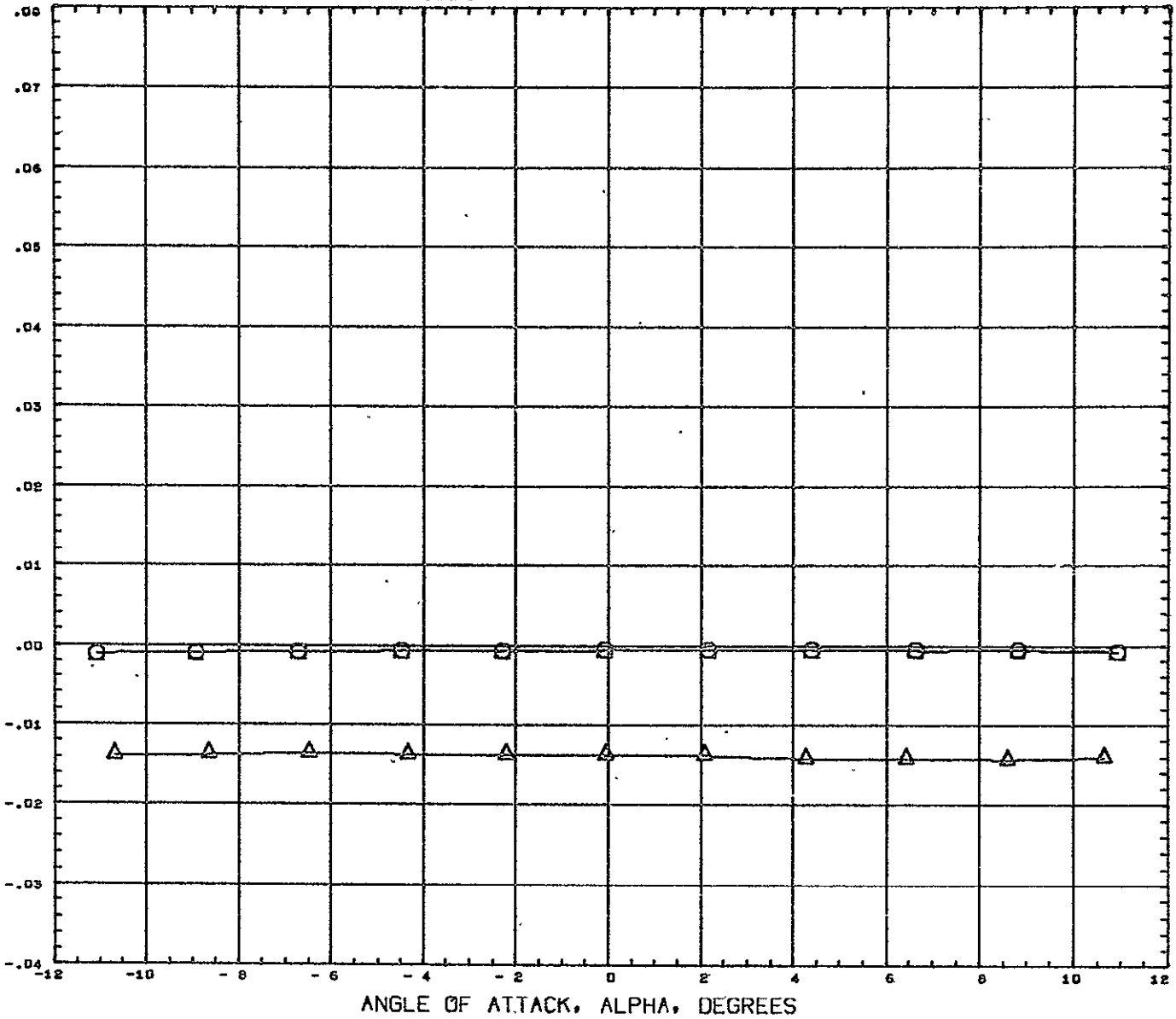
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
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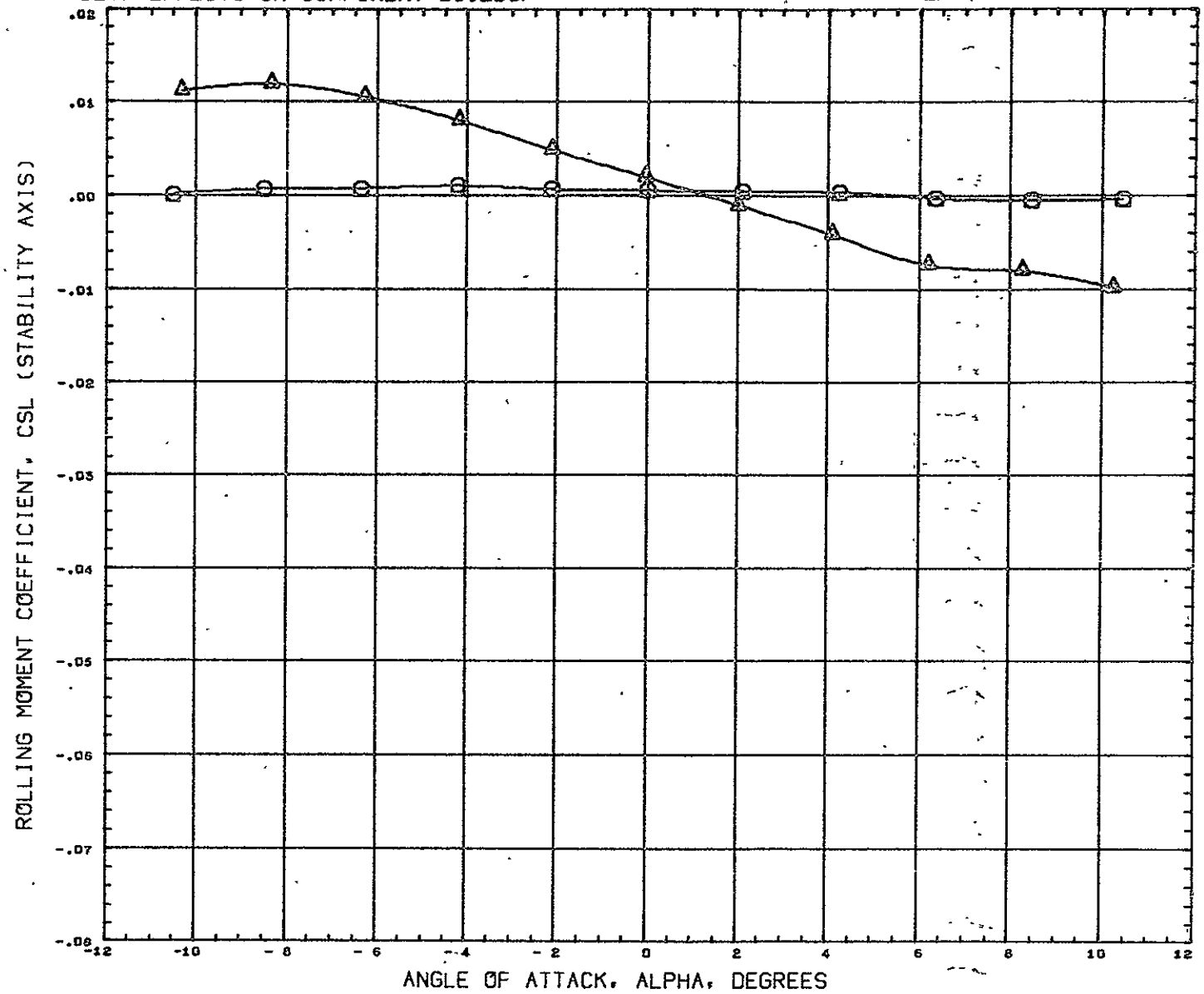
DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
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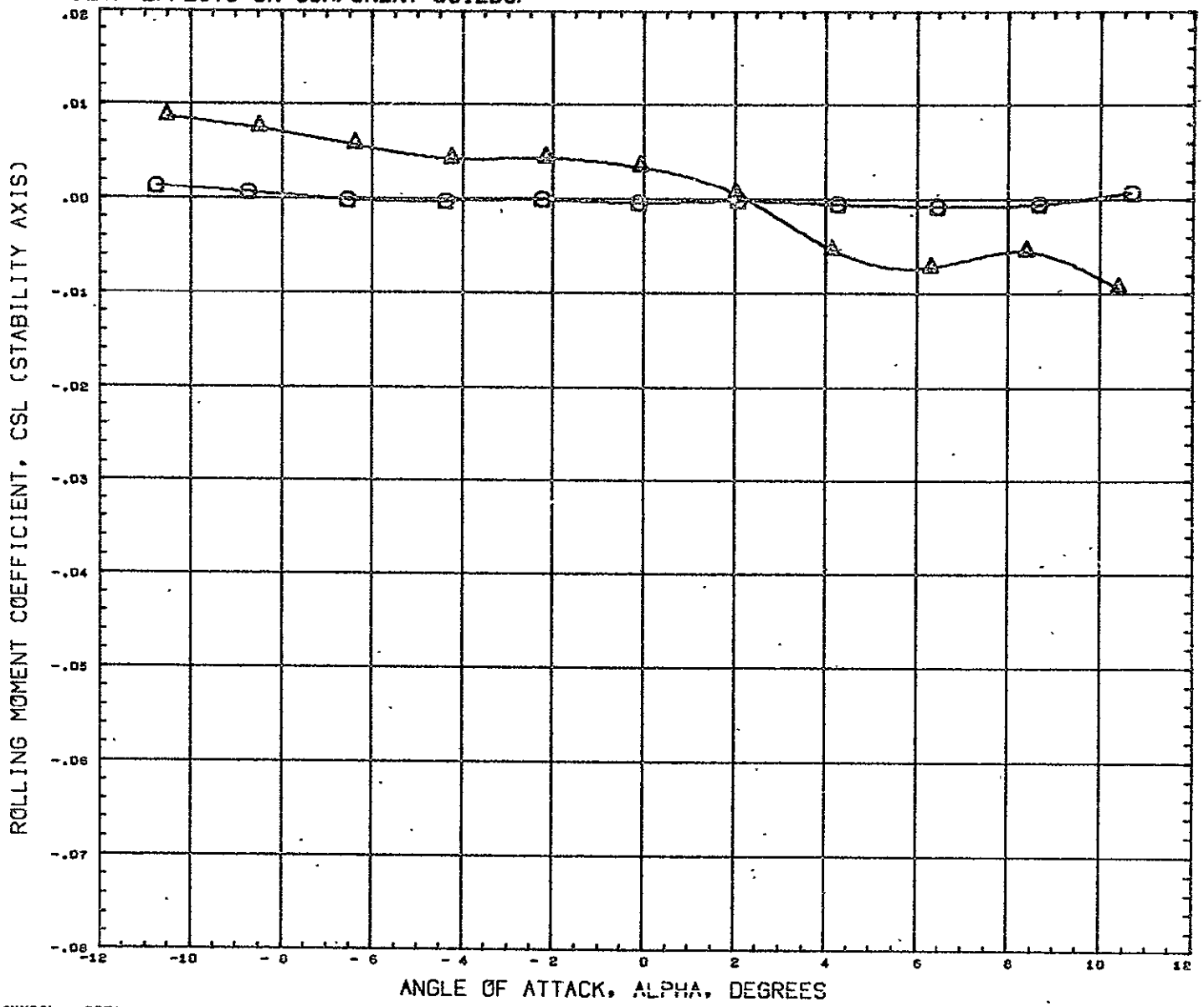
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE #E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
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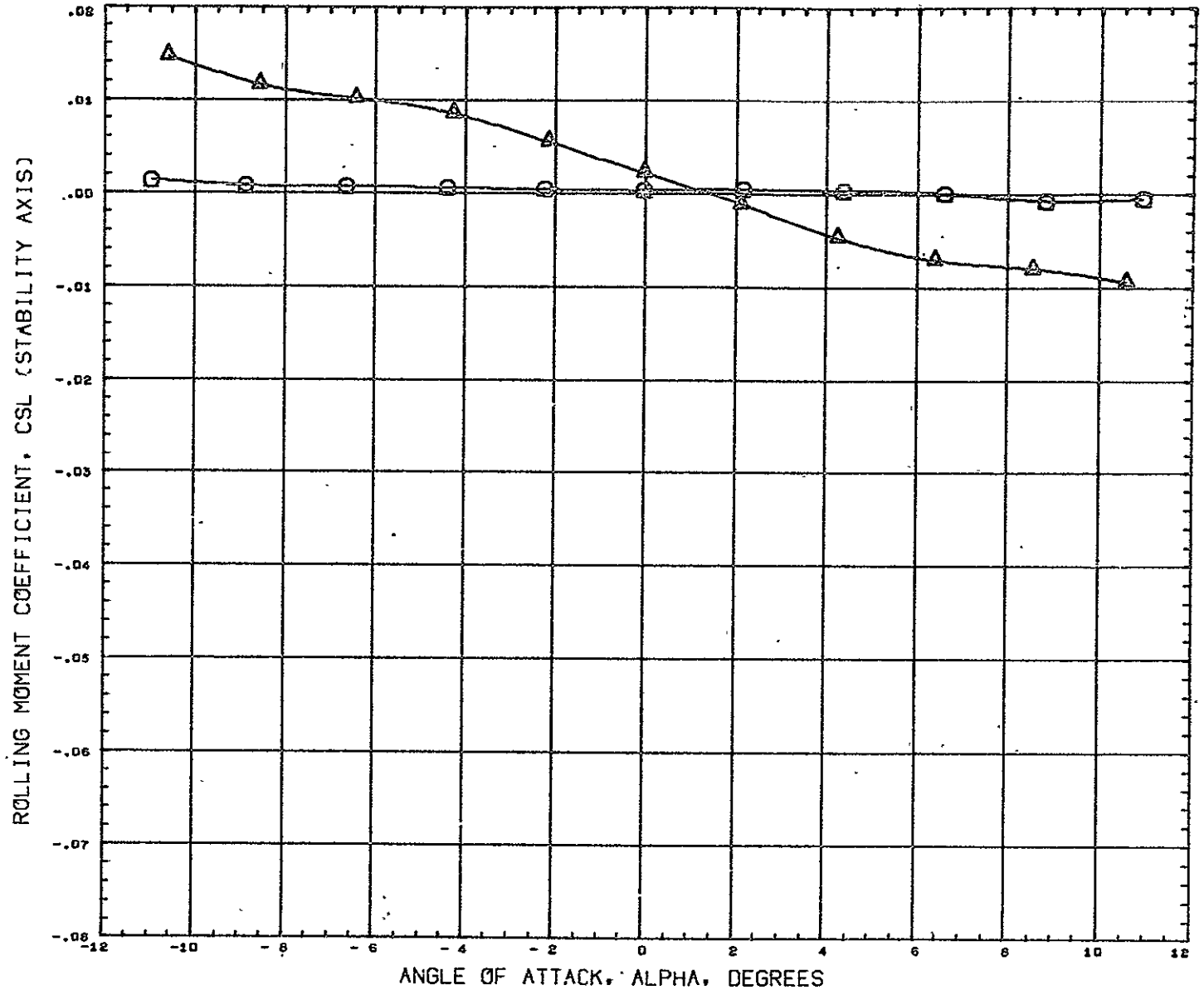
BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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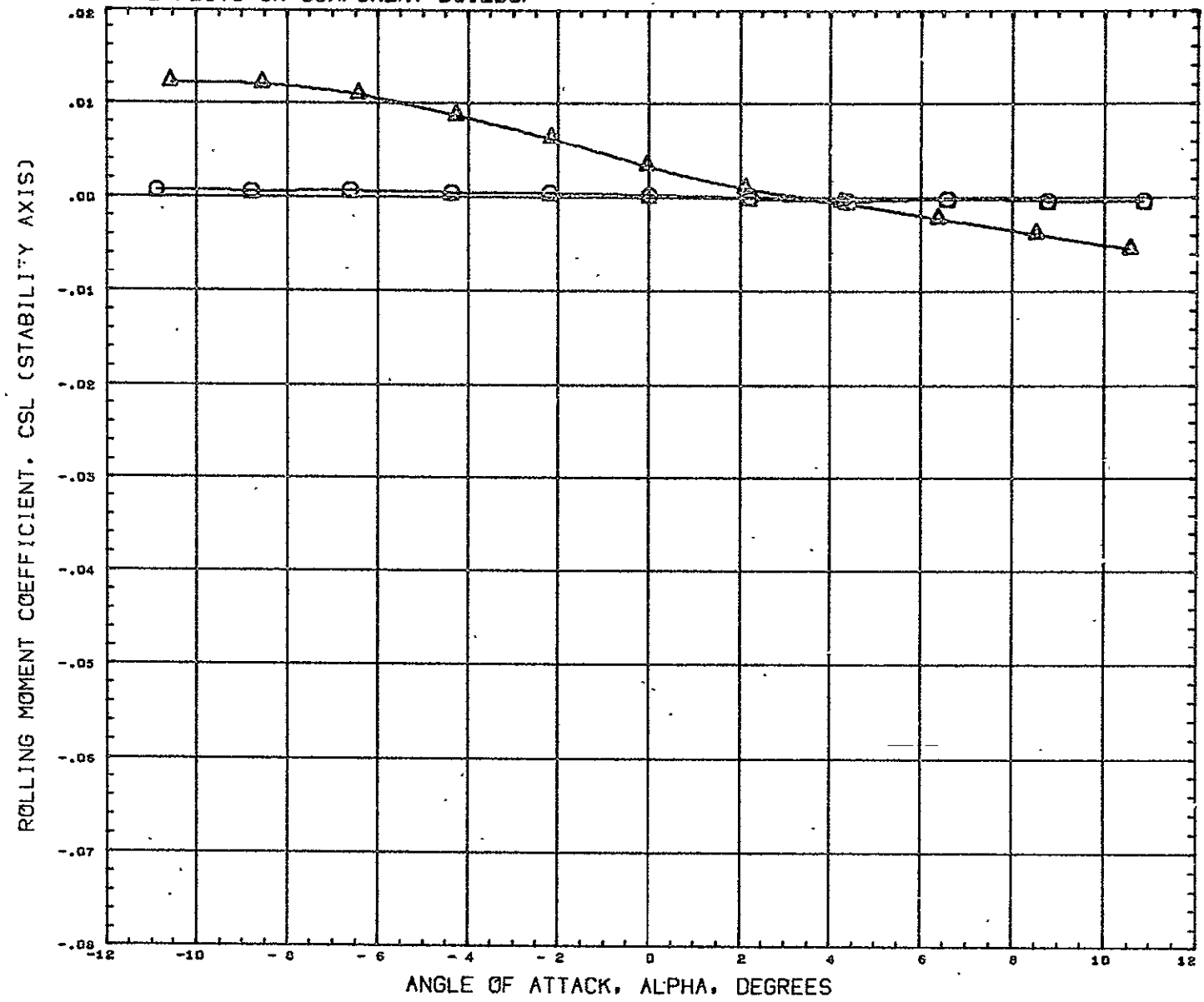
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0904	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE . *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA
○	0.000
△	6.000

PARAMETRIC VALUES

MACH	1.464	ELVATR	0.000		
AILRON	0.000				

DATA SOURCE

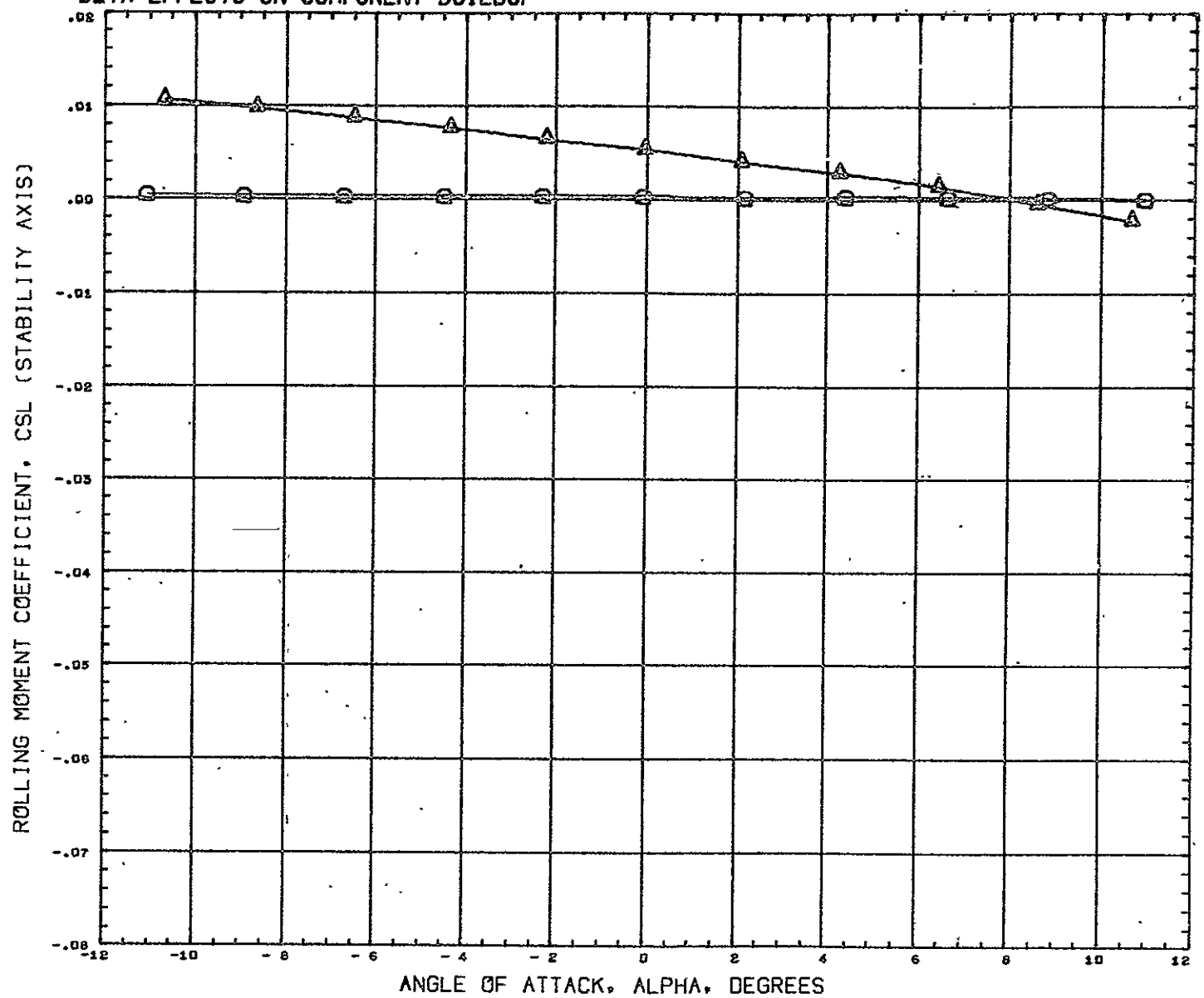
DATASET	BETA	DATASET	BETA
V2902A	0.000	V2903A	6.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
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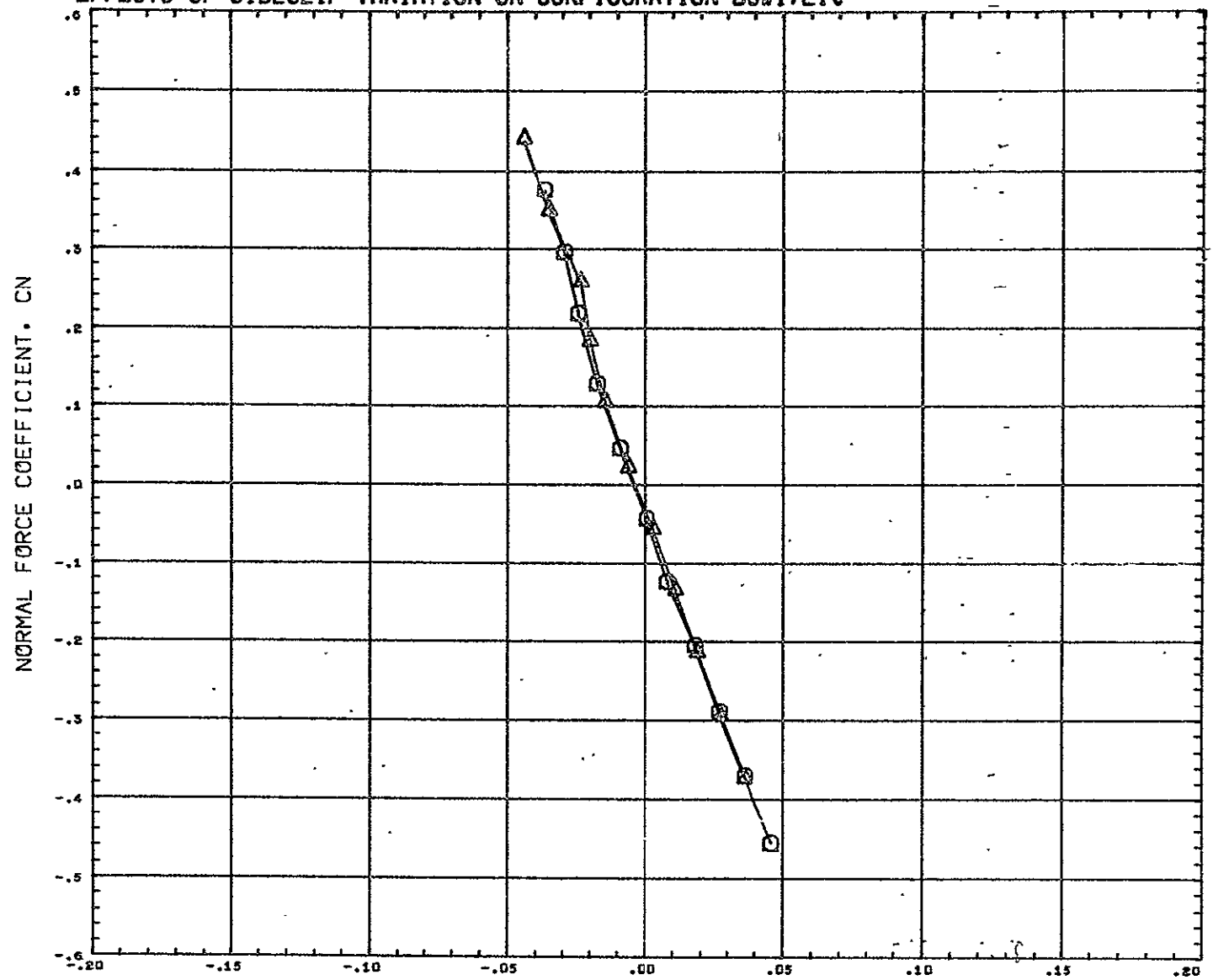
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE #E

EFFECTS OF SIDESLIP VARIATION ON CONFIGURATION B5W17E10



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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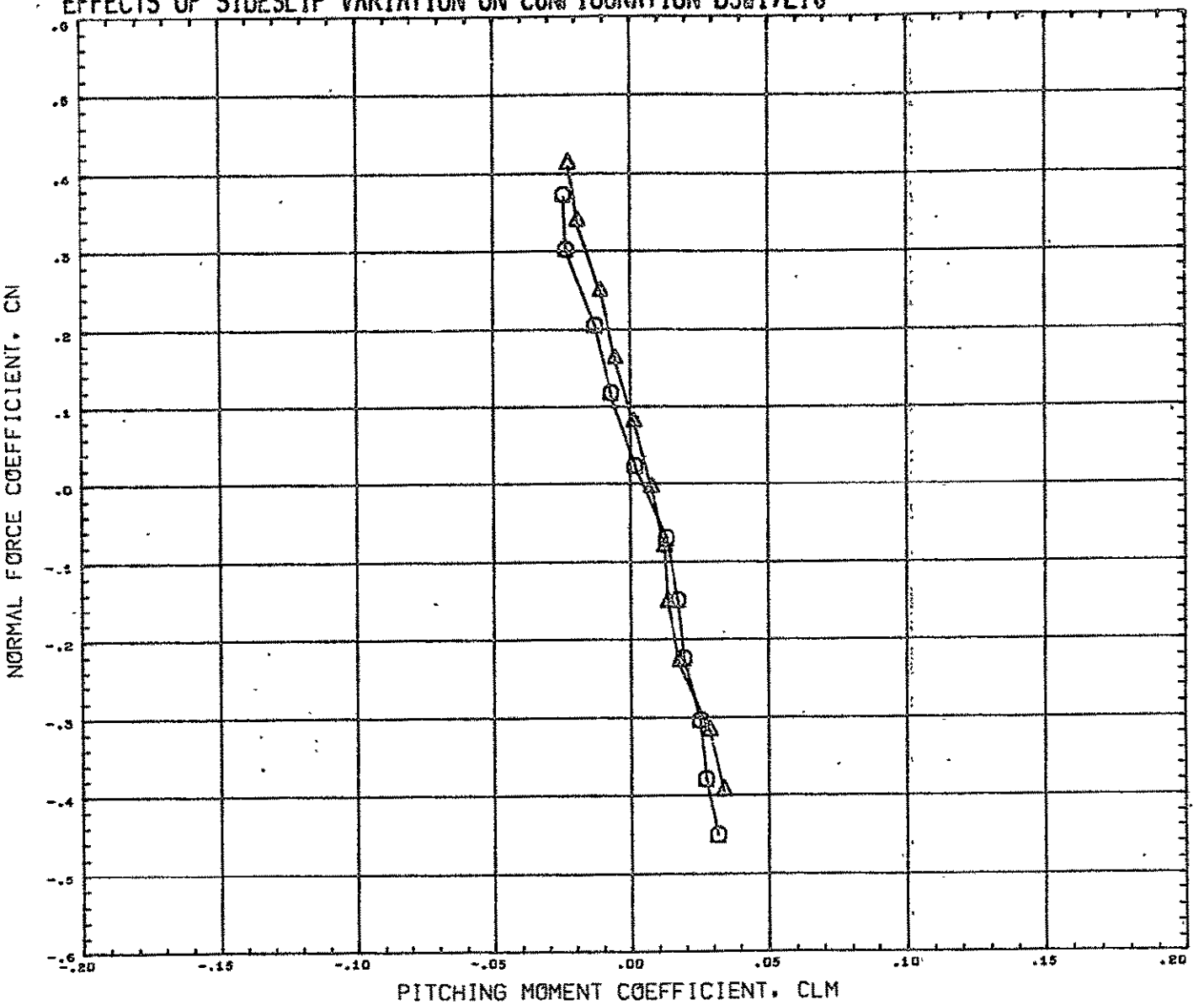
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

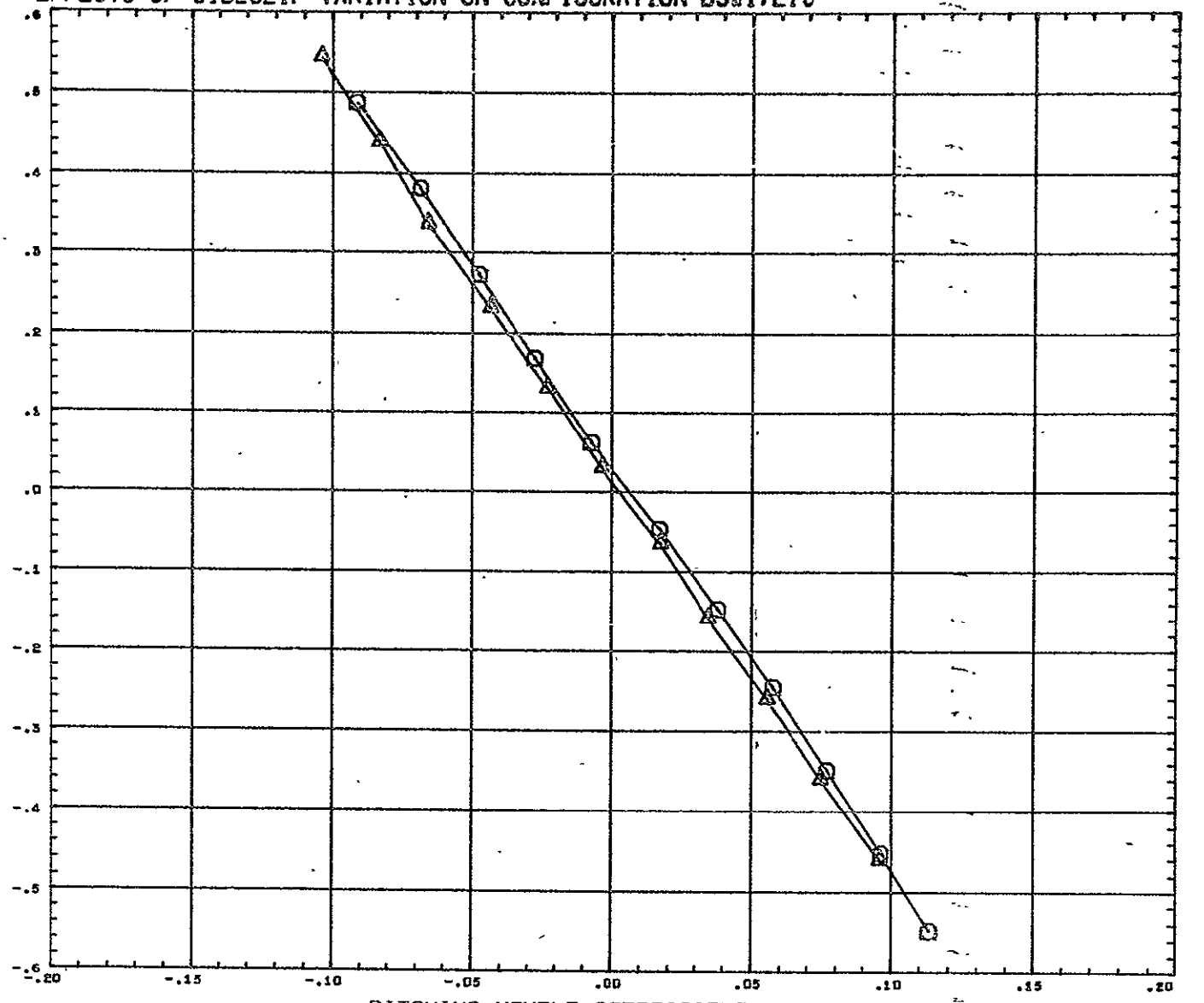
EFFECTS OF SIDESLIP VARIATION ON CONFIGURATION B5W17E10



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	0.000	MACH	0.904	ELVATR	0.000	DATASET	BETA	DATASET	BETA	REFS	6084.0040	SQ FT
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000	REFL	821.2004	INCHES
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

EFFECTS OF SIDESLIP VARIATION ON CONFIGURATION B5W17E10



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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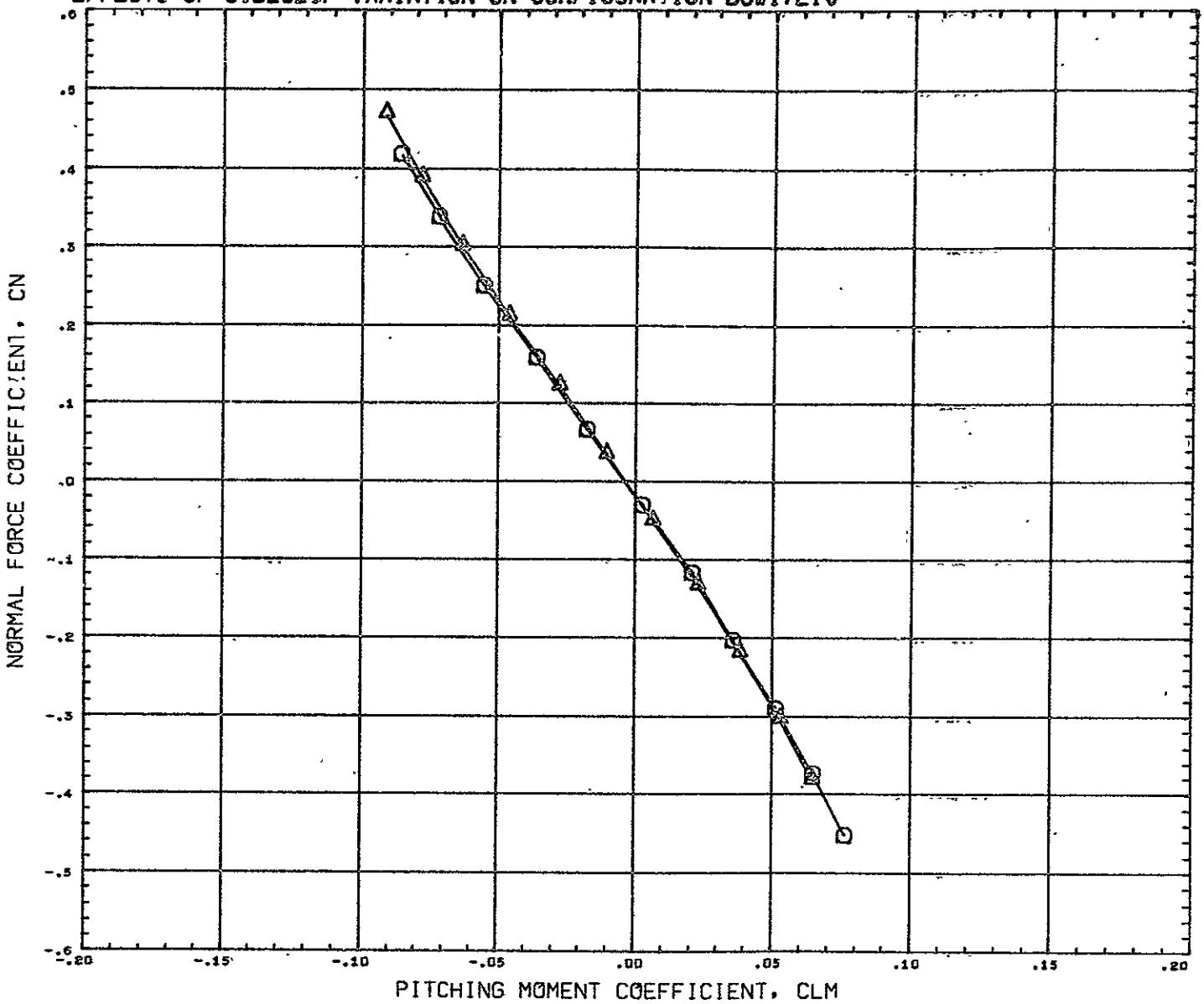
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

EFFECTS OF SIDESLIP VARIATION ON CONFIGURATION B5W17E10

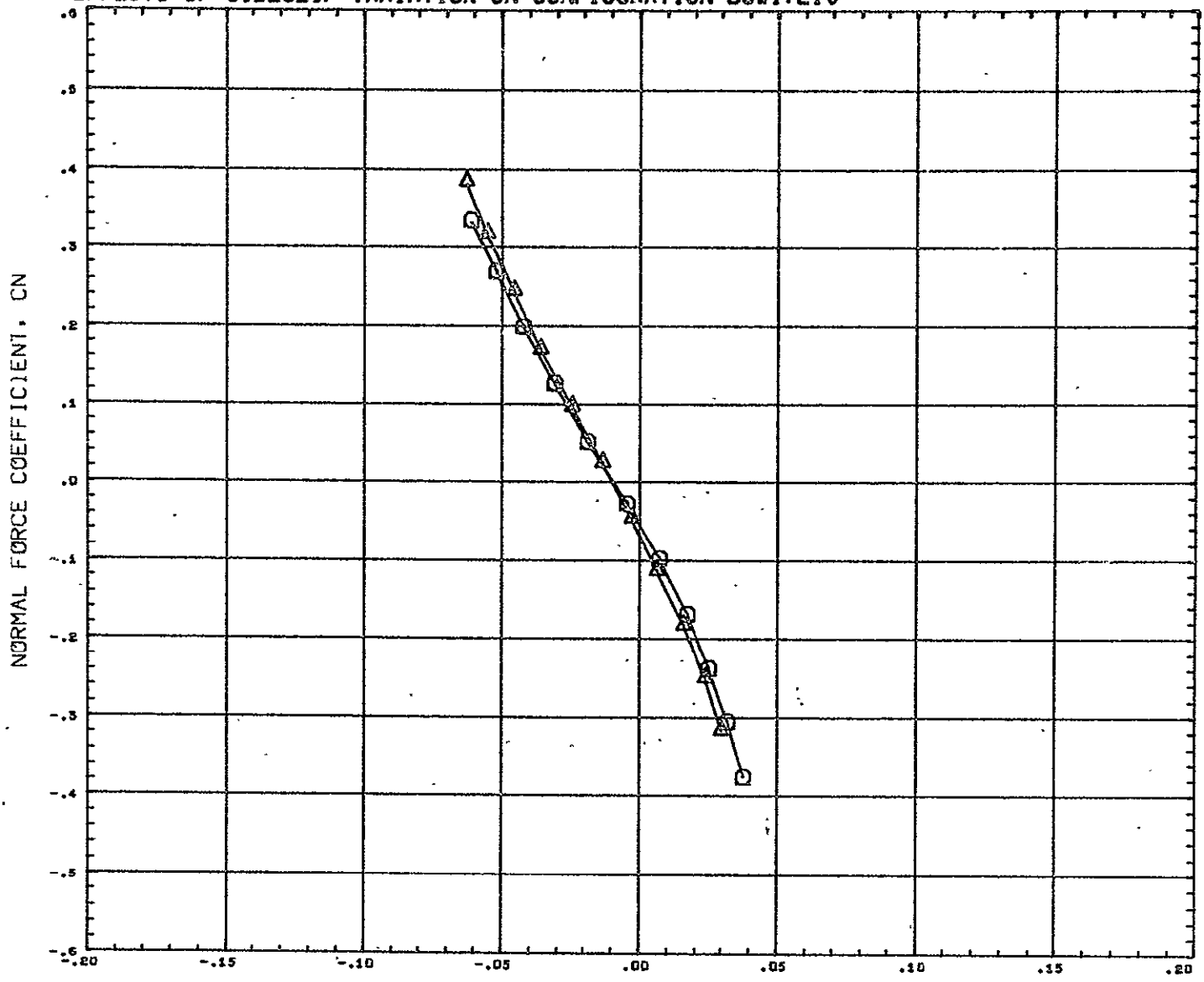


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.464	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2902A	0.000	V2903A	6.000

DATA HIST. CODE *E

REFERENCE INFORMATION		
REFS	5084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF SIDESLIP VARIATION ON CONFIGURATION B5W17E10



SYMBOL	BETA
○	0.000
△	6.000

PARAMETRIC VALUES

MACH	1.963	ELVATR	0.000		
AILRON	0.000				

DATA SOURCE

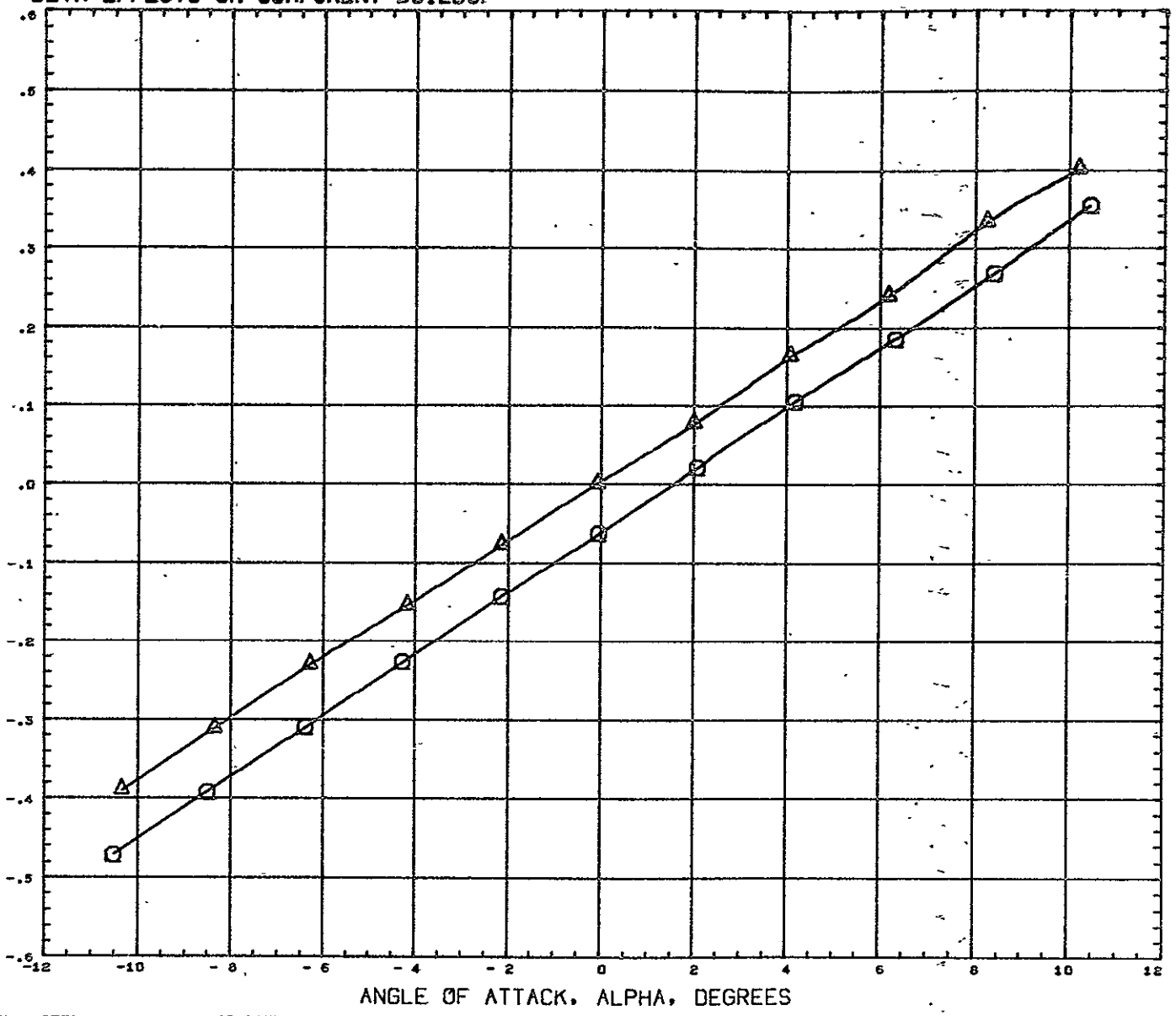
DATASET	BETA	DATASET	BETA
V2902A	0.000	V2903A	6.000

REFERENCE INFORMATION

REFS	6084.0042	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

BETA EFFECTS ON COMPONENT BUILDUP

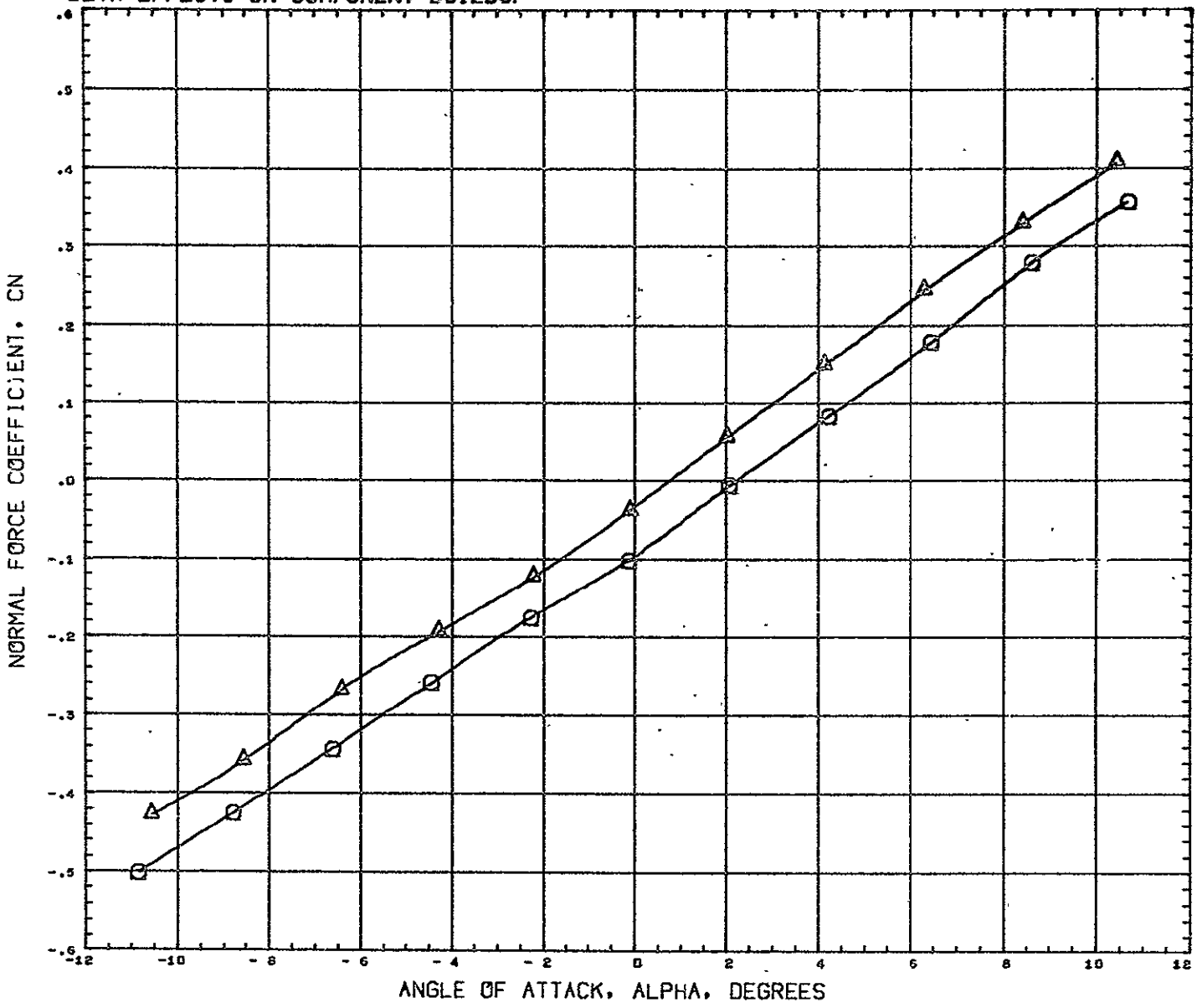


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	0.605	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.8040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

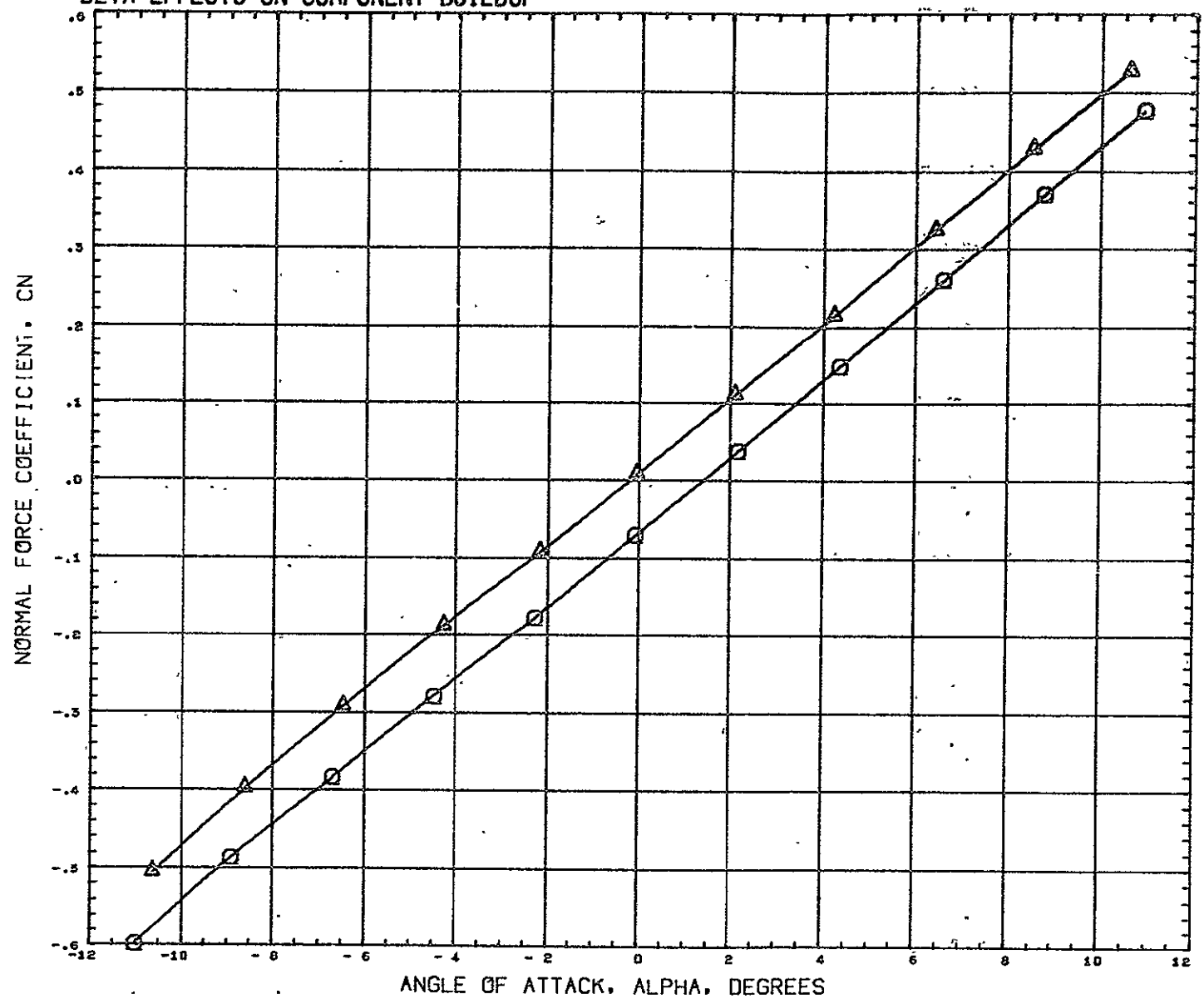
BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
○	0.000	MACH	0.904	ELVATR	0.000	DATASET	BETA	DATASET	BETA	REFS	6084.0040	SQ FT
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000	REFL	821.2004	INCHES
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	0.000	MACH	1.102	ELVATR	0.000	DATASET	BETA	DATASET	BETA	REFS	6084.0040	SQ FT
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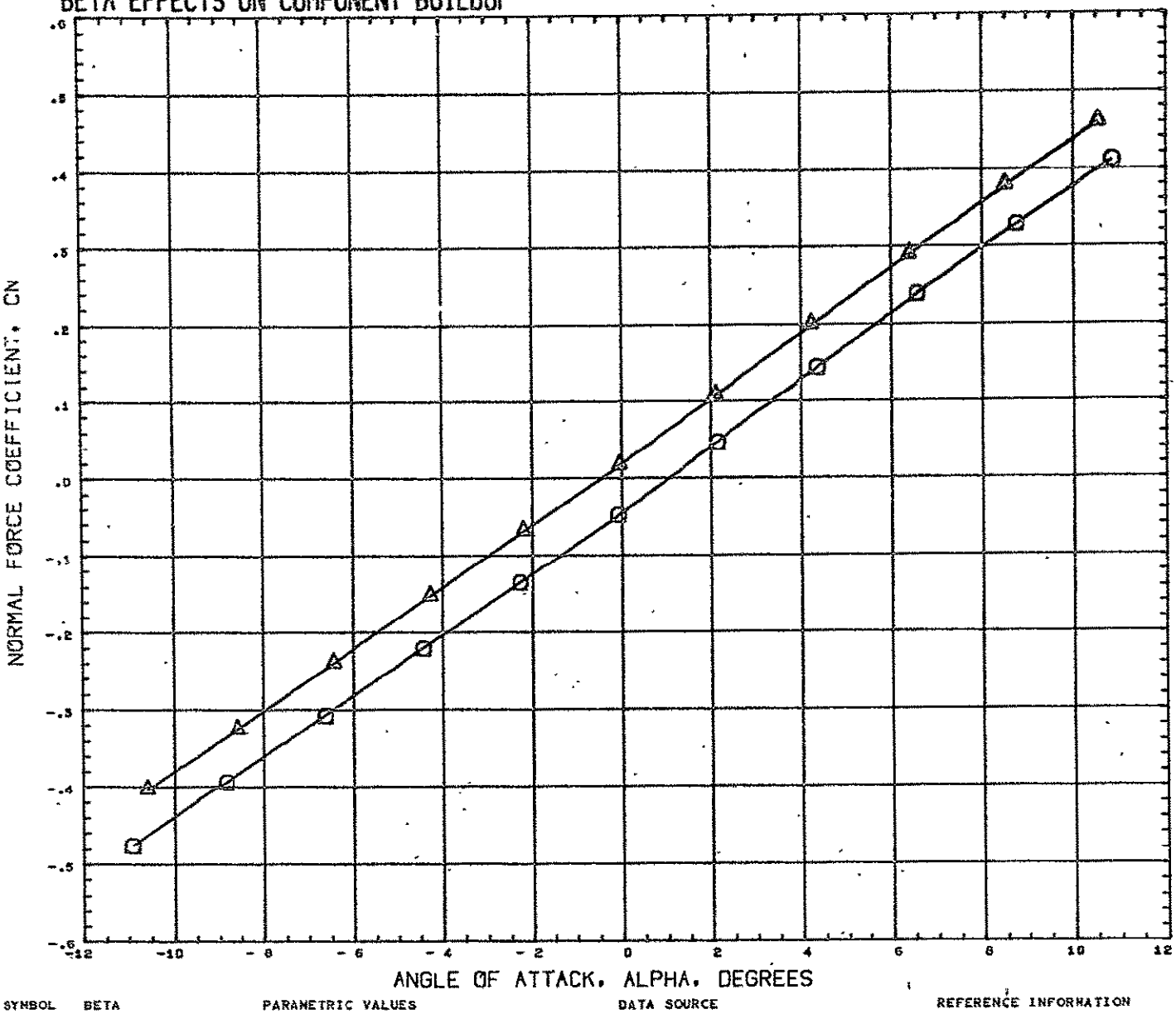
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP

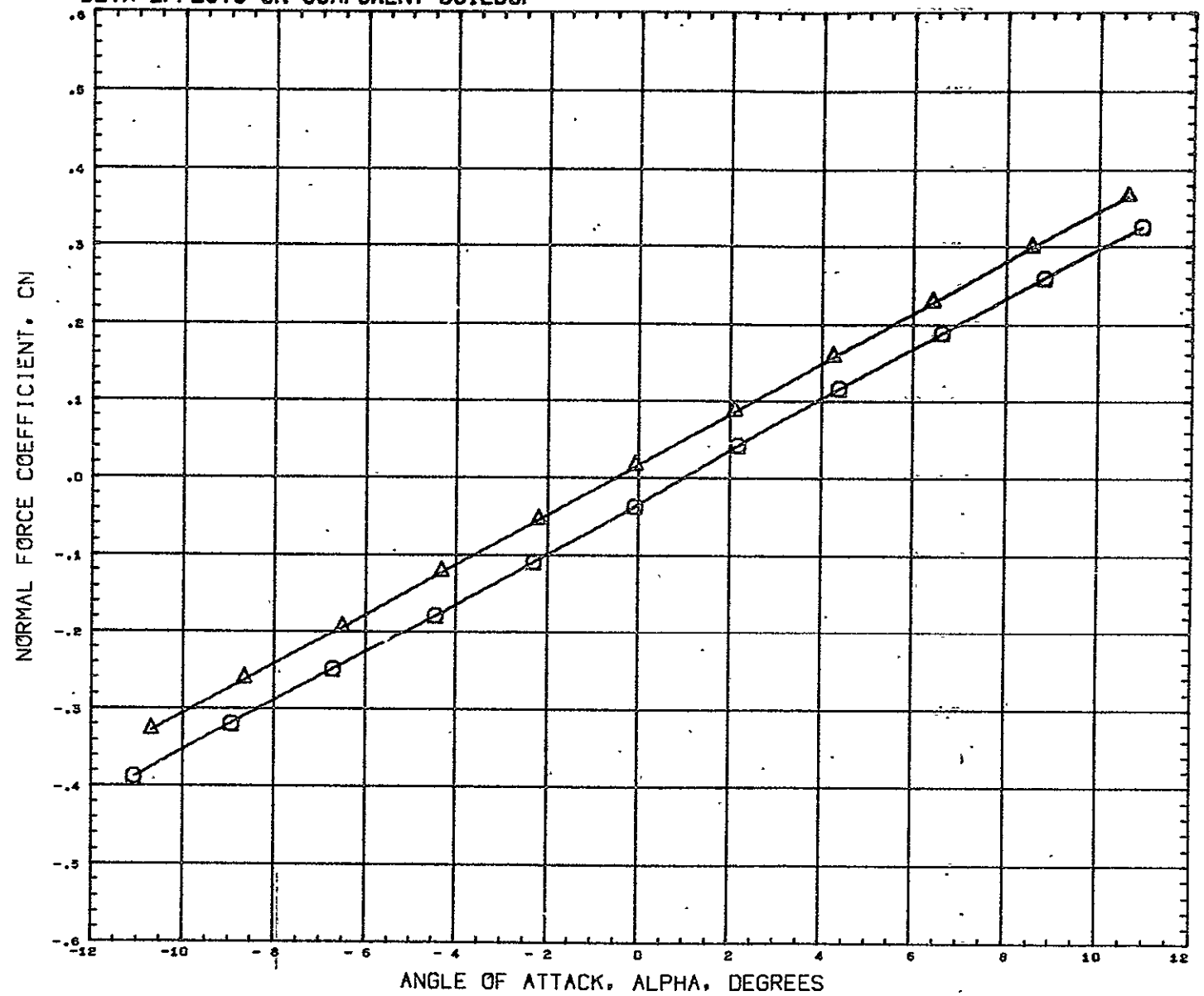


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.463	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP

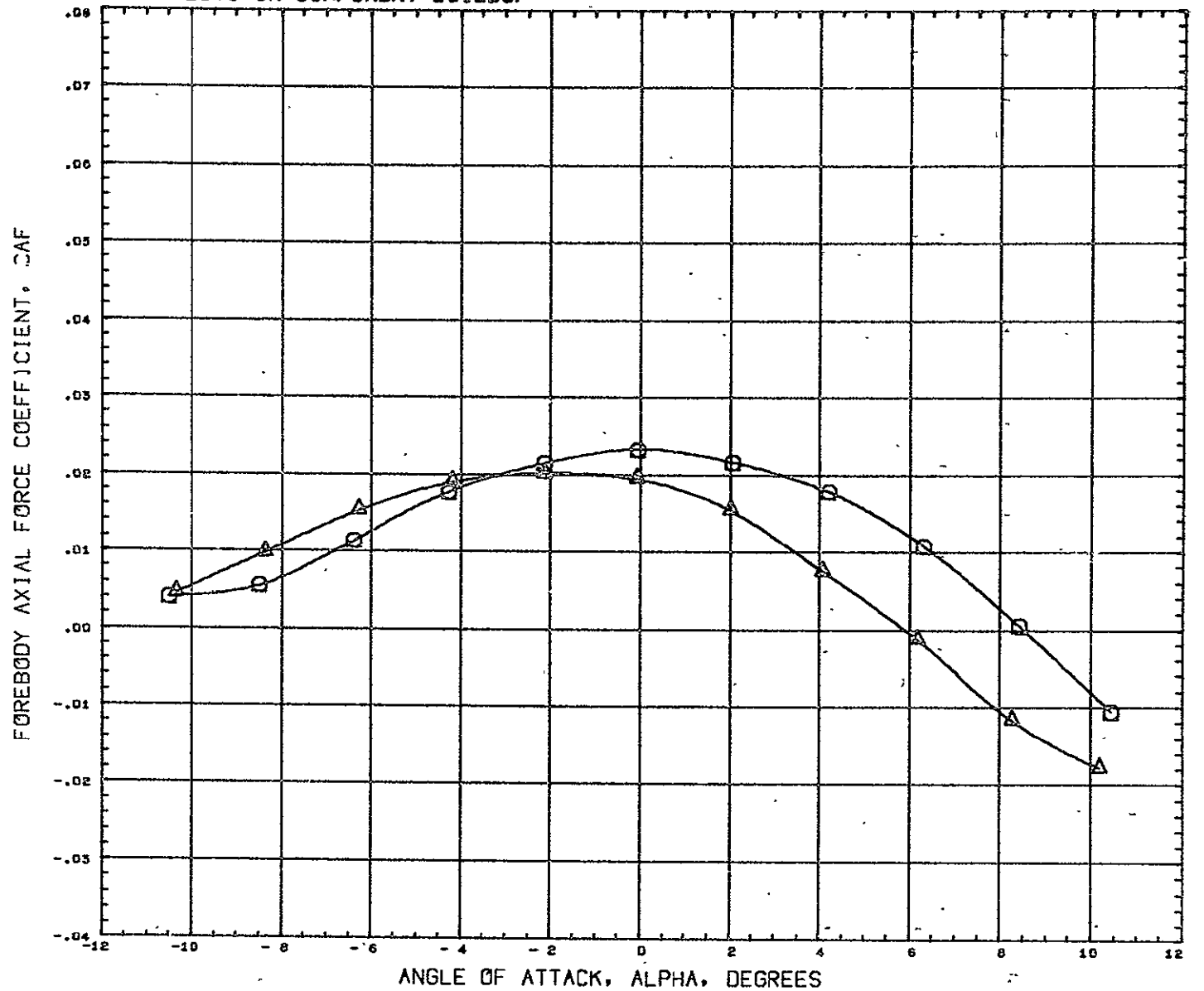


SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
○	0.000	MACH	1.965	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



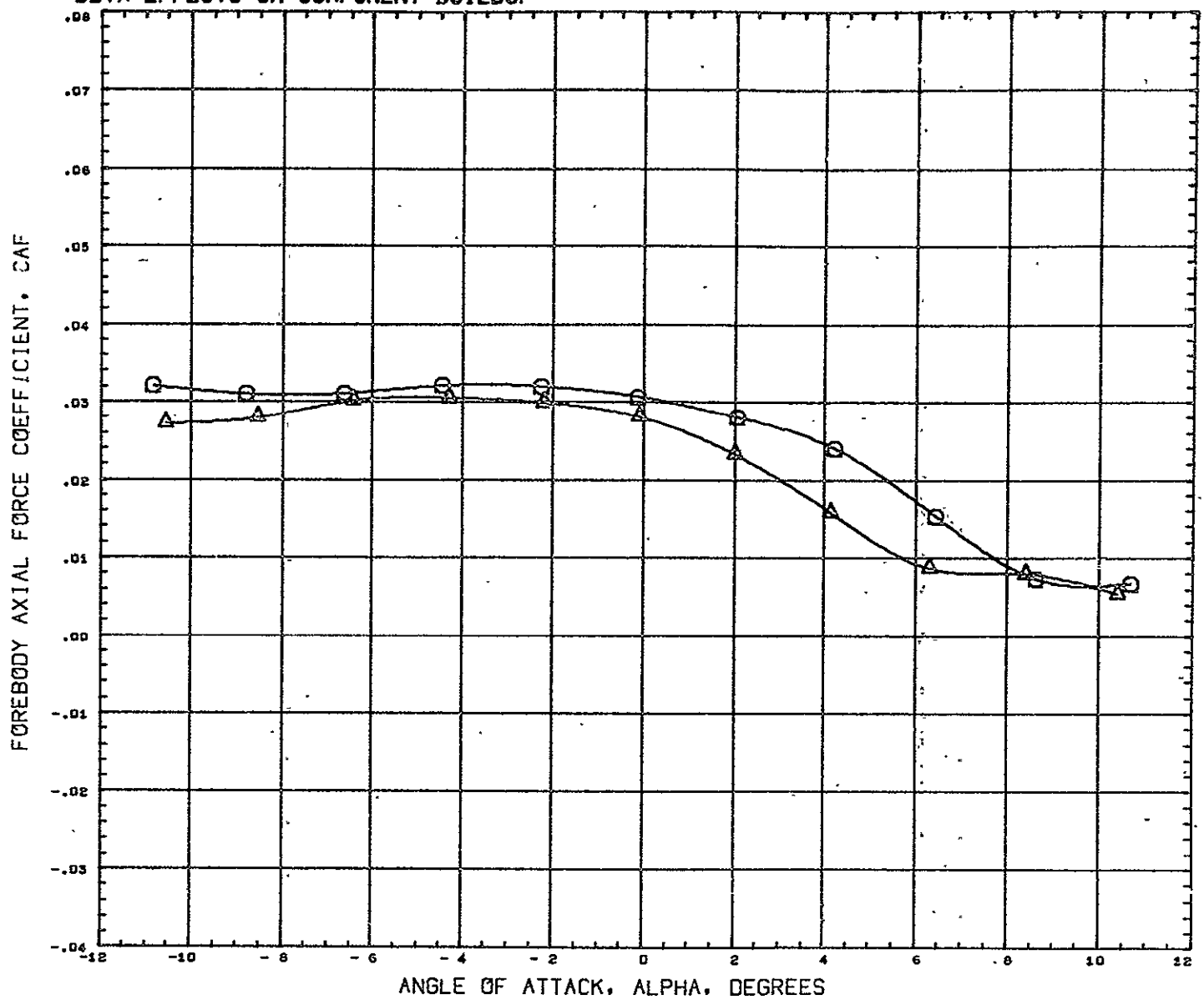
SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
	0.000	MACH	0.605	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

REFERENCE INFORMATION

REFS	6084.0042	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP

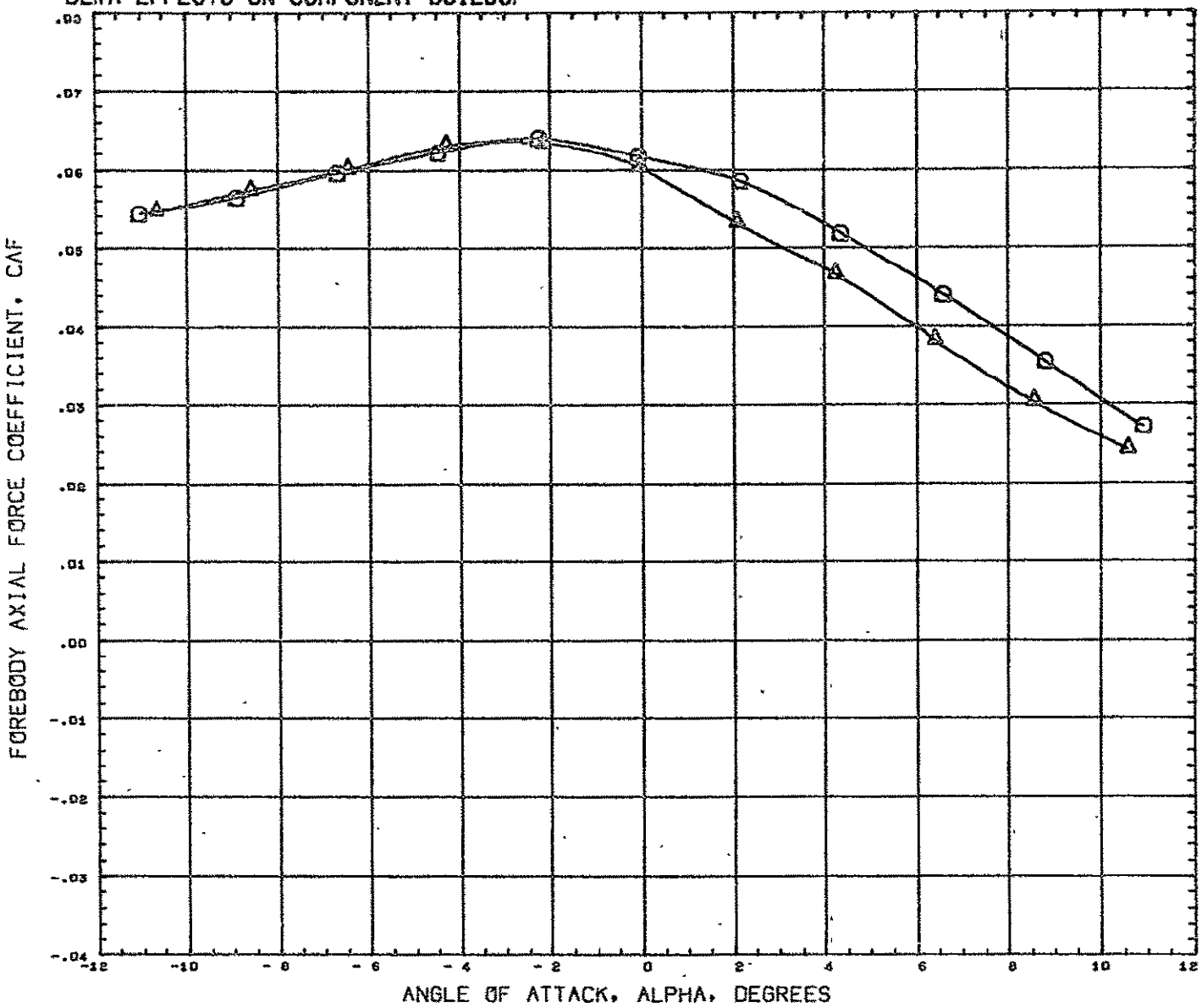


SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
○	0.000	MACH	0.904	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.8040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

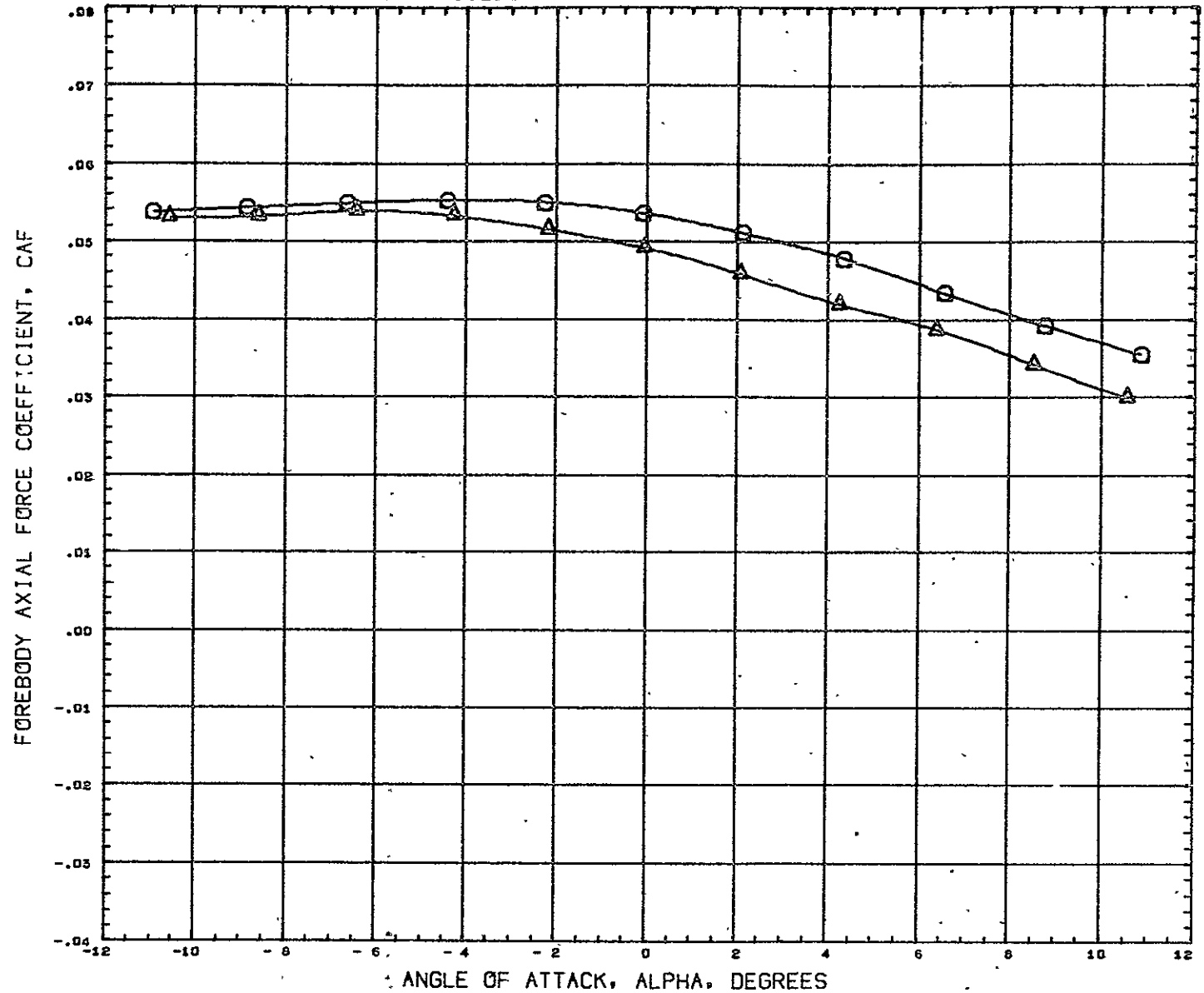


SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
○	0.000	MACH	1.102	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

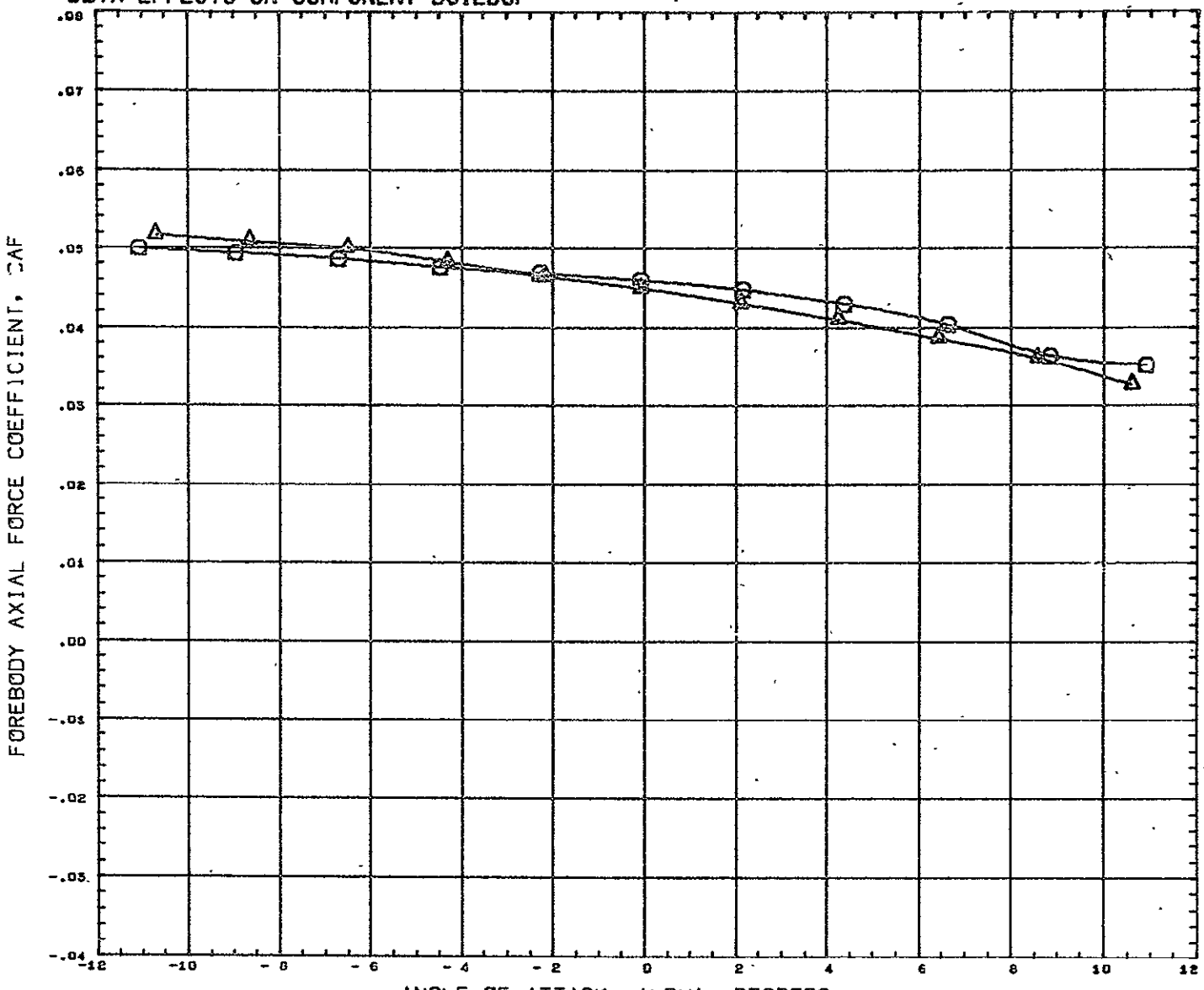


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.463	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

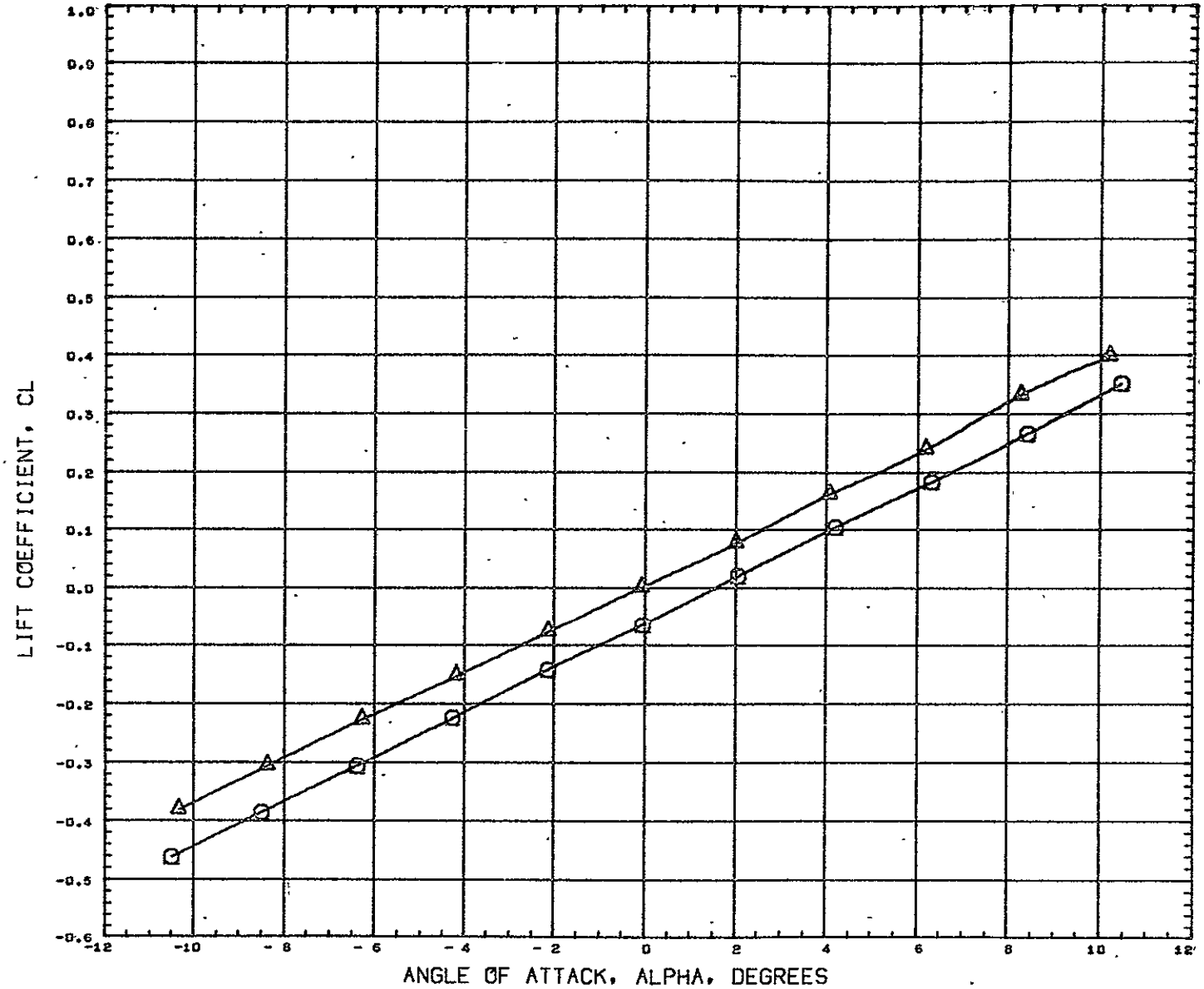


SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
○	0.000	MACH	1.965	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000	REFL	821.2004	INCHES
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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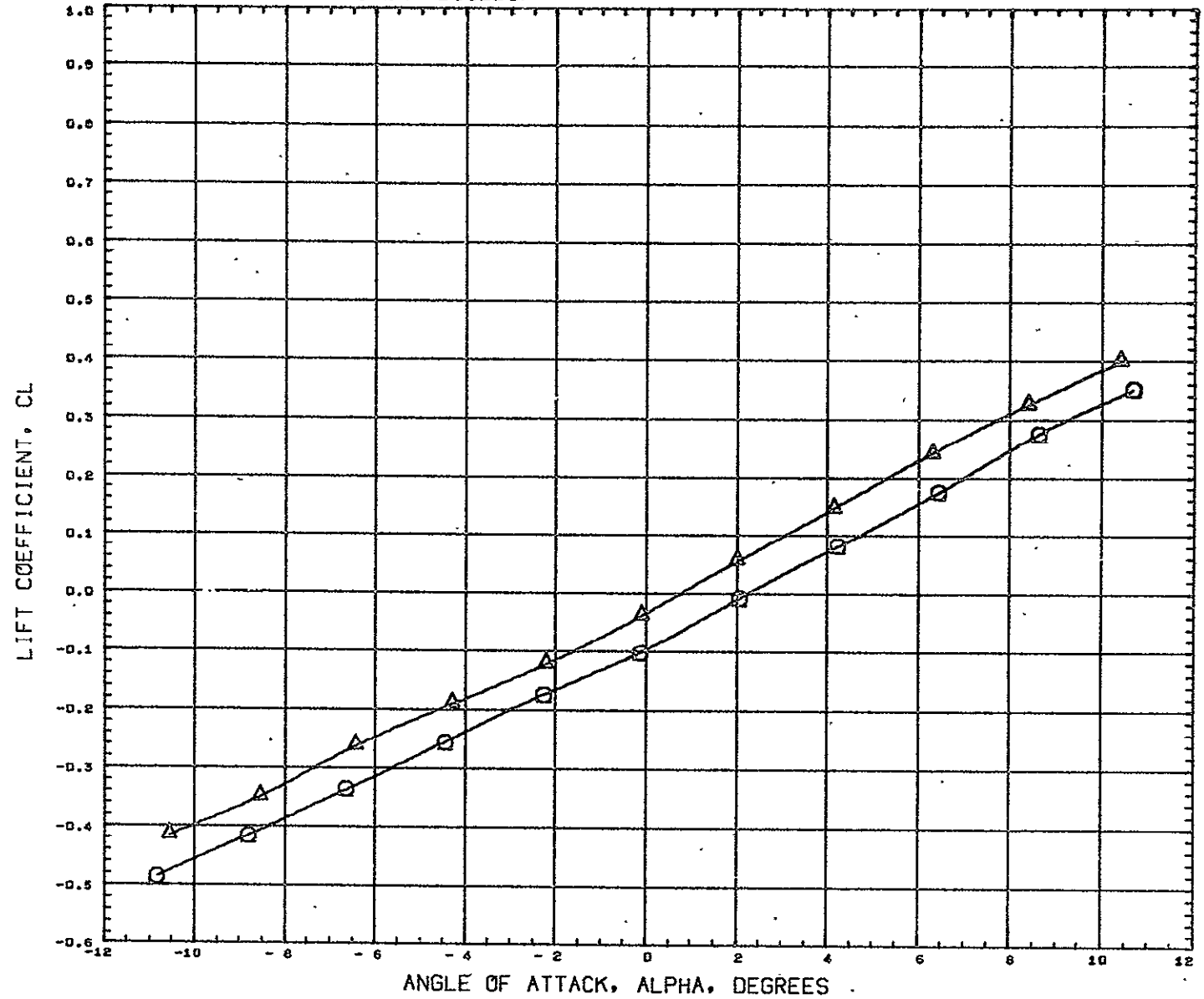
DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
○	0.000	MACH	0.904	ELVATR	0.000	DATASET	BETA	DATASET	BETA	REFS	6084.0040	SQ FT
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										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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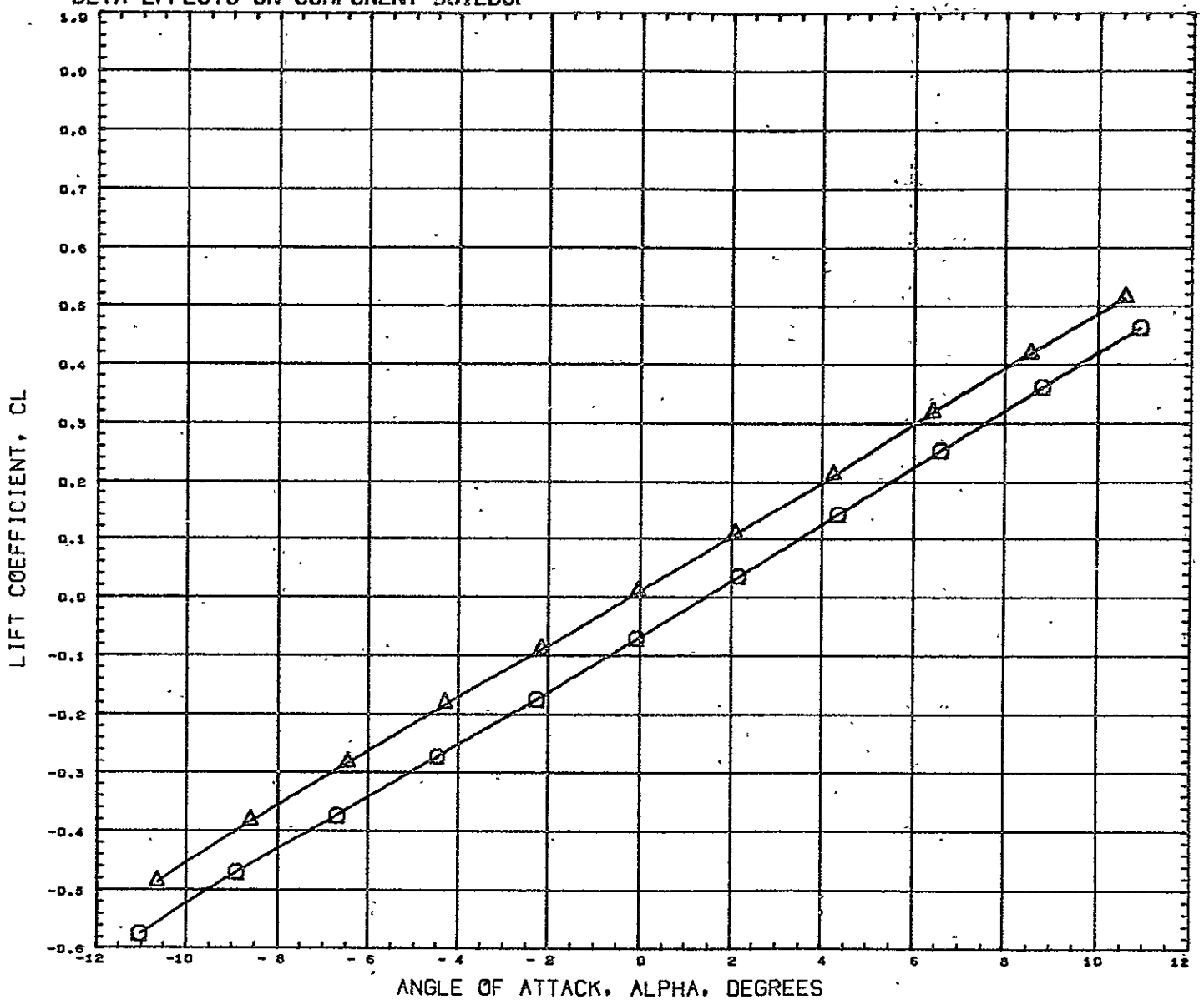
										SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP

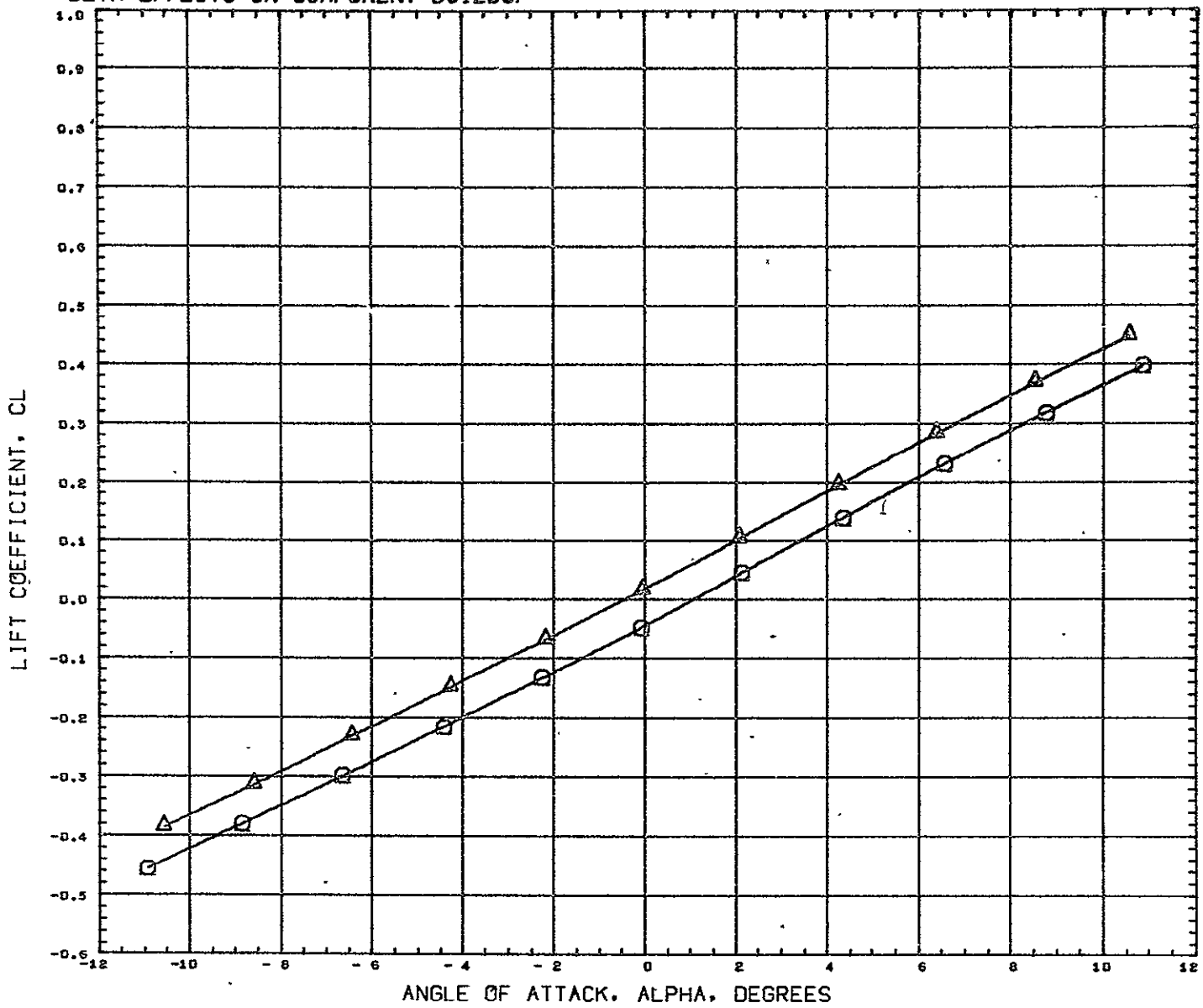


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.102	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

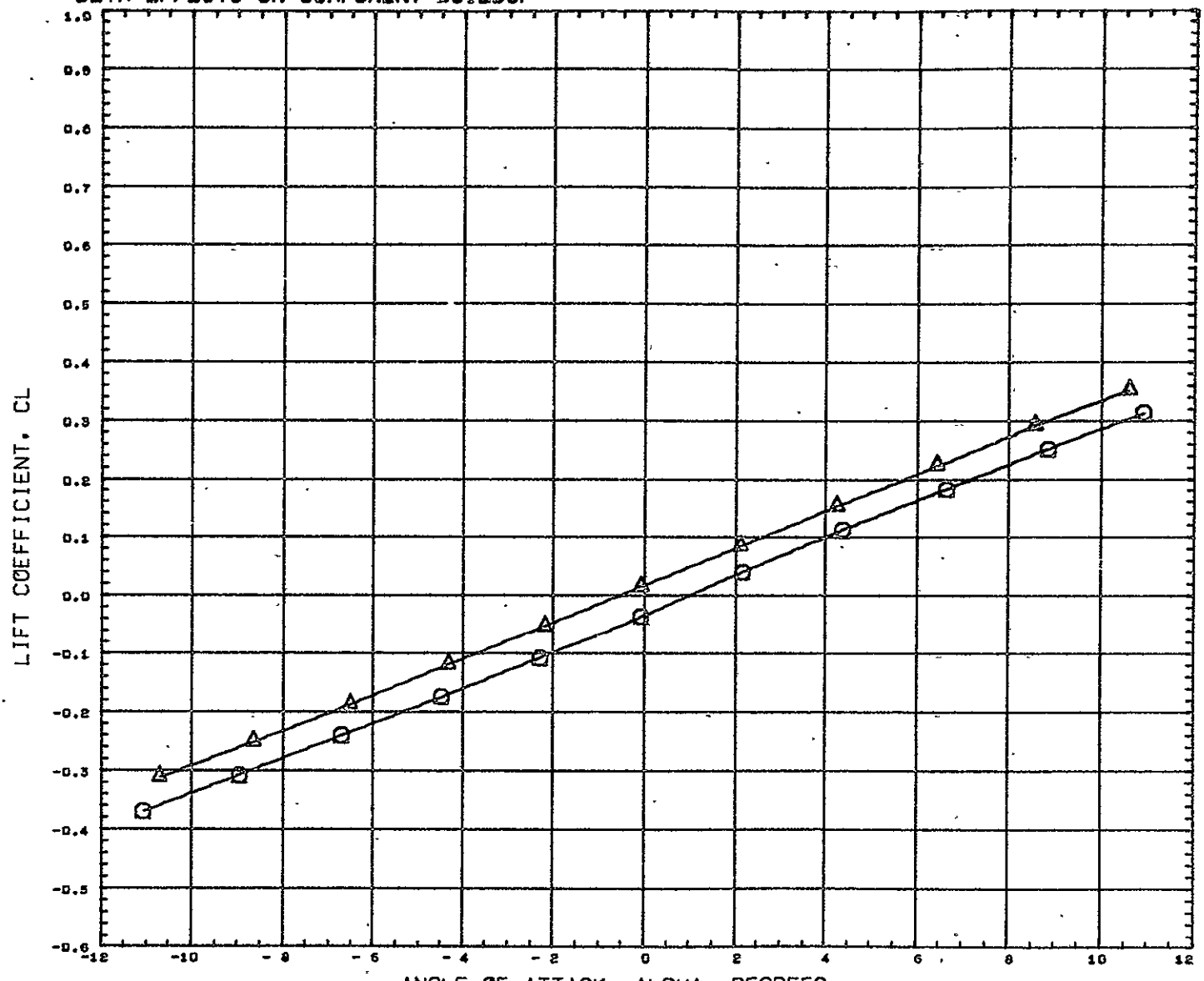


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.463	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2905A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

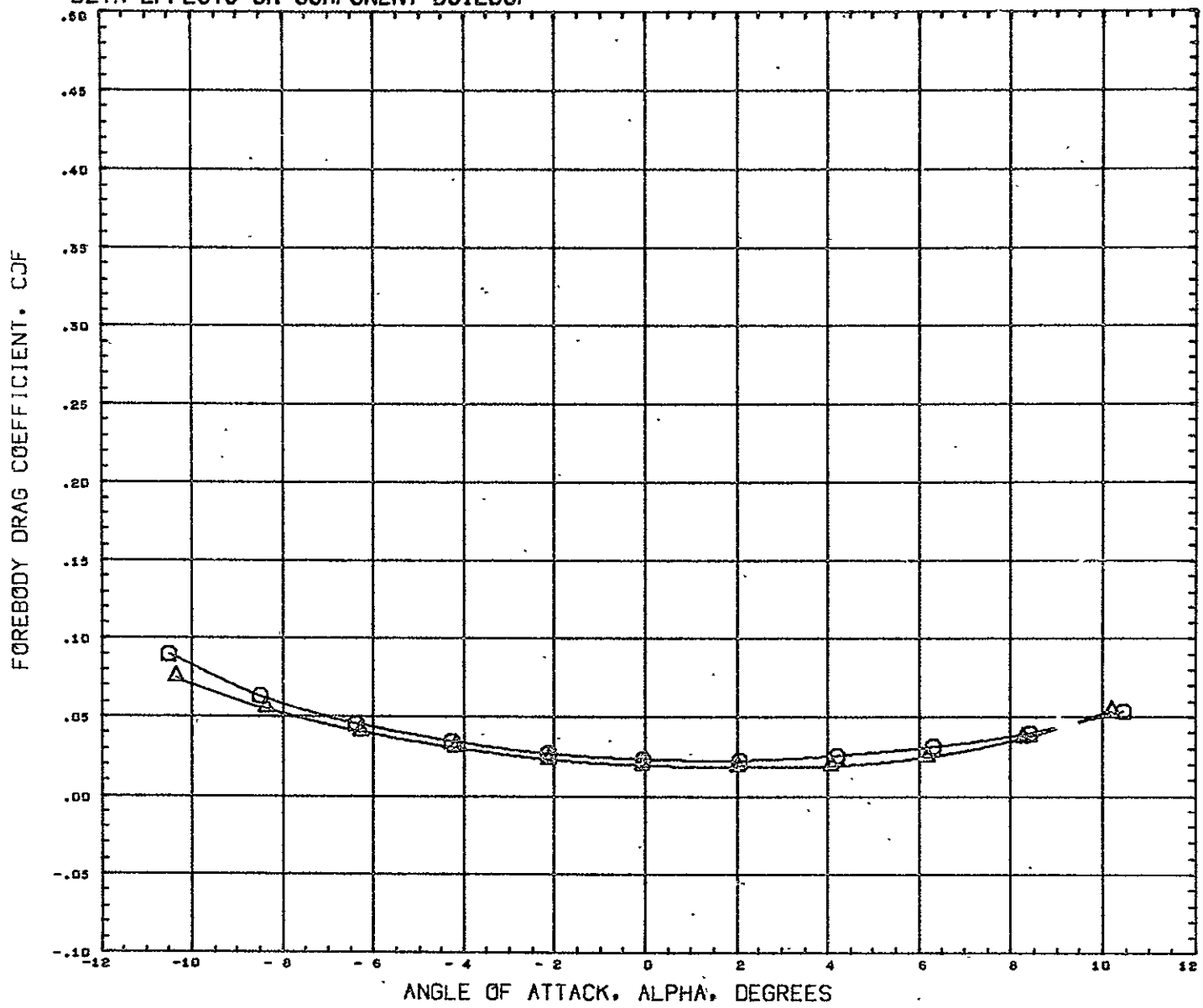


SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
○	0.000	MACH	.965	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
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										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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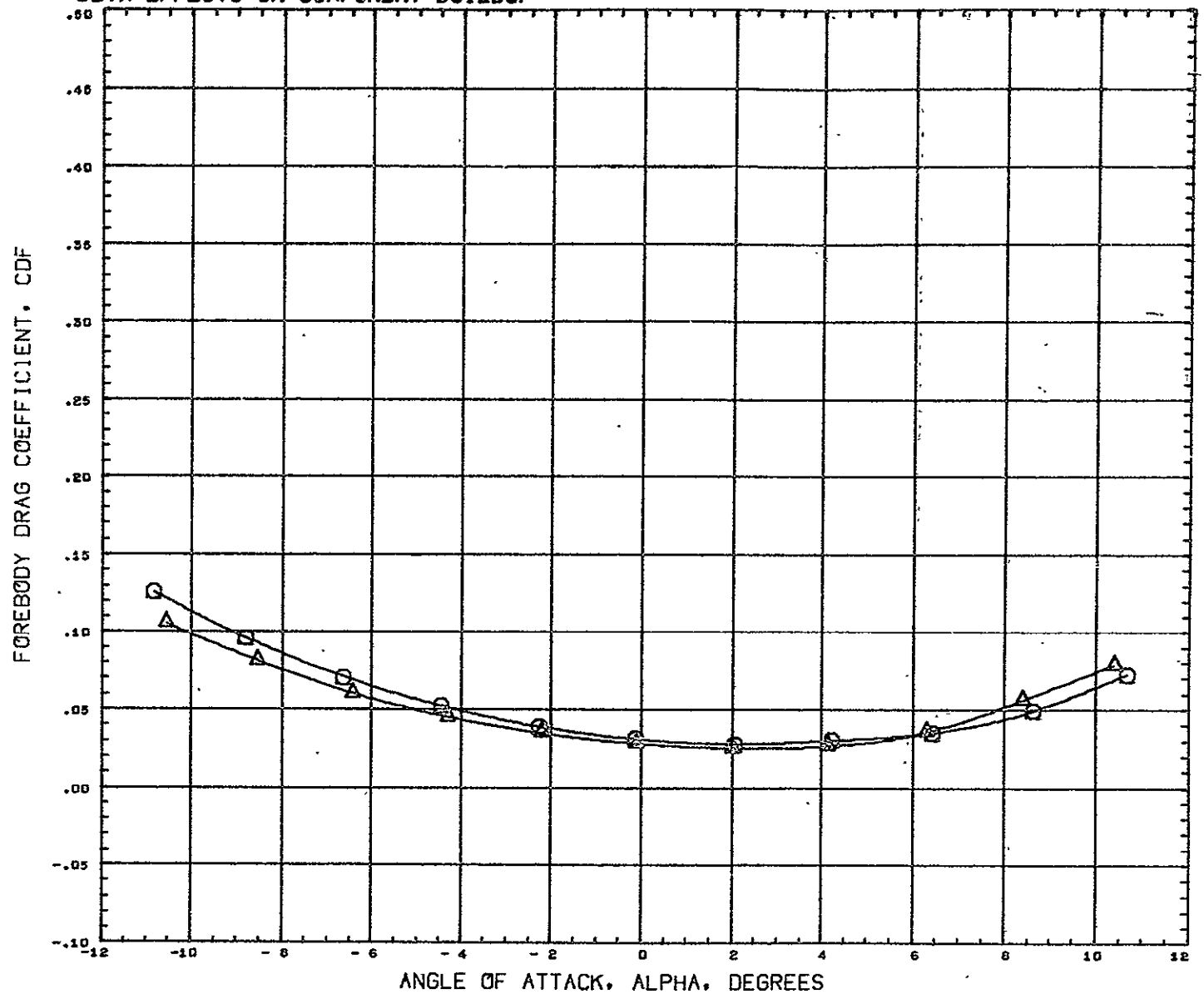
										SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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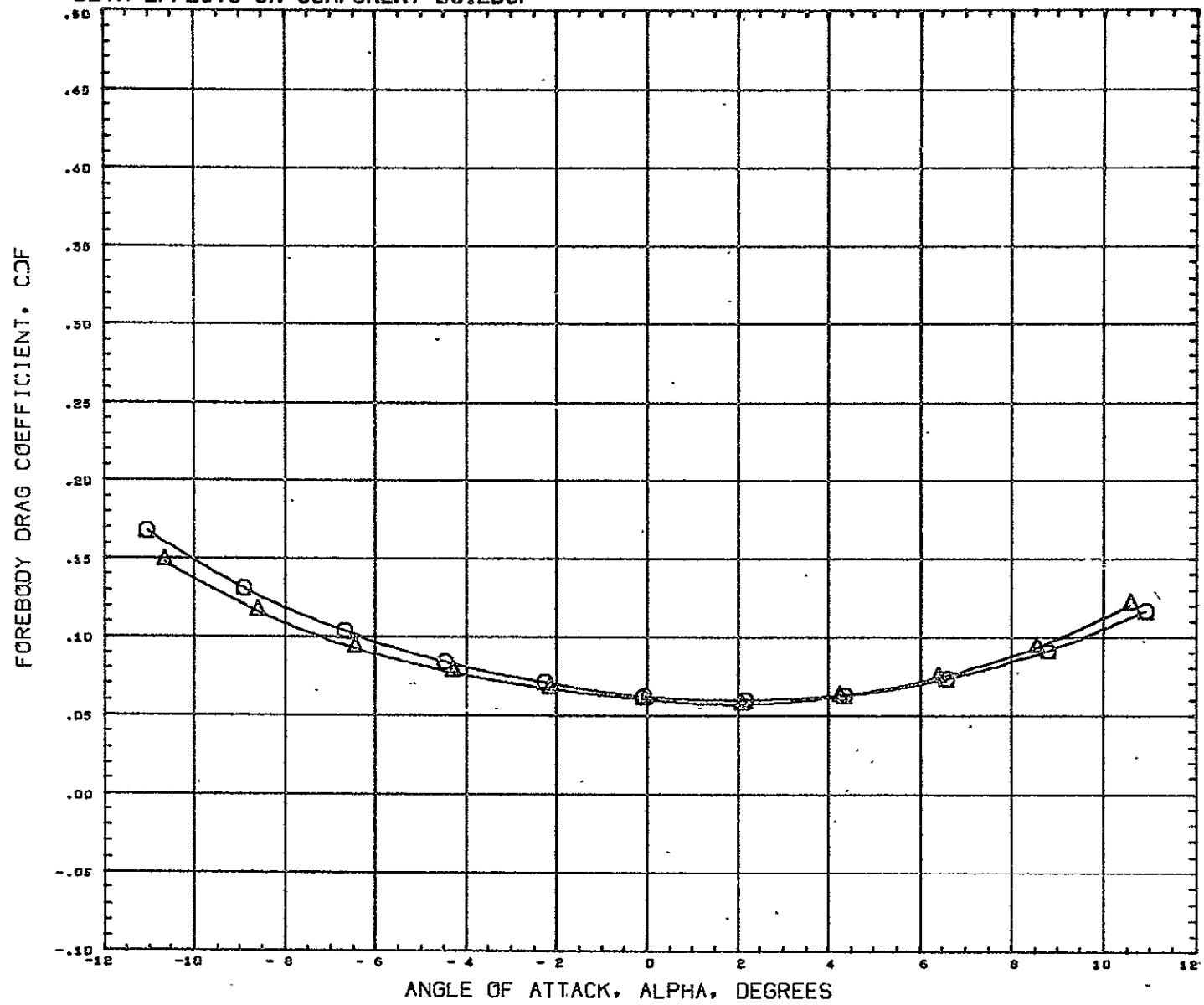
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRF	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
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										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
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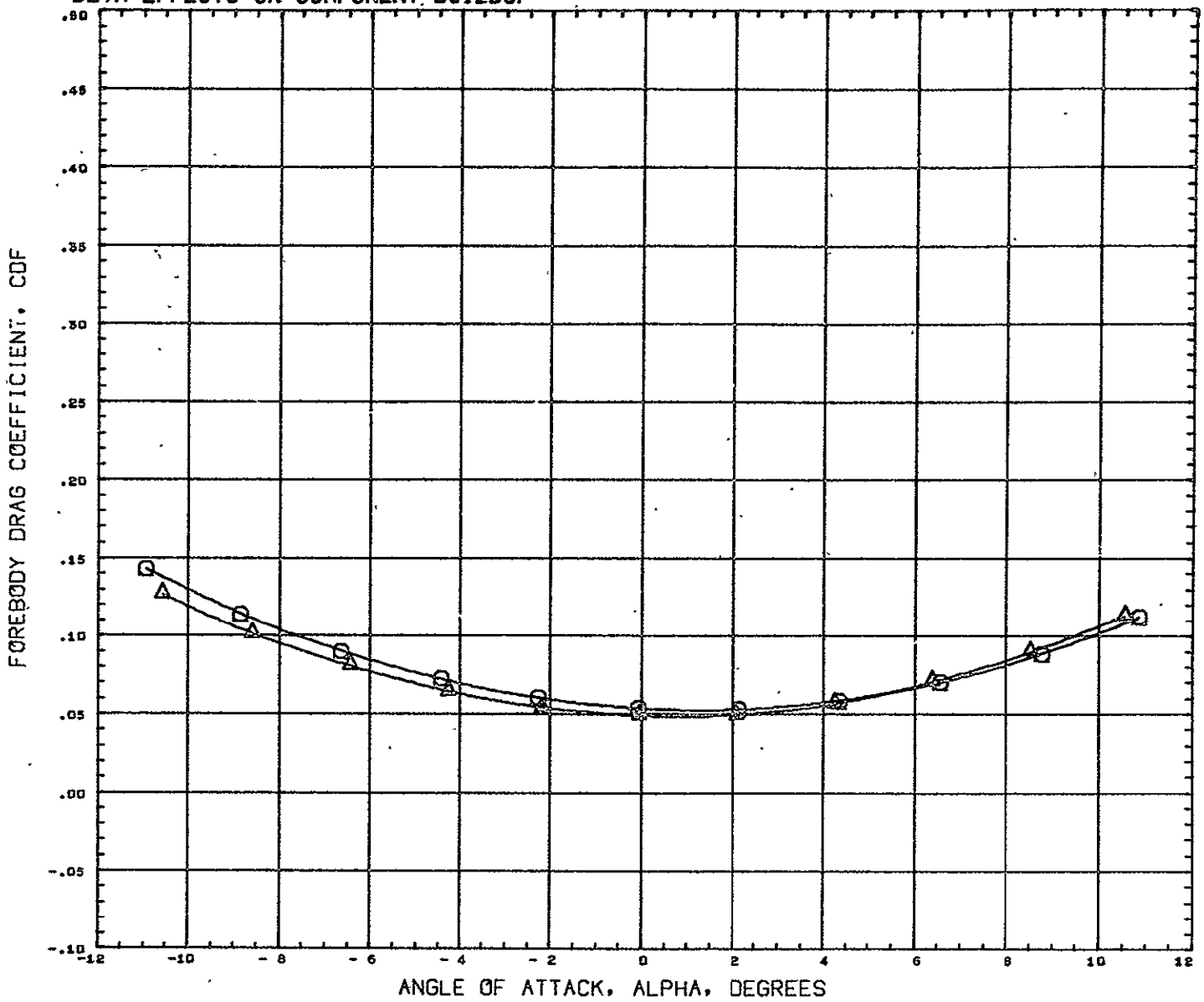
DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES			DATA SOURCE			
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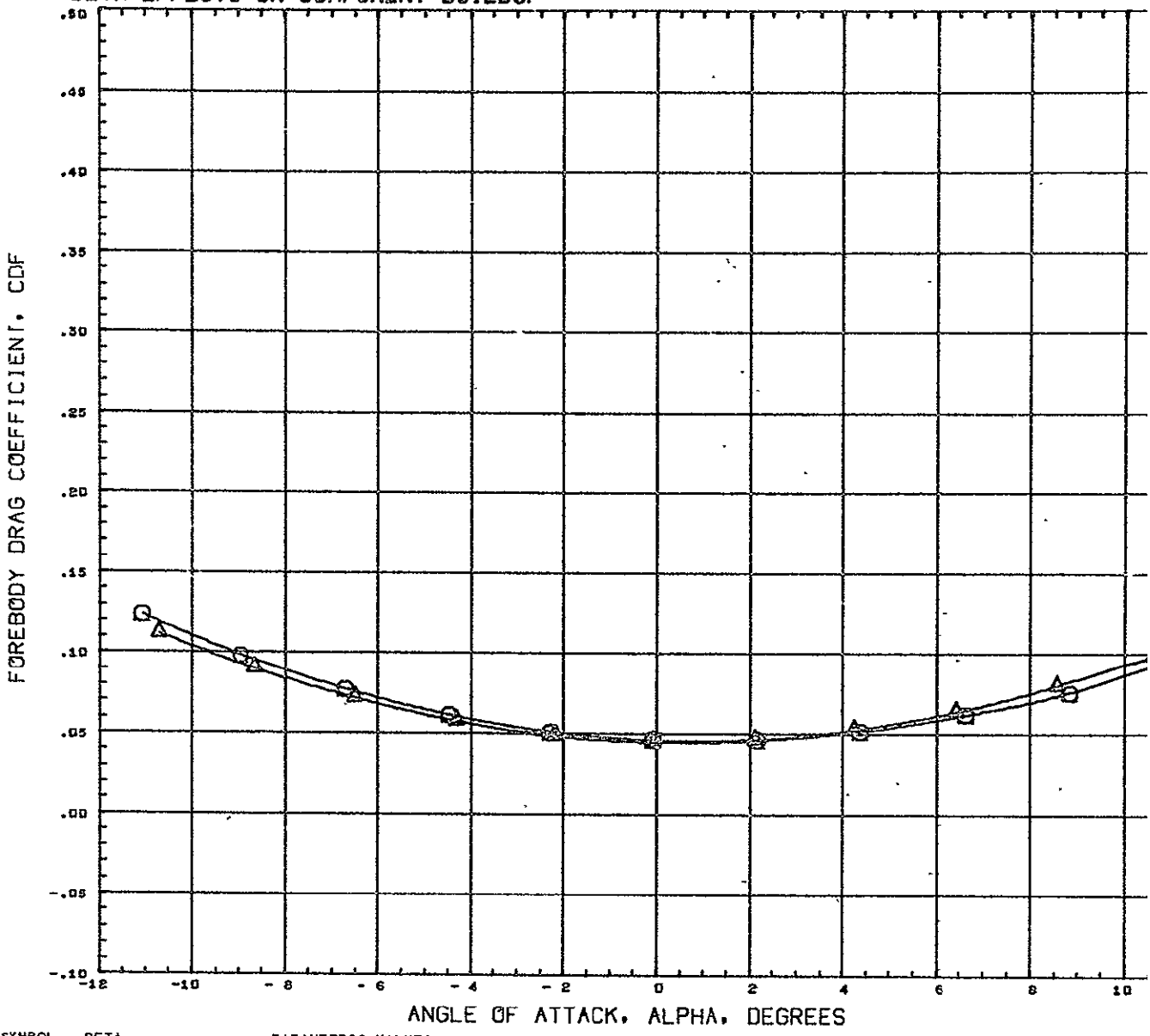
△	6.000	AILRON	0.000		V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMAT	
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△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000	REFL	821.2004
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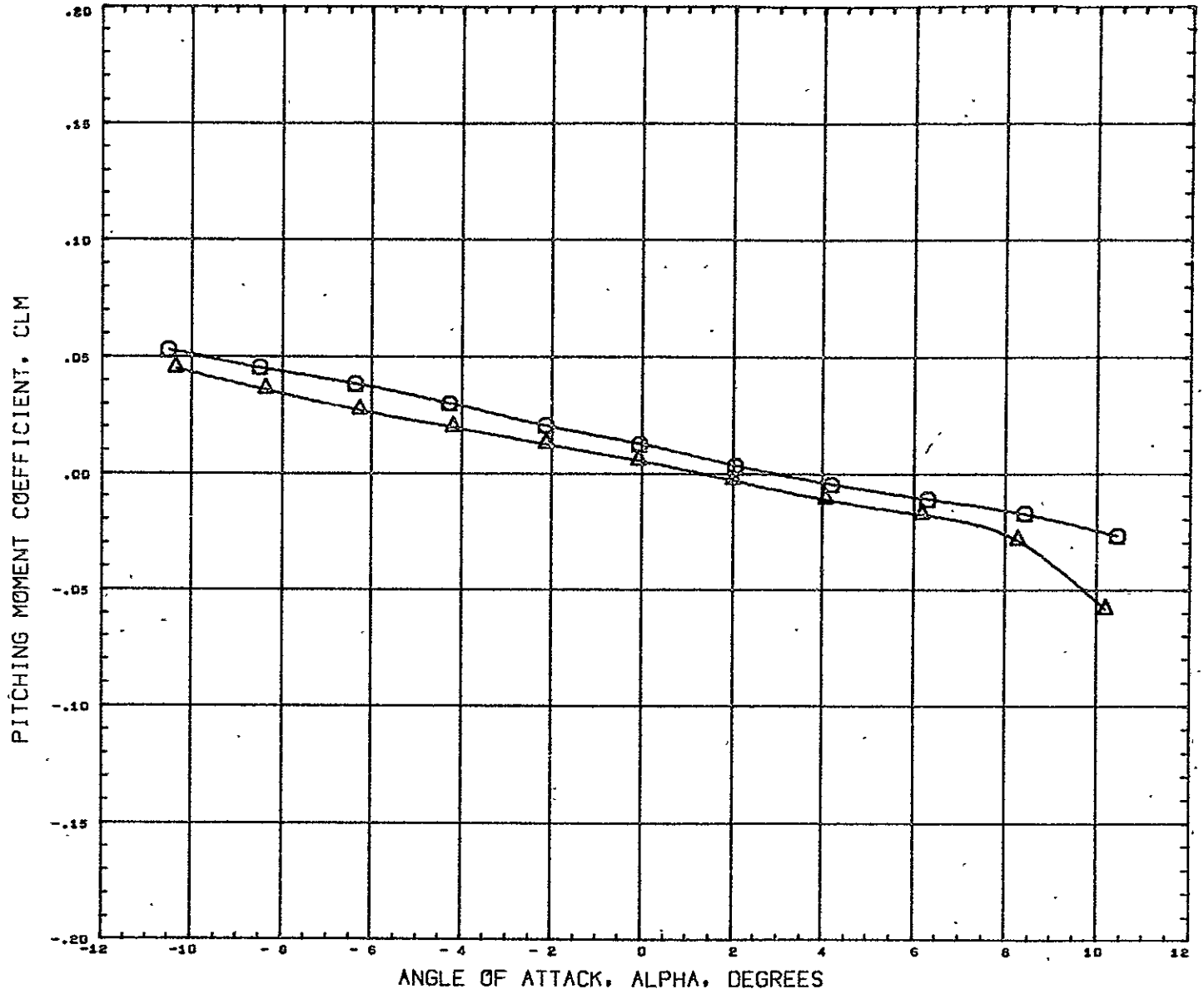
DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	0.000	MACH	0.605	ELVATR	0.000	DATASET	BETA	DATASET	BETA	REFS	6084.0040	SQ FT
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000	REFL	821.2004	INCHES
										REFB	1422.8040	INCHES
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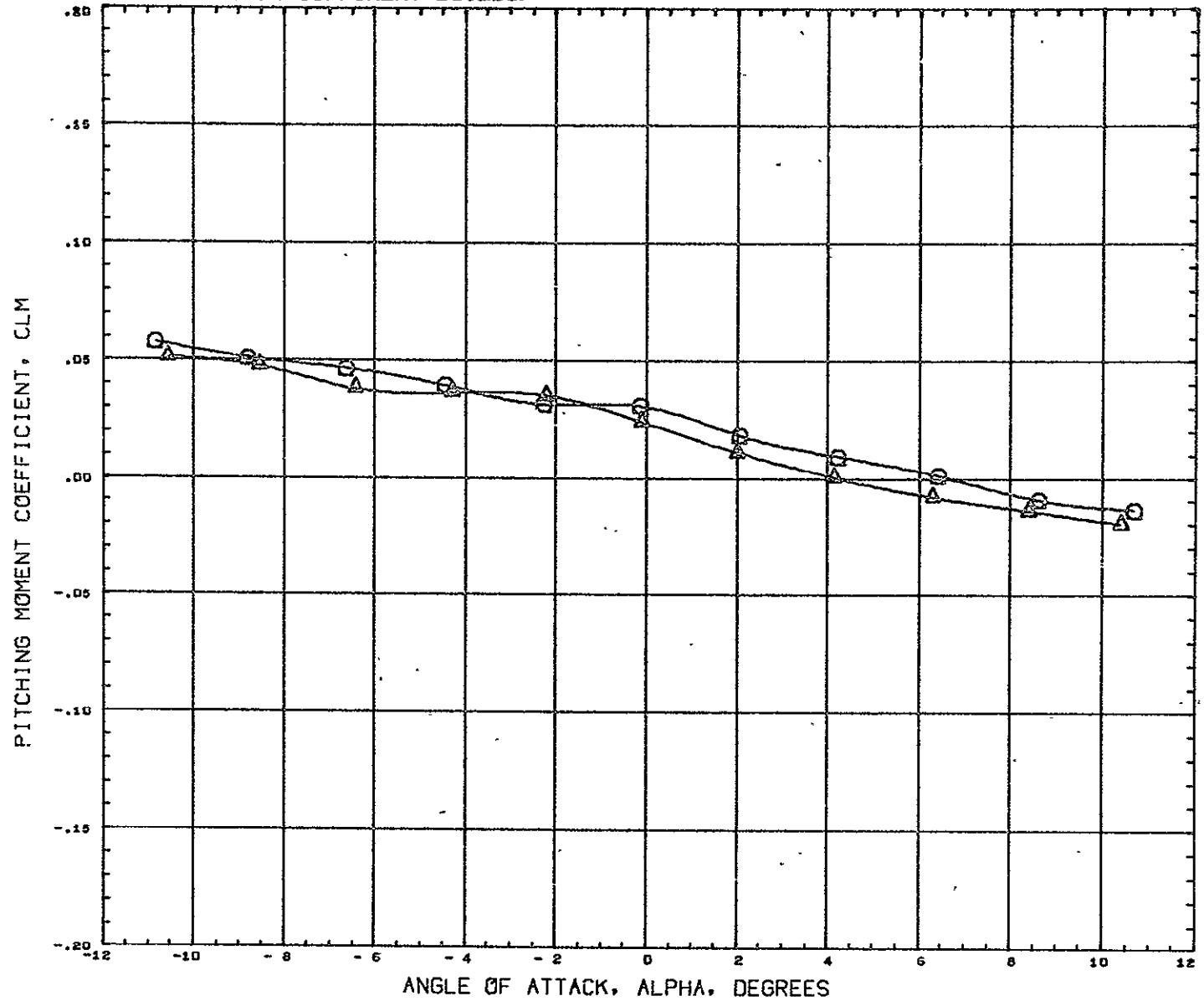
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP

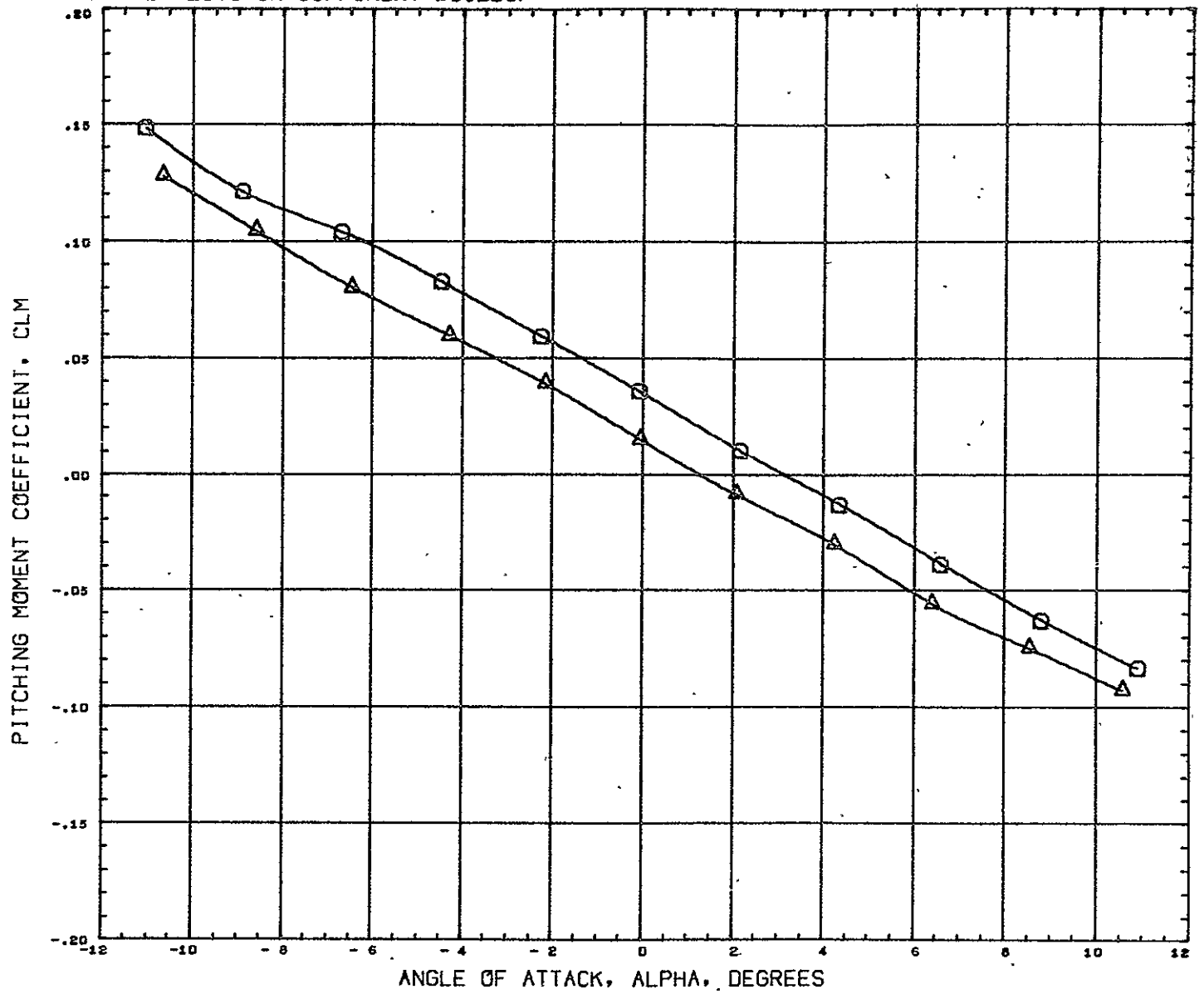


SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
○	0.000	MACH	0.904	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP

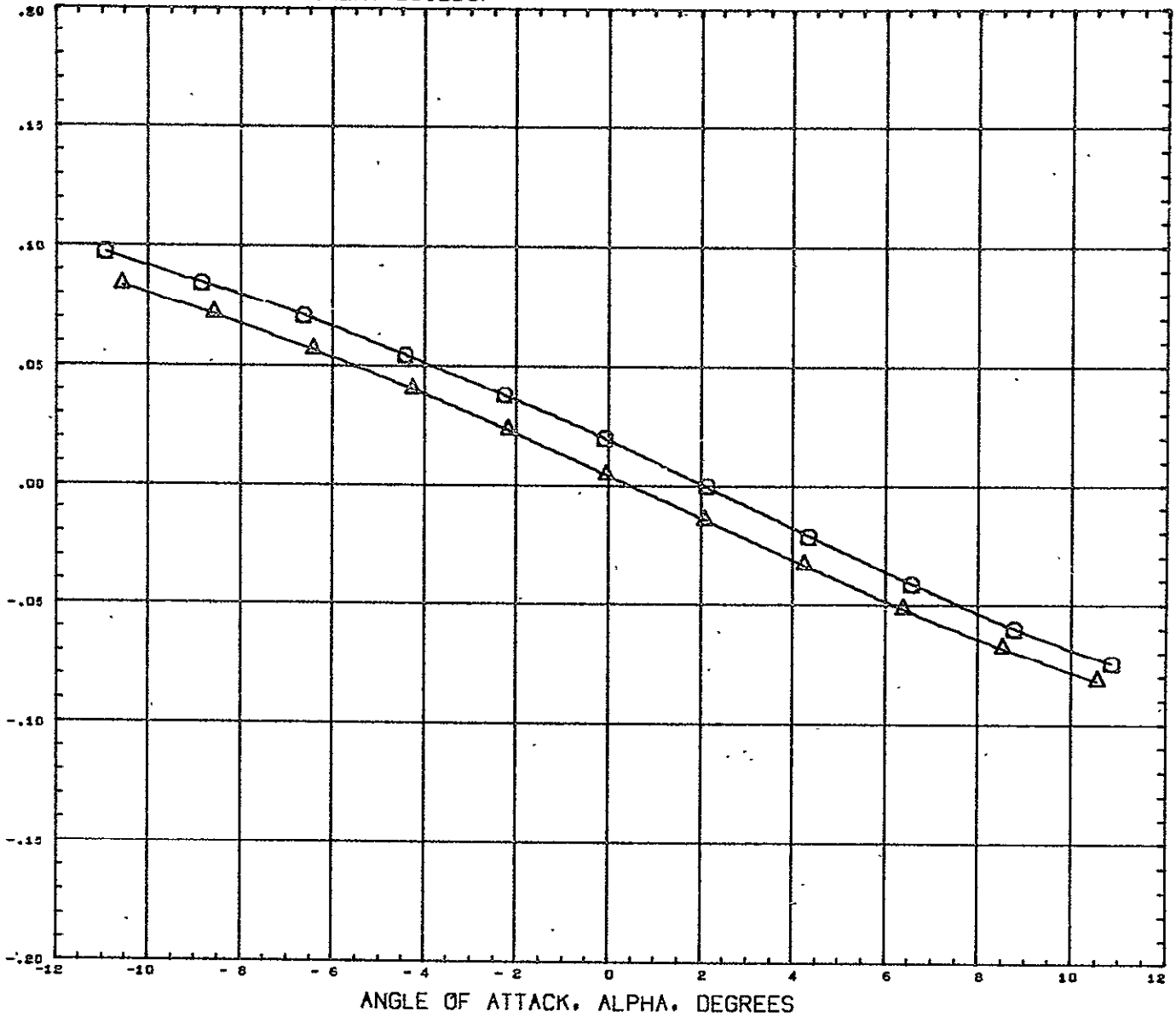


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.102	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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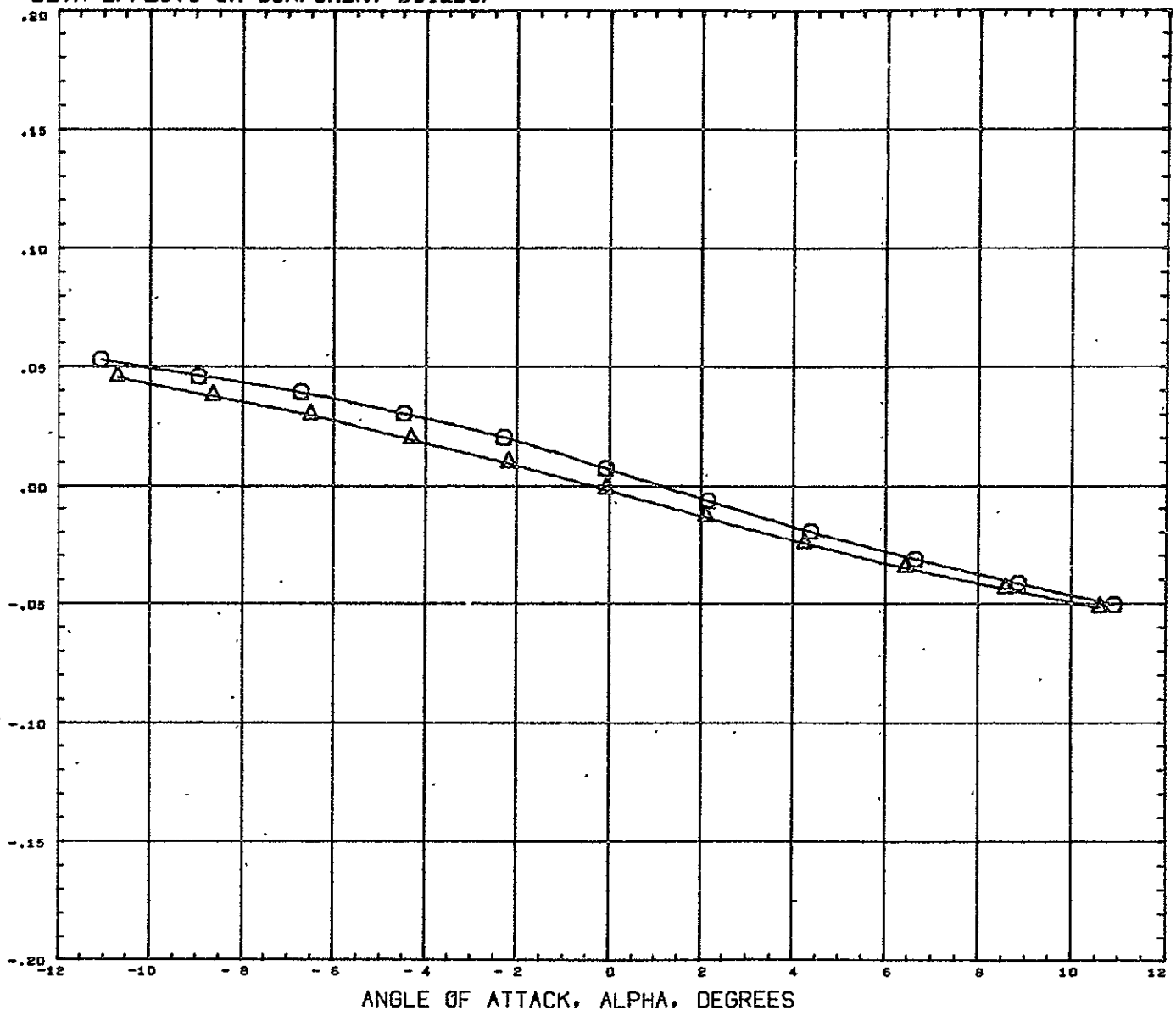
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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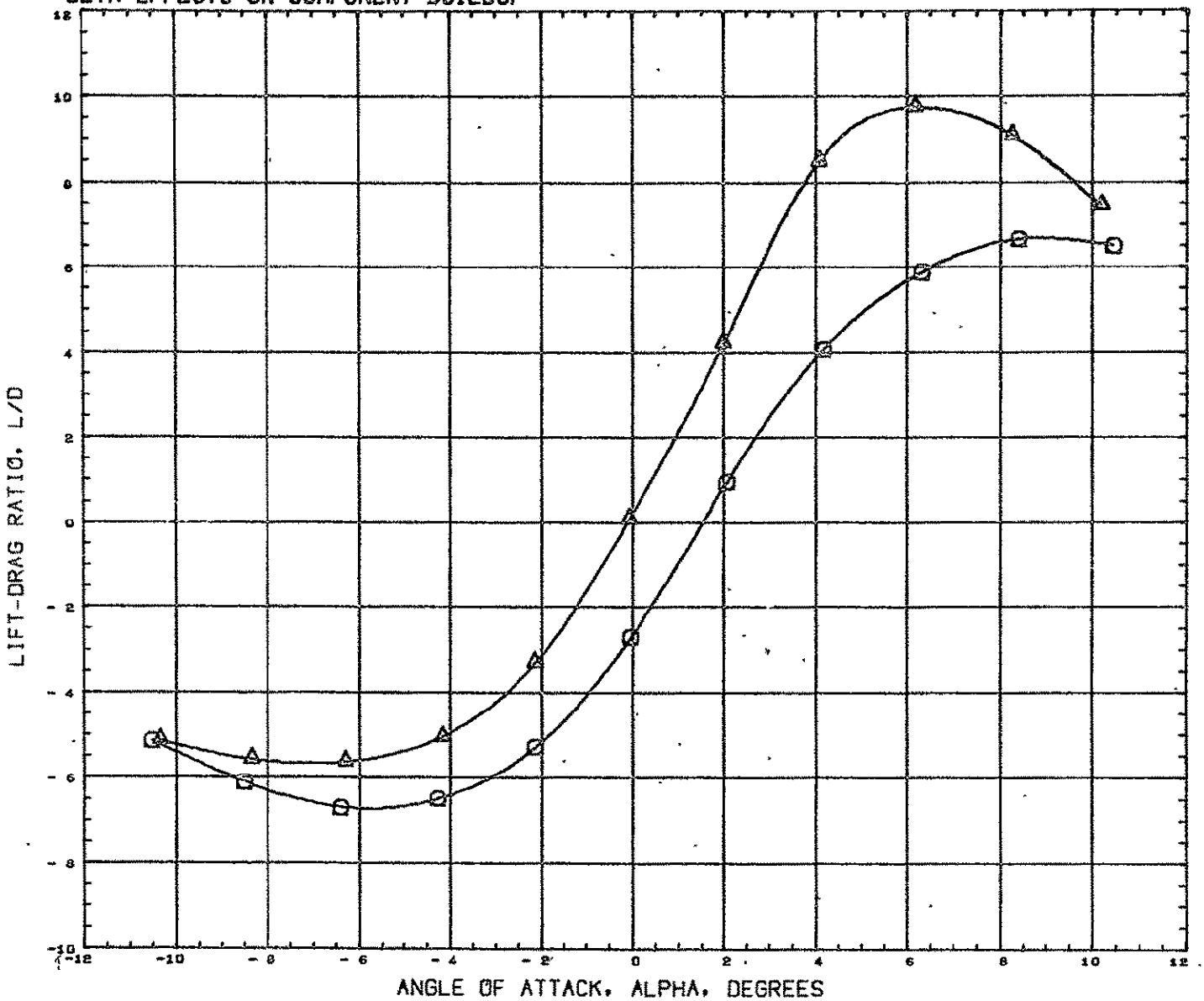
DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000	REFL	821.2004	INCHES
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
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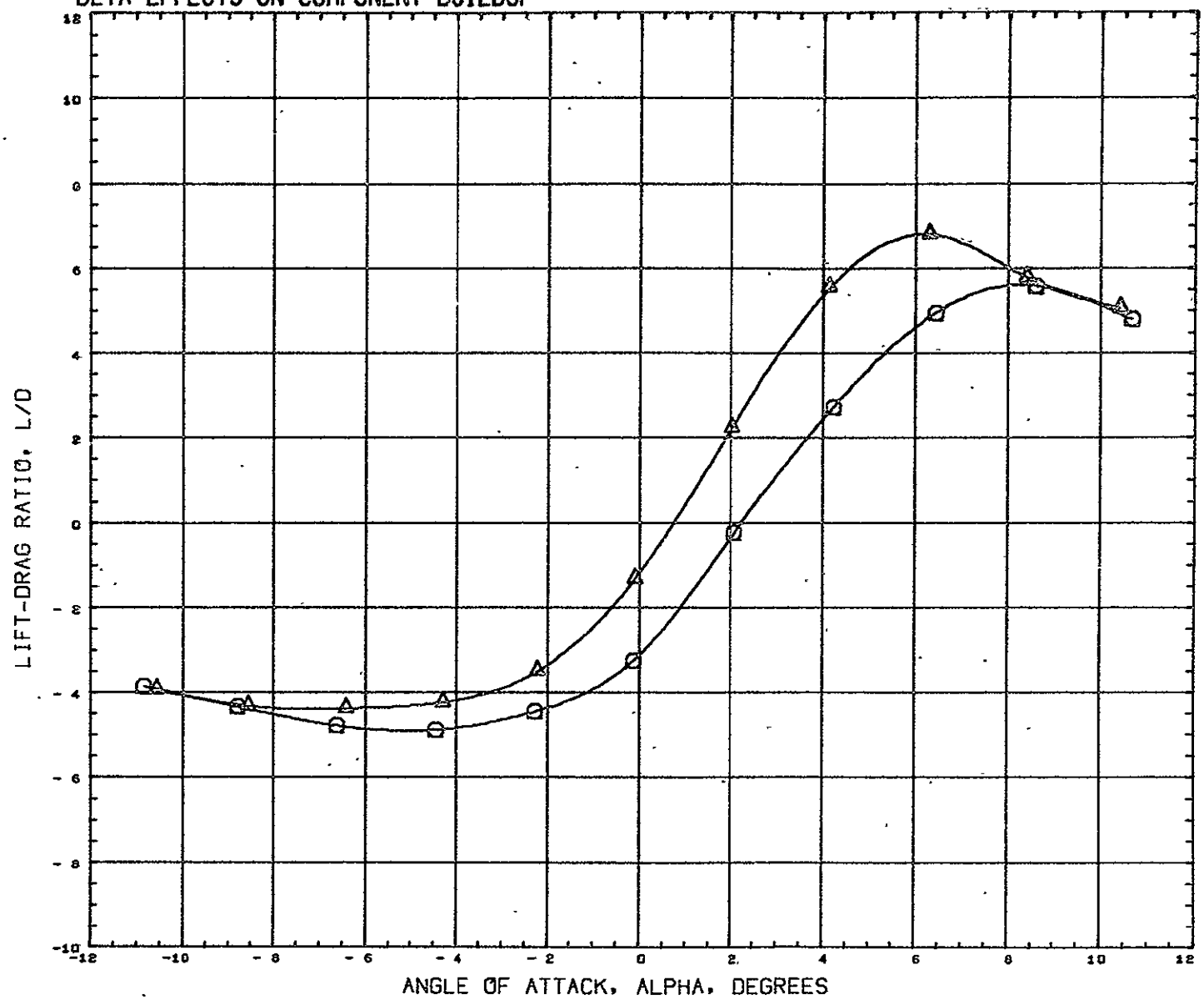
DATA HIST. CODE. *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000	REFL	821.2004	INCHES
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
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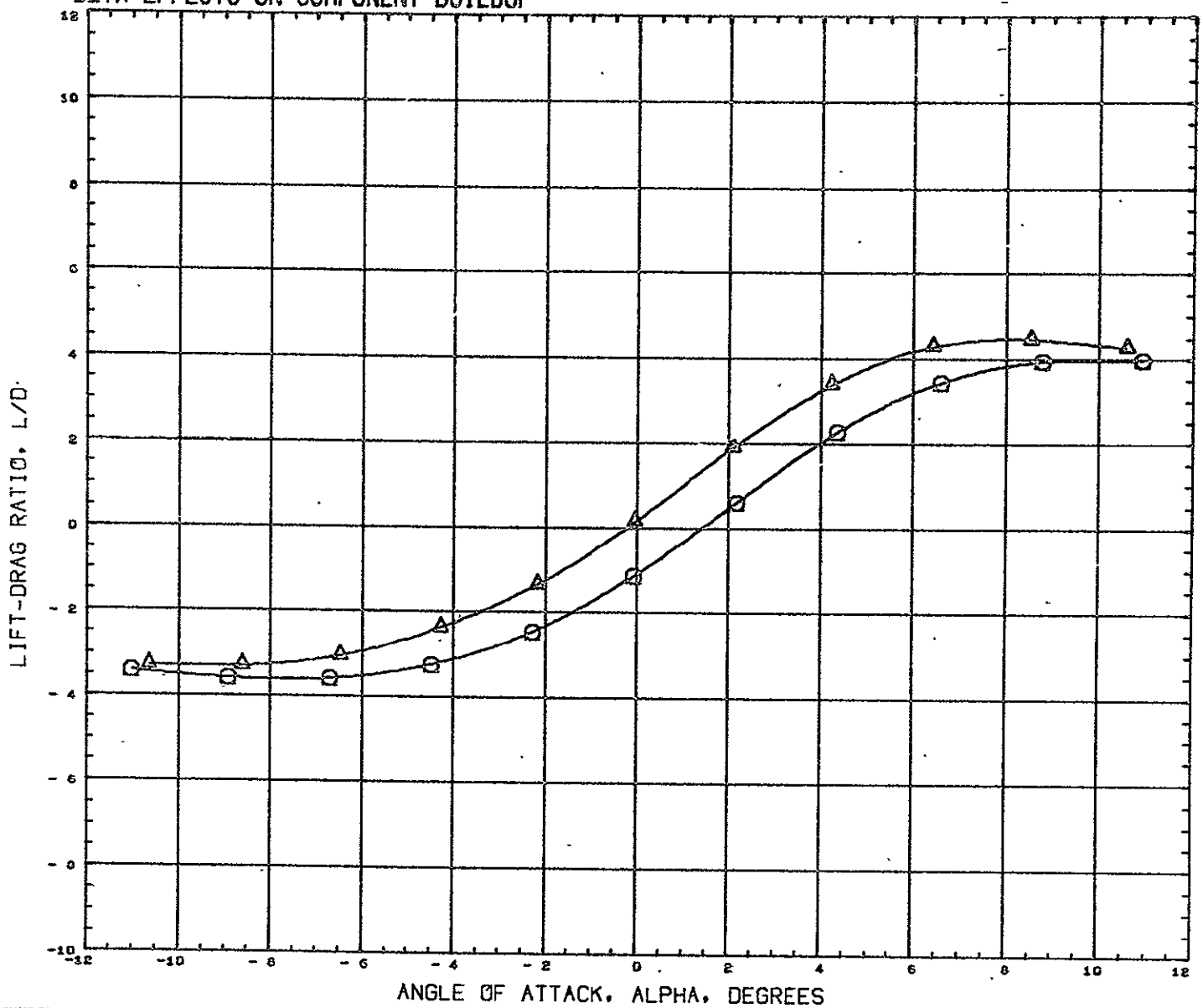
DATA HIST. CODE *E*E-

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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										REFB	1422.8040	INCHES
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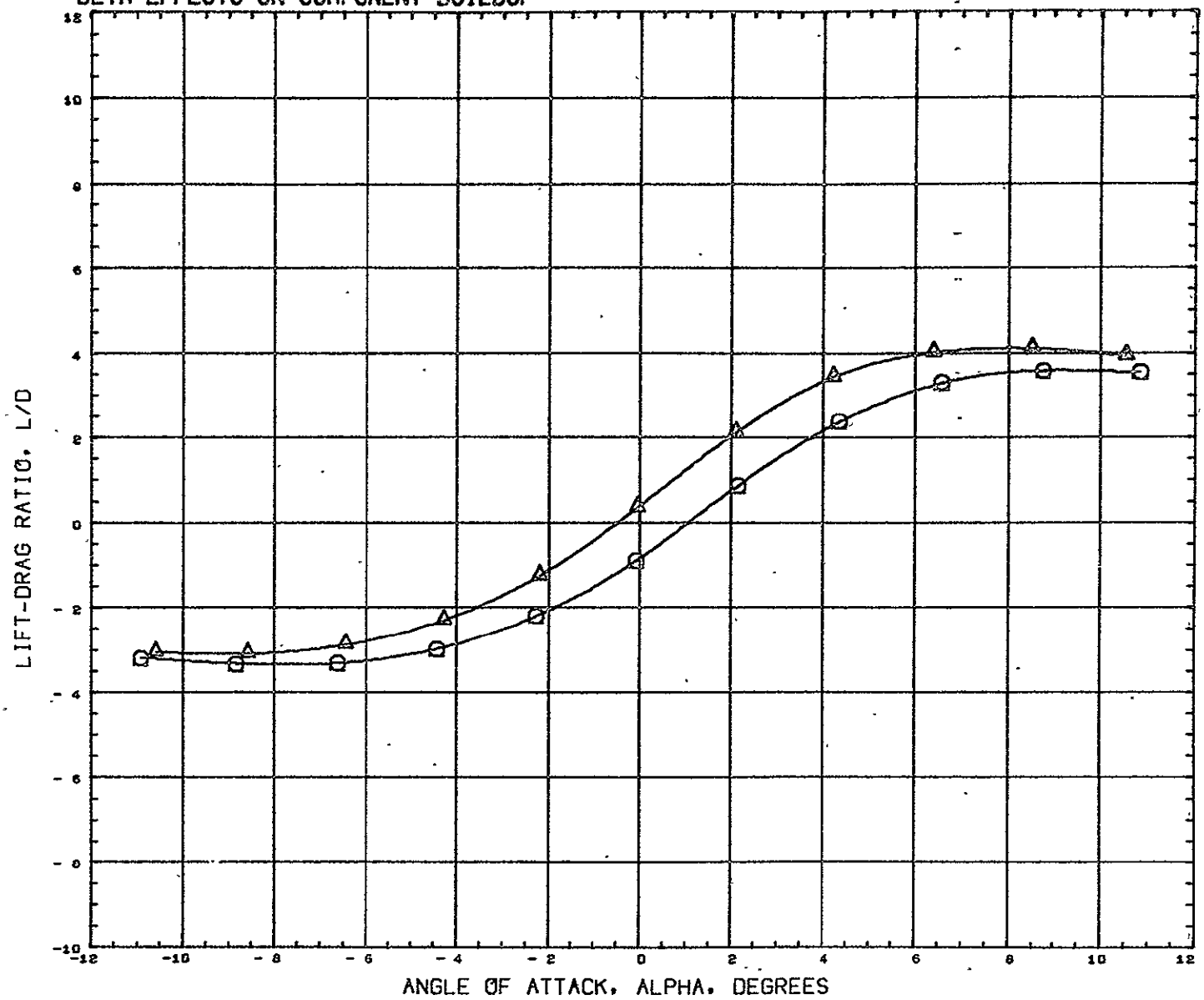
DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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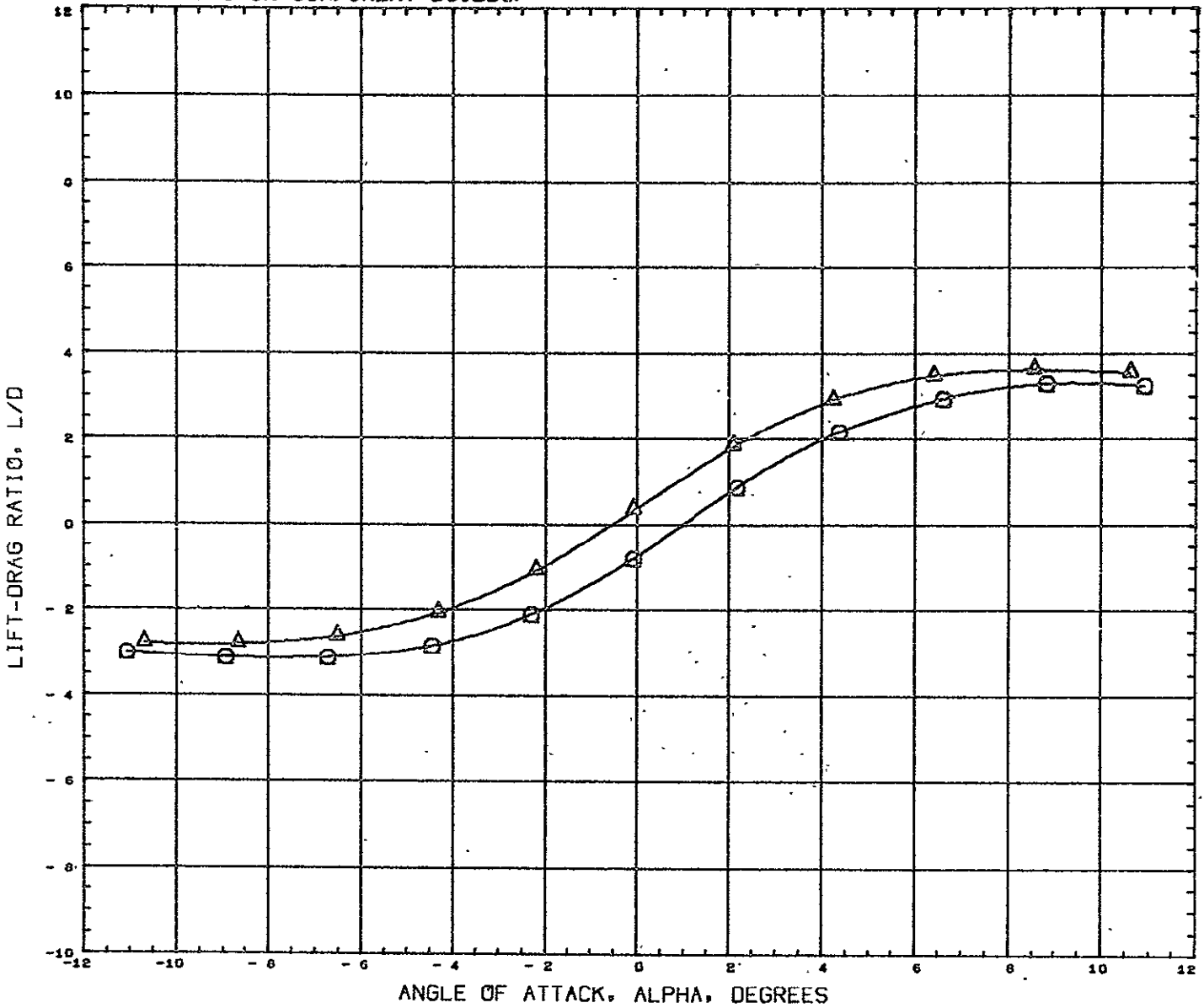
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000	REFL	821.2004	INCHES
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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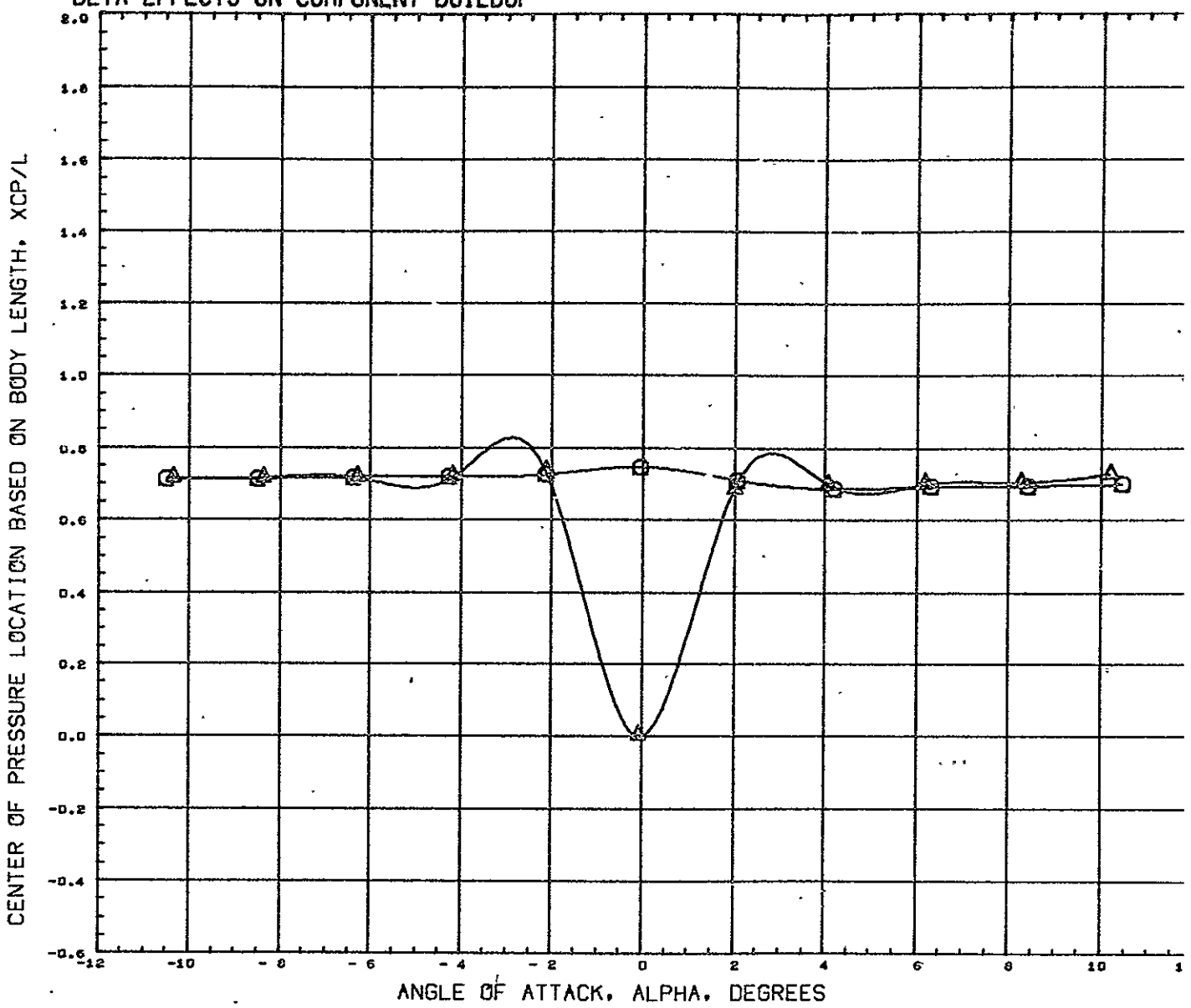
										SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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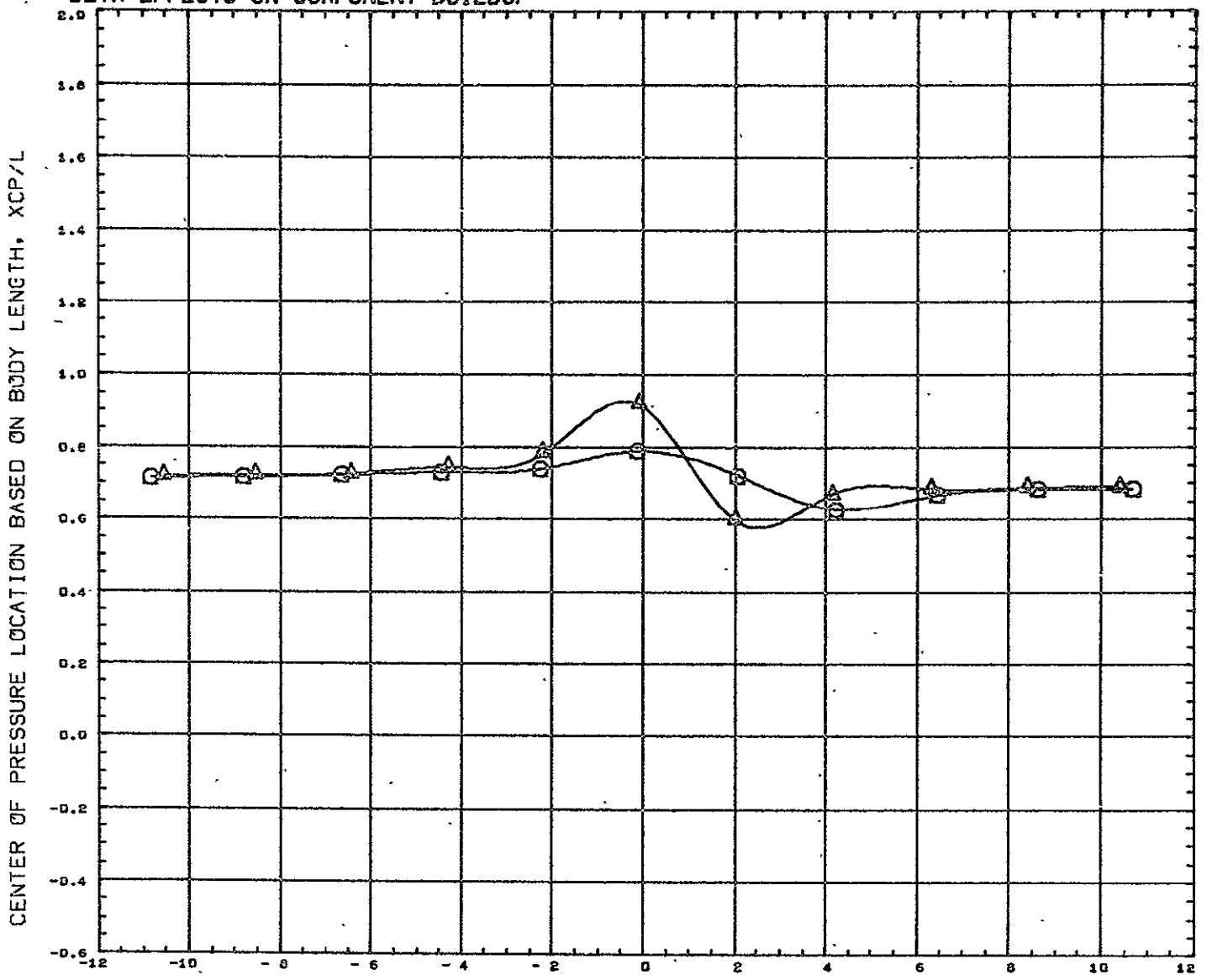
DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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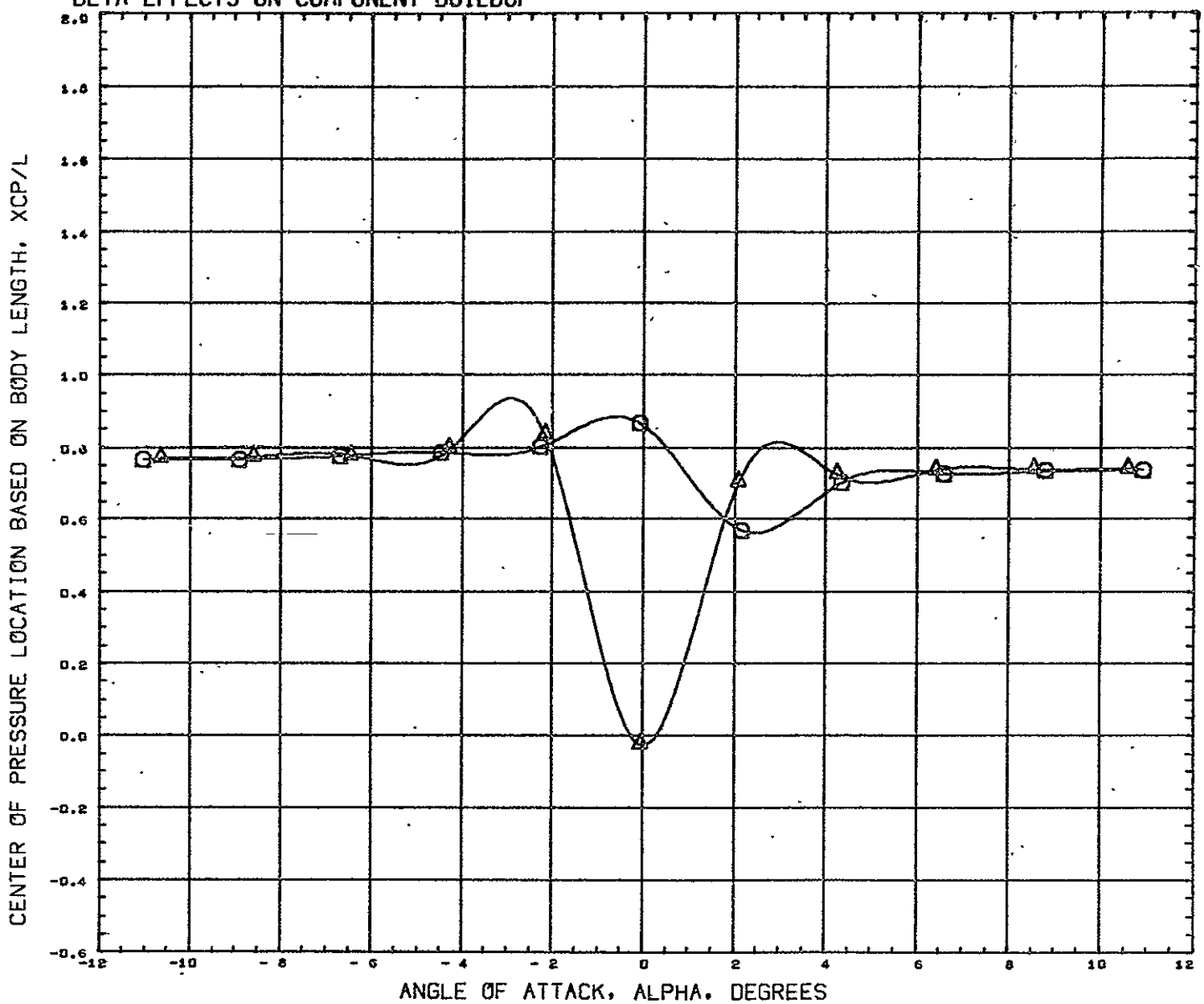
	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
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△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
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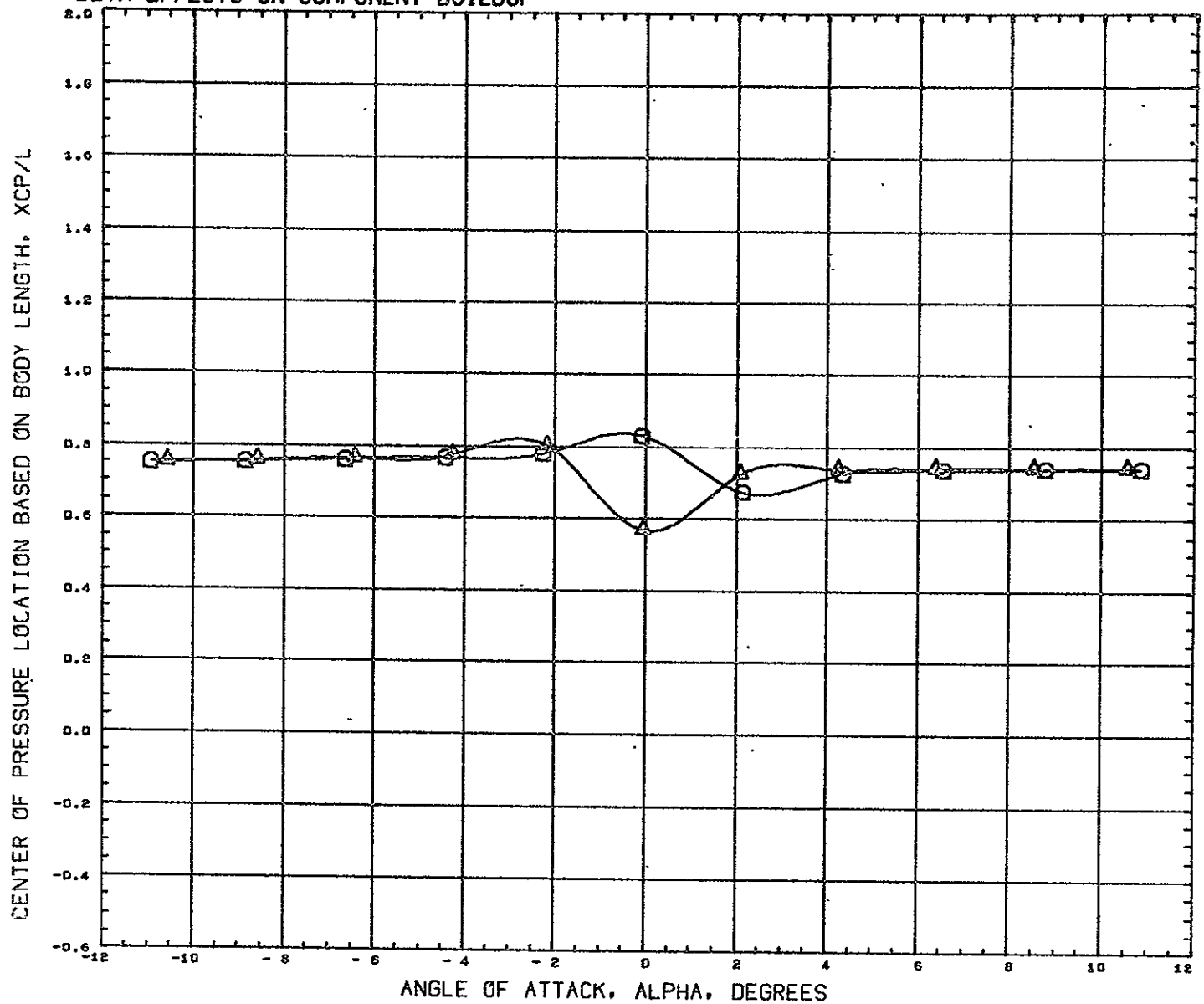
BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
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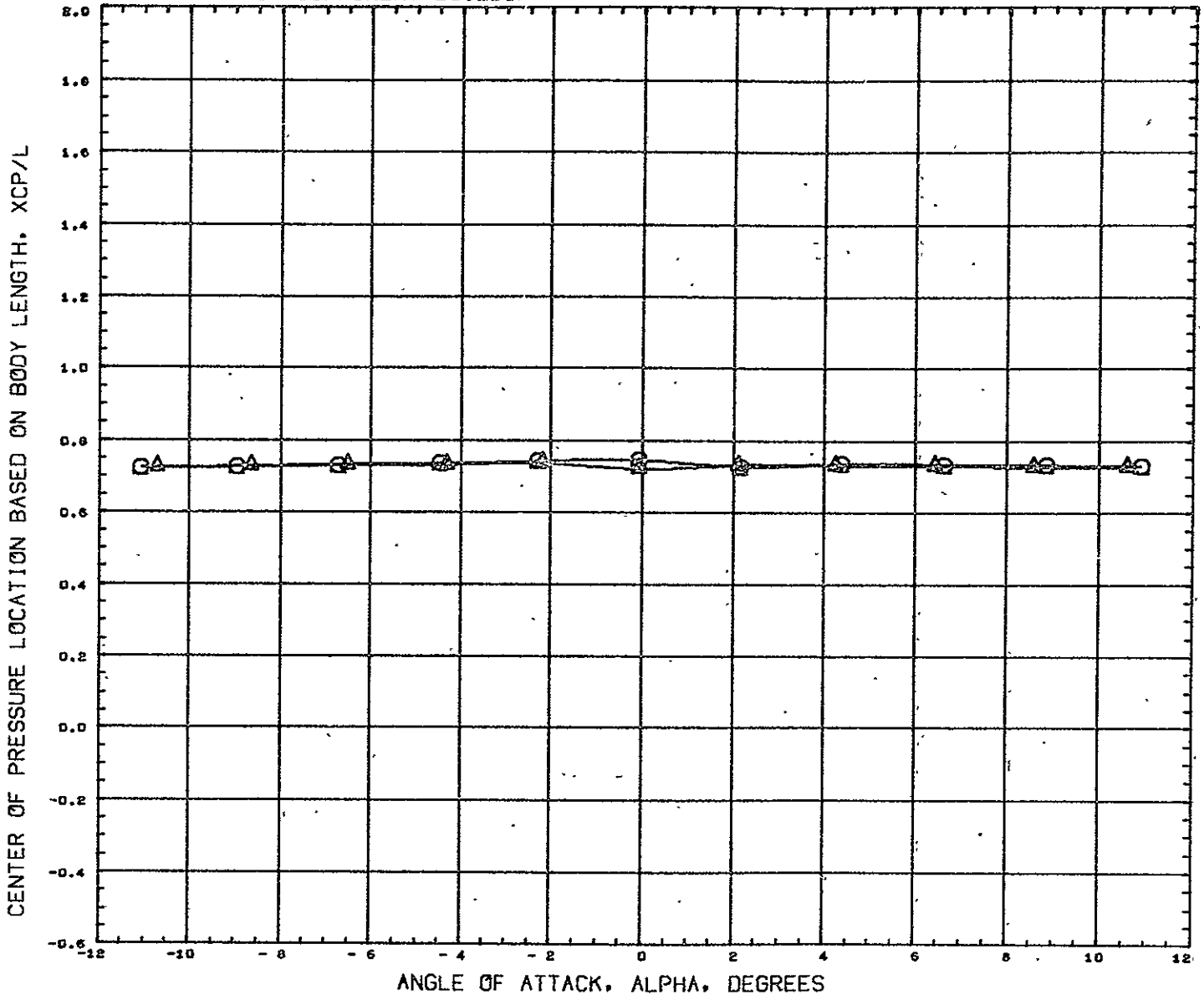
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

REFERENCE INFORMATION		
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REFL	821.2094	INCHES
REFB	1422.8040	INCHES
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YMRP	0.0000	INCHES
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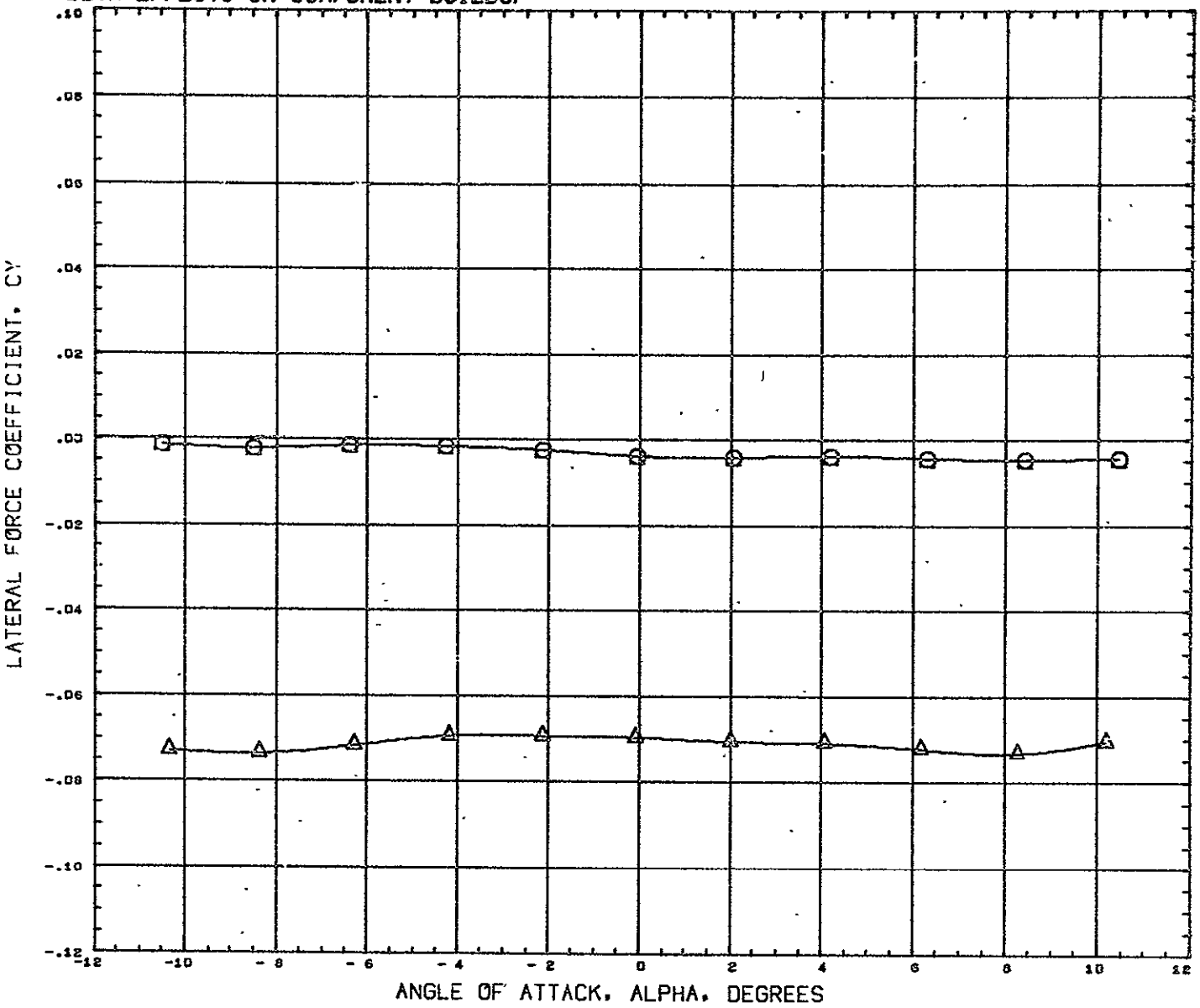
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	0.605	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
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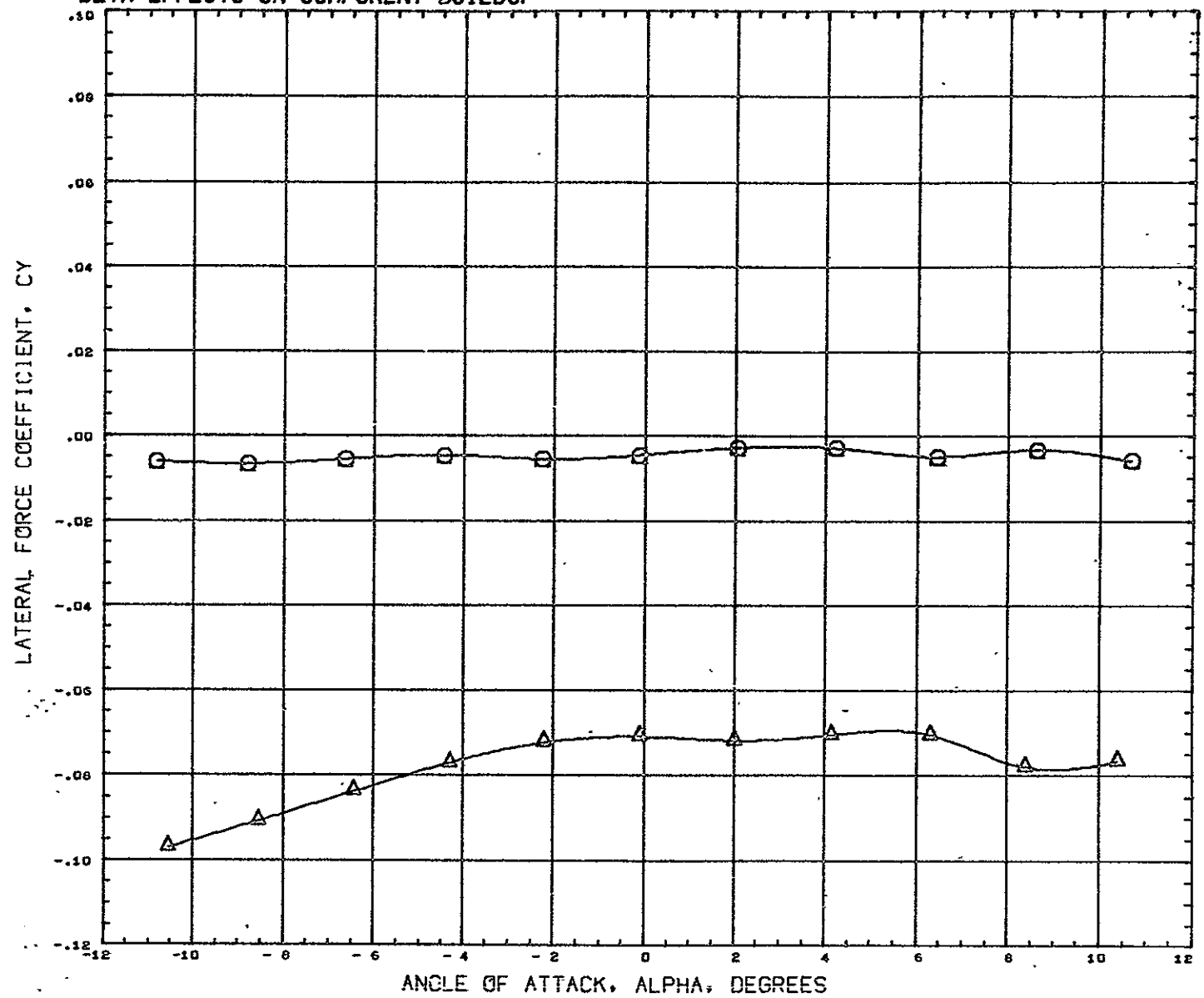
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	0.904	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
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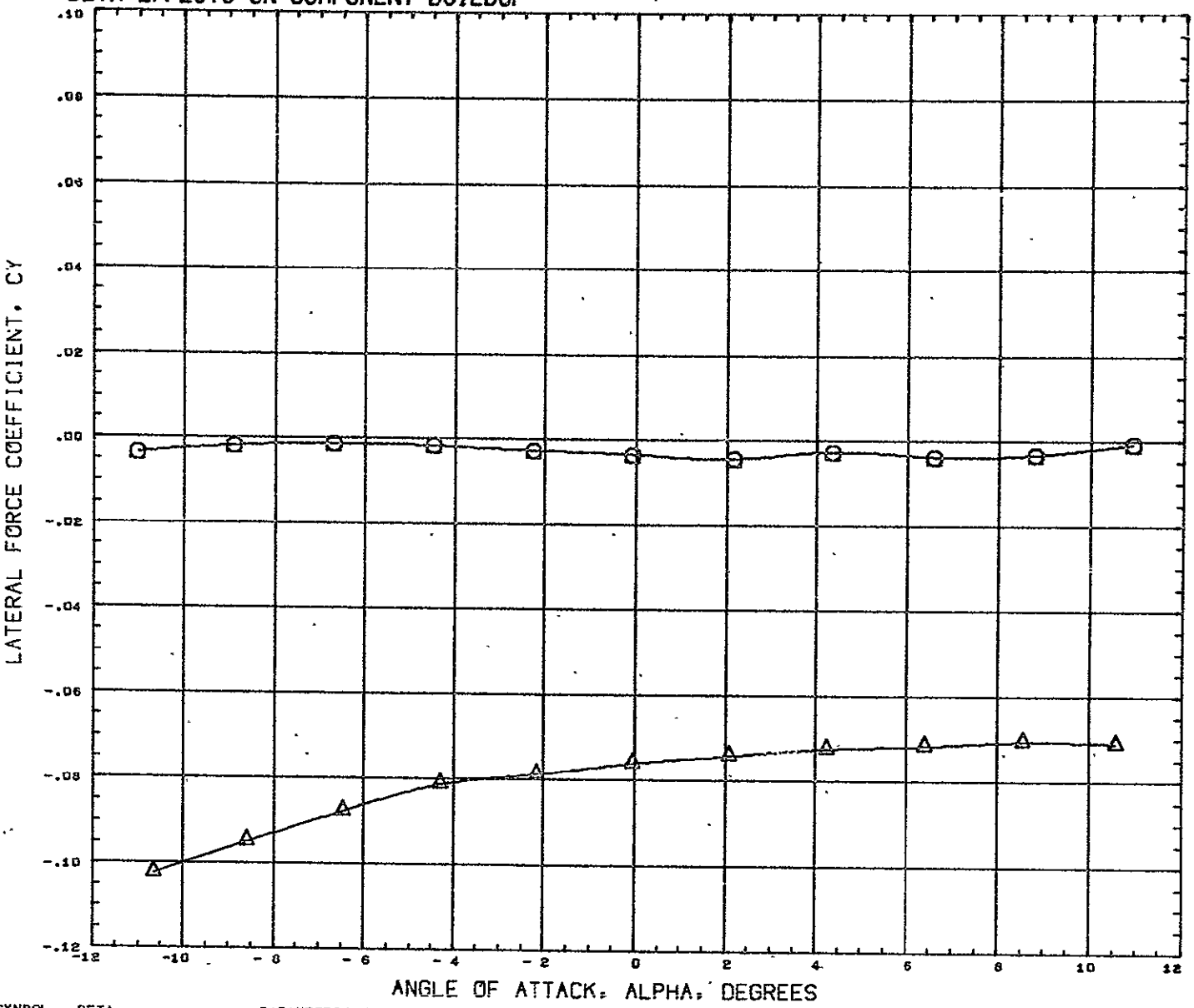
BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
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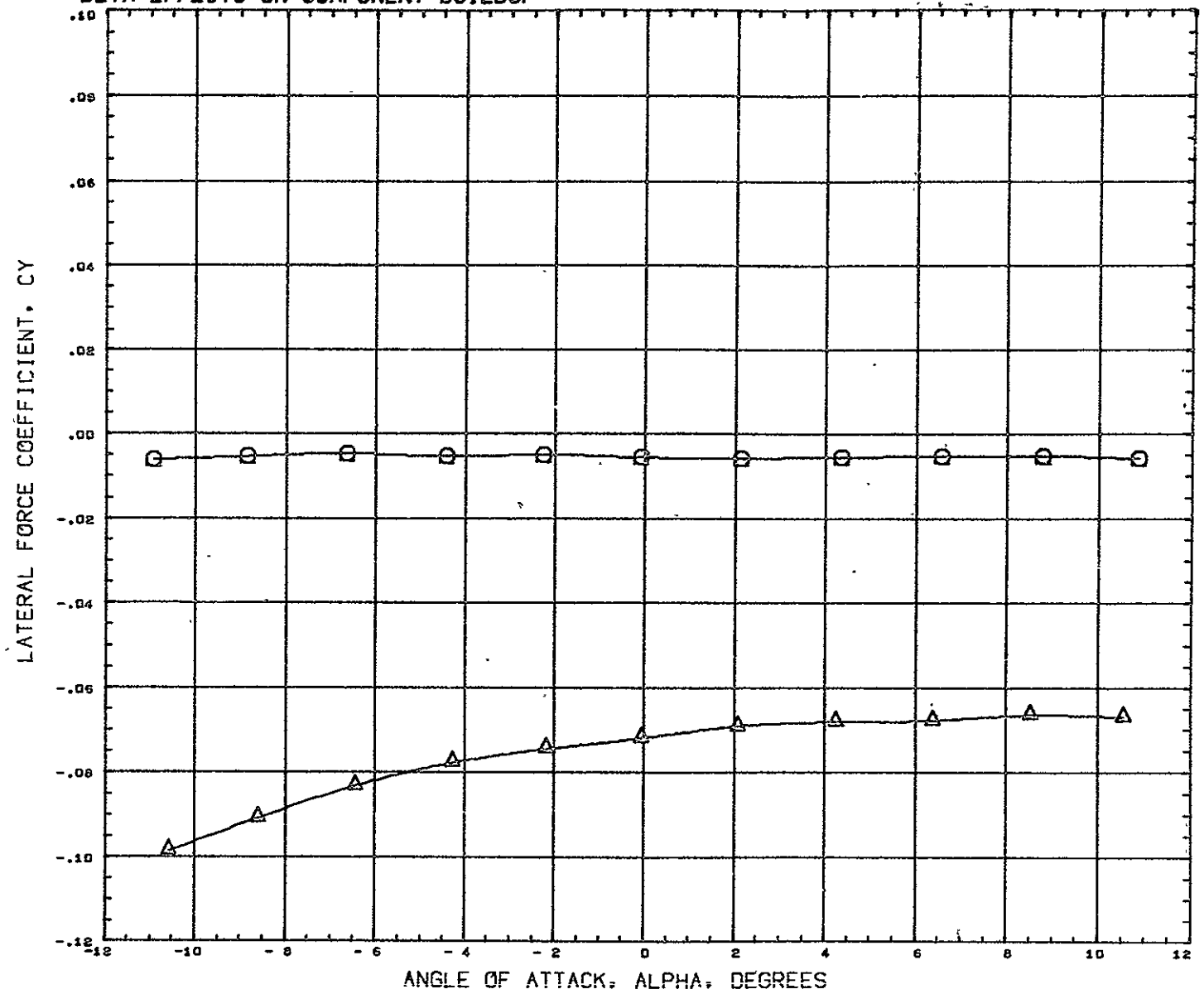
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000	REFL	821.2004	INCHES
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
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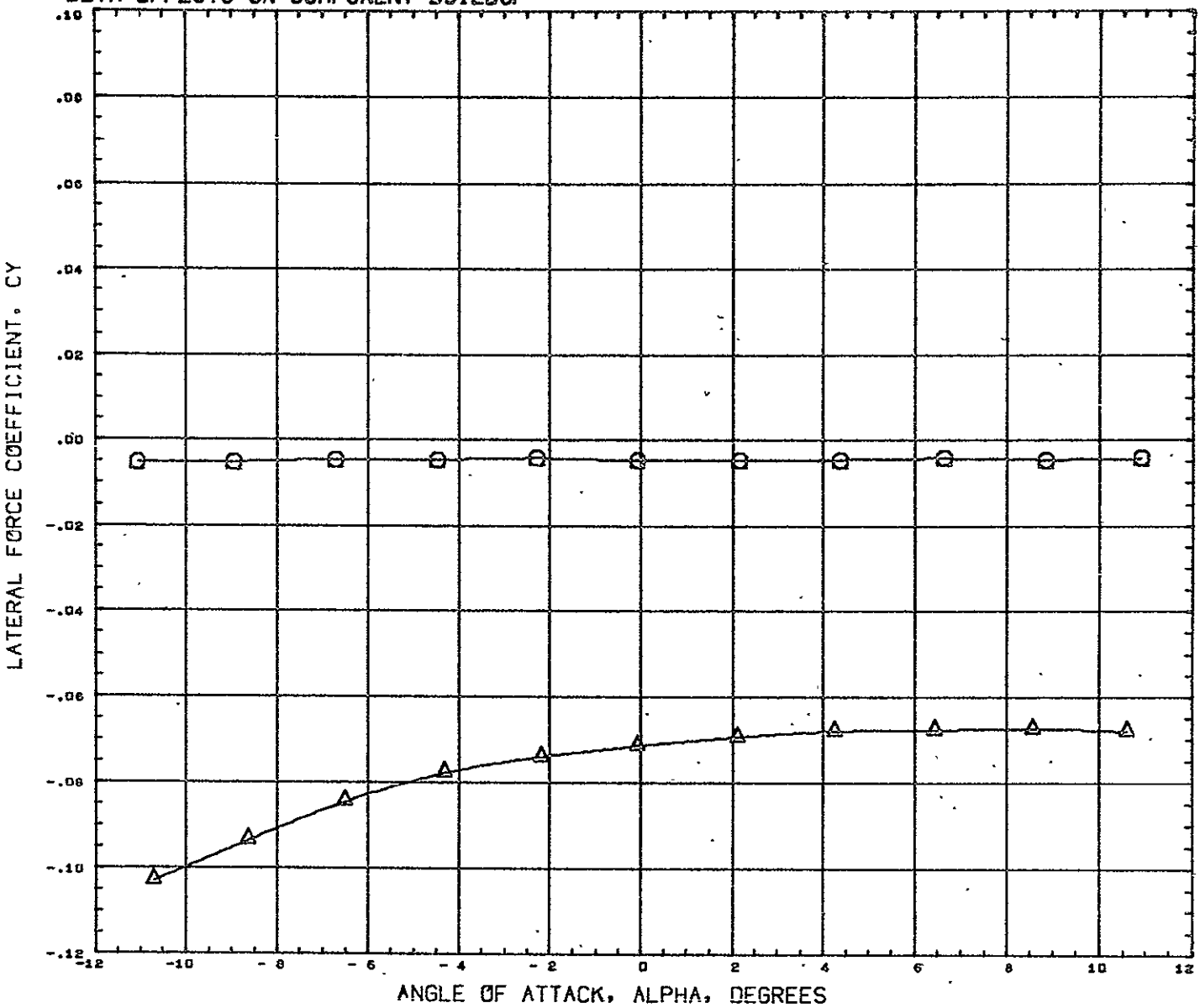
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	0.000	MACH	1.965	ELVATR	0.000	DATASET	BETA	DATASET	BETA	REFS	6084.0040	SQ FT
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000	REFL	621.2004	INCHES
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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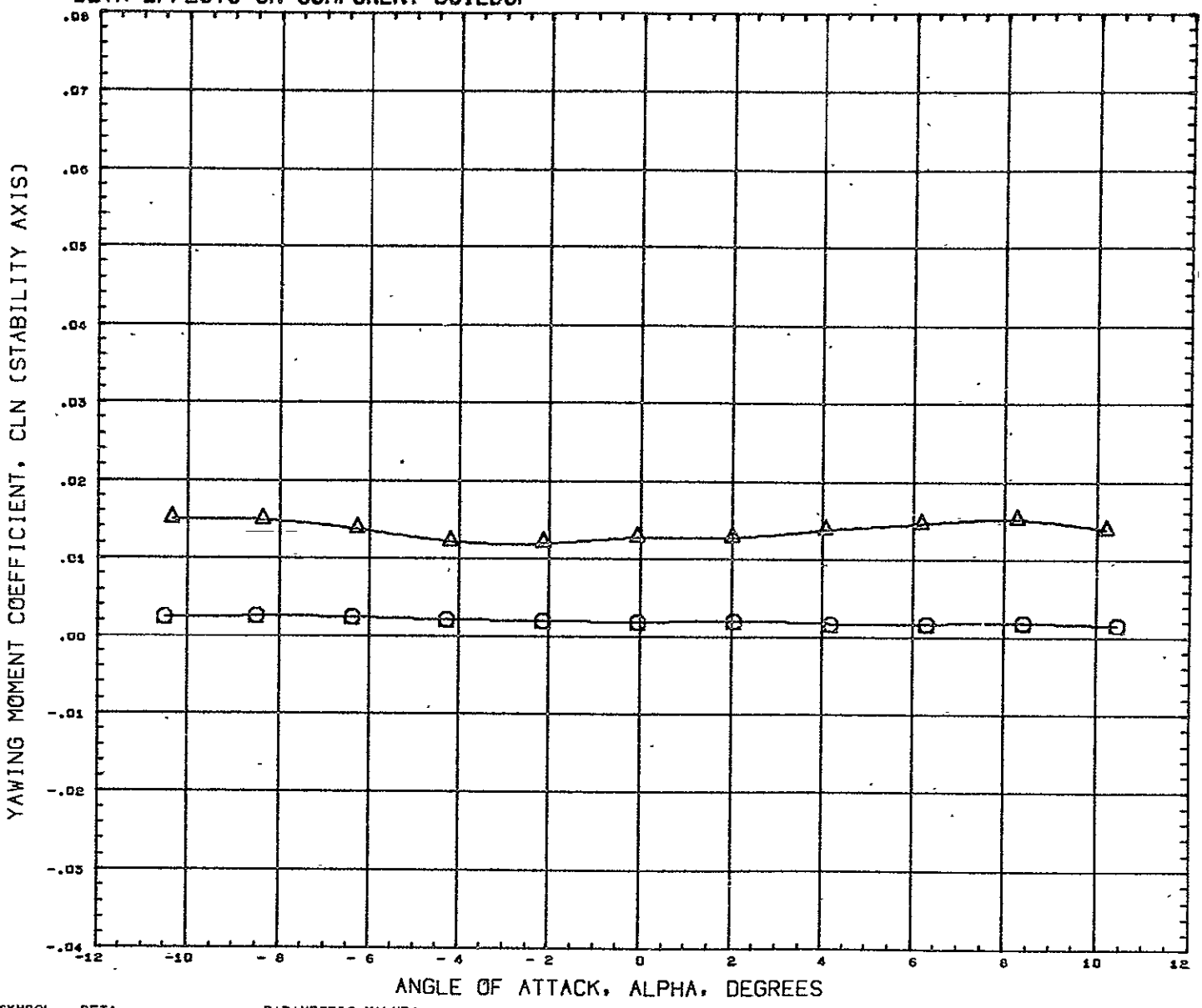
										SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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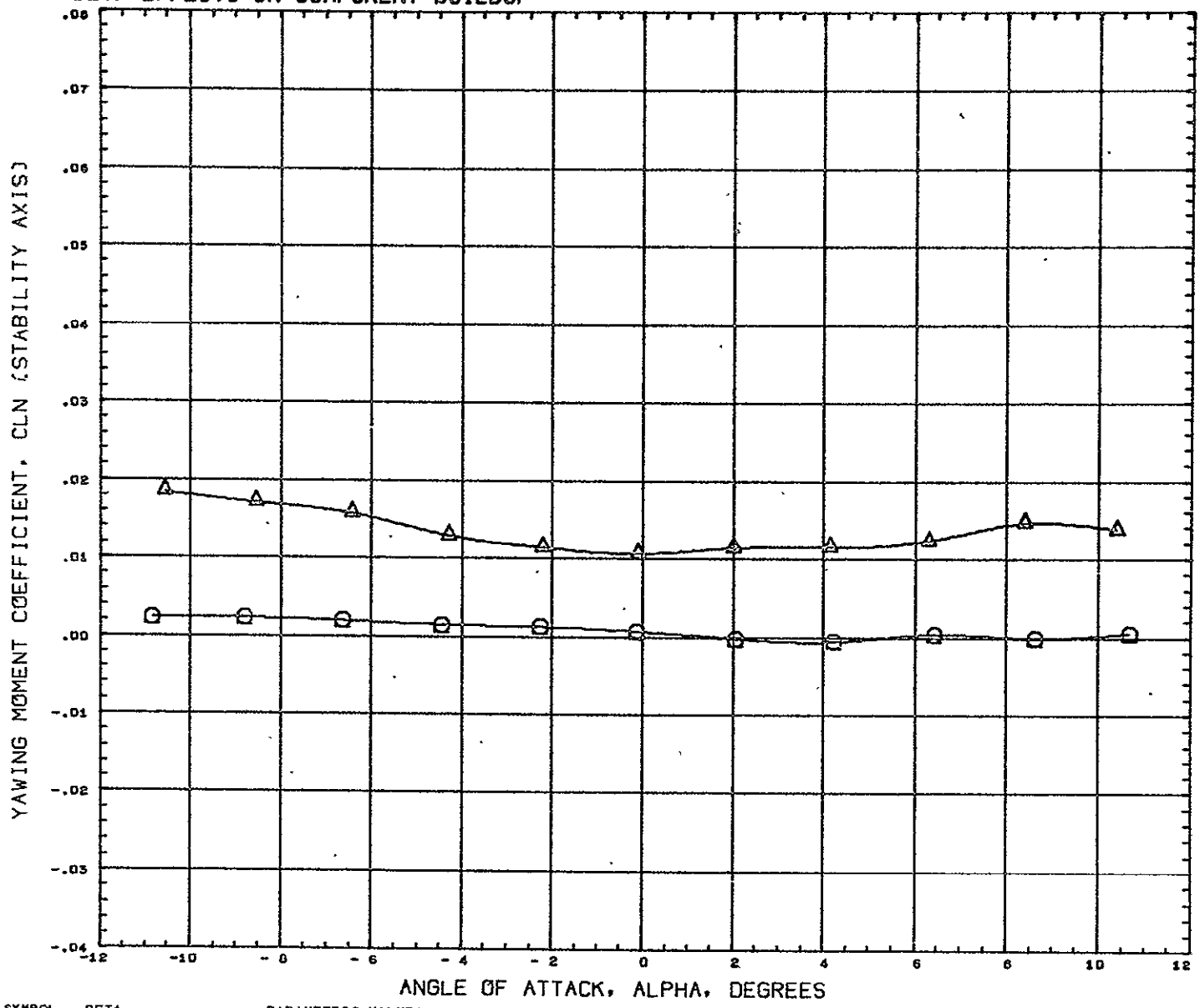
DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



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										REFB	1422.6040	INCHES
										XMRP	1422.5040	INCHES
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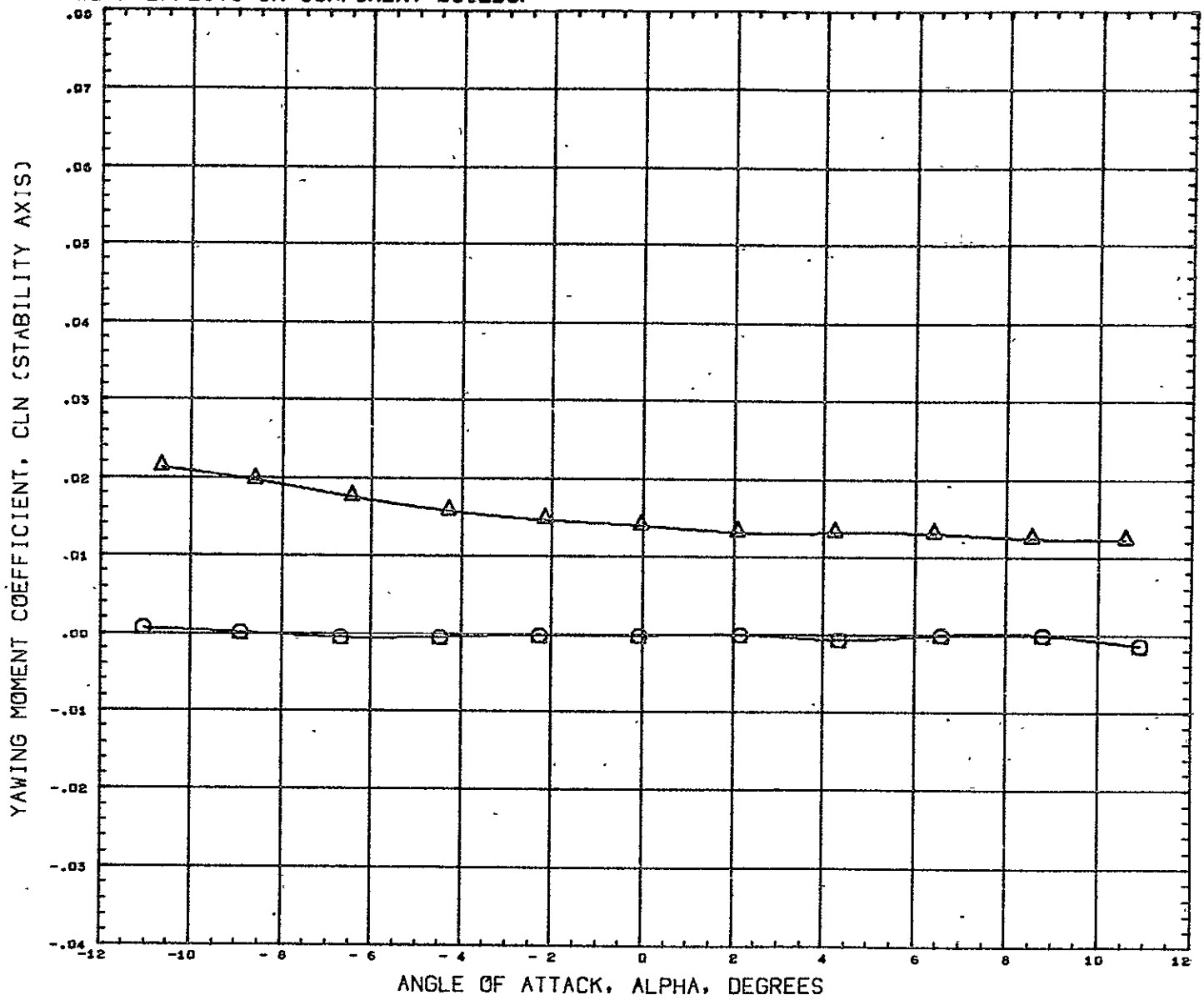
										SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP

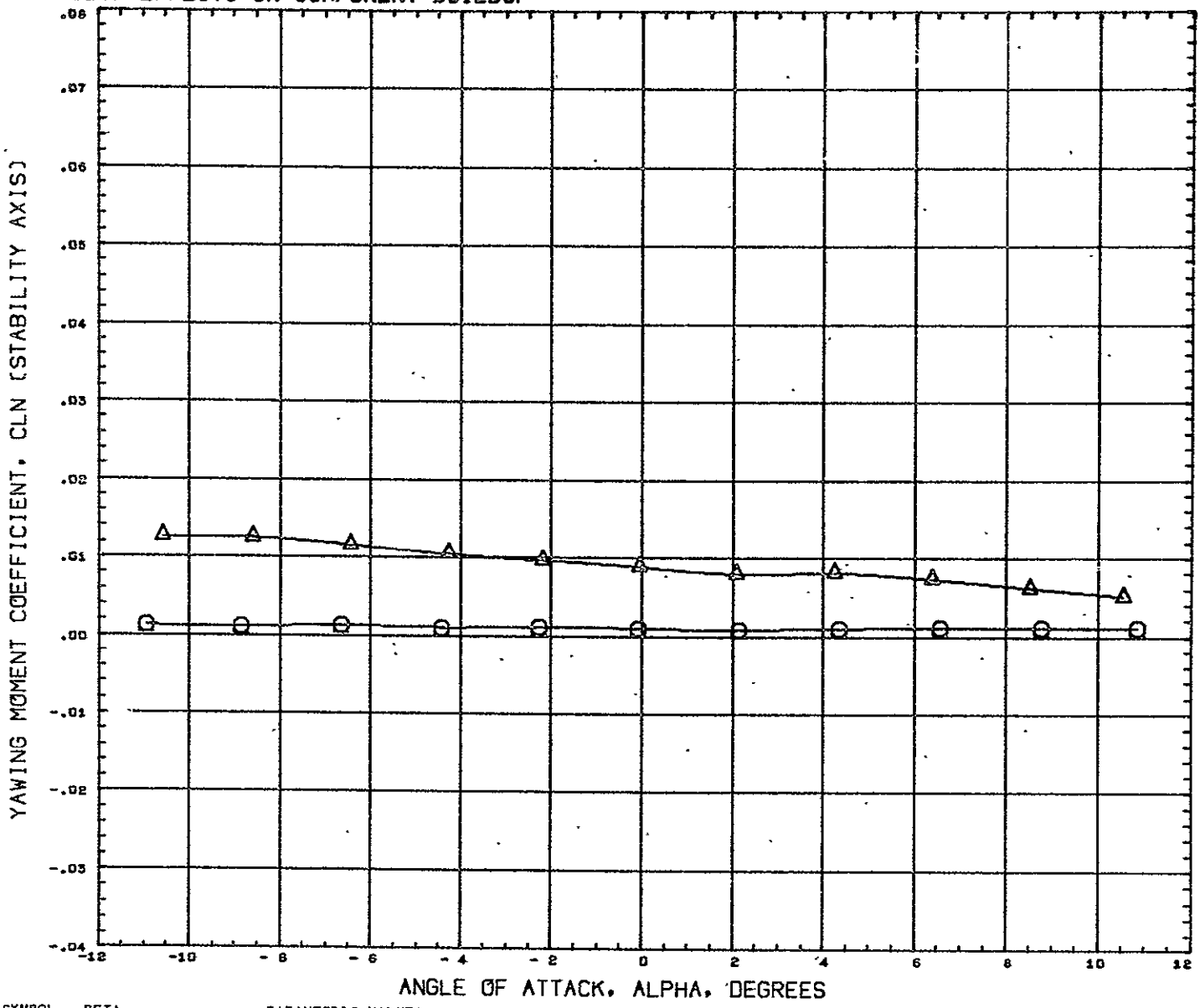


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.102	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

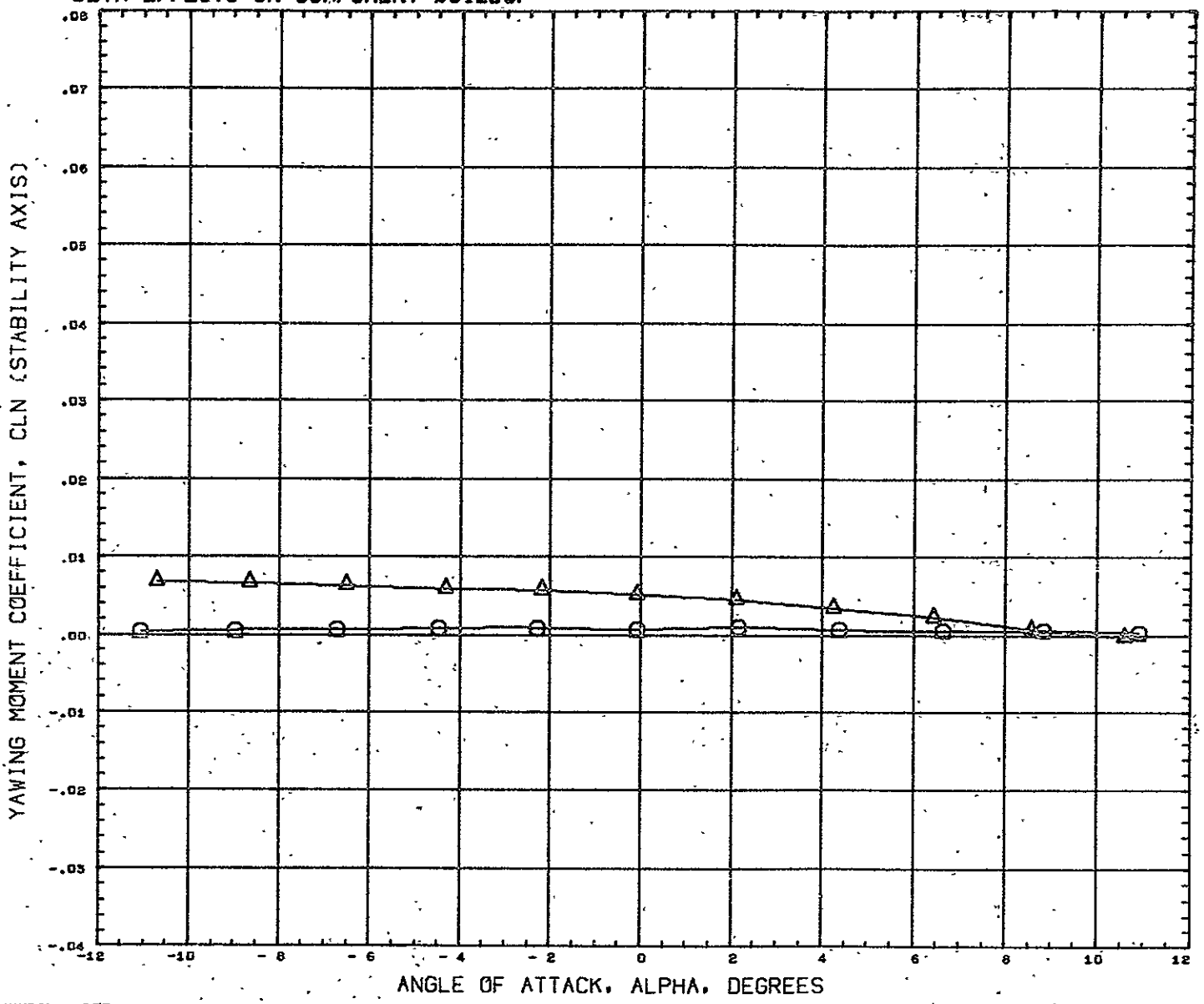


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACh	1.463	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

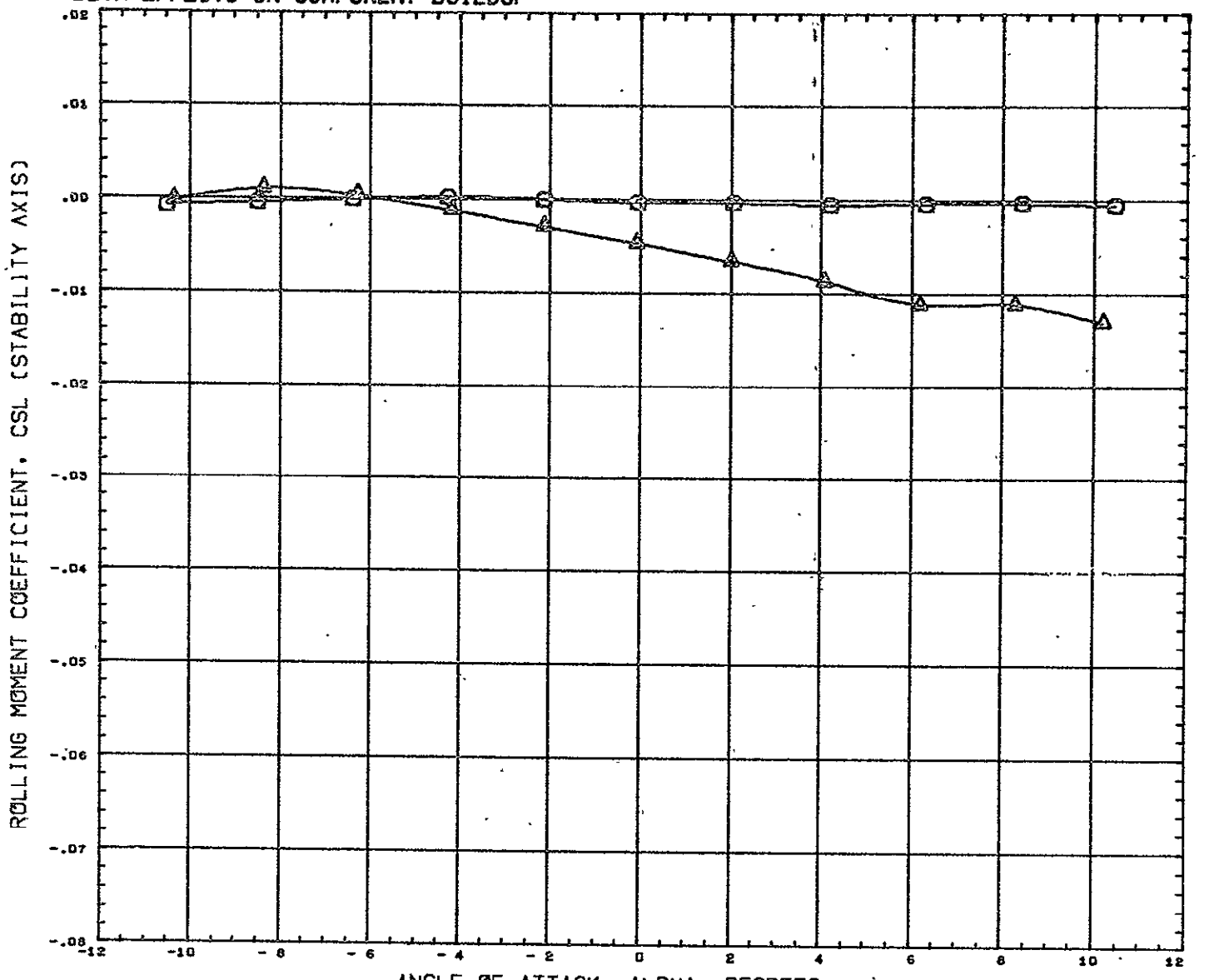


SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
○	0.000	MACH	1.965	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	-6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
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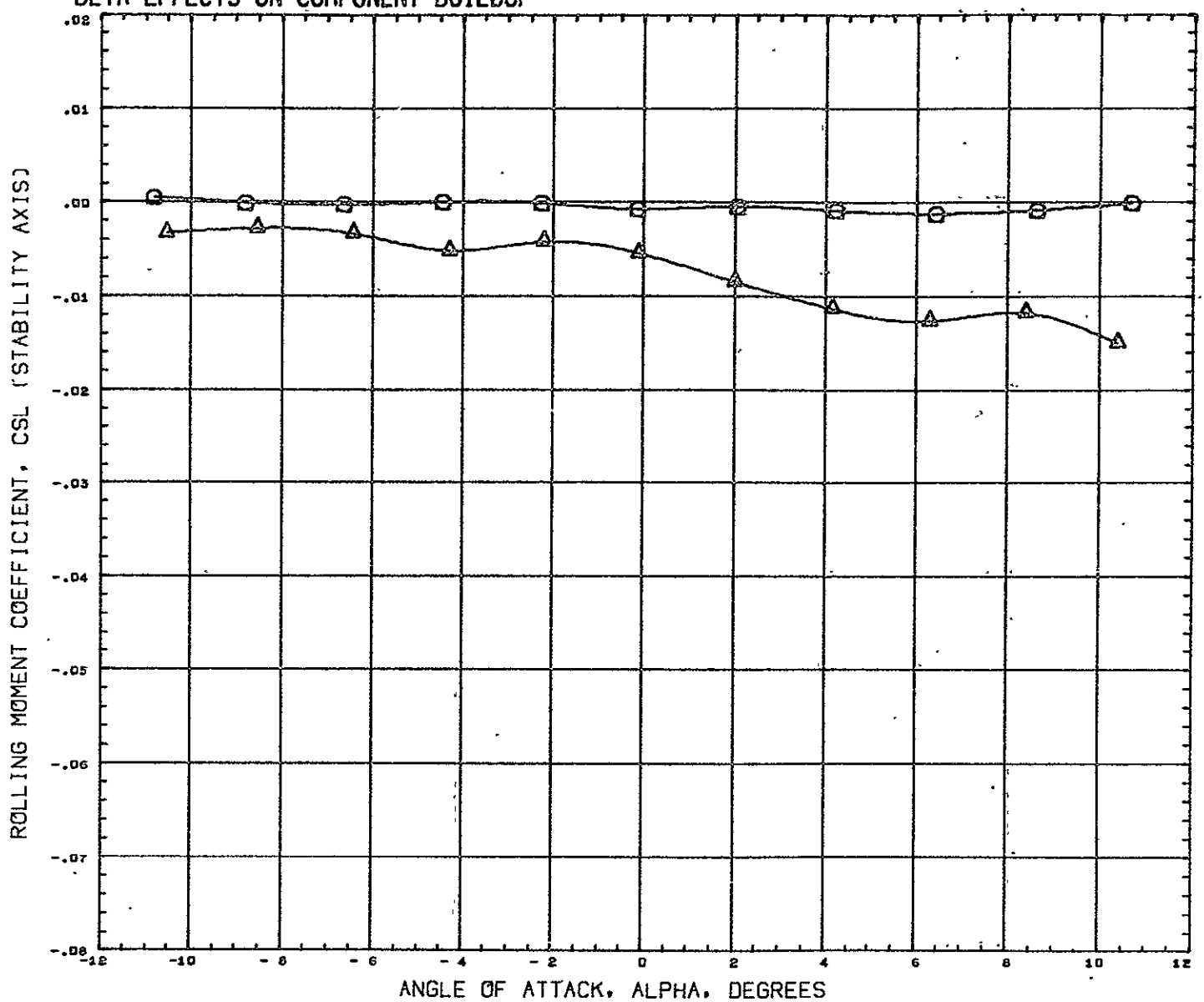
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000	REFL	821.2004	INCHES
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA	PARAMETRIC VALUES				DATA SOURCE			
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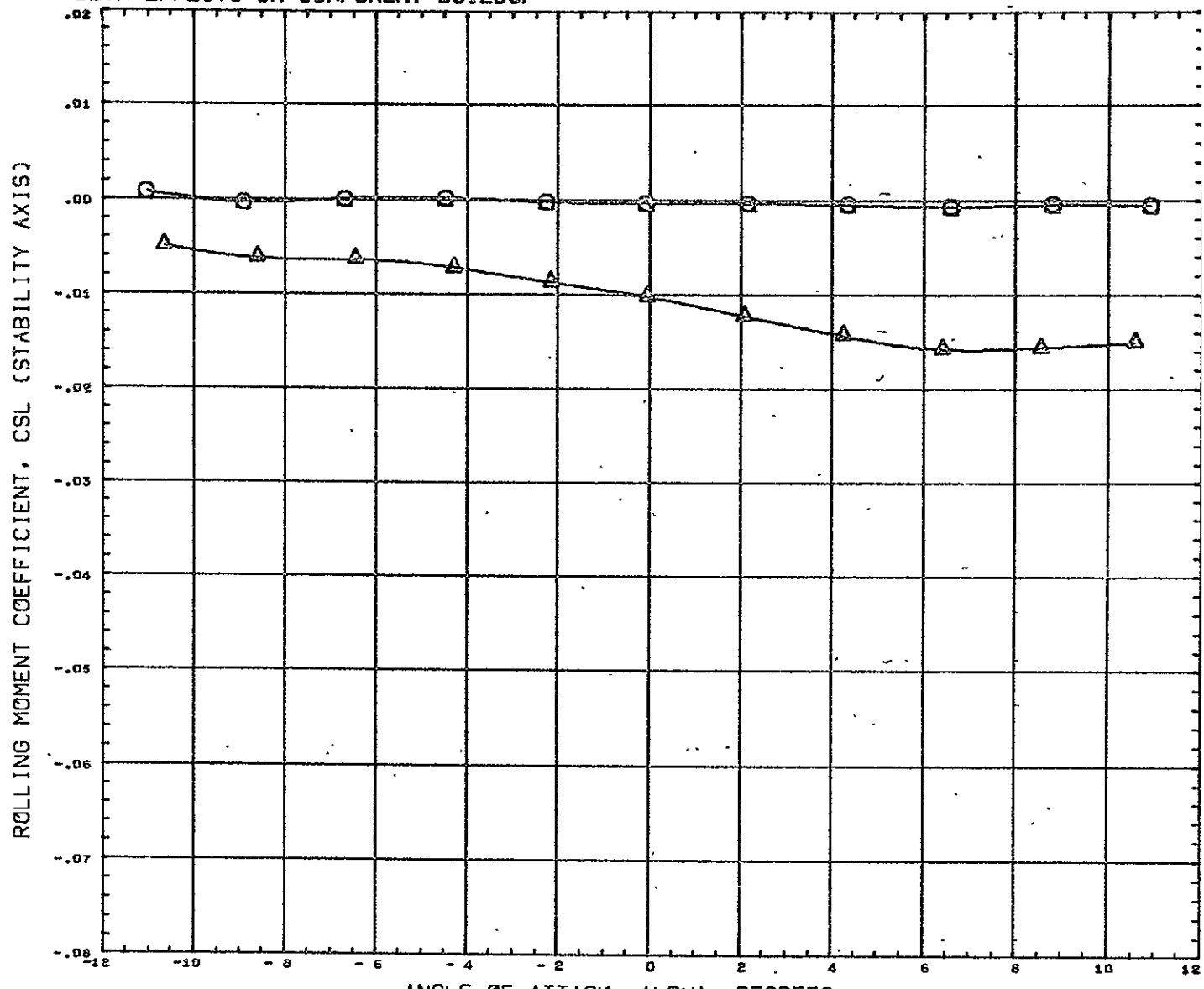
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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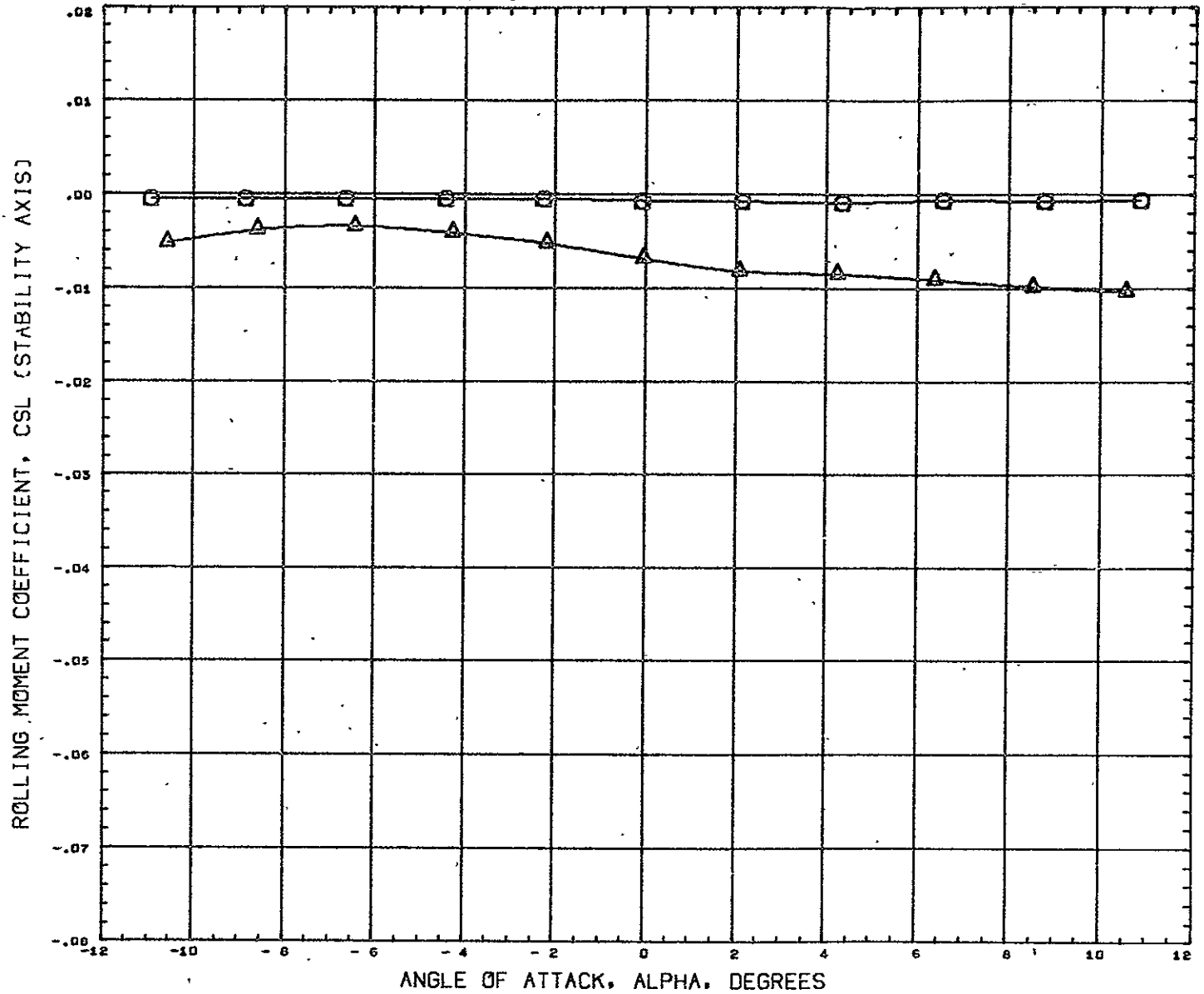
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

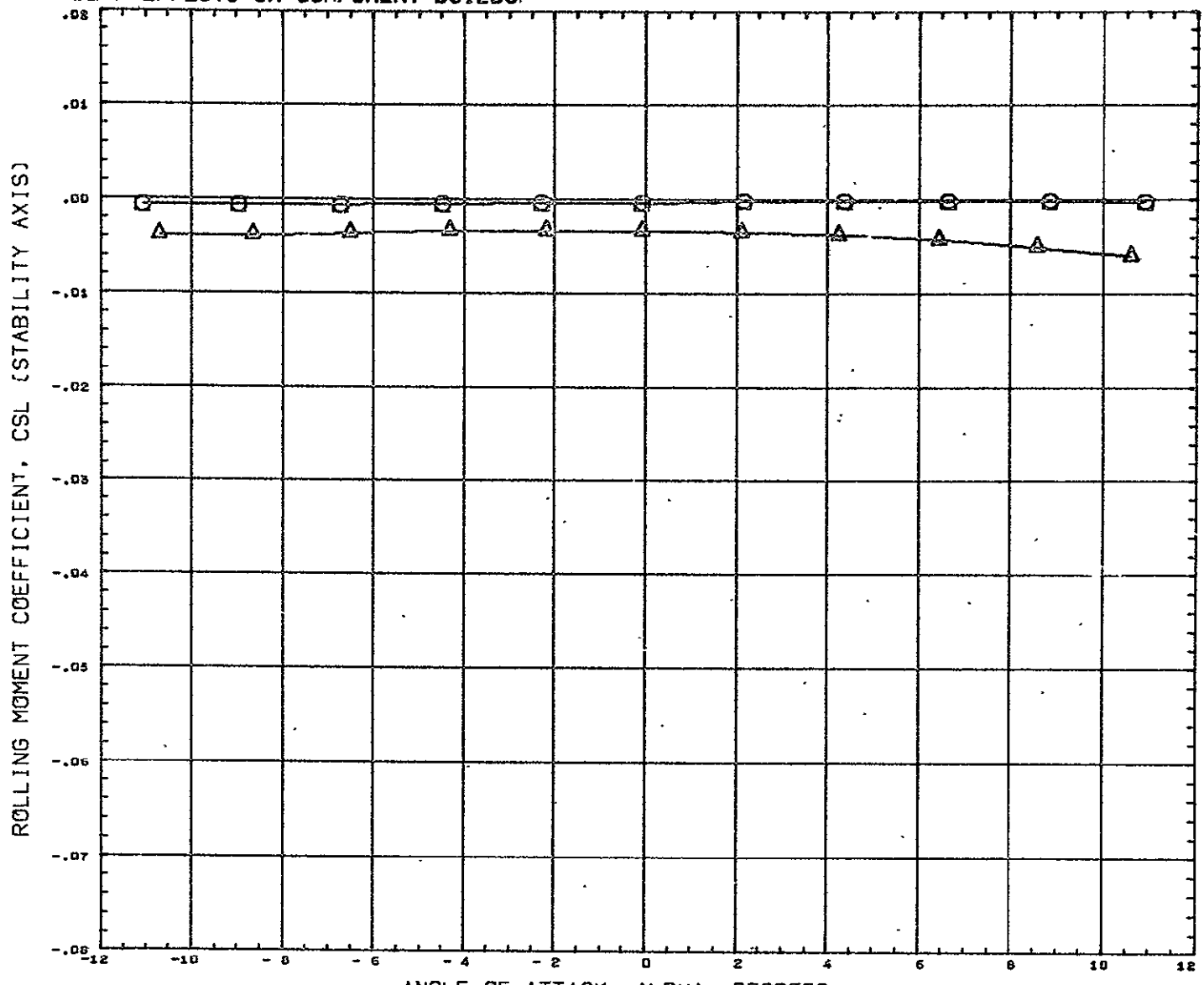


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.463	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

BETA EFFECTS ON COMPONENT BUILDUP

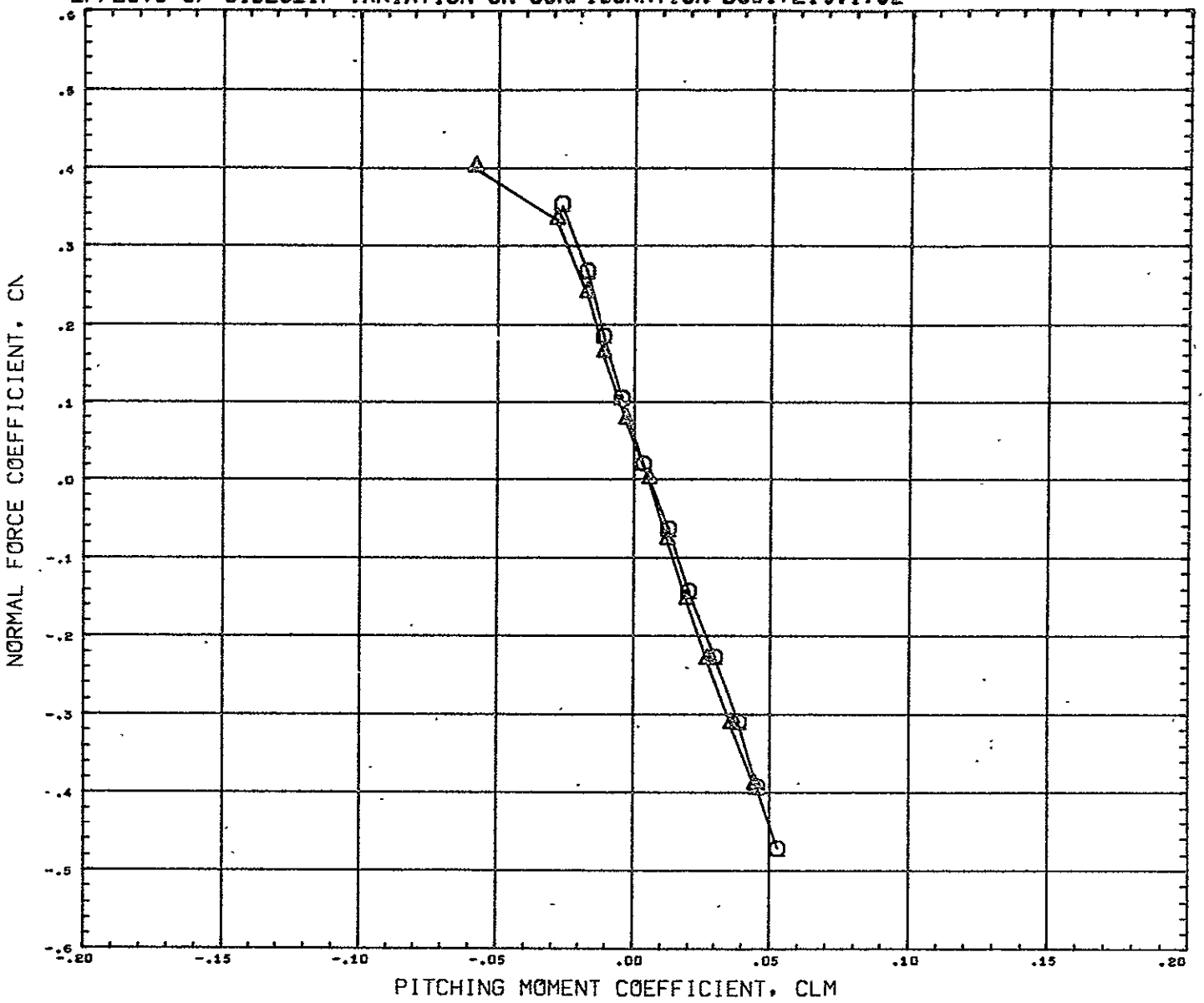


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.965	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF SIDESLIP VARIATION ON CONFIGURATION B5W17E10V17J2

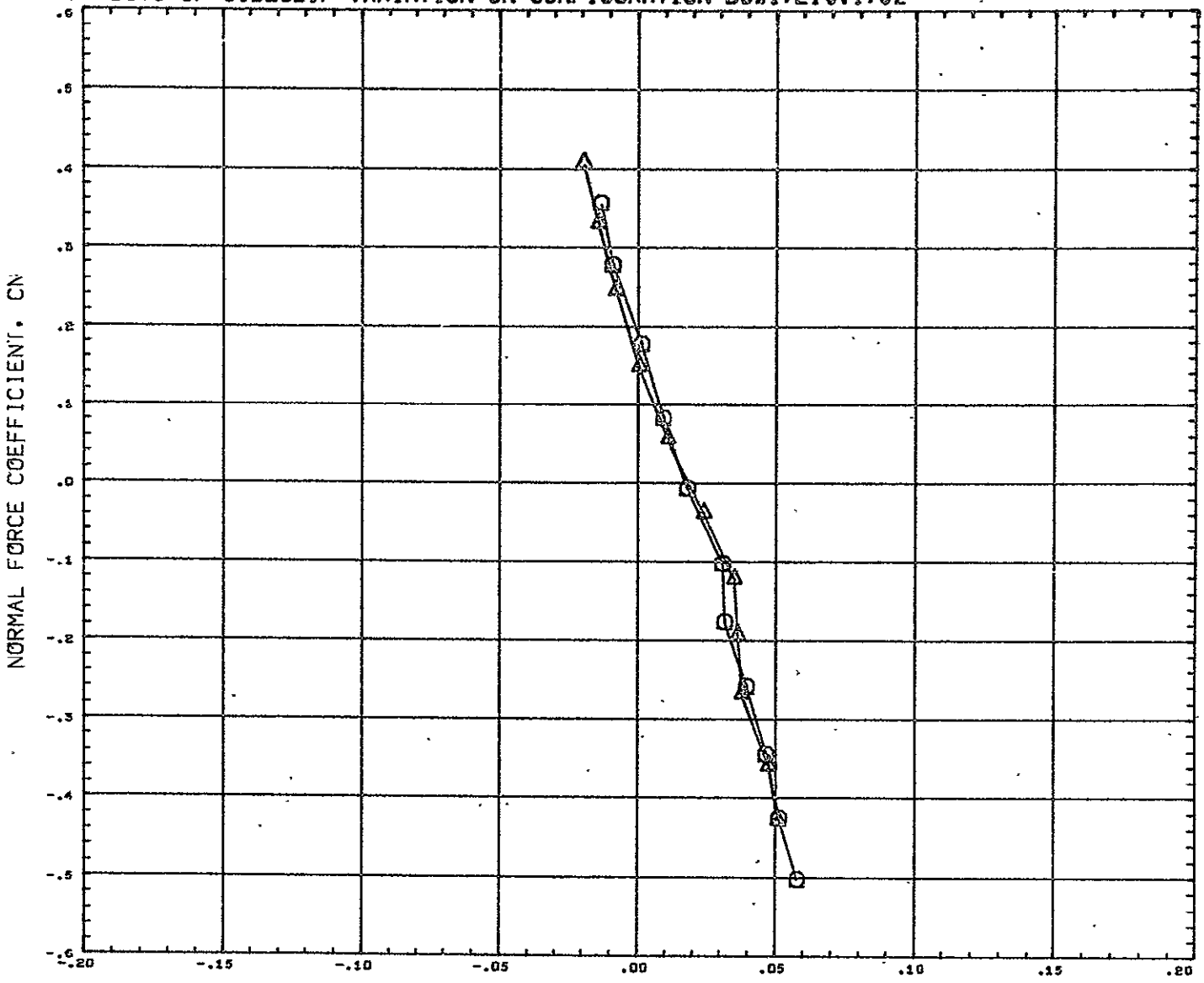


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	0.605	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E

EFFECTS OF SIDESLIP VARIATION ON CONFIGURATION B5W17E10V17J2



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	0.000	MACH	0.904	ELVATR	0.000	DATASET	BETA	DATASET	BETA	REFS	6084.0040	SQ FT
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000	REFL	821.2004	INCHES
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
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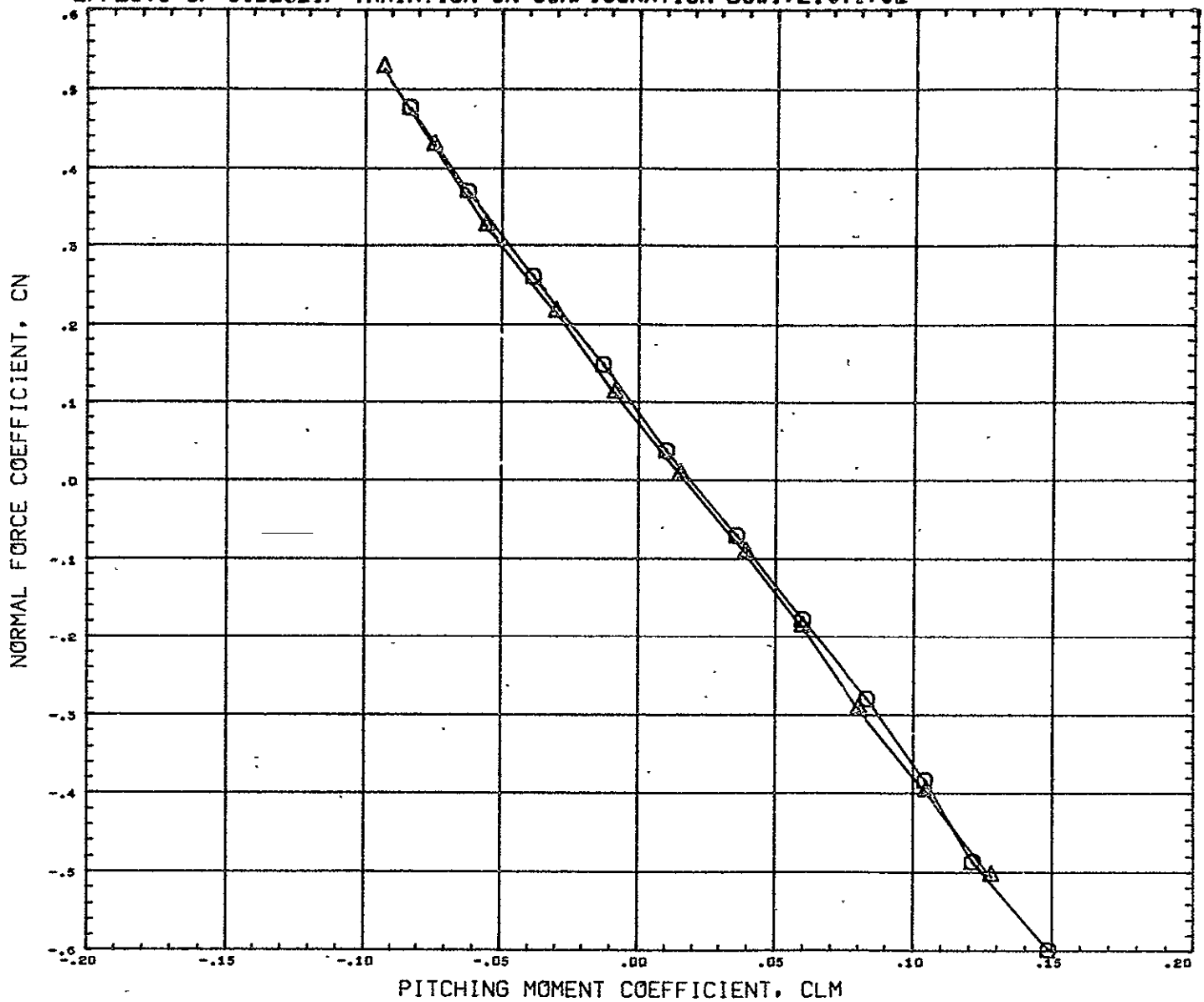
DATA MISC. CODE #E*E

EFFECTS OF SIDESLIP VARIATION ON CONFIGURATION B5W17E10V17J2

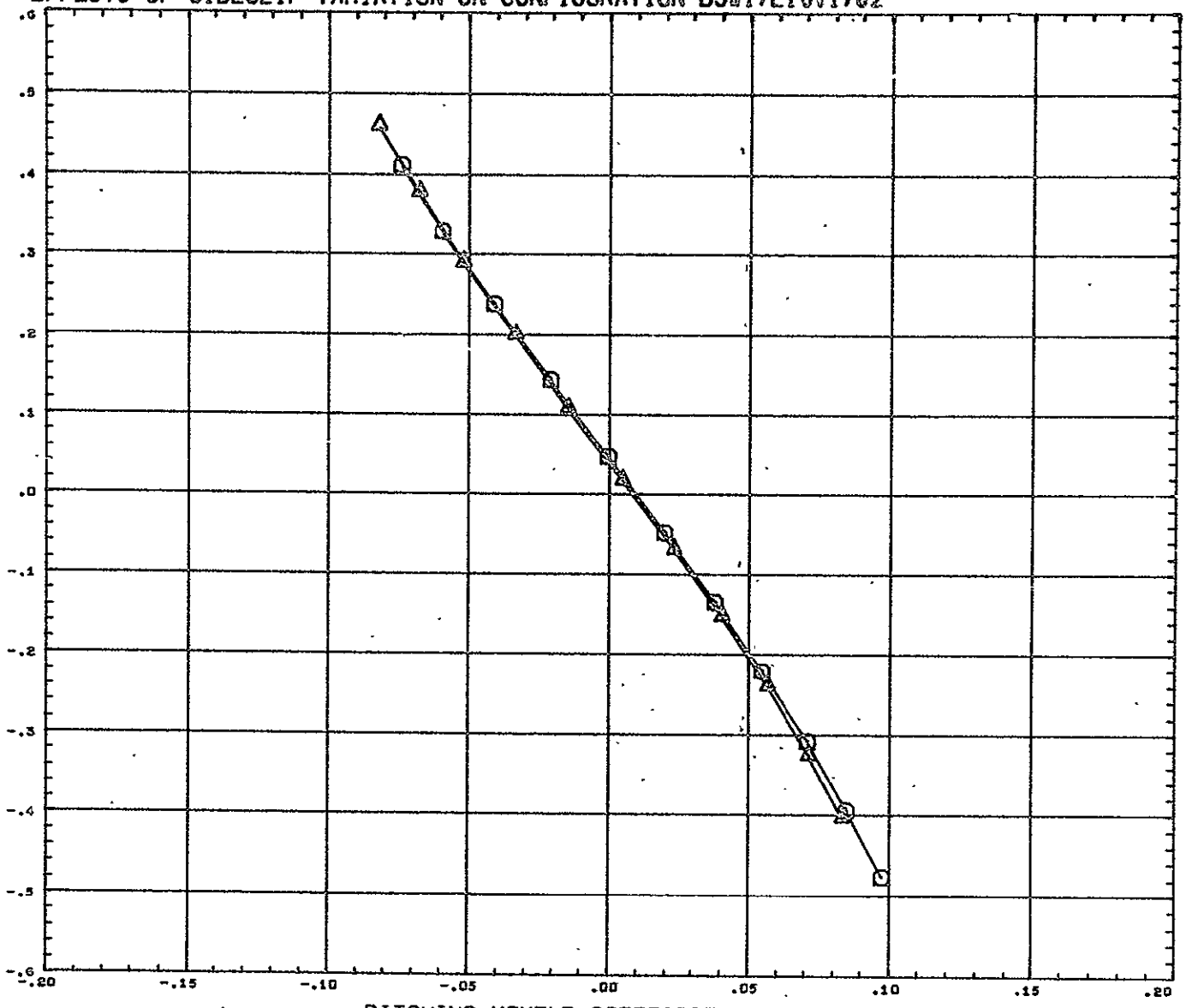


SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
○	0.000	MACH	1.102	ELVATR	0.000	DATASET	BETA	DATASET	BETA
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

DATA HIST. CODE *E*E

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF SIDESLIP VARIATION ON CONFIGURATION B5W17E10V17J2



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	0.000	MACH	1.463	ELVATR	0.000	DATASET	BETA	DATASET	BETA	REFS	6084.0040	SQ FT
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										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
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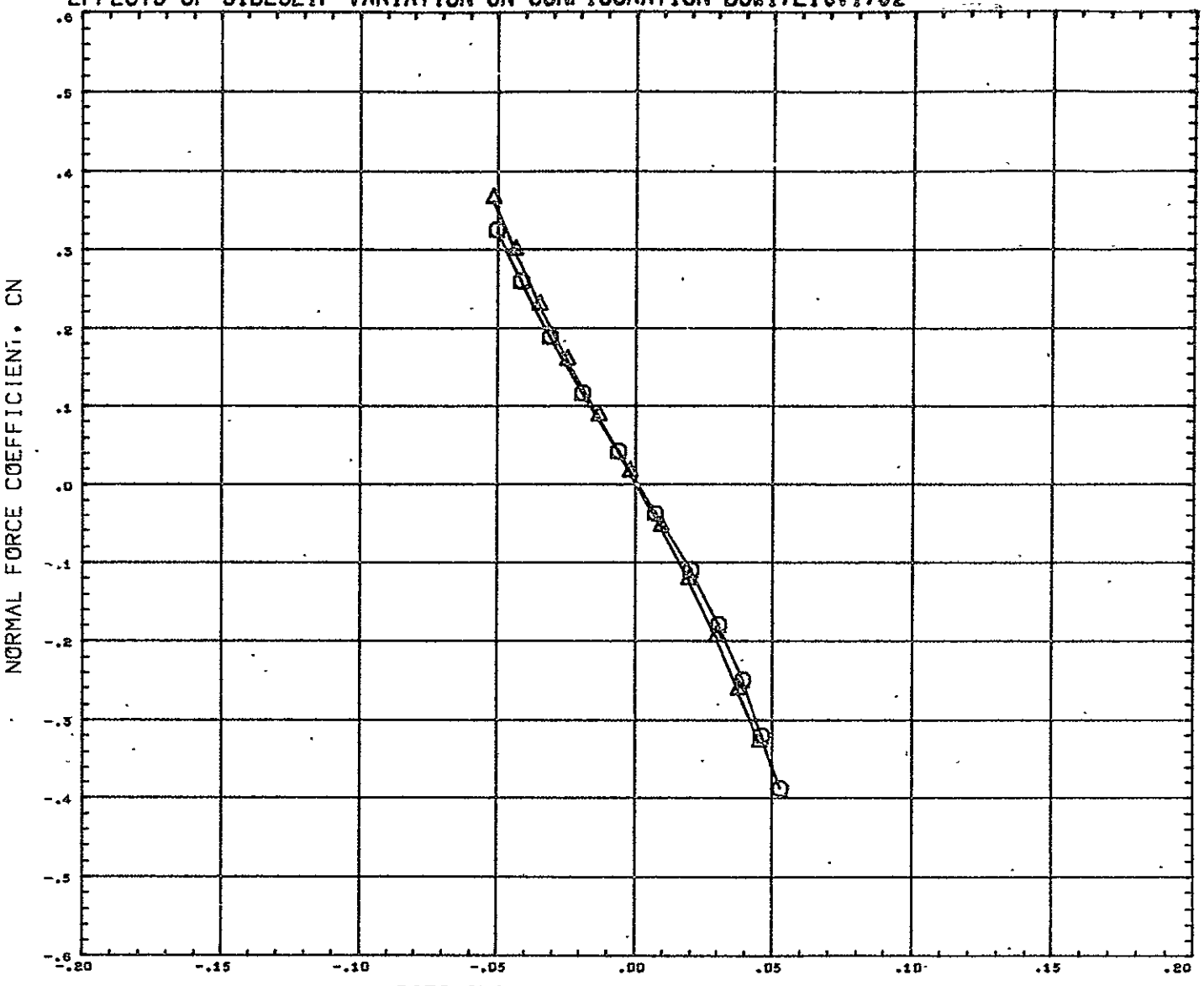
DATA HIST. CODE *E*E

EFFECTS OF SIDESLIP VARIATION ON CONFIGURATION B5W17E10V17J2



SYMBOL	BETA		PARAMETRIC VALUES			DATA SOURCE			
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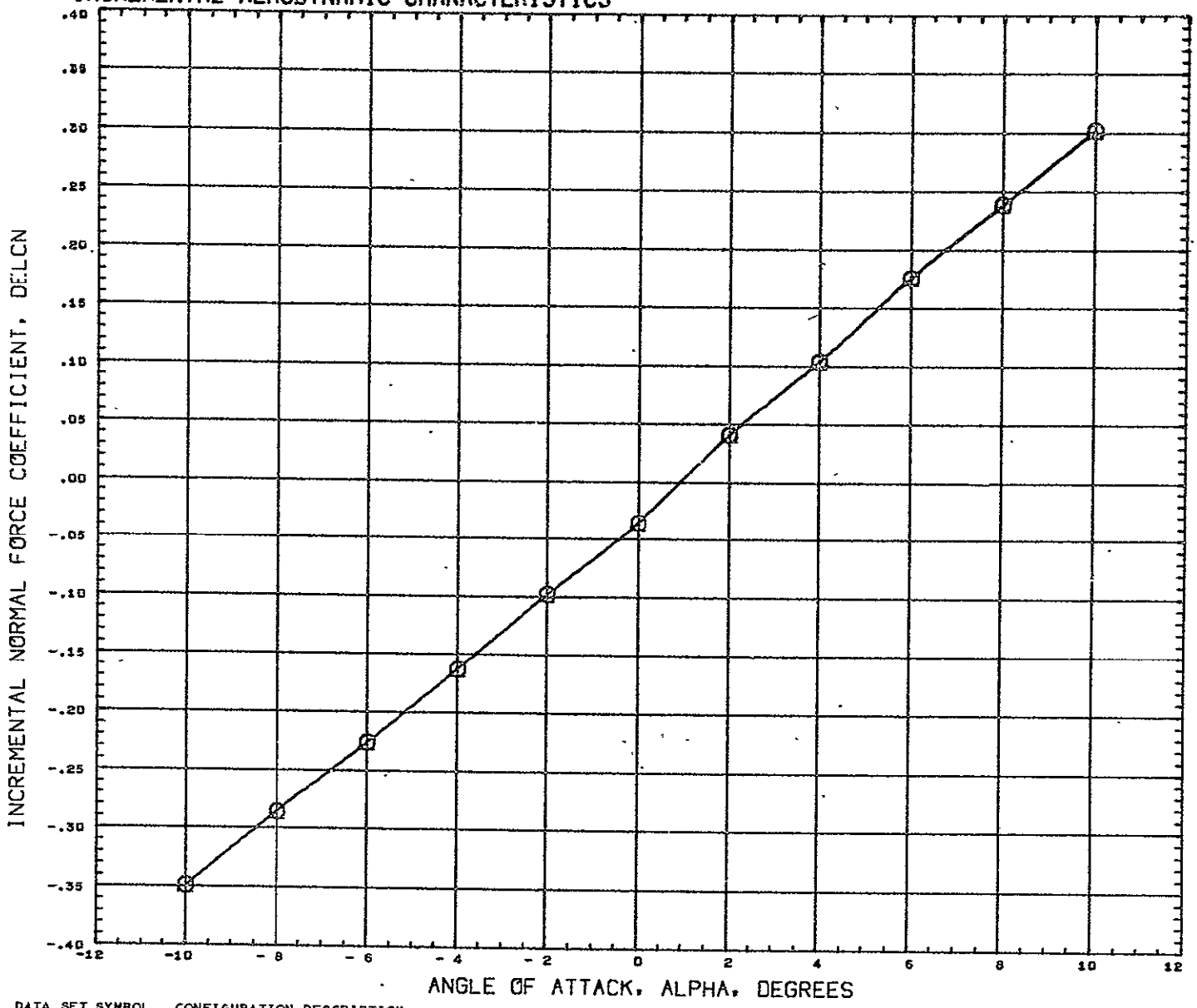
△	6.000	AILRON	0.000			V2906A	0.000	V2905A	6.000

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

· DATA HIST. CODE *E*E

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION
(E2902A) O MSFC484 (B5W17E10X - B5X) AT BETA=0

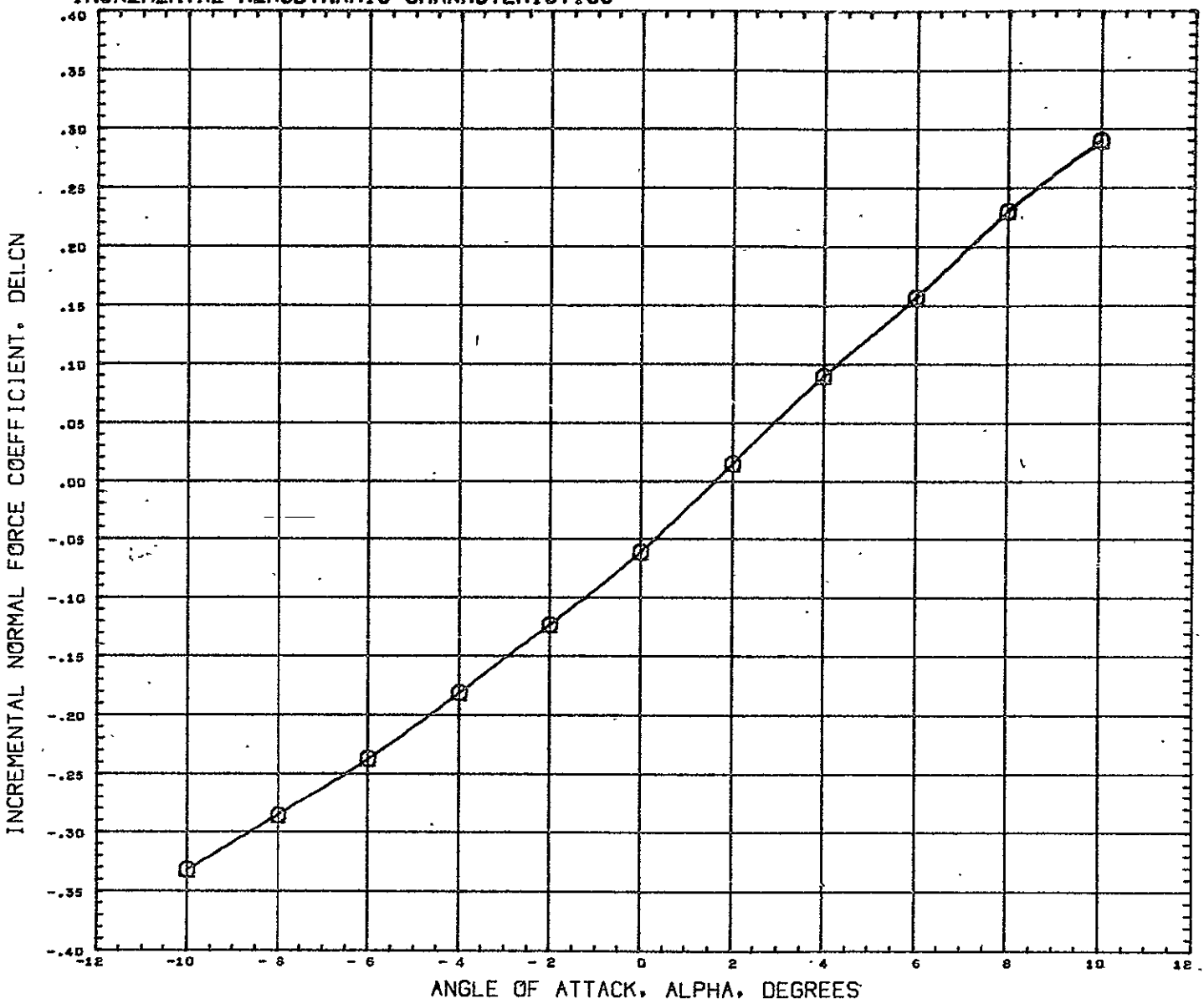
BETA
0.000

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



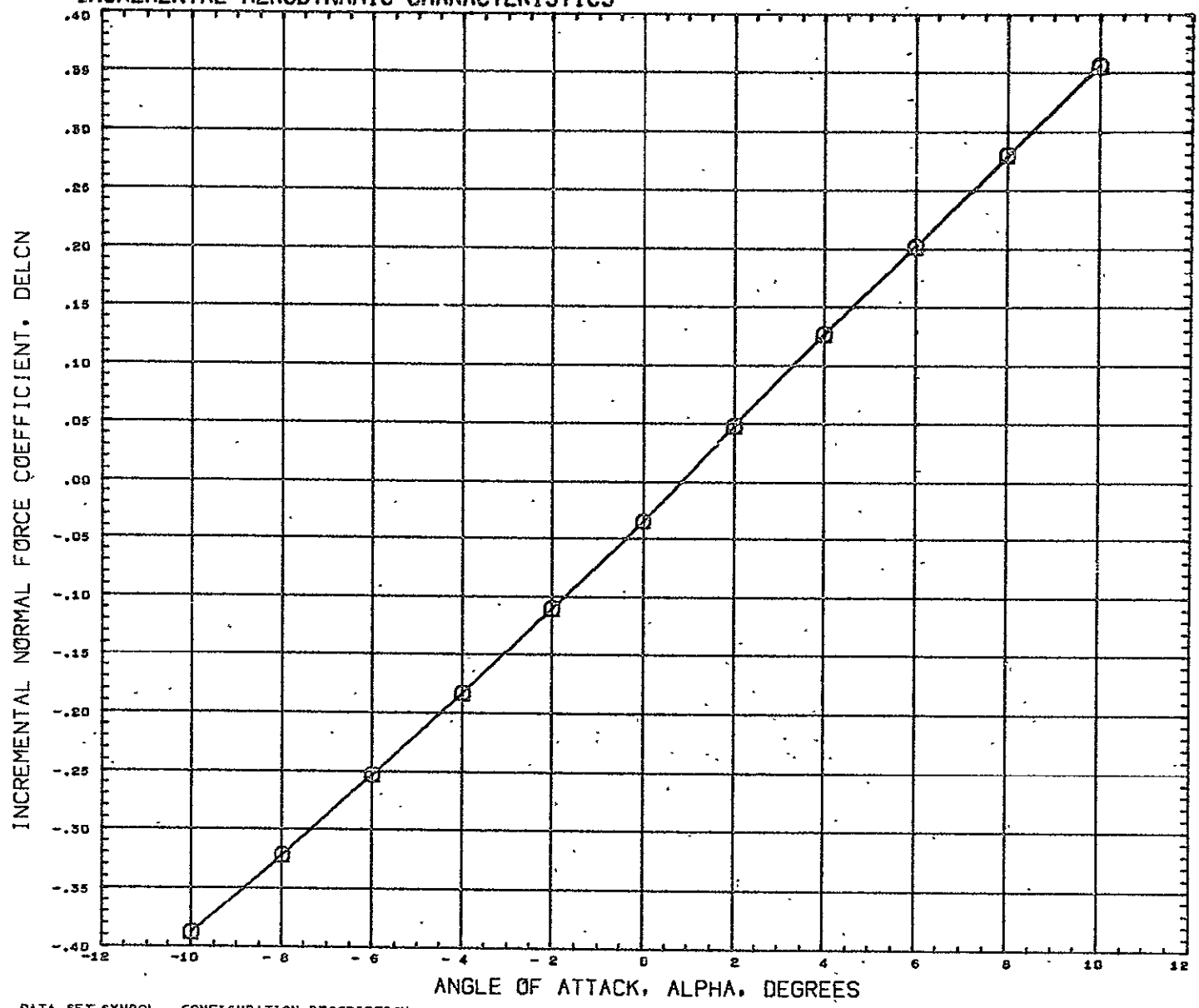
DATA SET SYMBOL		CONFIGURATION DESCRIPTION	BETA
(E29D2A)	○	MSFC404 (B5W17E10X - B5X) AT BETA=0	0.000

MACH 0.900

REFERENCE INFORMATION

REFS	6084.5040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA

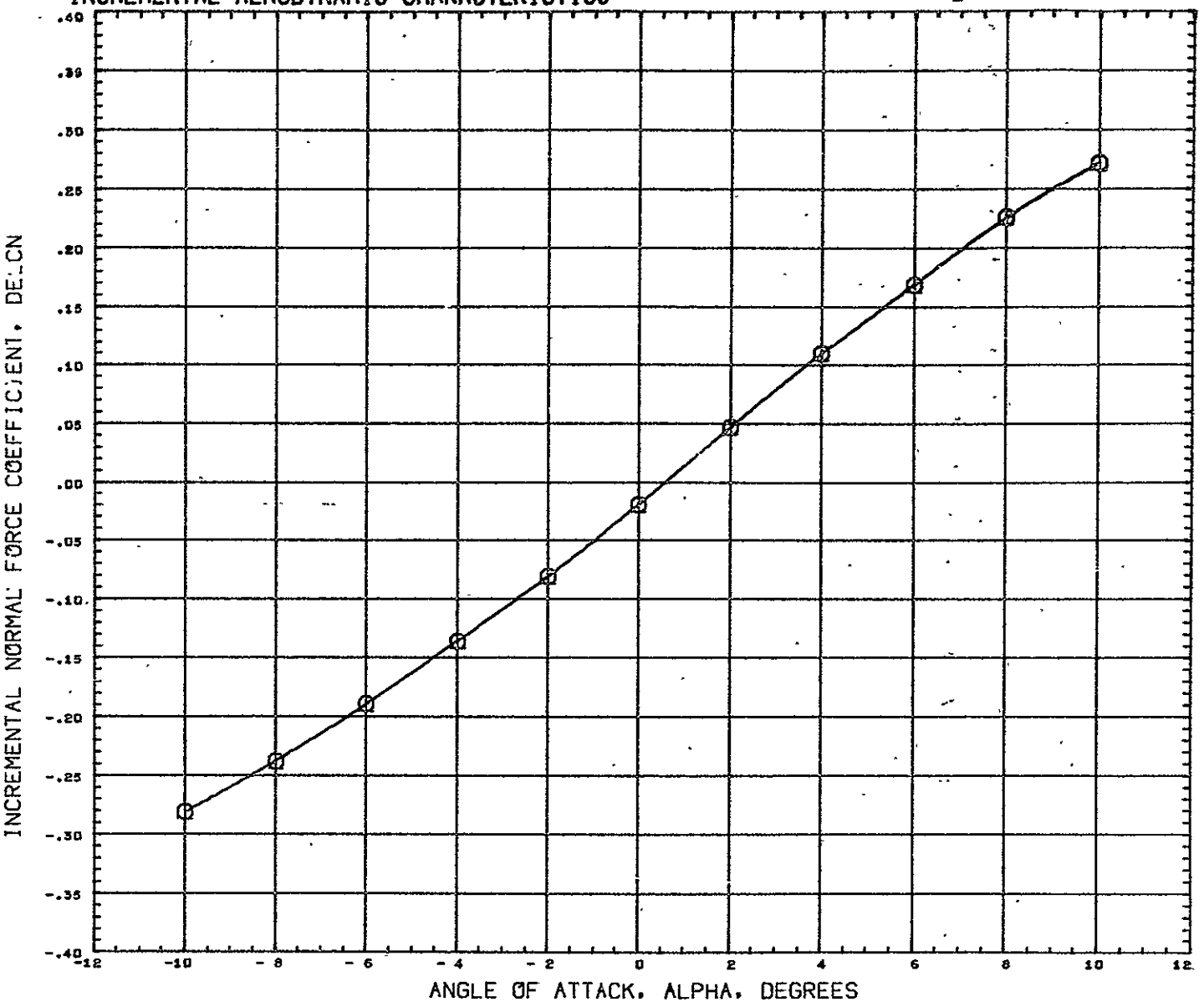
(E2902A) ○ HSFC484 (B5W17E10X - B5X) AT BETA=0 0.000

MACH 1.100

REFERENCE INFORMATION

REFS	6084.004D	SQ FT
REFL	821.2004	INCHES
REFB	1422.804D	INCHES
XMRP	1422.504D	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



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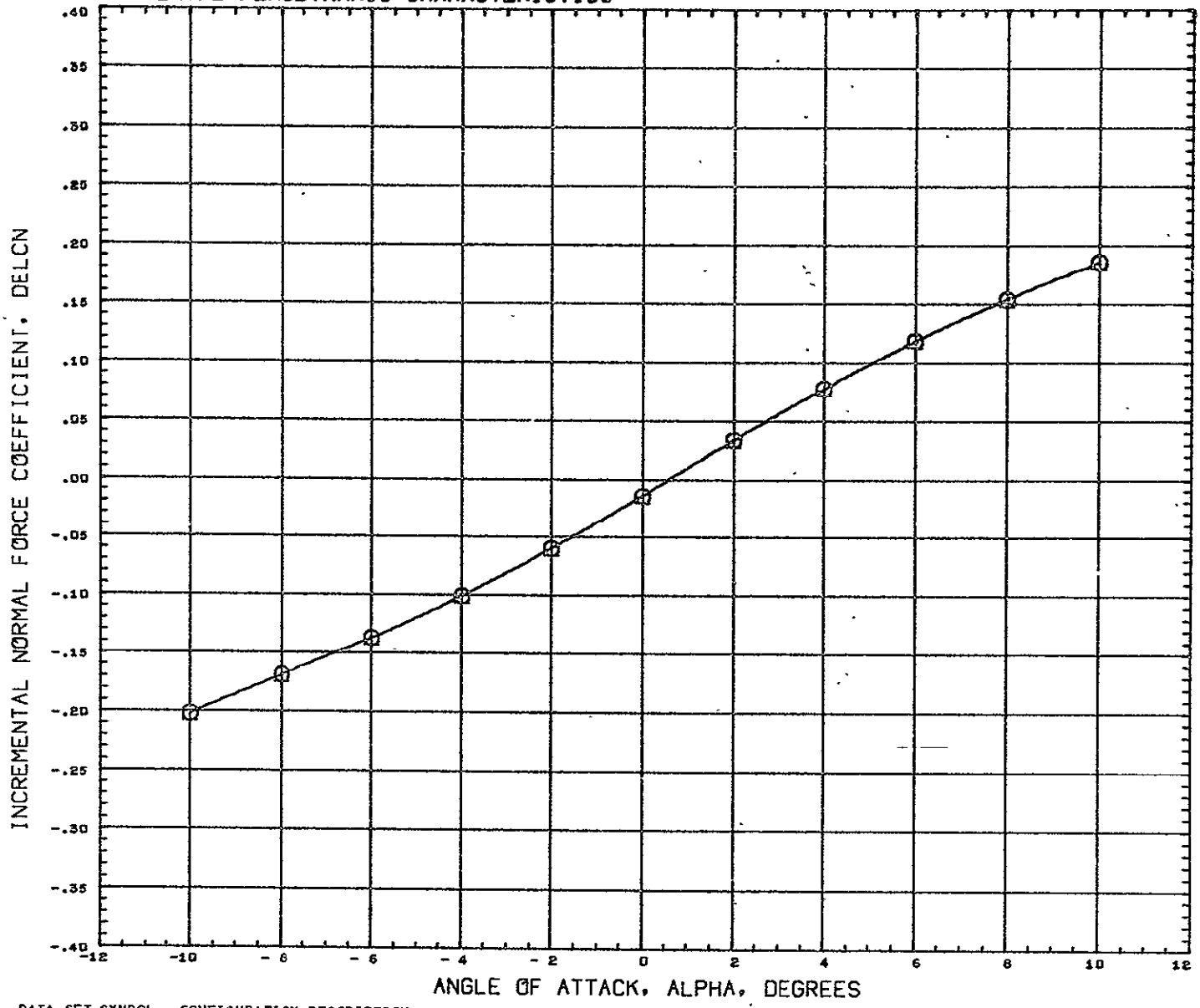
MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION
(E2902A) ○ HSFC404 (B5W17E10X - B5X) AT BETA=0

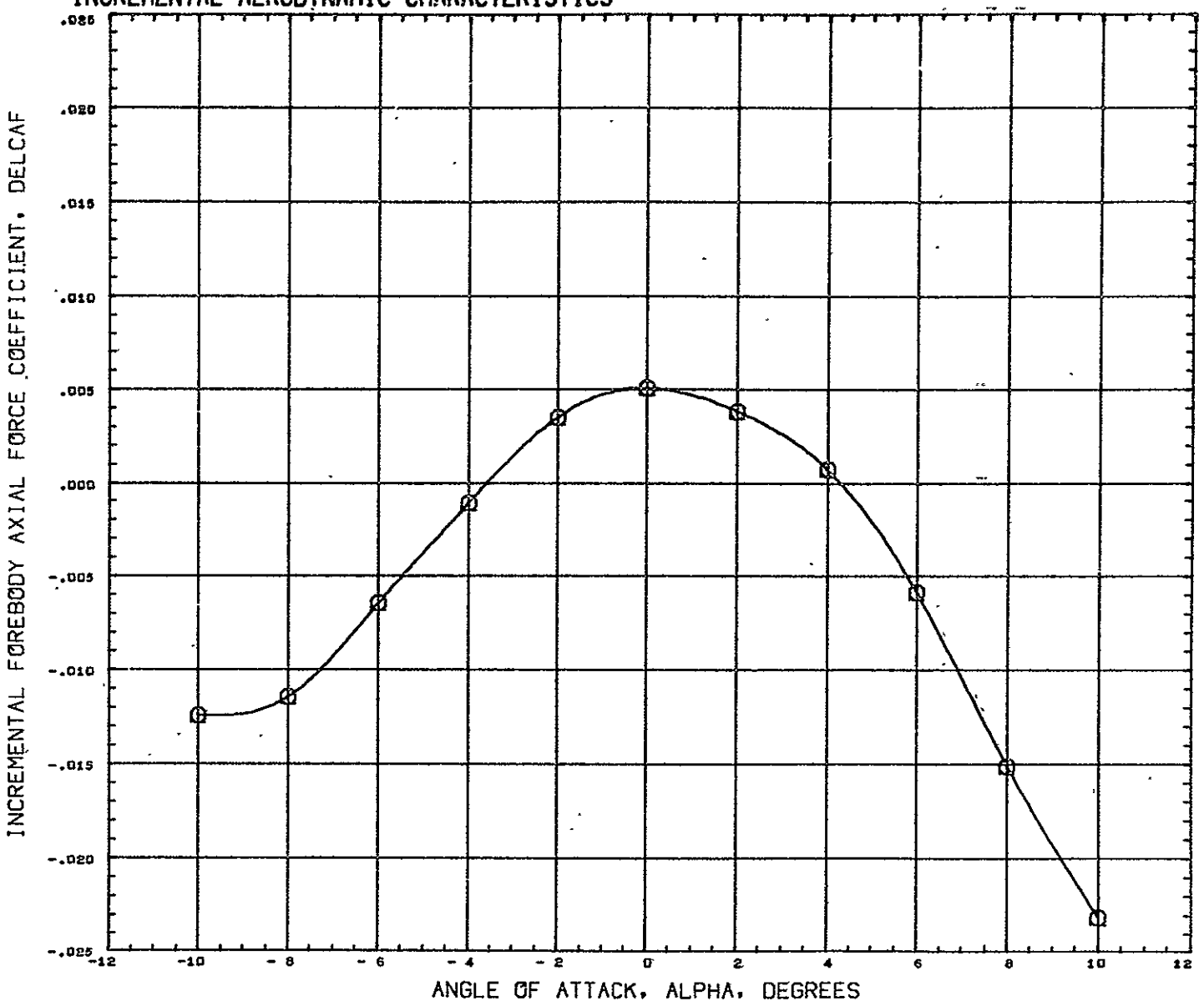
BETA
0.000

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA

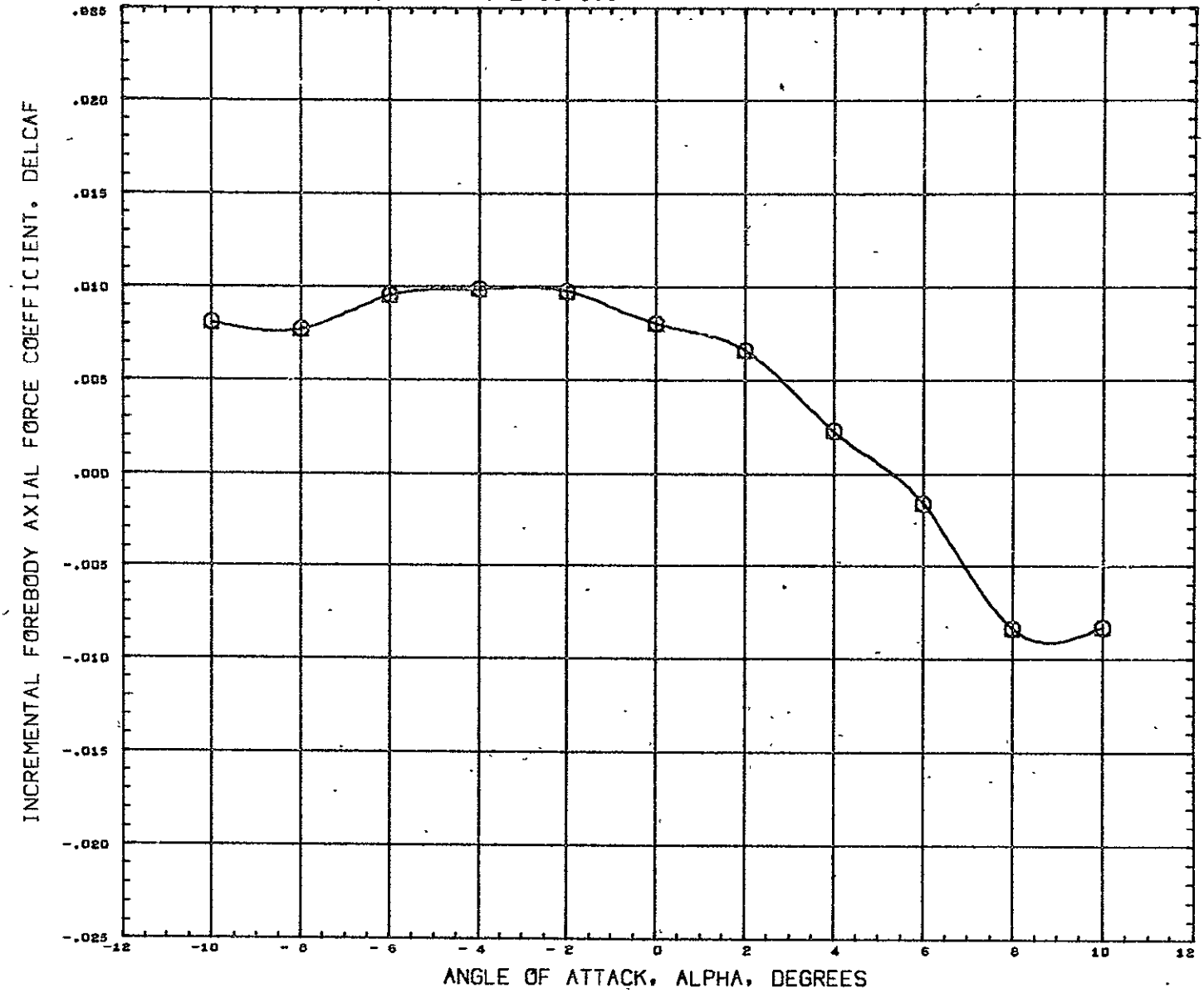
(E2902A) ○ MSFC484 (B5W17E10X - B5X) AT BETA=0 0.000

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



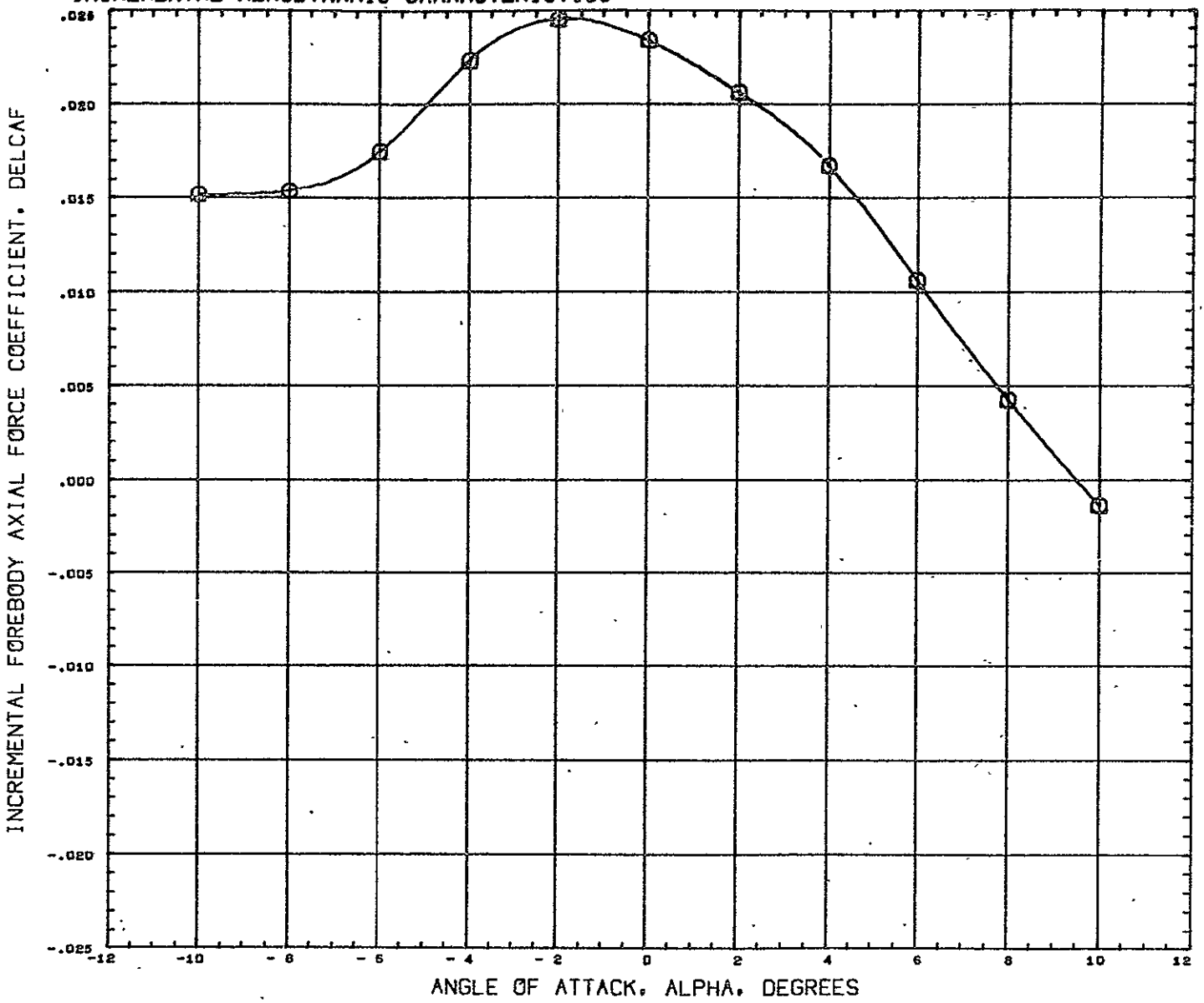
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA
(E2902A) ○	NSFC484 (B5W17E10X - B5X) AT BETA=0	0.000

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA

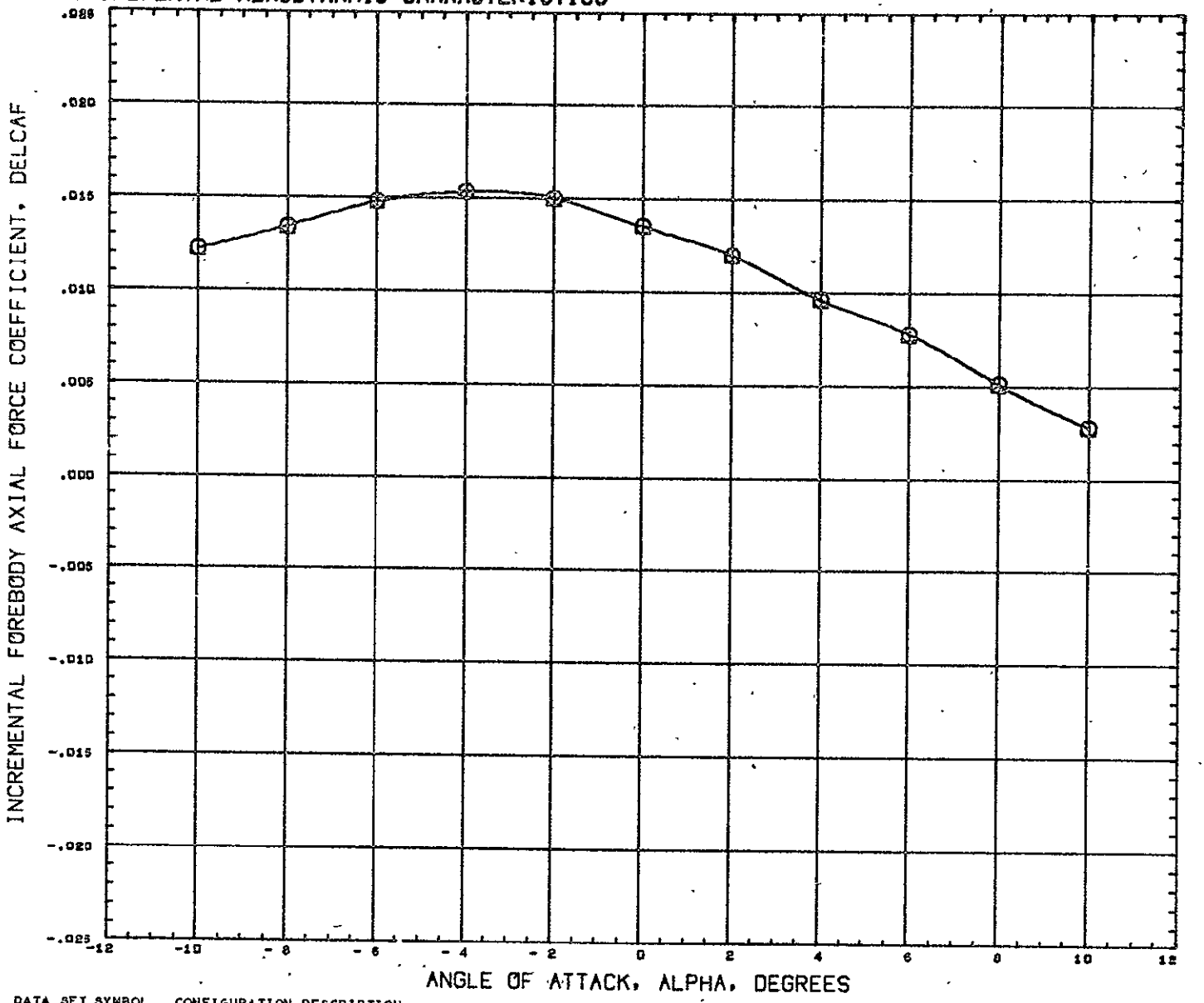
(E2902A) ○ MSFC484 (B5W17E10X - B5X) AT BETA=0 0.000

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA

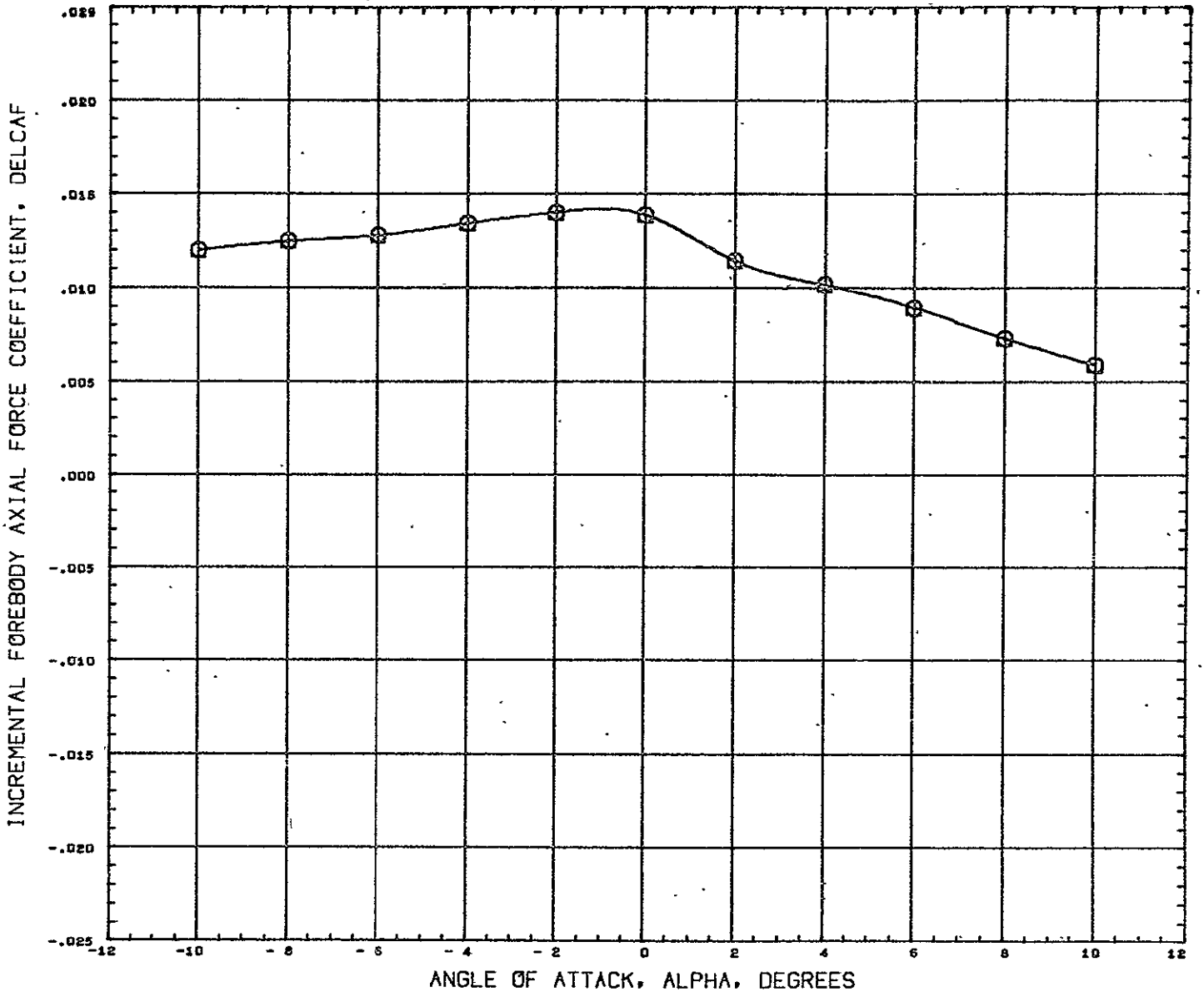
(E29D2A) O MSFC484 (B5W17E10X - B5X) AT BETA=0 0.000

MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA

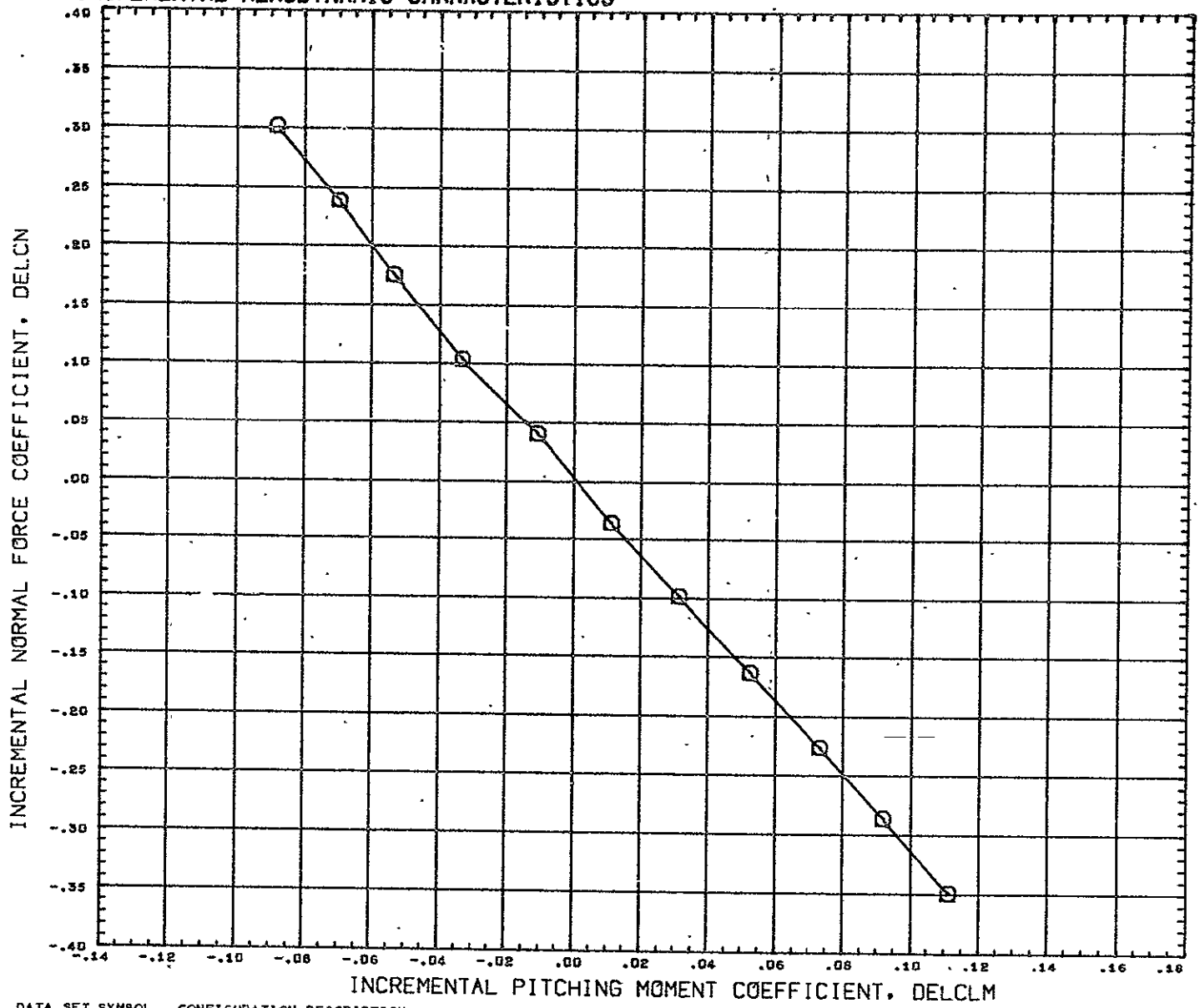
(E2902A) ○ HSFC484 (B5W17E10X - B5X) AT BETA=0 0.000

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFC	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(E2902A) ○ MSFC484 (B5W17E10X - B5X) AT BETA=0

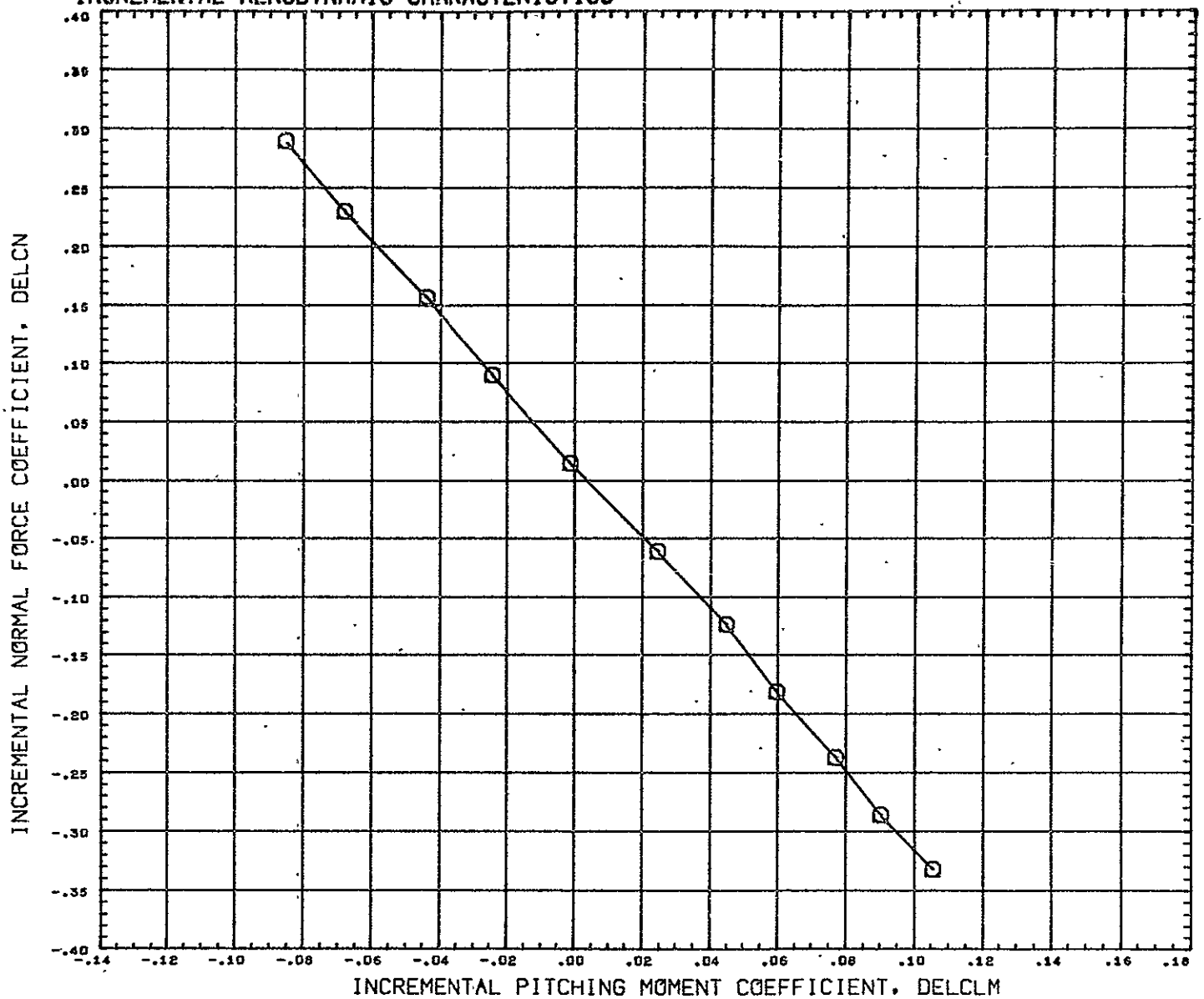
BETA 0.000

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS

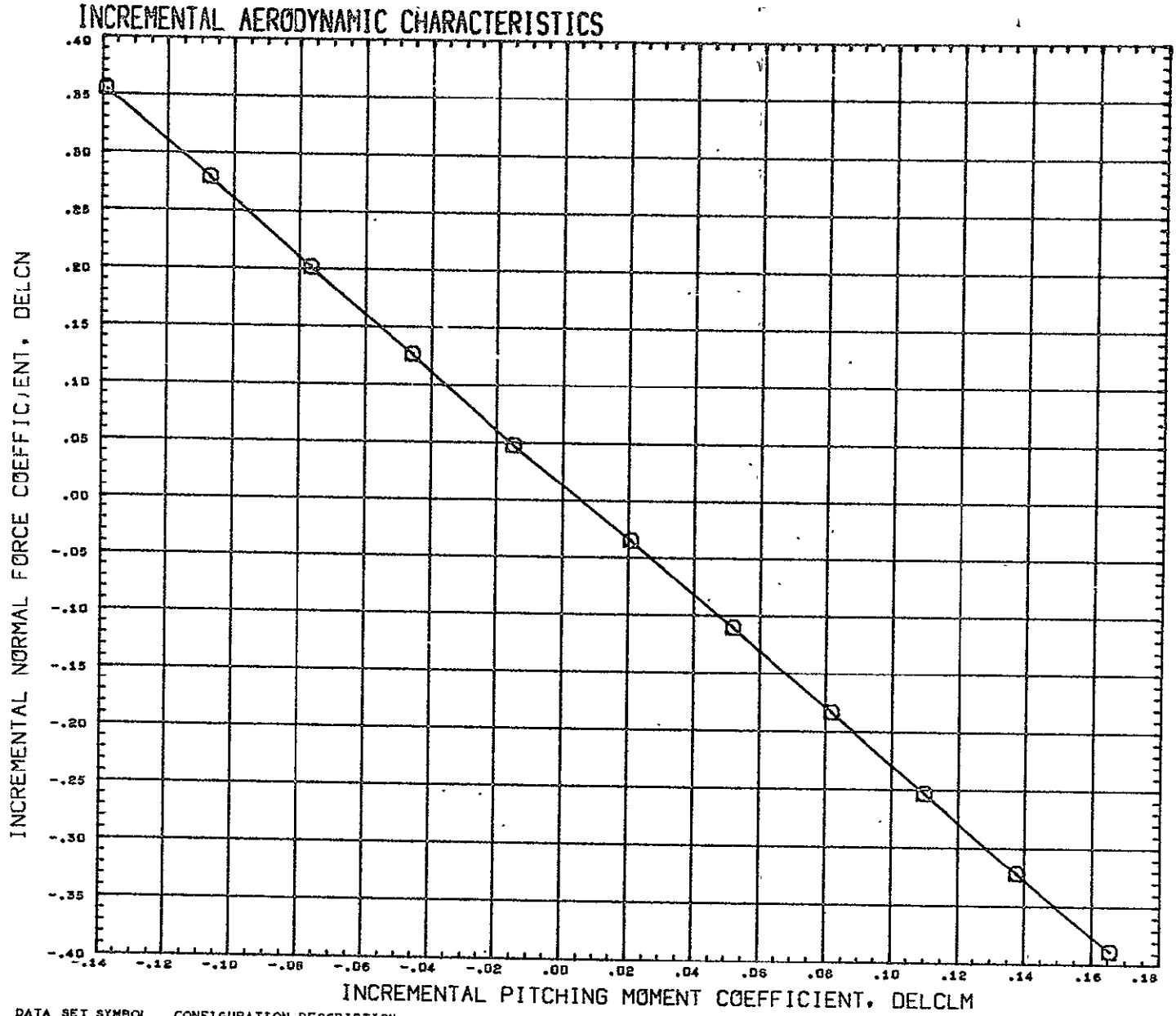


DATA SET SYMBOL (E2902A)		CONFIGURATION DESCRIPTION	BETA
	○	MSFC484 (B5W17E10X - B5X) AT BETA=0	0.000

MACH 0.900

REFERENCE INFORMATION

REFS	6084.2040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE



DATA SET SYMBOL CONFIGURATION DESCRIPTION
(E2902A) ○ MSFC484 (B5W17E10X - B5X) AT BETA=0

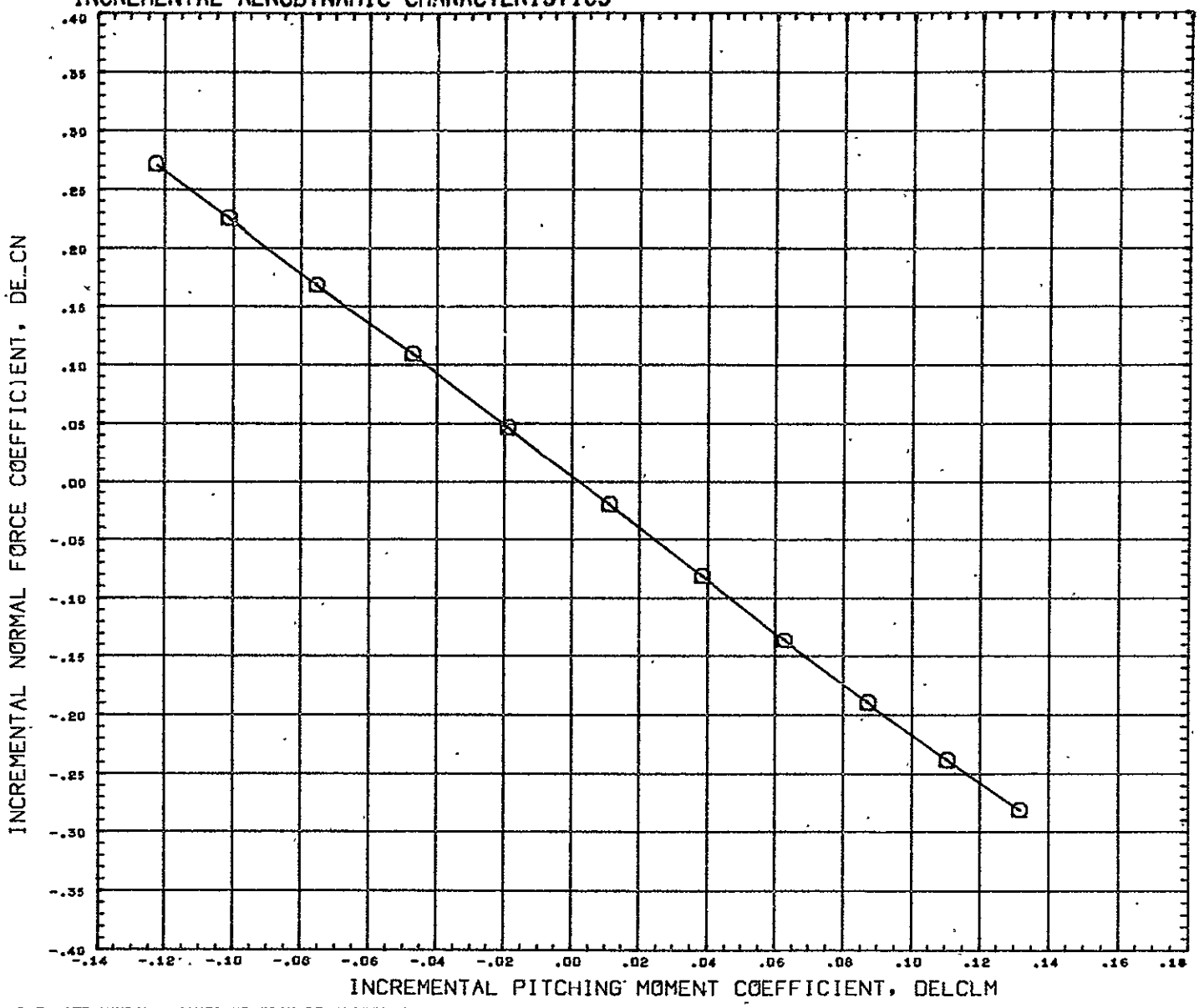
BETA
0.000

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



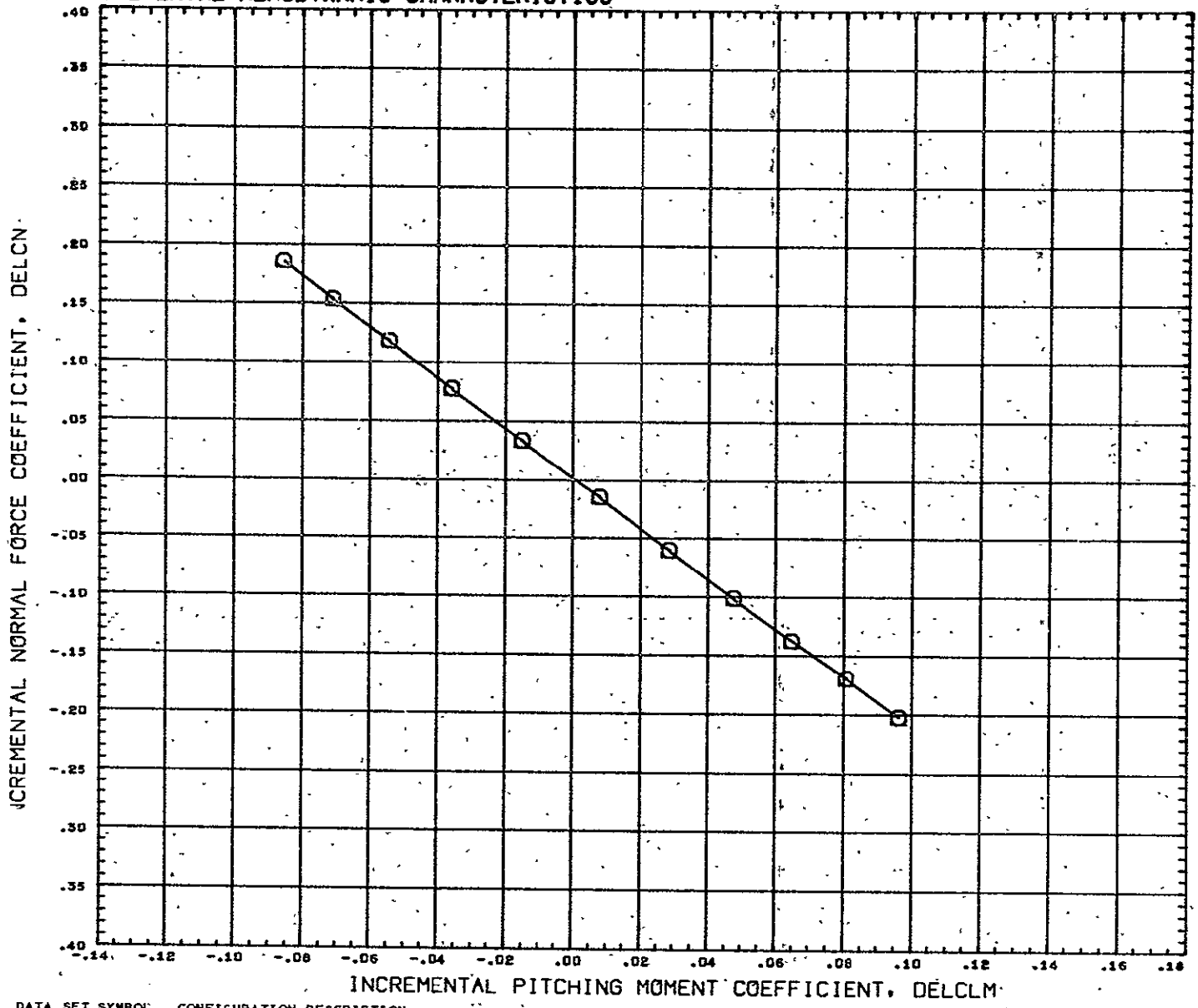
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA
(E2902A) ○	MSFC484 (B5W17E10X - B5X) AT BETA=0	0.000

MACH 1.500

REFERENCE INFORMATION

REFS	6084.2040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION
(E2902A) ○ MSFC484 (B5W17E10X - B5X) AT BETA=0

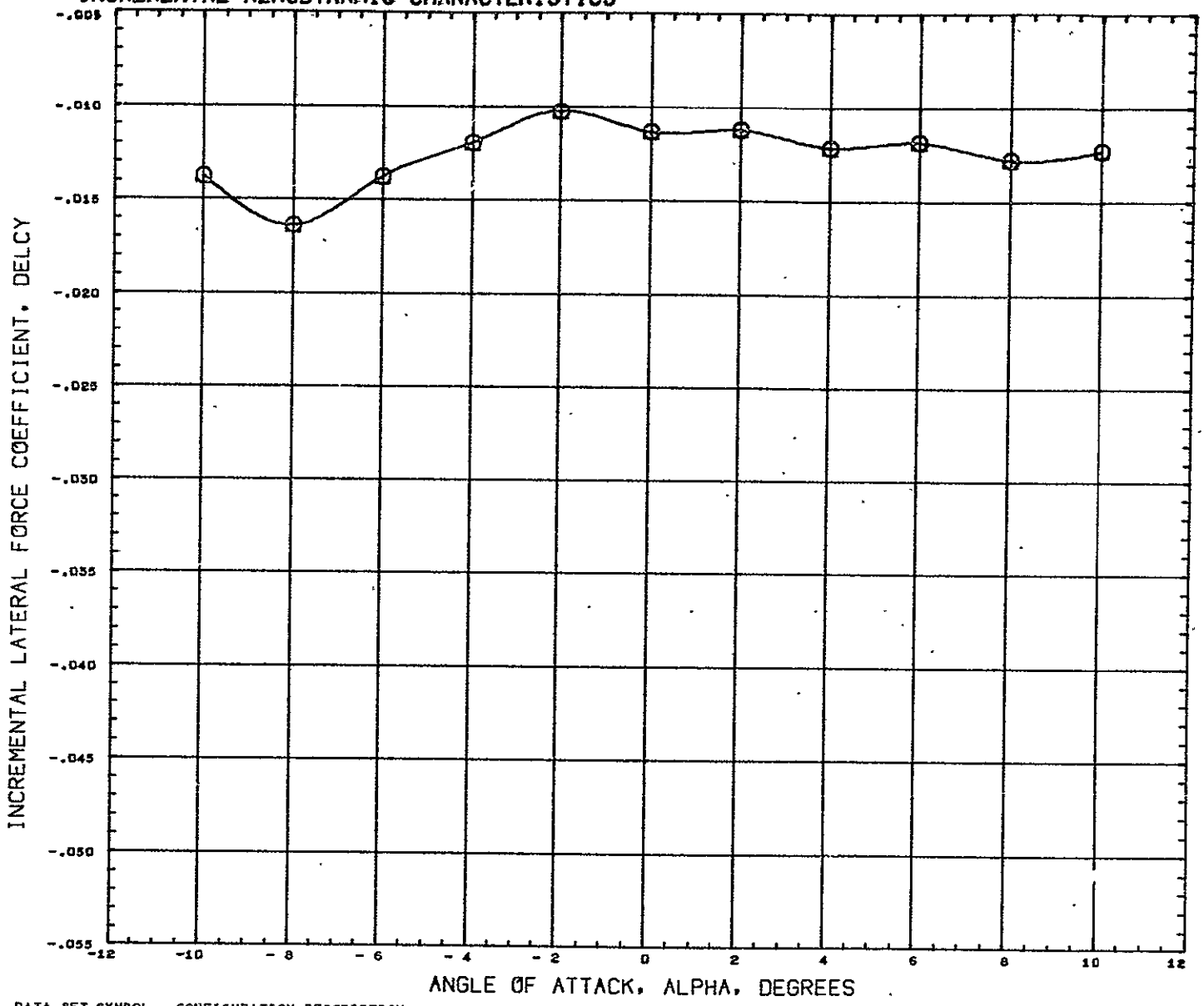
BETA
0.000

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

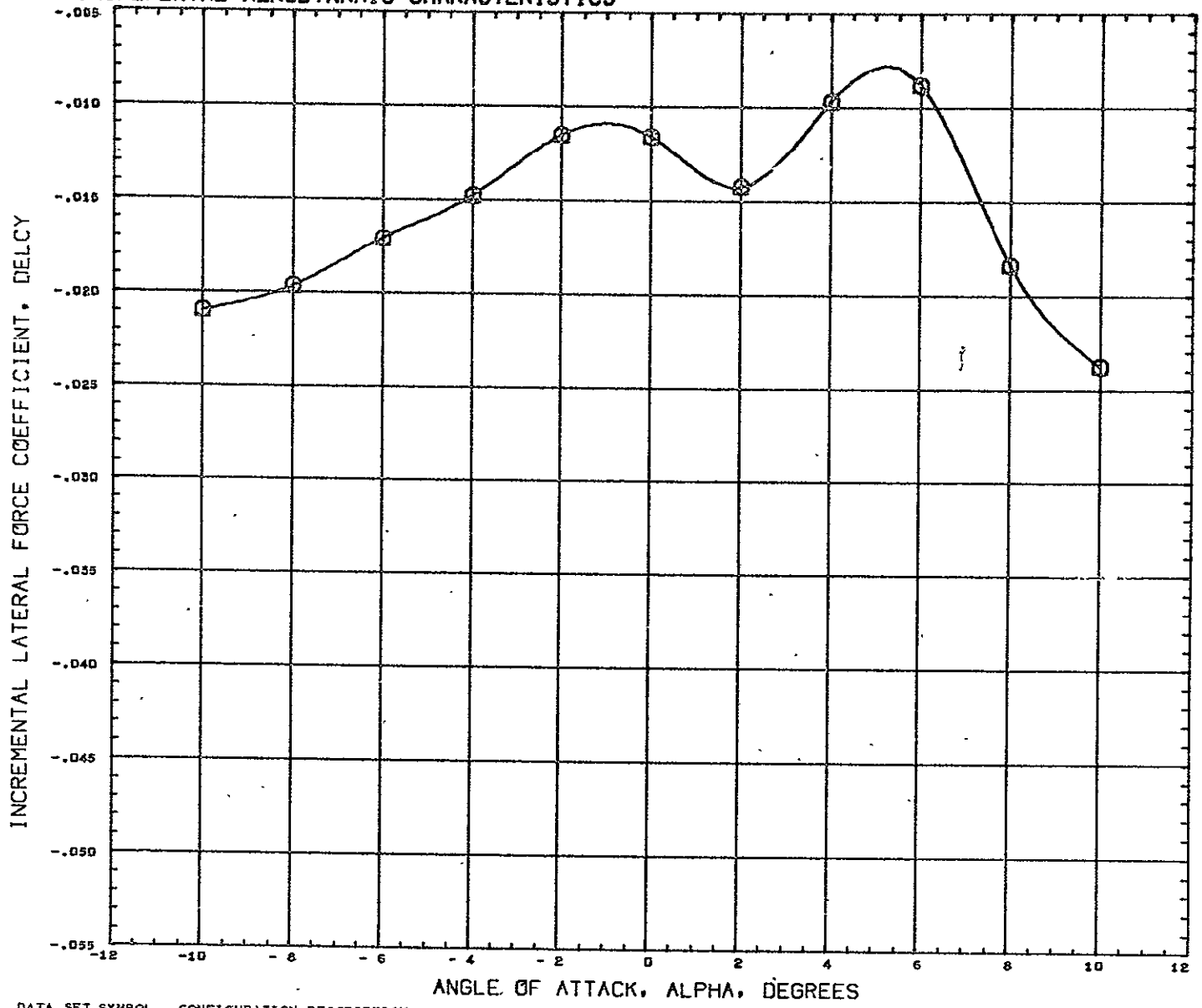
(F2903A) ○ MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



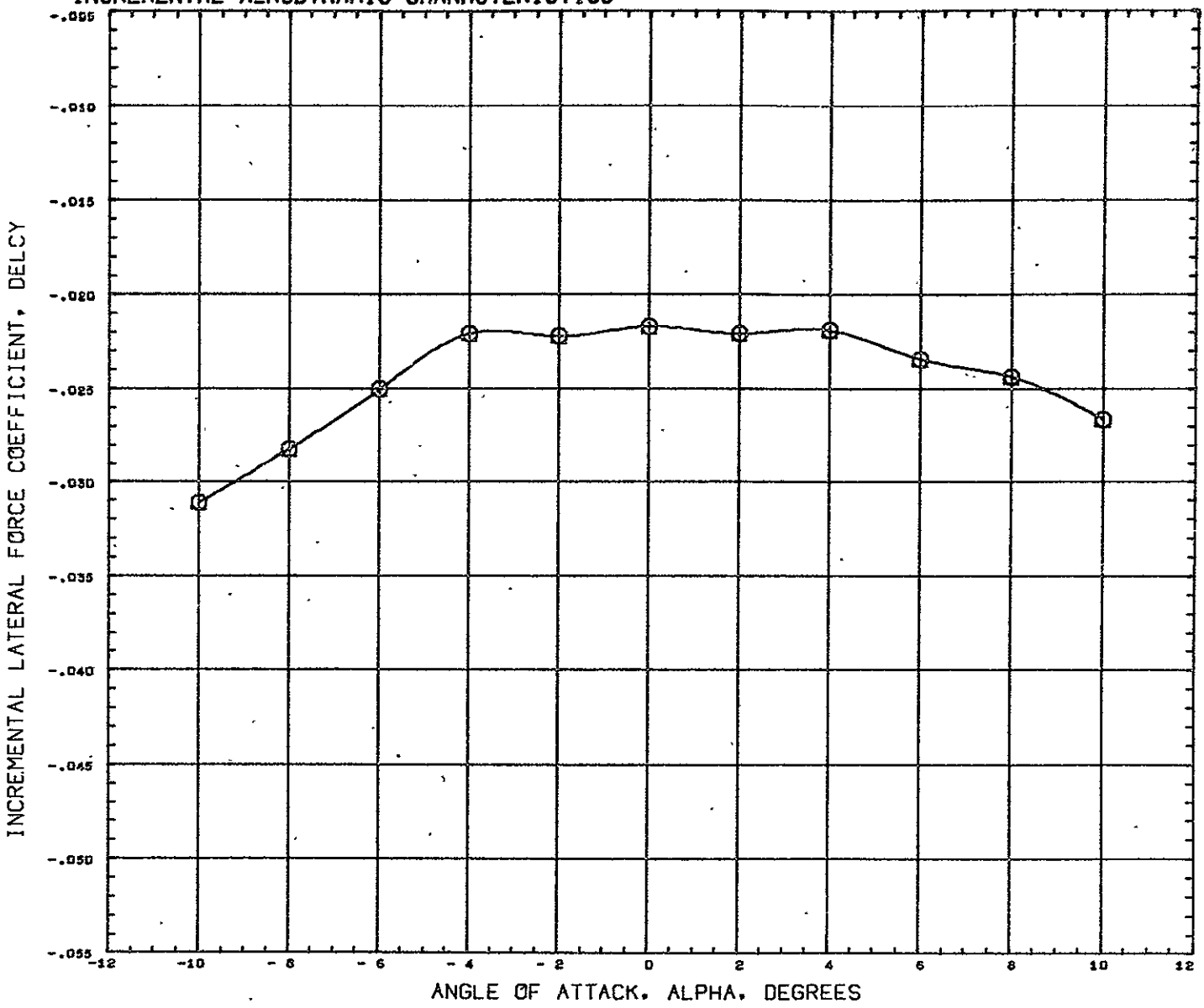
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2903A) ○ MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2404	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



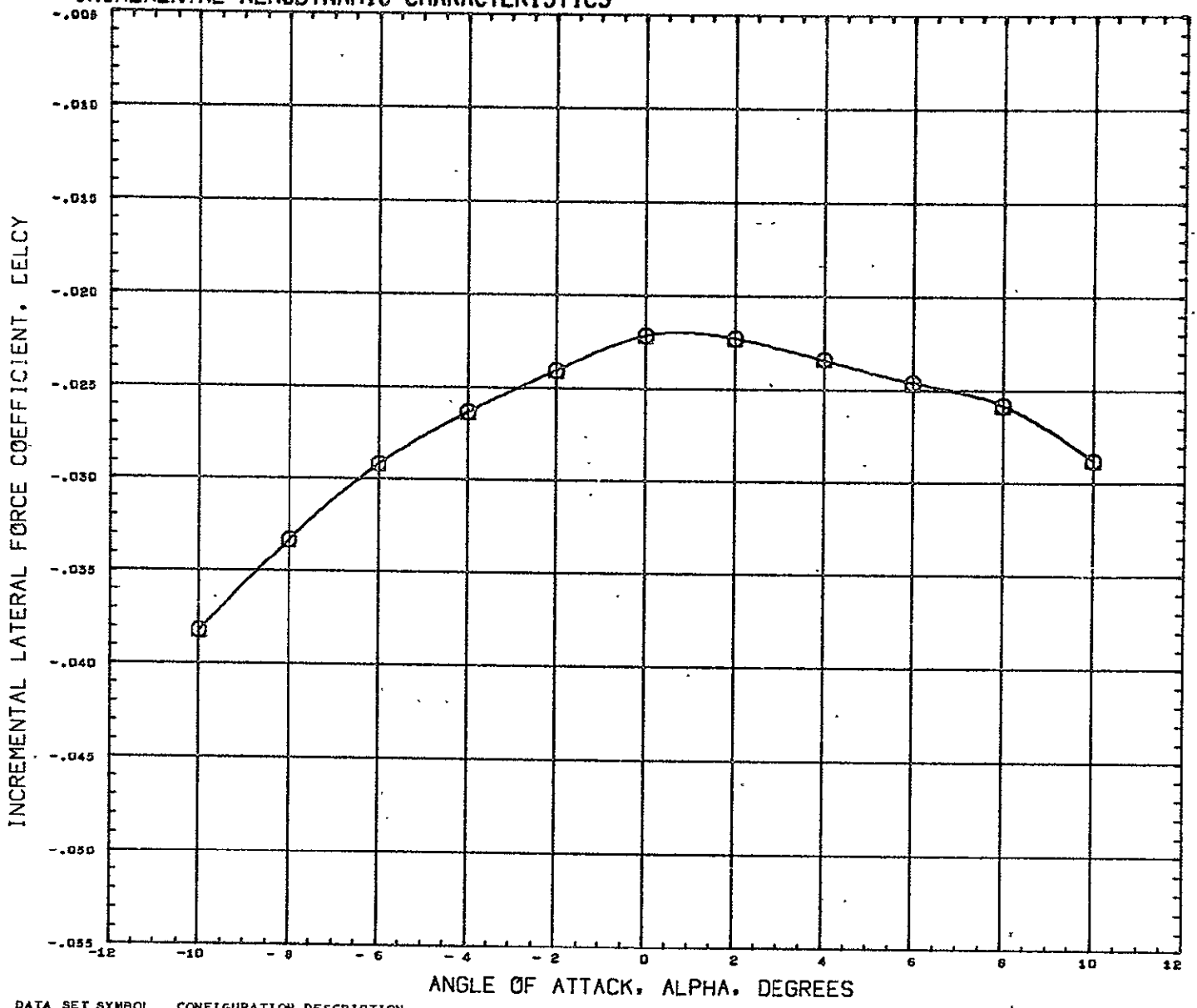
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2903A) ○ MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



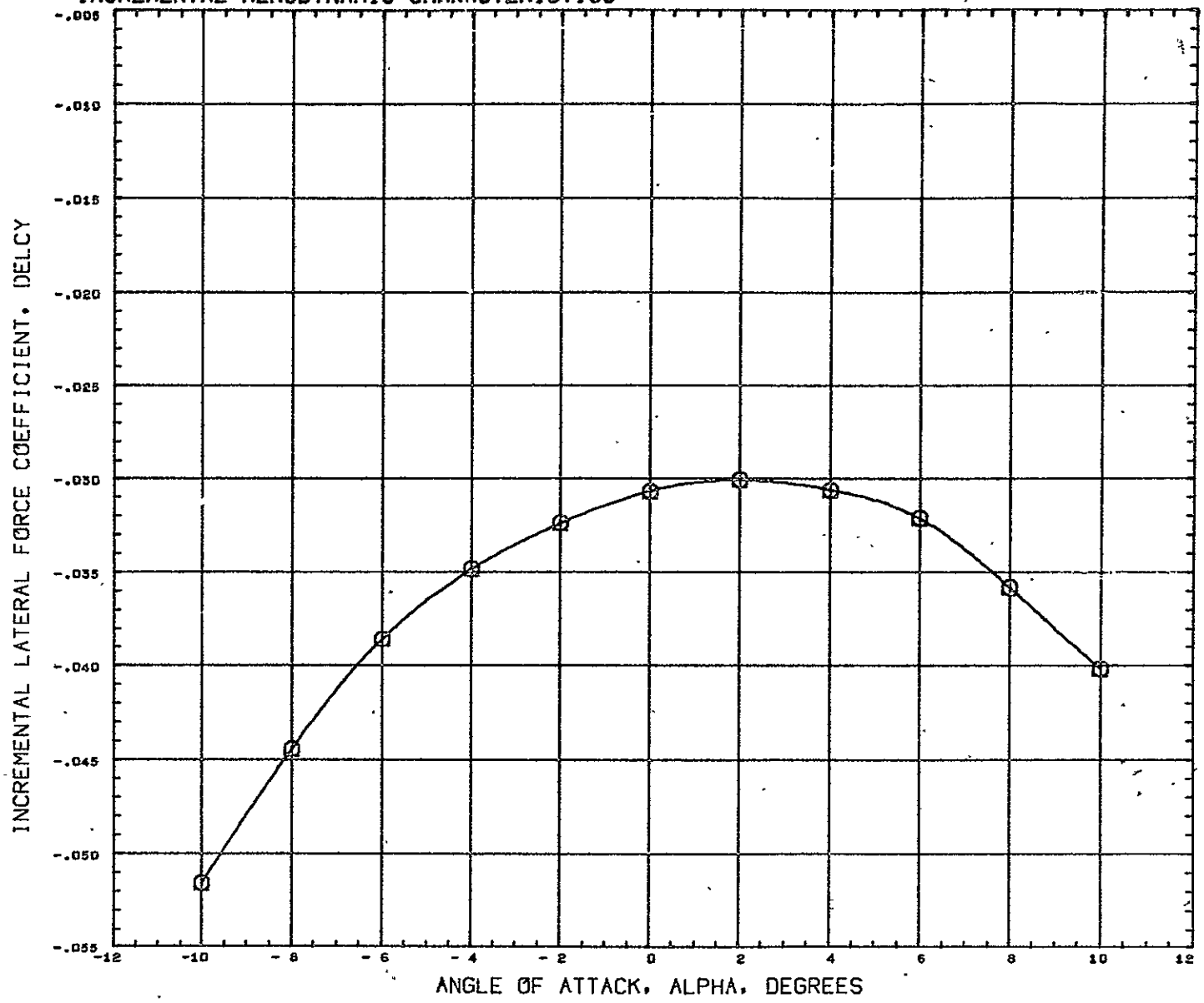
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2903A) O MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



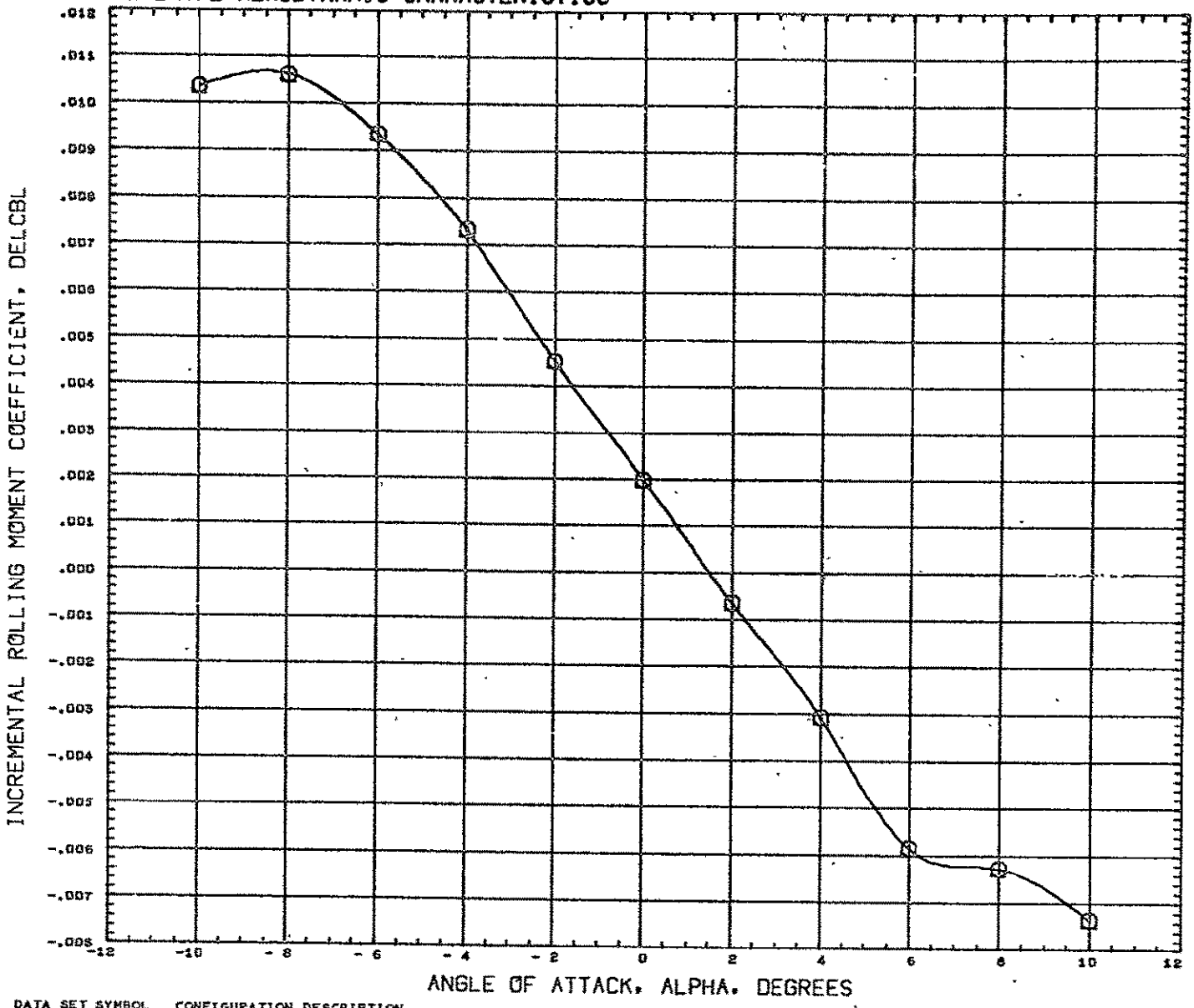
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2903A) ○ MSFC484 (B5W17E1D AT BETA=6 - B5X AT BETA=0)

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2304	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



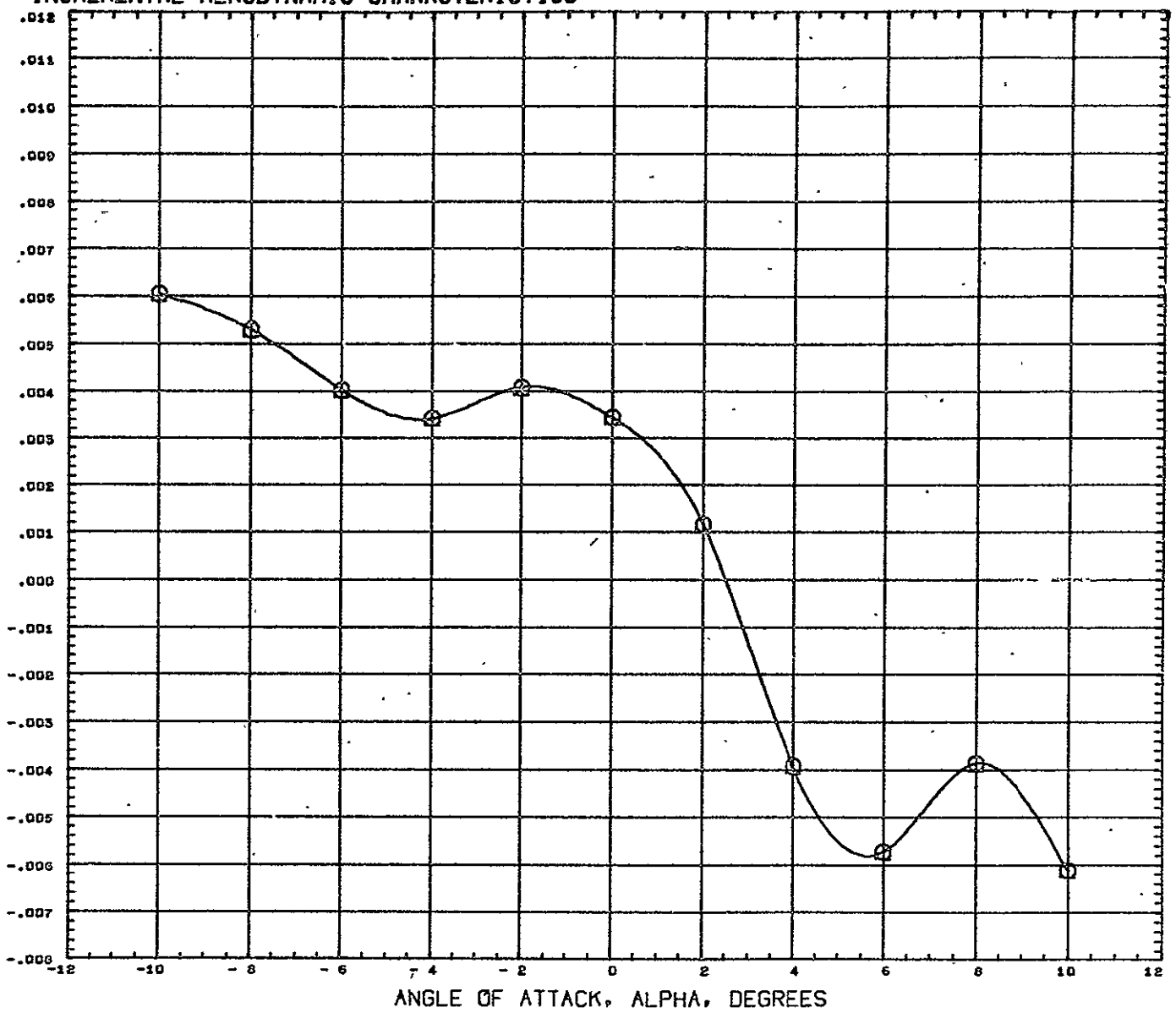
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2903A) ○ MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

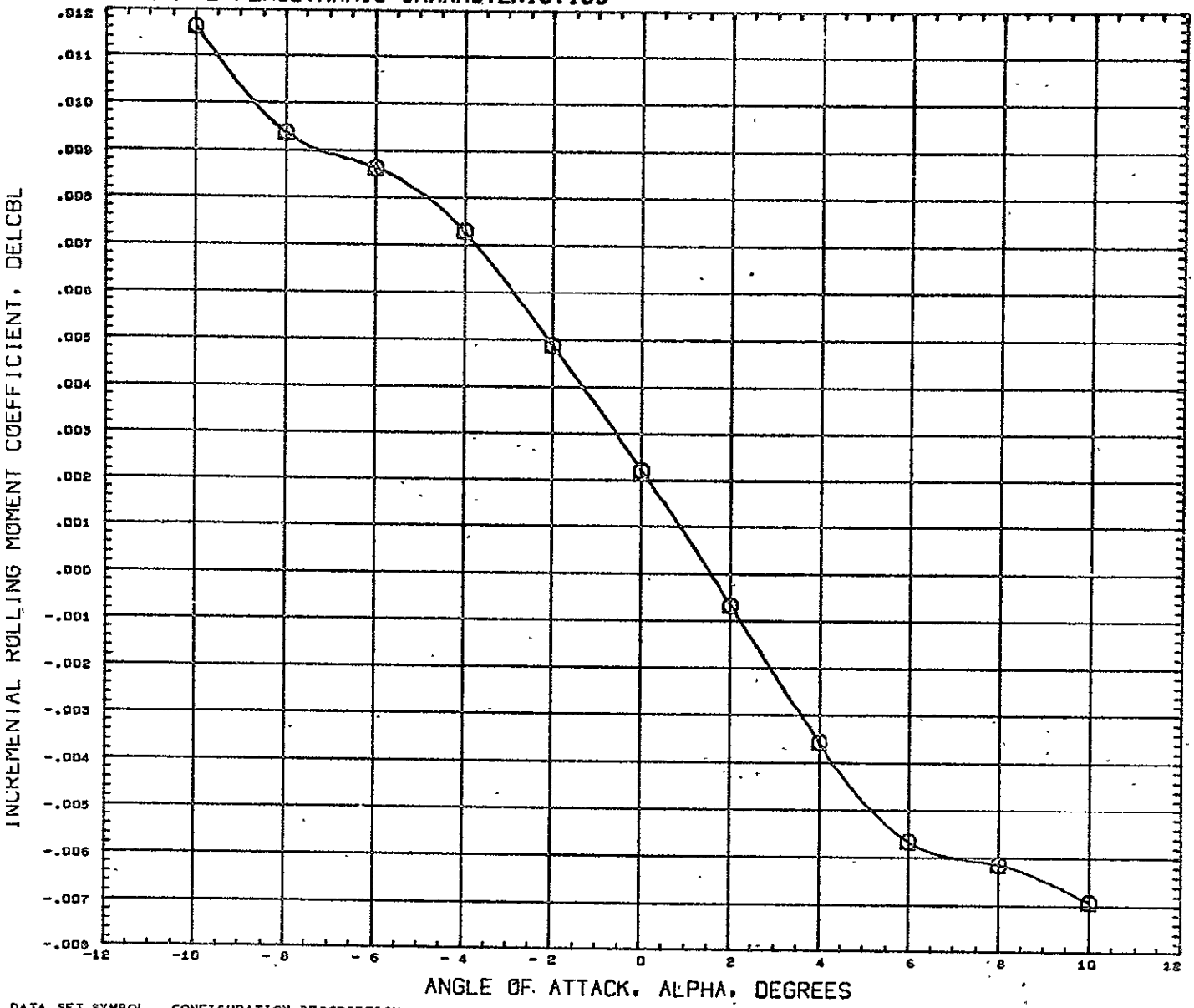
(F2903A) ○ HSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.4004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



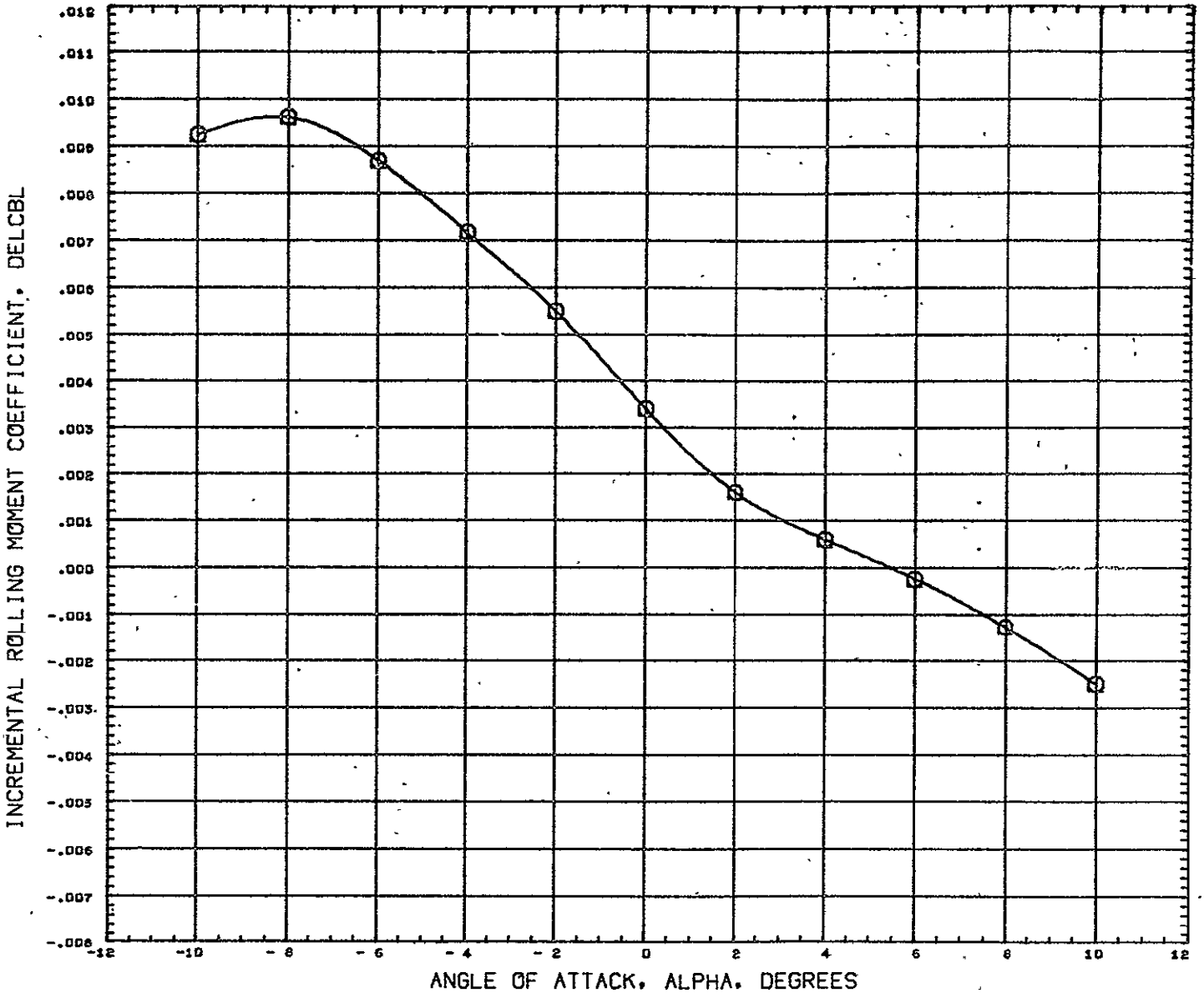
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2903A) ○ MSFC484 (B5W17E1D AT BETA=6 - B5X AT BETA=0)

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

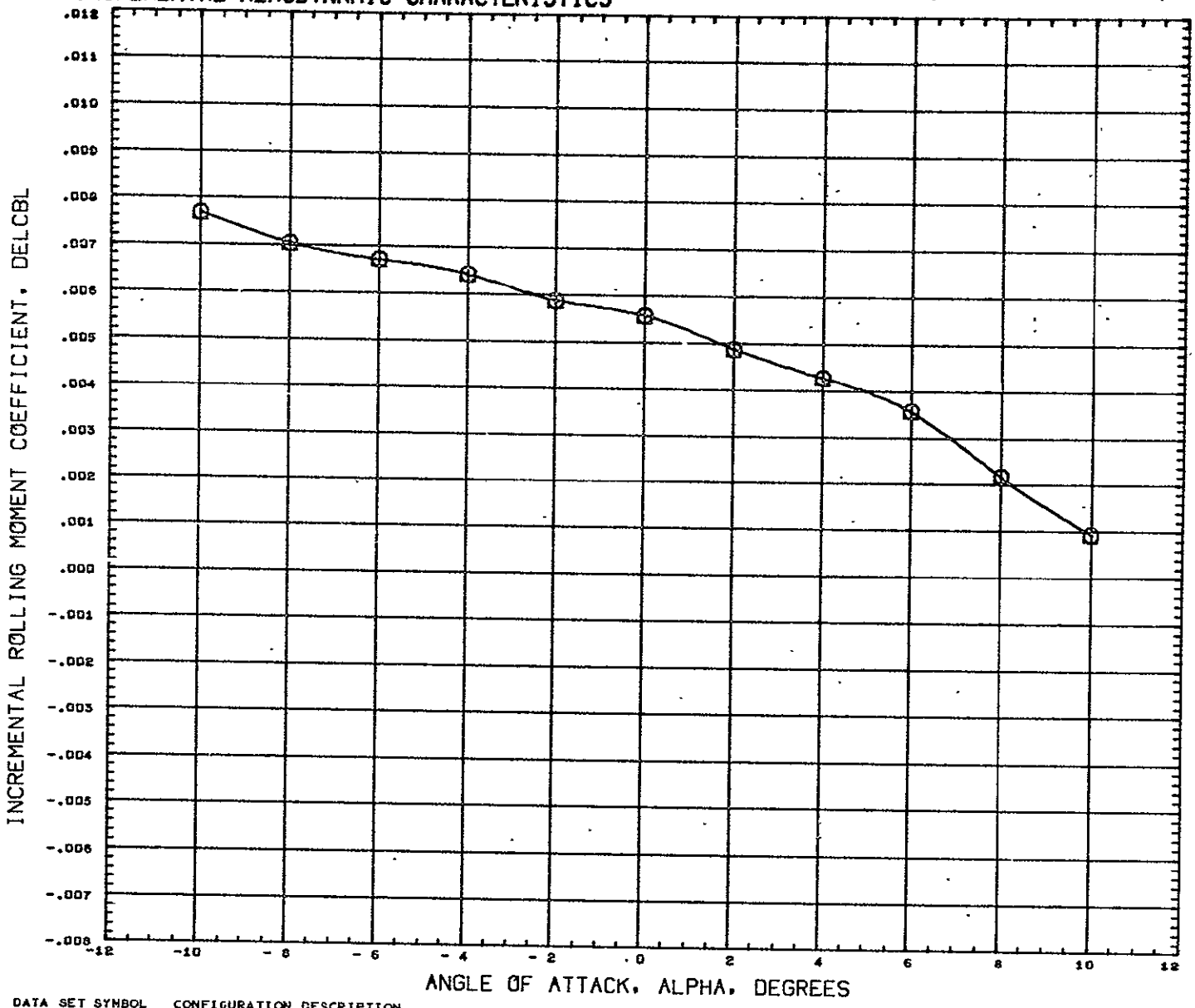
(F2903A) O MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2404	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



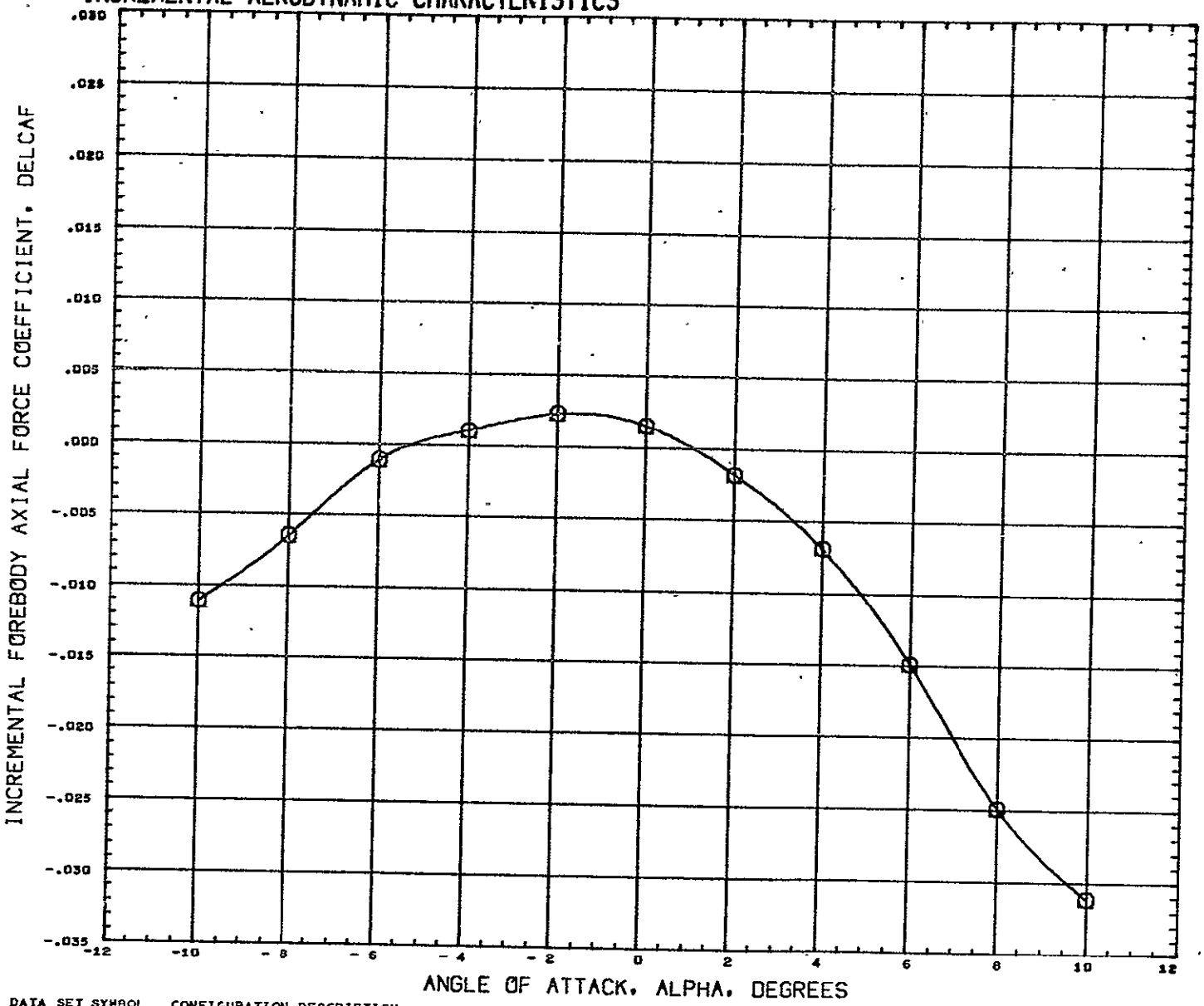
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2903A) ○ MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



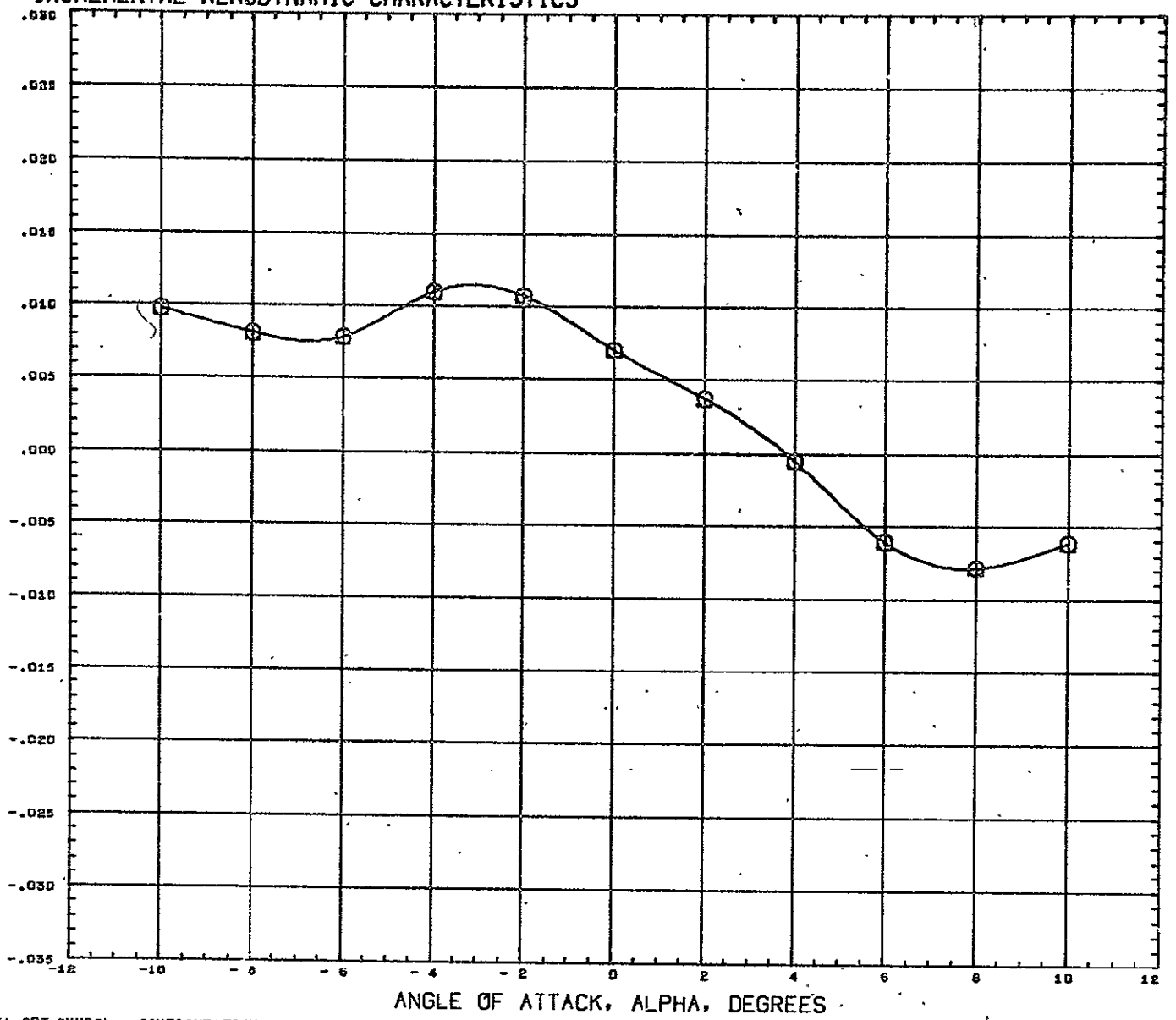
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2903A) ○ MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



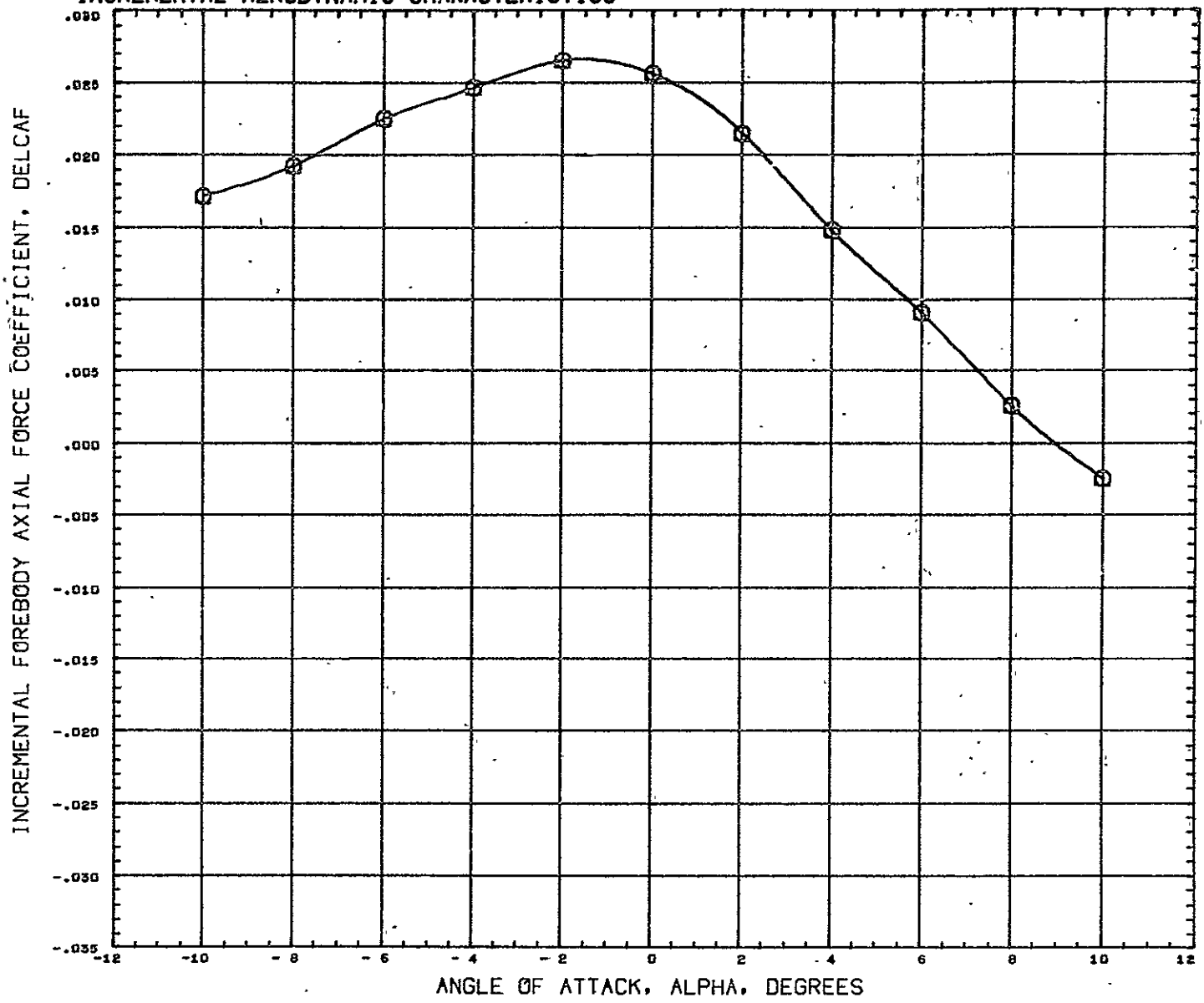
DATA SET SYMBOL (F2903A) ○ CONFIGURATION DESCRIPTION HSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

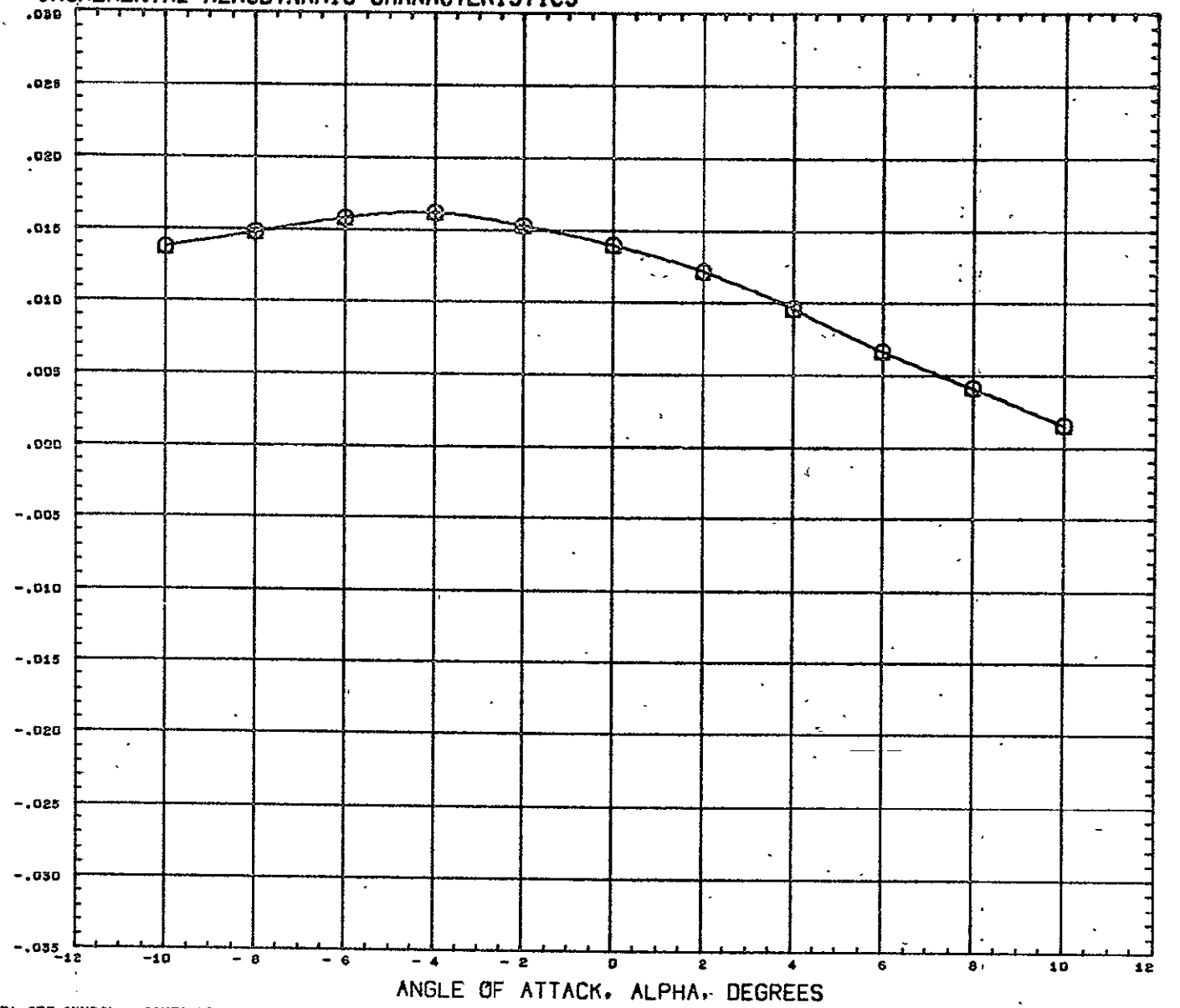
(F2903A) O MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2404	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERØDYNAMIC CHARACTERISTICS



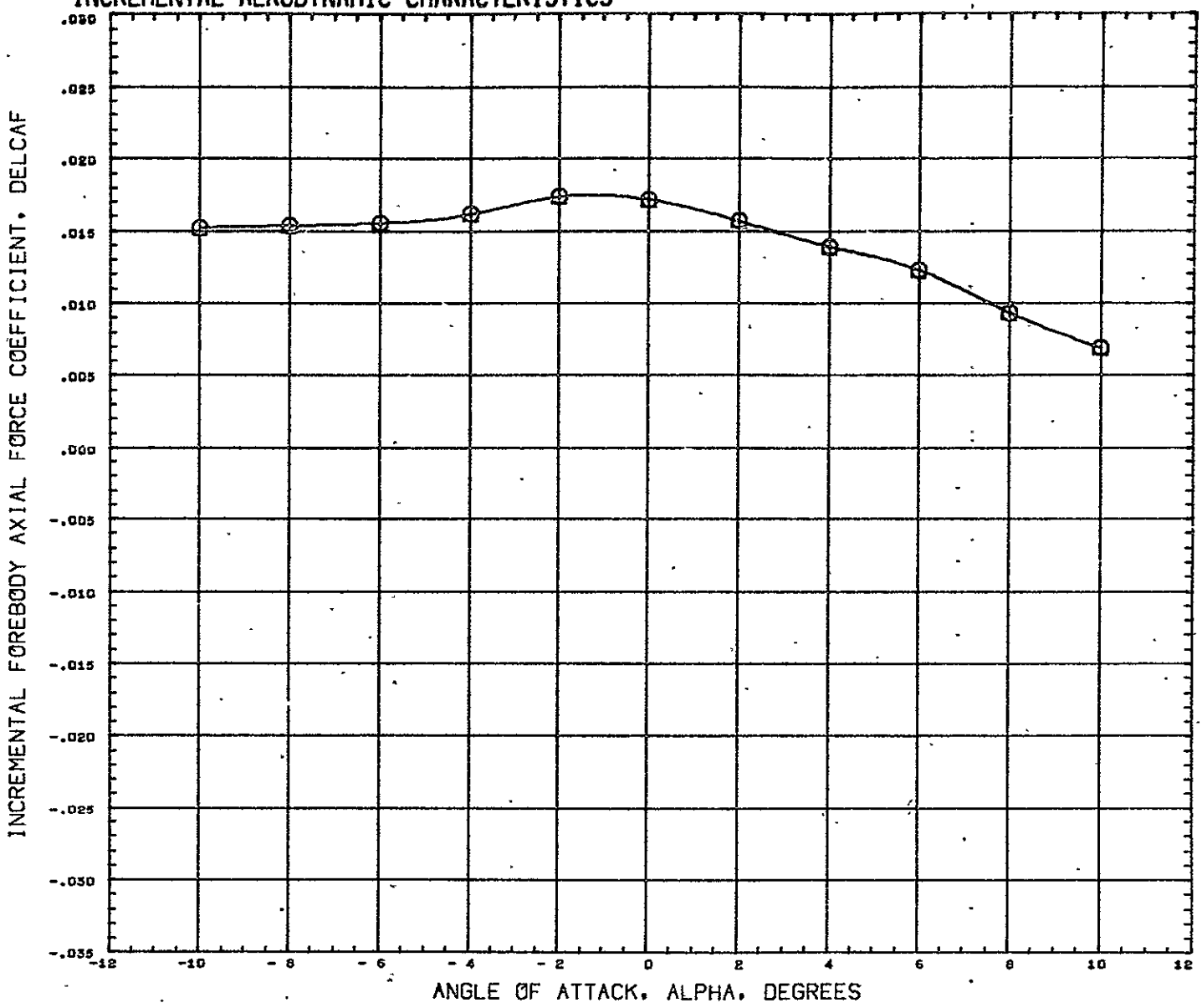
DATA SET SYMBOL (F2903A) ○ CONFIGURATION DESCRIPTION MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

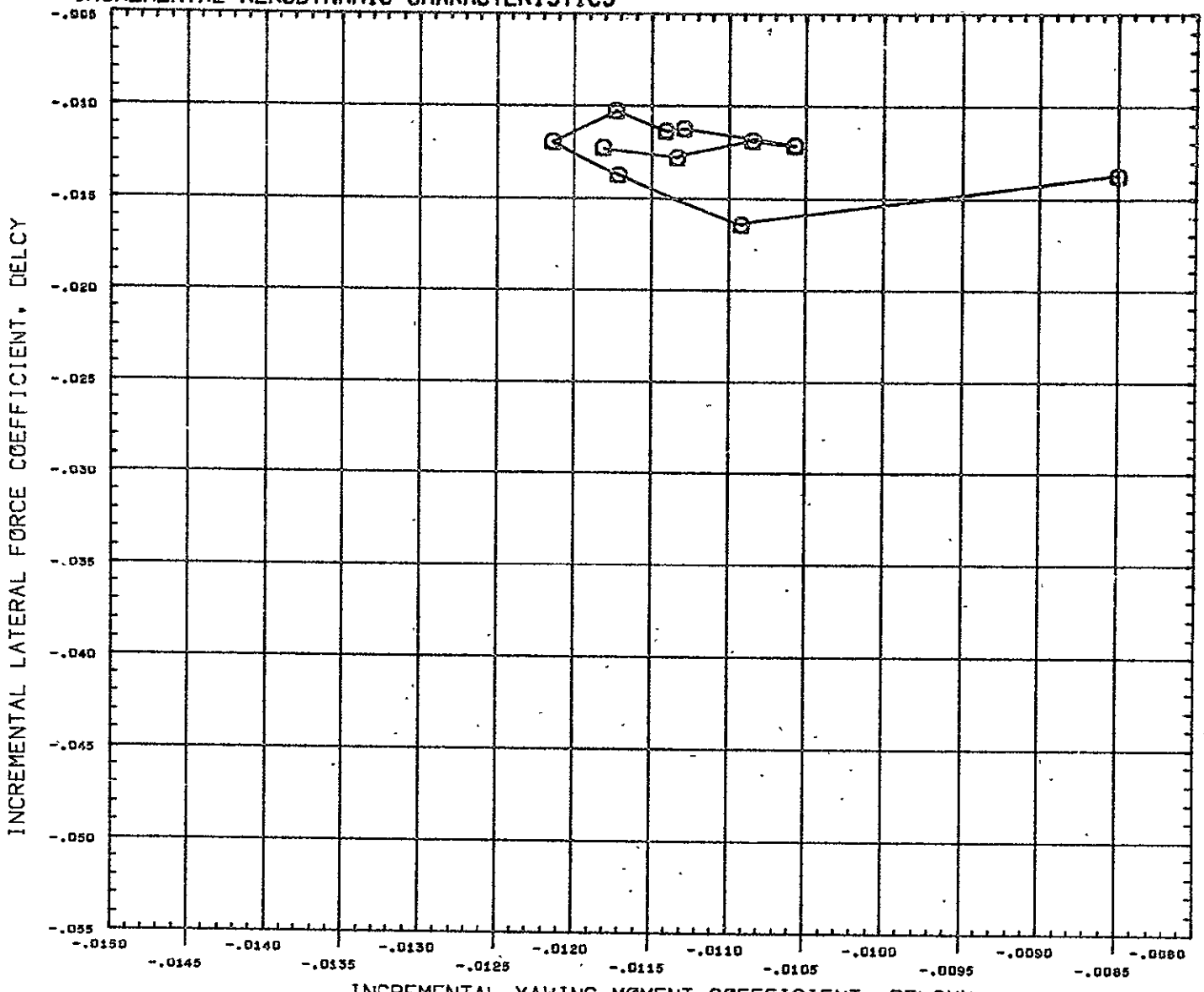
(F2903A) ○ HSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH, 2.000

REFERENCE INFORMATION

REFS	6084.2040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

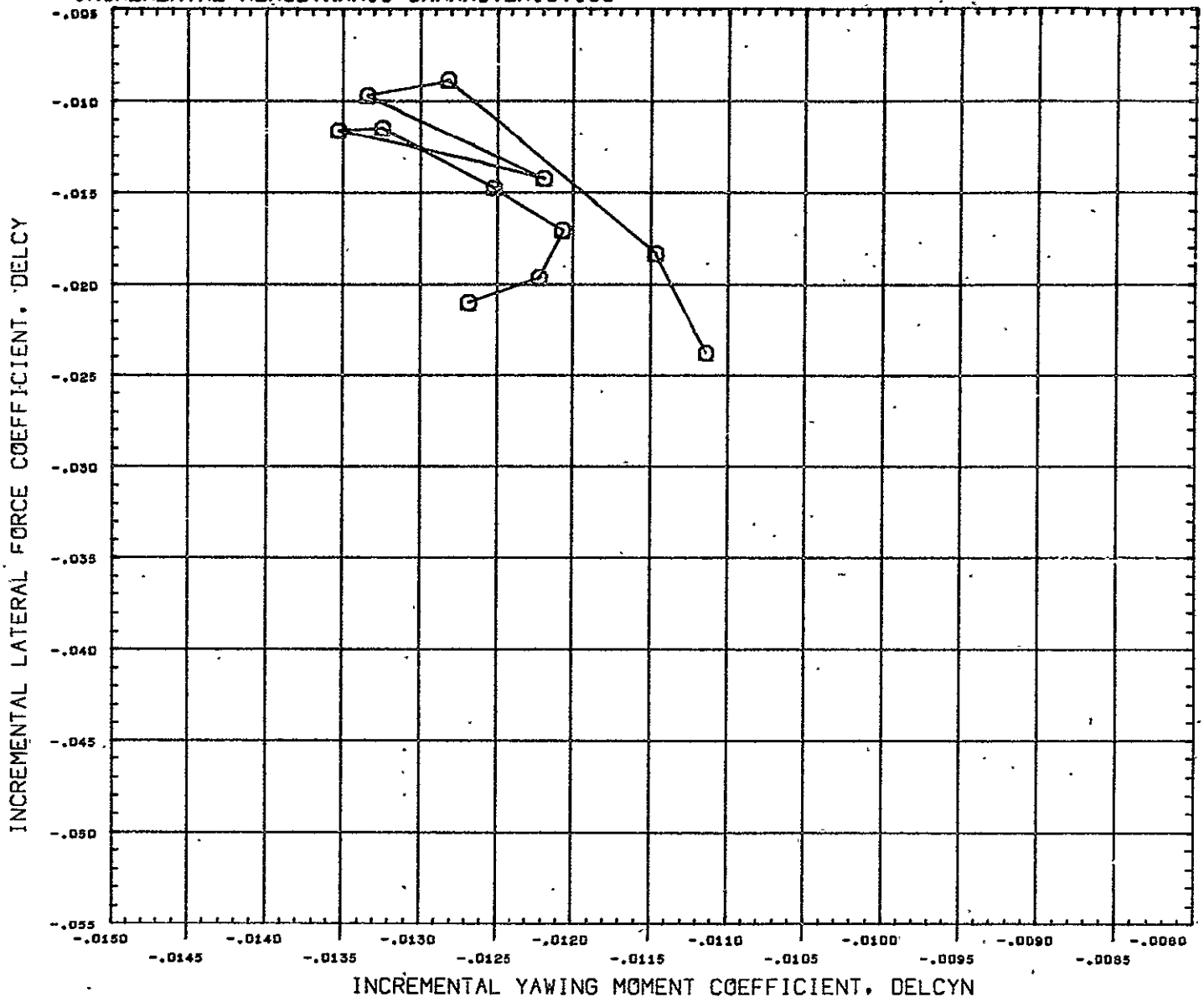
(F2903A) O MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

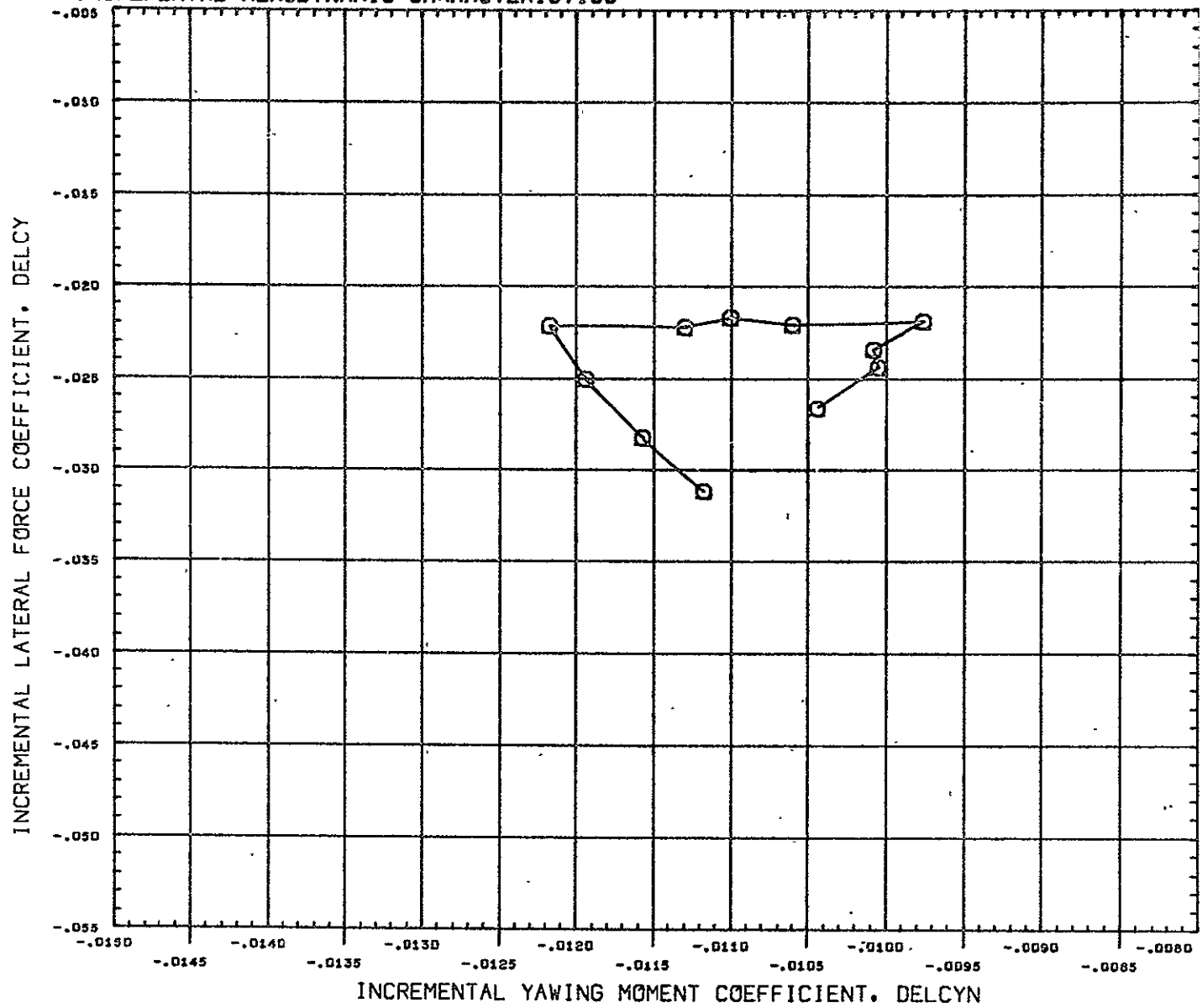
(F2903A) ○ MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 0.900

REFERENCE INFORMATION

REFS	6084.2040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



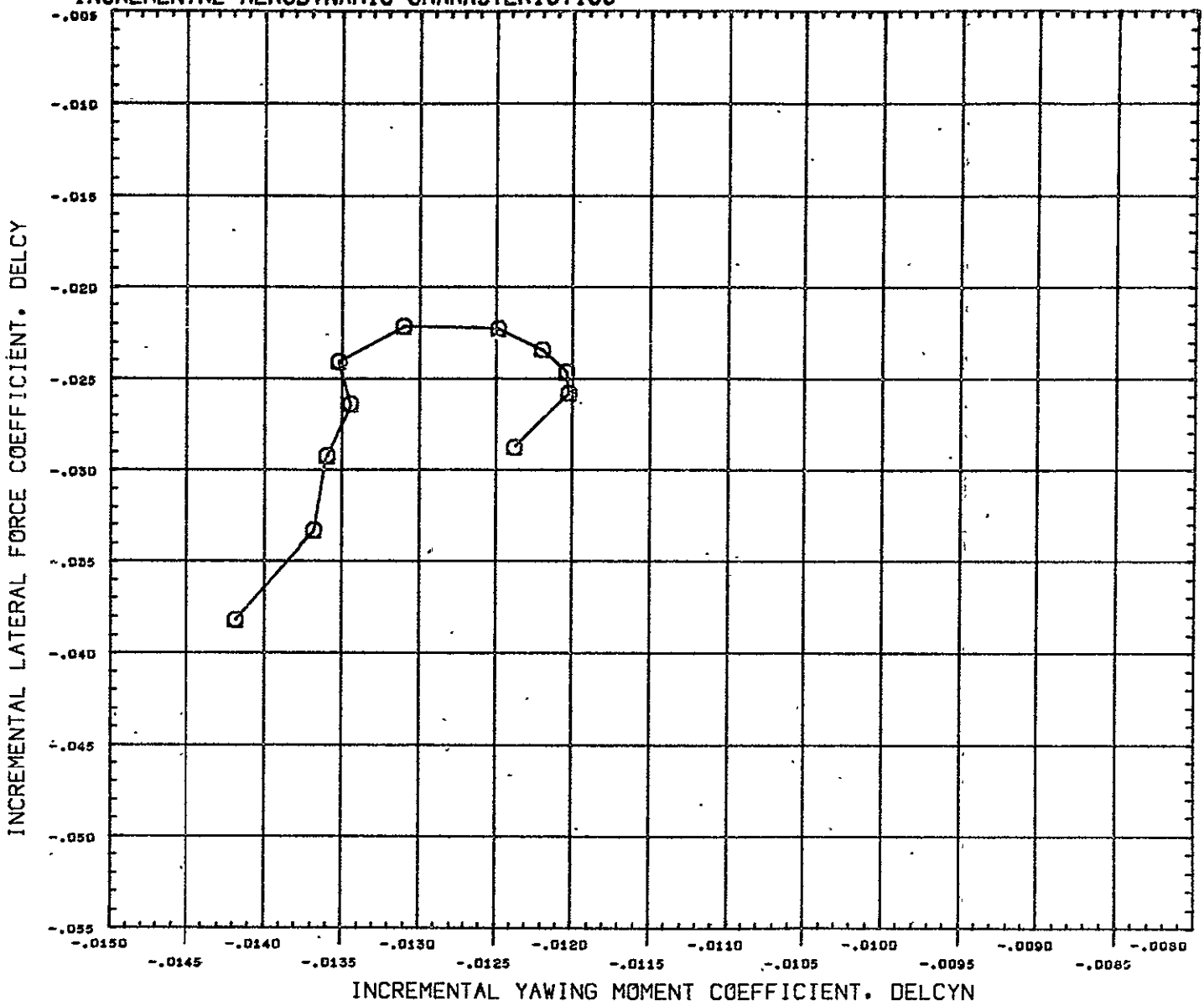
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2903A) ○ MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

. MACH 1.100

REFERENCE INFORMATION

REFS	6084.9040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

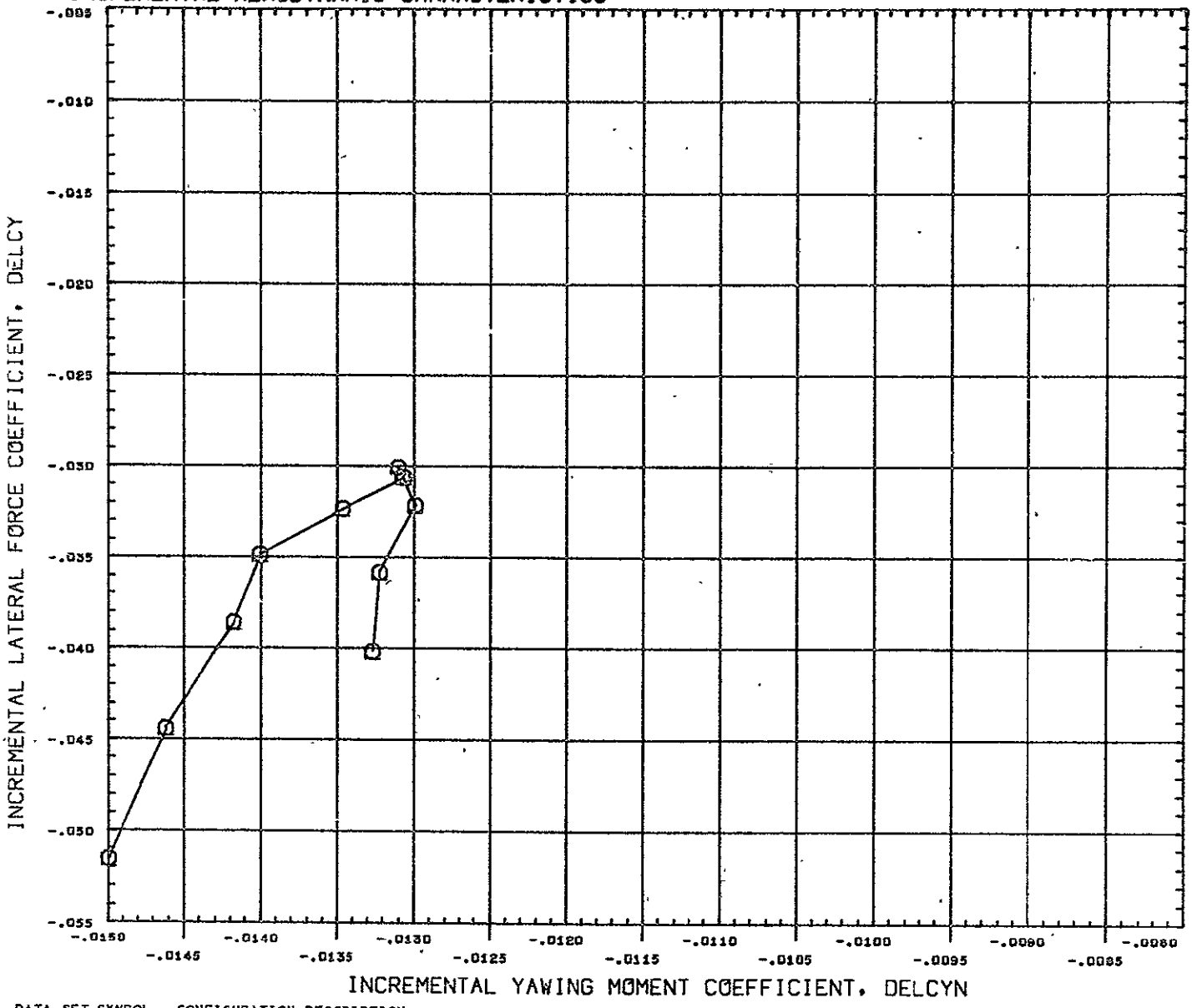
(F2903A) ○ MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



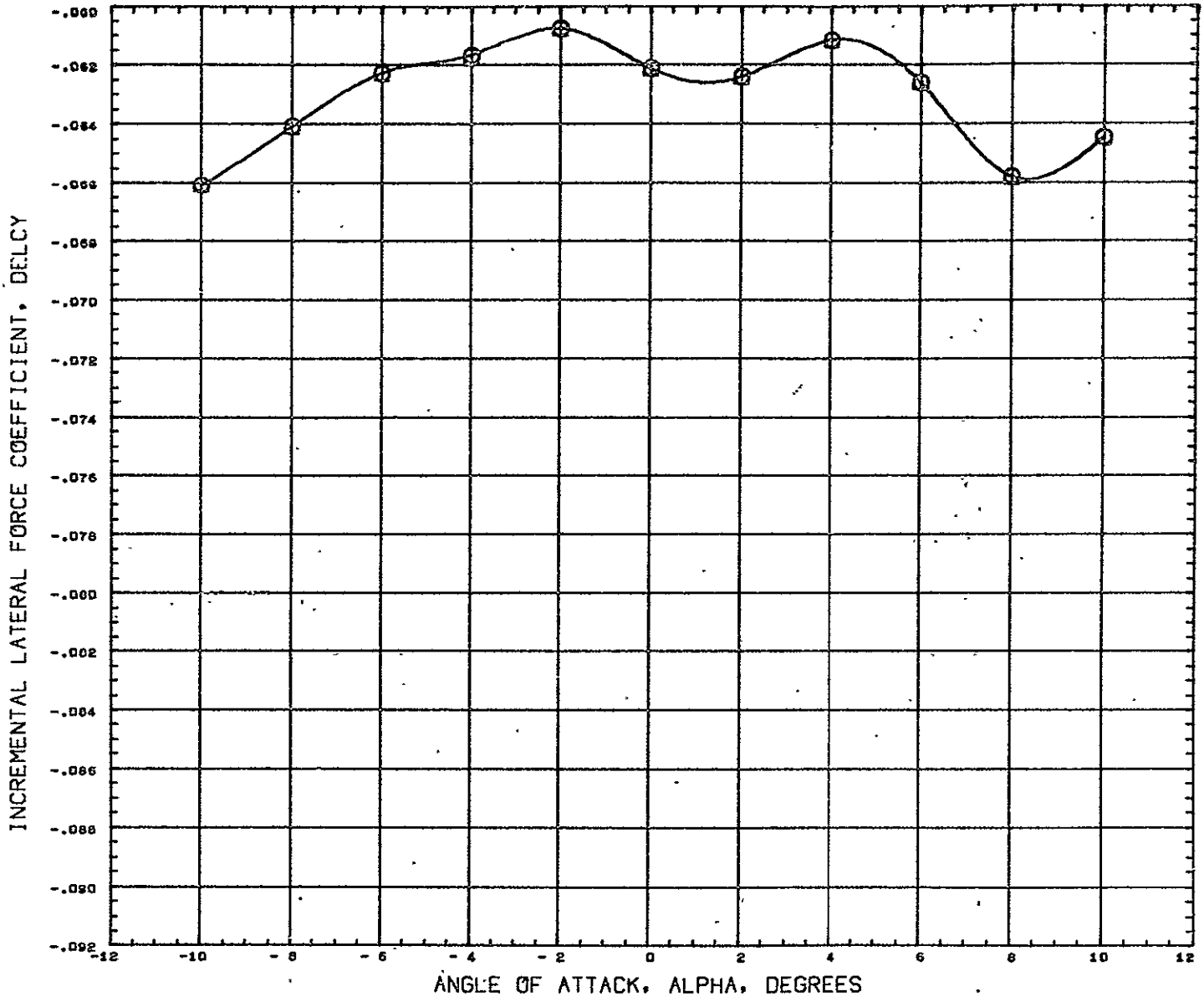
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2903A) Q MSFC484 (B5W17E10 AT BETA=6 - B5X AT BETA=0)

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

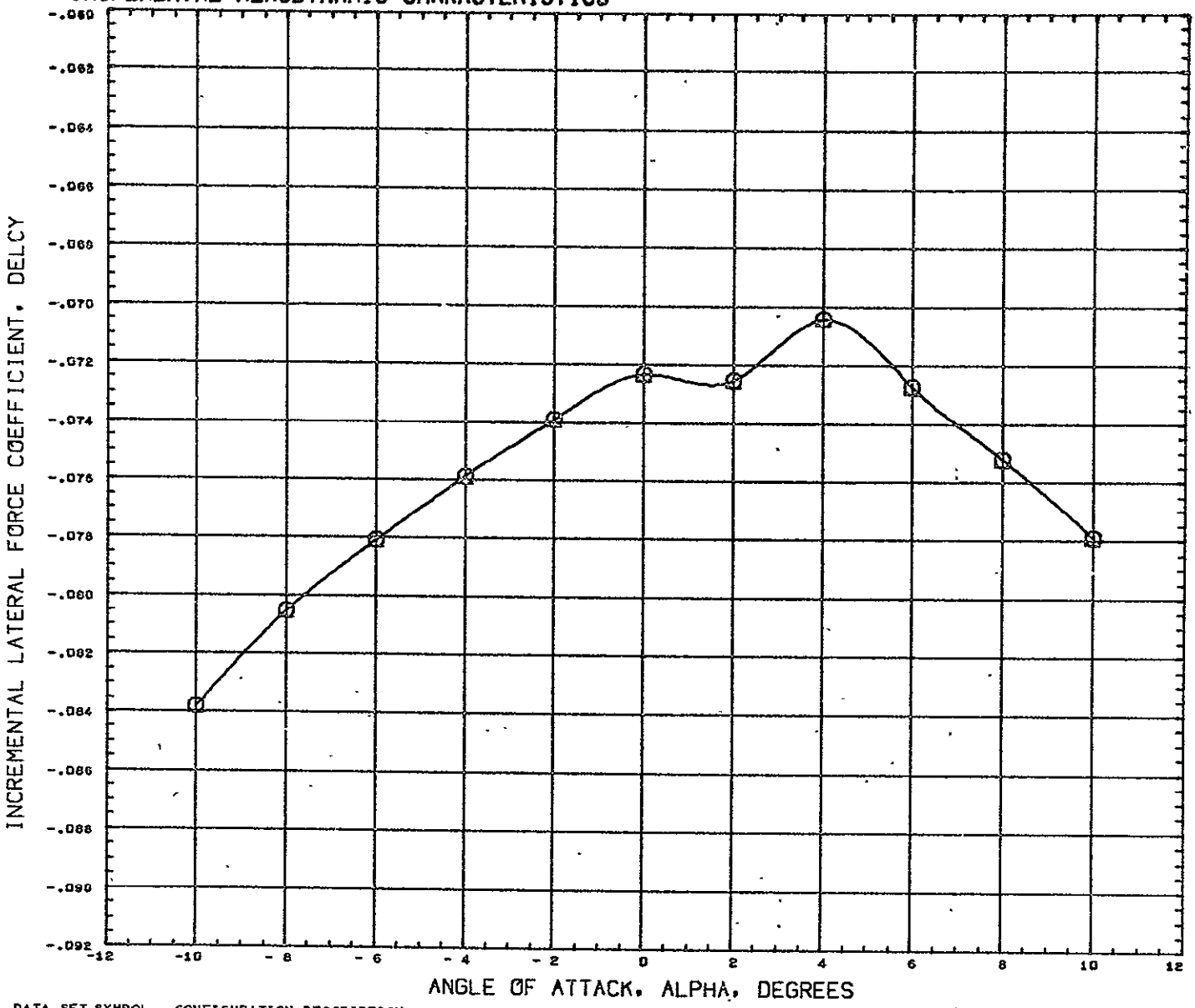
(F2904A) ○ MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



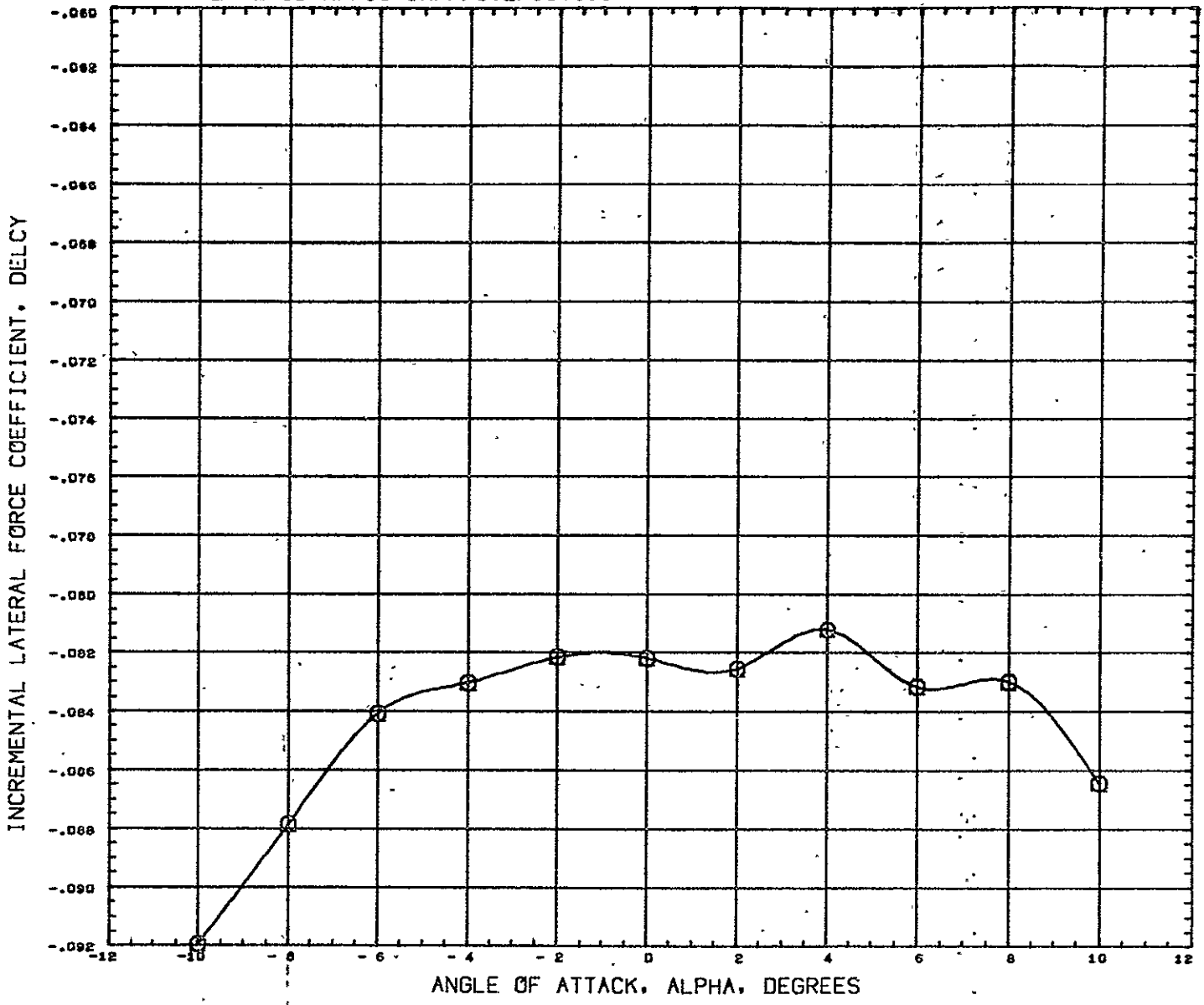
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2904A) O MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

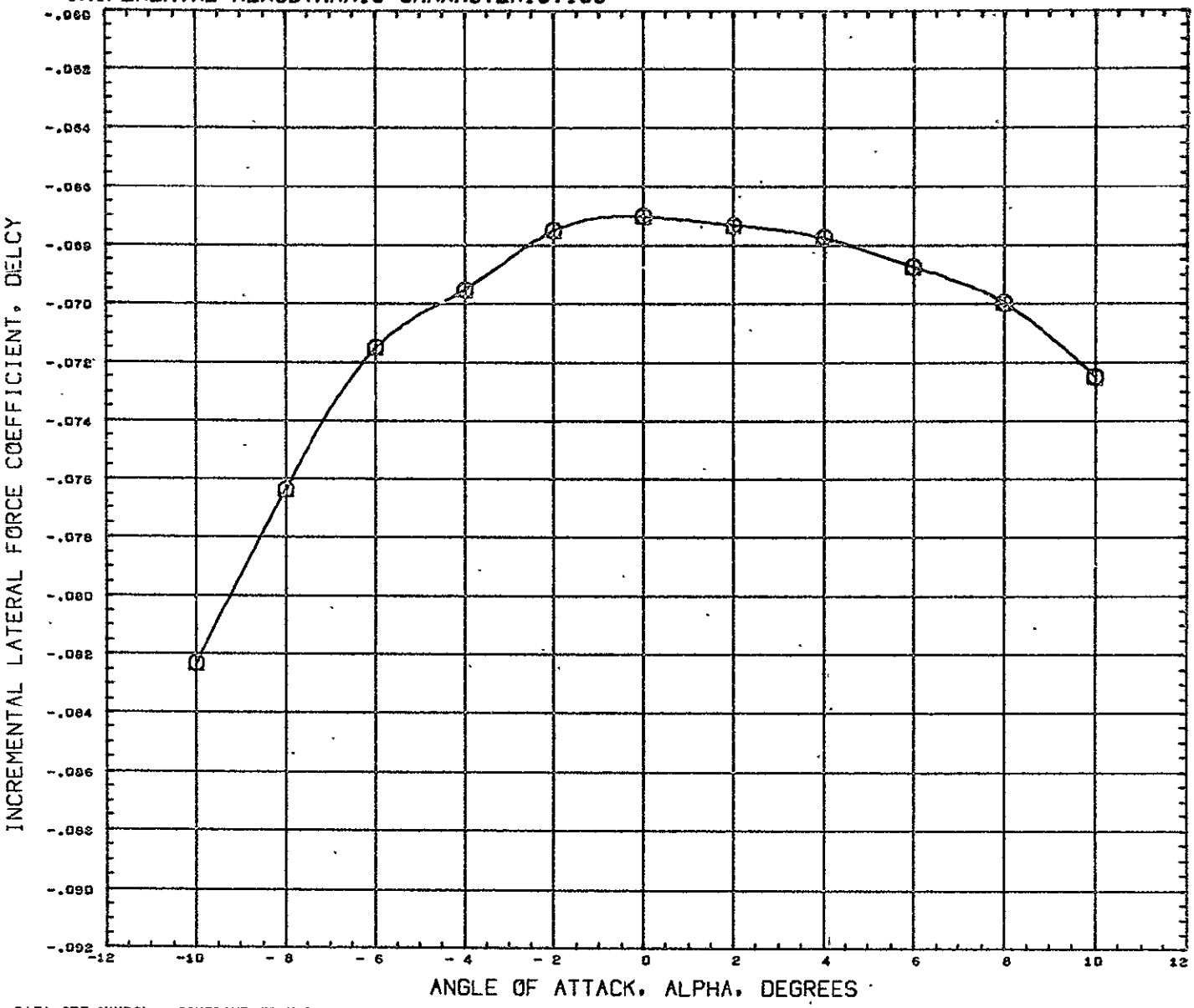
(F2904A) ○ HSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0340	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



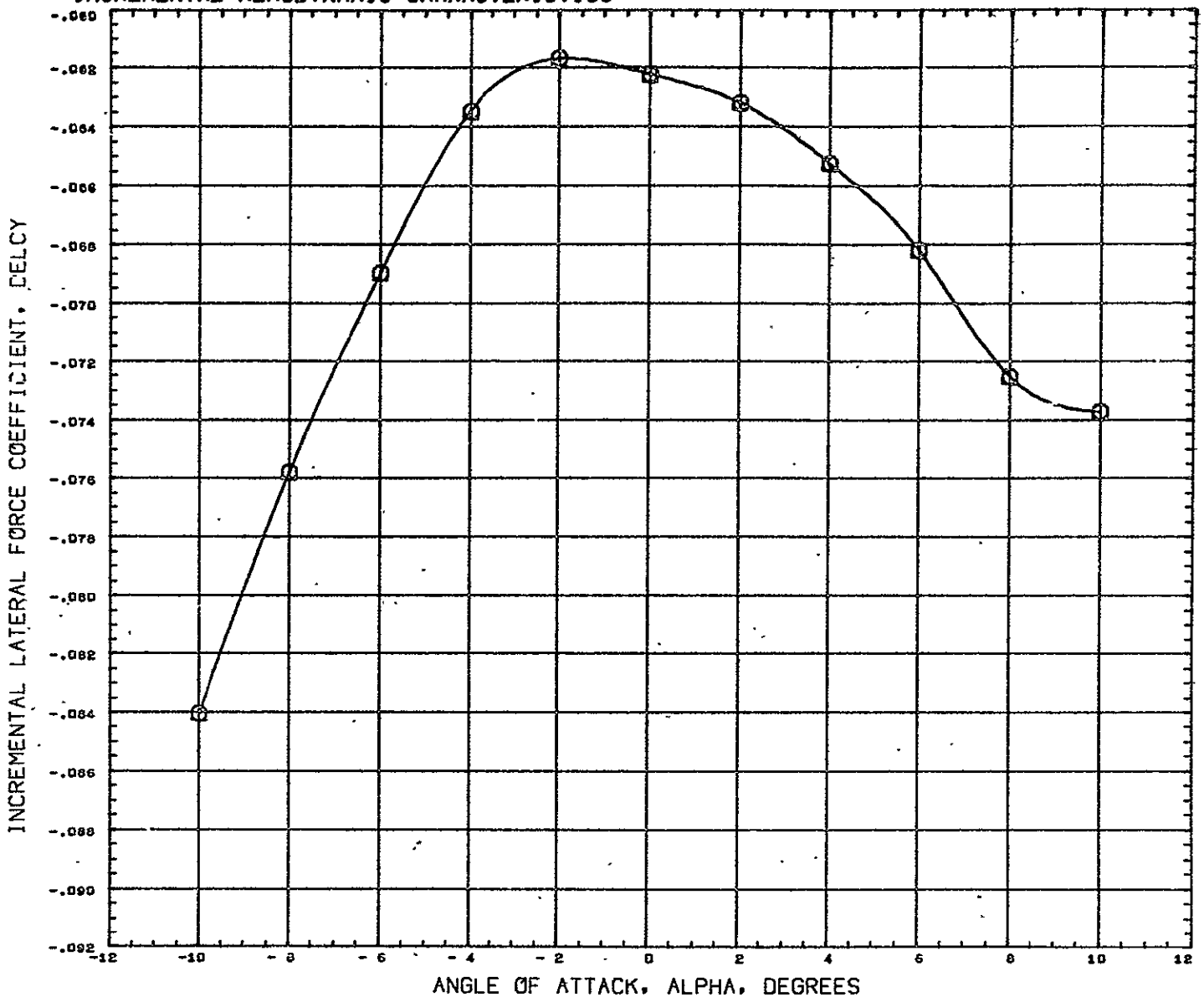
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2904A) O MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 1.500

REFERENCE INFORMATION

REFS	6084.3040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



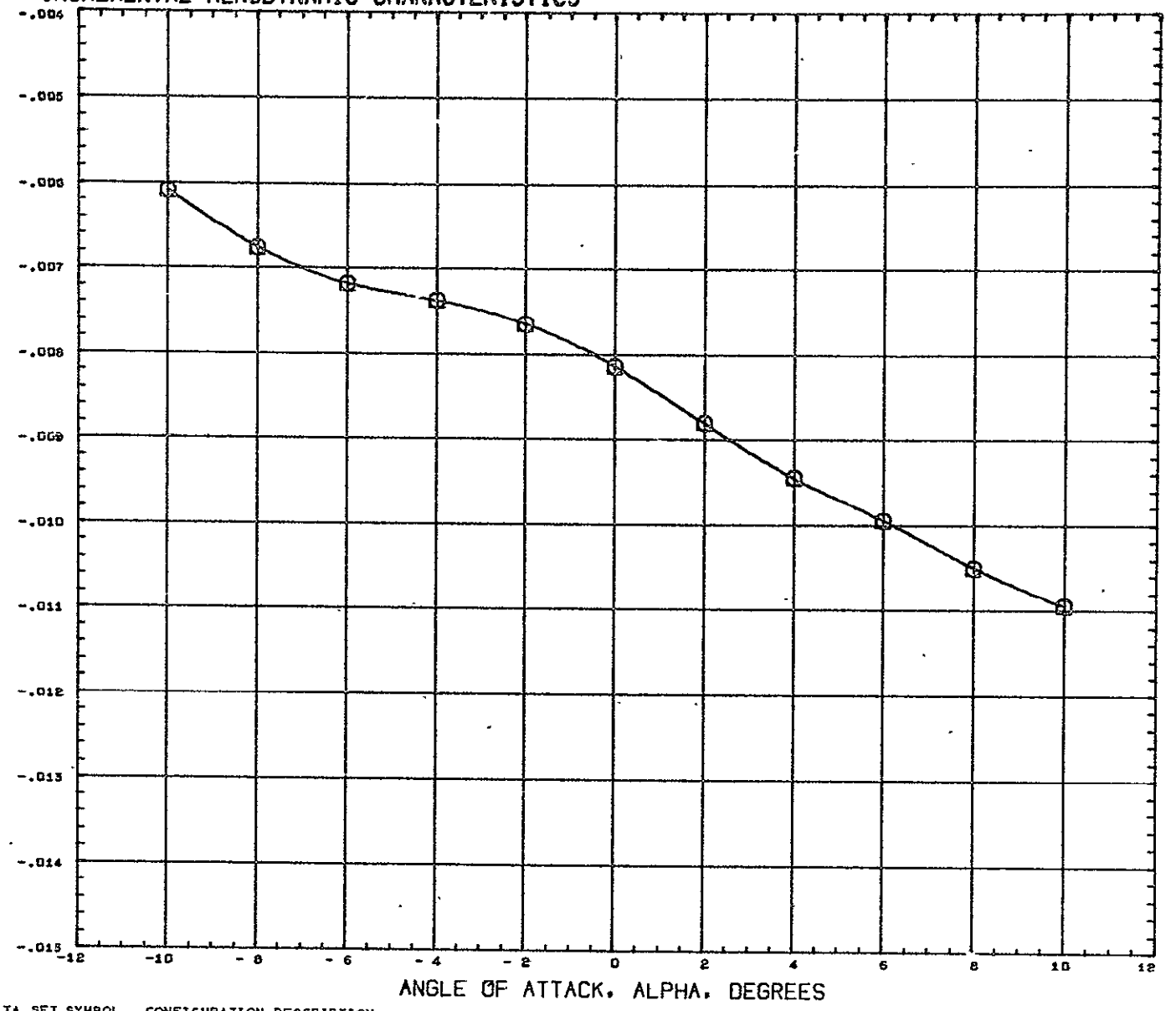
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2904A) ○ MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

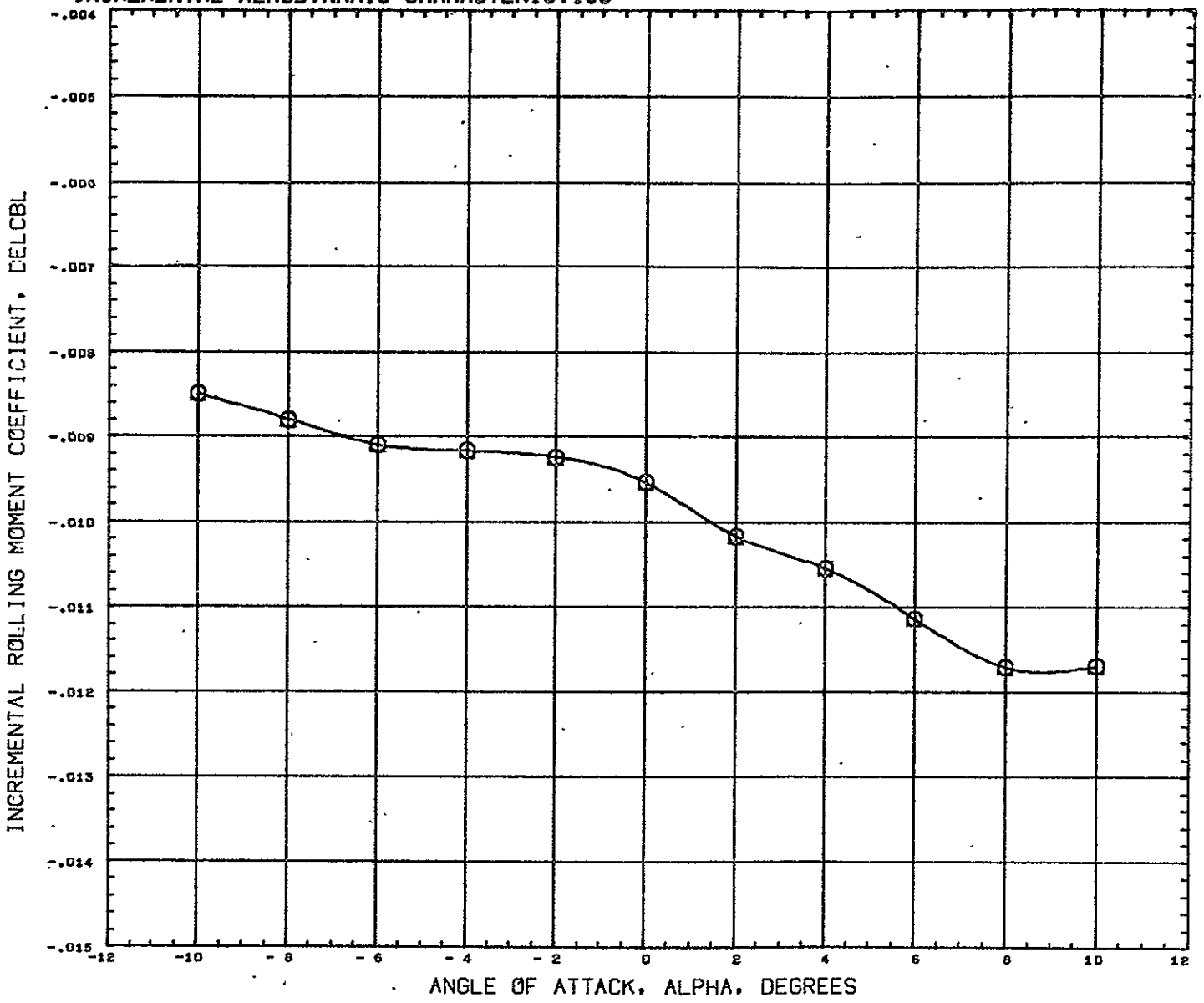
(F2904A) Q MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

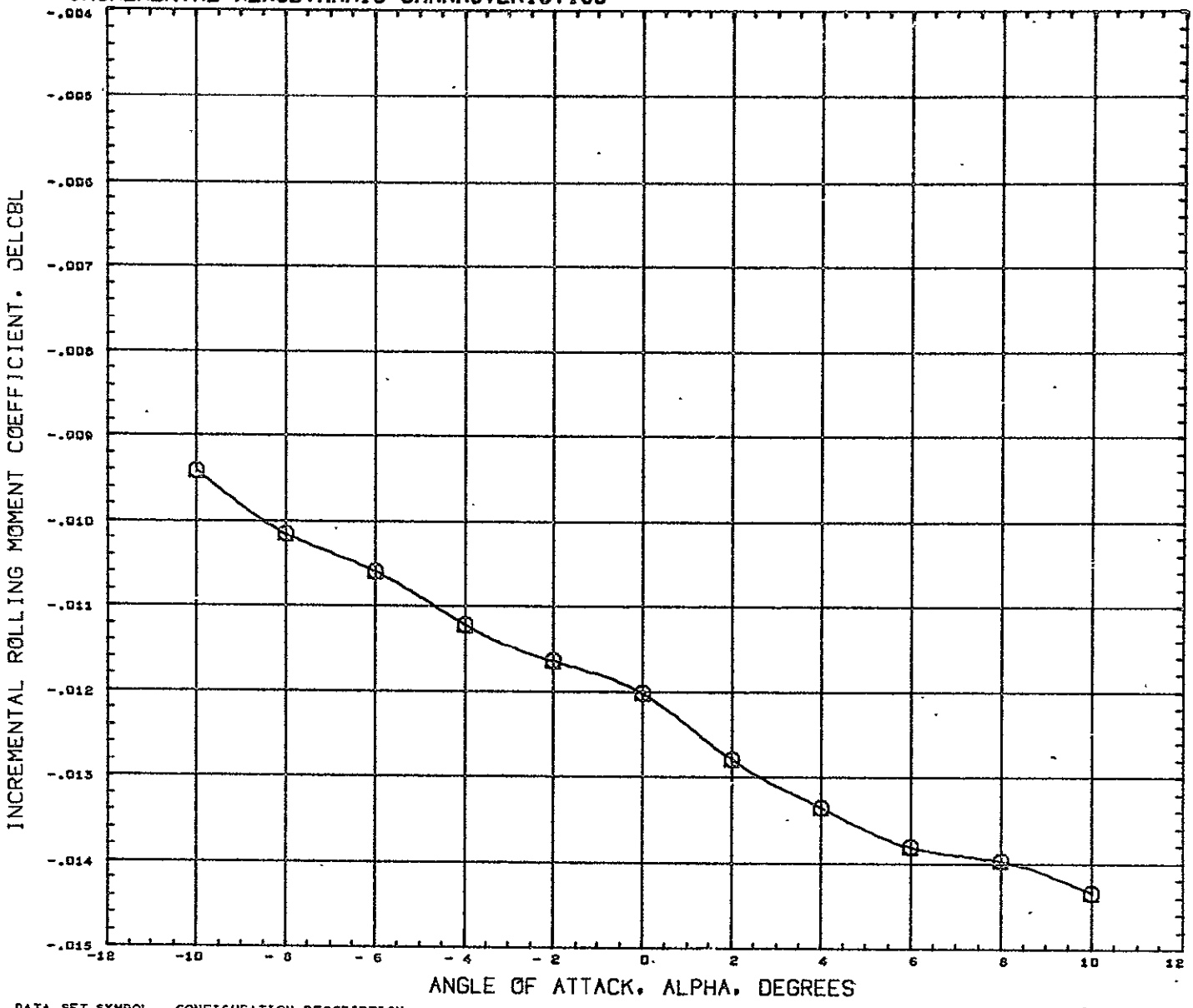
(F2904A) ○ MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



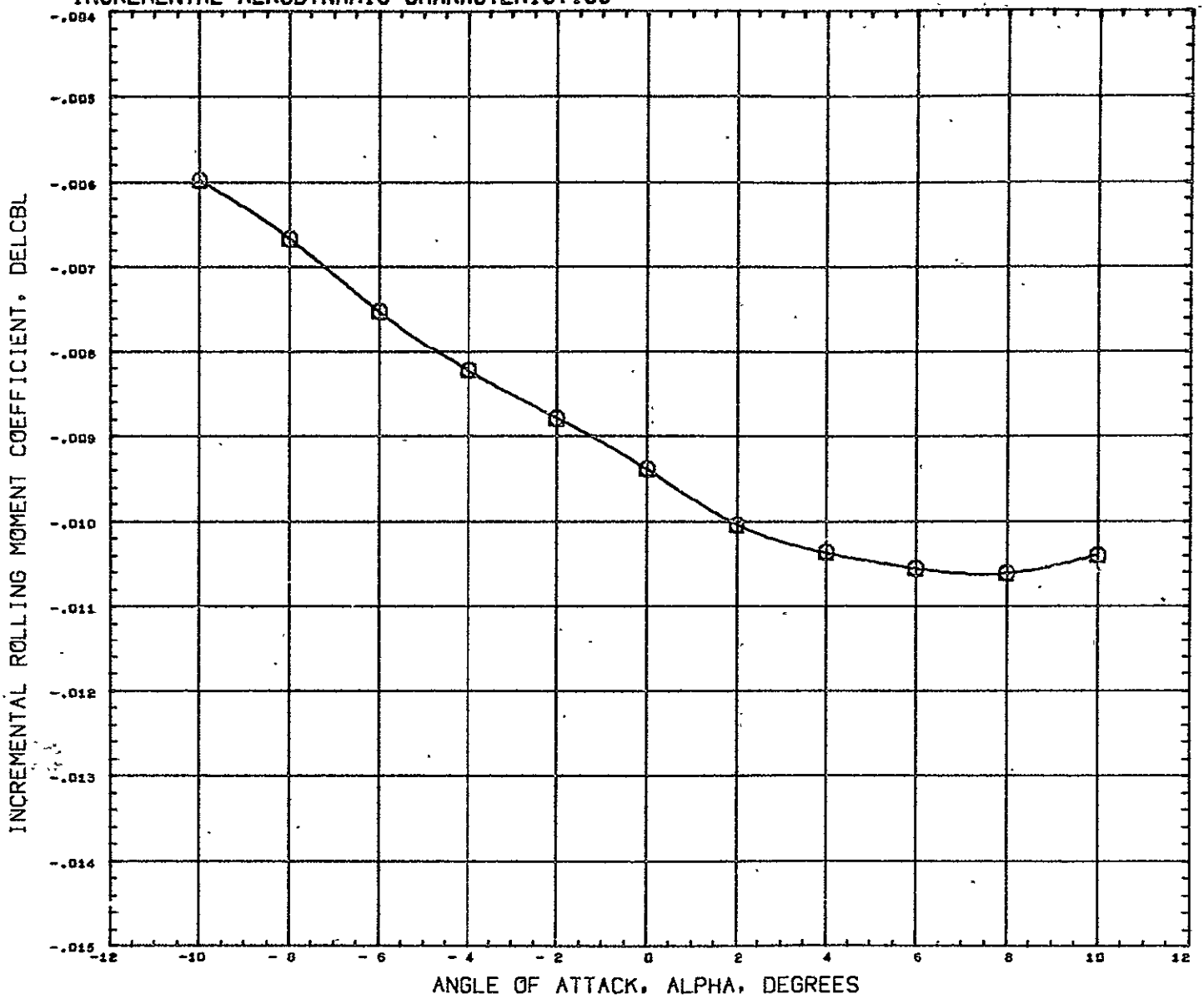
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2904A) O MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

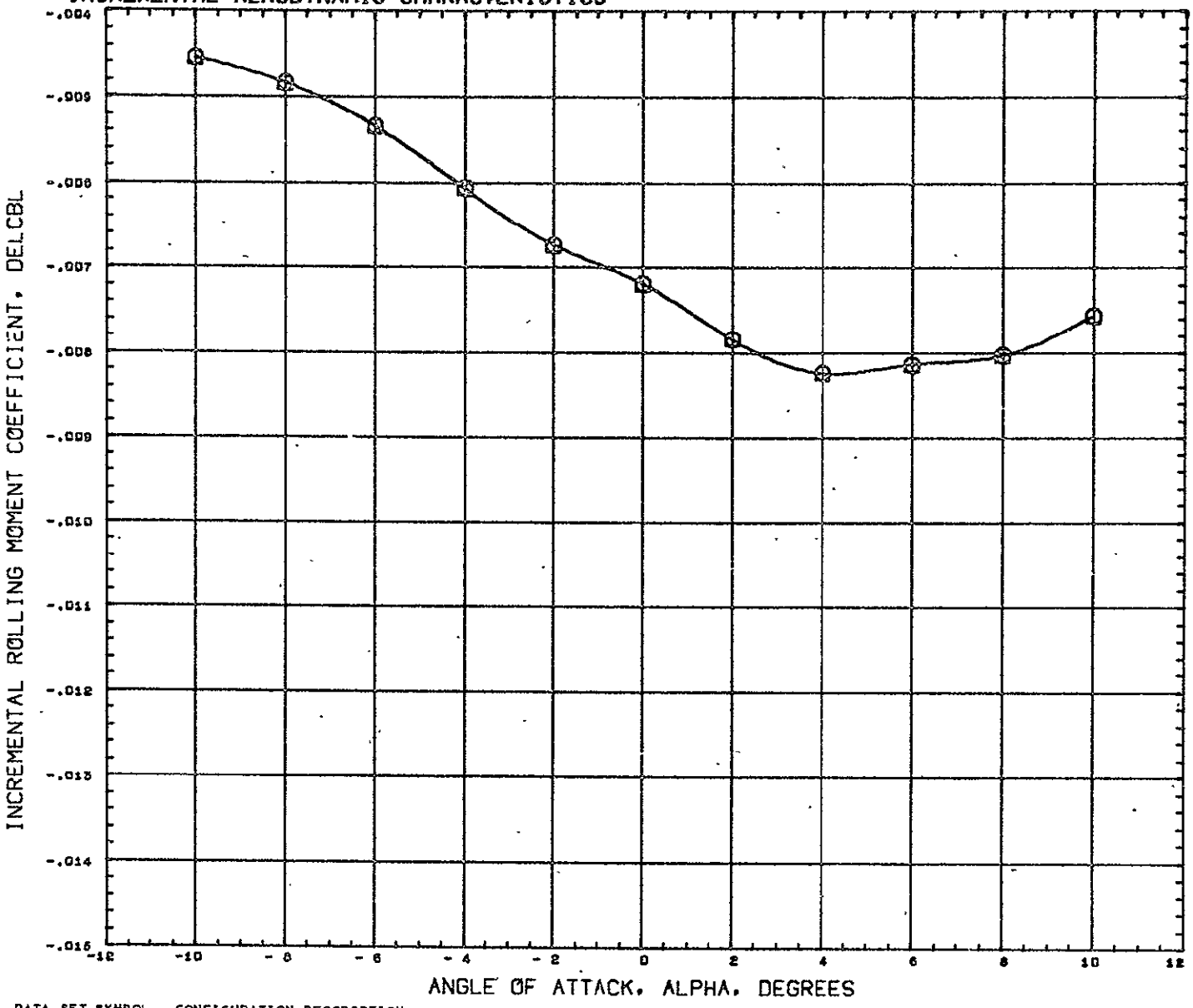
(F2904A) ○ MSFC484 (B5V17J2 AT BETA=6' - B5X AT BETA=0)

MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.3004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

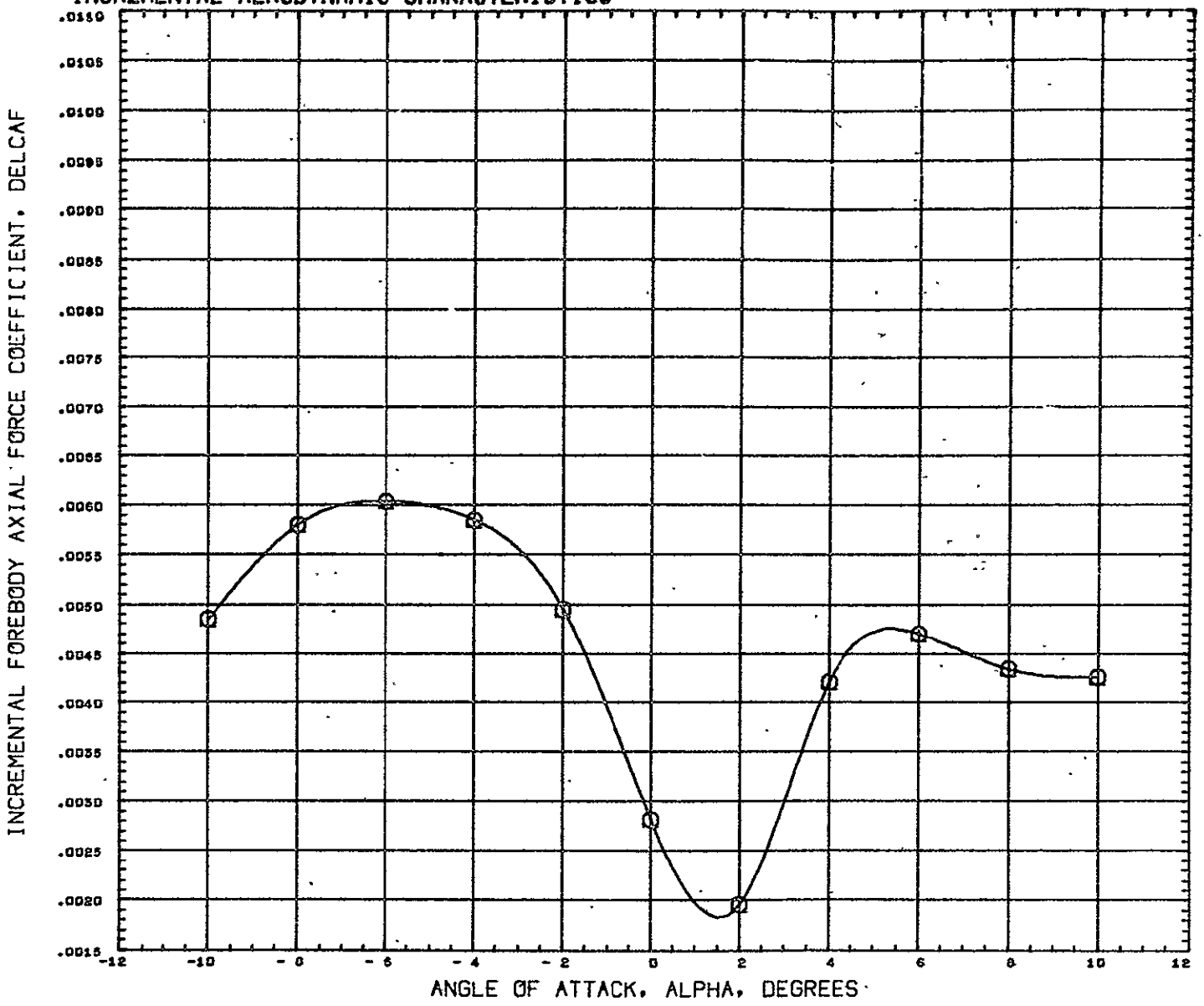
(F2904A) ○ MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

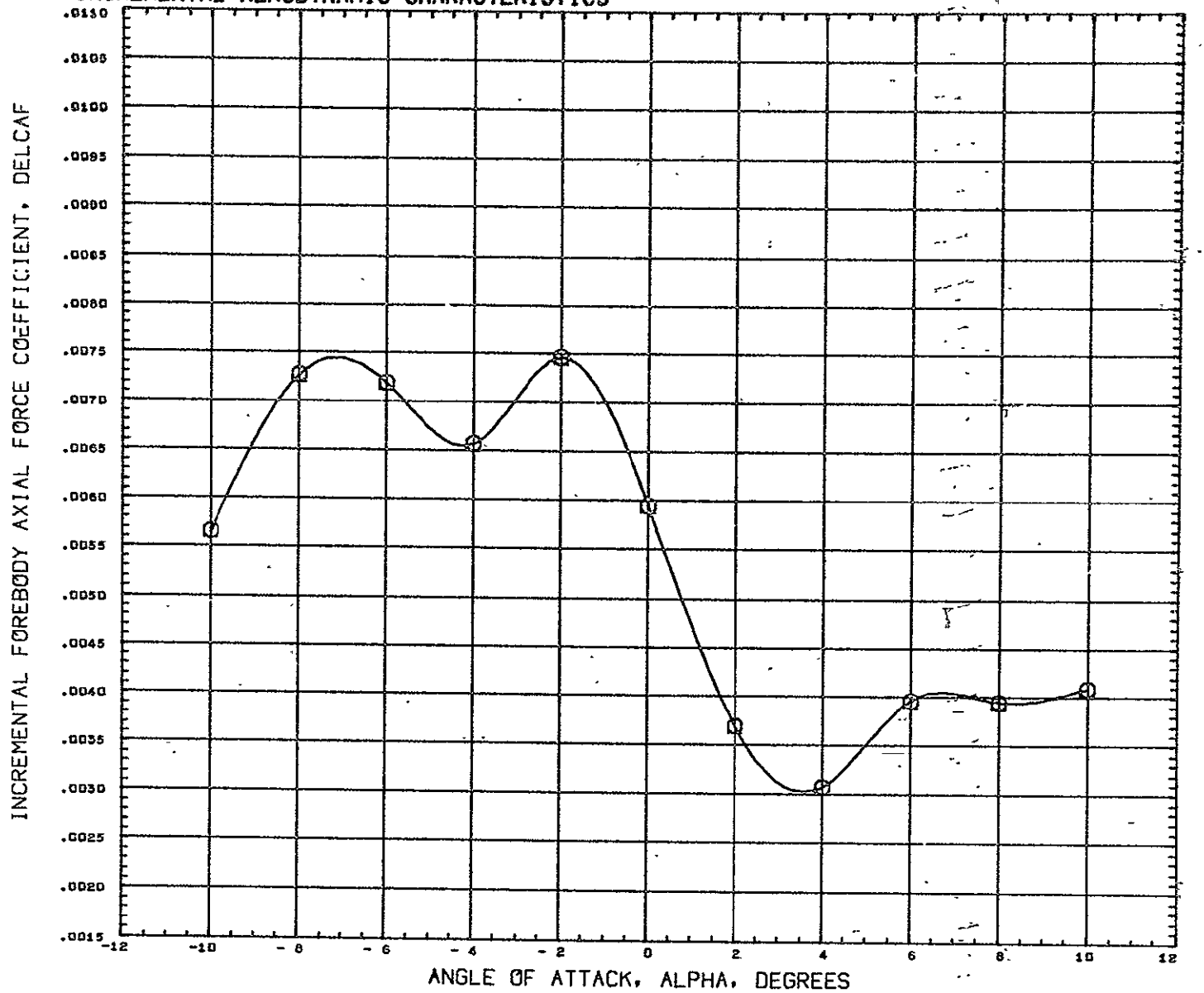
(F2904A) ○ HSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



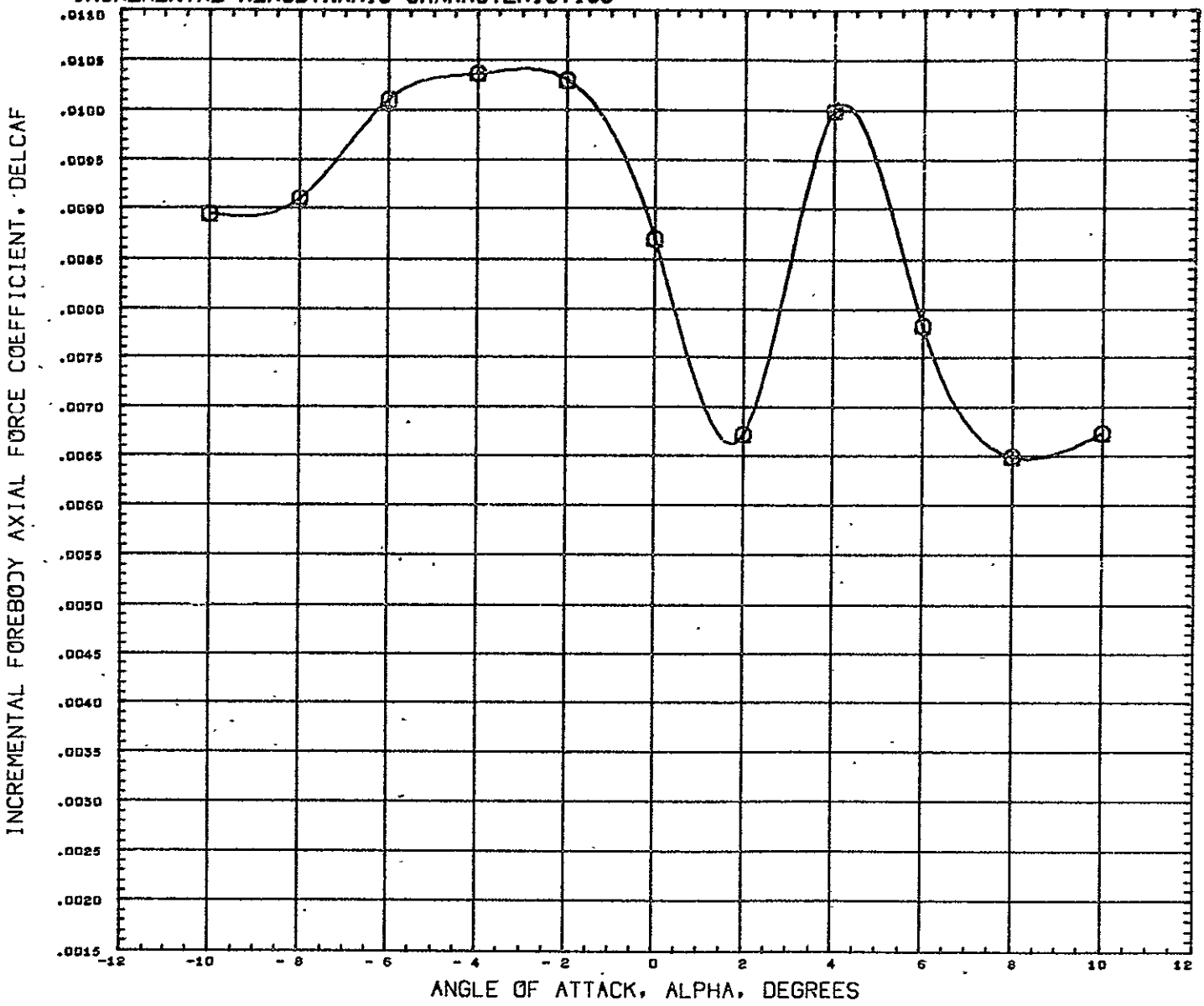
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2904A) O MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

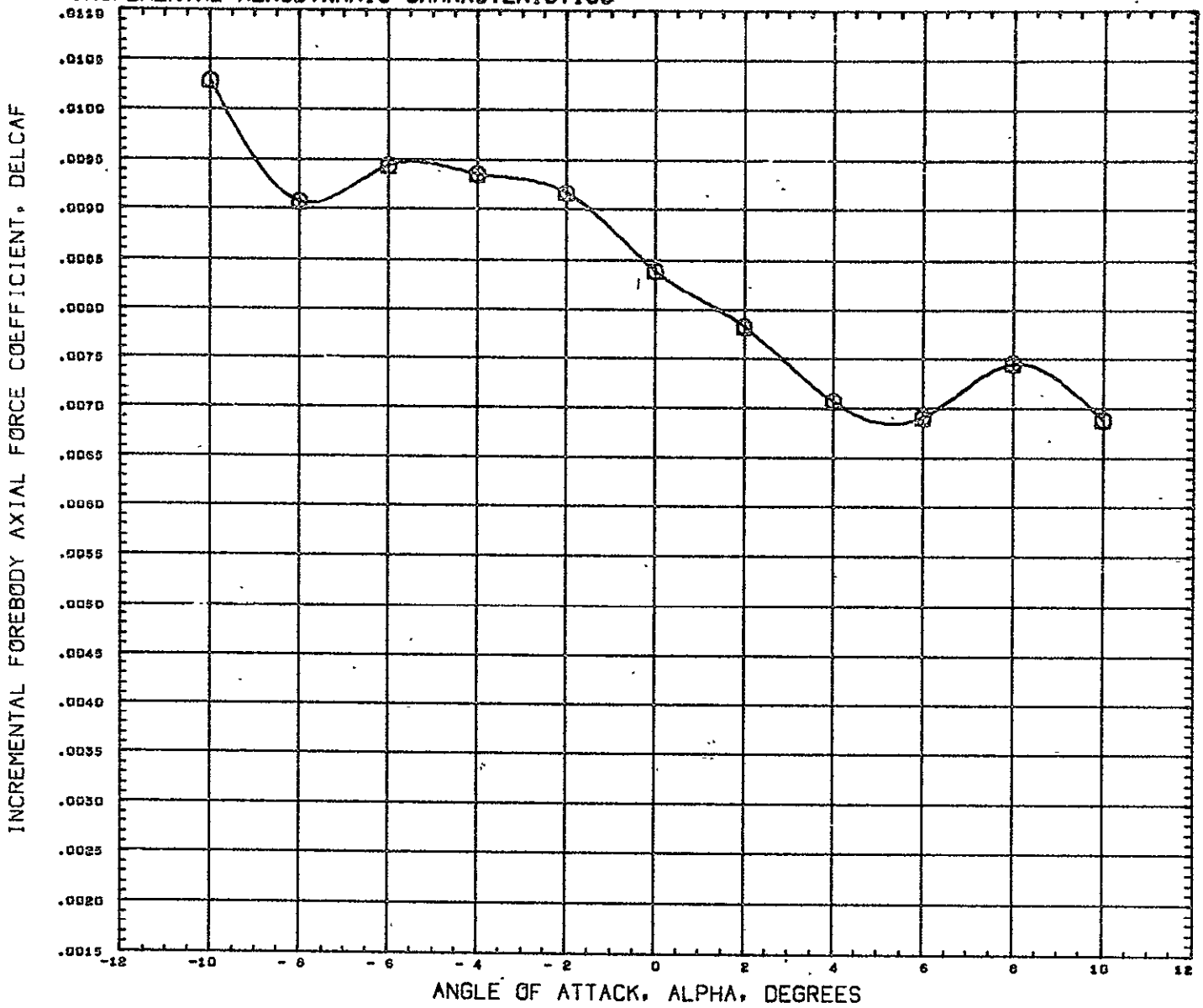
(F29D4A) ○ MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



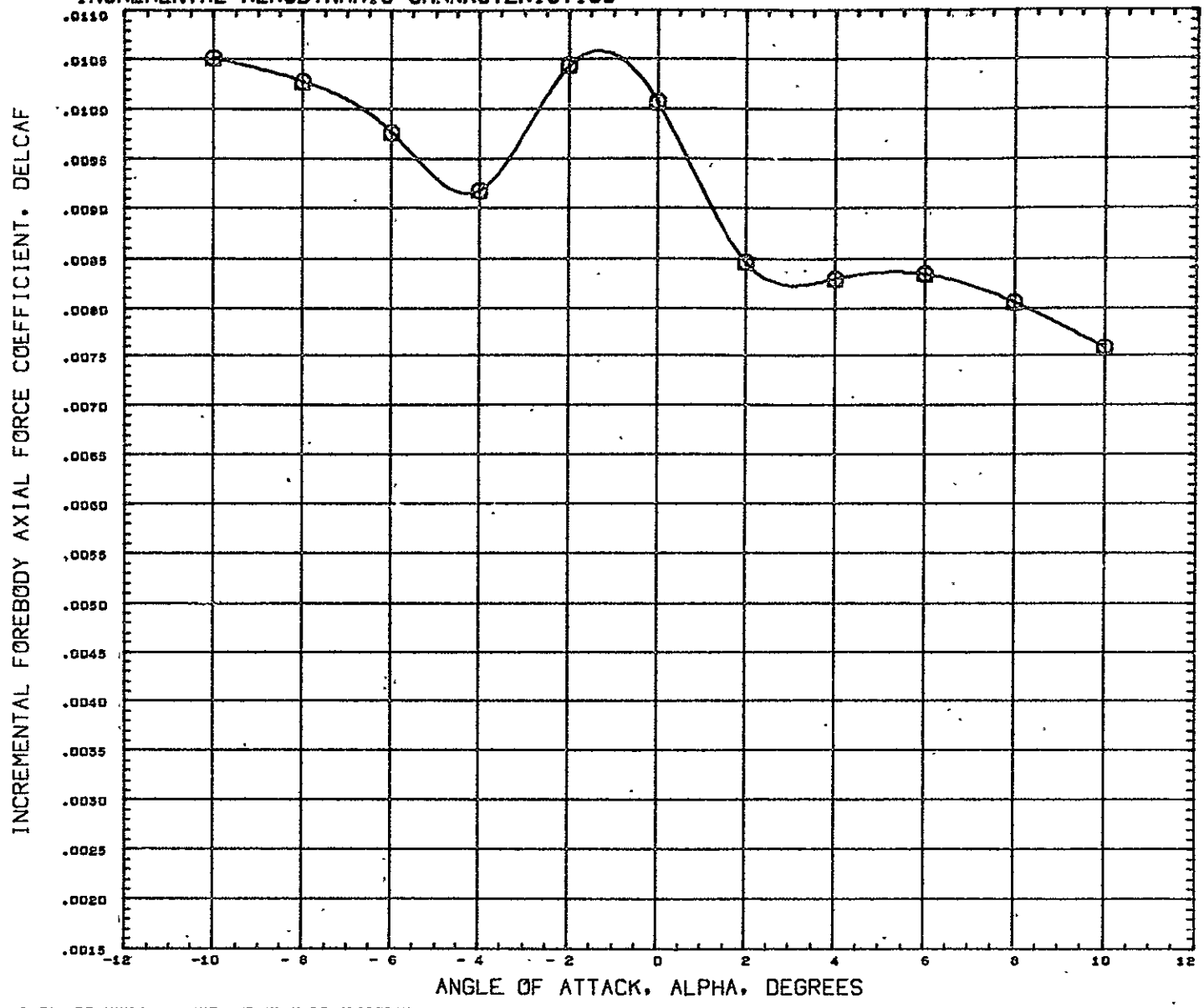
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2904A) ○ MSFC404 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



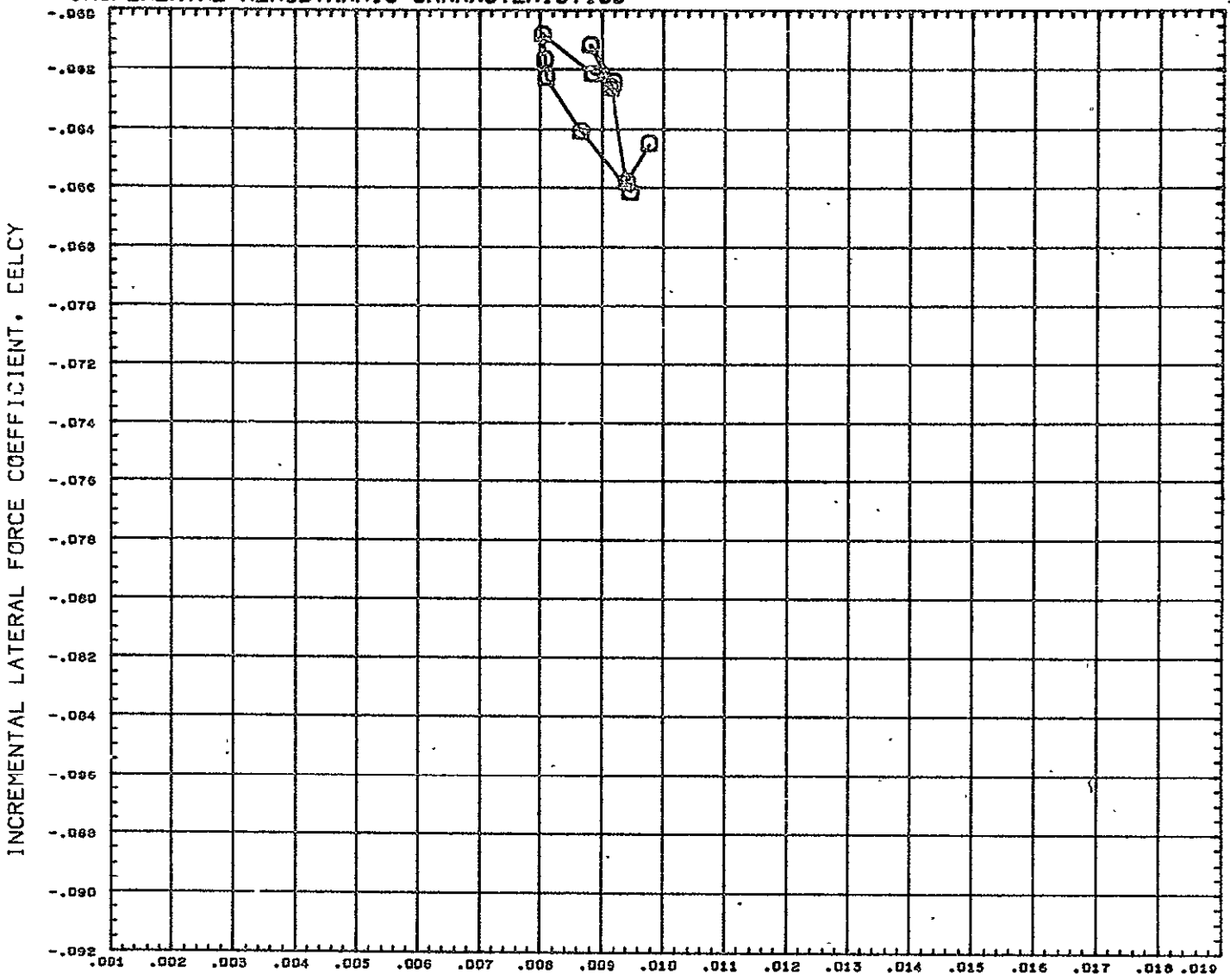
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2904A) ○ MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 2.000

REFERENCE INFORMATION

REFS	6084.2040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

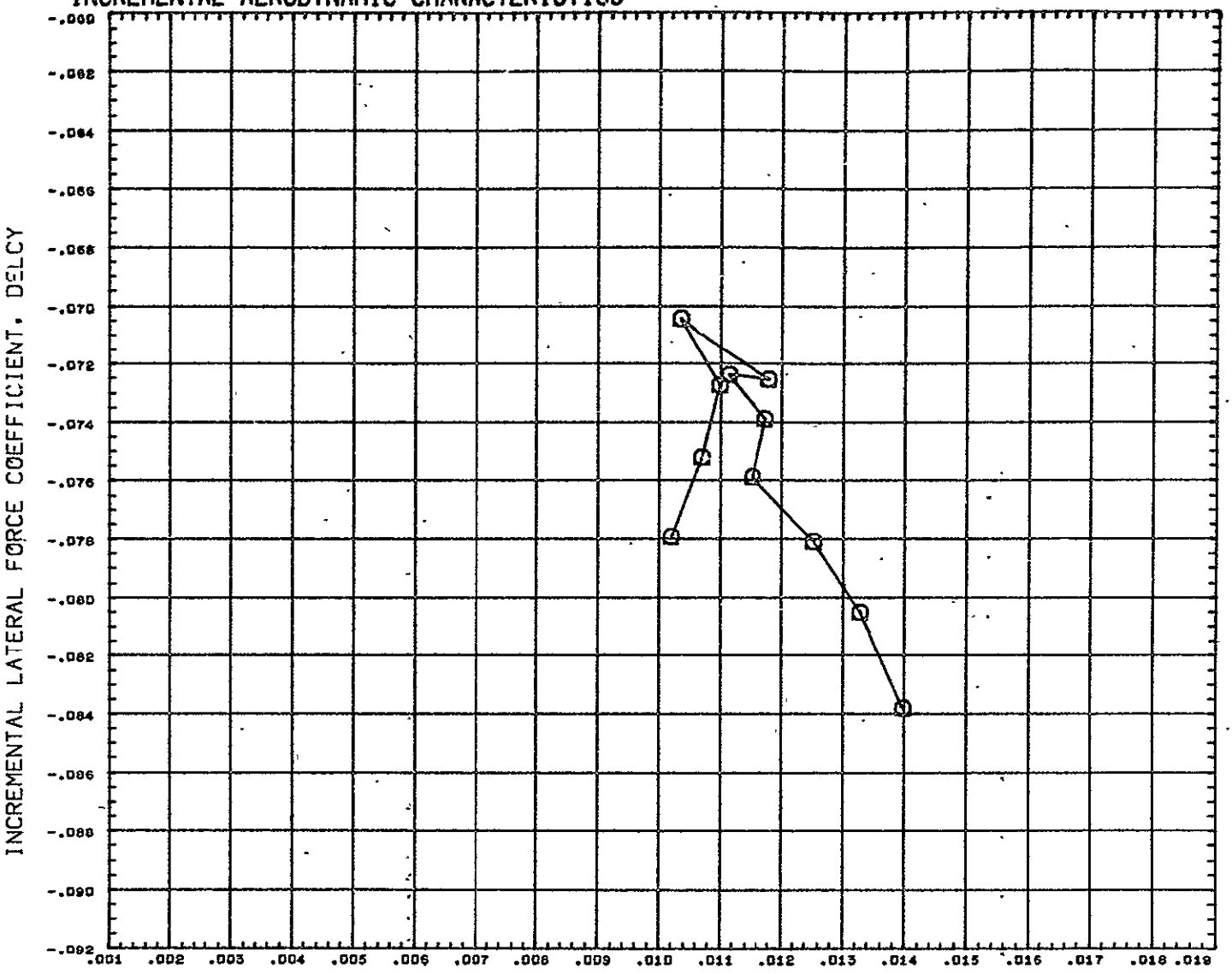
(F2904A) O MSFC484 (B5V17J2 AT BETA=6 - B5X-AT BETA=0)

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	621.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



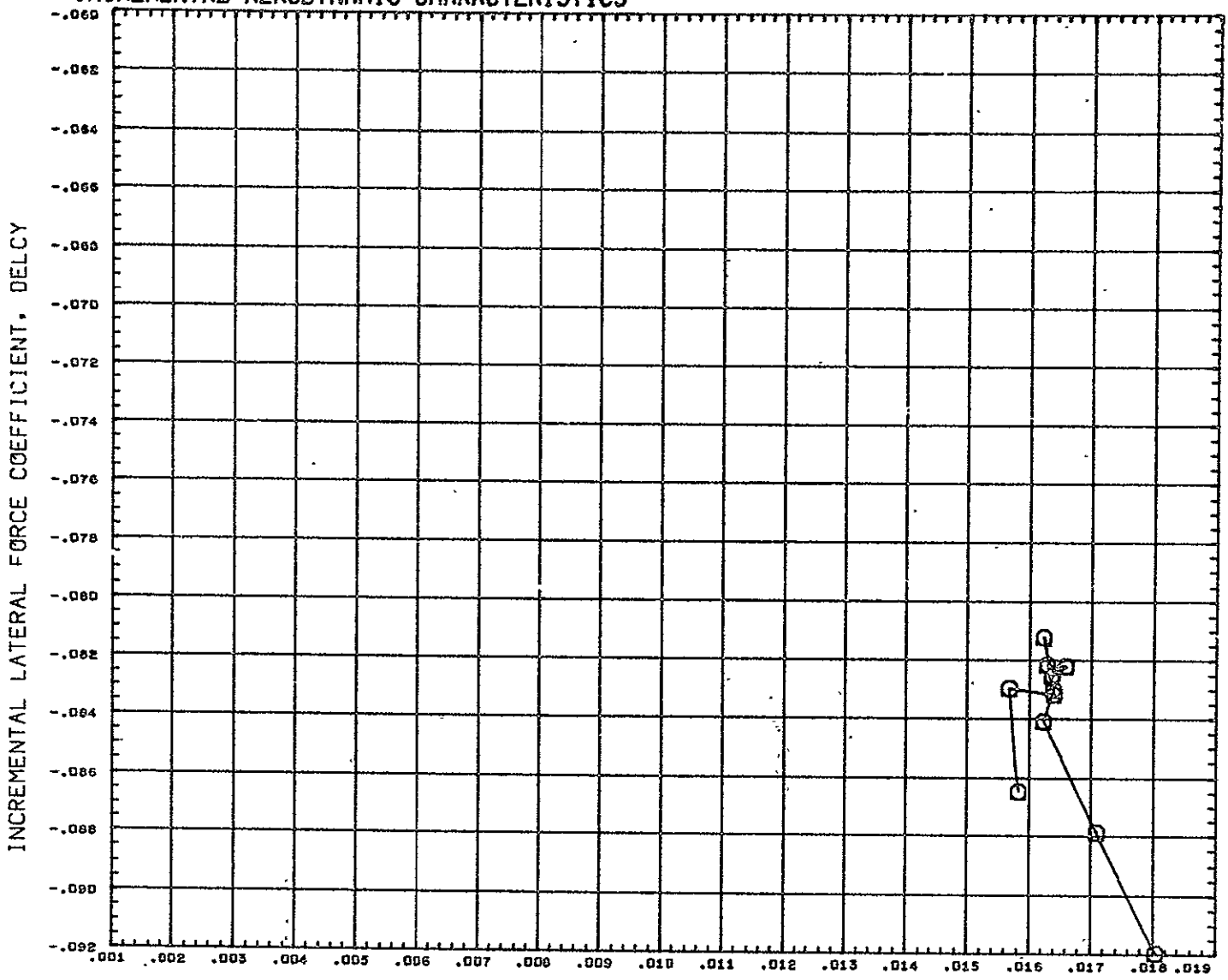
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2904A) ○ HSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL CONFIGURATION DESCRIPTION

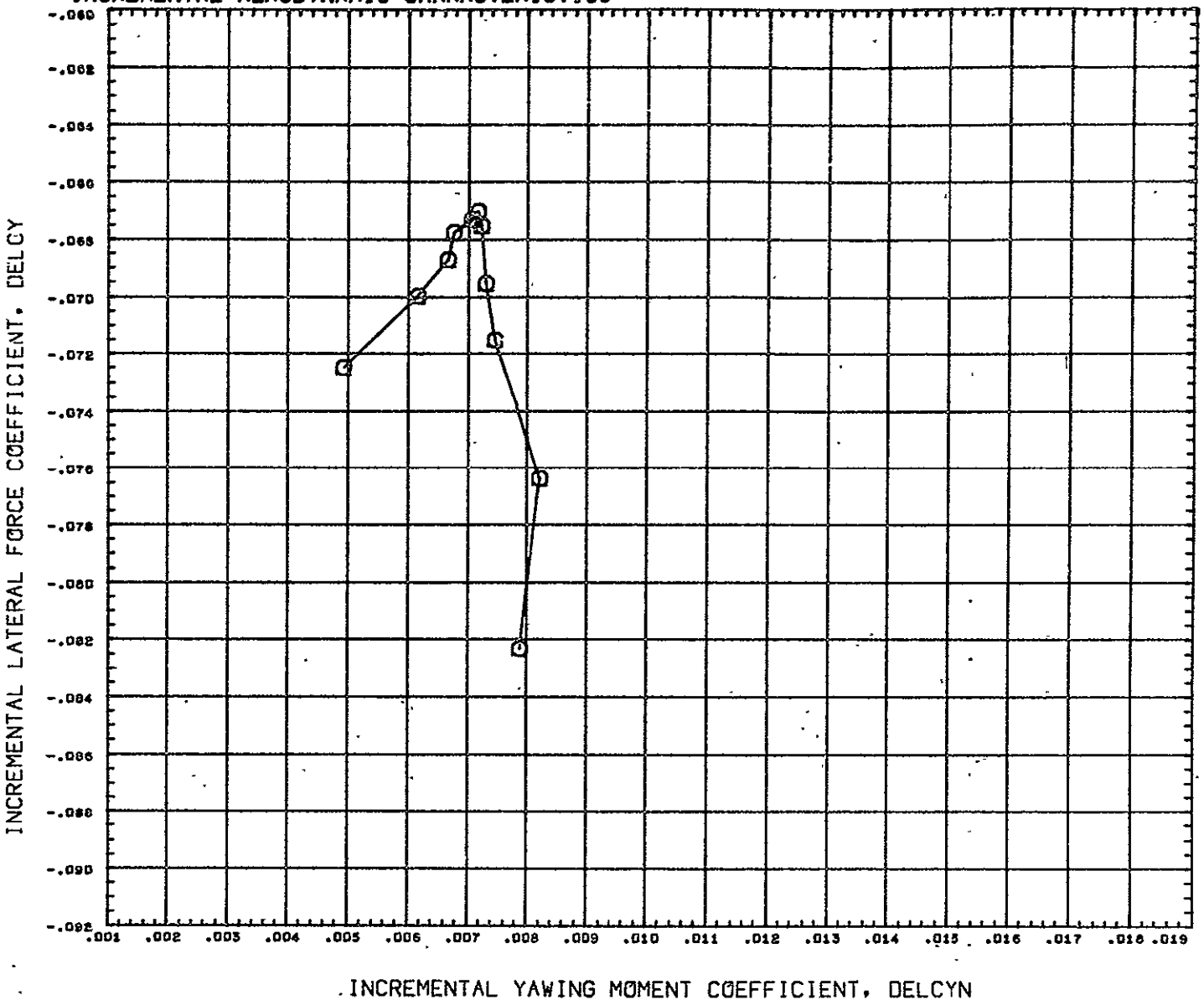
(F2904A) ○ MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



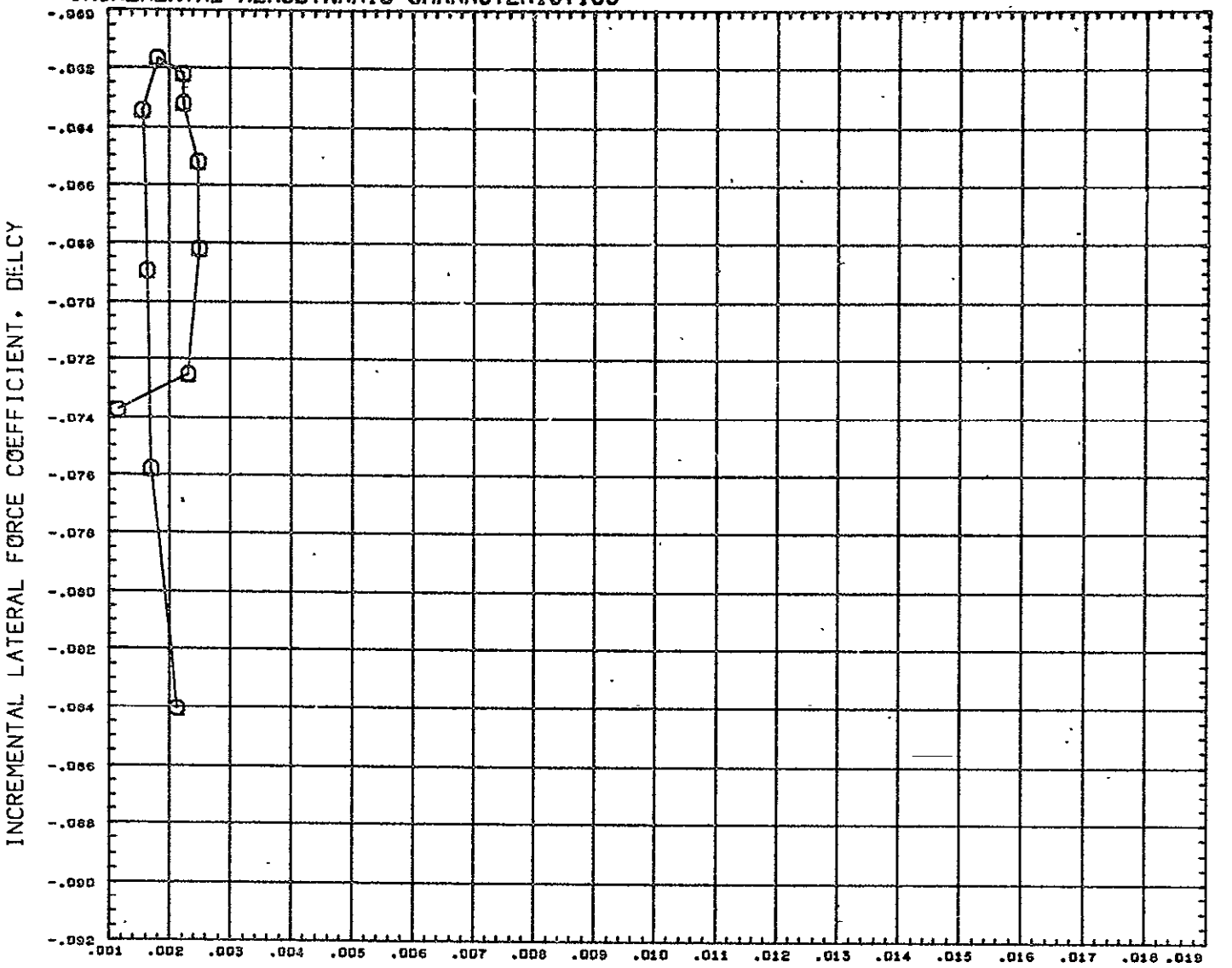
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2904A) ○ MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



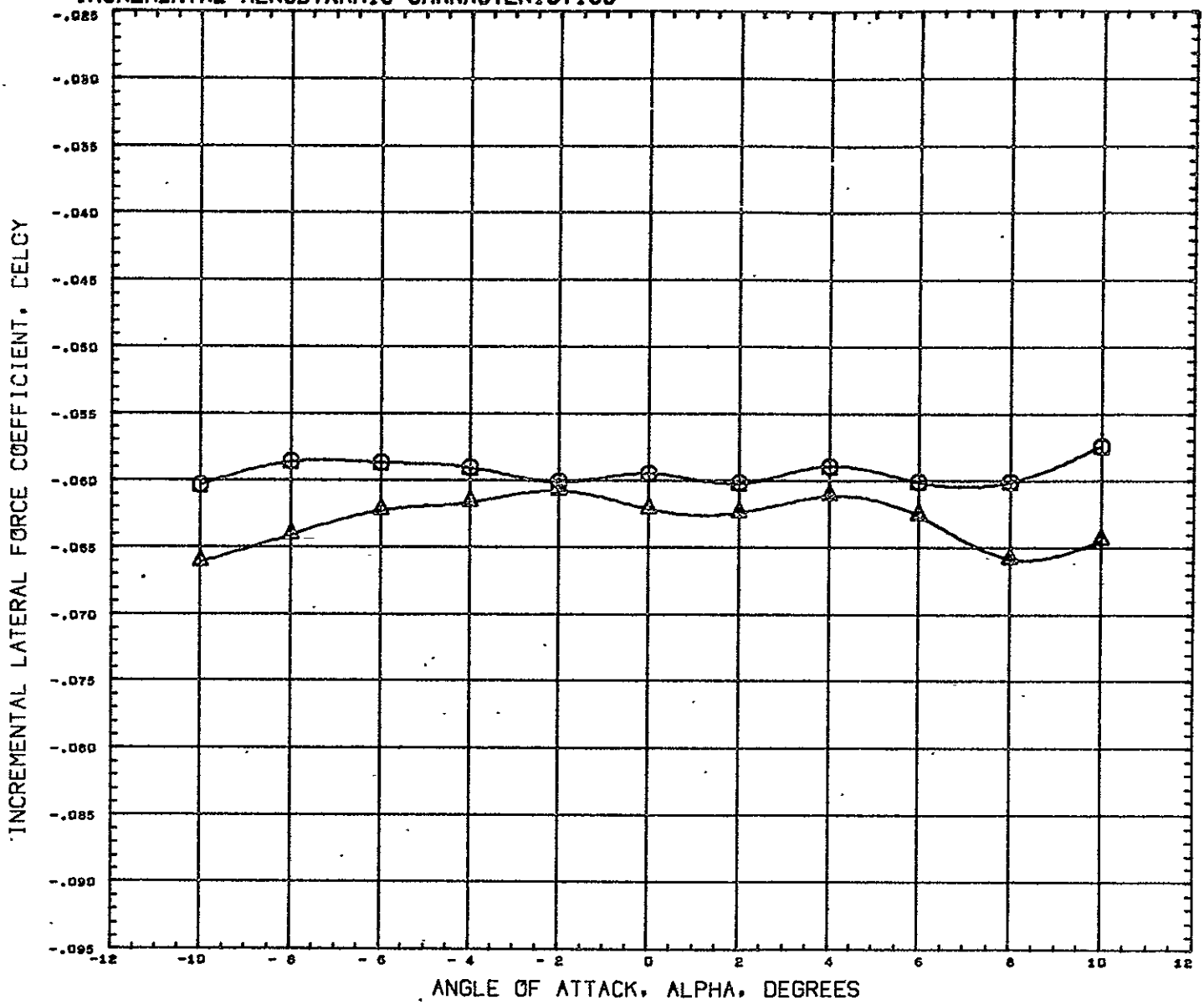
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F2904A). ○ MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



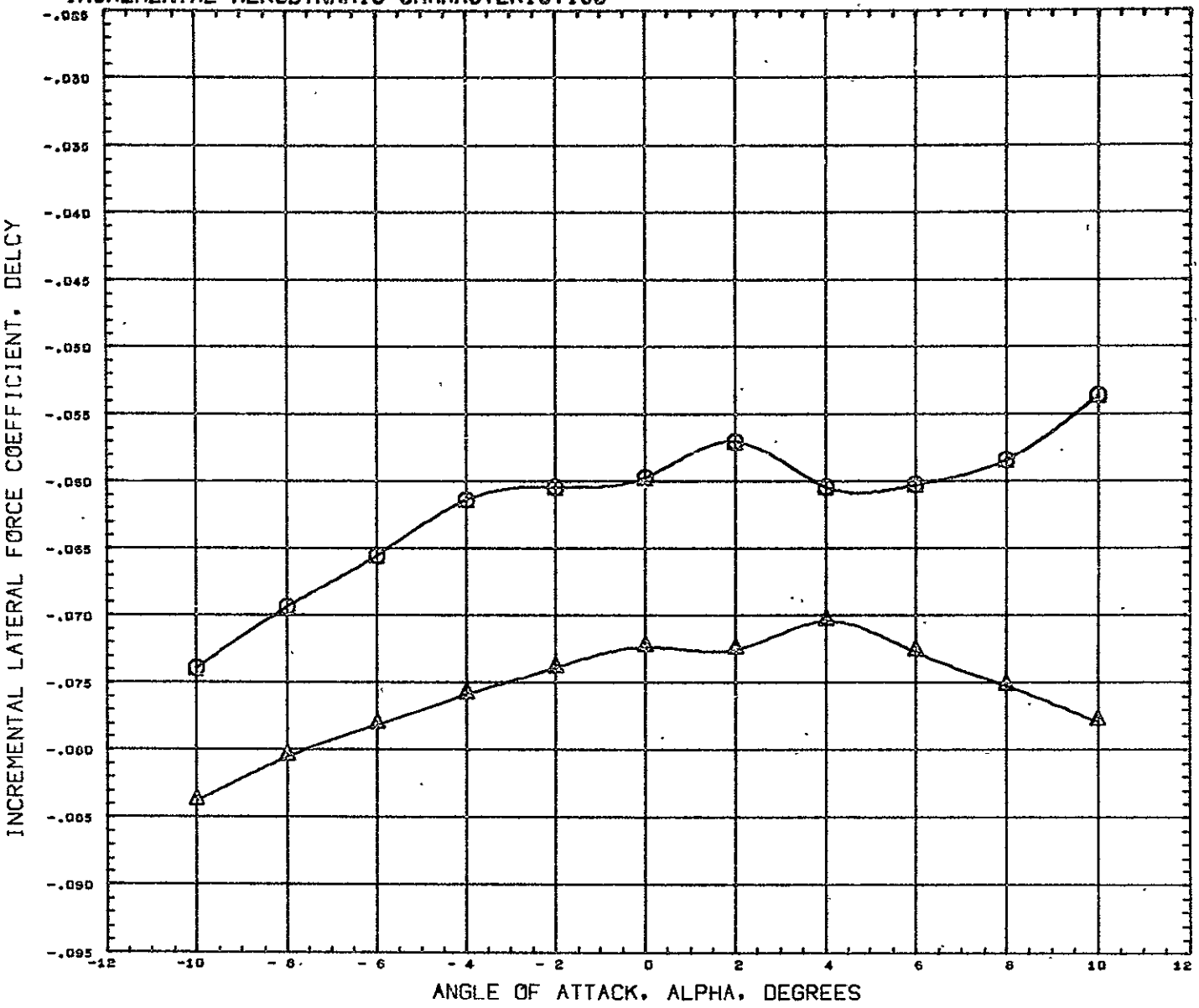
DATA SET SYMBOL		CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(F2905A)	○	MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6	6.000	0.000	0.000
(F2904A)	△	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)			

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



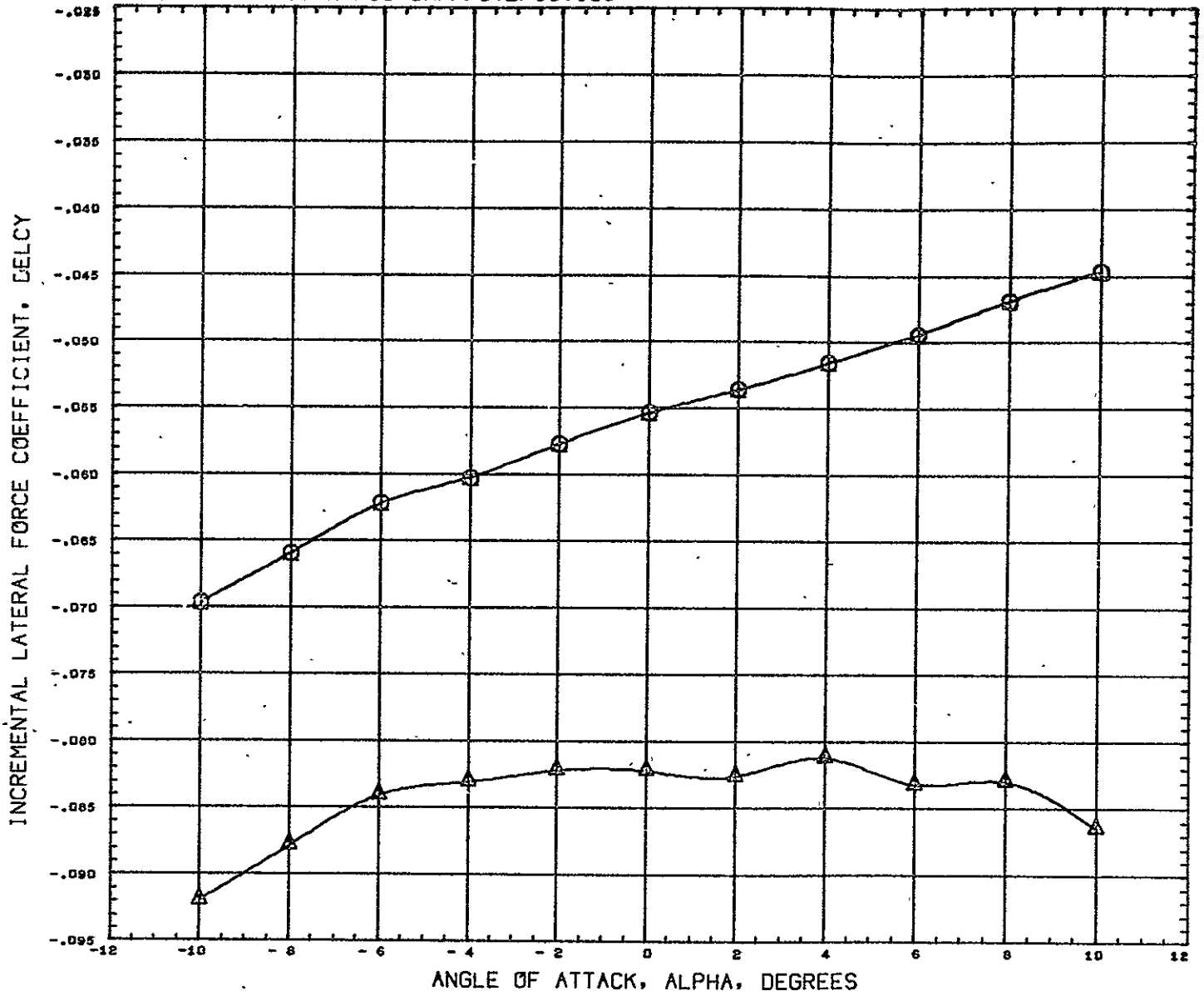
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(F2905A)	○	MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6	6.000	0.000	0.000
(F2904A)	△	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)			

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(F2905A)	○	MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6
(F2904A)	△	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

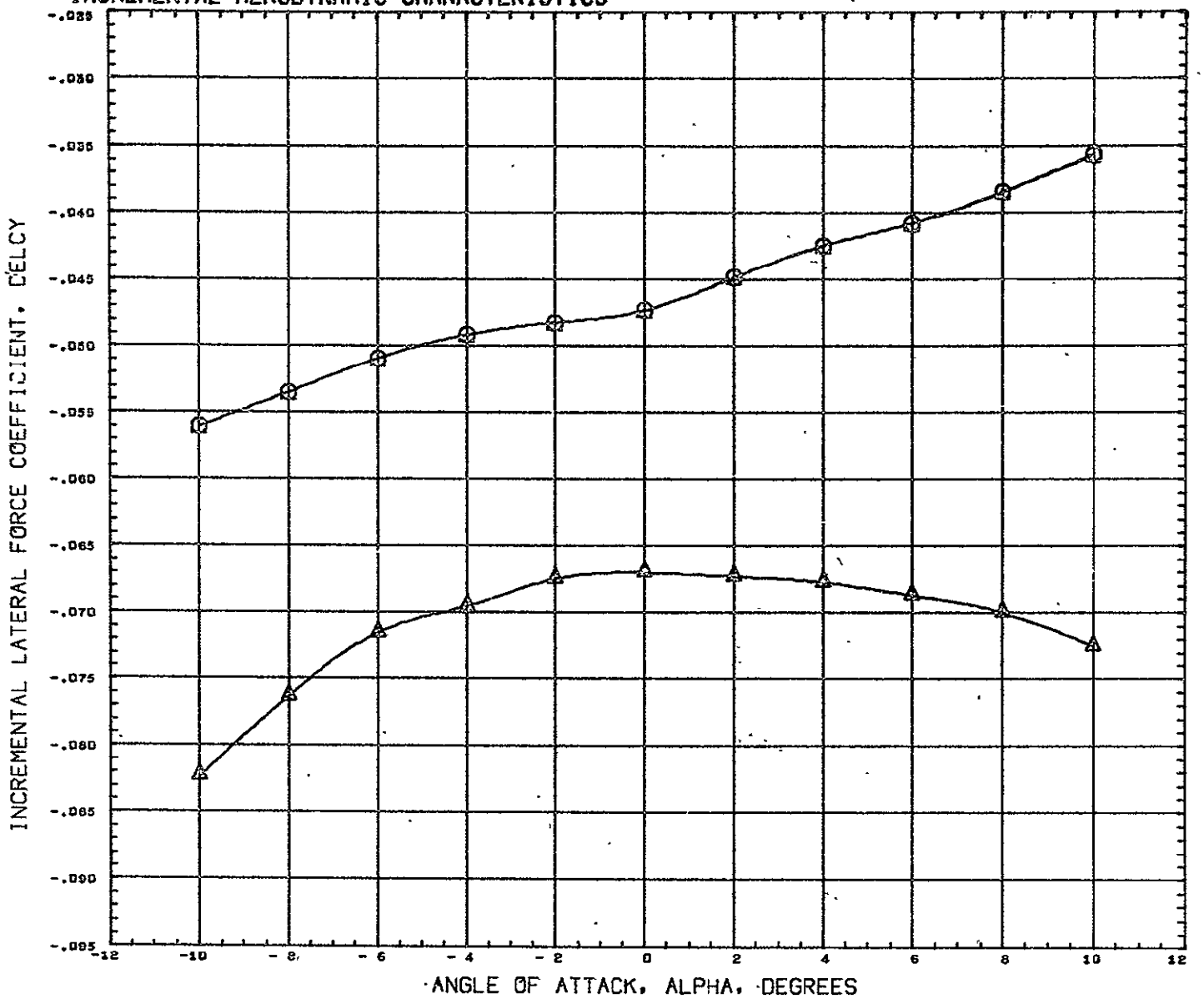
BETA	ELVATR	AILRON
6.000	0.000	0.000

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS

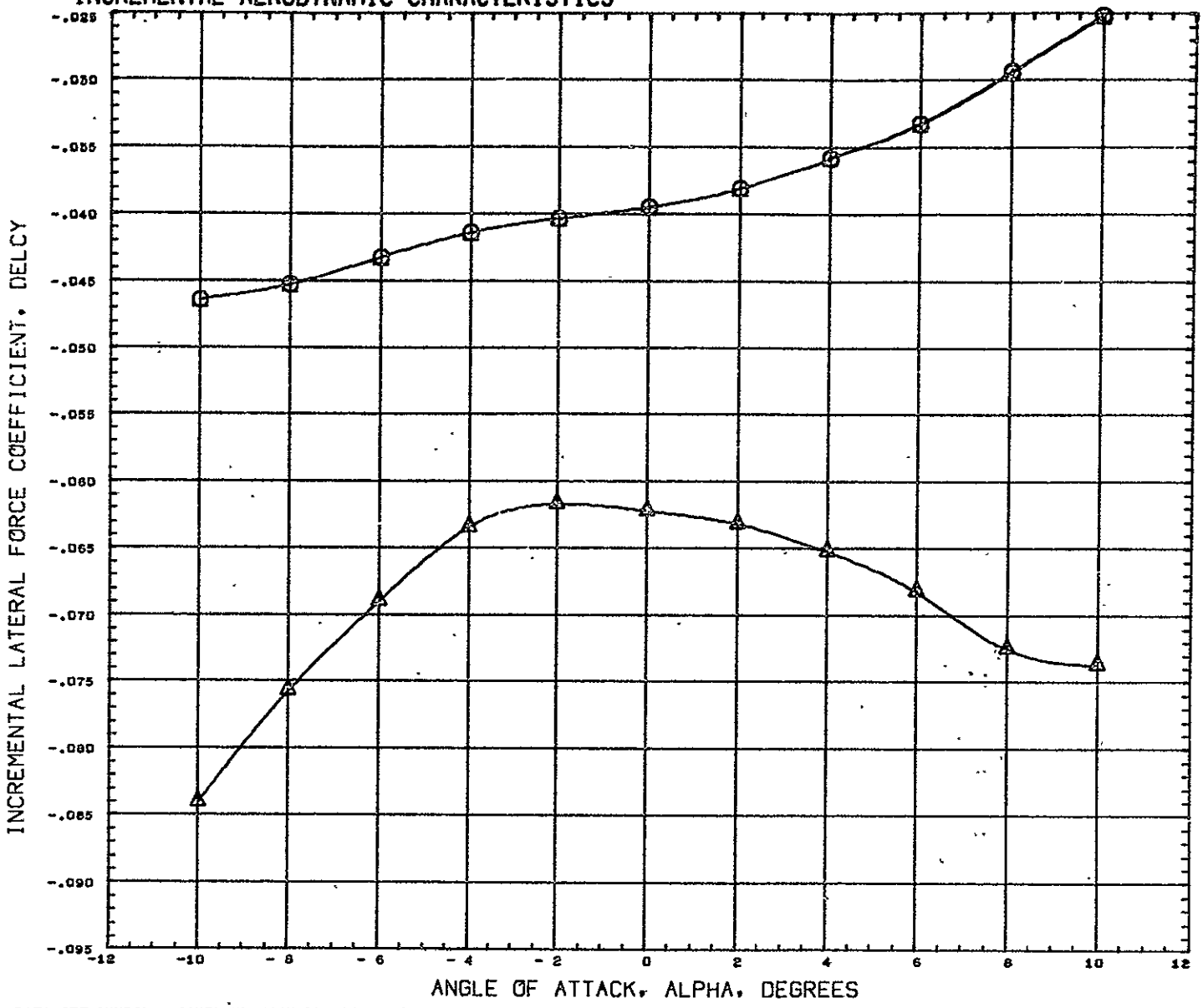


DATA SET SYMBOL		CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(F2905A)	○	MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6	6.000	0.000	0.000
(F2904A)	△	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)			

MACH 1.500

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



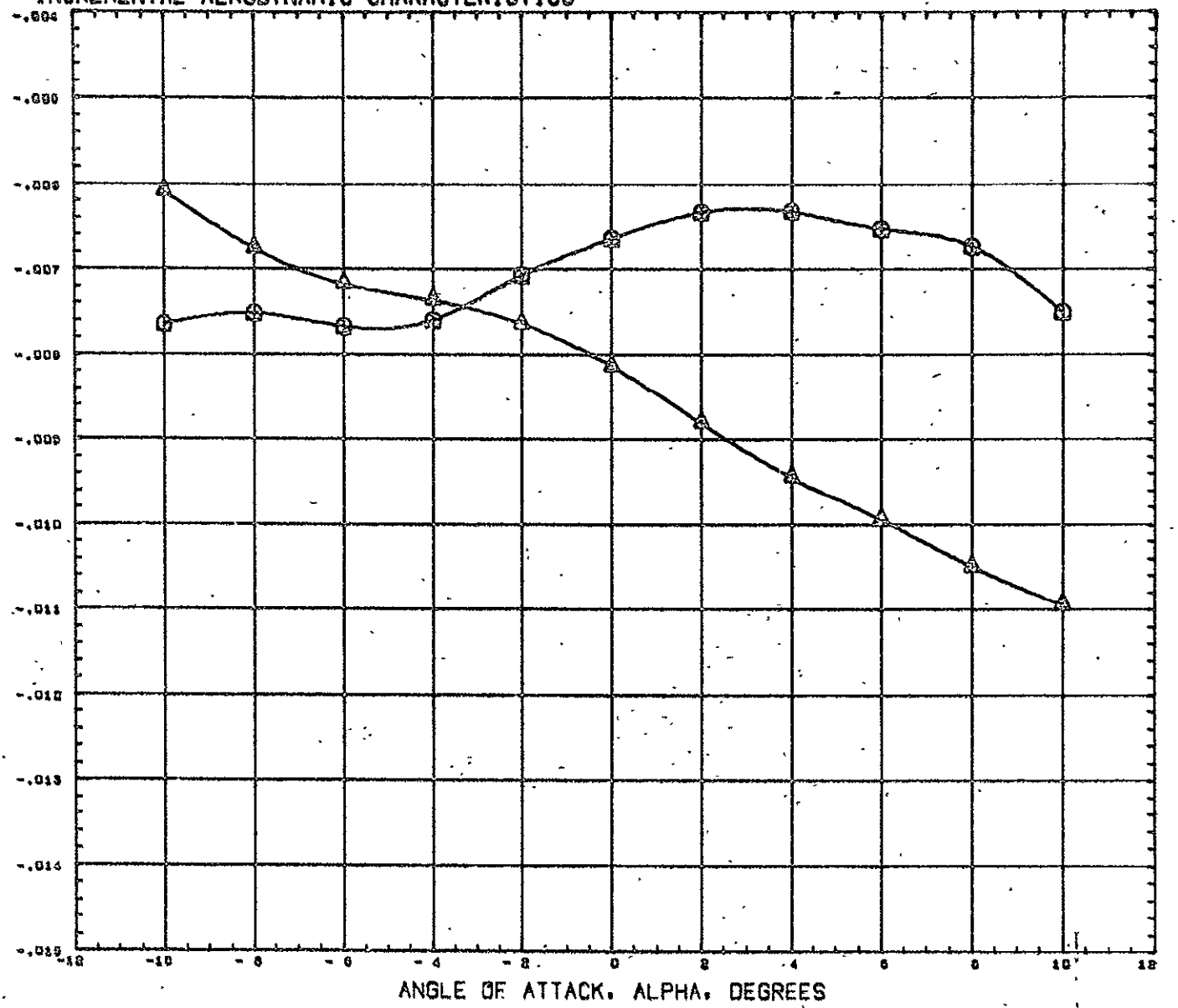
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(F2905A)	Ω	MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6	6.000	0.000	0.000
(F2904A)	Δ	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)			

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



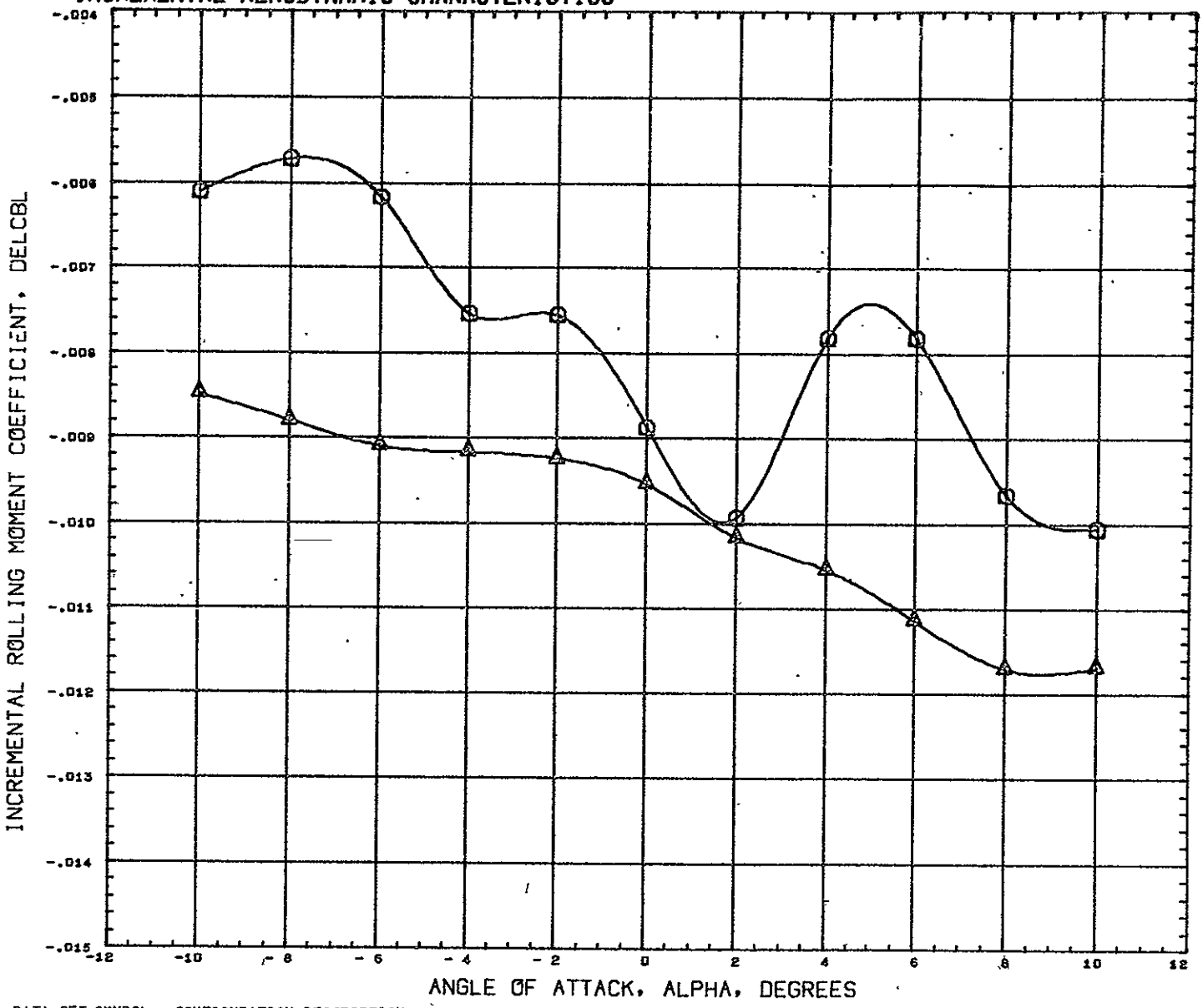
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(FS005A)	M8FC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6	6.000	0.000	0.000
(FS006A)	M8FC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)			

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(F2905A)		MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6
(F2904A)		MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

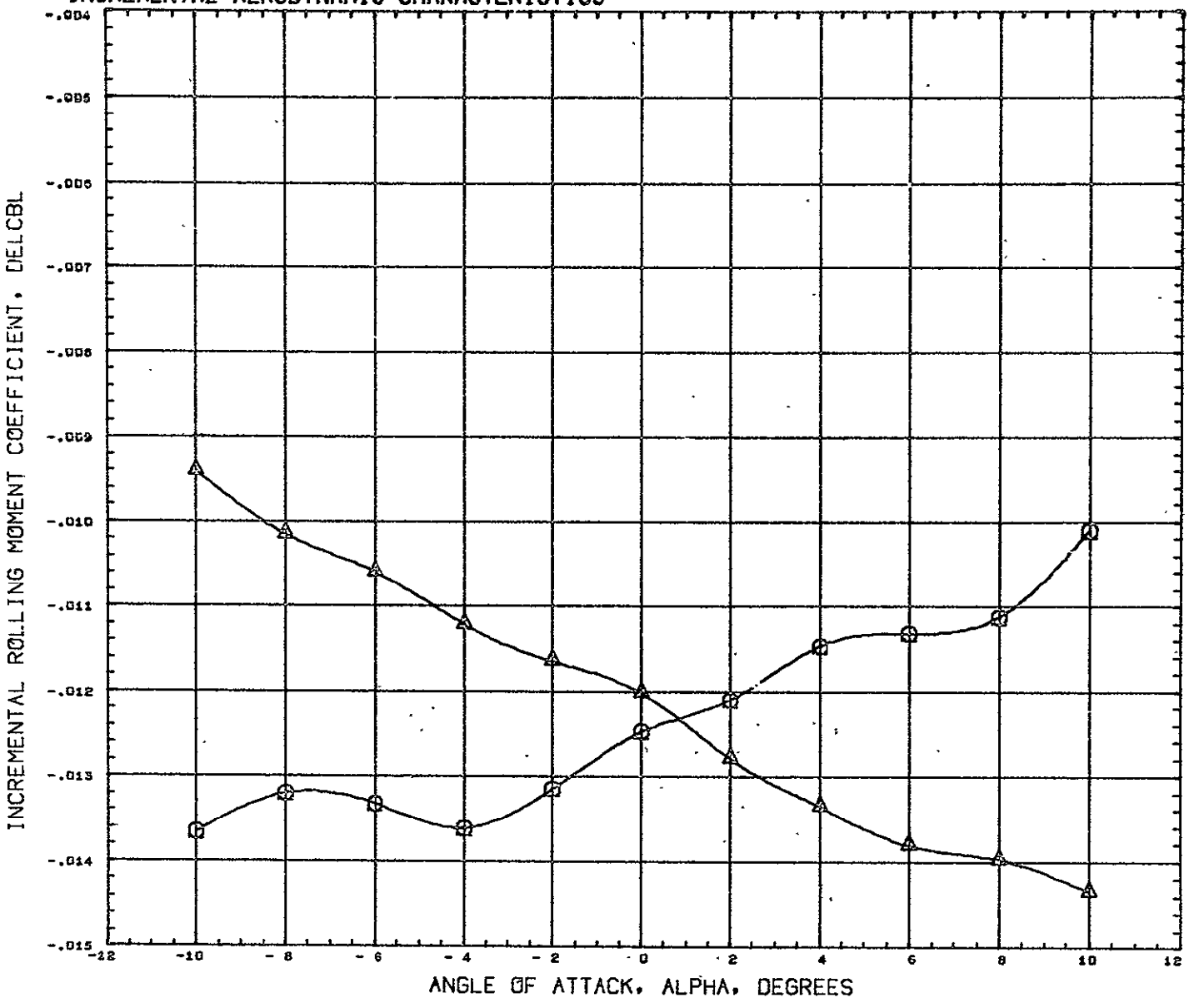
BETA	ELVATR	AILRON
6.000	0.000	0.000

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



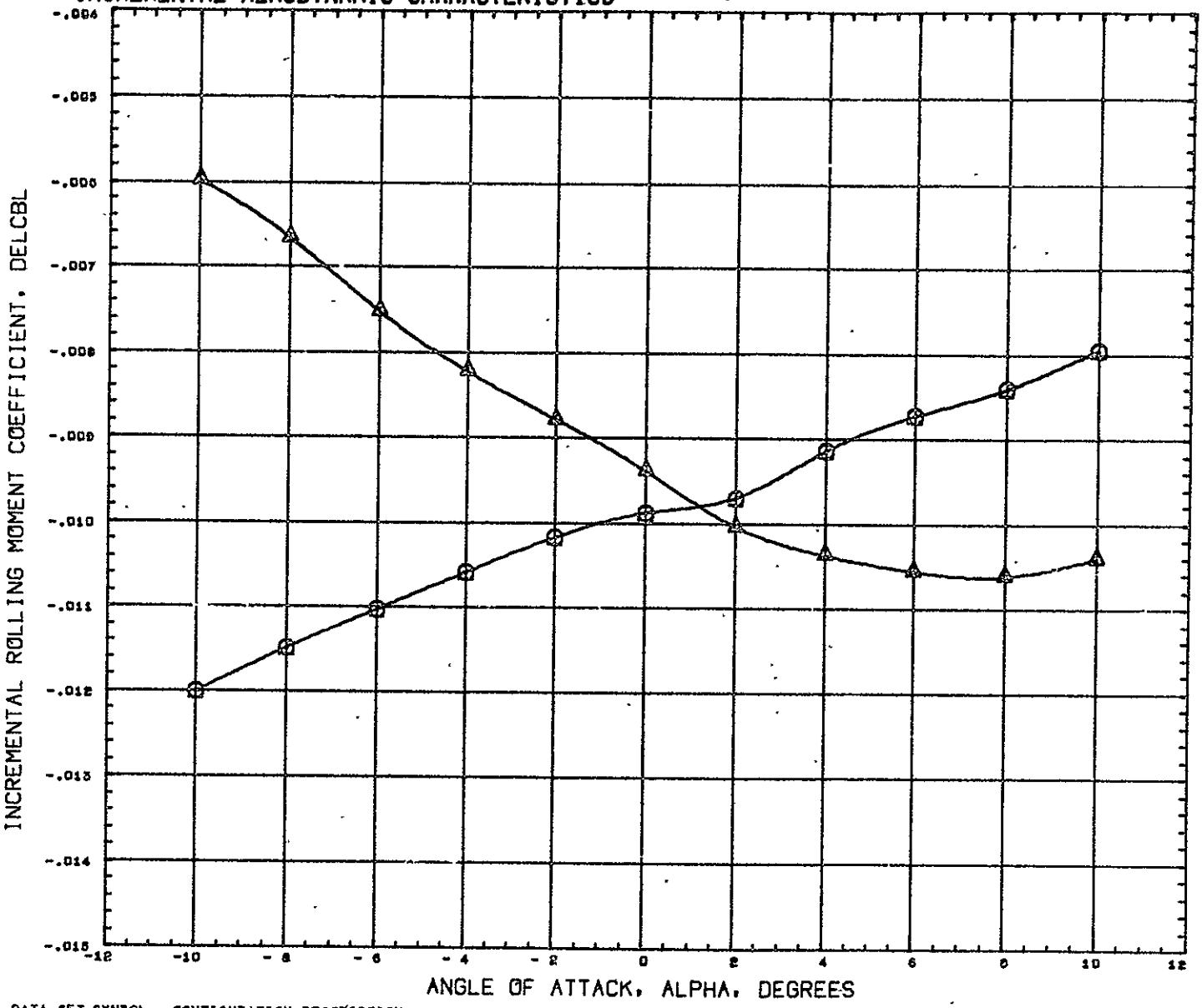
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(F2905A)		MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6	6.000	0.000	0.000
(F2904A)		MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)			

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(F2905A)	○	MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6
(F2904A)	△	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

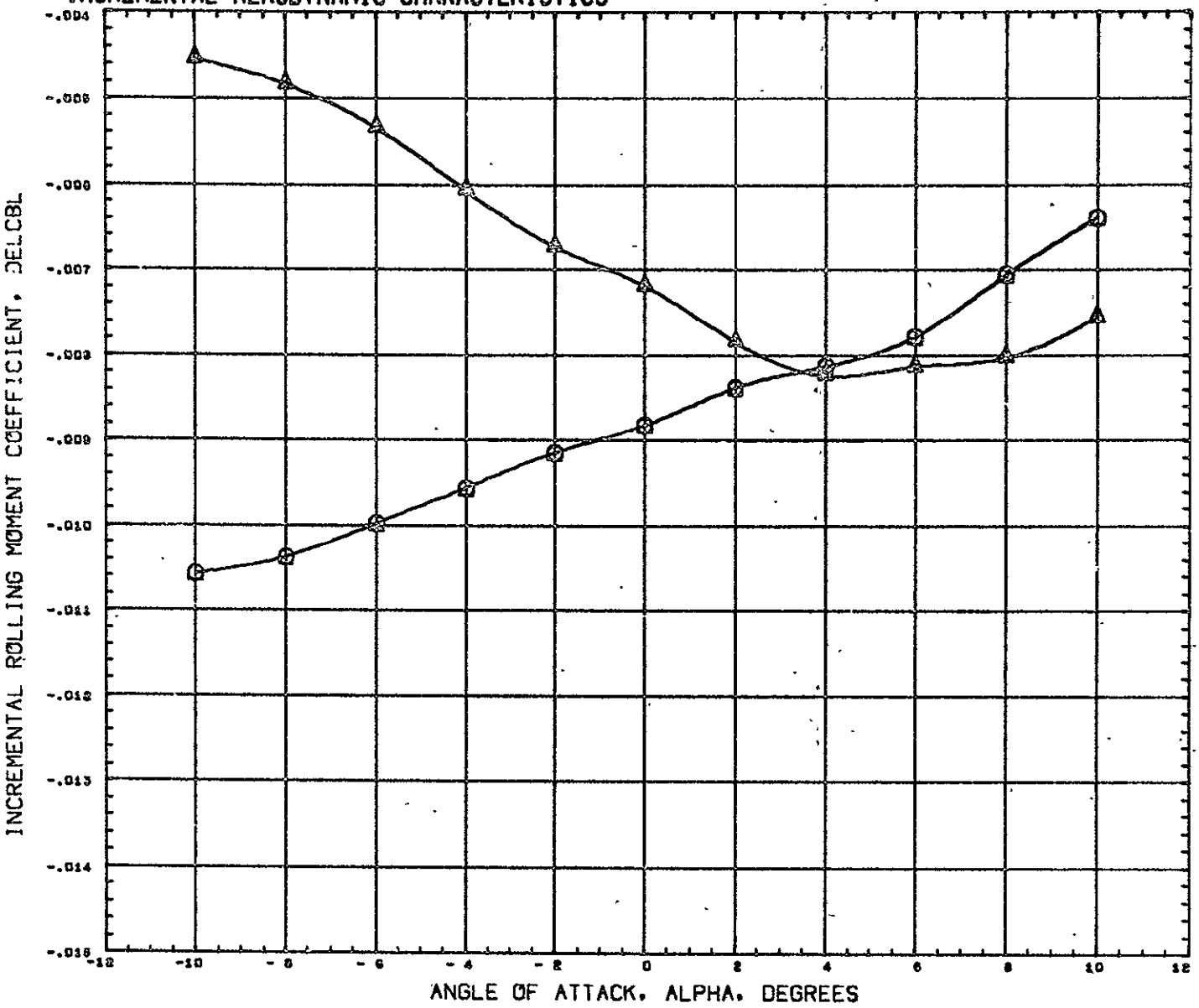
BETA	ELVATR	AILRON
6.000	0.000	0.000

MACH 1.500

REFERENCE INFORMATION

REFS	6064.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



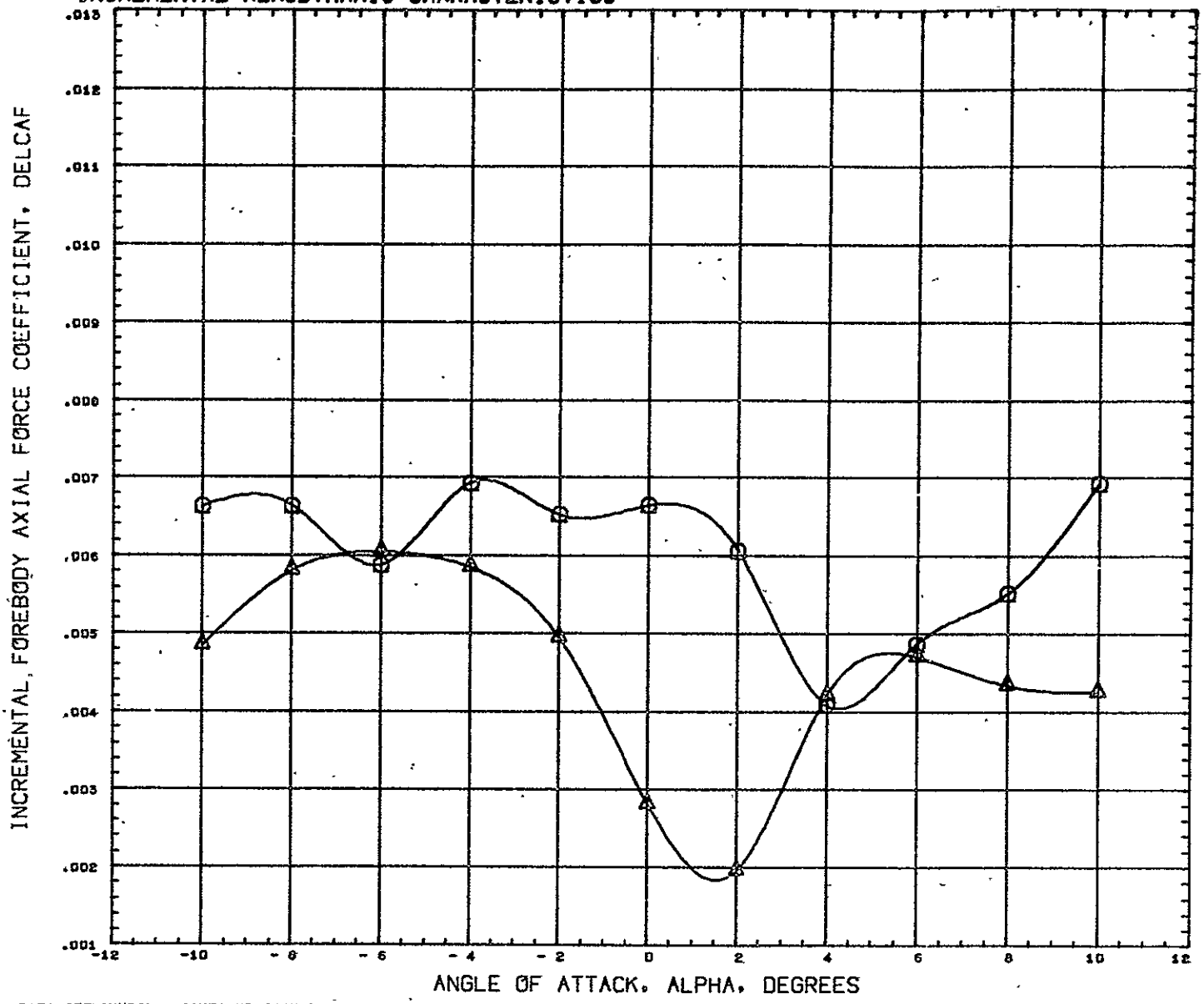
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(F2905A)	○	M8FC404 (B5W17E10V17J2 - B5W17E10) AT BETA=6	6.000	0.000	0.000
(F2904A)	△	M8FC404 (B5V17J2 AT BETA=6 - B5X AT BETA=0)			

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(F2905A)	Ω	MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6
(F2904A)	Δ	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

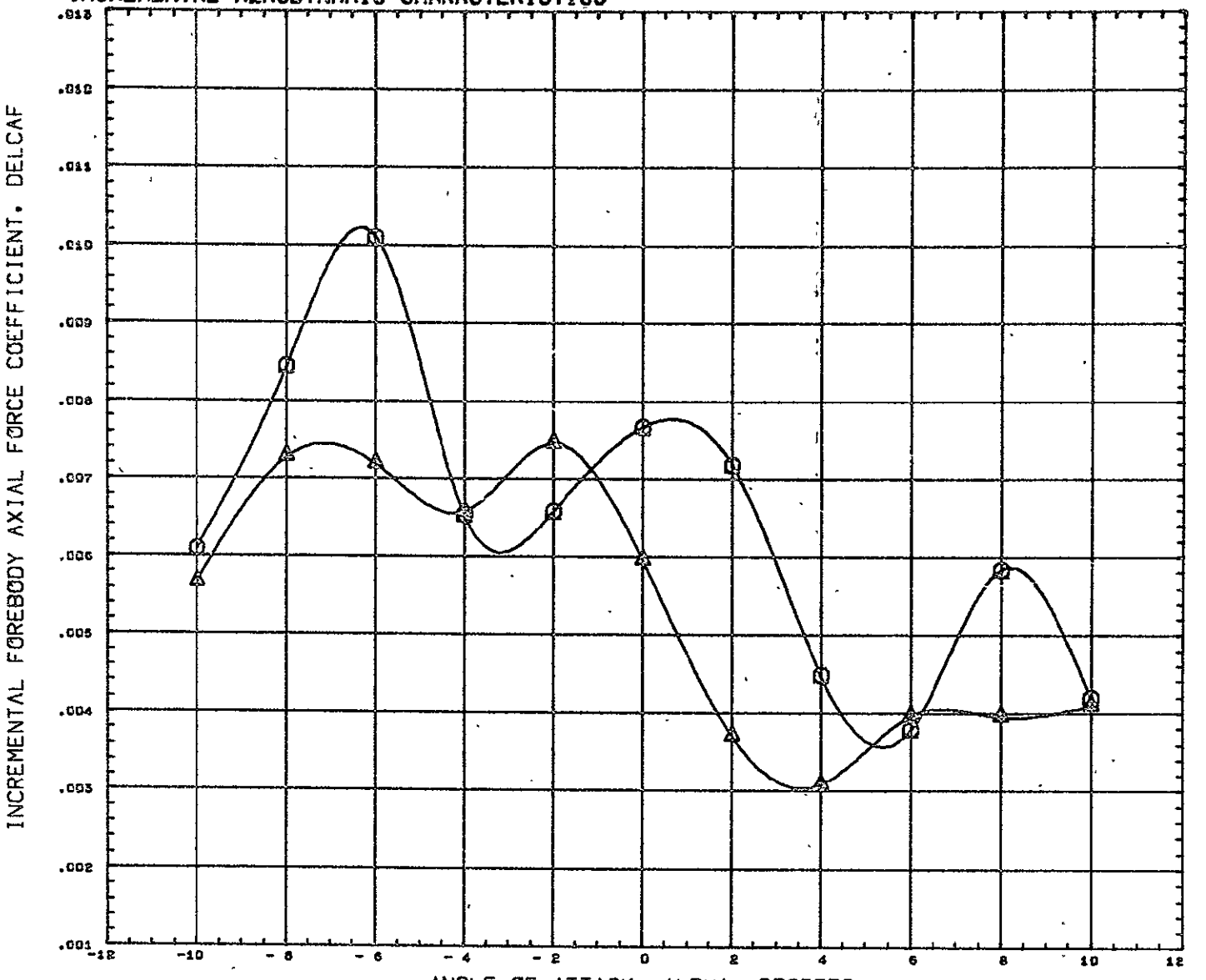
BETA	ELVATR	AILRON
6.000	0.000	0.000

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	621.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(F2905A)	○	HSFC484 (B5W17E10V17J2 - BSW17E10) AT BETA=6
(F2904A)	△	HSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

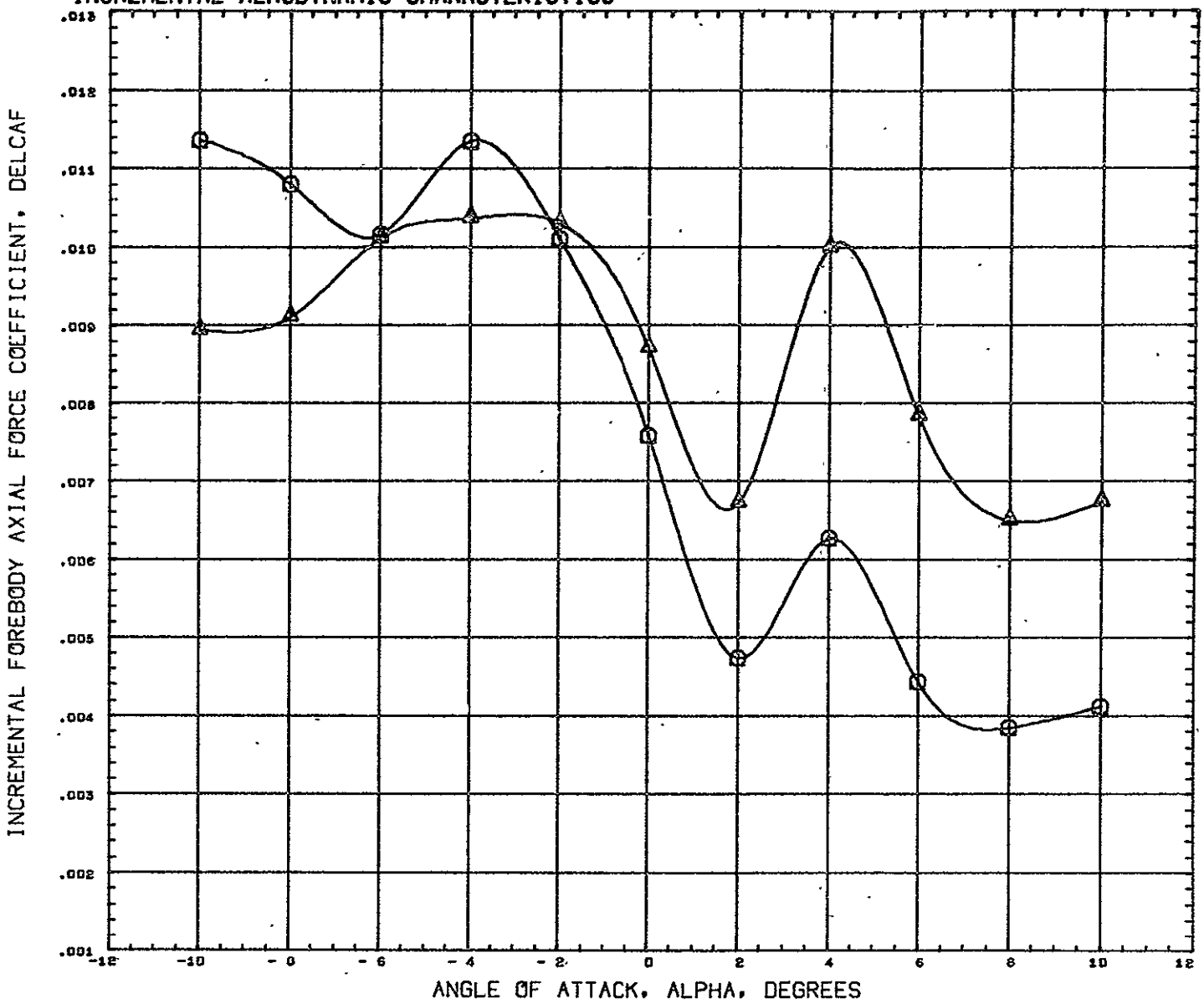
BETA	ELVATR	AILRON
6.000	0.000	0.000

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS

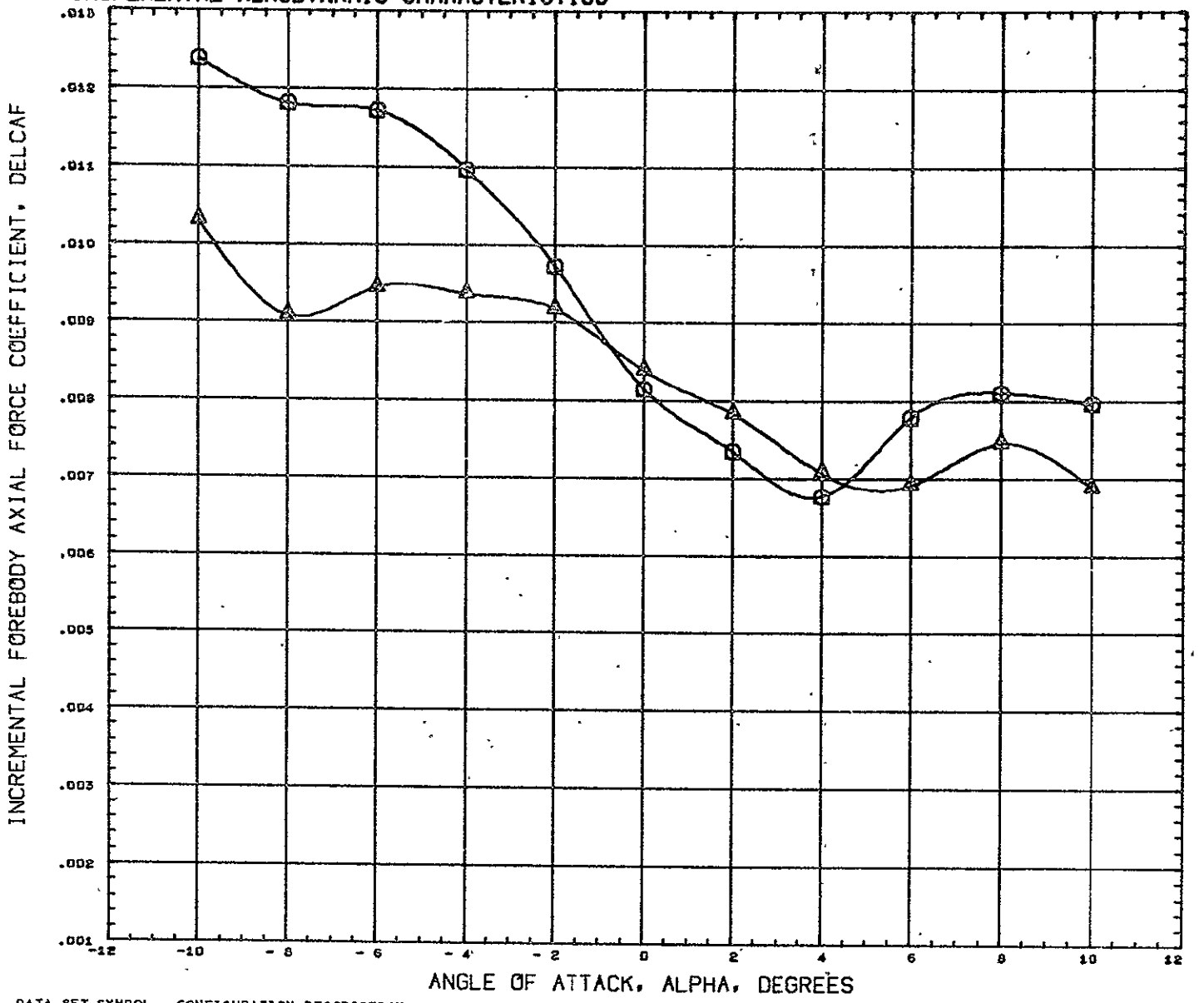


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(F2905A)	○	MSFC484 (B5W17E10V17J2 - BSW17E10) AT BETA=6	6.000	0.000	0.000
(F2904A)	△	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)			

MACH 1.100

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(F2905A)	○	HSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6
(F2904A)	△	HSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

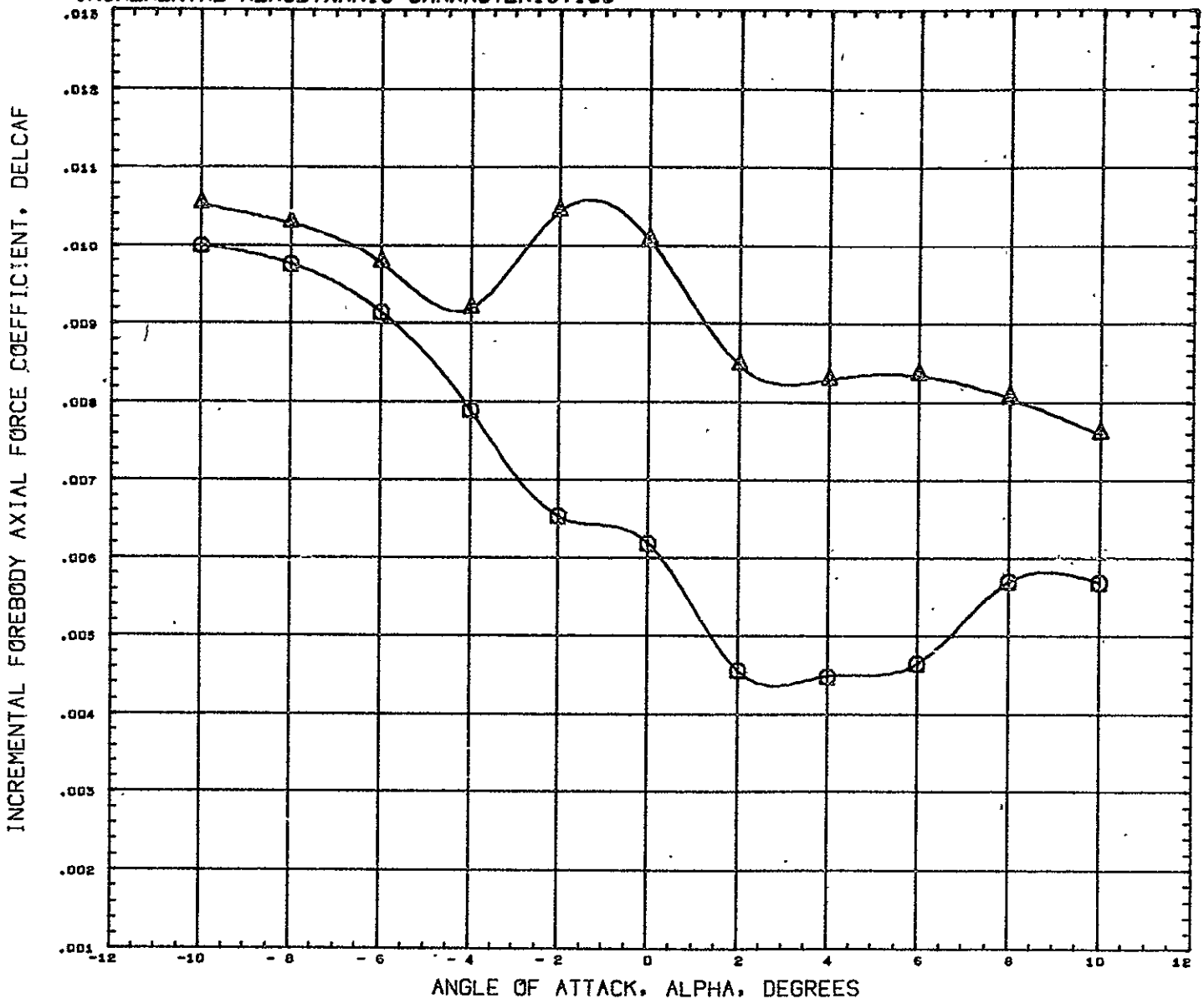
BETA	ELVATR	AILRON
6.000	0.000	0.000

NACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



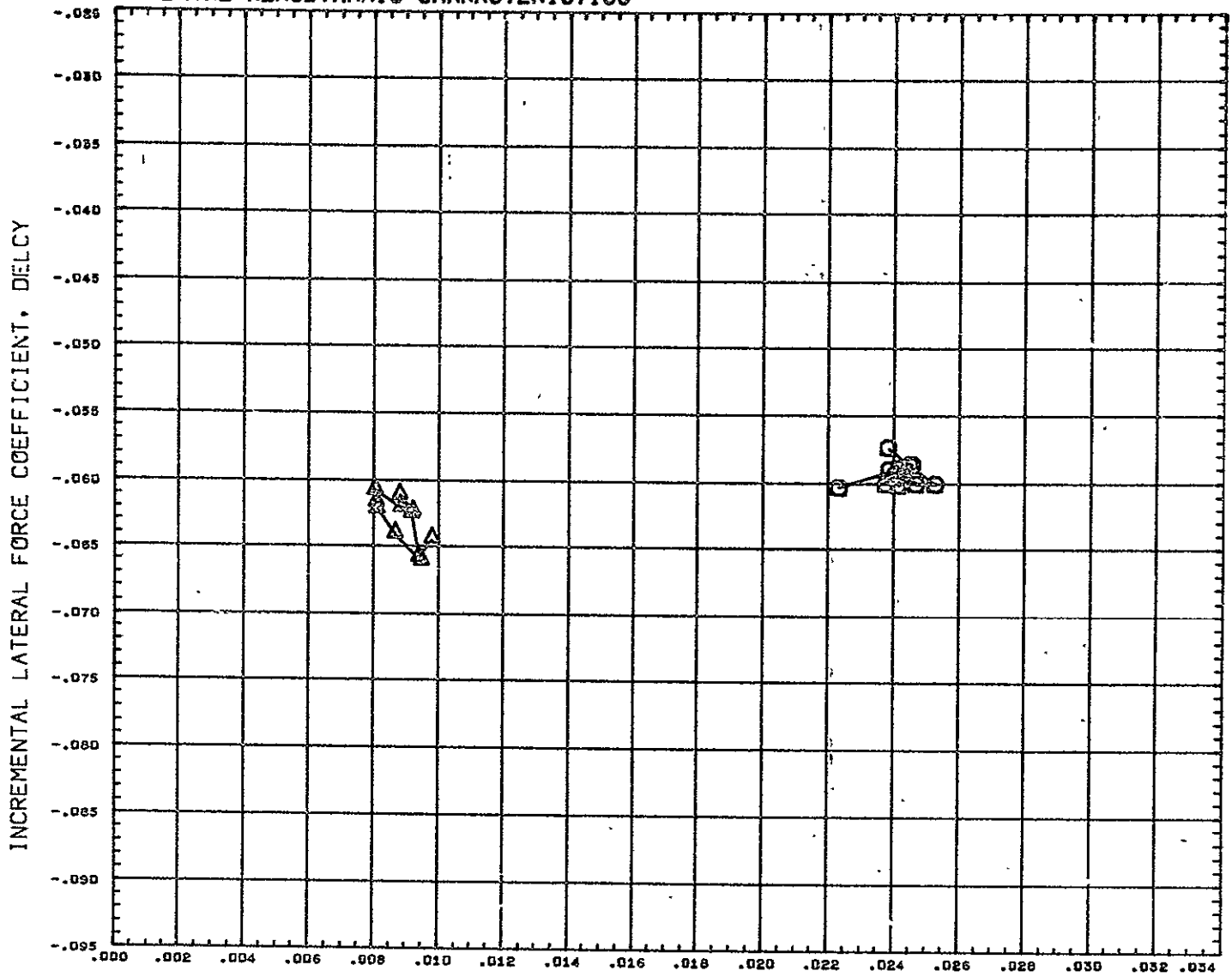
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(F2905A)	○	MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6	6.000	0.000	0.000
(F2904A)	△	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)			

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(F2905A) ○	MSFC484 (B5W17E10V17J2 - BSW17E10) AT BETA=6
(F2904A) △	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

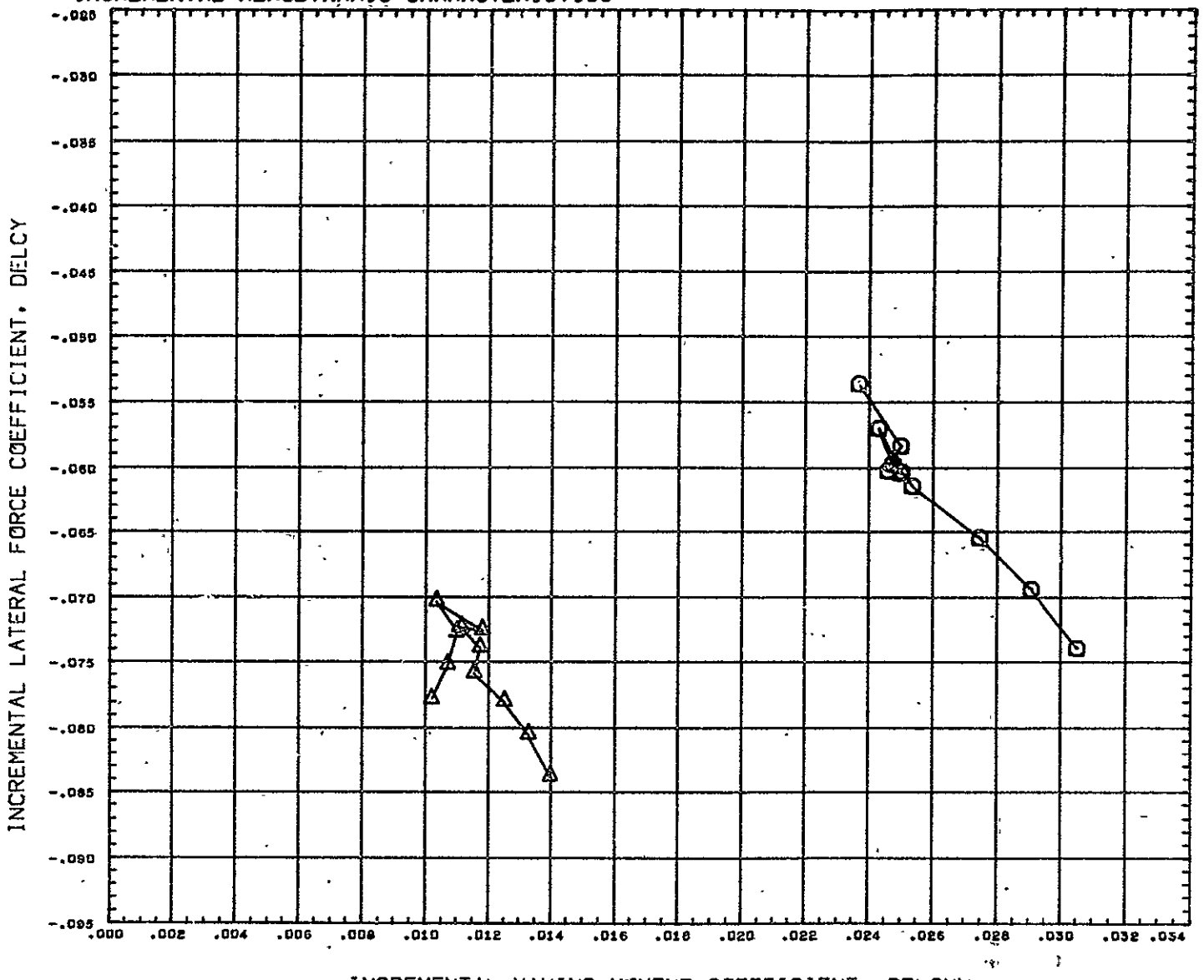
BETA	ELVATR	AILRON
6.000	0.000	0.000

MACH 0.600

REFERENCE INFORMATION

REFS	6084.5[illegible]0	SQ FT
REFL	821.2004	INCHES
XSFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



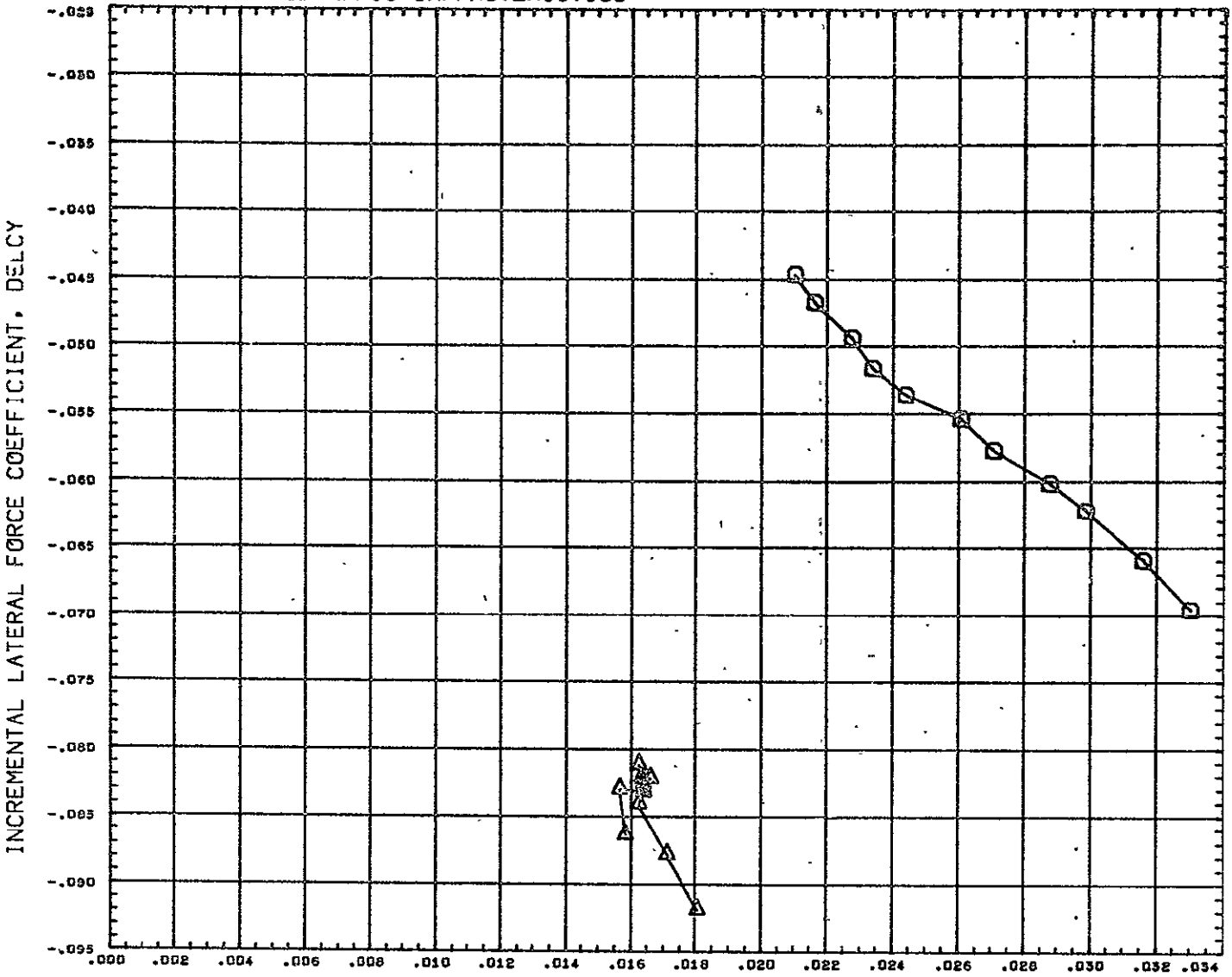
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(F2905A) ○	MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6	6.000	0.000	0.000
(F2904A) △	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)			

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0010	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(F2905A)		HSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6
(F2904A)		HSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

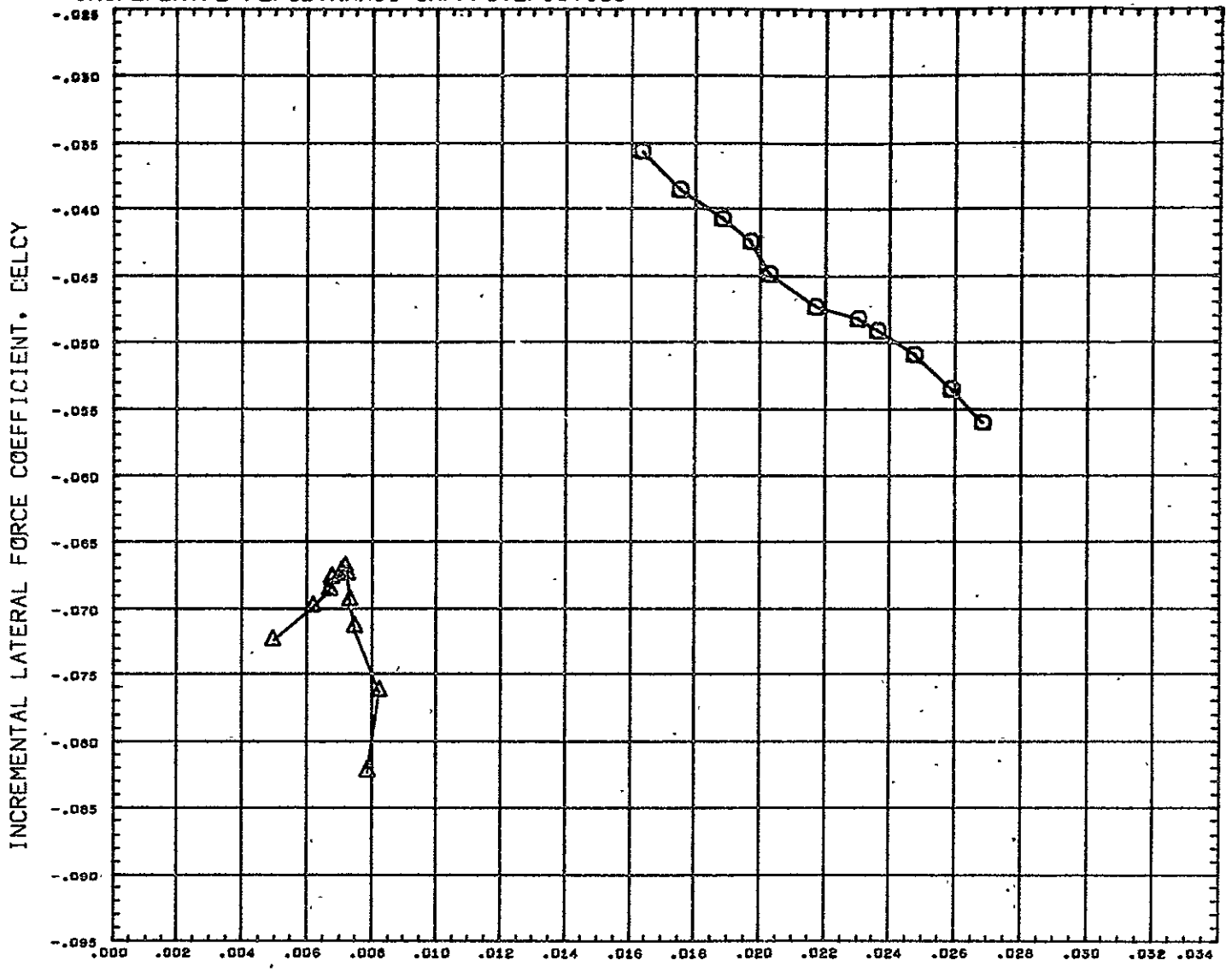
BETA	ELVATR	AILRON
6.000	0.000	0.000

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



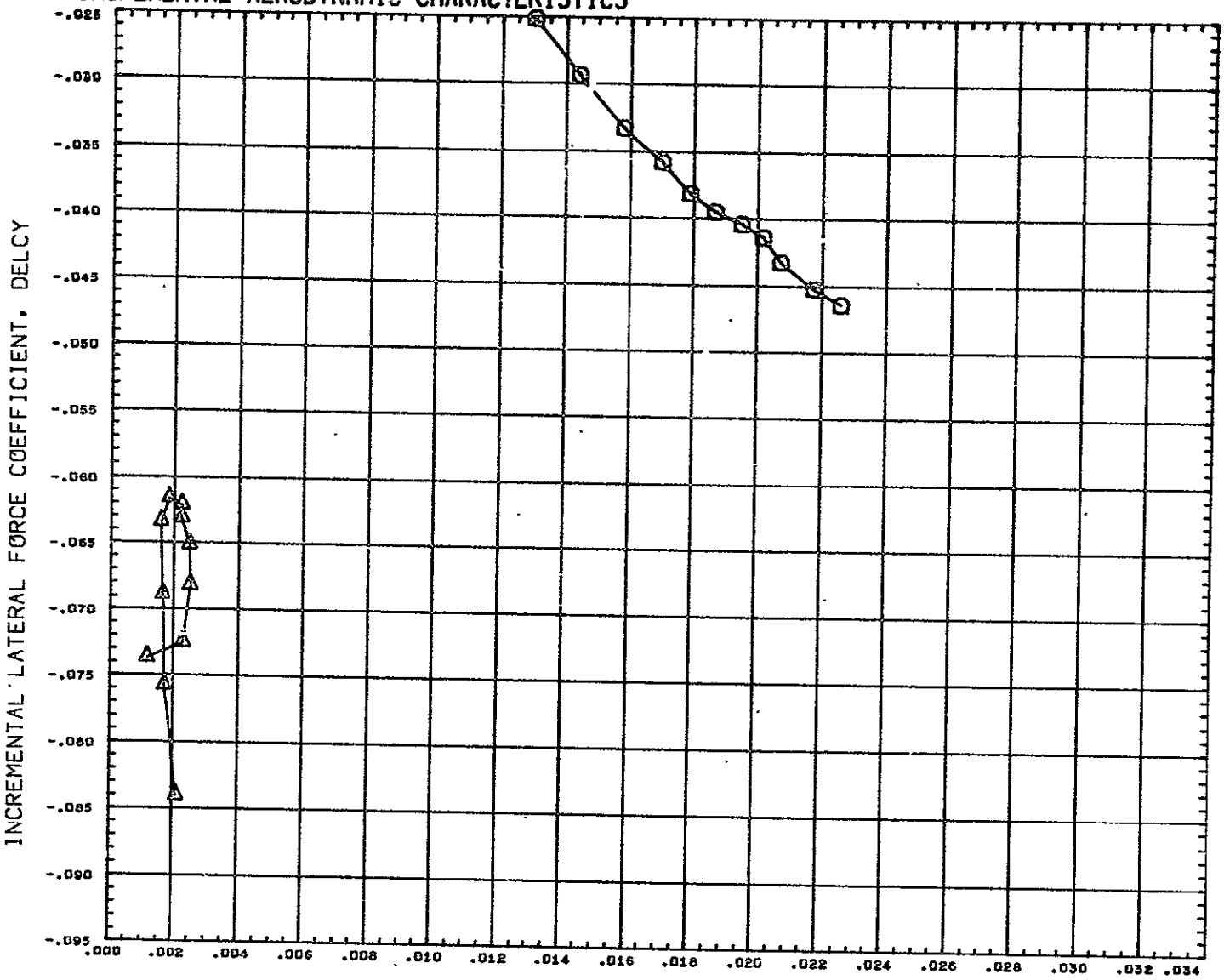
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELVATR	AILRON
(F2905A)	○	MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6	6.000	0.000	0.000
(F2904A)	△	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)			

MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

INCREMENTAL AERODYNAMIC CHARACTERISTICS



DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(F2905A)	○	MSFC484 (B5W17E10V17J2 - B5W17E10) AT BETA=6
(F2904A)	△	MSFC484 (B5V17J2 AT BETA=6 - B5X AT BETA=0)

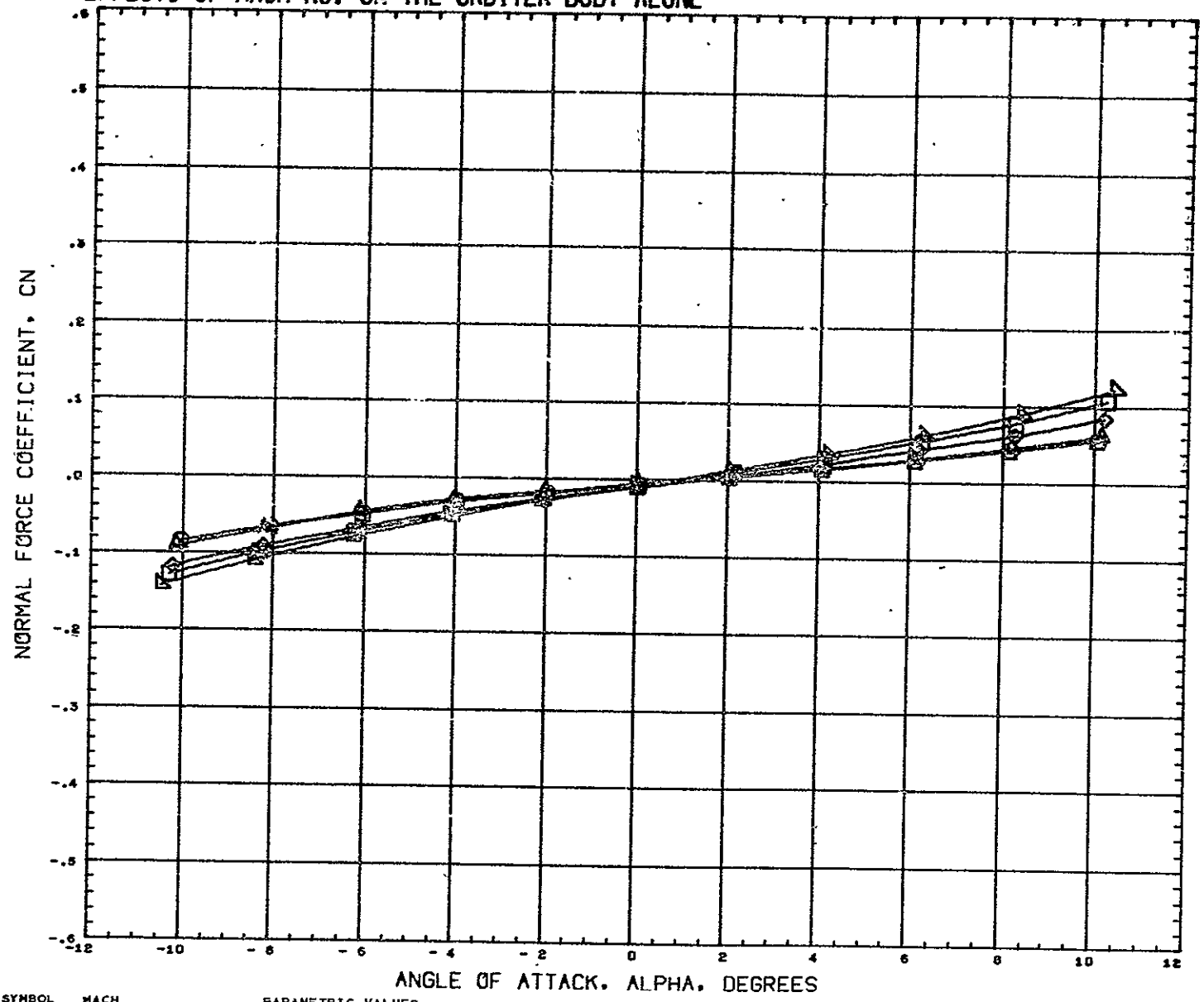
BETA	ELVATR	AILRON
6.000	0.000	0.000

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF MACH NO. ON THE ORBITER BODY ALONE



SYMBOL	MACH
○	0.606
△	0.905
◇	1.104
□	1.467
▽	1.959

PARAMETRIC VALUES

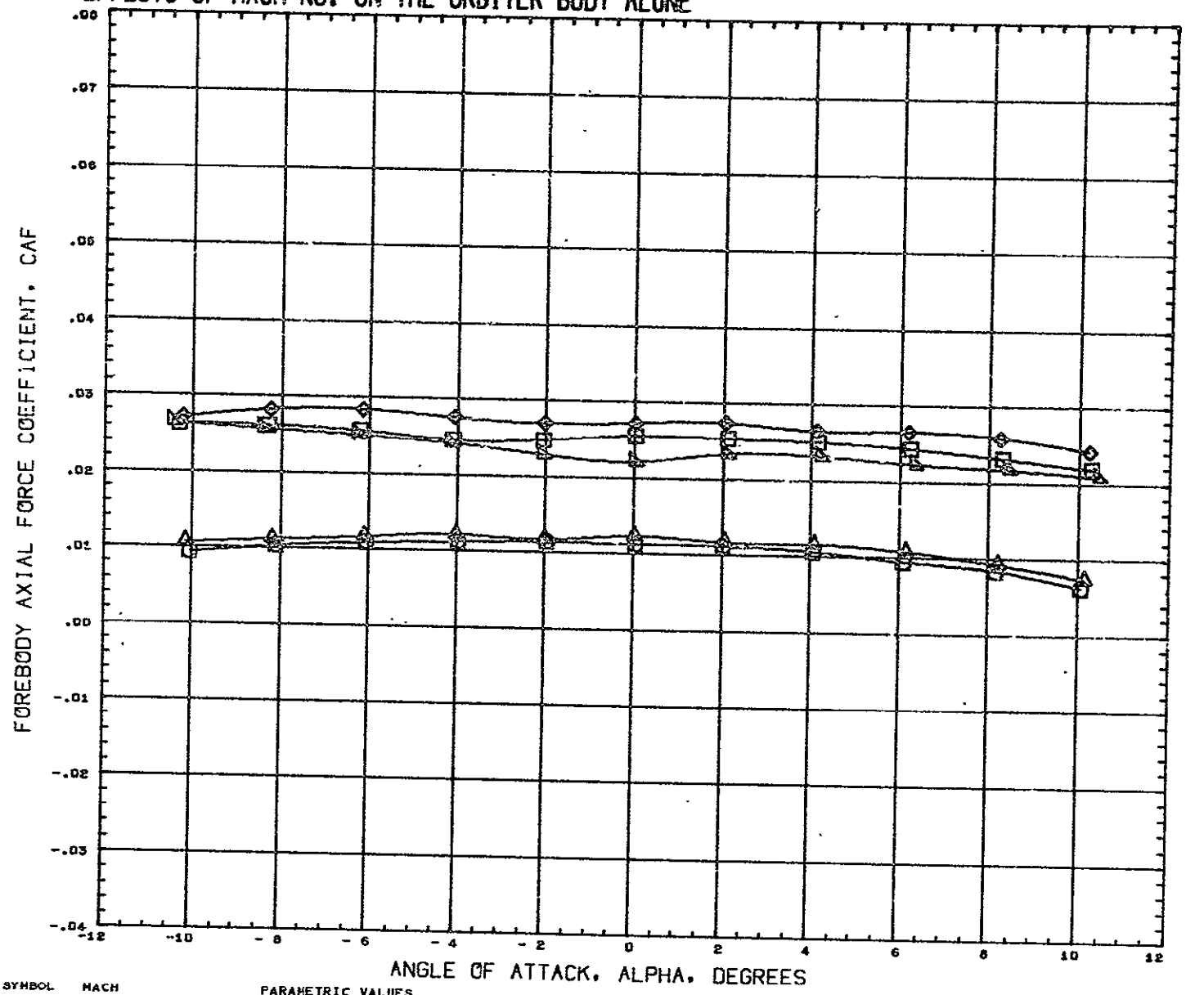
BETA 0.000

DATA HIST. CODE *E

REFERENCE INFORMATION

REFS	6064.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF MACH NO. ON THE ORBITER BODY ALONE



SYMBOL	MACH	PARAMETRIC VALUES	
□	0.606	BETA	0.000
◇	0.905		
△	1.104		
○	1.467		
▽	1.959		

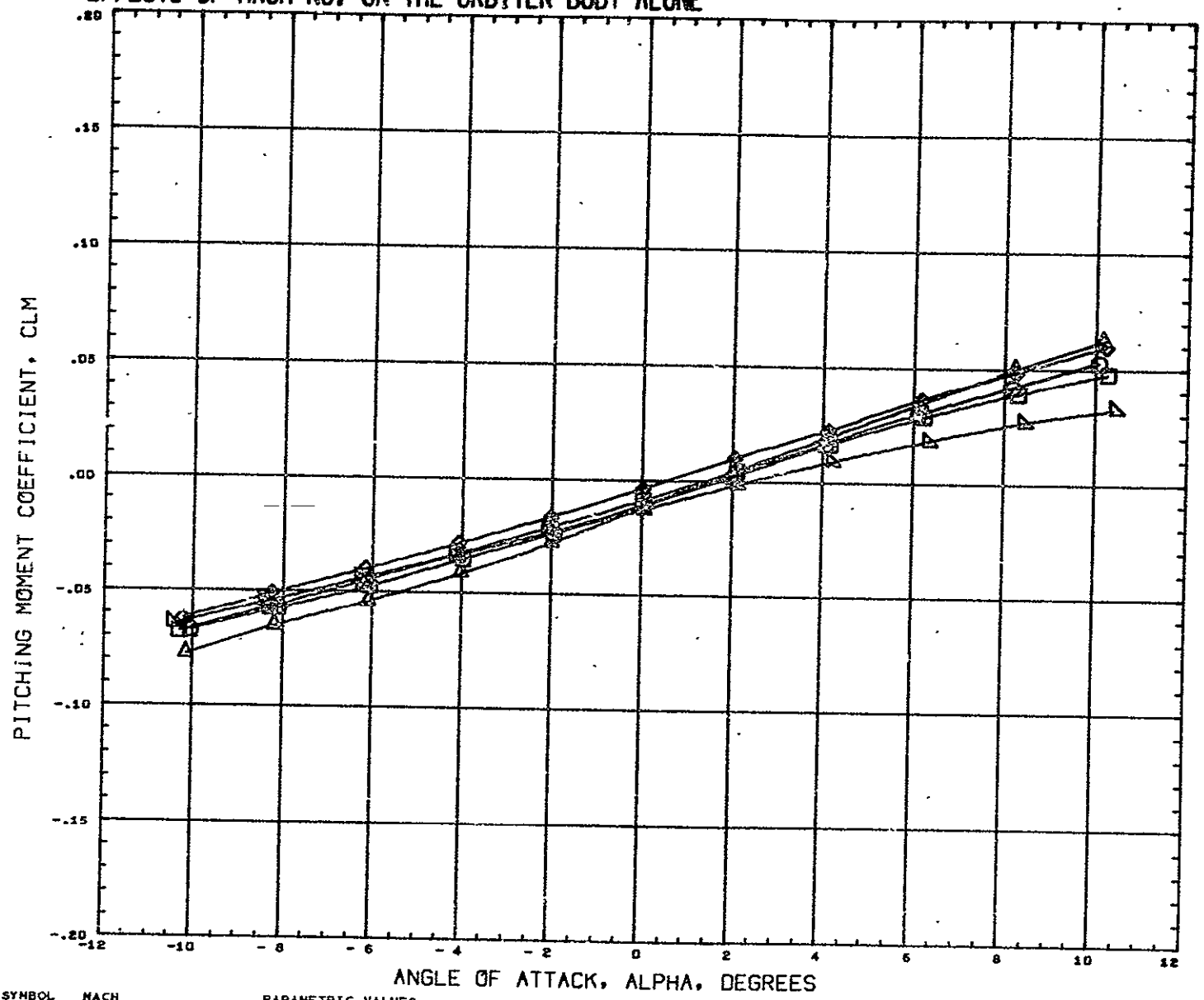
DATA HIST. CODE #E

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

MSFC484 NR DELTA ORBITER B5X (V2901A) 03 AUG 71 PAGE 257

EFFECTS OF MACH NO. ON THE ORBITER BODY ALONE



SYMBOL	MACH
▽	0.606
△	0.905
◇	1.104
□	1.467
▽	1.959

PARAMETRIC VALUES

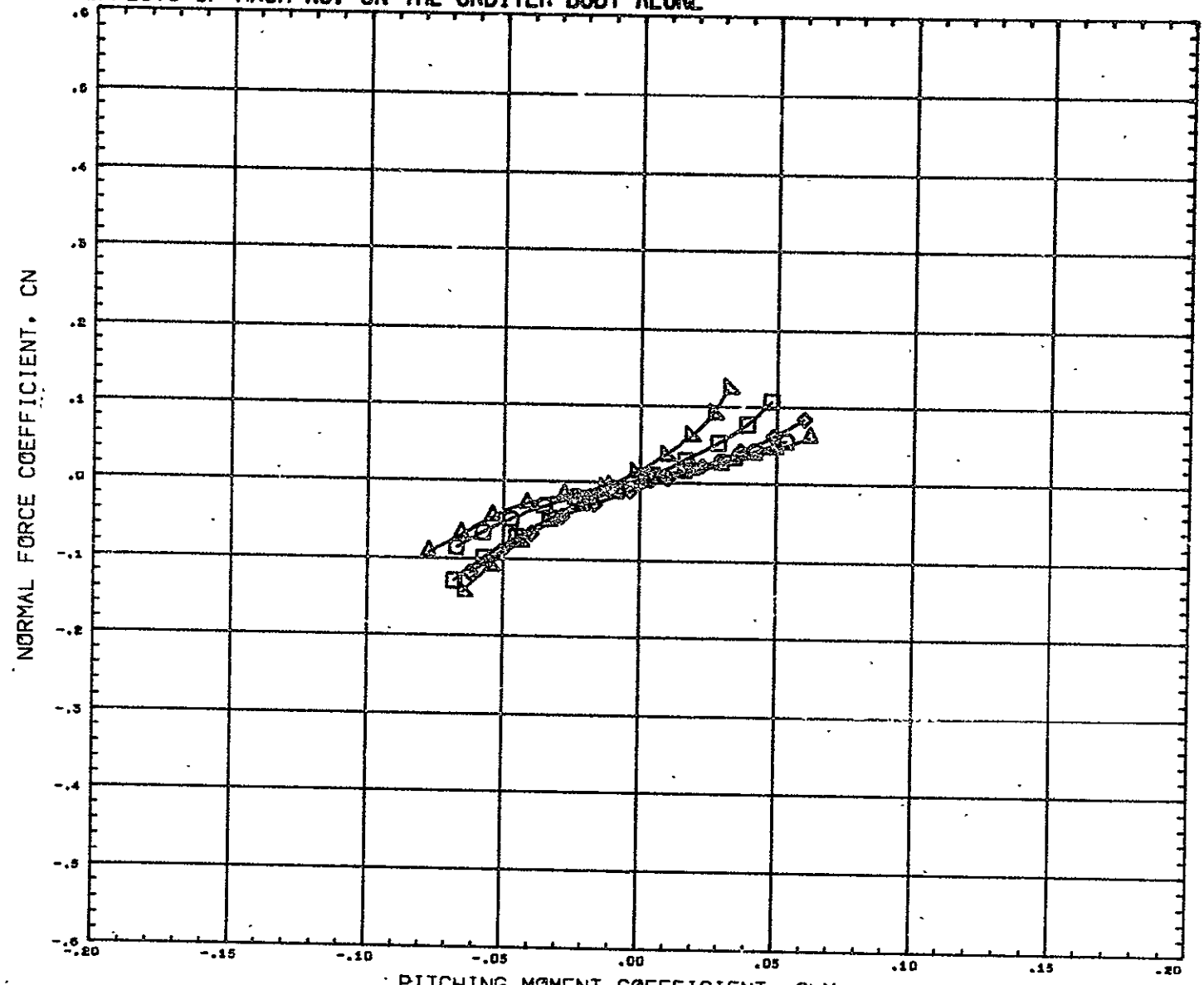
BETA 0.000

DATA HIST. CODE *E

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF MACH NO. ON THE ORBITER BODY ALONE



SYMBOL	MACH
□	0.606
△	0.905
◇	1.104
▽	1.467
▽	1.959

PARAMETRIC VALUES

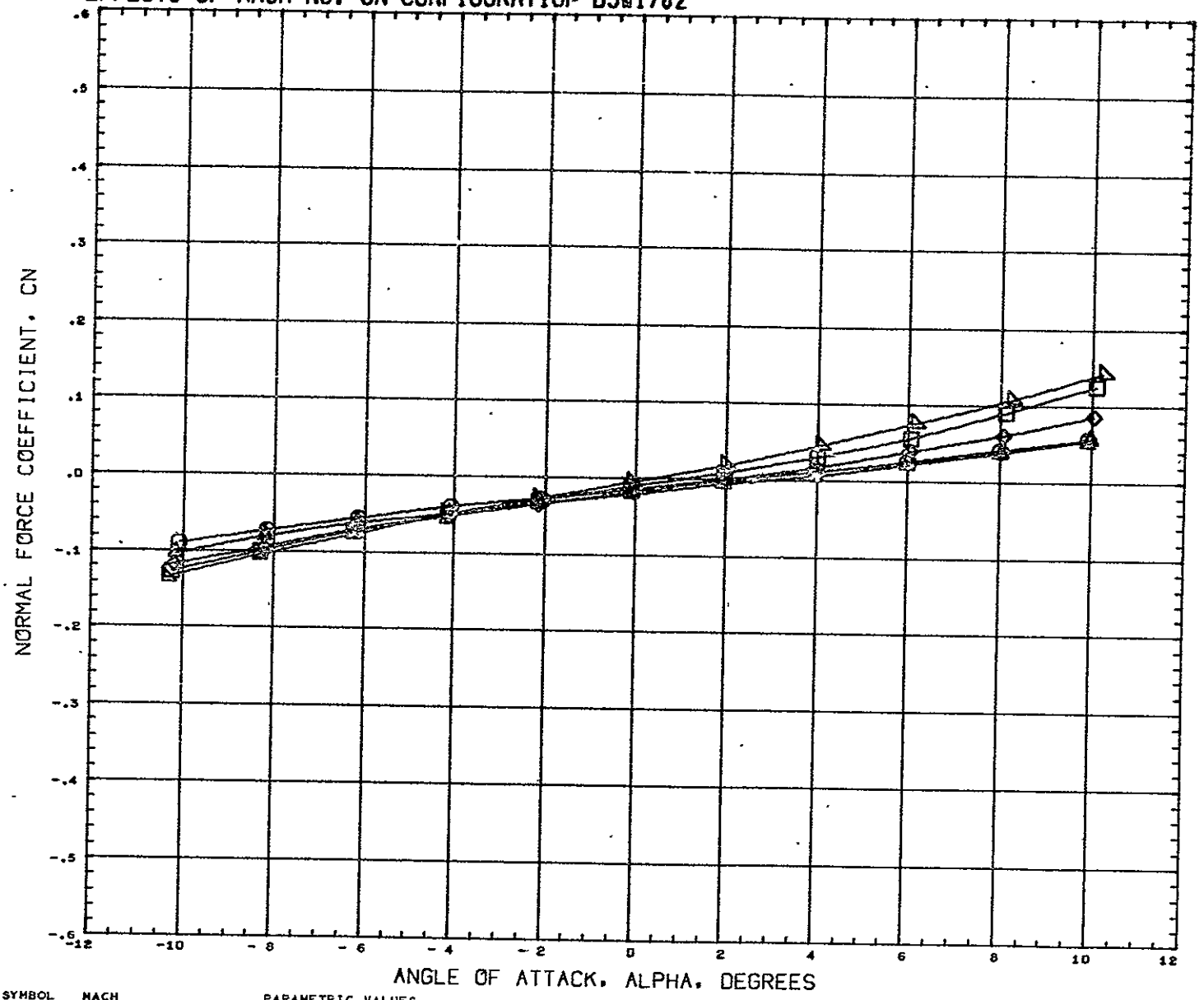
BETA 0.000

DATA HIST. CODE *E

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF MACH NO. ON CONFIGURATION B5W17J2



SYMBOL	MACH
○	0.605
△	0.907
◇	1.101
□	1.471
▽	1.960

PARAMETRIC VALUES

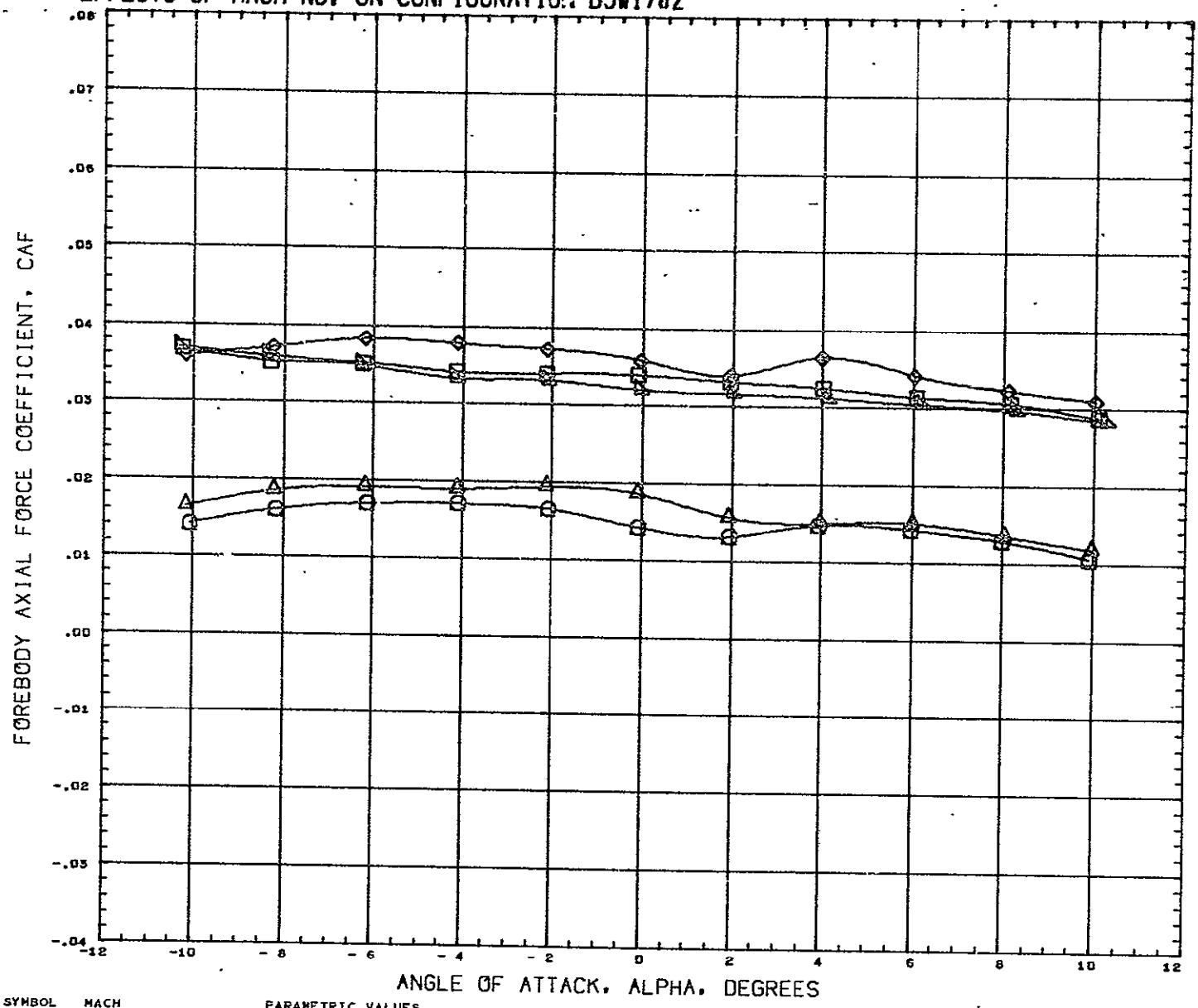
BETA 6.000

DATA HIST. CODE HM*E*E

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF MACH NO. ON CONFIGURATION B5W17J2



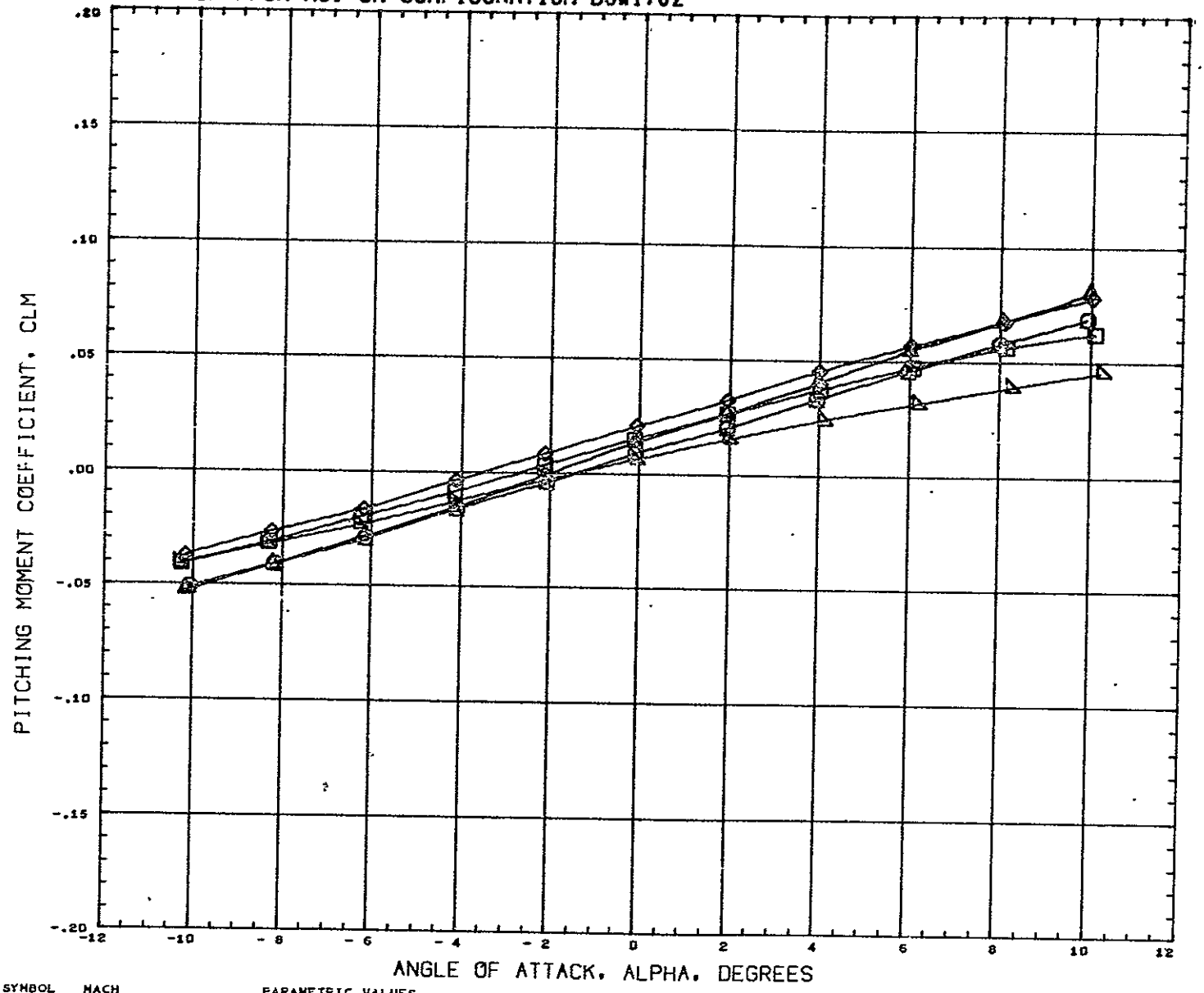
SYMBOL	MACH	PARAMETRIC VALUES	
▽	0.605	BETA	6.000
□	0.907		
◇	1.101		
△	1.471		
○	1.960		

DATA HIST. CODE MM*E*E

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF MACH NO. ON CONFIGURATION: B5W17J2



SYMBOL	MACH
○	0.605
△	0.907
◇	1.101
□	1.471
▽	1.960

PARAMETRIC VALUES

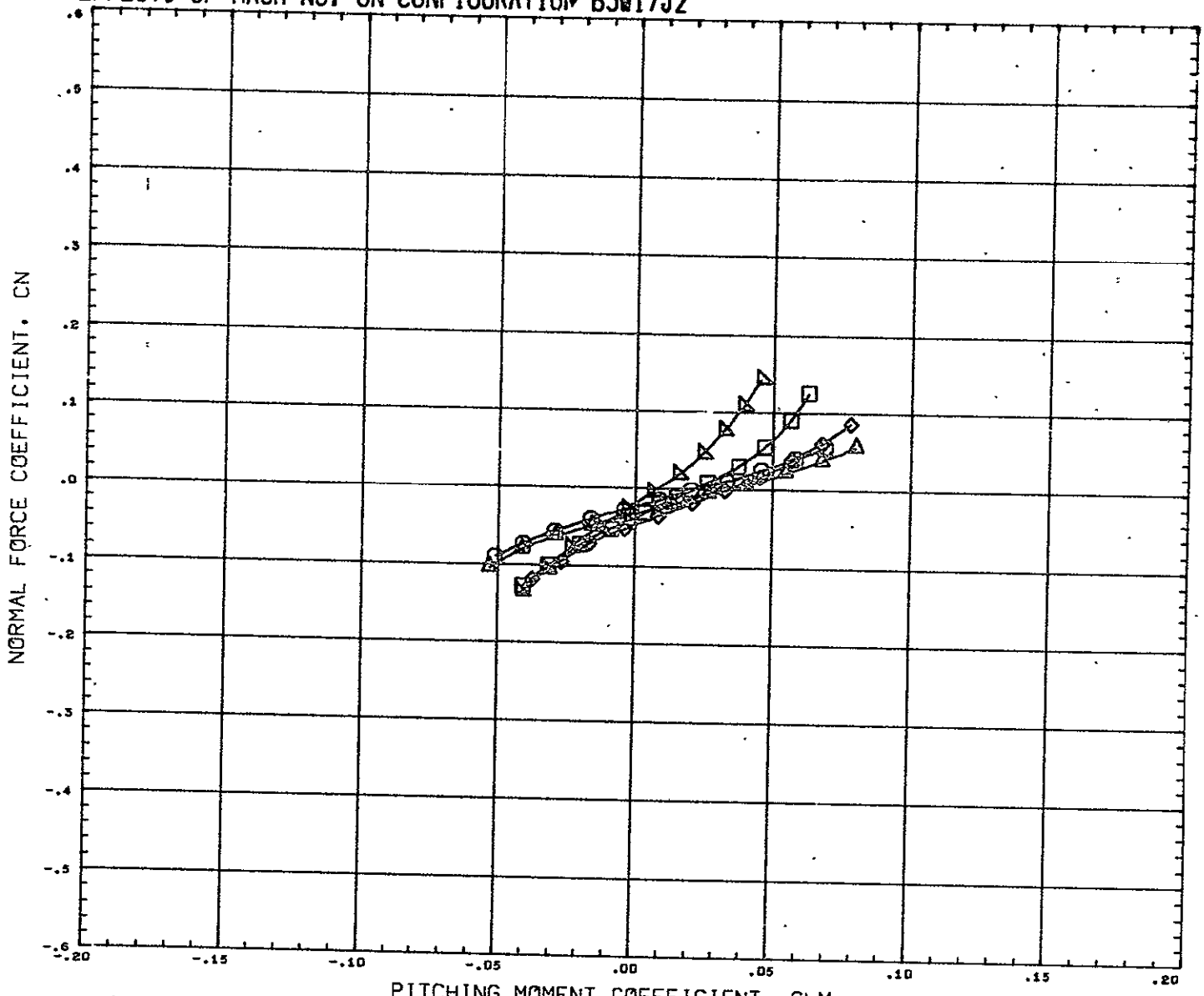
BETA 6.000

DATA HIST. CODE MM*E*E

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF MACH NO. ON CONFIGURATION B5W17J2



SYMBOL	MACH
○	0.605
△	0.907
◇	1.101
□	1.471
▽	1.960

PARAMETRIC VALUES

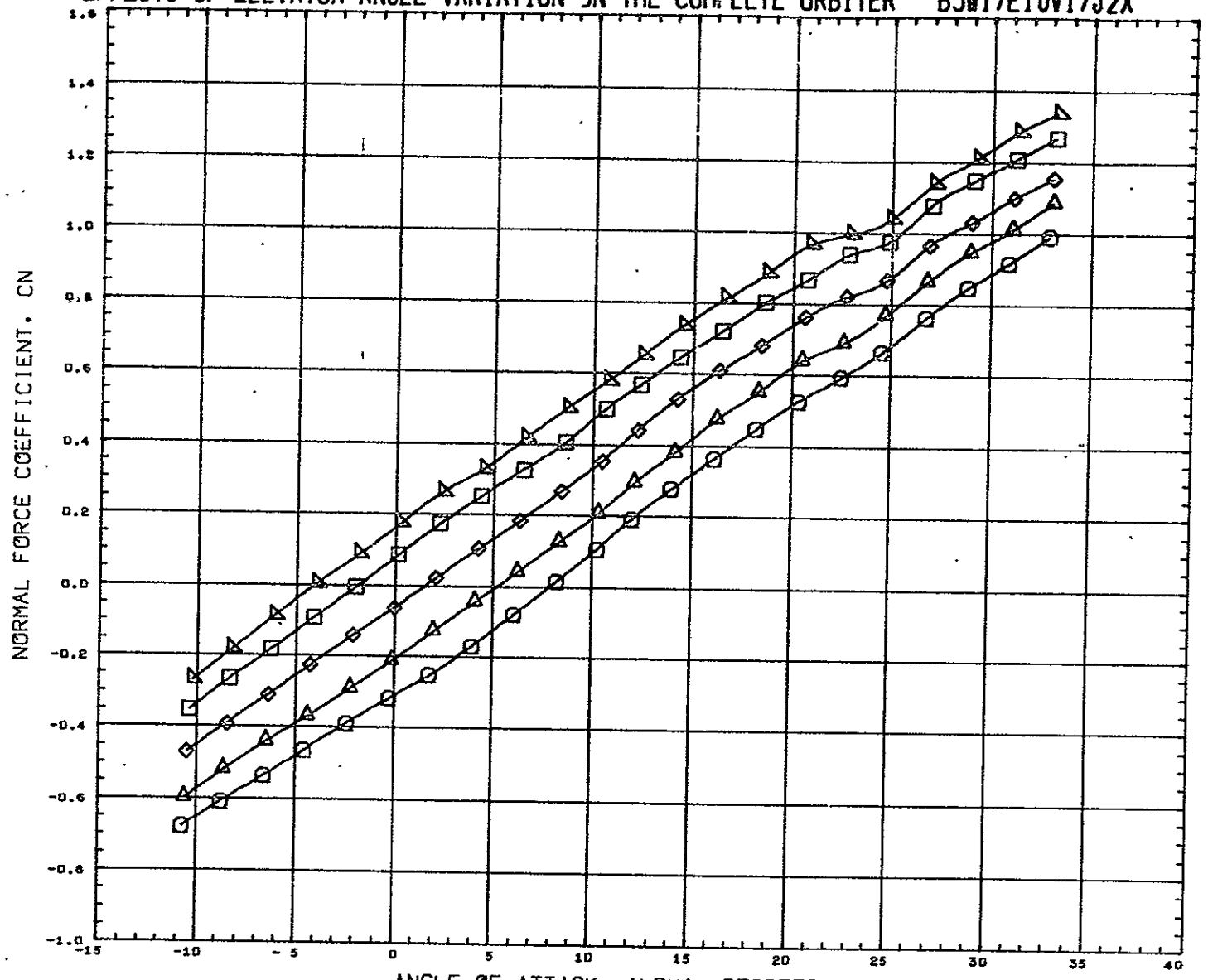
BETA 6.000

DATA HIST. CODE MM*E*E

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
▽	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	0.608	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

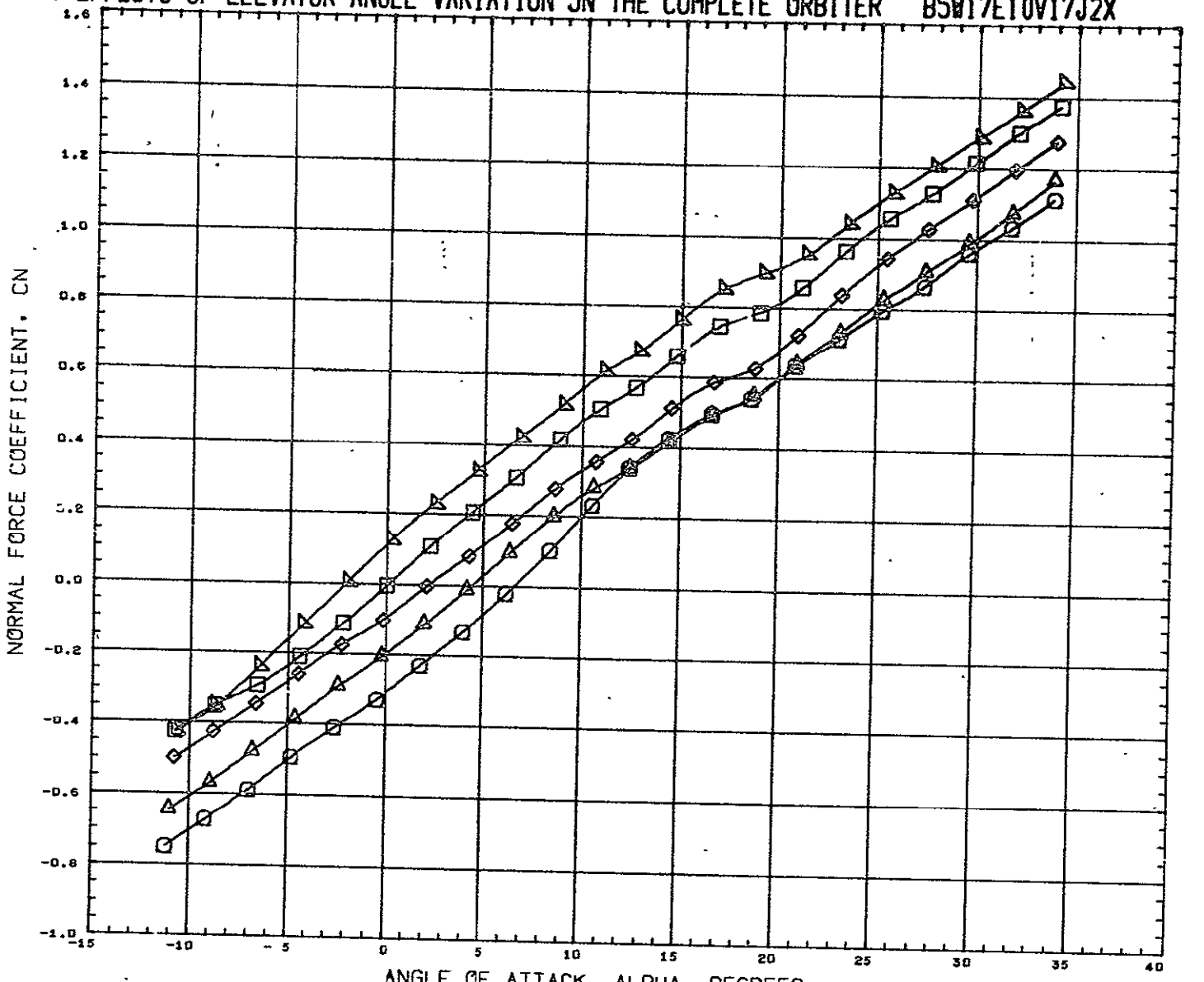
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	0.911	BETA	0.000
AILRON	0.000		

DATA SOURCE

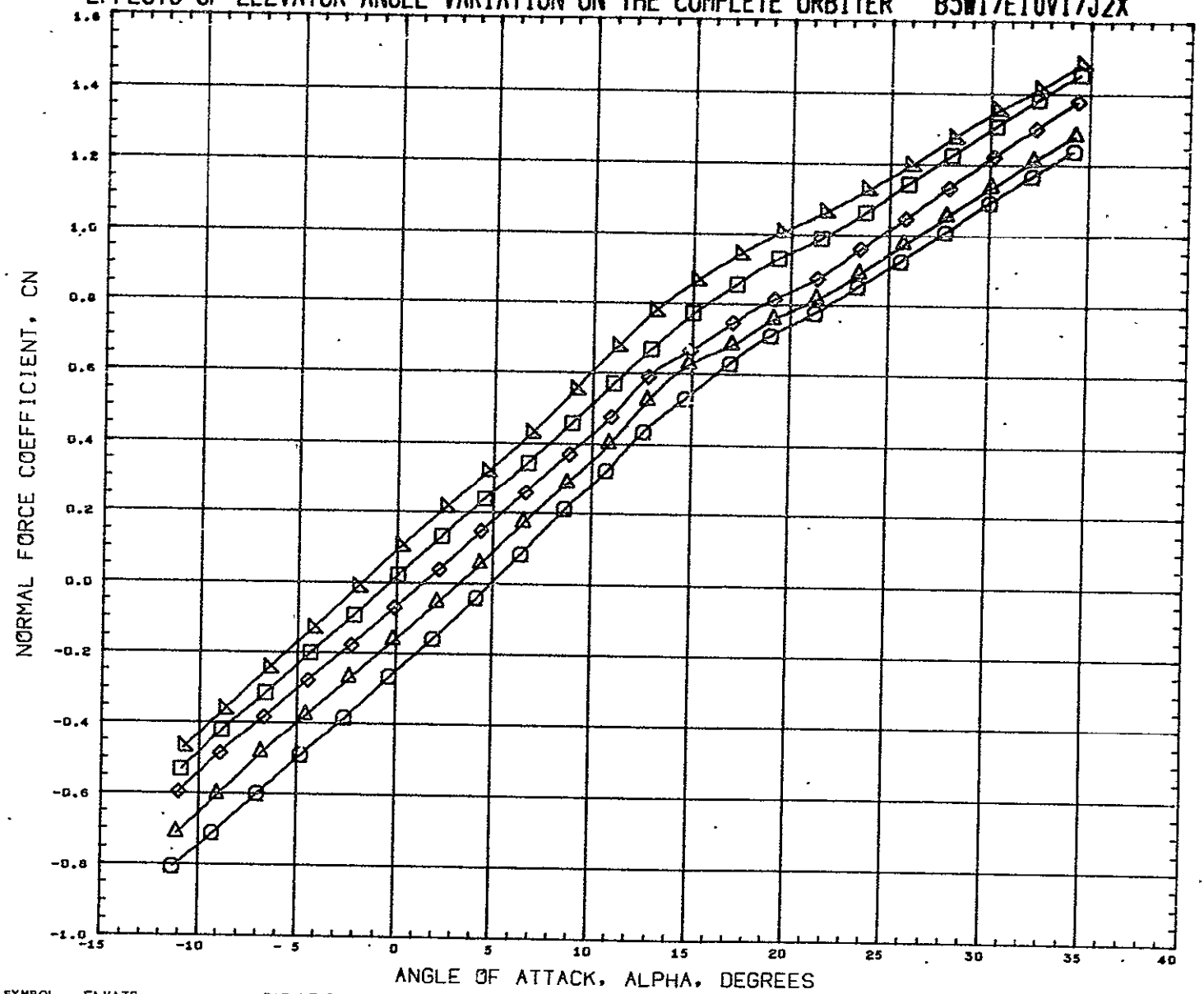
DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*G

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
□	- 20.000
△	- 10.000
◇	0.000
○	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.108	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

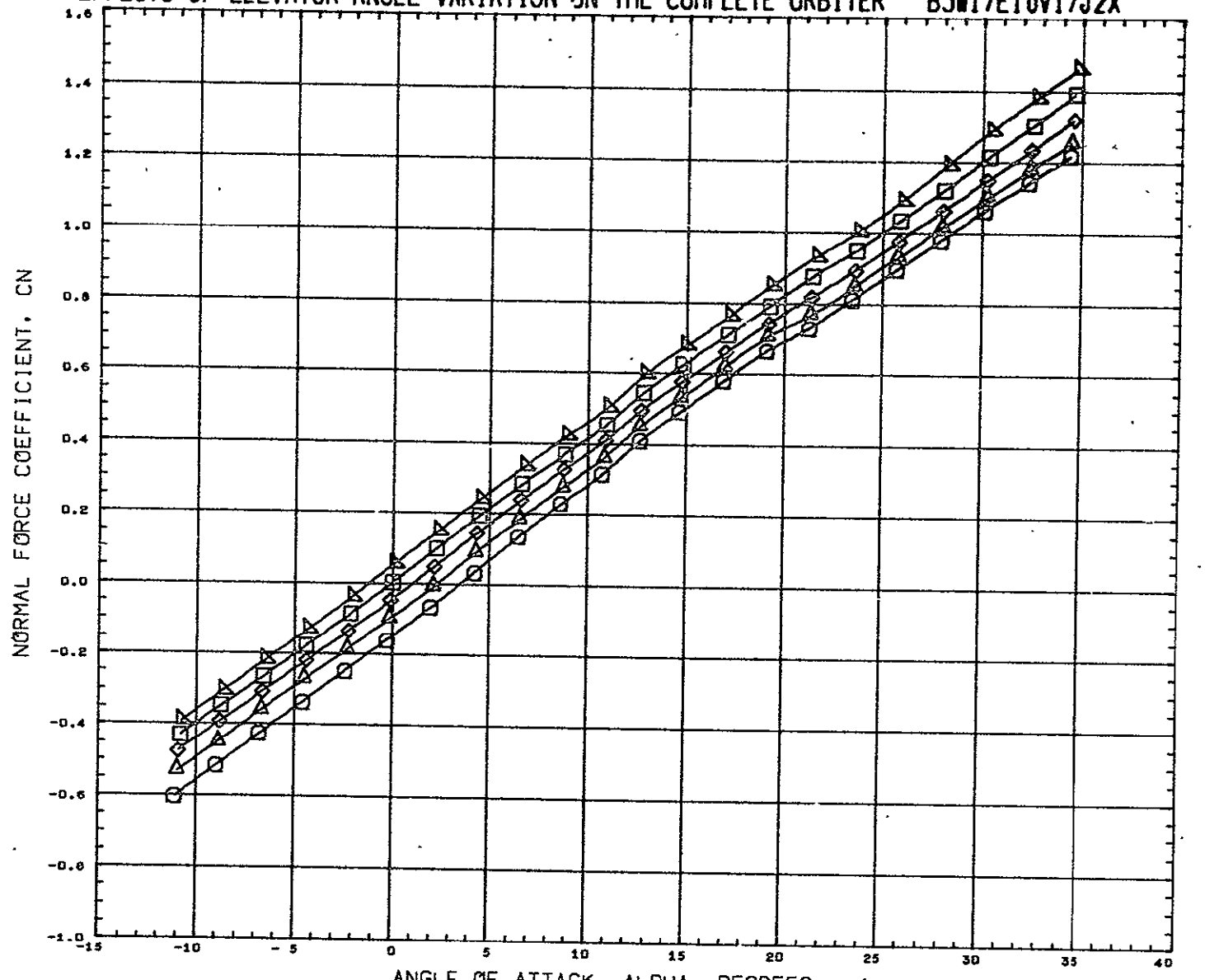
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
◸	20.000

PARAMETRIC VALUES

MACH	1.465	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

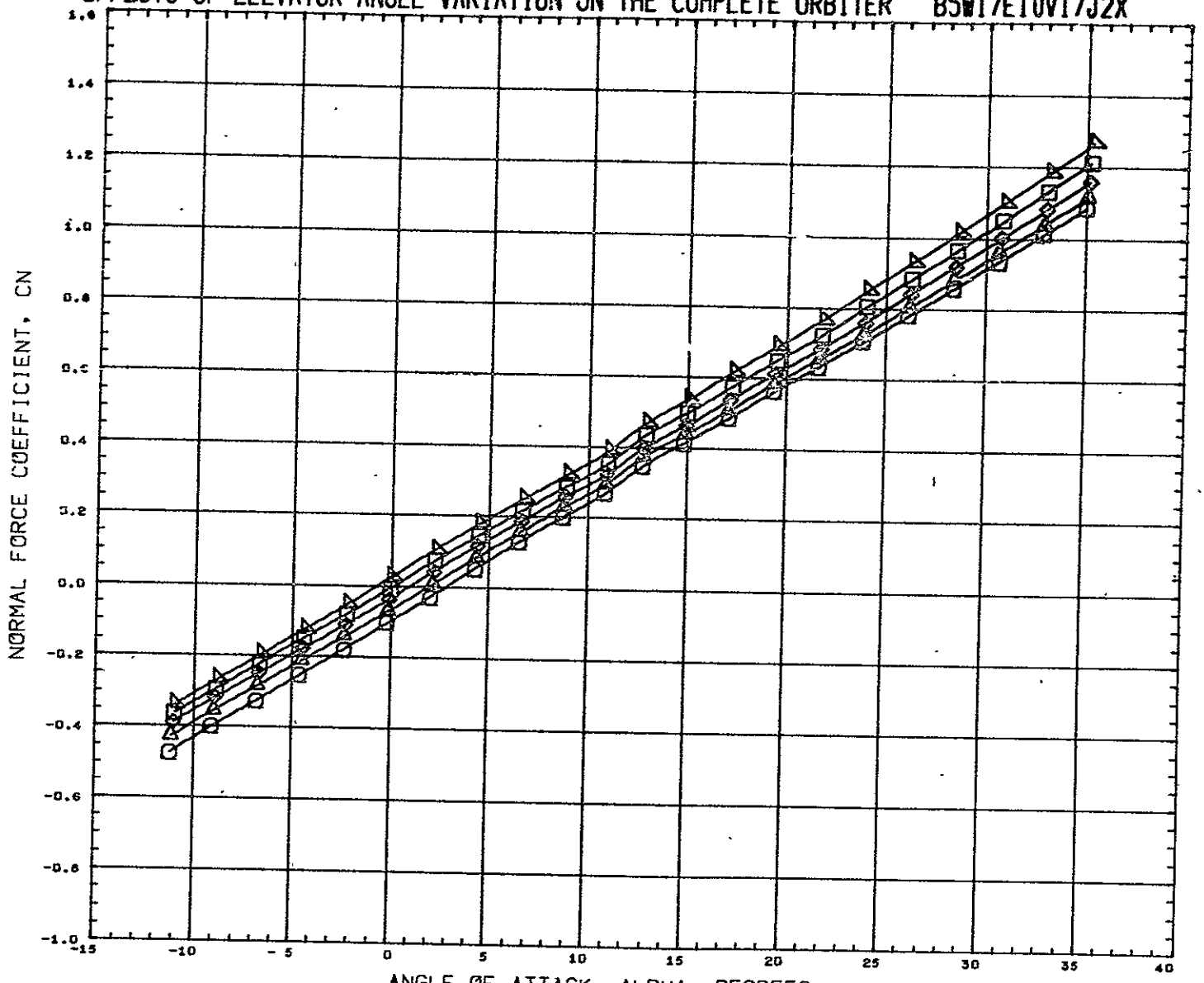
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
▽○	-20.000
△	-10.000
◇	0.000
□	10.000
◁	20.000

PARAMETRIC VALUES

MACH	1.966	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

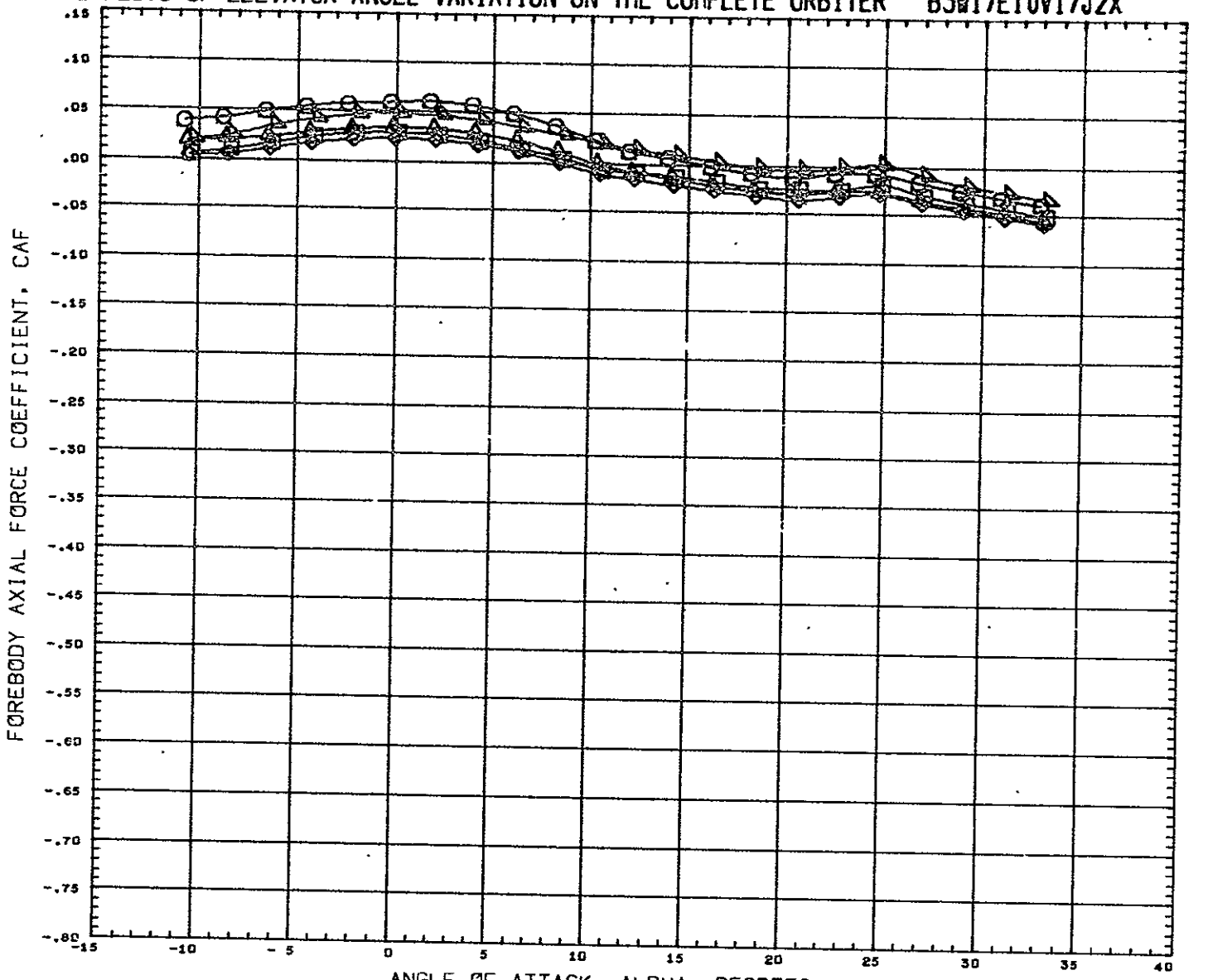
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	-20.000	V2908S	-10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
☐	- 20.000
△	- 10.000
◇	0.000
☐	10.000
△	20.000

PARAMETRIC VALUES

MACH	0.608	BETA	0.000
AILRON	0.000		

DATA SOURCE

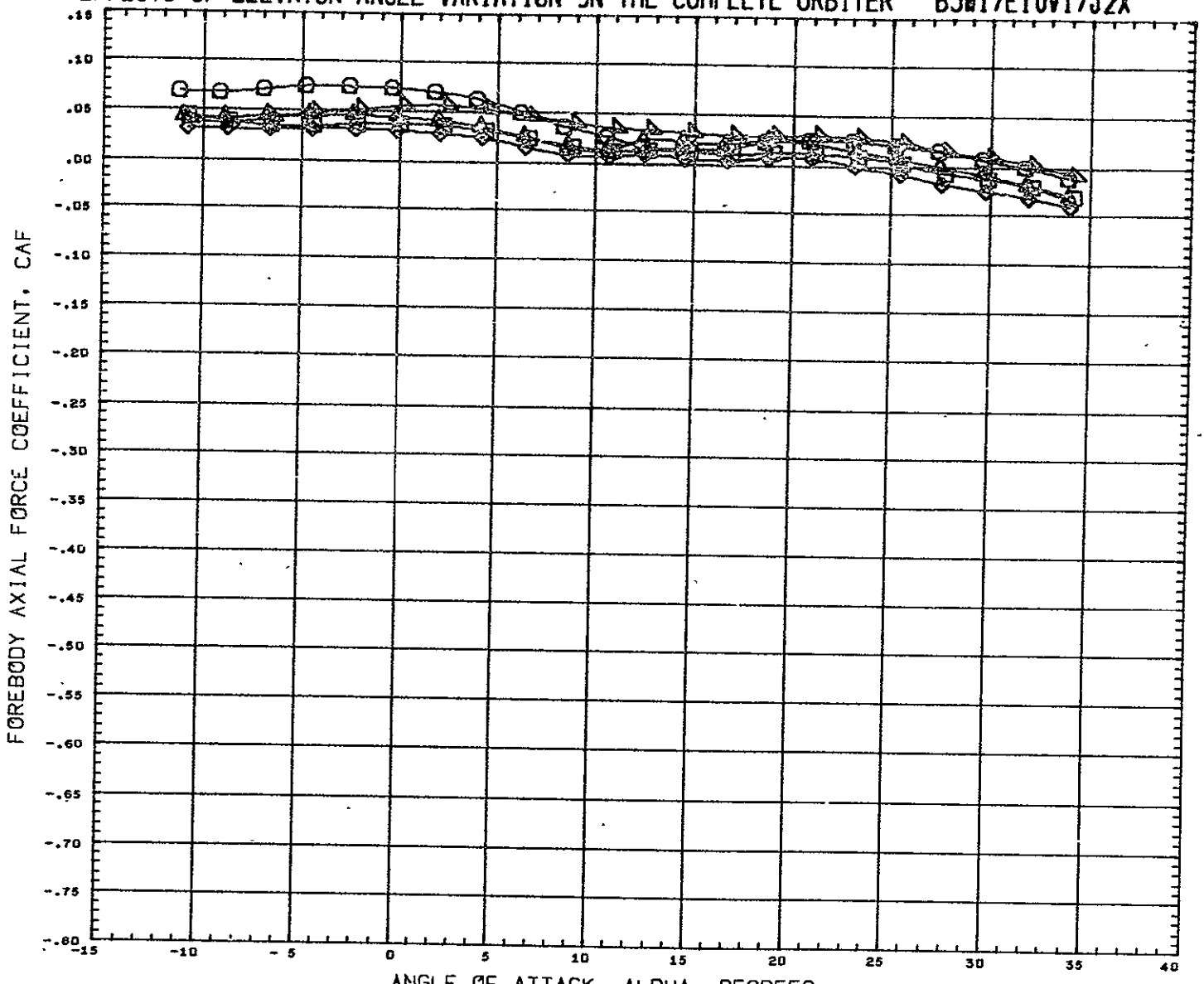
DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*G

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	-20.000
△	-10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	0.911	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

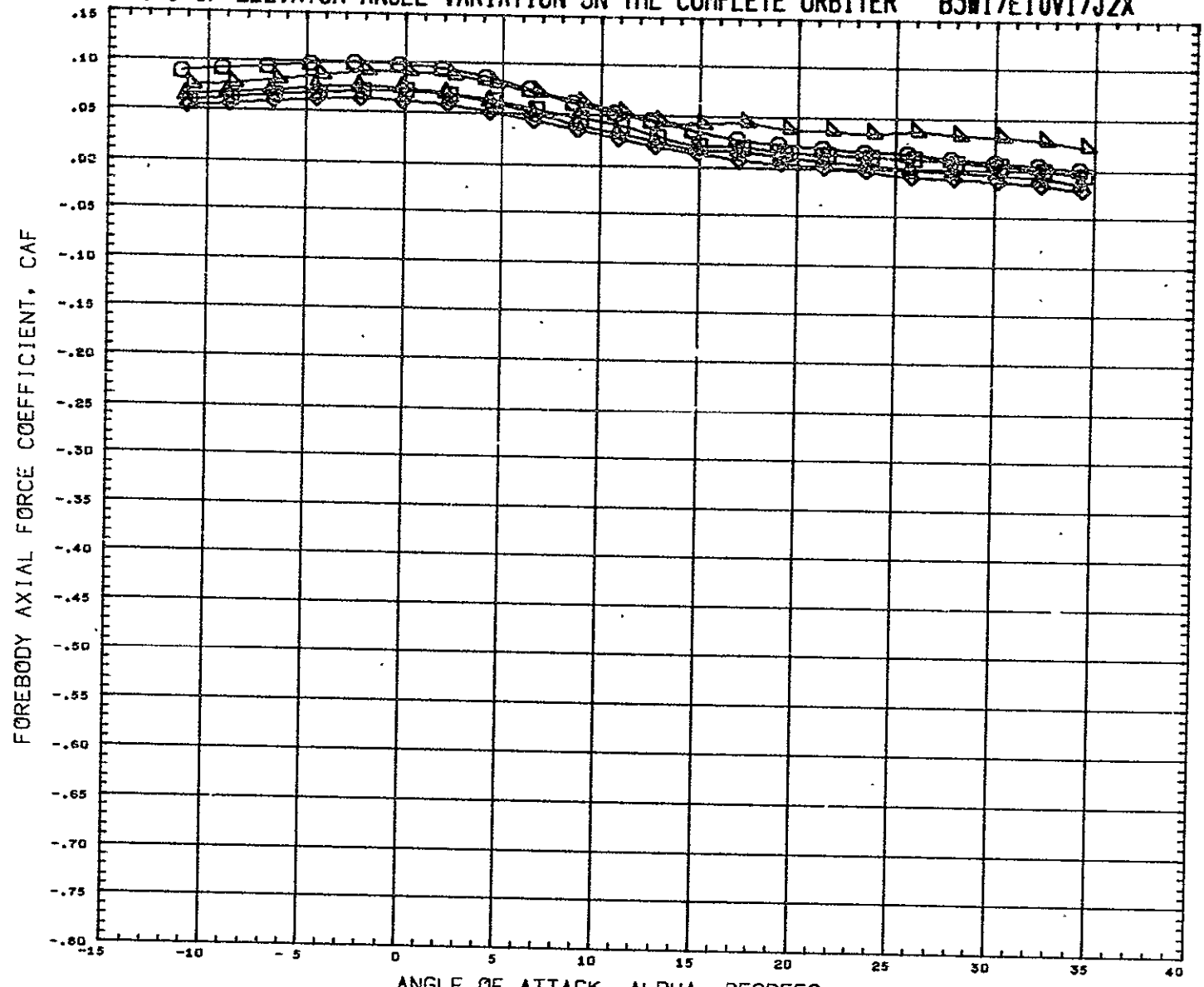
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	-20.000	V2906S	-10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
▽	- 20.000
△	- 10.000
◇	0.000
□	10.000
⬠	20.000

PARAMETRIC VALUES

MACH	1.108	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

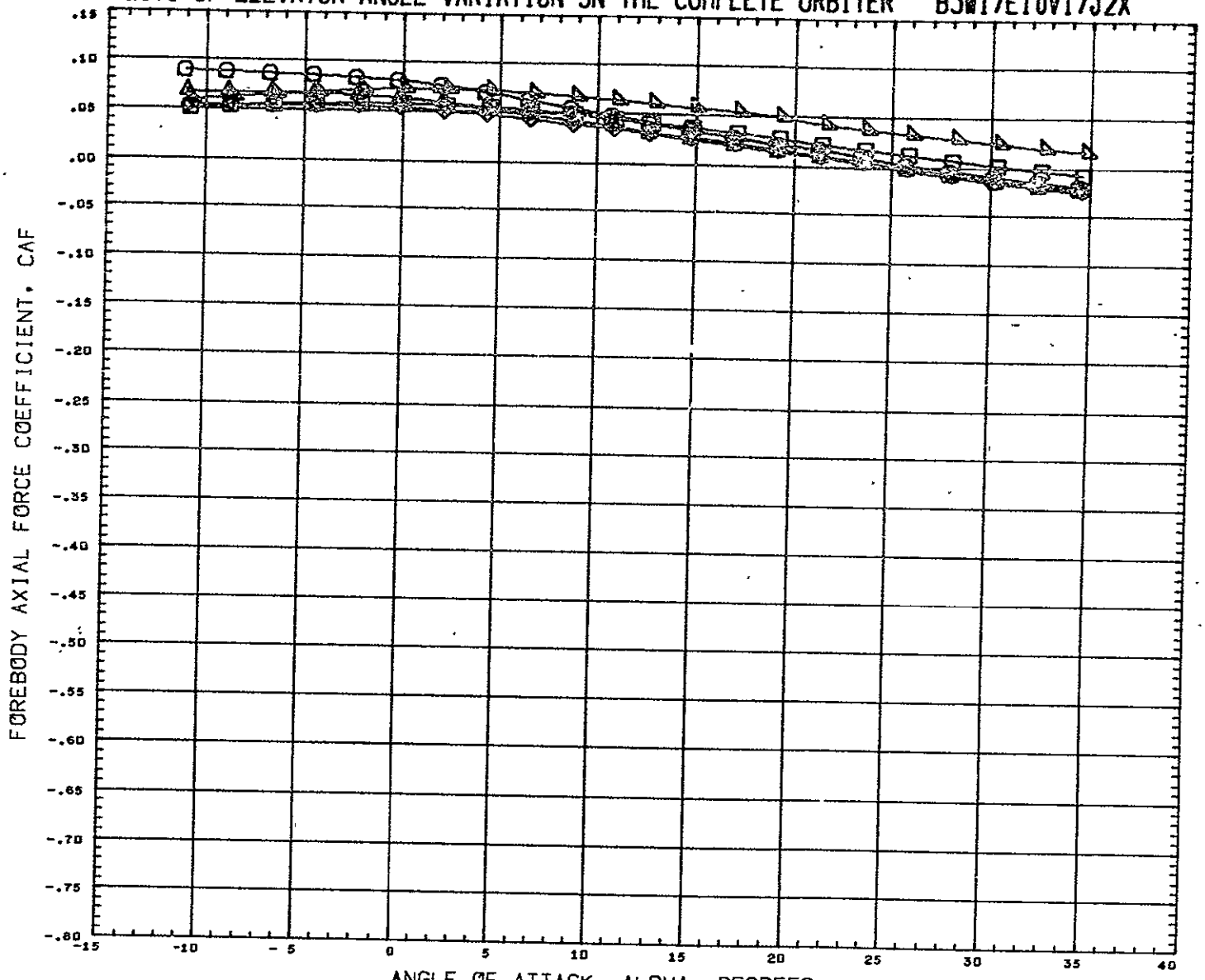
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.465	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

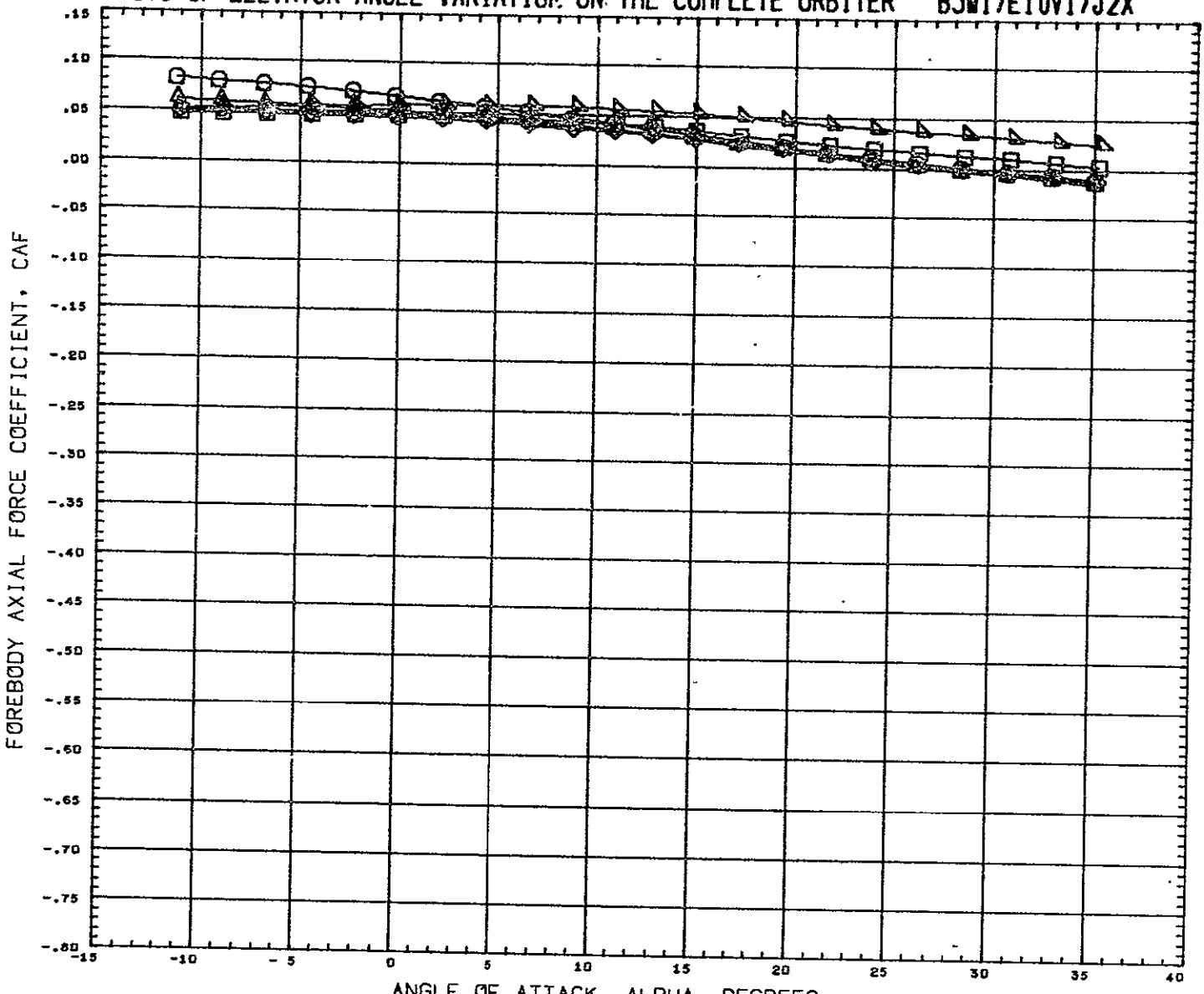
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.966	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

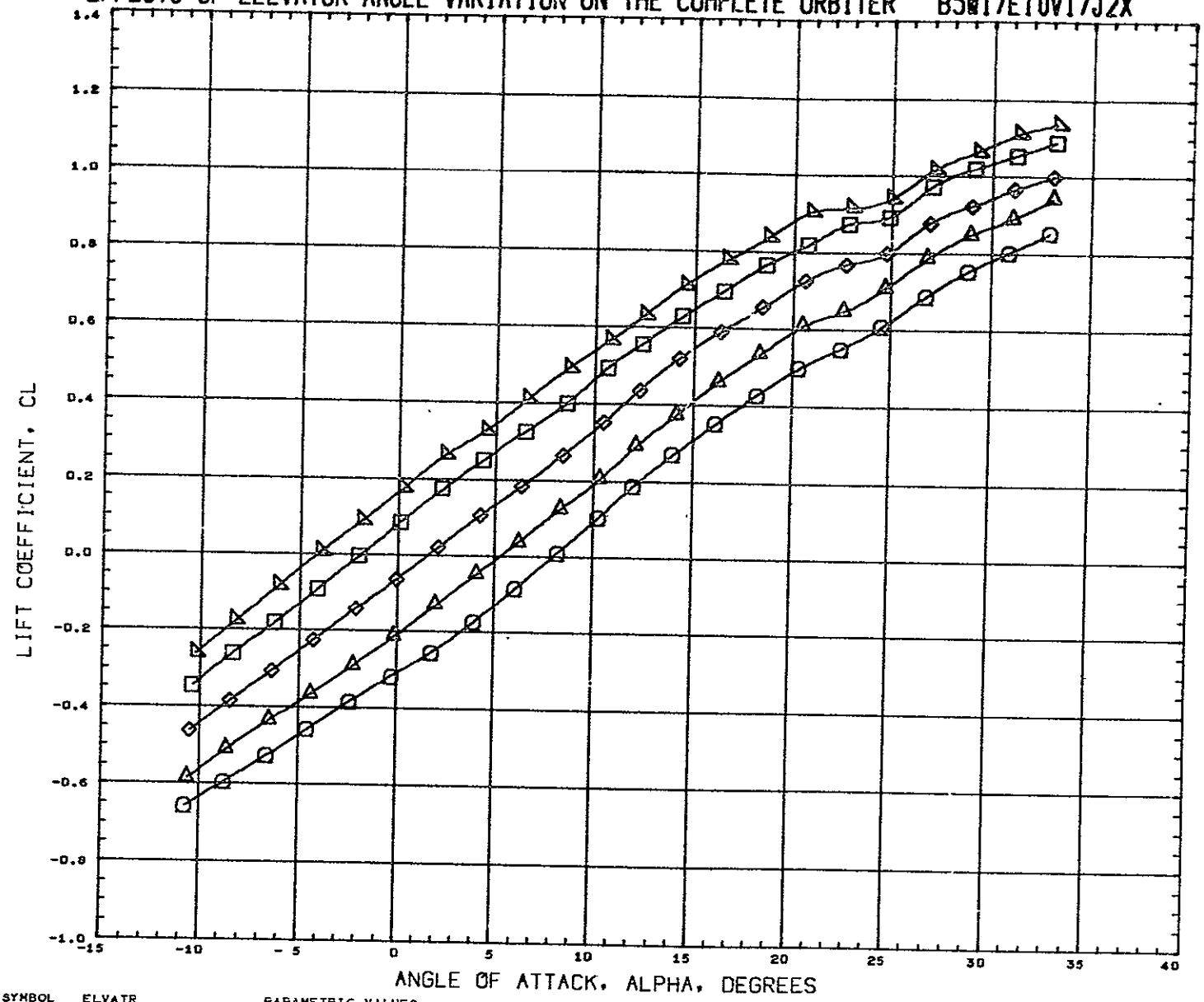
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	-20.000
△	-10.000
◇	0.000
□	10.000
▷	20.000

PARAMETRIC VALUES

MACH	0.600	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

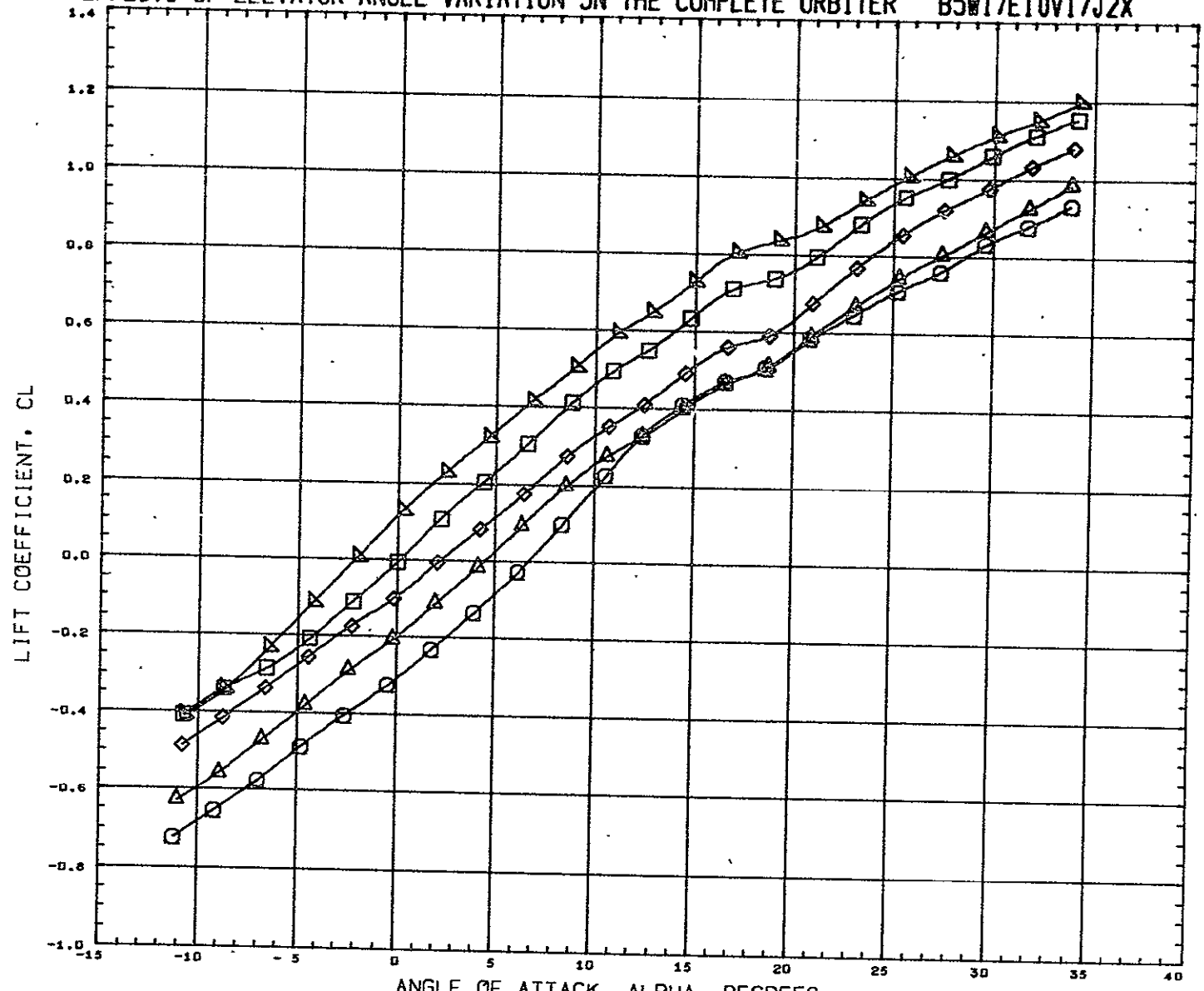
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	-20.000	V2908S	-10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
□	- 20.000
△	- 10.000
◇	0.000
▽	10.000
○	20.000

PARAMETRIC VALUES

MACH	0.911	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

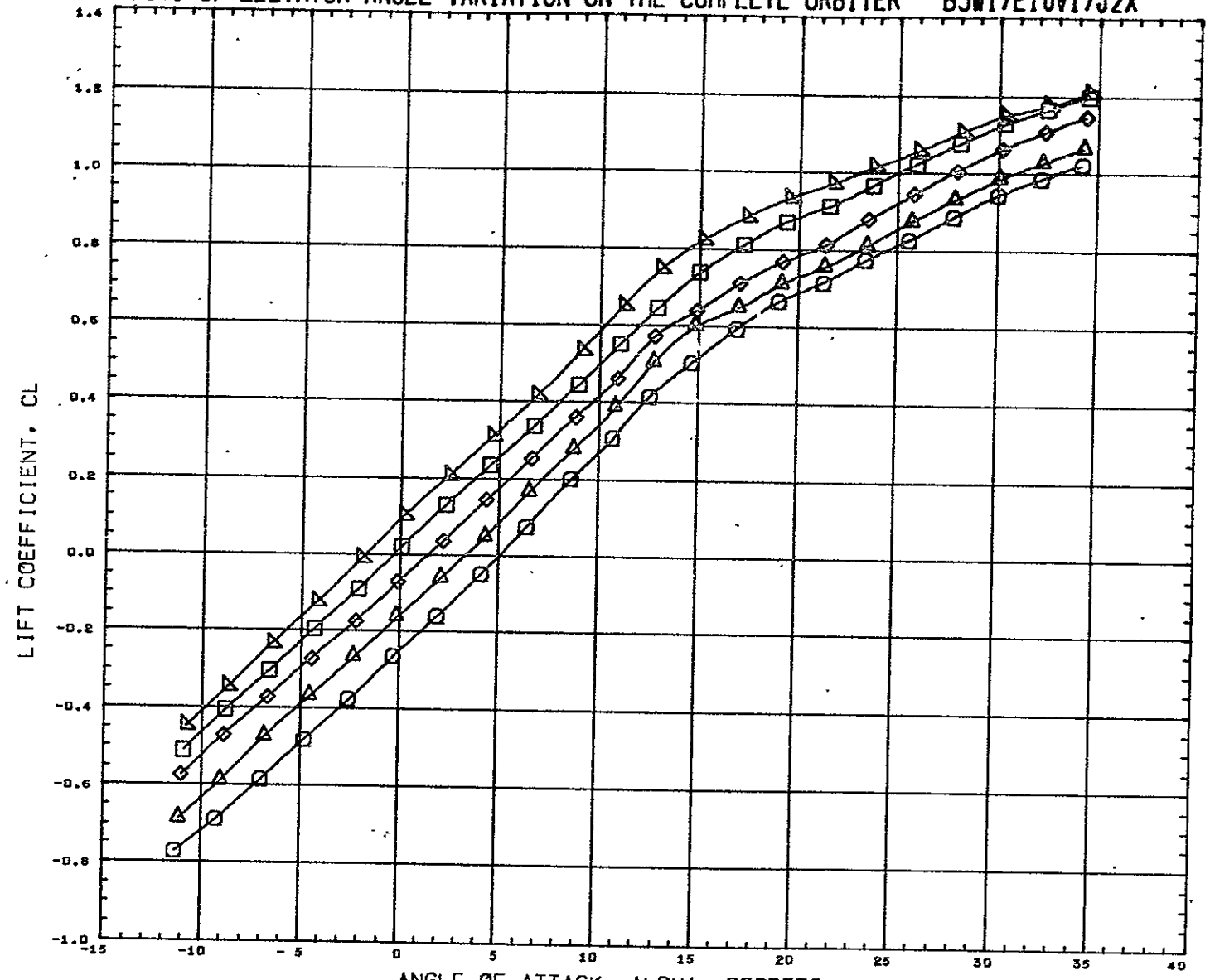
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.100	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

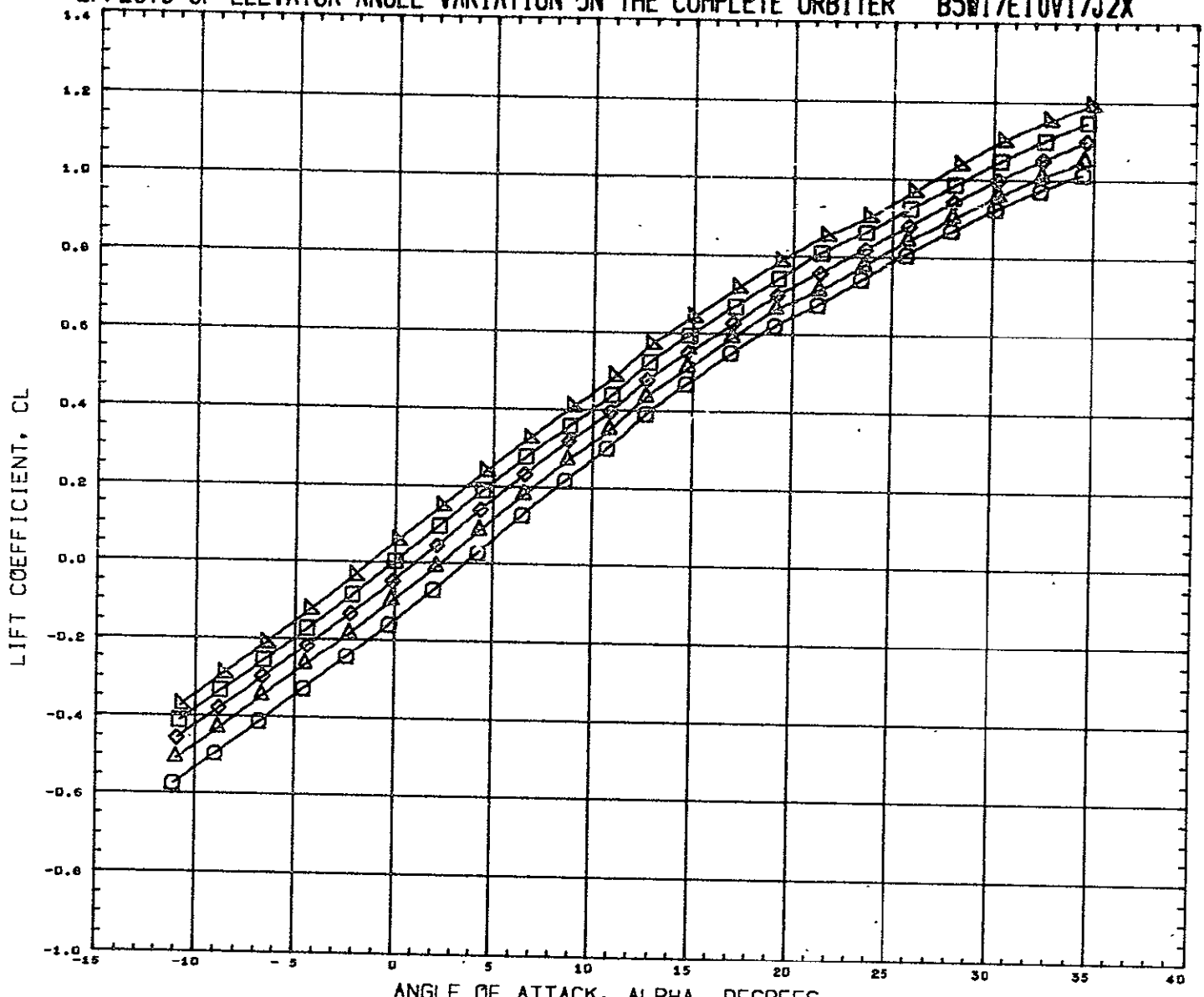
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.465	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

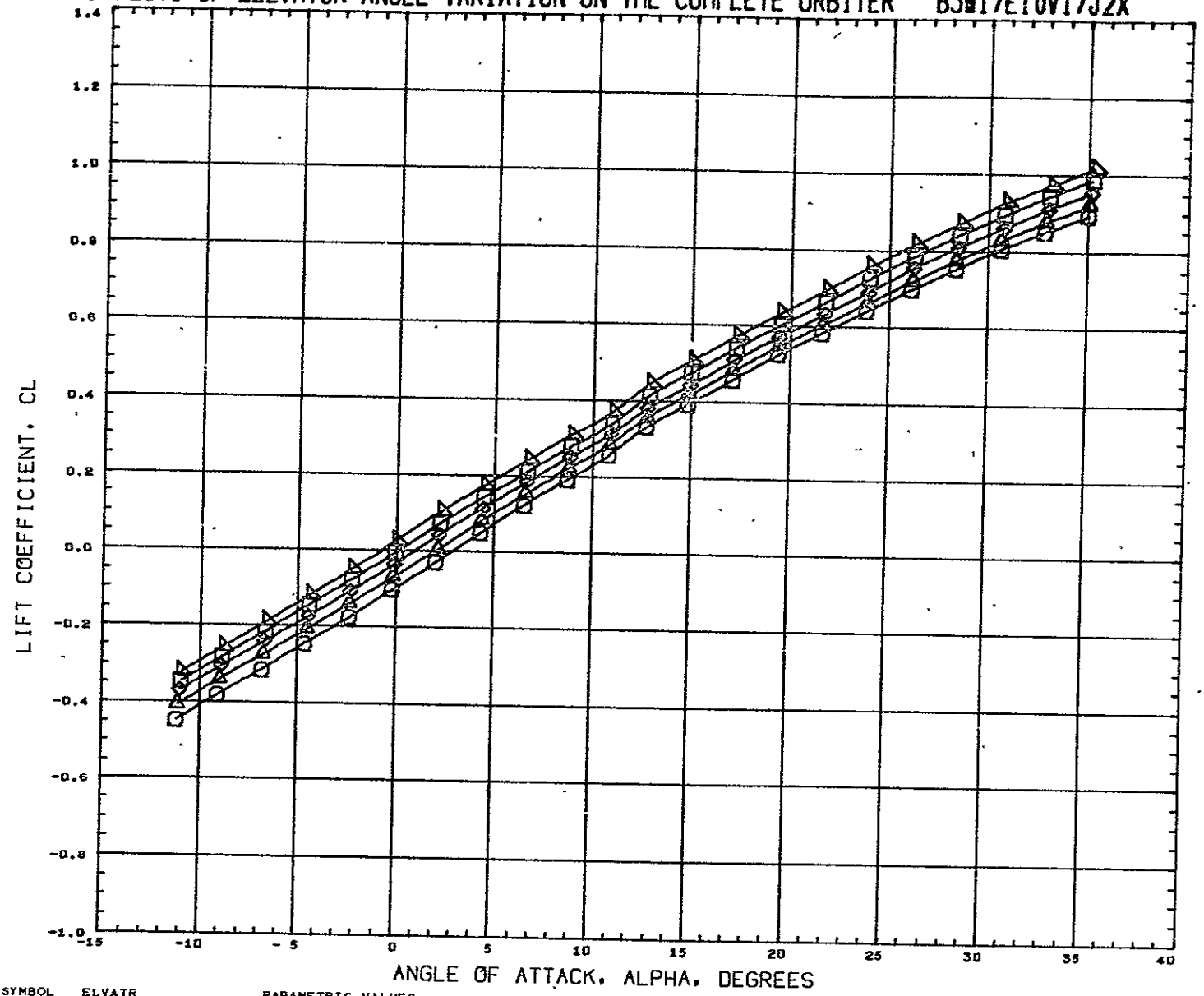
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRF	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
△	- 20.000
▷	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.966	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

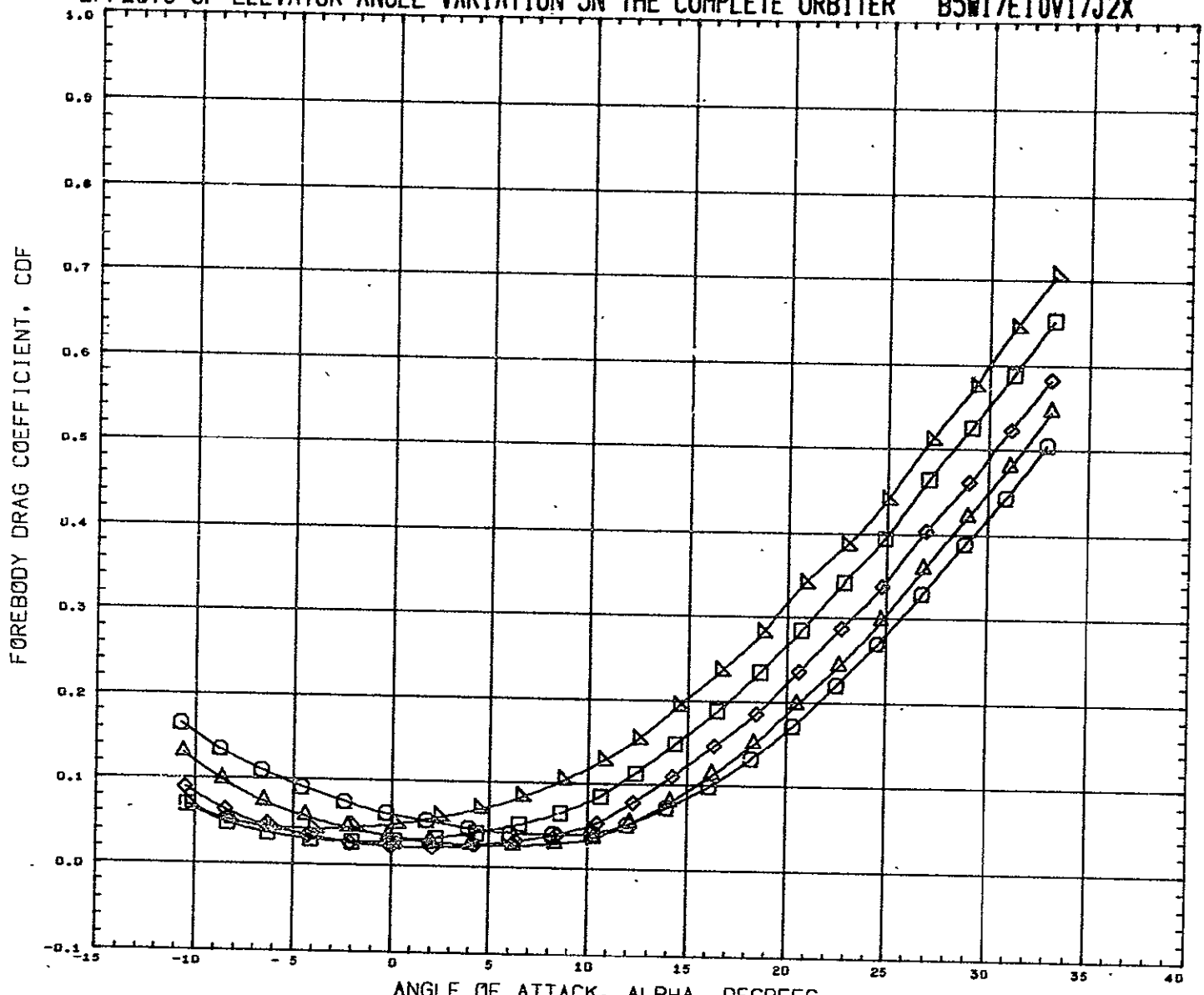
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	-20.000
△	-10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	0.608	BETA	0.000
AILRON	0.000		

DATA SOURCE

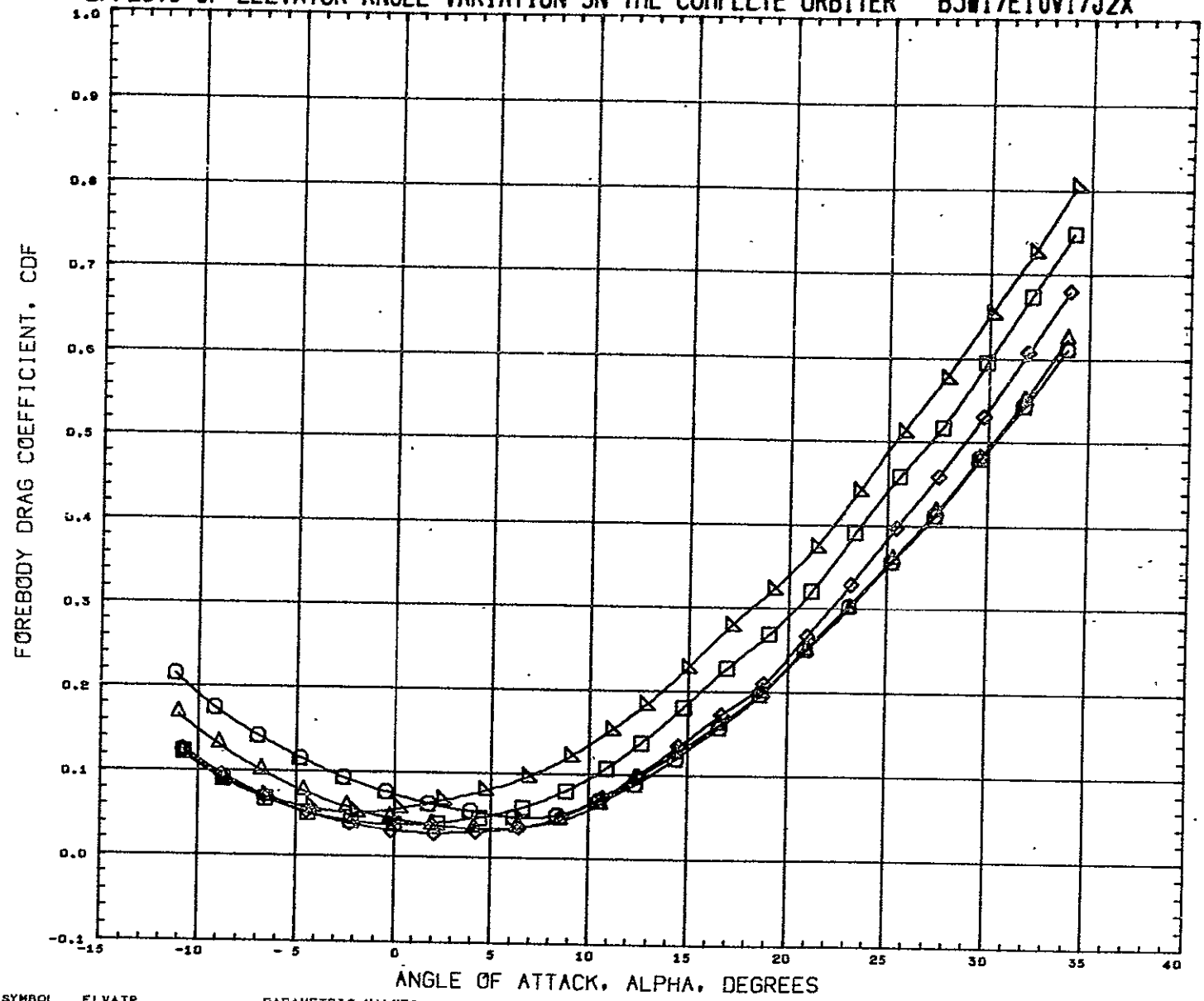
DATASET	ELVATR	DATASET	ELVATR
V2907S	-20.000	V2908S	-10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*G

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	-20.000
△	-10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	0.911	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

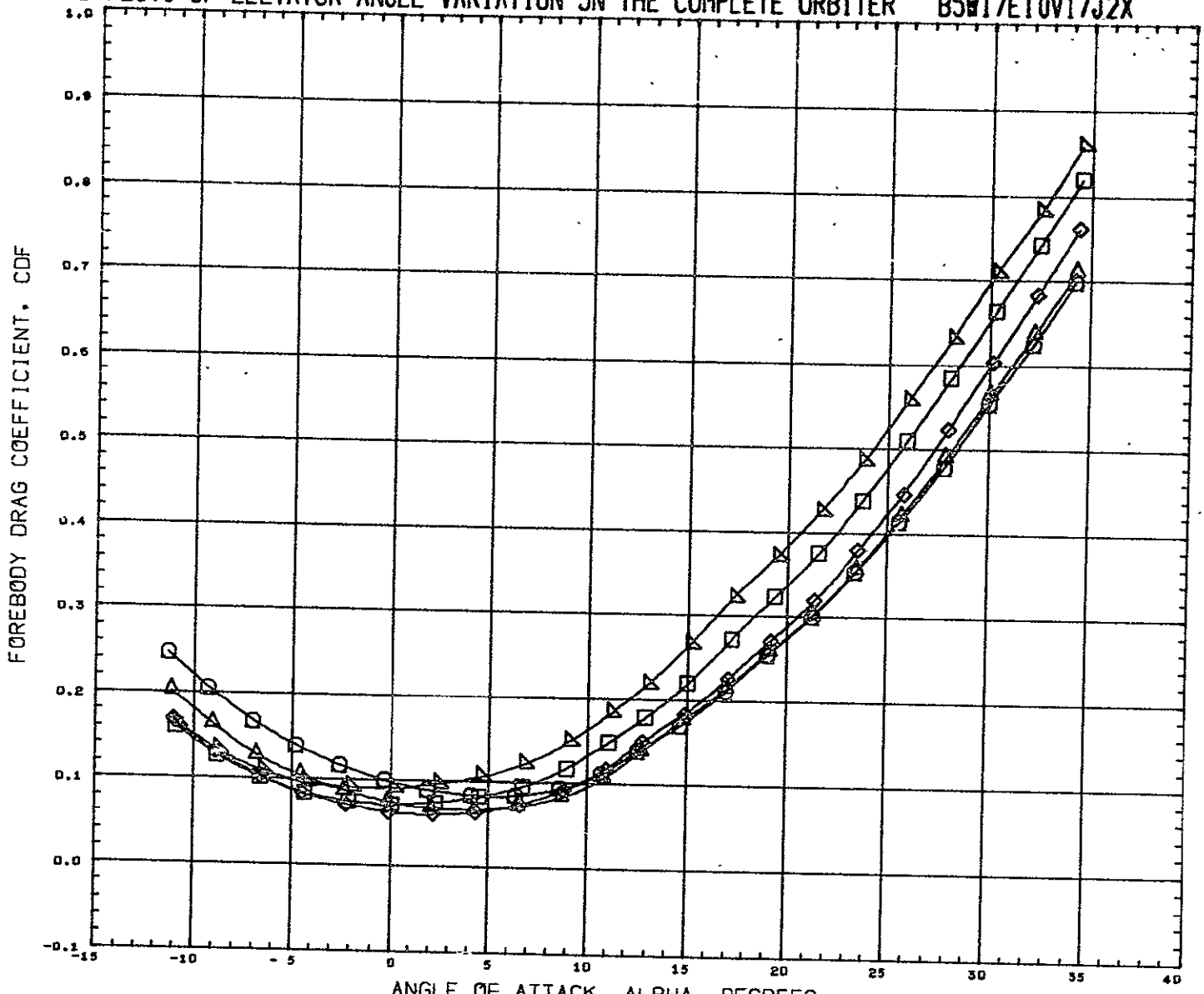
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	-20.000	V2908S	-10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.108	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

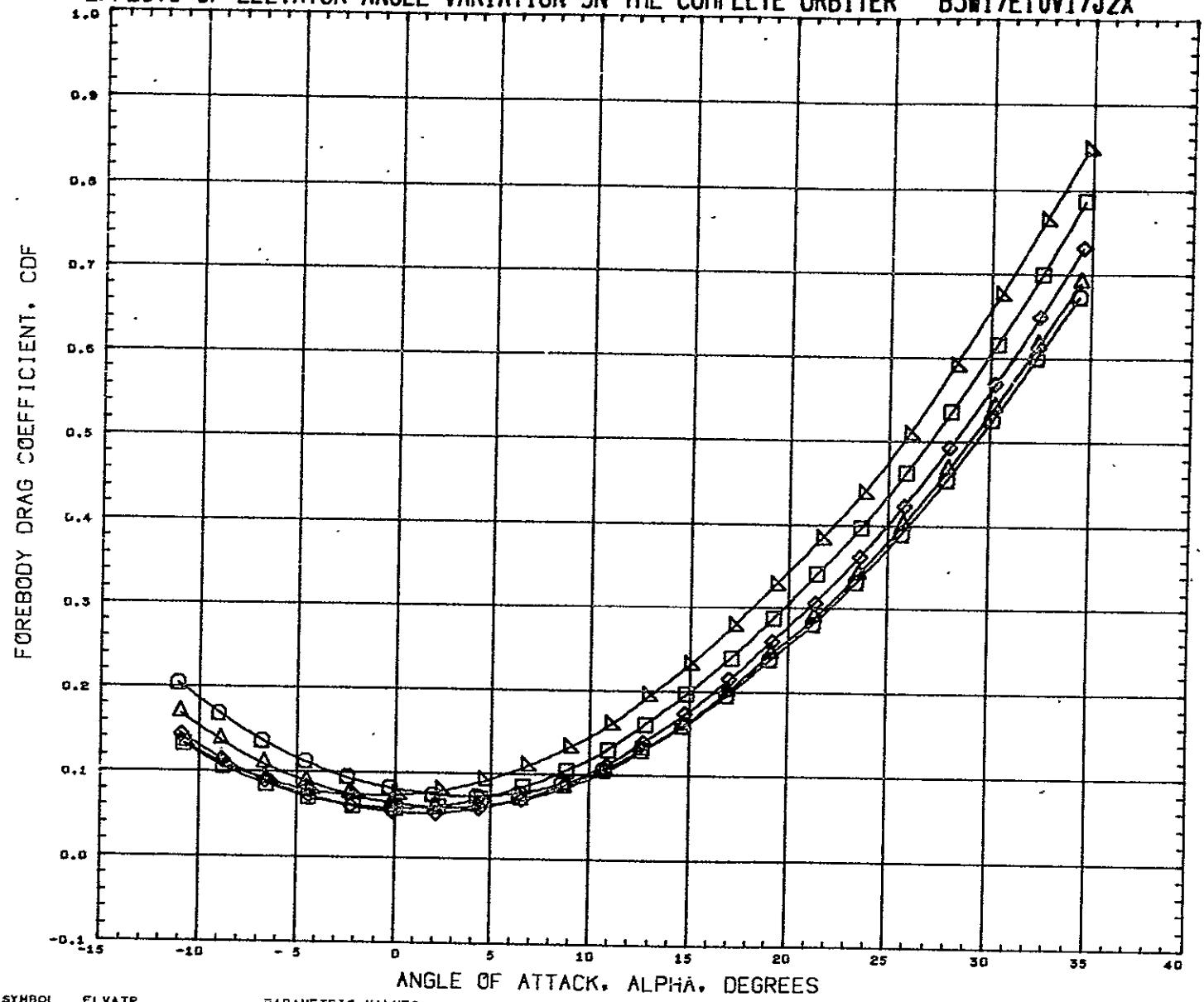
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.465	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

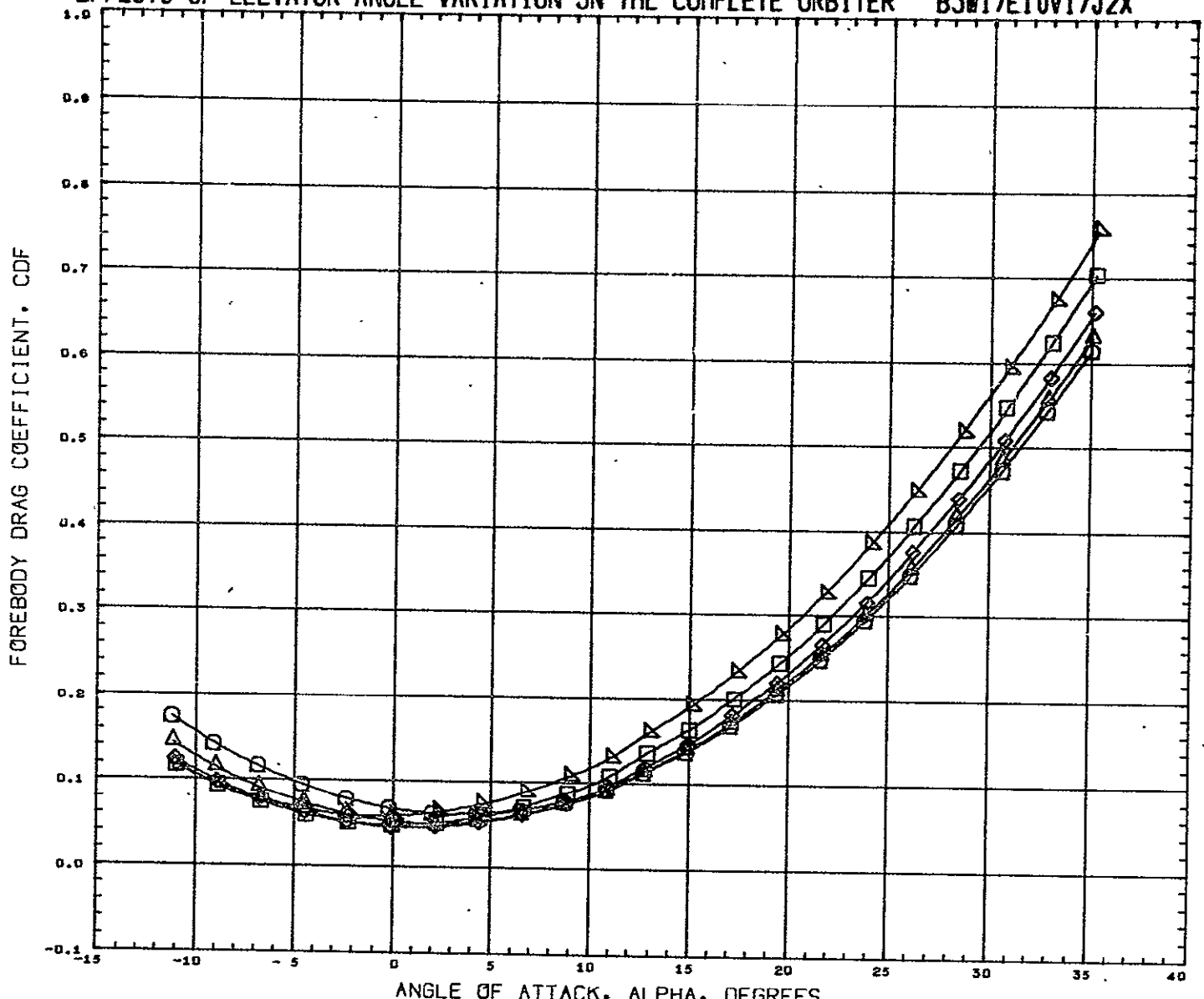
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	-20.000
△	-10.000
◇	0.000
□	10.000
⬠	20.000

PARAMETRIC VALUES

MACH	1.966	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

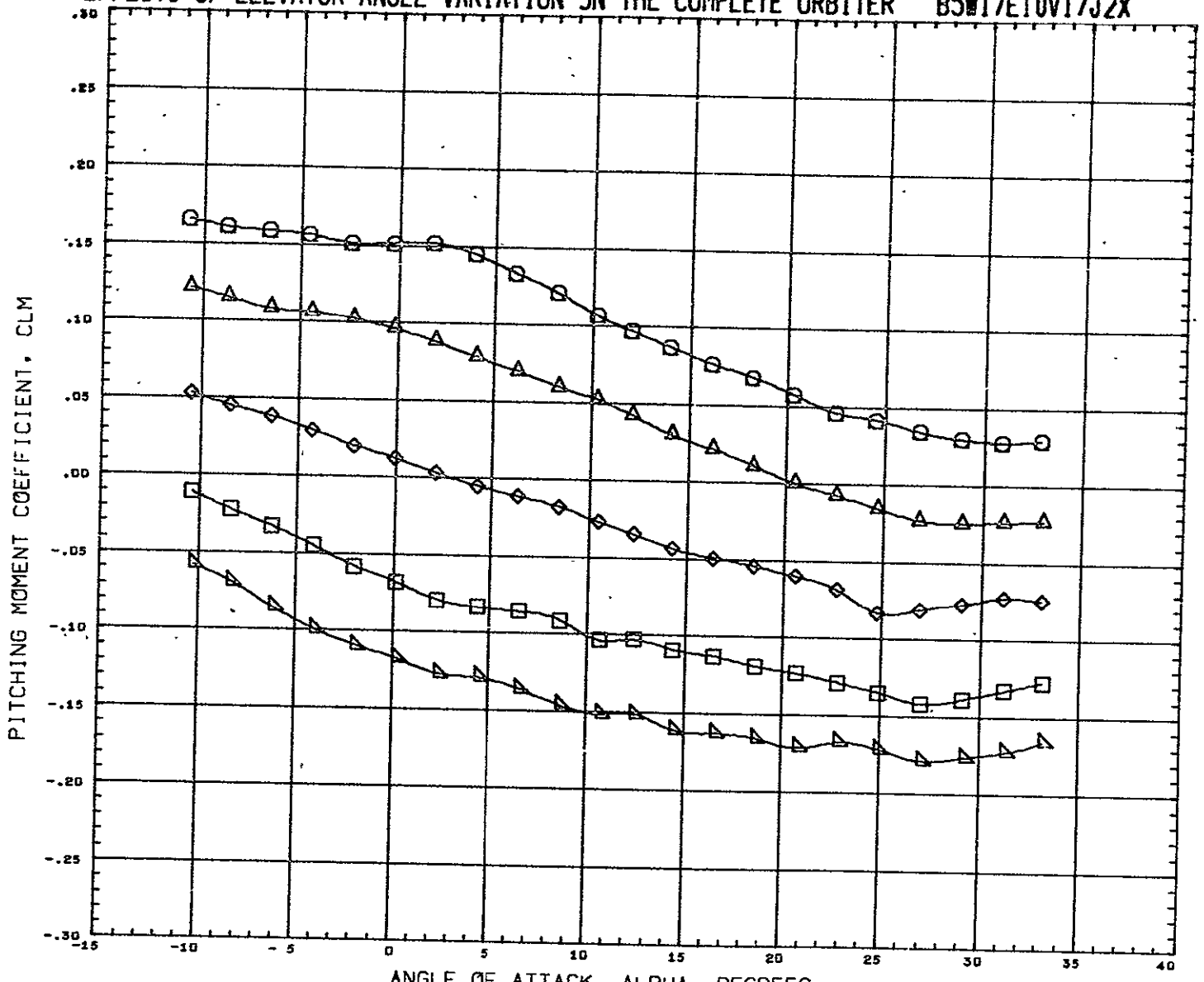
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	-20.000	V2908S	-10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	0.608	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

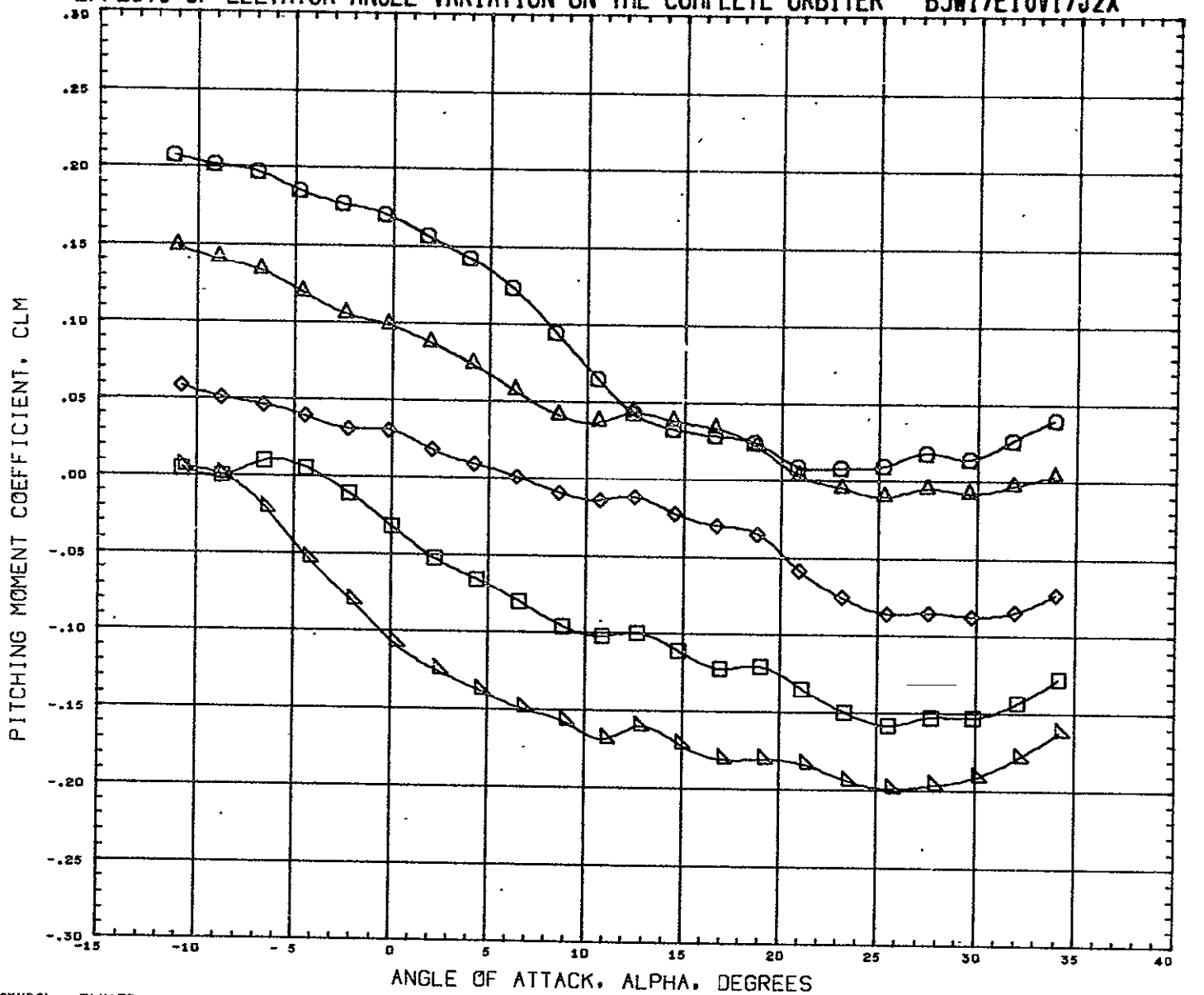
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	0.911	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

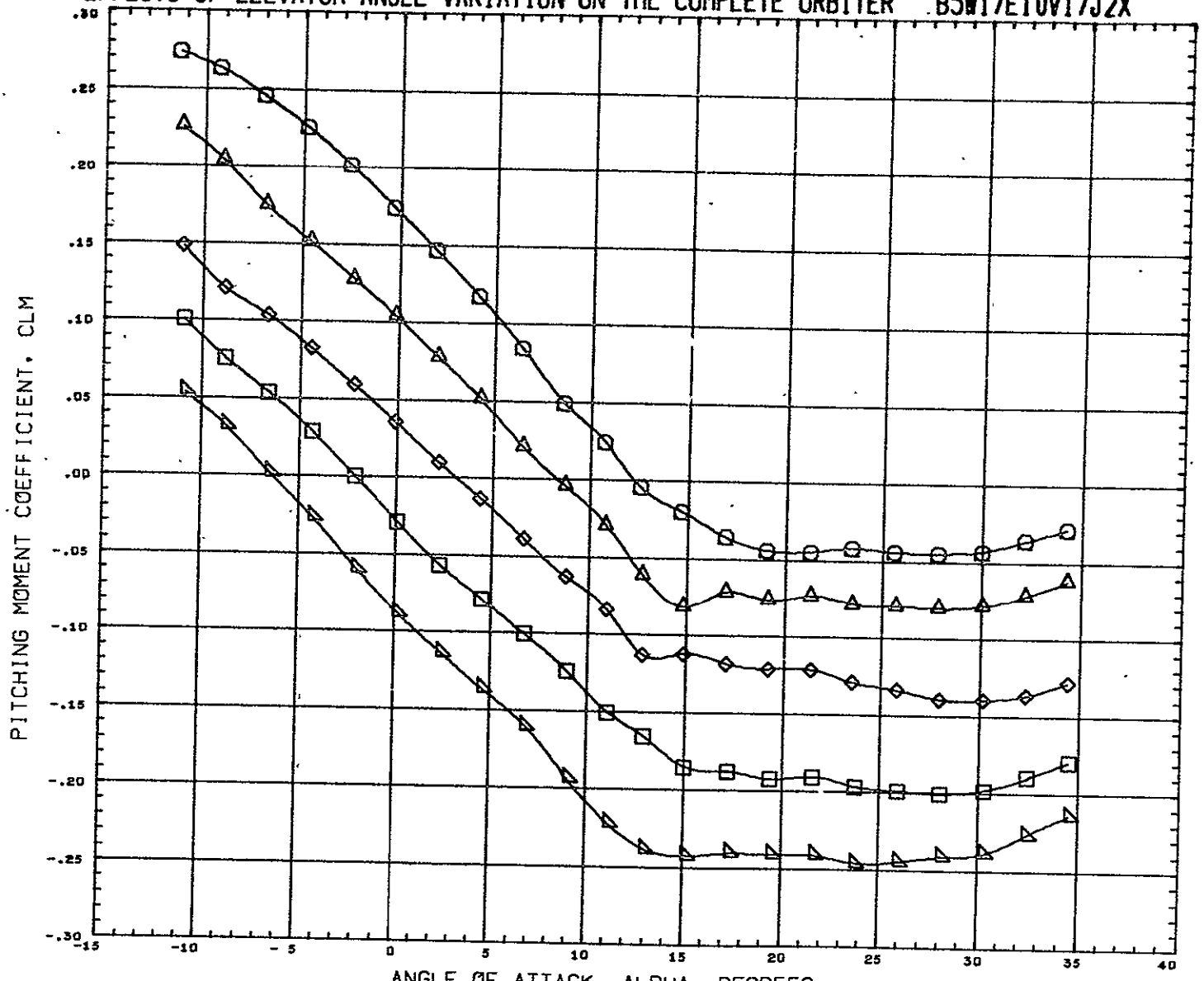
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▷	20.000

PARAMETRIC VALUES

MACH	1.108	BETA	0.000
AILRON	0.000		

DATA SOURCE

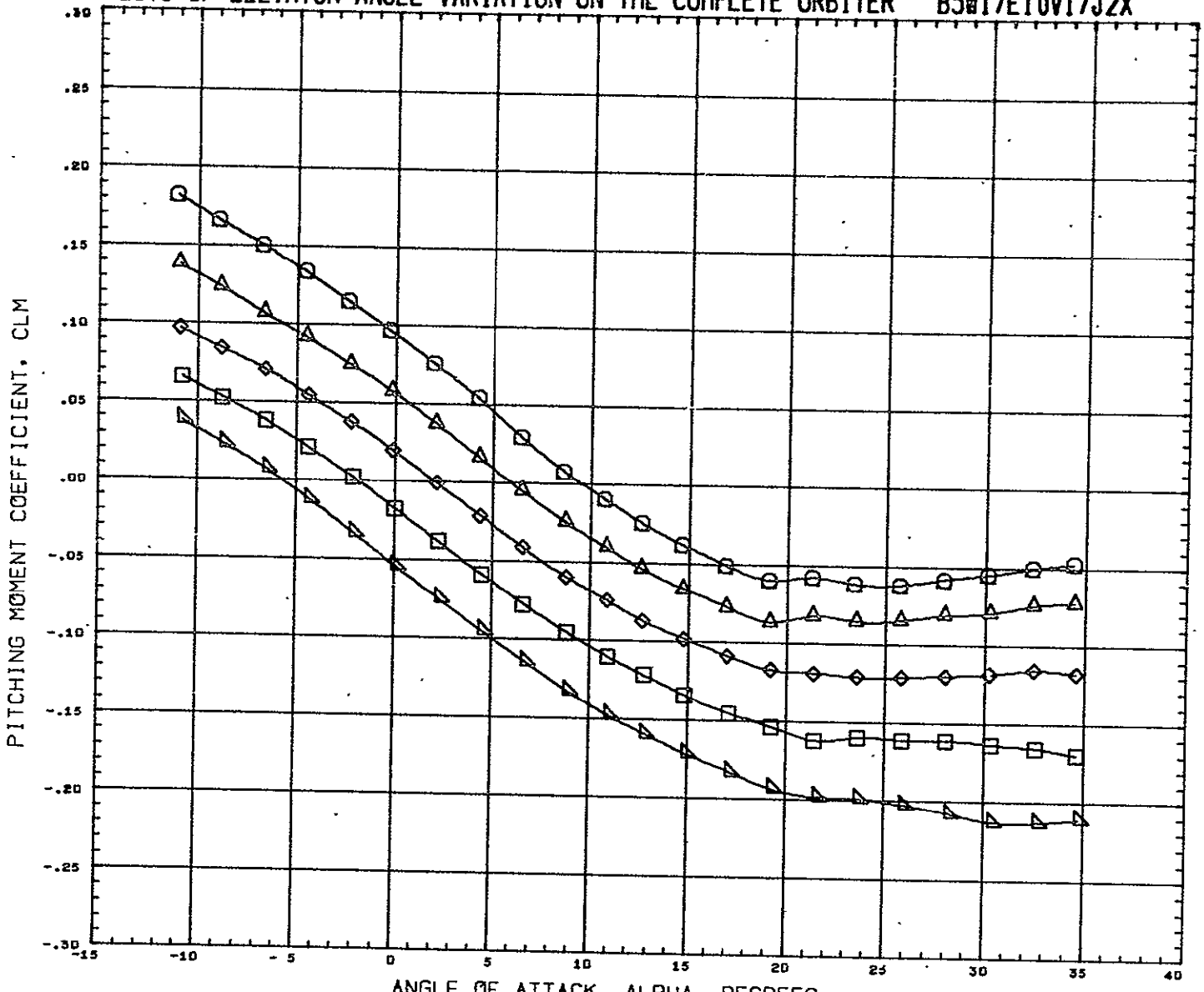
DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*G

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.465	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

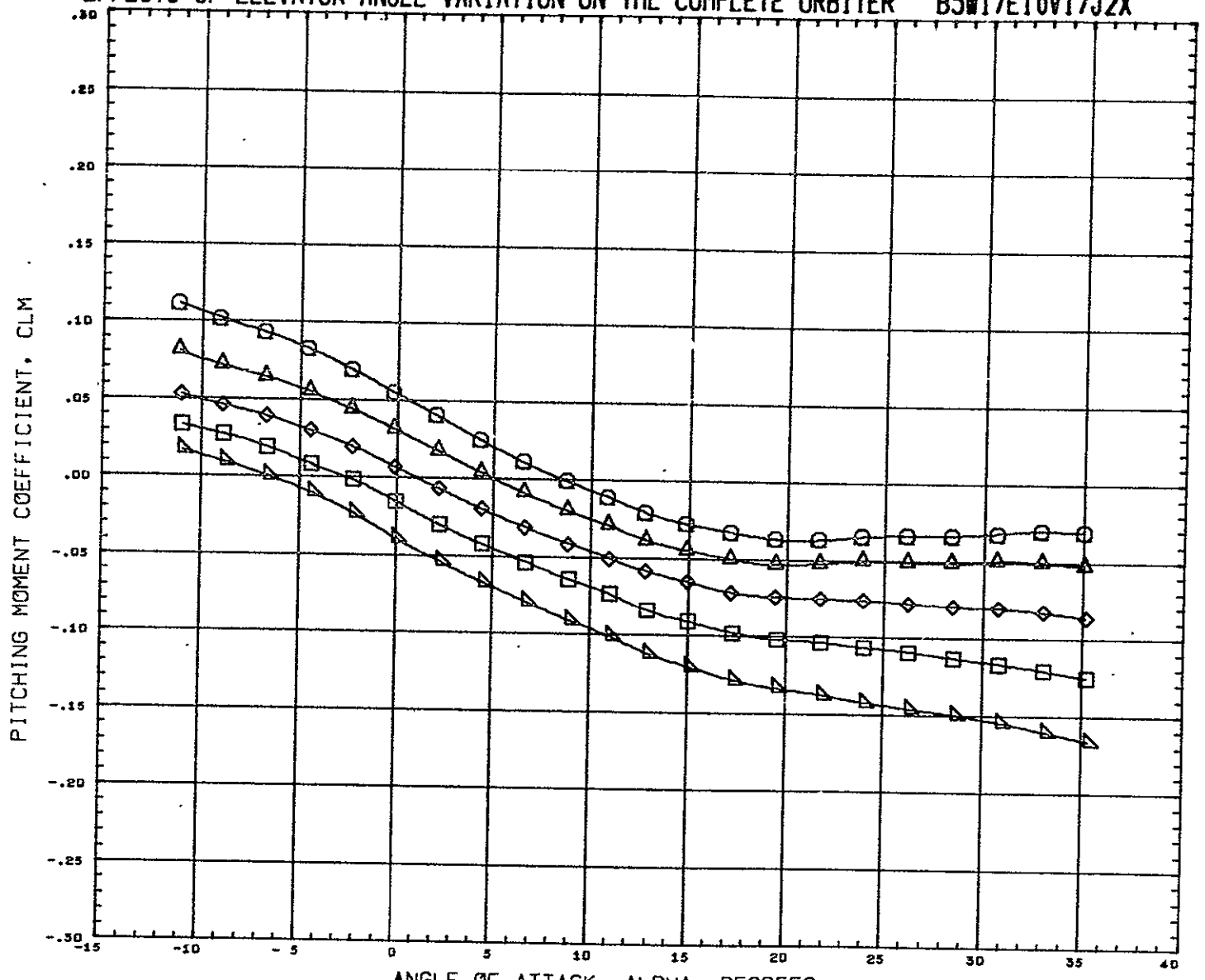
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRF	0.0000	INCHES
ZMRF	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.966	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*C

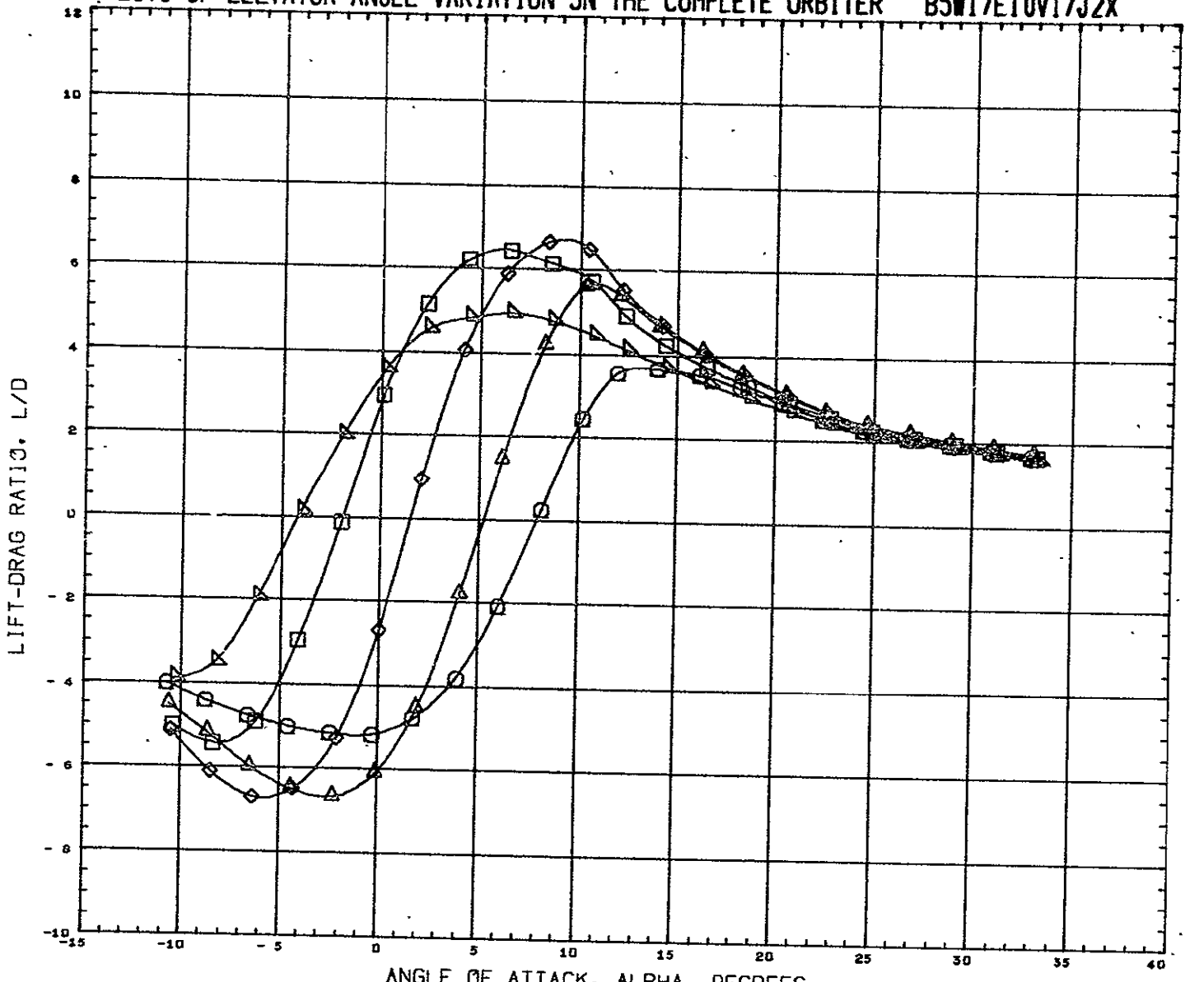
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	0.608	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

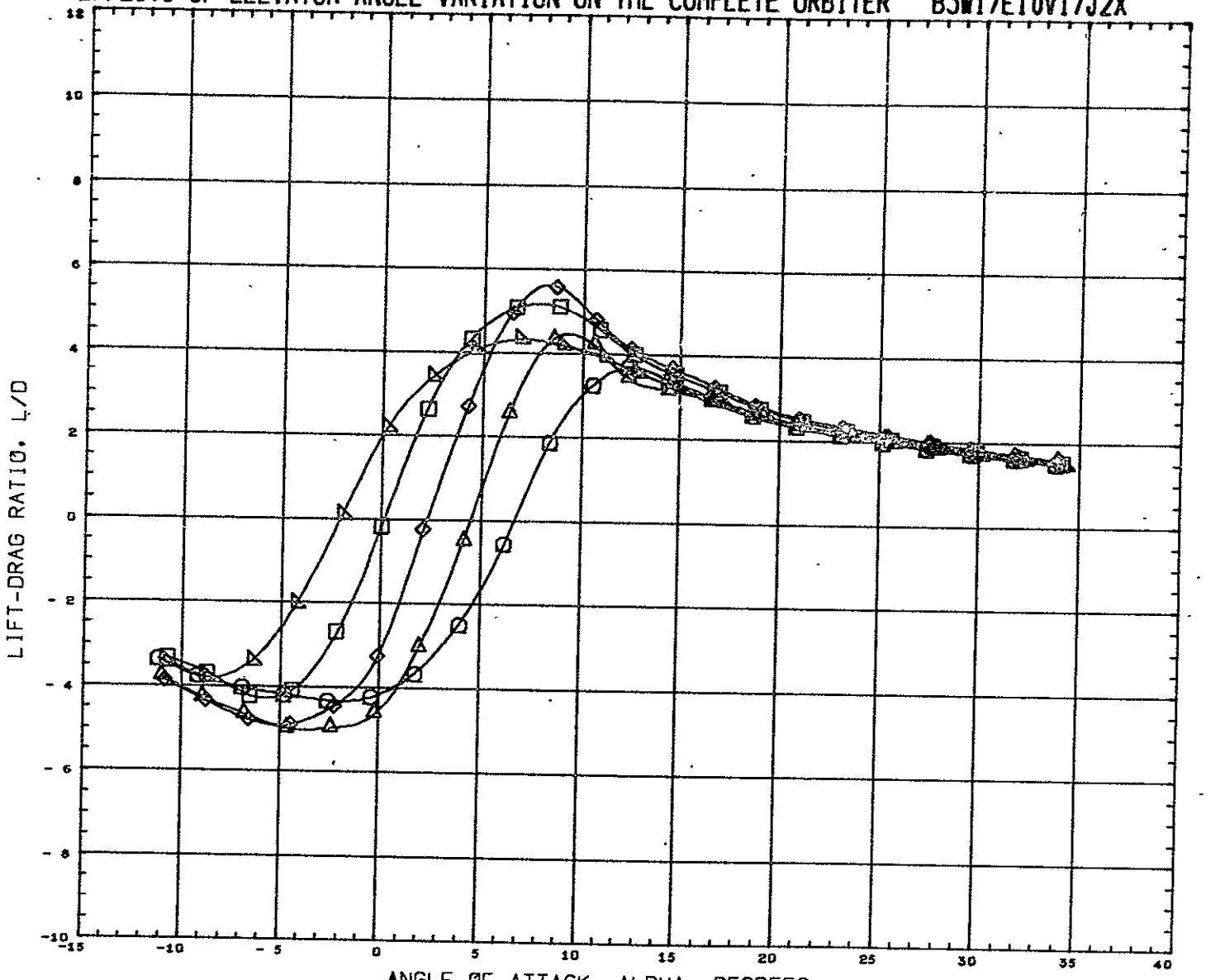
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	0.911	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

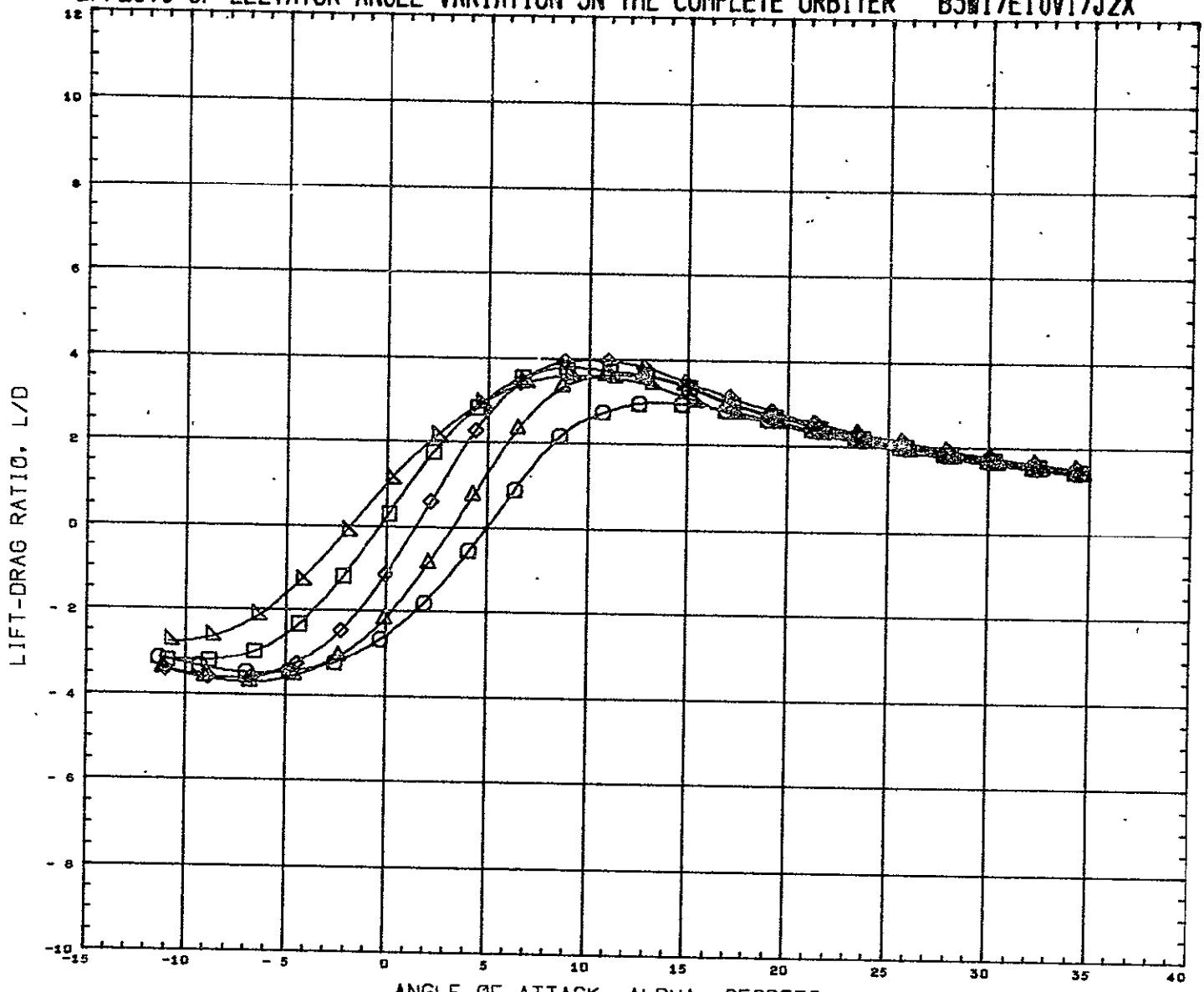
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.108	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

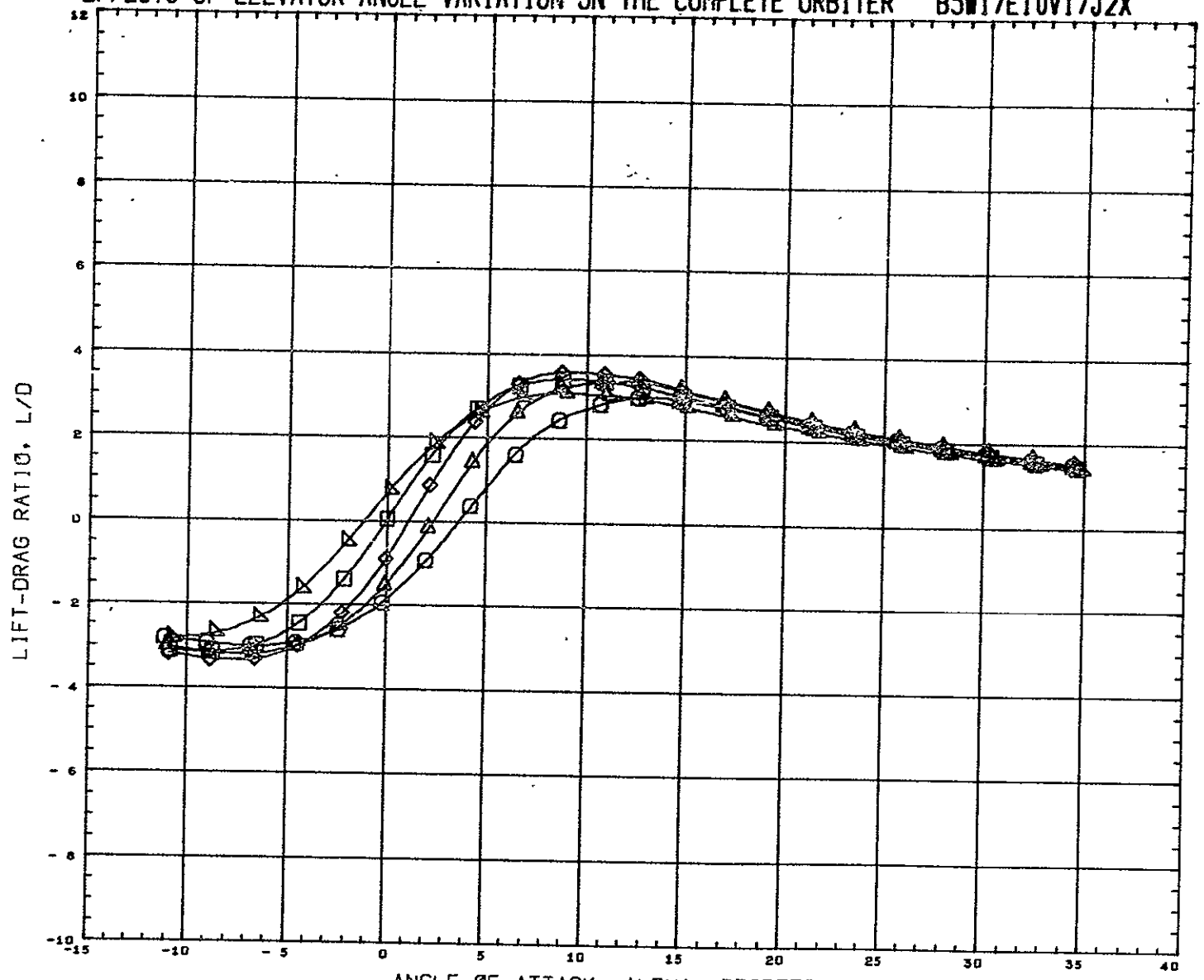
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
◻	- 20.000
△	- 10.000
◇	0.000
○	10.000
⊠	20.000

PARAMETRIC VALUES

MACH	1.465	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

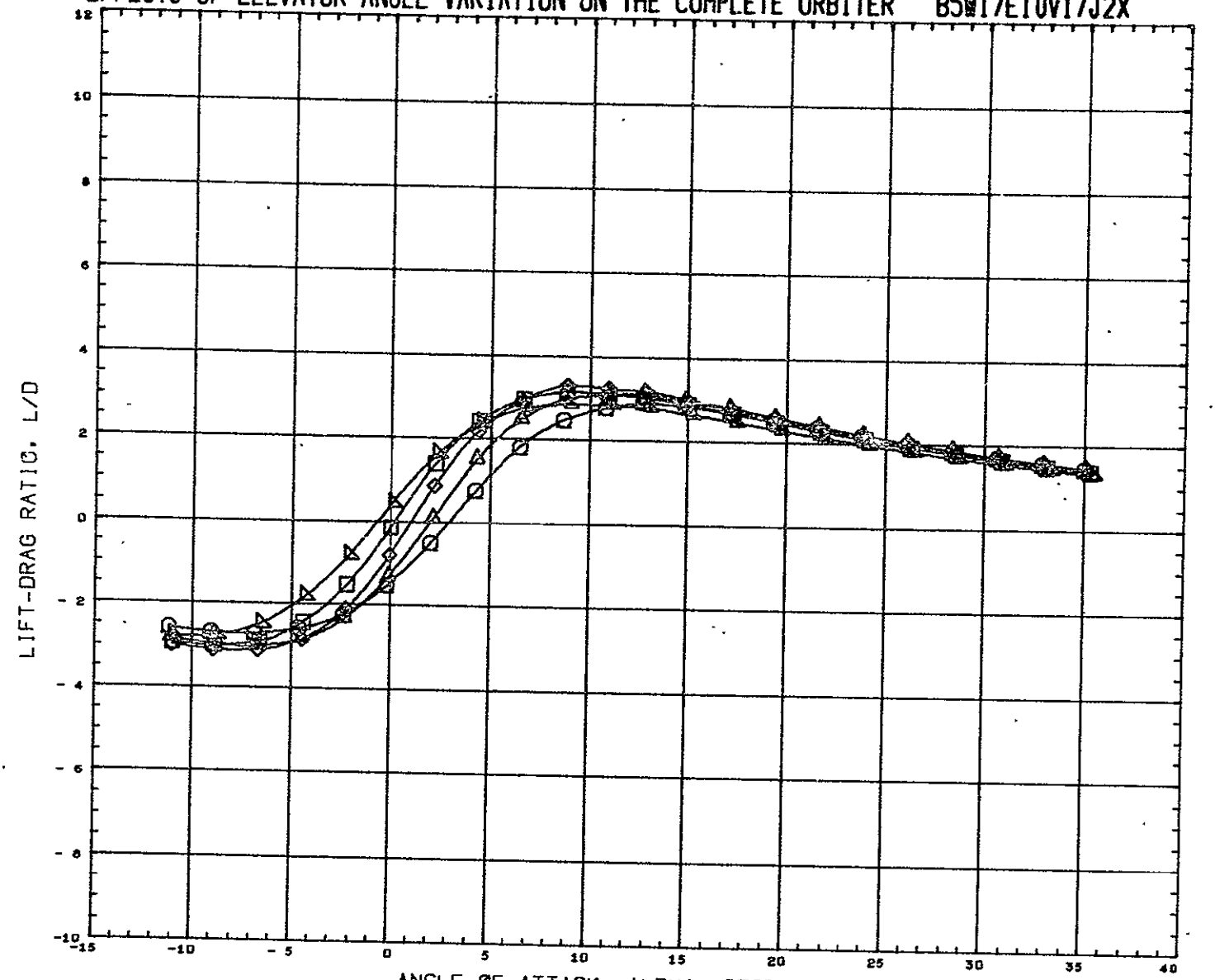
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.966	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

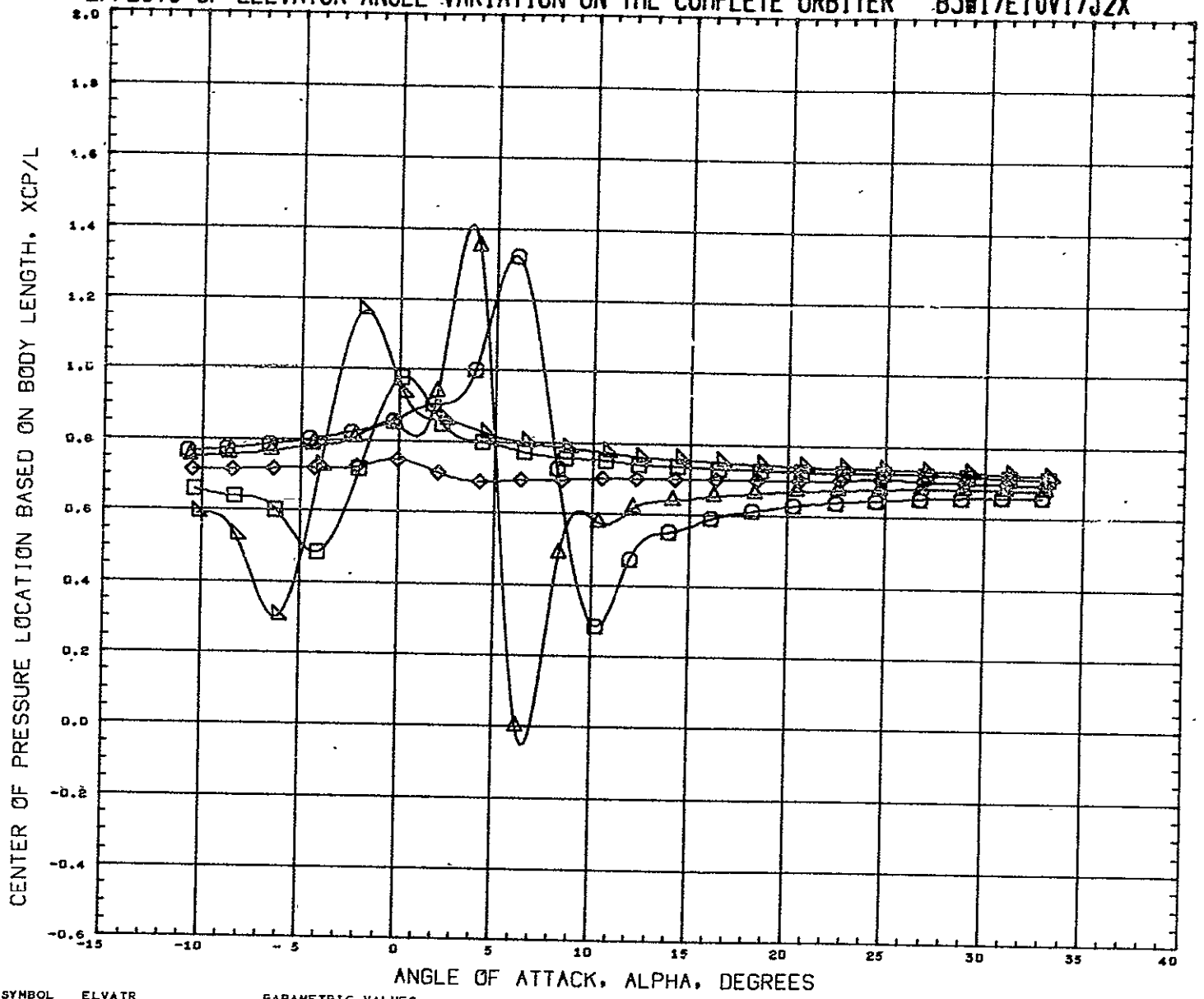
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
△	- 20.000
◇	- 10.000
○	0.000
□	10.000
▷	20.000

PARAMETRIC VALUES

MACH	0.606	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

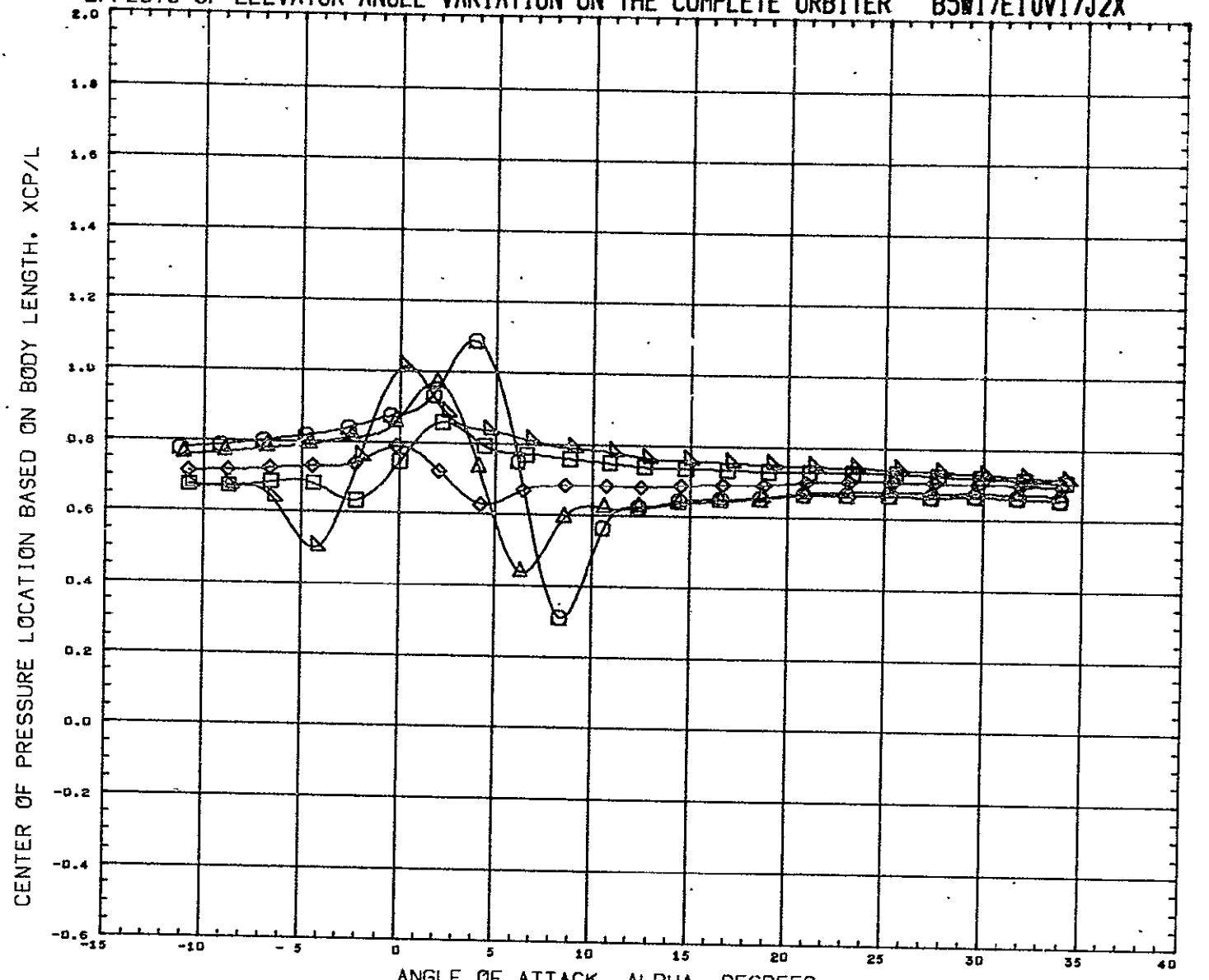
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	0.911	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

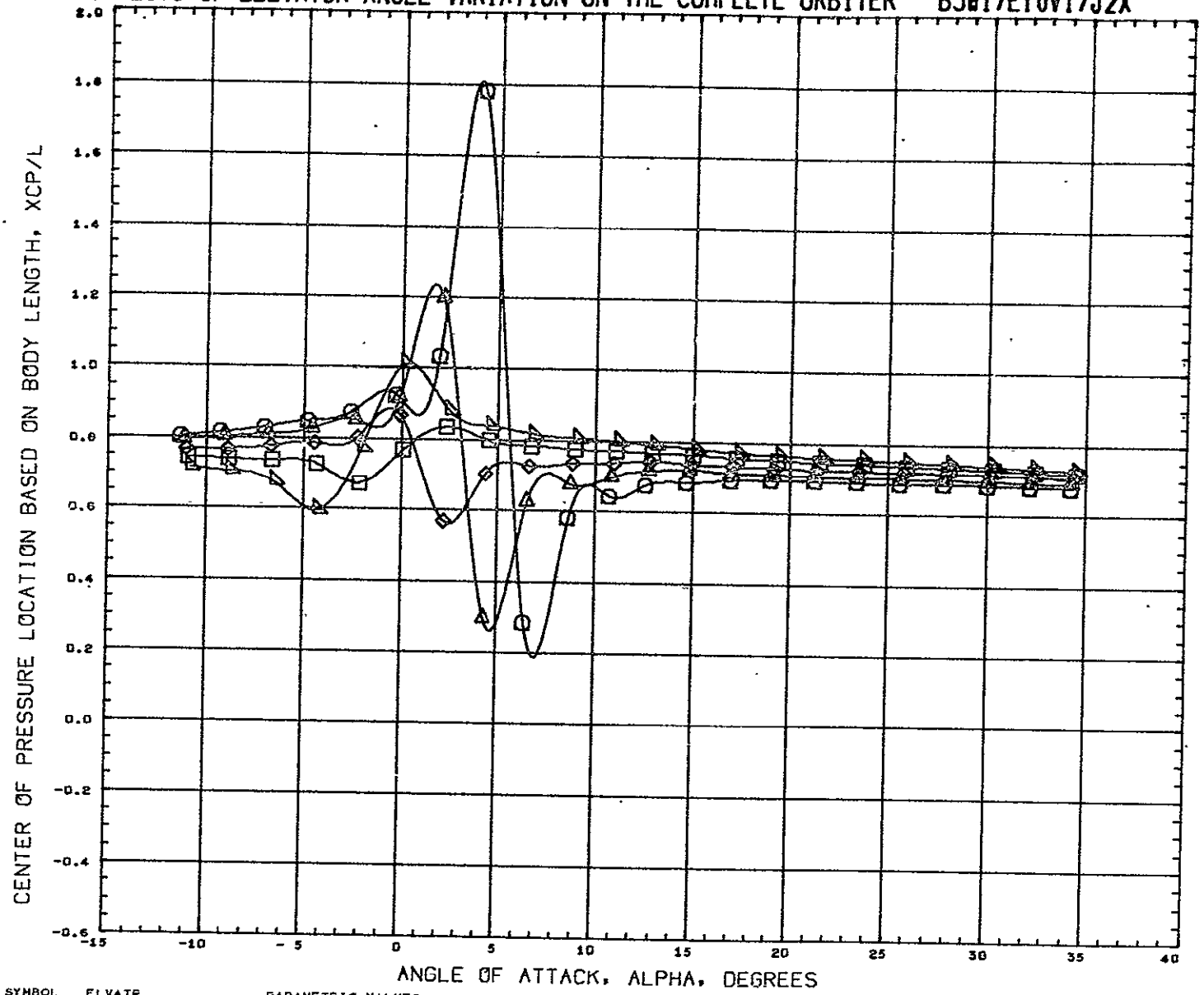
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
□	- 20.000
◇	- 10.000
△	0.000
▽	10.000
○	20.000

PARAMETRIC VALUES

MACH	1.108	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

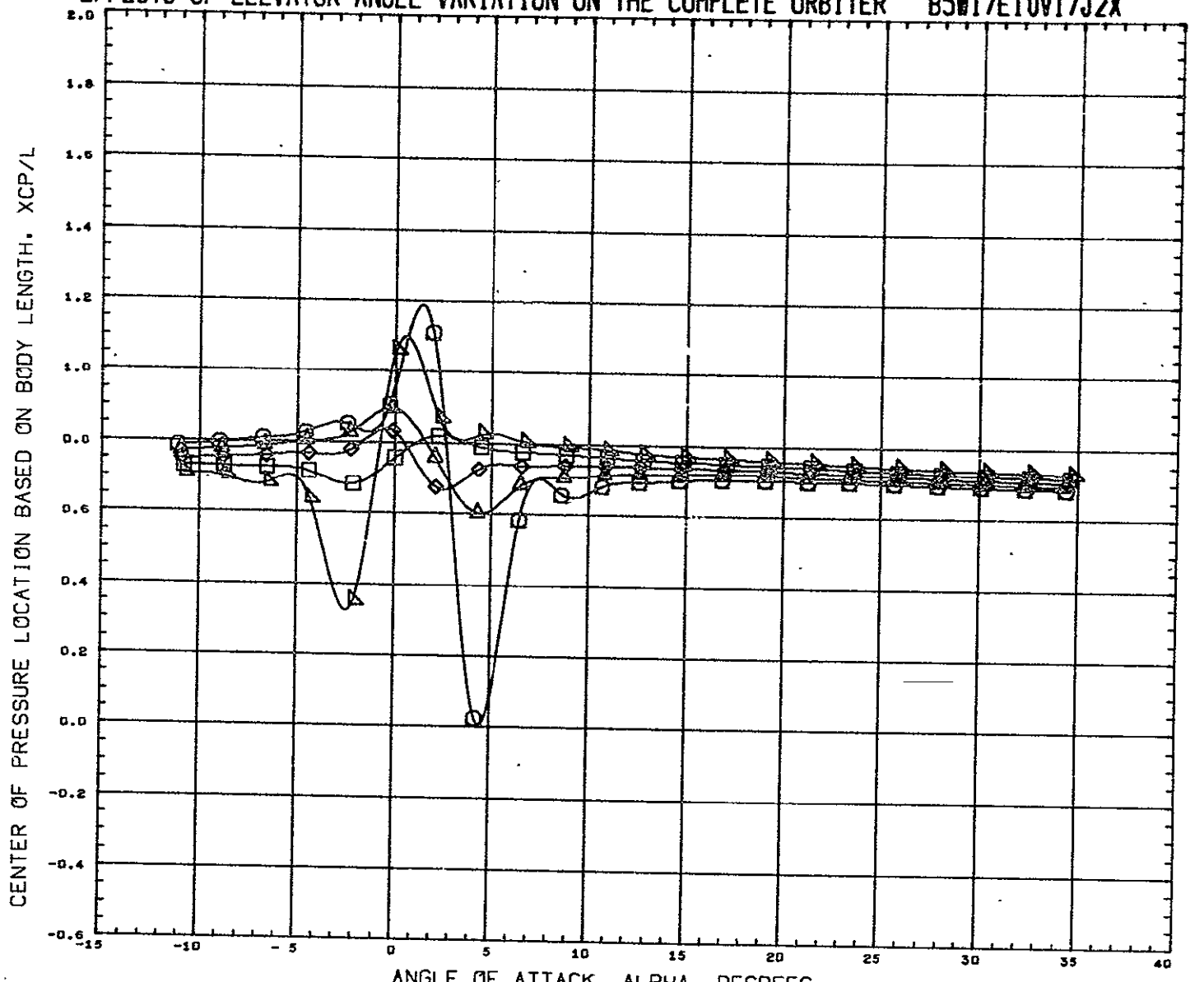
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
▽	- 20.000
△	- 10.000
◇	0.000
□	10.000
○	20.000

PARAMETRIC VALUES

MACH	1.465	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

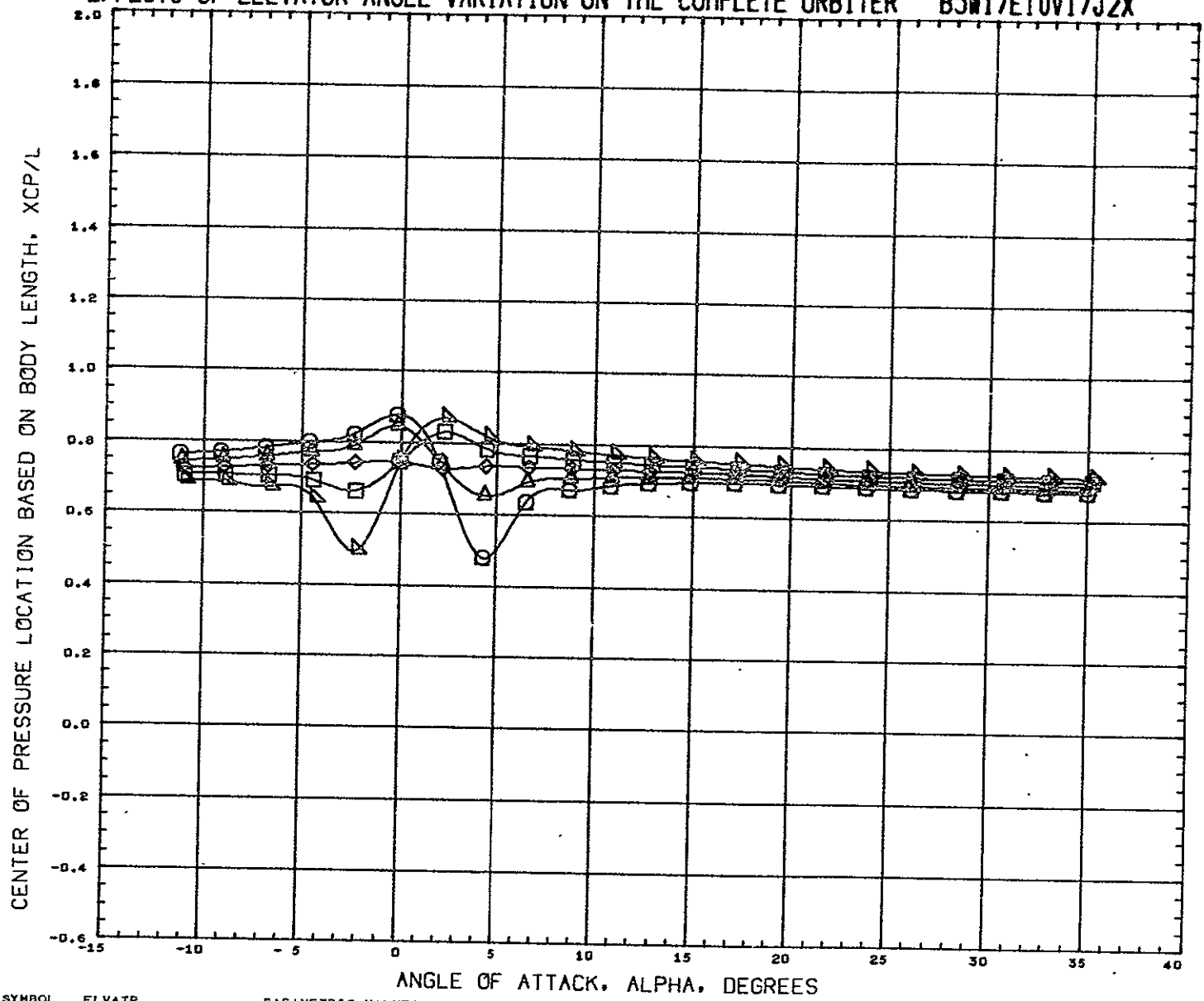
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	621.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
▽	-20.000
△	-10.000
◇	0.000
□	10.000
⊿	20.000

PARAMETRIC VALUES

MACH	1.966	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

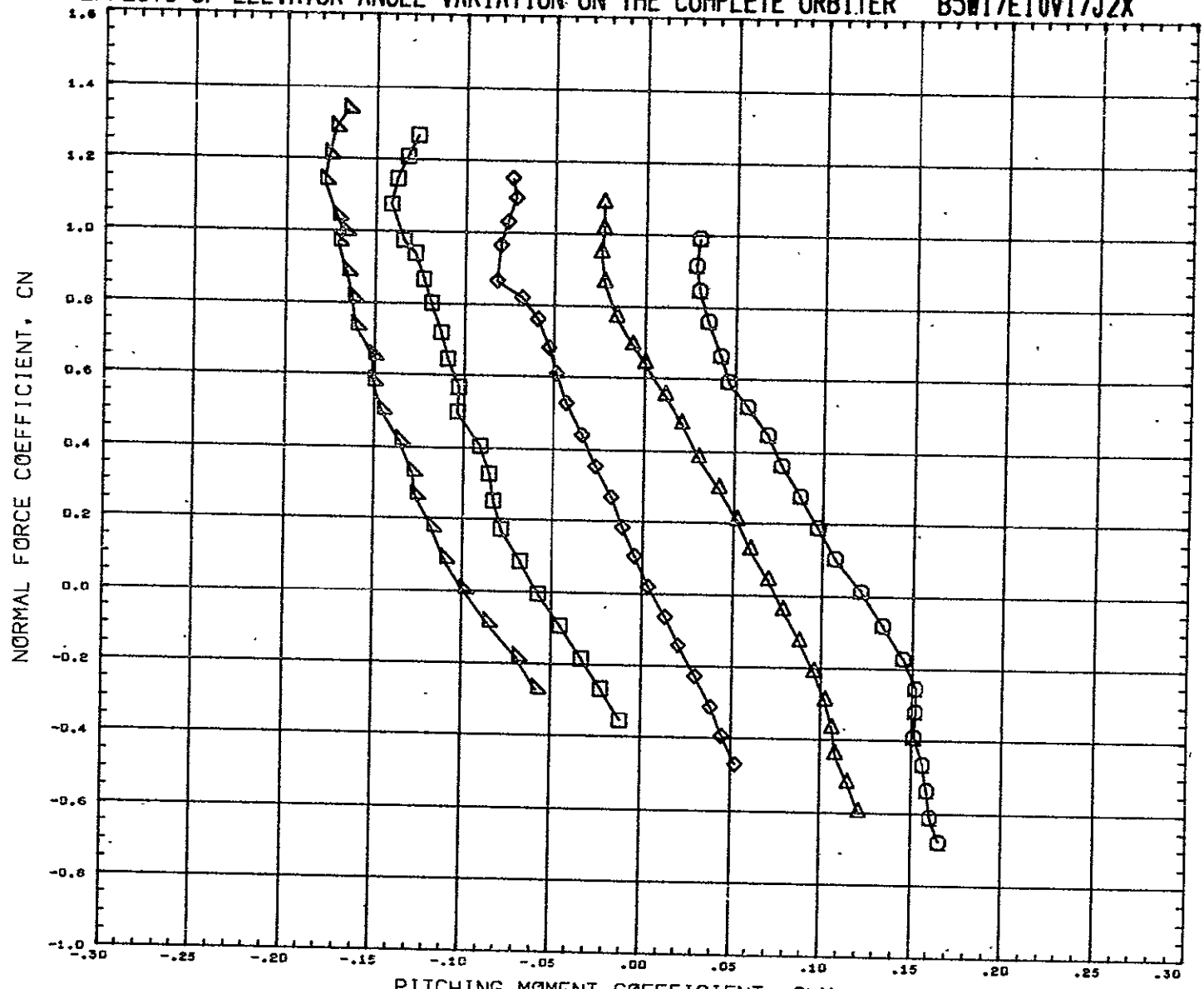
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	-20.000	V2908S	-10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	5.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
⊠	20.000

PARAMETRIC VALUES

MACH	0.608	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

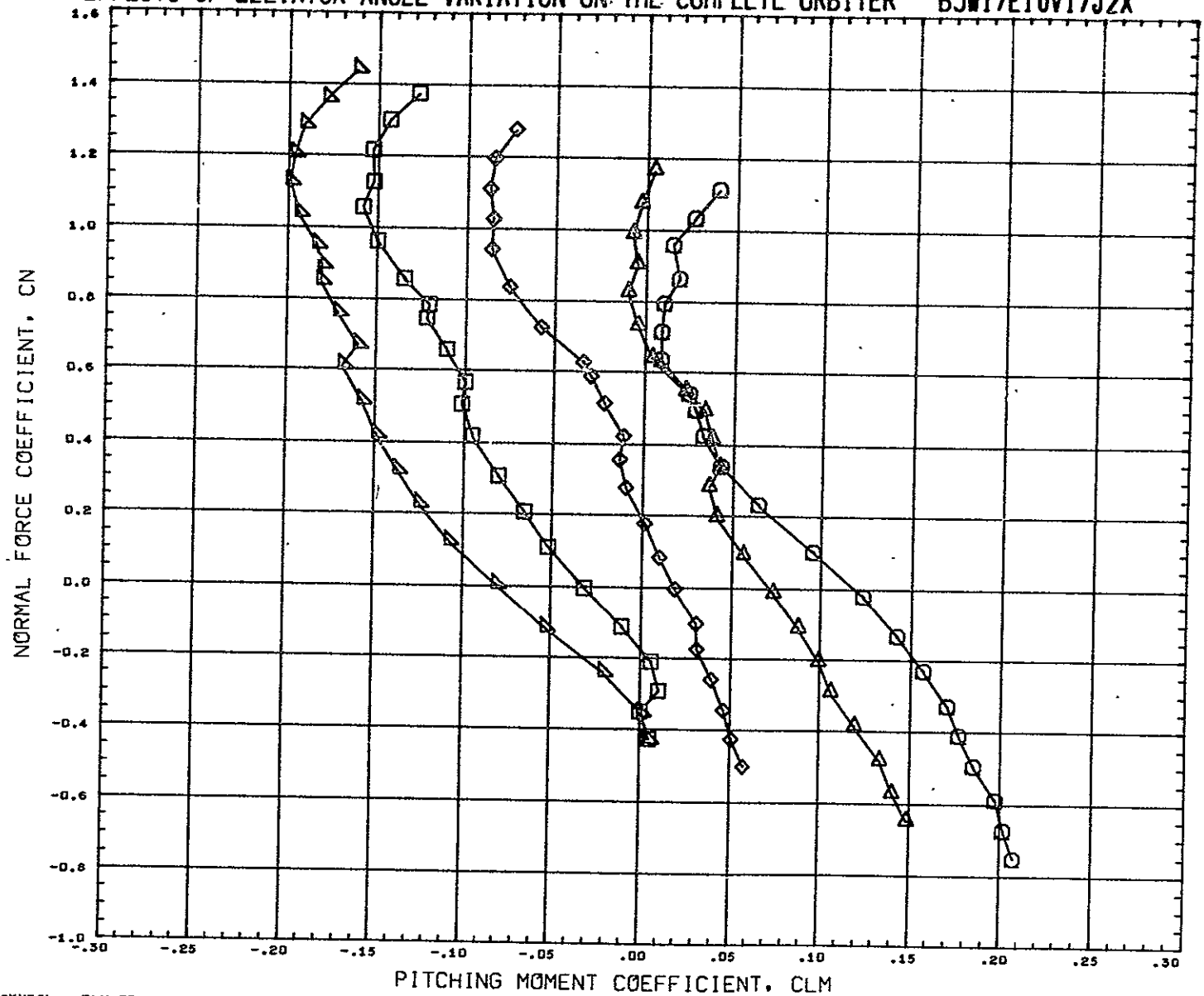
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
△	- 20.000
▷	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH 0.911 BETA 0.000

AILRON 0.000

DATA HIST. CODE *E*E*G

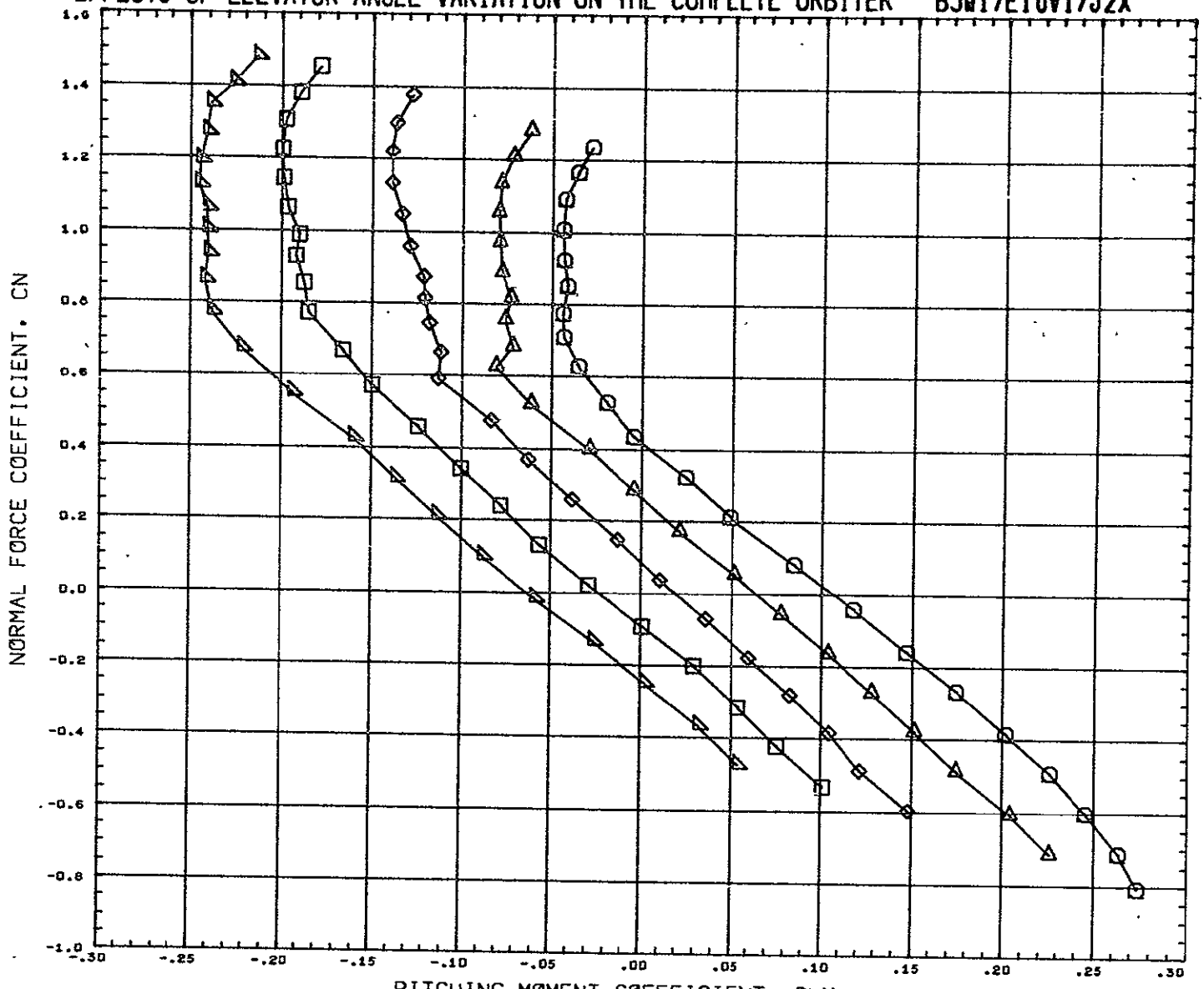
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
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△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.108	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

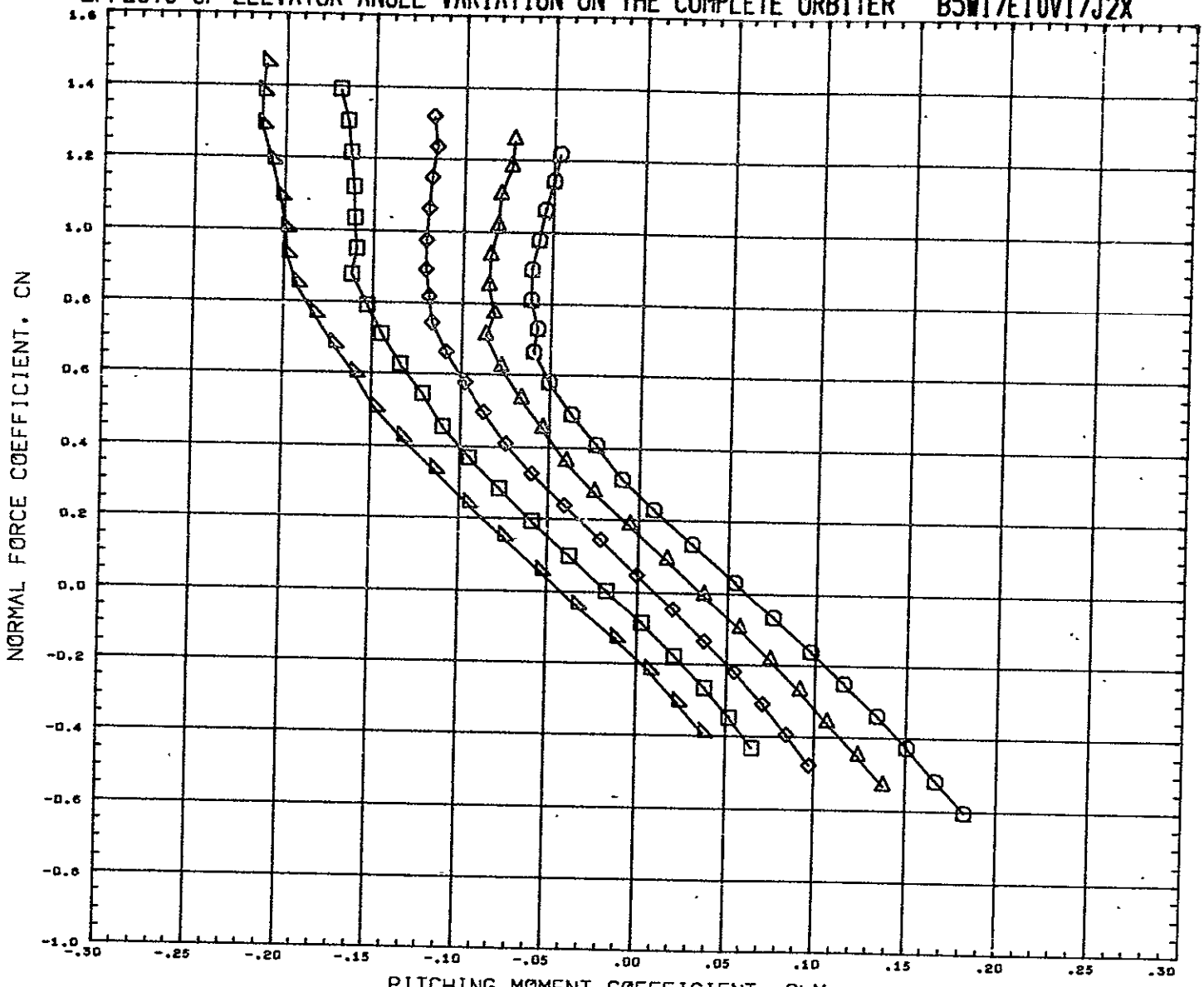
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▽	20.000

PARAMETRIC VALUES

MACH	1.465	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

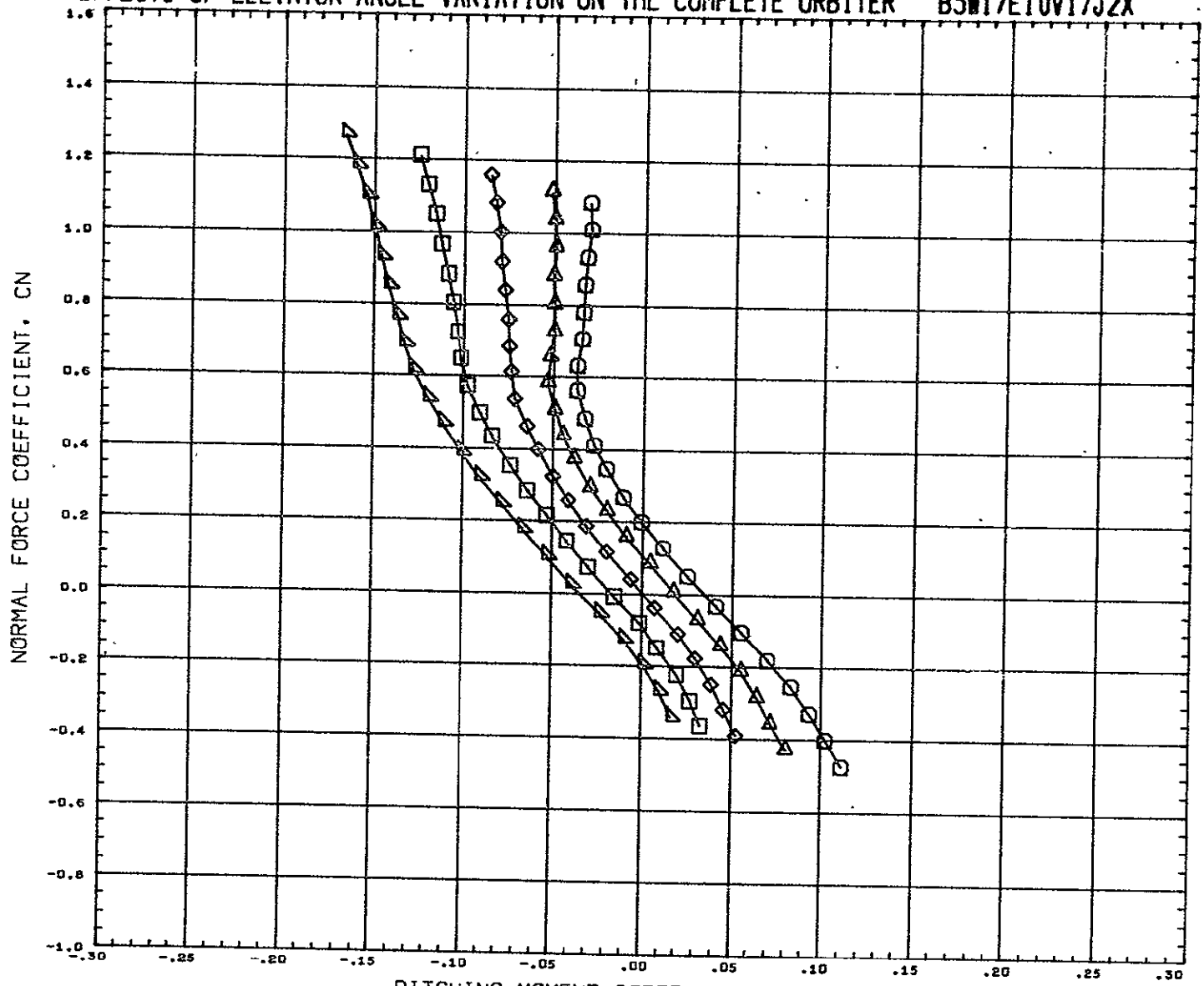
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF ELEVATOR ANGLE VARIATION ON THE COMPLETE ORBITER B5W17E10V17J2X



SYMBOL	ELVATR
○	- 20.000
△	- 10.000
◇	0.000
□	10.000
▷	20.000

PARAMETRIC VALUES

MACH	1.966	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*G

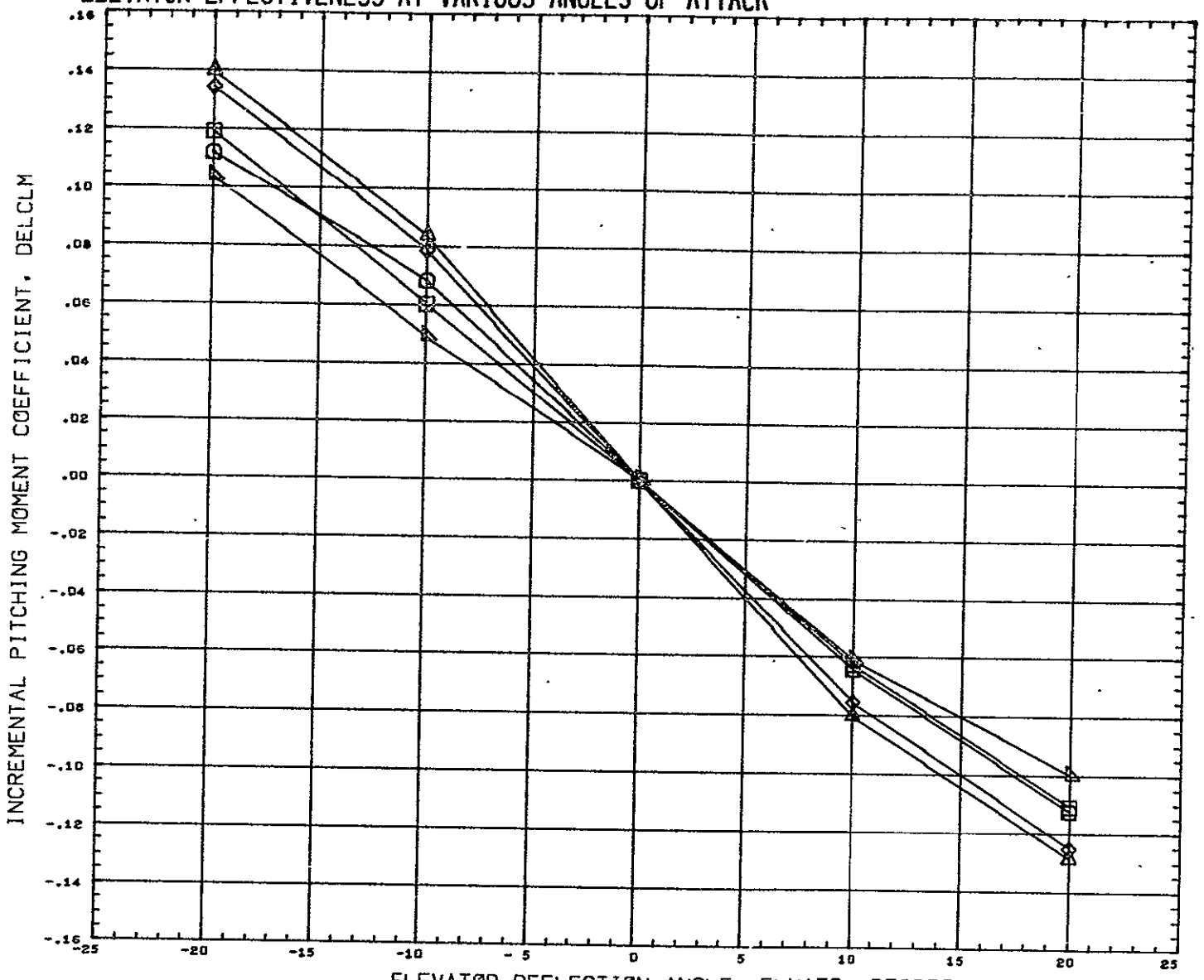
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907S	- 20.000	V2908S	- 10.000
V2906S	0.000	V2909S	10.000
V2910S	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
▽	-10.000
△	0.000
◇	10.000
□	20.000
◸	30.000

PARAMETRIC VALUES

MACH	0.600	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*GI*CH

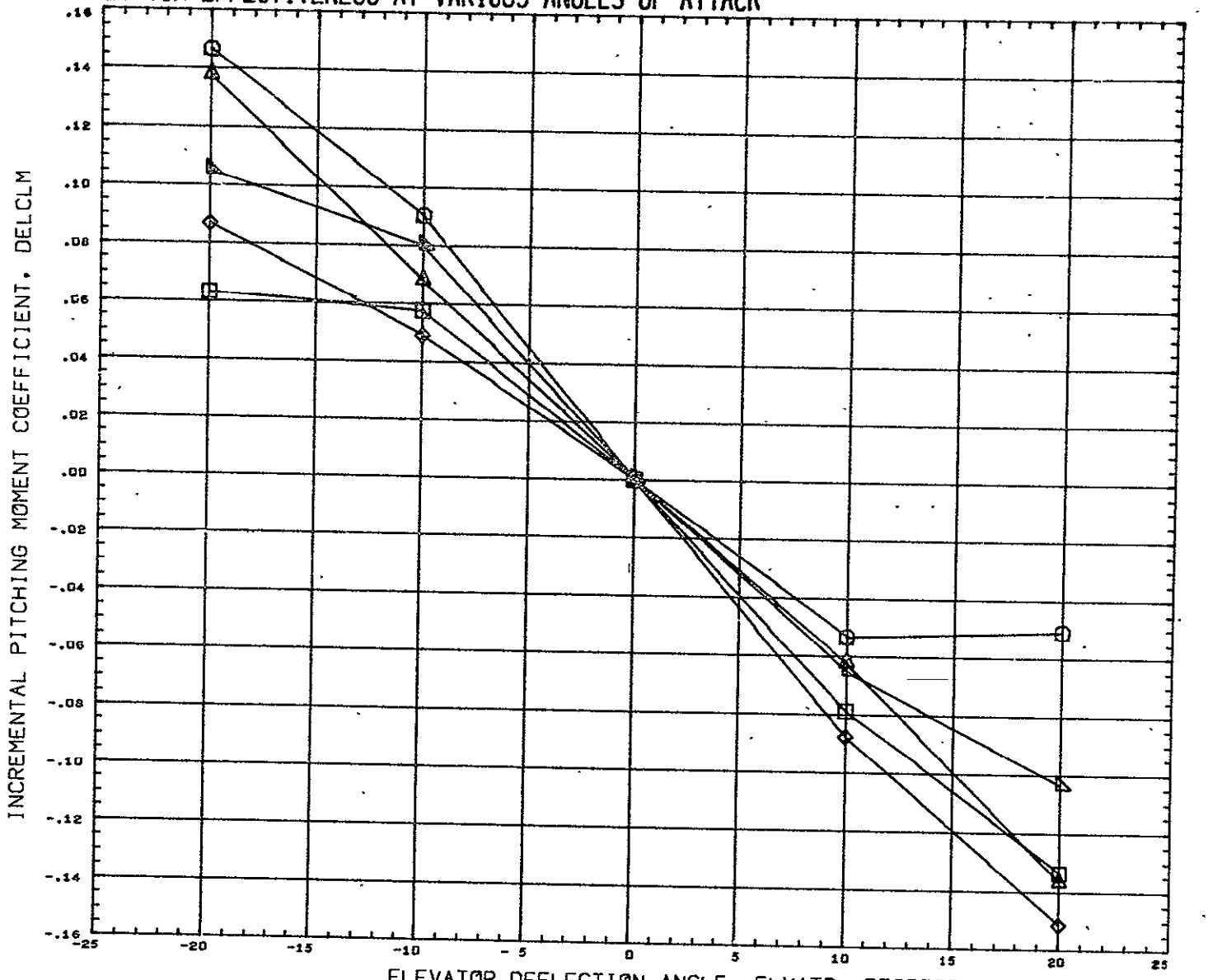
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALFHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	0.900	BETA	0.000
AILRON	0.000		

DATA SOURCE

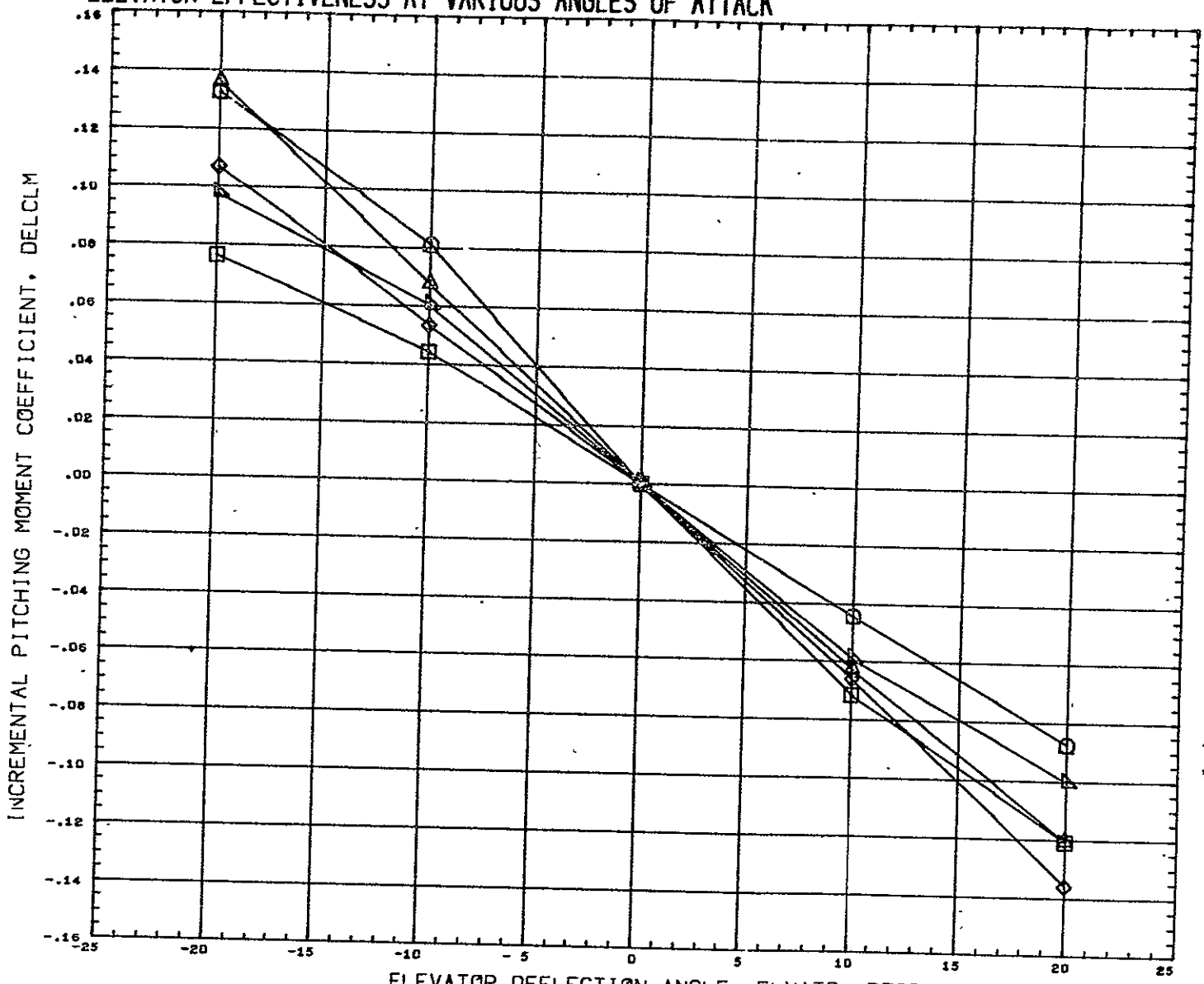
DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI*CH

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
△	-10.000
○	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	1.100	BETA	0.000
AILRON	0.000		

DATA SOURCE

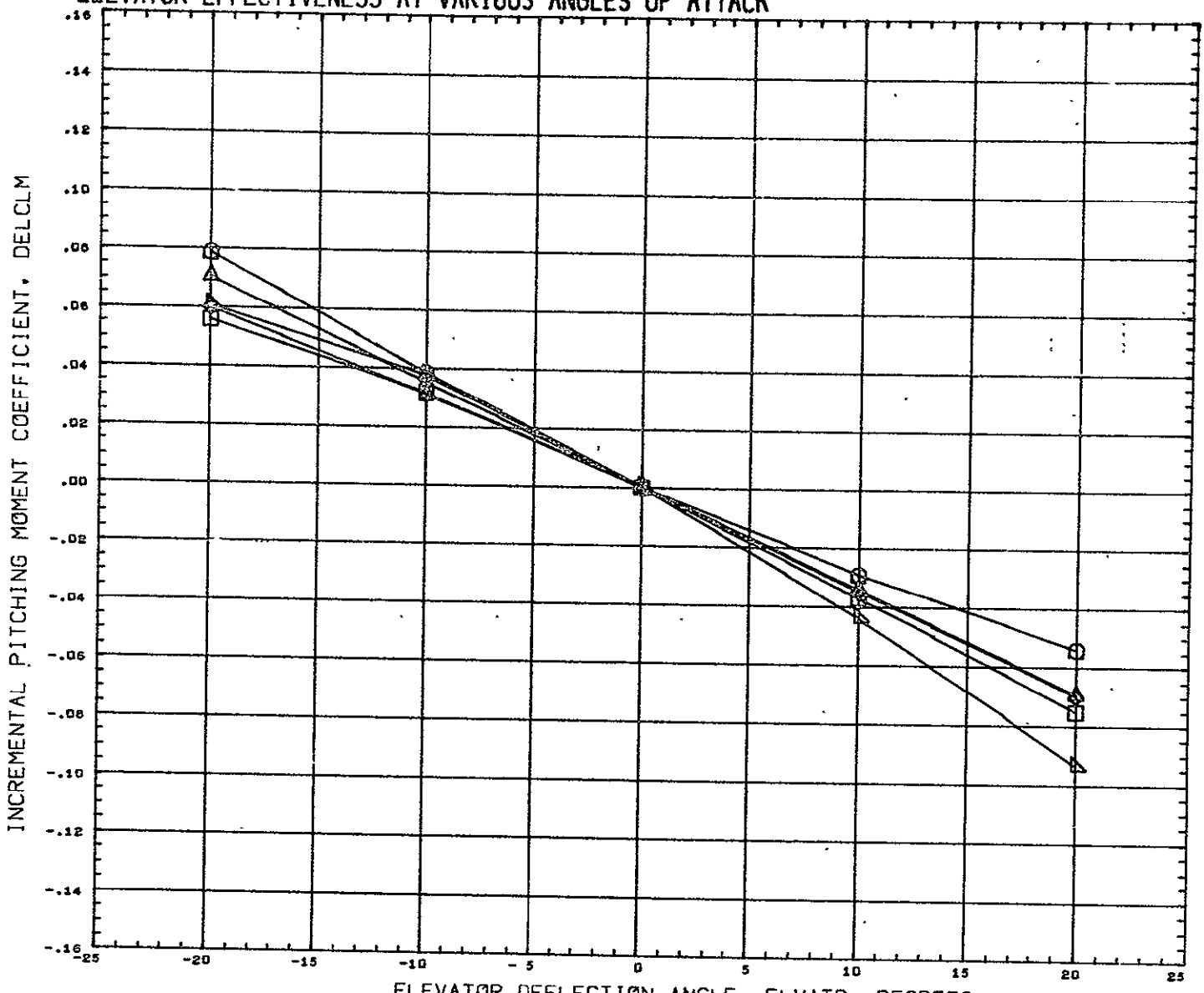
DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.5040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRF	1422.5040	INCHES
YMRF	0.0000	INCHES
ZMRF	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI*CM

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
△	-10.000
○	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	1.500	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*GI*CM

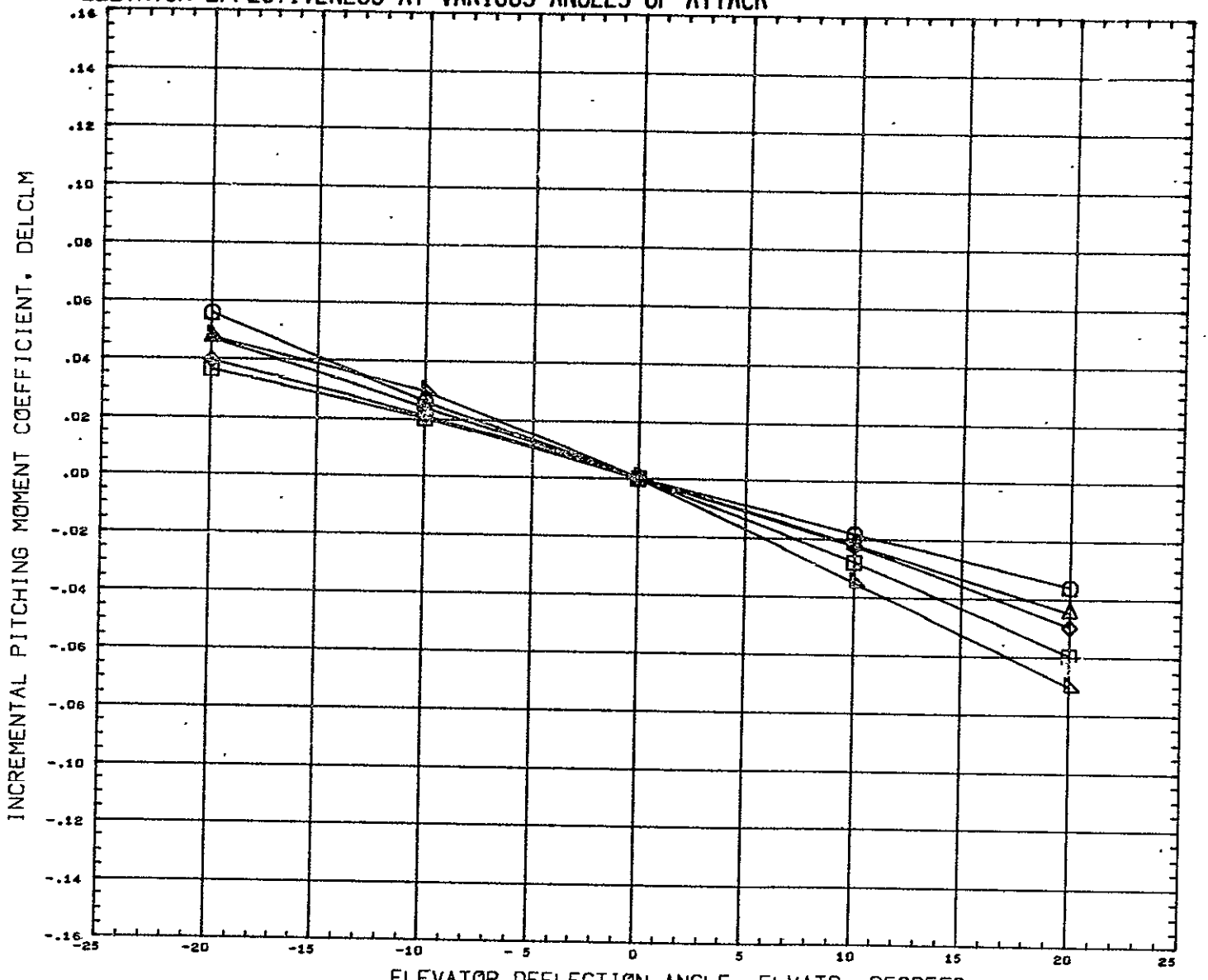
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	2.000	BETA	0.000
AILRON	0.000		

DATA SOURCE

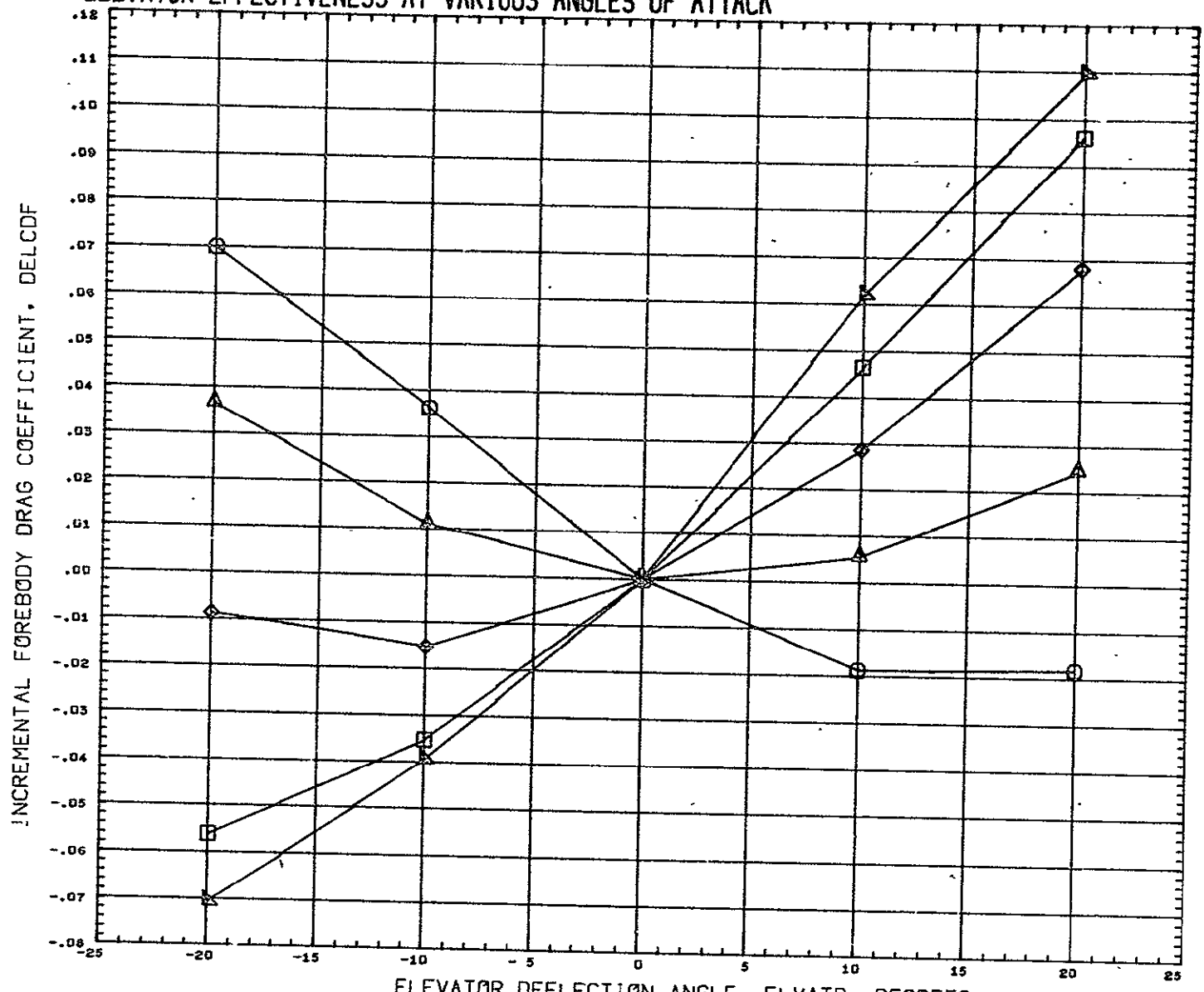
DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI*CM

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
▽	-10.000
△	0.000
□	10.000
◇	20.000
○	30.000

PARAMETRIC VALUES

MACH	0.600	BETA	0.000
AILRON	0.000		

DATA SOURCE

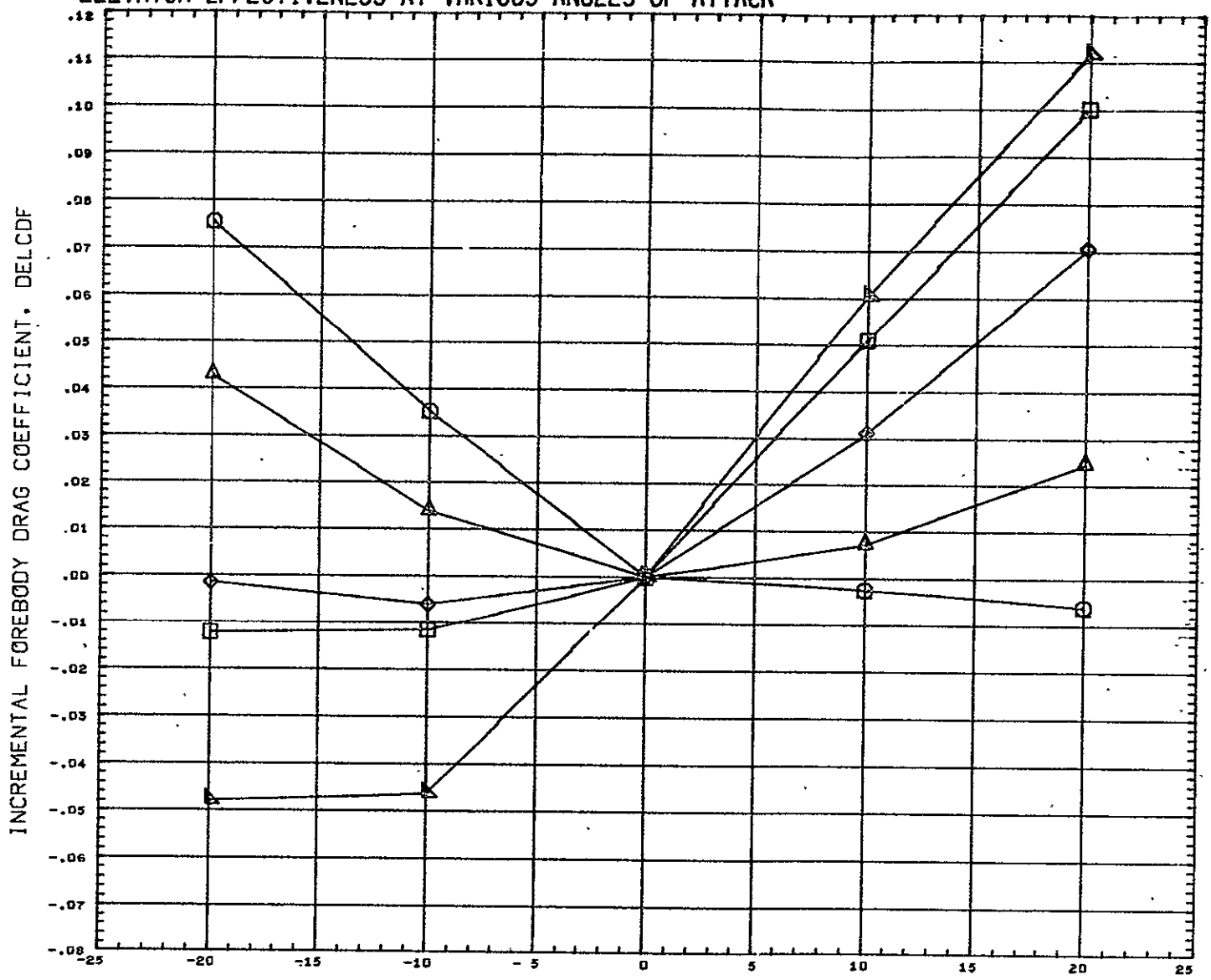
DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI*CM

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	- 10.000
△	0.000
◇	10.000
□	20.000
◸	30.000

PARAMETRIC VALUES

MACH	0.900	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*GI*CN

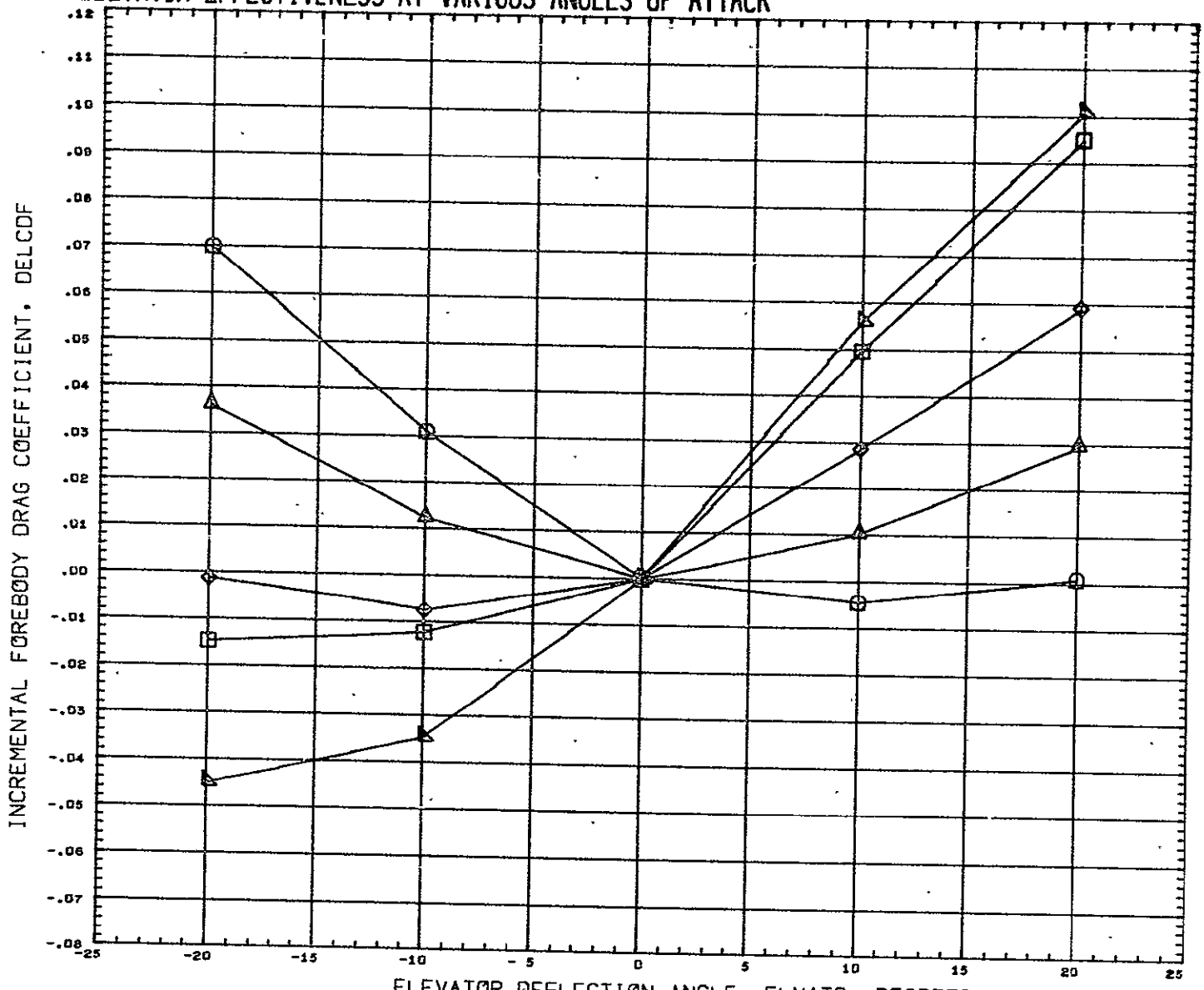
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
M2907I	- 20.000	M2908I	- 10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
□	-10.000
△	0.000
◇	10.000
▽	20.000
⊠	30.000

PARAMETRIC VALUES

MACH	1.100	BETA	0.000
AILRON	0.000		

DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

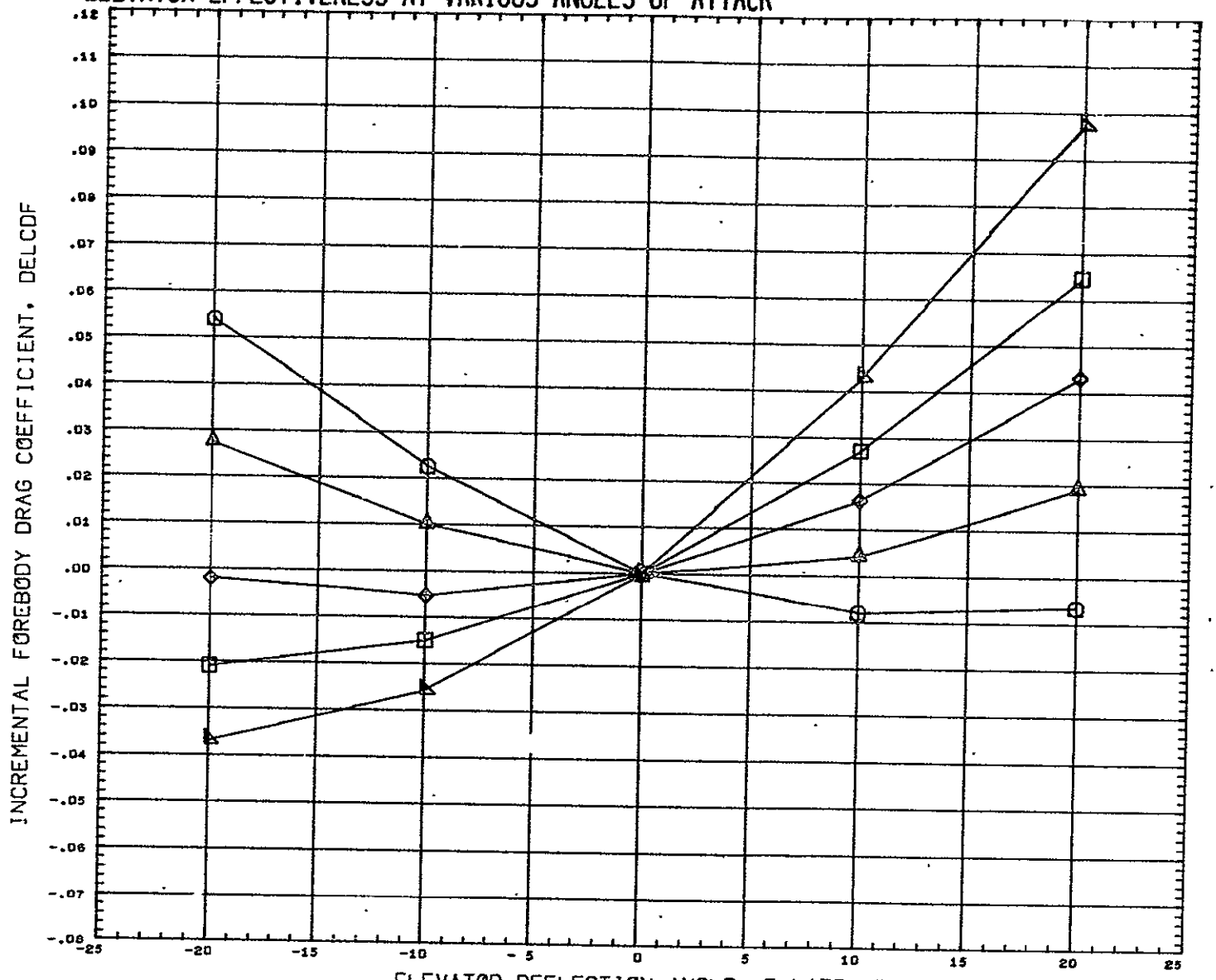
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*G1*CM

MSFC484 NR DELTA ORB. INCREMENTAL ELVATR EFFECTS (M2907I) 03 AUG 71 PAGE 311

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
□	-10.000
◇	0.000
△	10.000
▽	20.000
○	30.000

PARAMETRIC VALUES

MACH	1.500	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*GI*CM

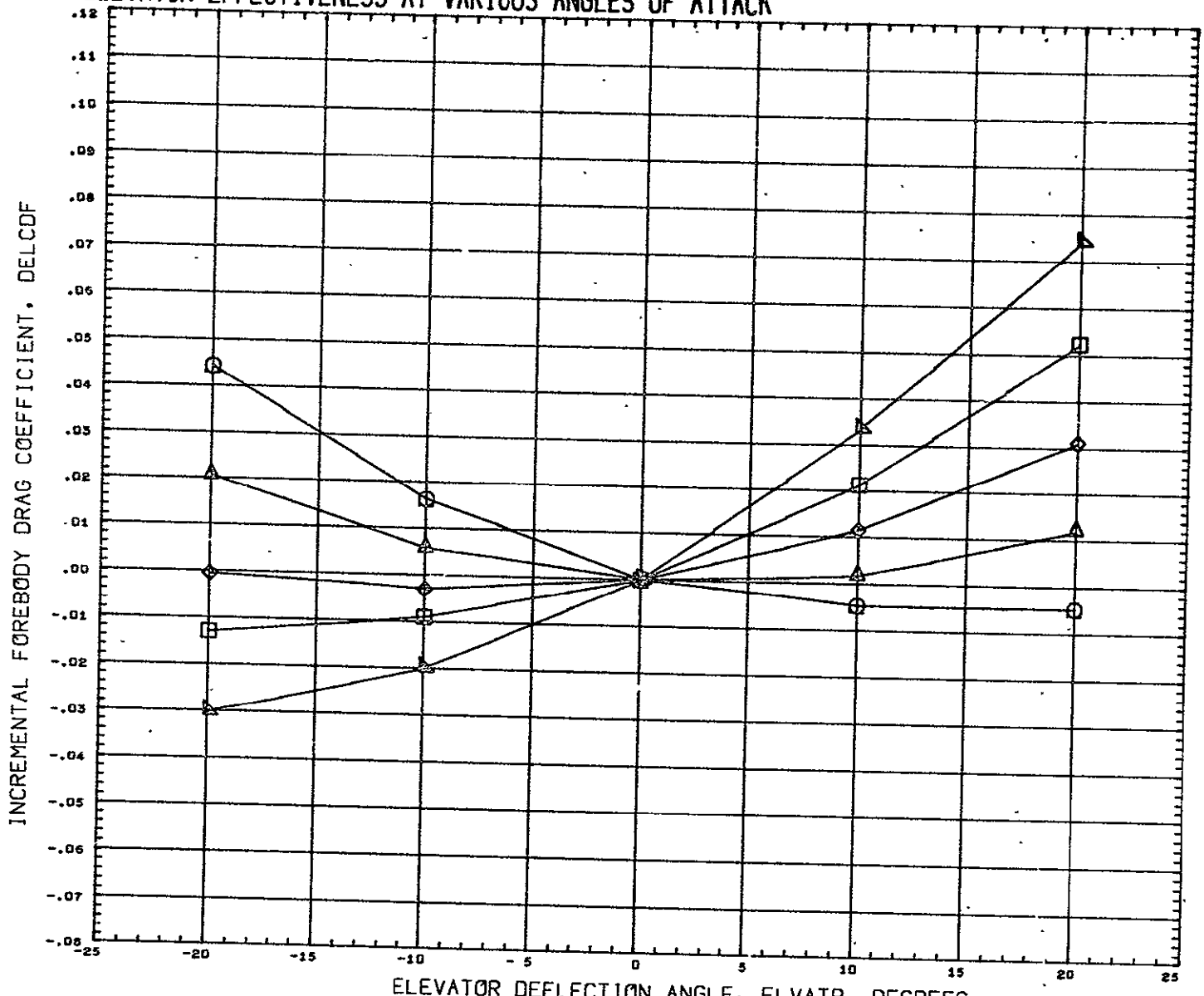
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	2.000	BETA	0.000
AILRON	0.000		

DATA SOURCE

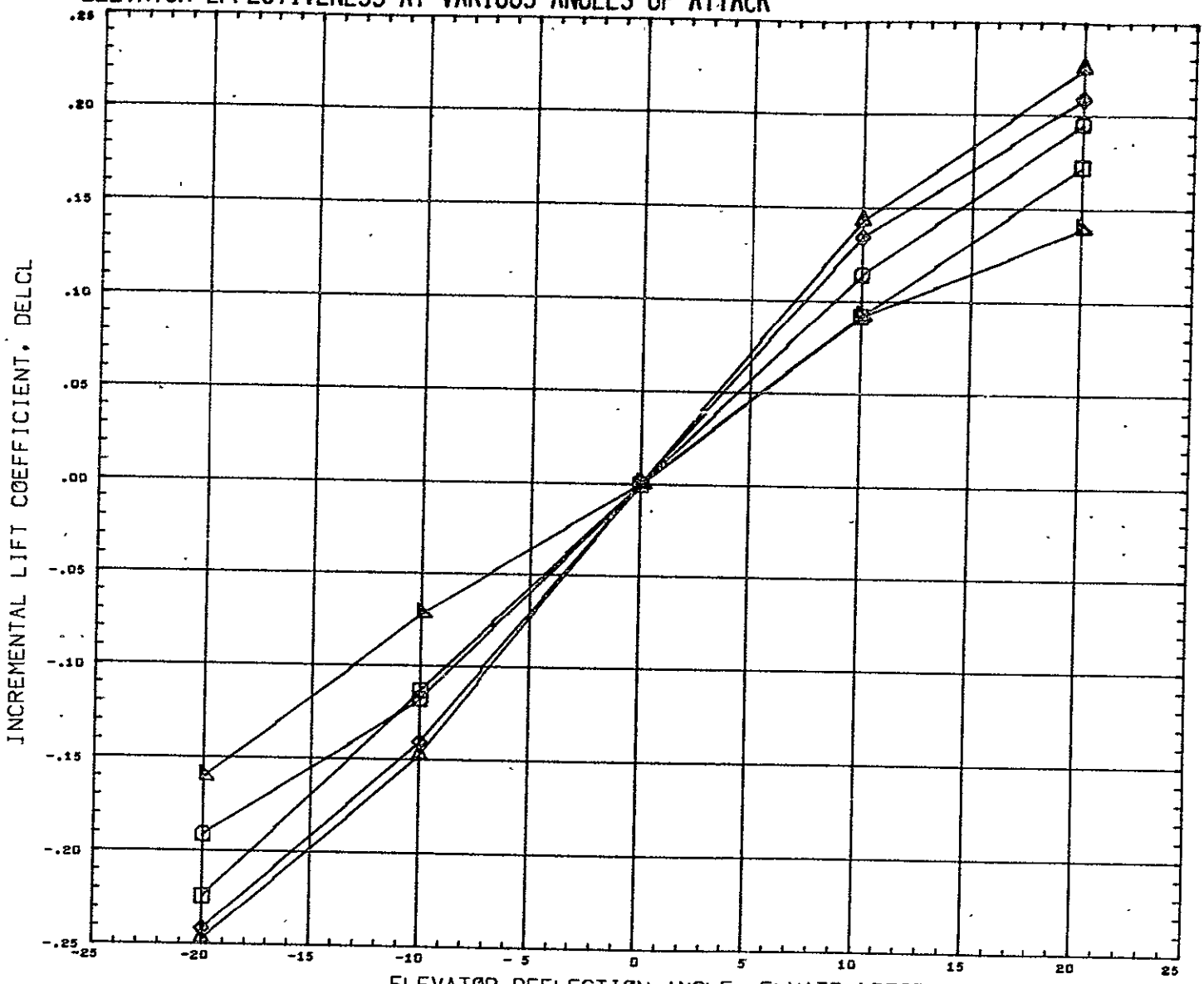
DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI*CM

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
△	-10.000
○	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	0.600	BETA	0.000
AILRCN	0.000		

DATA HIST. CODE *E*E*GI*CM

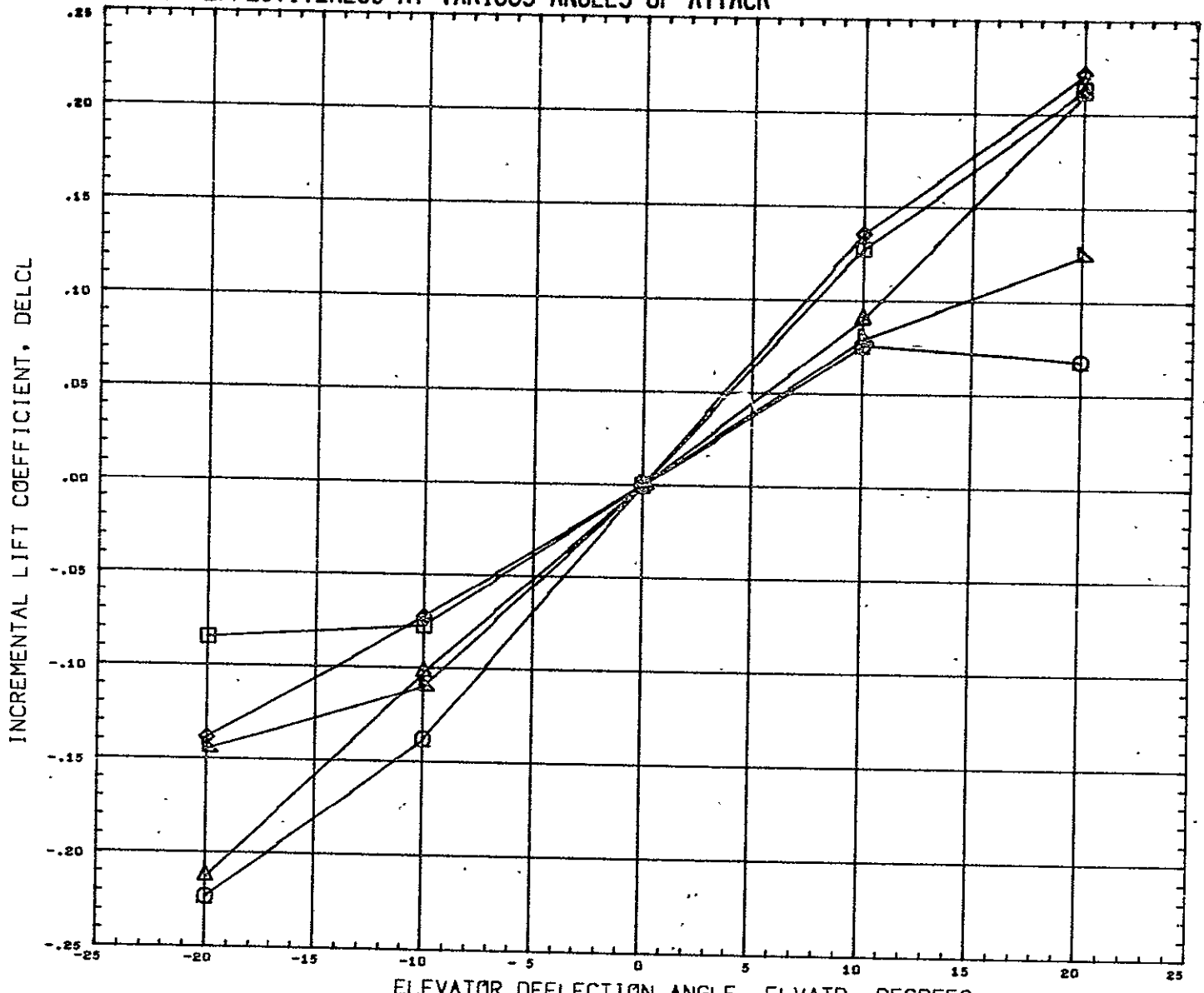
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	0.900	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*GI*CM

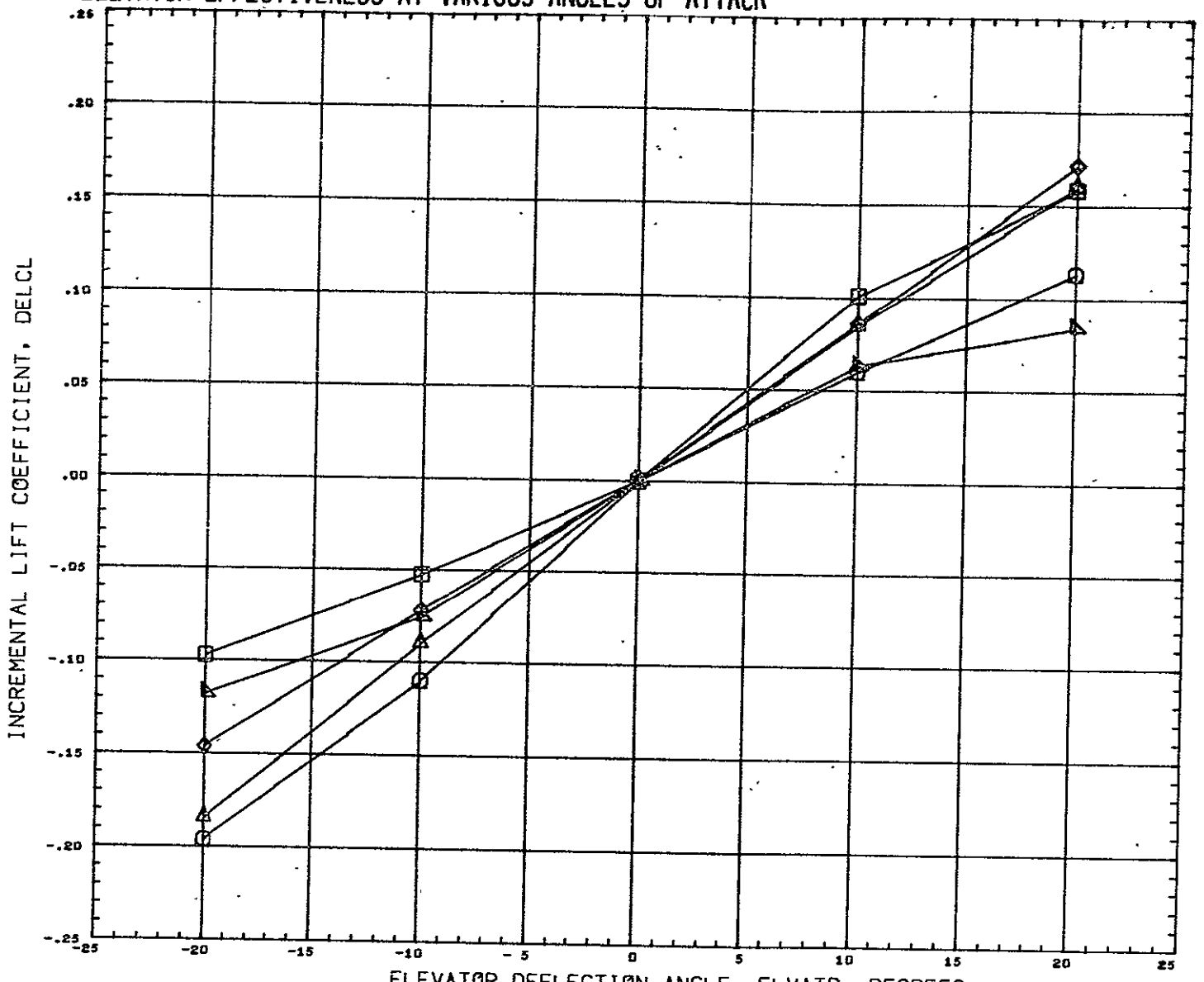
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
□	-10.000
◇	0.000
△	10.000
○	20.000
⊠	30.000

PARAMETRIC VALUES

MACH	1.100	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*GI*CH

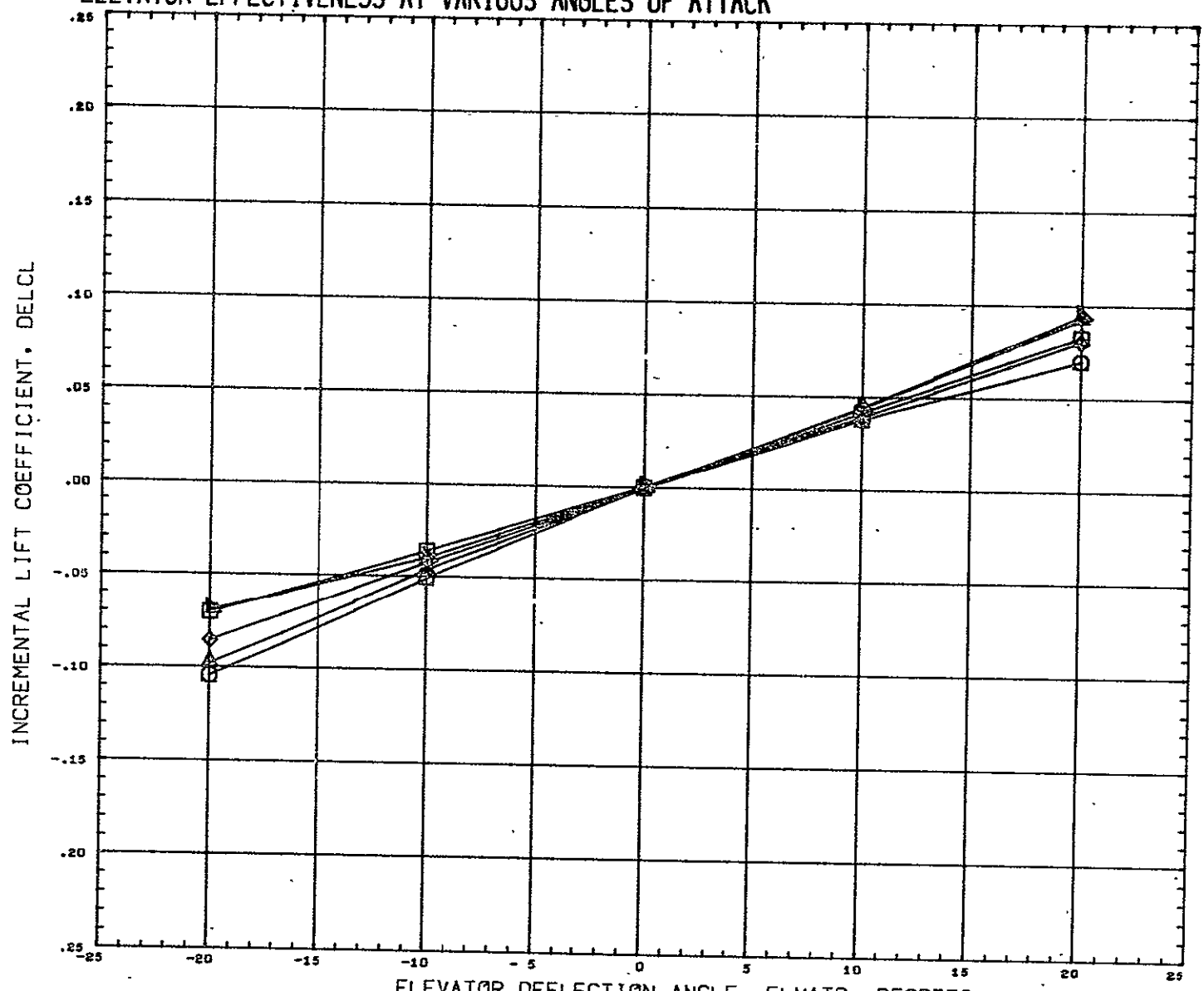
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XHRP	1422.5640	INCHES
YHRP	0.0000	INCHES
ZHRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	1.500	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*GI*CM

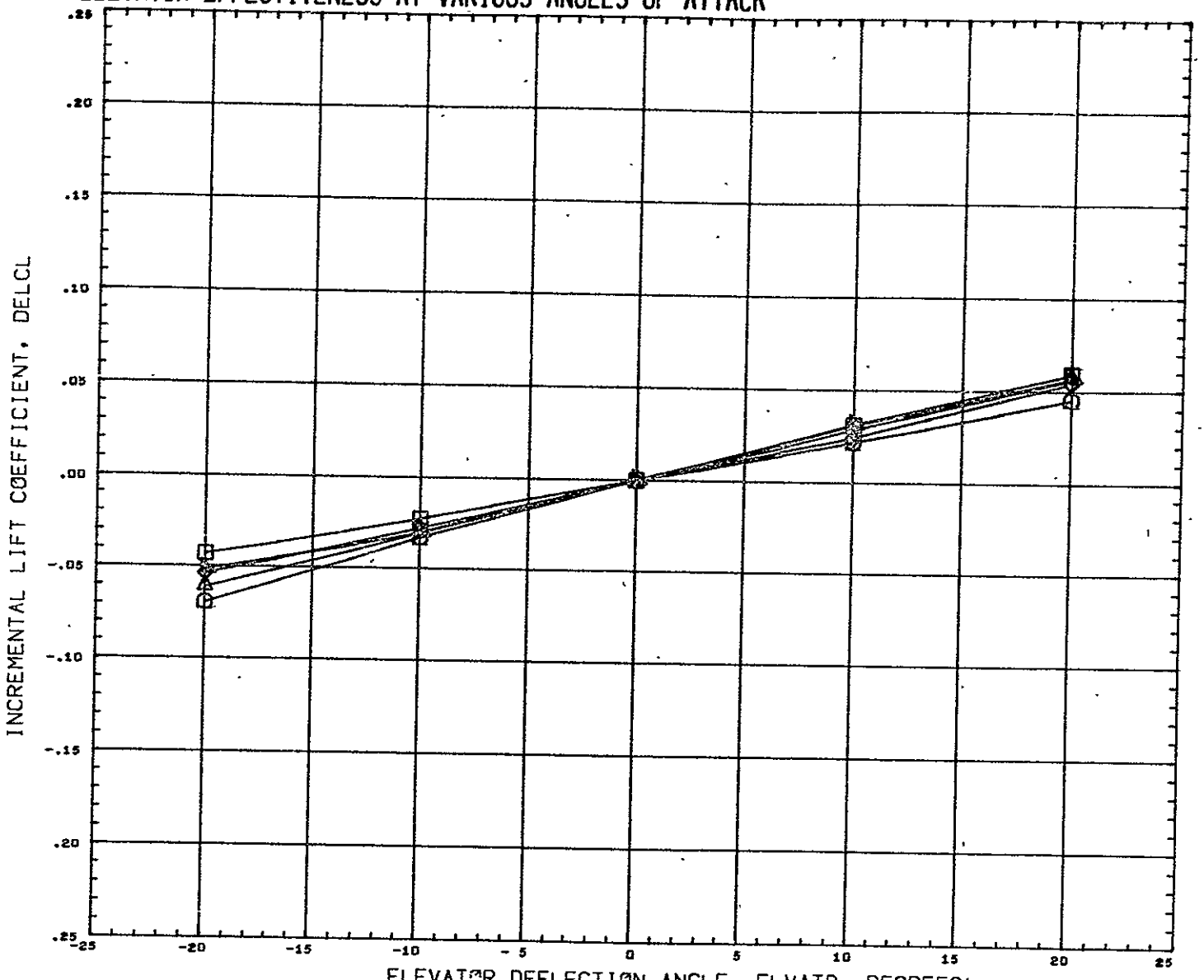
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
□	-10.000
△	0.000
◇	10.000
○	20.000
▽	30.000

PARAMETRIC VALUES

MACH	2.000	BETA	0.000
AILRON	0.000		

DATA SOURCE

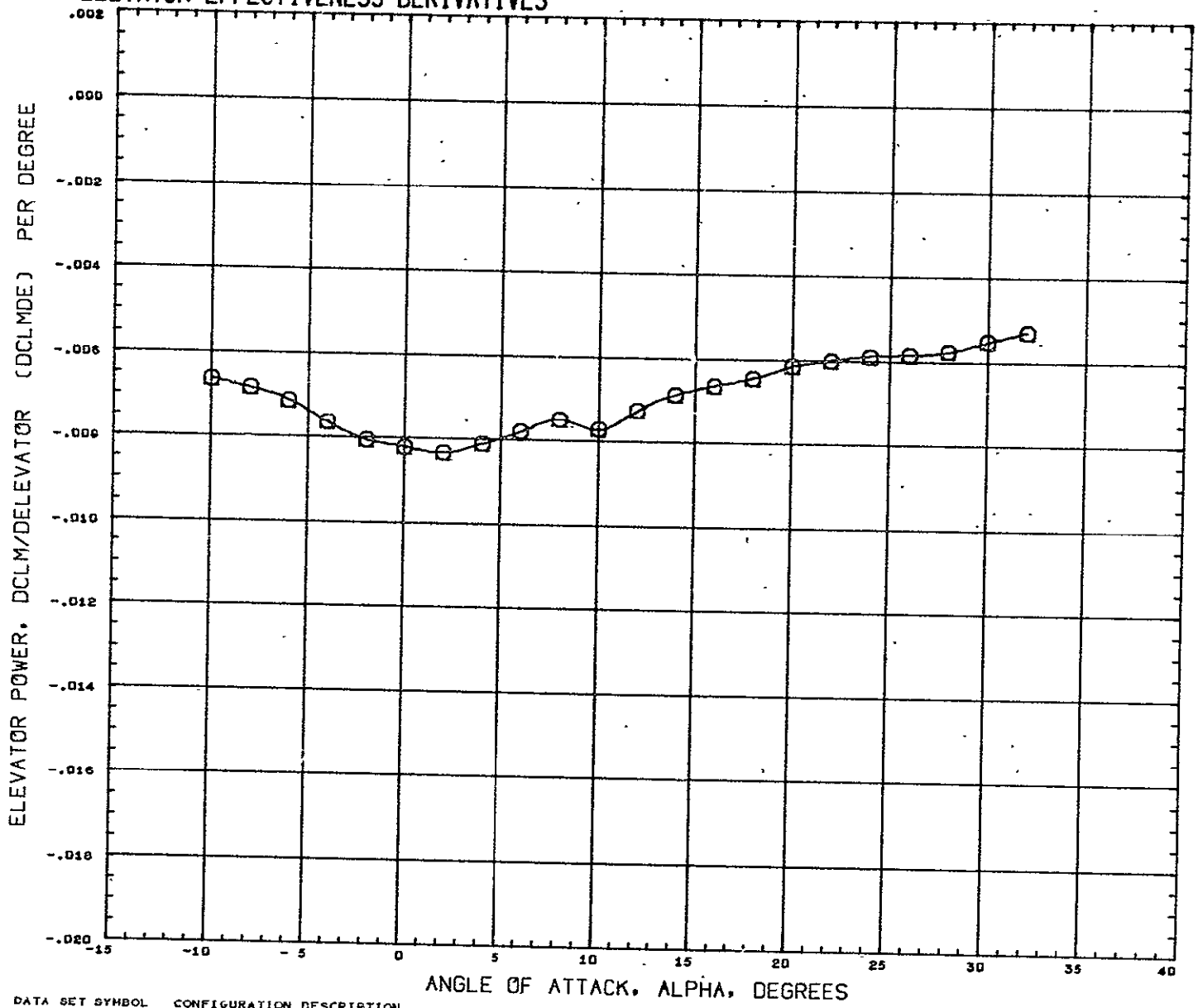
DATASET	ELVATR	DATASET	ELVATR
M2907I	-20.000	M2908I	-10.000
C2906I	0.000	M2909I	10.000
M2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	138.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI*CM

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL (P29061) ○ CONFIGURATION DESCRIPTION MSFC484 NR DELTA ORBITER B5W17E1GV17J2X

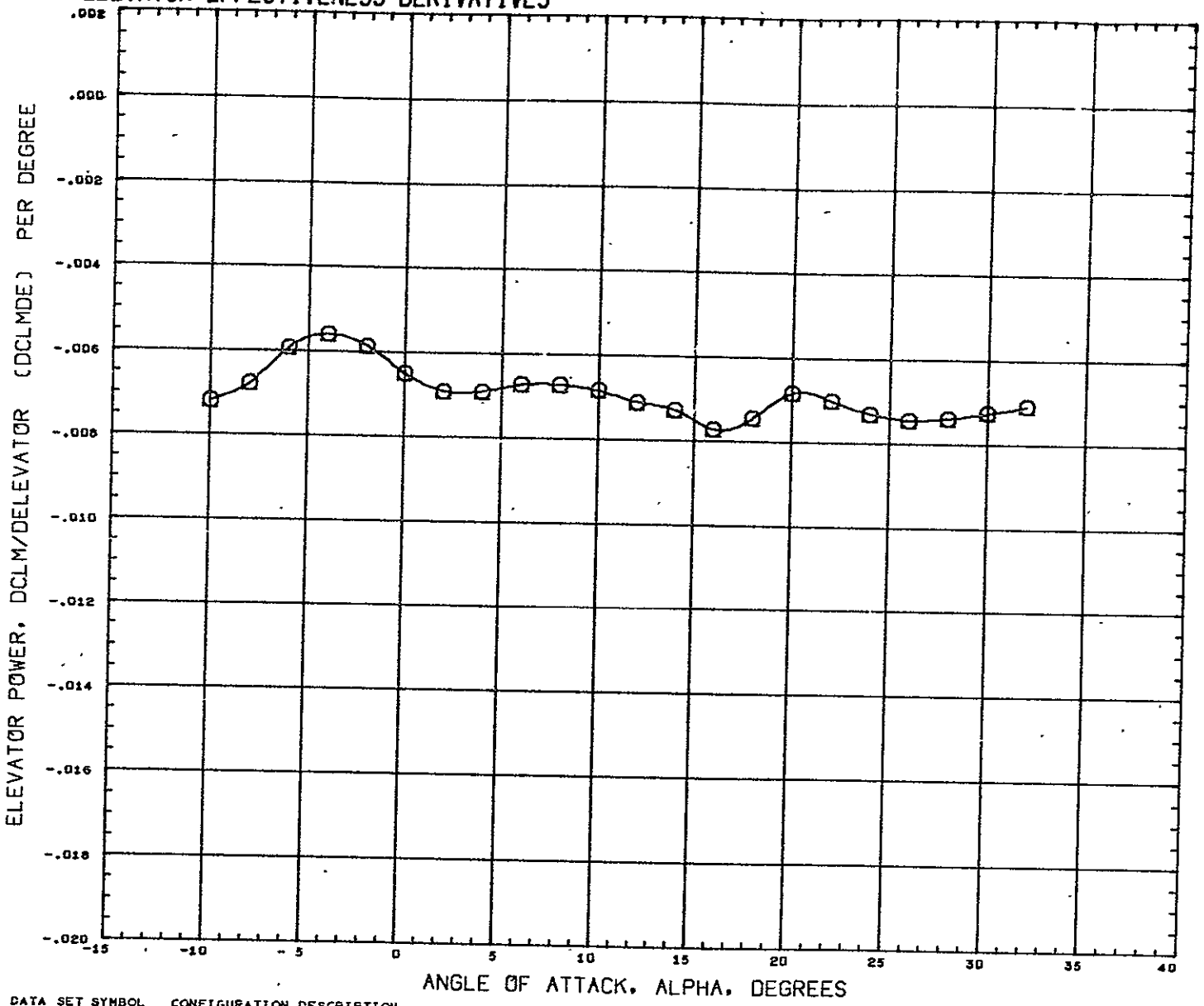
BETA 0.000 AILRON 0.000

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
(P2906I) ○ MSFC484 NR DELTA ORBITER B5W17E1UV17J2X

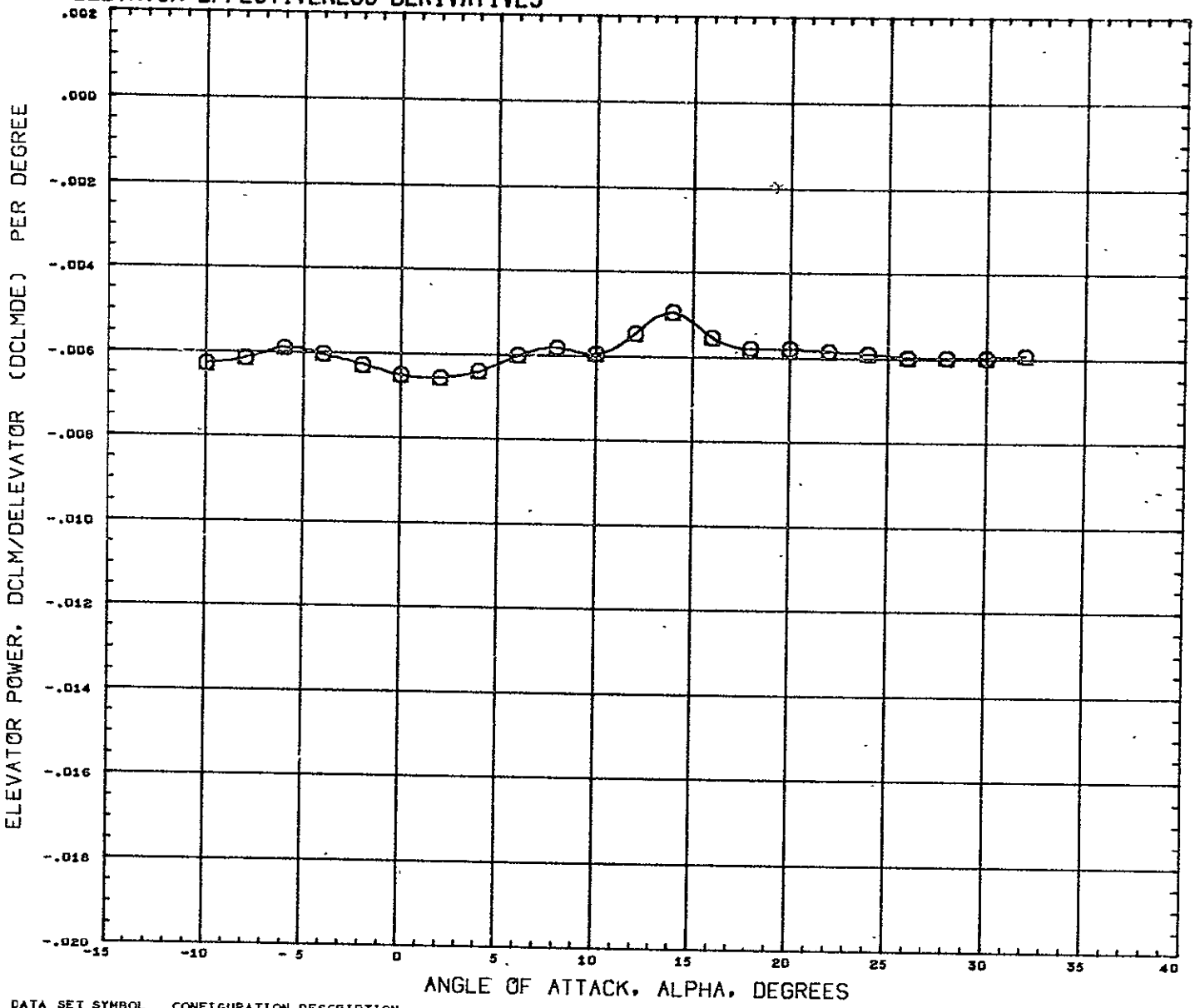
BETA	AILRON
0.000	0.000

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
(P2906I) ○ MSFC484 NR DELTA ORBITER B5W17E10V17J2X

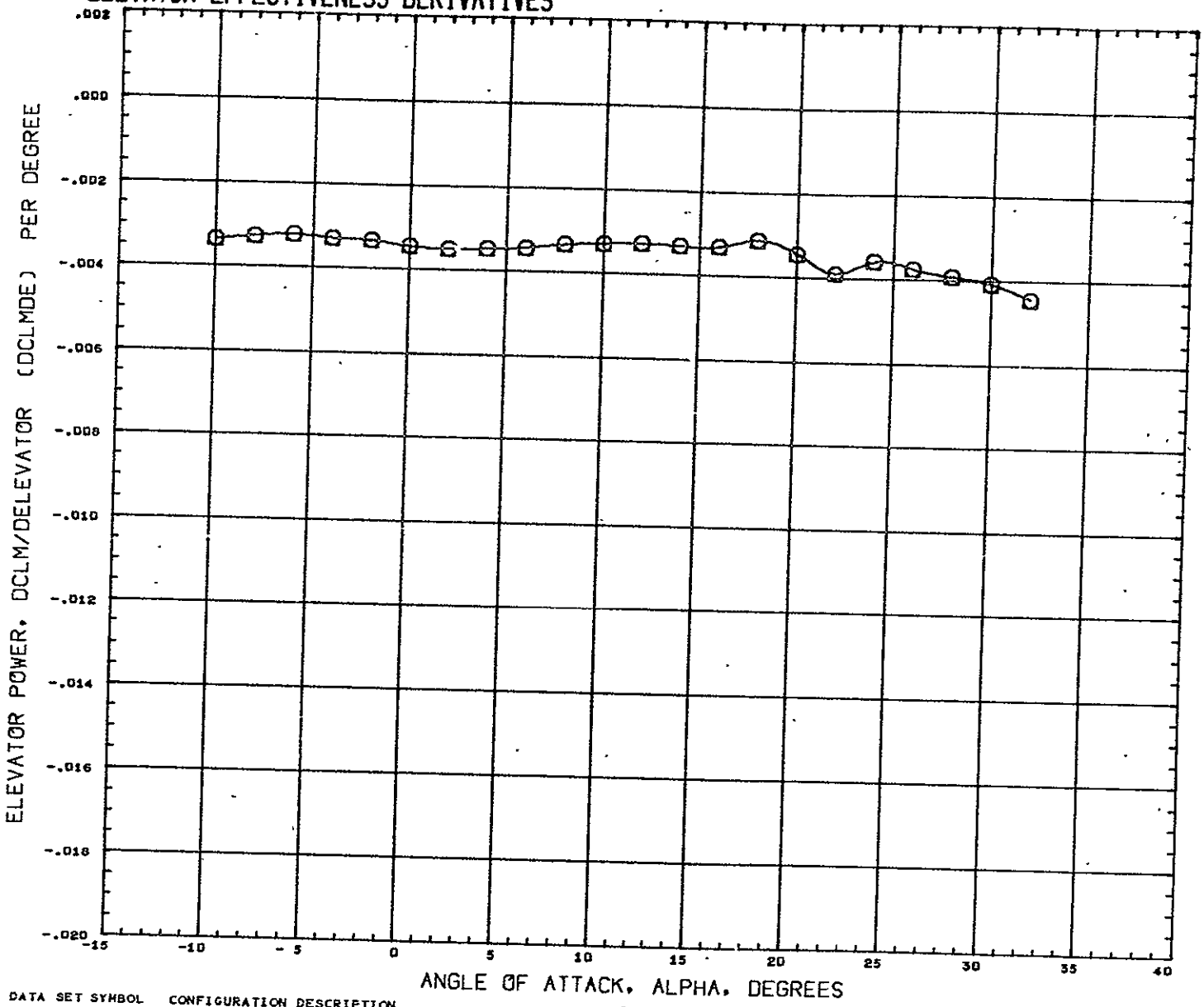
BETA	AILRON
0.000	0.000

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F29061) O MSFC484 NR DELTA ORBITER B5W17E10V17J2X

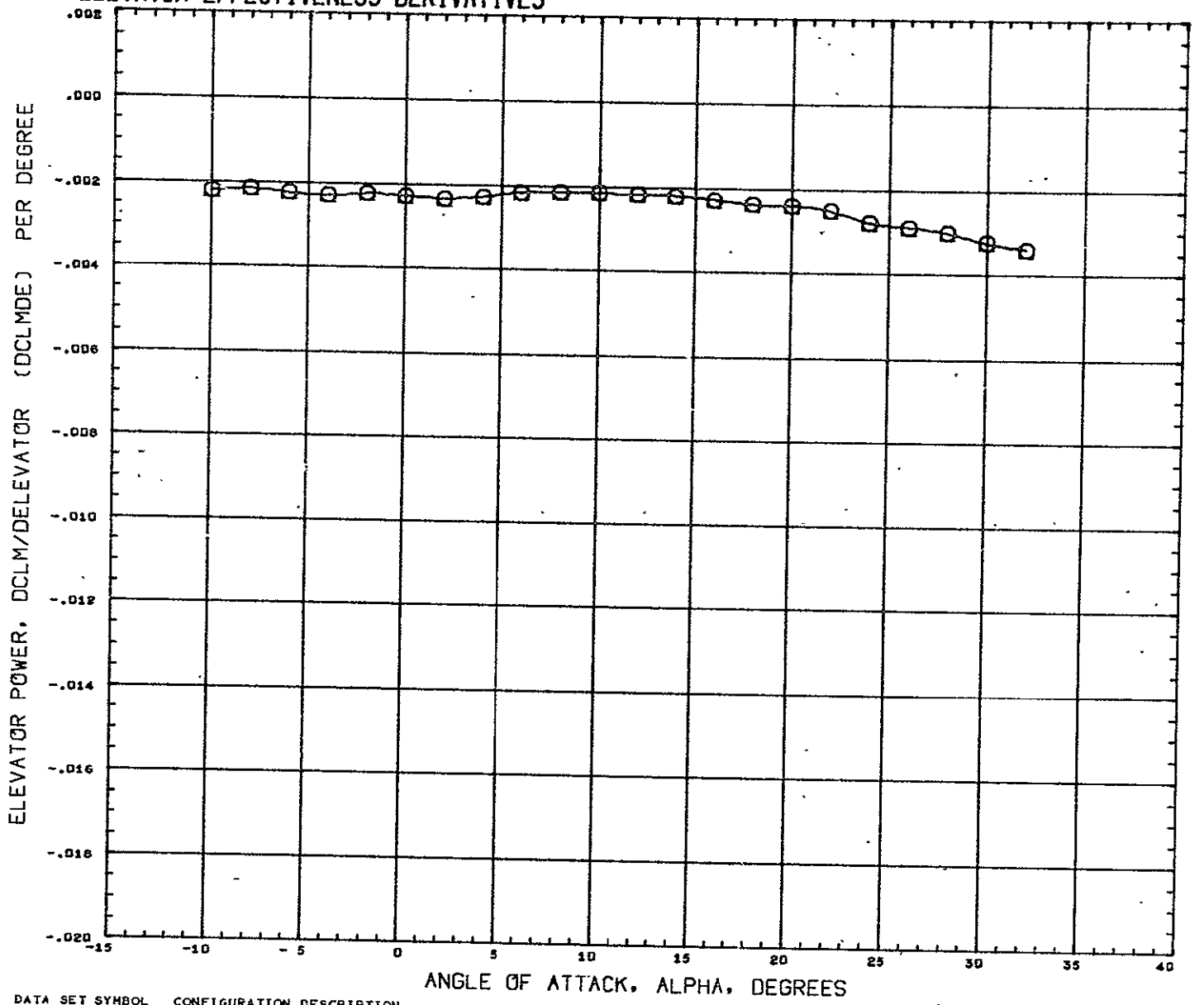
BETA AILRON
0.000 0.000

MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL (P29D6I) ○ CONFIGURATION DESCRIPTION MSFC484 NR DELTA ORBITER B5W17E10V17J2X

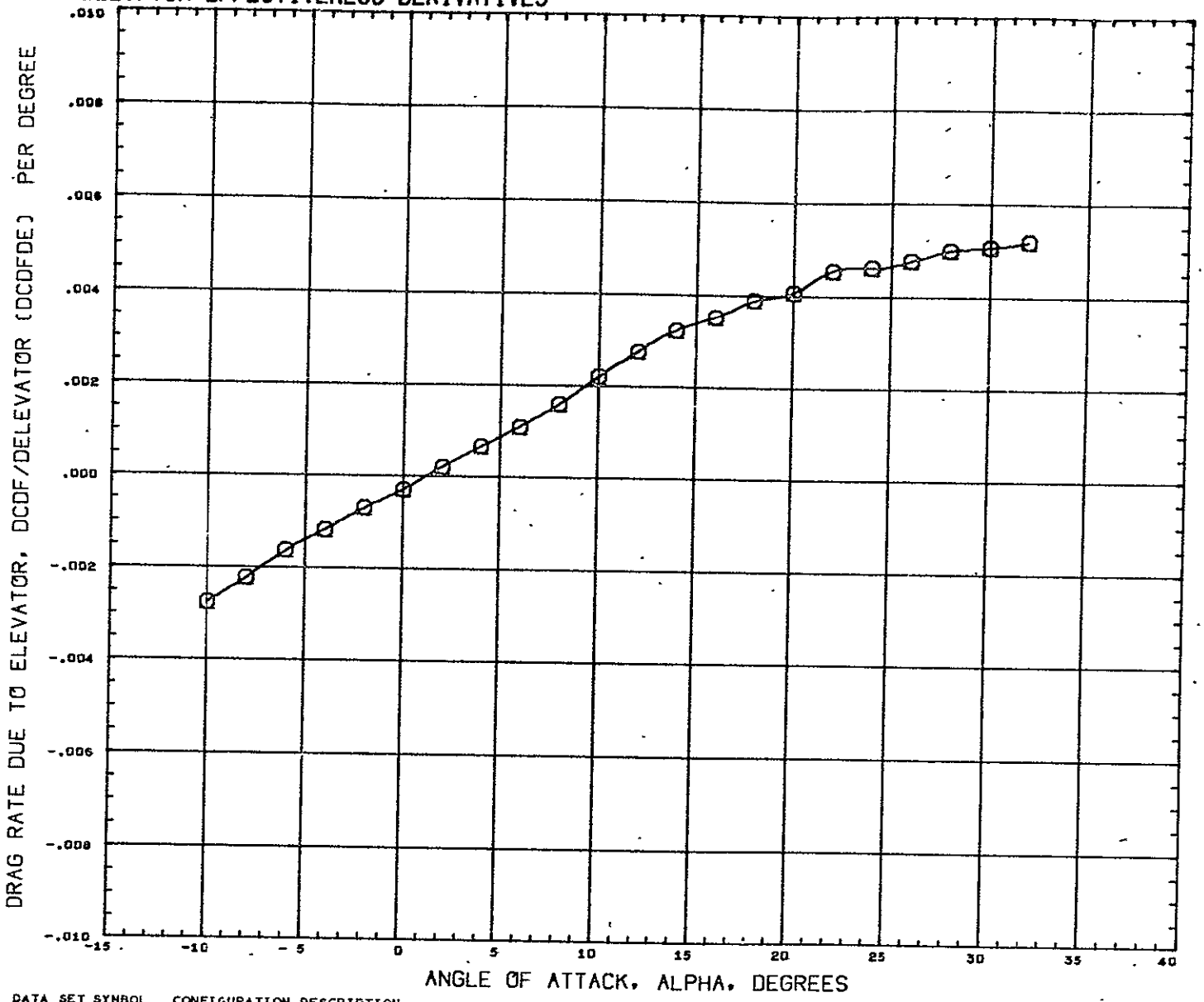
BETA 0.000 AILRON 0.000

MACH 2.000

REFERENCE INFORMATION

REFS	6064.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
(P29061) ○ MSFC484 NR DELTA ORBITER B5W17E10V17J2X

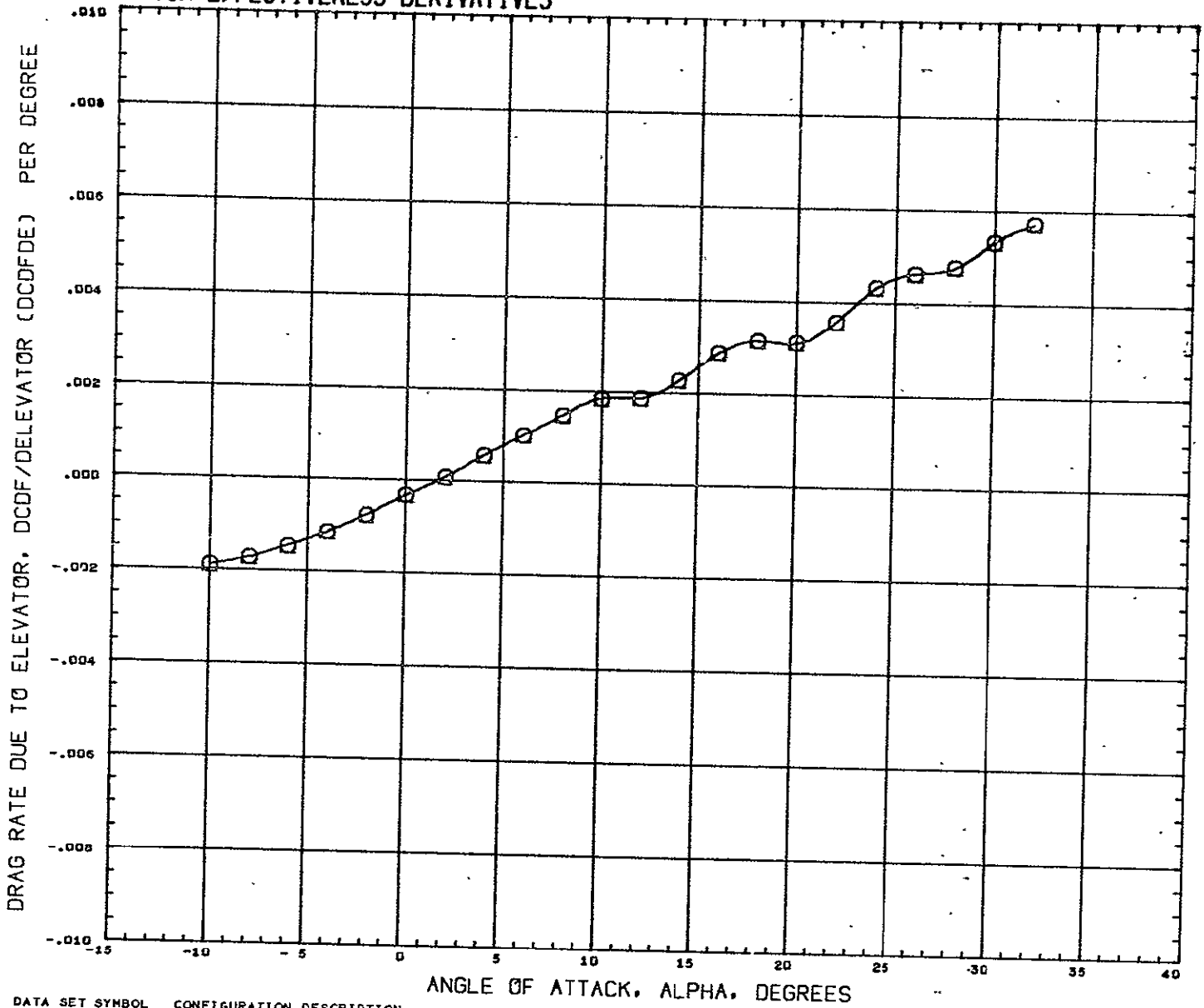
BETA AILRON
0.000 0.000

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL (P29D6I) ○ CONFIGURATION DESCRIPTION: HSFC484 NR DELTA ORBITER B5W17E10V17J2X

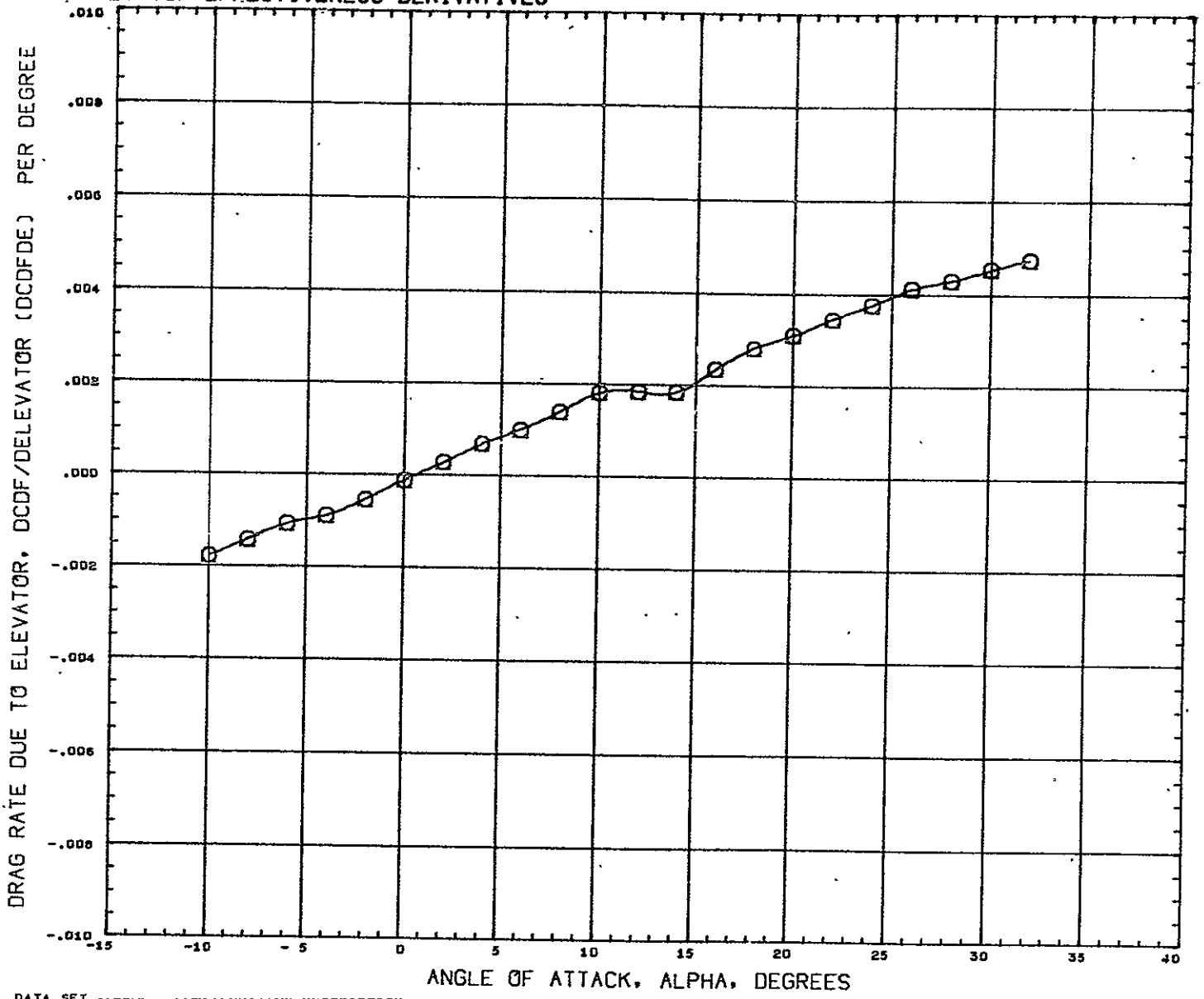
BETA 0.000 AILRON 0.000

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



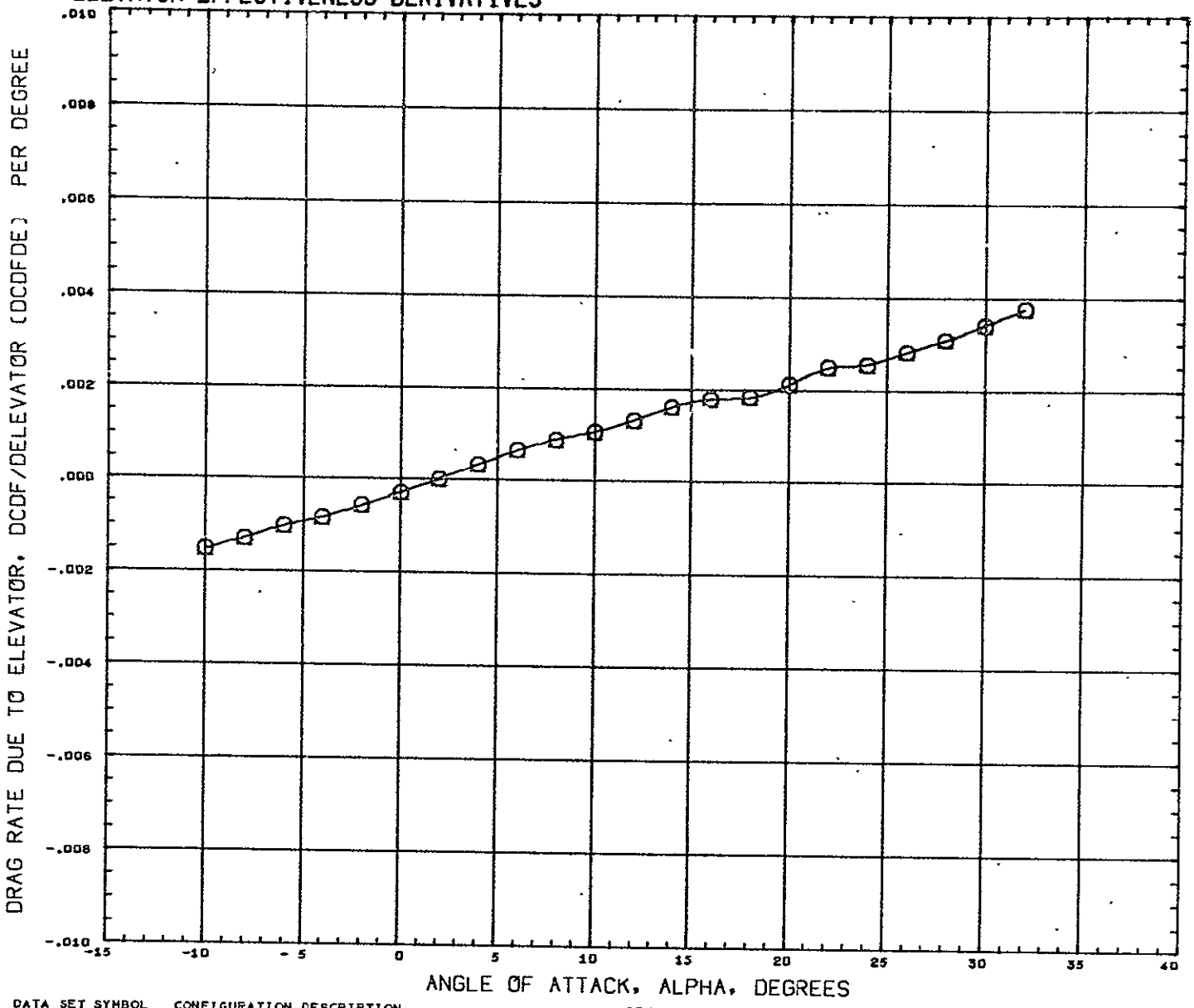
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	AILRON
(P29061) O	MSFC484 NR DELTA ORBITER B5W17E10V17J2X	0.000	0.000

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL (P29061) Q — CONFIGURATION DESCRIPTION: MSFC484 NR DELTA ORBITER B5W17E10V17J2X

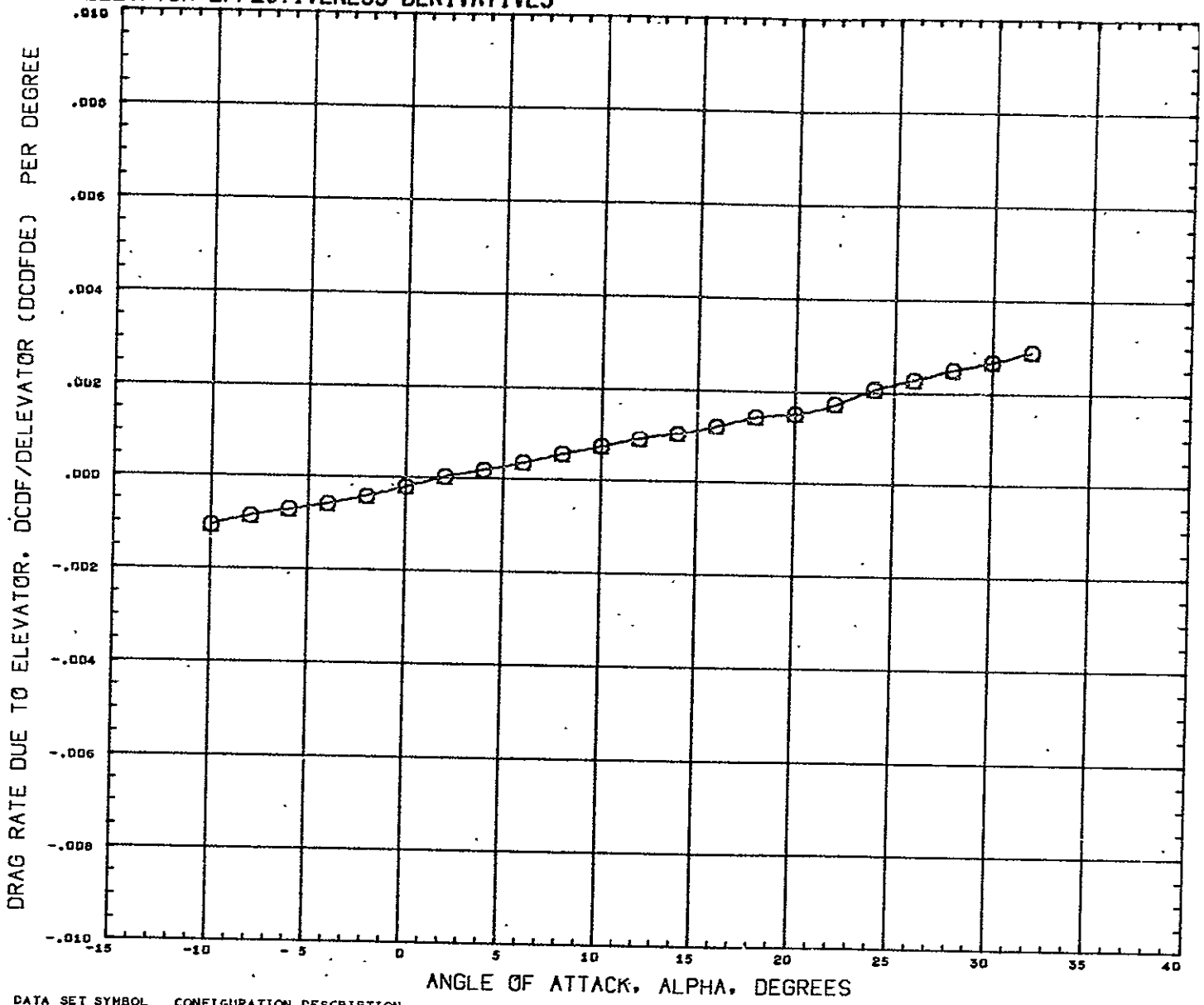
BETA	AILRON
0.000	0.000

MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
(P2906I) O MSFC484 NR DELTA ORBITER B5W17E10V17J2X

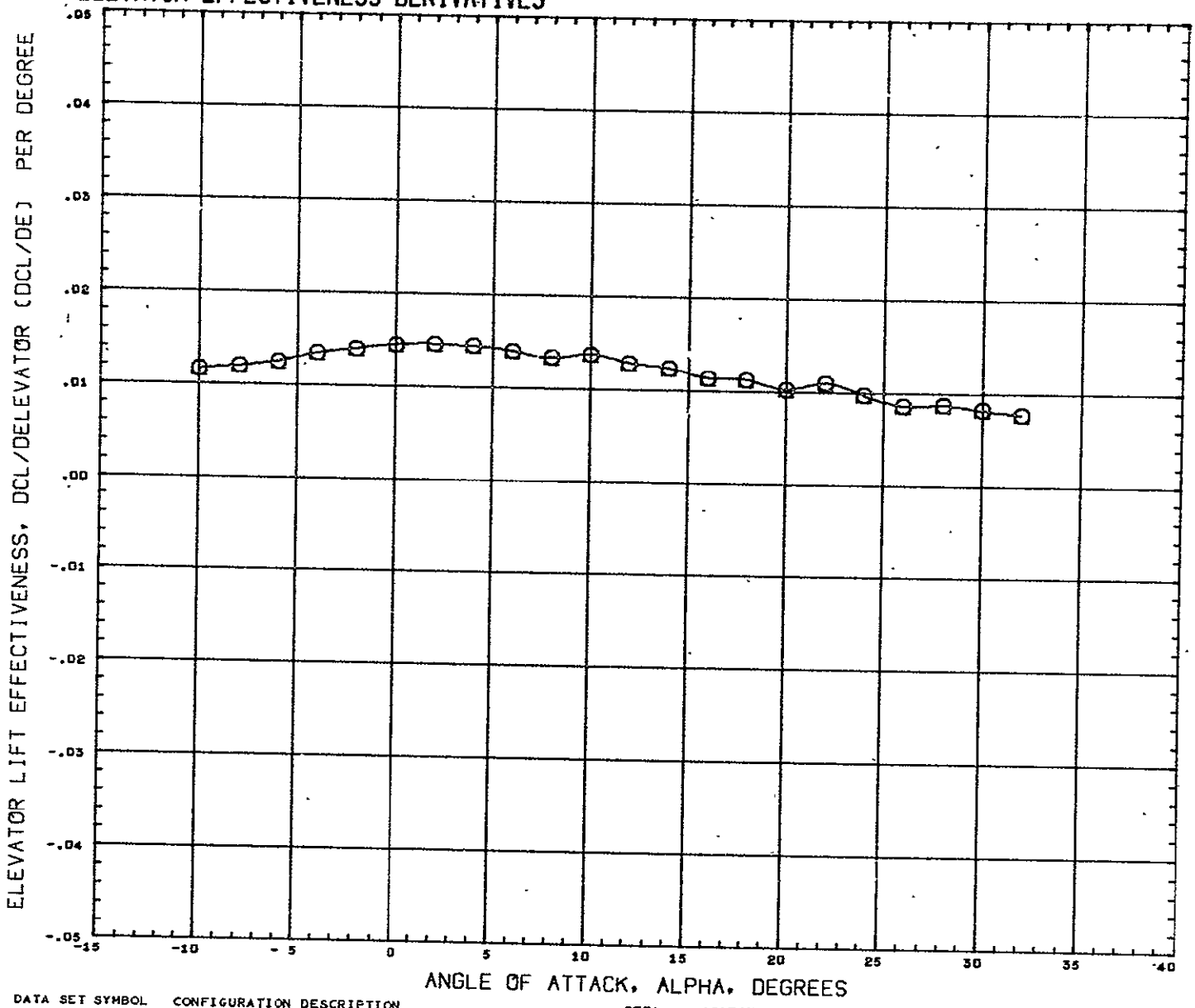
BETA	AILRON
0.000	0.000

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL (F2906I) ○ CONFIGURATION DESCRIPTION MSFC484 NR DELTA ORBITER B5W17E10V17J2X

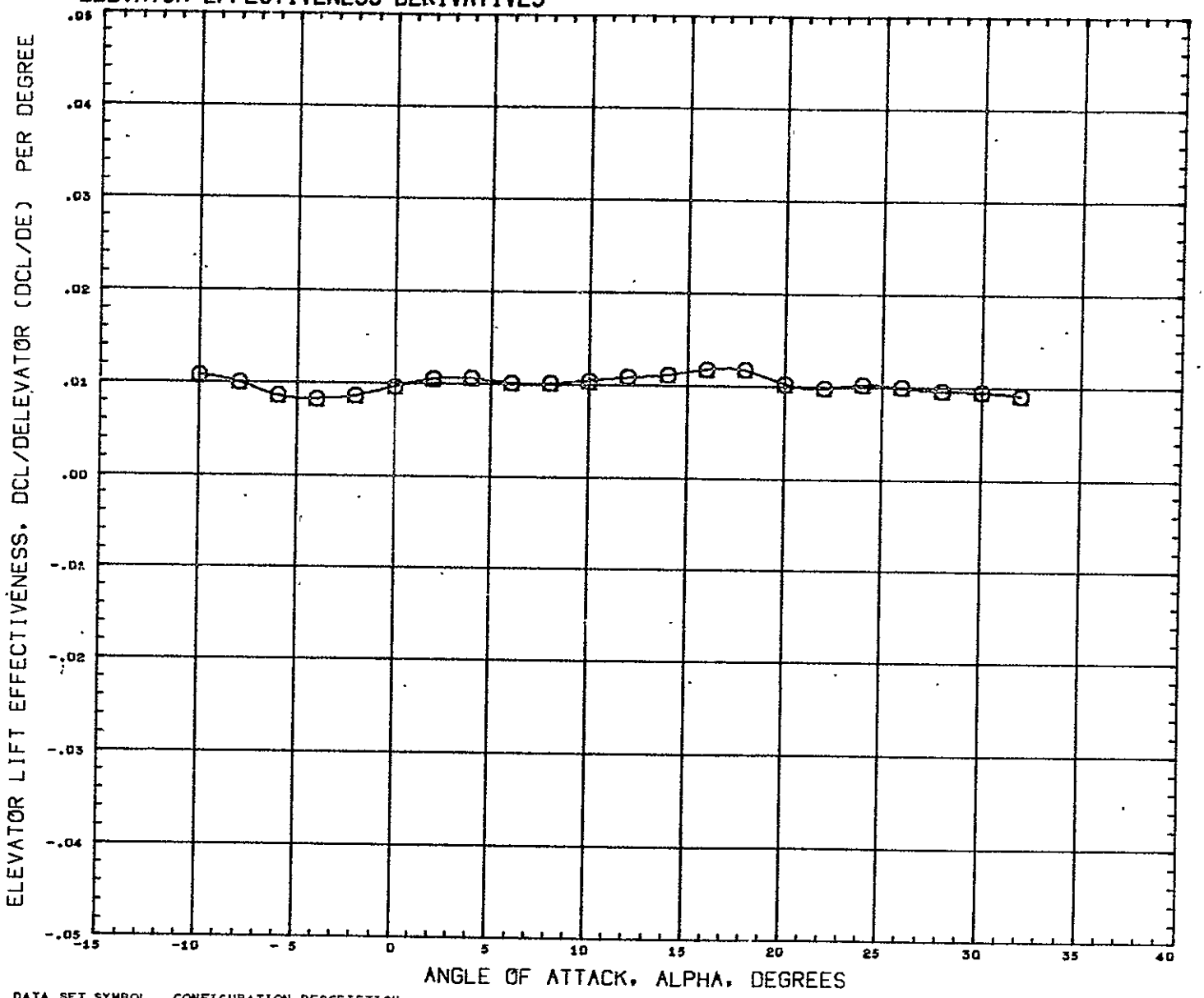
BETA 0.000 AILRON 0.000

MACH 0.600

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



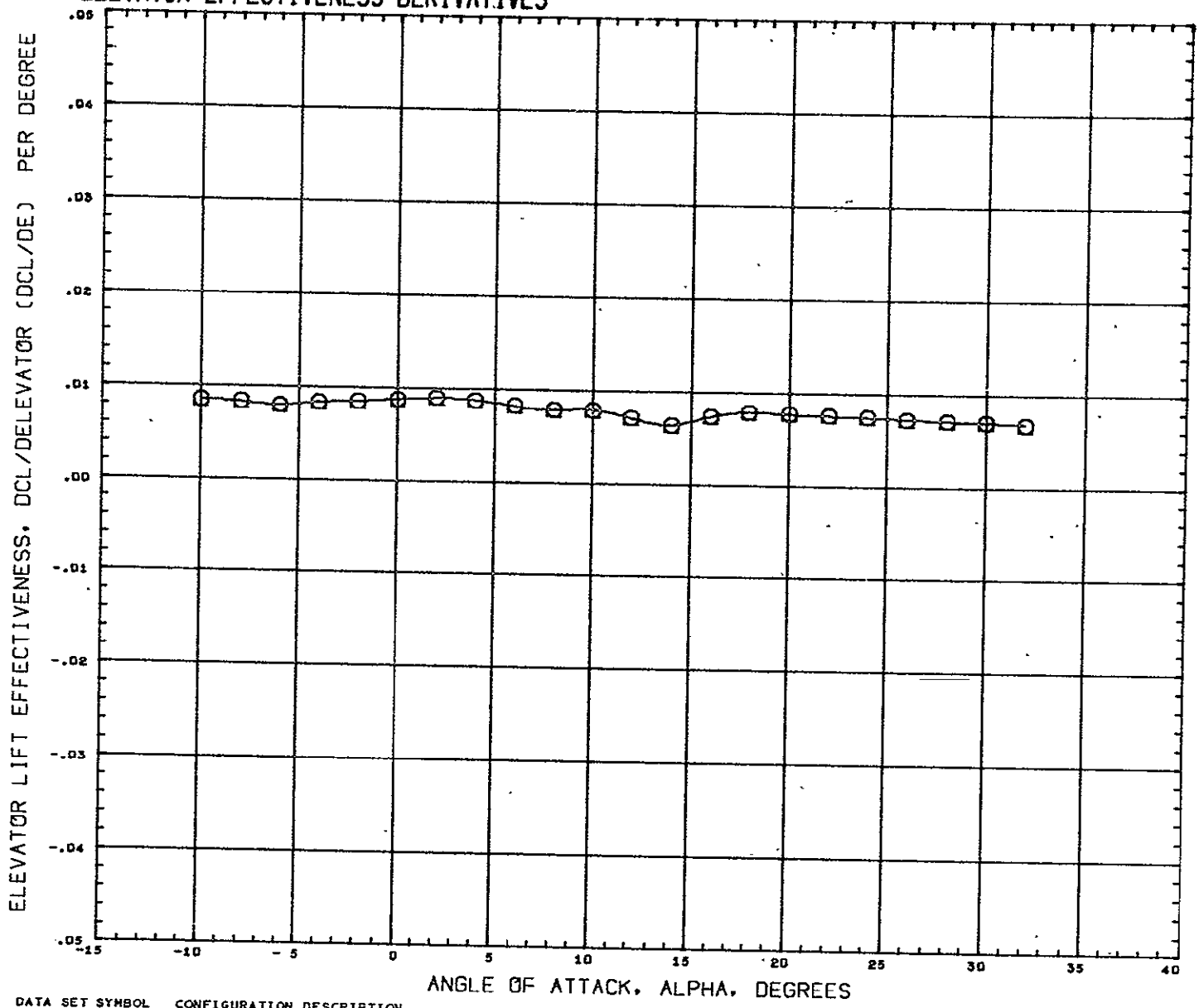
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	AILRON
(P29061) O	MSFC484 NR DELTA ORBITER B5W17E1UV17J2X	0.000	0.000

MACH 0.900

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL (P2906I) ○ CONFIGURATION DESCRIPTION MSFC484 NR DELTA ORBITER D5W17E10V17J2X

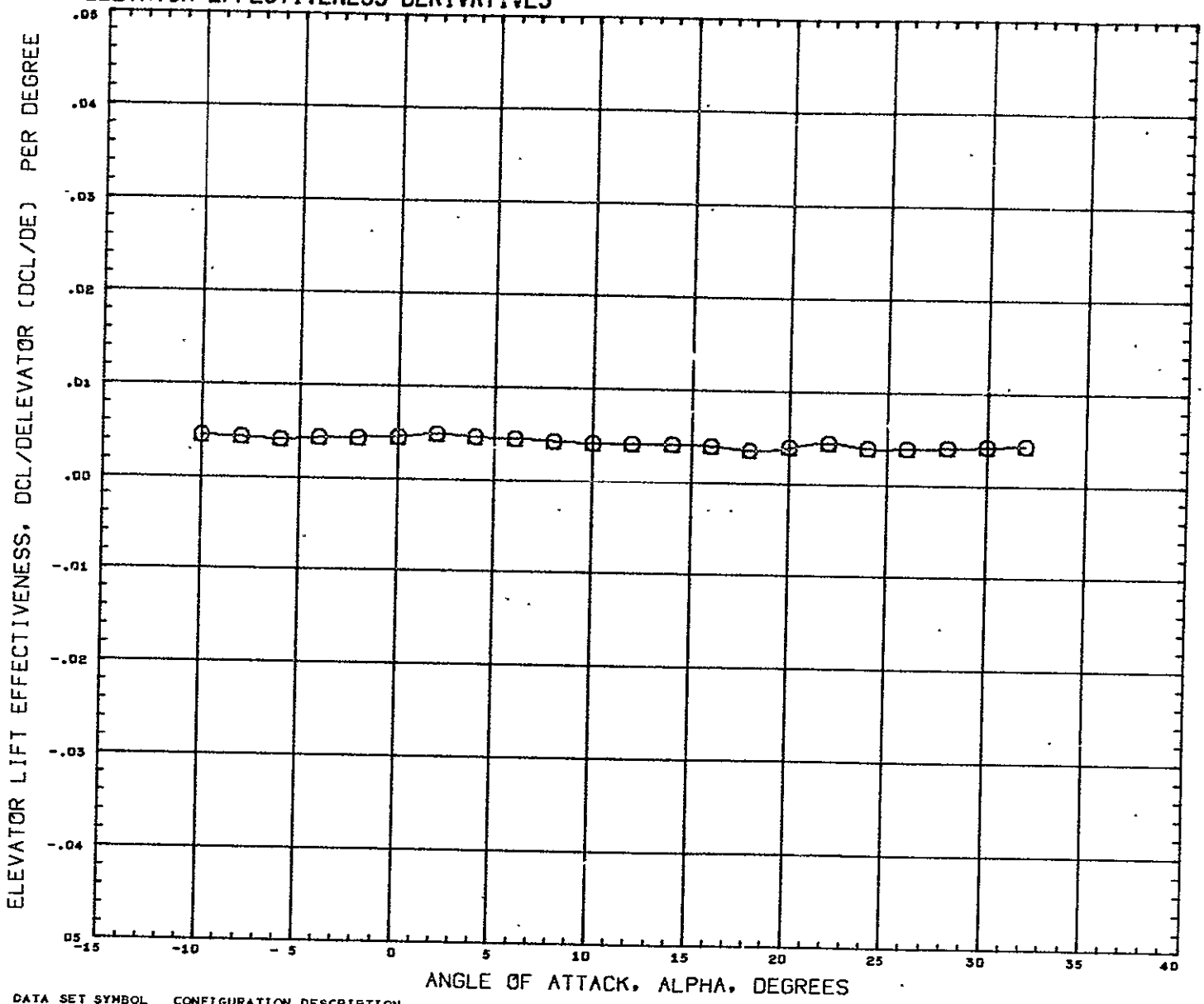
BETA 0.000 AILRON 0.000

MACH 1.100

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
(F290GI) O MSFC484 NR DELTA ORBITER B5W17E10V17J2X

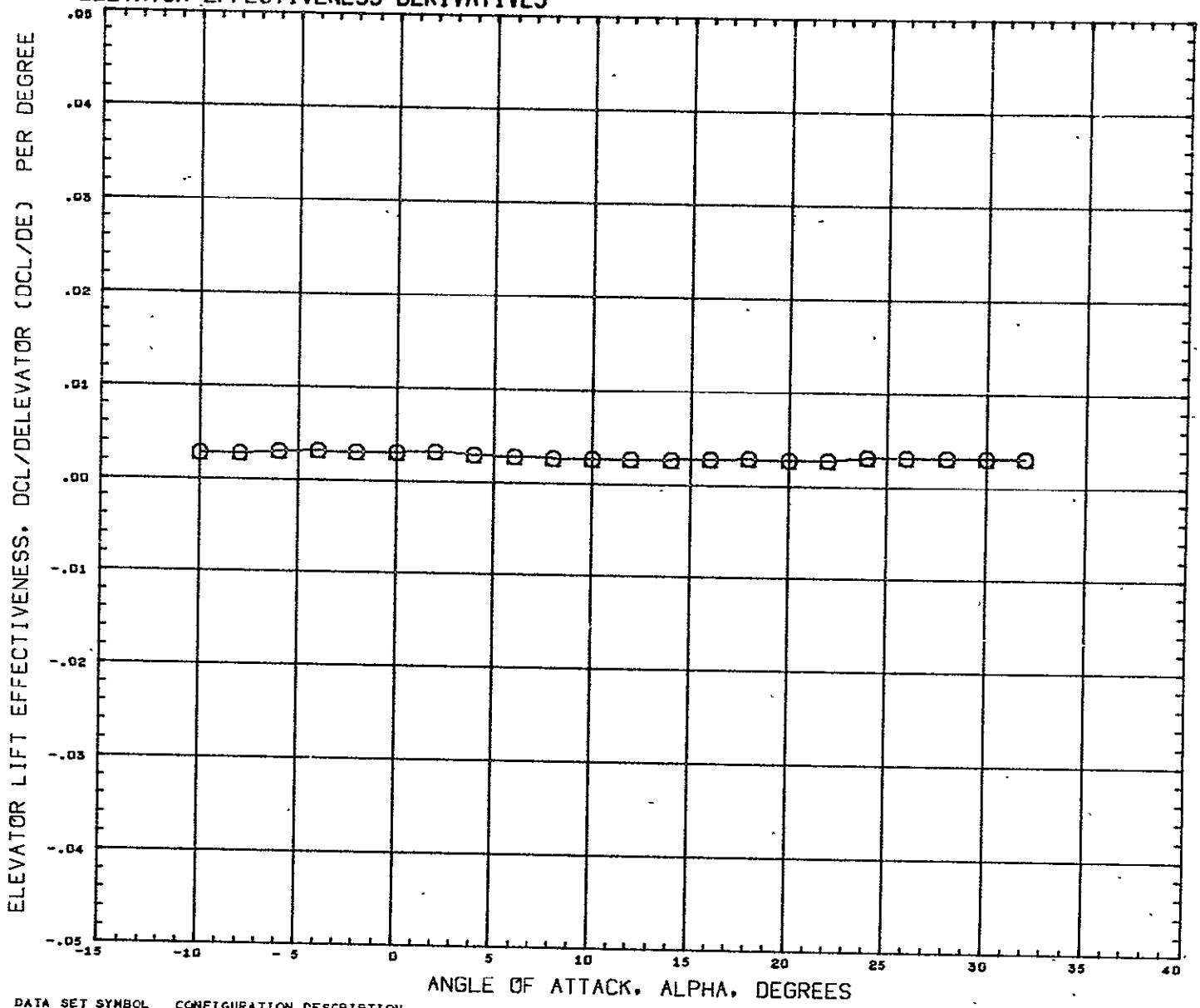
BETA AILRON
0.000 0.000

MACH 1.500

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL (P29061) Q CONFIGURATION DESCRIPTION MSFC484 NR DELTA ORBITER B5W17E10V17J2X

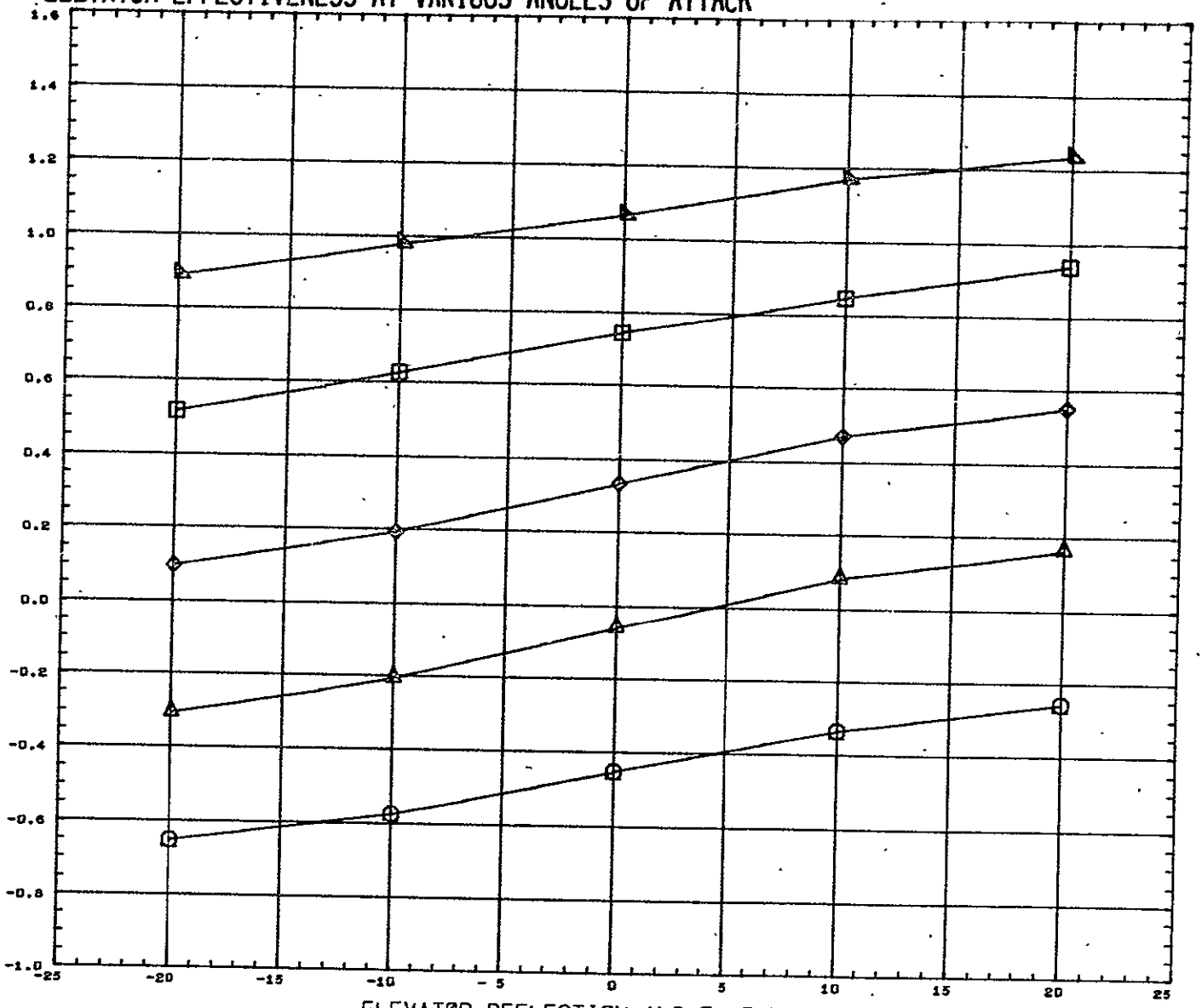
BETA 0.000 AILRON 0.000

MACH 2.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRF	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRF	130.0004	INCHES
SCALE	0.0035	SCALE.

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	0.600	BETA	0.000
AILRON	0.000		

DATA SOURCE

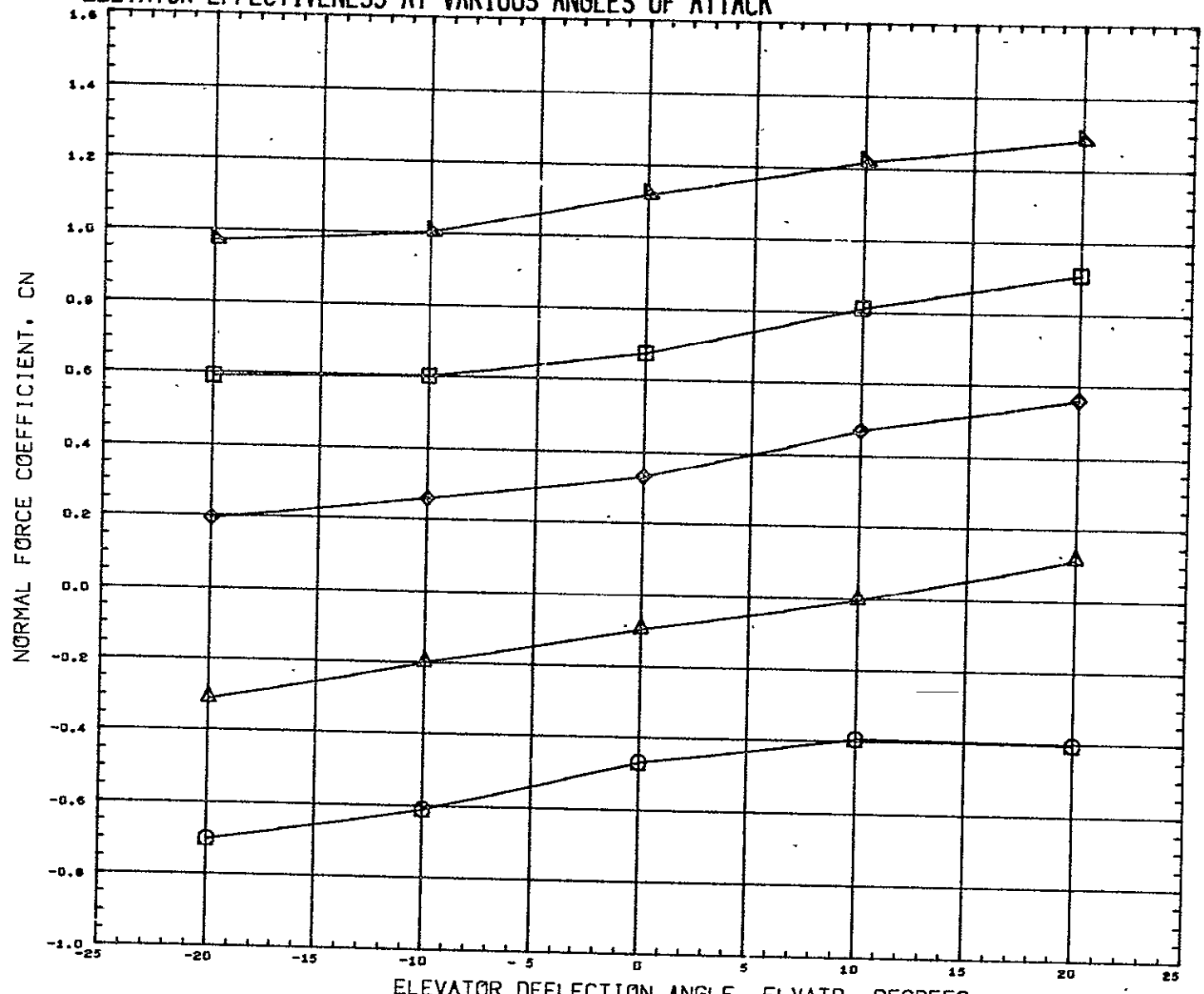
DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	0.900	BETA	0.000
AILRON	0.000		

DATA SOURCE

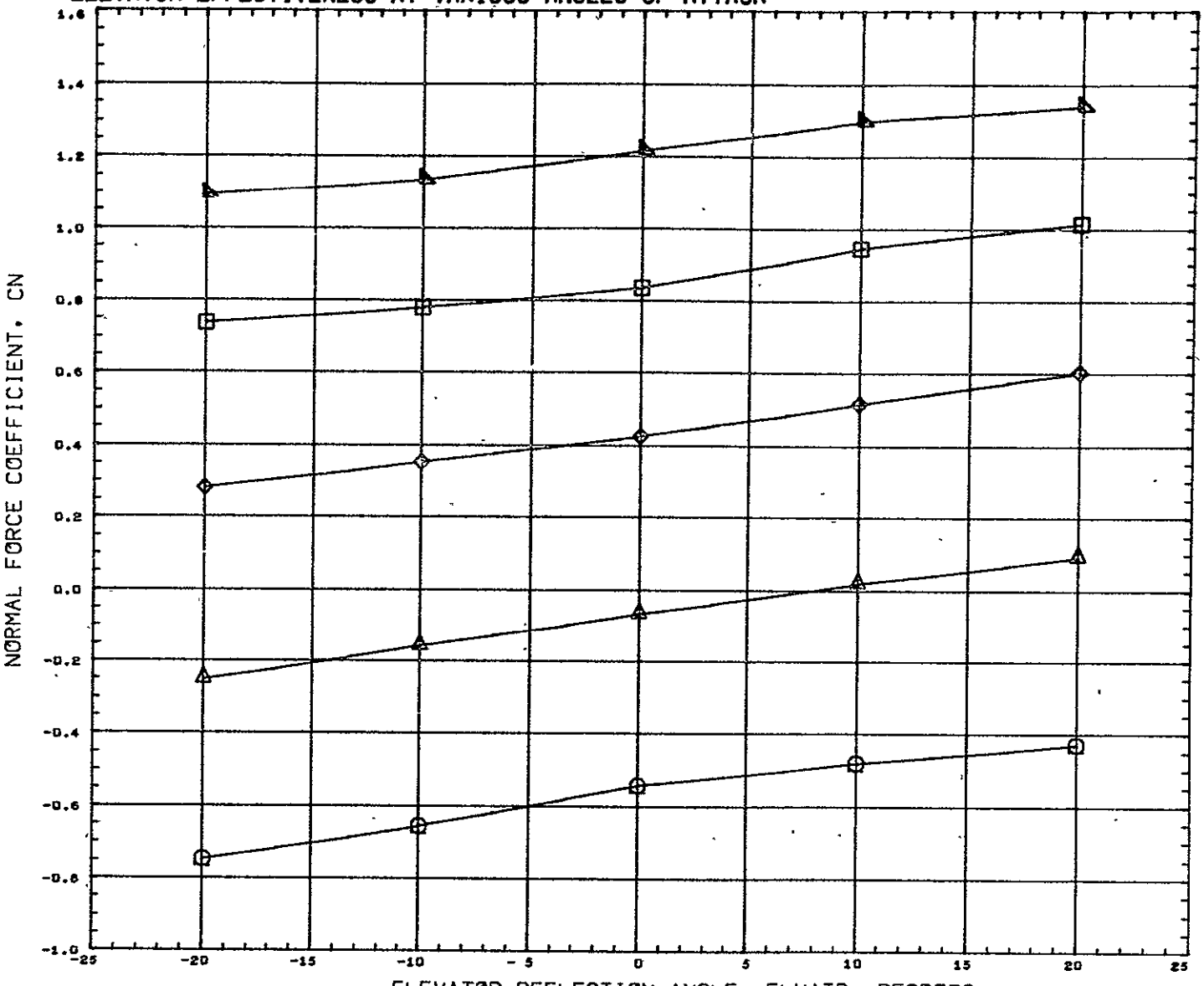
DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
⊘	30.000

PARAMETRIC VALUES

MACH	1.100	BETA	0.000
AILRON	0.000		

DATA SOURCE

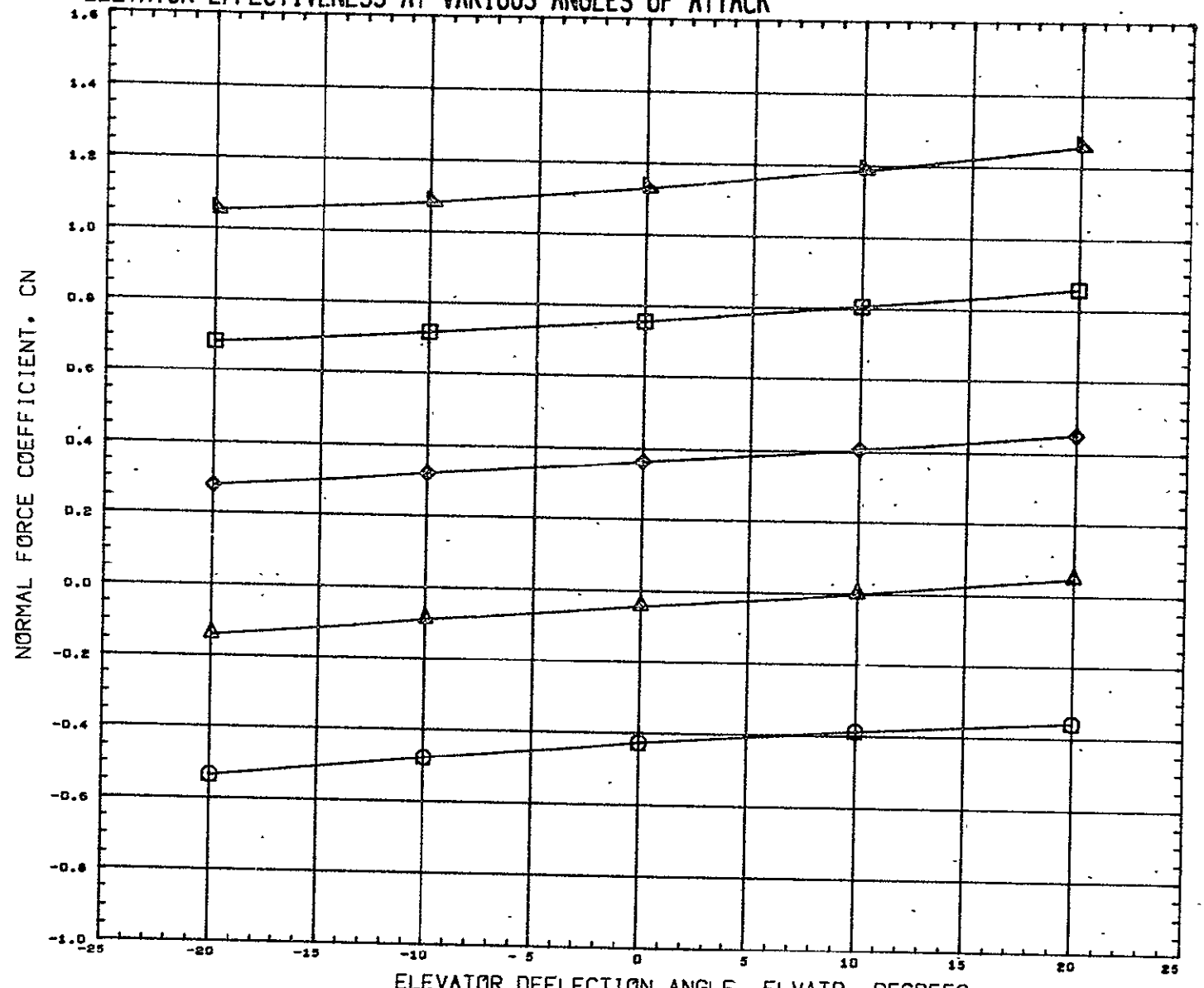
DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRF	1422.5040	INCHES
YMRF	0.0000	INCHES
ZMRF	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	- 10.000
△	0.000
◇	10.000
□	20.000
◺	30.000

PARAMETRIC VALUES

MACH	1.500	BETA	0.000
AILRON	0.000		

DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907I	- 20.000	V2908I	- 10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

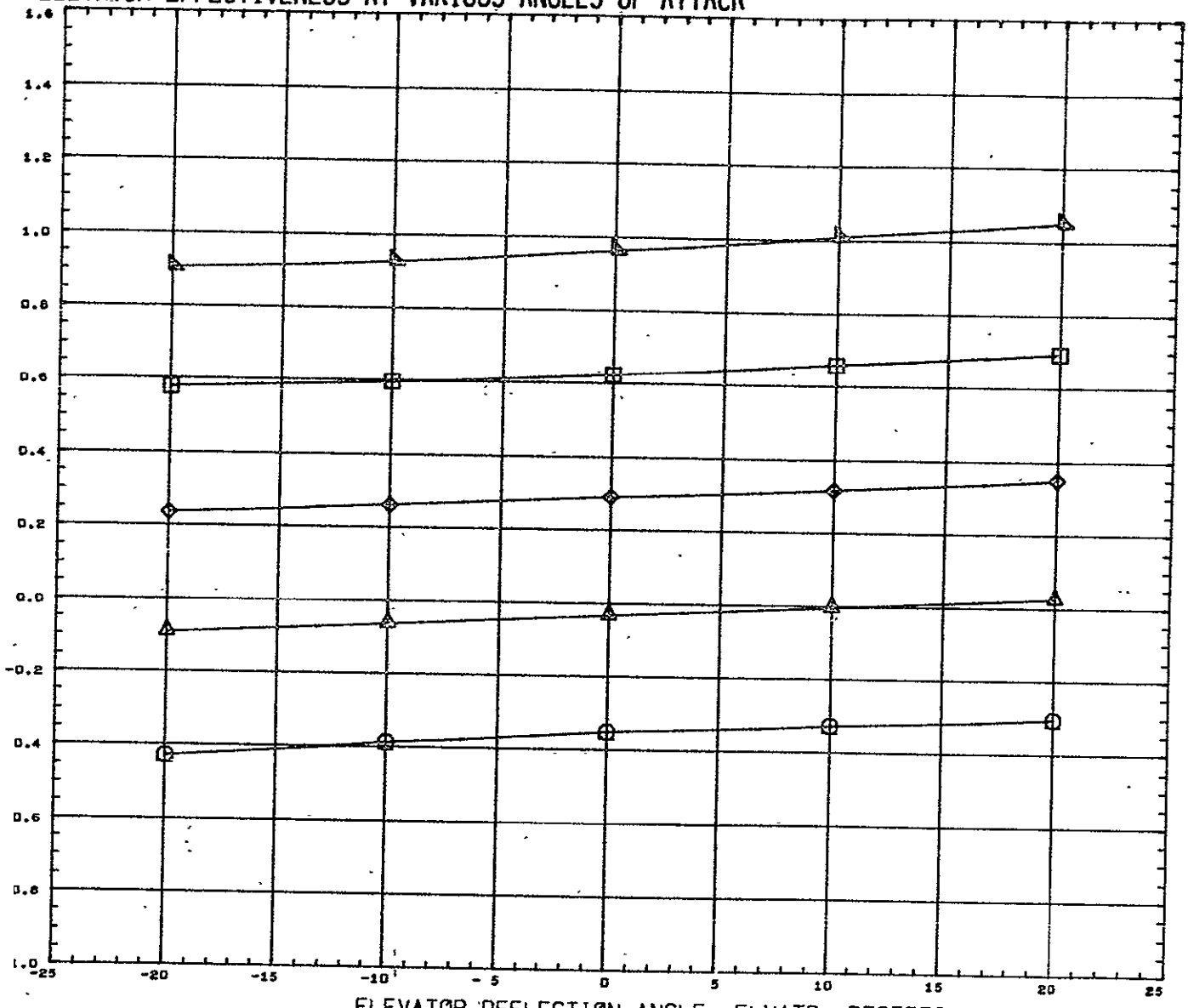
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (V2907I) 03 AUG 71 PAGE 337

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	2.000	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*GI

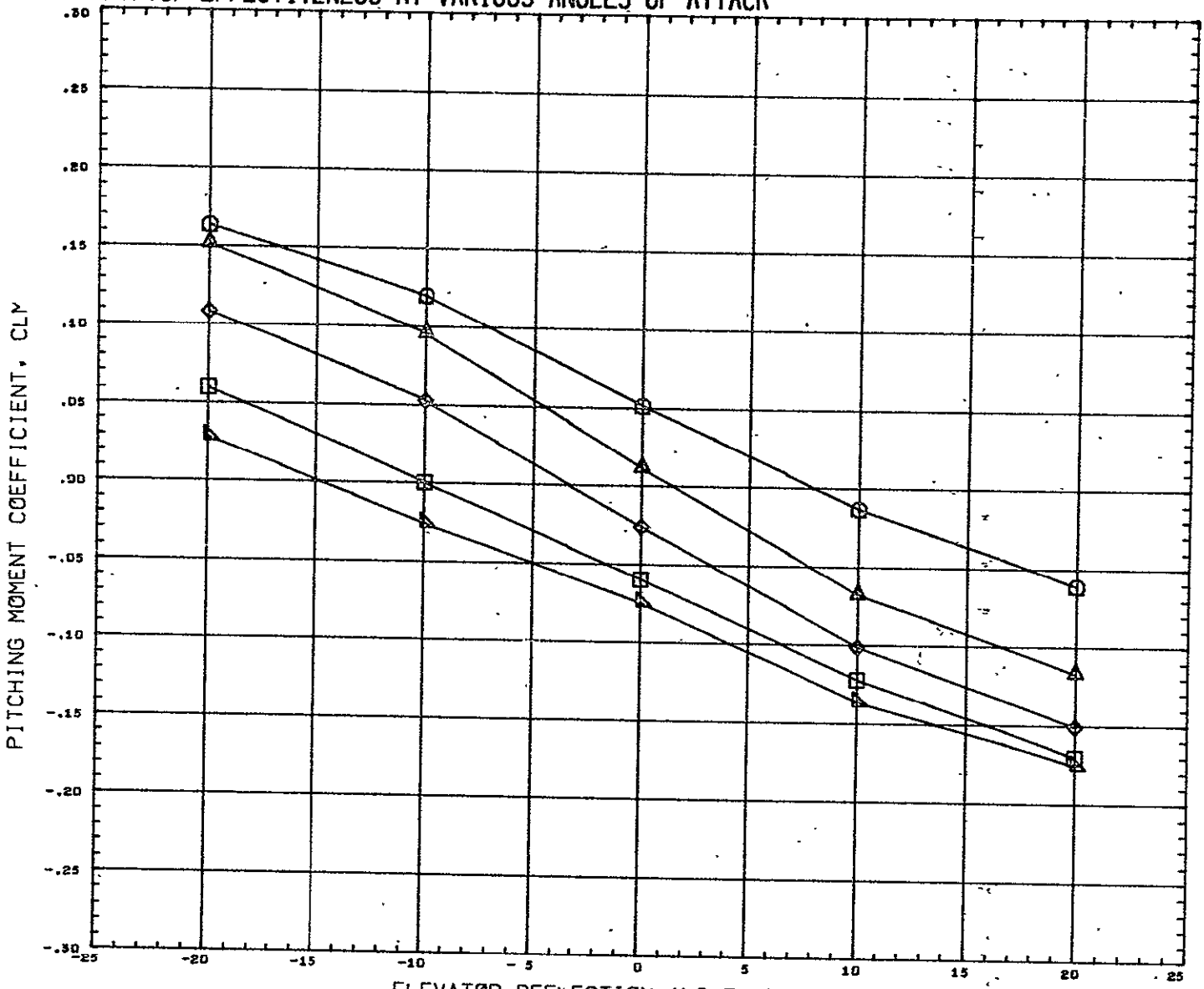
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	0.600	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*GI

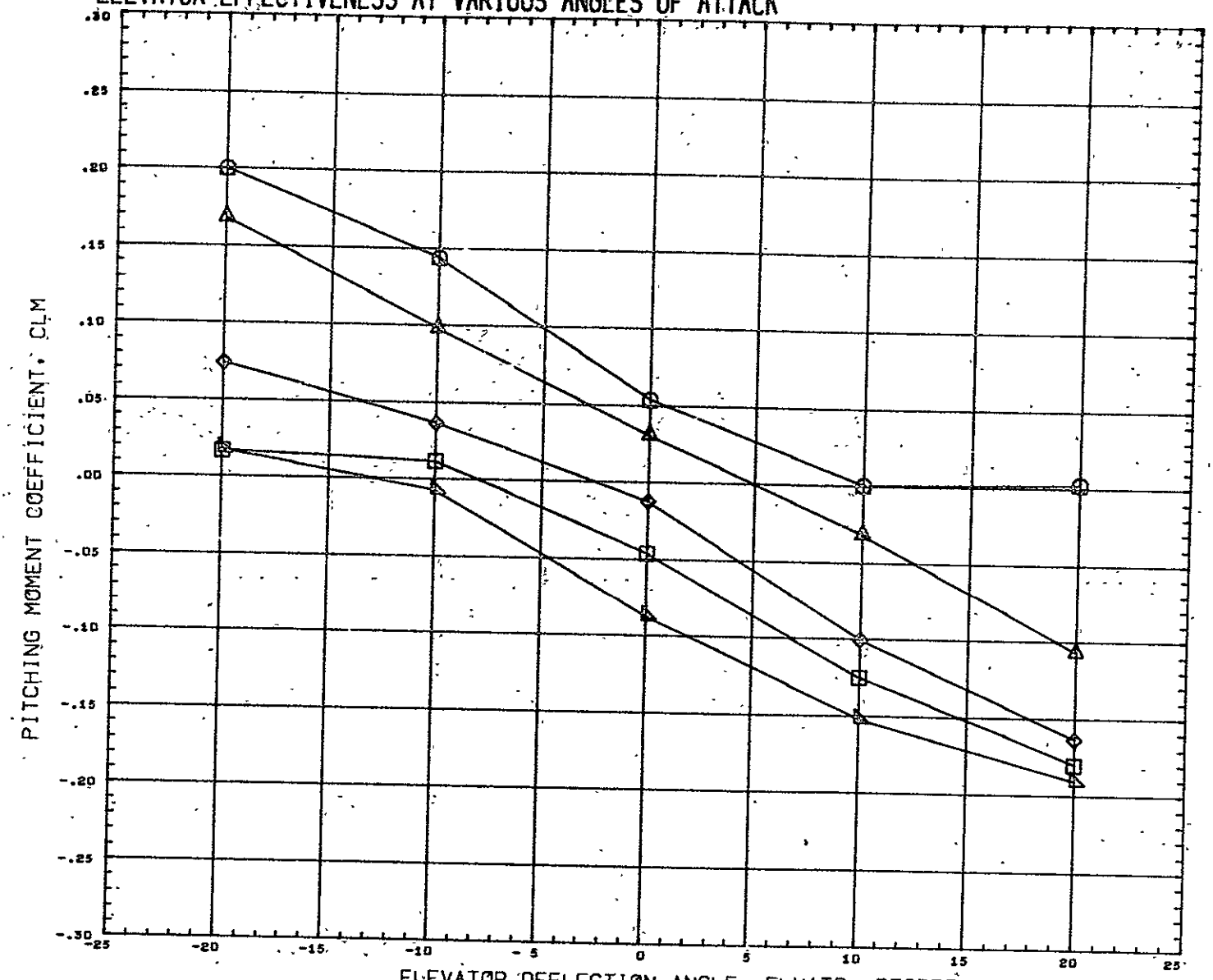
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	-130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
□	0.000
◇	10.000
△	20.000
▽	30.000

PARAMETRIC VALUES

MACH	0.900	BETA	0.000
AILRON	0.000		

DATA SOURCE

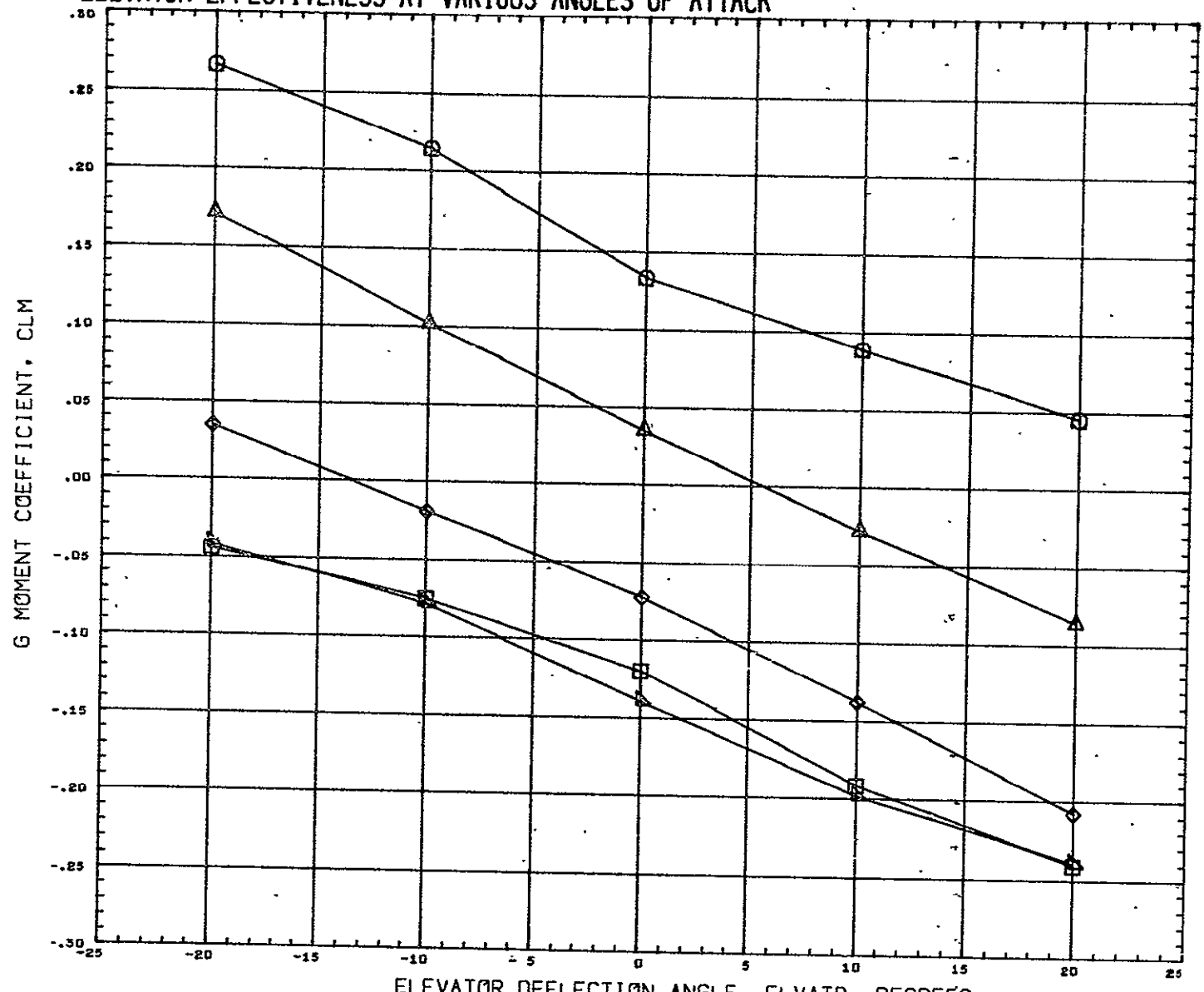
DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	1.100	BETA	0.000
AILRON	0.000		

DATA SOURCE

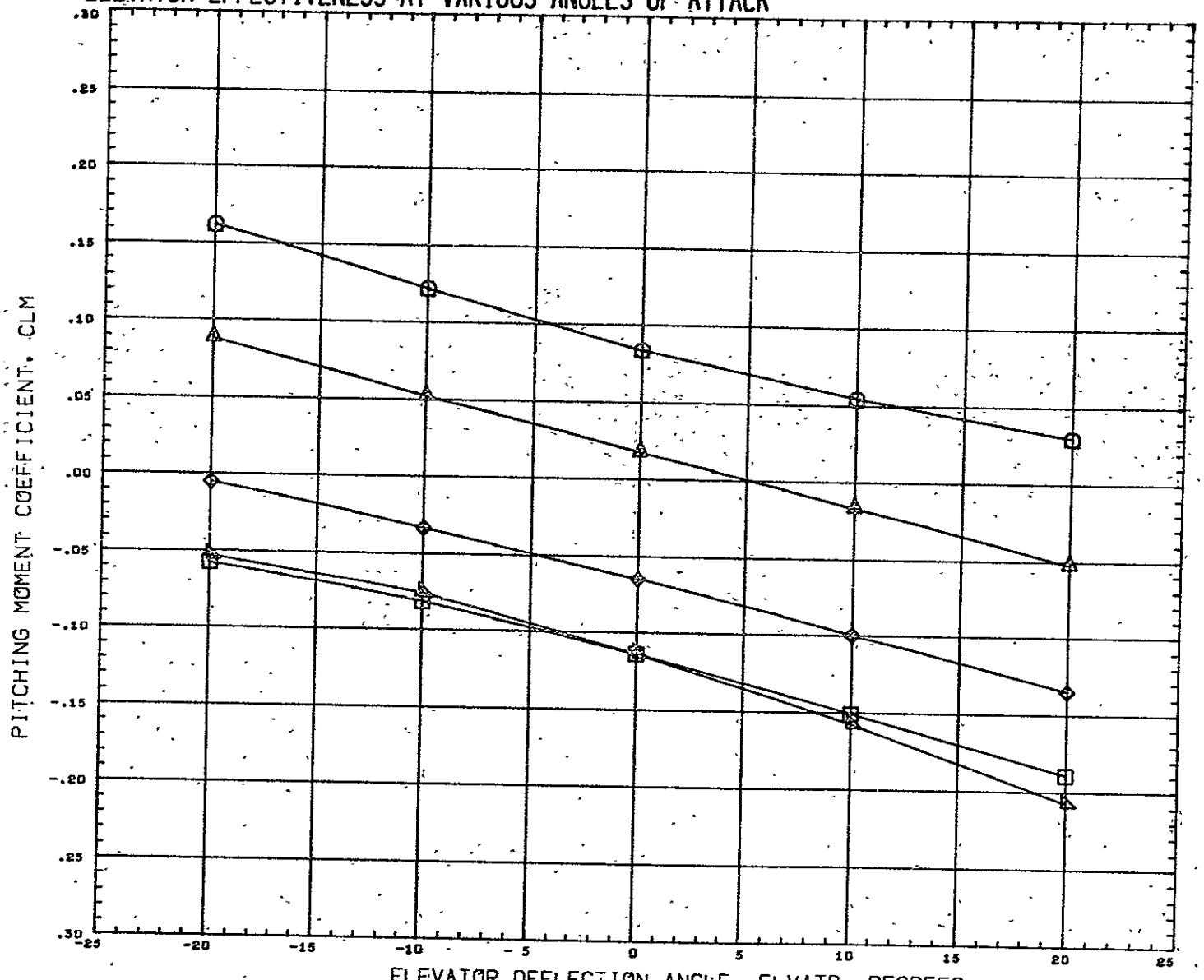
DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	1.500	BETA	0.000
AILRON	0.000		

DATA SOURCE

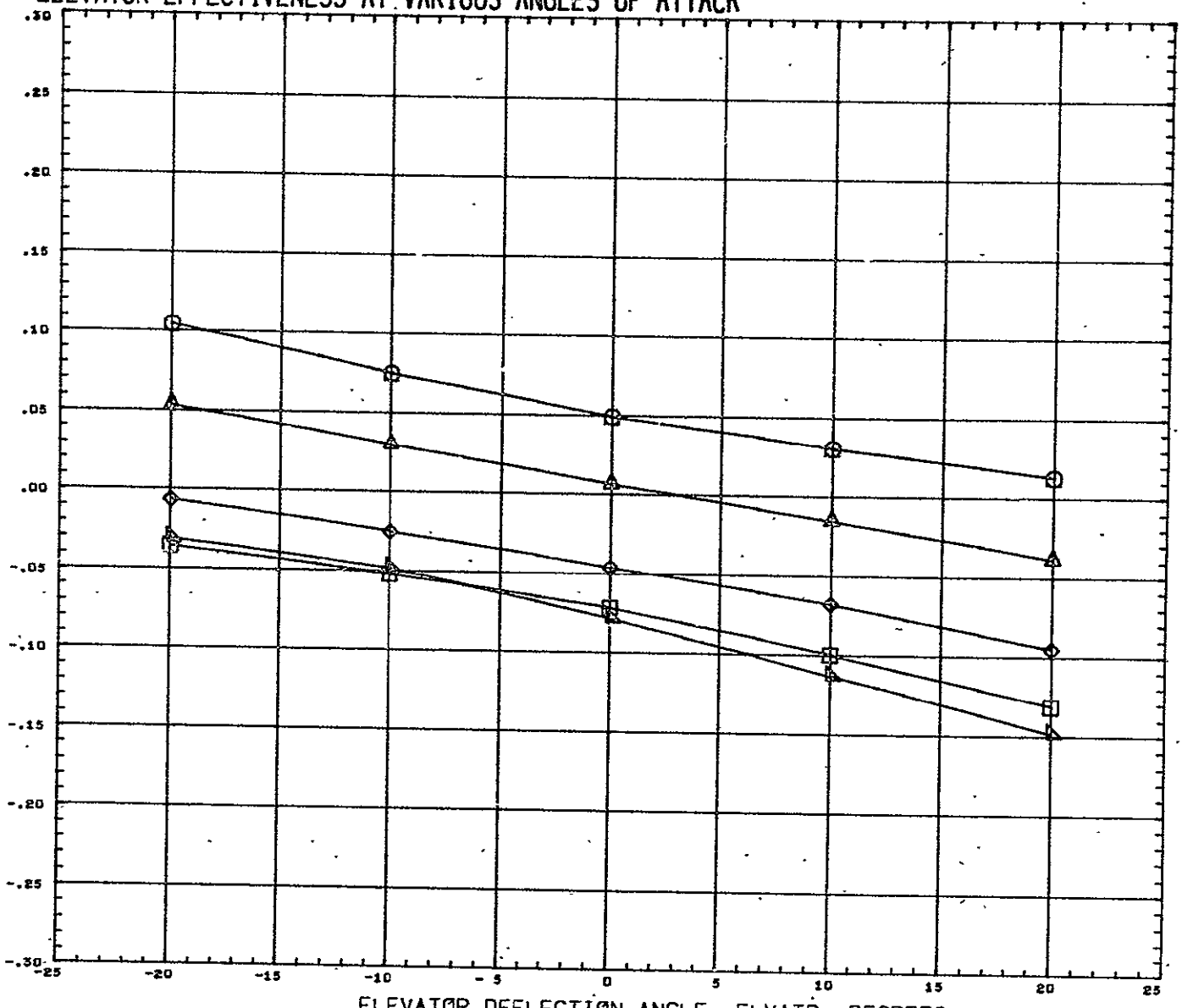
DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
△	-10.000
○	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	2.000	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*GI

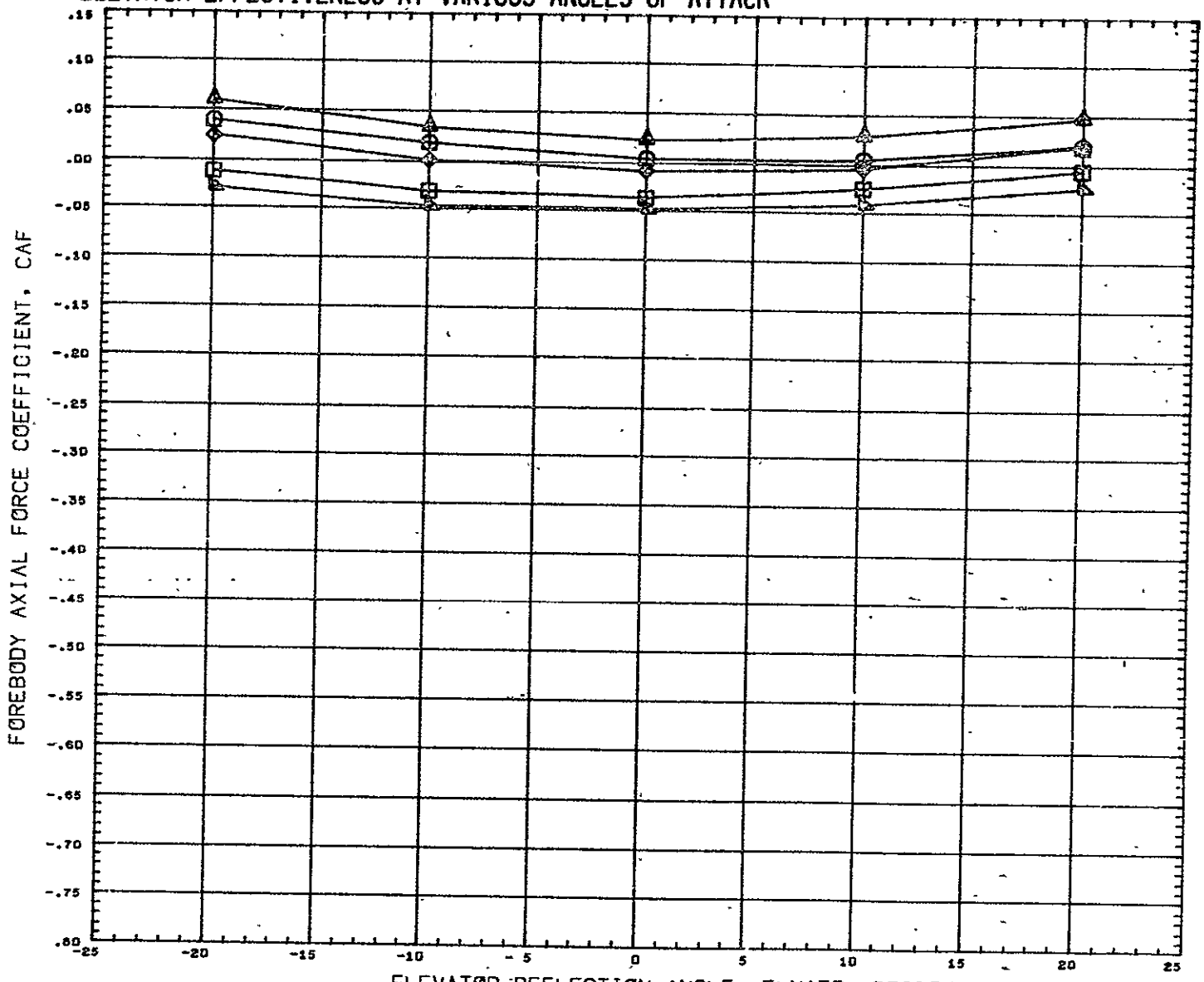
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
△	-10.000
○	0.000
◇	10.000
□	20.000
⊿	30.000

PARAMETRIC VALUES

MACH	0.600	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*GI

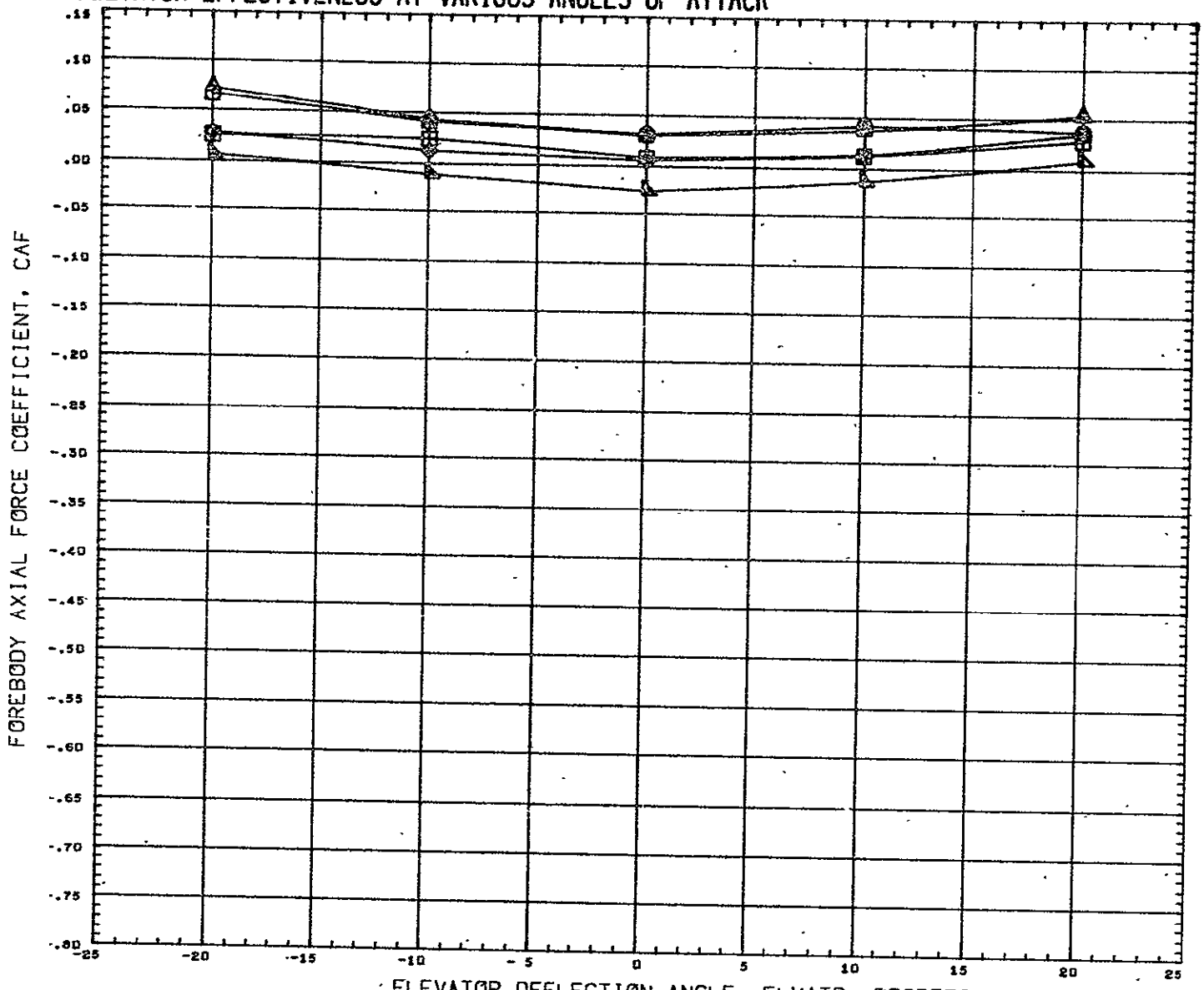
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRF	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	0.900	BETA	0.000
AILRON	0.000		

DATA SOURCE

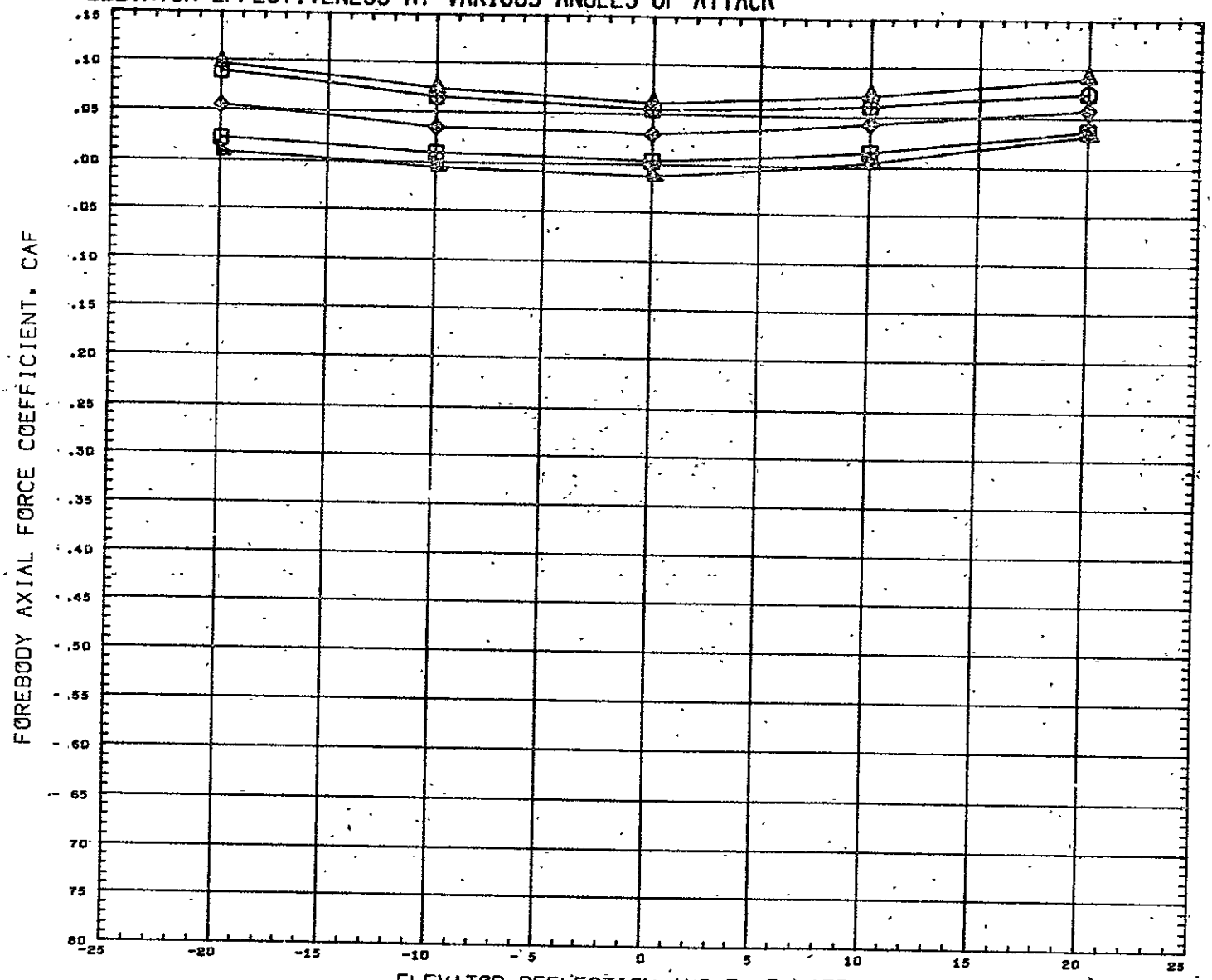
DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
□	10.000
◇	20.000
▷	30.000

PARAMETRIC VALUES

MACH	1.100	BETA	0.000
AILRON	0.000		

DATA HIST. CODE *E*E*GI

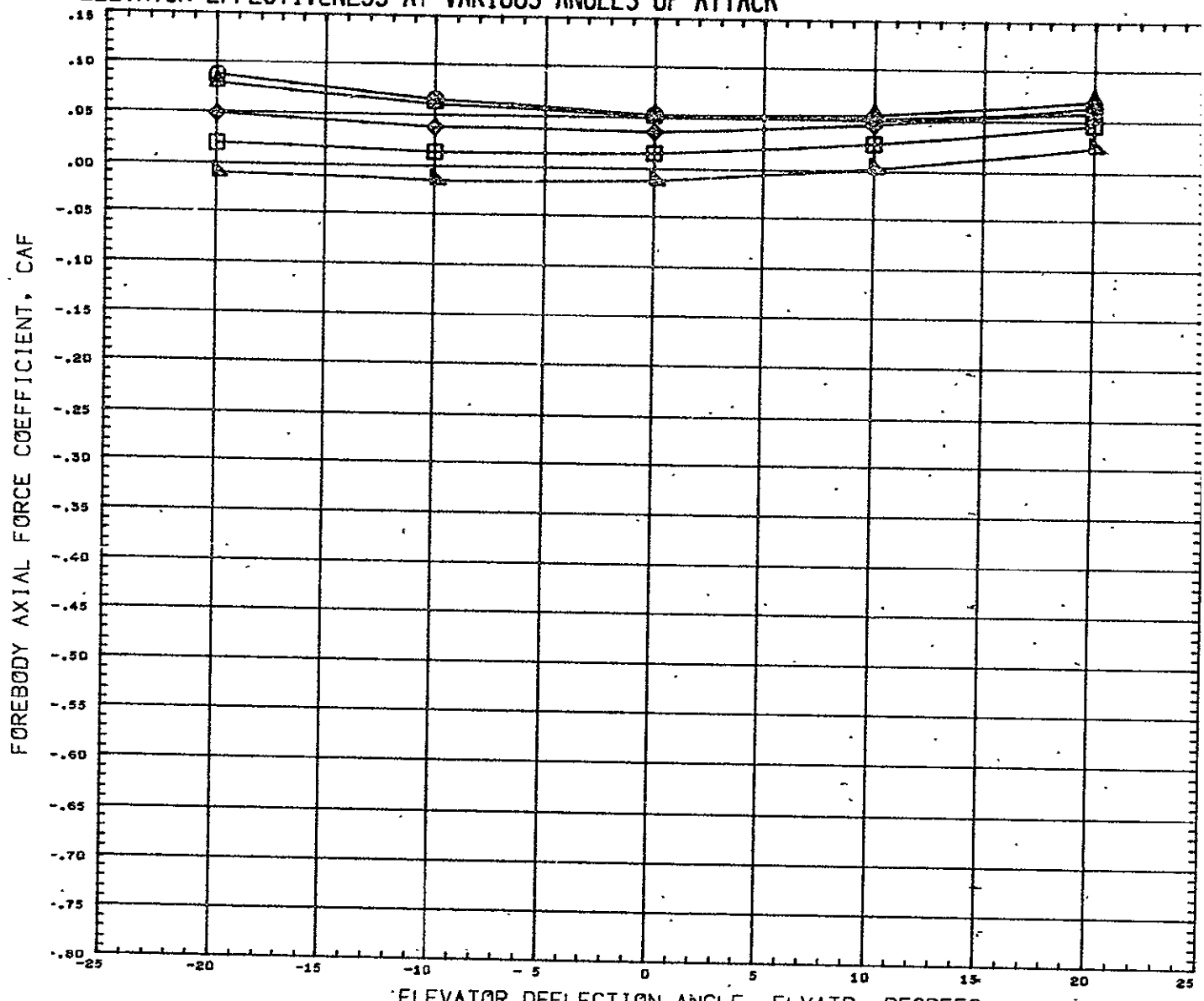
DATA SOURCE

DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
□	-10.000
△	0.000
◇	10.000
▽	20.000
○	30.000

PARAMETRIC VALUES

MACH	1.500	BETA	0.000
AILRON	0.000		

DATA SOURCE

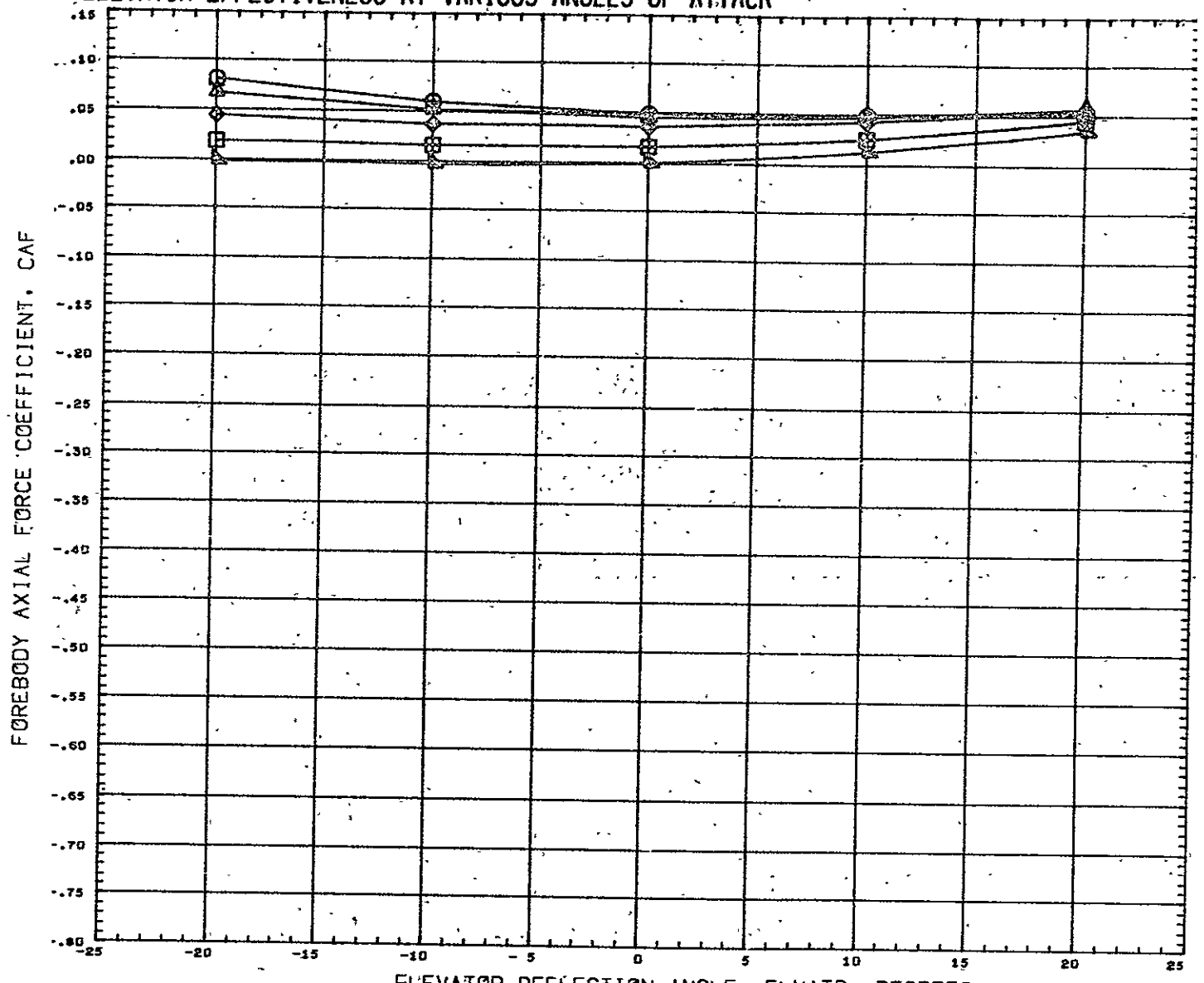
DATASET	ELVATR	DATASET	ELVATR
V2907I	-20.000	V2908I	-10.000
V2906I	0.000	V2909I	10.000
V2910I	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI

ELEVATOR EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	2.000	BETA	0.000
AILRON	0.000		

DATA SOURCE

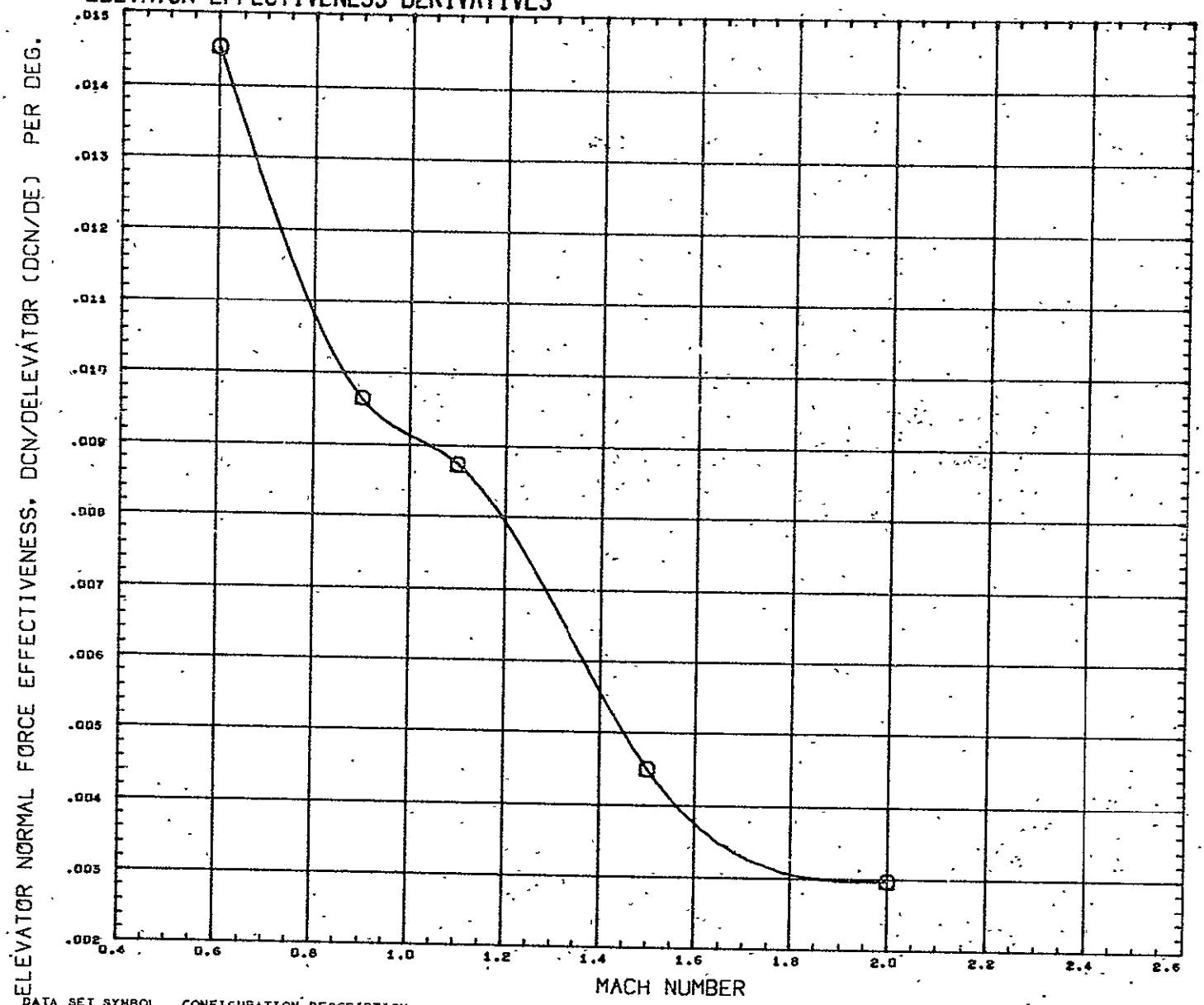
DATASET	ELVATR	DATASET	ELVATR
V29071	-20.000	V29081	-10.000
V29061	0.000	V29091	10.000
V29101	20.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E*E*GI

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(029061) ○ MSFC484 NR DELTA ORBITER B5W17E10V17J2X

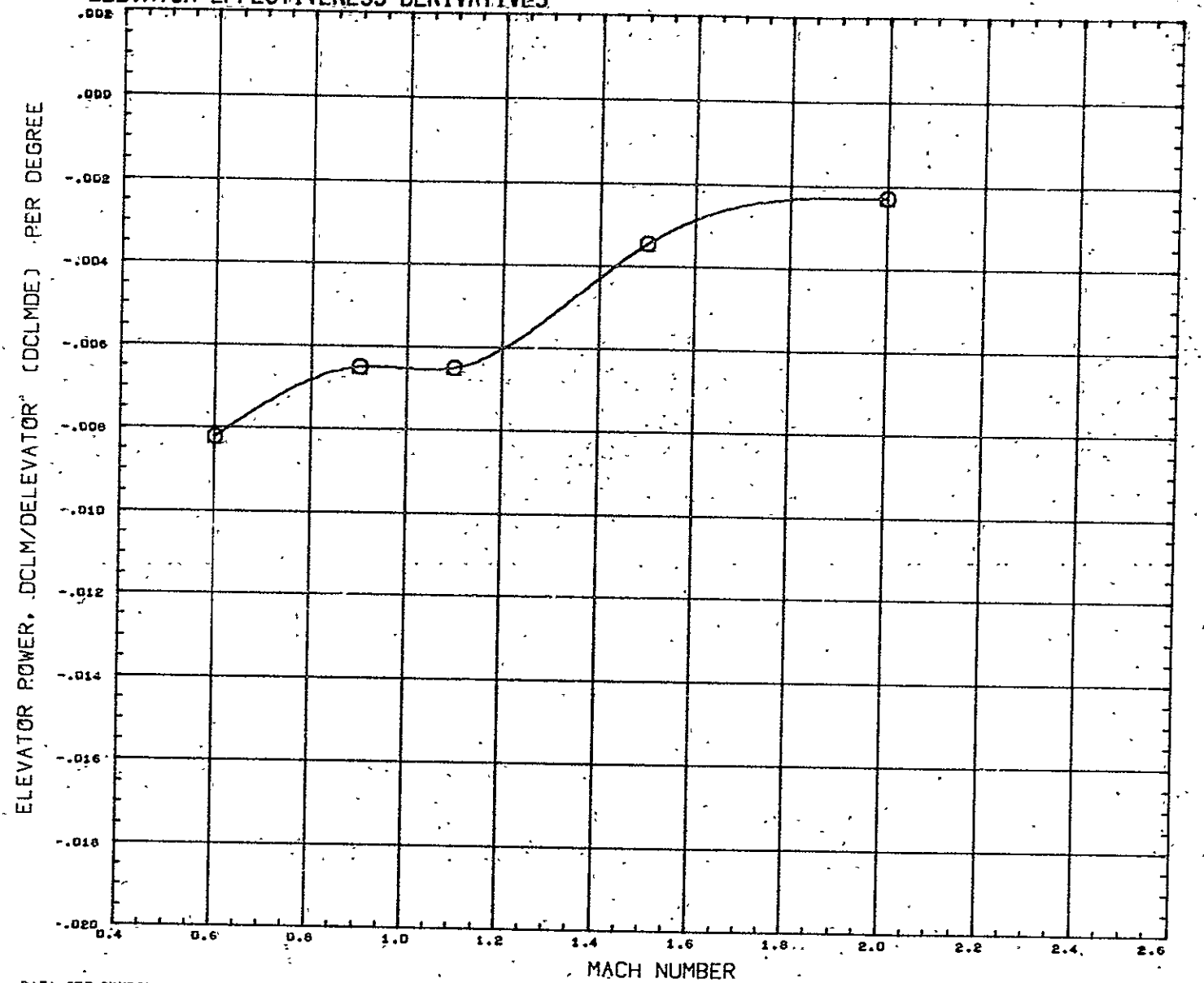
BETA	AILRON
0.000	0.000

ALPHA 0.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(029061) ○ MSFC484 NR DELTA ORBITER B5W17E10V17J2X

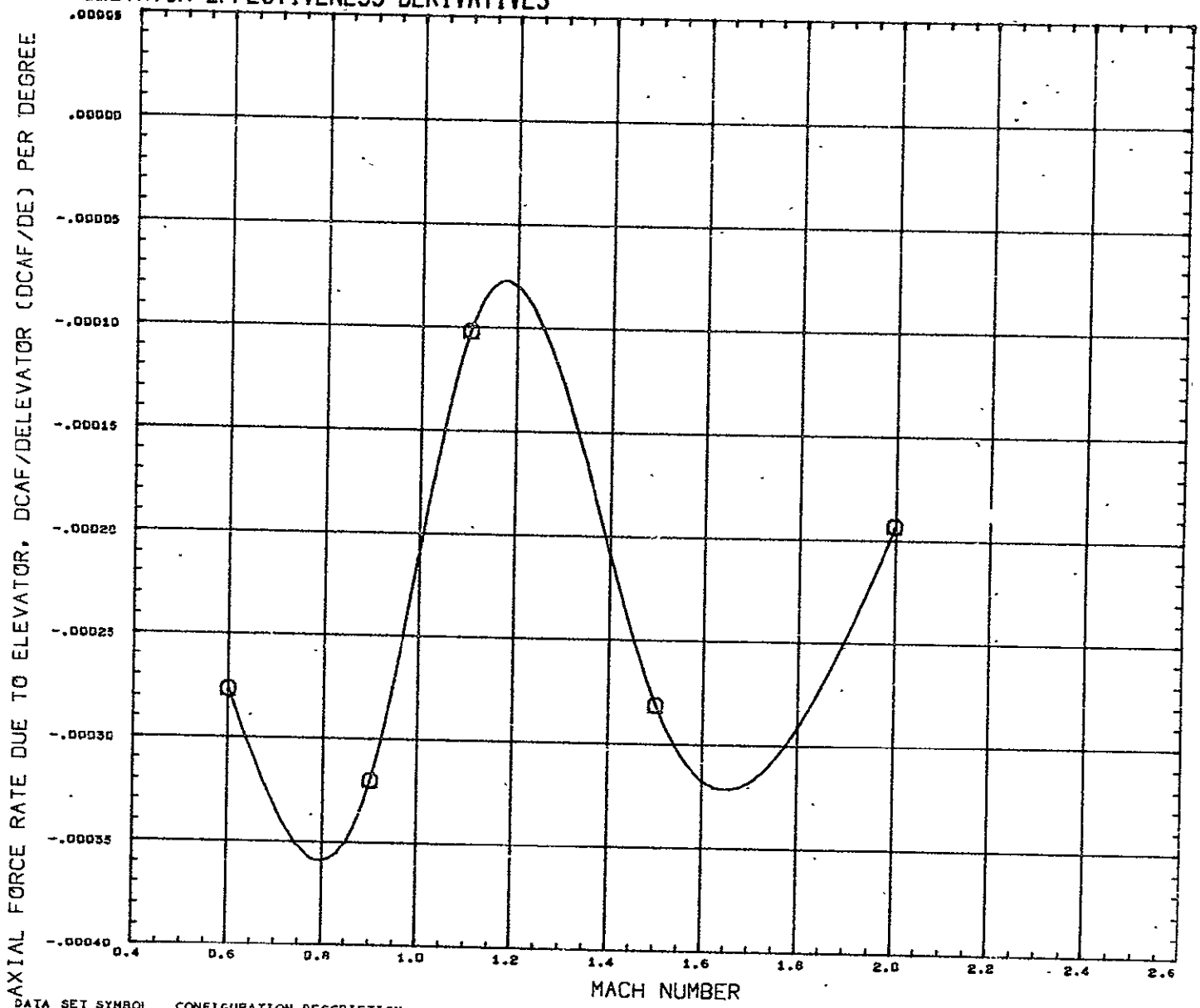
BETA	AILRON
0.000	0.000

ALPHA 0.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

ELEVATOR EFFECTIVENESS DERIVATIVES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
(02S061) O MSFC484 NR DELTA ORBITER B5W17E10V17J2X

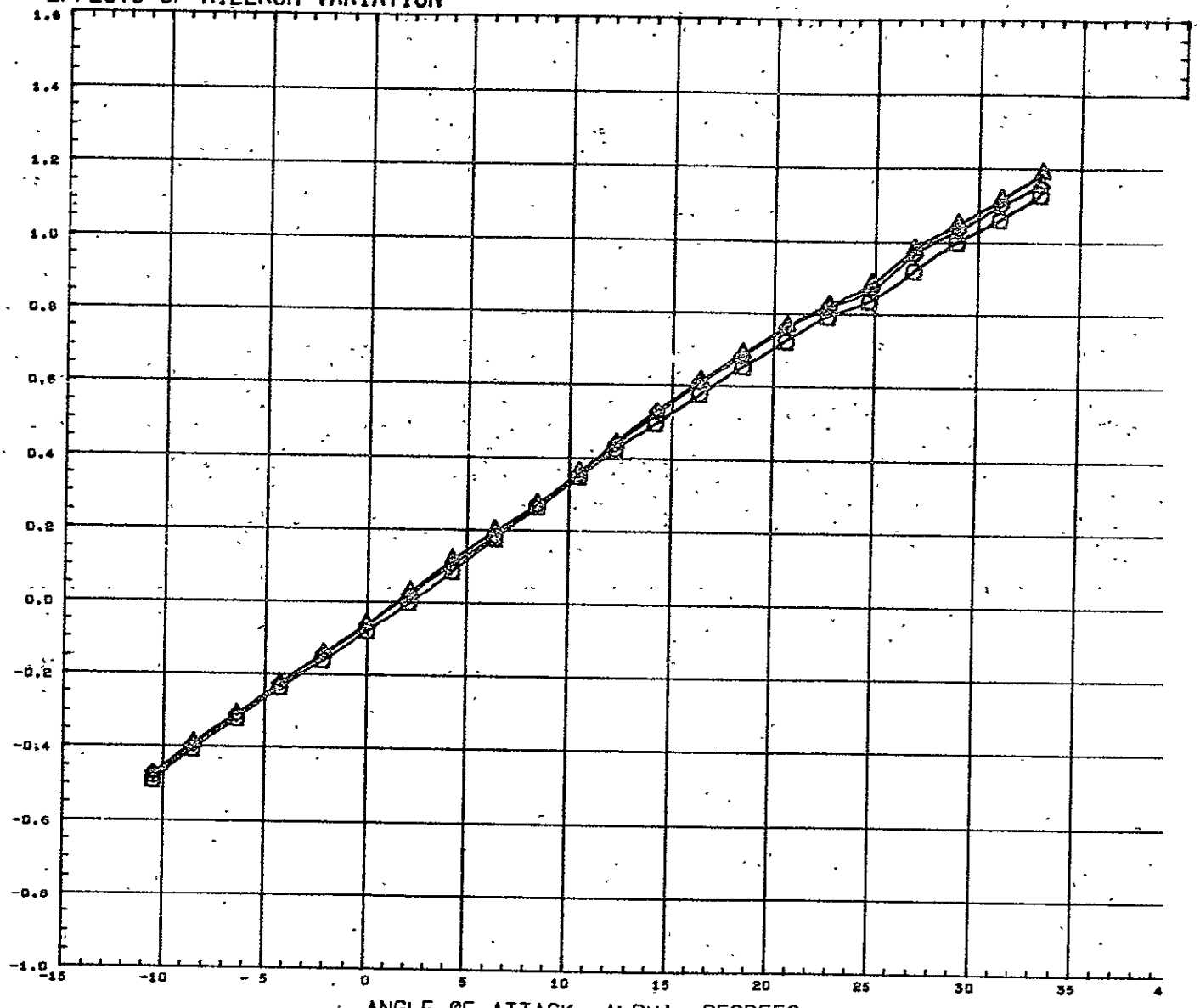
BETA AILRON
0.000 0.000

ALPHA 0.000

REFERENCE INFORMATION

REFS	6004.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

EFFECTS OF AILERON VARIATION



ANGLE OF ATTACK, ALPHA, DEGREES

SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

MACH	0.607	BETA	0.000	
ELVATR	0.000			

DATA SOURCE

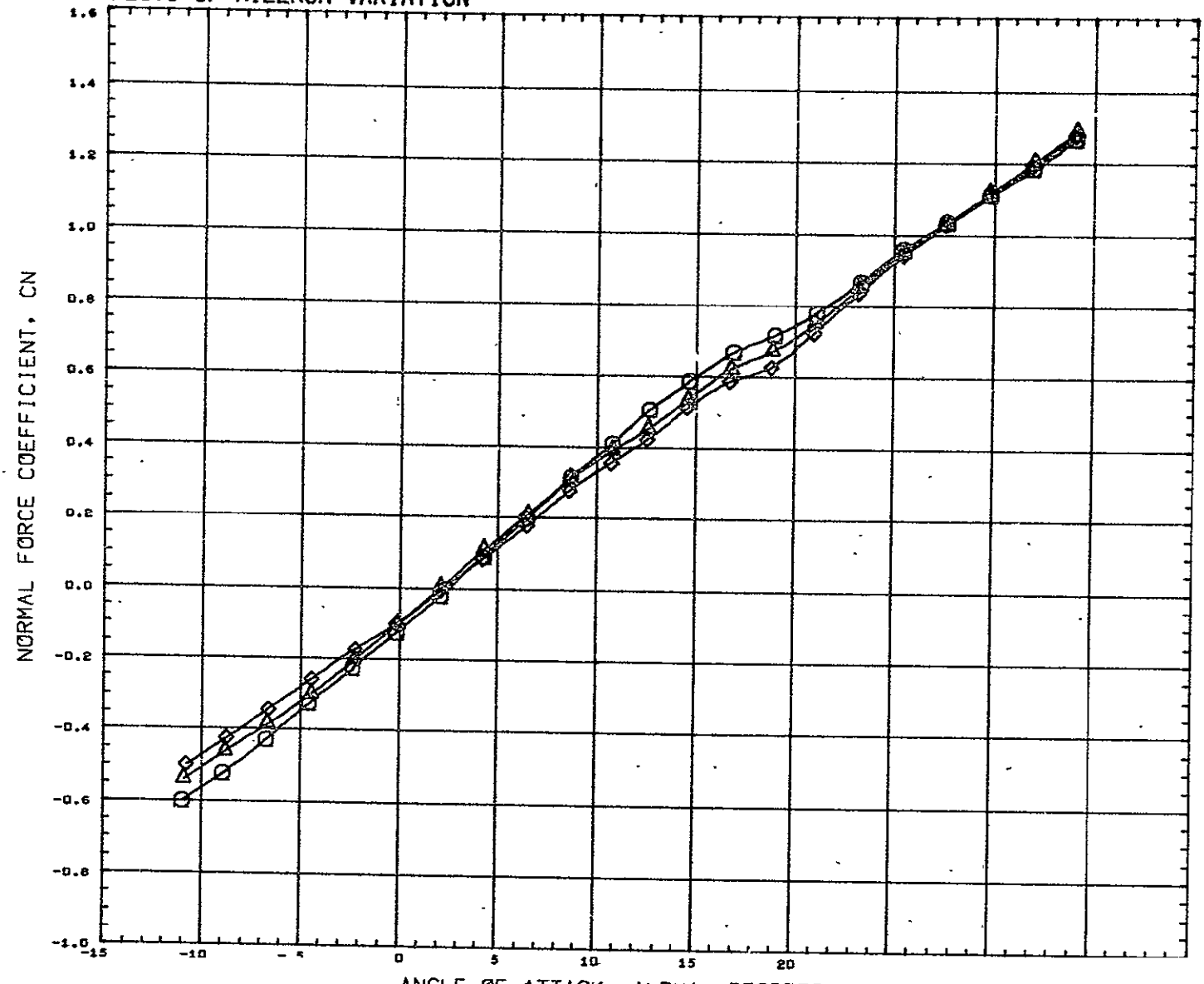
DATASET	AILRON	DATASET
V2912S	- 40.000	V2911S
V2905S	0.000	

REFERENCE INFORMATION

REFS	6094.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.904	BETA	0.000
ELVATR	0.000		

DATA SOURCE

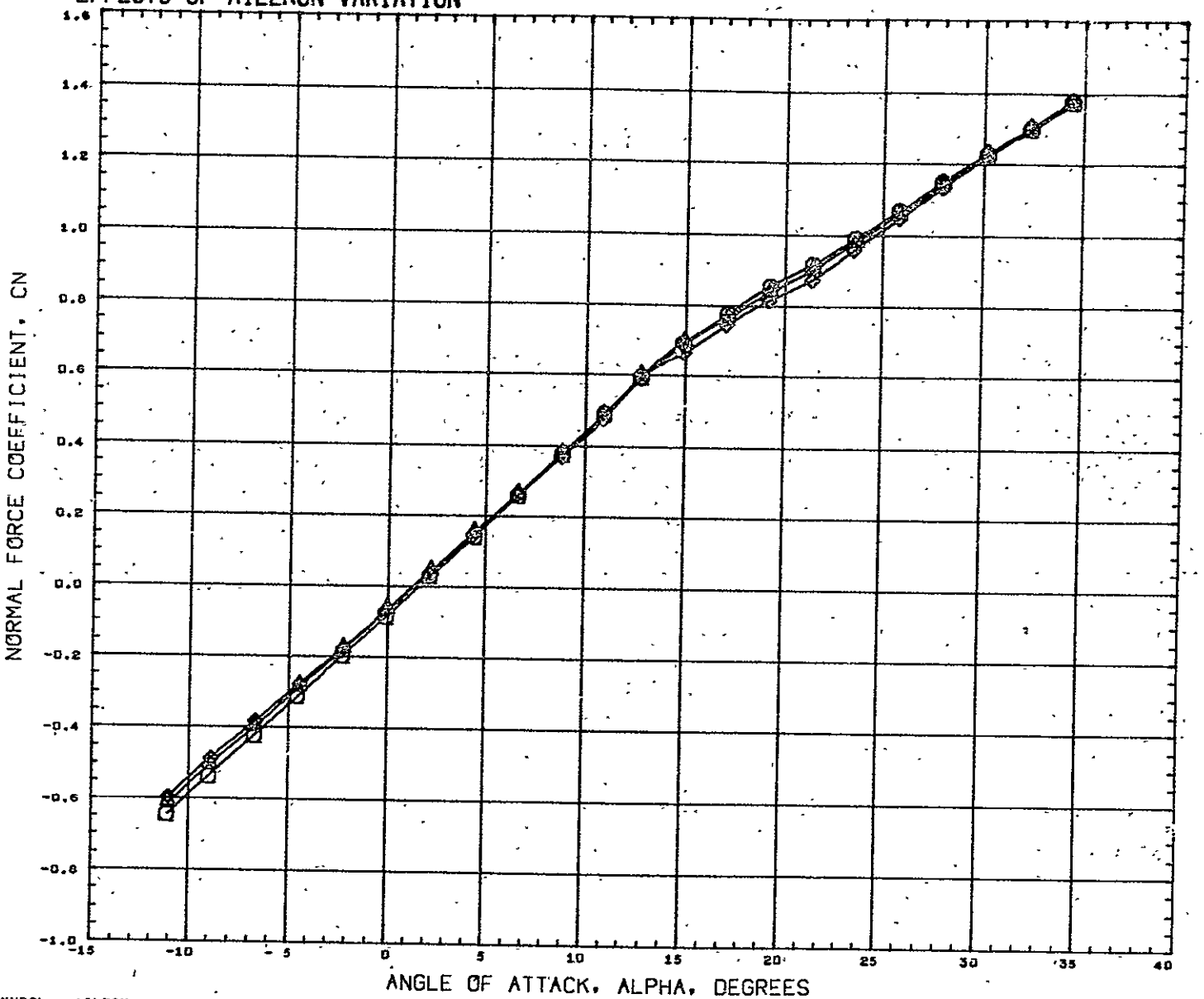
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MH*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.099	BETA	0.000
ELVATR	0.000		

DATA SOURCE

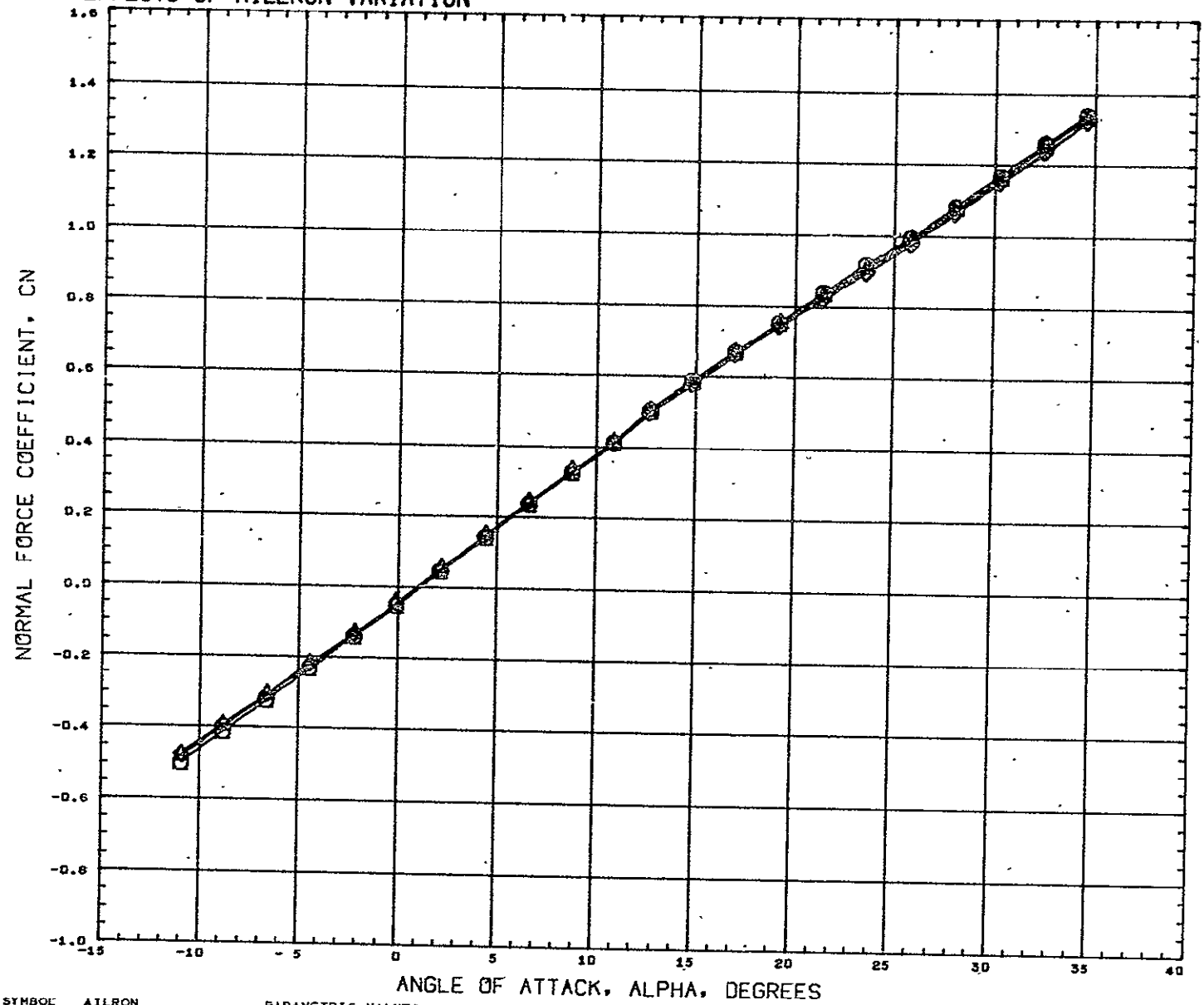
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.468	BETA	0.000
ELVATR	0.000		

DATA SOURCE

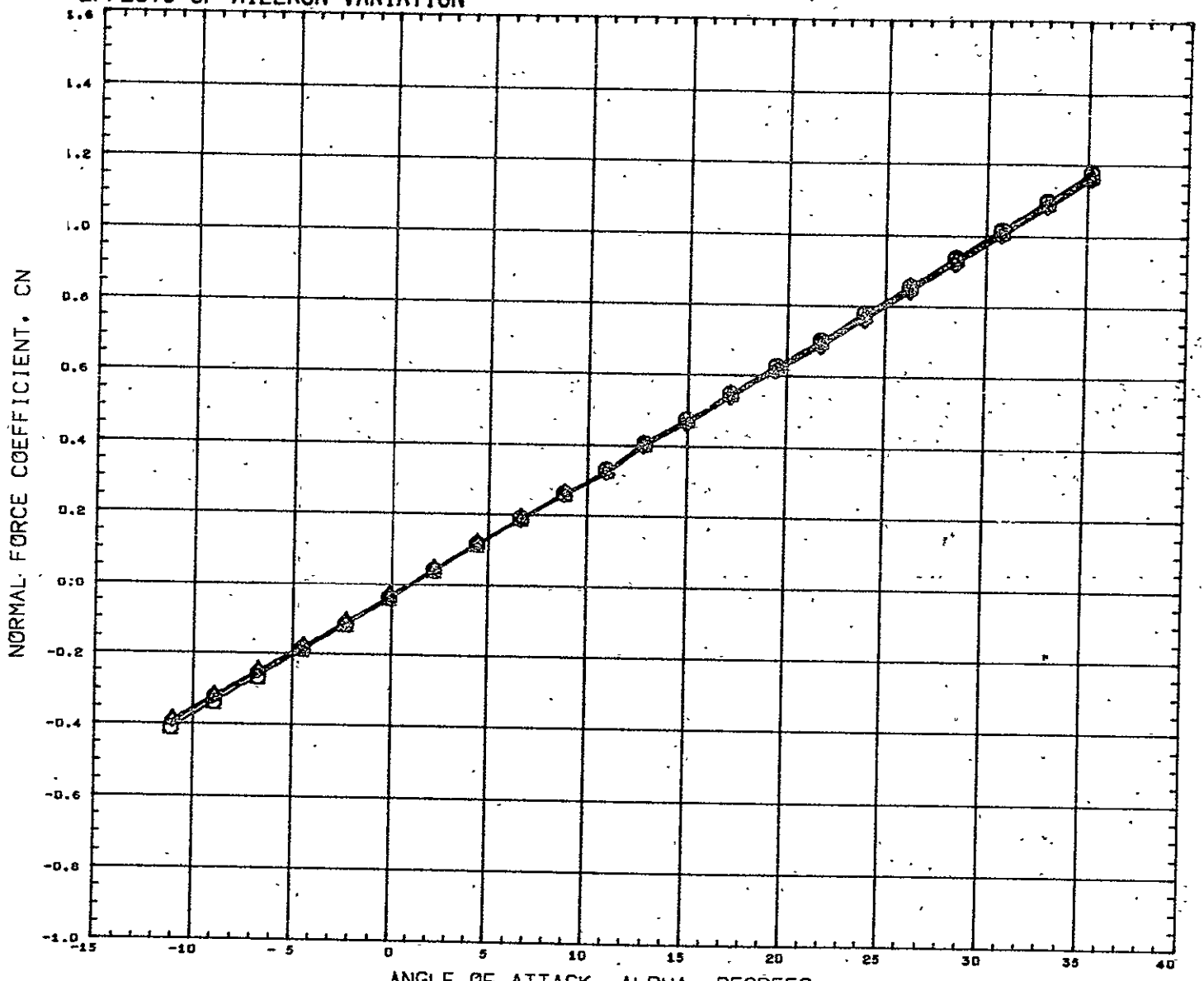
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.964	BETA	0.000
ELVATR	0.000		

DATA SOURCE

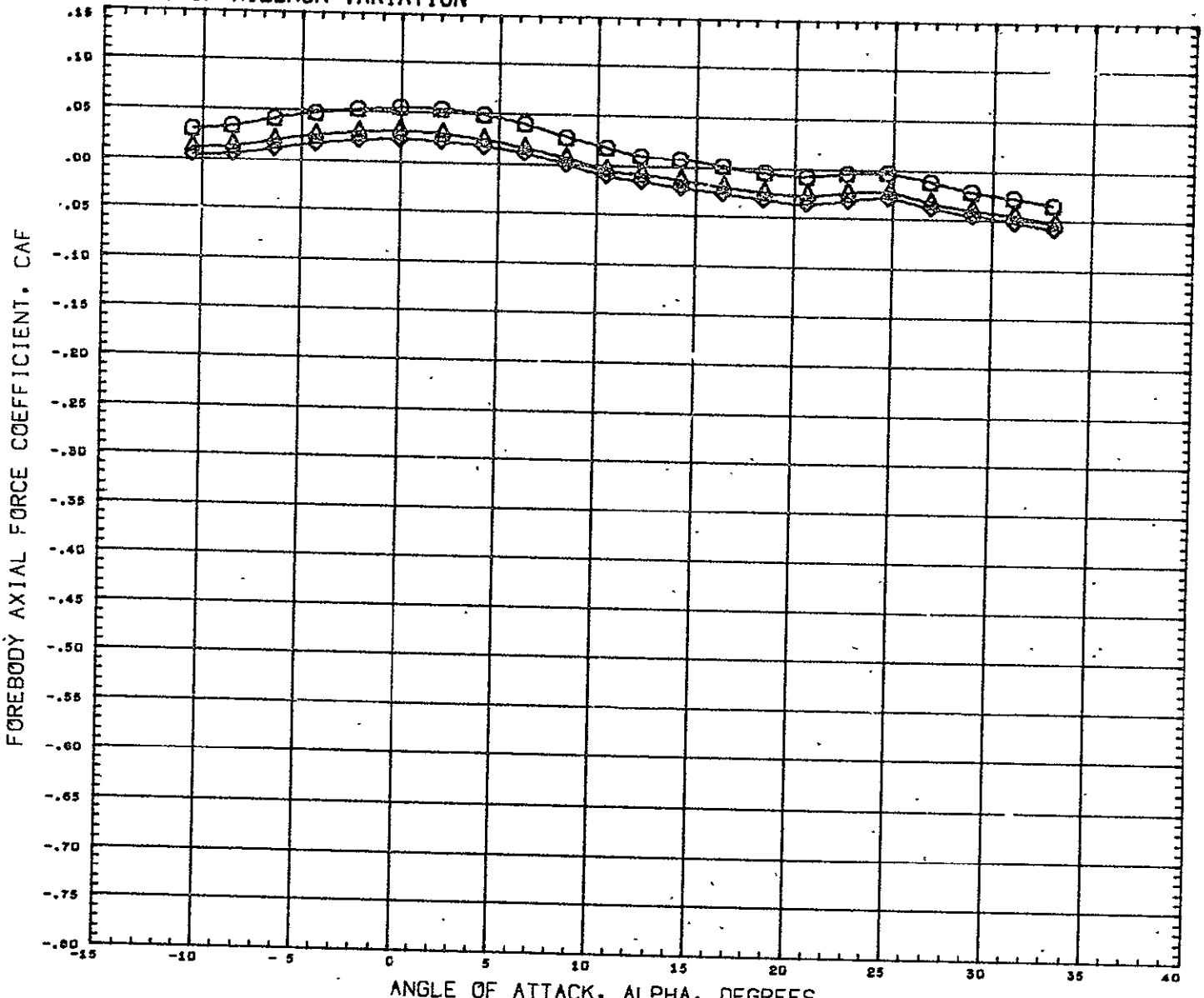
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.607	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

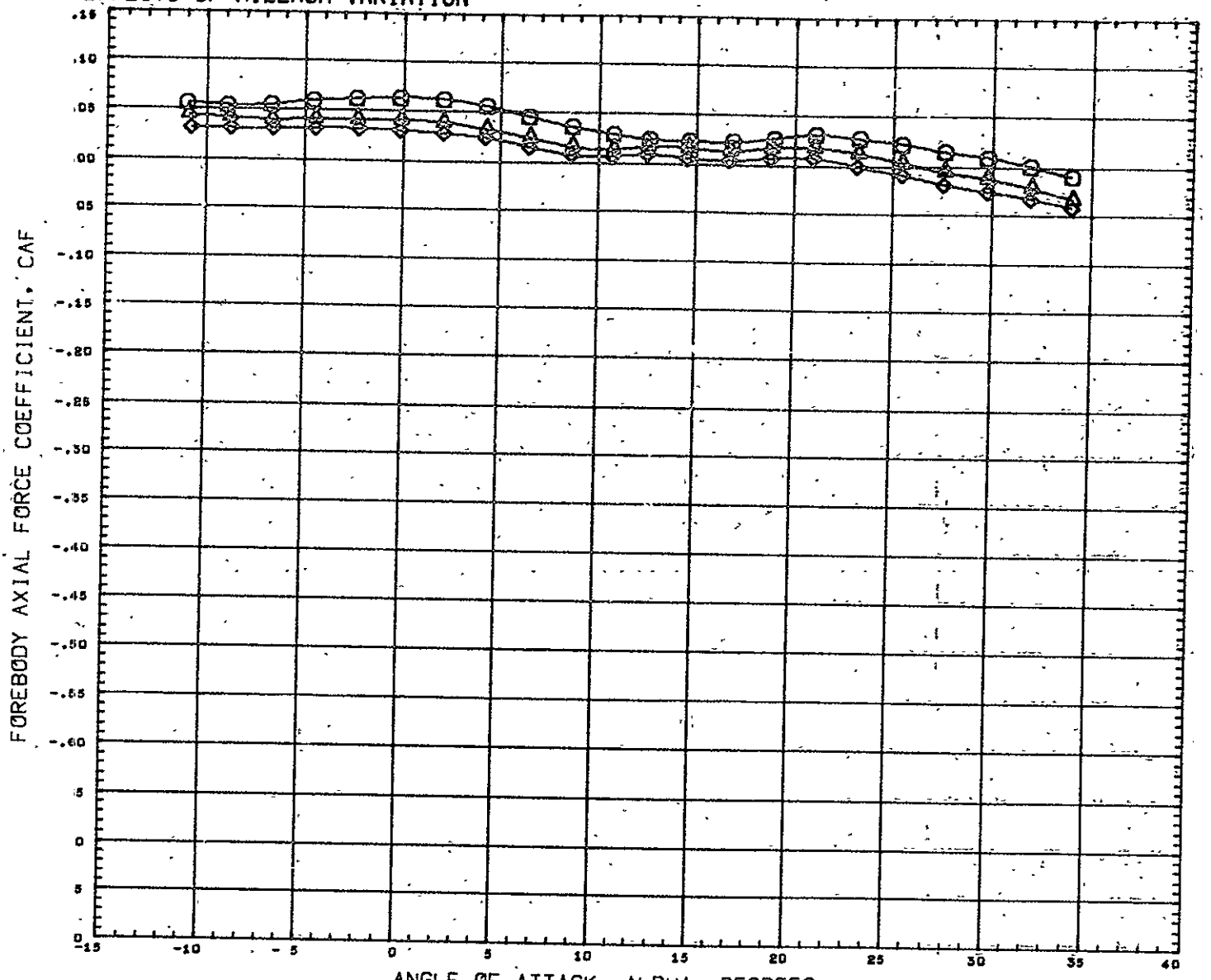
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (V2912S) 03 AUG 71 PAGE 357

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
▷○	- 40.000
◇	- 20.000
	0.000

PARAMETRIC VALUES

MACH	0.904	BETA	0.000
ELVATR	0.000		

DATA SOURCE

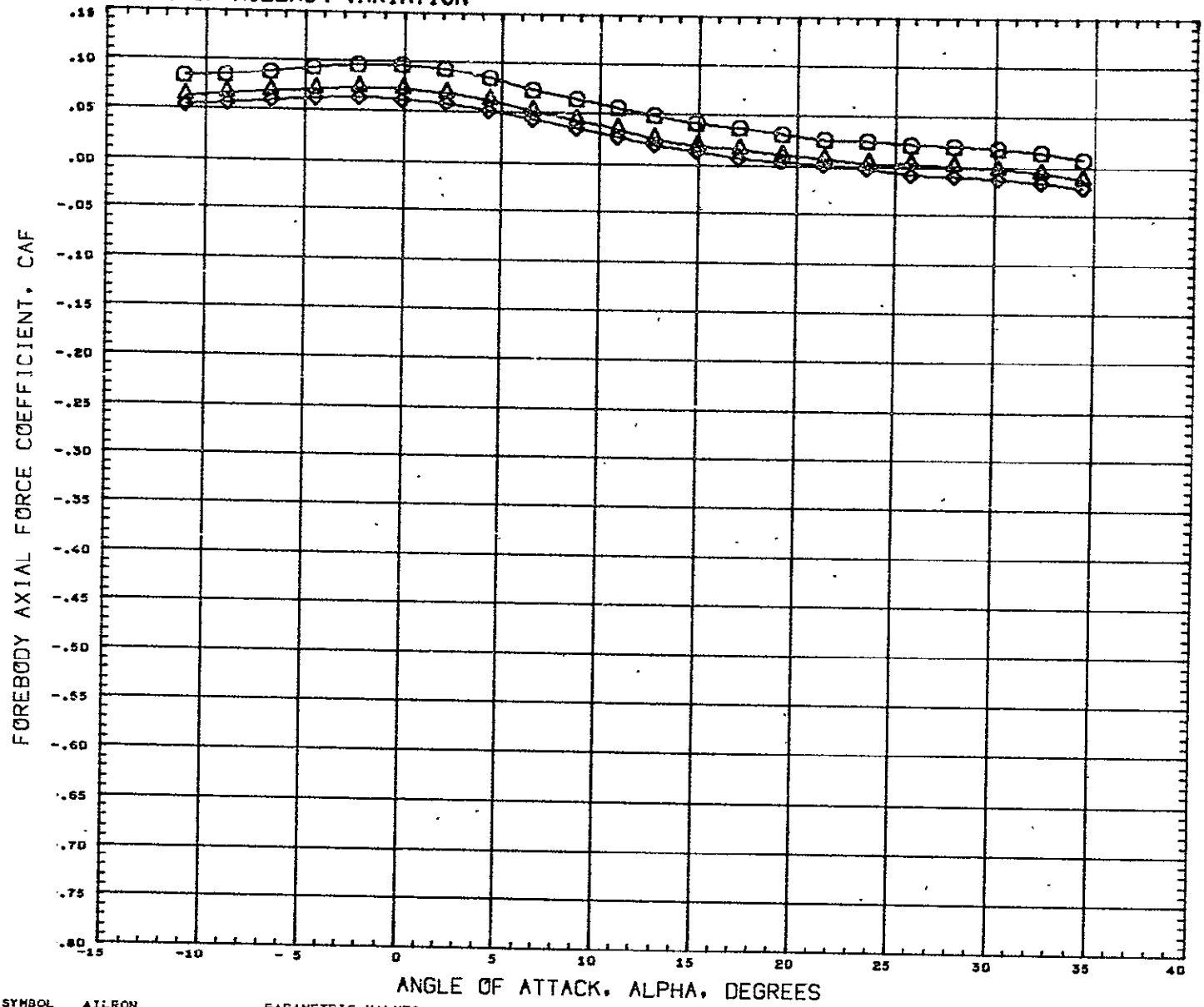
DATASET	AILRON	DATASET	AILRON
V2912S	40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HH*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.099	BETA	0.000
ELVATR	0.000		

DATA SOURCE

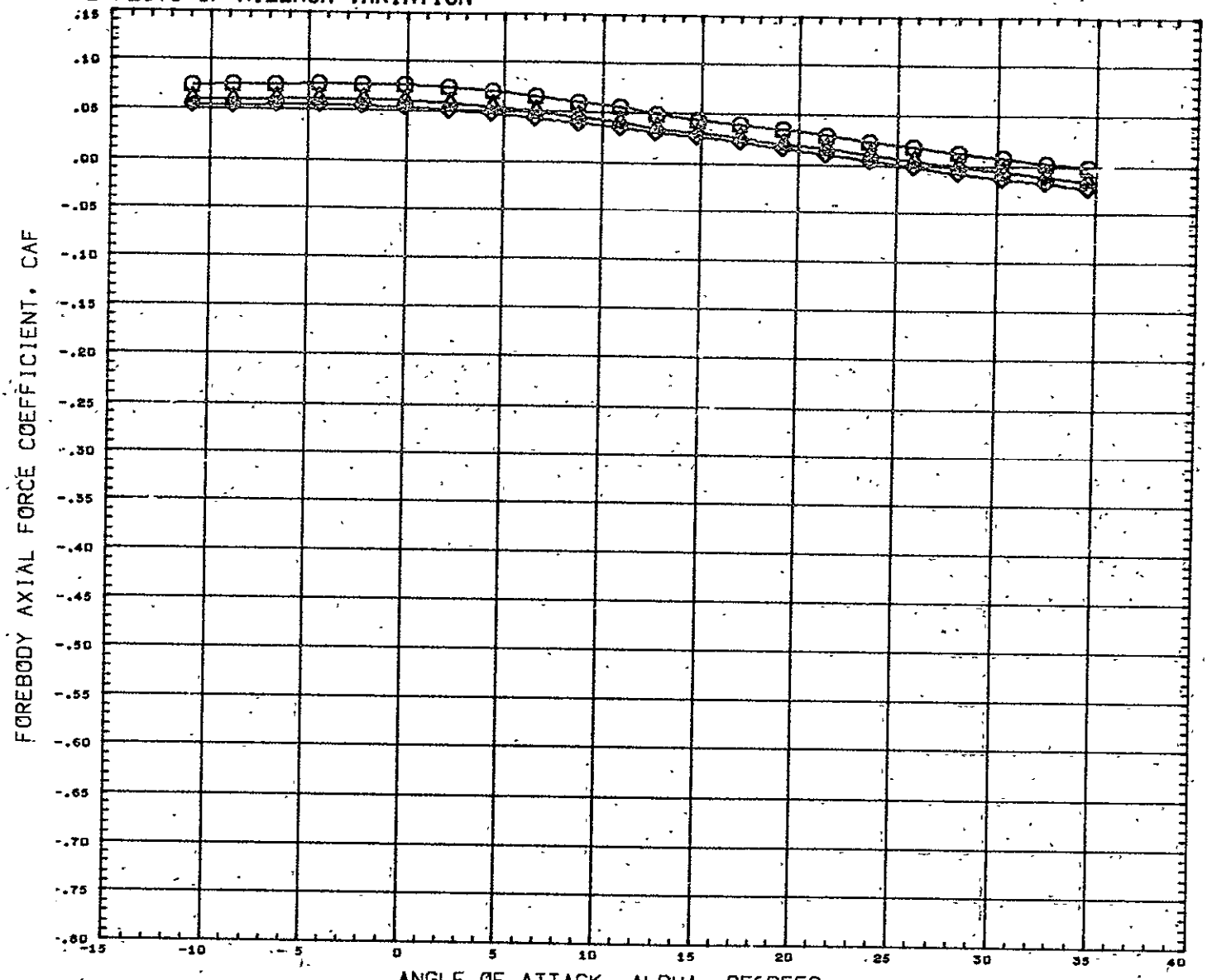
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE NM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.468	BETA	0.000
ELVATR	0.000		

DATA SOURCE

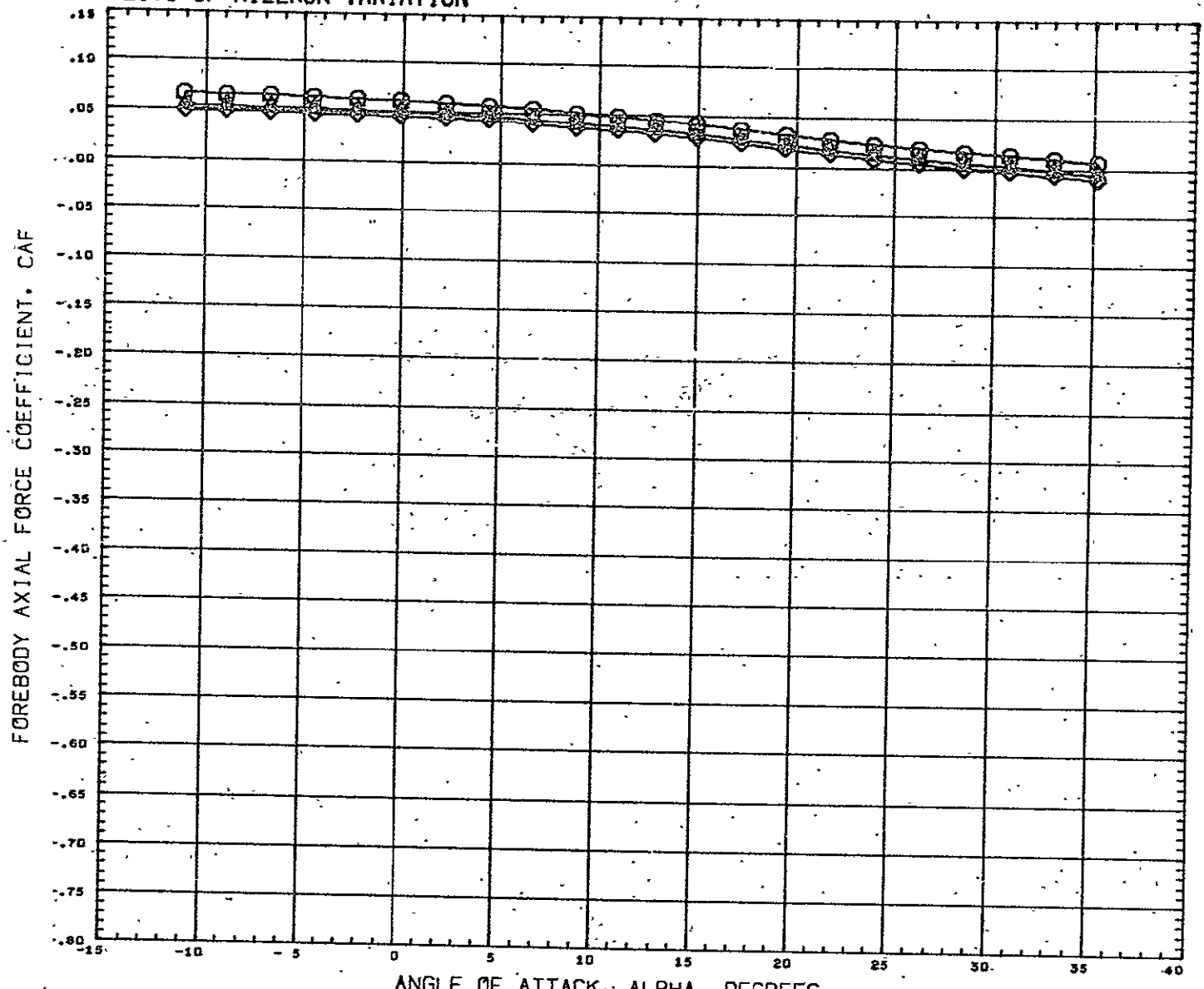
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MH*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.964	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

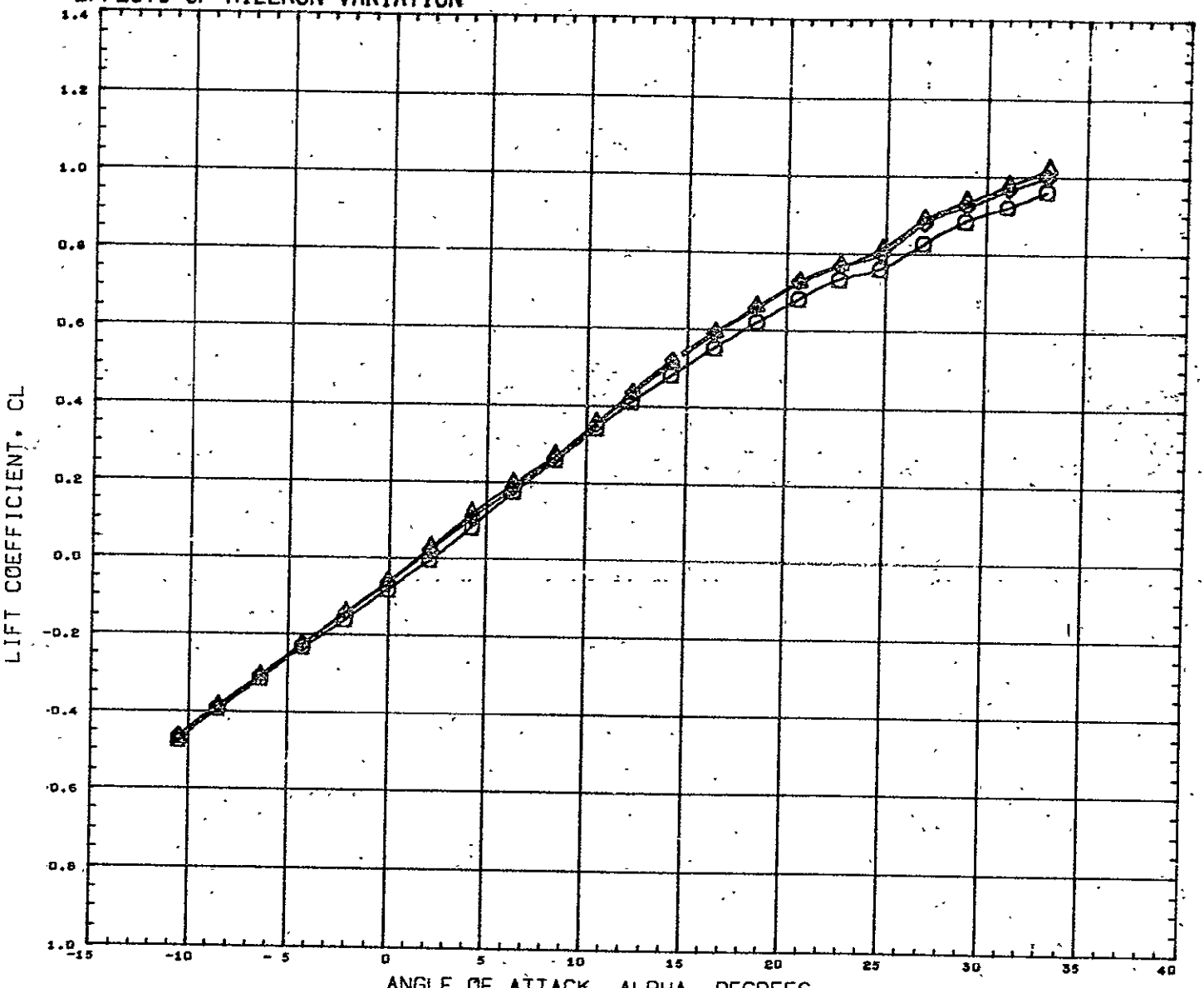
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (V2912S) 03 AUG 71 PAGE 361

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.607	BETA	0.000
ELVATR	0.000		

DATA SOURCE

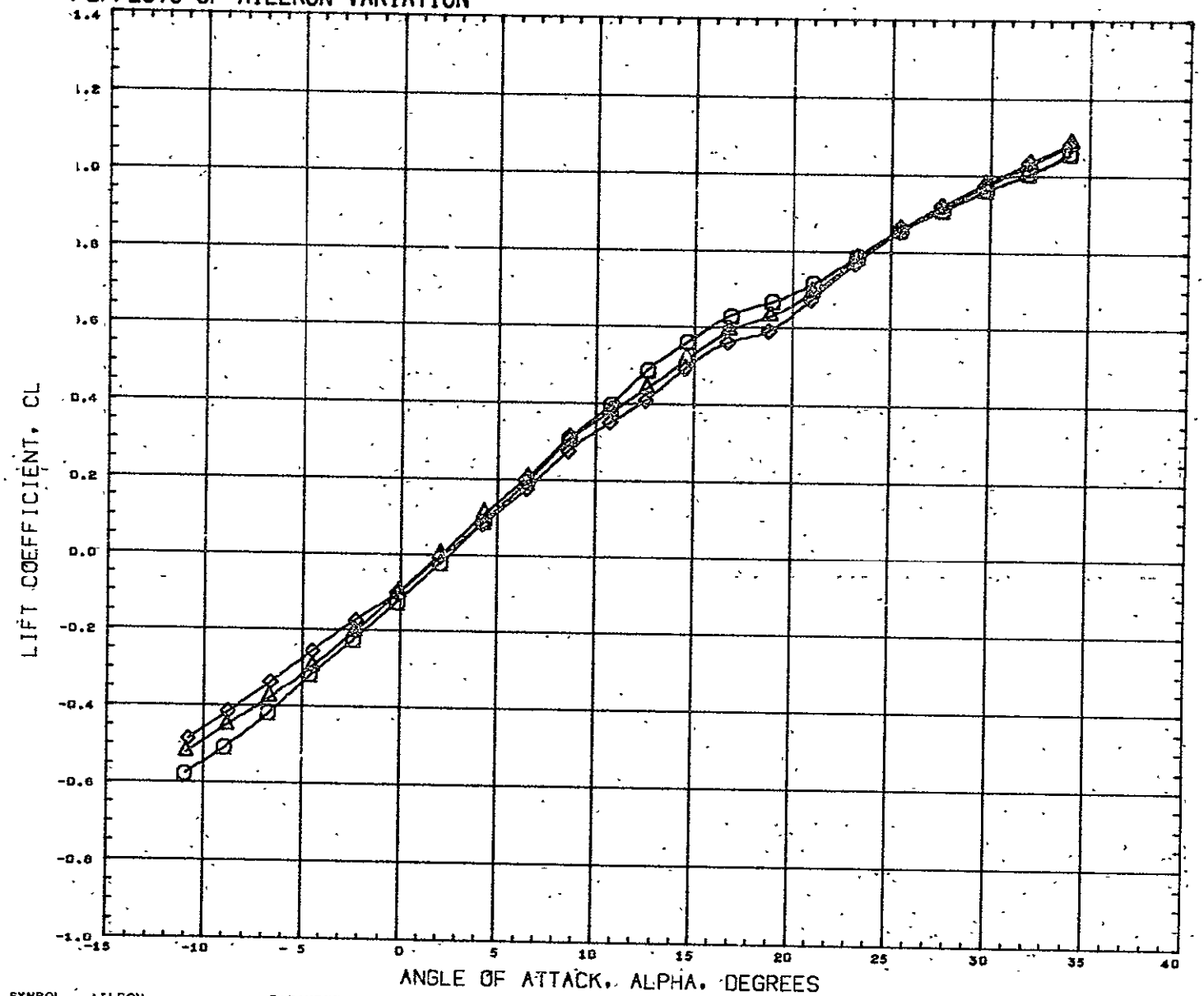
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	136.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.904	BETA	0.000
ELVATR	0.000		

DATA SOURCE

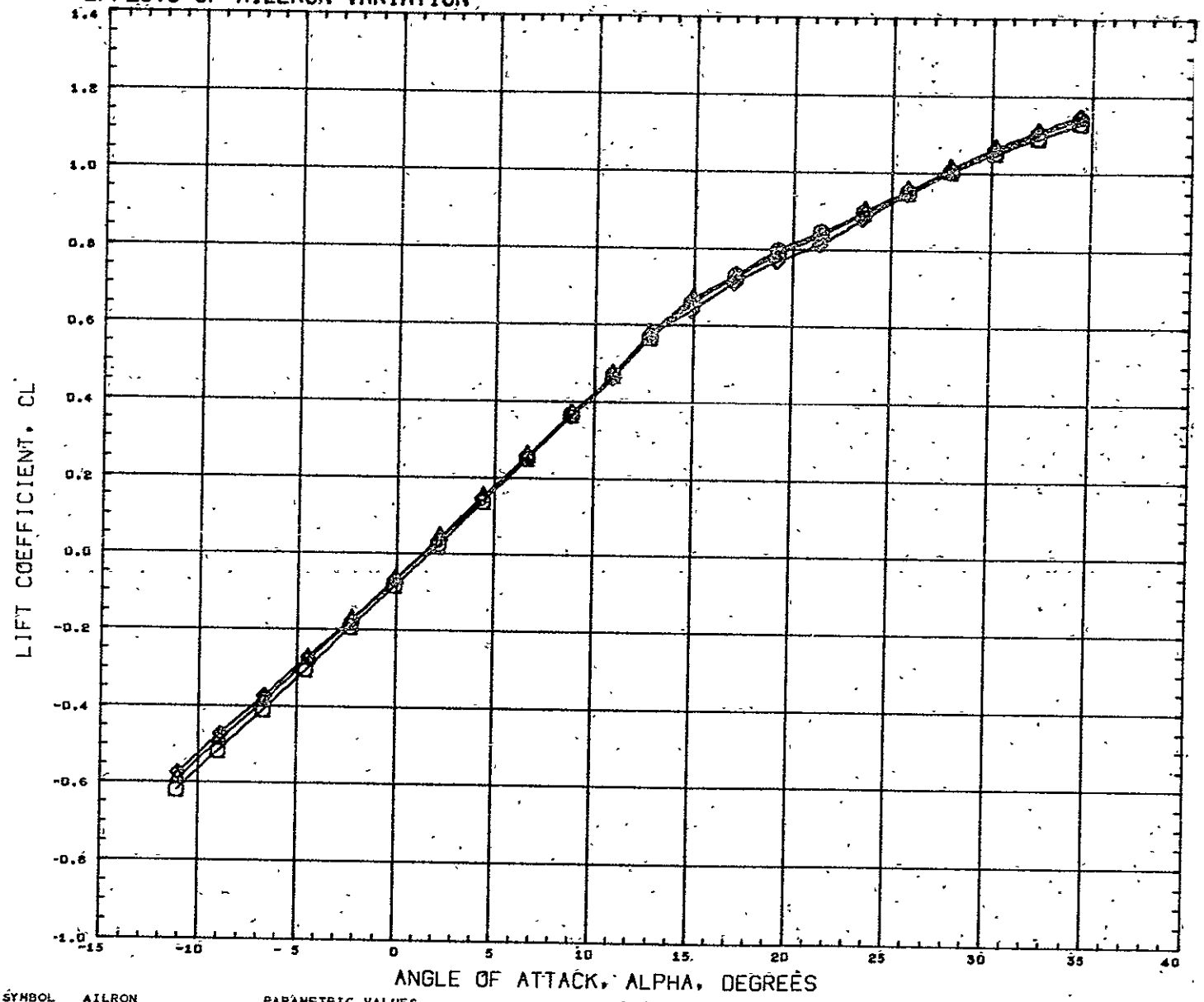
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.099	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

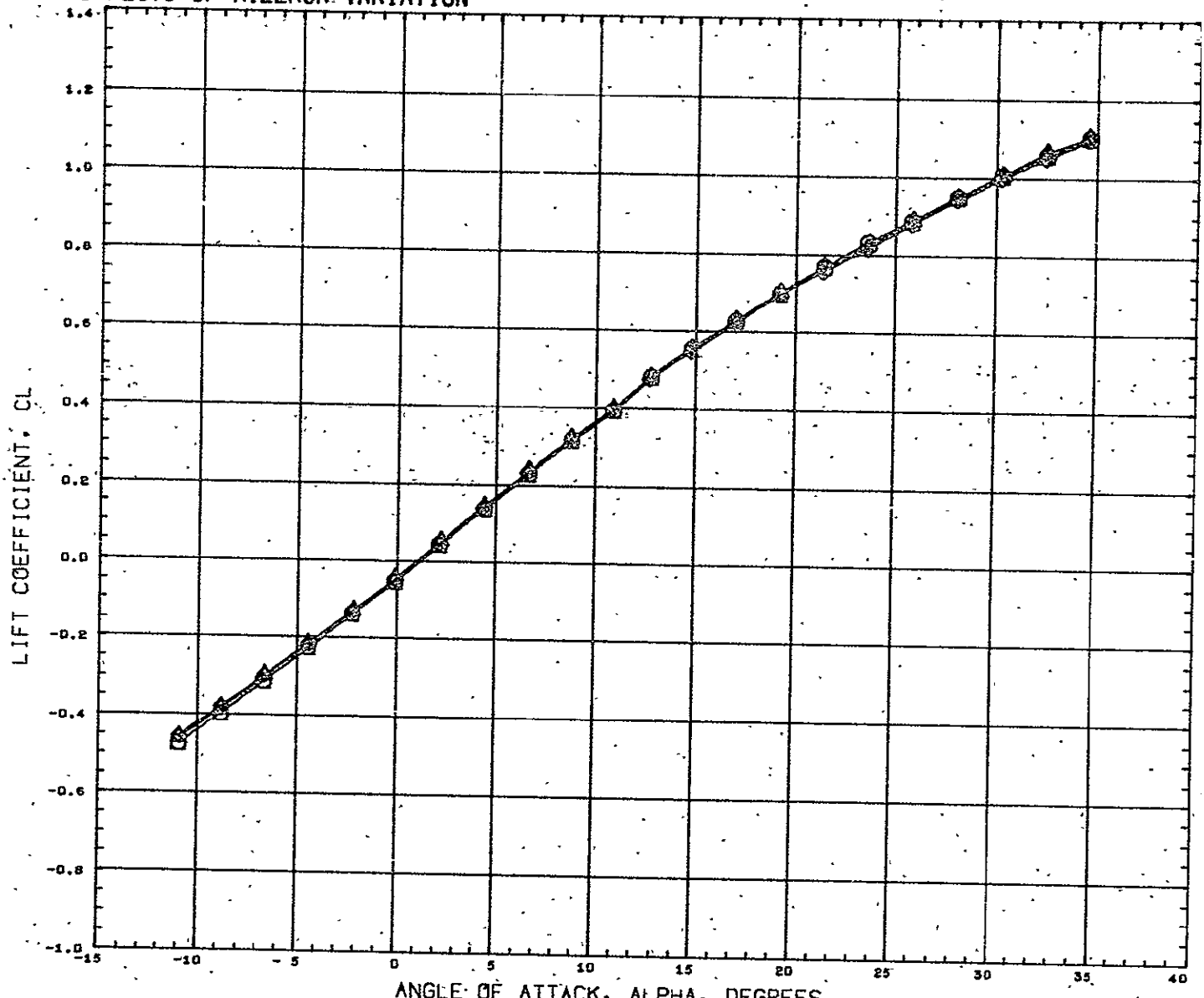
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HM*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (V2912S) 03 AUG 71 PAGE 364

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.468	BETA	0.000
ELVATR	0.000		

DATA SOURCE

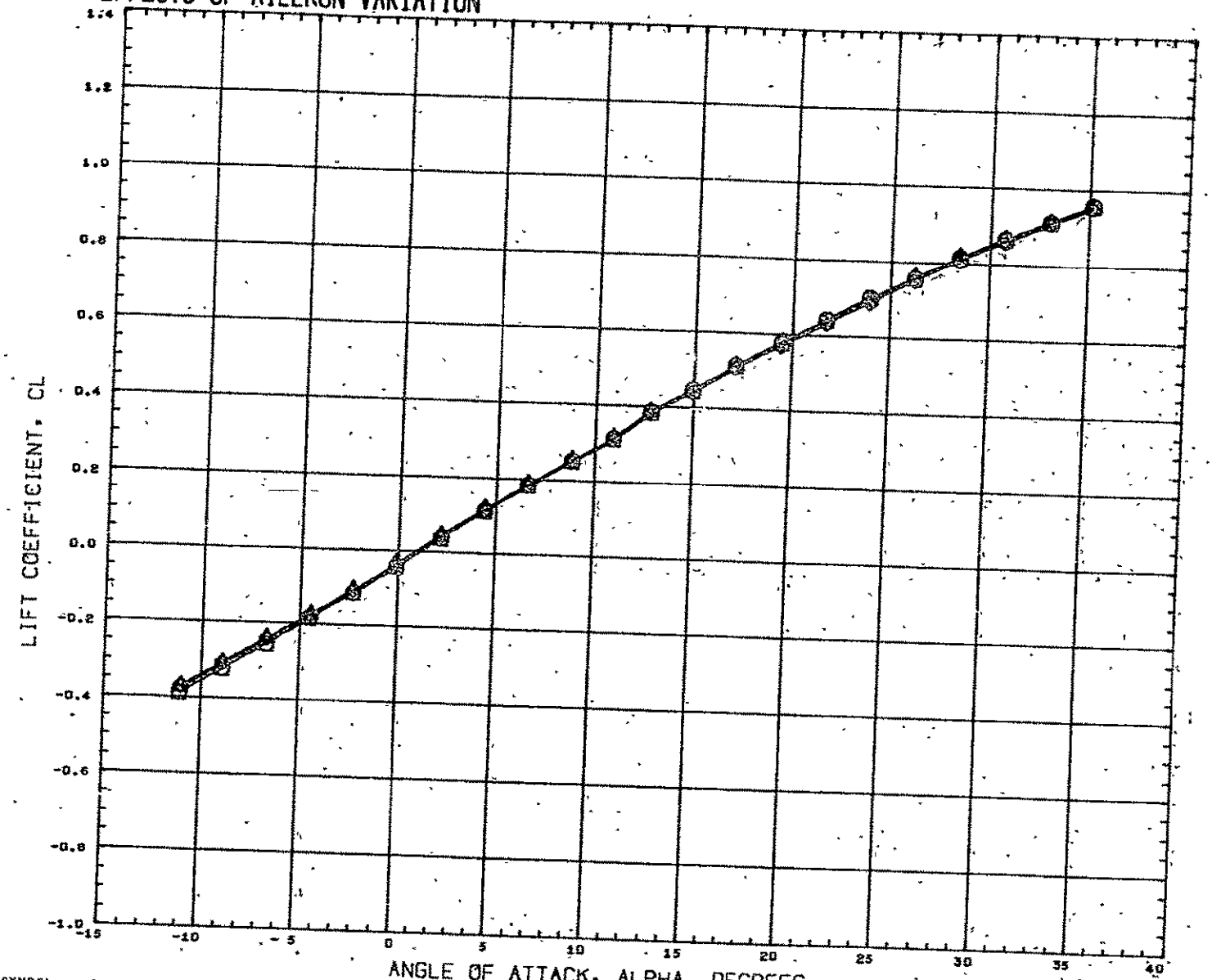
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.964	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

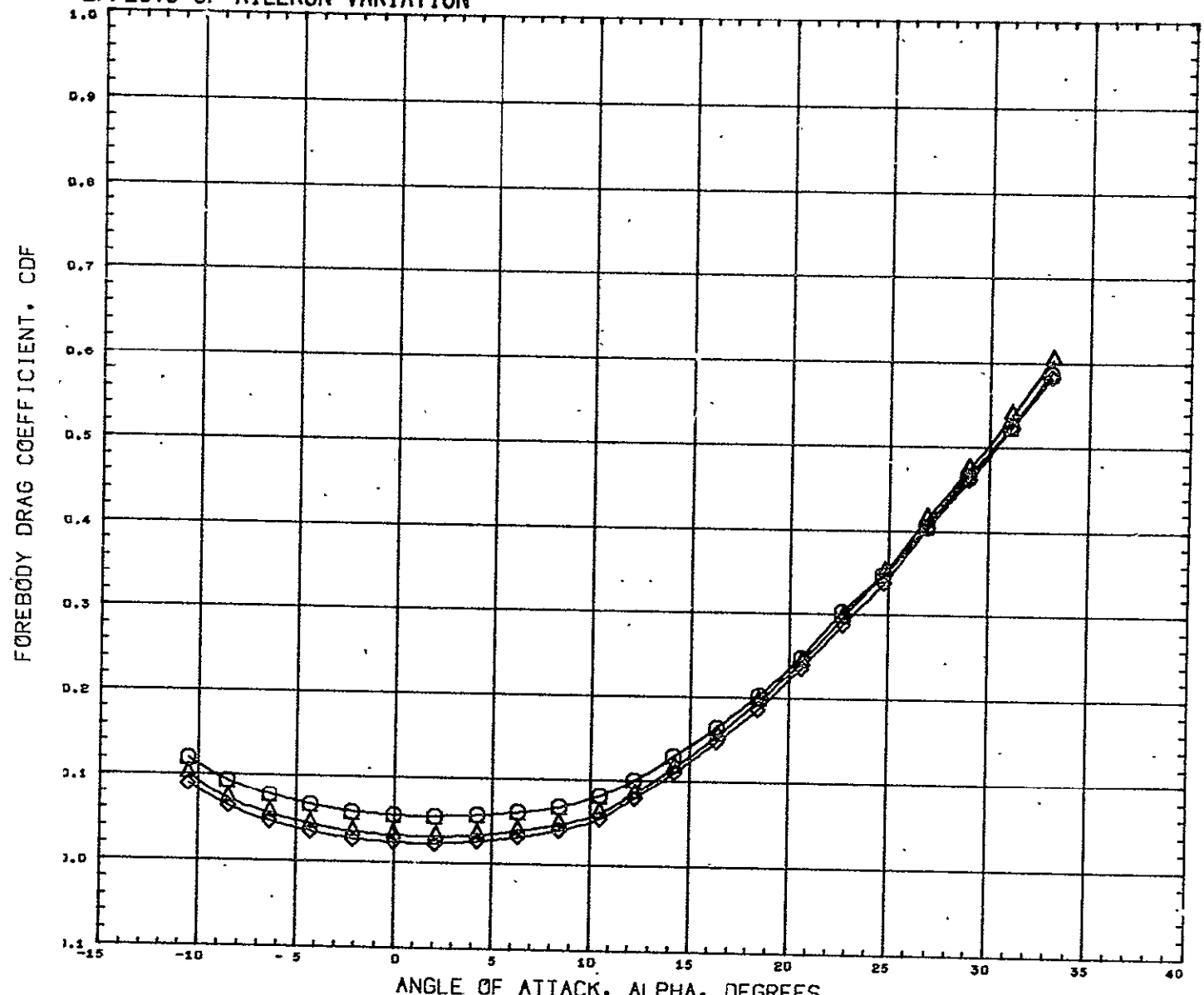
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRF	1422.5040	INCHES
YMRF	0.0000	INCHES
ZMRF	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MN*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (V2912S) 03 AUG 71

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.607	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

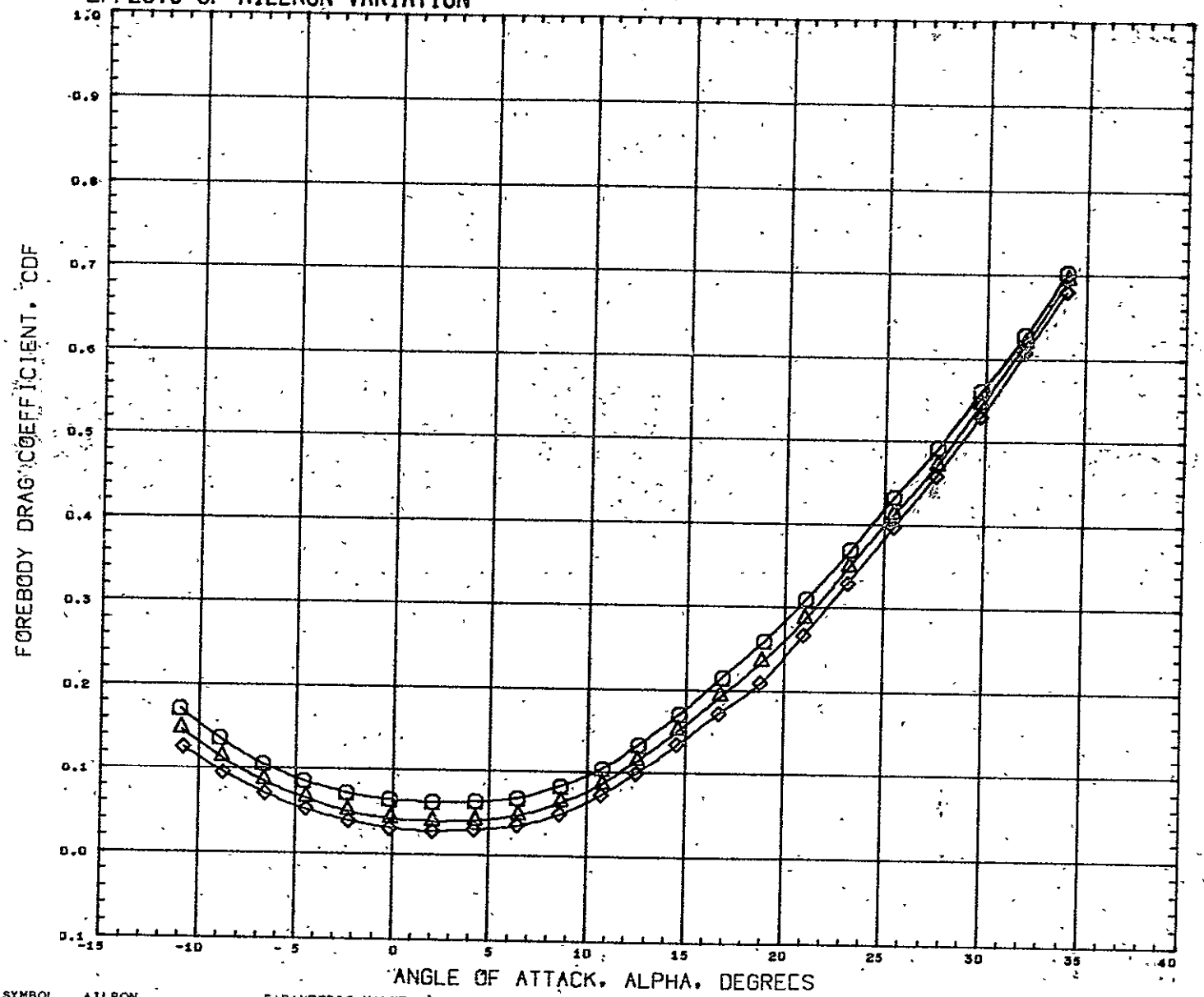
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRF	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (V2912S) 03 AUG 71 PAGE 367

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.904	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

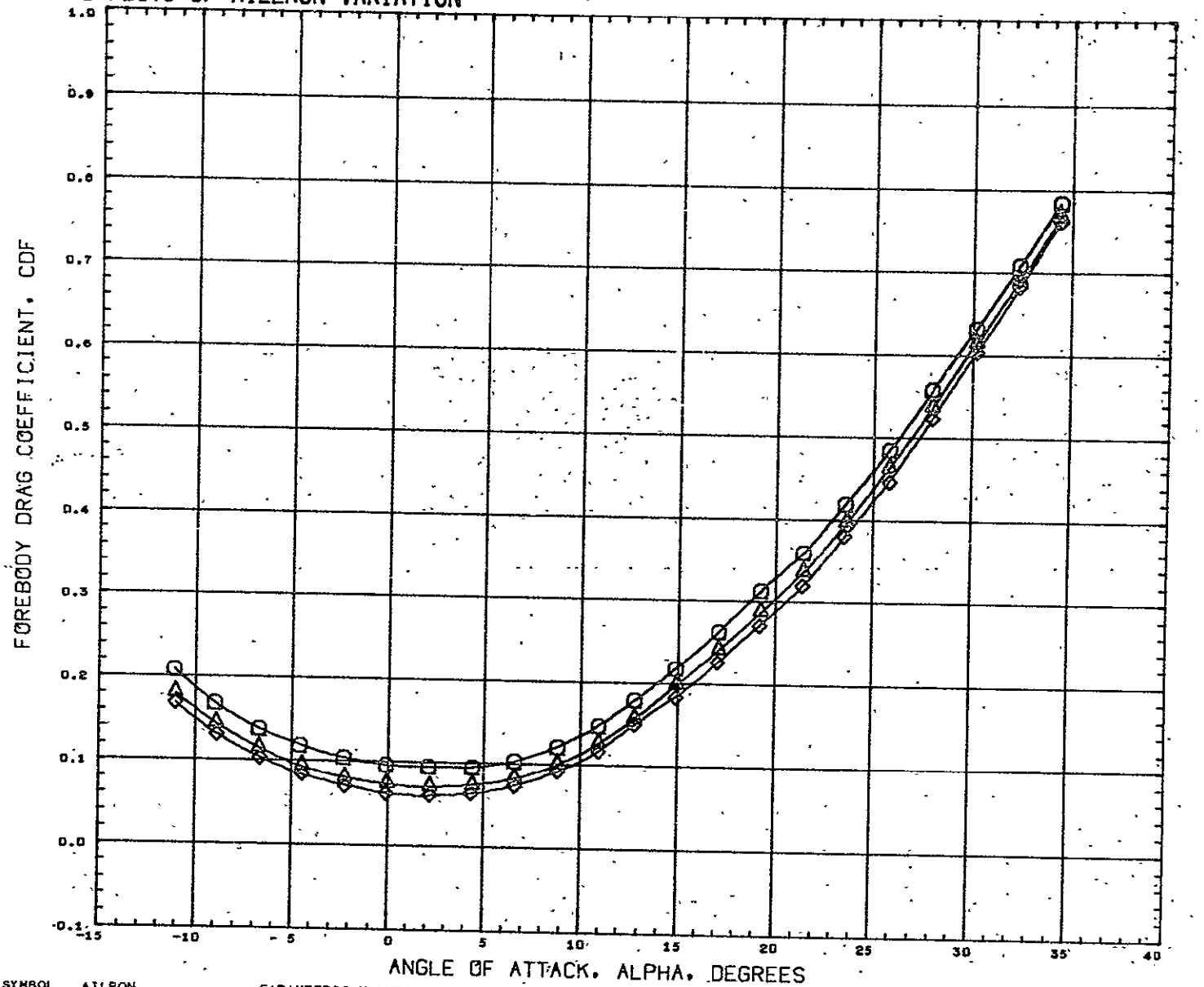
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (V2912S) 03 AUG 71 PAGE 368

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.099	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

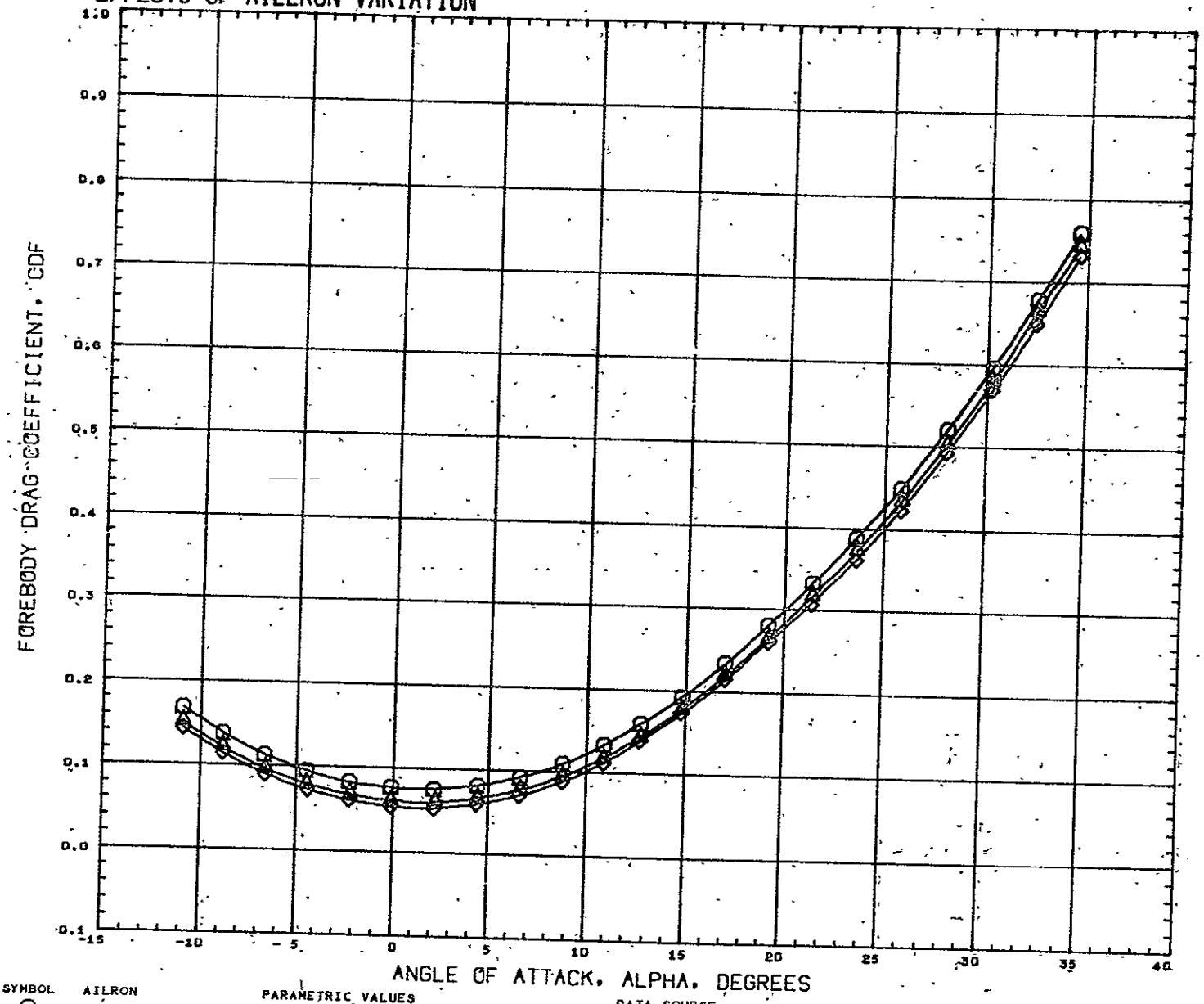
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HH*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (V2912S) 03 AUG 71

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.468	BETA	0.000
ELVATR	0.000		

DATA SOURCE

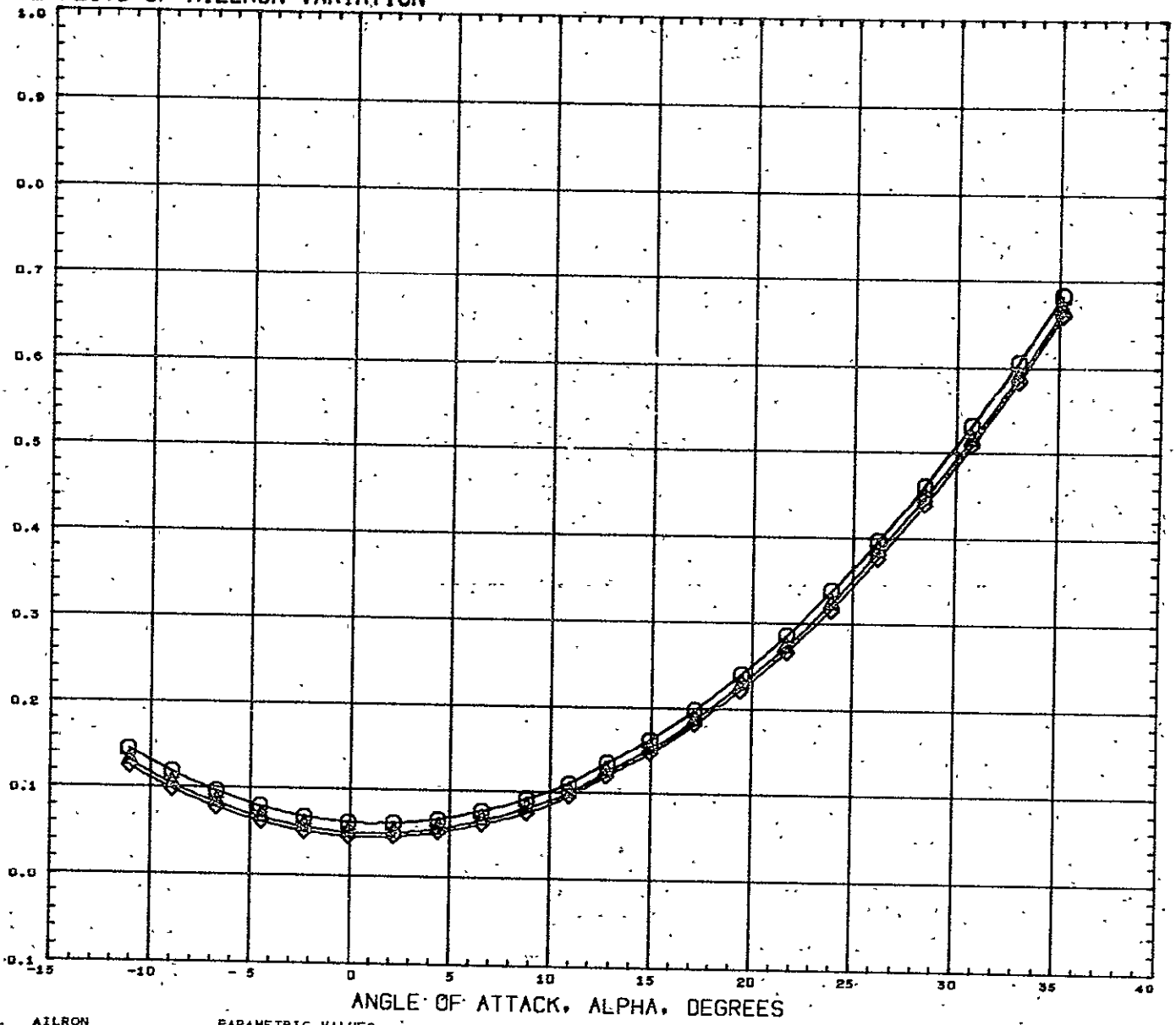
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HH*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	-40.000
△	-20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.964	BETA	0.000
ELVATR	0.000		

DATA SOURCE

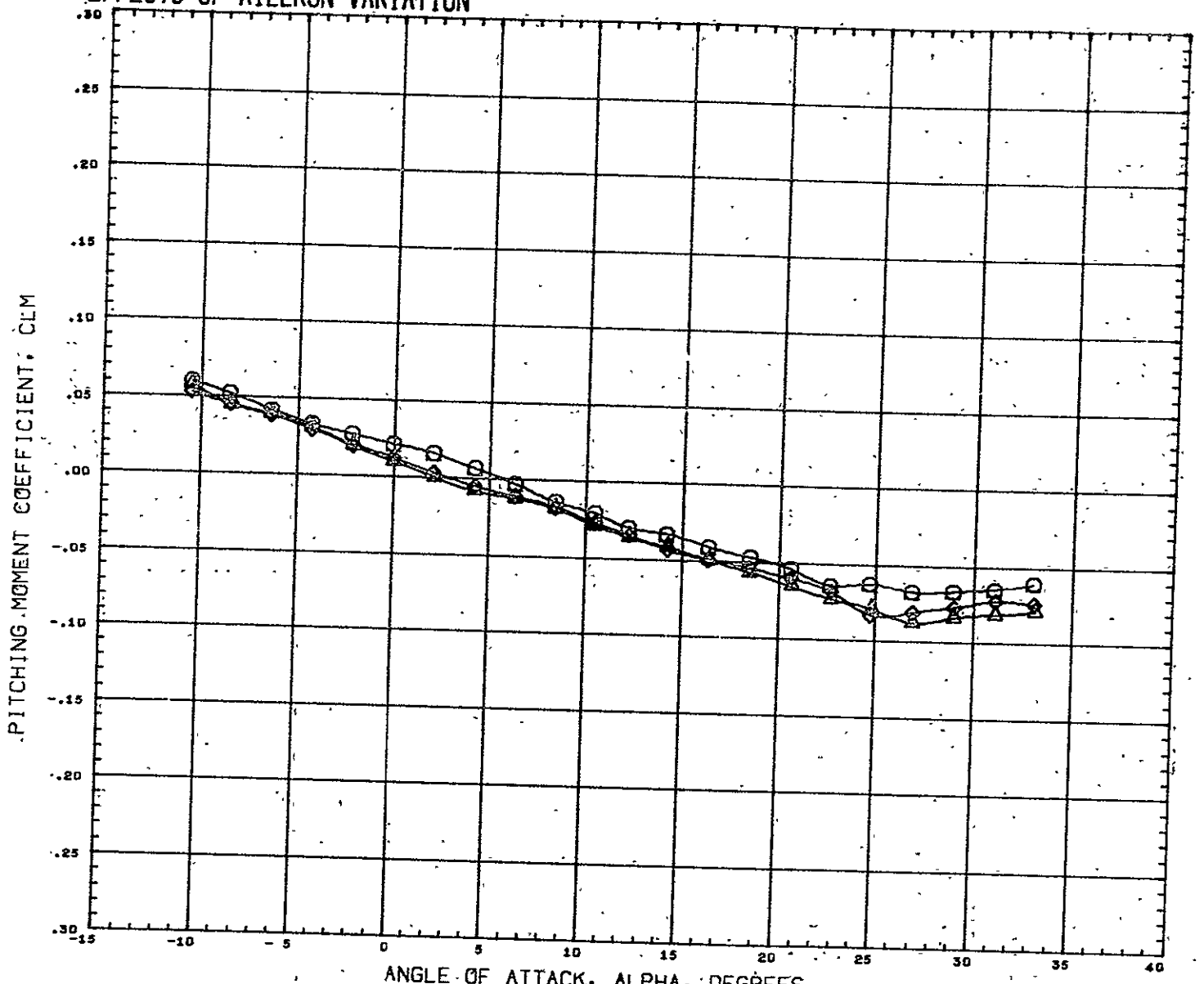
DATASET	AILRON	DATASET	AILRON
V2912S	-40.000	V2911S	-20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM#E#G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.607	BETA	0.000
ELVATR	0.000		

DATA SOURCE

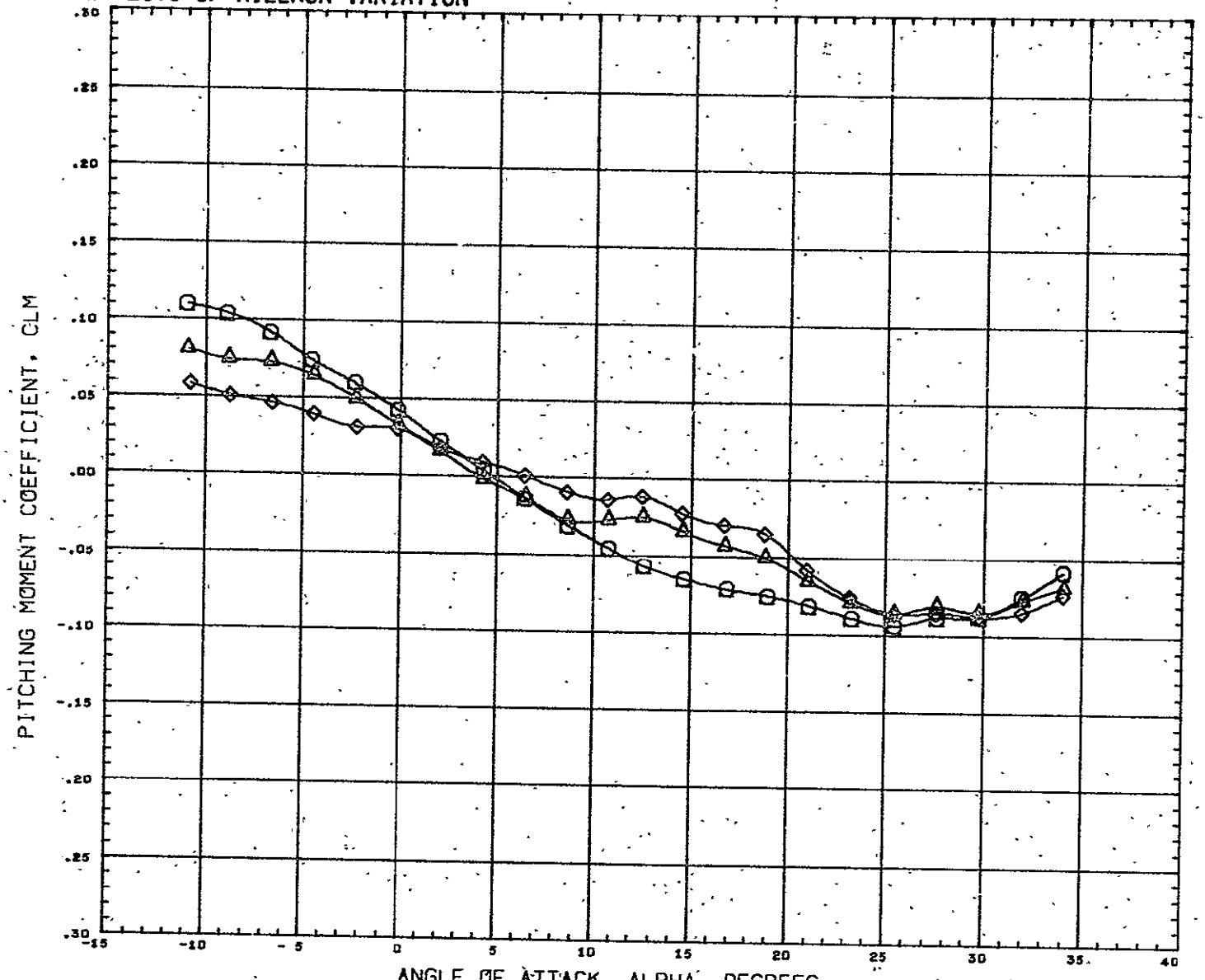
	DATASET	AILRON	DATASET	AILRON
	V2912S	- 40.000	V2911S	- 20.000
	V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	-40.000
△	-20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.904	BETA	0.000
ELVATR	0.000		

DATA SOURCE

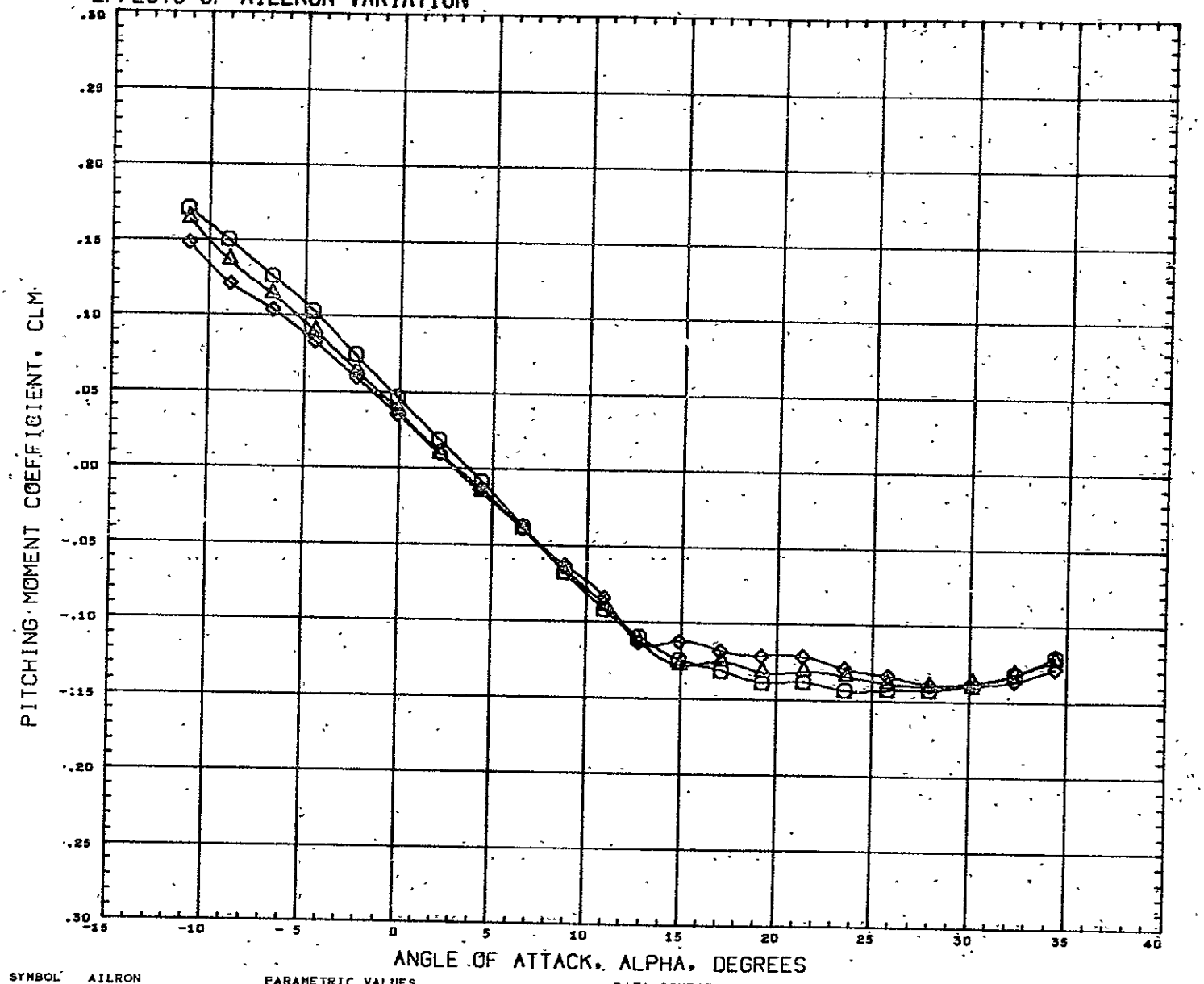
	AILRON		AILRON
DATASET		DATASET	
V2912S	-40.000	V2911S	-20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MH*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.099	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

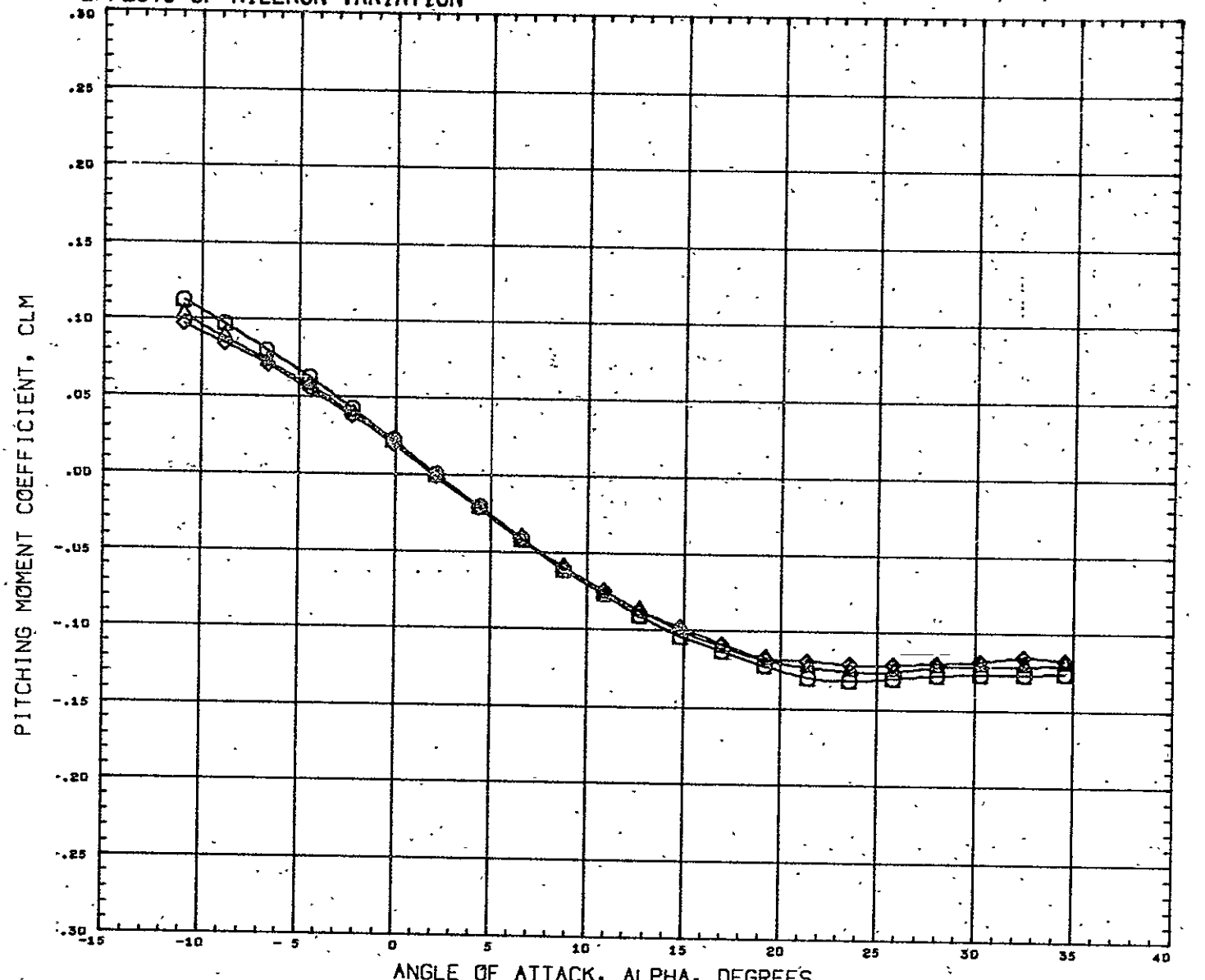
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (V2912S) 03 AUG 71 PAGE 374

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.468	BETA	0.000
ELVATR	0.000		

DATA SOURCE

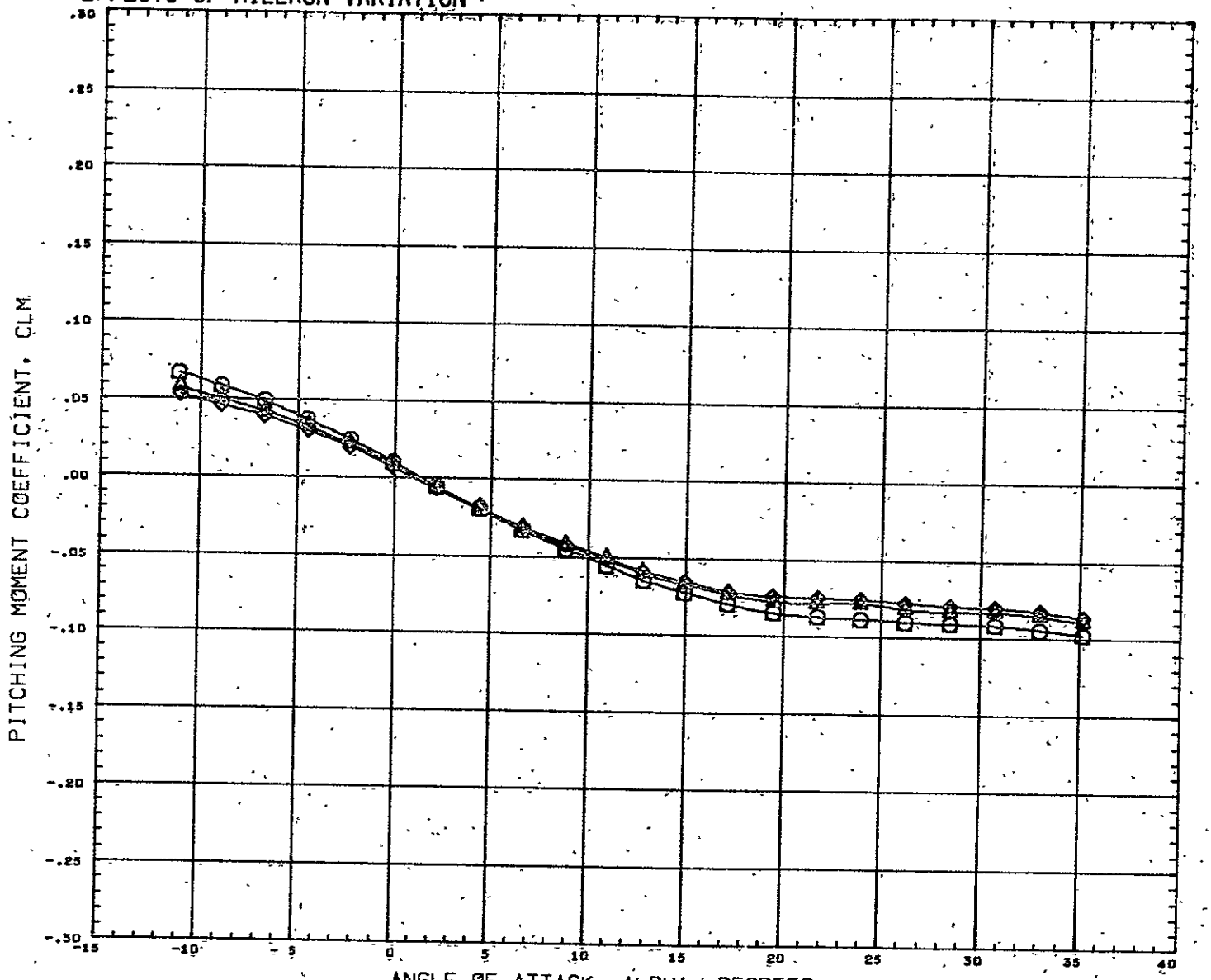
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HH*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.964	BETA	0.000
ELVATR	0.000		

DATA SOURCE

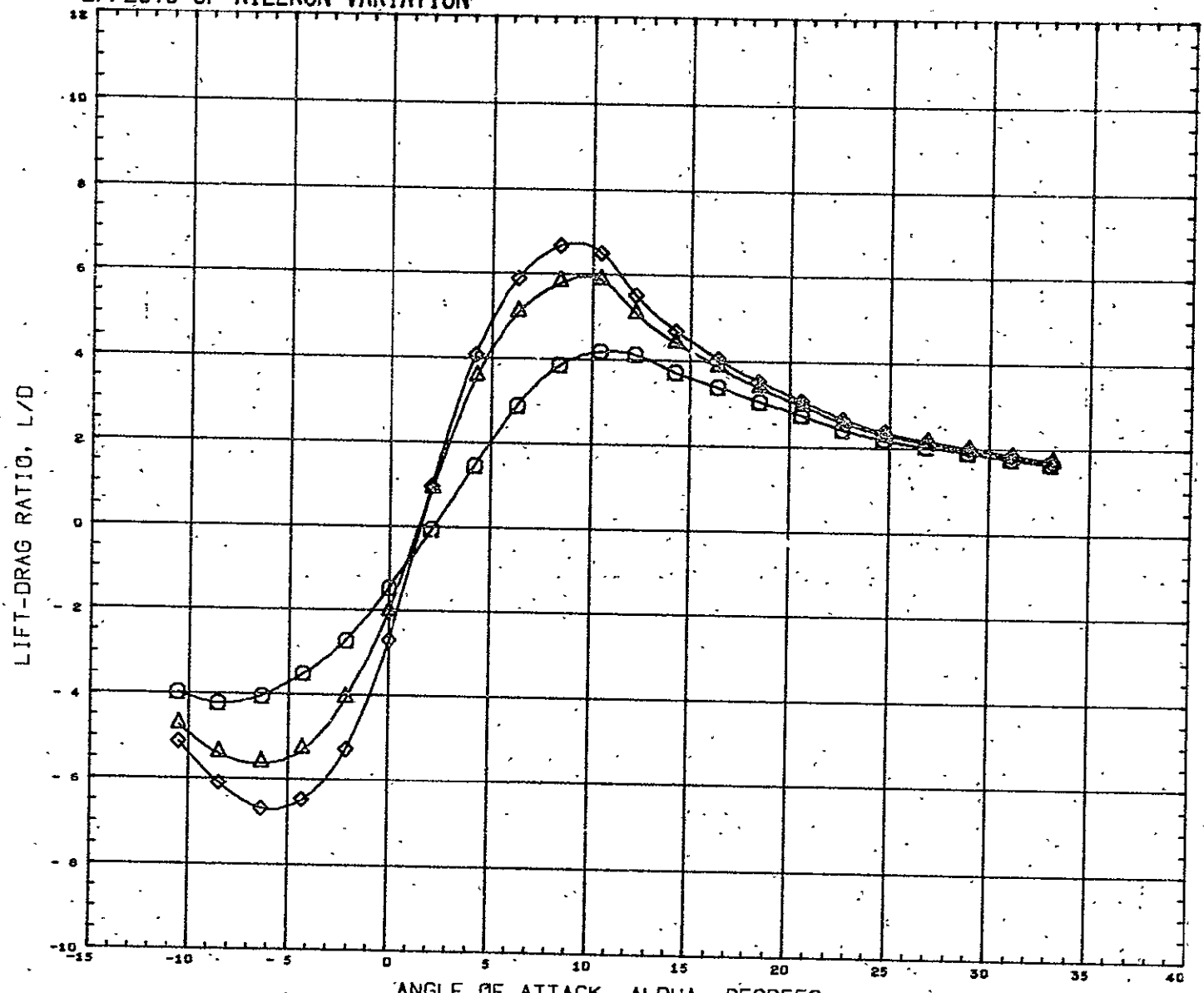
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MH*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.607	BETA	0.000
ELVATR	0.000		

DATA SOURCE

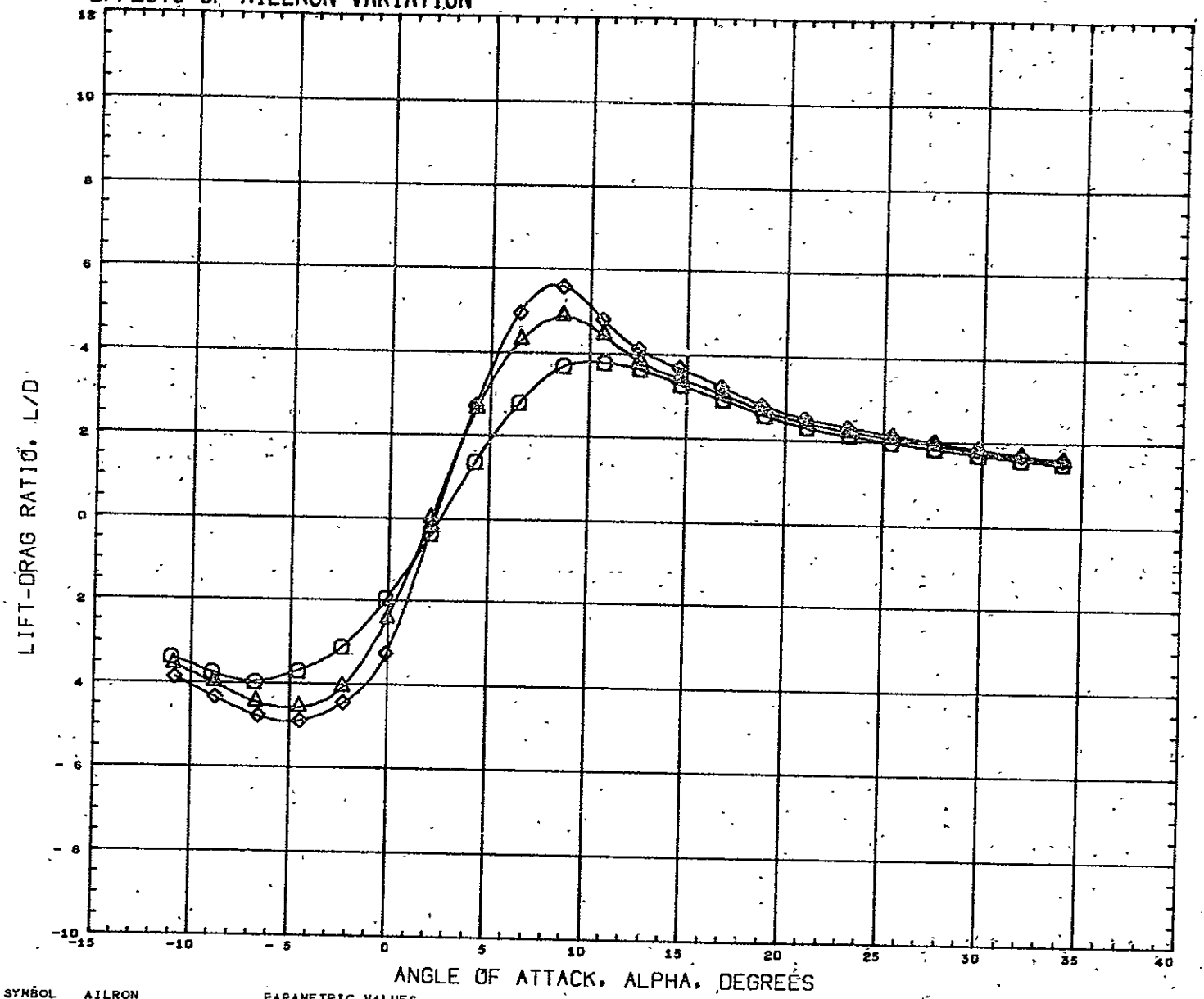
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HH*E*6

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.904	BETA	0.000
ELVATR	0.000		

DATA SOURCE

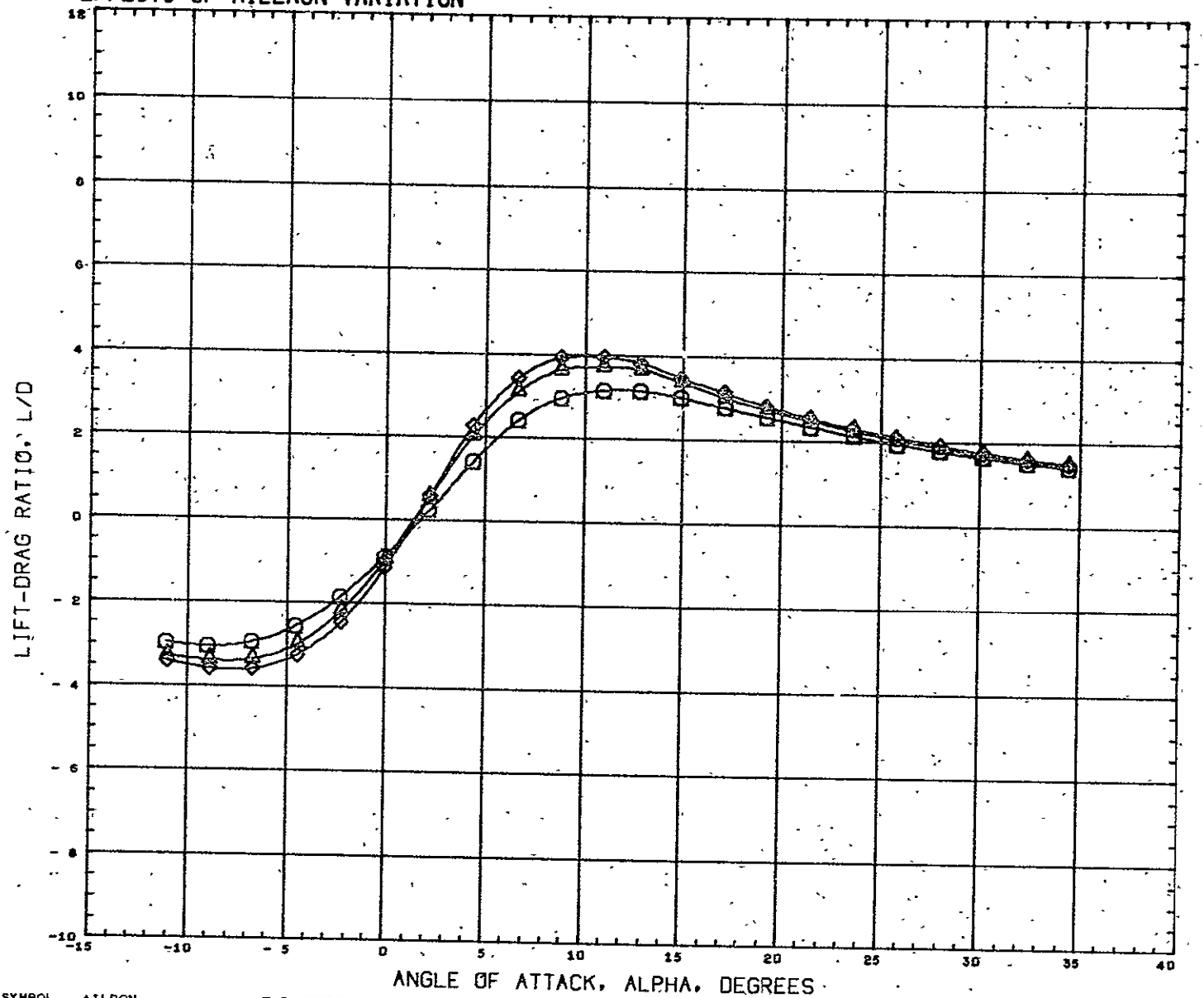
DATASET	AILRON
V2912S	- 40.000
V2906S	0.000
DATASET	AILRON
V2911S	- 20.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE NN*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.099	BETA	0.000
ELVATR	0.000		

DATA SOURCE

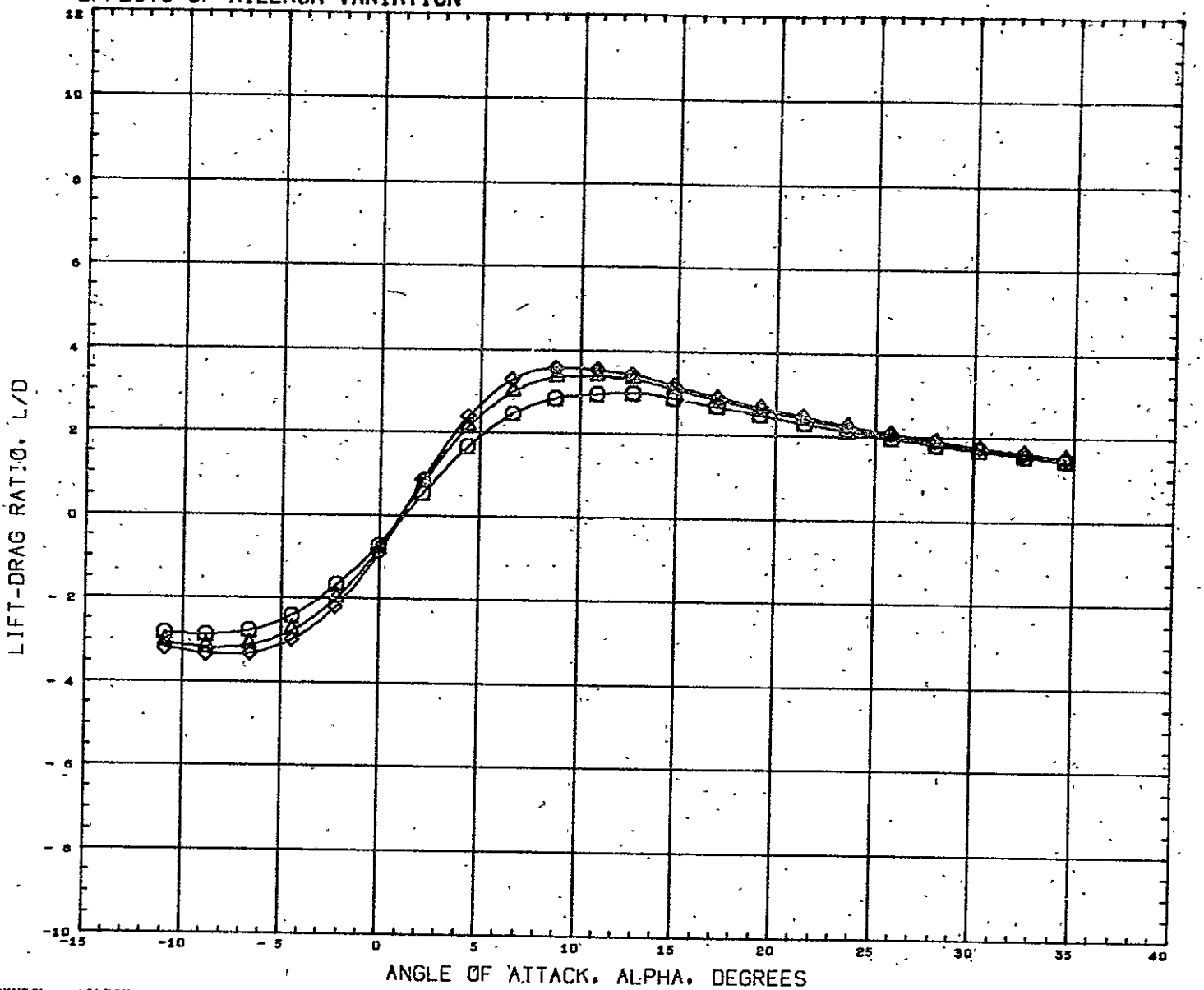
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.468	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

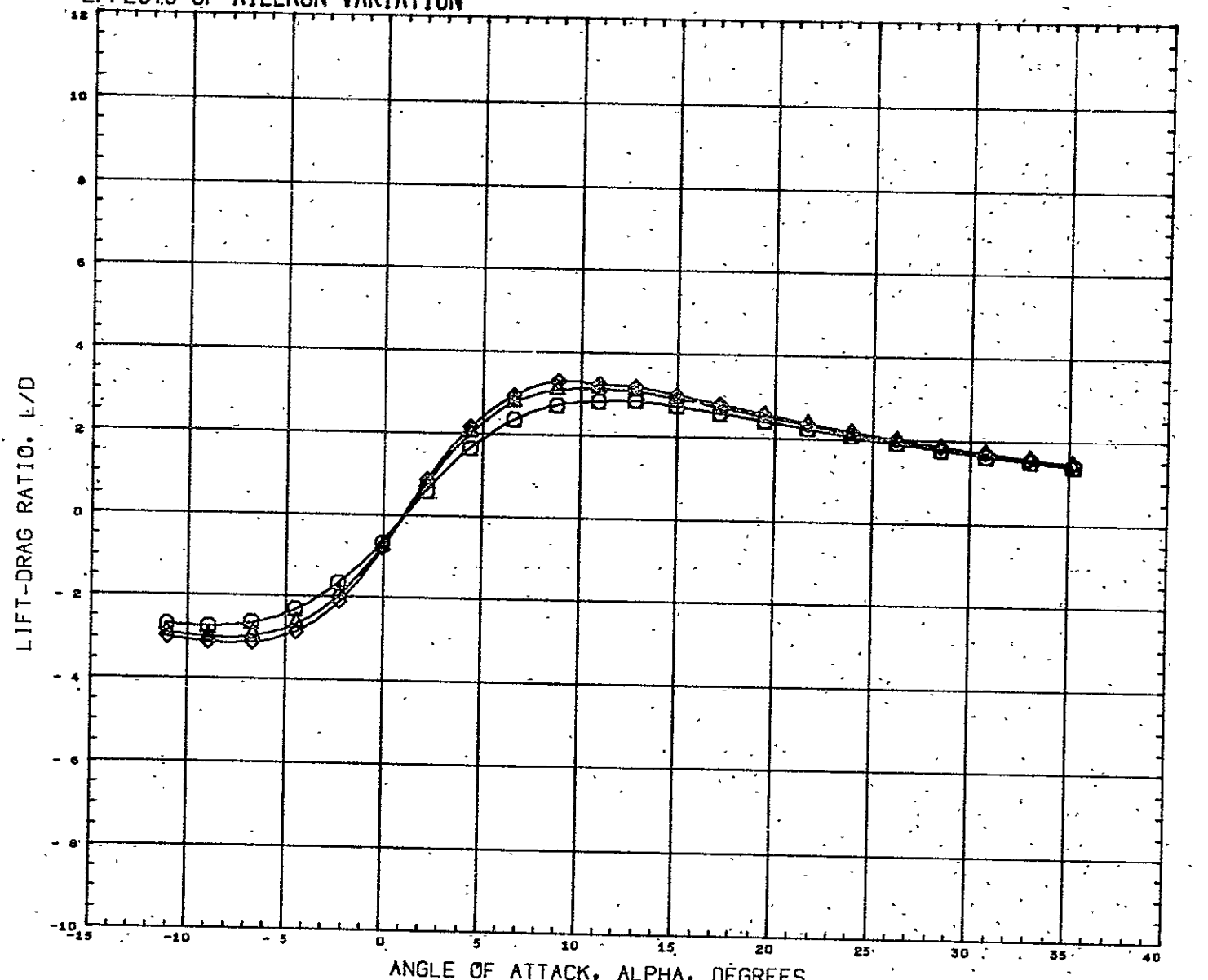
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*C

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (V2912S) 03 AUG 71

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.964	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

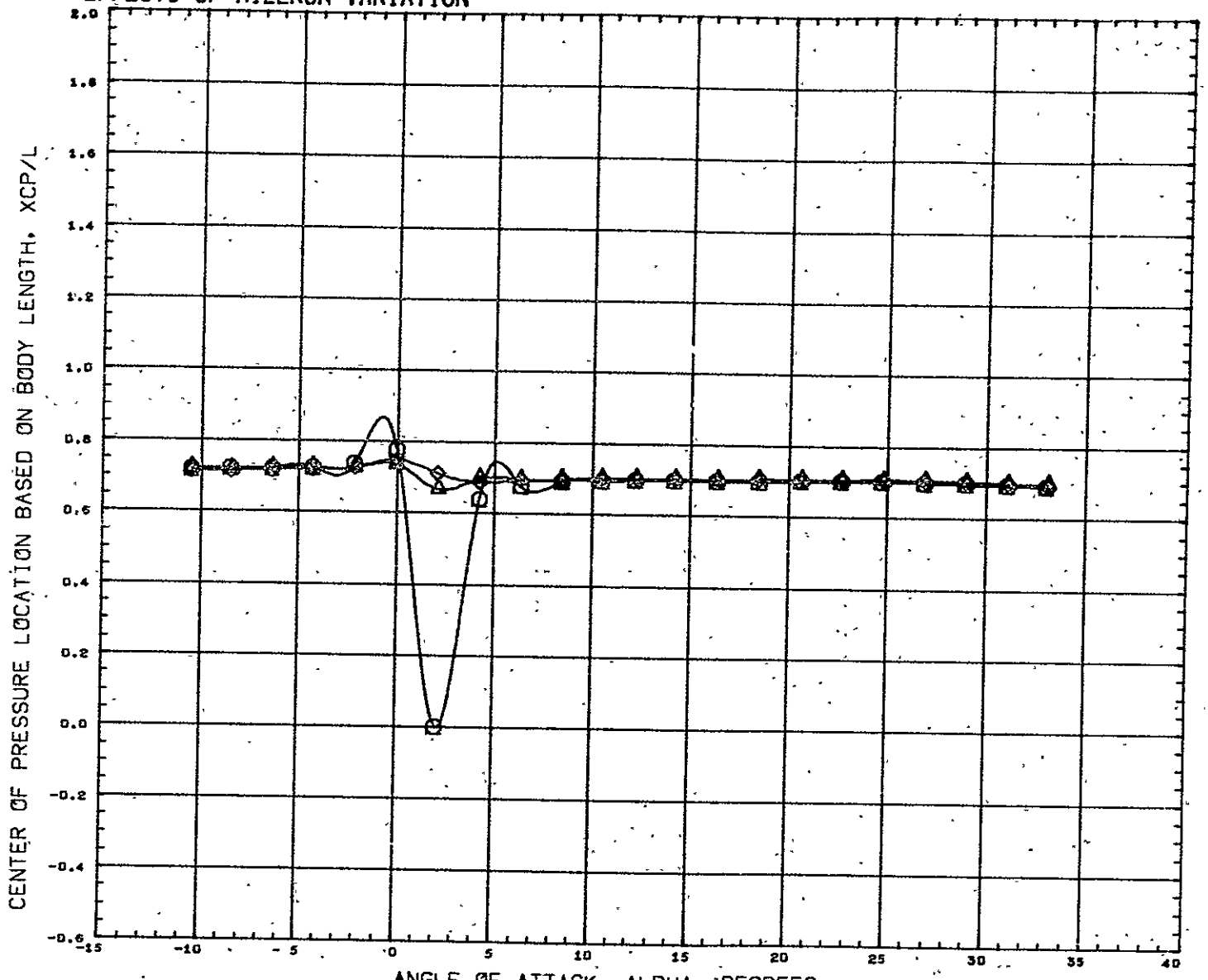
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HM*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (V2912S) 03 AUG 71 PAGE 381

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.607	BETA	0.000
ELVATR	0.000		

DATA SOURCE

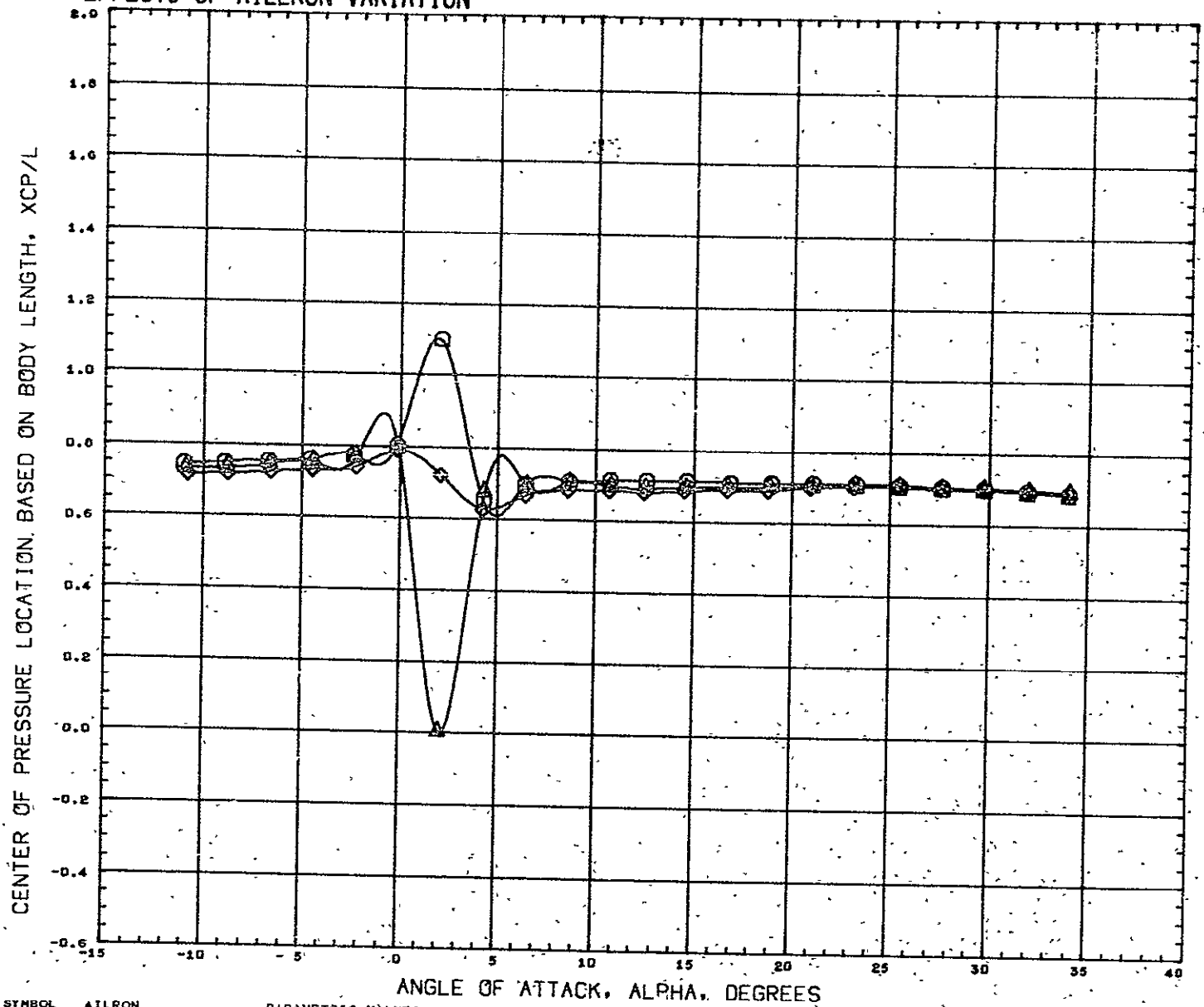
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE NH*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.904	BETA	0.000
ELVATR	0.000		

DATA SOURCE

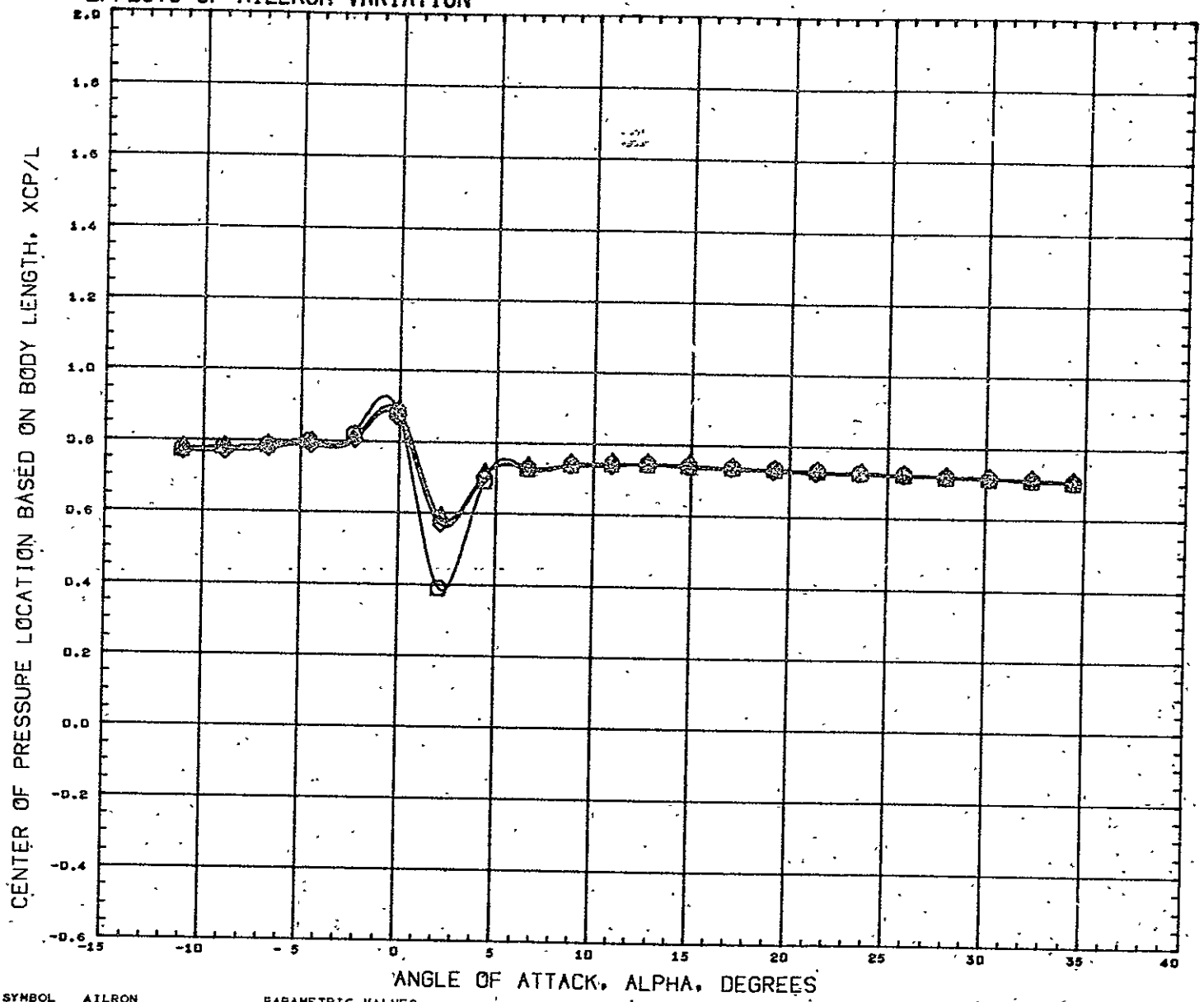
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	-130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HH*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
◇	- 40.000
△	- 20.000
□	0.000

PARAMETRIC VALUES

MACH	1.099	BETA	0.000
ELVATR	0.000		

DATA SOURCE.

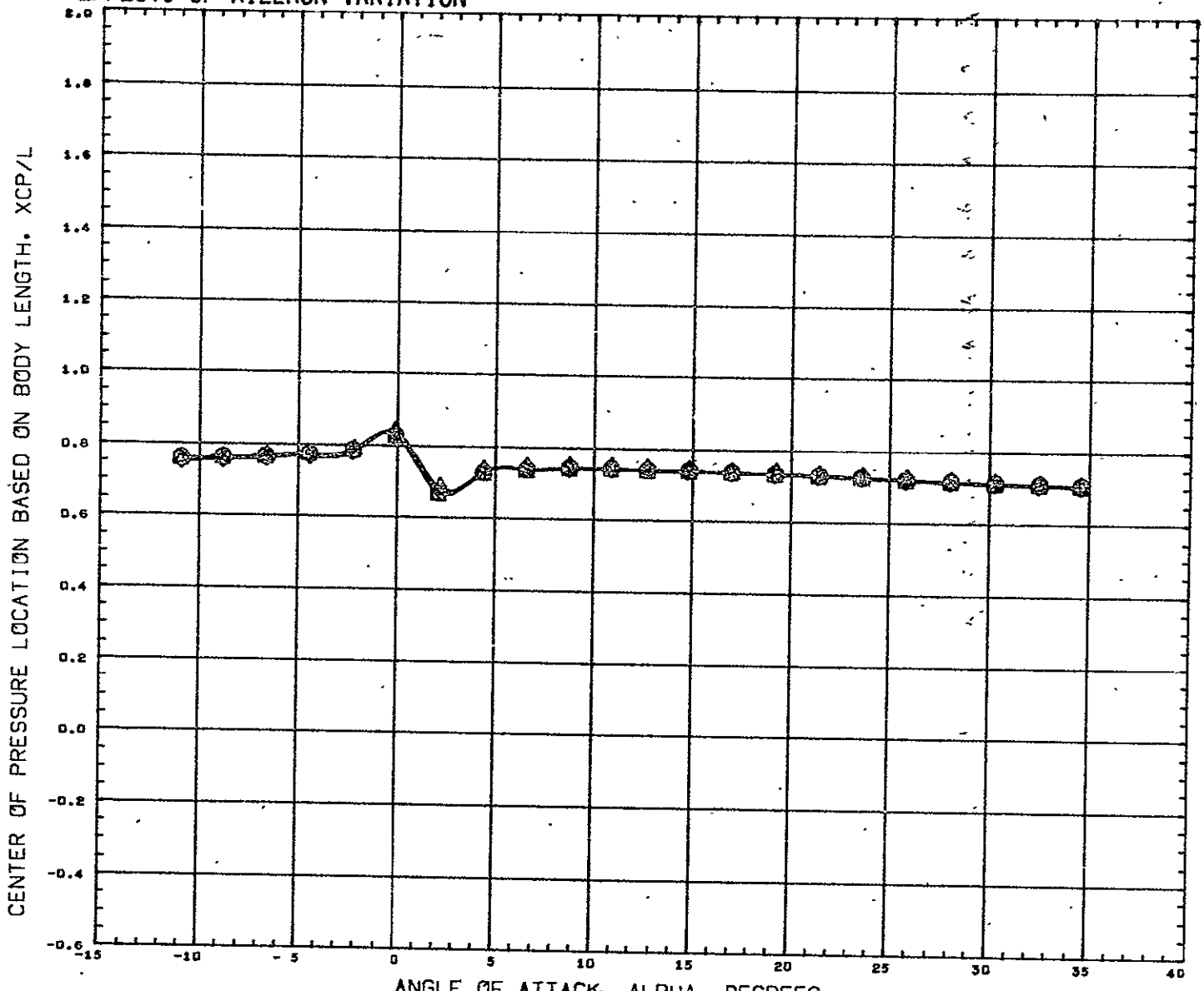
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.468	BETA	0.000
ELVATR	0.000		

DATA SOURCE

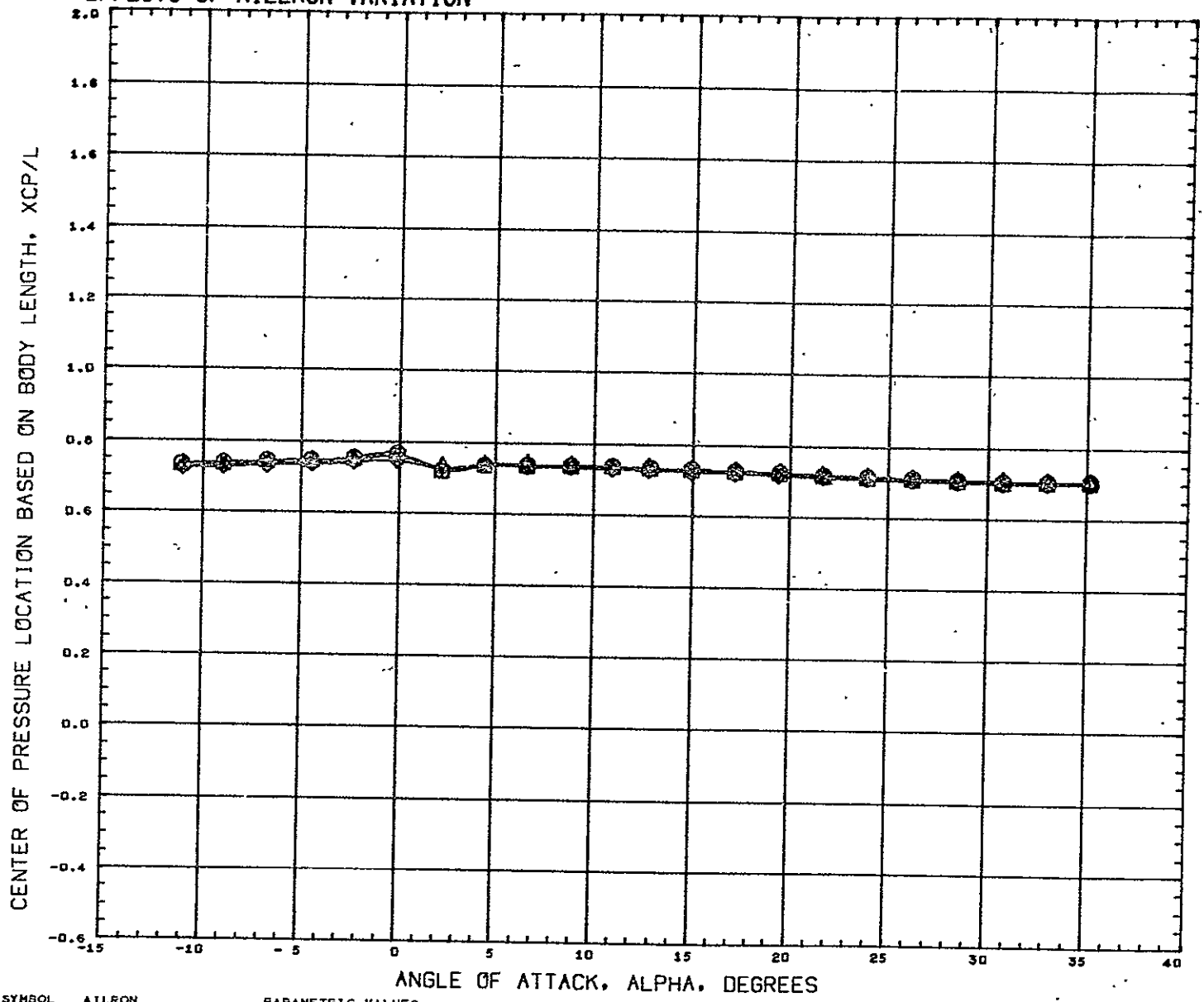
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.964	BETA	0.000
ELVATR	0.000		

DATA SOURCE

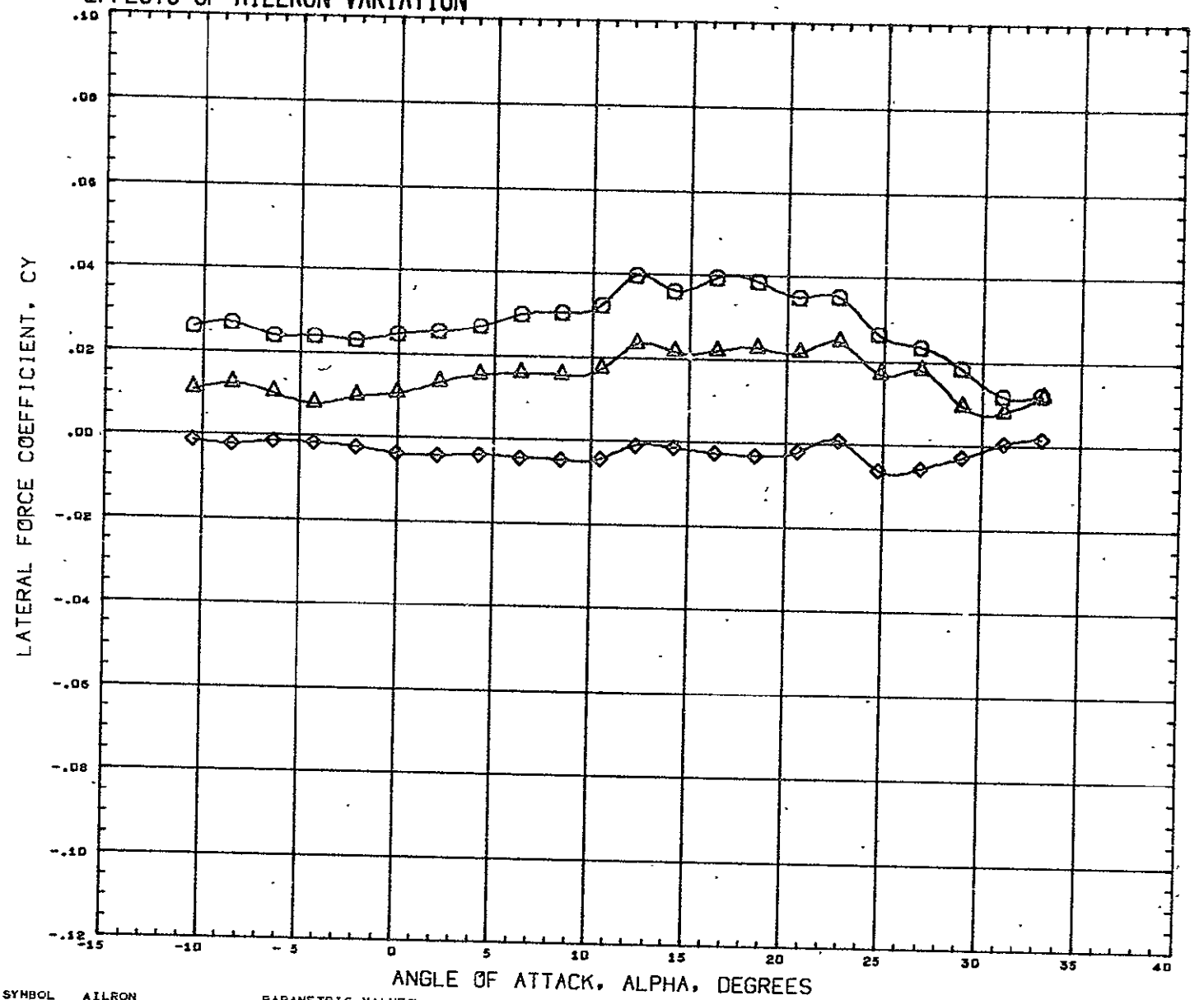
DATASET	AILRON	DATASET	AILRON
V2912S	- 40.000	V2911S	- 20.000
V2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.607	BETA	0.000
ELVATR	0.000		

DATA SOURCE

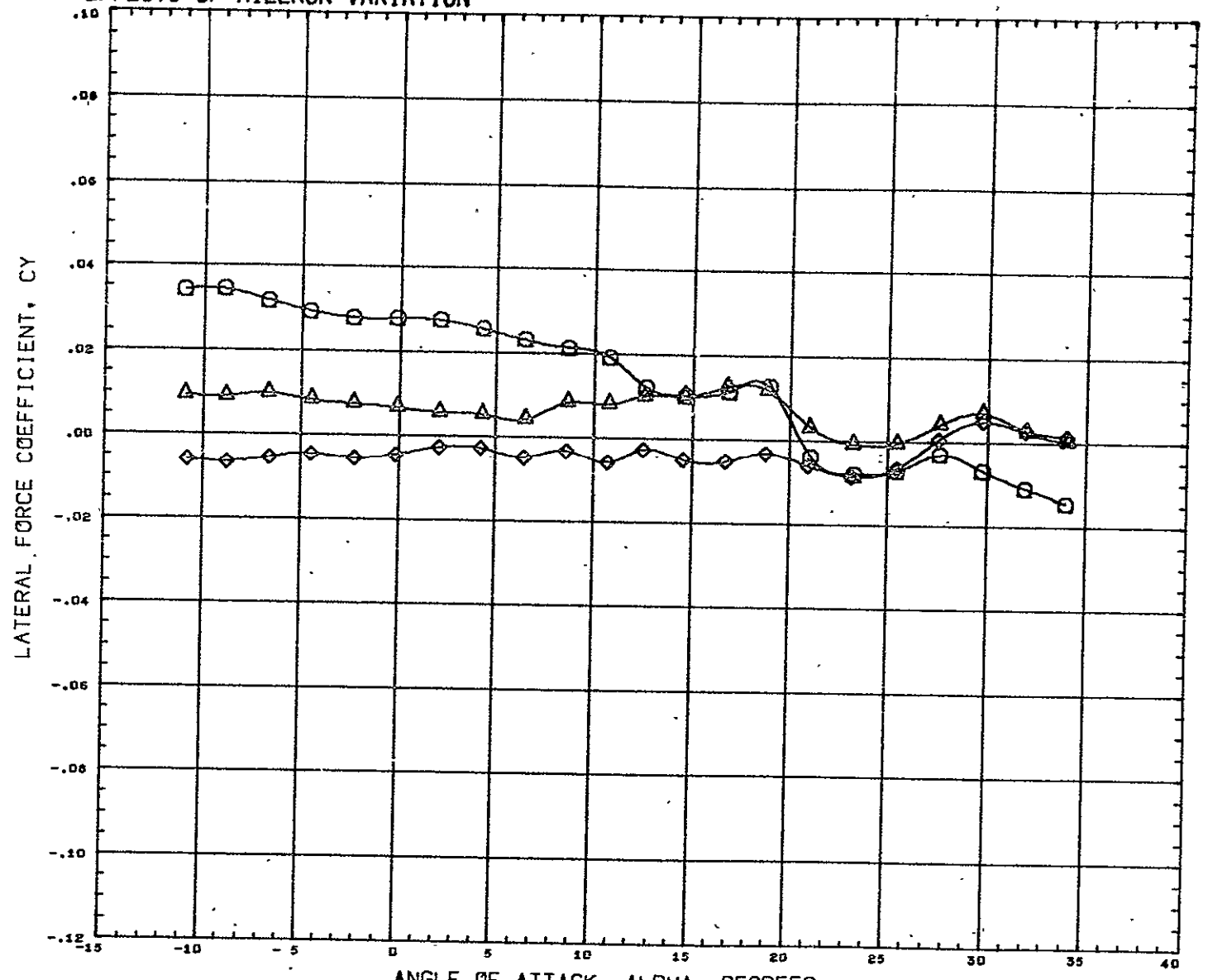
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.904	BETA	0.000
ELVATR	0.000		

DATA SOURCE

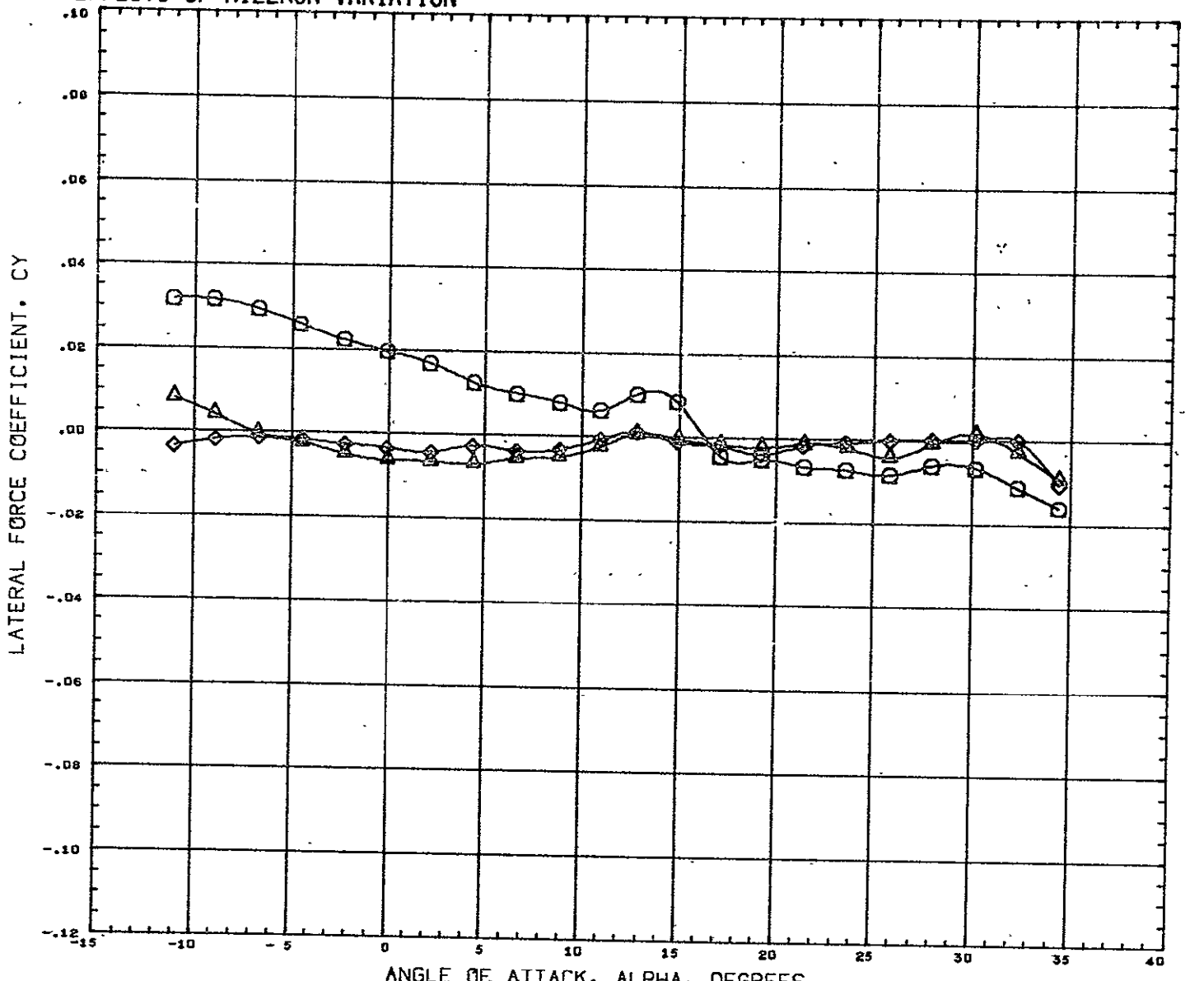
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○ △	- 40.000
◇	- 20.000
	0.000

PARAMETRIC VALUES

MACH	1.099	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

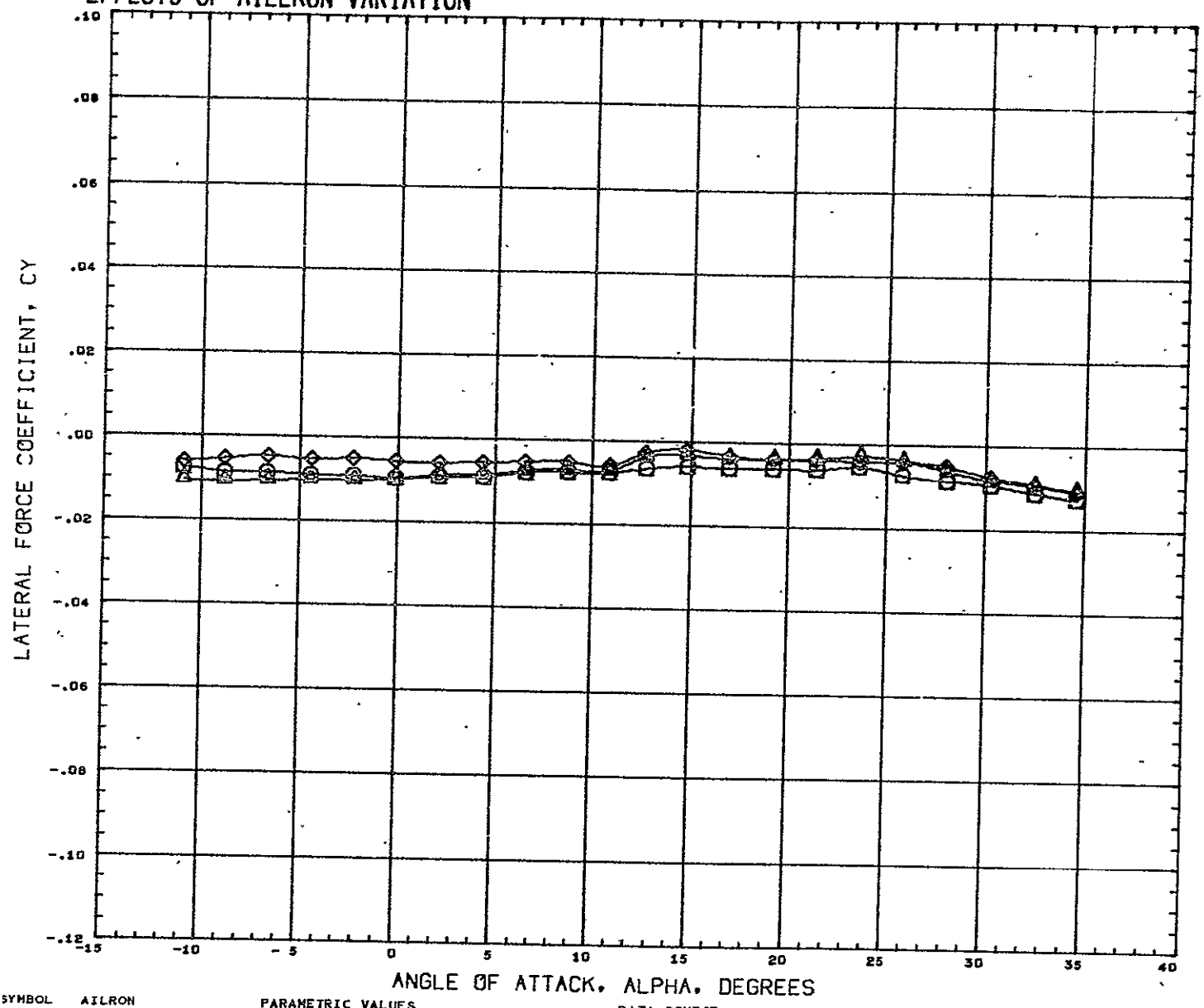
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (W2912S) 03 AUG 71 PAGE 389

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
▷	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.468	BETA	0.000
ELVATR	0.000		

DATA SOURCE

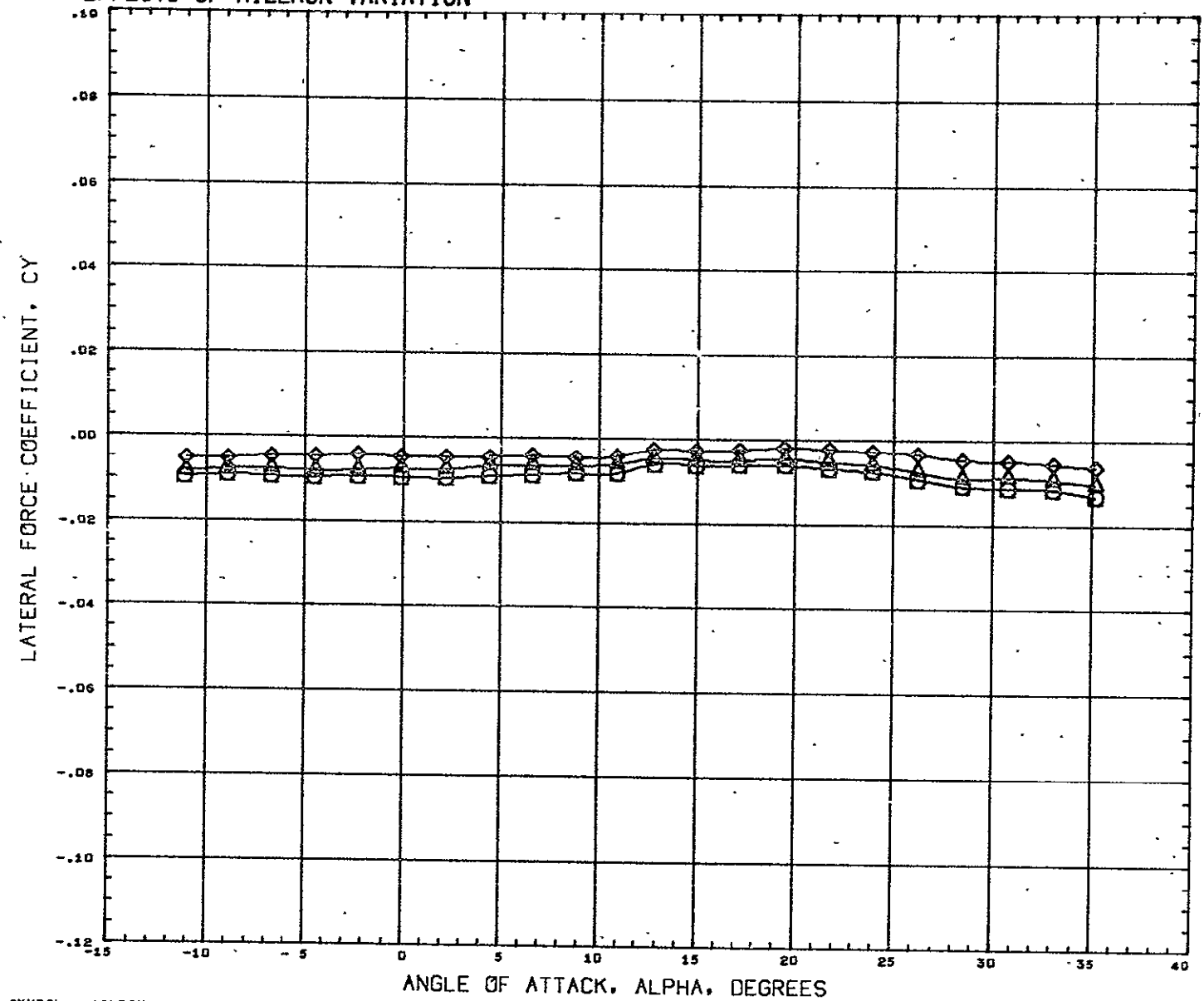
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MN*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
▷○	- 40.000
◇	- 20.000
	0.000

PARAMETRIC VALUES

MACH	1.964	BETA	0.000
ELVATR	0.000		

DATA SOURCE

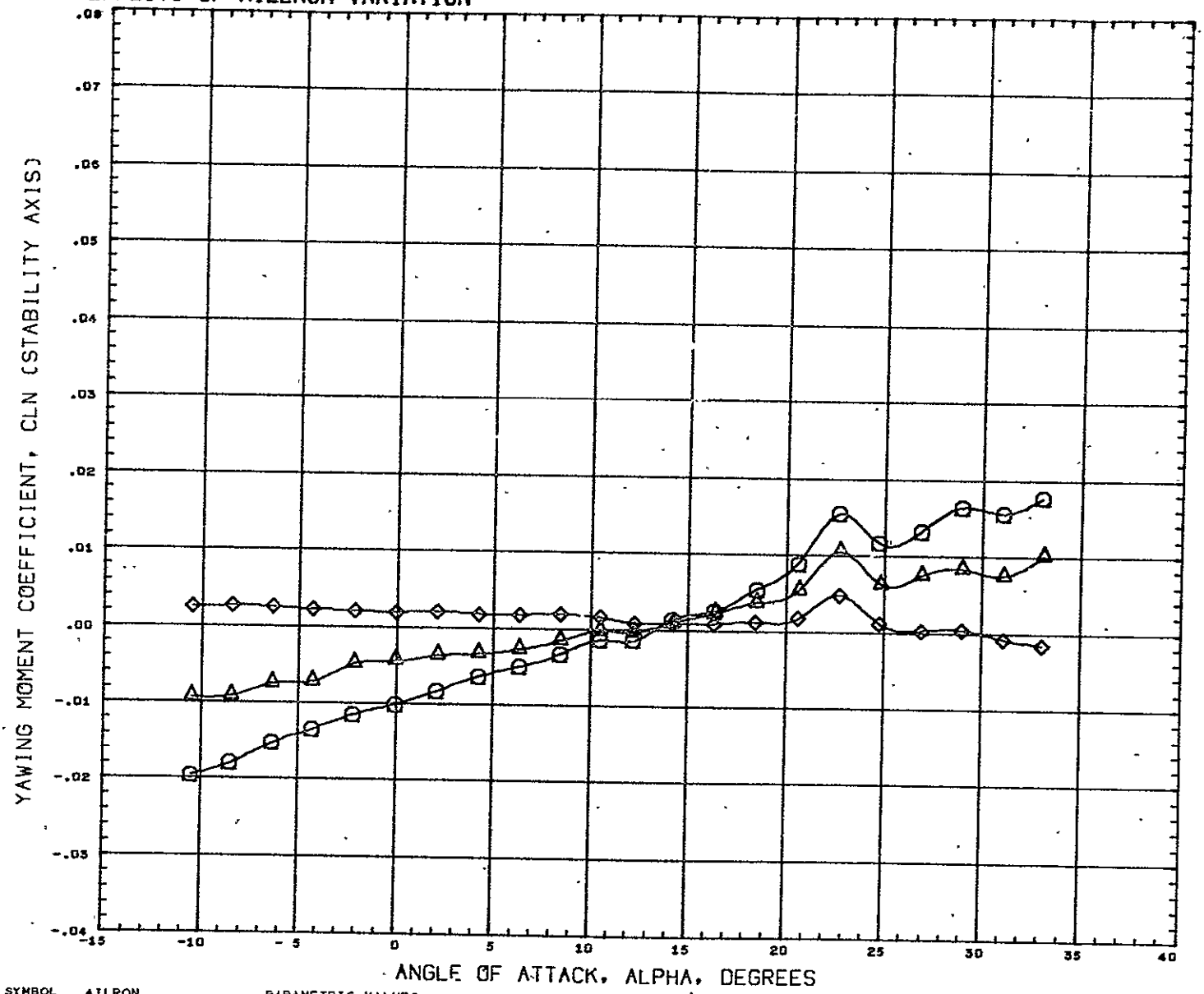
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.607	BETA	0.000
ELVATR	0.000		

DATA SOURCE

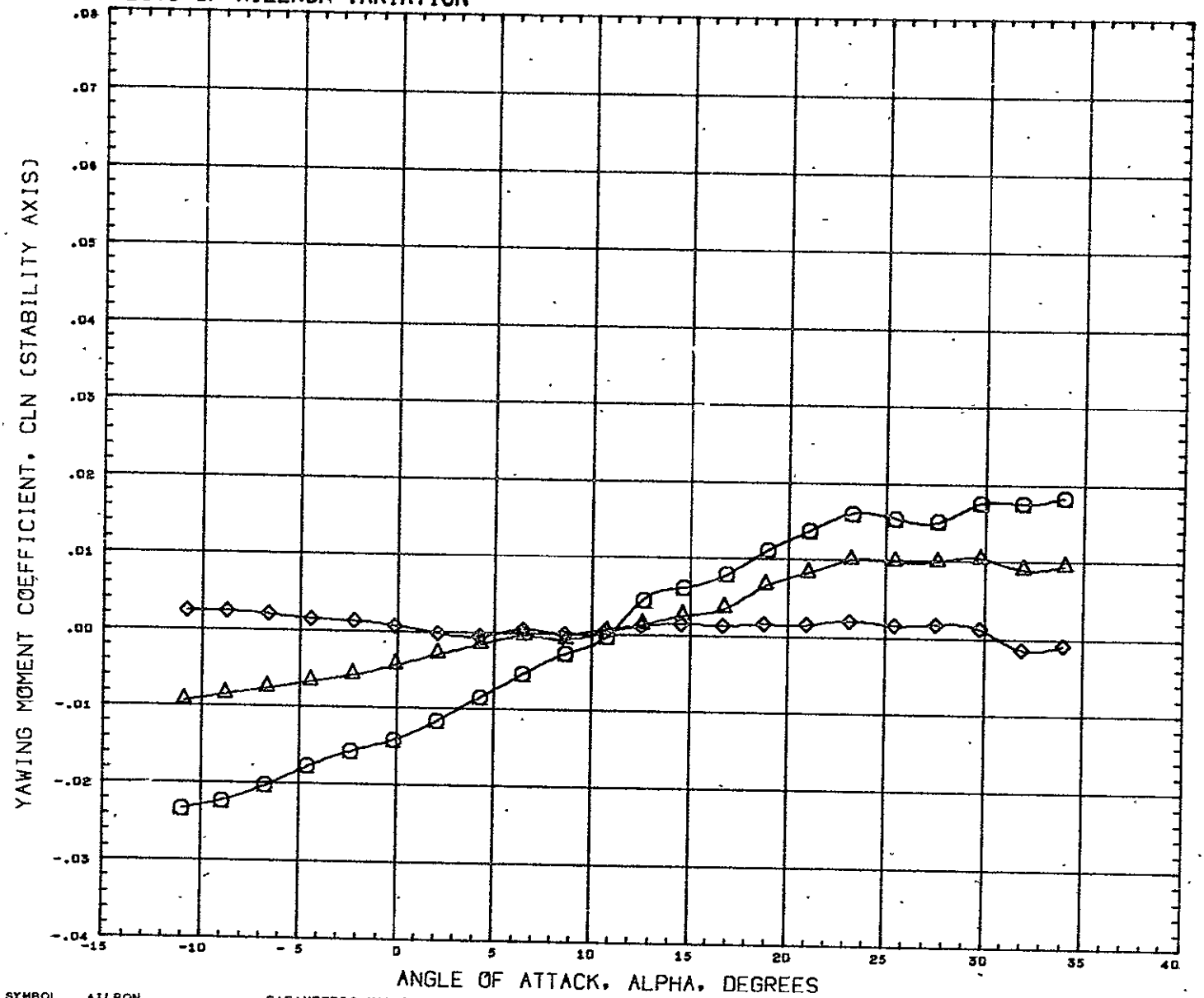
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XHRP	1422.5040	INCHES
YHRP	0.0000	INCHES
ZHRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.904	BETA	0.000
ELVATR	0.000		

DATA SOURCE

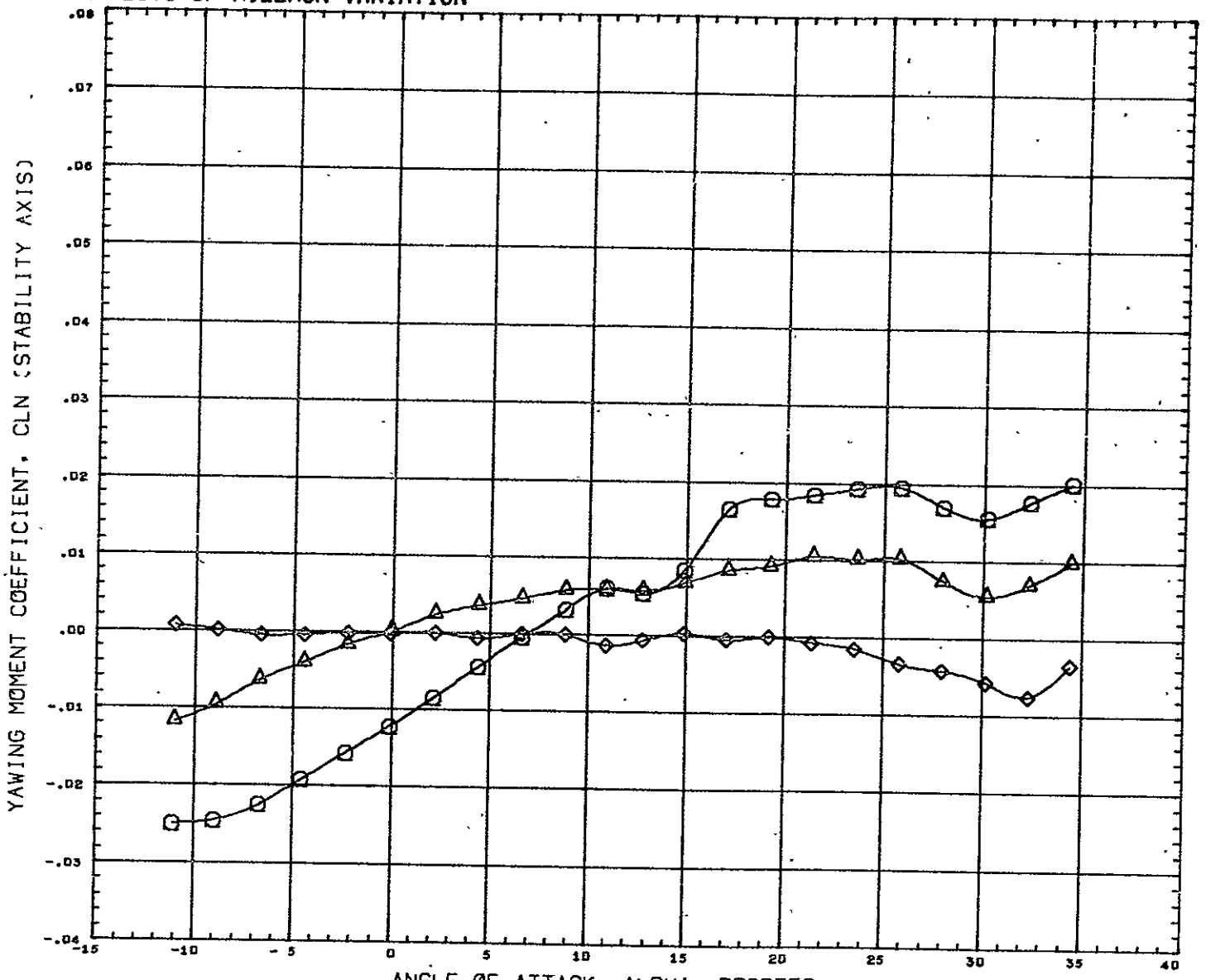
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.099	BETA	0.000
ELVATR	0.000		

DATA SOURCE

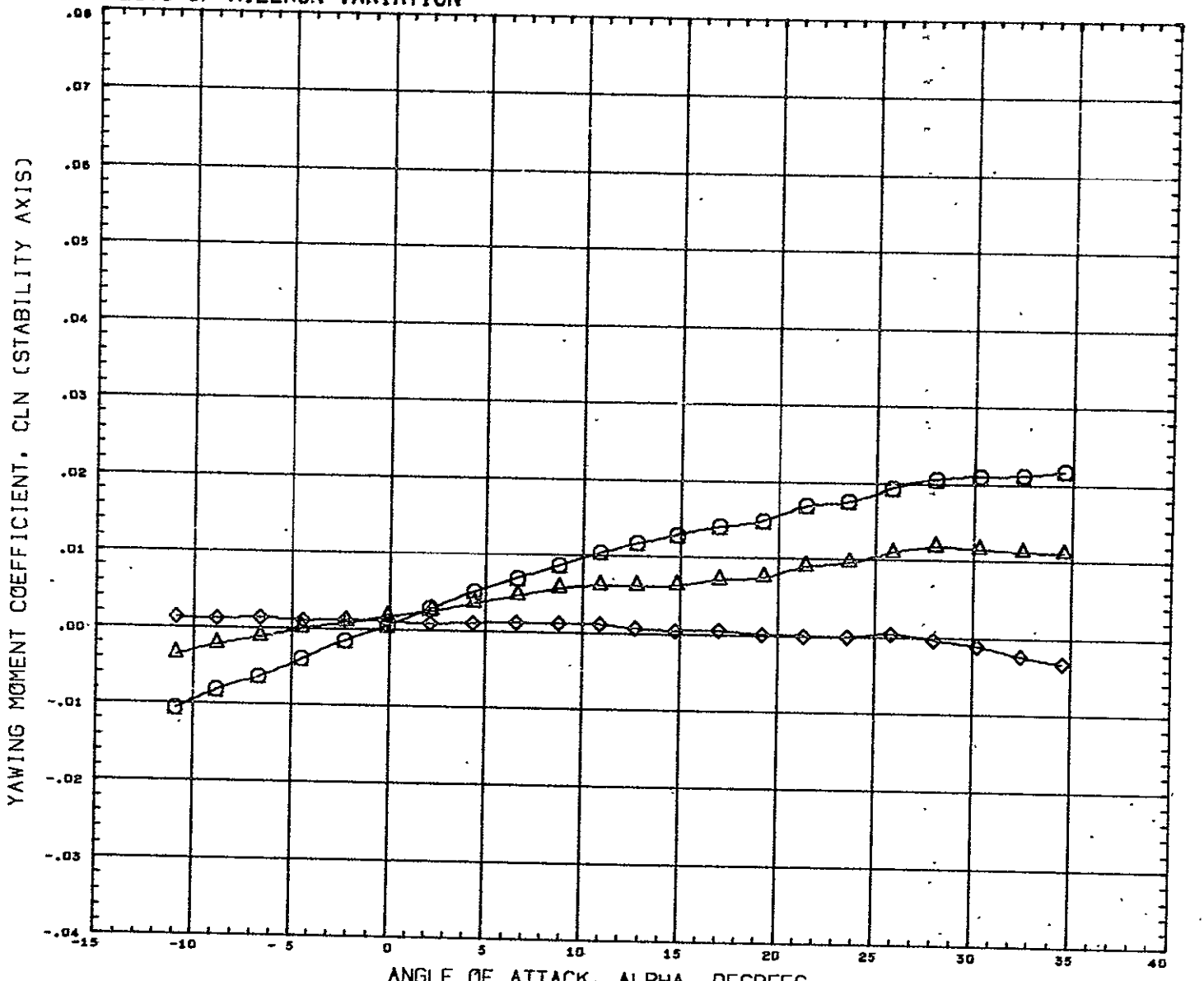
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.468	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

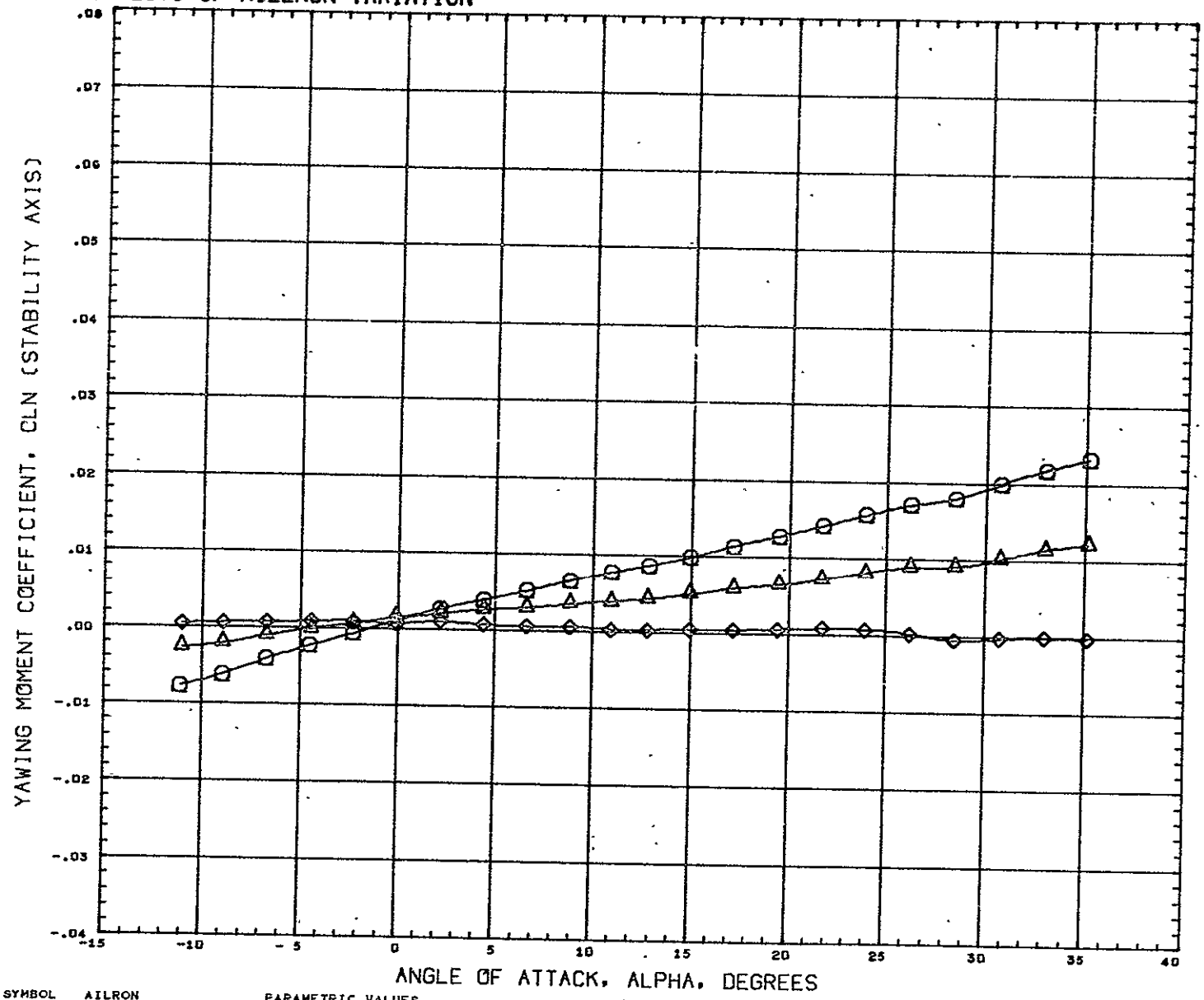
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (W2912S) 03 AUG 71 PAGE 395

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.964	BETA	0.000
ELVATR	0.000		

DATA SOURCE

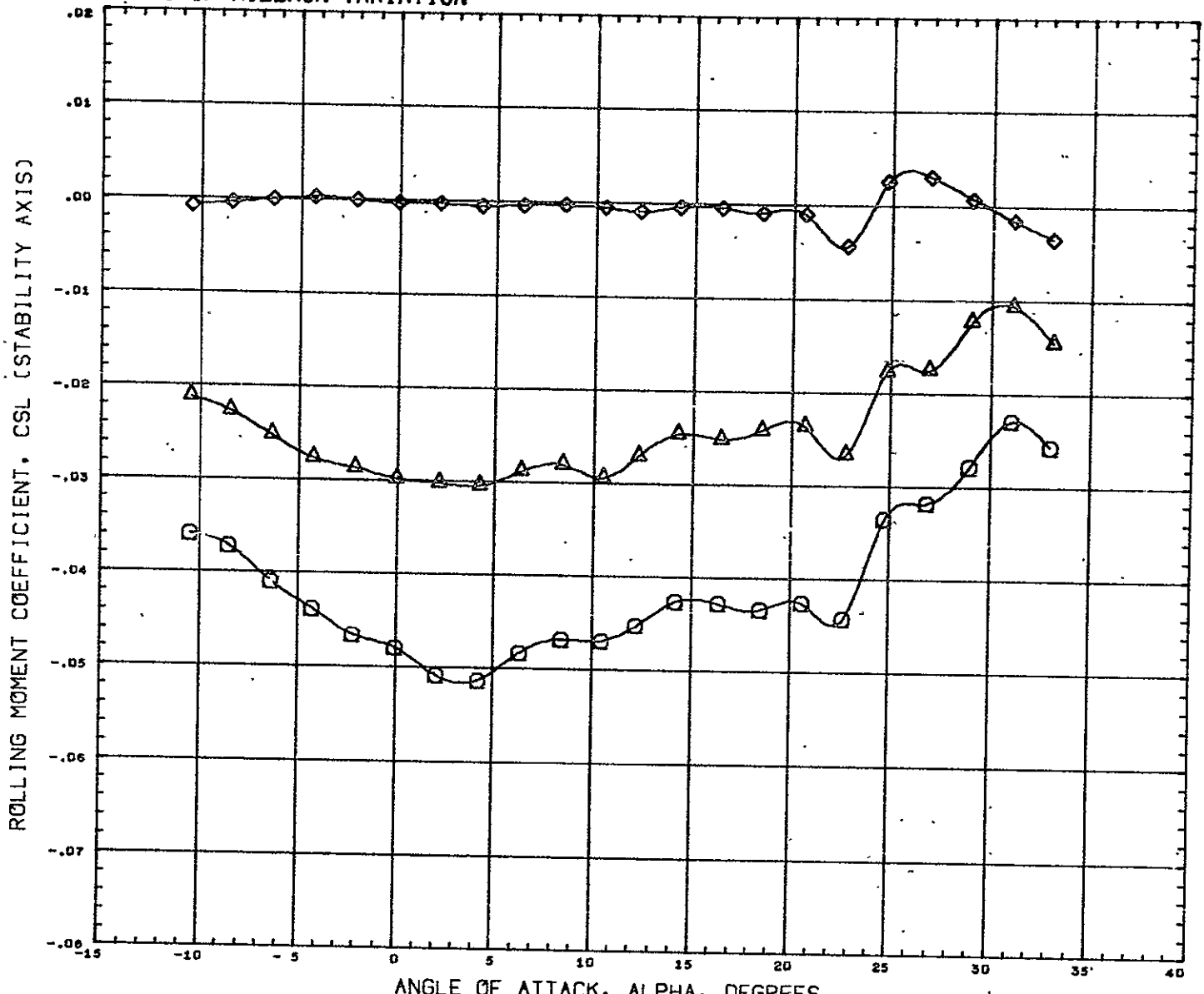
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MH*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.607	BETA	0.000
ELVATR	0.000		

DATA SOURCE

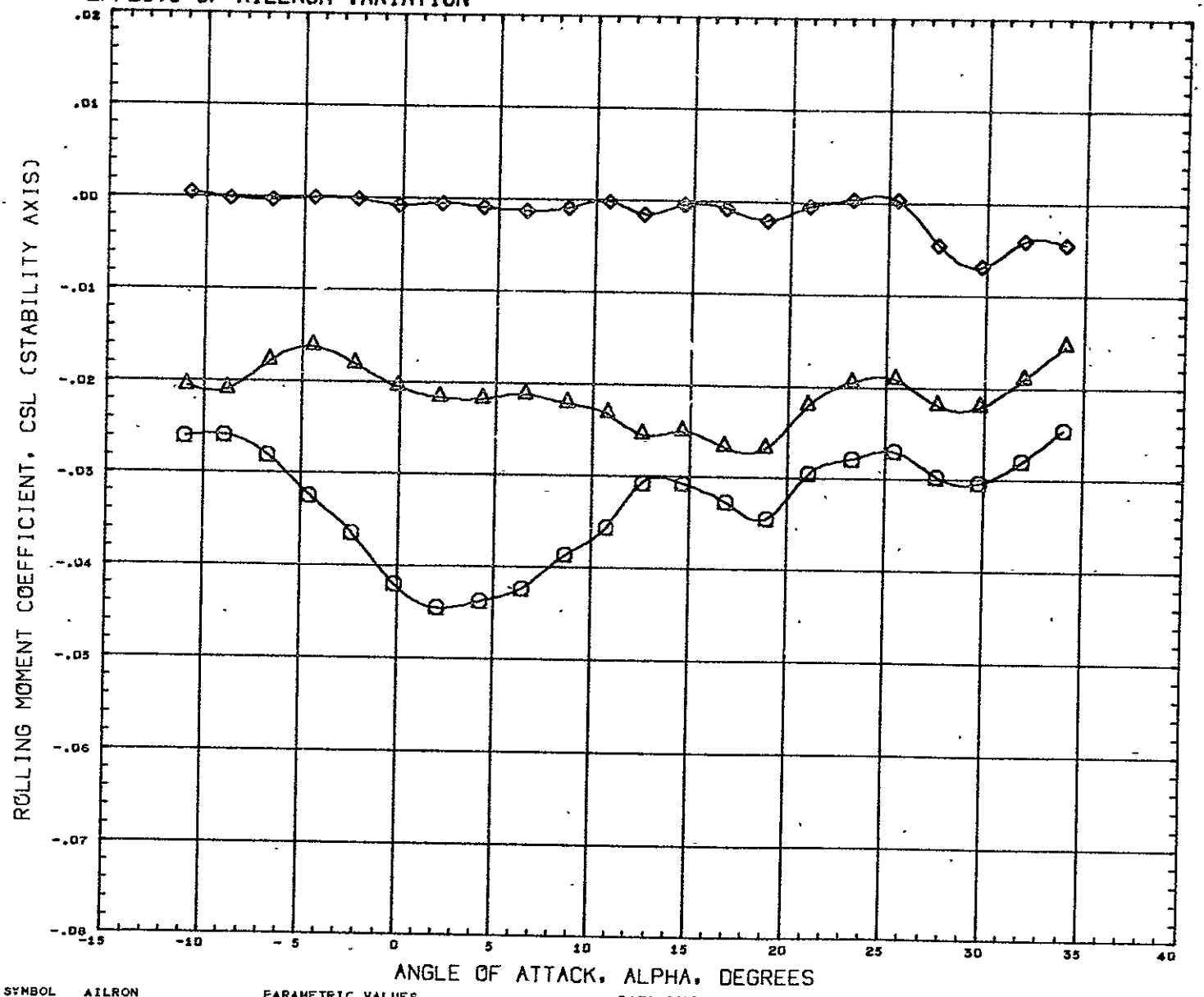
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.904	BETA	0.000
ELVATR	0.000		

DATA SOURCE

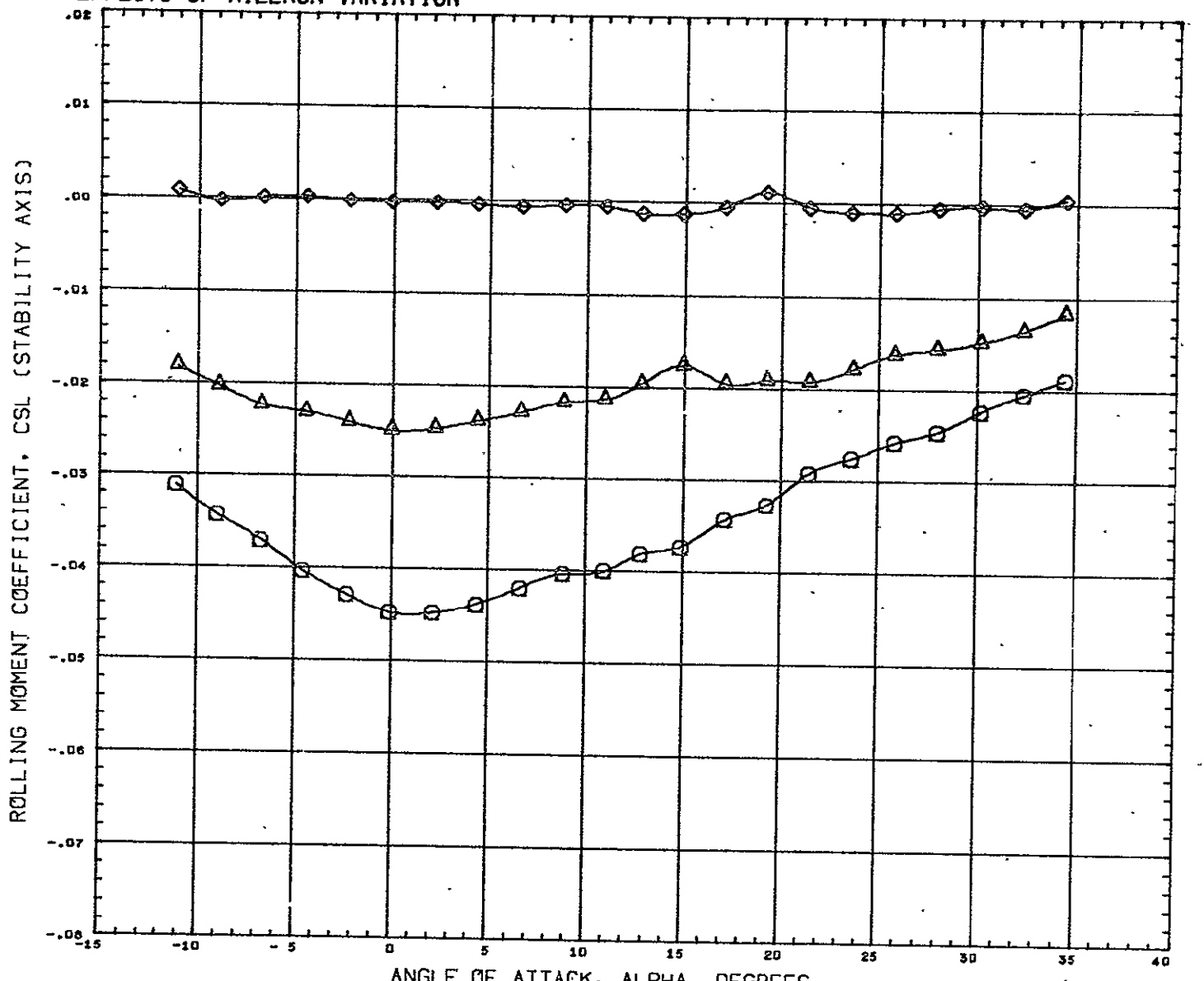
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.099	BETA	0.000
ELVATR	0.000		

DATA SOURCE

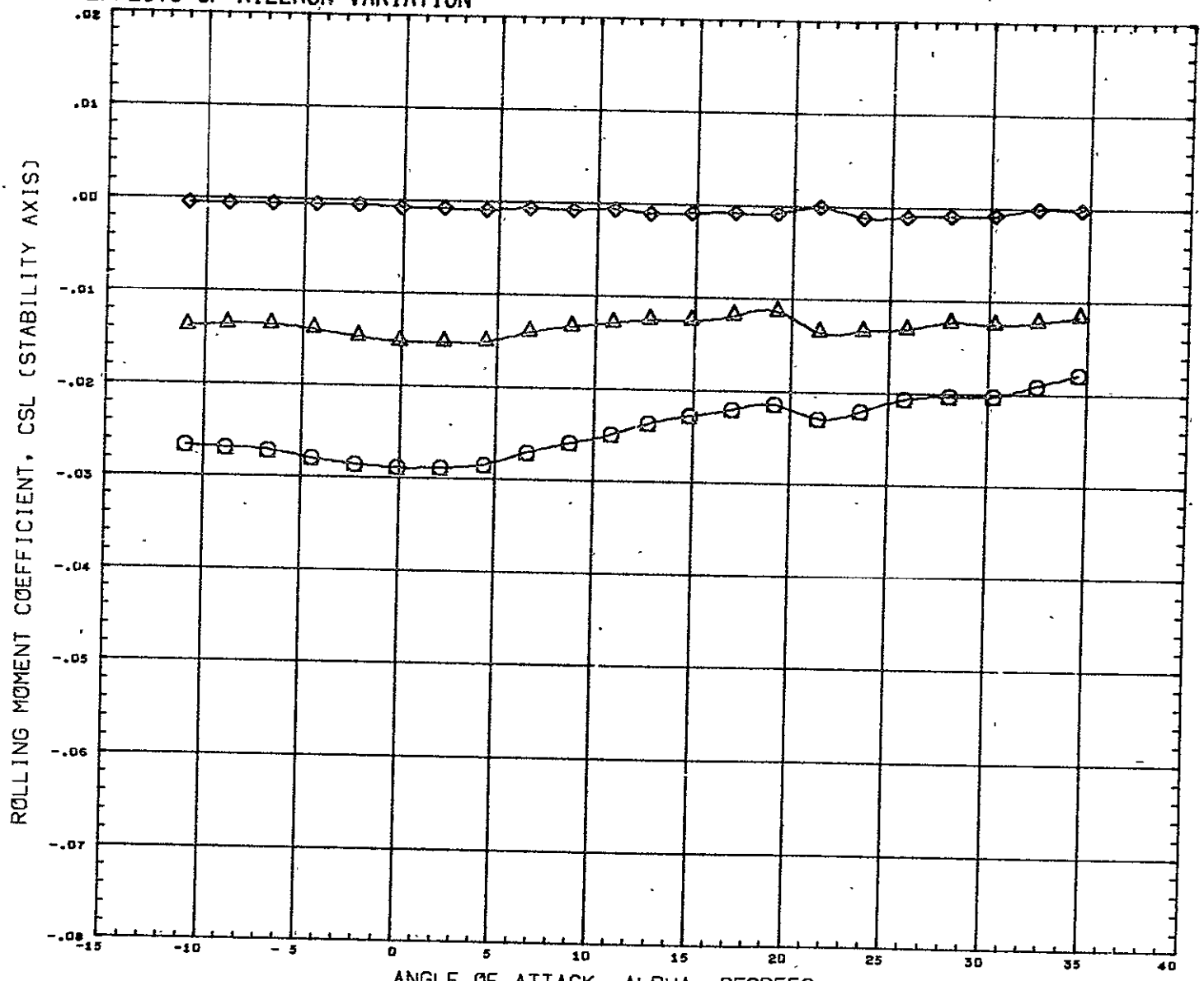
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MH*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.468	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

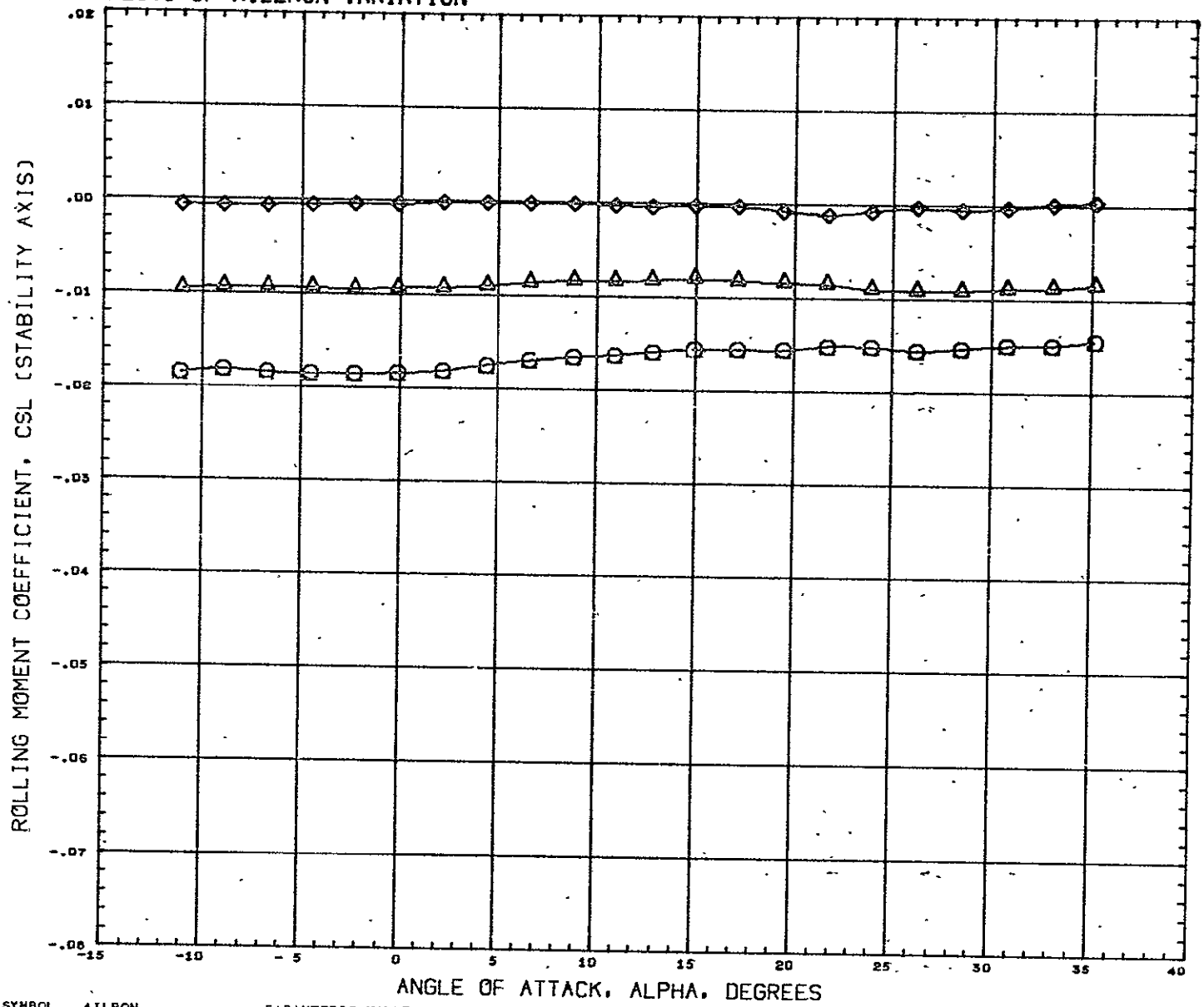
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRF	1422.5049	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (W2912S) 03 AUG 71

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.964	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

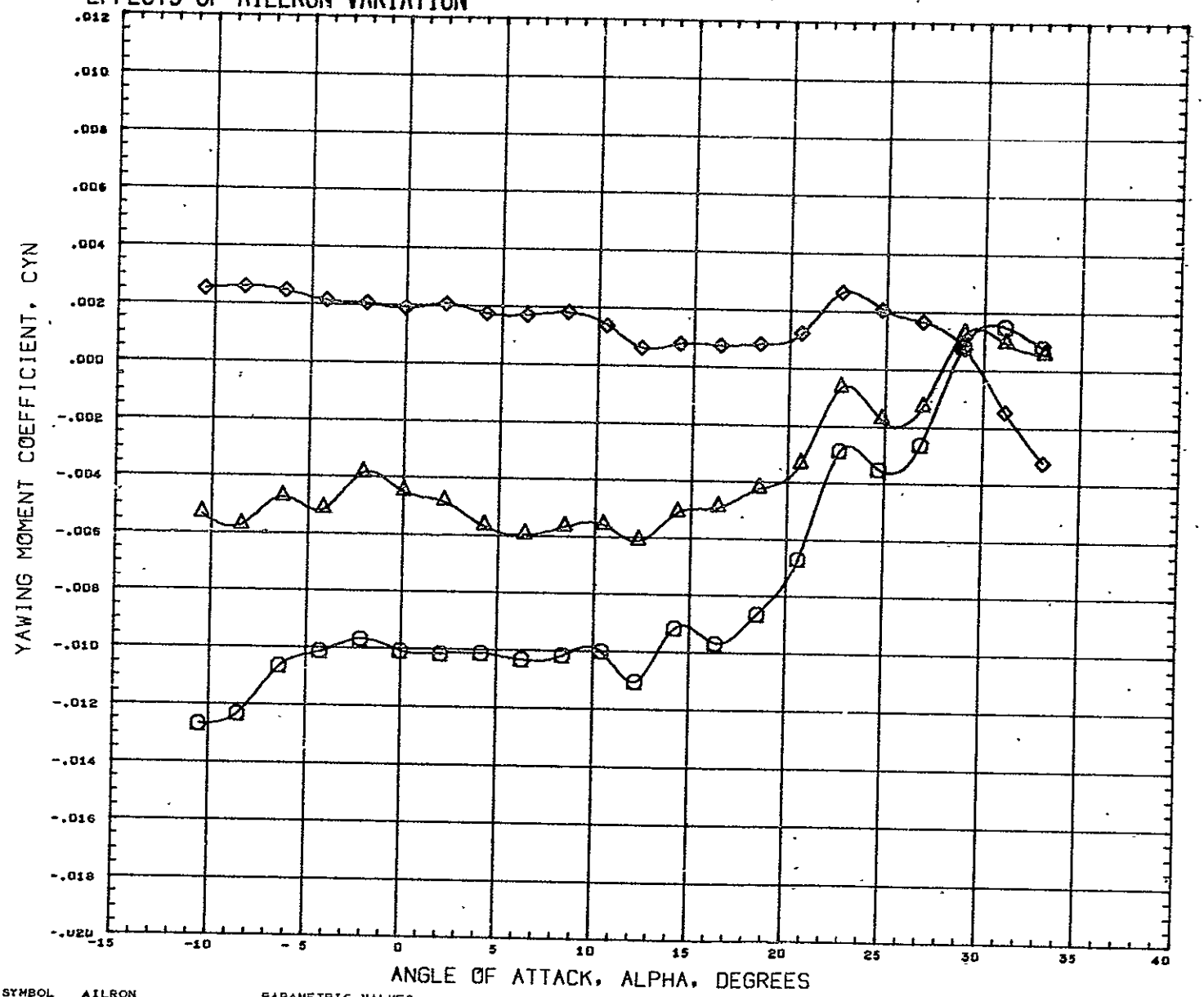
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (W2912S) 03 AUG 71 PAGE 401

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
◻	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.607	BETA	0.000
ELVATR	0.000		

DATA SOURCE

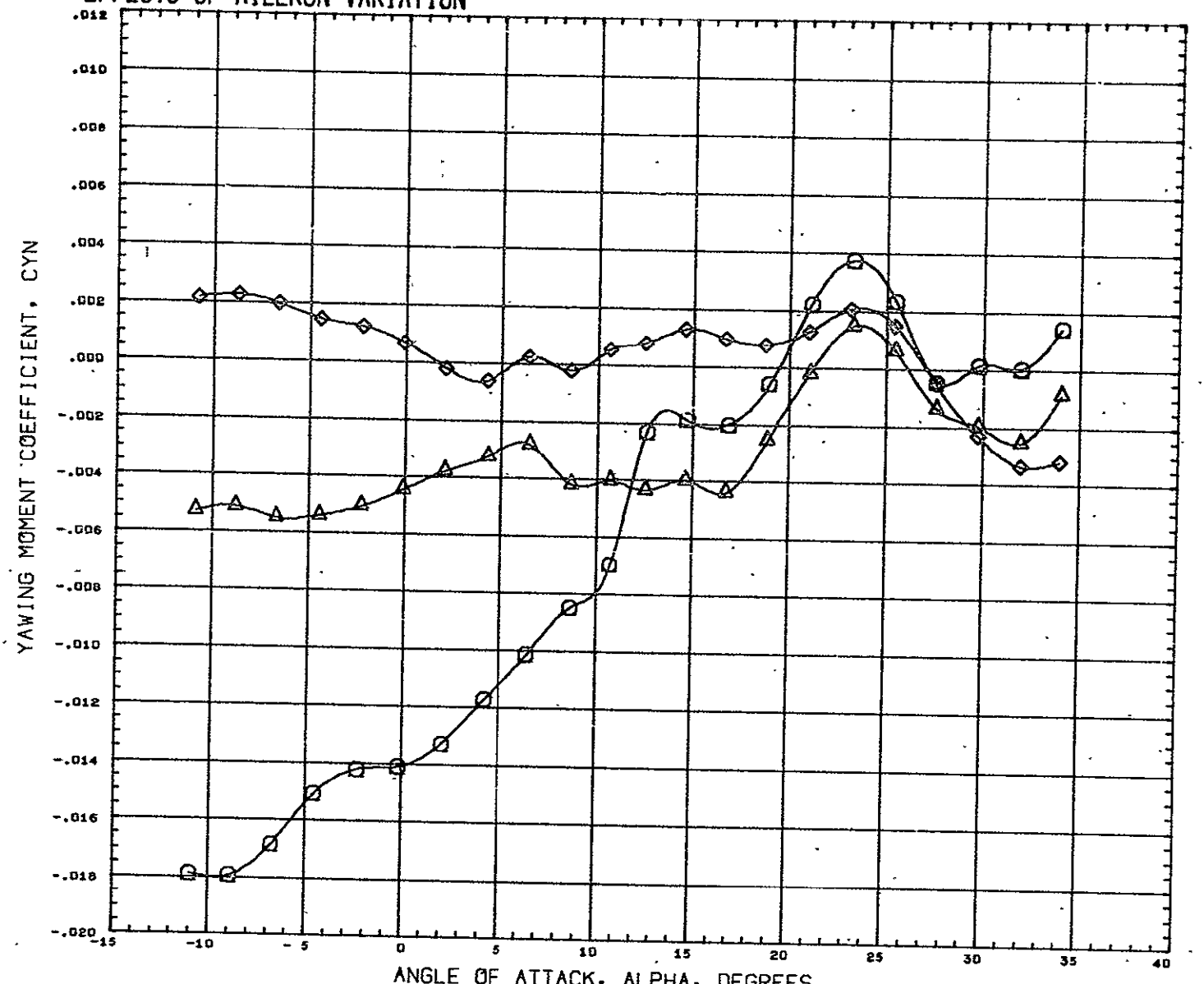
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.904	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

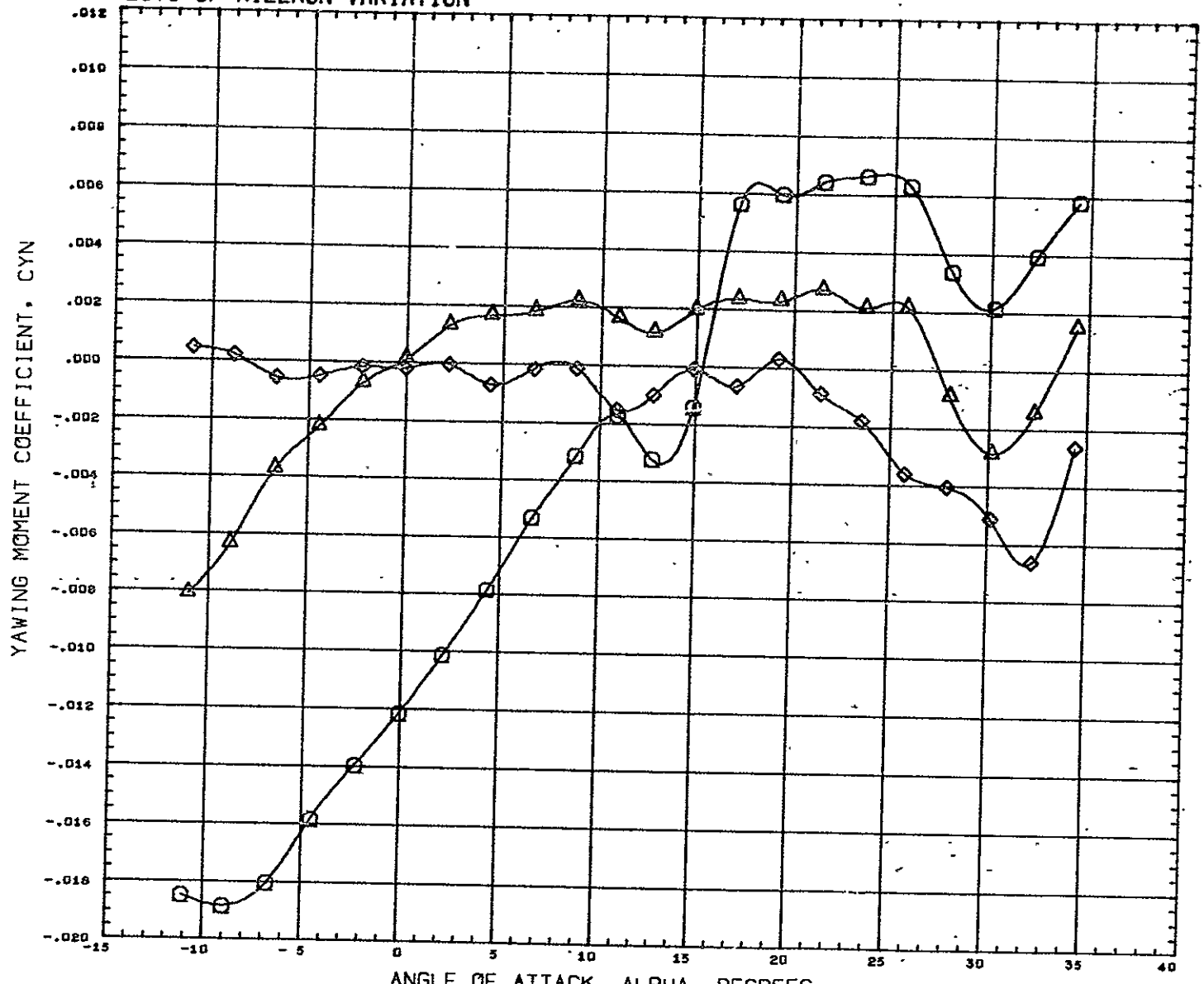
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	-0.0000	INCHES
ZMRP	138.0004	INCHES
SCALE.	0.0035	SCALE

DATA HIST. CODE MM*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (W2912S) 03 AUG 71 PAGE 403

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.099	BETA	0.000
ELVATR	0.000		

DATA SOURCE

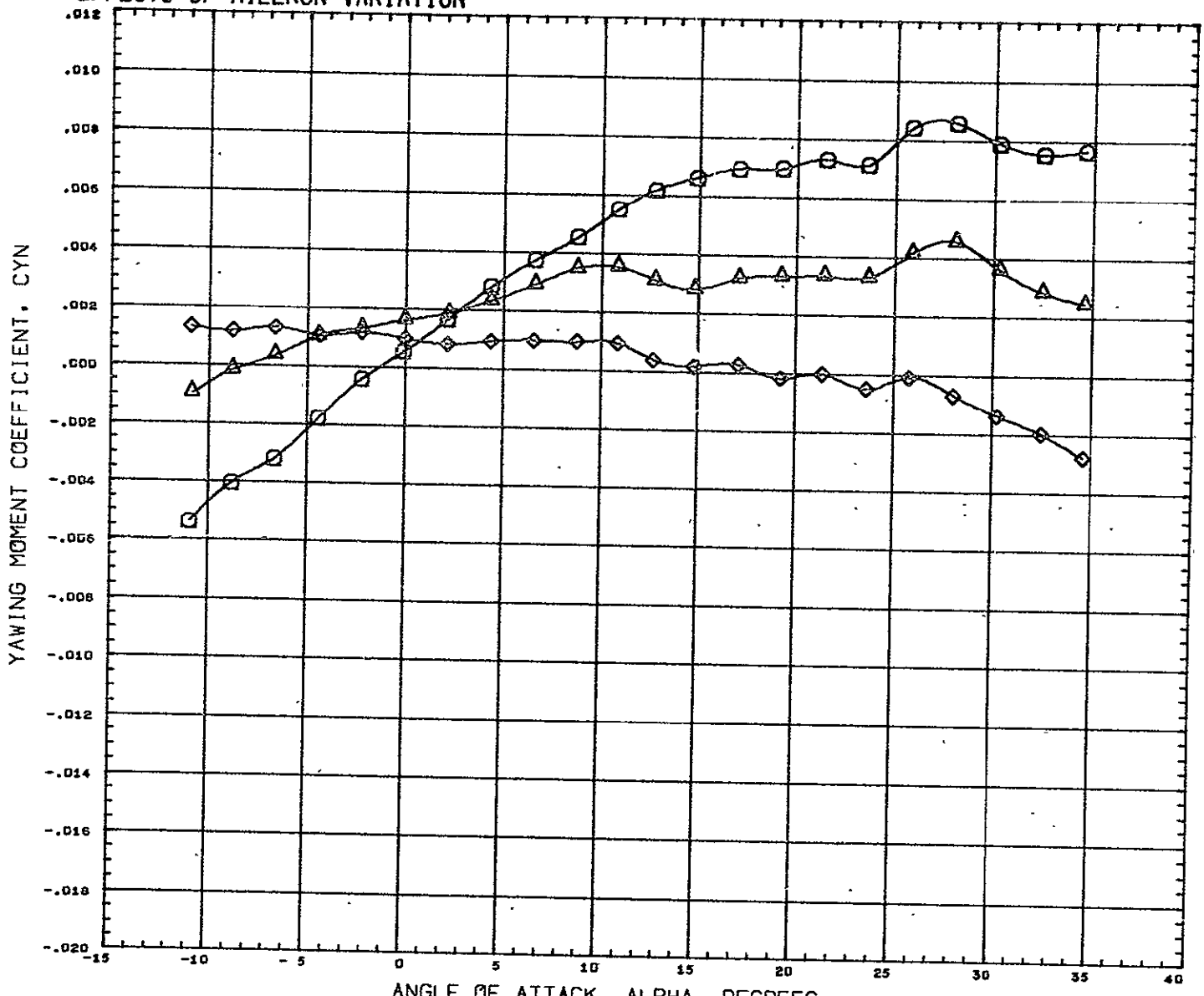
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MN*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.460	BETA	0.000
ELVATR	0.000		

DATA SOURCE

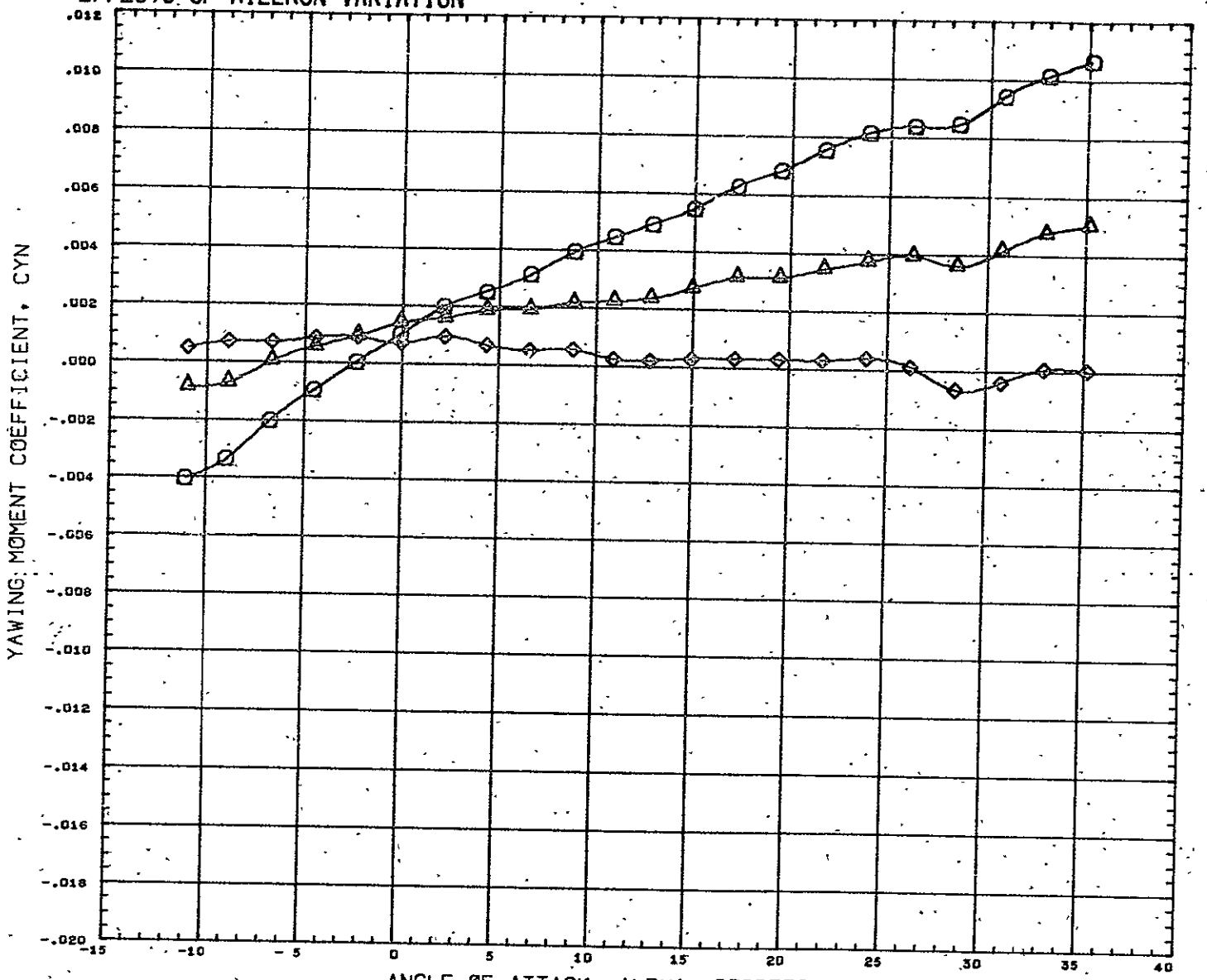
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MN*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.964	BETA	0.000
ELVATR	0.000		

DATA SOURCE

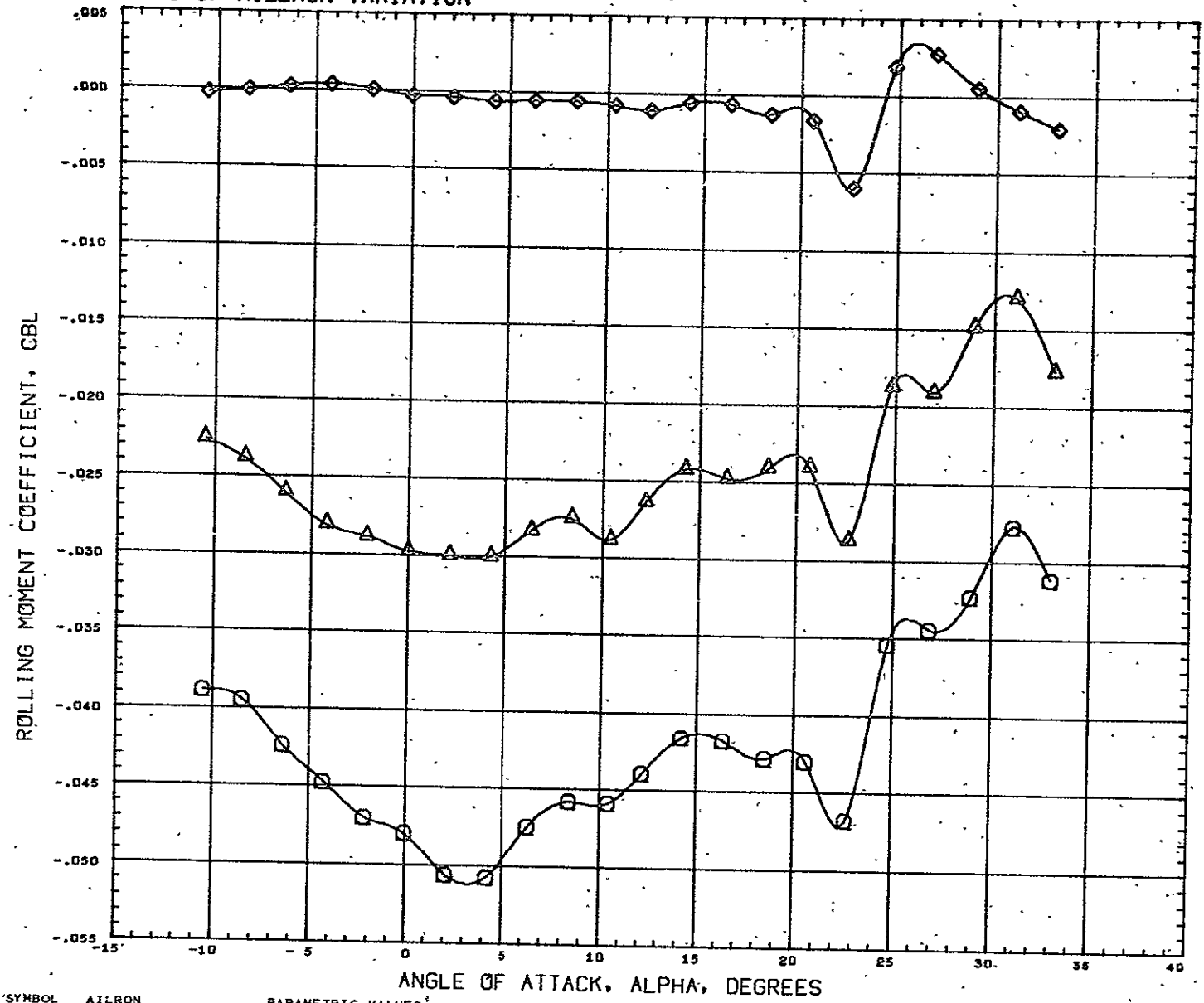
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REF8	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HM#E#G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.607	BETA	0.000
ELVATR	0.000		

DATA SOURCE

DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

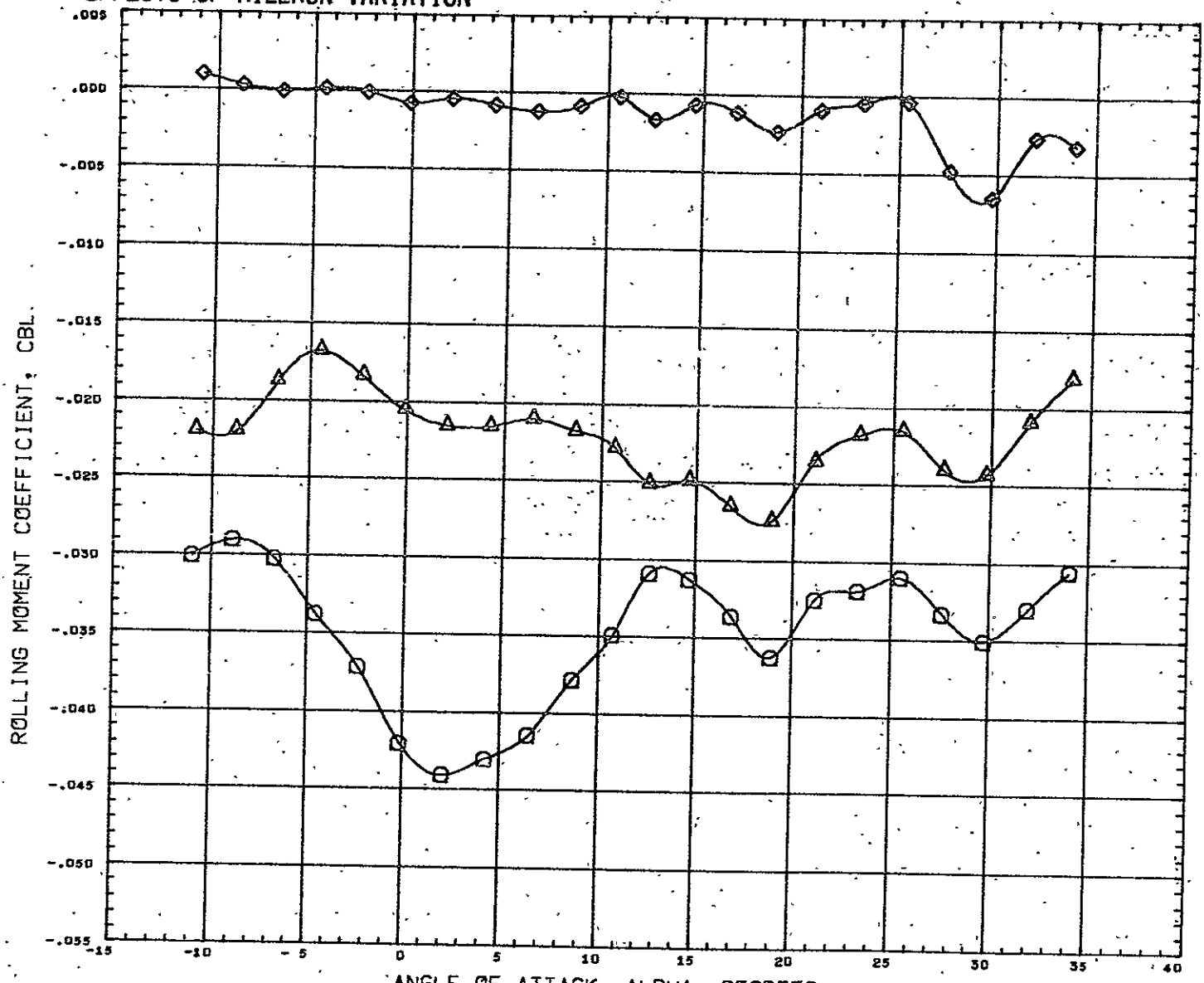
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRF	1422.5040	INCHES
YMRF	0.0000	INCHES
ZMRF	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MN*E*G

MSFC484 NR DELTA ORBITER B5W17E10V17J2X (W2912S) 03 AUG 71 PAGE 407

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	0.904	BETA	0.000
ELVATR	0.000		

DATA SOURCE

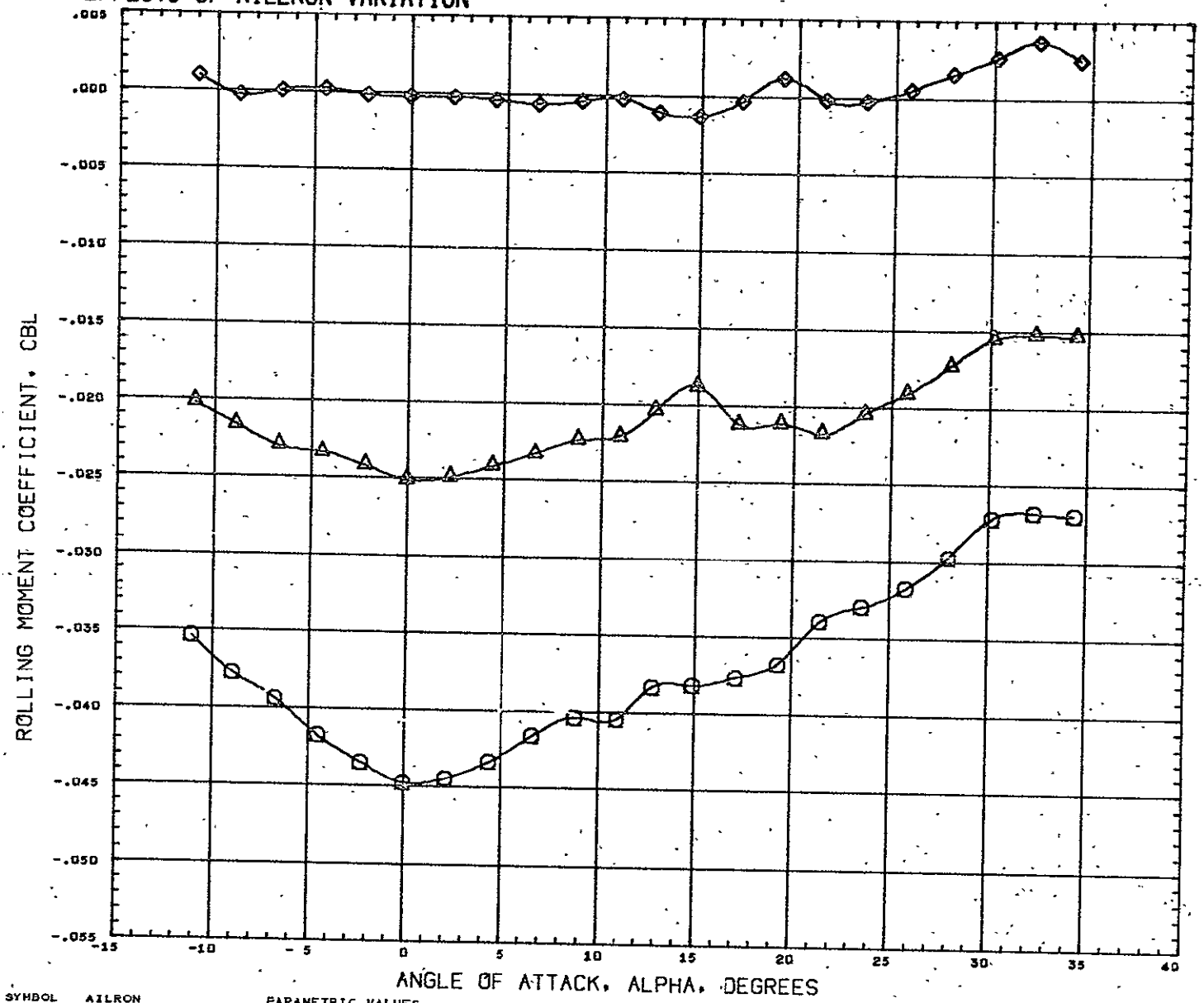
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRF	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.099	BETA	0.000
ELVATR	0.000		

DATA SOURCE

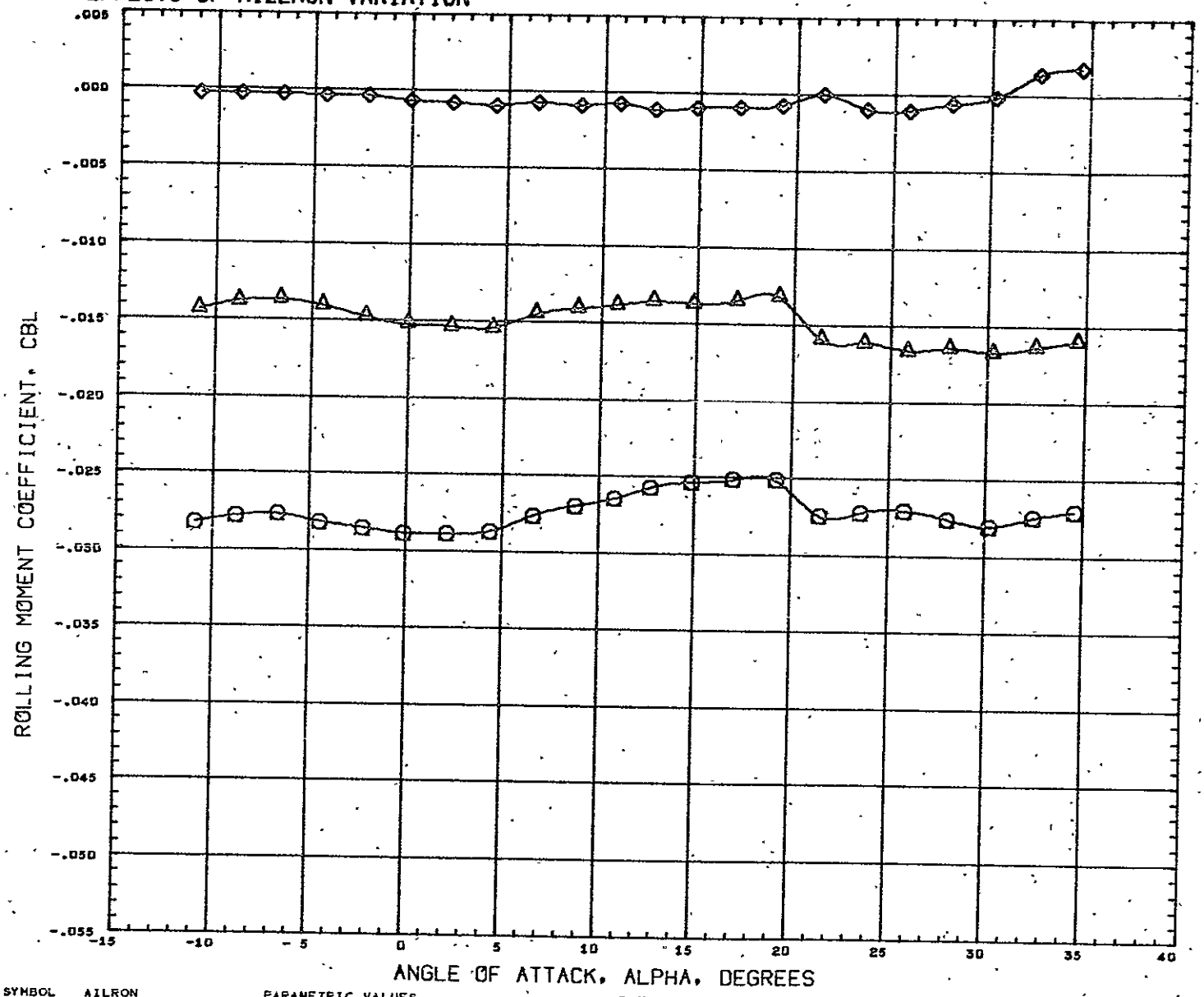
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6064.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	-40.000
△	-20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.468	BETA	0.000
ELVATR	0.000		

DATA SOURCE

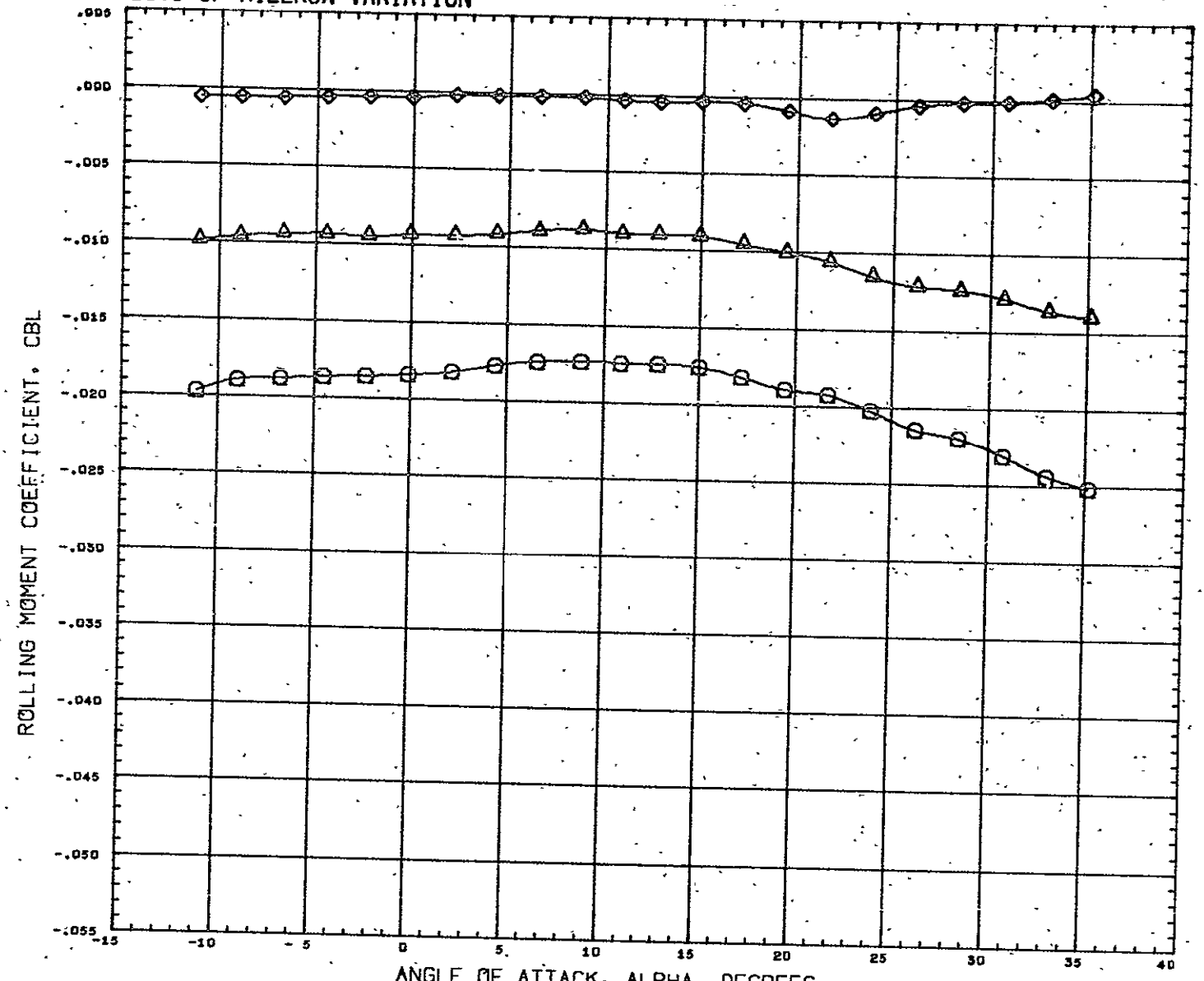
DATASET	AILRON	DATASET	AILRON
W2912S	-40.000	W2911S	-20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*G

EFFECTS OF AILERON VARIATION



SYMBOL	AILRON
○	- 40.000
△	- 20.000
◇	0.000

PARAMETRIC VALUES

MACH	1.964	BETA	0.000
ELVATR	0.000		

DATA SOURCE

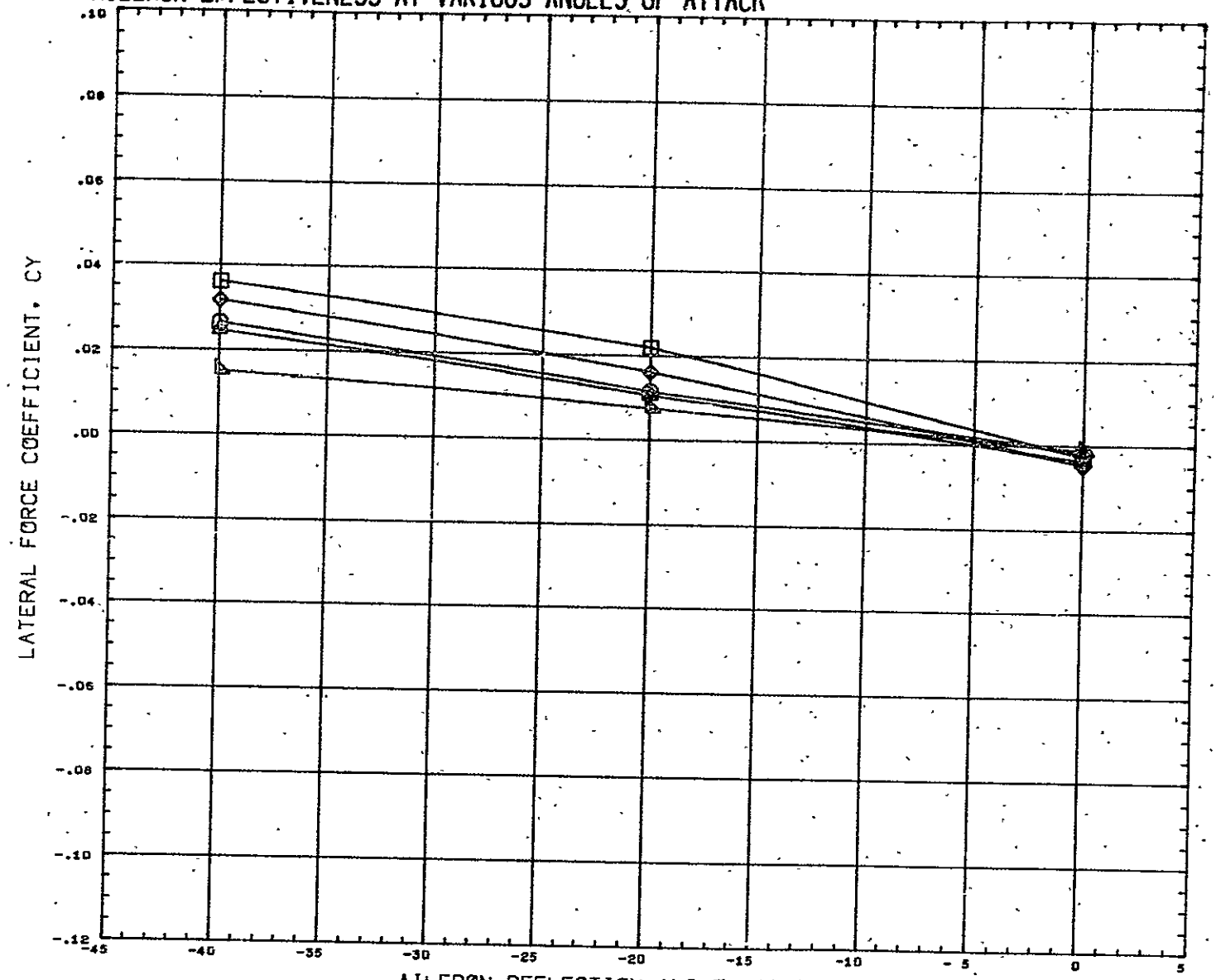
DATASET	AILRON	DATASET	AILRON
W2912S	- 40.000	W2911S	- 20.000
W2906S	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.3040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MH*E*G

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
▽□	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	0.600	BETA	0.000
ELVATR	0.000		

DATA SOURCE

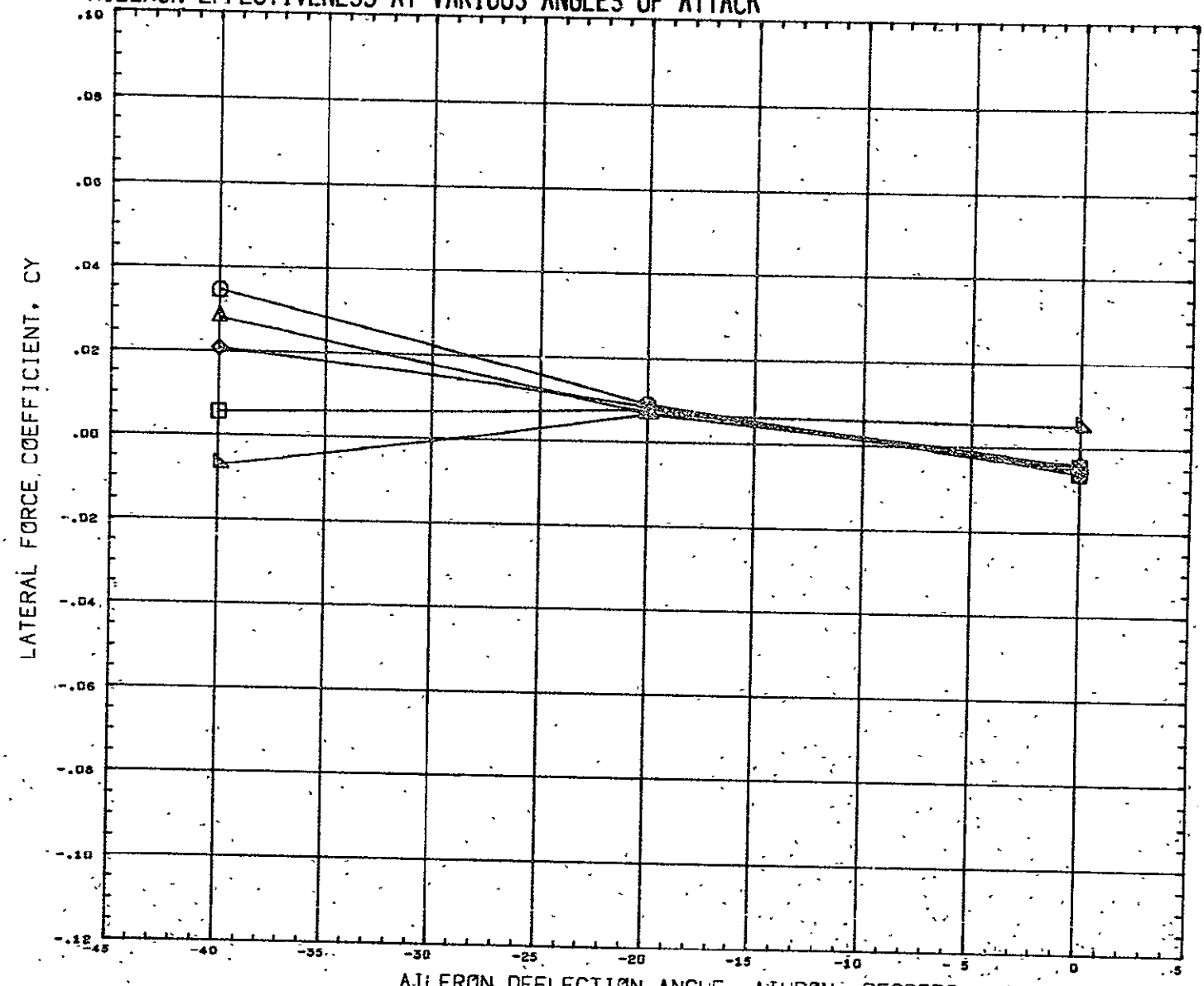
DATASET	AILRON	DATASET	AILRON
W29121	-40.000	W29111	-20.000
W29061	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	-0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MH*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	0.900	BETA	0.000
ELVATR	0.000		

DATA SOURCE

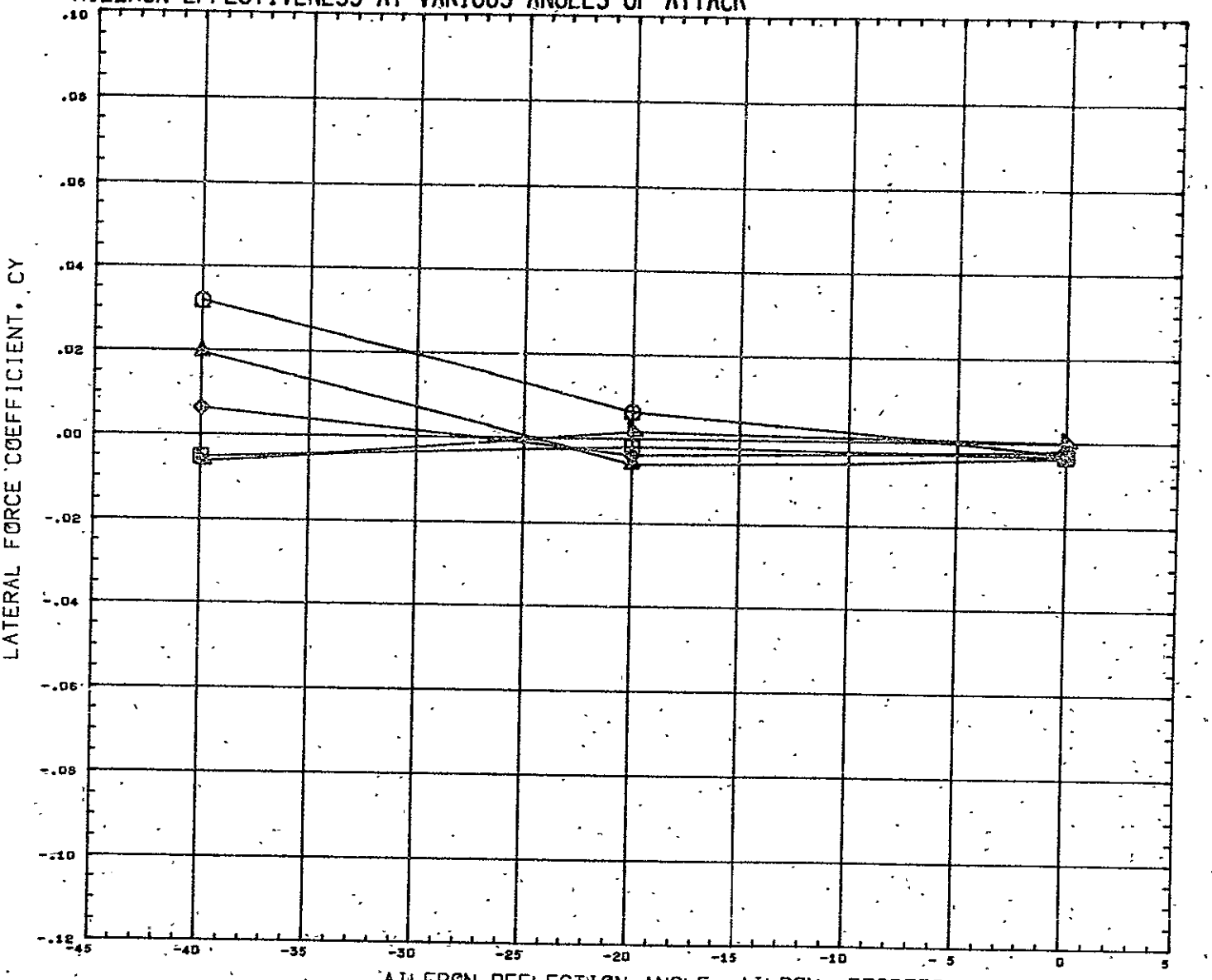
DATASET	AILRON	DATASET	AILRON
W29121	-40.000	W29111	20.000
W29061	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE NN*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
□	-10.000
△	0.000
◇	10.000
▽	20.000
▷	30.000

PARAMETRIC VALUES

MACH	1.100	BETA	0.000
ELVATR	0.000		

DATA SOURCE

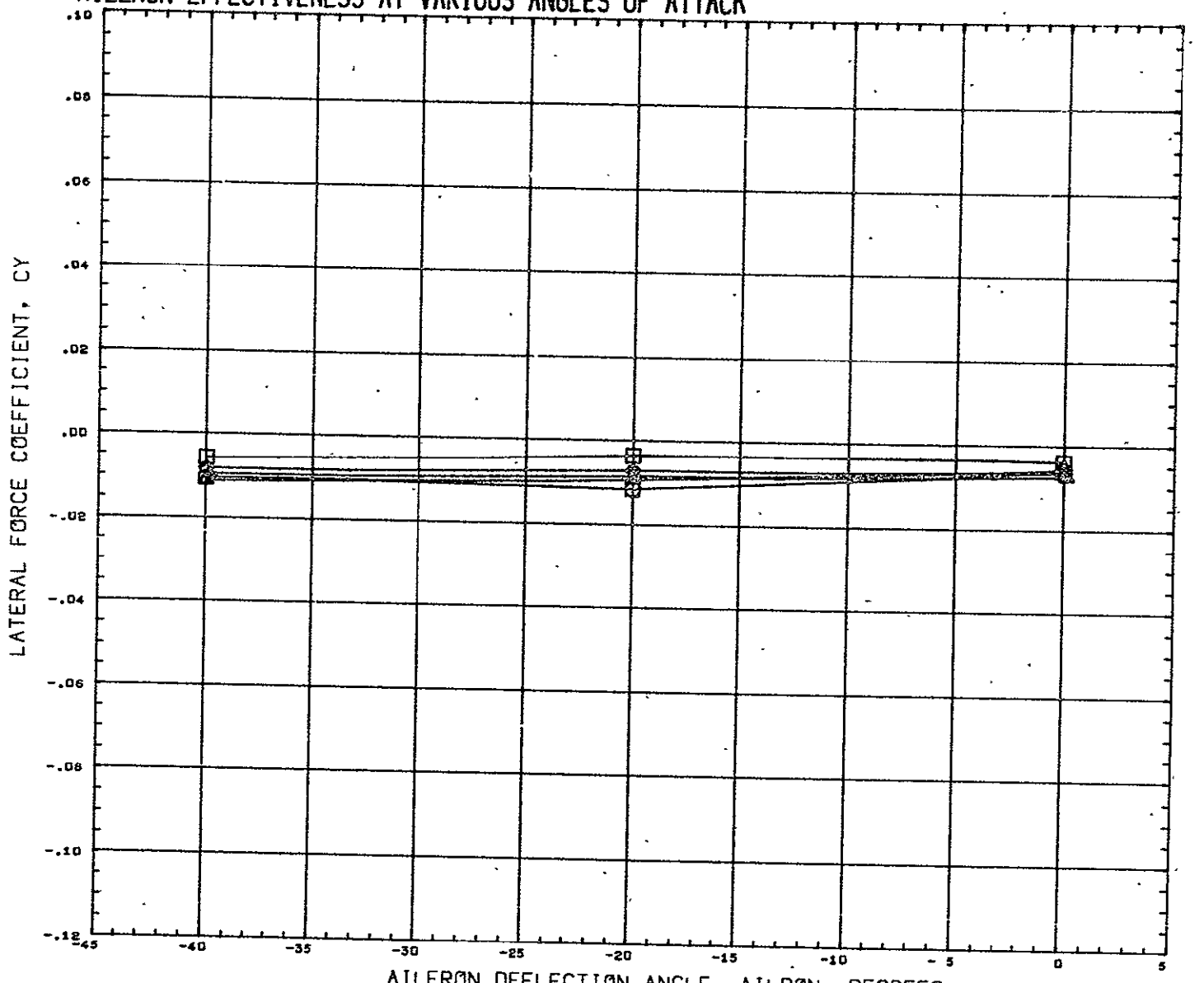
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALFHA
○	-10.000
△	0.000
□	10.000
◇	20.000
▽	30.000

PARAMETRIC VALUES

MACH	1.500	BETA	0.000
ELVATR	0.000		

DATA SOURCE

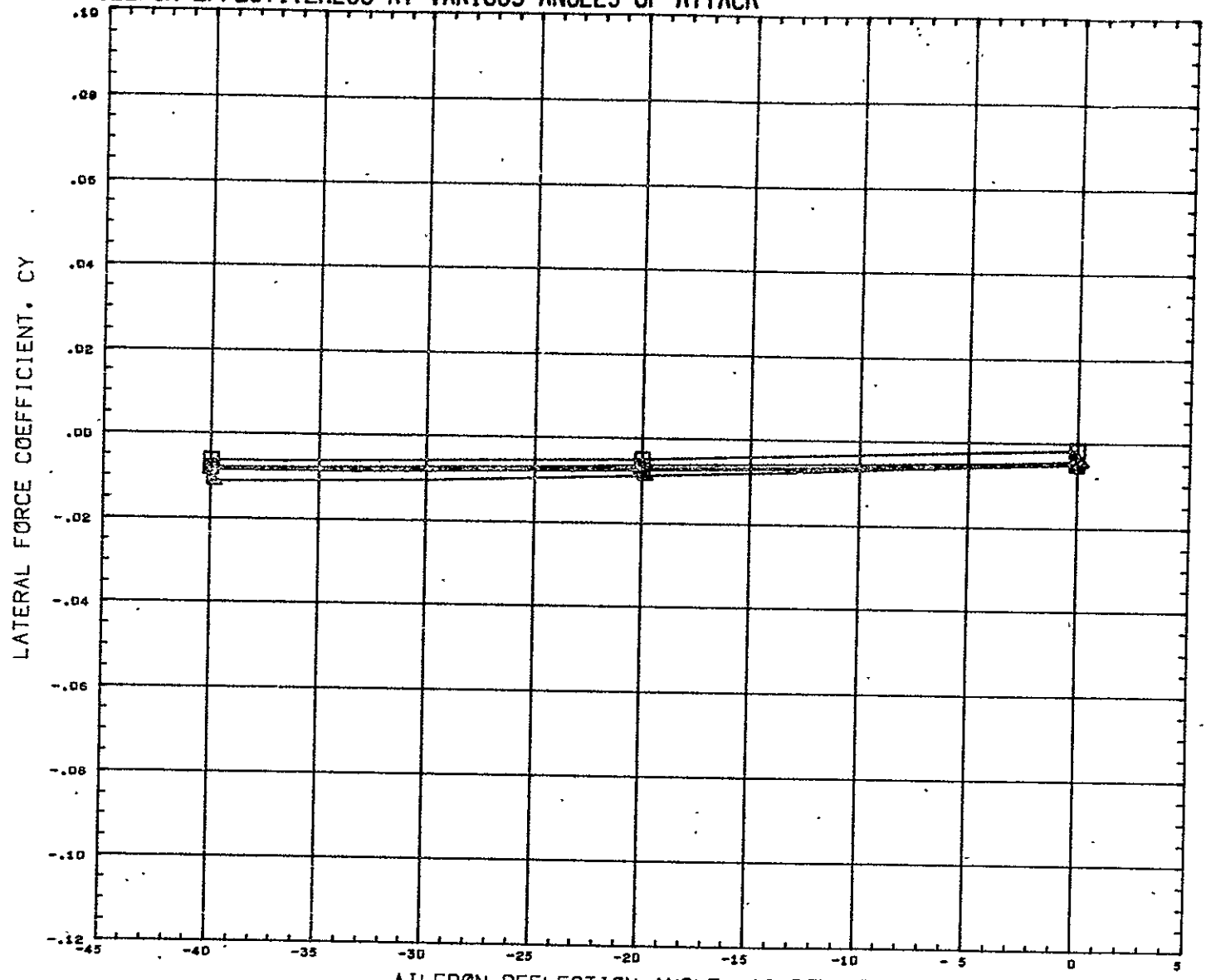
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
□	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	2.000	BETA	0.000
ELVATR	0.000		

DATA SOURCE

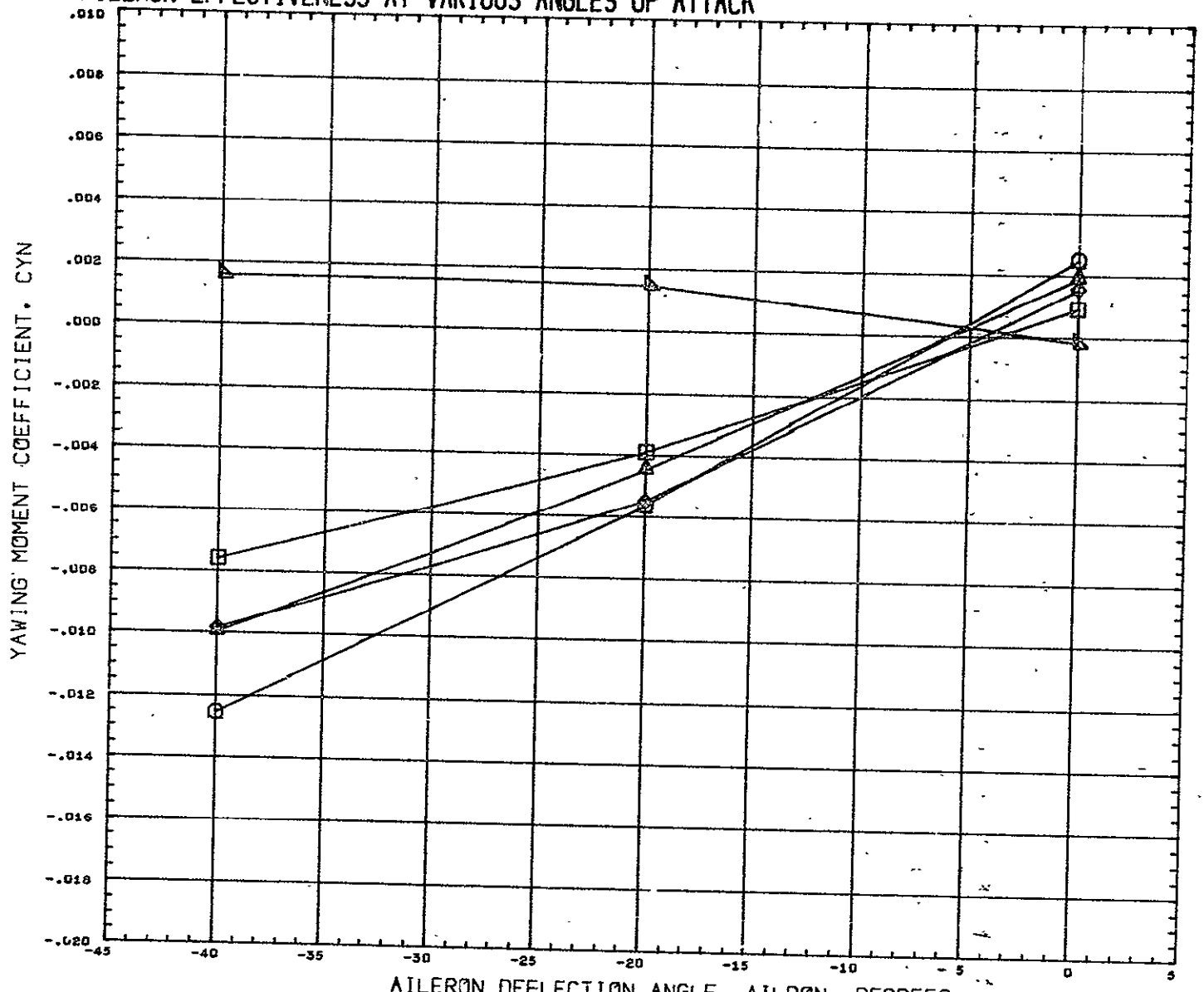
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM#E#CI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
□	-10.000
◇	0.000
△	10.000
○	20.000
▽	30.000

PARAMETRIC VALUES

MACH	0.600	BETA	0.000
ELVATR	0.000		

DATA SOURCE

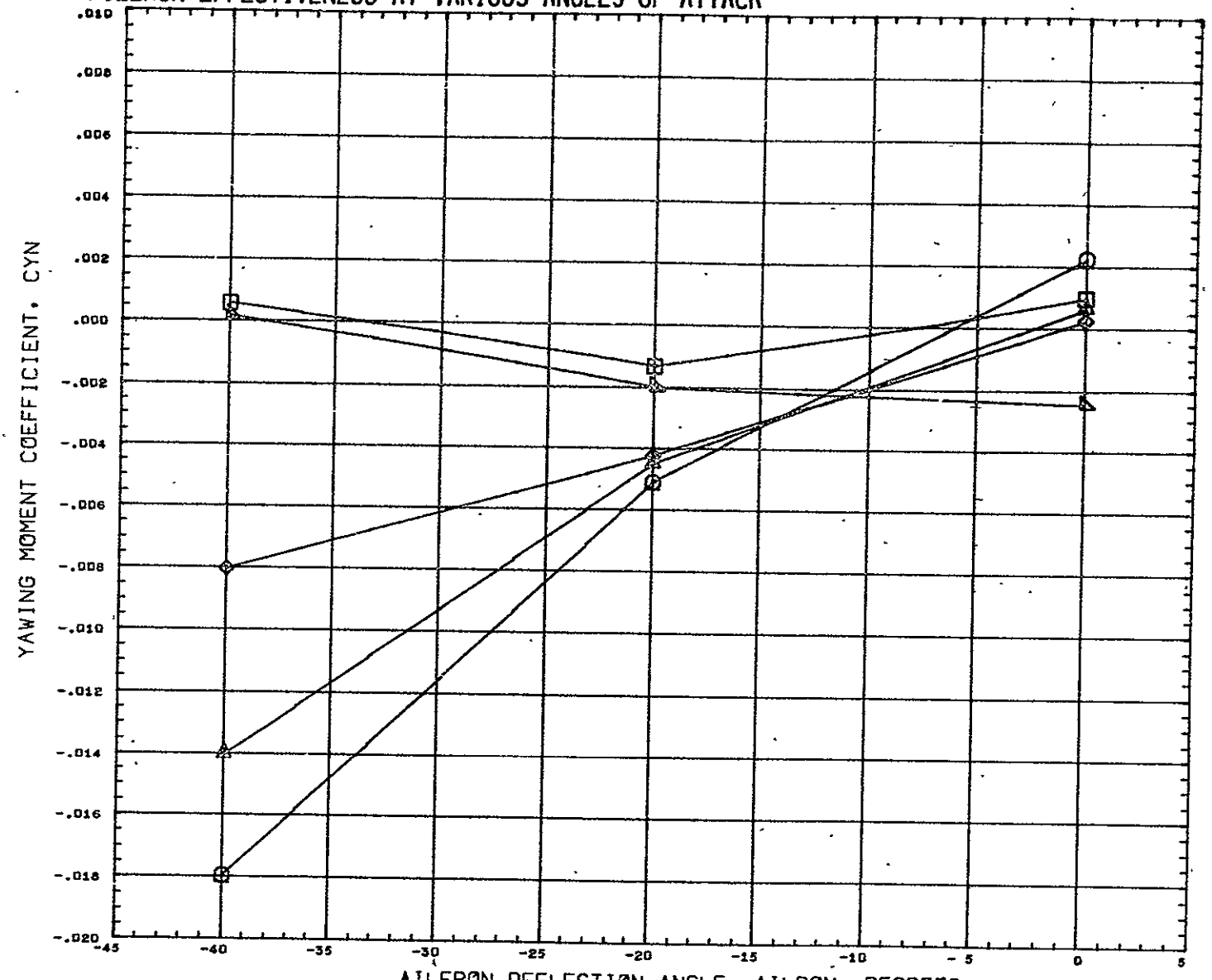
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HM*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	- 10.000
△	0.000
◇	10.000
□	20.000
⬀	30.000

PARAMETRIC VALUES

MACH	0.900	BETA	0.000
ELVATR	0.000		

DATA SOURCE

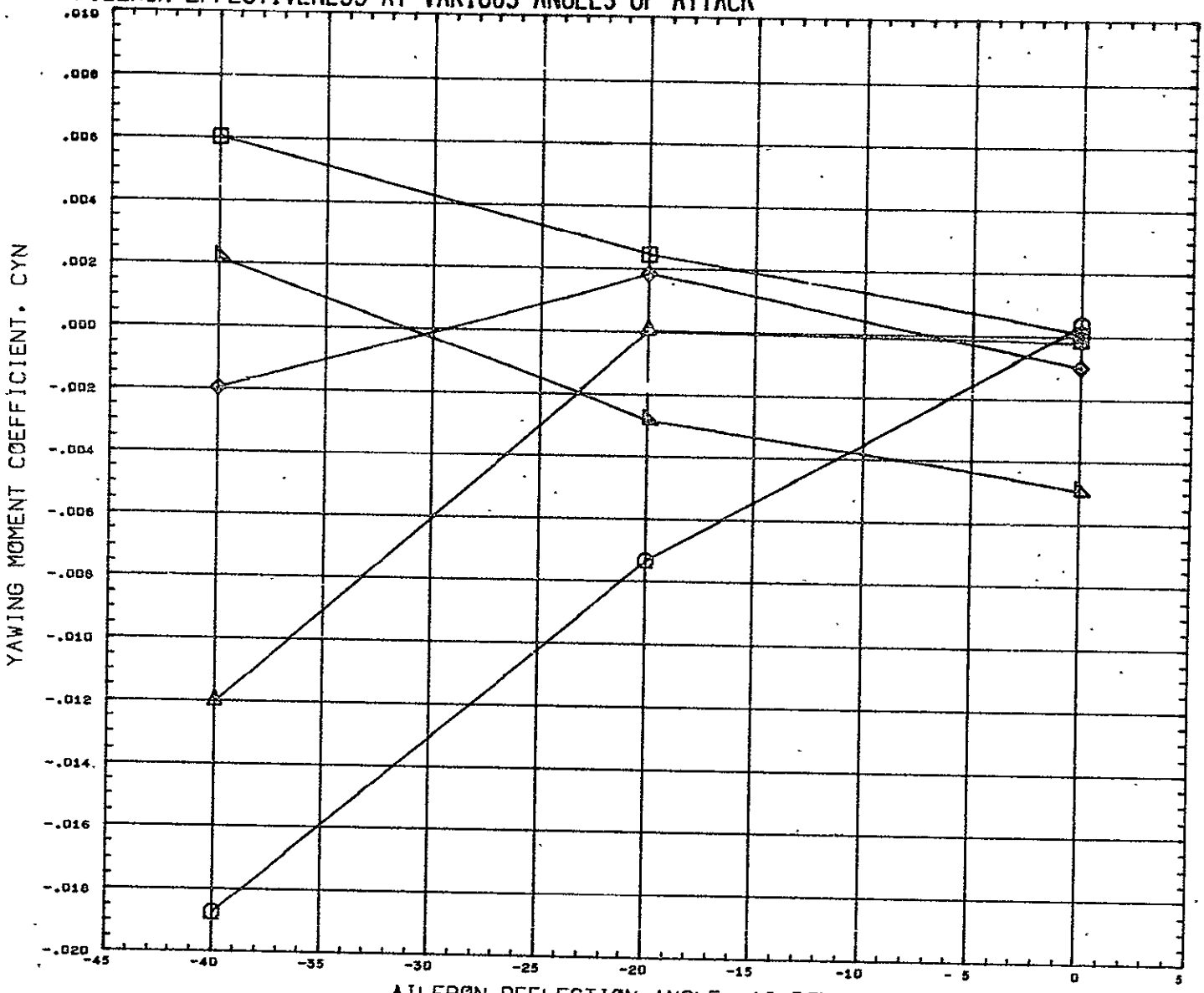
DATASET	AILRON	DATASET	AILRON
W2912I	- 40.000	W2911I	- 20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALFHA
○	-10.000
△	0.000
□	10.000
◇	20.000
▽	30.000

PARAMETRIC VALUES

MACH 1.100 BETA 0.000

ELVATR 0.000

DATA SOURCE

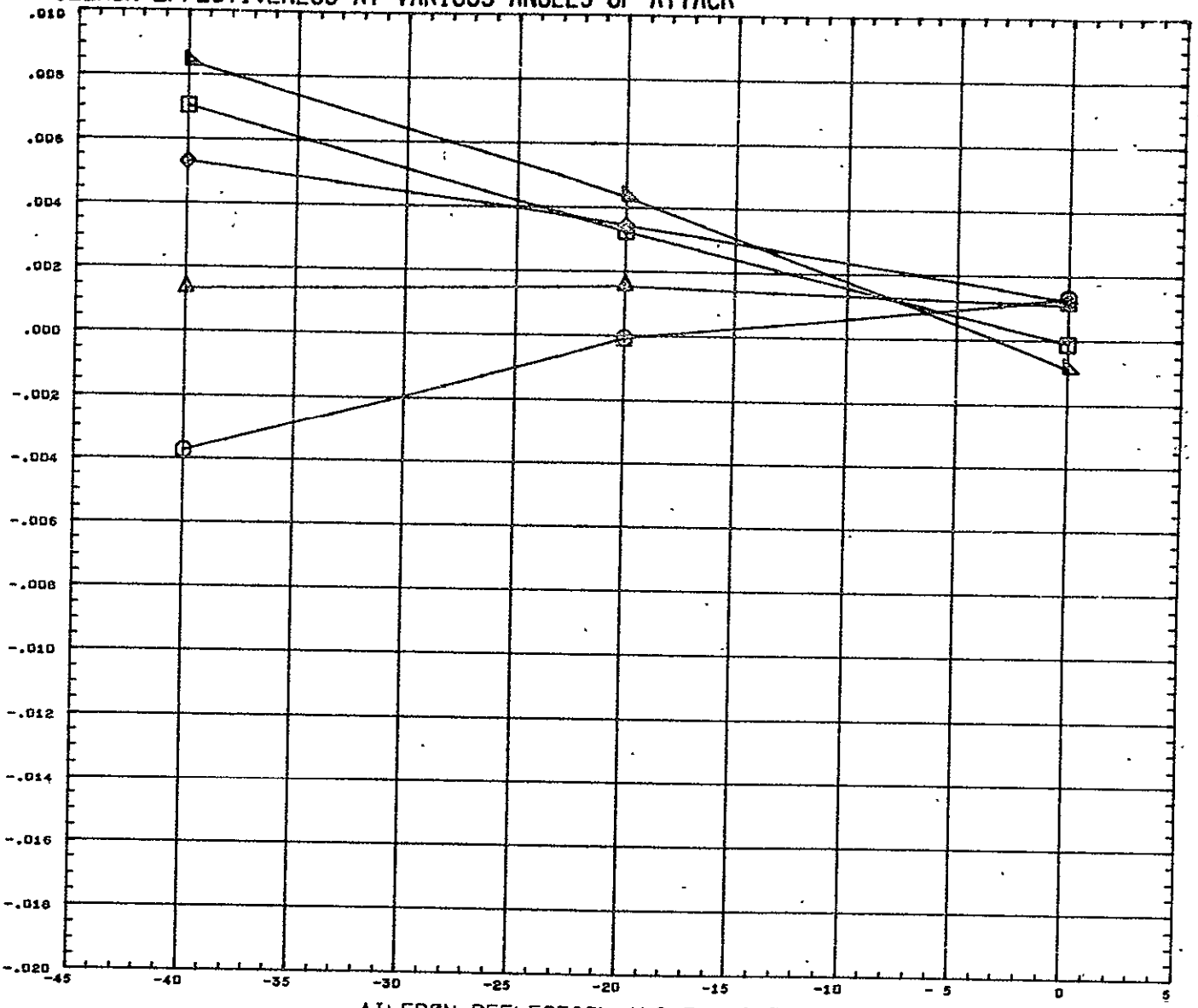
	DATASET	AILRON	DATASET	AILRON
	W2912I	-40.000	W2911I	-20.000
	W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MH*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH 1.500 BETA 0.000

ELVATR 0.000

DATA SOURCE

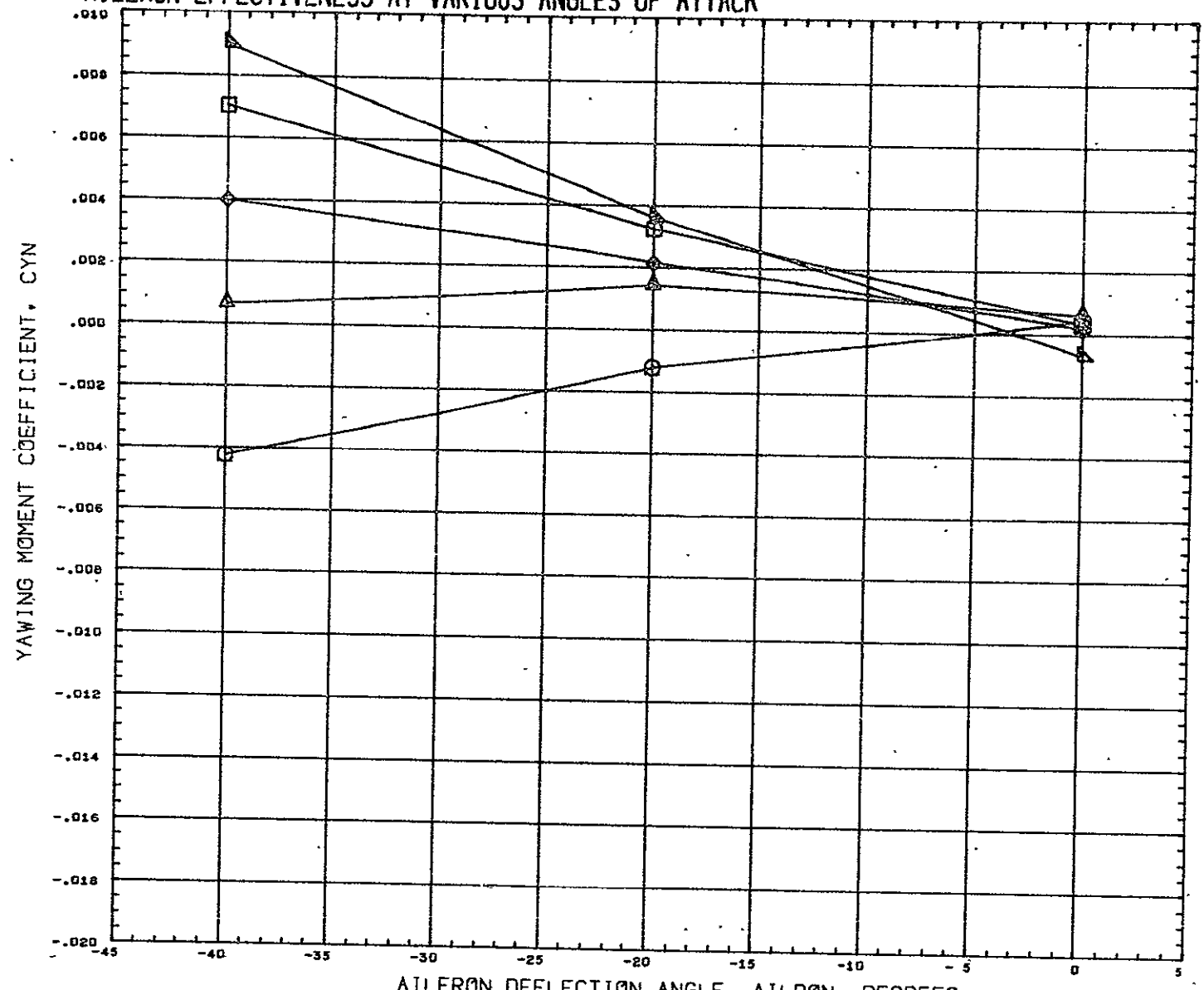
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0045	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HH*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH 2.000 BETA 0.000

ELVATR 0.000

DATA HIST. CODE NH*E*GI

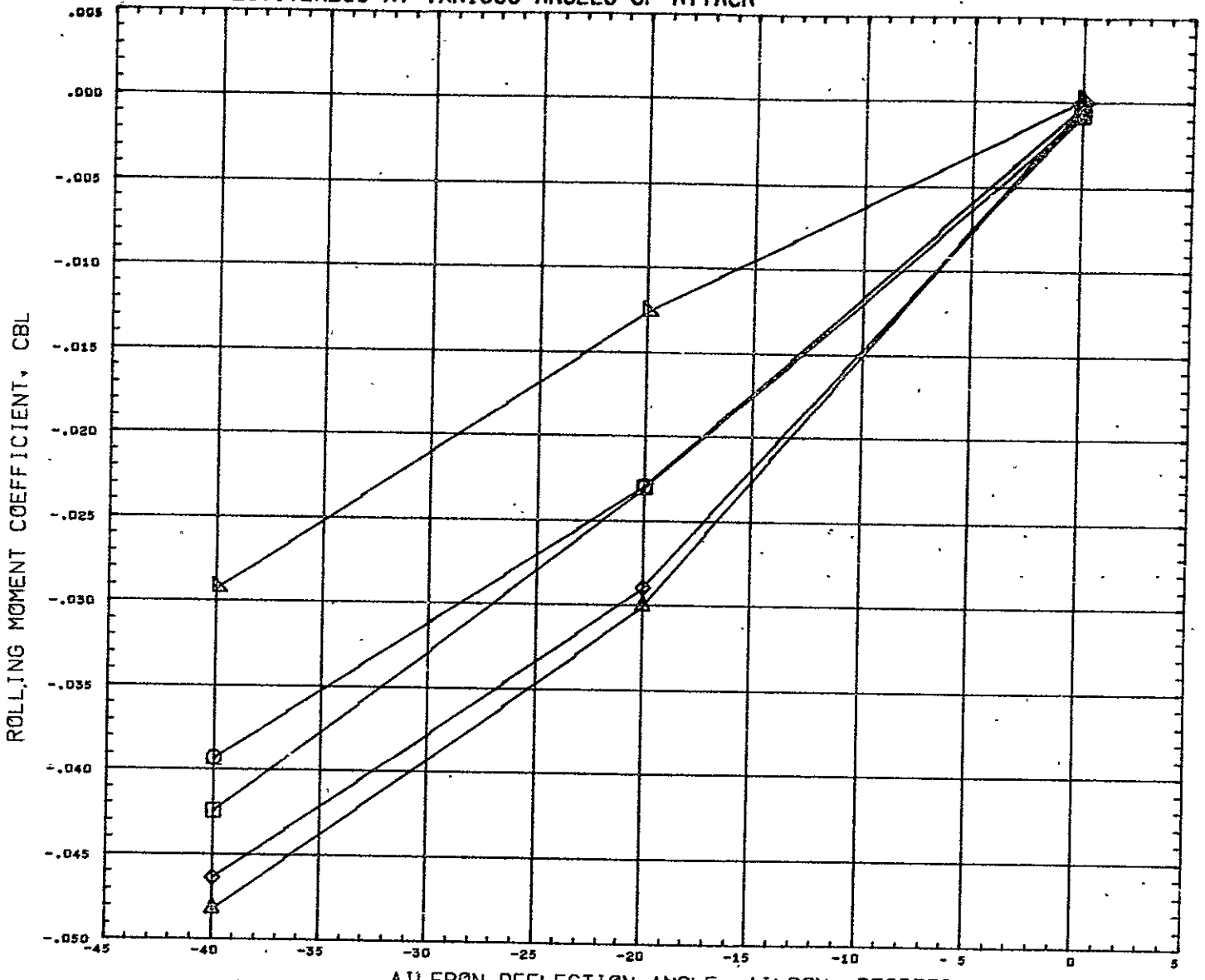
DATA SOURCE

DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
▽	-10.000
△	0.000
◇	10.000
□	20.000
◸	30.000

PARAMETRIC VALUES

MACH	0.600	BETA	0.000
ELVATR	0.000		

DATA SOURCE

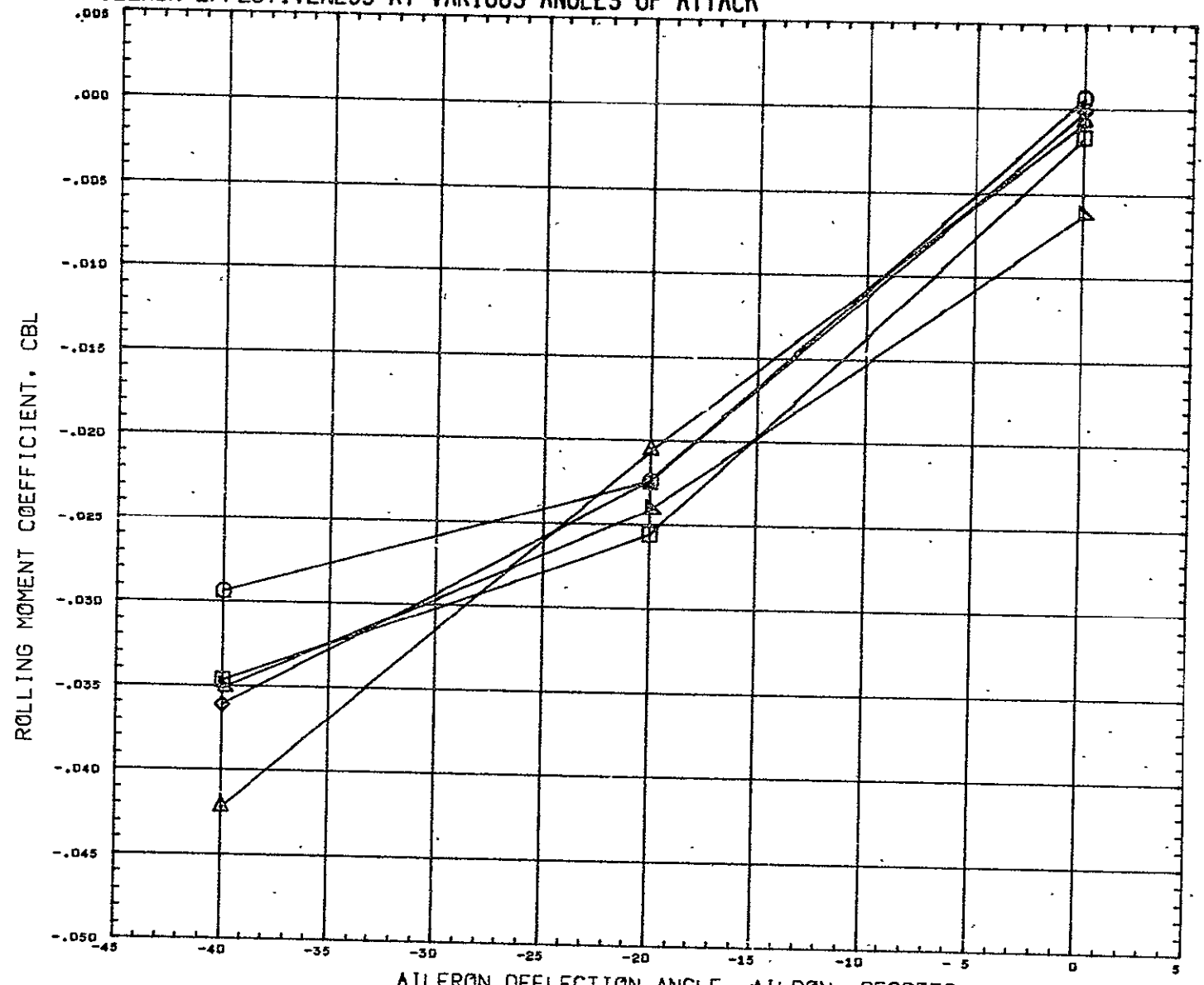
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE NM*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
○	-10.000
△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH:	0.900	BETA	0.000
ELVATR	0.000		

DATA SOURCE

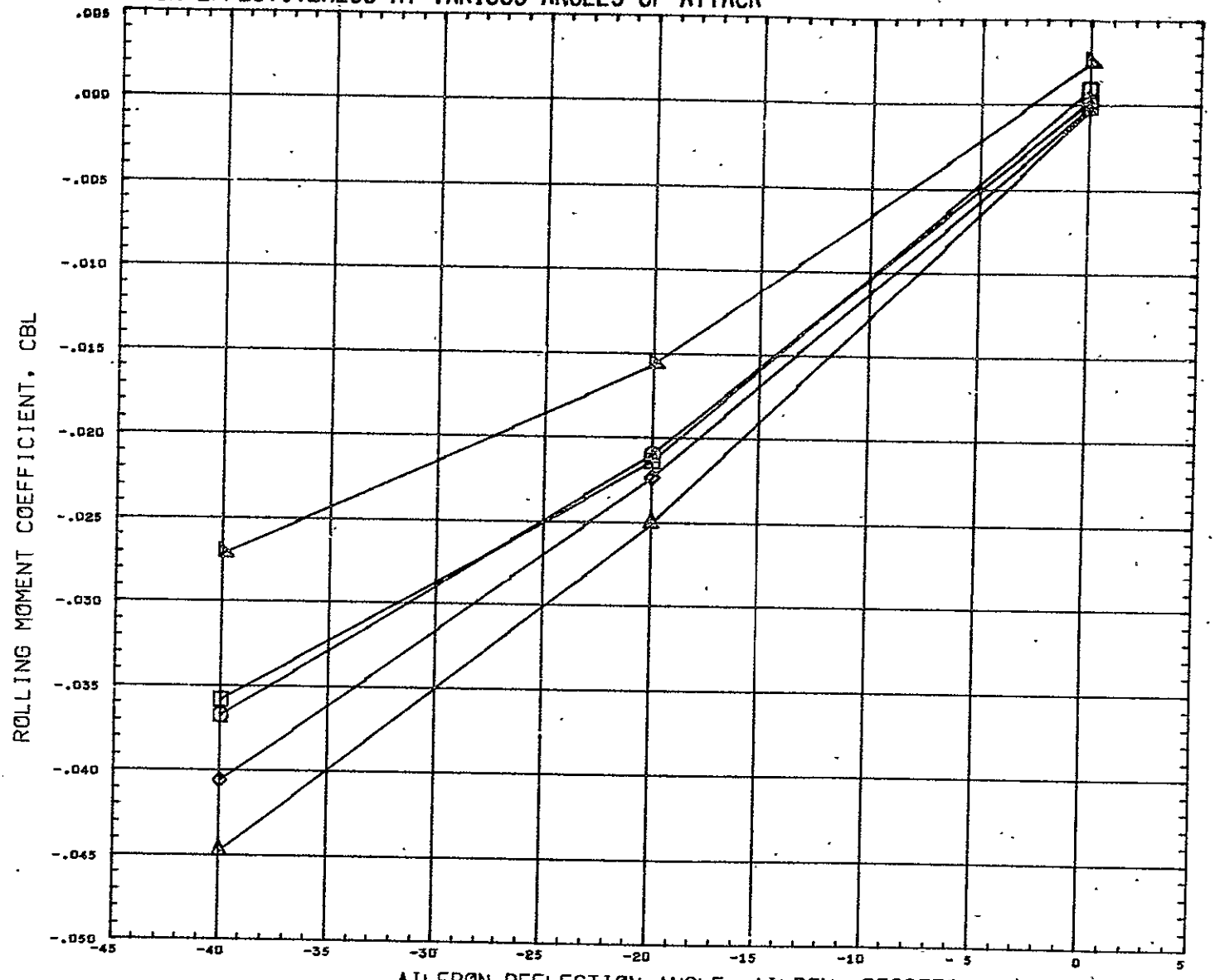
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HN*E*SI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
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△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH	1.100	BETA	0.000
ELVATR	0.000		

DATA SOURCE

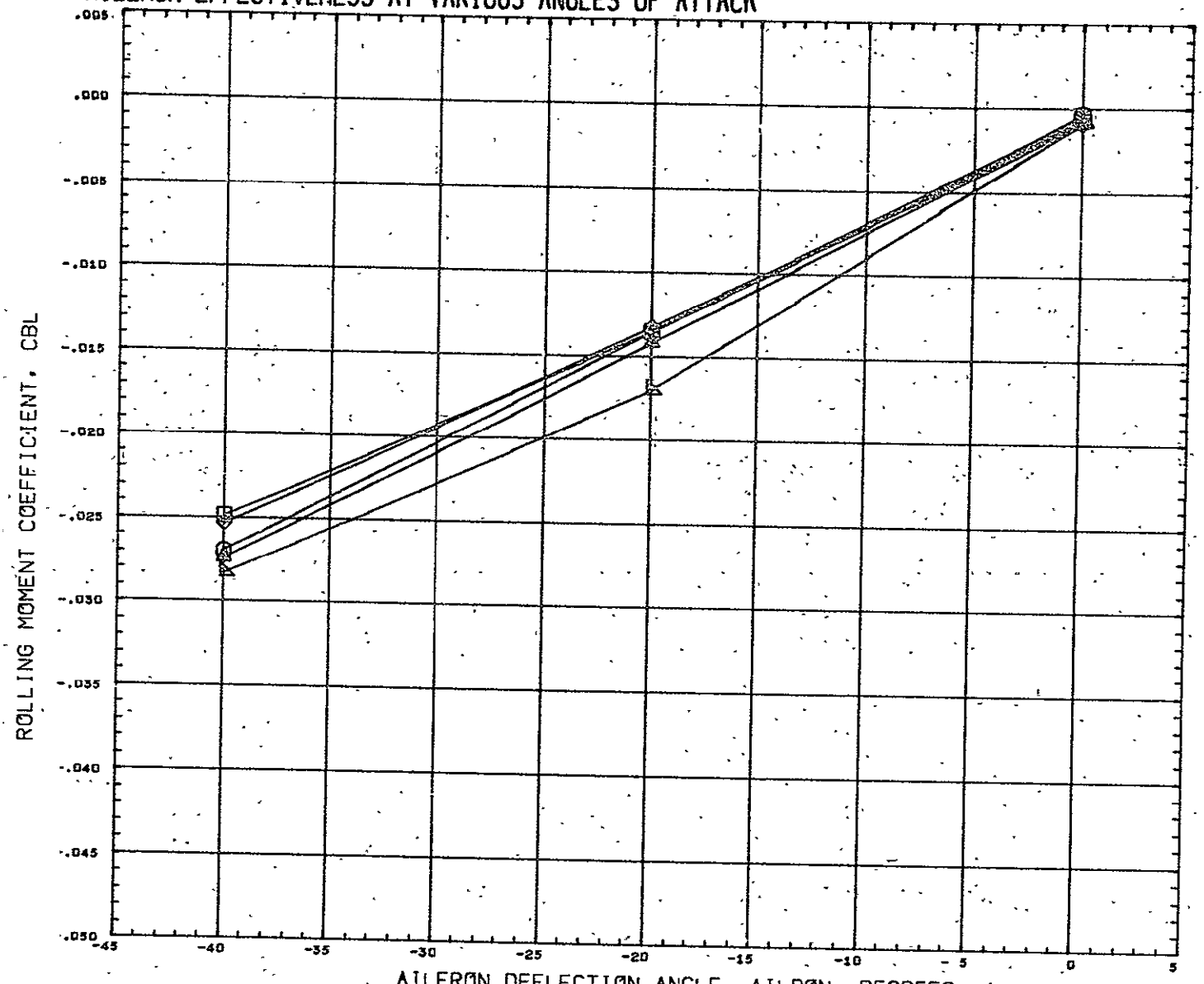
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MH*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
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◇	0.000
□	10.000
	20.000
	30.000

PARAMETRIC VALUES

MACH	1.500	BETA	0.000
ELVATR	0.000		

DATA SOURCE

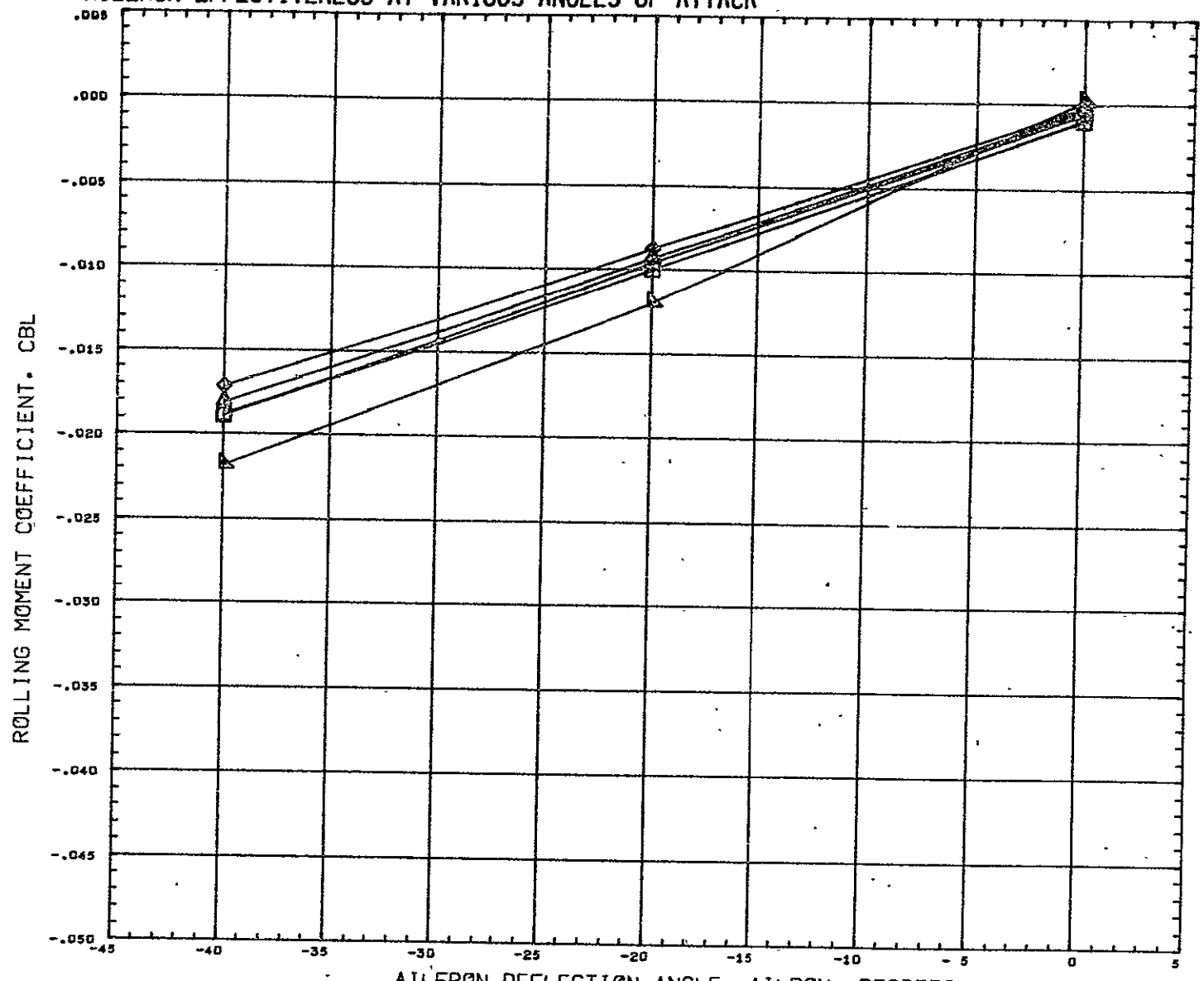
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
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△	0.000
◇	10.000
□	20.000
▷	30.000

PARAMETRIC VALUES

MACH	2.000	BETA	0.000
ELVATR	0.000		

DATA HIST. CODE HH*E*GI

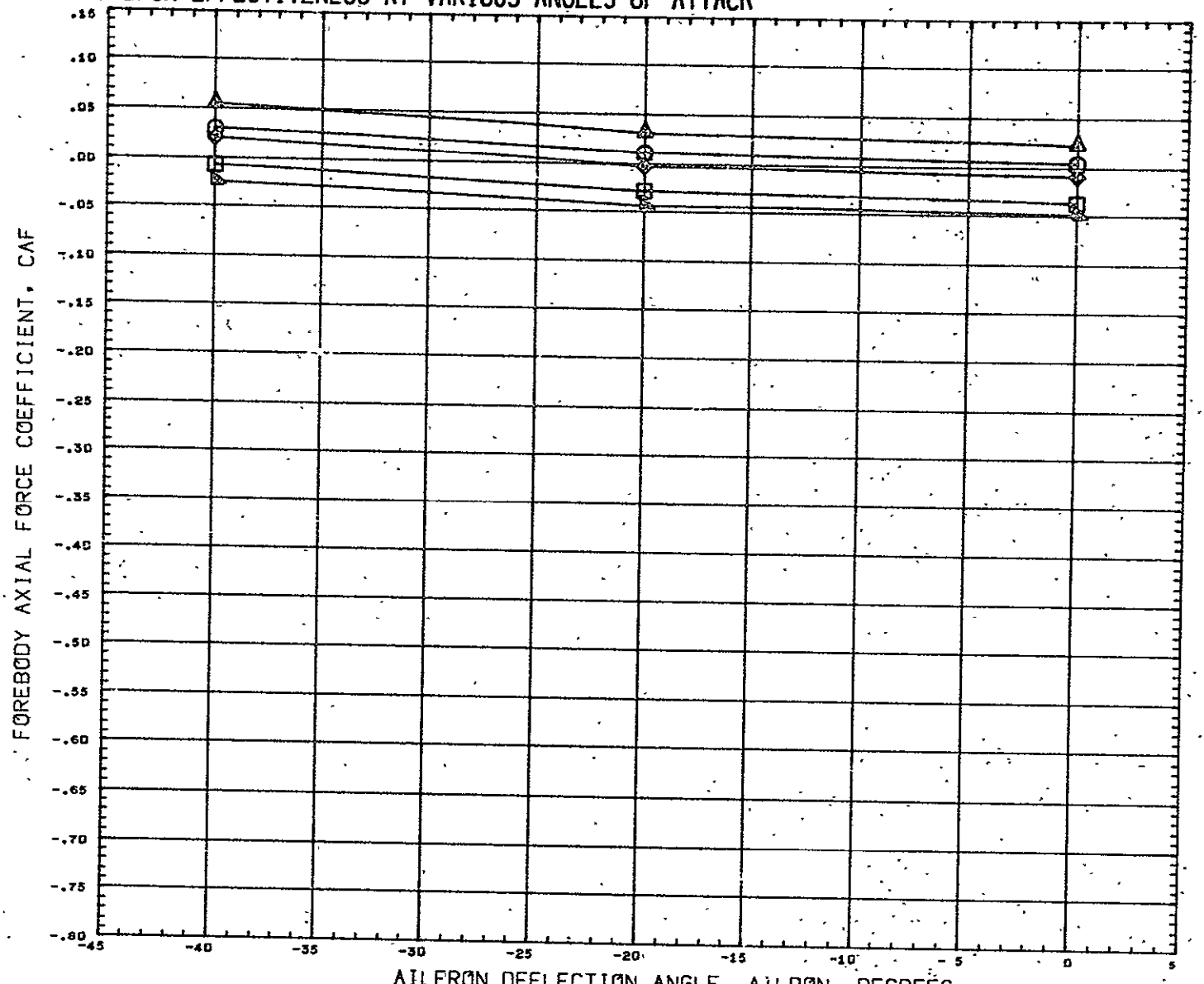
DATA SOURCE

DATASET	AILRON	DATASET	AILRON
W2912I	- 40.000	W2911I	- 20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
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▽	0.000
◇	10.000
□	20.000
◸	30.000

PARAMETRIC VALUES

MACH	0.600	BETA	0.000
ELVATR	0.000		

DATA SOURCE

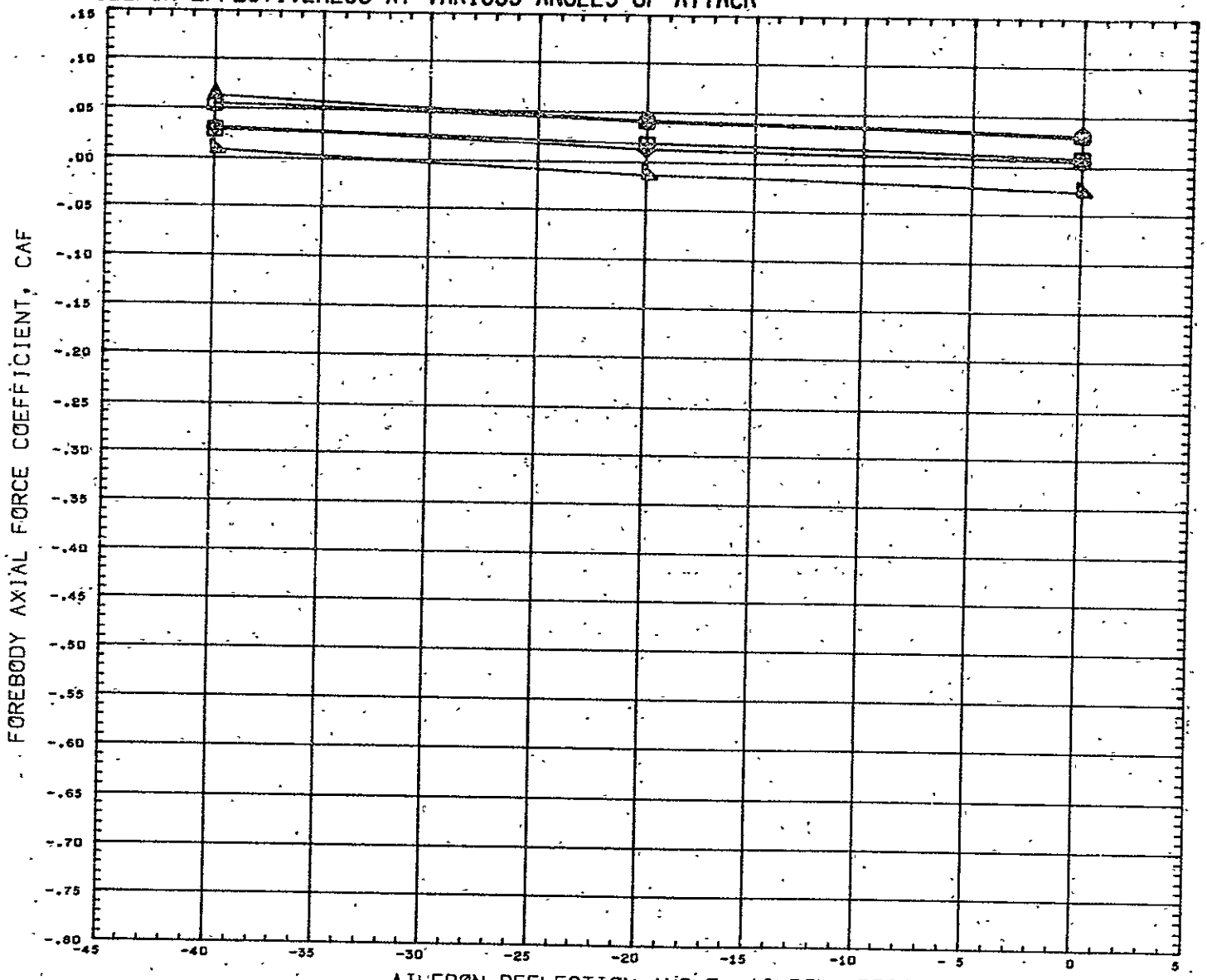
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE NM*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALFHA
○	-10.000
△	0.000
□	10.000
◇	20.000
▽	30.000

PARAMETRIC VALUES

MACH	0.900	BETA	0.000
ELVATR	0.000		

DATA SOURCE

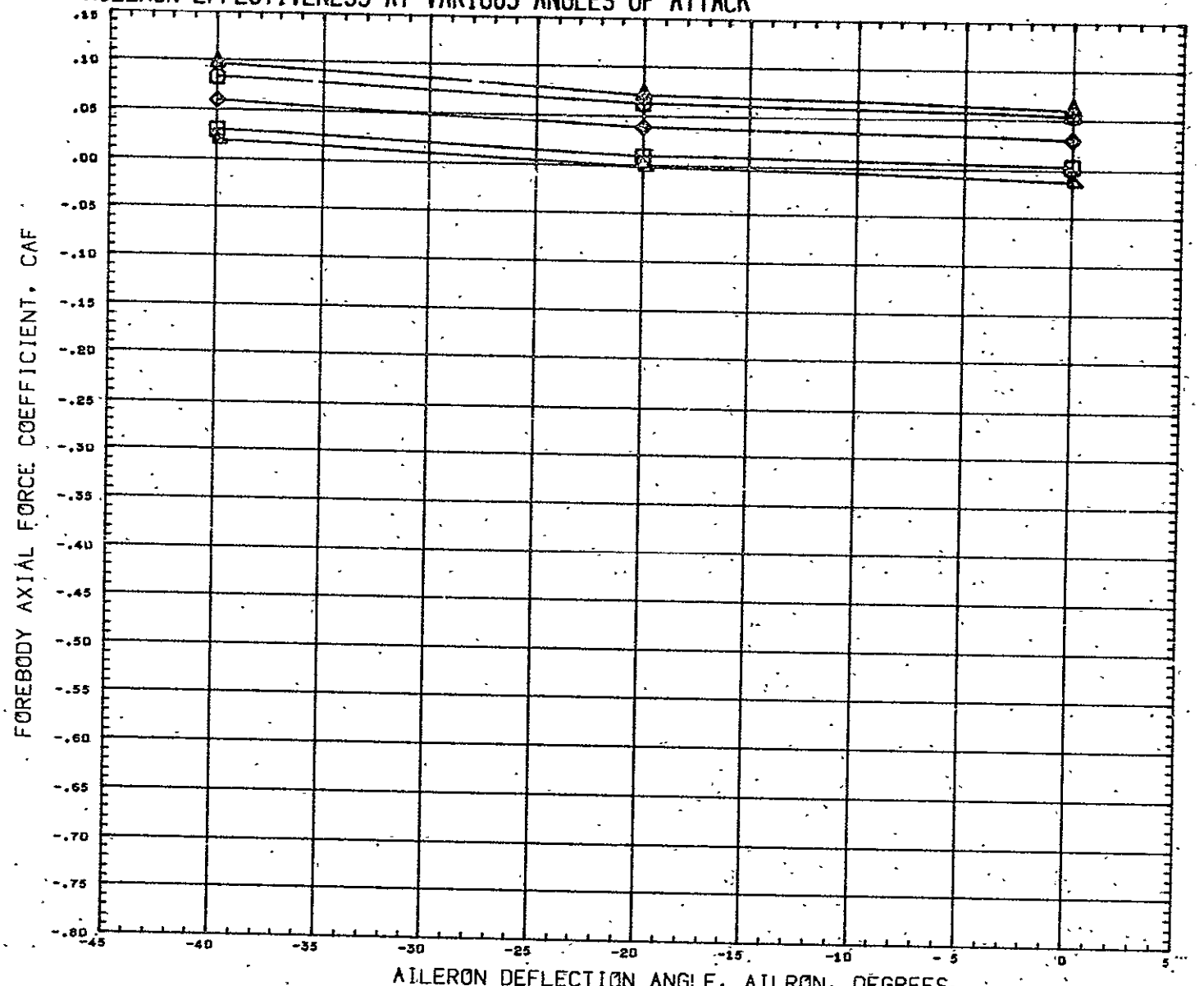
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE - MN*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
△	10.000
□	0.000
◇	10.000
▽	20.000
▷	30.000

PARAMETRIC VALUES

MACH	1.100	BETA	0.000
ELVATR	0.000		

DATA SOURCE

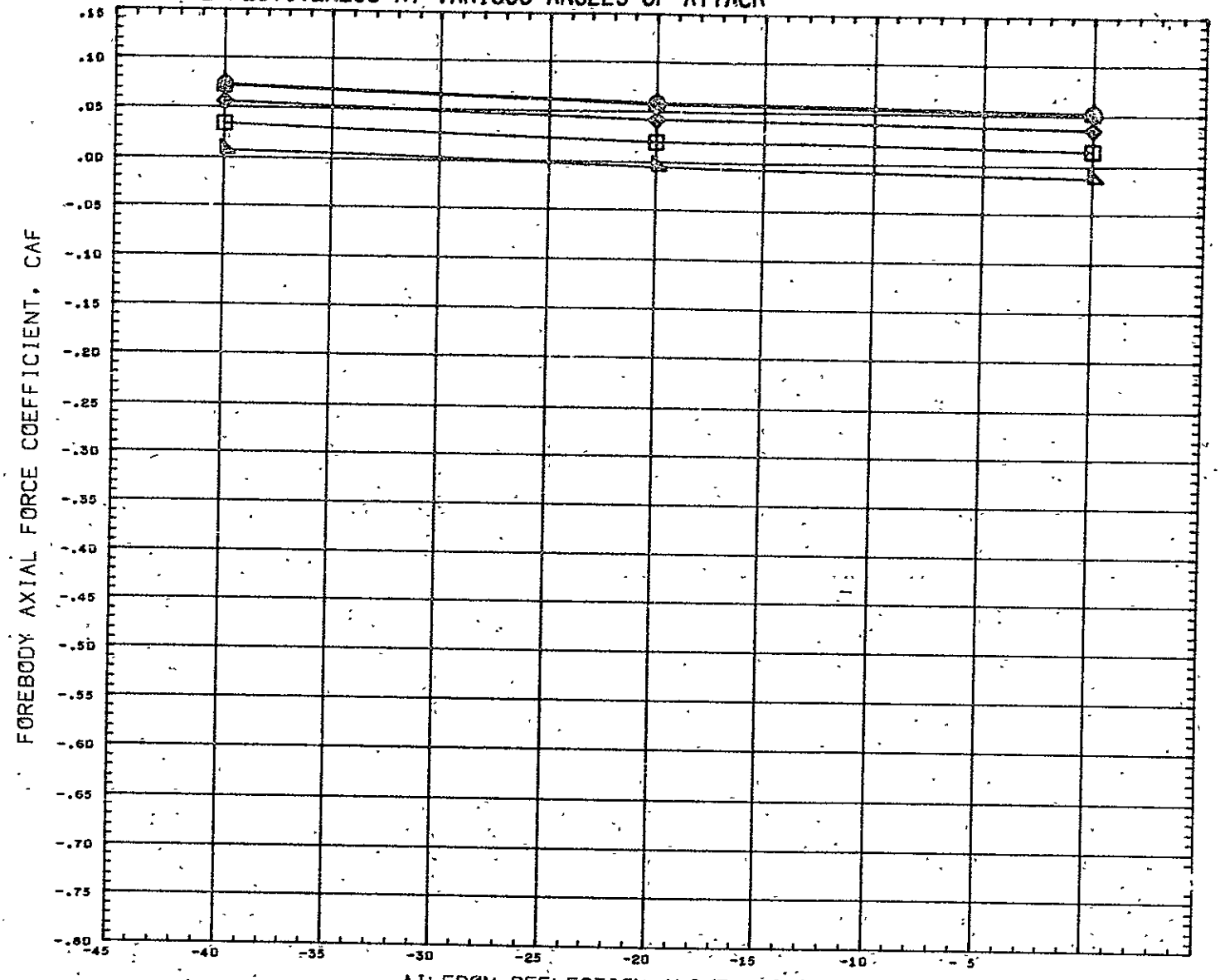
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	139.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
△	-10.000
□	0.000
◇	10.000
▷	20.000
▽	30.000

PARAMETRIC VALUES

MACH	1.500	BETA	0.000
ELVATR	0.000		

DATA SOURCE

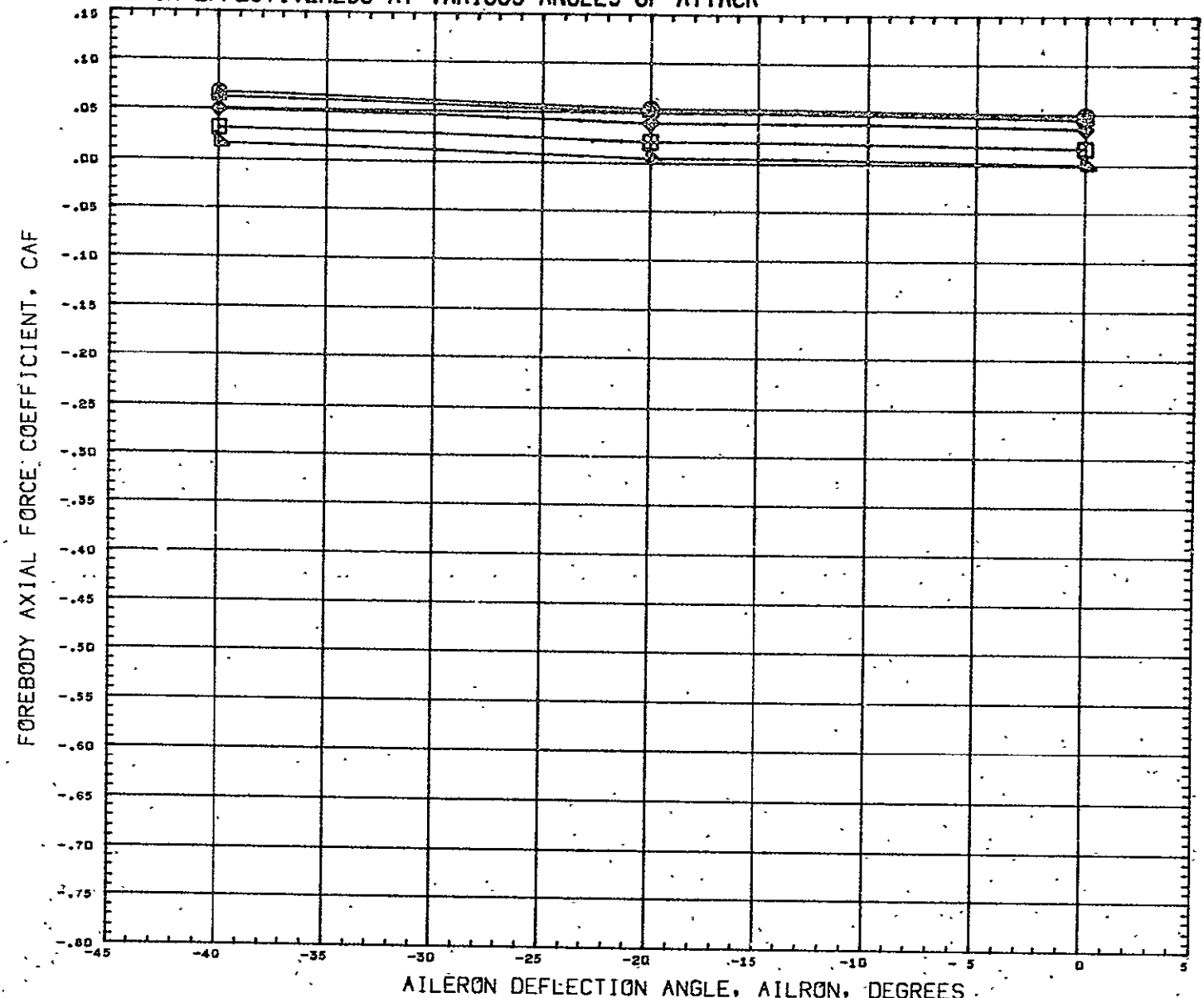
DATASET	AILRON	DATASET	AILRON
W2912I	-40.000	W2911I	-20.000
W2906I	0.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE MM*E*GI

AILERON EFFECTIVENESS AT VARIOUS ANGLES OF ATTACK



SYMBOL	ALPHA
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△	0.000
◇	10.000
□	20.000
▽	30.000

PARAMETRIC VALUES

MACH 2.000 BETA 0.000
ELVATR 0.000

DATA SOURCE

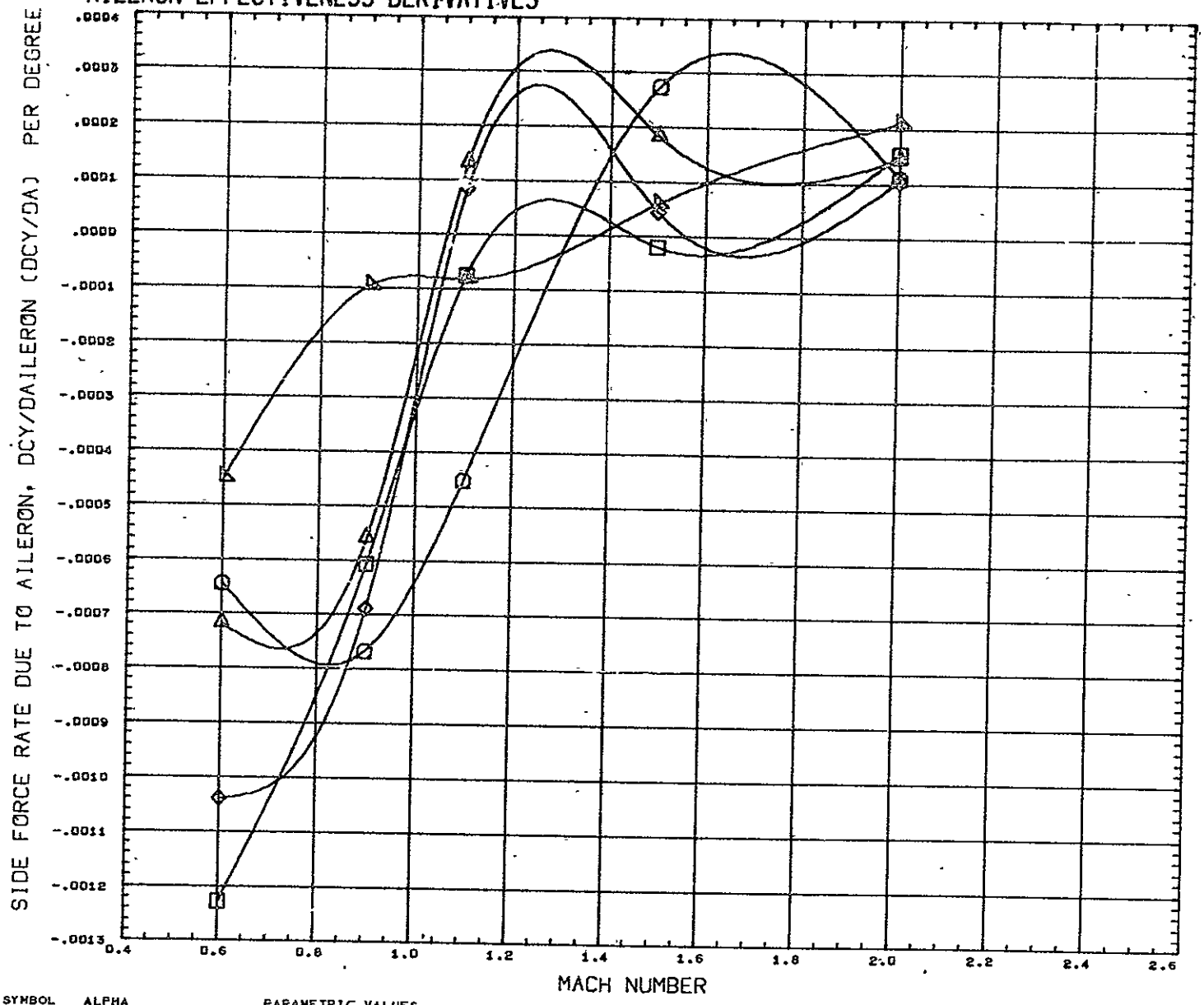
DATASET	AILRON
W29121	-40.000
W29061	0.000
W29111	-20.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	-0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE HH*E*GI

AILERON EFFECTIVENESS DERIVATIVES



SYMBOL	ALPHA
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□	0.000
◇	10.000
△	20.000
○	30.000

PARAMETRIC VALUES

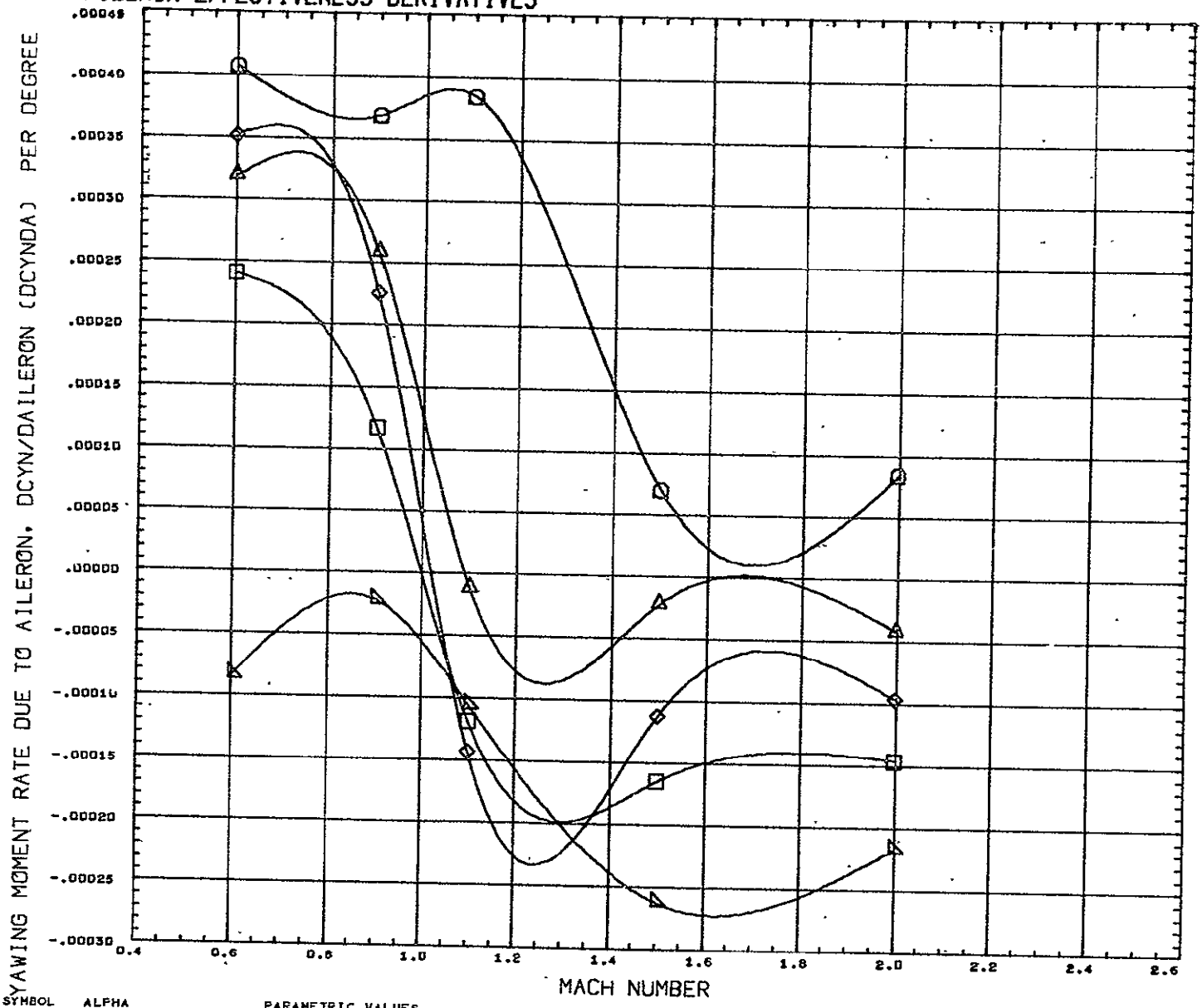
BETA 0.000 ELVATR 0.000

DATA HIST. CODE MM*E*GI*F

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

AILERØN EFFECTIVENESS DERIVATIVES



SYMBOL	ALPHA
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□	0.000
◇	10.000
△	20.000
○	30.000

PARAMETRIC VALUES

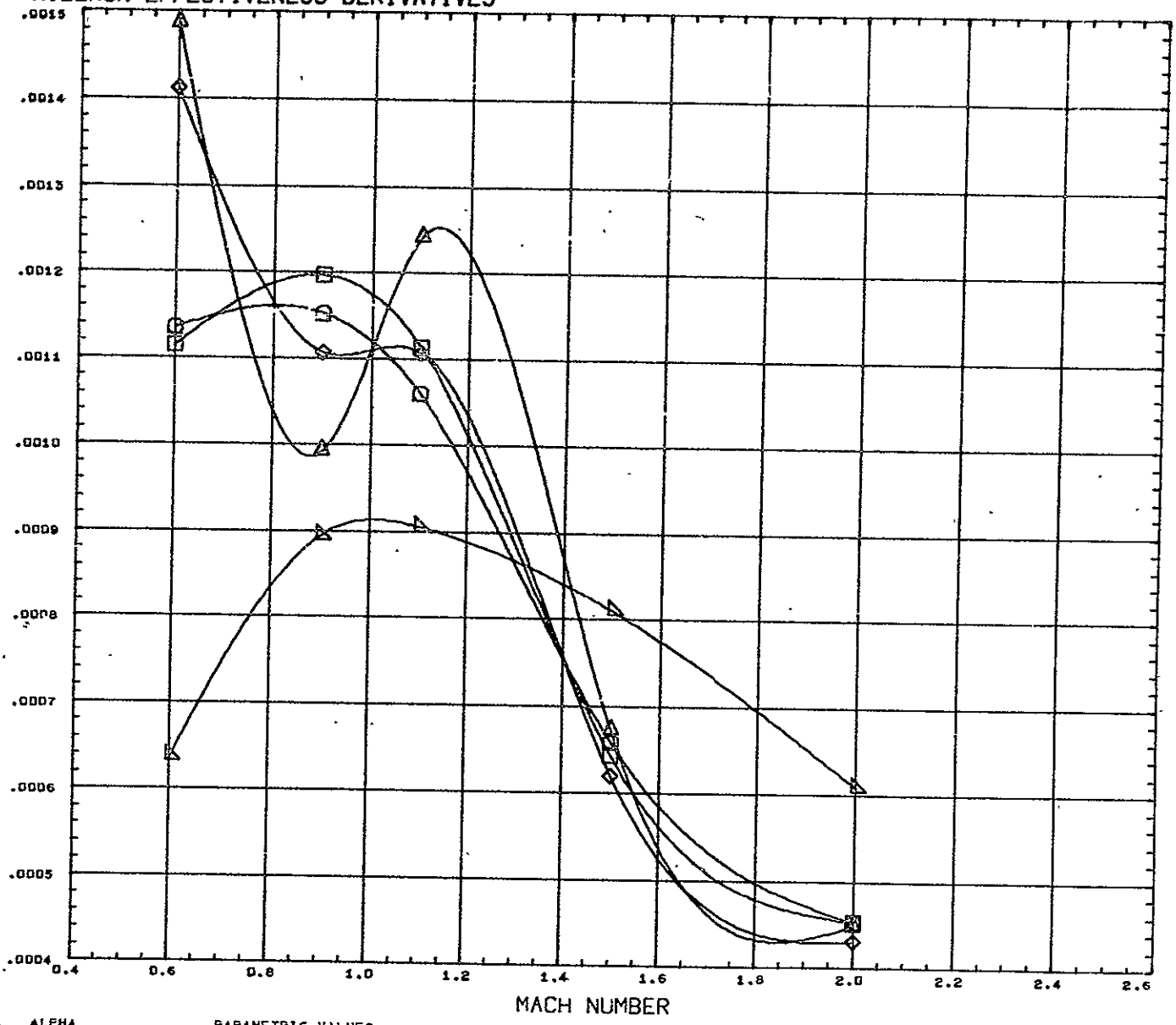
BETA 0.000 ELVATR 0.000

DATA HIST. CODE MM*E*GI*P

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

AILERON EFFECTIVENESS DERIVATIVES



SYMBOL	ALPHA
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	0.000
	10.000
	20.000
	30.000

PARAMETRIC VALUES

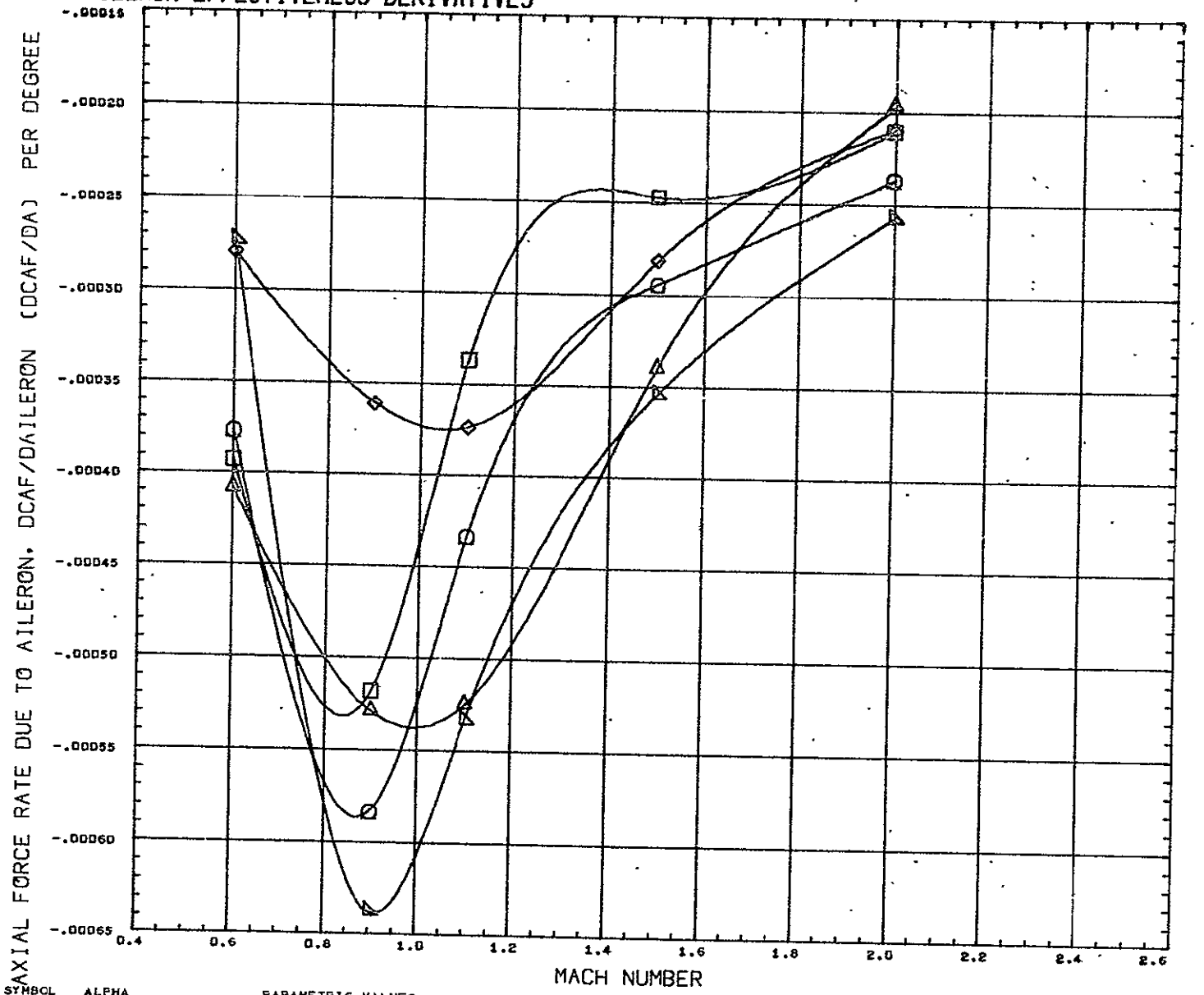
BETA 0.000 ELVATR 0.000

DATA HIST. CODE MM*E*GI*P

REFERENCE INFORMATION

REFS	6064.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

AILERON EFFECTIVENESS DERIVATIVES



SYMBOL	ALPHA
▽	-10.000
□	0.000
◇	10.000
▷	20.000
○	30.000

PARAMETRIC VALUES

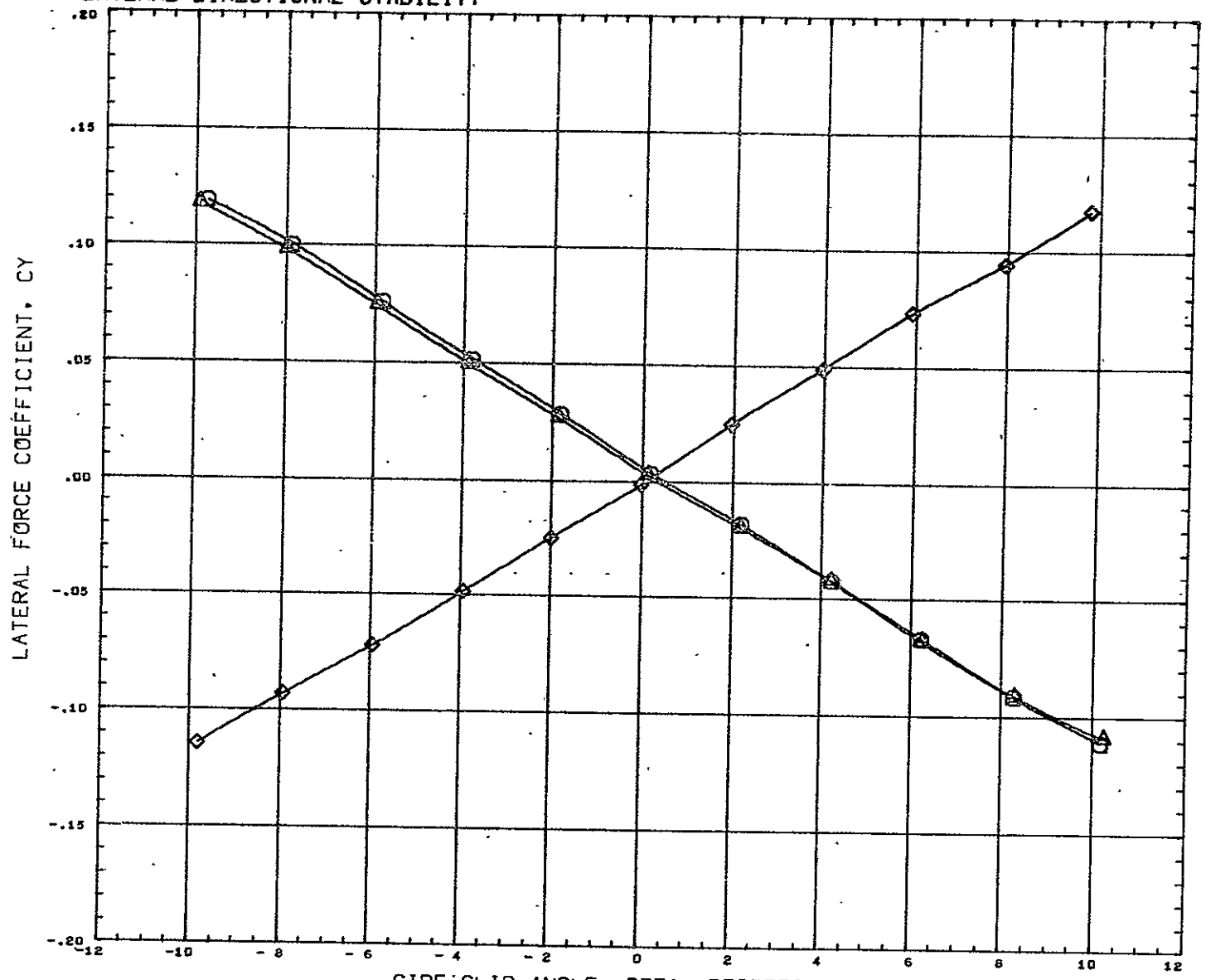
BETA 0.000 ELVATR 0.000

DATA HIST. CODE MH*E*GI*F

REFERENCE INFORMATION

REFS	6064.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	0.606	ELVATR	0.000		
AILRON	0.000				

DATA SOURCE

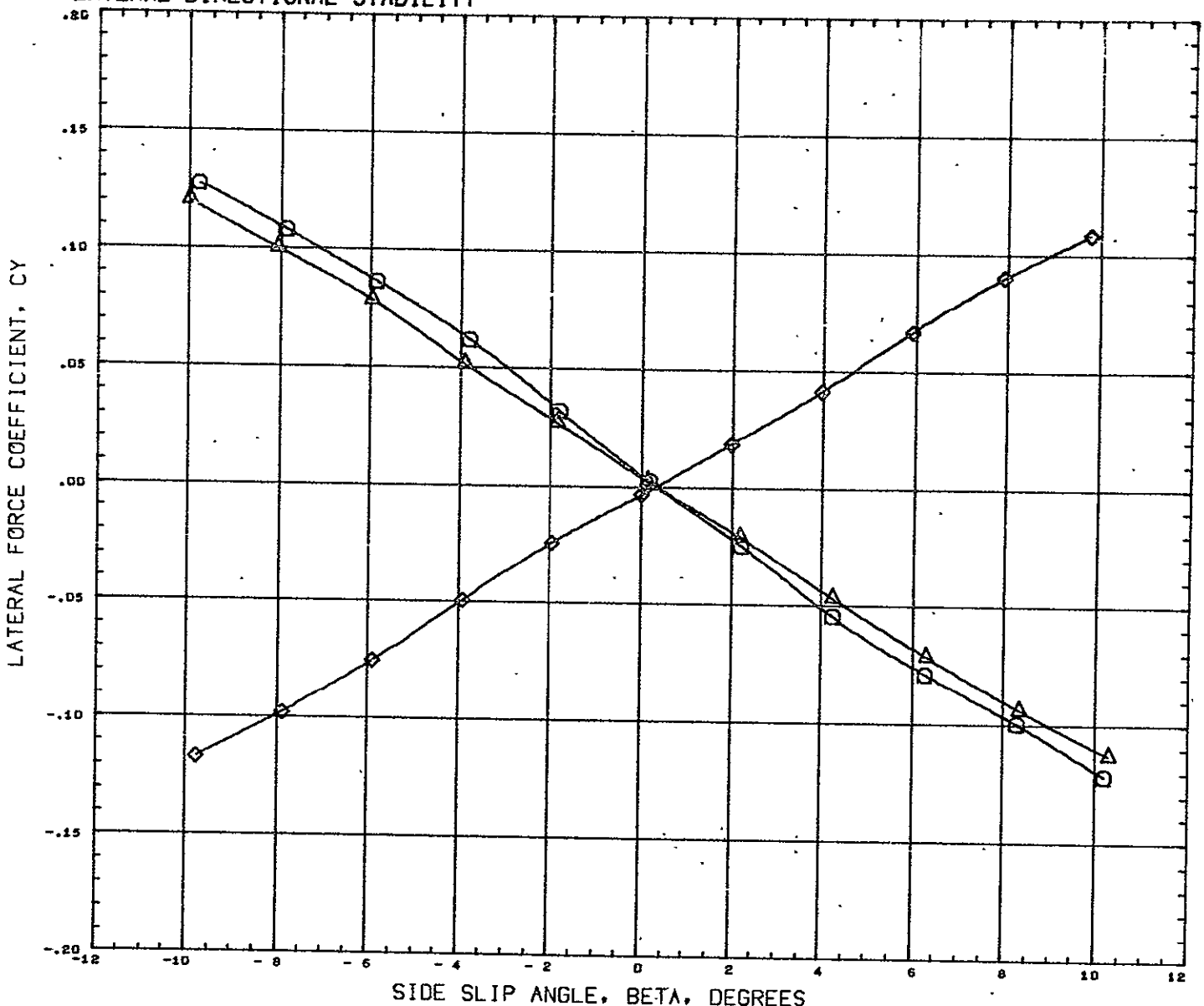
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	0.906	ELVATR	0.000
AILRON	0.000		

DATA SOURCE

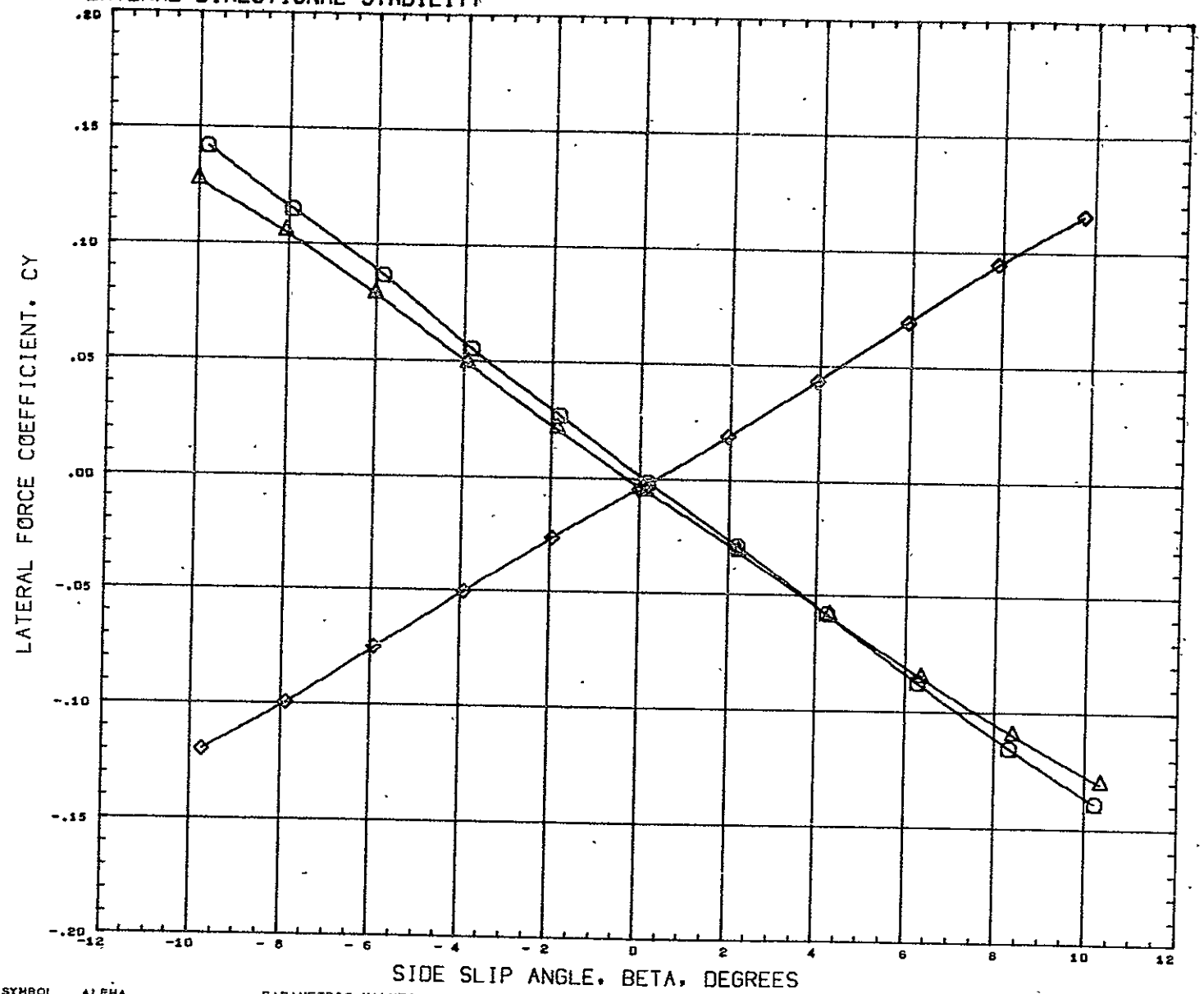
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.101	ELVATR	0.000
AILRON	0.000		

DATA SOURCE

DATASET	ALPHA
W2913C	- 6.000
W2914C	6.000

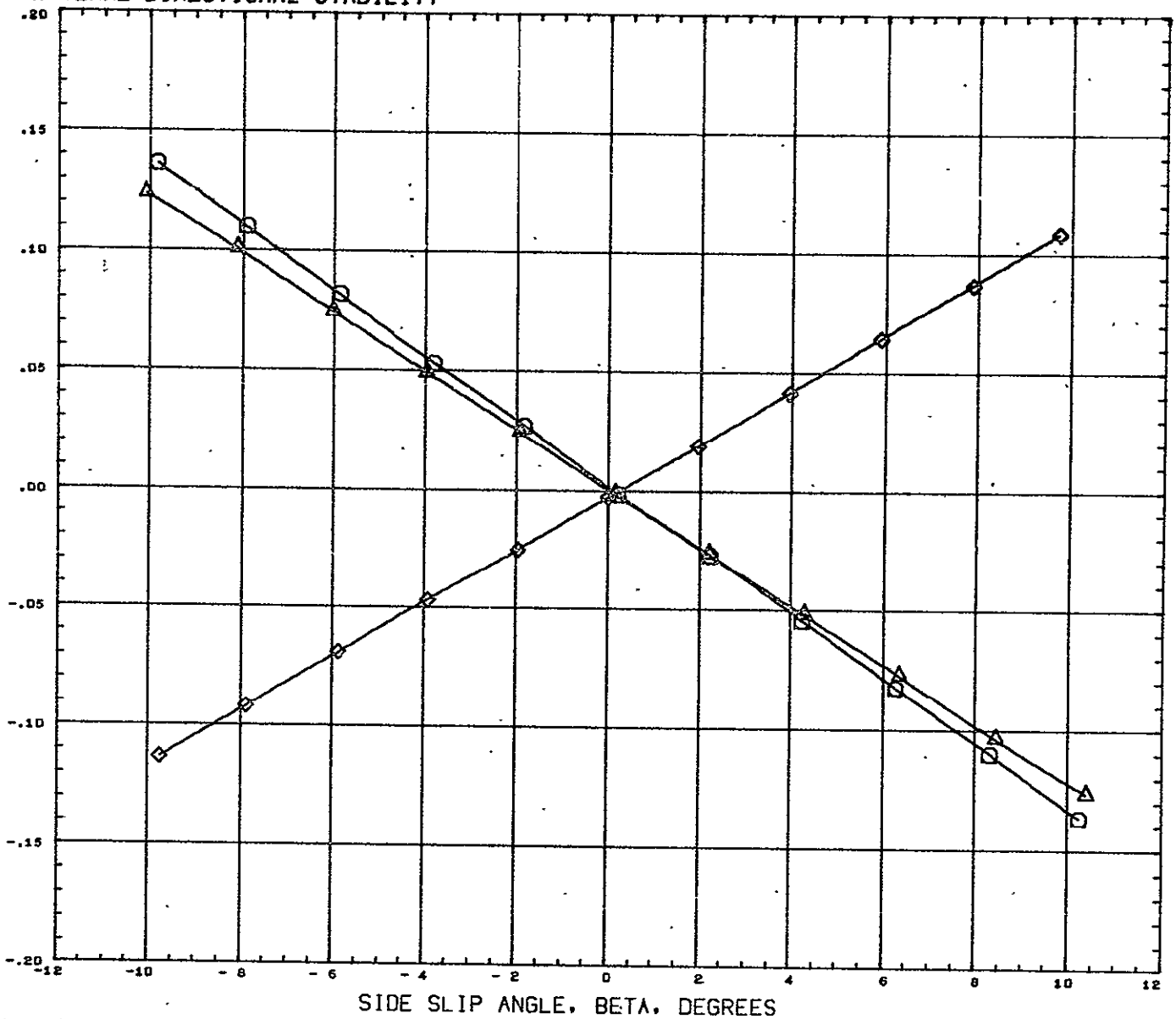
DATASET	ALPHA
X2906C	0.000

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.463	ELVATR	0.000
AILRON	0.000		

DATA SOURCE

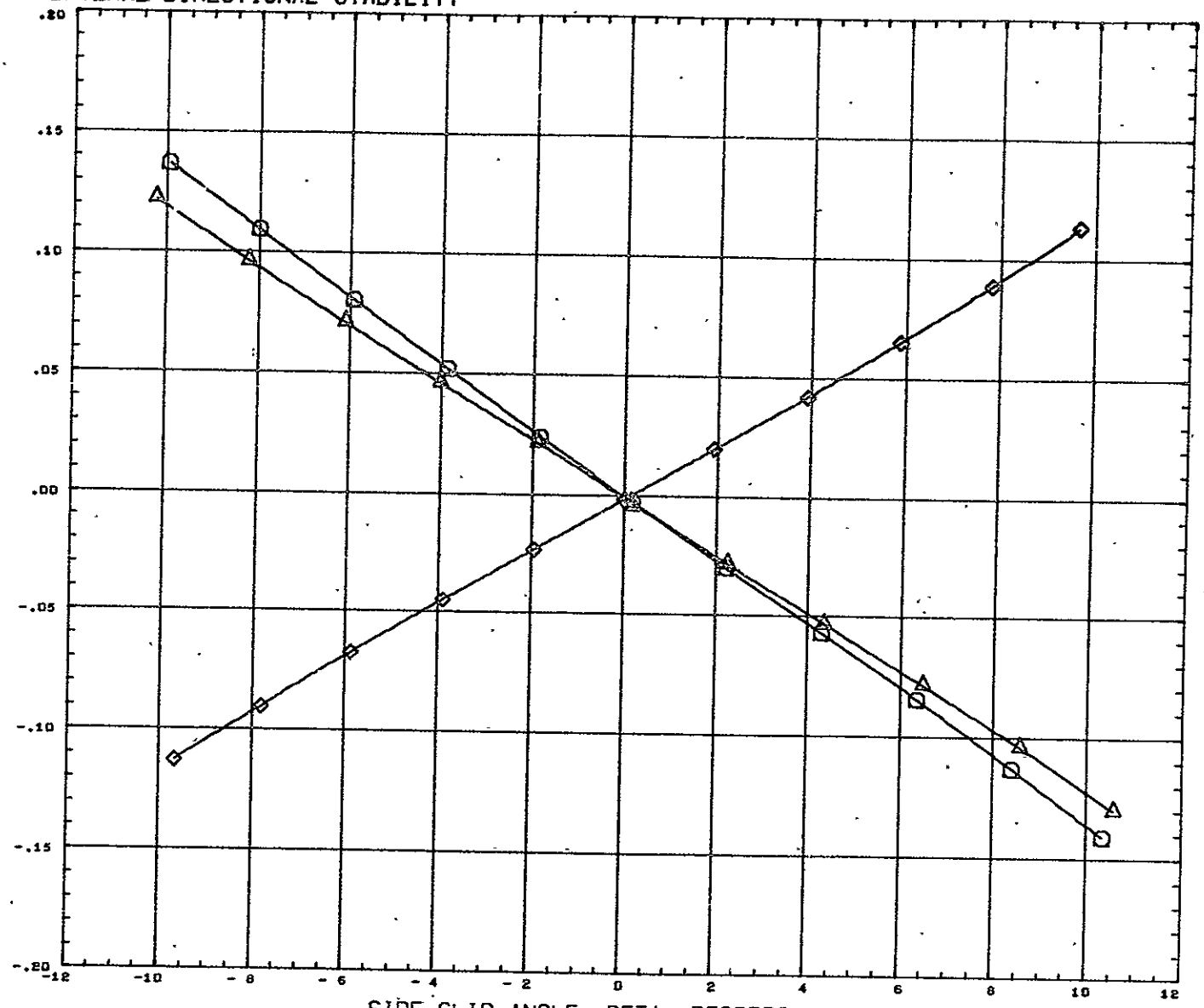
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.961	ELVATR	0.000
AILRON	0.000		

DATA SOURCE

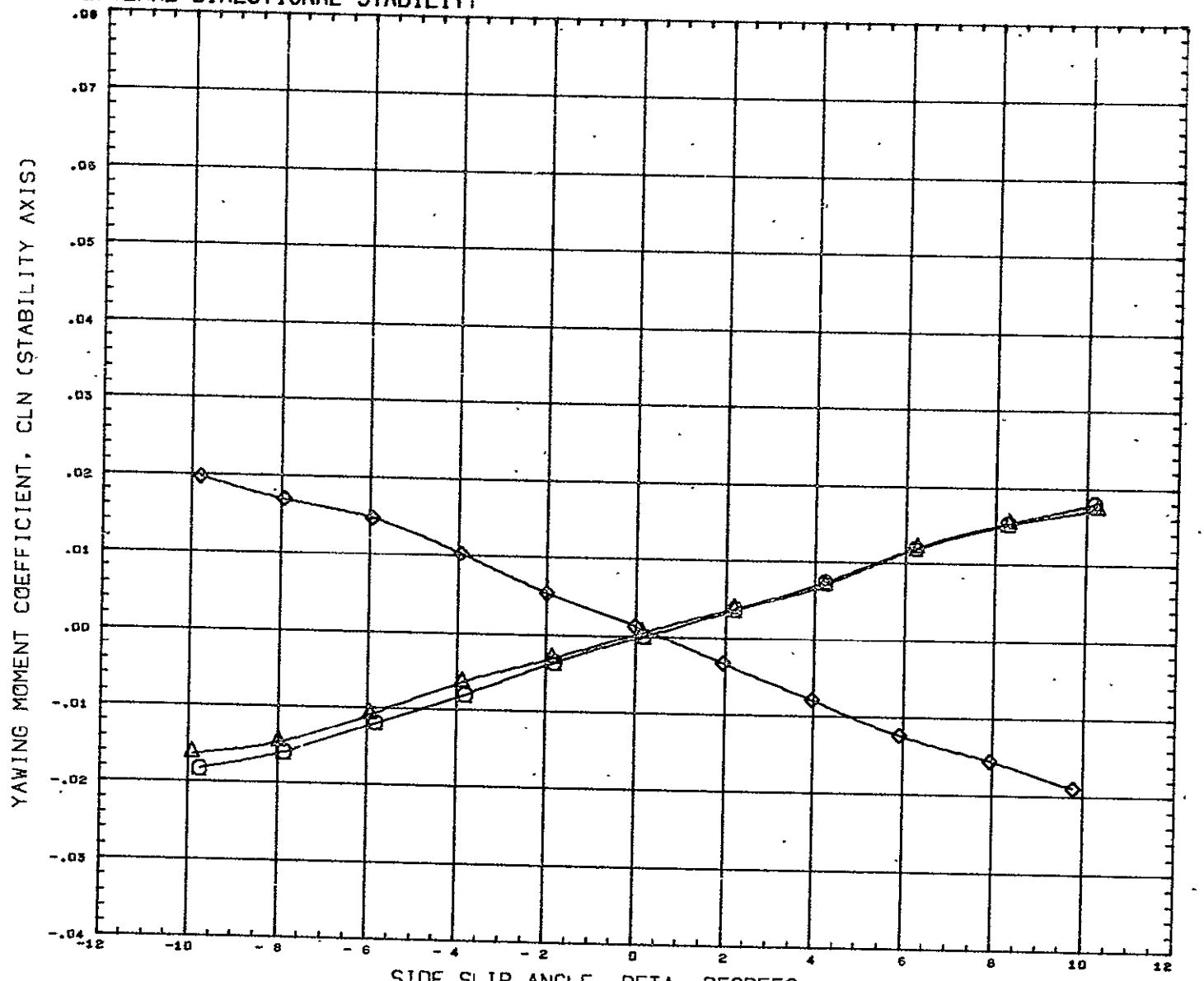
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	139.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
△	- 6.000
□	0.000
◇	6.000

PARAMETRIC VALUES

MACH		ELVATR	
	0.606		0.000
AILRON	0.000		

DATA SOURCE

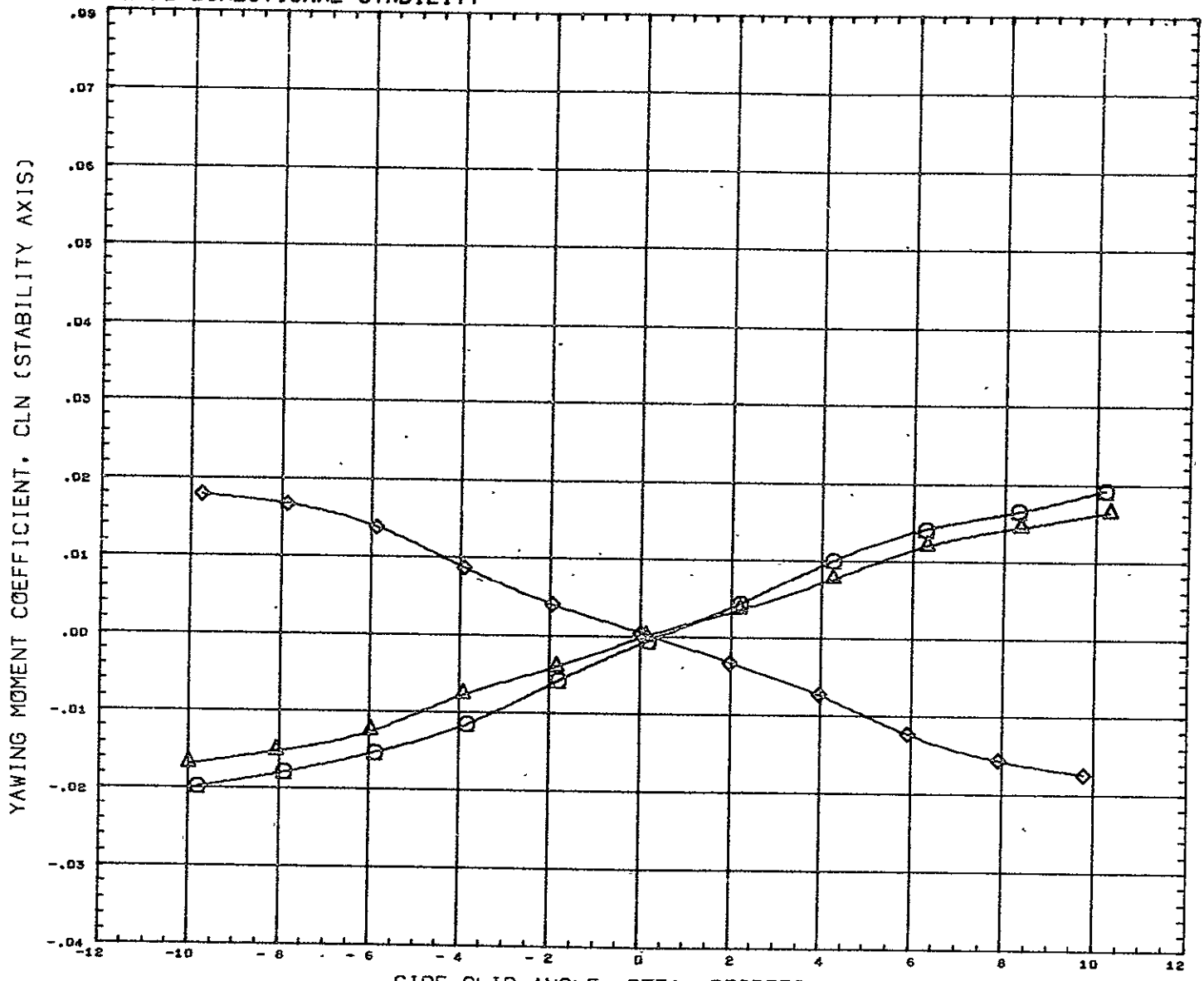
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	0.906	ELVATR	0.000		
AILRON	0.000				

DATA SOURCE

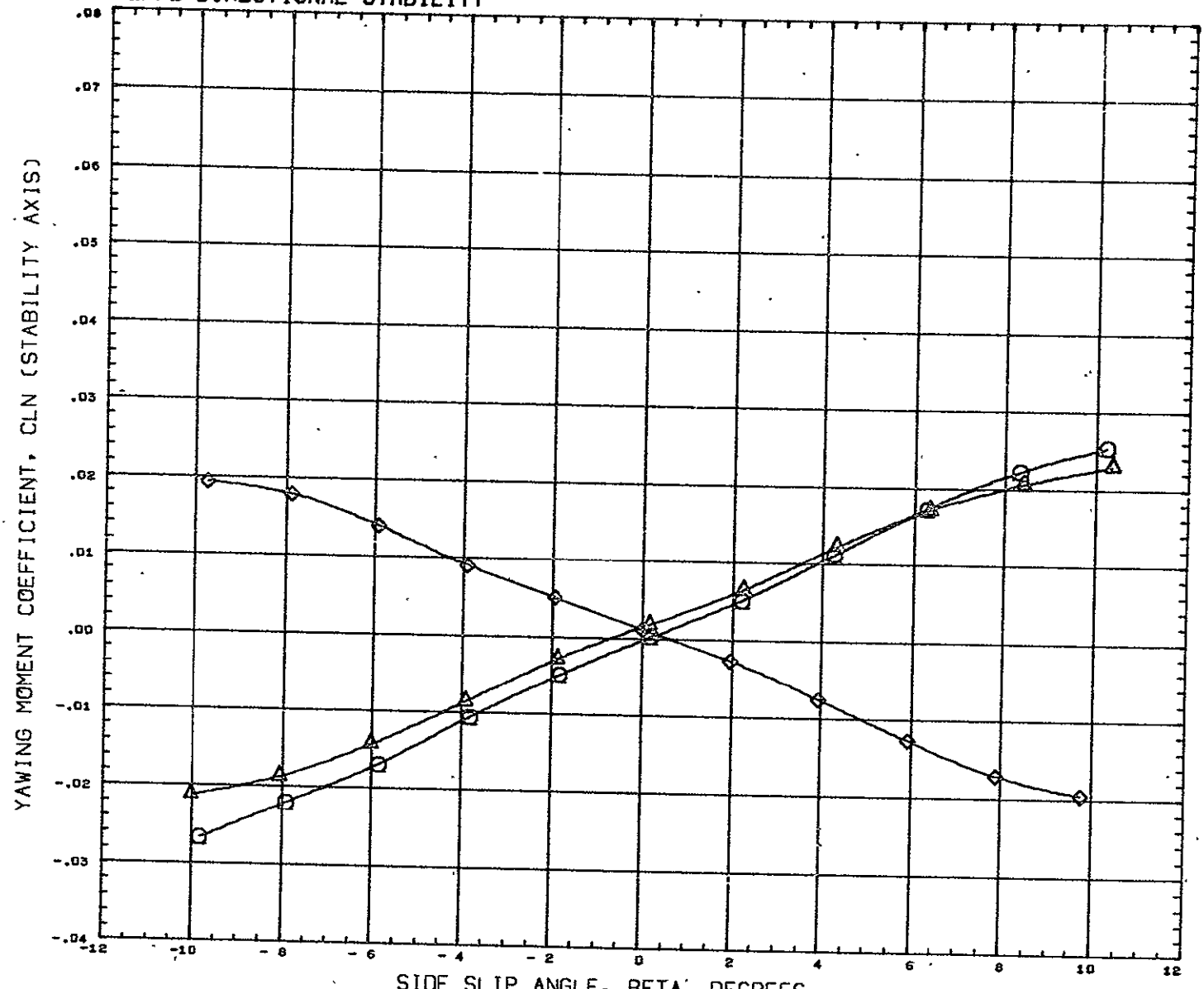
DATASET	ALPHA	DATASET	ALPHA
W2913C	6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2904	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
△	6.000
○	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.101	ELVATR	0.000		
AILRON	0.000				

DATA SOURCE

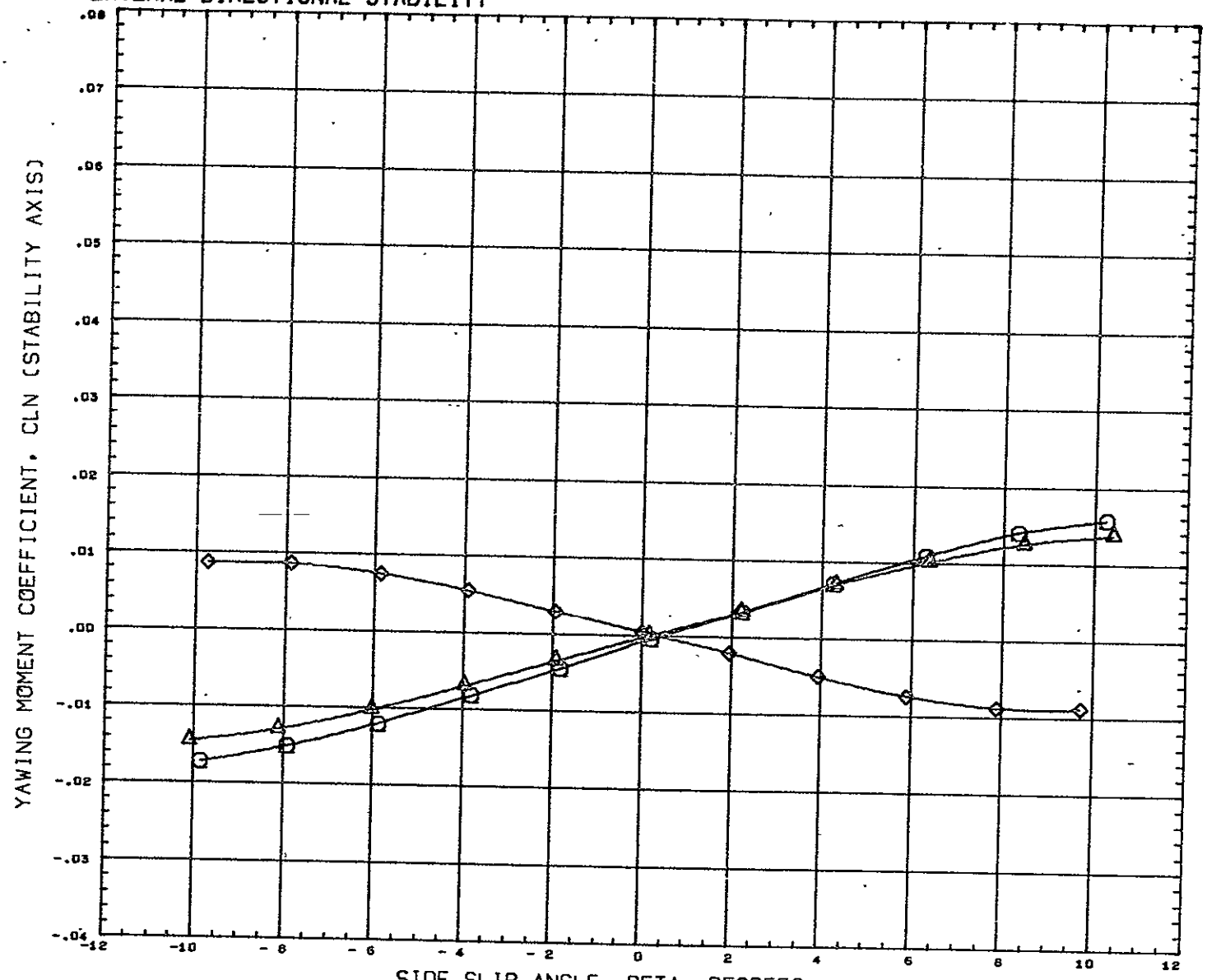
DATASET	ALPHA	DATASET	ALPHA
W2913C	6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	-130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
◇	- 6.000
△	0.000
○	6.000

PARAMETRIC VALUES

MACH	1.463	ELVATR	0.000
AILRON	0.000		

DATA SOURCE

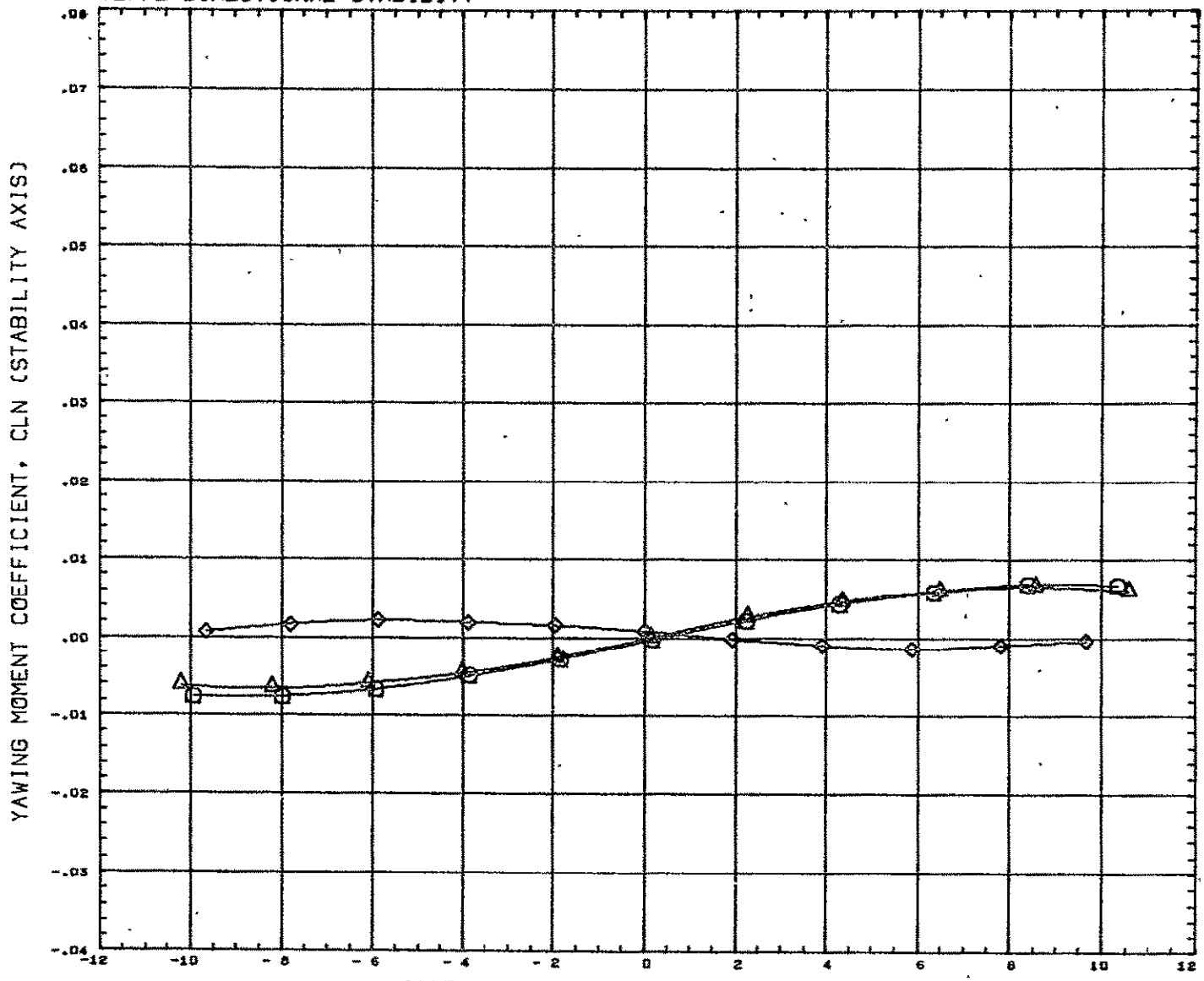
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X29G6C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

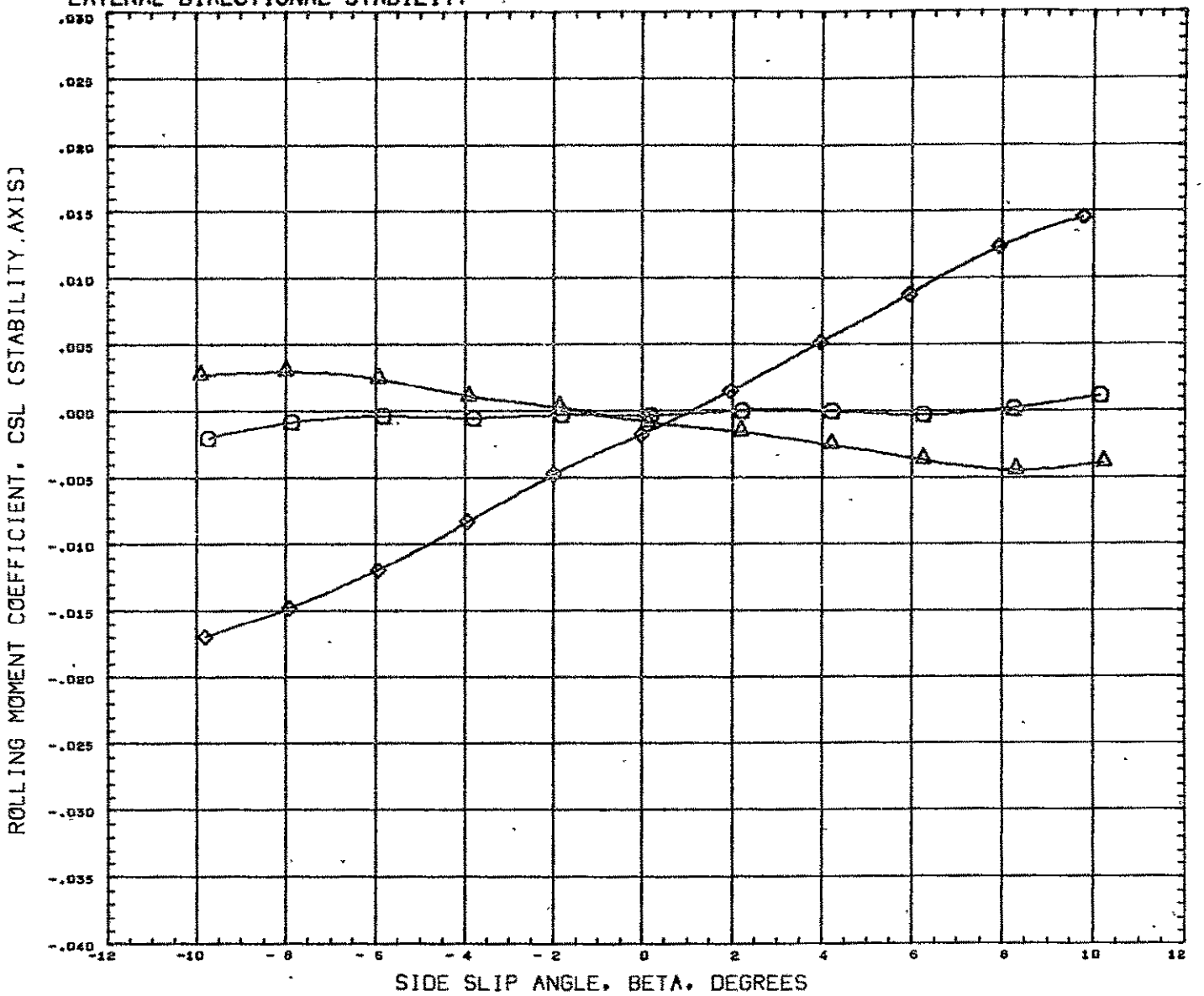
LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	6.000	MACH	1.961	ELVATR	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0840	SQ FT
△	0.000	AILRON	0.000			W2913C	6.000	X2906C	0.000	REFL	821.2004	INCHES
◇	6.000					W2914C	6.000			REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE #E

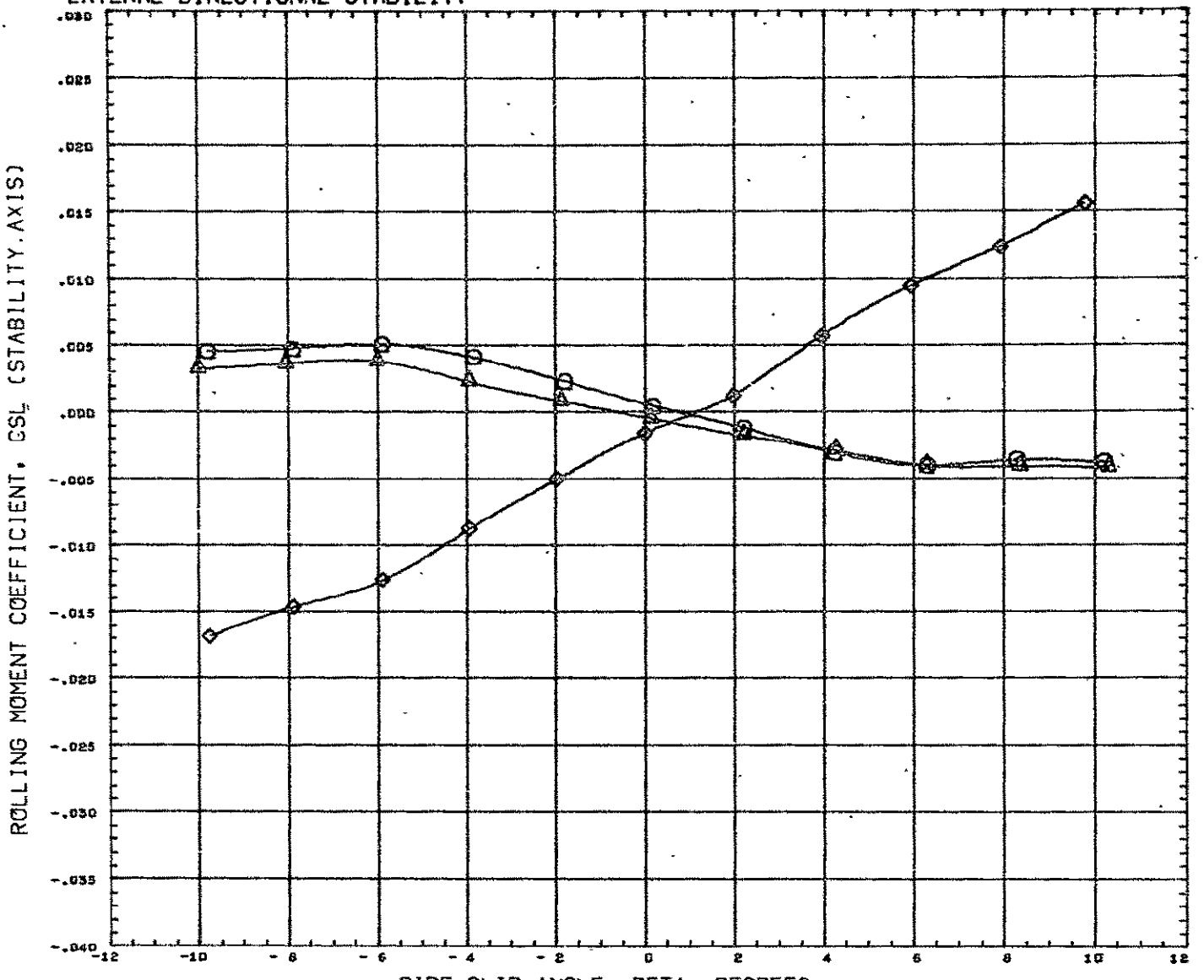
LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
△□	- 6.000	MACH	0.606	ELVATR	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
▷	0.000	AILRON	0.000			W2913C	- 6.000	X2906C	0.000	REFL	821.2004	INCHES
◇	6.000					W2914C	6.000			REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	0.906	ELVATR	0.000	
AILRON	0.000			

DATA SOURCE

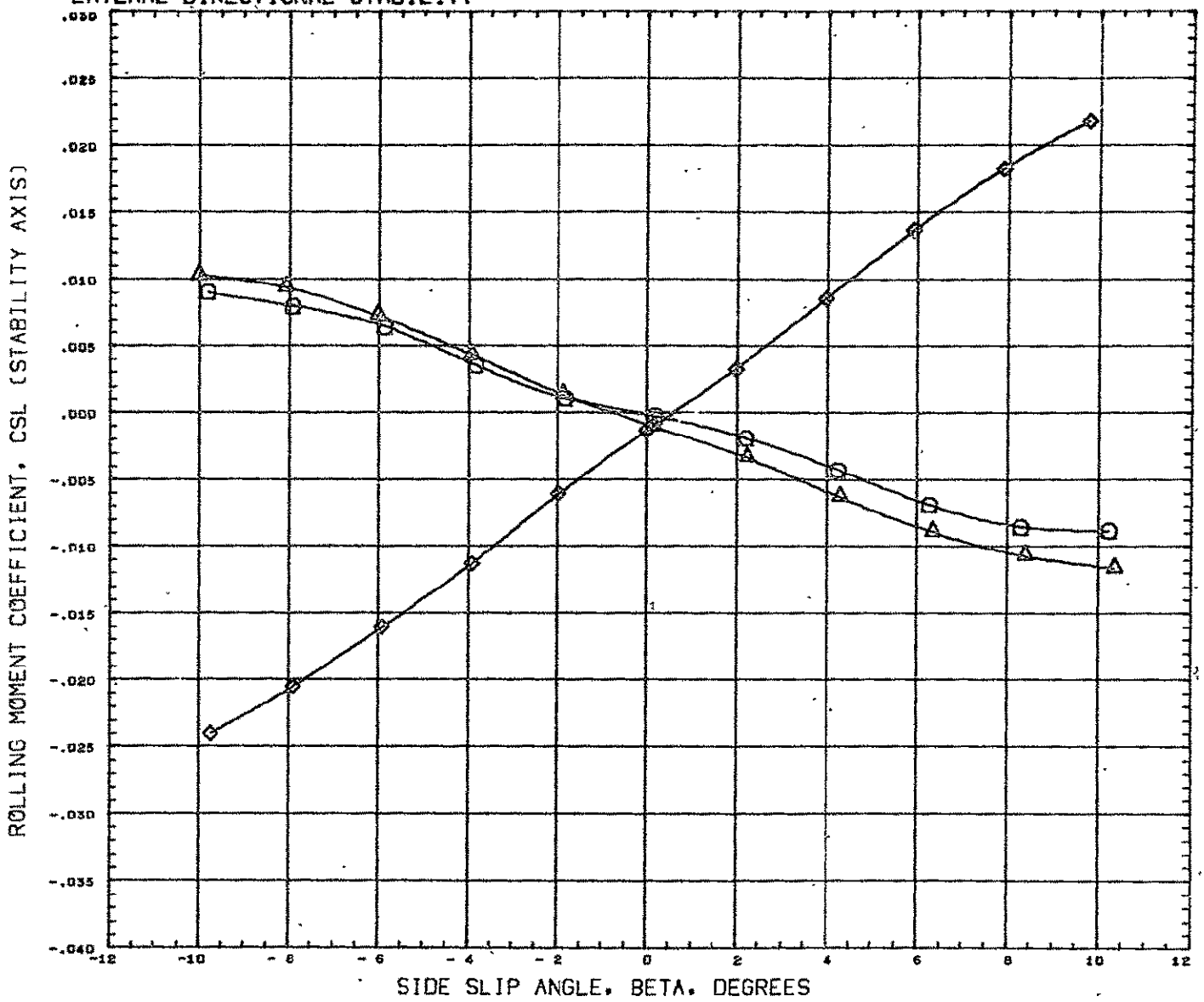
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST..CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.101	ELVATR	0.000	
AILRON	0.000			

DATA SOURCE

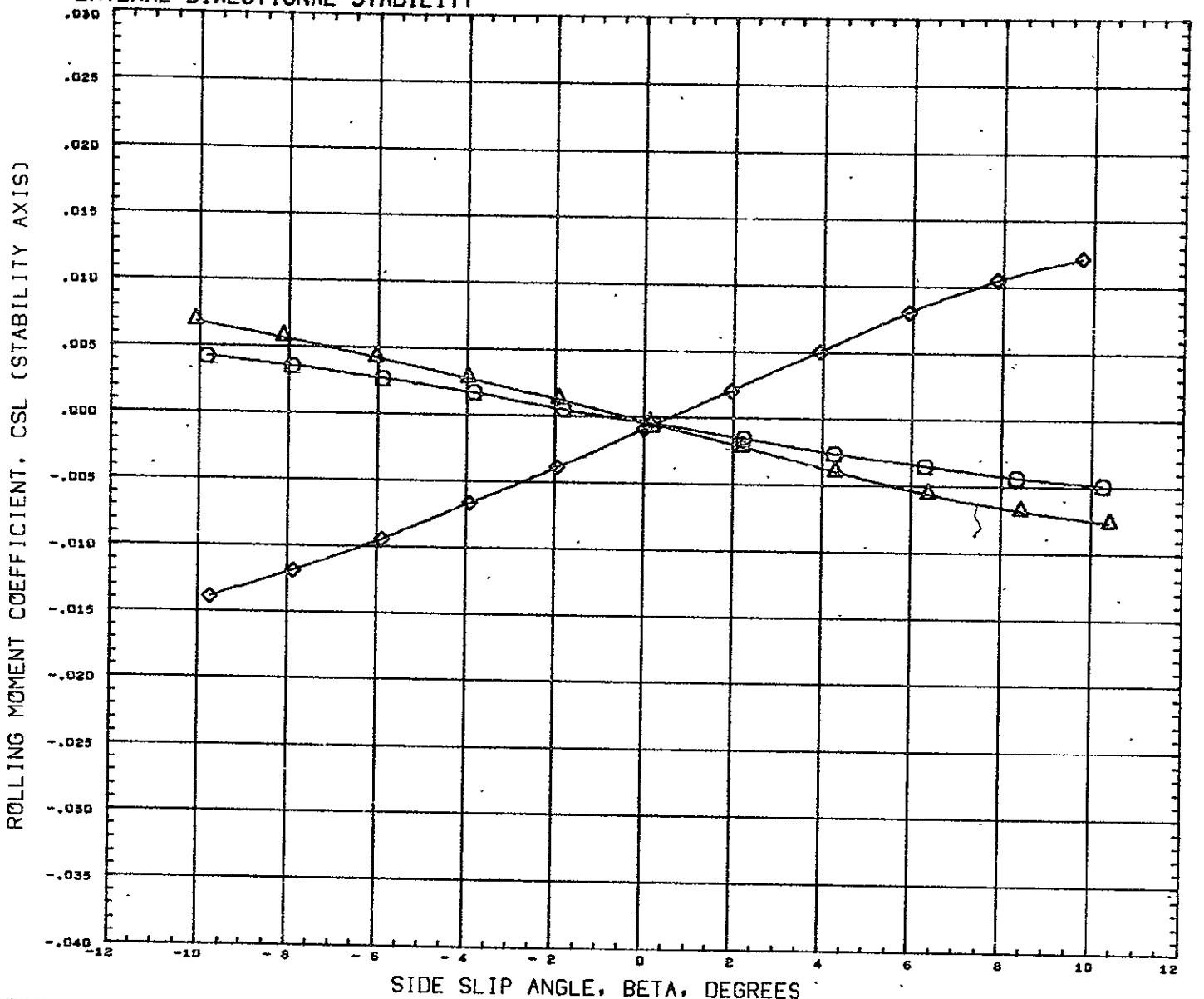
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.463	ELVATR	0.000	
AILRON	0.000			

DATA SOURCE

DATASET	ALPHA	DATASET	ALPHA
W2913C	6.000	X2906C	0.000
W2914C	6.000		

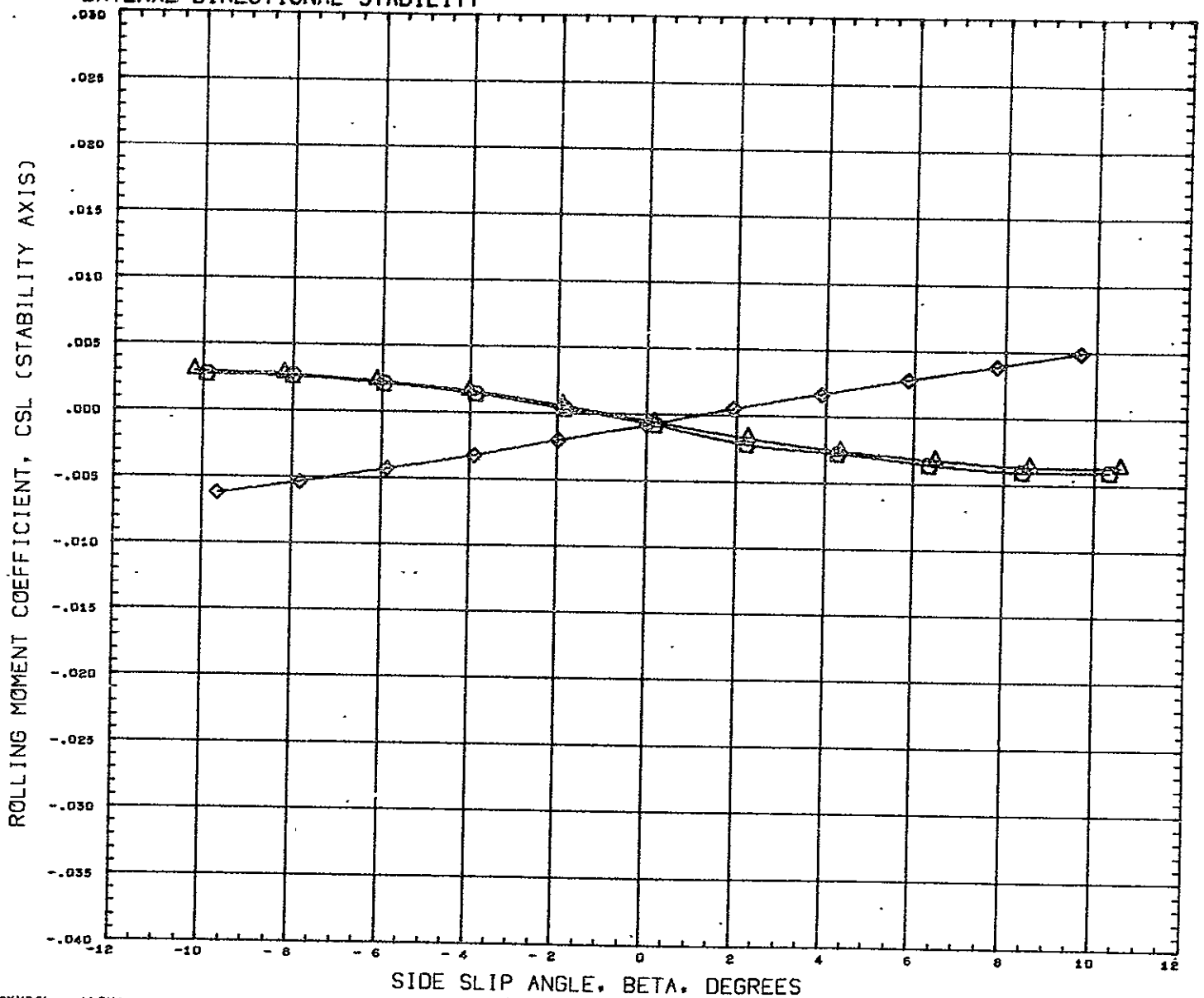
REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

MSFC484 NR DELTA ORBITER B5W17E10V17J2 (W2913C) 03 AUG 71 PAGE 449

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
▷◁	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.961	ELVATR	0.000
AILRON	0.000		

DATA SOURCE

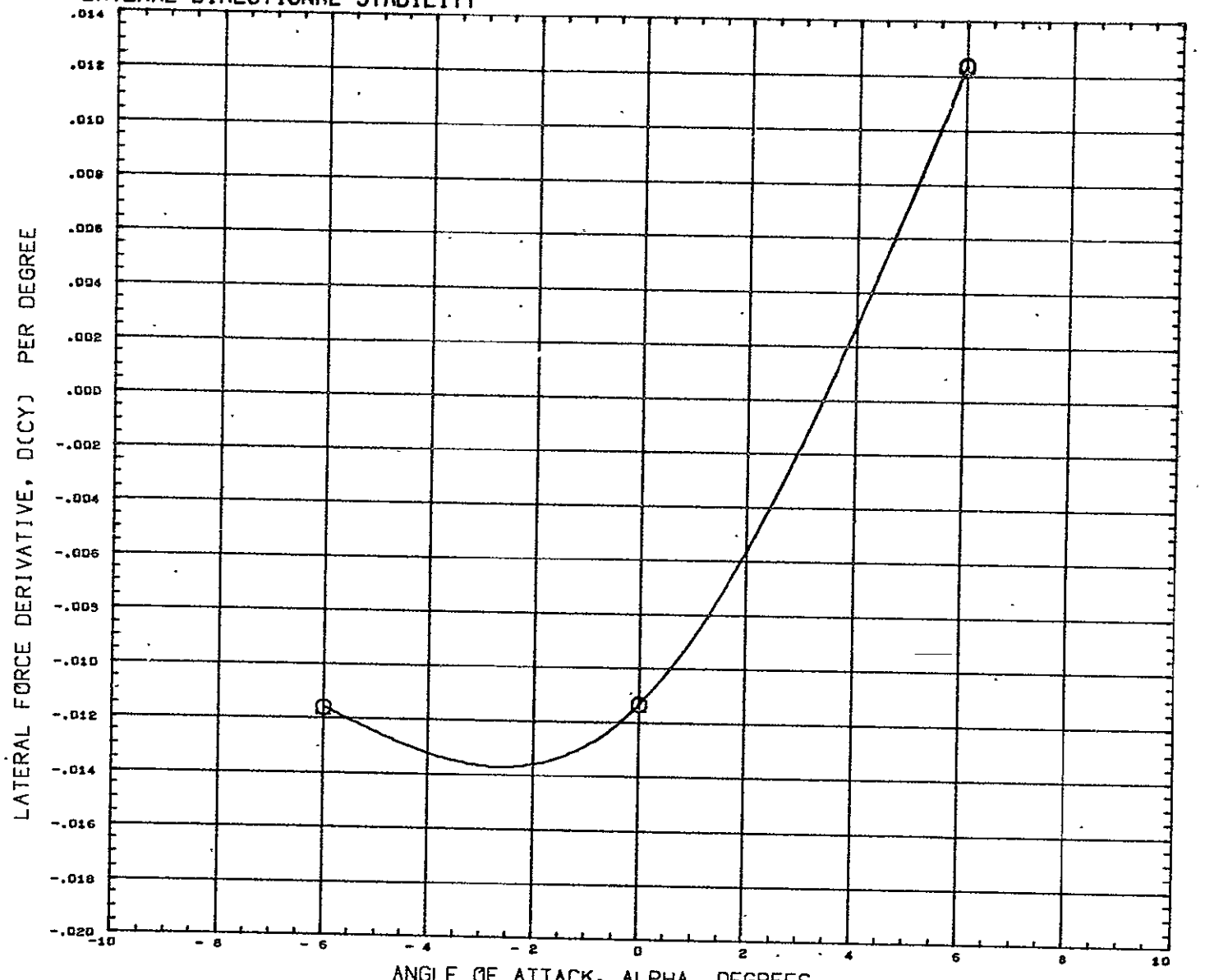
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY

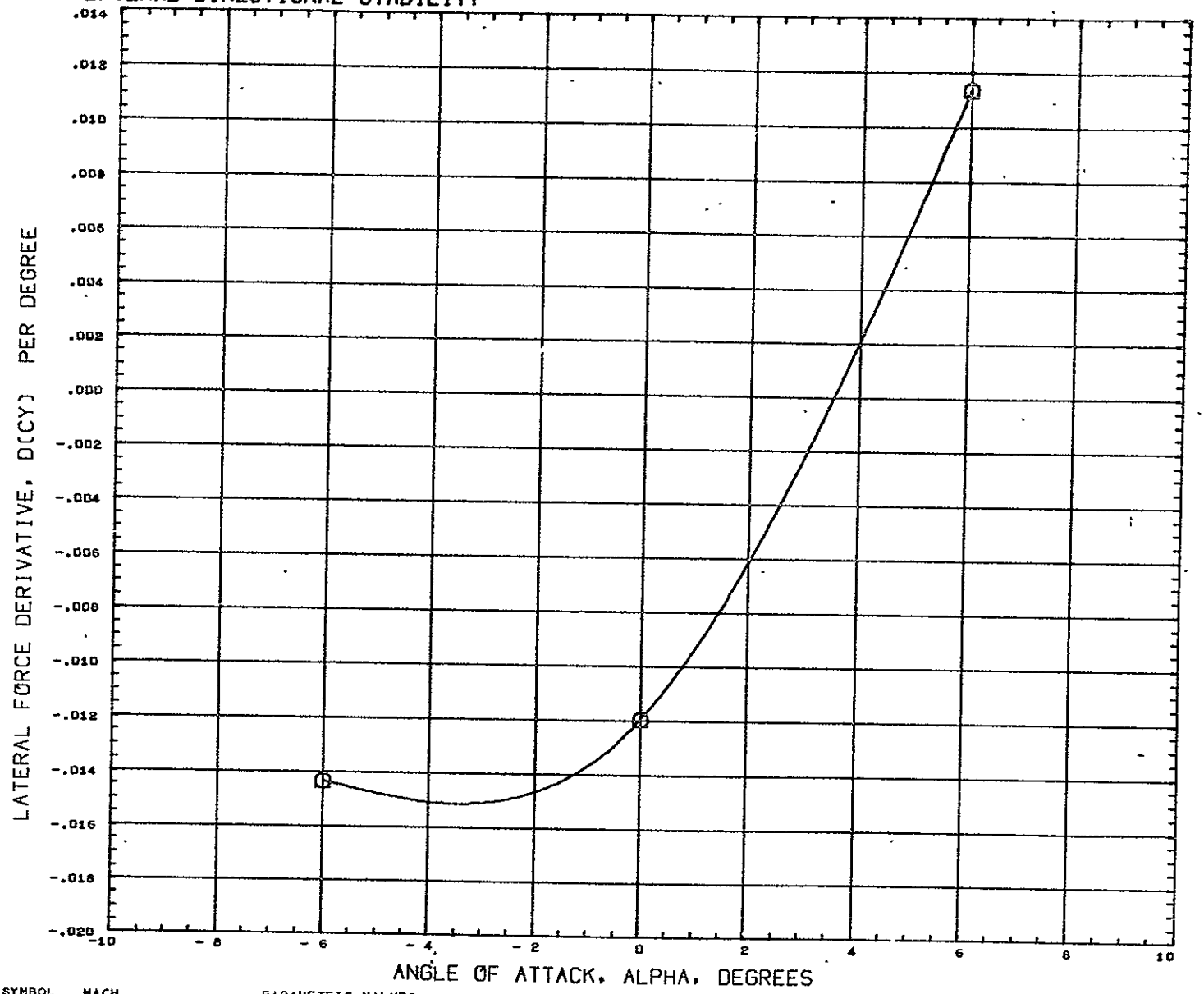


SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE			
						DATASET	ALPHA	DATASET	ALPHA
O	0.600	ELVATR	0.000	AILRON	0.000	I2913C	-6.000	I2906C	0.000
						I2914C	6.000		

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *EI

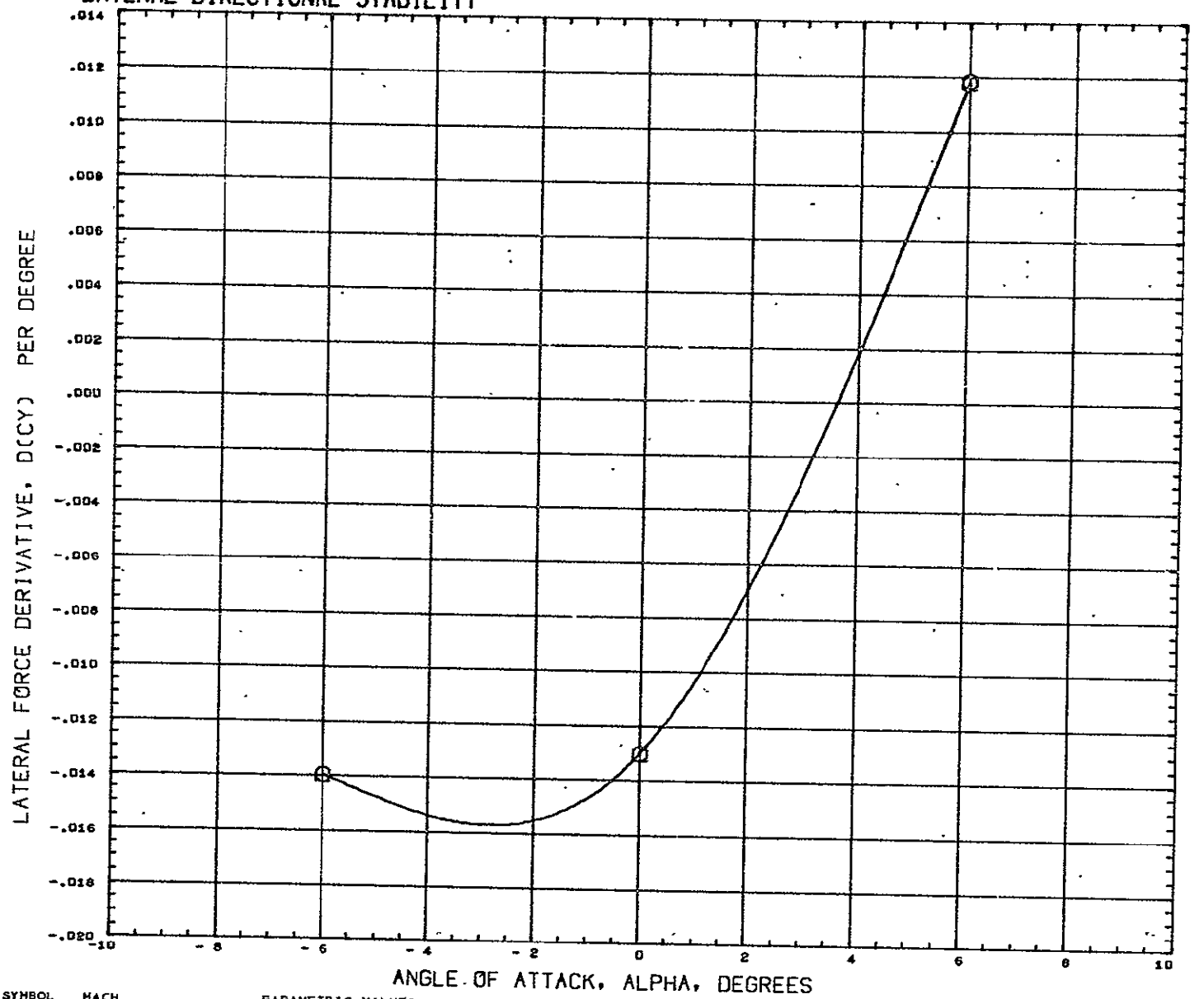
LATERAL DIRECTIONAL STABILITY



SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	0.900	ELVAIR	0.000	AILRON	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
						I2913C	- 6.000	I2906C	0.000	REFL	821.2004	INCHES
						I2914C	6.000			REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *EI

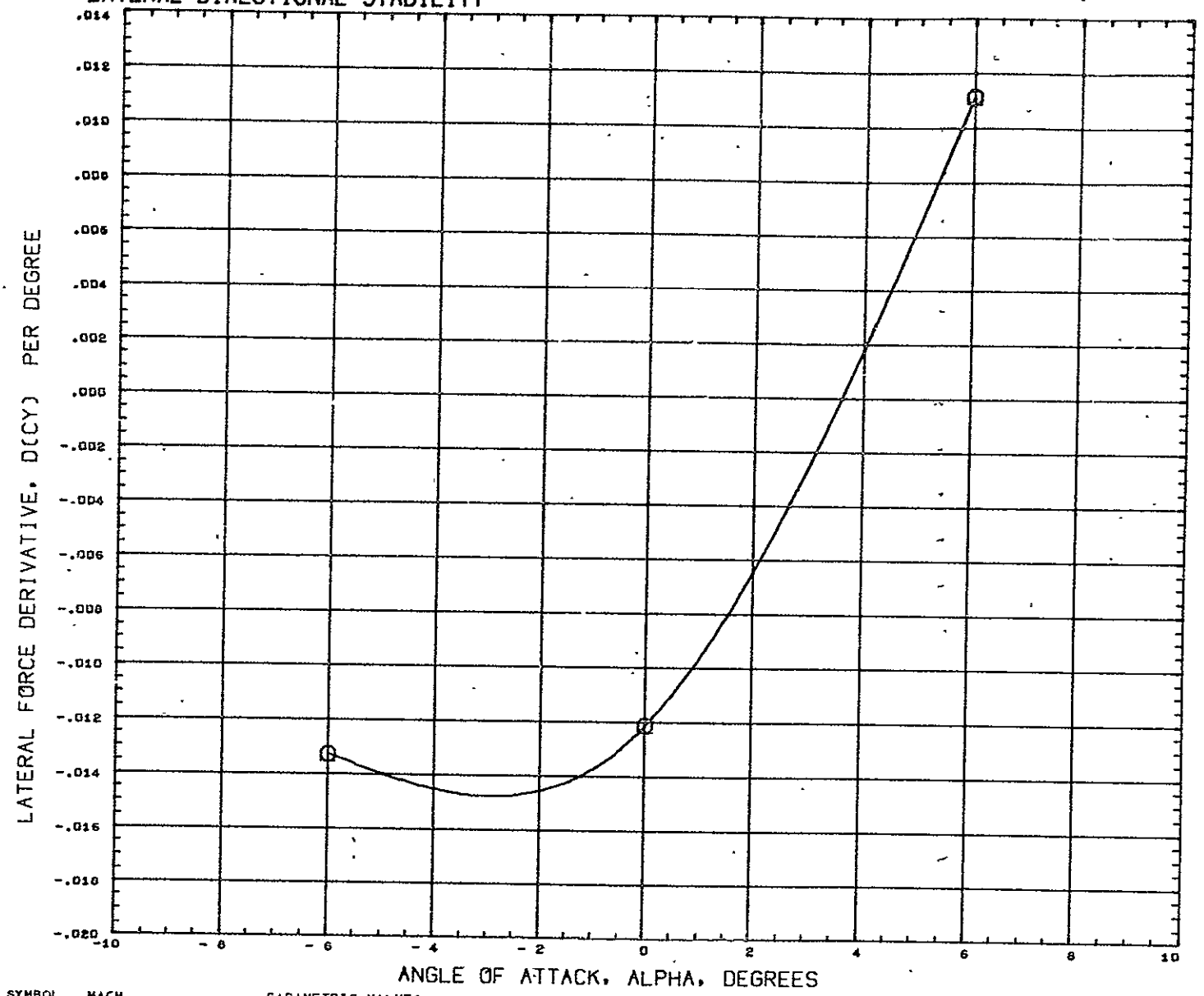
LATERAL DIRECTIONAL STABILITY



SYMBOL	MACH	PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
O	1.100	ELVATR 0.000	AILRON	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
					I2913C	- 6.000	I2906C	0.000	REFL	821.2004	INCHES
					I2914C	6.000			REFB	1422.8040	INCHES
									XMRP	1422.5040	INCHES
									YMRP	0.0000	INCHES
									ZMRP	130.0004	INCHES
									SCALE	0.0035	SCALE

DATA HIST. CODE *EI

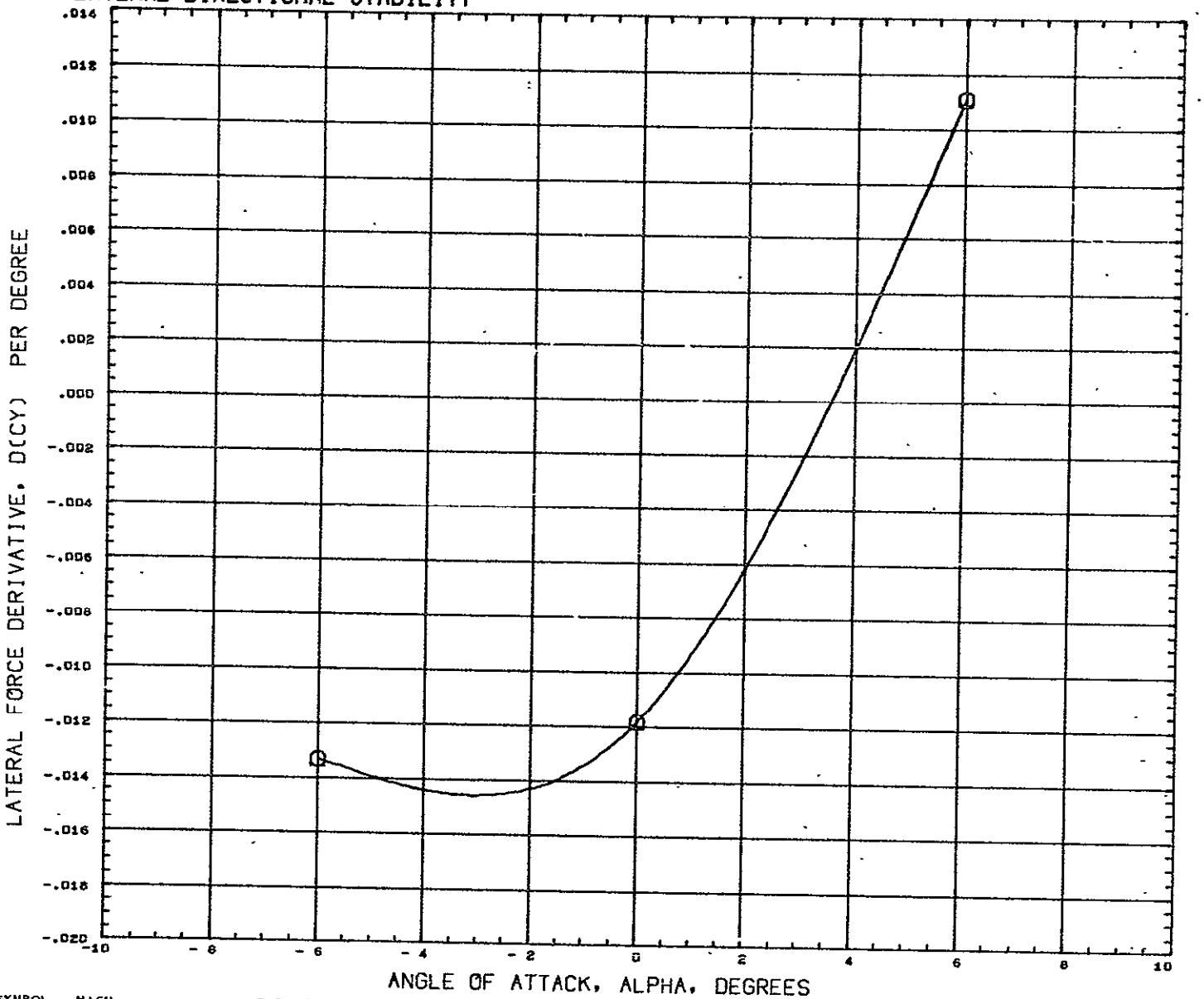
LATERAL DIRECTIONAL STABILITY



SYMBOL	MACH	PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
O	1.500	ELVATR	0.000	AILRON 0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
					I2913C	- 6.000	I2906C	0.000	REFL	821.2004	INCHES
					I2914C	6.000			REFB	1422.8040	INCHES
									XHRP	1422.5040	INCHES
									YHRP	0.0000	INCHES
									ZHRP	130.0004	INCHES
									SCALE	0.0035	SCALE

DATA HIST. CODE *EI

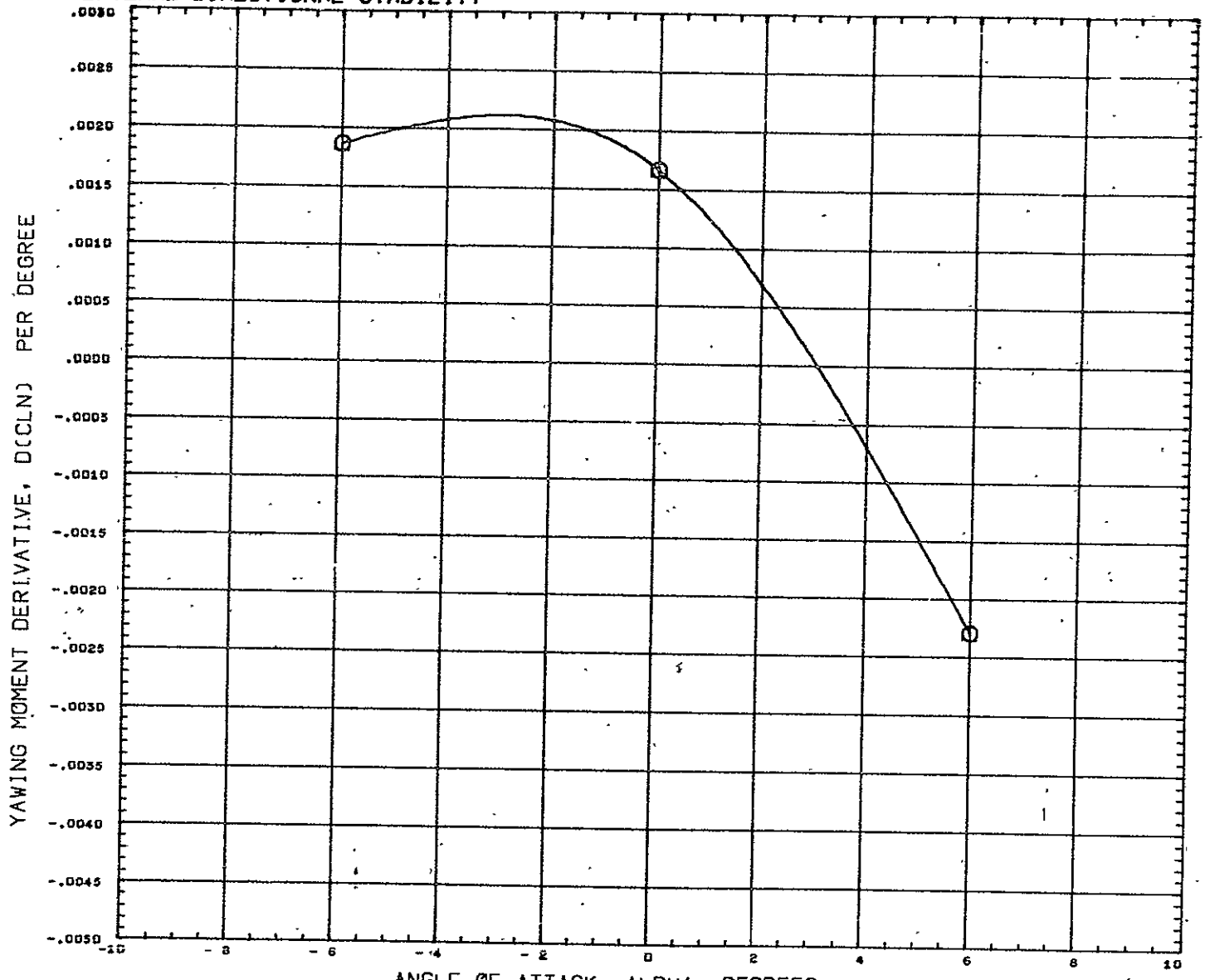
LATERAL DIRECTIONAL STABILITY



SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
						DATASET	ALPHA	DATASET	ALPHA			
O	2.000	ELVATR	0.000	AILRON	0.000	I2913C	- 6.000	I2906C	0.000	REFS	6084.0040	SQ FT
						I2914C	6.000			REFL	821.2004	INCHES
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE #EI

LATERAL DIRECTIONAL STABILITY

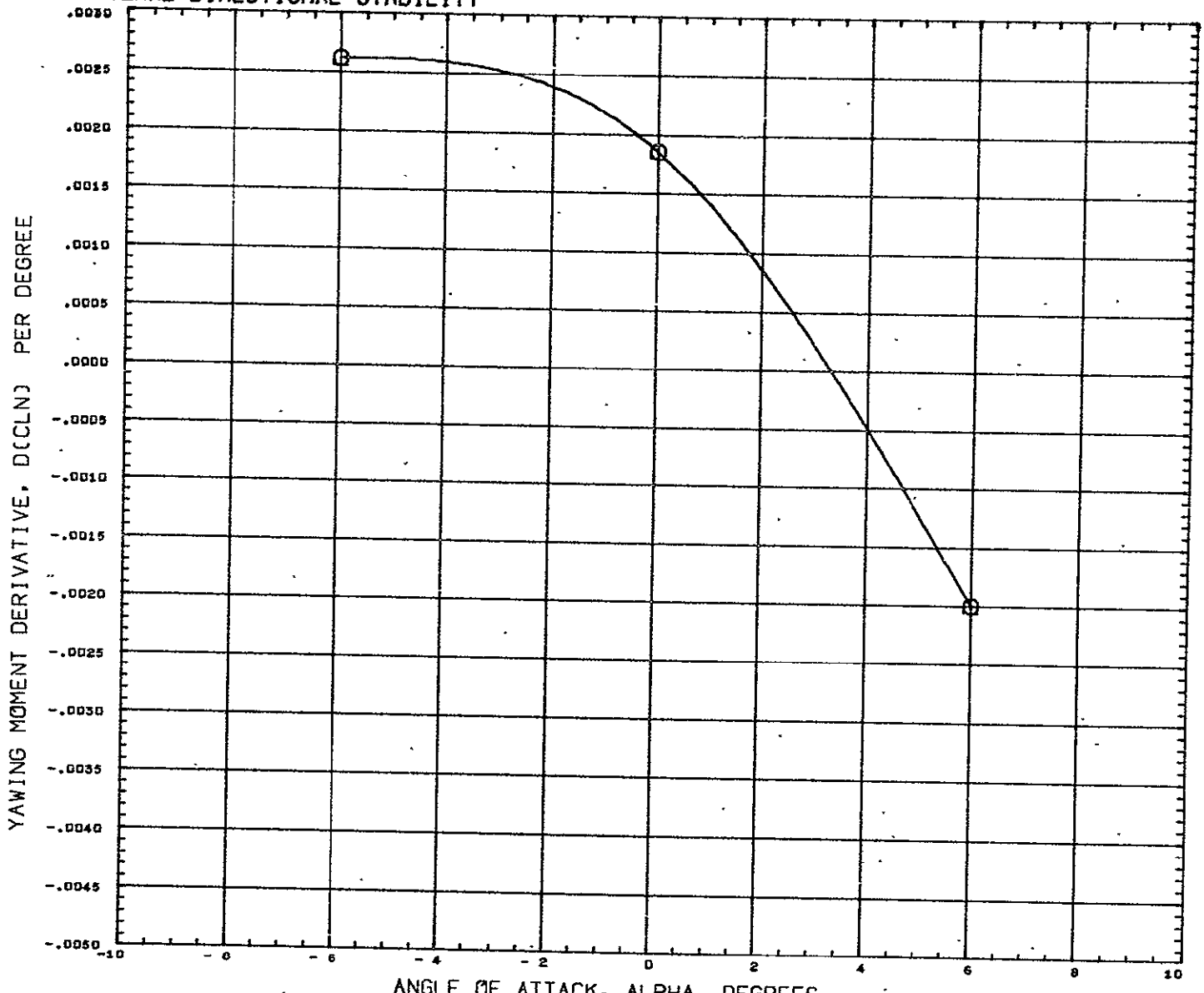


SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE			
						DATASET	ALPHA	DATASET	ALPHA
O	0.600	ELVAIR	0.000	AILRON	0.000	I2913C	- 6.000	I2906C	0.000
						I2914C	6.000		

DATA HIST. CODE *EI

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

LATERAL DIRECTIONAL STABILITY

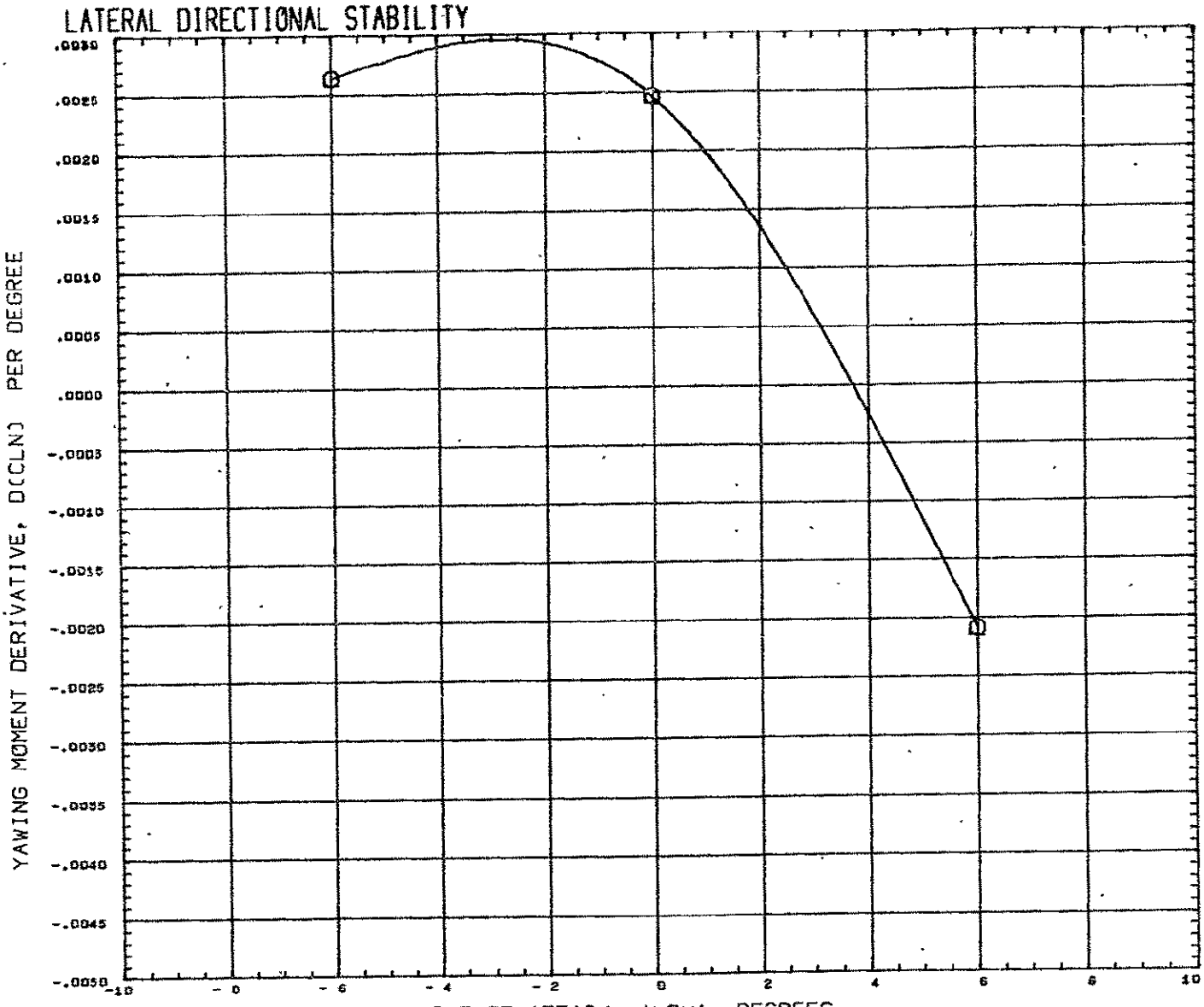


SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE			
O	0.900	ELVATR	0.000	AILRON	0.000	DATASET	ALPHA	DATASET	ALPHA
						I2913C	- 6.000	I2906C	0.000
						I2914C	6.000		

DATA HIST. CODE *EI

REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	621.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

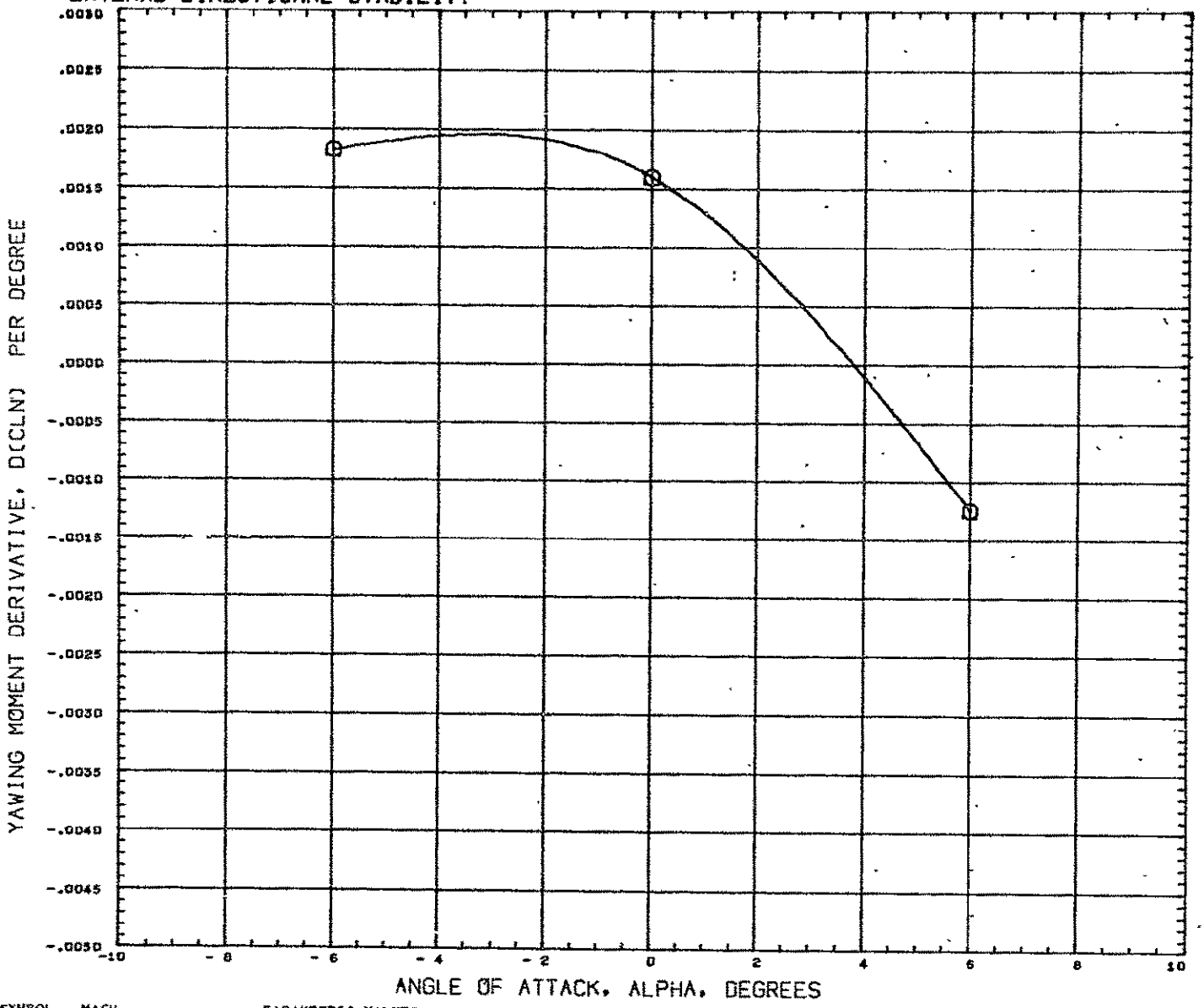
LATERAL DIRECTIONAL STABILITY



SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
						DATASET	ALPHA	DATASET	ALPHA			
O	1.100	ELVATR	0.000	AILRON	0.000	I2913C	- 6.000	I2906C	0.000	REFS	6084.0040	SQ FT
						I2914C	6.000			REFL	821.2004	INCHES
										REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *EI

LATERAL DIRECTIONAL STABILITY



SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE			
						DATASET	ALPHA	DATASET	ALPHA
O	1.500	ELVAIR	0.000	AILRON	0.000	I2913C	- 6.000	I2906C	0.000
						I2914C	6.000		

DATA HIST. CODE #EI

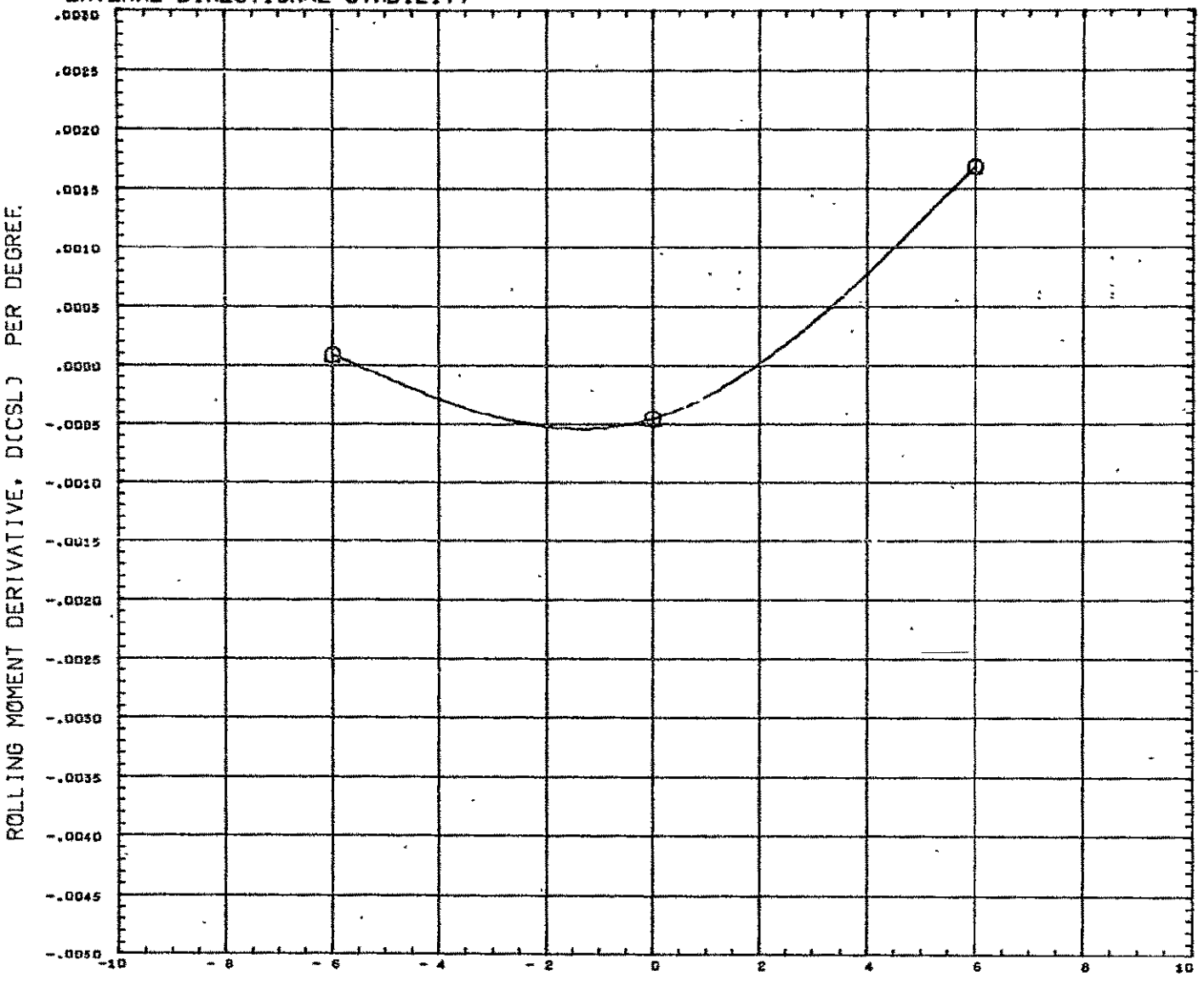
REFERENCE INFORMATION		
REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

LATERAL DIRECTIONAL STABILITY

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	2.000	ELVAIR	0.000	AILRON	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
						I2913C	- 6.000	I2906C	0.000	REFL	821.2004	INCHES
						I2914C	6.000			REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE 4EI

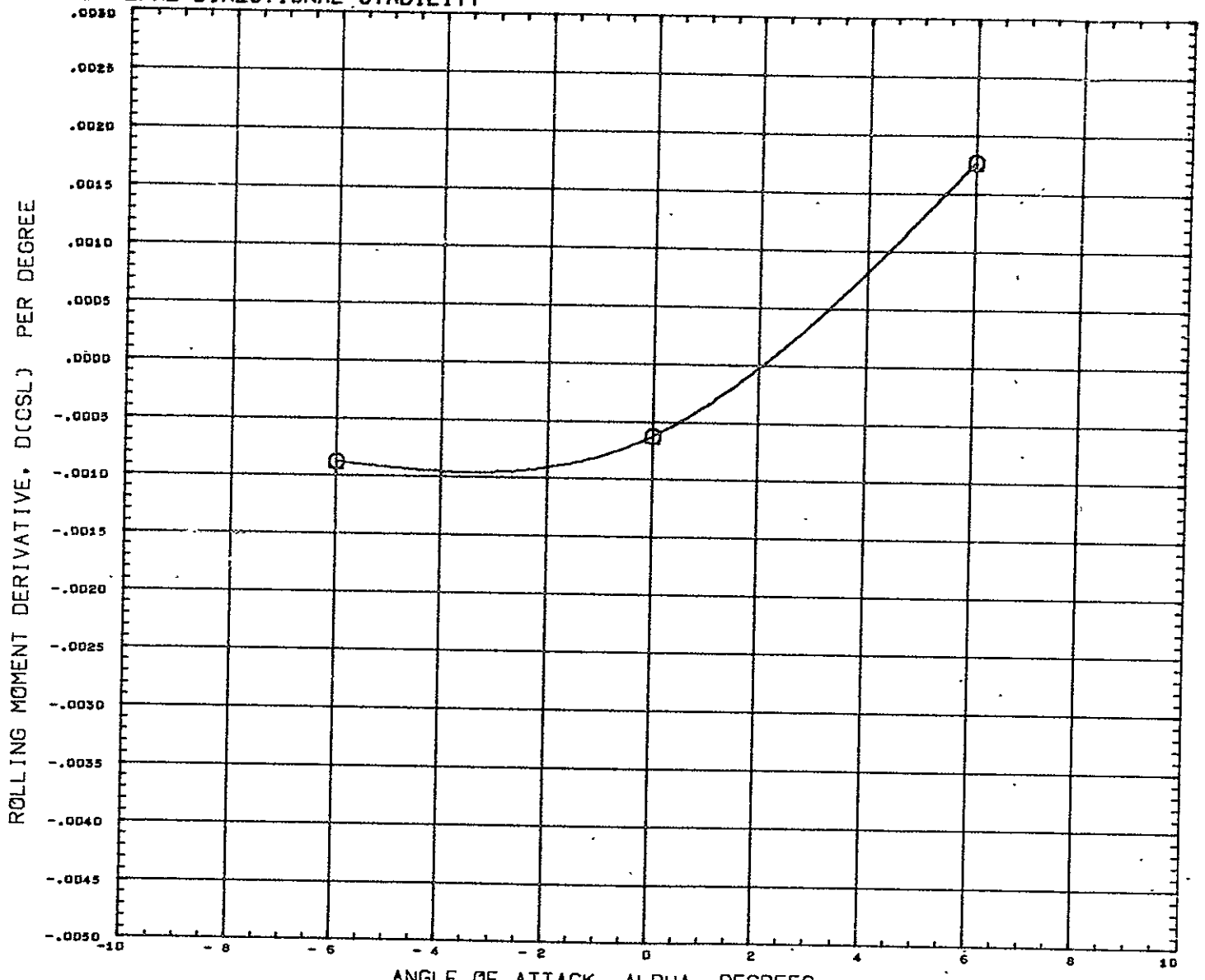
LATERAL DIRECTIONAL STABILITY



SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
○	0.600	ELVAIR	0.000	AILRON	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
						I2913C	- 6.000	I2906C	0.000	REFL	821.2004	INCHES
						I2914C	6.000			REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *EI

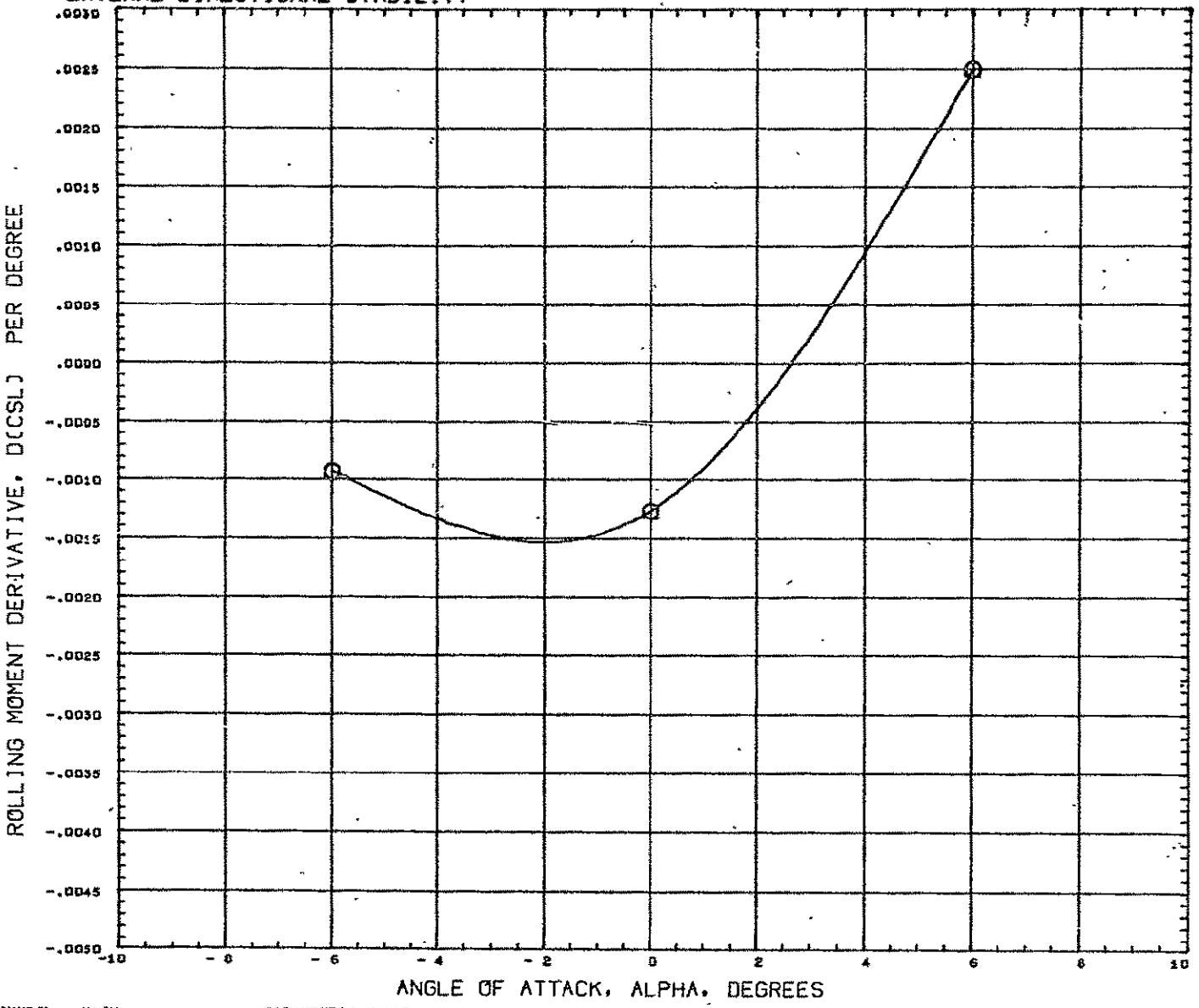
LATERAL DIRECTIONAL STABILITY



SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	0.900	ELVATR	0.000	AILRON	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
						I2913C	- 6.000	I2906C	0.000	REFL	821.2004	INCHES
						I2914C	6.000			REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *EI

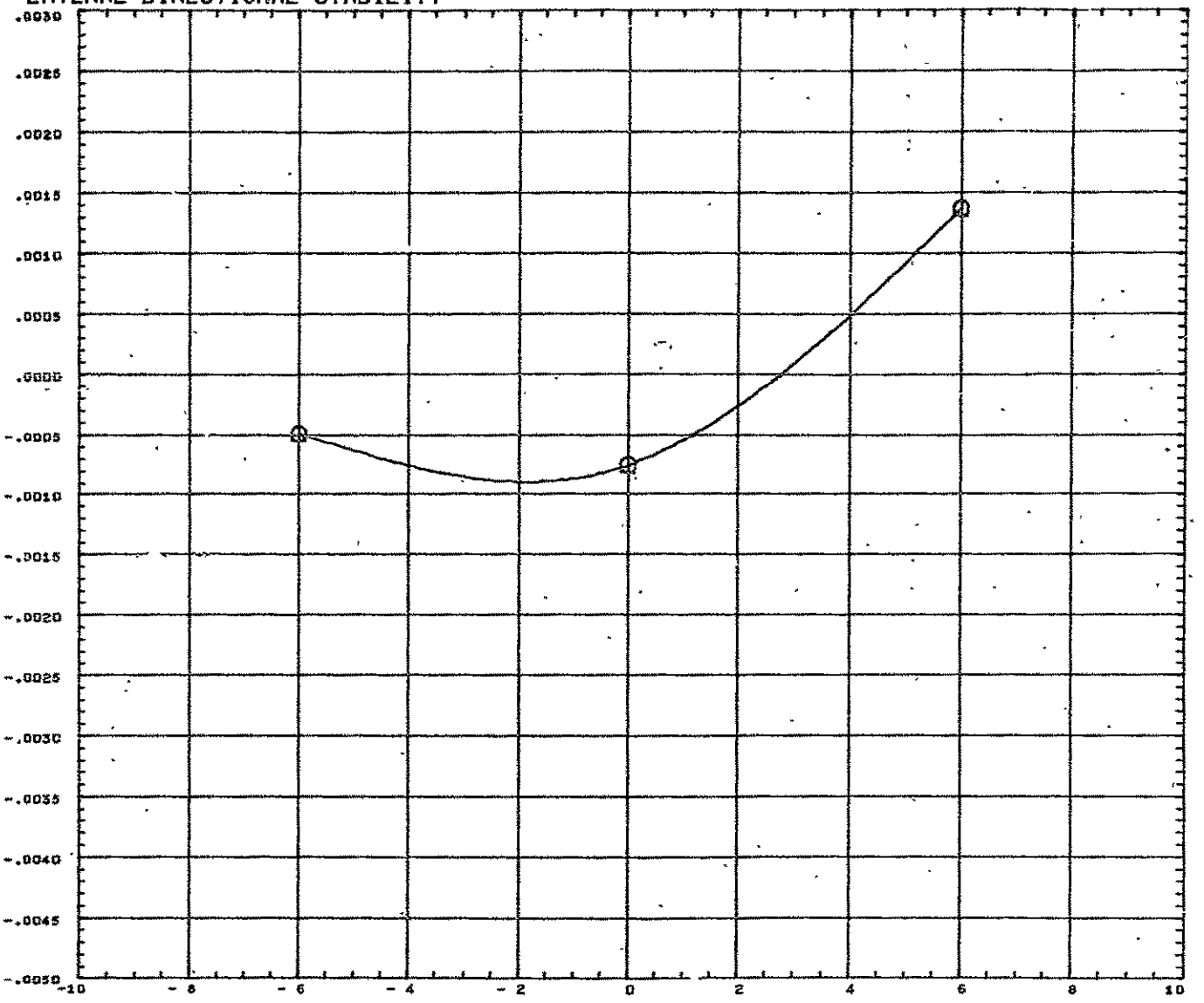
LATERAL DIRECTIONAL STABILITY



SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	1.100	ELVATR	0.000	AILRON	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
						I2913C	- 6.000	I2906C	0.000	REFL	821.2004	INCHES
						I2914C	6.000			REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *EI

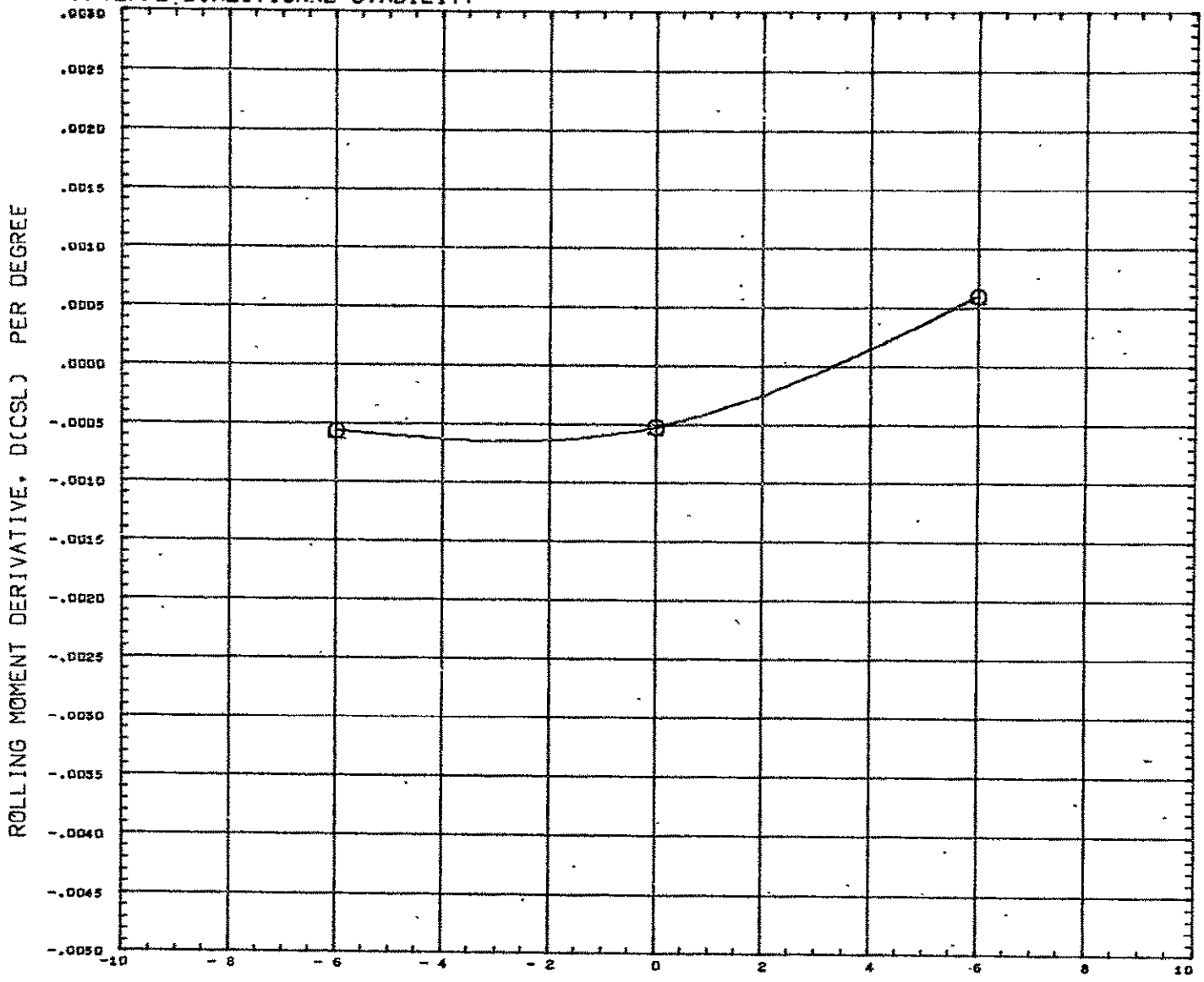
LATERAL DIRECTIONAL STABILITY



SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	1.500	ELVATR	0.000	AILRON	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
						I2913C	- 6.000	I2906C	0.000	REFL	821.2004	INCHES
						I2914C	6.000			REFB	1422.8040	INCHES
										XMRF	1422.5040	INCHES
										YMRF	0.0000	INCHES
										ZMRF	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *EI

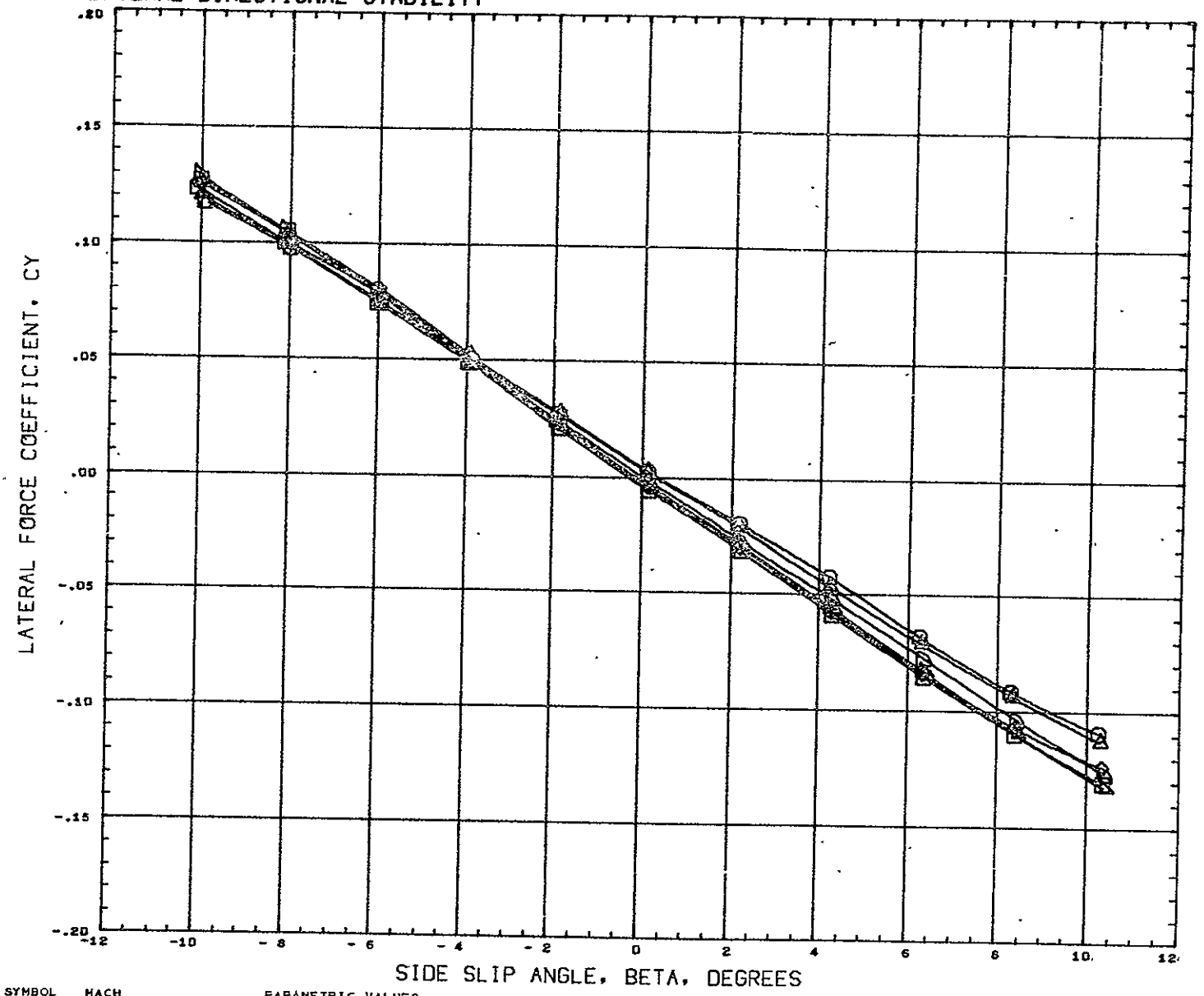
LATERAL DIRECTIONAL STABILITY



SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
O	2.000	ELVATR	0.000	AILRON	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
						I2913C	- 6.000	I2906C	0.000	REFL	821.2004	INCHES
						I2914C	6.000			REFB	1422.8040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *EI

LATERAL DIRECTIONAL STABILITY

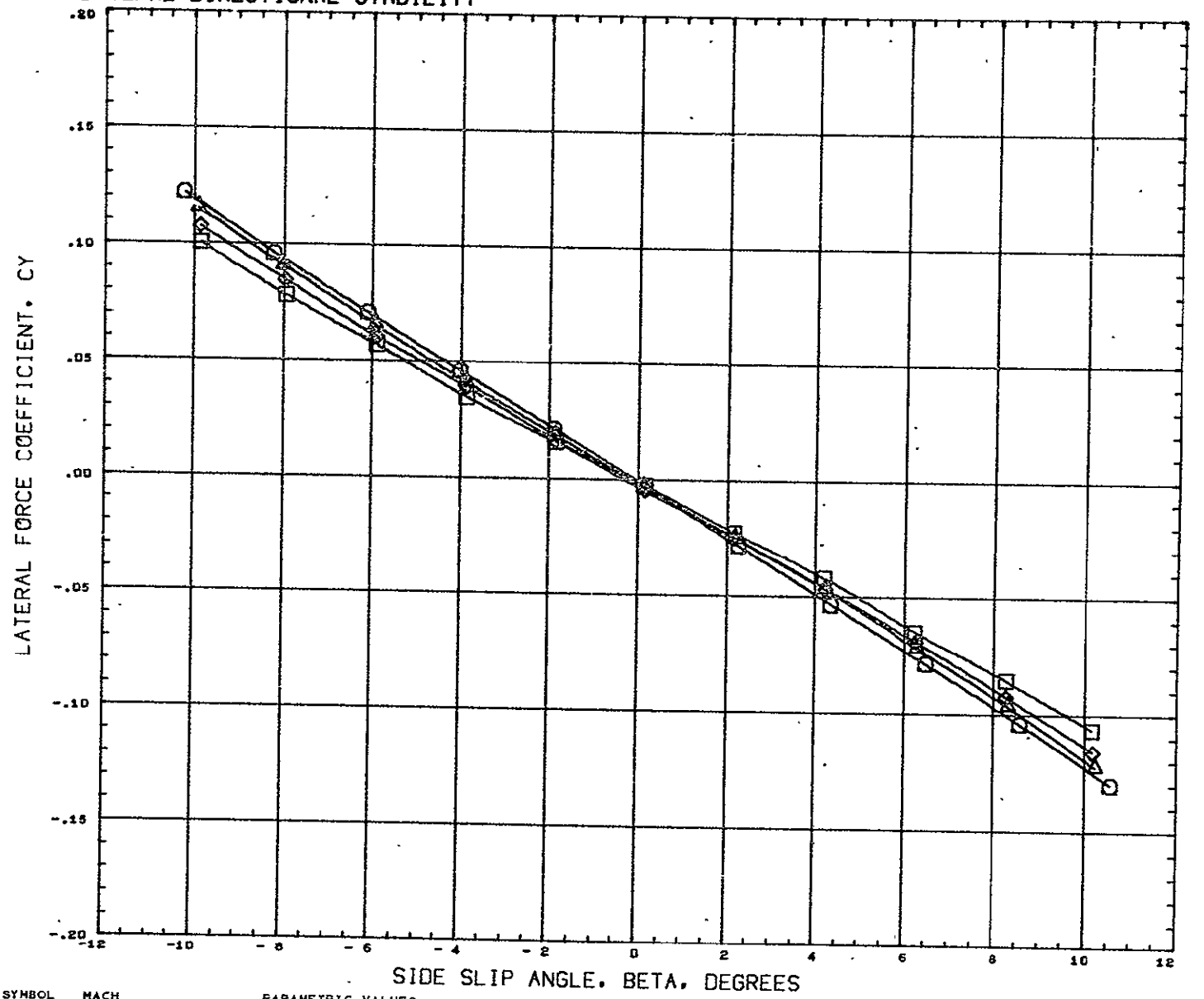


SYMBOL	MACH		PARAMETRIC VALUES		
▷	0.606	ALPHA	0.000	ELVATR	0.000
△	0.905	AILRON	0.000		
◇	1.001				
□	1.100				
▽	1.209				
○	1.472	DATA HIST. CODE	*E		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

LATERAL DIRECTIONAL STABILITY



SYMBOL	MACH
○	1.964
△	2.990
◇	4.000
□	4.959

PARAMETRIC VALUES

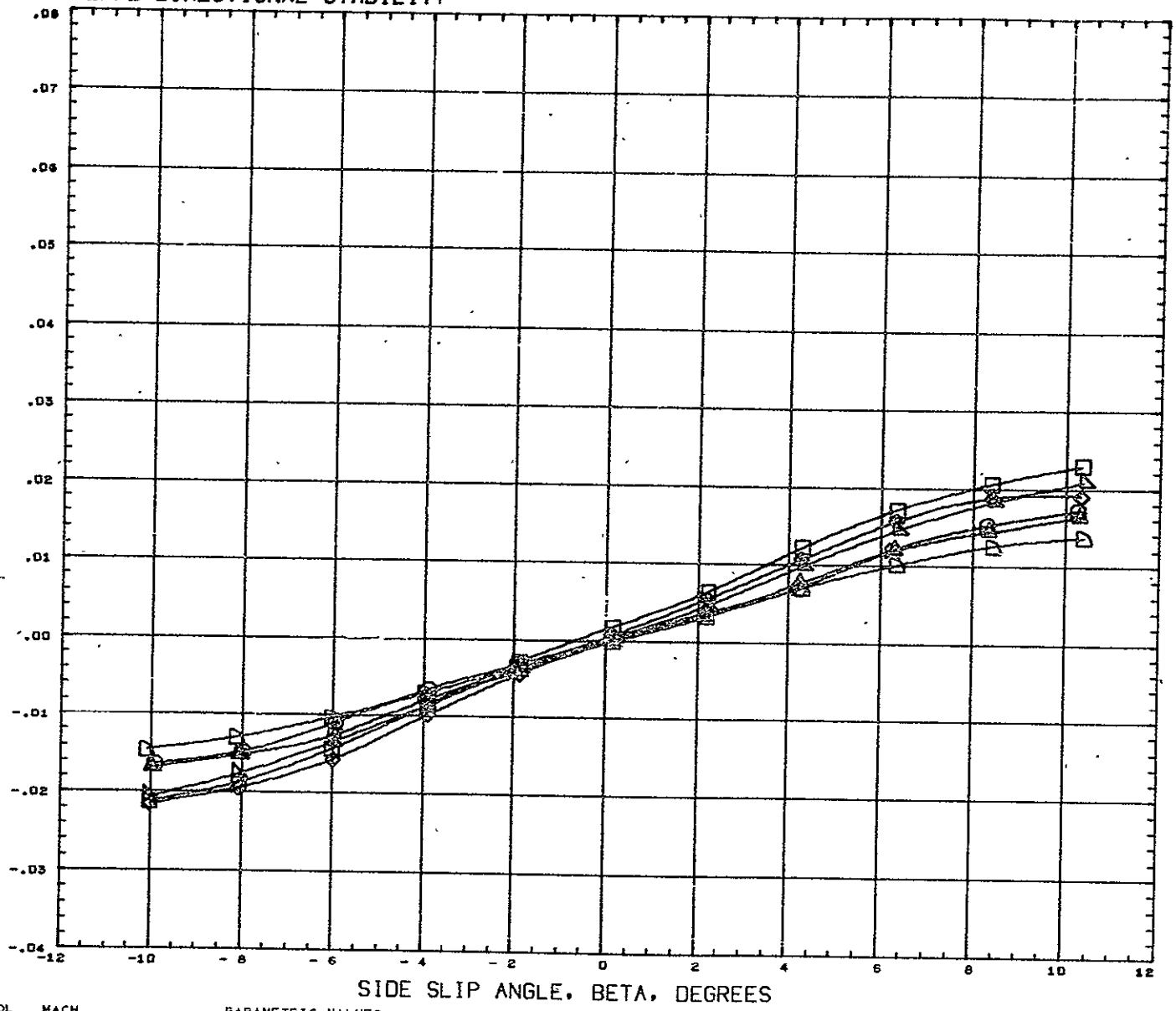
ALPHA	0.000	ELVATR	0.000
AILRON	0.000		

DATA HIST. CODE *E

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

LATERAL DIRECTIONAL STABILITY

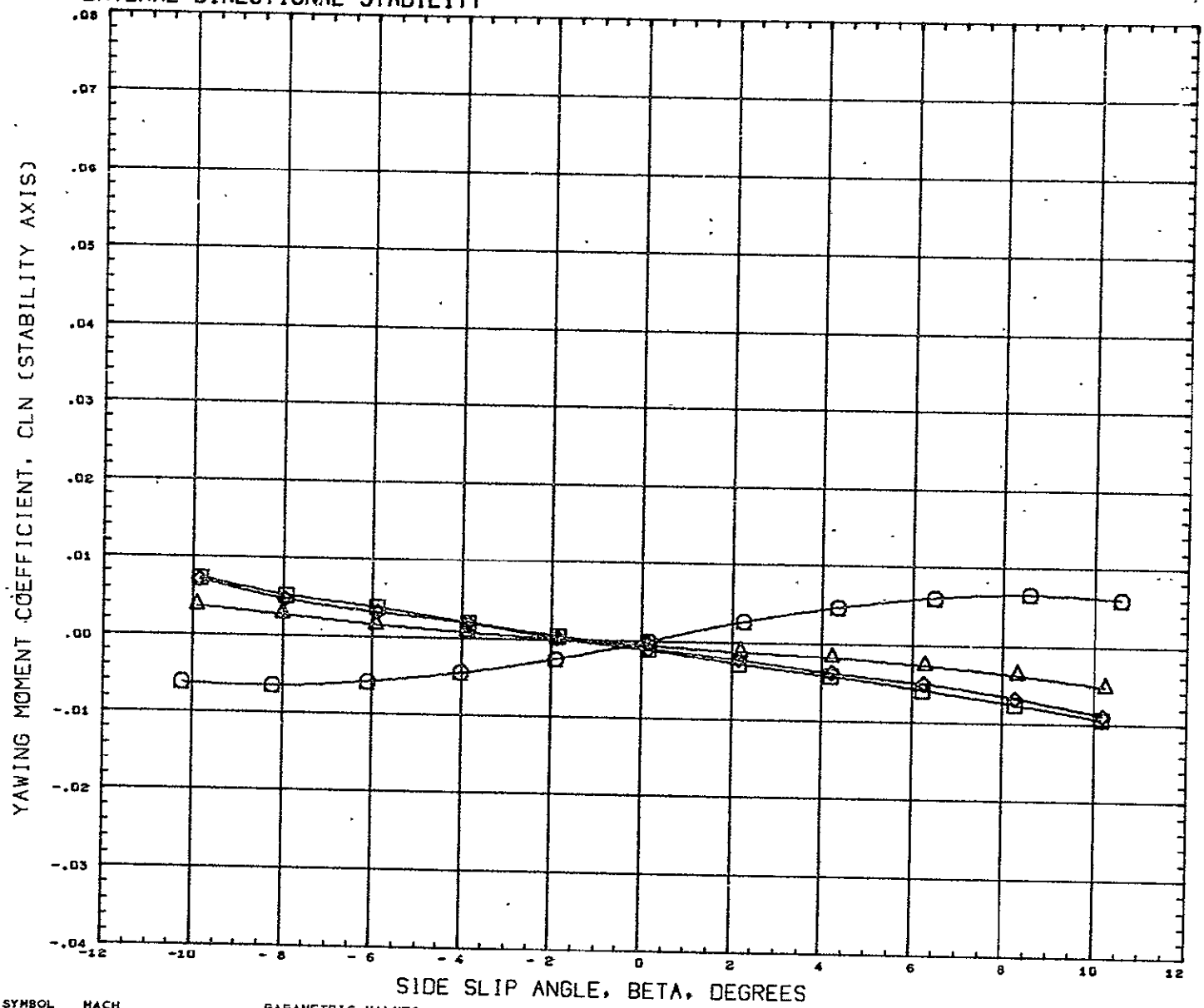


SYMBOL	MACH		PARAMETRIC VALUES		
○	0.606	ALPHA	0.000	ELVATR	0.000
△	0.905	AILRON	0.000		
□	1.001				
◇	1.100				
▷	1.209				
D	1.472	DATA HIST. CODE	*E		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

LATERAL DIRECTIONAL STABILITY



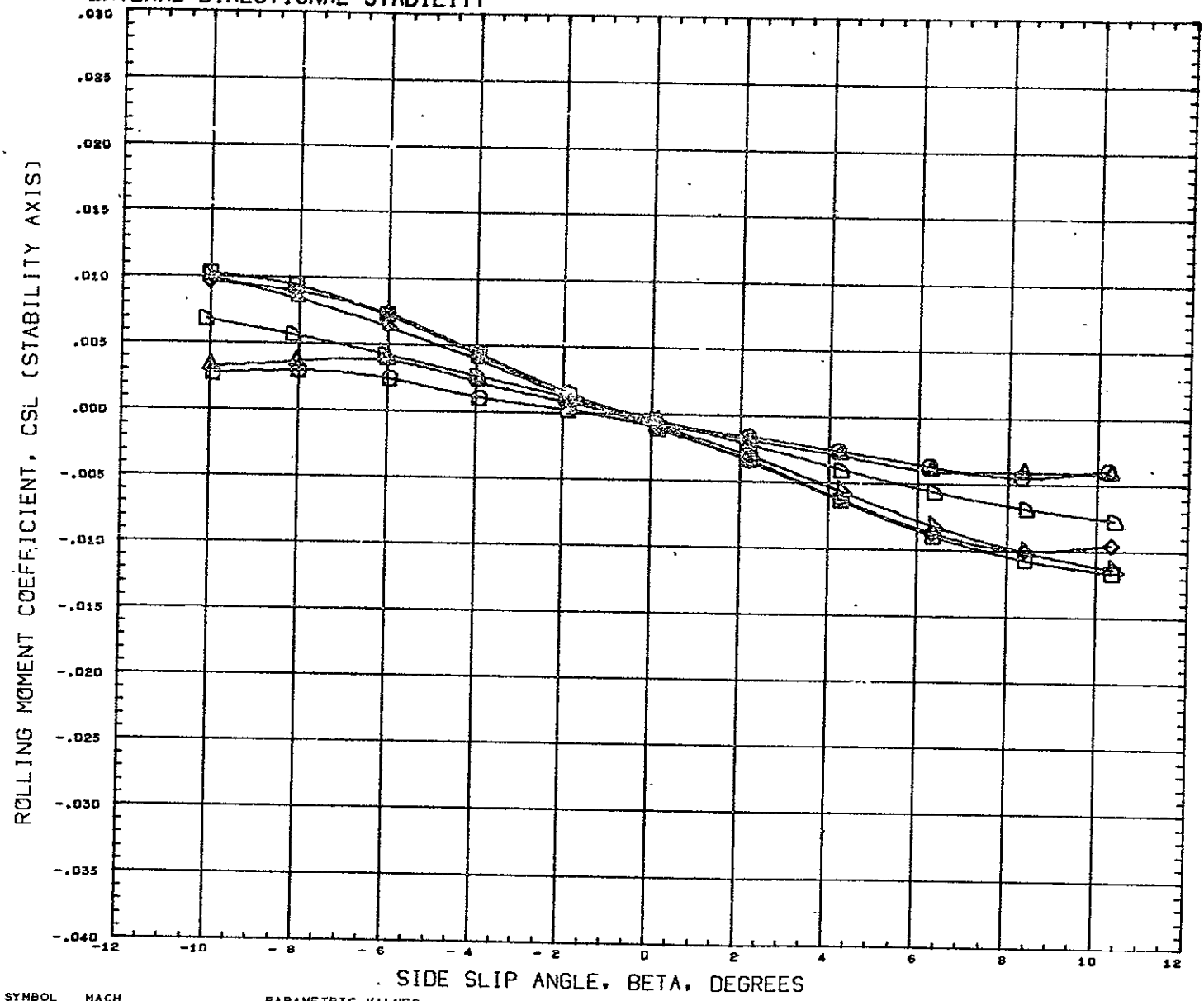
SYMBOL	MACH	PARAMETRIC VALUES			
○	1.964	ALPHA	0.000	ELVATR	0.000
△	2.990	AILRON	0.000		
□	4.000				
◇	4.959				

DATA HIST. CODE --

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

LATERAL DIRECTIONAL STABILITY

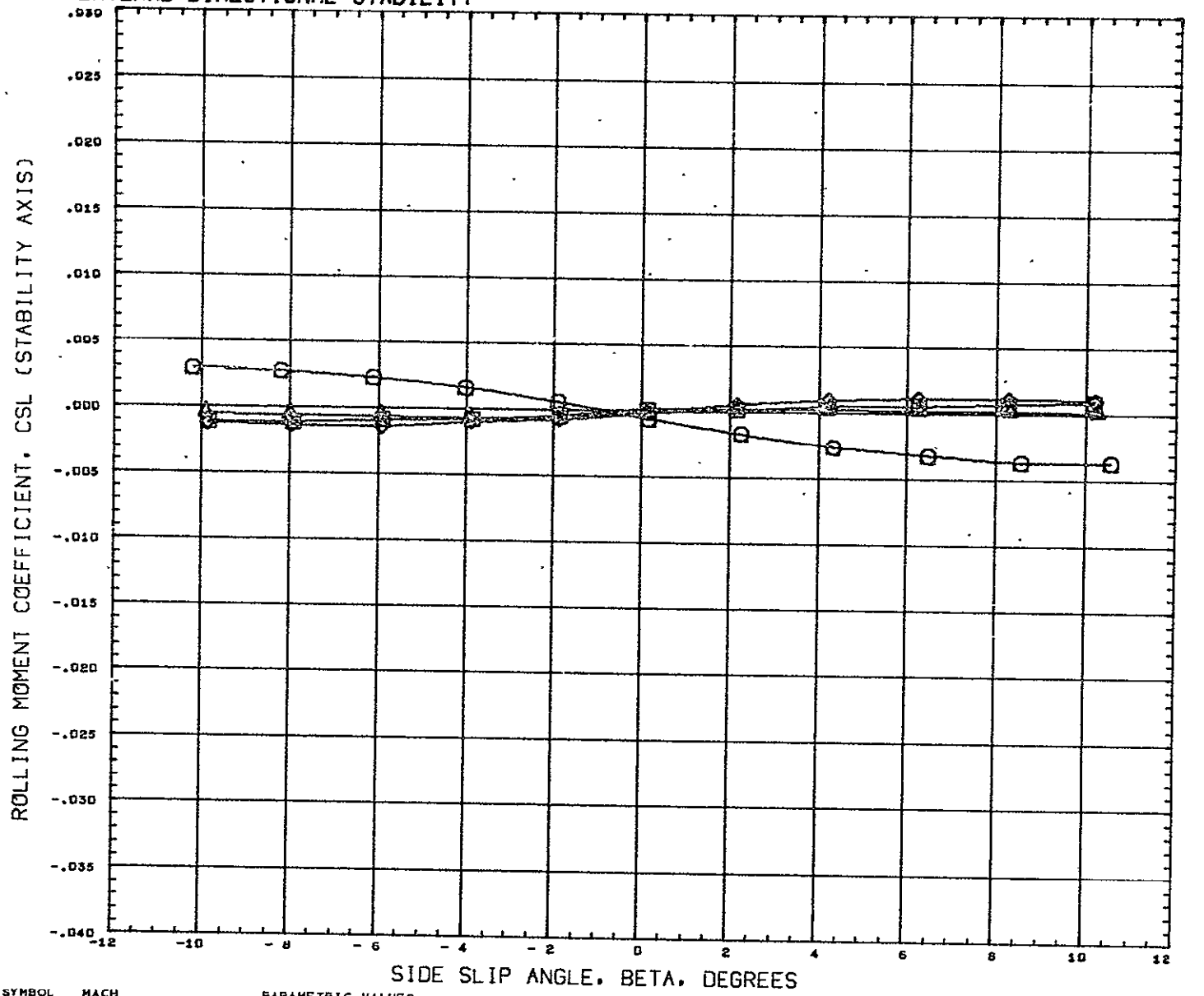


SYMBOL	MACH		PARAMETRIC VALUES		
▽	0.606	ALPHA	0.000	ELVATR	0.000
△	0.905	AILRON	0.000		
□	1.001				
◇	1.100				
▷	1.209				
◁	1.472	DATA HIST. CODE	*E		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

LATERAL DIRECTIONAL STABILITY



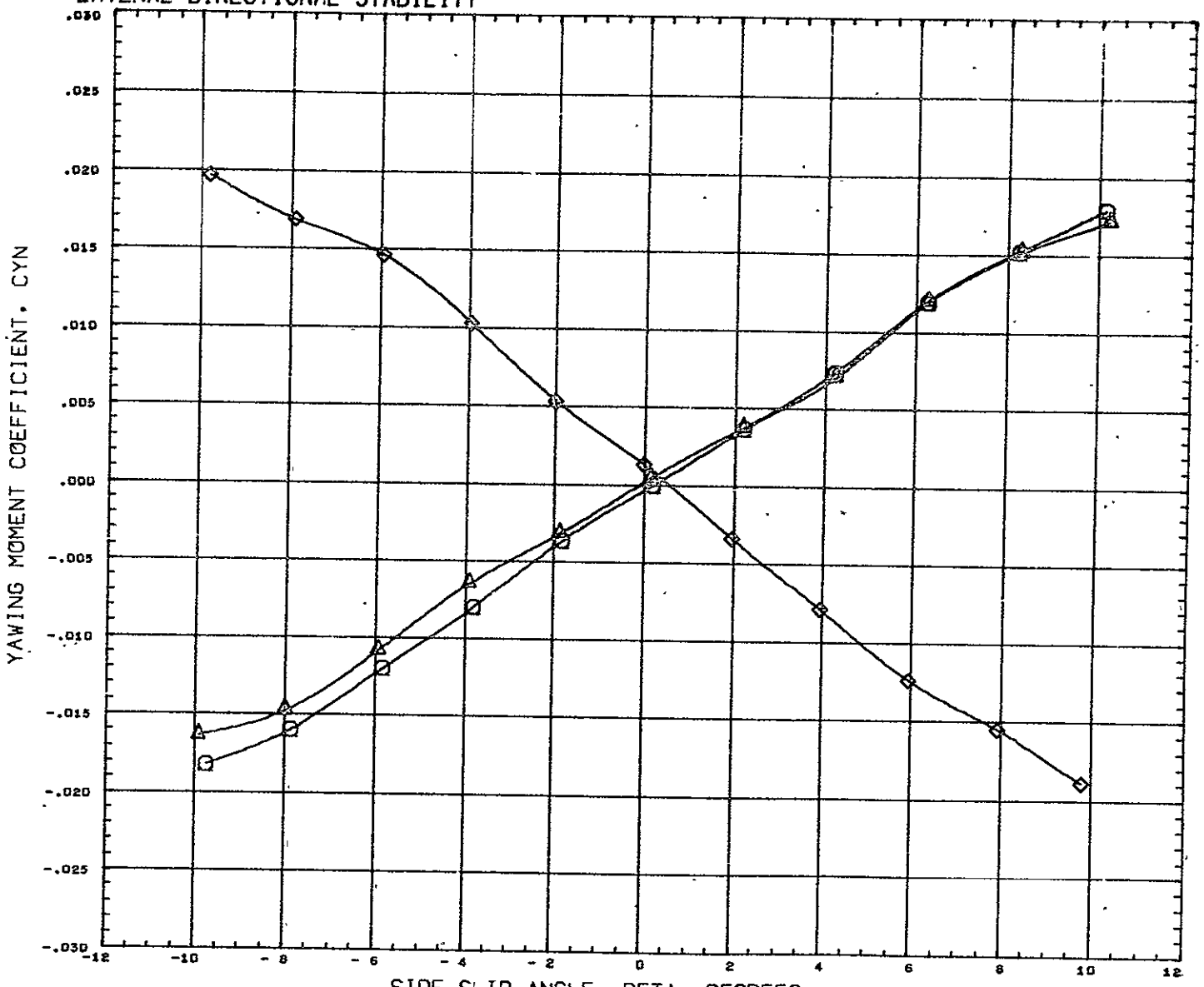
SYMBOL	MACH	PARAMETRIC VALUES			
○	1.964	ALPHA	0.000	ELVATR	0.000
△	2.990	AILRON	0.000		
◇	4.000				
□	4.959				

DATA HIST. CODE *E

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.5004	INCHES
SCALE	0.0035	SCALE

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	0.606	ELVATR	0.000
AILRON	0.000		

DATA SOURCE

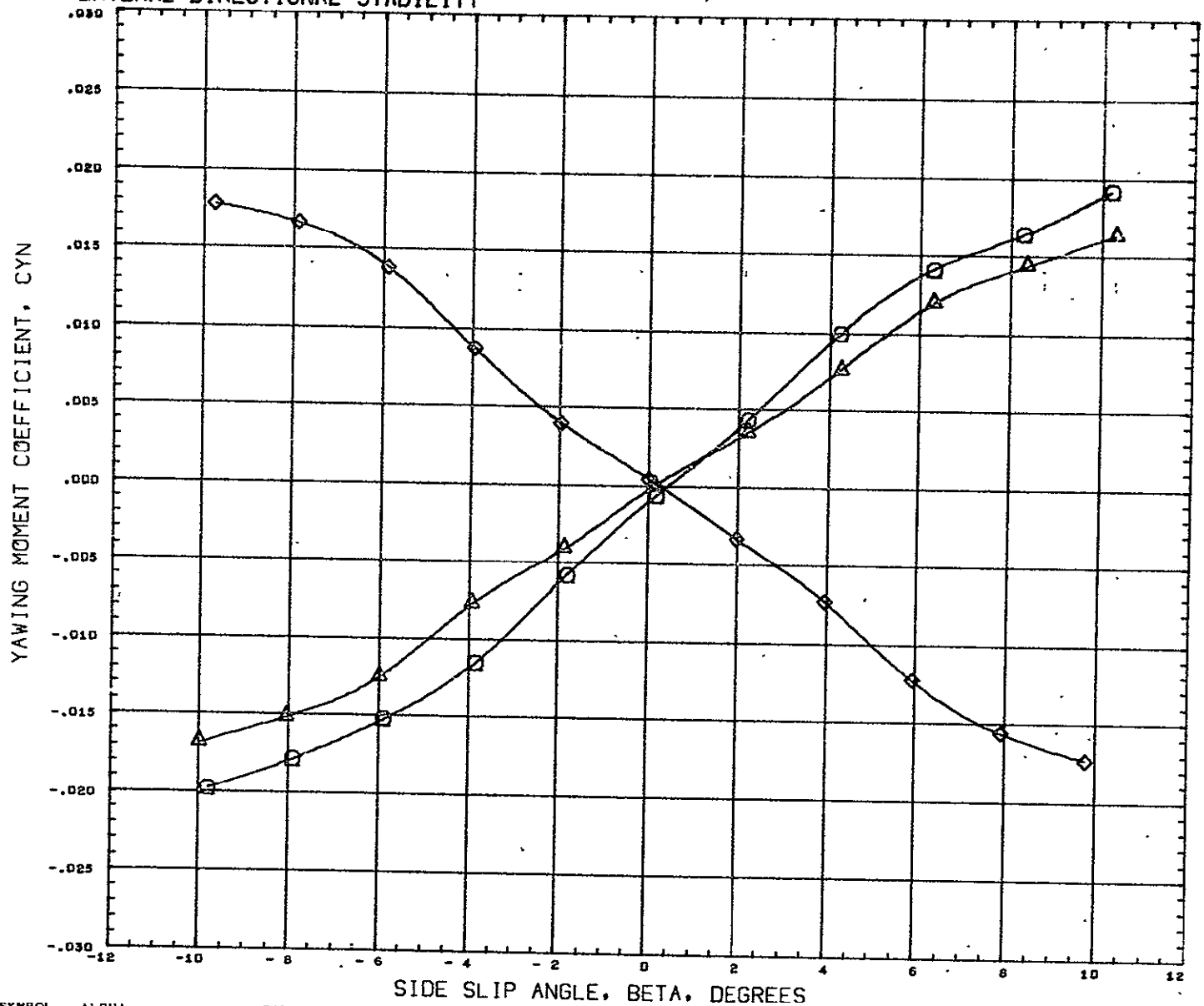
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6064.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	0.906	ELVATR	0.000
AILRON	0.000		

DATA SOURCE

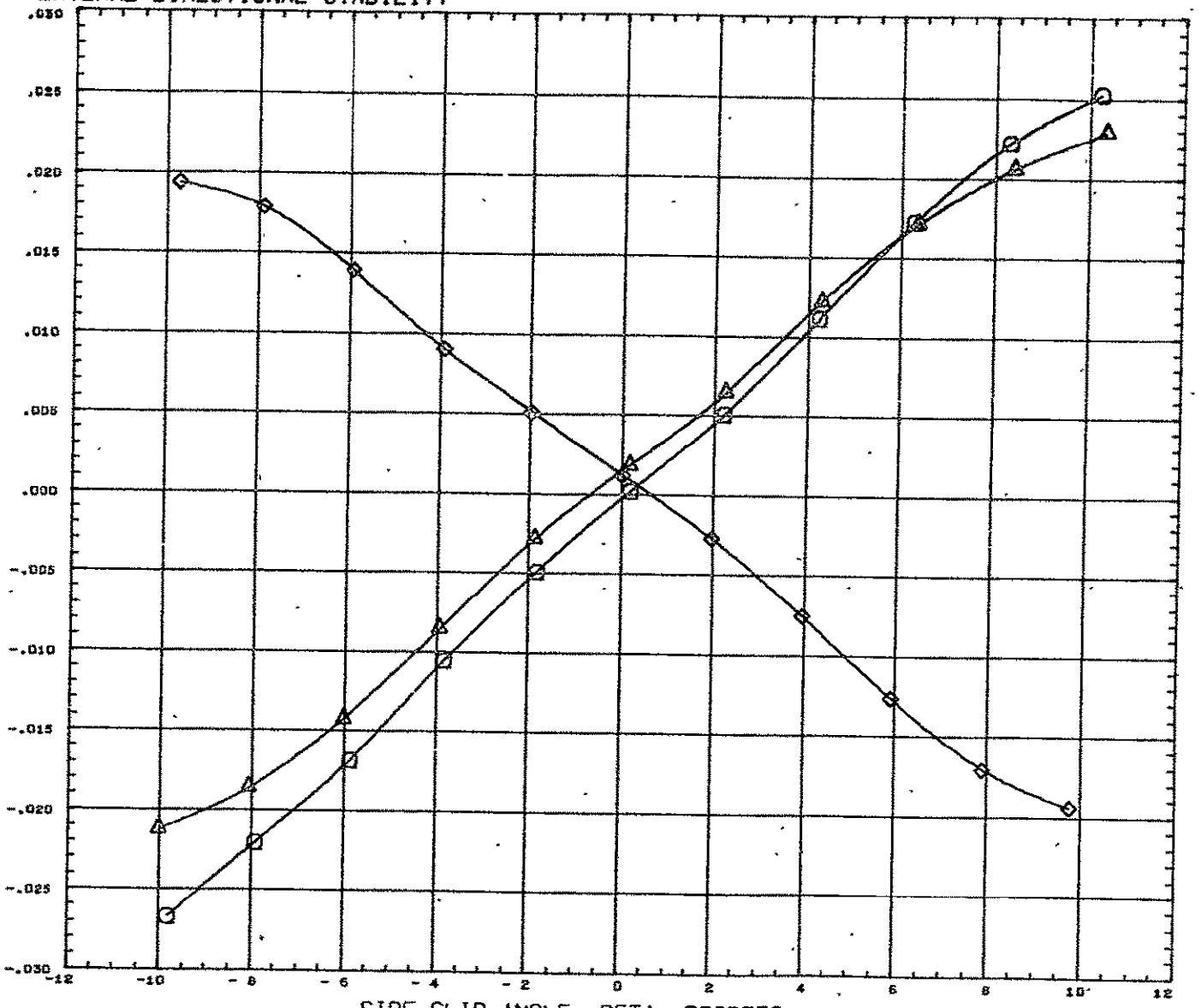
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRF	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.101	ELVATR	0.000		
AILRON	0.000				

DATA SOURCE

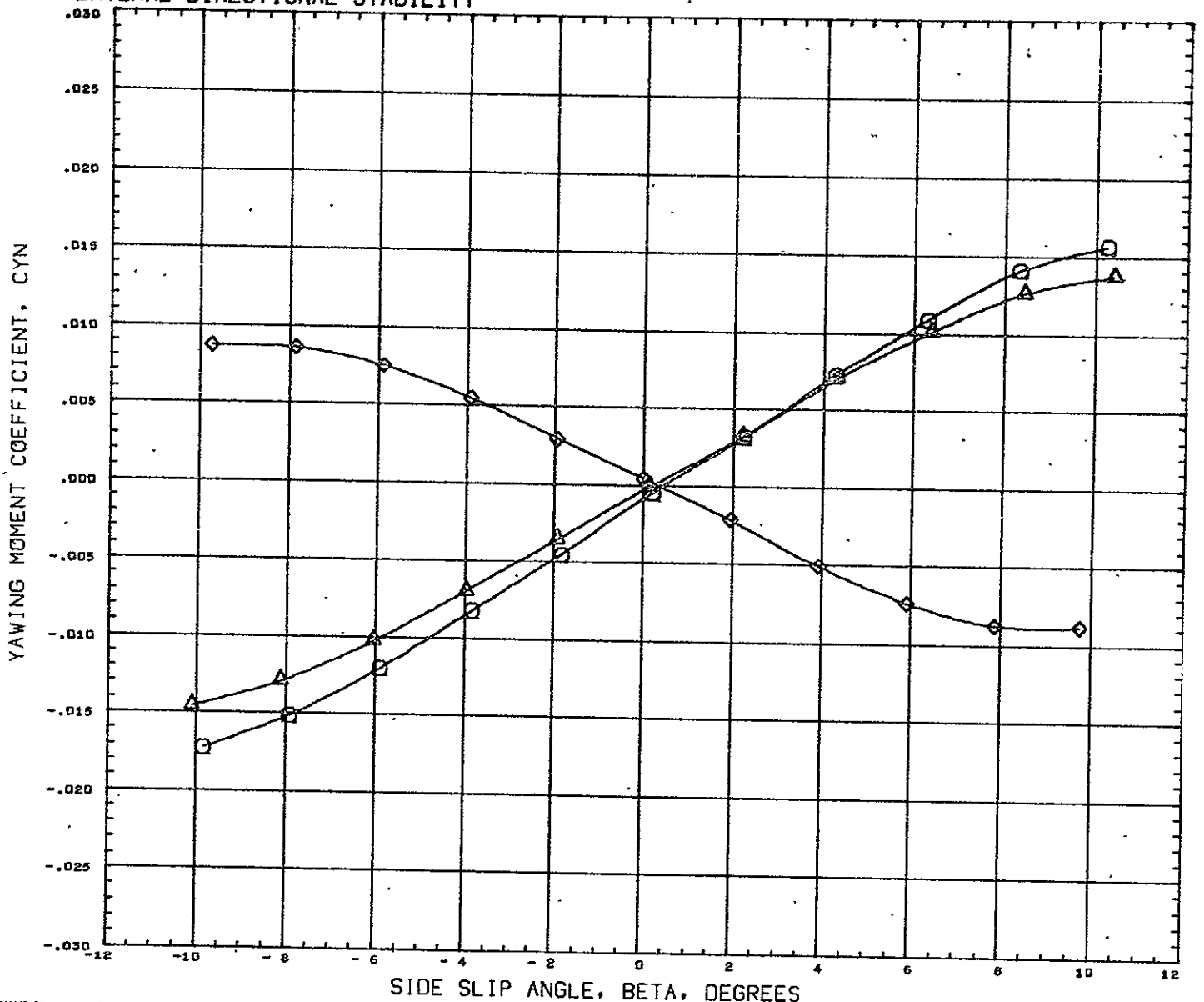
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.463	ELVATR	0.000		
AILRON	0.000				

DATA SOURCE

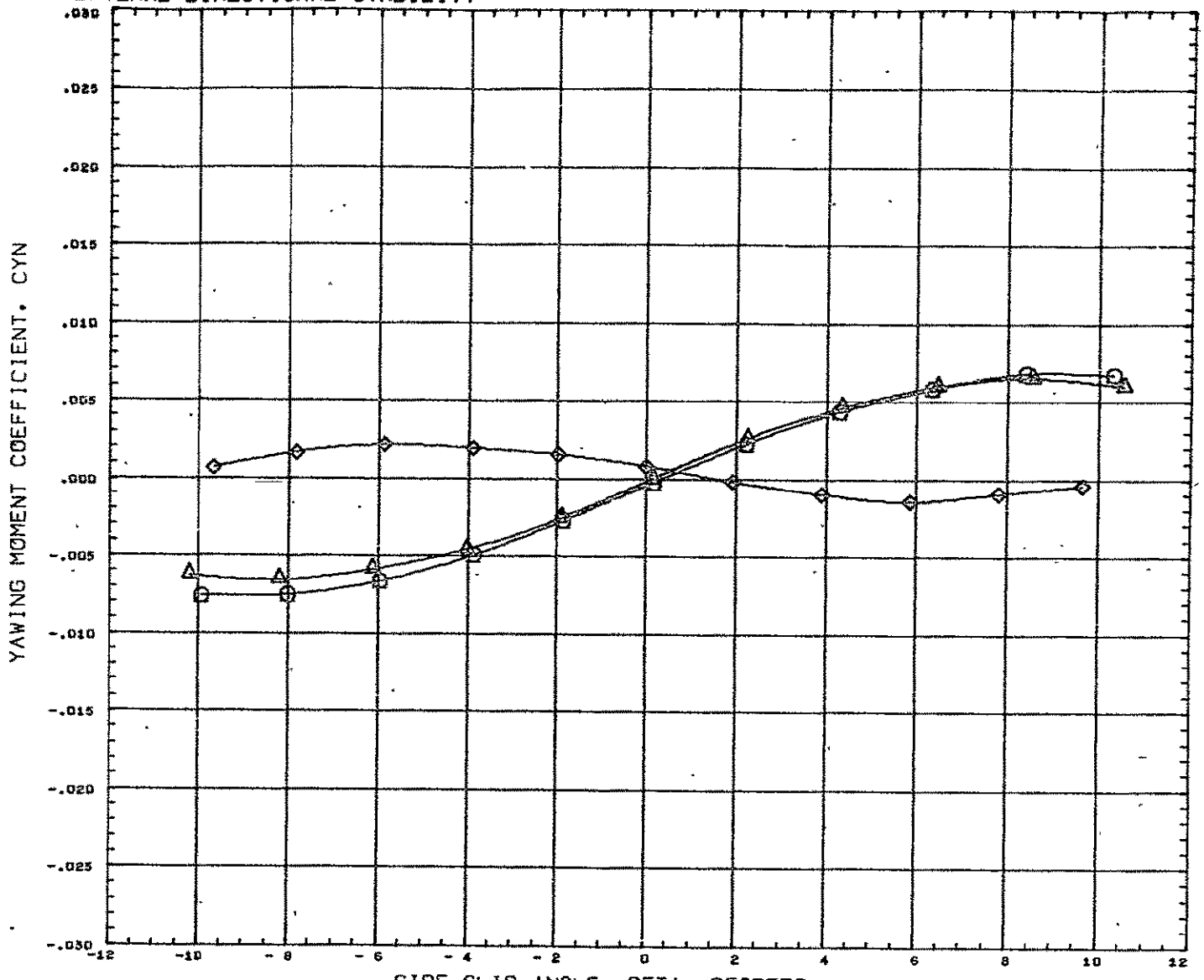
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	-6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.961	ELVATR	0.000	
AILRON	0.000			

DATA SOURCE

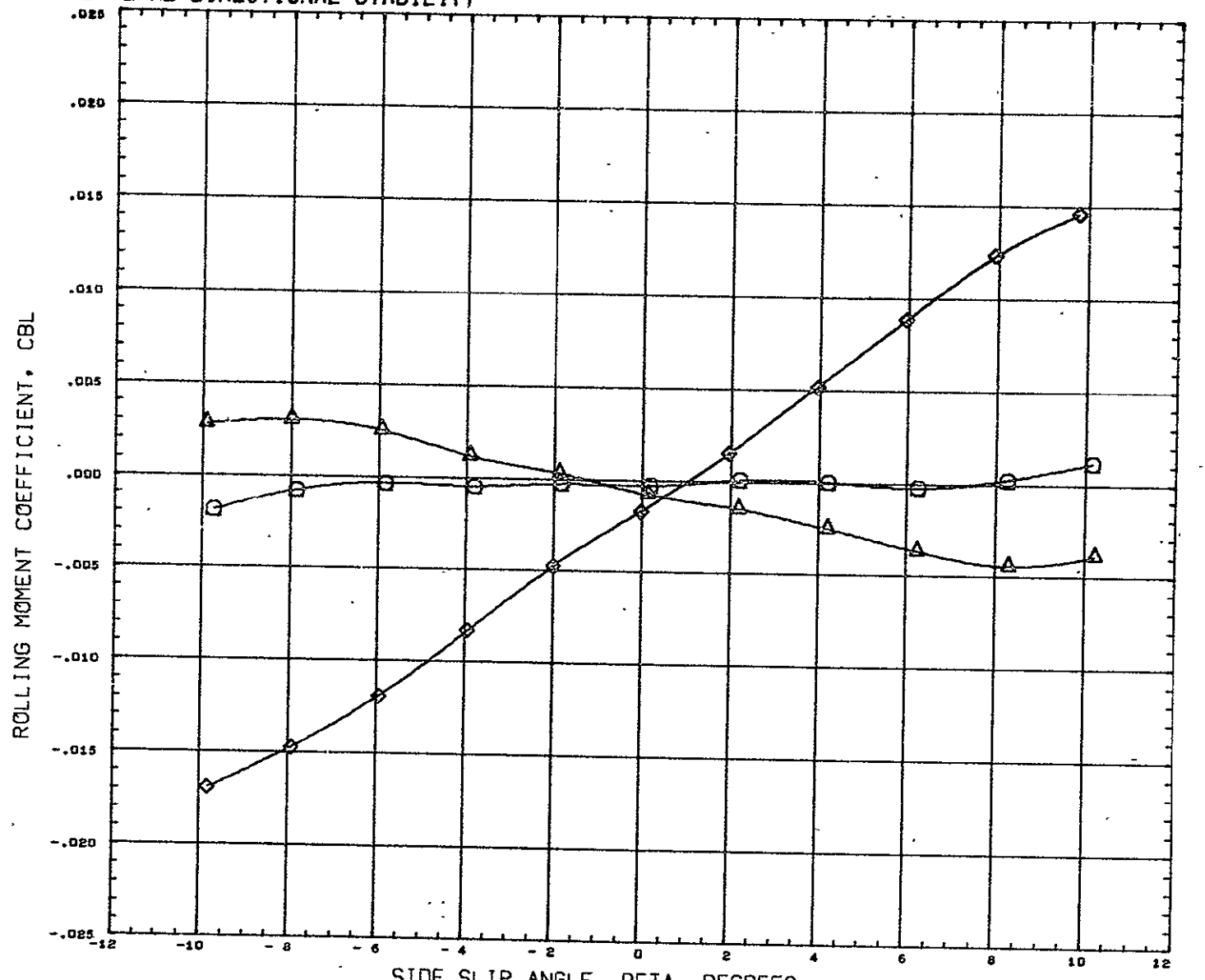
DATASET	ALPHA	DATASET	ALPHA
W2913C	-6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE #E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	0.606	ELVATR	0.000
AILRON	0.000		

DATA SOURCE

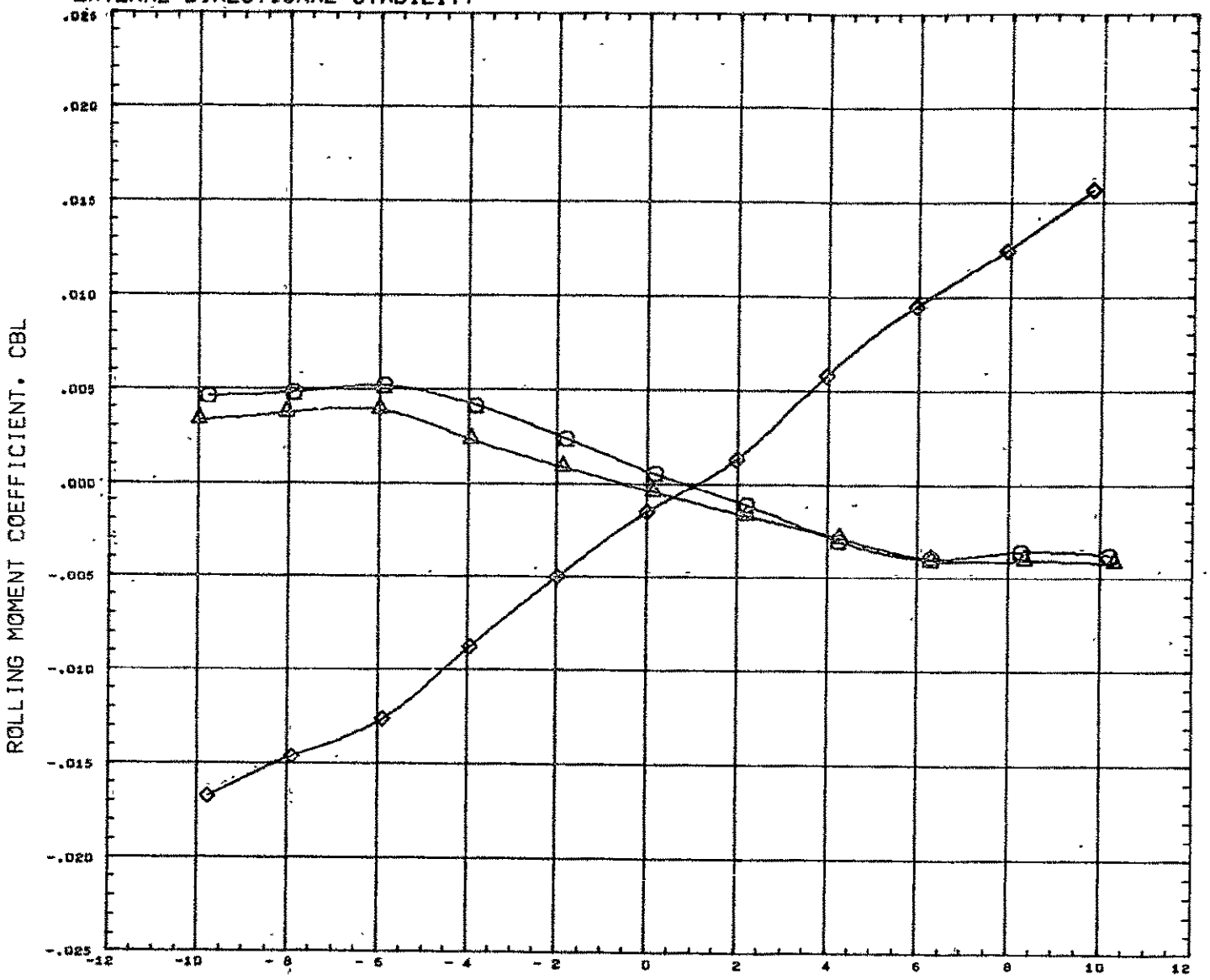
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X290SC	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	621.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	0.906	ELVATR	0.000	
AILRON	0.000			

DATA SOURCE

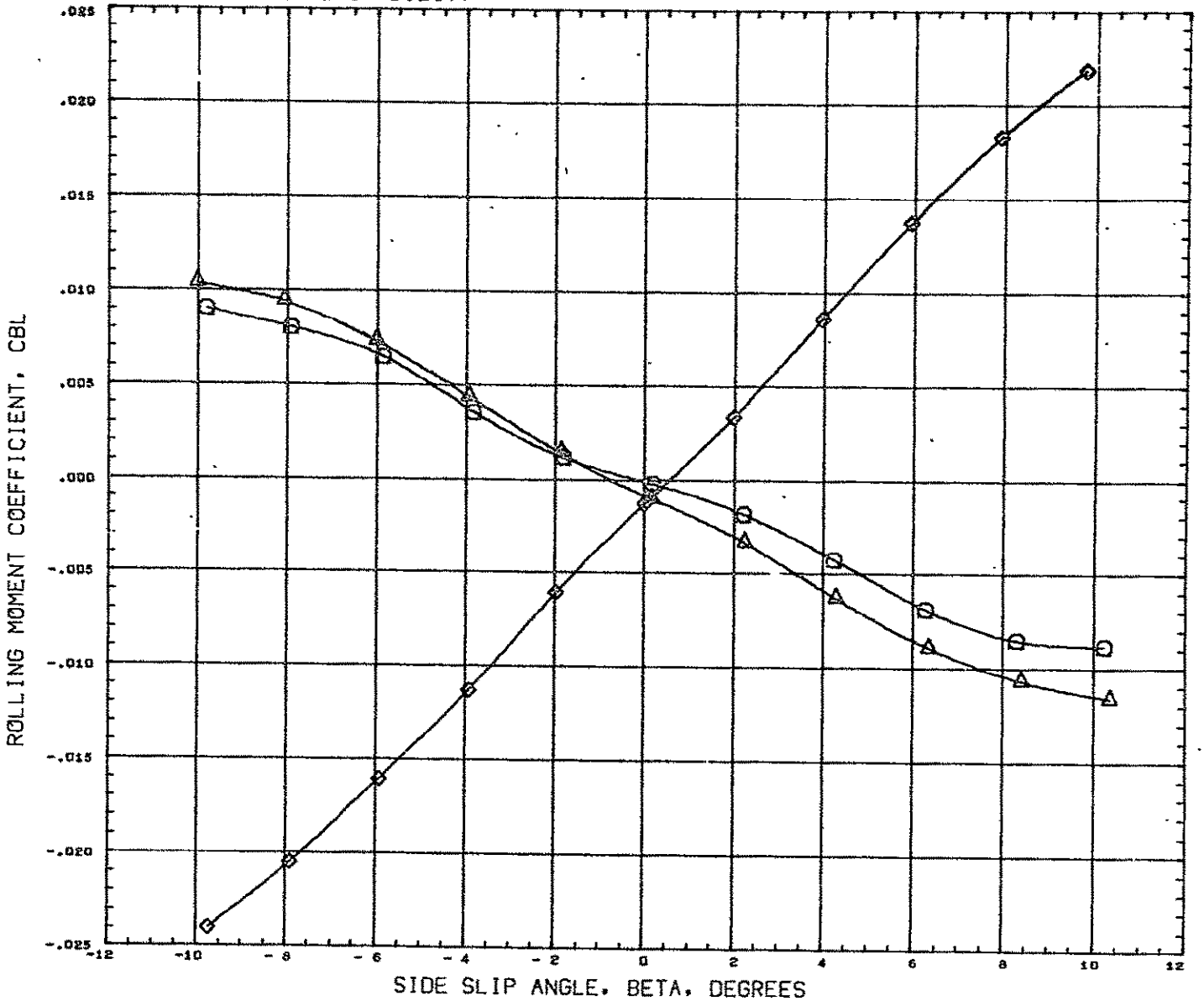
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRF	1422.5040	INCHES
YMRF	0.0000	INCHES
ZMRF	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.101	ELVATR	0.000	
AILRON	0.000			

DATA SOURCE

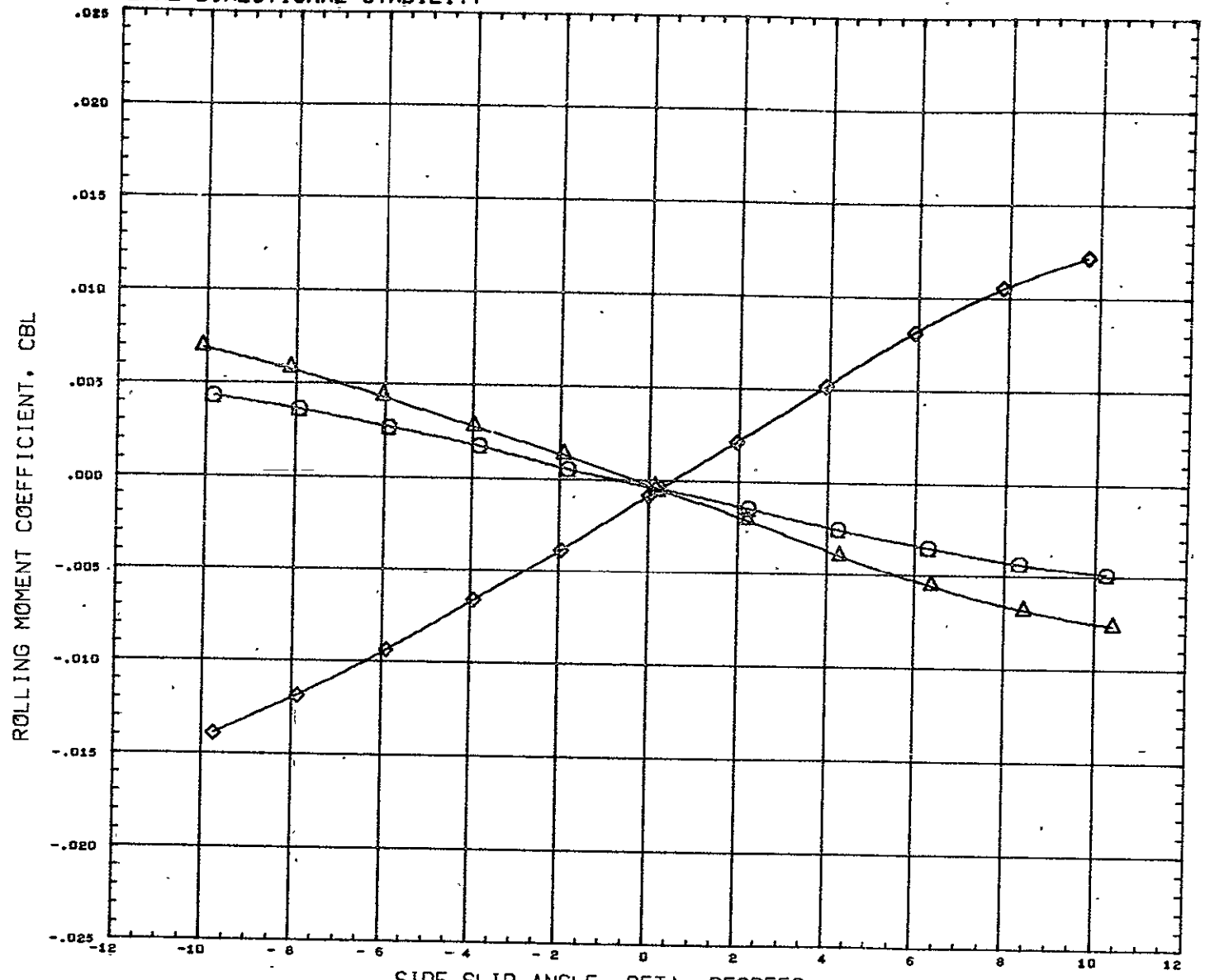
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	136.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.463	ELVATR	0.000
AILRON	0.000		

DATA SOURCE

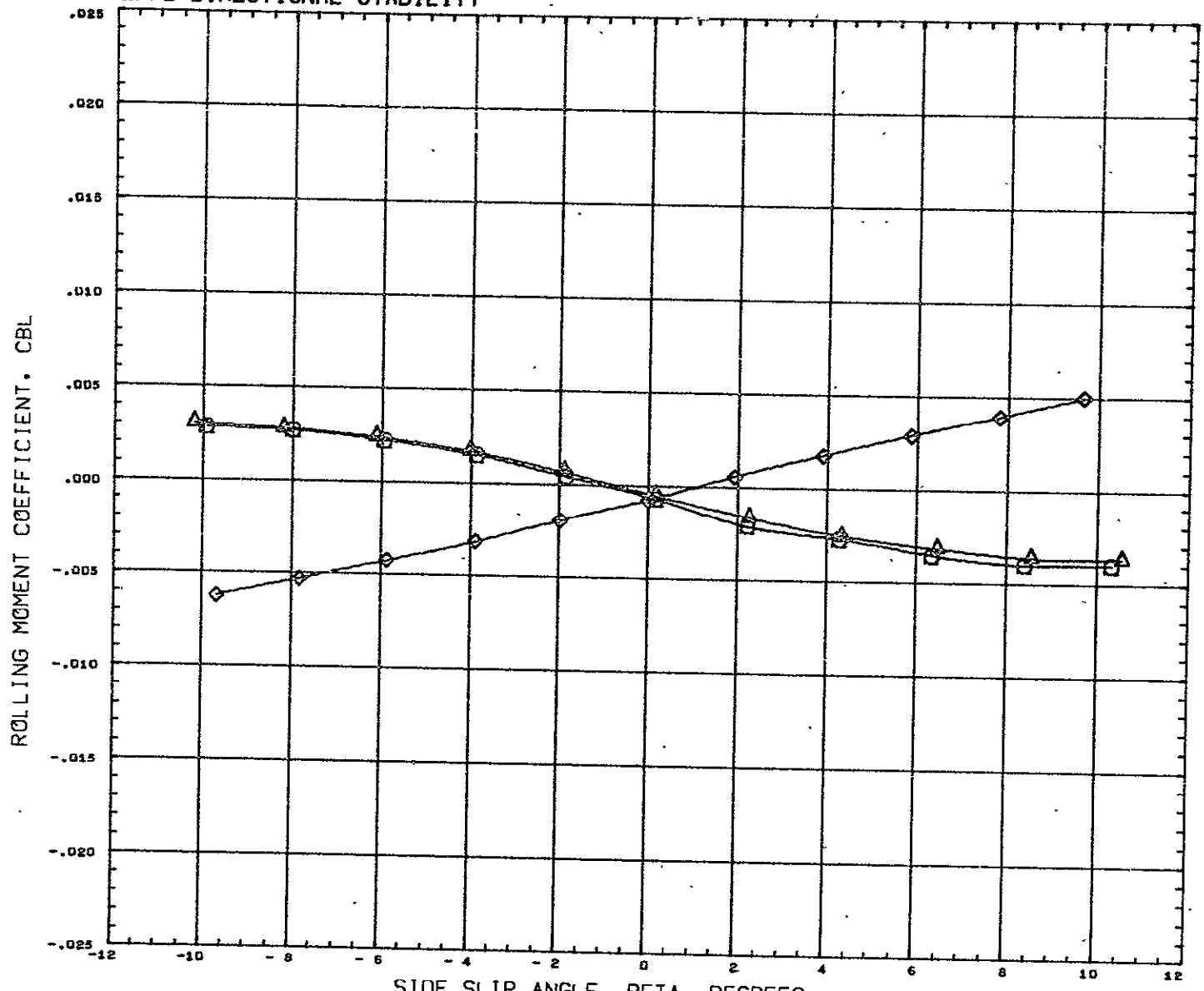
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X29D6C	9.000
W2914C	6.005		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.961	ELVATR	0.000
AILRON	0.000		

DATA SOURCE

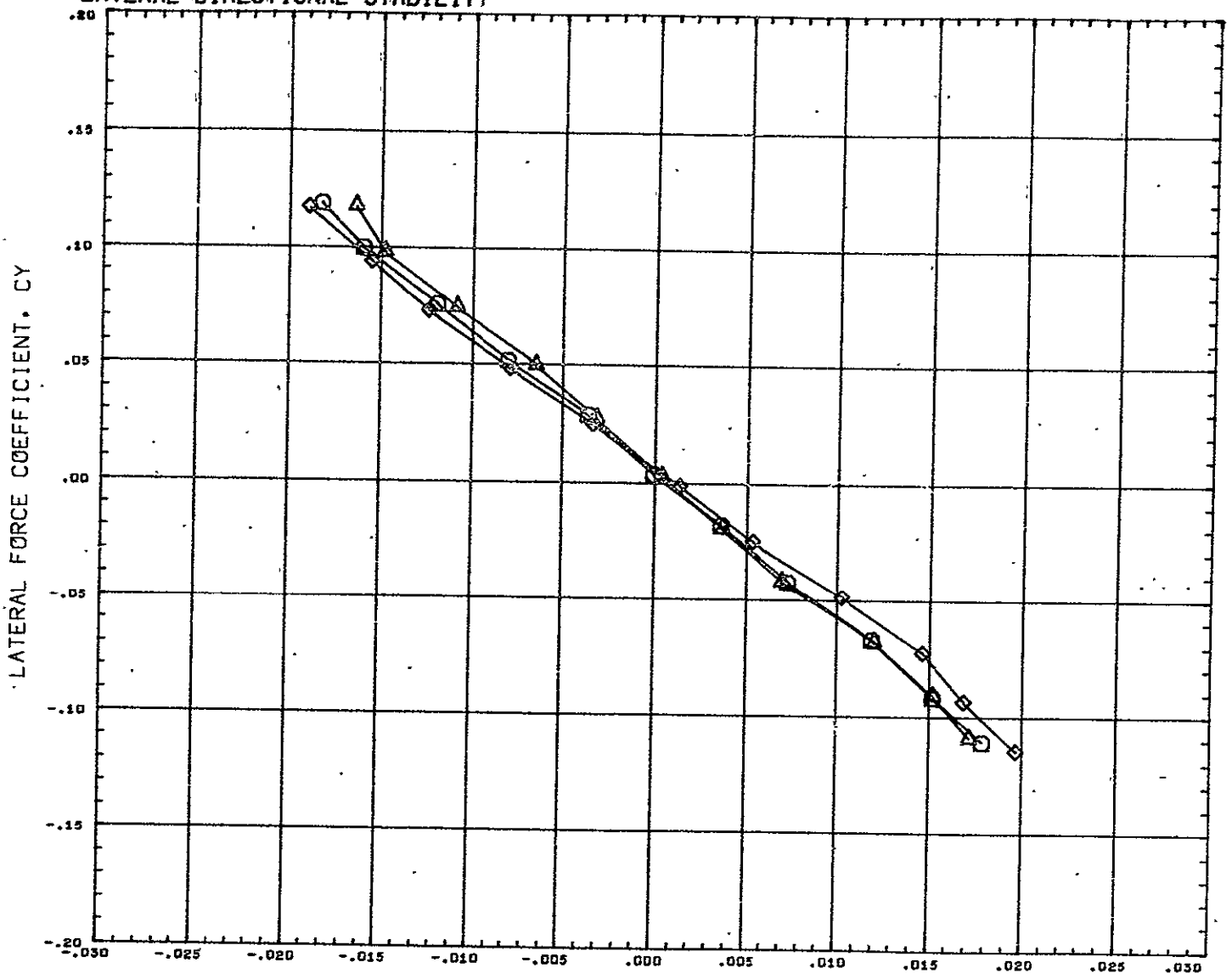
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.6040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA		PARAMETRIC VALUES		
○	- 6.000	MACH	0.606	ELVATR	0.000
△	0.000	AILRON	0.000		
◇	6.000				

DATA HIST. CODE *E

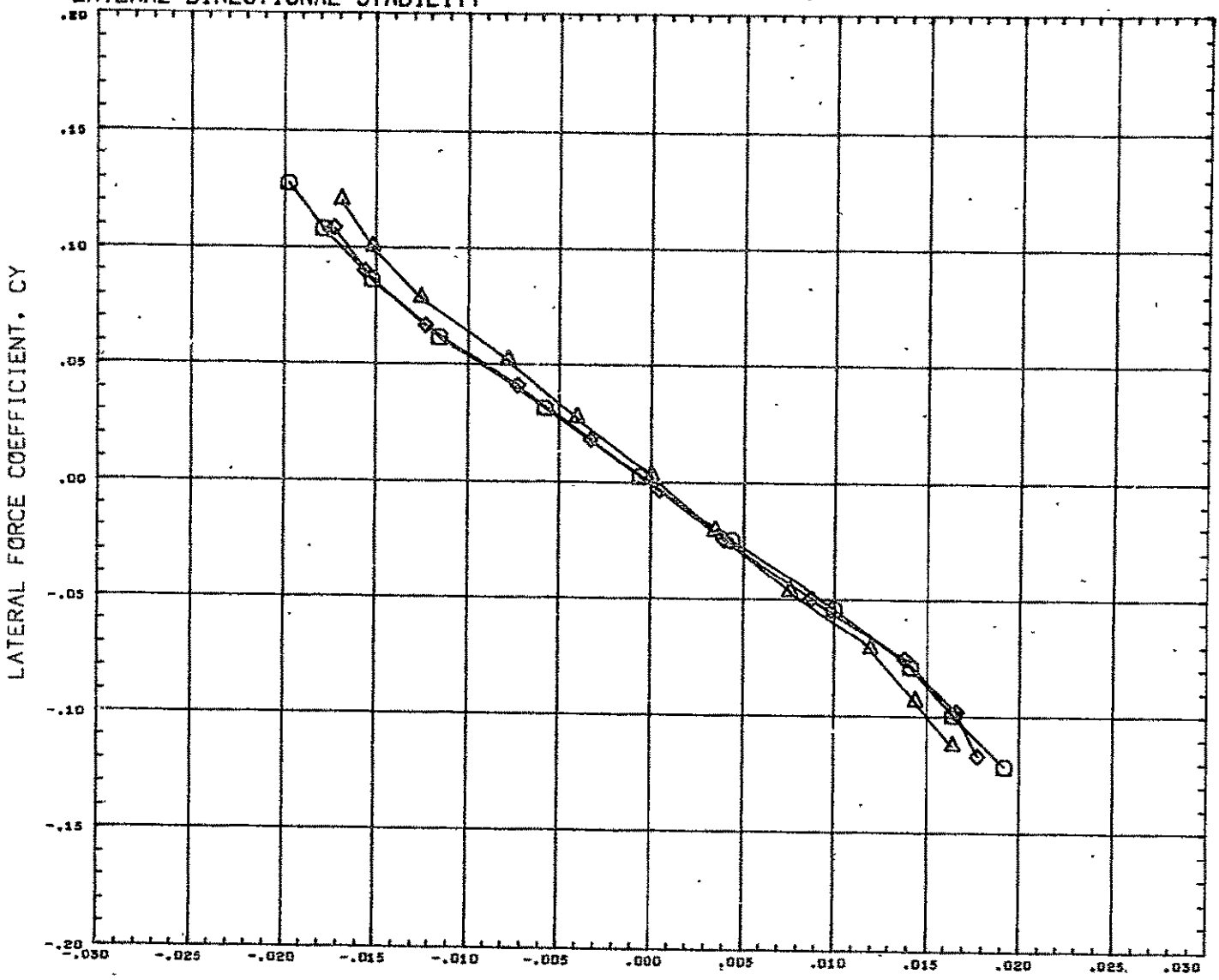
DATA SOURCE

DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

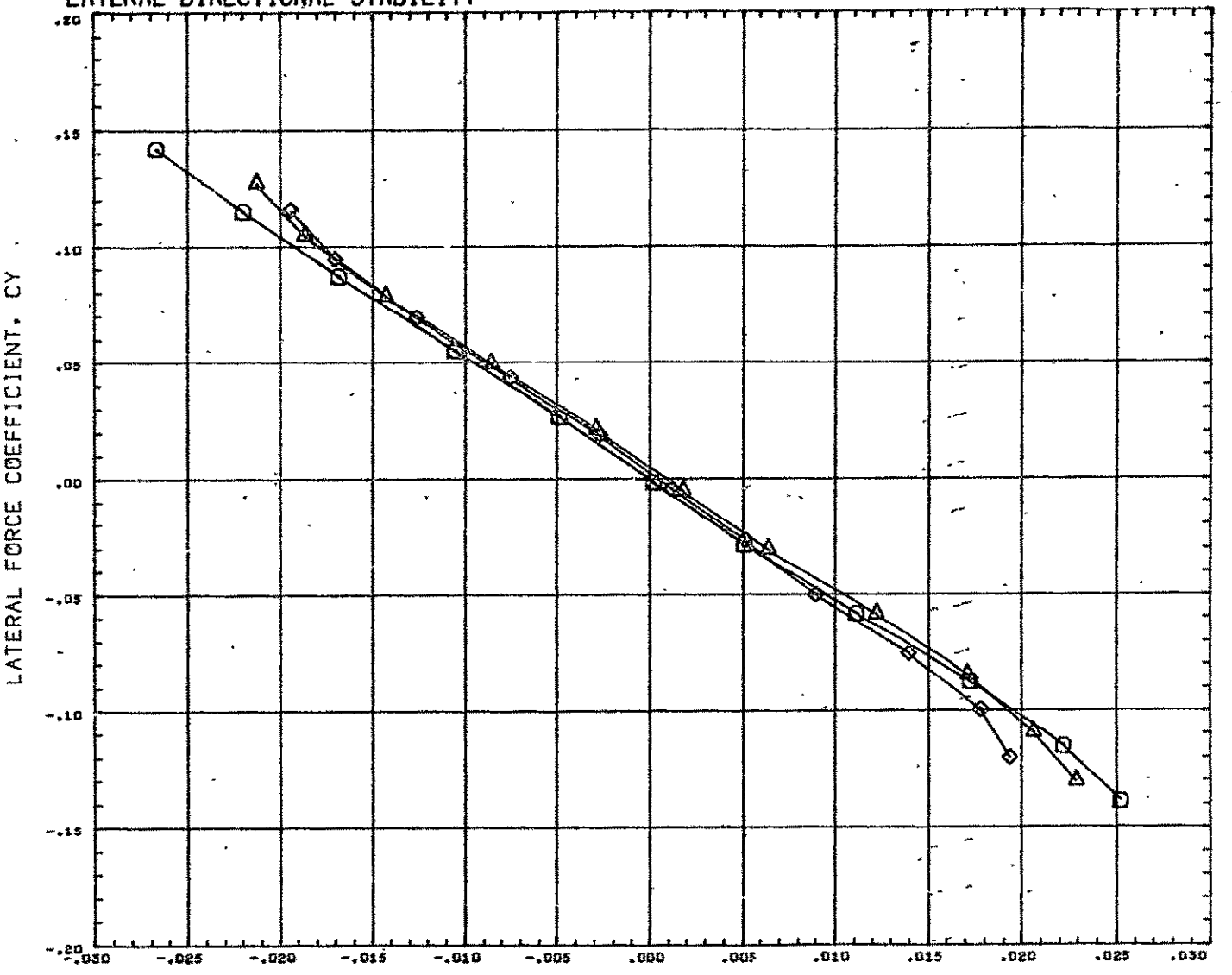
LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	- 6.000	MACH	0.906	ELVATR	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
△	0.000	AILRON	0.000			W2913C	- 6.000	X2906C	0.000	REFL	821.2004	INCHES
◇	6.000					W2914C	6.000			REFB	1422.6040	INCHES
										XMRP	1422.5040	INCHES
										YMRP	0.0000	INCHES
										ZMRP	139.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	- 6.000	MACH	1.101	ELVATR	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
△	0.000	AILRON	0.000			W2913C	- 6.000	X29D6C	0.000	REFL	821.2004	INCHES
◇	6.000					W2914C	6.000			REFB	1422.8040	INCHES
										XMRP	1422.8040	INCHES
										YMRP	0.0000	INCHES
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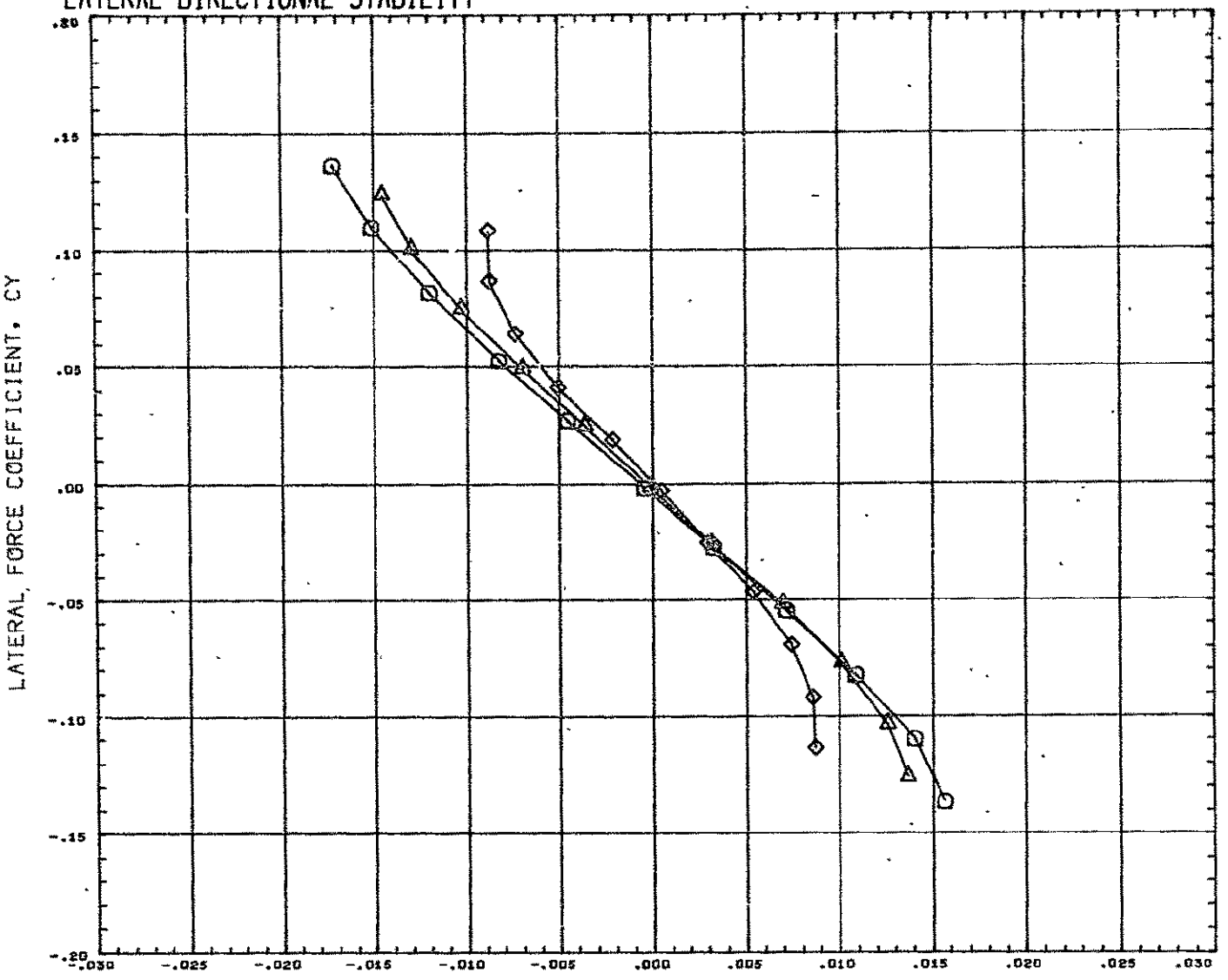
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE				REFERENCE INFORMATION		
○	6.000	MACH	1.463	ELVATR	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT
△	0.000	AILRON	0.000			W2913C	6.000	X29D6C	0.000	REFL	821.2004	INCHES
◇	6.000					W2914C	6.000			REFB	1422.8040	INCHES
										XMRF	1422.5040	INCHES
										YMRP	0.0000	INCHES
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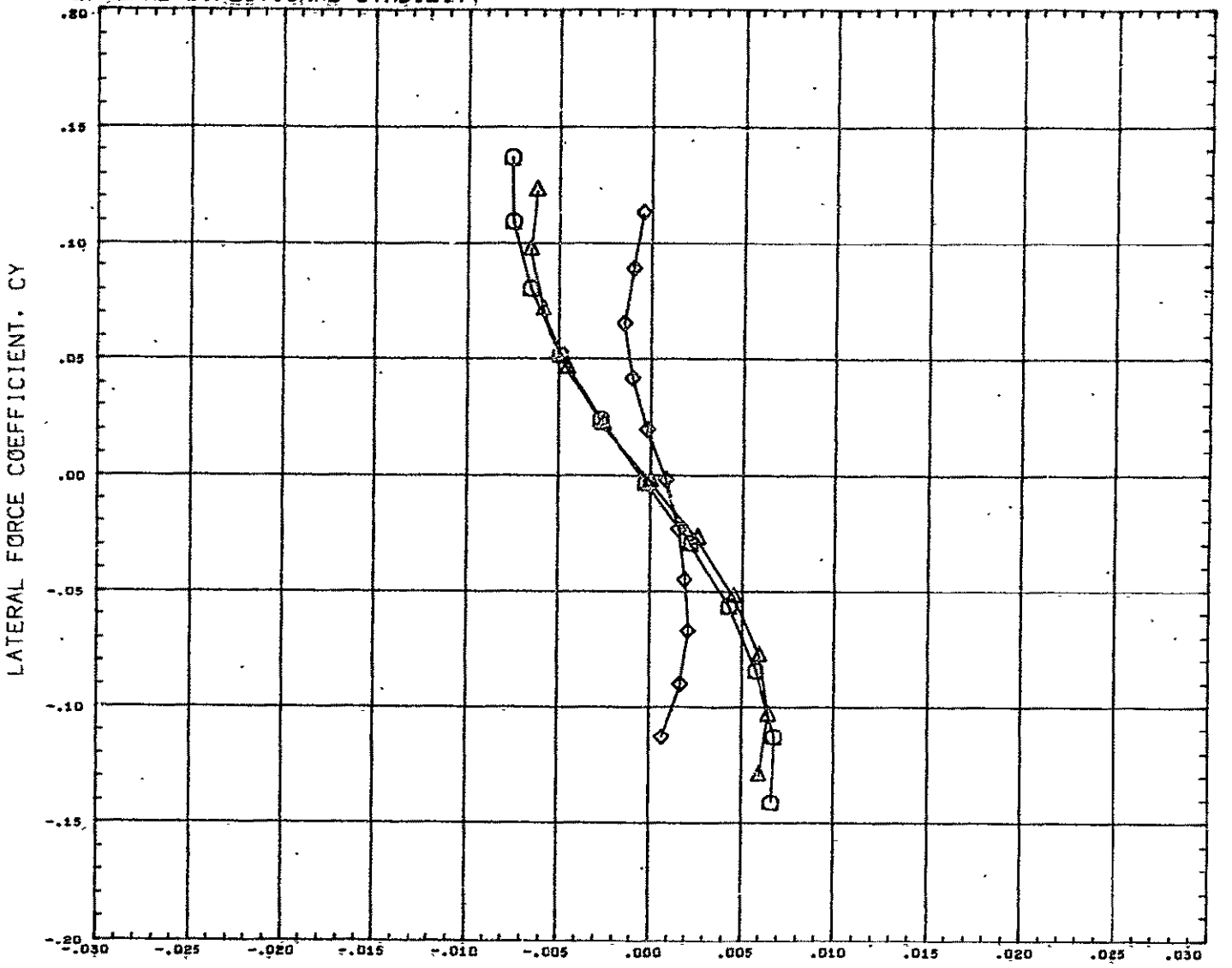
										SCALE	0.0035	SCALE

DATA HIST. CODE *E

LATERAL DIRECTIONAL STABILITY



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

MACH	1.961	ELVATR	0.000		
AILRON	0.000				

DATA SOURCE

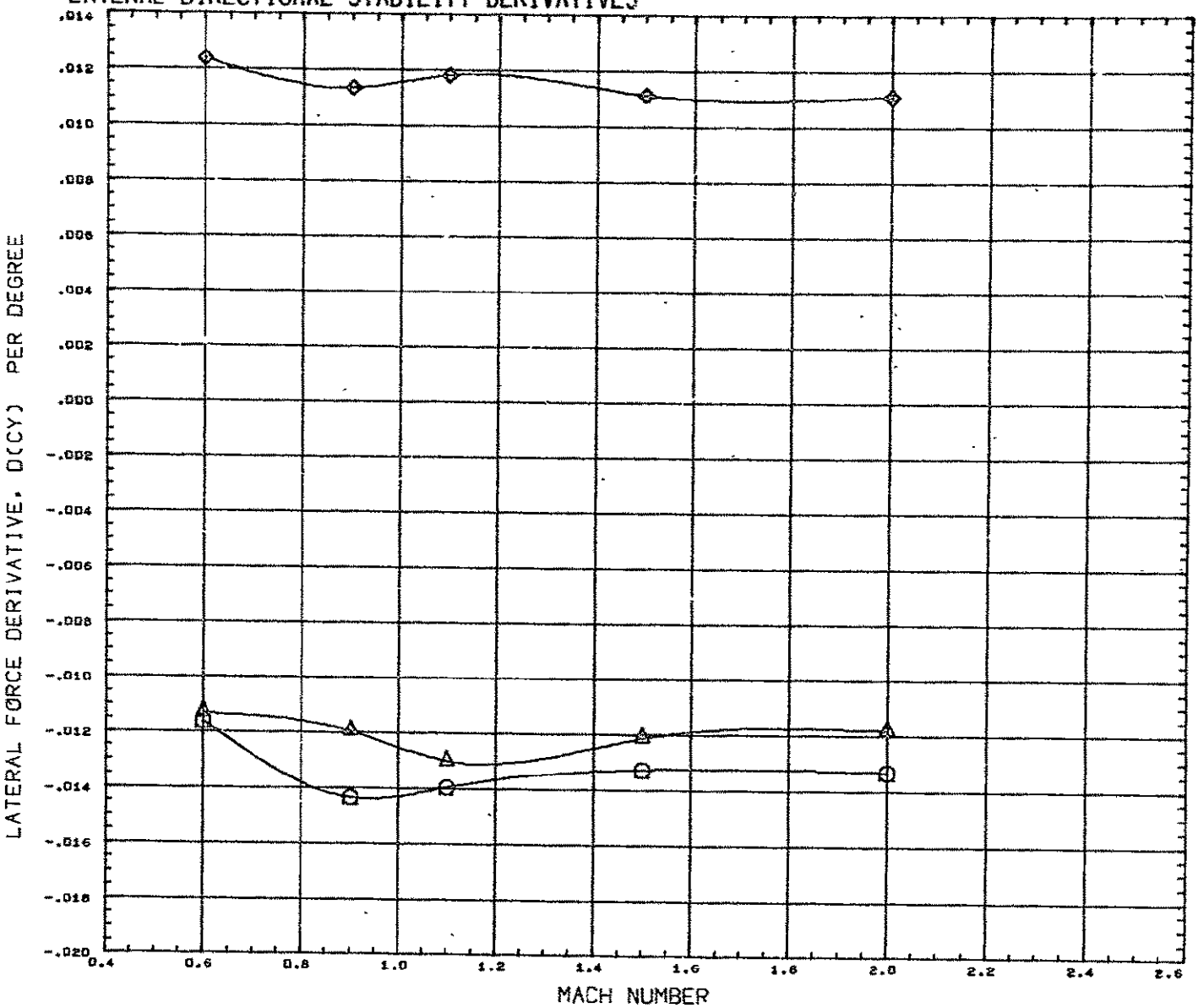
DATASET	ALPHA	DATASET	ALPHA
W2913C	- 6.000	X2906C	0.000
W2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE . *E

LATERAL DIRECTIONAL STABILITY DERIVATIVES



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

ELVATR 0.000 AILRON 0.000

DATA SOURCE

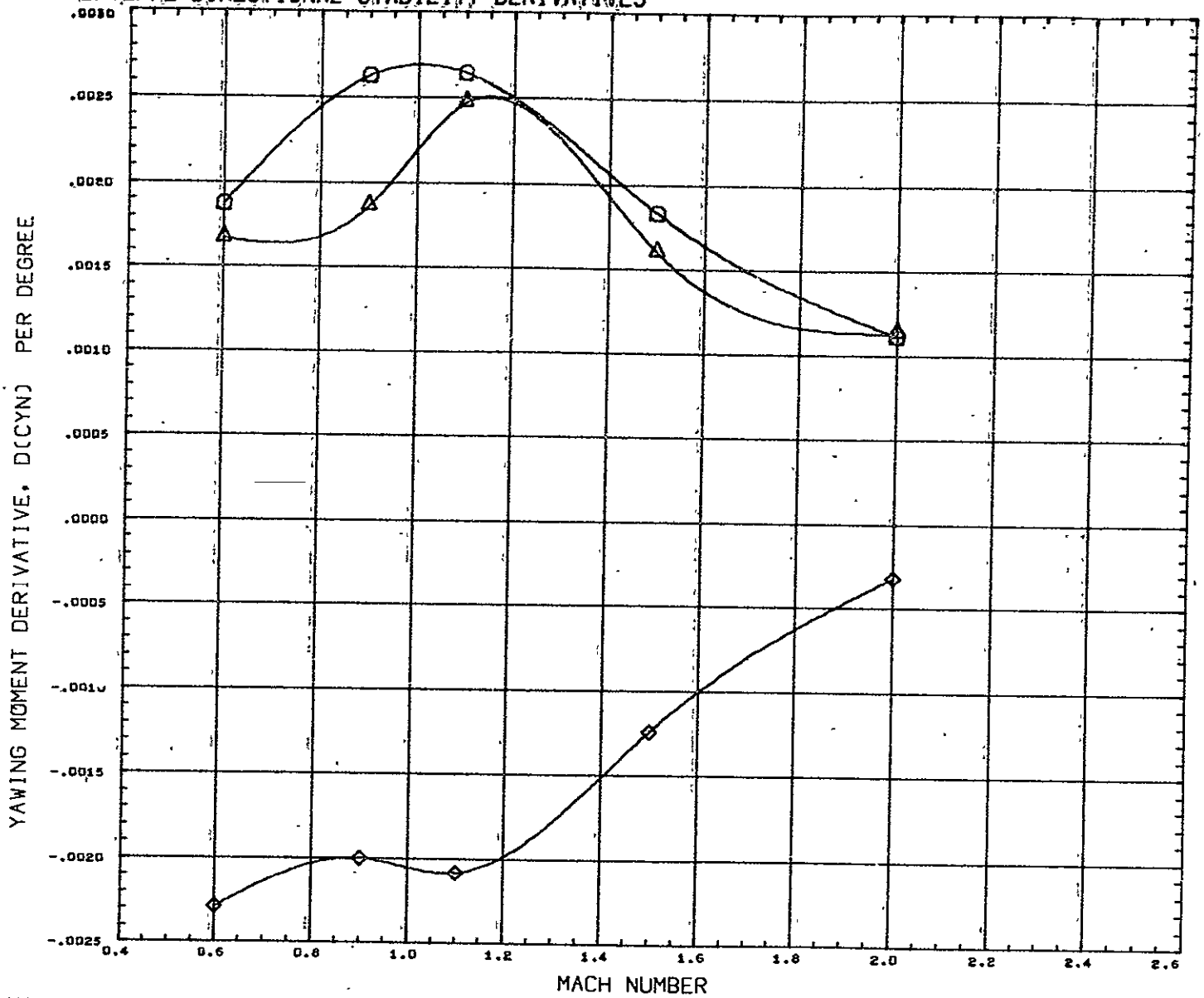
DATASET	ALPHA	DATASET	ALPHA
I2913C	- 6.000	I2906C	0.000
I2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	139.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *EI

LATERAL DIRECTIONAL STABILITY DERIVATIVES



SYMBOL	ALPHA
○	- 6.000
△	0.000
◇	6.000

PARAMETRIC VALUES

ELVATR 0.000 AILRON 0.000

DATA SOURCE

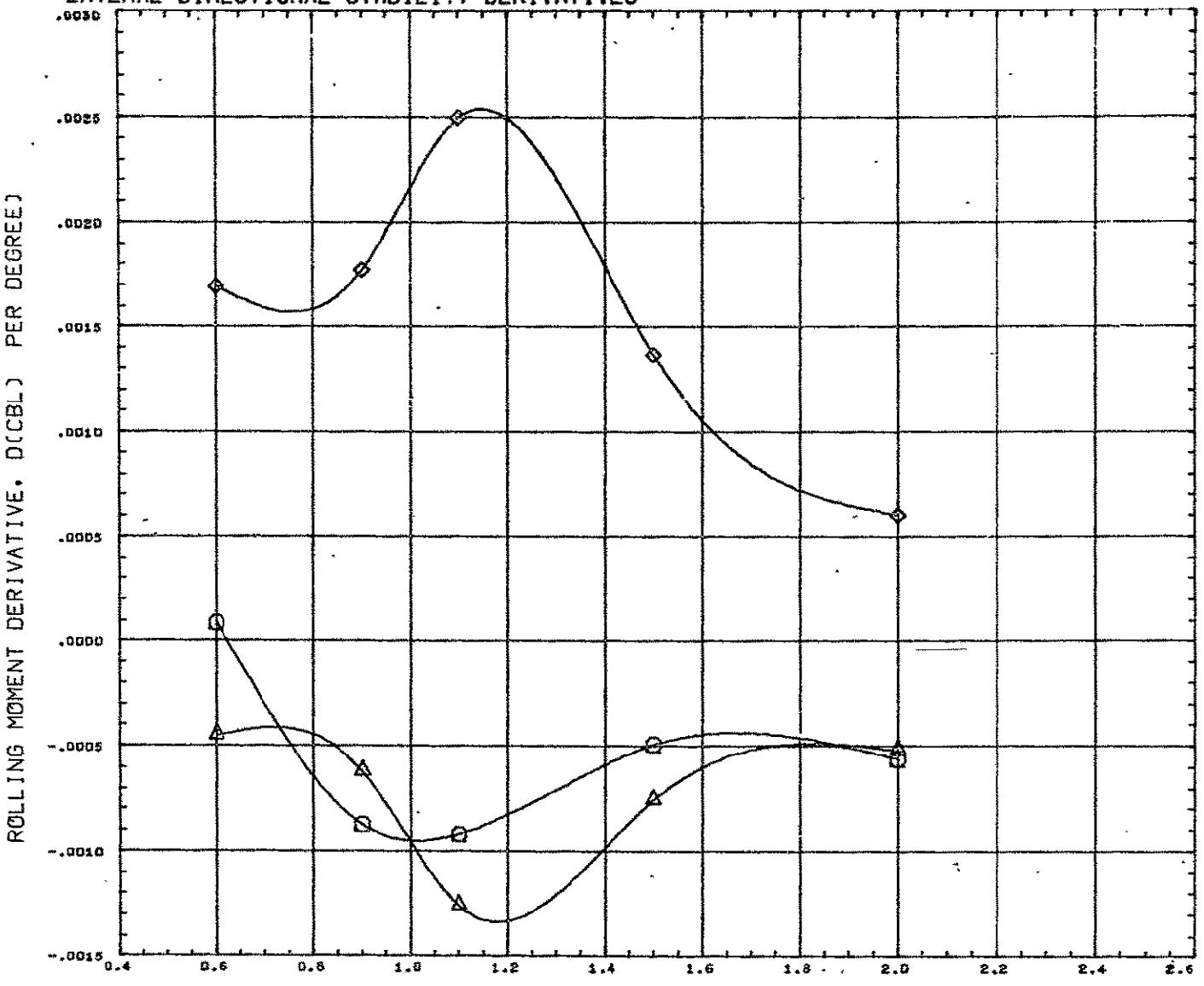
DATASET	ALPHA	DATASET	ALPHA
I2913C	- 6.000	I2906C	0.000
I2914C	6.000		

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

DATA HIST. CODE *EI

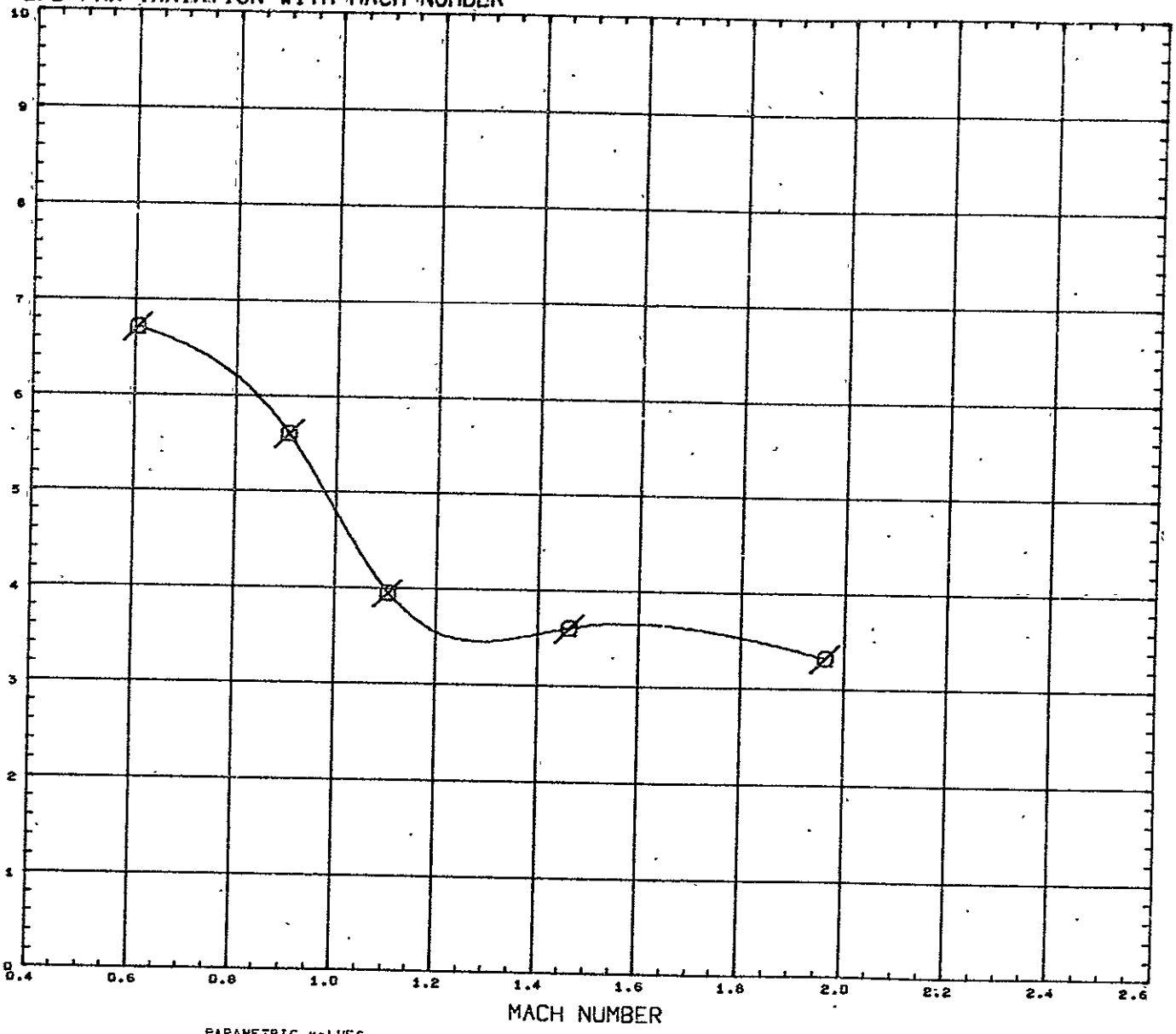
LATERAL DIRECTIONAL STABILITY DERIVATIVES



SYMBOL	ALPHA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION		
○	6.000	ELVATR	0.000	AILRON	0.000	DATASET	ALPHA	DATASET	ALPHA	REFS	6084.0040	SQ FT.
△	0.000					I2913C	6.000	I2906C	0.000	REFL	821.2004	INCHES
◇	6.000					I2914C	6.000			REFB	1422.8040	INCHES
										XMRF	1422.5040	INCHES
										YMRF	0.0000	INCHES
										ZMRF	130.0004	INCHES
										SCALE	0.0035	SCALE

DATA HIST. CODE *EI

L/D MAX VARIATION WITH MACH NUMBER



PARAMETRIC VALUES

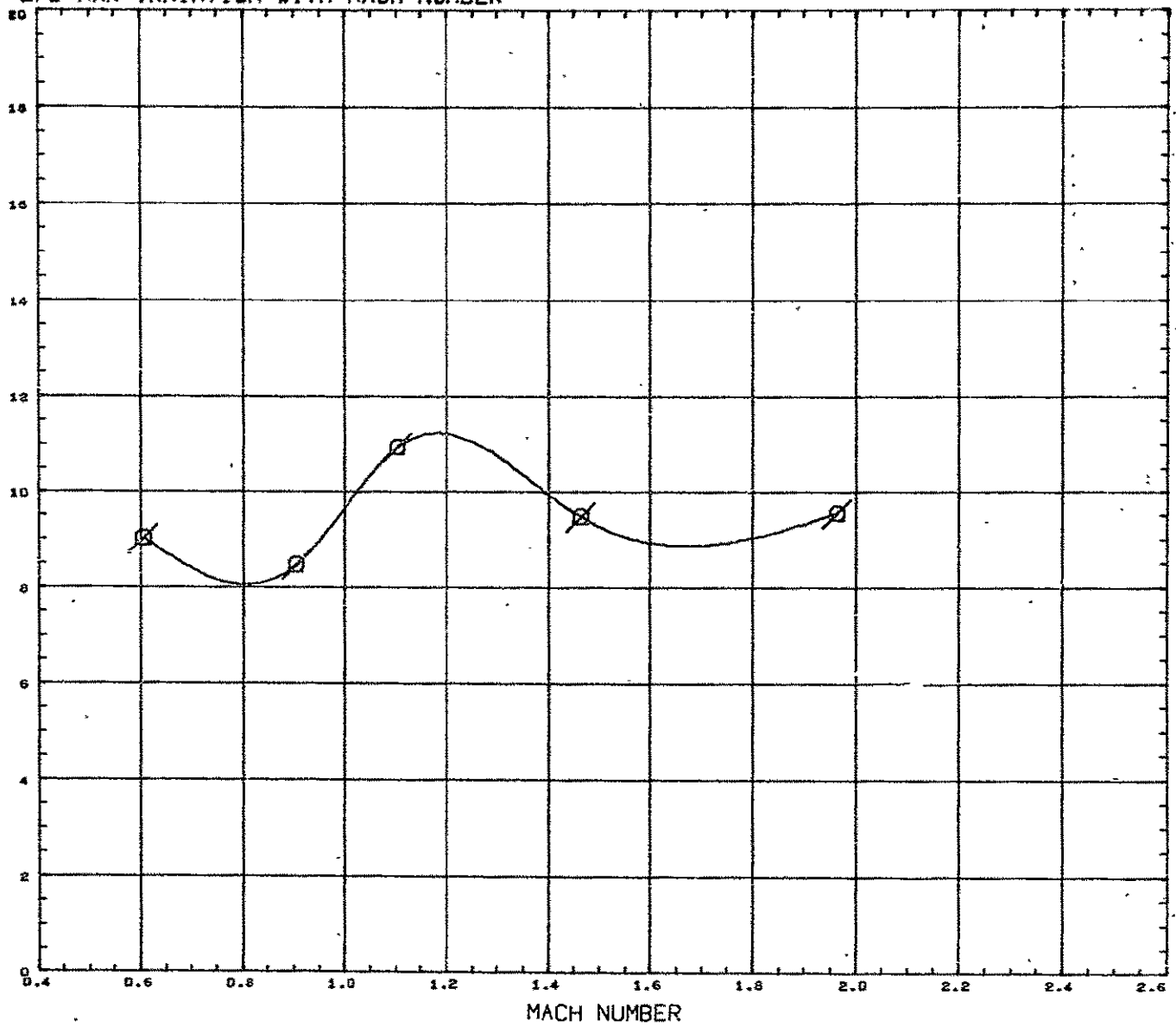
BETA	0.000	ELVATR	0.000
AILRON	0.000		

DATA HIST. CODE *E*EF

REFERENCE INFORMATION

REFS	6084.0040	SQ FT
REFL	821.2004	INCHES
REFB	1422.8040	INCHES
XMRP	1422.5040	INCHES
YMRP	0.0000	INCHES
ZMRP	130.0004	INCHES
SCALE	0.0035	SCALE

L/D MAX VARIATION WITH MACH NUMBER



PARAMETRIC VALUES

BETA	0.000	ELVATR	0.000
AILRON	0.000		

DATA HIST. CODE *E*EF

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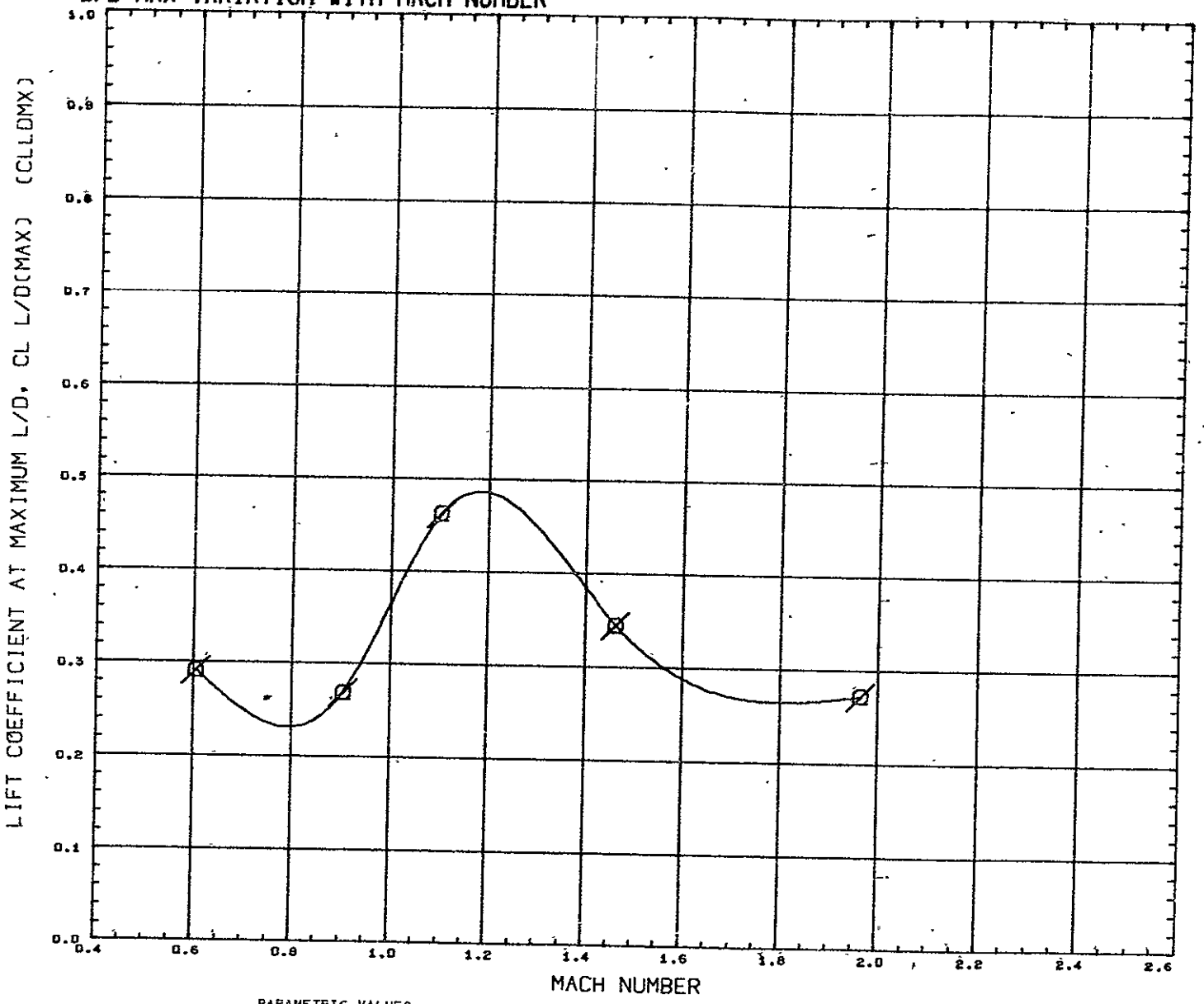

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