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NASA CR-151,068

RESULTS OF A DRAG REDUCTION INVESTIGATION ON AN 0.010-SCALE MODEL OF THE SPACE SHUTTLE VEHICLE 72-OTS LAUNCH CONFIGURATION TESTED IN THE LaRC 8-FOOT TRANSONIC PRESSURE TUNNEL FOR THE MACH RANGE OF 0.35 TO 1.20 (LA59)

SPACE SHUTTLE AEROTHERMODYNAMIC DATA REPORT

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Data Management SERVICES

SPACE DIVISION CHRYSLER CORPORATION

May 1977

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Prepared under NASA Contract Number NAS9-13247

by

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for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	LaRC 8' TPT 703
NASA Series Number	LA59
Model Number:	72-OTS
Test Dates:	December 20, 1974 through January 7, 1975
Occupancy Hours:	96

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(LA59)

ABSTRACT

A study has been made to determine the effects of various configurational components on the total drag associated with the Rockwell International Space Shuttle Launch Vehicle as presently designed (vehicle 5). In addition, several modifications have been made to this vehicle in an attempt to reduce drag, especially near Mach 1.0. Primary attention has been focused on base drag reduction for the external tank and some modification to the orbiter base and orbital maneuvering system package (OMS pod).

The models were tested at Mach numbers of 0.35, 0.60, 0.80, 0.85, 0.90, 0.92, 0.95, 0.98, 1.12 and 1.20 over an angle of attack range of about -8° to 8° at 0° sideslip. Tests were also run over an angle of sideslip of about -8° to 8° at 0° angle of attack.

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INTRODUCTION

The National Aeronautics and Space Administration is continuing its support of the Space Shuttle Vehicle Development Program. While considerable emphasis has been placed on determining orbiter aerodynamics, the launch vehicle has not received such in-depth experimental efforts in the past. Somewhat detailed studies have been made on an early version of the launch configuration at Langley from subsonic through supersonic speeds (references 1 & 2). However, considerable alterations have been made to this configuration resulting in a large increase in transonic drag for the vehicle as presently configured (see reference 3). This increase in drag not only results in higher thrust requirements, but also large increases in fuel and therefore added weight which decreases the payload in orbit capability.

In an effort to reduce this large drag increase, an investigation has been made to determine fixes or methods for reducing drag at transonic speeds by employing simple light weight structures in critical areas of high drag, such as the tank base. Modifications to the present launch vehicle (designated vehicle 5) consisted of external tank base-fairing of an ogival configuration, solid rocket booster and the orbiter attachment structure fairings as well as mounting the orbiter directly onto the external tank. In addition, a Langley designed minimum structure orbital maneuvering system (OMS pod) has also been considered.

In addition to the six-component aerodynamic force and moment data obtained, the wing and elevons were also instrumented with strain gages

to measure inboard and outboard elevon hinge moments and wing bending, shear and torsion. However, strain gage data were not an integral part of this test and these data were not verified.

The test was conducted in three parts in the Langley Research Center 8-foot Transonic Wind Tunnel. This report presents data obtained during the second test phase from December 20, 1974 through January 7, 1975. The models were tested at Mach numbers of 0.35, 0.60, 0.80, 0.85, 0.90, 0.92, 0.95, 0.98, 1.12 and 1.20 over an angle of attack range of about -8° to 8° at 0° sideslip. Tests were also run over an angle of sideslip of about -8° to 8° at 0° angle of attack.

Data are presented in references 4 and 5 for the remainder of the tests.

NOMENCLATURE
General

SYMBOL	MNEMONIC	DEFINITION
a		speed of sound; m/sec, ft/sec
C_p	CP	pressure coefficient; $(p_l - p_\infty)/q$
M	MACH	Mach number; V/a
p	P	pressure; N/m^2, psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$, N/m^2, psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m^3, $slugs/ft^3$
		Reference & C.G. Definitions
A_b		base area; m^2, ft^2
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
ℓ_{REF} $\bar{c}$	LREF	reference length or wing mean aerodynamic chord; m, ft
S_w	SREF	wing area or reference area; m^2, ft^2
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
∞	free stream
1	orbiter base
2	sting/balance cavity
i	manifold number
w	wing

NOMENCLATURE (Continued)

Body-Axis System

SYMBOL	MNEMONIC	DEFINITION
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
		Stability-Axis System
C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_{D_b}	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
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)

SYMBOL	MNEMONIC	DEFINITION
	IORD	Incidence angle of orbiter reference plane with respect to ET reference plane, degrees
δ_s	ELVSPL	Orbiter elevon spoiler deflection, degrees
d_g	DG	Wing root gage span
X_{wRc}	XWRC	Longitudinal location of wing reference center, distance from orbiter nose station
$X_{C_{P_w}}$	XCPW	Longitudinal location of wing center of pressure, distance from orbiter nose station
$Y_{C_{P_w}}$	YCPW/B	Lateral location of wing center of pressure, distance from orbiter plane of symmetry
X_{G_m}	XGM	Longitudinal location of wing-root pitch axis gage from nose
$Y_{G_{\ell_I}}$	YGLI	Lateral location of inboard wing-root roll axis gage
$Y_{G_{\ell_o}}$	YGLO	Lateral location outboard wing-root roll axis gage
$M_{\ell_{w_I}}$	MLWI	Wing-root roll axis bending moment about inboard gage, in-lb.
$M_{\ell_{w_o}}$	MLWO	Wing-root roll axis bending moment about outboard gage, in-lb.
$M_{m_{W_G}}$	MMWG	Wing-root pitch axis bending moment about gage, in-lb.
X_T	XT	Tank longitudinal station, inches
Y_o	YO	Orbiter spanwise station, inches
Y_T	YT	Tank spanwise station, inches
$C_{h_{e_I}}$	CHEI	Inboard elevon hinge moment coefficient

NOMENCLATURE (Concluded)

SYMBOL	MNEMONIC	DEFINITION
$C_{h_{e_o}}$	CHEO	Outboard elevon hinge moment coefficient
$C_{\ell_{w_I}}$		Wing-root roll axis bending moment coefficient about inboard gage
$C_{\ell_{w_o}}$		Wing-root roll axis bending moment coefficient about outboard gage
$C_{m_{W_G}}$		Wing-root pitch axis bending moment coefficient about gage
C_{N_w}		Wing normal force coefficient
C_{ℓ_w}		Wing bending moment coefficient
C_{m_w}		Wing torsional bending moment coefficient
b_w		Wing reference span, 9.366 in.
S_w		Wing area, 38.736 in^2
Y_{wRc}		Lateral location of wing moment reference center
c_w		Wing mean aerodynamic chord, 4.748 in
δ_{SI}	IBDESP	Orbiter inboard elevon spoiler deflection angle when the outboard and inboard settings are not equal, positive trailing up, degrees
δ_{SO}	OBDESP	Orbiter outboard elevon spoiler deflection angle when the outboard and inboard settings are not equal, positive trailing edge up, degrees
AM_E	AME	Elevon area moment
H_{M_o}		Outboard measured elevon hinge moment
H_{M_I}		Inboard measured elevon hinge moment

CONFIGURATIONS INVESTIGATED

The model used in this investigation was a 0.010-scale outer mold line model 72-OTS of the space shuttle mated vehicle. The model 72-OTS dimensional data are given in Table III.

During the test, alternate tank and attach structure configurations were investigated in addition to other modifications designed to reduce the overall aerodynamic drag. The tested configurations included the following:

Component	
AT_{28}	Attach structure
AT_{32}	Attach structure
B_{26}	Fuselage, VL70-0000193, VL70-000140A, VL70-000140B
C_9	Canopy, VL70-000140A, VL70-000143A
E_{44}	Elevons, SAS/AERO/74-344
F_{10}	Bodyflap, VL70-000140B, VL70-00020
FL_{10}	Feedline, VL78-000063, VL78-000062B, VC78-000002
FL_{11}	Feedline, VL78-000063, VL78-000062B, VC78-000002
M_{16}	OMS Pod, VL70-000203
N_{28}	OMS Nozzle, VL70-000140A
N_{86}	SRBN, VL77-000066, VC77-000002
PS_1	Electrical Tunnel
PS_2	Attach Ring
PS_3	4 Intermediate Rings
PS_4	Aft Structural Ring
PS_5	Aft Separation Motor Fairing
R_5	Rudder, VL70-000095

CONFIGURATIONS INVESTIGATED (Concluded)

S_{21}	SRB, VL77-000066, VC77-000002
T_{28}	ET, VL78-000063, VL78-00062B, VC78-000002
V_8	Vertical, VL70-000140A, VL70-000002
W_{116}	Wing, VL70-000140B, VL70-000200

The Baseline Configuration consists of the following components:

BASELINE = B26 C9 E44 F10 M16 N28 R5 V8 W116 N86 PS1 PS2 PS3 PS4 PS5 S21 AT28 AT32 FL10 FL11 T28 with Struts, OMS and Vertical Tail Faired.

Configuration 2 consists of the following:

Configuration 2 = Baseline with orbiter attached directly to tank and faired. Long Ogive Base added to External Tank.

Configuration 3 consists of the following;

Configuration 3 = Configuration 2 with Tank to SRB Fairing.

Configuration 3A = Configuration with elevon spoiler moved to the tip of the wing.

Model sketches are shown in Figure 2.

TEST FACILITY DESCRIPTION

NASA/Langley Research Center 8-Foot Transonic Pressure Tunnel is an air-medium facility capable of attaining continuously variable Mach numbers from 0.20 to 1.30. It is a single-return, closed-circuit tunnel, having controlled stagnation temperature, total pressure, and dew-point temperature. The test section is 7.1 feet square. Reynolds numbers are variable from 0.30×10^6 per foot to 7.00×10^6, depending on Mach number and tunnel total pressure limitations. Models are supported in the test section by a sting-sector system, but wall-mounting is possible. Schlieren photography is available for flow and shock-wave studies.

DATA REDUCTION

The aerodynamic force and moment data were measured by an internal strain gage balance. The data were adjusted for tunnel correction, sting and balance deflection, and model weight tares.

All final data were presented along a set of body and stability axes (Figure 1) whose origin is located at FS 976 on the longitudinal axes of the external tank and FRL 400 on the vertical axis of the external tank. Model data were converted to standard NASA coefficients using the following:

Reference Area	SREF = 38.736 in.^{2}
Reference Length	LREF = 12.903 in.
Reference Span	BREF = 12.903 in.

Base and cavity pressure coefficients were computed by:

$$C_{P_i} = \frac{P_i - P_\infty}{Q}$$

Where i = manifold number

Wing root gage centered moment coefficients can be computed by

$$C\ell_{w_I} = \frac{M\ell_{w_I}}{S_w b_w Q} \qquad C\ell_{w_O} = \frac{M\ell_{w_O}}{S_w b_w Q} \qquad C_{m_{W_G}} = \frac{M_{m_{W_G}}}{S_w c_w Q}$$

From which the wing normal force coefficient can be computed by

$$C_{N_w} = \frac{(C\ell_{w_I} - C\ell_{w_O})\, b_w}{d_G}$$

Where: $d_G = Y_{G\ell_O} - Y_{G\ell_I}$

and wing center of pressure data can be computed by

$$X_{C_{P_w}} = X_{G_m} - \frac{C_{m_{W_G}}\, c_w}{C_{N_w}} \qquad Y_{C_{P_w}} = Y_{G\ell_I} - \frac{C\ell_{w_I}\, b_w}{C_{N_w}}$$

Finally, the wing gage centered bending moment was transferred from gage to wing root by;

$$C\ell_W = C\ell_{W_O} + C_{N_W} \frac{(Y_{G\ell_O} - Y_{WRc})}{b_W}$$

$$C_{mW} = C_{mW_G} + C_{N_W} \frac{(X_{G_m} - X_{WRc})}{c_W}$$

The constants used in the above equations are:

X_{Gm} = 12.05 in.

$Y_{G\ell_I}$ = 1.4413 in.

$Y_{G\ell_O}$ = 1.9386 in.

X_{WRc} = 13.07 in.

Y_{WRc} = 1.06 in.

c_W = 4.748 in.

b_W = 9.366 in.

S_W = 38.736 in^2

The equations used to calculate elevon hinge moment coefficients are:

$CHEO = H_{M_O}/Q(AM_E)$

$CHEI = H_{M_I}/Q(AM_E)$

where:

AM_E = elevon area moment[1] = 0.019047 in ft^2

H_{M_O} = outboard elevon hinge moment

H_{M_I} = inboard elevon hinge moment

(1) See dimensional data sheet on E_{44}

REFERENCES

1. Chrysler Corporation Space Division, Data Management Services. DMS-DR-2118, "Results of Transonic Wind Tunnel Tests on an 0.015-Scale Space Shuttle Mated Vehicle Model (67-OTS) in the LaRC 8-Foot TPT (IA41)."

2. Chrysler Corporation Space Division, Data Management Services. DMS-DR-2119, "Supersonic Tests of an 0.015-Scale Space Shuttle Mated Vehicle Model (67-OTS) in the LaRC UPWT to Obtain Aerodynamic Force Data (IA42A/B)."

3. Chrysler Corporation Space Division, Data Management Services. DMS-DR-2204, "Results of Transonic Wind Tunnel Tests on an 0.010-Scale Space Shuttle Mated Vehicle Model 72-OTS in the LaRC 8-Foot TPT (IA43)."

4. Chrysler Corporation Space Division, Data Management Services. DMS-Dr-2224, "Results of a Drag Reduction Investigation on an 0.010-Scale Model of the Space Shuttle Vehicle 72-OTS Launch Configuration Tested in the LaRC 8-Foot Transonic Pressure Tunnel for the Mach Range of 0.35 to 1.20 (LA56)."

5. Chrysler Corporation Space Division, Data Management Services. DMS-DR-2257, "Results of a Drag Reduction Investigation on an 0.010-Scale Model of the Space Shuttle Vehicle 72-OTS Launch Configuration Tested in the LaRC 8-Foot Transonic Pressure Tunnel for the Mach Range of 0.35 to 1.20 (LA60)."

TABLE I.

TEST : LaRC 8' TPT 703 (LA59)

DATE : 2-4-77

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per foot)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.35	2.06×10^6	1.16	100°
0.60	3.16×10^6	2.90	
0.80	3.78×10^6	4.33	
0.85	3.89×10^6	4.37	
0.90	3.98×10^6	4.94	
0.92	4.01×10^6	5.05	
0.95	4.05×10^6	5.20	
0.98	4.09×10^6	5.35	
1.12	4.20×10^6	5.91	
1.20	4.22×10^6	6.12	

BALANCE UTILIZED: LaRC 840

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	800 lb.	4.0 lb.	
SF	250 lb.	1.25 lb.	
AF	125 lb.	0.625 lb.	
PM	1600 lb.	8.0 in-lb.	
RM	500 in-lb.	2.5 in-lb.	
YM	500 in-lb.	2.5 in-lb.	

COMMENTS:

TABLE II.

TEST: 8'-TPT-703 (LA-59)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 2-4-77

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_S			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) .35	.60	.80	.85	.90	.92	.95	.98	1.12	1.20
-HZ001	BASELINE	A	O	-*				10	9	8	7	6	5	4	3	2	1
02		O	A	-				30	29	28	27	26	25	24	23	22	21
03		A	O	10°				40	39	38	37	36	35	34	33	32	31
04		O	A	10°				50	49	48	47	46	45	44	43	42	41
05		A	O	20°				70	69	68	67	66	65	64	63	62	61
06		O	A	20°				60	59	58	57	56	55	54	53	52	51
07		A	O	40°				95	94				75	74	73	72	71
08		O	A	40°				90	89	88	87	86	85	84	83	82	81
09	CONFIG 2	A	O	-				105	104	103	102	101	100	99	98	97	96
10	CONFIG 3	A	O	-				115	114	113	112	111	110	109	108	107	106
11		A	O	40°				125	124	123	122	121	120	119	118	117	116
12	A	A	O	outbd 40°				135	134	133	132	131	130	129	128	127	126
13		O	A	outbd 40°				146	145	144	143	142	141	140	139	138	137

TEST RUN NUMBERS

R Dataset	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D		MACH	ALPHA / BETA	
S Dataset	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2			Mach	ALPHA / BETA	

TYPE OF DATA α OR β SCHEDULES: A) $-8^\circ \rightarrow 8^\circ$

COEFFICIENT SCHEDULES

IDVAR (1) IDVAR (2) NDV

NOTE: Run numbers on data tape are these plus 500, e.g., Run 10 is Run 510 on tape

*SPOILER OFF SIMULATES A $\delta_S = 0^\circ$ CONDITION

TABLE III. - MODEL DIMENSIONAL DATA.

MODEL COMPONENT: ATTACH STRUCTURE - AT_{28}

GENERAL DESCRIPTION: Rear orbiter to ET attach structure (LH and RH), 2 members.

MODEL SCALE: 0.010 MODEL DRAWING NO.: _____

DRAWING NO.: VL78-000063, VL78-000062B

DIMENSIONS:

MEMBER		FULL SCALE	MODEL SCALE
#1	X_o	1317.0	13.17
	Y_o	- 96.50 (LH)	- 0.965
		96.50 (RH)	0.965
	Z_o	267.50	2.675
	X_T	2058.0	20.580
	Y_T	- 125.68 (LH)	- 1.257
		125.68 (RH)	1.257
	Z_T	515.5	5.155
#2	X_o	1317.00	13.170
	Y_o	- 96.50 (LH)	- 9.650
		96.50 (RH)	9.650
	Z_o	267.50	2.675
	X_T	1872.0	18.720
	Y_T	- 125.68 (LH)	- 1.257
		125.68 (RH)	1.257
	Z_T	504.5	5.045
Diameter, In. #1		11.5	0.115
#2		15.5	0.155

TABLE III (CONT'D)

MODEL COMPONENT: ATTACH STRUCTURE - AT32

GENERAL DESCRIPTION: Forward orbiter/ET attach structure (2 member structure)

MODEL SCALE: 0.010 MODEL DRAWING NO.: _____

DRAWING NO.: VL78-000062B, Martin Marietta 8260020914

DIMENSIONS:

		FULL SCALE	MODEL SCALE
Member #1	X_o	388.15	3.882
	Y_o	0	0
Attach point on Orbiter (Z_T = 614)	Z_o	LWR ML	LWR ML
	X_T	1129.9	11.299
	Y_T	46.50	0.465
(Attach point on tank)	Z_T	562.58	5.626
Member #2	X_T	388.15	3.882
	Y_T	0	0
	Z_T	LWR ML	LWR ML
	X_o	1129.9	11.299
	Y_o	- 46.50	- 0.465
	Z_o	562.58	5.626
Attach structure dia., in.		6.0	0.060

TABLE III (CONT'D)

MODEL COMPONENT : BODY - B_{26}

GENERAL DESCRIPTION : Configuration 140A/B orbiter fuselage

NOTE: B_{26} is identical to B_{24} except underside of fuselage has been refaired to accept W_{116}.

MODEL SCALE: 0.010 MODEL DRAWING: SS-A00147, RELEASE 12

DRAWING NUMBER : VL70-000143B, -000200, -000205, -006089, -000145, -000140A, -000140B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (IML: Fwd Sta. X_o=238), In.	1290.3	12.903
Length (OML: Fwd Sta. X_o=235), In.	1293.3	12.933
Max Width (@ X_o = 1528.3), In.	264.0	2.640
Max Depth (@ X_o = 1464), In.	250.0	2.500
Fineness Ratio	0.26357	0.26357
Area - Ft^2		
Max. Cross-Sectional	340.88	0.0341
Planform		
Wetted		
Base		

TABLE III (CONT'D)

MODEL COMPONENT : CANOPY - C_9

GENERAL DESCRIPTION : Configuration 3A. Canopy used with fuselage B_{26}.

MODEL SCALE: 0.010 MODEL DRAWING: SS-A00147, Rel. 12

DRAWING NUMBER : VL70-000143A

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X_o=434.643 to 578)	143.357	1.434
Max Width (@ X_o = 513.127)	152.412	1.524
Max Depth (@ X_o = 485.0)	25.000	0.250
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

TABLE III (CONT'D)

MODEL COMPONENT: ELEVON - E_{44}

GENERAL DESCRIPTION: 6.0 In. F.S. gaps machined into E_{26} elevon. Flipper doors, centerbody pieces, and tipseals are not simulated. (Data are for one side.)

MODEL SCALE: 0.010

DRAWING NUMBER: Not available.

DIMENSIONS:

	FULL-SCALE	MODEL SCALE
Area, Ft^2	210.0	0.021
Span (equivalent), In.	349.2	3.492
Inb'd equivalent chord, In.	118.0	1.180
Outb'd equivalent chord, In.	55.19	0.552
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.2096	0.2096
At Outb'd equiv. chord	0.4004	0.4004
Sweep Back Angles, degrees		
Leading Edge	0.00	0.00
Trailing Edge	- 10.056	-10.056
Hingeline	0.00	0.00
Area Moment (~~Normal to hinge line~~) (Product of Area & $\bar{c}$), Ft^3	1587.25	0.00159
Mean Aerodynamic Chord, In.	90.7	0.907

TABLE III (CONT'D)

MODEL COMPONENT : BODY FLAP - F_{10}

GENERAL DESCRIPTION : Configuration 140C body flap. Hingeline located at X_o = 1532, Z_o = 287.

MODEL SCALE: 0.010

DRAWING NUMBER : VL70-000140C, VL70-355114

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X_o=1525.5 to 1613), In.	87.50	0.875
Max Width (@ L.E., X_o = 1525.5), In.	256.00	2.560
Max Depth (@ X_o = 1532), In.	19.798	0.198
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional (@H.L.)	35.196	0.0035
Planform	135.00	0.0135
Wetted		
Base (@ X_o = 1613)	4.89	0.00049

TABLE III (CONT'D)

MODEL COMPONENT: FEEDLINE - FL_{10}

GENERAL DESCRIPTION: LH_2 feedline on upper left-hand side of T_{28}.

MODEL SCALE: 0.010

DRAWING NO.: VL78-000063, VL78-000062B

DIMENSIONS:

		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	2071.5	20.715
	Y_T	- 70.0	- 0.70
	Z_T	573.934	5.739
Trailing edge at:	X_T	2081.8	20.818
	Y_T	- 70.0	- 0.700
	Z_T	584.059	5.841
Diameter of line (17.0 I.D.)		18.160	0.182

TABLE III (CONT'D)

MODEL COMPONENT: FEEDLINE - FL_{11}

GENERAL DESCRIPTION: LO_2 feedline on upper right-hand of T_{28}.

MODEL SCALE: 0.010

DRAWING NO.: VL78-000063, VL78-000062B

DIMENSIONS:

		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	1000.667	10.007
	Y_T	70.00	0.700
	Z_T	150.519	1.505
Trailing edge at:	X_T	2071.5	20.715
	Y_T	70.000	0.700
	Z_T	573.934	5.739
Diameter of line (17.0 I.D.)		18.16 O.D.	0.182

TABLE III (CONT'D)

MODEL COMPONENT : OMS POD - M_{16}

GENERAL DESCRIPTION : Configuration 140C - orbiter OMS Pod - short pod.

MODEL SCALE: 0.010

DRAWING NUMBER : VL70-008401, -008410

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (OMS Fwd Sta X_o=1310.5)	258.50	2.585
Max Width (@ X_o = 1511), In.	136.8	1.368
Max Depth (@ X_o = 1511), In.	74.70	0.747
Fineness Ratio	2.484	2.484
Area - Ft^2		
Max. Cross-Sectional	58.864	0.0058
Planform		
Wetted		
Base		

TABLE III (CONT'D)

MODEL COMPONENT: OMS NOZZLES - N 28

GENERAL DESCRIPTION: Configuration 140A/B Orbiter OMS Nozzles.

MODEL SCALE: 0.010

DRAWING NUMBER: VL70-000140A(Location), SS-A00106, Rel. 5 (Contour)

DIMENSIONS:	FULL SCALE	MODEL SCALE
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane		
Throat to Exit Plane		
Diameter - In.		
Exit		
Throat		
Inlet		
Area - ft^2		
Exit		
Throat		
Gimbal Point (Station) - In.		
Left ~~Upper~~ Nozzle		
X_o	1518.0	15.180
Y_o	± 88.0	± 0.880
Z_o	492.0	4.920
Right ~~Lower~~ Nozzles		
X_o	1518.00	15.180
Y_o	88.0	0.880
Z_o	492.0	4.920
Null Position - Deg.	PITCH	YAW
Left ~~Upper~~ Nozzle (OUTB'D)		13°17' OUTBOARD
Pitch (Pitch (15°49'; Yaw 12°17'	± 8	2°30' INBOARD
Yaw		
Right ~~Lower~~ Nozzle		13°17' OUTB'D
Pitch Null: 15°49'	± 8	2°17' INB'D
Yaw 12°17' OUTB'D	± 8	13°17' OUTB'D
		2°17' INB'D

TABLE III (CONT'D)

MODEL COMPONENT: BSRM NOZZLE - N_{86}

GENERAL DESCRIPTION: Booster solid rocket motor nozzles.

MODEL SCALE: 0.010

DRAWING NO.: VL70-000066

DIMENSIONS:	FULL SCALE	MODEI SCALE
Diameter, D_{ex} - In. (I.D.)	144.29	1.443
Diameter D_{ex} - In. (O.D.)	146.79	1.468
Diameter DT - In.		
Diameter $D_{in.}$ - In.		
Area - Ft^2		
Max. Cross-sectional (I.D.)	113.553	1.136
Gimbal Origin:		
Left Nozzle		
X_o	1902.6	19.026
Y_o	- 250.50	-- 2.505
Z_o	400.0	4.000
Right Nozzle		
X_o	1902.6	19.026
Y_o	250.5	2.505
Z_o	400.0	4.000
Null Position - Deg.		
Left nozzle gimbal	± 8	± 8
Right nozzle gimbal	± 8	± 8

TABLE III (CONT'D)

MODEL COMPONENT: SRB PROTUBERANCE - PS_1

GENERAL DESCRIPTION: Electrical tunnel fairing on top of each SRB.

MODEL SCALE: 0.010

DRAWING NO.: None

DIMENSIONS (DATA FOR 1 OF 2):	FULL SCALE	MODEL SCALE
Leading edge at X_B	467.00	4.670
Centerline of tunnel Y_B	0	0
Trailing edge at X_B	1820.0	18.200
Height	3.00	0.030
Width	6.00	0.060
Leading edge, deg.	72	72

TABLE III (CONT'D)

MODEL COMPONENT: SRB PROTUBERANCE - PS_2

GENERAL DESCRIPTION: SRB/ET attach ring

MODEL SCALE: 0.010

DRAWING NO.: VL77-000036A

DIMENSIONS (DATA FOR 1 OF 2)	FULL SCALE	MODEL SCALE
Centerline at X_T	1515.0	15.150
Width	10.0	0.100
Height	10.0	0.100

TABLE III (CONT'D)

MODEL COMPONENT: SRB PROTUBERANCE - PS_3

GENERAL DESCRIPTION: Separation rocket fairing on each SRB nozzle shroud located 30° inboard from top centerline.

MODEL SCALE: 0.010

DRAWING NO.: VL77-000036A

DIMENSIONS (DATA FOR 1 OF 2):	FULL SCALE	MODEL SCALE
Leading edge at X_B	1796.0	17.960
Trailing edge at X_B	1889.0	18.890

Radial location is 30° inboard from top centerline.

TABLE III (CONT'D)

MODEL COMPONENT: SRB PROTUBERANCE - PS_4

GENERAL DESCRIPTION: AFT STRUCTURAL RING. Ring stiffener located at aft end of solid rocket booster.

MODEL SCALE: 0.010

DRAWING NO.: NONE

DIMENSIONS:	FULL SCALE	MODEL SCALE
Height, In.	8.0	0.080
Width, In.	6.0	0.060
Location of centerline, In. X_B	1833.7	18.337

TABLE III (CONT'D)

MODEL COMPONENT: SRB AFT SEPARATION MOTOR FAIRING - PS_5

GENERAL DESCRIPTION: Fairing over aft separation motors on SRB. Fairing covers four separation motors.

MODEL SCALE: 0.010

DRAWING NO.: SS-A01184

DIMENSIONS	FULL SCALE	MODEL SCALE
Length	278.0	2.78
Max. thickness	14.0	.14
Depth		
from SRB mainbody	49.838	.498
from skirt	19.0	.190
Leading edge of fairing at X_S	1547.2	15.472
Leading edge sweep angle	75°	75°

TABLE III (CONT'D)

MODEL COMPONENT: RUDDER - R_5

GENERAL DESCRIPTION: Configuration 140C orbiter rudder (identical to configuration 140A/B rudder)

MODEL SCALE: 0.010

DRAWING NUMBER: VL70-000095, -000146B

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area - Ft^2	100.15	0.0010
Span (equivalent), In.	201.0	2.010
Inb'd equivalent chord, In.	91.585	0.916
Outb'd equivalent chord, In.	50.833	0.508
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge		
Tailing Edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (~~Normal to hinge line~~) (Product of Area and $\bar{c}$), Ft^3	610.92	0.00061
Mean Aerodynamic Chord, In.	73.2	0.732

TABLE III (CONT'D)

MODEL COMPONENT : BOOSTER SOLID ROCKET MOTOR - S21

GENERAL DESCRIPTION :

MODEL SCALE: 0.010

DRAWING NUMBER : VL72-000143D, VL77-000066

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (Includes nozzle), In.	1789.40	17.894
Max Width (Tank Dia., In.)	146.0	1.460
~~Max Depth~~ (Aft shroud Dia.), In.	192.0	1.920
Fineness Ratio	9.3198	9.3198
Area - Ft^2		
Max. Cross-Sectional	201.062	0.0201
Planform		
Wetted		
Base		
WP of BSRM centerline (Z_T)	400.0	4.00
FS of BSRM nose (X_T)	743.0	7.430
BP of BSRM centerline (Y_T)	250.5	2.505

TABLE III (CONT'D)

MODEL COMPONENT : EXTERNAL TANK - T28

GENERAL DESCRIPTION :

MODEL SCALE: 0.010

DRAWING NUMBER : VL72-000143D, VL78-000063
(Dimensions are to tank structural OML, TPS not included)

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length, In.	1844.275	18.443
Max ~~Width~~ Dia., In.	331.0	3.310
Max Depth		
Fineness Ratio	5.687	5.687
Area - Ft^2		
Max. Cross-Sectional	594.678	0.059
Planform		
Wetted		
Base		

TABLE III (CONT'D)

MODEL COMPONENT: VERTICAL - V_8

GENERAL DESCRIPTION: Configuration 140A/B orbiter vertical tail

MODEL SCALE: 0.010 MODEL DRAWING: SS-A00148, Release 6

DRAWING NUMBER: VL70-000146A

DIMENSIONS:	FULL SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) - Ft^2		
Planform	413.253	0.041
Span (Theo) - In.	315.720	3.157
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.404	0.404
Sweep-Back Angles, Degrees.		
Leading Edge	45.000	45.000
Trailing Edge	26.2	26.2
0.25 Element Line	41.130	41.130
Chords:		
Root (Theo) WP	268.500	2.684
Tip (Theo) WP	108.470	1.085
MAC	199.808	1.998
Fus. Sta. of .25 MAC	1463.50	14.635
W.P. of .25 MAC	635.522	6.355
B.L. of .25 MAC	0.0	0.0
Airfoil Section		
Leading Wedge Angle - Deg.	10.00	10.0
Trailing Wedge Angle - Deg.	14.920	14.920
Leading Edge Radius	2.00	0.02
Void Area	13.17	0.0013
Blanketed Area	0.00	0.00

TABLE III (CONL'D)

MODEL COMPONENT: WING-W116

GENERAL DESCRIPTION: Configuration 4

NOTE: (Identical to Wing114 except airfoil thickness. Dihedral angle is along trailing edge of wing.)

MODEL SCALE: 0.010

TEST NO.

DWG. NO. VL70-000140A, -000200

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2		
Planform	2690.0	0.2690
Span (Theo In.	936.68	9.367
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	0.500	0.500
Aerodynamic Twist, degrees	3.000	3.000
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	- 10.056	- 10.056
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.O.O.	689.24	6.892
Tip, (Theo) B.P.	137.85	1.379
MAC	474.81	4.748
Fus. Sta. of .25 MAC	1136.83	11.368
W.P. of .25 MAC	290.58	2.906
B.L. of .25 MAC	182.13	1.821
EXPOSED DATA		
Area (Theo) Ft^2	1751.50	0.1752
Span, (Theo) In. BP108	720.68	7.207
Aspect Ratio	2.059	2.059
Taper Ratio	0.245	0.245
Chords		
Root BP108	562.09	5.621
Tip 1.00 $\frac{b}{2}$	137.85	1.379
MAC	392.83	3.928
Fus. Sta. of .25 MAC	1185.98	11.860
W.P. of .25 MAC	294.30	2.943
B.L. of .25 MAC	251.77	2.518
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root $\frac{b}{2}$ =	0.113	0.113
Tip $\frac{b}{2}$ =	0.120	0.120
Data for (1) of (2) Sides		
Leading Edge Cuff		
Planform Area Ft^2	113.18	0.011
Leading Edge Intersects Fus M. L. @ Sta	500.00	5.000
Leading Edge Intersects Wing @ Sta	1024.00	10.240

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

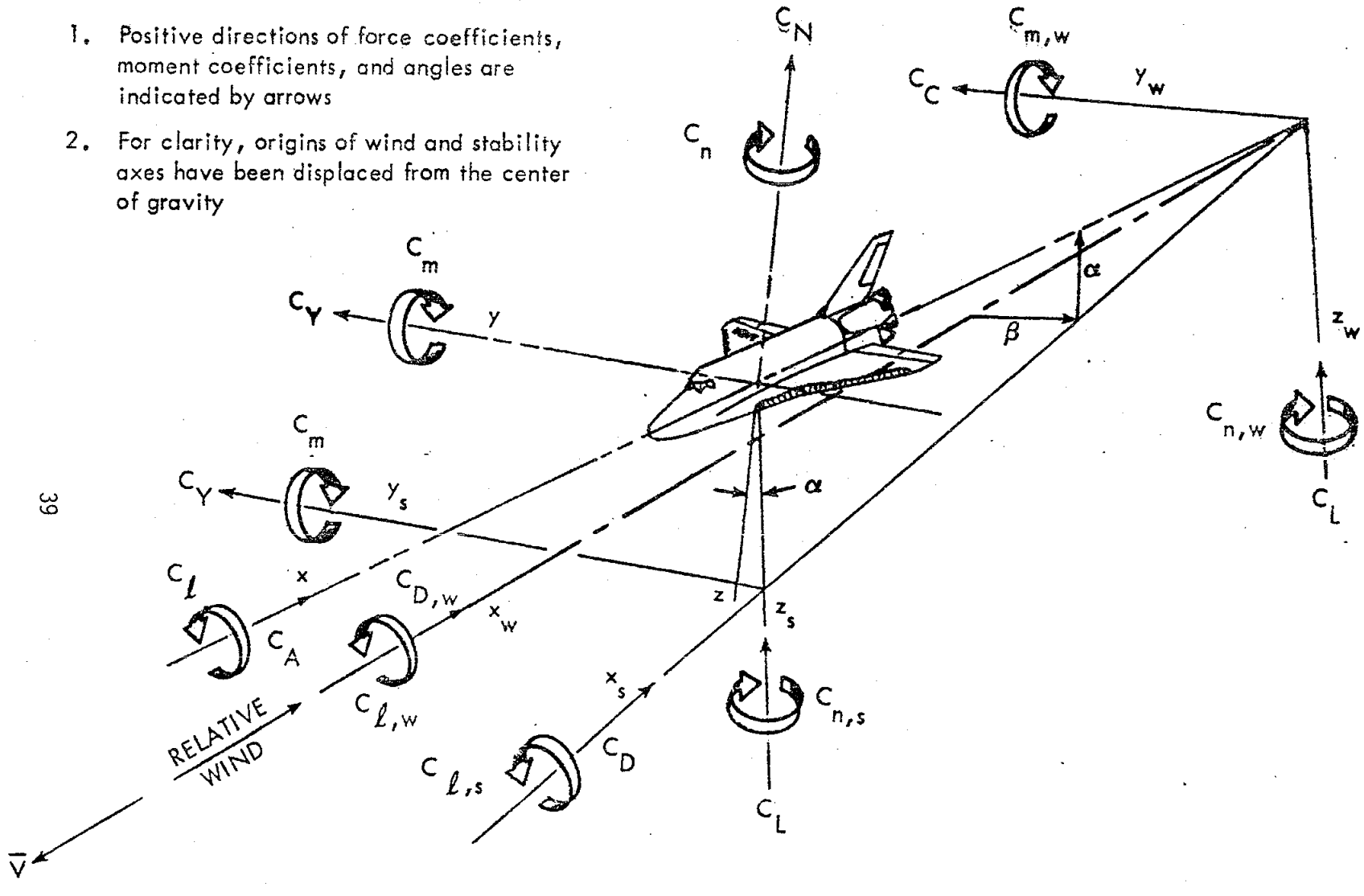
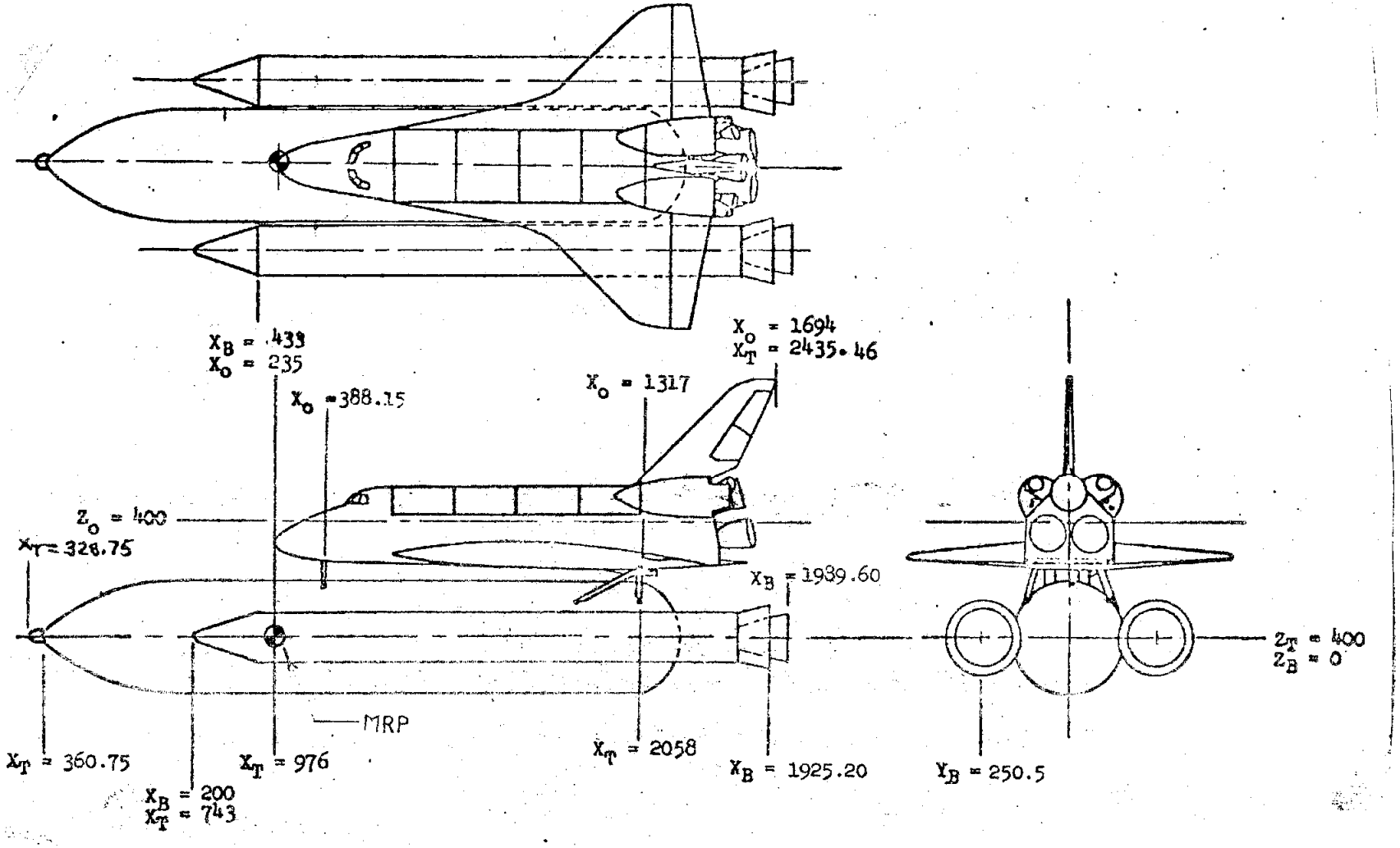
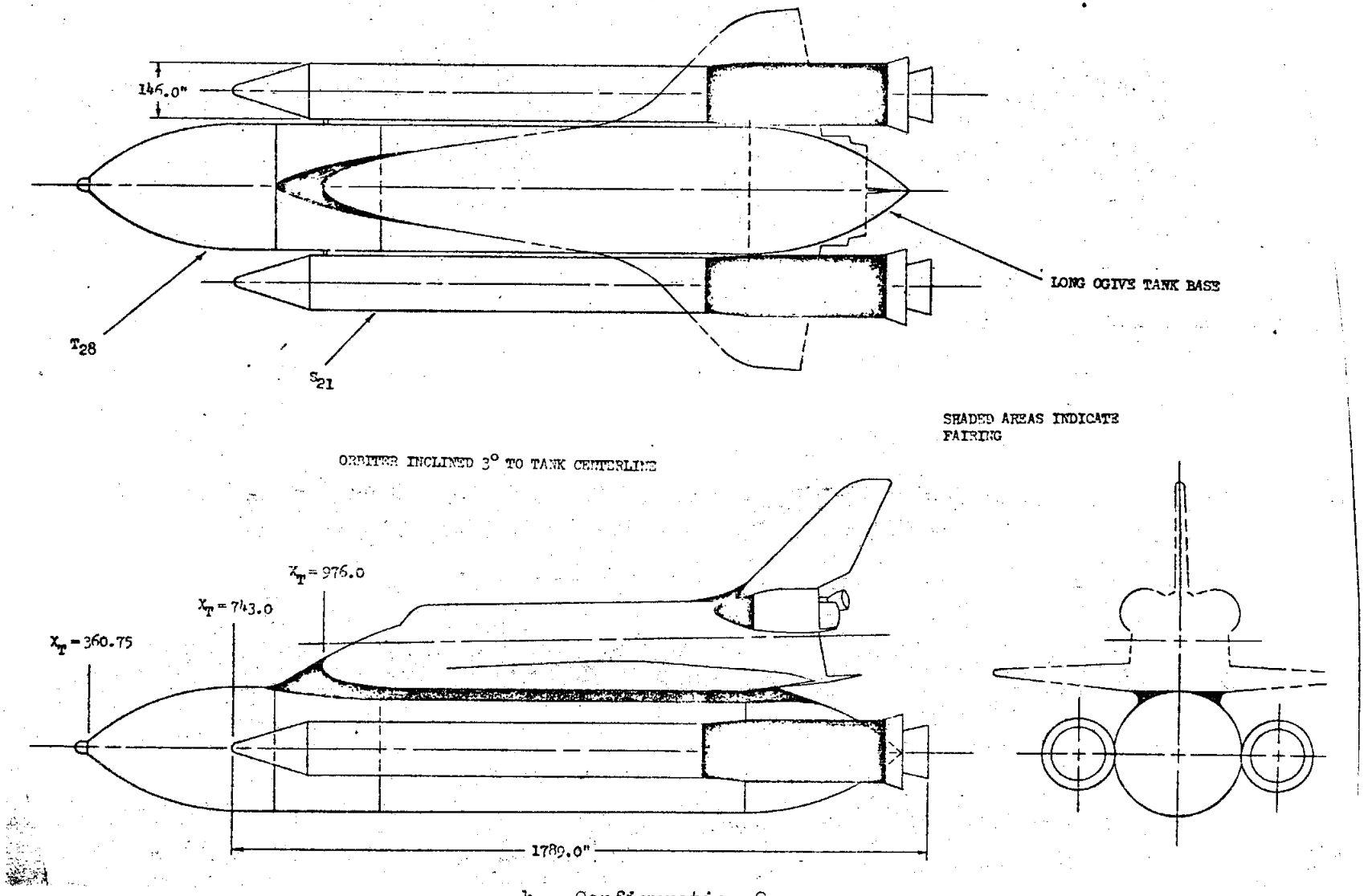


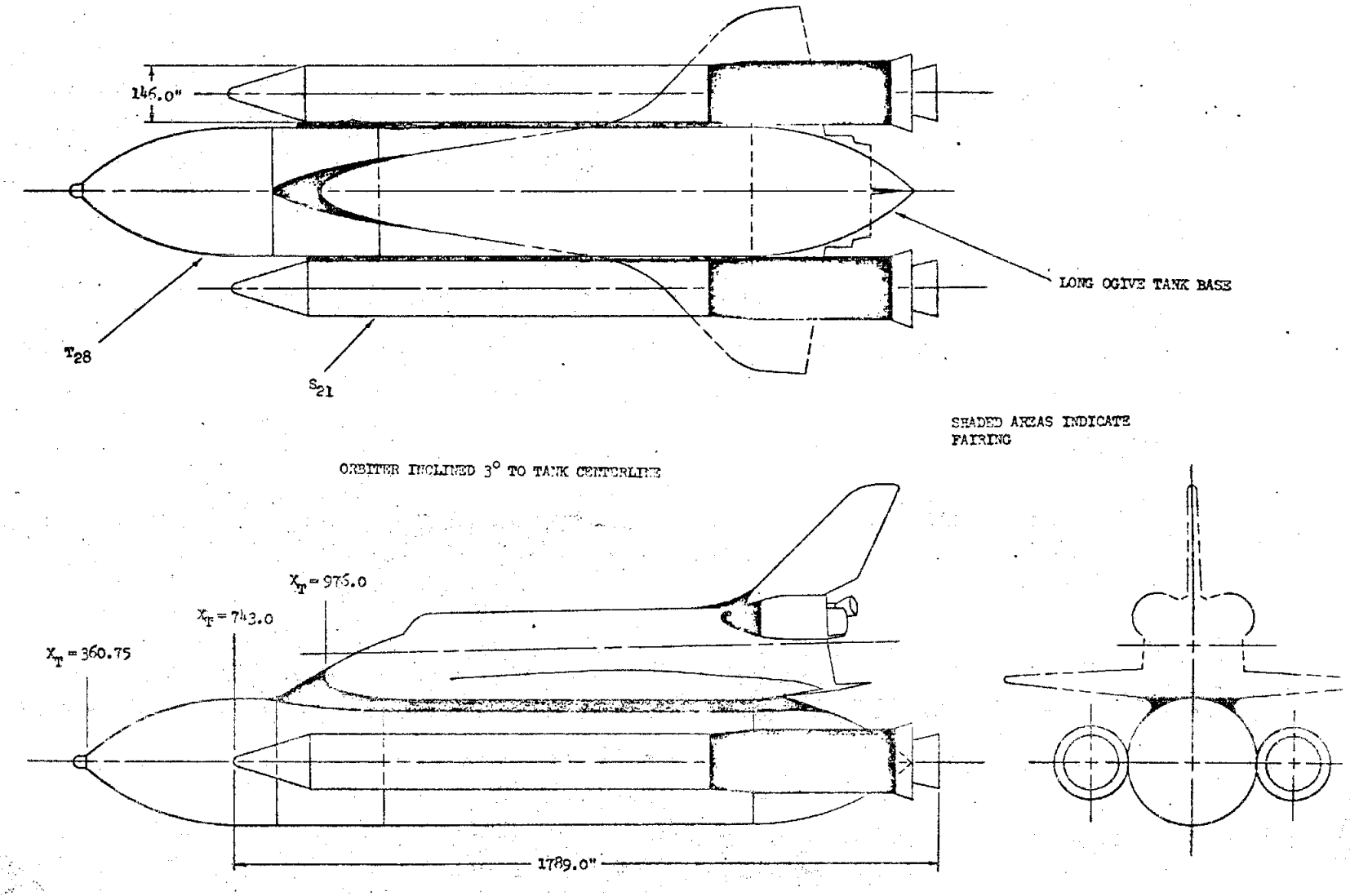
Figure 1. - Axis Systems.



a. Baseline Configuration
Figure 2. - Model Sketches



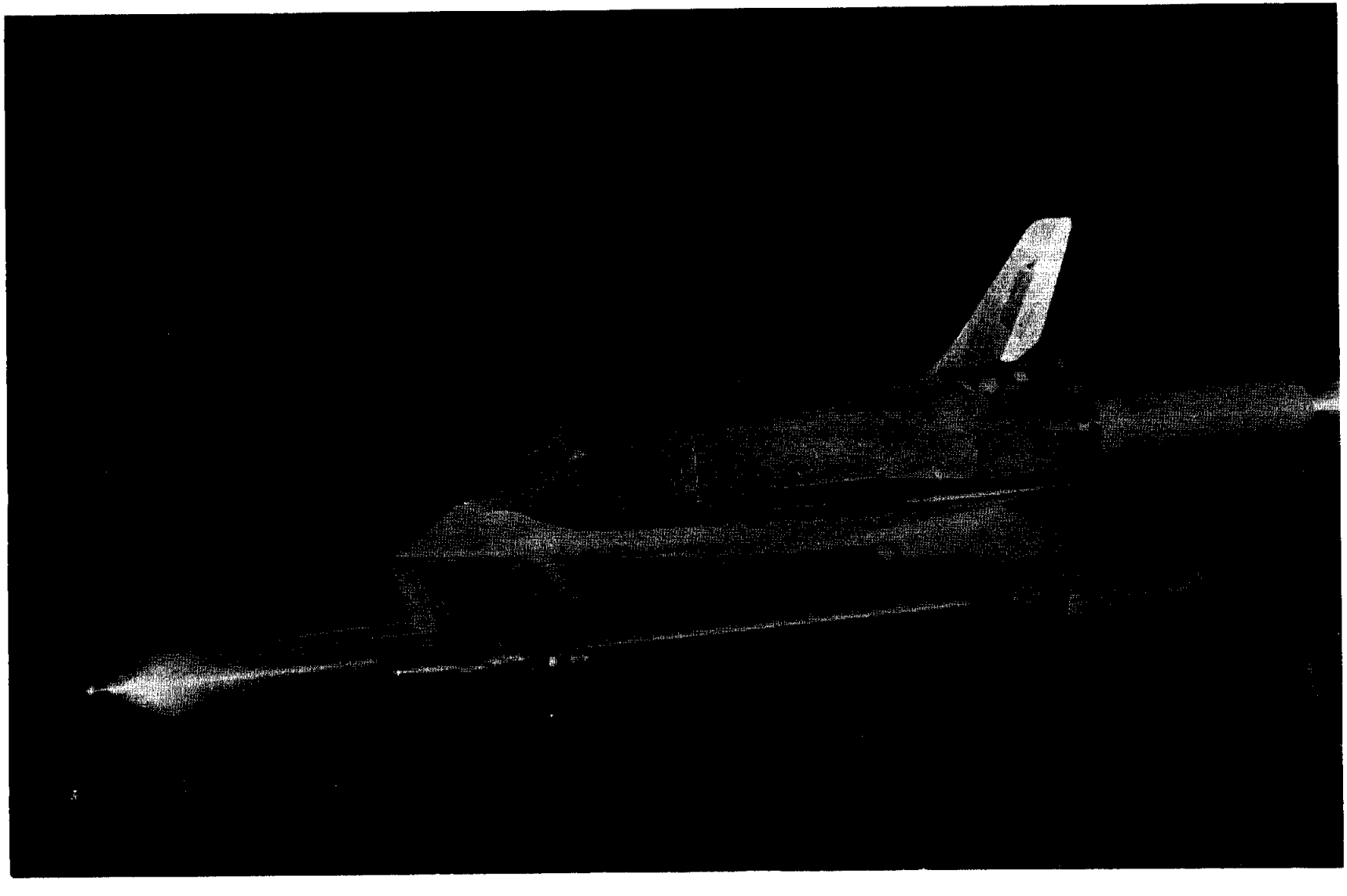
b. Configuration 2
Figure 2. - Model Sketches



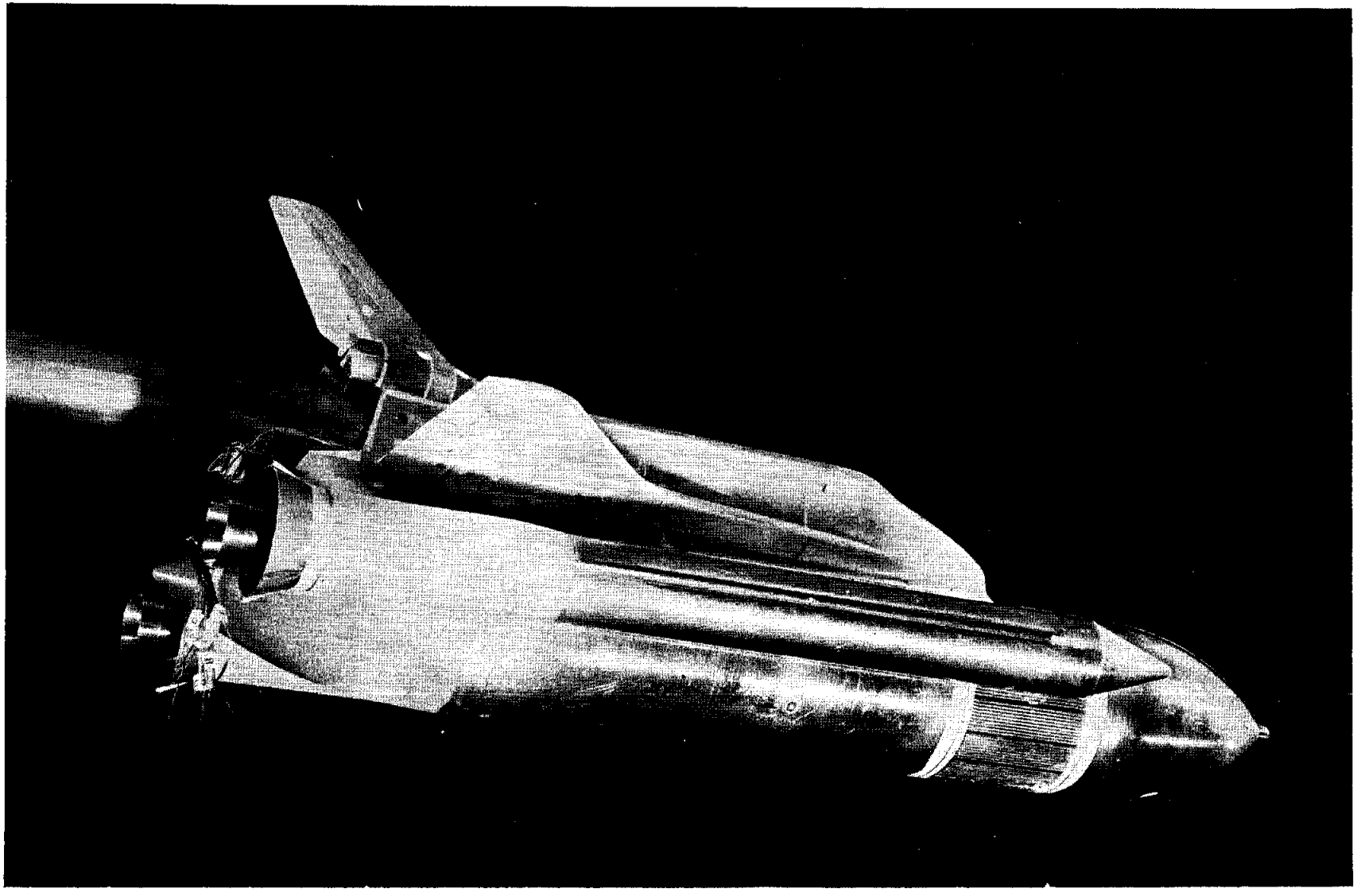
c. Configuration 3

Figure 2. - Model Sketches

a. Configuration 2, 3/4 Rear View
Figure 3. - Model Photographs



b. Configuration 2, Side View
Figure 3. - Model Photographs



c. Configuration 2, Bottom View
Figure 3. - Model Photographs

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DATA FIGURES

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
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YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
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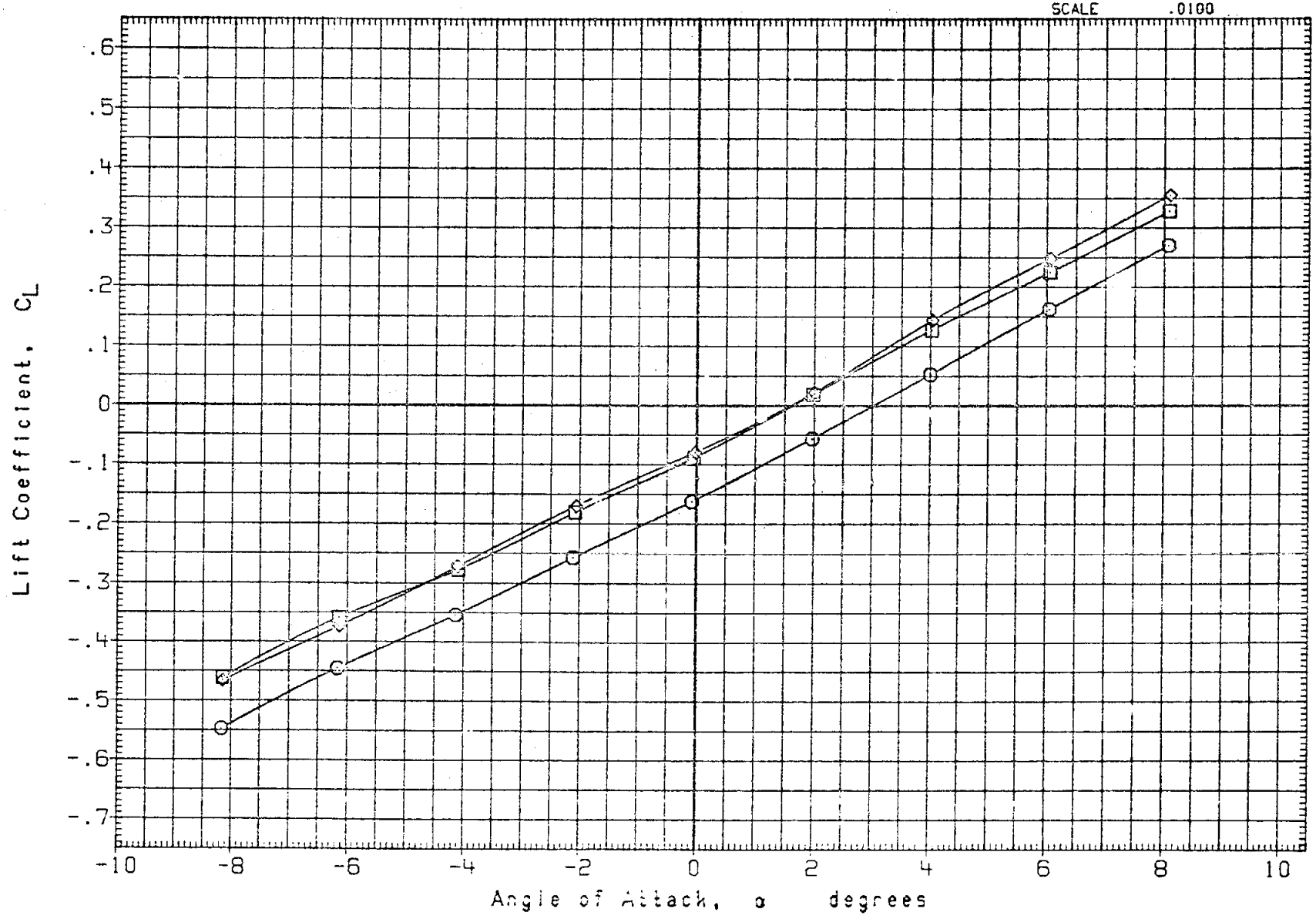

FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

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XMRP	976.0000	IN. XT
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ZMRP	400.0000	IN. ZT
SCALE	.0100	

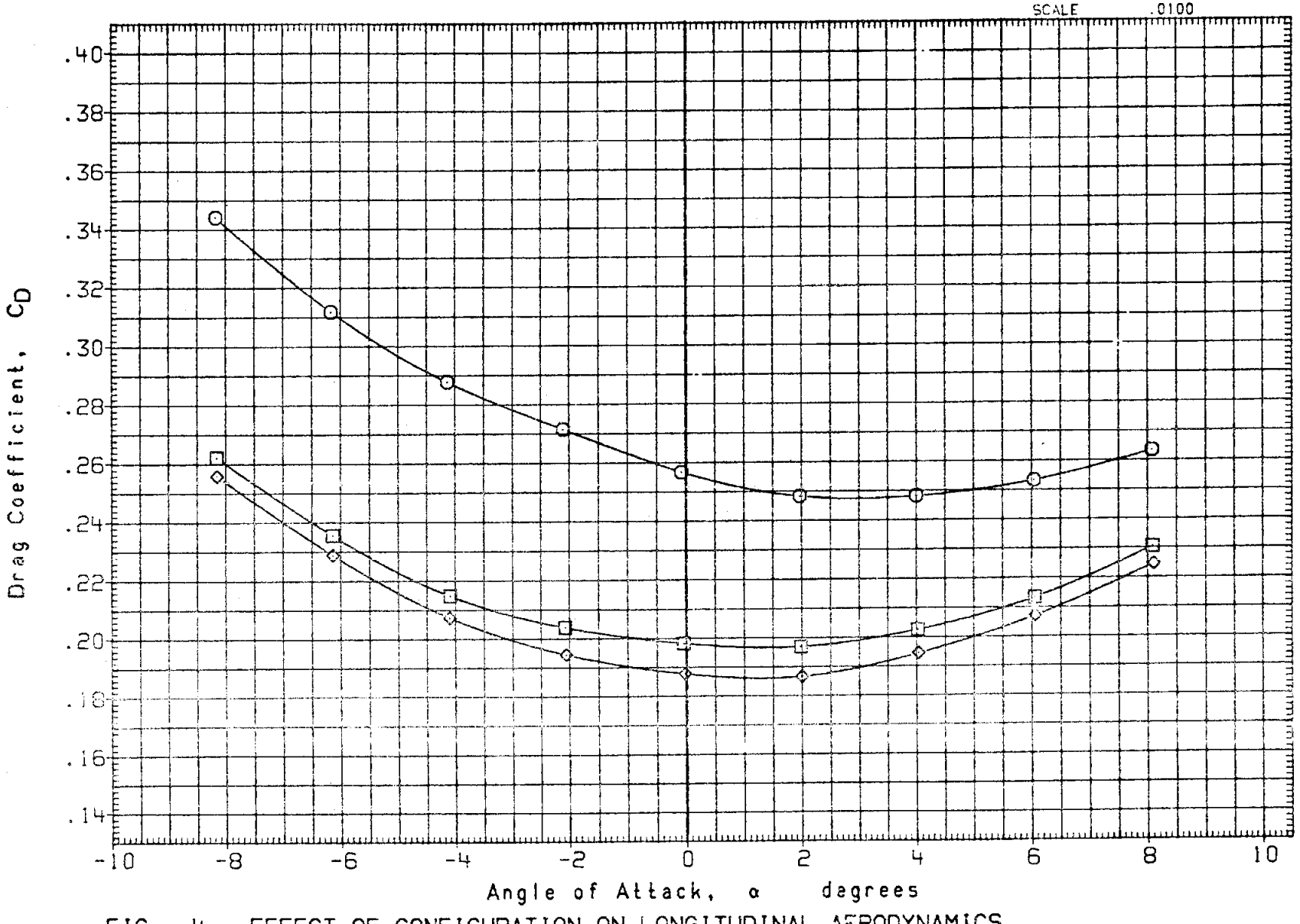

FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

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YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

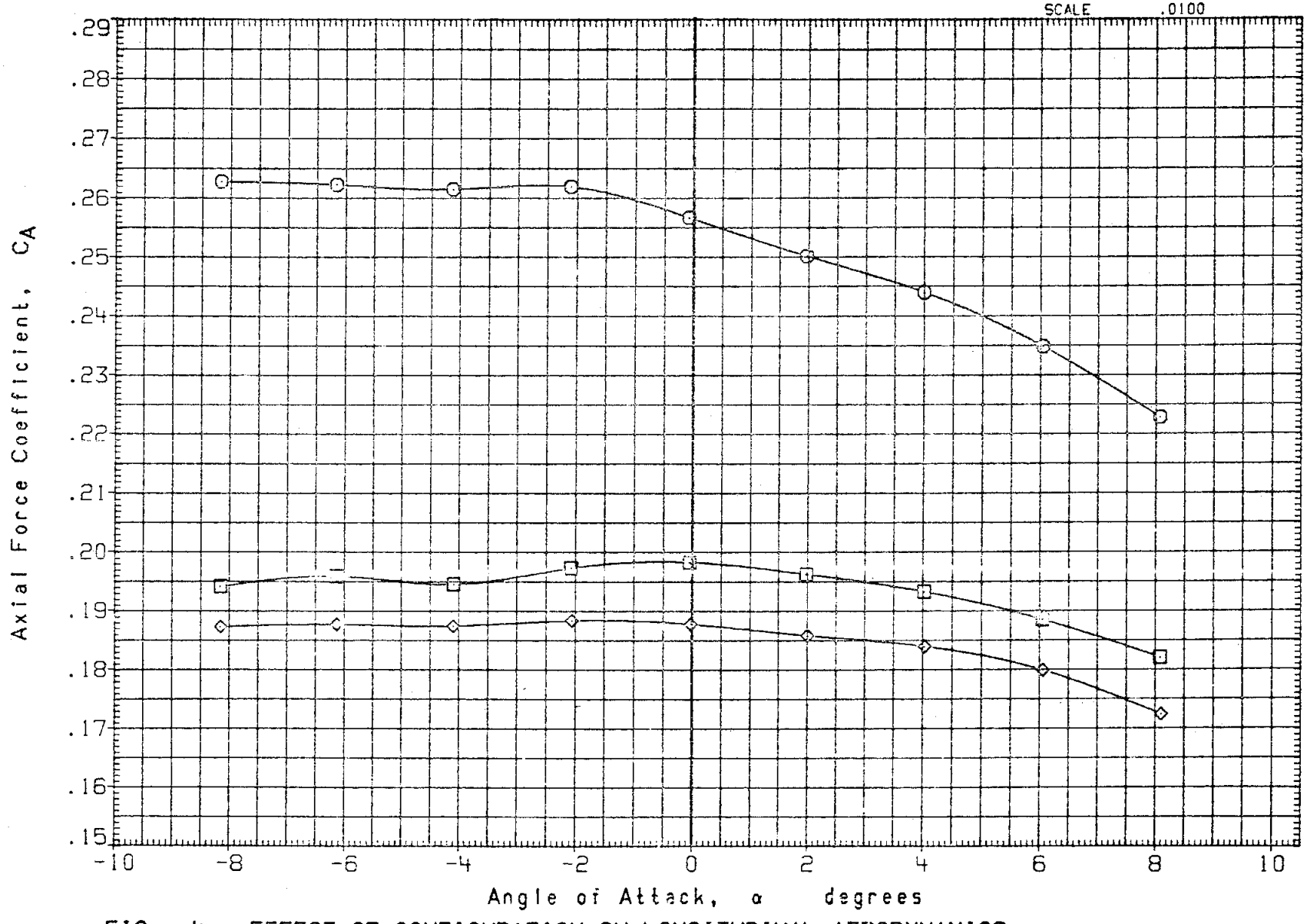

FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

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RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
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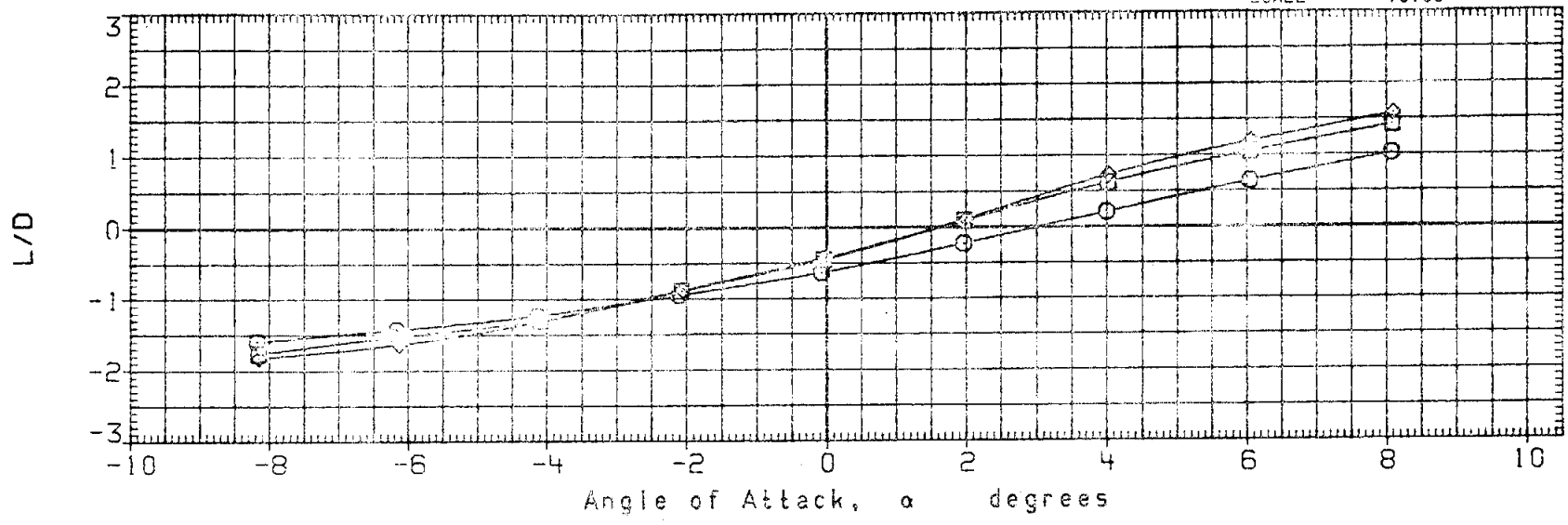
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



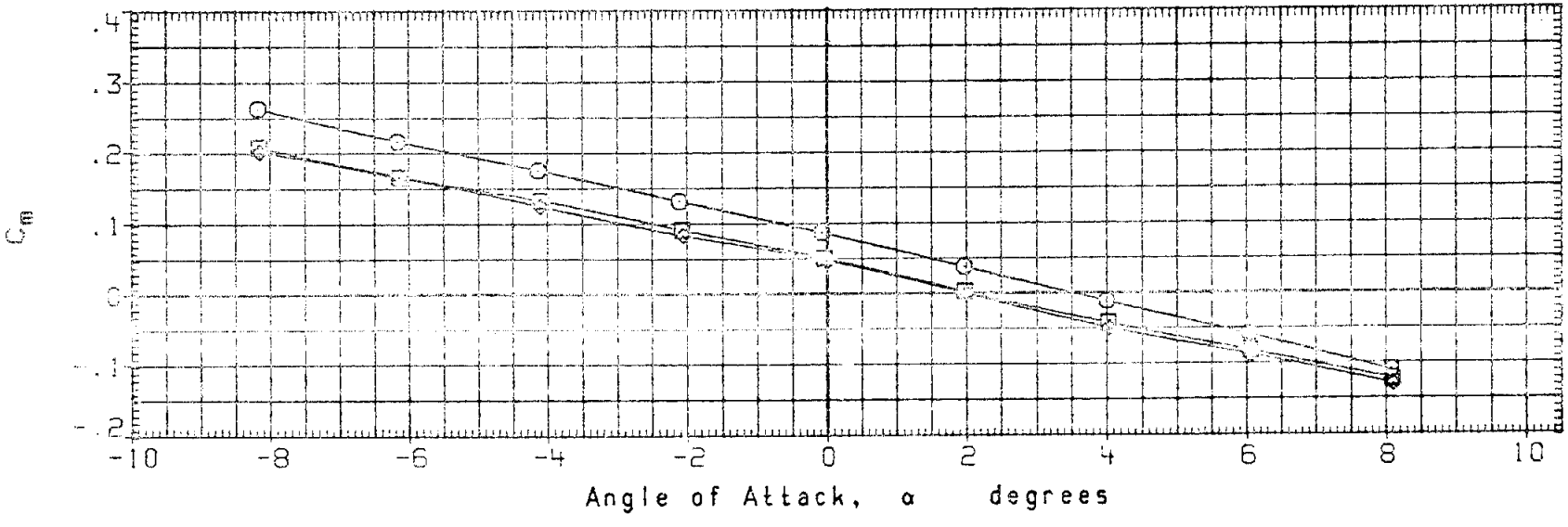


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
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RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

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YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
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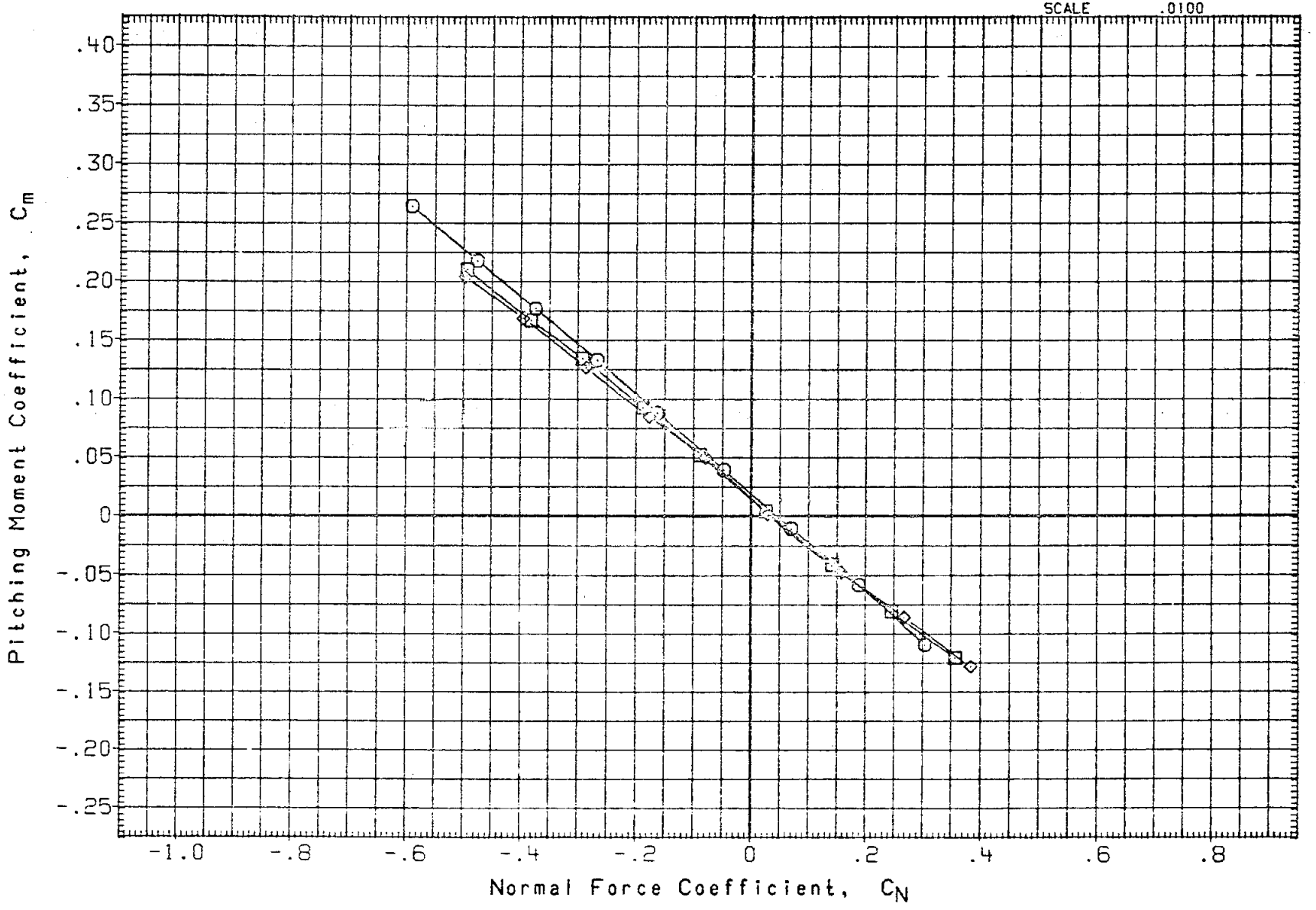

FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
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YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

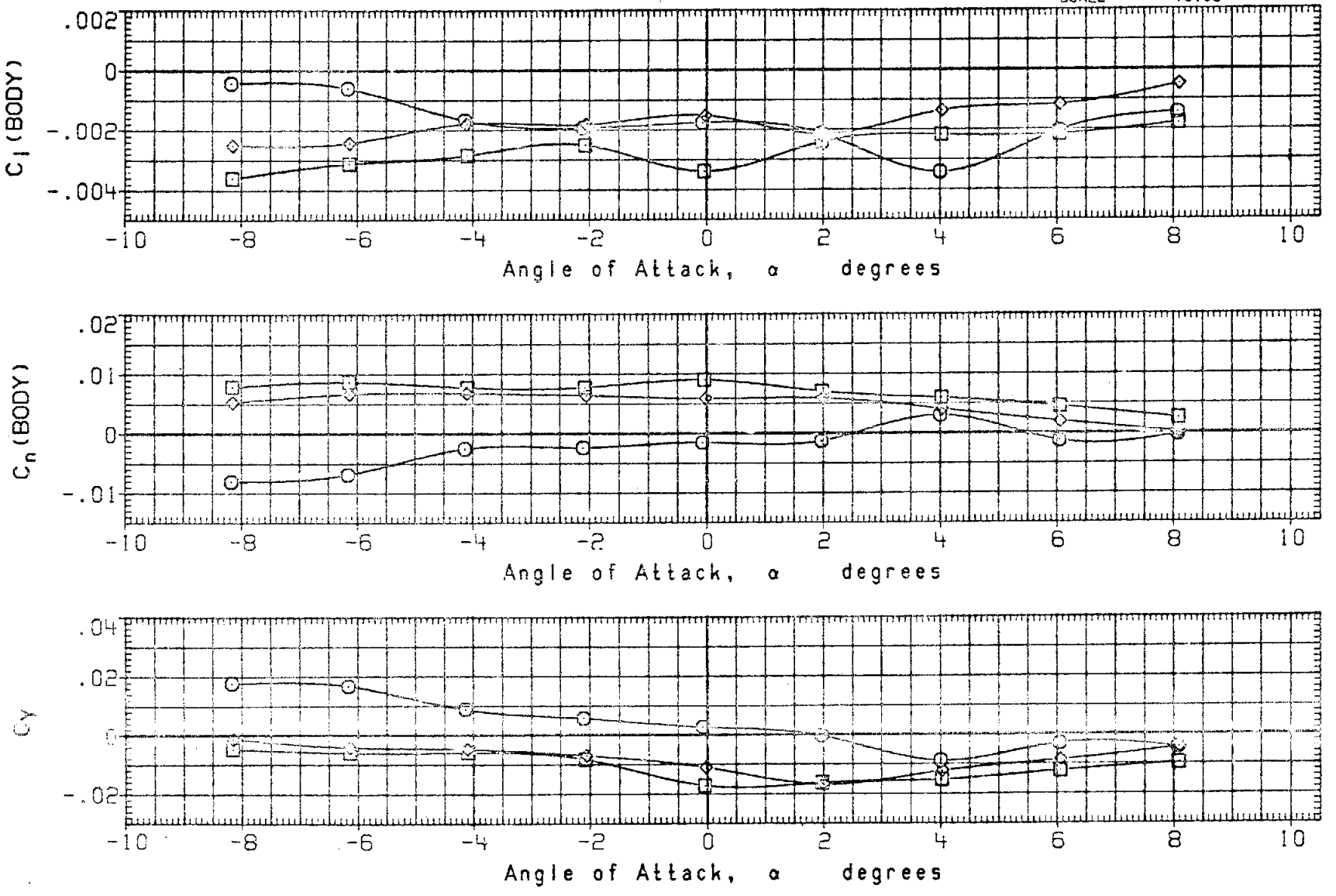


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

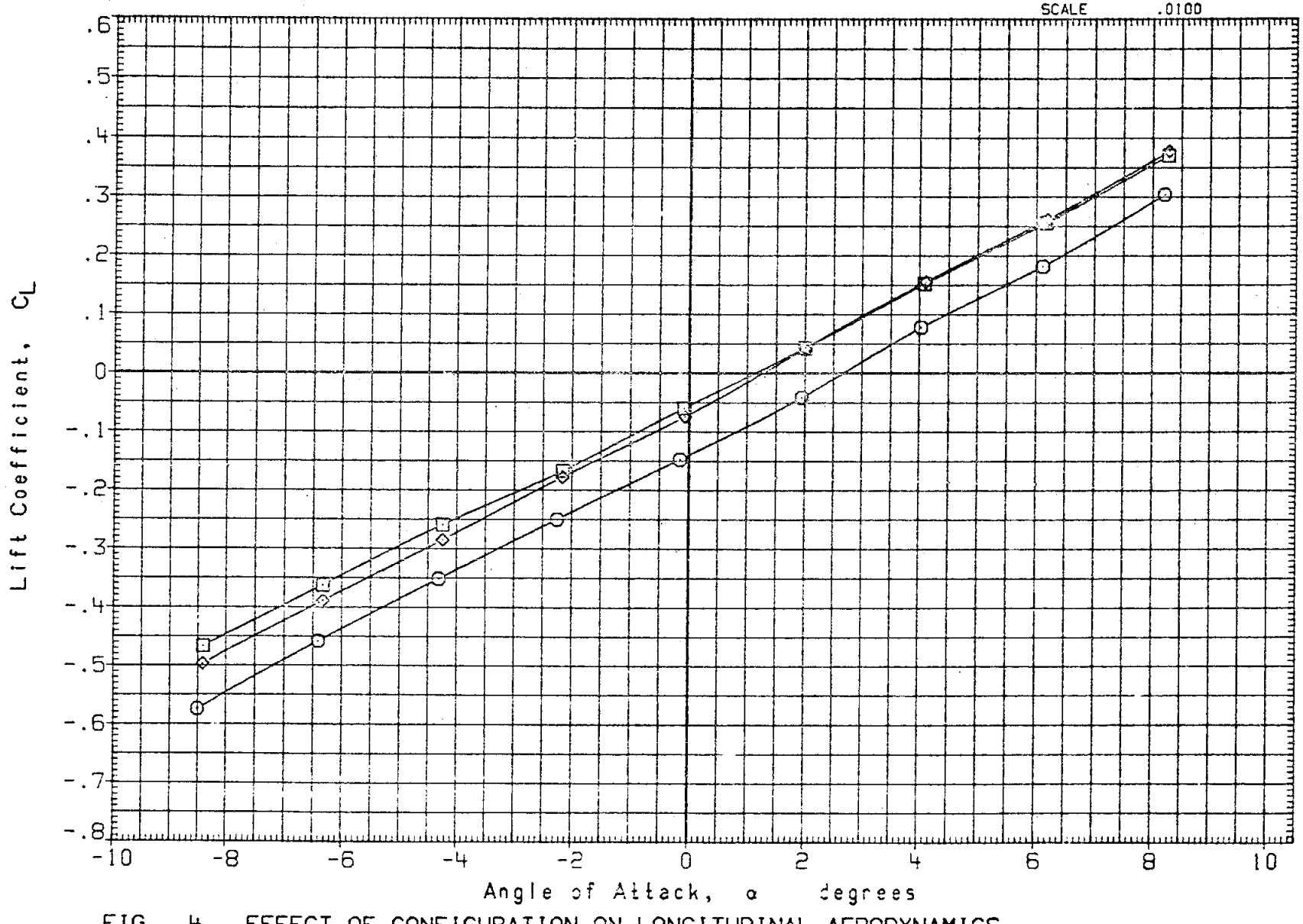


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

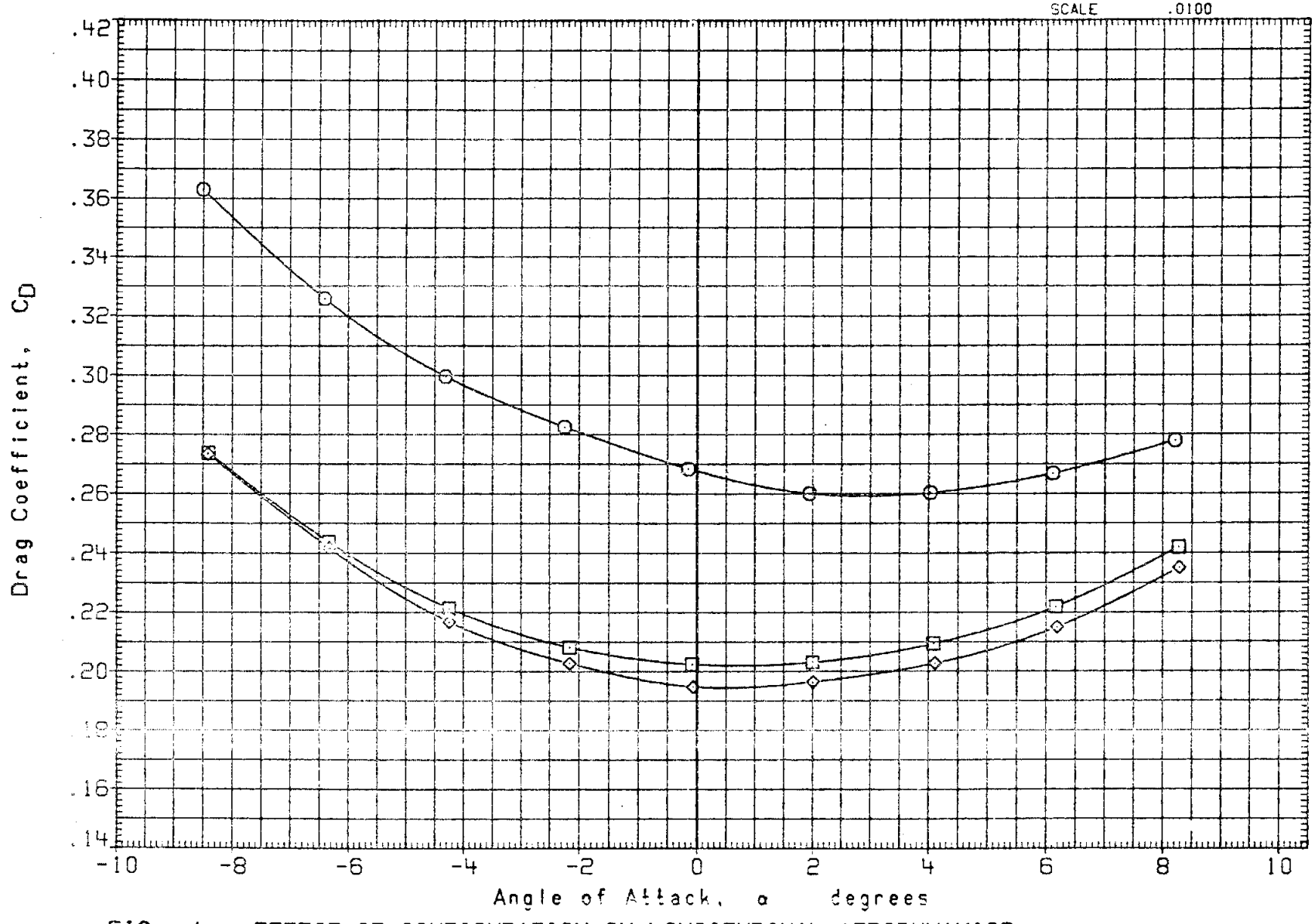


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

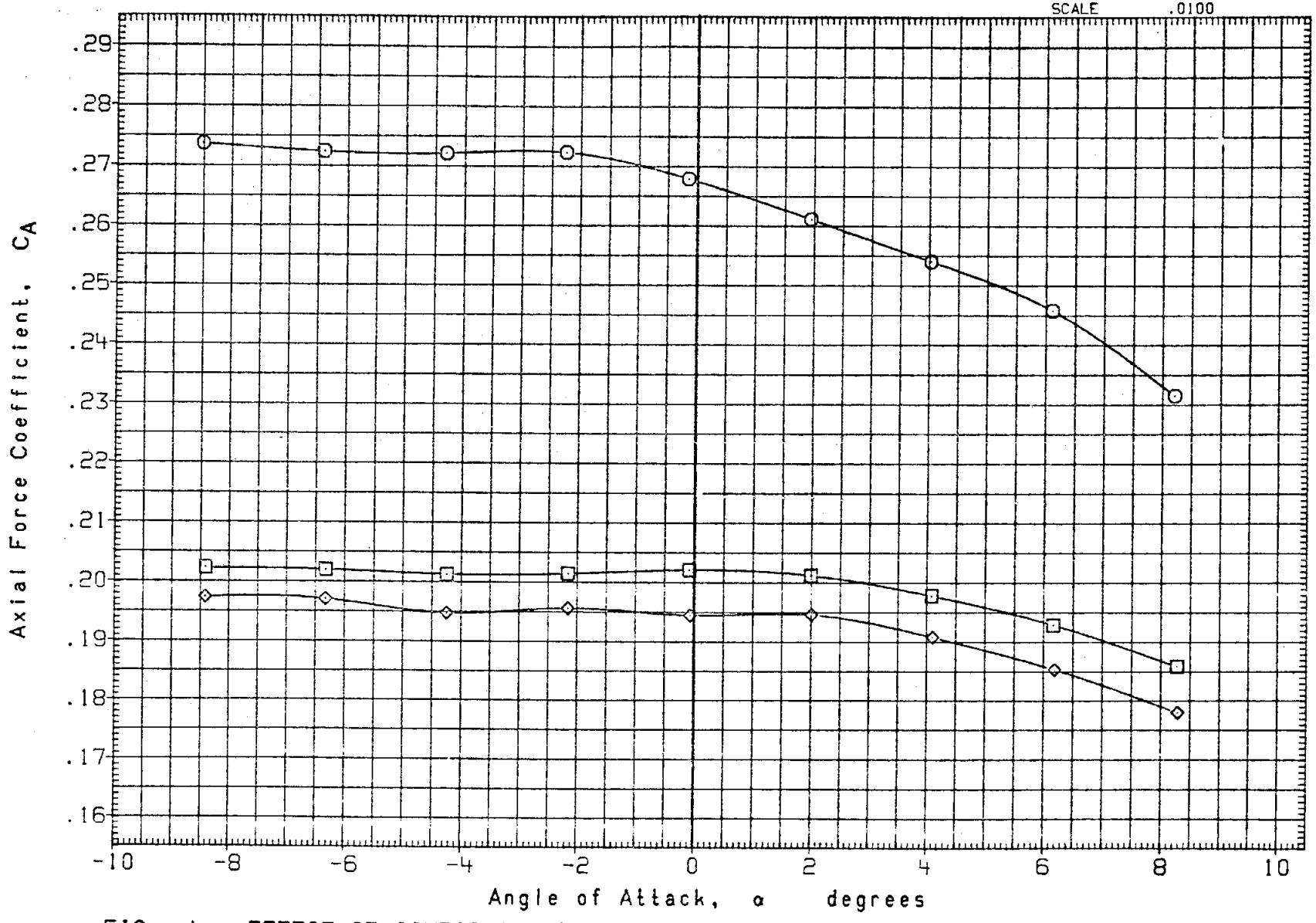


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

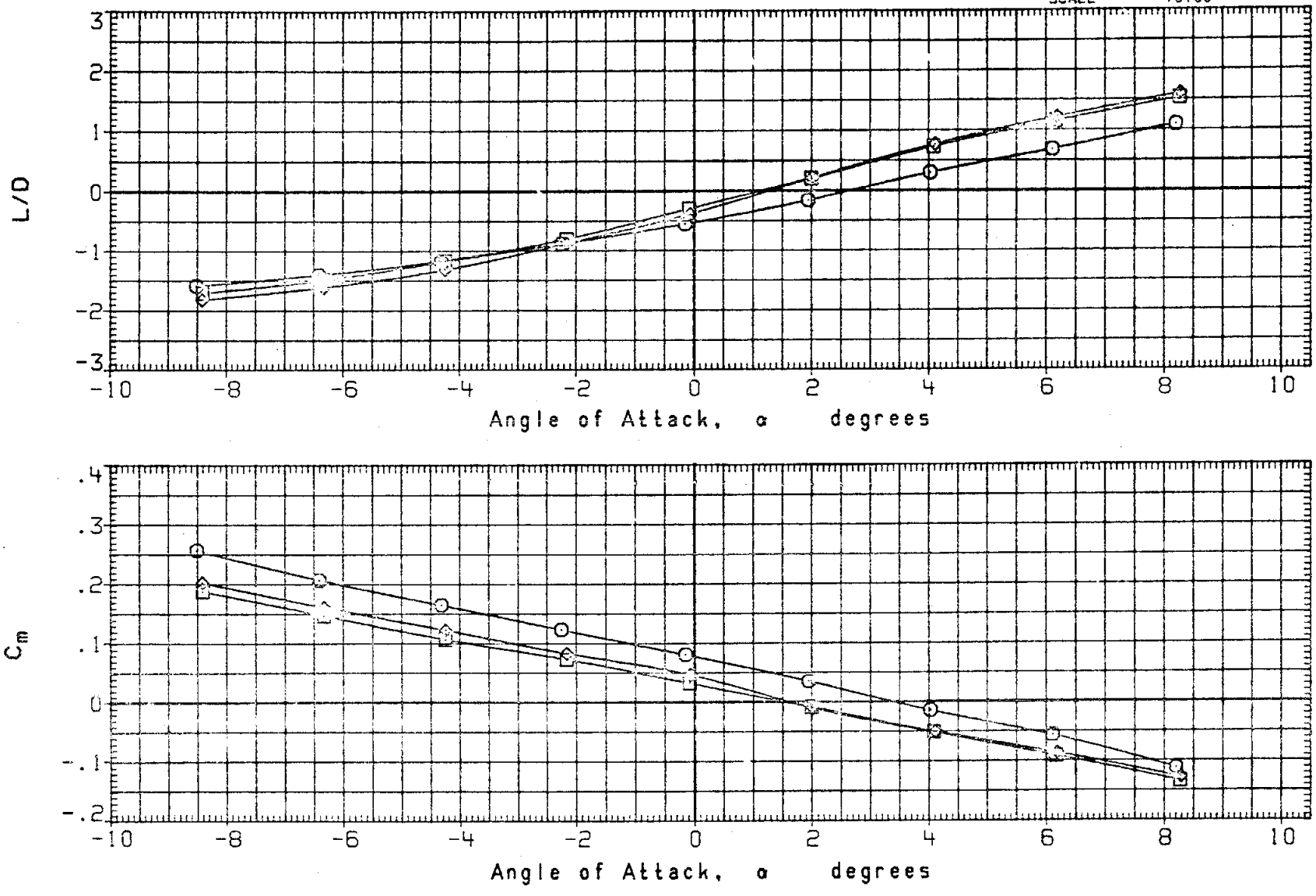


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

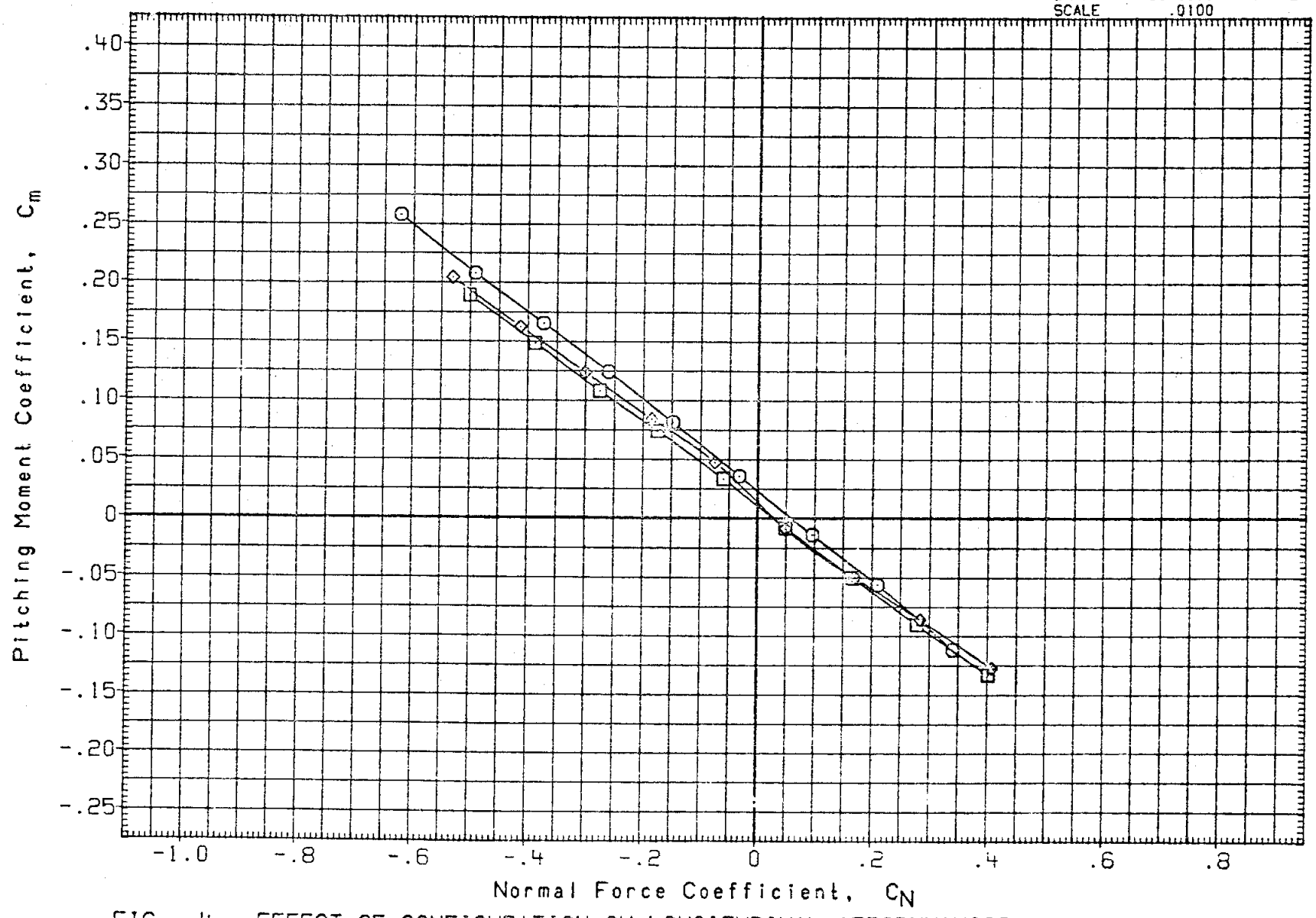


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

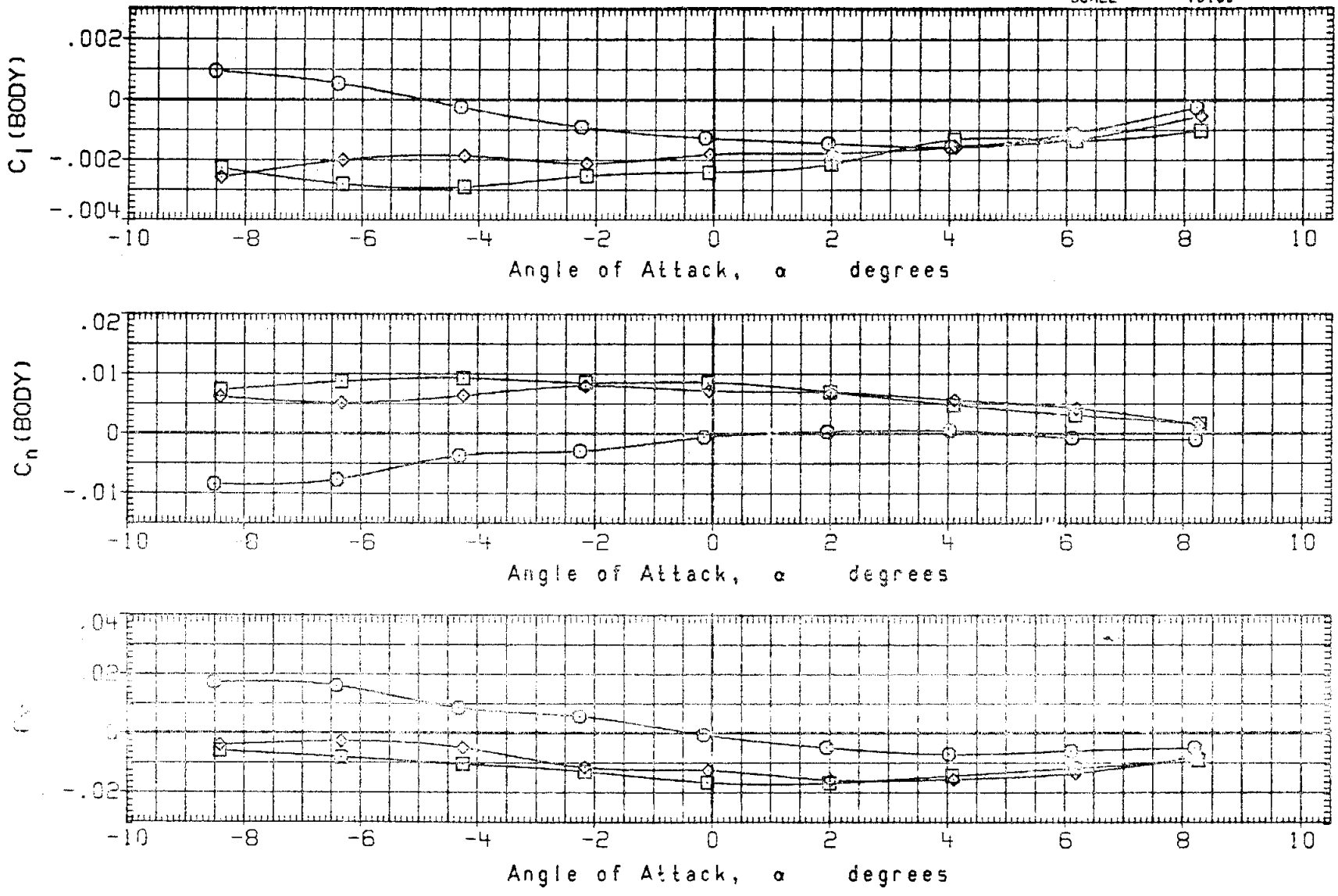


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

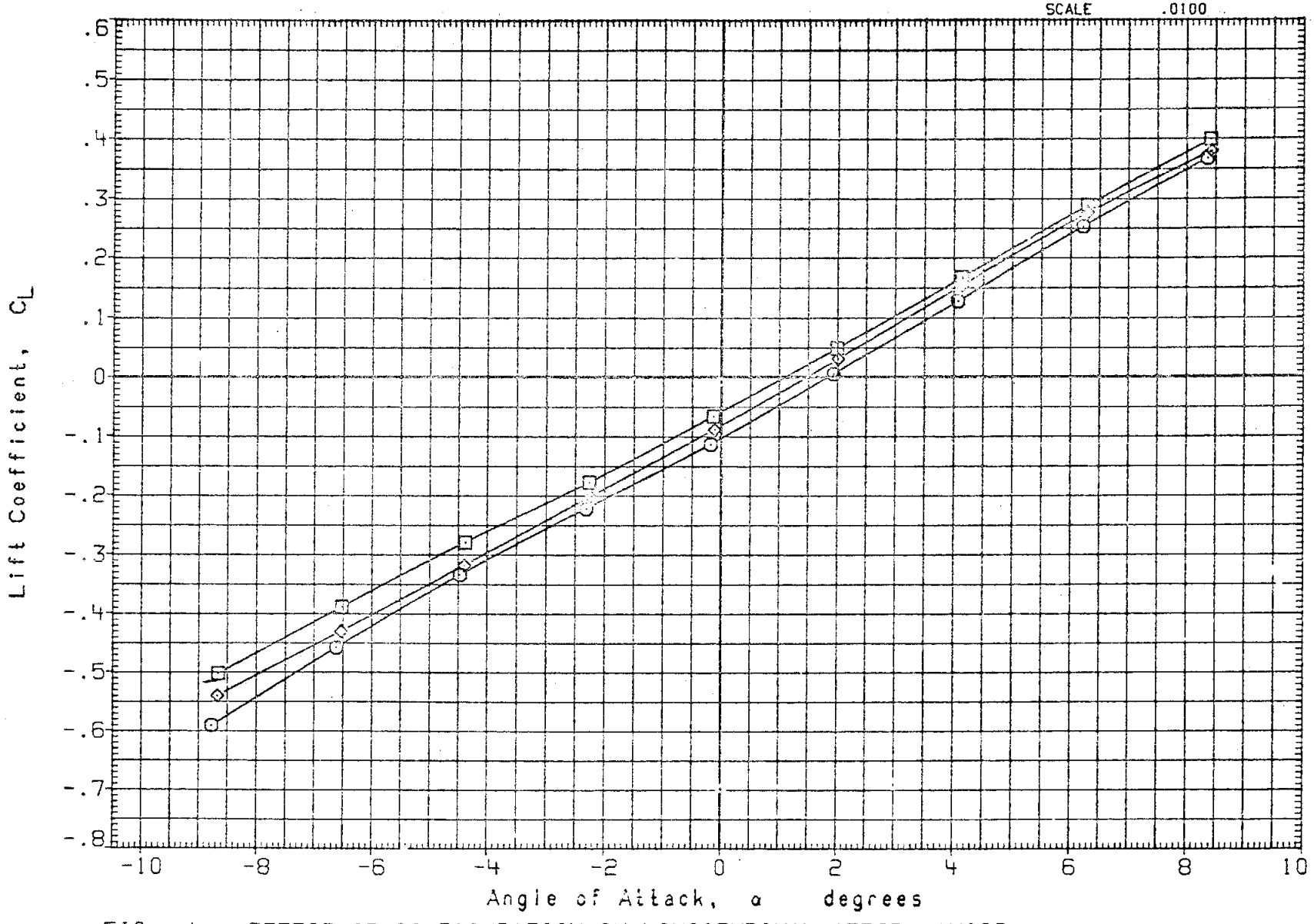


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC B-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC B-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC B-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	970.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

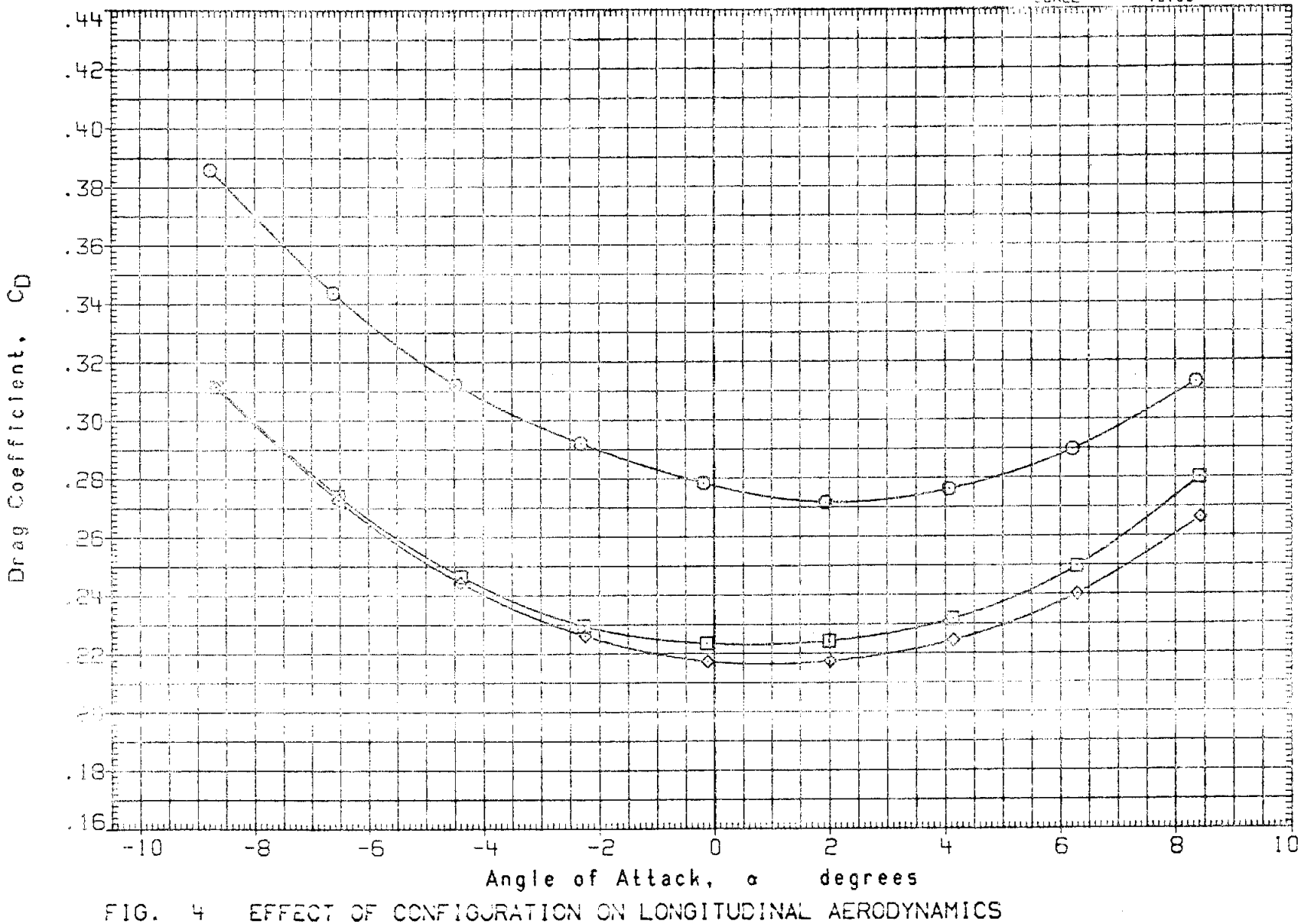


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

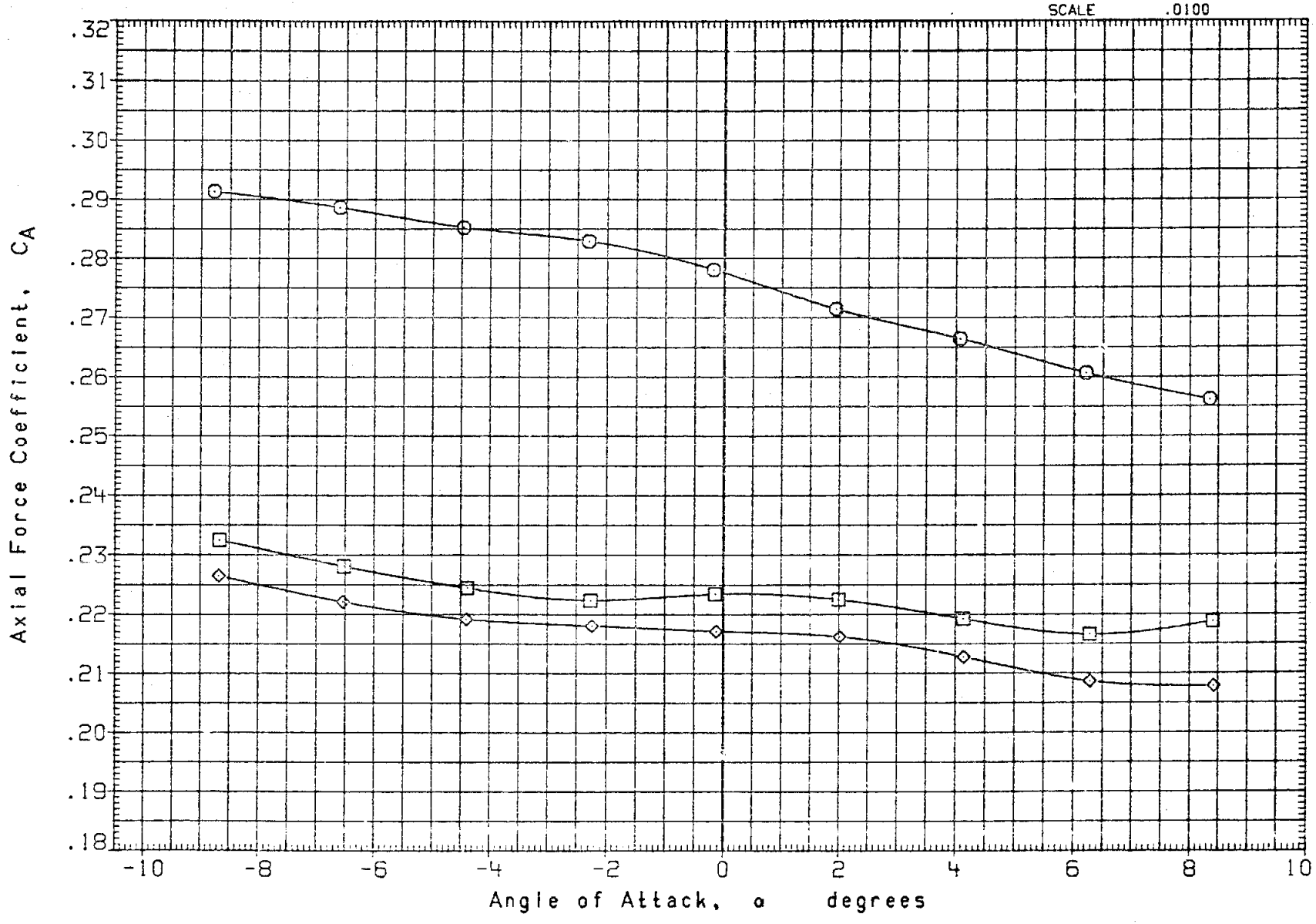


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

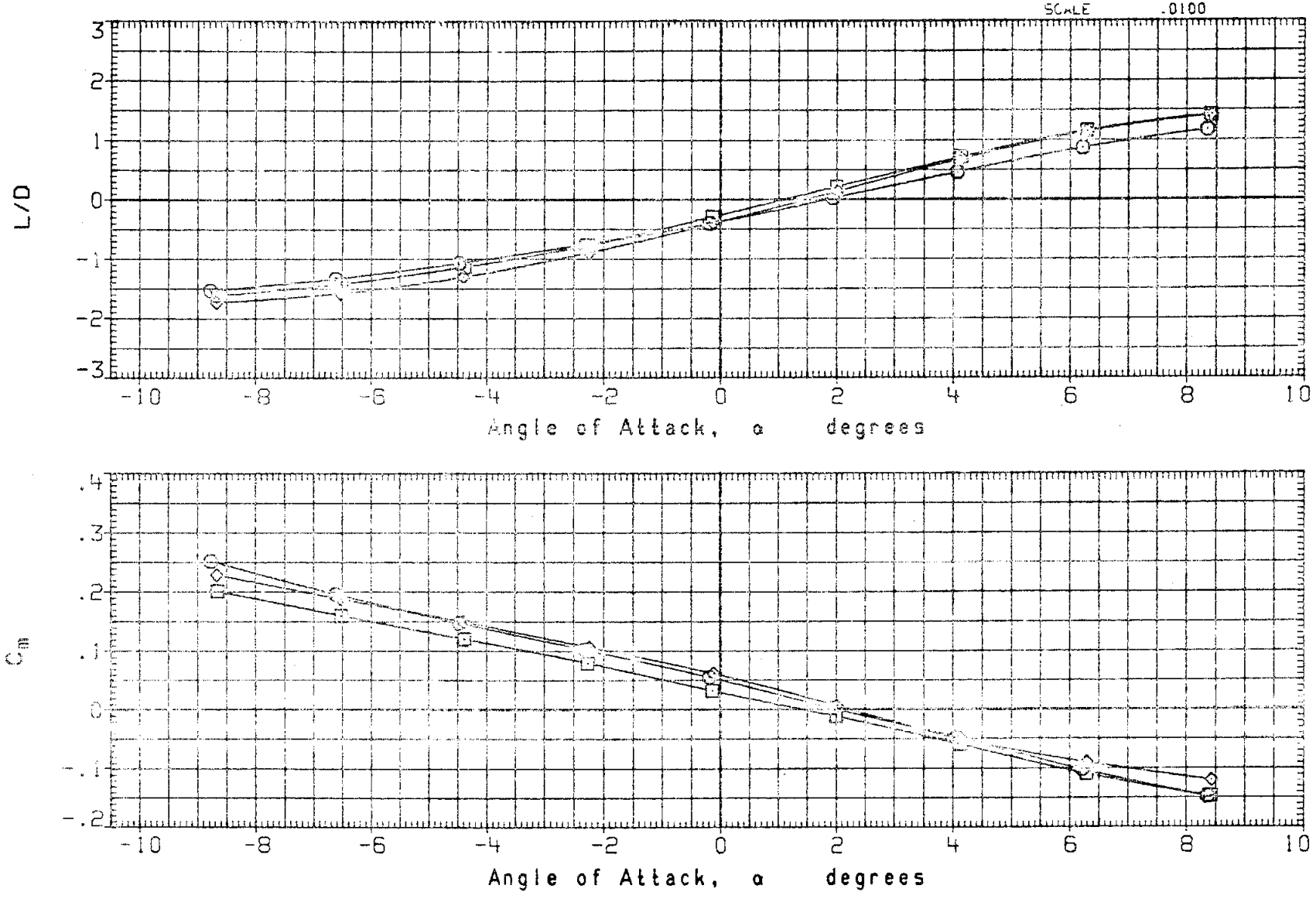


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

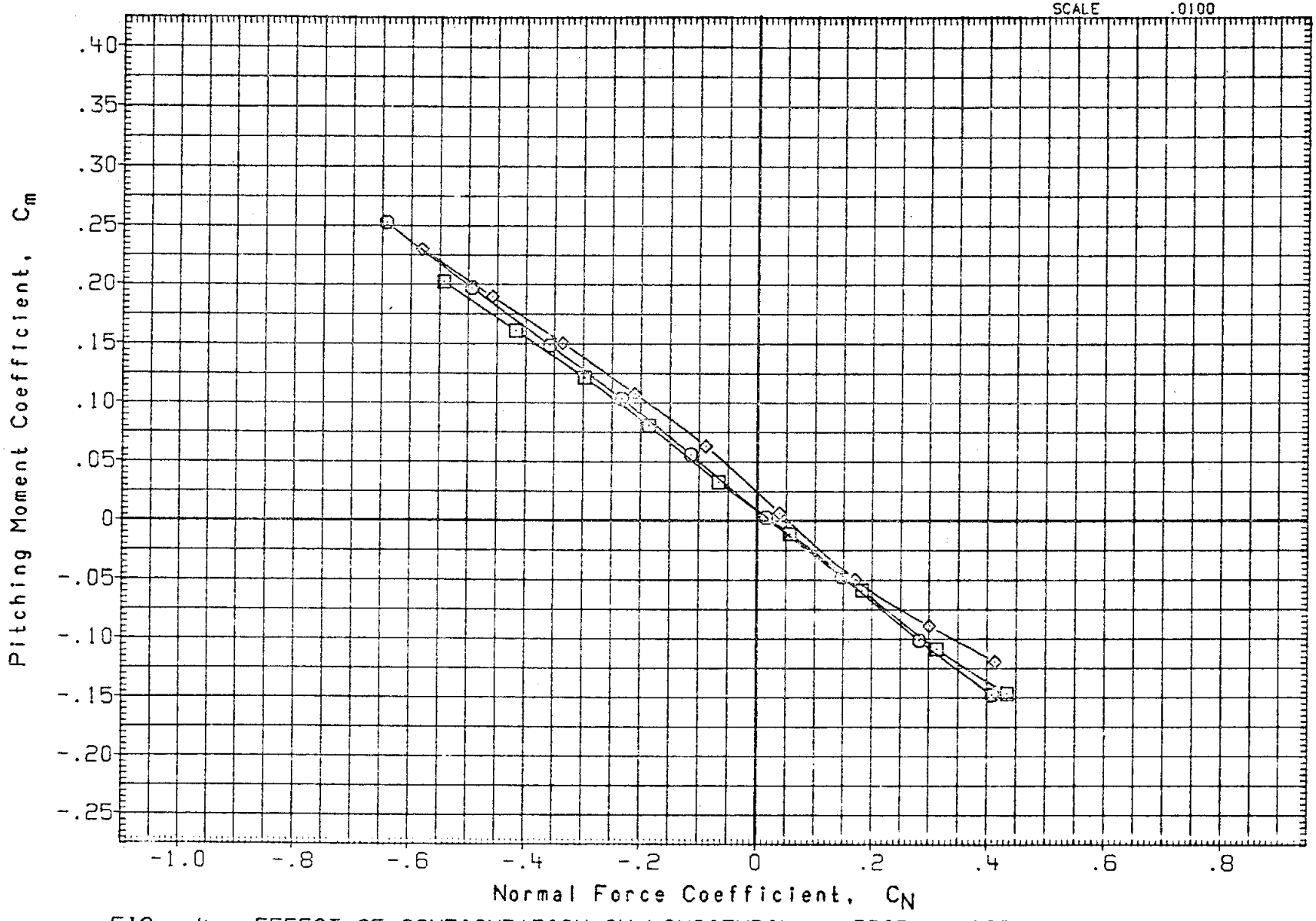


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

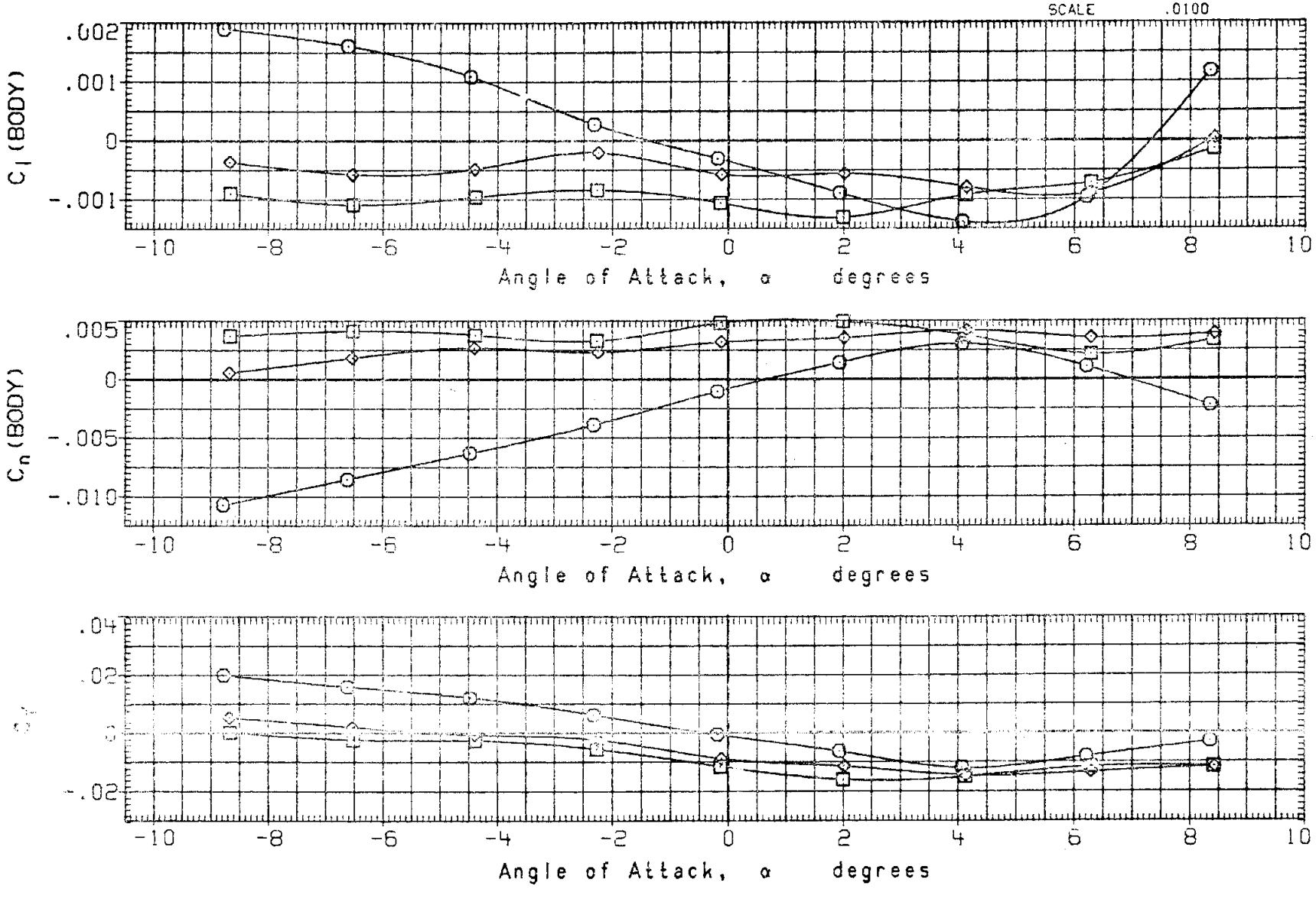


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

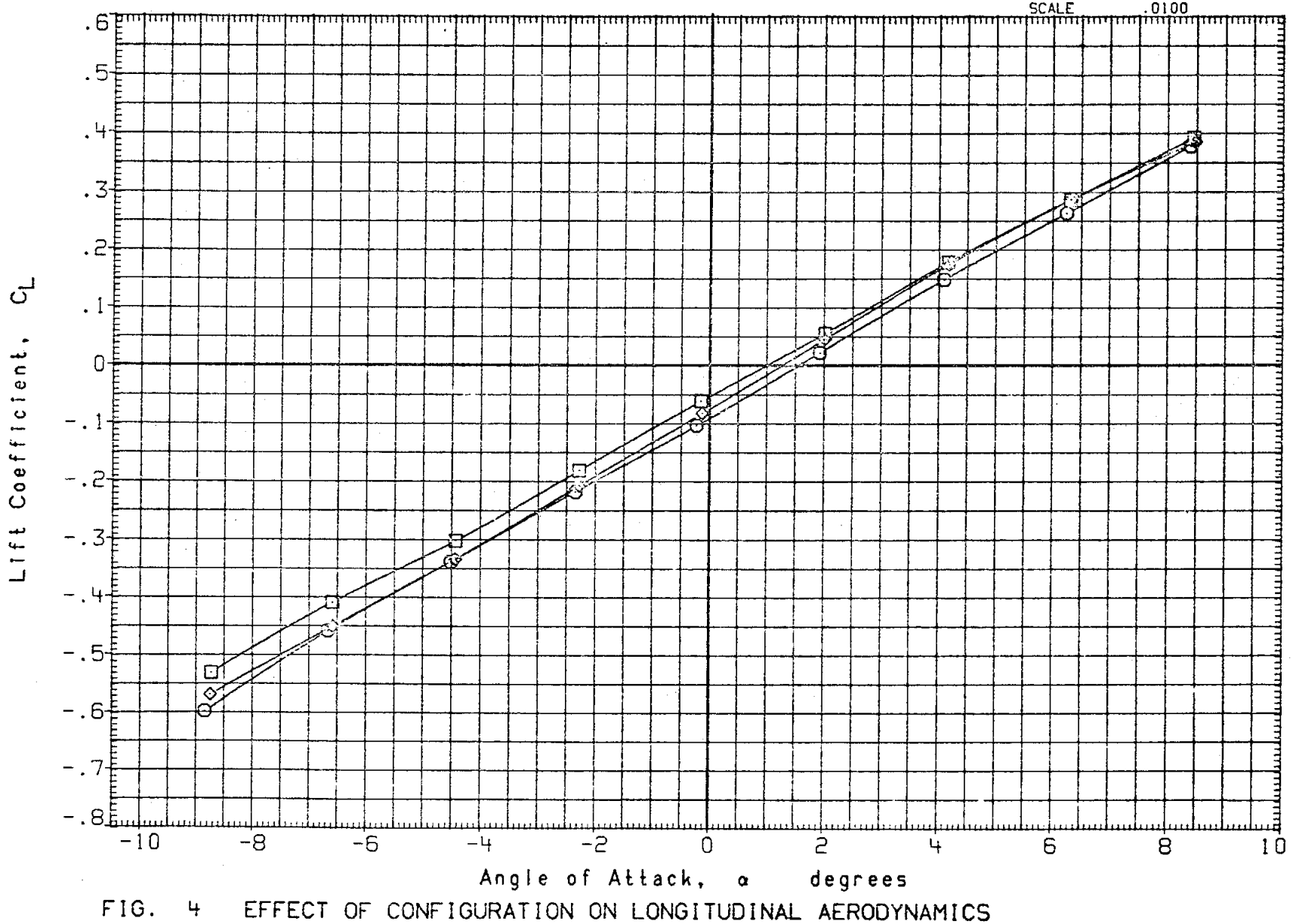


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

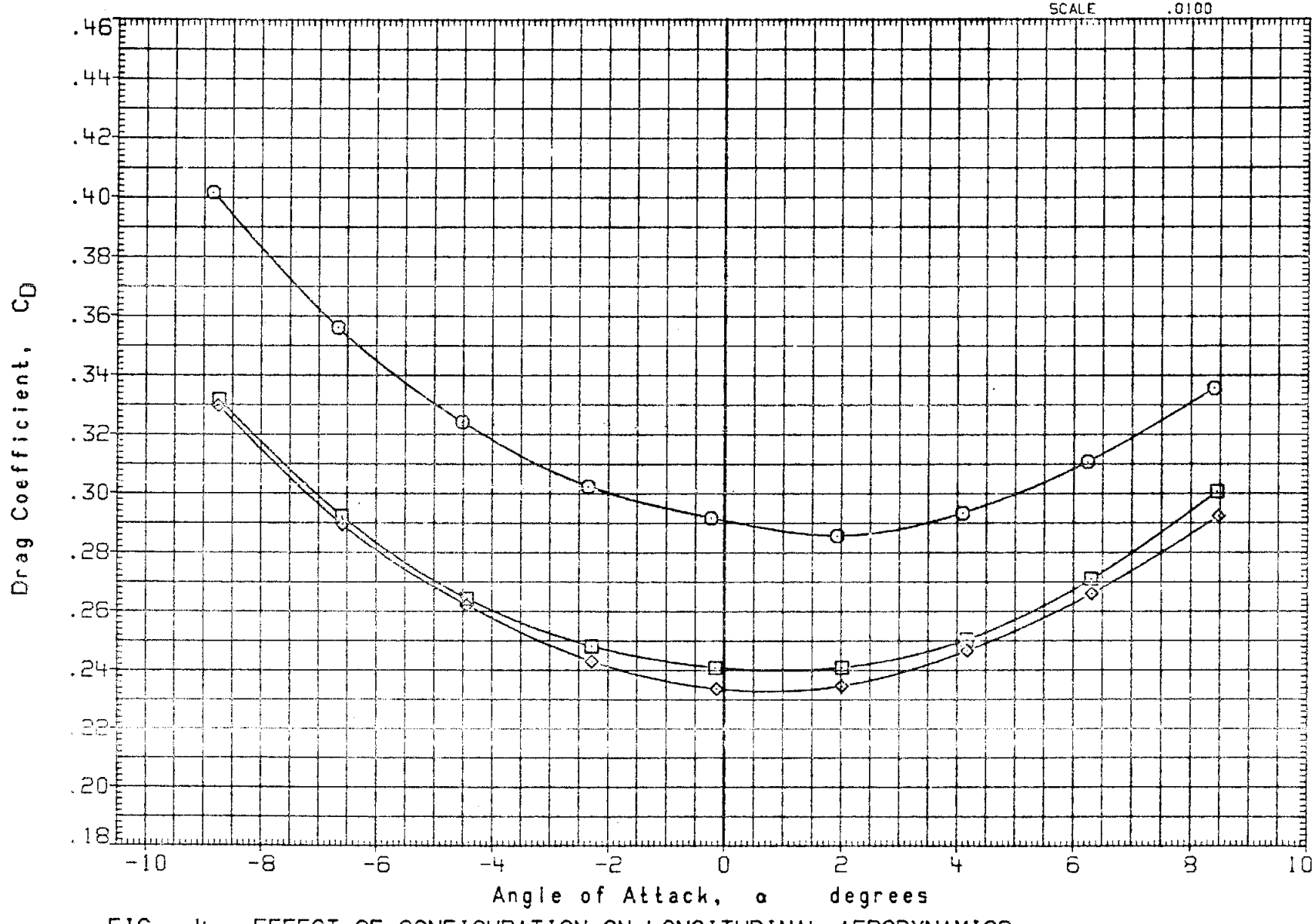


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

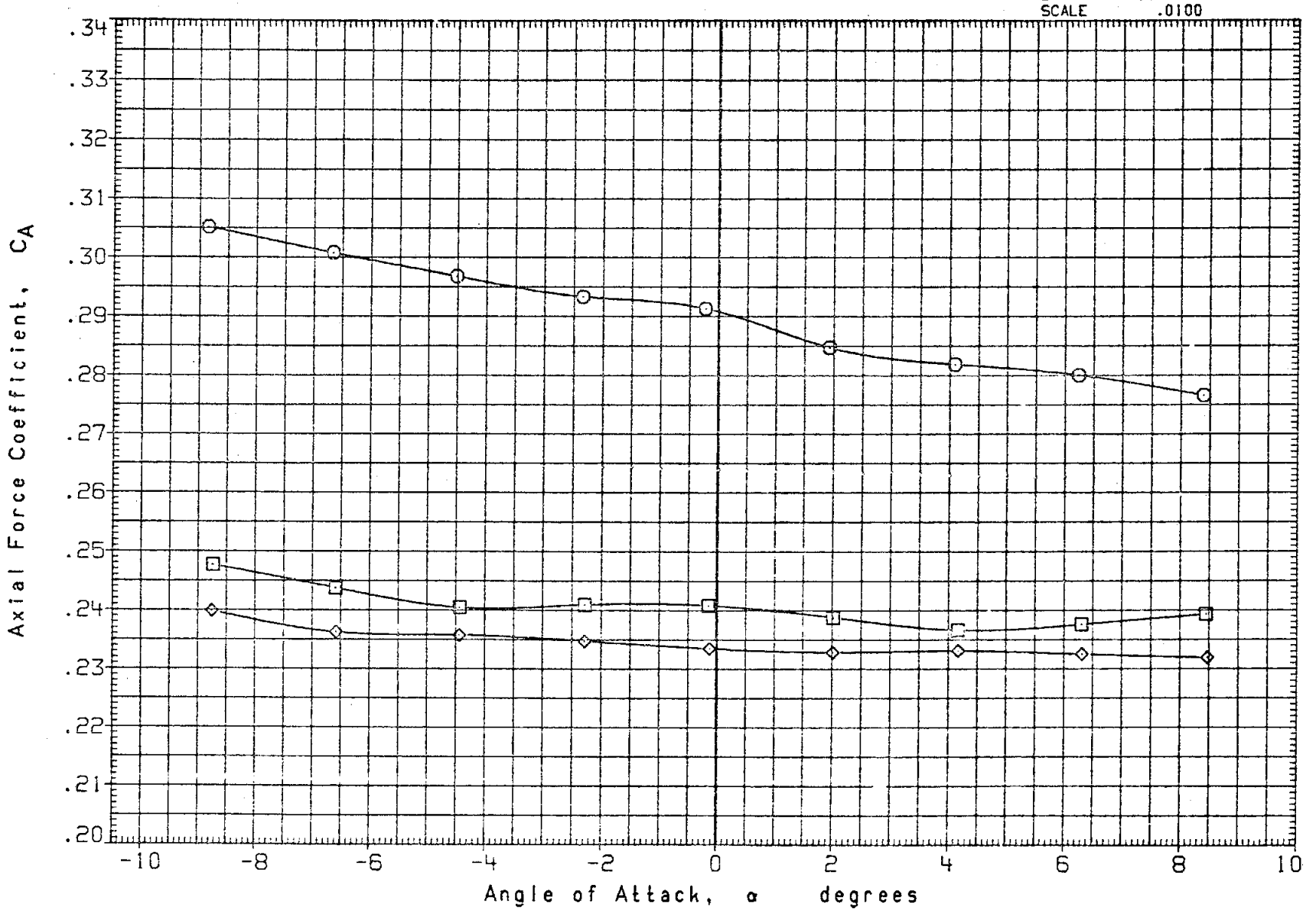


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

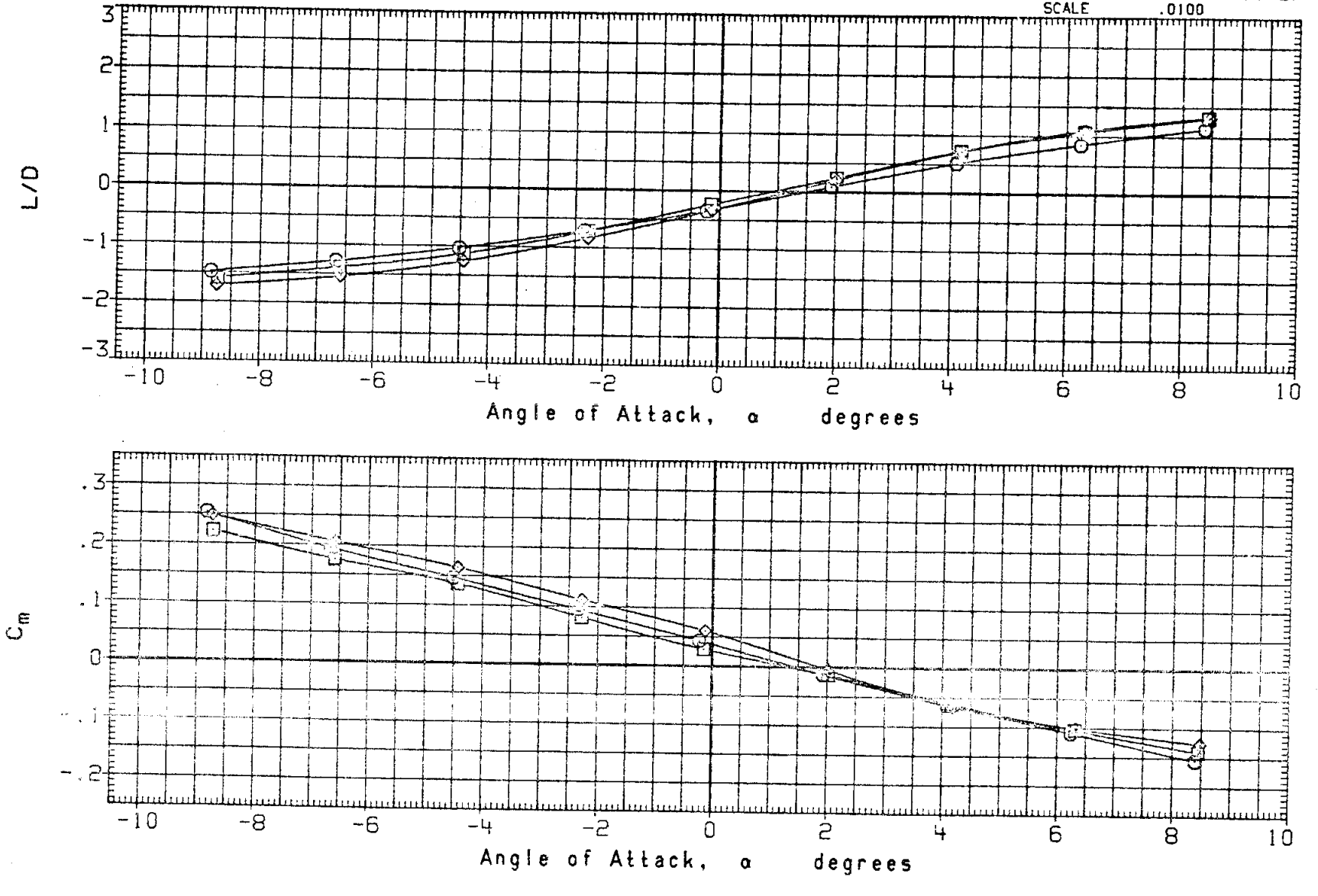


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

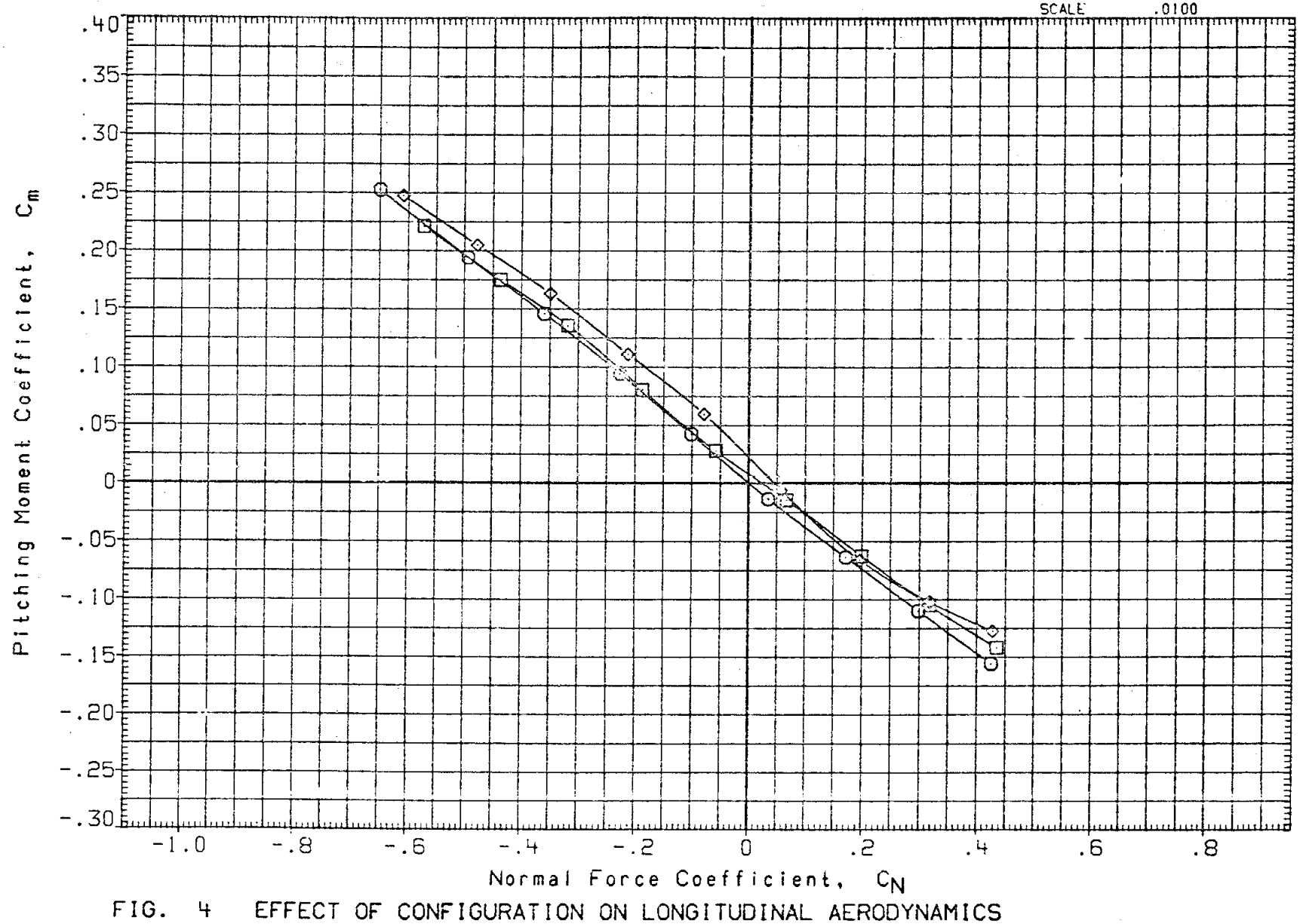


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

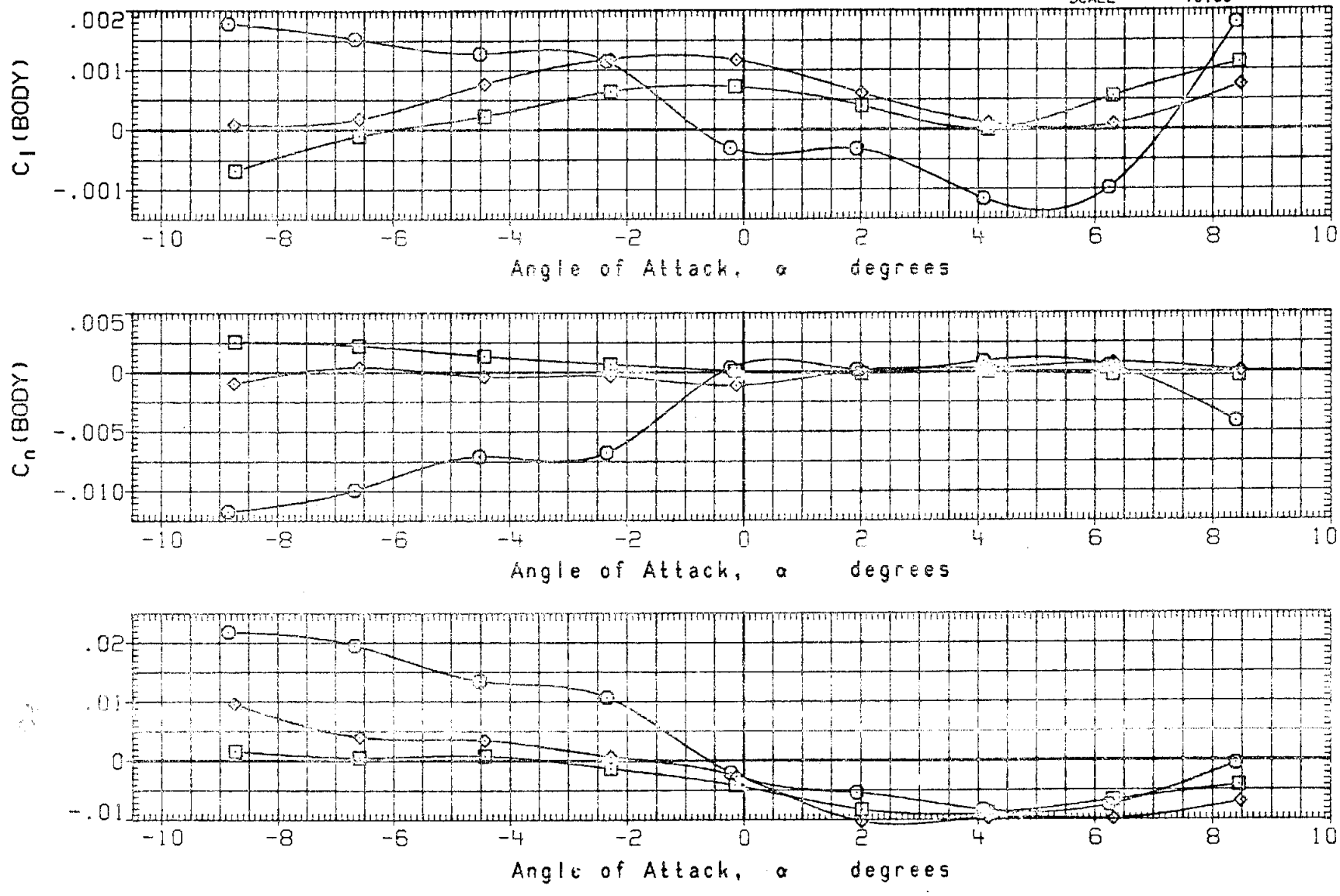


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

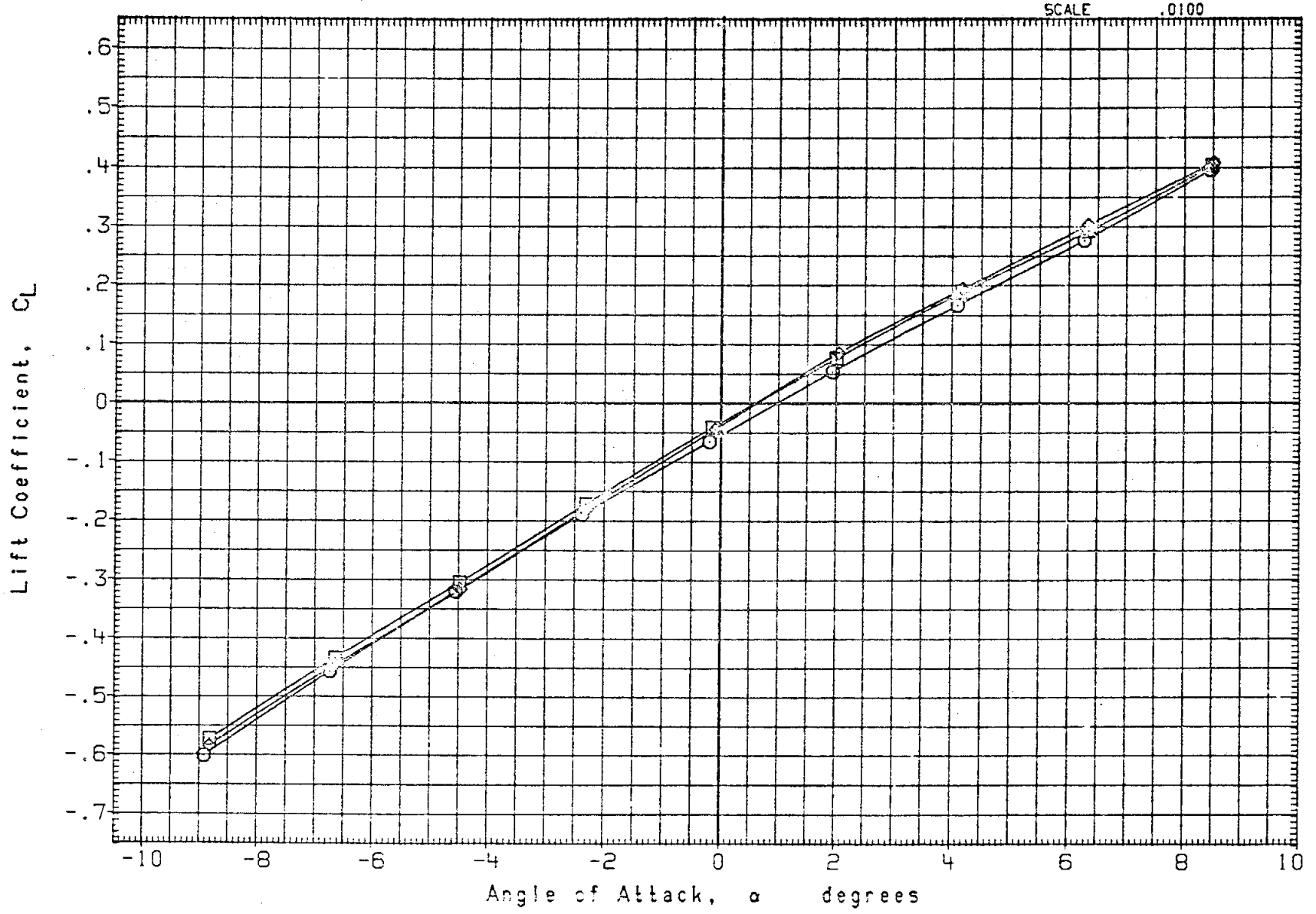


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

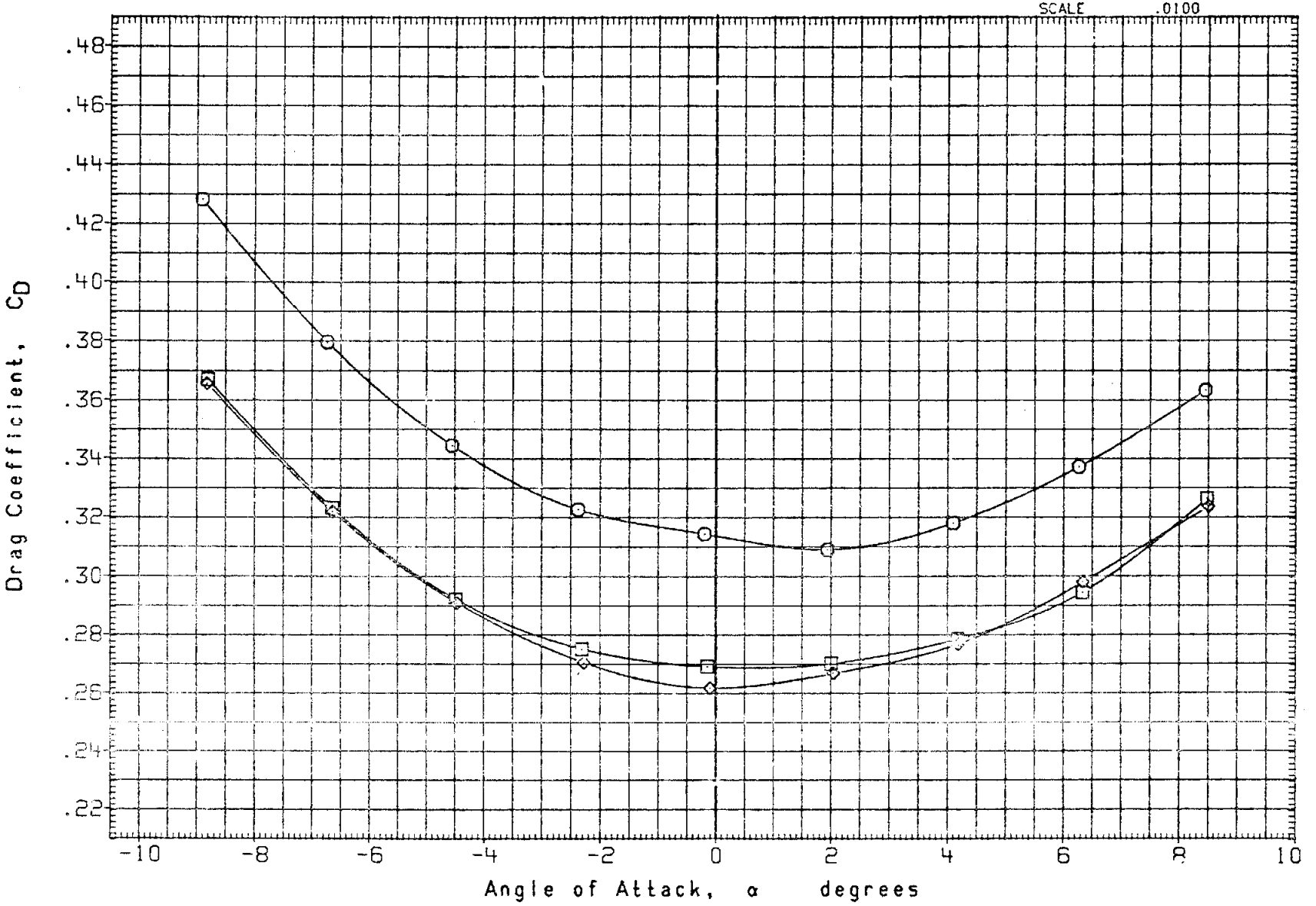


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

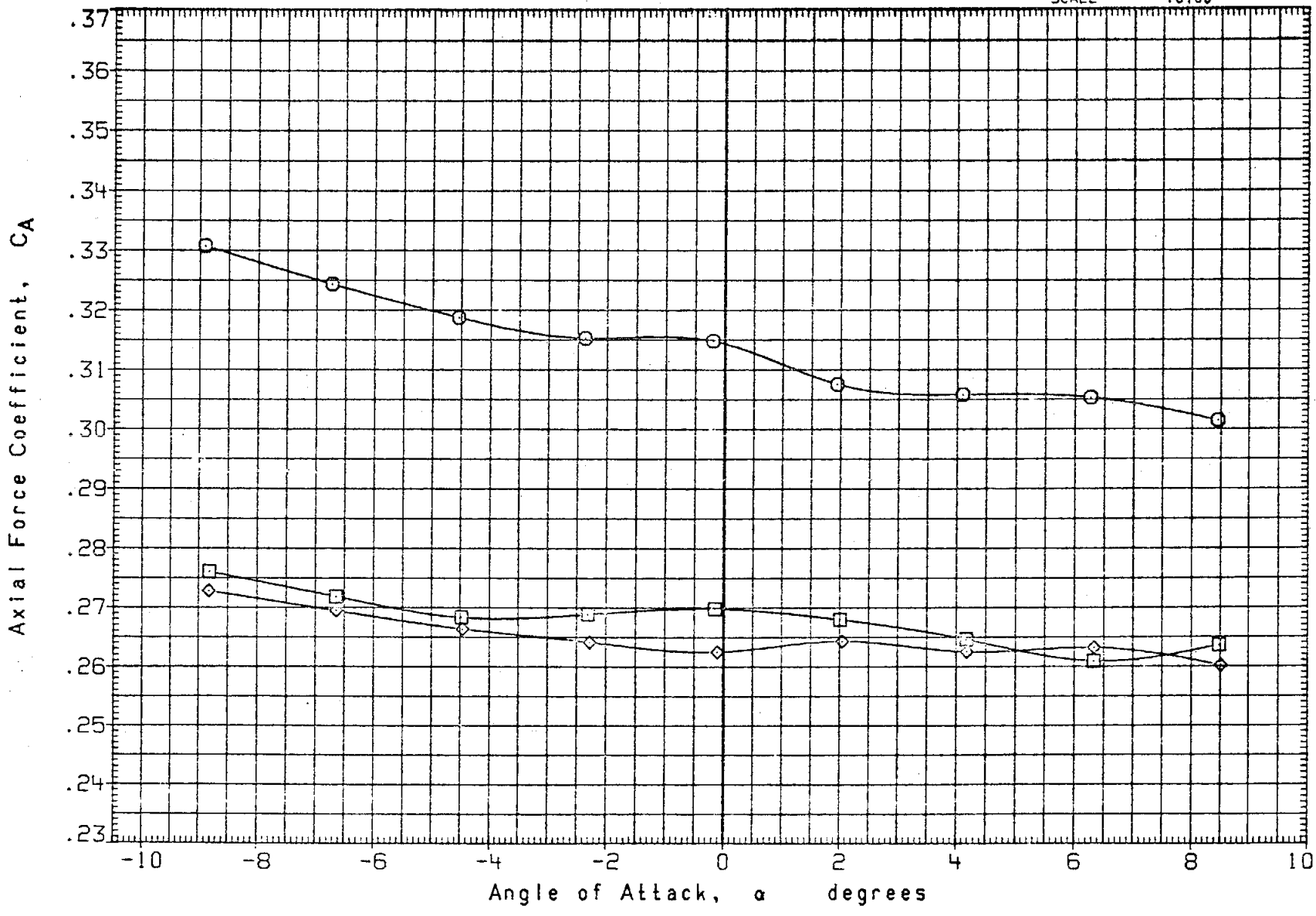


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALF	.0100	

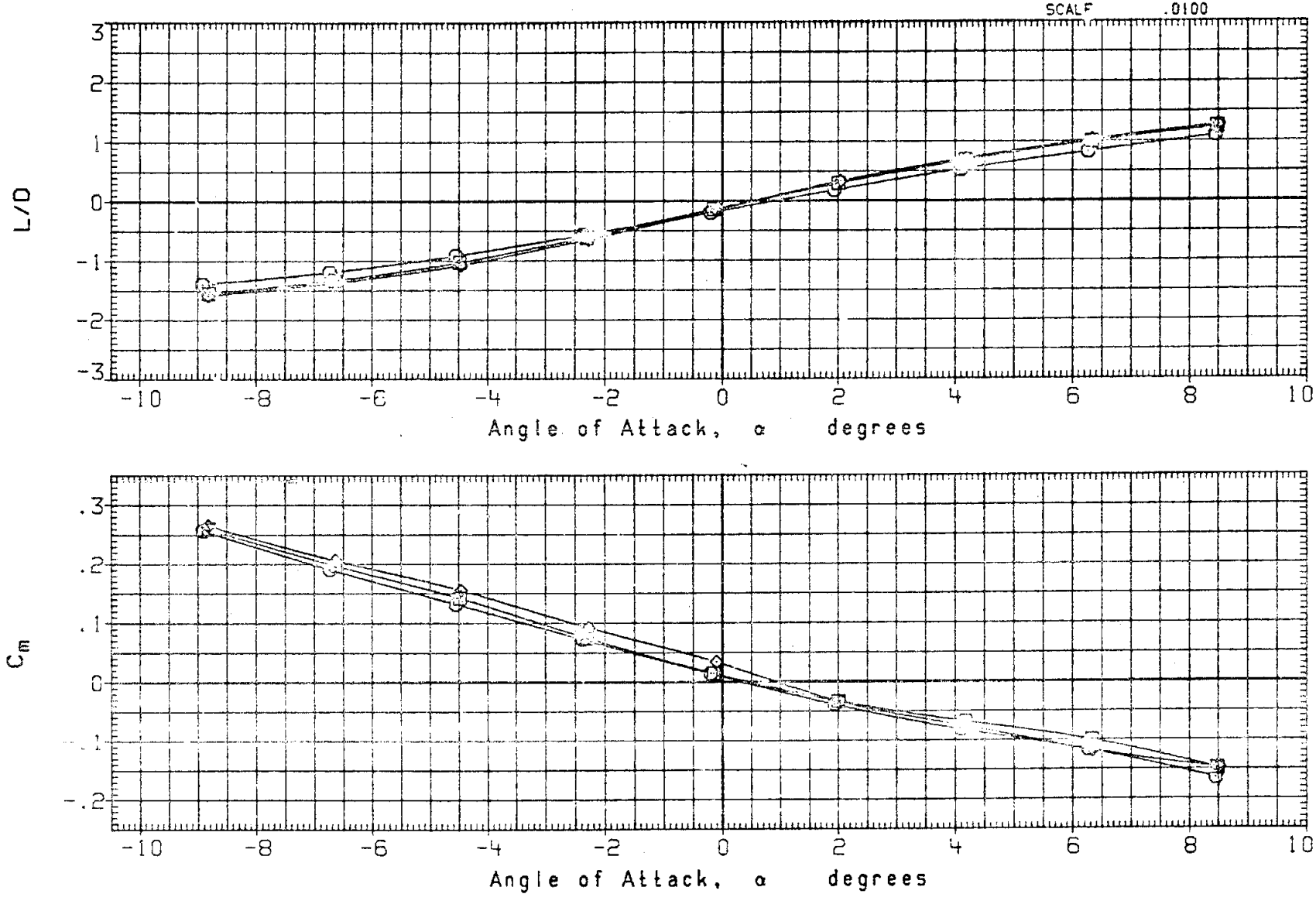


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

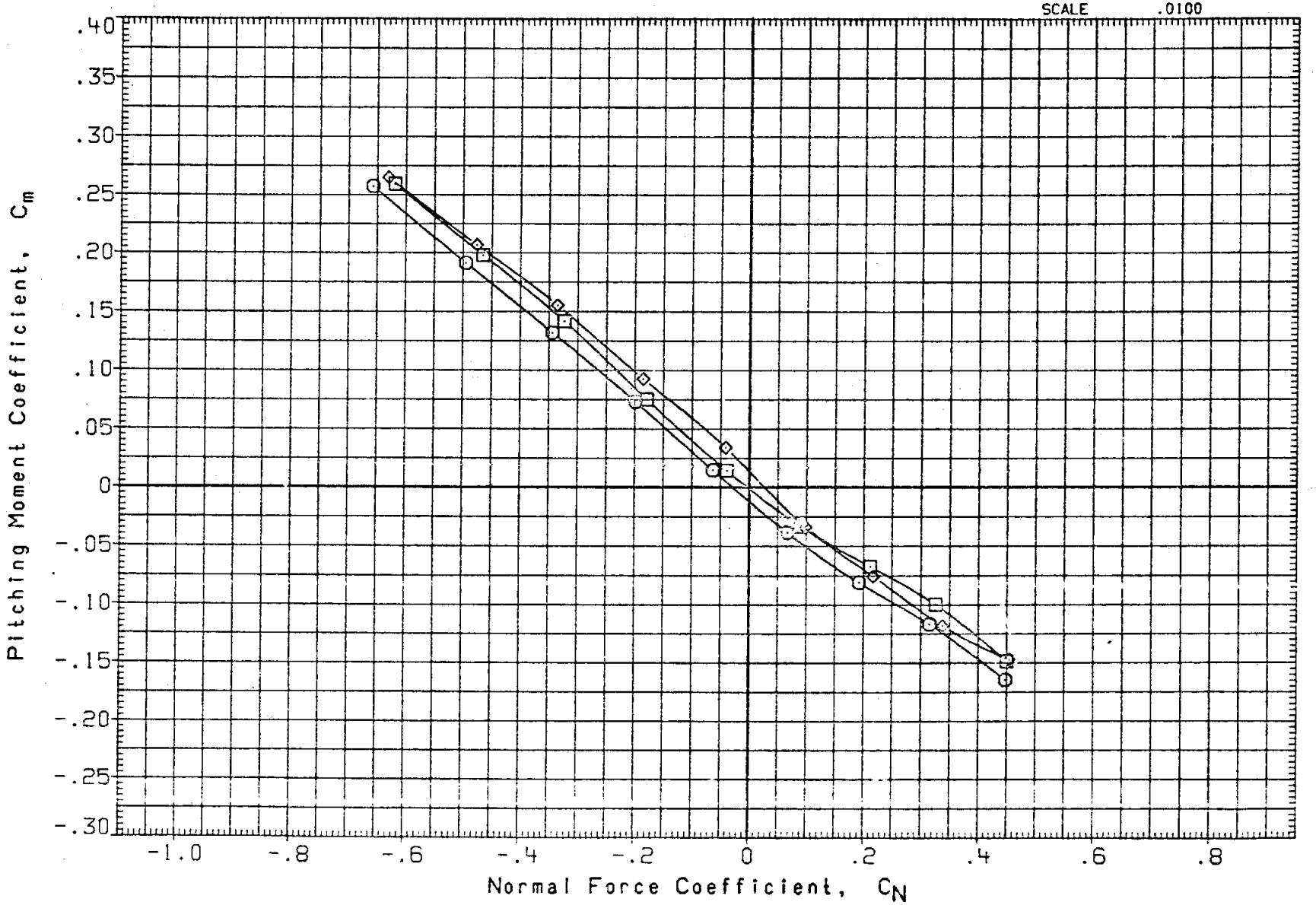


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

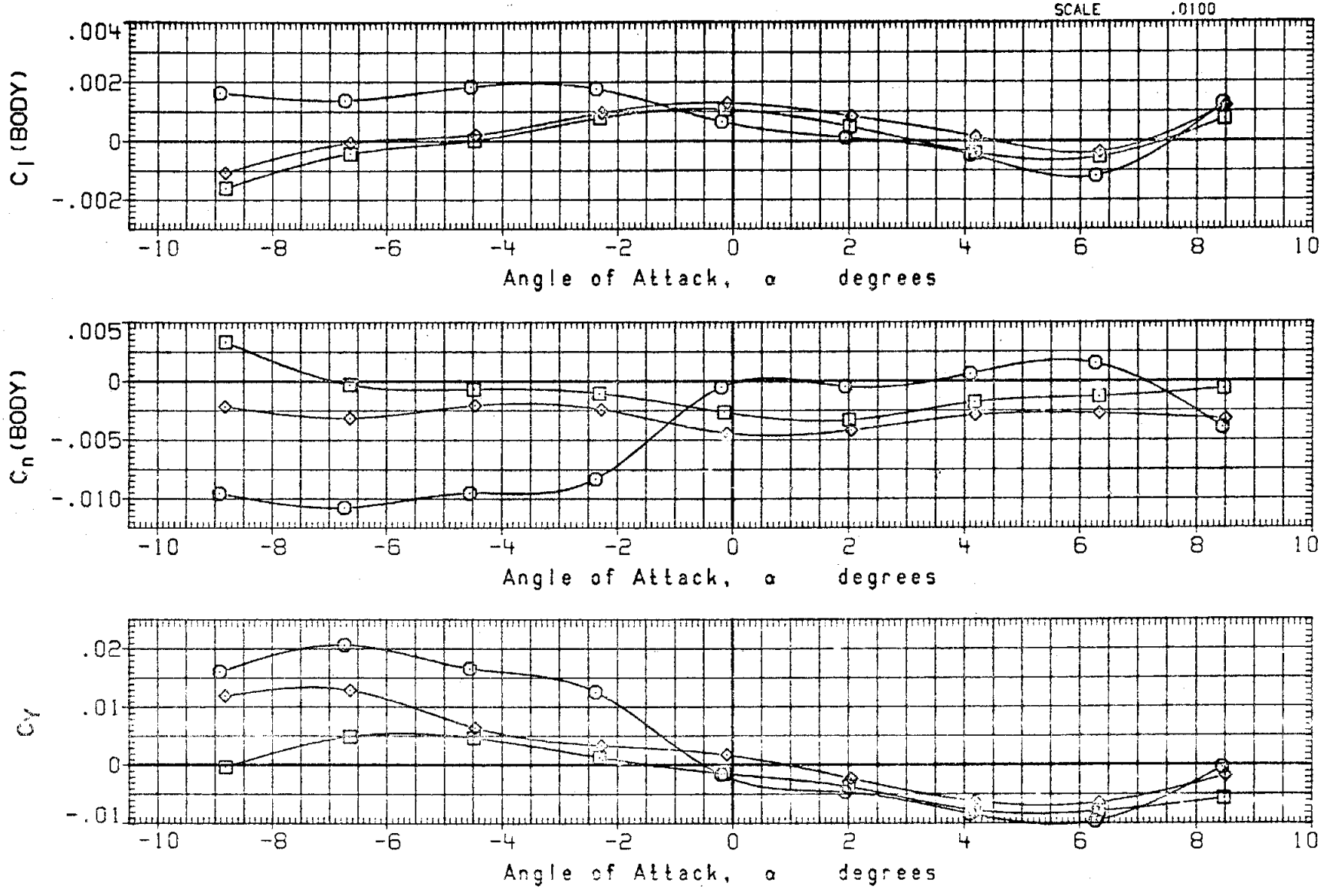


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

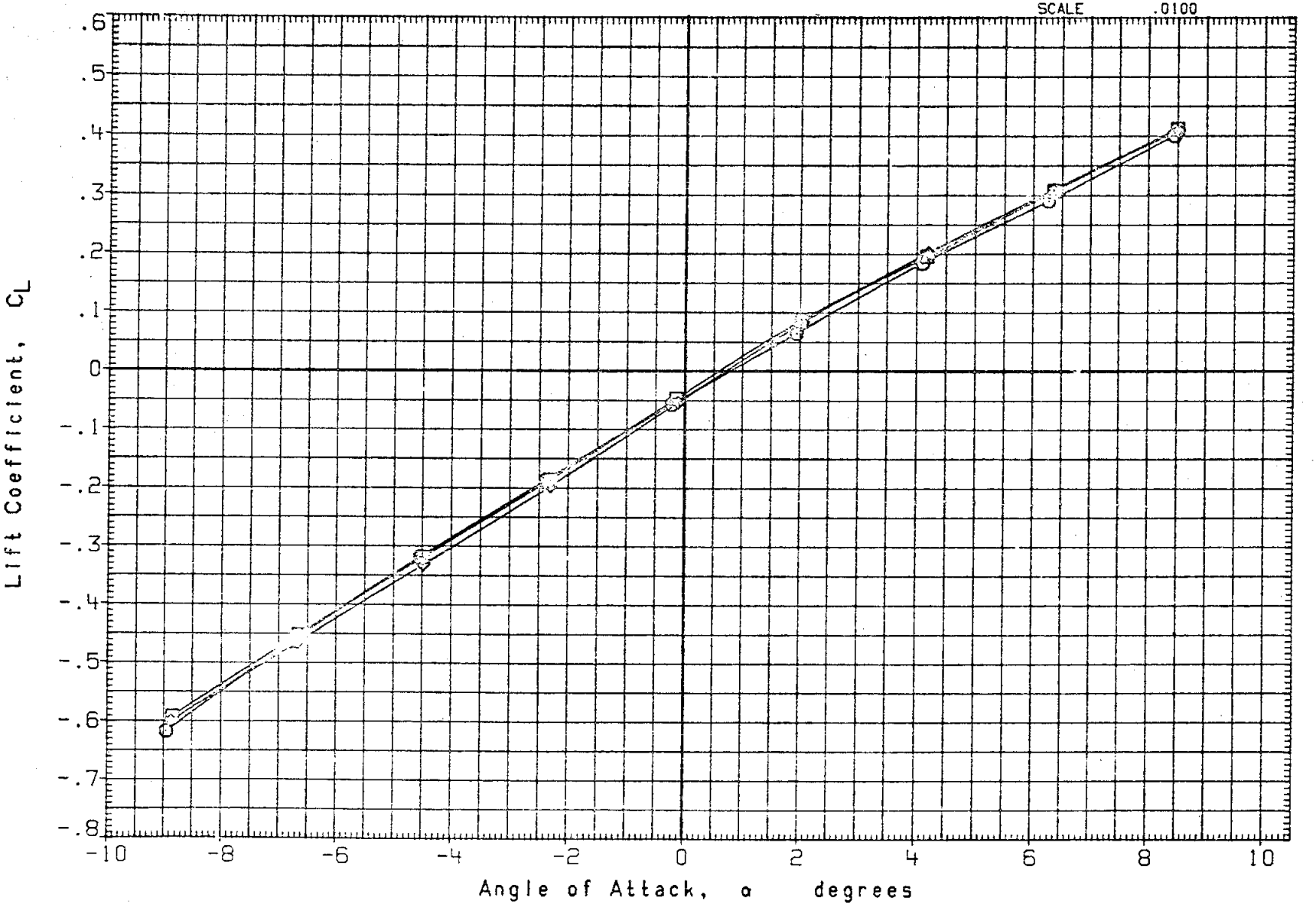


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

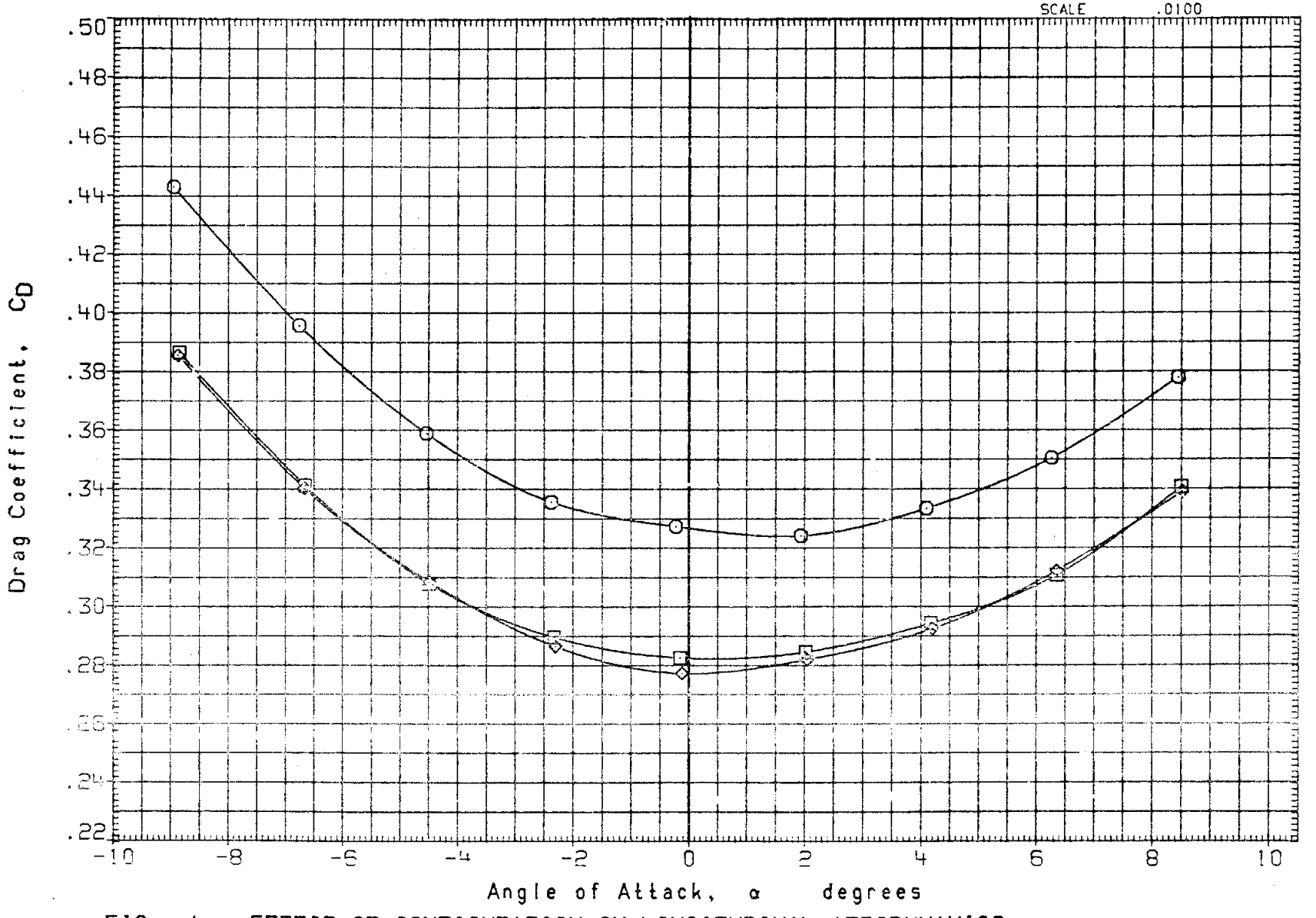


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

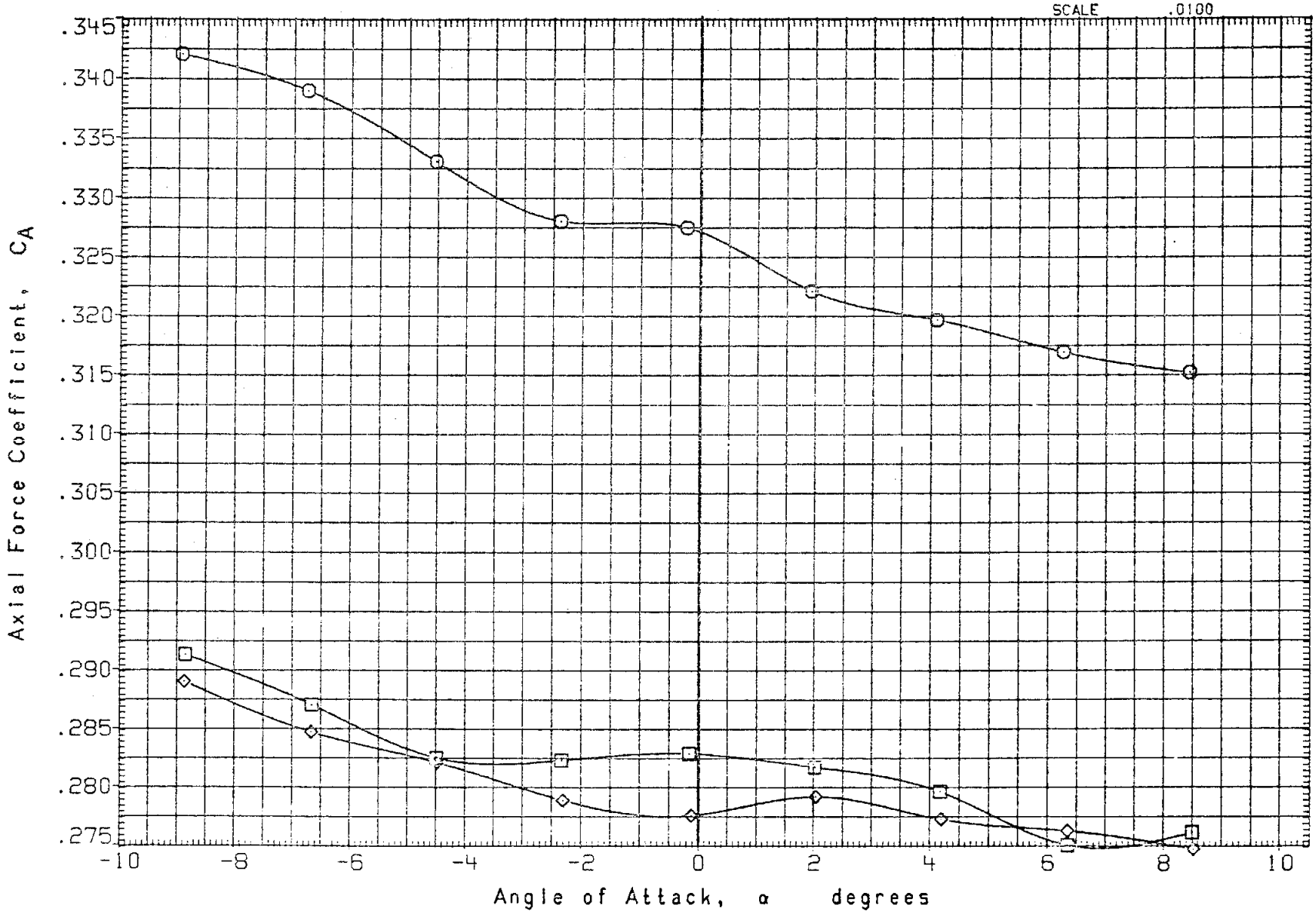


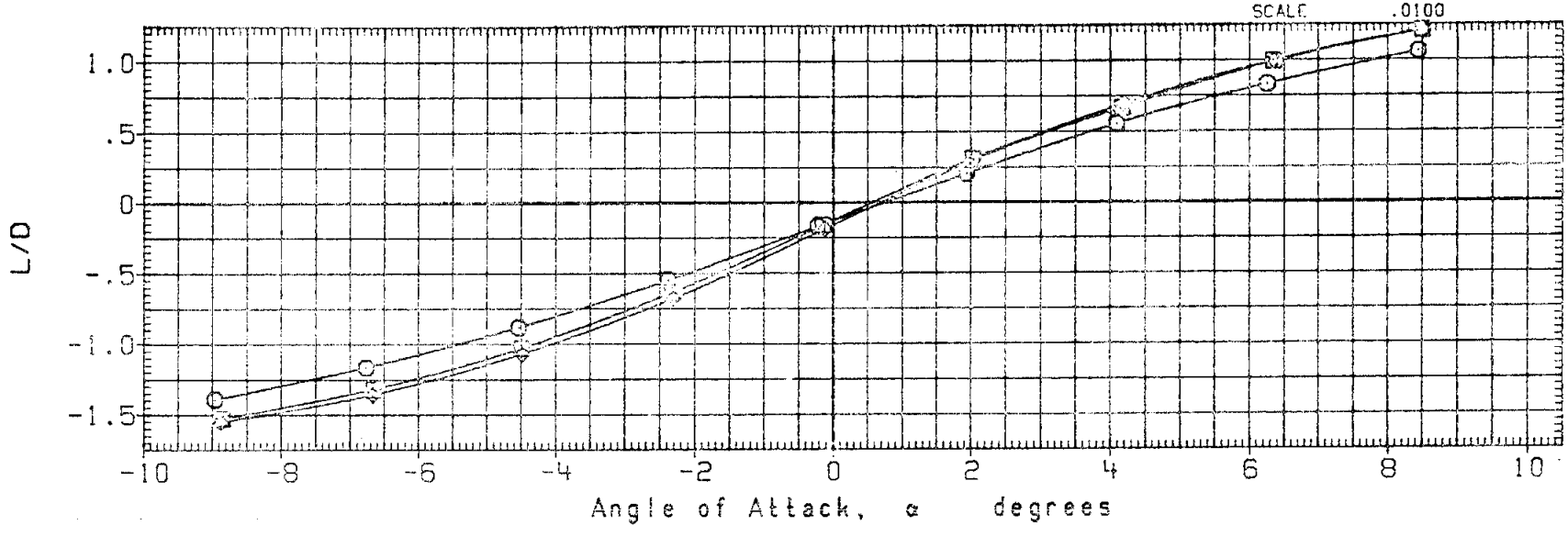
FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



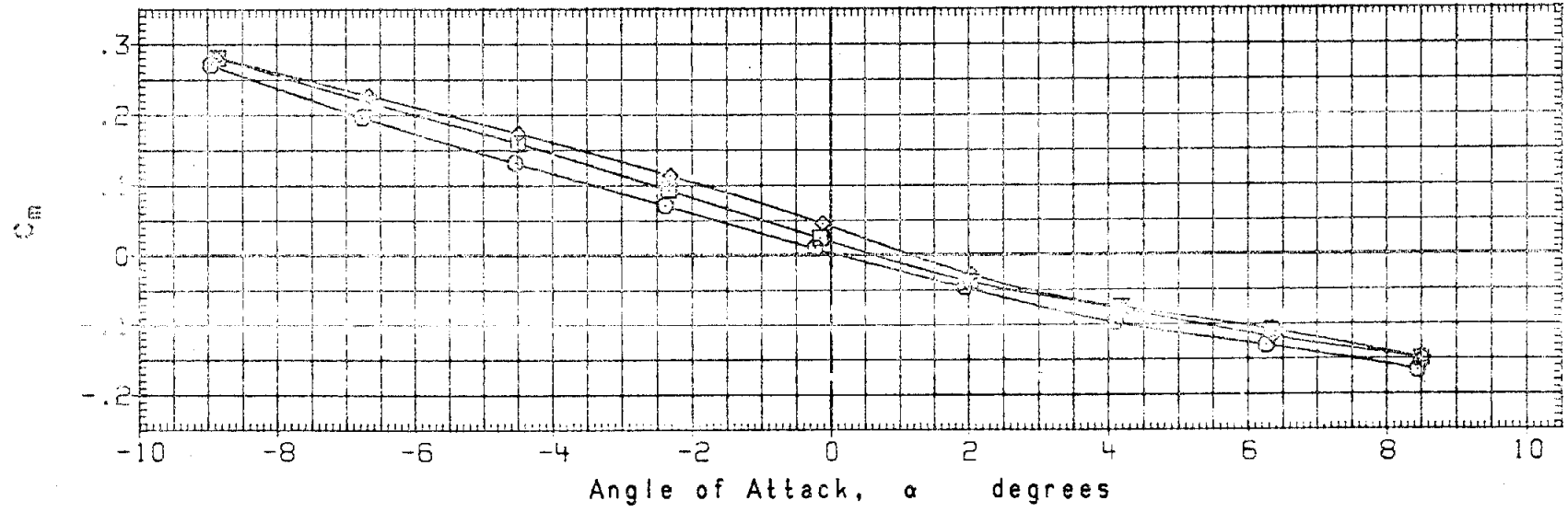


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

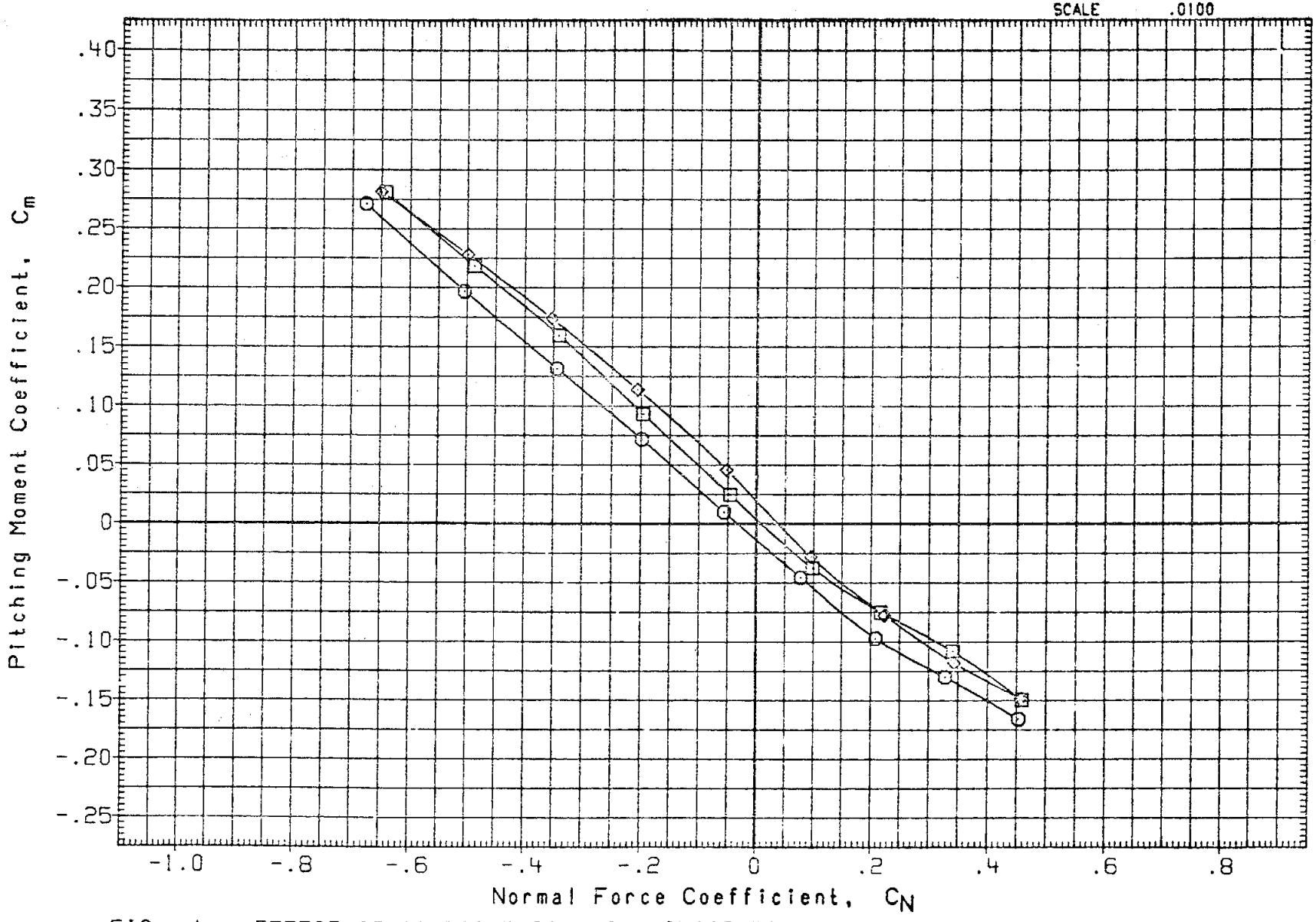


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	376.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

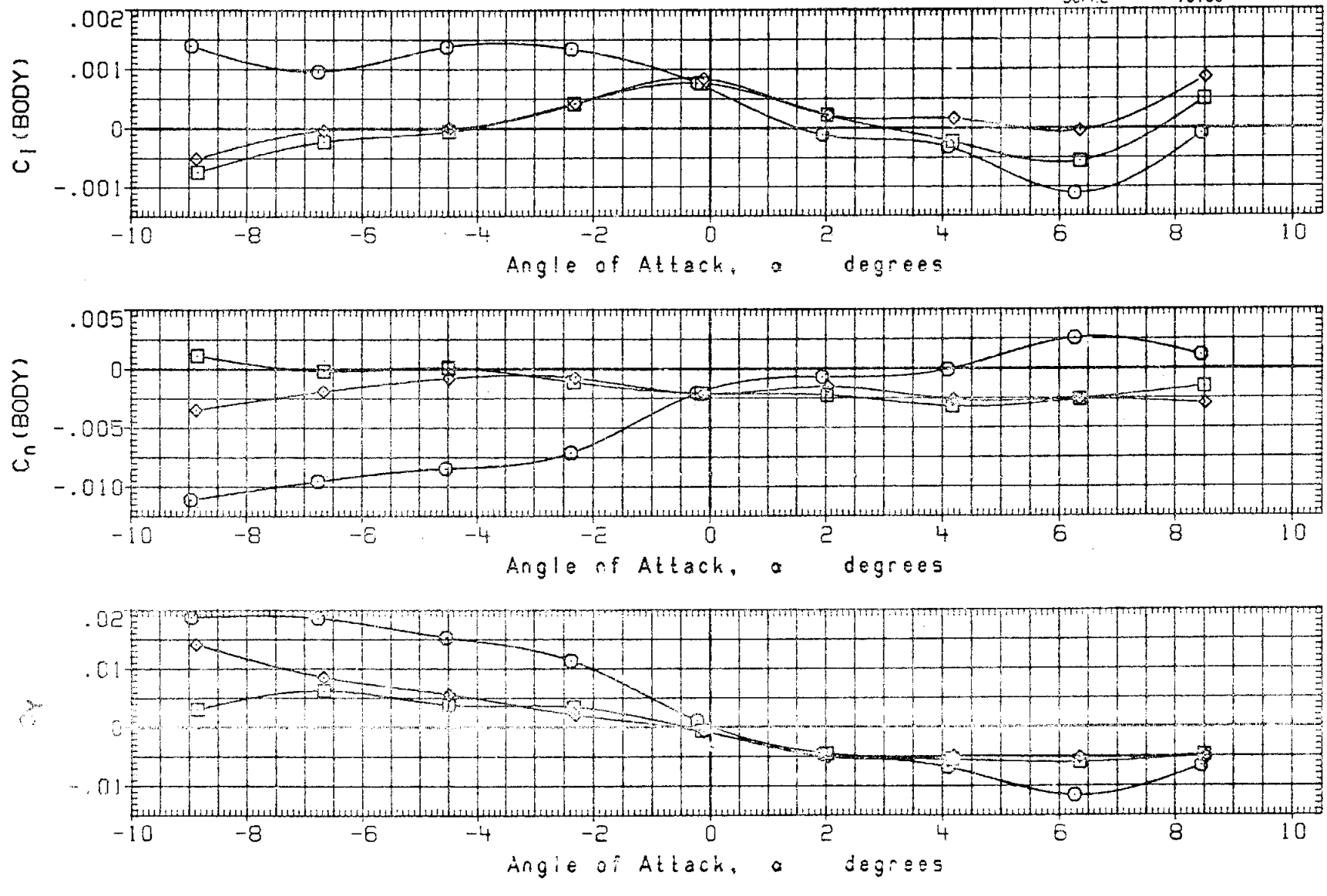


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

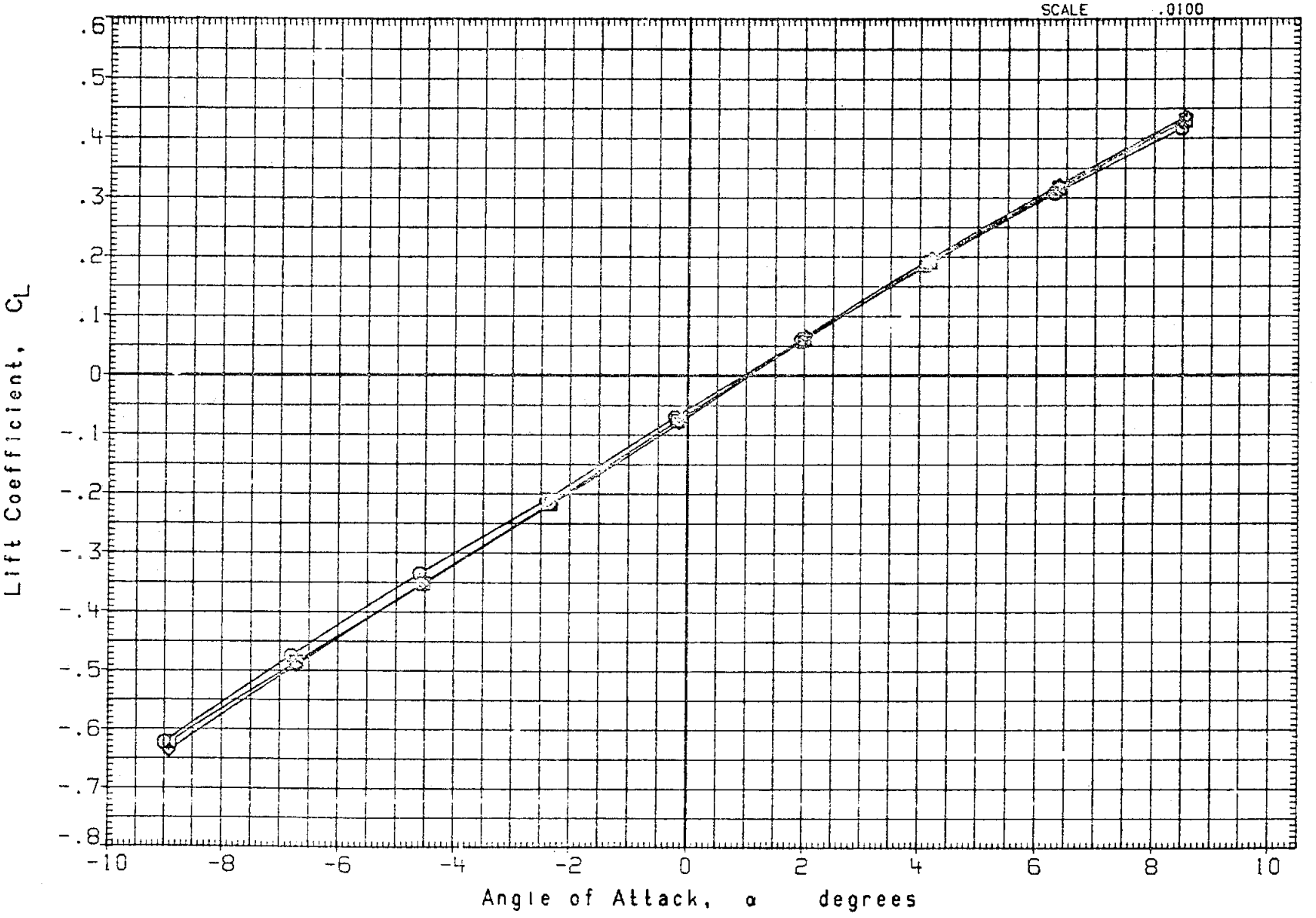


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(G) MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

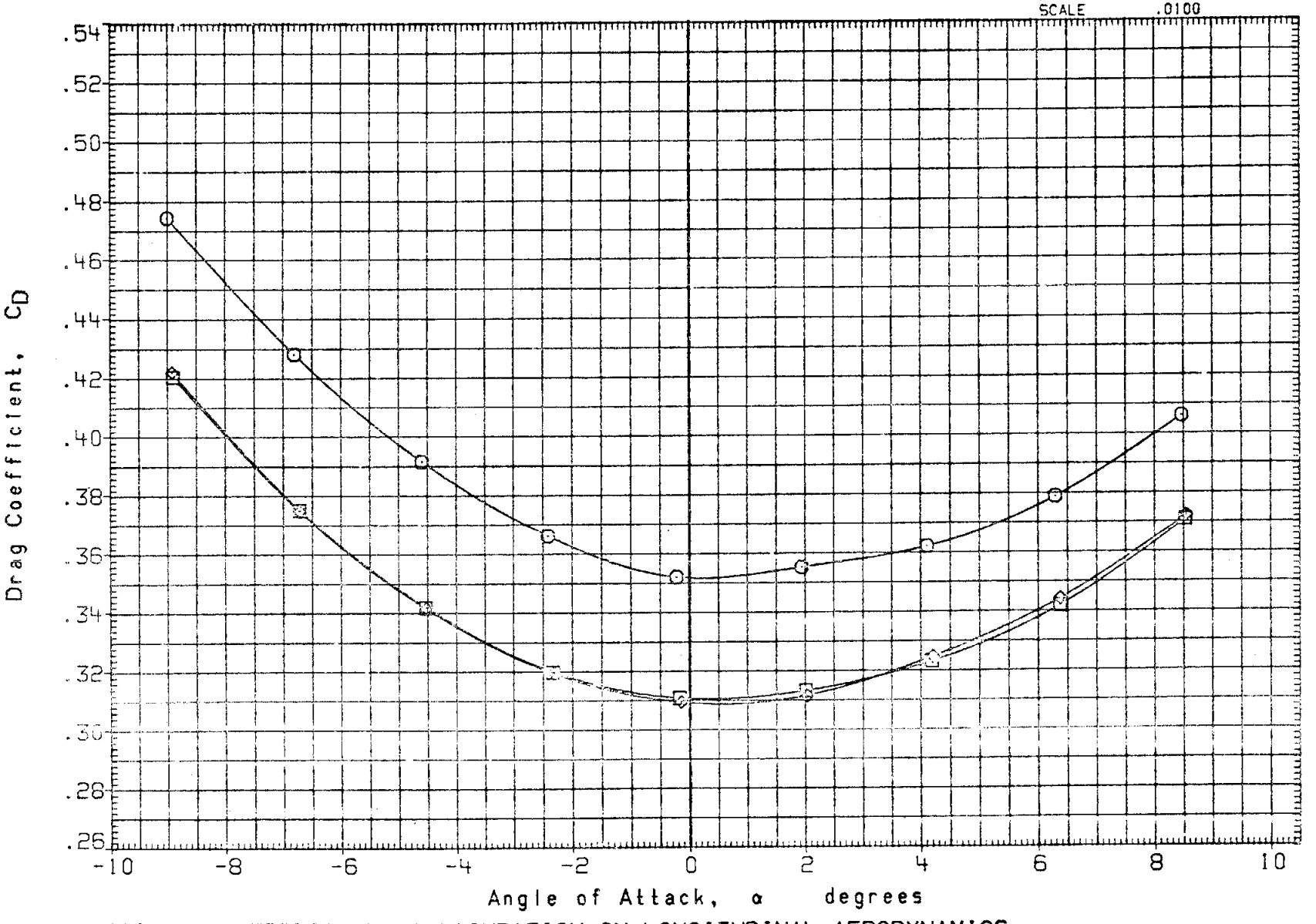


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

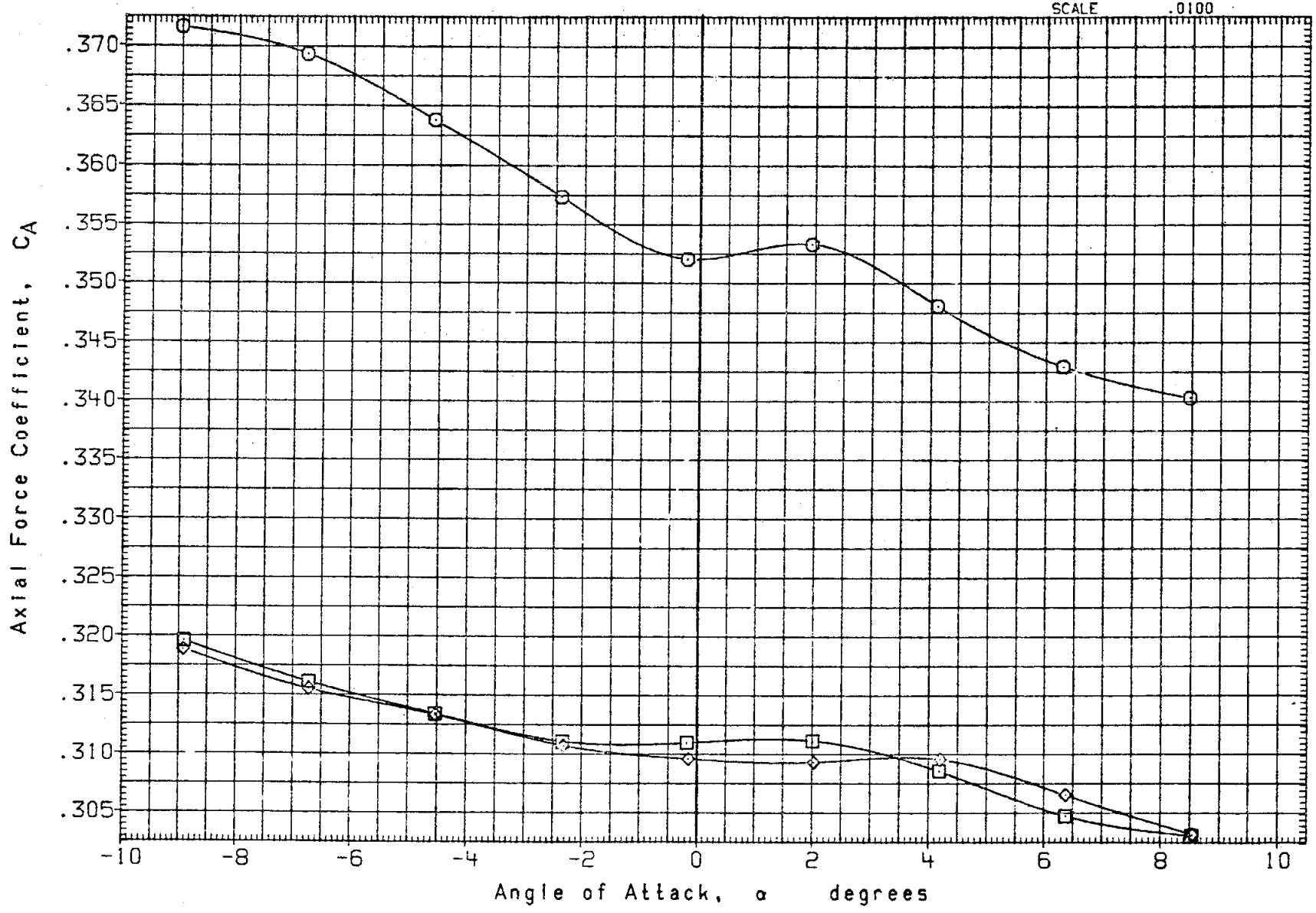


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION		BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

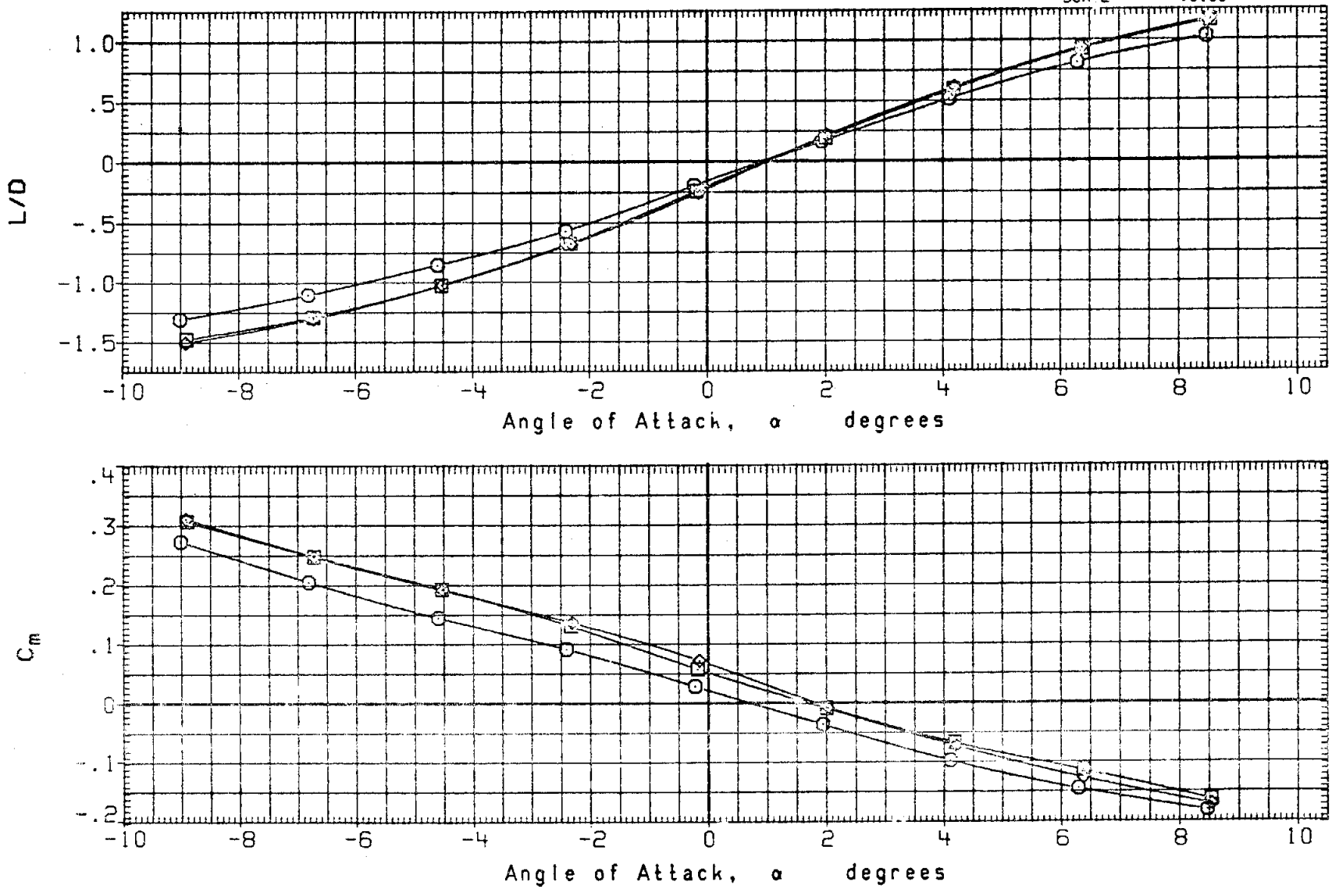


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

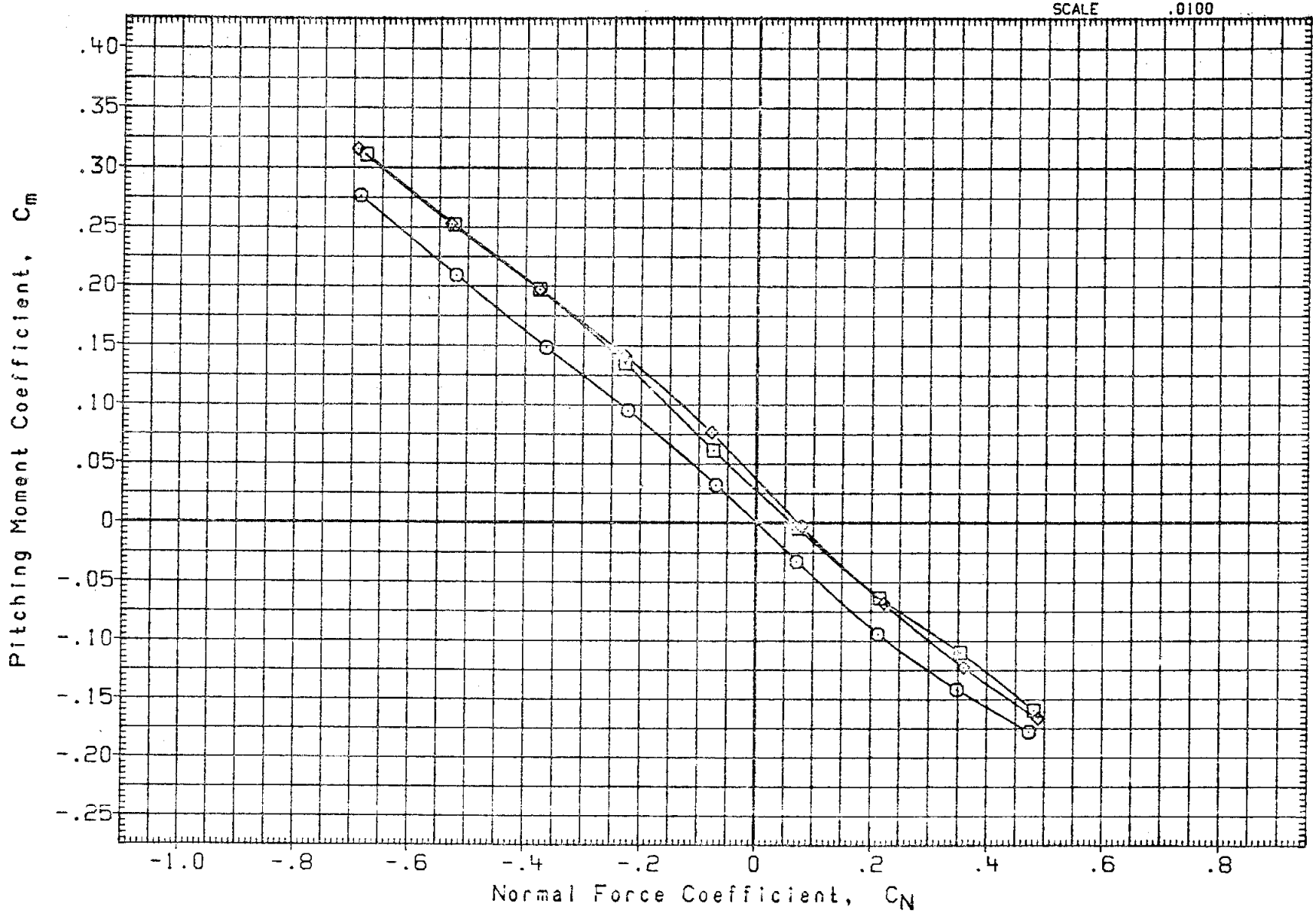


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

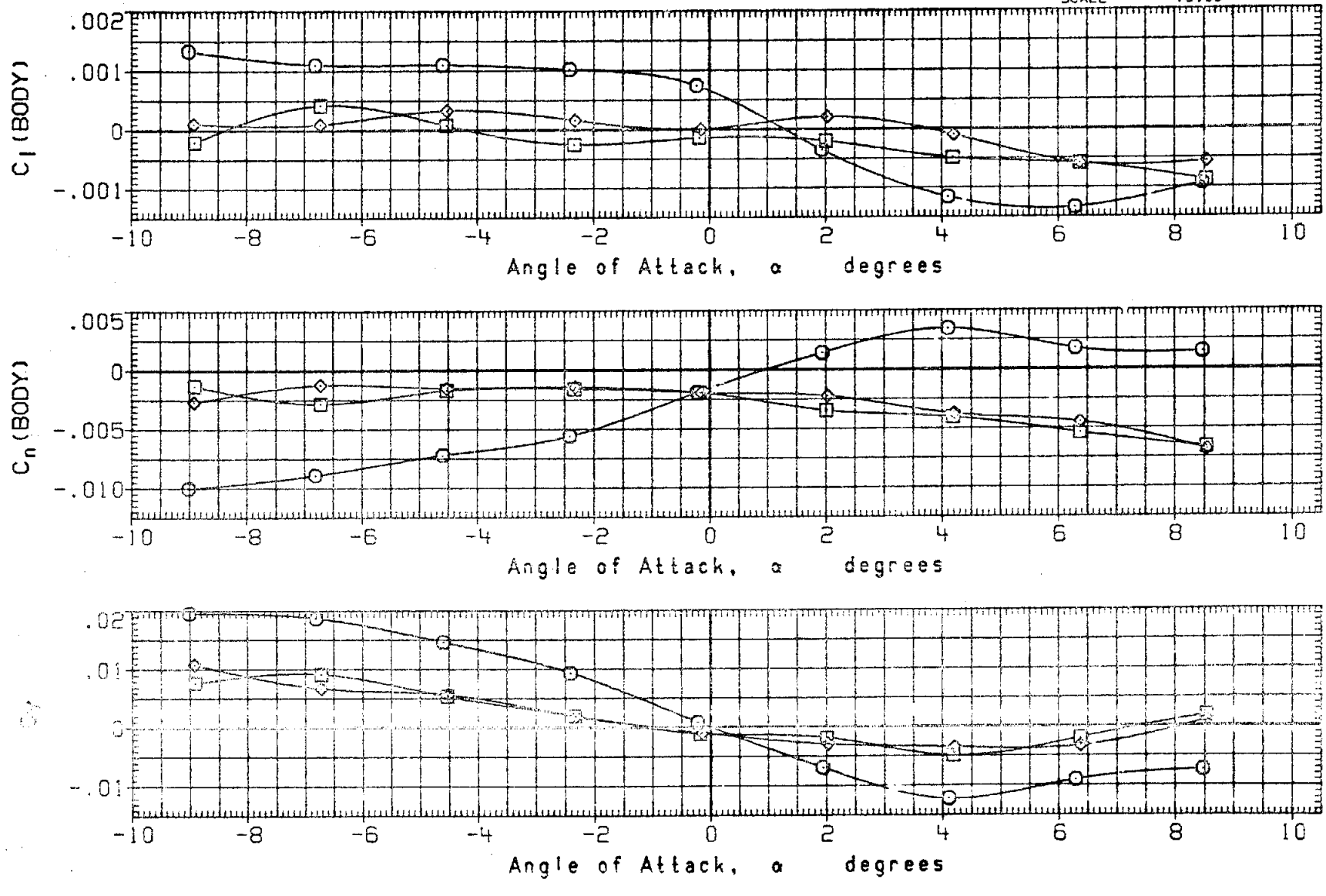


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

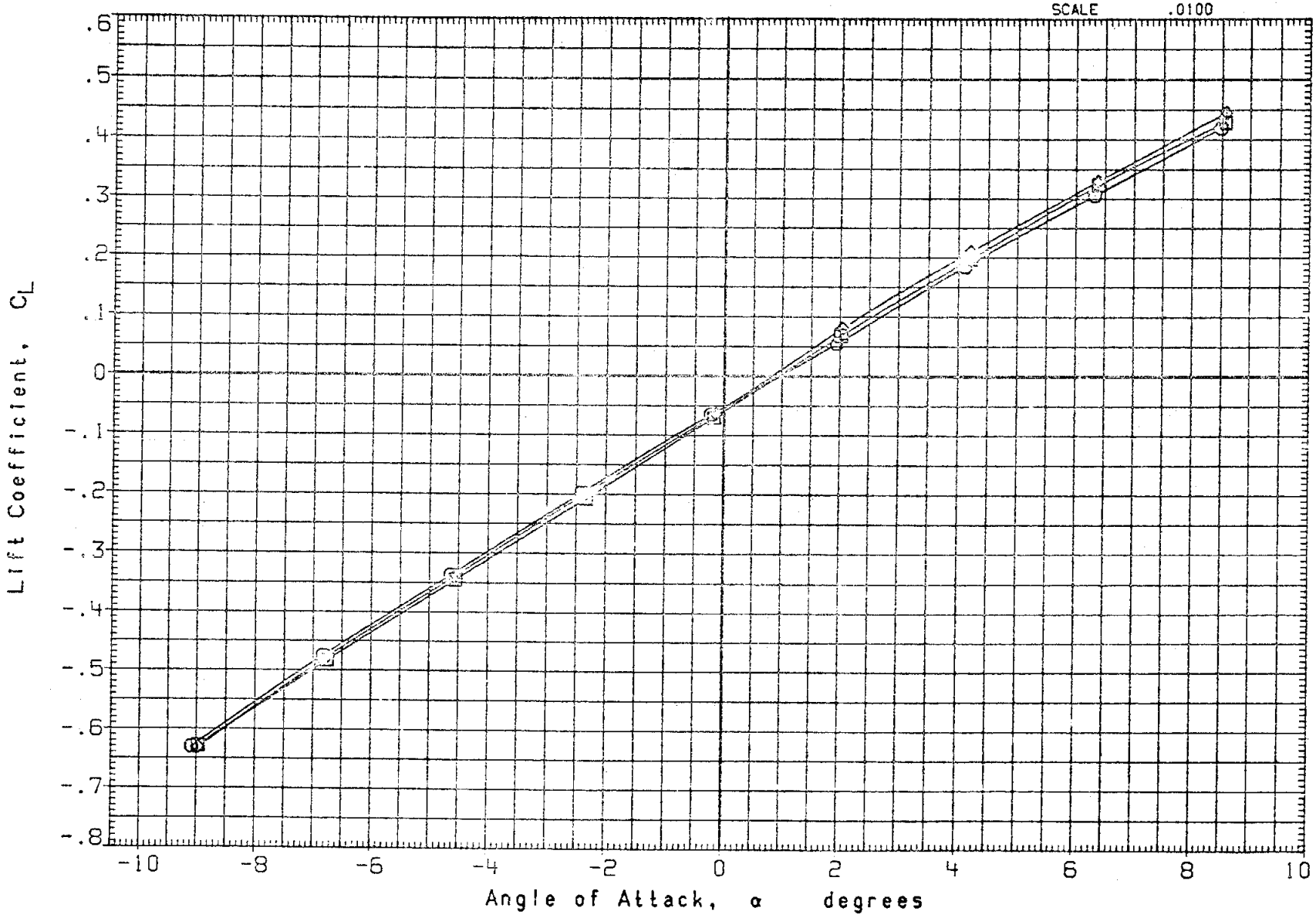


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

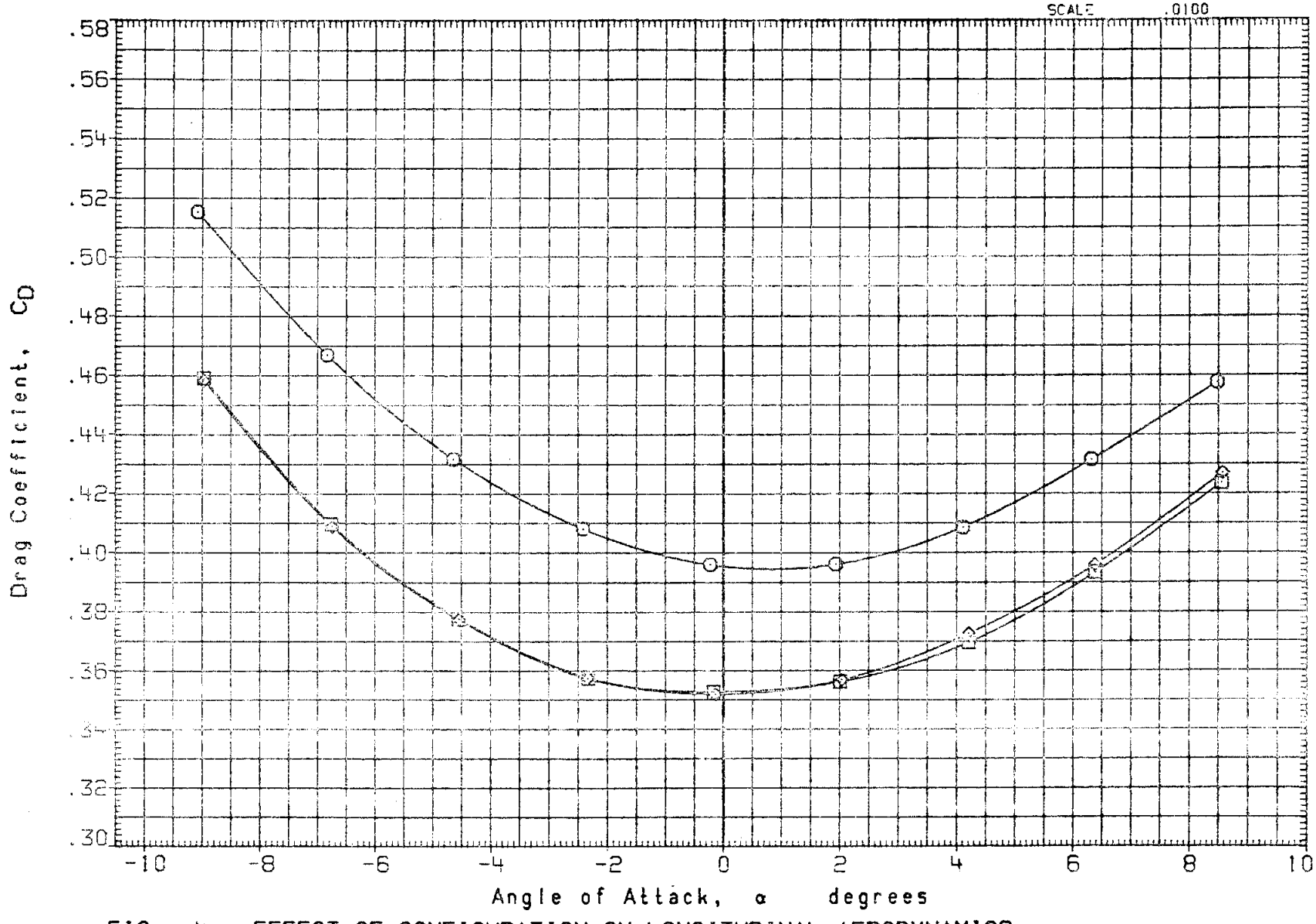


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

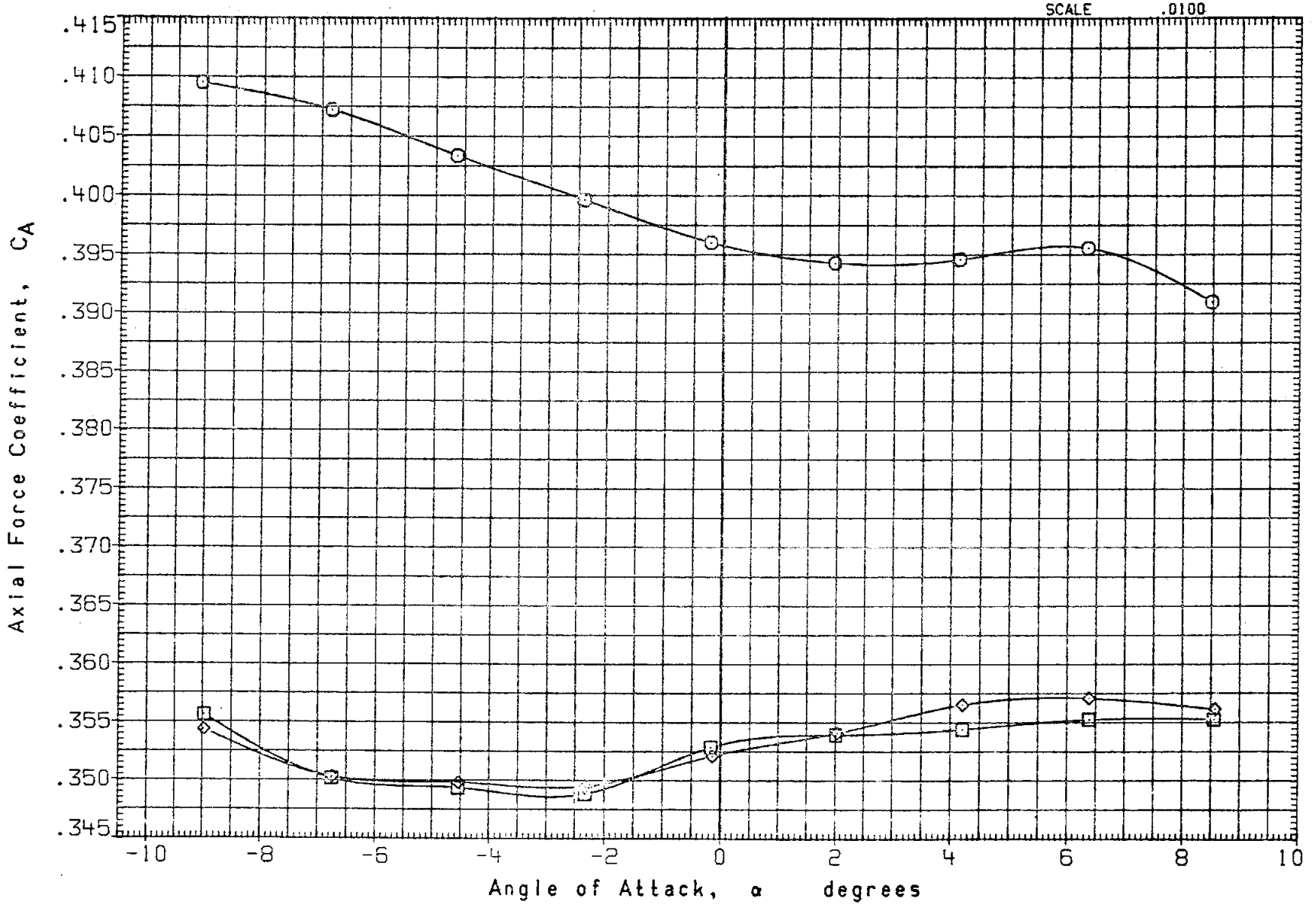


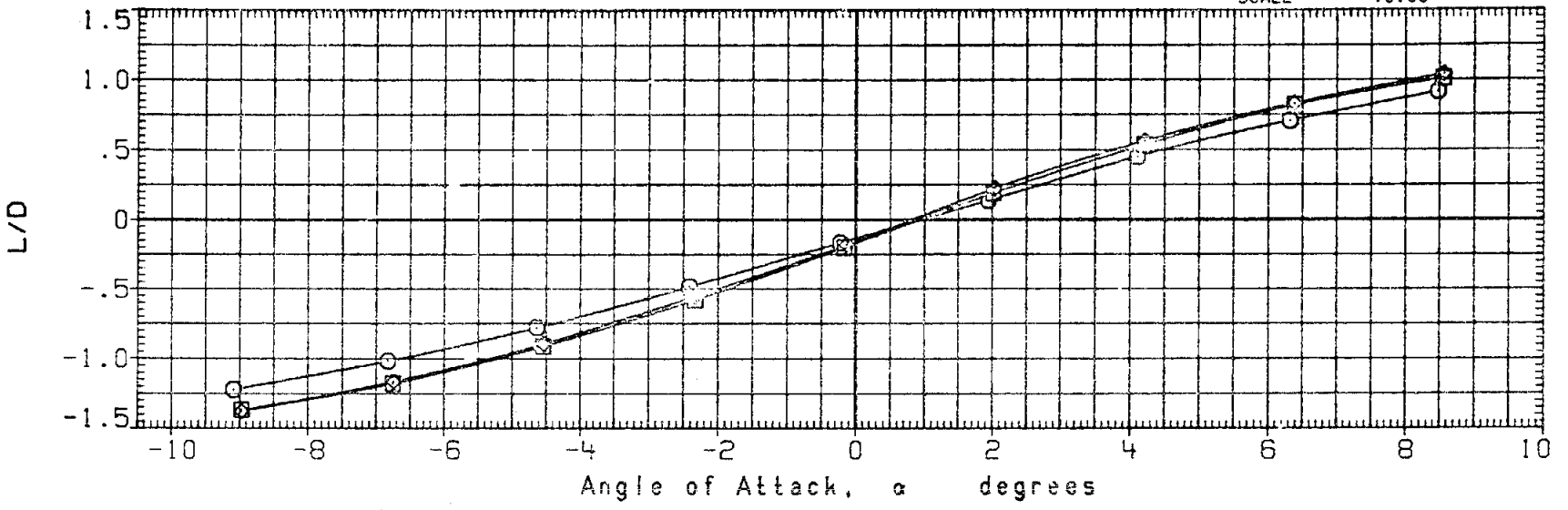
FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



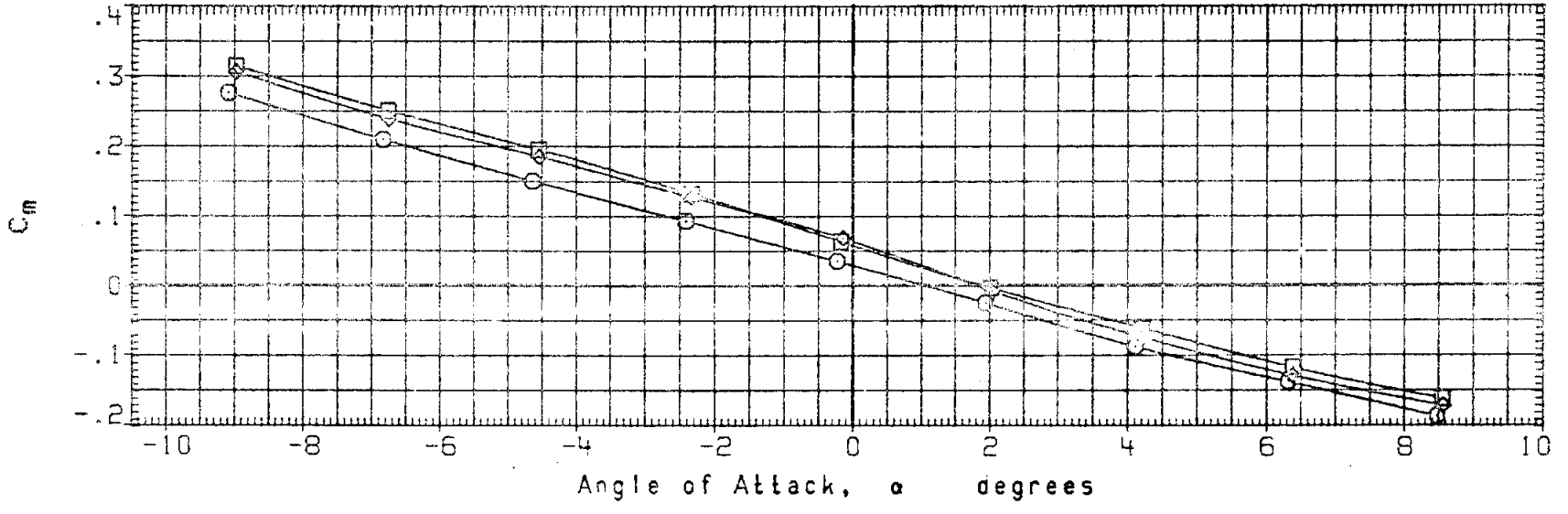


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

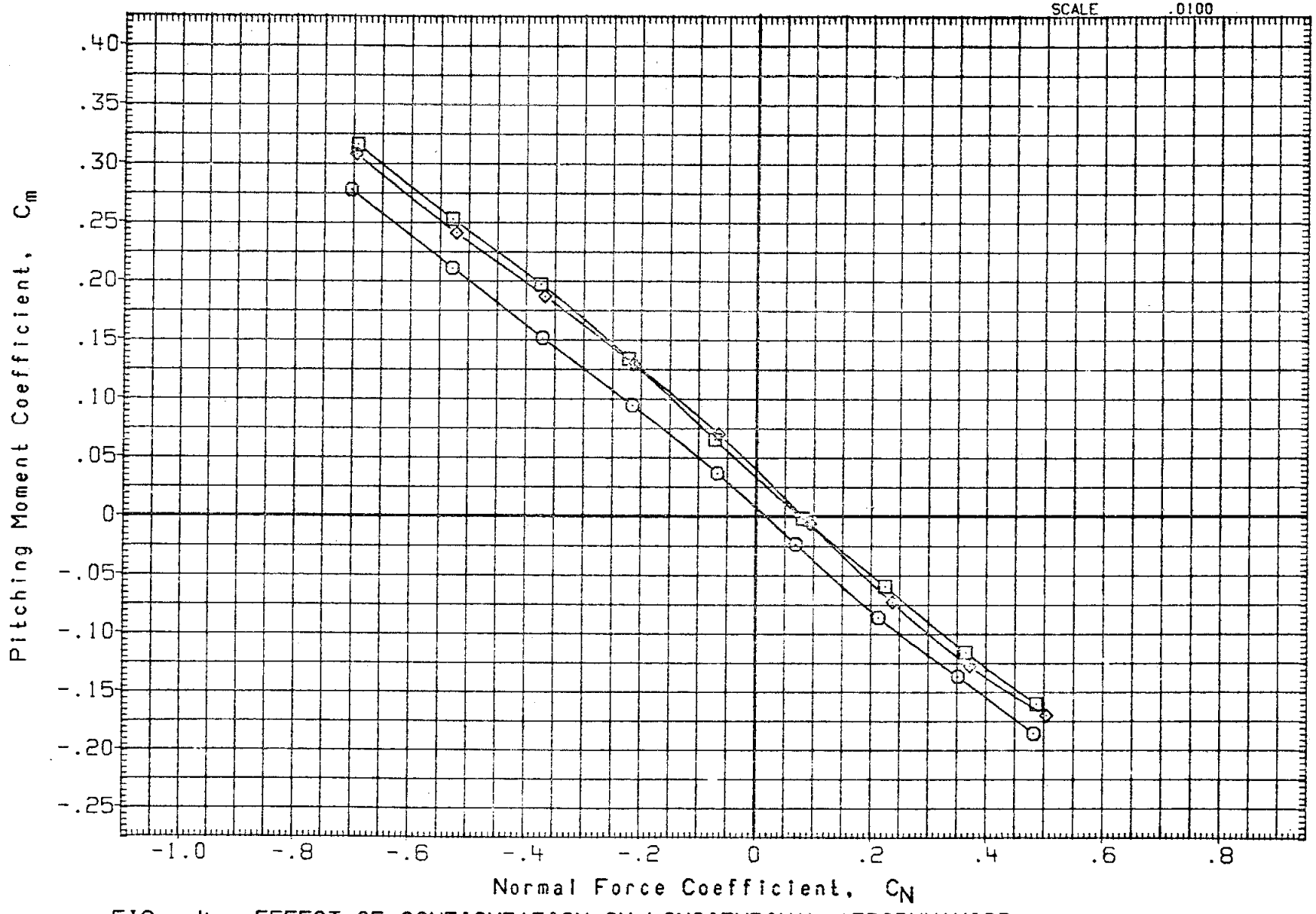


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

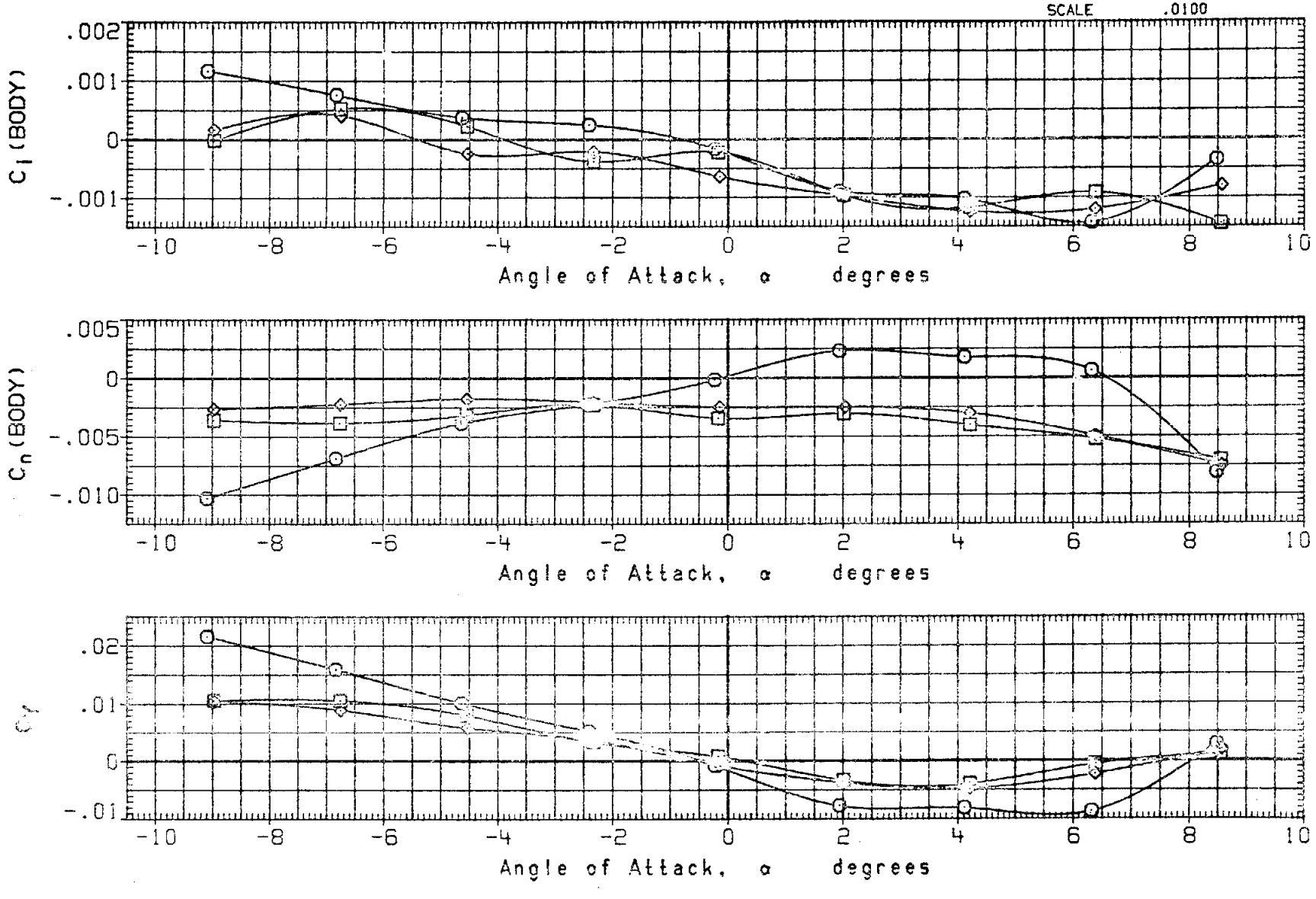


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

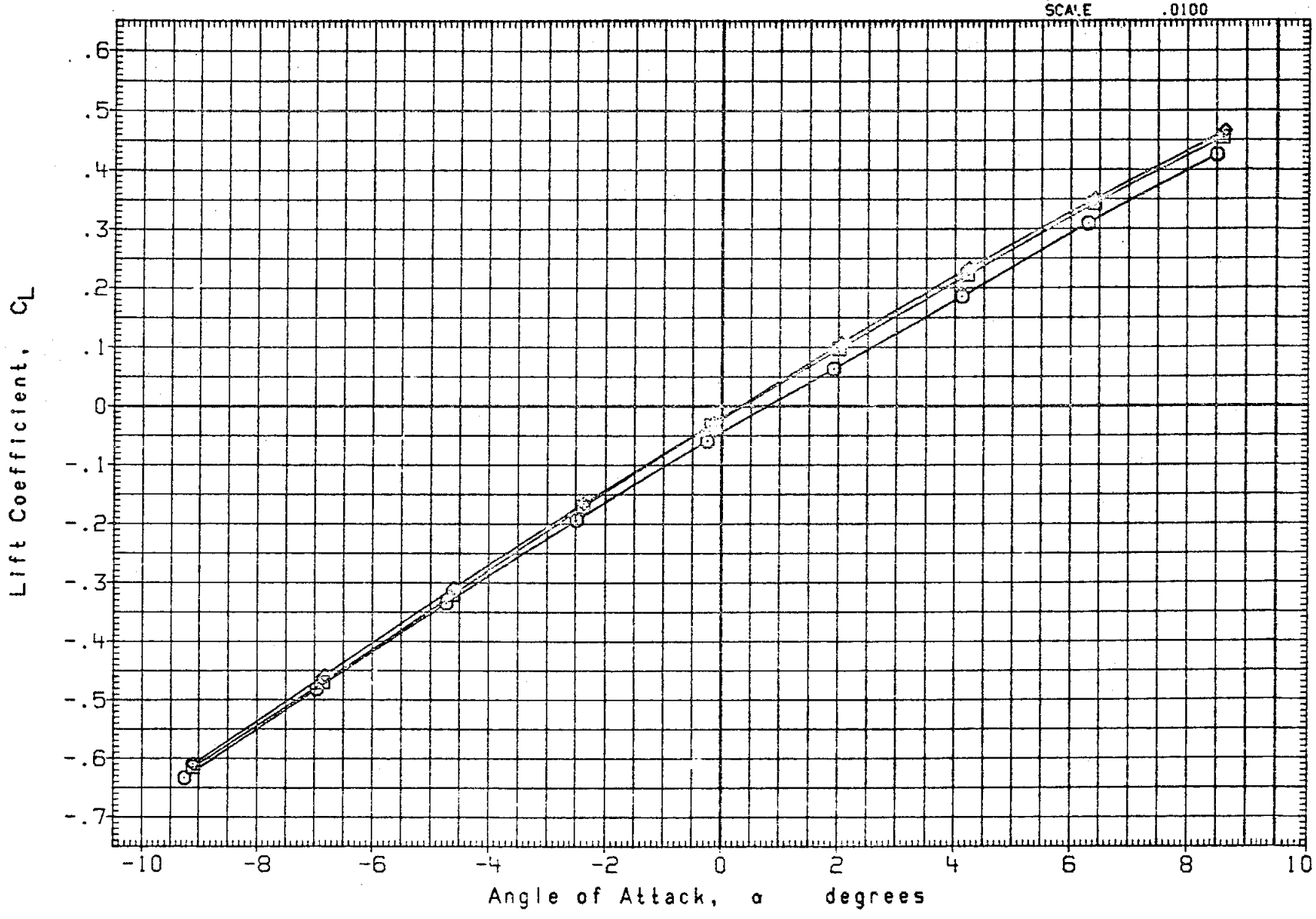


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

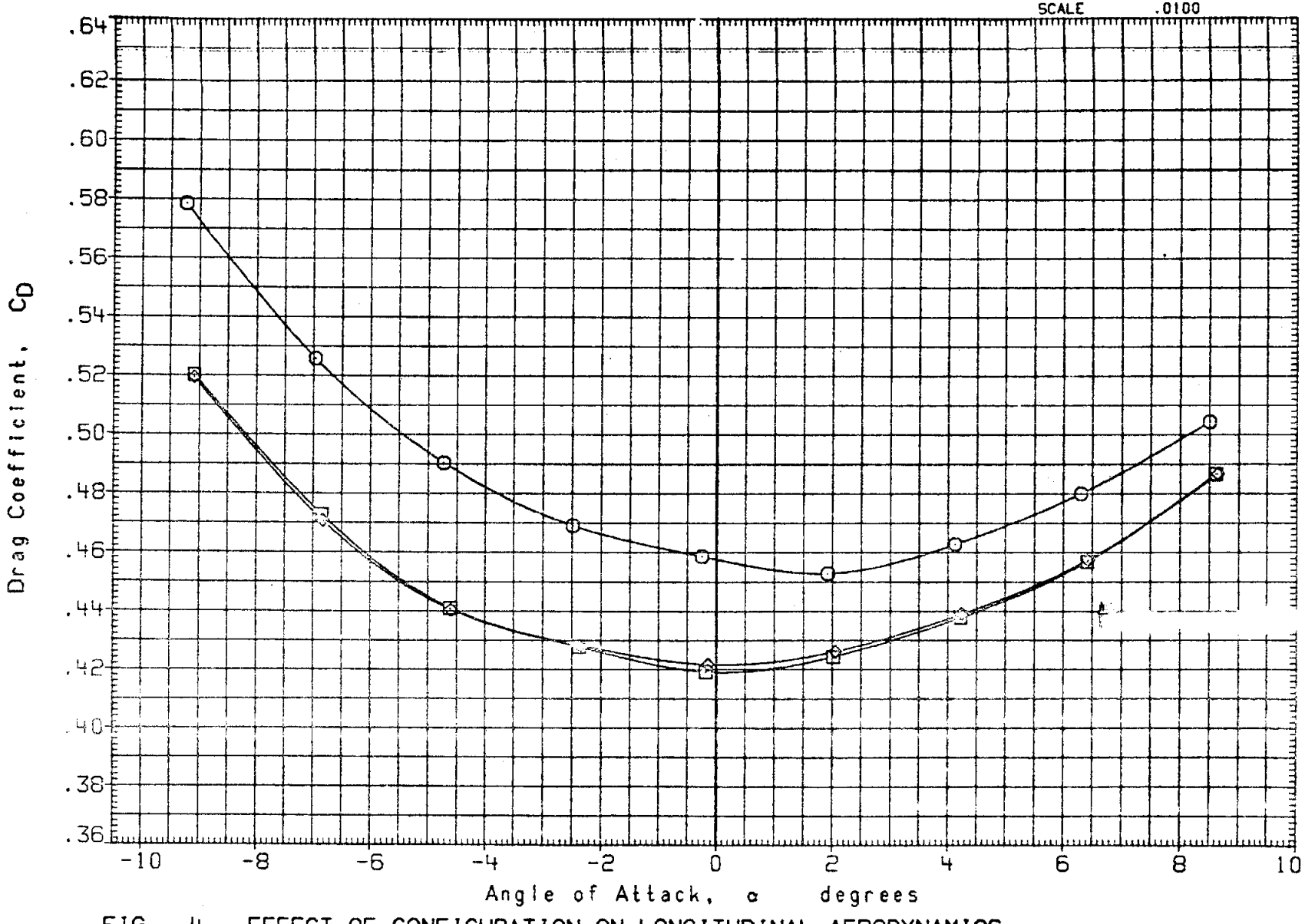


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

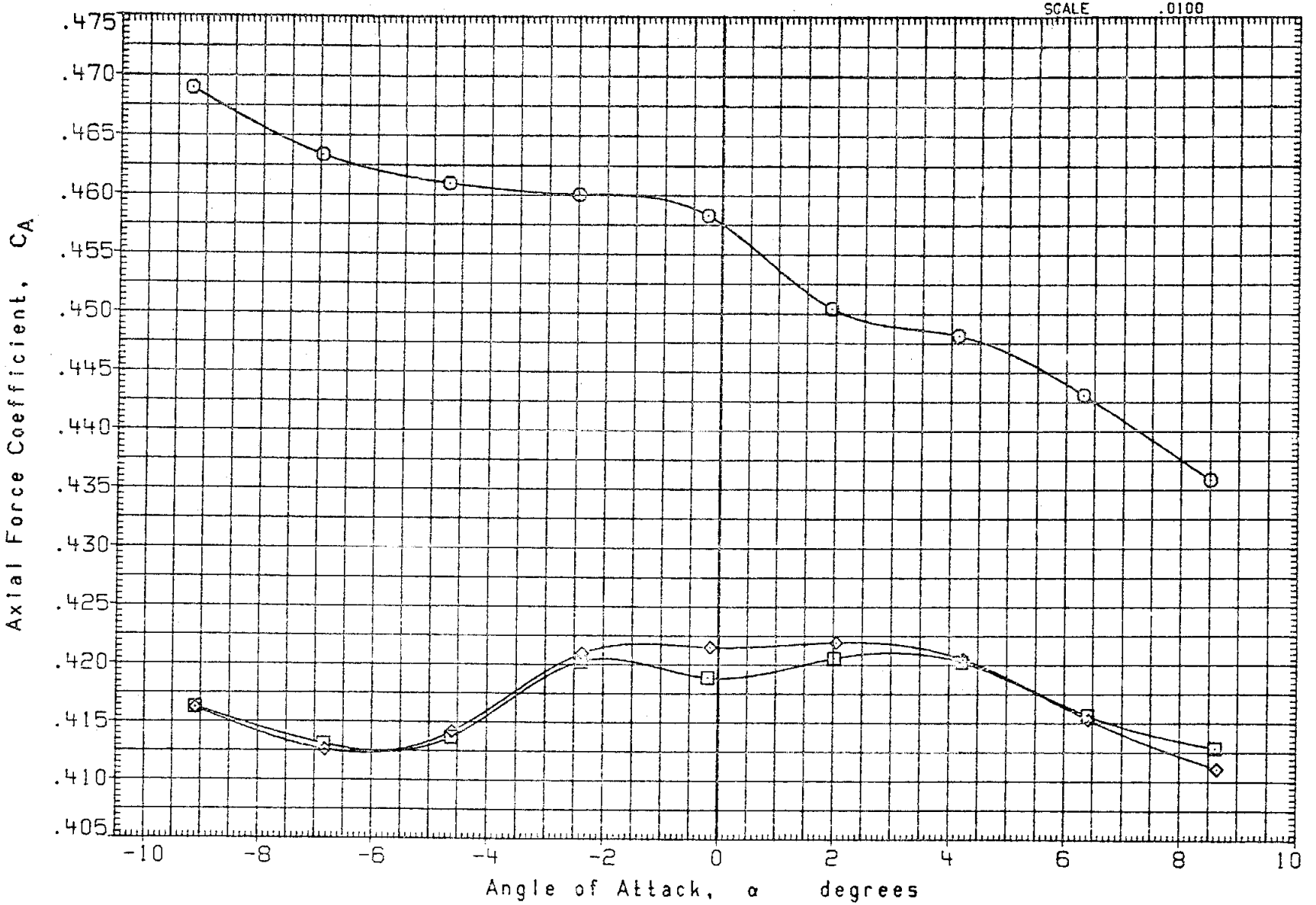


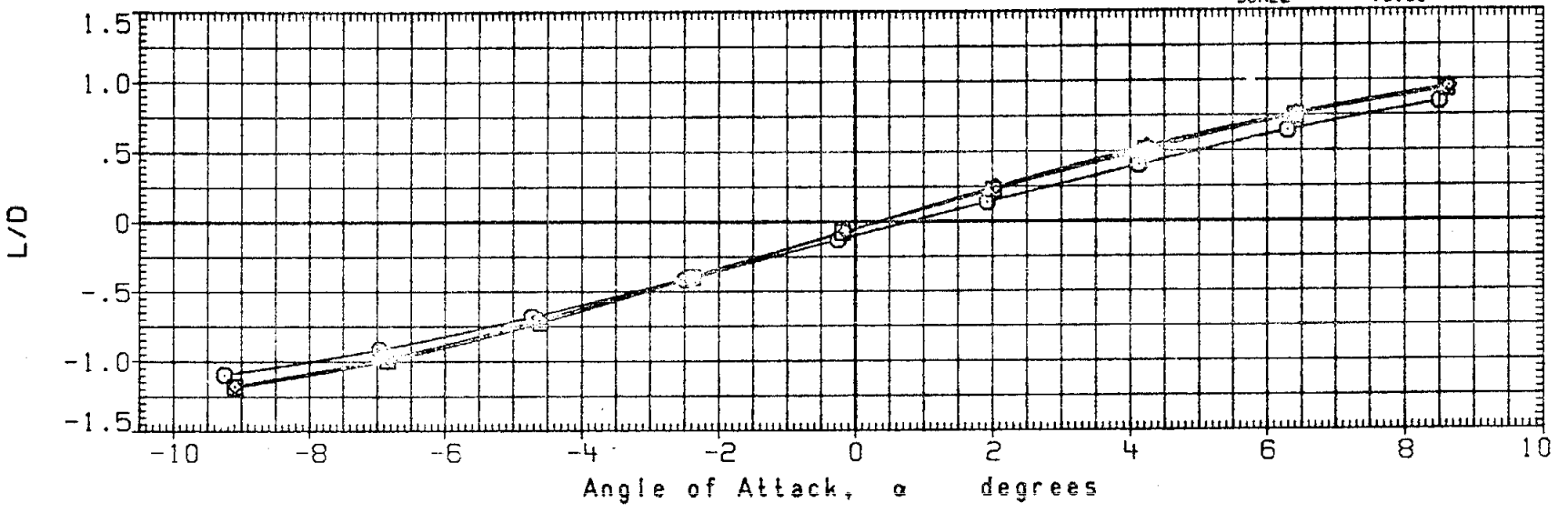
FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



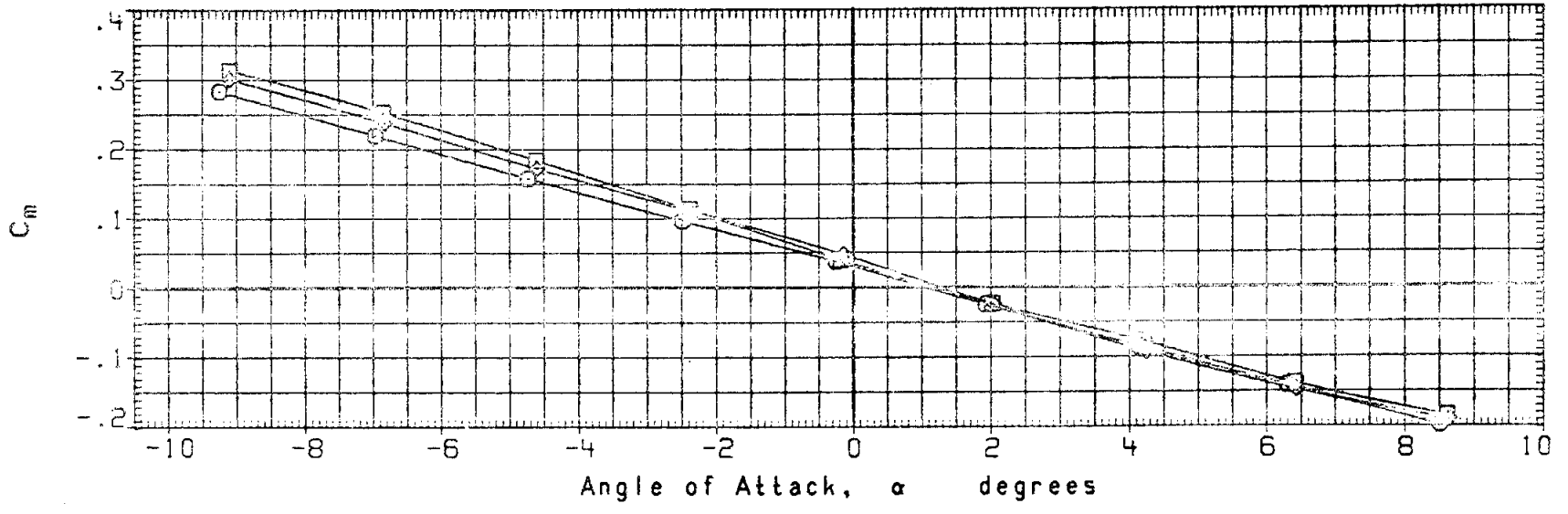


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

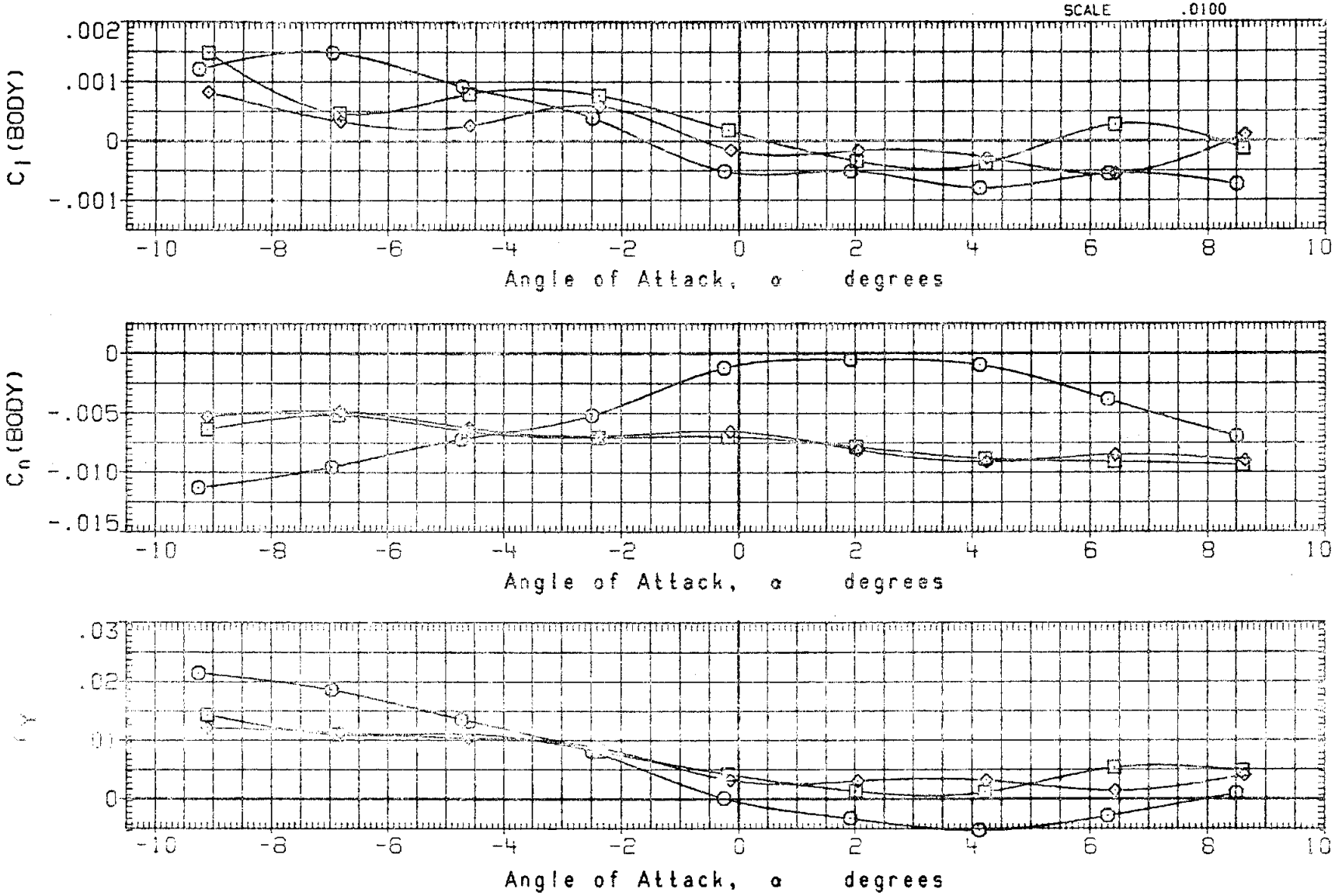


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

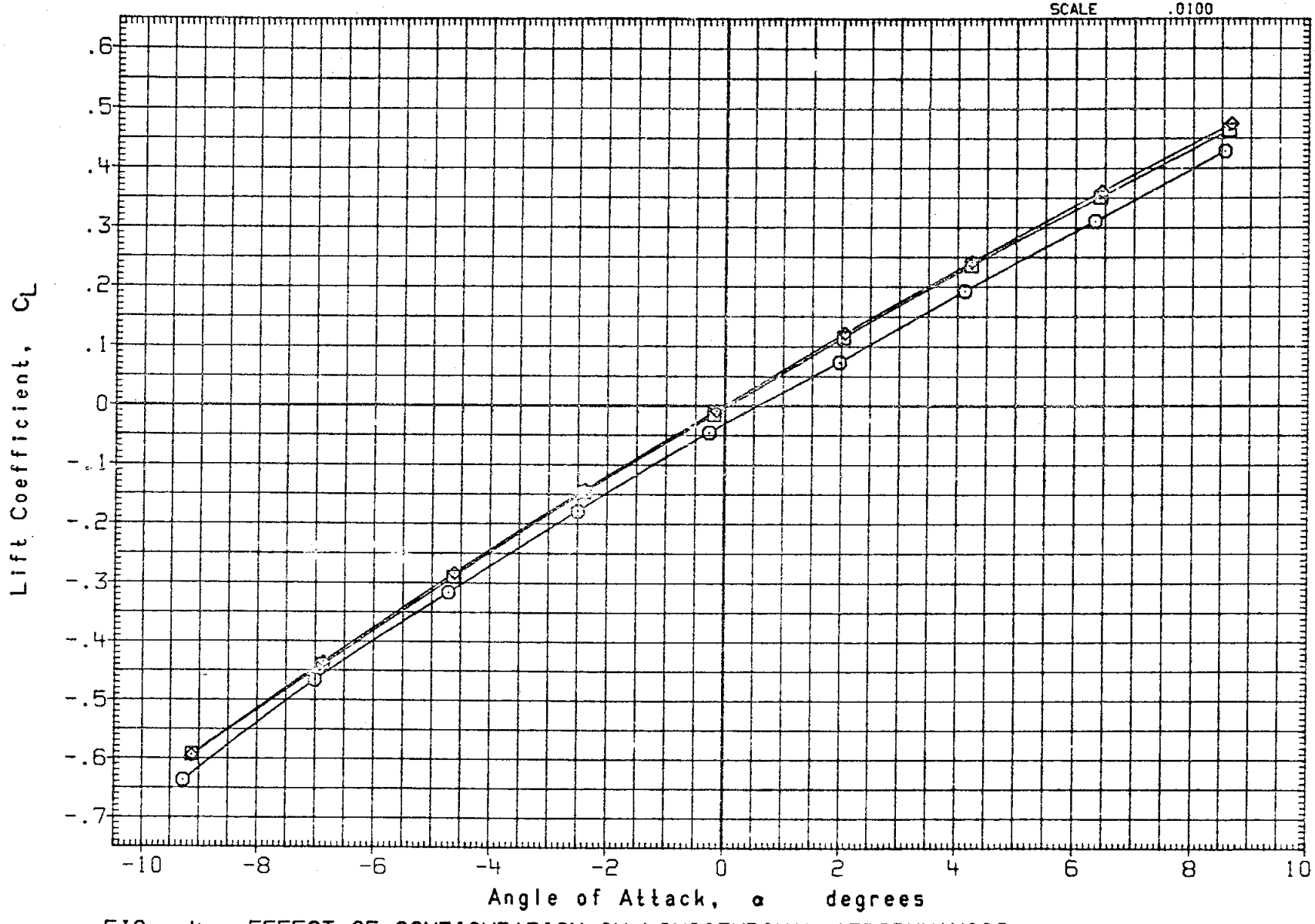


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

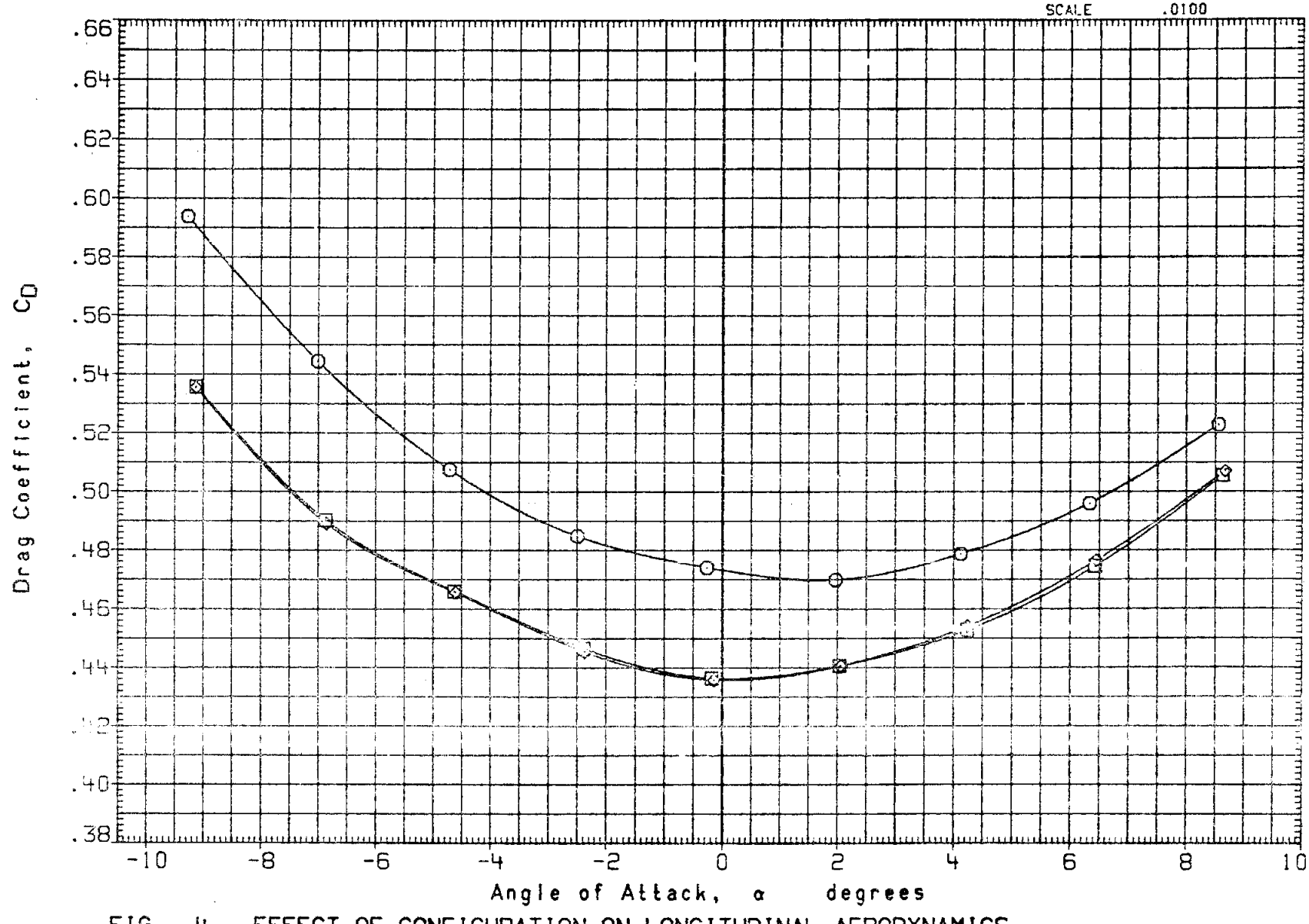


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

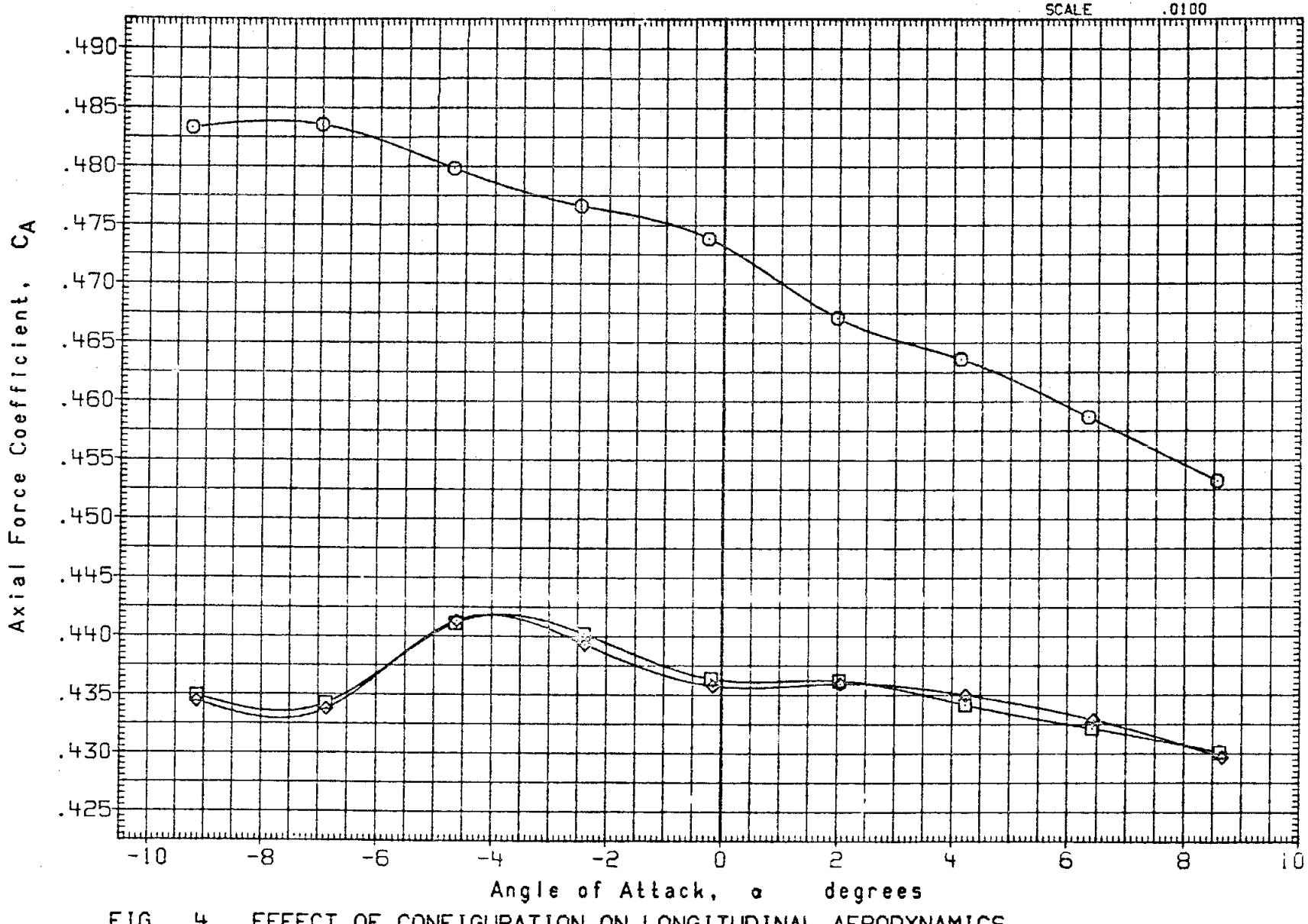


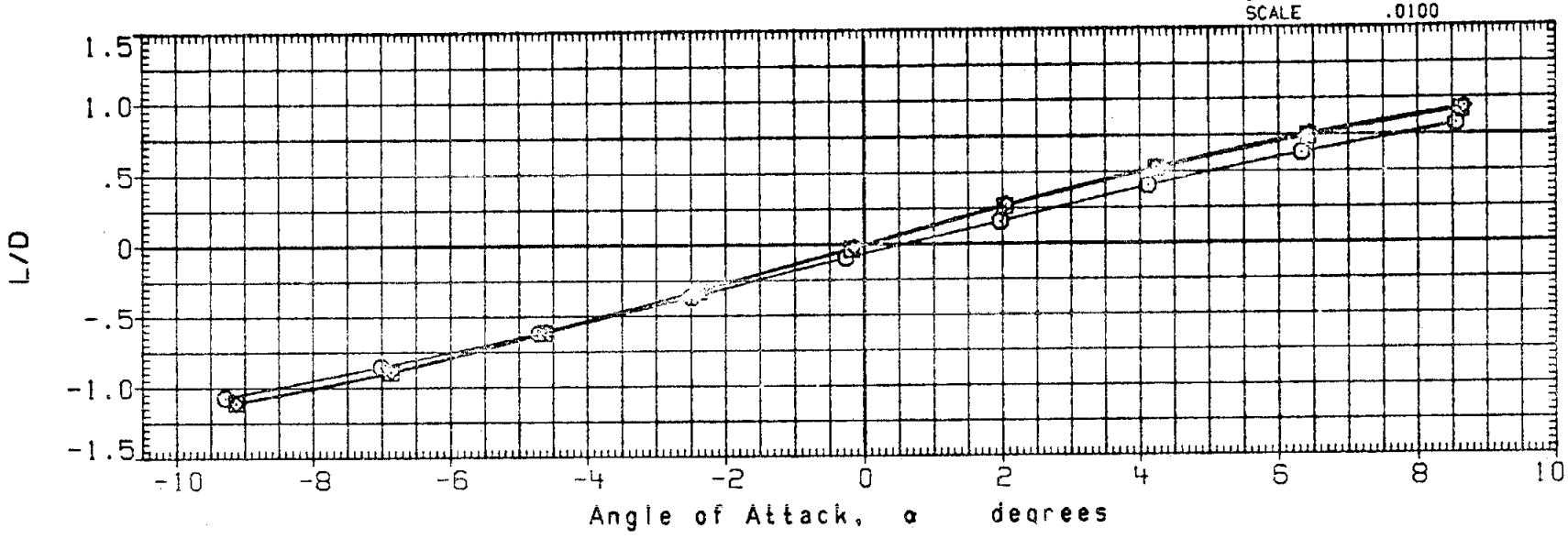
FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION		BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



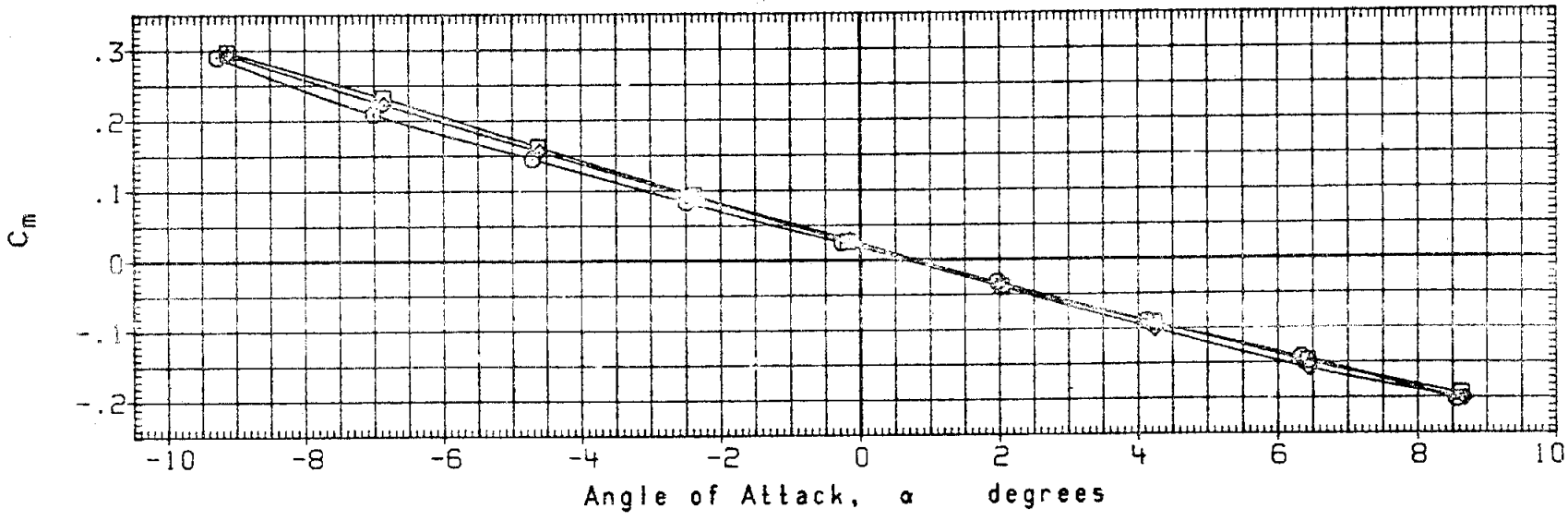


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

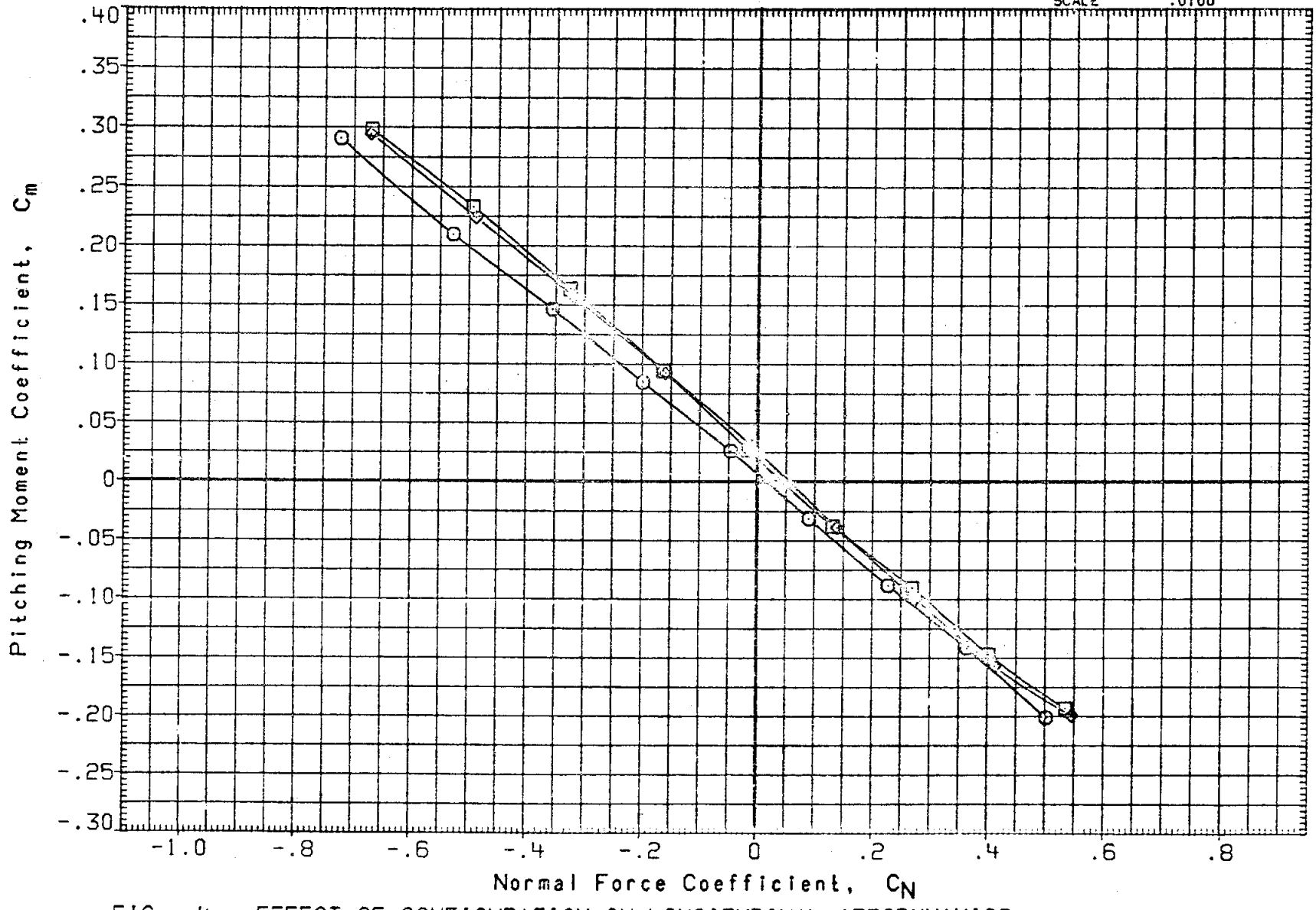


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ009	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2	.000	.000
RHZ010	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LPEF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

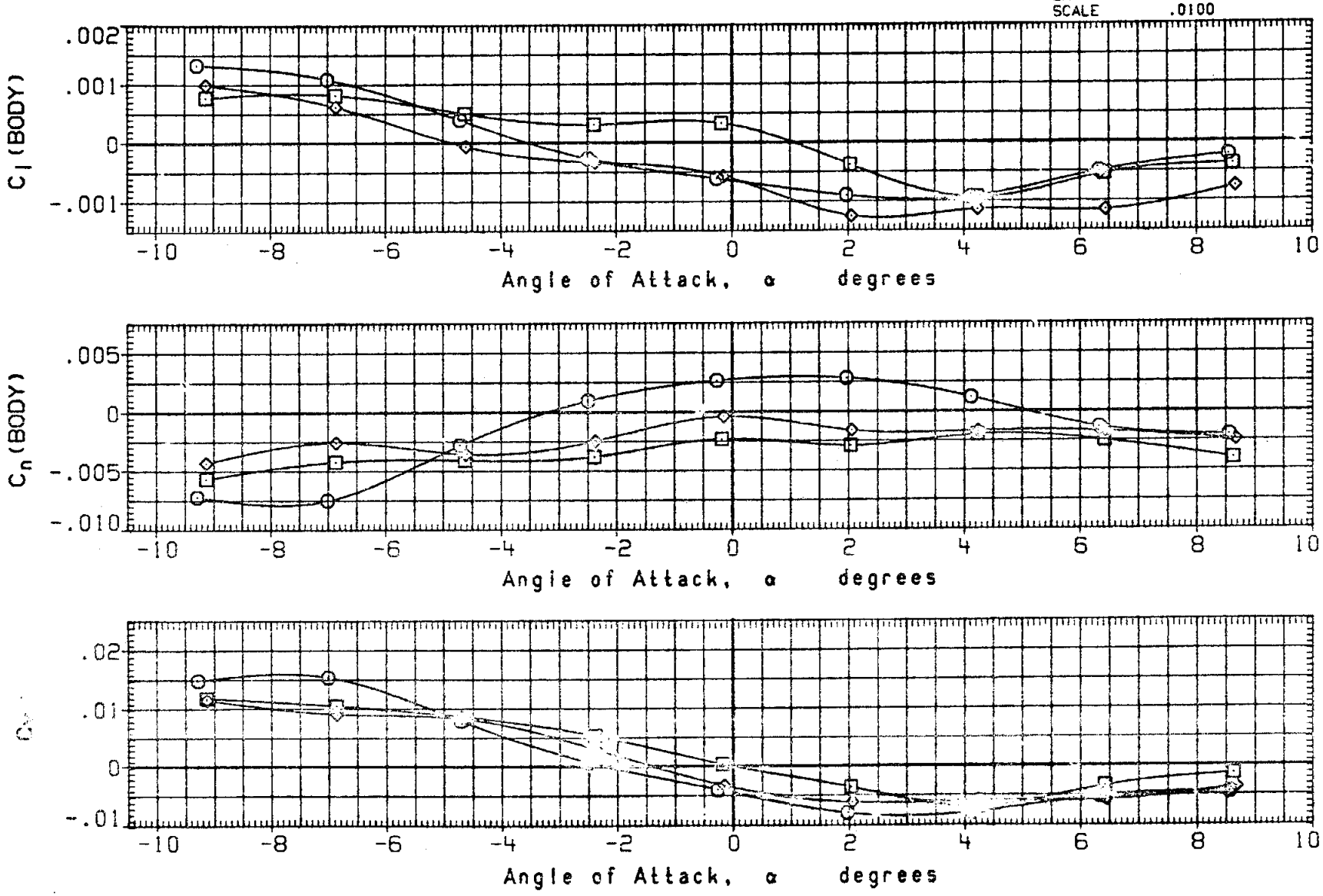


FIG. 4 EFFECT OF CONFIGURATION ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

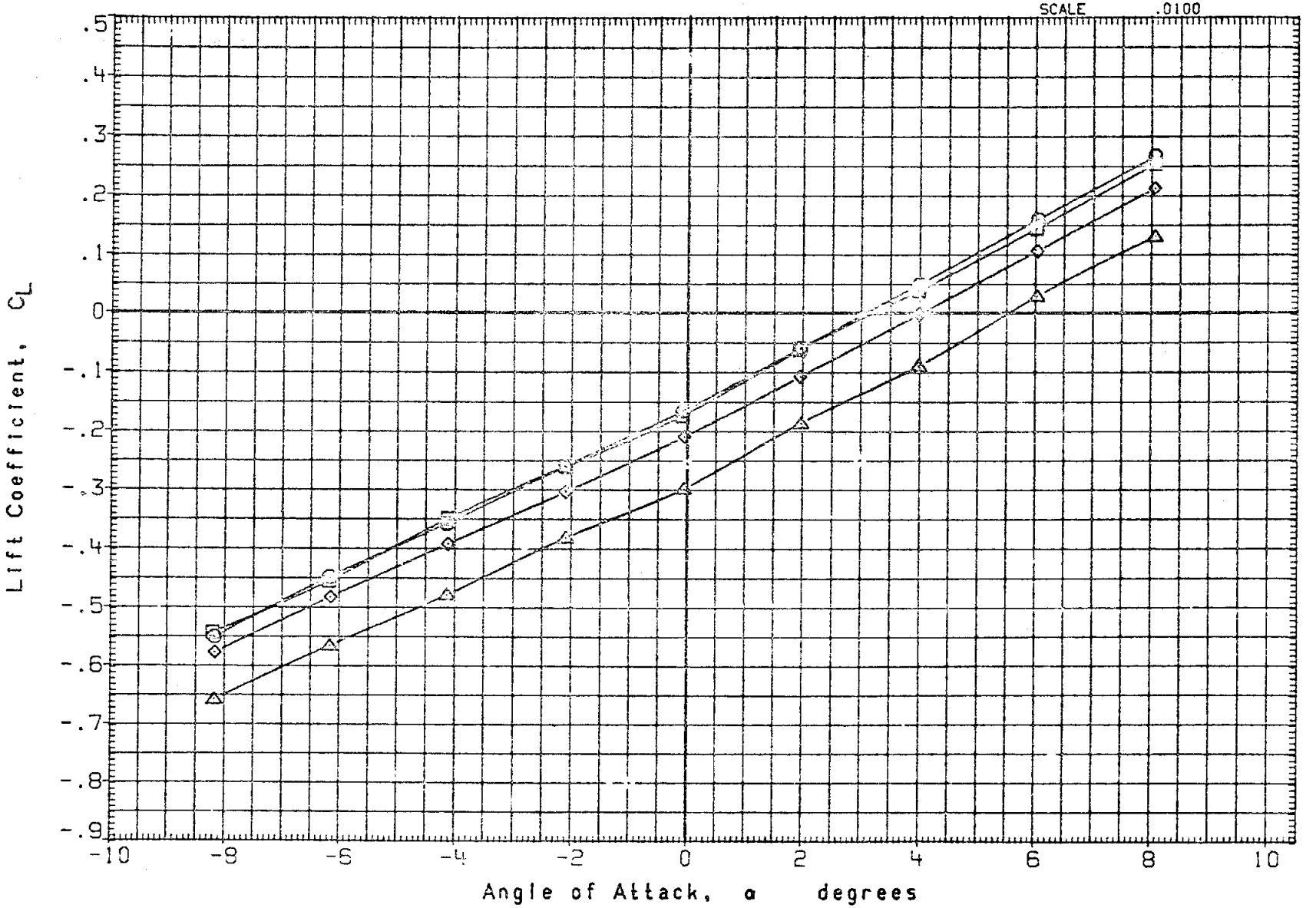


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	875.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

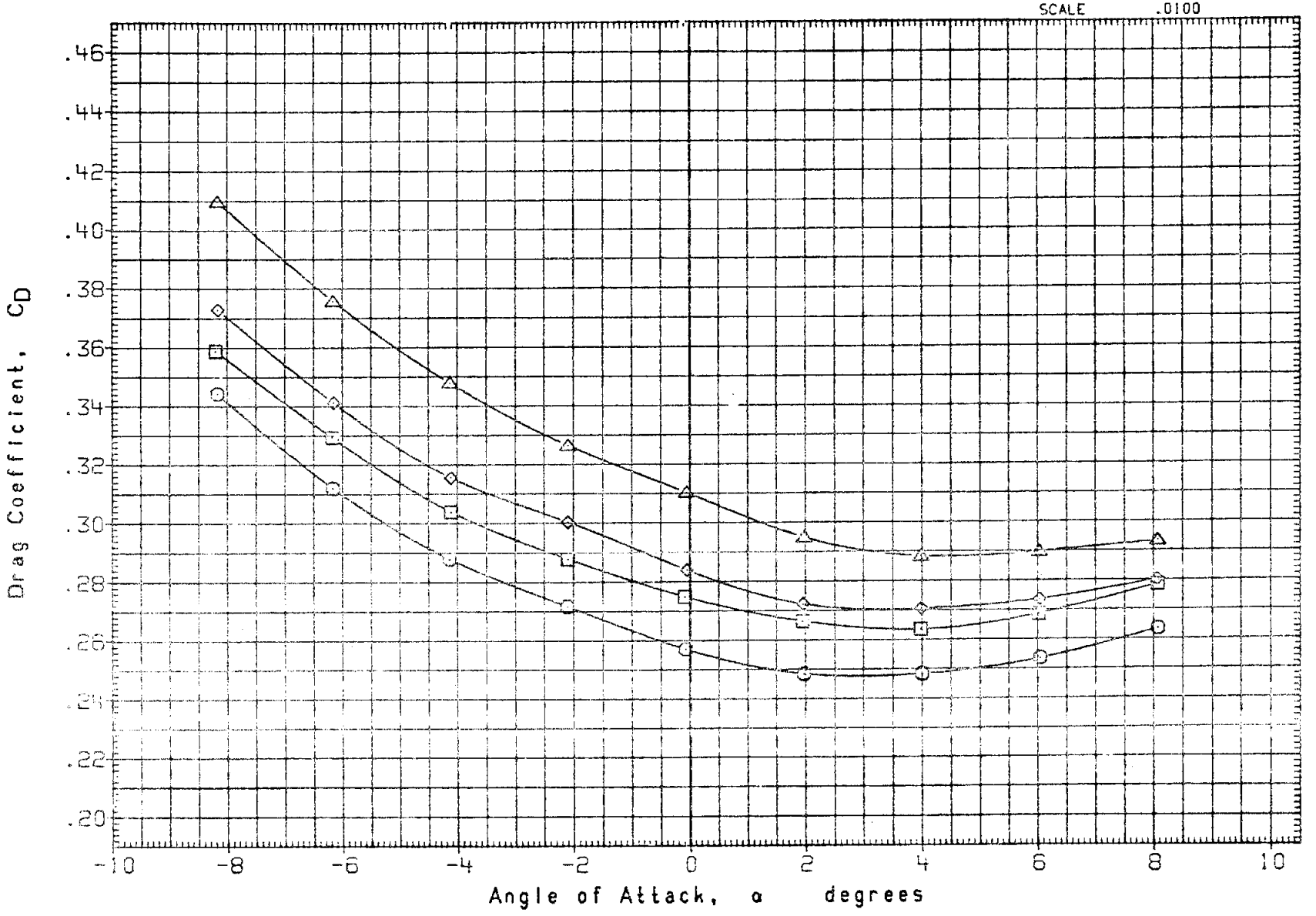


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

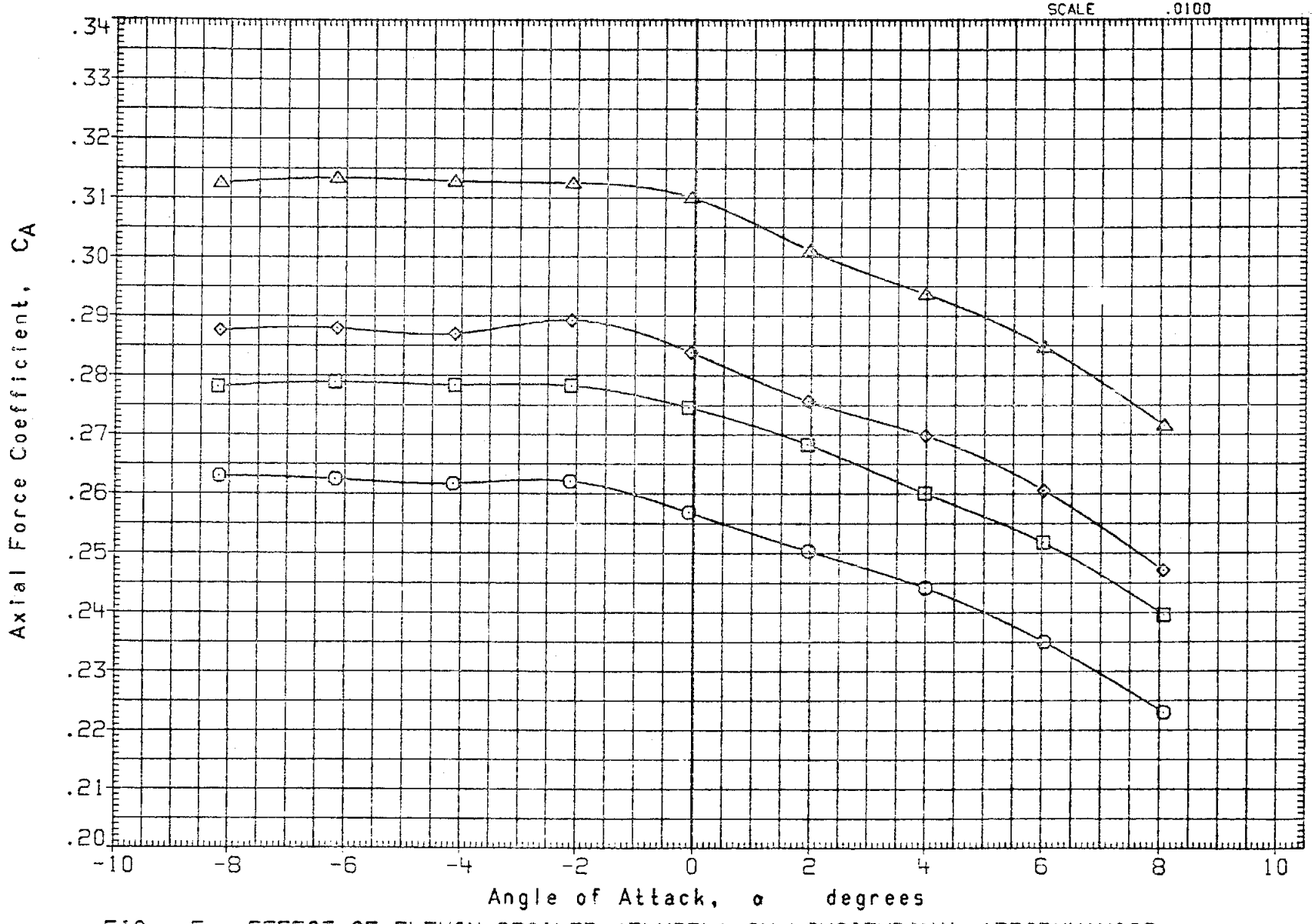


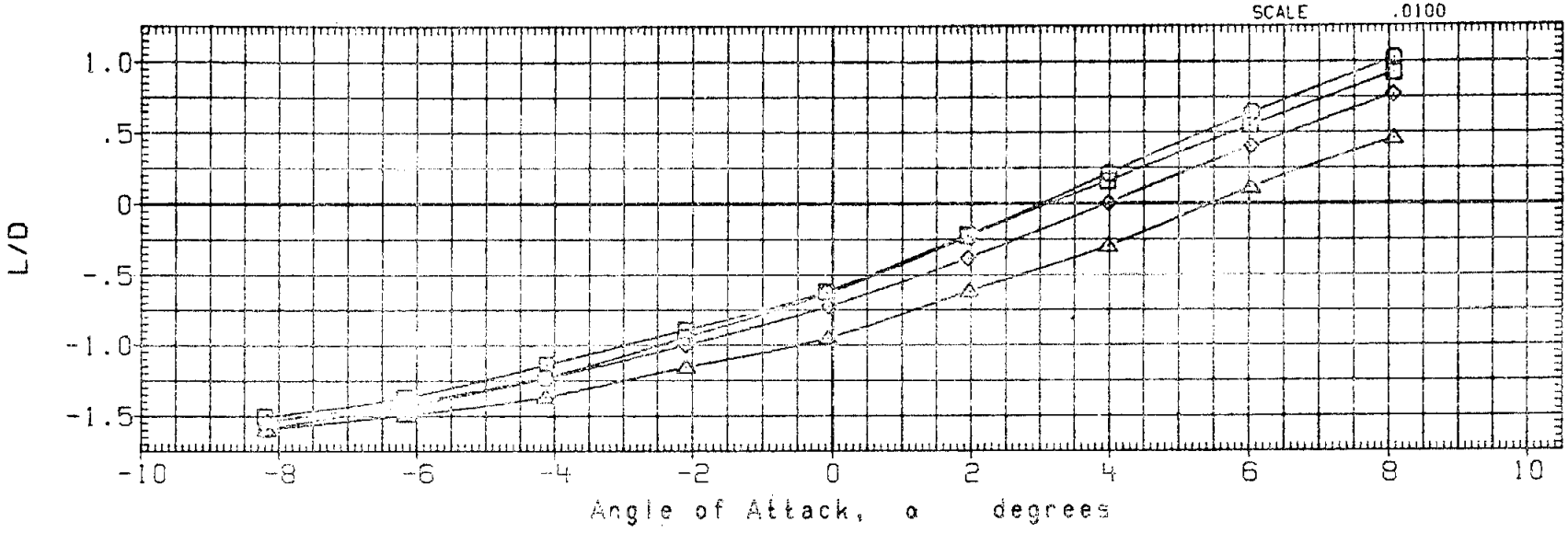
FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



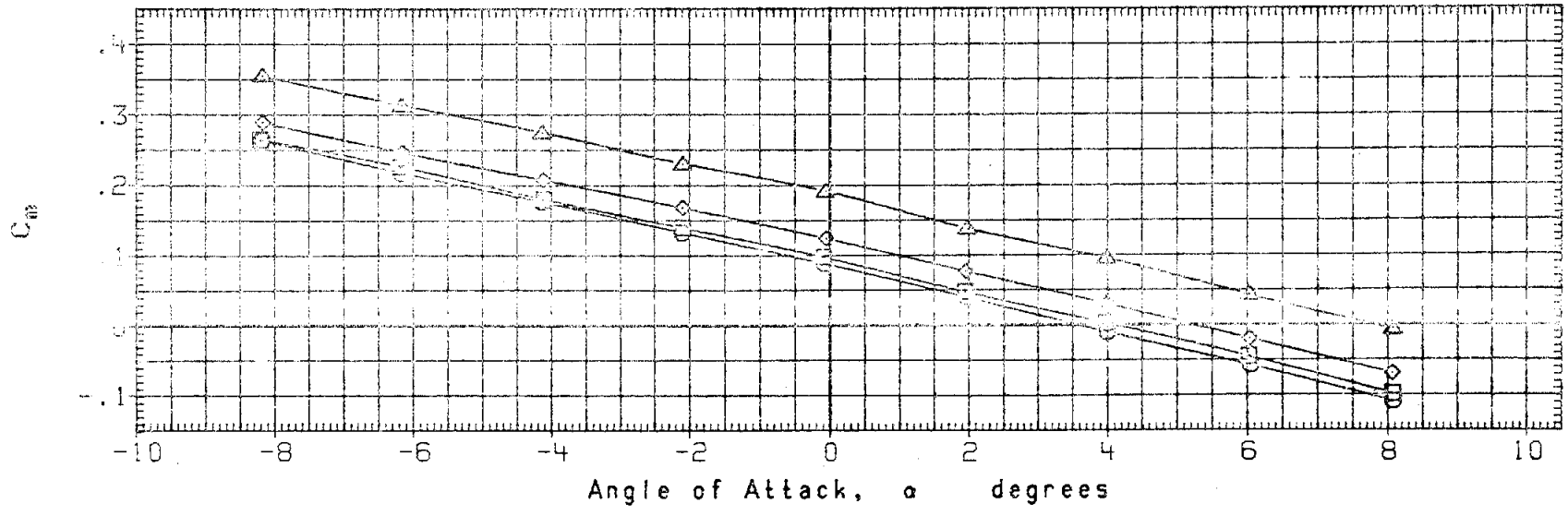


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

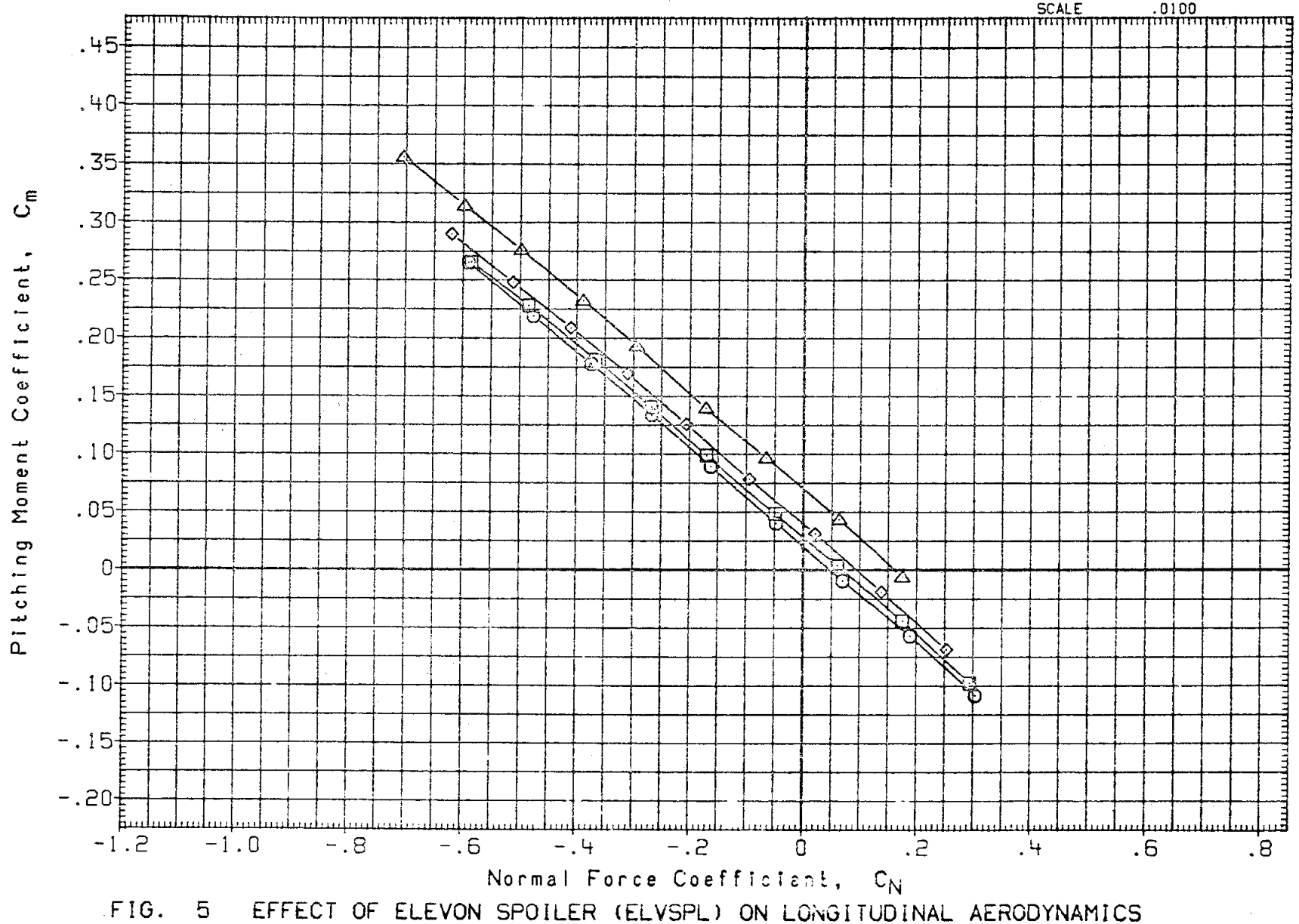


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

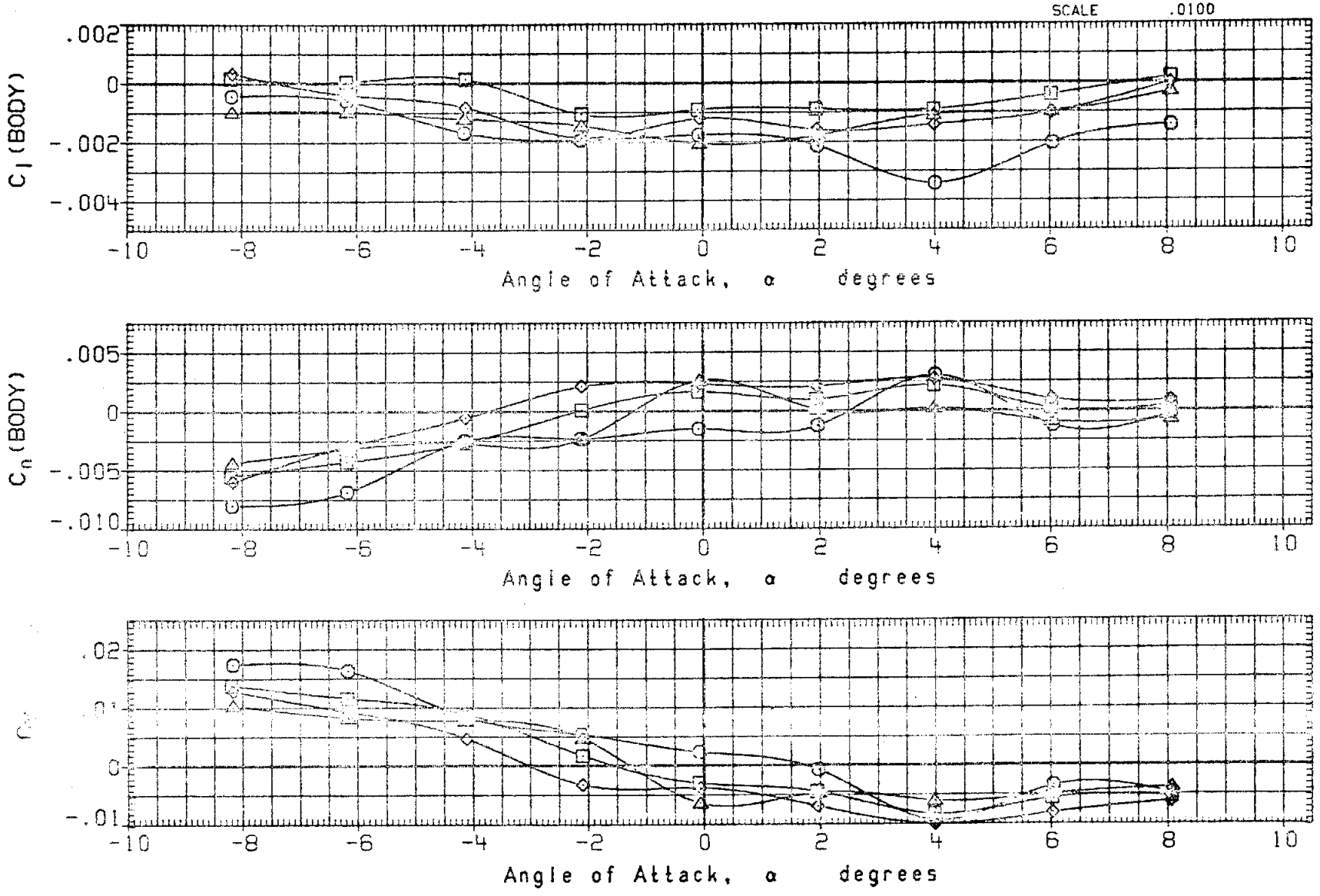


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(A) MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

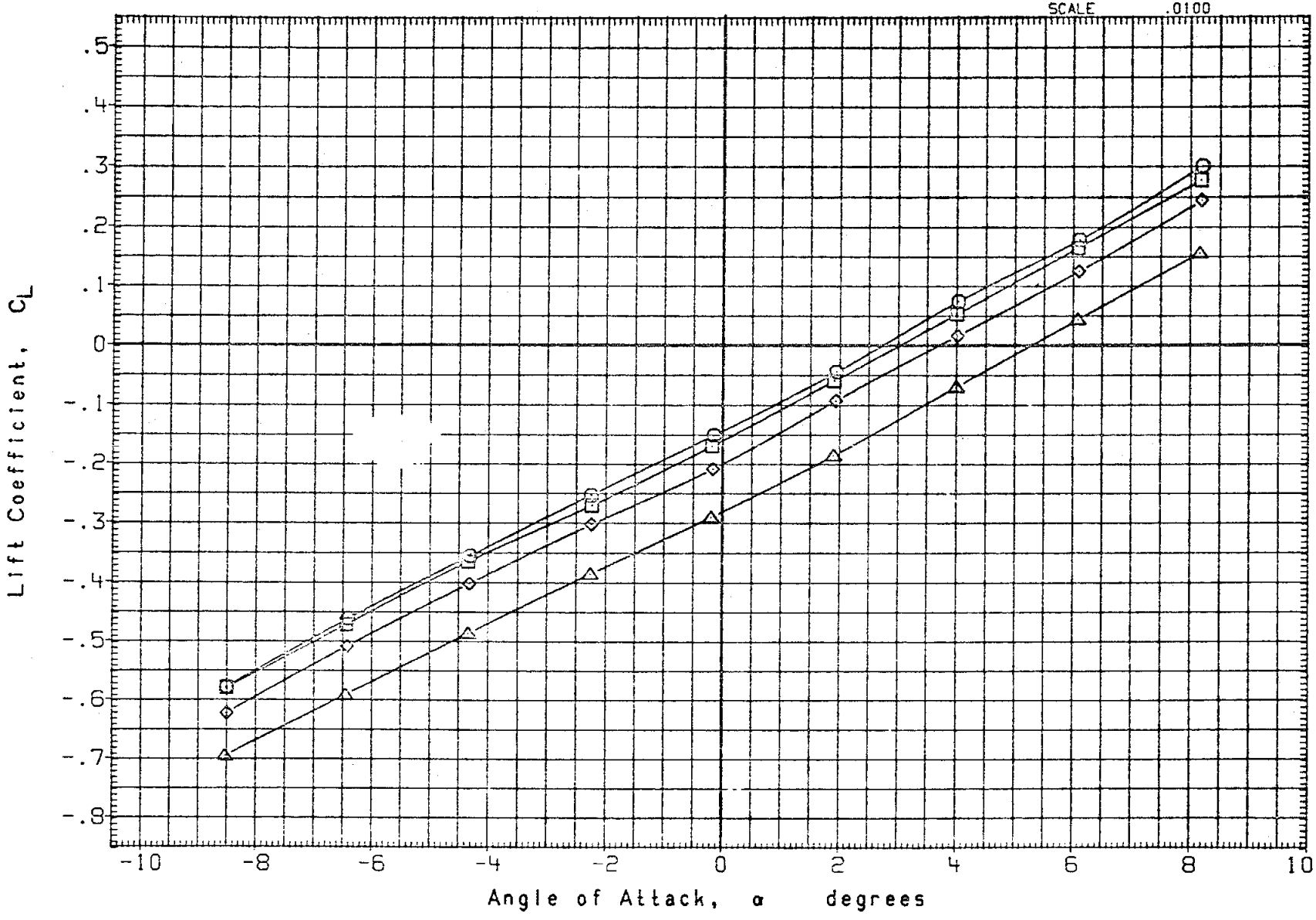


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

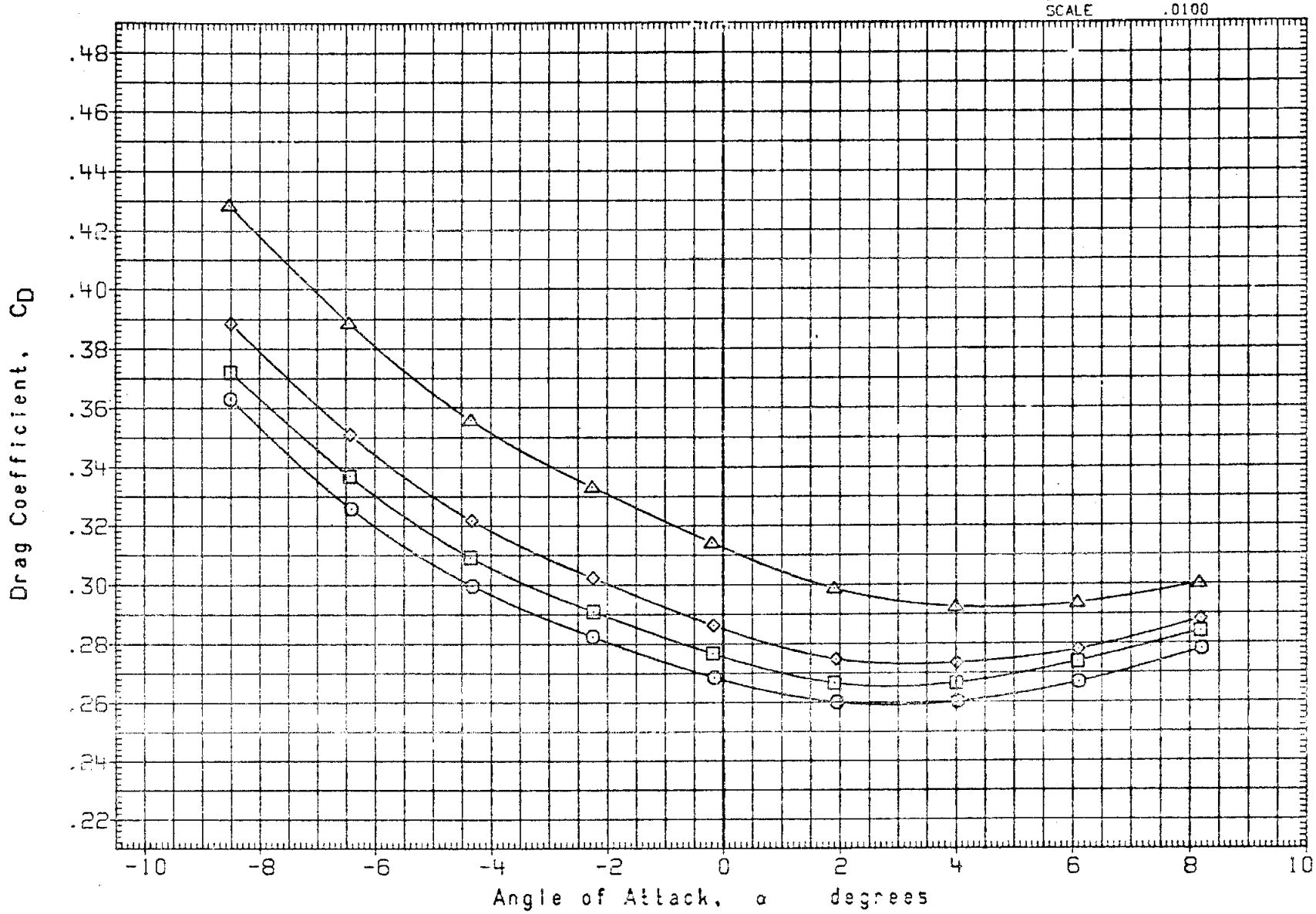


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

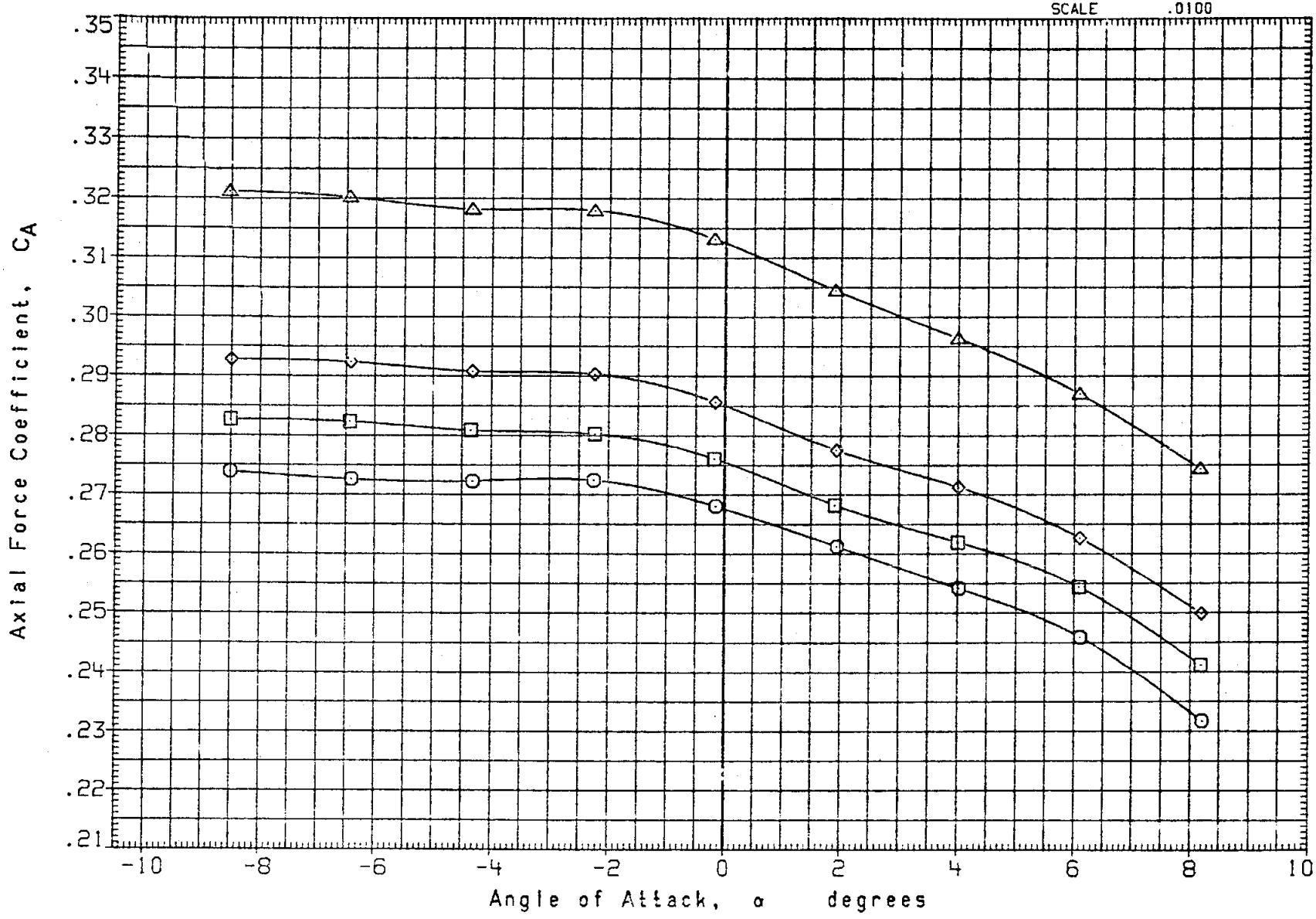


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(B) MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

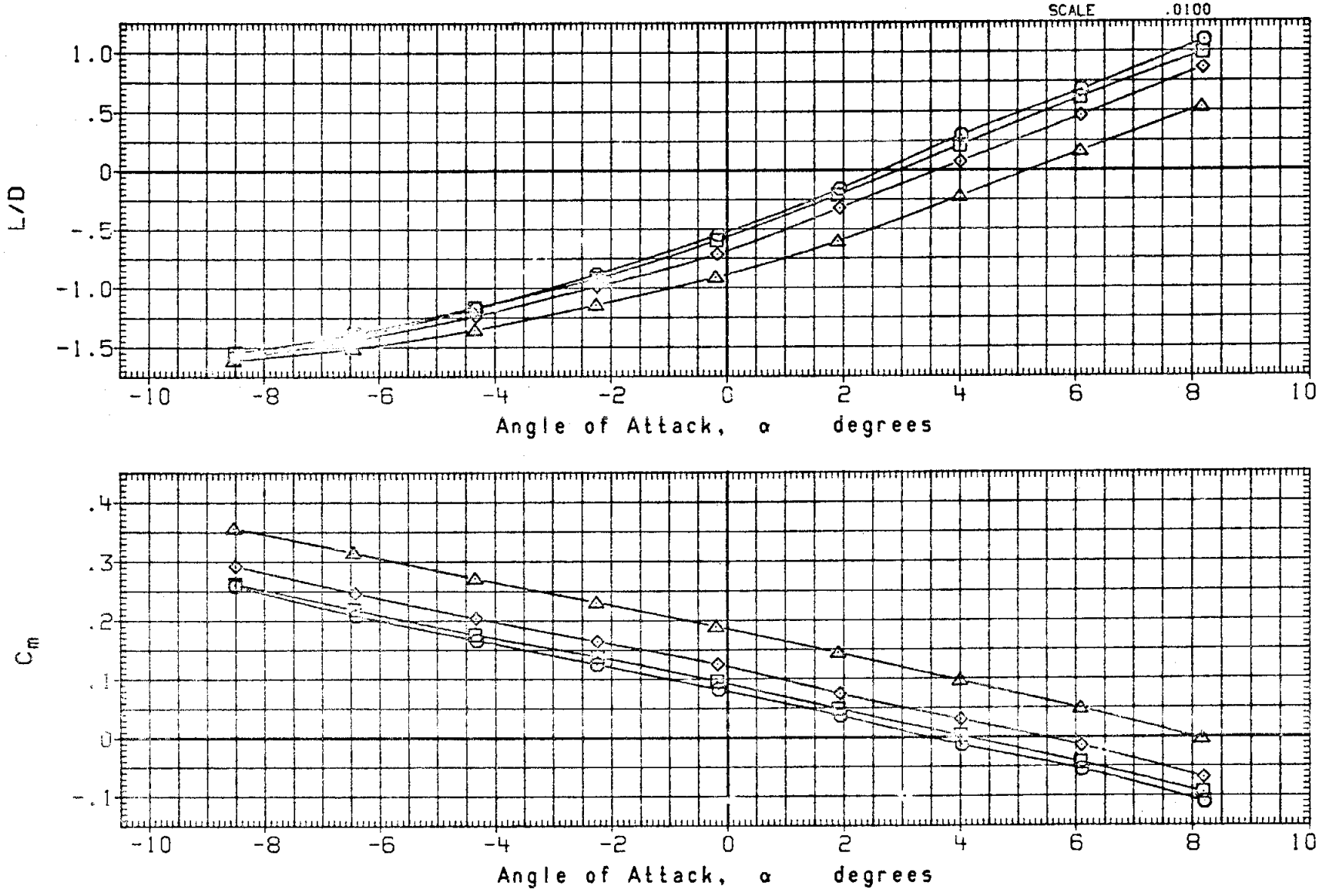


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

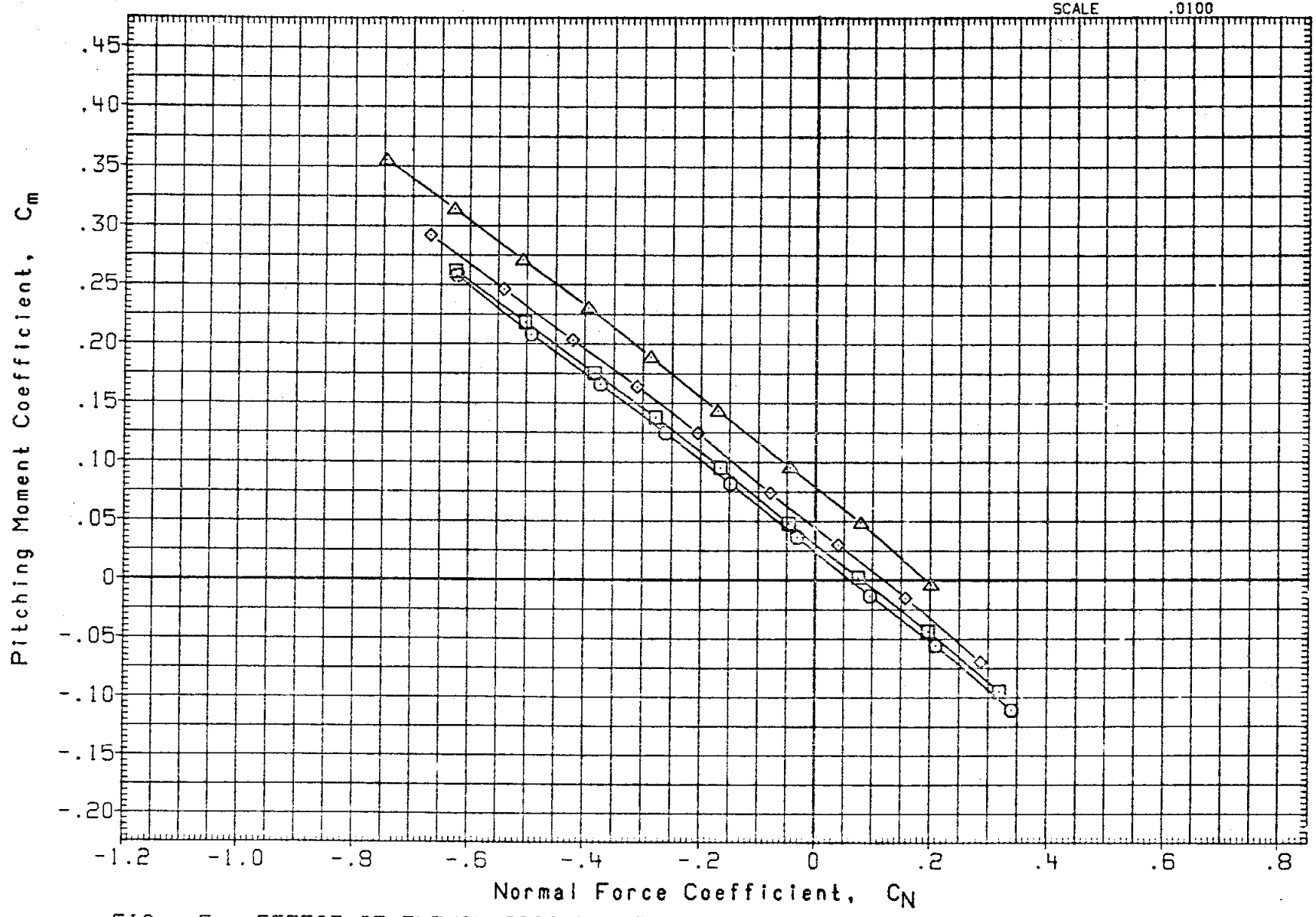


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

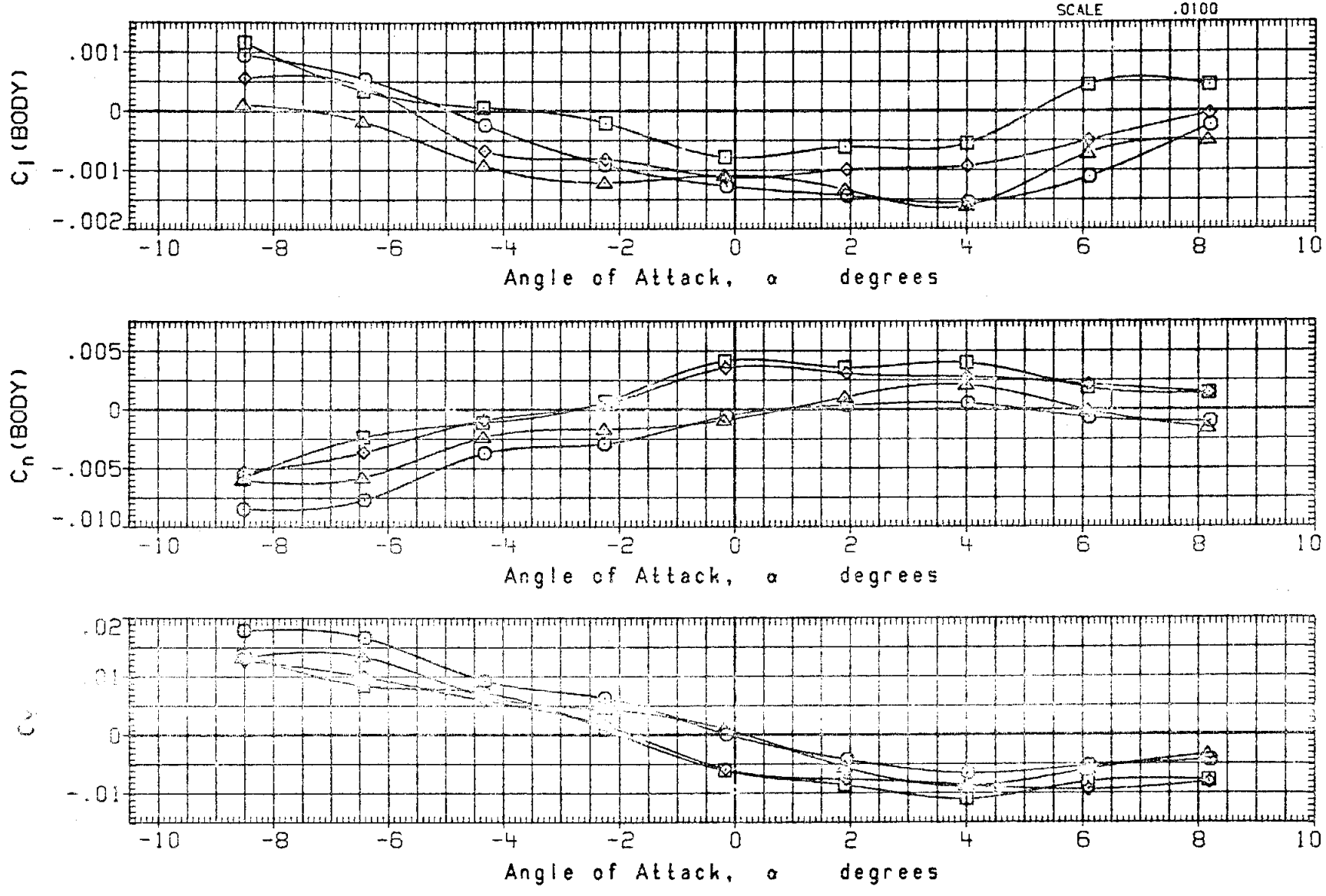


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

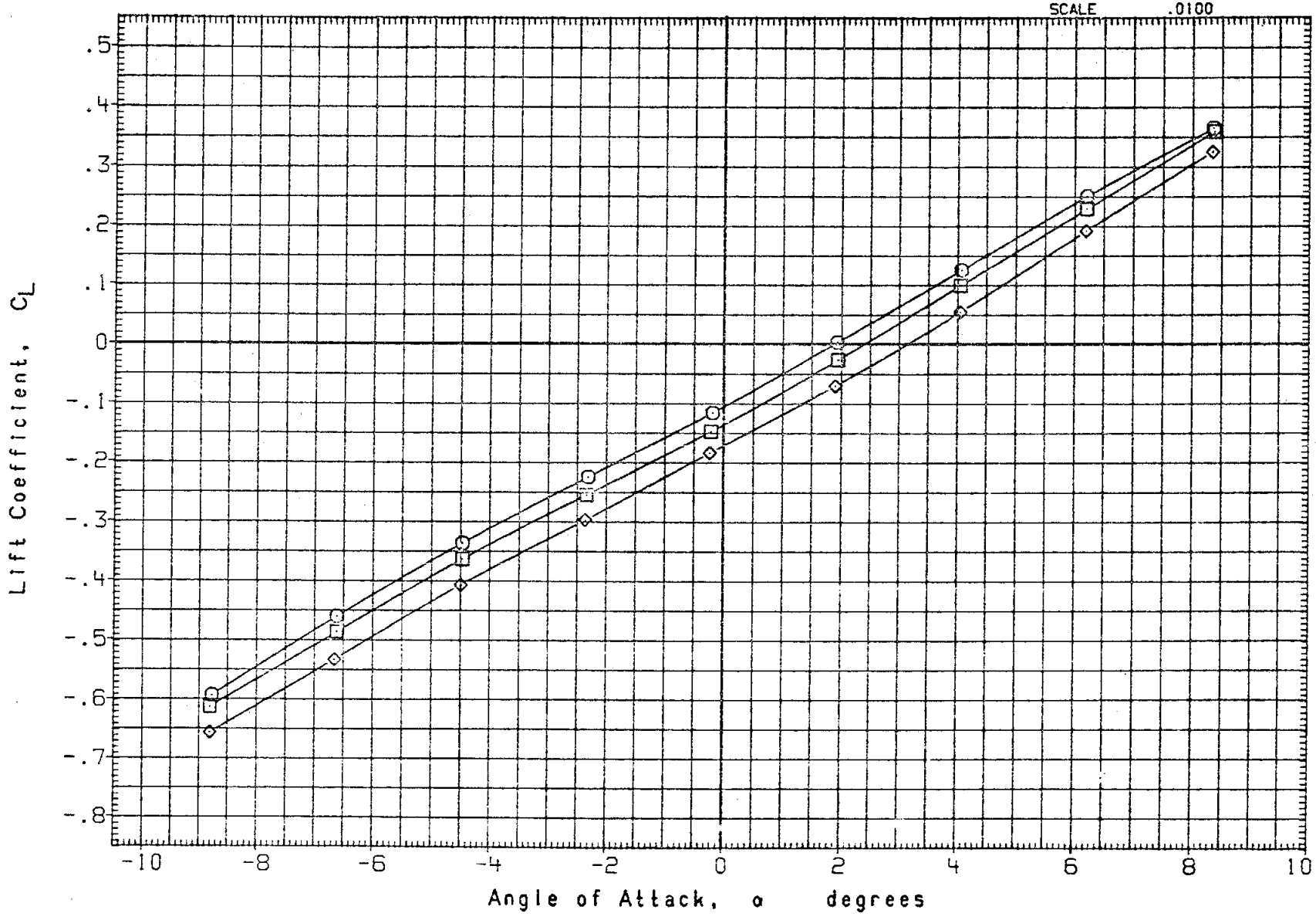


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2890.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

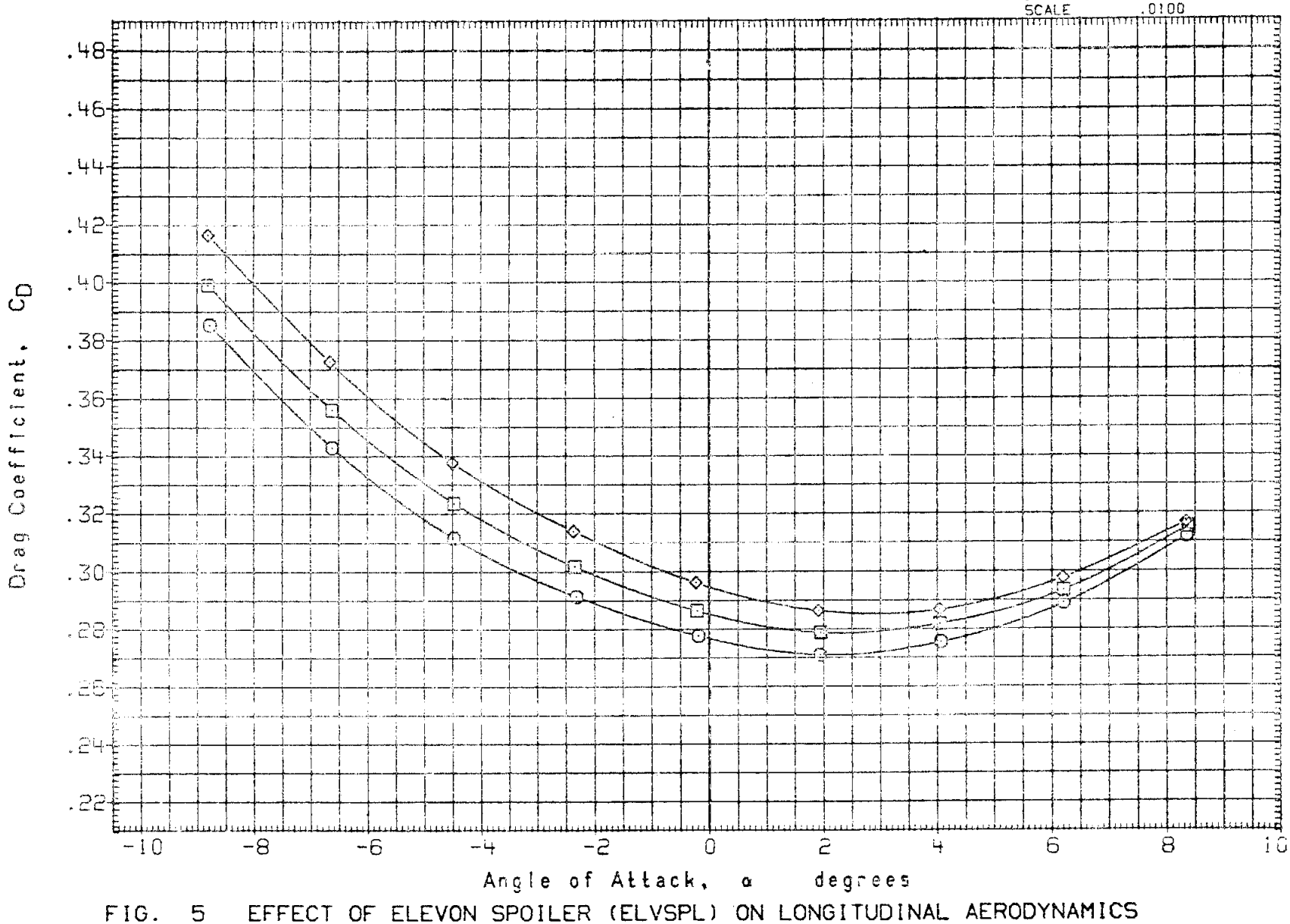


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

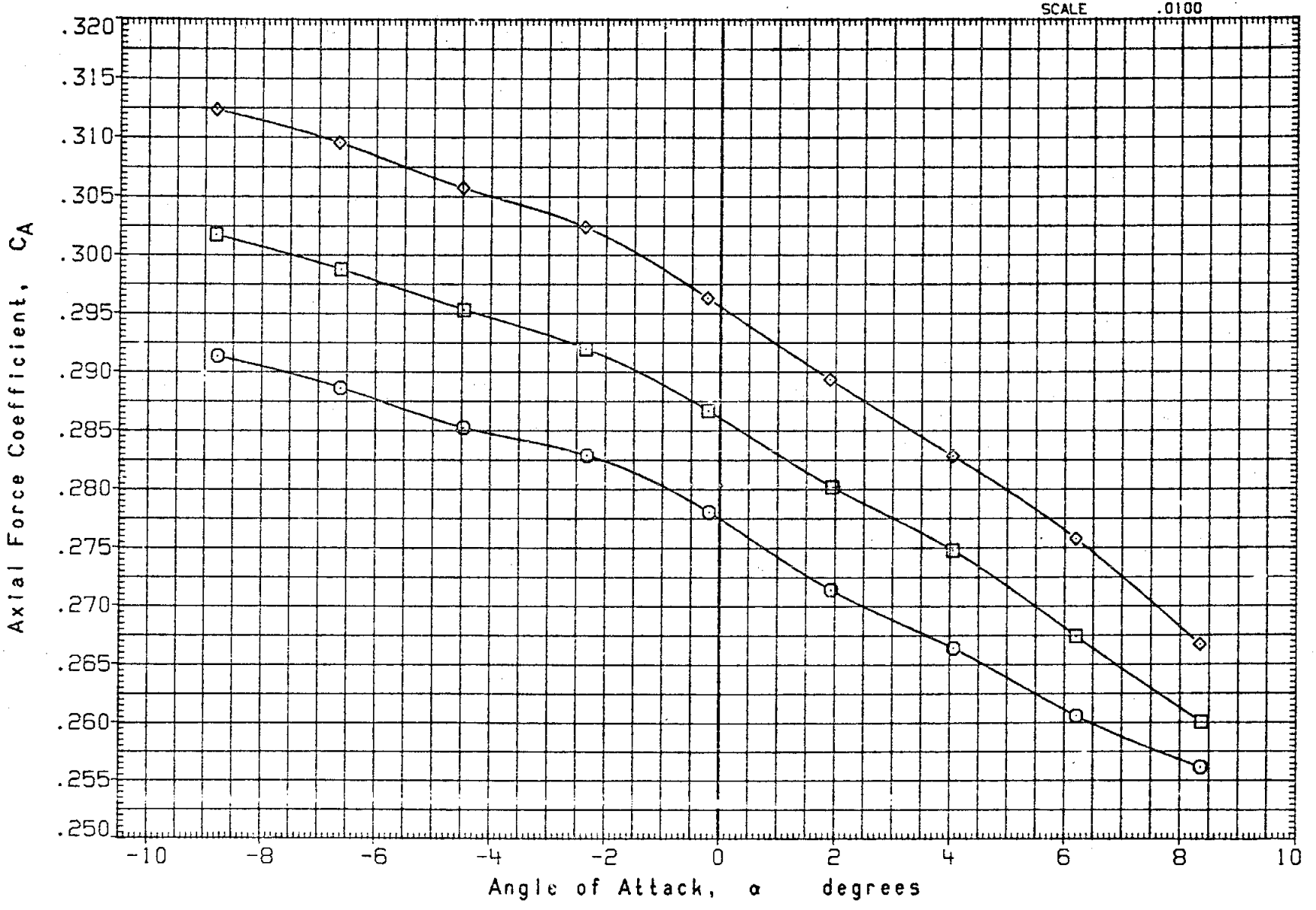


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

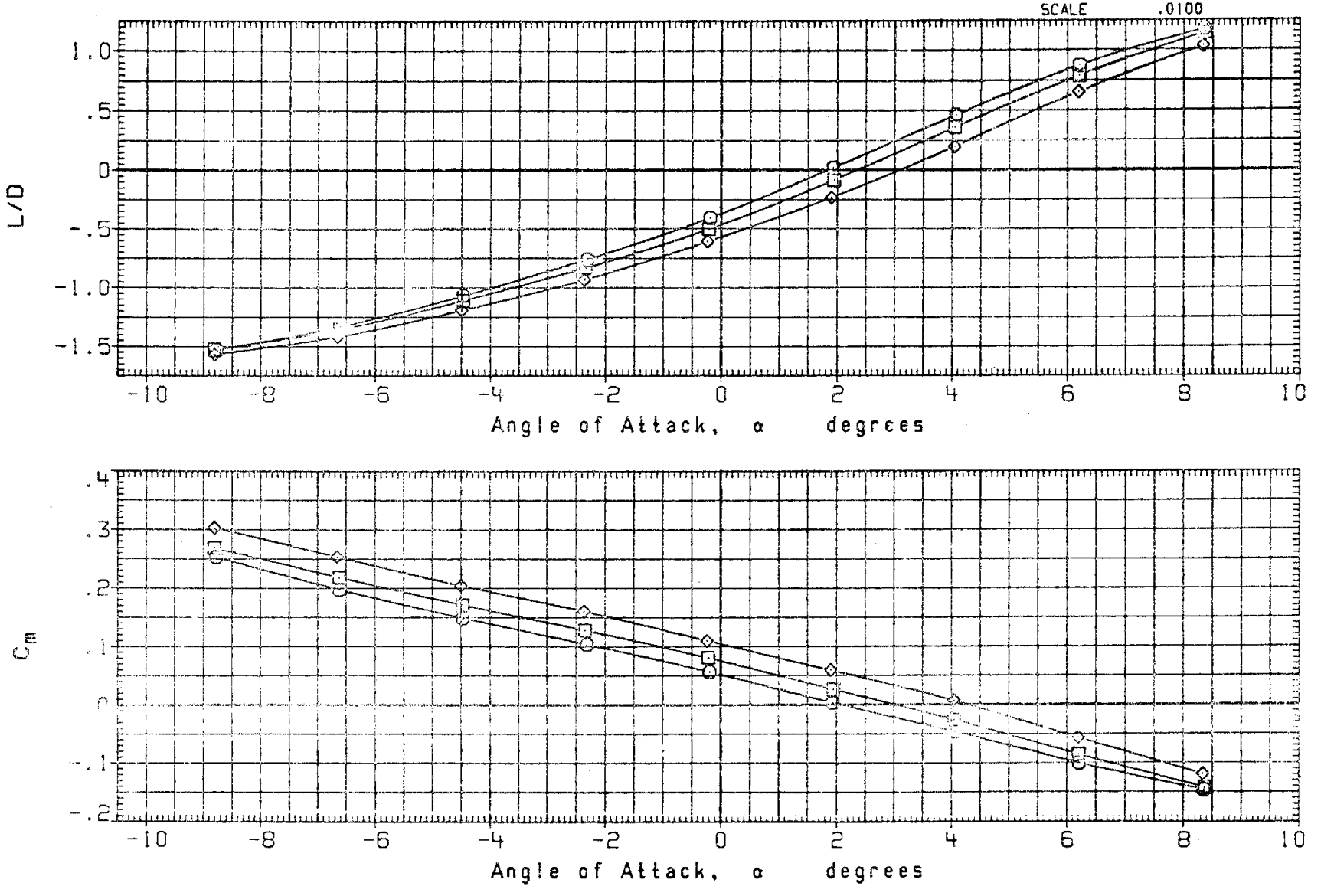


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

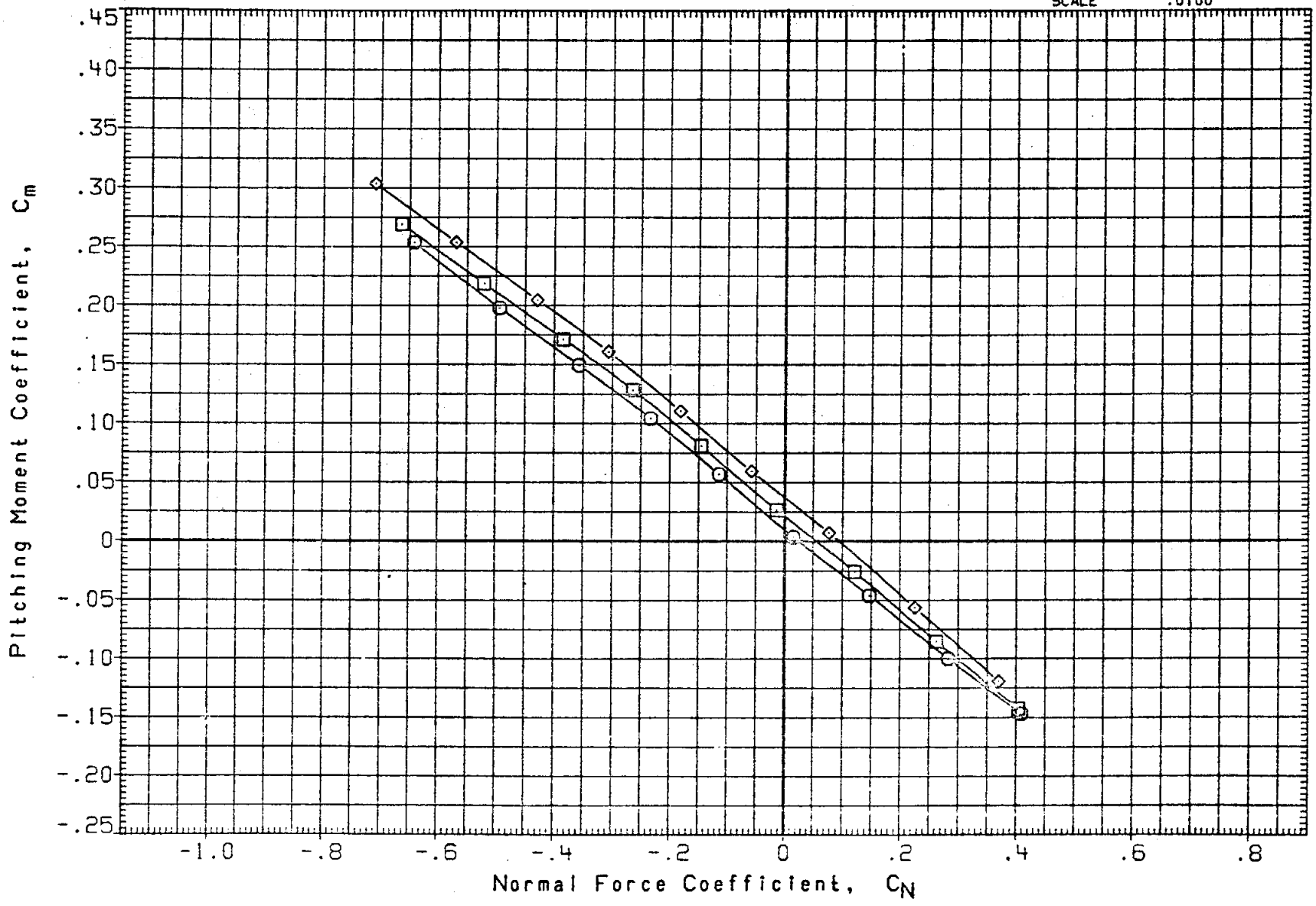


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

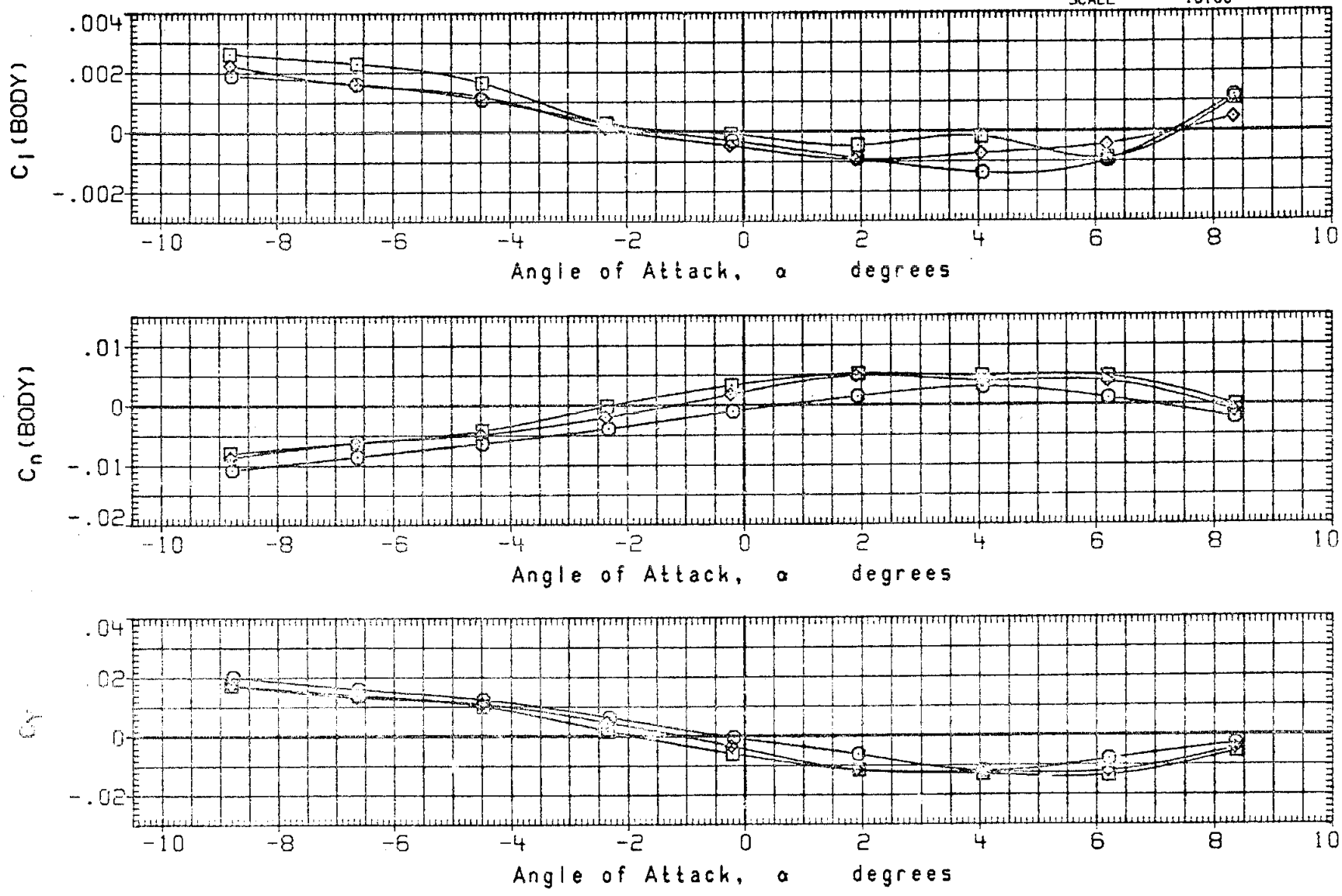


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

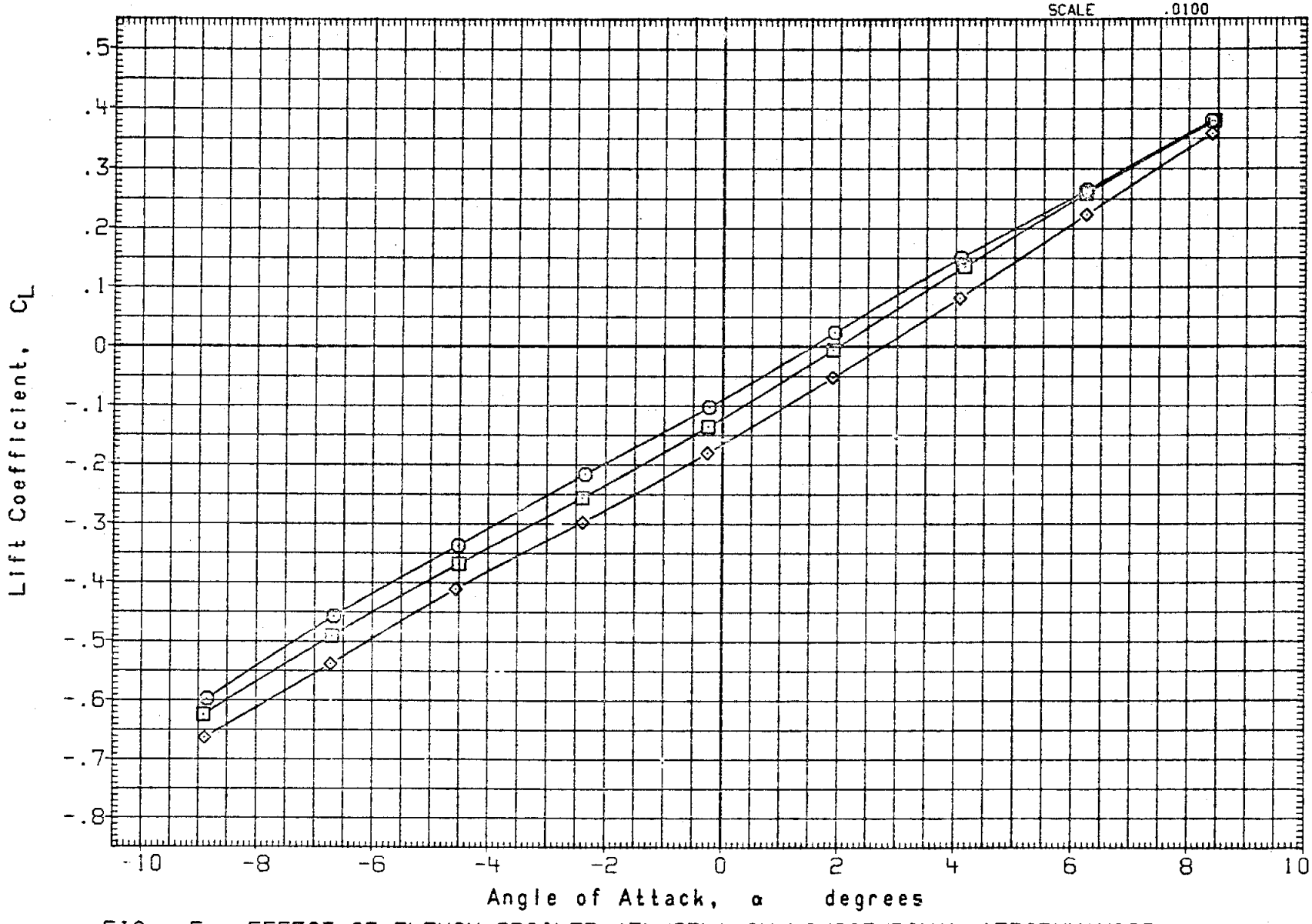


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

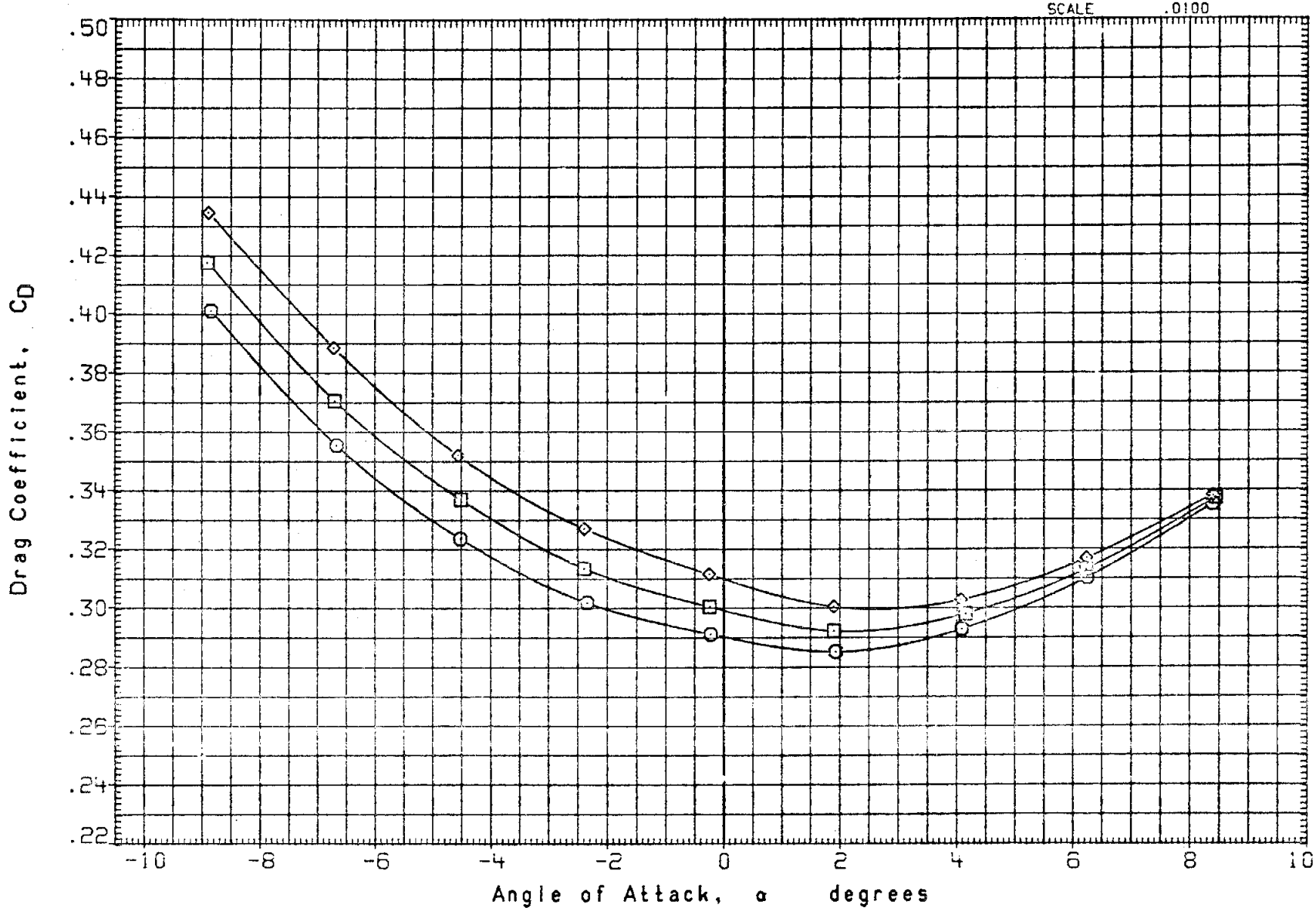


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

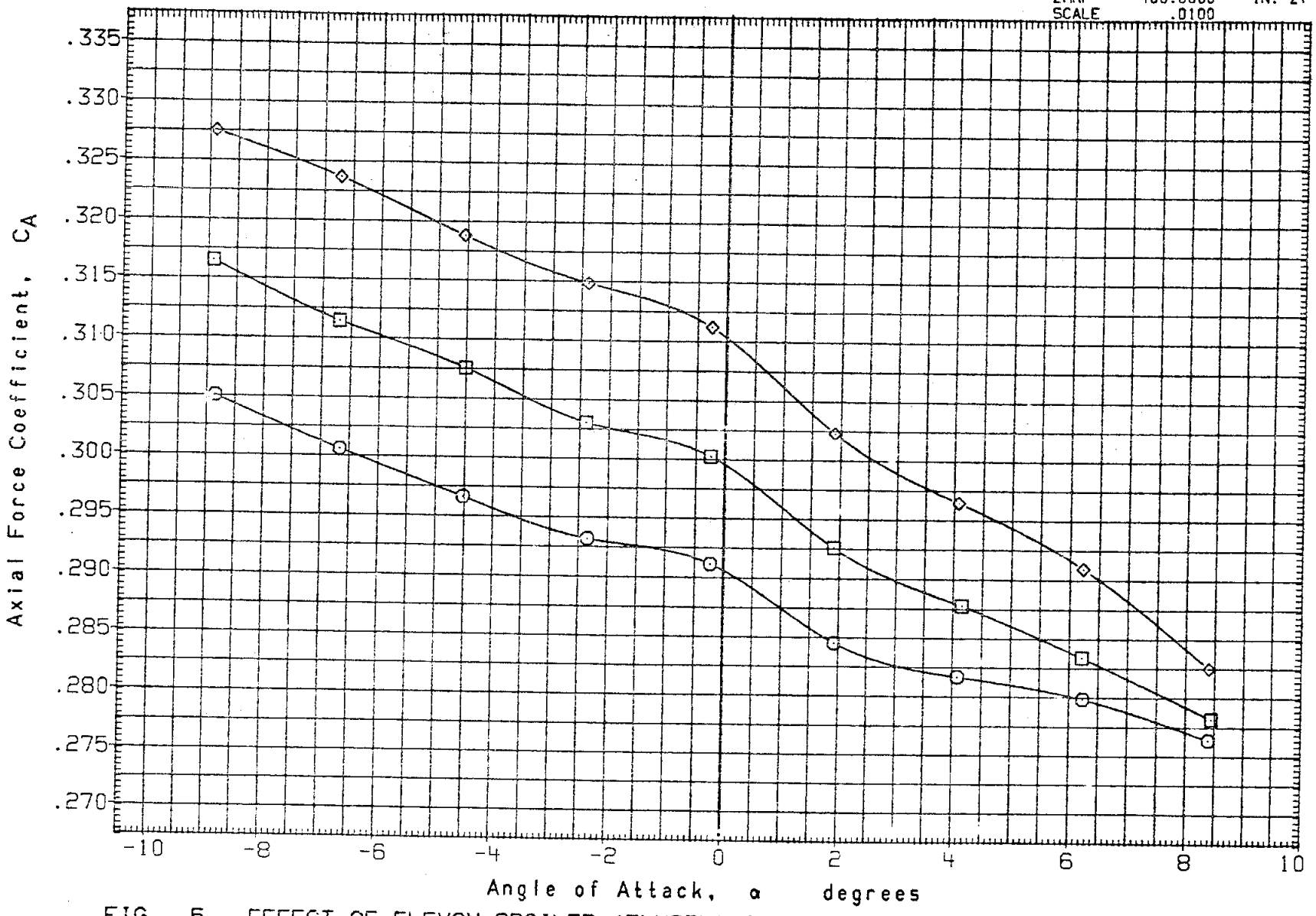


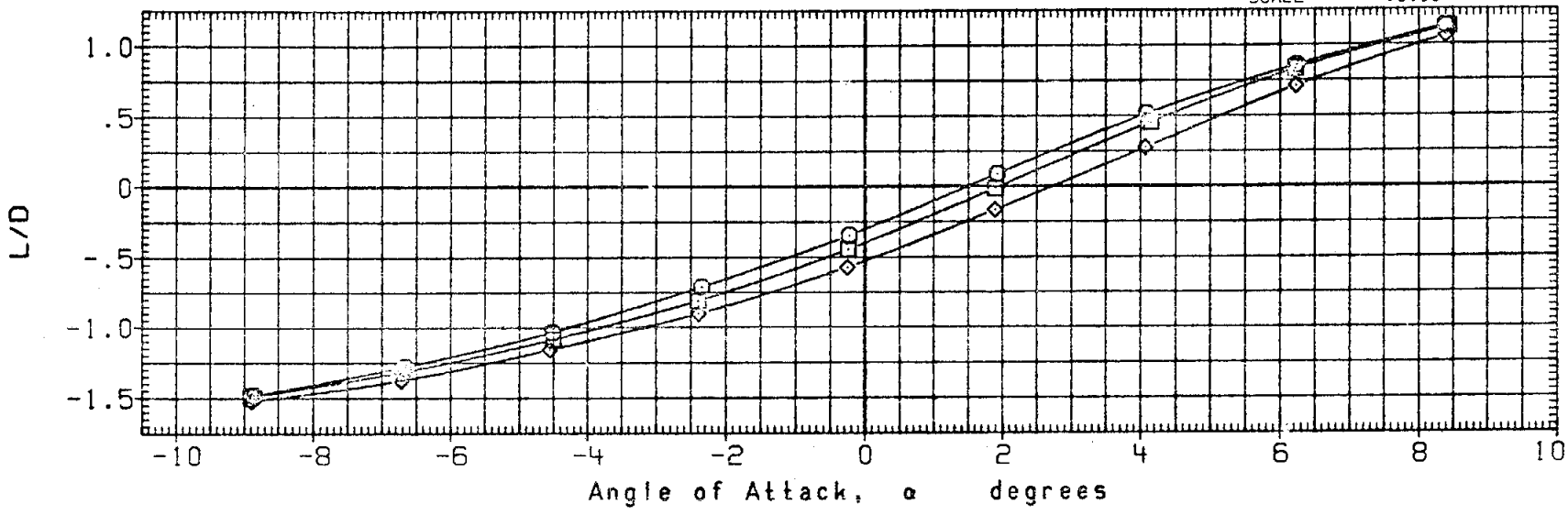
FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

. (D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



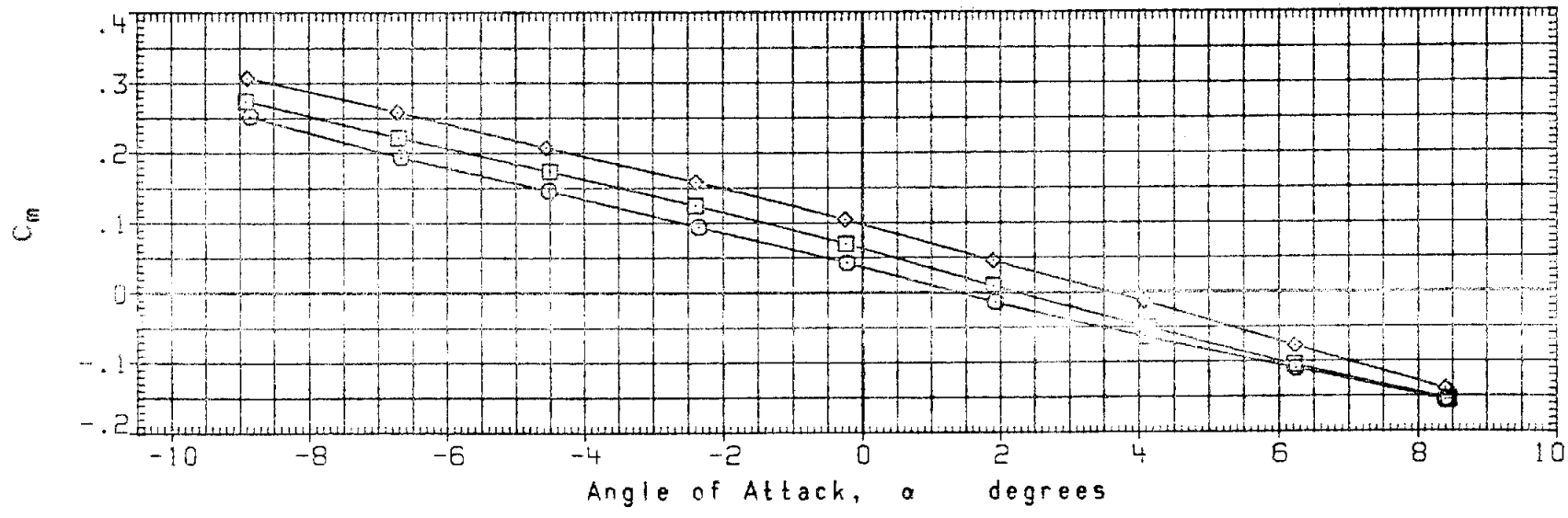


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION I	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION I	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION I	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

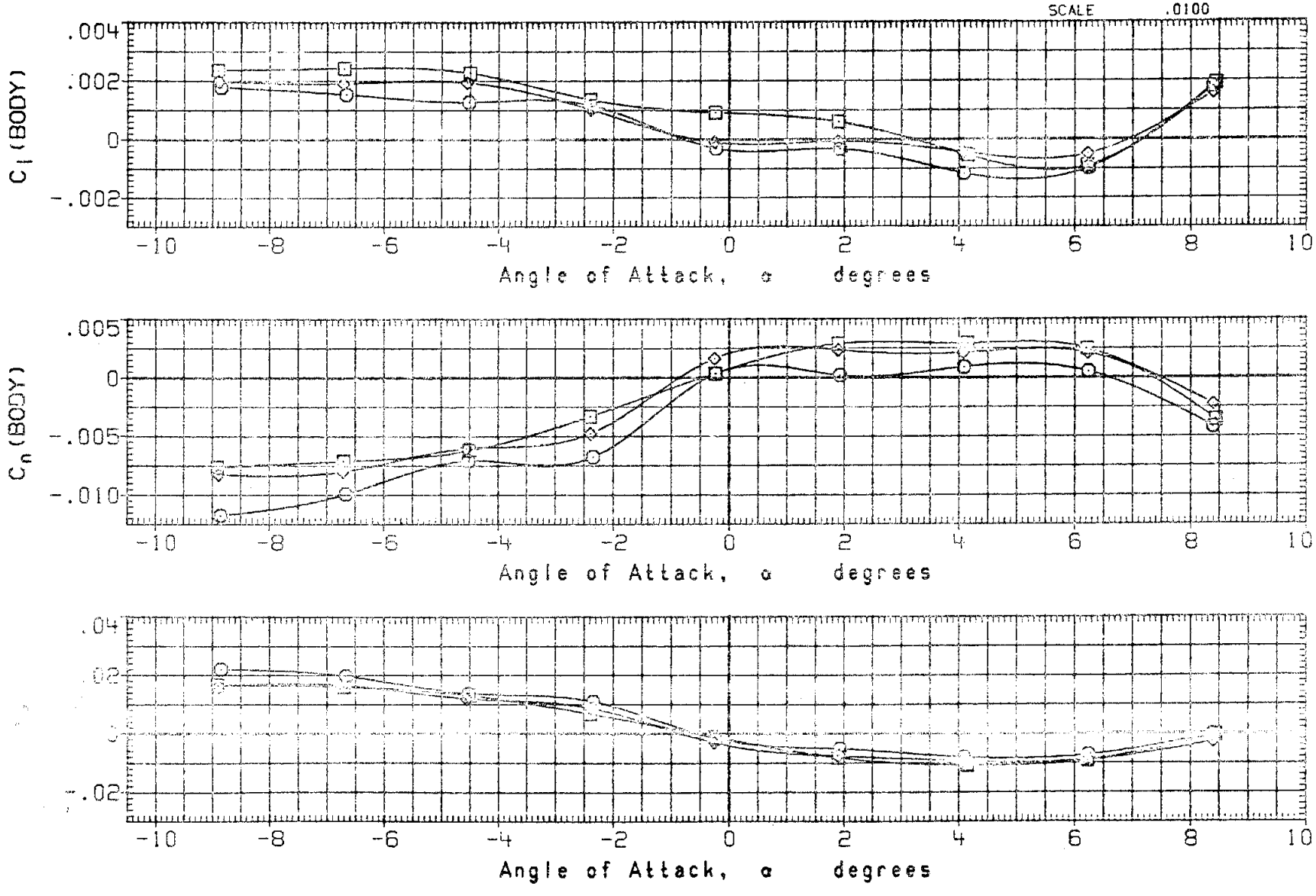


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

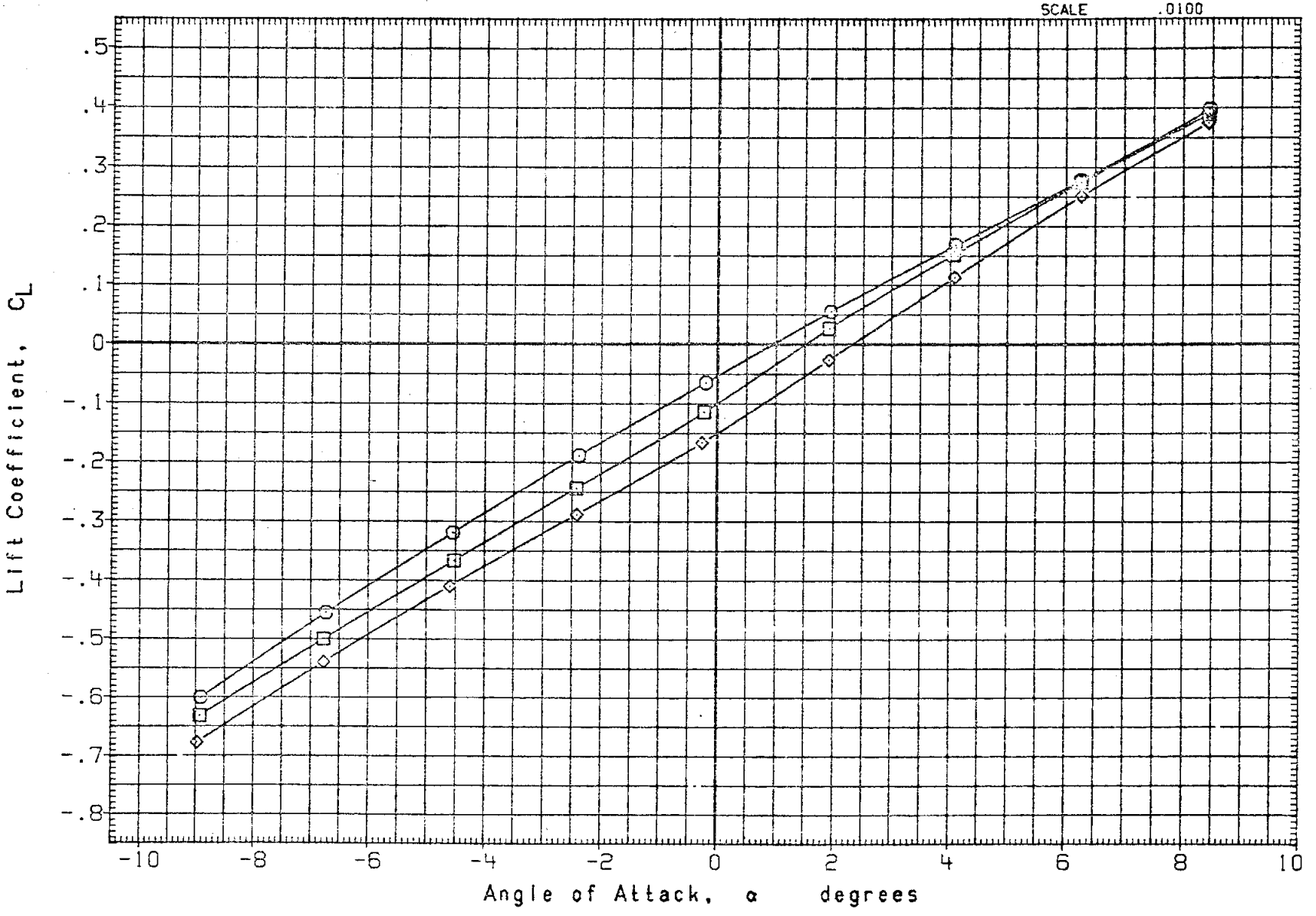


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

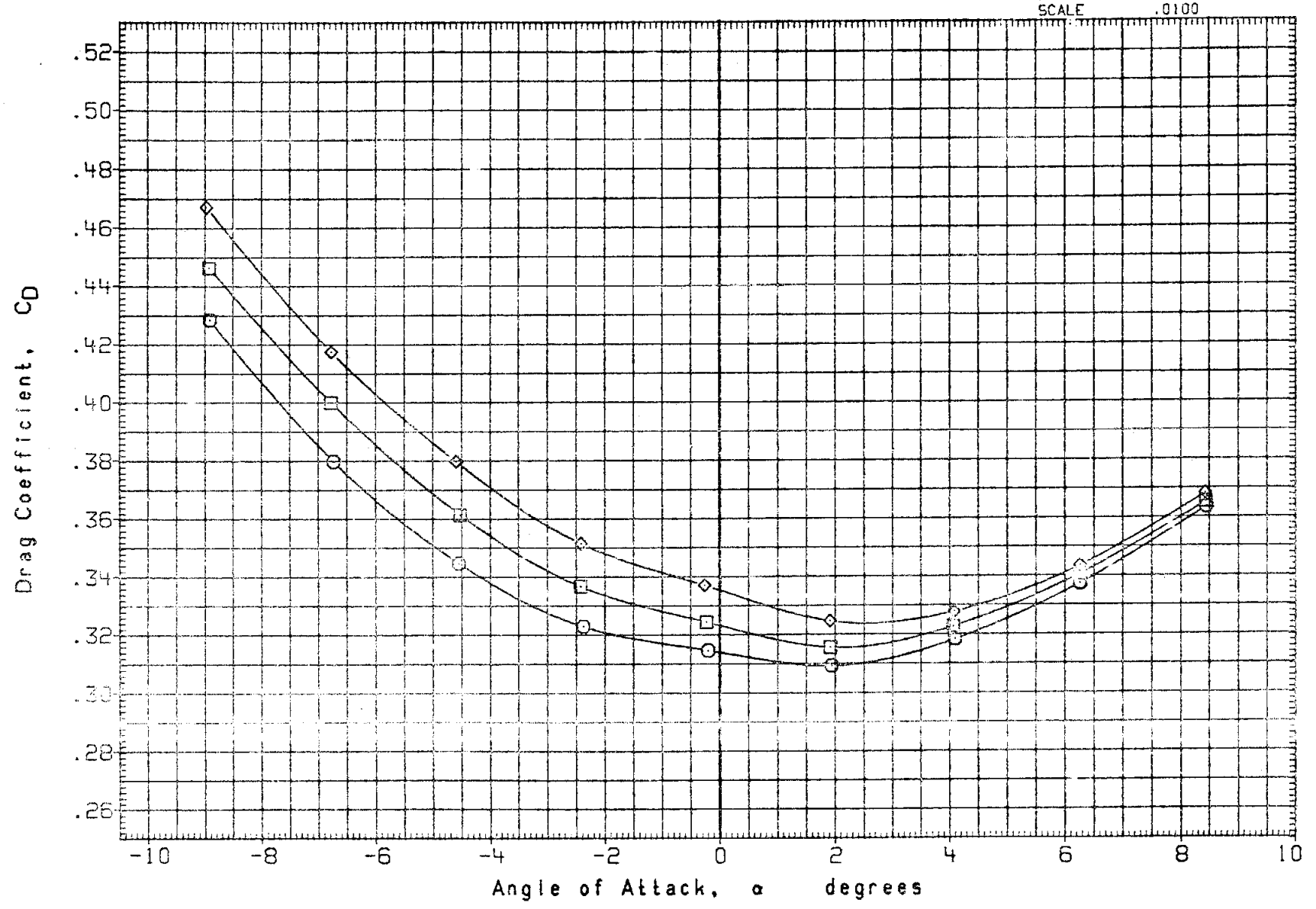


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION I	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION I	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION I	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALL	.0100	

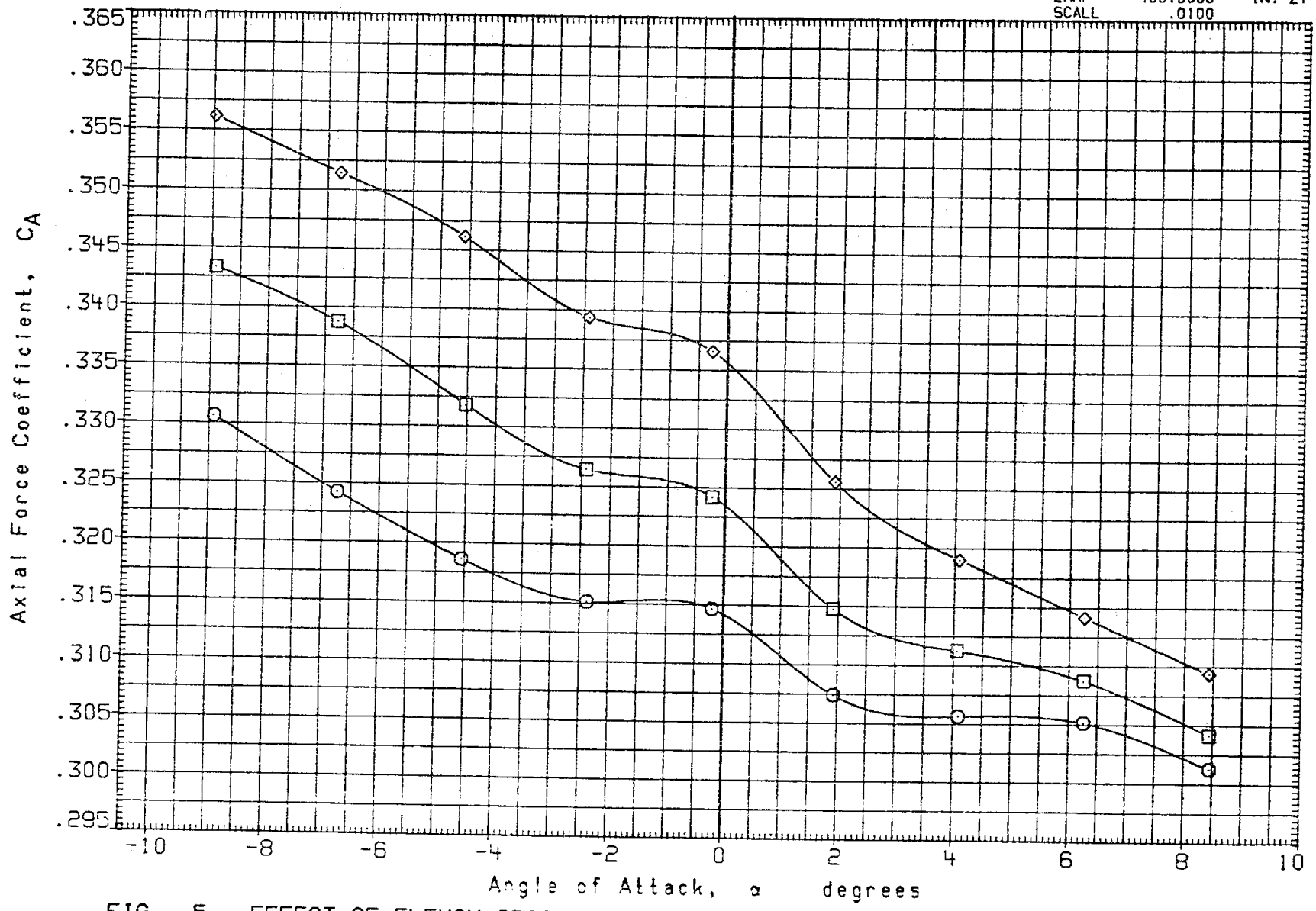


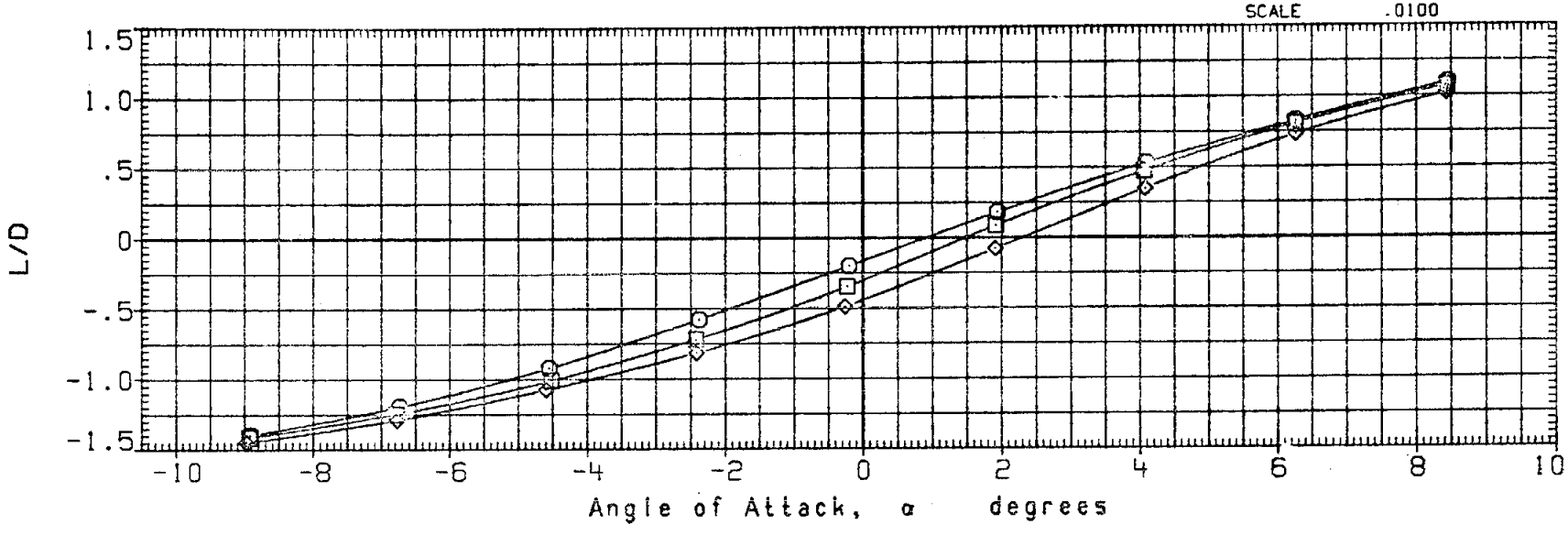
FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



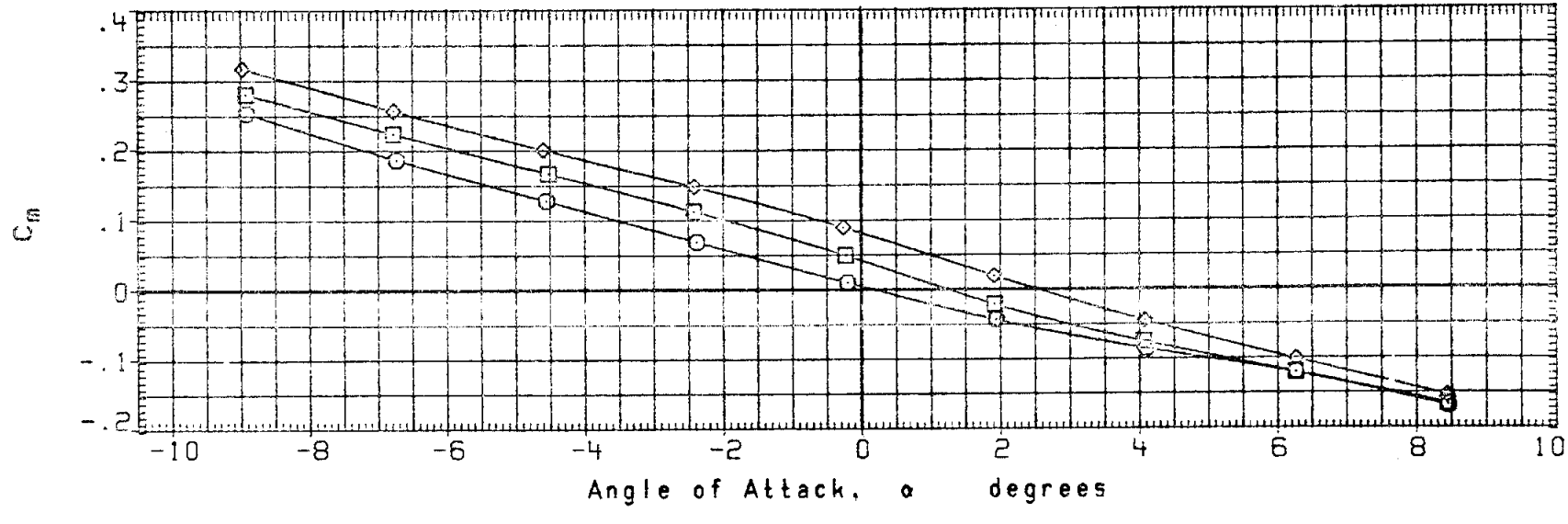


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

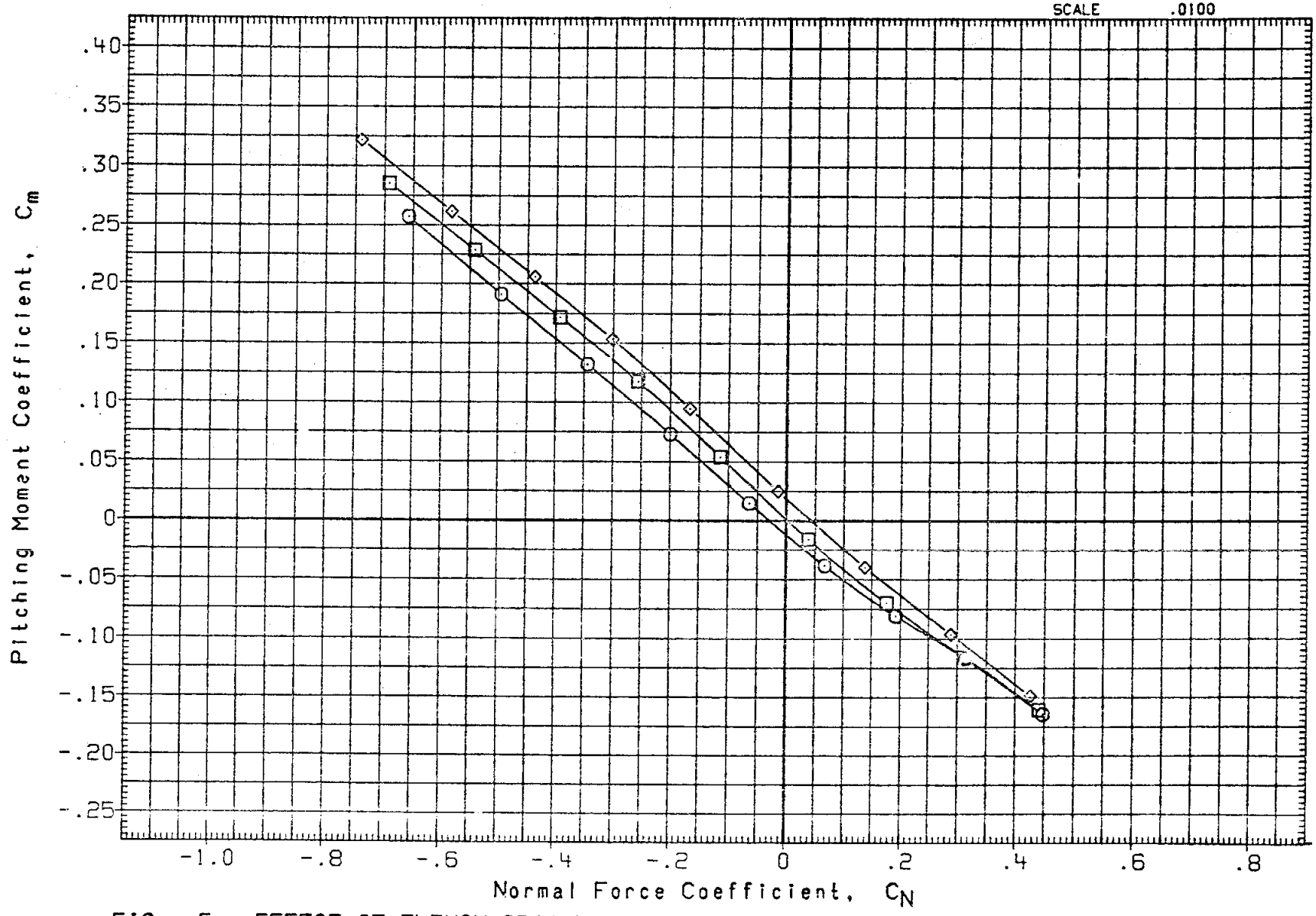


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	DATA NOT AVAILABLE	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

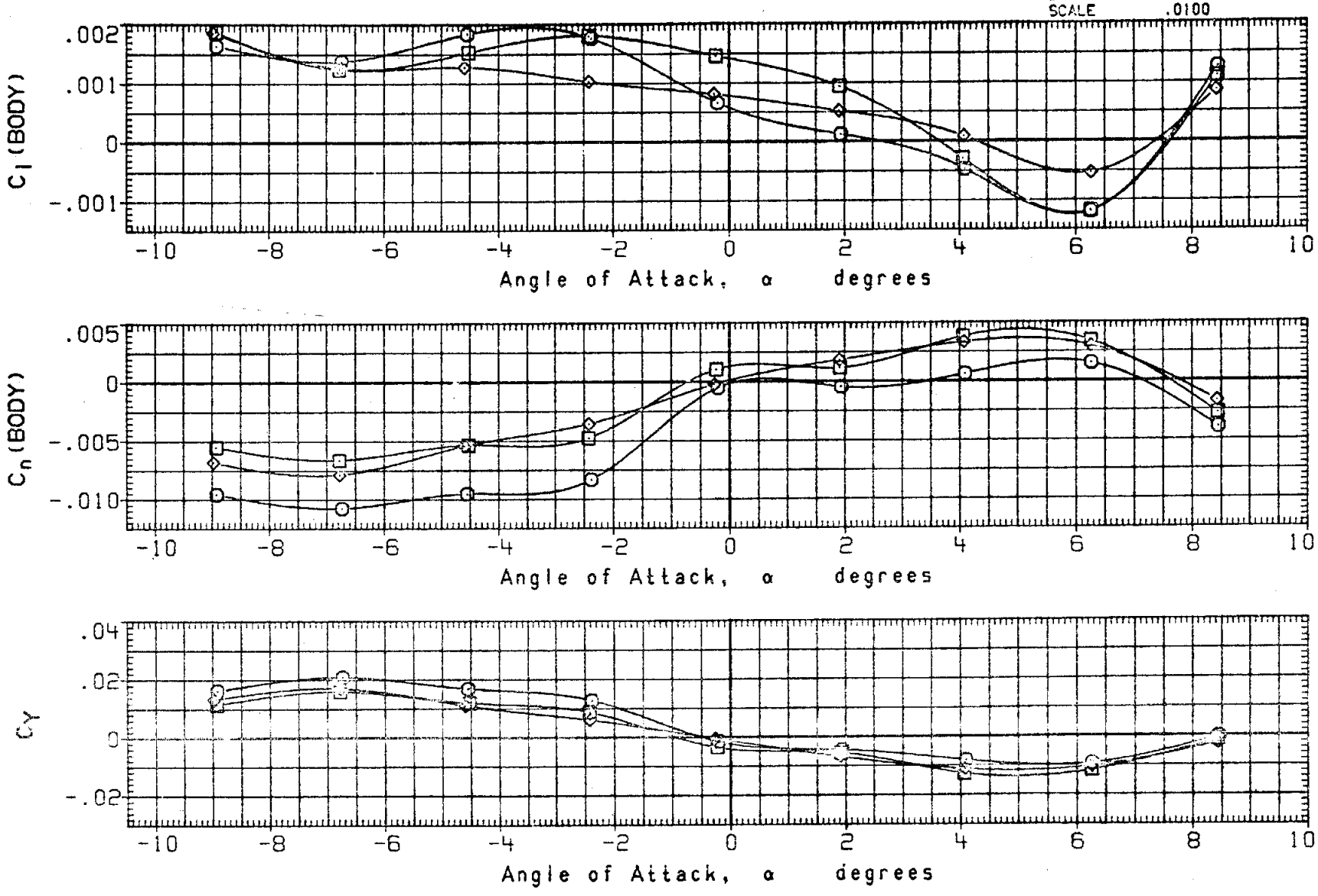


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

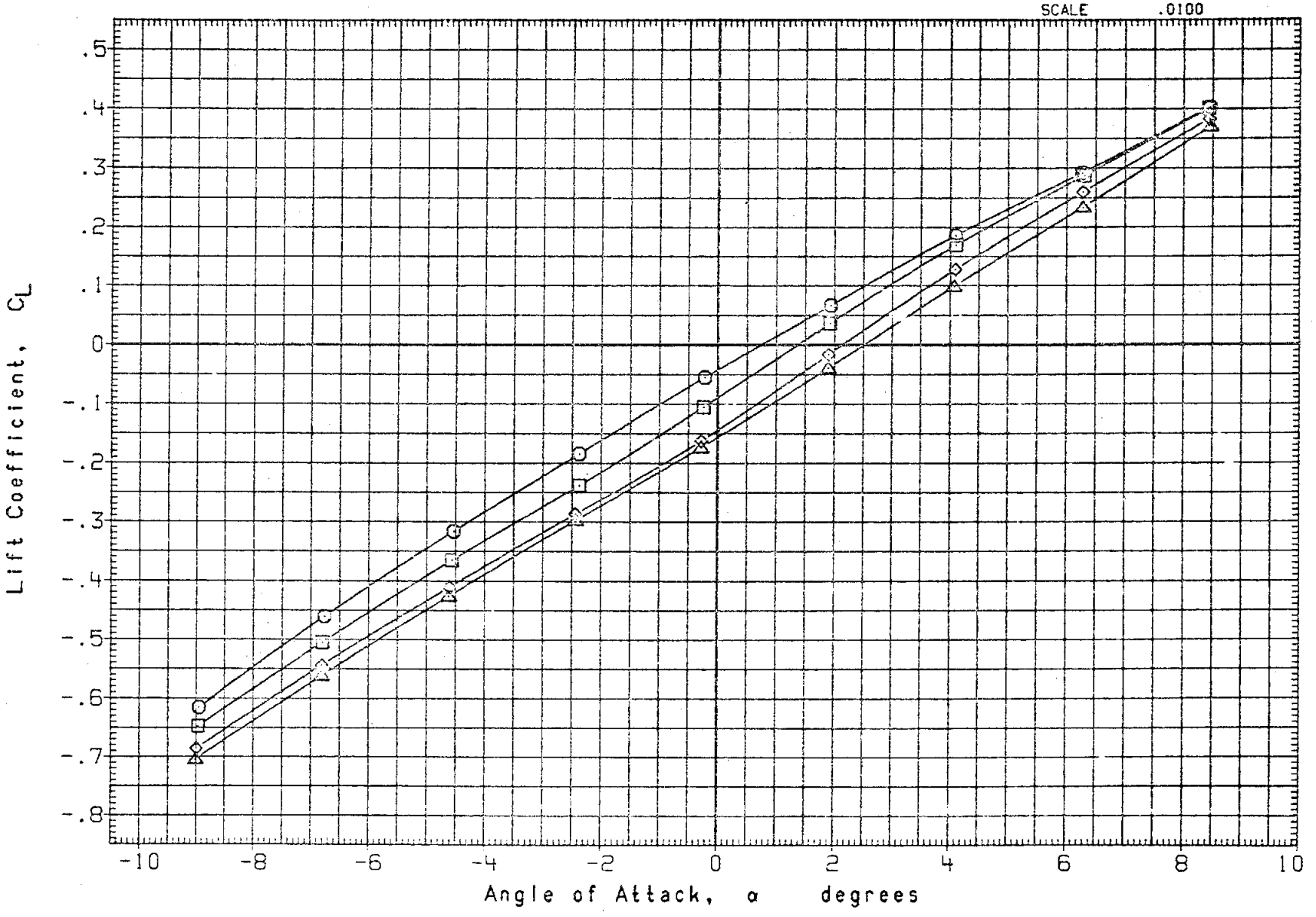


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

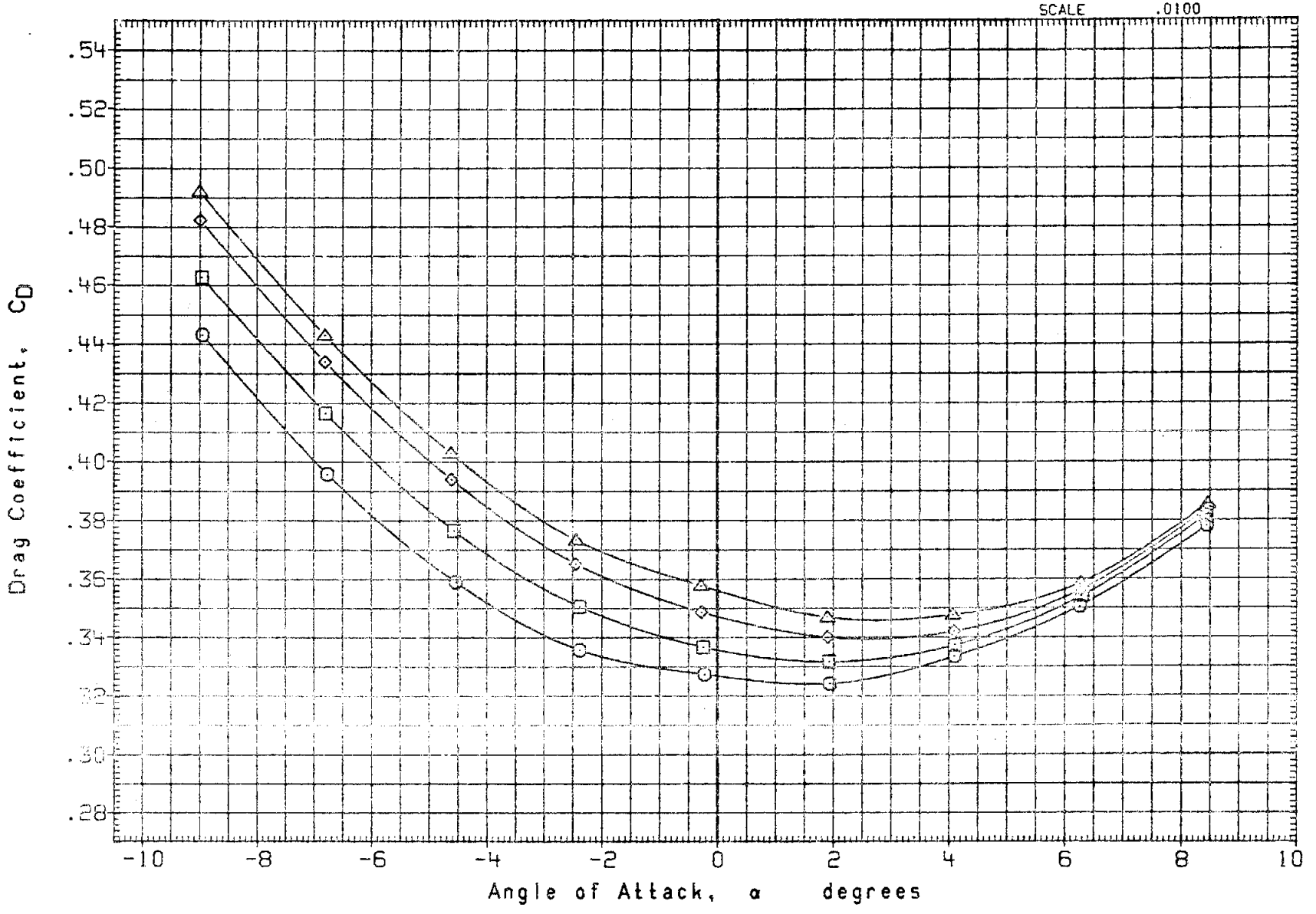


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

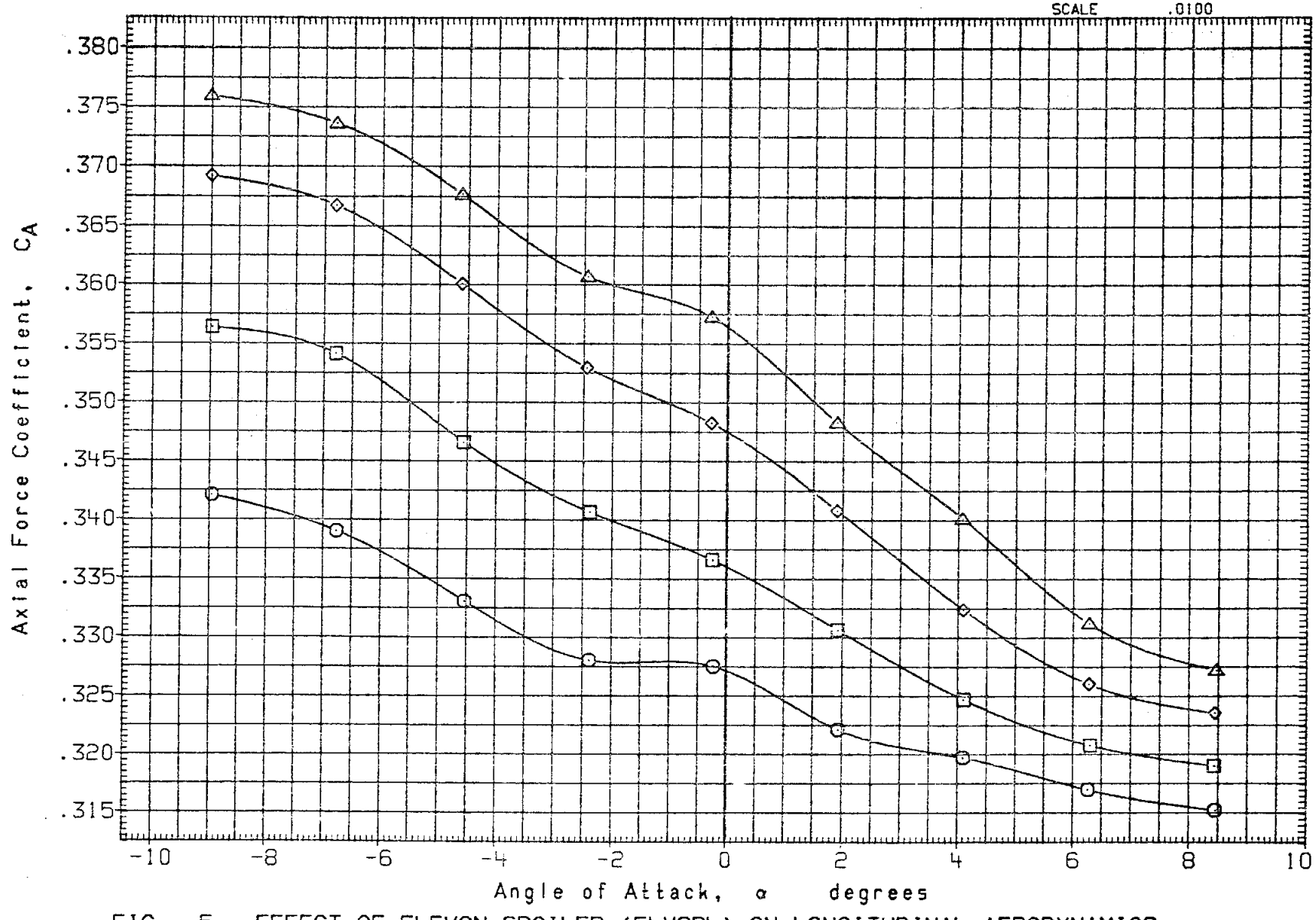


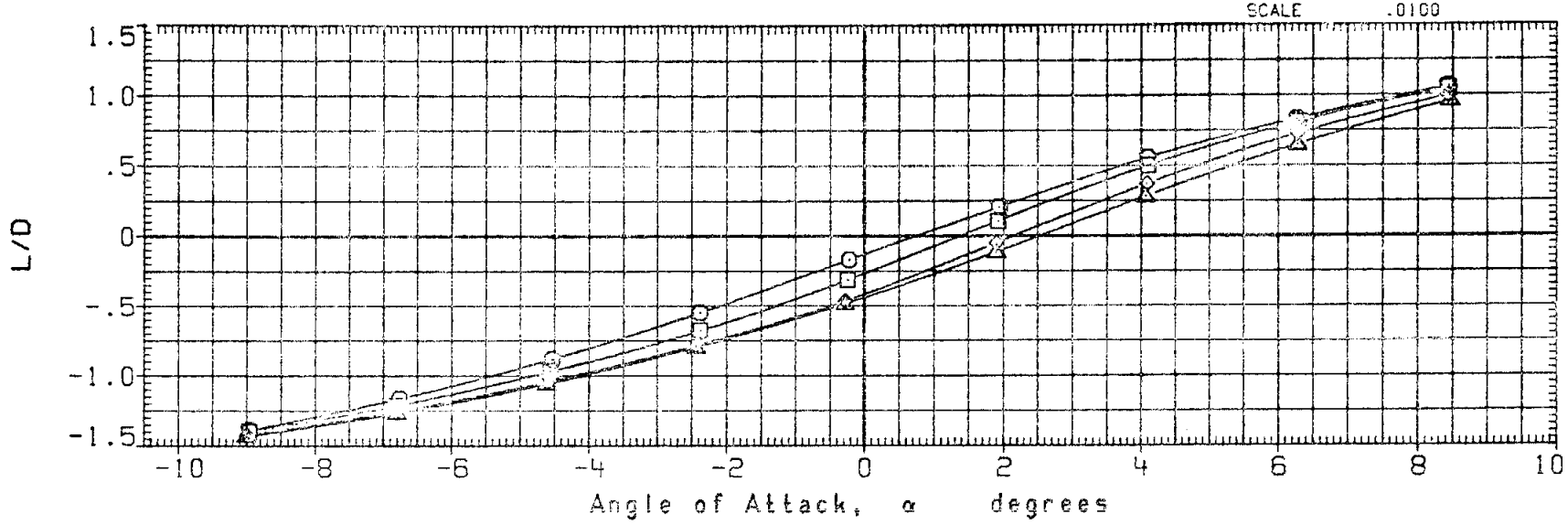
FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	575.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



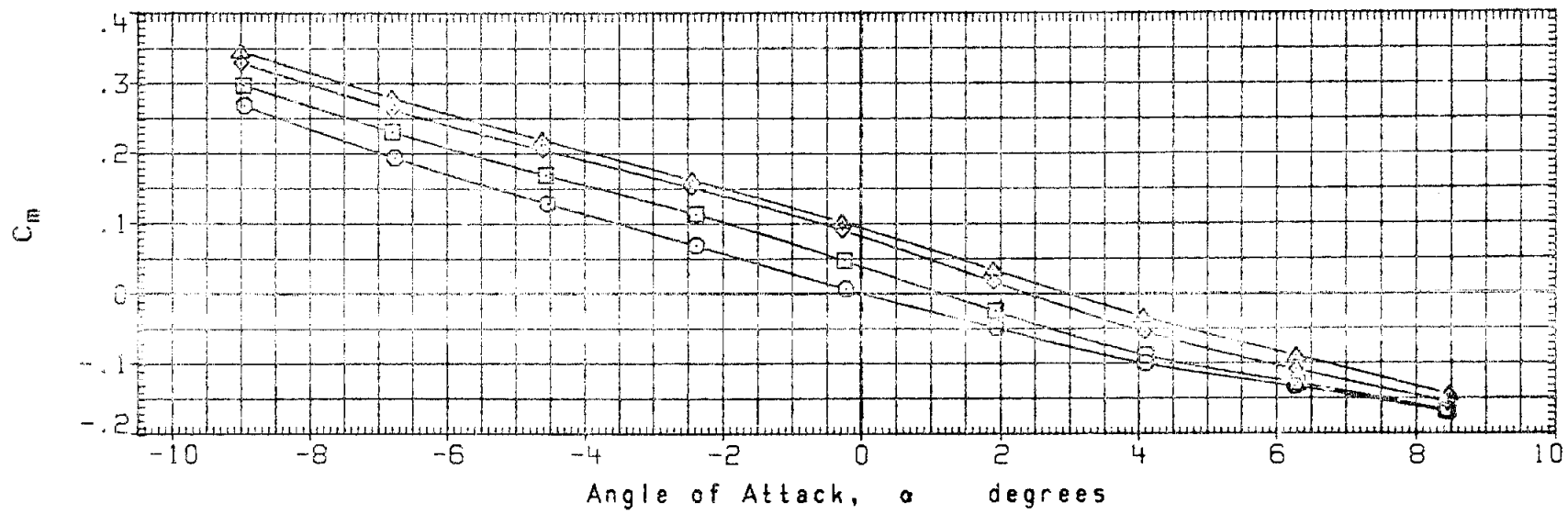


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

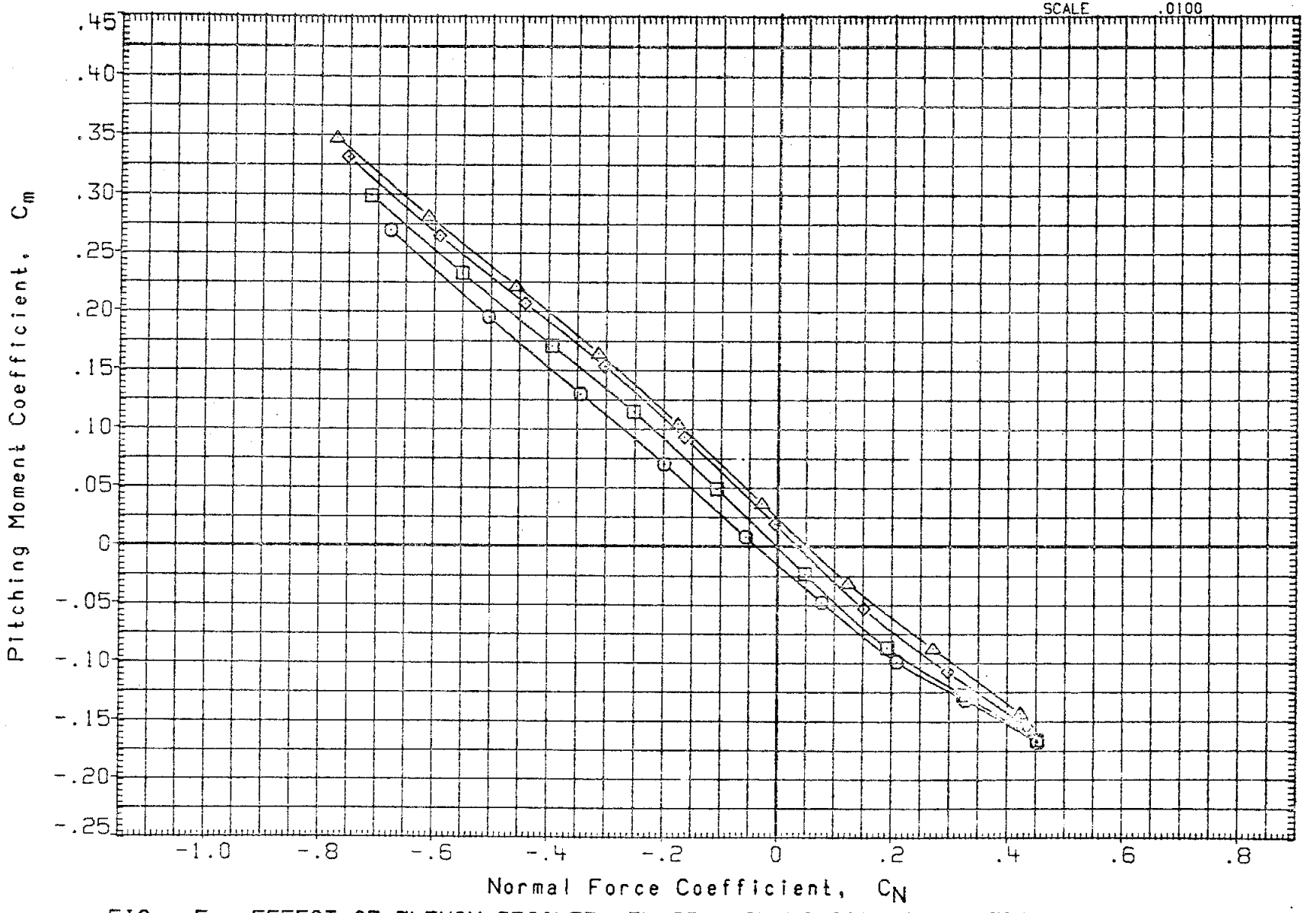


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

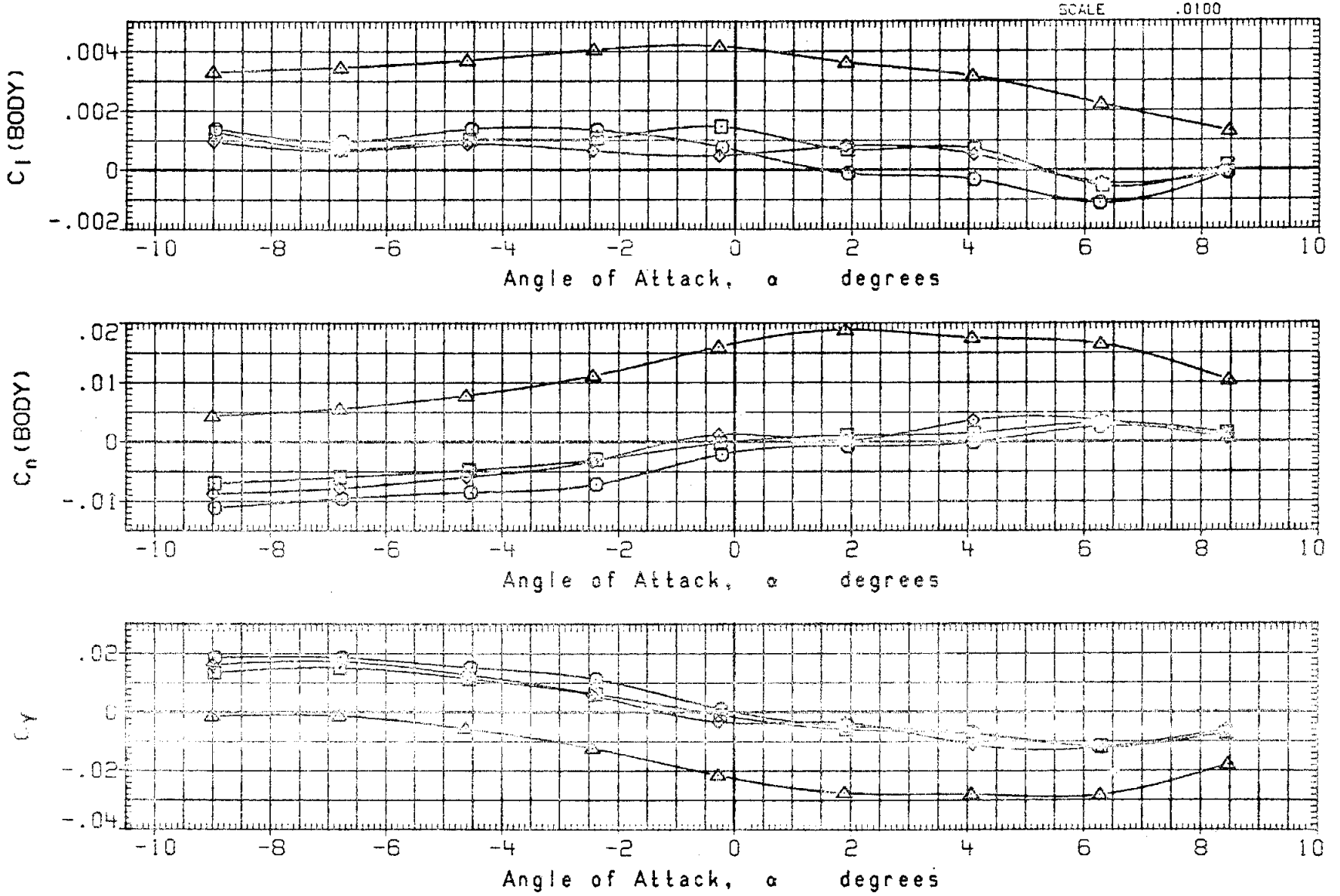


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

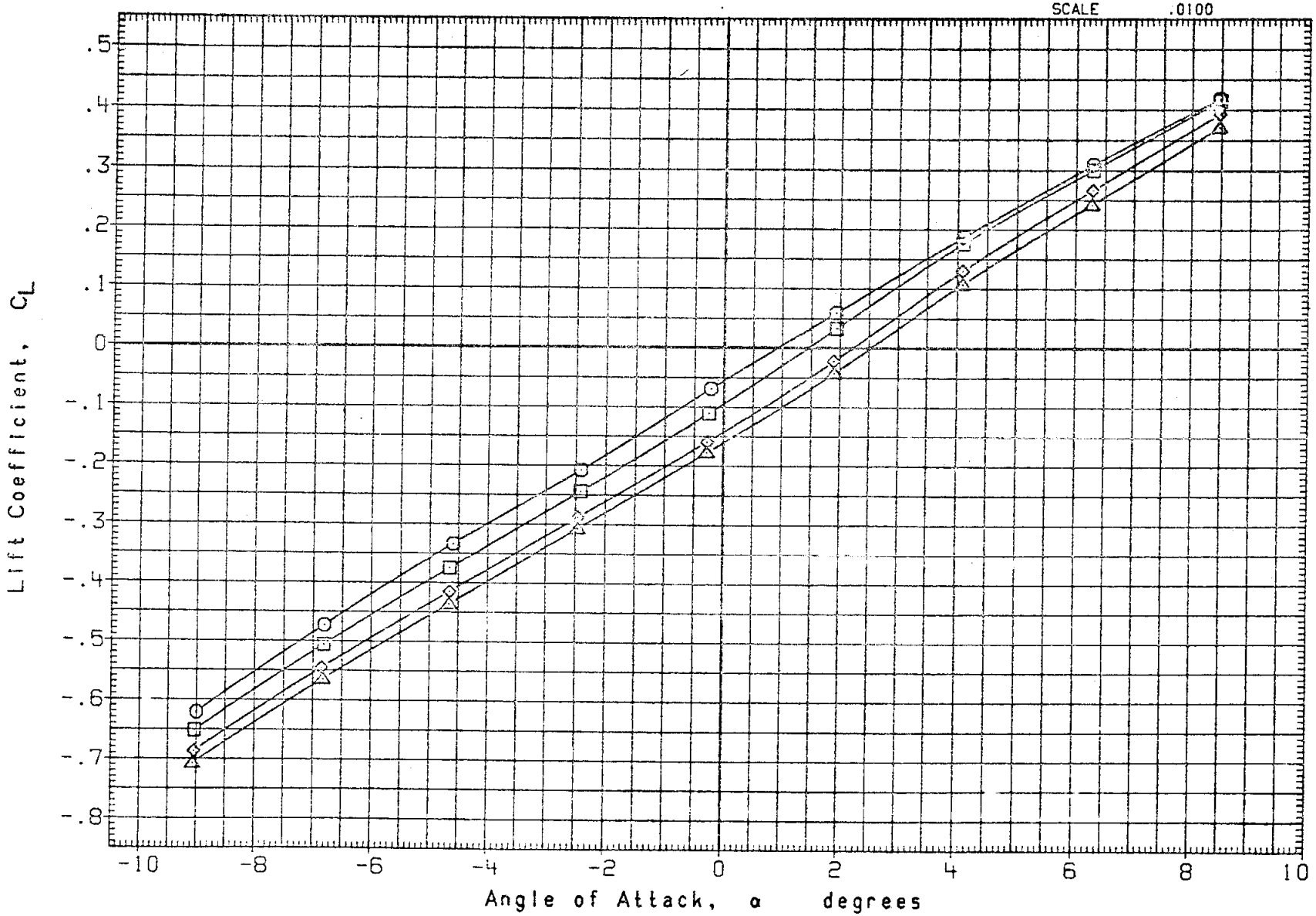


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

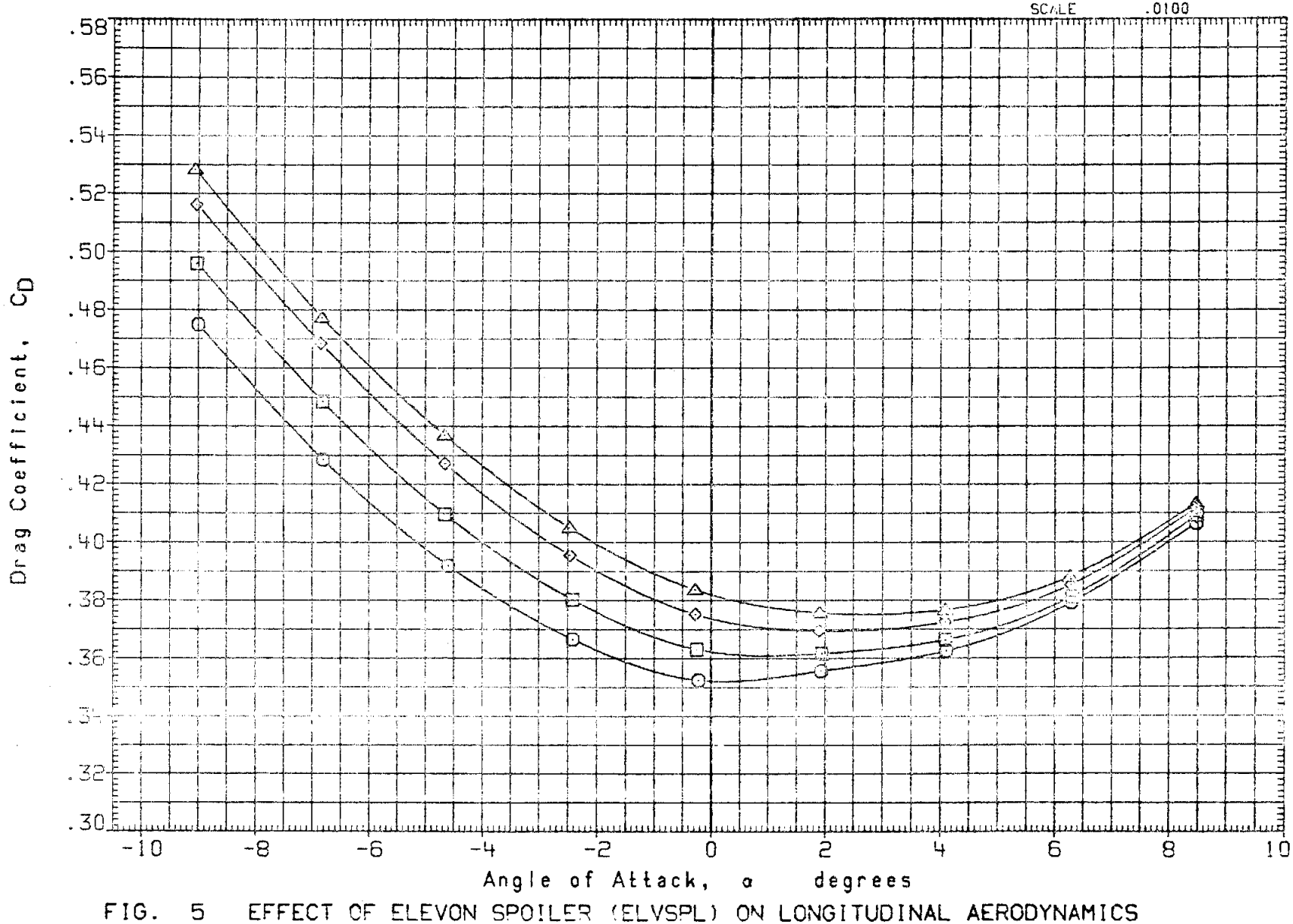


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

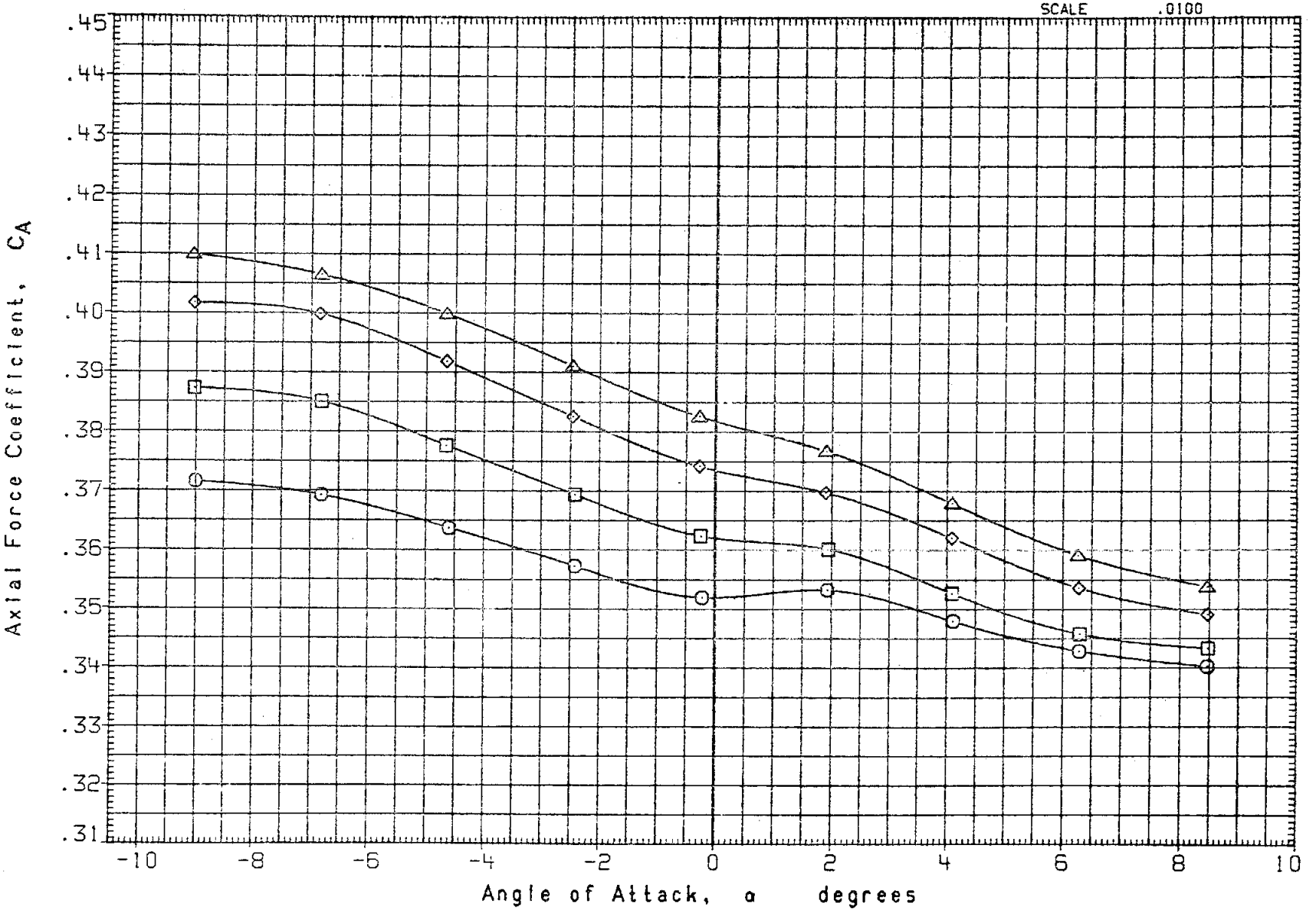


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

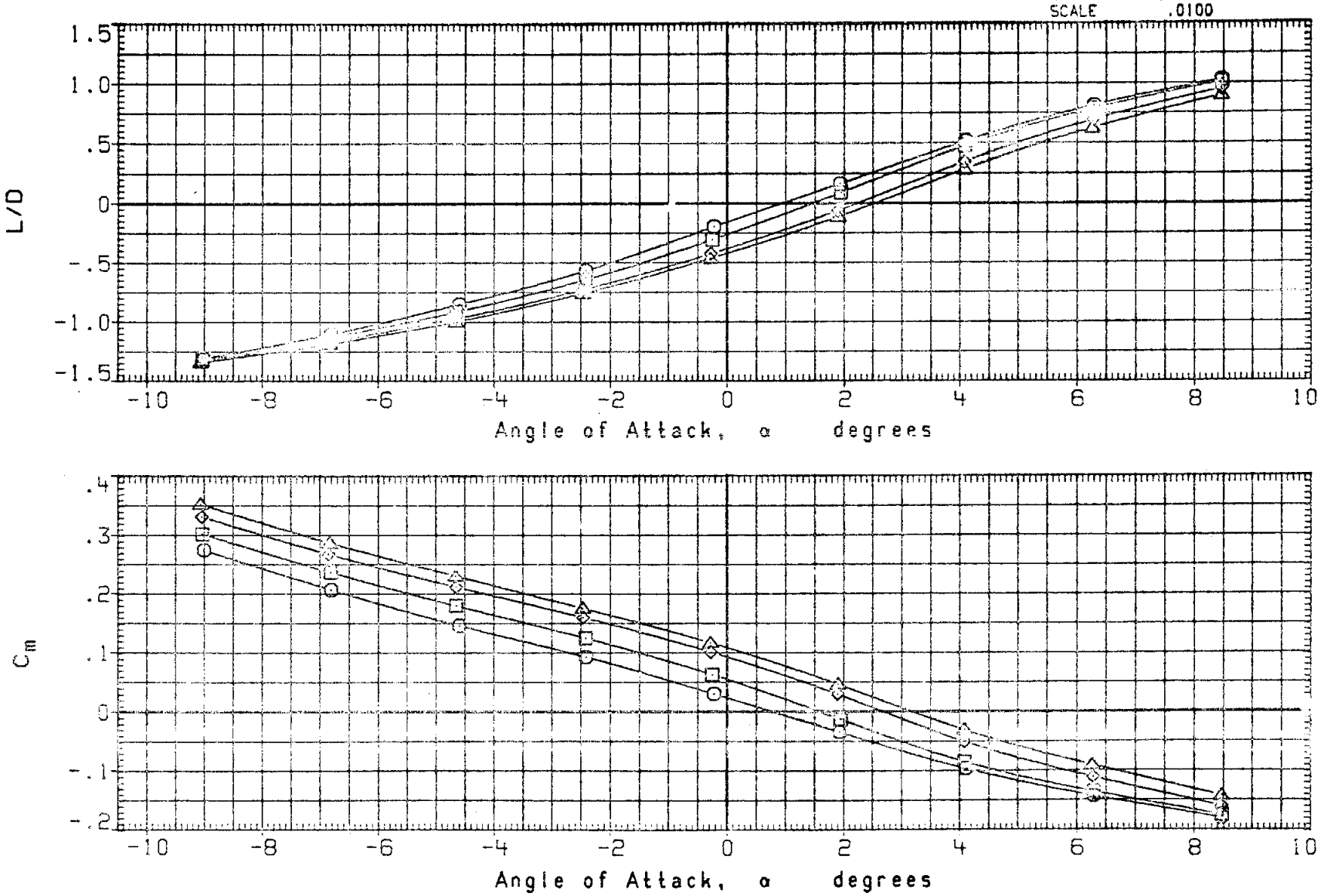


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

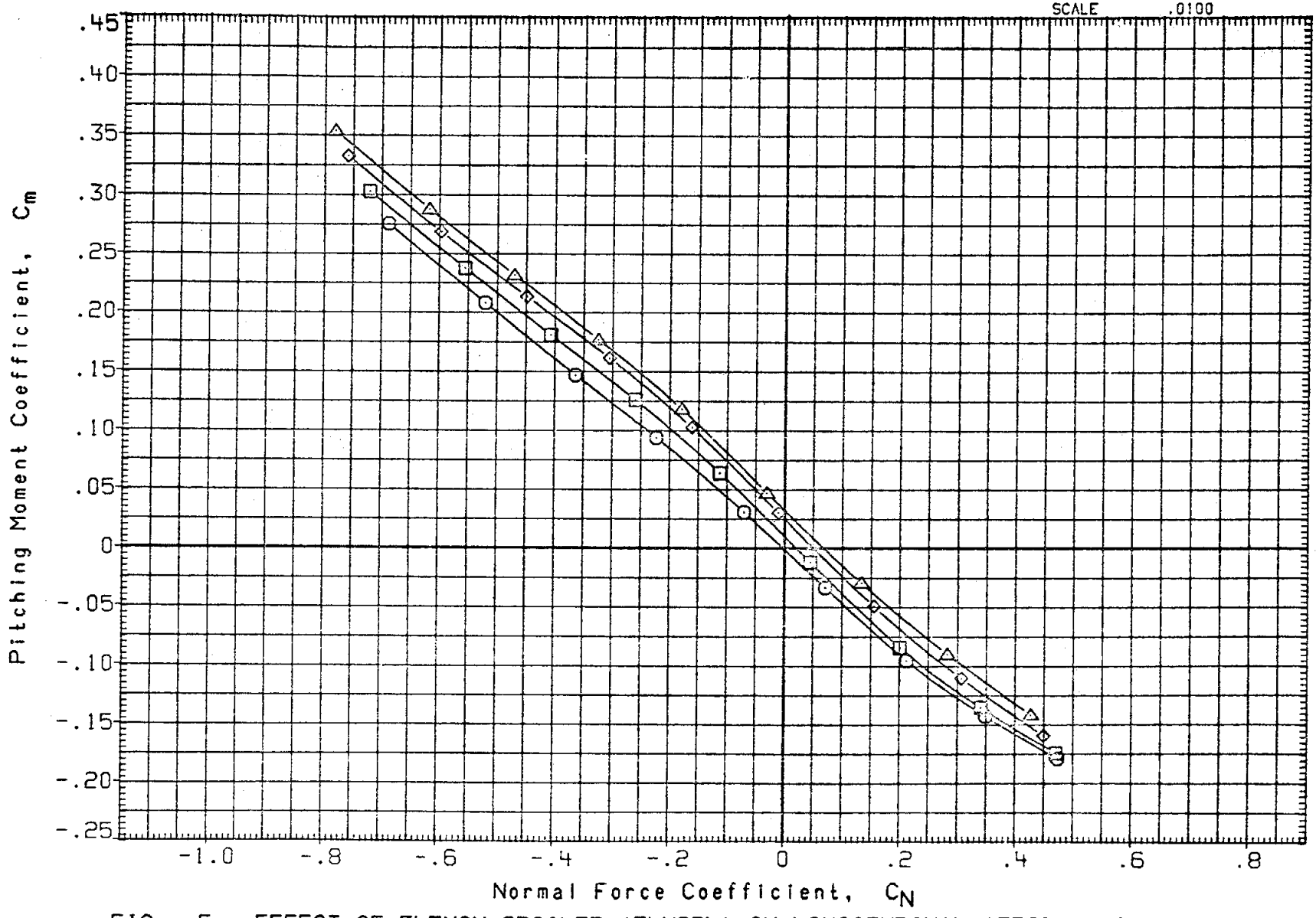


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

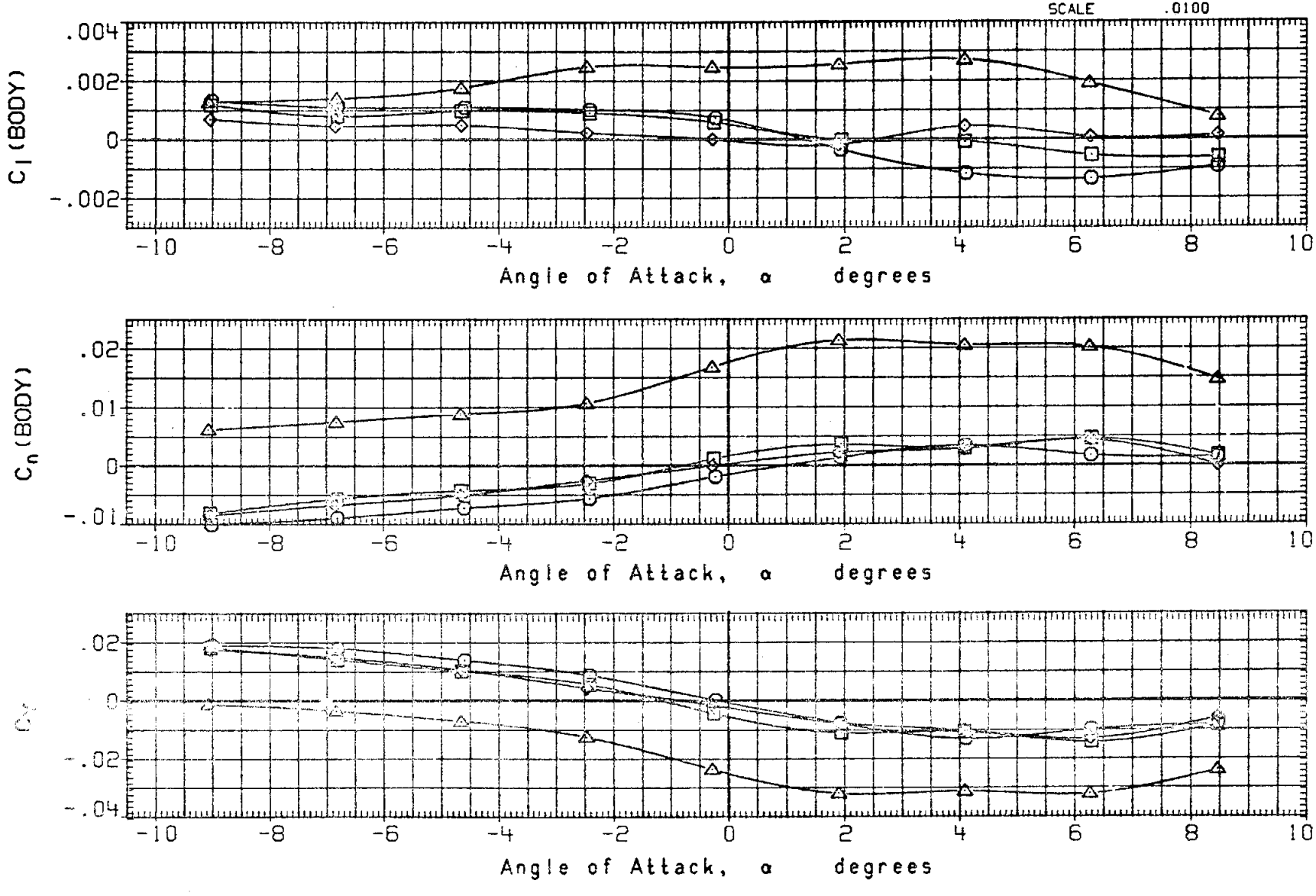


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

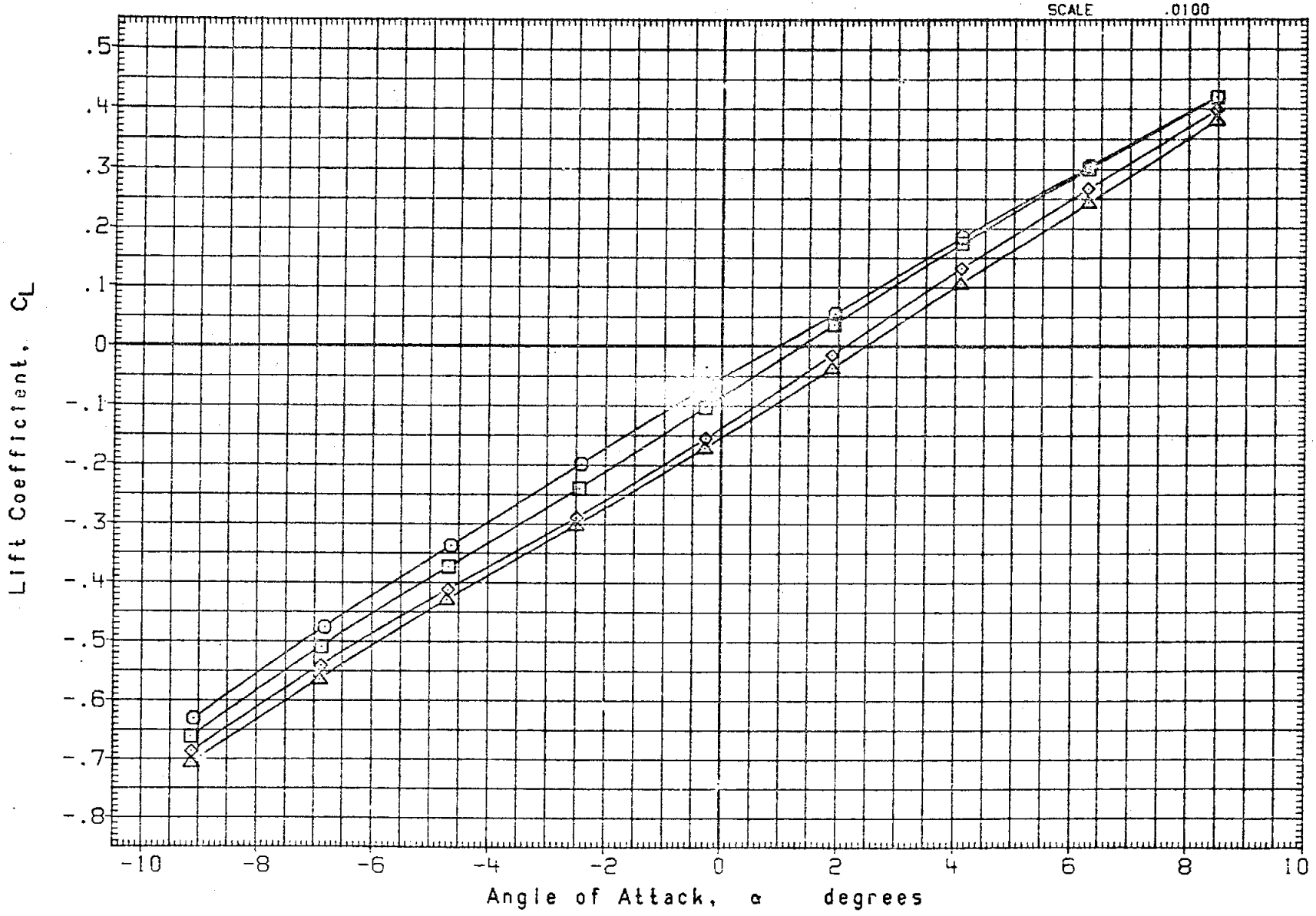


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8 TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1990.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

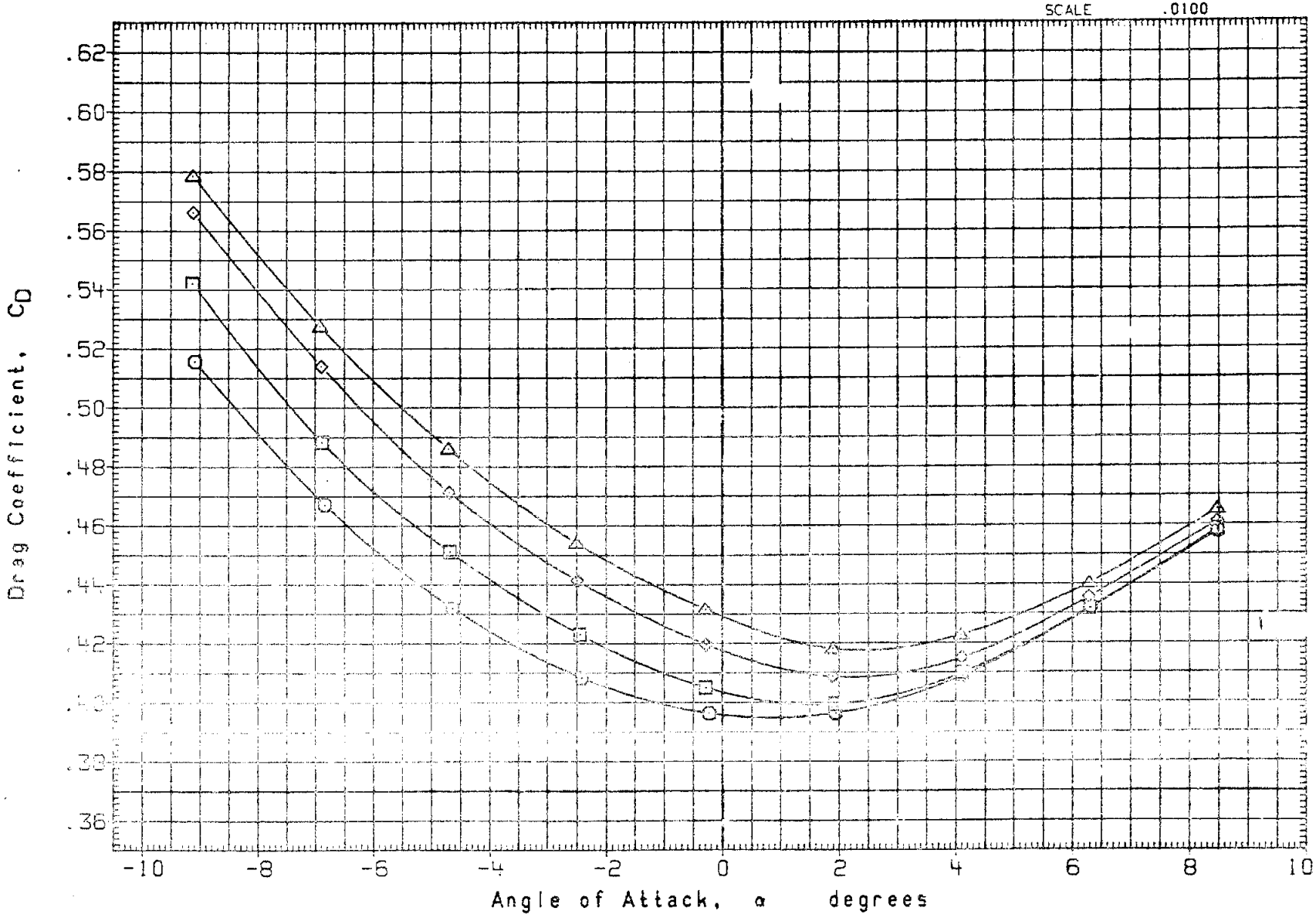


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

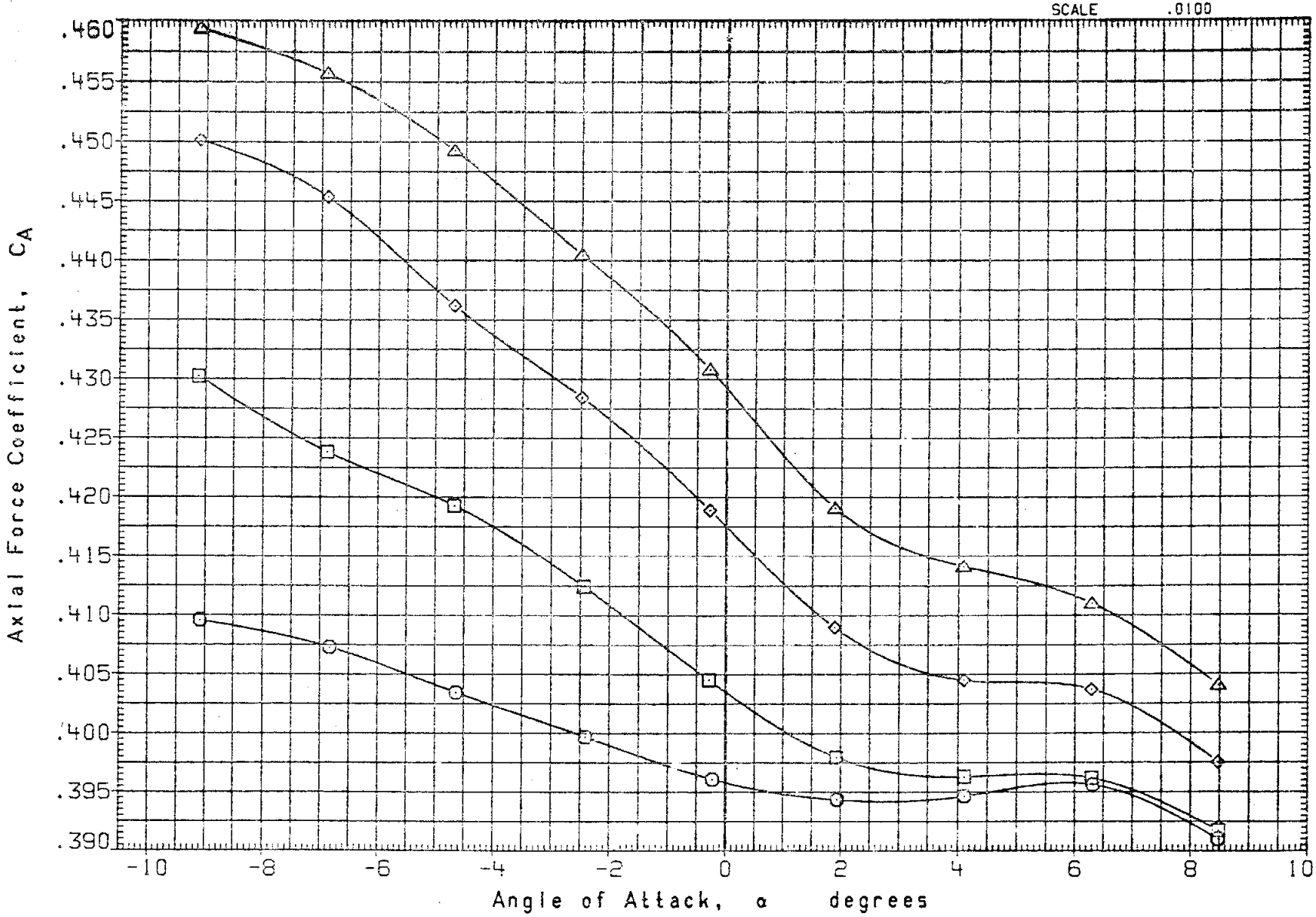


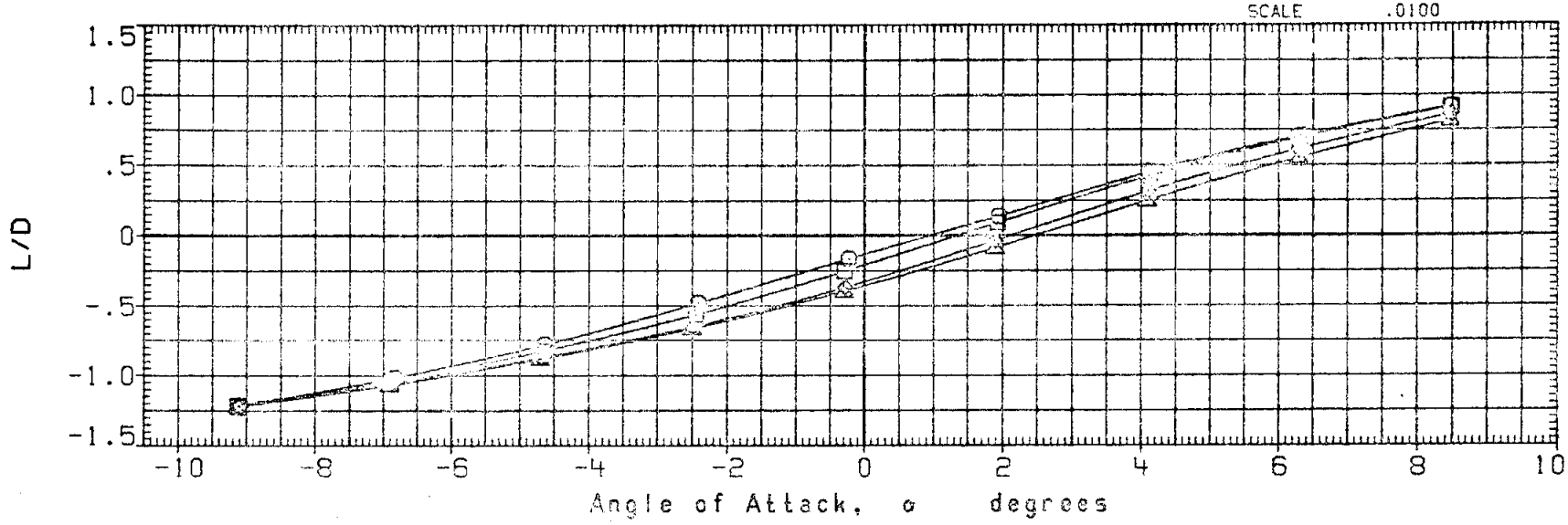
FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



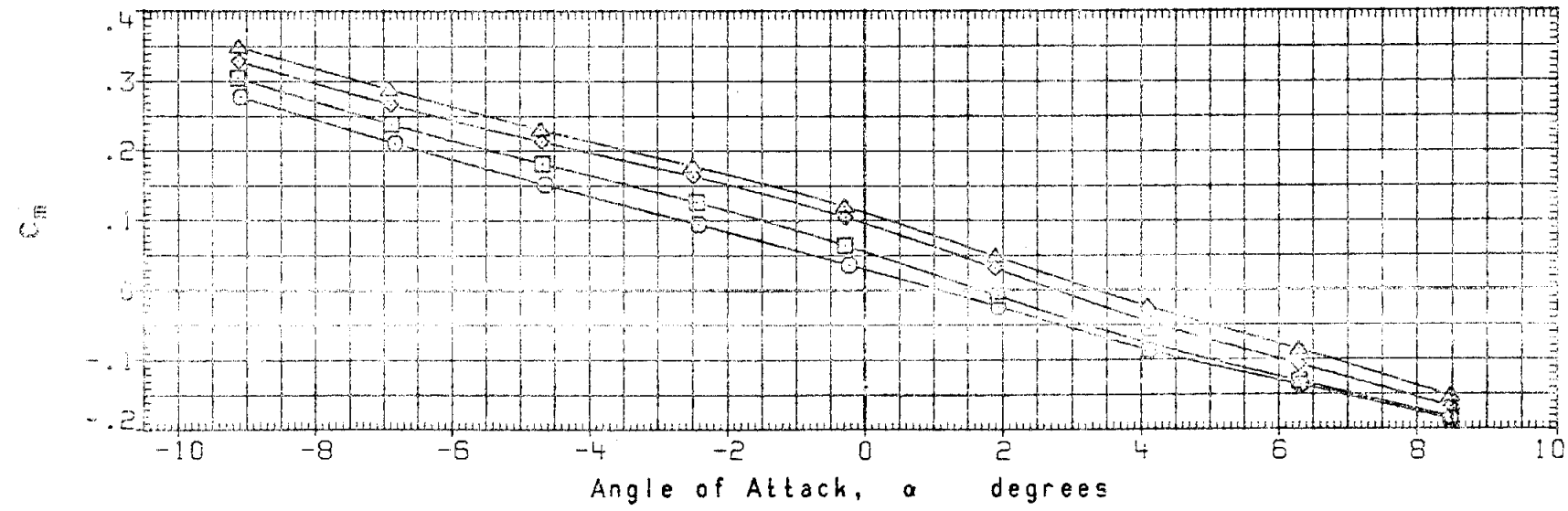


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	978.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

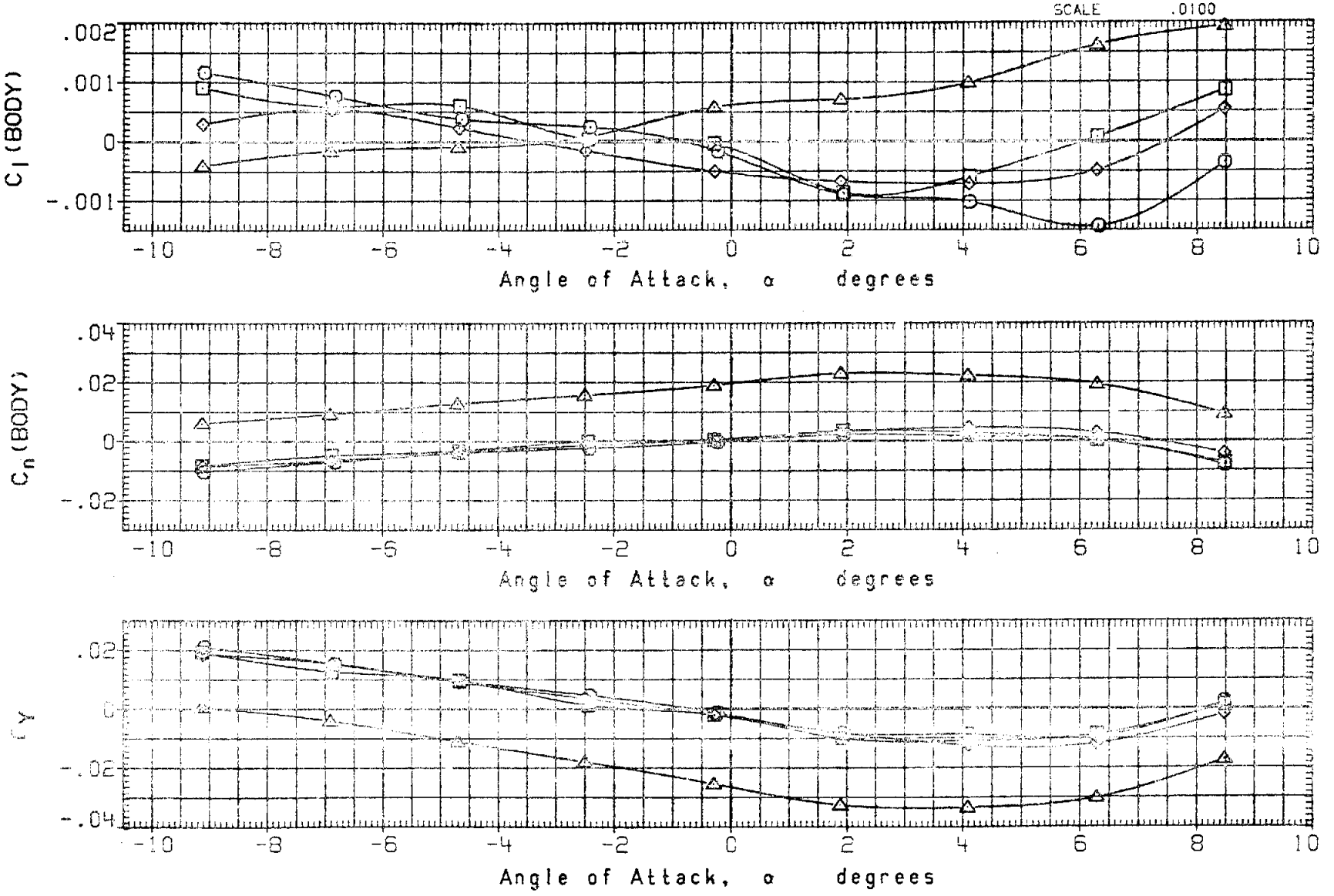


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

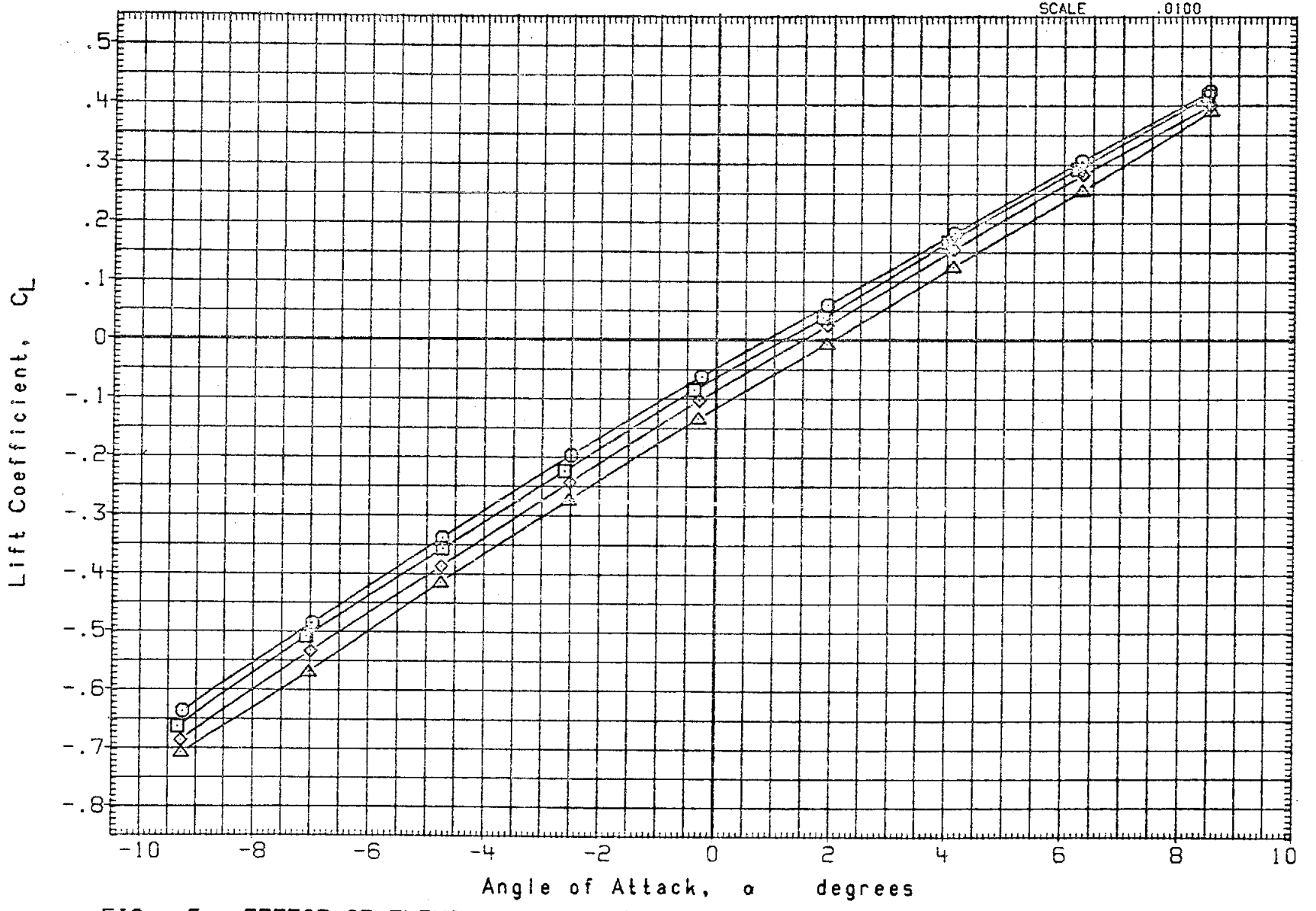


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(1)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

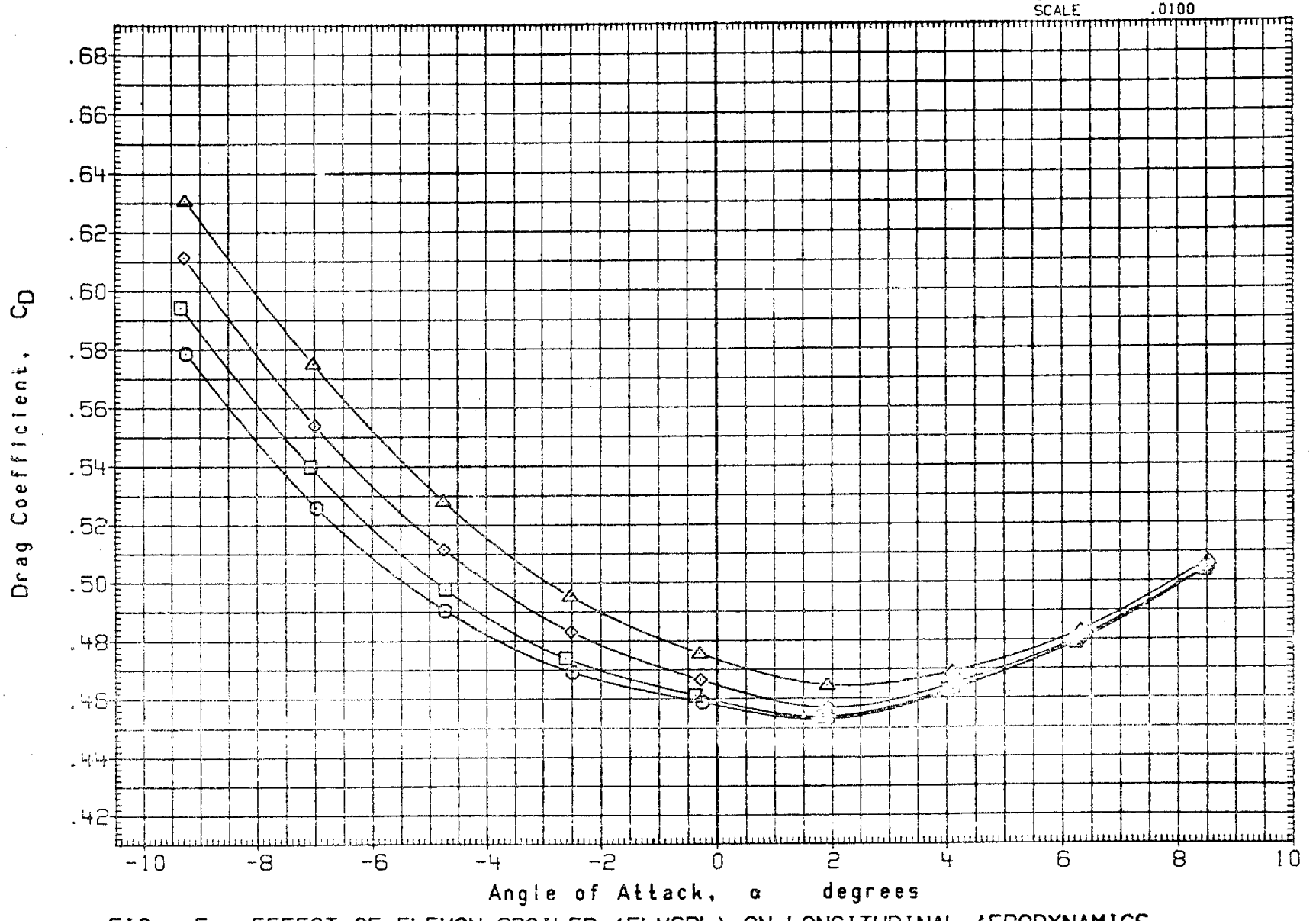


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(1)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

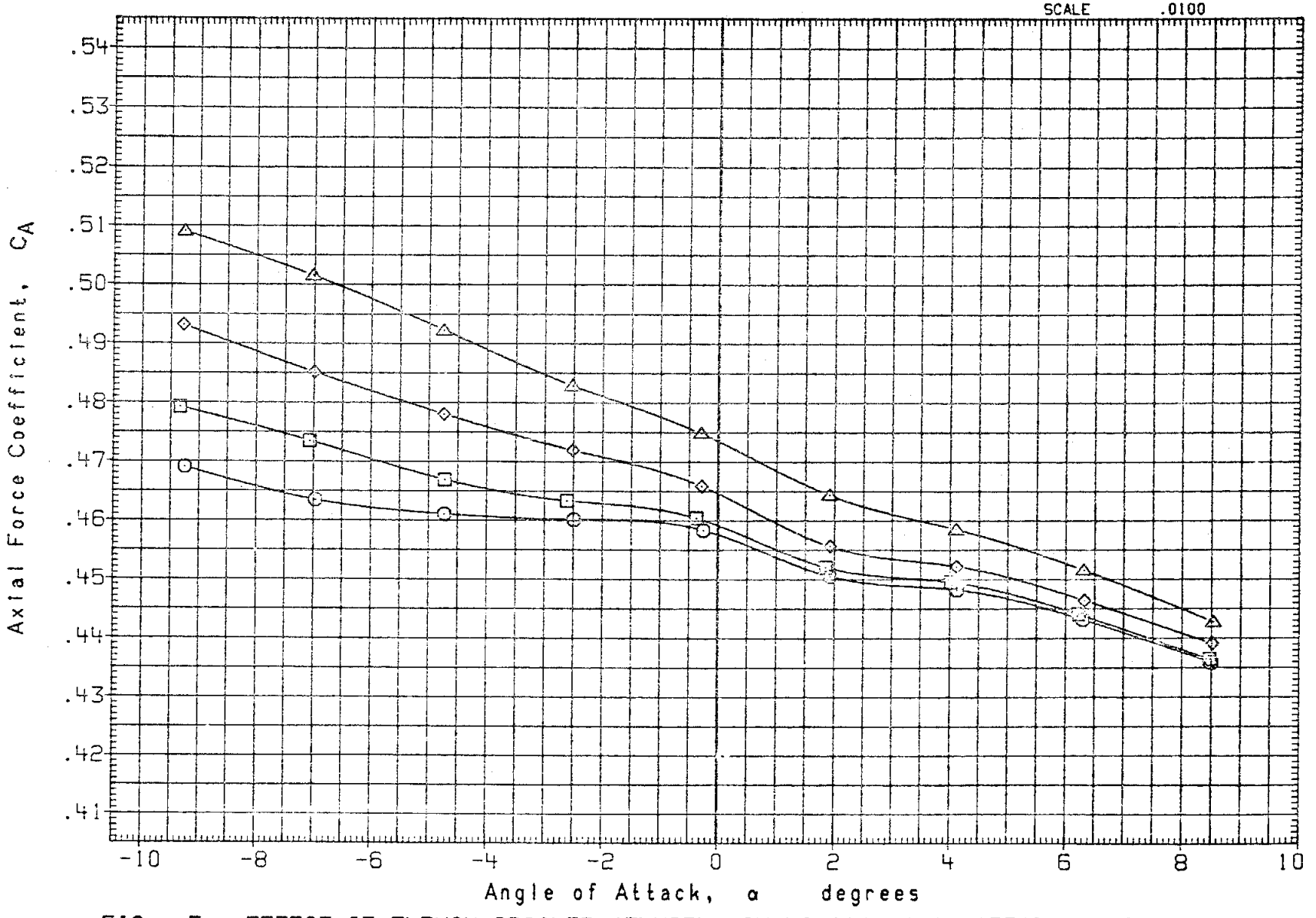


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

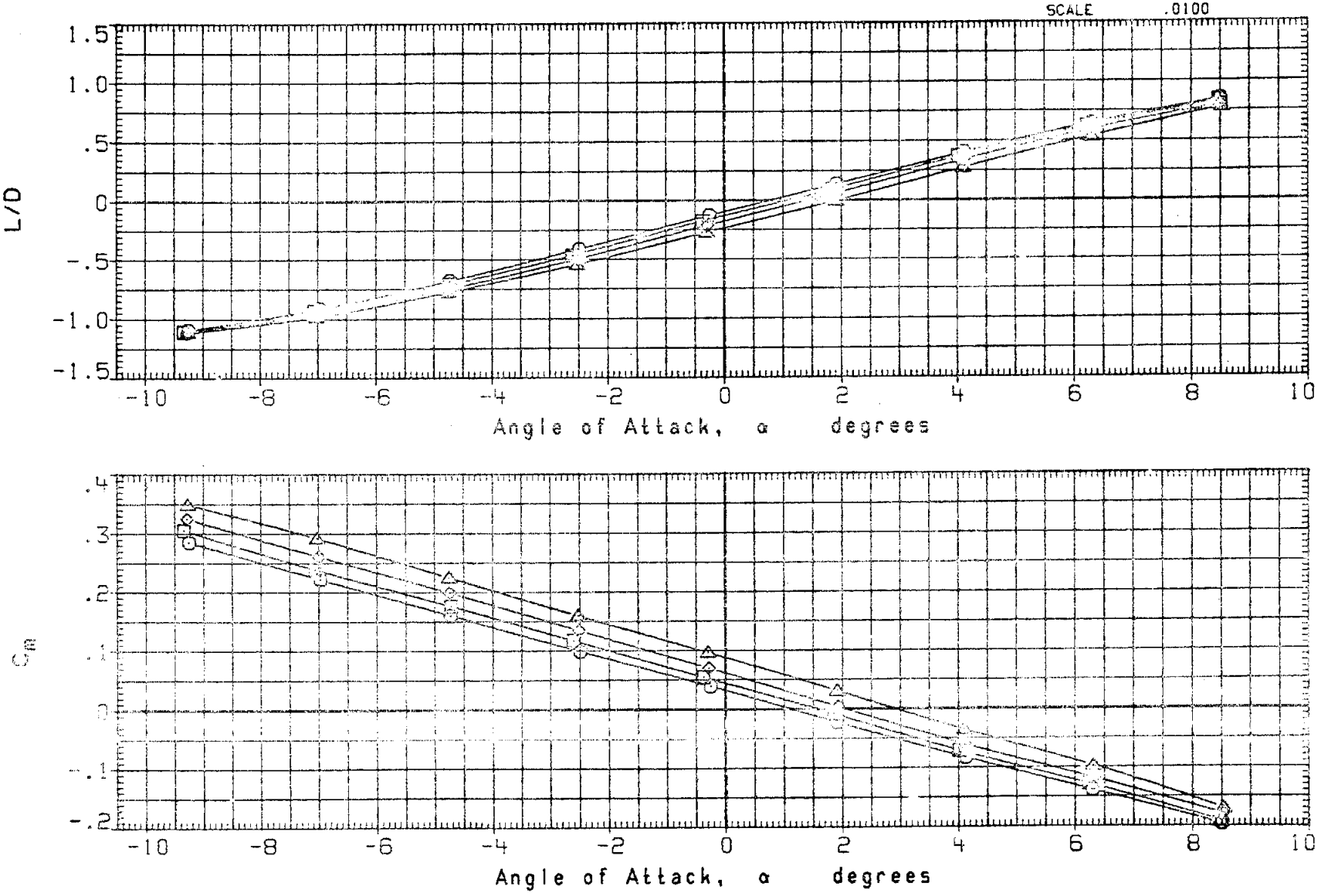


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

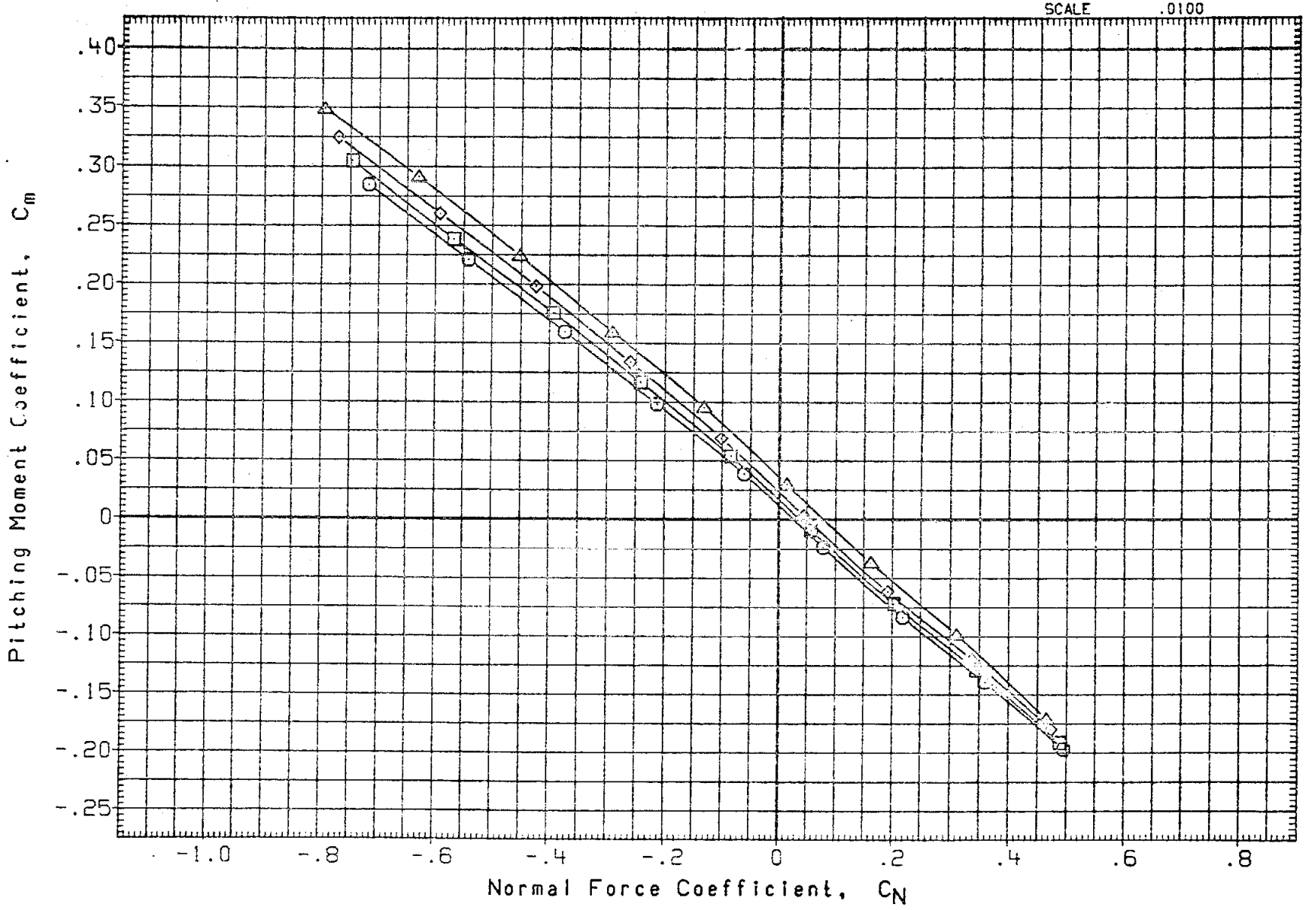


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	576.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

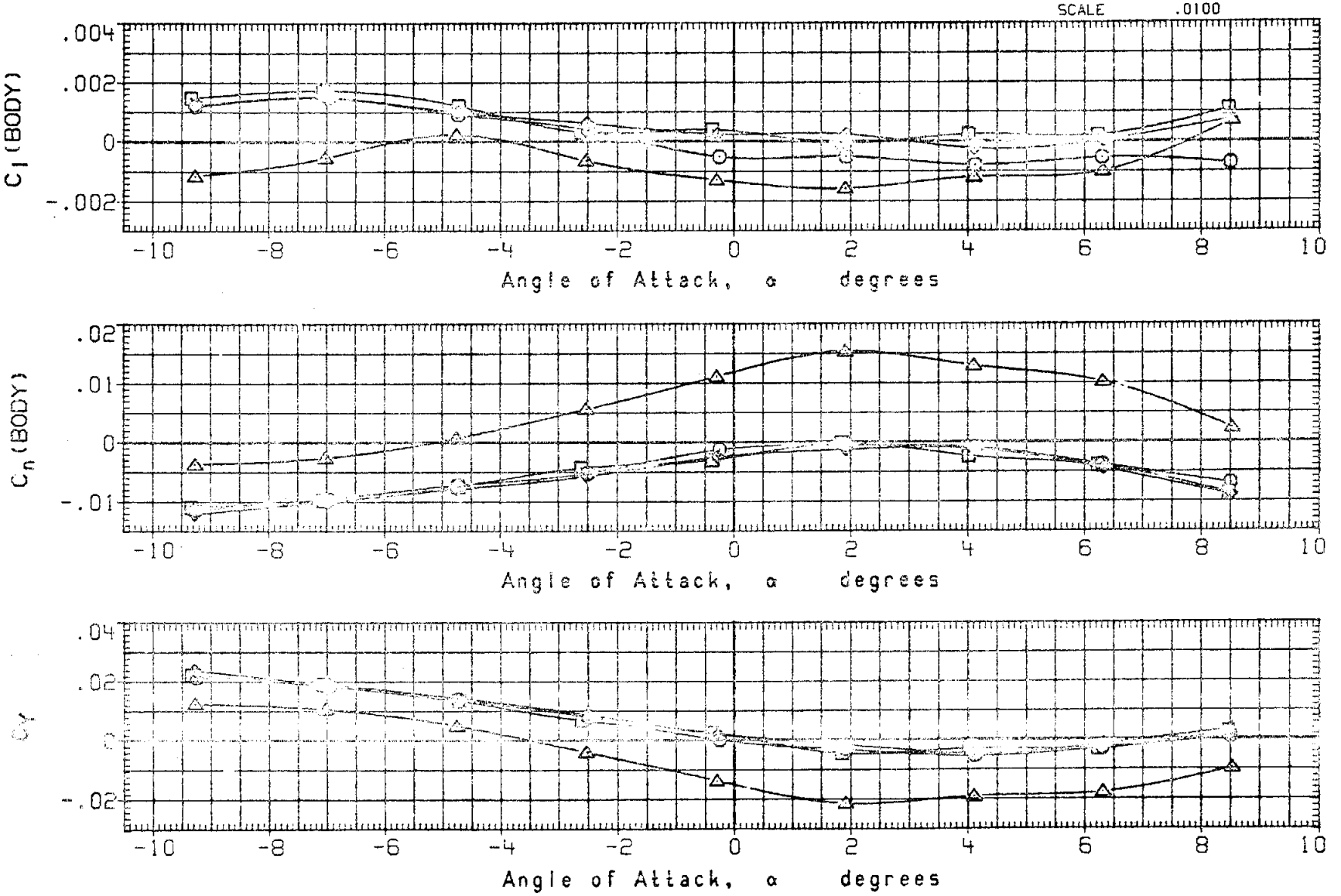


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

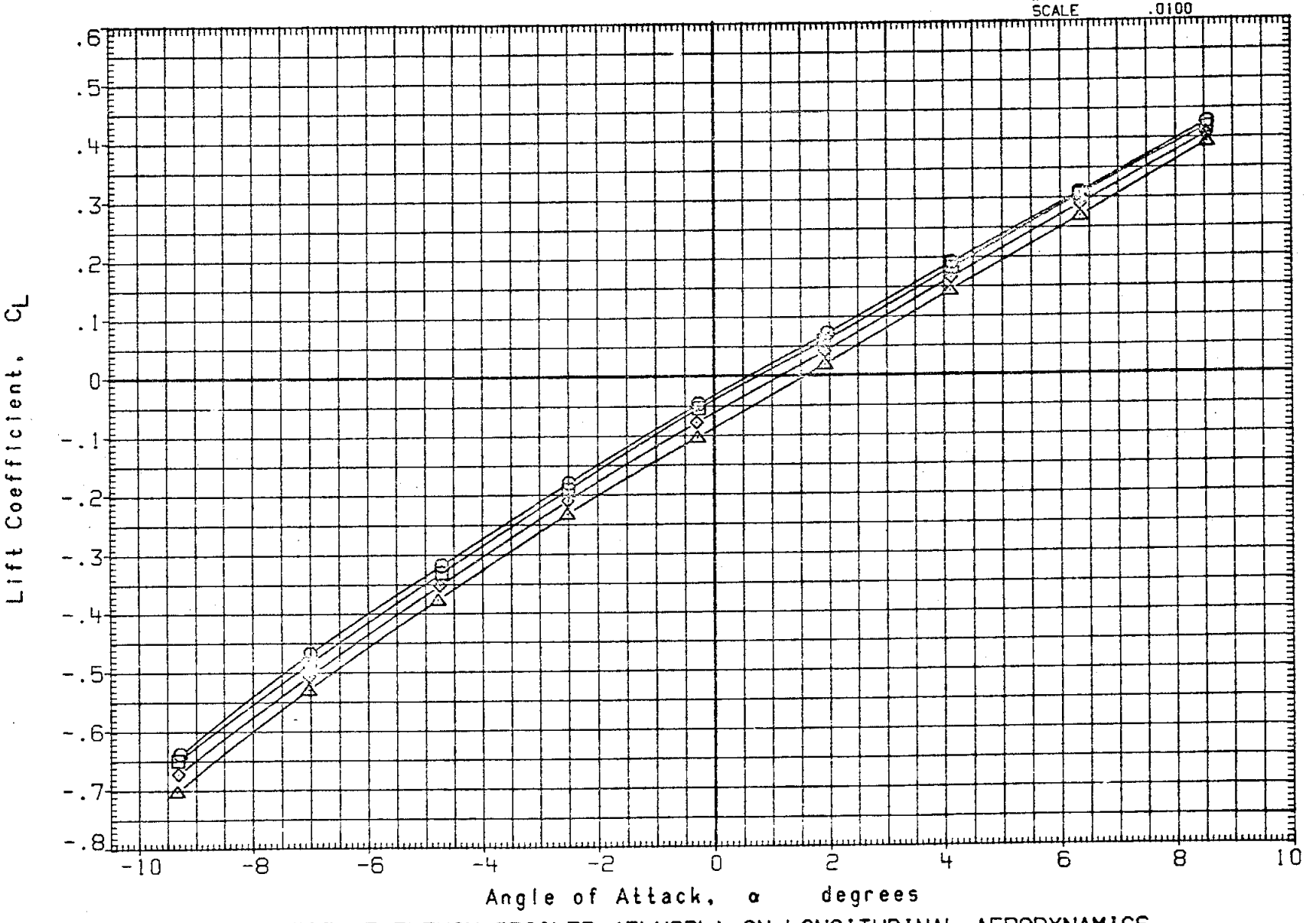


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

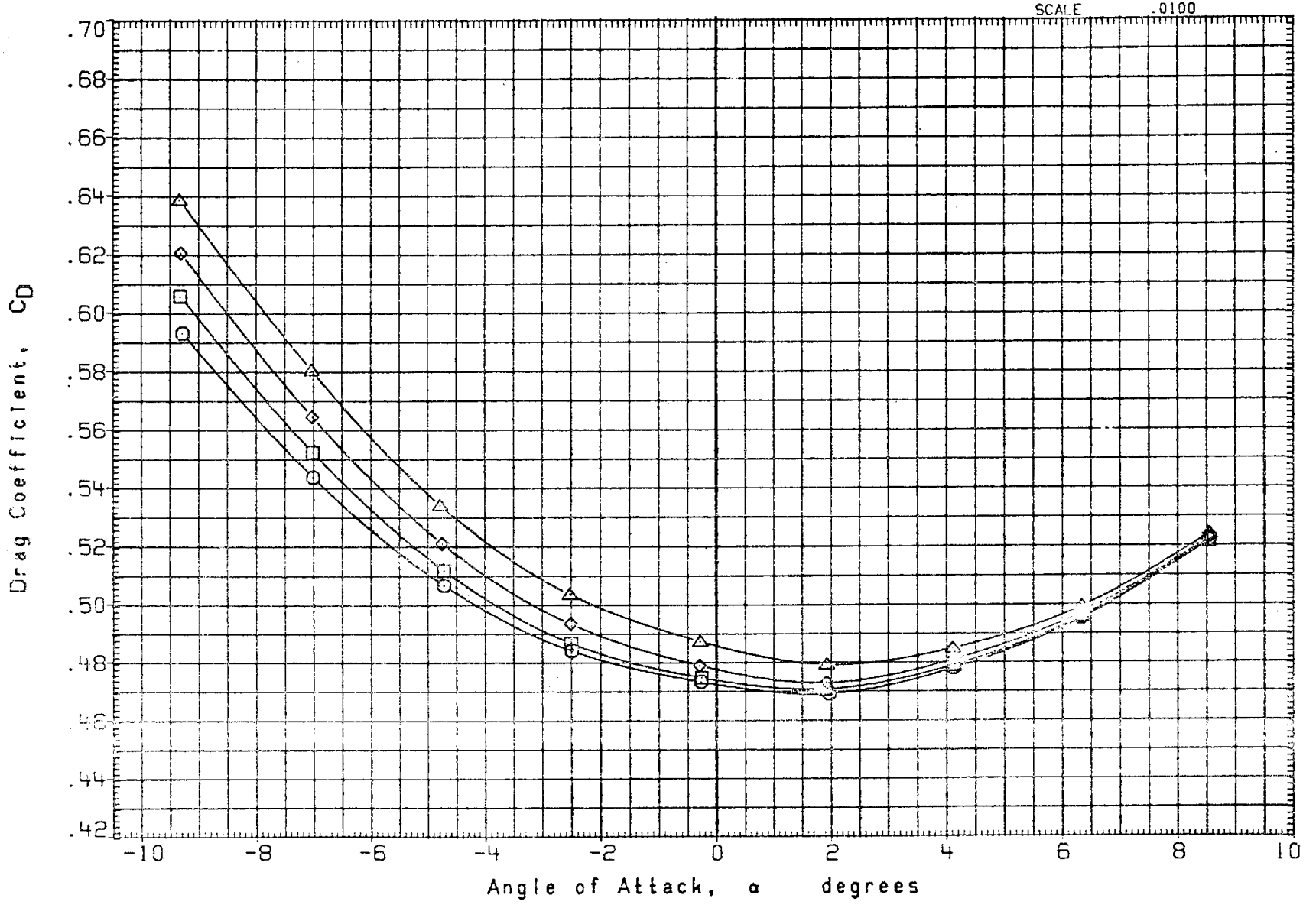


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

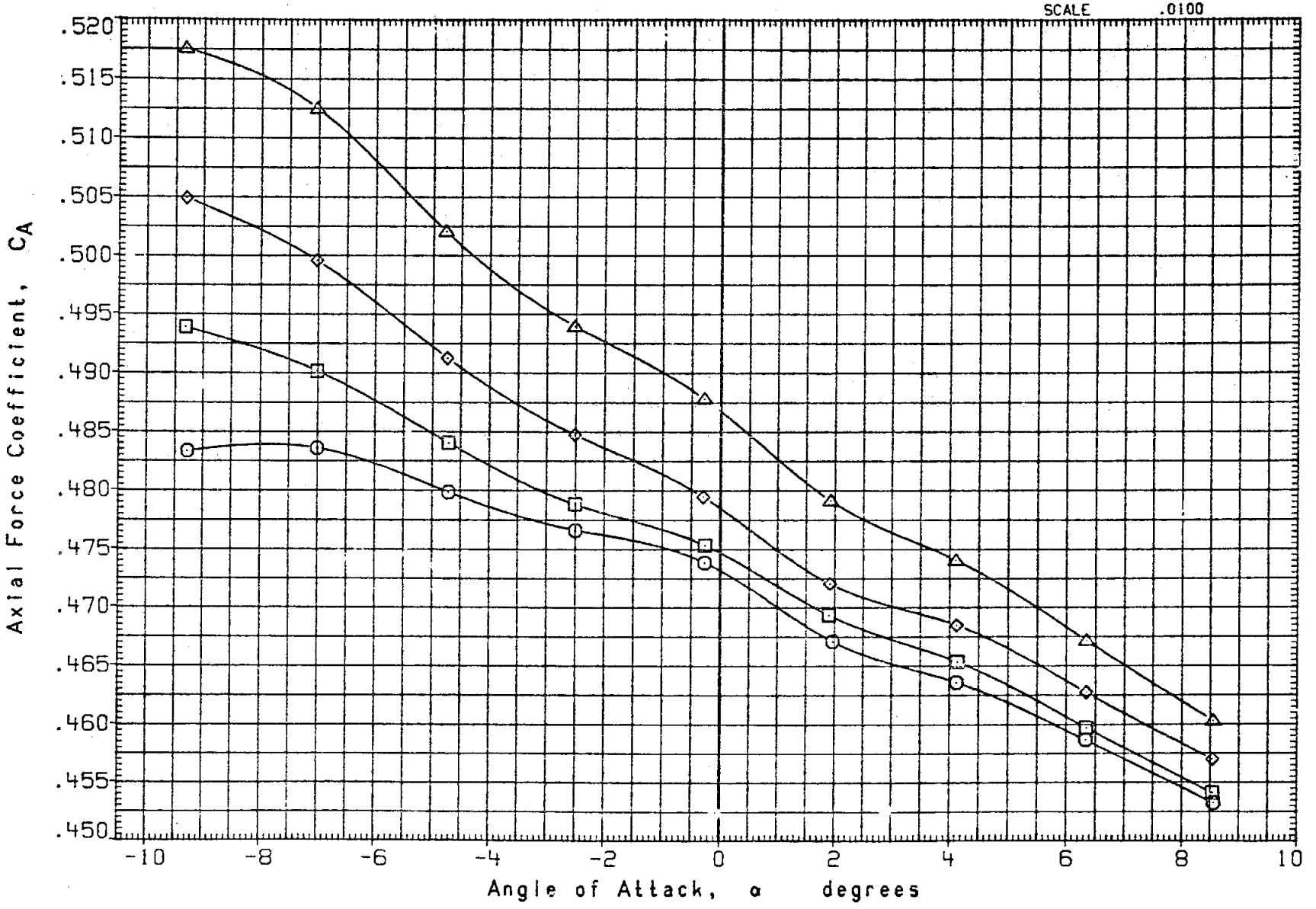


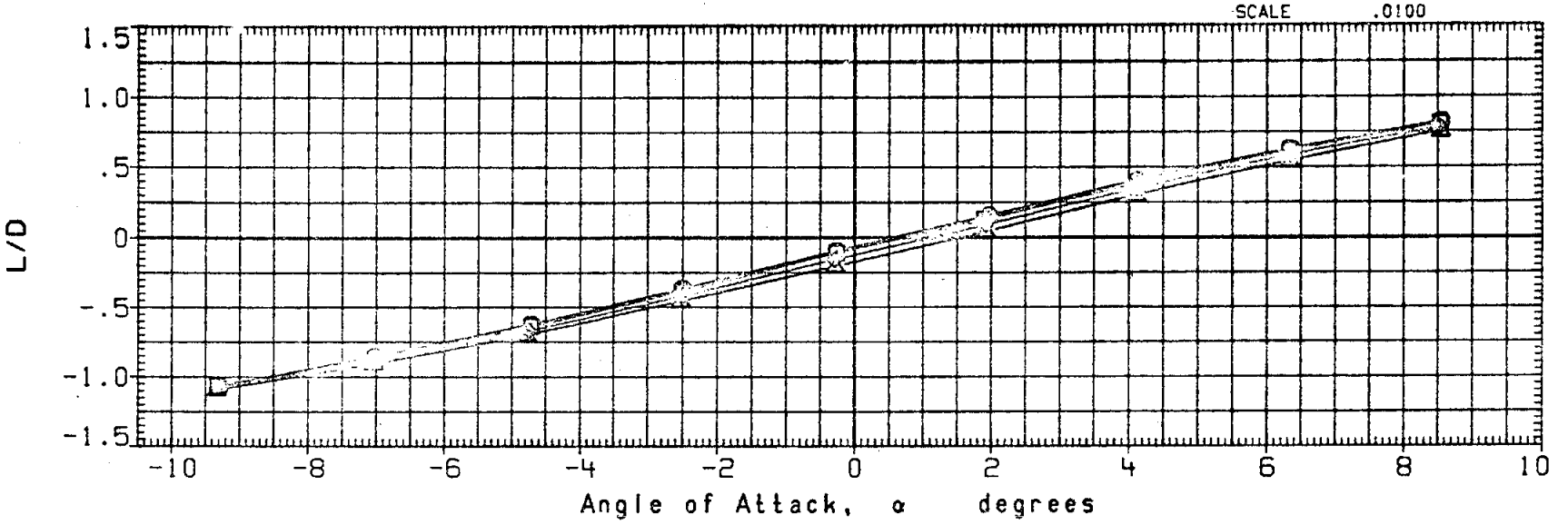
FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



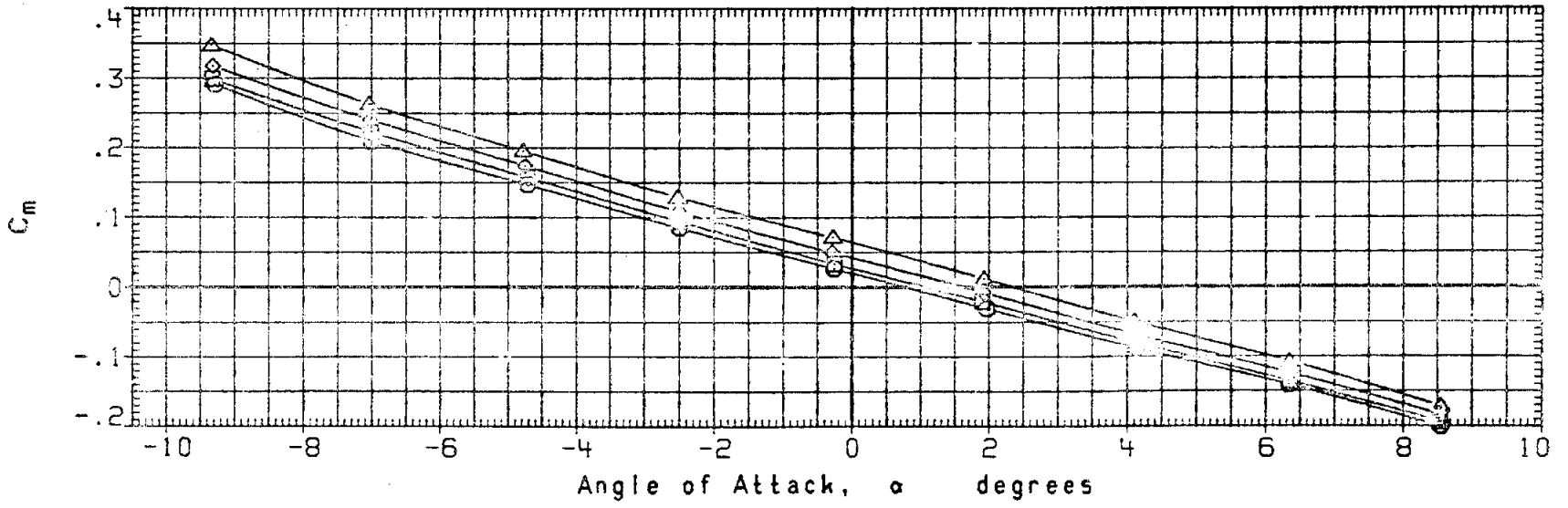


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

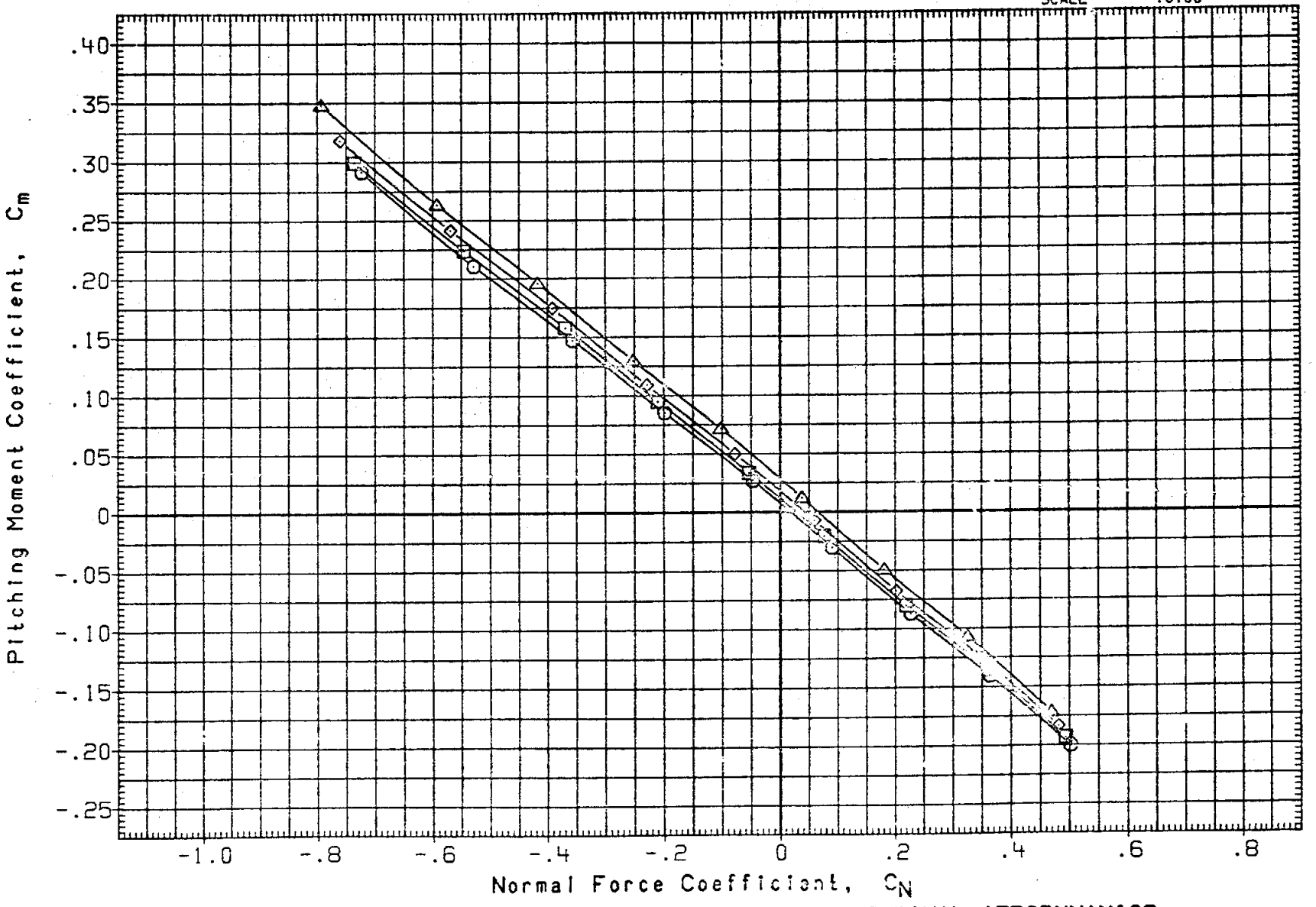


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	ELVSPL
RHZ001	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ003	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ005	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ007	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	970.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

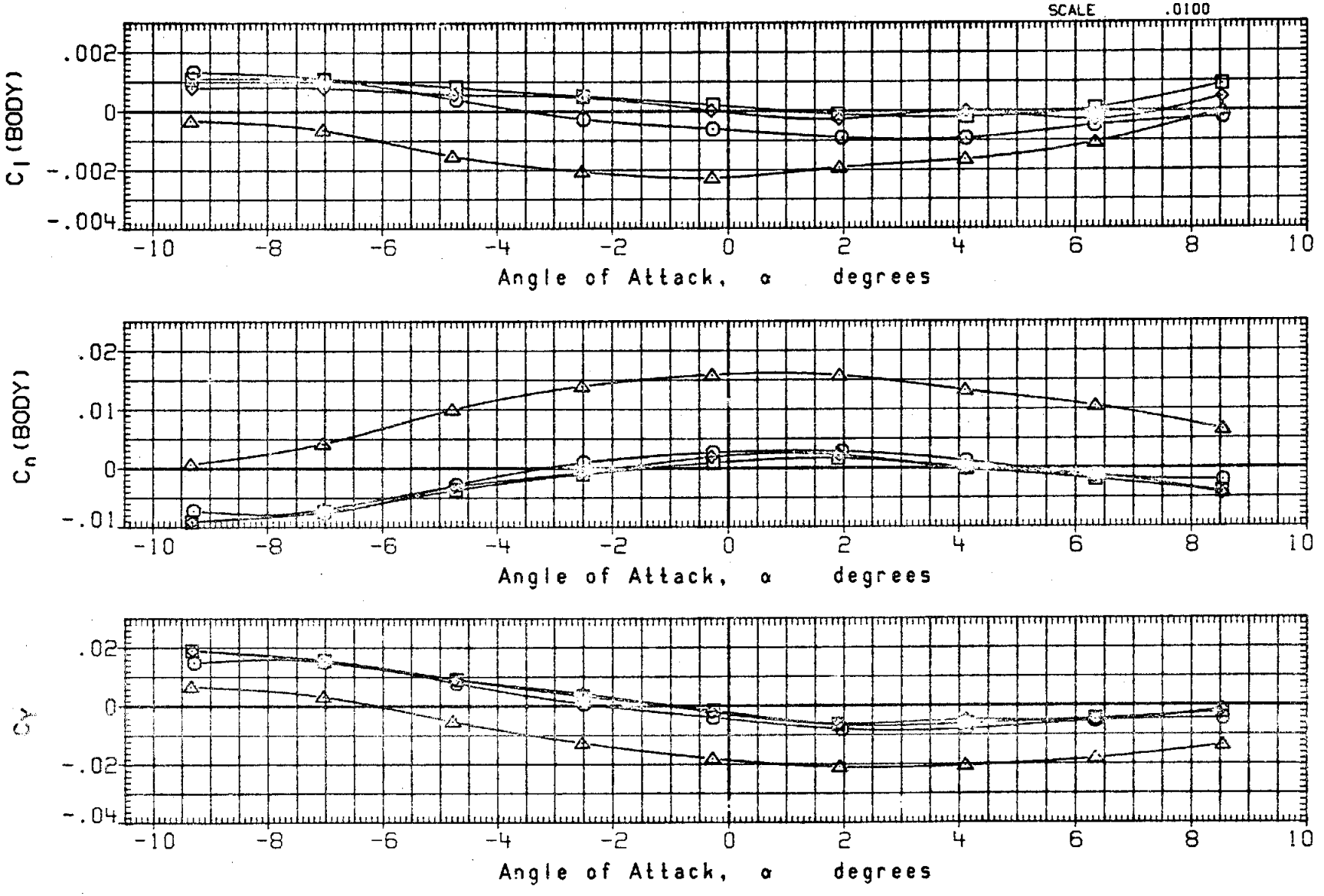


FIG. 5 EFFECT OF ELEVON SPOILER (ELVSPL) ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

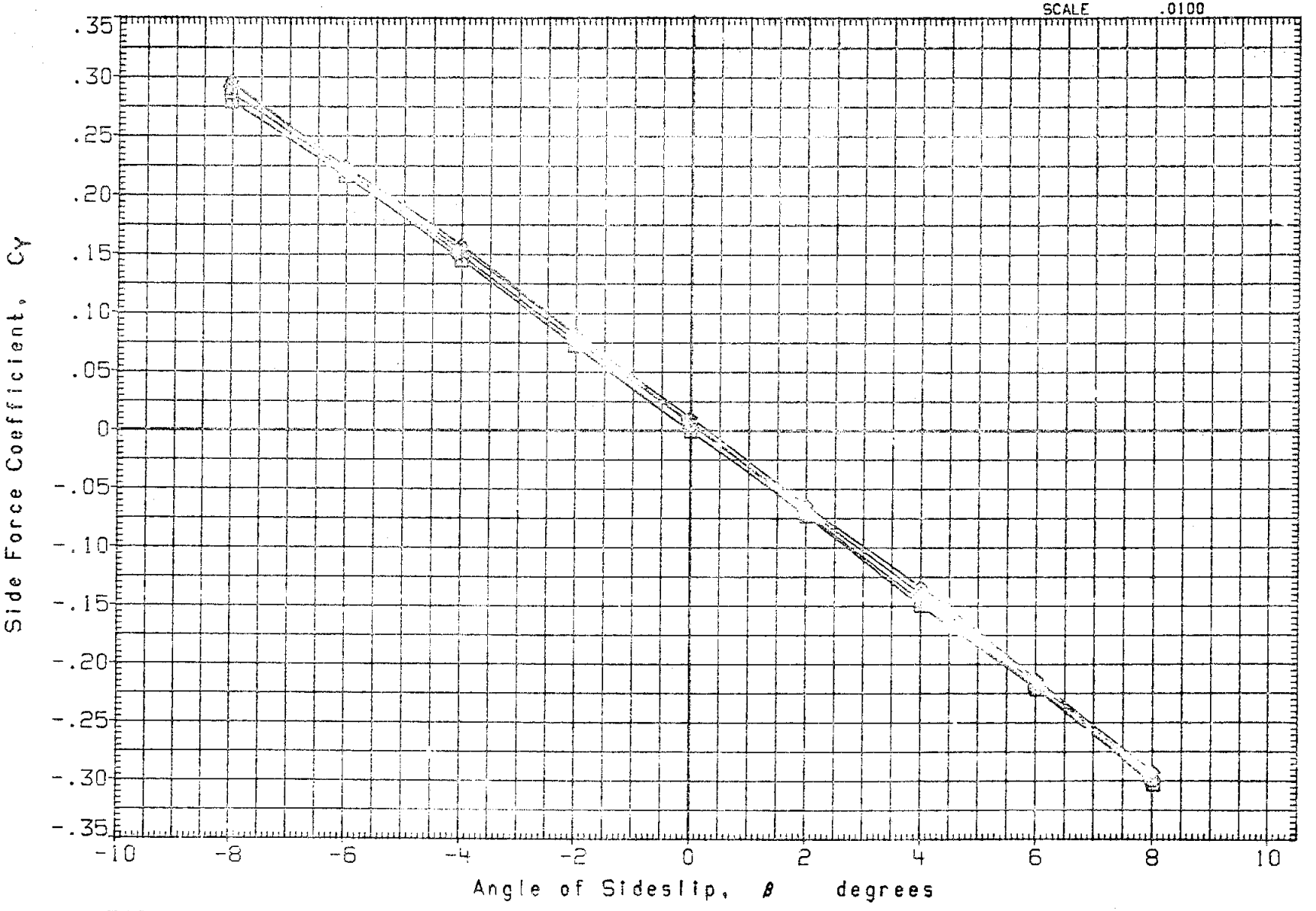


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

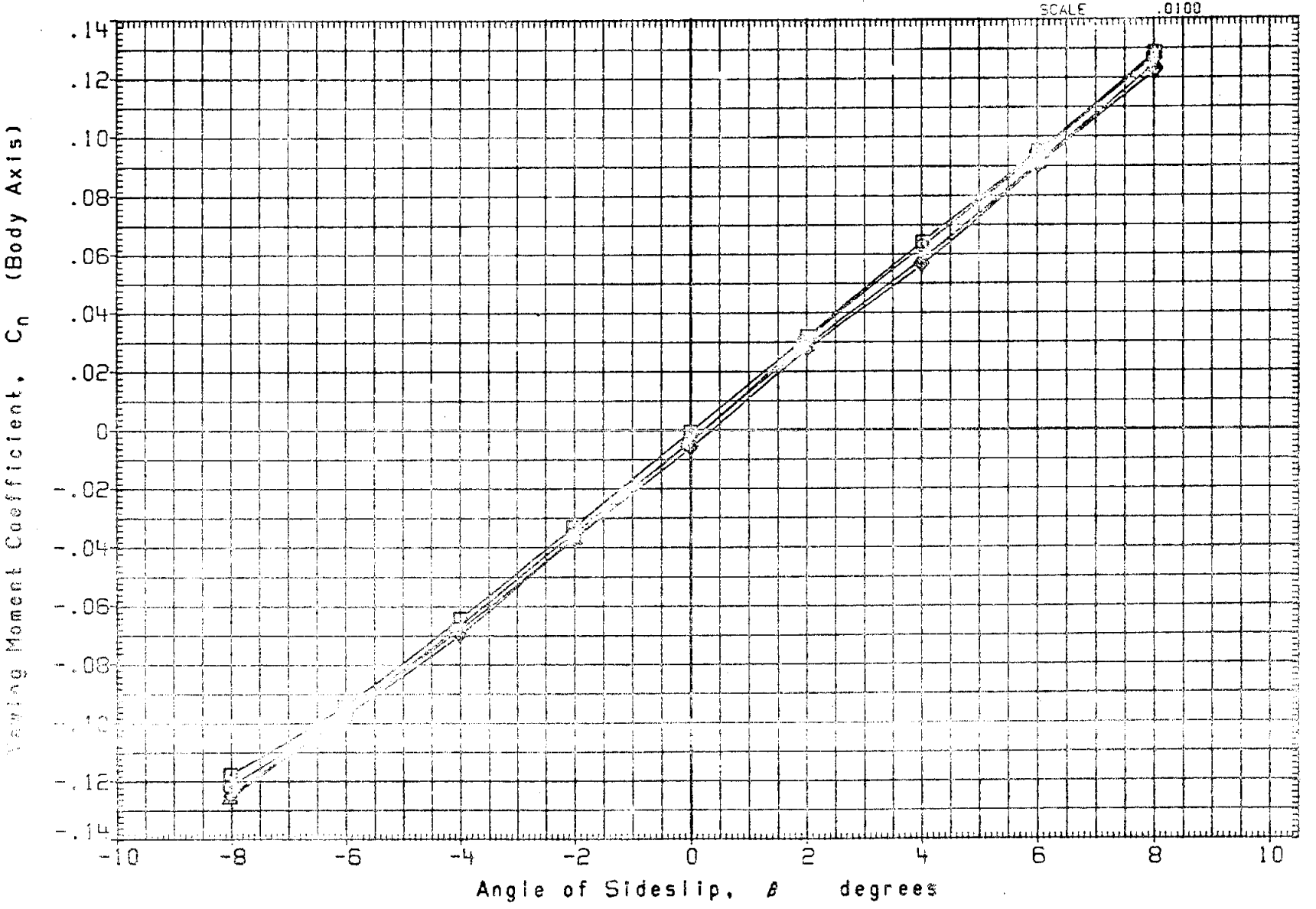


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

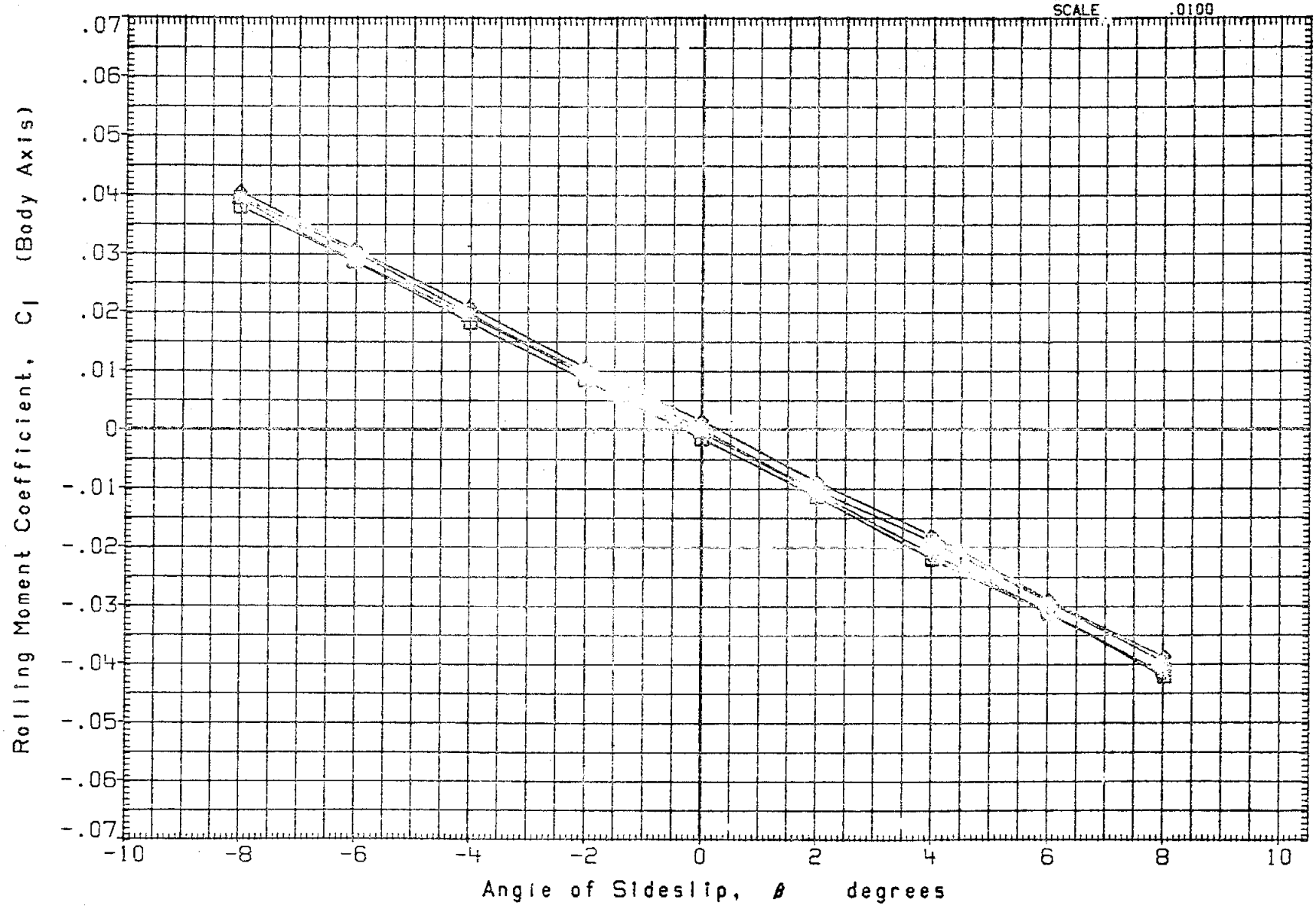


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRF	975.0000	IN. XT
YMRF	.0000	IN. YT
ZMRF	400.0000	IN. ZT
SCALE	.0100	

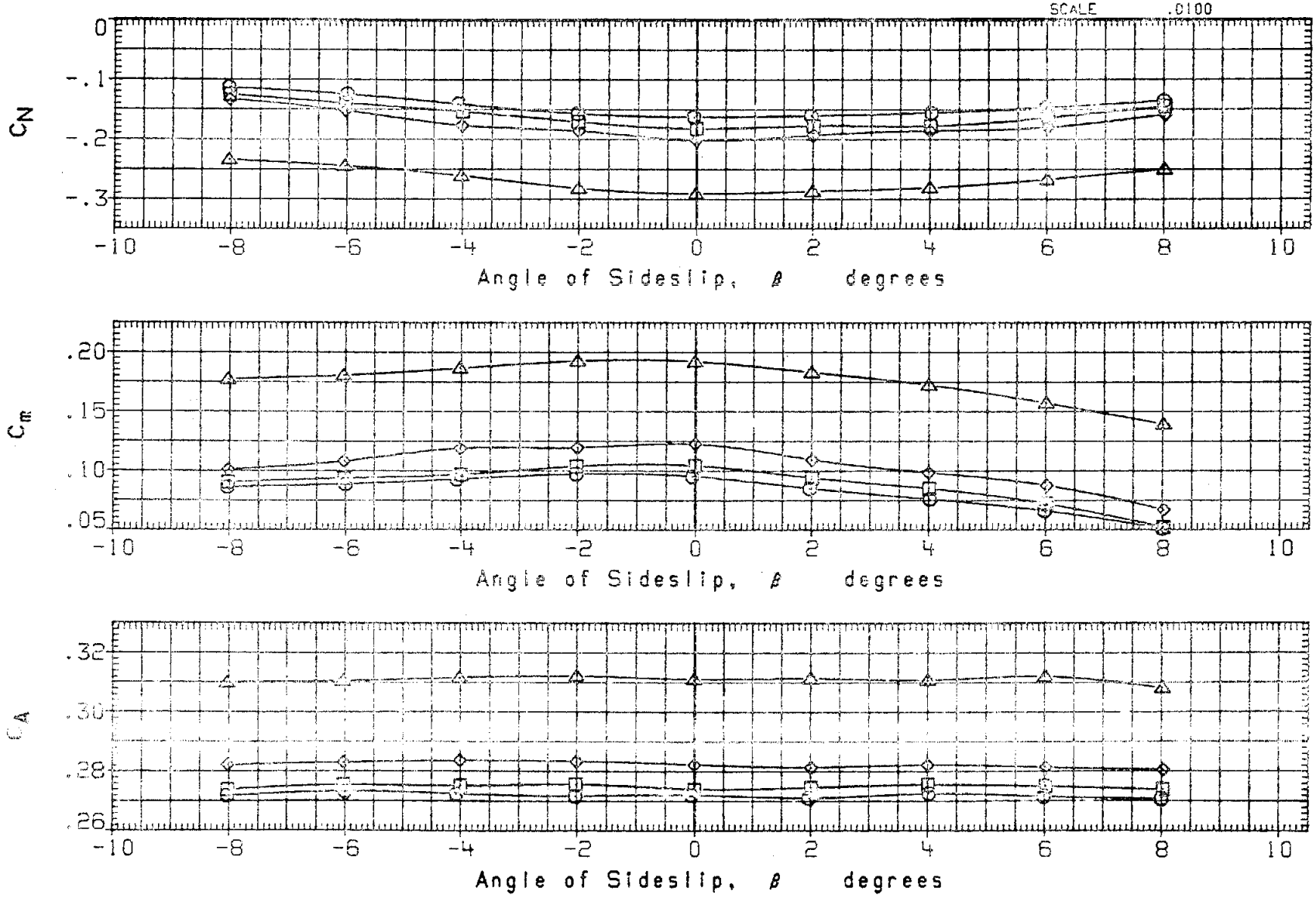


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(A) MACH = .35

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

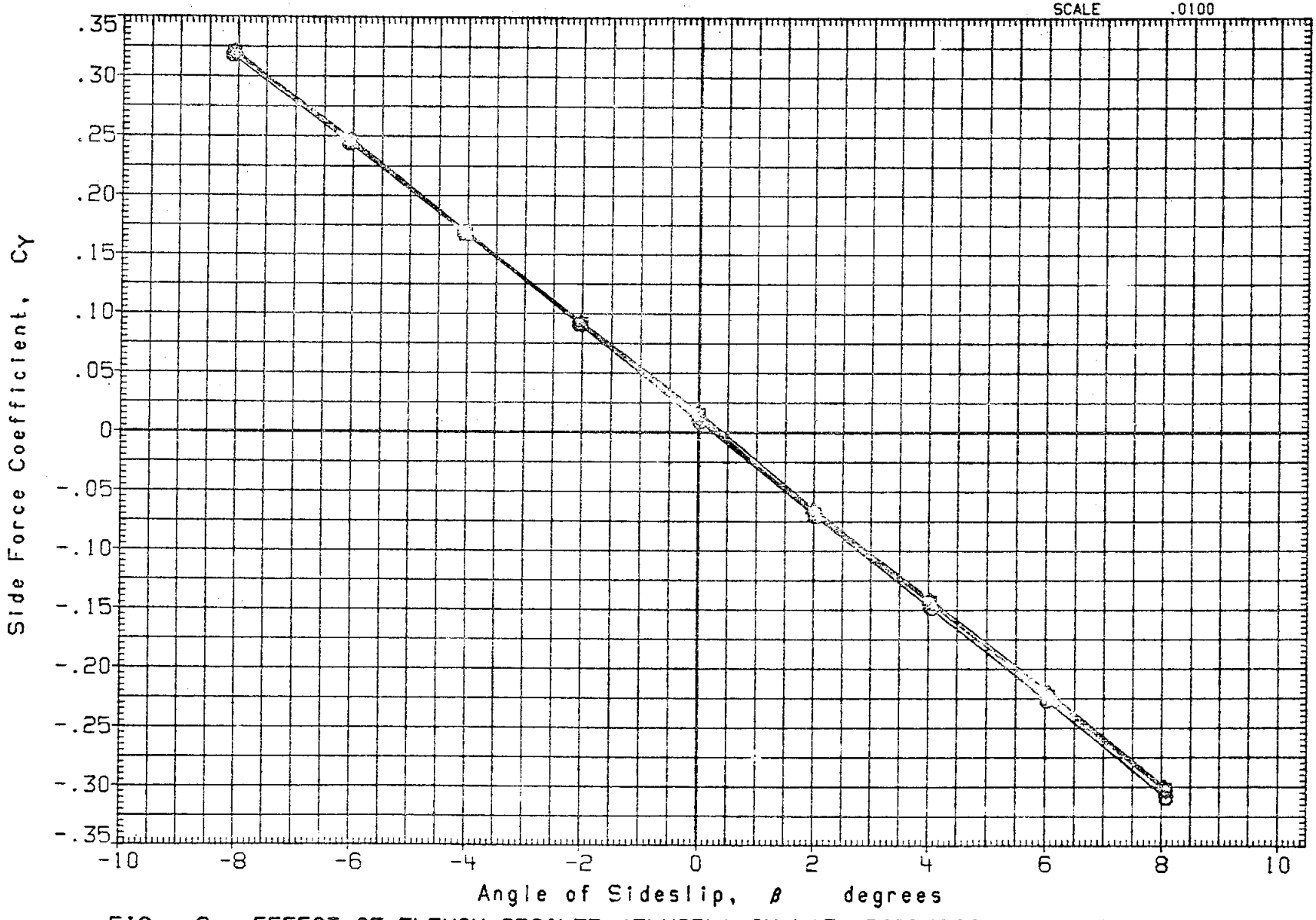


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(B) MACH = .60

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

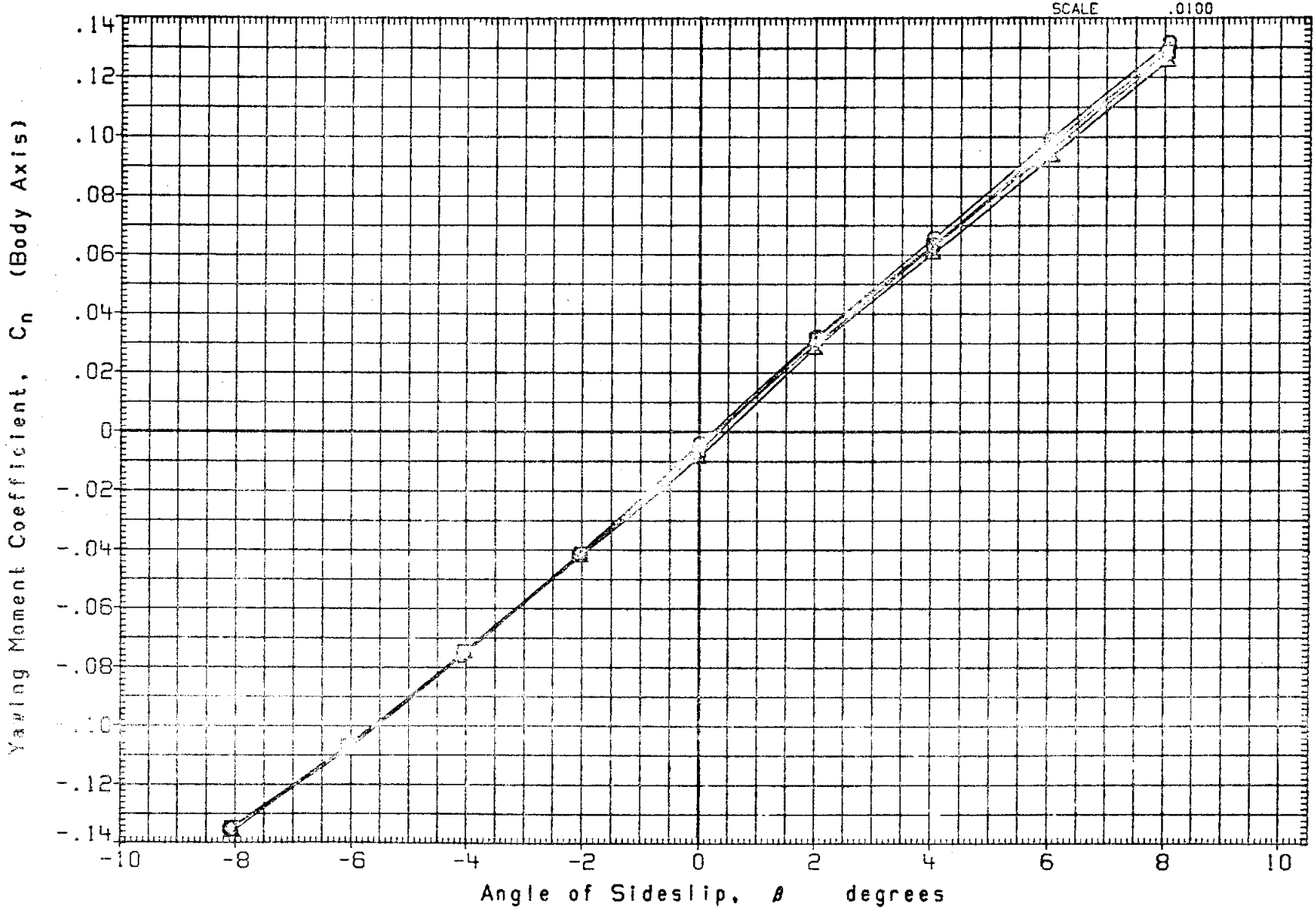


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

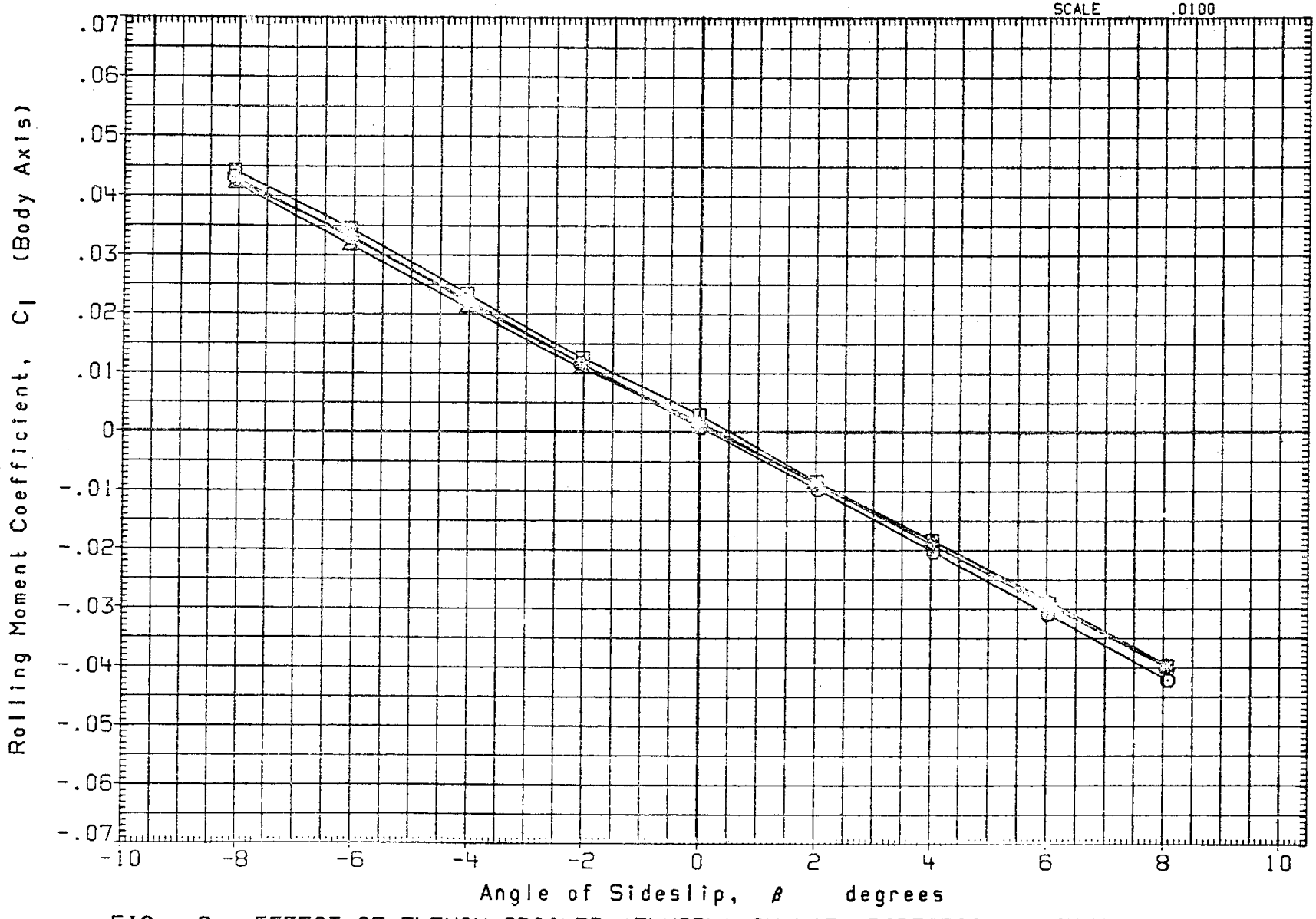


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.3000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

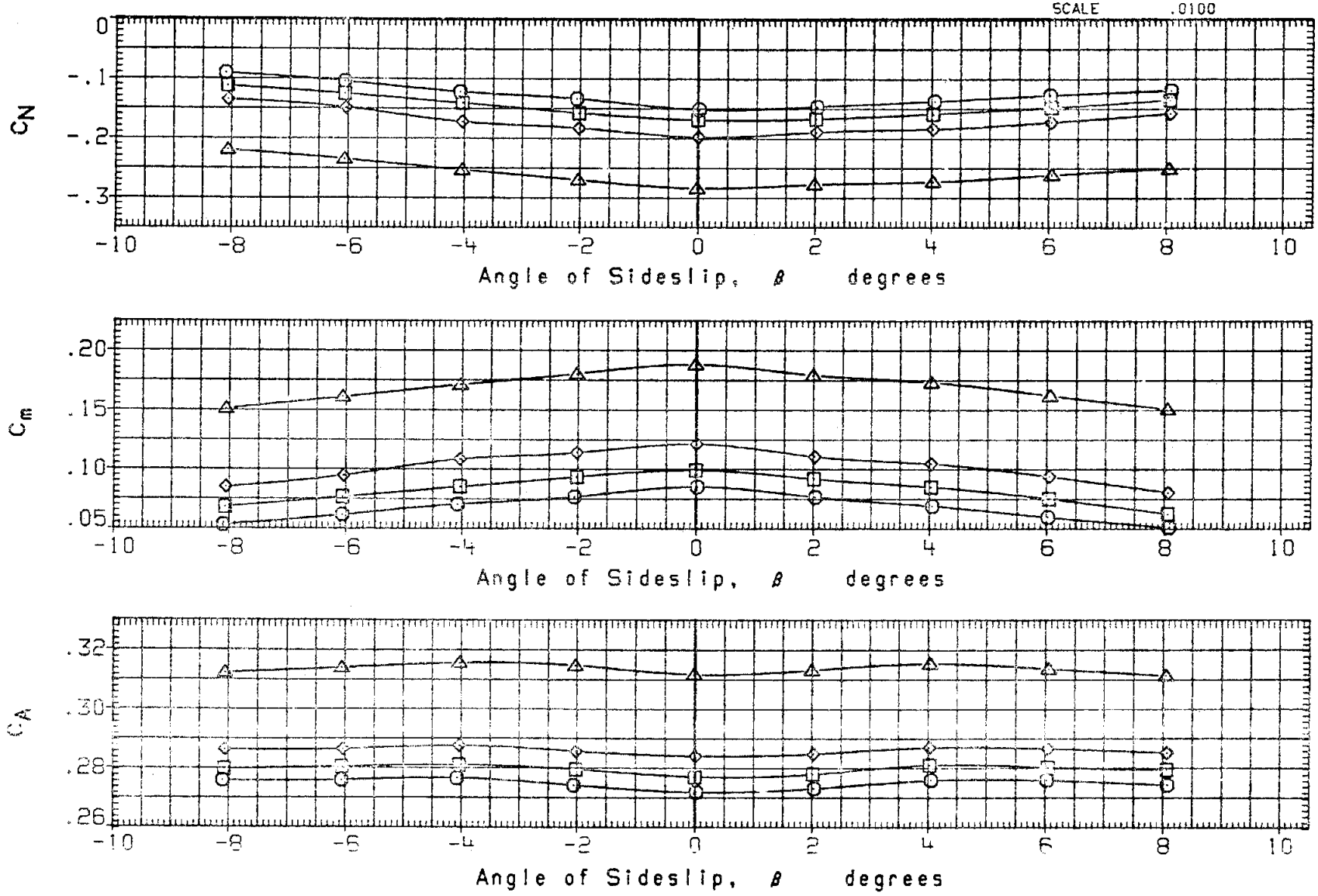


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

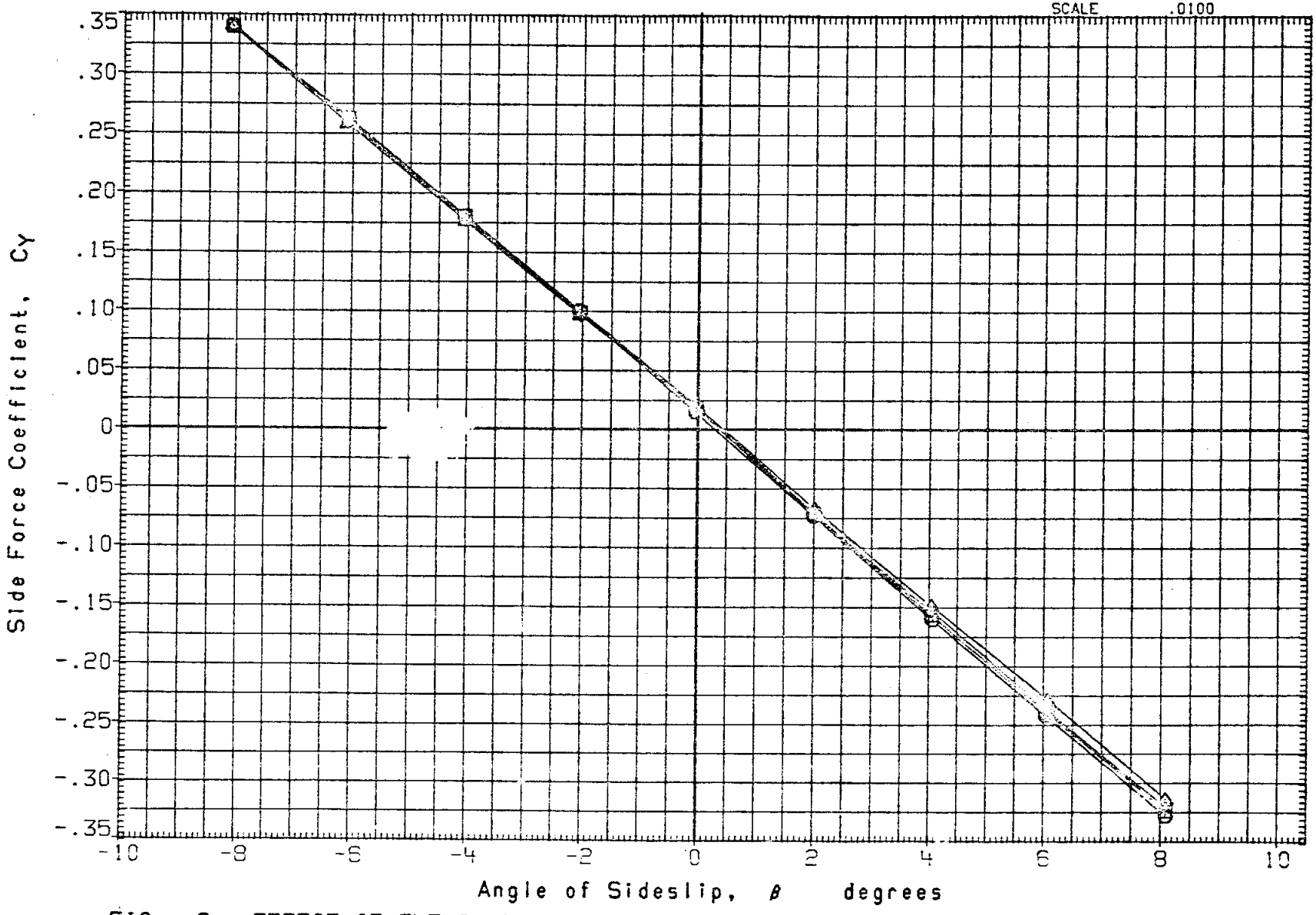


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

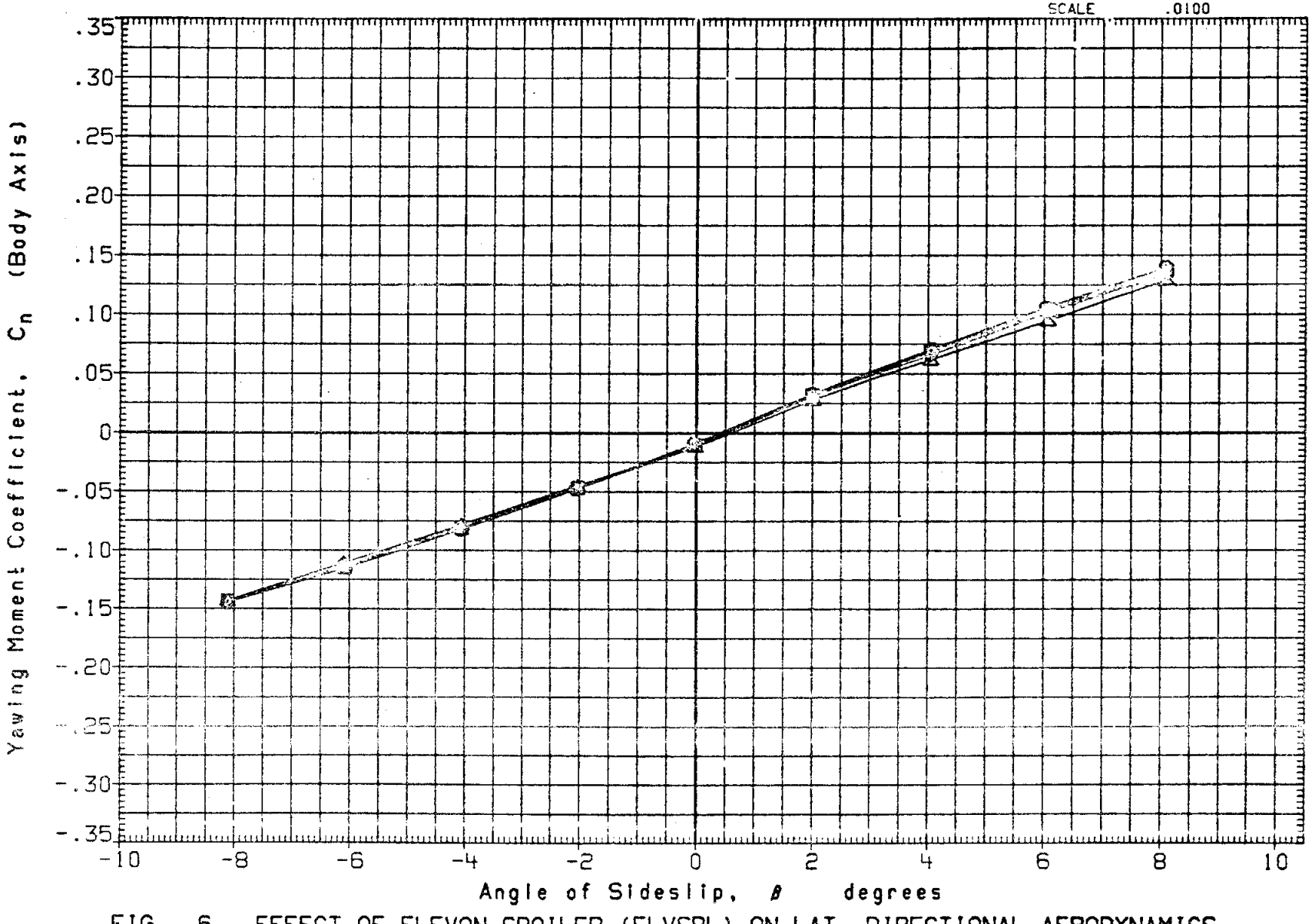


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

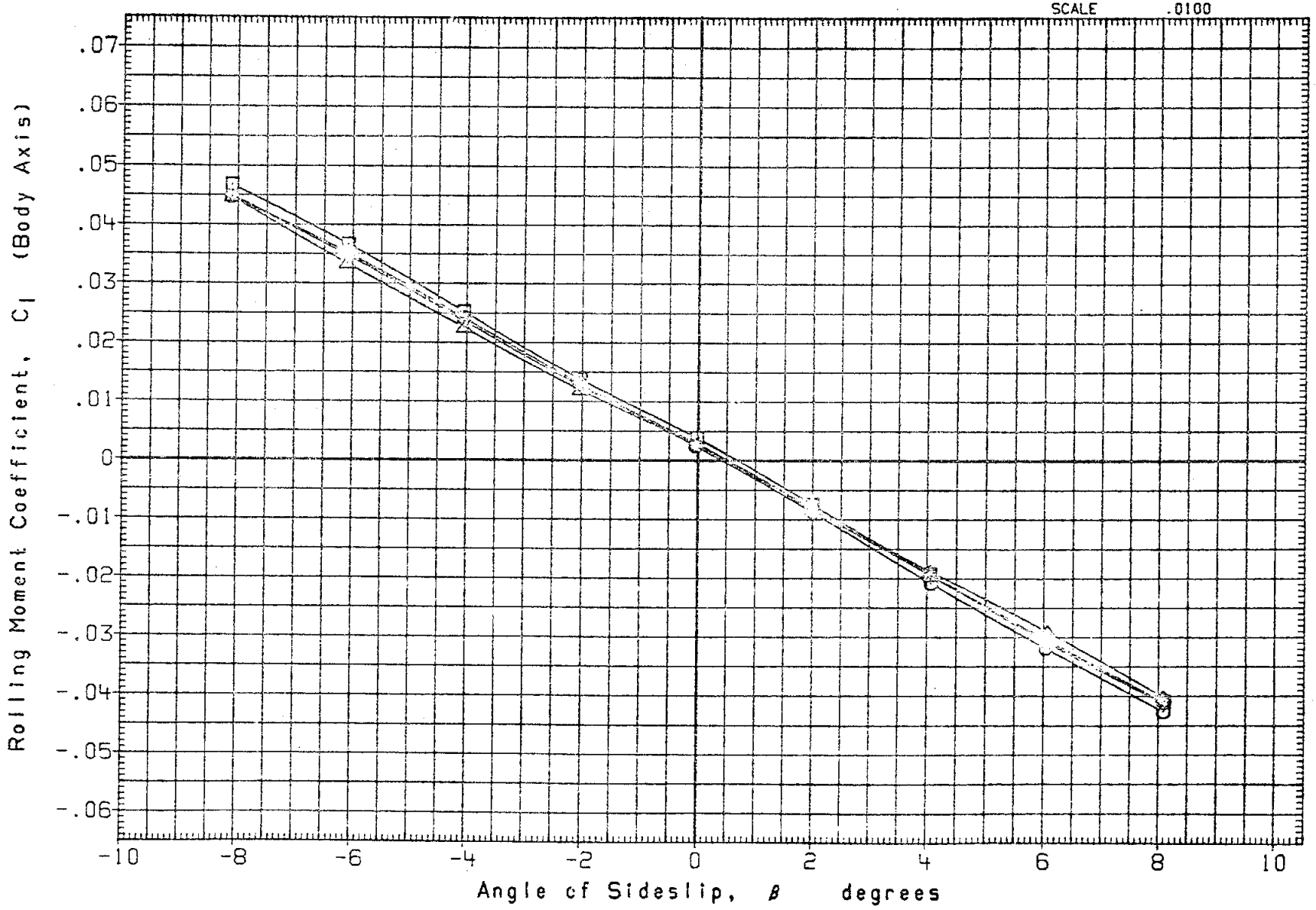


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

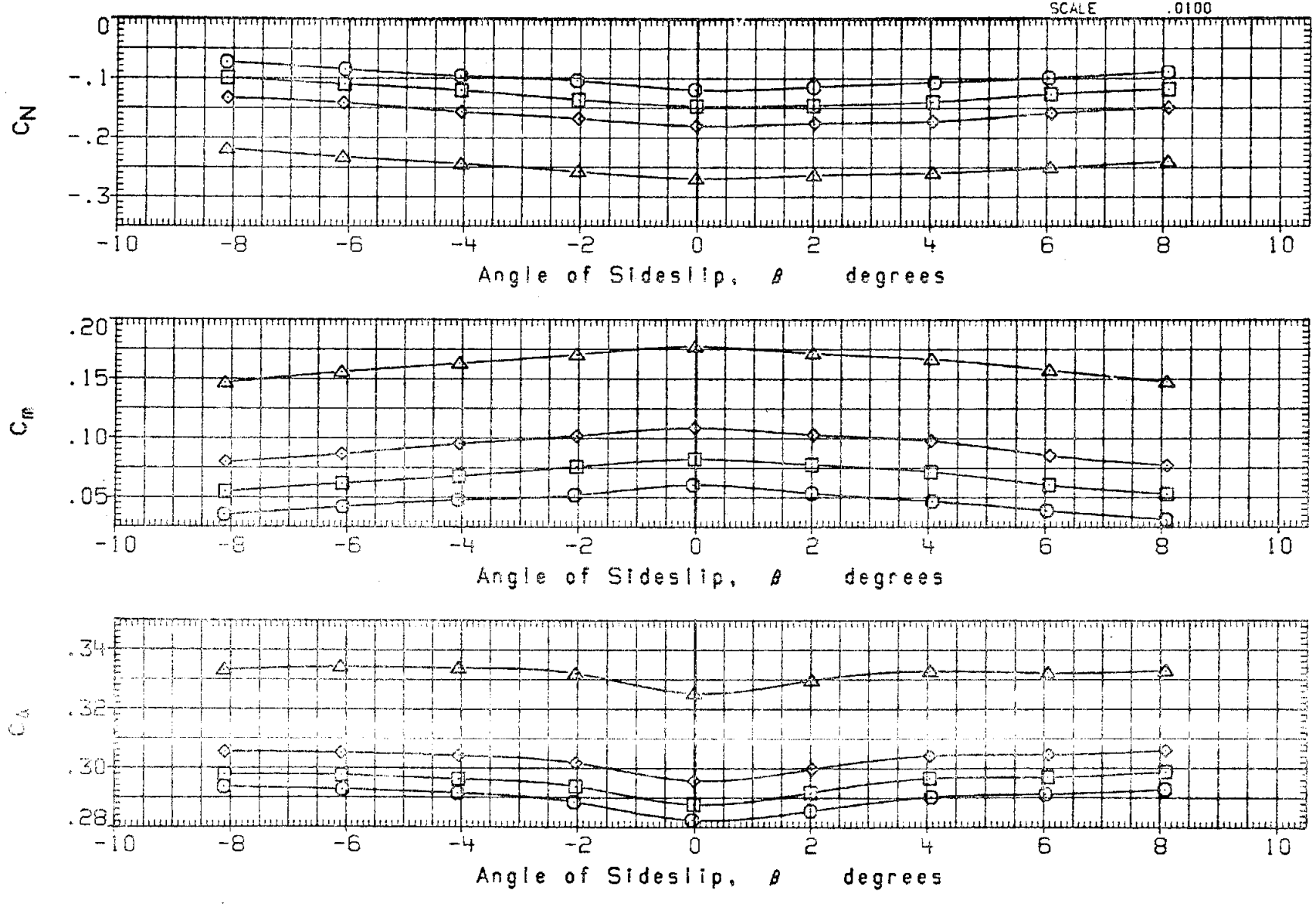


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

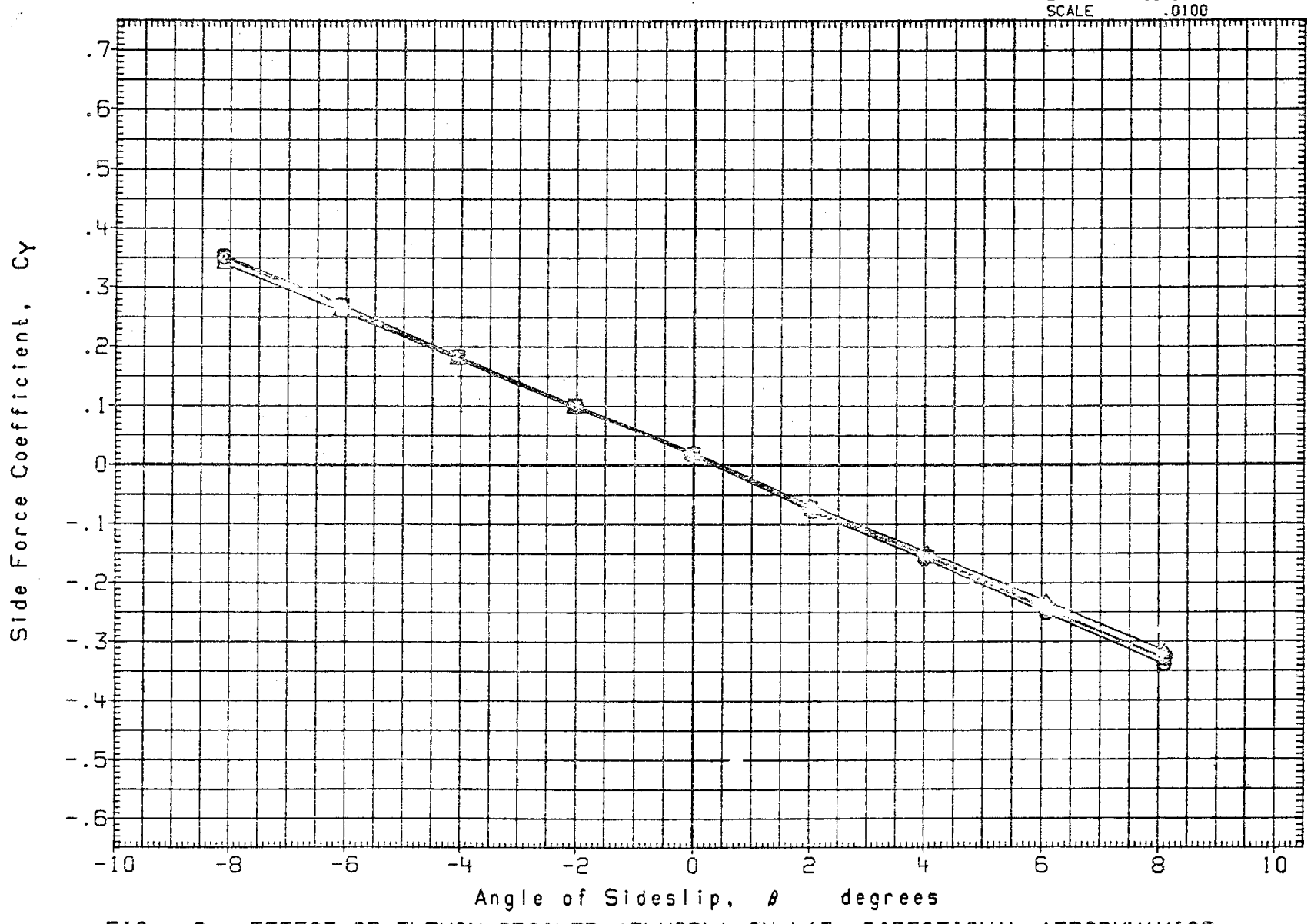


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

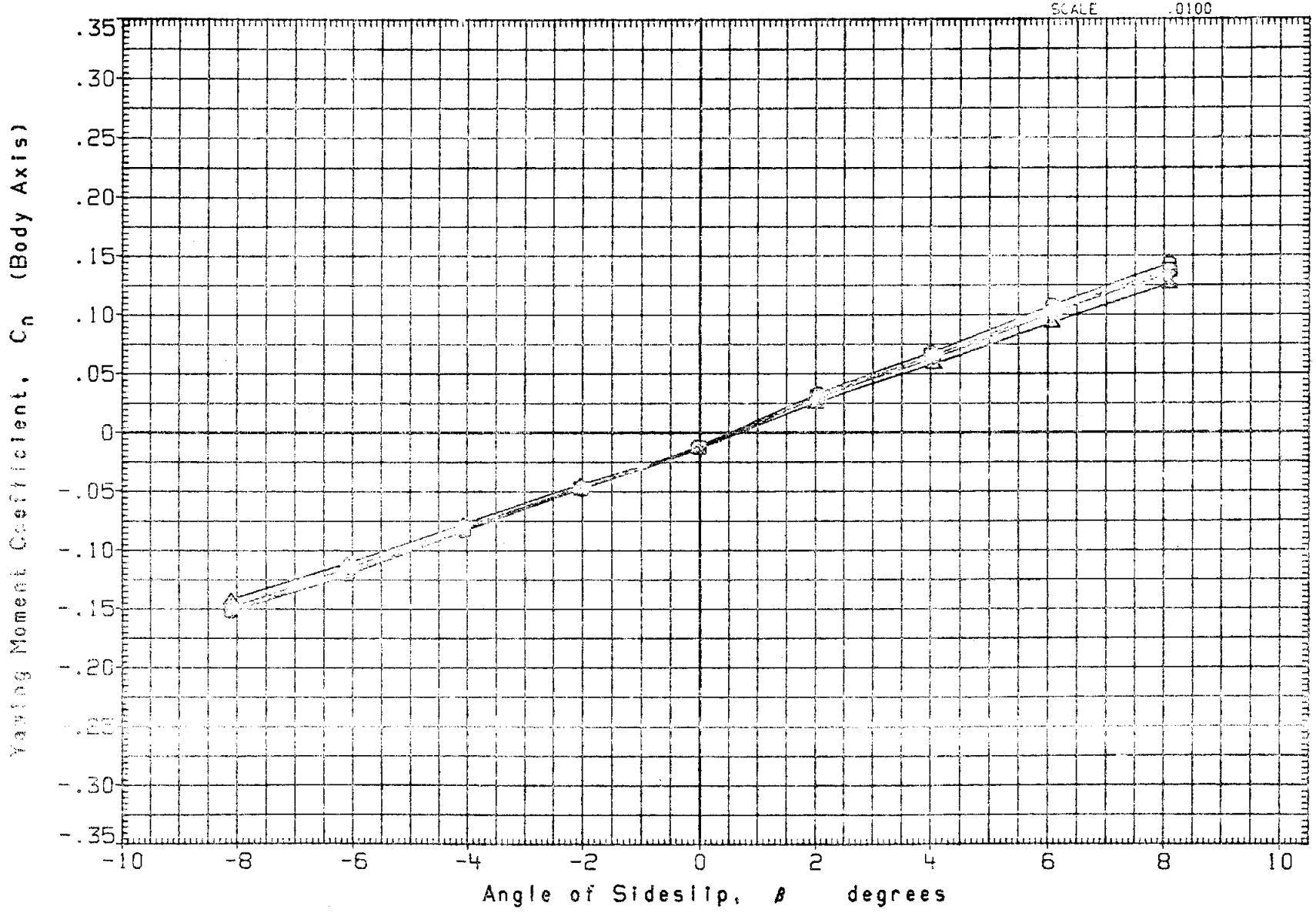


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

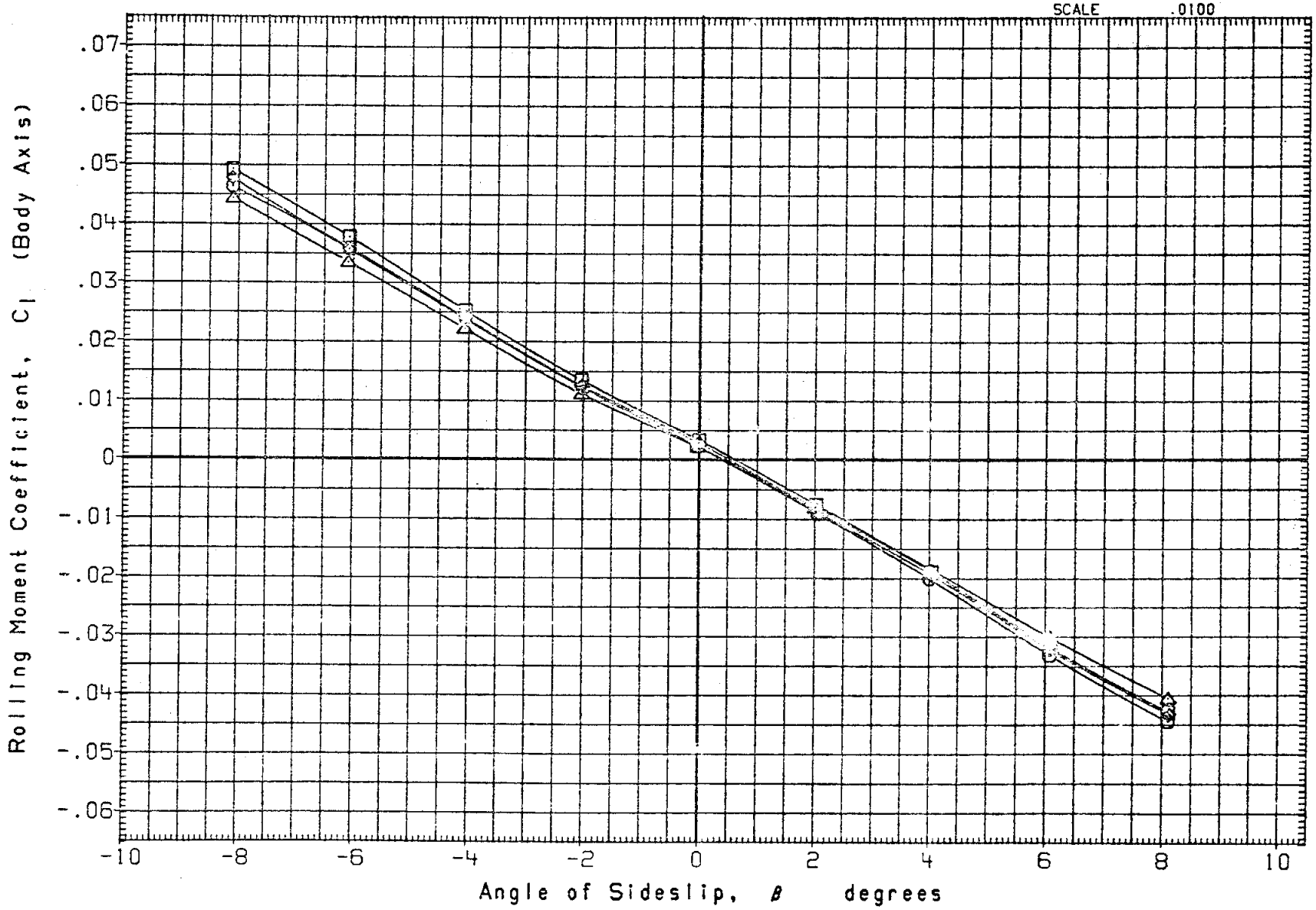


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

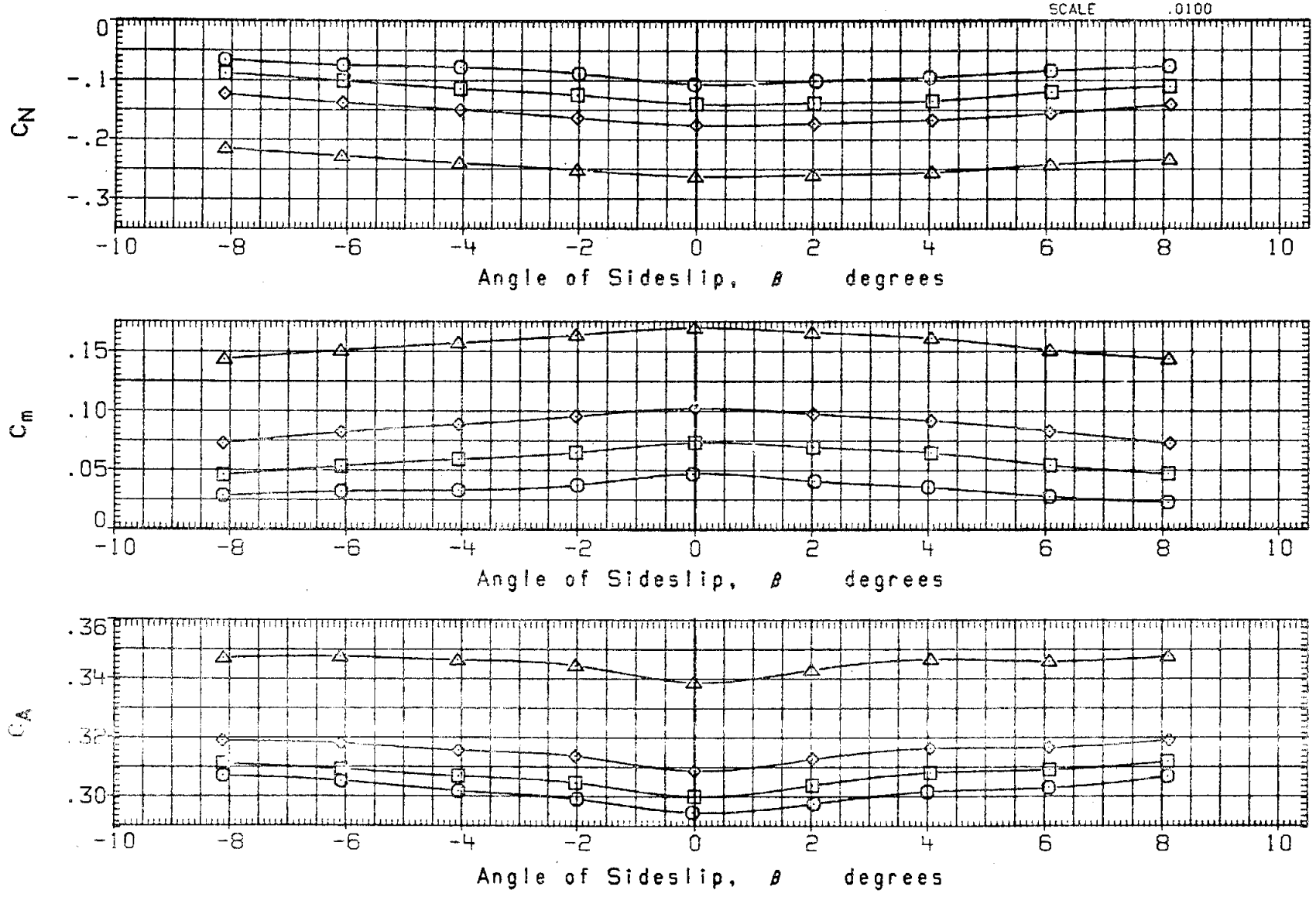


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

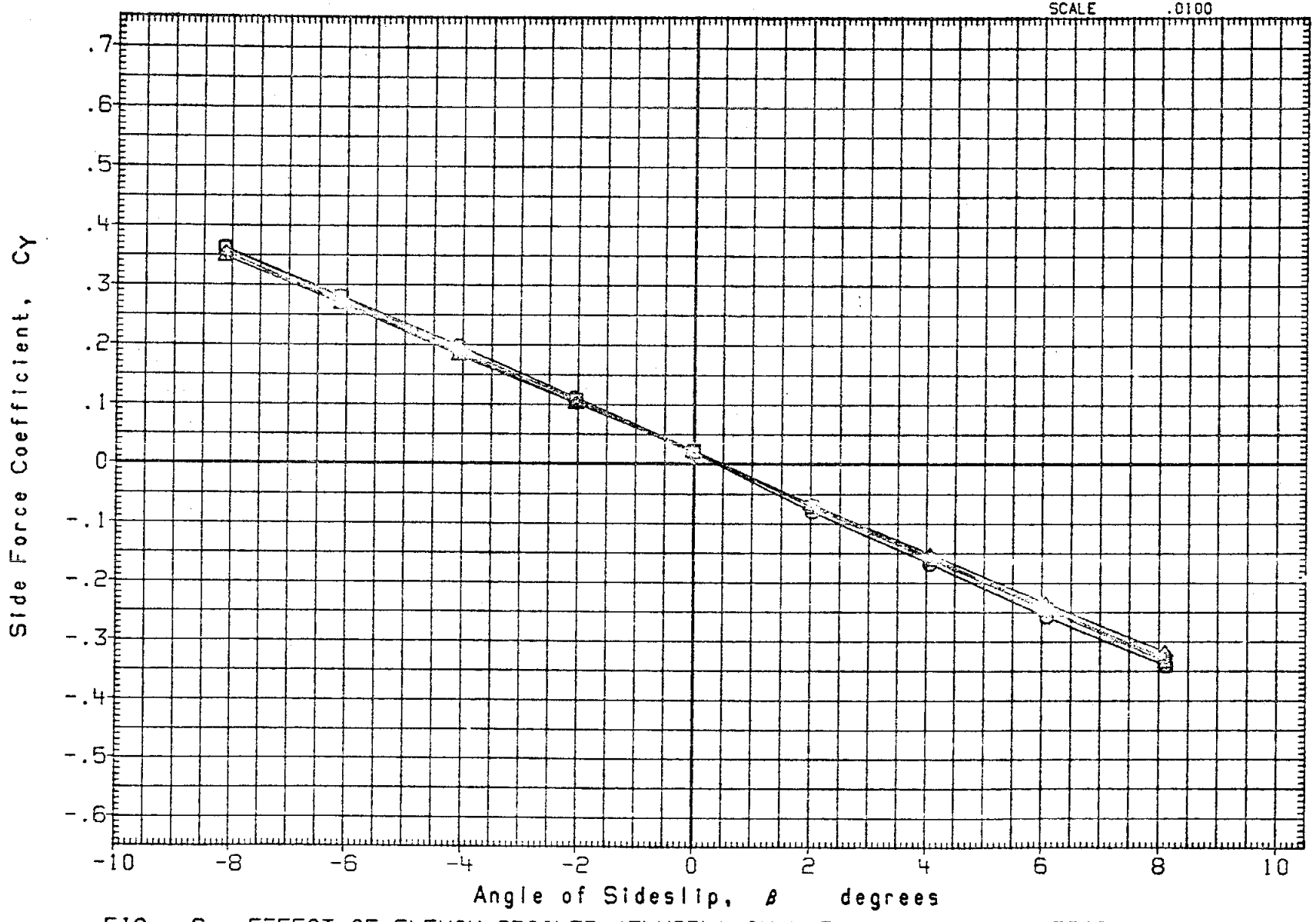


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	979.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

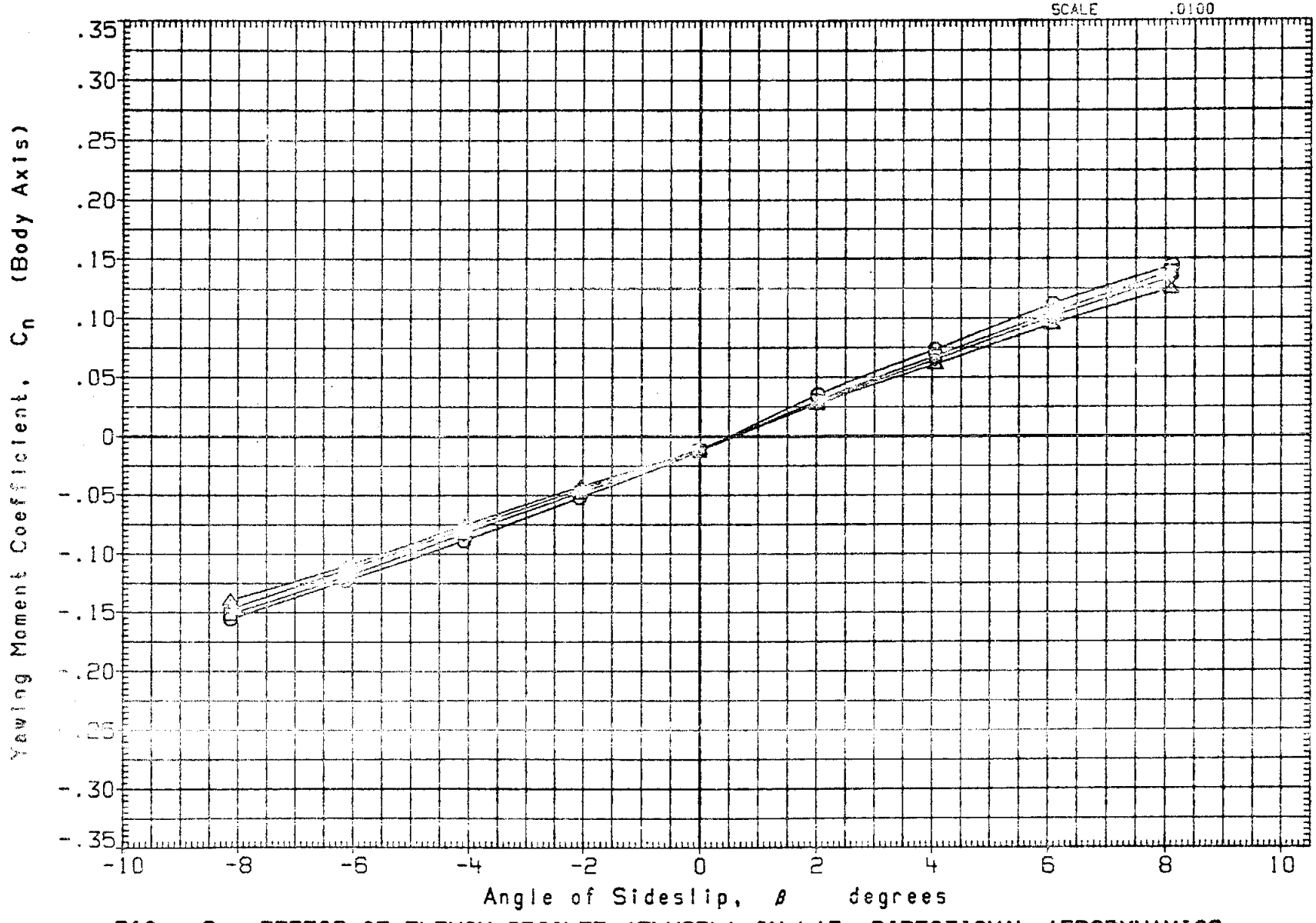


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

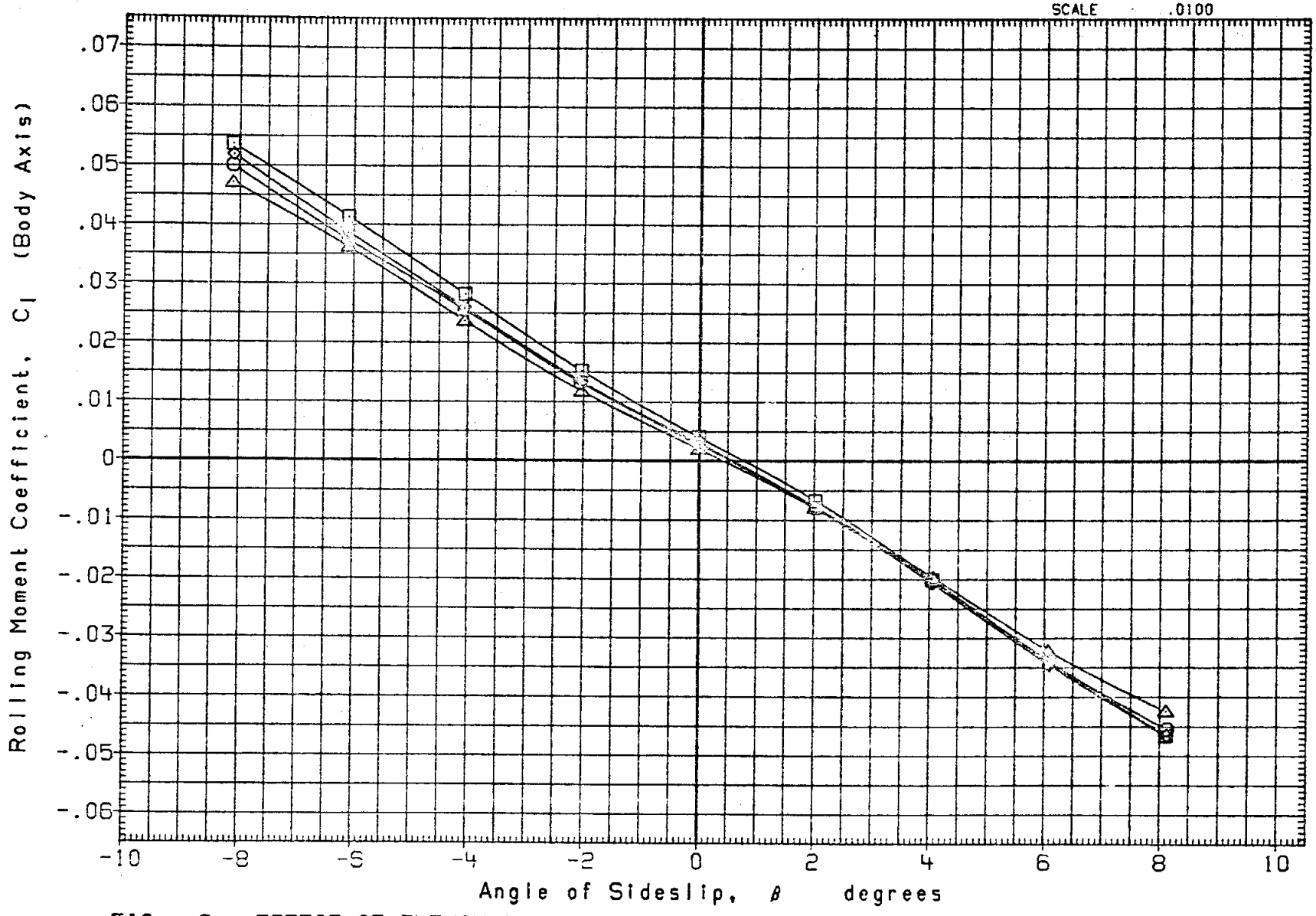


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

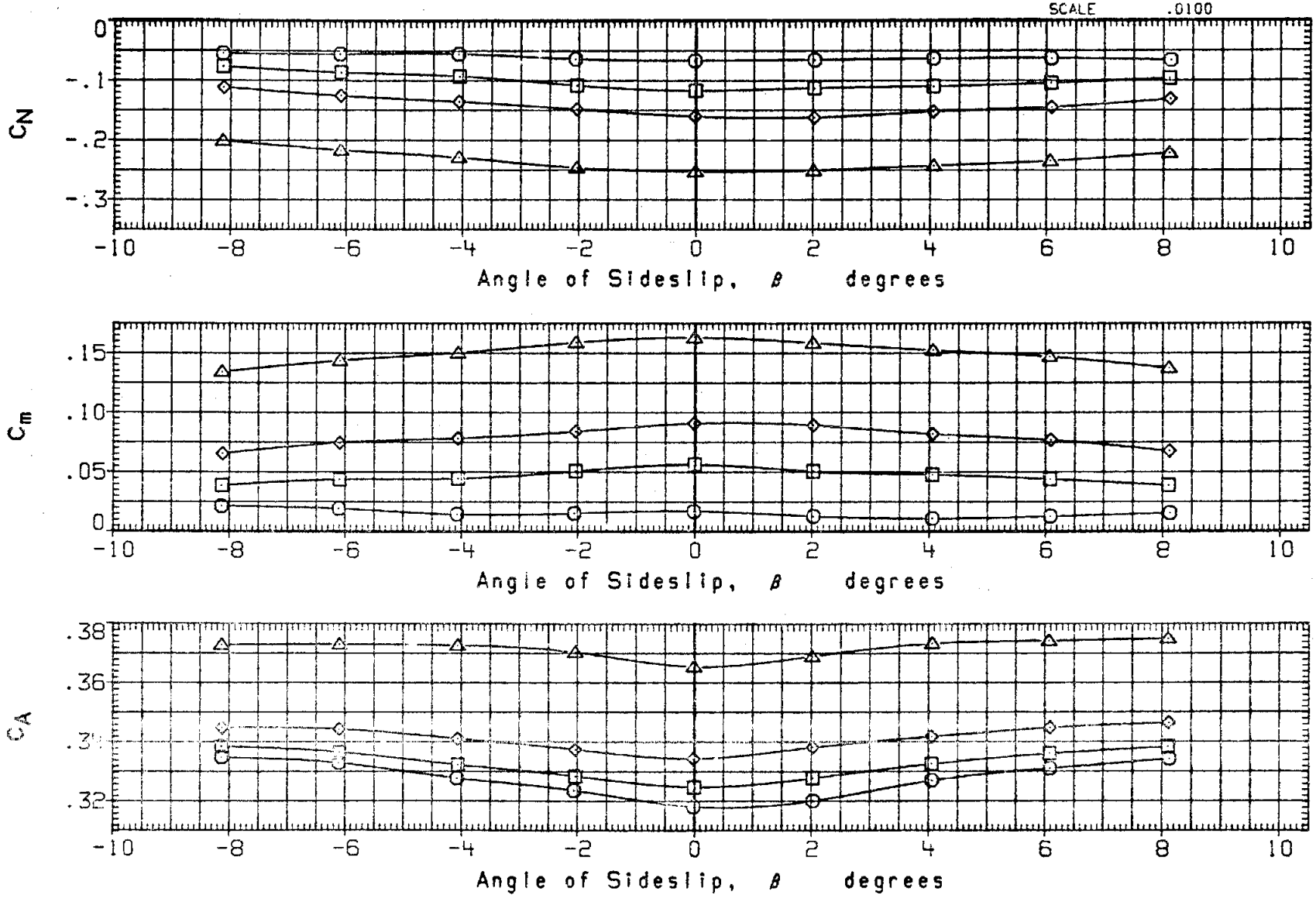


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

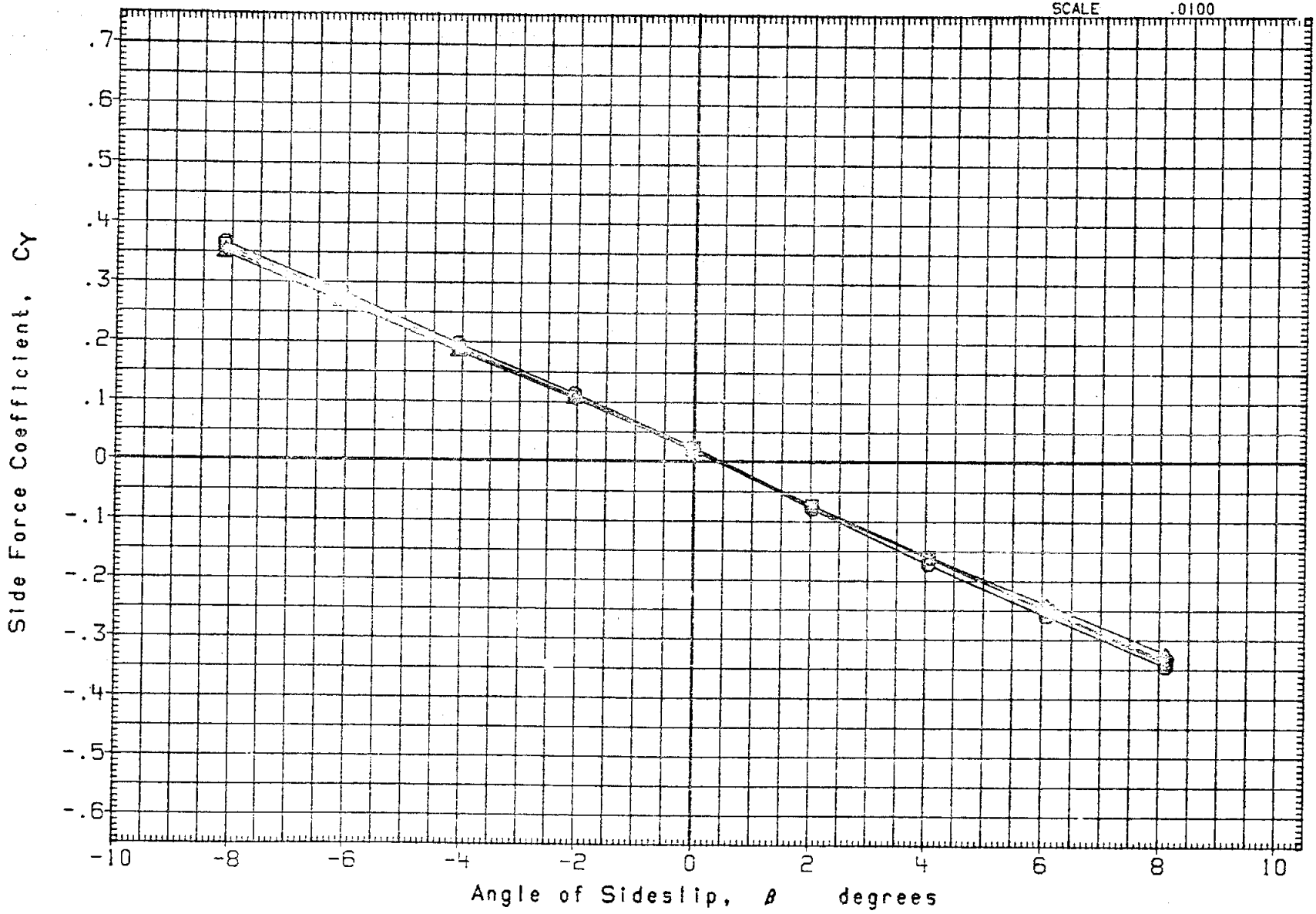


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

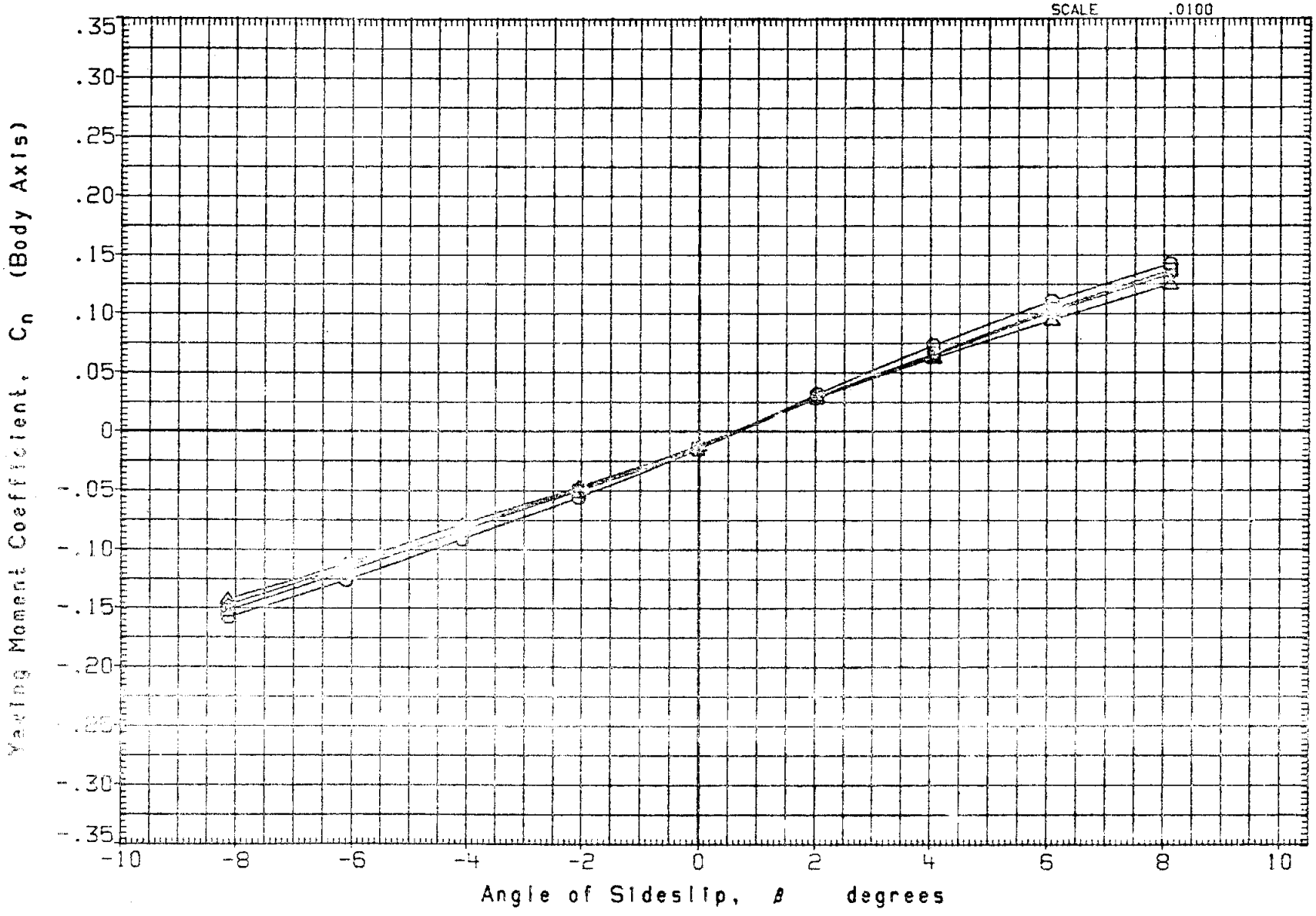


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

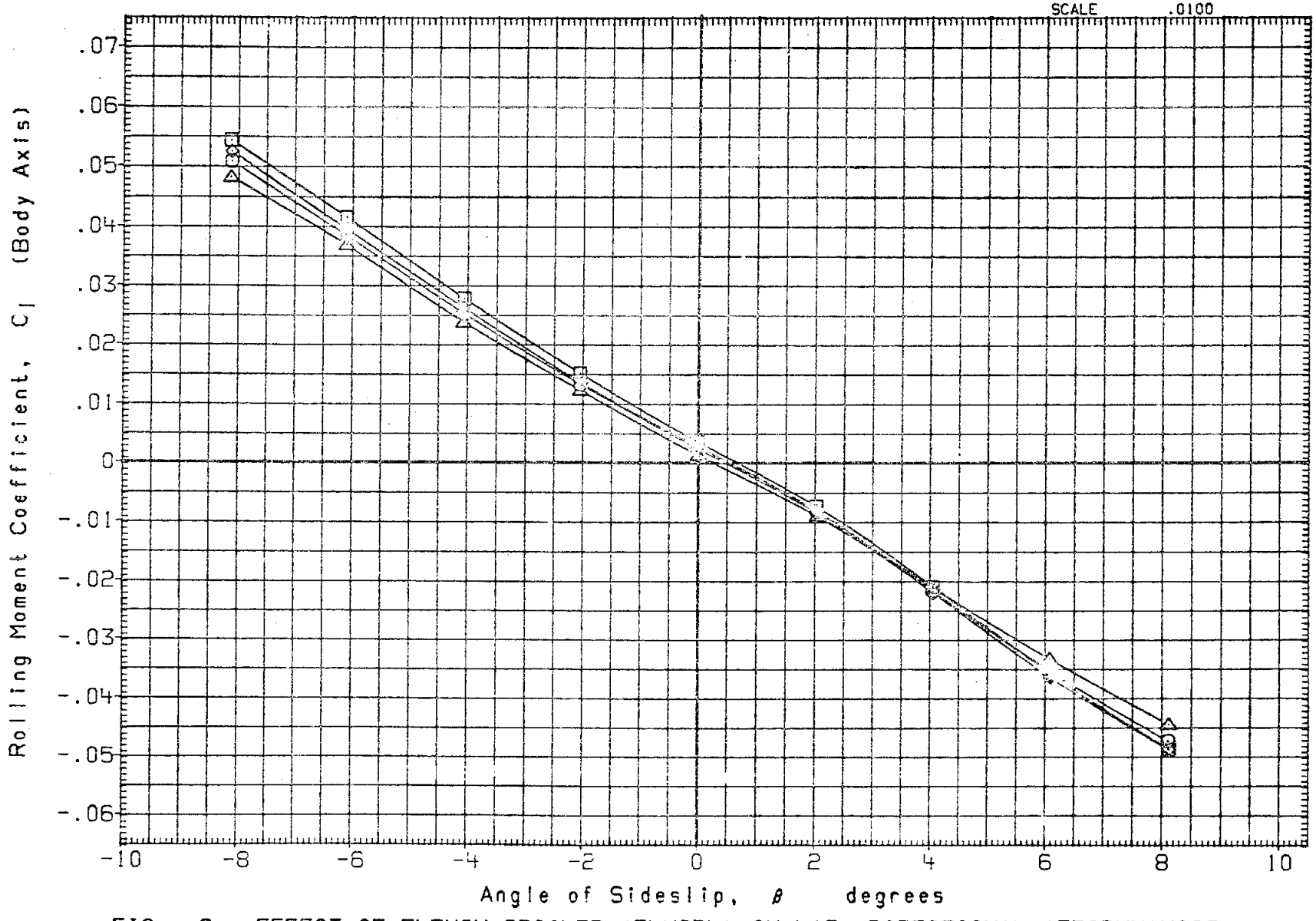


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	906.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.3100	

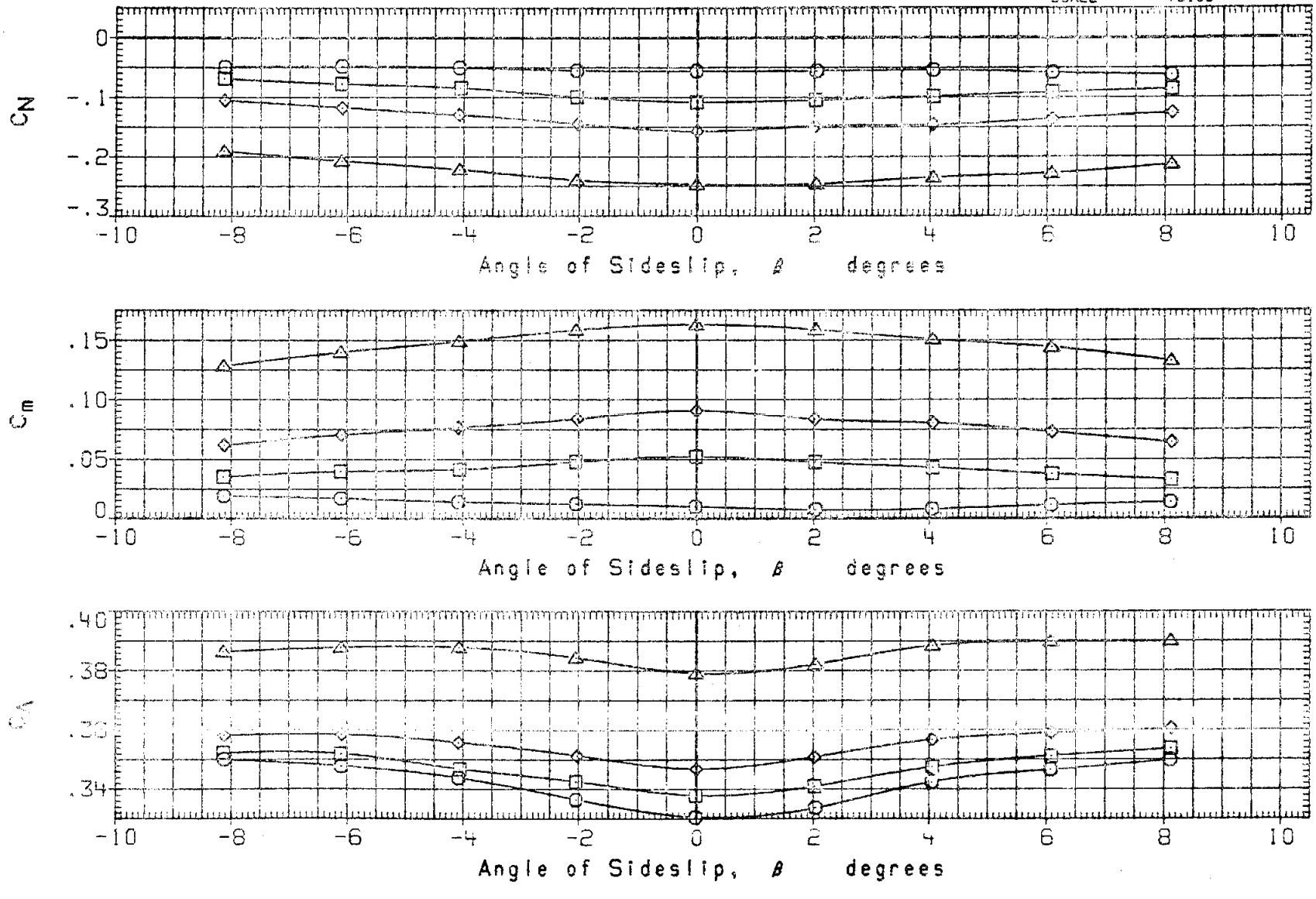


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(F) MACH = .92

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

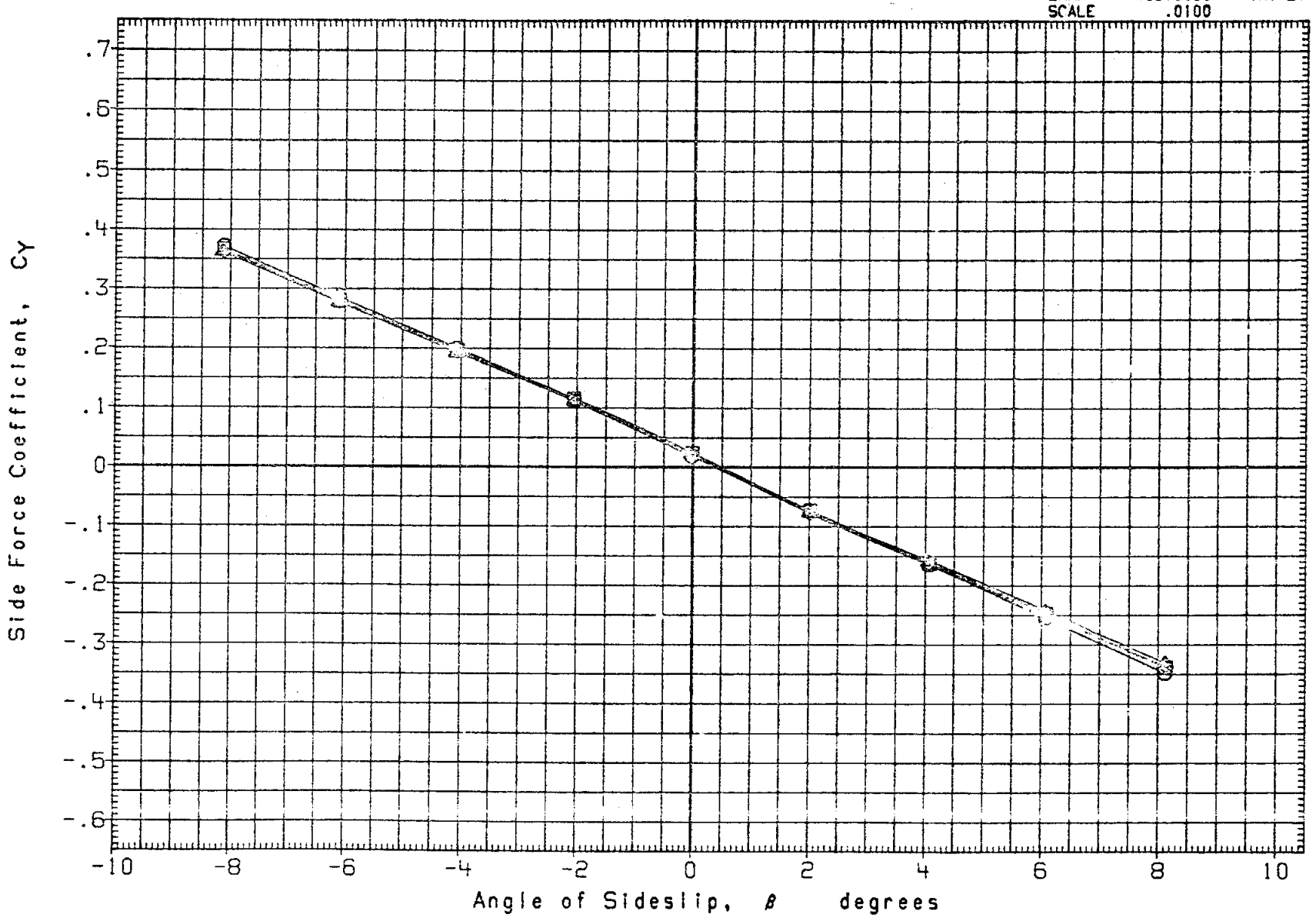


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

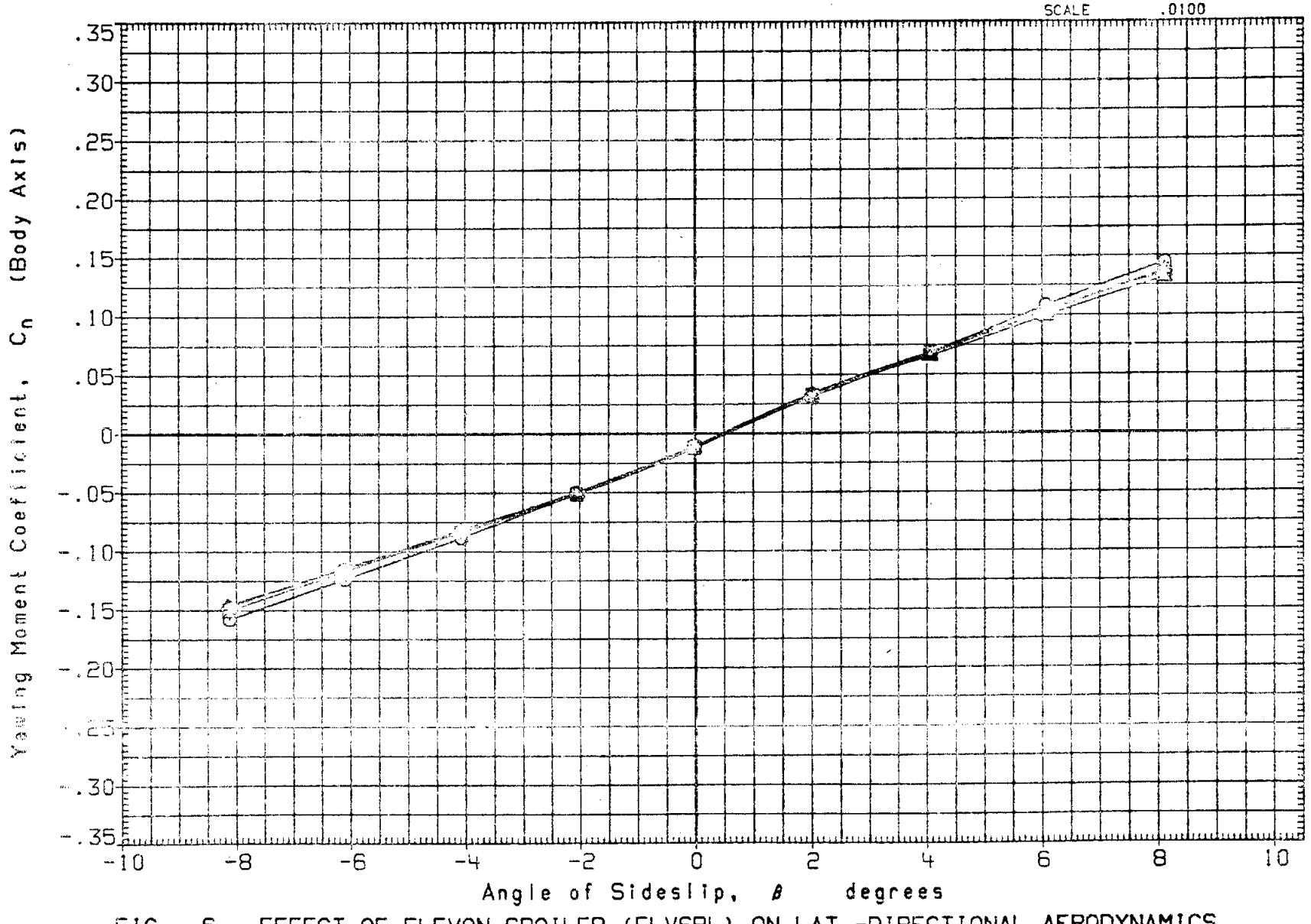


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

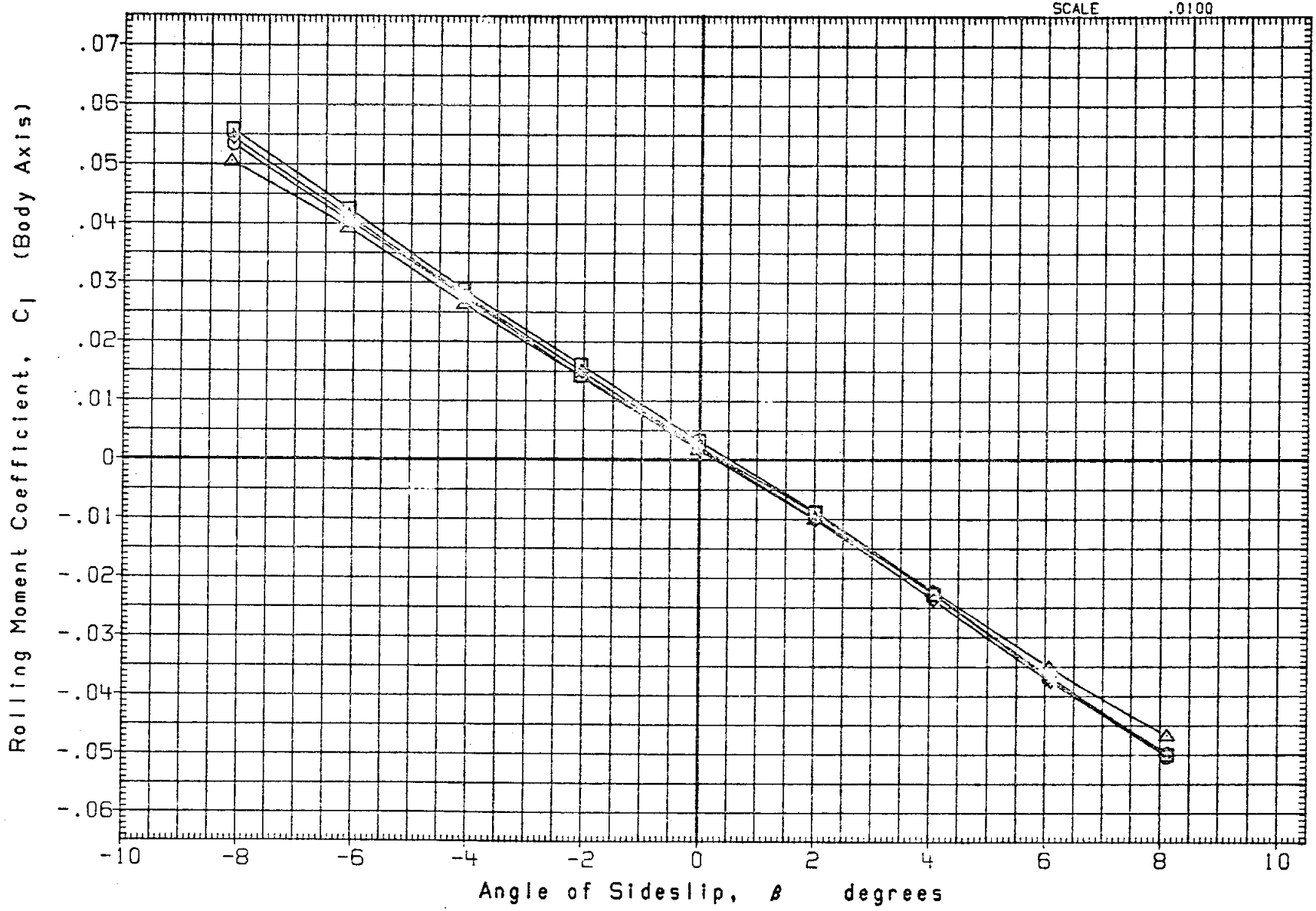


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

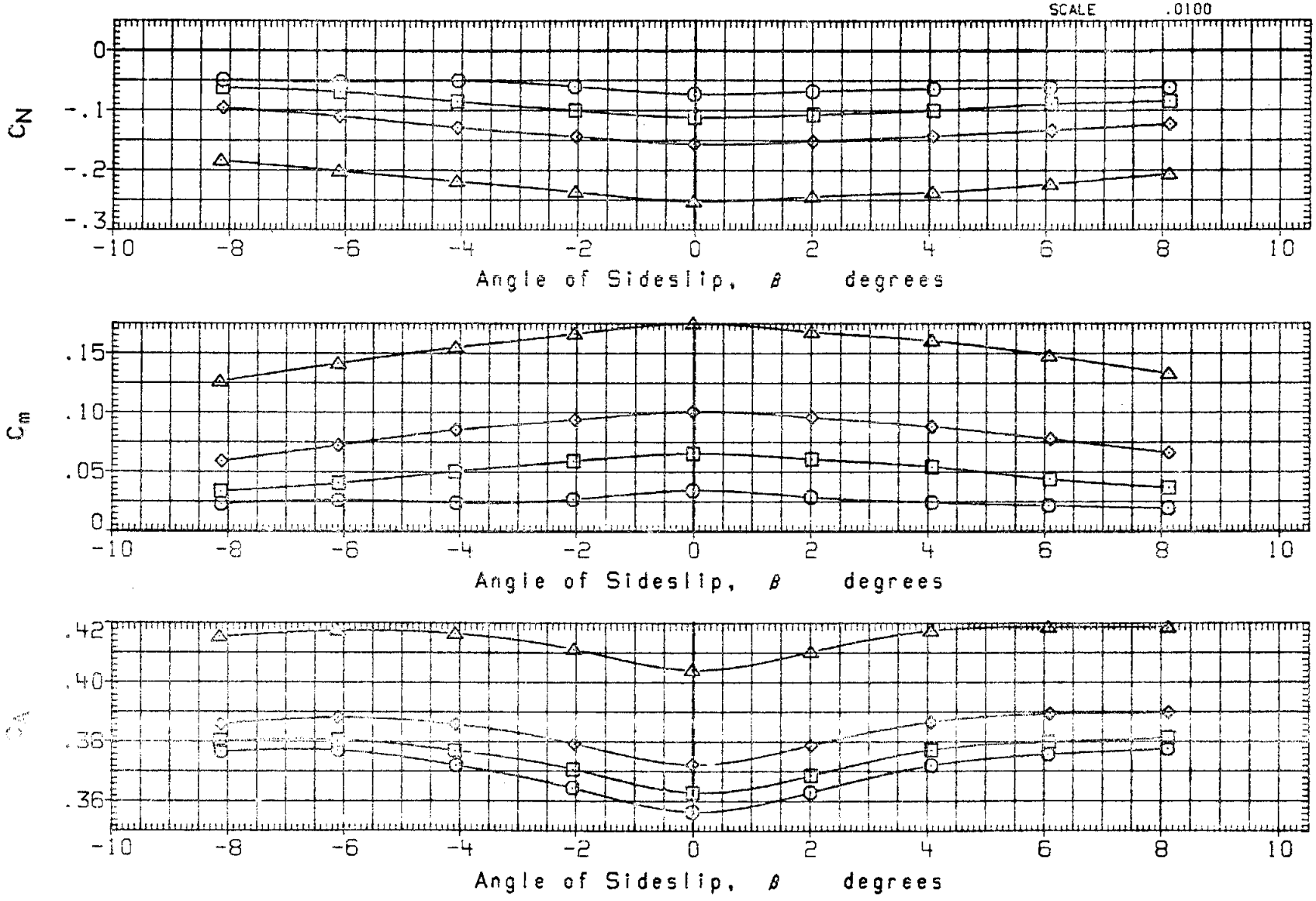


FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

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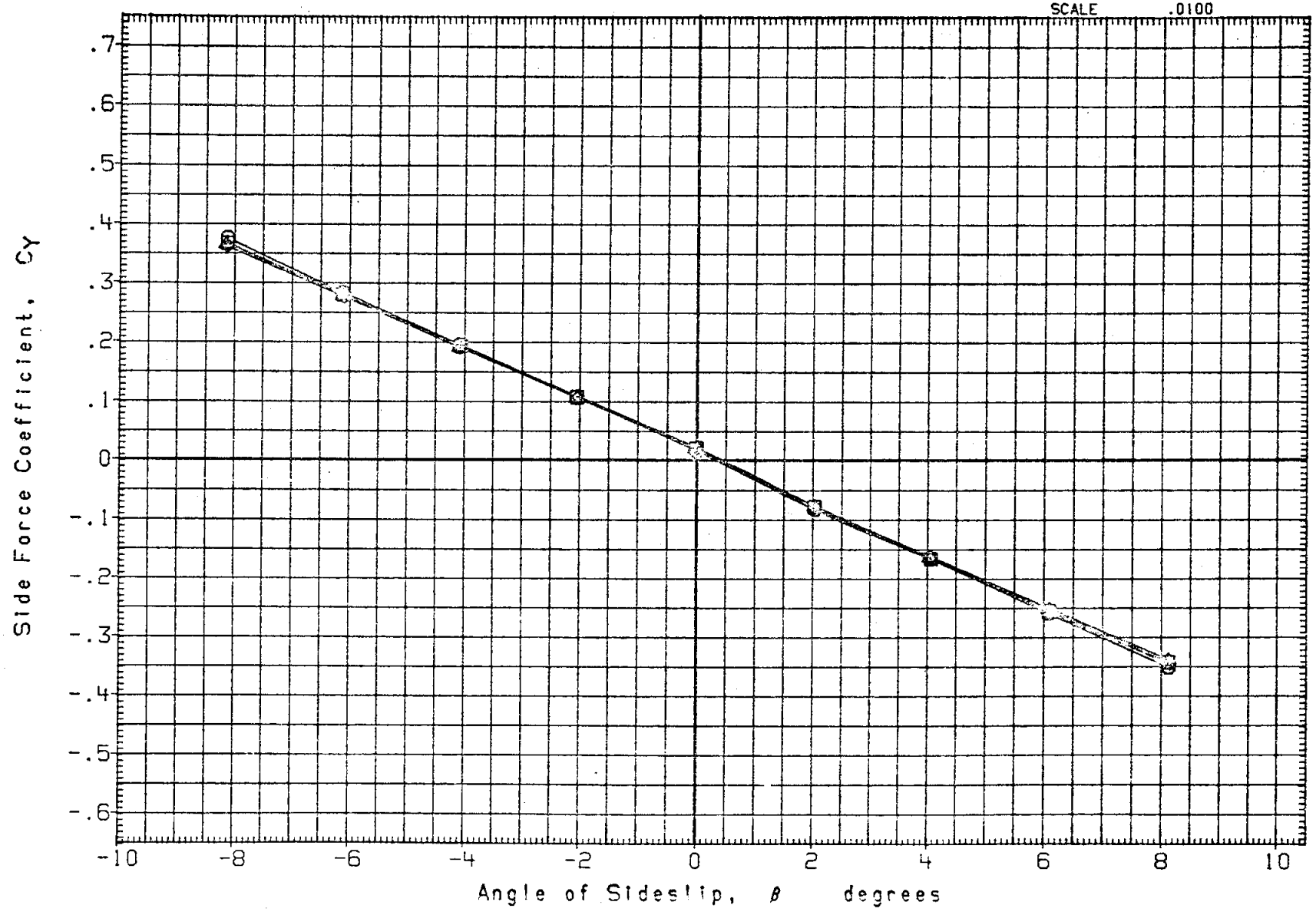

FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

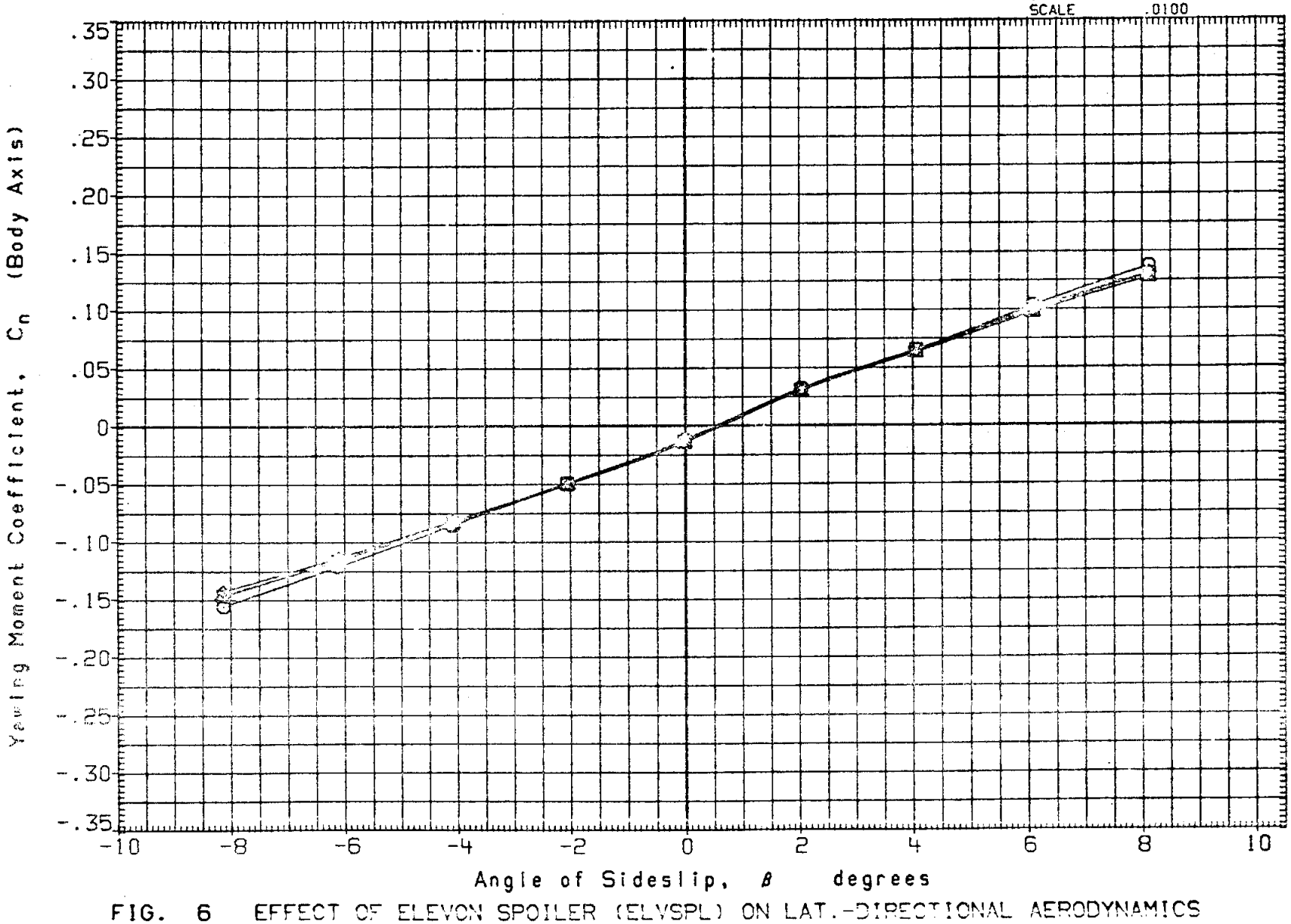

FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

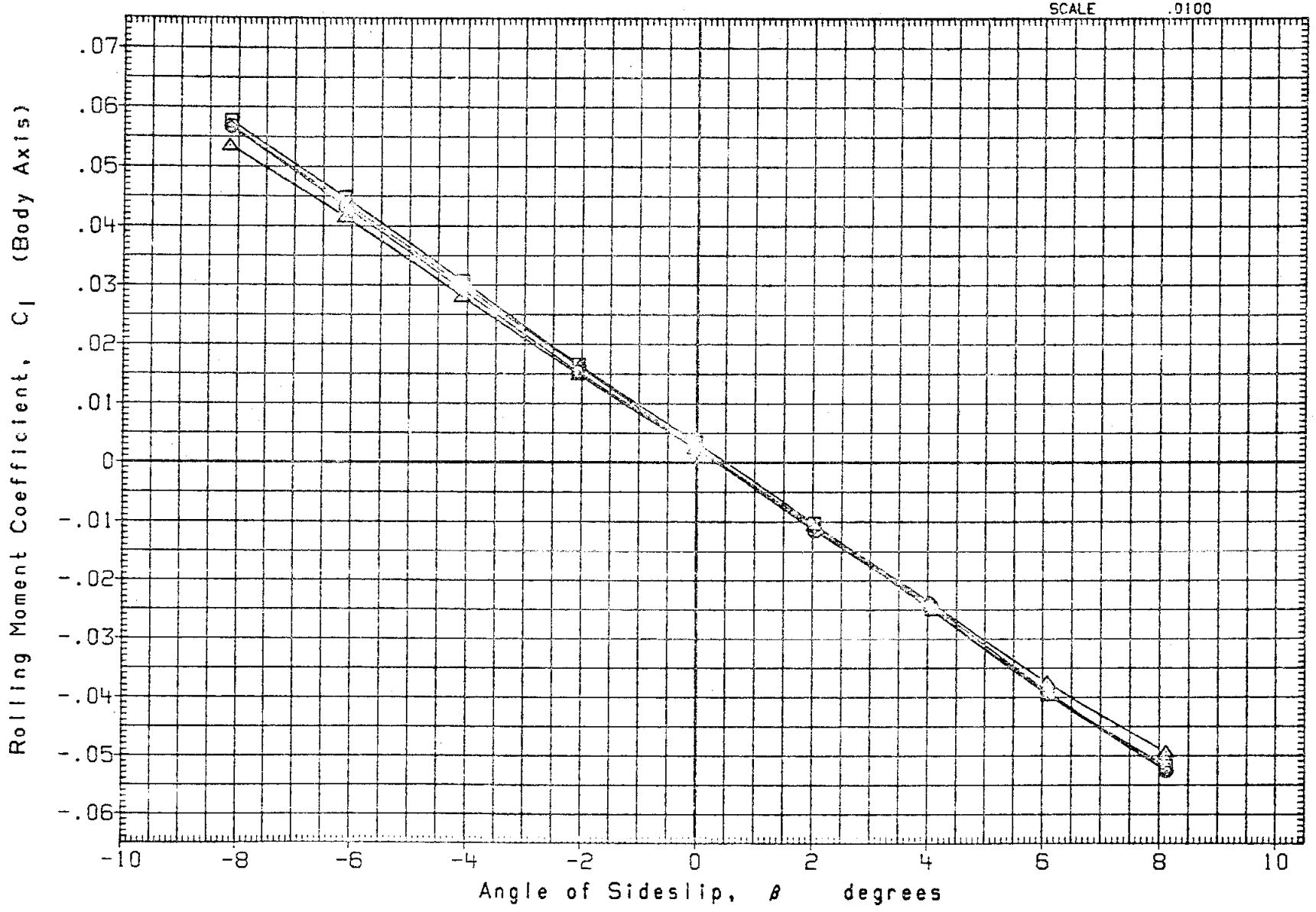

FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1200.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

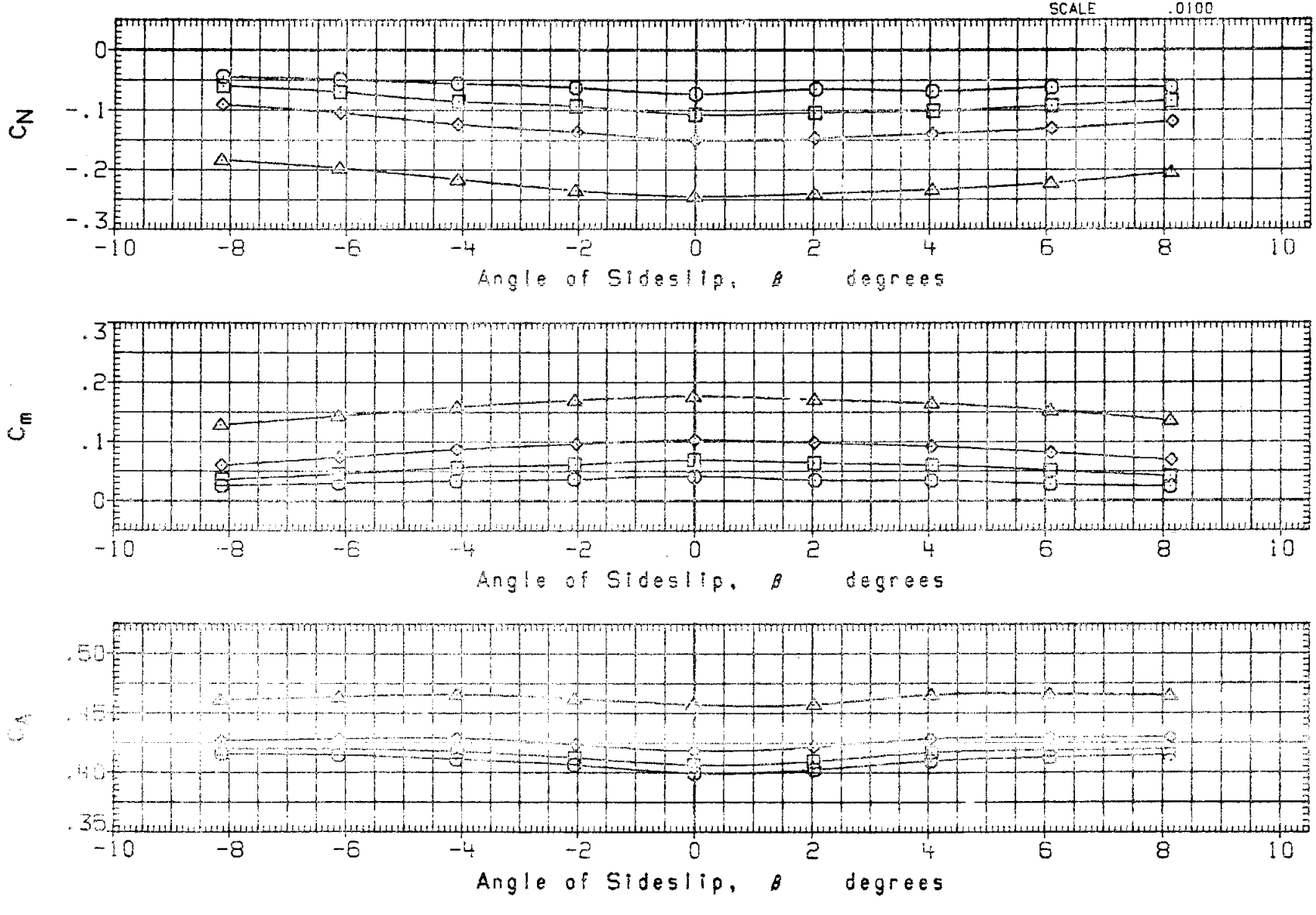

FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

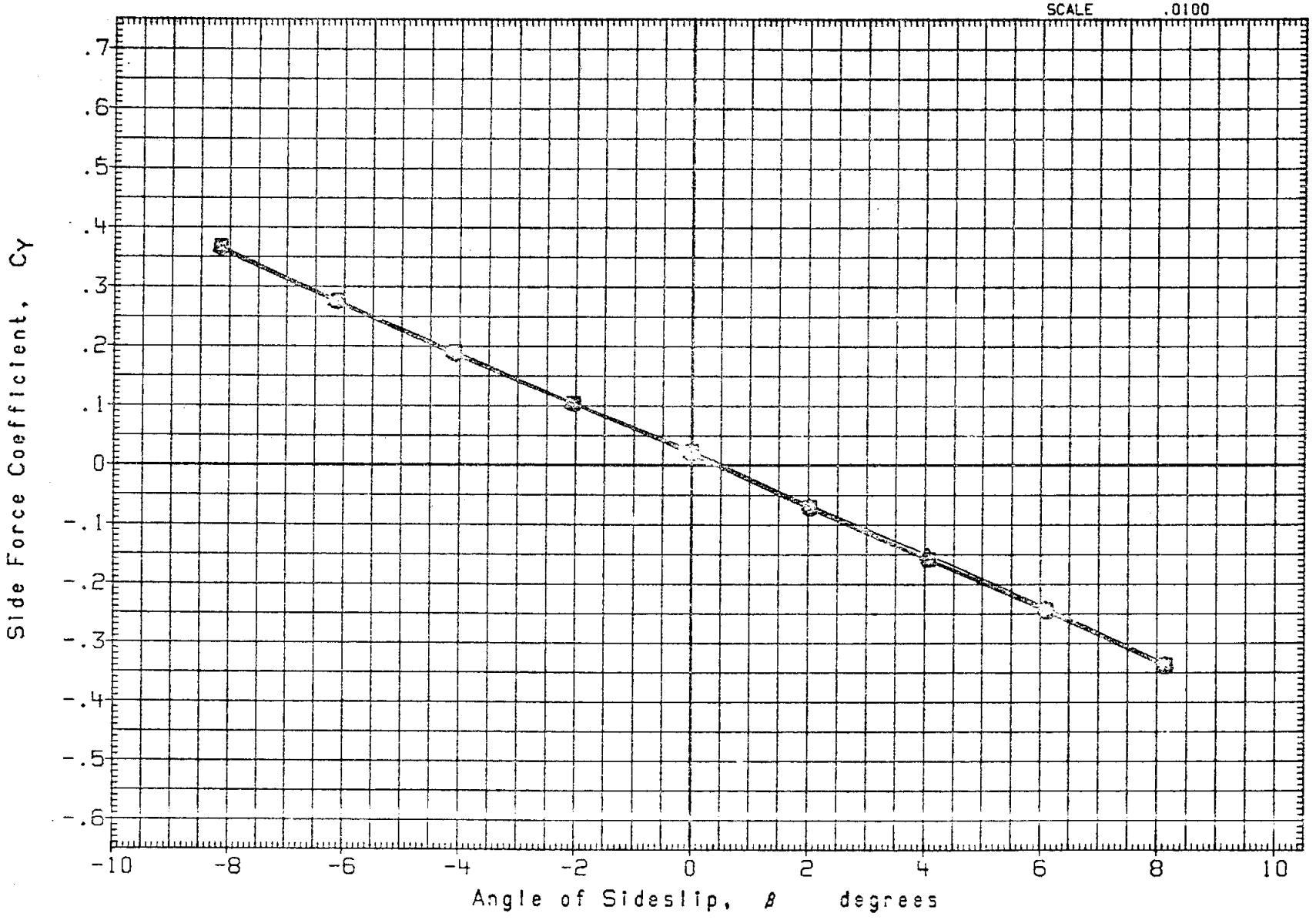

FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION !	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION !	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION !	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION !	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

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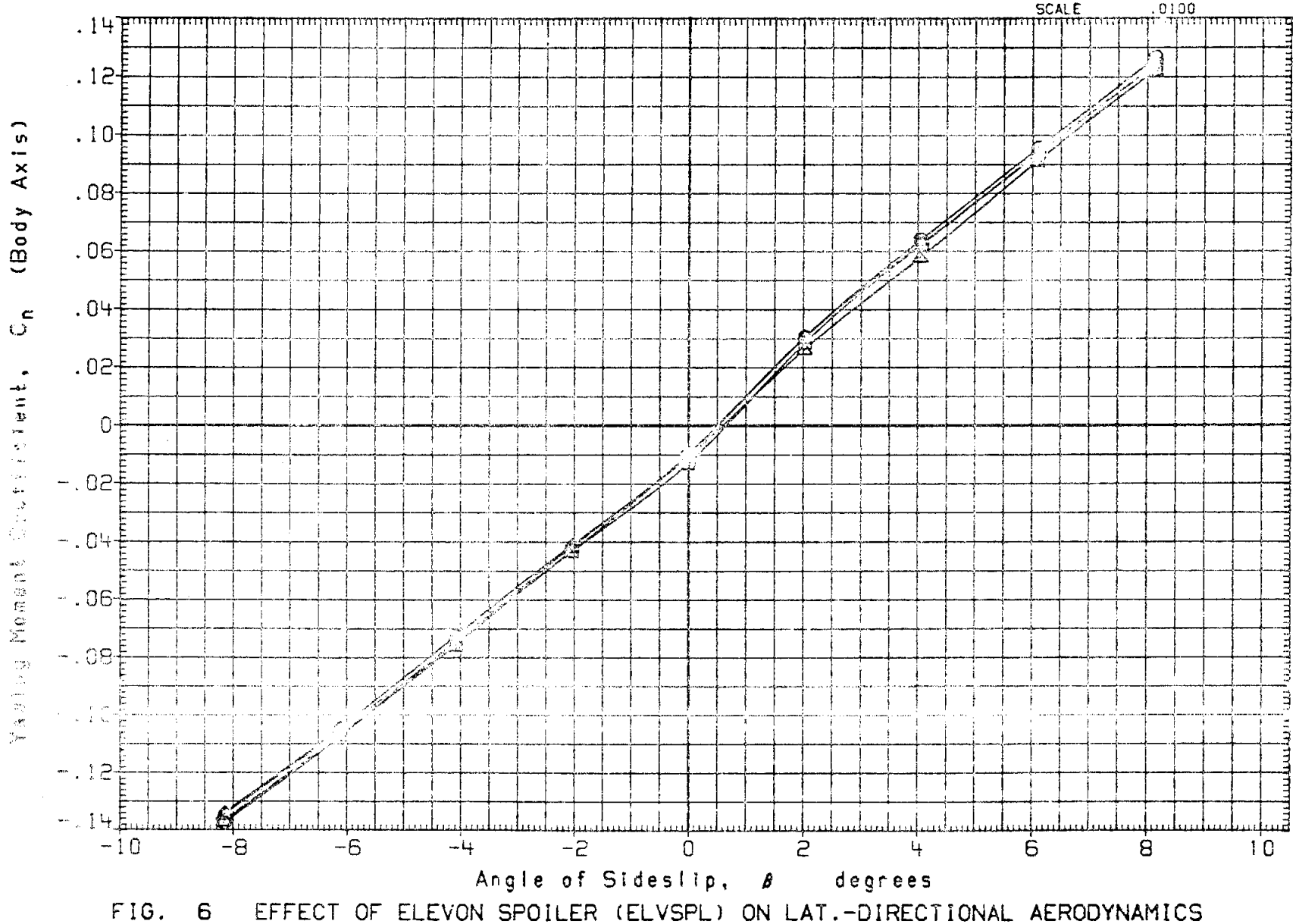

FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

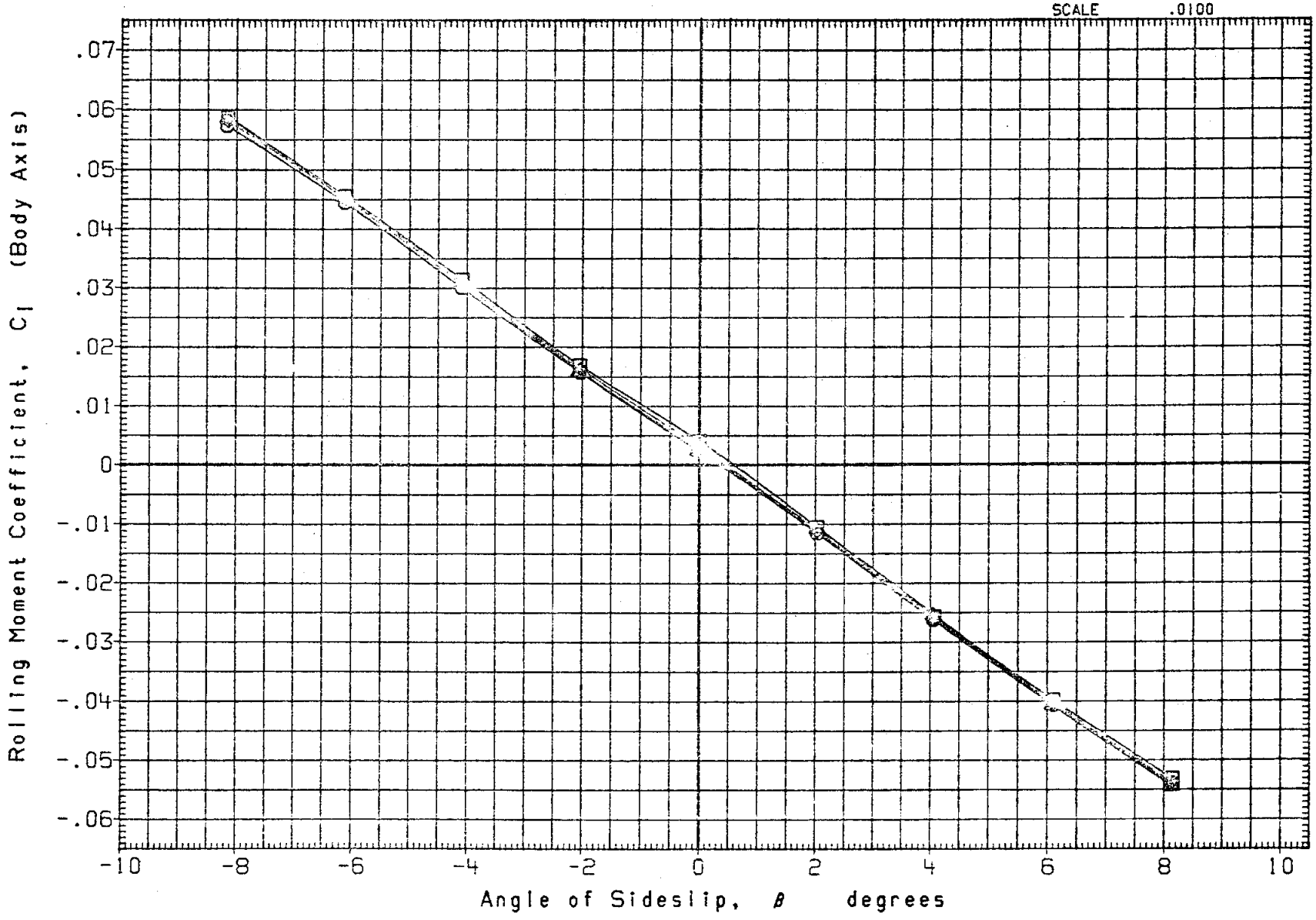

FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

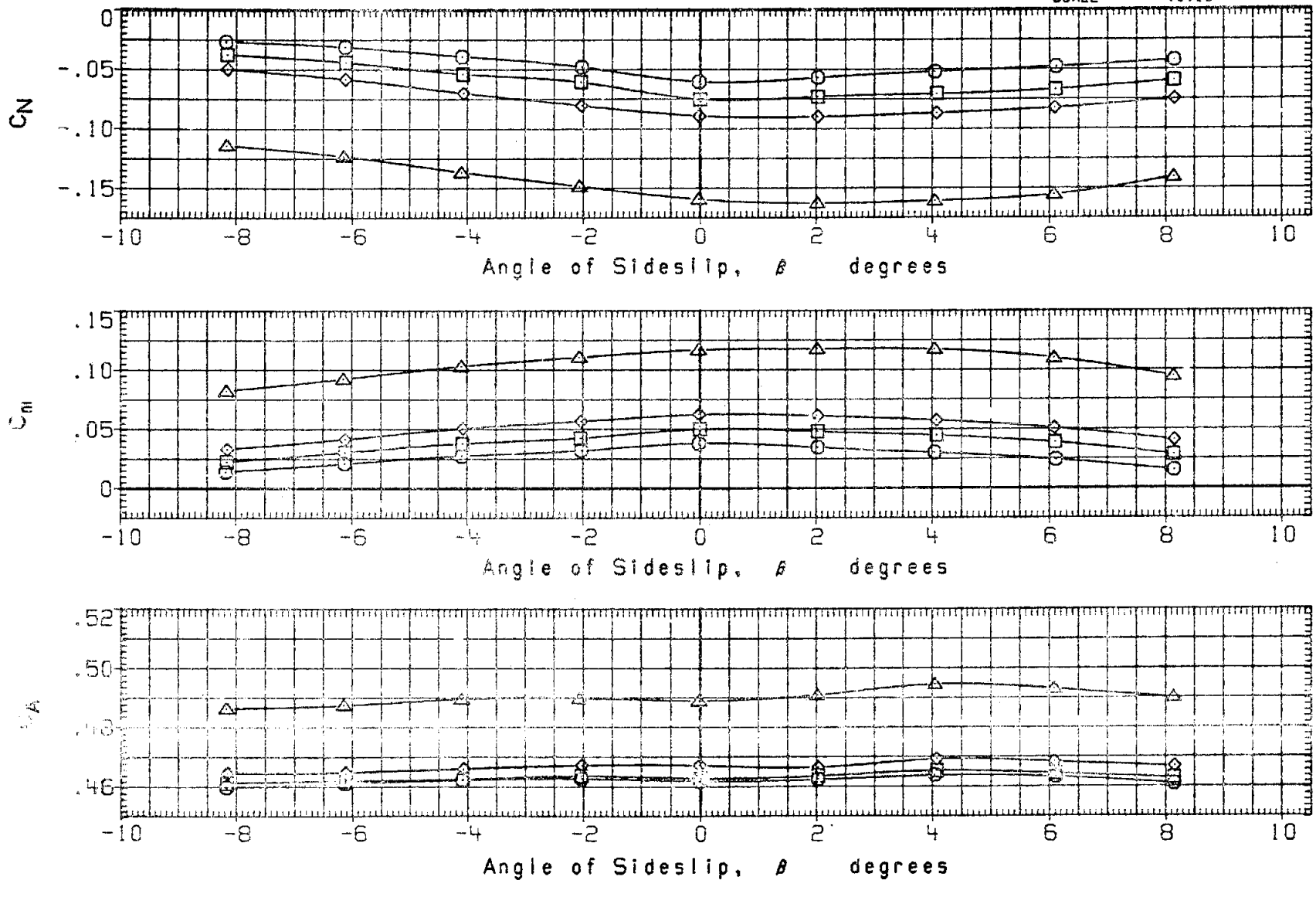

FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

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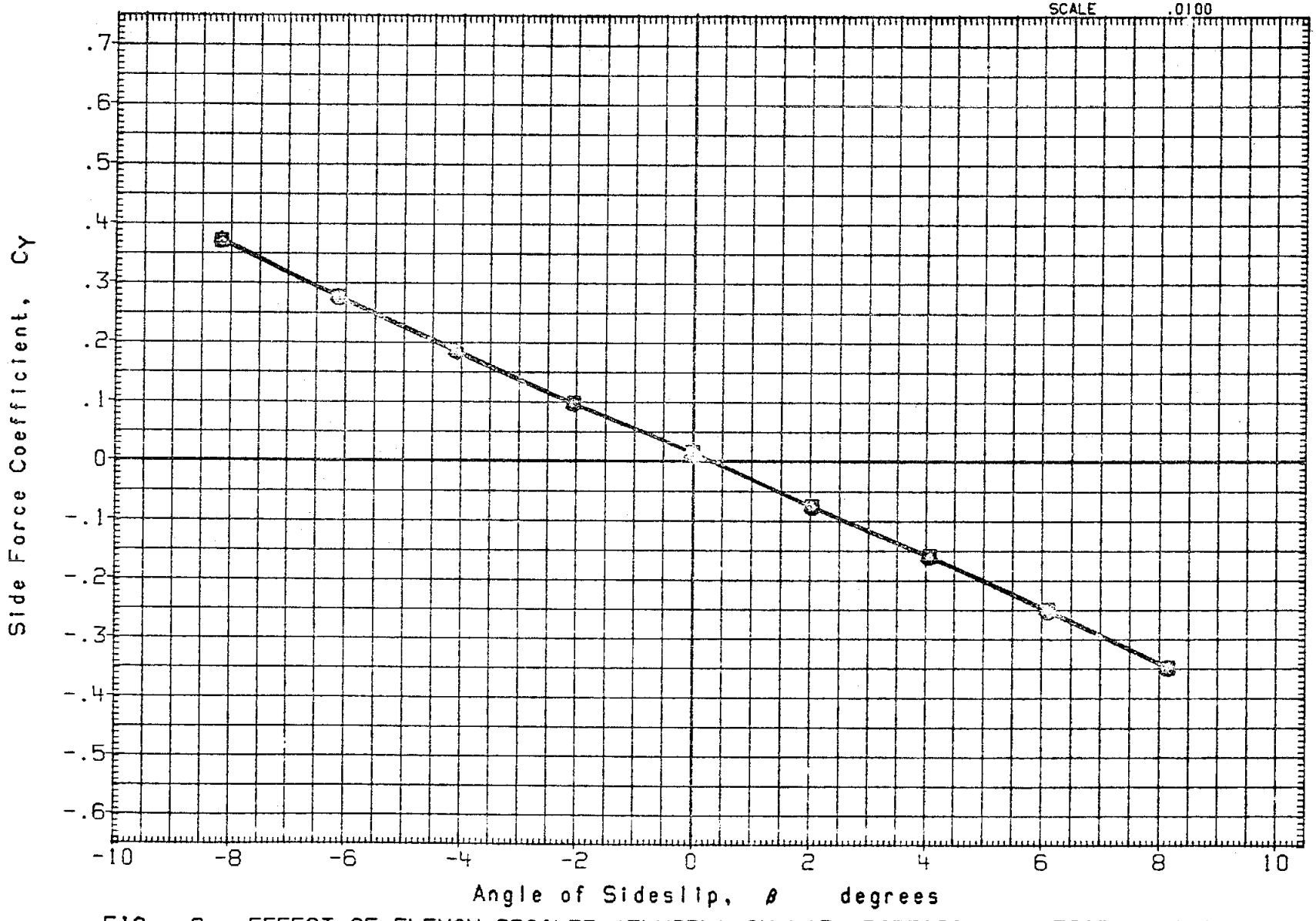

FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

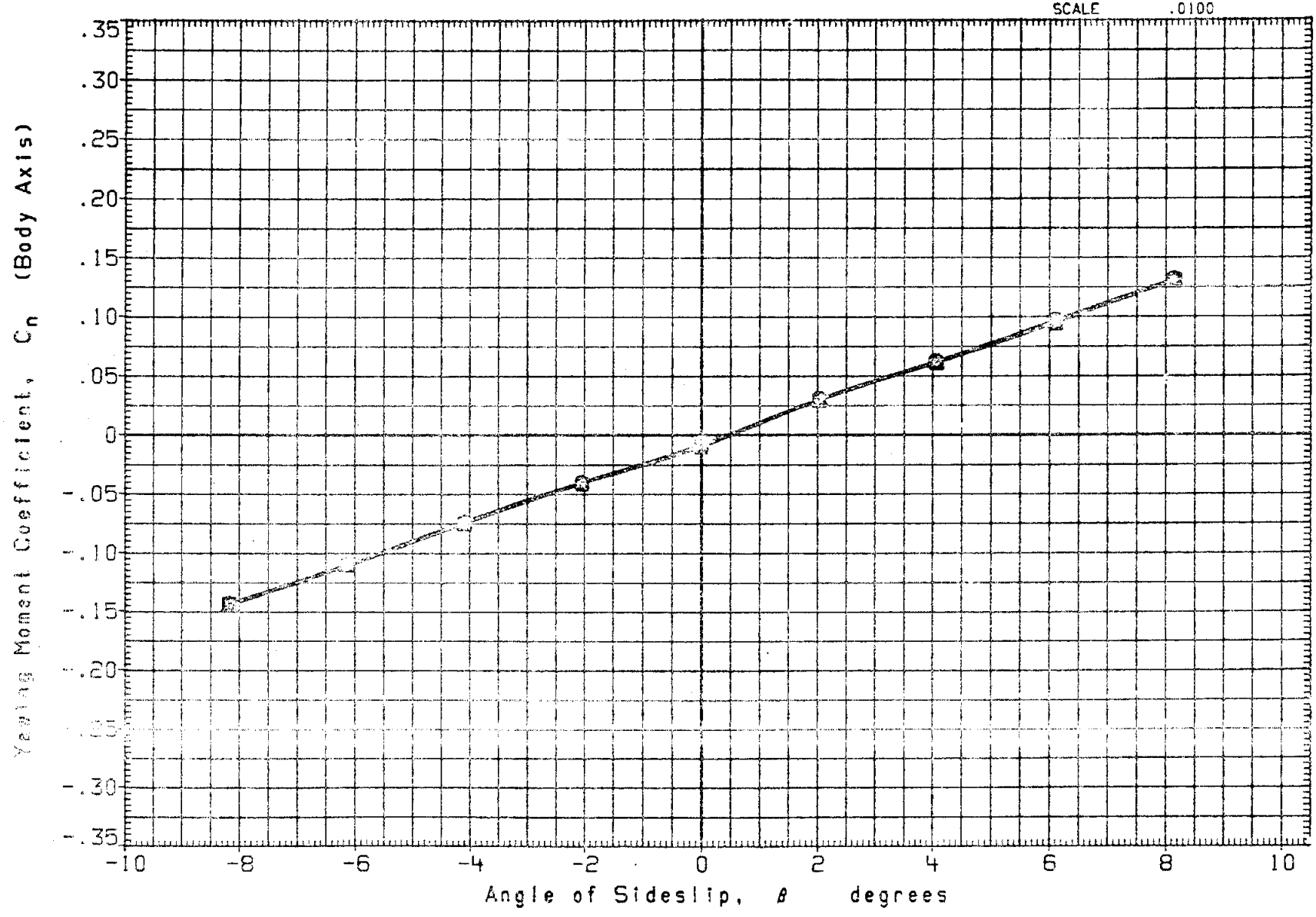

FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	0100	

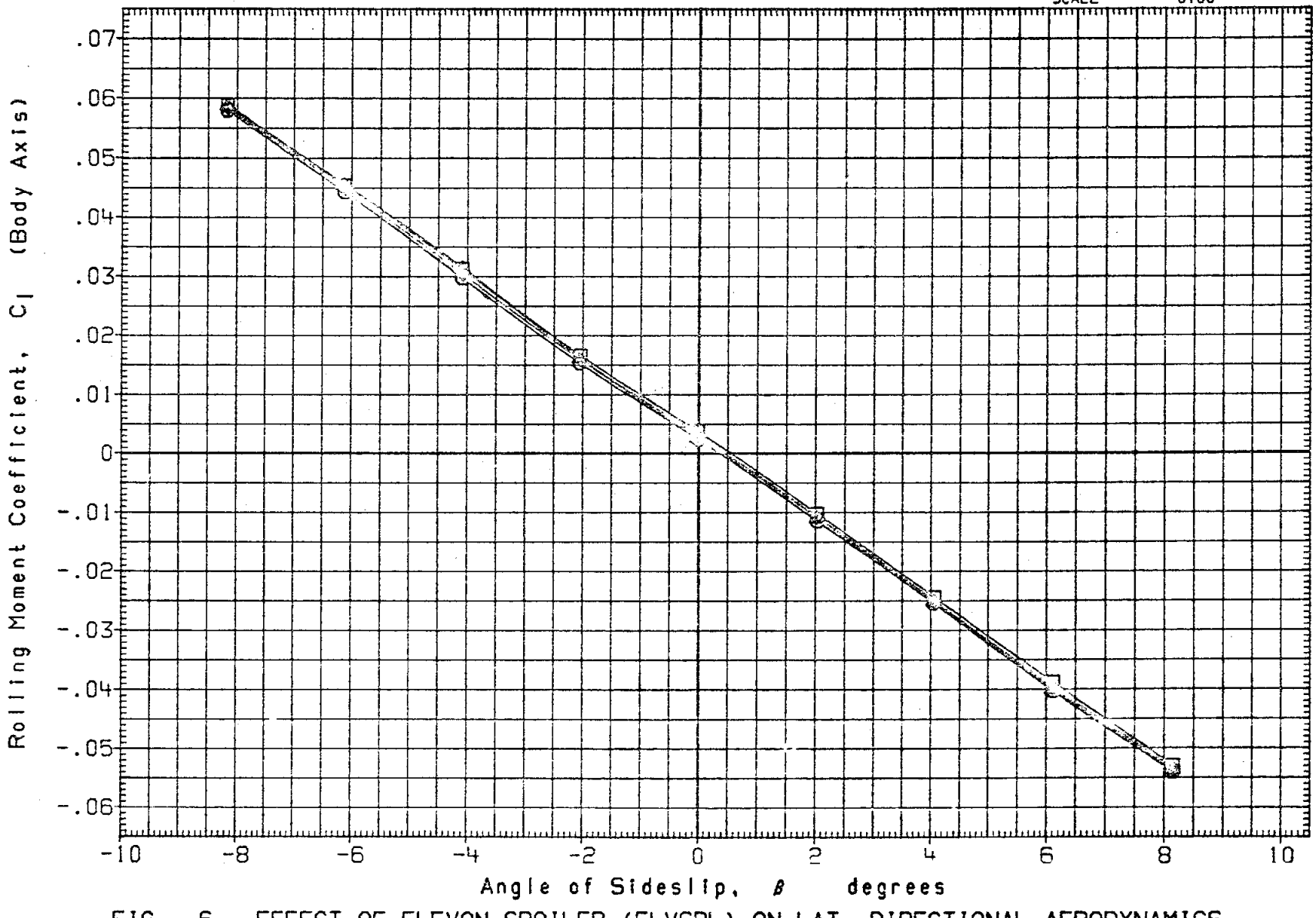

FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	ALPHA	ELVSPL
RHZ002	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	.000
RHZ004	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	10.000
RHZ006	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	20.000
RHZ008	△	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

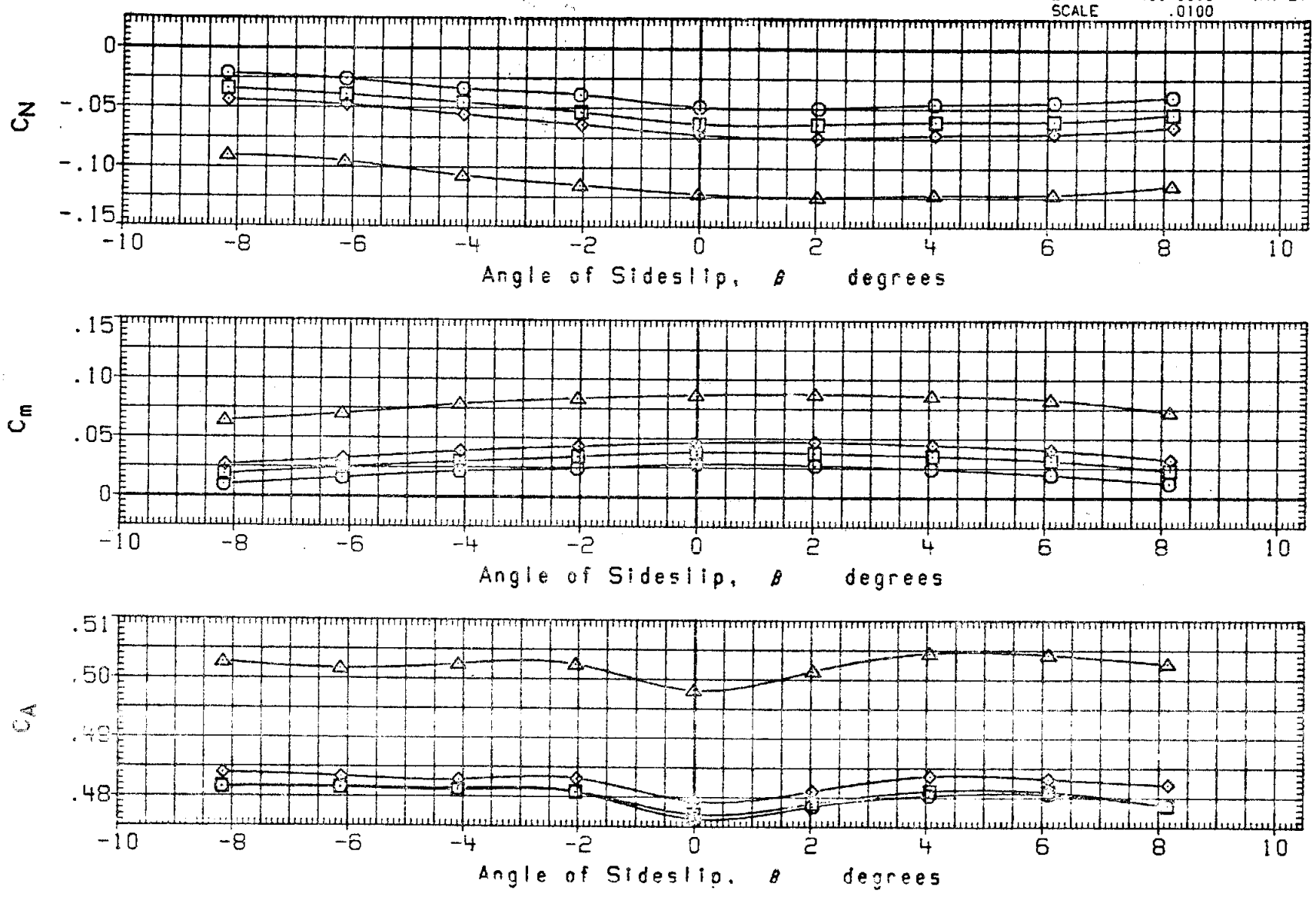

FIG. 6 EFFECT OF ELEVON SPOILER (ELVSPL) ON LAT.-DIRECTIONAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

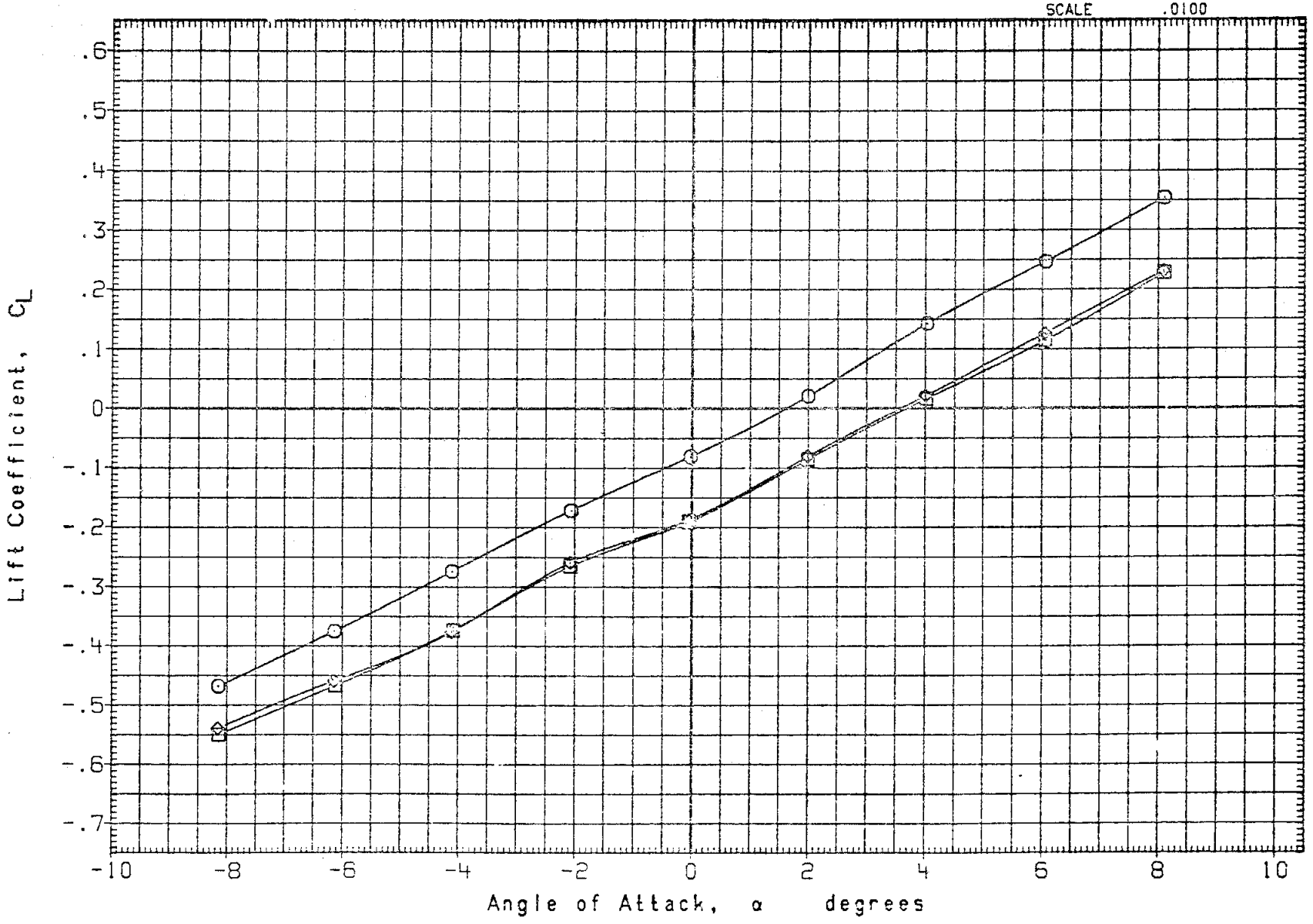

FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(A) MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2590.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

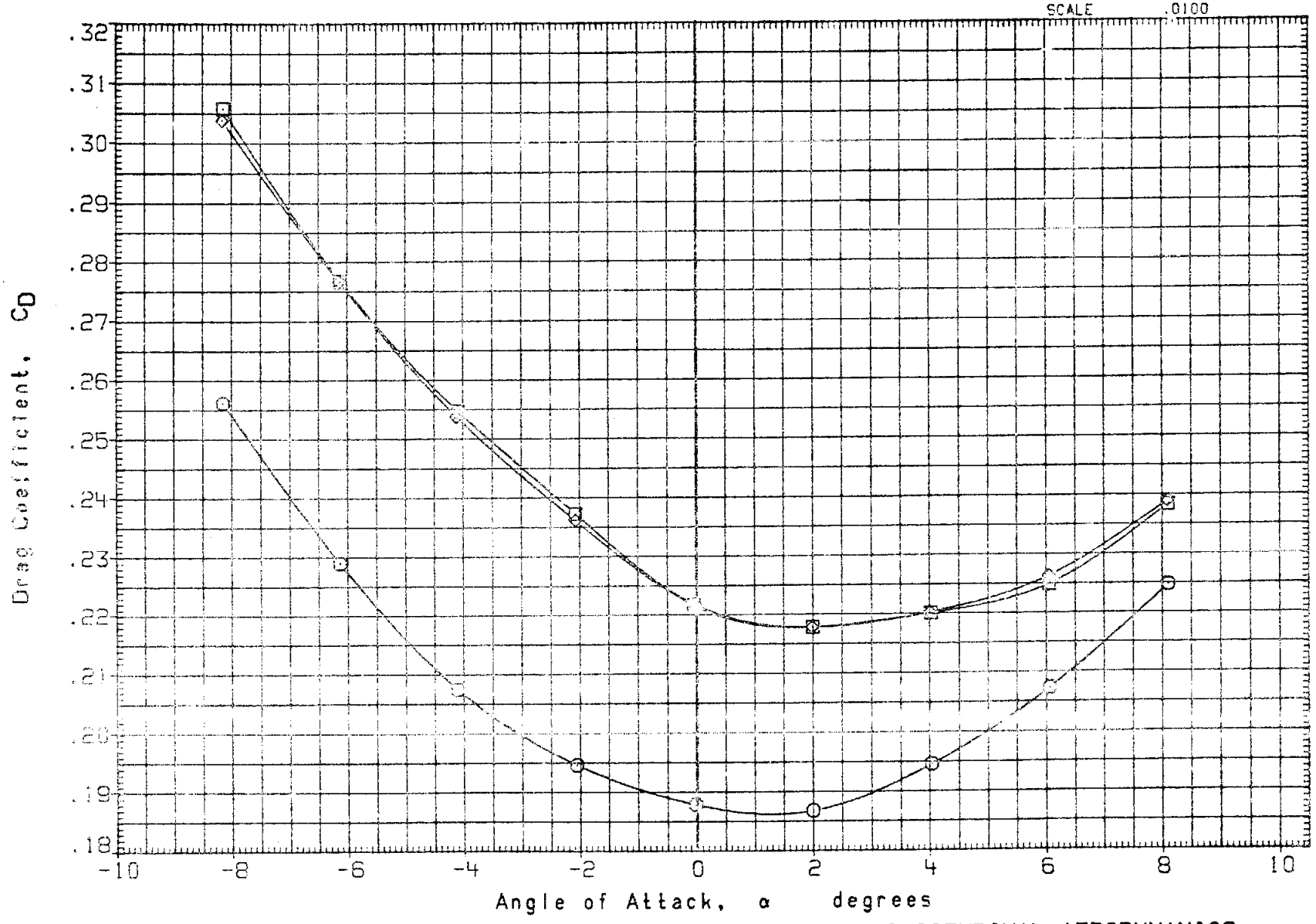

FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(A) MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

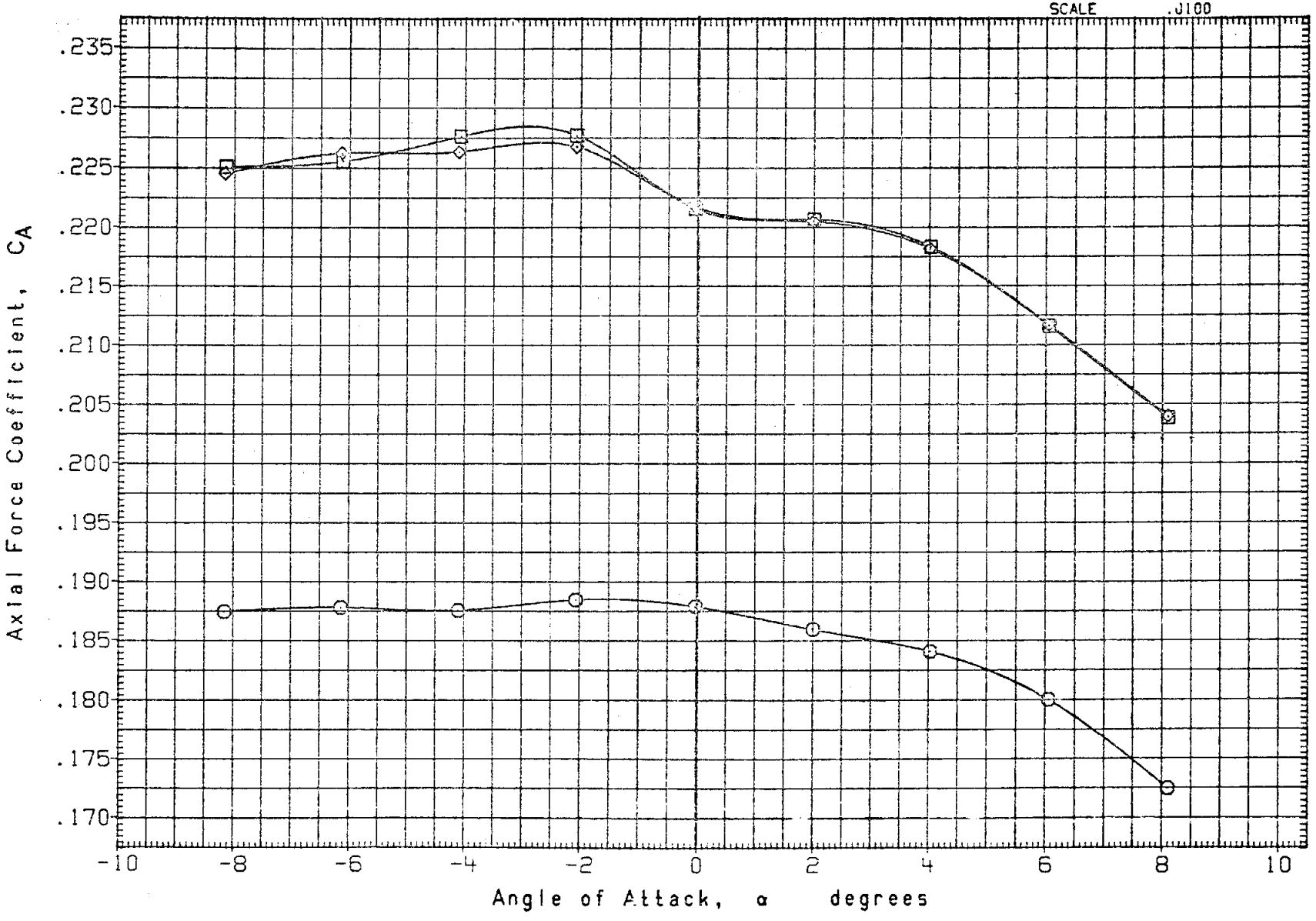

FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

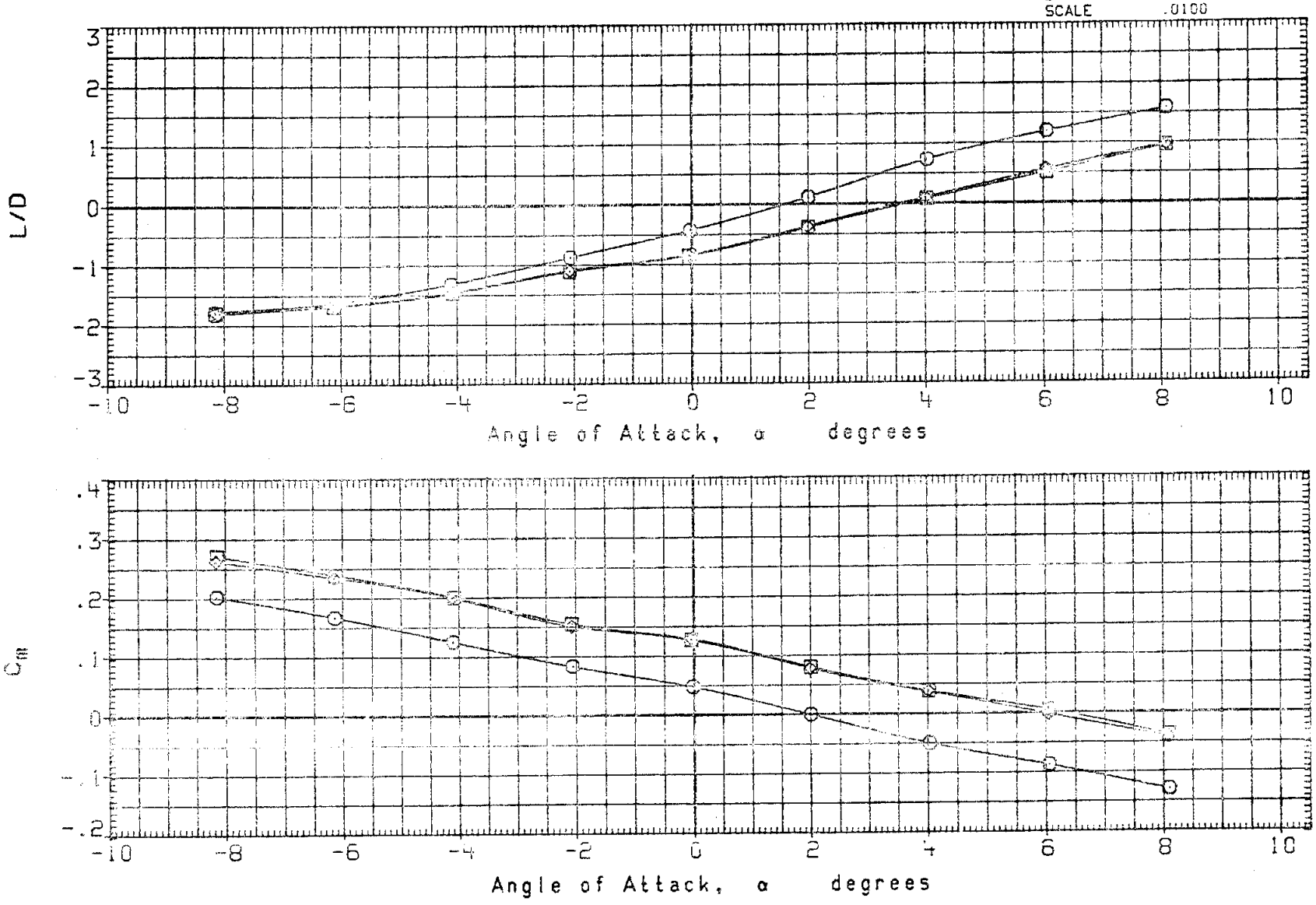

FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(A) MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

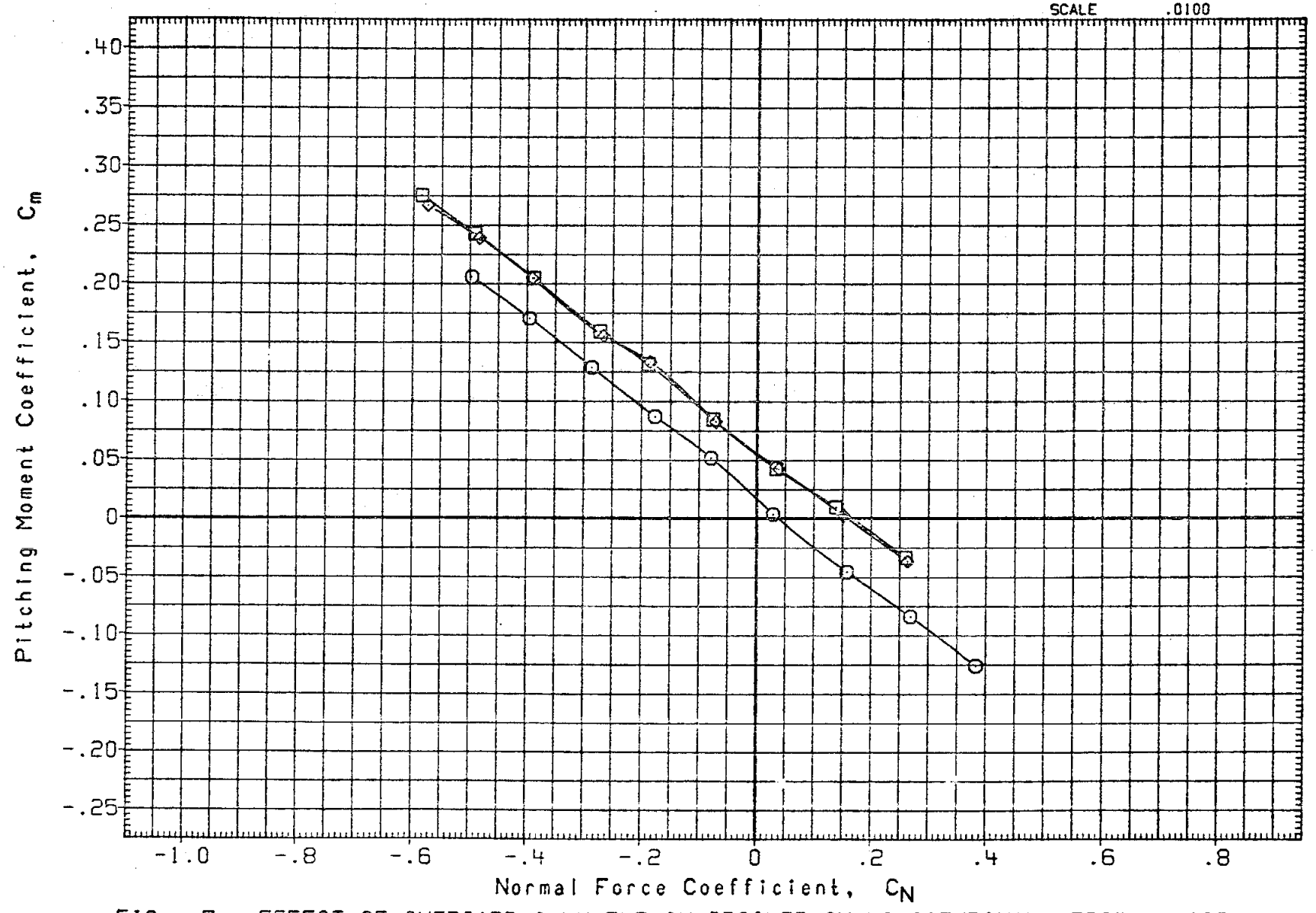

FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(A) MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-7.3(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

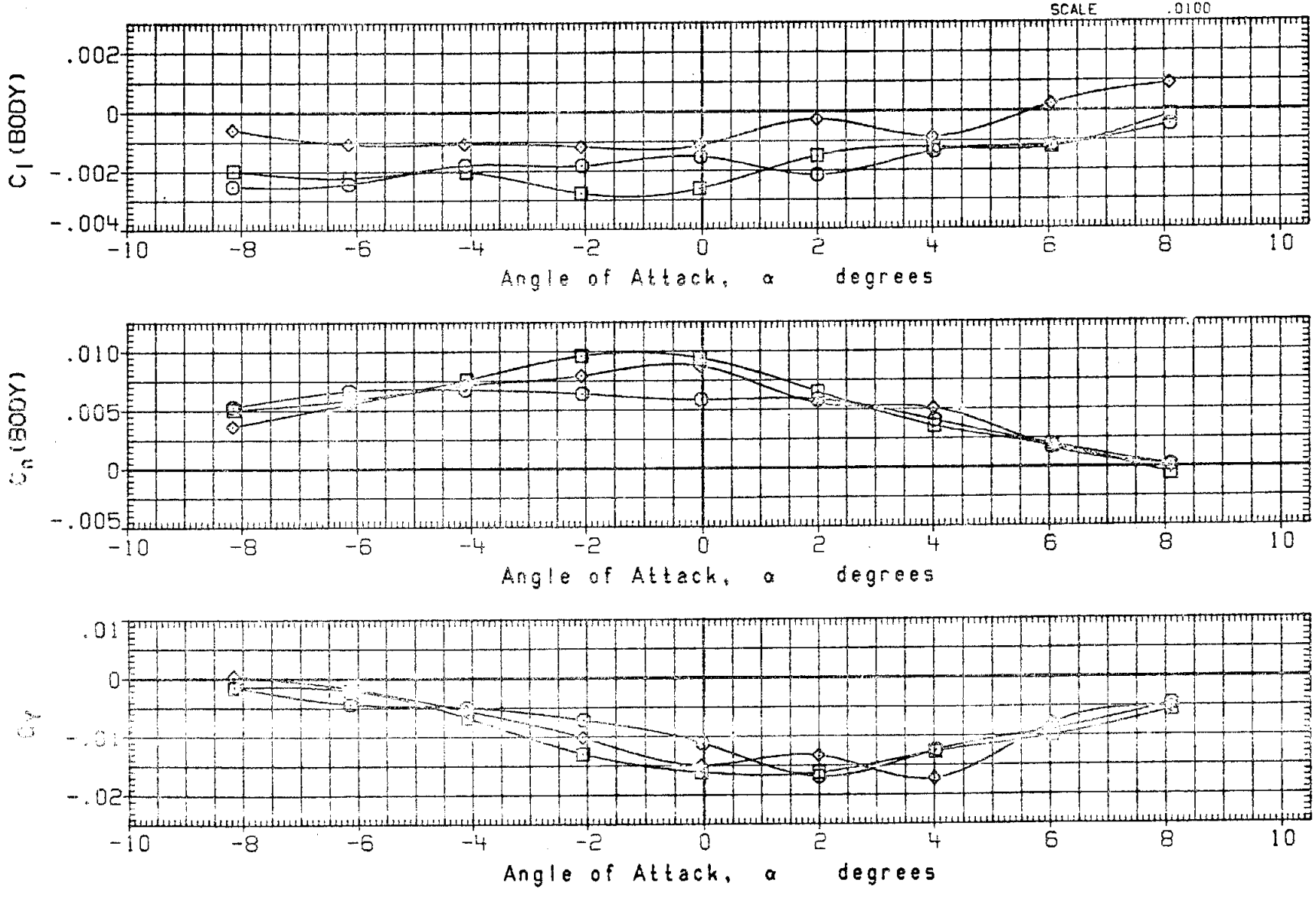

FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

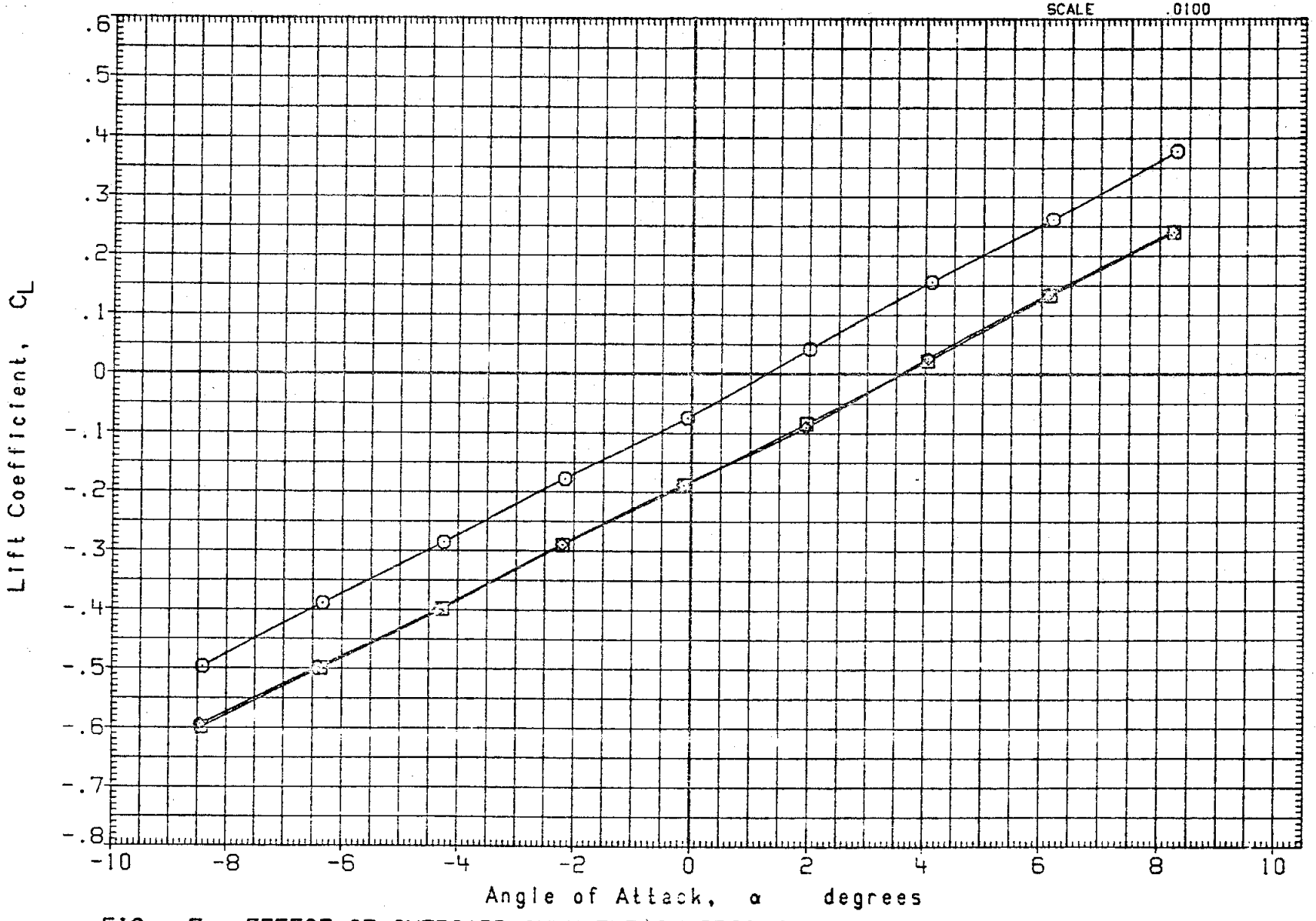

FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

D

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

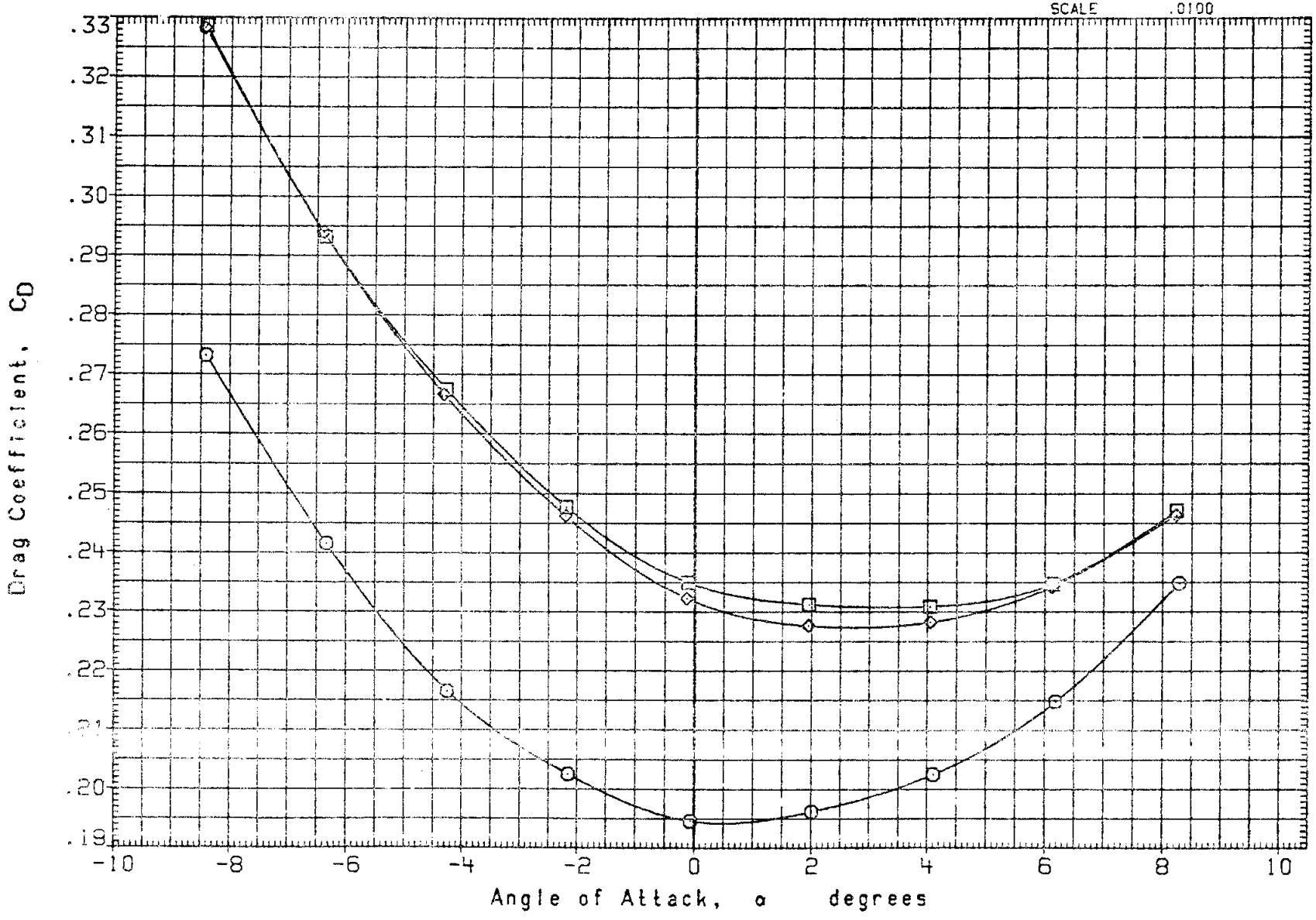

FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

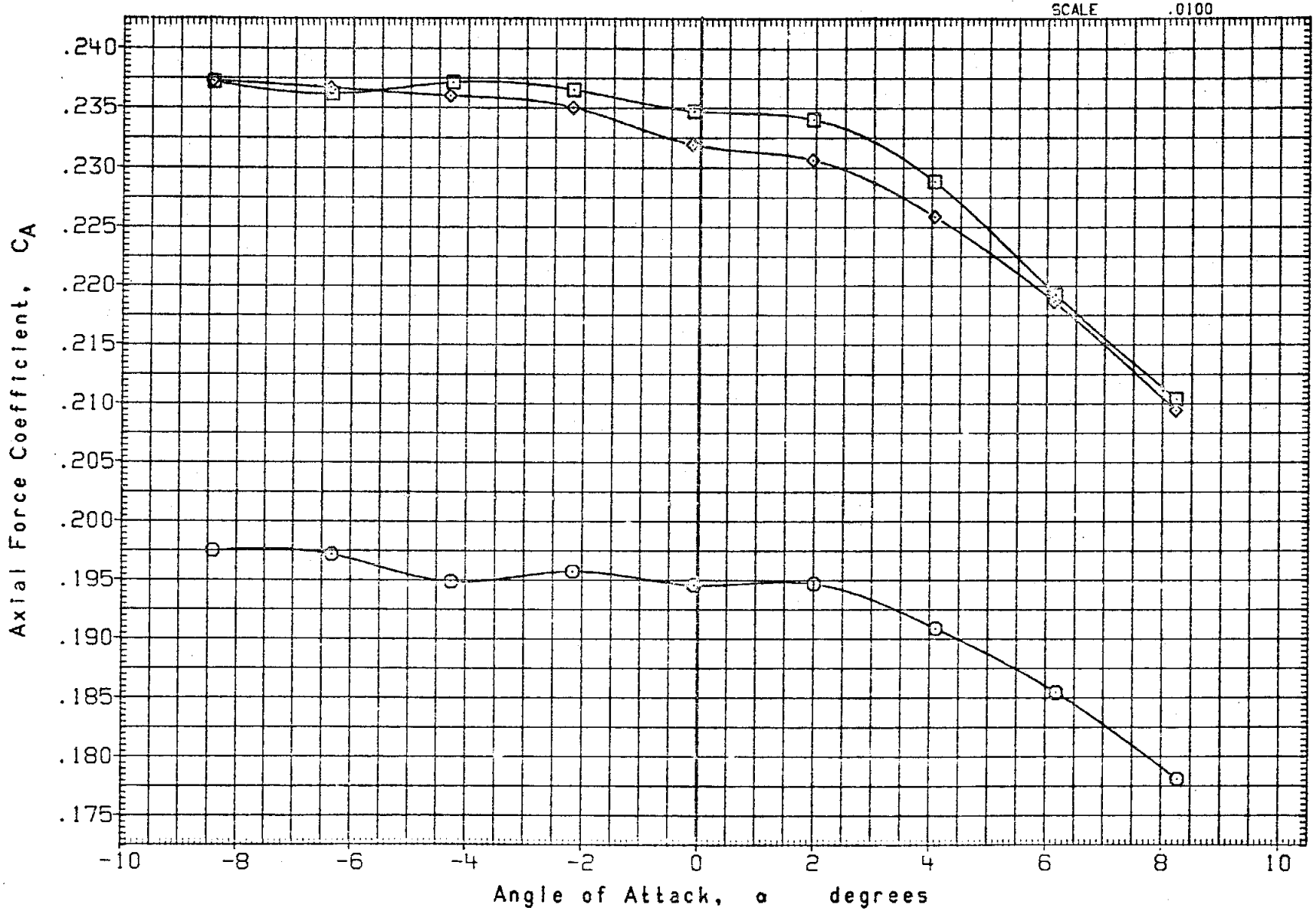

FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(B) MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

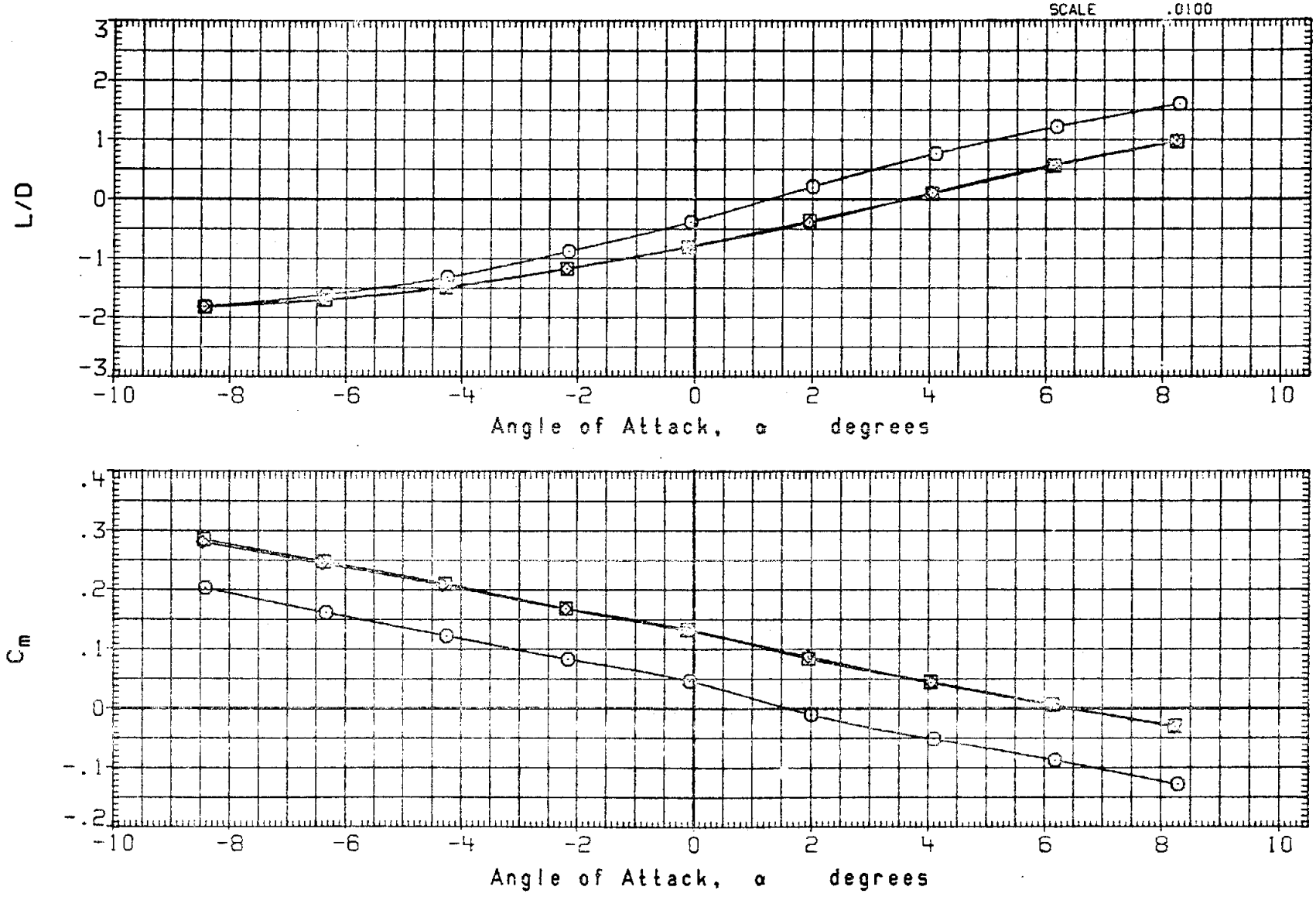

FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

DA
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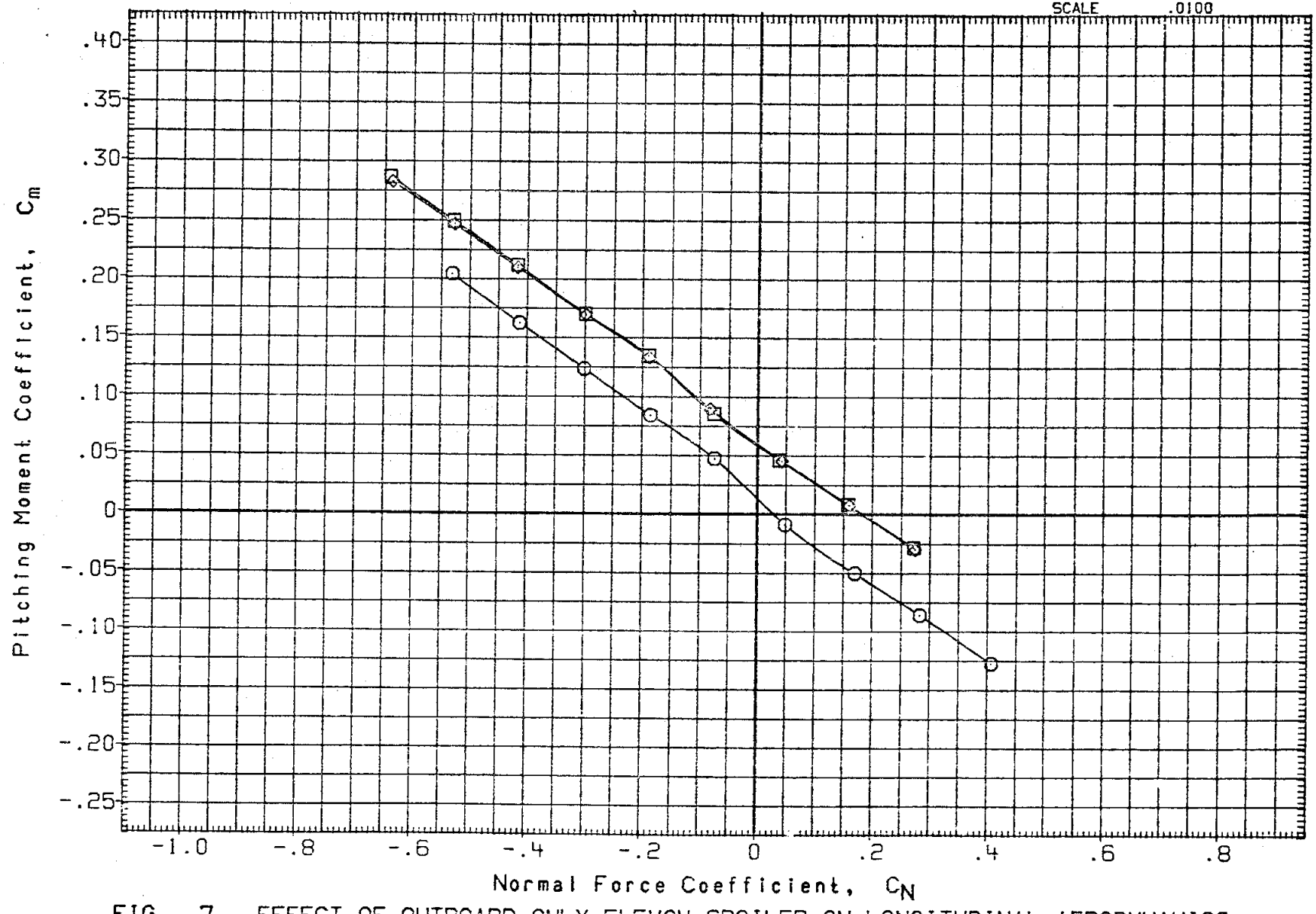


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

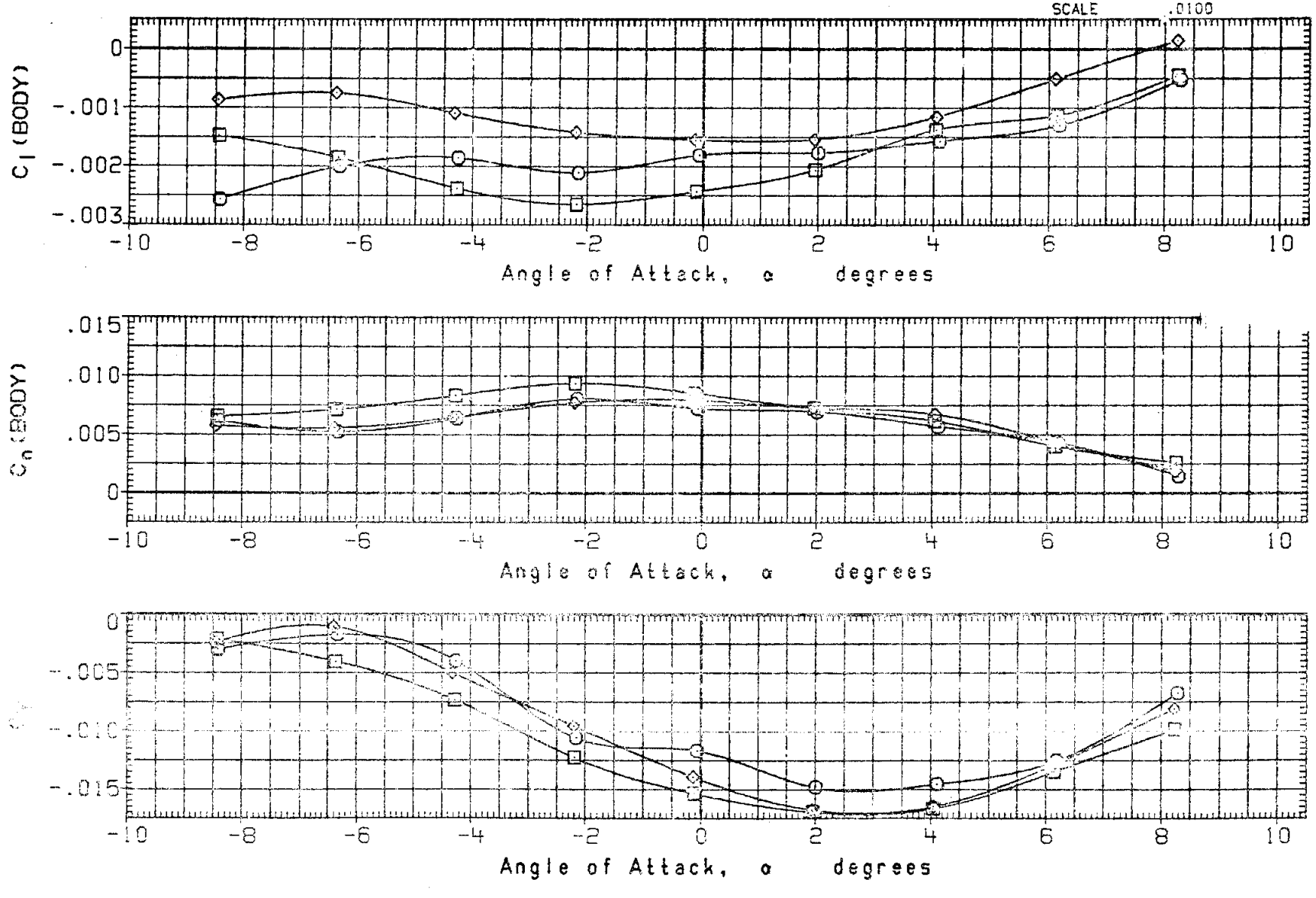


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

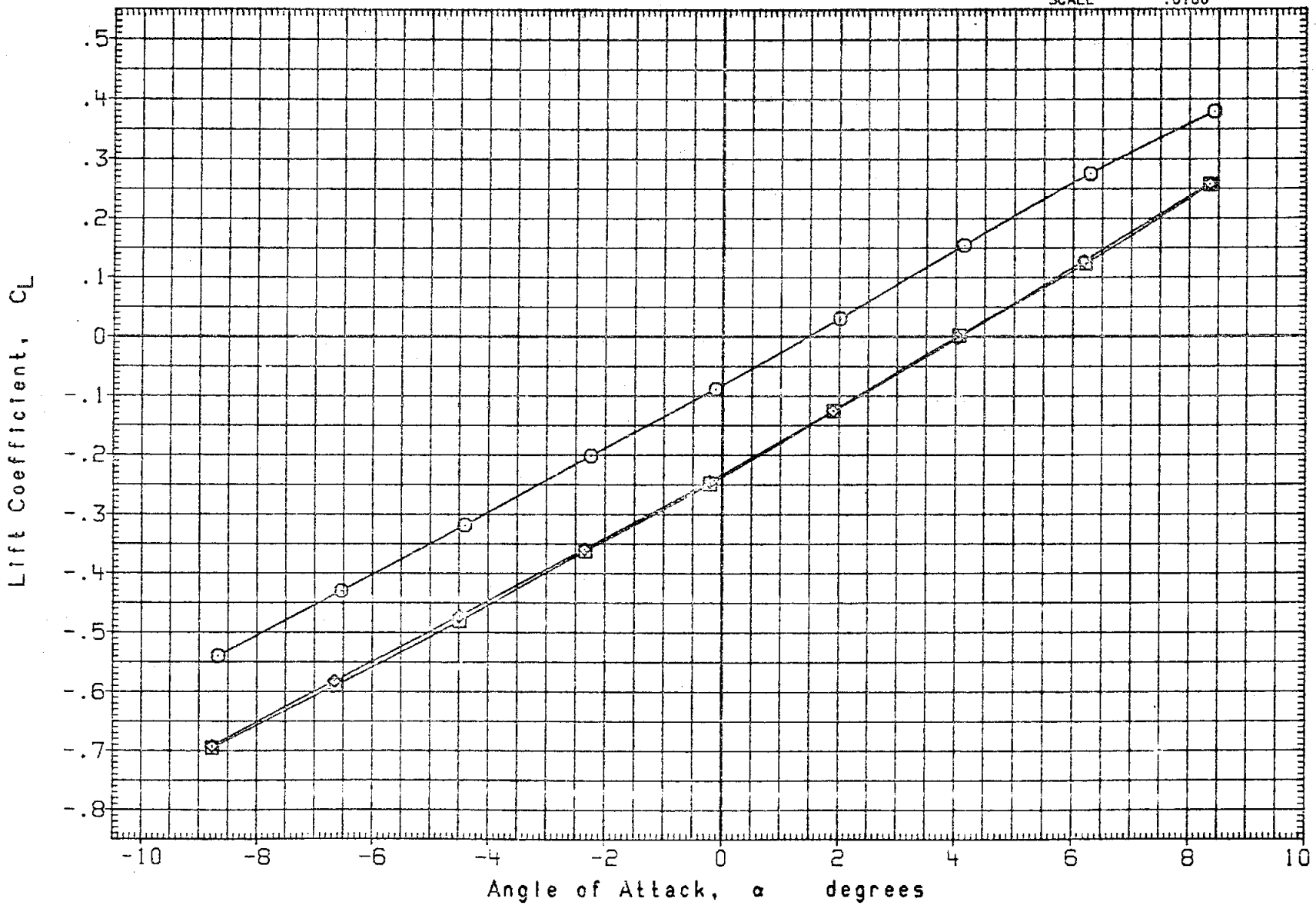


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

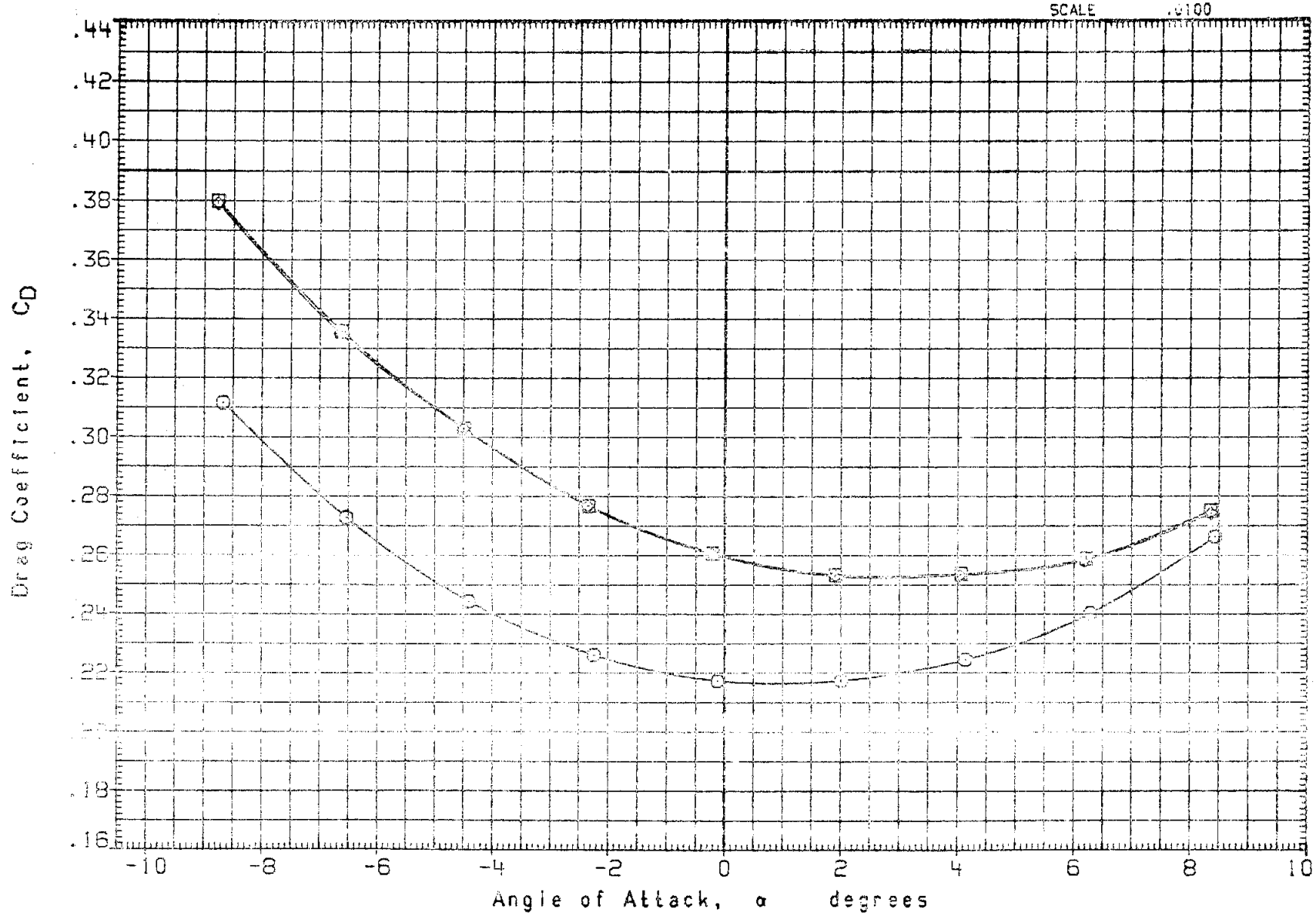


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

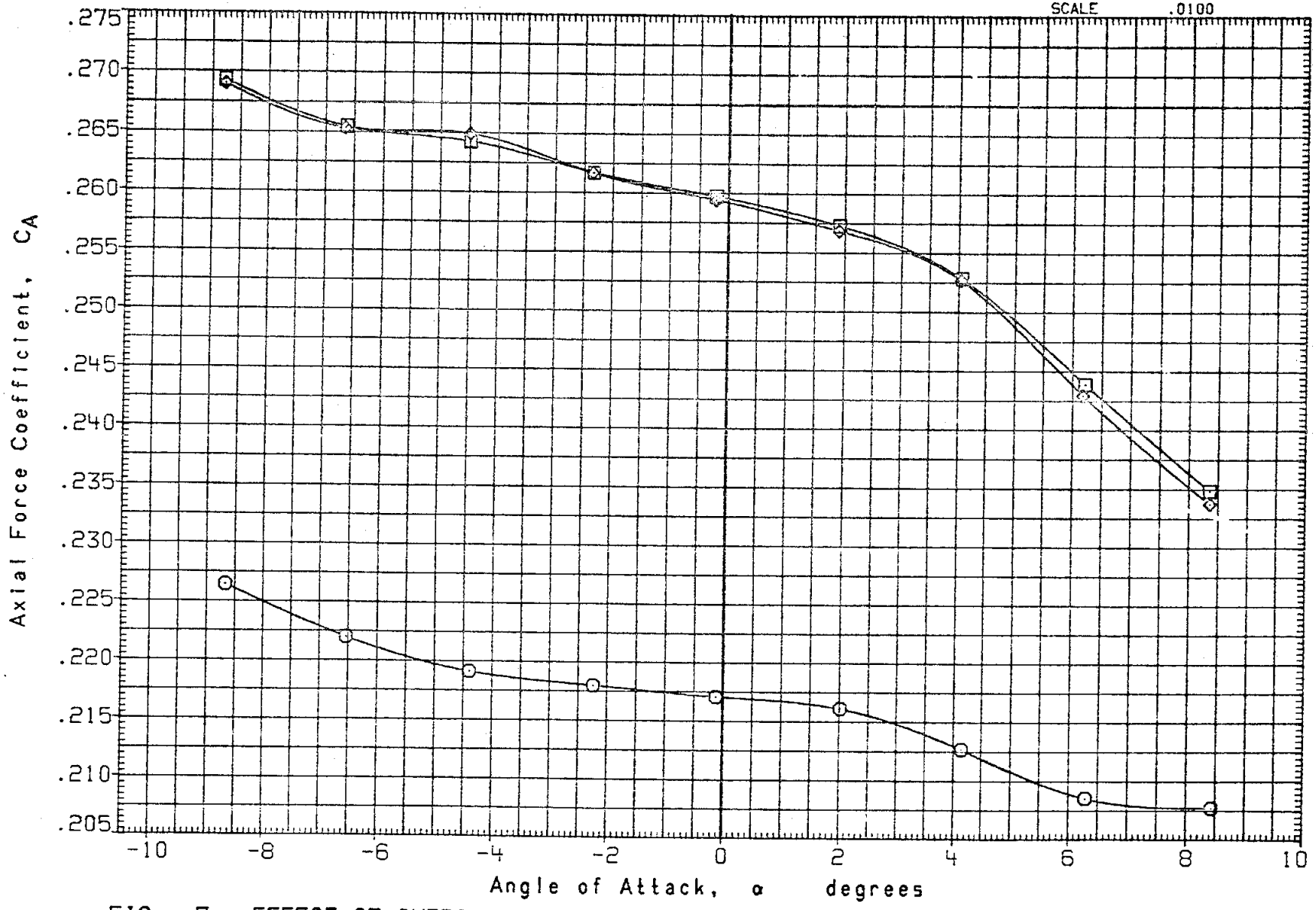


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

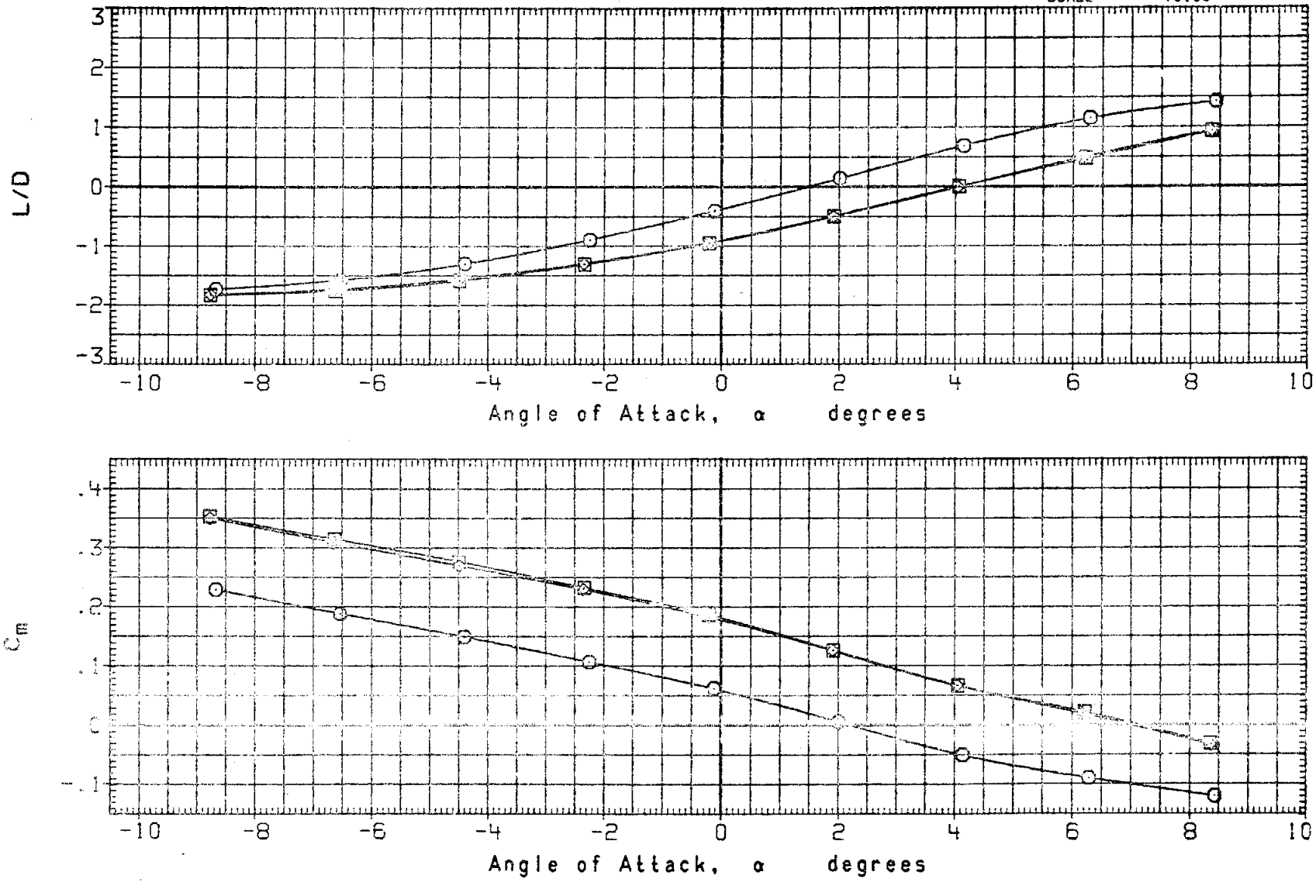


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

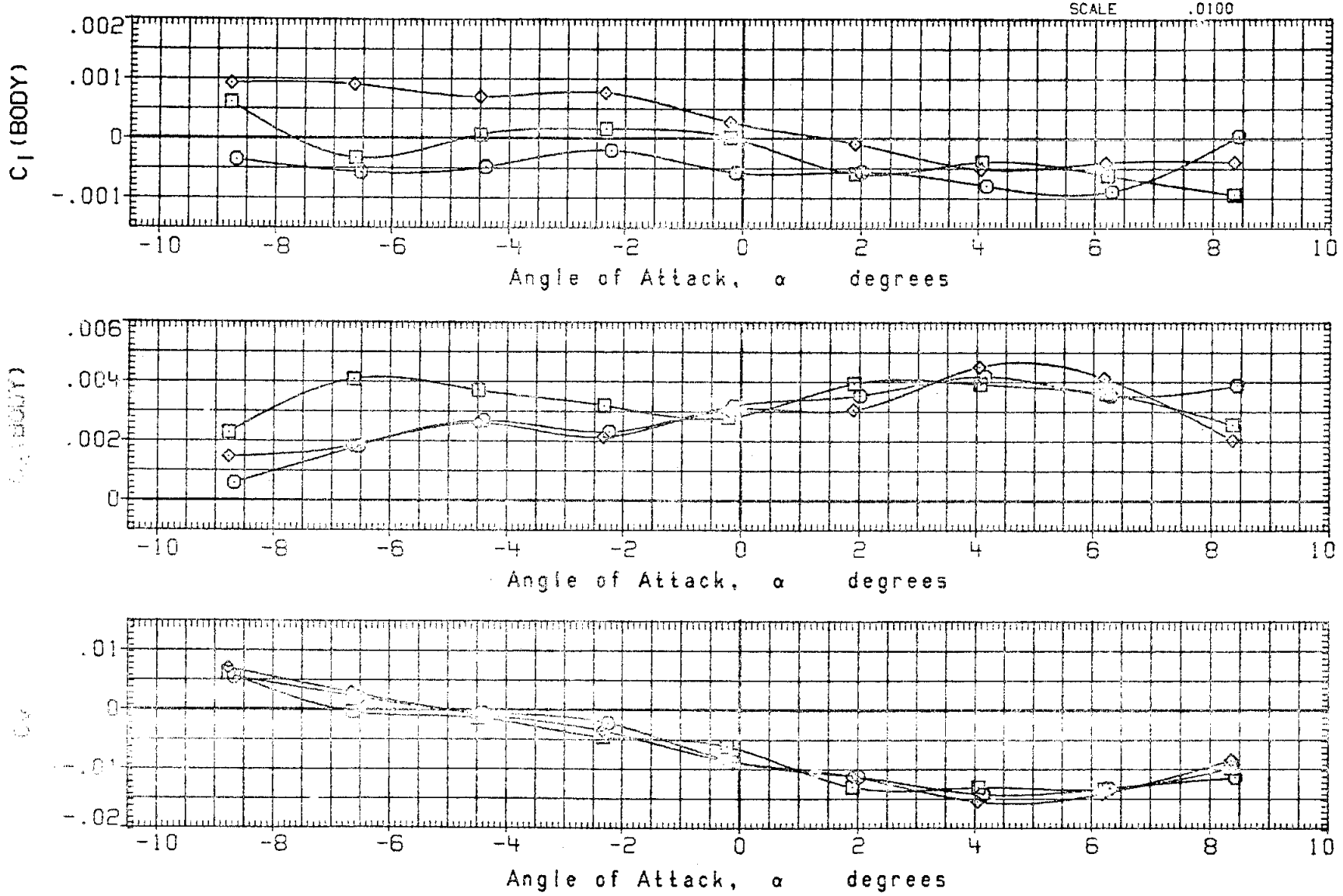


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

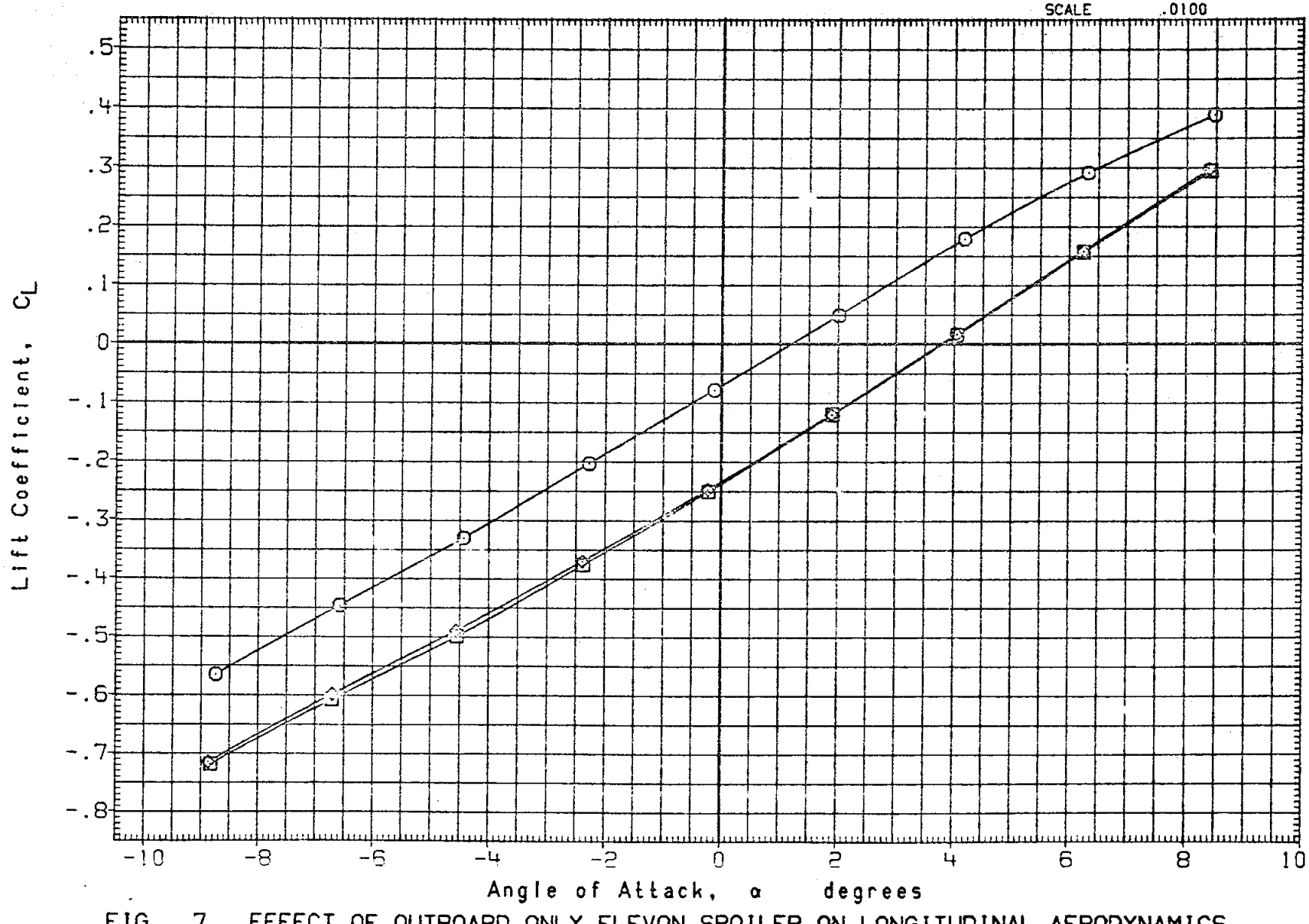


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

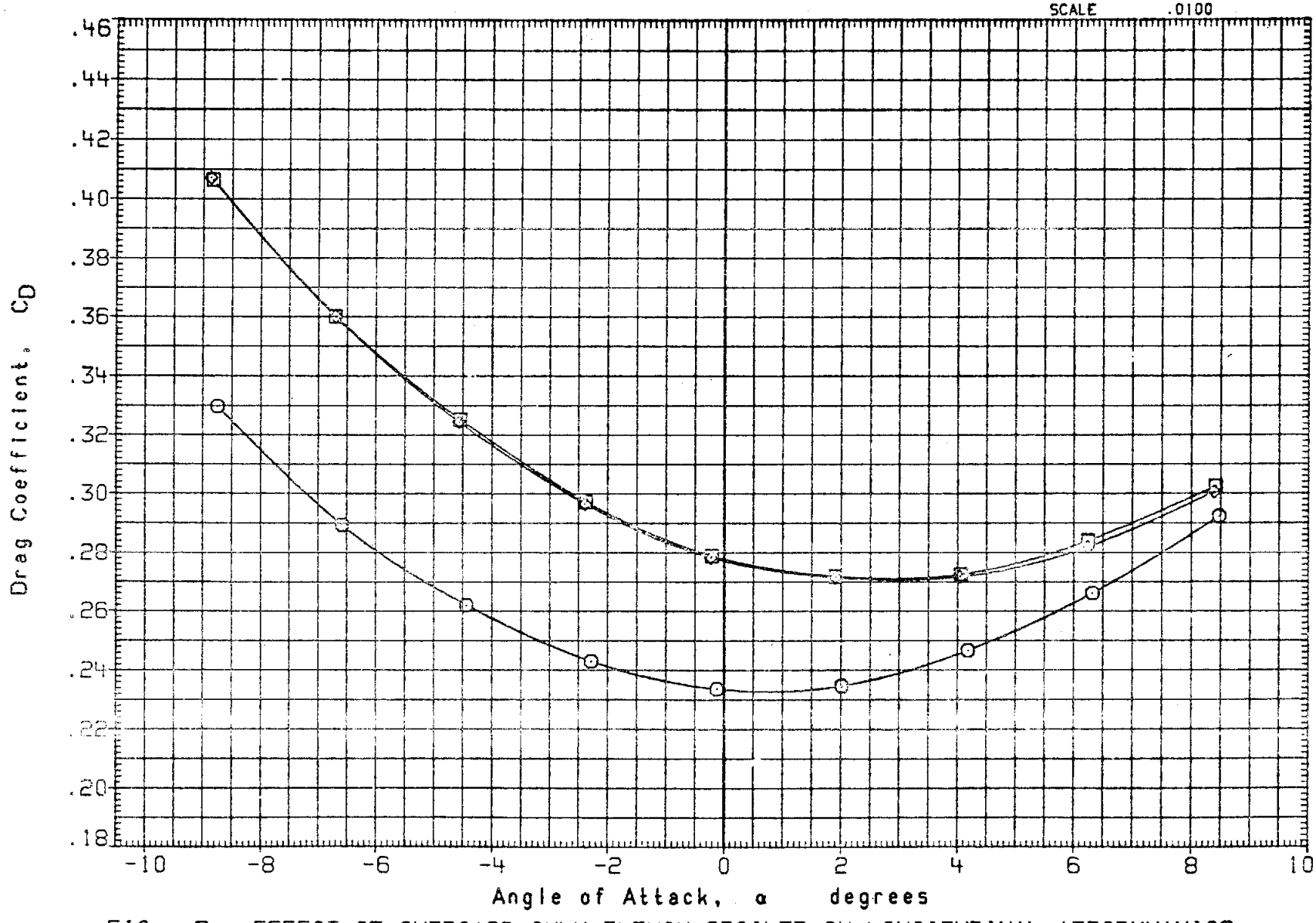


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

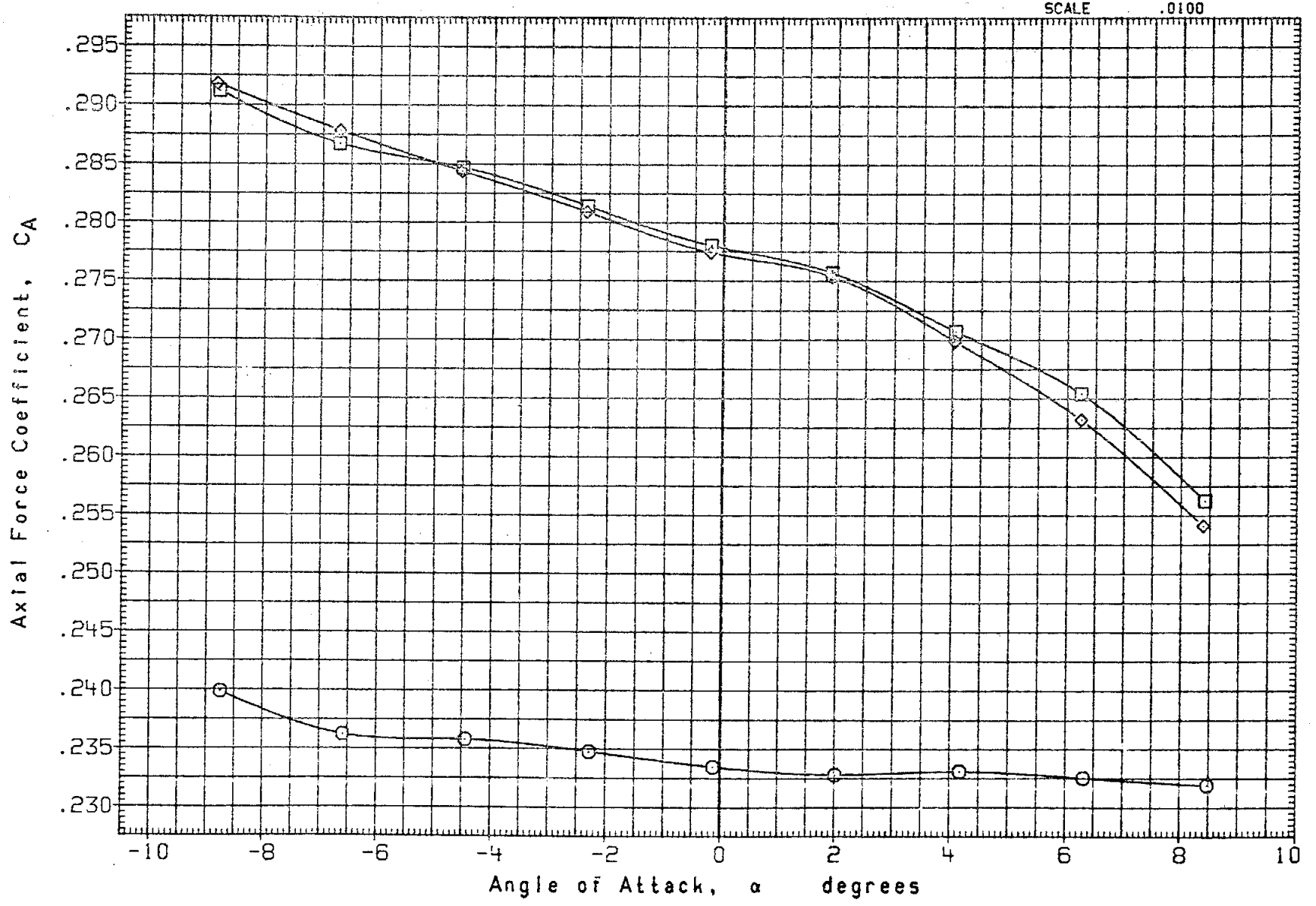


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

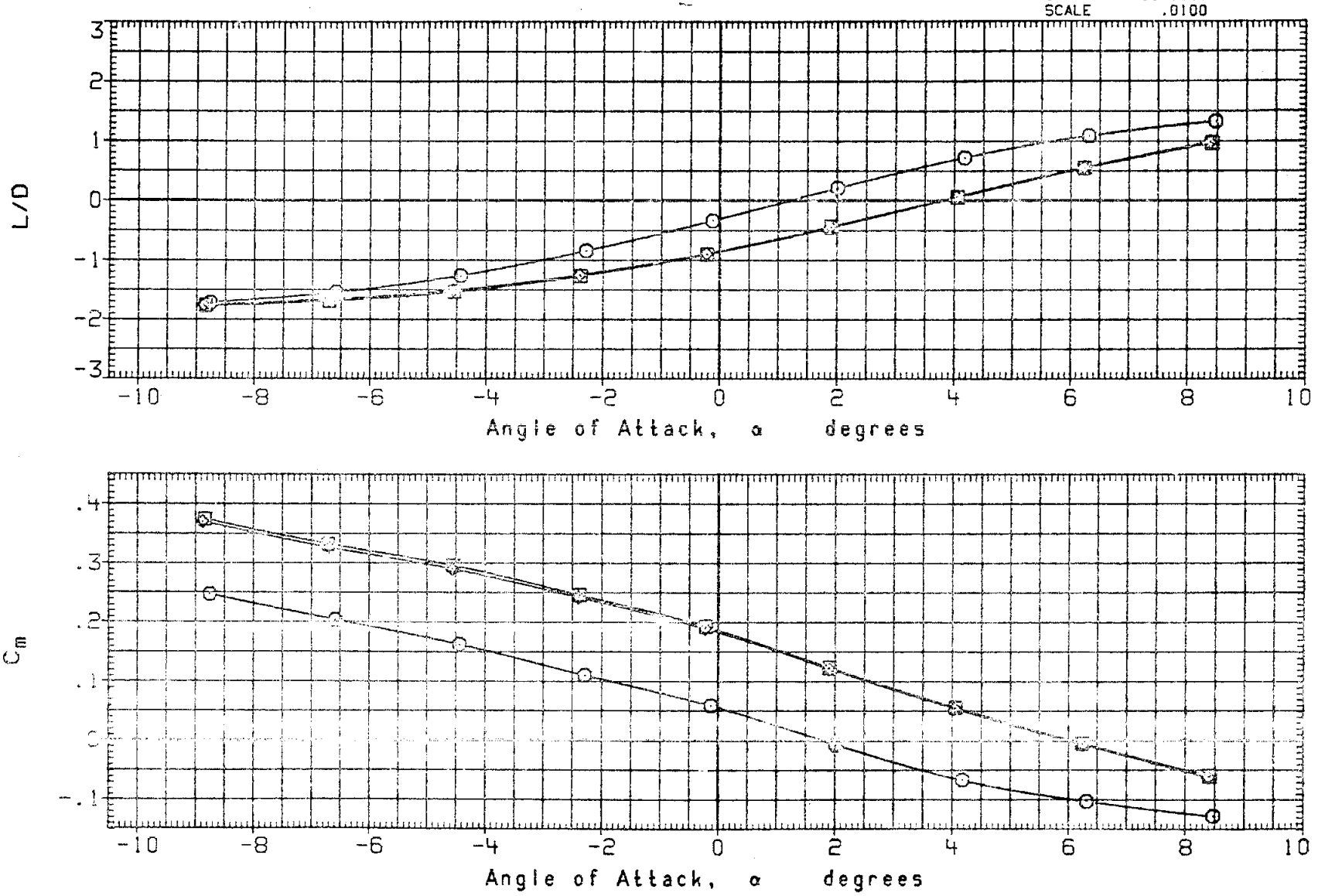


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

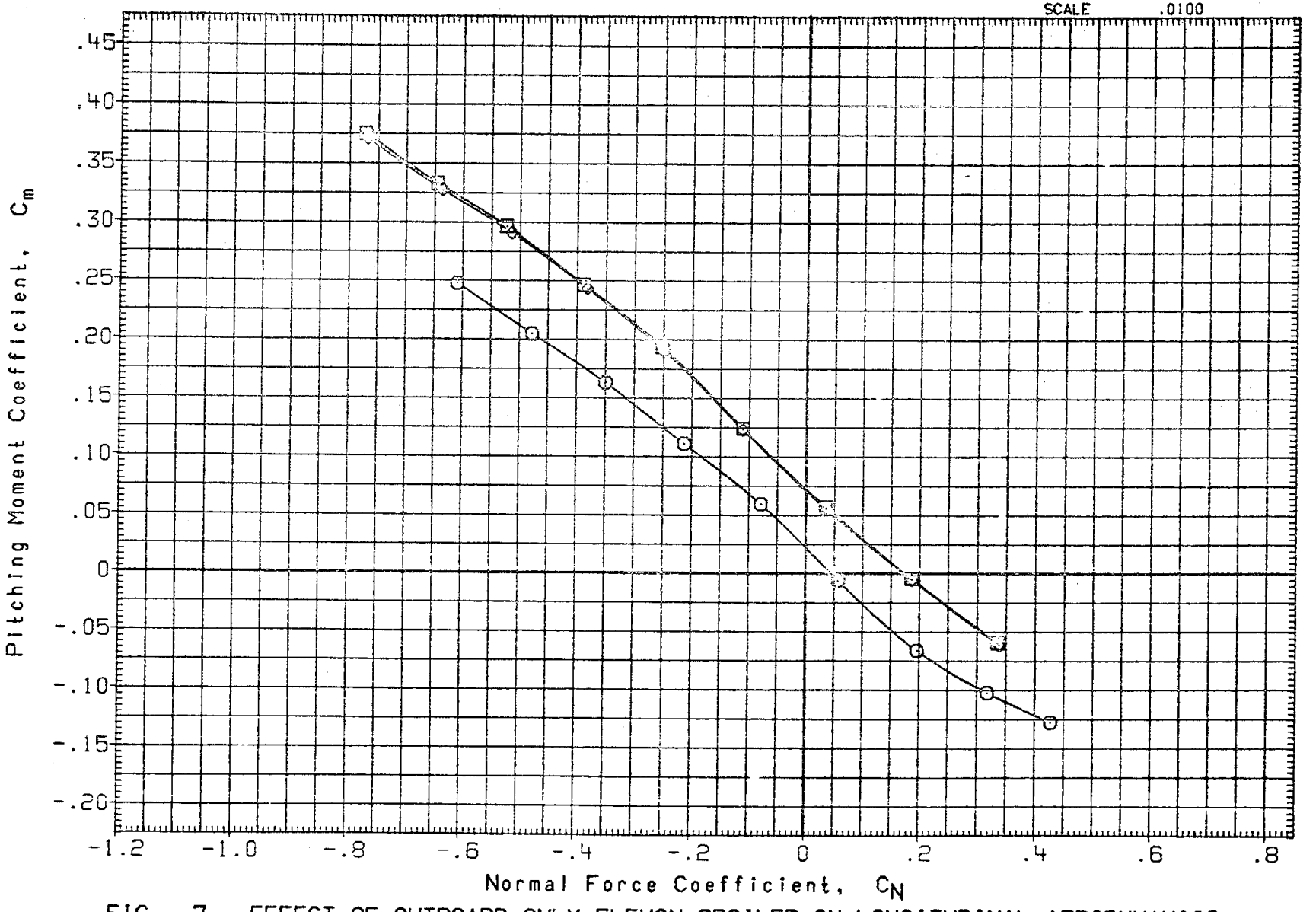


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

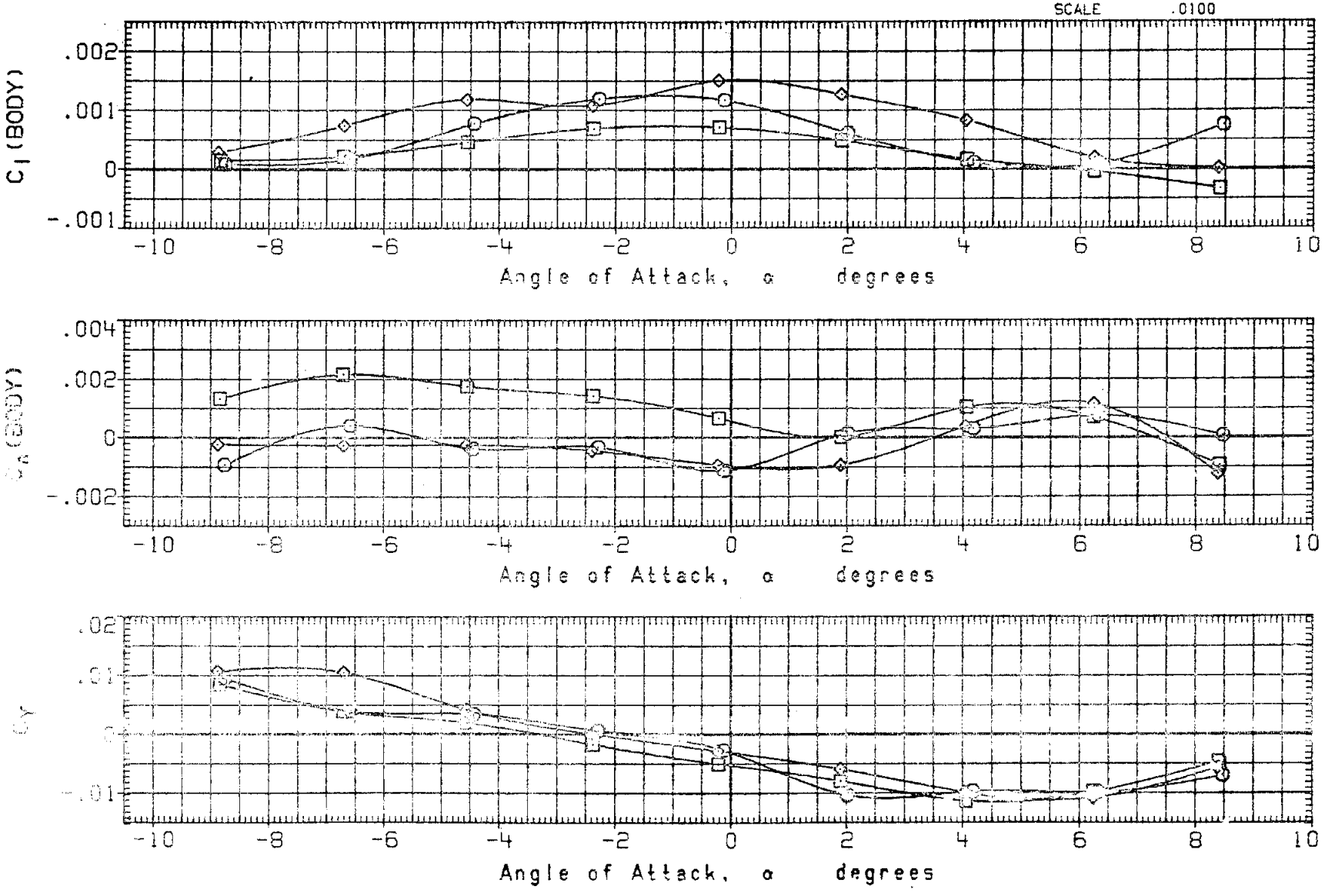


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

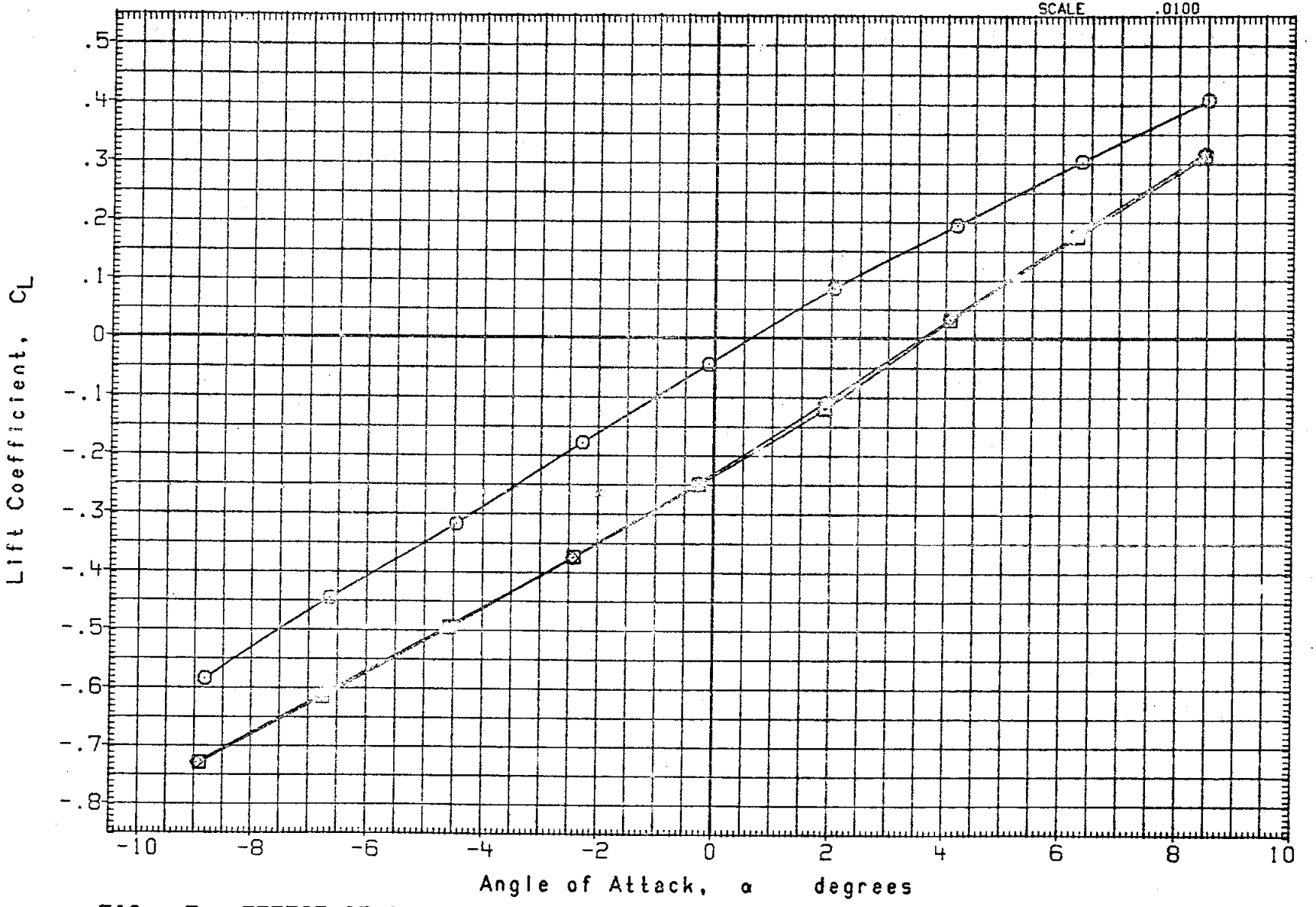


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

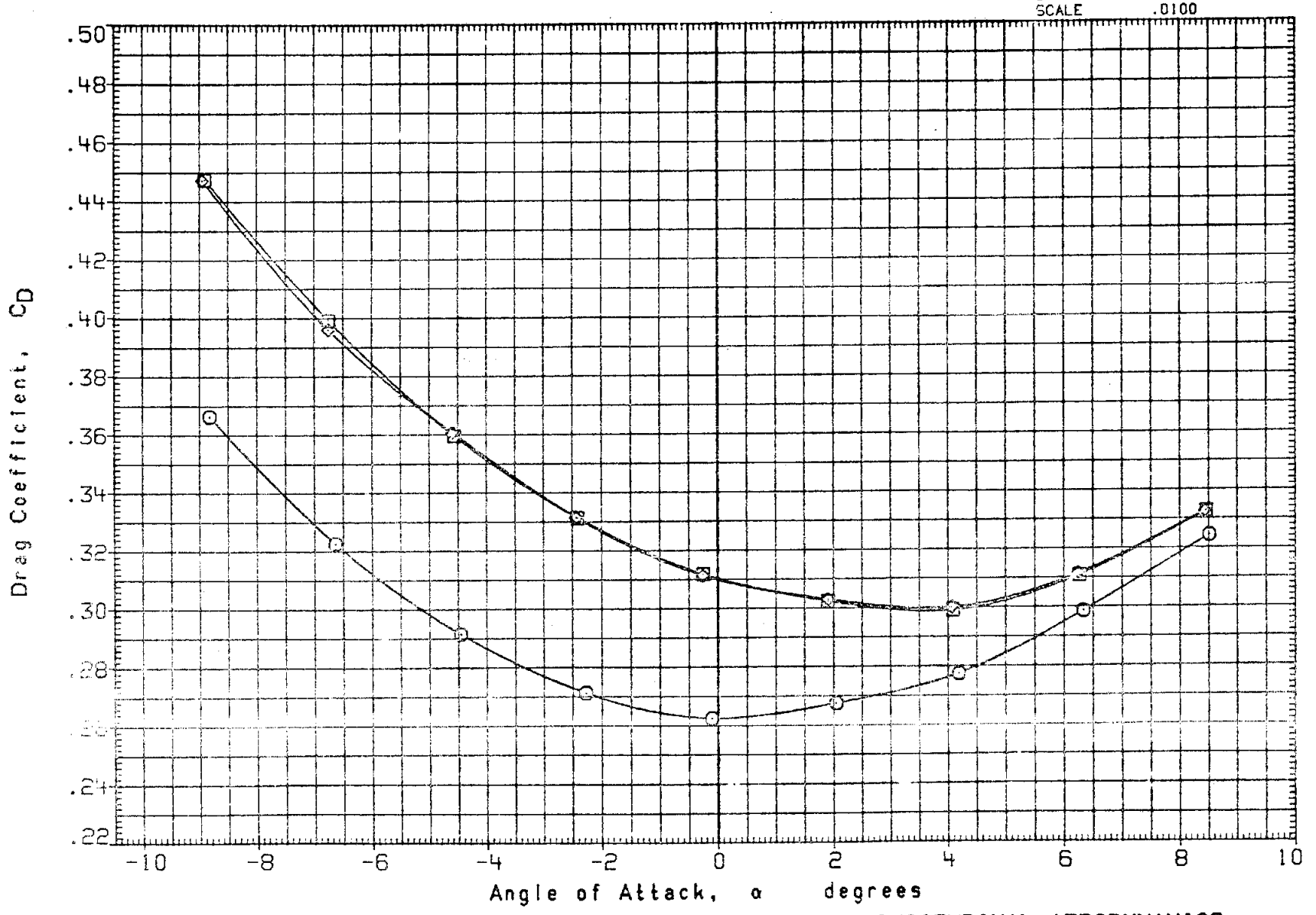


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

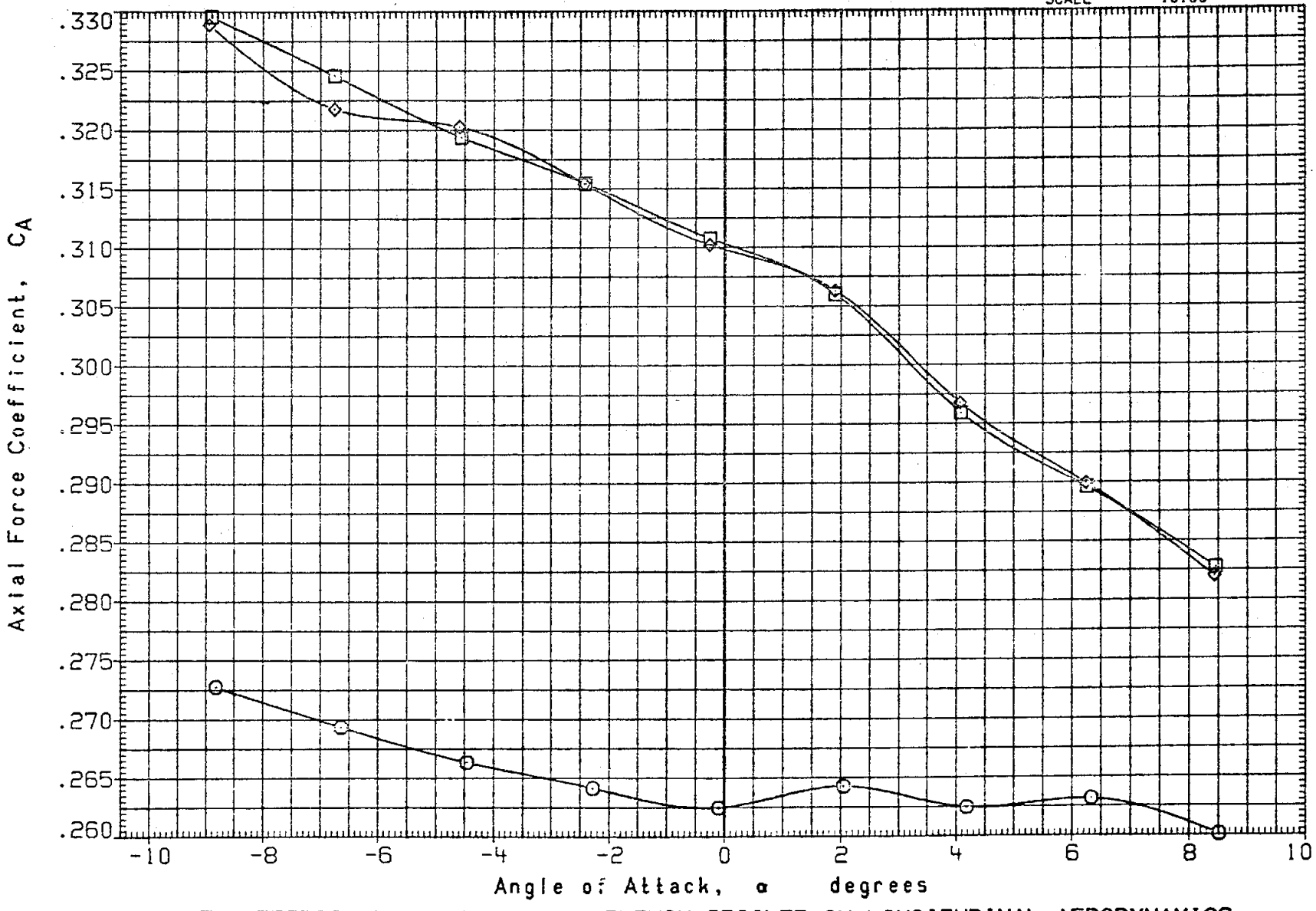


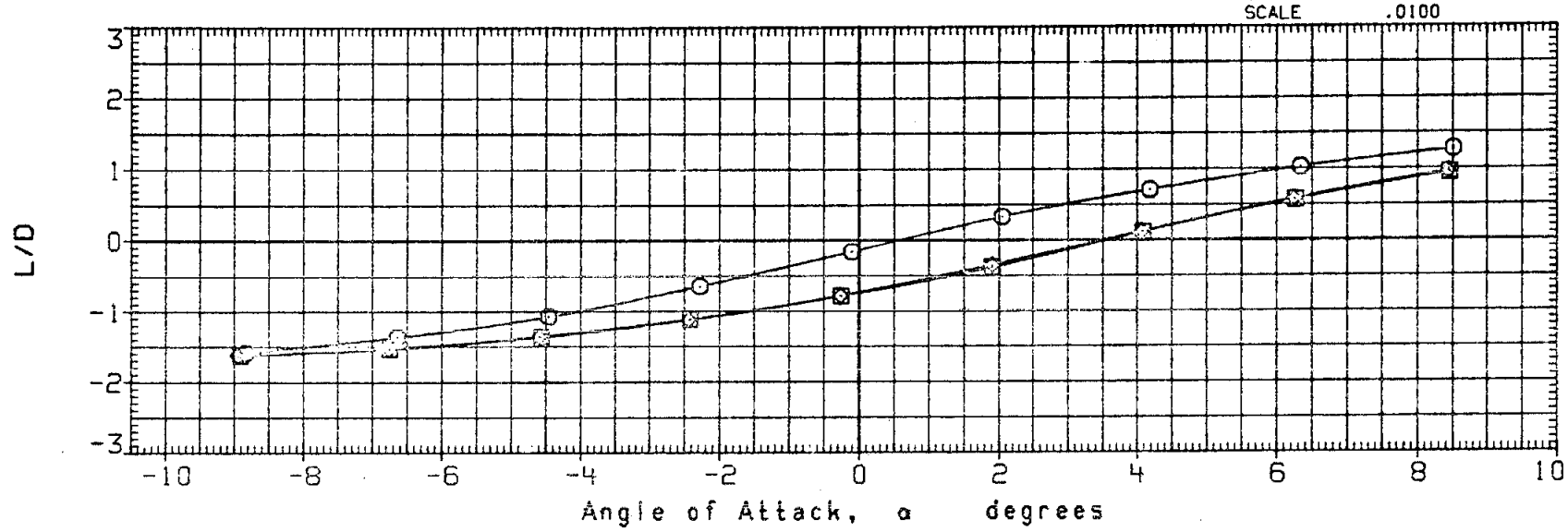
FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



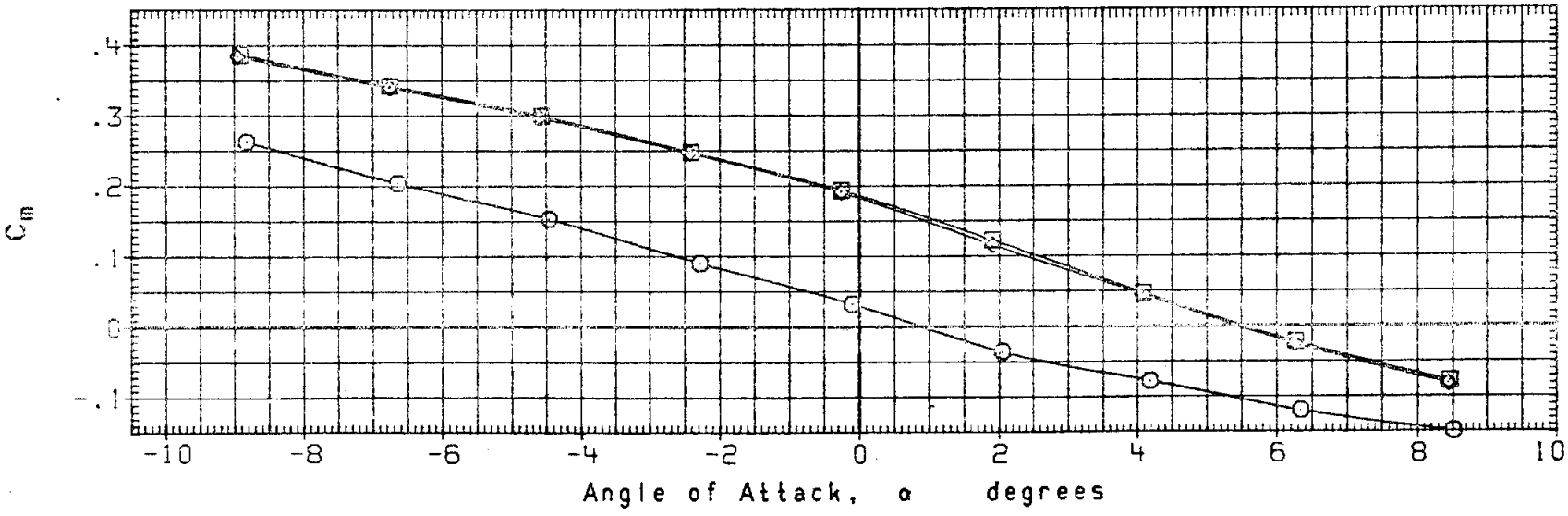


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

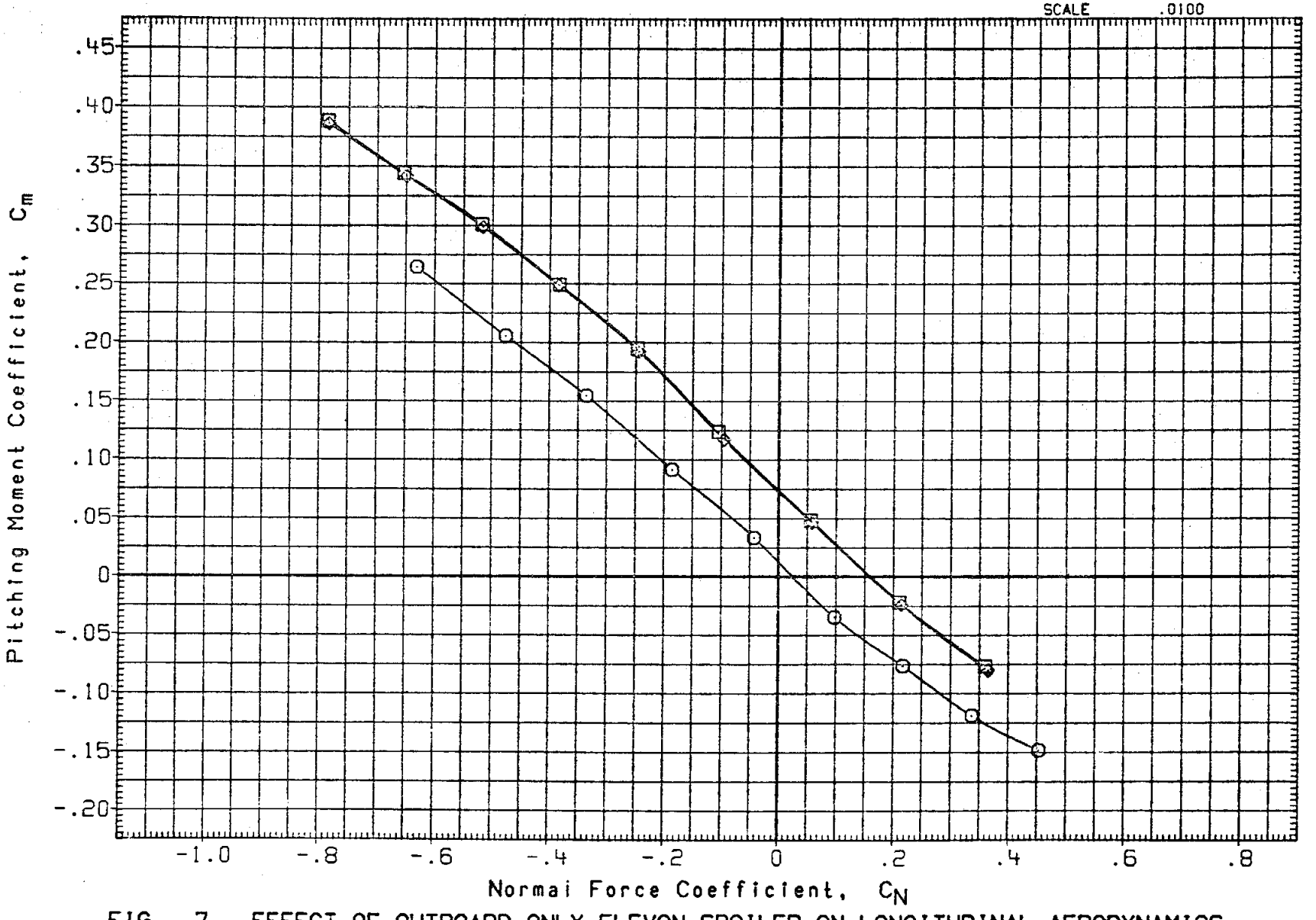


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

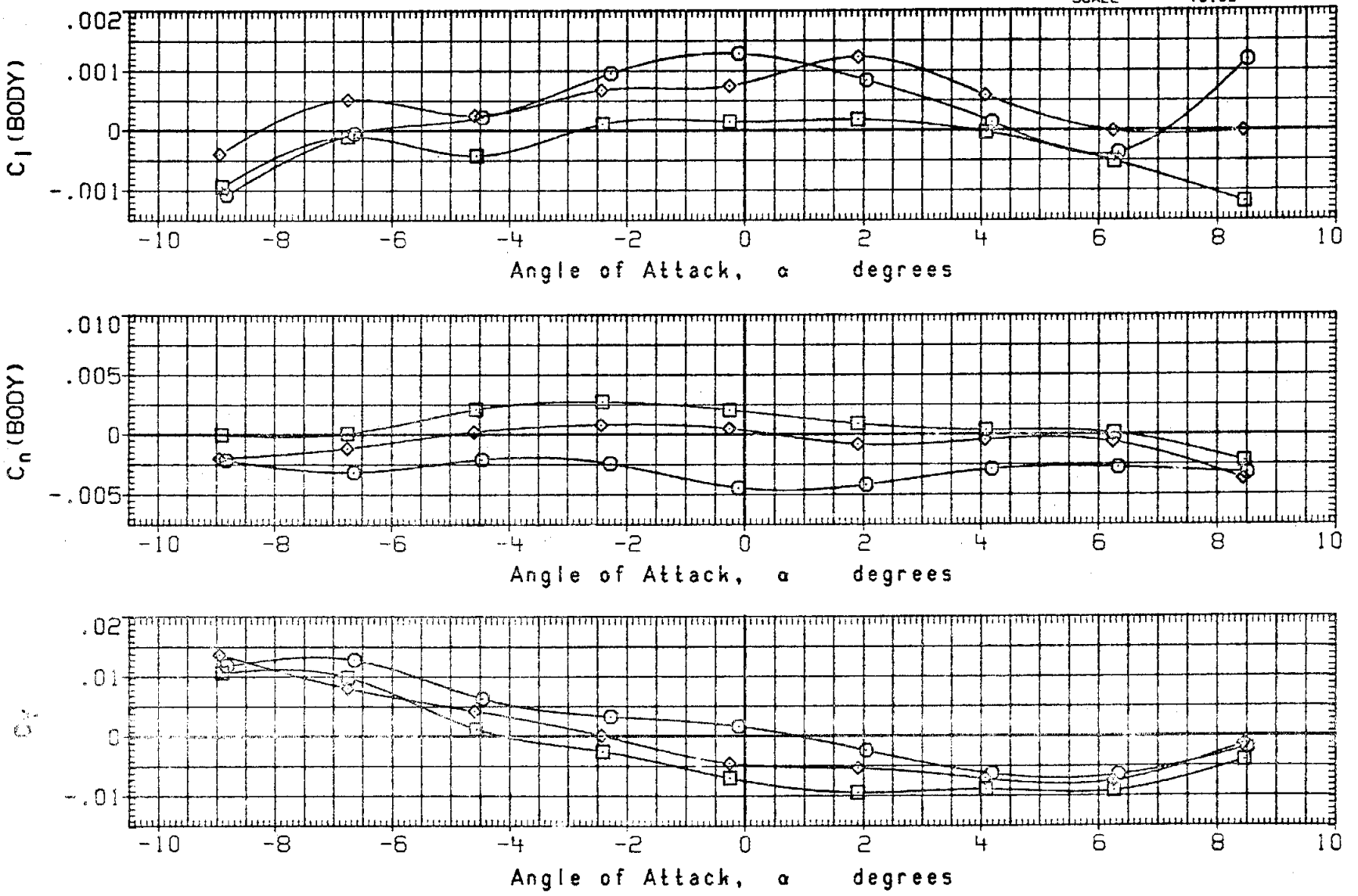


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

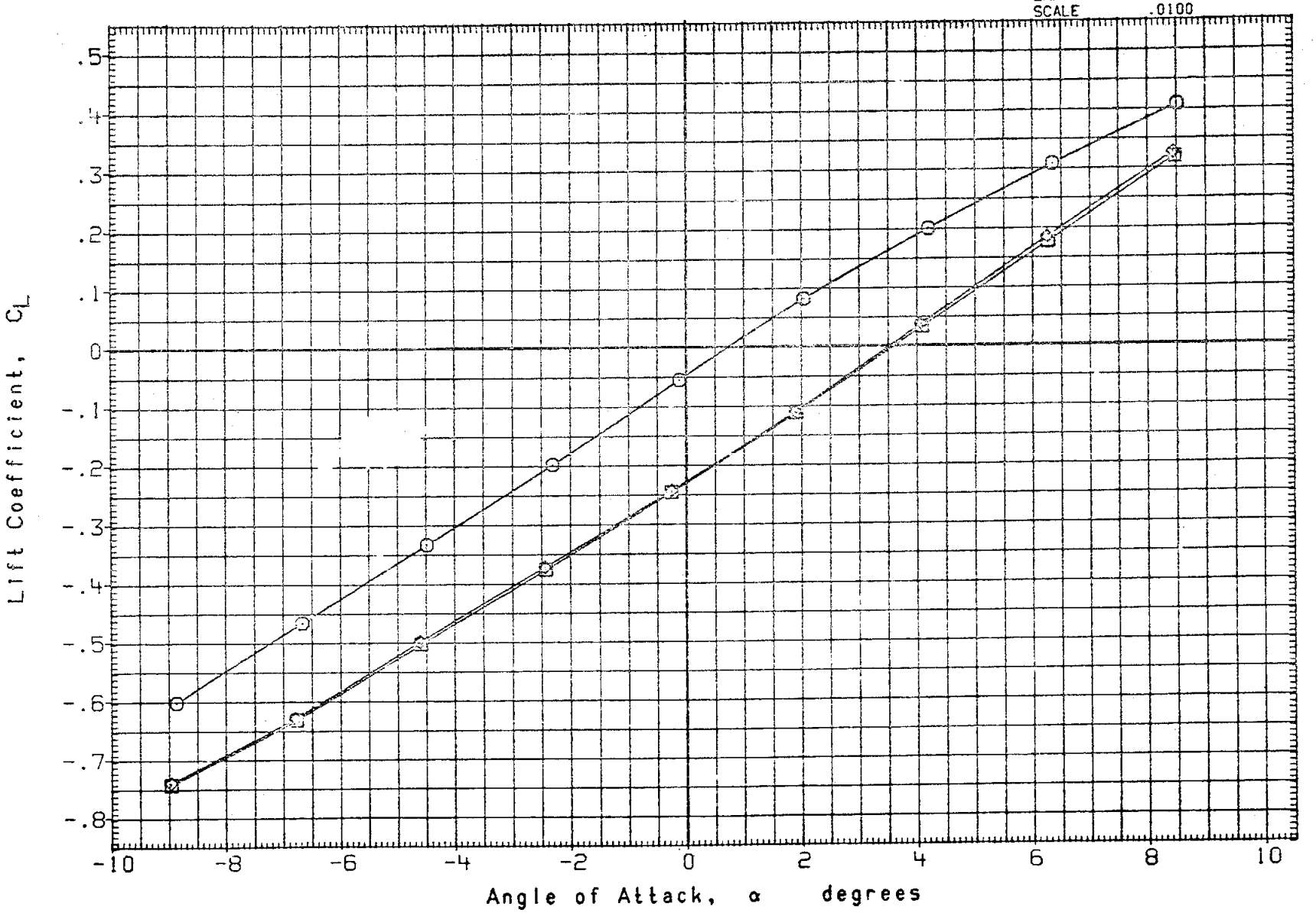


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

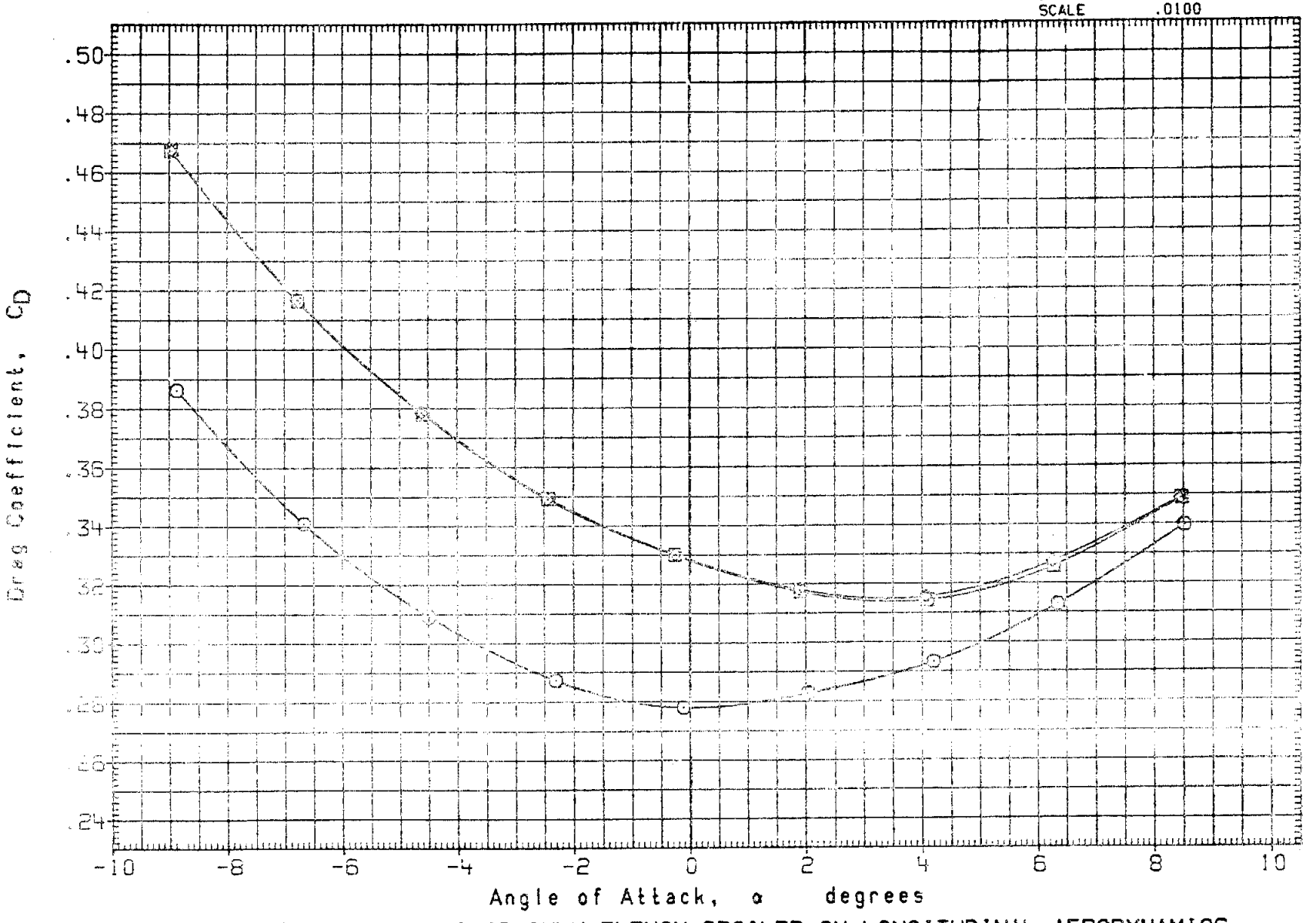


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

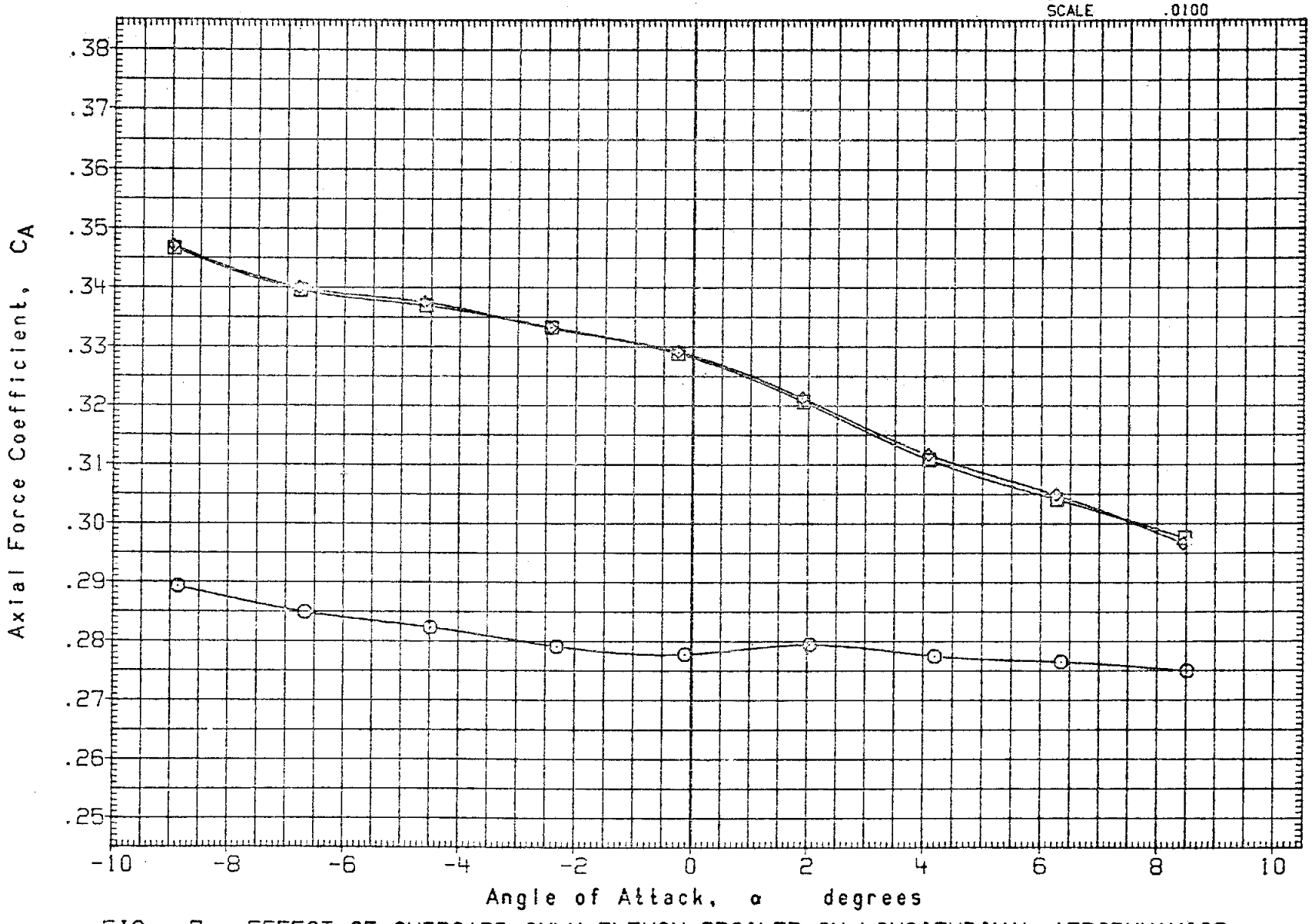


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

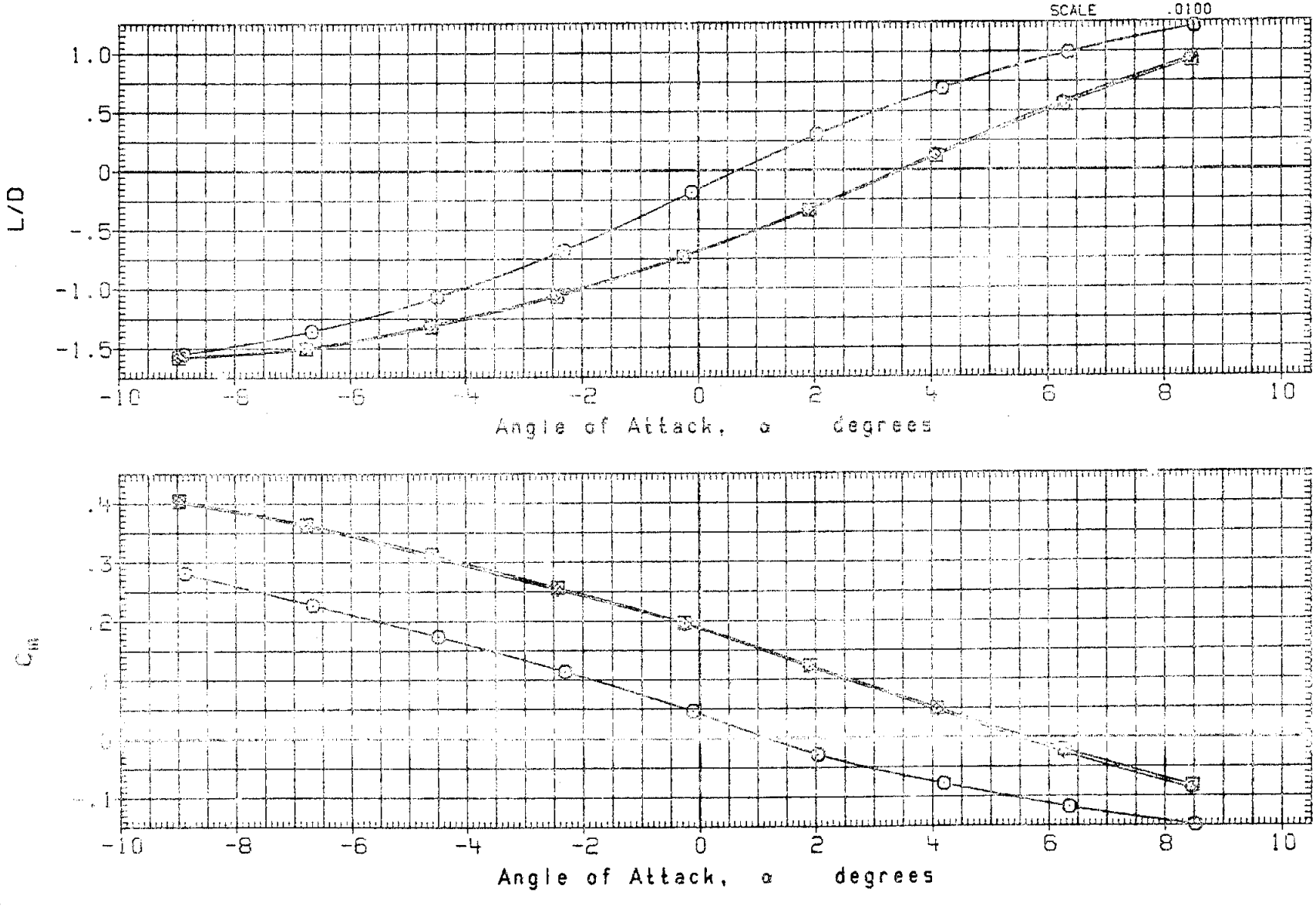


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

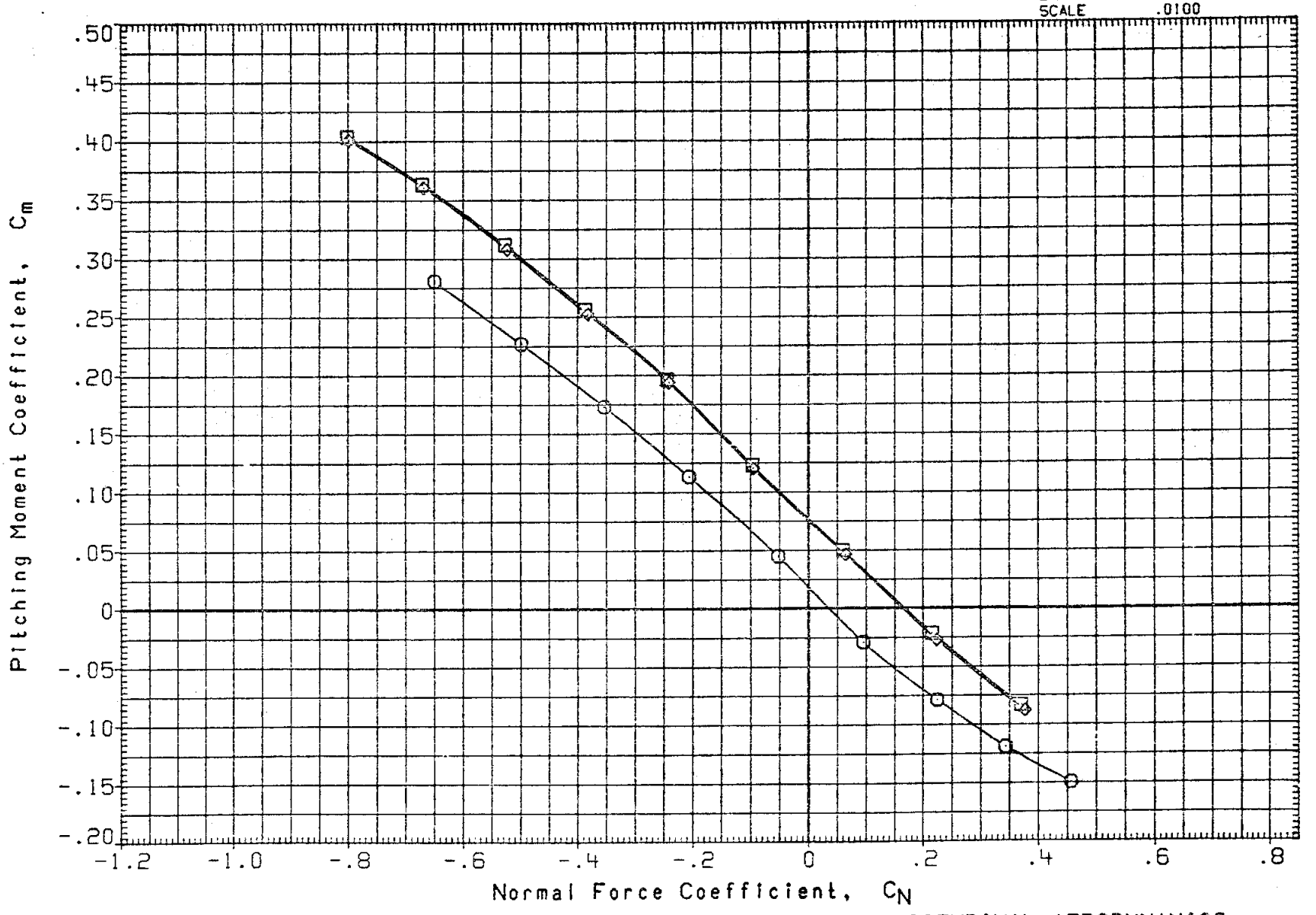


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

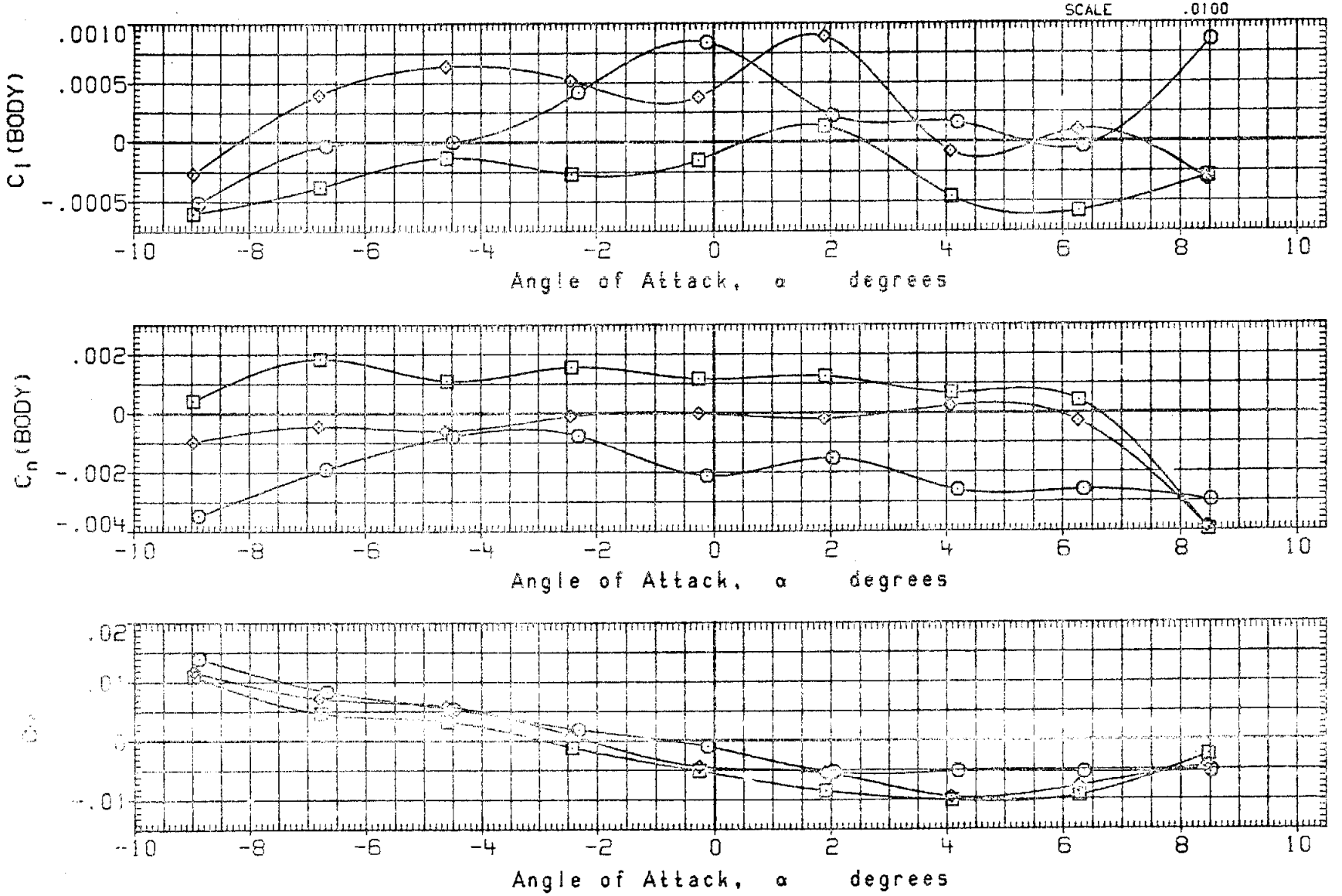


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

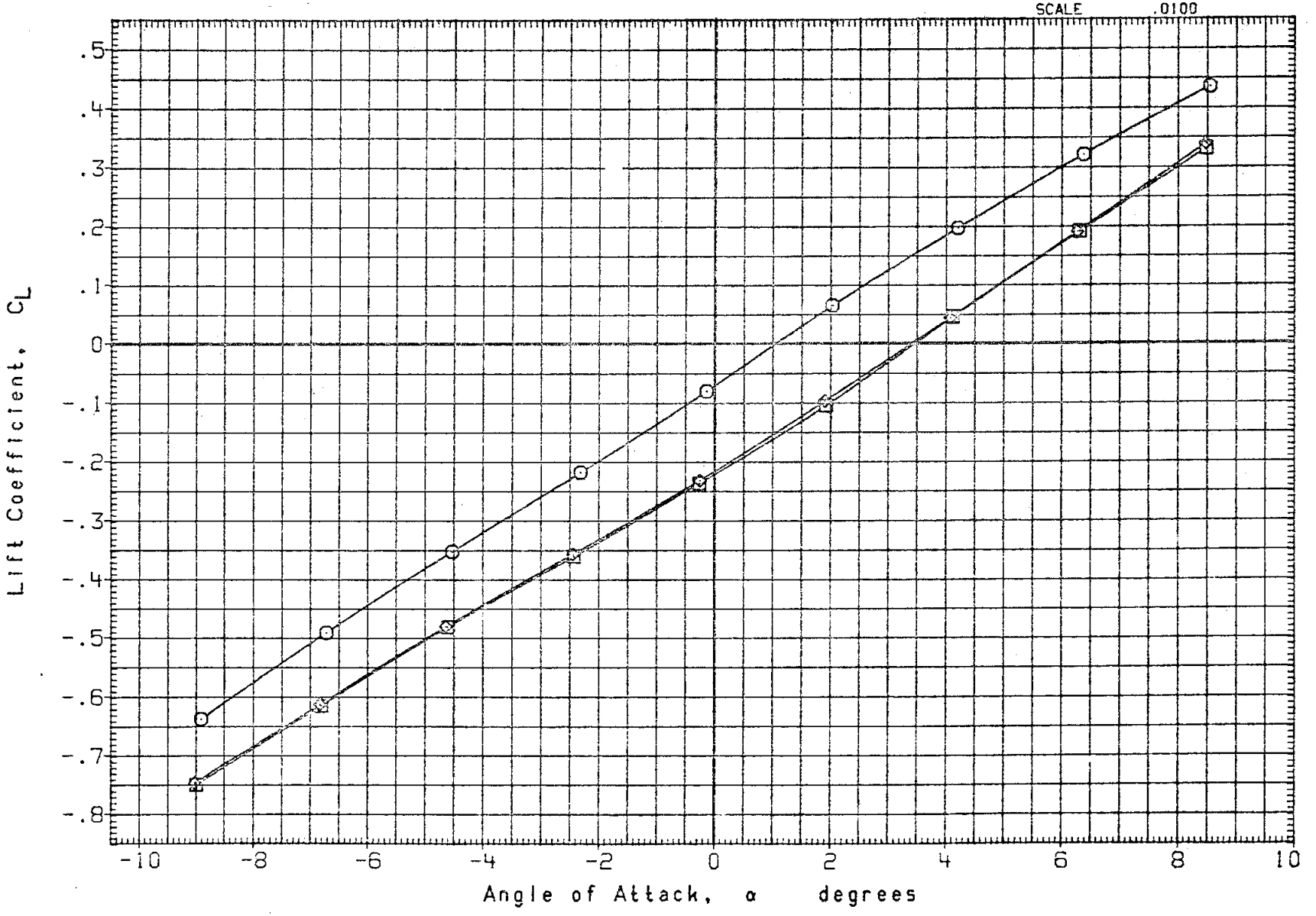


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

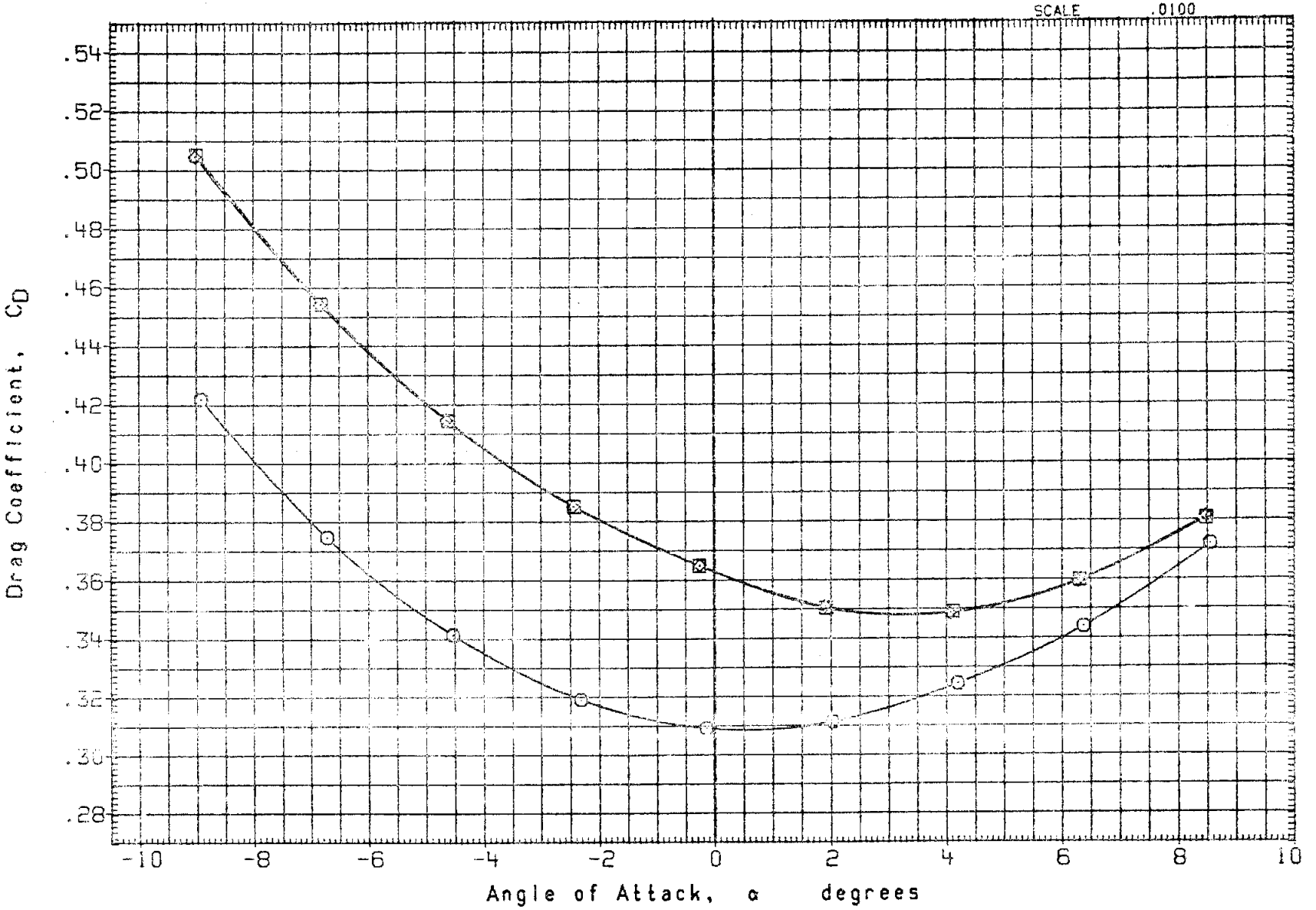


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

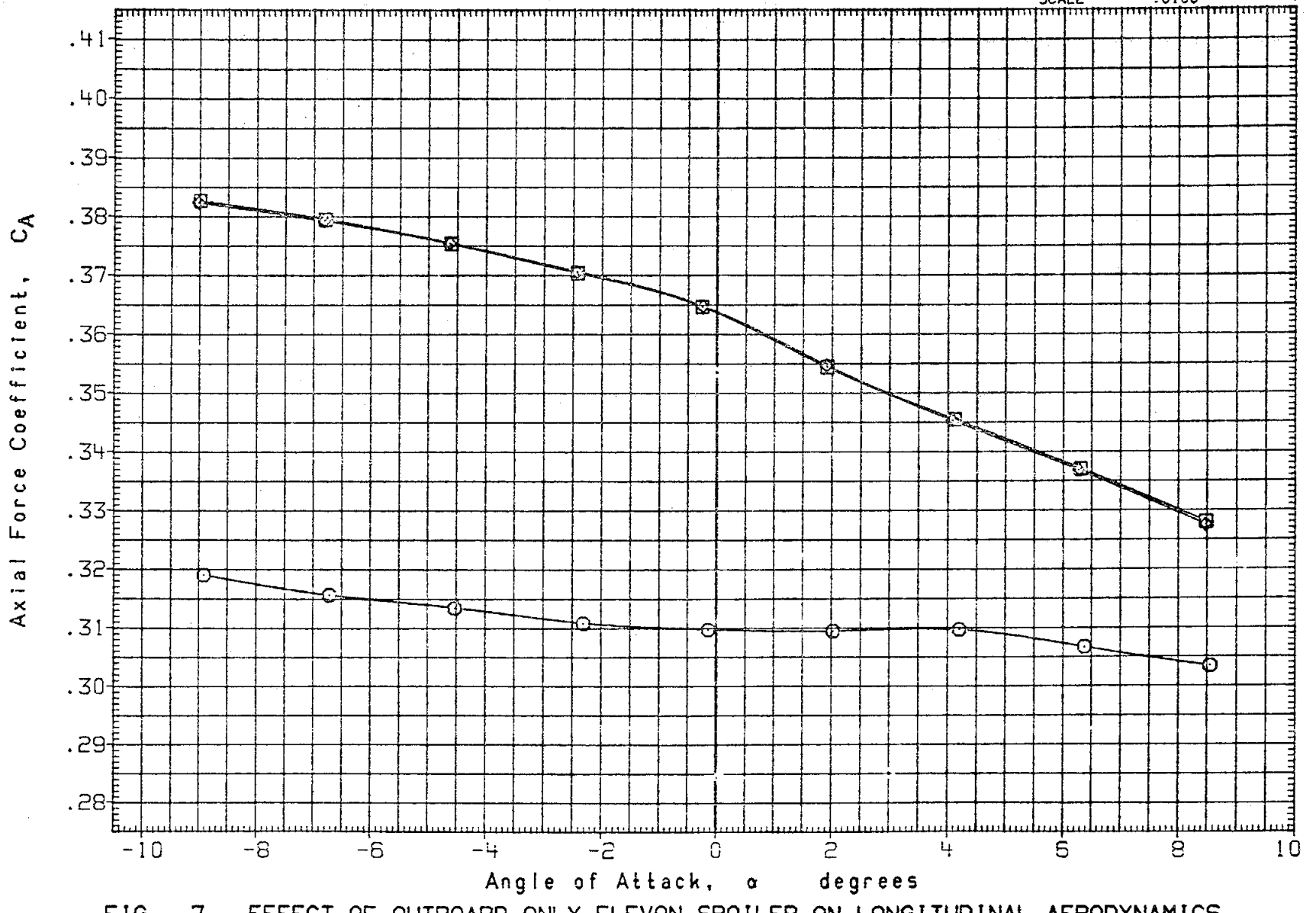


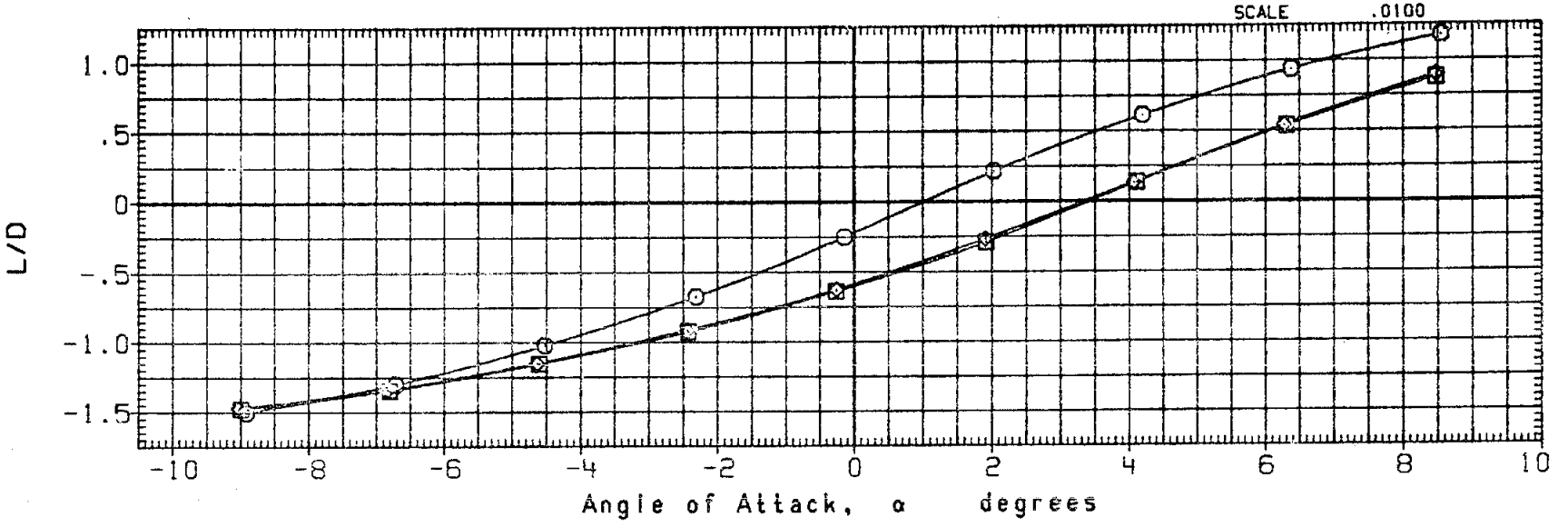
FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	



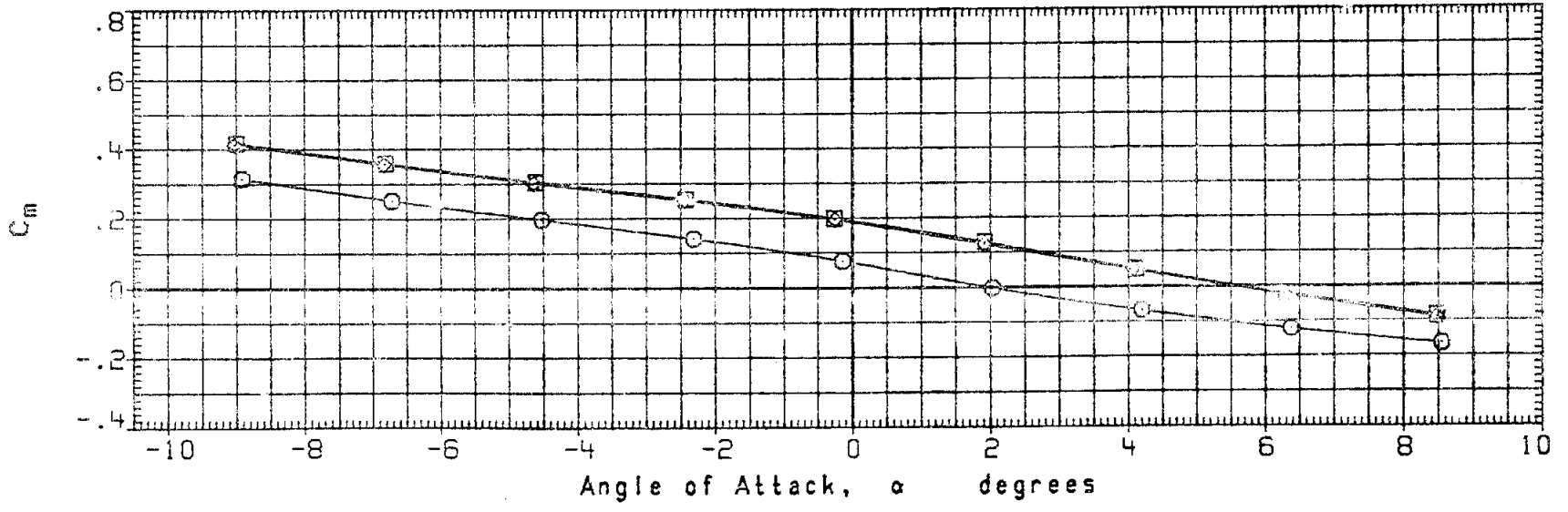


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

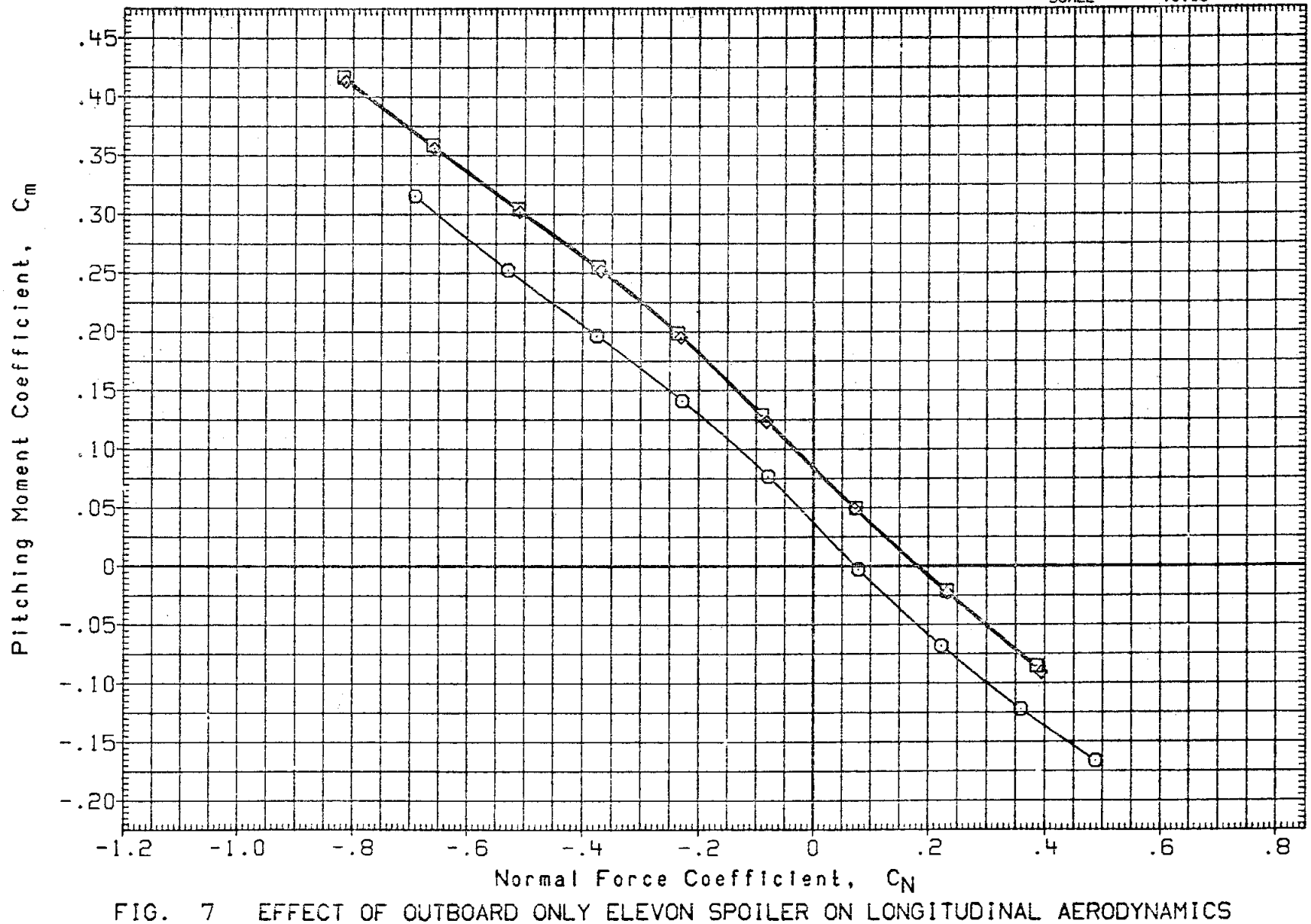


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2590.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

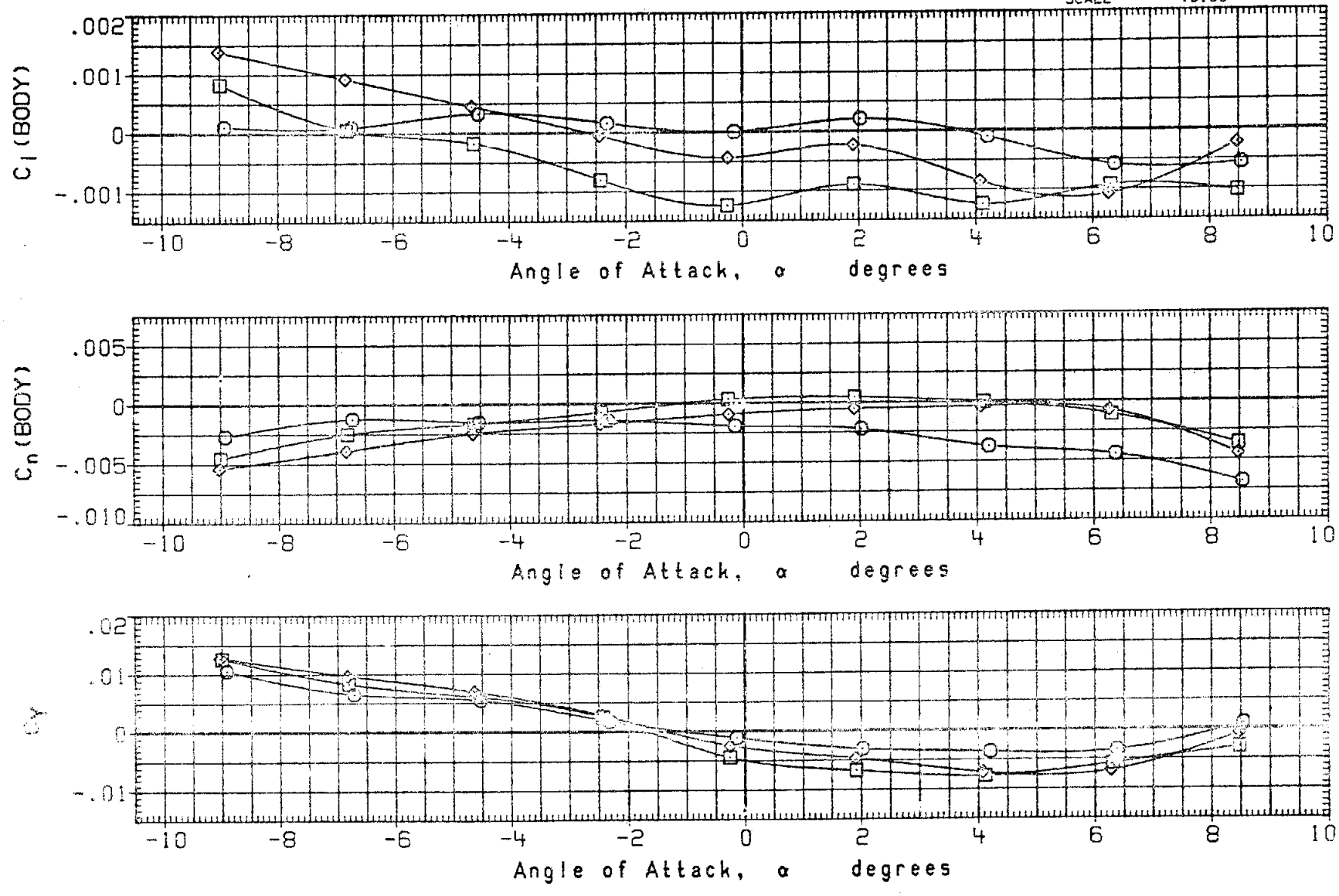


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

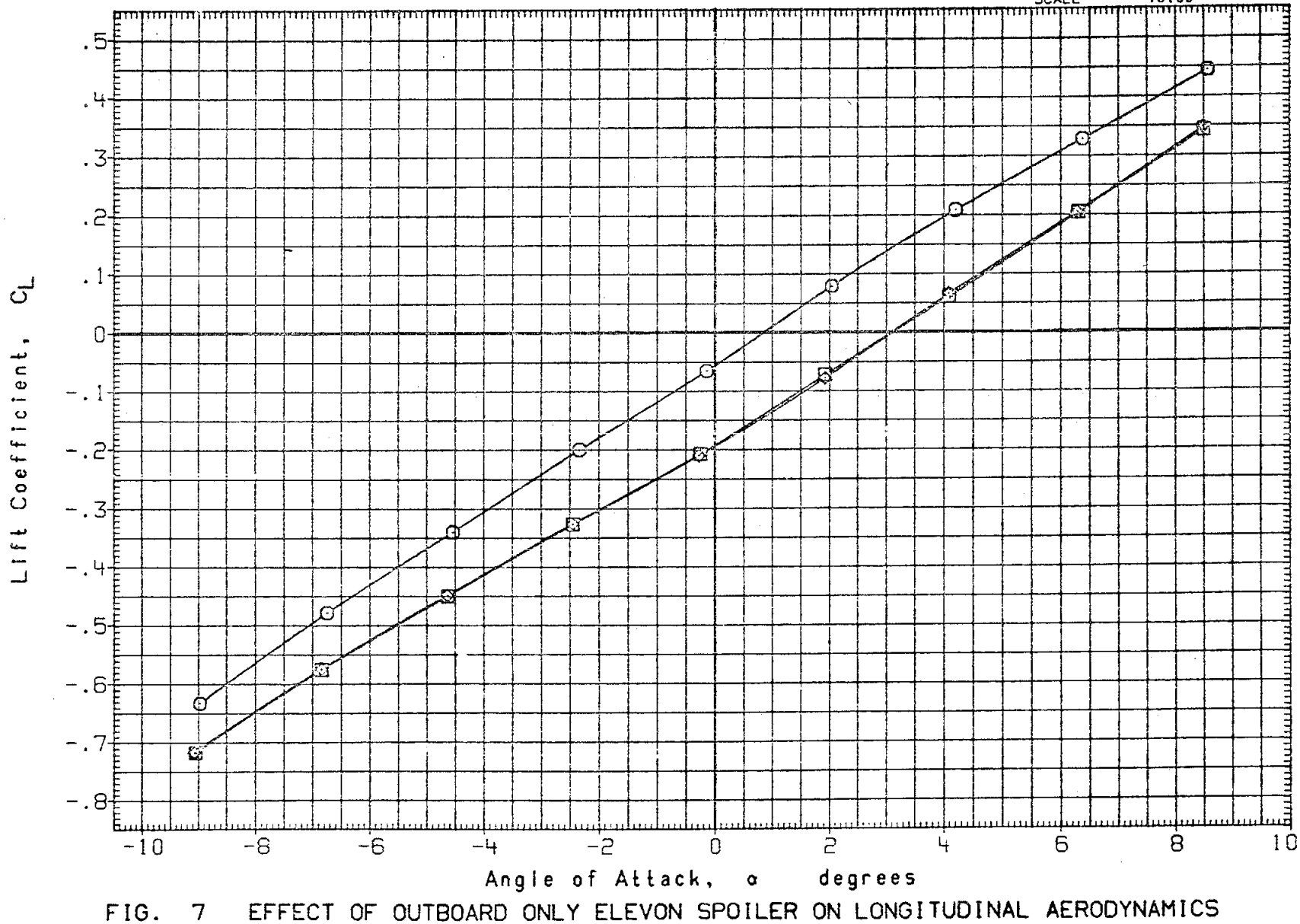


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

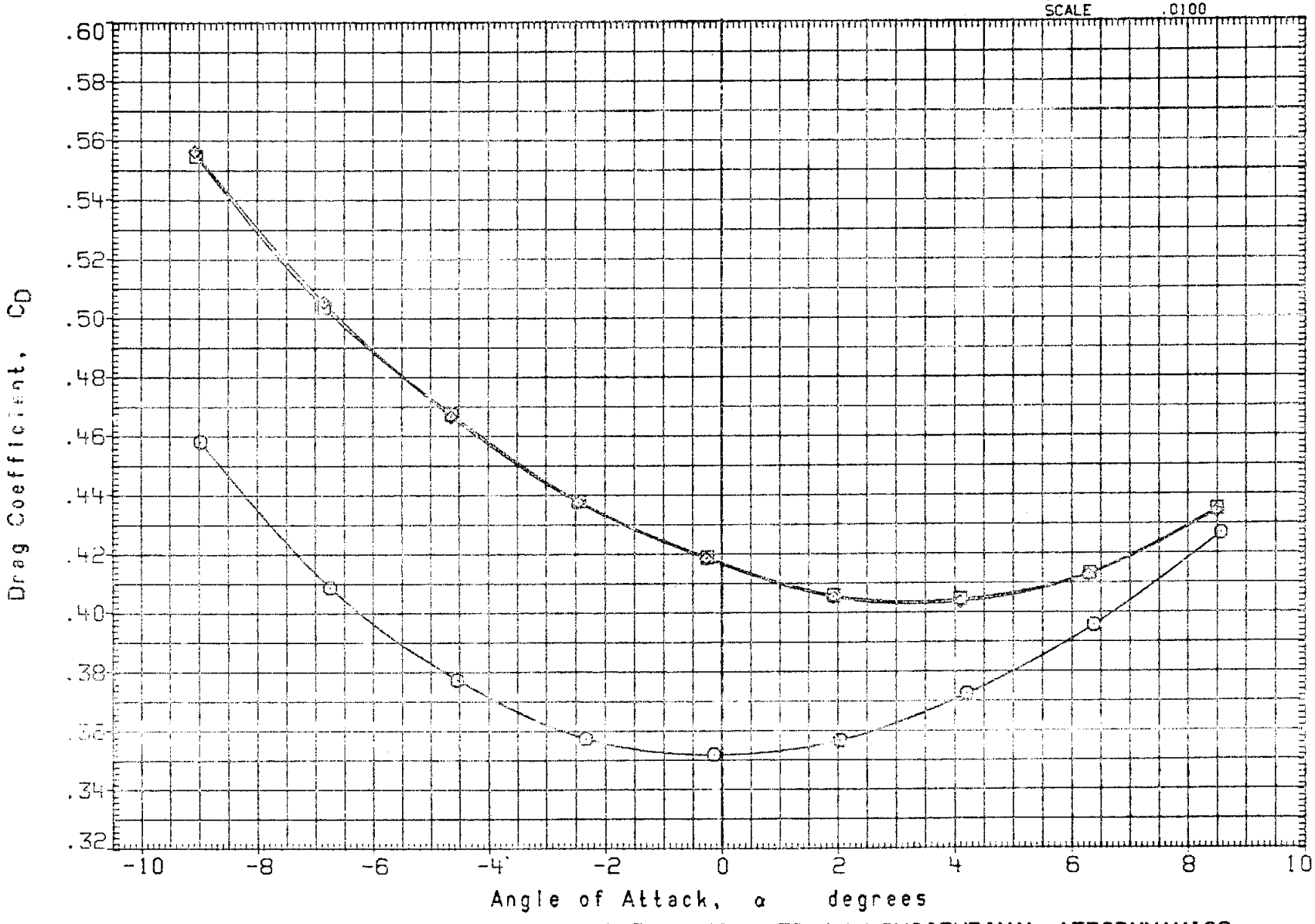


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

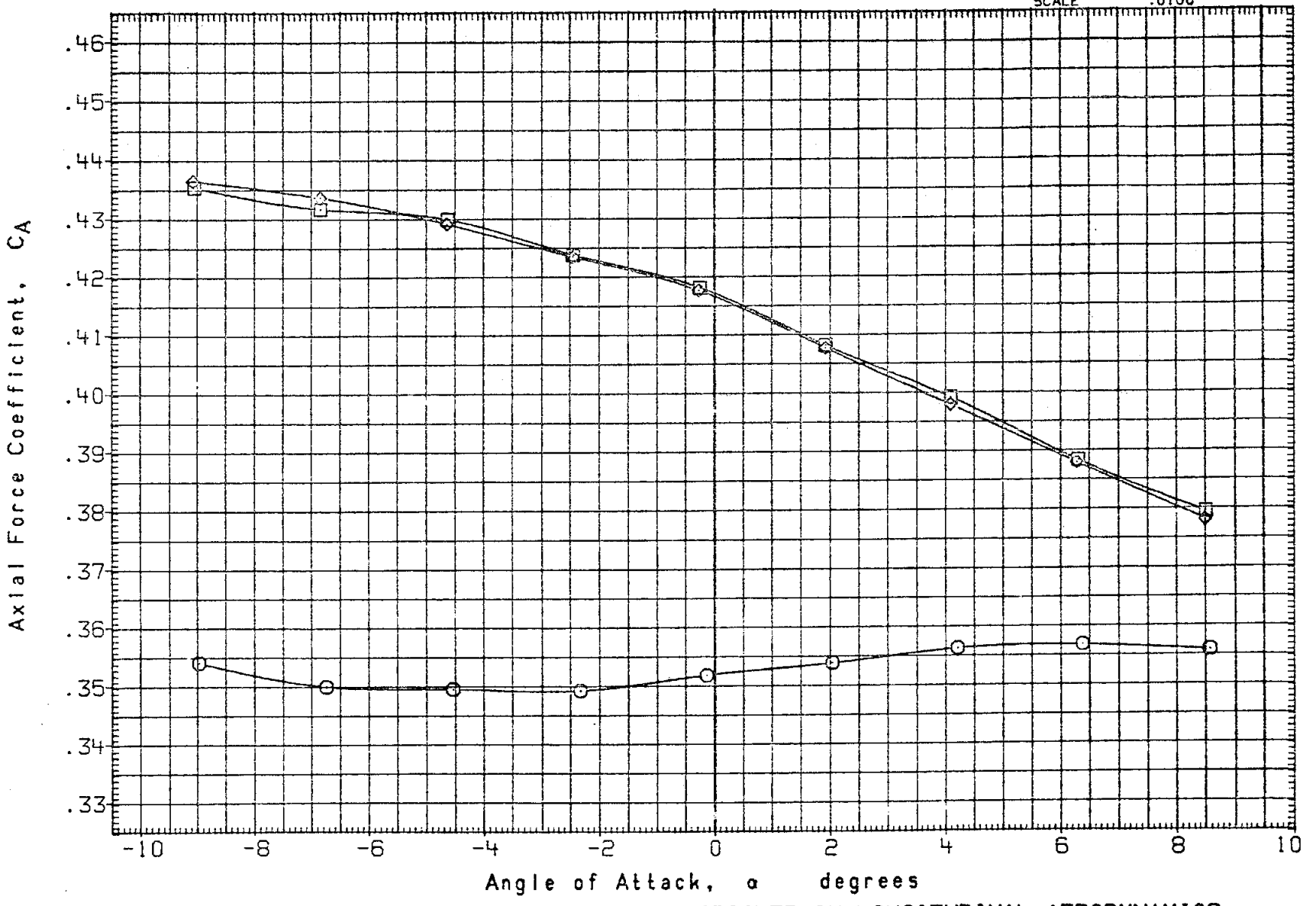


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

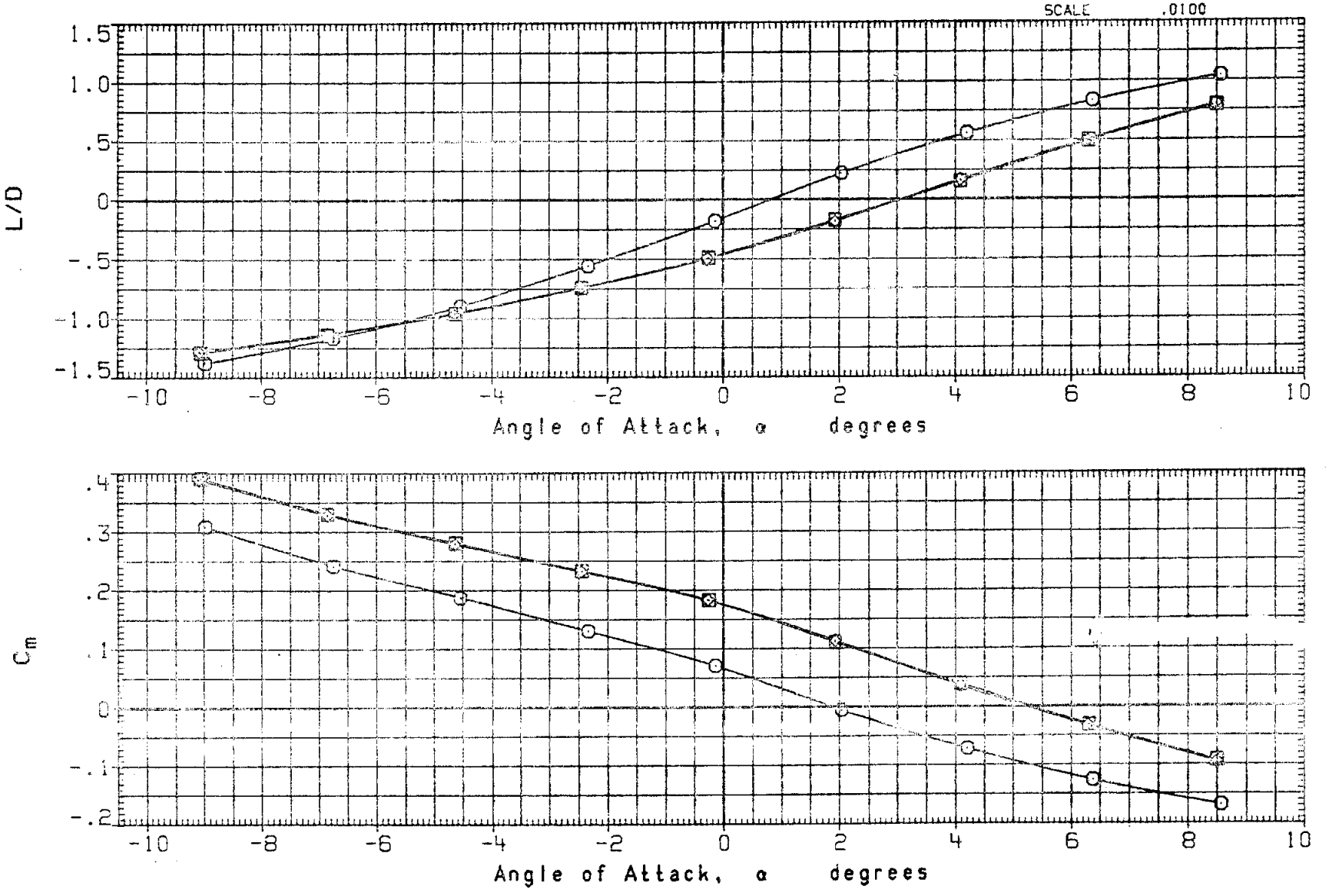


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

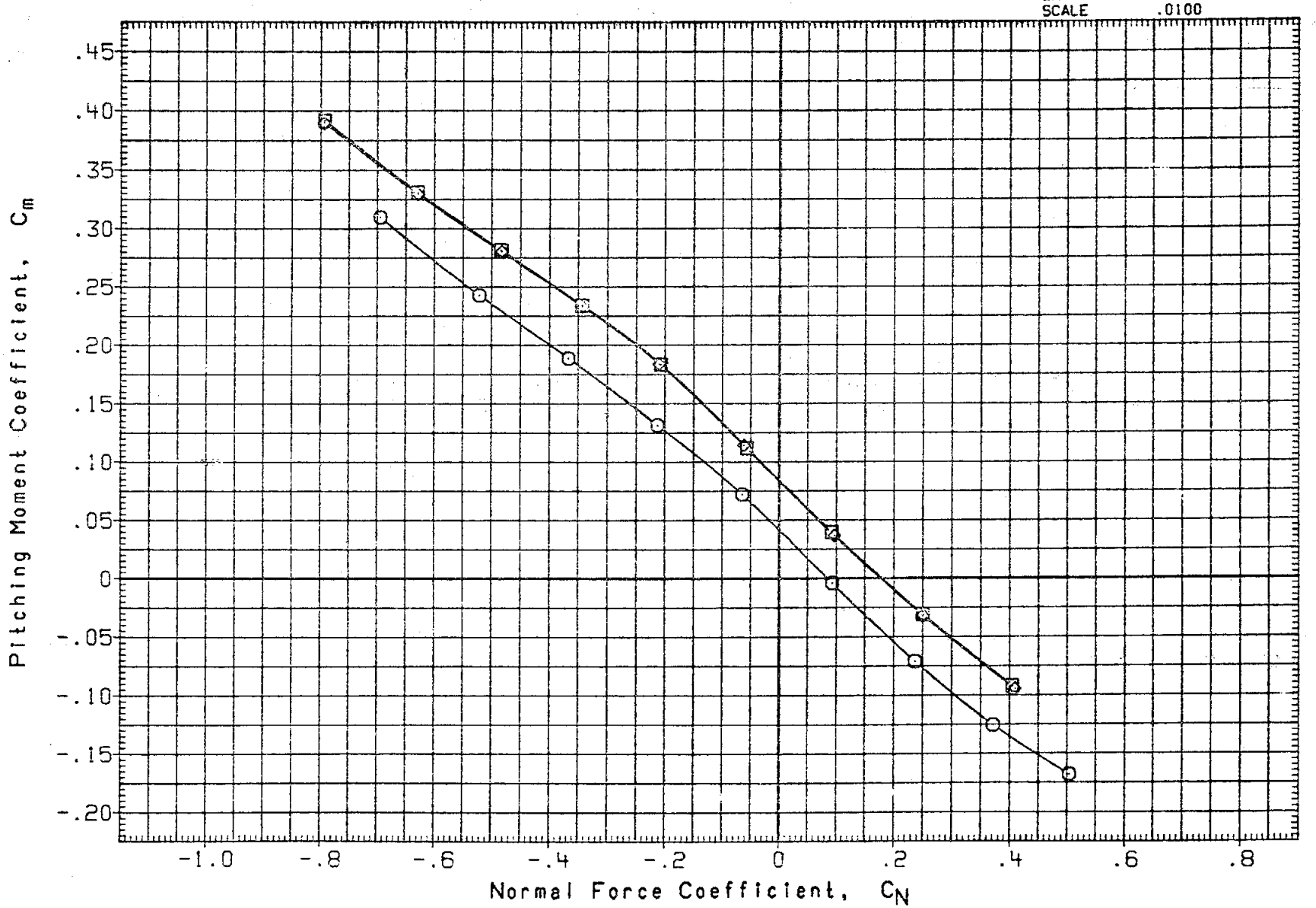


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

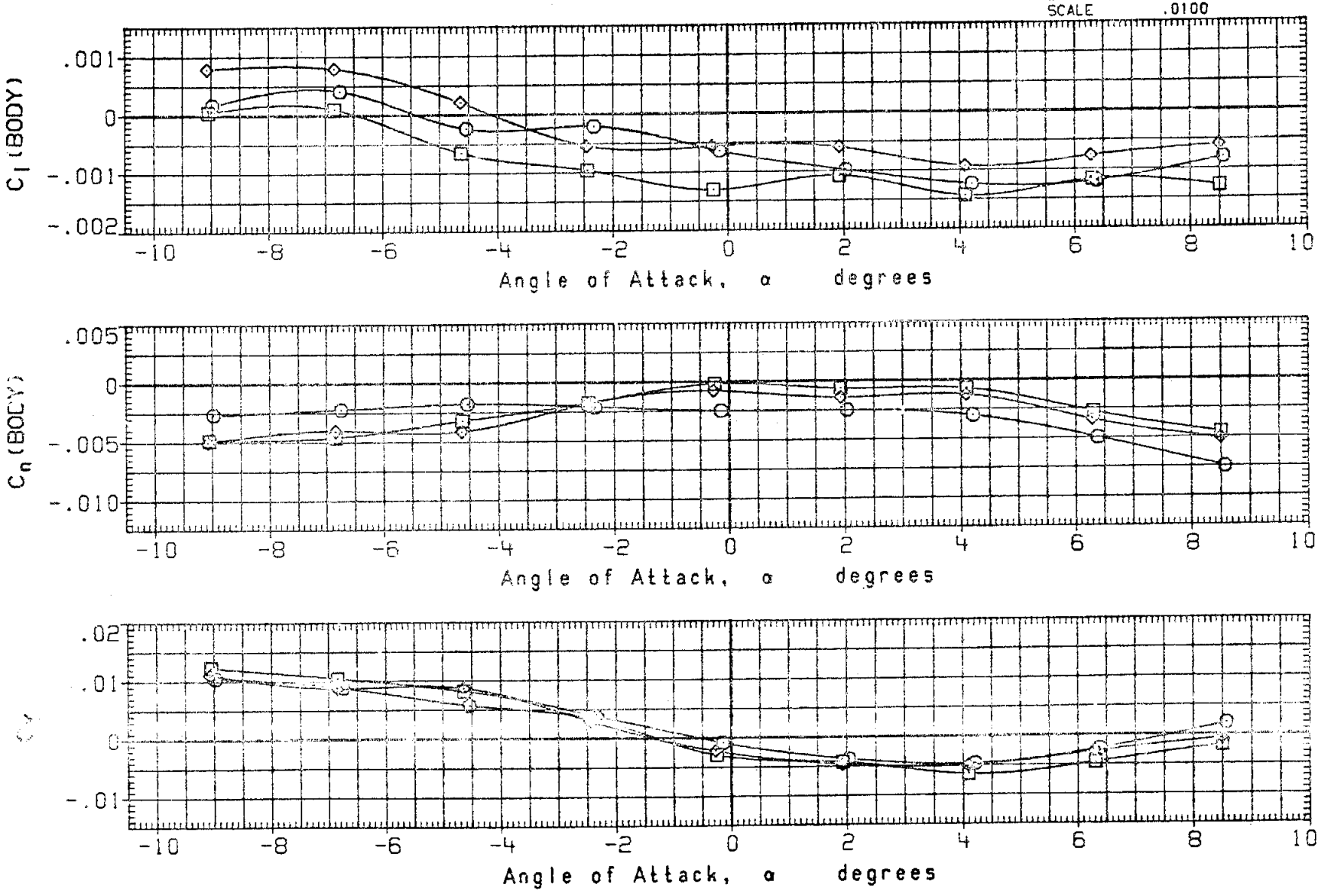


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	BETA	IBOESP	OBOESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

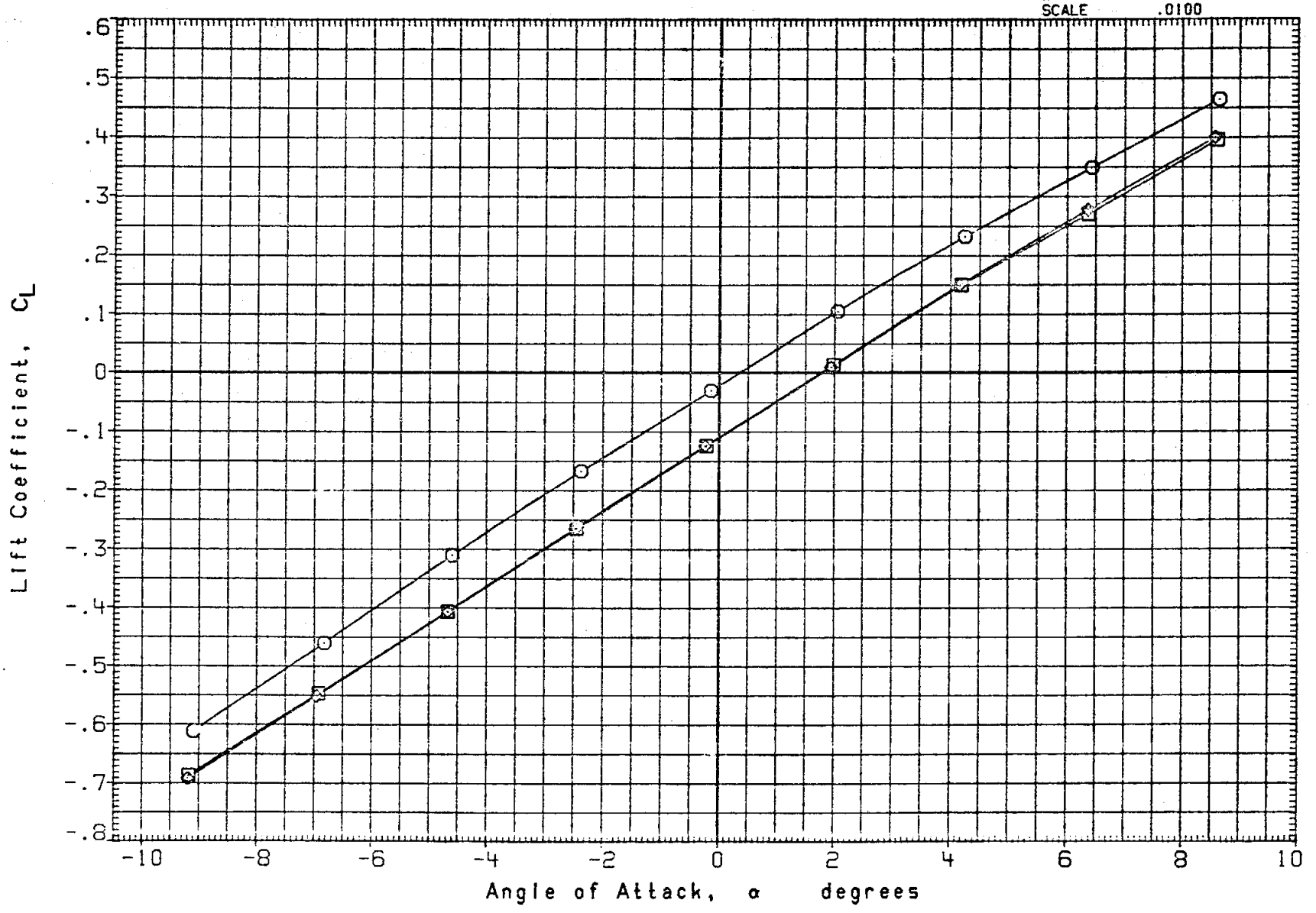


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

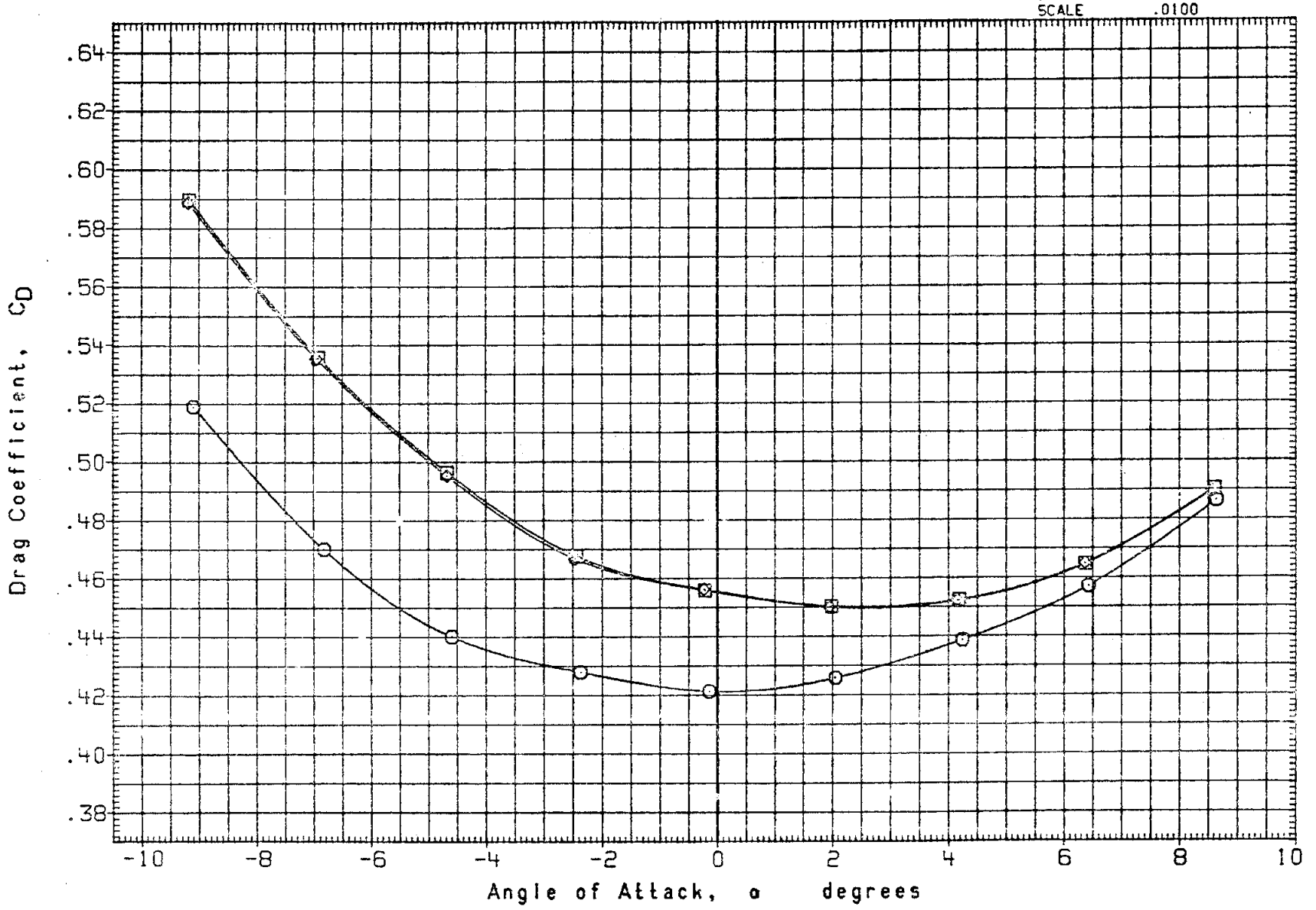


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

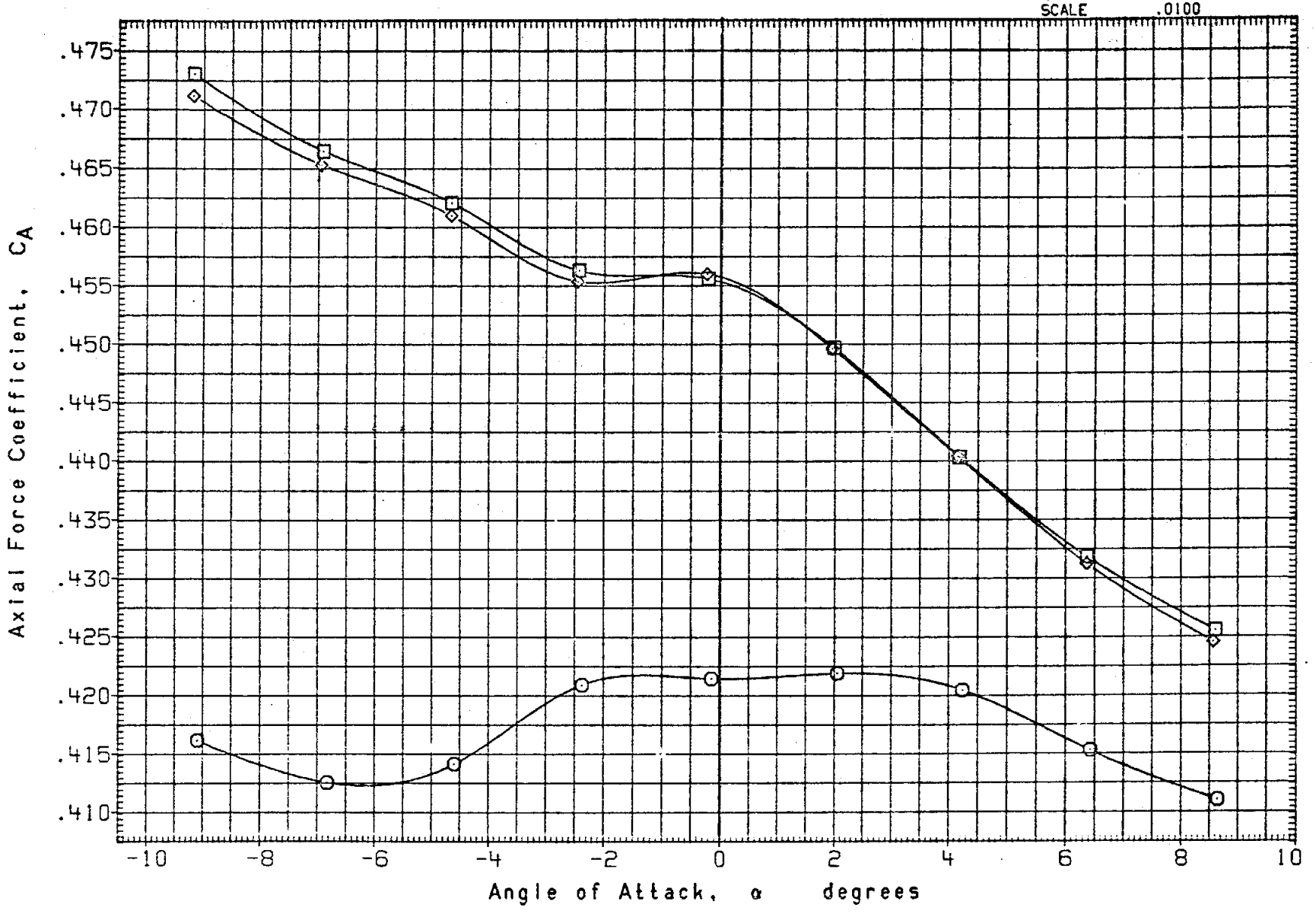


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

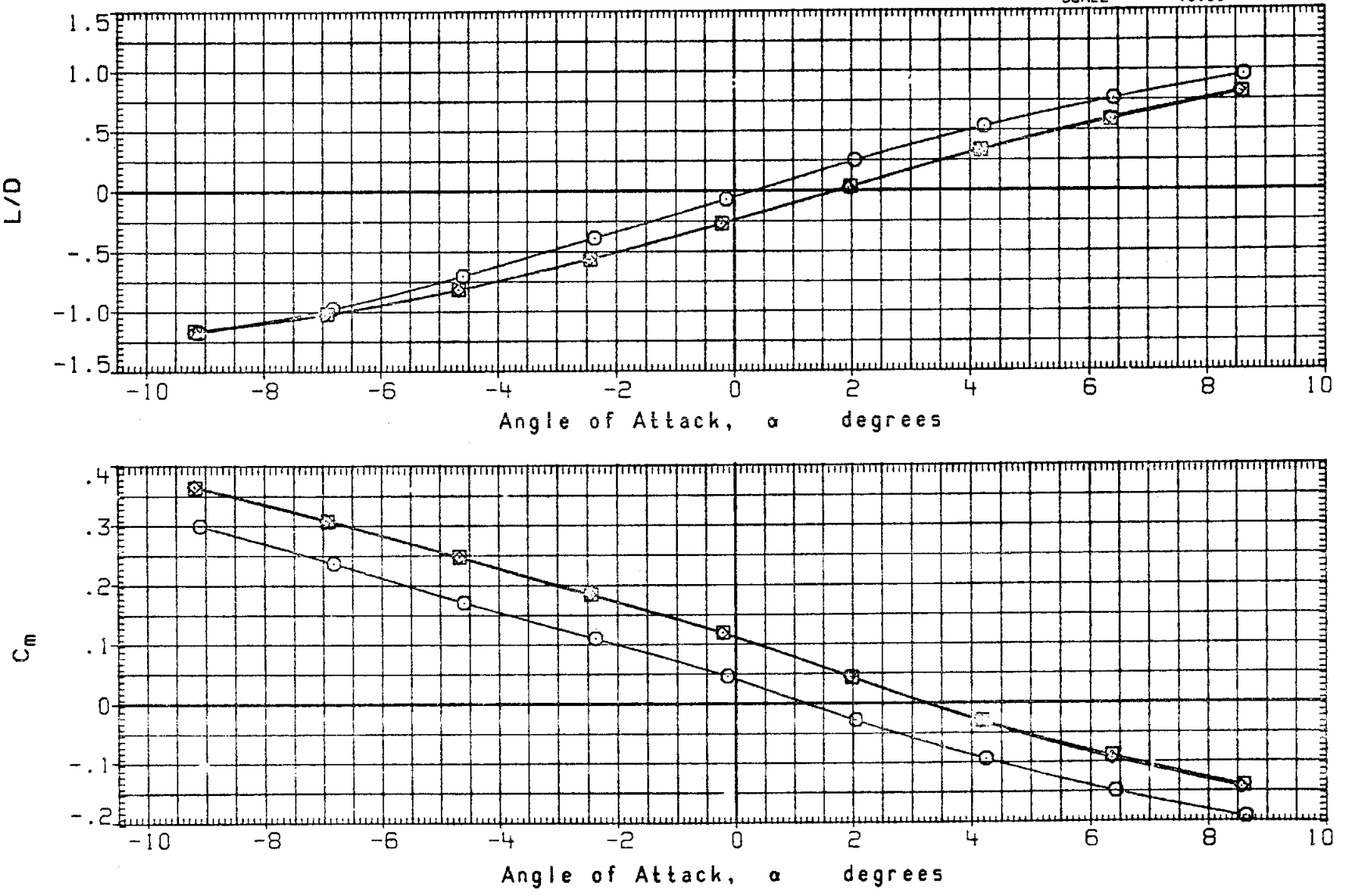


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

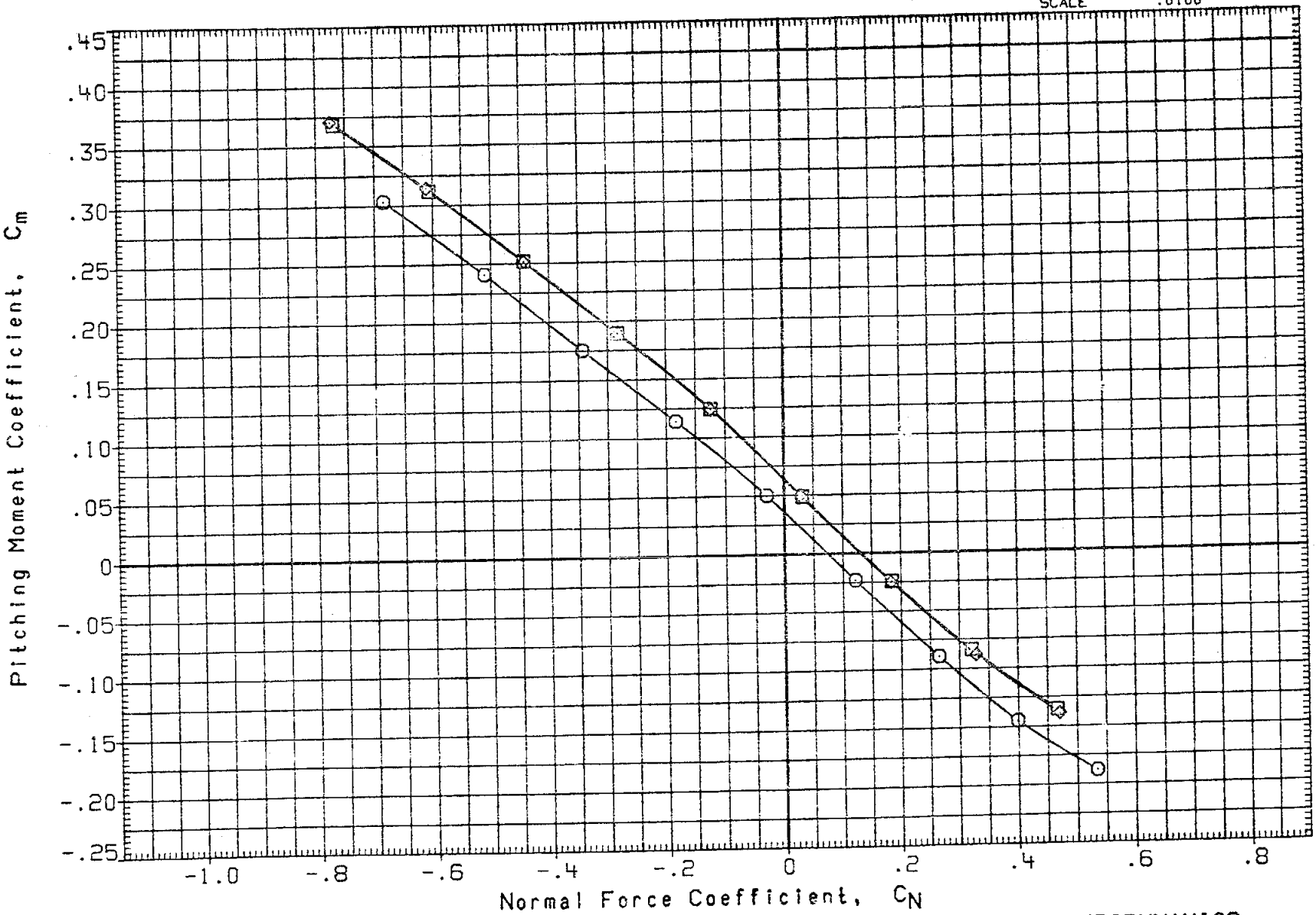


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(L)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	-

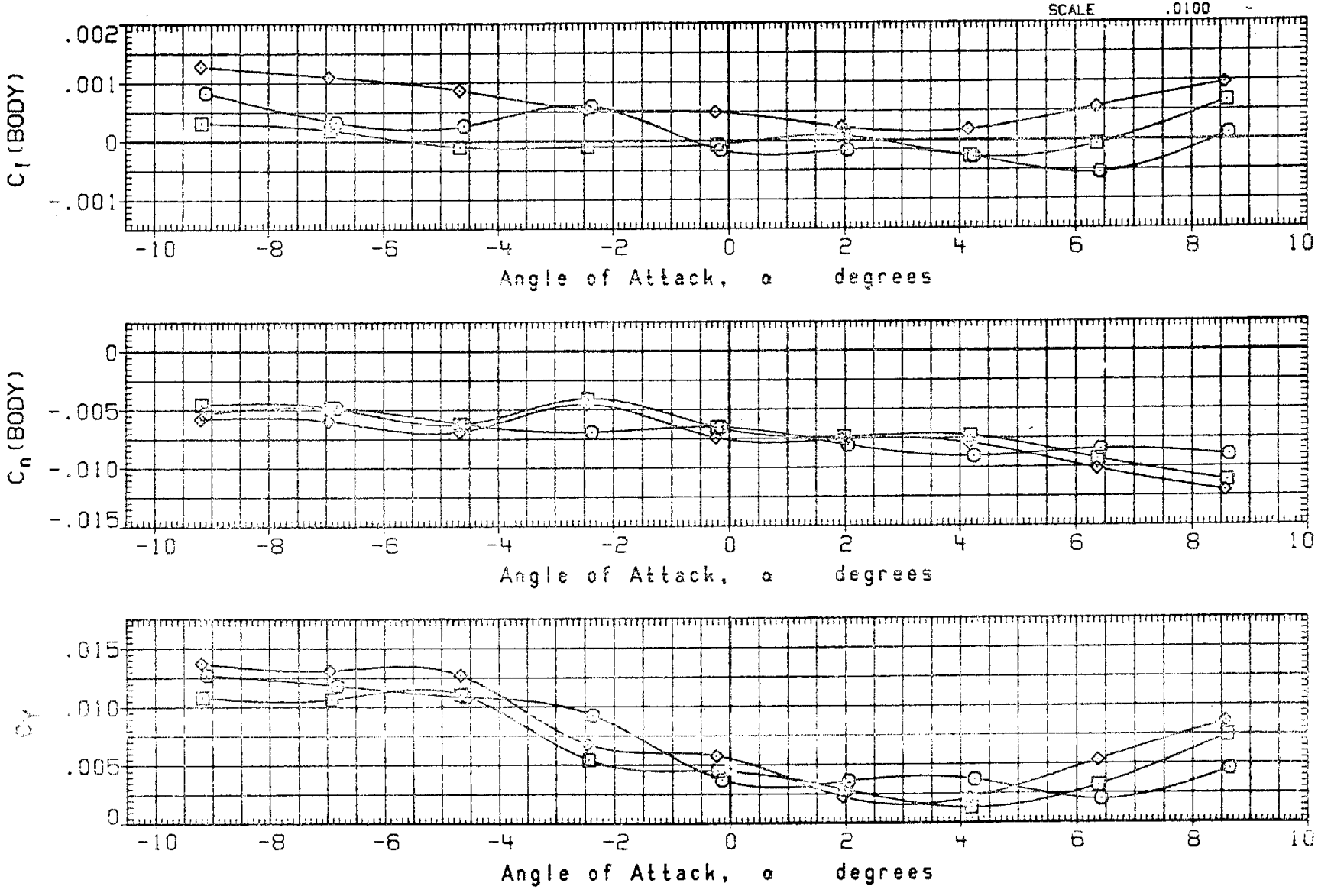


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

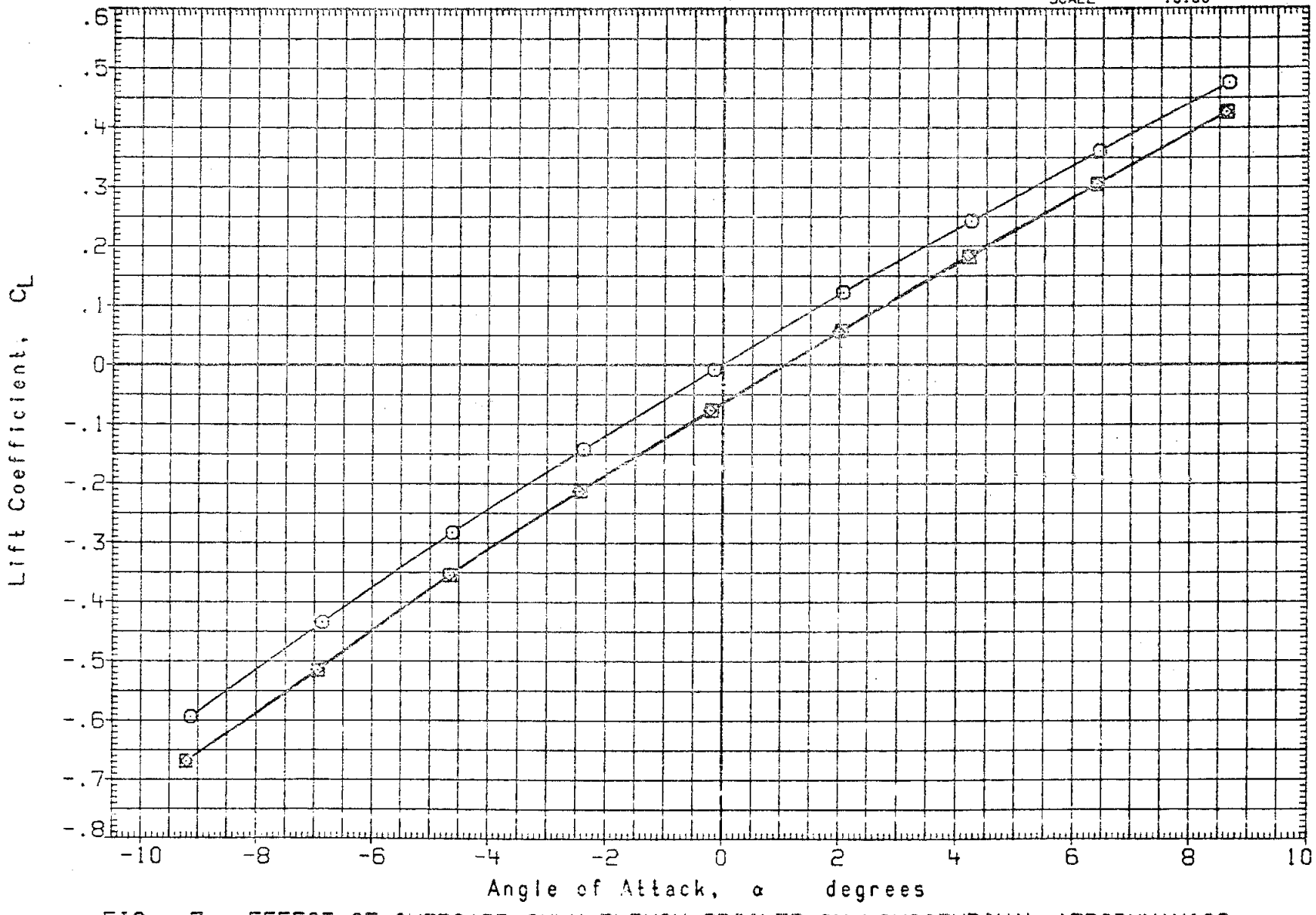


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

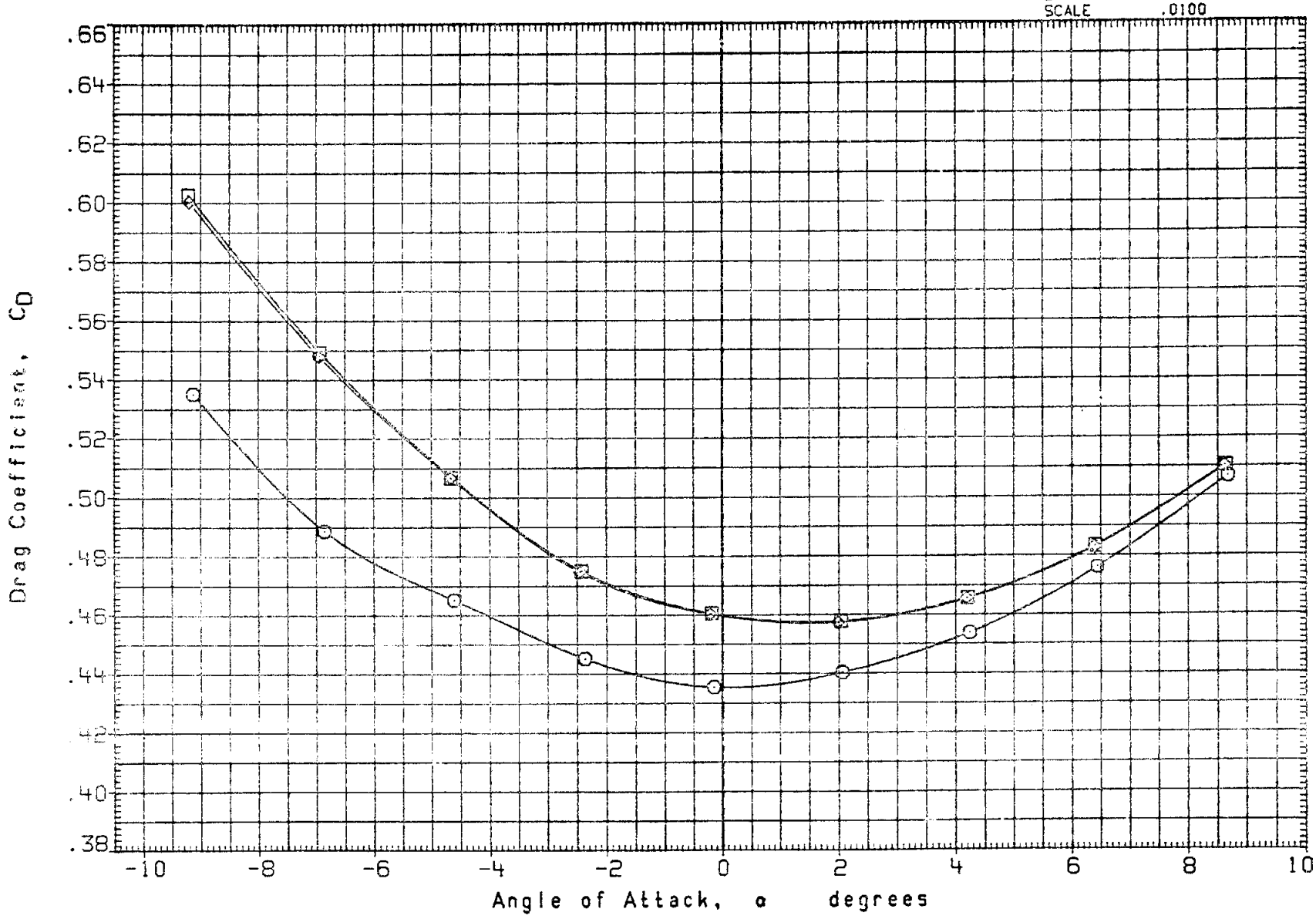


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

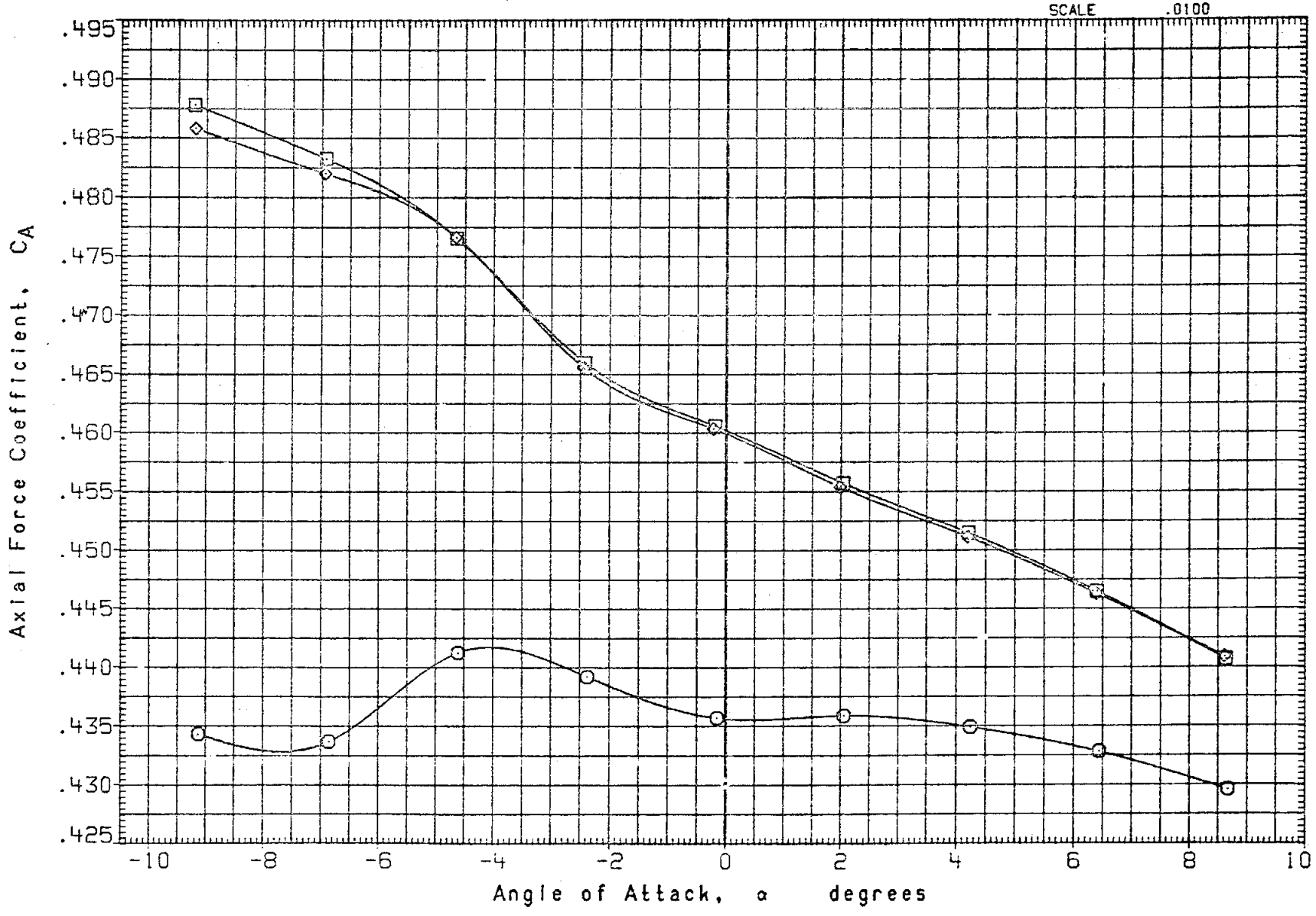


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

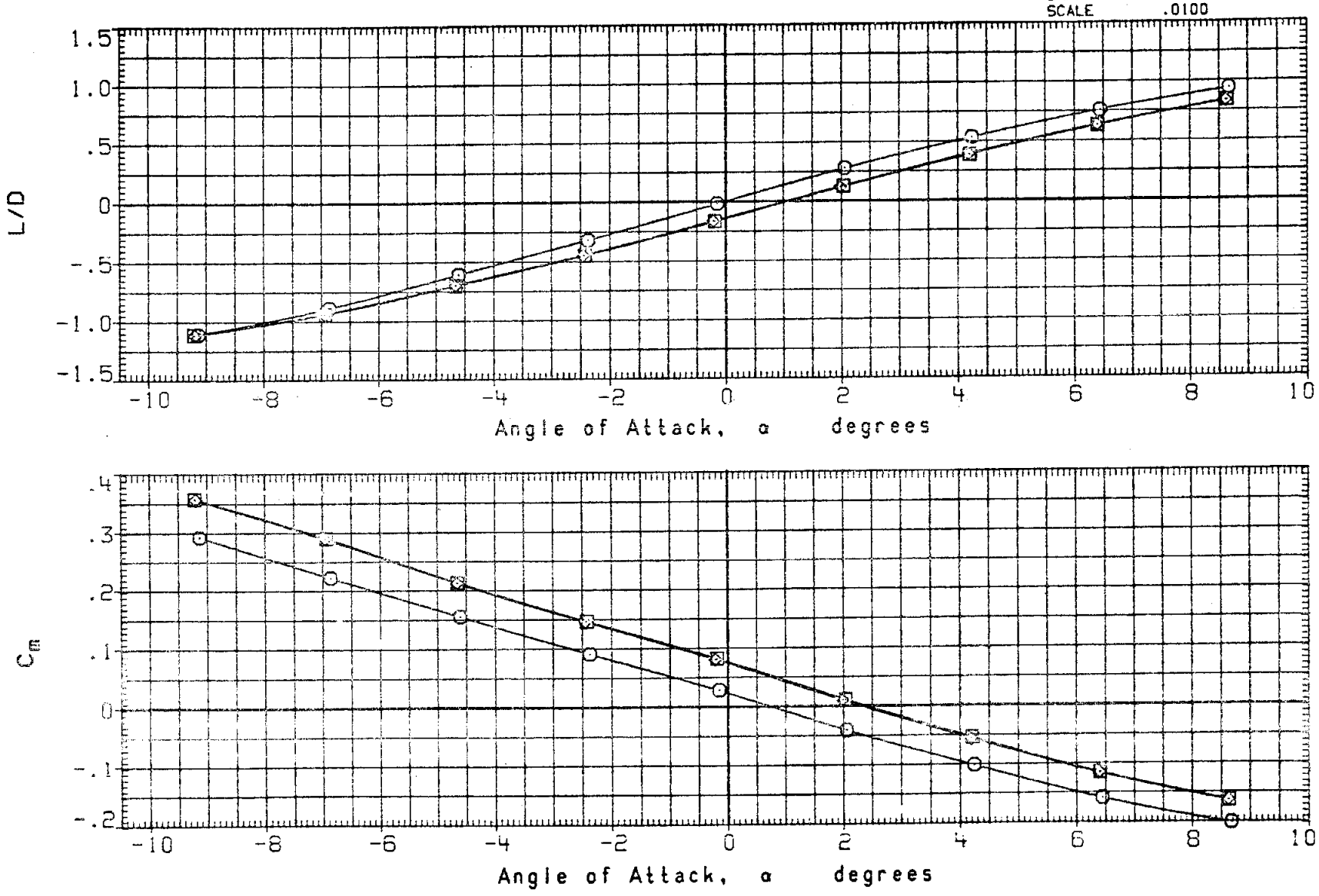


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

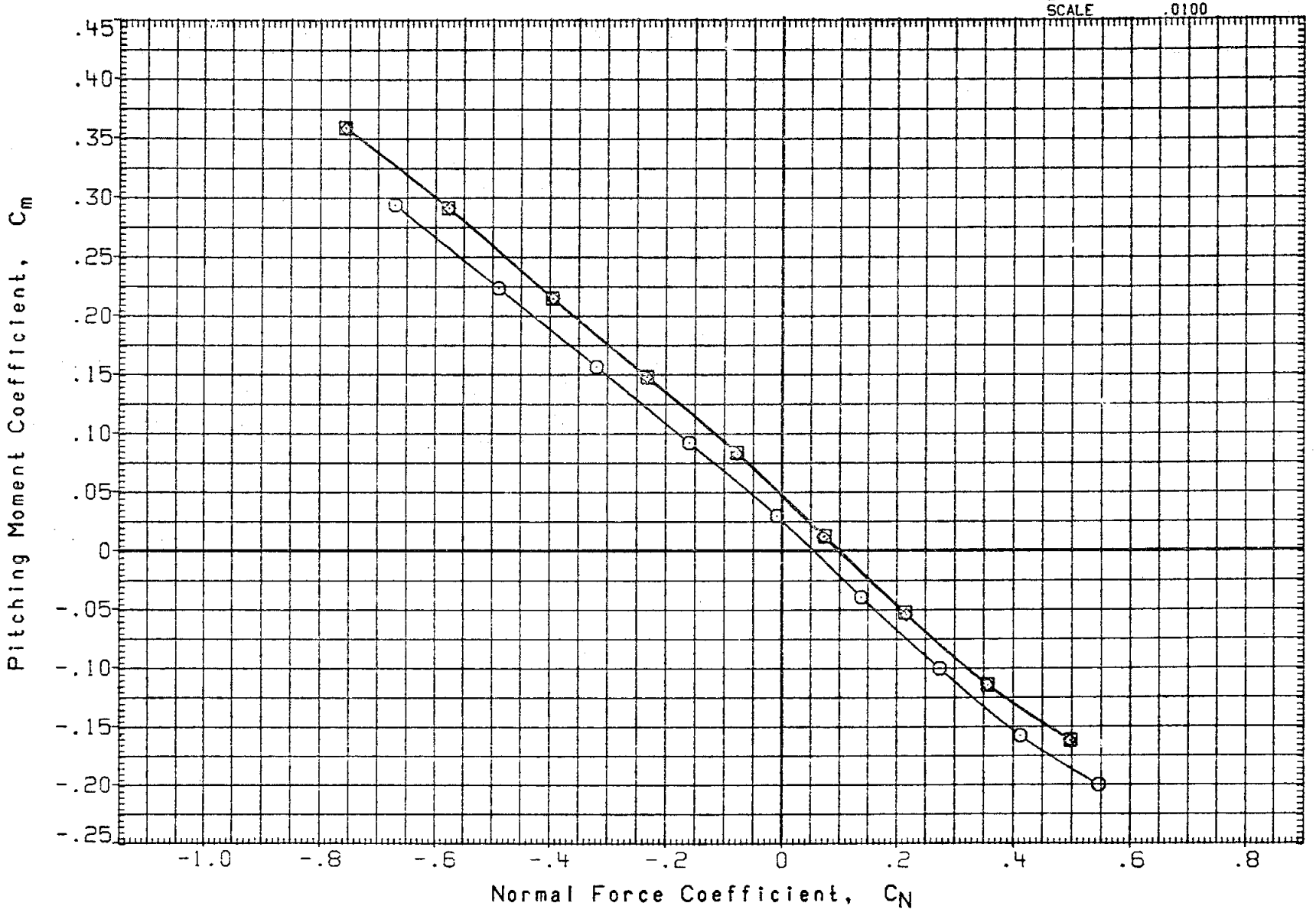


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	BETA	IBDESP	OBDESP
AHZ010	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	.000	.000
AHZ011	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3	.000	40.000	40.000
AHZ012	◇	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

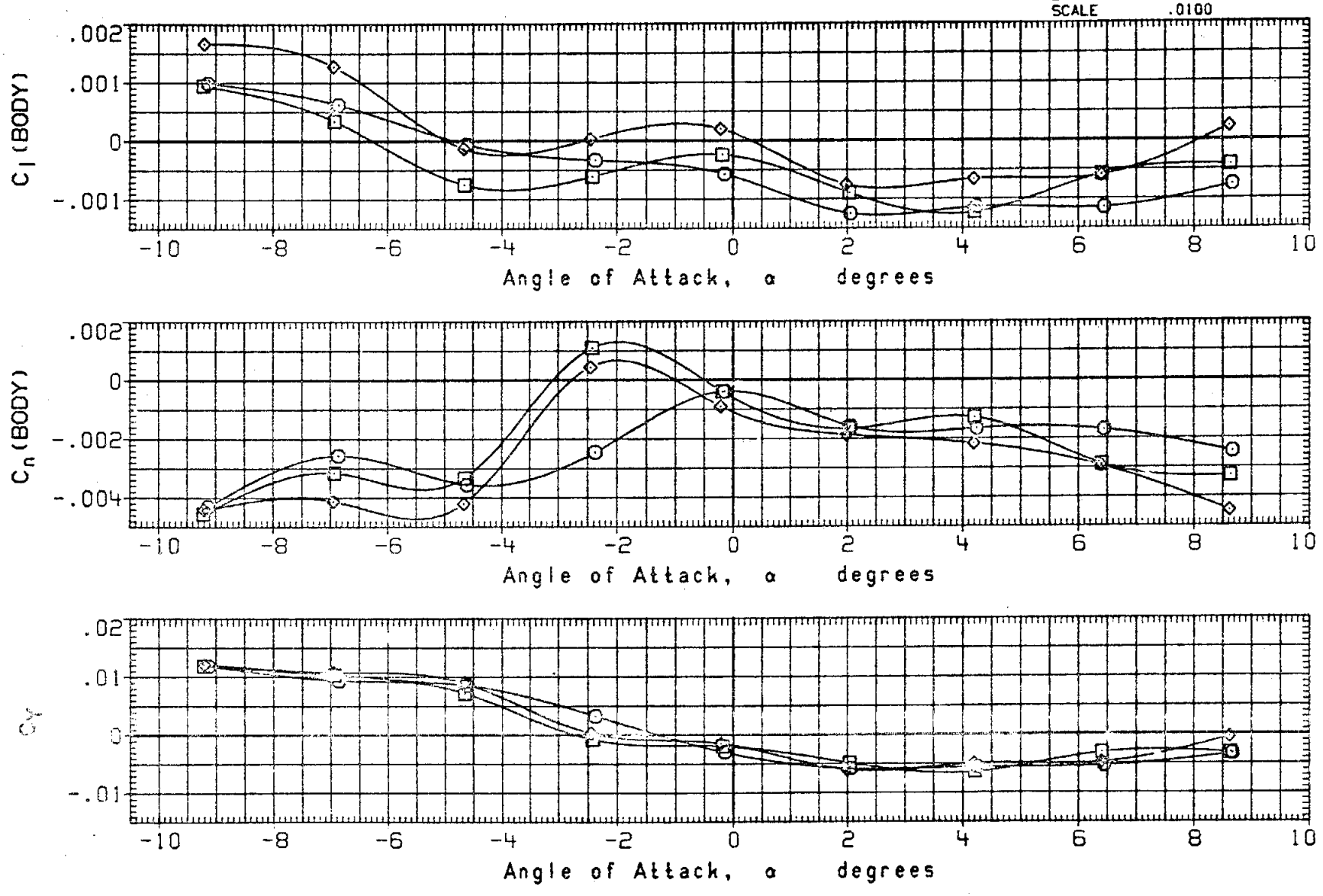


FIG. 7 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LONGITUDINAL AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

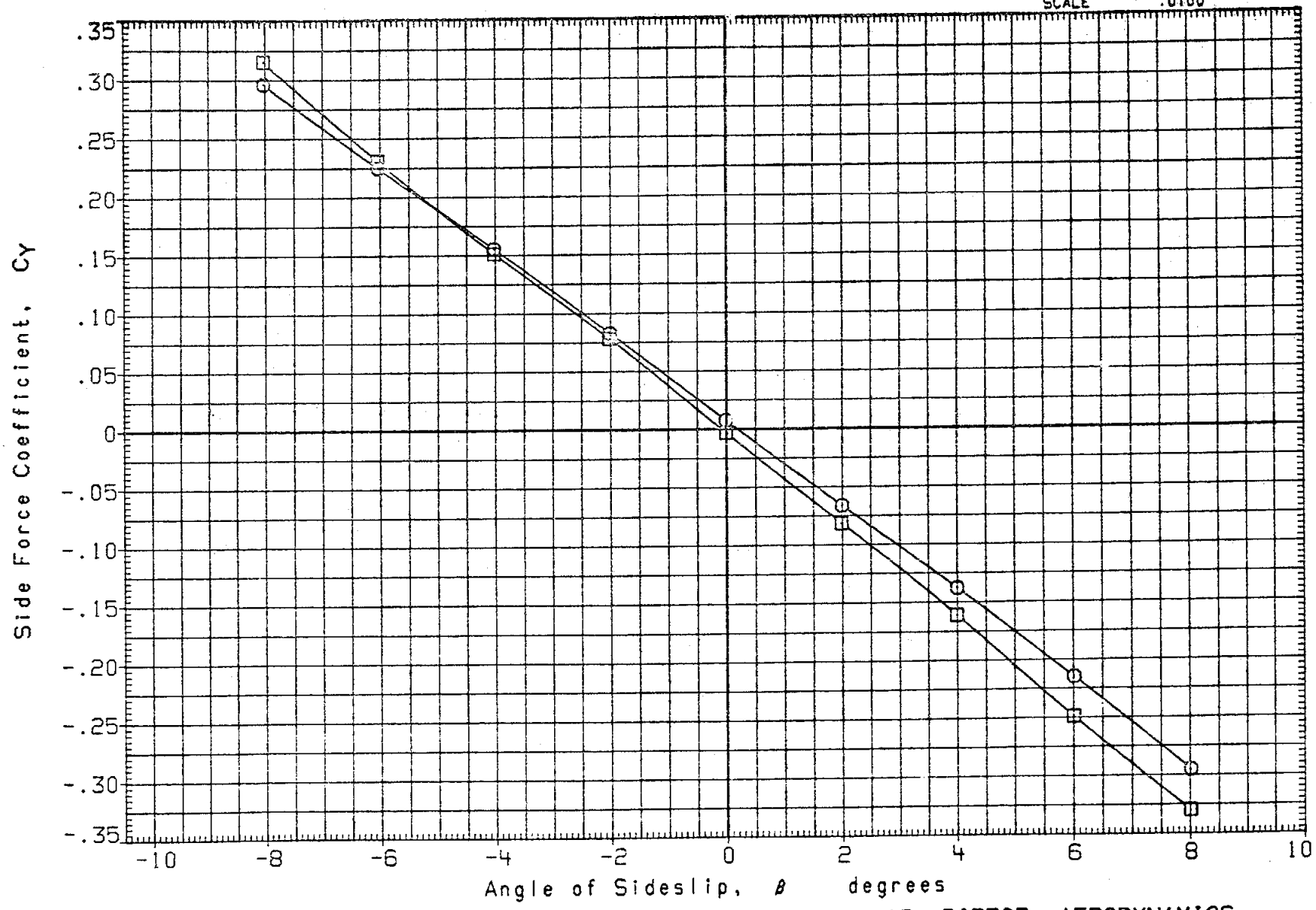


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

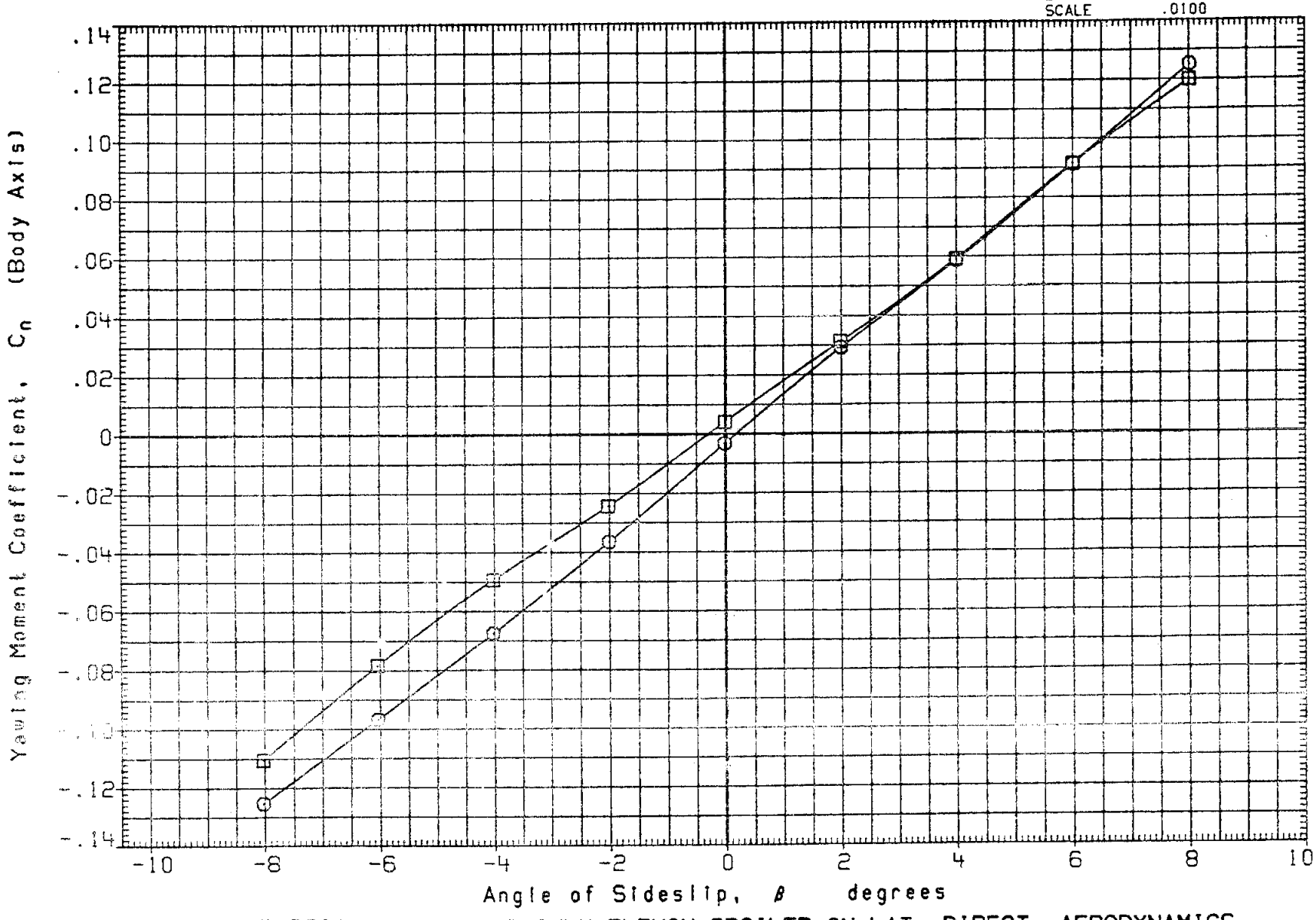


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

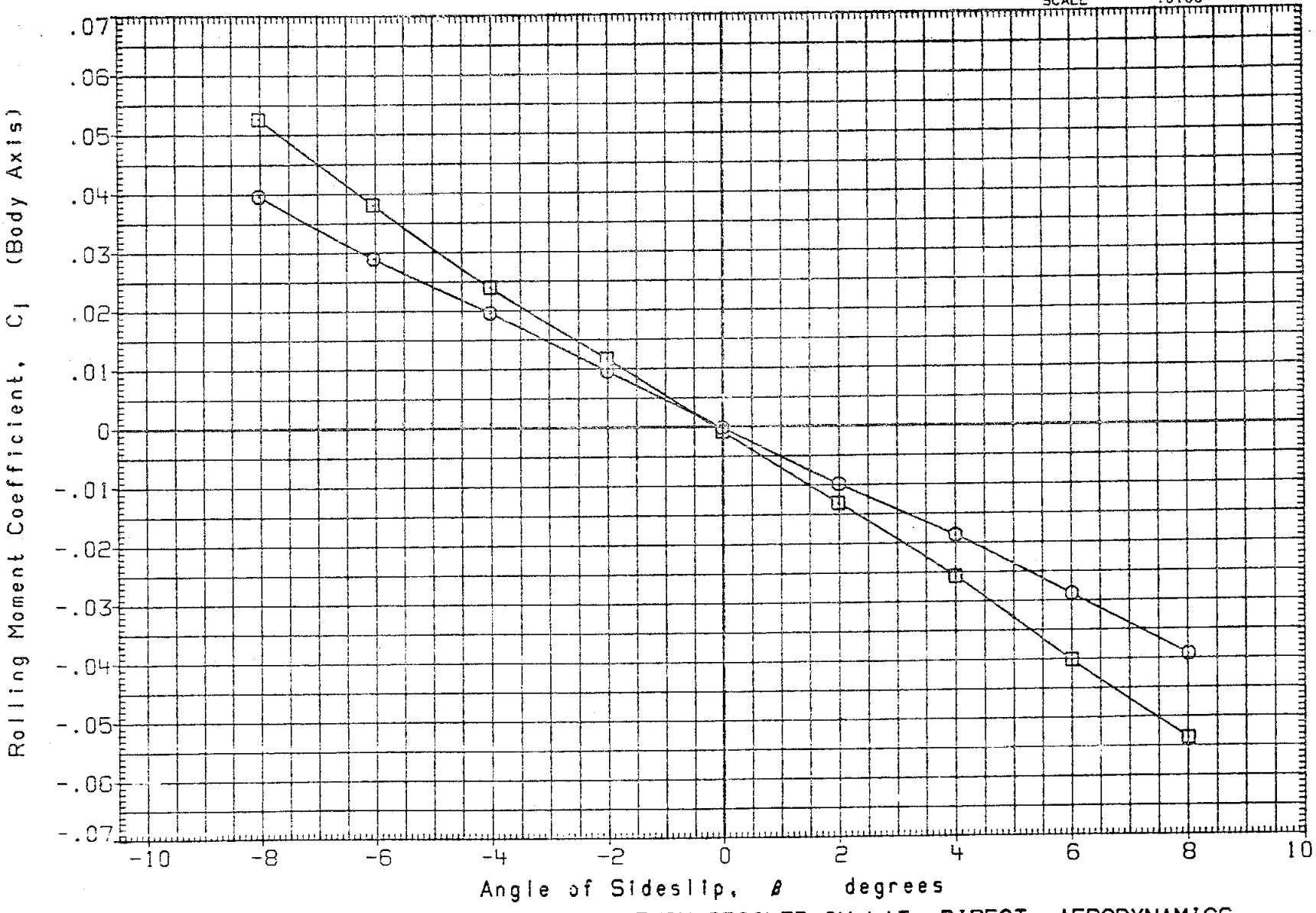


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

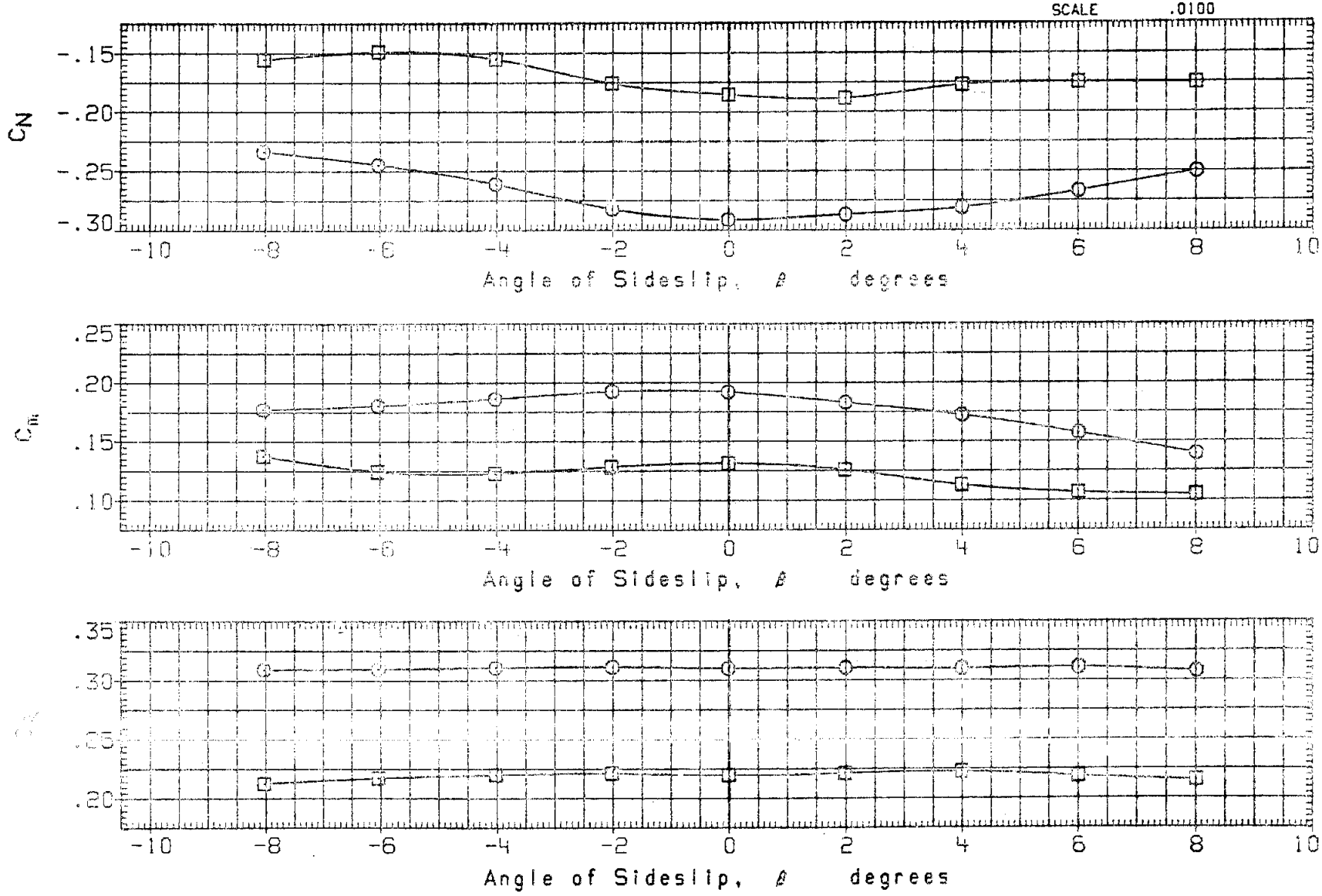


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(A)MACH = .35

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

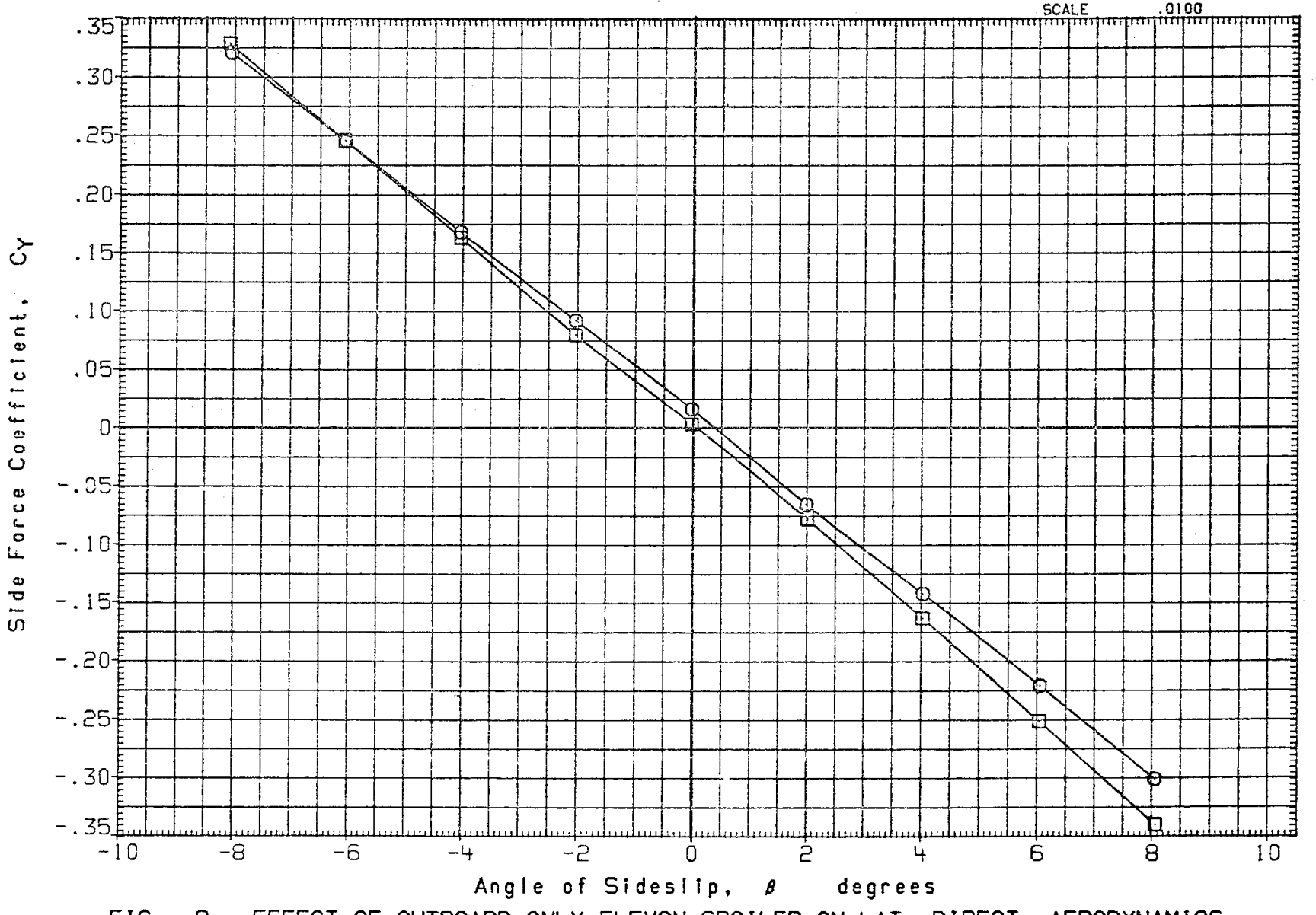


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

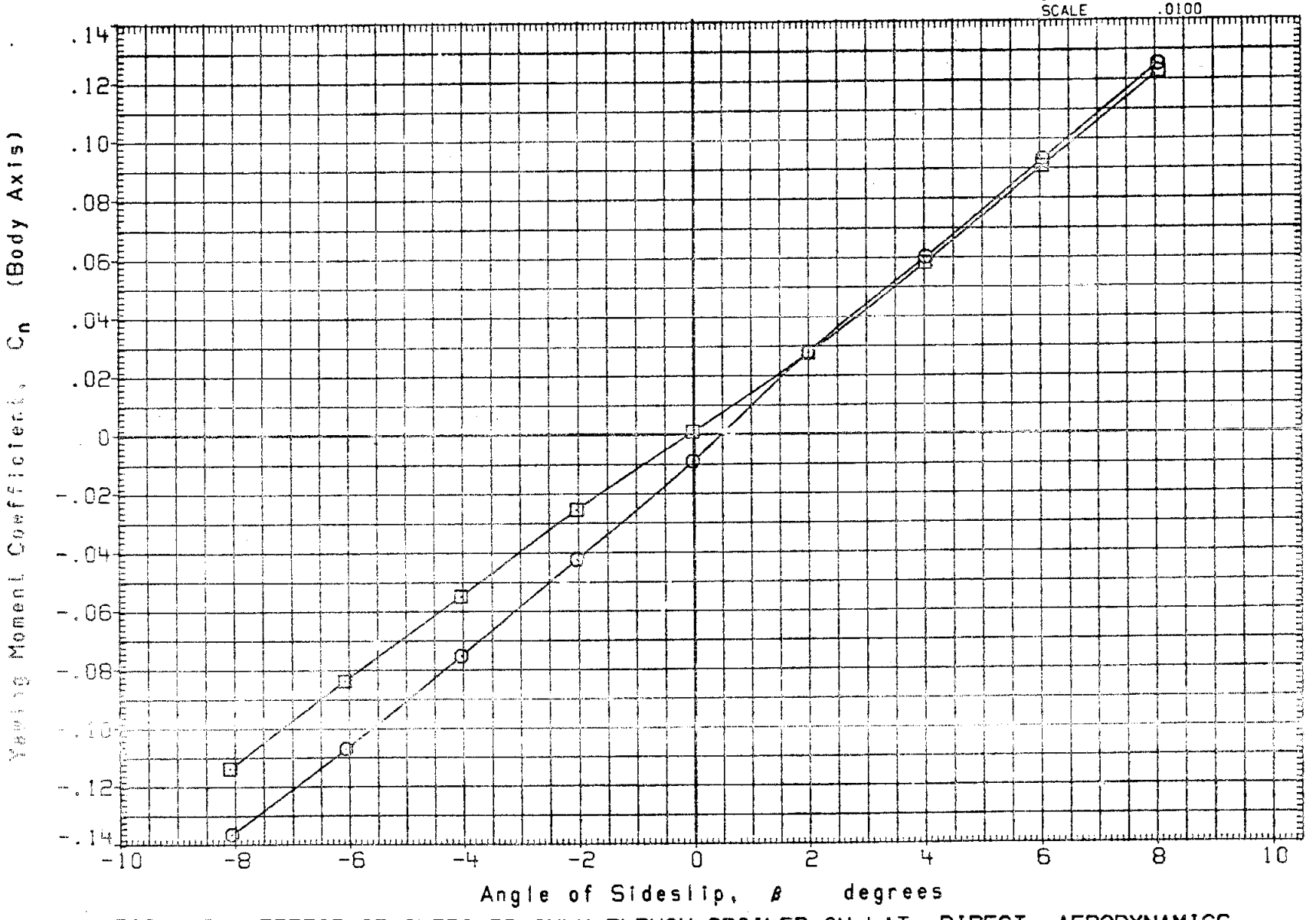


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

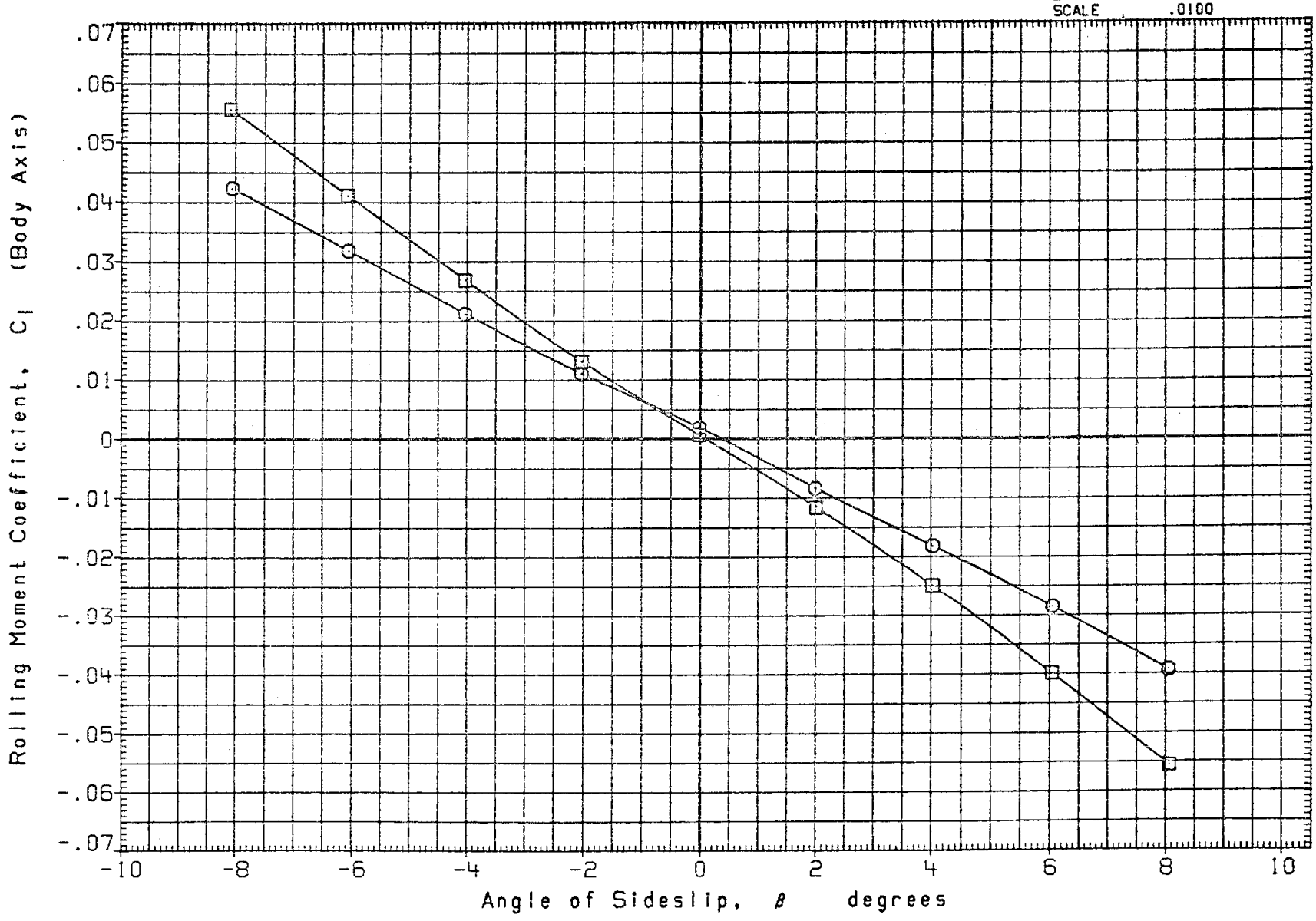


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

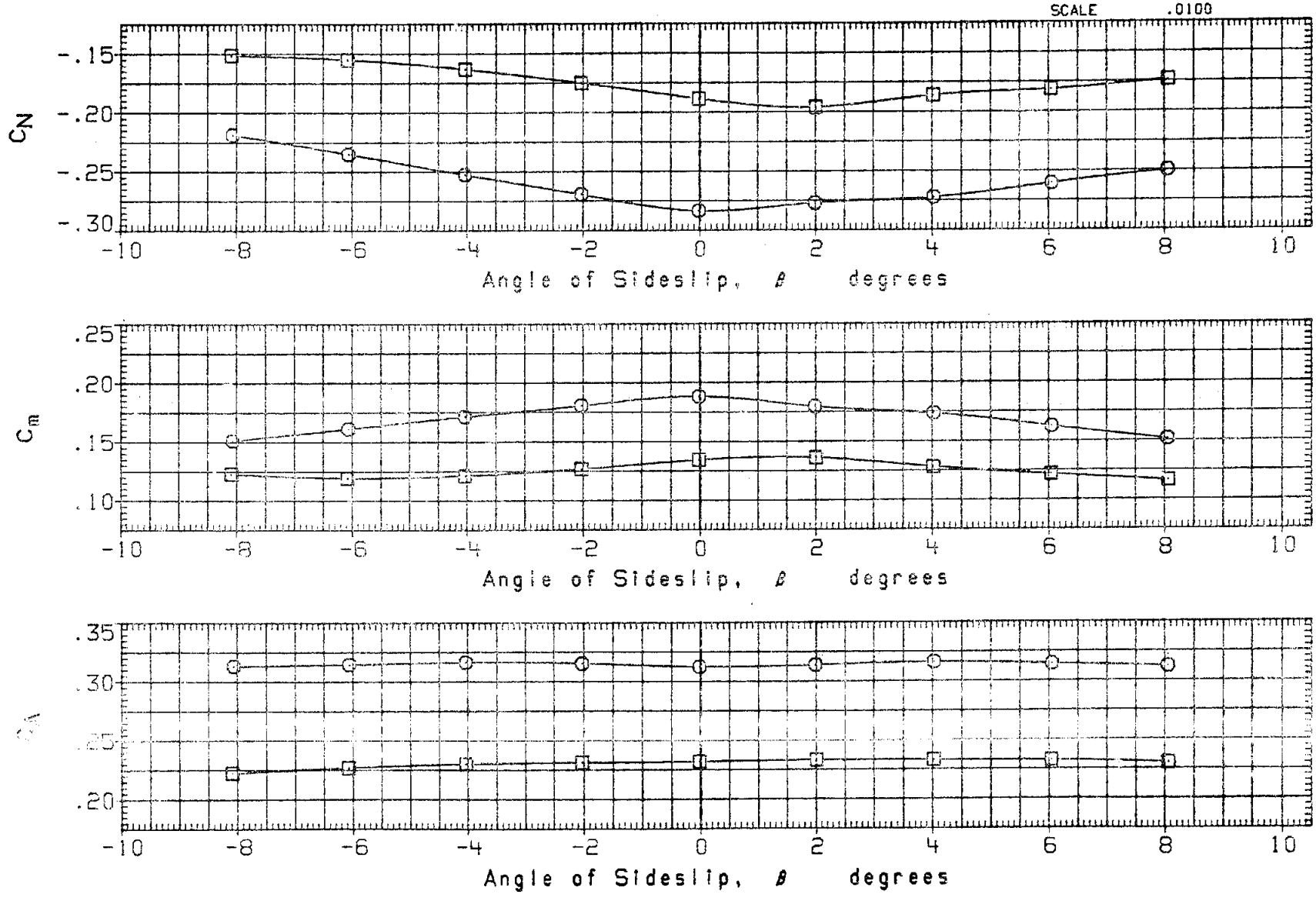


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(B)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

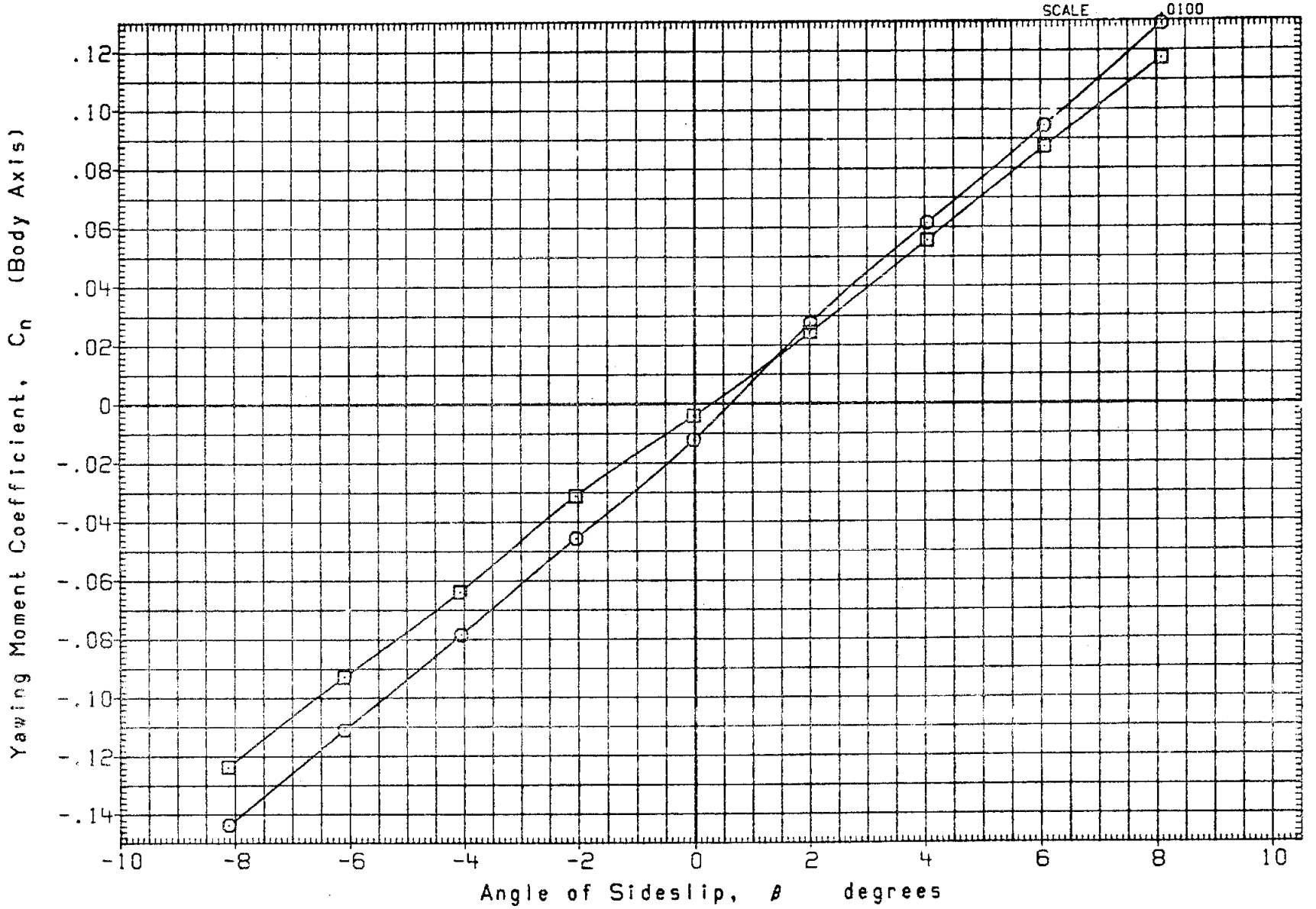


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

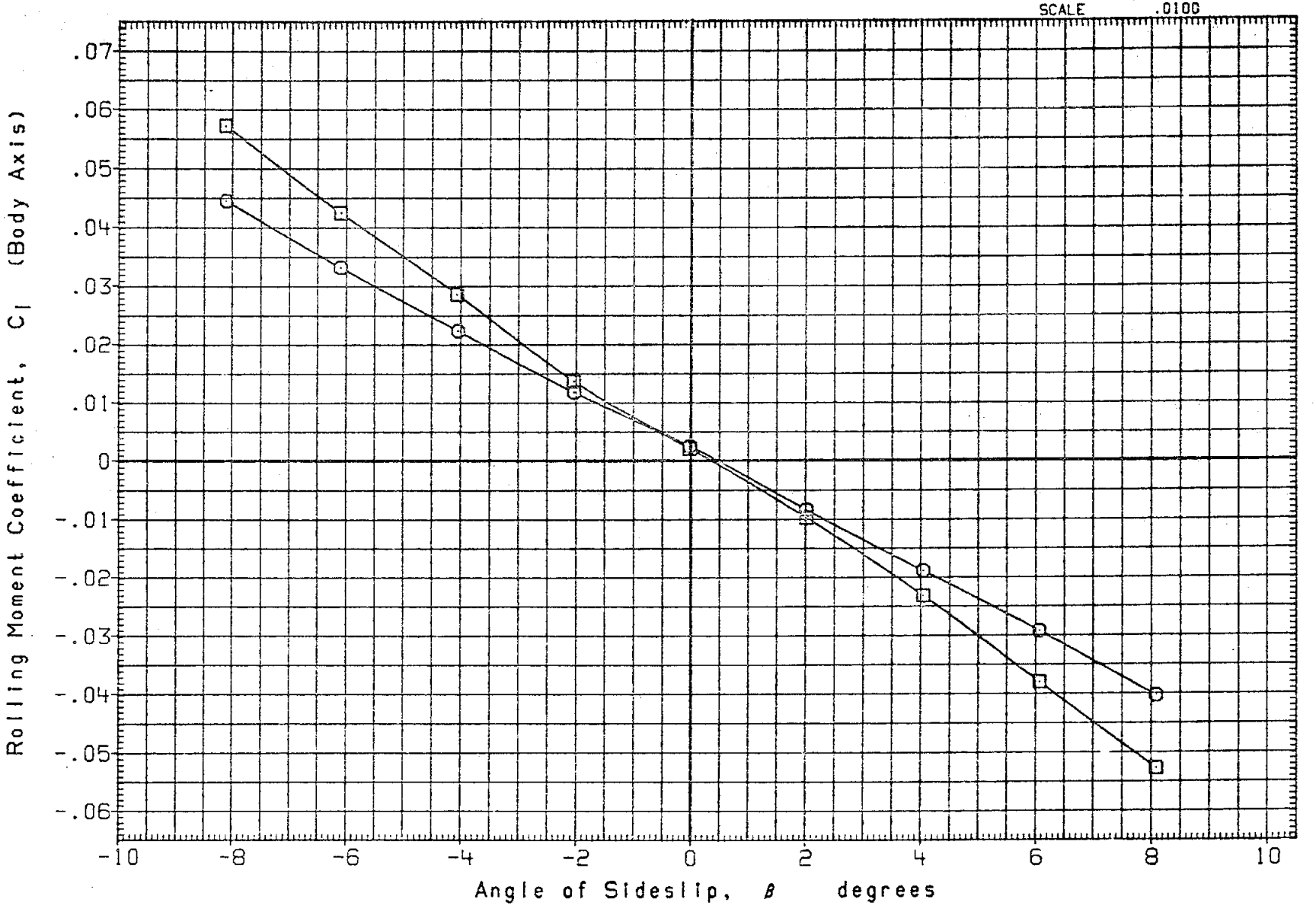


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

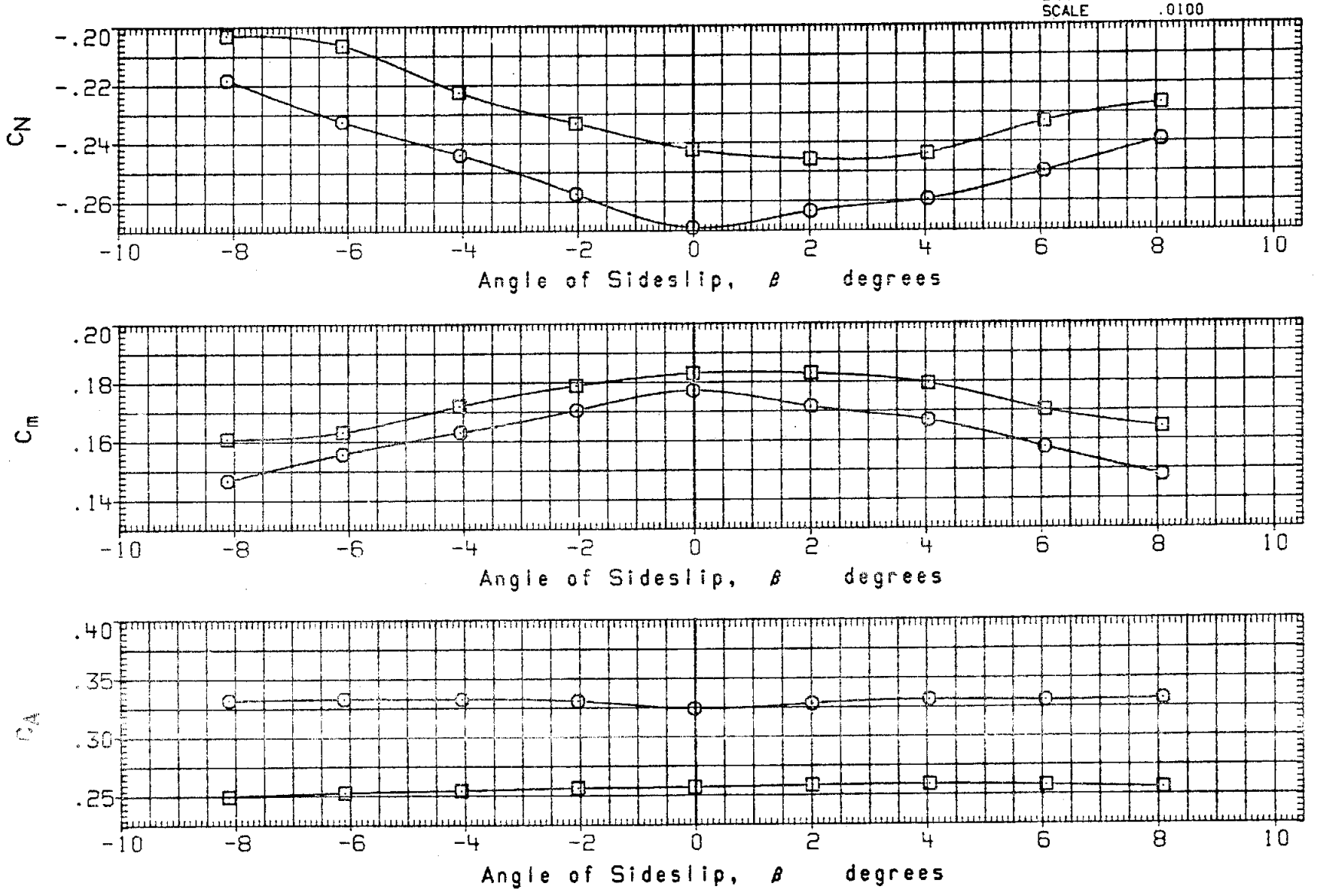


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(C)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

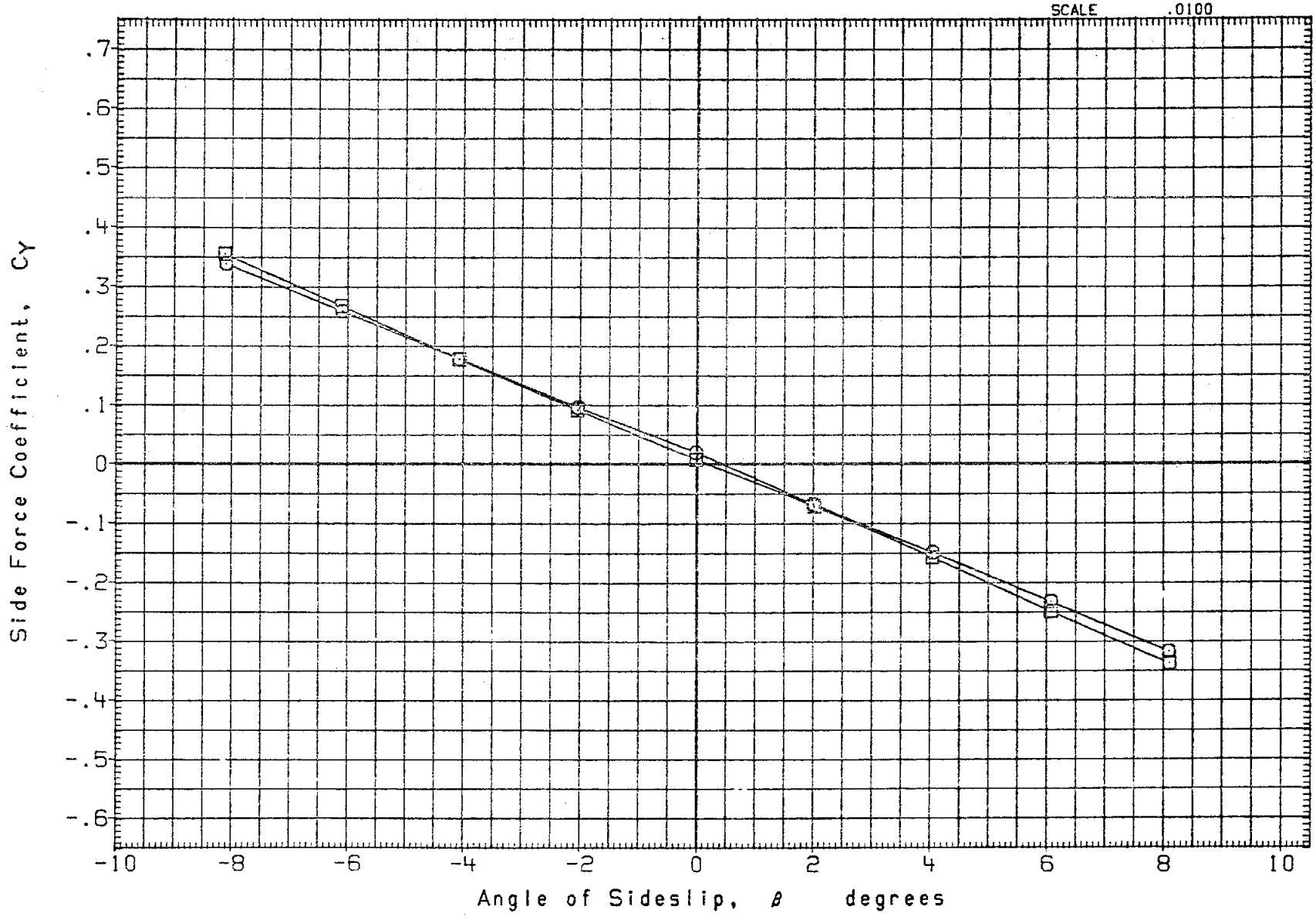


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

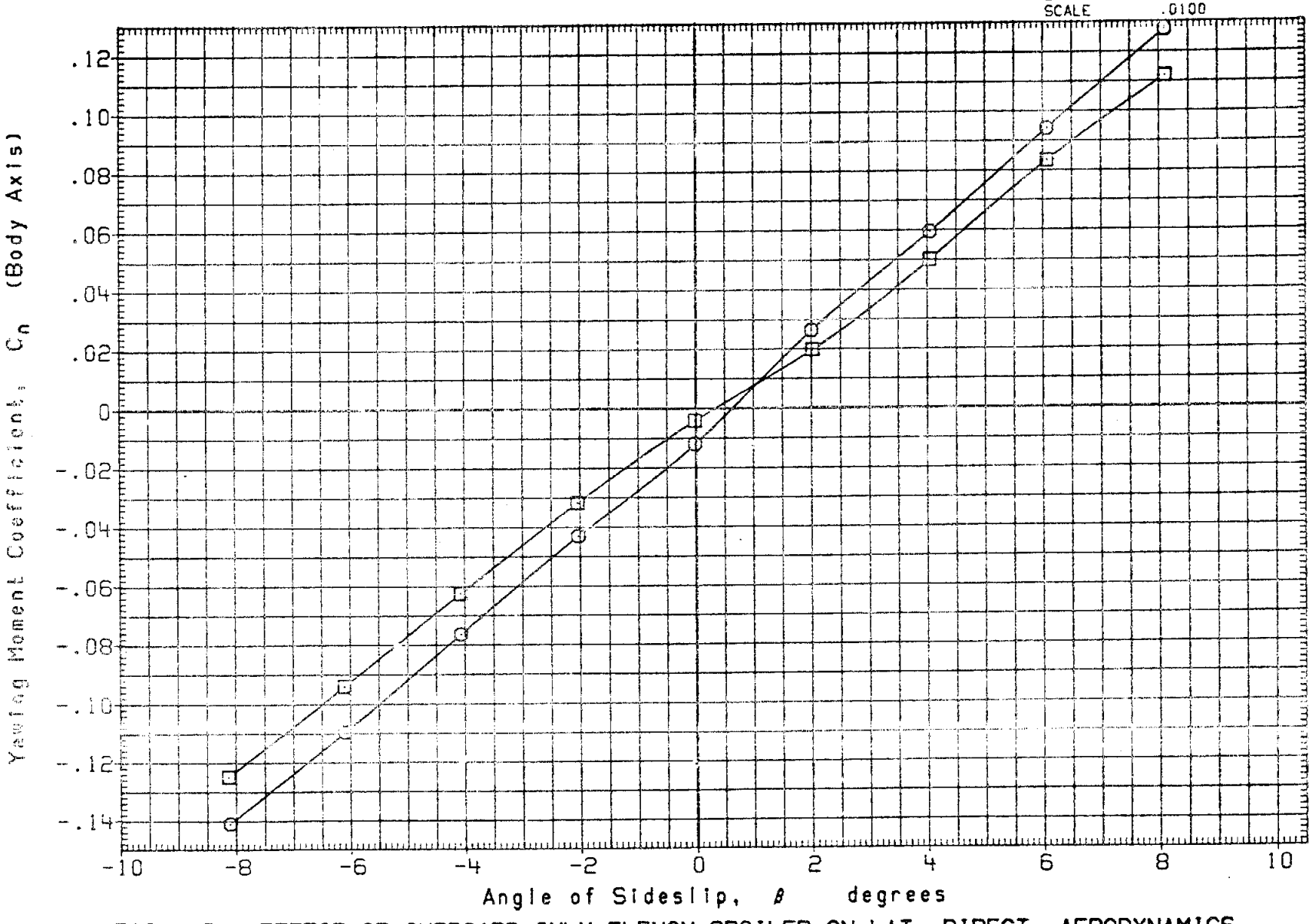


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

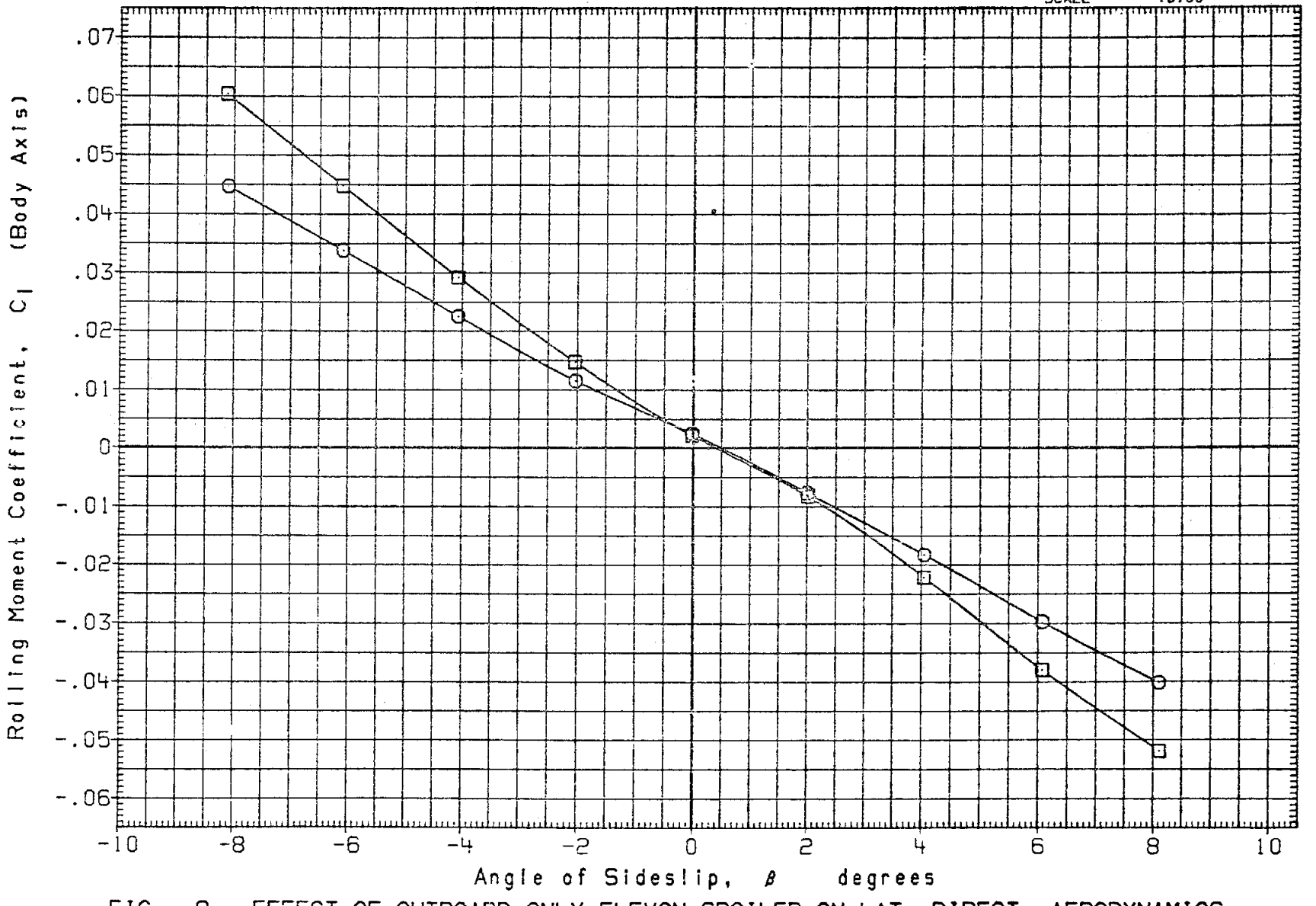


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

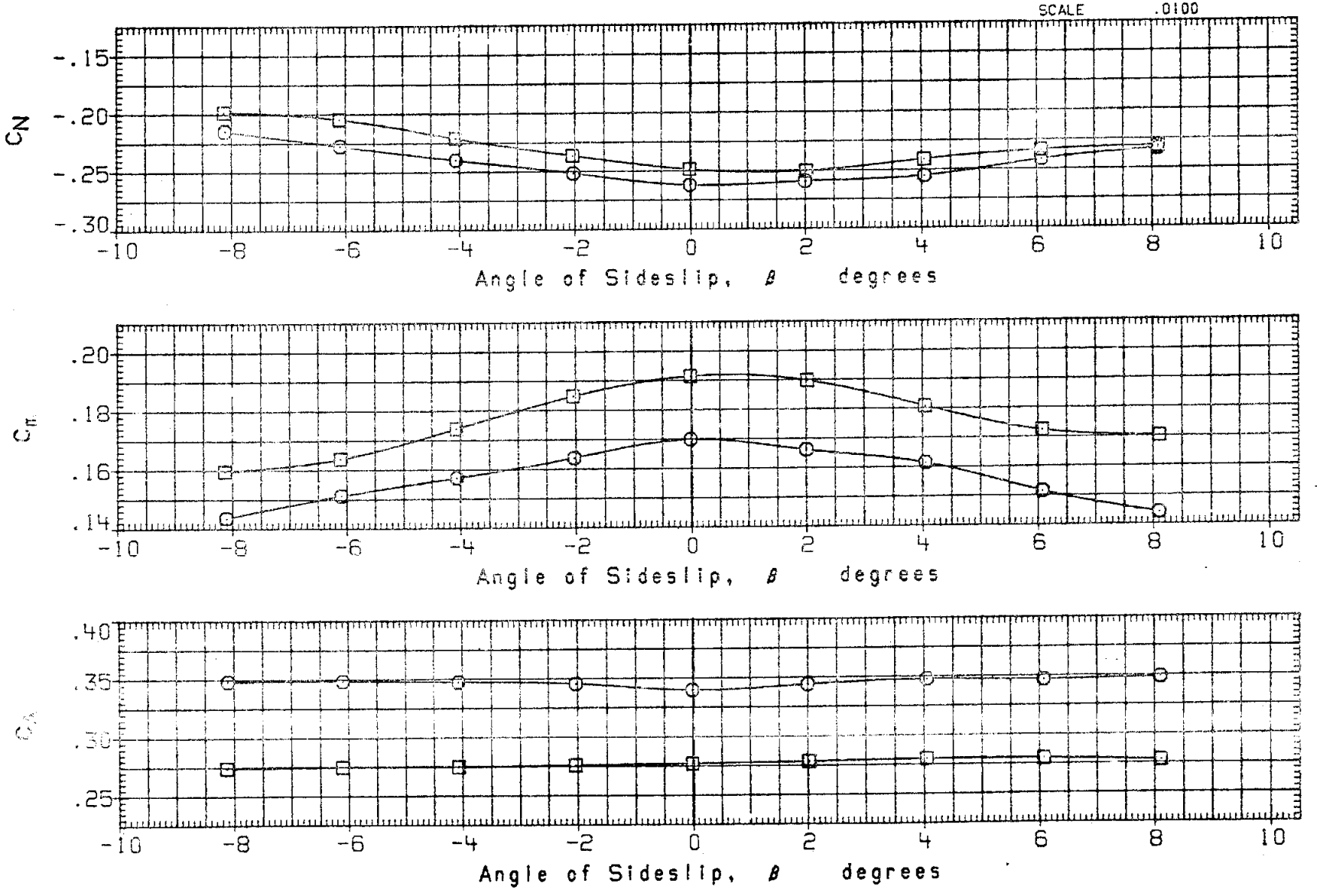


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(D)MACH = .85

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

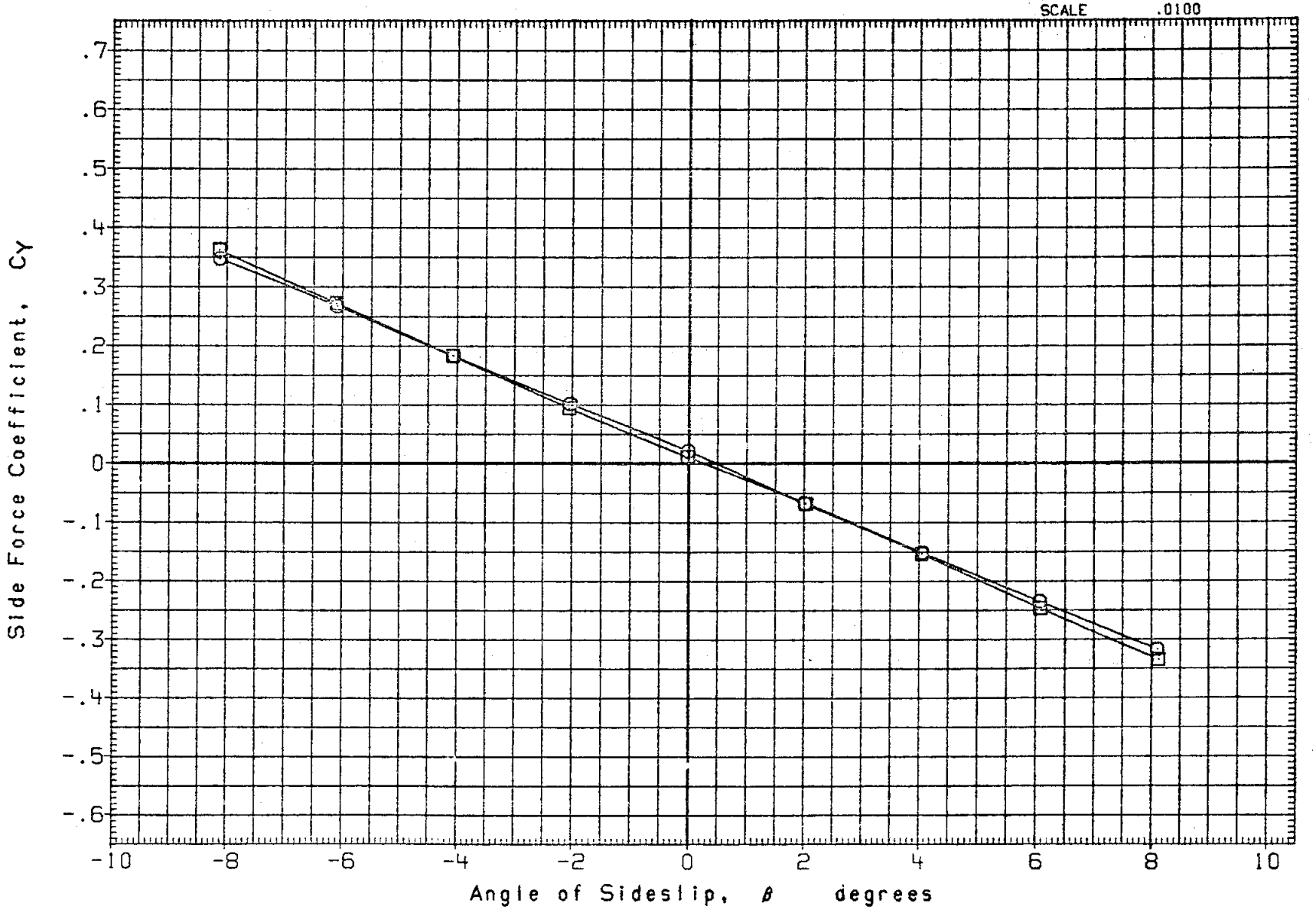


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

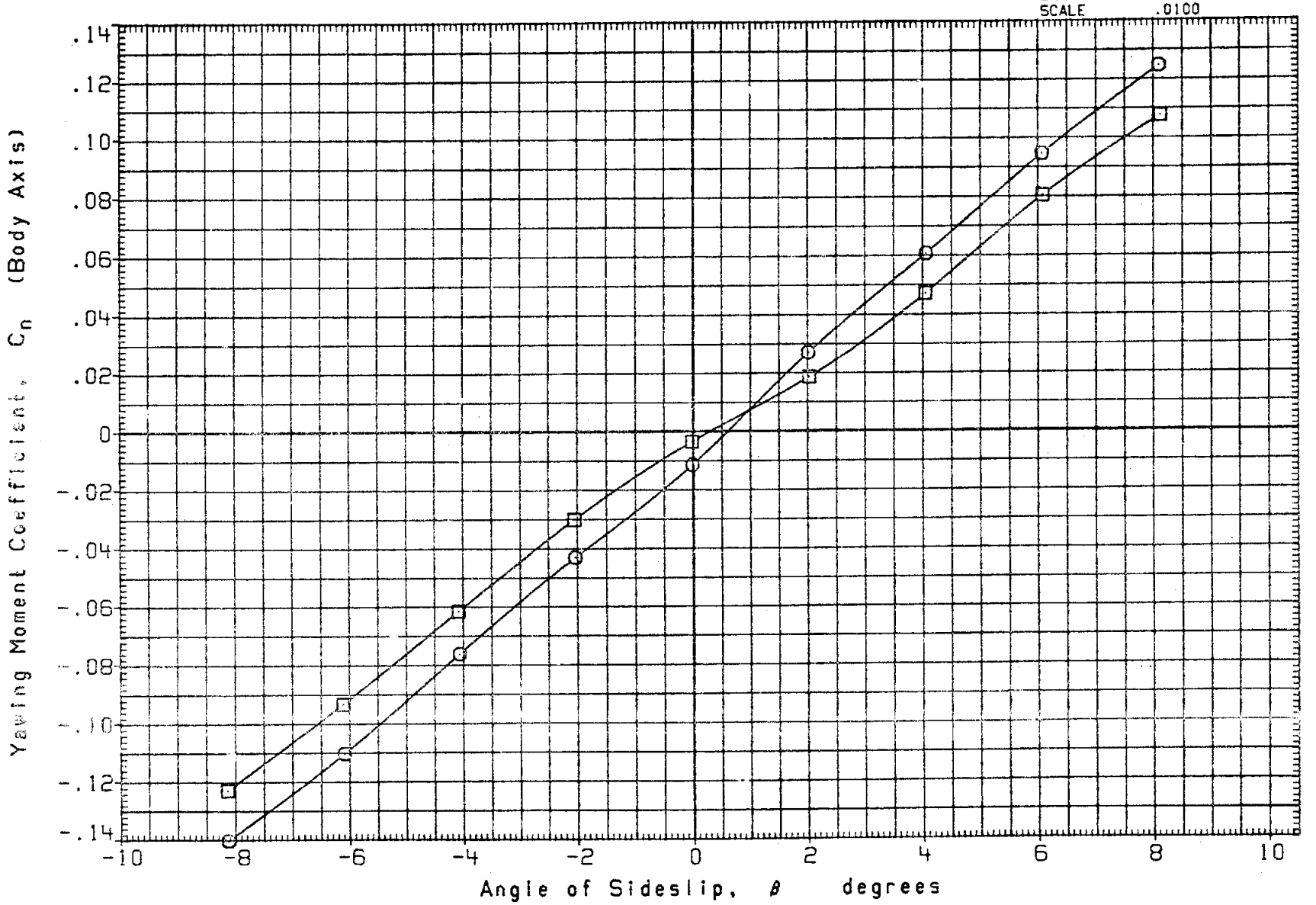


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

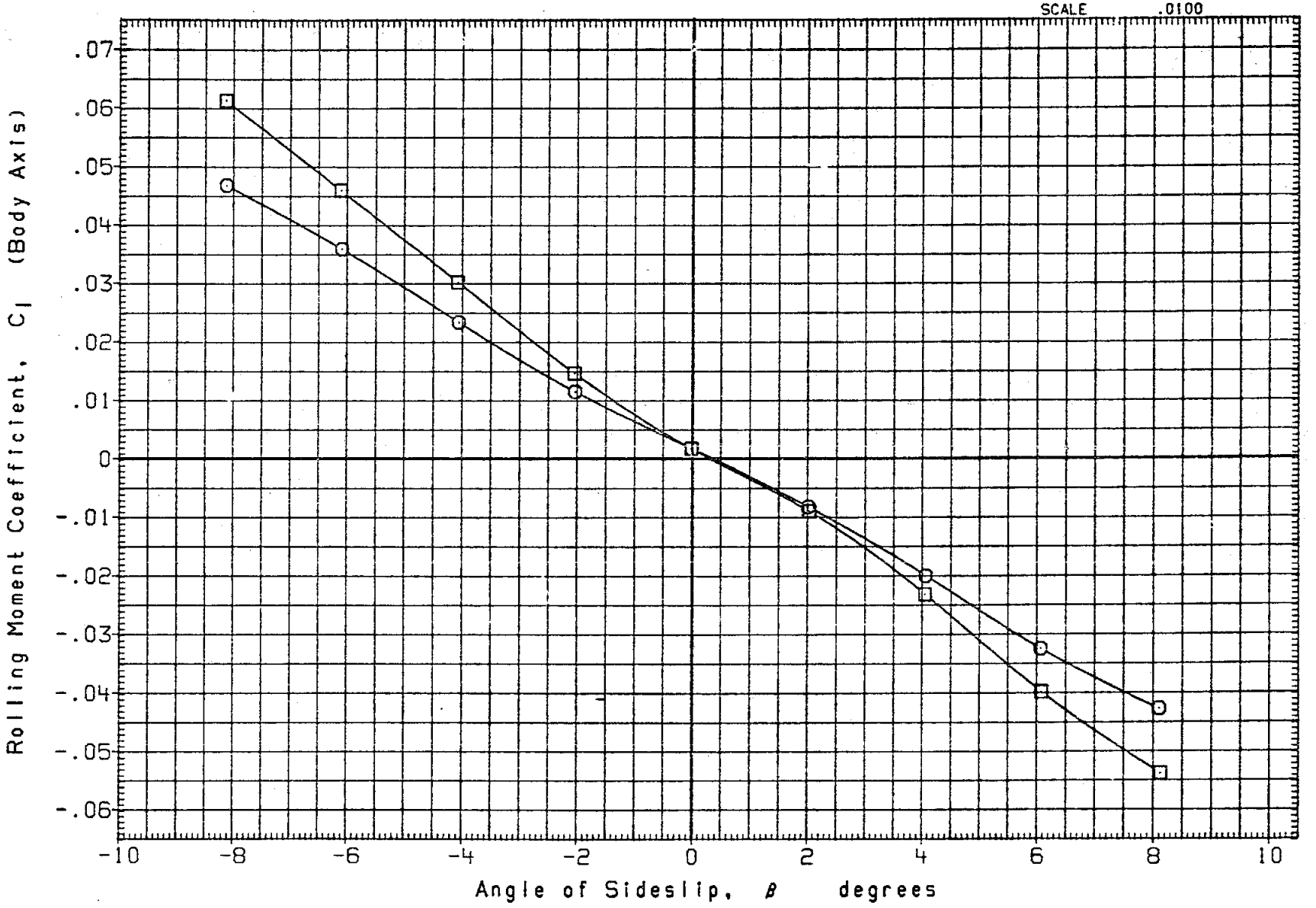


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

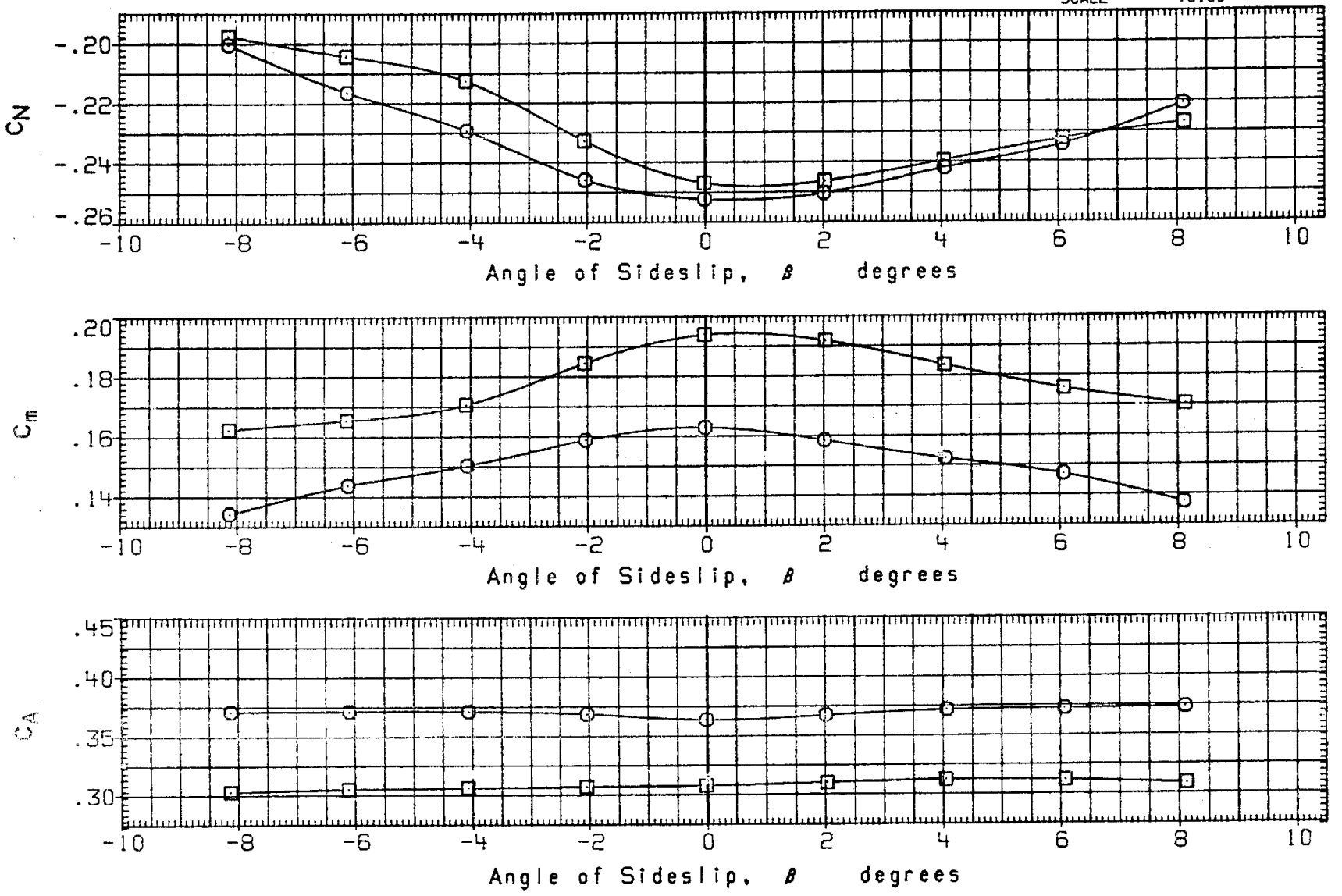


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(E)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

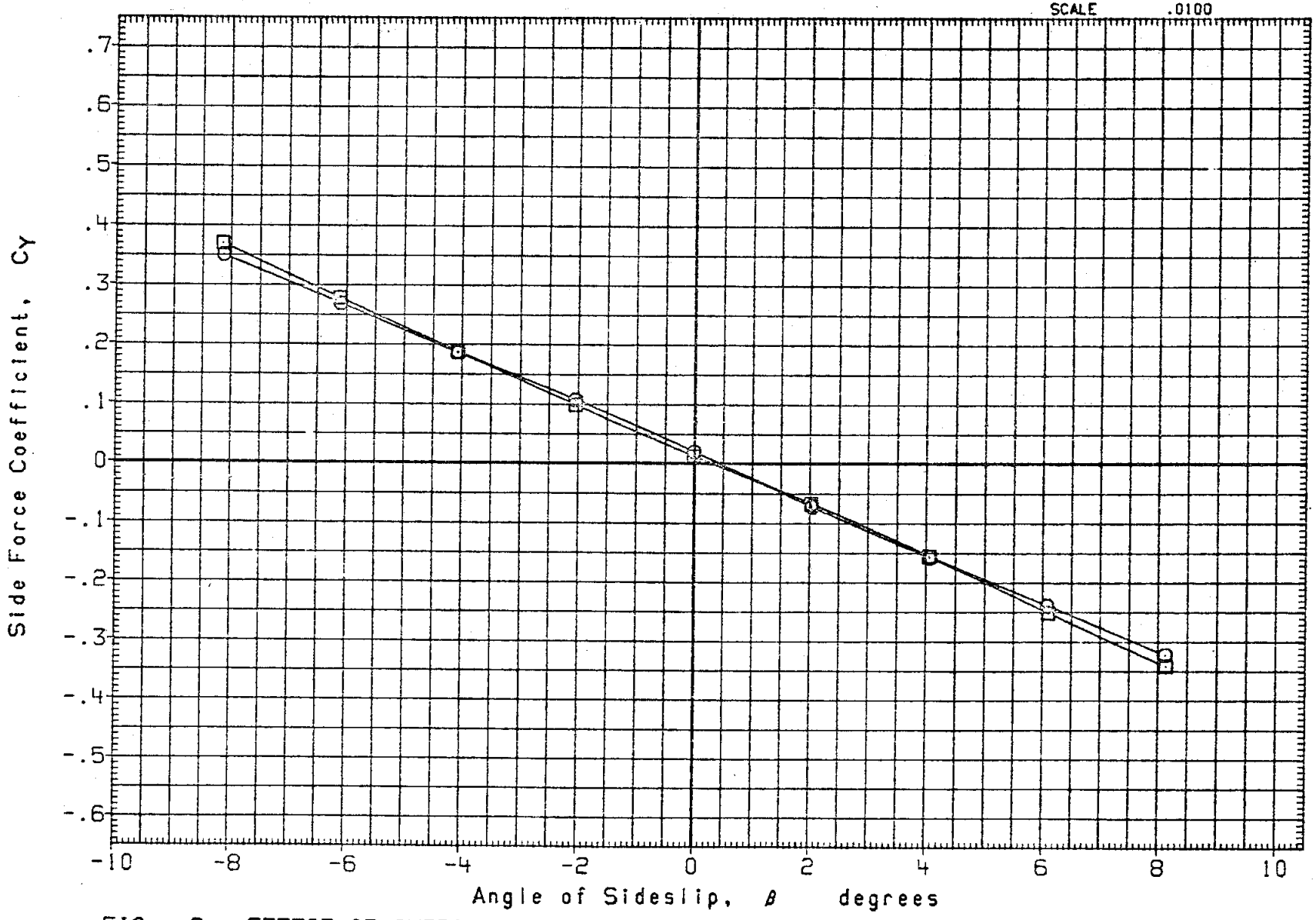


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION I	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

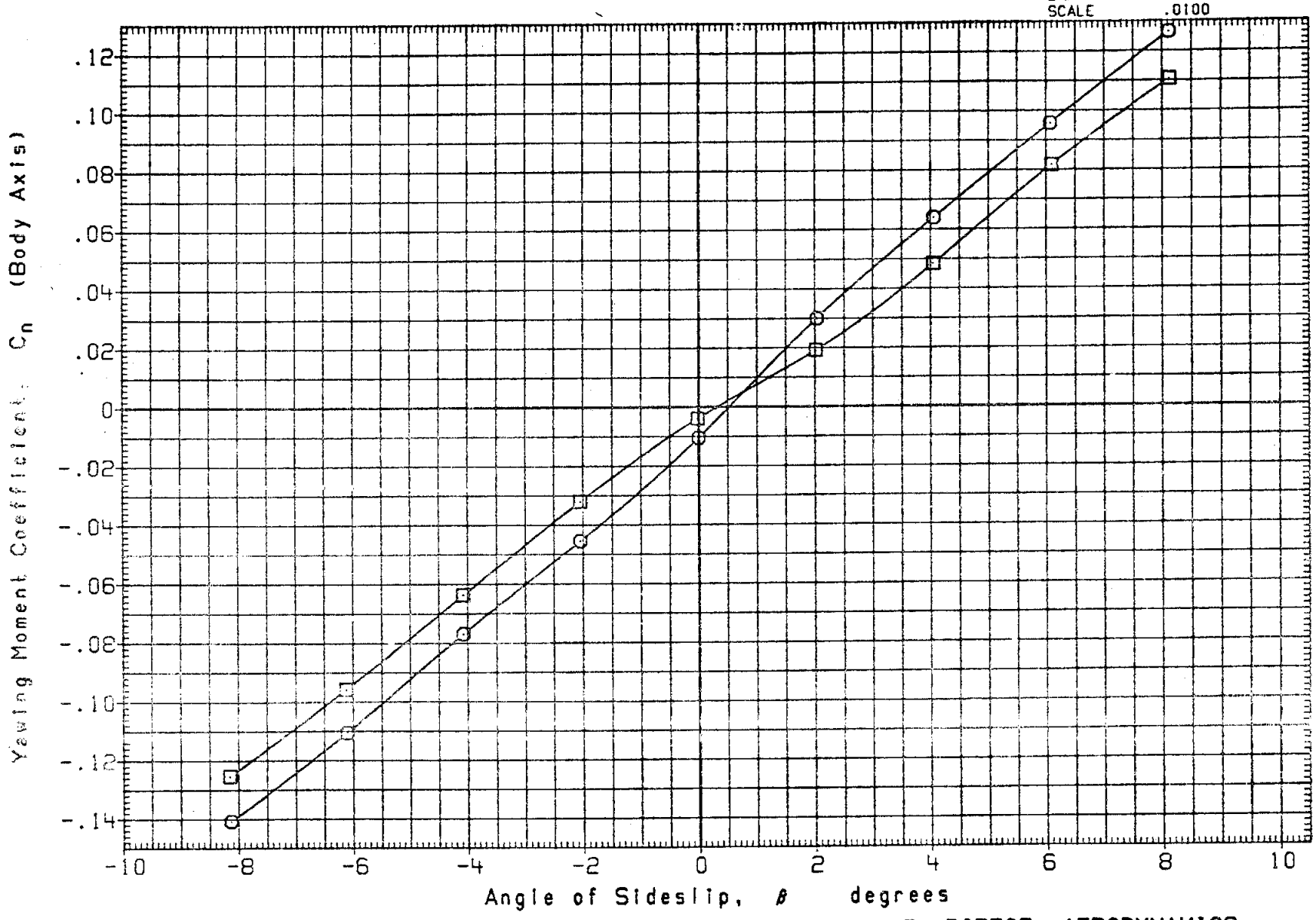


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

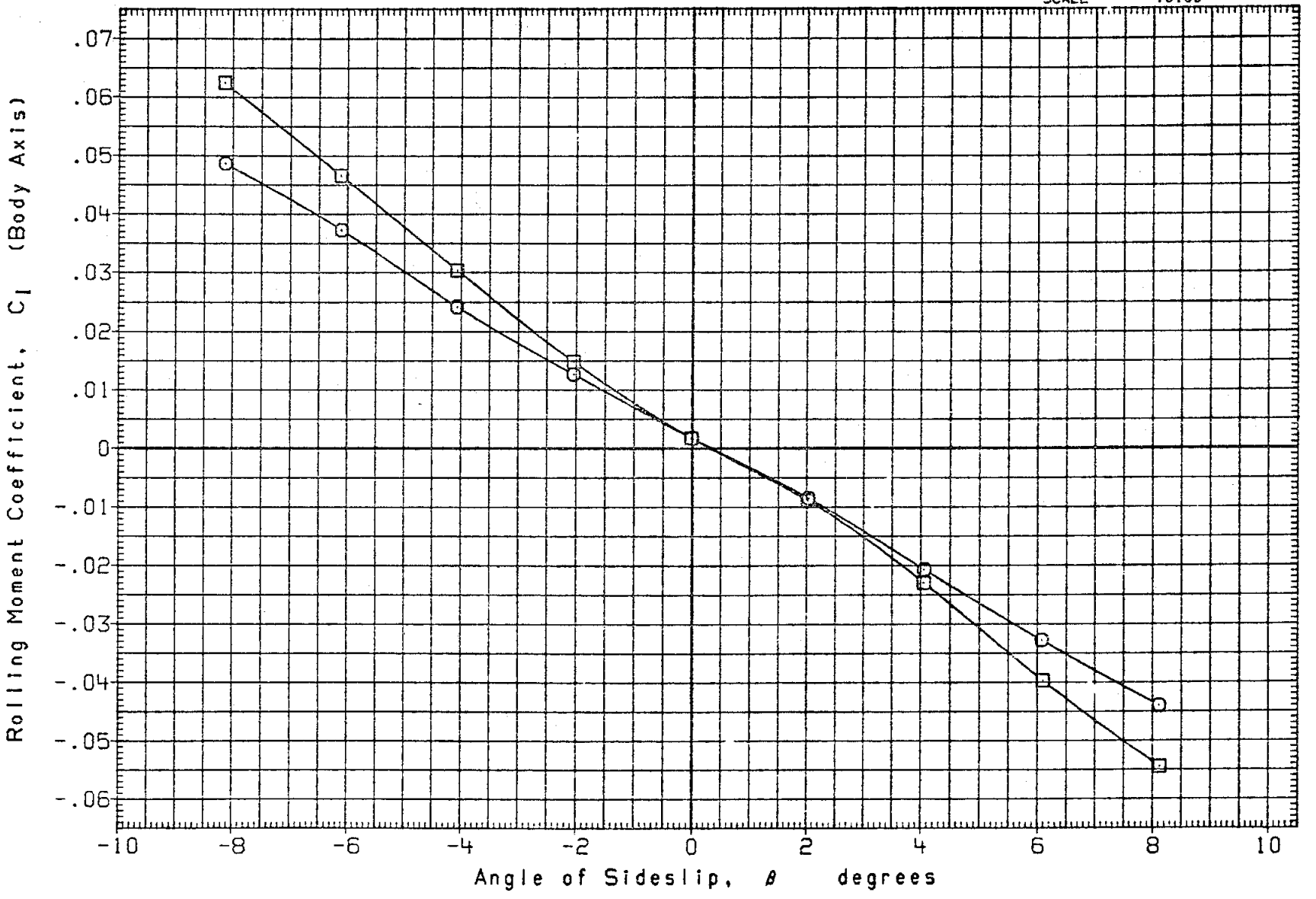


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

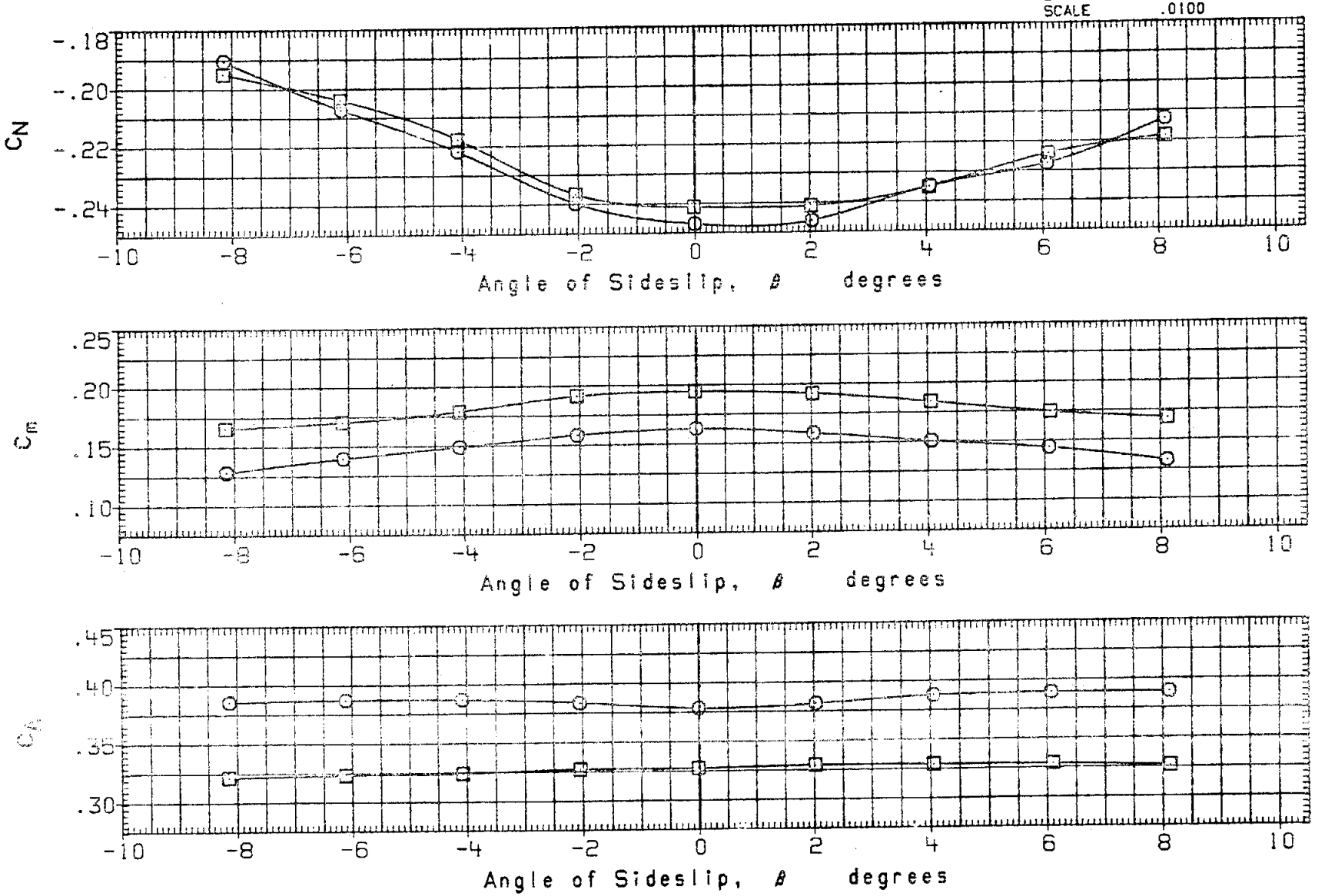


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(F)MACH = .92

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

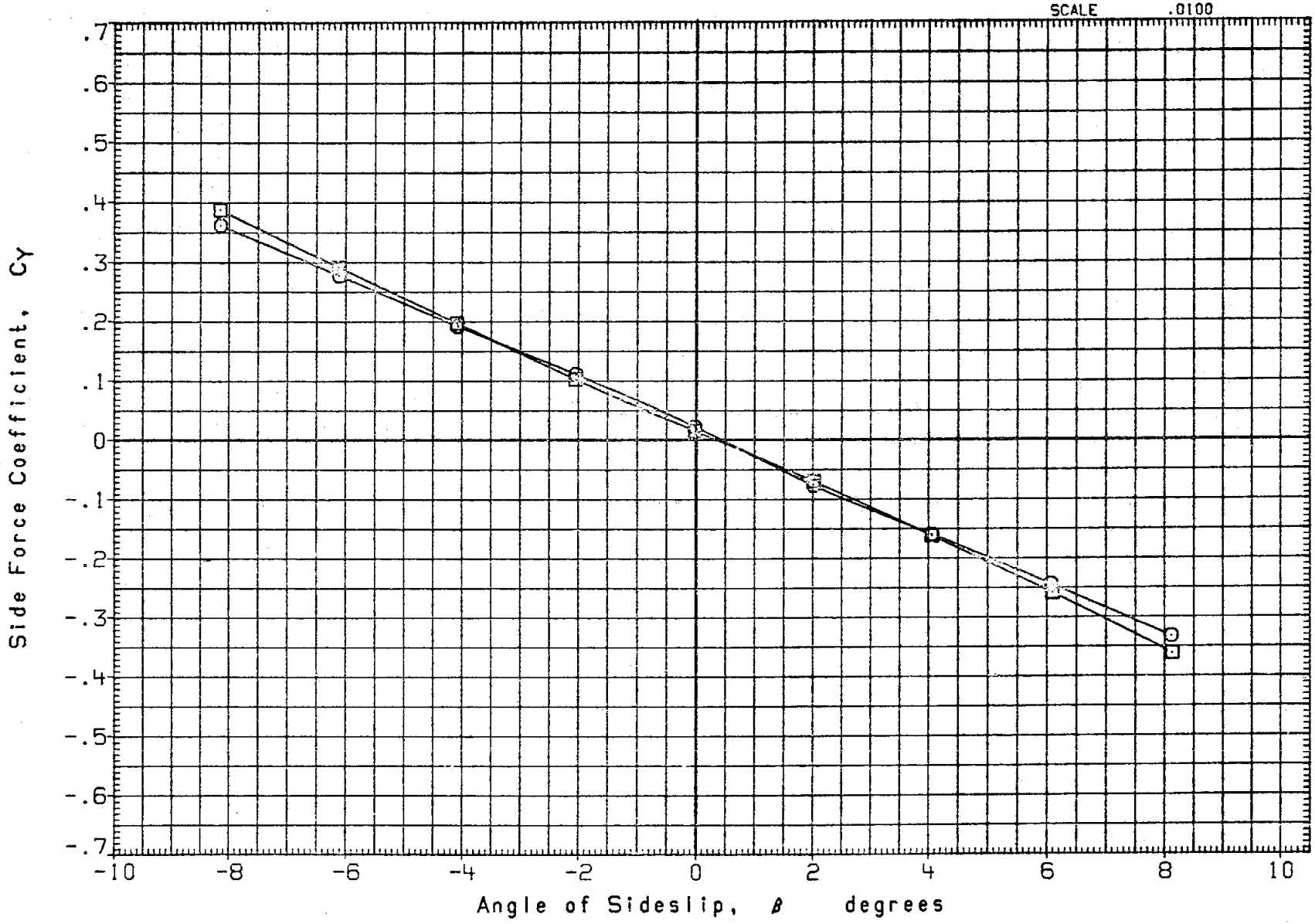


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

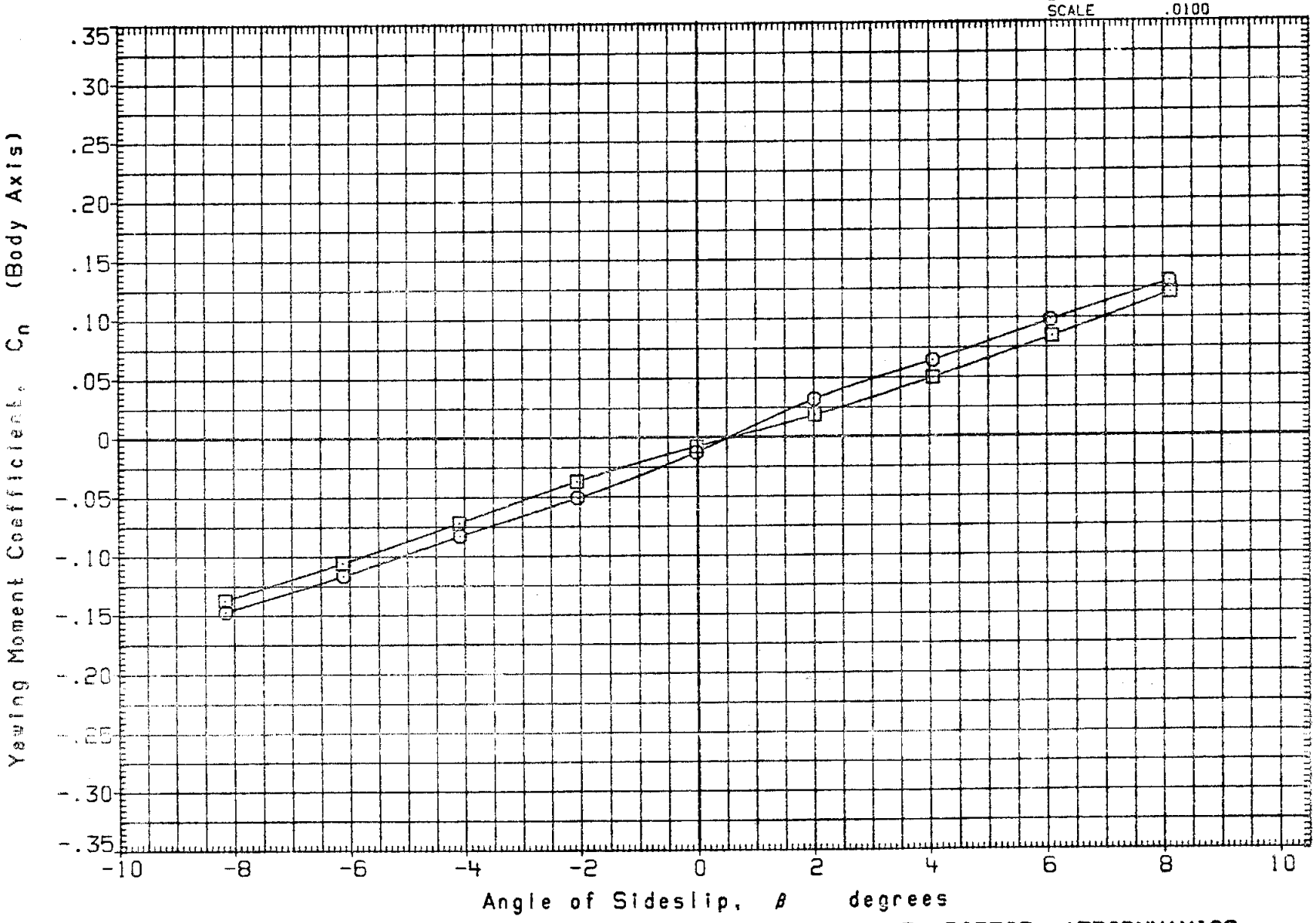


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

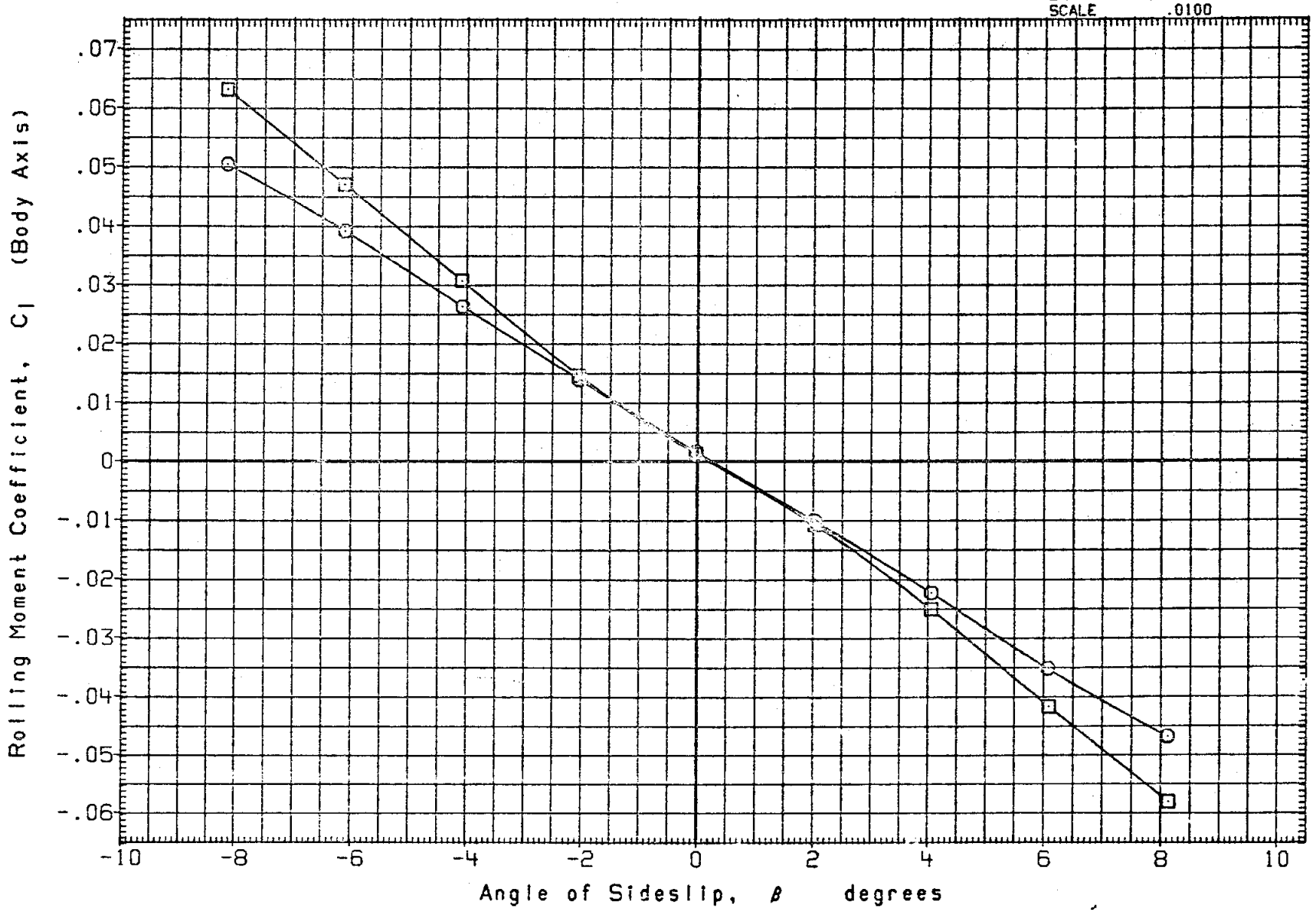


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

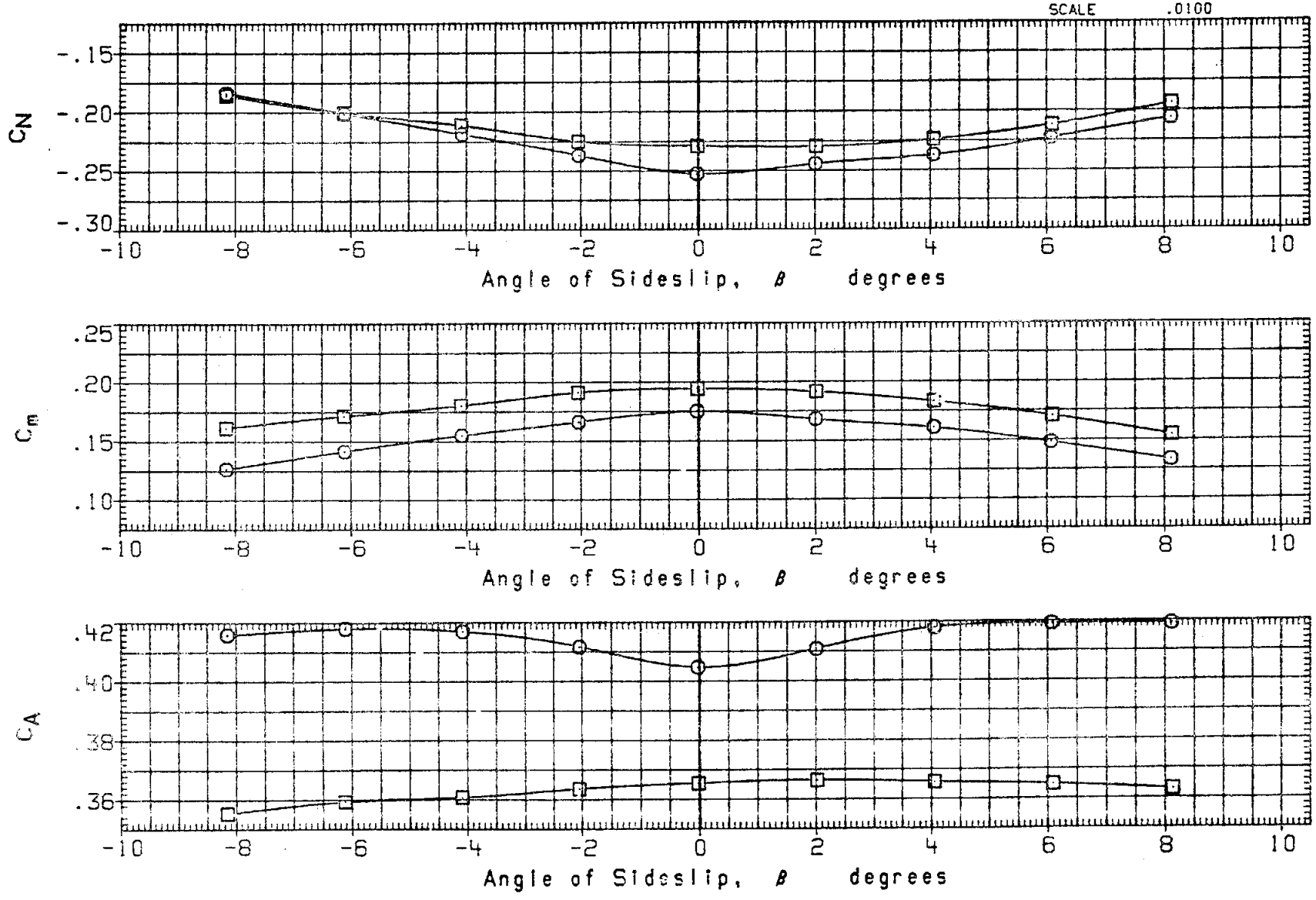


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(G)MACH = .95

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

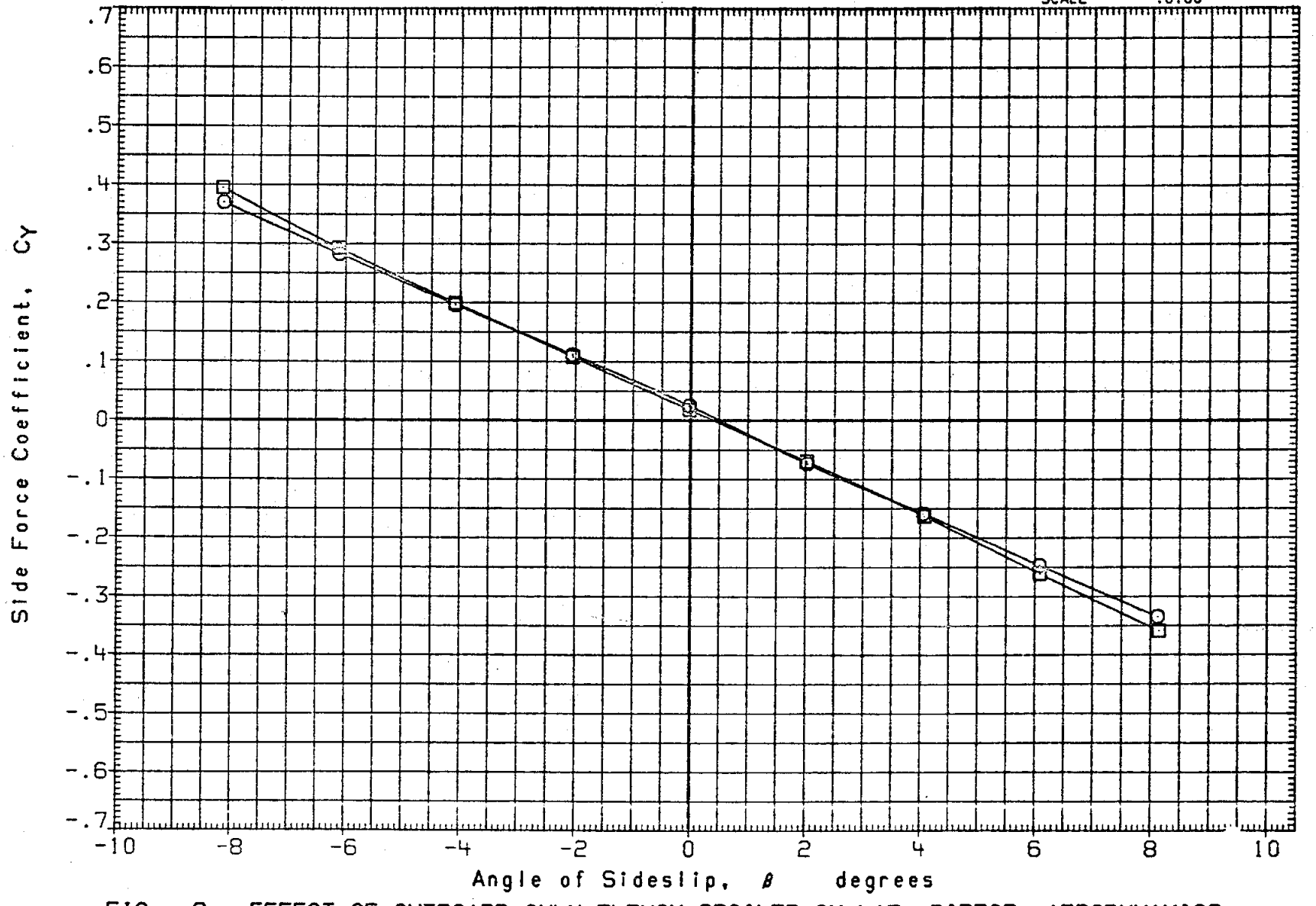


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

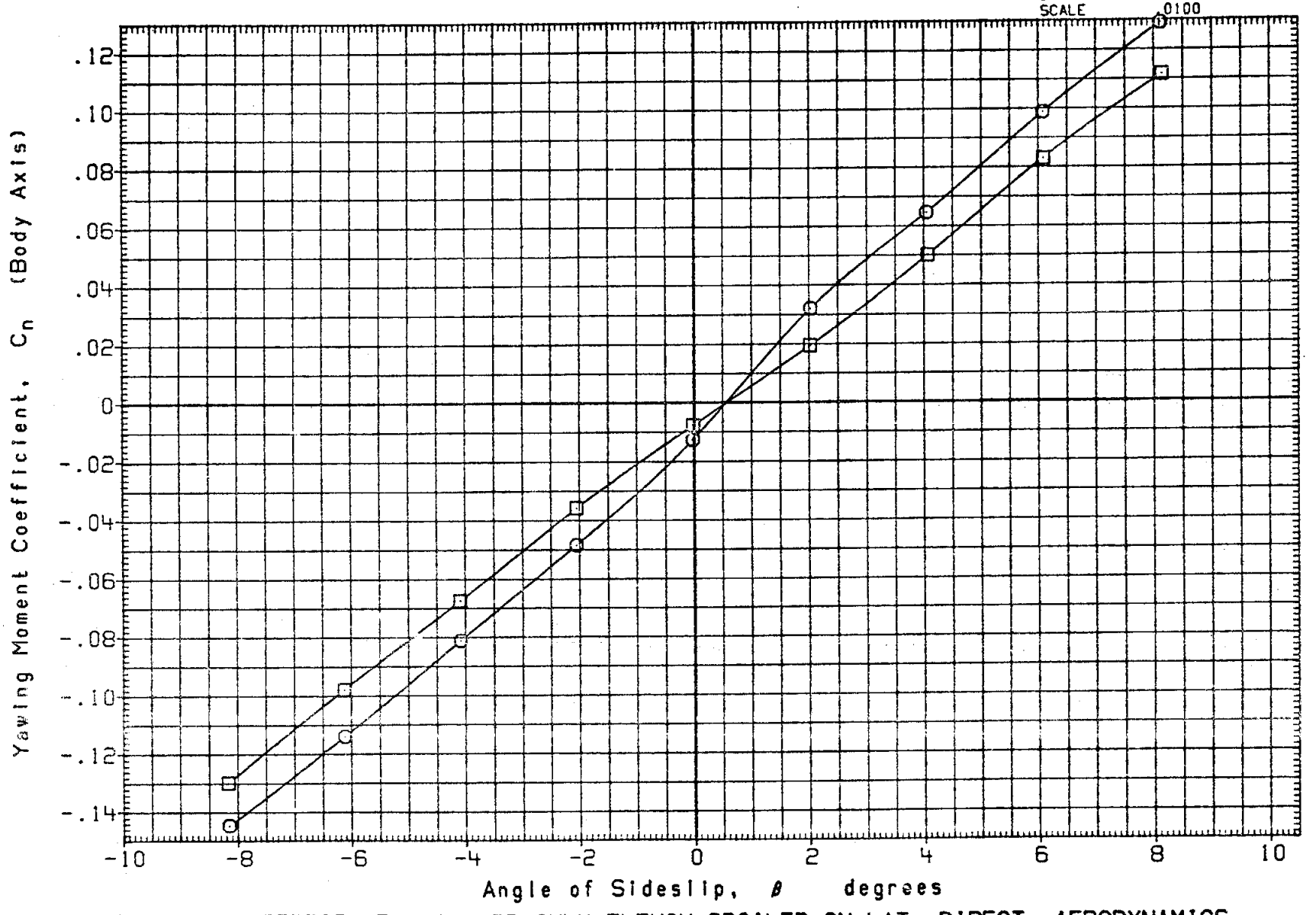


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

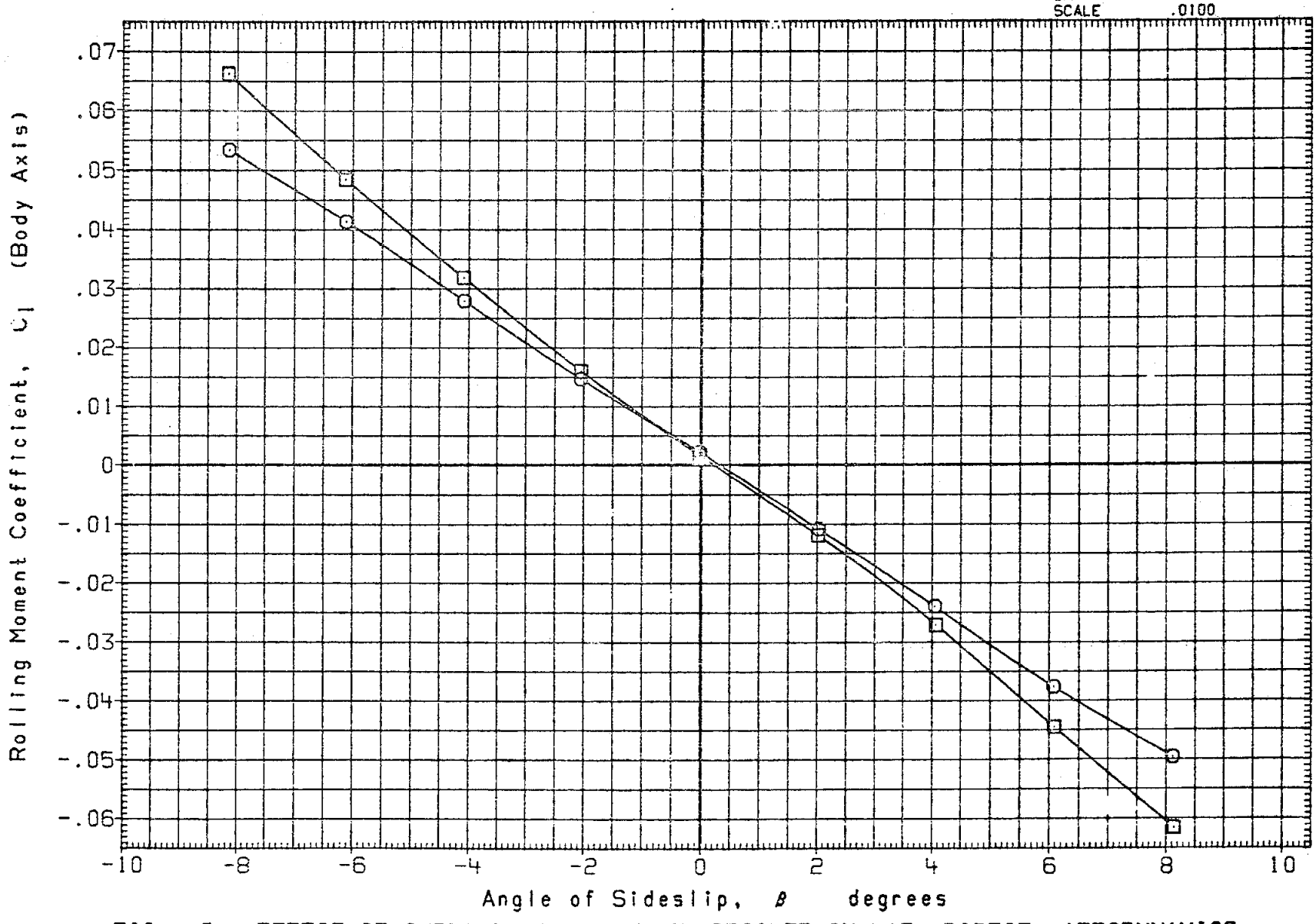


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

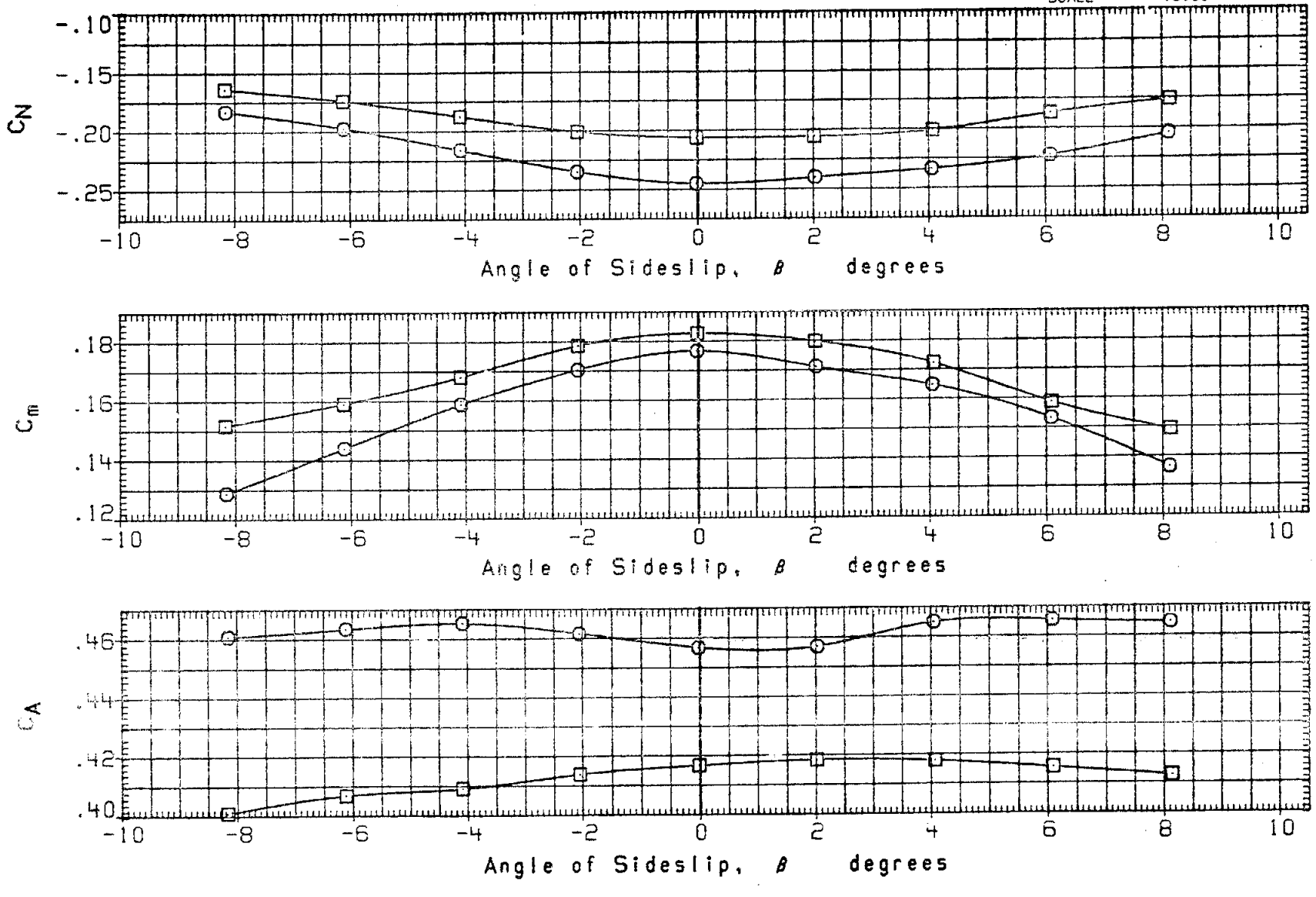


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(H)MACH = .98

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

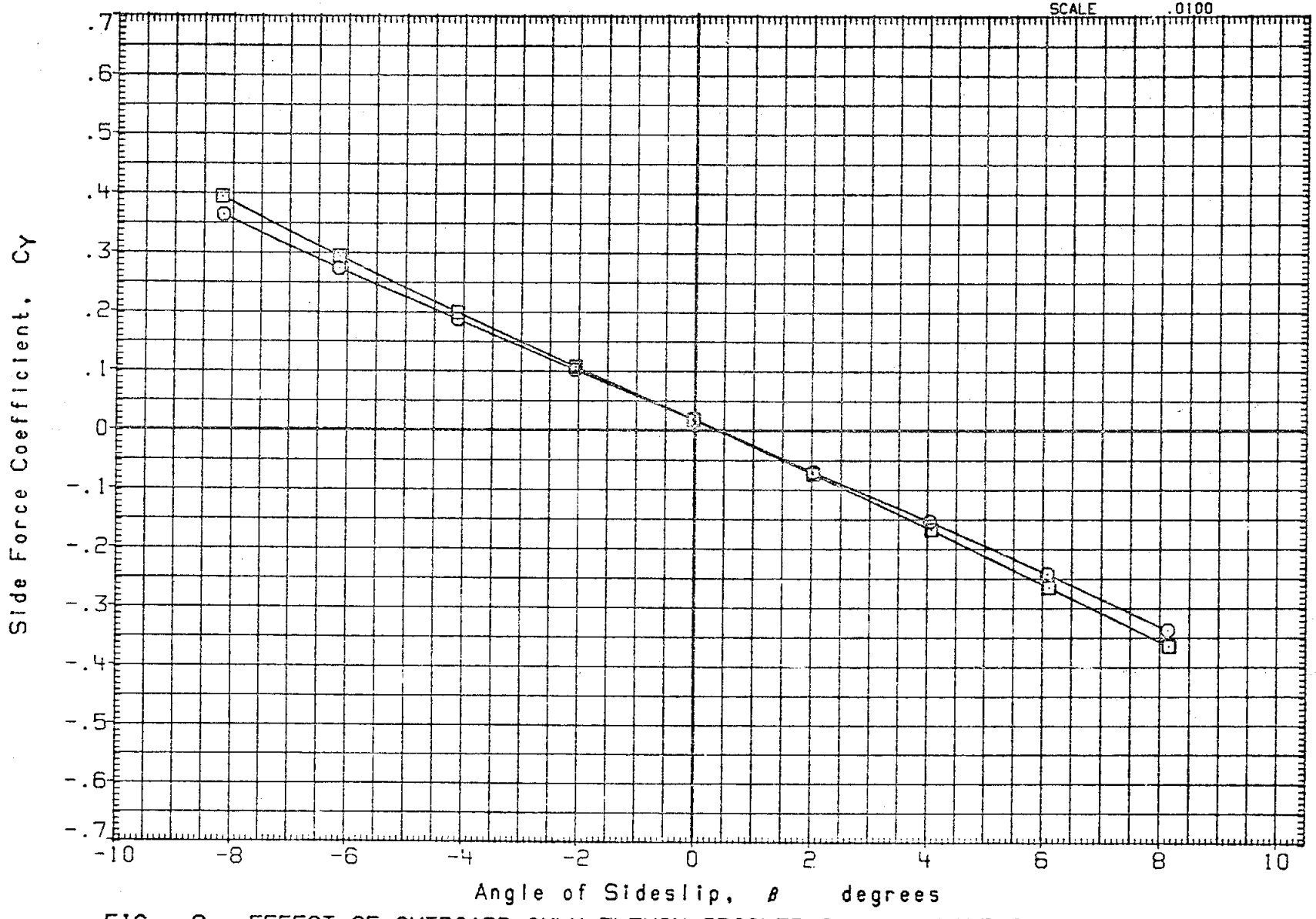


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC B-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC B-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

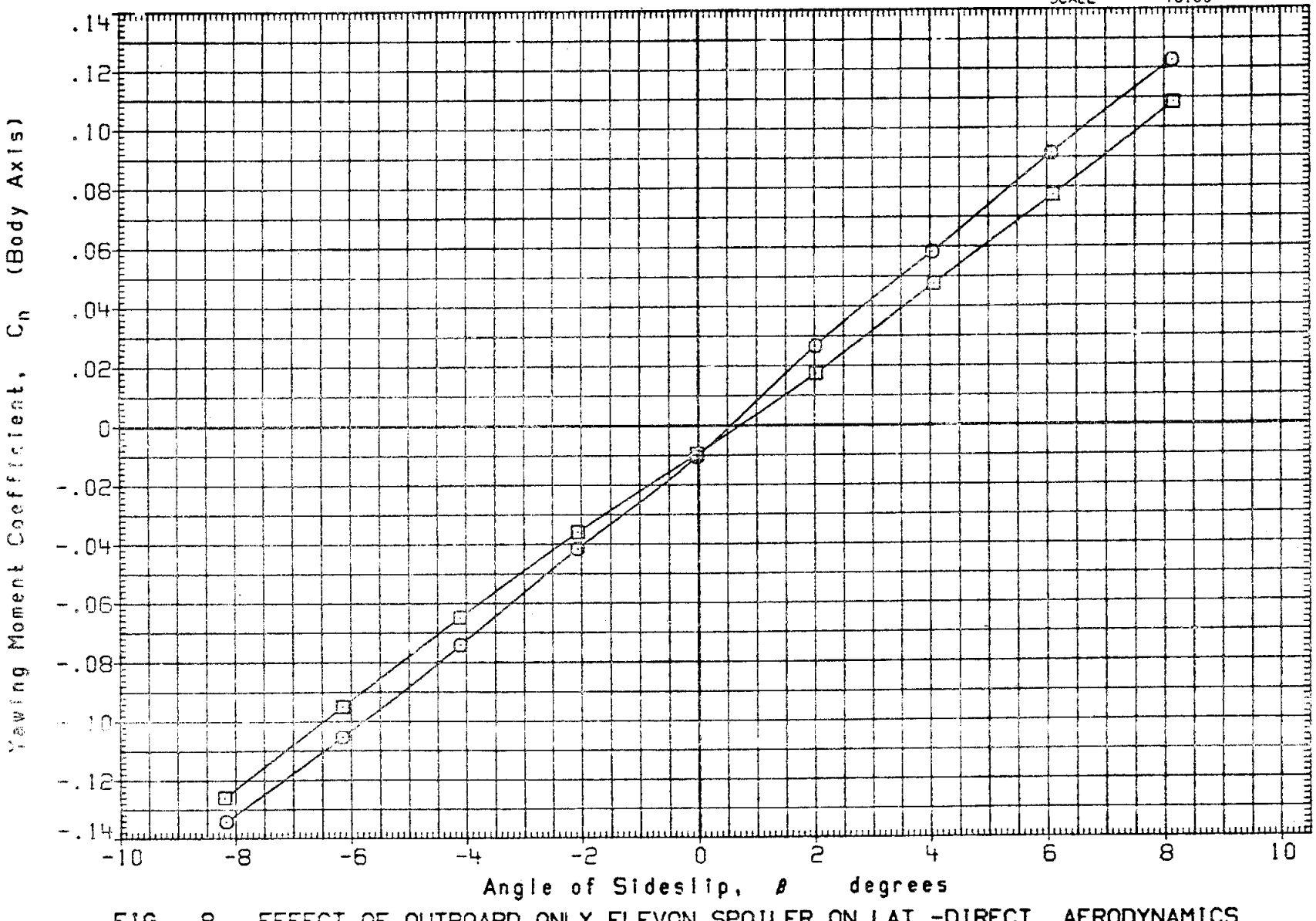


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

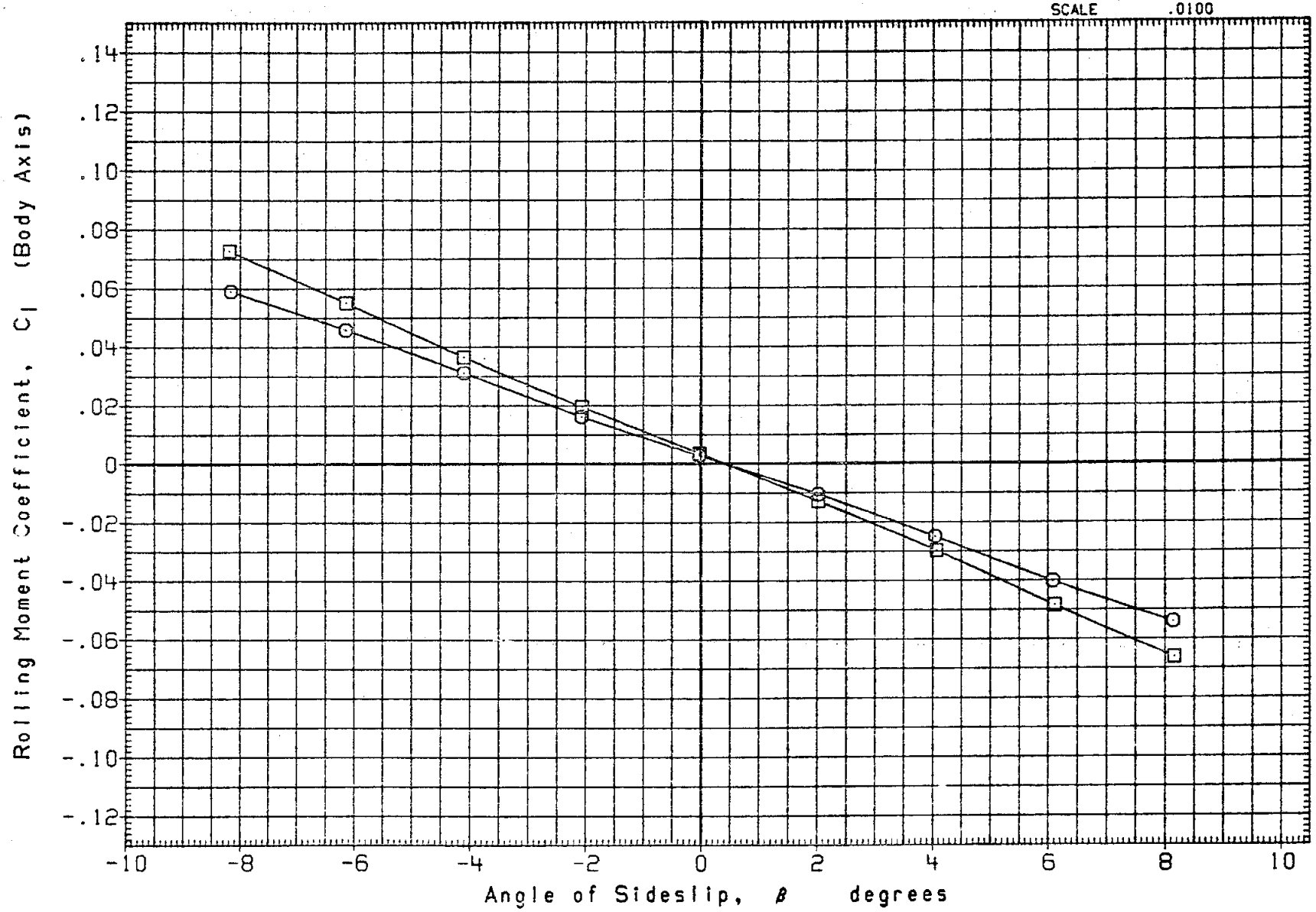


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(1) MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

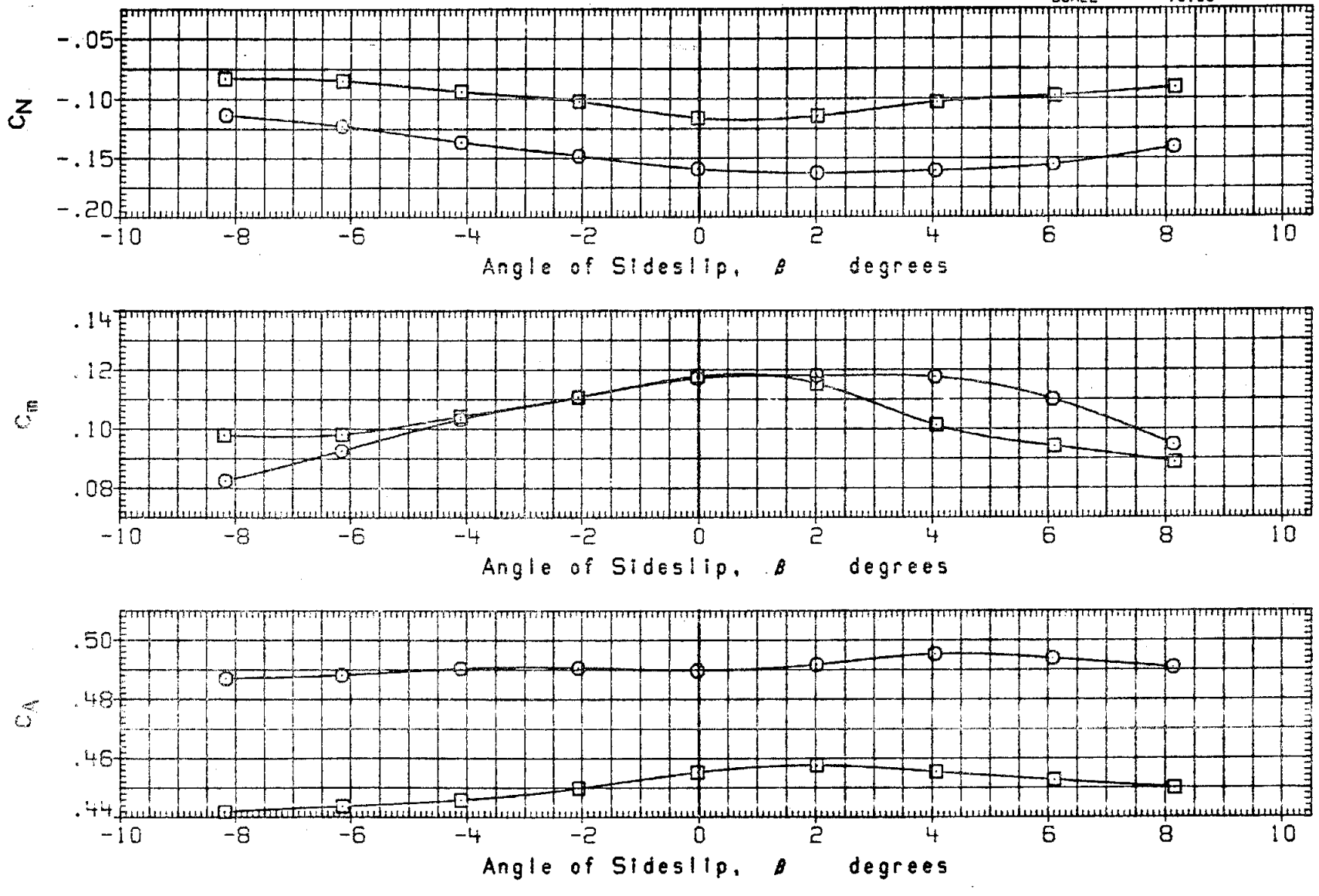


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(I)MACH = 1.12

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC B-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC B-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

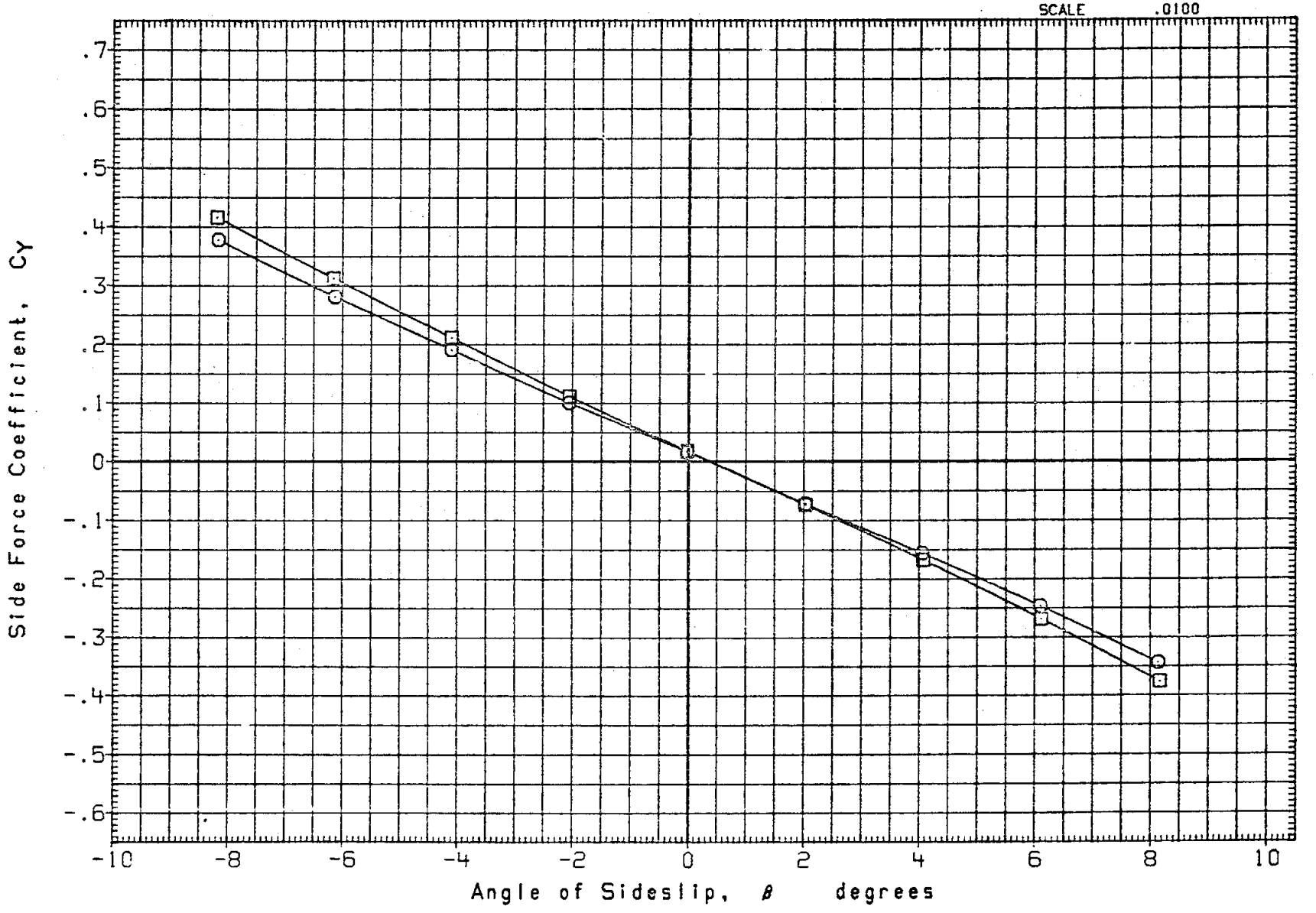


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

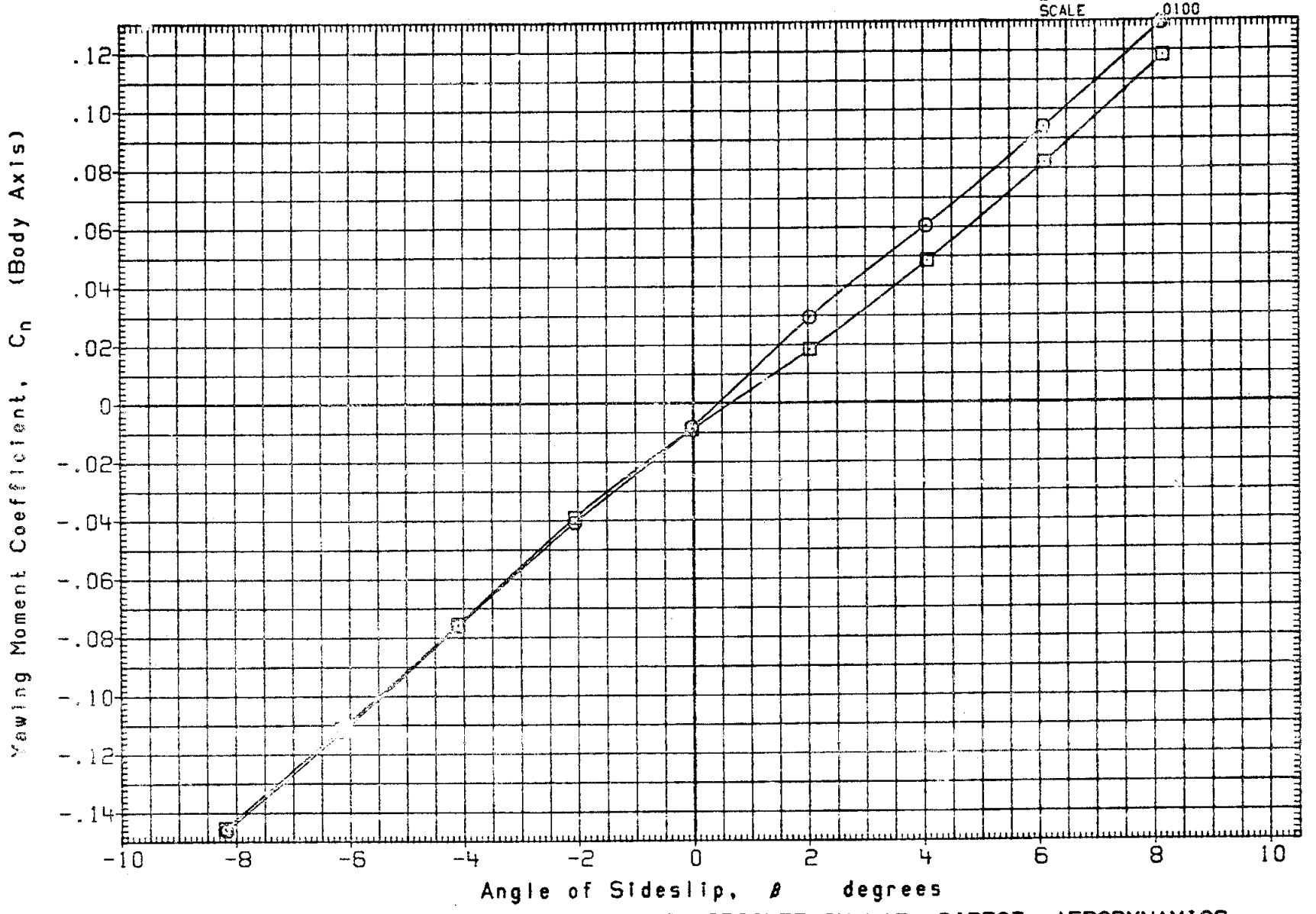


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

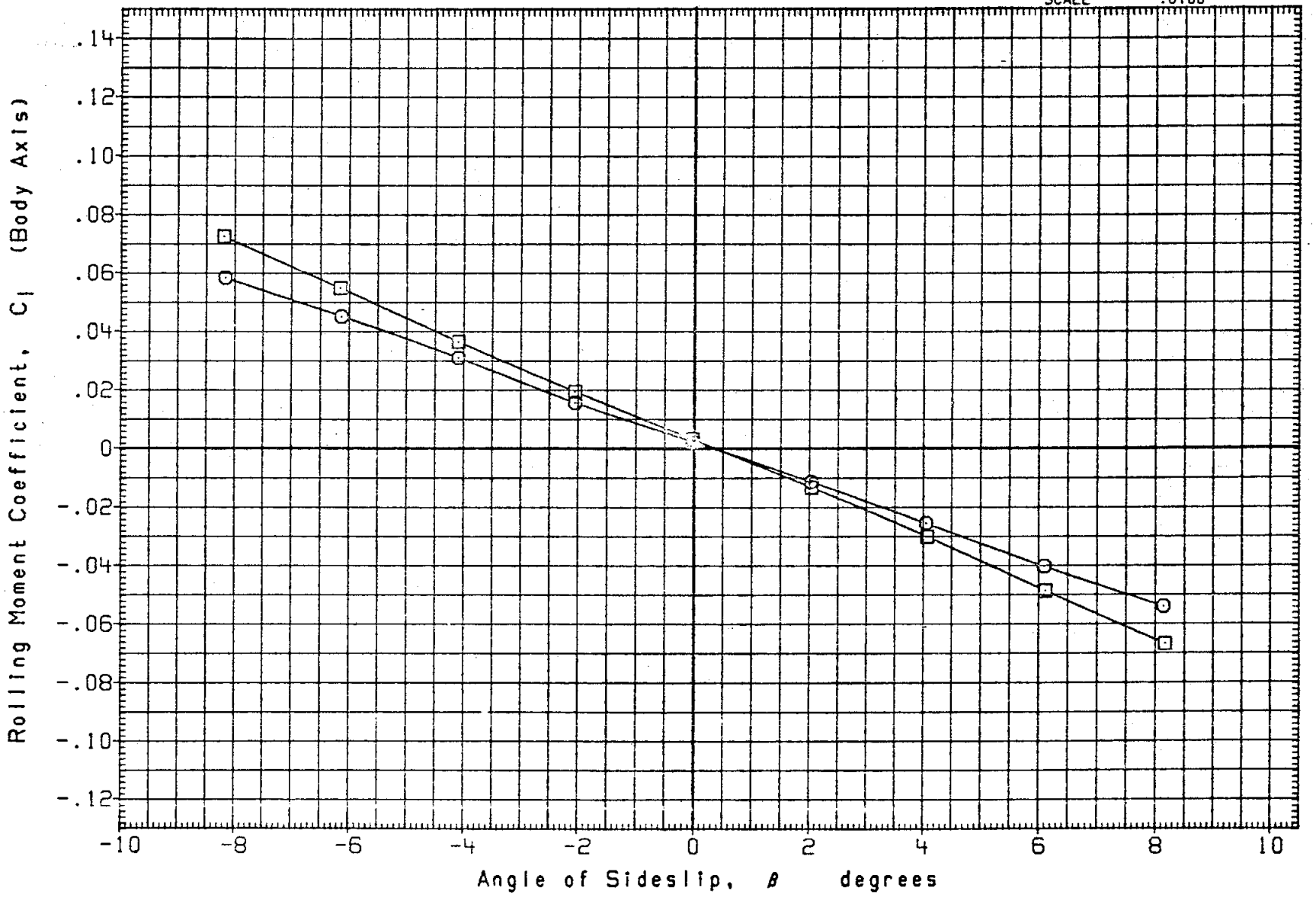


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(J)MACH = 1.20

DATA SET	SYMBOL	CONFIGURATION	ALPHA	IBDESP	OBDESP
AHZ008	○	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1	.000	40.000	40.000
AHZ013	□	LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A	.000	.000	40.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0100	

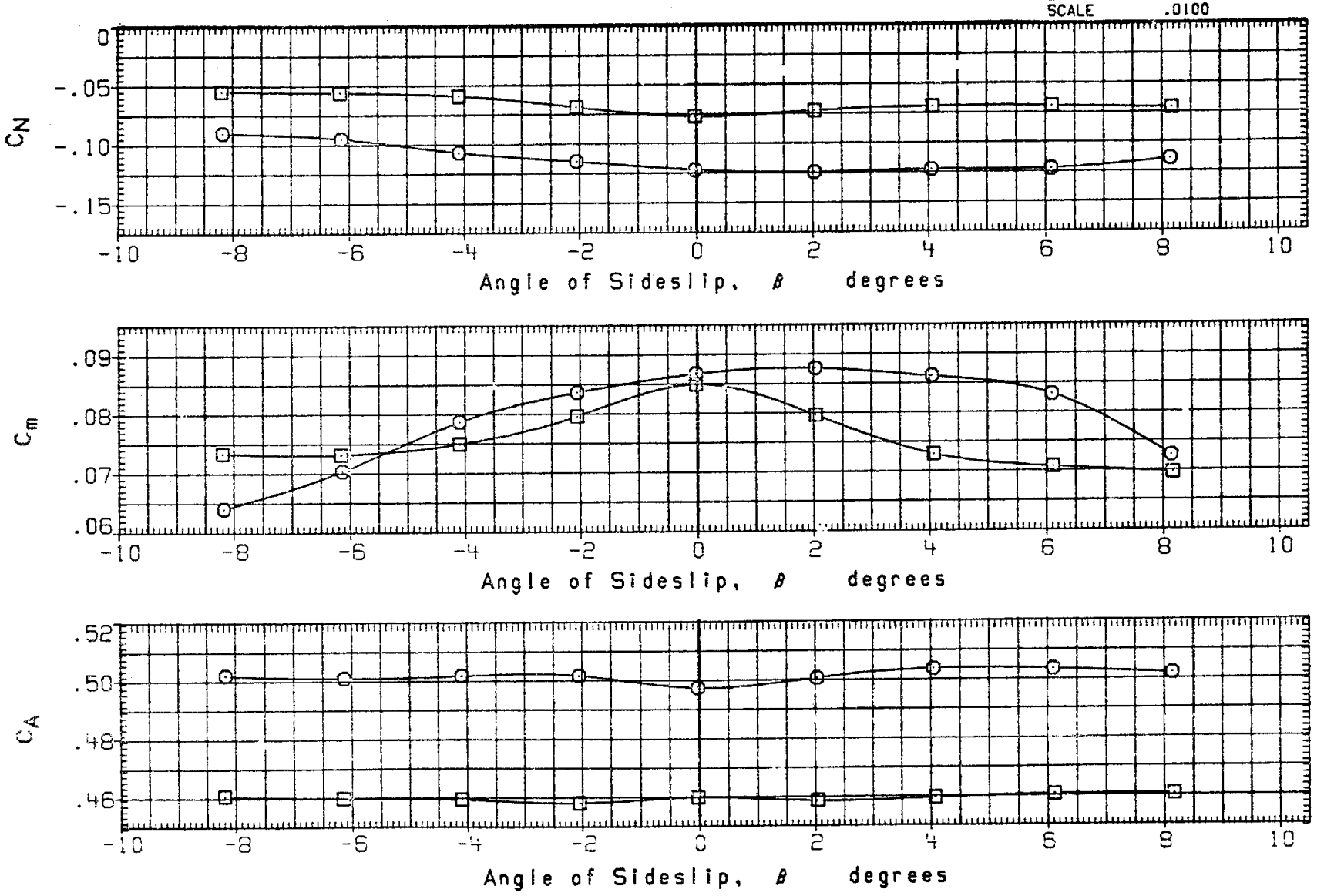


FIG. 8 EFFECT OF OUTBOARD ONLY ELEVON SPOILER ON LAT.-DIRECT. AERODYNAMICS

(J)MACH = 1.20

APPENDIX

TABULATED SOURCE DATA

Tabulations of plotted data are available from DMS upon request.

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ001) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 510/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.351	-8.178	-.59103	.26293	.26566	.01766	-.00800	-.00043	-.54761	.34433	-1.59037
.349	-6.164	-.47630	.26241	.21938	.01661	-.00684	-.00060	-.44537	.31204	-1.42728
.351	-4.137	-.37415	.26163	.17830	.00872	-.00253	-.00168	-.35430	.28794	-1.23046
.350	-2.106	-.26677	.26206	.13447	.00569	-.00232	-.00193	-.25695	.27169	-.94576
.350	-.078	-.16272	.25683	.09001	.00263	-.00149	-.00176	-.16237	.25705	-.63167
.351	1.964	-.04770	.25032	.04111	-.00043	-.00126	-.00213	-.05625	.24854	-.22632
.350	3.996	.06991	.24413	-.00860	-.00899	.00302	-.00342	.05272	.24841	.21224
.349	6.040	18852	.23502	-.05617	-.00319	-.00126	-.00205	.16274	.25356	.64185
.351	8.072	.30428	.22298	-.10760	-.00449	-.00027	-.00144	.26995	.26350	1.02450
	GRADIENT	.05445	-.00230	-.02297	-.00204	.00060	-.00018	.04990	-.00503	.17728

RUN NO. 509/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.598	-8.513	-.62248	.27382	.25863	.01810	-.00845	.00095	-.57509	.36294	-1.58452
.599	-6.410	-.49191	.27254	.20875	.01683	-.00766	.00054	-.45841	.32576	-1.40720
.600	-4.314	-.37341	.27223	.16643	.00944	-.00370	-.00024	-.35187	.29954	-1.17471
.600	-2.251	-.26078	.27241	.12528	.00652	-.00291	-.00091	-.24988	.28244	-.88474
.599	-.149	-.14830	.26801	.08240	.00032	-.00056	-.00127	-.14760	.26840	-.54994
.598	1.945	-.03240	.26122	.03700	-.00402	.00035	-.00144	-.04124	.25997	-.15865
.600	4.027	.09559	.25413	-.01270	-.00631	.00051	-.00155	.07751	.26022	.29786
.598	6.111	.20921	.24591	-.05501	-.00512	-.00070	-.00111	.18184	.26678	.68161
.598	8.203	.34025	.23166	-.11028	-.00413	-.00101	-.00024	.30371	.27784	1.09311
	GRADIENT	.05587	-.00227	-.02139	-.00201	.00056	-.00015	.05113	-.00484	.17586

RUN NO. 508/ 0 RN/L = 3.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.801	-8.775	-.64278	.29134	.25317	.02042	-.01071	.00190	-.59081	.38600	-1.53061
.801	-6.614	-.49418	.28862	.19757	.01633	-.00852	.00161	-.45765	.34362	-1.33186
.801	-4.472	-.35736	.28523	.14921	.01269	-.00631	.00109	-.33403	.31223	-1.06981
.801	-2.316	-.23340	.28287	.10417	.00674	-.00390	.00028	-.22178	.29207	-.75933
.801	-.190	-.11432	.27803	.05671	-.00011	-.00101	-.00030	-.11340	.27841	-.40731
.801	1.936	.01492	.27138	.00356	-.00586	.00144	-.00089	.00575	.27173	.02115
.801	4.069	.14701	.26540	-.04625	-.01144	.00303	-.00138	.12774	.27616	.46255
.801	6.214	.28280	.26059	-.10033	-.00761	.00108	-.00096	.25293	.28967	.87317
.800	8.351	.40835	.25614	-.14660	-.00241	-.00223	.00117	.36682	.31273	1.17234
	GRADIENT	.05892	-.00230	-.02304	-.00285	.00113	-.00029	.05395	-.00434	.18021

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ001) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 507/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.851	-8.849	-.65053	.30518	.25295	.02200	-.01174	.00178	-.59584	.40161	-1.48361
.851	-6.666	-.49389	.30074	.19458	.01972	-.00992	.00153	-.45564	.35604	-1.27974
.850	-4.517	-.35992	.29676	.14645	.01367	-.00708	.00128	-.33543	.32418	-1.03469
.851	-2.345	-.22706	.29333	.09477	.01090	-.00677	.00115	-.21487	.30237	-.71062
.851	-.225	-.10164	.29131	.04310	-.00176	.00037	-.00030	-.10050	.29170	-.34452
.851	1.929	.03487	.28471	-.01304	-.00521	.00018	-.00032	.02527	.28572	.08844
.851	4.090	.17186	.28187	-.06312	-.00809	.00090	-.00116	.15133	.29341	.51575
.851	6.238	.29830	.28004	-.10916	-.00732	.00050	-.00098	.26611	.31079	.85621
.851	8.389	.42547	.27660	-.15509	-.00030	-.00419	.00179	.38056	.33572	1.13359
	GRADIENT	.06169	-.00179	-.02452	-.00277	.00106	-.00030	.05648	-.00364	.18149

RUN NO. 506/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.901	-8.920	-.65830	.33072	.25709	.01622	-.00954	.00164	-.59906	.42880	-1.39707
.900	-6.733	-.49535	.32433	.19083	.02082	-.01075	.00138	-.45391	.38017	-1.19397
.900	-4.548	-.34406	.31874	.13186	.01681	-.00951	.00184	-.31771	.34502	-.92083
.900	-2.376	-.19962	.31524	.07294	.01275	-.00830	.00177	-.18638	.32324	-.57661
.900	-.199	-.06397	.31475	.01461	-.00145	-.00052	.00066	-.06278	.31497	-.19931
.899	1.937	.06671	.30754	-.03860	-.00445	-.00046	.00012	.05627	.30952	.18174
.900	4.098	.19170	.30577	-.08110	-.00812	.00061	-.00047	.16936	.31868	.53144
.900	6.263	.31448	.30526	-.11687	-.00936	.00150	-.00119	.27930	.33775	.82696
.900	8.451	.44761	.30138	-.16475	-.00019	-.00394	.00126	.39846	.36388	1.09502
	GRADIENT	.06193	-.00166	-.02488	-.00311	.00130	-.00029	.05632	-.00307	.16953

RUN NO. 505/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.921	-8.957	-.67747	.34218	.27090	.01875	-.01108	.00139	-.61593	.44349	-1.38882
.921	-6.763	-.50443	.33911	.19659	.01861	-.00953	.00096	-.46099	.39615	-1.16365
.920	-4.536	-.34431	.33317	.13147	.01530	-.00844	.00138	-.31688	.35936	-.88181
.921	-2.379	-.19855	.32814	.07166	.01136	-.00713	.00134	-.18476	.33610	-.54971
.920	-.222	-.05648	.32761	.00980	.00113	-.00207	.00076	-.05521	.32782	-.16841
.924	1.940	.07741	.32222	-.04590	-.00455	-.00068	-.00011	.06646	.32456	.20472
.921	4.093	.20878	.31982	-.09717	-.00685	-.00008	-.00032	.18542	.33391	.55531
.921	6.261	.32807	.31708	-.13012	-.01159	.00258	-.00111	.29154	.35097	.83066
.920	8.445	.45295	.31532	-.16589	-.00664	.00114	-.00009	.40174	.37842	1.06163
	GRADIENT	.08406	-.00151	-.02884	-.00279	.00107	-.00022	.05820	-.00289	.16617

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ001) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 504/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.950	-9.008	-.68811	.37171	.27640	.01963	-.01003	.00133	-.62142	.47486	-1.30863
.950	-6.807	-.52012	.36943	.20884	.01872	-.00890	.00110	-.47267	.42847	-1.10317
.950	-4.596	-.36414	.36388	.14811	.01465	-.00720	.00110	-.33382	.39189	-.85182
.950	-2.411	-.22325	.35743	.09516	.00939	-.00559	.00102	-.20801	.36651	-.56755
.950	-.220	-.07054	.35216	.03215	.00092	-.00189	.00074	-.06919	.35242	-.19632
.950	1.936	.07090	.35343	-.03228	-.00699	.00139	-.00035	.05892	.35562	.16569
.950	4.108	.21218	.34817	-.09396	-.01215	.00342	-.00116	.18670	.36247	.51507
.950	6.292	.34850	.34307	-.14130	-.00902	.00173	-.00134	.30880	.37920	.81435
.950	8.470	.47323	.34041	-.17770	-.00729	.00143	-.00093	.41793	.40639	1.02838
	GRADIENT	.06650	-.00163	-.02811	-.00321	.00130	-.00027	.06012	-.00321	.15935

RUN NO. 503/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.979	-9.086	-.70402	.40956	.27912	.02158	-.01028	.00117	-.63051	.51560	-1.22286
.980	-6.832	-.52786	.40728	.21261	.01586	-.00688	.00076	-.47566	.46718	-1.01815
.980	-4.633	-.37110	.40343	.15310	.01004	-.00386	.00038	-.33731	.43208	-.78065
.981	-2.412	-.21508	.39969	.09585	.00518	-.00225	.00025	-.19806	.40839	-.48499
.980	-.227	-.06709	.39609	.03805	-.00077	-.00015	-.00016	-.06552	.39636	-.16530
.980	1.940	.06834	.39435	-.02194	-.00770	.00232	-.00089	.05495	.39644	.13851
.980	4.111	.21325	.39464	-.08449	-.00810	.00179	-.00102	.18441	.40891	.45099
.980	6.316	.35096	.39561	-.13484	-.00870	.00060	-.00143	.30531	.43182	.70704
.980	8.482	.48218	.39102	-.18389	.00297	-.00811	-.00035	.41923	.45786	.91562
	GRADIENT	.06650	-.00105	-.02715	-.00225	.00073	-.00018	.05937	-.00268	.14133

RUN NO. 502/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.120	-9.251	-.71818	.46903	.28519	.02191	-.01129	.00121	-.63343	.57839	-1.09517
1.120	-6.966	-.54224	.46343	.22187	.01900	-.00954	.00149	-.48203	.52577	-.91681
1.121	-4.725	-.37407	.46103	.16026	.01397	-.00717	.00092	-.33482	.49028	-.68291
1.120	-2.491	-.21396	.46012	.09907	.00852	-.00517	.00039	-.19375	.46898	-.41313
1.120	-.250	-.06106	.45833	.03935	.00057	-.00121	-.00051	-.05906	.45859	-.12879
1.120	1.922	.07821	.45049	-.02268	-.00282	-.00051	-.00051	.06306	.45286	.13926
1.120	4.126	.21853	.44820	-.08283	-.00481	-.00094	-.00079	.18572	.46277	.40132
1.120	6.300	.35938	.44317	-.13955	-.00235	-.00382	-.00055	.30858	.47993	.64297
1.119	8.502	.49531	.43592	-.19606	.00142	-.00695	-.00073	.42542	.50436	.84349
	GRADIENT	.06681	-.00159	-.02749	-.00221	.00078	-.00020	.05870	-.00323	.12303

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ001) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 501/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.200	-9.282	-.72388	.48331	.29137	.01513	-.00720	.00133	-.63644	.59374	-1.07192
1.200	-7.008	-.52836	.48355	.21032	.01568	-.00748	.00109	-.46541	.54441	-.85489
1.200	-4.712	-.35610	.47980	.14703	.00821	-.00281	.00039	-.31548	.50744	-.62171
1.200	-2.497	-.19893	.47660	.08519	.00104	.00096	-.00027	-.17788	.48480	-.36691
1.200	-.266	-.04686	.47384	.02693	-.00362	.00266	-.00061	-.04466	.47406	-.09421
1.200	1.965	.09013	.46708	-.03048	-.00756	.00284	-.00090	.07406	.46989	.15761
1.200	4.126	.22730	.46358	-.08737	-.00749	.00121	-.00093	.19336	.47873	.40390
1.200	6.332	.36388	.45866	-.14052	-.00477	-.00135	-.00050	.31107	.49600	.62715
1.200	8.551	.50191	.45323	-.20017	-.00414	-.00204	-.00022	.42894	.52282	.82043
	GRADIENT	.06576	-.00190	-.02640	-.00181	.00045	-.00015	.05736	-.00328	.11635

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ002) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = .000

RUN NO. 530/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.350	-8.033	-.11371	.27188	.08627	.28685	-.12142	.03983	-.11352	.27196	-.41739
.350	-5.997	-.12460	.27328	.08887	.22082	-.09578	.03046	-.12439	.27338	-.45500
.351	-4.072	-.14082	.27249	.09290	.15183	-.06715	.02024	-.14059	.27262	-.51569
.351	-2.026	-.15719	.27180	.09728	.07833	-.03503	.01017	-.15693	.27195	-.57707
.351	-.051	-.16276	.27217	.09542	.00968	-.00428	.00064	-.16248	.27233	-.59665
.351	1.965	-.16039	.27111	.08527	-.06854	.03070	-.01008	-.16011	.27127	-.59020
.351	4.021	-.15512	.27267	.07604	-.14465	.06315	-.02078	-.15483	.27283	-.56749
.351	5.987	-.14691	.27167	.06632	-.21938	.09429	-.03063	-.14663	.27182	-.53941
.351	7.994	-.13601	.27083	.05135	-.29847	.12749	-.04120	-.13572	.27098	-.50085
	GRADIENT	-.00157	-.00002	-.00227	-.03667	.01617	-.00507	-.00157	-.00001	-.00577

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ002) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = .000

RUN NO. 529/ 0 RN/L = 3.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.600	-8.103	-.09068	.27642	.05305	.31752	-.13487	.04333	-.09017	.27659	-.32601
.601	-6.058	-.10438	.27646	.06176	.24368	-.10637	.03310	-.10383	.27666	-.37532
.600	-4.073	-.12196	.27712	.07058	.16884	-.07573	.02262	-.12137	.27738	-.43754
.601	-2.058	-.13348	.27477	.07674	.09112	-.04135	.01185	-.13286	.27507	-.48298
.601	.018	-.15127	.27245	.08538	.00887	-.00360	.00094	-.15060	.27283	-.55200
.598	2.033	-.14627	.27368	.07681	-.07066	.03244	-.00951	-.14559	.27404	-.53126
.601	4.049	-.13755	.27654	.06924	-.14881	.06603	-.02010	-.13687	.27687	-.49433
.600	6.024	-.12728	.27656	.05989	-.22677	.09931	-.03070	-.12662	.27686	-.45734
.600	8.082	-.11941	.27491	.05128	-.30955	.13191	-.04199	-.11875	.27520	-.43152
	GRADIENT	-.00217	-.00011	-.00012	-.03920	.01757	-.00525	-.00216	-.00010	-.00800

RUN NO. 528/ 0 RN/L = 3.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.801	-8.122	-.07270	.29365	.03552	.34189	-.14468	.04470	-.07189	.29385	-.24466
.801	-6.066	-.08455	.29277	.04212	.26193	-.11475	.03499	-.08370	.29302	-.28565
.801	-4.062	-.09620	.29153	.04785	.18209	-.08194	.02418	-.09530	.29182	-.32655
.801	-2.058	-.10411	.28859	.05193	.10170	-.04784	.01312	-.10319	.28892	-.35716
.801	-.044	-.11953	.28253	.06066	.01652	-.00936	.00249	-.11857	.28293	-.41908
.801	2.001	-.11451	.28558	.05365	-.07157	.03235	-.00873	-.11353	.28597	-.39700
.801	4.066	-.10669	.29036	.04702	-.15891	.07036	-.02083	-.10571	.29072	-.36363
.801	6.030	-.09905	.29130	.03905	-.23999	.10526	-.03184	-.09807	.29163	-.33627
.802	8.087	-.08925	.29280	.03157	-.32640	.13941	-.04267	-.08829	.29309	-.30125
	GRADIENT	-.00153	-.00026	-.00001	-.04210	.01894	-.00551	-.00152	-.00025	-.00555

RUN NO. 527/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.849	-8.122	-.06572	.30784	.02859	.35485	-.15132	.04658	-.06480	.30803	-.21038
.851	-6.075	-.07440	.30603	.03225	.27167	-.11947	.03608	-.07344	.30626	-.23980
.851	-4.057	-.07785	.30265	.03329	.18462	-.08262	.02414	-.07689	.30289	-.25385
.851	-2.001	-.08851	.29996	.03753	.10095	-.04675	.01248	-.08749	.30025	-.29140
.851	-.035	-.10609	.29544	.04707	.01908	-.01108	.00255	-.10501	.29582	-.35498
.851	2.044	-.10044	.29848	.04087	-.07623	.03353	-.00869	-.09935	.29884	-.33245
.850	3.999	-.09452	.30253	.03562	-.15741	.06870	-.01977	-.09343	.30287	-.30848
.850	6.078	-.08394	.30379	.02791	-.24938	.10863	-.03283	-.08288	.30408	-.27255
.851	8.097	-.07643	.30770	.02312	-.33706	.14391	-.04418	-.07538	.30795	-.24478
	GRADIENT	-.00225	-.00009	.00040	-.04273	.01900	-.00541	-.00223	-.00007	-.00746

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ002) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = .000

RUN NO. 526/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.900	-8.132	-.05458	.33520	.02136	.36325	-.15588	.04998	-.05352	.33537	-.15959
.900	-6.113	-.05508	.33326	.01928	.28079	-.12294	.03744	-.05401	.33343	-.16199
.900	-4.075	-.05501	.32811	.01455	.19782	-.08895	.02552	-.05393	.32829	-.16429
.900	-2.056	-.06374	.32397	.01553	.11183	-.05220	.01320	-.06260	.32419	-.19311
.899	-.015	-.06644	.31845	.01727	.02030	-.01249	.00307	-.05532	.31868	-.20496
.899	2.026	-.06500	.32047	.01302	-.07926	.03503	-.00787	-.06385	.32070	-.19908
.900	4.056	-.06328	.32735	.01092	-.16755	.07344	-.02016	-.06209	.32758	-.18953
.899	6.086	-.06281	.33141	.01284	-.25713	.11190	-.03398	-.06162	.33163	-.18581
.900	8.125	-.06610	.33467	.01543	-.34016	.14400	-.04548	-.06488	.33491	-.19372
	GRADIENT	-.00087	-.00025	-.00048	-.04531	.02025	-.00553	-.00086	-.00024	-.00277

RUN NO. 525/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.921	-8.127	-.04880	.35025	.01917	.36784	-.15676	.05111	-.04768	.35040	-.13608
.920	-6.097	-.04781	.34793	.01707	.28518	-.12464	.03865	-.04670	.34808	-.13417
.920	-4.076	-.05014	.34394	.01417	.19875	-.08961	.02563	-.04900	.34410	-.14240
.920	-2.048	-.05497	.33667	.01226	.11535	-.05440	.01366	-.05380	.33686	-.15972
.920	-.016	-.05596	.33068	.01014	.02316	-.01380	.00319	-.05479	.33087	-.16559
.920	2.036	-.05558	.33380	.00746	-.07684	.03281	-.00781	-.05438	.33399	-.16281
.920	4.048	-.05416	.34265	.00814	-.17011	.07406	-.02133	-.05293	.34284	-.15439
.920	6.078	-.05821	.34674	.01139	-.25766	.11148	-.03490	-.05695	.34695	-.16413
.920	8.109	-.06200	.35006	.01372	-.34312	.14345	-.04695	-.06069	.35029	-.17326
	GRADIENT	-.00043	-.00027	-.00083	-.04574	.02039	-.00567	-.00042	-.00027	-.00133

RUN NO. 524/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.949	-8.122	-.04889	.37700	.02308	.37168	-.15786	.05356	-.04763	.37716	-.12628
.950	-6.100	-.05218	.37751	.02653	.28531	-.12377	.04065	-.05090	.37768	-.13478
.950	-4.059	-.05030	.37241	.02408	.19923	-.08814	.02763	-.04906	.37258	-.13167
.950	-2.059	-.06018	.36482	.02701	.11209	-.05044	.01429	-.05889	.36504	-.16133
.950	-.016	-.07299	.35688	.03473	.01836	-.01090	.00231	-.07166	.35714	-.20066
.950	2.007	-.06831	.36342	.02900	-.07432	.03099	-.00876	-.06695	.36367	-.18410
.950	4.069	-.06397	.37243	.02446	-.16415	.06851	-.02247	-.06257	.37267	-.16788
.950	6.071	-.06190	.37614	.02186	-.25486	.10761	-.03666	-.06047	.37638	-.16066
.950	8.115	-.06189	.37800	.01963	-.34799	.14427	-.05001	-.06042	.37824	-.15975
	GRADIENT	-.00174	-.00006	.00013	-.04494	.01942	-.00606	-.00172	-.00005	-.00466

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ002) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = .000

RUN NO. 523/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.979	-8.131	-.04464	.41589	.02549	.37775	-.15408	.05675	-.04318	.41604	-.10380
.980	-6.115	-.04900	.41494	.03006	.28537	-.11948	.04325	-.04755	.41511	-.11454
.980	-4.092	-.05590	.41111	.03376	.19720	-.08381	.02927	-.05441	.41131	-.13229
.980	-2.060	-.06237	.40647	.03661	.10997	-.04801	.01533	-.06086	.40670	-.14964
.980	-.006	-.07300	.39956	.04181	.01947	-.01065	.00239	-.07144	.39985	-.17867
.980	2.039	-.05489	.40260	.03513	-.07999	.03383	-.01150	-.06335	.40284	-.15725
.979	4.041	-.06798	.41006	.03442	-.16274	.06617	-.02422	-.06634	.41033	-.16169
.979	6.085	-.06182	.41305	.02838	-.25612	.10445	-.03912	-.06018	.41329	-.14561
.979	8.121	-.06139	.41535	.02442	-.34810	.13865	-.05256	-.05970	.41559	-.14364
	GRADIENT	-.00131	-.00030	-.00001	-.04468	.01875	-.00657	-.00130	-.00029	-.00327

RUN NO. 522/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.119	-8.176	-.02668	.46047	.01397	.36468	-.13718	.05750	-.02490	.46057	-.05407
1.120	-6.126	-.03100	.46171	.02108	.27506	-.10724	.04464	-.02924	.46183	-.06331
1.119	-4.098	-.03898	.46287	.02764	.18643	-.07449	.03024	-.03716	.46302	-.08026
1.119	-2.032	-.04774	.46330	.03202	.10283	-.04267	.01589	-.04583	.46349	-.09888
1.120	-.016	-.06045	.46252	.03813	.01832	-.00972	.00278	-.05841	.46278	-.12622
1.119	2.030	-.05695	.46302	.03457	-.07357	.03079	-.01136	-.05492	.46327	-.11855
1.119	4.046	-.05191	.46447	.03013	-.15941	.06419	-.02598	-.04990	.46469	-.10738
1.119	6.114	-.04789	.46397	.02425	-.24679	.09601	-.04028	-.04586	.46418	-.09881
1.119	8.146	-.04228	.46163	.01529	-.34054	.12680	-.05385	-.04025	.46181	-.08715
	GRADIENT	-.00173	.00014	.00037	-.04266	.01724	-.00686	-.00170	.00015	-.00364

RUN NO. 521/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.199	-8.184	-.02152	.48158	.00970	.37298	-.14333	.05797	-.01955	.48166	-.04059
1.200	-6.120	-.02586	.48162	.01603	.27736	-.10968	.04424	-.02390	.48172	-.04962
1.200	-4.091	-.03393	.48141	.02178	.18709	-.07464	.02974	-.03192	.48155	-.06628
1.200	-2.052	-.03877	.48084	.02436	.09926	-.04046	.01528	-.03671	.48100	-.07631
1.200	-.006	-.04892	.47637	.02813	.01673	-.00864	.00244	-.04676	.47659	-.09811
1.200	2.032	-.04953	.47854	.02716	-.07480	.03066	-.01147	-.04733	.47876	-.09886
1.200	4.049	-.04603	.48039	.02414	-.15834	.06231	-.02541	-.04383	.48060	-.09120
1.200	6.110	-.04449	.48069	.01938	-.25074	.09695	-.04021	-.04224	.48089	-.08785
1.200	8.143	-.03971	.47867	.01240	-.34680	.13124	-.05391	-.03747	.47885	-.07824
	GRADIENT	-.00172	-.00021	.00037	-.04247	.01694	-.00673	-.00169	-.00020	-.00356

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ003) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 10.000

RUN NO. 540/ 0 RN/L = 2.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.350	-8.206	-.58573	.27812	.26611	.01418	-.00549	.00017	-.54004	.35887	-1.50481
.351	-6.178	-.48454	.27886	.22833	.01197	-.00427	.00005	-.45172	.32938	-1.37143
.348	-4.112	-.36688	.27837	.18212	.00923	-.00266	.00014	-.34597	.30396	-1.13821
.351	-2.096	-.26739	.27822	.14133	.00206	.00010	-.00106	-.25704	.28781	-.89308
.350	-.089	-.17020	.27459	.09943	-.00264	.00166	-.00090	-.16977	.27486	-.61768
.350	1.944	-.04956	.26829	.04910	-.00408	.00101	-.00089	-.05864	.26646	-.22006
.350	3.975	.06009	.26004	.00450	-.00791	.00218	-.00090	.04192	.26358	.15902
.350	6.018	.17513	.25177	-.04329	-.00527	.00020	-.00041	.14777	.26874	.54986
.349	8.070	.29412	.23958	-.09697	-.00498	.00047	.00019	.25758	.27850	.92489
	GRADIENT	.05303	-.00231	-.02214	-.00200	.00052	-.00009	.04820	-.00505	.16169

RUN NO. 539/ 0 RN/L = 3.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.599	-8.515	-.62482	.28265	.26215	.01406	-.00574	.00116	-.57608	.37205	-1.54839
.600	-6.435	-.50237	.28233	.21876	.00868	-.00236	.00034	-.46756	.33686	-1.38801
.601	-4.348	-.38332	.28085	.17609	.00747	-.00111	.00006	-.35093	.30910	-1.16765
.597	-2.237	-.27795	.28025	.13855	.00124	.00066	-.00021	-.26679	.29088	-.91718
.599	-.177	-.16607	.27610	.09612	-.00589	.00413	-.00078	-.16521	.27661	-.59726
.598	1.908	-.04696	.26821	.04984	-.00836	.00357	-.00061	-.05586	.26650	-.20962
.598	4.007	.07512	.26193	.00298	-.01069	.00397	-.00055	.05663	.26654	.21247
.598	6.086	.19665	.25435	-.04301	-.00783	.00187	.00044	.16858	.27377	.61577
.599	8.183	.31864	.24112	-.09411	-.00752	.00143	.00044	.28107	.28402	.98964
	GRADIENT	.05504	-.00239	-.02090	-.00220	.00063	-.00008	.05016	-.00525	.16628

RUN NO. 538/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.800	-8.812	-.66448	.30172	.26898	.01758	-.00793	.00263	-.61042	.39995	-1.52624
.801	-6.814	-.52135	.29872	.21936	.01432	-.00618	.00230	-.48347	.35678	-1.35509
.800	-4.469	-.38432	.29527	.17114	.01046	-.00421	.00165	-.36015	.32432	-1.11047
.800	-2.346	-.26398	.29195	.12842	.00220	-.00014	.00029	-.25181	.30251	-.83243
.800	-.211	-.14560	.28667	.08066	-.00553	.00331	-.00007	-.14454	.28720	-.50328
.800	1.947	-.01400	.28017	.02648	-.01112	.00523	-.00046	-.02351	.27954	-.08410
.801	4.053	.12150	.27477	-.02591	-.01258	.00482	-.00017	.10178	.28267	.35006
.800	6.208	.26212	.26742	-.08563	-.01310	.00473	-.00088	.23167	.29419	.78747
.801	8.368	.40371	.26001	-.14265	-.00505	-.00012	.00109	.36157	.31599	1.14425
	GRADIENT	.05913	-.00247	-.02325	-.00278	.00110	-.00021	.05400	-.00498	.17291

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ003) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 10.000

RUN NO. 537/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.850	-8.910	-.67970	.31666	.27497	.01656	-.00766	.00236	-.62245	.41811	-1.48873
.850	-6.698	-.52839	.31161	.22259	.01603	-.00713	.00243	-.48844	.37112	-1.31612
.850	-4.506	-.39210	.30772	.17411	.01296	-.00621	.00227	-.36671	.33758	-1.08629
.850	-2.393	-.26723	.30323	.12542	.00666	-.00329	.00136	-.25434	.31412	-.80969
.850	-.247	-.13542	.30044	.07045	-.00109	.00037	.00092	-.13412	.30102	-.44554
.850	1.899	.00598	.29277	.00986	-.00831	.00289	.00060	-.00373	.29281	-.01272
.850	4.151	.15786	.28795	-.05038	-.01080	.00291	-.00053	.13660	.29862	.45744
.849	6.225	.29295	.28360	-.10407	-.00917	.00246	-.00090	.26047	.31369	.83034
.850	8.439	.42575	.27839	-.15429	-.00056	-.00357	.00191	.38028	.33786	1.12557
	GRADIENT	.06357	-.00232	-.02614	-.00289	.00113	-.00029	.05821	-.00456	.17995

RUN NO. 536/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.899	-8.931	-.69198	.34341	.28510	.01157	-.00549	.00187	-.63028	.44668	-1.41106
.900	-6.777	-.54211	.33884	.22840	.01591	-.00661	.00124	-.49834	.40044	-1.24448
.899	-4.521	-.39223	.33191	.17140	.01193	-.00534	.00153	-.36485	.36179	-1.00847
.899	-2.425	-.25602	.32655	.11764	.00878	-.00475	.00181	-.24197	.33709	-.71782
.900	-.225	-.11373	.32430	.05386	-.00346	.00104	.00146	-.11246	.32474	-.34630
.899	1.917	.03869	.31487	-.01634	-.00545	.00115	.00094	.02813	.31599	.08902
.899	4.063	.17610	.31137	-.07037	-.01274	.00380	-.00029	.15359	.32307	.47542
.899	6.257	.31119	.30887	-.11593	-.01169	.00340	-.00118	.27567	.34094	.80854
.899	8.443	.44075	.30427	-.16093	-.00118	-.00277	.00110	.39129	.36569	1.07003
	GRADIENT	.06655	-.00245	-.02871	-.00296	.00113	-.00021	.06076	-.00458	.17551

RUN NO. 535/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.920	-8.970	-.71194	.35647	.30051	.01361	-.00695	.00129	-.64765	.46311	-1.39848
.920	-6.797	-.55130	.35422	.23439	.01515	-.00596	.00070	-.50551	.41697	-1.21233
.920	-4.560	-.39391	.34668	.17249	.01146	-.00474	.00103	-.36511	.37690	-.96870
.920	-2.375	-.25272	.34075	.11676	.00620	-.00297	.00107	-.23838	.35093	-.67928
.920	-.246	-.10700	.33670	.05095	-.00078	-.00019	.00145	-.10555	.33715	-.31307
.920	1.928	.04704	.33075	-.02123	-.00572	.00110	.00069	.03588	.33214	.10803
.920	4.100	.19256	.32482	-.08503	-.00725	.00152	.00072	.16885	.33776	.49992
.920	6.300	.32430	.32088	-.12521	-.01166	.00325	-.00053	.28713	.35453	.80989
.919	8.434	.45190	.31911	-.16374	-.00692	.00149	.00015	.40021	.38194	1.04784
	GRADIENT	.06811	-.00248	-.03020	-.00228	.00077	-.00005	.06207	-.00449	.17225

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ003) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 10.000

RUN NO. 534/ 0 RN/L = 4.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.950	-9.034	-.72145	.38747	.30396	.01912	-.00809	.00119	-.65166	.49595	-1.31397
.951	-6.813	-.55542	.38519	.23876	.01496	-.00564	.00080	-.50580	.44837	-1.12810
.950	-4.649	-.40680	.37780	.18200	.01103	-.00427	.00098	-.37483	.40953	-.91526
.950	-2.416	-.26027	.35955	.12732	.00632	-.00304	.00091	-.24445	.38020	-.64297
.950	-.252	-.11256	.36259	.06535	-.00344	.00119	.00059	-.11096	.36308	-.30562
.950	1.948	.04517	.36031	-.01042	-.01001	.00365	-.00002	.03290	.36164	.09097
.950	4.091	.20055	.35290	-.08269	-.00969	.00293	-.00007	.17486	.36631	.47737
.950	6.296	.34026	.34599	-.13382	-.01325	.00461	-.00055	.30026	.38122	.78764
.949	8.480	.47028	.34351	-.17280	-.00737	.00169	-.00062	.41448	.40910	1.01314
	GRADIENT	.06958	-.00270	-.03053	-.00265	.00097	-.00014	.06302	-.00482	.16104

RUN NO. 533/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.980	-9.130	-.73923	.43022	.30630	.01996	-.00829	.00091	-.66160	.54207	-1.22050
.980	-6.883	-.56358	.42381	.24059	.01336	-.00481	.00059	-.50873	.48830	-1.04184
.981	-4.674	-.40869	.41925	.18333	.01034	-.00317	.00060	-.37317	.45116	-.82712
.981	-2.448	-.25743	.41244	.12803	.00197	.00004	.00005	-.23958	.42306	-.56630
.980	-.288	-.10491	.40452	.06644	-.00122	.00046	-.00003	-.10287	.40504	-.25397
.980	1.928	.05016	.39796	-.00632	-.00933	.00361	-.00086	.03674	.39942	.09199
.980	4.115	.20341	.39630	-.07519	-.01014	.00290	-.00059	.17445	.40987	.42562
.980	6.294	.34584	.39617	-.12909	-.00797	.00039	.00008	.30032	.43170	.69568
.980	8.484	.48113	.39175	-.18125	.00197	-.00742	.00086	.41807	.45844	.91194
	GRADIENT	.06977	-.00275	-.02967	-.00238	.00072	-.00015	.06247	-.00484	.14410

RUN NO. 532/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.118	-9.340	-.74700	.47920	.30551	.02266	-.01090	.00147	-.65932	.59408	-1.10983
1.121	-7.064	-.55715	.47347	.23890	.01949	-.00976	.00173	-.50462	.53962	-.93514
1.120	-4.720	-.39280	.46687	.17616	.01417	-.00742	.00121	-.35305	.49761	-.70949
1.119	-2.610	-.24223	.46333	.11751	.00732	-.00432	.00032	-.22088	.47388	-.46610
1.119	-.374	-.08448	.46039	.05464	.00308	-.00297	.00039	-.08148	.46093	-.17676
1.118	1.851	.05677	.45203	-.00812	-.00392	-.00016	-.00004	.04214	.45363	.09289
1.119	4.011	.20235	.44950	-.07111	-.00242	-.00232	.00023	.17041	.46255	.36841
1.118	6.227	.34518	.44404	-.12813	-.00249	-.00392	.00021	.29497	.47886	.61599
1.118	8.467	.48868	.43639	-.19064	.00307	-.00872	.00109	.41911	.50359	.83225
	GRADIENT	.06793	-.00210	-.02829	-.00203	.00065	-.00011	.05975	-.00411	.12385

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ003) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 10.000

RUN NO. 531/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.199	-9.321	-.73638	.49384	.29922	.01931	-.00904	.00110	-.64667	.60658	-1.06609
1.200	-7.016	-.54574	.49010	.22350	.01592	-.00728	.00108	-.48180	.55309	-.87110
1.200	-4.714	-.36907	.48399	.15771	.00946	-.00365	.00080	-.32805	.51268	-.63986
1.200	-2.505	-.20978	.47878	.09477	.00379	-.00095	.00050	-.18865	.48749	-.38699
1.200	-.260	-.05373	.47531	.03379	-.00117	.00094	.00021	-.05157	.47555	-.10845
1.200	1.901	.07645	.46932	-.02065	-.00603	.00170	-.00011	.06083	.47160	.12899
1.199	4.141	.21952	.46532	-.08016	-.00562	.00006	-.00020	.18535	.47995	.38618
1.199	6.344	.36108	.45970	-.13550	-.00412	-.00189	.00009	.30807	.49579	.62012
1.199	8.535	.49356	.45408	-.19317	-.00190	-.00401	.00089	.42070	.52230	.80547
	GRADIENT	.06618	-.00212	-.02673	-.00181	.00046	-.00012	.05771	-.00368	.11613

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ004) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 10.000

RUN NO. 550/ 0 RN/L = 2.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.349	-8.022	-.12528	.27397	.09033	.28005	-.11713	.03831	-.12507	.27406	-.45635
.349	-6.027	-.13952	.27549	.09382	.21668	-.09357	.02900	-.13929	.27560	-.50538
.349	-4.001	-.15365	.27515	.09683	.14570	-.06364	.01853	-.15339	.27529	-.55720
.351	-2.016	-.17099	.27573	.10386	.07303	-.03264	.00883	-.17070	.27590	-.61871
.351	.000	-.18231	.27410	.10431	.00039	.00001	-.00115	-.18201	.27430	-.66353
.350	2.006	-.17757	.27464	.09415	-.07168	.03241	-.01098	-.17726	.27484	-.64496
.351	4.012	-.17761	.27564	.08501	-.14853	.06462	-.02151	-.17729	.27585	-.64268
.351	6.017	-.16372	.27503	.07214	-.22033	.09538	-.03080	-.16340	.27521	-.59371
.351	8.024	-.14469	.27397	.05233	-.30214	.12885	-.04176	-.14438	.27414	-.52665
	GRADIENT	-.00272	-.00001	-.00167	-.03657	.01604	-.00498	-.00271	.00000	-.00983

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ004) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 10.000

RUN NO. 549/ 0 RN/L = 3.16 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.600	-8.074	-.11219	.28045	.06834	.32007	-.13442	.04438	-.11162	.28068	-.39768
.598	-6.058	-.12531	.28108	.07666	.24551	-.10645	.03458	-.12471	.28135	-.44325
.600	-4.033	-.14093	.28164	.08531	.16746	-.07418	.02350	-.14028	.28196	-.49751
.600	-2.018	-.15739	.28020	.09352	.09118	-.04098	.01273	-.15670	.28058	-.55948
.600	-.003	-.16882	.27770	.09937	.01447	-.00624	.00307	-.16810	.27814	-.60436
.599	2.013	-.16719	.27863	.09208	-.06870	.03173	-.00817	-.16645	.27907	-.59643
.599	4.028	-.15852	.28174	.08525	-.14363	.06362	-.01813	-.15778	.28215	-.55922
.599	6.044	-.14766	.28093	.07535	-.22343	.09769	-.02891	-.14694	.28131	-.52233
.599	8.060	-.13517	.28009	.06274	-.30260	.12887	-.03960	-.13447	.28043	-.47950
	GRADIENT	-.00223	-.00007	-.00008	-.03881	.01728	-.00517	-.00222	-.00006	-.00801

RUN NO. 548/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.800	-8.111	-.09889	.29792	.05486	.34105	-.14385	.04672	-.09799	.29822	-.32858
.800	-6.077	-.10959	.29756	.06196	.26414	-.11470	.03659	-.10865	.29791	-.36470
.800	-4.052	-.12045	.29631	.06812	.18179	-.08085	.02516	-.11947	.29671	-.40263
.800	-2.028	-.13658	.29394	.07586	.10035	-.04678	.01373	-.13553	.29432	-.46049
.800	-.015	-.14699	.28776	.08232	.02011	-.01066	.00379	-.14593	.28830	-.50619
.800	2.000	-.14547	.29184	.07774	-.06904	.03131	-.00752	-.14437	.29239	-.49378
.801	4.045	-.13981	.29666	.07183	-.15490	.06830	-.01931	-.13870	.29718	-.46670
.800	6.069	-.12630	.29701	.06060	-.23783	.10388	-.03055	-.12522	.29747	-.42094
.800	8.095	-.11820	.29875	.05320	-.32203	.13672	-.04098	-.11713	.29917	-.39151
	GRADIENT	-.00235	-.00006	.00046	-.04168	.01861	-.00545	-.00233	-.00005	-.00797

RUN NO. 547/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.850	-8.112	-.08610	.31214	.04615	.35296	-.14977	.04952	-.08709	.31243	-.27875
.849	-6.075	-.10069	.31015	.05352	.27112	-.11722	.03801	-.09963	.31049	-.32090
.850	-4.057	-.11395	.30773	.05942	.18414	-.08089	.02547	-.11283	.30814	-.36618
.850	-2.031	-.12451	.30552	.06500	.10219	-.04639	.01378	-.12335	.30599	-.40313
.850	-.006	-.13961	.30091	.07336	.02102	-.01160	.00363	-.13840	.30147	-.45907
.849	2.022	-.13761	.30473	.06944	-.07157	.03152	-.00728	-.13637	.30529	-.44670
.850	4.048	-.13425	.30902	.06483	-.15347	.06643	-.01863	-.13298	.30957	-.42955
.849	6.086	-.11911	.31007	.05441	-.24311	.10483	-.03149	-.11790	.31054	-.37966
.849	8.104	-.11004	.31282	.04715	-.32756	.13838	-.04247	-.10884	.31324	-.34747
	GRADIENT	-.00265	.00009	.00075	-.04190	.01839	-.00538	-.00263	.00011	-.00840

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ004) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 10.000

RUN NO. 546/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.900	-8.133	-.07669	.33891	.03886	.36177	-.15169	.05368	-.07553	.33917	-.22270
.899	-6.094	-.08597	.33694	.04389	.27927	-.11894	.04130	-.08477	.33725	-.25135
.899	-4.054	-.09270	.33271	.04462	.19096	-.08262	.02811	-.09145	.33306	-.27459
.900	-2.036	-.10808	.32882	.05083	.10780	-.04772	.01519	-.10675	.32925	-.32423
.900	-.006	-.11727	.32512	.05615	.02193	-.01217	.00403	-.11591	.32560	-.35600
.900	2.024	-.11238	.32818	.05067	-.07092	.02994	-.00672	-.11102	.32864	-.33780
.900	4.054	-.10967	.33299	.04778	-.15945	.06769	-.02011	-.10828	.33344	-.32473
.900	6.082	-.10402	.33640	.04406	-.24488	.10447	-.03398	-.10264	.33683	-.30472
.900	8.103	-.09648	.33872	.03886	-.33300	.13886	-.04654	-.09511	.33911	-.28047
	GRADIENT	-.00188	-.00000	.00030	-.04338	.01866	-.00584	-.00187	.00001	-.00561

RUN NO. 545/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.920	-8.137	-.06828	.35252	.03523	.36305	-.15074	.05467	-.06708	.35275	-.19016
.920	-6.107	-.07791	.35210	.03985	.27880	-.11733	.04187	-.07664	.35237	-.21751
.919	-4.056	-.08454	.34690	.04159	.19176	-.08187	.02813	-.08325	.34721	-.23977
.920	-2.048	-.09945	.34273	.04801	.11078	-.04876	.01552	-.09808	.34313	-.28583
.920	-.007	-.10784	.33802	.05241	.02464	-.01302	.00396	-.10644	.33846	-.31450
.920	2.025	-.10462	.34114	.04785	-.07199	.03019	-.00698	-.10320	.34157	-.30214
.920	4.055	-.09836	.34766	.04318	-.15897	.06714	-.02059	-.09693	.34806	-.27848
.920	6.086	-.09149	.35140	.03771	-.24821	.10455	-.03528	-.09006	.35177	-.25602
.920	8.118	-.08557	.35386	.03290	-.33576	.13933	-.04935	-.08415	.35420	-.23758
	GRADIENT	-.00161	-.00000	.00015	-.04357	.01858	-.00591	-.00160	.00001	-.00461

RUN NO. 544/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.950	-8.133	-.06222	.38082	.03381	.36671	-.15049	.05600	-.06088	.38103	-.15977
.951	-6.091	-.06905	.38122	.04066	.28009	-.11667	.04264	-.06769	.38146	-.17744
.950	-4.080	-.08504	.37747	.05046	.19677	-.08384	.02893	-.08360	.37779	-.22128
.950	-2.050	-.10032	.37120	.05900	.11498	-.05136	.01623	-.09882	.37160	-.26593
.950	-.007	-.11182	.36344	.06540	.02376	-.01236	.00338	-.11029	.36391	-.30306
.950	2.016	-.10687	.36911	.06080	-.07379	.03216	-.00862	-.10532	.36955	-.28500
.950	4.068	-.10037	.37774	.05429	-.16195	.06786	-.02255	-.09878	.37816	-.26120
.950	6.089	-.08912	.38039	.04407	-.24783	.10280	-.03654	-.08755	.38076	-.22993
.950	8.123	-.08467	.38185	.03693	-.33849	.13712	-.04979	-.08308	.38220	-.21736
	GRADIENT	-.00183	-.00007	.00046	-.04450	.01900	-.00628	-.00181	-.00006	-.00485

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ004) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 10.000

RUN NO. 543/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.980	-8.131	-.05967	.42022	.03600	.36930	-.14462	.05759	-.05809	.42045	-.13817
.980	-6.116	-.07009	.42026	.04542	.28286	-.11403	.04470	-.06848	.42053	-.16283
.980	-4.072	-.08567	.41759	.05656	.19571	-.08180	.03061	-.08398	.41793	-.20095
.980	-2.050	-.09330	.41246	.06172	.11009	-.04790	.01648	-.09159	.41283	-.22187
.980	-.008	-.10731	.40661	.06907	.02362	-.01191	.00338	-.10554	.40707	-.25927
.980	2.027	-.10397	.40960	.06434	-.07549	.03238	-.01039	-.10218	.41005	-.24918
.979	4.061	-.10120	.41726	.06054	-.16308	.06688	-.02486	-.09934	.41770	-.23783
.979	6.085	-.09240	.41909	.05153	-.25257	.10212	-.03942	-.09056	.41950	-.21587
.979	8.120	-.08450	.41992	.04185	-.33964	.13201	-.05185	-.08265	.42029	-.19665
	GRADIENT	-.00205	-.00017	.00052	-.04440	.01856	-.00677	-.00203	-.00016	-.00497

RUN NO. 542/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.119	-8.158	-.03753	.46197	.02263	.36702	-.13622	.05890	-.03567	.46212	-.07720
1.119	-6.117	-.04401	.46262	.03060	.27613	-.10646	.04565	-.04215	.46279	-.09109
1.119	-4.080	-.05374	.46306	.03809	.19042	-.07518	.03159	-.05182	.46328	-.11185
1.119	-2.043	-.06057	.46427	.04262	.10436	-.04289	.01707	-.05859	.46452	-.12612
1.119	.001	-.07512	.46347	.04999	.02392	-.01242	.00426	-.07300	.46381	-.15738
1.120	2.029	-.07305	.46428	.04805	-.07001	.02895	-.01032	-.07092	.46461	-.15264
1.119	4.076	-.07072	.46603	.04472	-.15803	.06291	-.02550	-.06857	.46635	-.14705
1.119	6.103	-.06683	.46516	.03877	-.24381	.09413	-.03961	-.06468	.46546	-.13895
1.119	8.145	-.05914	.46361	.02852	-.33629	.12469	-.05298	-.05699	.46388	-.12285
	GRADIENT	-.00228	.00029	.00092	-.04274	.01707	-.00695	-.00225	.00031	-.00476

RUN NO. 541/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.200	-8.174	-.03409	.48165	.01869	.37400	-.14398	.05877	-.03203	.48180	-.06647
1.200	-6.121	-.03910	.48160	.02474	.27973	-.11054	.04527	-.03723	.48176	-.07686
1.200	-4.092	-.04548	.48112	.02993	.19025	-.07588	.03122	-.04337	.48132	-.09011
1.200	-2.043	-.05343	.48091	.03429	.10181	-.04190	.01658	-.05124	.48115	-.10650
1.200	-.007	-.06310	.47716	.03814	.01994	-.01040	.00369	-.06082	.47746	-.12739
1.200	2.031	-.06311	.47903	.03751	-.07141	.02864	-.01023	-.06081	.47933	-.12686
1.200	4.068	-.06068	.48116	.03520	-.15540	.06026	-.02448	-.05837	.48145	-.12123
1.200	6.108	-.06013	.48102	.03143	-.24556	.09397	-.03876	-.05778	.48131	-.12004
1.200	8.153	-.05433	.47876	.02305	-.34465	.12980	-.05295	-.05198	.47902	-.10852
	GRADIENT	-.00197	-.00009	.00068	-.04239	.01691	-.00578	-.00194	-.00008	-.00405

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ005) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 20.000

RUN NO. 570/ 0 RN/L = 2.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.350	-8.173	-.62075	.28751	.29060	.01319	-.00596	.00034	-.57357	.37285	-1.53837
.350	-6.152	-.51275	.28789	.24845	.00961	-.00293	-.00039	-.47894	.34119	-1.40374
.351	-4.113	-.41002	.28691	.20939	.00504	-.00053	-.00082	-.38839	.31558	-1.23070
.350	-2.095	-.31092	.28922	.17009	-.00288	.00212	-.00185	-.30014	.30039	-.99915
.350	-.056	-.20588	.28383	.12641	-.00344	.00232	-.00120	-.20561	.28403	-.72389
.350	1.955	-.09435	.27564	.07887	-.00655	.00211	-.00159	-.10370	.27226	-.38088
.350	3.988	.02077	.26979	.03200	-.00958	.00276	-.00142	.00196	.27058	.00724
.350	6.030	.13808	.26052	-.01805	-.00775	.00100	-.00100	.10994	.27359	.40187
.350	8.062	.25337	.24706	-.06767	-.00581	.00085	.00000	.21622	.28016	.77177
	GRADIENT	.05324	-.00236	-.02202	-.00162	.00032	-.00005	.04825	-.00583	.15278

RUN NO. 569/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.600	-8.508	-.66918	.29267	.29253	.01303	-.00528	.00056	-.61852	.38846	-1.59224
.600	-6.423	-.54032	.29231	.24672	.01020	-.00362	.00041	-.50423	.35032	-1.43686
.599	-4.325	-.42110	.29072	.20386	.00616	-.00089	-.00067	-.39798	.32164	-1.23733
.600	-2.243	-.31013	.29028	.16461	.00189	.00049	-.00082	-.29853	.30220	-.98788
.599	-.166	-.20529	.28561	.12517	-.00563	.00354	-.00112	-.20446	.28620	-.71439
.600	1.934	-.07954	.27750	.07473	-.00736	.00307	-.00099	-.08886	.27465	-.32354
.601	4.012	.03947	.27127	.03051	-.00835	.00278	-.00093	.02040	.27337	.07461
.599	6.039	.15792	.26261	-.01447	-.00914	.00215	-.00050	.12913	.27790	.46466
.599	8.189	.28649	.24980	-.06875	-.00785	.00146	-.00004	.24799	.28806	.86087
	GRADIENT	.05524	-.00248	-.02094	-.00183	.00048	-.00003	.05019	-.00595	.15772

RUN NO. 568/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.801	-8.813	-.71003	.31232	.30324	.01769	-.00863	.00225	-.65380	.41742	-1.56629
.800	-6.657	-.56959	.30950	.25357	.01363	-.00620	.00159	-.52987	.37345	-1.41887
.800	-4.500	-.42928	.30566	.20439	.01129	-.00481	.00120	-.40397	.33840	-1.19377
.800	-2.364	-.30657	.30234	.16056	.00517	-.00200	.00014	-.29383	.31473	-.93360
.800	-.233	-.18200	.29626	.11040	-.00296	.00177	-.00046	-.18080	.29699	-.60877
.800	1.898	-.05776	.28933	.05921	-.01095	.00488	-.00093	-.06731	.28726	-.23433
.800	4.043	.07719	.28281	.00707	-.01179	.00403	-.00073	.05705	.28754	.19942
.801	6.195	.22584	.27574	-.05675	-.01163	.00389	-.00043	.19477	.29850	.65249
.801	8.333	.37028	.26569	-.11955	-.00402	-.00113	.00045	.32772	.31754	1.03207
	GRADIENT	.05910	-.00275	-.02323	-.00292	.00115	-.00023	.05380	-.00605	.16319

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ005) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 20.000

RUN NO. 567/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.849	-8.898	-.72083	.32770	.30779	.01628	-.00826	.00197	-.66147	.43525	-1.51975
.850	-6.715	-.57751	.32384	.25913	.01655	-.00800	.00191	-.53568	.38915	-1.37654
.850	-4.557	-.43572	.31898	.20808	.01190	-.00604	.00194	-.40901	.35259	-1.16000
.850	-2.391	-.30923	.31501	.15936	.00862	-.00476	.00103	-.29582	.32763	-.90290
.850	-.258	-.18010	.31137	.10532	-.00309	.00163	-.00009	-.17869	.31218	-.57240
.850	1.897	-.04003	.30250	.04585	-.00774	.00234	-.00006	-.05003	.30101	-.16620
.850	4.071	.10487	.29667	-.01266	-.00924	.00212	-.00043	.08355	.30336	.27540
.850	6.231	.25821	.29115	-.07707	-.00903	.00210	-.00049	.22508	.31746	.70902
.850	8.394	.40507	.28271	-.13941	-.00278	-.00229	.00158	.35946	.33881	1.06095
	GRADIENT	.06268	-.00265	-.02576	-.00272	.00109	-.00027	.05714	-.00580	.16747

RUN NO. 566/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.900	-8.980	-.74074	.35628	.32174	.01336	-.00680	.00186	-.67605	.46753	-1.44599
.900	-6.776	-.58311	.35156	.26159	.01696	-.00786	.00126	-.53756	.41790	-1.28634
.900	-4.597	-.43700	.34626	.20565	.01106	-.00542	.00128	-.40785	.38016	-1.07281
.900	-2.419	-.30091	.33950	.15306	.00609	-.00354	.00103	-.28631	.35189	-.81363
.900	-.263	-.16597	.33669	.09464	-.00040	-.00023	.00081	-.16442	.33745	-.48723
.900	1.909	-.01386	.32570	.02477	-.00680	.00182	.00052	-.02471	.32505	-.07600
.900	4.077	.13794	.31916	-.04000	-.01122	.00332	.00008	.11491	.32816	.35016
.899	6.263	.28855	.31428	-.09653	-.01038	.00297	-.00053	.25255	.34388	.73439
.900	8.432	.42608	.30951	-.14913	-.00248	-.00173	.00086	.37609	.36865	1.02018
	GRADIENT	.06629	-.00314	-.02658	-.00265	.00105	-.00013	.06030	-.00604	.16532

RUN NO. 565/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.920	-9.003	-.75353	.36929	.33296	.01631	-.00869	.00096	-.68645	.48266	-1.42224
.920	-6.808	-.59189	.36683	.26647	.01727	-.00779	.00064	-.54424	.43440	-1.25285
.920	-4.608	-.44141	.36014	.20864	.01286	-.00591	.00087	-.41106	.39444	-1.04214
.920	-2.443	-.30261	.35305	.15529	.00595	-.00324	.00064	-.28729	.36562	-.78575
.919	-.279	-.16410	.34835	.09503	-.00319	.00122	.00048	-.16240	.34915	-.46514
.920	1.902	-.00483	.34091	.02091	-.00349	.00026	.00081	-.01614	.34056	-.04740
.920	4.092	.15153	.33249	-.05138	-.01097	.00367	.00052	.12742	.34245	.37208
.920	6.277	.29693	.32614	-.10555	-.01186	.00363	-.00041	.25949	.35665	.72757
.920	8.439	.43471	.32367	-.15193	-.00584	.00060	-.00010	.38250	.38396	.99620
	GRADIENT	.06824	-.00310	-.03010	-.00262	.00104	-.00002	.06200	-.00593	.16407

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION I (RHZ005) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 20.000

RUN NO. 564/ 0 RN/L = 4.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.950	-9.045	-.75919	.40185	.33354	.01850	-.00842	.00070	-.68657	.51622	-1.33001
.951	-6.851	-.59738	.40004	.26977	.01575	-.00669	.00047	-.54540	.46844	-1.16427
.951	-4.654	-.44851	.39200	.21441	.01149	-.00501	.00049	-.41522	.42710	-.97219
.950	-2.461	-.30496	.38272	.16249	.00522	-.00255	.00023	-.28825	.39546	-.72888
.951	-.280	-.16151	.37440	.10397	-.00054	-.00004	.00000	-.15968	.37518	-.42561
.950	1.895	-.01039	.36996	.03168	-.00658	.00226	-.00018	-.02261	.36941	-.06121
.950	4.086	.15546	.36222	-.04788	-.00917	.00296	.00045	.12926	.37238	.34711
.950	6.279	.30678	.35382	-.10877	-.01200	.00438	.00008	.26624	.38525	.69109
.950	8.471	.44913	.34931	-.15784	-.00475	.00001	.00014	.39277	.41166	.95410
	GRADIENT	.06881	-.00331	-.03001	-.00243	.00095	-.00002	.06203	-.00621	.15141

RUN NO. 563/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.979	-9.123	-.76811	.45016	.33094	.01922	-.00846	.00030	-.68701	.56625	-1.21327
.980	-6.894	-.59863	.44533	.26901	.01609	-.00645	.00055	-.54085	.51397	-1.05229
.979	-4.687	-.44895	.43617	.21523	.00994	-.00339	.00023	-.41181	.47139	-.87361
.980	-2.492	-.30811	.42843	.16565	.00436	-.00133	-.00015	-.28919	.44142	-.65514
.980	-.281	-.15717	.41887	.10689	-.00140	.00078	-.00050	-.15511	.41963	-.36964
.980	1.887	-.00131	.40898	.03334	-.00740	.00323	-.00067	-.01478	.40871	-.03515
.980	4.100	.16077	.40449	-.04335	-.01166	.00473	-.00071	.13144	.41495	.31676
.980	6.286	.31285	.40369	-.10481	-.01103	.00309	-.00048	.26677	.43552	.61253
.980	8.477	.46055	.39750	-.16548	-.00103	-.00413	.00054	.39592	.46105	.86091
	GRADIENT	.06952	-.00377	-.02958	-.00250	.00095	-.00011	.06199	-.00663	.13664

RUN NO. 562/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.120	-9.286	-.77183	.49307	.32524	.02432	-.01204	.00118	-.68216	.61116	-1.11617
1.121	-6.994	-.59241	.48510	.26092	.01948	-.00990	.00148	-.52894	.55363	-.95540
1.120	-4.740	-.42352	.47800	.19909	.01494	-.00778	.00100	-.38257	.51136	-.74814
1.120	-2.514	-.26069	.47192	.13471	.00916	-.00567	.00062	-.23974	.48290	-.49647
1.120	-.285	-.10132	.46583	.07009	.00264	-.00245	.00025	-.09900	.45633	-.21230
1.120	1.923	.04393	.45558	.00393	-.00103	-.00121	.00024	.02862	.45680	.06266
1.120	4.115	.19124	.45219	-.06055	-.00411	-.00110	-.00024	.15830	.46474	.34062
1.120	6.325	.33700	.44638	-.11869	-.00101	-.00442	.00003	.28577	.48080	.59437
1.119	8.513	.47314	.43911	-.17894	.00405	-.00894	.00074	.40293	.50431	.79896
	GRADIENT	.06928	-.00307	-.02935	-.00218	.00081	-.00013	.06097	-.00540	.12356

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ005) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 20.000

RUN NO. 561/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.200	-9.316	-.76098	.50487	.31791	.01944	-.00903	.00079	-.66921	.62140	-1.07693
1.200	-7.029	-.56896	.49951	.24124	.01546	-.00690	.00079	-.50357	.56538	-.89067
1.200	-4.745	-.39123	.49121	.17439	.00951	-.00309	.00056	-.34925	.52189	-.66920
1.200	-2.513	-.22866	.48471	.10868	.00460	-.00072	.00046	-.20718	.49427	-.41917
1.200	-.295	-.07767	.47941	.04987	-.00174	.00194	.00002	-.07520	.47981	-.15672
1.200	1.916	.05943	.47202	-.00740	-.00565	.00229	-.00027	.04351	.47374	.09206
1.200	4.123	.20231	.46844	-.06798	-.00438	-.00013	.00000	.16810	.48177	.34892
1.200	6.339	.34470	.46273	-.12345	-.00484	-.00113	-.00029	.29151	.49796	.58541
1.199	8.534	.48128	.45696	-.18332	-.00096	-.00437	.00046	.40815	.52332	.77992
	GRADIENT	.06656	-.00263	-.02711	-.00172	.00040	-.00008	.05800	-.00455	.11493

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ006) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 20.000

RUN NO. 560/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.350	-8.024	-.13308	.28225	.10104	.29690	-.12451	.04091	-.13286	.28235	-.47057
.350	-6.028	-.15189	.28310	.10818	.22477	-.09696	.03105	-.15154	.28323	-.53540
.350	-4.012	-.17699	.28370	.11887	.15830	-.06928	.02123	-.17671	.28387	-.62250
.351	-2.006	-.18544	.28352	.11945	.09211	-.03645	.01101	-.18614	.28371	-.65608
.350	-.001	-.20136	.28245	.12245	.01204	-.00653	.00188	-.20104	.28268	-.71120
.350	2.005	-.19319	.28148	.10941	-.06328	.02799	-.00834	-.19286	.28170	-.68464
.350	4.000	-.18568	.28228	.09949	-.13253	.05672	-.01753	-.19535	.28250	-.65811
.351	6.017	-.17968	.28144	.08721	-.21237	.09070	-.02850	-.17935	.28165	-.63677
.350	8.023	-.15843	.28062	.06729	-.29164	.12273	-.03829	-.15811	.28080	-.56307
	GRADIENT	-.00121	-.00024	-.00253	-.03629	.01579	-.00485	-.00120	-.00024	-.00479

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ006) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 20.000

RUN NO. 559/ 0 RN/L = 3.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.600	-8.064	-.13521	.28706	.08505	.31896	-.13387	.04262	-.13457	.28736	-.46830
.598	-6.039	-.14828	.28710	.09482	.24747	-.10719	.03322	-.14762	.28744	-.51355
.600	-4.033	-.17241	.28829	.10856	16941	-.07478	.02214	-.17168	.28873	-.59459
.600	-2.017	-.18278	.28635	.11406	.09014	-.04088	.01164	-.18201	.28684	-.63456
.600	.008	-.19776	.28477	.12154	.01042	-.00465	.00144	-.19696	.28532	-.69032
.600	2.023	-.18927	.28556	.11099	-.06680	.03017	-.00854	-.18847	.28609	-.65877
.600	4.028	-.18406	.28775	.10474	-.14390	.06301	-.01883	-.18325	.28627	-.63568
.600	6.044	-.17242	.28733	.09413	-.22194	.09601	-.02917	-.17163	.28781	-.59633
.601	8.071	-.15776	.28591	.08063	-.30295	.12796	-.03976	-.15699	.28633	-.54827
	GRADIENT	-.00148	-.00009	-.00053	-.03886	.01719	-.00506	-.00147	-.00008	-.00529

RUN NO. 558/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.800	-8.101	-.13265	.30556	.07981	.34100	-.14350	.04487	-.13160	.30601	-.43005
.800	-6.087	-.14153	.30526	.08662	.26143	-.11303	.03471	-.14045	.30575	-.45936
.800	-4.042	-.15669	.30426	.09533	.17883	-.07951	.02359	-.15555	.30484	-.51026
.800	-2.028	-.16811	.30178	.10191	.09850	-.04556	.01262	-.16693	.30244	-.55195
.800	-.015	-.18005	.29581	.10873	.01930	-.01071	.00281	-.17895	.29653	-.60313
.800	2.021	-.17569	.29976	.10285	-.07082	.03116	-.00841	-.17447	.30047	-.58064
.800	4.044	-.17246	.30429	.09780	-.15109	.06566	-.01934	-.17120	.30500	-.56132
.800	6.079	-.15827	.30461	.08552	-.23587	.10180	-.03099	-.15705	.30524	-.51451
.800	8.095	-.14866	.30600	.07743	-.31869	.13400	-.04120	-.14745	.30659	-.48097
	GRADIENT	-.00193	-.00009	.00029	-.04101	.01815	-.00529	-.00192	-.00008	-.00645

RUN NO. 557/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.849	-8.123	-.12288	.32001	.07331	.35361	-.14864	.04901	-.12171	.32045	-.37982
.849	-6.084	-.13769	.31902	.08241	.26631	-.11416	.03595	-.13646	.31955	-.42705
.850	-4.057	-.14947	.31657	.08892	.18191	-.07908	.02409	-.14819	.31717	-.46723
.850	-2.031	-.16358	.31467	.09571	.10192	-.04619	.01279	-.16224	.31535	-.51445
.850	-.006	-.17579	.30971	.10250	.02223	-.01253	.00318	-.17441	.31049	-.56174
.850	2.022	-.17251	.31370	.09769	-.07066	.03017	-.00820	-.17111	.31447	-.54410
.849	4.049	-.16660	.31734	.09205	-.15124	.06385	-.01918	-.16519	.31808	-.51933
.849	6.077	-.15542	.31773	.08533	-.24120	.10232	-.03183	-.15404	.31840	-.48381
.849	8.125	-.14059	.32019	.07296	-.32694	.13587	-.04293	-.13935	.32077	-.43442
	GRADIENT	-.00213	.00003	.00042	-.04140	.01788	-.00531	-.00212	.00005	-.00660

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 20.000

RUN NO. 556/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.900	-8.121	-.11136	.34526	.06530	.35493	-.14723	.05189	-.11002	.34569	-.31827
.900	-6.092	-.12566	.34477	.07464	.27067	-.11321	.03864	-.12425	.34528	-.35986
.900	-4.063	-.13568	.34153	.07922	.18599	-.07887	.02566	-.13422	.34211	-.39234
.900	-2.034	-.14823	.33783	.08409	.10301	-.04495	.01337	-.14671	.33849	-.43341
.900	-.016	-.16005	.33476	.09077	.02069	-.01152	.00282	-.15848	.33550	-.47238
.900	2.024	-.16178	.33855	.08919	-.07011	.02870	-.00789	-.16016	.33332	-.47200
.900	4.053	-.15209	.34217	.08186	-.15603	.06473	-.02072	-.15048	.34288	-.43887
.900	6.093	-.14442	.34523	.07668	-.24271	.10124	-.03451	-.14283	.34589	-.41294
.900	8.113	-.13120	.34678	.06742	-.32808	.13417	-.04651	-.12966	.34736	-.37327
	GRADIENT	-.00228	.00010	.00061	-.04225	.01779	-.00564	-.00226	.00012	-.00648

RUN NO. 555/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.920	-8.125	-.10475	.35837	.06182	.35580	-.14581	.05283	-.10335	.35878	-.28805
.919	-6.095	-.11742	.35865	.07058	.27259	-.11303	.03979	-.11595	.35912	-.32287
.920	-4.076	-.12972	.35592	.07662	.18943	-.07972	.02663	-.12818	.35648	-.35959
.920	-2.026	-.14443	.35150	.08395	.10723	-.04675	.01386	-.14282	.35216	-.40556
.920	.003	-.15732	.34702	.09069	.02270	-.01199	.00281	-.15567	.34777	-.44762
.920	2.015	-.14832	.35106	.08772	-.07170	.02968	-.00787	-.14668	.35175	-.41699
.920	4.056	-.14597	.35688	.08074	-.15901	.06607	-.02155	-.14428	.35757	-.40351
.919	6.086	-.13600	.35918	.07200	-.24697	.10275	-.03593	-.13434	.35981	-.37337
.919	8.127	-.12582	.35067	.06414	-.33264	.13496	-.04829	-.12419	.36124	-.34378
	GRADIENT	-.00180	.00007	.00037	-.04313	.01812	-.00582	-.00178	.00009	-.00491

RUN NO. 554/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.949	-8.121	-.09573	.38546	.05899	.36129	-.14692	.05460	-.09418	.38684	-.24346
.950	-6.100	-.10976	.38867	.07242	.27765	-.11454	.04142	-.10816	.38912	-.27795
.950	-4.069	-.12848	.38641	.08540	.19411	-.08280	.02801	-.12679	.38697	-.32765
.950	-2.028	-.14378	.37992	.09393	.11110	-.04990	.01506	-.14203	.38047	-.37331
.950	-.017	-.15595	.37281	.10088	.02133	-.01116	.00236	-.15417	.37354	-.41272
.950	2.017	-.15168	.37939	.09583	-.07769	.03391	-.00990	-.14985	.38011	-.39424
.950	4.059	-.14271	.38717	.08817	-.16427	.06867	-.02345	-.14087	.38784	-.36321
.950	6.101	-.13265	.38994	.07761	-.25105	.10354	-.03730	-.13081	.39055	-.33492
.950	8.123	-.12298	.38036	.06614	-.33711	.13547	-.04949	-.12114	.38093	-.30938
	GRADIENT	-.00179	.00006	.00036	-.04461	.01905	-.00830	-.00177	.00007	-.00452

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ006) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 20.000

RUN NO. 553/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.979	-8.139	-.09090	.42720	.06016	.36361	-.14057	.05658	-.08912	.42758	-.20842
.980	-6.105	-.10480	.42856	.07368	.27945	-.11160	.04377	-.10295	.42900	-.23999
.981	-4.082	-.12394	.42899	.08719	.19352	-.07991	.02996	-.12198	.42956	-.28396
.980	-2.030	-.13692	.42366	.09639	.11035	-.04804	.01618	-.13492	.42430	-.31799
.980	.003	-.15023	.41846	.10305	.01999	-.01028	.00249	-.14816	.41920	-.35344
.980	2.028	-.14695	.42166	.09841	-.07791	.03351	-.01102	-.14484	.42238	-.34292
.980	4.050	-.13943	.42871	.09228	-.16210	.06626	-.02499	-.13731	.42940	-.31978
.979	6.095	-.13084	.42984	.08176	-.25171	.10106	-.03950	-.12871	.43048	-.29899
.979	8.141	-.11874	.43002	.06925	-.34227	.13257	-.05266	-.11664	.43059	-.27088
	GRADIENT	-.00202	-.00013	.00061	-.04426	.01840	-.00675	-.00200	-.00011	-.00477

RUN NO. 552/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.119	-8.155	-.04959	.46527	.03338	.36007	-.13350	.05831	-.04765	.46547	-.10238
1.119	-6.116	-.05806	.46558	.04165	.27276	-.10405	.04528	-.05609	.46582	-.12042
1.119	-4.067	-.06976	.46576	.05093	.18423	-.07178	.03077	-.06771	.46706	-.14497
1.118	-2.032	-.08017	.46725	.05586	.10176	-.04064	.01652	-.07802	.46821	-.16663
1.119	-.007	-.08910	.46765	.06249	.01963	-.00976	.00333	-.08687	.46827	-.18551
1.118	2.030	-.08983	.46721	.06147	-.07330	.03110	-.01102	-.08758	.46764	-.18728
1.119	4.076	-.08663	.46998	.05750	-.15804	.06306	-.02593	-.08436	.47039	-.17933
1.118	6.093	-.08228	.46913	.05104	-.24436	.09427	-.04038	-.08000	.46952	-.17039
1.118	8.155	-.07462	.46751	.04091	-.33633	.12432	-.05359	-.07234	.46786	-.15463
	GRADIENT	-.00213	.00029	.00087	-.04225	.01678	-.00693	-.00210	.00030	-.00439

RUN NO. 551/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.200	-8.163	-.04367	.48400	.02670	.37228	-.14318	.05826	-.04153	.48419	-.08577
1.200	-6.111	-.04755	.48341	.03241	.27757	-.10905	.04477	-.04542	.48361	-.09393
1.200	-4.080	-.05585	.48287	.03680	.18506	-.07309	.03034	-.05367	.48312	-.11108
1.200	-2.032	-.06394	.48313	.04314	.09829	-.03958	.01580	-.06167	.48343	-.12757
1.200	-.007	-.07211	.47938	.04634	.01781	-.00863	.00308	-.06977	.47973	-.14544
1.201	2.031	-.07473	.48110	.04702	-.07275	.02995	-.01083	-.07234	.48146	-.15024
1.200	4.068	-.07187	.48388	.04447	-.15708	.06133	-.02521	-.06947	.48401	-.14353
1.200	6.108	-.07078	.48322	.04044	-.24691	.09470	-.03946	-.06834	.48357	-.14133
1.200	8.163	-.06493	.48219	.03219	-.34628	.13092	-.05358	-.06249	.48251	-.12951
	GRADIENT	-.00210	-.00002	.00075	-.04201	.01662	-.00677	-.00208	-.00001	-.00430

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ007) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 595/ 0 RN/L = 2.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.351	-8.179	-.70533	.31253	.35686	.01077	-.00436	-.00097	-.65369	.40969	-1.59557
.351	-6.159	-.59807	.31334	.31516	.00863	-.00317	-.00096	-.56100	.37569	-1.49324
.351	-4.130	-.49820	.31275	.27688	.00814	-.00271	-.00121	-.47438	.34782	-1.36389
.351	-2.089	-.38913	.31249	.23294	.00509	-.00234	-.00145	-.37748	.32647	-1.15625
.350	-.062	-.29456	.31000	.19401	-.00500	.00262	-.00204	-.29422	.31032	-.94811
.351	1.971	-.17143	.30097	.14041	-.00423	.00012	-.00178	-.18169	.29490	-.61610
.351	3.982	-.06510	.29366	.09753	-.00563	.00023	-.00108	-.08533	.28943	-.29585
.351	6.028	.06289	.28472	.04447	-.00455	-.00091	-.00097	.03264	.28975	.11266
.351	8.069	.17434	.27152	-.00495	-.00342	-.00071	-.00030	.13450	.29330	.45857
	GRADIENT	.05344	-.00245	-.02225	-.00182	.00041	-.00000	.04801	-.00742	.13191

RUN NO. 594/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.599	-8.541	-.74677	.32115	.35614	.01361	-.00598	.00011	-.69079	.42850	-1.61213
.600	-6.451	-.62693	.32015	.31481	.01367	-.00577	-.00018	-.58699	.38857	-1.51066
.599	-4.343	-.50760	.31812	.27148	.00697	-.00236	-.00092	-.48206	.35565	-1.35544
.599	-2.259	-.39416	.31793	.23133	.00468	-.00166	-.00121	-.38132	.33322	-1.14435
.598	-.191	-.28698	.31312	.18968	.00133	-.00092	-.00109	-.28593	.31408	-.91039
.600	1.902	-.17114	.30441	.14432	-.00526	.00105	-.00133	-.18115	.29856	-.60674
.599	3.994	-.04524	.29532	.09637	-.00852	.00210	-.00161	-.06577	.29245	-.22490
.598	6.084	.07664	.28693	.04909	-.00568	-.00007	-.00072	.04778	.29365	.16272
.600	8.160	.20094	.27437	-.00307	-.00309	-.00155	-.00049	.15996	.30011	.53299
	GRADIENT	.06509	-.00274	-.02099	-.00196	.00056	-.00007	.04957	-.00773	.13436

RUN NO. 575/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.919	-9.016	-.77307	.37606	.34947	-.00125	.00441	.00331	-.70459	.49255	-1.43048
.920	-6.809	-.61053	.37370	.28329	-.00127	.00562	.00346	-.56192	.44344	-1.26717
.920	-4.617	-.45727	.36774	.22356	-.00549	.00784	.00370	-.42618	.40336	-1.05659
.919	-2.439	-.31359	.36077	.16643	-.01219	.01115	.00405	-.29795	.37379	-.79711
.920	-.286	-.17551	.35736	.10559	-.02133	.01600	.00417	-.17373	.35823	-.48495
.920	1.894	-.02799	.34840	.03882	-.02732	.01885	.00363	-.03949	.34729	-.11371
.920	4.070	.12301	.34022	-.02902	-.02784	.01750	.00315	.09856	.34809	.28313
.920	6.279	.27155	.33129	-.09544	-.02807	.01643	.00222	.23358	.35900	.65093
.920	8.463	.42291	.32732	-.14075	-.01777	.01036	.00131	.37014	.38600	.95891
	GRADIENT	.06662	-.00311	-.02915	-.00276	.00124	-.00007	.06026	-.00631	.15493

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ007) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 574/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.950	-9.069	-.78212	.41015	.35489	-.00018	.00624	.00128	-.70770	.52831	-1.33955
.950	-6.830	-.61715	.40668	.28912	-.00241	.00757	.00141	-.56441	.47719	-1.18278
.950	-4.659	-.47002	.40005	.23290	-.00600	.00889	.00176	-.43598	.43690	-.99787
.950	-2.467	-.32456	.39127	.17824	-.01147	.01070	.00248	-.30741	.40488	-.75928
.950	-.283	-.17987	.38277	.11993	-.02258	.01684	.00248	-.17798	.38365	-.46391
.950	1.901	-.03016	.37693	.04863	-.03088	.02139	.00257	-.04264	.37572	-.11349
.950	4.082	.13324	.36813	-.02801	-.03021	.02058	.00272	.10669	.37668	.28324
.949	6.263	.28264	.35933	-.08814	-.03114	.02026	.00192	.24176	.38802	.62305
.949	8.466	.42744	.35404	-.14008	-.02282	.01473	.00078	.37067	.41311	.89726
	GRADIENT	.06869	-.00358	-.02981	-.00310	.00156	.00009	.06179	-.00685	.14681

RUN NO. 573/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.978	-9.124	-.78863	.45942	.35126	.00150	.00627	-.00040	-.70579	.57867	-1.21969
.980	-6.912	-.62331	.45558	.29058	-.00319	.00938	-.00015	-.56394	.52738	-1.06932
.980	-4.701	-.46737	.44925	.23281	-.01025	.01290	-.00009	-.42898	.48605	-.88259
.980	-2.500	-.32188	.44047	.18058	-.01723	.01577	.00008	-.30236	.45409	-.66586
.981	-.294	-.17379	.43078	.12248	-.02458	.01907	.00058	-.17158	.43167	-.39748
.980	1.889	-.02276	.41906	.05081	-.03176	.02300	.00071	-.03656	.41808	-.08745
.980	4.082	.13525	.41413	-.02115	-.03259	.02230	.00099	.10543	.42270	.24943
.980	6.292	.28987	.41099	-.08359	-.02935	.01938	.00162	.24308	.44029	.55209
.980	8.477	.44452	.40403	-.15057	-.01649	.00923	.00193	.38011	.46514	.81719
	GRADIENT	.06852	-.00417	-.02905	-.00270	.00119	.00013	.06079	-.00742	.12945

RUN NO. 572/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.119	-9.271	-.79567	.50904	.34943	.01300	-.00363	-.00114	-.70327	.63057	-1.11529
1.121	-7.029	-.63073	.50148	.29206	.01115	-.00256	-.00054	-.56462	.57489	-.98213
1.121	-4.753	-.45246	.49222	.22510	.00556	.00078	.00024	-.41012	.52802	-.77671
1.120	-2.530	-.29135	.48288	.16018	-.00344	.00564	-.00064	-.26975	.49526	-.54466
1.119	-.299	-.13214	.47479	.09659	-.01307	.01115	-.00128	-.12966	.47547	-.27269
1.120	1.910	.01342	.46431	.03083	-.02076	.01536	-.00157	-.00206	.46450	-.00444
1.119	4.103	.16210	.45846	-.03580	-.01847	.01295	-.00119	.12888	.46888	.27488
1.119	6.313	.31043	.45153	-.09755	-.01716	.01021	-.00100	.25890	.48293	.53611
1.119	8.530	.46523	.44276	-.17009	-.00912	.00232	.00070	.39441	.50687	.77813
	GRADIENT	.06925	-.00389	-.02939	-.00295	.00154	-.00017	.06075	-.00674	.11932

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ007) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 571/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.200	-9.340	-.79349	.51753	.34792	.00704	.00075	-.00032	-.69898	.63944	-1.09310
1.200	-7.039	-.59344	.51247	.26357	.00365	.00424	-.00064	-.52616	.58133	-.90509
1.200	-4.780	-.41715	.50198	.19573	-.00482	.01001	-.00152	-.37388	.53499	-.69884
1.200	-2.522	-.25195	.49392	.12953	-.01227	.01398	-.00205	-.22997	.50453	-.45581
1.200	-.285	-.10252	.48777	.07167	-.01757	.01590	-.00227	-.10009	.48828	-.20499
1.200	1.920	.03772	.47911	.01213	-.02043	.01578	-.00192	.02164	.48011	.04507
1.200	4.106	.18055	.47403	-.04928	-.01999	.01324	-.00164	.14614	.48574	.30087
1.200	6.344	.32539	.46713	-.10709	-.01759	.01055	-.00107	.27178	.50023	.54332
1.200	8.546	.46862	.46028	-.17142	-.01316	.00650	.00000	.39501	.52481	.75268
	GRADIENT	.06686	-.00318	-.02734	-.00174	.00038	-.00001	.05816	-.00555	.11254

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ008) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 590/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.351	-8.034	-.23354	.31009	.17721	.29611	-.12539	.03974	-.23320	.31034	-.75143
.351	-6.038	-.24444	.31073	.18052	.22468	-.09676	.02910	-.24408	.31101	-.78481
.350	-4.022	-.26087	.31169	.18638	.15502	-.06754	.01969	-.26049	.31201	-.83486
.349	-2.006	-.28198	.31229	.19256	.08260	-.03650	.00969	-.28156	.31267	-.90051
.350	-.011	-.29105	.31125	.19213	.00755	-.00325	.00000	-.29061	.31166	-.93244
.350	1.995	-.28681	.31154	.18303	-.06646	.02924	-.00976	-.28636	.31195	-.91798
.350	4.001	-.28080	.31098	.17237	-.13798	.05867	-.01857	-.28034	.31139	-.90030
.350	6.007	-.26676	.31213	.15707	-.21483	.09134	-.02870	-.26631	.31252	-.852[illegible]
.351	8.013	-.25010	.30826	.13926	-.29503	.12502	-.03911	-.24966	.30862	-.80895
	GRADIENT	-.00223	-.00011	-.00187	-.03667	.01587	-.00479	-.00222	-.00010	-.00740

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ008) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 589/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.599	-8.064	-.21881	.31302	.15123	.32169	-.13578	.04231	-.21792	.31364	-.69481
.599	-6.058	-.23487	.31477	.16106	.24612	-.10635	.03186	-.23392	.31548	-.74148
.600	-4.033	-.25259	.31639	.17130	.16899	-.07465	.02115	-.25158	.31719	-.79314
.599	-2.028	-.26945	.31551	.18037	.09289	-.04183	.01103	-.26839	.31641	-.84824
.600	-.013	-.28348	.31255	.18819	.01721	-.00845	.00189	-.28238	.31354	-.90063
.600	1.992	-.27695	.31400	.17935	-.06395	.02835	-.00840	-.27585	.31497	-.87579
.600	4.028	-.27249	.31614	.17337	-.14074	.06069	-.01821	-.27138	.31710	-.85582
.600	6.054	-.26059	.31447	.16235	-.21954	.09372	-.02856	-.25950	.31537	-.82285
.599	8.050	-.24963	.31209	.15114	-.29953	.12574	-.03931	-.24857	.31294	-.79430
	GRADIENT	-.00234	-.00010	.00015	-.03854	.01692	-.00487	-.00233	-.00008	-.00757

RUN NO. 588/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.800	-8.112	-.21811	.33326	.14692	.34243	-.14338	.04467	-.21663	.33422	-.64816
.801	-6.097	-.23237	.33442	.15580	.26038	-.11085	.03332	-.23082	.33550	-.68799
.800	-4.052	-.24386	.33388	.16313	.17848	-.07816	.02247	-.24226	.33504	-.72306
.800	-2.038	-.25732	.33204	.17053	.09895	-.04524	.01196	-.25567	.33332	-.76703
.800	-.015	-.26890	.32538	.17721	.02127	-.01188	.00268	-.26724	.32675	-.81788
.800	2.009	-.26338	.32973	.17163	-.06496	.02769	-.00818	-.26170	.33107	-.79047
.800	4.044	-.25937	.33292	.16679	-.14661	.06154	-.01873	-.25767	.33424	-.77090
.799	6.067	-.25009	.33224	.15751	-.22611	.09470	-.02910	-.24842	.33350	-.74488
.800	8.083	-.23926	.33305	.14788	-.31156	.12907	-.04020	-.23759	.33423	-.71086
	GRADIENT	-.00183	-.00021	.00041	-.04022	.01742	-.00507	-.00182	-.00019	-.00587

RUN NO. 587/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.849	-8.110	-.21456	.34816	.14376	.34193	-.14106	.04467	-.21289	.34919	-.60966
.850	-6.094	-.22755	.34864	.15121	.26173	-.10984	.03379	-.22580	.34977	-.64555
.850	-4.067	-.23978	.34735	.15719	.18065	-.07658	.02246	-.23797	.34860	-.68263
.850	-2.031	-.25148	.34549	.16379	.09885	-.04331	.01148	-.24961	.34684	-.71968
.850	-.016	-.26214	.33978	.16988	.02274	-.01218	.00248	-.26025	.34122	-.76271
.849	2.001	-.25927	.34395	.16610	-.06478	.02610	-.00768	-.25735	.34538	-.74513
.849	4.047	-.25513	.34757	.16141	-.14584	.05924	-.01826	-.25320	.34898	-.72553
.850	6.074	-.24179	.34695	.15150	-.22917	.09402	-.02971	-.23991	.34826	-.68890
.850	8.102	-.23320	.34862	.14409	-.31398	.12709	-.04015	-.23133	.34986	-.66121
	GRADIENT	-.00190	-.00005	.00053	-.04031	.01683	-.00497	-.00188	-.00003	-.00548

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ008) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 586/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.900	-8.131	-.20031	.37326	.13436	.34821	-.13972	.04706	-.19842	.37426	-.53016
.900	-6.092	-.21638	.37347	.14379	.26826	-.10990	.03613	-.21439	.37462	-.57231
.900	-4.063	-.22928	.37312	.15036	.18303	-.07581	.02363	-.22721	.37439	-.60687
.900	-2.035	-.24579	.37079	.15890	.10225	-.04277	.01176	-.24362	.37222	-.65451
.900	-.007	-.25228	.36588	.16296	.02176	-.01100	.00205	-.25012	.36736	-.68084
.899	2.013	-.25036	.36944	.15854	-.06714	.02728	-.00794	-.24815	.37093	-.66899
.900	4.062	-.24215	.37377	.15243	-.15107	.06102	-.01972	-.23994	.37519	-.63950
.900	6.071	-.23426	.37473	.14705	-.23442	.09479	-.03217	-.23209	.37608	-.61712
.900	8.101	-.22073	.37553	.13744	-.31649	.12476	-.04244	-.21861	.37676	-.58025
	GRADIENT	-.00149	-.00000	.00018	-.04126	.01693	-.00524	-.00147	.00002	-.00392

RUN NO. 585/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.920	-8.135	-.19052	.38651	.12834	.35097	-.14081	.04859	-.18855	.38748	-.48660
.920	-6.105	-.20714	.38809	.13989	.26951	-.11053	.03720	-.20506	.38919	-.52690
.920	-4.075	-.22176	.38803	.14894	.18658	-.07694	.02419	-.21960	.38926	-.56413
.920	-2.047	-.23967	.38453	.15842	.10796	-.04552	.01270	-.23741	.38593	-.61516
.920	-.006	-.24687	.37925	.16293	.02051	-.01053	.00175	-.24461	.38071	-.64251
.919	2.035	-.24609	.38238	.15856	-.07137	.02995	-.00856	-.24378	.38386	-.63507
.920	4.055	-.23482	.38866	.15071	-.15677	.06380	-.02070	-.23251	.39005	-.59609
.920	6.074	-.22750	.38998	.14408	-.23774	.09571	-.03280	-.22520	.39131	-.57550
.920	8.115	-.21261	.39018	.13247	-.32116	.12637	-.04401	-.21038	.39138	-.53752
	GRADIENT	-.00160	-.00004	.00018	-.04258	.01755	-.00546	-.00158	-.00003	-.00413

RUN NO. 584/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.950	-8.153	-.18372	.41581	.12639	.36337	-.14588	.05072	-.18152	.41677	-.43555
.950	-6.111	-.20069	.41794	.14158	.27903	-.11538	.03946	-.19842	.41903	-.47351
.951	-4.079	-.21837	.41695	.15495	.19356	-.08187	.02660	-.21601	.41819	-.51652
.950	-2.039	-.23658	.41165	.16626	.11236	-.04969	.01425	-.23413	.41305	-.56685
.950	-.018	-.25236	.40469	.17504	.02408	-.01159	.00200	-.24987	.40624	-.61508
.950	2.006	-.24426	.41078	.16800	-.07494	.03297	-.00973	-.24174	.41226	-.58636
.950	4.057	-.23706	.41791	.16070	-.15791	.06549	-.02195	-.23450	.41935	-.55920
.950	6.068	-.22278	.41924	.14812	-.24224	.09894	-.03483	-.22027	.42057	-.52374
.950	8.111	-.20598	.41915	.13303	-.33051	.13127	-.04648	-.20353	.42035	-.48419
	GRADIENT	-.00222	.00005	.00065	-.04382	.01857	-.00596	-.00219	.00008	-.00515

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (RHZ008) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 970.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 583/ 0 RN/L = 4.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.979	-8.151	-.18289	.46129	.12888	.36947	-.14428	.05350	-.18029	.46231	-.38999
.980	-6.116	-.19723	.46398	.14403	.28228	-.11363	.04146	-.19458	.46510	-.41835
.980	-4.083	-.21598	.46578	.15880	.19553	-.08091	.02807	-.21321	.46705	-.45650
.980	-2.050	-.23464	.46229	.17045	.11096	-.04809	.01483	-.23175	.46375	-.49973
.980	-.018	-.24494	.45743	.17670	.02490	-.01231	.00235	-.24202	.45898	-.52729
.980	2.026	-.24023	.45754	.17115	-.07347	.03226	-.01064	-.23731	.45906	-.51694
.980	4.049	-.23363	.46552	.16476	-.15918	.06486	-.02382	-.23065	.46700	-.49390
.979	6.083	-.22256	.46611	.15325	-.24725	.09908	-.03749	-.21961	.46750	-.46976
.979	8.118	-.20449	.46514	.13644	-.33454	.12918	-.04945	-.20162	.46639	-.43231
	GRADIENT	-.00201	-.00026	.00062	-.04395	.01828	-.00635	-.00199	-.00024	-.00453

RUN NO. 582/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.119	-8.168	-.11372	.48709	.08249	.36627	-.13422	.05891	-.11118	.48767	-.22797
1.120	-6.148	-.12286	.48821	.09264	.27669	-.10541	.04578	-.12029	.48885	-.24607
1.120	-4.100	-.13634	.49037	.10323	.19027	-.07421	.03111	-.13366	.49111	-.27216
1.119	-2.064	-.14818	.49066	.11080	.10489	-.04162	.01616	-.14539	.49149	-.29582
1.120	-.018	-.15929	.48977	.11711	.02206	-.01051	.00271	-.15640	.49070	-.31873
1.120	2.018	-.16264	.49173	.11801	-.06683	.02668	-.01052	-.15968	.49270	-.32410
1.120	4.043	-.16071	.49534	.11755	-.15039	.05828	-.02501	-.15775	.49629	-.31787
1.119	6.081	-.15540	.49388	.11008	-.23907	.09140	-.04027	-.15244	.49480	-.30809
1.119	8.134	-.14077	.49083	.09464	-.33430	.12258	-.05415	-.13788	.49165	-.28044
	GRADIENT	-.00311	.00054	.00176	-.04188	.01636	-.00682	-.00307	.00057	-.00588

RUN NO. 581/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.200	-8.176	-.09012	.50274	.06407	.37886	-.14575	.05885	-.08751	.50320	-.17390
1.200	-6.133	-.09479	.50173	.07036	.28302	-.11173	.04557	-.09220	.50222	-.18358
1.200	-4.093	-.10686	.50251	.07871	.19199	-.07574	.03146	-.10416	.50308	-.20705
1.200	-2.05:	-.11475	.50249	.08369	.10203	-.04043	.01617	-.11197	.50311	-.22256
1.200	-.018	-.12224	.49817	.08676	.01887	-.00790	.00290	-.11940	.49886	-.23936
1.200	2.030	-.12447	.50146	.08764	-.07039	.02965	-.01085	-.12157	.50217	-.24209
1.200	4.047	-.12254	.50451	.08620	-.15389	.06079	-.02496	-.11964	.50520	-.23681
1.199	6.097	-.12198	.50424	.08309	-.24471	.09428	-.03983	-.11904	.50495	-.23574
1.200	8.141	-.11426	.50272	.07256	-.34201	.12953	-.05352	-.11132	.50338	-.22114
	GRADIENT	-.00202	.00015	.00093	-.04244	.01695	-.00687	-.00199	.00016	-.00389

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2 (RHZ009) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 605/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.350	-8.159	-.49458	.19434	.21200	-.00490	.00790	-.00361	-.46199	.26256	-1.75954
.351	-6.138	-.38207	.19608	.16855	-.00619	.00867	-.00312	-.35891	.23581	-1.52201
.349	-4.091	-.29217	.19475	.13603	-.00608	.00771	-.00285	-.27753	.21509	-1.29026
.349	-2.072	-.18822	.19749	.09447	-.00838	.00776	-.00251	-.18096	.20416	-.88633
.350	-.045	-.08905	.19848	.05392	-.01729	.00900	-.00339	-.08890	.19855	-.44774
.350	1.977	.02579	.19646	.00605	-.01636	.00702	-.00241	.01900	.19724	.09632
.350	4.020	.14107	.19348	-.03906	-.01534	.00591	-.00218	.12716	.20289	.62676
.351	6.051	.24605	.18874	-.07874	-.01251	.00447	-.00216	.22478	.21362	1.05226
.350	8.084	.35735	.18228	-.11877	-.00990	.00250	-.00180	.32817	.23072	1.42239
	GRADIENT	.05330	-.00018	-.02164	-.00131	-.00021	.00007	.04979	-.00154	.23764

RUN NO. 604/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.600	-8.412	-.50166	.20243	.19020	-.00504	.00737	-.00227	-.46665	.27364	-1.70533
.601	-6.328	-.38714	.20218	.14956	-.00722	.00879	-.00280	-.36249	.24362	-1.48795
.600	-4.245	-.27514	.20146	.10912	-.00954	.00932	-.00290	-.25947	.22128	-1.17263
.600	-2.159	-.17505	.20161	.07550	-.01205	.00856	-.00253	-.16733	.20807	-.80422
.600	-.084	-.05988	.20228	.03463	-.01574	.00865	-.00240	-.05959	.20237	-.29445
.599	1.995	.04892	.20139	-.00664	-.01598	.00706	-.00212	.04188	.20297	.20632
.601	4.082	.16648	.19798	-.04885	-.01344	.00486	-.00131	.15197	.20933	.72597
.600	6.165	.27794	.19313	-.08901	-.01092	.00315	-.00134	.25559	.22186	1.15202
.600	8.269	.40153	.18609	-.13179	-.00829	.00174	-.00102	.37059	.24191	1.53197
	GRADIENT	.05321	-.00035	-.01913	-.00056	-.00050	.00017	.04960	-.00139	.23105

RUN NO. 603/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.801	-8.667	-.54355	.23249	.20305	.00067	.00372	-.00090	-.50231	.31174	-1.61132
.800	-6.521	-.41714	.22808	.16158	-.00181	.00413	-.00109	-.38854	.27398	-1.41815
.800	-4.384	-.29724	.22445	.12216	-.00213	.00379	-.00096	-.27921	.24652	-1.13260
.801	-2.264	-.18658	.22239	.08141	-.00503	.00329	-.00084	-.17765	.22959	-.77379
.800	-.137	-.06628	.22343	.03382	-.01093	.00482	-.00106	-.06574	.22358	-.29403
.800	1.998	.05630	.22249	-.01009	-.01532	.00493	-.00131	.04851	.22472	.21624
.801	4.135	.18270	.21924	-.05766	-.01439	.00376	-.00092	.16642	.23184	.71762
.800	6.225	.31349	.21657	-.10756	-.01099	.00216	-.00071	.28790	.24958	1.15350
.801	8.414	.43450	.21879	-.14561	-.01094	.00337	-.00014	.39780	.28001	1.42067
	GRADIENT	.05647	-.00048	-.02118	-.00163	.00007	-.00002	.05246	-.00162	.22025

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2 (RHZ009) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 602/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.850	-8.741	-.57243	.24767	.22195	.00182	.00261	-.00068	-.52814	.33179	-1.59179
.850	-6.587	-.43661	.24374	.17544	.00073	.00225	-.00010	-.40576	.29222	-1.38858
.850	-4.433	-.31845	.24046	.13620	.00102	.00137	.00023	-.29891	.26436	-1.13070
.850	-2.280	-.18785	.24093	.08105	-.00106	.00066	.00064	-.17812	.24822	-.71758
.850	-.146	-.05824	.24081	.02864	-.00395	.00011	.00072	-.05763	.24095	-.23918
.850	2.016	.06701	.23881	-.01370	-.00803	-.00012	.00040	.05857	.24102	.24302
.850	4.161	.19919	.23563	-.06180	-.00866	.00001	.00001	.18149	.25045	.72464
.850	6.310	.31723	.23760	-.10420	-.00643	-.00023	.00056	.28920	.27103	1.06703
.850	8.445	.43524	.23936	-.14101	-.00394	-.00033	.00112	.39537	.30068	1.31489
	GRADIENT	.06005	-.00046	-.02284	-.00123	-.00016	-.00003	.05574	-.00163	.21743

RUN NO. 601/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.900	-8.818	-.61977	.27597	.25924	-.00016	.00334	-.00159	-.57014	.36771	-1.55052
.899	-6.642	-.46543	.27177	.19756	.00509	-.00028	-.00042	-.43087	.32378	-1.33076
.900	-4.481	-.32397	.26828	.14165	.00484	-.00068	.00003	-.30202	.29278	-1.03156
.900	-2.312	-.17993	.26884	.07500	.00153	-.00104	.00079	-.16894	.27588	-.61235
.900	-.151	-.03943	.26975	.01435	-.00128	-.00266	.00107	-.03872	.26985	-.14349
.900	2.008	.08894	.26794	-.03310	-.00353	-.00332	.00049	.07939	.27088	.29309
.900	4.176	.21143	.26455	-.06744	-.00750	-.00178	-.00040	.19160	.27924	.68615
.899	6.331	.32536	.26087	-.09995	-.00764	-.00129	-.00054	.29461	.29516	.99812
.900	8.481	.44964	.26354	-.14844	-.00547	-.00062	.00075	.40586	.32697	1.24126
	GRADIENT	.06192	-.00039	-.02433	-.00137	-.00021	-.00005	.05711	-.00148	.20065

RUN NO. 600/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.921	-8.853	-.64310	.29153	.28098	.00305	.00114	-.00074	-.59058	.38703	-1.52590
.920	-6.662	-.48731	.28722	.21788	.00628	-.00017	-.00022	-.45070	.34181	-1.31854
.920	-4.491	-.34041	.28270	.15929	.00381	.00010	-.00005	-.31723	.30848	-1.02837
.920	-2.328	-.19660	.28251	.09318	.00344	-.00113	.00042	-.18496	.29026	-.63722
.920	-.147	-.04608	.28308	.02444	-.00060	-.00208	.00076	-.04536	.28320	-.16015
.920	2.023	.09821	.28193	-.03781	-.00452	-.00225	.00022	.08819	.28522	.30921
.921	4.175	.21789	.27934	-.07510	-.00556	-.00320	-.00023	.19693	.29496	.66765
.920	6.350	.34077	.27529	-.10817	-.00601	-.00260	-.00056	.30823	.31129	.99018
.920	8.502	.45862	.27636	-.14960	-.00480	-.00152	.00049	.41273	.34113	1.20990
	GRADIENT	.06510	-.00029	-.02767	-.00123	-.00036	-.00003	.06003	-.00148	.20010

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2 (RHZ009) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 599/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.949	-8.909	-.67836	.31972	.31050	.00769	-.00131	-.00020	-.62066	.42092	-1.47451
.950	-6.720	-.52439	.31624	.25199	.00912	-.00283	.00042	-.48377	.37544	-1.28857
.950	-4.527	-.37629	.31353	.19701	.00536	-.00167	.00008	-.35037	.34225	-1.02371
.950	-2.334	-.22786	.31121	.13472	.00201	-.00157	-.00025	-.21500	.32023	-.67140
.950	-.170	-.07505	.31112	.06135	-.00109	-.00191	-.00014	-.07413	.31134	-.23811
.950	2.007	.07326	.31128	-.00465	-.00181	-.00346	-.00020	.06232	.31365	.19869
.949	4.184	.21566	.30871	-.06349	-.00489	-.00405	-.00049	.19256	.32362	.59503
.949	6.372	.35410	.30490	-.10991	-.00190	-.00541	-.00059	.31807	.34232	.92915
.949	8.535	.48130	.30323	-.15934	.00200	-.00664	-.00088	.43096	.37130	1.16069
	GRADIENT	.06824	-.00044	-.03034	-.00112	-.00031	-.00005	.06264	-.00202	.18873

RUN NO. 598/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.979	-8.975	-.69293	.35569	.31756	.01058	-.00359	-.00001	-.62896	.45944	-1.36898
.980	-6.756	-.52816	.35025	.25440	.01050	-.00384	.00053	-.48329	.40995	-1.17892
.980	-4.547	-.37407	.34945	.19876	.00793	-.00317	.00023	-.34519	.37801	-.91316
.979	-2.333	-.22161	.34895	.13576	.00331	-.00228	-.00038	-.20722	.35769	-.57934
.979	-.174	-.07138	.35296	.06693	.00079	-.00345	-.00022	-.07031	.35317	-.19908
.980	2.012	.08032	.35401	.00002	-.00337	-.00306	-.00096	.06784	.35661	.19023
.979	4.207	.22422	.35451	-.05776	-.00397	-.00403	-.00117	.19761	.37000	.53407
.979	6.388	.36487	.35535	-.11414	-.00055	-.00523	-.00092	.32307	.39375	.82049
.979	8.553	.48689	.35536	-.15822	.00116	-.00707	-.00145	.42863	.42383	1.01133
	GRADIENT	.06857	.00069	-.02969	-.00139	-.00011	-.00015	.06226	-.00078	.16765

RUN NO. 597/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.118	-9.096	-.68937	.41637	.31562	.01489	-.00634	.00148	-.61488	.52011	-1.18221
1.119	-6.847	-.52306	.41318	.25555	.01141	-.00516	.00047	-.47008	.47259	-.99469
1.119	-4.609	-.35484	.41379	.18687	.01158	-.00652	.00079	-.32044	.44097	-.72666
1.119	-2.383	-.18880	.42035	.11571	.00864	-.00704	.00077	-.17116	.42783	-.40007
1.119	-.181	-.03336	.41899	.04197	.00470	-.00697	.00018	-.03204	.41910	-.07644
1.119	2.017	.11165	.42067	-.02117	.00185	-.00782	-.00034	.09678	.42434	.22807
1.120	4.222	.25315	.42034	-.07616	.00167	-.00881	-.00038	.22152	.43783	.50594
1.119	6.413	.39110	.41575	-.13587	.00586	-.00906	.00028	.34222	.45683	.74911
1.120	8.612	.52258	.41293	-.18252	.00527	-.00936	-.00013	.45485	.48653	.93489
	GRADIENT	.06874	.00061	-.03005	-.00121	-.00024	-.00016	.06128	-.00045	.14022

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2 (RHZ009) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 596/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.200	-9.132	-.67018	.43488	.29885	.01219	-.00564	.00078	-.59266	.53573	-1.10626
1.200	-6.863	-.49441	.43425	.23378	.01081	-.00421	.00082	-.43898	.49022	-.89549
1.200	-4.629	-.32572	.44110	.16438	.00890	-.00407	.00050	-.28905	.46595	-.62035
1.199	-2.387	-.16386	.44021	.09515	.00569	-.00378	.00031	-.14538	.44665	-.32549
1.200	-.181	-.01582	.43637	.02790	.00074	-.00232	.00033	-.01445	.43642	-.03310
1.200	2.036	.13095	.43621	-.03672	-.00325	-.00289	-.00038	.11537	.44059	.26185
1.200	4.235	.26877	.43417	-.08938	-.00643	-.00196	-.00094	.23598	.45283	.52111
1.200	6.418	.40237	.43215	-.14597	-.00305	-.00249	-.00054	.35154	.47442	.74098
1.199	8.627	.53494	.43011	-.19230	-.00100	-.00401	-.00038	.46437	.50549	.91866
	GRADIENT	.06699	-.00081	-.02887	-.00179	.00023	-.00016	.05918	-.00147	.12958

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (RHZ010) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 615/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.351	-8.153	-.49779	.18755	.20574	-.00142	.00529	-.00251	-.46616	.25626	-1.81914
.351	-6.133	-.39584	.18792	.17038	-.00435	.00666	-.00243	-.37350	.22914	-1.63000
.350	-4.101	-.28626	.18768	.12857	-.00494	.00675	-.00179	-.27210	.20766	-1.31030
.352	-2.060	-.17694	.18859	.08686	-.00713	.00639	-.00182	-.17005	.19483	-.87280
.351	-.021	-.07940	.18801	.05165	-.01115	.00585	-.00152	-.07934	.18804	-.42191
.351	1.998	.02878	.18607	.00378	-.01692	.00586	-.00215	.02227	.18696	.11912
.351	4.035	.15730	.18419	-.04562	-.01245	.00403	-.00136	.14395	.19481	.73895
.351	6.059	.26871	.18011	-.08391	-.00888	.00196	-.00116	.24820	.20746	1.19633
.351	8.103	.38346	.17258	-.12606	-.00451	.00014	-.00049	.35530	.22491	1.57977
	GRADIENT	.05375	-.00047	-.02122	-.00122	-.00029	.00003	.05039	-.00165	.25037

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (RHZ010) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 614/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.599	-8.419	-.53166	.19757	.20538	-.00300	.00619	-.00257	-.49700	.27329	-1.81861
.600	-6.332	-.41353	.19727	.16359	-.00173	.00526	-.00200	-.38925	.24167	-1.61065
.599	-4.246	-.30083	.19495	.12503	-.00397	.00643	-.00186	-.28557	.21669	-1.31785
.599	-2.160	-.18531	.19583	.08562	-.01058	.00804	-.00211	-.17780	.20267	-.87727
.599	-.066	-.07443	.19468	.04874	-.01167	.00724	-.00181	-.07421	.19477	-.38102
.599	2.005	.04901	.19478	-.00738	-.01481	.00697	-.00177	.04217	.19637	.21472
.600	4.106	.16964	.19100	-.04883	-.01455	.00570	-.00157	.15552	.20266	.76740
.602	6.187	.28298	.18557	-.08447	-.01252	.00432	-.00130	.26133	.21498	1.21560
.599	8.281	.40730	.17818	-.12592	-.00675	.00148	-.00052	.37739	.23498	1.60505
	GRADIENT	.05632	-.00043	-.02112	-.00122	-.00012	.00004	.05281	-.00165	.25216

RUN NO. 613/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.800	-8.678	-.58087	.22651	.23067	.00590	.00059	-.00036	-.54004	.31156	-1.73337
.800	-6.537	-.45814	.22209	.19015	.00258	.00184	-.00057	-.42988	.27281	-1.57575
.800	-4.396	-.33579	.21920	.15116	-.00011	.00270	-.00048	-.31800	.24429	-1.30172
.800	-2.245	-.21046	.21807	.10852	-.00181	.00232	-.00020	-.20175	.22615	-.89213
.800	-.123	-.08867	.21716	.06375	-.00817	.00320	-.00057	-.08821	.21735	-.40584
.800	2.014	.03831	.21619	.00767	-.01079	.00355	-.00056	.03069	.21740	.14117
.800	4.138	.17023	.21277	-.04860	-.01390	.00419	-.00079	.15443	.22450	.68788
.800	6.291	.30016	.20865	-.08769	-.01272	.00306	-.00088	.27543	.24029	1.14650
.801	8.430	.41384	.20782	-.11830	-.01094	.00389	.00005	.37890	.26624	1.42314
	GRADIENT	.05912	-.00069	-.02346	-.00170	.00020	-.00006	.05520	-.00227	.23501

RUN NO. 612/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.850	-8.755	-.60929	.23985	.24812	.00980	-.00092	.00009	-.56568	.32979	-1.71524
.850	-6.582	-.47724	.23623	.20526	.00423	.00042	.00018	-.44702	.28938	-1.54475
.850	-4.436	-.34967	.23577	.16386	.00370	-.00037	.00077	-.33039	.26211	-1.26045
.850	-2.28[illegible]	-.21332	.23475	.11163	.00091	-.00032	.00119	-.20382	.24306	-.83856
.851	-.126	-.07911	.23349	.06034	-.00239	-.00111	.00117	-.07859	.23367	-.33635
.850	2.012	.05689	.23283	-.00517	-.01003	.00015	.00061	.04868	.23468	.20744
.850	4.172	.19584	.23309	-.06527	-.00941	.00031	.00011	.17836	.24672	.72294
.850	6.316	.31778	.23253	-.10132	-.00958	.00076	.00009	.29027	.26608	1.09090
.850	8.474	.42741	.23191	-.12664	-.00670	.00007	.00075	.38857	.29236	1.32906
	GRADIENT	.06329	-.00034	-.02674	-.00173	.00008	-.00009	.05905	-.00182	.23306

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (RHZ010) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 611/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.900	-8.829	-.63096	.27274	.26498	.01211	-.00214	-.00107	-.58162	.36635	-1.58762
.900	-6.639	-.47647	.26938	.20633	.01306	-.00313	-.00005	-.44213	.32266	-1.37028
.900	-4.462	-.33569	.26633	.15521	.00662	-.00206	.00022	-.31396	.29164	-1.07651
.900	-2.276	-.18565	.26414	.09230	.00357	-.00241	.00096	-.17501	.27130	-.64508
.900	-.105	-.04202	.26249	.03415	.00196	-.00442	.00129	-.04154	.26257	-.15820
.899	2.044	.09792	.26428	-.03402	-.00209	-.00418	.00064	.08843	.26760	.33046
.900	4.184	.21671	.26246	-.07568	-.00596	-.00288	.00014	.19698	.27758	.70964
.900	6.335	.33688	.26315	-.11814	-.00615	-.00275	-.00037	.30579	.29872	1.02366
.900	8.511	.45385	.26010	-.14725	-.00161	-.00321	.00118	.41035	.32440	1.26495
	GRADIENT	.06425	-.00035	-.02722	-.00143	-.00016	-.00001	.05948	-.00149	.21044

RUN NO. 610/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.920	-8.874	-.65079	.28925	.28119	.01416	-.00346	-.00051	-.59838	.38619	-1.54946
.920	-6.668	-.49875	.28490	.22730	.00854	-.00190	-.00003	-.46230	.34088	-1.35617
.920	-4.483	-.35323	.28233	.17356	.00560	-.00079	.00000	-.33008	.30908	-1.06795
.920	-2.304	-.20619	.27910	.11382	.00210	-.00077	.00042	-.19481	.28716	-.67839
.920	-.115	-.05222	.27782	.04562	-.00079	-.00212	.00084	-.05166	.27793	-.18589
.920	2.042	.09503	.27943	-.02816	-.00509	-.00153	.00022	.08501	.28264	.30078
.920	4.193	.22401	.27750	-.07771	-.00501	-.00261	.00018	.20312	.29314	.69291
.920	6.350	.34343	.27651	-.11801	-.00520	-.00260	-.00004	.31074	.31279	.99342
.920	8.520	.45652	.27496	-.14836	-.00507	-.00297	.00086	.41075	.33956	1.20965
	GRADIENT	.06709	-.00043	-.02971	-.00131	-.00020	.00001	.06205	-.00169	.20744

RUN NO. 609/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.950	-8.920	-.69284	.31900	.31508	.01080	-.00269	.00011	-.63500	.42257	-1.50271
.950	-6.719	-.52906	.31564	.25209	.00671	-.00123	.00010	-.48849	.37537	-1.30136
.950	-4.526	-.37537	.31347	.19637	.00565	-.00153	.00033	-.34946	.34212	-1.02145
.950	-2.316	-.22851	.31087	.14095	.00195	-.00141	.00016	-.21576	.31985	-.67457
.950	-.143	-.07863	.30975	.07643	-.00092	-.00193	.00001	-.07785	.30995	-.25117
.950	2.030	.07842	.30948	-.00280	-.00290	-.00224	.00021	.06741	.31207	.21600
.950	4.200	.22262	.30972	-.06810	-.00344	-.00376	-.00010	.19934	.32519	.61299
.950	6.373	.35936	.30668	-.12236	-.00328	-.00448	-.00053	.32310	.34467	.93740
.950	8.548	.48819	.30337	-.16636	.00109	-.00685	-.00056	.43768	.37256	1.17481
	GRADIENT	.06895	-.00041	-.03085	-.00106	-.00024	-.00004	.06334	-.00192	.19079

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (RHZ010) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 608/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.980	-8.974	-.69543	.35445	.30958	.01048	-.00265	.00017	-.63163	.45859	-1.37734
.981	-6.743	-.52144	.35040	.24258	.00885	-.00222	.00041	-.47669	.40920	-1.16495
.981	-4.541	-.36693	.34993	.18861	.00574	-.00178	-.00024	-.33808	.37788	-.89467
.981	-2.334	-.21280	.34960	.13128	.00361	-.00208	-.00021	-.19836	.35797	-.55419
.980	-.144	-.06469	.35221	.07183	-.00078	-.00248	-.00064	-.06381	.35237	-.18109
.980	2.039	.09303	.35420	-.00446	-.00373	-.00248	-.00098	.08037	.35728	.22495
.980	4.210	.23665	.35663	-.07092	-.00471	-.00303	-.00124	.20983	.37305	.56248
.980	6.383	.37157	.35718	-.12567	-.00231	-.00498	-.00120	.32955	.39627	.83163
.980	8.571	.50383	.35622	-.16816	.00194	-.00751	-.00080	.44511	.42733	1.04162
	GRADIENT	.06917	.00082	-.02993	-.00129	-.00013	-.00013	.06284	-.00048	.16884

RUN NO. 607/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.120	-9.098	-.68448	.41631	.30305	.01270	-.00526	.00083	-.61004	.51931	-1.17472
1.119	-6.827	-.51137	.41269	.24063	.01184	-.00481	.00033	-.45868	.47055	-.97479
1.119	-4.595	-.34311	.41428	.17504	.01086	-.00623	.00026	-.30882	.44044	-.70117
1.119	-2.365	-.18326	.42107	.11387	.00926	-.00693	.00059	-.16573	.42827	-.38697
1.118	-.141	-.02998	.42160	.04970	.00374	-.00651	-.00015	-.02894	.42167	-.06863
1.119	2.053	.12170	.42204	-.02351	.00361	-.00807	-.00016	.10650	.42613	.24993
1.119	4.244	.26515	.42060	-.08943	.00372	-.00905	-.00028	.23330	.43907	.53135
1.118	6.424	.39886	.41541	-.14496	.00200	-.00846	-.00055	.34988	.45742	.76490
1.119	8.645	.53343	.41117	-.18835	.00457	-.00897	.00011	.46556	.48668	.95661
	GRADIENT	.06886	.00062	-.03015	-.00090	-.00031	-.00008	.06139	-.00023	.14039

RUN NO. 606/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.200	-9.131	-.67143	.43441	.29519	.01190	-.00430	.00099	-.59398	.53546	-1.10930
1.200	-6.857	-.48944	.43377	.22478	.00943	-.00256	.00062	-.43415	.48910	-.88764
1.199	-4.606	-.31896	.44134	.15796	.00857	-.00355	-.00006	-.26249	.46053	-.60682
1.200	-2.371	-.16002	.43931	.09357	.00336	-.00245	-.00033	-.14171	.44556	-.31805
1.199	-.150	-.00908	.43577	.03107	-.00292	-.00039	-.00057	-.00794	.43579	-.01822
1.200	2.060	.13807	.43596	-.03780	-.00572	-.00159	-.00125	.12231	.44064	.27758
1.199	4.242	.27464	.43500	-.09847	-.00552	-.00166	-.00114	.24171	.45412	.53226
1.199	6.442	.41235	.43290	-.15595	-.00530	-.00171	-.00115	.36118	.47643	.75810
1.199	8.670	.54580	.42968	-.19850	-.00331	-.00246	-.00076	.47479	.50705	.93638
	GRADIENT	.06713	-.00073	-.02912	-.00169	.00021	-.00014	.05932	-.00127	.12989

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (RHZ011) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 625/ 0 RN/L = 2.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.350	-8.149	-.58566	.22521	.27484	-.00155	.00508	-.00197	-.54782	.30595	-1.79058
.349	-6.120	-.49209	.22566	.24262	-.00203	.00587	-.00222	-.46523	.27684	-1.68049
.349	-4.080	-.38865	.22774	.20422	-.00672	.00758	-.00203	-.37146	.25481	-1.45776
.349	-2.067	-.27173	.22779	.15908	-.01297	.00963	-.00277	-.26333	.23744	-1.10904
.350	-.042	-.18838	.22170	.13114	-.01610	.00941	-.00262	-.18821	.22184	-.84841
.349	1.999	-.07628	.22077	.08452	-.01619	.00651	-.00150	-.08393	.21798	-.38506
.350	4.020	.03342	.21845	.04263	-.01272	.00356	-.00122	.01802	.22026	.08182
.350	6.053	.13831	.21171	.00966	-.00997	.00184	-.00122	.11521	.22511	.51181
.349	8.100	.26016	.20395	-.03350	-.00562	-.00059	-.00016	.22883	.23857	.95918
	GRADIENT	.05130	-.00126	-.01953	-.00075	-.00055	.00014	.04729	-.00437	.18768

RUN NO. 624/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.599	-8.441	-.64089	.23726	.28804	-.00211	.00656	-.00148	-.59912	.32876	-1.82235
.599	-6.356	-.52871	.23625	.25075	-.00405	.00715	-.00185	-.49931	.29332	-1.70223
.598	-4.271	-.41690	.23720	.21334	-.00731	.00834	-.00238	-.39808	.26759	-1.48766
.598	-2.194	-.29923	.23660	.17148	-.01228	.00936	-.00265	-.28996	.24768	-1.16974
.600	-.110	-.18932	.23480	.13620	-.01536	.00851	-.00243	-.18887	.23517	-.80315
.599	1.957	-.07580	.23410	.08692	-.01695	.00727	-.00206	-.08375	.23138	-.36197
.600	4.043	.03835	.22892	.04766	-.01668	.00617	-.00138	.02212	.23106	.09572
.599	6.147	.15738	.21935	.00984	-.01348	.00403	-.00113	.13299	.23494	.56605
.599	8.237	.27195	.21050	-.02686	-.00986	.00262	-.00045	.23899	.24729	.96641
	GRADIENT	.05457	-.00092	-.02002	-.00113	-.00031	.00012	.05037	-.00431	.19127

RUN NO. 623/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.800	-8.779	-.74512	.26936	.35536	.00656	.00229	.00061	-.69528	.37993	-1.83002
.800	-6.629	-.62410	.26553	.31646	.00013	.00409	-.00033	-.58928	.33580	-1.75485
.800	-4.489	-.50297	.26433	.27901	-.00087	.00372	.00006	-.48074	.30289	-1.58721
.800	-2.333	-.37339	.26175	.23472	-.00415	.00321	.00016	-.36243	.27673	-1.30966
.800	-.208	-.24964	.25979	.18894	-.00564	.00281	.00002	-.24869	.26069	-.95396
.800	1.912	-.11691	.25735	.12817	-.01249	.00395	-.00059	-.12543	.25330	-.49519
.800	4.060	.01994	.25292	.06823	-.01259	.00393	-.00039	.00198	.25370	.00782
.799	6.218	.15042	.24398	.02374	-.01289	.00361	-.00061	.12311	.25883	.47563
.800	8.356	.29398	.23493	-.02962	-.00931	.00258	-.00094	.25672	.27516	.93297
	GRADIENT	.06102	-.00128	-.02474	-.00149	.00005	-.00008	.05634	-.00571	.18760

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (RHZ011) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 622/ 0 RN/L = 3.88 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.850	-8.841	-.77260	.29118	.37598	.00881	.00134	.00015	-.71866	.40646	-1.76809
.850	-6.706	-.64534	.28673	.33375	.00423	.00216	.00022	-.60744	.36013	-1.68675
.850	-4.542	-.52354	.28469	.29728	.00227	.00176	.00046	-.49935	.32526	-1.53525
.850	-2.374	-.38850	.28139	.24735	-.00139	.00143	.00069	-.37651	.29724	-1.26670
.850	-.217	-.25211	.27801	.19447	-.00469	.00067	.00071	-.25106	.27897	-.89995
.850	1.904	-.11090	.27568	.12481	-.00762	.00003	.00049	-.12000	.27184	-.44143
.849	4.058	.03518	.27071	.05786	-.01098	.00105	.00017	.01593	.27252	.05847
.850	6.238	.18591	.26540	-.00350	-.00950	.00071	-.00004	.15597	.28403	.54914
.850	8.413	.33476	.25625	-.05876	-.00429	-.00093	-.00033	.29366	.30247	.97089
	GRADIENT	.06495	-.00157	-.02799	-.00152	-.00013	-.00004	.05992	-.00610	.18676

RUN NO. 621/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.900	-8.915	-.78642	.32958	.38928	.01098	.00000	-.00094	-.72584	.44747	-1.62210
.900	-6.753	-.65380	.32456	.34487	.01022	.00011	-.00010	-.61111	.39918	-1.53089
.899	-4.563	-.51825	.31940	.30175	.00153	.00212	-.00042	-.49119	.35962	-1.36587
.900	-2.409	-.38360	.31543	.24970	-.00222	.00276	.00011	-.37001	.33127	-1.11692
.900	-.254	-.24740	.31073	.19556	-.00670	.00207	.00015	-.24602	.31183	-.78897
.899	1.906	-.10558	.30599	.12450	-.00911	.00092	.00018	-.11570	.30231	-.38272
.899	4.086	.05572	.29591	.04916	-.00855	.00039	-.00003	.03450	.29913	.11532
.899	6.262	.21066	.28951	-.02080	-.00876	.00012	-.00052	.17782	.31086	.57201
.900	8.459	.36022	.28272	-.07593	-.00367	-.00222	-.00119	.31471	.33264	.94612
	GRADIENT	.06598	-.00261	-.02917	-.00125	-.00025	.00004	.06042	-.00693	.17108

RUN NO. 620/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.919	-8.968	-.80226	.34662	.40469	.01109	.00042	-.00060	-.73842	.46744	-1.57973
.920	-6.769	-.67157	.33954	.36402	.00487	.00184	-.00038	-.62686	.41633	-1.50567
.920	-4.584	-.52752	.33690	.31245	.00349	.00110	-.00013	-.49891	.37798	-1.31992
.920	-2.421	-.38676	.33319	.25655	-.00093	.00156	-.00027	-.37235	.34923	-1.06621
.920	-.258	-.24356	.32892	.19685	-.00488	.00116	-.00015	-.24207	.32992	-.73374
.920	1.912	-.09698	.32068	.12357	-.00827	.00125	.00013	-.10763	.31727	-.33924
.919	4.091	.05954	.31080	.05040	-.00988	.00069	-.00046	.03722	.31425	.11842
.919	6.271	.21501	.30409	-.02030	-.00911	.00042	-.00058	.18051	.32575	.55414
.919	8.471	.36980	.29758	-.08241	-.00224	-.00396	-.00029	.32193	.34881	.92294
	GRADIENT	.06752	-.00299	-.03031	-.00157	-.00005	-.00001	.06166	-.00735	.16822

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (RHZ011) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 619/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.950	-9.002	-.81717	.38267	.41684	.01290	-.00453	.00083	-.74723	.50582	-1.47727
.951	-6.809	-.66158	.37946	.35869	.00851	-.00250	.00006	-.61192	.45522	-1.34423
.950	-4.608	-.51036	.37529	.30407	.00625	-.00166	-.00017	-.47856	.41508	-1.15293
.950	-2.426	-.37330	.37036	.25490	.00265	-.00071	-.00080	-.35729	.38582	-.92606
.950	-.262	-.23560	.36464	.19861	-.00422	.00032	-.00124	-.23393	.36572	-.63965
.950	1.918	-.09003	.35435	.12894	-.00652	.00045	-.00090	-.10184	.35114	-.29002
.950	4.116	.07360	.34543	.04943	-.00749	-.00001	-.00124	.04862	.34982	.13898
.950	6.307	.23183	.33705	-.02120	-.00548	-.00110	-.00093	.19340	.36048	.53650
.950	8.479	.38577	.32799	-.08551	-.00282	-.00360	-.00103	.33319	.38129	.87385
	GRADIENT	.06660	-.00348	-.02916	-.00168	.00020	-.00010	.06011	-.00758	.14779

RUN NO. 618/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.978	-9.053	-.79391	.43580	.39179	.01235	-.00482	.00005	-.71545	.55528	-1.28845
.979	-6.843	-.62979	.43207	.33095	.01048	-.00459	.00010	-.57382	.50403	-1.13847
.981	-4.632	-.48422	.43028	.28131	.00818	-.00321	-.00065	-.44789	.46797	-.95708
.980	-2.443	-.34336	.42415	.23378	.00386	-.00176	-.00096	-.32496	.43841	-.74124
.980	-.249	-.20738	.41646	.18324	-.00291	-.00017	-.00131	-.20555	.41936	-.49016
.980	1.931	-.05681	.40849	.11150	-.00425	-.00064	-.00108	-.07054	.40634	-.17360
.980	4.098	.09165	.39953	.03969	-.00647	-.00072	-.00144	.06287	.40506	.15522
.980	6.305	.24991	.38872	-.03095	-.00460	-.00277	-.00117	.20570	.41381	.49710
.980	8.500	.40484	.37984	-.09219	-.00171	-.00458	-.00129	.34425	.43550	.79047
	GRADIENT	.06587	-.00353	-.02773	-.00171	.00028	-.00008	.05843	-.00724	.12786

RUN NO. 617/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.119	-9.180	-.77026	.47319	.36806	.01080	-.00455	.00031	-.68489	.59002	-1.16080
1.119	-6.918	-.60574	.46658	.31138	.01067	-.00480	.00019	-.54513	.53614	-1.01677
1.119	-4.667	-.44380	.46220	.25169	.01106	-.00626	-.00010	-.40472	.49678	-.81470
1.118	-2.441	-.28284	.45644	.18943	.00544	-.00407	-.00010	-.26314	.46807	-.56218
1.119	-.217	-.12391	.45573	.12413	.00448	-.00654	-.00006	-.12219	.45620	-.26784
1.119	1.982	.03073	.44980	.04836	.00292	-.00735	.00008	.01515	.45060	.03362
1.119	4.185	.18387	.44047	-.02461	.00132	-.00730	-.00027	.15124	.45271	.33407
1.119	6.367	.32152	.43199	-.08427	.00317	-.00928	-.00007	.27163	.46499	.58417
1.119	8.608	.46644	.42568	-.13573	.00744	-.01117	.00066	.39747	.49070	.81002
	GRADIENT	.07091	-.00226	-.03135	-.00099	-.00024	-.00001	.06283	-.00478	.13075

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (RHZ011) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 616/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.200	-9.215	-.75748	.48787	.36071	.01189	-.00455	.00095	-.66958	.60288	-1.11063
1.200	-6.931	-.57788	.48331	.29293	.01037	-.00315	.00034	-.51534	.54952	-.93780
1.199	-4.653	-.39490	.47662	.21653	.00722	-.00332	-.00075	-.35493	.50709	-.69994
1.200	-2.421	-.23214	.46605	.14968	-.00070	.00110	-.00061	-.21225	.47544	-.44642
1.200	-.186	-.07829	.46065	.08562	-.00187	-.00040	-.00024	-.07680	.46090	-.16662
1.200	2.043	.07376	.45578	.01426	-.00482	-.00166	-.00090	.05747	.45812	.12545
1.200	4.208	.21483	.45157	-.05077	-.00634	-.00129	-.00123	.18111	.46611	.38856
1.200	6.402	.35701	.44658	-.11212	-.00306	-.00288	-.00058	.30498	.48360	.63064
1.199	8.638	.49806	.44080	-.16003	-.00312	-.00329	-.00042	.42620	.51061	.83469
	GRADIENT	.06876	-.00272	-.03020	-.00141	.00006	-.00006	.06049	-.00449	.12390

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (RHZ012) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 635/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.350	-8.167	-.57494	.22463	.26672	.00038	.00364	-.00059	-.53720	.30402	-1.76697
.350	-6.139	-.48407	.22634	.23873	-.00167	.00555	-.00107	-.45709	.27681	-1.65132
.351	-4.112	-.39144	.22645	.20426	-.00547	.00714	-.00107	-.37420	.25394	-1.47359
.350	-2.077	-.26596	.22686	.15531	-.01015	.00792	-.00117	-.25757	.23635	-1.08980
.350	-.050	-.18593	.22187	.13316	-.01491	.00873	-.00114	-.18574	.22204	-.83653
.350	1.990	-.07162	.22060	.08250	-.01327	.00554	-.00027	-.07924	.21798	-.36351
.350	4.002	.03830	.21830	.04231	-.01723	.00508	-.00087	.02297	.22044	.10420
.350	6.046	.15068	.21179	.00274	-.00789	.00169	.00022	.12753	.22648	.56310
.350	8.090	.26347	.20408	-.03656	-.00514	.00028	.00089	.23213	.23913	.97070
	GRADIENT	.05193	-.00111	-.01955	-.00131	-.00032	.00006	.04793	-.00421	.19126

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (RHZ012) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 634/ 0 RN/L = 3.16 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.600	-8.461	-.63655	.23736	.28388	-.00239	.00576	-.00087	-.59469	.32844	-1.81067
.601	-6.399	-.52758	.23677	.24811	-.00104	.00557	-.00075	-.49791	.29409	-1.69302
.600	-4.313	-.41703	.23608	.21146	-.00499	.00647	-.00109	-.39809	.26678	-1.49221
.600	-2.204	-.29841	.23511	.17079	-.00956	.00773	-.00142	-.28915	.24641	-1.17344
.600	-.130	-.18853	.23201	.13495	-.01392	.00794	-.00155	-.18800	.23244	-.80882
.600	1.944	-.08239	.23073	.09123	-.01676	.00731	-.00154	-.09017	.22781	-.39581
.599	4.048	.04264	.22597	.04683	-.01649	.00675	-.00116	.02659	.22842	.11639
.600	6.119	.15904	.21873	.00938	-.01293	.00440	-.00051	.13482	.23443	.57508
.599	8.227	.27383	.20954	-.02806	-.00809	.00190	.00014	.24103	.24657	.97752
	GRADIENT	.05440	-.00118	-.01959	-.00145	.00001	-.00001	.05024	-.00457	.19141

RUN NO. 633/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.800	-8.778	-.74186	.26905	.35245	.00749	.00148	.00093	-.69212	.37911	-1.82566
.800	-6.653	-.61683	.26541	.31198	.00340	.00185	.00091	-.58192	.33509	-1.73660
.800	-4.494	-.49462	.26499	.27251	-.00021	.00262	.00070	-.47233	.30293	-1.55920
.800	-2.352	-.37023	.26174	.23190	-.00303	.00215	.00077	-.35918	.27671	-1.29801
.801	-.217	-.24625	.25950	.18554	-.00802	.00308	.00028	-.24527	.26043	-.94176
.800	1.901	-.11732	.25694	.12785	-.01066	.00307	-.00008	-.12578	.25291	-.49734
.800	4.045	.01592	.25276	.06914	-.01496	.00452	-.00051	-.00195	.25325	-.00769
.800	6.182	.15456	.24305	.02168	-.01363	.00414	-.00040	.12749	.25829	.49358
.800	8.356	.29521	.23383	-.03150	-.00792	.00206	-.00039	.25810	.27424	.94111
	GRADIENT	.05972	-.00137	-.02394	-.00174	.00022	-.00015	.05504	-.00578	.18299

RUN NO. 632/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.850	-8.881	-.76930	.29180	.37186	.01108	-.00022	.00029	-.71503	.40707	-1.75652
.849	-6.698	-.63649	.28783	.32833	.01088	-.00025	.00074	-.59857	.36010	-1.66226
.849	-4.563	-.51424	.28439	.29181	.00451	-.00024	.00118	-.48999	.32440	-1.51045
.849	-2.388	-.38223	.28090	.24381	.00044	-.00043	.00108	-.37020	.29658	-1.24824
.849	-.225	-.24856	.27740	.19145	-.00243	-.00092	.00151	-.24747	.27837	-.88897
.849	1.892	-.11136	.27539	.12404	-.00552	-.00092	.00127	-.12040	.27156	-.44336
.849	4.037	.03545	.26988	.05638	-.00949	.00040	.00083	.01636	.27171	.06021
.850	6.239	.18720	.26318	-.00464	-.01043	.00116	.00020	.15749	.28197	.55853
.849	8.386	.33752	.25409	-.06022	-.00529	-.00122	.00002	.29686	.30060	.98755
	GRADIENT	.05379	-.00161	-.02749	-.00158	.00004	-.00002	.05877	-.00608	.18361

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (RHZ012) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 631/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.900	-8.957	-.78572	.32889	.38687	.01404	-.00198	-.00039	-.72494	.44721	-1.62102
.899	-6.757	-.64967	.32179	.34271	.00840	-.00113	.00052	-.60730	.39600	-1.53359
.900	-4.595	-.51706	.32028	.29950	.00460	.00024	.00025	-.48974	.36068	-1.35784
.900	-2.432	-.38464	.31541	.24915	.00045	.00084	.00068	-.37091	.33145	-1.11907
.899	-.263	-.24478	.31019	.19320	-.00418	.00051	.00075	-.24335	.31131	-.78170
.899	1.905	-.09515	.30628	.11779	-.00501	-.00080	.00123	-.10528	.30295	-.34751
.900	4.068	.05787	.29676	.04758	-.00675	-.00043	.00059	.03668	.30011	.12220
.900	6.245	.21394	.28992	-.02300	-.00714	-.00062	-.00001	.18113	.31148	.58154
.900	8.434	.36513	.28197	-.07924	-.00097	-.00369	-.00001	.31983	.33247	.96197
	GRADIENT	.06644	-.00259	-.02932	-.00130	-.00014	.00006	.06086	-.00691	.17226

RUN NO. 630/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.920	-8.978	-.79935	.34702	.40204	.01200	-.00096	-.00027	-.73540	.46751	-1.57303
.920	-6.799	-.66922	.33999	.36161	.00744	-.00044	.00040	-.62426	.41683	-1.49765
.920	-4.613	-.52358	.33749	.30847	.00612	-.00060	.00064	-.49474	.37851	-1.30708
.920	-2.438	-.38208	.33307	.25276	.00112	-.00010	.00052	-.36757	.34902	-1.05317
.920	-.257	-.24087	.32911	.19447	-.00414	.00000	.00038	-.23939	.33018	-.72503
.920	1.891	-.09572	.32127	.12117	-.00523	-.00018	.00089	-.10627	.31794	-.33425
.920	4.074	.06417	.31164	.04701	-.00925	.00024	-.00008	.04186	.31541	.13272
.920	6.257	.22315	.30487	-.02592	-.00753	-.00027	.00010	.18859	.32738	.57607
.919	8.447	.37640	.29863	-.08695	-.00409	-.00385	-.00032	.32875	.34870	.94278
	GRADIENT	.06736	-.00293	-.03016	-.00171	.00007	-.00005	.06149	-.00725	.16579

RUN NO. 629/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.950	-9.030	-.81349	.39235	.41318	.01308	-.00539	.00139	-.74340	.50529	-1.47124
.950	-6.828	-.65927	.37924	.35602	.00995	-.00390	.00092	-.60951	.45493	-1.33976
.950	-4.640	-.50960	.37544	.30175	.00718	-.00247	.00045	-.47756	.41543	-1.14954
.950	-2.443	-.36938	.37057	.25150	.00299	-.00171	-.00005	-.35324	.38598	-.91520
.950	-.258	-.23063	.36475	.19495	-.00220	-.00093	-.00043	-.22898	.35578	-.62601
.950	1.904	-.08200	.35464	.12298	-.00446	-.00052	-.00023	-.09374	.35172	-.26651
.950	4.071	.07131	.34530	.04897	-.00690	-.00037	-.00086	.04662	.34949	.13339
.950	6.275	.23199	.33681	-.02301	-.00669	-.00074	-.00108	.19379	.36015	.53810
.950	8.477	.39399	.32744	-.09093	-.00056	-.00448	-.00022	.34142	.38194	.89391
	GRADIENT	.06657	-.00350	-.02912	-.00164	.00025	-.00013	.06007	-.00764	.14761

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (RHZ012) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 628/ 0 RN/L = 4.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.980	-9.078	-.79398	.43692	.38976	.01107	-.00498	.00079	-.71510	.55672	-1.28448
.981	-6.845	-.62863	.43403	.32924	.00875	-.00402	.00079	-.57242	.50586	-1.13157
.981	-4.641	-.48278	.42954	.27981	.00870	-.00412	.00021	-.44644	.46720	-.95557
.980	-2.453	-.34292	.42385	.23307	.00301	-.00179	-.00054	-.32446	.43814	-.74054
.980	-.274	-.21013	.41803	.18370	-.00219	-.00078	-.00056	-.20813	.41903	-.49670
.980	1.925	-.06233	.40809	.11421	-.00465	-.00142	-.00059	-.07600	.40576	-.18731
.980	4.092	.09616	.39833	.03678	-.00497	-.00125	-.00093	.06749	.40418	.16699
.979	6.284	.25014	.38833	-.03178	-.00275	-.00345	-.00077	.20613	.41338	.49865
.979	8.494	.40893	.37850	-.09465	-.00059	-.00510	-.00059	.34854	.43475	.80172
	GRADIENT	.06585	-.00358	-.02769	-.00160	.00028	-.00011	.05843	-.00725	.12809

RUN NO. 627/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.119	-9.196	-.77501	.47131	.37065	.01372	-.00576	.00128	-.68973	.58911	-1.17080
1.119	-6.952	-.60996	.46543	.31409	.01310	-.00595	.00110	-.54914	.53584	-1.02484
1.119	-4.677	-.44378	.46111	.25132	.01271	-.00689	.00087	-.40470	.49576	-.81633
1.118	-2.461	-.28254	.45552	.18898	.00679	-.00454	.00054	-.26273	.46723	-.56231
1.119	-.238	-.12421	.45615	.12373	.00578	-.00741	.00049	-.12231	.45666	-.26783
1.119	1.947	.02672	.44976	.04988	.00229	-.00756	.00023	.01143	.45041	.02537
1.119	4.152	.18305	.44055	-.02531	.00215	-.00793	.00018	.15067	.45264	.33288
1.118	6.366	.32895	.43139	-.08834	.00533	-.01017	.00056	.27909	.46520	.59993
1.119	8.570	.47013	.42471	-.13873	.00860	-.01207	.00096	.40159	.49003	.81953
	GRADIENT	.07083	-.00212	-.03137	-.00116	-.00023	-.00008	.06276	-.00468	.13078

RUN NO. 626/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.200	-9.204	-.75662	.48589	.36016	.01212	-.00442	.00167	-.66916	.60066	-1.11404
1.200	-6.949	-.57641	.48207	.29230	.01080	-.00412	.00128	-.51385	.54826	-.93724
1.200	-4.662	-.39422	.47670	.21633	.00897	-.00420	-.00013	-.35418	.50716	-.69835
1.200	-2.453	-.23288	.46566	.14968	.00041	.00044	.00003	-.21274	.47520	-.44769
1.200	-.216	-.07755	.46043	.08439	-.00138	-.00090	.00020	-.07581	.46072	-.16455
1.200	1.987	.07135	.45547	.01382	-.00592	-.00187	-.00075	.05552	.45767	.12131
1.199	4.189	.21674	.45126	-.05232	-.00492	-.00217	-.00066	.18320	.46589	.39322
1.199	6.392	.35699	.44640	-.11242	-.00478	-.00294	-.00060	.30508	.48337	.63114
1.200	8.616	.49691	.44099	-.16011	-.00045	-.00448	.00023	.42524	.51046	.83305
	GRADIENT	.06893	-.00276	-.03040	-.00154	.00008	-.00008	.06066	-.00453	.12429

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (RHZ013) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 646/ 0 RN/L = 2.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.351	-8.037	-.15542	.21389	.13770	.31536	-.11067	.05276	-.15528	.21399	-.72565
.351	-6.040	-.14876	.21841	.12464	.23067	-.07841	.03820	-.14862	.21851	-.68014
.350	-4.023	-.15496	.22114	.12302	.15114	-.04941	.02406	-.15481	.22125	-.69969
.349	-2.017	-.17573	.22230	.12834	.07805	-.02440	.01185	-.17554	.22245	-.78916
.350	-.010	-.18526	.22077	.13152	-.00317	.00405	-.00067	-.18507	.22093	-.83767
.350	1.987	-.18841	.22233	.12596	-.08166	.03120	-.01297	-.18820	.22251	-.84583
.351	3.994	-.17709	.22396	.11316	-.16106	.05909	-.02555	-.17688	.22413	-.78918
.350	6.001	-.17489	.22008	.10692	-.24905	.09139	-.03994	-.17468	.22025	-.79312
.349	8.008	-.17548	.21632	.10469	-.32974	.11984	-.05343	-.17527	.21649	-.80960
	GRADIENT	-.00284	.00028	-.00110	-.03913	.01360	-.00619	-.00284	.00029	-.01176

RUN NO. 645/ 0 RN/L = 3.16 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.599	-8.092	-.15153	.22242	.12270	.32933	-.11312	.05557	-.15114	.22268	-.67872
.599	-6.074	-.15499	.22699	.11929	.24689	-.08298	.04109	-.15457	.22728	-.68009
.598	-4.036	-.16327	.23001	.12122	.16448	-.05417	.02685	-.16281	.23034	-.70683
.599	-2.028	-.17509	.23126	.12671	.08087	-.02485	.01303	-.17460	.23163	-.75379
.599	-.012	-.18849	.23200	.13439	.00475	.00159	.00064	-.18796	.23243	-.80869
.599	2.006	-.19596	.23324	.13613	-.07647	.02832	-.01166	-.19541	.23371	-.83612
.599	4.024	-.18611	.23311	.12803	-.16160	.05889	-.02499	-.18557	.23354	-.79457
.599	6.043	-.18126	.23263	.12165	-.24993	.09131	-.03990	-.18072	.23305	-.77544
.597	8.062	-.17361	.23017	.11608	-.33848	.12328	-.05560	-.17309	.23056	-.75076
	GRADIENT	-.00330	.00041	.00114	-.04017	.01386	-.00637	-.00329	.00042	-.01279

RUN NO. 644/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.799	-8.123	-.20296	.25129	.16091	.35234	-.12330	.05740	-.20214	.25196	-.80227
.800	-6.095	-.20638	.25426	.16327	.26459	-.09251	.04261	-.20553	.25495	-.80615
.800	-4.069	-.22235	.25600	.17205	.18188	-.06348	.02873	-.22143	.25680	-.86225
.800	-2.040	-.23315	.25789	.17895	.09095	-.03083	.01387	-.23218	.25876	-.89728
.800	-.014	-.24232	.25855	.18307	.01242	-.00374	.00229	-.24131	.25949	-.92993
.800	2.014	-.24570	.25984	.18298	-.07356	.02468	-.00957	-.24456	.26082	-.93804
.800	4.041	-.24388	.26052	.17946	-.15933	.05581	-.02299	-.24283	.26151	-.92858
.800	6.069	-.23294	.25934	.17031	-.24728	.08750	-.03783	-.23191	.26025	-.89111
.800	8.088	-.22675	.25700	.16427	-.33568	.11751	-.05255	-.22575	.25788	-.87541
	GRADIENT	-.00274	.00054	.00093	-.04178	.01451	-.00626	-.00273	.00057	-.00855

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (RHZ013) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 643/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.850	-8.134	-.19832	.27400	.15955	.35862	-.12510	.06036	-.19734	.27470	-.71839
.850	-6.104	-.20453	.27475	.16376	.27075	-.09429	.04476	-.20353	.27549	-.73878
.850	-4.073	-.22099	.27487	.17389	.18114	-.06275	.02920	-.21992	.27573	-.79760
.850	-2.043	-.23643	.27585	.18480	.09519	-.03198	.01466	-.23530	.27681	-.85004
.849	-.014	-.24854	.27710	.19147	.01164	-.00434	.00215	-.24735	.27816	-.88924
.850	2.015	-.25042	.27838	.18977	-.06713	.01950	-.00827	-.24920	.27948	-.89168
.850	4.045	-.24110	.27976	.18075	-.15370	.04987	-.02214	-.23989	.28080	-.85431
.850	6.076	-.23350	.27966	.17230	-.24509	.08317	-.03790	-.23229	.28066	-.82765
.850	8.108	-.23105	.27770	.17021	-.33387	.11163	-.05192	-.22986	.27868	-.82481
	GRADIENT	-.00267	.00061	.00092	-.04100	.01364	-.00619	-.00265	.00063	-.00764

RUN NO. 642/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.899	-8.145	-.19744	.30533	.16250	.36302	-.12248	.06159	-.19626	.30609	-.64117
.900	-6.112	-.20426	.30743	.16556	.27319	-.09289	.04621	-.20302	.30824	-.65864
.899	-4.079	-.21256	.30836	.17071	.18405	-.06121	.03049	-.21128	.30924	-.68323
.899	-2.046	-.23275	.30940	.18458	.09494	-.02974	.01495	-.23138	.31042	-.74538
.900	-.015	-.24682	.31028	.19398	.01198	-.00306	.00202	-.24538	.31142	-.78794
.900	2.026	-.24631	.31234	.19190	-.06668	.01893	-.00865	-.24485	.31349	-.78104
.900	4.049	-.23963	.31465	.18370	-.15272	.04747	-.02288	-.23815	.31577	-.75418
.900	6.083	-.23233	.31403	.17581	-.24606	.08068	-.03948	-.23086	.31511	-.73265
.900	8.127	-.22705	.31093	.17030	-.33421	.10781	-.05352	-.22561	.31197	-.72317
	GRADIENT	-.00333	.00076	.00164	-.04108	.01309	-.00641	-.00331	.00079	-.00874

RUN NO. 641/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.920	-8.151	-.19483	.32256	.16556	.36979	-.12546	.06244	-.19357	.32332	-.59869
.921	-6.116	-.20384	.32424	.17056	.27846	-.09576	.04653	-.20252	.32506	-.62302
.920	-4.071	-.21756	.32532	.17915	.18768	-.06372	.03033	-.21616	.32625	-.66257
.920	-2.048	-.23658	.32797	.19145	.09920	-.03215	.01484	-.23507	.32905	-.71438
.920	-.015	-.24113	.32837	.19460	.01339	-.00396	.00177	-.23960	.32949	-.72717
.920	2.017	-.24105	.33009	.19211	-.06651	.01905	-.00890	-.23950	.33122	-.72306
.920	4.051	-.23511	.32997	.18410	-.15458	.04838	-.02297	-.23354	.33106	-.70539
.920	6.097	-.22417	.32945	.17464	-.25015	.08161	-.03973	-.22264	.33048	-.67368
.920	8.122	-.21850	.32720	.16874	-.34028	.11050	-.05450	-.21699	.32820	-.66117
	GRADIENT	-.00195	.00056	.00052	-.04186	.01356	-.00642	-.00193	.00058	-.00464

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (RHZ013) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 640/ 0 RN/L = 4.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.950	-8.161	-.18571	.35531	.16143	.38927	-.13595	.06353	-.18428	.35606	-.51754
.951	-6.123	-.20041	.35926	.17160	.29317	-.10442	.04738	-.19887	.36012	-.55223
.951	-4.087	-.21108	.36069	.18018	.19830	-.07048	.03102	-.20949	.36162	-.57930
.951	-2.051	-.22477	.36354	.19121	.10441	-.03575	.01492	-.22310	.36456	-.61198
.951	-.016	-.22869	.36544	.19440	.01704	-.00660	.00169	-.22699	.36650	-.61934
.951	2.019	-.22937	.36634	.19142	-.06866	.01972	-.01030	-.22763	.36742	-.61953
.950	4.054	-.22382	.36585	.18300	-.16002	.05112	-.02472	-.22207	.36671	-.60558
.950	6.092	-.21181	.36477	.17058	-.25673	.08542	-.04123	-.21009	.36576	-.57438
.950	8.131	-.19387	.36292	.15404	-.35930	.12199	-.05767	-.19222	.36380	-.52837
	GRADIENT	-.00148	.00063	.00029	-.04372	.01468	-.00672	-.00146	.00064	-.00295

RUN NO. 639/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
.979	-8.171	-.16389	.40172	.15169	.39411	-.12947	.06646	-.16228	.40237	-.40332
.980	-6.129	-.17391	.40750	.15919	.29217	-.09754	.04862	-.17222	.40822	-.42188
.980	-4.090	-.18756	.40978	.16811	.19852	-.06716	.03197	-.18576	.41060	-.45240
.980	-2.044	-.20102	.41446	.17865	.10723	-.03551	.01618	-.19912	.41538	-.47936
.980	-.017	-.20593	.41732	.18271	.01790	-.00746	.00185	-.20398	.41827	-.48767
.980	2.020	-.20542	.41904	.17989	-.07027	.01970	-.01170	-.20343	.42001	-.48436
.980	4.068	-.20109	.41850	.17221	-.16336	.05031	-.02687	-.19909	.41946	-.47463
.980	6.088	-.18698	.41605	.15870	-.26152	.08322	-.04435	-.18504	.41692	-.44382
.980	8.139	-.17594	.41329	.14928	-.35862	.11174	-.06136	-.17407	.41408	-.42037
	GRADIENT	-.00154	.00108	.00046	-.04422	.01424	-.00714	-.00152	.00110	-.00243

RUN NO. 638/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.119	-8.191	-.08310	.44196	.09793	.39698	-.12602	.07261	-.08164	.44223	-.18461
1.119	-6.146	-.09482	.44374	.09819	.29775	-.09510	.05501	-.08332	.44403	-.18765
1.119	-4.102	-.09401	.44584	.10422	.20241	-.06486	.03644	-.09242	.44617	-.20714
1.119	-2.060	-.10247	.44985	.11061	.11048	-.03602	.01948	-.10080	.45023	-.22390
1.118	-.019	-.11612	.45527	.11781	.02185	-.00966	.00345	-.11428	.45573	-.25077
1.118	2.024	-.11460	.45765	.11525	-.07023	.01745	-.01293	-.11274	.45812	-.24609
1.119	4.067	-.10296	.45549	.10124	-.16411	.04754	-.02982	-.10112	.45590	-.22180
1.119	6.112	-.09751	.45274	.09414	-.26145	.07732	-.04852	-.09569	.45313	-.21117
1.119	8.158	-.09084	.45007	.08873	-.36092	.10839	-.06632	-.08907	.45042	-.19775
	GRADIENT	-.00147	.00133	-.00007	-.04474	.01363	-.00808	-.00144	.00134	-.00252

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (RHZ013) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 637/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D
1.199	-8.201	-.05463	.46168	.07339	.41[illegible]	-.14503	.07298	-.05313	.46185	-.11503
1.200	-6.153	-.05581	.46081	.07317	.31410	-.11083	.05529	-.05429	.46099	-.11778
1.199	-4.097	-.05888	.46044	.07496	.21285	-.07521	.03700	-.05734	.46063	-.12447
1.201	-2.052	-.06855	.45914	.07965	.11326	-.03871	.02000	-.06691	.45938	-.14565
1.200	-.018	-.07686	.46087	.08499	.01964	-.00858	.00368	-.07513	.46115	-.16292
1.199	2.036	-.07225	.45966	.07964	-.07189	.01876	-.01263	-.07054	.45992	-.15337
1.200	4.070	-.06908	.46044	.07297	-.16545	.04886	-.02953	-.06733	.46070	-.14615
1.199	6.117	-.06902	.46144	.07072	-.26677	.08239	-.04814	-.06723	.46170	-.14562
1.201	8.167	-.07084	.46147	.06970	-.37424	.11847	-.06633	-.06901	.46175	-.14944
	GRADIENT	-.00118	.00003	-.00020	-.04611	.01496	-.00811	-.00116	.00003	-.00250

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ001) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 510/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.351	-8.178	-.00135	167.94377	4.38990	2.29414	-1.72975	-.06370	-.03530	-.21704	-.22775
.349	-6.164	-.00132	166.16477	3.01675	1.38073	-1.48878	-.06078	-.03148	-.21318	-.22214
.351	-4.137	-.00081	167.66291	1.74764	.57353	-1.37260	-.05973	-.02883	-.20896	-.22019
.350	-2.106	-.00046	166.72633	.37449	-.36111	-1.19188	-.05852	-.02869	-.20587	-.21906
.350	-.078	-.00017	166.91396	-1.04020	-1.29592	-1.12303	-.05897	-.02895	-.20093	-.21553
.351	1.964	.00017	167.56960	-2.47558	-2.29455	-.99394	-.05772	-.02735	-.19546	-.20863
.350	3.996	.00079	167.00777	-4.01497	-3.25068	-.80461	-.05842	-.02625	-.19234	-.20510
.349	6.040	.00050	166.25885	-5.47116	-4.33429	-.66261	-.05611	-.02278	-.18941	-.20036
.351	8.072	.00056	167.47558	-7.07296	-5.39666	-.42164	-.05468	-.01755	-.19900	-.19893
	GRADIENT	.00019	-.02288	-.70690	-.47118	.06560	.00017	.00032	.00215	.00200

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ001) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 509/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.598	-8.513	-.00336	416.97355	12.39990	7.45595	-5.49918	-.07143	-.03047	-.23232	-.23676
.599	-6.410	-.00320	418.06854	8.65496	5.05560	-5.07318	-.06838	-.02586	-.22567	-.22899
.600	-4.314	-.00195	419.31422	4.97244	2.61277	-4.62567	-.06695	-.02246	-.21933	-.22453
.600	-2.251	-.00126	418.31939	1.26912	.19118	-4.25561	-.06629	-.02203	-.21763	-.22735
.599	-.149	.00004	417.82416	-2.49638	-2.29455	-3.94149	-.06698	-.02278	-.20944	-.22258
.598	1.945	.00112	416.72898	-6.19925	-4.71675	-3.68762	-.06634	-.02200	-.20756	-.22151
.600	4.027	.00178	418.82263	-10.52619	-7.50015	-3.22720	-.06662	-.01951	-.20177	-.21622
.598	6.111	.00169	416.31481	-14.41627	-10.11357	-2.74526	-.06558	-.01592	-.19872	-.21178
.598	8.203	.00147	416.98326	-18.49358	-12.87573	-2.29775	-.06342	-.01028	-.19612	-.20560
	GRADIENT	.00047	-.12324	-1.84239	-1.20364	.16115	.00003	.00028	.00217	.00108

RUN NO. 508/ 0 RN/L = 3.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.801	-8.775	-.00525	623.65051	18.72468	11.76809	-9.63436	-.07617	-.03124	-.24439	-.23963
.801	-6.614	-.00424	623.70487	13.48097	8.47557	-8.81679	-.07177	-.02524	-.23655	-.23196
.801	-4.472	-.00342	623.70487	7.63551	4.69449	-8.06377	-.07012	-.02149	-.22874	-.22481
.801	-2.316	-.00162	623.76554	1.37314	.55229	-7.43553	-.06957	-.02005	-.22153	-.21927
.801	-.190	.00041	623.97906	-4.74307	-3.37816	-6.88475	-.07050	-.02180	-.21516	-.21594
.801	1.936	.00211	623.69225	-11.04625	-7.50015	-6.30814	-.07205	-.02213	-.21185	-.21477
.801	4.069	.00403	623.64420	-17.97352	-12.06833	-5.37870	-.07205	-.02013	-.20555	-.21090
.801	6.214	.00301	623.43061	-24.69276	-16.50902	-4.15664	-.07235	-.01638	-.20057	-.20745
.800	8.351	.00186	623.10814	-27.79235	-18.40004	-2.86574	-.06964	-.00944	-.20092	-.20478
	GRADIENT	.00087	-.00907	-2.98285	-1.94888	.30455	-.00030	.00003	.00263	.00152

RUN NO. 507/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.851	-8.849	-.00600	669.19785	19.88977	12.53280	-10.46484	-.07738	-.03298	-.26237	-.25639
.851	-6.666	-.00563	669.19785	14.52203	9.26153	-9.72042	-.07213	-.02442	-.25262	-.24621
.850	-4.517	-.00384	669.00229	8.40530	5.31051	-9.25570	-.07011	-.02033	-.24516	-.23797
.851	-2.345	-.00264	669.70592	1.49797	.76471	-8.68340	-.06965	-.01830	-.24000	-.23202
.851	-.225	.00070	669.40919	-5.49136	-3.76062	-7.75395	-.07313	-.02054	-.23445	-.22790
.851	1.929	.00244	669.65135	-13.02250	-8.60501	-6.91487	-.07336	-.02135	-.22839	-.22362
.851	4.090	.00354	669.19785	-20.44903	-13.47065	-5.21949	-.07290	-.01809	-.22335	-.22035
.851	6.238	.00331	669.12740	-26.04493	-17.06145	-3.75216	-.07265	-.01333	-.21880	-.21851
.851	8.389	.00174	669.58092	-28.49964	-18.40004	-3.51550	-.07107	-.00938	-.22043	-.21920
	GRADIENT	.00092	.01577	-3.36138	-2.18412	.45802	-.00043	.00007	.00251	.00198

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ001) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 506/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.901	-8.920	-.00435	712.88462	21.86627	13.89229	-11.94938	-.08668	-.04389	-.28677	-.28020
.900	-6.733	-.00620	711.03905	14.87572	9.55892	-9.72903	-.07812	-.03265	-.27755	-.27090
.900	-4.548	-.00469	710.67345	7.48987	4.73697	-8.58873	-.07455	-.02931	-.26652	-.26014
.900	-2.376	-.00312	710.91111	-1.14422	-.99846	-7.09559	-.07151	-.02355	-.26001	-.25201
.900	-.199	.00095	710.35798	-9.17402	-6.14032	-6.20487	-.07289	-.02273	-.25955	-.24879
.899	1.937	.00246	709.98291	-16.20530	-10.58101	-5.43464	-.07571	-.02260	-.25326	-.24374
.900	4.098	.00389	710.10168	-21.98842	-14.10807	-4.72894	-.07774	-.02484	-.25200	-.24150
.900	6.263	.00414	710.35798	-26.46098	-16.84898	-3.36920	-.07241	-.02146	-.24582	-.23623
.900	8.451	.00169	710.30764	-30.33026	-19.39866	-2.46126	-.07266	-.01501	-.24484	-.23911
	GRADIENT	.00105	-.09583	-3.42654	-2.18849	.43435	-.00049	.00046	.00166	.00211

RUN NO. 505/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.921	-8.957	-.00511	727.29445	23.46827	14.99688	-12.97779	-.09485	-.04802	-.29484	-.28876
.921	-6.763	-.00571	727.64404	15.60390	9.94127	-10.22818	-.08081	-.03780	-.28518	-.27872
.920	-4.536	-.00445	726.92540	7.28182	4.52455	-8.02074	-.07312	-.03352	-.27725	-.26986
.921	-2.379	-.00295	727.34311	-1.37304	-1.16844	-6.04996	-.06801	-.02761	-.27060	-.26205
.920	-.222	.00027	727.22590	-10.54699	-7.13894	-4.45355	-.06614	-.02576	-.27173	-.26103
.924	1.940	.00268	731.97432	-18.59760	-12.23831	-3.08520	-.07331	-.02838	-.26400	-.25425
.921	4.093	.00361	727.53716	-24.87998	-16.04158	-2.53872	-.07929	-.02602	-.26296	-.25198
.921	6.261	.00496	727.46927	-29.49816	-18.90997	-1.73836	-.07342	-.01973	-.25682	-.24705
.920	8.445	.00296	727.08045	-32.11929	-20.52477	-1.22630	-.07216	-.01336	-.25178	-.24816
	GRADIENT	.00101	.27154	-3.77947	-2.41939	.64557	-.00082	.00066	.00163	.00202

RUN NO. 504/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.950	-9.008	-.00618	749.45460	25.59040	16.35637	-16.23086	-.11386	-.05006	-.31309	-.30790
.950	-6.807	-.00621	749.70447	17.45556	11.08834	-13.46403	-.10035	-.04878	-.30051	-.29549
.950	-4.596	-.00477	749.56217	9.17509	5.62914	-11.03284	-.09329	-.04759	-.28976	-.28437
.950	-2.411	-.00265	749.69288	1.06107	.21242	-9.11370	-.09088	-.04626	-.28489	-.27722
.950	-.220	.00032	749.33544	-9.07001	-6.50152	-6.45014	-.08601	-.04216	-.29732	-.27734
.950	1.936	.00311	749.34701	-19.59612	-13.34317	-2.80981	-.08501	-.03644	-.29088	-.28141
.950	4.108	.00506	749.29321	-28.49964	-18.88872	.22364	-.08601	-.02527	-.28355	-.27391
.950	6.292	.00409	749.16245	-35.19807	-23.20194	2.10312	-.09334	-.01051	-.27709	-.27144
.950	8.470	.00328	749.38172	-38.46408	-25.24168	2.54610	-.08452	-.00226	-.27145	-.27335
	GRADIENT	.00117	-.04065	-4.41278	-2.87698	1.32422	.00089	.00250	.00030	.00077

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ001) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 503/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.979	-9.086	-.00731	770.37142	26.46422	16.80245	-18.81266	-.13476	-.05439	-.34609	-.34239
.980	-6.832	-.00570	770.99933	17.45556	11.00337	-16.29110	-.12444	-.05280	-.33399	-.33015
.980	-4.633	-.00384	770.92352	8.69657	5.20430	-13.76524	-.11546	-.05209	-.32376	-.31915
.981	-2.412	-.00188	771.42731	-.81137	-1.06220	-11.52338	-.11350	-.05219	-.31681	-.31062
.980	-.227	.00050	771.06077	-10.92144	-7.79761	-8.21437	-.11067	-.04581	-.31933	-.31190
.980	1.940	.00324	771.12181	-20.90669	-14.40553	-3.98022	-.10888	-.03754	-.33022	-.32203
.980	4.111	.00369	770.83176	-30.22625	-20.43978	-.24522	-.10848	-.02379	-.33162	-.32576
.980	6.316	.00453	770.70921	-38.25605	-25.62413	2.82566	-.11483	-.00465	-.33152	-.33226
.980	8.482	.00193	770.46446	-43.04065	-28.74749	4.37396	-.10453	.00543	-.33625	-.34032
	GRADIENT	.00092	-.02215	-4.48435	-2.95926	1.58262	.00085	.00326	-.00133	-.00112

RUN NO. 502/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.120	-9.251	-.00777	850.54582	27.50448	17.48219	-24.89710	-.18183	-.05085	-.33991	-.33817
1.120	-6.966	-.00690	850.87808	17.30993	10.87592	-21.55367	-.17070	-.05089	-.33183	-.32856
1.121	-4.725	-.00502	850.87591	5.65901	2.97388	-16.62674	-.16386	-.05358	-.32474	-.32013
1.120	-2.491	-.00268	850.87808	-6.86493	-5.46040	-10.77466	-.16134	-.04210	-.31981	-.31458
1.120	-.250	.00024	850.72764	-18.41037	-13.15194	-4.92688	-.15755	-.02835	-.31817	-.31414
1.120	1.922	.00198	850.50085	-28.33321	-19.58989	-.12043	-.14572	-.01359	-.31979	-.31907
1.120	4.126	.00339	850.48520	-37.67358	-25.66663	4.30085	-.13294	.00094	-.32339	-.32357
1.120	6.300	.00329	850.53398	-46.43148	-31.31842	8.53289	-.11431	.01423	-.32486	-.32595
1.119	8.502	.00250	850.29139	-52.06898	-34.97296	11.56929	-.11032	.02595	-.33064	-.32950
	GRADIENT	.00097	-.05234	-4.89104	-3.23016	2.37510	.00350	.00622	.00013	-.00051

RUN NO. 501/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.200	-9.282	-.00586	880.67959	25.96489	16.73872	-26.30419	-.20030	-.05799	-.33676	-.33795
1.200	-7.008	-.00610	880.98795	13.60660	8.43309	-19.68187	-.18633	-.04643	-.32852	-.32664
1.200	-4.712	-.00376	881.11186	1.16509	-.02124	-12.70671	-.17572	-.03398	-.32158	-.31938
1.200	-2.497	-.00115	881.40653	-10.75502	-7.96759	-6.42863	-.16886	-.02080	-.31748	-.31387
1.200	-.266	.00095	881.63716	-21.84280	-15.12794	-1.29085	-.16261	-.00653	-.31600	-.31471
1.200	1.965	.00335	881.23401	-31.57842	-21.37465	2.78265	-.14792	.00095	-.32087	-.32320
1.200	4.126	.00413	881.46465	-40.39872	-27.09020	6.64911	-.13264	.01028	-.32546	-.32794
1.200	6.332	.00369	881.52089	-48.94859	-32.69950	10.91126	-.11418	.02401	-.32395	-.32644
1.200	8.551	.00362	881.48598	-55.39740	-36.99146	14.47666	-.09952	.03384	-.32397	-.32432
	GRADIENT	.00092	.02405	-4.69663	-3.05178	2.16542	.00483	.00498	-.00050	-.00119

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ002) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = .000

RUN NO. 530/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.350	-8.033	-.04007	166.63322	-1.58099	-2.43251	-.08386	-.06613	-.05799	-.24252	-.22616
.350	-5.997	-.04394	167.10229	-1.58099	-2.41126	-.25587	-.06441	-.05901	-.23056	-.21851
.351	-4.072	-.04947	167.85096	-1.53939	-2.41126	-.41928	-.06565	-.05934	-.21831	-.21662
.351	-2.026	-.05472	167.75694	-1.45618	-2.36877	-.50959	-.06364	-.05997	-.20812	-.21814
.351	-.051	-.05775	167.94450	-1.43538	-2.39002	-.55691	-.06306	-.06020	-.20181	-.22070
.351	1.965	-.06005	167.85120	-1.62260	-2.49624	-.43218	-.05851	-.06083	-.20613	-.22921
.351	4.021	-.06107	167.85096	-1.85143	-2.68744	-.48809	-.05341	-.06053	-.20894	-.23061
.351	5.987	-.06077	167.66363	-1.95544	-2.79367	-.53970	-.04735	-.06060	-.21433	-.23133
.351	7.994	-.06125	167.85144	-2.24668	-3.00611	-.55261	-.04067	-.06053	-.22534	-.23713
	GRADIENT	-.00141	.00457	-.03927	-.03376	-.00300	.00147	-.00016	.00102	-.00193

RUN NO. 529/ 0 RN/L = 3.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.600	-8.103	-.10557	419.07502	-3.43243	-3.43101	-2.19574	-.07714	-.03185	-.25327	-.24124
.601	-6.058	-.11269	419.72756	-3.53644	-3.43101	-2.56135	-.07600	-.03251	-.24011	-.23412
.600	-4.073	-.12350	418.99198	-3.51564	-3.40976	-2.95278	-.07430	-.03305	-.22762	-.22878
.601	-2.058	-.13001	419.57641	-3.16199	-3.30354	-3.41303	-.07215	-.03371	-.21623	-.21949
.601	.018	-.14105	420.32493	-2.84995	-3.17607	-3.77434	-.07040	-.03424	-.20796	-.22038
.598	2.033	-.14206	416.73383	-3.47403	-3.55848	-3.22807	-.06135	-.03430	-.21855	-.23309
.601	4.049	-.14113	420.33817	-4.01490	-3.98337	-3.52486	-.05850	-.03401	-.21844	-.23285
.600	6.024	-.13780	418.82754	-4.49336	-4.32328	-3.75284	-.05124	-.03365	-.22790	-.24177
.600	8.082	-.13668	419.41533	-5.07583	-4.83316	-3.97221	-.04484	-.03337	-.24275	-.24664
	GRADIENT	-.00233	-.00756	-.06407	-.06872	-.04732	.00207	-.00012	.00079	-.00107

RUN NO. 528/ 0 RN/L = 3.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.801	-8.122	-.15646	624.17615	-5.51269	-4.70569	-3.52486	-.09457	-.03024	-.25035	-.24891
.801	-6.066	-.16641	624.56518	-5.76232	-4.76942	-4.11415	-.08999	-.03054	-.24001	-.23724
.801	-4.062	-.17689	624.51090	-5.74151	-4.72693	-4.87120	-.08452	-.03062	-.23034	-.22698
.801	-2.058	-.18319	624.59049	-5.57509	-4.64196	-5.48630	-.07861	-.03038	-.22502	-.22119
.801	-.044	-.19424	624.29111	-4.61817	-4.17457	-6.81112	-.07344	-.03016	-.21493	-.21402
.801	2.001	-.19617	624.43132	-6.32399	-5.27930	-5.85622	-.06260	-.02999	-.22281	-.22588
.801	4.066	-.19368	624.10918	-7.55134	-6.17157	-6.51863	-.06140	-.02969	-.23400	-.23476
.801	6.030	-.19223	624.64477	-8.32104	-6.76642	-7.21545	-.05436	-.02950	-.24816	-.24485
.802	8.087	-.18692	624.86452	-9.50678	-7.61621	-7.74452	-.04776	-.02869	-.26330	-.25454
	GRADIENT	-.00228	-.04746	-.21656	-.17457	-.17975	.00306	.00011	-.00027	-.00101

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ002) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = .000

RUN NO. 527/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.849	-8.122	-.16948	667.13024	-6.40720	-5.44925	-3.09903	-.10041	-.03218	-.27347	-.26762
.851	-6.075	-.17905	669.65927	-6.86485	-5.59797	-3.73133	-.09479	-.03176	-.26078	-.25406
.851	-4.057	-.18224	669.44005	-7.21850	-5.72543	-4.76366	-.08830	-.03117	-.24794	-.24198
.851	-2.001	-.19335	669.41630	-6.61522	-5.27930	-5.80030	-.08166	-.03028	-.24102	-.23416
.851	-.035	-.20840	669.69886	-5.65830	-4.76942	-7.61548	-.07536	-.02938	-.23341	-.22775
.851	2.044	-.20830	669.74553	-7.63455	-6.08659	-6.73800	-.06399	-.02841	-.24220	-.23569
.850	3.999	-.20654	668.84557	-8.69548	-6.87265	-7.46493	-.06305	-.02859	-.25331	-.24580
.850	6.078	-.19972	668.89232	-9.94364	-7.74368	-8.35532	-.05511	-.02896	-.26611	-.25913
.851	8.097	-.19527	670.04308	-11.31661	-8.72094	-8.93171	-.04838	-.02810	-.27800	-.27016
	GRADIENT	-.00315	-.04221	-.19727	-.15389	-.31376	.00339	.00035	-.00059	-.00045

RUN NO. 526/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.900	-8.132	-.18051	710.52250	-7.63455	-5.89539	-2.55705	-.10897	-.03526	-.29741	-.29174
.900	-6.113	-.18382	711.03451	-8.75789	-6.59647	-2.46672	-.10288	-.03362	-.28570	-.27898
.900	-4.075	-.18851	710.54985	-9.69401	-7.14883	-2.68609	-.09415	-.03105	-.27439	-.26585
.900	-2.056	-.20122	711.12134	-9.90203	-7.31879	-3.47325	-.08505	-.02879	-.26378	-.25474
.899	-.015	-.20132	710.06972	-9.79802	-7.48874	-5.70137	-.07554	-.02848	-.26151	-.25037
.899	2.026	-.20551	710.09703	-10.92136	-8.12608	-6.07559	-.05854	-.02778	-.26681	-.25830
.900	4.056	-.20816	711.29041	-12.06550	-8.91214	-7.12082	-.05171	-.02423	-.27610	-.26975
.899	6.086	-.20565	710.08793	-13.02242	-9.67695	-8.33812	-.04456	-.02209	-.28951	-.28464
.900	6.125	-.20903	710.54074	-13.91694	-10.35678	-9.01773	-.03999	-.02124	-.30493	-.29636
	GRADIENT	-.00214	.02231	-.28332	-.21308	-.56392	.00548	.00072	-.00032	-.00056

RUN NO. 525/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.921	-8.127	-.18280	727.19769	-8.11301	-6.34153	-2.27316	-.11777	-.03924	-.30845	-.30390
.920	-6.097	-.18312	726.66328	-9.40277	-7.08509	-1.70108	-.10938	-.03859	-.29788	-.29294
.920	-4.076	-.19015	726.82866	-10.35969	-7.70119	-1.76990	-.10076	-.03728	-.28493	-.27812
.920	-2.048	-.19900	726.55617	-10.71334	-7.87115	-2.15702	-.08925	-.03434	-.27304	-.26498
.920	-.016	-.20182	726.78954	-11.00457	-8.40227	-3.35711	-.07121	-.03193	-.27359	-.26145
.920	2.036	-.20604	726.53699	-12.83520	-9.48574	-3.71843	-.04838	-.02989	-.27791	-.26940
.920	4.049	-.20572	726.96450	-14.39540	-10.50549	-5.36586	-.04282	-.02473	-.28639	-.27925
.920	6.078	-.20966	726.68246	-14.93626	-10.97287	-6.73800	-.03683	-.02111	-.29906	-.29304
.920	8.109	-.21432	726.88698	-15.89318	-11.65270	-7.61978	-.03494	-.01932	-.31443	-.30339
	GRADIENT	-.00188	.01232	-.50137	-.35528	-.43033	.00771	.00145	-.00038	-.00033

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ002) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = .000

RUN NO. 524/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.949	-8.122	-.19219	748.71628	-7.75937	-6.06535	-4.13136	-.13690	-.04204	-.32708	-.32242
.950	-6.100	-.19339	749.04258	-8.27943	-6.40526	-3.80876	-.12770	-.04322	-.31521	-.31093
.950	-4.059	-.19178	749.18487	-8.98672	-6.83016	-3.89048	-.11386	-.04301	-.30120	-.29562
.950	-2.059	-.20293	748.98136	-8.82030	-6.76642	-4.43676	-.09858	-.04296	-.28983	-.28346
.950	-.016	-.21241	749.42729	-9.13234	-7.46750	-5.48630	-.08630	-.04699	-.28809	-.27944
.950	2.007	-.21470	749.53900	-13.79212	-10.20806	-3.67111	-.06471	-.04751	-.29413	-.28285
.950	4.069	-.21665	749.45047	-16.60047	-12.09884	-4.01952	-.05650	-.04167	-.30214	-.29155
.950	6.071	-.21808	749.59276	-17.82782	-13.03361	-5.20240	-.04861	-.03634	-.32023	-.31028
.950	8.115	-.22193	749.19312	-18.84715	-13.77717	-6.26055	-.04384	-.03151	-.34073	-.32610
	GRADIENT	-.00302	.05362	-.99539	-.68877	.02522	.00731	-.00009	-.00031	.00042

RUN NO. 523/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.979	-8.131	-.20006	769.25780	-5.99114	-5.17307	-7.49504	-.16328	-.03820	-.36004	-.35941
.980	-6.115	-.20110	769.56507	-7.07288	-5.87415	-7.16384	-.15188	-.04174	-.34769	-.34508
.980	-4.092	-.20746	770.70823	-8.11301	-6.57522	-7.31008	-.13788	-.04537	-.33496	-.32987
.980	-2.060	-.21383	771.16690	-9.21555	-7.29754	-7.38751	-.12459	-.04766	-.32999	-.32299
.980	-.006	-.22359	771.24351	-10.50531	-8.48724	-7.73162	-.11016	-.05115	-.32479	-.31569
.980	2.039	-.21915	770.05260	-15.35232	-11.46150	-5.25832	-.08755	-.05562	-.32174	-.31386
.979	4.041	-.22885	769.86878	-17.86943	-13.18232	-5.49060	-.08045	-.05214	-.33095	-.32181
.979	6.085	-.22742	769.59354	-20.01210	-14.62696	-5.65405	-.07047	-.04679	-.35226	-.34179
.979	8.121	-.23352	769.57777	-21.65550	-15.83791	-5.82611	-.06436	-.04245	-.37767	-.36282
	GRADIENT	-.00236	-.13707	-1.25912	-.85314	.28333	.00746	-.00106	.00080	.00125

RUN NO. 522/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.119	-8.176	-.22104	849.92573	-7.34331	-6.29904	-12.19216	-.17759	-.00492	-.33313	-.33186
1.120	-6.126	-.21857	849.89270	-10.25568	-8.29604	-10.75980	-.17911	-.00949	-.33496	-.32663
1.119	-4.098	-.22469	849.81827	-13.39687	-10.48424	-8.62631	-.17157	-.01623	-.32777	-.31834
1.119	-2.032	-.23593	849.98638	-15.89318	-12.09884	-6.69929	-.16318	-.02397	-.33300	-.32087
1.120	-.016	-.25203	850.09021	-18.20227	-13.94713	-5.00454	-.14947	-.03211	-.32259	-.31502
1.119	2.030	-.25086	849.86508	-22.27958	-16.30529	-1.69247	-.14045	-.04038	-.31503	-.31652
1.119	4.046	-.24823	849.39682	-25.69121	-18.47225	.19566	-.12853	-.04796	-.32879	-.32616
1.119	6.114	-.24965	849.80608	-28.47676	-20.19307	2.26411	-.11800	-.05421	-.34205	-.33918
1.119	8.146	-.25204	849.71584	-31.18309	-21.95638	4.94751	-.10724	-.05885	-.34537	-.34340
	GRADIENT	-.00305	-.04721	-1.52185	-.99158	1.11303	.00535	-.00392	.00078	-.00055

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ002) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = .000

RUN NO. 521/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.199	-8.184	-.23422	880.58026	-10.90056	-8.78467	-10.84152	-.15528	.00622	-.33592	-.33141
1.200	-6.120	-.23266	880.93161	14.12496	-10.97287	-8.56179	-.16017	.00000	-.33932	-.32751
1.200	-4.091	-.24005	880.75732	-17.07893	-12.94863	-6.00246	-.16603	-.00520	-.33360	-.32039
1.200	-2.052	-.24579	880.70693	-19.63765	-14.56322	-3.48185	-.16235	-.00899	-.33485	-.32440
1.200	-.006	-.25953	881.11586	-21.71791	-16.15658	-.97414	-.15596	-.01351	-.31973	-.31095
1.200	2.032	-.26348	881.07325	-25.31676	-18.08984	2.36302	-.14926	-.02159	-.31372	-.32219
1.200	4.049	-.26201	881.31935	-27.87548	-19.66195	4.67659	-.14582	-.03108	-.32472	-.32905
1.200	6.110	-.26702	880.94527	-29.91414	-20.87290	7.79862	-.13705	-.04071	-.33992	-.34375
1.200	8.143	-.26805	881.09817	-32.03600	-22.23256	10.10768	-.12750	-.04850	-.34277	-.34276
	GRADIENT	-.00303	.07319	-1.33913	-.83251	1.33586	.00263	-.00316	.00191	-.00074

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ003) (19 MAR 75)

REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 10.000

RUN NO. 540/ 0 RN/L = 2.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.350	-8.206	-.00116	166.91372	4.56561	2.19860	-1.27744	-.04918	-.02984	-.21482	-.23329
.351	-6.178	-.00103	167.85048	3.40081	1.47638	-1.28605	-.04636	-.02849	-.21176	-.22735
.348	-4.112	-.00084	165.41537	2.04881	.62669	-1.20432	-.04549	-.02830	-.20818	-.22591
.351	-2.096	-.00026	167.47534	.82161	-.22307	-1.14840	-.04442	-.02795	-.20565	-.22551
.350	-.089	.00016	166.82014	-.50966	-1.07286	-1.07958	-.04510	-.02866	-.20060	-.22357
.350	1.944	.00039	167.10110	-1.92424	-2.00762	-1.01936	-.04554	-.02802	-.19623	-.21571
.350	3.975	.00074	166.91372	-3.25560	-2.94239	-.92903	-.04713	-.02596	-.19033	-.21079
.350	6.018	.00061	166.63322	-4.71179	-3.89840	-.71396	-.04670	-.02391	-.18592	-.20691
.349	8.070	.00054	165.79057	-6.23038	-4.87566	-.43867	-.04745	-.01923	-.19211	-.20087
	GRADIENT	.00019	.12954	-.66069	-.44144	.03363	-.00022	.00023	.00223	.00198

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ003) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 10.000

RUN NO. 539/ 0 RN/L = 3.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.599	-8.515	-.00281	417.97567	13.26001	8.10389	-4.86480	-.03889	-.00977	-.23027	-.24247
.600	-6.435	-.00203	418.57020	10.07761	6.10714	-4.87340	-.03740	-.00892	-.22336	-.23575
.601	-4.348	-.00198	419.74571	6.64561	3.83424	-4.67124	-.03689	-.00783	-.21539	-.22816
.597	-2.237	-.00053	415.65411	3.27601	1.66755	-4.52069	-.03746	-.00839	-.21330	-.22885
.599	-.177	.00078	417.66771	-.34324	-.73294	-4.44327	-.03871	-.00978	-.20788	-.22525
.598	1.908	.00165	416.40764	-3.96289	-3.09110	-4.21959	-.03862	-.00993	-.20477	-.22202
.598	4.007	.00224	416.32125	-7.72816	-5.55549	-3.86688	-.04027	-.00897	-.20009	-.21887
.598	6.086	.00189	417.08096	-11.72226	-8.21107	-3.38082	-.04205	-.00466	-.19387	-.21151
.599	8.183	.00190	417.41187	-16.00760	-11.18533	-2.77863	-.04427	-.00179	-.19031	-.20758
	GRADIENT	.00051	-.29339	-1.72551	-1.12861	.09161	-.00038	-.00018	.00188	.00122

RUN NO. 538/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.800	-8.812	-.00497	623.17517	21.97521	13.90297	-9.53181	-.02732	-.00631	-.24455	-.24288
.801	-6.614	-.00418	624.33276	17.56561	11.24771	-9.75118	-.02864	-.00622	-.23746	-.23620
.800	-4.469	-.00317	623.45582	11.78321	7.55160	-9.30383	-.03019	-.00671	-.22843	-.22809
.800	-2.346	-.00094	623.38881	6.04241	3.79176	-8.77476	-.03129	-.00719	-.22215	-.22397
.800	-.211	.00129	623.38251	-.01040	-.13809	-8.32742	-.03280	-.00823	-.21761	-.22159
.800	1.947	.00310	623.12701	-6.43840	-4.32329	-7.88007	-.03474	-.00919	-.21265	-.21954
.801	4.053	.00390	623.87669	-13.22005	-8.78468	-6.92517	-.03593	-.00758	-.20624	-.21340
.800	6.208	.00415	623.46842	-21.60350	-14.45701	-4.31852	-.03732	-.01094	-.2020	-.21014
.801	8.368	.00228	623.75534	-26.88736	-17.83492	-2.83885	-.03813	-.01094	-.20060	-.20679
	GRADIENT	.00085	.02698	-2.92851	-1.91153	.26478	-.00070	-.00018	.00252	.00158

RUN NO. 537/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.850	-8.910	-.00495	668.18815	24.05521	15.24121	-10.98567	-.02394	-.00432	-.26377	-.25902
.850	-6.698	-.00493	668.54058	19.97841	13.03204	-11.90617	-.02508	-.00440	-.25341	-.24859
.850	-4.506	-.00383	668.85347	13.98401	9.05978	-11.65669	-.02699	-.00633	-.24661	-.24182
.850	-2.393	-.00193	668.54058	7.45681	4.98131	-10.96847	-.02777	-.00626	-.24224	-.23689
.850	-.247	.00038	668.93183	.23921	.20182	-10.40499	-.03121	-.00759	-.23471	-.23162
.850	1.999	.00288	668.26652	-7.72816	-4.98188	-8.83068	-.03201	-.00768	-.22974	-.22819
.850	4.151	.00406	668.33701	-17.42218	-11.52524	-5.51431	-.03162	-.01177	-.22525	-.22466
.849	6.225	.00344	667.94552	-24.74469	-16.72654	-3.51847	-.03484	-.01521	-.21984	-.22032
.850	8.439	.00163	668.14916	-27.94829	-18.28105	-3.05822	-.03637	-.01275	-.21978	-.21991
	GRADIENT	.00095	-.06045	-3.60353	-2.36873	.67037	-.00062	-.00057	.00255	.00199

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ003) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 10.000

RUN NO. 536/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.899	-8.931	-.00362	710.27065	26.82161	17.08927	-12.98582	-.02927	-.00631	-.28656	-.28038
.900	-6.777	-.00539	710.88926	21.55921	14.03042	-13.06324	-.02684	-.01366	-.27891	-.27299
.899	-4.521	-.00389	710.08793	14.42481	9.44214	-12.37932	-.02602	-.01613	-.27025	-.26370
.899	-2.425	-.00254	710.04663	7.02001	4.66268	-11.64809	-.02614	-.01164	-.26263	-.25479
.900	-.225	.00134	710.46304	-1.61220	-.92414	-10.30175	-.02408	-.00813	-.25893	-.25123
.899	1.917	.00231	709.60265	-11.70146	-7.63747	-7.12733	-.02608	-.01313	-.25515	-.24690
.899	4.063	.00494	709.97802	-19.64805	-12.65121	-4.48628	-.02618	-.02259	-.25346	-.24413
.899	6.257	.00455	710.28462	-26.34649	-17.00637	-2.36139	-.02999	-.02412	-.24749	-.23895
.899	8.443	.00172	709.73991	-29.73731	-19.19458	-1.85383	-.04111	-.01846	-.24635	-.24123
	GRADIENT	.00105	-.03076	-4.03892	-2.62640	.94439	.00013	-.00067	.00191	.00218

RUN NO. 535/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.920	-8.970	-.00415	726.43944	28.65201	18.47000	-14.60744	-.03463	-.00528	-.29397	-.28862
.920	-6.797	-.00539	726.88698	21.66321	13.94545	-13.11056	-.02825	-.01439	-.28480	-.27960
.920	-4.560	-.00399	726.30352	14.13361	9.01730	-12.03521	-.02638	-.01577	-.27552	-.26918
.920	-2.375	-.00200	726.71202	6.27121	3.94045	-10.98998	-.02543	-.01364	-.26897	-.26169
.920	-.246	.00049	726.22599	-3.02678	-2.11385	-9.38556	-.02158	-.00994	-.26505	-.25724
.920	1.929	.00253	726.42027	-14.05215	-9.33704	-5.41108	-.02332	-.01803	-.26216	-.25405
.920	4.100	.00315	726.66328	-22.12356	-14.37203	-2.89477	-.02649	-.02529	-.25926	-.25126
.920	6.300	.00470	726.87667	-28.05230	-18.08985	-1.26884	-.03566	-.02453	-.25334	-.24721
.919	8.434	.00296	725.92443	-31.65115	-20.34179	-.32254	-.04656	-.01571	-.25326	-.25121
	GRADIENT	.00087	.02000	-4.29319	-2.77721	1.10361	.00009	-.00109	.00182	.00201

RUN NO. 534/ 0 RN/L = 4.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.950	-9.034	-.00673	749.35450	29.00561	18.36379	-16.22046	-.04739	-.01150	-.31172	-.30787
.951	-6.813	-.00559	749.77294	21.43441	13.45688	-14.31925	-.04074	-.01315	-.29825	-.29630
.950	-4.649	-.00409	749.54639	14.07121	8.67743	-12.87828	-.03801	-.01515	-.28669	-.28358
.950	-2.416	-.00209	749.58117	6.02161	3.38816	-11.52335	-.03575	-.01542	-.27745	-.27459
.950	-.252	.00134	749.42729	-3.93005	-2.88990	-9.21350	-.03345	-.01721	-.27593	-.27360
.950	1.948	.00381	749.30817	-15.92439	-10.99413	-4.21099	-.03186	-.02326	-.278[illegible]	-.27907
.950	4.091	.00395	749.21219	-25.82643	-17.28255	-.45588	-.02923	-.02406	-.270[illegible]	-.27022
.950	6.296	.00512	748.88935	-32.83690	-21.61647	1.72873	-.03884	-.01842	-.26770	-.26938
.949	8.480	.00321	748.83551	-37.60070	-24.88815	3.06183	-.05382	-.00831	-.26741	-.27410
	GRADIENT	.00101	-.04303	-4.65632	-3.03450	1.47073	.00103	-.00117	.00147	.00102

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ003) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 10.000

RUN NO. 533/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.980	-9.130	-.00730	770.78586	29.67121	18.49125	-18.19910	-.06561	-.01215	-.34901	-.34599
.980	-6.883	-.00524	770.40339	21.33041	13.11701	-16.33660	-.05853	-.01332	-.33162	-.32959
.981	-4.674	-.00431	771.07631	13.15601	7.84899	-14.94725	-.05504	-.01563	-.31981	-.31783
.981	-2.448	-.00111	771.12249	4.31601	2.15612	-13.17508	-.05459	-.01699	-.31015	-.30852
.980	-.288	.00047	770.46496	-5.87673	-4.57823	-9.95334	-.05275	-.02153	-.30766	-.30736
.980	1.928	.00357	770.58709	-17.60940	-12.31130	-4.76157	-.05174	-.02553	-.31426	-.31596
.980	4.115	.00432	770.40390	-27.61545	-18.81217	-.70535	-.04987	-.02224	-.31819	-.32089
.980	6.294	.00422	770.41852	-35.49963	-23.93214	2.27487	-.05664	-.01293	-.32191	-.32897
.980	8.484	.00218	770.25042	-40.99152	-27.50125	4.08530	-.06554	-.00084	-.32879	-.33683
	GRADIENT	.00100	-.08546	-4.71273	-3.08763	1.68045	.00060	-.00099	-.00004	-.00062

RUN NO. 532/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.118	-9.340	-.00840	849.56755	30.66961	19.19223	-24.73291	-.11734	-.01436	-.33294	-.33067
1.121	-7.064	-.00709	850.93648	20.22801	12.37354	-21.76925	-.11293	-.01516	-.32483	-.32268
1.120	-4.720	-.00502	850.54378	8.18481	4.40778	-16.77964	-.11057	-.02553	-.31445	-.31309
1.119	-2.610	-.00236	850.10768	-2.94357	-2.94239	-12.03091	-.11063	-.03117	-.30575	-.30644
1.119	-.374	-.00043	849.77653	-14.19777	-10.33554	-6.88215	-.11037	-.02532	-.30408	-.30607
1.118	1.851	.00247	849.61144	-24.32854	-16.77268	-1.77210	-.10968	-.01501	-.30490	-.30919
1.119	4.011	.00261	850.12501	-33.96024	-23.20982	2.84681	-.10317	-.00111	-.30831	-.31342
1.118	6.227	.00342	849.67216	-42.73894	-28.83967	6.91921	-.08852	.01078	-.31032	-.31643
1.118	8.467	.00237	849.67216	-48.70929	-32.74869	9.69721	-.07462	.01869	-.31384	-.32003
	GRADIENT	.00092	-.06078	-4.81961	-3.14978	2.25855	.00072	.00297	.00059	-.00016

RUN NO. 531/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.199	-9.321	-.00755	881.11347	28.38161	18.00268	-26.03193	-.14490	-.02329	-.33510	-.33122
1.200	-7.016	-.00635	880.70862	16.33841	9.99443	-20.04009	-.13496	-.02613	-.32586	-.32166
1.200	-4.714	-.00413	881.23990	4.19121	1.83749	-13.62673	-.12915	-.02560	-.31450	-.31195
1.200	-2.505	-.00192	881.36386	-7.27051	-5.81042	-8.21128	-.12787	-.01899	-.30917	-.30798
1.200	-.260	.00026	881.09817	-18.50391	-12.96988	-3.09263	-.12801	-.00927	-.30843	-.30946
1.200	1.901	.00296	881.16995	-28.03150	-19.06711	1.07079	-.12061	-.00124	-.31201	-.31613
1.199	4.141	.00352	880.85899	-37.64230	-25.41927	5.43130	-.10676	.00712	-.31644	-.31966
1.199	6.344	.00354	880.74042	-46.35859	-31.09160	9.89073	-.09201	.01820	-.31490	-.31866
1.199	8.535	.00321	881.31512	-52.30814	-34.93689	12.91395	-.07476	.02938	-.31197	-.31600
	GRADIENT	.00091	-.04241	-4.72217	-3.06456	2.14339	.00235	.00376	-.00030	-.00106

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ004) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 10.000

RUN NO. 550/ 0 RN/L = 2.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.349	-8.022	-.04354	166.16454	-1.17624	-2.31622	.00430	-.13336	-.11694	-.24549	-.22630
.349	-6.027	-.04840	166.25979	-1.11377	-2.20997	-.14193	-.13174	-.11717	-.23164	-.22005
.349	-4.001	-.05316	166.16618	-1.00965	-2.20997	-.31826	-.13130	-.11814	-.22183	-.21970
.351	-2.016	-.05860	167.85168	-1.05130	-2.23122	-.49460	-.12998	-.11814	-.20746	-.21660
.351	.000	-.06292	167.57104	-.96800	-2.23122	-.49890	-.12969	-.11893	-.20123	-.22069
.350	2.006	-.06428	167.29013	-1.11377	-2.29497	-.37847	-.12428	-.11883	-.20673	-.22994
.351	4.012	-.06758	167.66435	-1.15541	-2.35872	-.42578	-.12043	-.11887	-.21425	-.23644
.351	6.017	-.06614	167.85216	-1.34262	-2.54997	-.41288	-.11621	-.11903	-.21636	-.23478
.351	8.024	-.06478	167.85168	-1.67600	-2.76247	-.39138	-.11060	-.11844	-.22713	-.23851
	GRADIENT	-.00172	.12107	-.01766	-.01802	-.00489	.00137	-.00011	.00079	-.00234

RUN NO. 549/ 0 RN/L = 3.16 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.600	-8.074	-.11592	419.06845	-1.28035	-2.06122	-2.55985	-.07601	-.04351	-.25290	-.23675
.598	-6.058	-.12208	416.89851	-1.32200	-2.06122	-2.87832	-.07677	-.04458	-.23675	-.22848
.600	-4.033	-.13175	419.90895	-1.28035	-2.03997	-3.32588	-.07558	-.04484	-.22260	-.22247
.600	-2.018	-.14151	418.40409	-1.00965	-1.89122	-3.65295	-.07179	-.04537	-.21480	-.21770
.600	-.003	-.14608	418.73958	-.59318	-1.76372	-4.05749	-.07010	-.04569	-.20824	-.21976
.599	2.013	-.15246	418.15651	-1.28035	-2.16747	-3.45499	-.06098	-.04635	-.21795	-.23356
.599	4.028	-.14984	418.24285	-1.92588	-2.71997	-3.63574	-.06138	-.04717	-.21790	-.23351
.599	6.044	-.14868	418.23958	-2.42564	-3.05997	-3.82079	-.05462	-.04682	-.22448	-.23800
.599	8.060	-.14376	417.23427	-3.13364	-3.59122	-3.86383	-.04716	-.04645	-.23994	-.24310
	GRADIENT	-.00234	-.07839	-.07750	-.08120	-.02092	.00195	-.00028	.00031	-.00188

RUN NO. 548/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.800	-8.111	-.17373	622.64301	-.90553	-1.55122	-5.47765	-.07615	-.03169	-.24793	-.24697
.800	-6.077	-.18133	622.78957	-1.05130	-1.52997	-6.11888	-.07270	-.03216	-.23815	-.23648
.800	-4.052	-.18993	622.38107	-1.17624	-1.57247	-6.80745	-.06766	-.03242	-.22970	-.22720
.800	-2.028	-.20456	622.72263	-.82224	-1.35997	-7.27553	-.05157	-.03224	-.22378	-.22030
.800	-.015	-.21081	622.92740	-.11424	-1.04122	-8.35242	-.05510	-.03208	-.21566	-.21473
.800	2.000	-.21552	623.24048	-1.75929	-2.08247	-7.44437	-.04174	-.03150	-.22171	-.22703
.801	4.045	-.21570	623.58982	-3.02952	-2.95372	-7.91346	-.04226	-.03084	-.23118	-.23467
.800	6.069	-.20883	623.38251	-4.17481	-3.76122	-8.24483	-.03253	-.02989	-.24588	-.24355
.800	8.095	-.20602	623.26107	-5.42422	-4.69622	-8.40836	-.02374	-.02926	-.26195	-.25150
	GRADIENT	-.00309	.14559	-.23003	-.17258	-.11764	.00349	.00019	-.00005	-.00106

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ004) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 10.000

RUN NO. 547/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.850	-8.112	-.18483	668.48587	-.48906	-1.12622	-6.39861	-.07452	-.03168	-.26675	-.26429
.849	-6.075	-.19495	667.56174	-.71812	-1.14747	-7.14743	-.07128	-.03060	-.25636	-.25289
.850	-4.057	-.20840	668.07079	-.90553	-1.14747	-7.99092	-.06623	-.03028	-.24654	-.24265
.850	-2.031	-.21791	668.61895	-.55153	-.97747	-8.70961	-.06016	-.03025	-.24012	-.23522
.850	-.006	-.23007	668.08654	-.01013	-.80747	-10.04371	-.05278	-.02993	-.23229	-.22835
.849	2.022	-.23302	667.49906	-1.99835	-2.01872	-8.95922	-.03971	-.02926	-.24119	-.23791
.850	4.048	-.23530	668.40750	-3.23776	-2.91122	-9.44552	-.03905	-.02870	-.25042	-.24547
.849	6.086	-.22428	667.82024	-4.90363	-4.07997	-9.72955	-.02870	-.02805	-.26275	-.25375
.849	8.104	-.21978	667.63227	-6.92350	-5.52497	-9.51437	-.01922	-.02731	-.27294	-.26330
	GRADIENT	-.00340	-.02204	-.30115	-.22550	-.15585	.00374	.00020	-.00044	-.00041

RUN NO. 546/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.900	-8.133	-.19613	711.36810	.09396	-.46747	-7.75423	-.07147	-.04013	-.29069	-.28765
.899	-6.094	-.20432	710.19760	-.11424	-.50997	-8.46861	-.06508	-.03578	-.27954	-.27600
.899	-4.054	-.21353	710.06972	-.71812	-.93497	-9.03238	-.05918	-.03256	-.27051	-.26569
.900	-2.036	-.23064	710.31675	-.86389	-1.01997	-9.50577	-.05362	-.03016	-.26201	-.25579
.900	-.006	-.23805	710.48600	-1.84259	-1.95497	-10.04801	-.04549	-.02847	-.25851	-.25066
.900	2.024	-.23819	710.26639	-4.44552	-3.59122	-8.75695	-.03108	-.02680	-.26413	-.25724
.900	4.054	-.23921	710.38534	-6.84021	-5.24872	-8.58481	-.03312	-.02616	-.27261	-.26491
.900	6.082	-.23568	710.31675	-9.13079	-6.94872	-8.24483	-.02565	-.02546	-.28370	-.27419
.900	8.103	-.23057	710.32587	-11.50466	-8.58497	-7.67246	-.01830	-.02532	-.29798	-.28531
	GRADIENT	-.00289	.02861	-.78079	-.55250	.08122	.00368	.00080	-.00031	.00000

RUN NO. 545/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.920	-8.137	-.19522	726.61452	-.19754	-.74372	-8.10712	-.07315	-.04450	-.29924	-.29629
.920	-6.107	-.20573	726.71202	-.78059	-1.01997	-8.39545	-.06207	-.04052	-.29054	-.28688
.919	-4.056	-.21308	725.85645	-1.57188	-1.52997	-8.63215	-.05612	-.03604	-.28083	-.27560
.920	-2.048	-.22942	726.79985	-1.88423	-1.78497	-8.82581	-.05146	-.03277	-.27081	-.26445
.920	-.007	-.23650	726.83927	-3.23776	-2.97497	-8.73277	-.04545	-.03030	-.26636	-.25862
.920	2.025	-.23824	726.34274	-6.13221	-4.75997	-7.64233	-.03075	-.02737	-.27229	-.26484
.920	4.055	-.23602	726.27478	-9.13079	-6.82122	-7.14743	-.03252	-.02579	-.28174	-.27456
.920	6.086	-.23306	726.77994	-11.73371	-8.66997	-6.51481	-.02613	-.02564	-.29635	-.28793
.920	8.118	-.23018	726.58575	-13.94100	-10.22122	-6.07585	-.02072	-.02729	-.31451	-.29997
	GRADIENT	-.00269	.01844	-.95468	-.66833	.20481	.00335	.00128	-.00017	.00008

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ004) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 10.000

RUN NO. 544/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.950	-8.133	-.20237	749.15840	-1.32200	-1.55122	-8.97213	-.08043	-.04735	-.32643	-.32235
.951	-6.091	-.20510	749.74242	-1.90506	-1.97622	-8.83441	-.06712	-.04459	-.31529	-.31148
.950	-4.080	-.21869	749.42729	-2.17576	-2.209[illegible]7	-8.90757	-.06041	-.04082	-.30052	-.29625
.950	-2.050	-.23196	749.24281	-2.48811	-2.54997	-8.84302	-.05586	-.03824	-.28589	-.28191
.950	-.007	-.24094	749.25439	-3.63340	-3.65497	-8.51595	-.05254	-.03577	-.27886	-.27636
.950	2.016	-.24064	749.11618	-8.11044	-6.31122	-6.78163	-.04078	-.03372	-.28299	-.27923
.950	4.068	-.24136	748.93161	-11.58795	-8.64872	-6.01990	-.04125	-.03140	-.29303	-.28911
.950	6.089	-.23676	749.07394	-14.60735	-10.73122	-5.05591	-.03667	-.03113	-.31176	-.30609
.950	8.123	-.23966	748.90091	-16.77298	-12.21872	-4.64277	-.03393	-.03000	-.33293	-.32109
	GRADIENT	-.00265	-.05491	-1.20074	-.81726	.38484	.00262	.00115	.00088	.00083

RUN NO. 543/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.980	-8.131	-.21451	770.46446	-.78059	-1.52997	-11.33907	-.10676	-.04604	-.35829	-.35760
.980	-6.116	-.22005	770.86248	-1.59271	-2.08247	-11.01631	-.09116	-.04589	-.34580	-.34416
.980	-4.072	-.23167	770.86248	-2.67552	-2.86872	-10.80113	-.08028	-.04460	-.33285	-.32984
.980	-2.050	-.23630	770.61785	-4.02905	-3.88872	-10.24167	-.07231	-.04241	-.32146	-.31739
.980	-.008	-.24955	770.51088	-5.73657	-5.24872	-9.71234	-.06898	-.04067	-.31270	-.31081
.980	2.027	-.25149	770.29690	-10.02619	-7.79872	-7.21198	-.05900	-.03777	-.30999	-.30912
.979	4.061	-.25481	770.05204	-13.54535	-10.17872	-6.27381	-.06091	-.03468	-.31788	-.31850
.979	6.085	-.25256	770.06717	-16.58557	-12.15497	-5.38298	-.05635	-.03326	-.33788	-.33688
.979	8.120	-.25263	769.96011	-19.39674	-14.08872	-4.57821	-.05380	-.03177	-.36067	-.35499
	GRADIENT	-.00302	-.09545	-1.36365	-.91099	.59412	.00261	.00120	.00203	.00152

RUN NO. 542/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.119	-8.158	-.22979	849.91346	-4.71622	-4.50497	-13.15947	-.16024	-.01682	-.32683	-.32700
1.119	-6.117	-.23024	850.07824	-7.50656	-6.35372	-11.93726	-.16051	-.02110	-.32016	-.32075
1.119	-4.080	-.23811	849.74695	-10.23443	-8.39372	-9.89739	-.14990	-.02691	-.31176	-.30971
1.119	-2.043	-.24536	849.95592	-12.62912	-9.90247	-8.02104	-.13657	-.03365	-.31747	-.31309
1.119	.001	-.26313	849.80608	-14.62817	-11.38997	-6.62239	-.12128	-.03922	-.31065	-.30842
1.120	2.029	-.26248	850.19772	-18.89697	-13.85497	-3.24842	-.11266	-.04436	-.29961	-.30571
1.119	4.076	-.26388	849.94300	-22.43696	-16.08622	-1.34195	-.10464	-.04807	-.31040	-.31287
1.119	6.103	-.26529	849.53376	-25.08153	-17.76497	.74835	-.09794	-.04762	-.32860	-.32647
1.119	8.145	-.26601	850.03317	-27.87187	-19.50747	3.32026	-.09224	-.04437	-.33419	-.33295
	GRADIENT	-.00337	.03100	-1.50466	-.94863	1.07343	.00561	-.00260	.00101	.00005

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ004) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 10.000

RUN NO. 541/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.200	-8.174	-.24594	880.83847	-8.50608	-7.22497	-11.98891	-.14733	-.00526	-.32614	-.32757
1.200	-6.121	-.24624	880.94527	-11.31725	-9.00997	-10.00498	-.15188	-.00939	-.32240	-.32038
1.200	-4.092	-.25093	881.30384	-13.94100	-10.73122	-7.70258	-.15395	-.01476	-.31648	-.31289
1.200	-2.043	-.26048	881.12721	-16.27322	-12.11247	-5.39589	-.14942	-.01923	-.32291	-.31902
1.200	-.007	-.27332	881.41425	-18.31392	-13.57872	-3.20539	-.14131	-.02408	-.31466	-.31117
1.200	2.031	-.27519	881.26306	-21.85390	-15.46997	.10752	-.13133	-.02980	-.30460	-.31350
1.200	4.068	-.27491	881.49182	-24.62342	-17.25497	2.62352	-.12653	-.03709	-.31550	-.31955
1.200	6.108	-.28023	881.33480	-26.55999	-18.46622	5.62121	-.11752	-.04364	-.33191	-.33118
1.200	8.153	-.28127	881.01873	-28.85057	-19.88997	8.00388	-.11134	-.04603	-.33421	-.33196
	GRADIENT	-.00307	.02507	-1.32117	-.80436	1.28245	.00358	-.00271	.00099	-.00038

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ005) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 20.000

RUN NO. 570/ 0 RN/L = 2.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.350	-8.173	-.00100	167.38250	5.33787	2.28378	-.90107	-.03727	-.03156	-.21423	-.23242
.350	-6.152	-.00087	167.00824	4.13087	1.45534	-.91398	-.03838	-.03223	-.21046	-.22777
.351	-4.113	-.00055	167.56984	2.88224	.64812	-.78487	-.03825	-.03331	-.20648	-.22375
.350	-2.095	.00014	166.63369	1.59200	-.22312	-.72892	-.03950	-.03589	-.20432	-.22170
.350	-.056	.00019	167.47605	.17689	-1.13687	-.69450	-.04236	-.03601	-.19862	-.21734
.350	1.955	.00058	167.10157	-1.09243	-1.98687	-.54826	-.04297	-.03579	-.19623	-.21266
.350	3.988	.00088	167.10157	-2.54898	-2.90062	-.51816	-.04246	-.03549	-.18917	-.20517
.350	6.030	.00083	167.10157	-3.92230	-3.72937	-.31604	-.03990	-.03400	-.18682	-.20189
.350	8.062	.00061	166.72704	-5.29561	-4.70687	-.10963	-.03691	-.03318	-.19252	-.19811
	GRADIENT	.00016	-.02298	-.66893	-.43756	.03525	-.00059	-.00021	.00211	.00228

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ005) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 20.000

RUN NO. 569/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLW1	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.600	-8.508	-.00262	418.57838	16.01361	9.48483	-5.40257	-.02595	-.00738	-.23070	-.24276
.600	-6.423	-.00218	418.99854	12.74637	7.40311	-5.47142	-.02694	-.01023	-.22501	-.23691
.599	-4.325	-.00163	418.07506	8.83402	4.81158	-5.02385	-.02762	-.01192	-.22159	-.23521
.600	-2.243	-.00069	418.49696	5.29625	2.43247	-4.93778	-.02964	-.01381	-.21422	-.22954
.599	-.166	.00084	418.24285	1.90415	.20187	-4.90336	-.03395	-.01549	-.20984	-.22669
.600	1.934	.00147	418.58002	-1.88313	-2.26312	-4.65375	-.03495	-.01560	-.20478	-.22014
.601	4.012	.00185	420.32990	-5.54530	-4.66437	-4.40845	-.03562	-.01589	-.19770	-.21321
.599	6.099	.00222	417.99197	-9.35313	-7.12937	-3.90063	-.03192	-.01443	-.19530	-.21111
.599	8.189	.00199	418.07832	-13.61873	-9.97687	-3.09587	-.02946	-.01216	-.18962	-.20564
	GRADIENT	.00044	.22027	-1.72360	-1.13413	.07267	-.00102	-.00047	.00274	.00256

RUN NO. 568/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLW1	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.801	-8.813	-.00478	623.67573	26.41881	16.49470	-11.41031	-.01989	-.00559	-.24880	-.24703
.800	-6.657	-.00386	623.53543	22.21511	13.94565	-11.88800	-.02277	-.00831	-.24103	-.23905
.800	-4.500	-.00333	623.04739	16.28414	10.10085	-11.41031	-.02430	-.01080	-.23225	-.23106
.800	-2.364	-.00160	623.21292	10.12426	6.08610	-10.64428	-.02443	-.01343	-.22525	-.22509
.800	-.233	.00069	623.55433	3.92276	2.09260	-10.13215	-.02954	-.01638	-.22022	-.22285
.800	1.898	.00315	622.72469	-2.42413	-2.07187	-9.30588	-.03174	-.01609	-.21620	-.22149
.800	4.043	.00383	623.05997	-8.93698	-6.27937	-8.40644	-.02925	-.01528	-.20953	-.21397
.801	6.195	.00380	623.88931	-17.26010	-11.86812	-5.87165	-.02674	-.01334	-.20323	-.20719
.801	8.333	.00219	624.11549	-24.83414	-16.96937	-3.31105	-.02330	-.01158	-.20203	-.20461
	GRADIENT	.00089	-.02166	-2.95068	-1.91875	.34414	-.00081	-.00054	.00255	.00177

RUN NO. 567/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLW1	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.849	-8.898	-.00459	667.82811	28.66633	17.89667	-13.18767	-.01639	-.00351	-.26674	-.26306
.850	-6.715	-.00485	668.55635	25.14937	16.06986	-14.60353	-.02073	-.00995	-.25754	-.25379
.850	-4.557	-.00338	668.35277	18.82301	12.03387	-14.32810	-.02137	-.01148	-.24997	-.24590
.850	-2.391	-.00231	668.68154	12.12206	7.63677	-13.36411	-.02290	-.01573	-.24492	-.24193
.850	-.258	.00086	668.82248	4.90085	2.89980	-12.14621	-.02878	-.02109	-.23688	-.23428
.850	1.897	.00282	668.47798	-3.00675	-2.24187	-10.98425	-.02982	-.01707	-.23229	-.23064
.850	4.071	.00362	668.42326	-11.66280	-8.04312	-8.02772	-.02752	-.01573	-.22619	-.22375
.850	6.231	.00351	668.93183	-20.79742	-14.05687	-5.06259	-.02494	-.01646	-.22098	-.21811
.850	8.394	.00220	668.49375	-26.76926	-17.90312	-3.03992	-.02050	-.01707	-.21911	-.21682
	GRADIENT	.00089	-.00294	-3.53259	-2.32255	.69571	-.00089	-.00046	.00279	.00258

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ005) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 20.000

RUN NO. 566/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.900	-8.980	-.00400	710.94768	32.26653	20.40323	-15.89029	-.02130	-.00147	-.28997	-.28689
.900	-6.776	-.00542	710.60932	26.37719	16.79209	-15.71815	-.01866	-.01508	-.28037	-.27667
.900	-4.597	-.00343	711.16247	19.28094	12.16132	-14.93921	-.01816	-.01752	-.27153	-.26721
.900	-2.419	-.00167	710.71910	12.01801	7.50932	-14.36684	-.01841	-.01963	-.26374	-.25857
.900	-.263	.00030	711.28126	4.02681	2.34750	-13.24792	-.02345	-.01899	-.25889	-.25375
.900	1.909	.00273	710.53162	-6.02388	-4.28187	-10.24835	-.02432	-.01978	-.25407	-.24697
.900	4.077	.00437	710.71910	-15.40820	-10.38062	-6.92602	-.02251	-.02012	-.25046	-.24206
.899	6.263	.00406	710.15653	-23.81456	-15.84187	-3.86190	-.02024	-.02484	-.24523	-.23619
.900	8.432	.00195	710.60932	-29.26620	-19.43312	-1.72734	-.02263	-.02230	-.24442	-.23879
	GRADIENT	.00092	-.04964	-4.03300	-2.62385	.92936	-.00067	-.00025	.00239	.00286

RUN NO. 565/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.920	-9.003	-.00483	727.07085	33.66083	21.42285	-16.93605	-.02530	-.00946	-.29666	-.29304
.920	-6.808	-.00573	727.04203	26.29395	16.60091	-15.32652	-.02106	-.01131	-.28639	-.28336
.920	-4.608	-.00424	726.46817	19.23922	11.94890	-14.62935	-.02096	-.01255	-.27700	-.27337
.920	-2.443	-.00175	726.47863	11.72666	7.10572	-14.01395	-.02190	-.01461	-.26909	-.26485
.919	-.279	.00116	726.19632	3.21521	1.66776	-12.67555	-.02380	-.01585	-.26434	-.26065
.920	1.902	.00171	726.74081	-7.87578	-5.62062	-9.45220	-.02661	-.01845	-.26045	-.25495
.920	4.092	.00419	726.75999	-17.38494	-11.74062	-5.86304	-.02307	-.02037	-.25633	-.24999
.920	6.277	.00465	726.51697	-25.91614	-17.30812	-2.52350	-.02273	-.02511	-.25209	-.24664
.920	8.439	.00277	726.75999	-31.36779	-20.77187	-.26874	-.03026	-.02071	-.25222	-.24989
	GRADIENT	.00093	.03900	-4.27061	-2.76452	1.01687	-.00041	-.00090	.00230	.00261

RUN NO. 564/ 0 RN/L = 4.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.950	-9.045	-.00626	749.40828	32.89085	20.53068	-16.67353	-.03334	-.00599	-.31708	-.31438
.951	-6.851	-.00557	750.07634	25.60720	15.77247	-15.21463	-.03023	-.00558	-.30394	-.30296
.951	-4.654	-.00402	749.94570	18.42761	11.03550	-14.23343	-.03149	-.00645	-.29172	-.29216
.950	-2.461	-.00171	749.55799	10.93587	6.14993	-13.28665	-.03288	-.00824	-.28032	-.28154
.951	-.280	.00031	749.81935	2.17469	.49937	-11.94394	-.03412	-.01203	-.27519	-.27738
.950	1.895	.00257	749.37352	-9.31152	-6.93812	-8.10088	-.03574	-.01616	-.27755	-.28307
.950	4.086	.00366	749.76561	-20.52692	-14.16312	-3.74140	-.02762	-.01648	-.27007	-.27385
.950	6.279	.00455	749.52741	-29.12054	-19.64562	-.41065	-.02283	-.01782	-.26548	-.27173
.950	8.471	.00253	749.37766	-35.79985	-24.15062	2.19964	-.03471	-.01383	-.26820	-.27585
	GRADIENT	.00090	-.02493	-4.49489	-2.90719	1.19832	.00022	-.00128	.00211	.00161

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ0[illegible]) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 20.000

RUN NO. 563/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.979	-9.123	-.00681	769.91414	32.64112	20.10584	-17.69777	-.04713	-.00142	-.35658	-.35597
.980	-6.894	-.00601	770.67974	24.71236	14.92279	-16.28191	-.04453	-.00136	-.34292	-.34329
.979	-4.687	-.00399	769.73085	17.07494	9.95215	-15.13717	-.04347	-.00298	-.32742	-.32858
.980	-2.492	-.00183	770.12934	9.14617	4.85406	-14.09141	-.04545	-.00524	-.31668	-.31951
.980	-.281	.00043	770.22119	.07284	-1.00937	-12.17203	-.04822	-.01171	-.31259	-.31716
.980	1.887	.00266	770.05773	-11.28826	-8.44687	-7.82115	-.04834	-.01527	-.31421	-.32081
.980	4.100	.00435	770.06773	-22.64932	-15.84187	-3.07866	-.04056	-.01437	-.31482	-.32183
.980	6.286	.00471	770.63253	-32.09606	-22.02562	.71173	-.03886	-.01209	-.31854	-.32877
.980	8.477	.00238	770.29637	-39.04587	-26.65812	3.54134	-.04433	-.00776	-.32637	-.33566
	GRADIENT	.00096	.02794	-4.54950	-2.95557	1.38390	.00013	-.00149	.00126	.00056

RUN NO. 562/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.120	-9.286	-.00886	850.56146	33.53597	20.72186	-23.38275	-.09056	.00246	-.33693	-.33547
1.121	-6.994	-.00701	850.67850	23.50535	14.17932	-20.76620	-.09653	.00299	-.32647	-.32515
1.120	-4.740	-.00531	850.62005	12.03982	6.57467	-16.67784	-.08854	-.00533	-.31326	-.31375
1.120	-2.514	-.00283	850.51451	.09365	-1.24312	-12.06014	-.09208	-.01488	-.30409	-.30546
1.120	-.285	-.00041	850.09207	-11.22583	-8.53187	-7.21436	-.09434	-.01759	-.29819	-.30538
1.120	1.923	.00122	850.32083	-21.58812	-15.22562	-2.44173	-.09311	-.01190	-.29608	-.30714
1.120	4.115	.00305	850.39330	-31.65910	-21.83437	2.29855	-.08998	-.00182	-.29953	-.31021
1.120	6.325	.00277	850.32063	-40.75211	-27.82687	6.68487	-.07660	.00714	-.30320	-.31414
1.119	8.513	.00188	850.30699	-46.84879	-31.86437	9.58328	-.06291	.01505	-.30936	-.31723
	GRADIENT	.00094	-.02937	-4.92571	-3.19719	2.14794	-.00018	.00045	.00161	.00029

RUN NO. 561/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.200	-9.316	-.00764	881.23215	31.51736	19.78721	-25.30643	-.11830	-.00288	-.33465	-.33087
1.200	-7.029	-.00624	880.36181	19.11436	11.56655	-19.51387	-.11181	-.00742	-.32374	-.32000
1.200	-4.745	-.00444	880.65553	7.27324	3.62203	-13.78586	-.10944	-.01403	-.31187	-.31094
1.200	-2.513	-.00255	881.05967	-4.25522	-3.87812	-8.56997	-.10948	-.01386	-.30325	-.30458
1.200	-.295	.00012	881.00928	-15.[illegible]932	-10.95437	-3.78013	-.11347	-.00894	-.29933	-.30237
1.200	1.916	.00242	880.93756	-25.10464	-17.30812	.33761	-.11037	-.00181	-.29833	-.30493
1.200	4.123	.00284	881.01701	-34.50977	-23.53437	4.55621	-.09851	.00588	-.30232	-.30703
1.200	6.339	.00362	881.42012	-43.95651	-29.65437	9.26075	-.08[illegible]23	.01633	-.30405	-.31319
1.199	8.534	.00279	880.74530	-50.13643	-33.84062	12.40858	-.06394	.02295	-.30735	-.31364
	GRADIENT	.00088	.02709	-4.71124	-3.05656	2.05714	.00094	.00234	.00109	.00034

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ006) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 20.000

RUN NO. 560/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.350	-8.024	-.04409	167.00943	-.16659	-.86062	-.63665	-.01816	-.03252	-.24888	-.22474
.350	-6.028	-.04961	167.19657	.02082	-.73313	-.92069	-.02018	-.03397	-.23027	-.21701
.350	-4.012	-.05643	167.00895	.08329	-.69062	-1.16168	-.01867	-.03490	-.21828	-.21912
.351	-2.006	-.06057	168.22653	.12494	-.71187	-1.23054	-.01802	-.03524	-.20317	-.21663
.350	-.001	-.06525	167.10348	.24988	-.66938	-1.28218	-.01712	-.03608	-.20028	-.21993
.350	2.005	-.06525	167.38369	.10412	-.71187	-1.23054	-.01198	-.03602	-.20465	-.22799
.350	4.000	-.06674	167.10324	.00000	-.86062	-1.25206	-.00241	-.03727	-.20640	-.23117
.351	6.017	-.06794	167.57128	-.27070	-1.03063	-1.27358	-.00226	-.03627	-.21193	-.23194
.350	8.023	-.06562	166.82227	-.52059	-1.24312	-1.23054	.00492	-.03465	-.22559	-.23719
	GRADIENT	-.00131	-.03261	-.00933	-.01695	-.00903	.00133	-.00028	.00111	-.00177

RUN NO. 559/ 0 RN/L = 3.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.600	-8.064	-.12719	419.08322	.58268	-.20188	-3.28763	-.03073	-.01272	-.25999	-.23957
.598	-6.039	-.13201	417.25047	.83222	-.05313	-3.87722	-.03045	-.01433	-.24009	-.22943
.600	-4.033	-.14651	419.41862	1.08176	.03187	-4.48402	-.02968	-.01580	-.22453	-.22463
.600	-2.017	-.15228	419.42026	1.41448	.18062	-5.02196	-.02662	-.01663	-.21497	-.21791
.600	.008	-.16108	418.91878	1.74719	.30812	-5.37054	-.02502	-.01699	-.20642	-.22006
.600	2.023	-.16137	419.24600	1.16494	-.05313	-4.96601	-.01377	-.01688	-.21581	-.23406
.600	4.022	-.16156	419.07666	.64507	-.41437	-5.19840	-.01193	-.01629	-.21994	-.23845
.600	6.044	-.15805	418.50023	.10412	-.73313	-5.30169	-.00315	-.01476	-.22506	-.24011
.601	8.071	-.15432	419.82706	-.66635	-1.28562	-5.40067	.00644	-.01234	-.23984	-.24303
	GRADIENT	.00195	-.04261	-.05554	-.05577	-.06814	.00240	-.00006	.00043	-.00217

RUN NO. 558/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.800	-8.101	-.19708	622.63879	2.64137	1.54027	-7.20385	-.04282	-.01448	-.25130	-.24835
.800	-6.087	-.20231	622.91959	2.74534	1.71021	-8.20658	-.04033	-.01512	-.24060	-.23820
.800	-4.042	-.21443	622.49208	3.03647	1.92263	-9.39005	-.03540	-.01561	-.23128	-.22943
.800	-2.028	-.22332	623.05368	3.57714	2.24126	-10.23354	-.02946	-.01599	-.22591	-.22358
.800	-.015	-.23154	623.26107	4.24257	2.53865	-11.34385	-.02272	-.01639	-.21903	-.21925
.800	2.021	-.23307	622.63879	2.41263	1.41282	-10.19051	-.01009	-.01656	-.22390	-.23151
.800	4.044	-.23591	623.12072	1.31050	.60562	-10.63807	-.00685	-.01599	-.22967	-.23512
.800	6.079	-.22929	622.63997	-.02082	-.30813	-10.76718	.00214	-.01504	-.24517	-.24313
.800	8.095	-.22498	622.98664	-1.49929	-1.32813	-10.85325	.01121	-.01320	-.26266	-.25086
	GRADIENT	-.00260	.04149	-.22885	-.17157	-.12092	.00358	-.00007	.00026	-.00096

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ006) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 20.000

RUN NO. 557/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.849	-8.123	-.20891	667.74186	3.80588	2.51741	-8.71870	-.04377	-.01768	-.26640	-.26609
.849	-6.084	-.22062	667.94552	3.95140	2.68734	-9.88065	-.04030	-.01775	-.25680	-.25512
.850	-4.057	-.23081	668.06291	4.07621	2.72983	-11.09425	-.03632	-.01790	-.24852	-.24630
.850	-2.031	-.24452	668.47010	4.59608	3.17591	-12.03242	-.03143	-.01945	-.24309	-.23984
.850	-.006	-.25408	668.47010	5.30310	3.47330	-13.56878	-.02439	-.01998	-.23603	-.23340
.850	2.022	-.25623	658.12553	2.67011	1.92263	-12.10558	-.01005	-.01963	-.24225	-.24194
.849	4.048	-.25497	667.67134	1.43527	.96674	-12.50151	-.00864	-.01948	-.25147	-.24771
.849	6.077	-.24821	667.67920	-.14576	-.11688	-12.72529	.00328	-.01888	-.26525	-.25650
.849	8.125	-.23852	667.87502	-2.35305	-1.73187	-12.55745	.01251	-.01589	-.28095	-.26756
	GRADIENT	-.00296	-.05567	-.34591	-.23591	-.14246	.00379	-.00017	-.00025	-.00024

RUN NO. 556/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.900	-8.121	-.22163	710.64140	5.05357	3.57951	-10.96084	-.04149	-.02124	-.28930	-.28751
.900	-6.092	-.23335	710.55458	4.88721	3.51578	-11.85167	-.03957	-.02019	-.27938	-.27763
.900	-4.063	-.24476	710.42655	4.55449	3.32461	-12.52302	-.03427	-.01978	-.27157	-.26887
.900	-2.034	-.25724	710.41268	4.51290	3.19715	-13.25032	-.02728	-.01915	-.26328	-.25940
.900	-.016	-.26772	710.94768	3.76429	2.41120	-13.87433	-.01980	-.01899	-.25833	-.25348
.900	2.024	-.27417	710.54545	1.49766	1.05171	-12.46708	-.01029	-.02363	-.26611	-.26089
.900	4.053	-.26872	710.51339	-1.22858	-.75438	-12.09697	-.00800	-.02391	-.27165	-.26564
.900	6.093	-.26355	710.32587	-3.64410	-2.47562	-11.76560	.00079	-.02238	-.28357	-.27563
.900	8.113	-.25403	710.56370	-6.39279	-4.38812	-10.88768	.00778	-.01830	-.29830	-.28633
	GRADIENT	-.00319	.01500	-.71895	-.50796	.08087	.00343	-.00063	-.00015	.00024

RUN NO. 555/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.920	-8.125	-.22425	726.31310	4.57529	3.13343	-11.30512	-.03942	-.01955	-.29805	-.29579
.919	-6.095	-.23436	726.05081	4.38813	3.06970	-11.90762	-.03861	-.01839	-.29026	-.28771
.920	-4.075	-.24700	726.26429	4.01383	2.85728	-12.39392	-.03553	-.01701	-.28086	-.27792
.920	-2.026	-.26126	726.61452	3.86826	2.70859	-12.85009	-.02962	-.01550	-.27119	-.26776
.920	.003	-.27300	726.24514	3.22362	1.90139	-13.34930	-.02139	-.01585	-.25603	-.26252
.920	2.015	-.26848	726.68246	-.31235	-.20188	-11.73548	-.00453	-.01659	-.27300	-.26871
.920	4.055	-.27100	726.17718	-3.01940	-2.07187	-11.24918	-.00606	-.01763	-.28068	-.27645
.919	6.086	-.26449	726.13792	-5.64315	-3.87812	-10.70693	-.00229	-.01859	-.29358	-.28767
.919	8.127	-.25947	725.92443	-8.30855	-5.76937	-9.73003	.00313	-.01750	-.31110	-.29908
	GRADIENT	-.00272	-.00525	-.89797	-.62846	.16720	.00414	-.00011	-.00007	.00010

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ006) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 20.000

RUN NO. 554/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.949	-8.121	-.22882	748.79323	3.41078	2.30499	-11.92053	-.04269	-.01797	-.32371	-.32072
.950	-6.100	-.23580	749.50423	3.28601	2.15629	-12.18304	-.04220	-.01536	-.31568	-.31200
.950	-4.069	-.25030	749.43988	3.24442	2.09257	-12.44126	-.04049	-.01356	-.30290	-.29949
.950	-2.028	-.26339	748.92004	3.41078	2.05008	-12.57897	-.03640	-.01257	-.28734	-.28390
.950	-.017	-.27309	749.06237	2.35024	.94550	-12.39822	-.03125	-.01204	-.28036	-.28197
.950	2.017	-.27510	749.07394	-1.87411	-1.41312	-11.00387	-.01548	-.01197	-.28351	-.28834
.950	4.059	-.27263	748.82396	-5.47656	-3.85687	-10.24645	-.01228	-.01231	-.29231	-.29689
.950	6.101	-.27087	749.16998	-8.28772	-5.81187	-9.28676	-.00793	-.01164	-.31192	-.31222
.950	8.123	-.27013	748.87778	-11.14053	-7.76687	-8.03443	-.00645	-.01151	-.33135	-.32456
	GRADIENT	-.00277	-.05308	-1.11992	-.75692	.29392	.00381	.00015	.00123	.00004

RUN NO. 553/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.979	-8.139	-.23952	770.29580	3.97224	2.28375	-14.08951	-.05928	-.01669	-.36644	-.35985
.980	-6.105	-.24583	770.54165	3.43157	1.94387	-14.05508	-.05749	-.01494	-.35361	-.34779
.981	-4.082	-.26194	771.10731	2.78693	1.43406	-14.00344	-.05400	-.01260	-.33752	-.33401
.980	-2.030	-.27035	770.40390	2.03832	.81605	-13.69789	-.04850	-.01106	-.32505	-.32201
.980	.003	-.28359	770.40390	.18741	-.60562	-12.80706	-.04361	-.01074	-.31842	-.31998
.980	2.028	-.28551	770.09800	-3.60245	-2.81562	-10.95654	-.03084	-.01055	-.31540	-.32348
.980	4.050	-.28327	770.25042	-7.47561	-5.40812	-9.86344	-.03228	-.01035	-.32392	-.33257
.979	6.095	-.28338	770.03691	-10.59912	-7.53312	-8.58529	-.02795	-.00958	-.34238	-.34687
.979	8.141	-.27956	769.92926	-14.15993	-9.82812	-7.10057	-.02673	-.00893	-.36136	-.36058
	GRADIENT	-.00285	-.09956	-1.28555	-.85160	.54199	.00301	.00025	.00182	.00008

RUN NO. 552/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.119	-8.155	-.23817	849.44197	-1.45764	-1.51937	-14.89427	-.12320	-.00111	-.33712	-.32723
1.119	-6.116	-.24218	849.63632	-3.89398	-3.15562	-13.54296	-.11964	-.00516	-.33013	-.31973
1.119	-4.067	-.25150	849.51666	-6.62185	-5.08937	-11.74839	-.10747	-.00874	-.31259	-.30872
1.118	-2.032	-.26368	849.10881	-8.72502	-6.40687	-10.05279	-.09683	-.01309	-.30947	-.30985
1.119	-.007	-.27304	849.50109	-11.39041	-8.31937	-8.17215	-.08459	-.01519	-.30712	-.30834
1.118	2.030	-.27594	849.16953	-15.05534	-10.48687	-5.13815	-.07334	-.01672	-.29842	-.30668
1.119	4.076	-.27714	849.39530	-18.86602	-12.86687	-3.10258	-.06949	-.01613	-.31432	-.31505
1.118	6.093	-.27847	849.00415	-21.71683	-14.60937	-.87335	-.06256	-.01385	-.33054	-.32695
1.118	8.155	-.27884	848.98856	-24.63411	-16.50062	1.55697	-.06044	-.01115	-.33562	-.33450
	GRADIENT	-.00312	-.00895	-1.51483	-.96508	1.09140	.00489	-.00090	.00037	-.00047

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ006) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 20.000

RUN NO. 551/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLW1	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.200	-8.163	-.25384	881.11779	-5.80974	-4.64312	-13.03084	-.11780	.00769	-.33362	-.32980
1.200	-6.111	-.25197	880.91791	-8.60008	-6.34312	-11.27069	-.12035	.00356	-.32288	-.31964
1.200	-4.080	-.25864	881.04010	-11.03642	-8.00062	-9.22651	-.12082	-.00119	-.31164	-.31031
1.200	-2.032	-.26878	881.08282	-13.32699	-9.36062	-6.96285	-.11450	-.00435	-.31391	-.31622
1.200	-.007	-.27939	881.06914	-15.38851	-10.93312	-4.76374	-.10508	-.00701	-.30572	-.30754
1.201	2.031	-.28486	881.77068	-18.97014	-12.78187	-1.47154	-.09480	-.01051	-.30157	-.31104
1.200	4.068	-.28389	880.86583	-21.67719	-14.46062	.76561	-.09023	-.01544	-.31929	-.32042
1.200	6.108	-.28849	881.07680	-23.67624	-15.67187	3.61707	-.08156	-.01827	-.33396	-.33076
1.200	8.163	-.28985	881.23215	-25.84187	-17.11687	5.96964	-.07863	-.01651	-.33813	-.33544
	GRADIENT	-.00327	.01666	-1.32249	-.80263	1.25130	.00397	-.00170	-.00015	-.00074

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ007) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 595/ 0 RN/L = 2.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLW1	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.351	-8.179	-.00087	167.66435	8.01000	4.35462	-2.67828	.02061	-.01515	-.21697	-.22926
.351	-6.159	-.00073	167.94474	6.82411	3.61115	-2.62235	.01854	-.01780	-.21427	-.22515
.351	-4.130	-.00072	167.75814	5.47177	2.67650	-2.52339	.01652	-.01782	-.20888	-.22073
.351	-2.089	-.00039	167.85168	4.07782	1.82681	-2.44165	.01294	-.01662	-.20502	-.21782
.350	-.062	.00047	167.38345	2.82951	.95589	-2.34699	.00991	-.01518	-.20089	-.21514
.351	1.971	.00050	167.94498	1.35234	.02124	-2.31688	.00631	-.01305	-.19742	-.21071
.351	3.982	.00066	168.03875	.00000	-.87100	-2.26525	.00427	-.01215	-.18982	-.20454
.351	6.028	.00063	167.94546	-1.49797	-1.82701	-2.05012	.00733	-.01127	-.18478	-.20139
.351	8.069	.00048	167.66483	-2.91273	-2.71929	-1.80058	.01091	-.01010	-.17992	-.19845
	GRADIENT	.00018	.03222	-.67388	-.43878	.03161	-.00154	.00074	.00225	.00195

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ007) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 594/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.599	-8.541	-.00262	418.15977	21.65821	13.34000	-8.58126	.01420	-.00667	-.23765	-.24997
.600	-6.451	-.00271	418.49205	18.62066	11.47070	-8.41346	.01091	-.00952	-.23295	-.24453
.599	-4.343	-.00152	417.49012	15.02136	9.02786	-8.18543	.00746	-.01086	-.22732	-.23971
.599	-2.259	-.00101	418.15651	11.27642	6.60627	-7.86275	.00417	-.01060	-.22036	-.23313
.598	-.191	-.00018	416.98326	7.88517	4.37586	-7.83693	.00008	-.01075	-.21479	-.22800
.600	1.902	.00133	418.31939	4.28587	2.03924	-7.69495	-.00504	-.00929	-.21011	-.22349
.599	3.994	.00205	417.56835	.43691	-.48860	-7.41529	-.00689	-.00811	-.20166	-.21735
.598	6.084	.00171	417.06801	-3.53688	-3.05921	-6.94633	-.00423	-.00729	-.19419	-.21163
.600	8.160	.00129	418.74122	-7.73953	-5.75728	-5.93955	.00171	-.00583	-.18886	-.20905
	GRADIENT	.00046	.01549	-1.73557	-1.13274	.08201	-.00182	.00033	.00296	.00261

RUN NO. 575/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.919	-9.016	-.00117	726.13792	40.86123	26.58452	-21.41870	-.11265	-.02086	-.30269	-.29554
.920	-6.809	-.00168	726.58492	34.78459	22.71847	-20.54078	-.10633	-.03155	-.28919	-.28479
.920	-4.617	-.00041	726.45860	27.52176	17.87529	-19.47350	-.09975	-.02888	-.27864	-.27558
.919	-2.439	.00170	726.14749	20.17569	13.18080	-18.63431	-.09084	-.02663	-.27107	-.26859
.920	-.266	.00445	726.26429	12.39260	8.40134	-17.40350	-.08422	-.02711	-.27200	-.26984
.920	1.894	.00638	726.50739	2.36198	1.79507	-14.35660	-.07995	-.03046	-.26336	-.26177
.920	4.070	.00721	726.50739	-7.97981	-4.96187	-10.41456	-.07877	-.03073	-.25524	-.25553
.920	6.279	.00775	726.35232	-17.01039	-10.89062	-6.90717	-.07443	-.02580	-.25162	-.25192
.920	8.463	.00490	726.83752	-25.79129	-16.75562	-3.52029	-.07297	-.01721	-.25090	-.25282
	GRADIENT	.00092	.02107	-4.09198	-2.62893	1.03208	.00243	-.00035	.00251	.00216

RUN NO. 574/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.950	-9.069	-.00257	749.36608	41.27744	26.66949	-21.75008	-.14342	-.03265	-.33756	-.32196
.950	-6.830	-.00196	749.26598	34.07704	21.93252	-20.29118	-.13316	-.03006	-.32407	-.31104
.950	-4.659	-.00060	749.46205	27.12636	17.25927	-19.00872	-.12707	-.02693	-.30742	-.29885
.950	-2.467	.00156	749.19312	19.78029	12.54354	-18.09637	-.12003	-.02514	-.29314	-.28913
.950	-.283	.00490	749.22377	11.97639	7.61538	-17.22706	-.11329	-.02933	-.28641	-.28609
.950	1.901	.00741	749.27007	.78039	.32937	-13.43134	-.10551	-.03292	-.28776	-.28826
.950	4.082	.00738	749.25850	-10.31028	-6.78937	-9.28703	-.09920	-.02867	-.27737	-.27793
.949	6.263	.00799	749.72783	-19.98591	-13.05812	-5.49561	-.08856	-.01771	-.27052	-.27372
.949	8.466	.00588	748.87018	-29.34942	-19.51812	-1.63964	-.08785	-.00765	-.27257	-.27847
	GRADIENT	.00100	-.01513	-4.29591	-2.76002	1.10307	.00331	-.00052	.00300	.00195

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ007) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = - 40.000

RUN NO. 573/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.978	-9.124	-.00356	769.65183	40.67394	25.90478	-21.79311	-.16945	-.03199	-.37778	-.36929
.980	-6.912	-.00238	770.40284	33.09895	20.95538	-20.47623	-.15951	-.02898	-.36897	-.35820
.980	-4.701	-.00004	770.95423	25.04532	15.75108	-19.19377	-.15206	-.02579	-.35363	-.34628
.980	-2.500	.00255	770.86248	17.42871	10.92914	-18.12219	-.14509	-.02580	-.33671	-.33553
.981	-.294	.00517	771.16802	9.62481	6.00099	-16.68912	-.13892	-.03115	-.32769	-.33132
.980	1.889	.00740	770.96940	-1.40454	-1.30687	-12.63518	-.12997	-.03174	-.32772	-.33247
.980	4.082	.00815	770.52603	-12.24541	-8.27687	-8.60277	-.12315	-.02322	-.32584	-.33172
.980	6.292	.00762	770.58709	-22.33719	-14.97062	-4.88021	-.11670	-.01080	-.32715	-.33465
.980	8.477	.00499	770.34231	-32.05443	-21.68562	-.46908	-.10474	.00090	-.33668	-.34220
	GRADIENT	.00097	-.03405	-4.25413	-2.74567	1.21412	.00332	-.00004	.00294	.00147

RUN NO. 572/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.119	-9.271	-.00609	849.94300	39.57099	25.24627	-23.46719	-.19010	.01224	-.34702	-.34979
1.121	-7.029	-.00553	851.17637	30.68494	19.40471	-21.40149	-.17796	.01094	-.33816	-.33986
1.121	-4.753	-.00377	850.79964	20.00920	12.60726	-18.36319	-.17532	.00562	-.32585	-.32863
1.120	-2.530	-.00066	850.48520	8.04322	4.62026	-14.13281	-.17368	-.00357	-.31551	-.31631
1.119	-.299	.00253	850.27579	-2.71543	-2.41187	-11.01275	-.17422	-.00703	-.30361	-.31008
1.120	1.910	.00517	850.66703	-12.76560	-8.93562	-7.69902	-.16479	-.00457	-.30294	-.31235
1.119	4.103	.00494	850.12329	-23.29435	-15.86312	-3.35245	-.14908	.00205	-.30089	-.31188
1.119	6.313	.00547	850.12329	-33.67744	-22.76937	1.89217	-.13015	.01201	-.30302	-.31492
1.119	8.530	.00439	850.21514	-41.43875	-27.78437	6.72142	-.10356	.01968	-.31197	-.32309
	GRADIENT	.00105	-.05284	-4.84934	-3.18262	1.64551	.00277	-.00037	.00282	.00169

RUN NO. 571/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.200	-9.340	-.00478	881.42012	38.90505	25.37373	-26.15260	-.20555	.00520	-.34143	-.34449
1.200	-7.039	-.00443	881.22439	26.77259	17.30175	-21.32403	-.19482	-.00107	-.33470	-.33495
1.200	-4.780	-.00202	881.31160	14.16148	8.69873	-16.00485	-.18605	-.00192	-.32517	-.32351
1.200	-2.522	.00068	881.35422	2.67414	1.13656	-11 98965	-.16051	.00028	-.31182	-.31422
1.200	-.285	.00307	881.31935	-8.16708	-5.83312	-7.82813	-.17896	.00266	-.30255	-.30997
1.200	1.920	.00494	881.27669	-18.09240	-12.14437	-4.07545	-.16518	.00638	-.30233	-.31224
1.200	4.106	.00594	881.33460	-28.01772	-18.68937	.22795	-.14409	.01237	-.30291	-.31458
1.200	6.344	.00576	881.83870	-37.79739	-25.14937	5.19051	-.12430	.02123	-.30177	-.31327
1.200	8.548	.00499	881.19935	-44.97608	-29.69587	9.08229	-.10332	.02865	-.30759	-.31827
	GRADIENT	.00091	-.00140	-4.73320	-3.06426	1.81765	.00446	.00156	.00244	.00090

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ008) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 590/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.351	-8.034	-.06271	167.56889	2.03891	-.11684	-1.38753	.02562	-.02319	-.25833	-.23102
.351	-6.038	-.06618	167.56913	2.14294	-.01062	-1.67579	.02817	-.02438	-.24097	-.22168
.350	-4.022	-.07108	167.47605	2.22616	.07436	-1.97266	.02921	-.02469	-.21810	-.21432
.349	-2.006	-.07730	166.35150	2.35099	.07436	-2.05010	.03043	-.02545	-.21010	-.21433
.350	-.011	-.08159	167.38178	2.49662	.11685	-2.18778	.03331	-.02619	-.20319	-.21584
.350	1.995	-.08257	166.72656	2.28857	.05311	-1.94685	.04012	-.02749	-.20397	-.22231
.350	4.001	-.08378	167.10086	2.18455	-.07435	-2.11894	.04720	-.02802	-.20964	-.23072
.350	6.007	-.08330	167.38178	2.03891	-.13809	-2.22220	.05632	-.02827	-.21822	-.23875
.351	8.013	-.08208	167.47558	1.83086	-.35053	-2.23081	.06446	-.02736	-.23453	-.24423
	GRADIENT	-.00153	-.01890	-.00726	-.01590	-.00945	.00228	-.00043	.00115	-.00203

RUN NO. 589/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.599	-8.064	-.16347	418.07995	6.34559	3.13327	-6.10302	-.00426	-.00894	-.26702	-.24656
.599	-6.058	-.17225	418.07995	6.59525	3.36693	-6.52036	-.00058	-.00953	-.25762	-.24151
.600	-4.033	-.18282	419.08322	6.84491	3.51563	-7.16573	.00310	-.01010	-.23408	-.22932
.599	-2.028	-.19195	417.74269	7.28182	3.74929	-7.65621	.00700	-.01145	-.22396	-.22410
.600	-.013	-.19982	418.74449	7.73953	4.00419	-8.16390	.00984	-.01225	-.21494	-.22372
.600	1.992	-.20077	418.82918	7.05296	3.53687	-7.69924	.02006	-.01332	-.21827	-.23526
.600	4.028	-.20170	419.07994	6.61605	3.26072	-7.98320	.02719	-.01438	-.22433	-.24146
.600	6.054	-.19818	419.00182	6.13753	2.85712	-8.18972	.03700	-.01379	-.22869	-.24076
.599	8.050	-.19500	417.49174	5.53418	2.34732	-8.28007	.04348	-.01312	-.25084	-.24618
	GRADIENT	-.00231	.05380	-.03428	-.03597	-.08328	.00304	-.00052	.00125	-.00176

RUN NO. 588/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.800	-8.112	-.25392	622.94261	11.38045	6.68069	-11.92856	-.01756	-.01439	-.26683	-.25719
.801	-6.097	-.26537	623.26510	11.69252	7.02056	-12.62125	-.01137	-.01526	-.25712	-.25167
.800	-4.052	-.27357	622.67444	11.79655	7.21174	-13.44733	-.00437	-.01560	-.24547	-.24209
.800	-2.038	-.28490	623.36361	12.50393	7.65782	-14.29921	.00373	-.01582	-.23942	-.23619
.800	-.015	-.29202	622.39990	13.14889	7.99770	-15.40925	.01033	-.01761	-.23332	-.23389
.800	2.009	-.29214	623.22959	11.02676	6.78690	-13.83025	.01760	-.01854	-.23366	-.24540
.800	4.044	-.29268	622.73521	10.04891	6.02219	-14.37236	.02173	-.01760	-.23750	-.24571
.799	6.067	-.28904	621.28849	9.21670	5.34244	-14.87574	.03129	-.01603	-.25231	-.25002
.800	8.093	-.28529	622.93632	7.98633	4.55649	-15.25436	.03697	-.01375	-.27100	-.25318
	GRADIENT	-.00224	-.00070	-.24610	-.16086	-.06805	.00326	-.00033	.00107	-.00081

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ008) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 587/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.849	-8.110	-.27548	668.11803	12.67037	7.70031	-13.92060	-.02240	-.01909	-.27766	-.27312
.850	-6.094	-.28751	668.86137	12.85761	7.97645	-14.60469	-.01418	-.01869	-.26799	-.26677
.850	-4.067	-.29910	668.22754	13.00325	8.18887	-15.21564	-.00497	-.01849	-.26115	-.25938
.850	-2.031	-.30912	668.36853	13.46097	8.48626	-16.07613	.00399	-.01804	-.25510	-.25347
.850	-.016	-.31709	668.97921	14.10593	8.76241	-17.63362	.00936	-.01996	-.24984	-.25069
.849	2.001	-.31805	667.56960	11.71333	7.38168	-15.66310	.01764	-.02112	-.25243	-.25809
.849	4.047	-.31864	667.58531	10.54824	6.59572	-16.10195	.02194	-.01671	-.25784	-.25796
.850	6.074	-.30991	668.30592	9.19590	5.66107	-16.73011	.03088	-.01528	-.26948	-.26251
.850	8.102	-.30611	668.29804	7.71873	4.59897	-17.07861	.03638	-.01297	-.28642	-.26814
	GRADIENT	-.00237	-.10279	-.32871	-.21186	-.06716	.00334	.00002	.00046	-.00009

RUN NO. 586/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.900	-8.131	-.28990	710.75114	13.19050	8.16763	-14.57457	-.03032	-.01346	-.30252	-.29520
.900	-6.092	-.30480	710.53162	13.56499	8.50751	-15.41355	-.01937	-.01346	-.29133	-.28857
.900	-4.063	-.31819	710.82884	13.60660	8.65620	-16.23532	-.00708	-.01444	-.28335	-.28163
.900	-2.035	-.33415	710.43091	14.10593	8.95359	-17.28943	.00038	-.01599	-.27466	-.27496
.900	-.007	-.33824	710.65052	13.56499	8.35881	-18.17143	.01110	-.01535	-.26926	-.27234
.899	2.013	-.34198	709.88211	11.21400	7.10553	-16.13206	.02280	-.01986	-.27243	-.27958
.900	4.062	-.33803	710.61844	9.07107	5.66107	-16.18800	.02519	-.01998	-.27625	-.28149
.900	6.071	-.33210	710.60932	7.30263	4.34407	-16.32137	.03073	-.01731	-.28599	-.28920
.900	8.101	-.32235	710.97509	4.80600	2.55974	-16.21811	.03588	-.01240	-.30055	-.29401
	GRADIENT	-.00234	-.04757	-.58965	-.38635	.06169	.00428	-.00074	.00081	-.00021

RUN NO. 585/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.920	-8.135	-.29214	726.68246	12.69117	7.93397	-14.23898	-.03425	-.00905	-.31140	-.30438
.920	-6.105	-.30588	726.72161	13.10728	8.25260	-14.99621	-.02353	-.00843	-.30262	-.29909
.920	-4.075	-.31912	726.86707	13.29452	8.44378	-15.81798	-.01199	-.00959	-.29217	-.29031
.920	-2.047	-.33624	726.56575	13.81465	8.67744	-16.73011	-.00186	-.01015	-.28159	-.28207
.920	-.006	-.34099	726.93500	13.19050	7.93397	-17.81002	.01026	-.01137	-.27387	-.27962
.919	2.035	-.34664	726.12835	10.48582	6.51075	-15.69751	.02583	-.01509	-.27798	-.28609
.920	4.055	-.34037	727.07085	7.80195	4.72642	-15.59426	.03191	-.01487	-.28257	-.29194
.920	6.074	-.33706	726.60493	5.82546	3.38817	-15.54263	.03511	-.01213	-.29272	-.30183
.920	8.115	-.32730	726.94460	2.85031	1.15776	-15.02203	.03898	-.00877	-.30750	-.30729
	GRADIENT	-.00260	-.00161	-.70353	-.47192	.07279	.00558	-.00076	.00112	-.00036

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ008) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 584/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.950	-8.153	-.30207	749.22783	11.65091	7.23298	-14.24759	-.03791	-.00219	-.33738	-.33020
.950	-6.111	-.31184	749.68867	12.08782	7.40292	-14.69504	-.02955	-.00140	-.32671	-.32396
.951	-4.079	-.32432	749.74242	12.83681	7.89149	-15.55123	-.02110	-.00179	-.31295	-.31215
.950	-2.039	-.33916	749.45047	13.56499	8.10887	-16.19660	-.01289	-.00306	-.29733	-.29910
.950	-.018	-.35292	749.66970	13.35694	7.67907	-16.97104	-.00363	-.00412	-.28633	-.29933
.950	2.006	-.35056	749.59276	9.02946	5.34244	-15.06075	.01509	-.00691	-.28794	-.30301
.950	4.057	-.35068	749.56217	6.63686	3.79177	-15.06505	.02570	-.00751	-.29560	-.31169
.950	6.068	-.34323	749.06237	3.70333	1.60384	-14.48852	.03075	-.00638	-.30964	-.32181
.950	8.111	-.33452	748.90091	.27047	-.79667	-13.45163	.03270	-.00552	-.32670	-.33378
	GRADIENT	-.00315	-.01078	-.83368	-.54373	.10373	.00598	-.00075	.00217	-.00015

RUN NO. 583/ 0 RN/L = 4.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.979	-8.151	-.32179	769.69860	12.00460	6.97808	-15.62437	-.04268	.00330	-.39812	-.37557
.980	-6.116	-.32714	770.37258	12.00460	6.91435	-15.96427	-.03898	.00356	-.37868	-.36548
.980	-4.083	-.34111	770.84732	12.23346	6.95684	-16.43754	-.03329	.00368	-.36006	-.35569
.980	-2.050	-.35757	770.99973	12.44151	6.95684	-17.11733	-.02496	.00284	-.34735	-.34649
.980	-.018	-.36563	770.58755	11.40125	6.17088	-17.03128	-.01609	.00162	-.34196	-.34427
.980	2.026	-.36508	770.31204	7.88517	4.30158	-15.08657	-.00387	-.00116	-.32821	-.34613
.980	4.049	-.36539	770.55632	4.78520	2.26235	-14.92307	.00302	-.00091	-.33733	-.35459
.979	6.083	-.36200	770.15850	1.51878	-.09560	-13.82164	.01035	-.00045	-.35944	-.36574
.979	8.118	-.35309	770.35689	-2.26777	-2.64496	-12.22113	.01279	.00026	-.37366	-.37460
	GRADIENT	-.00276	-.06247	-.95640	-.59212	.24891	.00461	-.00065	.00318	.00013

RUN NO. 582/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.119	-8.168	-.29908	850.26019	7.78115	4.02544	-17.97352	-.06773	.00551	-.34918	-.33809
1.120	-6.148	-.30160	850.34833	5.63821	2.55974	-16.96674	-.06400	.00252	-.34940	-.32837
1.120	-4.100	-.31292	850.40894	2.76709	.54174	-14.98761	-.05876	.00117	-.34326	-.31950
1.119	-2.064	-.32501	850.06264	.47852	-1.03036	-13.27953	-.05385	.00070	-.32671	-.31564
1.120	-.018	-.33739	850.24458	-2.10133	-2.70870	-11.28319	-.04709	.00123	-.31828	-.31222
1.120	2.018	-.34381	850.45586	-5.15969	-4.42951	-9.06312	-.03802	.00275	-.31481	-.31897
1.120	4.043	-.34196	850.32083	-8.57174	-6.78768	-7.97890	-.03803	.00316	-.33240	-.33014
1.119	6.081	-.34270	849.94458	-12.17104	-9.01837	-5.56091	-.03029	.00217	-.34208	-.34189
1.119	8.134	-.33683	849.97414	-16.16564	-11.58898	-2.45023	-.03090	.00305	-.34767	-.34838
	GRADIENT	-.00378	.01067	-1.39005	-.88647	.89534	.00281	.00030	.00166	-.00121

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 1 (SHZ008) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 581/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLW1	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.200	-8.176	-.29752	881.28609	.91543	-.64796	-14.47992	-.07476	.01232	-.34530	-.34049
1.200	-6.133	-.29634	881.60035	-1.66442	-2.32629	-13.03429	-.07648	.00876	-.33913	-.32725
1.200	-4.093	-.30815	881.09646	-3.30803	-3.53724	-12.10496	-.07245	.00537	-.33529	-.31827
1.200	-2.054	-.31671	881.41425	-5.53418	-4.76943	-10.25060	-.06530	.00226	-.32248	-.31814
1.200	-.018	-.32593	881.67980	-7.80195	-6.32029	-7.84122	-.05988	.00073	-.30976	-.30645
1.200	2.030	-.33053	881.38520	-11.23481	-8.31729	-4.94996	-.05067	.00034	-.31635	-.32287
1.200	4.047	-.33004	881.06914	-13.98110	-10.03811	-2.79873	-.04943	.00028	-.32990	-.33351
1.199	6.097	-.33416	881.04927	-16.62336	-11.61022	.32473	-.04214	.00040	-.33677	-.34088
1.200	8.141	-.33522	881.12363	-19.07837	-13.16108	2.83212	-.04282	.00198	-.34345	-.34904
	GRADIENT	-.00283	-.00403	-1.32815	-.81266	1.17433	.00303	-.00059	.00083	-.00173

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2 (SHZ009) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 605/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLW1	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.350	-8.159	-.00017	166.72656	5.89757	1.66766	-.44496	-.12229	-.08932	-.27257	-.27600
.351	-6.138	-.00009	167.94426	4.56620	.79678	-.35468	-.11936	-.08511	-.25985	-.25911
.349	-4.091	-.00001	166.44604	3.15163	-.13811	-.38047	-.11992	-.08378	-.24658	-.24120
.349	-2.072	.00026	166.25861	1.88267	-1.05174	-.39767	-.12006	-.08268	-.23645	-.22876
.350	-.045	.00121	166.91396	.48889	-2.05037	-.46216	-.12061	-.08265	-.22988	-.22647
.350	1.977	.00129	167.10110	-.96756	-2.96400	-.38477	-.12099	-.08167	-.22822	-.22609
.350	4.020	.00127	166.63298	-2.59056	-4.04762	-.24720	-.12164	-.07921	-.22696	-.23013
.351	6.051	.00107	167.85000	-4.08873	-5.13123	-.10102	-.12045	-.07507	-.22628	-.23222
.350	8.084	.00094	166.91324	-5.71173	-6.25734	.18273	-.12061	-.07072	-.22517	-.23350
	GRADIENT	.00018	.05990	-.70721	-.48008	.01382	-.00024	.00050	.00234	.00112

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2 (SHZ009) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 604/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.600	-8.412	-.00026	418.58492	15.77880	7.88925	-4.46240	-.07918	-.05259	-.29962	-.30797
.601	-6.328	.00005	419.66106	12.17995	5.51103	-4.04081	-.07714	-.04949	-.28870	-.29577
.600	-4.245	.00062	419.32902	8.31067	2.92047	-3.88164	-.07720	-.04585	-.27225	-.27381
.600	-2.159	.00156	418.40736	4.81583	.47807	-4.17417	-.07901	-.04523	-.25597	-.25088
.500	-.084	.00266	419.24107	1.21698	-2.00787	-4.66459	-.08150	-.04574	-.25056	-.24475
.599	1.995	.00310	417.90400	-2.46572	-4.51506	-4.63017	-.08361	-.04588	-.24595	-.24464
.601	4.082	.00288	419.48682	-6.56485	-7.36220	-4.40647	-.08431	-.04369	-.23972	-.23882
.600	6.165	.00251	418.56857	-10.70561	-10.18810	-3.99779	-.08552	-.03998	-.23821	-.23825
.600	8.269	.00206	418.81935	-15.05444	-13.24772	-3.40413	-.08608	-.03449	-.23618	-.24090
	GRADIENT	.00029	-.00898	-1.77975	-1.22832	-.07232	-.00090	.00018	.00361	.00366

RUN NO. 603/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.801	-8.667	-.00162	623.68204	23.28854	12.51828	-8.08892	-.06536	-.04775	-.30615	-.30822
.800	-6.521	-.00067	623.15217	19.10722	10.03389	-7.92115	-.06353	-.04260	-.29276	-.29440
.800	-4.384	-.00040	623.13330	13.65694	6.42410	-8.18787	-.06404	-.03868	-.27587	-.27344
.801	-2.264	.00108	623.97522	8.08184	2.68690	-8.97082	-.06628	-.03560	-.26431	-.25667
.800	-.137	.00317	623.19405	1.86186	-1.51919	-9.02674	-.06843	-.03620	-.26109	-.25533
.800	1.998	.00510	623.39511	-3.90146	-5.49244	-9.32357	-.07184	-.03811	-.25722	-.25752
.801	4.135	.00509	623.68204	-10.74722	-10.16685	-8.63096	-.07441	-.03697	-.24968	-.25113
.800	6.285	.00413	623.26107	-17.94672	-15.03250	-7.05216	-.07543	-.03444	-.24479	-.24502
.801	8.414	.00366	623.90193	-21.33839	-17.19973	-5.26686	-.07535	-.02730	-.24644	-.24591
	GRADIENT	.00070	.02427	-2.85419	-1.94194	-.05799	-.00123	.00004	.00279	.00205

RUN NO. 602/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.850	-8.741	-.00186	668.41538	25.51442	13.89849	-9.97316	-.07417	-.04940	-.30523	-.29970
.850	-6.587	-.00121	668.49375	20.50099	10.86202	-9.86992	-.07147	-.04388	-.29249	-.28620
.850	-4.433	-.00101	668.62684	15.23794	7.48580	-10.74321	-.07261	-.04067	-.28186	-.27199
.850	-2.280	.00025	668.42326	8.16505	2.72937	-11.01423	-.07353	-.03532	-.27970	-.27066
.850	-.146	.00185	668.09441	1.19618	-1.98663	-11.02714	-.07254	-.03496	-.27641	-.27008
.850	2.016	.00390	668.24329	-5.54527	-6.53356	-10.83785	-.07368	-.03689	-.26824	-.26745
.850	4.161	.00415	668.15704	-12.91123	-11.50544	-9.25904	-.07382	-.03459	-.26050	-.26233
.850	6.310	.00316	668.23542	-17.98834	-14.71379	-7.73616	-.07330	-.03130	-.25624	-.25691
.850	8.445	.00200	668.37641	-21.06789	-16.75353	-6.29932	-.07315	-.02981	-.25842	-.25944
	GRADIENT	.00065	-.05206	-3.25861	-2.19908	.14642	-.00012	.00049	.00252	.00105

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2 (SHZ009) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 601/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.900	-8.818	-.00127	710.58195	28.65561	15.83079	-13.47063	-.09169	-.06568	-.31833	-.30561
.899	-6.642	-.00247	710.09703	21.33310	11.18053	-11.58639	-.08694	-.05822	-.30924	-.29546
.900	-4.481	-.00219	710.55897	13.74015	6.42410	-10.35604	-.08326	-.05404	-.30285	-.28888
.900	-2.312	-.00036	710.72822	4.91985	.47807	-9.29346	-.08469	-.04555	-.30167	-.29002
.900	-.151	.00174	710.68702	-4.08873	-5.53493	-8.16636	-.08470	-.04212	-.29859	-.28850
.900	2.008	.00316	710.46304	-10.87207	-9.89064	-7.70605	-.08581	-.03951	-.28972	-.28110
.900	4.176	.00455	710.54985	-16.98956	-13.84264	-7.13389	-.08590	-.03897	-.28017	-.27589
.899	6.331	.00440	710.08793	-21.44243	-16.75353	-5.94656	-.08346	-.03781	-.27149	-.27177
.900	8.481	.00302	710.60020	-24.14745	-18.55956	-5.05176	-.07965	-.03140	-.27042	-.27191
	GRADIENT	.00079	-.01308	-3.57085	-2.35290	.37127	-.00029	.00167	.00265	.00161

RUN NO. 600/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.921	-8.853	-.00205	727.29445	31.54717	17.72062	-16.75300	-.10053	-.07067	-.32369	-.31077
.920	-6.662	-.00319	726.84787	23.37175	12.47581	-14.39554	-.09565	-.06393	-.31405	-.29934
.920	-4.491	-.00203	726.42985	14.69707	6.97618	-12.49409	-.09123	-.06294	-.30807	-.29306
.920	-2.328	-.00132	726.47663	5.54392	.86052	-10.87227	-.09087	-.05697	-.30783	-.29551
.920	-.147	.00119	726.36190	-4.38003	-5.74741	-8.59225	-.08888	-.04964	-.30572	-.29643
.920	2.023	.00331	727.06124	-13.38981	-11.73916	-6.30362	-.08797	-.04617	-.30044	-.29408
.921	4.175	.00424	727.44949	-19.48650	-15.64867	-5.60671	-.09110	-.04156	-.28990	-.28693
.920	6.350	.00421	726.58492	-24.60522	-19.02700	-4.66889	-.09415	-.03290	-.28085	-.28255
.920	8.502	.00311	726.77994	-27.12296	-20.72678	-3.86443	-.08918	-.02440	-.27968	-.28182
	GRADIENT	.00079	.12084	-4.02665	-2.66839	.84624	.00015	.00247	.00202	.00063

RUN NO. 599/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.949	-8.909	-.00354	748.61622	35.10442	19.86527	-21.46791	-.12694	-.07678	-.34501	-.33419
.950	-6.720	-.00367	749.15428	26.07609	14.06836	-19.11906	-.12399	-.07060	-.33587	-.32489
.950	-4.527	-.00216	748.98136	16.63171	7.93172	-16.91647	-.12094	-.07115	-.32985	-.32036
.950	-2.334	-.00040	748.90847	6.83509	1.43409	-14.91177	-.11901	-.06870	-.32557	-.320 9
.950	-.170	.00141	748.81240	-3.46449	-5.51369	-12.42526	-.11613	-.06252	-.32151	-.32157
.950	2.007	.00247	748.96228	-14.13889	-12.75903	-8.44168	-.11248	-.05200	-.31936	-.32318
.949	4.184	.00437	748.61622	-23.10706	-18.72953	-4.99154	-.11196	-.04038	-.31424	-.31663
.949	6.372	.00333	748.62777	-30.74352	-23.82890	-1.25322	-.11562	-.02189	-.31276	-.31276
.949	8.535	.00177	748.61622	-35.92466	-27.16473	.98239	-.11368	-.01131	-.30846	-.30994
	GRADIENT	.00073	-.03109	-4.61841	-3.10224	1.39305	.00113	.00359	.00172	.00022

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 2 (SHZ009) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 598/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.979	-8.975	-.00421	769.50221	37.08067	21.01191	-24.84492	-.14330	-.07463	-.38646	-.37307
.980	-6.756	-.00408	769.53426	27.05381	14.38687	-21.58406	-.13929	-.06919	-.37673	-.36298
.980	-4.547	-.00298	769.53426	16.88134	7.78308	-19.34706	-.13784	-.06996	-.37408	-.36176
.979	-2.333	-.00082	769.50343	6.72967	1.03050	-17.19179	-.13673	-.06841	-.37182	-.36622
.979	-.174	.00109	769.51856	-3.98469	-6.15111	-14.58913	-.13573	-.06090	-.37130	-.37353
.980	2.012	.00322	769.73263	-15.11686	-13.77890	-10.32162	-.13491	-.04989	-.36624	-.36768
.979	4.207	.00397	769.54881	-24.56360	-20.08936	-6.13585	-.13406	-.03650	-.37066	-.37015
.979	6.388	.00261	769.47198	-32.57461	-25.46494	-1.70056	-.13374	-.01748	-.37842	-.37676
.979	8.553	.00247	769.24269	-39.10826	-29.67192	1.54989	-.13400	-.00466	-.37778	-.37713
	GRADIENT	.00082	.01179	-4.79249	-3.22837	1.52338	.00043	.00391	.00057	-.00083

RUN NO. 597/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.118	-9.096	-.00592	849.49131	39.51457	22.88050	-31.16444	-.15691	-.06479	-.39196	-.37445
1.119	-6.847	-.00442	849.82165	28.53080	15.42734	-27.09482	-.15594	-.05913	-.38825	-.37012
1.119	-4.609	-.00388	849.86833	15.73720	6.82754	-21.33885	-.15442	-.05878	-.38735	-.37116
1.119	-2.383	-.00183	849.71733	1.46661	-2.70904	-13.69003	-.15344	-.05129	-.39016	-.38629
1.119	-.181	.00054	850.15449	-11.43388	-11.46294	-8.80304	-.14964	-.03831	-.38551	-.38296
1.119	2.017	.00270	850.27579	-22.06667	-18.62330	-3.97198	-.14307	-.02489	-.39320	-.39042
1.120	4.222	.00328	850.32083	-31.92957	-25.14623	1.25324	-.13481	-.01113	-.40101	-.40087
1.119	6.413	.00085	850.03482	-40.06542	-30.47932	5.91361	-.12620	.00146	-.39675	-.39699
1.120	8.612	.00134	850.47149	-47.34815	-34.94126	9.92480	-.11989	.01270	-.39090	-.39255
	GRADIENT	.00085	.06628	-5.38861	-3.62038	2.48907	.00225	.00552	-.00138	-.00288

RUN NO. 596/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.200	-9.132	-.00481	881.66427	37.18468	21.73386	-32.50665	-.14604	-.06841	-.39082	-.37652
1.200	-6.863	-.00468	881.55573	24.82793	13.32517	-25.01699	-.14479	-.05441	-.38902	-.37580
1.200	-4.629	-.00357	881.44919	11.97193	4.57673	-16.67126	-.14365	-.03978	-.39687	-.39124
1.199	-2.387	-.00169	881.00645	-1.52937	-4.51506	-9.09987	-.14003	-.02657	-.40384	-.40004
1.200	-.181	.00071	881.48598	-13.74355	-12.67404	-3.03846	-.13422	-.01842	-.40750	-.40936
1.200	2.036	.00353	881.24939	-24.73007	-19.94063	.96089	-.12755	-.01057	-.40416	-.41031
1.200	4.235	.00505	881.42964	-34.17681	-26.18735	5.25153	-.11947	-.00226	-.40330	-.41042
1.200	6.418	.00318	881.39291	-42.18781	-31.37170	9.30571	-.11054	.00887	-.40676	-.40970
1.199	8.627	.00264	881.15624	-49.49135	-36.04612	13.15783	-.10396	.01848	-.40307	-.40585
	GRADIENT	.00101	.00906	-5.21509	-3.47473	2.43450	.00275	.00411	-.00060	-.00220

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (SHZ010) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 615/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.351	-8.153	-.00034	167.75862	5.90583	2.69774	-1.50968	-.05516	-.05048	-.26228	-.26501
.351	-6.133	-.00012	168.03923	4.63735	1.80557	-1.45376	-.05405	-.04713	-.24641	-.24501
.350	-4.101	-.00006	166.72869	3.24410	.84968	-1.43225	-.05345	-.04422	-.23795	-.22908
.352	-2.060	.00024	168.97536	1.95482	.02124	-1.43225	-.05375	-.04304	-.23064	-.22052
.351	-.021	.00078	168.31982	.64475	-.95589	-1.42795	-.05447	-.04409	-.22312	-.21579
.351	1.998	.00146	167.85168	-.81130	-1.93303	-1.42365	-.05462	-.04392	-.22092	-.21825
.351	4.035	.00111	167.57128	-2.43390	-3.10134	-1.25160	-.05471	-.04191	-.22316	-.22654
.351	6.069	.00088	168.13252	-3.95249	-4.16344	-1.04083	-.05453	-.03851	-.22149	-.22952
.351	8.103	.00053	168.03923	-5.45028	-5.18306	-.80855	-.05405	-.03468	-.21881	-.22778
	GRADIENT	.00018	.02794	-.69461	-.48479	.01819	-.00017	.00018	.00193	.00036

RUN NO. 614/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.599	-8.419	-.00058	418.32266	15.76257	8.87917	-4.82175	-.05260	-.03751	-.28413	-.29115
.600	-6.332	-.00074	418.31775	12.16507	6.58503	-4.56797	-.05199	-.03417	-.26853	-.27189
.599	-4.246	-.00035	417.98219	8.54677	4.07847	-4.52495	-.05346	-.03015	-.25428	-.24984
.599	-2.160	.00125	418.06364	4.92848	1.67812	-4.64109	-.05468	-.02907	-.24633	-.23874
.599	-.066	.00177	418.23469	1.55972	-.61602	-4.83895	-.05732	-.02906	-.24096	-.23378
.599	2.005	.00277	418.07506	-2.24668	-3.20755	-5.02391	-.05836	-.02931	-.23880	-.23650
.600	4.106	.00300	419.31939	-6.28239	-6.01150	-4.79594	-.05976	-.02739	-.23659	-.23728
.602	6.187	.00273	421.32352	-10.27648	-8.79420	-4.47764	-.06015	-.02388	-.23144	-.23382
.599	8.281	.00166	417.82253	-14.27058	-11.70436	-3.75070	-.06086	-.01931	-.23237	-.23927
	GRADIENT	.00039	.03291	-1.76499	-1.20110	-.04427	-.00078	.00025	.00206	.00131

RUN NO. 613/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.800	-8.678	-.00282	623.49102	23.29029	13.65863	-8.73601	-.04929	-.03675	-.28727	-.28723
.800	-6.537	-.00181	623.11443	19.21451	11.17331	-8.92527	-.04836	-.03174	-.27419	-.27132
.800	-4.396	-.00092	622.84625	14.05739	7.79583	-9.38552	-.04907	-.02767	-.26117	-.25133
.800	-2.245	-.00002	623.40771	8.21406	3.88605	-9.52316	-.04985	-.02445	-.25590	-.24534
.800	-.123	.00252	623.54803	2.12118	-.29739	-9.53607	-.05121	-.02524	-.24967	-.24353
.800	2.014	.00356	623.34698	-4.05651	-4.50331	-9.45864	-.05493	-.02717	-.24457	-.24235
.800	4.139	.00467	622.83997	-10.90056	-9.13407	-8.73601	-.05800	-.02599	-.23984	-.24065
.800	6.291	.00440	623.18775	-17.47418	-13.65863	-7.17891	-.05824	-.02366	-.23454	-.23601
.801	8.430	.00347	623.60243	-20.76100	-15.76159	-5.72934	-.05834	-.01661	-.23100	-.23373
	GRADIENT	.00069	-.00328	-2.91571	-1.97998	.06383	-.00108	.00003	.00253	.00114

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (SHZ010) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 612/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.850	-8.755	-.00431	668.47010	25.66089	15.10309	-10.65443	-.05878	-.03905	-.28504	-.27428
.850	-6.582	-.00218	668.45432	20.69094	12.00175	-10.86089	-.05724	-.03391	-.27529	-.26188
.850	-4.436	-.00163	668.72833	15.01396	8.36936	-11.35555	-.05824	-.03054	-.26931	-.25535
.850	-2.280	-.00031	668.79090	8.06849	3.75984	-11.12328	-.05798	-.02495	-.26729	-.25498
.851	-.126	.00158	669.04113	1.33098	-.78596	-11.18350	-.05694	-.02487	-.26368	-.25478
.850	2.012	.00476	668.32913	-5.45028	-5.31051	-11.19640	-.05700	-.02638	-.25910	-.25572
.850	4.172	.00440	668.53269	-12.77280	-10.21742	-9.63070	-.05864	-.02399	-.25492	-.25518
.850	6.316	.00429	668.72833	-17.59900	-13.31876	-8.31447	-.05786	-.02093	-.25120	-.25231
.850	8.474	.00316	668.47798	-20.44896	-15.14557	-7.25633	-.05596	-.01759	-.24811	-.25052
	GRADIENT	.00080	-.03957	-3.21243	-2.15010	.15707	.00001	.00054	.00172	-.00002

RUN NO. 611/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.900	-8.829	-.00526	711.07563	28.36422	16.71748	-14.05683	-.07812	-.05576	-.30236	-.29022
.900	-6.639	-.00536	710.97509	20.87809	12.08672	-12.02227	-.07392	-.04785	-.29588	-.28156
.900	-4.462	-.00253	710.83797	13.05924	7.05236	-10.29311	-.07117	-.04450	-.29428	-.27776
.900	-2.276	-.00084	710.67789	4.22145	1.12583	-9.08872	-.07130	-.03526	-.29058	-.27441
.900	-.105	.00081	710.65965	-4.45176	-4.71573	-7.83272	-.07154	-.03210	-.28816	-.27508
.899	2.044	.00277	710.23424	-11.21260	-9.07035	-8.03058	-.07171	-.03079	-.28556	-.27646
.900	4.184	.00421	710.26639	-16.47566	-12.46907	-7.76390	-.07086	-.02896	-.27702	-.27325
.900	6.335	.00424	710.70997	-21.13544	-15.52793	-6.79178	-.06552	-.02839	-.27121	-.27110
.900	8.511	.00211	710.79679	-23.83978	-17.18481	-5.95731	-.06358	-.02200	-.26521	-.26908
	GRADIENT	.00079	-.07340	-3.44884	-2.27941	.28362	.00001	.00165	.00183	.00032

RUN NO. 610/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.920	-8.874	-.00588	726.30352	30.63085	18.20442	-16.85273	-.08721	-.06152	-.31230	-.30044
.920	-6.668	-.00365	726.87667	22.70803	13.17006	-14.53858	-.08231	-.05393	-.30307	-.28825
.920	-4.483	-.00259	726.63370	14.20296	7.66837	-12.59435	-.07904	-.05422	-.30015	-.28393
.920	-2.304	-.00077	726.47863	4.99086	1.50818	-10.91681	-.07847	-.04779	-.29870	-.28410
.920	-.115	.00130	726.66328	-4.82620	-5.05560	-8.48223	-.07562	-.04106	-.29905	-.29027
.920	2.042	.00330	726.96450	-13.29286	-10.62102	-7.00685	-.07618	-.03769	-.29838	-.29176
.920	4.193	.00370	726.78954	-19.26321	-14.44458	-6.19389	-.07997	-.03276	-.29067	-.28849
.920	6.350	.00378	726.67287	-24.15182	-17.65213	-5.56159	-.08045	-.02399	-.28141	-.28359
.920	8.520	.00385	726.53699	-26.81455	-19.30901	-4.89487	-.07552	-.01584	-.27919	-.28569
	GRADIENT	.00077	.03677	-3.92848	-2.59806	.77060	.00002	.00244	.00089	-.00078

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (SHZ010) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 609/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.950	-8.920	-.00460	749.32387	34.18676	20.28614	-22.02730	-.11685	-.06854	-.33983	-.32951
.950	-6.719	-.00307	749.60014	25.24500	14.48707	-19.65293	-.11464	-.06452	-.33574	-.32429
.950	-4.526	-.00238	749.38511	15.99131	8.45433	-17.38180	-.11216	-.06454	-.32911	-.32009
.950	-2.316	-.00044	749.59276	6.67524	2.31538	-15.49779	-.11053	-.06140	-.32399	-.31959
.950	-.143	.00133	749.23535	-3.53644	-4.50331	-12.74920	-.10658	-.05525	-.32004	-.32370
.950	2.030	.00253	749.13932	-14.12497	-11.72560	-8.86935	-.10203	-.04415	-.31818	-.32353
.950	4.200	.00347	749.38924	-22.75804	-17.48219	-5.69493	-.10154	-.03197	-.31609	-.31998
.950	6.373	.00368	749.12775	-30.16377	-22.41035	-2.05165	-.10248	-.01363	-.31264	-.31434
.950	8.548	.00234	748.96629	-35.65566	-25.91528	-.01287	-.09965	-.00299	-.31059	-.31346
	GRADIENT	.00067	-.02039	-4.50942	-3.02373	1.37582	.00136	.00378	.00146	-.00017

RUN NO. 608/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.980	-8.974	-.00458	771.22751	36.09988	21.41197	-25.26624	-.13483	-.06795	-.38650	-.37216
.981	-6.743	-.00389	771.19870	26.18076	14.86942	-22.15634	-.13184	-.06343	-.37984	-.36482
.981	-4.541	-.00239	771.15285	16.28244	8.39060	-19.93252	-.13107	-.06356	-.37648	-.36381
.981	-2.334	-.00108	770.98493	6.38411	1.82681	-17.64418	-.12999	-.06164	-.37225	-.36833
.980	-.144	.00153	770.86248	-4.26453	-5.33175	-14.67623	-.12802	-.05357	-.36981	-.37574
.980	2.039	.00316	770.75595	-15.22750	-12.83019	-10.77917	-.12637	-.04201	-.36691	-.36971
.980	4.210	.00395	770.69450	-24.23503	-18.84168	-6.95954	-.12449	-.02863	-.37302	-.37356
.980	6.383	.00347	770.74039	-32.16082	-24.15219	-2.80440	-.12371	-.00944	-.37811	-.37792
.980	8.571	.00223	770.73997	-38.33919	-28.16694	.27091	-.12326	.00388	-.38246	-.38225
	GRADIENT	.00077	-.05240	-4.69252	-3.15989	1.49944	.00077	.00409	.00056	-.00096

RUN NO. 607/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.120	-9.098	-.00513	850.39524	38.49129	23.19630	-31.44303	-.14935	-.05928	-.39875	-.38348
1.119	-6.827	-.00485	849.62555	27.42845	15.86780	-27.27929	-.14828	-.05359	-.39403	-.38144
1.119	-4.595	-.00358	850.12663	14.59806	7.09484	-21.86384	-.14789	-.05414	-.38910	-.37589
1.119	-2.365	-.00227	850.10942	.83190	-2.14545	-14.03962	-.14678	-.04506	-.39467	-.39165
1.118	-.141	.00090	849.73287	-11.94069	-10.79095	-8.78333	-.14333	-.03253	-.39873	-.39799
1.119	2.053	.00174	849.88388	-22.42520	-17.86455	-4.43032	-.13756	-.01776	-.39693	-.39768
1.119	4.244	.00215	849.86833	-31.57835	-24.00350	-.14187	-.12880	-.00352	-.39683	-.39638
1.118	6.424	.00290	849.65800	-40.00340	-29.42022	4.42450	-.12168	.00885	-.39050	-.38907
1.119	8.645	.00158	849.89943	-46.34819	-33.62614	8.34159	-.11591	.02027	-.38908	-.38728
	GRADIENT	.00070	-.03369	-5.23392	-3.52743	2.40225	.00214	.00582	-.00080	-.00213

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (SHZ010) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = .000

RUN NO. 606/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
1.200	-9.131	-.00529	881.16995	36.72373	22.47407	-32.74635	-.14734	-.06529	-.39230	-.38611
1.200	-6.857	-.00464	881.48406	24.20526	13.95602	-25.36087	-.14418	-.05035	-.38987	-.38689
1.199	-4.606	-.00362	881.23568	10.91738	4.92815	-17.02478	-.14267	-.03408	-.40406	-.39933
1.200	-2.371	-.00089	881.27669	-2.18427	-4.01474	-9.39842	-.13664	-.02114	-.40559	-.40333
1.199	-.150	.00204	881.04166	-14.66583	-12.32038	-3.03237	-.12852	-.01300	-.40942	-.41256
1.200	2.060	.00443	881.26896	-25.25436	-19.28777	.59340	-.12314	-.00362	-.40403	-.41013
1.199	4.242	.00433	881.21430	-33.92904	-25.12933	4.06331	-.11655	.00492	-.40253	-.40908
1.199	6.442	.00420	881.02026	-42.20848	-30.33362	7.93311	-.10803	.01644	-.40396	-.40792
1.199	8.670	.00331	881.43123	-48.63648	-34.68824	11.56642	-.10050	.02542	-.40150	-.40432
	GRADIENT	.00096	-.00232	-5.09793	-3.40828	2.35945	.00297	.00432	.00021	-.00119

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (SHZ011) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 625/ 0 RN/L = 2.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.350	-8.149	-.00030	167.10157	9.27450	5.09809	-2.58513	.03504	-.00298	-.27788	-.28523
.349	-6.120	-.00032	166.35268	8.13078	4.33337	-2.60234	.03366	-.00749	-.26683	-.27426
.349	-4.080	.00008	165.79010	6.88309	3.46245	-2.62385	.02964	-.00841	-.25871	-.26716
.349	-2.067	.00063	166.25861	5.53143	2.54904	-2.57223	.02750	-.00899	-.25138	-.25983
.350	-.042	.00103	166.72704	4.32533	1.76309	-2.74859	.02434	-.00926	-.22616	-.22673
.349	1.999	.00131	166.25885	3.07765	.87092	-2.94215	.02029	-.00779	-.22584	-.23253
.350	4.020	.00118	166.82085	1.72598	-.14869	-2.96796	.01766	-.00776	-.21849	-.22332
.350	6.053	.00101	166.82062	.37432	-1.08334	-2.89913	.01407	-.00717	-.20813	-.21347
.349	8.100	.00072	166.53939	-.95690	-1.99675	-2.71848	.01358	-.00598	-.19998	-.22087
	GRADIENT	.00014	.10157	-.63000	-.43918	-.05225	-.00154	.00012	.00523	.00567

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (SHZ011) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 624/ 0 RN/L = 3.17 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.599	-8.441	-.00093	417.89585	25.22411	15.61290	-8.32749	.02671	.00298	-.29553	-.30063
.599	-6.356	-.00050	418.14508	22.27125	13.78608	-8.54686	.02301	-.00071	-.28200	-.28659
.598	-4.271	.00019	417.05991	18.75693	11.53442	-8.55546	.01978	-.00537	-.27202	-.27781
.598	-2.194	.00144	417.06478	15.09704	9.07035	-8.48234	.01630	-.00597	-.26335	-.27293
.600	-.110	.00258	418.56857	11.66590	6.81869	-8.83935	.01133	-.00726	-.25484	-.26779
.599	1.957	.00334	417.73781	8.21396	4.41834	-9.40713	.00500	-.00644	-.24992	-.26573
.600	4.043	.00353	418.90895	4.78282	1.95427	-9.44154	.00091	-.00499	-.24037	-.25524
.599	6.147	.00306	417.82253	.97737	-.67975	-9.20067	-.00135	-.00465	-.23105	-.24002
.599	8.237	.00231	417.57323	-2.47549	-3.14382	-8.66729	-.00155	-.00310	-.22085	-.22911
	GRADIENT	.00041	.21054	-1.67627	-1.14598	-.12976	-.00236	.00001	.00369	.00252

RUN NO. 623/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.800	-8.779	-.00372	623.26107	40.73703	25.38423	-17.94969	.02491	.00423	-.27753	-.26887
.800	-6.629	-.00152	622.55916	36.88999	23.11133	-18.44005	.02205	.00064	-.27239	-.26161
.800	-4.489	-.00094	623.46842	33.00137	20.81719	-19.95413	.02065	-.00823	-.26521	-.25448
.800	-2.333	.00071	623.32180	26.88769	16.80245	-19.94983	.01763	-.01111	-.25707	-.24650
.800	-.208	.00152	623.52913	20.77402	12.80895	-19.52830	.01392	-.01446	-.24943	-.24316
.800	1.912	.00418	622.63251	14.39002	8.60302	-18.68523	.00830	-.01664	-.24711	-.24537
.800	4.060	.00422	623.52913	7.83966	4.22716	-17.54966	.00294	-.01694	-.24174	-.24178
.799	6.218	.00445	622.59054	.91499	-.61602	-15.63124	.00281	-.01480	-.23588	-.24023
.800	8.356	.00321	623.18775	-7.69694	-6.75497	-12.48693	.00349	-.01343	-.22962	-.23764
	GRADIENT	.00065	-.02644	-2.94335	-1.93876	.28446	-.00210	-.00108	.00267	.00124

RUN NO. 622/ 0 RN/L = 3.88 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.850	-8.841	-.00469	668.07866	44.39692	27.57216	-21.84244	.01376	.00365	-.29237	-.28543
.850	-6.706	-.00285	668.35277	39.75968	24.76821	-22.10913	.01503	.00194	-.28497	-.27736
.850	-4.542	-.00177	668.59528	35.37197	22.15544	-23.51998	.01528	-.01296	-.27606	-.26850
.850	-2.374	.00012	668.14129	28.57207	17.80082	-23.18448	.01350	-.01603	-.26705	-.26140
.850	-.217	.00199	668.13341	21.75138	13.40372	-22.66831	.01056	-.01916	-.25235	-.25778
.850	1.904	.00365	668.27440	14.78512	8.85793	-21.34778	.00902	-.01901	-.26053	-.25819
.849	4.058	.00486	668.02390	7.09104	3.63239	-19.29172	.00633	-.01819	-.25885	-.25898
.850	6.238	.00427	668.80670	-1.83061	-2.52780	-15.89362	.00748	-.01609	-.25788	-.26503
.850	8.413	.00239	668.14916	-10.69251	-8.73048	-12.04818	.01056	-.01439	-.25316	-.26620
	GRADIENT	.00078	-.04715	-3.27523	-2.14107	.47885	-.00104	-.00063	.00191	.00104

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (SHZ011) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 621/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.900	-8.915	-.00554	710.51338	46.20606	28.57054	-24.44478	.00547	.00350	-.31090	-.31434
.900	-6.753	-.00524	710.57283	41.13213	25.46920	-24.73298	.00595	.00091	-.30080	-.30804
.899	-4.563	-.00164	710.08793	34.47780	21.39073	-24.28563	.00849	-.01403	-.28606	-.29734
.900	-2.409	.00001	710.38534	27.01246	16.54754	-23.46837	.00728	-.01423	-.27963	-.29215
.900	-.254	.00258	710.40357	19.98382	12.06548	-22.93069	.00246	-.00933	-.27520	-.28696
.899	1.906	.00427	710.21602	12.31054	6.96739	-21.84674	.00174	-.00849	-.27439	-.28682
.899	4.086	.00420	709.97802	2.24585	.04248	-18.03572	.00102	-.00793	-.27105	-.28339
.899	6.262	.00440	710.14742	-6.84403	-6.07522	-14.34082	.00596	-.00856	-.26954	-.27924
.900	8.459	.00276	710.37622	-16.26761	-12.46907	-10.15557	.00897	-.[illegible]673	-.27366	-.28609
	GRADIENT	.00074	-.01811	-3.66349	-2.41925	.65407	-.00095	.00083	.00163	.00154

RUN NO. 620/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.919	-8.968	-.00590	726.11878	46.87150	29.03786	-24.67276	-.00066	.00322	-.32007	-.32951
.920	-6.769	-.00329	726.28437	42.00551	26.27640	-25.17172	.00052	-.00823	-.30387	-.31887
.920	-4.584	-.00228	726.35232	33.85395	20.85968	-23.48557	.00194	-.00871	-.29345	-.31183
.920	-2.421	-.00017	726.23556	25.80636	15.65538	-22.36291	-.00018	-.00789	-.28776	-.30769
.920	-.258	.00207	726.55617	18.48659	10.93965	-21.77792	-.00407	-.00446	-.28114	-.30216
.920	1.912	.00380	726.45860	10.02311	5.31051	-20.41008	-.00231	-.00267	-.27815	-.29854
.919	4.091	.00486	726.01154	-.04158	-1.55067	-16.65927	-.00125	-.00165	-.27627	-.29410
.919	6.271	.00455	725.62273	-9.25713	-7.79583	-12.76222	.00559	-.00254	-.27805	-.29524
.919	8.471	.00280	725.96268	-18.38948	-13.84981	-8.86516	.00759	-.00199	-.28257	-.30135
	GRADIENT	.00084	-.02123	-3.85471	-2.54446	.72012	-.00039	.00089	.00203	.00206

RUN NO. 619/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.950	-9.002	-.00493	749.52741	49.34608	30.82219	-26.07931	-.01011	.00797	-.35769	-.36722
.951	-6.809	-.00348	749.69601	40.65385	25.10808	-23.37804	-.01045	.00073	-.34483	-.35588
.950	-4.608	-.00264	749.53480	31.69129	19.18156	-21.37359	-.01148	.00186	-.33126	-.34770
.950	-2.426	-.00112	749.56958	23.60212	13.93477	-20.00575	-.01456	.00385	-.32002	-.34361
.950	-.262	.00214	749.55799	16.03281	9.02786	-19.30893	-.01696	.00618	-.31205	-.34289
.950	1.918	.00332	749.33134	7.29899	3.22879	-17.56256	-.01674	.00658	-.30448	-.34016
.950	4.116	.00403	749.33134	-3.20358	-3.88729	-14.22899	-.01217	.00571	-.30217	-.33567
.950	6.307	.00341	749.30071	-12.73117	-10.30239	-10.11256	-.00223	.00571	-.30092	-.33088
.950	8.479	.00304	748.96629	-22.25876	-16.61127	-6.03915	-.00246	.00578	-.30030	-.32547
	GRADIENT	.00082	-.02961	-3.95125	-2.60892	.76836	-.00016	.00048	.00338	.00126

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3 (SHZ011) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 618/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.978	-9.053	-.00464	769.11584	48.57667	30.18493	-24.98246	-.02009	.00654	-.42714	-.43383
.979	-6.843	-.00375	770.23472	39.67650	24.21592	-22.48765	-.02151	.00905	-.41235	-.42113
.981	-4.632	-.00310	771.07631	30.79712	18.26815	-20.81871	-.02526	.01020	-.40544	-.41871
.980	-2.443	-.00135	770.41852	22.49999	12.87267	-19.57131	-.02761	.01170	-.39782	-.41205
.980	-.249	.00169	770.61785	14.68115	7.83831	-18.93040	-.03038	.01395	-.39199	-.40696
.980	1.931	.00264	770.66376	5.11554	1.44446	-17.11952	-.03149	.01357	-.38433	-.39974
.980	4.098	.00390	770.66376	-4.76377	-5.24678	-13.83756	-.02949	.01137	-.37617	-.39325
.980	6.305	.00376	770.40339	-15.26909	-12.23541	-9.29100	-.02028	.01176	-.37131	-.39237
.980	8.500	.00295	770.25042	-24.81748	-18.60802	-4.76164	-.01951	.01021	-.36879	-.39220
	GRADIENT	.00082	-.02662	-4.05309	-2.67699	.75122	-.00057	.00019	.00330	.00290

RUN NO. 617/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.119	-9.180	-.00432	849.53376	51.23841	32.07547	-29.45160	-.05516	.01453	-.41284	-.40799
1.119	-6.918	-.00414	849.80764	41.94313	25.91528	-26.37180	-.05434	.01705	-.40918	-.40434
1.119	-4.667	-.00368	849.85277	30.21486	18.07697	-22.86617	-.05534	.01658	-.40386	-.40024
1.118	-2.441	-.00133	849.68768	16.65665	9.04911	-17.65719	-.05757	.01131	-.39600	-.39343
1.119	-.217	.00047	849.71733	4.05500	.80720	-13.81605	-.05837	.00603	-.40363	-.40139
1.119	1.982	.00182	850.19954	-6.30316	-6.01150	-11.11048	-.05864	.00334	-.39588	-.39856
1.119	4.185	.00276	850.35204	-16.41323	-12.70274	-7.11019	-.05994	.00662	-.38721	-.38910
1.119	6.357	.00259	850.03482	-25.94082	-19.11783	-2.59804	-.05704	.01224	-.38210	-.38199
1.119	8.608	.00091	850.29139	-34.15785	-24.70449	2.23179	-.05390	.01915	-.38309	-.38059
	GRADIENT	.00072	.06812	-5.25319	-3.46338	1.72043	-.00046	-.00126	.00151	.00077

RUN NO. 616/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.200	-9.215	-.00515	880.52070	50.82251	32.52155	-31.93350	-.06158	.01374	-.41935	-.41053
1.200	-6.931	-.00493	880.65055	39.61411	25.21429	-27.01271	-.06283	.01199	-.42581	-.41812
1.199	-4.653	-.00288	880.93320	24.70424	14.93315	-19.89822	-.06242	.01034	-.42323	-.41565
1.200	-2.421	-.00012	881.44330	10.93908	5.60790	-13.41603	-.06025	.00559	-.41135	-.41324
1.200	-.186	.00139	881.27669	-1.37295	-2.40035	-8.65729	-.05958	.00299	-.40952	-.41177
1.200	2.043	.00390	881.41237	-11.85746	-9.32525	-5.87139	-.06113	.00571	-.40431	-.40605
1.200	4.208	.00466	881.44919	-21.36425	-15.76159	-2.58083	-.06093	.01056	-.40129	-.40340
1.200	6.402	.00338	881.23401	-30.10134	-21.58191	1.29014	-.05774	.01729	-.39878	-.39904
1.199	8.638	.00361	881.10593	-37.63189	-26.61627	5.53402	-.05309	.02407	-.39323	-.39725
	GRADIENT	.00086	.04519	-5.18223	-3.44127	1.90245	.00010	.00002	.00230	.00143

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (SHZ012) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 635/ 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.350	-8.167	-.00039	166.63487	9.20170	4.97064	-2.32917	.02729	-.01345	-.27437	-.28149
.350	-6.139	-.00033	166.63463	8.07878	4.24841	-2.39799	.02575	-.01644	-.26163	-.26646
.351	-4.112	-.00003	167.57128	7.03904	3.50494	-2.45821	.02356	-.01665	-.24987	-.25519
.350	-2.077	.00046	167.19657	5.62[illegible]99	2.59153	-2.39369	.02105	-.01788	-.24525	-.25107
.350	-.050	.00095	167.00967	4.43969	1.74185	-2.66038	.01749	-.02088	-.22057	-.21293
.350	1.990	.00106	167.10348	3.12962	.84968	-2.78942	.01543	-.02087	-.21716	-.21235
.350	4.002	.00158	167.00943	1.79875	-.12745	-2.80662	.01083	-.02028	-.21398	-.21012
.350	6.046	.00078	167.00990	.44709	-1.08334	-2.68188	.00929	-.01998	-.20645	-.21106
.350	8.090	.00059	167.10348	-.88397	-2.01799	-2.51843	.00570	-.01818	-.20022	-.21984
	GRADIENT	.00019	-.05997	-.63936	-.44377	-.05384	-.00153	-.00051	.00492	.00635

RUN NO. 634/ 0 RN/L = 3.16 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.600	-8.461	-.00066	419.00346	25.13052	15.50668	-7.81774	.02351	-.00083	-.29453	-.29895
.601	-6.399	-.00103	420.58873	22.35481	13.67987	-8.01990	.02037	-.00415	-.27935	-.28382
.600	-4.313	-.00006	418.66471	18.85049	11.32200	-8.20917	.01720	-.00857	-.26792	-.27266
.600	-2.204	.00101	418.82590	15.35696	8.90041	-8.26078	.01372	-.00963	-.25899	-.26563
.600	-.130	.00228	418.90731	11.96741	6.69124	-8.57048	.00840	-.01237	-.24561	-.25138
.600	1.944	.00328	418.82099	8.55706	4.29089	-9.12536	.00268	-.01344	-.23702	-.23854
.599	4.048	.00332	417.56347	4.81400	1.72060	-9.04794	-.00079	-.01348	-.23307	-.23574
.600	6.119	.00282	418.31122	1.23729	-.80720	-8.81996	-.00427	-.01322	-.22830	-.22874
.599	8.227	.00195	417.22291	-2.48577	-3.39873	-8.18766	-.00510	-.01242	-.22177	-.22919
	GRADIENT	.00043	-.10588	-1.67100	-1.14102	-.12167	-.00225	-.00065	.00439	.00483

RUN NO. 633/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.800	-8.778	-.00384	623.32180	40.66423	25.19305	-17.19476	.01855	.00000	-.27825	-.26977
.800	-6.653	-.00217	622.82740	36.83799	23.00512	-17.95611	.01568	-.00264	-.27291	-.26243
.800	-4.494	-.00084	623.54173	32.40870	20.15869	-19.05296	.01347	-.00975	-.26467	-.25299
.800	-2.352	.00059	623.18146	26.69013	16.52630	-19.00995	.01196	-.01207	-.25813	-.24798
.801	-.217	.00249	623.52283	20.76361	12.66025	-18.70885	.01004	-.01502	-.24955	-.24371
.800	1.901	.00367	622.77920	14.60835	8.64551	-18.09805	.00552	-.02088	-.24629	-.24335
.800	4.045	.00507	622.62623	8.07878	4.26965	-16.99690	-.00067	-.02144	-.24142	-.24027
.800	6.182	.00459	622.91959	.90457	-.74347	-15.19032	-.00135	-.02135	-.23463	-.23539
.800	8.356	.00278	622.70585	-7.81124	-7.00987	-11.83954	-.00122	-.01968	-.22814	-.23358
	GRADIENT	.00070	-.10463	-2.84754	-1.85919	.23550	-.00163	-.00151	.00274	.00141

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (SHZ012) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 632/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.850	-8.881	-.00518	668.07866	44.44889	27.52968	-21.11333	.00296	.00052	-.29272	-.28630
.849	-6.698	-.00510	667.75759	39.72847	24.68324	-21.34990	.00232	-.00075	-.28555	-.27857
.849	-4.563	-.00207	667.77331	34.67533	21.56066	-22.42955	.00373	-.01276	-.27847	-.26860
.849	-2.388	-.00004	667.74186	27.87543	17.09984	-21.99941	.00348	-.01634	-.26836	-.26323
.849	-.225	.00152	667.76545	21.74096	13.29751	-21.74563	.00437	-.02044	-.26211	-.25853
.849	1.892	.00301	668.10228	15.08663	8.92165	-20.73050	.00501	-.02326	-.26058	-.25900
.849	4.037	.00439	667.56960	7.35096	3.71736	-18.95833	.00207	-.02410	-.25865	-.25766
.850	6.239	.00454	668.42326	-2.04892	-2.82519	-15.44840	.00296	-.02303	-.25329	-.25596
.849	8.386	.00298	667.95340	-10.97324	-9.02786	-11.50403	.00514	-.02066	-.24839	-.25518
	GRADIENT	.00074	-.00220	-3.13921	-2.04183	.38175	-.00008	-.00138	.00202	.00122

RUN NO. 631/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.900	-8.957	-.00629	710.58195	46.23724	28.59178	-23.08336	-.00613	.00077	-.31086	-.31424
.899	-6.757	-.00380	709.99201	41.18410	25.59665	-23.36295	-.00661	-.00246	-.29761	-.30447
.900	-4.595	-.00244	710.81970	34.52977	21.36949	-22.90700	-.00793	-.01570	-.28676	-.29839
.900	-2.432	-.00056	710.62314	27.12682	16.63251	-22.39084	-.00673	-.01472	-.27942	-.29176
.899	-.263	.00193	710.01933	20.18135	12.15044	-22.10695	-.00830	-.01424	-.27689	-.28870
.899	1.905	.00288	710.12010	12.21695	6.86118	-21.09612	-.00432	-.01270	-.27464	-.28800
.900	4.068	.00362	710.58195	2.27703	-.02124	-17.24638	-.00311	-.01451	-.27114	-.28451
.900	6.245	.00388	710.85623	-6.97914	-6.28764	-13.48257	.00074	-.01570	-.26838	-.27956
.900	8.434	.00198	710.31675	-16.15308	-12.46907	-9.43076	.00375	-.01466	-.26958	-.27955
	GRADIENT	.00072	-.04519	-3.66588	-2.42587	.58229	.00056	.00020	.00166	.00145

RUN NO. 630/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.920	-8.978	-.00590	726.88698	46.75711	28.97413	-23.46619	-.00999	-.00151	-.32003	-.32961
.920	-6.799	-.00368	726.59534	42.03669	26.29754	-23.99095	-.01129	-.01227	-.30351	-.31736
.920	-4.613	-.00294	726.50922	33.86433	20.83844	-22.32202	-.01153	-.01035	-.29608	-.31266
.920	-2.438	-.00054	726.34274	25.99310	15.76159	-21.50045	-.01165	-.01022	-.28836	-.30681
.920	-.257	.00217	726.21641	18.47618	10.91841	-20.97998	-.01177	-.00885	-.29354	-.30418
.920	1.891	.00281	726.30352	10.22064	5.35299	19.84872	-.00717	-.00686	-.27885	-.29919
.920	4.074	.00472	726.19725	-.34311	-1.82681	-15.70218	-.00599	-.00851	-.27726	-.29513
.920	6.257	.00402	726.45946	-9.70428	-8.19943	-11.73630	-.00093	-.01029	-.27868	-.29534
.919	8.447	.00371	726.11878	-18.96143	-14.31713	-7.88656	.00190	-.01043	-.28185	-.29927
	GRADIENT	.00086	-.03050	-3.87860	-2.56824	.68621	.00072	.00032	.00217	.00197

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (SHZ012) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 629/ 0 RN/L = 4.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.950	-9.030	-.00467	749.30817	48.96136	30.48232	-24.72219	-.01540	.00312	-.36135	-.36736
.950	-6.828	-.00365	749.24281	40.99695	25.38423	-22.88120	-.01723	-.00439	-.34910	-.35496
.950	-4.640	-.00279	749.54639	32.01360	19.37274	-20.79072	-.01791	-.00080	-.33533	-.34857
.950	-2.443	-.00088	749.45047	23.75806	13.99850	-19.50461	-.02031	.00047	-.32194	-.34391
.950	-.258	.00159	749.06988	16.06398	8.98538	-18.93252	-.02123	.00246	-.31202	-.34209
.950	1.904	.00263	749.22377	6.95586	2.86767	-17.16465	-.01850	.00100	-.30493	-.33951
.950	4.071	.00387	749.06237	-3.06825	-3.90853	-13.54719	-.01724	-.00293	-.30278	-.33571
.950	6.275	.00390	749.20469	-12.99109	-10.64226	-9.42646	-.01335	-.00346	-.30262	-.33158
.950	8.477	.00221	748.88935	-22.76831	-17.18481	-5.28852	-.00913	-.00246	-.30200	-.32575
	GRADIENT	.00077	-.05495	-3.99430	-2.64975	.77232	.00014	-.00017	.00377	.00138

RUN NO. 628/ 0 RN/L = 4.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.980	-9.078	-.00388	770.52603	49.41885	30.73722	-25.23836	-.02297	.00019	-.42945	-.43453
.981	-6.845	-.00304	771.16802	40.35231	24.66200	-22.62741	-.02440	.00336	-.41703	-.42319
.981	-4.641	-.00299	770.78666	30.97386	18.35312	-20.70900	-.02863	.00601	-.40618	-.41899
.980	-2.453	-.00087	770.41904	22.88468	13.06385	-19.83151	-.03186	.00672	-.39744	-.41203
.980	-.274	.00156	770.23583	15.21140	8.05073	-19.17770	-.03376	.00937	-.39006	-.40641
.980	1.925	.00320	770.22016	5.70817	1.74185	-17.29800	-.03432	.00646	-.38432	-.39989
.980	4.092	.00330	770.15908	-4.96128	-5.54417	-13.43535	-.03365	.00136	-.37700	-.39280
.979	6.284	.00303	770.18934	-15.21697	-12.40535	-9.18128	-.02910	.00084	-.37207	-.39145
.979	8.494	.00256	770.02059	-24.99419	-18.88417	-4.68633	-.02632	.00278	-.36882	-.39137
	GRADIENT	.00076	-.06657	-4.07624	-2.70611	.78162	-.00057	-.00044	.00327	.00295

RUN NO. 627/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.119	-9.196	-.00549	849.85118	52.22614	32.60652	-30.35701	-.05950	.00797	-.41276	-.40657
1.119	-6.952	-.00506	850.10768	42.88928	26.46757	-27.33743	-.05837	.01101	-.40912	-.40276
1.119	-4.677	-.00438	850.19954	30.93227	18.39560	-23.47909	-.05877	.01165	-.40549	-.40061
1.118	-2.461	-.00193	849.59727	17.14531	9.19780	-18.17978	-.06203	.00322	-.39405	-.39181
1.119	-.238	.00009	849.86833	4.35651	.84968	-13.88700	-.06413	-.00281	-.40589	-.40608
1.119	1.947	.00230	849.70179	-6.18864	-6.07522	-11.06529	-.06374	-.00375	-.39927	-.40299
1.119	4.152	.00256	849.94458	-16.61074	-13.00012	-6.98757	-.06352	.00111	-.39069	-.39178
1.118	6.366	.00171	849.67216	-26.26315	-19.56391	-2.53133	-.06112	.00873	-.38451	-.38444
1.119	8.570	.00064	849.74695	-34.48017	-24.95939	1.90695	-.05799	.01553	-.38386	-.38268
	GRADIENT	.00082	-.01843	-5.36749	-3.53835	1.81765	-.00051	-.00127	.00110	.00029

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (SHZ012) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELVSPL = 40.000

RUN NO. 626/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.200	-9.204	-.00537	880.97248	51.29038	32.69149	-32.49050	-.06536	.00786	-.42107	-.40892
1.200	-6.949	-.00472	881.26122	39.91562	25.32050	-27.46217	-.06660	.00571	-.42504	-.41651
1.200	-4.662	-.00354	880.57111	24.86018	14.93315	-20.19283	-.06724	.00283	-.42754	-.42033
1.200	-2.453	-.00049	881.42787	11.13562	5.54417	-13.75365	-.06630	-.00107	-.41286	-.41389
1.200	-.216	.00133	881.07512	-1.27922	-2.46408	-8.85868	-.06458	-.00153	-.40902	-.41194
1.200	1.987	.00470	881.23401	-11.88855	-9.53767	-5.85631	-.06457	.00102	-.40448	-.40742
1.199	4.189	.00421	881.00500	-21.24972	-15.82532	-2.57865	-.06400	.00644	-.40199	-.40414
1.199	6.392	.00449	880.91317	-30.23644	-21.79433	1.23619	-.06197	.01379	-.39869	-.39988
1.200	8.616	.00253	881.49370	-37.51735	-26.74372	5.33817	-.05697	.02067	-.39189	-.39763
	GRADIENT	.00093	.03043	-5.20549	-3.45986	1.94821	.00037	.00042	.00269	.00175

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (SHZ013) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 646/ 0 RN/L = 2.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.351	-8.037	-.03589	168.32030	4.88925	1.30628	-1.71206	.00914	-.03286	-.24548	-.25584
.351	-6.040	-.03770	167.57176	4.47314	1.03017	-1.54426	.01275	-.03360	-.24610	-.24996
.350	-4.023	-.04099	167.38393	4.26509	.92397	-1.61310	.01584	-.03453	-.24214	-.24556
.349	-2.017	-.04765	166.44769	4.16106	.81777	-1.73357	.01850	-.03532	-.23167	-.23093
.350	-.010	-.05066	167.29037	4.03623	.75406	-1.91858	.01892	-.03604	-.22112	-.21387
.350	1.997	-.05394	167.29037	3.97382	.66910	-2.11219	.01943	-.03604	-.23005	-.22463
.351	3.994	-.05386	167.94594	3.80738	.54166	-2.31870	.02068	-.03530	-.25117	-.24894
.350	6.001	-.05448	167.19538	3.57852	.37175	-2.53813	.01688	-.03487	-.25852	-.24676
.349	8.008	-.05492	166.44627	3.26644	.20183	-2.66290	.01181	-.03323	-.26427	-.24551
	GRADIENT	-.00160	.09814	-.05503	-.04558	-.08932	.00055	-.00011	-.00082	-.00002

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (SHZ013) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 645/ 0 RN/L = 3.16 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.599	-8.092	-.09930	417.89585	13.21133	6.89224	-7.38270	-.00472	-.01645	-.27295	-.27453
.599	-6.074	-.10649	417.22940	12.56637	6.63736	-7.08583	-.00103	-.01612	-.27266	-.27499
.598	-4.036	-.11402	417.15276	12.17107	6.46745	-7.37840	.00204	-.01589	-.26292	-.26792
.599	-2.028	-.12216	417.99197	11.67174	6.17010	-7.51178	.00573	-.01597	-.25183	-.25724
.599	-.012	-.12970	417.74431	11.44288	5.97894	-7.92912	.00696	-.01586	-.24446	-.24841
.599	2.006	-.13640	418.24611	11.27644	5.83027	-8.55297	.00900	-.01477	-.24735	-.25277
.599	4.024	-.13294	418.32919	10.56907	5.32052	-9.08648	.00920	-.01489	-.25594	-.26170
.599	6.043	-.13296	417.73618	9.86169	4.81078	-9.46940	.00839	-.01503	-.26874	-.27933
.597	8.062	-.12852	415.56449	8.63418	3.98244	-9.75336	.00638	-.01475	-.29670	-.29800
	GRADIENT	-.00258	.12931	-.17859	-.13068	-.22121	.00087	.00016	.00091	.00084

RUN NO. 644/ 0 RN/L = 3.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.799	-8.123	-.18817	621.60085	23.07299	13.47645	-16.15542	-.00028	-.02244	-.27166	-.27205
.800	-6.095	-.19184	623.05368	22.13676	12.94546	-16.05647	.00274	-.02263	-.26413	-.26392
.800	-4.069	-.20596	622.69957	21.63743	12.66935	-16.68463	.00618	-.02216	-.25997	-.25727
.800	-2.040	-.21472	622.99293	20.74281	12.15960	-17.28267	.00879	-.02047	-.25367	-.24673
.800	-.014	-.22385	622.72469	20.09785	11.79853	-17.95385	.01113	-.01720	-.25238	-.24494
.800	2.014	-.22969	623.05997	19.26564	11.26755	-18.75411	.01264	-.01583	-.25314	-.24846
.800	4.041	-.23148	623.13959	18.14216	10.54541	-19.35646	.01318	-.01527	-.26068	-.26125
.800	6.069	-.22548	622.76663	16.33211	9.35601	-19.49413	.01209	-.01456	-.27055	-.27522
.800	8.088	-.22277	622.84625	14.27239	8.01792	-19.45541	.01085	-.01432	-.28554	-.29304
	GRADIENT	-.00326	.04672	-.41766	-.25352	-.33615	.00088	.00091	-.00004	-.00048

RUN NO. 643/ 0 RN/L = 3.89 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CPI	CP2
.850	-8.134	-.20387	668.74412	25.67364	15.15436	-20.09218	-.00910	-.02280	-.28507	-.28659
.850	-6.104	-.20876	668.68154	24.63338	14.47470	-20.13950	-.00641	-.02325	-.27651	-.27620
.850	-4.073	-.22235	668.07866	23.44749	13.77380	-20.49661	-.00321	-.02319	-.26767	-.26681
.850	-2.043	-.23372	668.27440	22.34481	13.09414	-20.85371	-.00026	-.02349	-.26525	-.26112
.849	-.014	-.24519	668.03178	21.26294	12.47819	-21.29687	.00320	-.02260	-.25298	-.25804
.850	2.015	-.25103	668.15704	20.01463	11.73482	-21.68409	.00589	-.01984	-.26411	-.26257
.850	4.045	-.24823	668.54847	18.16296	10.54541	-21.84328	.00742	-.01886	-.27244	-.27355
.850	6.076	-.24684	668.43115	15.91600	9.01618	-21.74002	.00819	-.01789	-.28519	-.28706
.850	8.108	-.24504	668.74412	13.41938	7.44446	-21.58943	.00691	-.01758	-.29824	-.29865
	GRADIENT	-.00340	.04052	-.63562	-.38515	-.17363	.00135	.00061	-.00041	-.00074

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (SHZ013) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 642/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.899	-8.145	-.22148	710.13832	25.34076	15.00568	-20.97848	-.01532	-.01410	-.31219	-.30946
.900	-6.112	-.22994	710.41268	24.13406	14.15611	-21.28826	-.01338	-.01220	-.29978	-.30218
.899	-4.079	-.23743	710.01933	22.98977	13.37025	-21.62385	-.01218	-.01123	-.29009	-.29662
.899	-2.046	-.25358	709.82260	21.76226	12.62687	-21.76583	-.01086	-.01256	-.28186	-.29207
.900	-.015	-.26550	710.33498	20.01463	11.50118	-21.58943	-.00748	-.01382	-.27646	-.28833
.900	2.026	-.26839	710.67789	17.97572	10.29054	-21.27966	-.00519	-.01381	-.27876	-.29513
.900	4.049	-.26907	710.78766	15.81199	8.84626	-21.12046	-.00326	-.01213	-.28878	-.30687
.900	6.083	-.26712	710.54985	13.00327	7.04091	-20.88813	-.00193	-.01234	-.30194	-.31722
.900	8.127	-.26446	710.25728	9.67444	4.78954	-19.96310	-.00193	-.01361	-.31523	-.32661
	GRADIENT	-.00384	.11769	-.89245	-.56000	.07345	.00116	-.00015	.00028	-.00116

RUN NO. 641/ 0 RN/L = 4.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.920	-8.151	-.22363	726.95490	24.13406	14.17734	-20.50951	-.01885	-.00843	-.32674	-.32226
.921	-6.116	-.23325	727.15863	23.09380	13.39149	-20.75476	-.01578	-.00589	-.31140	-.31818
.920	-4.071	-.24564	726.46905	21.84548	12.49943	-20.88813	-.01485	-.00583	-.29796	-.31311
.920	-2.048	-.26314	726.97411	20.38912	11.52242	-20.78487	-.01449	-.00692	-.28823	-.30664
.920	-.015	-.26661	726.17718	18.43343	10.33302	-20.50521	-.01026	-.00782	-.28304	-.30397
.920	2.017	-.27094	726.84787	16.08244	8.88874	-19.86415	-.00707	-.00823	-.28428	-.30572
.920	4.051	-.27153	726.10921	13.83548	7.50818	-19.69205	-.00449	-.00837	-.29606	-.31791
.920	6.097	-.26571	727.03242	10.58987	5.32052	-19.17575	-.00366	-.00658	-.30897	-.32836
.920	8.122	-.26306	726.42985	7.05299	2.94171	-18.29375	-.00425	-.00645	-.32471	-.34190
	GRADIENT	-.00293	-.04172	-1.00095	-.62125	.16315	.00139	-.00031	.00038	-.00043

RUN NO. 640/ 0 RN/L = 4.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.950	-8.161	-.23156	749.25850	21.07569	12.05341	-18.37549	-.03040	-.00219	-.36286	-.35852
.951	-6.123	-.24627	749.92247	20.40993	11.43746	-18.71969	-.02346	-.00020	-.34832	-.35845
.951	-4.087	-.25275	749.83827	19.26564	10.56665	-18.98214	-.02650	.00139	-.33063	-.35306
.951	-2.051	-.26271	749.96149	17.80928	9.58984	-18.79713	-.02455	.00166	-.31783	-.34396
.951	-.016	-.26594	750.00375	15.74956	8.27290	-18.37119	-.02158	.00292	-.31316	-.34379
.951	2.019	-.27194	749.84988	13.54421	6.95596	-18.39701	-.01656	.00352	-.31879	-.35190
.950	4.054	-.27395	749.75402	11.17242	5.49044	-18.52608	-.01200	.00412	-.33119	-.35893
.950	6.092	-.26983	749.55799	7.82278	3.23906	-17.87211	-.01028	.00458	-.34490	-.36477
.950	8.131	-.26057	749.46205	3.84899	.58414	-16.70184	-.01303	.00472	-.36183	-.37484
	GRADIENT	-.00254	-.00885	-1.00488	-.62824	.06448	.00182	.00036	-.00010	-.00096

LARC 8-TPT-703(LA-59)LAUNCH CONFIGURATION 3A (SHZ013) (19 MAR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELVSPL = 40.000

RUN NO. 639/ 0 RN/L = 4.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
.979	-8.171	-.22838	769.48644	20.76361	11.22507	-18.59062	-.05030	.00052	-.43353	-.41005
.980	-6.129	-.23837	770.34420	19.76496	10.35426	-18.62934	-.04946	.00213	-.41324	-.40755
.980	-4.090	-.25143	769.97692	18.43343	9.54716	-18.47445	-.04649	.00524	-.39544	-.40254
.980	-2.044	-.26263	769.93099	16.65499	8.44271	-18.34968	-.04360	.00705	-.39198	-.40539
.980	-.017	-.26696	770.37361	14.52205	7.10463	-18.48306	-.03857	.00957	-.39038	-.40714
.980	2.020	-.27094	770.31255	12.37912	5.85151	-18.81434	-.03235	.01060	-.39744	-.41316
.980	4.068	-.27434	770.44932	9.57042	4.10988	-18.83586	-.02645	.01202	-.40664	-.41825
.980	6.088	-.26722	770.28123	5.36777	1.34876	-17.86780	-.02235	.01293	-.41761	-.42278
.980	8.139	-.25952	770.31204	.81143	-1.60429	-16.40066	-.02146	.01390	-.42987	-.43406
	GRADIENT	-.00266	.06504	-1.08013	-.66077	-.05824	.00252	.00084	-.00137	-.00192

RUN NO. 638/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.119	-8.191	-.18991	850.18731	16.87304	8.46395	-19.77379	-.07533	.00100	-.39714	-.39647
1.119	-6.146	-.19382	850.19954	14.31400	6.80728	-18.66806	-.07644	-.00234	-.40248	-.39212
1.119	-4.102	-.20372	849.94458	11.02678	4.49219	-17.12778	-.07263	-.00240	-.40053	-.38594
1.119	-2.060	-.21230	849.73140	7.44829	2.17709	-15.31214	-.06983	-.00258	-.39564	-.38688
1.118	-.019	-.23103	849.68768	4.22348	.09564	-13.79337	-.06994	-.00229	-.40491	-.40320
1.118	2.024	-.23309	849.55073	-.14565	-2.45429	-11.77121	-.06743	.00035	-.41137	-.42576
1.119	4.067	-.23159	849.96013	-4.59852	-5.19554	-10.10616	-.06397	.00328	-.42404	-.42546
1.119	6.112	-.23106	850.08151	-9.59240	-8.25554	-7.50747	-.06084	.00744	-.42414	-.42639
1.119	8.158	-.22507	849.97568	-14.08688	-11.03929	-5.08949	-.06014	.01008	-.42950	-.43155
	GRADIENT	-.00375	-.00732	-1.90212	-1.17555	.86104	.00097	.00070	-.00307	-.00577

RUN NO. 637/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q(PSF)	MLWI	MLWO	MMWG	CHEI	CHEO	CP1	CP2
1.199	-8.201	-.18619	881.15624	11.11000	4.68334	-15.60041	-.06870	.00814	-.43028	-.43092
1.200	-6.153	-.18880	881.16226	8.48855	3.00543	-14.37420	-.07064	.00435	-.42959	-.42143
1.199	-4.097	-.19209	880.64447	5.34696	1.05141	-12.66613	-.07185	.00192	-.42082	-.41883
1.201	-2.052	-.20455	881.38902	2.24699	-.90304	-10.70851	-.07043	.00113	-.40832	-.41714
1.200	-.018	-.21407	881.57903	-1.22766	-2.98554	-8.74559	-.06847	-.00051	-.40546	-.41012
1.199	2.036	-.21281	881.21430	-5.07710	-5.30179	-6.98688	-.06637	-.00260	-.41389	-.41371
1.200	4.070	-.21793	881.06146	-8.53120	-7.38429	-5.33903	-.06521	-.00334	-.42596	-.42146
1.199	6.117	-.22220	881.12110	-12.27660	-9.55179	-3.26094	-.06453	-.00187	-.42815	-.42187
1.201	8.167	-.22822	882.07505	-15.27293	-11.35804	-1.52705	-.06523	.00000	-.42910	-.42184
	GRADIENT	-.00293	.03225	-1.71720	-1.04155	.89920	.00085	-.00070	-.00078	-.00009