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NASA

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
Houston, Texas 77058

DMS-DR-2304
NASA-CR 160,846

RESULTS OF TESTS TO EVALUATE ARC 40 x 80-FOOT TUNNEL SUPPORT STRUT TARES ON THE SPACE SHUTTLE VEHICLE WITH TAIL CONE USING A 0.03-SCALE MODEL (45-0) IN THE NASA/ARC 12-FOOT PRESSURE WIND TUNNEL (OA173)

SPACE SHUTTLE AEROTHERMODYNAMIC DATA REPORT

Data Management Services

HUNTSVILLE ELECTRONICS DIVISION CHRYSLER CORPORATION

AUGUST, 1981

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by

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Prepared under NASA Contract Number NAS9-16283

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: ARC 180-1-12
NASA Series Number: OA173
Model Number: 45-0
Test Dates: March 15 to March 31, 1976
Occupancy Hours: 160

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ABSTRACT

This test was conducted to evaluate model support system tares for 40 x 80-Foot Wind Tunnel test OA174. The test was run with the 40 x 80 struts and windshields in and out to determine their effect on the Orbiter tail cone-on configuration. The Orbiter tail cone was pressure instrumented to evaluate airloads as a function of Reynolds number.

The Orbiter was mounted on a blade strut through the vertical tail position with an internal force balance. The ground plane was installed for all runs.

Data were obtained at a Mach number of 0.26 with Reynolds numbers per foot of 1.75×10^6, 2.4×10^6, 5.5×10^6 and 8.0×10^6.

Test variables included elevon and body flap deflection angle changes, dummy struts in and out, and model angles of attack of -6° to +20° and angles of sideslip of 0° and +6°.

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SCHEDULE	COEFFICIENTS PLOTTED
A	C_L VS α
	C_D VS α
	C_m VS α
	C_L VS C_m
B	C_L VS Rn/L
	C_D VS Rn/L
	C_m VS Rn/L
C	C_p VS x/l_B

NOMENCLATURE
General

SYMBOL	PLOT SYMBOL	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		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	angular cylindrical coordinate position around orbiter body, degrees

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	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

NOMENCLATURE
(Continued)

General - Concluded

SYMBOL	PLOT SYMBOL	DEFINITION
δ_α	AILRON	aileron deflection, degrees
δ_{BF}	BDFLAP	body flap deflection, degrees
δ_e	ELEVON	elevon deflection, degrees
X/LB	X_o/L_o	longitudinal location of body surface, fraction of body length
XCP/L	X_{cp}	center of pressure location referred to ℓ_b
TTF	T_{t_∞}	freestream total temperature, ^oF
PT	P_t	freestream total pressure, PSF
P	P_∞	freestream static pressure, PSF
H/B	h/b	ratio of height above ground plane, measured to zero degree elevon intersection with fuselage, to model wing span
CP1-9	$C_{P_{B_i}}$	base tap pressure coefficient, port i, $(P_{B_i}-P_\infty)/q$

NOMENCLATURE
(Continued)

Body-Axis System

SYMBOL	PLOT SYMBOL	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; $\frac{\text{rolling moment}}{qSb}$

NOMENCLATURE
(Concluded)

Stability-Axis System

SYMBOL	PLOT SYMBOL	DEFINITION
C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
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_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

CONFIGURATIONS INVESTIGATED

The 0.030-scale model utilized in this test was an SSV Orbiter force model representing Rockwell International lines VL70-000140A/B with modified OMS pods and elevons. A three view of the Orbiter configuration is shown in Figure 2a.

The Orbiter model is of the blended wing-body design with a double delta wing, full span elevons with gaps simulated, orbital maneuvering system (OMS) pods mounted on the aft fuselage, a body flap, and with an ALT configuration tail cone on the base end. The fuselage contains the flight test nose boom, forward RCS ports, and simulated T-zero panels. The vertical tail was replaced by a blade strut mount.

Orbiter configurations were defined by the following nomenclature:

Tail cone off - B_{70} C_9 E_{44} F_8 M_{16} N_{24} N_{28} PR_1 W_{116}

Tail cone on - B_{70} C_9 E_{44} F_8 M_{16} PR_1 W_{116} TC_{19}

The above designated model components are described below.

Component	Description
B_{70}	Orbiter fuselage per Rockwell lines. VL70-000140A/B, model drawing SS-A01360.
C_9	Orbiter canopy per Rockwell lines. VL70-000140A/B, model drawing SS-A01360.
E_{44}	Orbiter 6.0 in. full scale gaps machines into E_{26} elevon. Flapper doors, centerbody pieces and tip seals are not simulated Rockwell lines VL70-000200, model drawing SS-A01360.
F_8	Orbiter body flap per Rockwell lines VL70-000200, model drawing SS-A01360.

CONFIGURATIONS INVESTIGATED (Concluded)

Component	Description
M_{16}	Orbiter OMS/RCS pods per Rockwell lines, VL70-000203A, -008401, model drawing SS-A01360.
N_{28}	Orbiter OMS nozzles - VL70-000140A model drawing SS-A01360.
N_{24}	Orbiter MPS nozzles - VL70-000140A model drawing SS-A01360.
PR_1	Flight test nose boom and probe. VL70-327001A, model drawing SS-A01548-8.
W_{116}	Orbiter double delta wing per Rockwell lines VL70-000200, model drawing SS-A01360.
TC_{19}	Orbiter tail cone fairing per Rockwell lines BCD VL70-30-330-02, attached to the base and covering the MPS and OMS nozzles, SS-A01681.

TEST FACILITY DESCRIPTION

Ames 12-foot Pressure Wind Tunnel is a closed circuit, continuous flow, single return, variable-density, low-turbulence tunnel that operates at subsonic speeds up to slightly less than Mach 1.0.

Airflow is produced by a two-stage, axial-flow, variable-speed fan powered by electric motors which deliver 12,000 hp. Airspeed in the test section is controlled by variation of the rotational speed of the fan.

The test section is 11.3 feet in diameter and is 18 feet long. The combination of eight fine-mesh screens in the settling chamber and the contraction ratio of 25 to 1 provides an exceptionally low turbulence airstream. A special mounting drive system is available for high angle of attack. External and internal strain-gage balances are available.

Data are recorded on a Beckman 210 medium speed recorder and processed through a centrally located Honeywell H-800 computer system.

DATA REDUCTION

Model force and moment data were reduced to coefficient form in both body and stability axes systems. Moment data were reduced about the MRC. Model angle of attack and sideslip were corrected for support hardware deflections with standard facility corrections applied as required. All model pressure data was reduced to the pressure coefficient form $(P_1 - P_\infty)/q$.

Axial force coefficient due to base pressures was computed as

$$CA_b = \frac{C_{PB} A_b}{S_W}$$

where

$$C_{pB} = \frac{\sum_{i=1}^{9} Cp_{B_i} A_i}{\sum_{i=1}^{9} A_i}$$

Forebody axial force coefficient was computed as:

$$C_{A_f} = C_A - C_{A_b}$$

The center of pressure location was computed as a ratio to the body length

$$\frac{X_{cp}}{l_B} = \frac{X_{cg} - \frac{C_m \bar{c}_w}{C_N}}{l_B}$$

where

X_{cg} = Reference center of gravity location aft of model nose in inches, full scale (X_o = 1076.68)

l_B = Body length in inches, full scale (1290.3)

DATA REDUCTION (Concluded)

Reference dimensions and constants used in data reduction equations are listed below:

Symbol	Description	Model Scale	Full Scale
S_w	Wing reference area, ft.^{2}	2.421	2690
b_w	Wing reference span, in.	28.100	936.68
$\bar{c}_w$	wing reference MAC, in.	14.244	474.81
	Moment reference center		
	X, in.	32.300	1076.68
	Y, in.	0	0
	Z, in.	11.250	375
X_{cg}	Longitudinal length, nose to moment reference center, in.	25.250	841.68
A_{b1}	Orbiter base areas, ft^2	0.0276	
A_{b2}		0.0438	
A_{b3}		0.0168	
A_{b4}		0.0199	
A_{b5}		0.0390	
A_{b6}		0.0536	
A_{b7}		0.0781	
A_{b8}		0.0441	
A_{b9}		0.0702	
A_b	Total base area, ft^2	0.3931	

REFERENCES

SD75-SH-0273, "Pretest Information for Tests to Evaluate 40 x 80-Foot Tunnel Support Strut Tares on the Space Shuttle Orbiter with Tail Cone in the NASA/ARC 12-Foot Pressure Wind Tunnel (OA173)," by R. L. Gillins, December 10, 1975.

Drawings

SS-A01360, "Model Assy, 45-0, .03-Scale SSV Orbiter (140A/B)," June 12, 1975.

SS-A01454, "45-0 Model Mofid. & Assy, Tail Cone Loads Test," October 24, 1975.

SS-A01455, "Assy Model Support Strut (.03-Scale 45-0 Model in Ames 12' PWT)," October 23, 1974.

SS-A01548, "Rework & Modif. - .03-Scale SSV Orbiter 45-0 Model," June 12, 1975.

SS-A01681, "Tail Cone Assy & Details - 45-0 SSV Orbiter (V70-35-333-01)," December 4, 1975.

TABLE I

TEST : 0A173 (ARC12-180)

DATE : MARCH 1976

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per foot)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.26	1.75×10^6	0.764	
↓	2.4×10^6	1.042	
	5.5×10^6	2.361	
	8.0×10^6	3.403	

BALANCE UTILIZED: ARC Task MK III 2in. Dia.

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	1800 lb_f		
SF	900 lb_f		
AF	160 lb_f		
PM	—		
RM	1000 in-lb_f		
YM	—		

COMMENTS:

TABLE II

TEST: OA173 ARC 180-1-12

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 9 APR 76

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	STRUTS	TAIL CONE	δ_e	δ_a	δ_{BF}	MACH	h/b			RN/L 1.75	RN/L 2.4	RN/L 5.5	RN/L 8.0
RNS001	QV101 + GROUND PLANE	0	0	IN	ON	0	0	-11.7	.26	.6			1	4	3	2
02		10												7	6	5
03		15												12	11	
04		0						16.3							14	
05		10													8	
06		15													13	
07		0					10	-11.7							15	
08		10													9	
09		15													10	
10		0	6				0								24	
11		10													25	
12		15													28	
13		0						16.3							23	
14		10													26	
15		15													27	

TEST RUN NUMBERS

COEFFICIENT SCHEDULES

FORCE DATA — RNS0__ : CL, CD, CLM, CY, CLN, CSL, CN, CA, CYN, CBL SNS0__ : MACH, Q (PSF), PT, P, TTF, XCP/L, L/D, BETA

PRESSURE DATA — RNSP01 → 25, 27, 28 : CP RNSP26: CP1, CP2, CP3, CP4, CP5, CP6, CP7, CP8, CP9 RNSQ25, 27 : CP

α SCHEDULES

A — .5, → 20° (or max) Δ2°

B — .5, → 6° (RUN 35: Δ1°, RUN 38: Δ2°)

NASA-MSFC-MAF

TABLE II (Concluded)

TEST: OA173 ARC 180-1-12

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 9 APR 76

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	STRUTS	TAIL CONE	δ_e	δ_a	δ_{BF}	MACH	h/b			RN/L 1.75	RN/L 2.4	RN/L 5.5	RN/L 8.0
RNS016	QV101+GROUND PLANE	A	0	OUT	ON	0	0	-11.7	.26	.6				19	18	17
17			0			0		16.3							21	20
18			0			10		-11.7							16	
19			6			0		-11.7							29	
20			6					16.3							30	
21		B	0					-11.7							35	38
22		A								.11					37	32
23		A								.21					36	33
24		A								.4					34	40
	(HYSTERESIS RUNS)															
RNS*25	QV101+GROUND PLANE+TRIPS	H^*_{25}	0	OUT	ON	0	0	-11.7	.26	.6						39
RNS026	QV101+GROUND PLANE	H_{26}	0	OUT	OFF	0	0	0	.26	.6					42	41
RNS⊛27	QV101	$H^{⊛}_{27}$	0	OUT	ON	0	0	-11.7	.26	FREE AIR			43	46	45	44
RNS028	QV101+TUFTS	H_{28}	0	OUT	ON	0	0	-11.7	.26	FREE AIR			48			47

TEST RUN NUMBERS

HYSTERESIS RUNS

* H_{25} RNS025, SNS025 – 1.7°→15°→.5°; RNSP25 – 1.7°→15°; RNSQ25 – 15°→.5°

H_{26} RUN 41: .5°→15°→.5° AND RUN 42: .5→11°→.5°

α SCHEDULES

⊛ H_{27} – RNS027, SNS027 – -5.5°→21° (α max)→-5.5°, 0°; RNSP27 – -5.5°→21° (α max); RNSQ27 – 21° (α max)→-5.5°, 0°

H_{28} – RUN 48: 4°→17°, 12.5° AND RUN 47: 0°→19°→0°, 10°, 13°

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TABLE III

MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - B_{70}

GENERAL DESCRIPTION : Configuration 140A/B orbiter fuselage.

NOTE: Identical to B_{24} except underside of fuselage has been refaired to accept $Wing_{116}$, and fwd RCS ports and T-zero panels are simulated.

MODEL SCALE: 0.030 MODEL DWG: SS-A00147, Release 12

DRAWING NUMBER : VL70-000134B, -000200, -000205, -006089, -000145, -000140A, -000140B

DIMENSIONS :

	FULL SCALE	MODEL SCALE
Length (OML: Fwd Sta X_o = 235), In.	1293.3	38.799
Length (IML: Fwd Sta X_o = 238), In.	1290.3	38.709
Max Width (At X_o = 1528.3), In.	264.00	7.920
Max Depth (At X_o = 1464), In.	250.00	7.500
Fineness Ratio	0.264	0.264
Area - Ft^2		
Max. Cross-Sectional	340.88	0.3068
Planform		
Wetted		
Base		

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : CANOPY - C_9

GENERAL DESCRIPTION : Configuration 3A. Canopy used with fuselage B_{70}.

MODEL SCALE: 0.030 MODEL DWG: SS-A00147, Release 12

DRAWING NUMBER : VL70-000143A

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X_o =434.643 - 578), In.	143.357	4.301
Max Width (X_o = 513.127), In.	152.412	4.572
Max Depth (At X_o = 485.0), In.	25.000	0.750
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

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: 0.030

DRAWING NUMBER Not available

DIMENSIONS :	FULL SCALE	MODEL SCALE
Area - Ft^2	210.00	0.189
Span (equivalent), In.	349.2	10.476
Inb'd equivalent chord, In.	118.0	3.54
Outb'd equivalent chord, In.	55.19	1.656
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 (Prod of area & $\bar{c}$) Ft^3	1587.25	0.0429
Mean Aerodynamic Chord, In.	90.7	2.721

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : BODY FLAP - F_8

GENERAL DESCRIPTION : Configuration 140A/B orbiter body flap.

Hingeline located at X_o = 1528.3, Z_o = 284.3.

MODEL SCALE: 0.030 MODEL DWG: SS-A00147, Release 12

DRAWING NUMBER : VL70-000140A, -000145

DIMENSIONS :	FULL SCALE	MODEL SCALE
Reference length(X_o=1528.3 to 1613)	84.70	2.541
Length (X_o = 1520 - X_o =1613), In.	93.00	2.79
Max Width (In.)	262.00	7.86
Max Depth(At X_o = 1520), In.	23.00	0.690
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional		
Planform	142.6	0.128
Wetted		
Base	41.847	0.113

TABLE III. - MODEL DIMENSIONAL DATA- Continued.

MODEL COMPONENT : OMS POD - M_{16}

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

MODEL SCALE: 0.030

DRAWING NUMBER : VL70-008401, -008410

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (OMS Fwd Sta X_o =1310.5)	258.50	7.755
Max Width (At X_o = 1511), In.	136.8	4.104
Max Depth (At X_o = 1511), In.	74.70	2.241
Fineness Ratio	2.484	2.484
Area - Ft^2		
Max. Cross-Sectional	58.865	0.053
Planform		
Wetted		
Base		

DMS 011

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: OMS NOZZLES - N_{28}

GENERAL DESCRIPTION: Configuration 140A/B orbiter OMS nozzles.

MODEL SCALE: 0.030 MODEL DWG: SS-A00106, Release 5 (Contour)

DRAWING NUMBER: VL70-000140A (Location)

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	1518.00	45.54
Y_o	- 88.0	2.65
Z_o	492.00	14.280
Right ~~Lower~~ Nozzles		
X_o	1518.00	45.54
Y_o	88.0	2.65
Z_o	492.0	14.280
Null Position - Deg.		
Left ~~Upper~~ Nozzle		
Pitch	15°49'	15°49'
Yaw	12°17'	12°17'
Right ~~Lower~~ Nozzle		
Pitch	15°49'	15°49'
Yaw	12°17'	12°17'

TABLE III. - MODEL DIMENSIONAL DATA-Continued.

MODEL COMPONENT: MPS NOZZLES - N_{24}

GENERAL DESCRIPTION: Configuration 140A/B orbiter MPS nozzles.

MODEL SCALE: 0.030 MODEL DWG: SS-A00147, Release 12

DRAWING NUMBER: VL70-005030A, VL70-000140A

DIMENSIONS:	FULL SCALE	MODEL SCALE
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane	157.0	4.71
Throat to Exit Plane	99.2	2.976
Diameter - In.		
Exit	91.00	2.730
Throat		
Inlet		
Area - ft^2		
Exit	45.166	0.0407
Throat		
Gimbal Point (Station) - In.		
Upper Nozzle		
X_o	1445.00	43.35
Y_o	0.0	0.0
Z_o	443.00	13.29
Lower Nozzles		
X_o	1468.17	44.045
Y_o	±53.00	±1.59
Z_o	342.640	10.279
Null Position - Deg.		
Upper Nozzle		
Pitch	16°	16°
Yaw	0	0
Lower Nozzle		
Pitch	10	10
Yaw	3.5	3.5

TABLE III. - **MODEL DIMENSIONAL DATA** - Continued.

MODEL COMPONENT : PROBE - PR_1

GENERAL DESCRIPTION : Flight test boom and probe

MODEL SCALE: 0.030

DRAWING NUMBER : VL70-327001A, Rosemount 00855-1153

DIMENSIONS :	**FULL SCALE**	**MODEL SCALE**
Length (Centerline distance from probe tip to nose OML), In.	215.325	6.460
Max Width (Dia. at pierce point OML), In.	6.201	1.860
Length ~~Max Depth~~ (Exposed probe), In.	31.485	9.446
Fineness Ratio	0.0288	0.0288
Area - In.^{2}		
Max. Cross-Sectional	30.200	0.272
Planform		
Wetted		
Base		
Centerline of boom intersects OML on orbiter nose at: X_o	238.067	7.142
Z_o	349.017	10.471
Centerline of probe at tip leading edge is located at (In.): X_o	23.561	0.707
Z_o	330.251	~~9.908~~

The centerline of the probe is at -5 deg. incidence with respect to the model fuselage reference plane, with positive being nose-up. The centerline of the boom and probe is coincident with the model plane of symmetry.

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: Tailcone - Tc19

GENERAL DESCRIPTION: Afterbody tailcone used with body B26 to simulate the orbiter ferry configuration.

Scale Model = .03

DRAWING NUMBER: SS-A01681
VL70-30-330-02

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length (TE @ X_o 1900), in.	459.3	13.779
Max. Width (X_o 1523), in.	303	9.090
Max. Depth (X 1466), in.	286	8.380
Area , ft^2		
Max. Cross-Sectional (X_o 1523)	504.6	.0454
Frontal	469.9	0.423

TABLE III. - MODEL DIMENSIONAL DATA - Concluded.

MODEL COMPONENT: WING-W_{116}

GENERAL DESCRIPTION: Configuration 4

NOTE: Identical to W_{114} except airfoil thickness. Dihedral angle is along trailing edge of wing. Geometric twist = 0°.

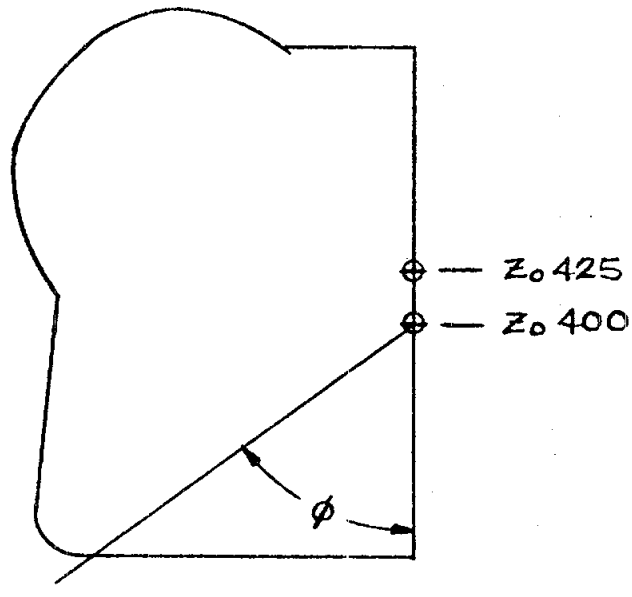
MODEL SCALE: 0.030

TEST NO. DWG. NO. VL70-000140A, -000200

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2		
Planform	2690.00	2.421
Span (Theo In.	936.68	28.10
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		
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	20.677
Tip, (Theo) B.P.	137.85	4.136
MAC	474.81	14.244
Fus. Sta. of .25 MAC	1136.83	34.105
W.P. of .25 MAC	290.58	8.717
B.L. of .25 MAC	182.13	5.464
EXPOSED DATA		
Area (Theo) Ft^2	1751.50	1.576
Span, (Theo) In. BP108	720.68	21.620
Aspect Ratio	2.059	2.059
Taper Ratio	0.245	0.245
Chords		
Root BP108	562.09	16.863
Tip 1.00 $\frac{b}{2}$	137.85	4.136
MAC	392.83	11.785
Fus. Sta. of .25 MAC	1185.98	35.579
W.P. of .25 MAC	294.30	8.829
B.L. of .25 MAC	251.77	7.553
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	0.102
Leading Edge Intersects Fus M. L. @ Sta	500.00	15.00
Leading Edge Intersects Wing @ Sta	1024.00	30.72

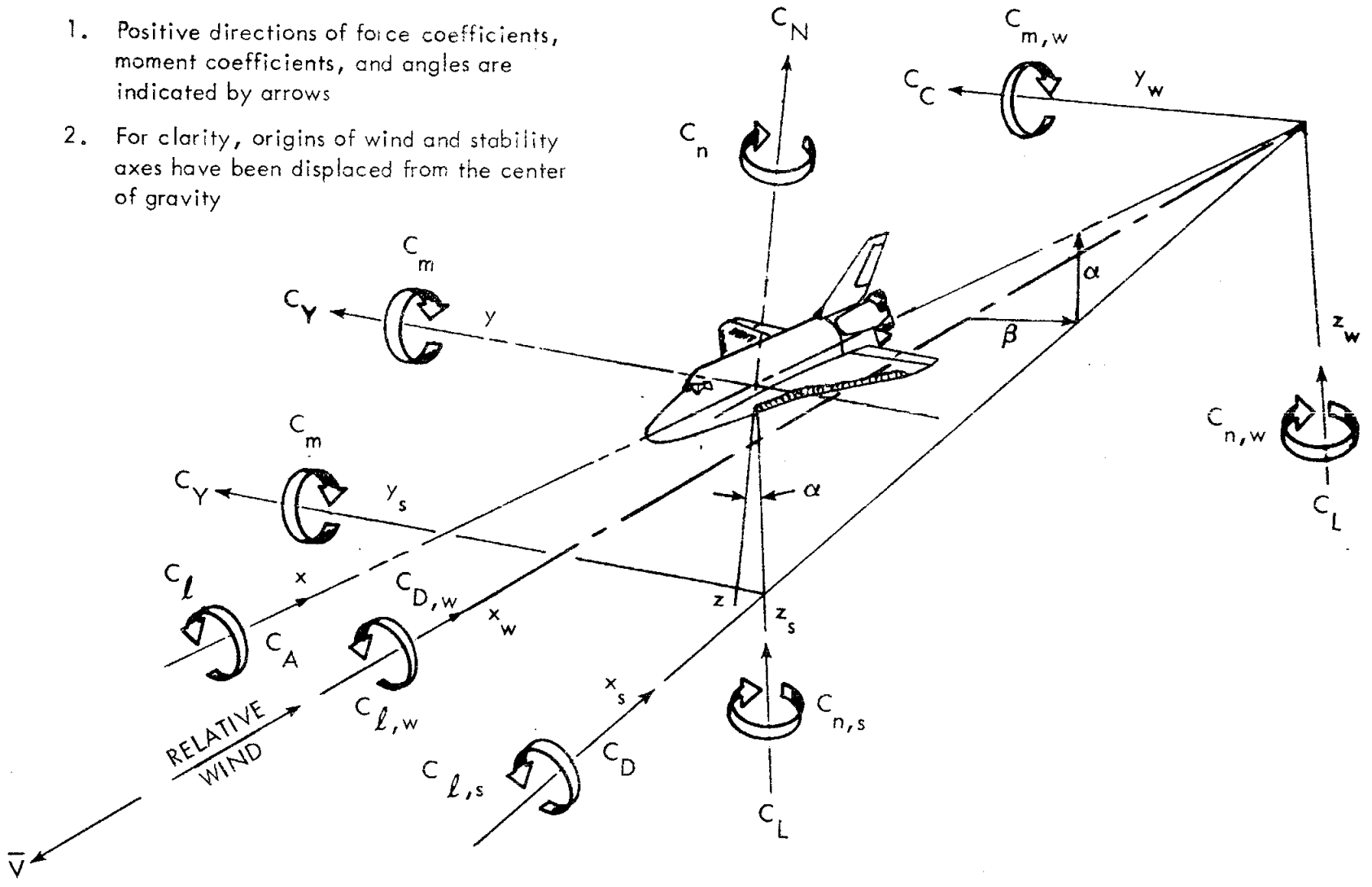
TABLE IV. - TAILCONE PRESSURE LOCATIONS

$\frac{X}{\ell_B}$	X_o (in.)	Z_o ϕ Origin		$\phi \sim$ DEGREES								
				0	44.8	50.1	101.4	115.6	133.8	149.1	180
0.997	1525	400	+	1	2	3	4	5	6	7	8
			−		102	103	104	105	106	107	
1.017	1550		+	9	10	11	12	13	14	15	16
			−		110	111	112	113	114	115	
1.055	1600		+	17	18	19	20	21	22	23	24
			−		118	119	120	121	122	123	
1.094	1650		+	25	26	27	28	29	30	31	32
		400	−		126	127	128	129	130	131	
1.249	1850	425	+	33	34	35					36
			−		134	135					
1.281	1890.7		+	37	38	39	40	41	42	43	44
			−		138	139	140	141	142	143	
1.288	1900	425	+	45							



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



a. Axes Systems

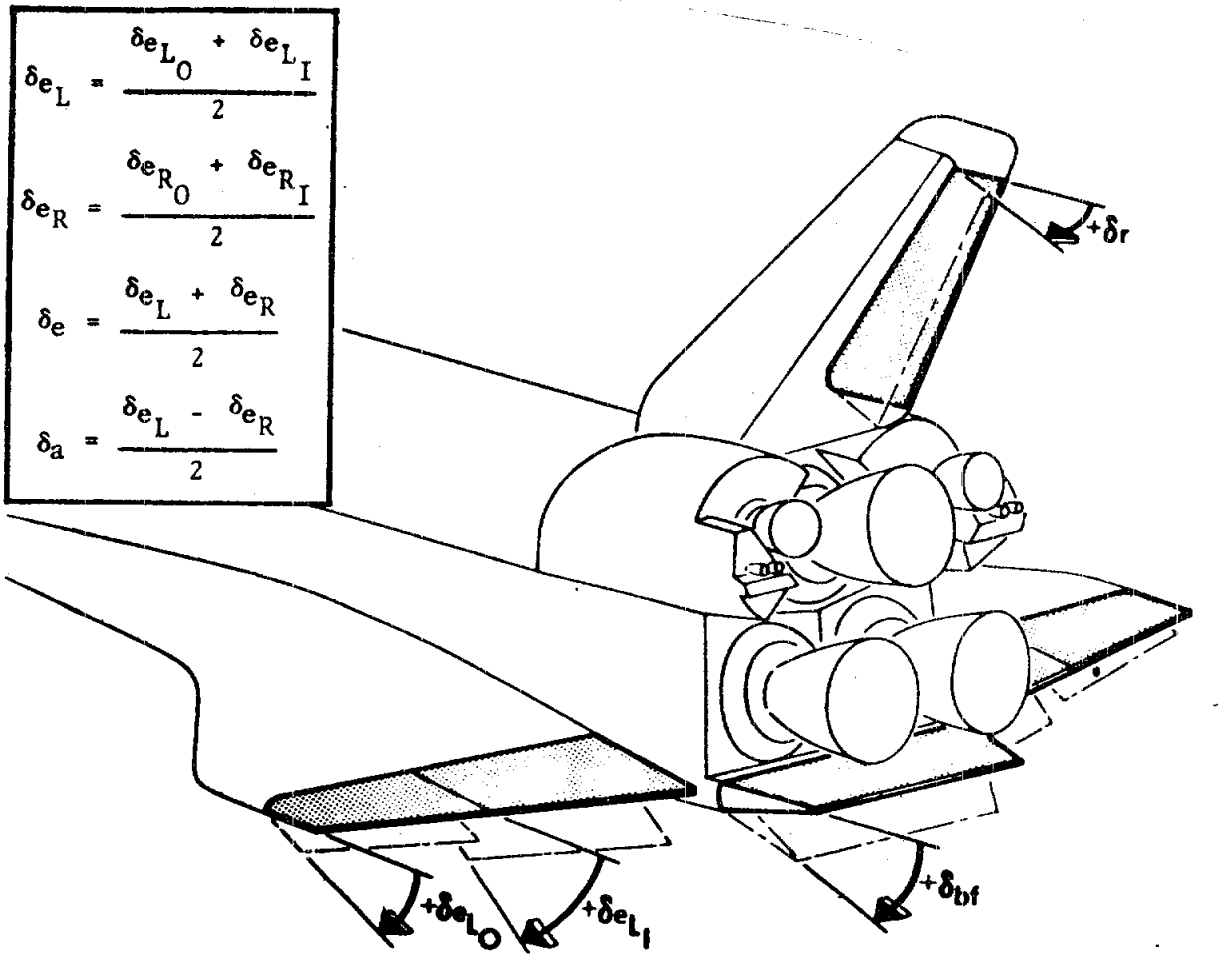
Figure 1. - Axes Systems and Sign Convention

$$\delta e_L = \frac{\delta e_{L_O} + \delta e_{L_I}}{2}$$

$$\delta e_R = \frac{\delta e_{R_O} + \delta e_{R_I}}{2}$$

$$\delta e = \frac{\delta e_L + \delta e_R}{2}$$

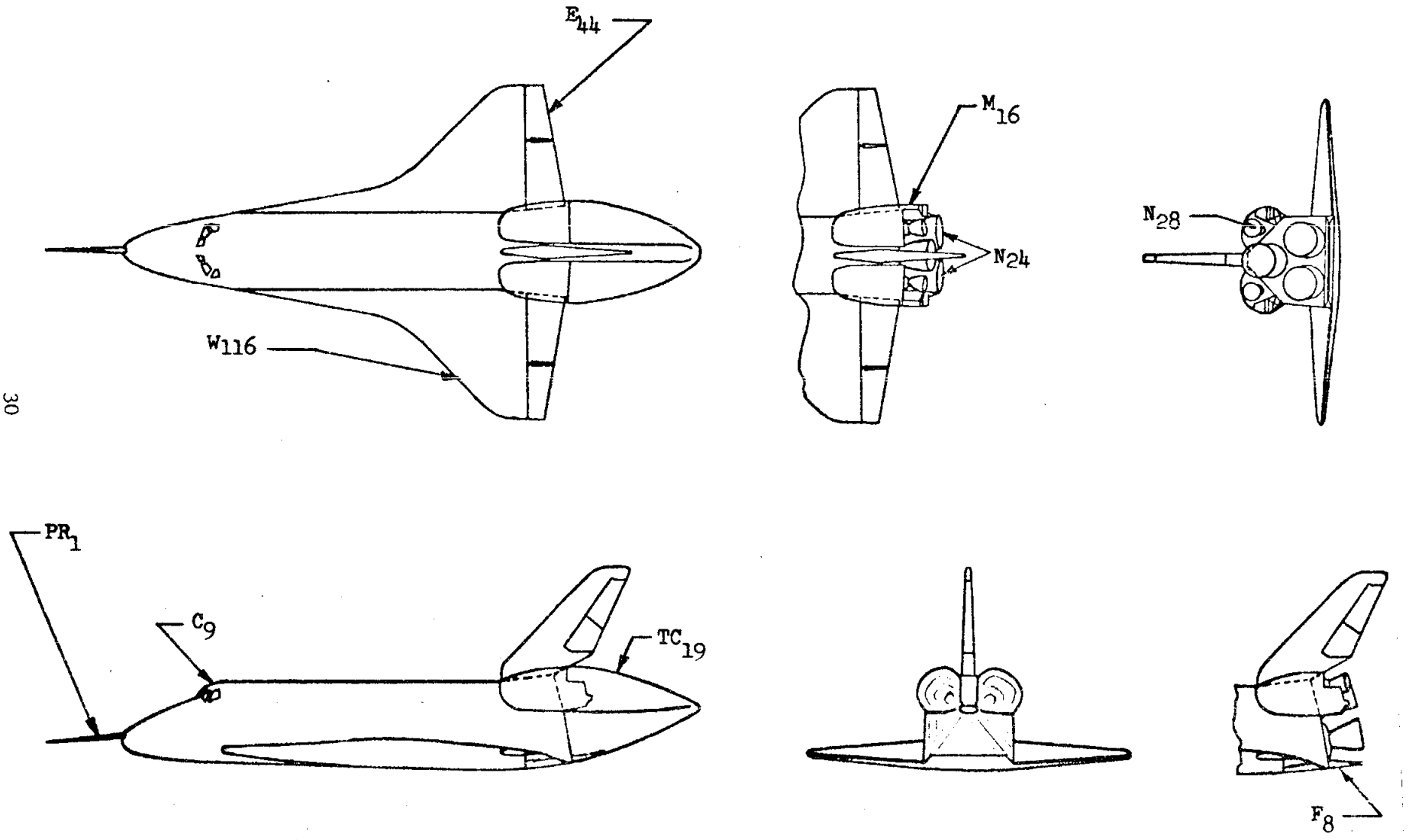
$$\delta a = \frac{\delta e_L - \delta e_R}{2}$$



Positive Deflection of	Angle	Aero Forces and Moments	Hinge Moment
Rudder, δr	$+\beta$, $-\psi$	$+C_Y$, $-C_n$	$-C_{h_r}$
Elevon, δe	$-\alpha$, $-\theta$	$-C_m$	$-C_{h_e}$
Right, δe_R	$-\phi$	$-C_\ell$	$-C_{h_{e_R}}$
Left, δe_L	$+\phi$	$+C_\ell$	$-C_{h_{e_L}}$
Aileron, δa	$+\phi$	$+C_\ell$	
Body Flap, δbf	$-\alpha$, $-\theta$	$-C_m$	$-C_{h_{bf}}$

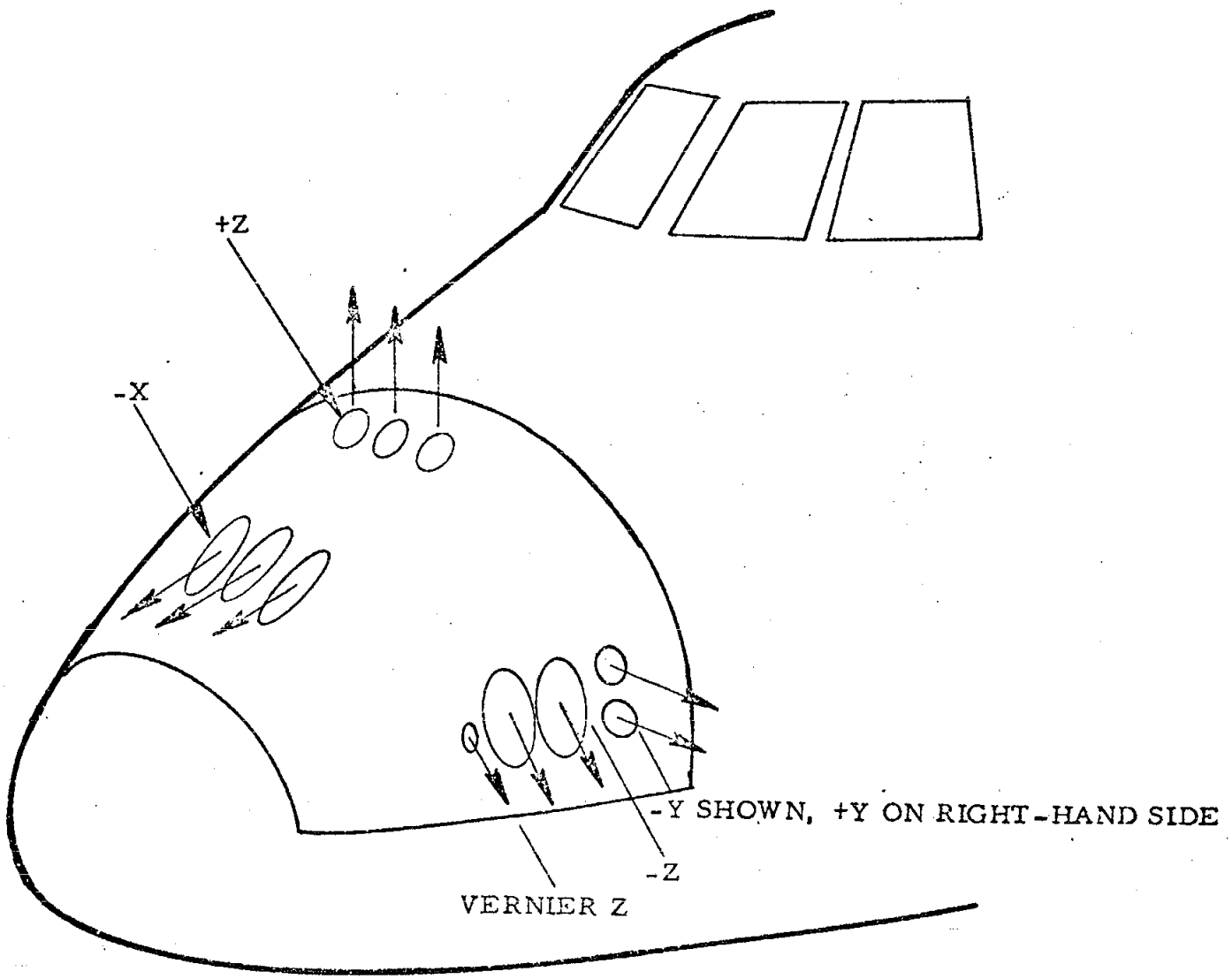
b. Control Surface Deflections

Figure 1. - Concluded.



a. Orbiter Configuration (ALT)

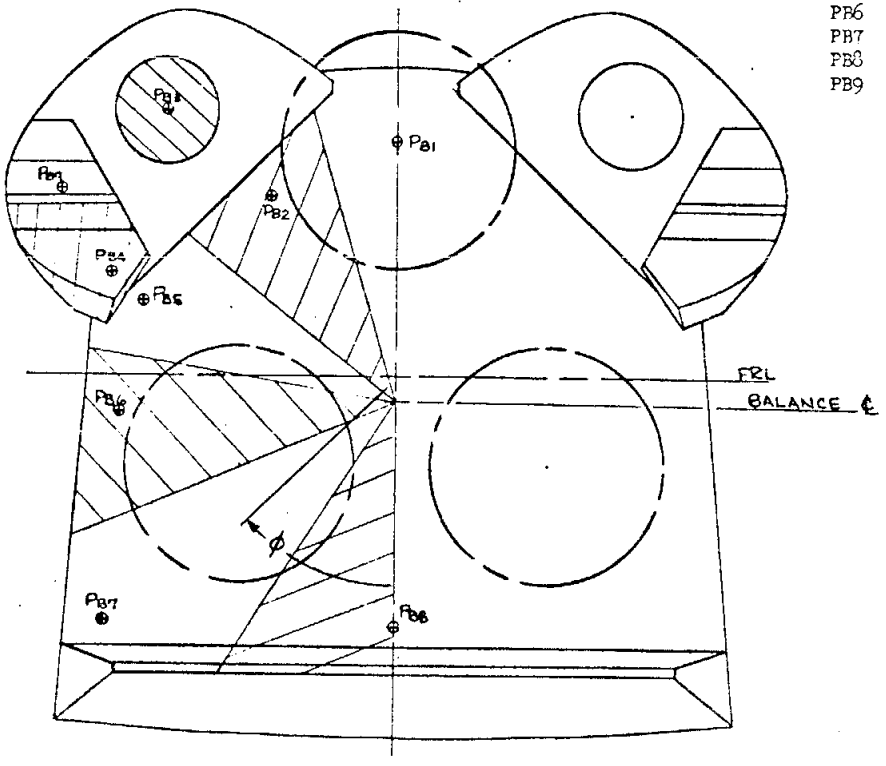
Figure 2. - Model Sketches.



b. RCS Forward Fuselage Thrustor Locations

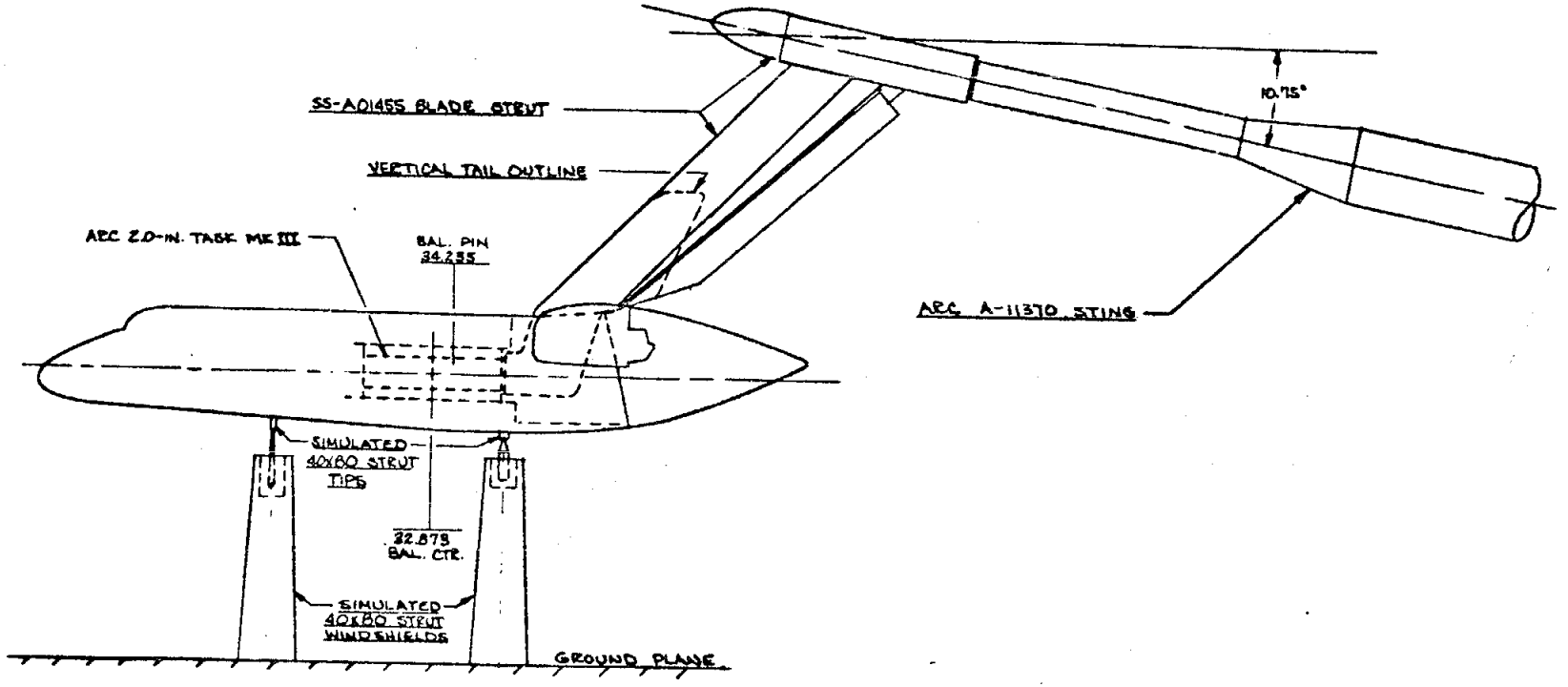
Figure 2. - Continued.

Tap	W.P., in.	B.P., in.	Area, ft^2
PB1	489	0	30.67
PB2	469	49	48.67
PB3	505	90	18.67
PB4	439	111	22.11
PB5	428	99	43.33
PB6	386	108	59.56
PB7	305	114	86.78
PB8	303	0	49.00
PB9	471	130	78.00



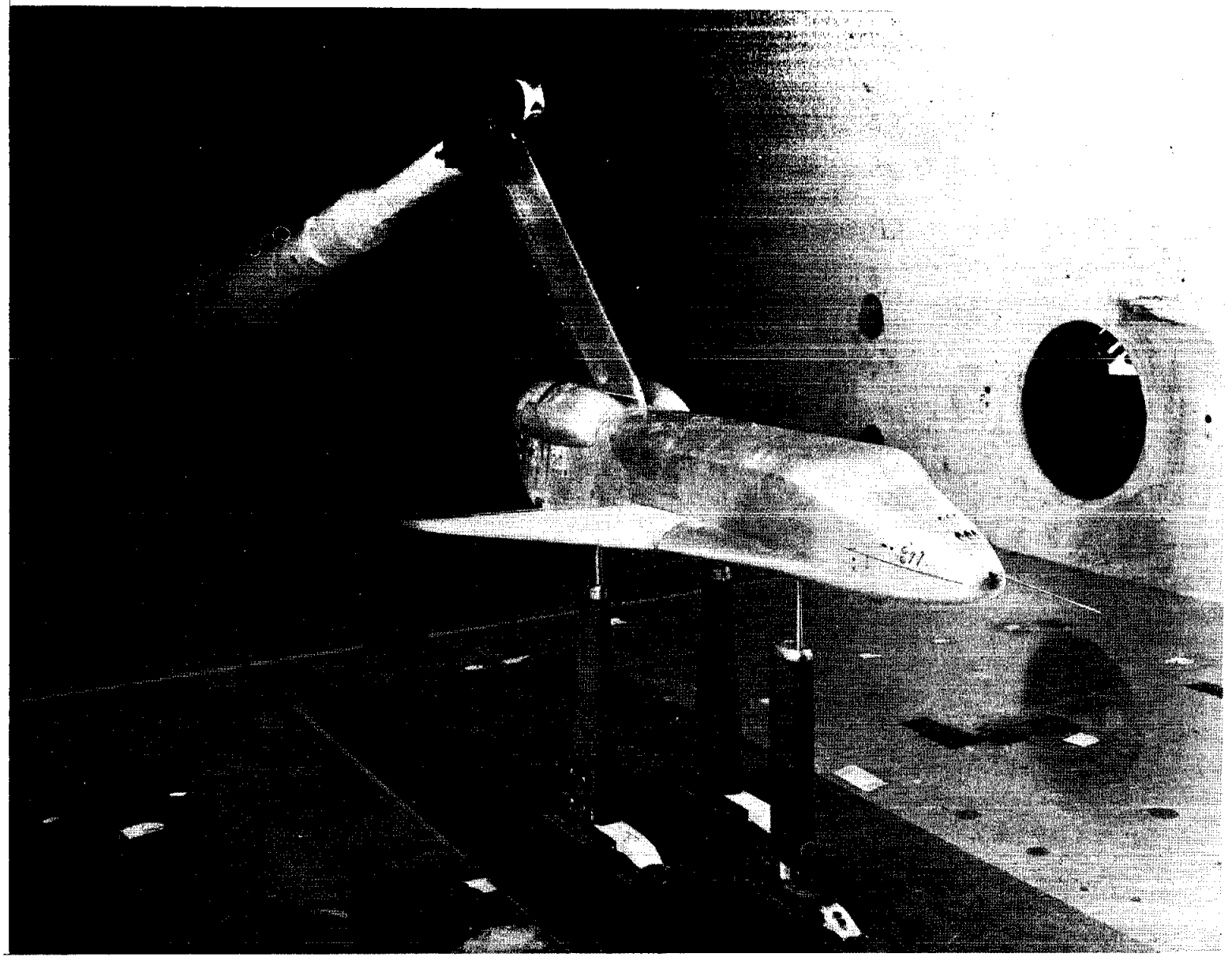
c. Orbiter Base Pressure Locations

Figure 2. - Continued.



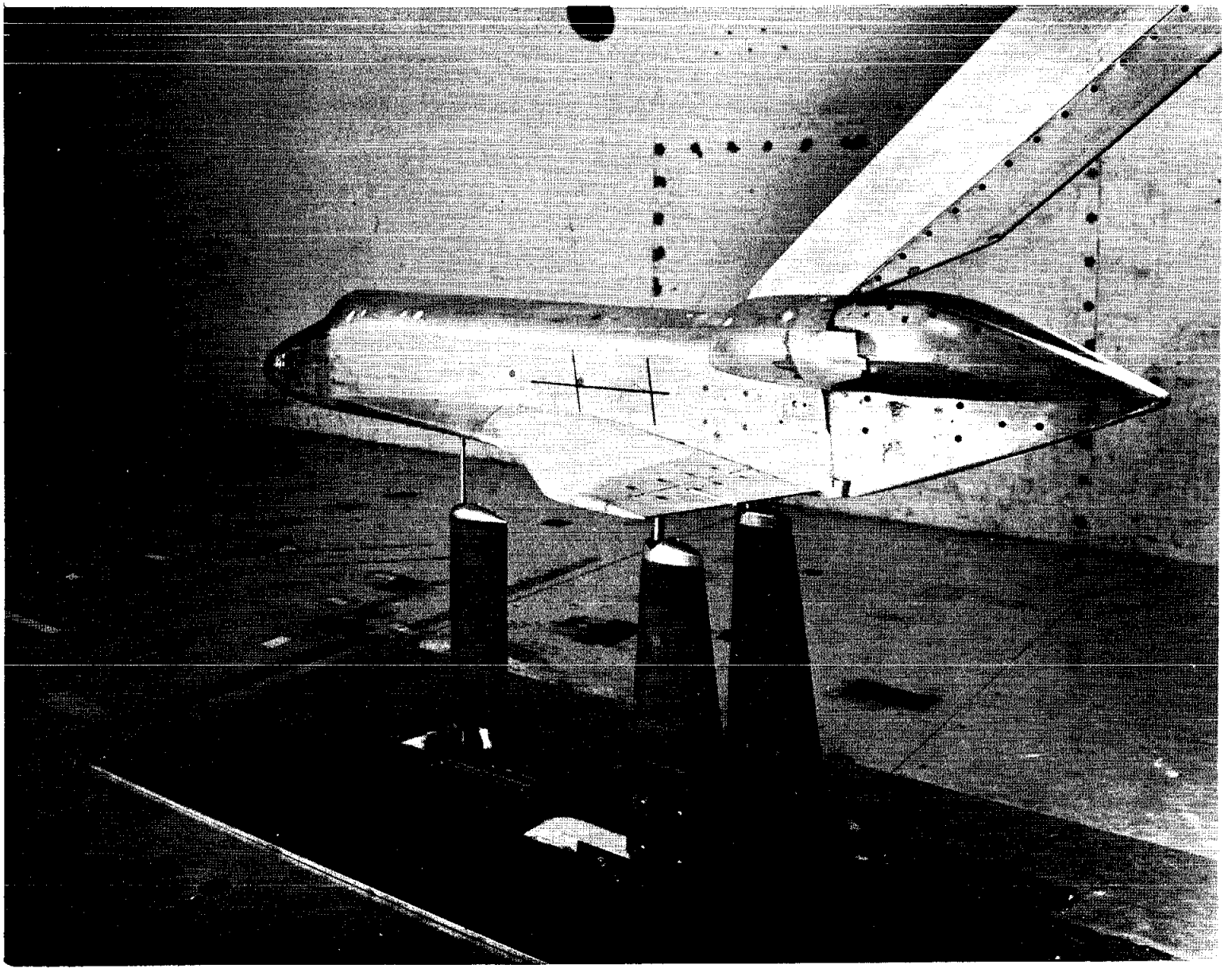
d. Installation Sketch

Figure 2. - Concluded.



a. Three-Quarter Front View of Model Installed in Tunnel

Figure 3. - Model Photographs.



b. Three-Quarter Rear View of Model Installed in Tunnel

Figure 3. - Concluded.

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS001	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS002	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS003	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

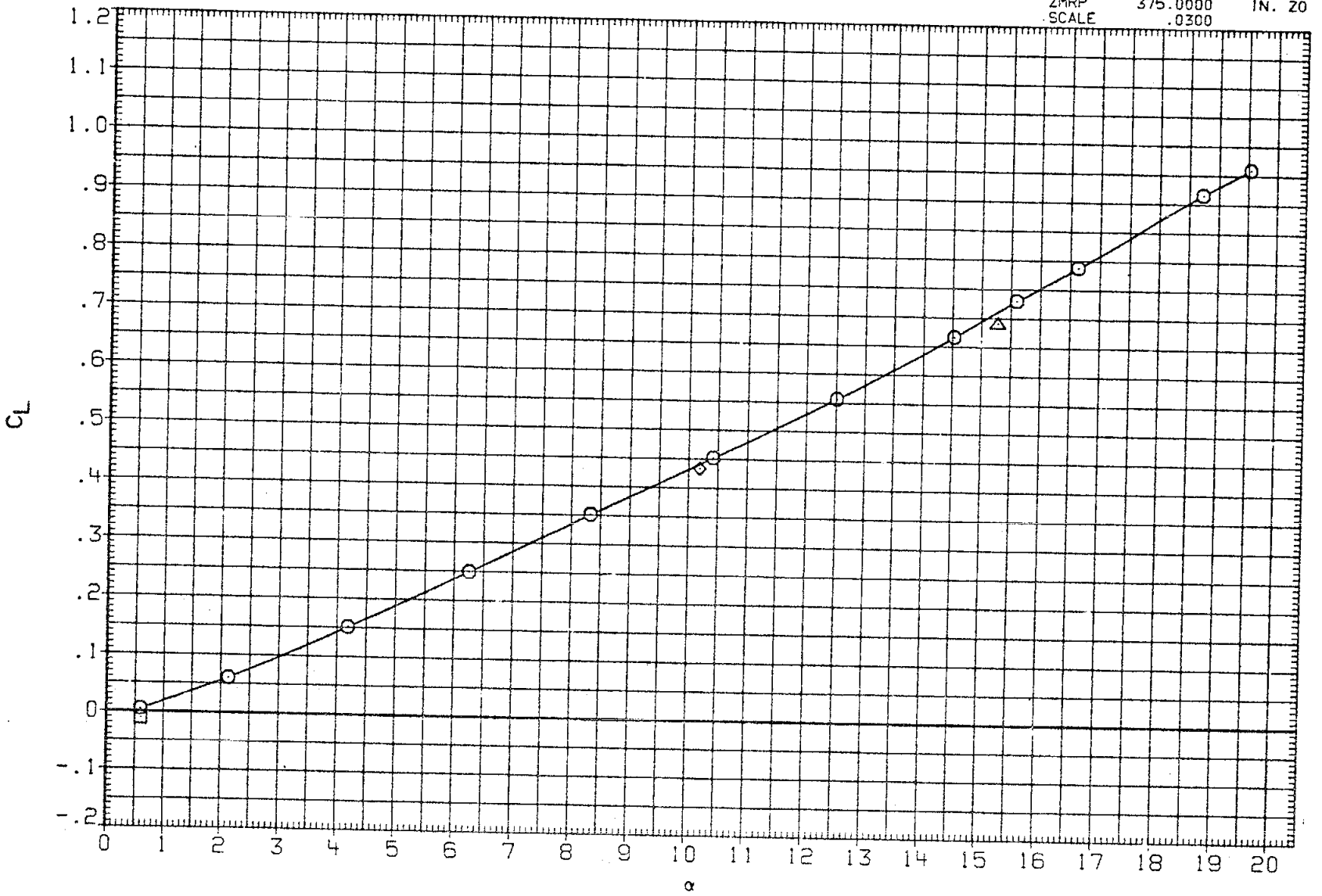


FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 2.40

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS001	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS002	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS003	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600

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YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

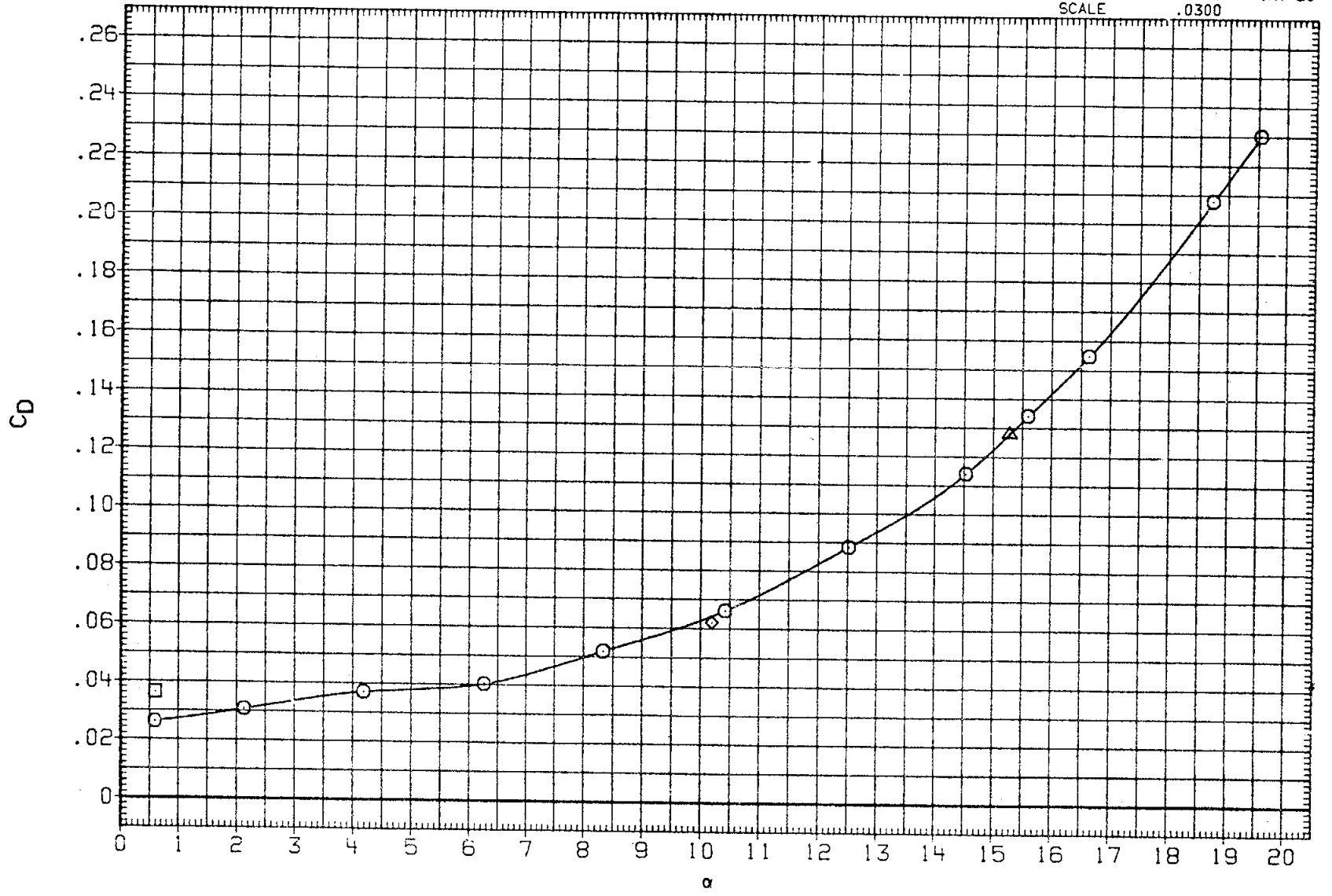

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 2.40

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS001	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS002	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS003	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600

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YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

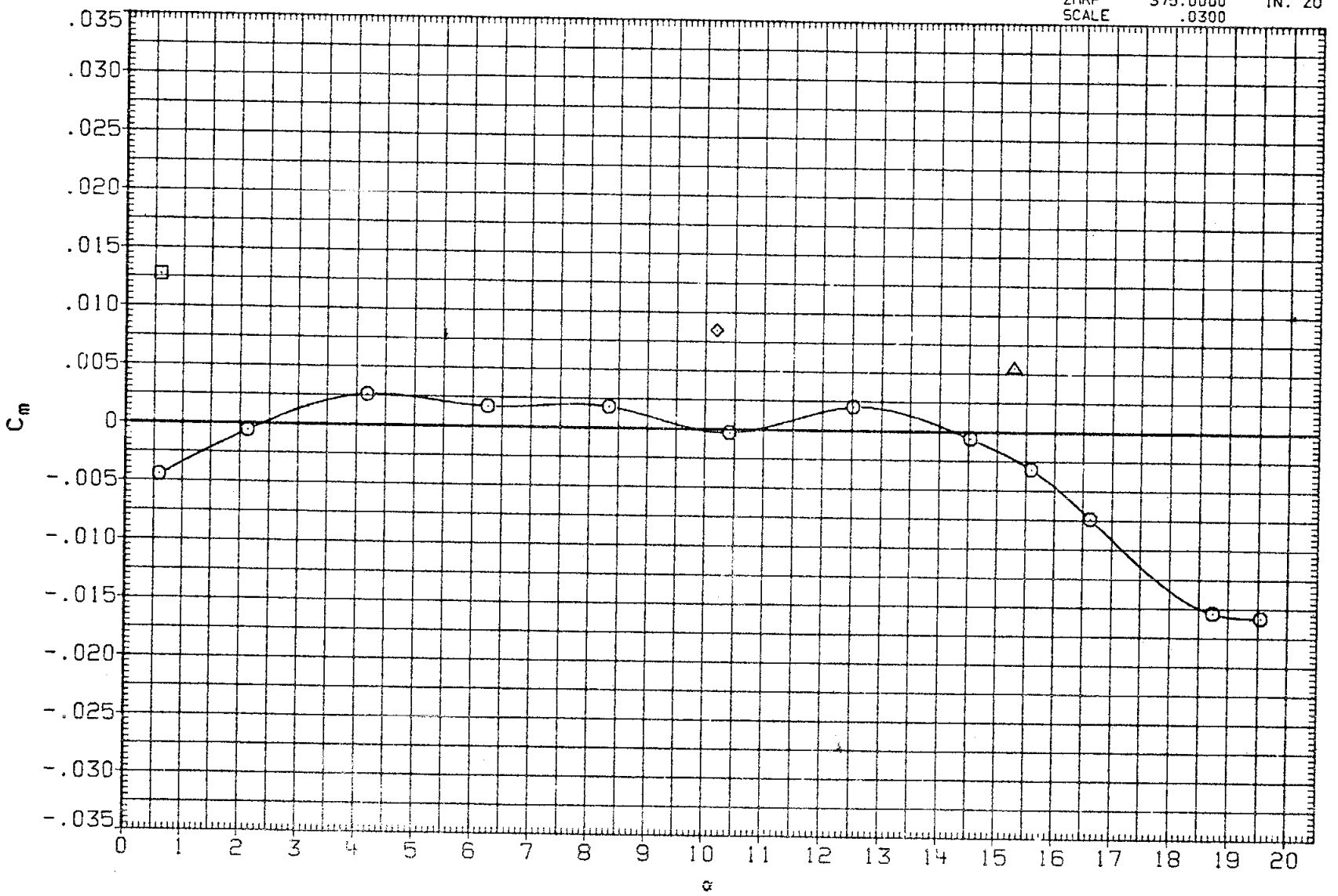

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 2.40

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS001	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS002	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS003	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600

REFERENCE INFORMATION

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BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

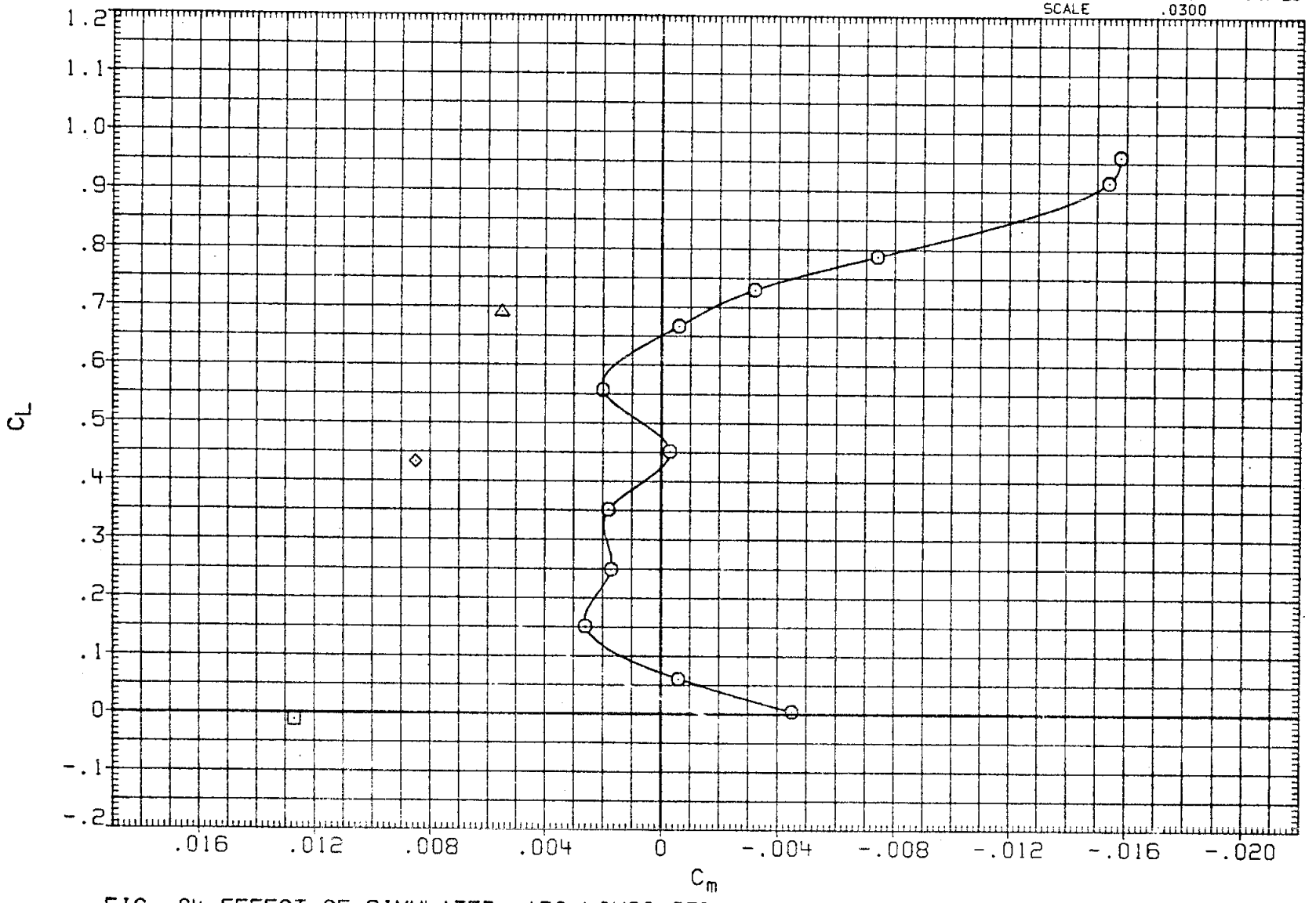

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 2.40

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	DOFLAP	H/B
RNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS001	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS002	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS003	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600

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BREF	936.6800	INCHES
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YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

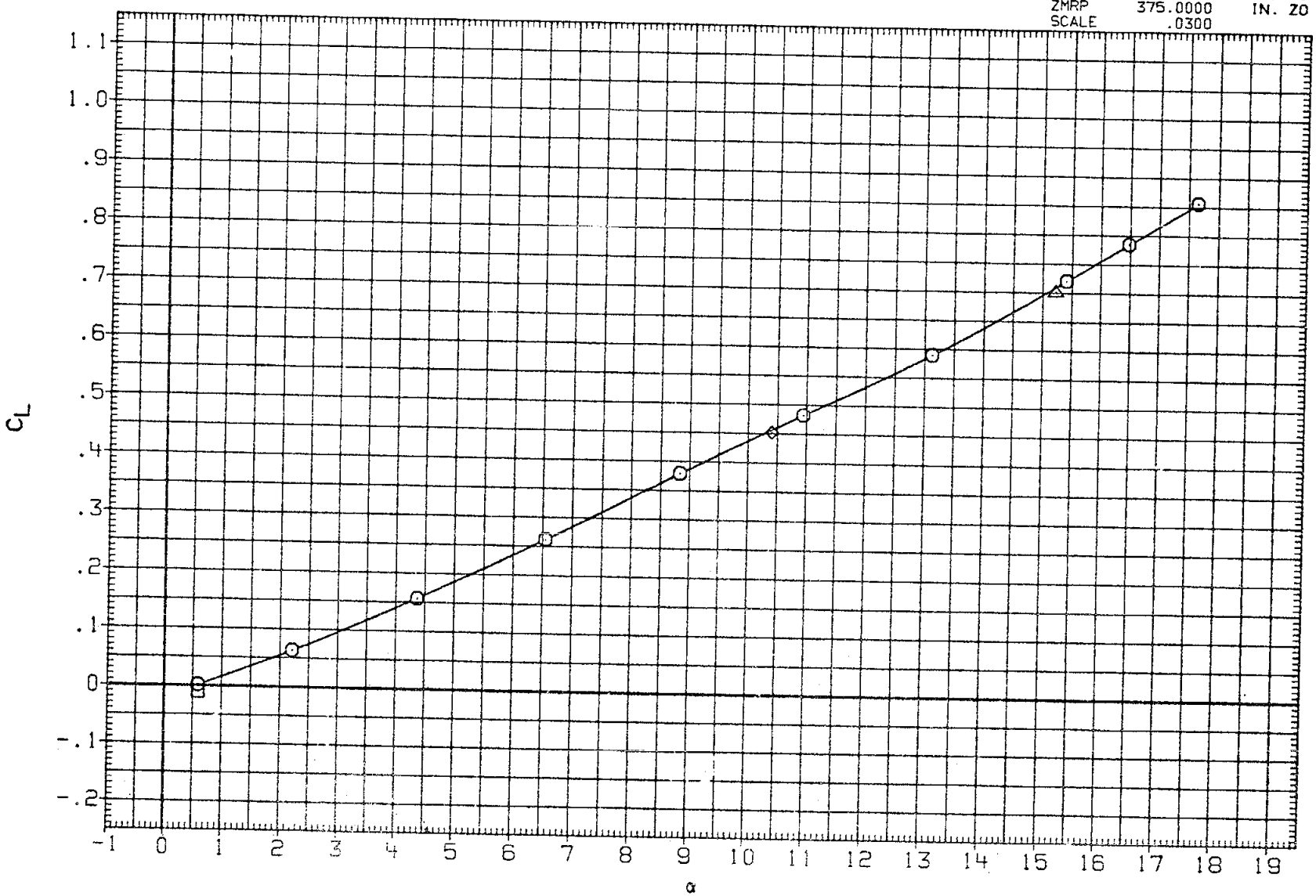

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(B)RN/L = 5.47

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS001	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS002	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS003	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600

REFERENCE INFORMATION

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BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

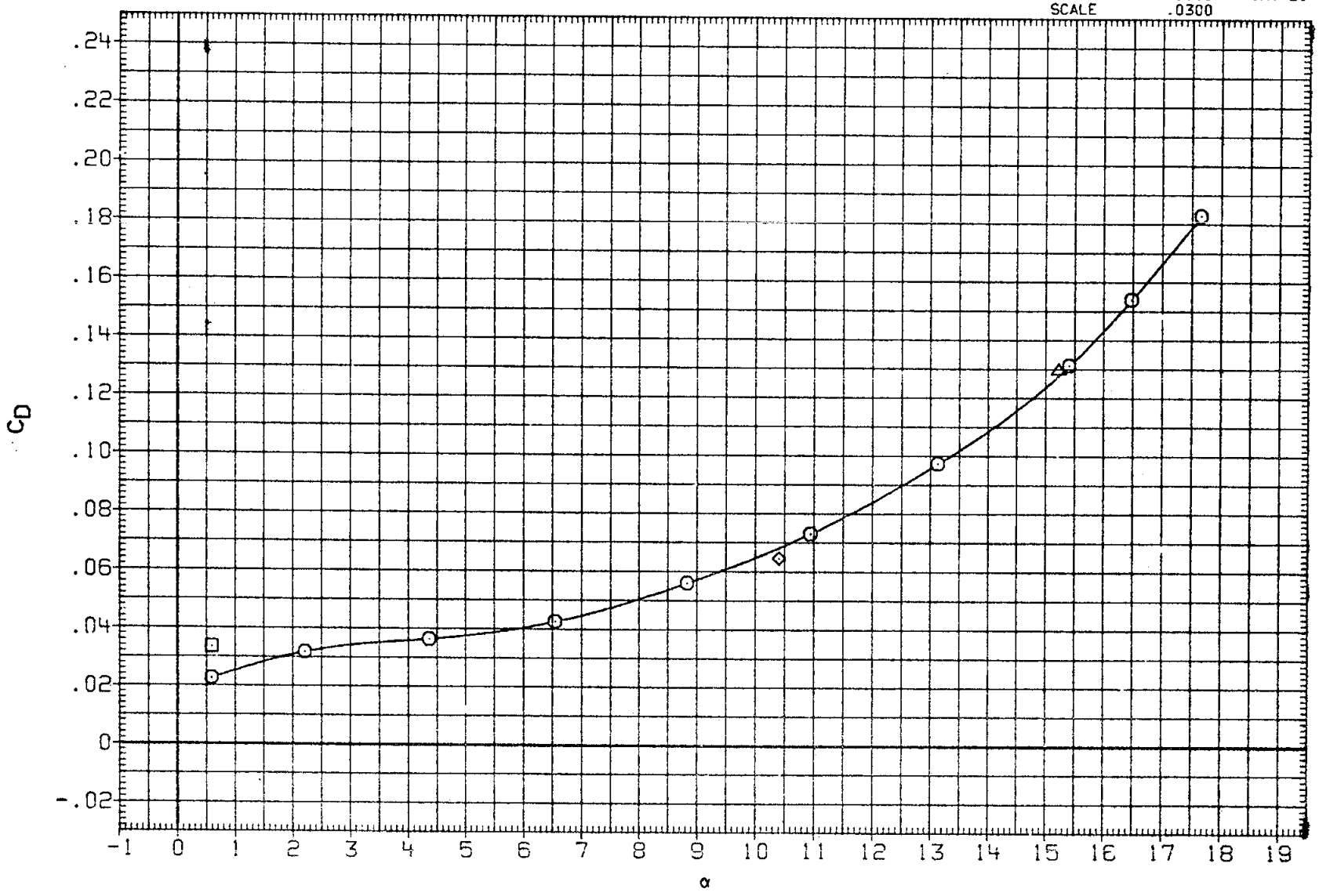

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(B)RN/L = 5.47

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS001	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS002	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS003	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600

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YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

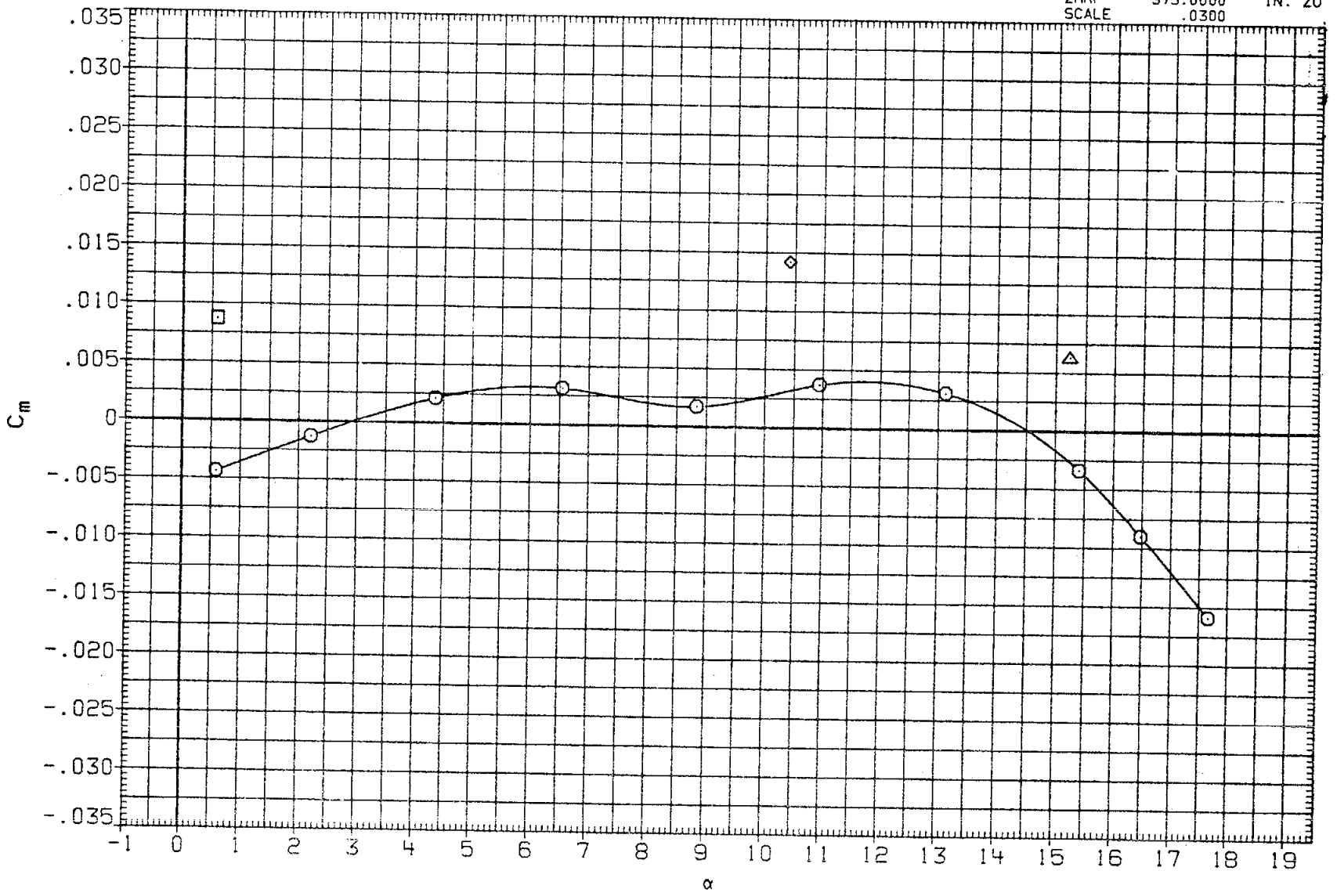

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(B)RN/L = 5.47

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS001	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS002	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
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YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

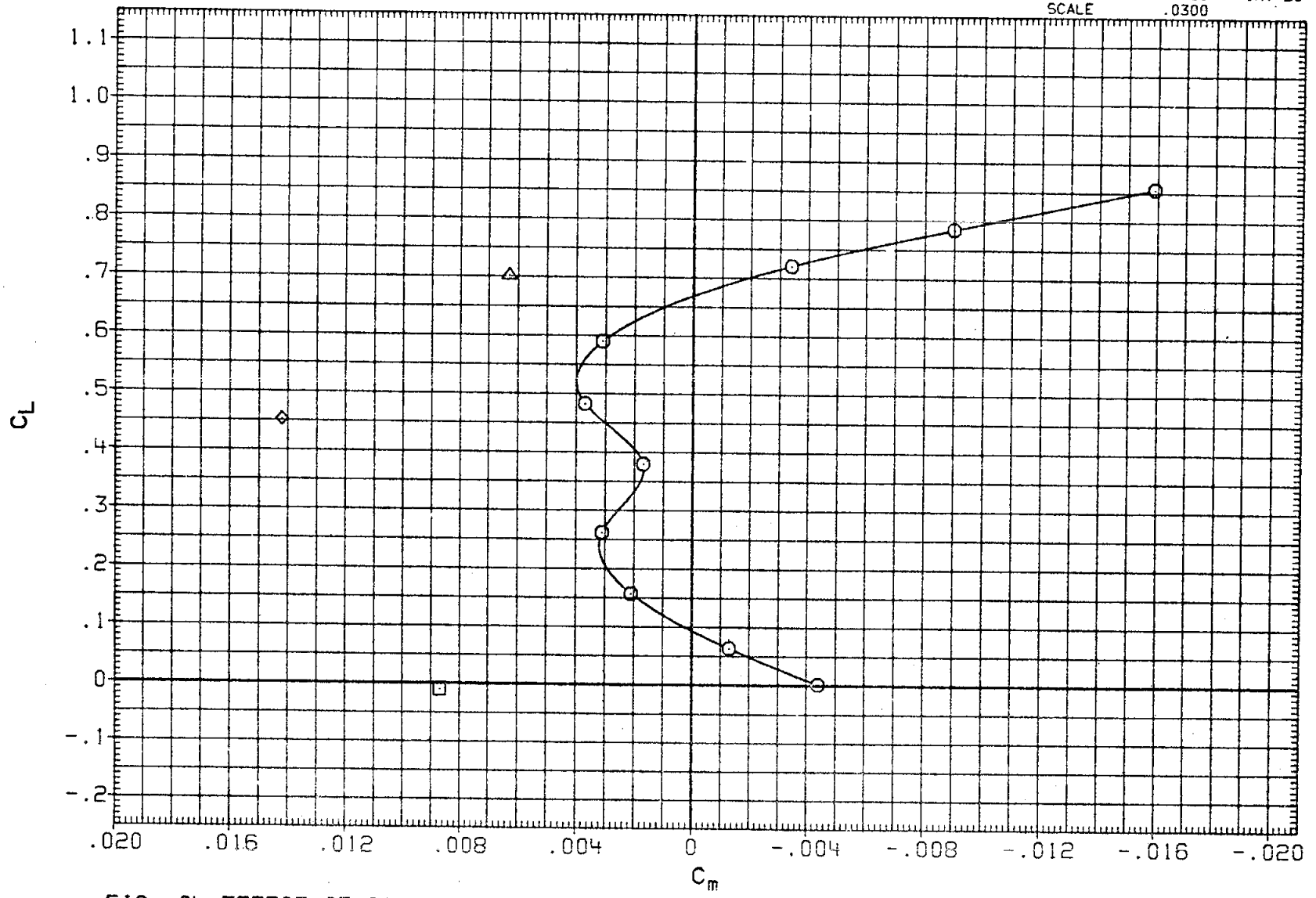

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(B)RN/L = 5.47

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS001	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS002	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS003	△	DATA NOT AVAILABLE	.000	.000	-11.700	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
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YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

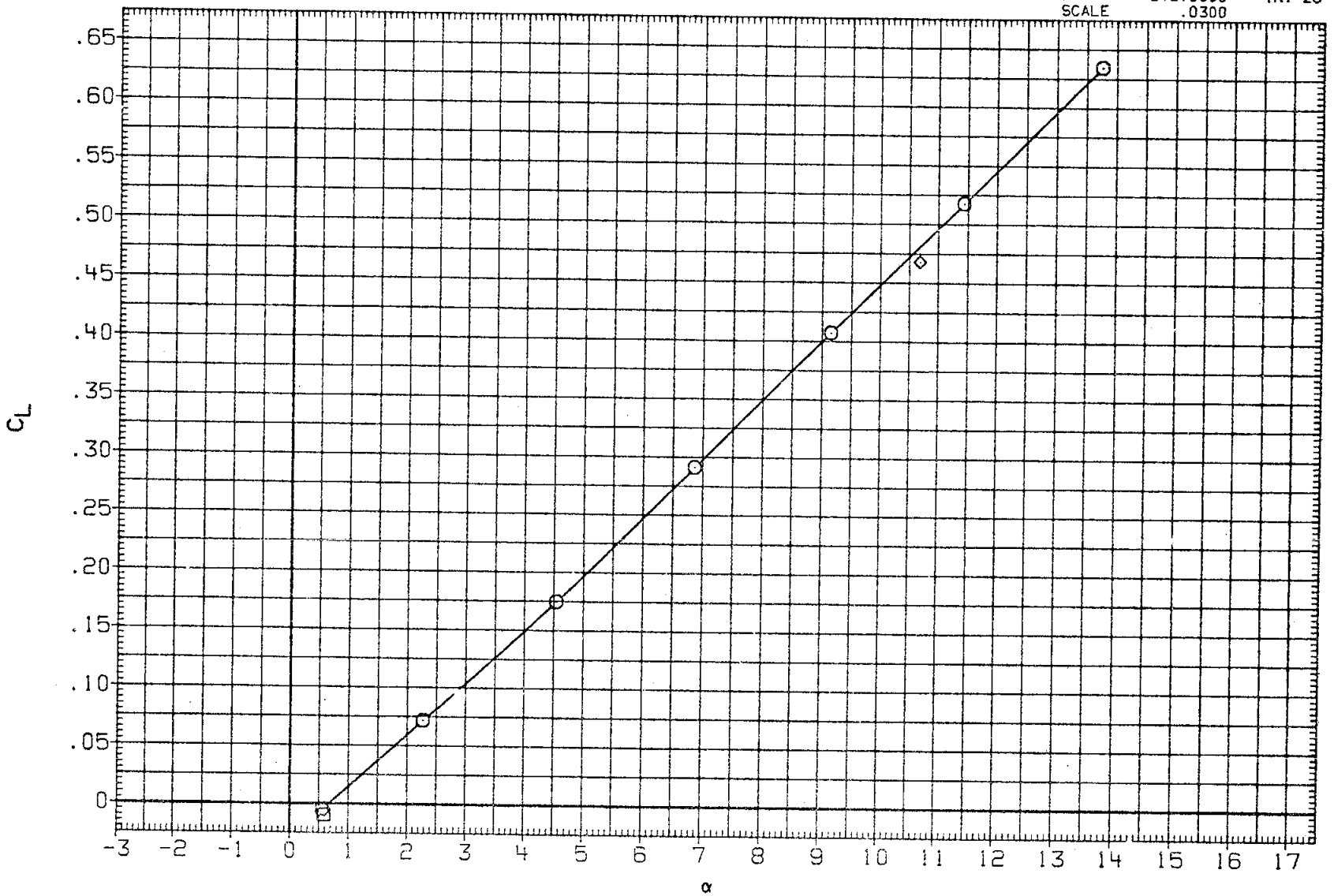

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(C)RN/L = 7.98

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS001	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS002	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS003	△	DATA NOT AVAILABLE	.000	.000	-11.700	.600

REFERENCE INFORMATION

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BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

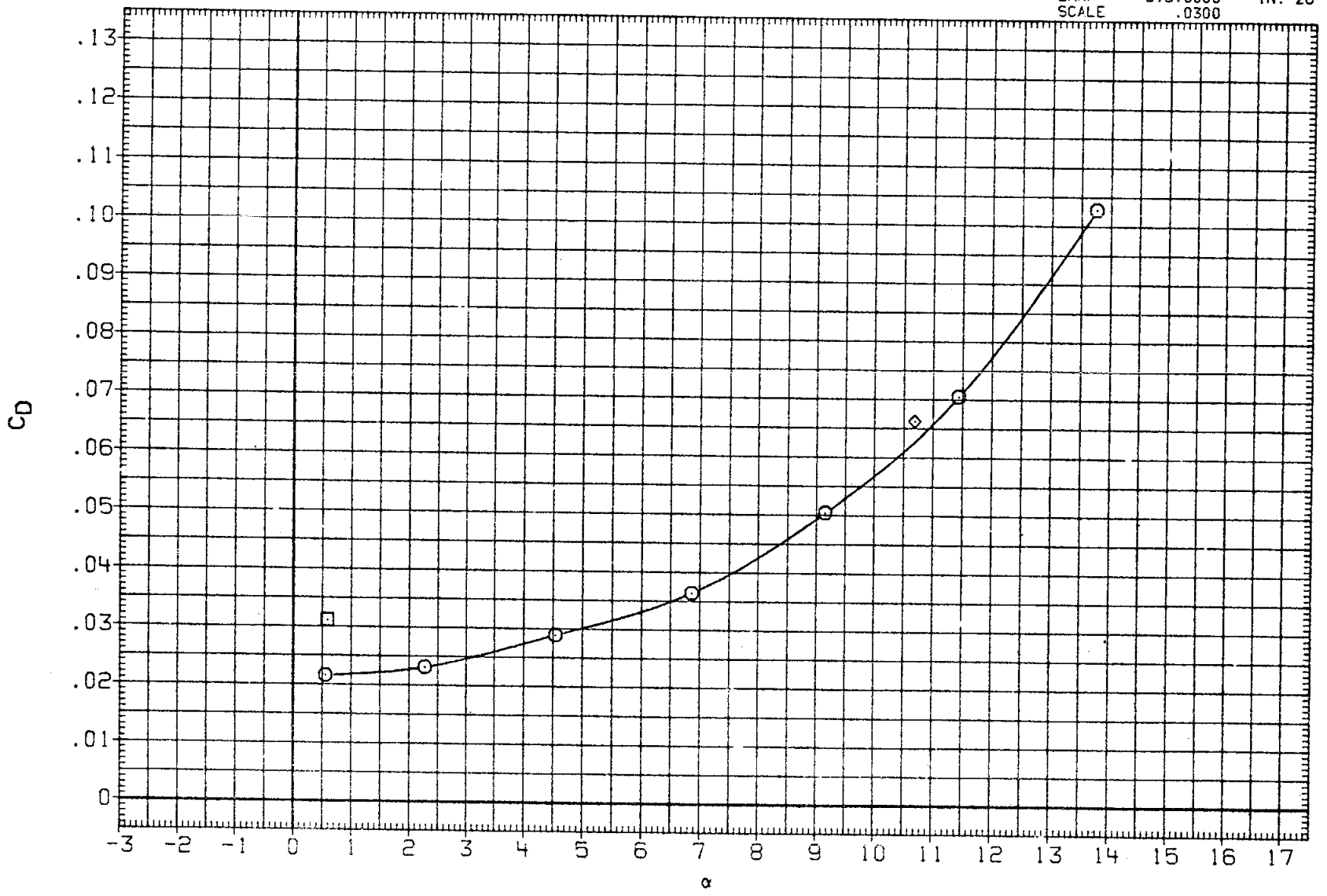

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(C)RN/L = 7.98

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS001	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS002	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS003	△	DATA NOT AVAILABLE	.000	.000	-11.700	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

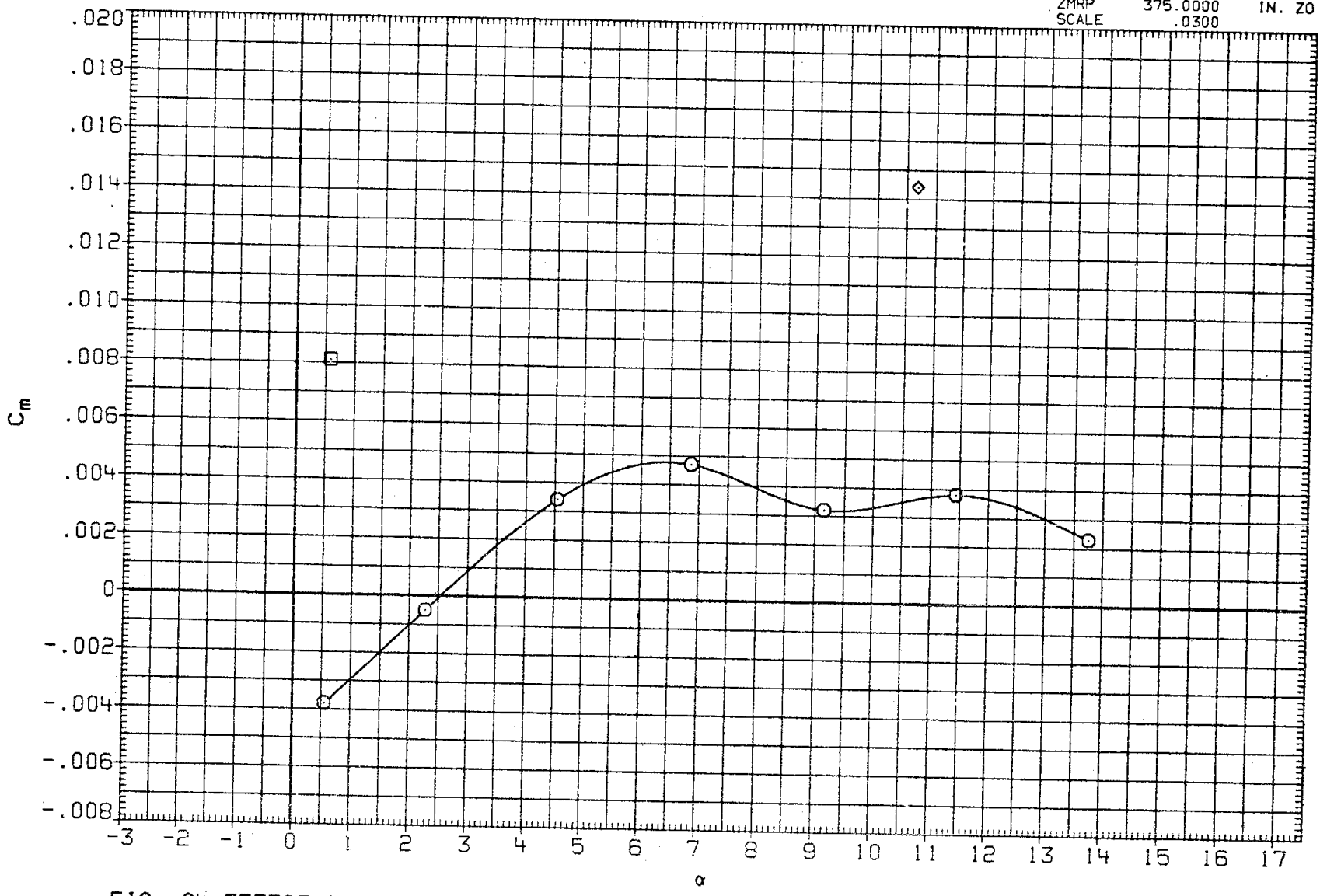

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(C)RN/L = 7.98

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS001	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS002	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	-11.700	.600
ZNS003	△	DATA NOT AVAILABLE	.000	.000	-11.700	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

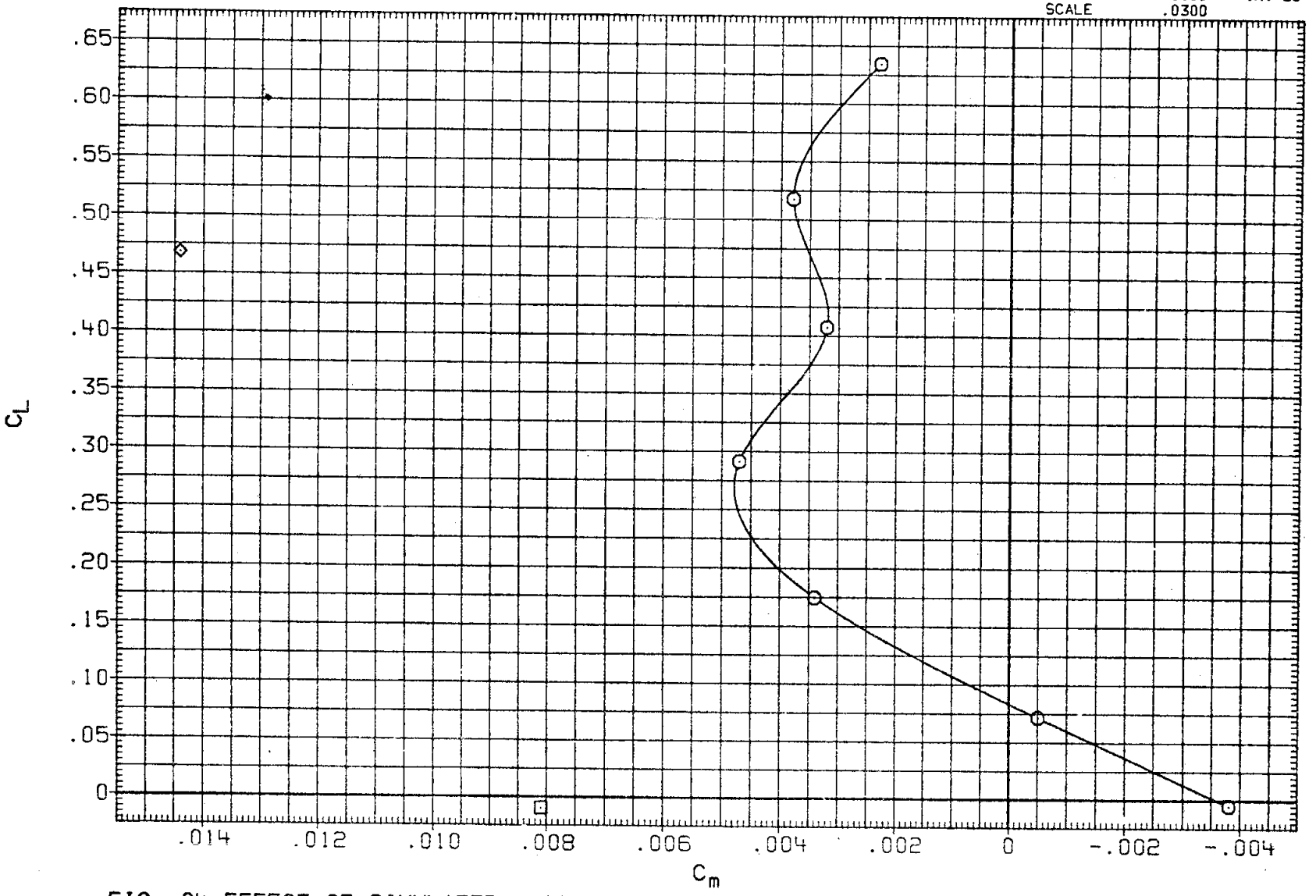

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(C)RN/L = 7.98

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
ZNS017	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	16.300	.600
ZNS004	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	16.300	.600
ZNS005	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	16.300	.600
ZNS006	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	16.300	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

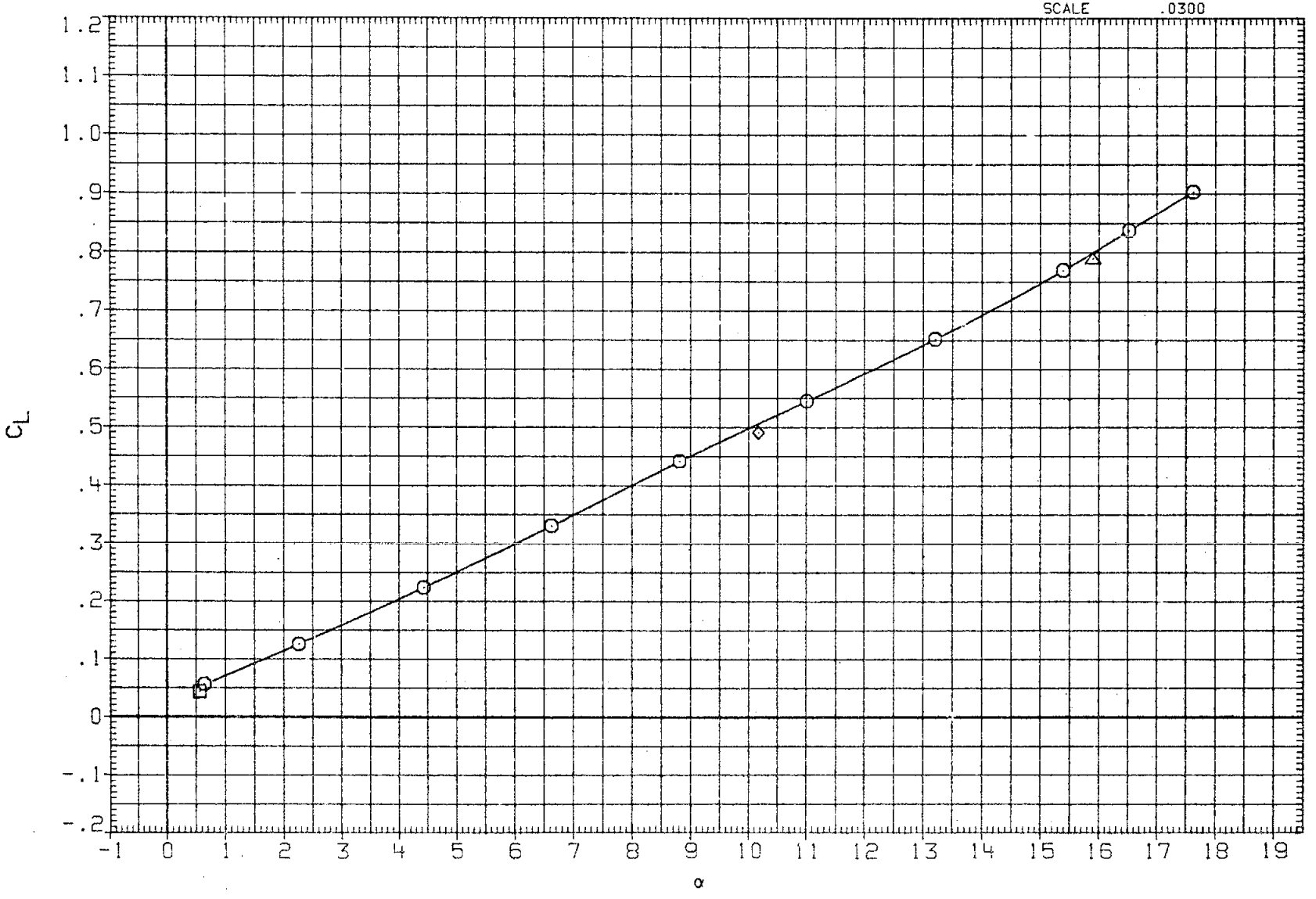

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.40

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
ZNS017	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	16.300	.600
ZNS004	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	16.300	.600
ZNS005	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	16.300	.600
ZNS006	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	16.300	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

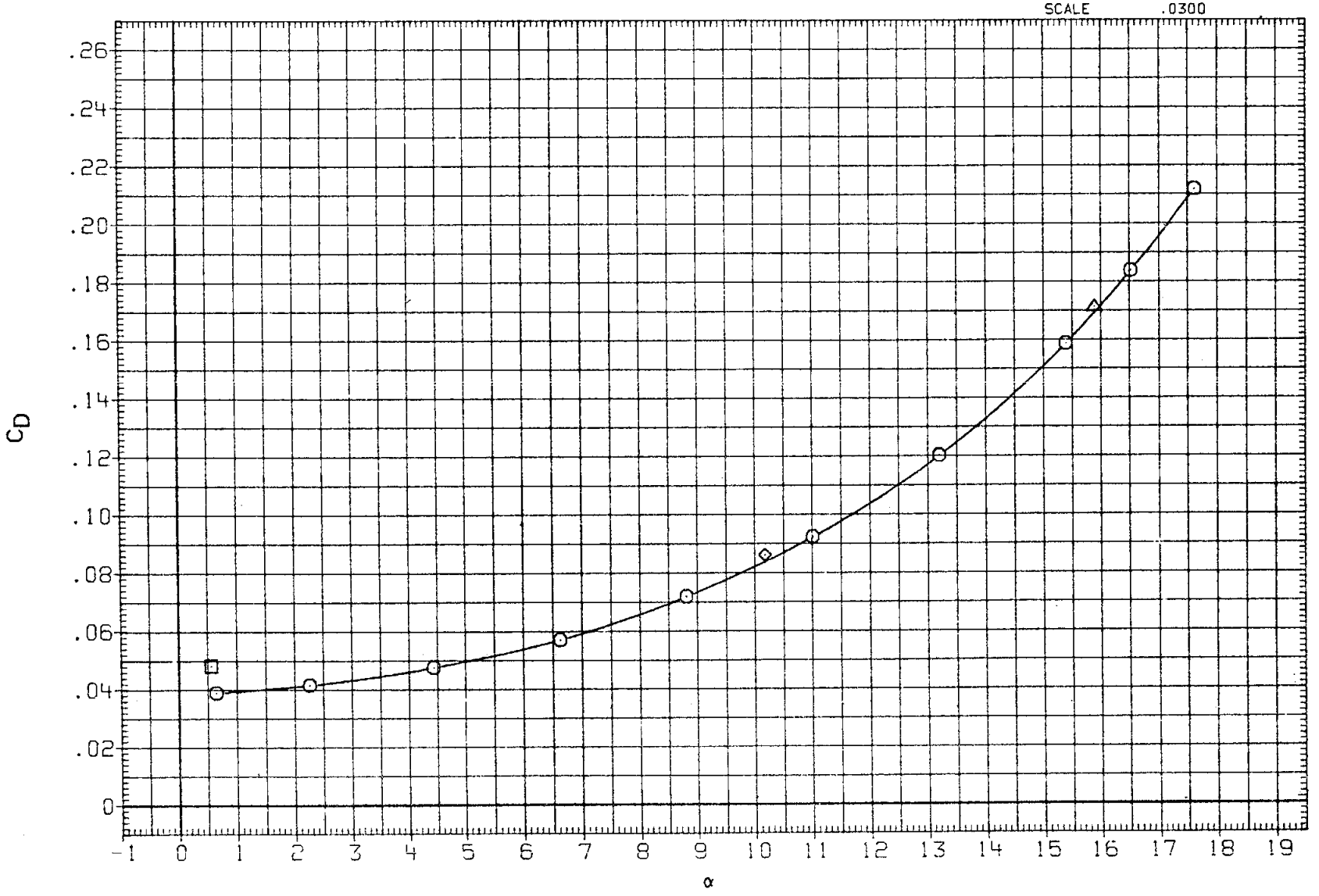

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.40

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
ZNS017	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	16.300	.600
ZNS004	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	16.300	.600
ZNS005	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	16.300	.600
ZNS006	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	16.300	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

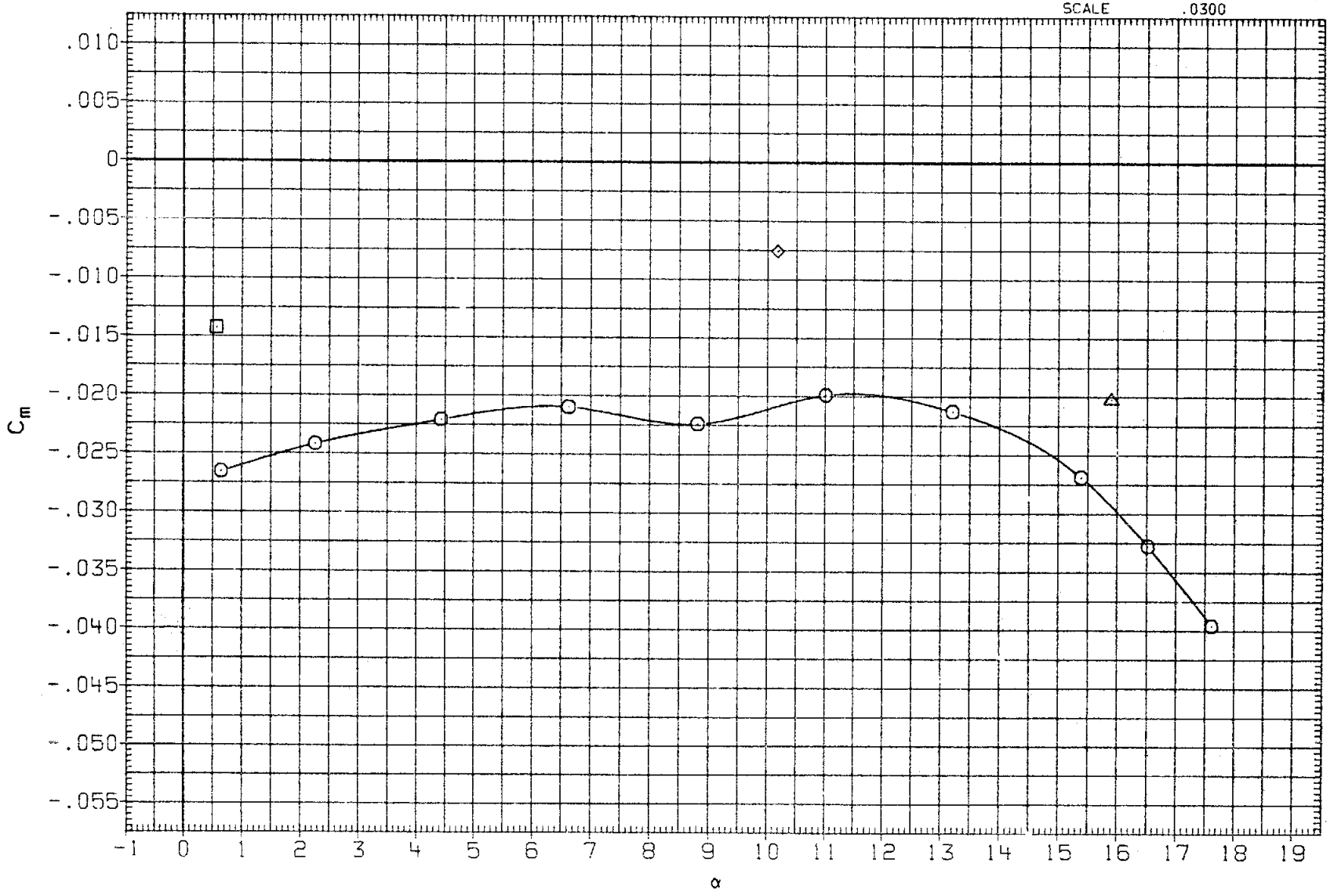

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.40

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
ZNS017	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	16.300	.600
ZNS004	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	16.300	.600
ZNS005	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	16.300	.600
ZNS006	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	.000	16.300	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

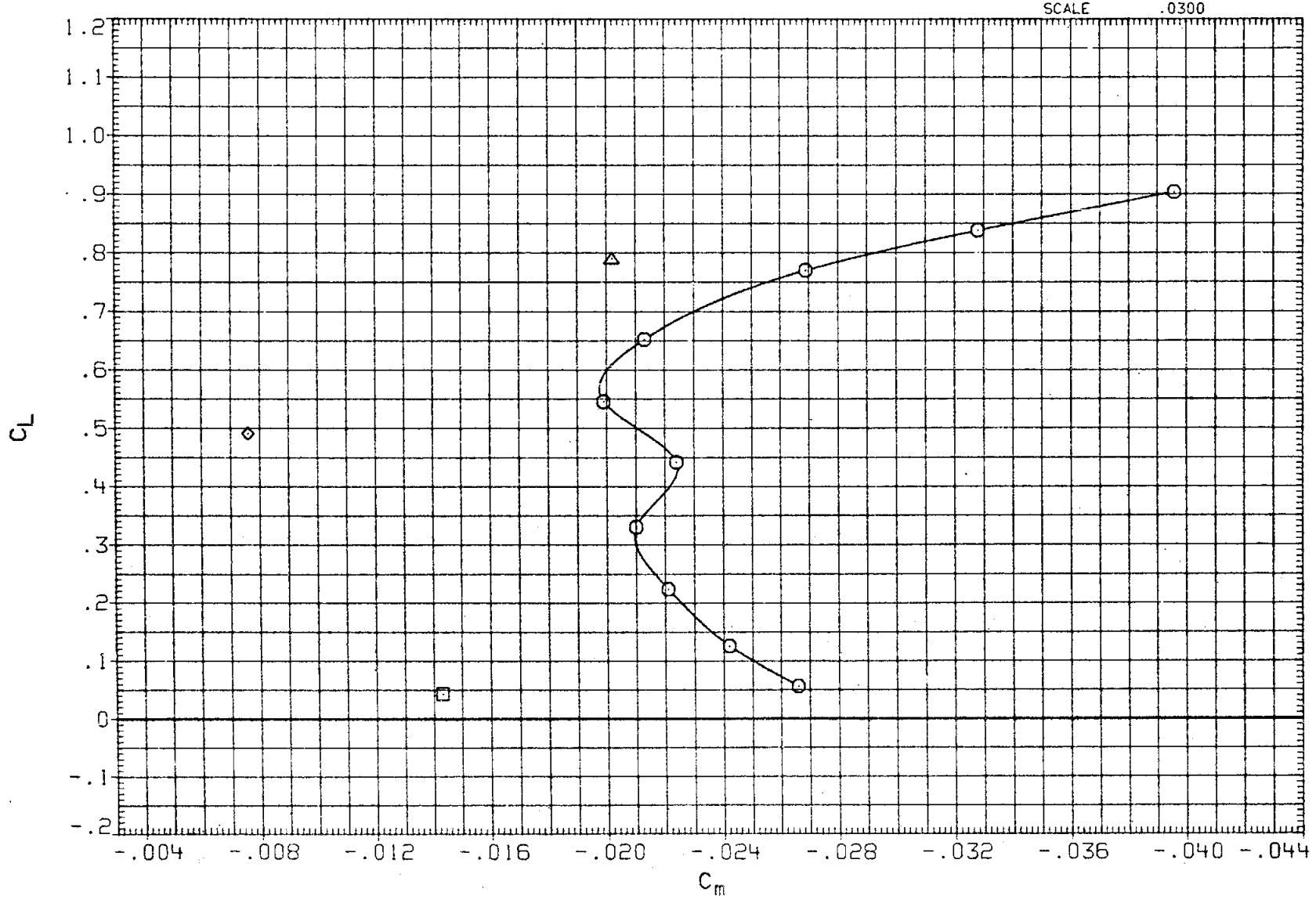

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.40

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
ZNS017	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	16.300	.600
ZNS004	□	DATA NOT AVAILABLE	.000	.000	16.300	.600
ZNS005	◇	DATA NOT AVAILABLE	.000	.000	16.300	.600
ZNS006	△	DATA NOT AVAILABLE	.000	.000	16.300	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

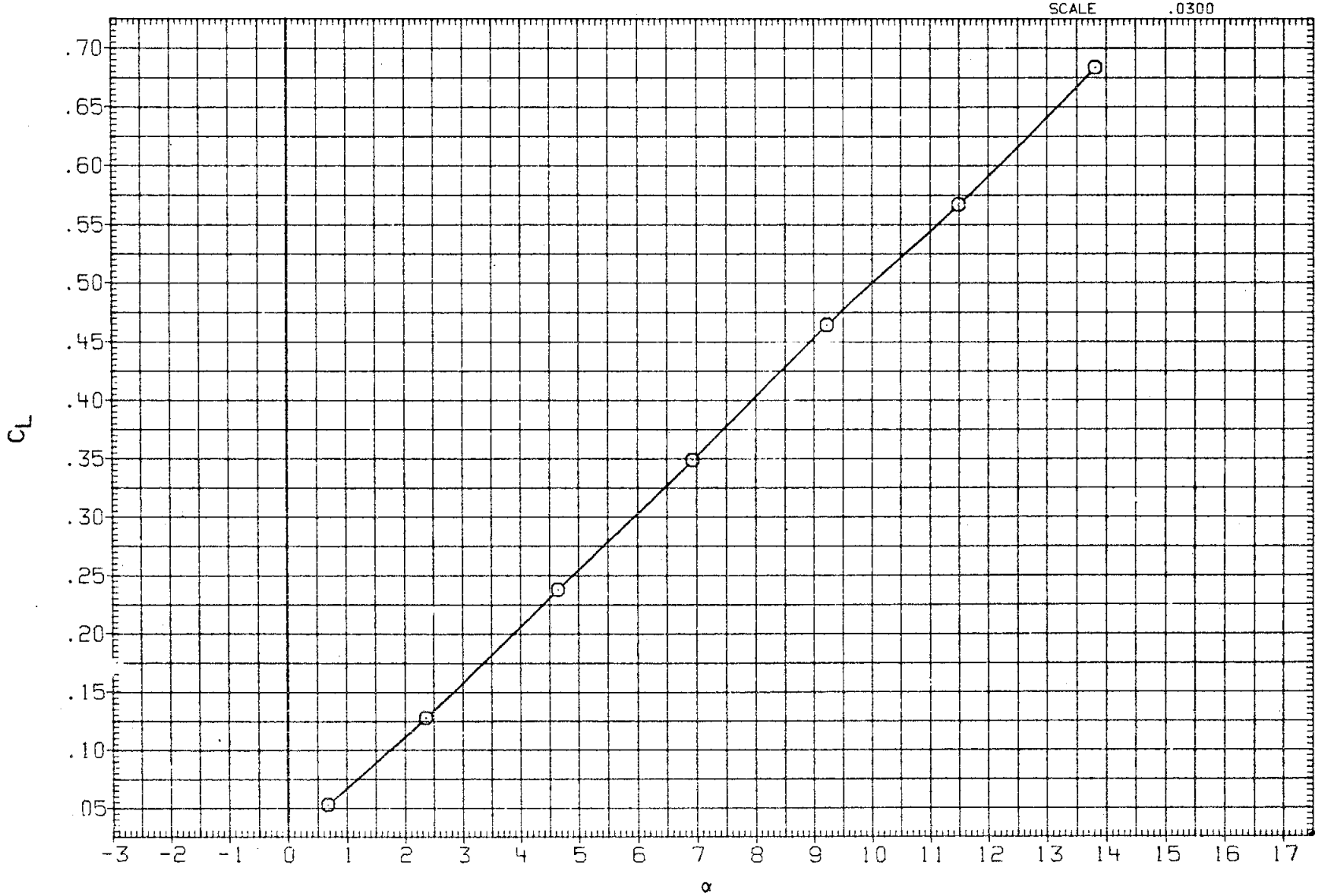

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(B)RN/L = 7.86

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
ZNS017	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	16.300	.600
ZNS004	□	DATA NOT AVAILABLE	.000	.000	16.300	.600
ZNS005	◇	DATA NOT AVAILABLE	.000	.000	16.300	.600
ZNS006	△	DATA NOT AVAILABLE	.000	.000	16.300	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

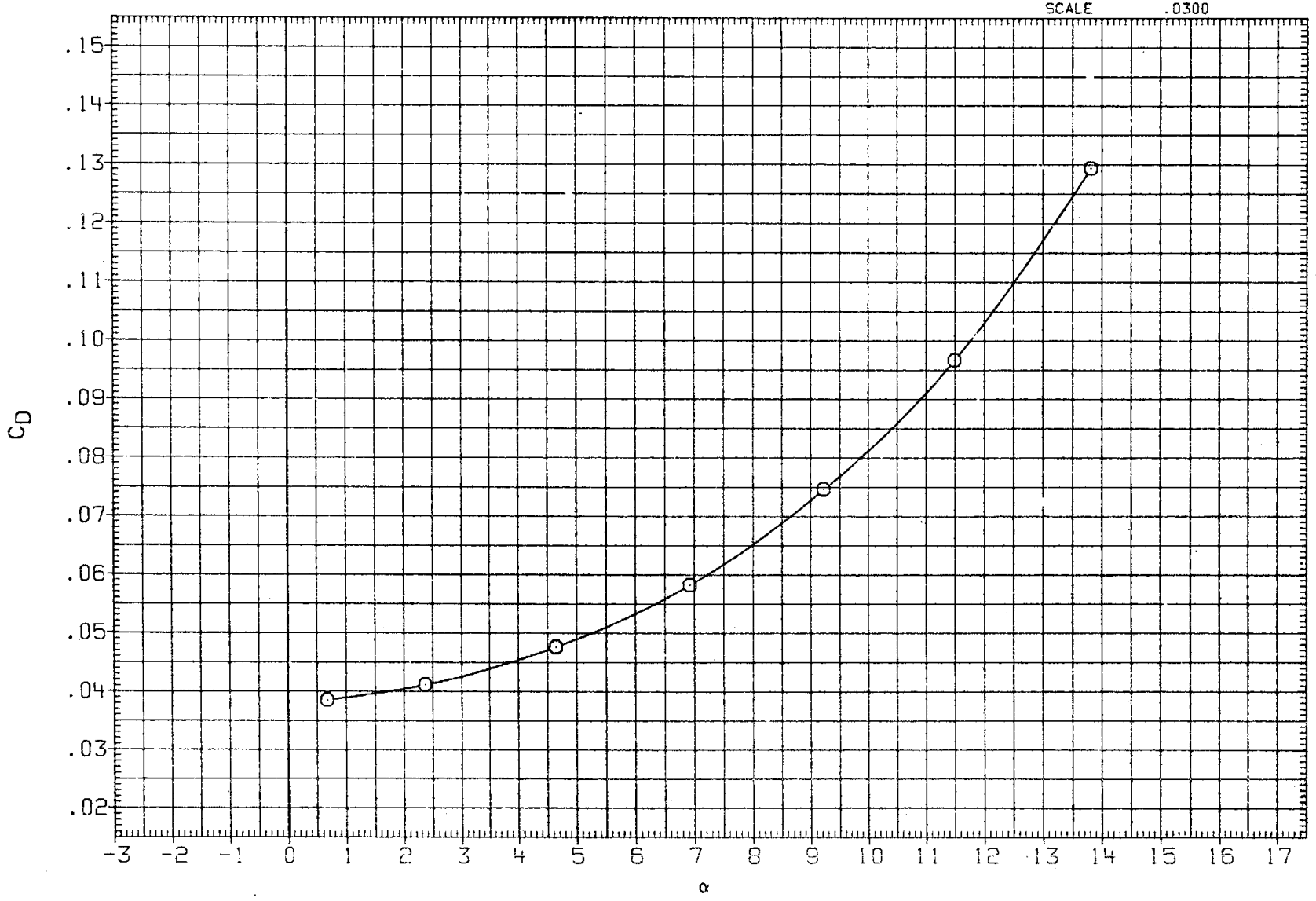

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(B)RN/L = 7.86

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
ZNS017	○	ARC-12-180(0A173) OV101+TC+GROUND PLANE	.000	.000	16.300	.600
ZNS004	□	DATA NOT AVAILABLE	.000	.000	16.300	.600
ZNS005	◇	DATA NOT AVAILABLE	.000	.000	16.300	.600
ZNS006	△	DATA NOT AVAILABLE	.000	.000	16.300	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

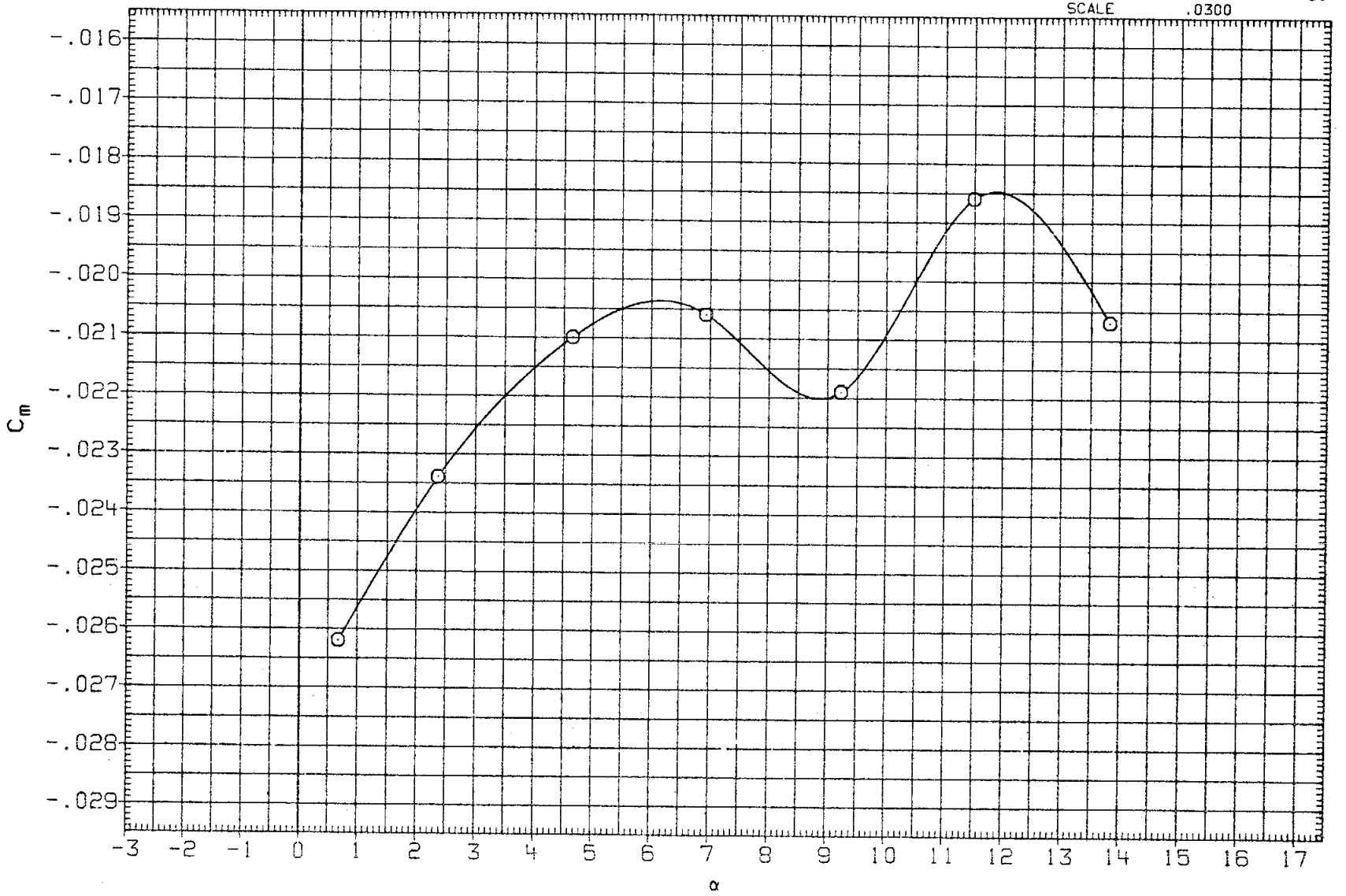

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(B)RN/L = 7.86

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
ZNS017	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	16.300	.600
ZNS004	□	DATA NOT AVAILABLE	.000	.000	16.300	.600
ZNS005	◇	DATA NOT AVAILABLE	.000	.000	16.300	.600
ZNS006	△	DATA NOT AVAILABLE	.000	.000	16.300	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

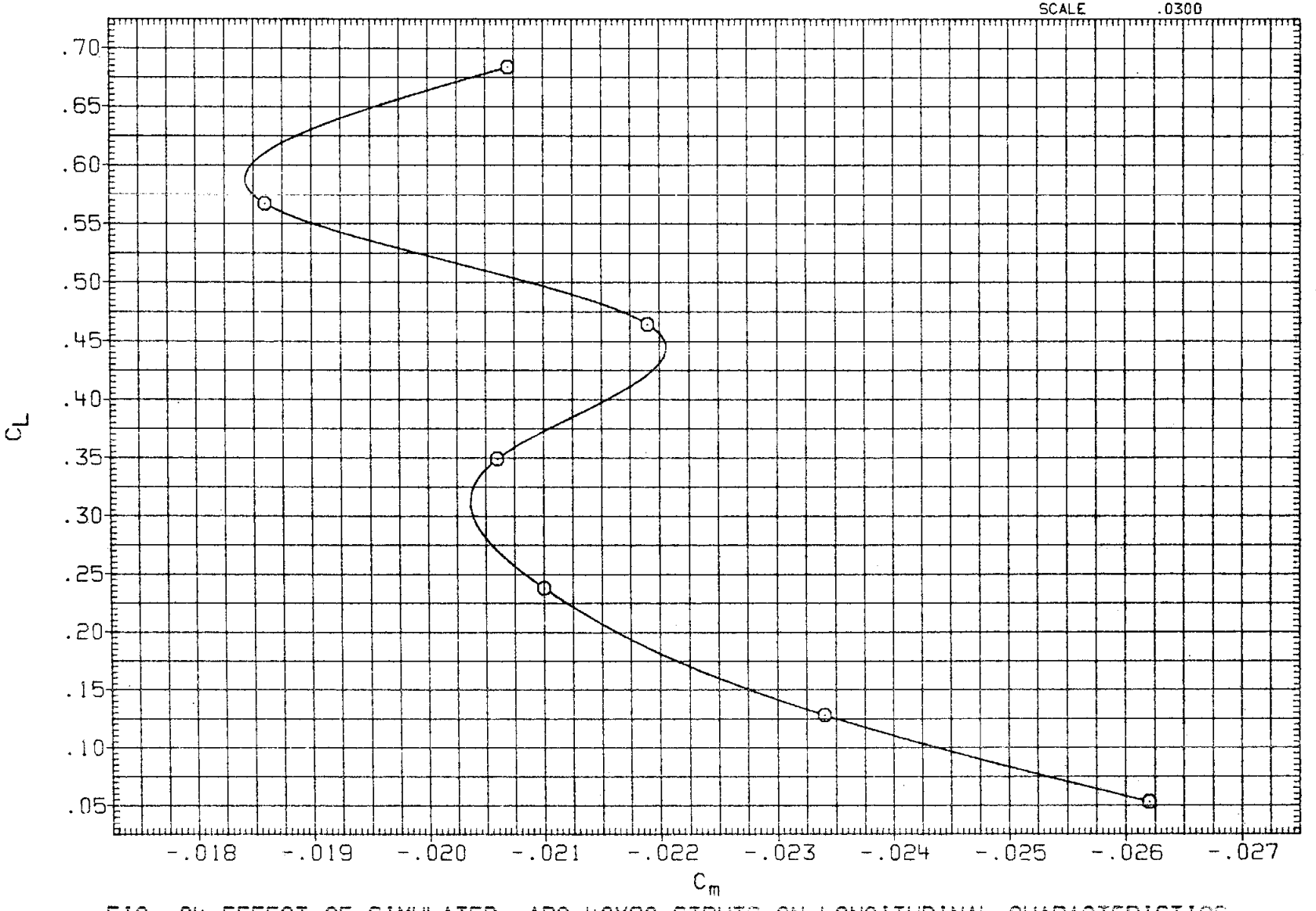

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(B)RN/L = 7.86

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS018	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	10.000	.000	-11.700	.600
ZNS007	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	10.000	.000	-11.700	.600
ZNS008	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	10.000	.000	-11.700	.600
ZNS009	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	10.000	.000	-11.700	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

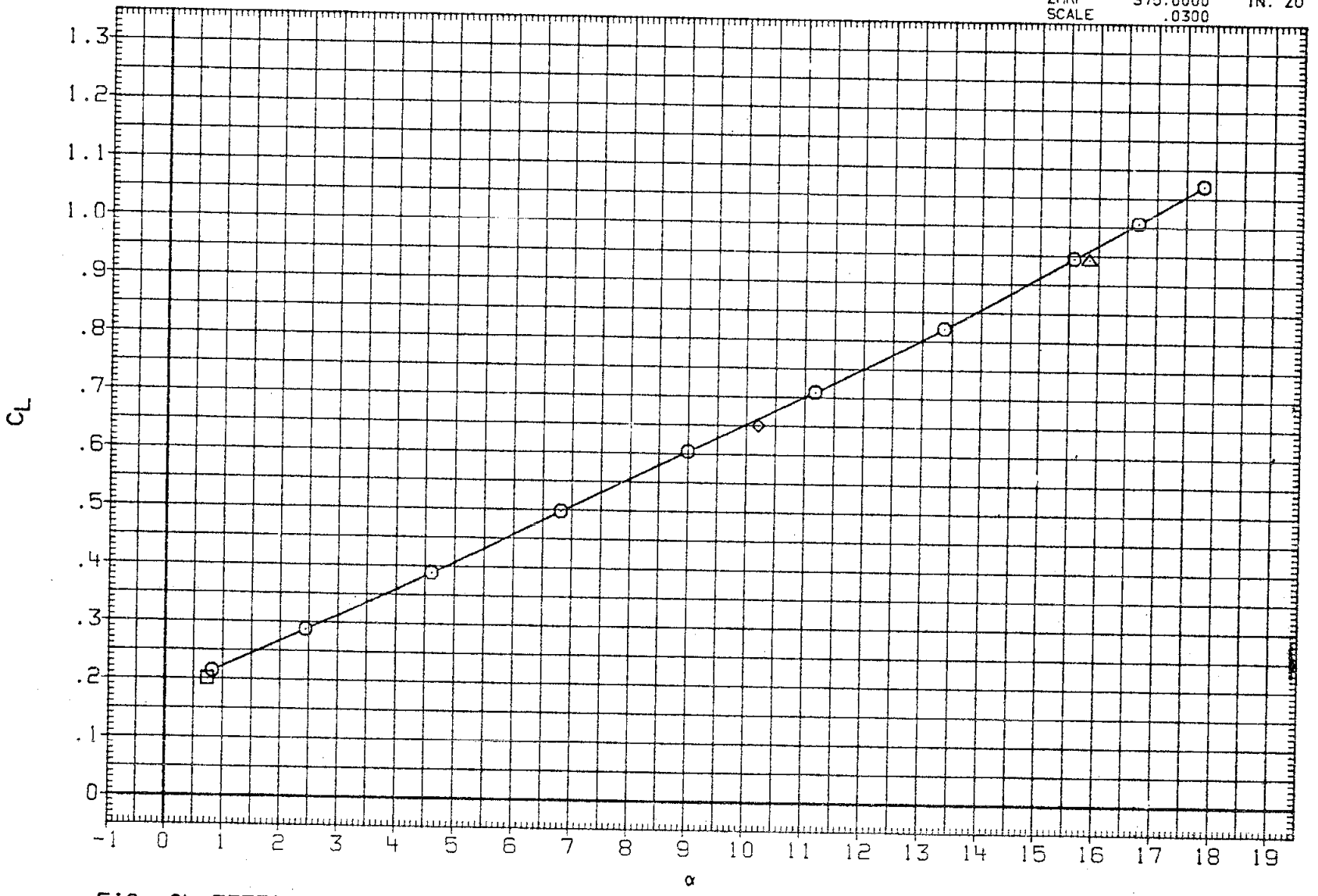

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.47

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS018	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	10.000	.000	-11.700	.600
ZNS007	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	10.000	.000	-11.700	.600
ZNS008	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	10.000	.000	-11.700	.600
ZNS009	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	10.000	.000	-11.700	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

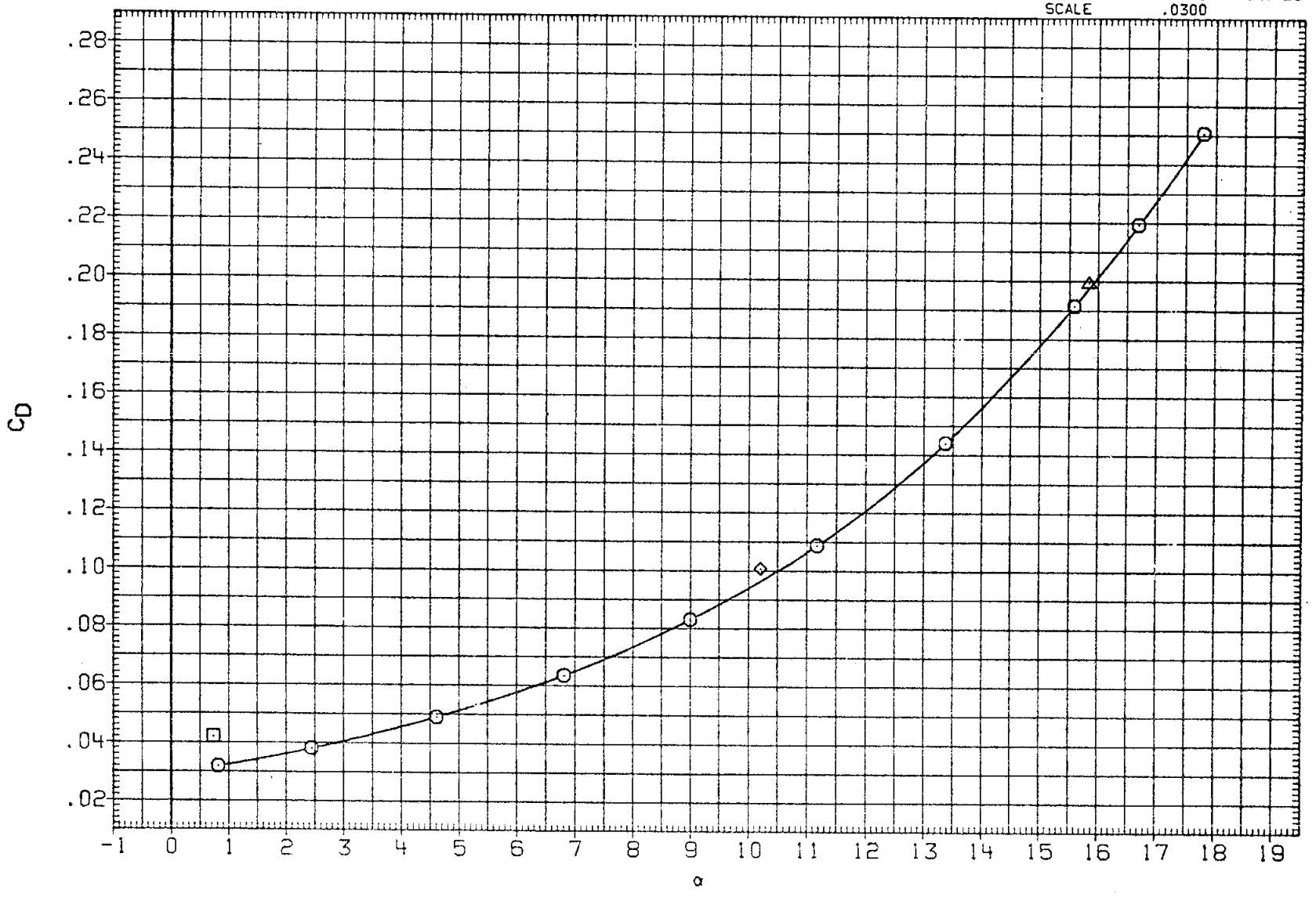

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.47

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS018	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	10.000	.000	-11.700	.600
ZNS007	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	10.000	.000	-11.700	.600
ZNS008	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	10.000	.000	-11.700	.600
ZNS009	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	10.000	.000	-11.700	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

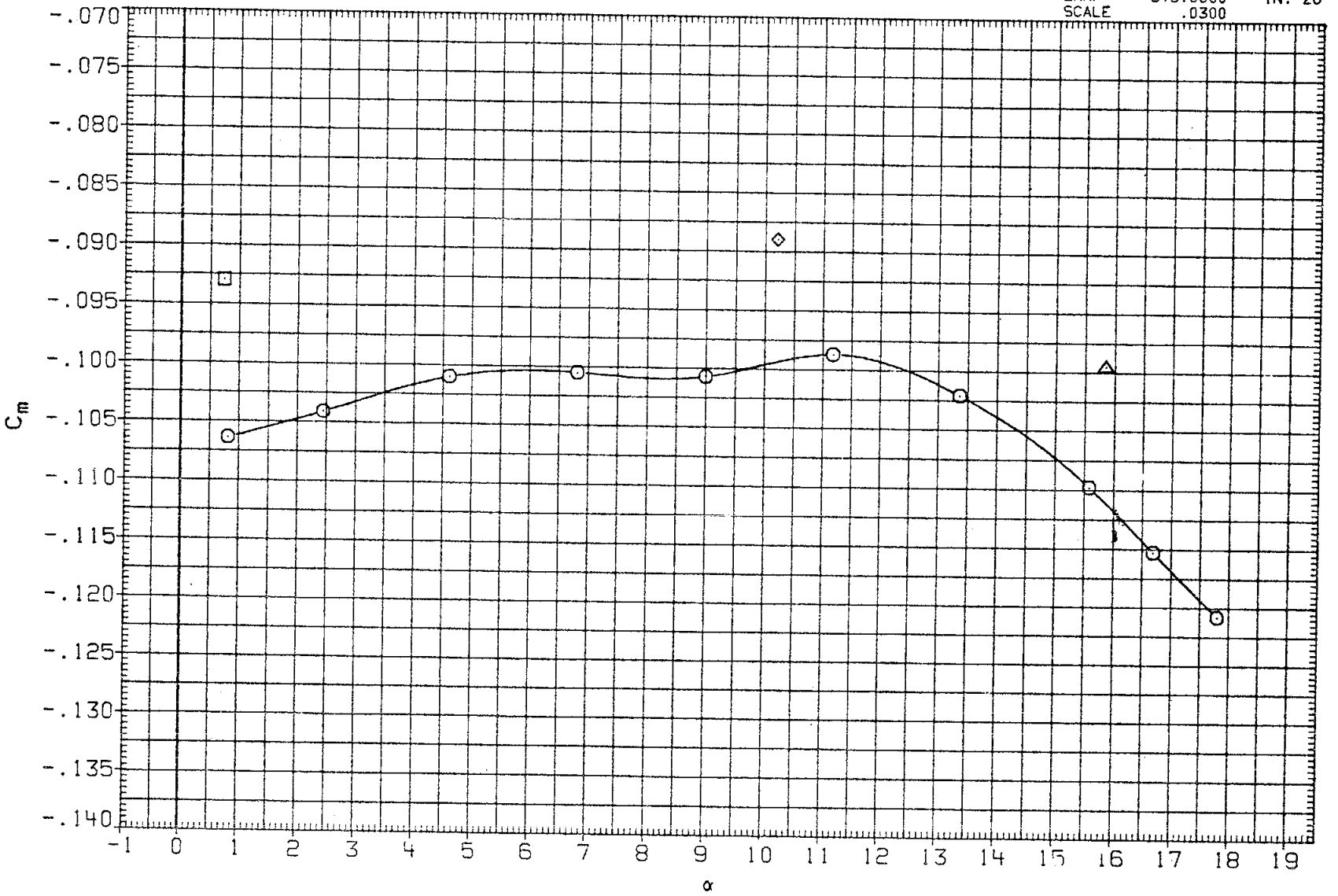

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.47

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS018	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	10.000	.000	-11.700	.600
ZNS007	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	10.000	.000	-11.700	.600
ZNS008	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	10.000	.000	-11.700	.600
ZNS009	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	10.000	.000	-11.700	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

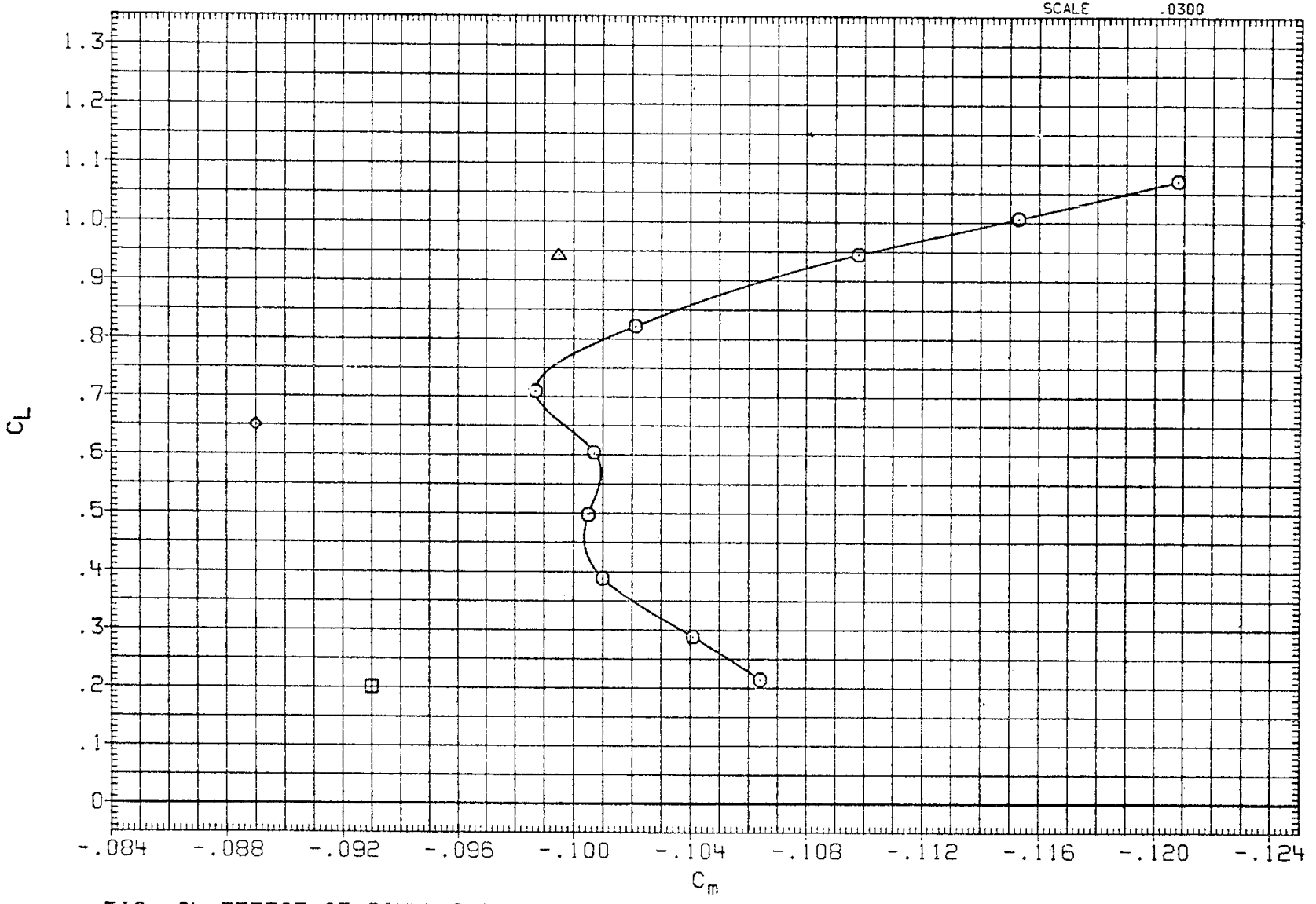

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.47

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS019	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	6.000	-11.700	.600
ZNS010	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	-11.700	.600
ZNS011	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	-11.700	.600
ZNS012	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	-11.700	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

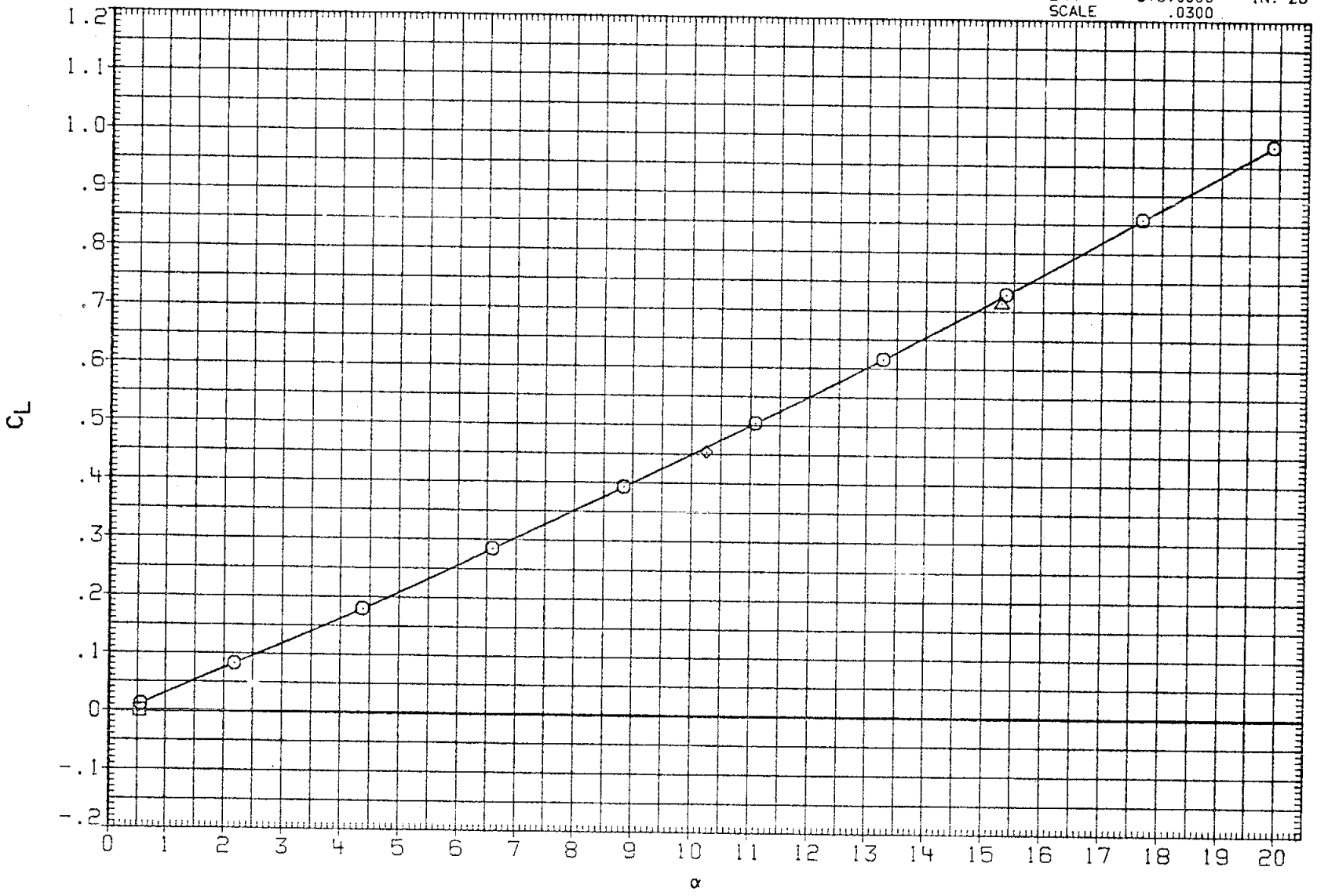

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.43

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS019	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	6.000	-11.700	.600
ZNS010	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	-11.700	.600
ZNS011	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	-11.700	.600
ZNS012	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	-11.700	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8.00	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

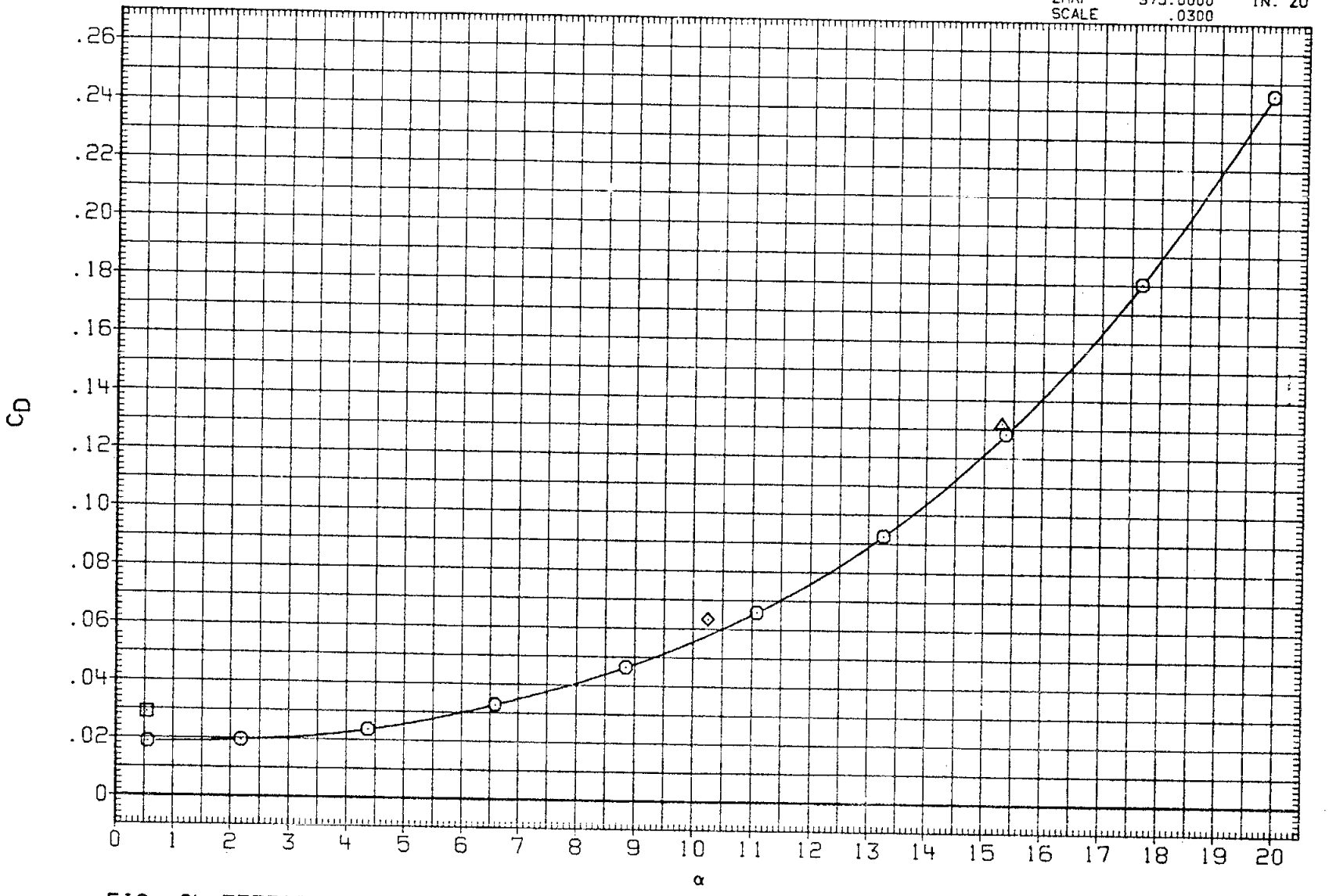

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.43

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS019	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	6.000	-11.700	.600
ZNS010	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	-11.700	.600
ZNS011	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	-11.700	.600
ZNS012	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	-11.700	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

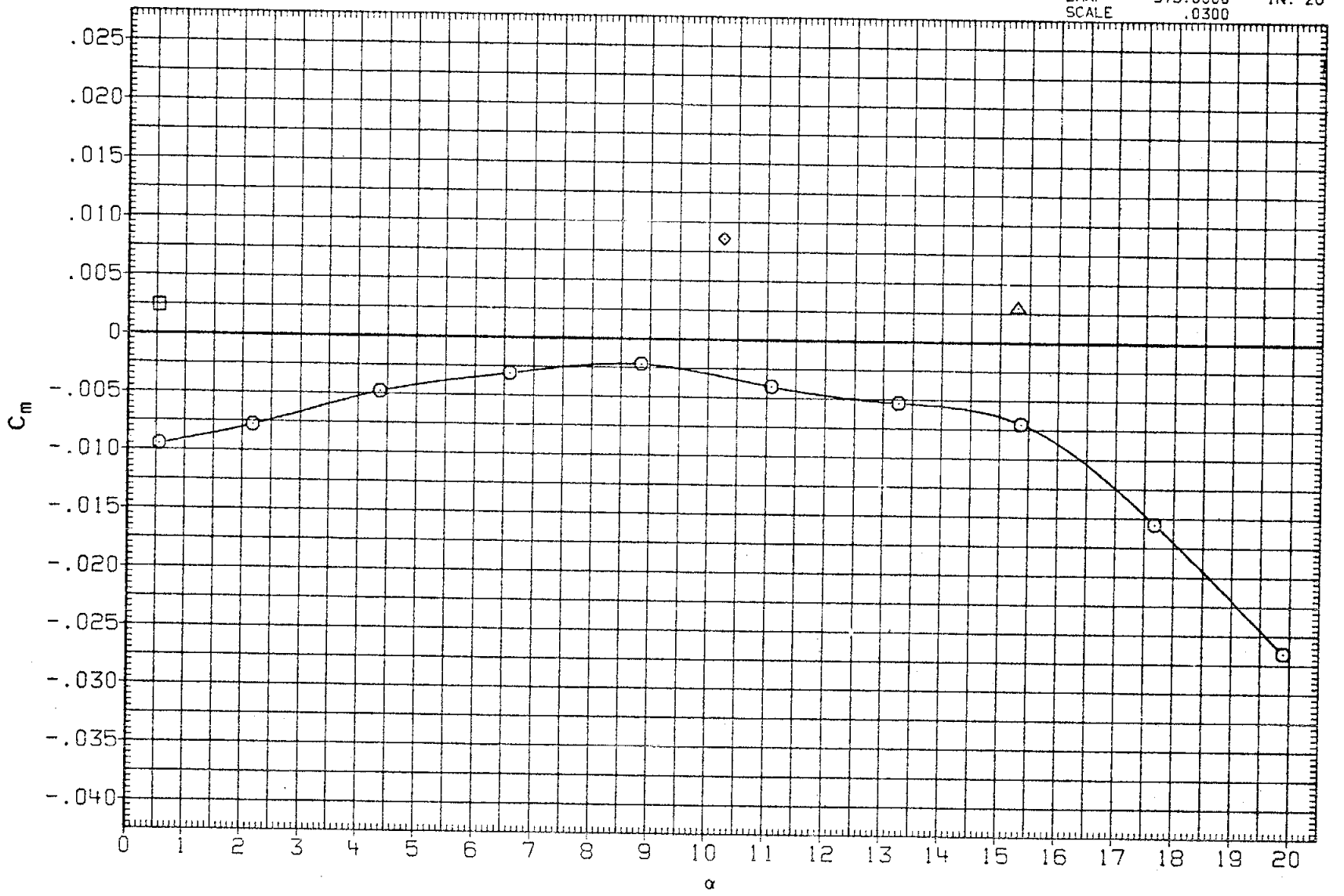

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.43

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS019	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	6.000	-11.700	.600
ZNS010	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	-11.700	.600
ZNS011	◇	ARC-12-190(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	-11.700	.600
ZNS012	△	ARC-12-180(CA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	-11.700	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6900	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

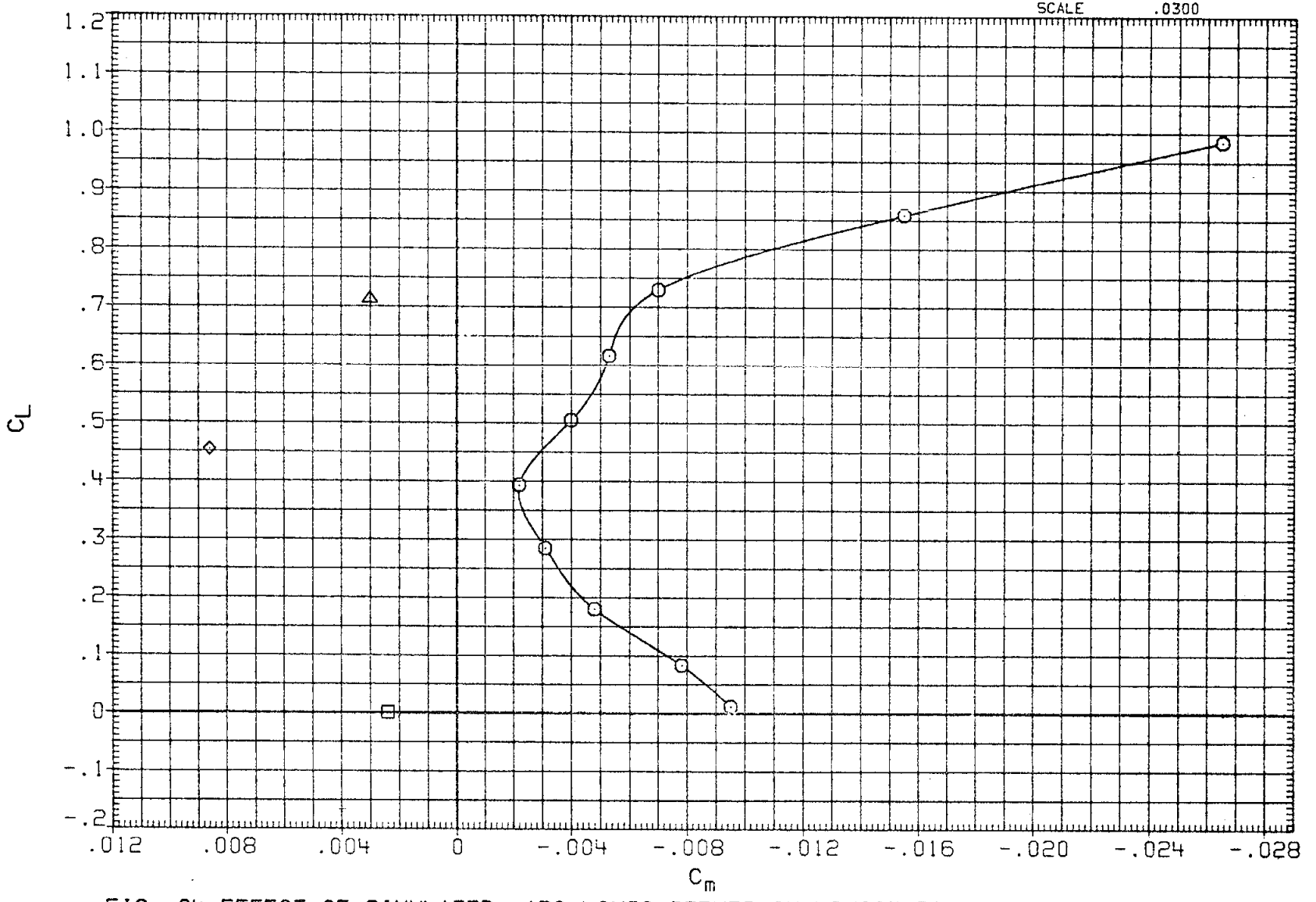

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.43

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS020	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	6.000	16.300	.600
ZNS013	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	16.300	.600
ZNS014	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	16.300	.600
ZNS015	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	16.300	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

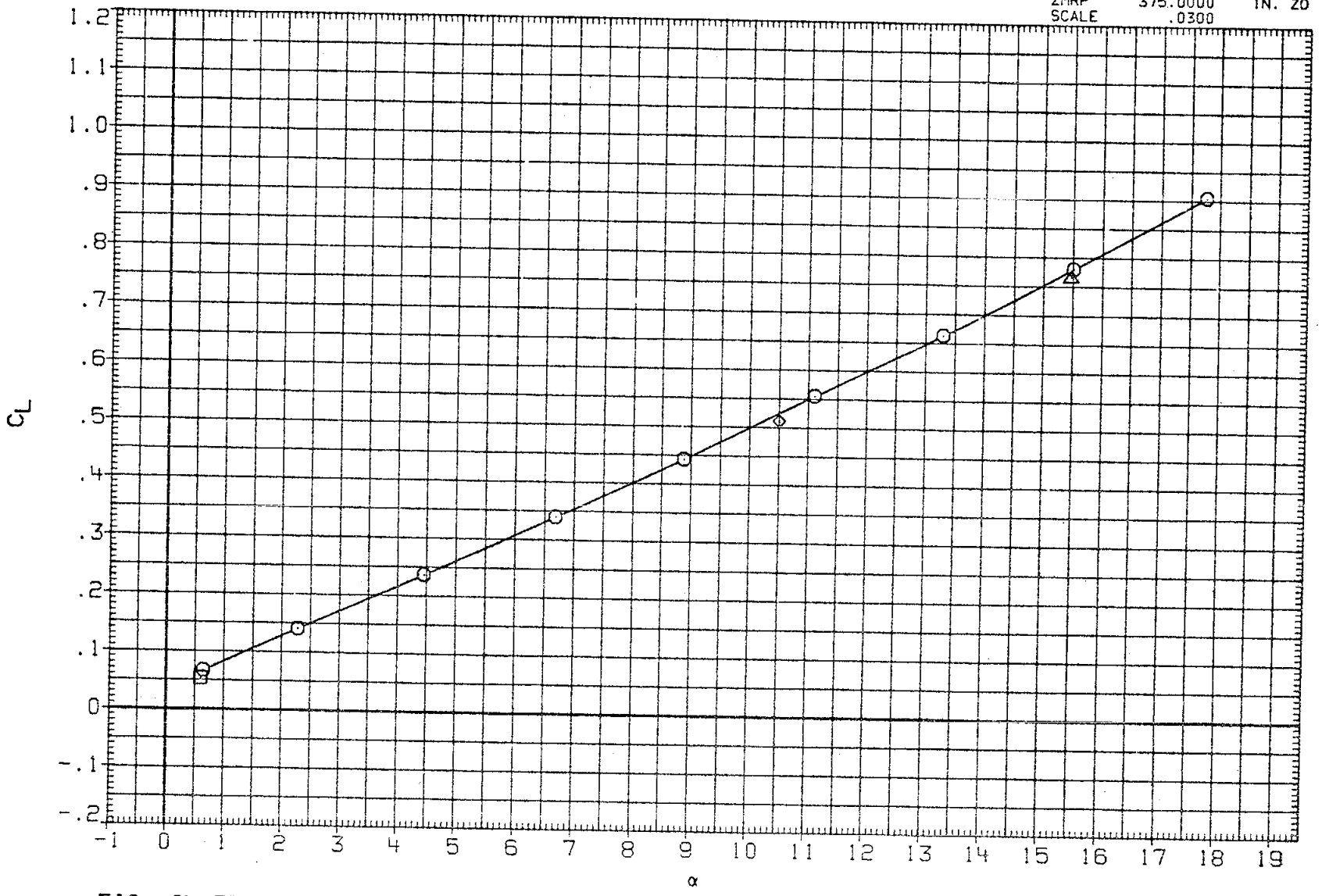

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.41

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS020	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	6.000	16.300	.600
ZNS013	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	16.300	.600
ZNS014	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	16.300	.600
ZNS015	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	16.300	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

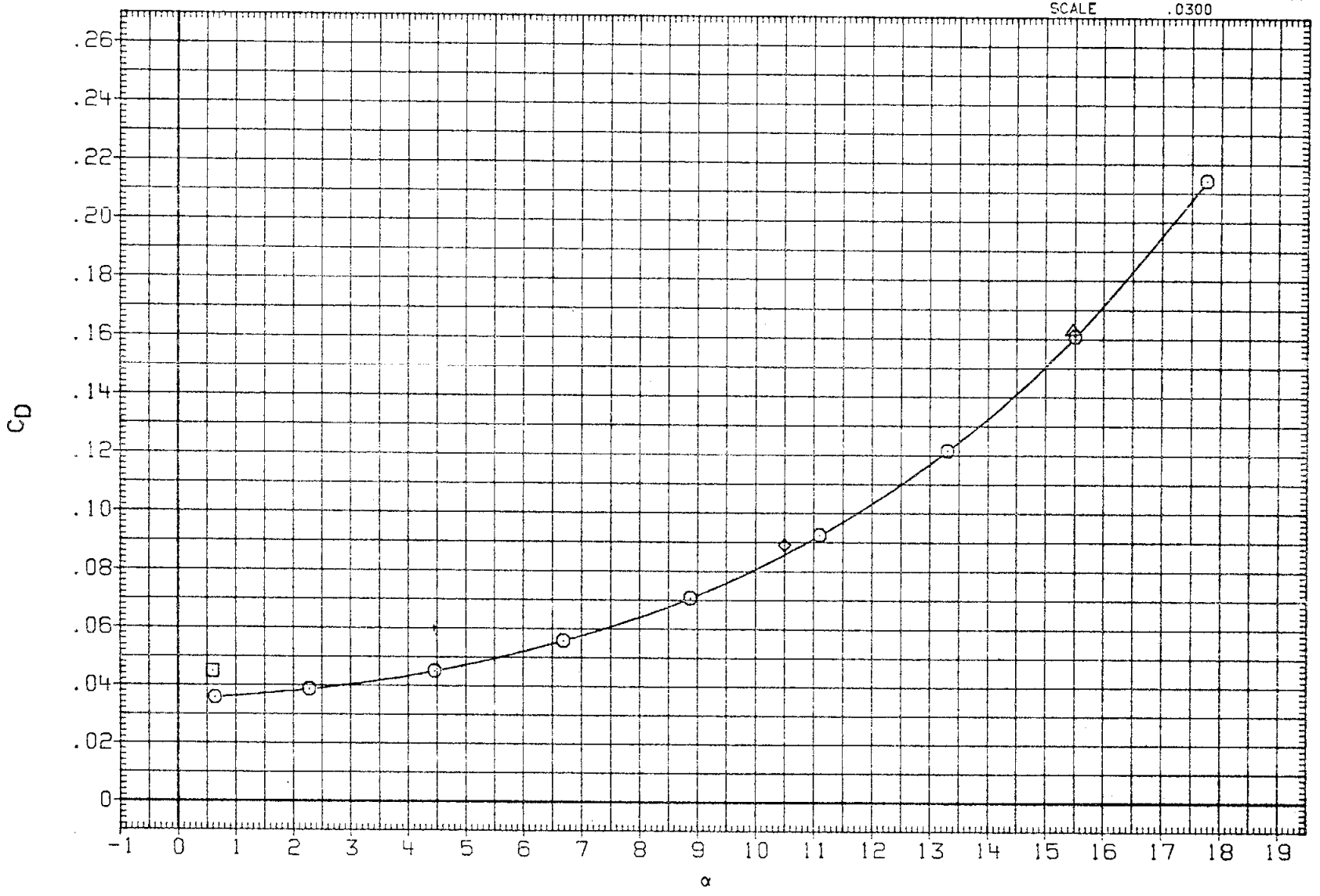

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.41

DATA SET	SYMBOL	CONFIGURATION	ELEVON	RFTA	BDFLAP	H/B
RNS020	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	6.000	16.300	.600
ZNS013	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	16.300	.600
ZNS014	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	16.300	.600
ZNS015	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	16.300	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

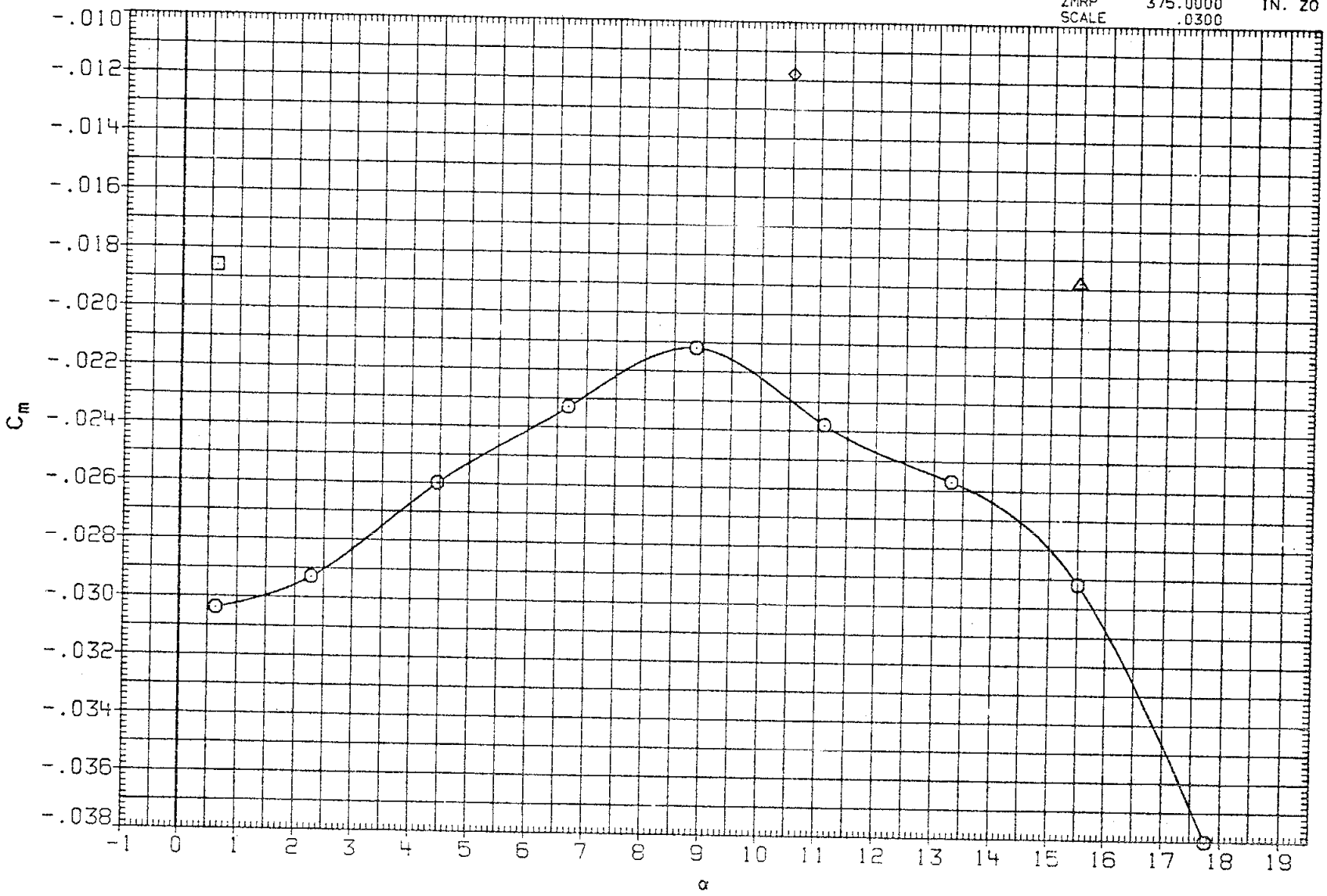

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.41

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS020	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	6.000	16.300	.600
ZNS013	□	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	16.300	.600
ZNS014	◇	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	16.300	.600
ZNS015	△	ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE	.000	6.000	16.300	.600

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

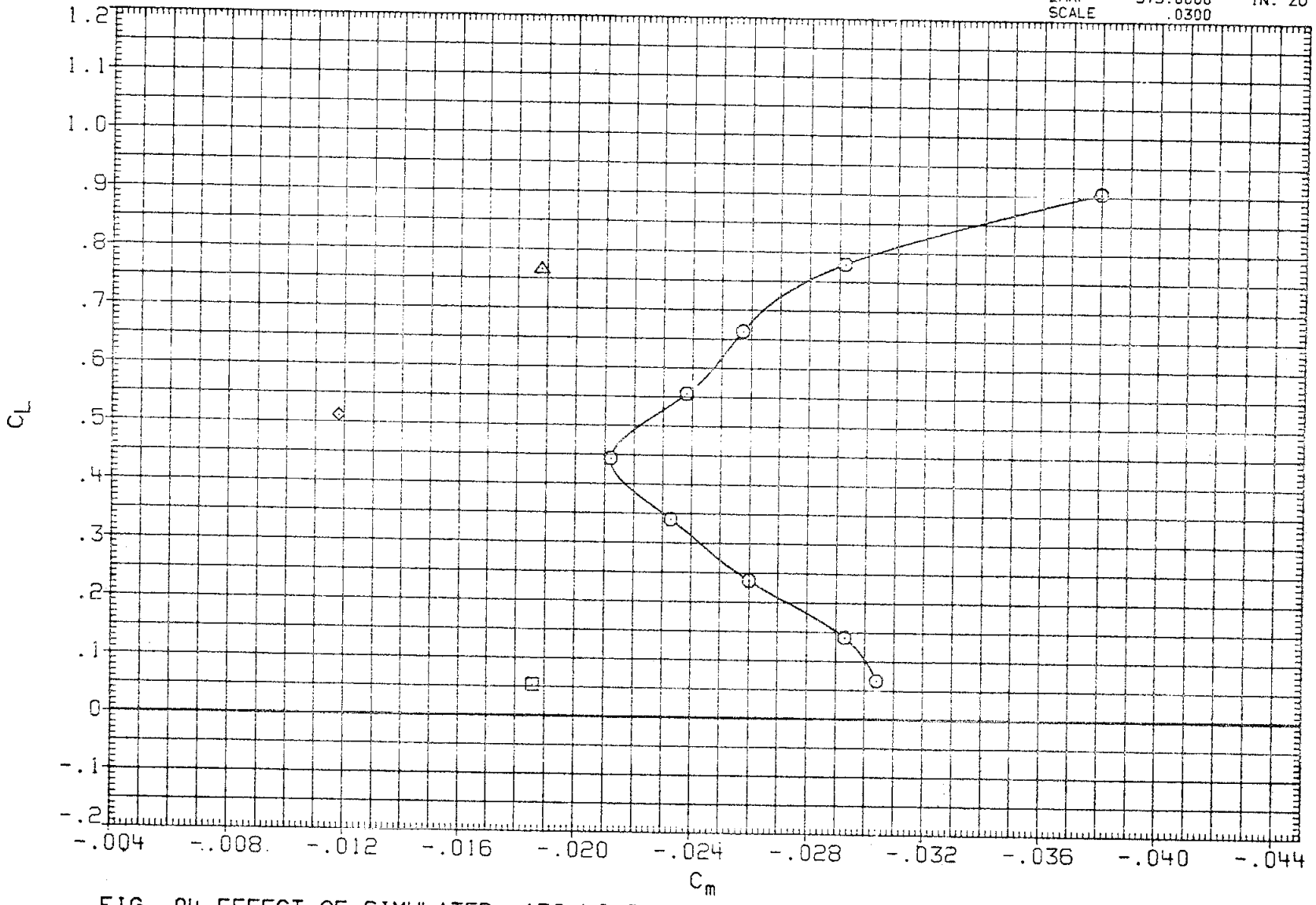

FIG. 04 EFFECT OF SIMULATED ARC 40X80 STRUTS ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 5.41

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	DATA NOT AVAILABLE	.000	.000	-11.700	.600
RNS022	□	DATA NOT AVAILABLE	.000	.000	-11.700	.110
RNS023	◇	DATA NOT AVAILABLE	.000	.000	-11.700	.210
RNS024	△	DATA NOT AVAILABLE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC	.000	.000	-11.700	

H/B=FREE AIR

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

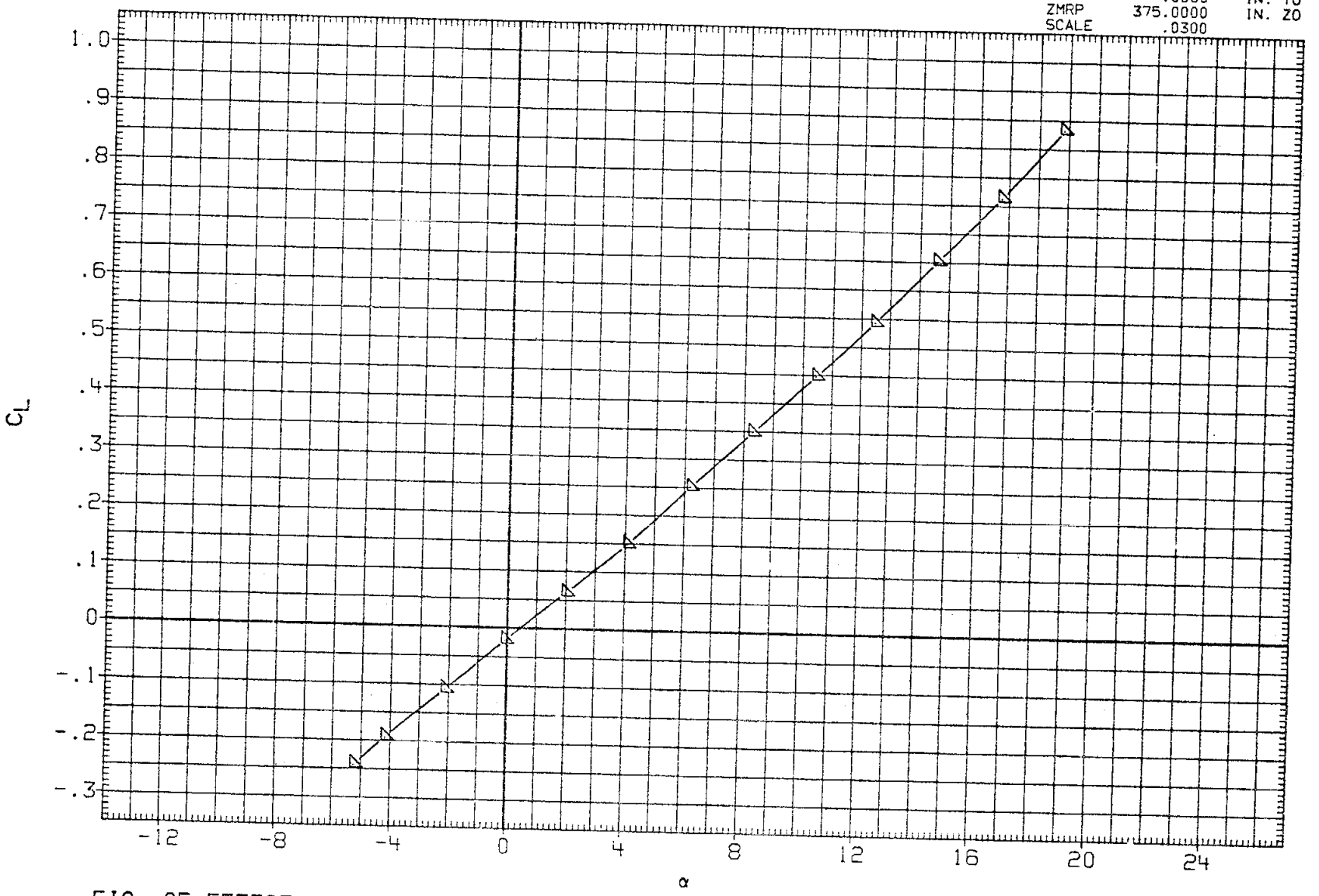

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 1.75

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	DATA NOT AVAILABLE	.000	.000	-11.700	.600
RNS022	□	DATA NOT AVAILABLE	.000	.000	-11.700	.110
RNS023	◇	DATA NOT AVAILABLE	.000	.000	-11.700	.210
RNS024	△	DATA NOT AVAILABLE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

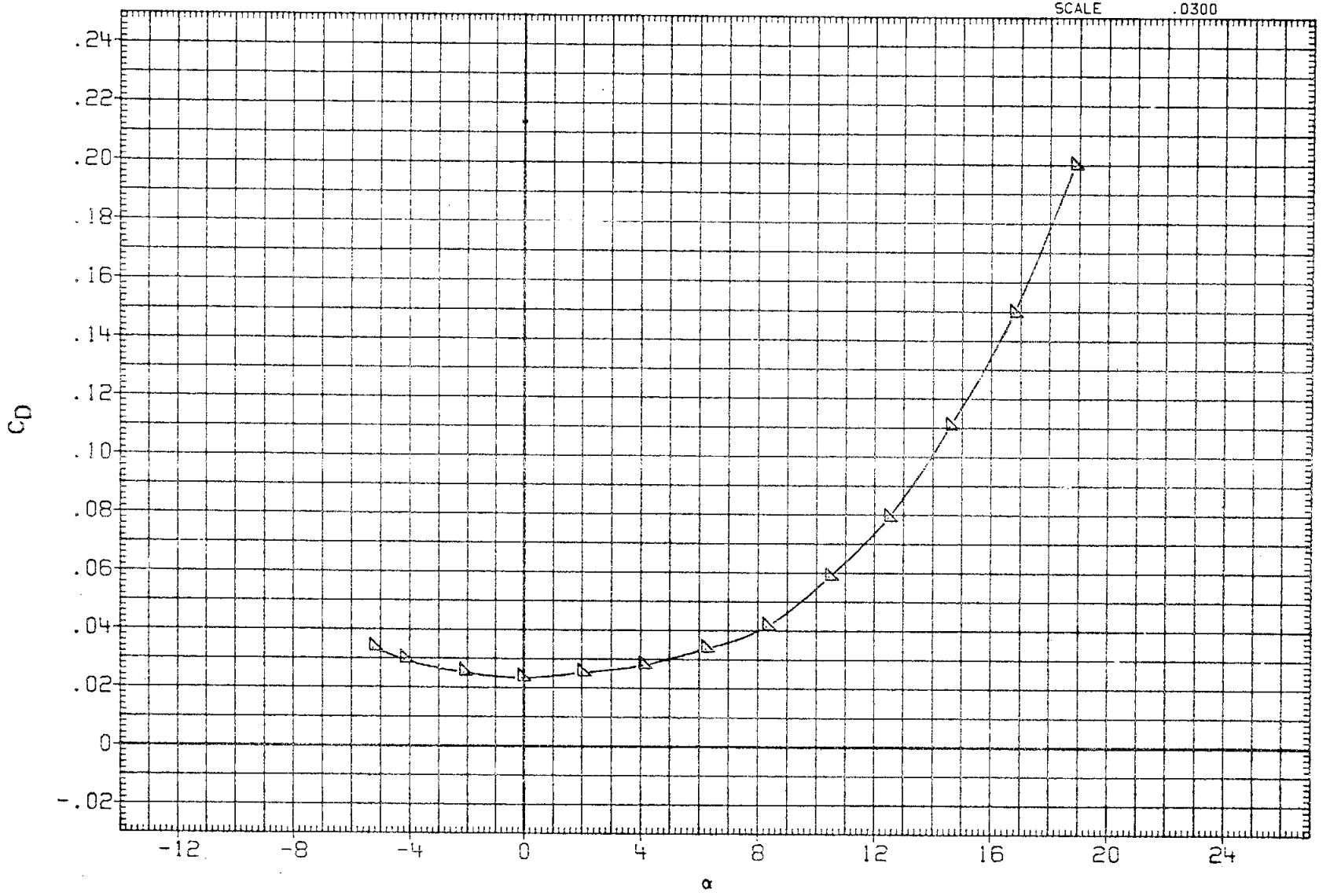

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 1.75

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	DATA NOT AVAILABLE	.000	.000	-11.700	.600
RNS022	□	DATA NOT AVAILABLE	.000	.000	-11.700	.110
RNS023	◇	DATA NOT AVAILABLE	.000	.000	-11.700	.210
RNS024	△	DATA NOT AVAILABLE	.000	.000	-11.700	.400
YNS027	▷	ARC-12-180(OA173) OV101+TC	.000	.000	-11.700	

H/B=FREE AIR

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

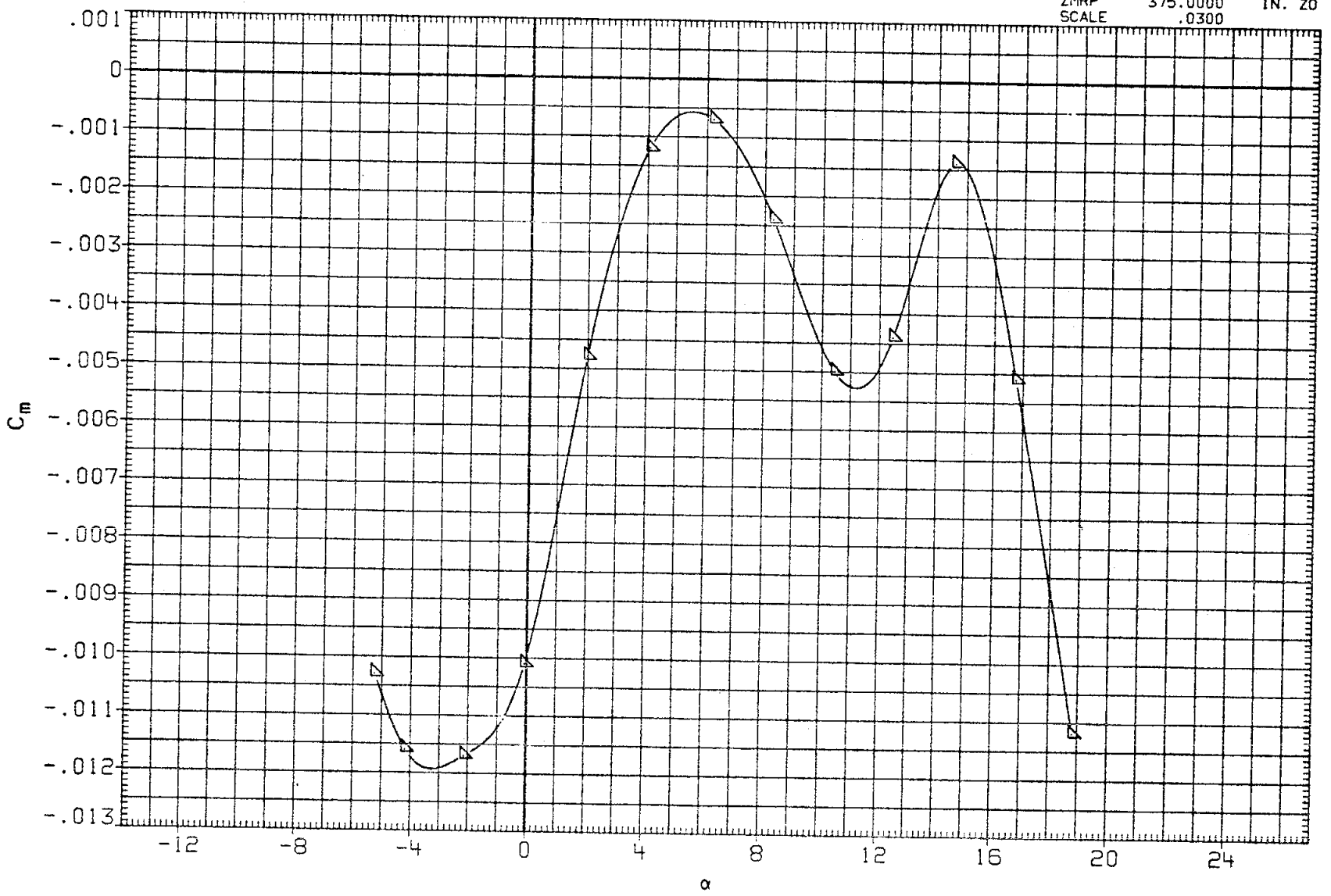

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 1.75

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	DATA NOT AVAILABLE	.000	.000	-11.700	.600
RNS022	□	DATA NOT AVAILABLE	.000	.000	-11.700	.110
RNS023	◇	DATA NOT AVAILABLE	.000	.000	-11.700	.210
RNS024	△	DATA NOT AVAILABLE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

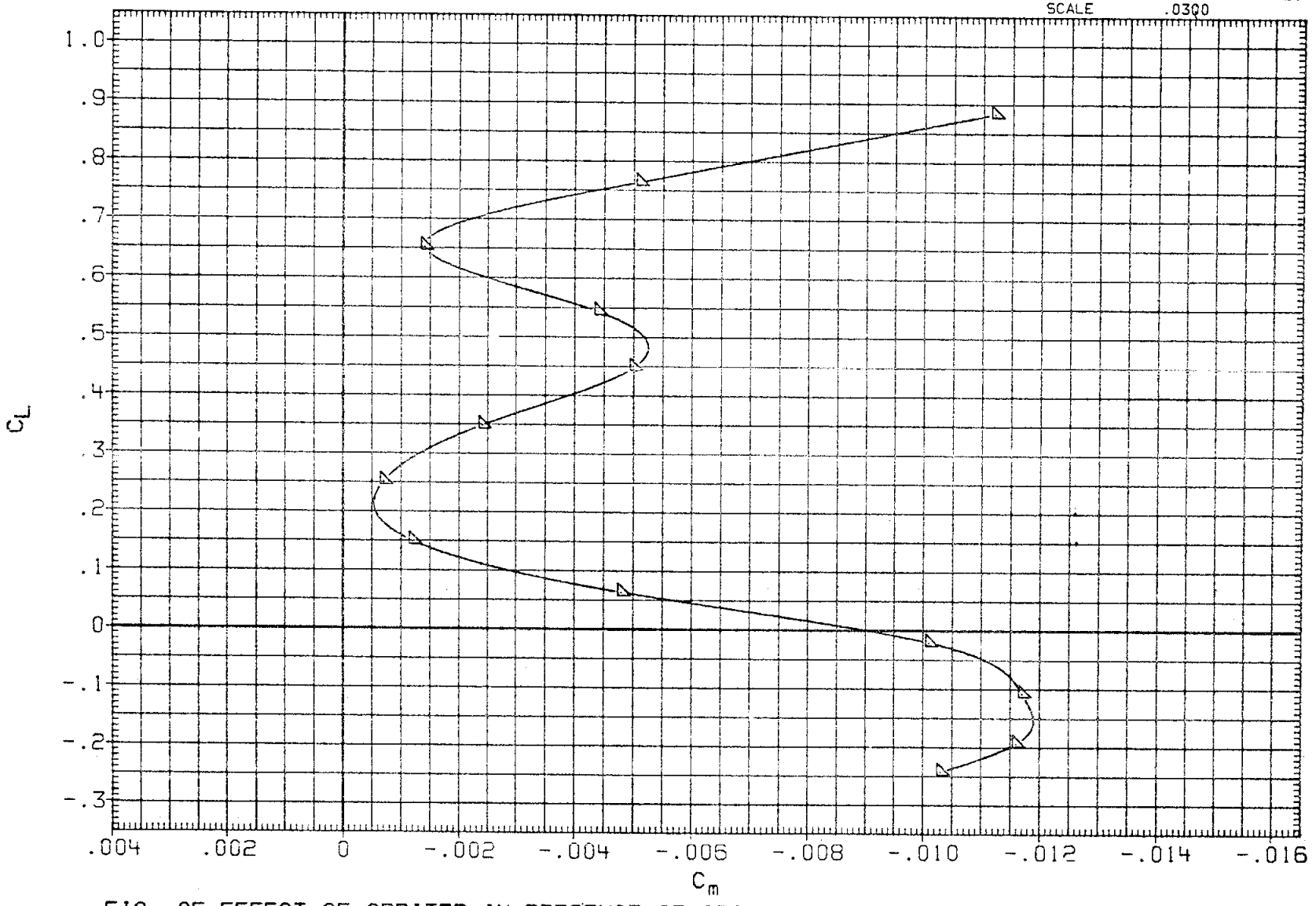

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(A)RN/L = 1.75

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	DATA NOT AVAILABLE	.000	.000	-11.700	.600
RNS022	□	DATA NOT AVAILABLE	.000	.000	-11.700	.110
RNS023	◇	DATA NOT AVAILABLE	.000	.000	-11.700	.210
RNS024	△	DATA NOT AVAILABLE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC	.000	.000	-11.700	

H/B=FREE AIR

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

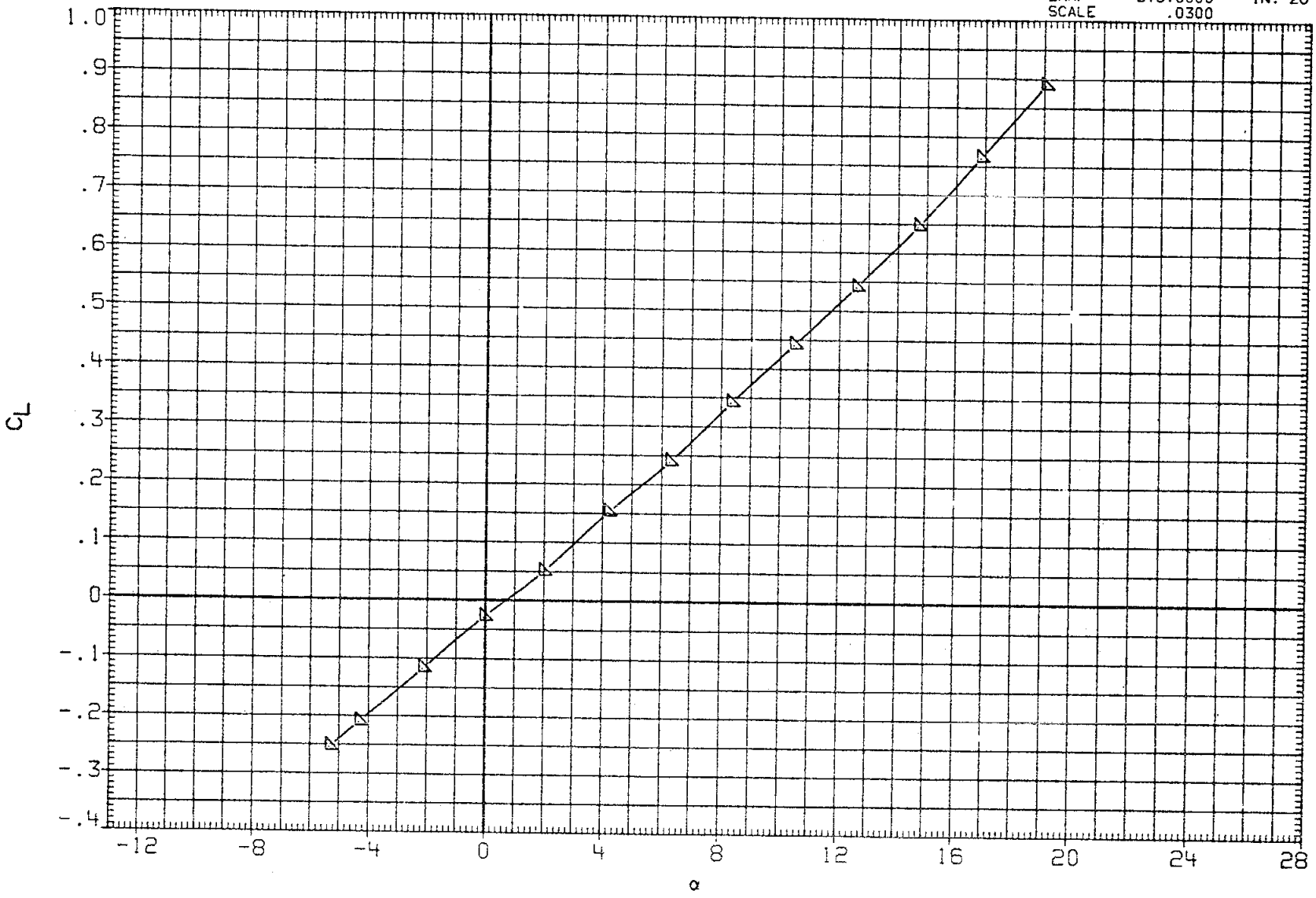

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(B)RN/L = 2.34

DATA SET	SYMBOL	CONFIGURATION		ELEVON	BETA	BDFLAP	H/B
RNS021	○	DATA NOT AVAILABLE		.000	.000	-11.700	.600
RNS022	□	DATA NOT AVAILABLE		.000	.000	-11.700	.110
RNS023	◇	DATA NOT AVAILABLE		.000	.000	-11.700	.210
RNS024	△	DATA NOT AVAILABLE		.000	.000	-11.700	.400
YNS027	▷	ARC-12-180(OA173) OV101+TC	H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

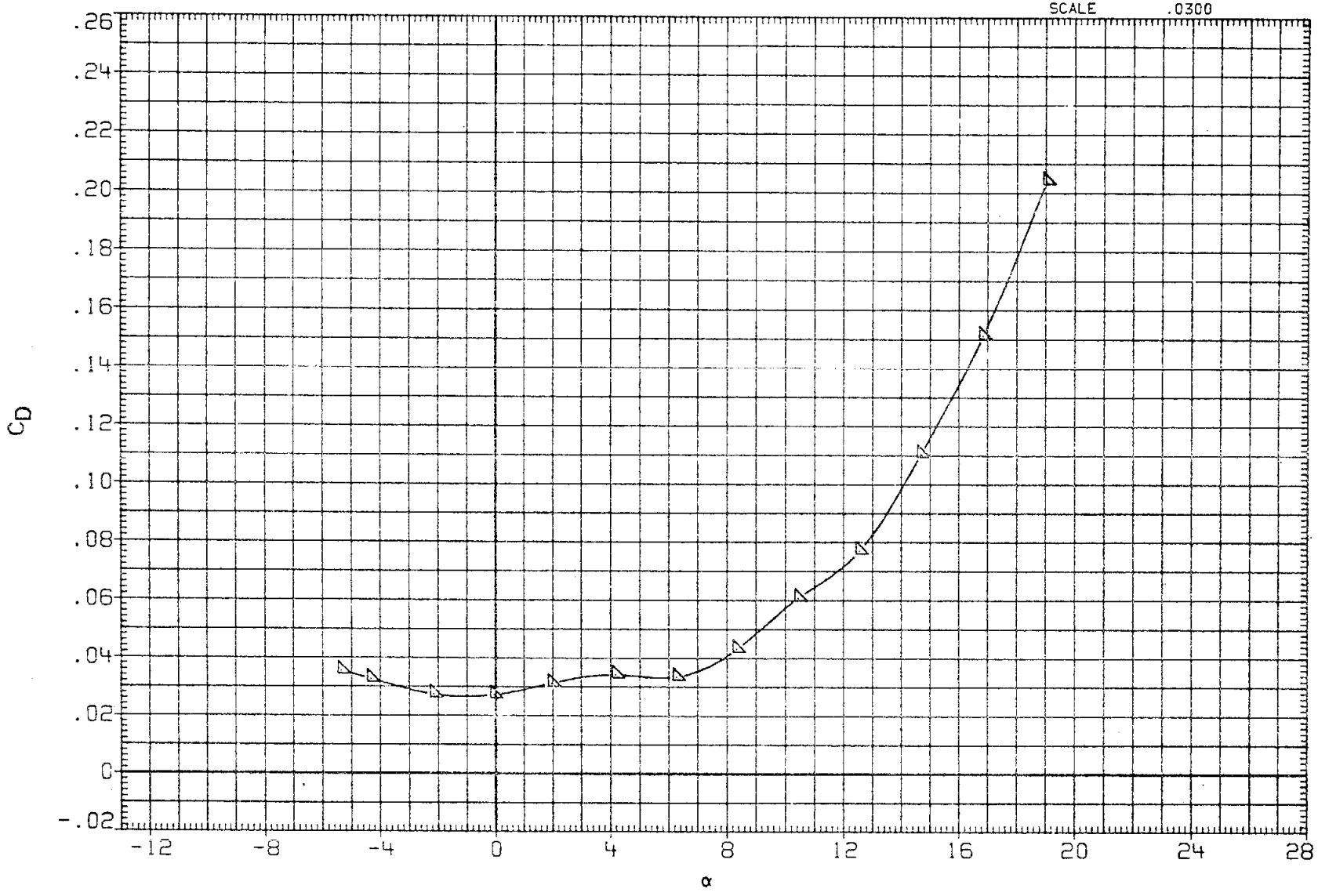

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(B)RN/L = 2.34

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	DATA NOT AVAILABLE	.000	.000	-11.700	.600
RNS022	□	DATA NOT AVAILABLE	.000	.000	-11.700	.110
RNS023	◇	DATA NOT AVAILABLE	.000	.000	-11.700	.210
RNS024	△	DATA NOT AVAILABLE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC	.000	.000	-11.700	

H/B=FREE AIR

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

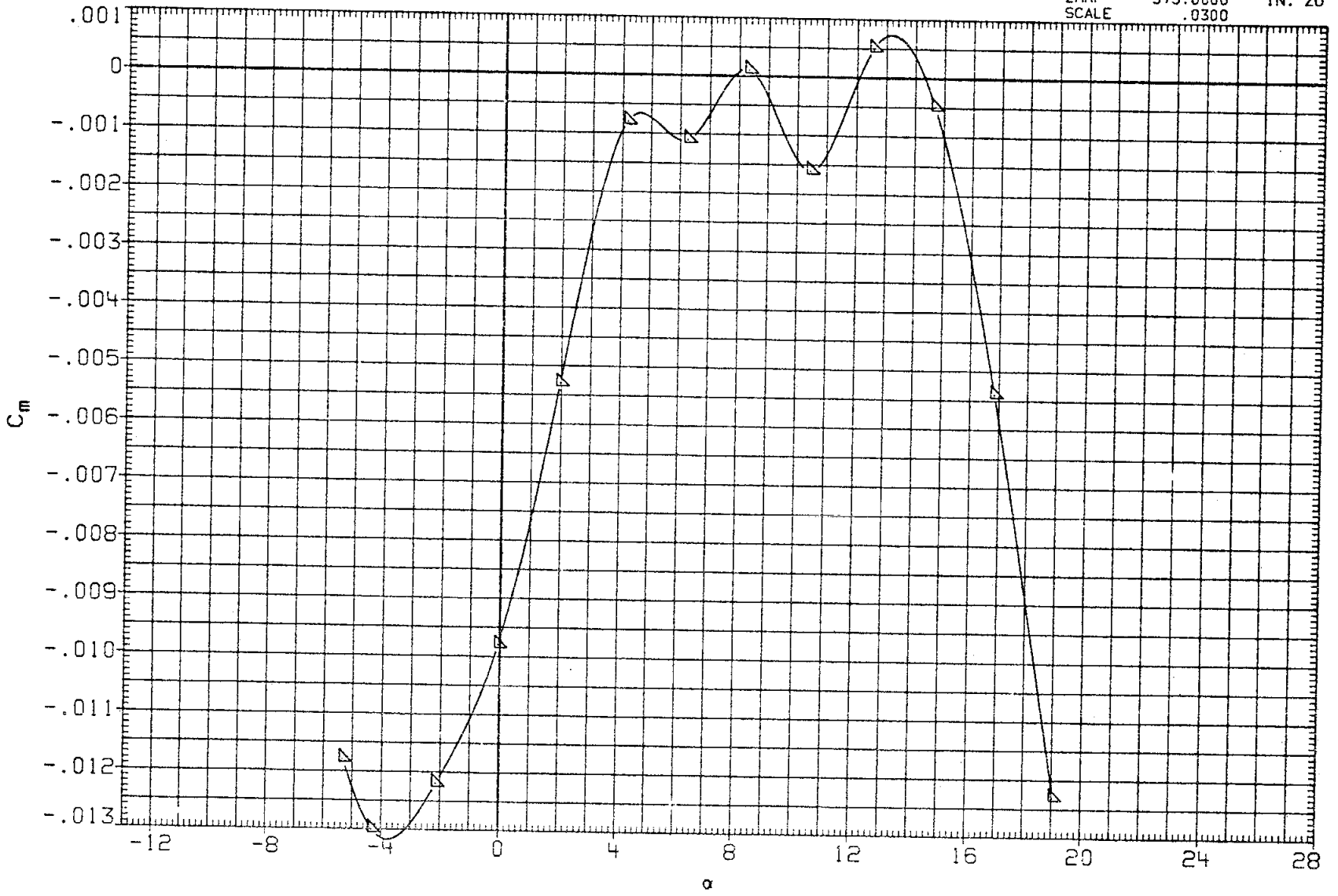

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(B)RN/L = 2.34

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	DATA NOT AVAILABLE	.000	.000	-11.700	.600
RNS022	□	DATA NOT AVAILABLE	.000	.000	-11.700	.110
RNS023	◇	DATA NOT AVAILABLE	.000	.000	-11.700	.210
RNS024	△	DATA NOT AVAILABLE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC	.000	.000	-11.700	

H/B=FREE AIR

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

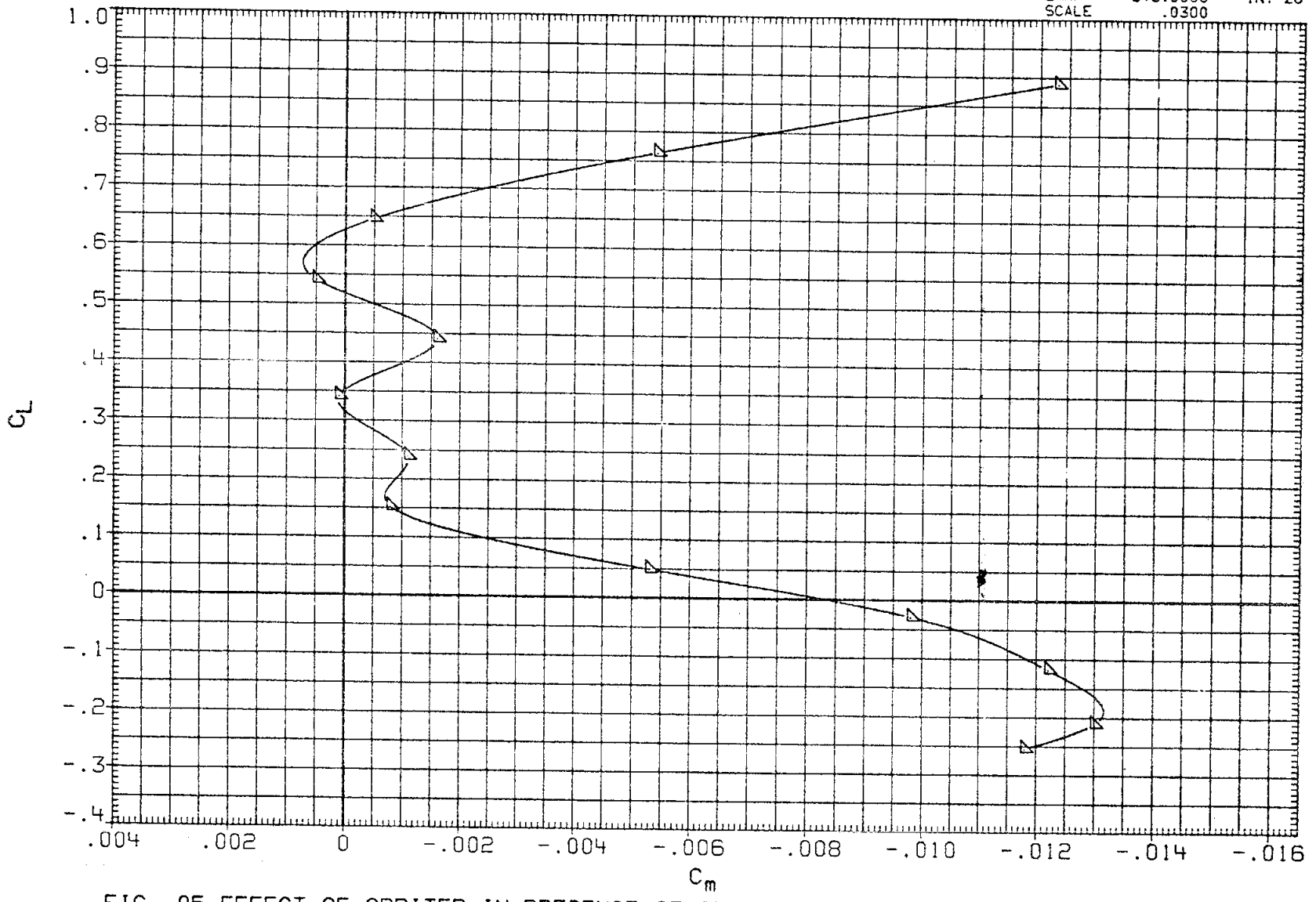

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(B)RN/L = 2.34

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
RNS022	□	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.110
RNS023	◇	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.210
RNS024	△	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.400
YNS027	◁	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

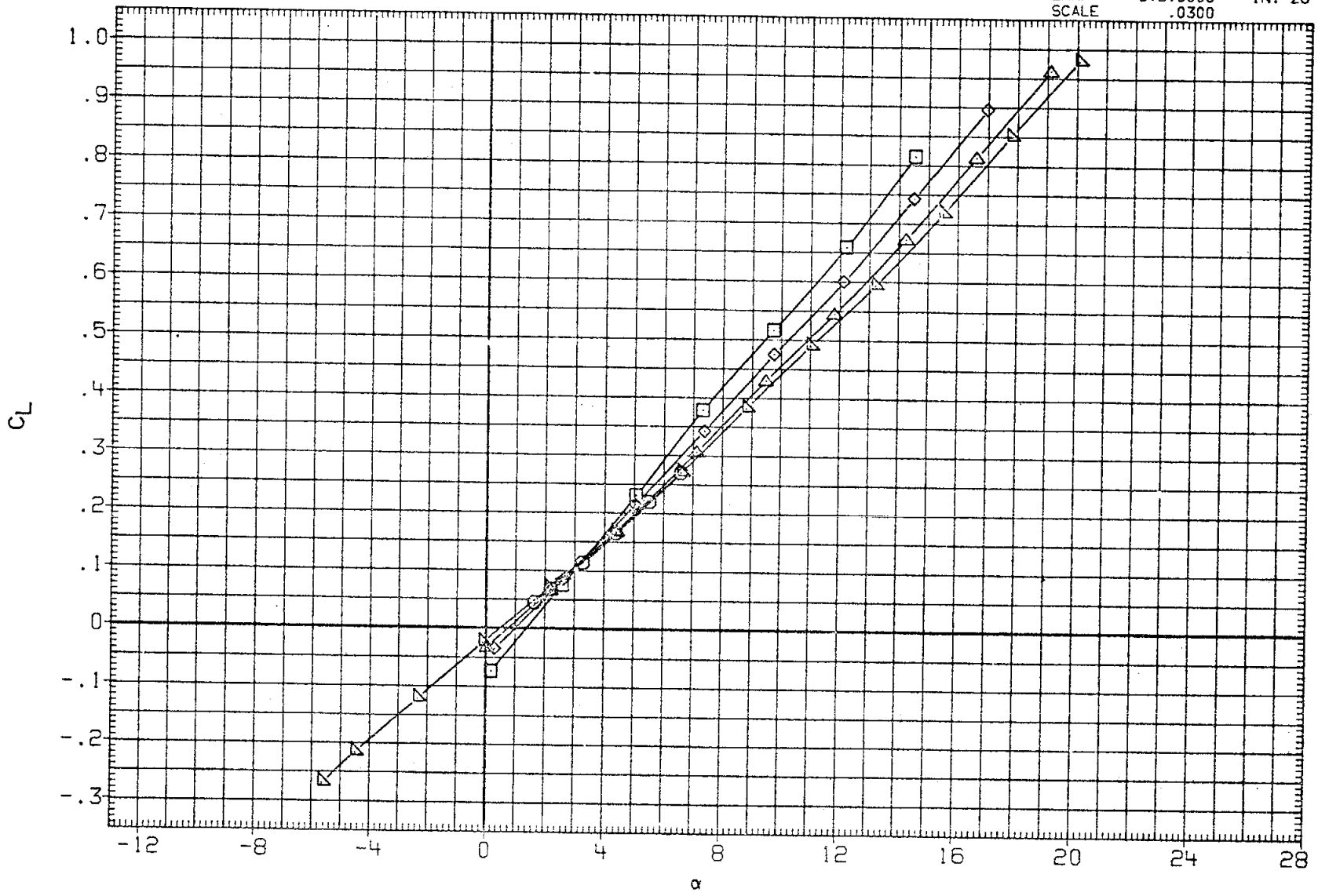

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(C)RN/L = 5.41

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
RNS022	□	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.110
RNS023	◇	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.210
RNS024	△	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

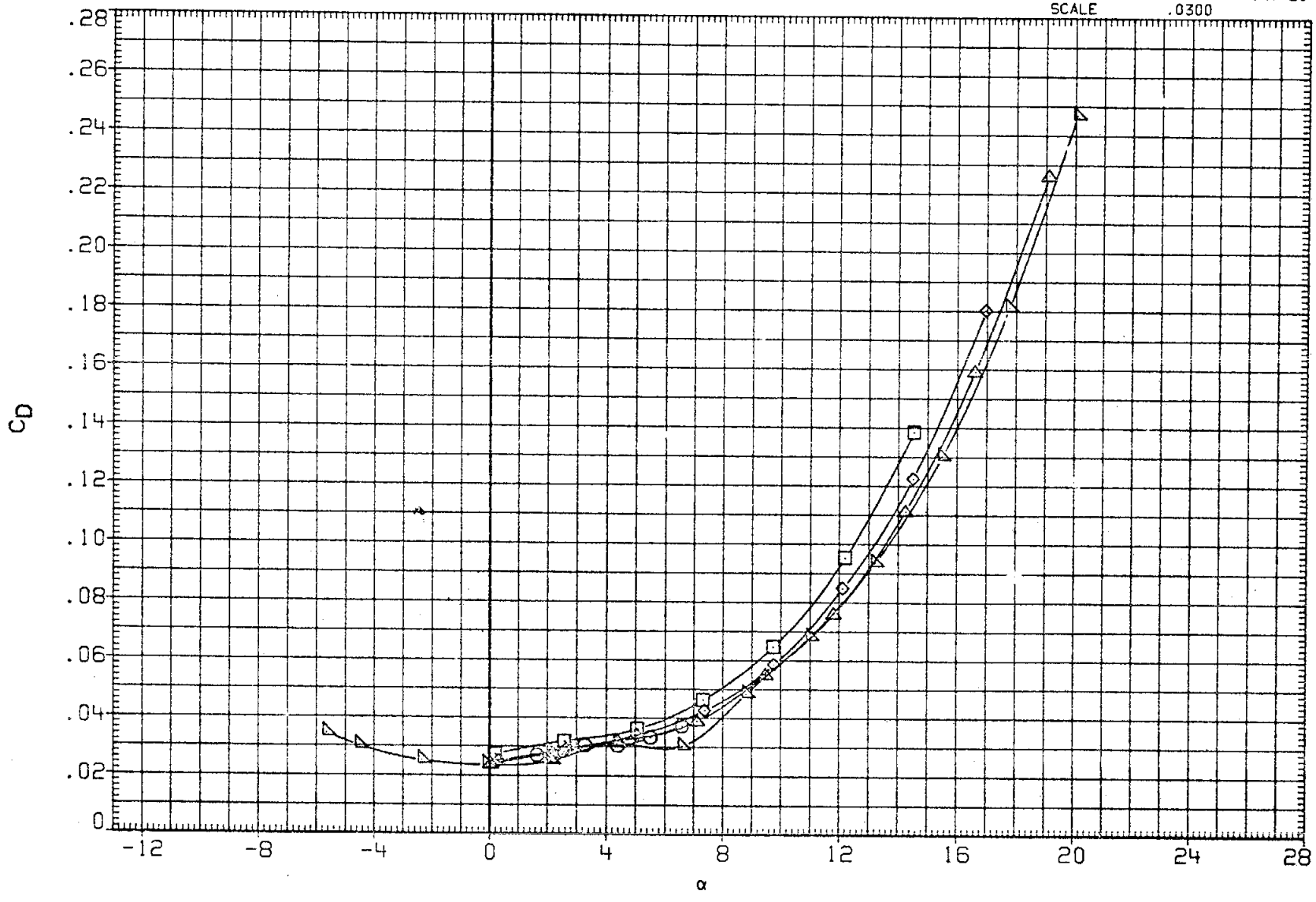

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(C)RN/L = 5.41

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
RNS022	□	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.110
RNS023	◇	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.210
RNS024	△	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

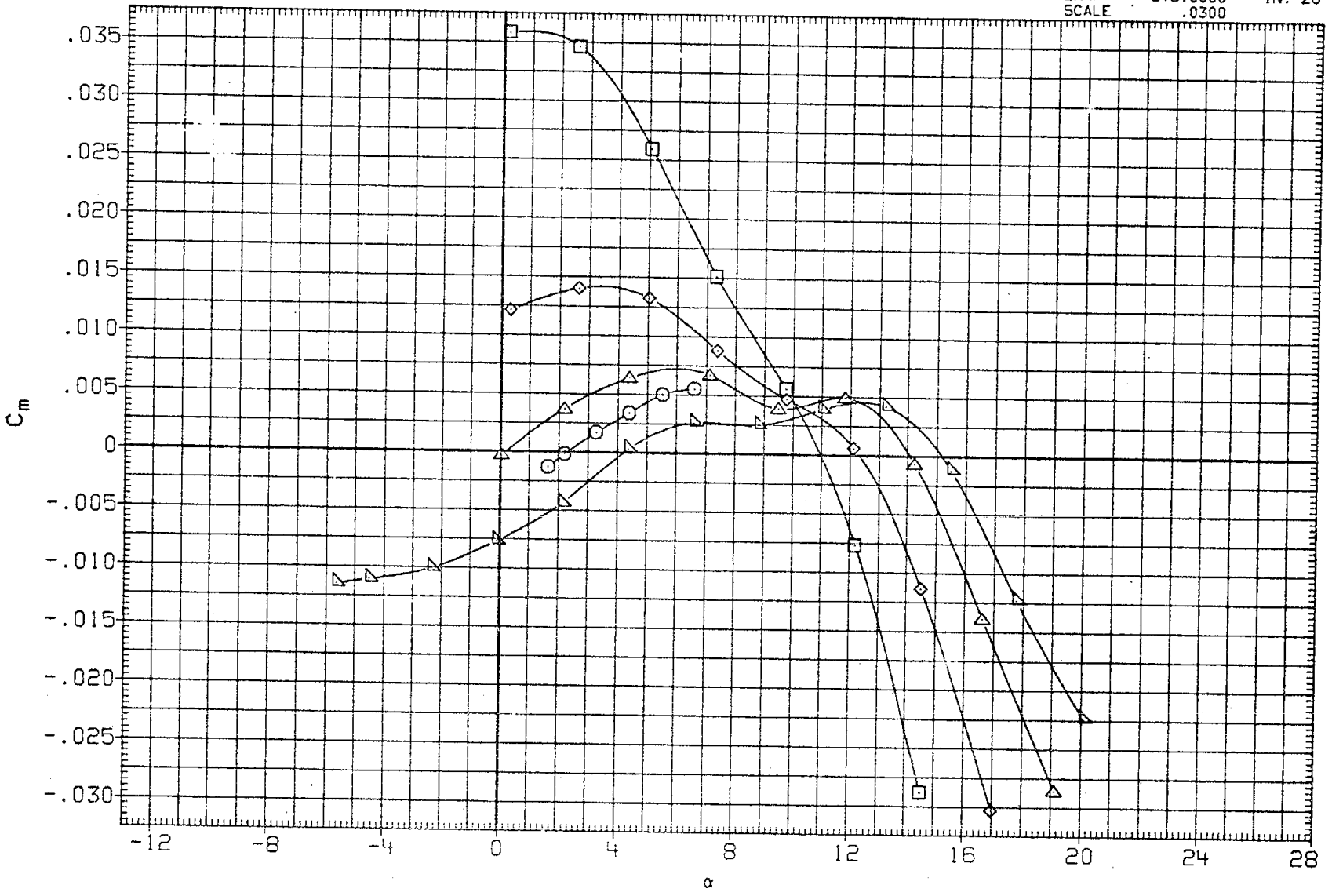

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(C)RN/L = 5.41

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
RNS022	□	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.110
RNS023	◇	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.210
RNS024	△	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

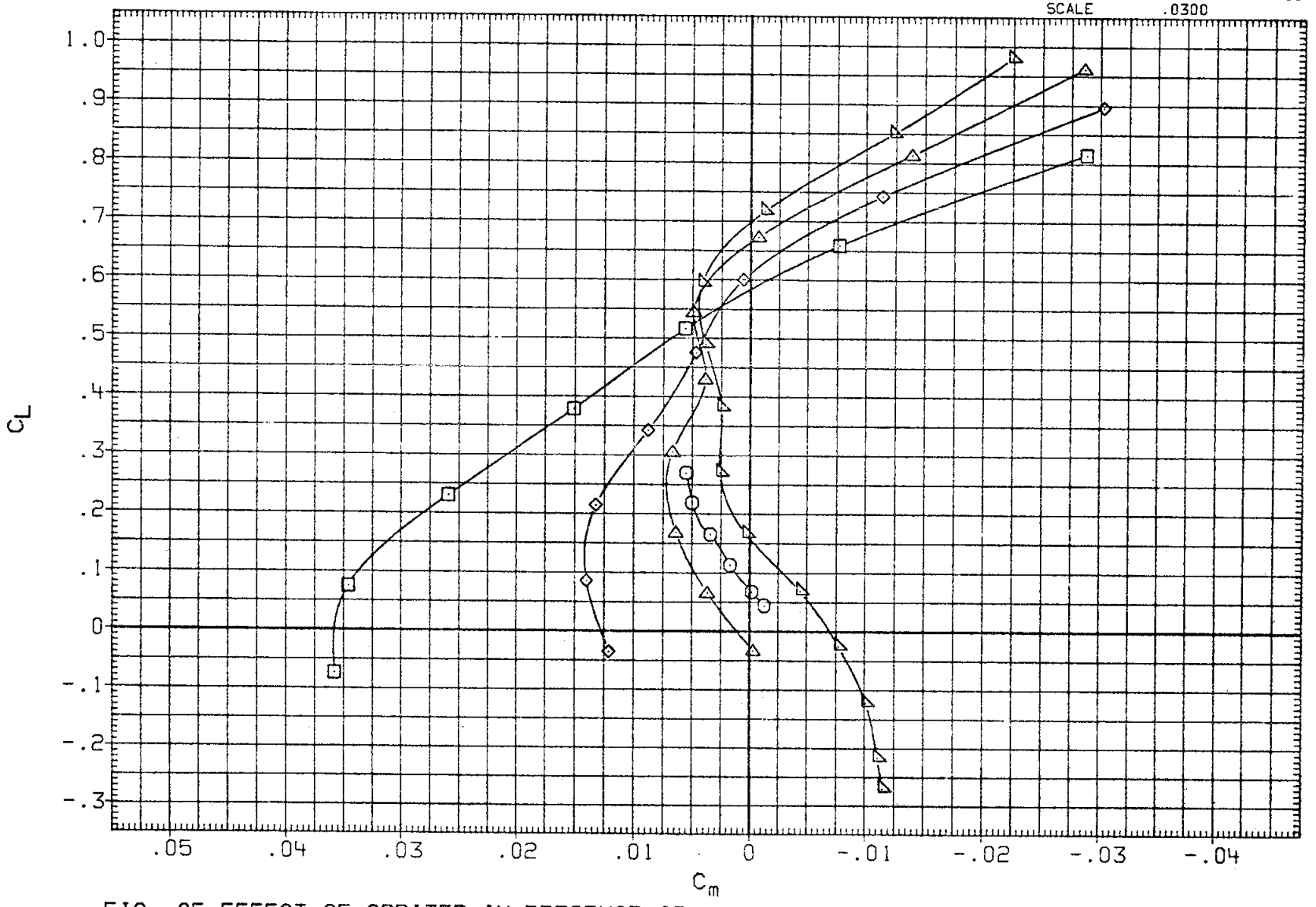

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(C)RN/L = 5.41

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
RNS022	□	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.110
RNS023	◇	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.210
RNS024	△	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

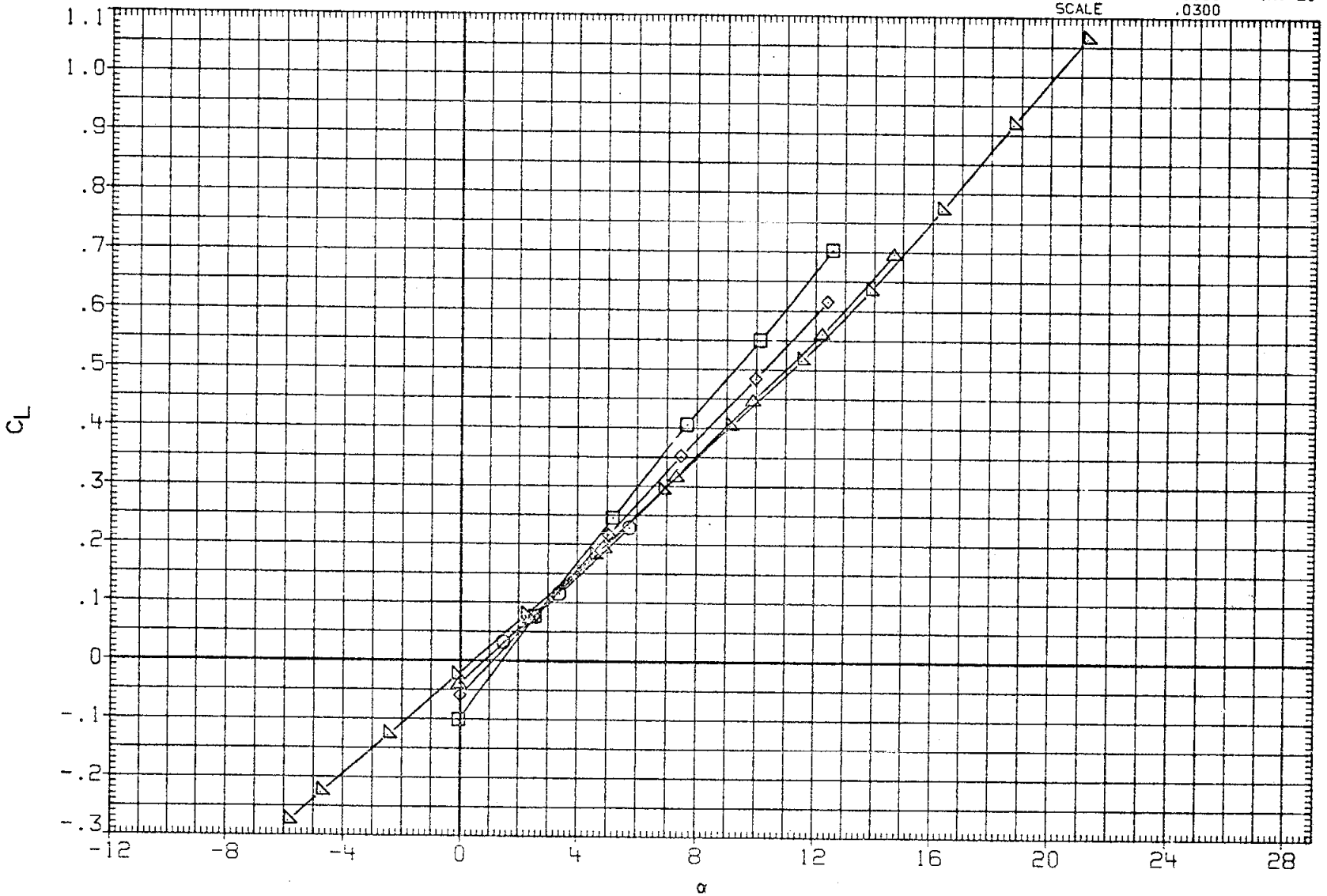

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(D)RN/L = 7.97

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
RNS022	□	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.110
RNS023	◇	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.210
RNS024	△	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

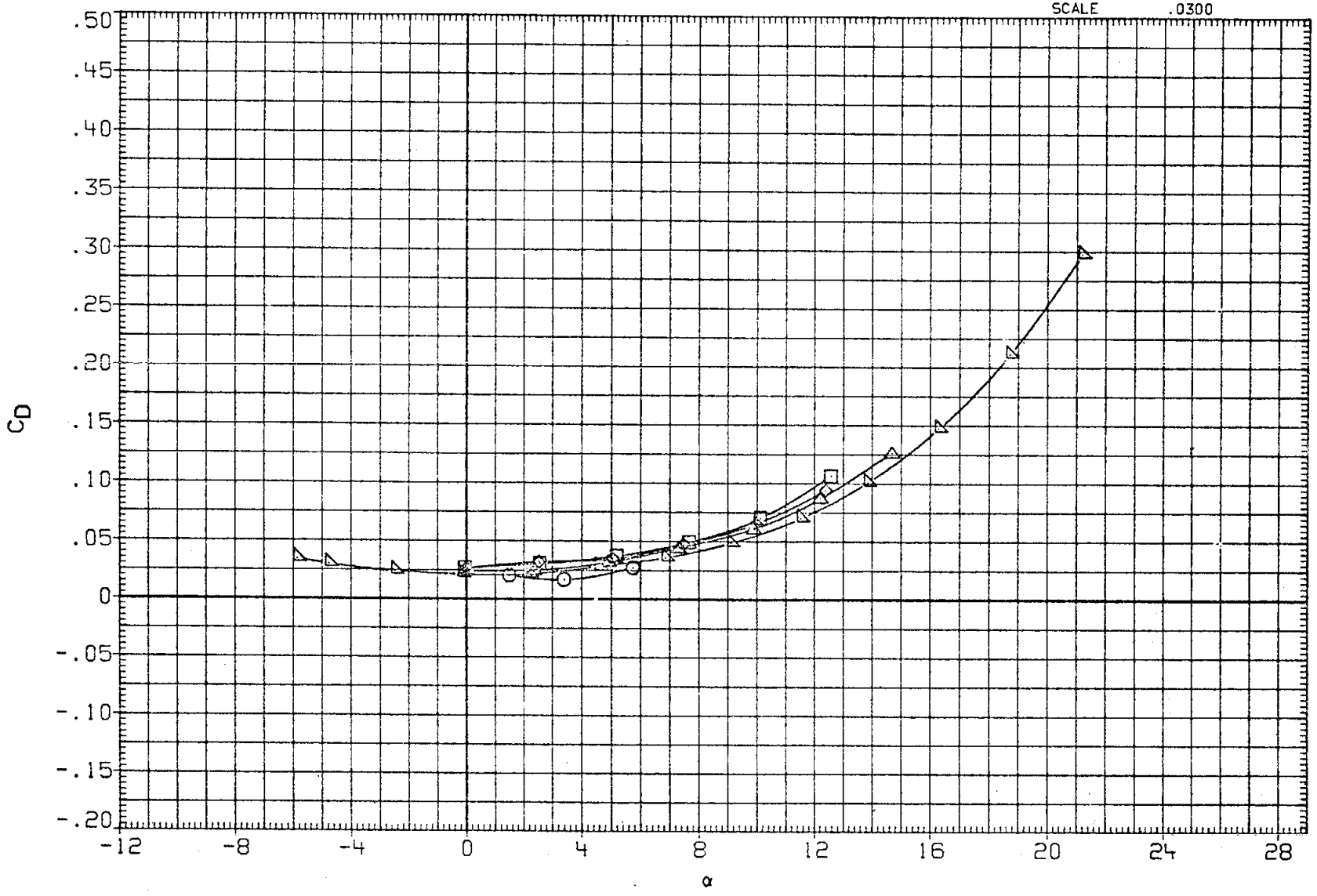

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(D)RN/L = 7.97

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
RNS022	□	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.110
RNS023	◇	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.210
RNS024	△	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

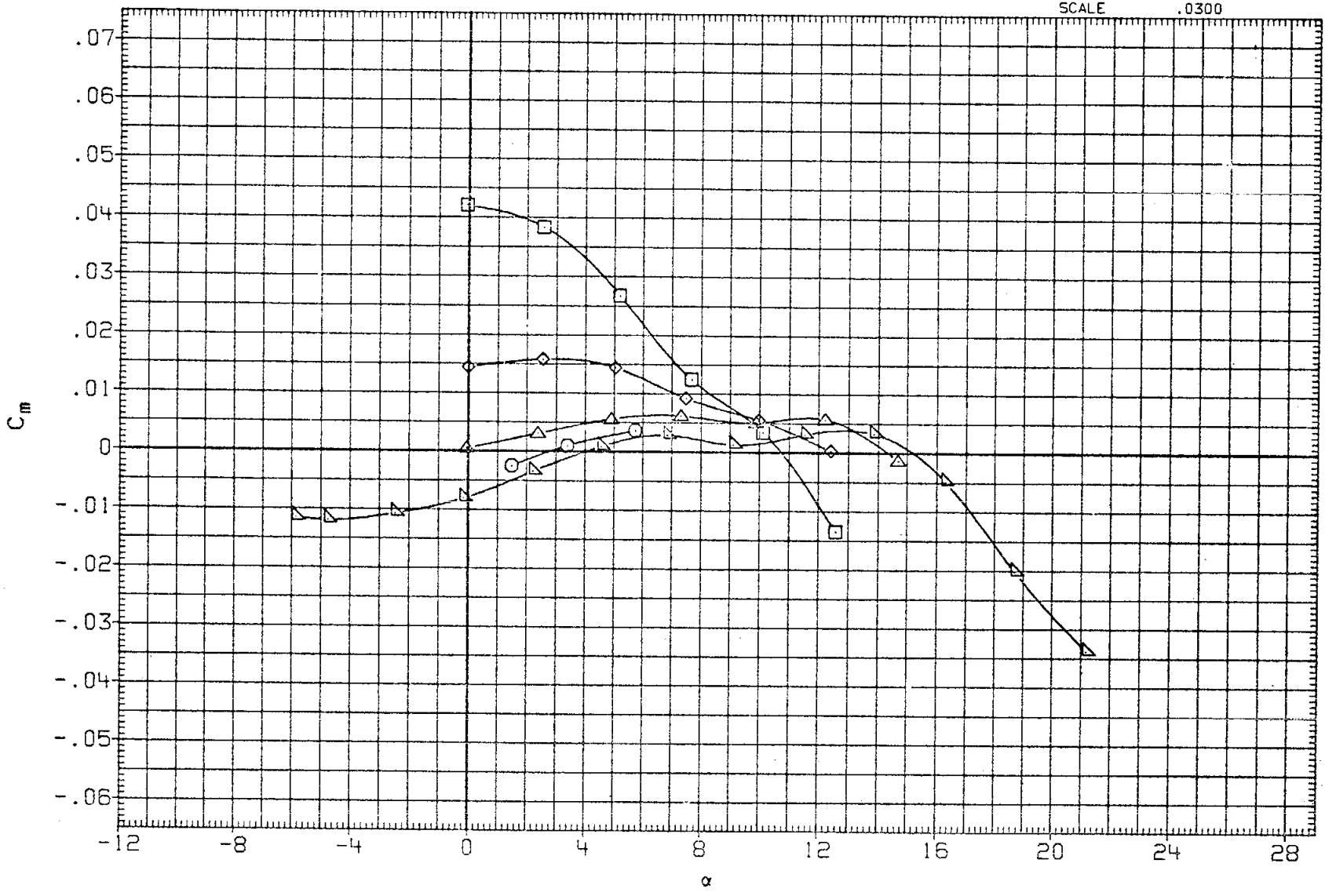

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(D)RN/L = 7.97

DATA SET	SYMBOL	CONFIGURATION	ELEVON	BETA	BDFLAP	H/B
RNS021	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
RNS022	□	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.110
RNS023	◇	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.210
RNS024	△	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.400
YNS027	◺	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

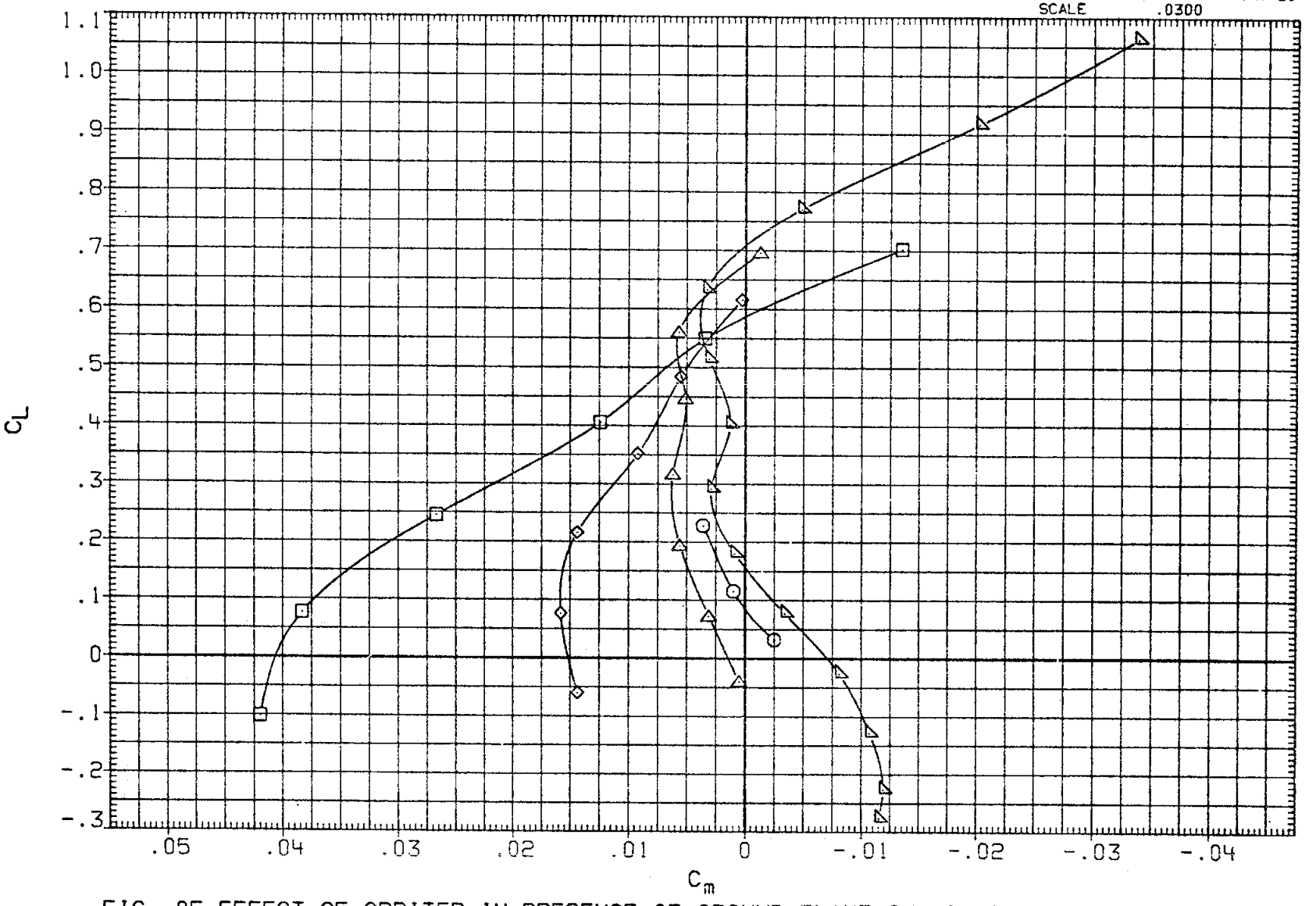

FIG. 05 EFFECT OF ORBITER IN PRESENCE OF GROUND PLANE ON LONGITUDINAL CHARACTERISTICS

(D)RN/L = 7.97

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	DATA NOT AVAILABLE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

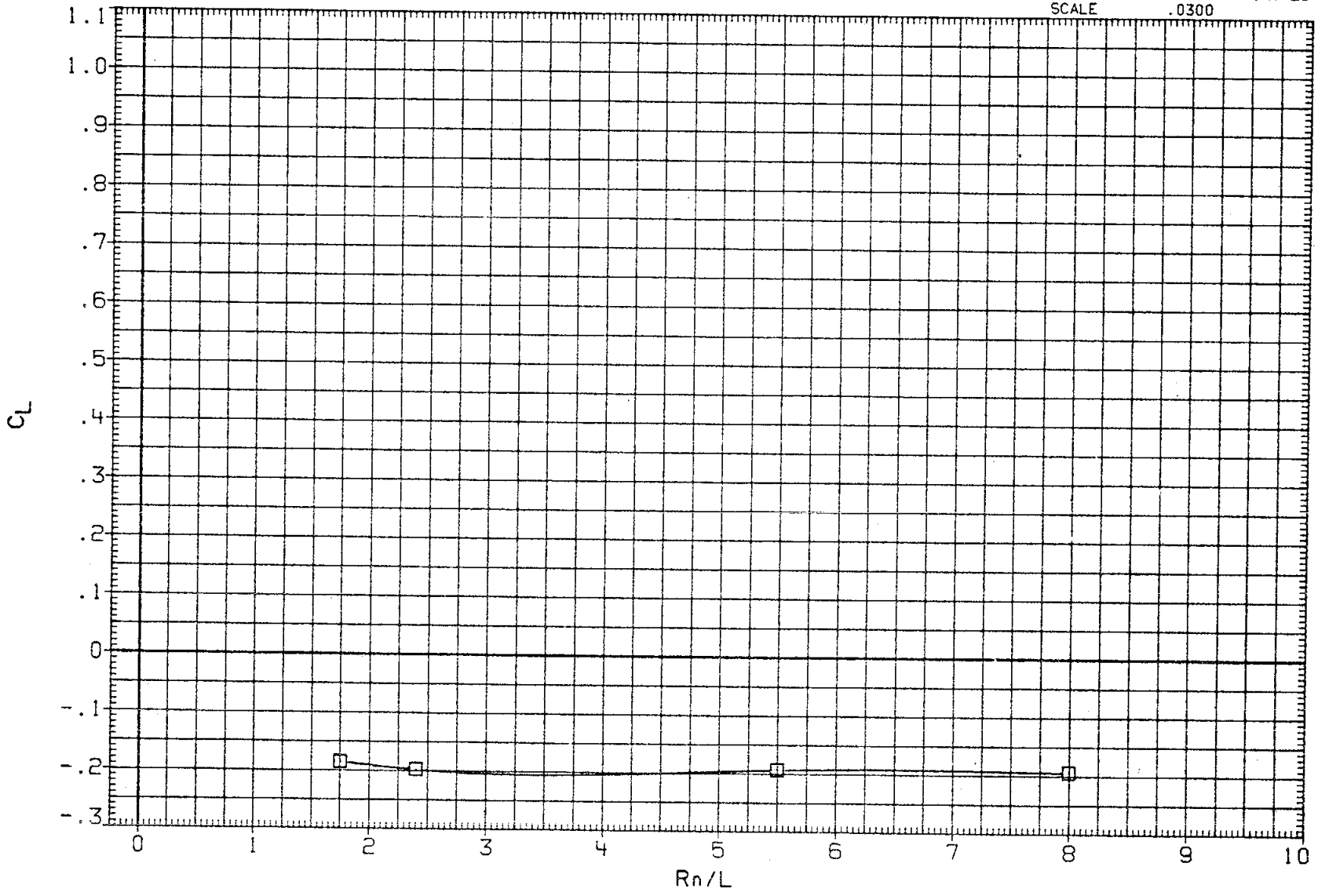

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(A)ALPHA = -4.00

DATA SET	SYMBOL	CONFIGURATION
ZNS016	○	DATA NOT AVAILABLE
ZNS027	□	ARC-12-180(OA173) OV101+TC

H/B=FREE AIR

ELEVON	AILRON	BDFLAP	H/B
.000	.000	-11.700	.600
.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

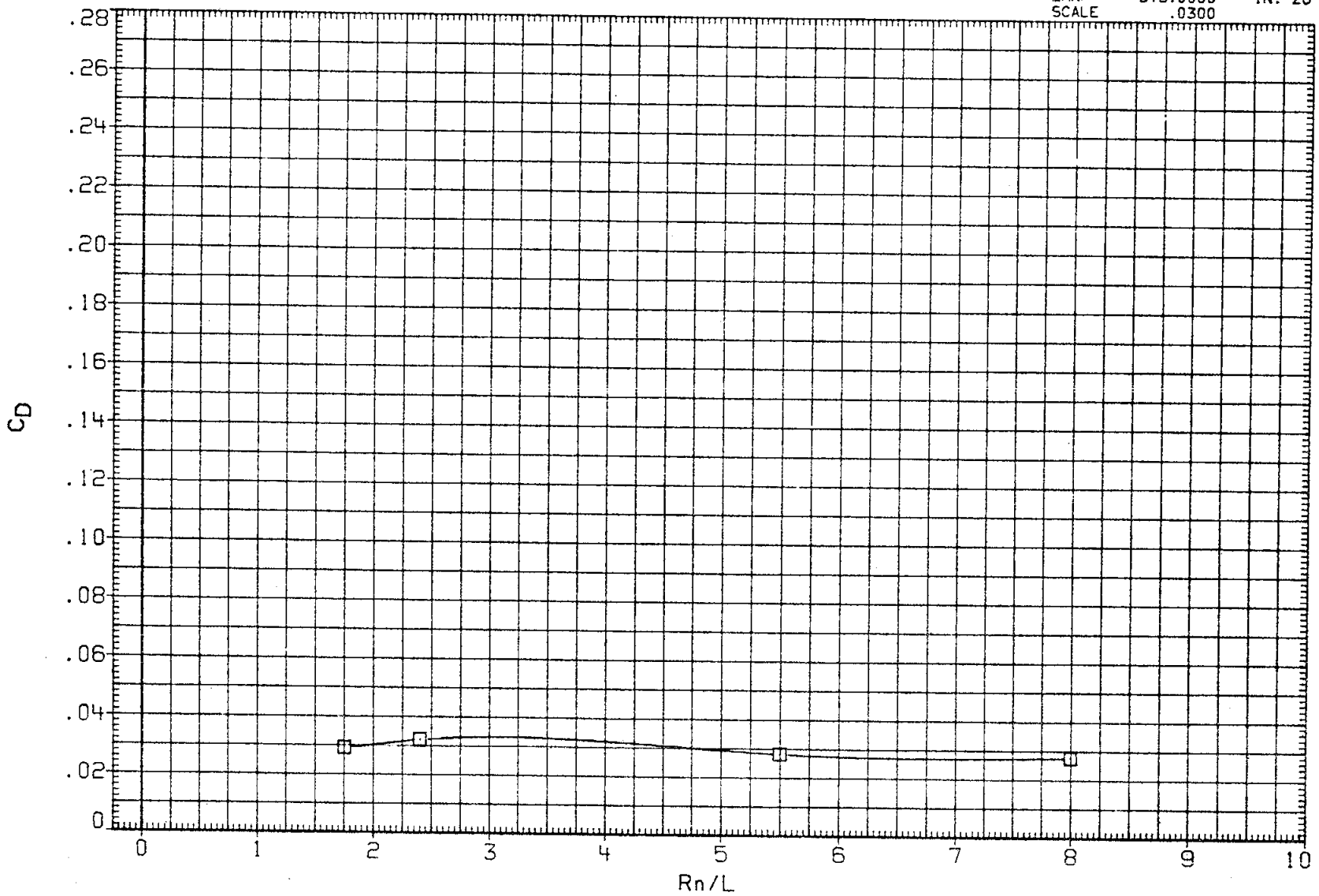

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(A)ALPHA = -4.00

DATA SET	SYMBOL	CONFIGURATION		ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	DATA NOT AVAILABLE		.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC	H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

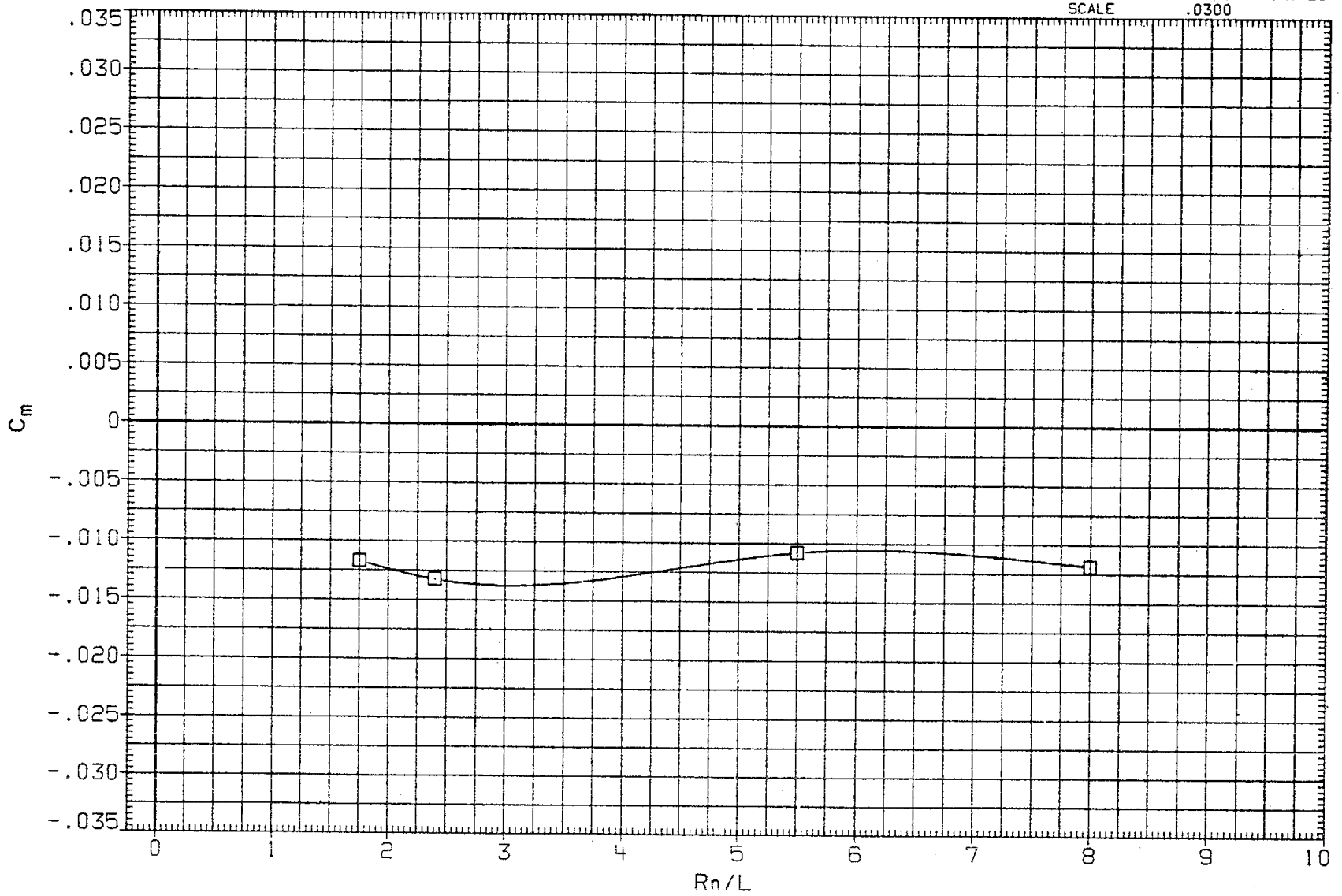

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(A) ALPHA = -4.00

DATA SET	SYMBOL	CONFIGURATION		ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	DATA NOT AVAILABLE		.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC	H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

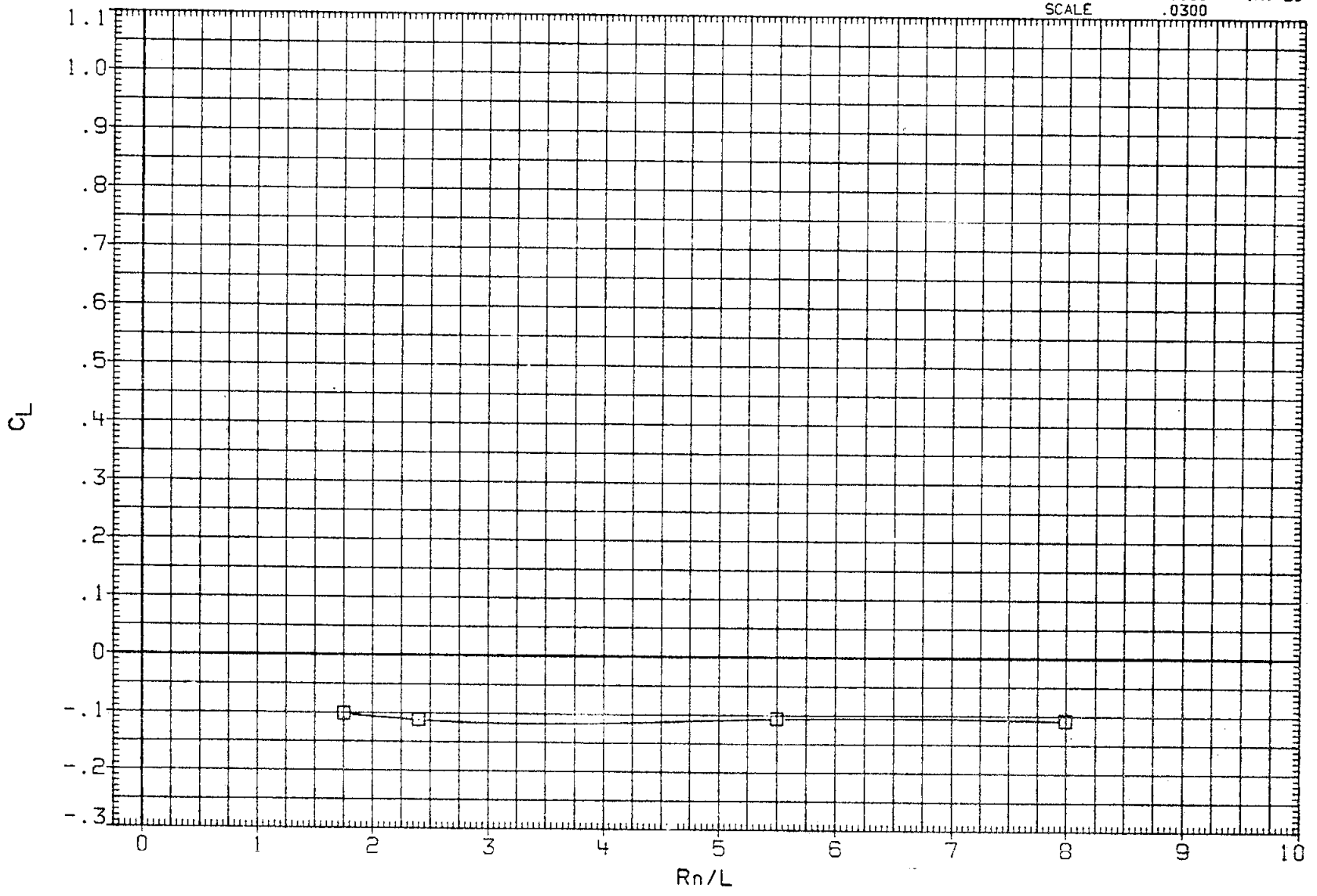

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(B)ALPHA = -2.00

DATA SET	SYMBOL	CONFIGURATION		ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	DATA NOT AVAILABLE		.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC	H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

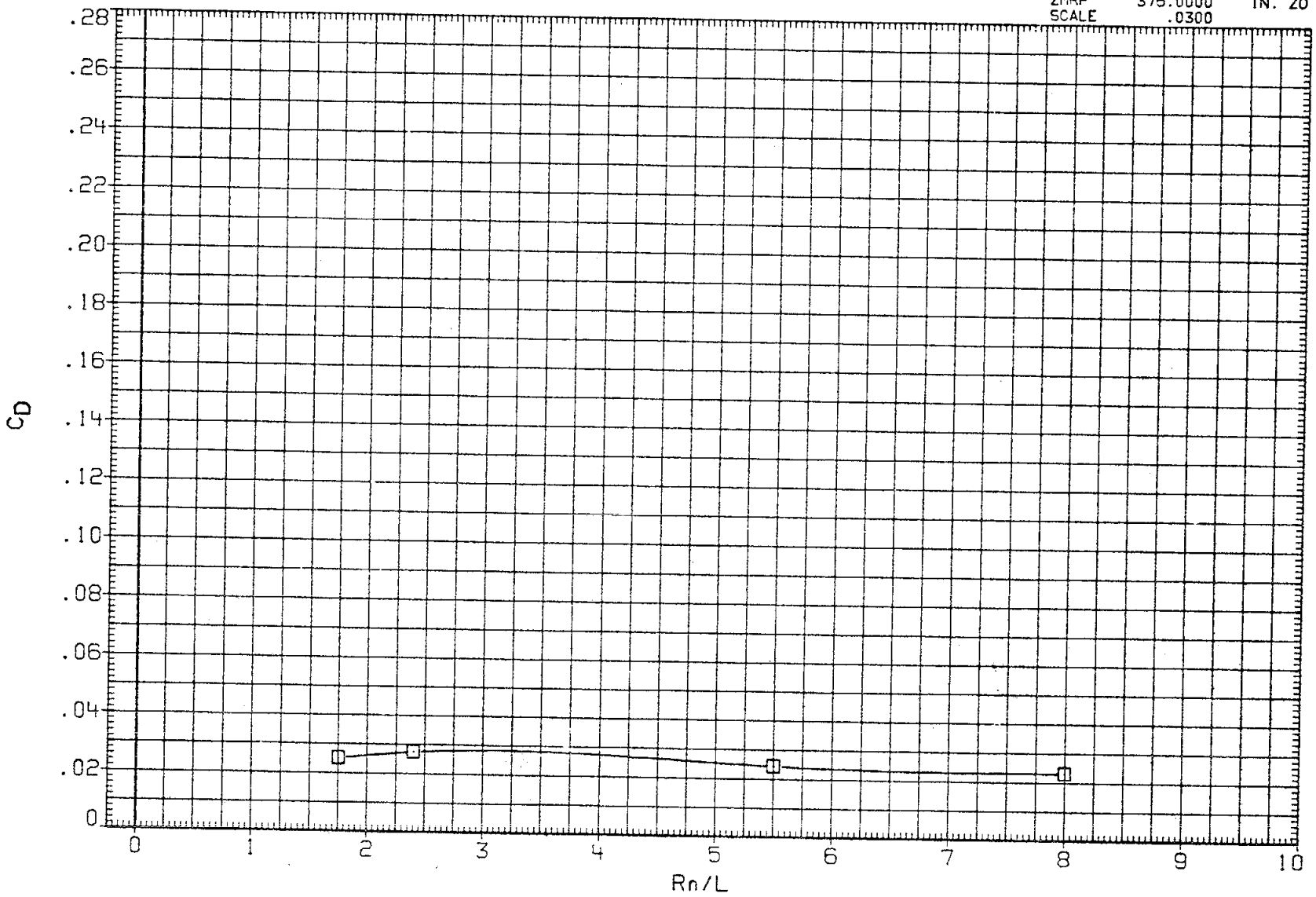

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(B) ALPHA = -2.00

DATA SET	SYMBOL	CONFIGURATION		ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	DATA NOT AVAILABLE		.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(0A173) OV101+TC	H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

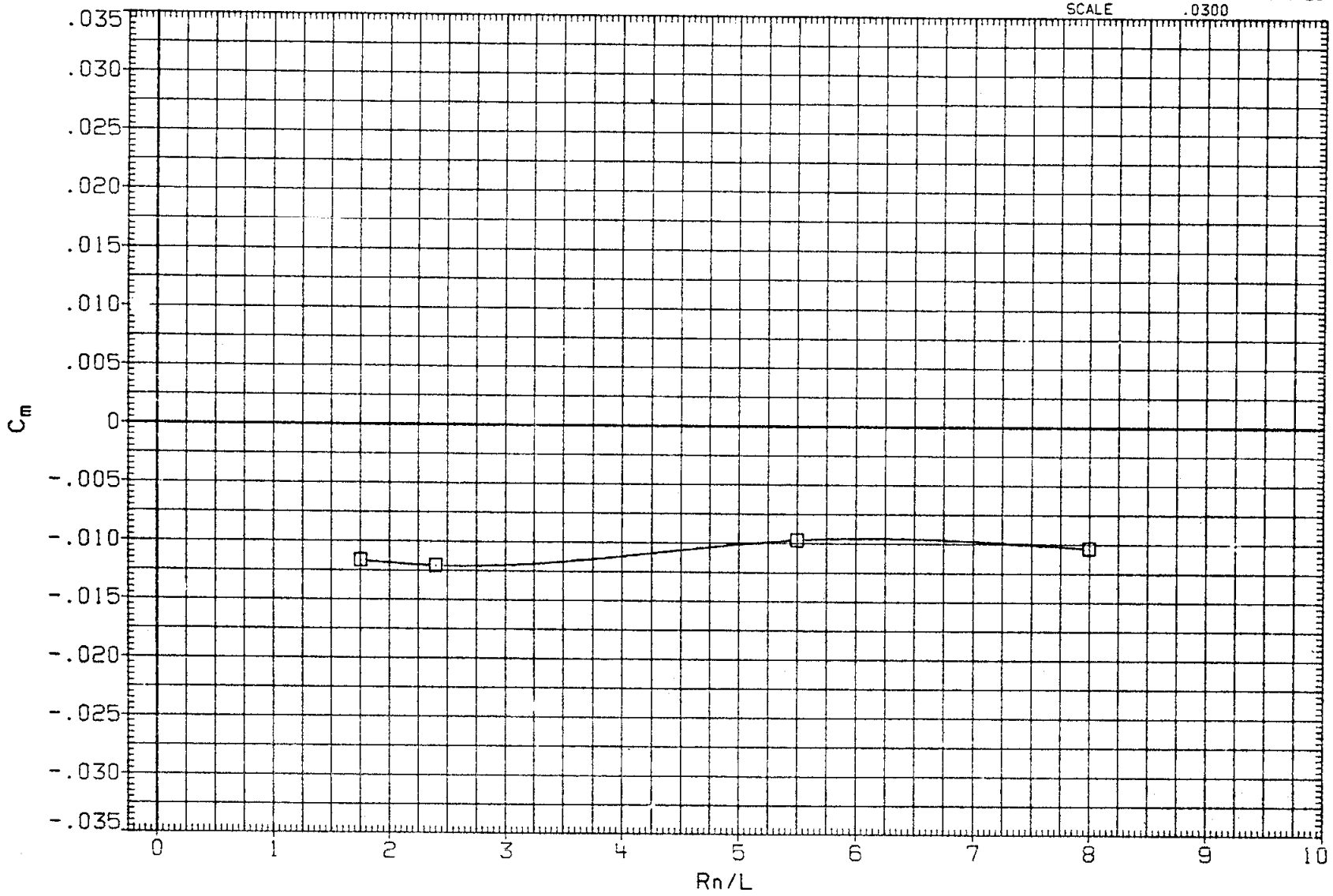

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(B)ALPHA = -2.00

DATA SET	SYMBOL	CONFIGURATION		ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	DATA NOT AVAILABLE		.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC	H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

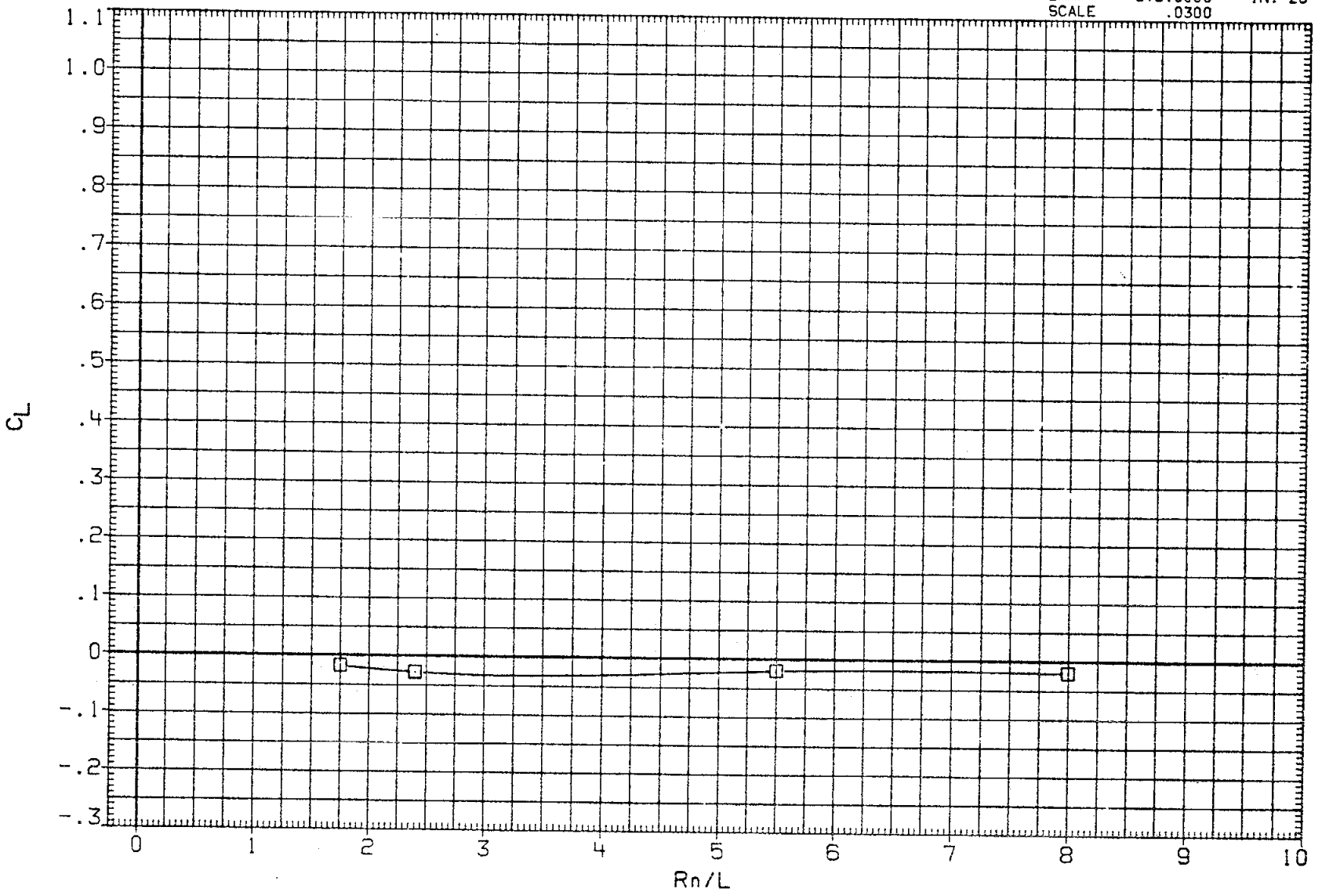

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(C)ALPHA = .00

DATA SET	SYMBOL	CONFIGURATION		ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	DATA NOT AVAILABLE		.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC	H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

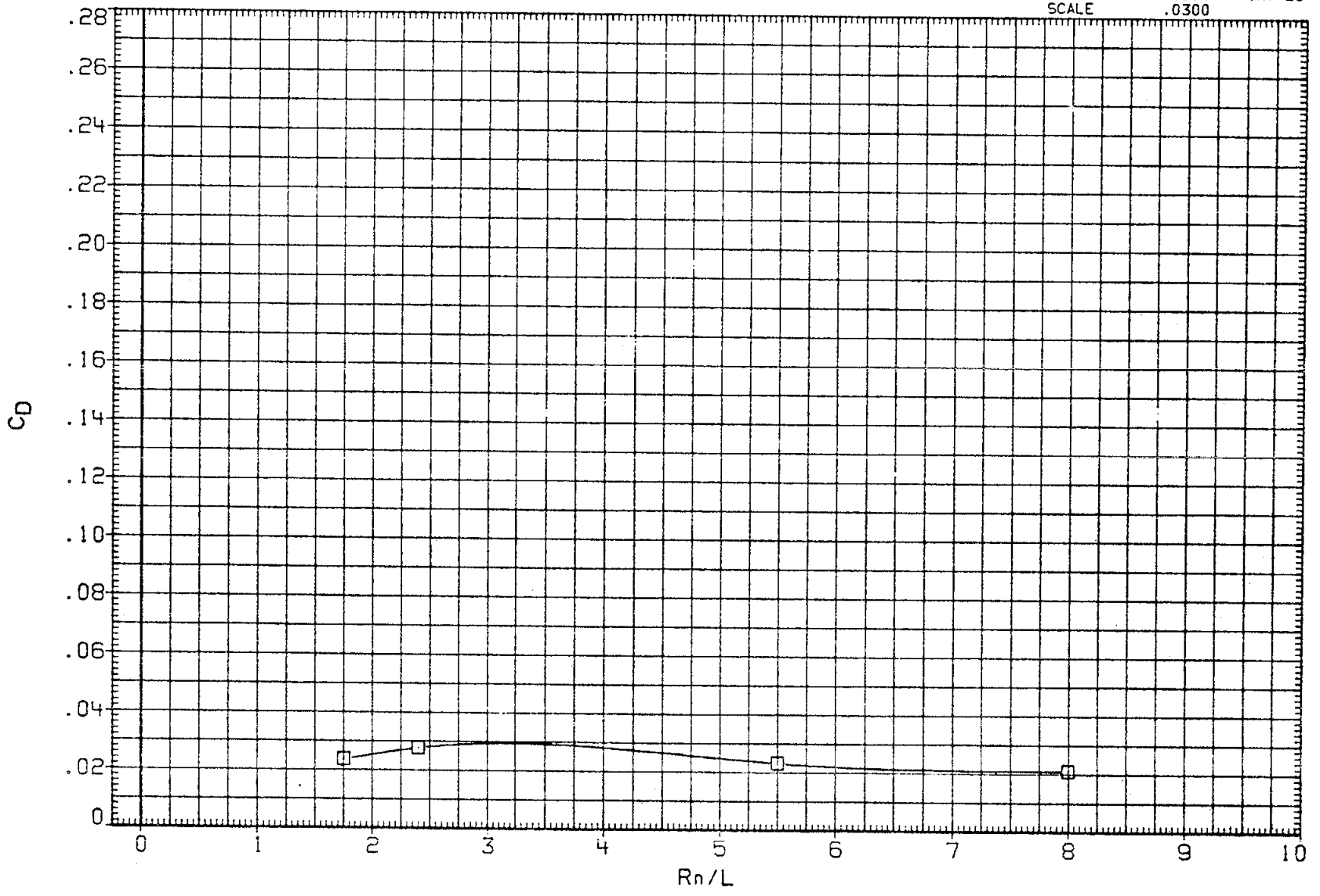

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(C)ALPHA = .00

DATA SET	SYMBOL	CONFIGURATION		ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	DATA NOT AVAILABLE		.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC	H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2590.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

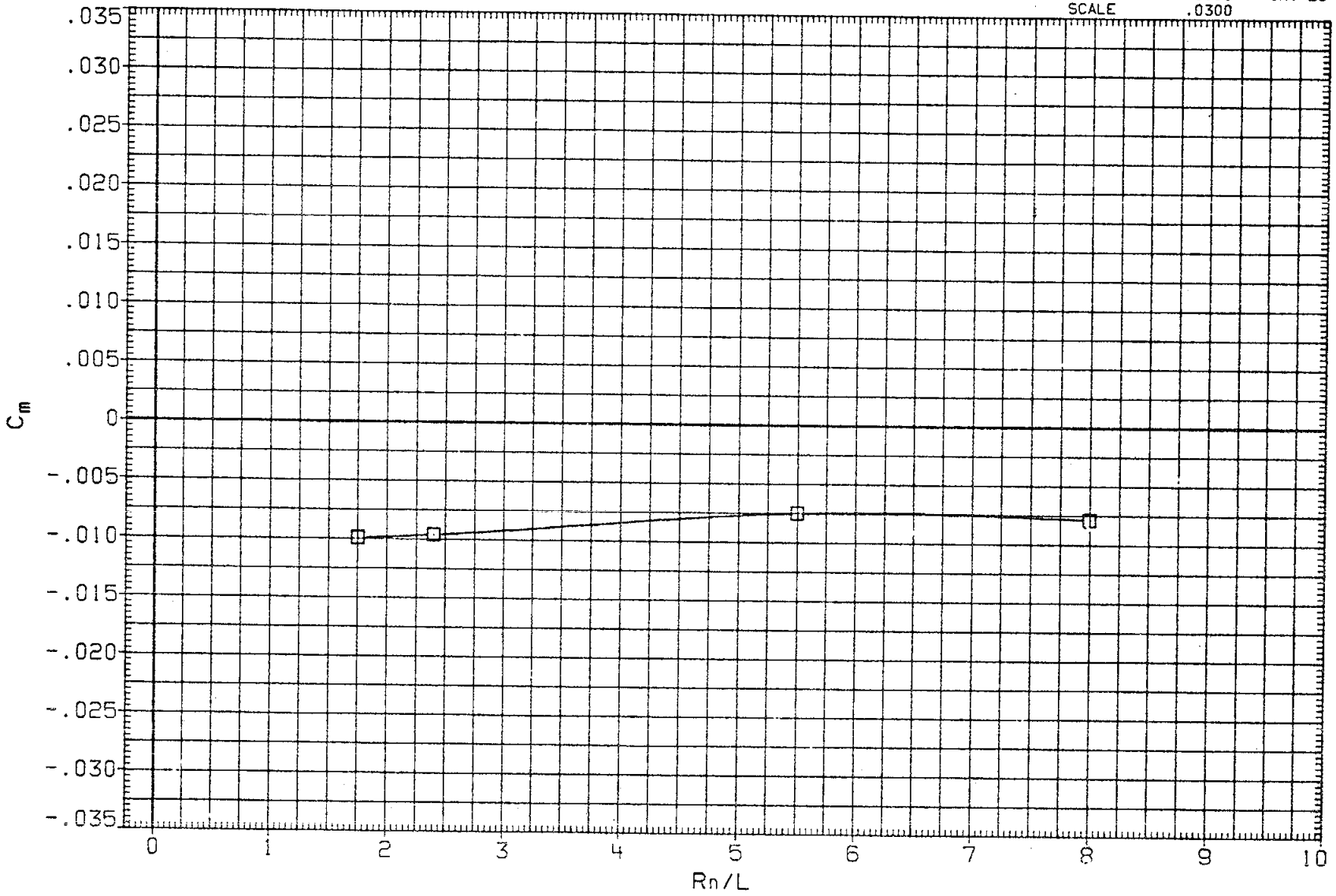

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(C)ALPHA = .00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS015	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

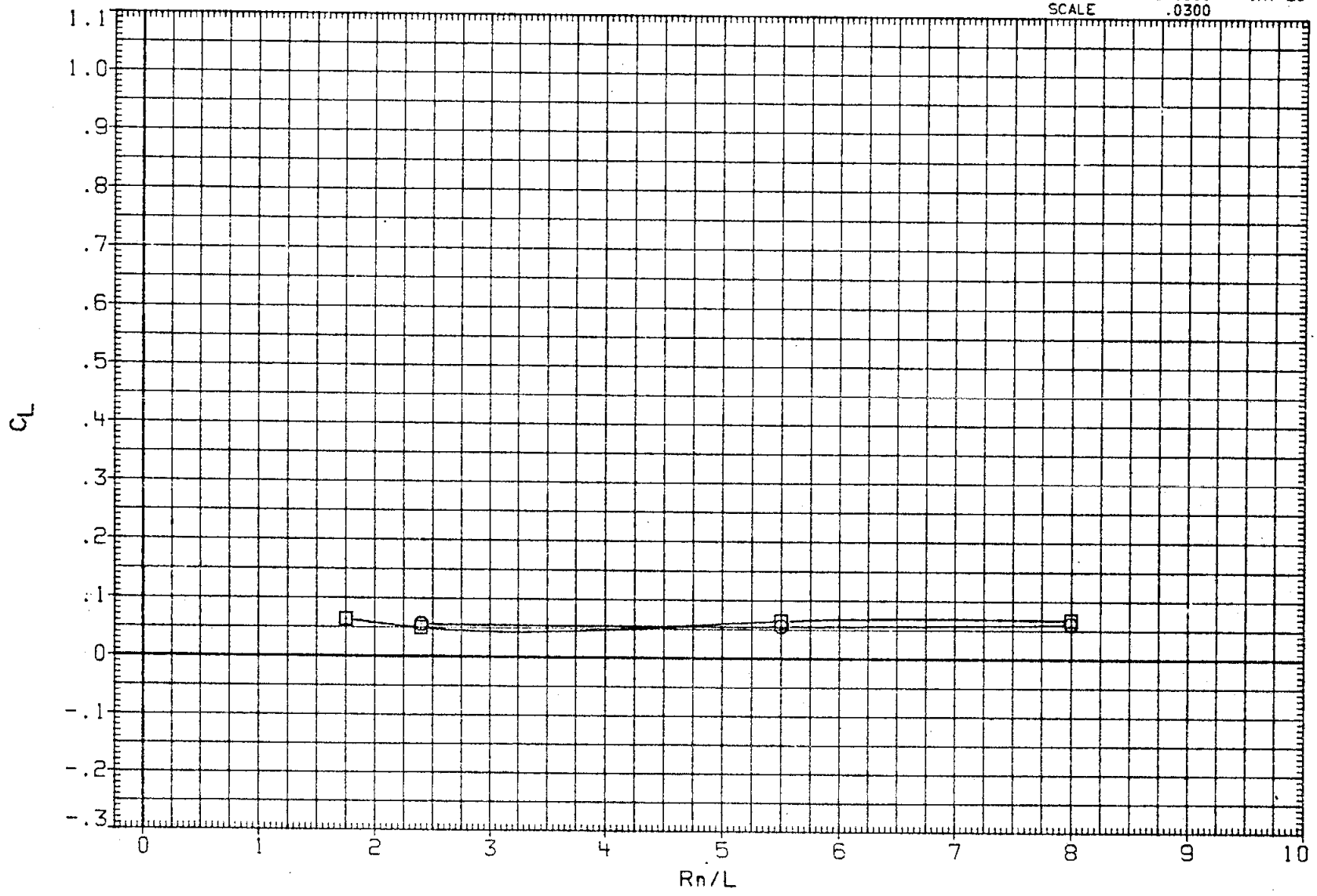

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(D)ALPHA = 2.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

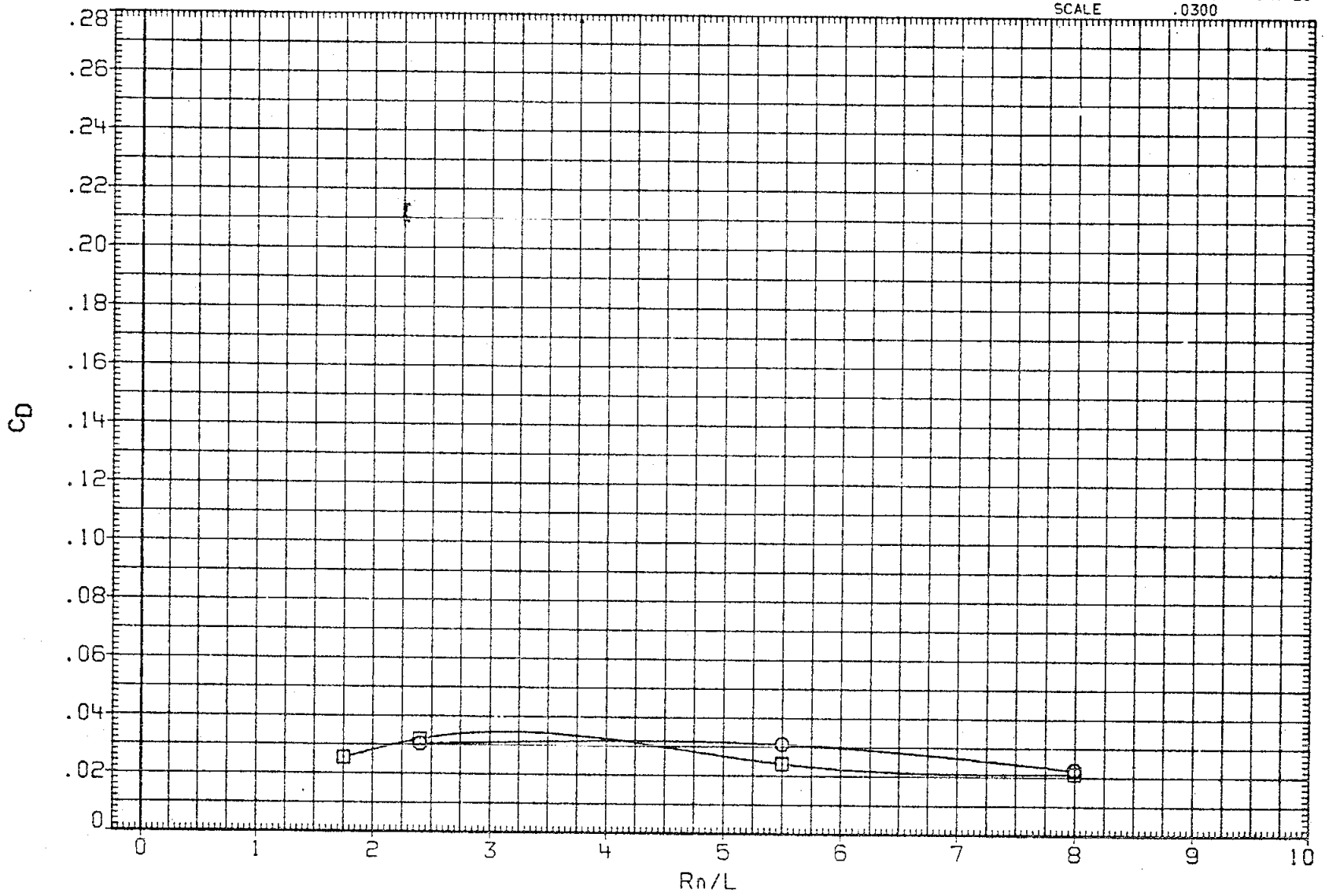

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(D)ALPHA = 2.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

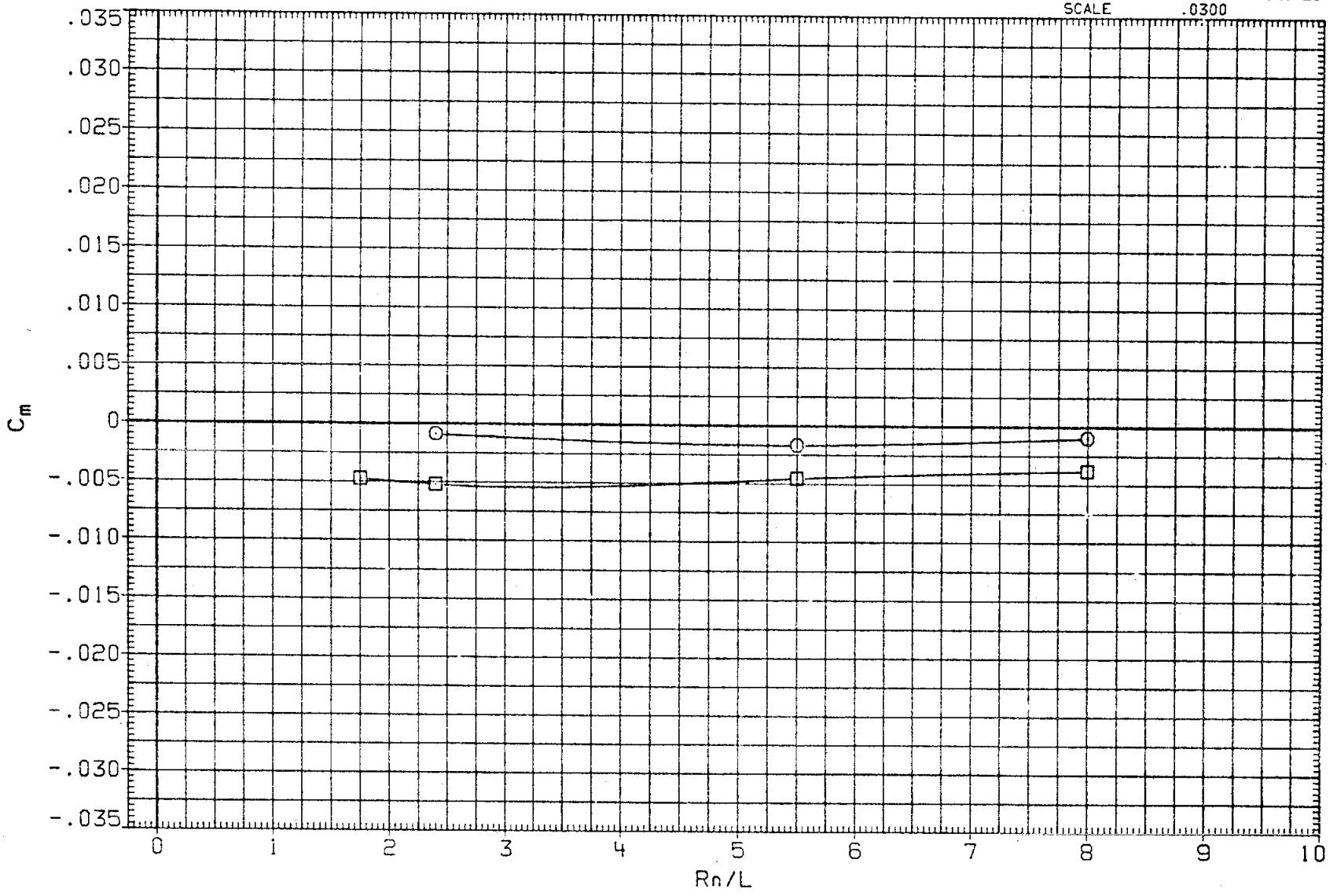

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(D)ALPHA = 2.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

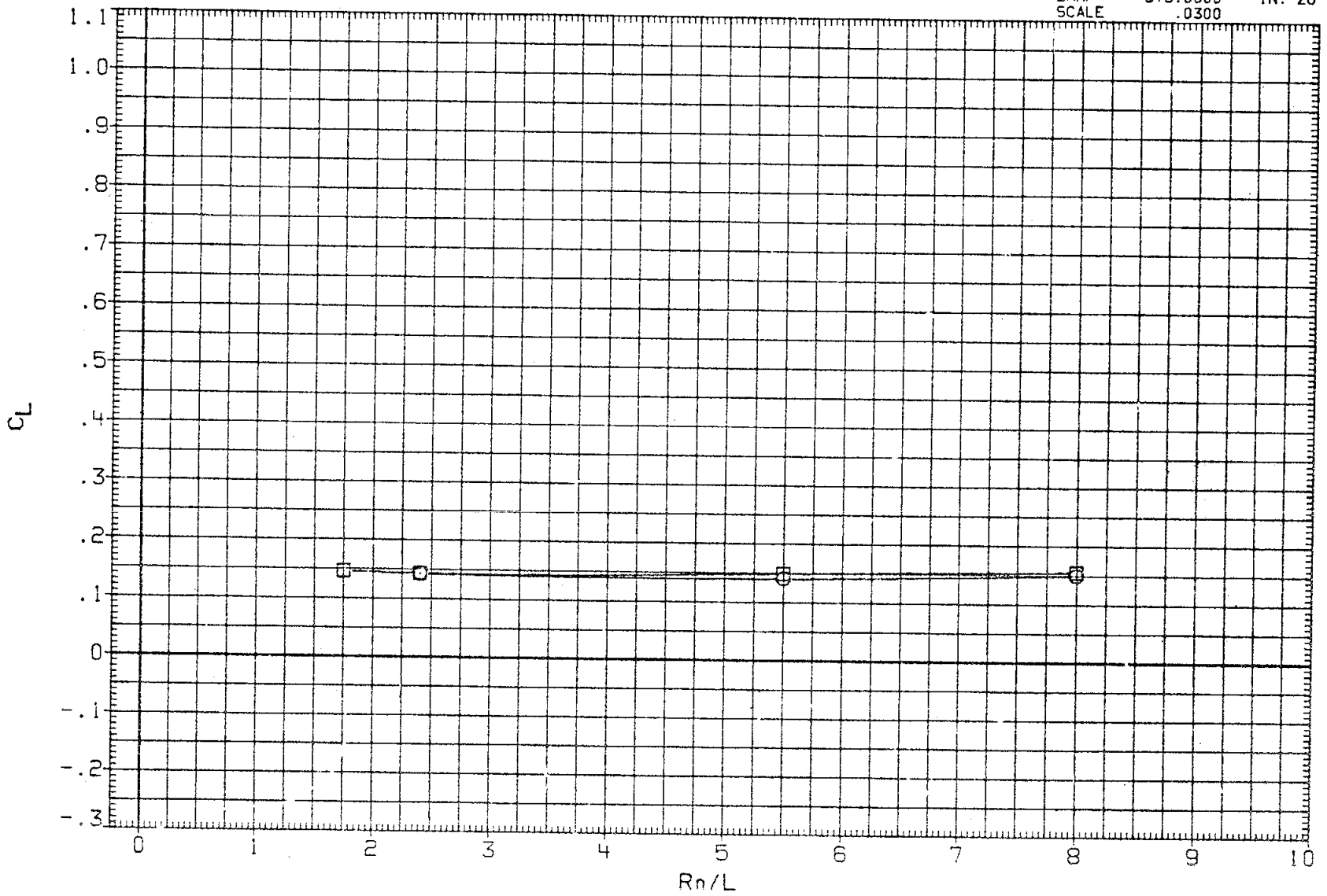

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(E)ALPHA = 4.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

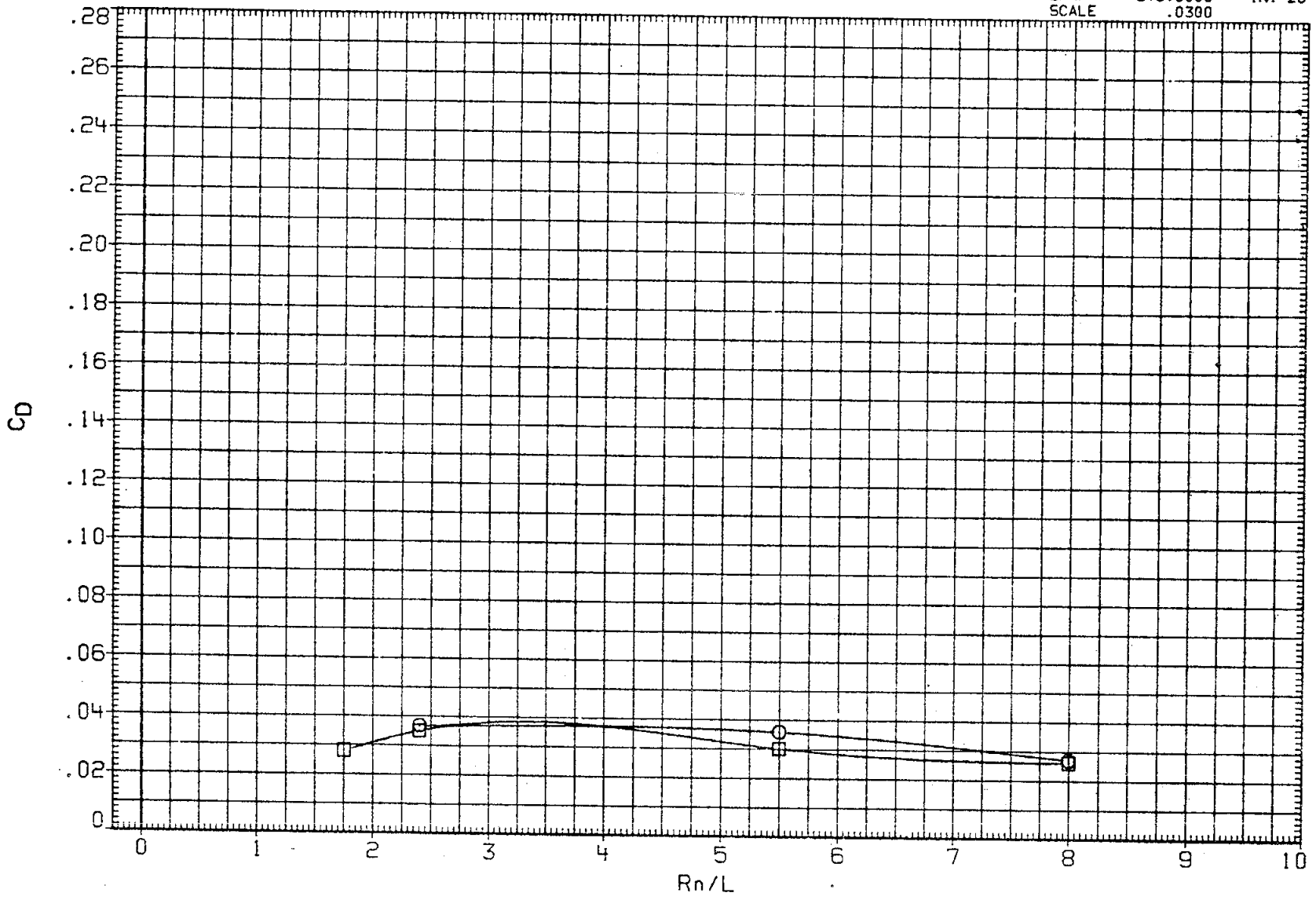

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(E)ALPHA = 4.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

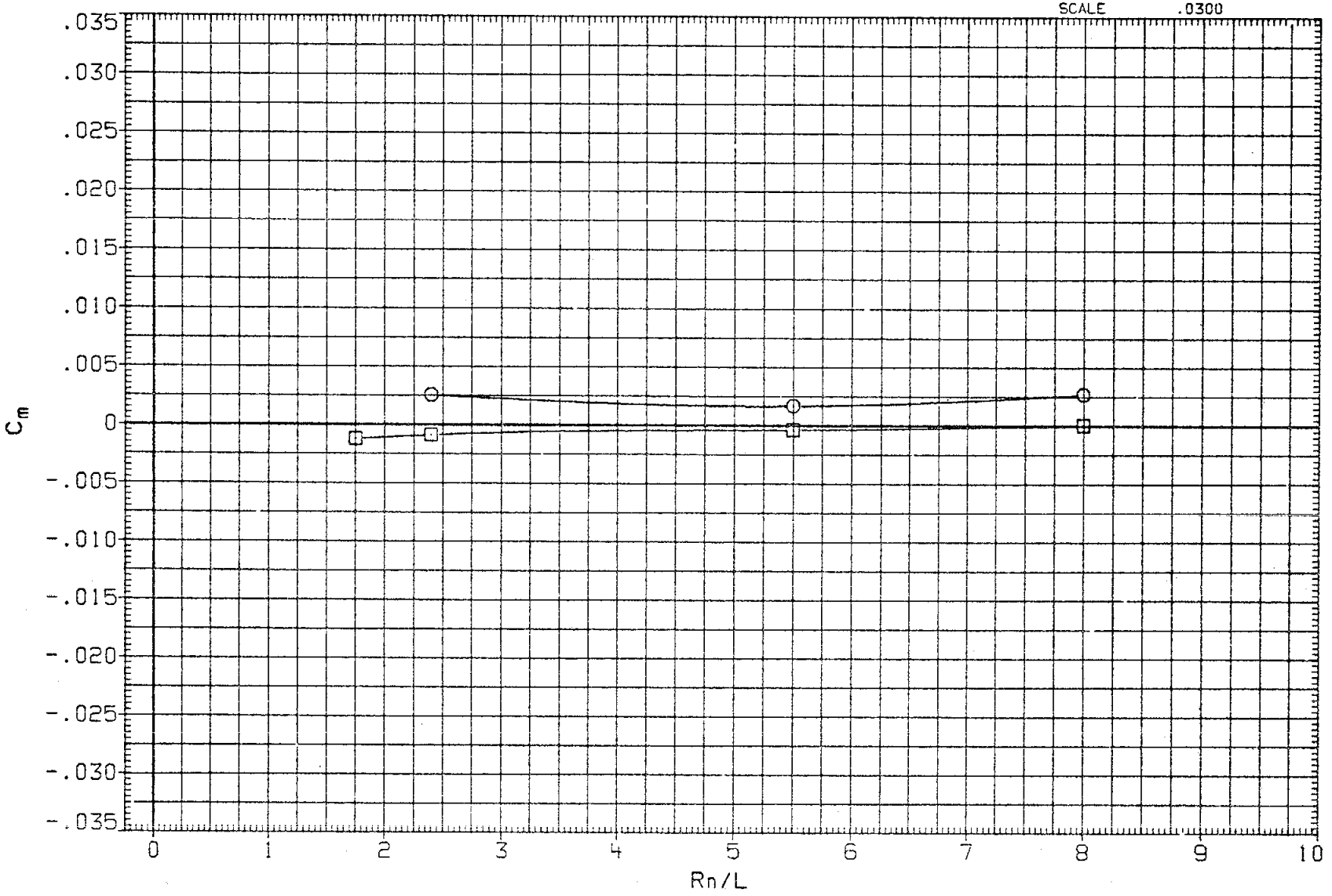

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(E)ALPHA = 4.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

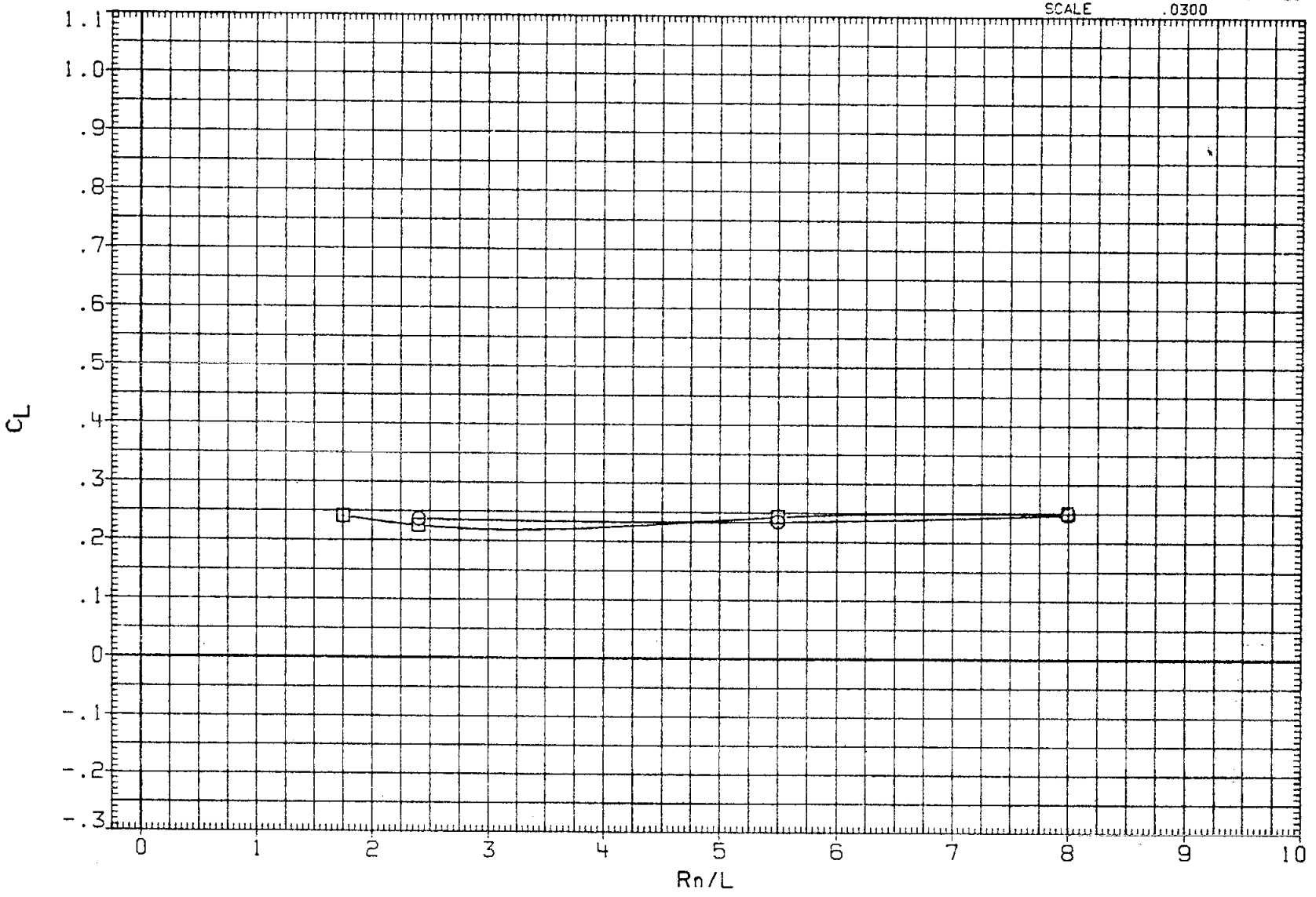

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(F)ALPHA = 6.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

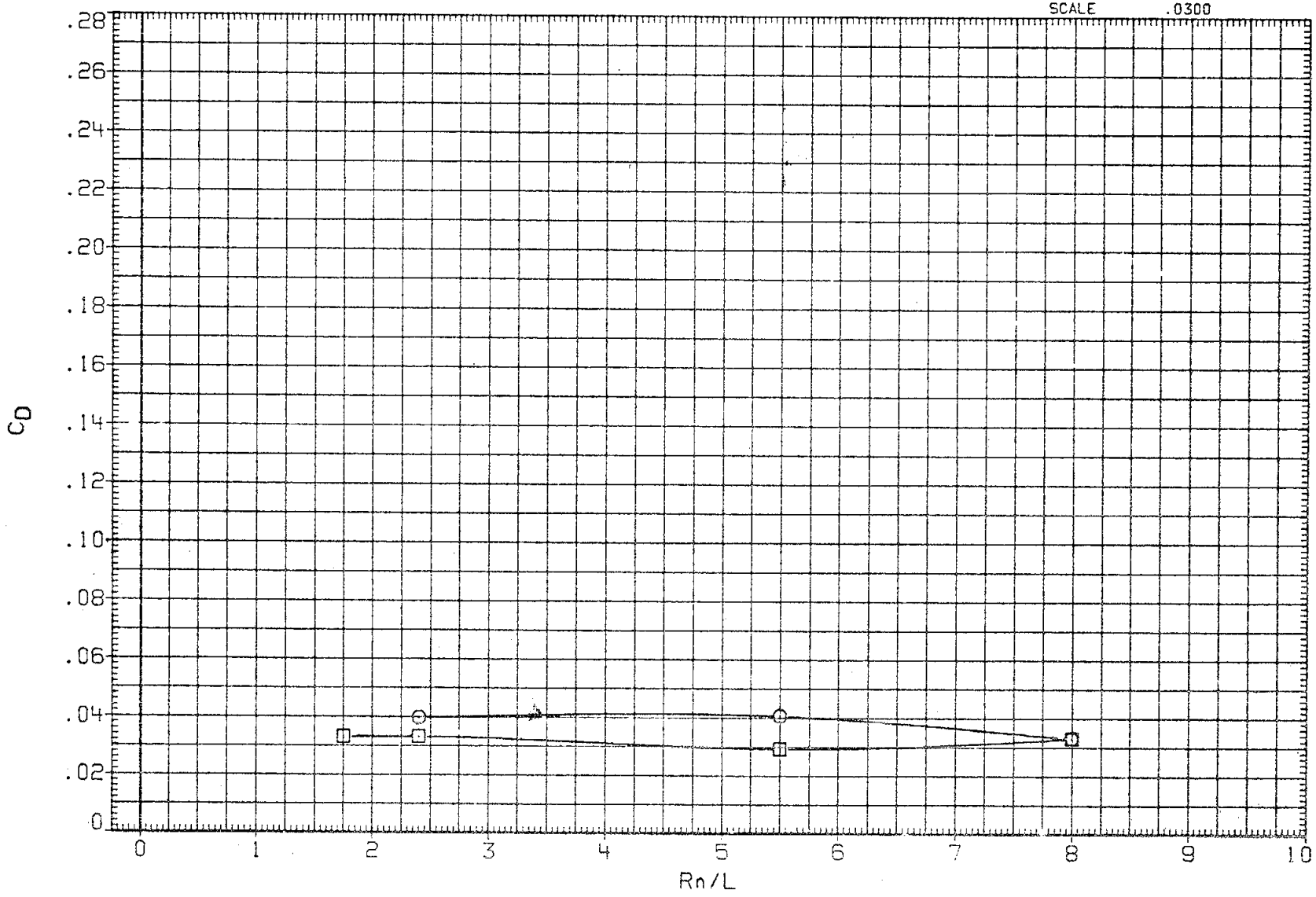

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(F)ALPHA = 6.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

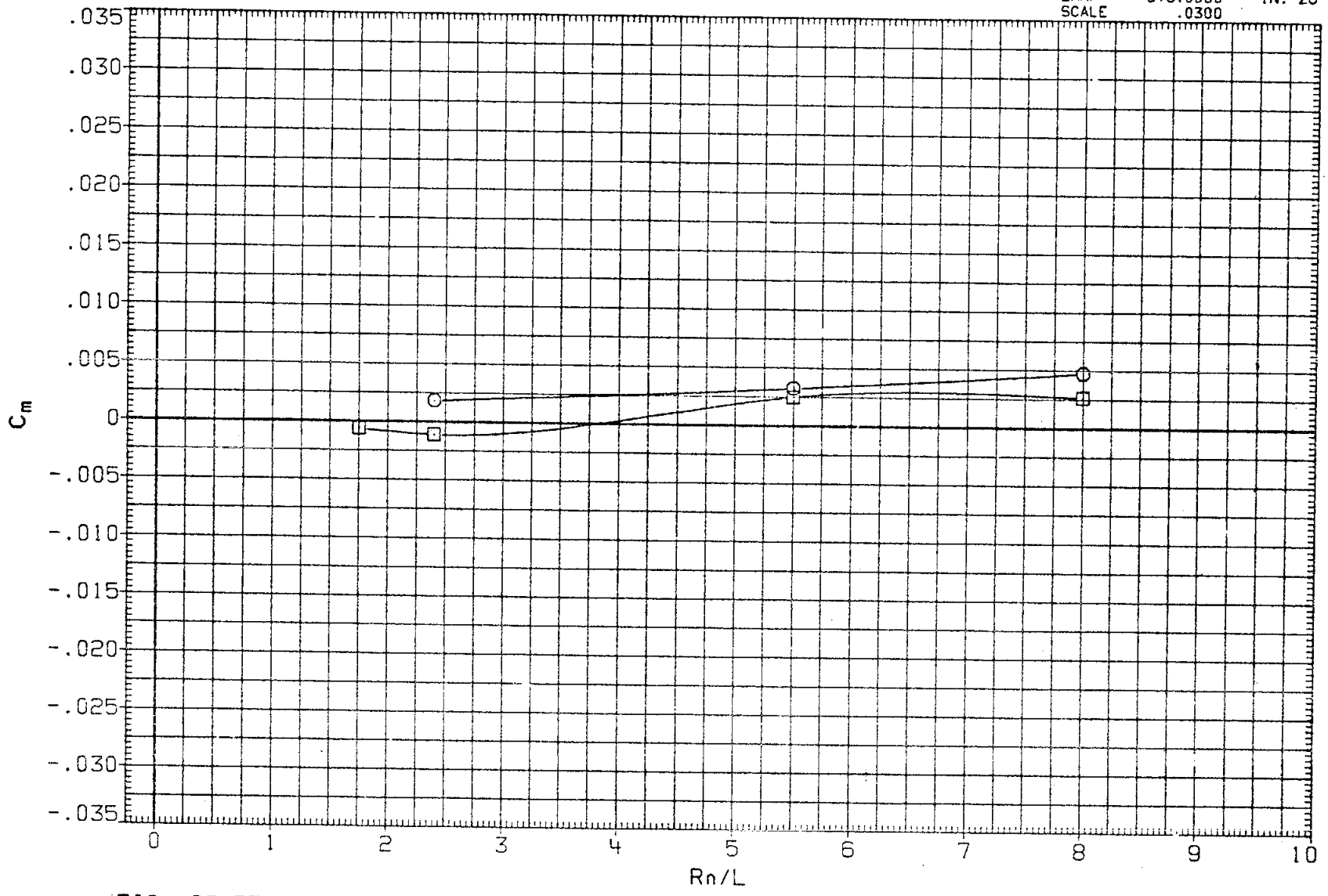

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(F)ALPHA = 6.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

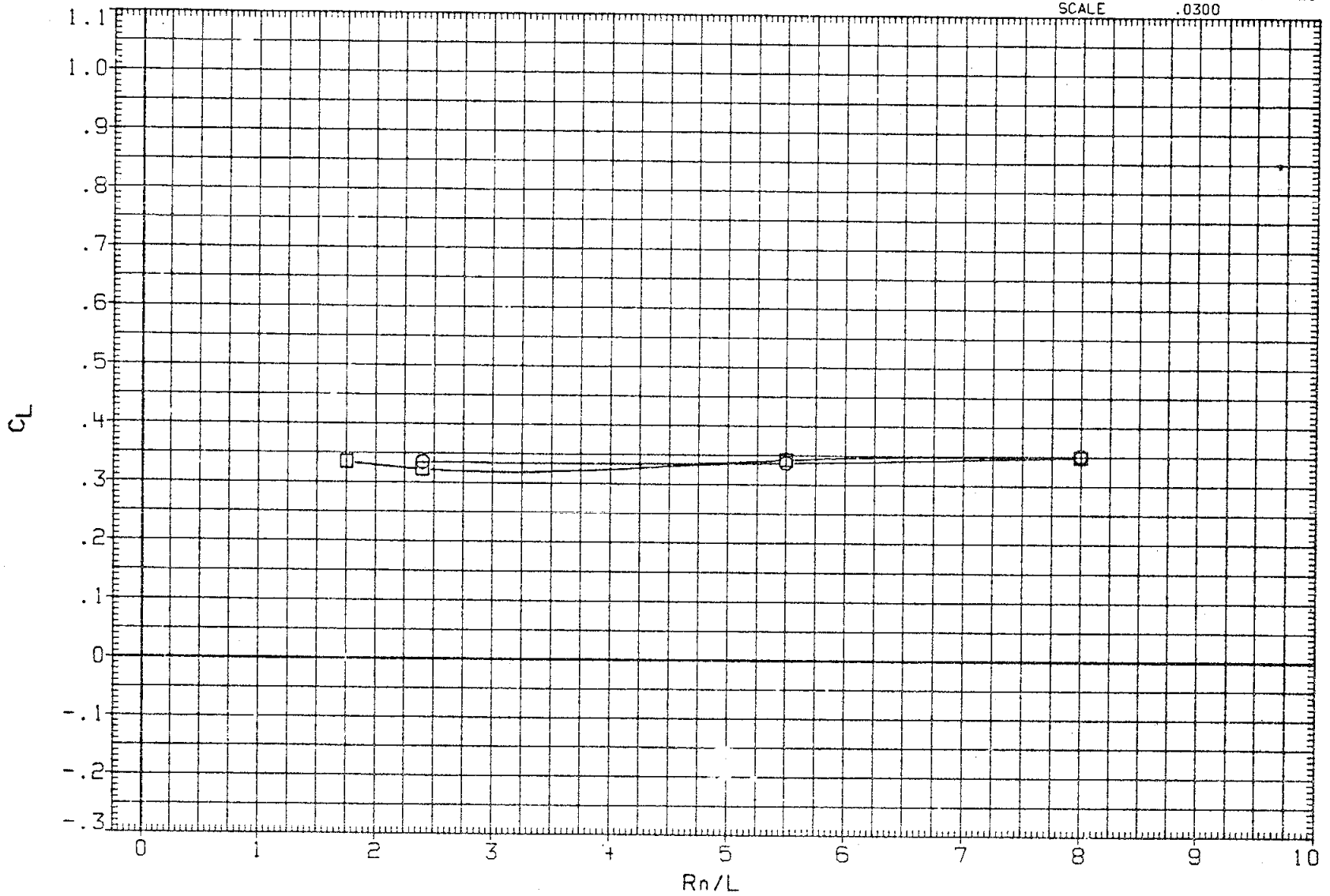

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(G)ALPHA = 8.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZN5016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZN5027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

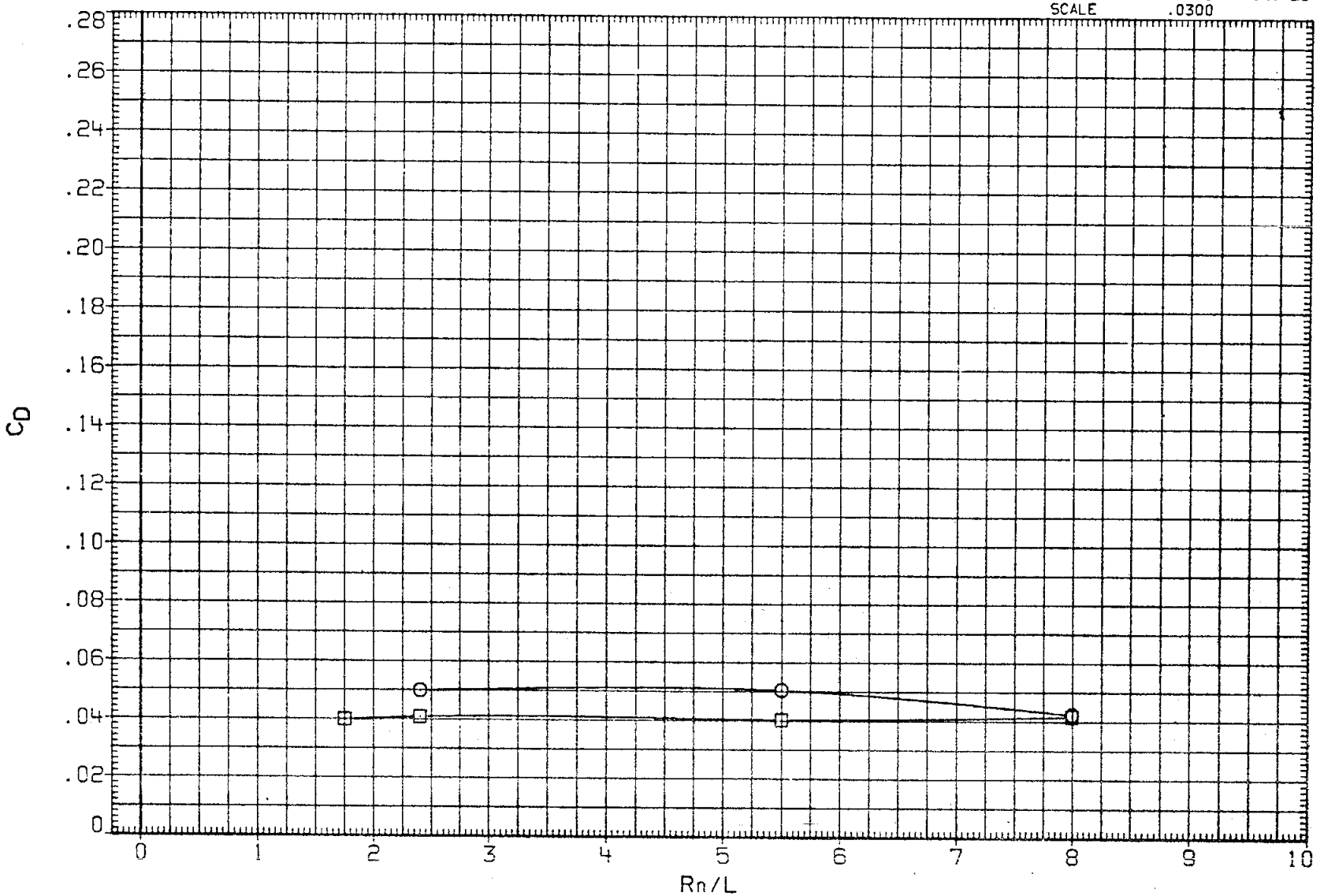

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(G)ALPHA = 8.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

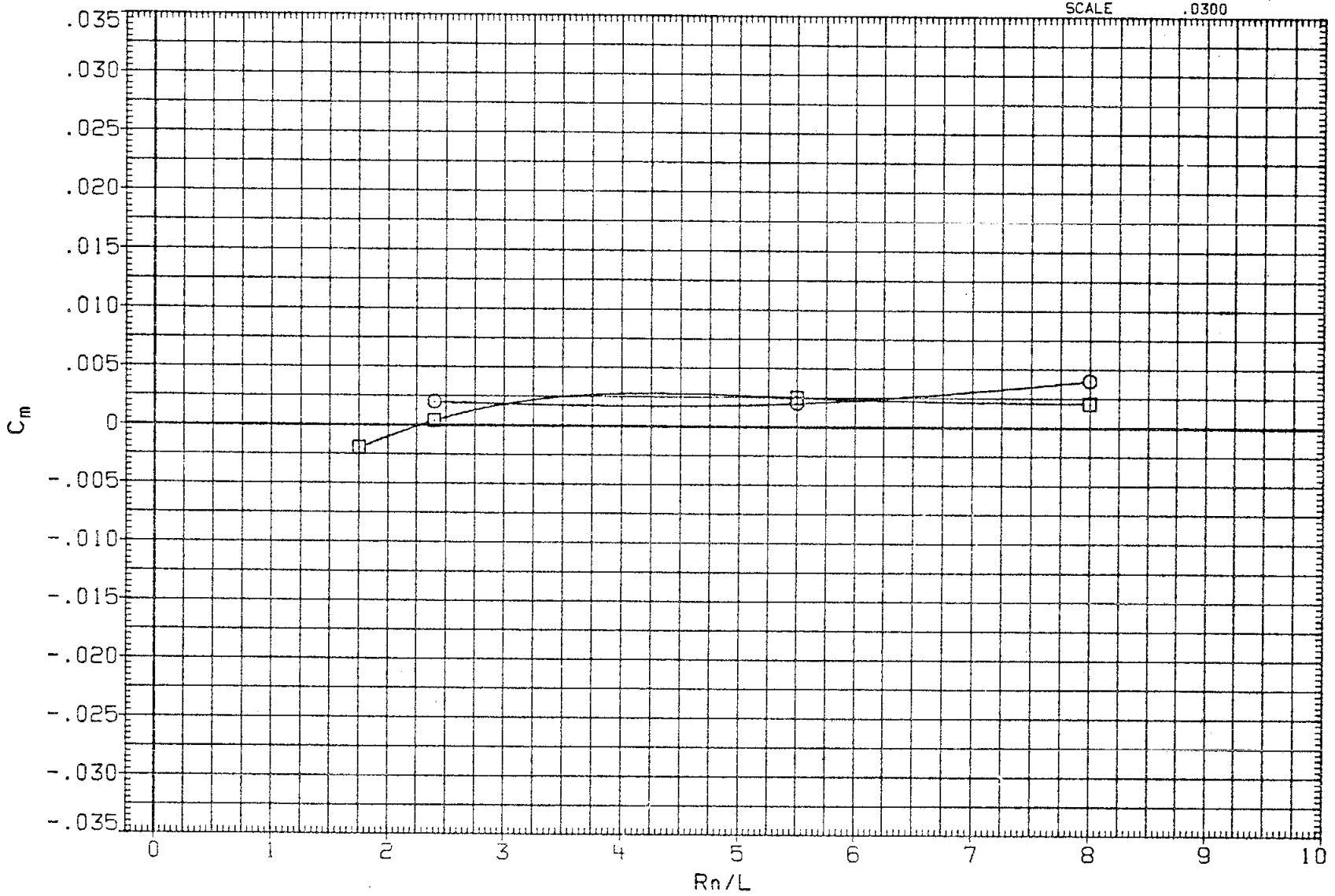

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(G)ALPHA = 8.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

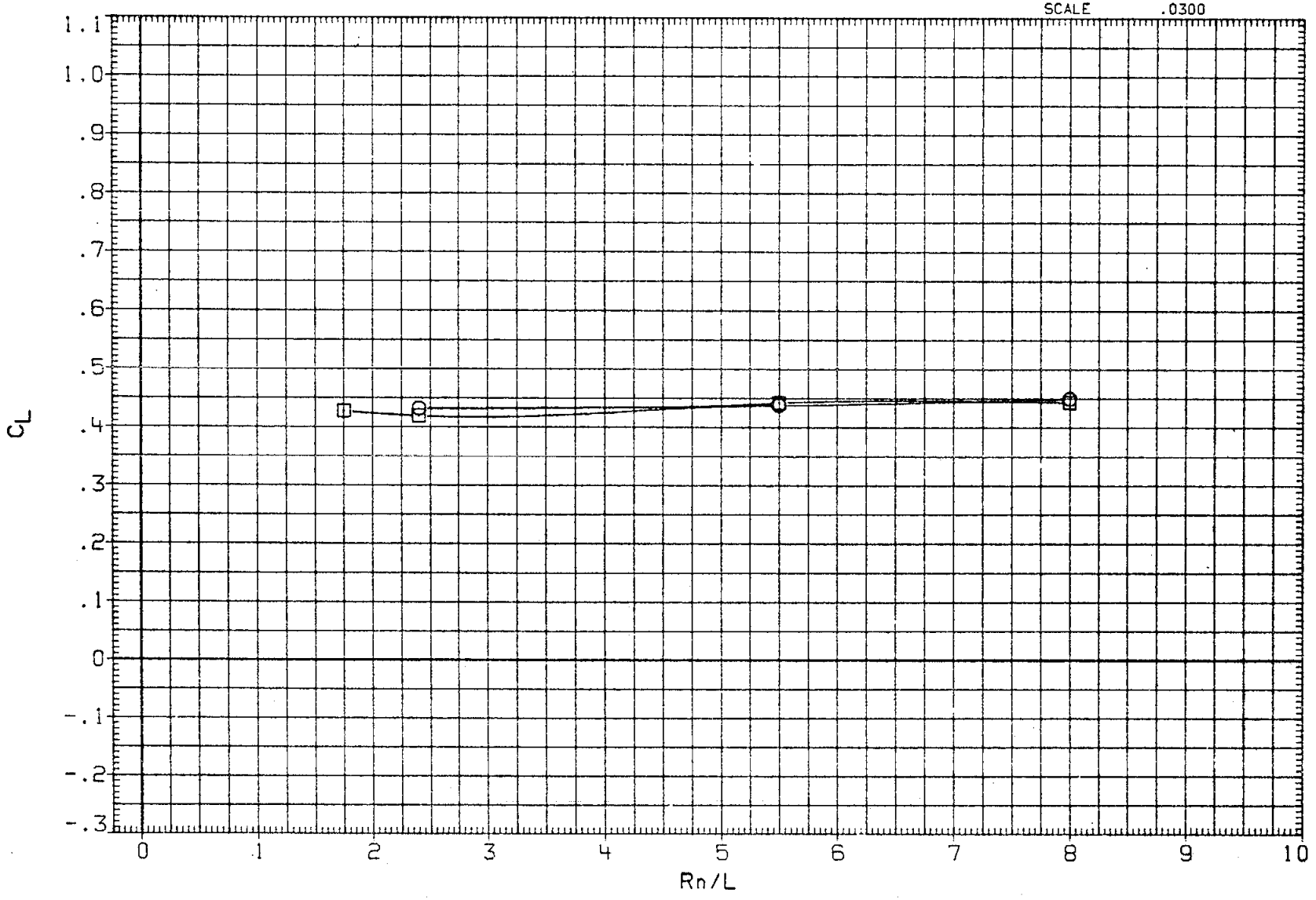

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(H)ALPHA = 10.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

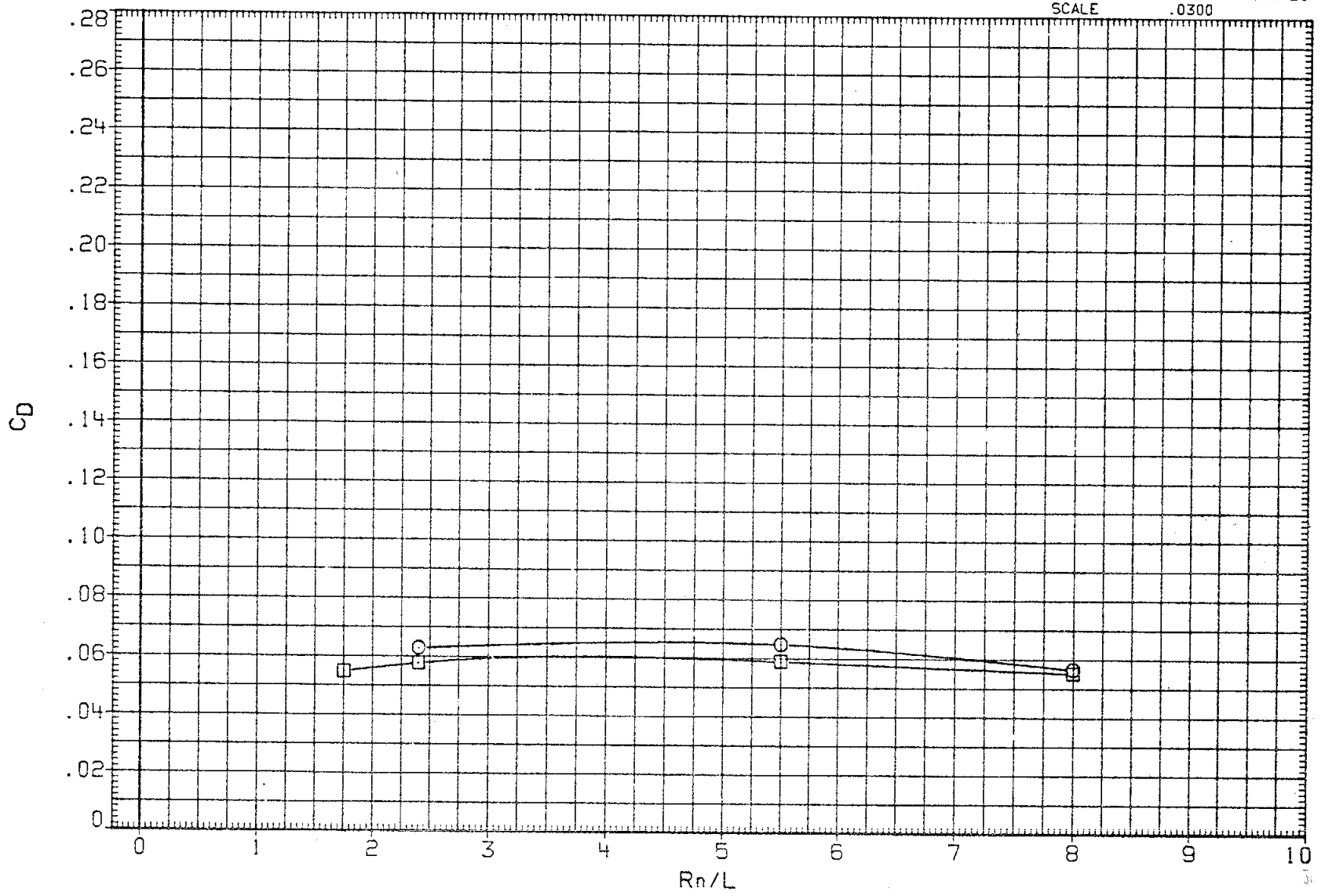

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(H)ALPHA = 10.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

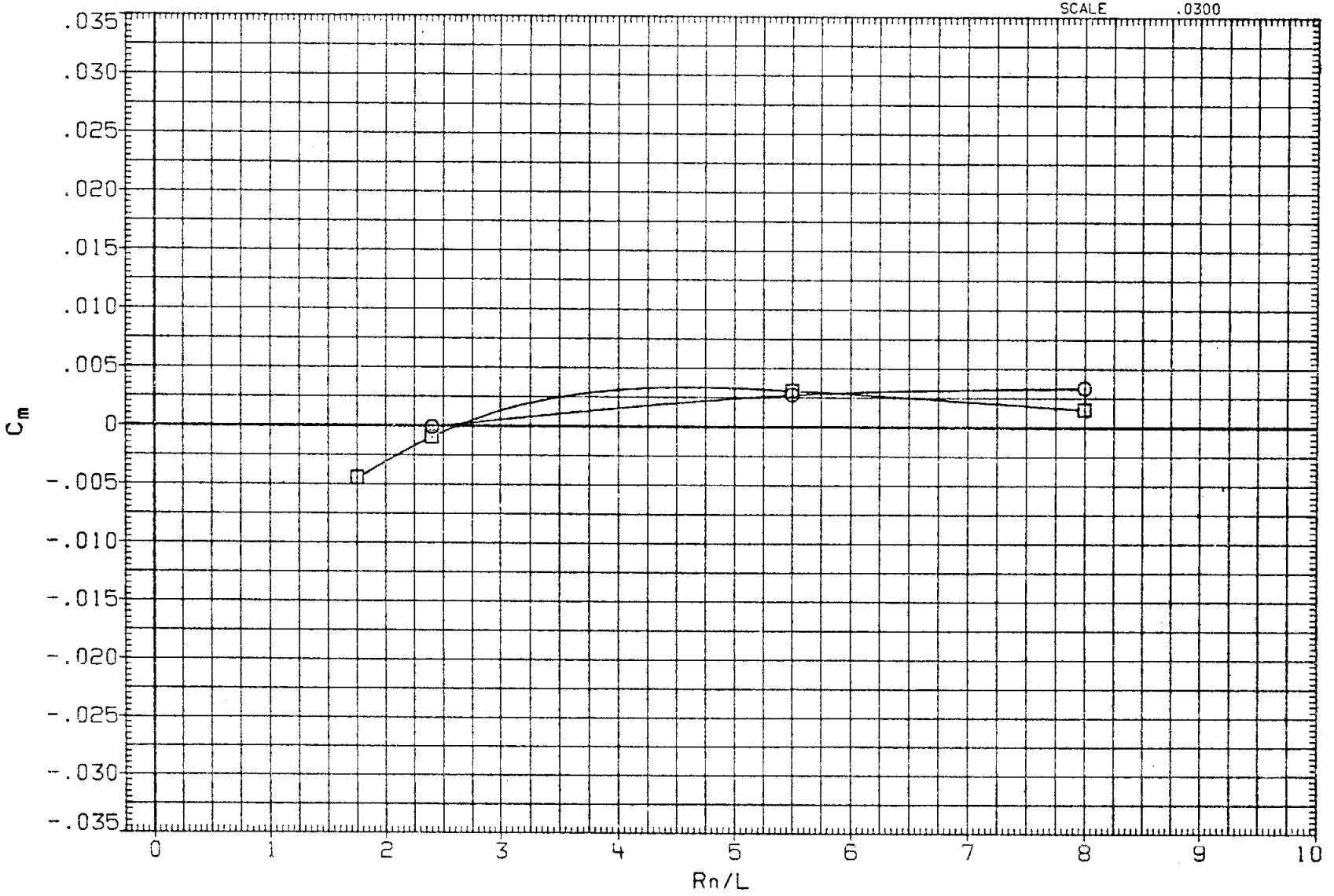

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(H)ALPHA = 10.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

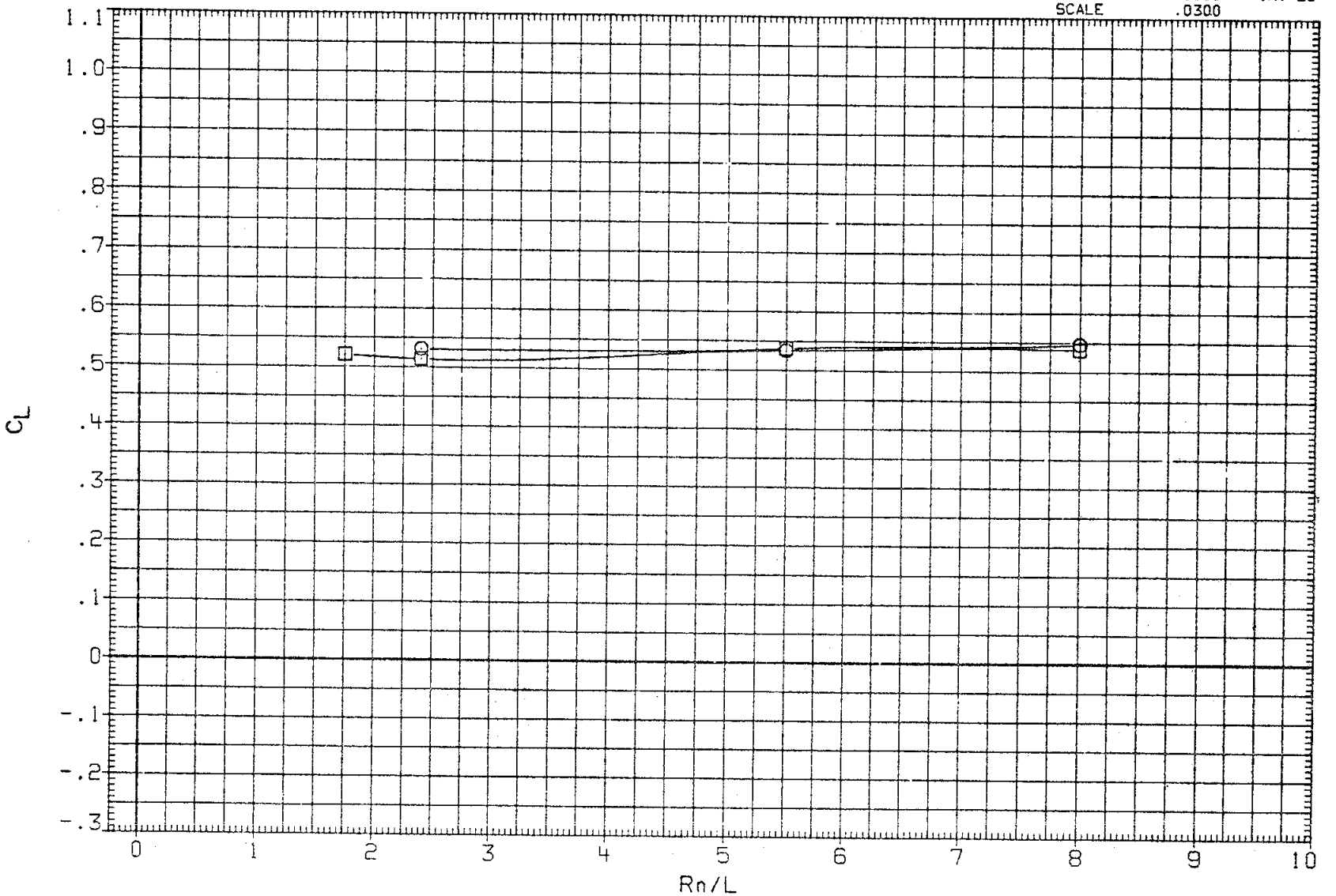

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(I)ALPHA = 12.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

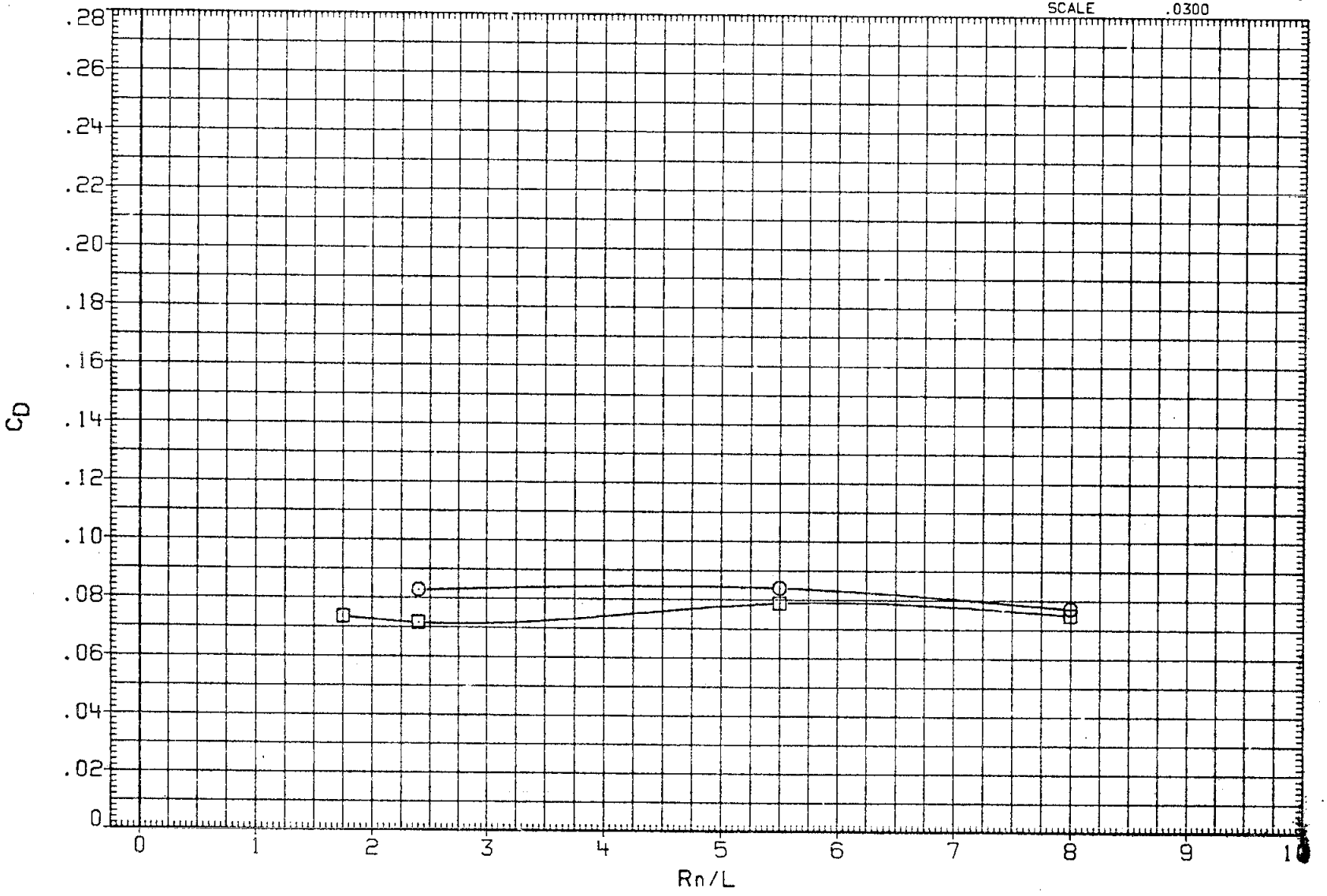

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(I)ALPHA = 12.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

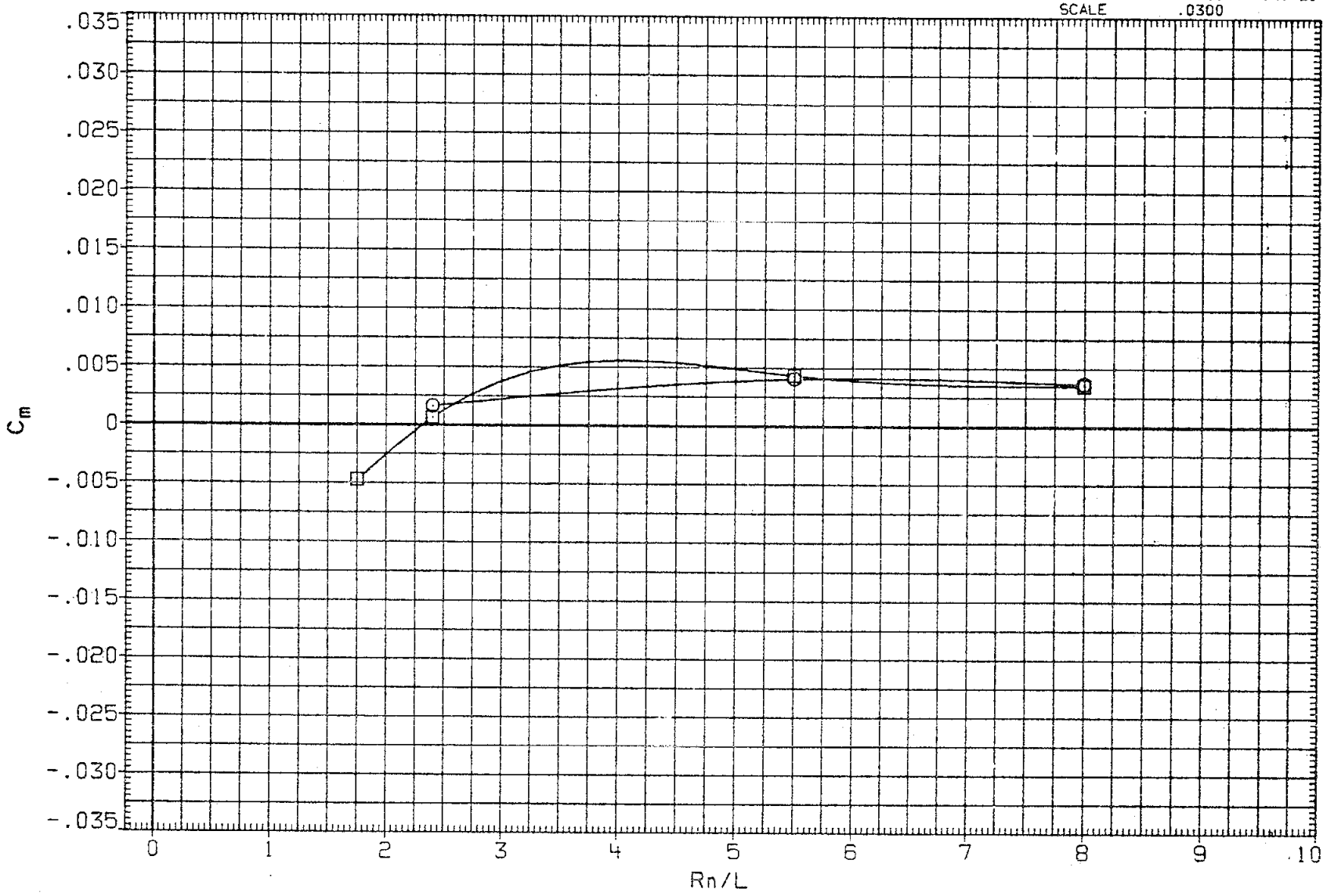

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(I)ALPHA = 12.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

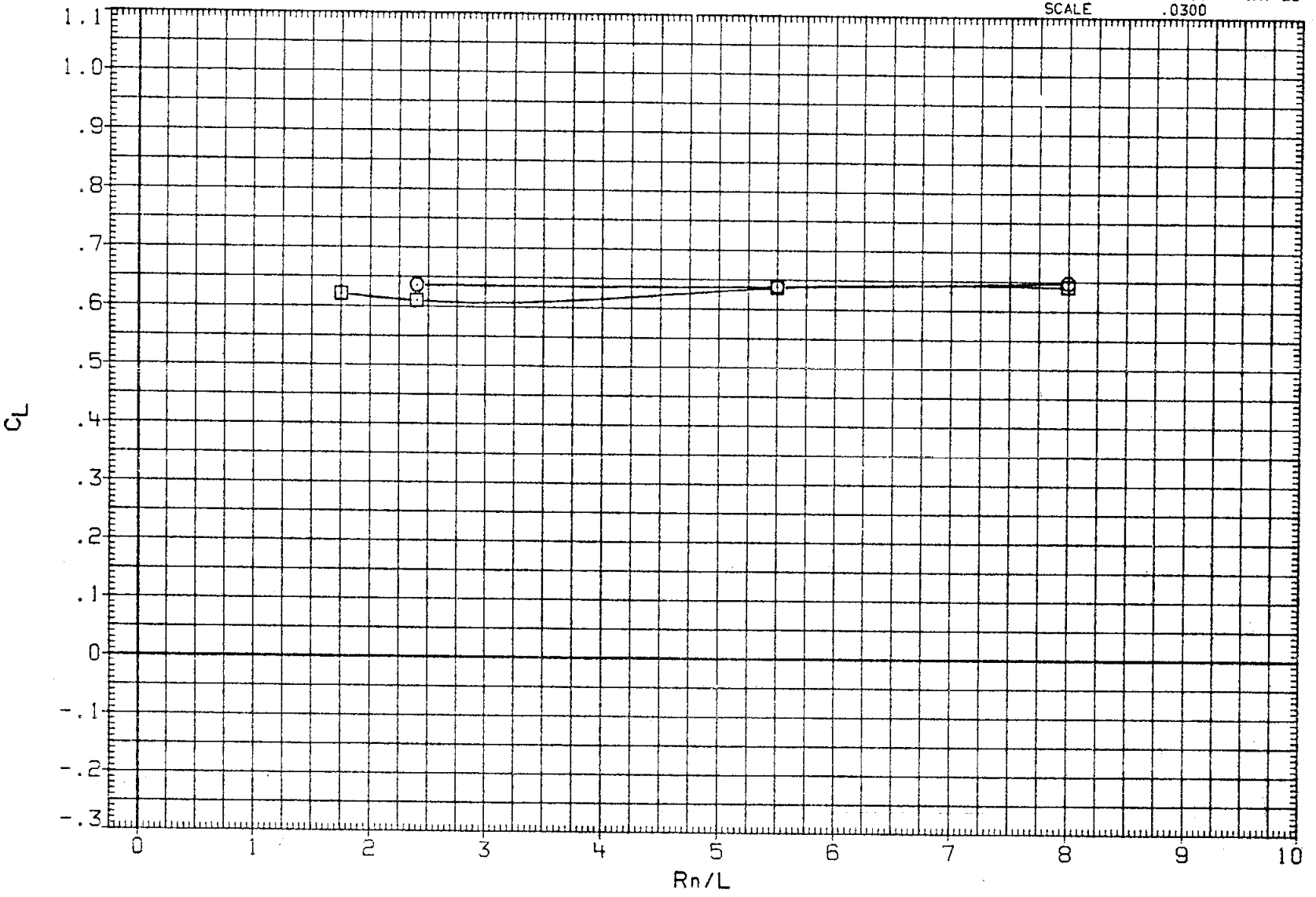

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(J)ALPHA = 14.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

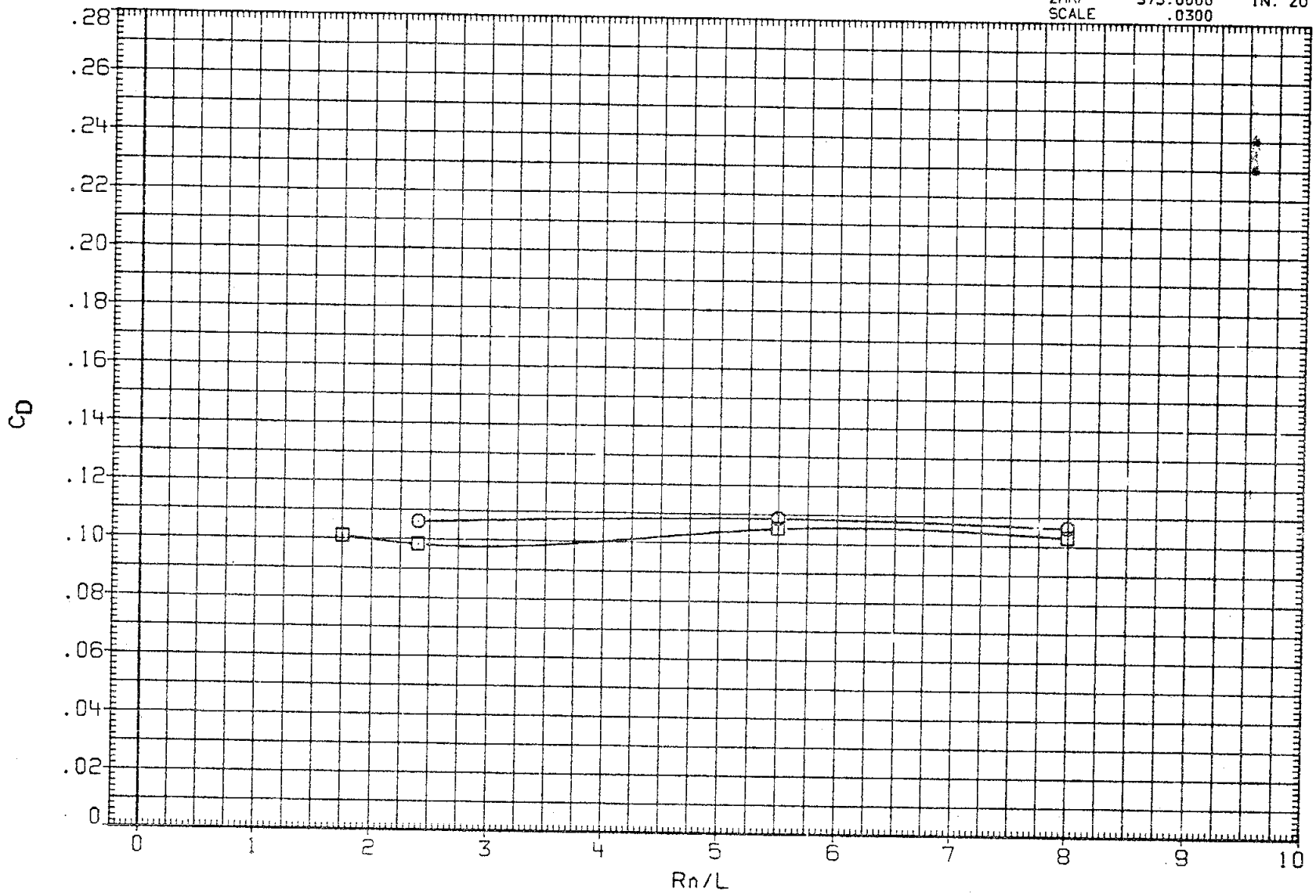

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(J)ALPHA = 14.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

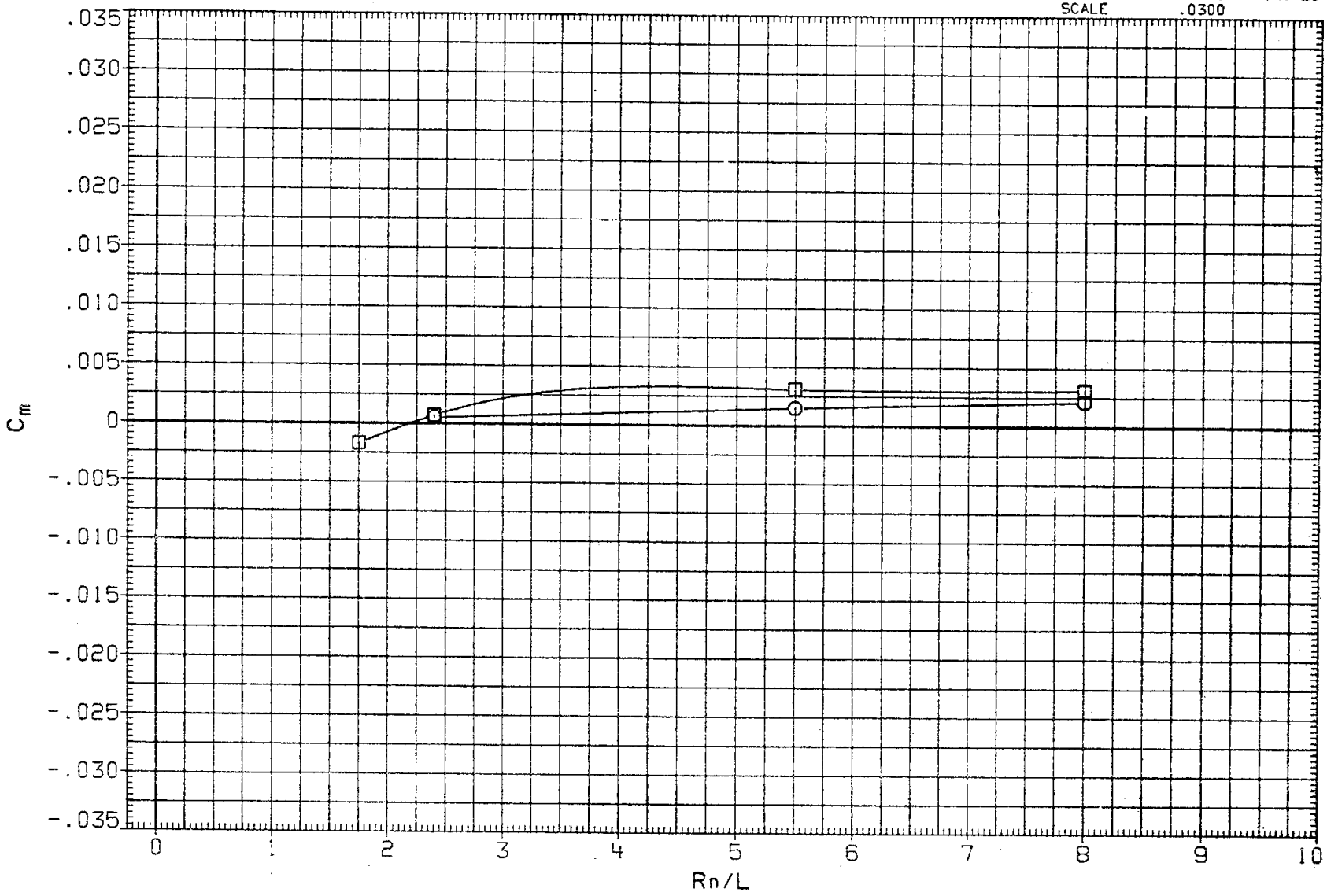

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(J)ALPHA = 14.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZN5016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZN5027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

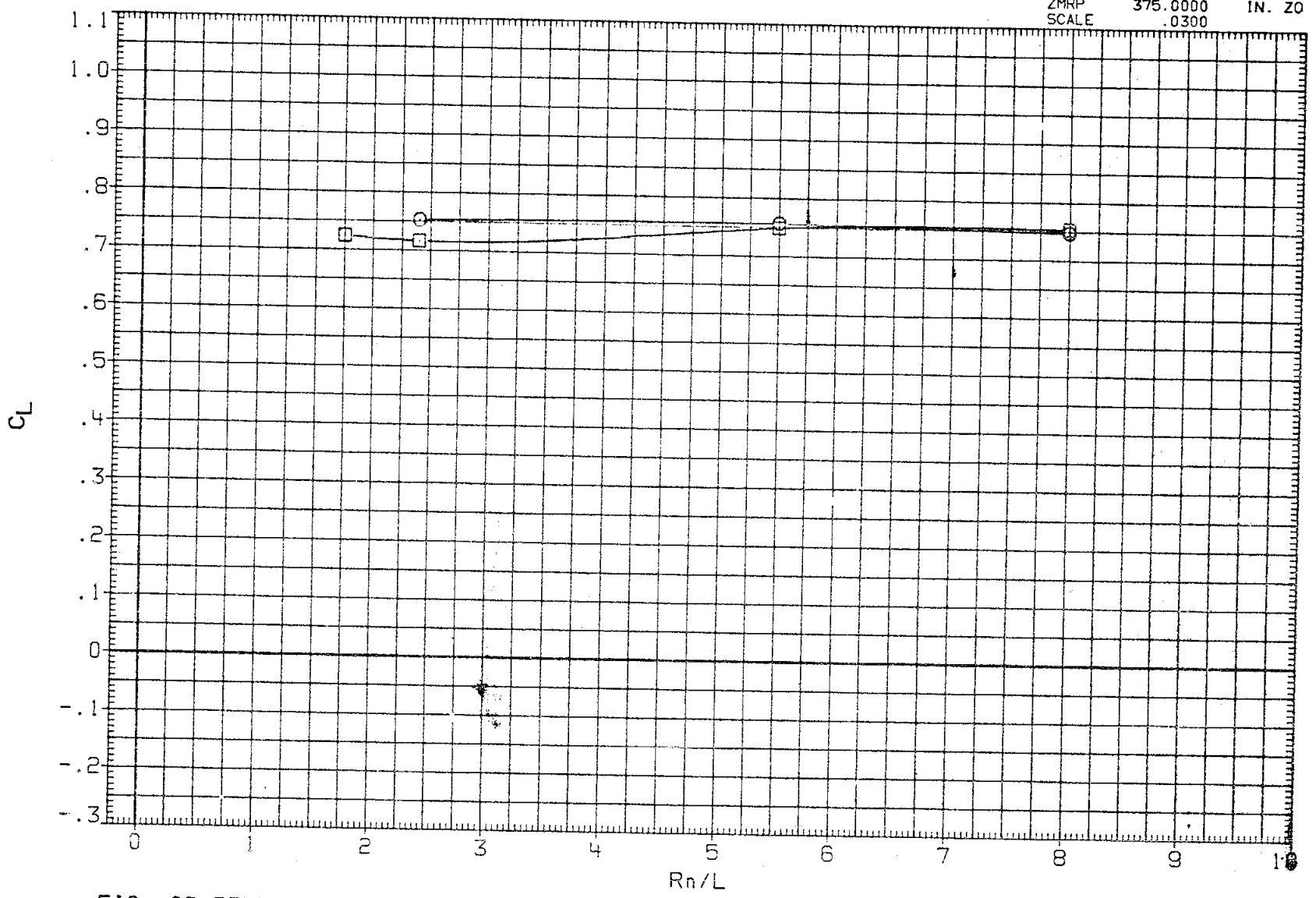

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(K)ALPHA = 16.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

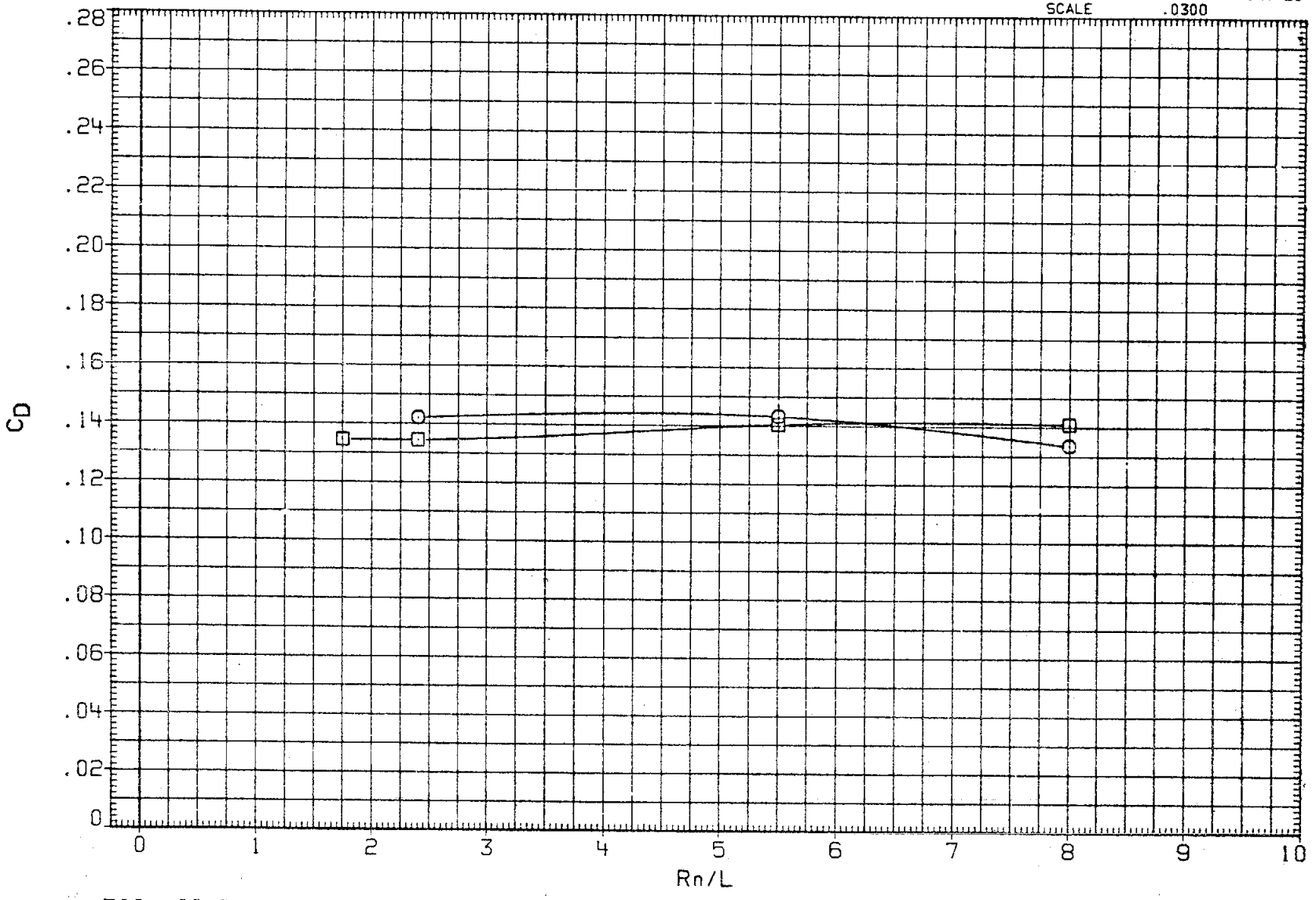

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(K)ALPHA = 16.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

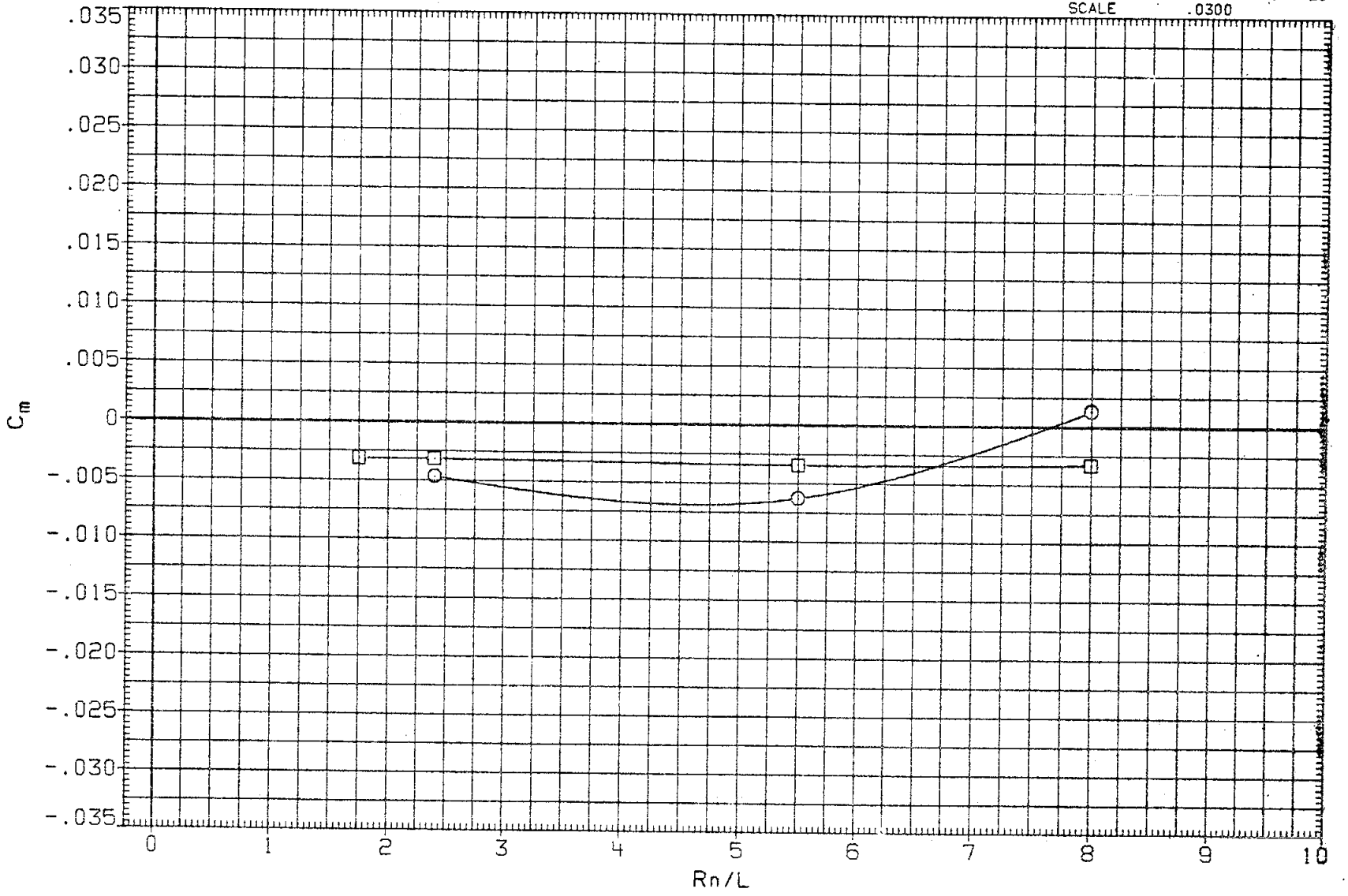

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(K)ALPHA = 16.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

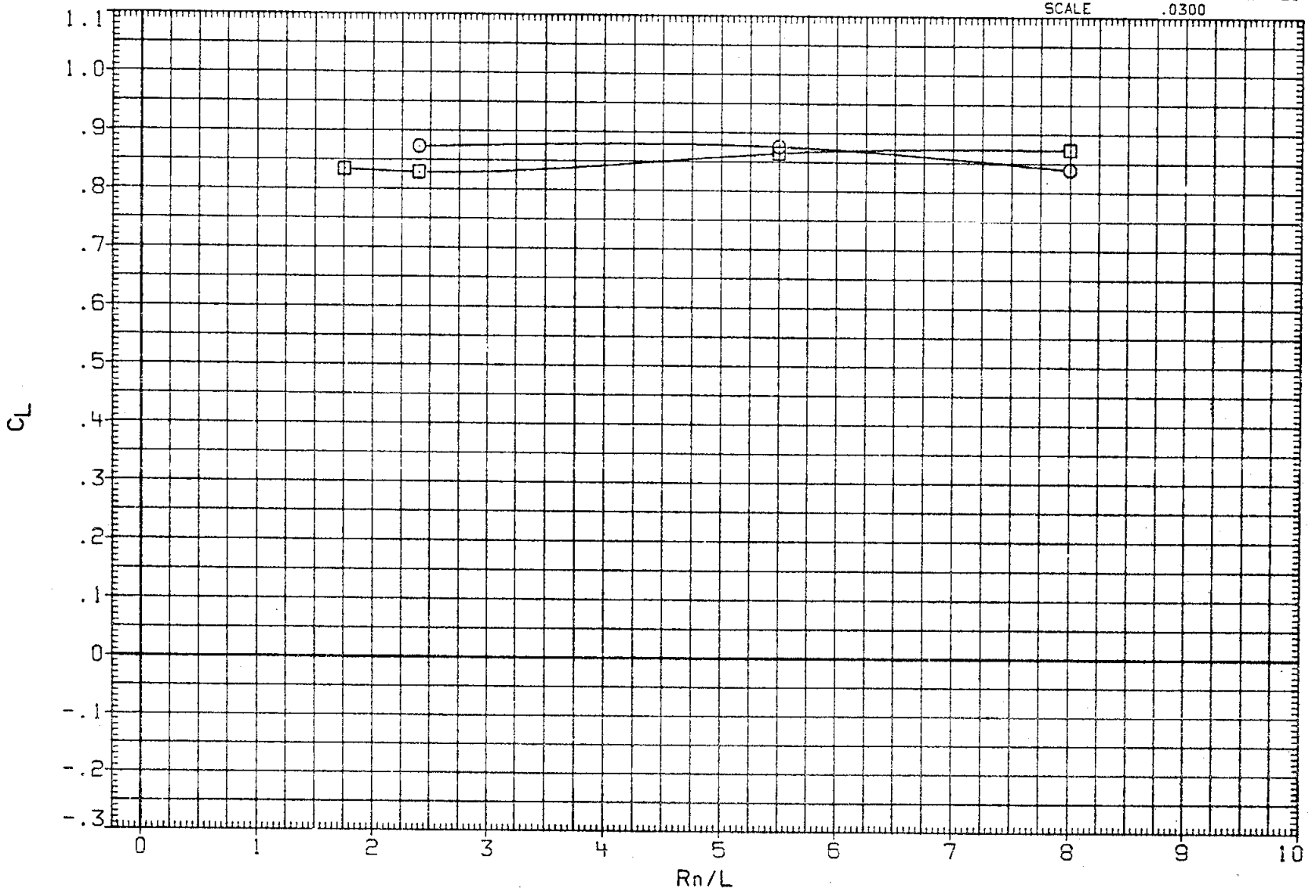

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(L)ALPHA = 18.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

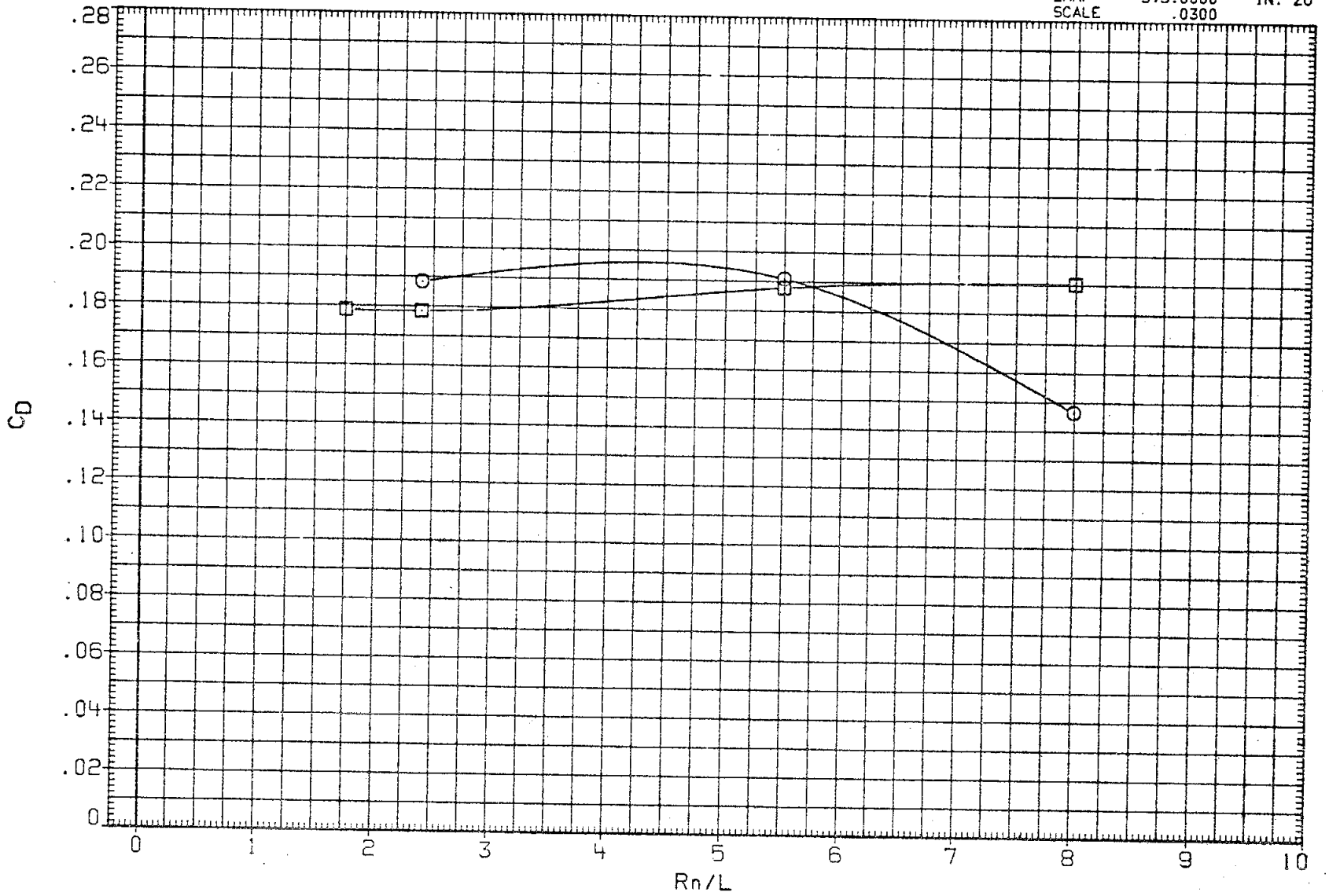

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(L)ALPHA = 18.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

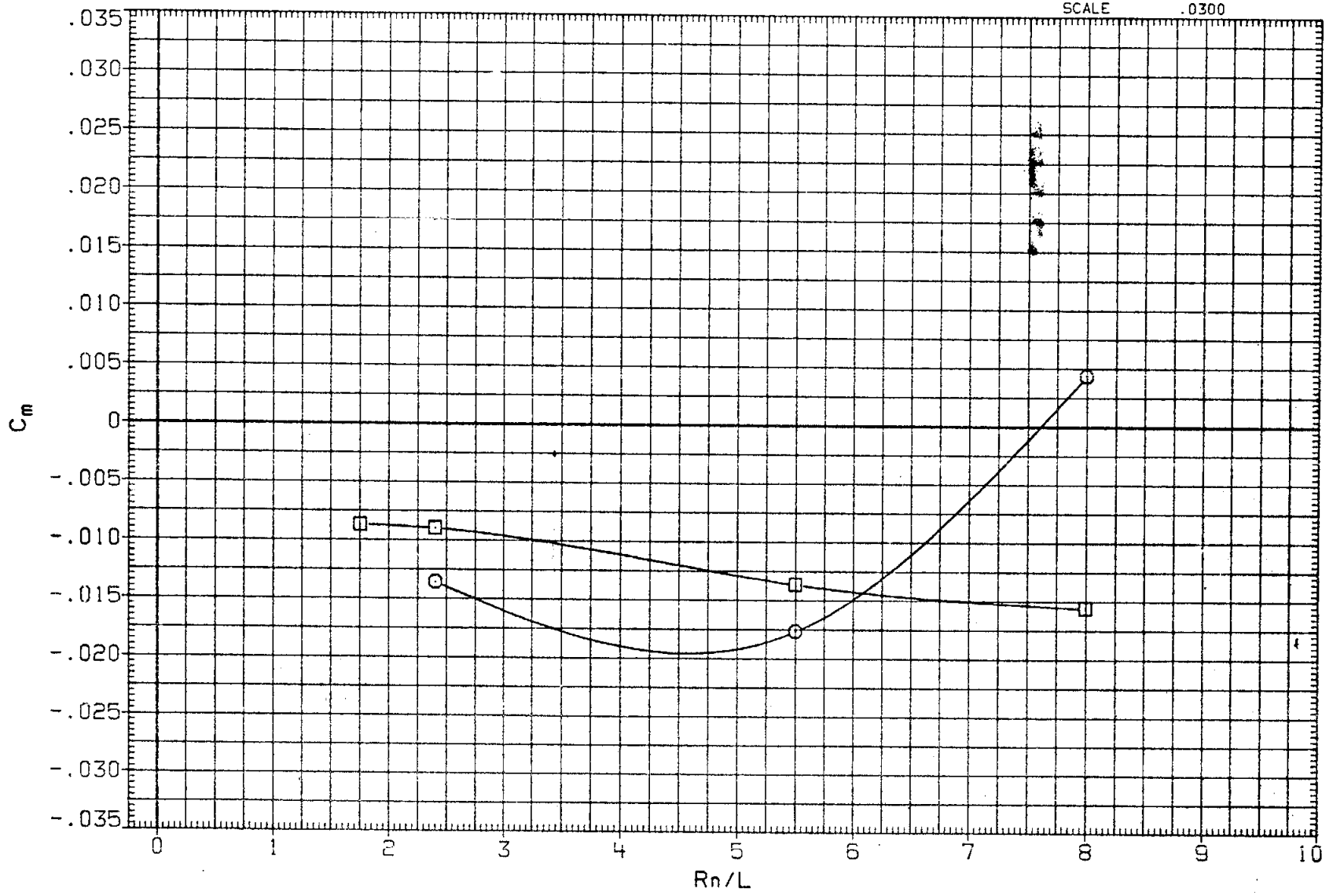

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(L)ALPHA = 18.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

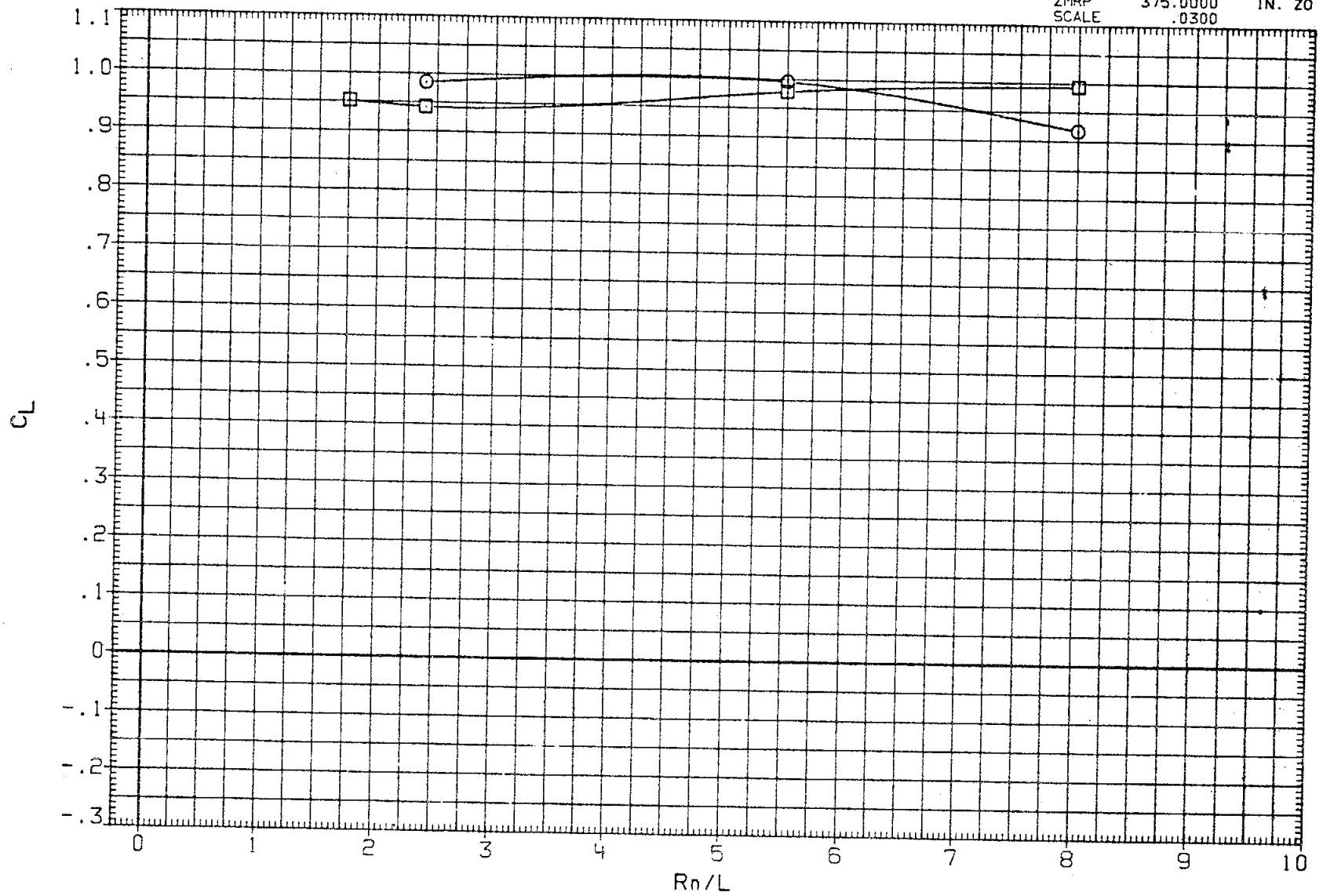

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(M)ALPHA = 20.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS016	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

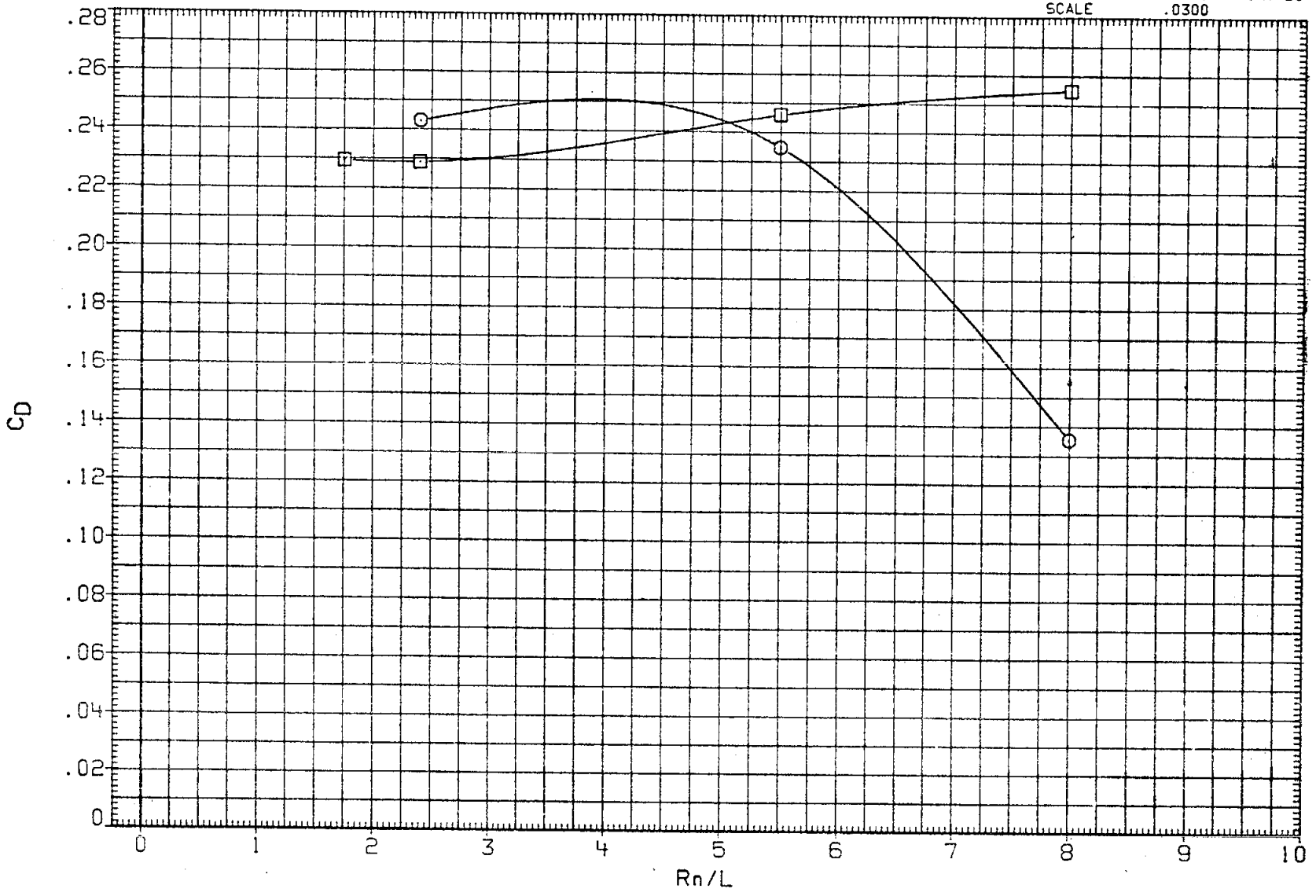

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(M)ALPHA = 20.00

DATA SET	SYMBOL	CONFIGURATION	ELEVON	AILRON	BDFLAP	H/B
ZNS01G	○	ARC-12-180(OA173) OV101+TC+GROUND PLANE	.000	.000	-11.700	.600
ZNS027	□	ARC-12-180(OA173) OV101+TC H/B=FREE AIR	.000	.000	-11.700	

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0300	

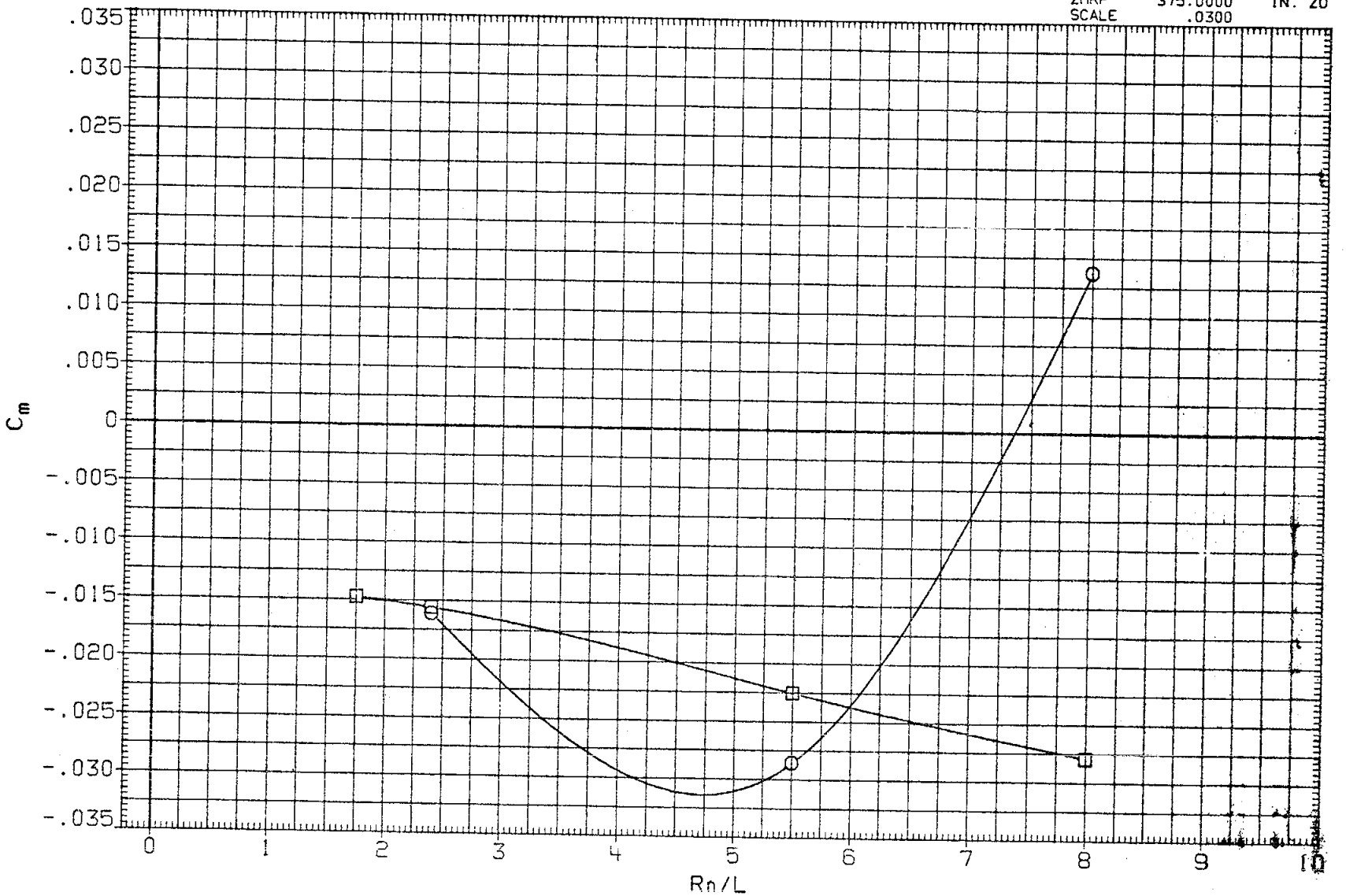

FIG. 06 REYNOLDS NUMBER EFFECT ON LONGITUDINAL CHARACTERISTICS WITH GROUND PLANE IN AND OUT

(M)ALPHA = 20.00

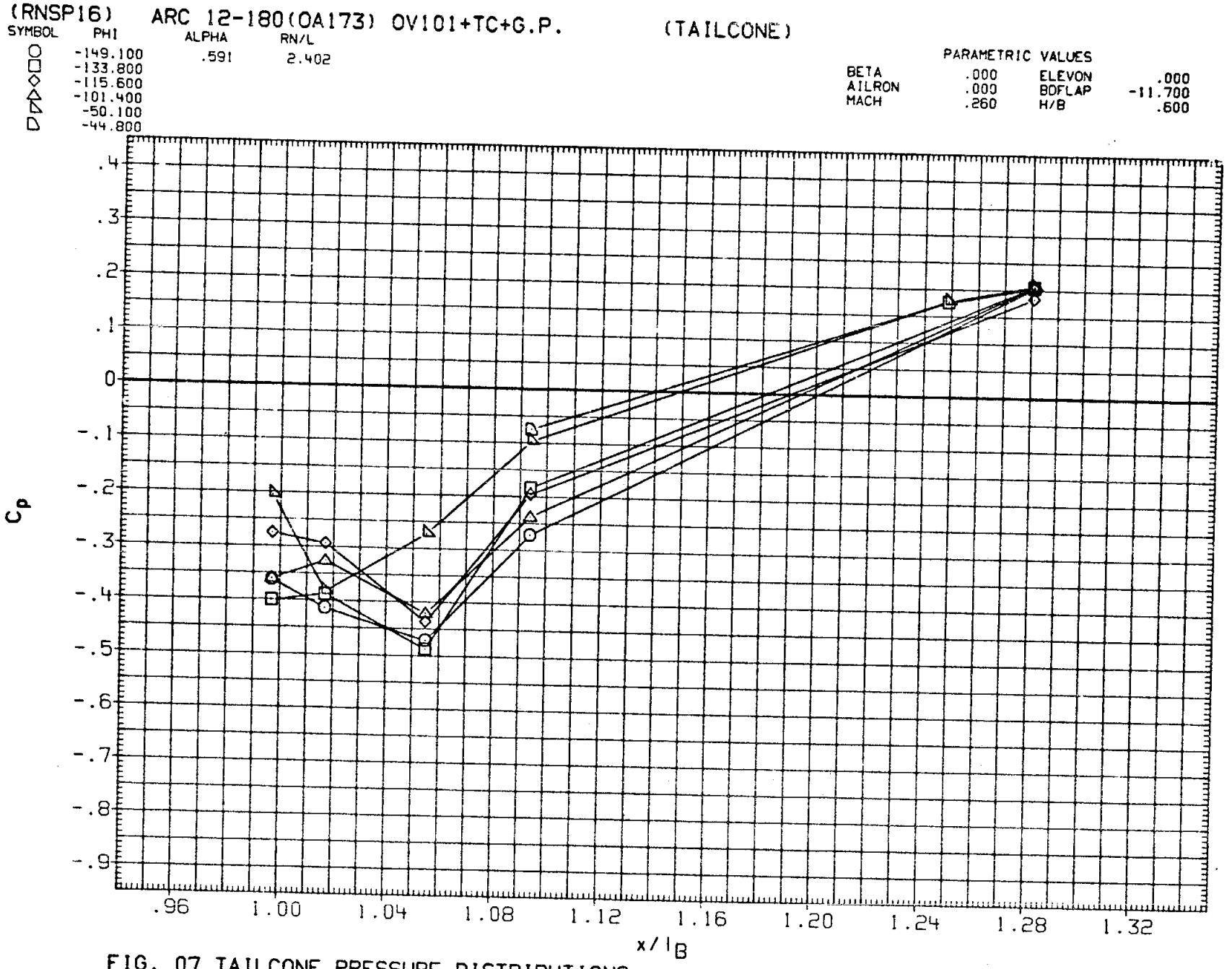

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

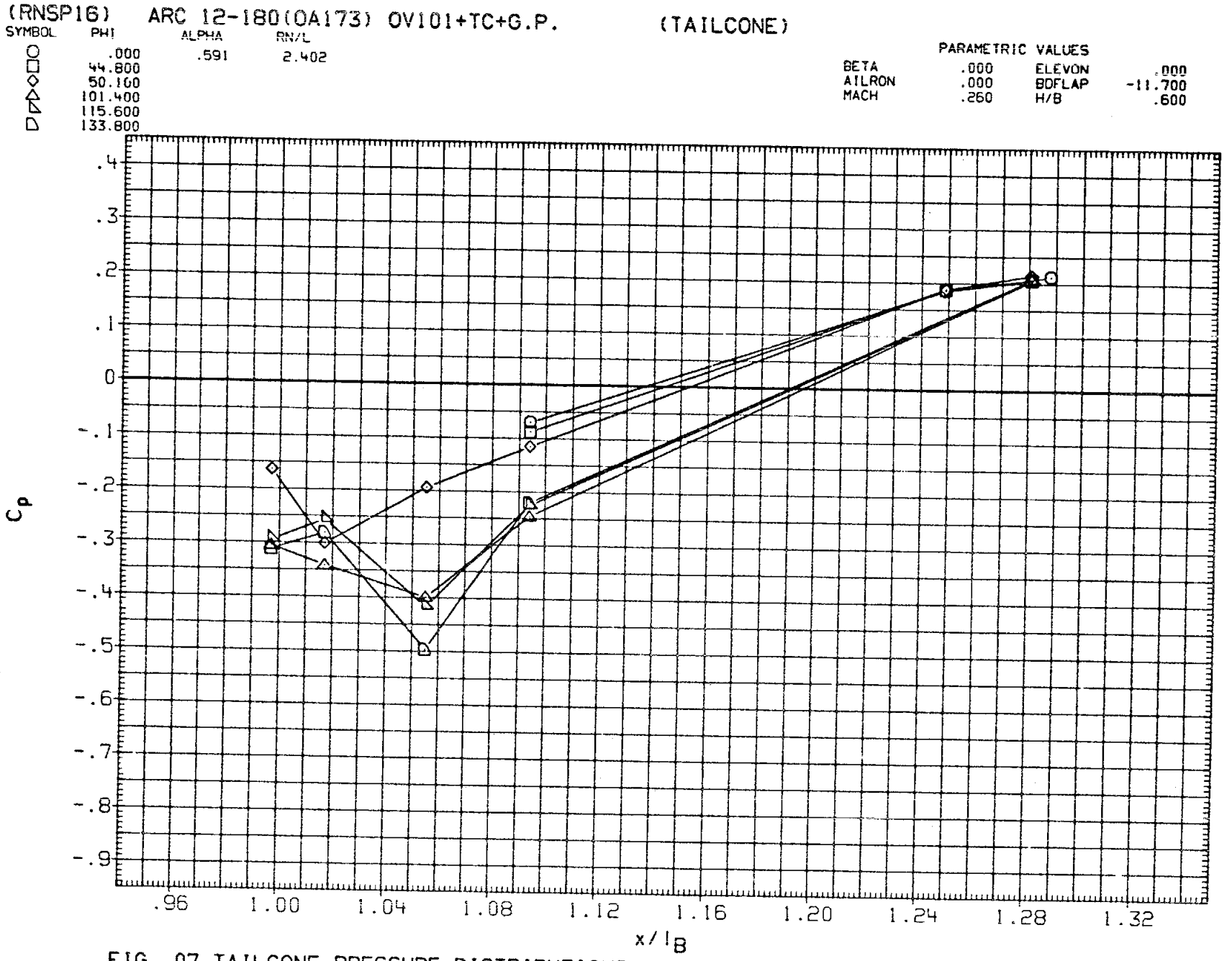

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	.591	2.402
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

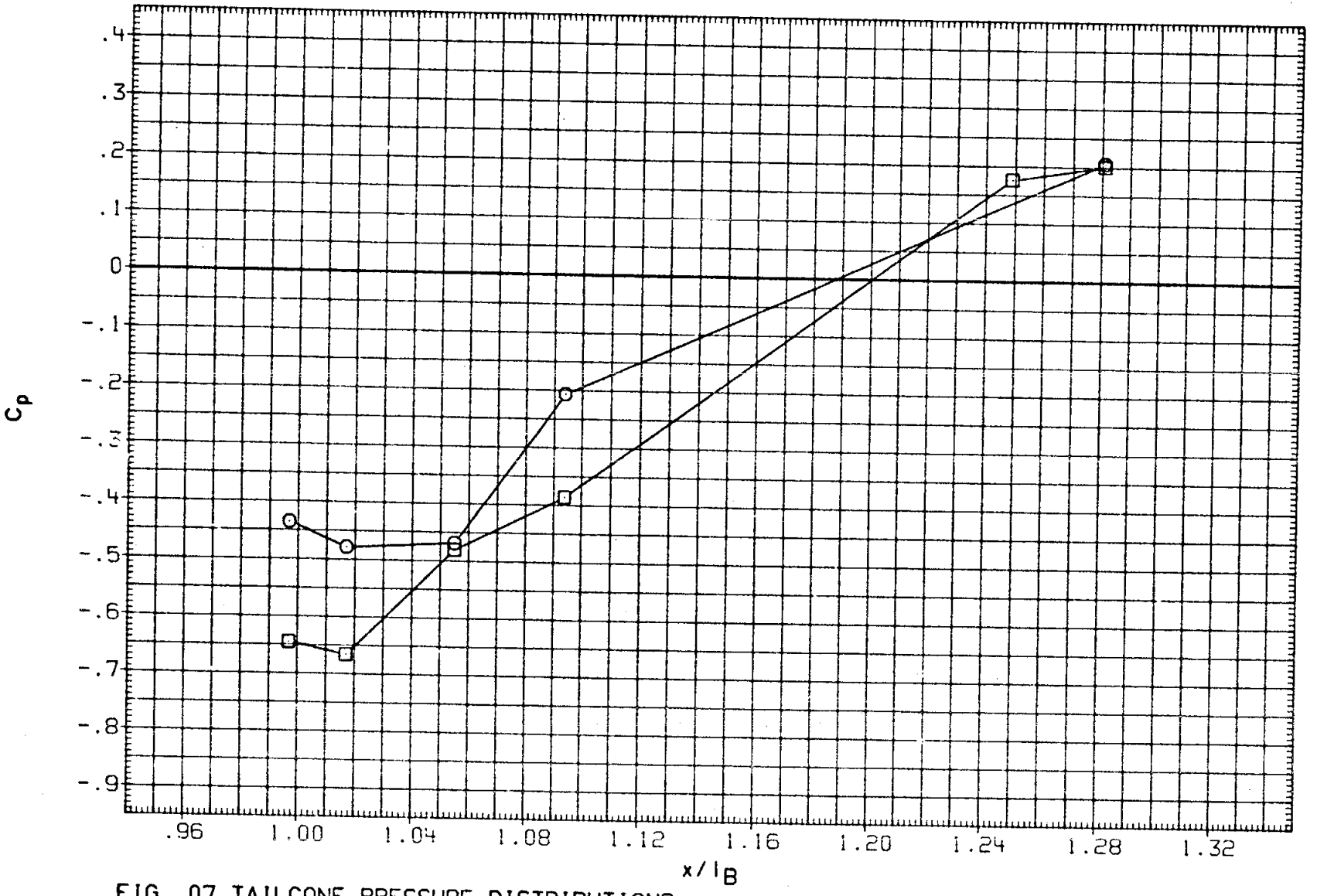

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

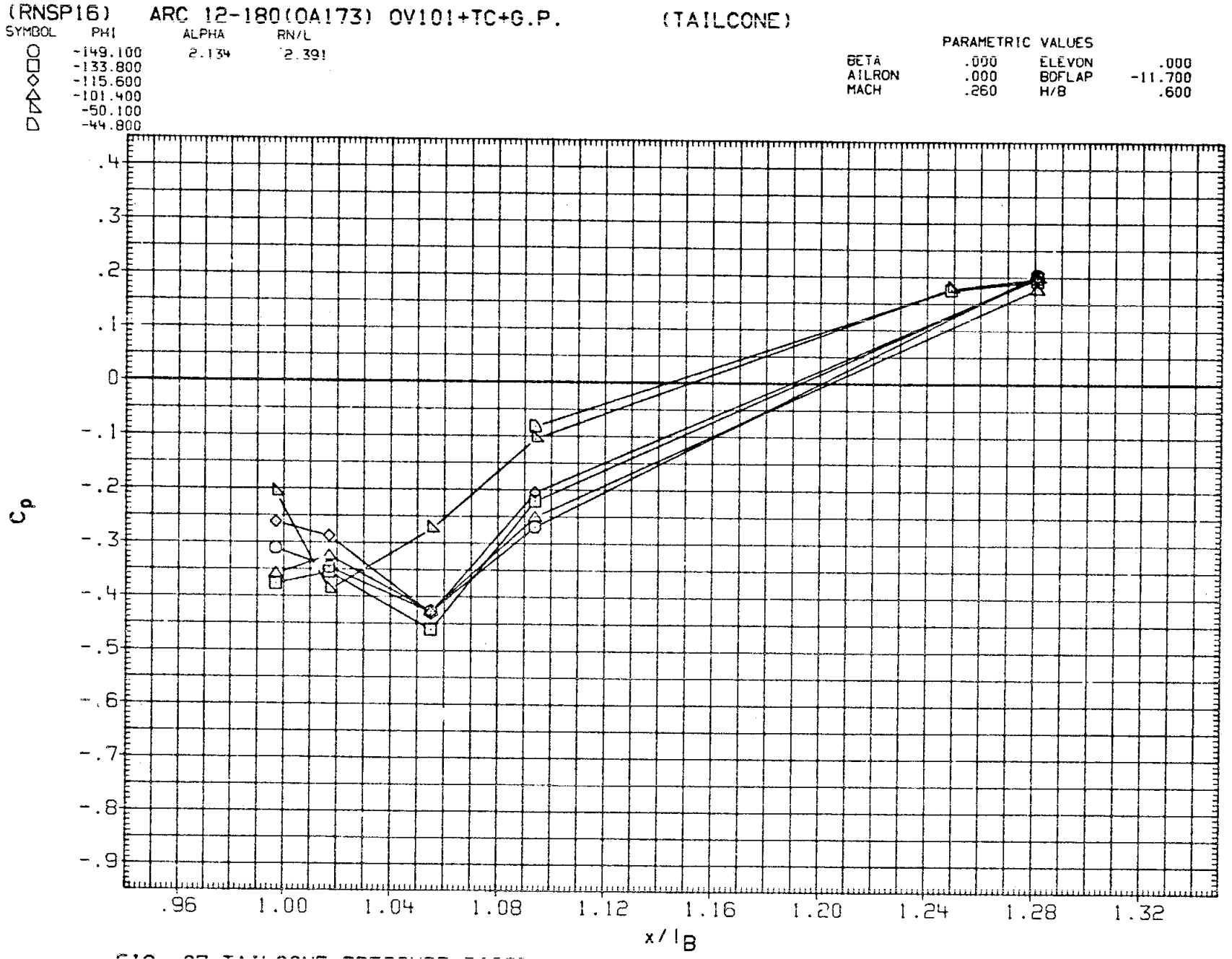

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	2.134	2.391
□	44.800		
◇	50.100		
△	101.400		
▽	115.600		
D	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

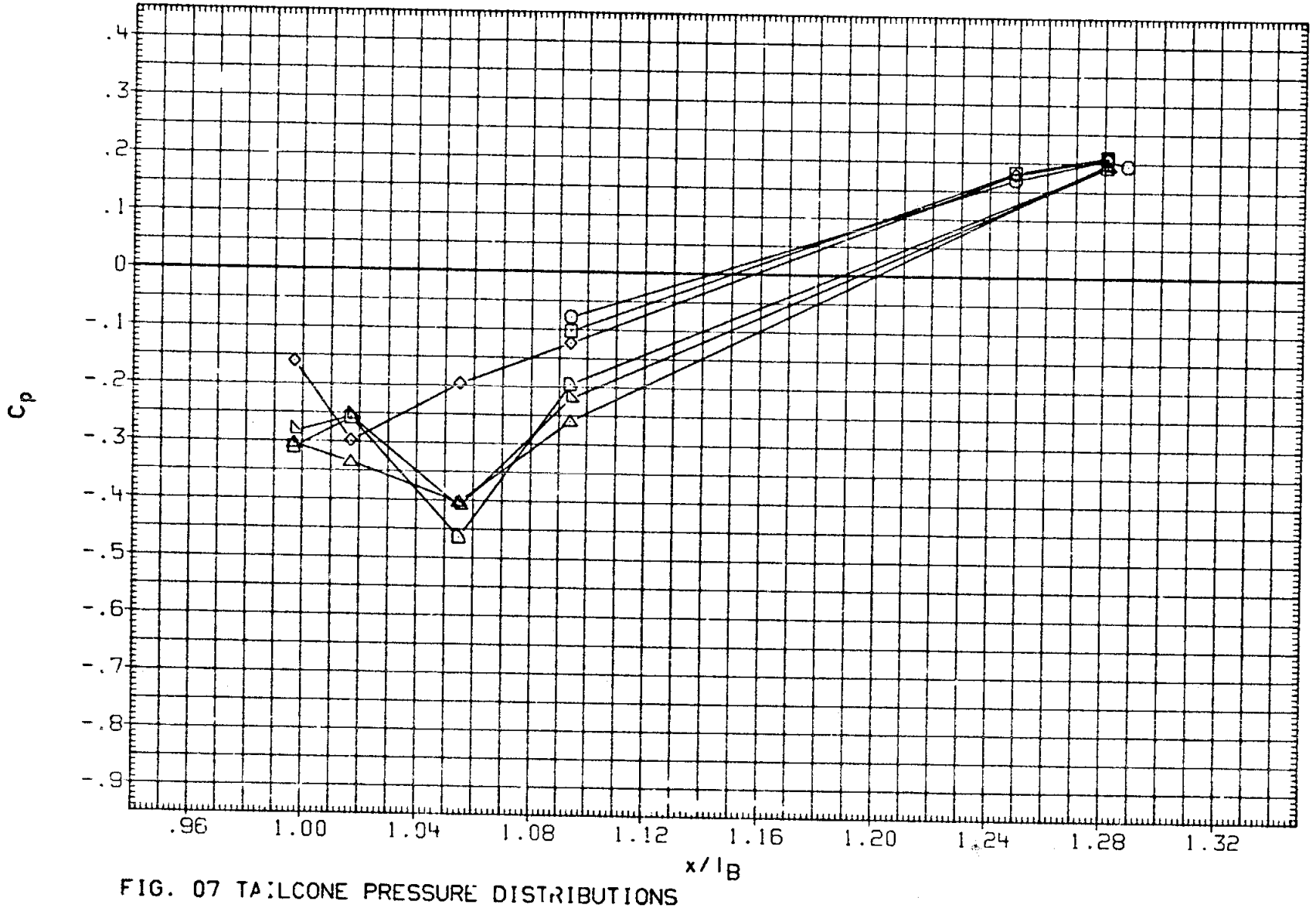

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(0A173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	2.134	2.391
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

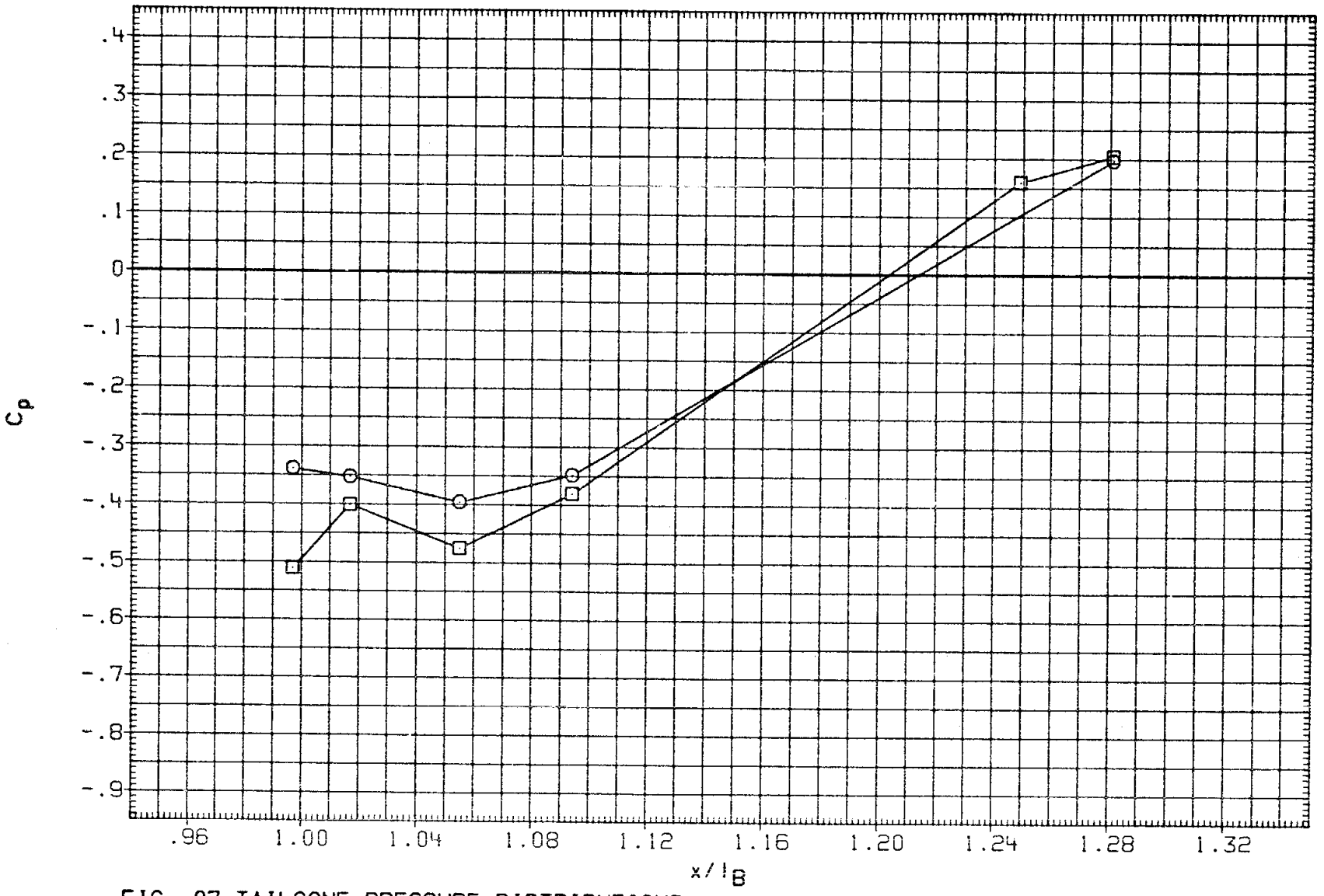

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI
○	-149.100
□	-133.800
◇	-115.600
△	-101.400
◁	-50.100
D	-44.800

ALPHA	RN/L
4.188	2.385

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

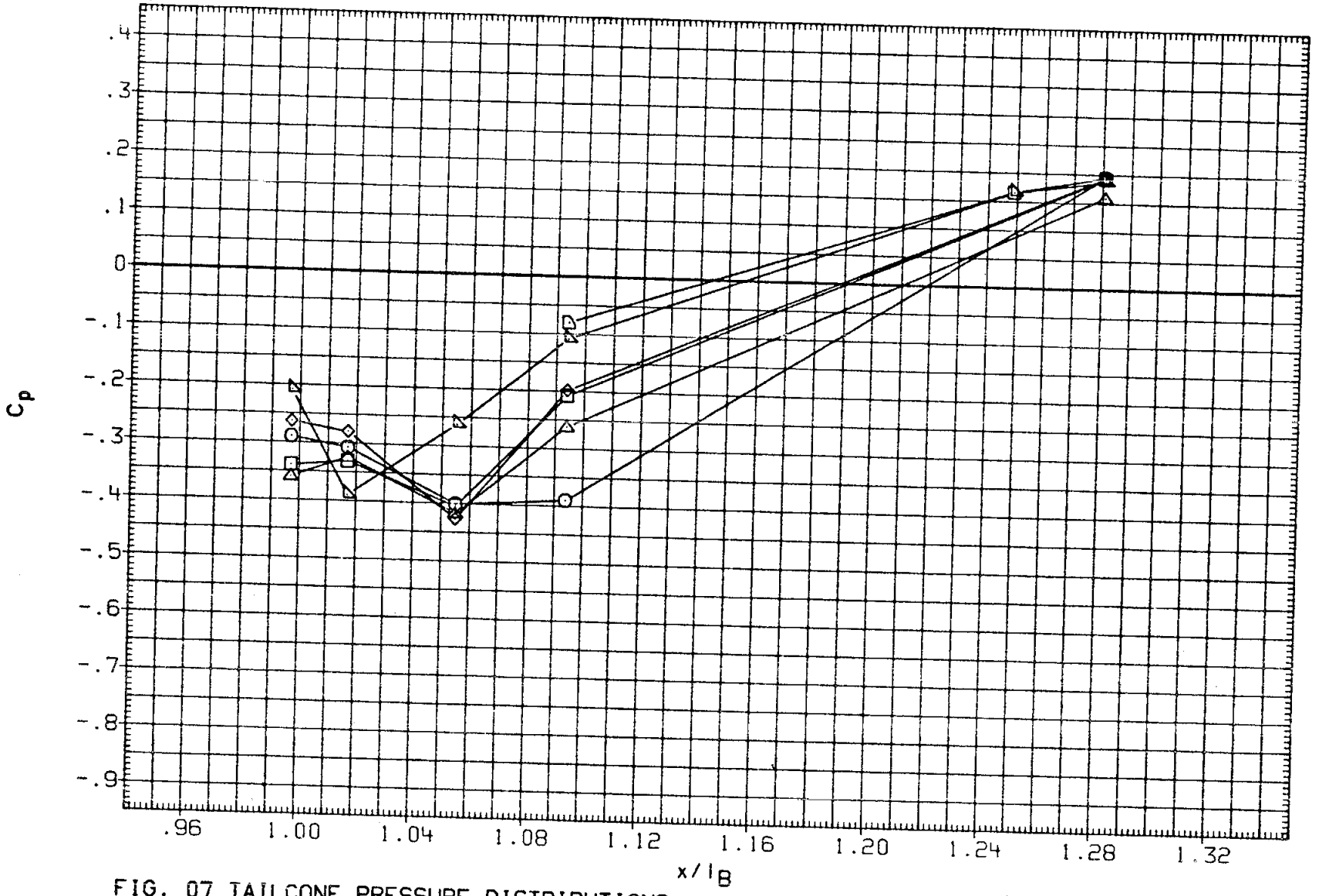

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

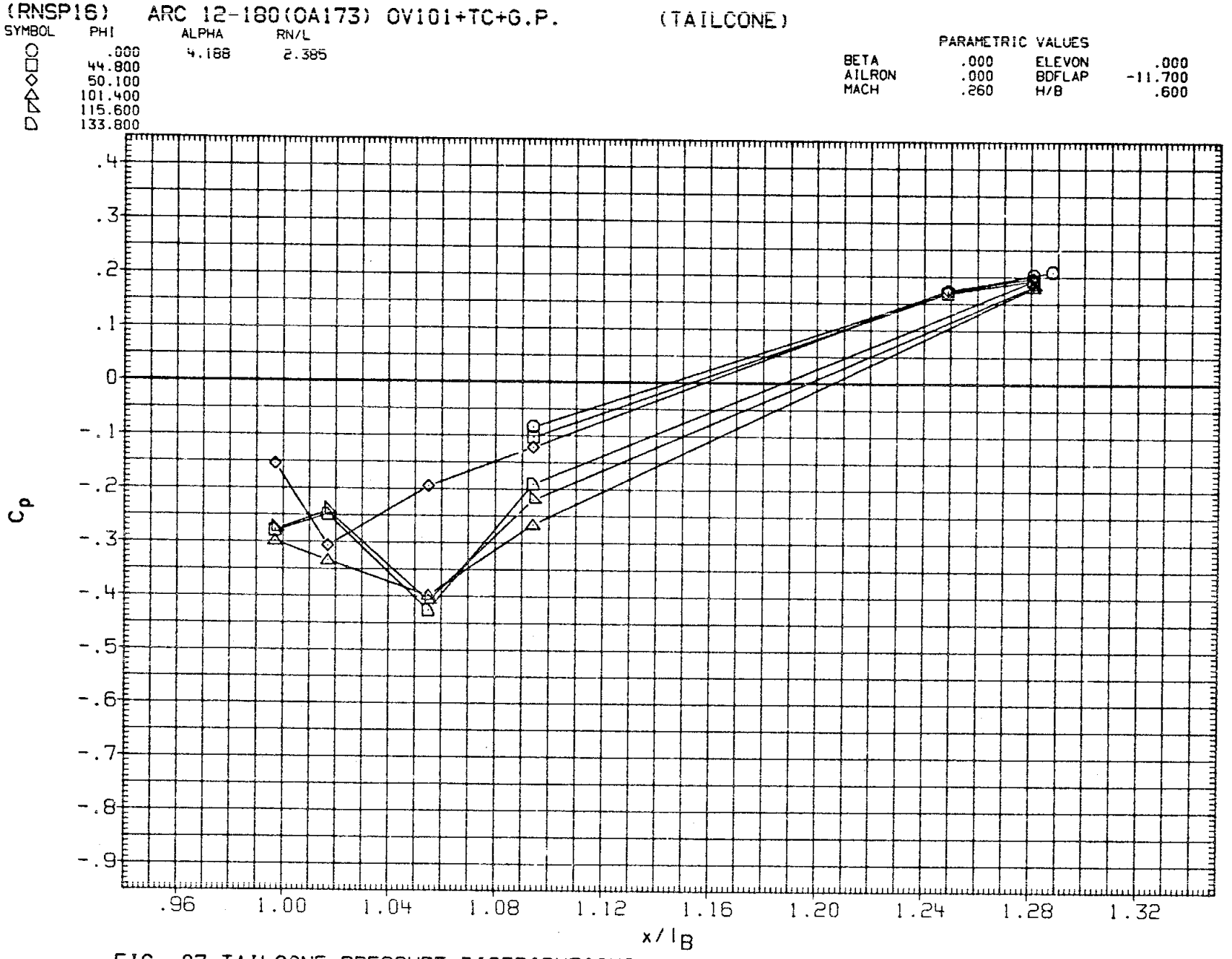

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	4.188	2.385
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

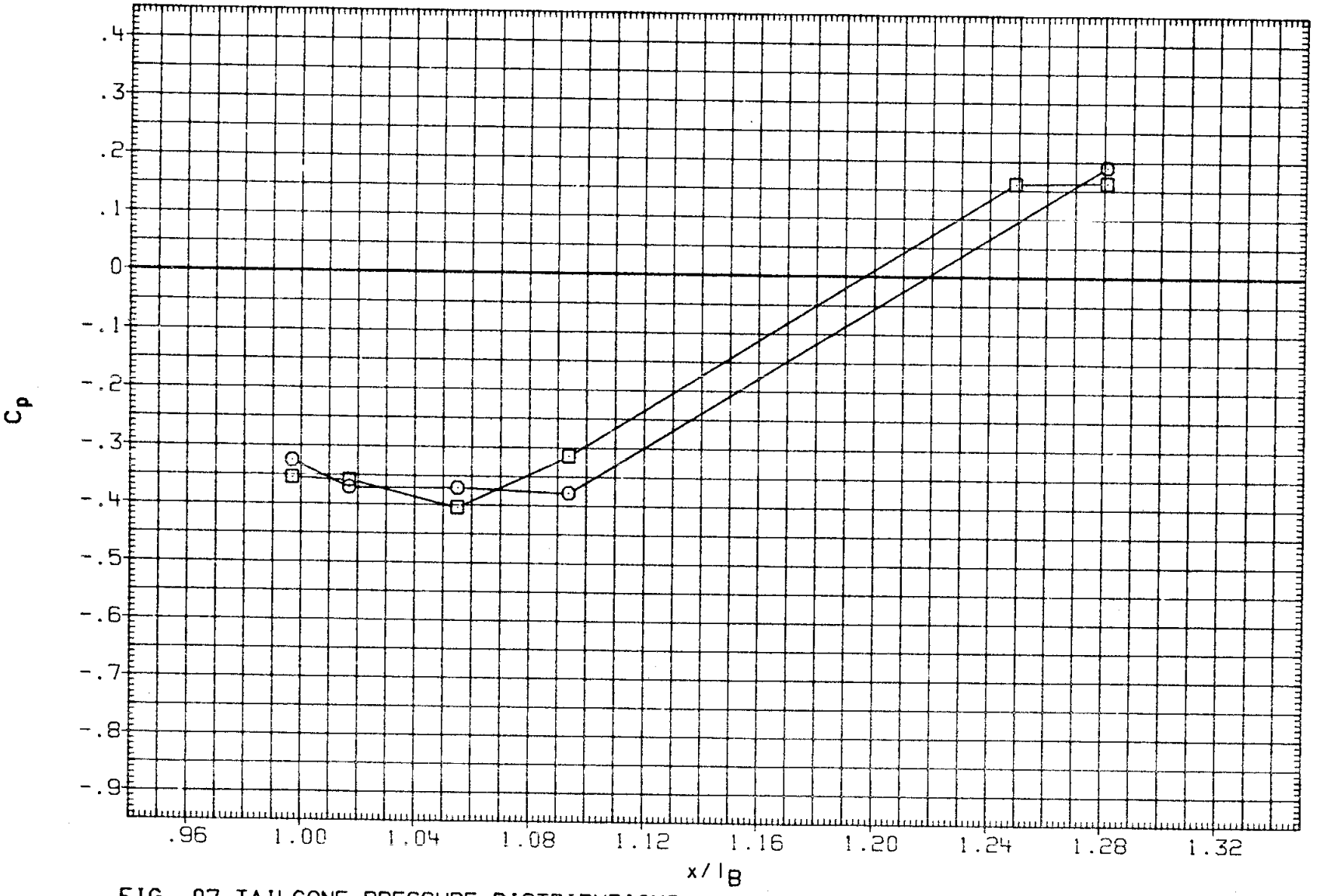

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	6.257	2.382
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

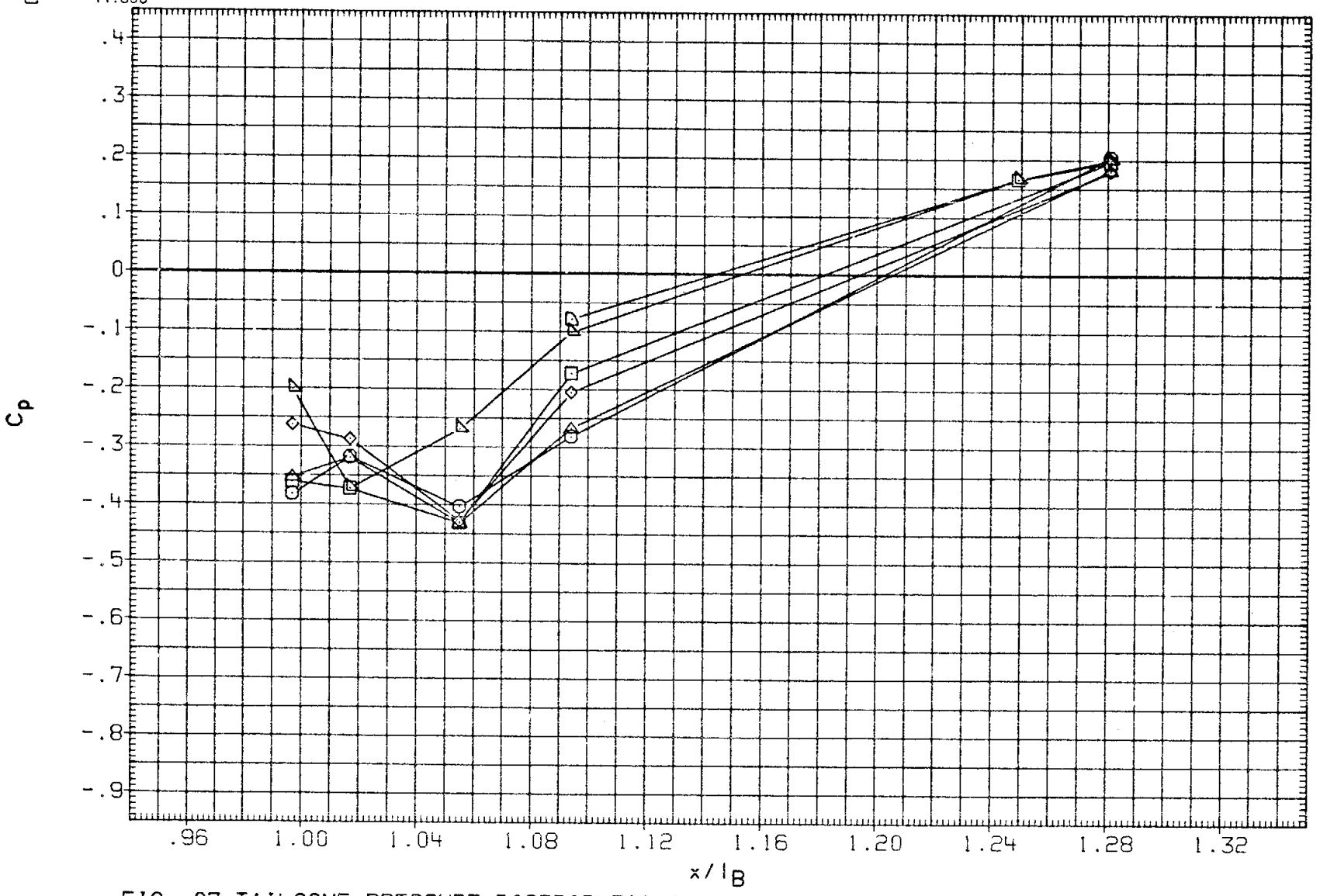

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	6.257	2.382
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
▷	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

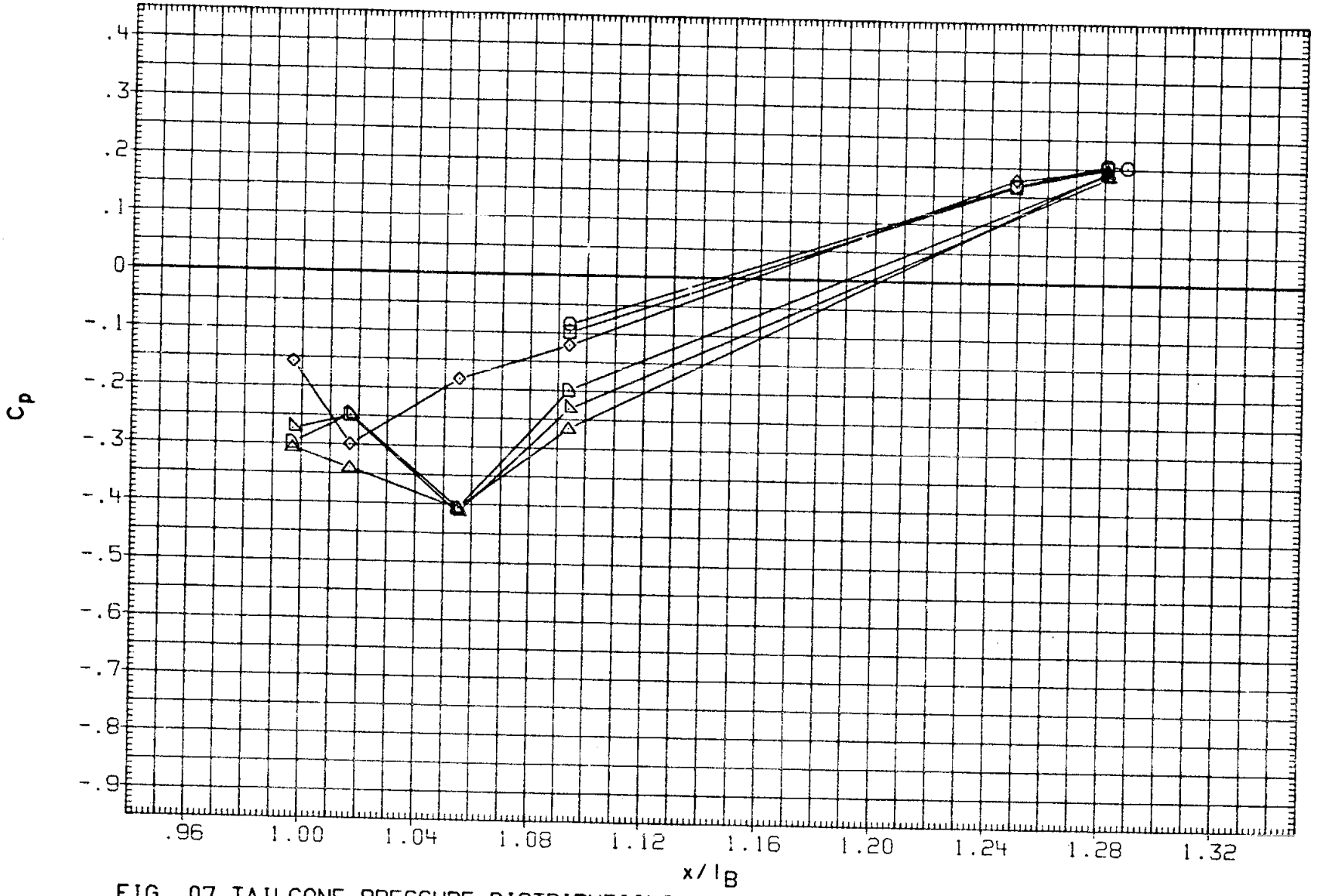

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	6.257	2.382
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

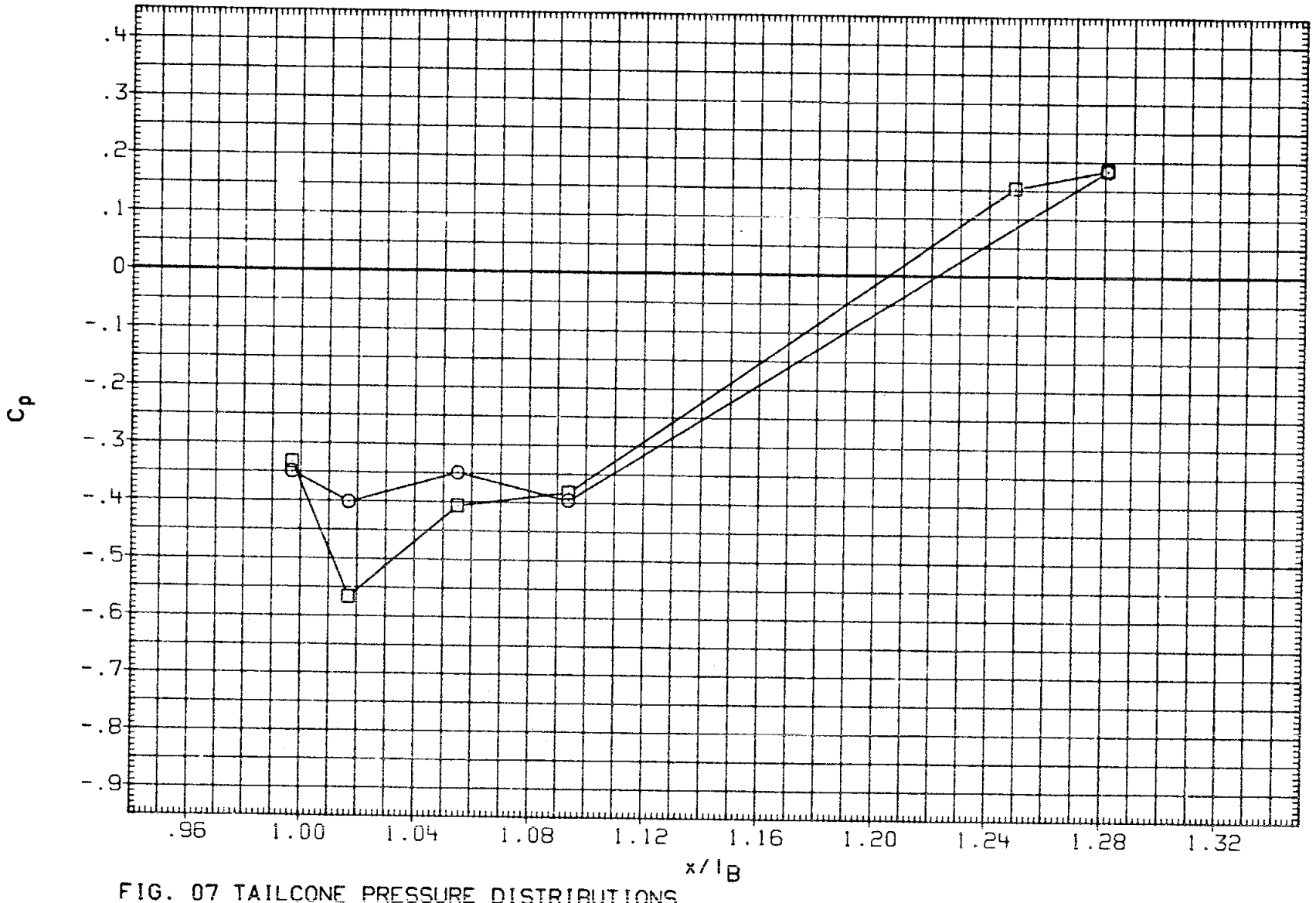

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	8.334	2.379
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
D	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

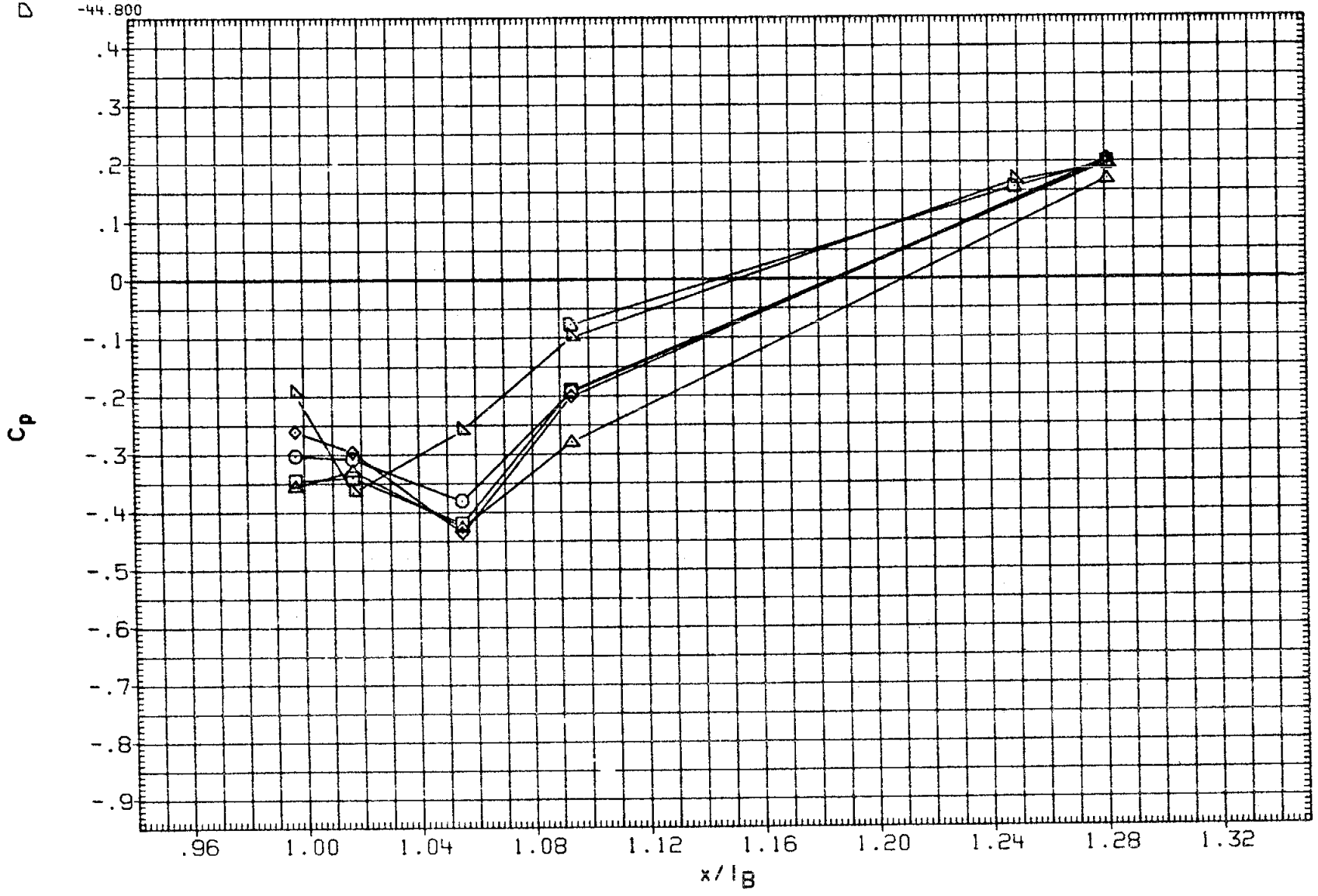

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

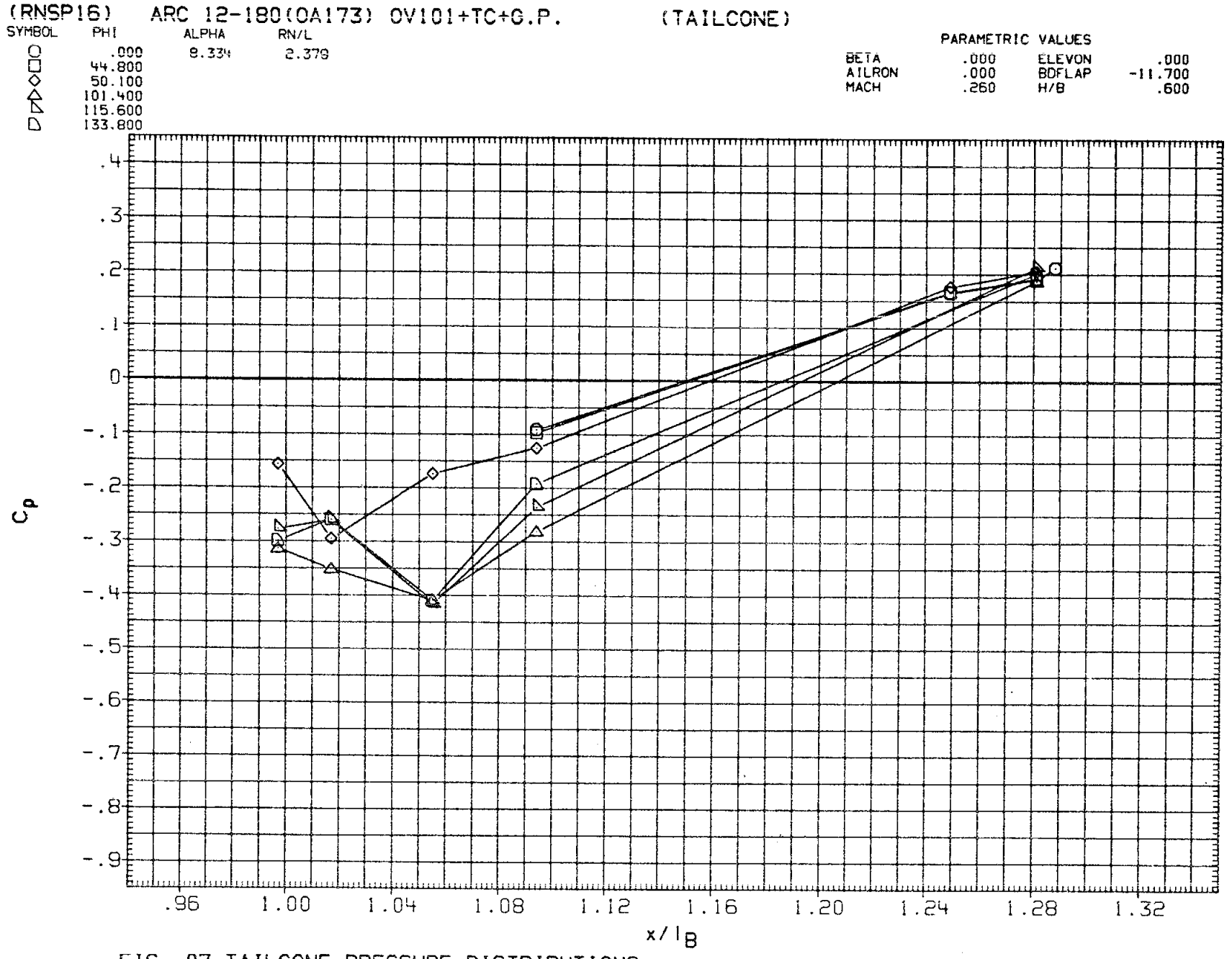

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	8.334	2.379
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

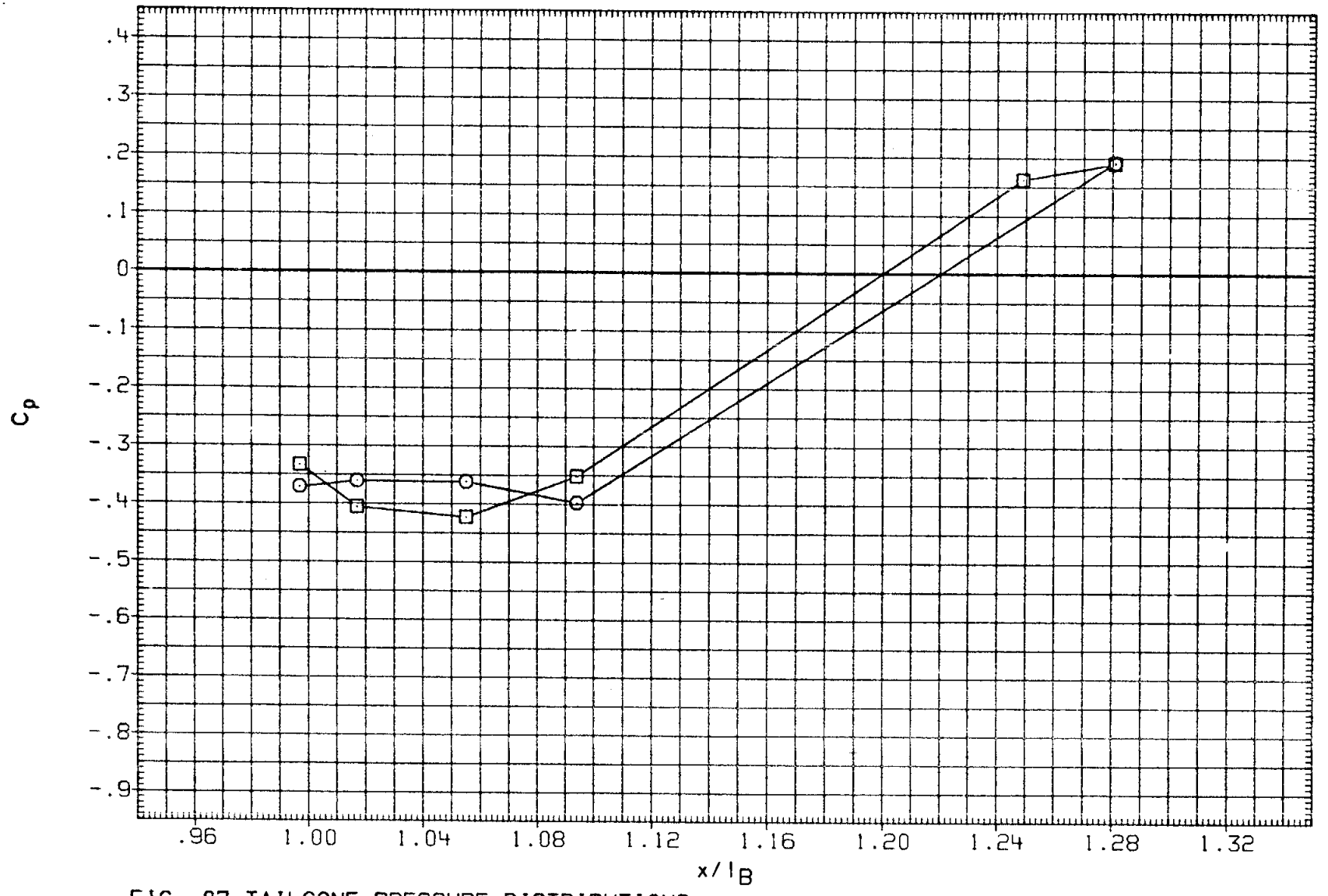

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	10.420	2.374
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

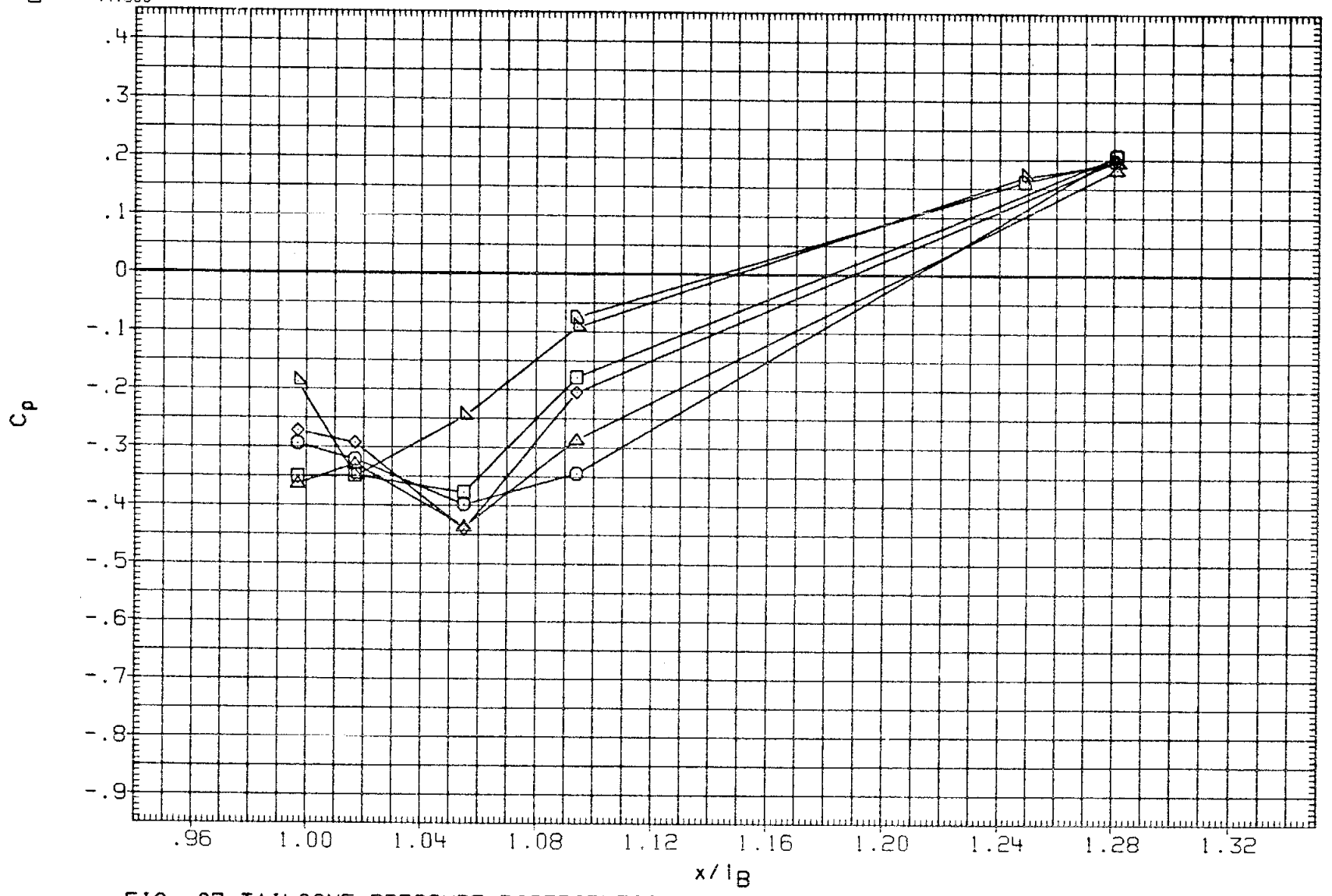

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	10.420	2.374
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
D	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

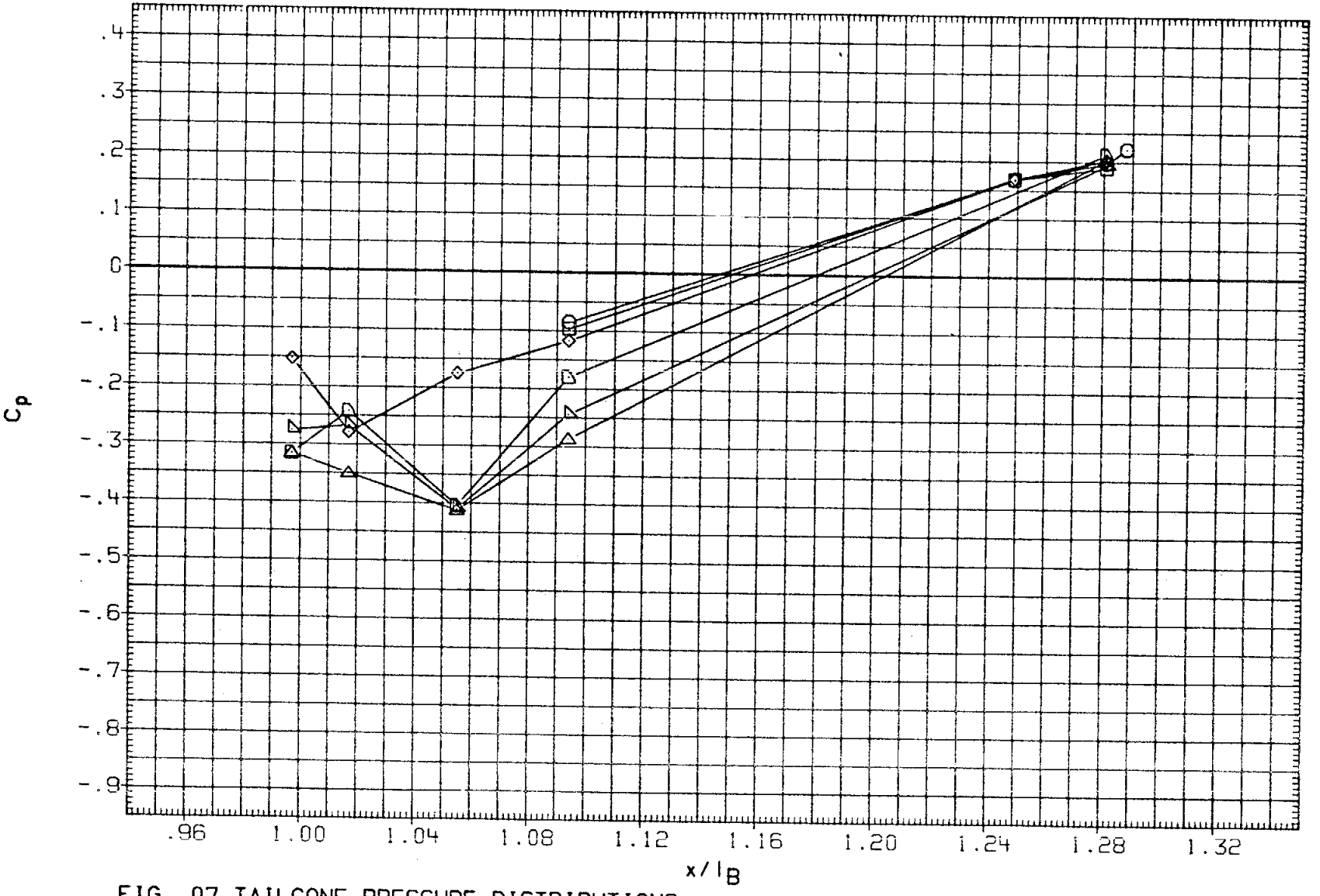

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	10.420	2.374
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

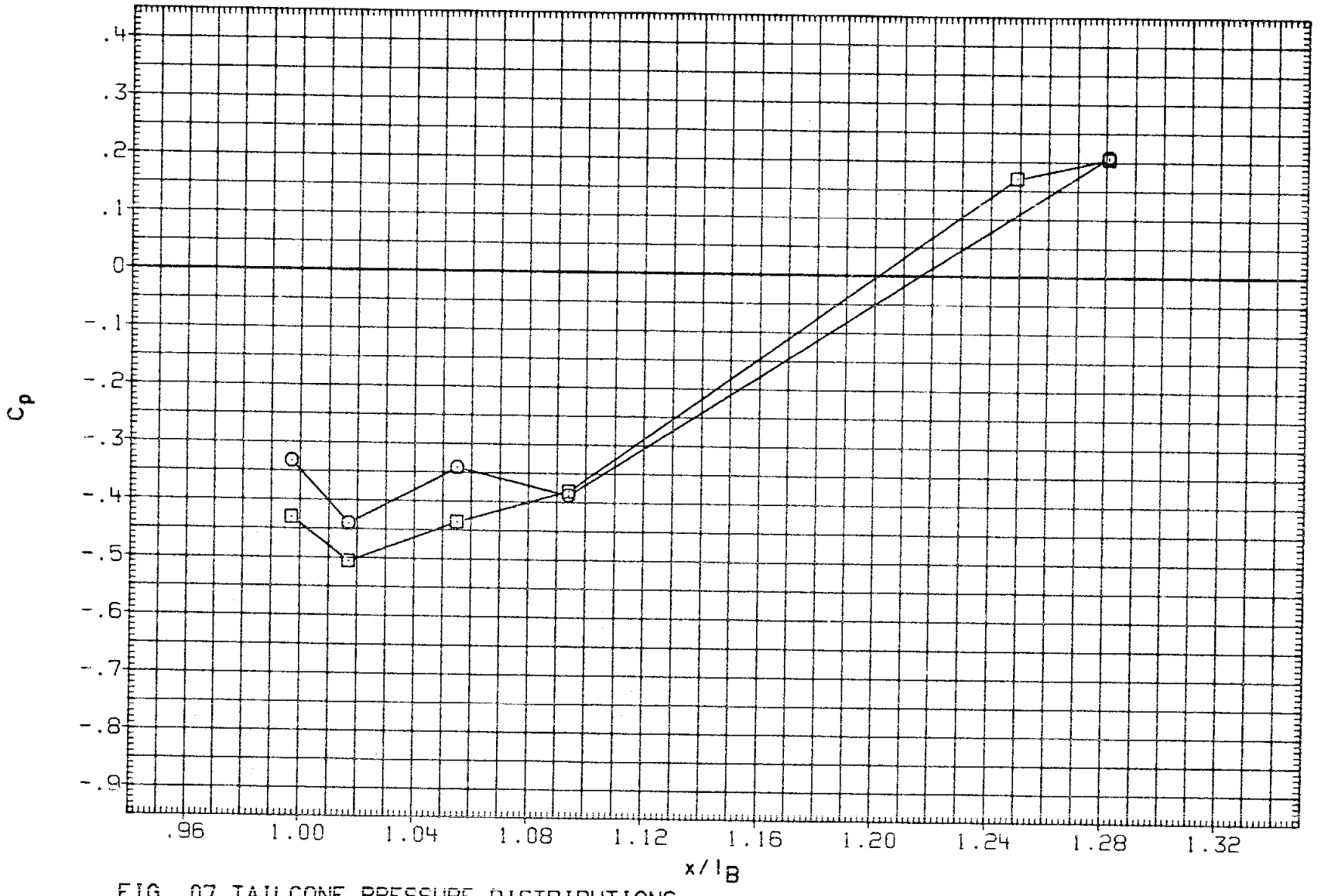

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	12.518	2.383
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

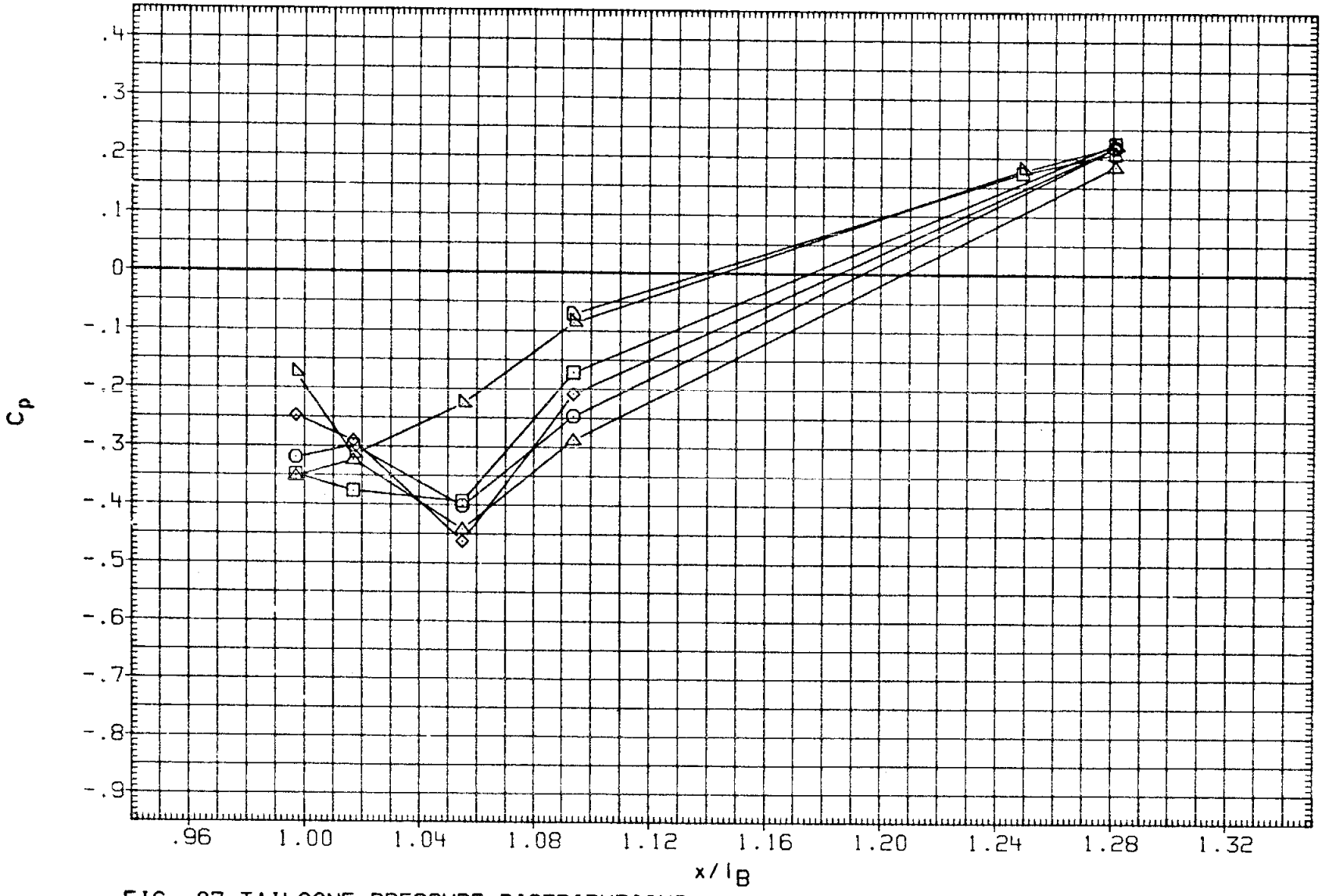

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	12.518	2.383
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
◗	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

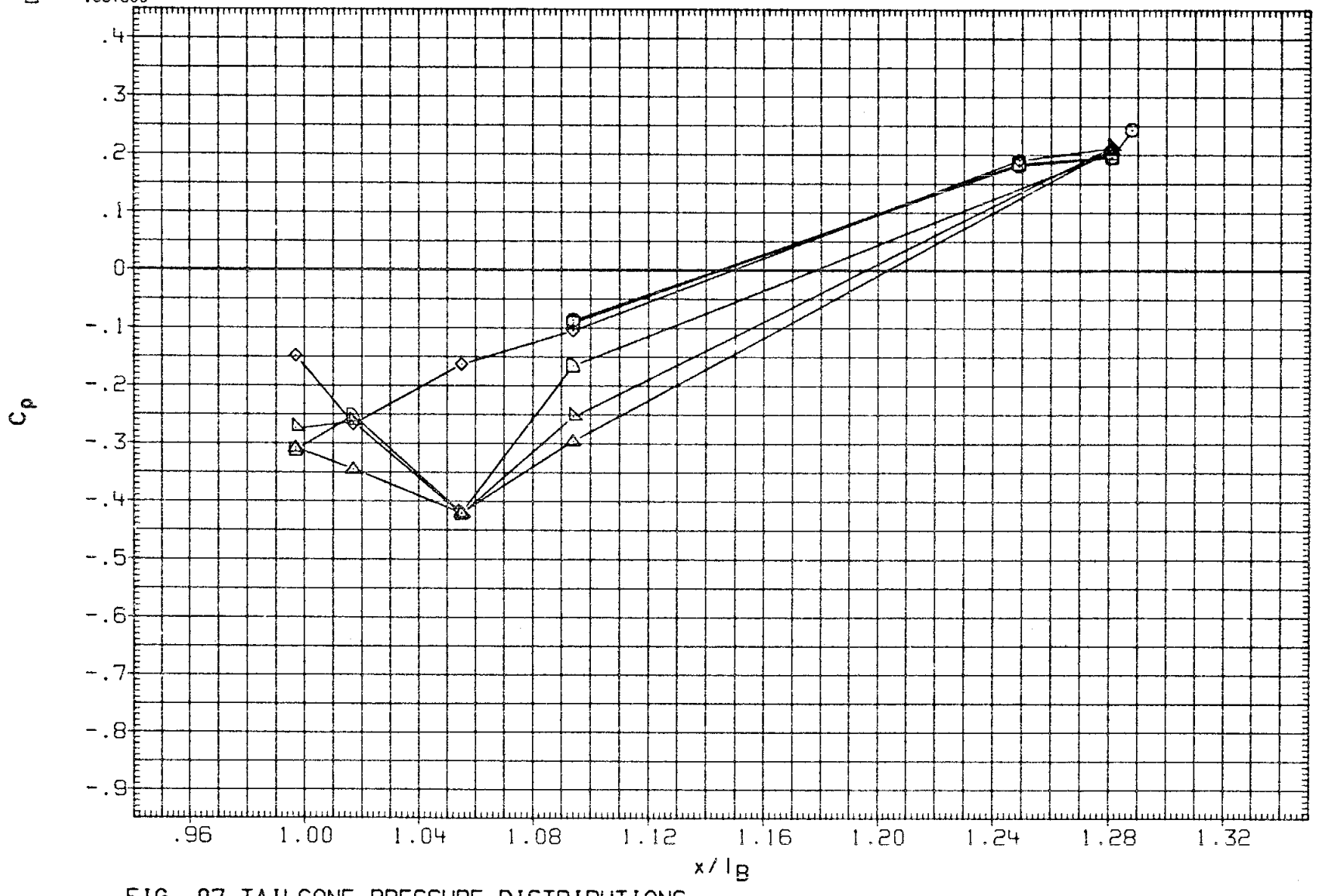

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	12.518	2.383
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

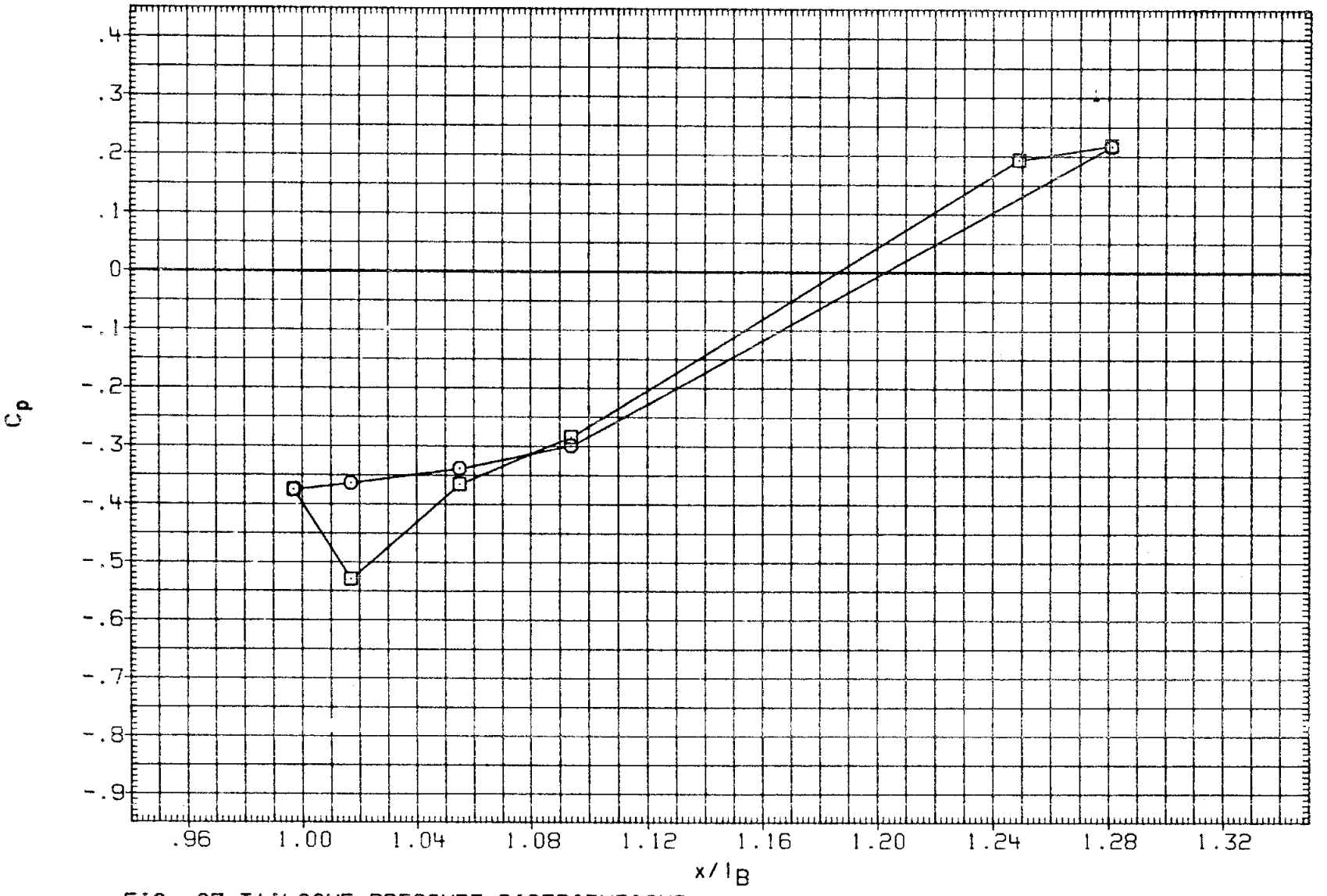

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

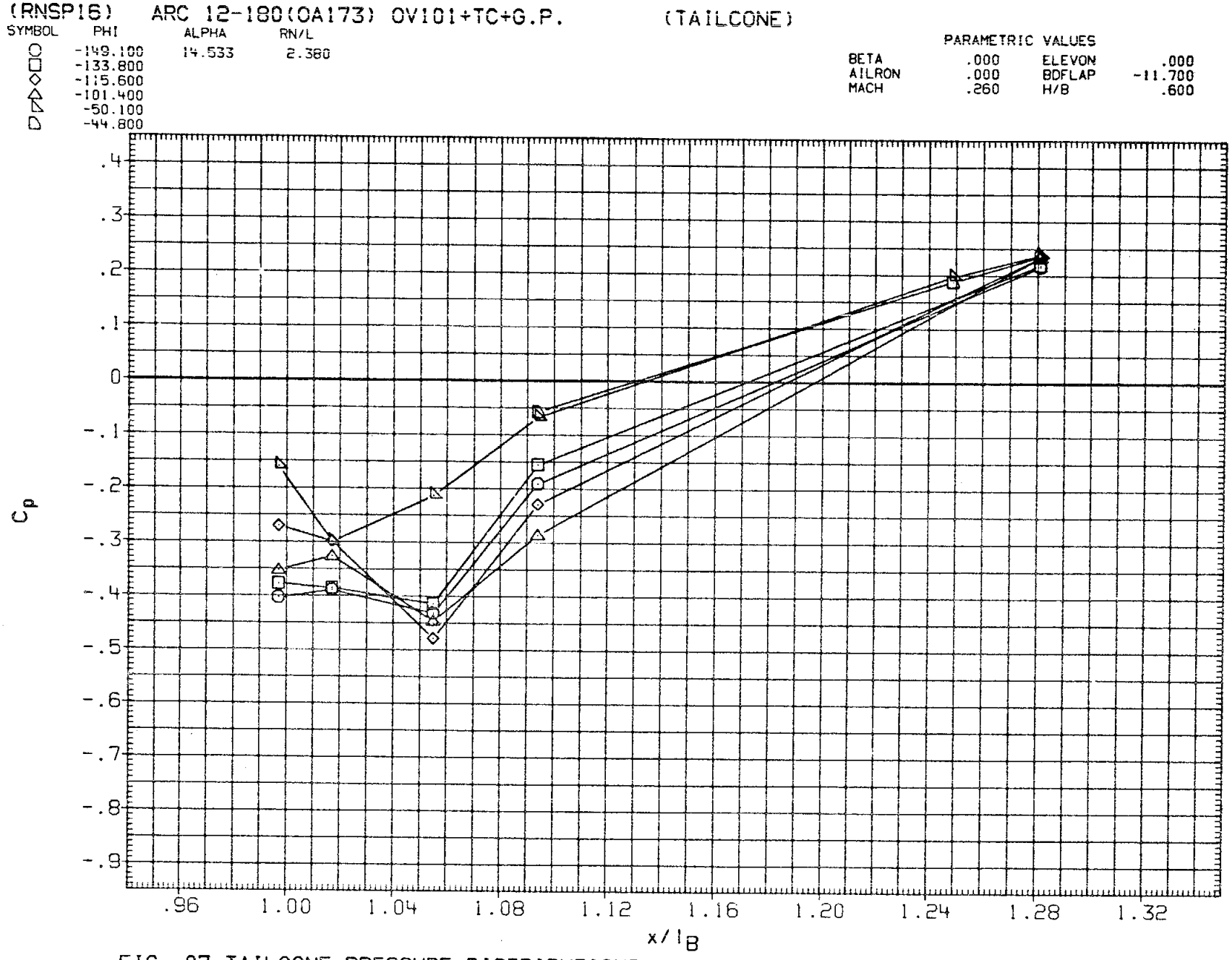

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	14.533	2.380
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
D	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

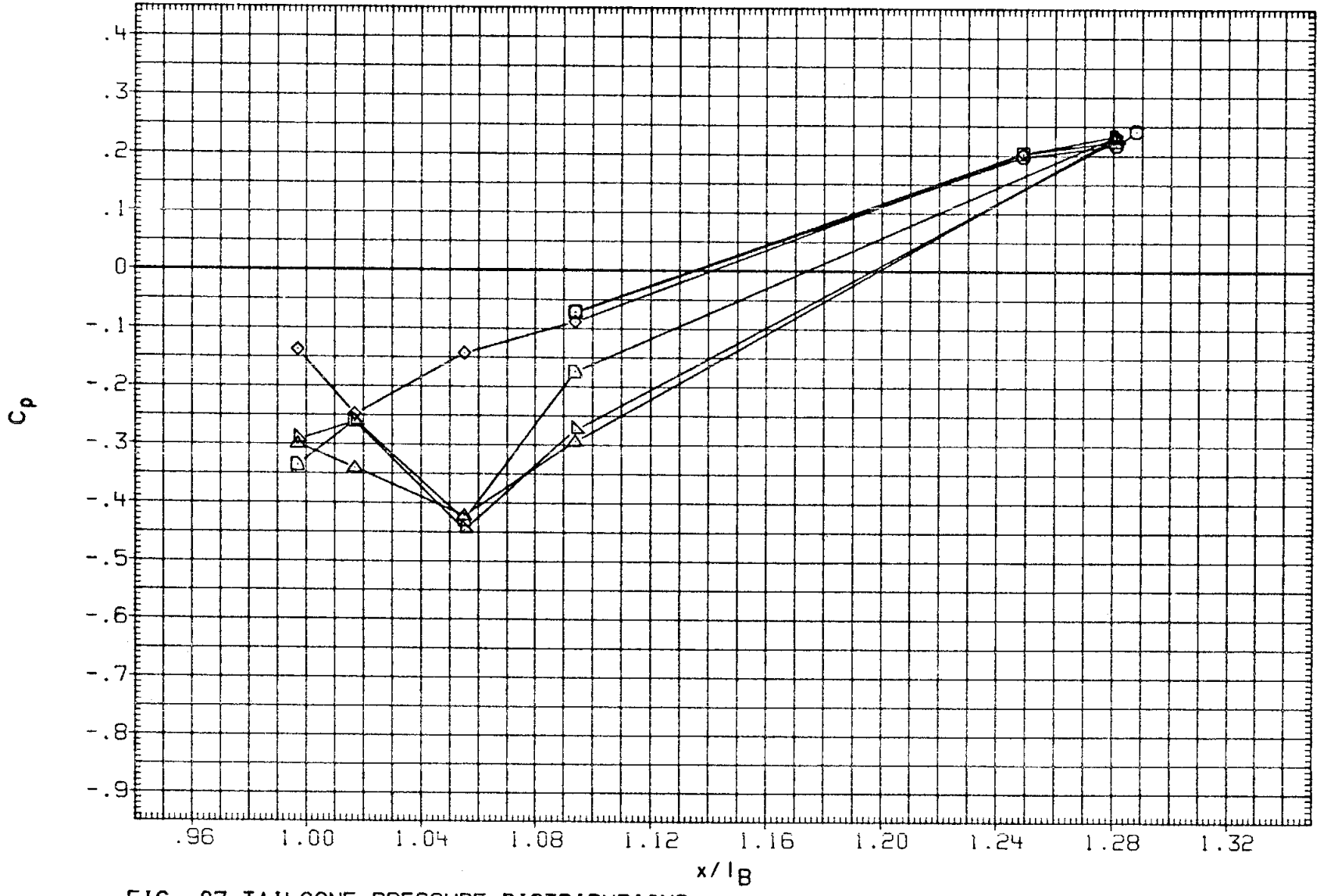

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	14.533	2.380
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

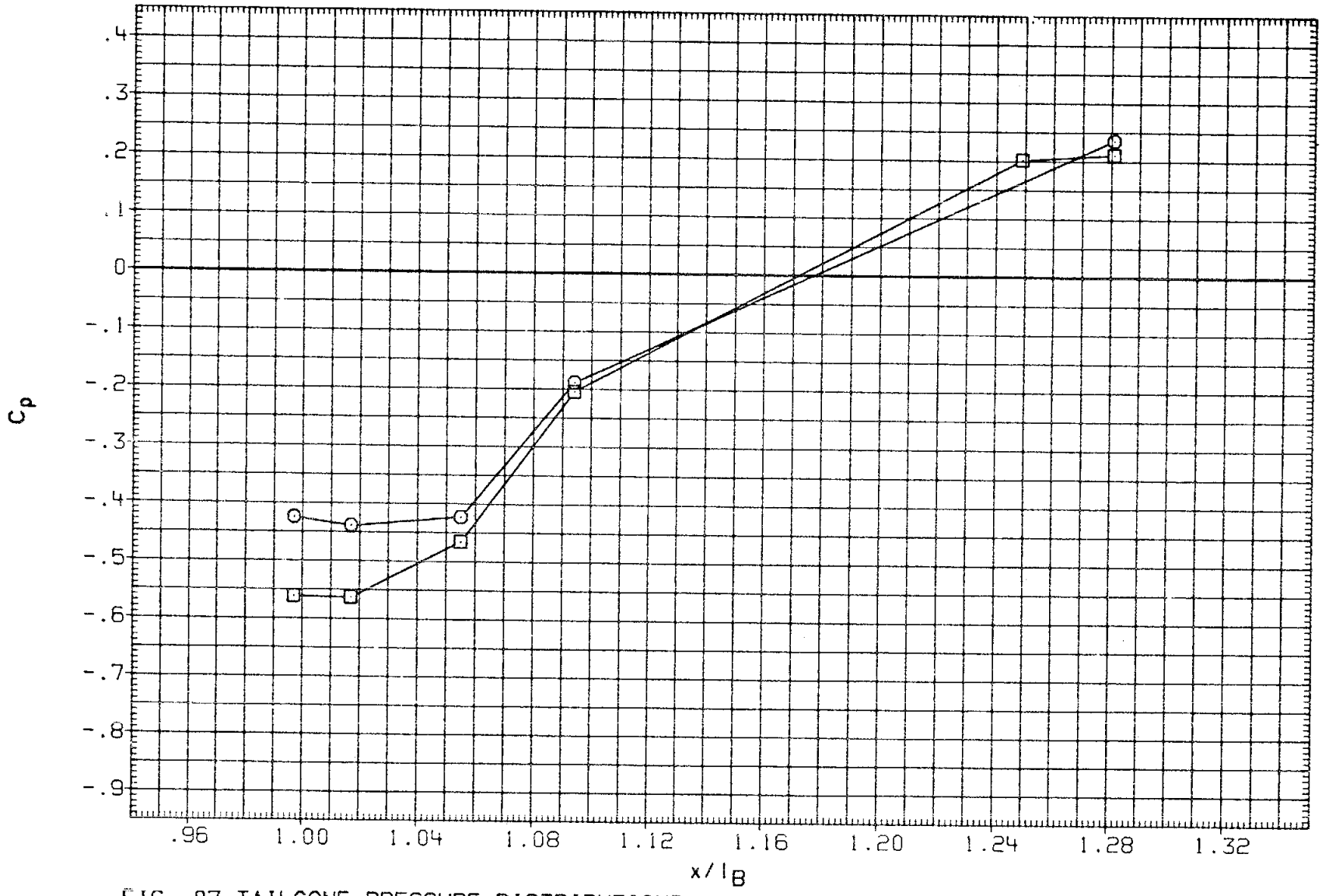

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	15.599	2.374
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

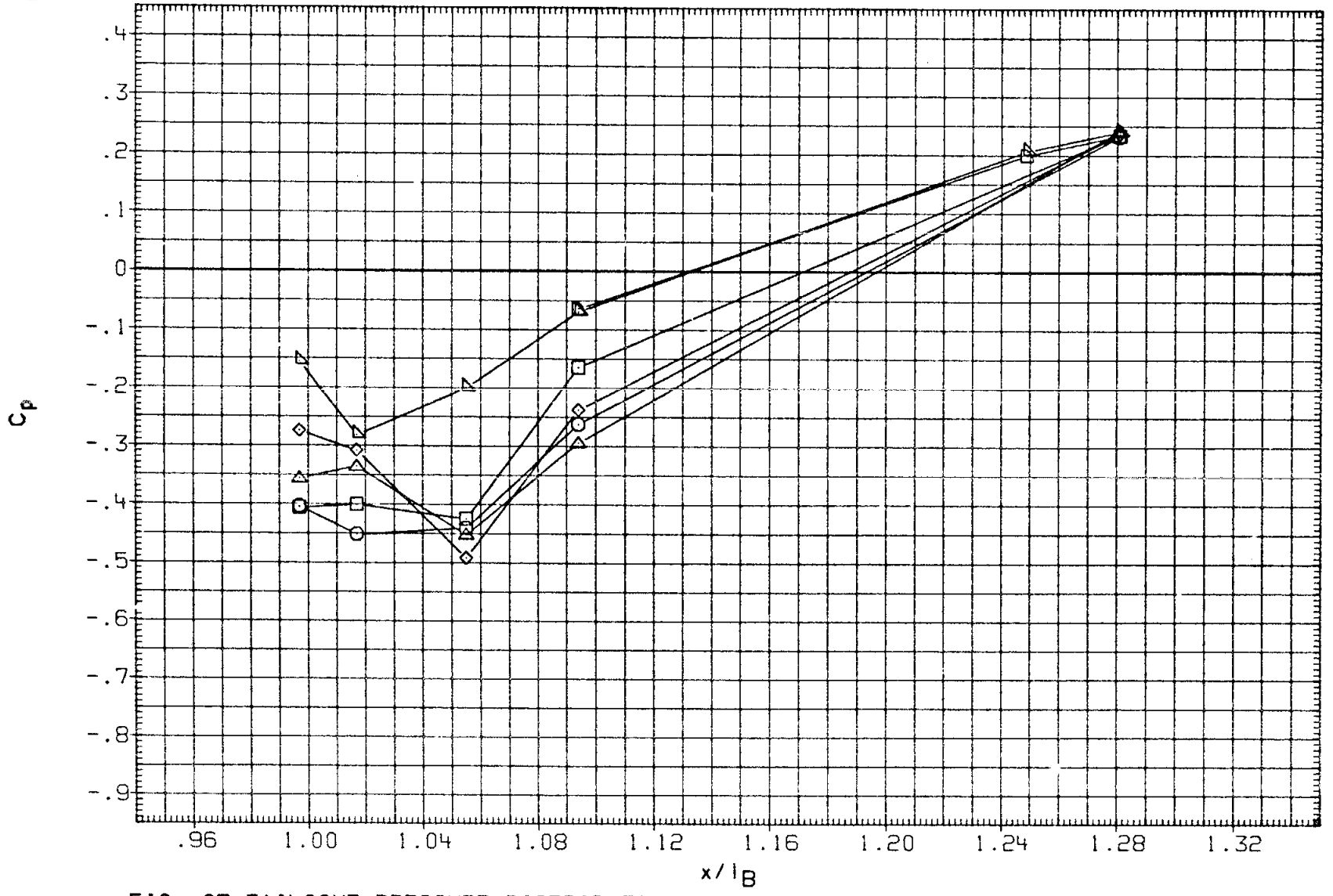

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

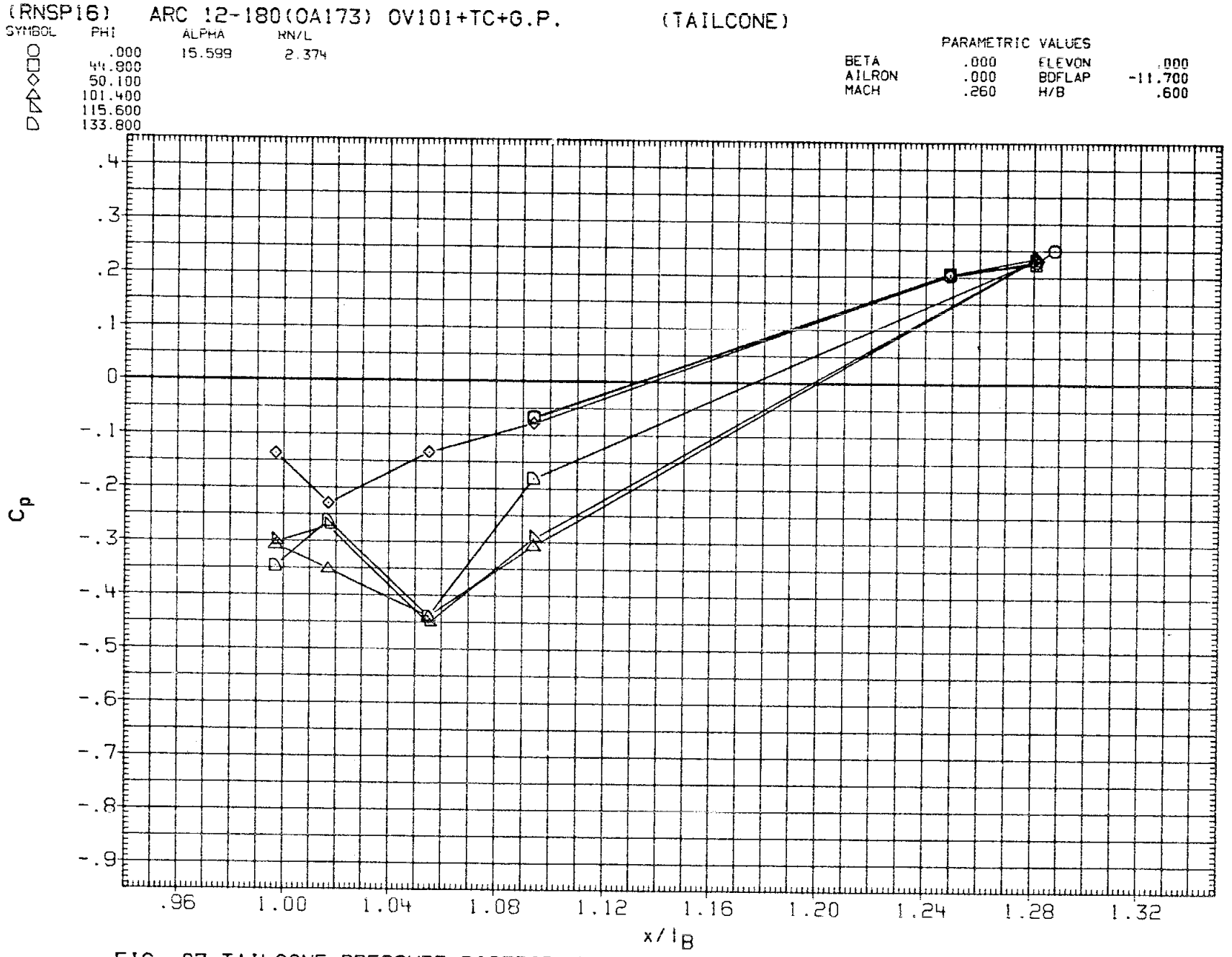

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	15.599	2.374
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

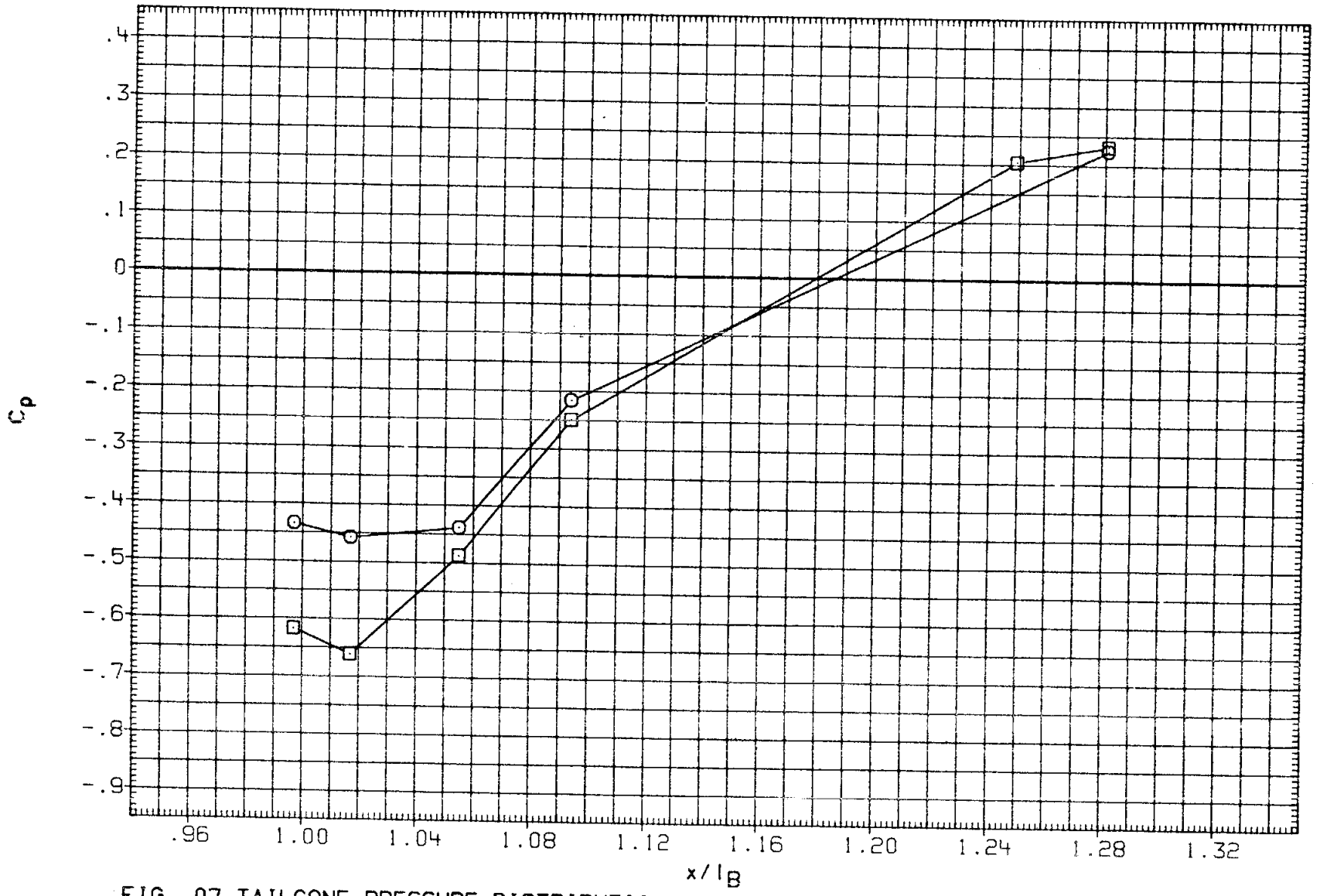

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	16.634	2.375
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
D	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

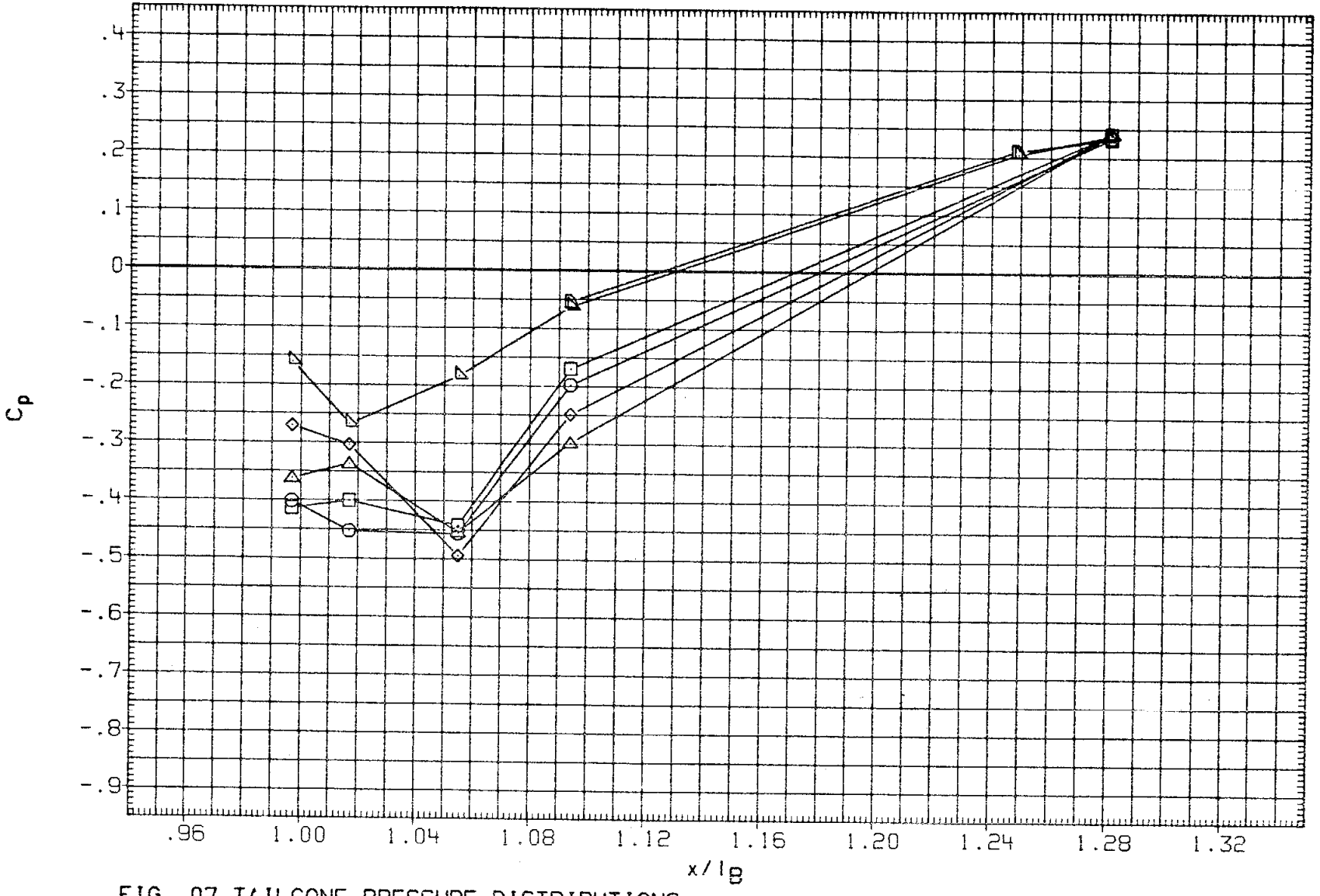

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	16.634	2.375
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
D	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

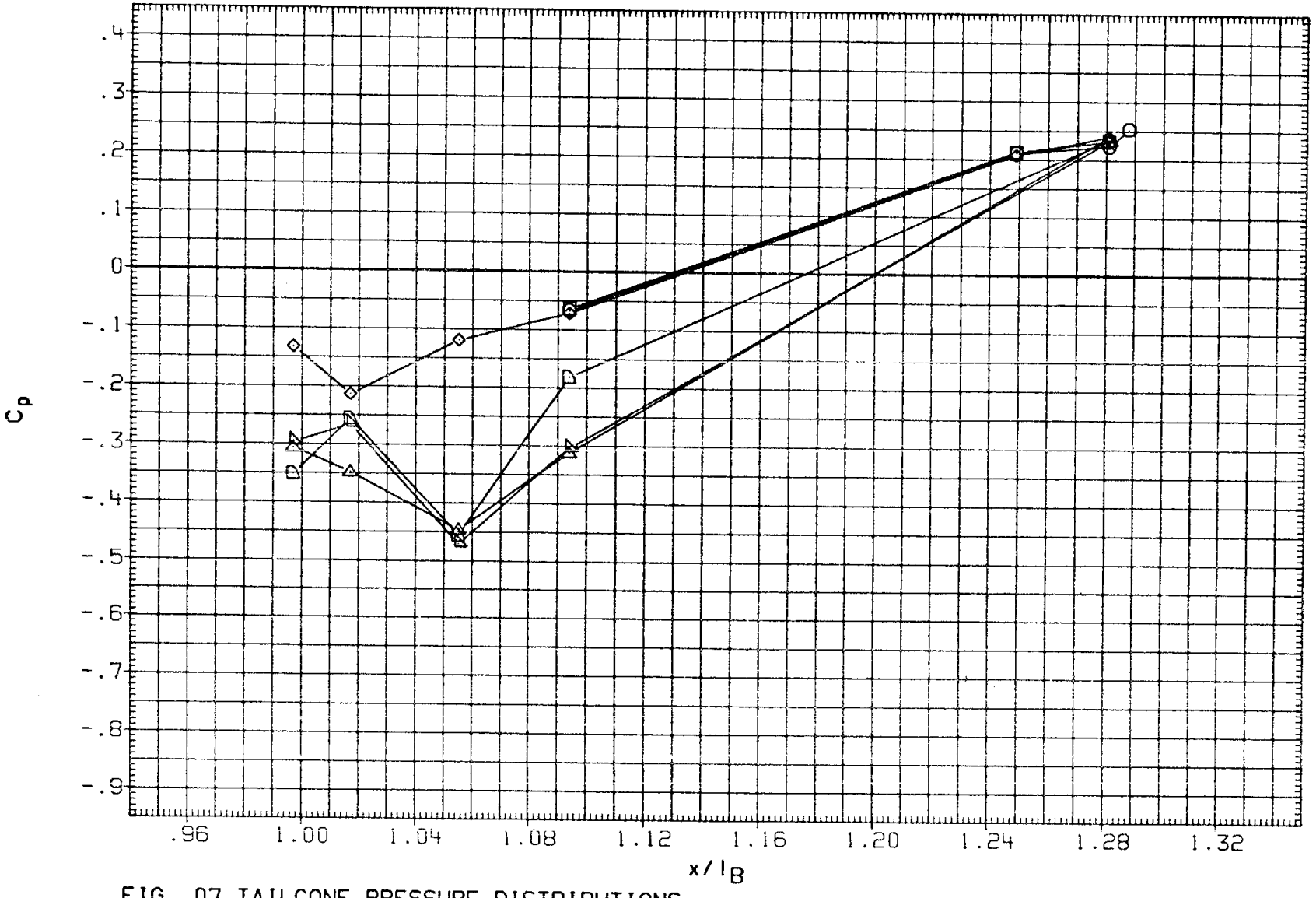

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	16.634	2.375
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

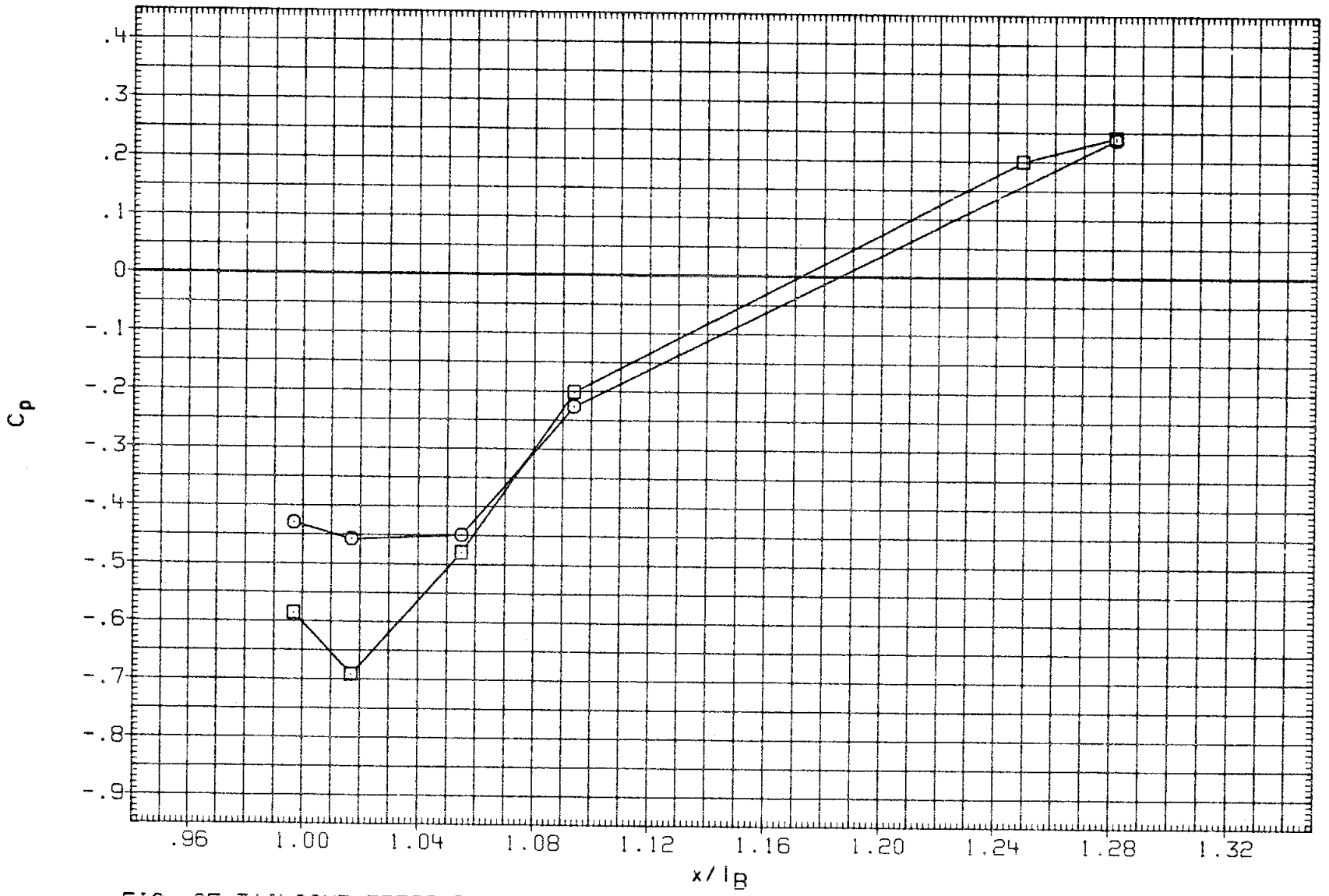

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	18.730	2.367
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

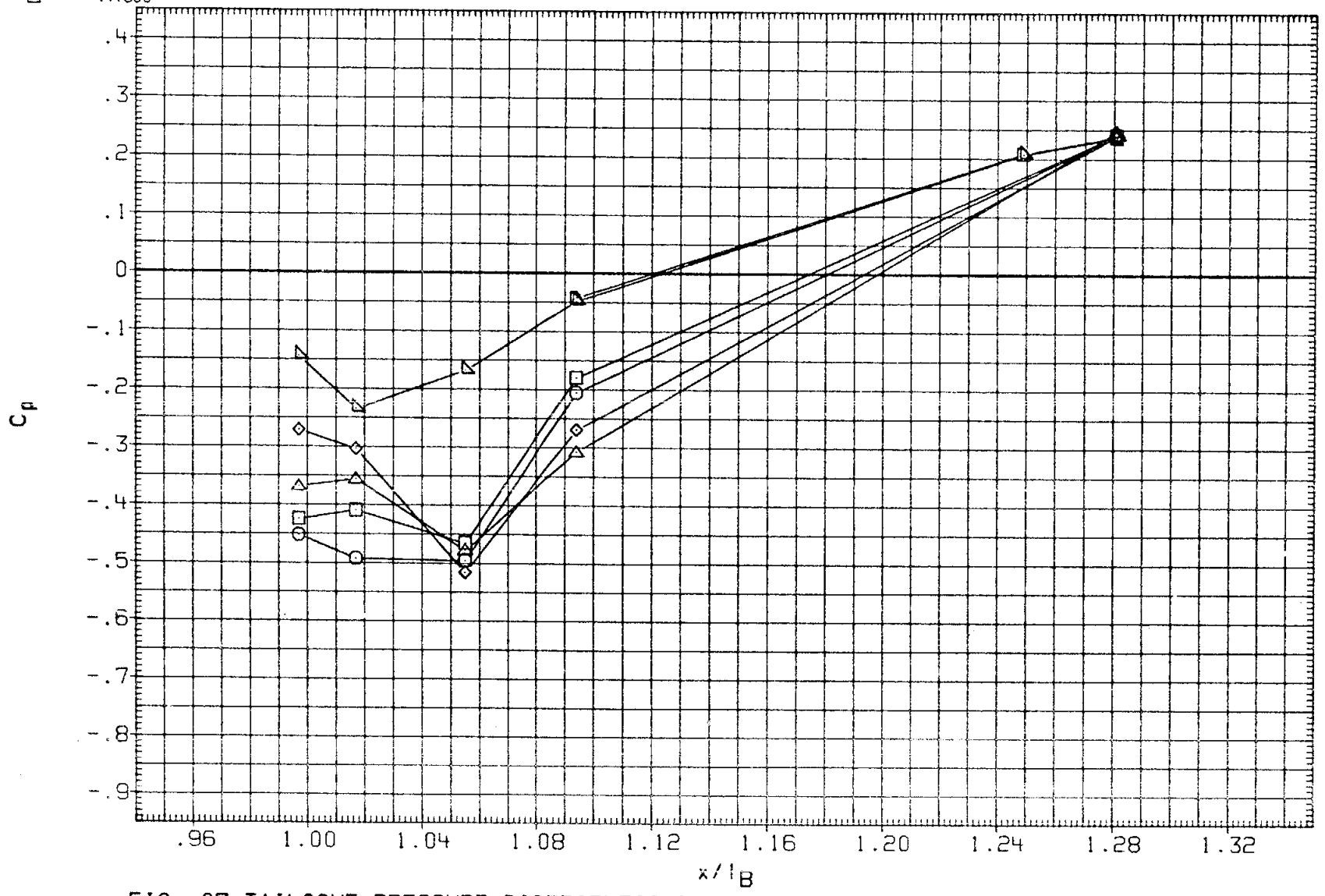

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	18.730	2.367
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
D	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

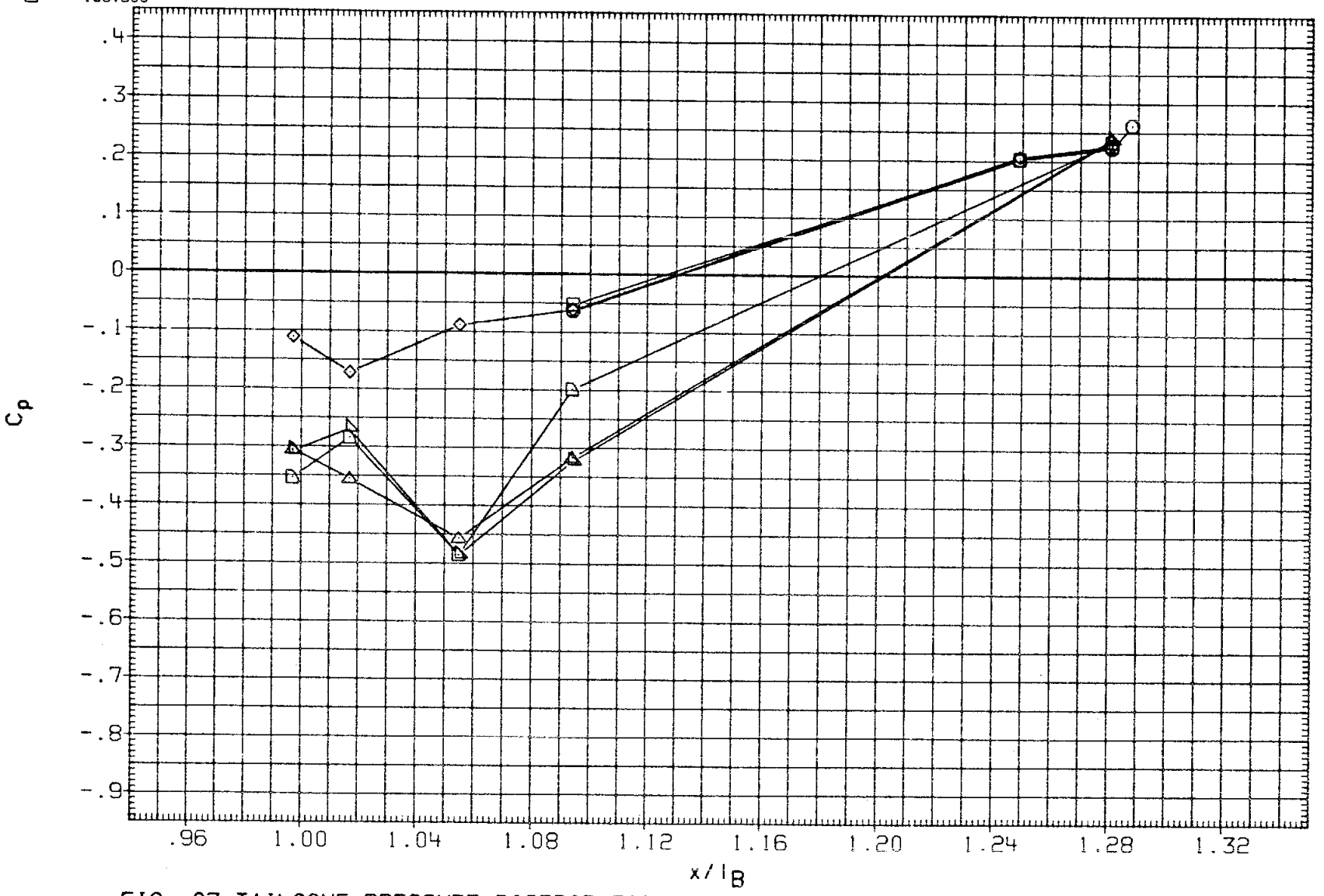

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	18.730	2.367
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

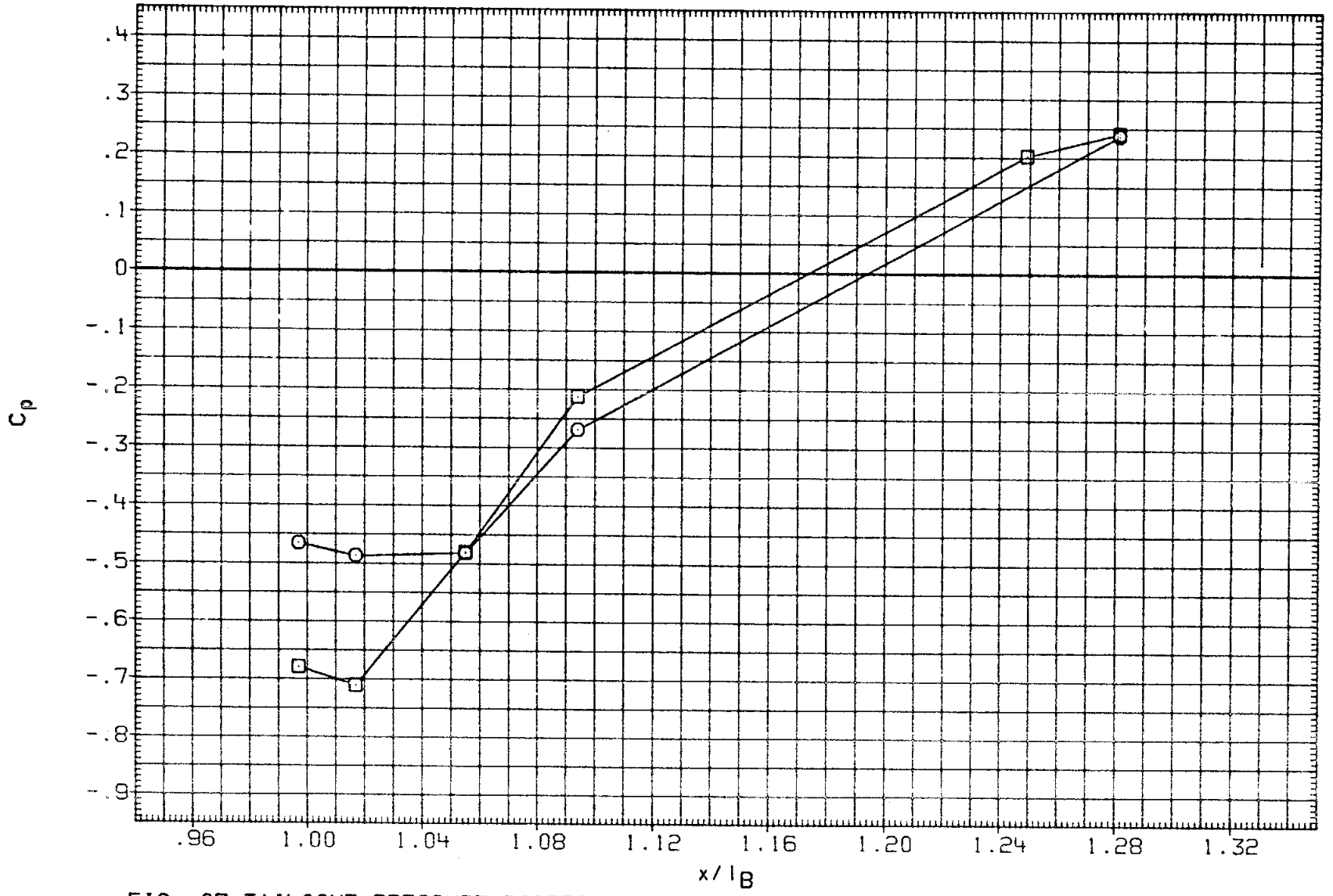

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	19.543	2.371
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
D	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

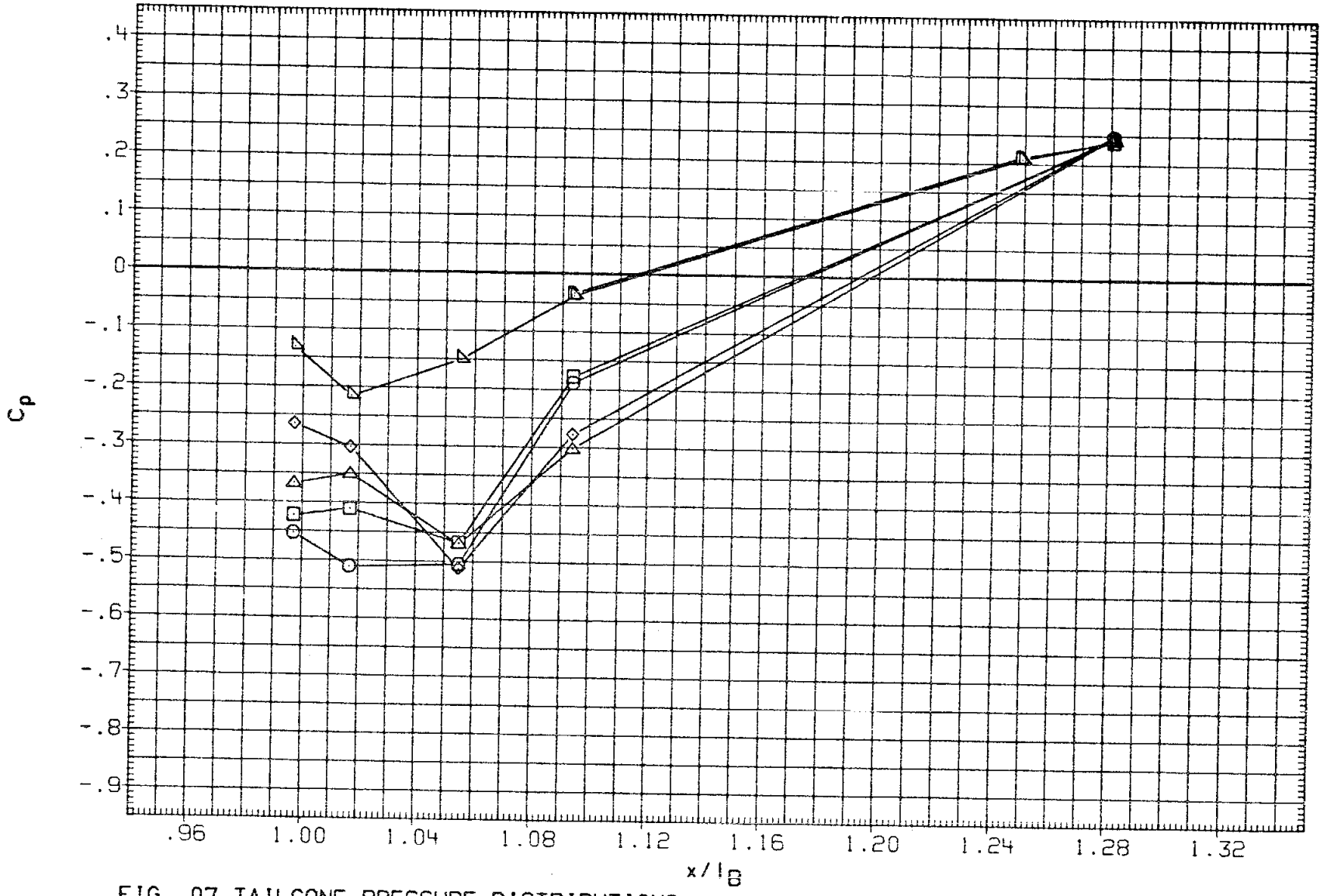

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	19.543	2.371
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
▷	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

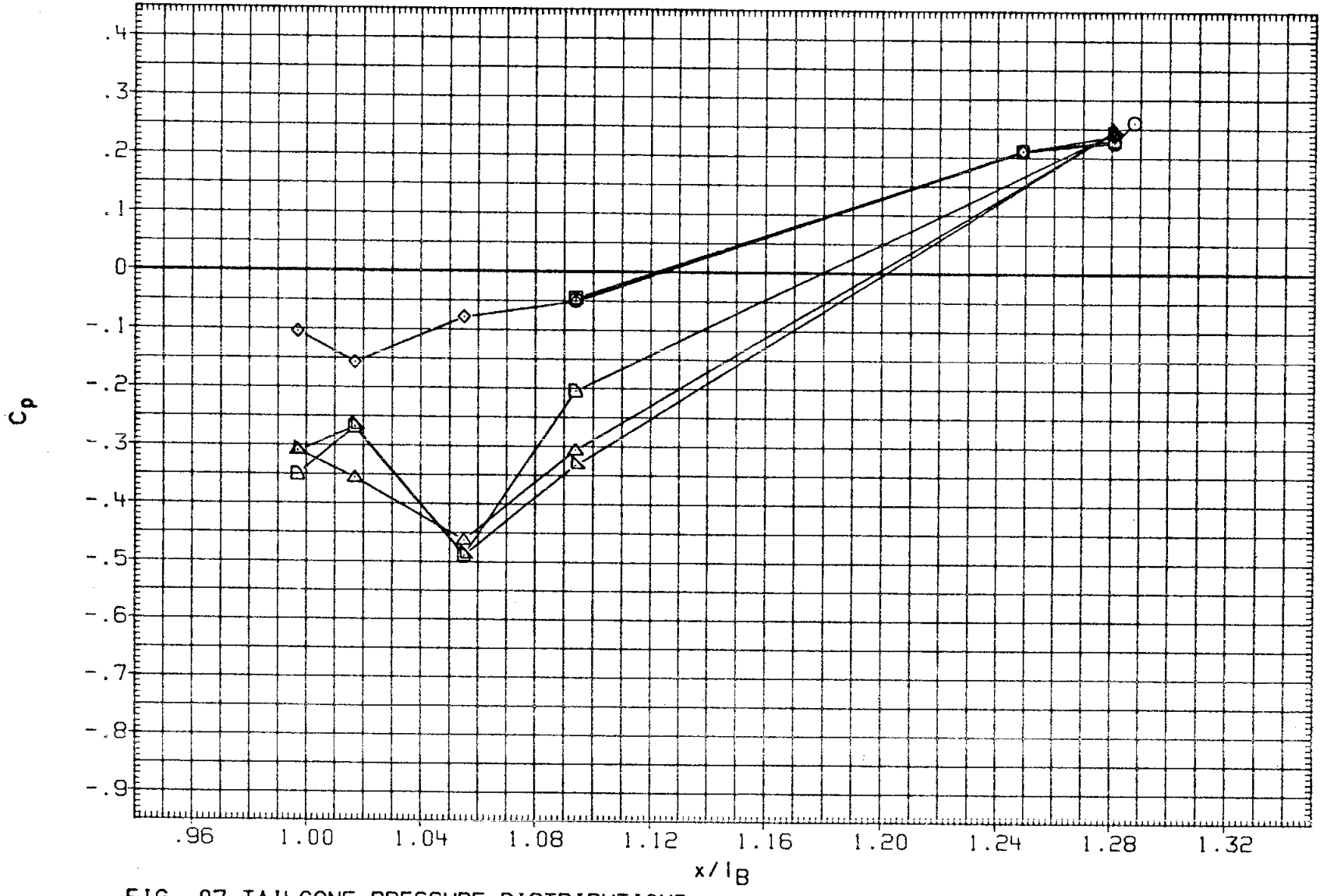

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	19.543	2.371
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

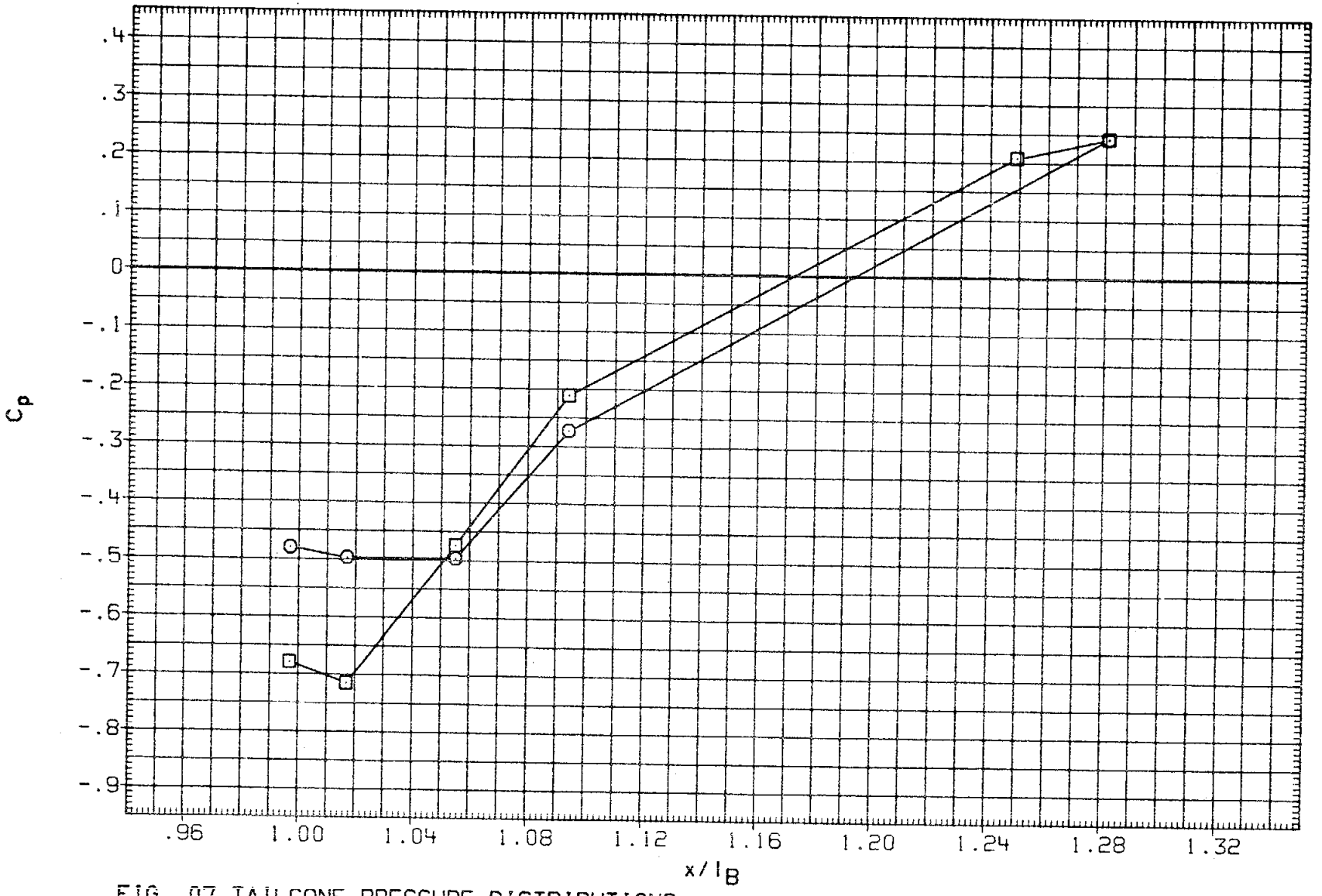

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	.586	5.466
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

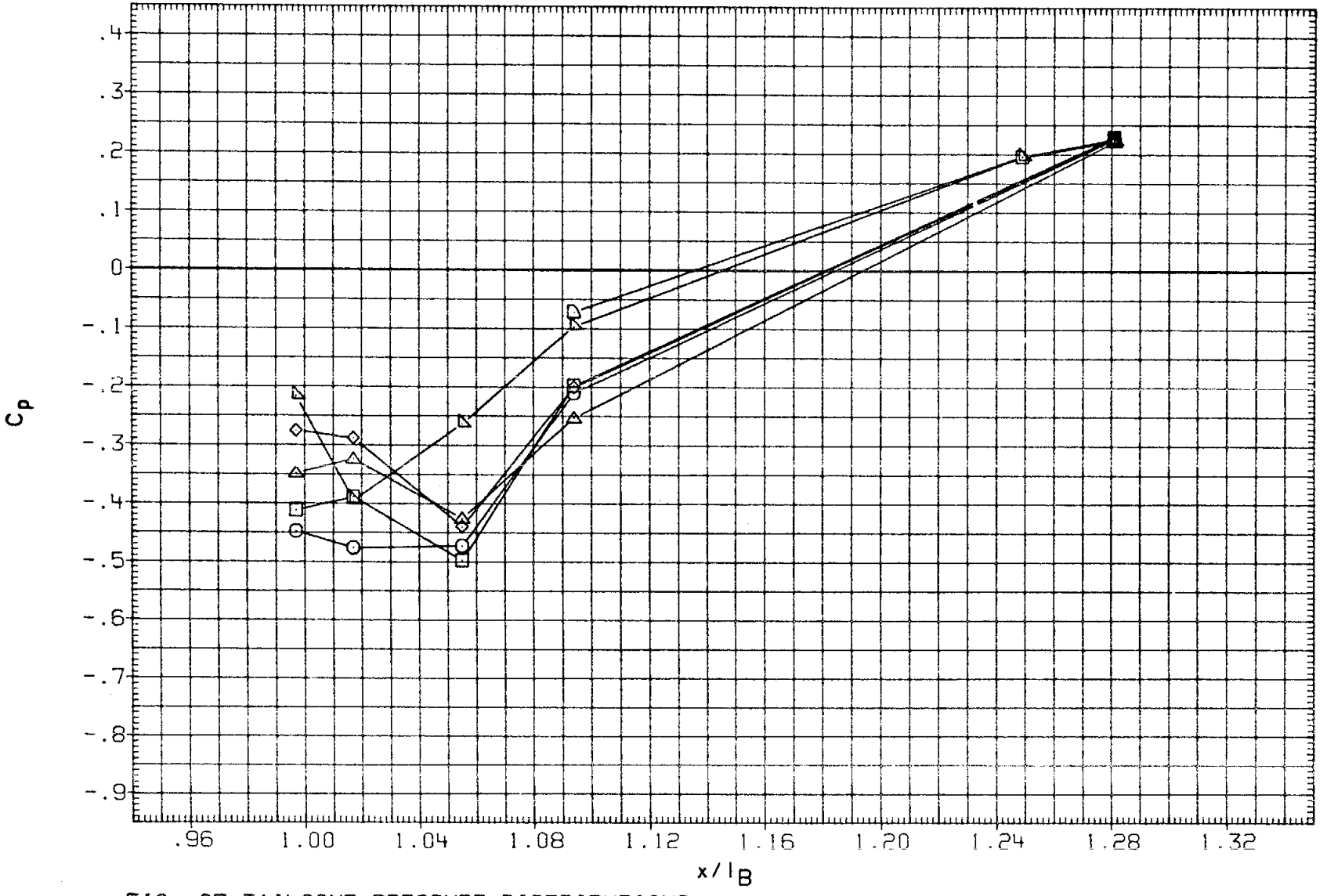

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	.586	5.466
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
▷	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

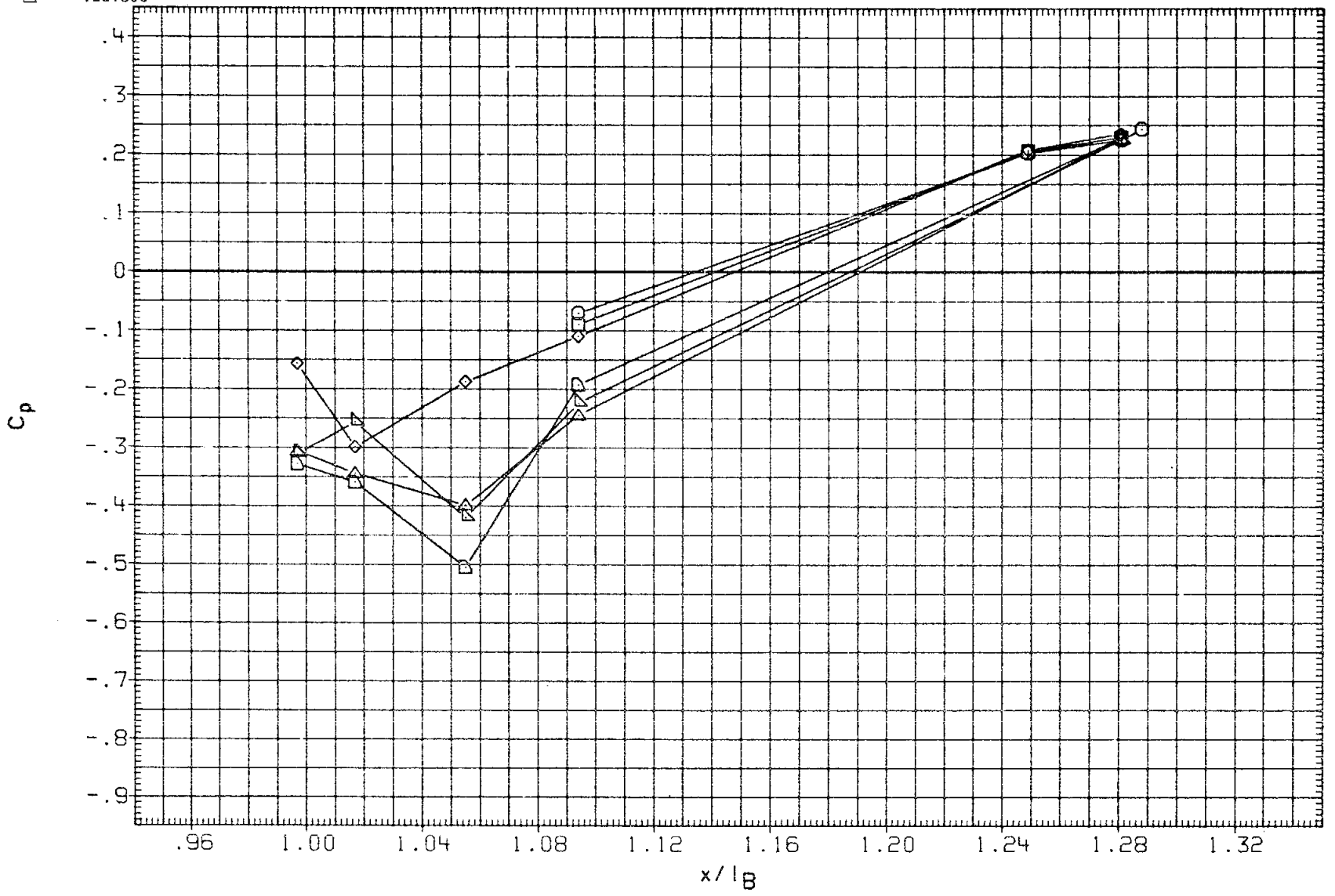

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	.586	5.466
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

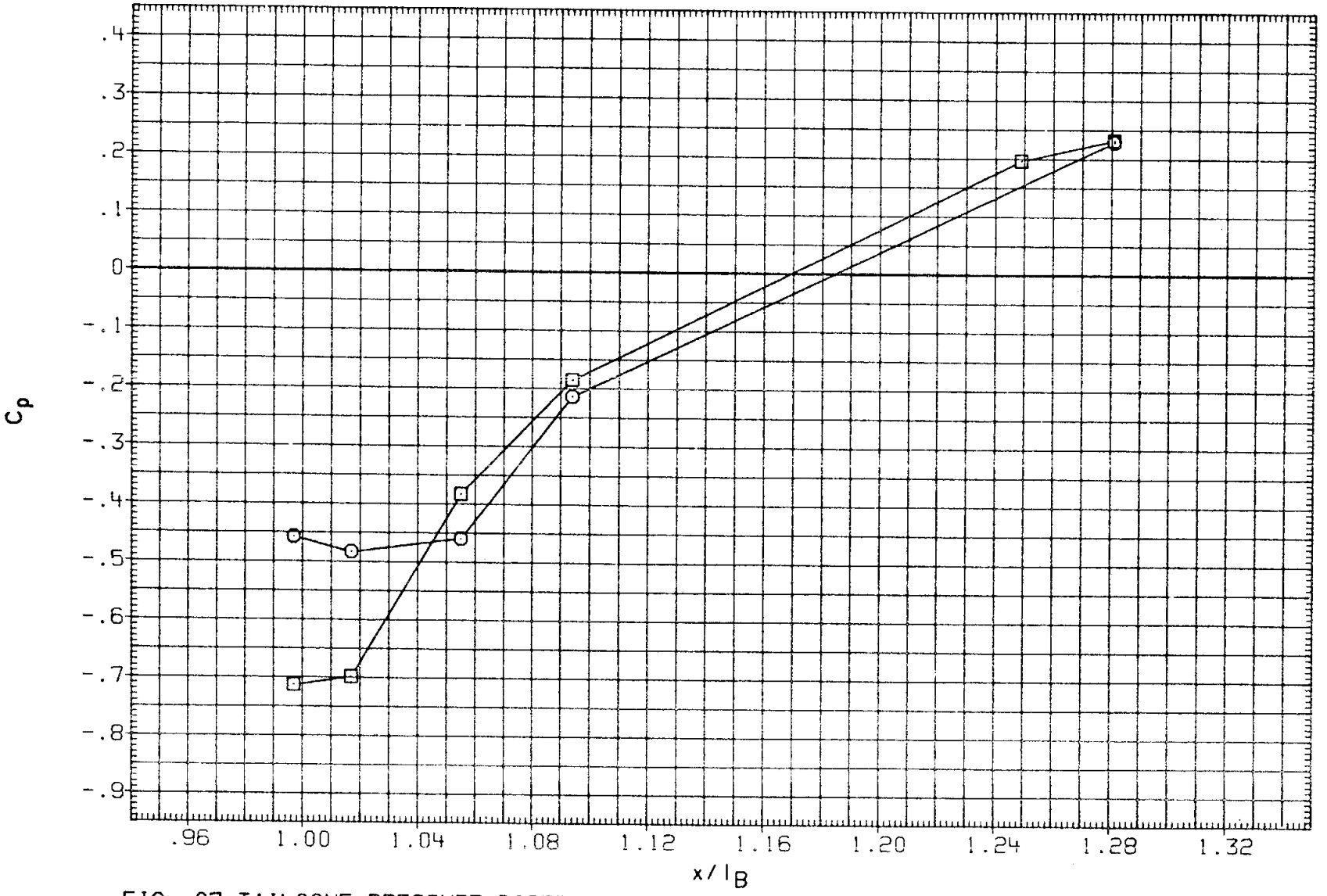

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

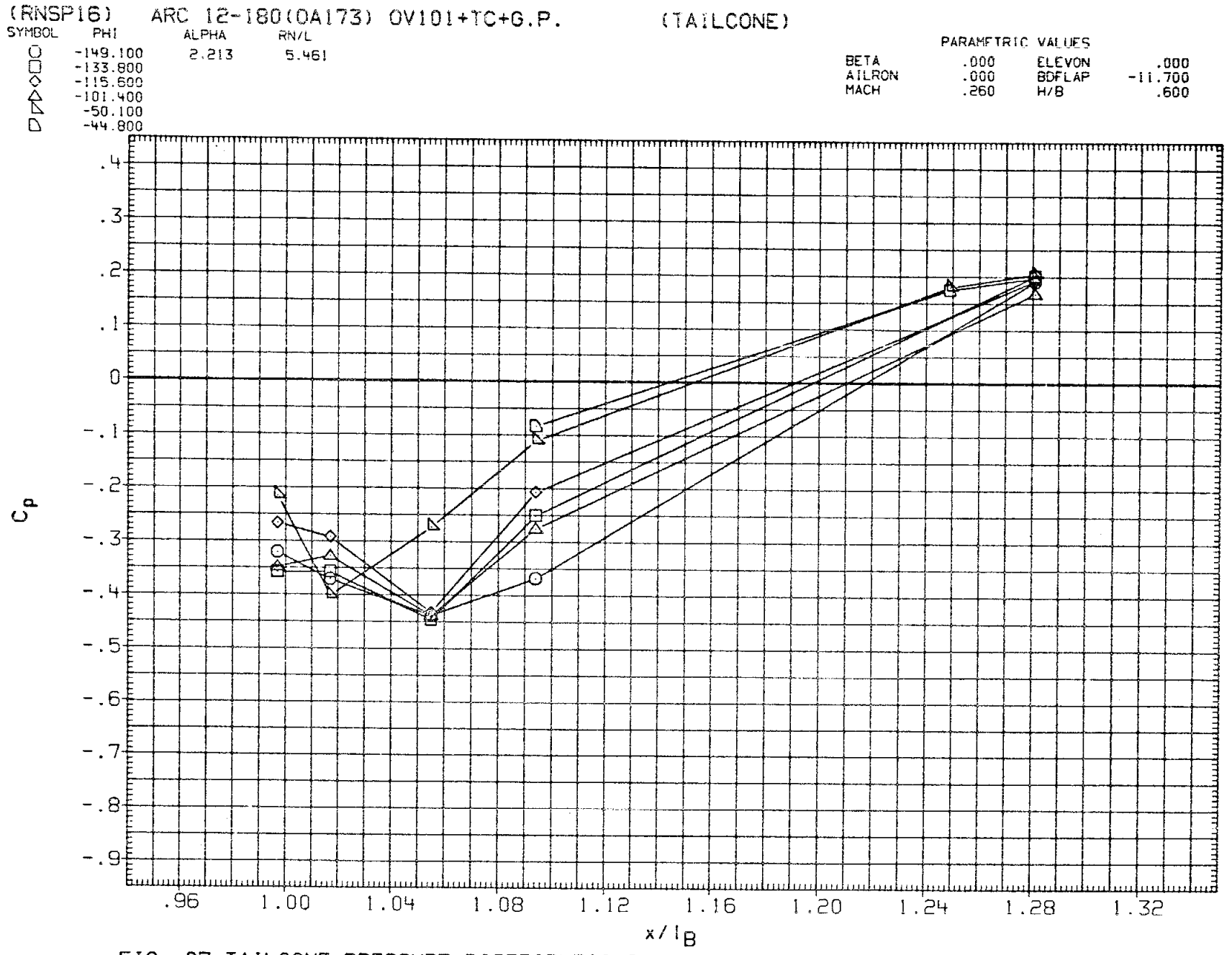

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	2.213	5.461
□	44.800		
◇	50.100		
△	101.400		
◺	115.600		
◻	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

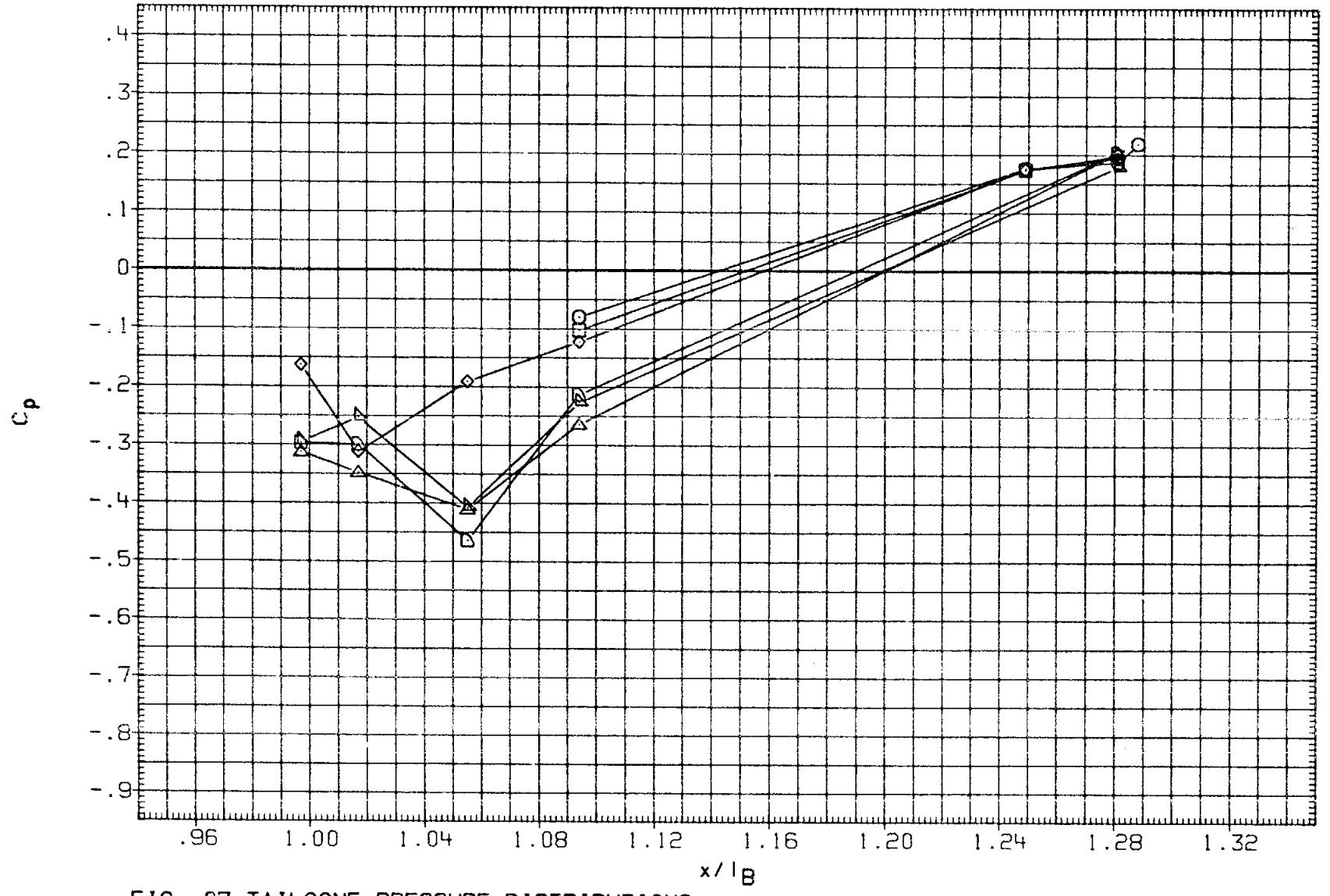

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	2.213	5.461
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

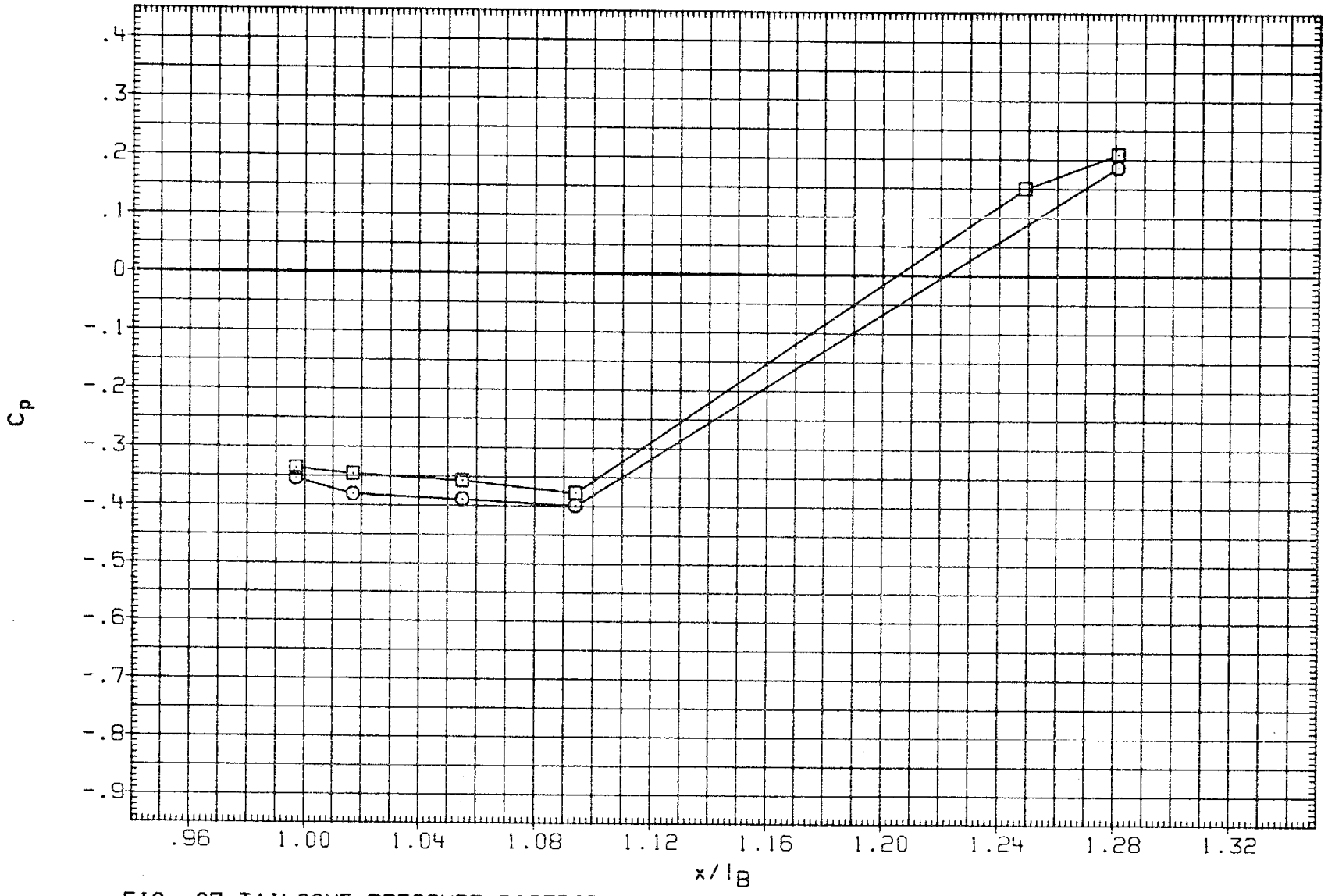

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

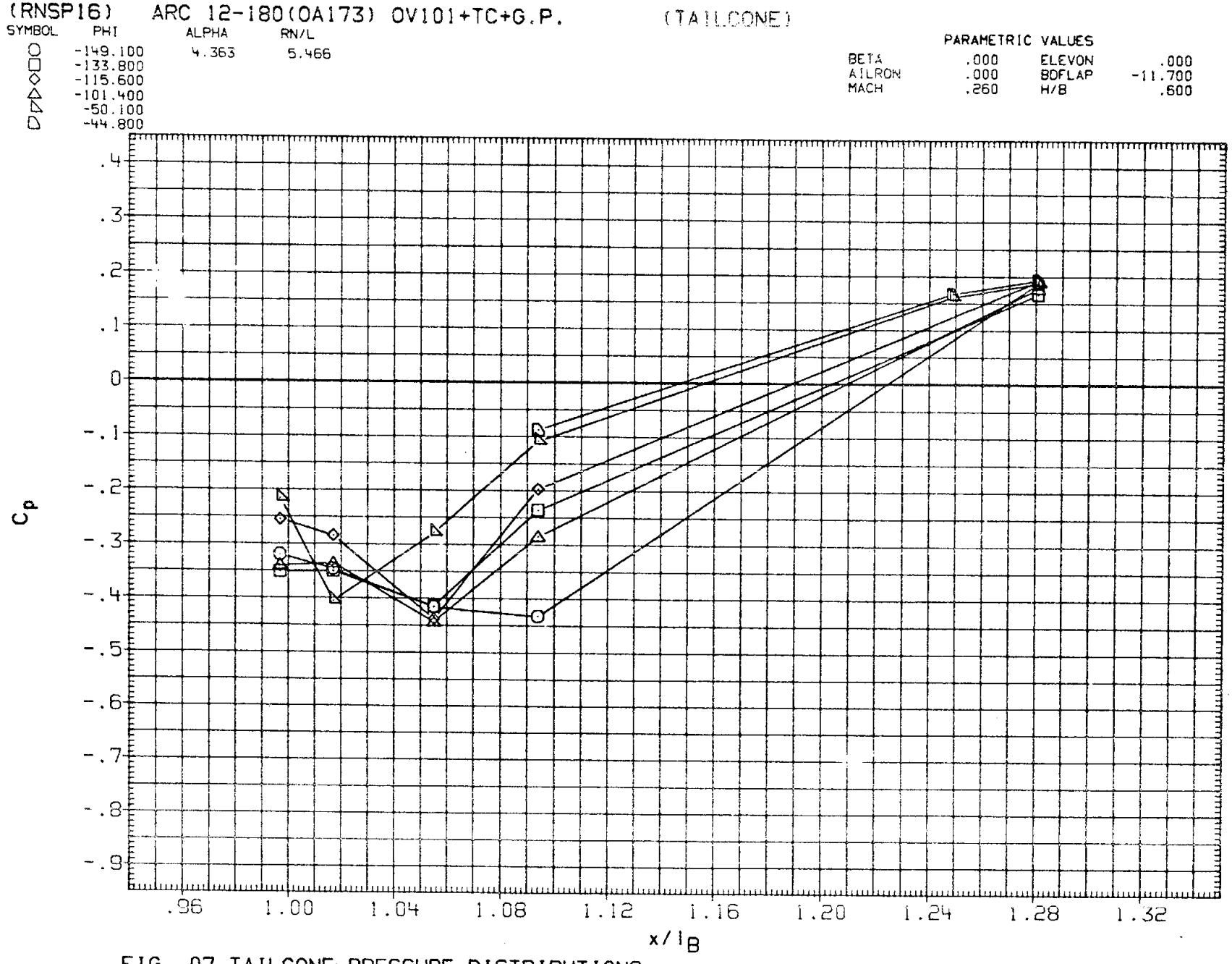

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

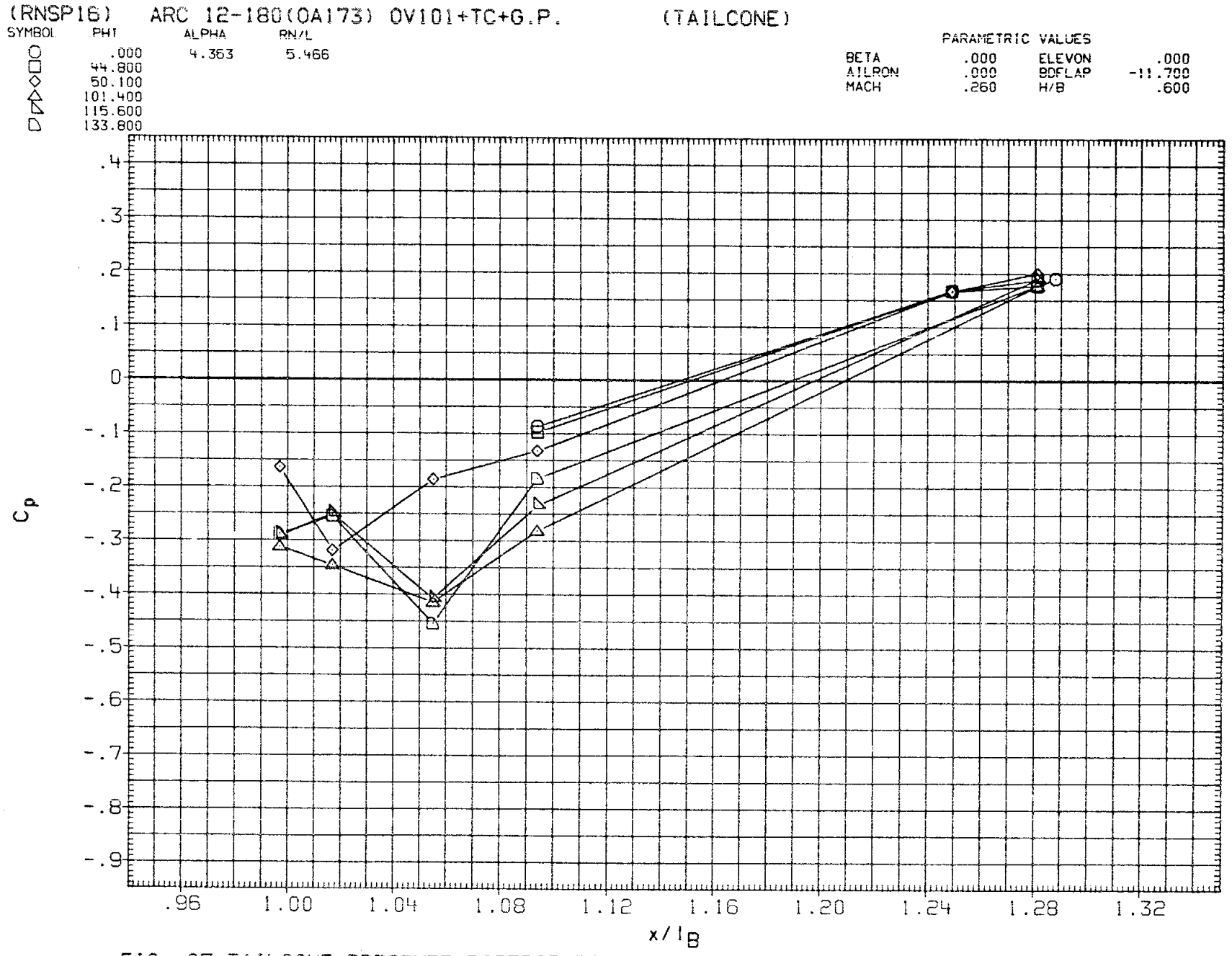

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(0A173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	4.363	5.466
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

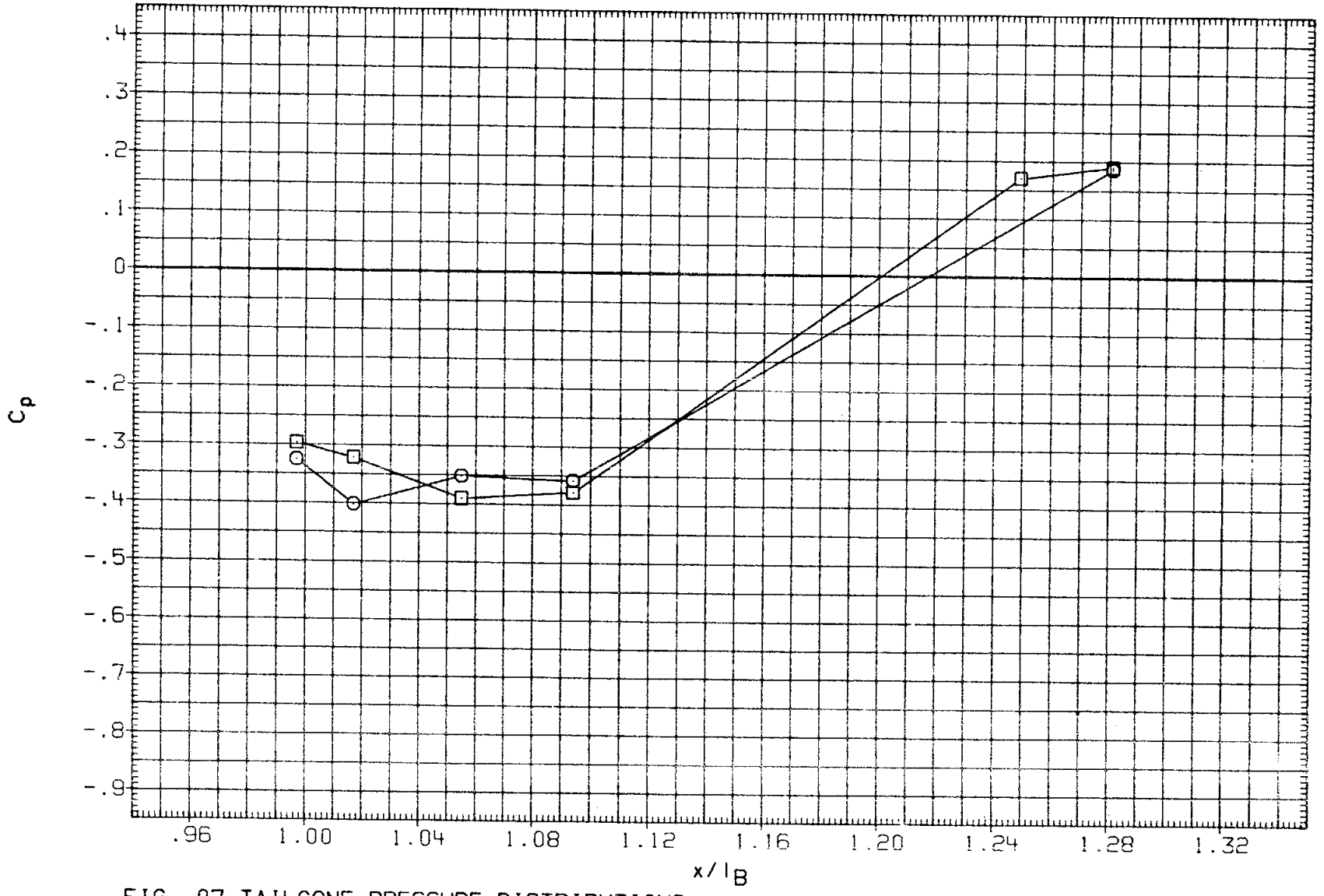

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	6.547	5.490
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
▷	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

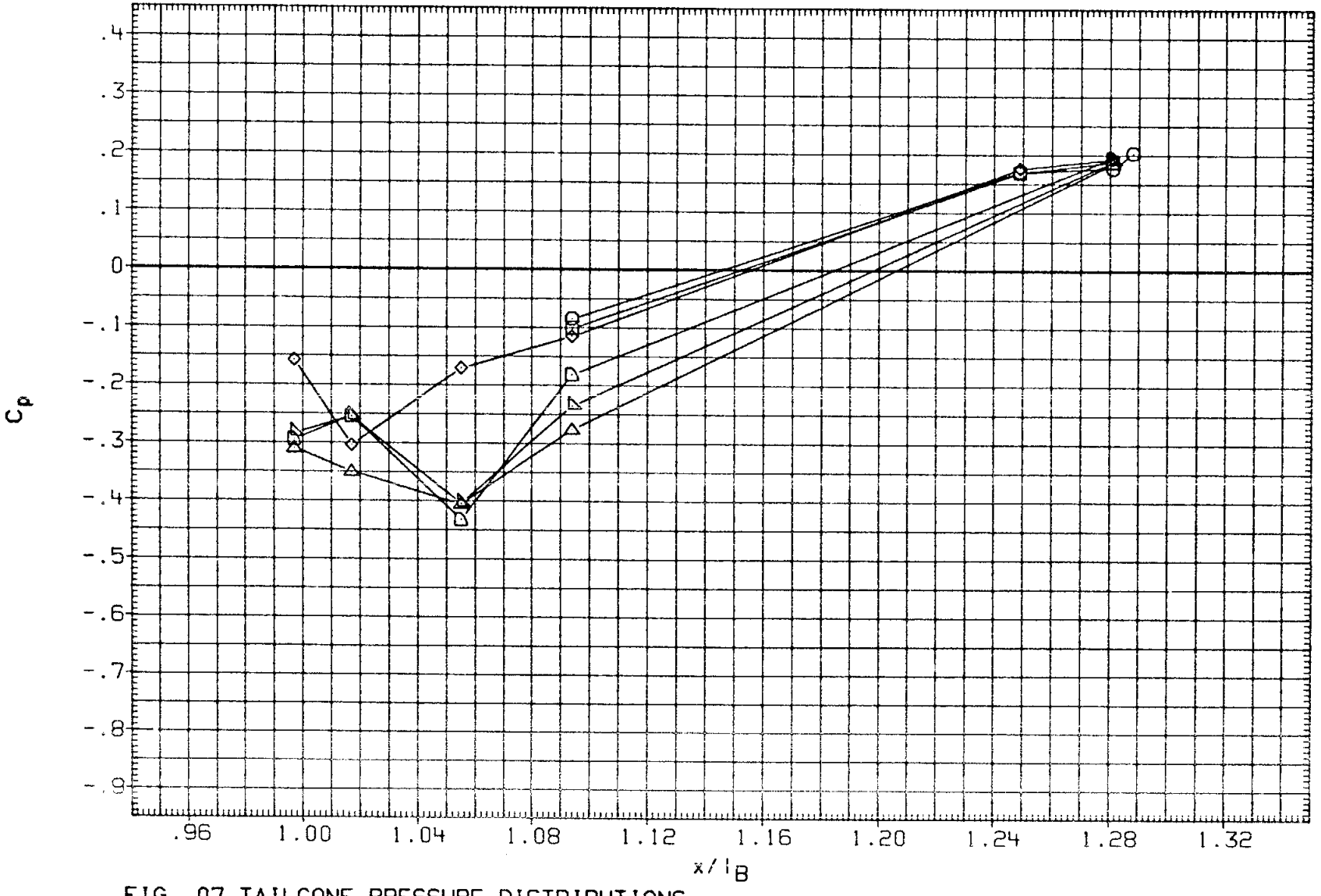

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(0A173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	6.547	5.490
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

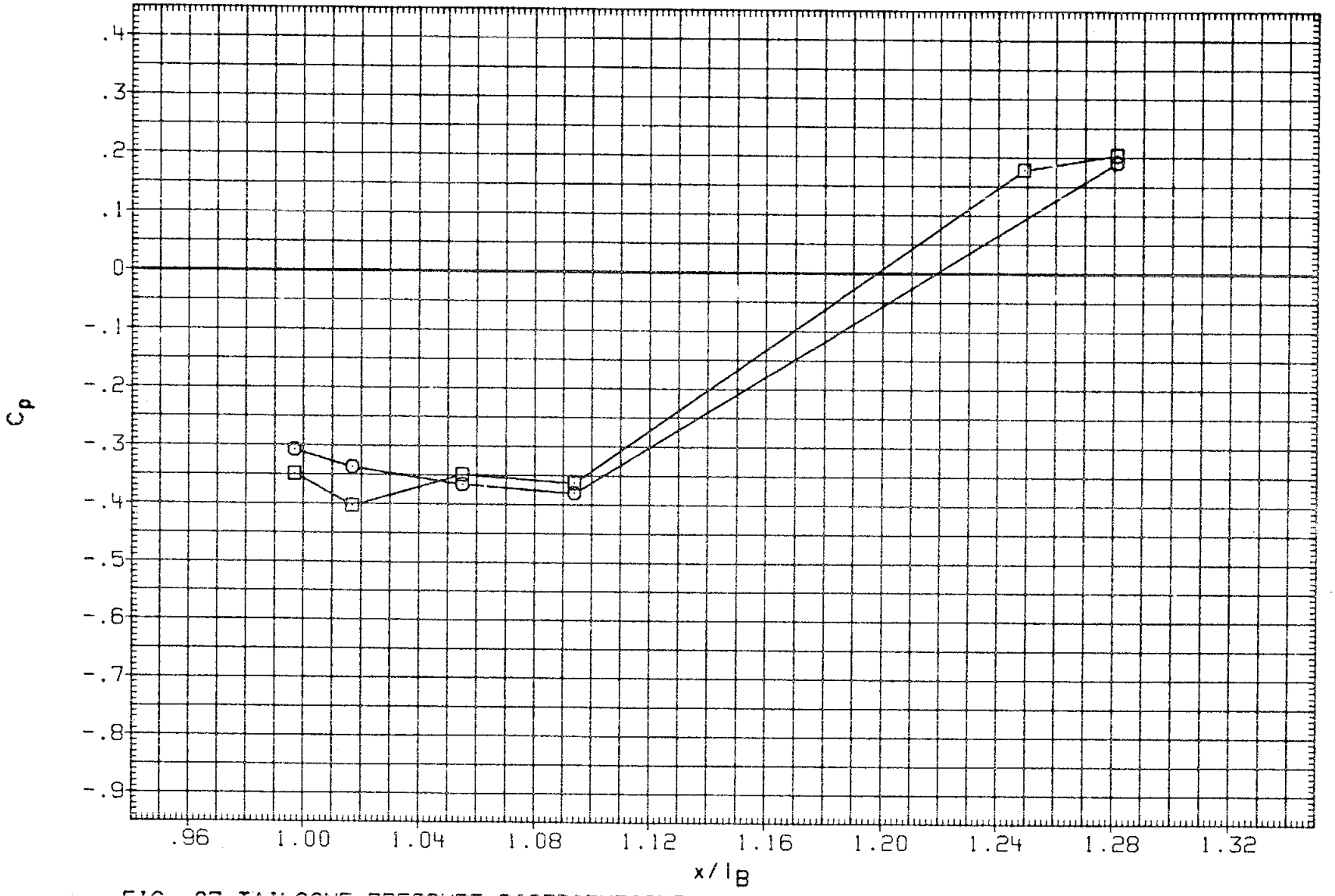

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	8.834	5.464
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

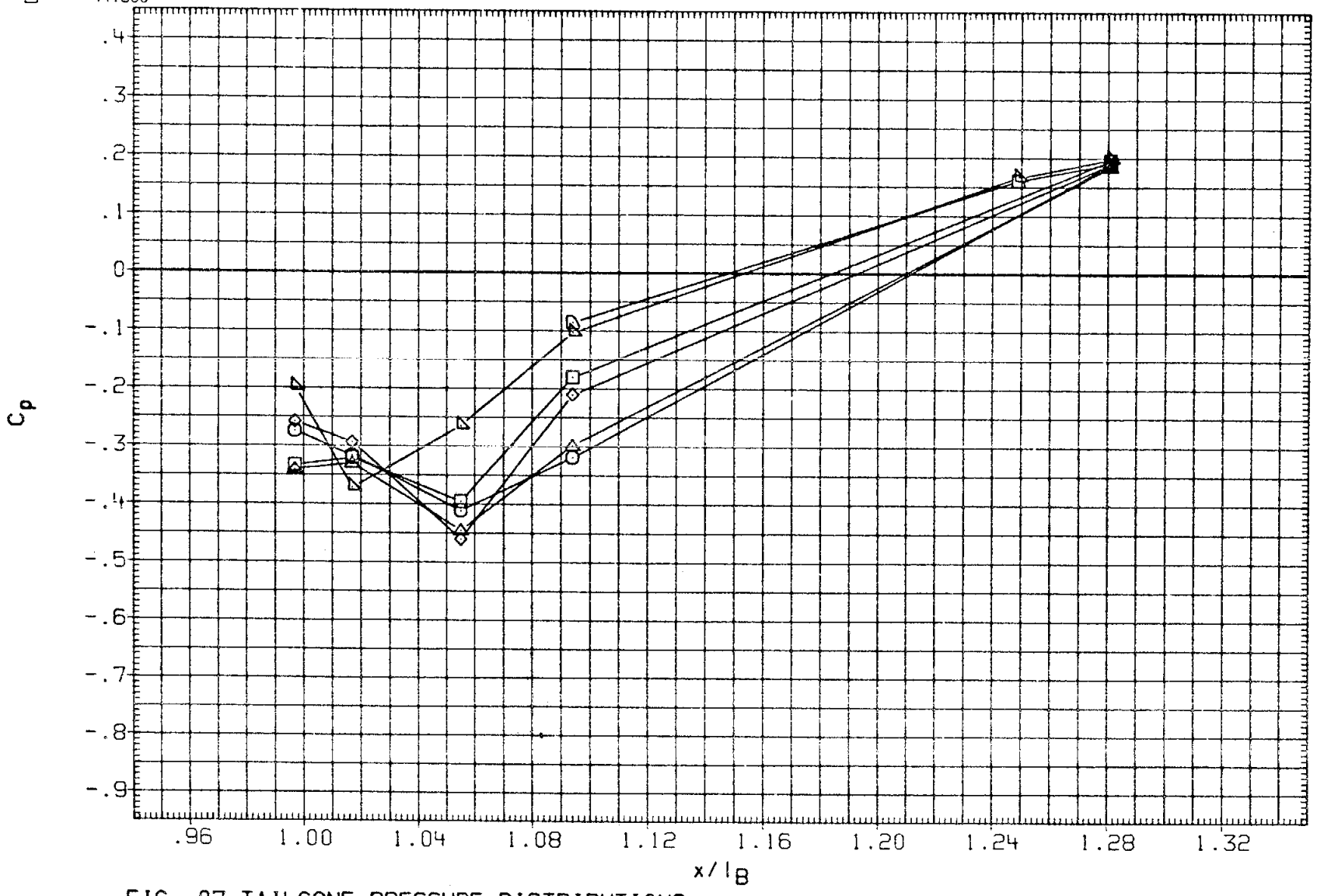

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

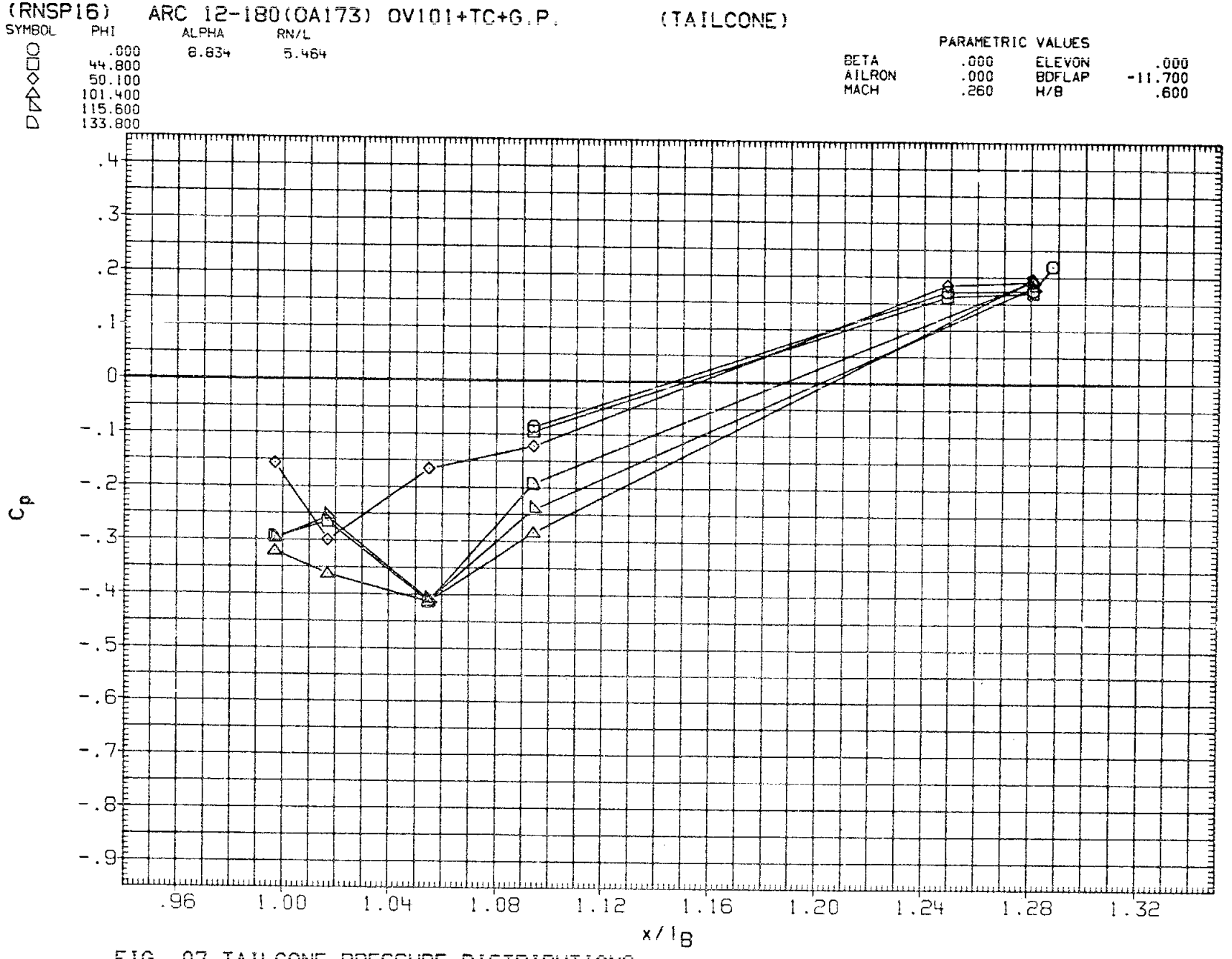

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	8.834	5.464
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

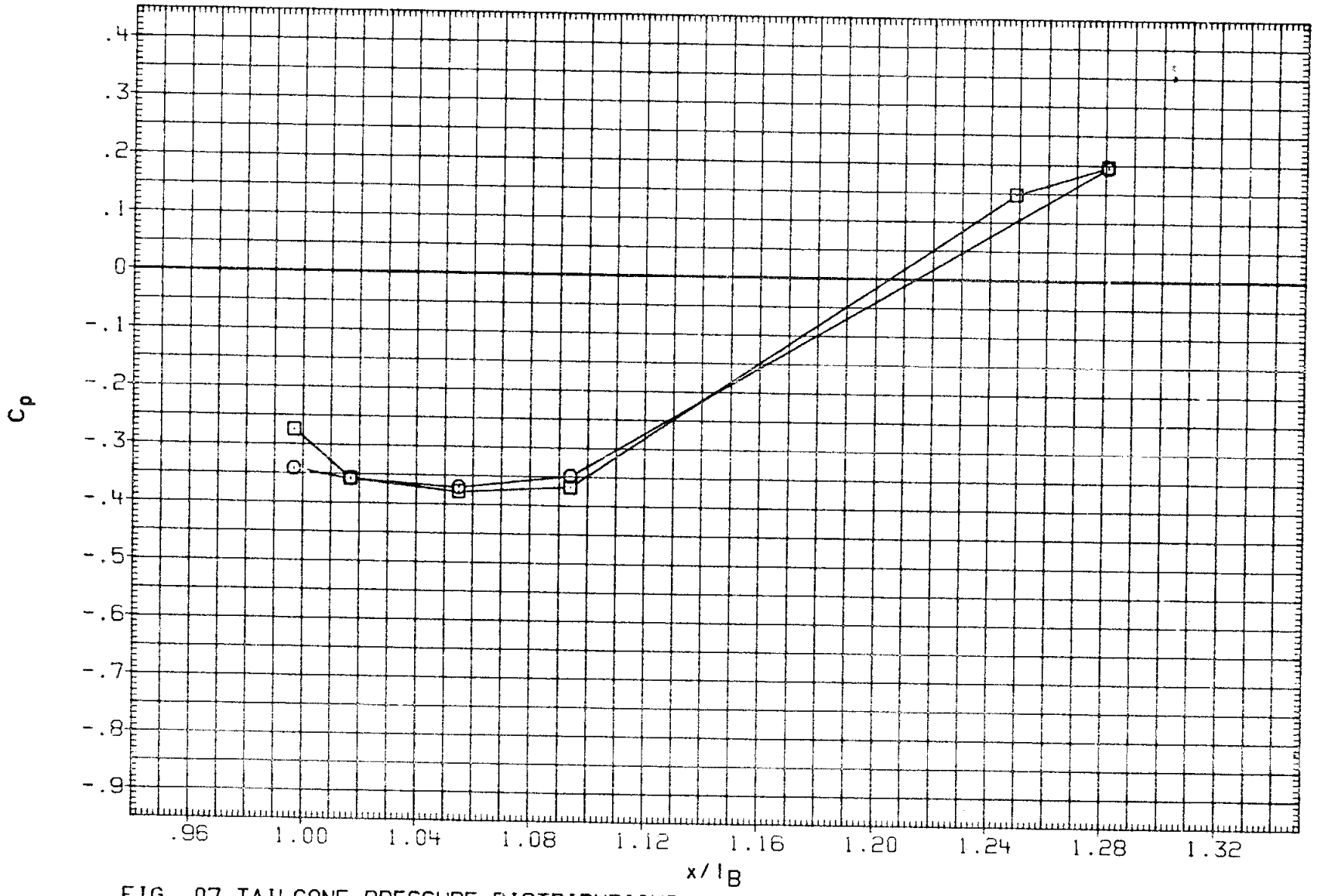

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(0A173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	10.943	5.453
□	-133.800		
◇	-115.000		
◁	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

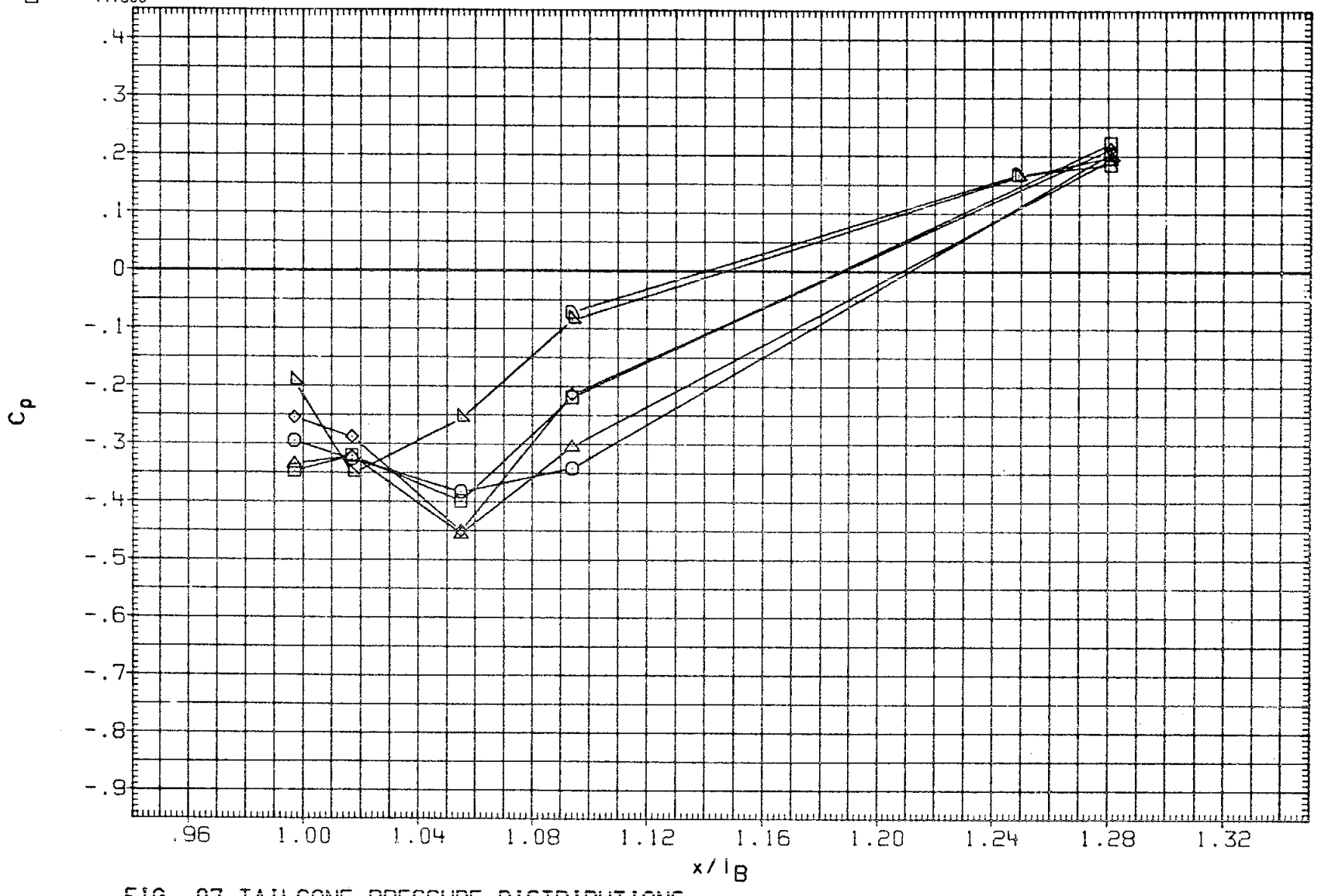

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	10.943	5.453
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
▷	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

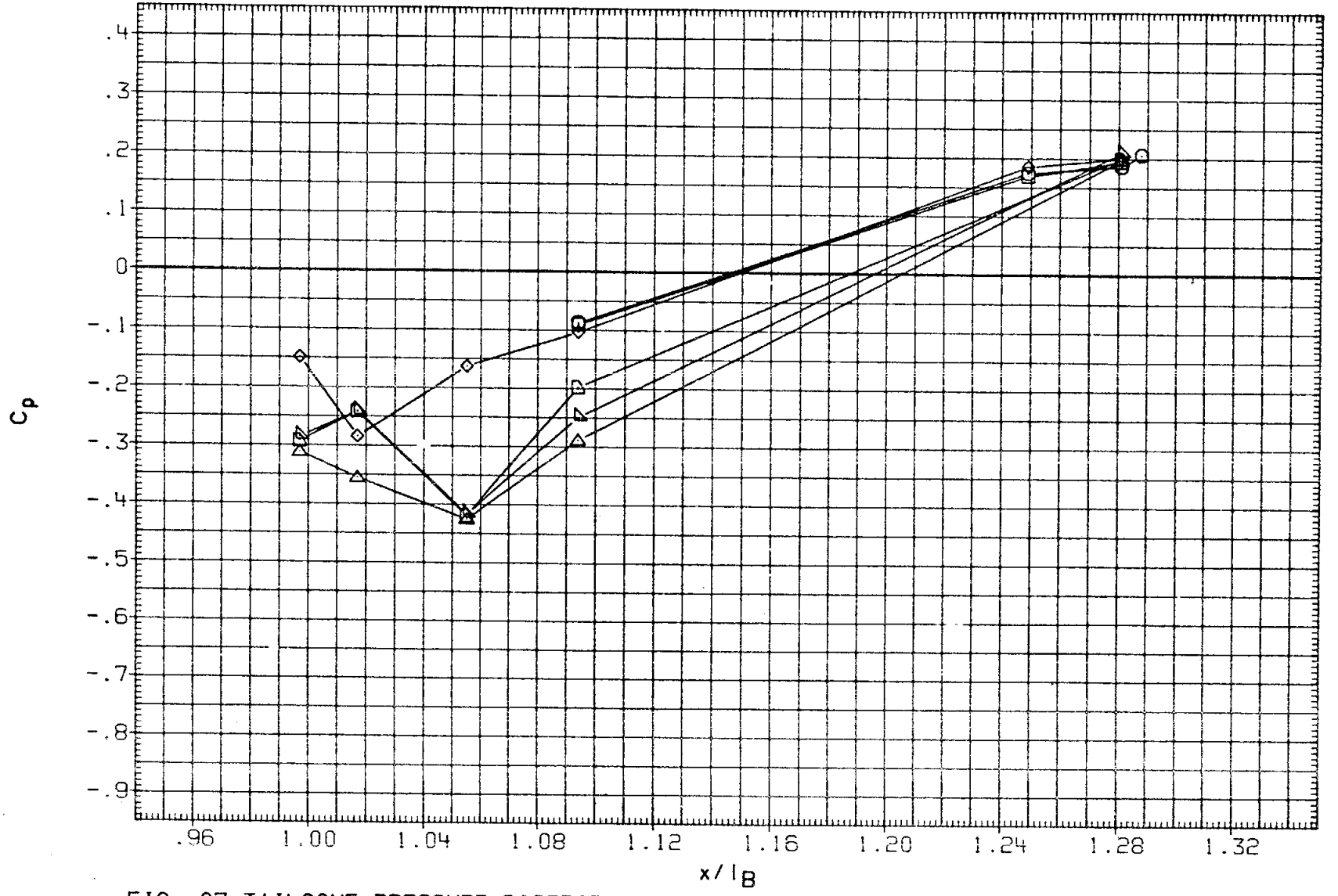

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	10.943	5.453
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

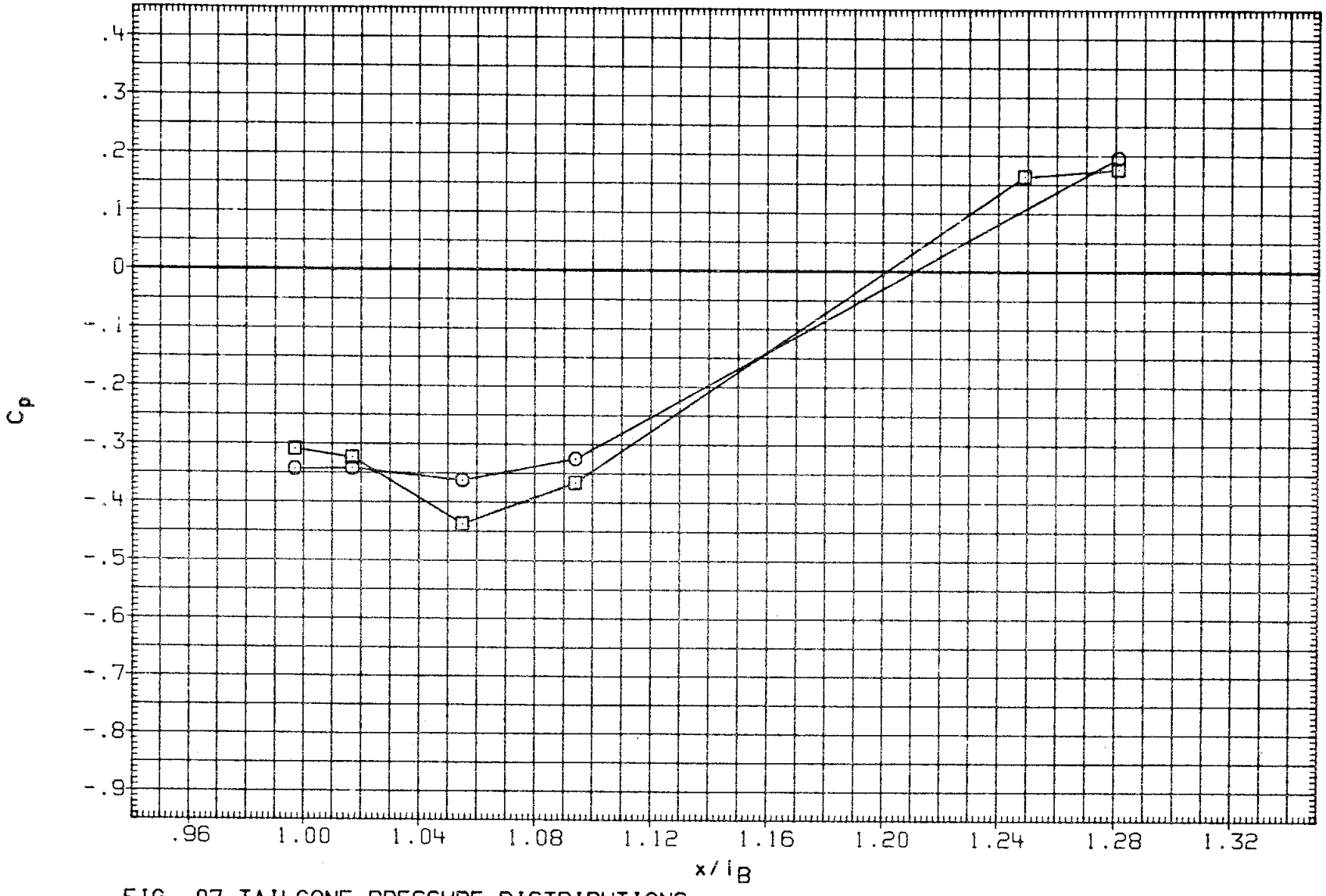

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(0A173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	13.129	5.435
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

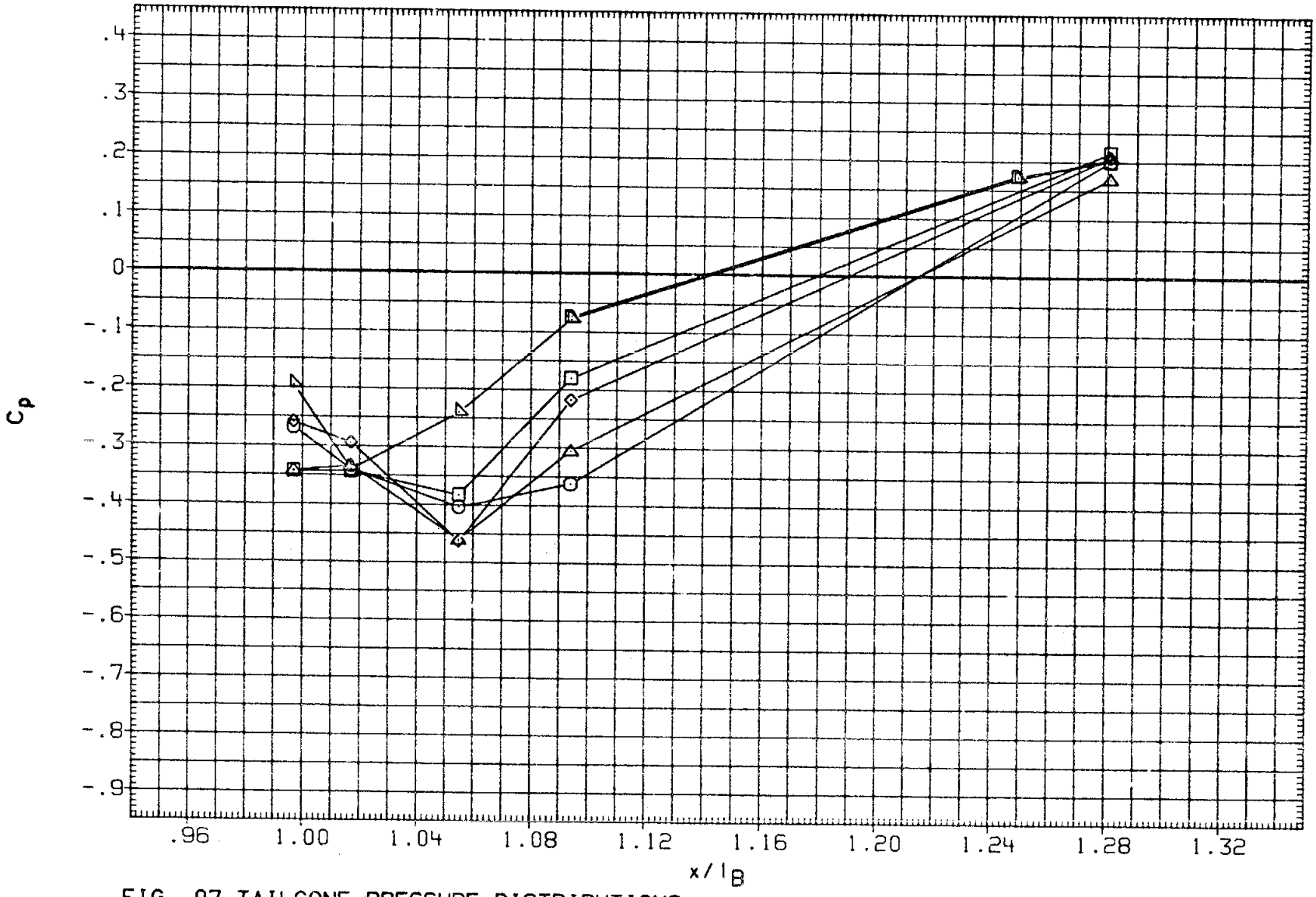

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

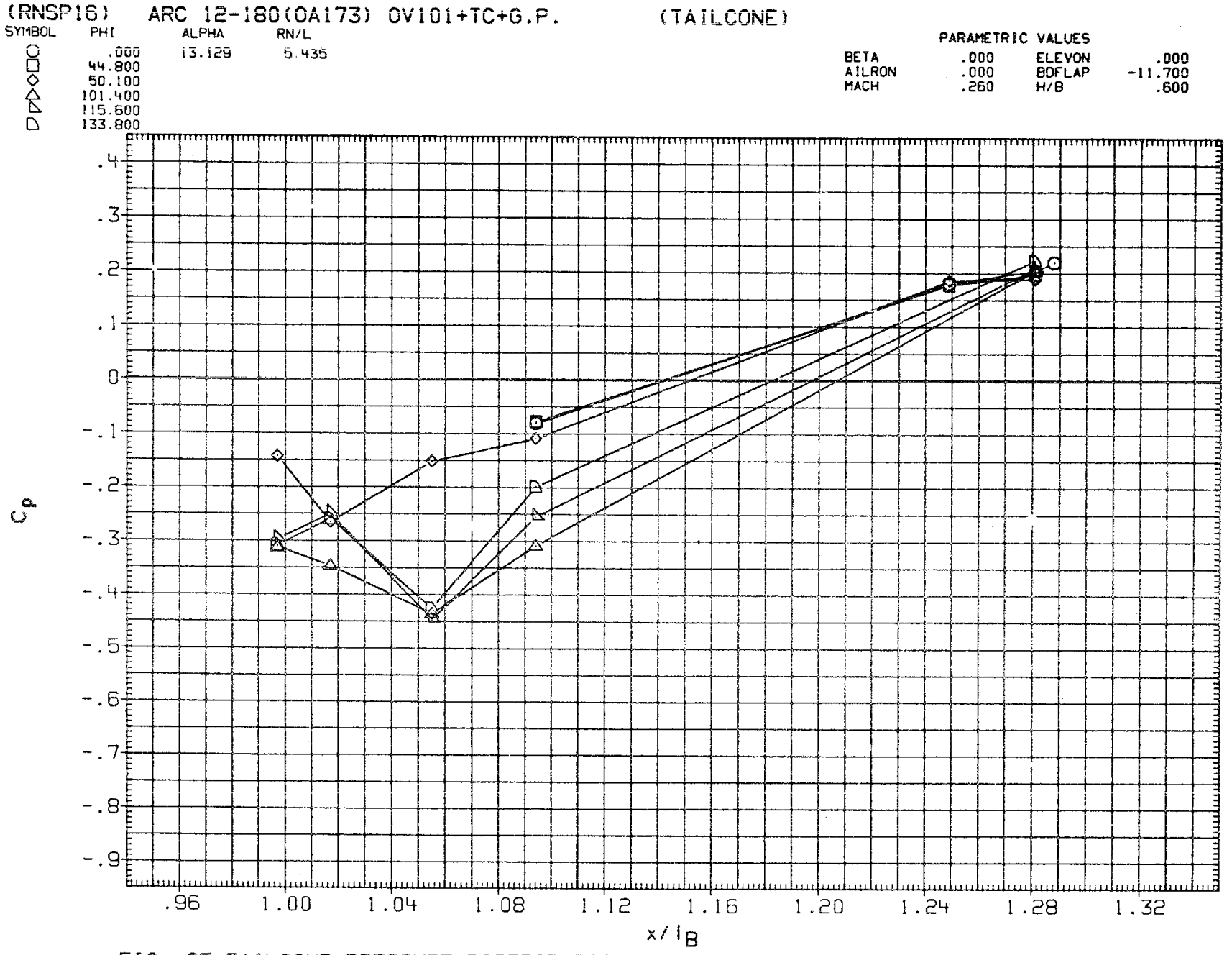

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(0A173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	13.129	5.435
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

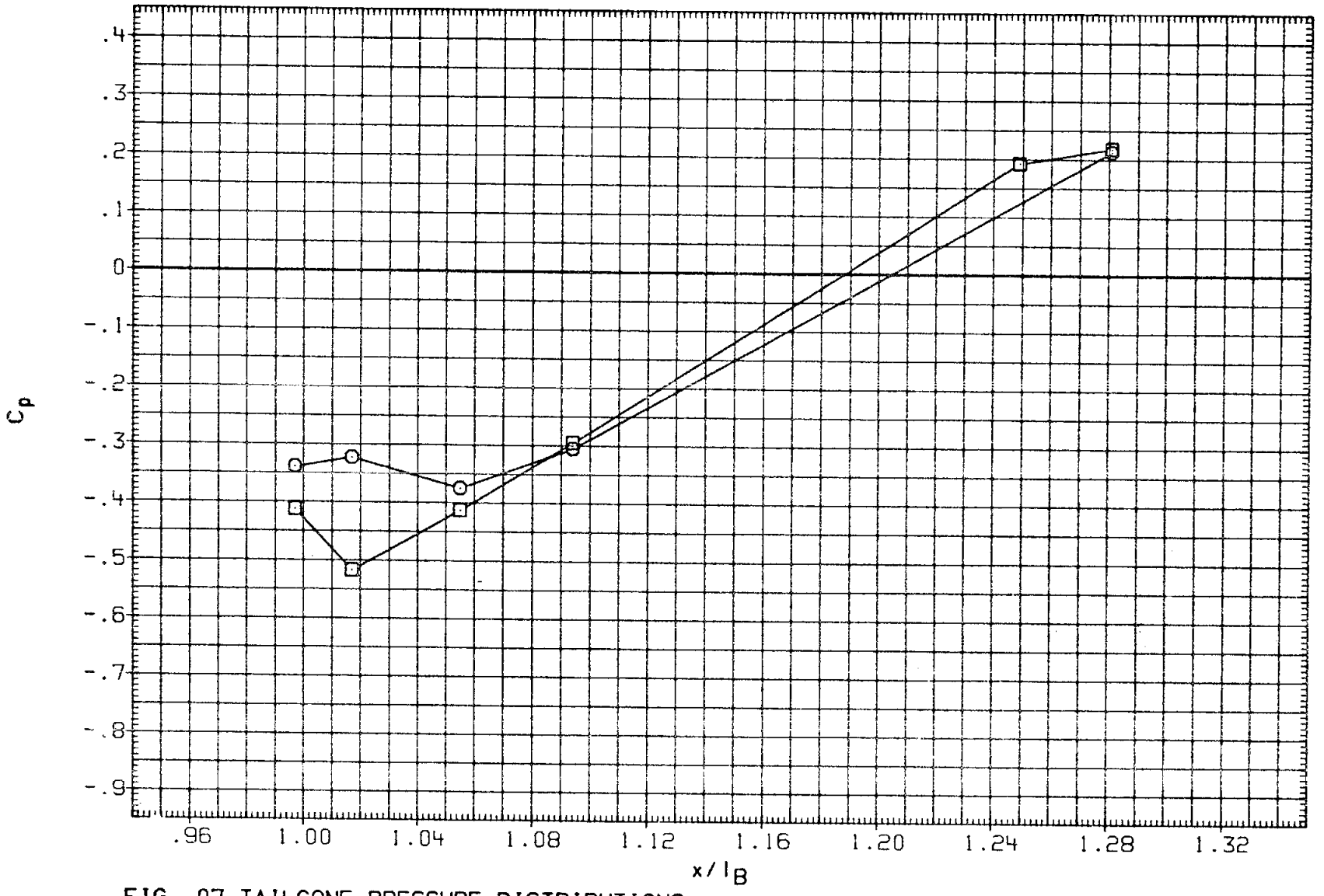

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

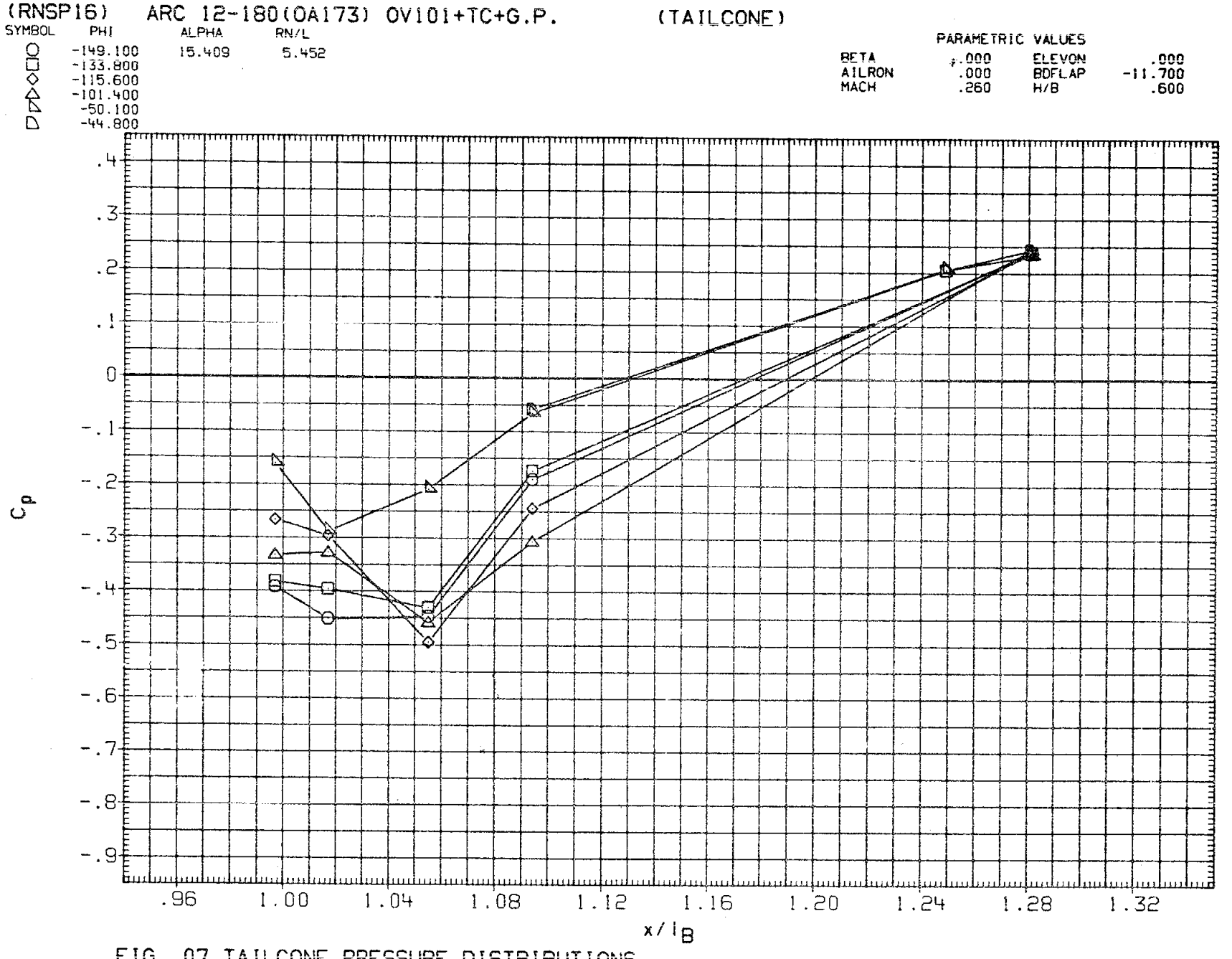

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

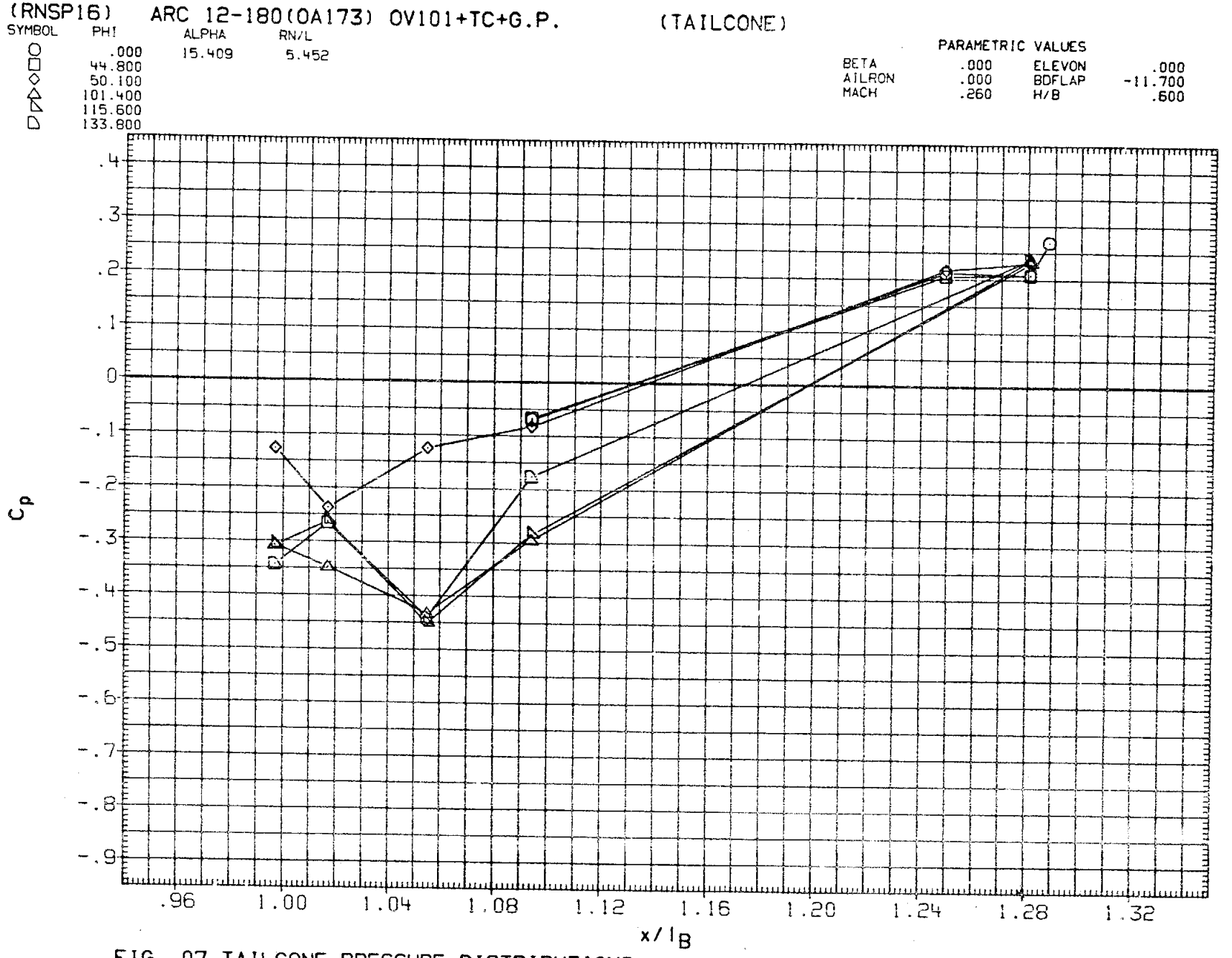

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	15.409	5.452
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

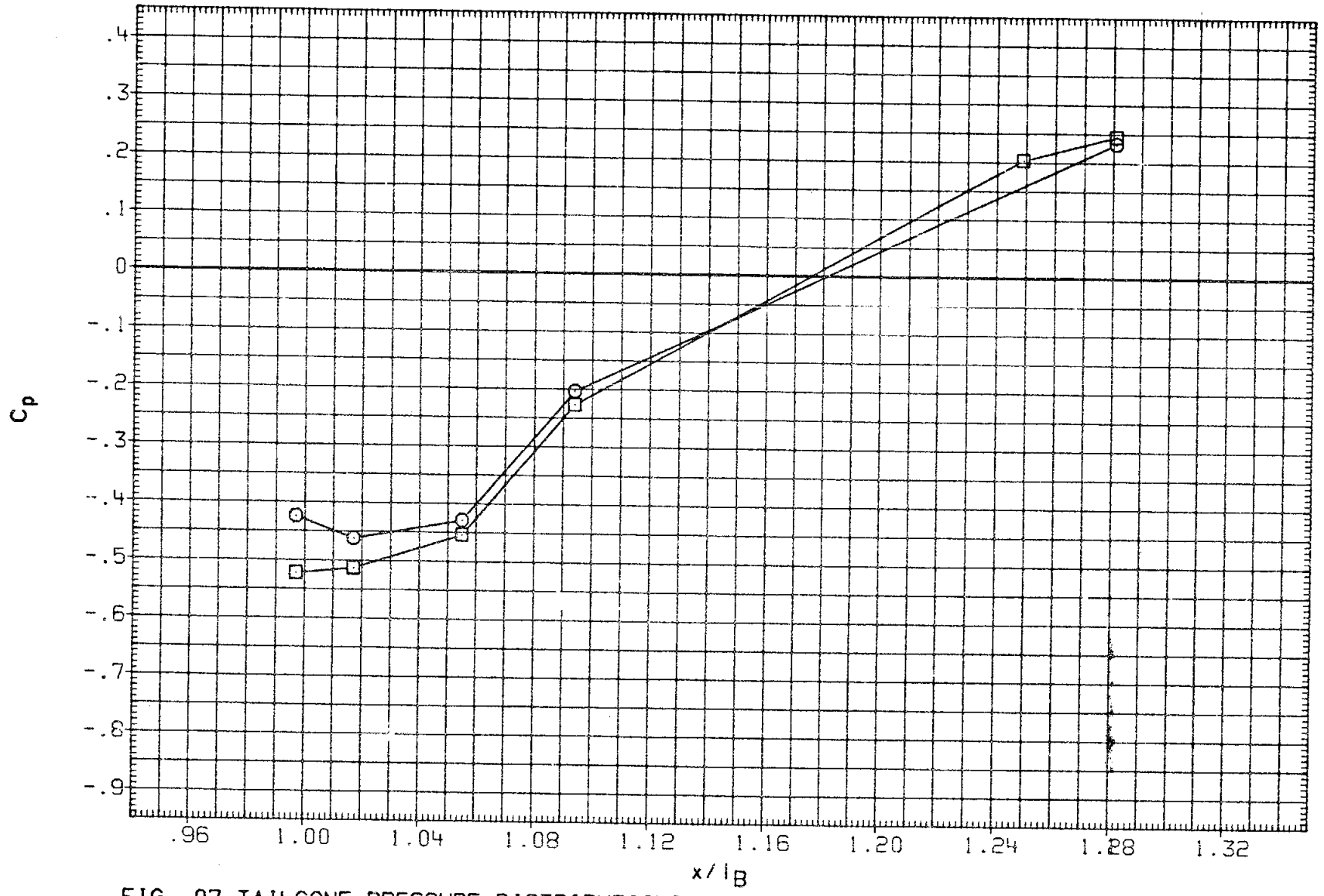

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	16.478	5.451
□	-133.800		
◇	-115.600		
△	-101.400		
◺	-50.100		
◸	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

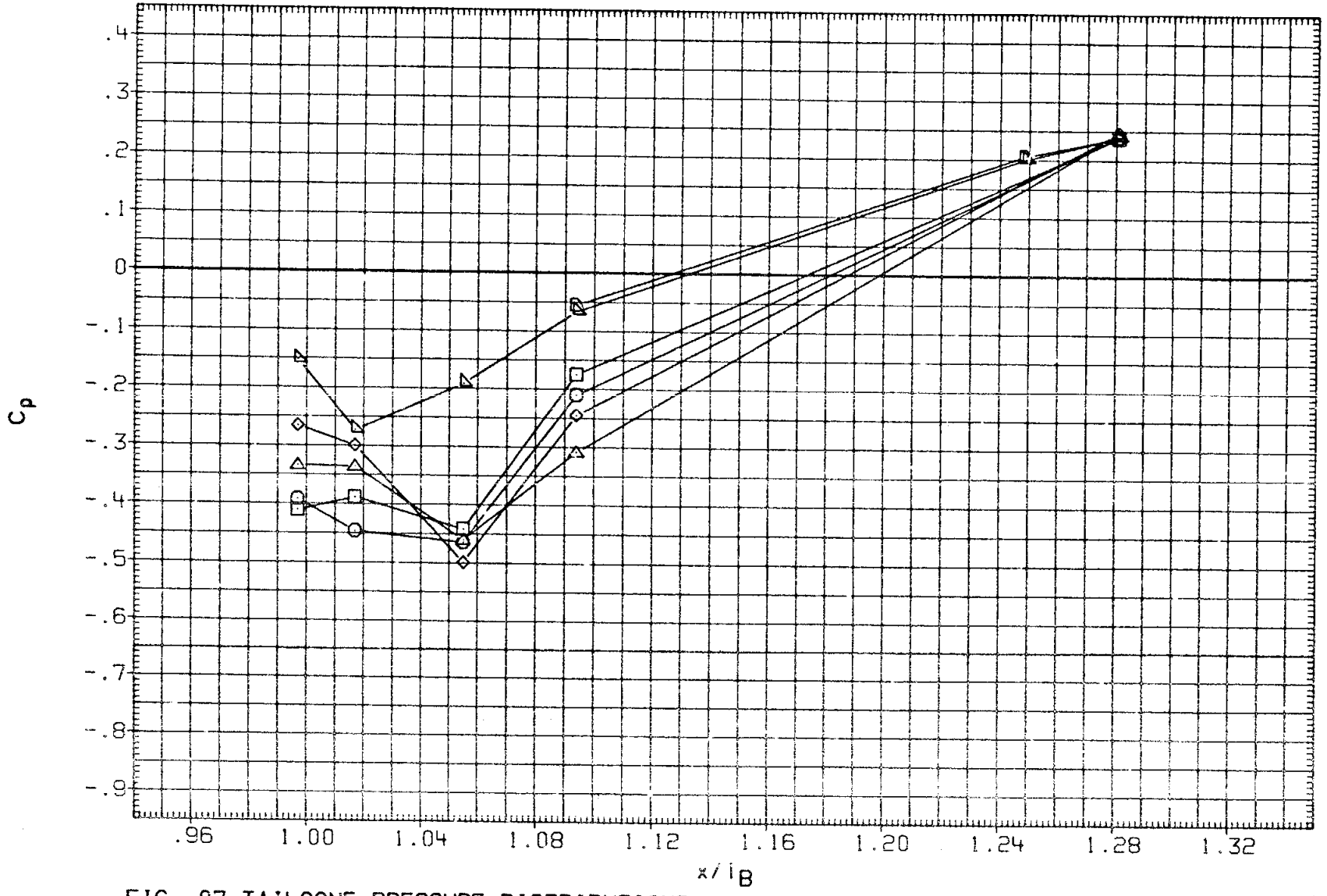

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	16.478	5.451
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
D	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

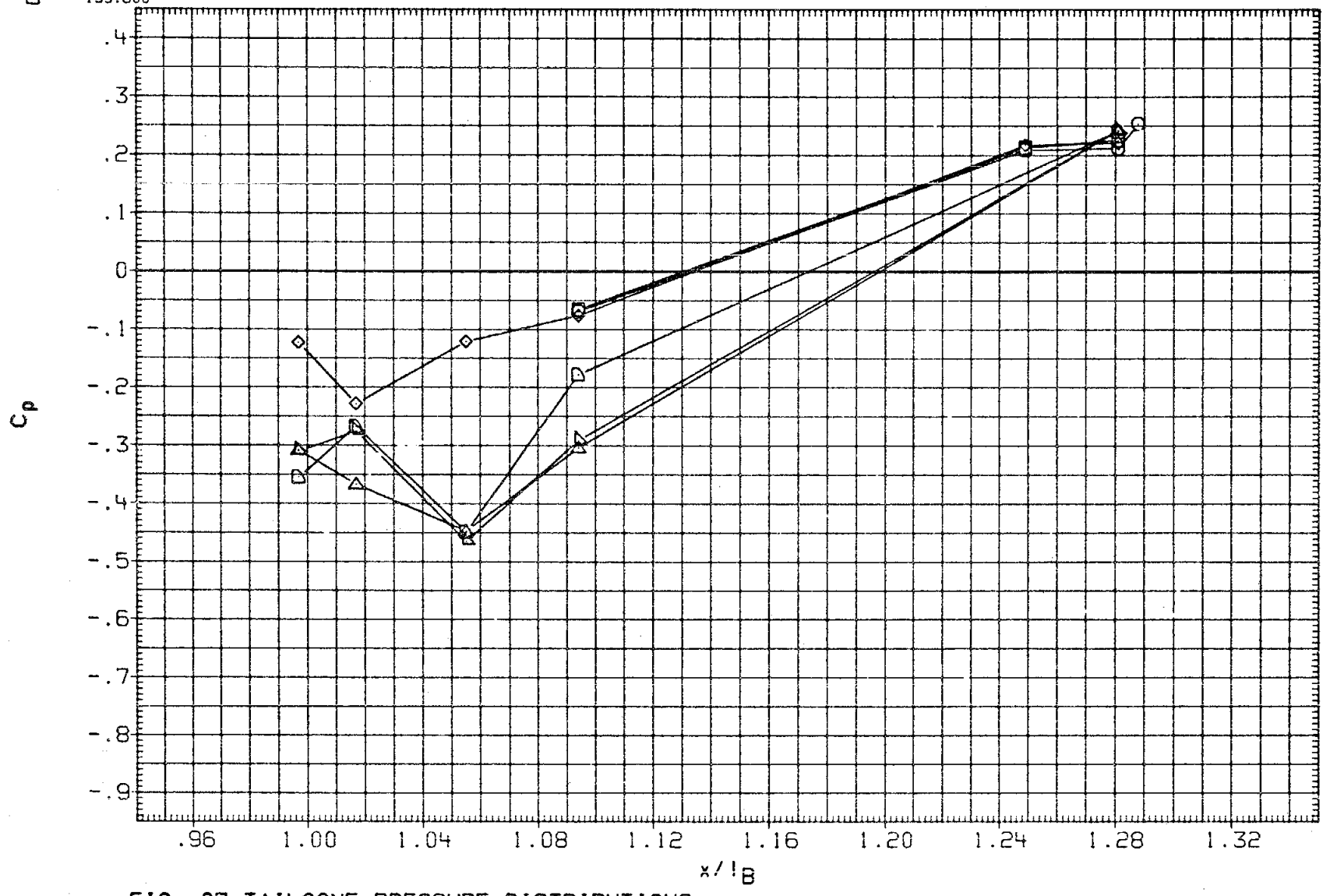

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	16.478	5.451
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

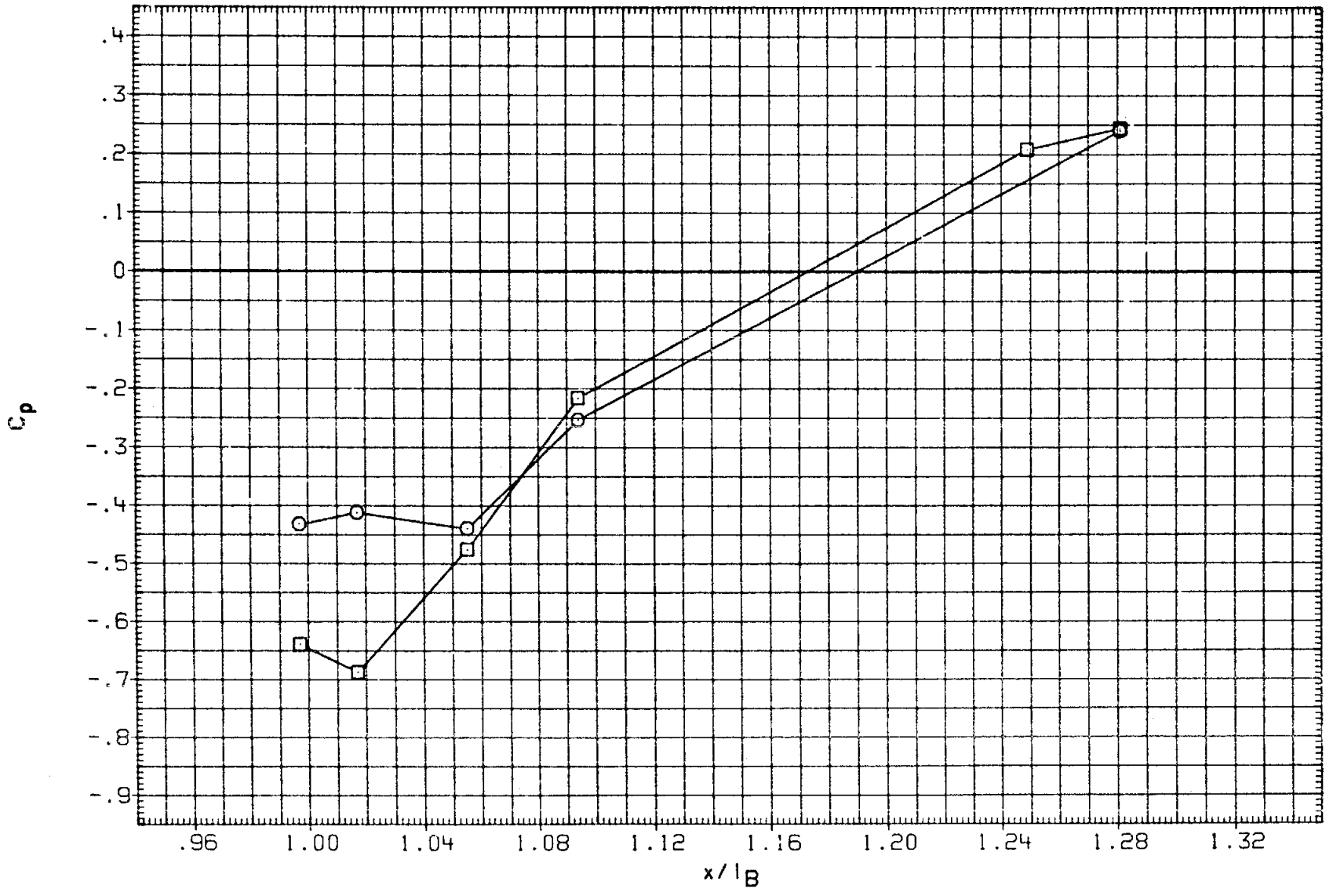

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

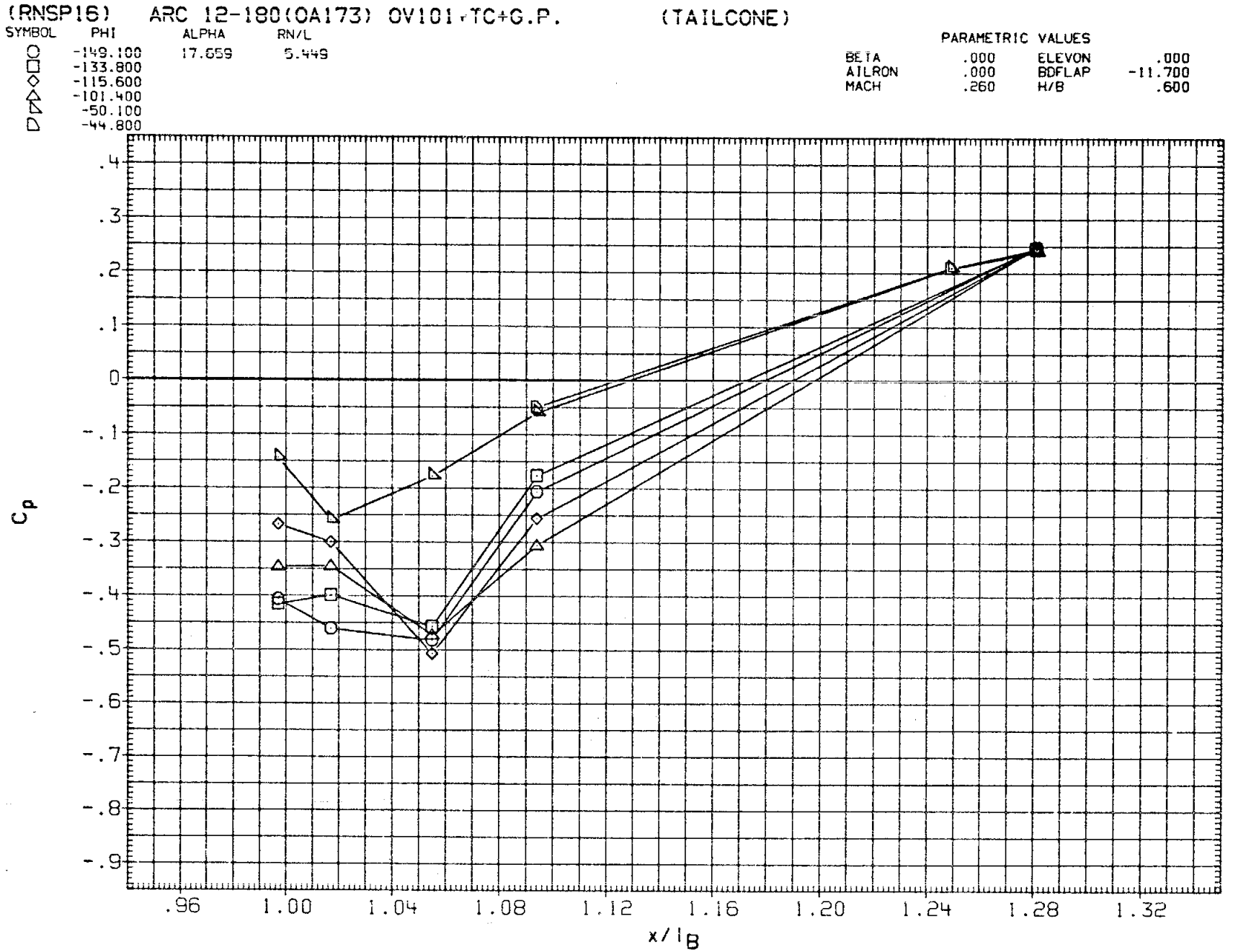

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

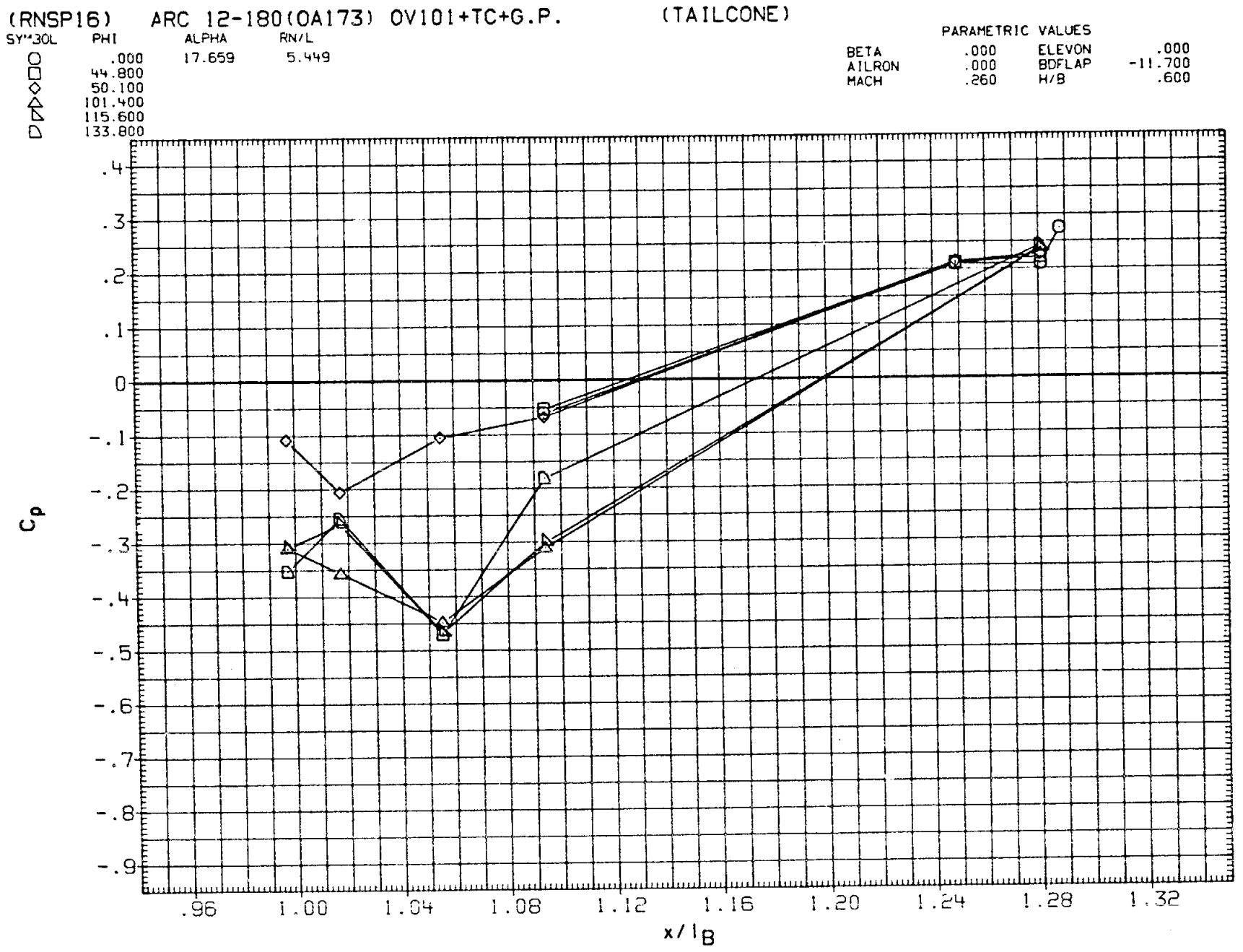

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	17.659	5.449
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

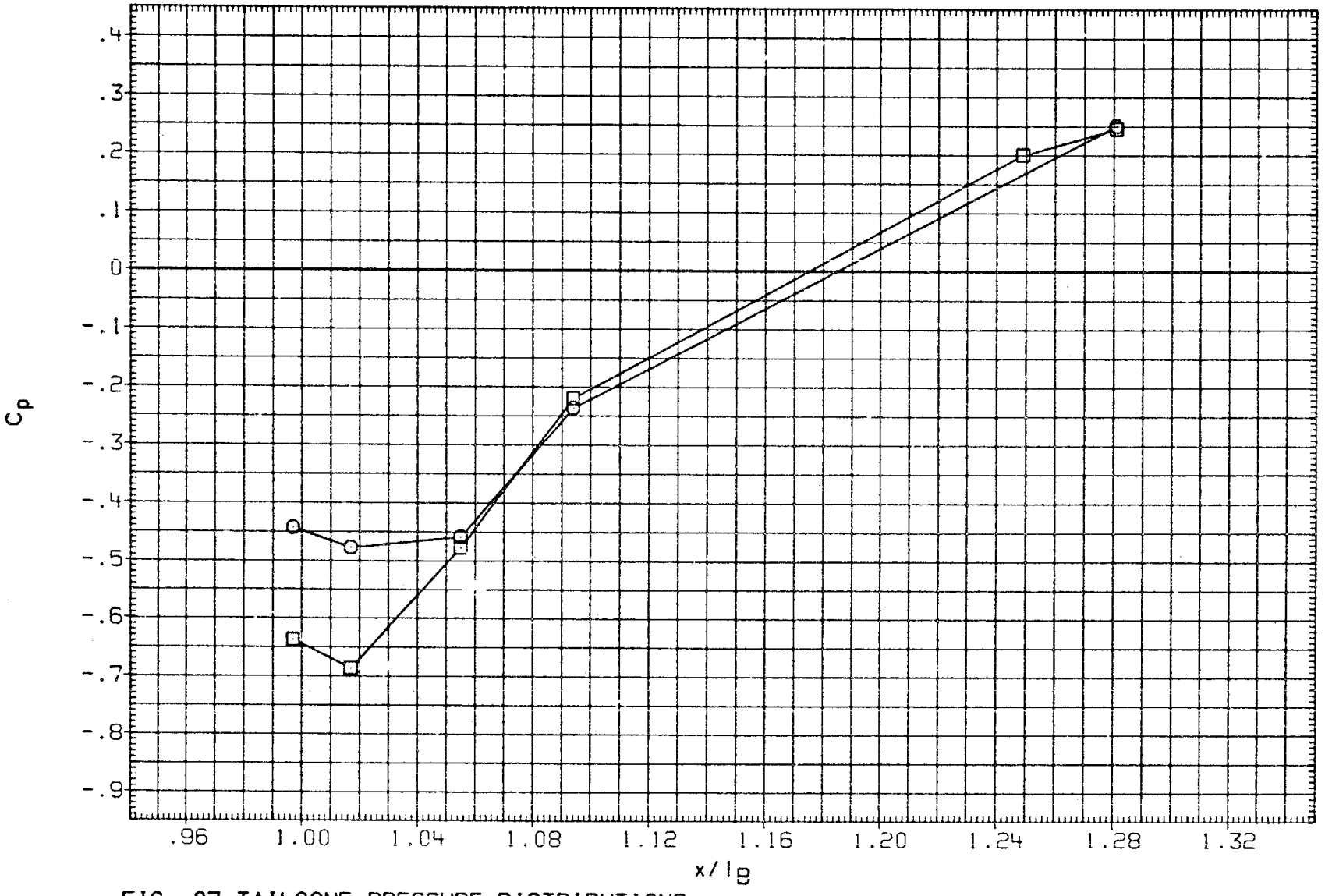

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	.554	7.979
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

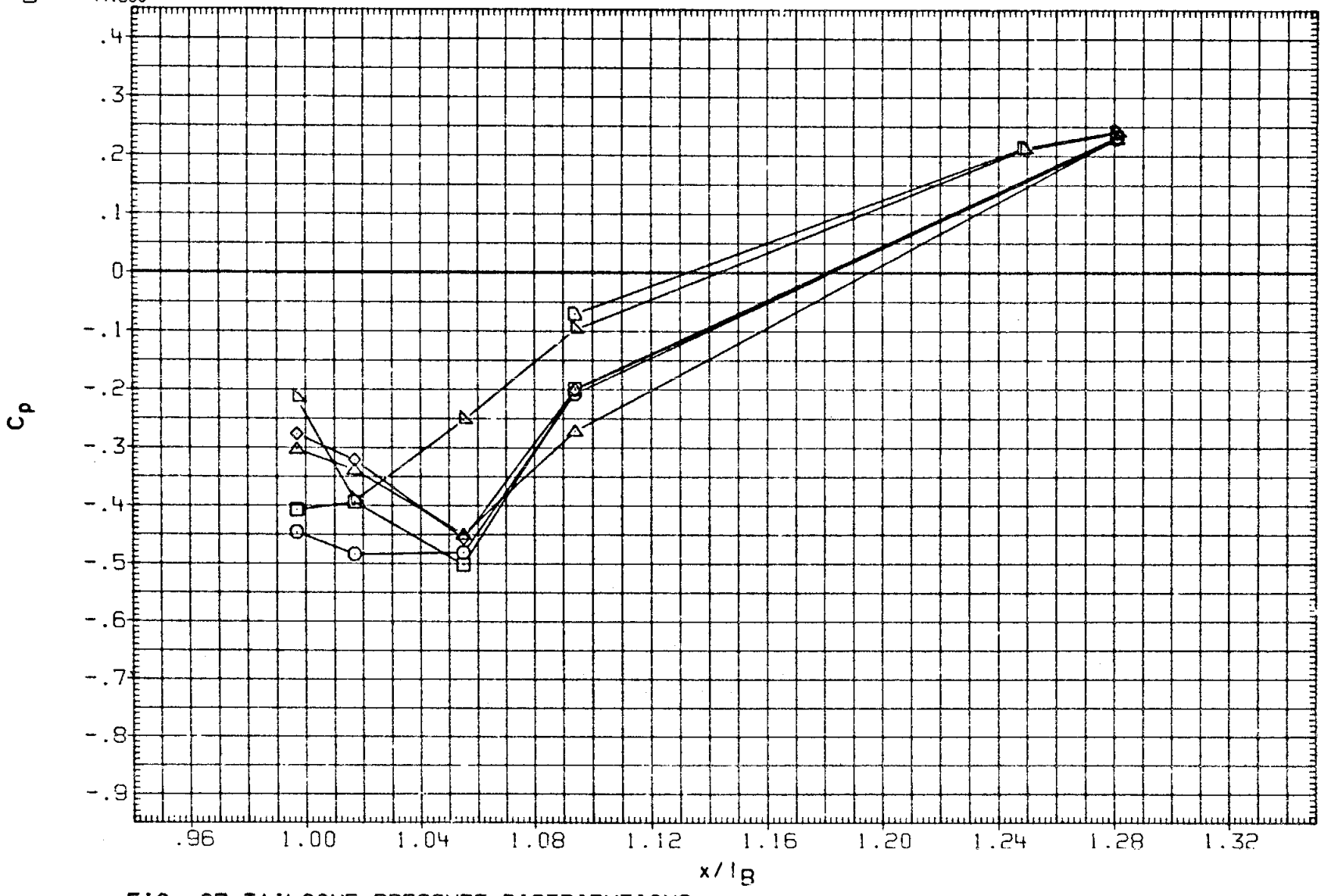

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

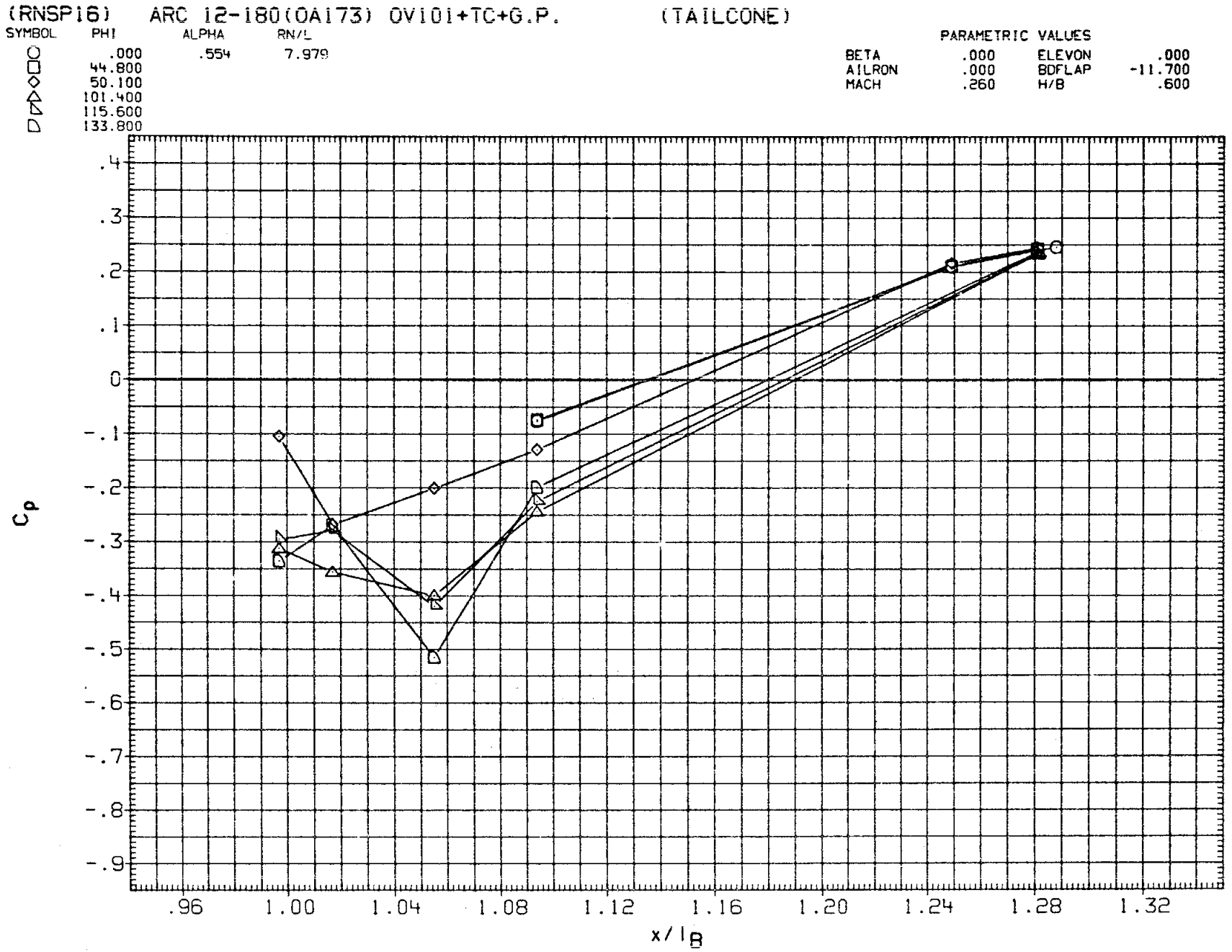

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	.554	7.979
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

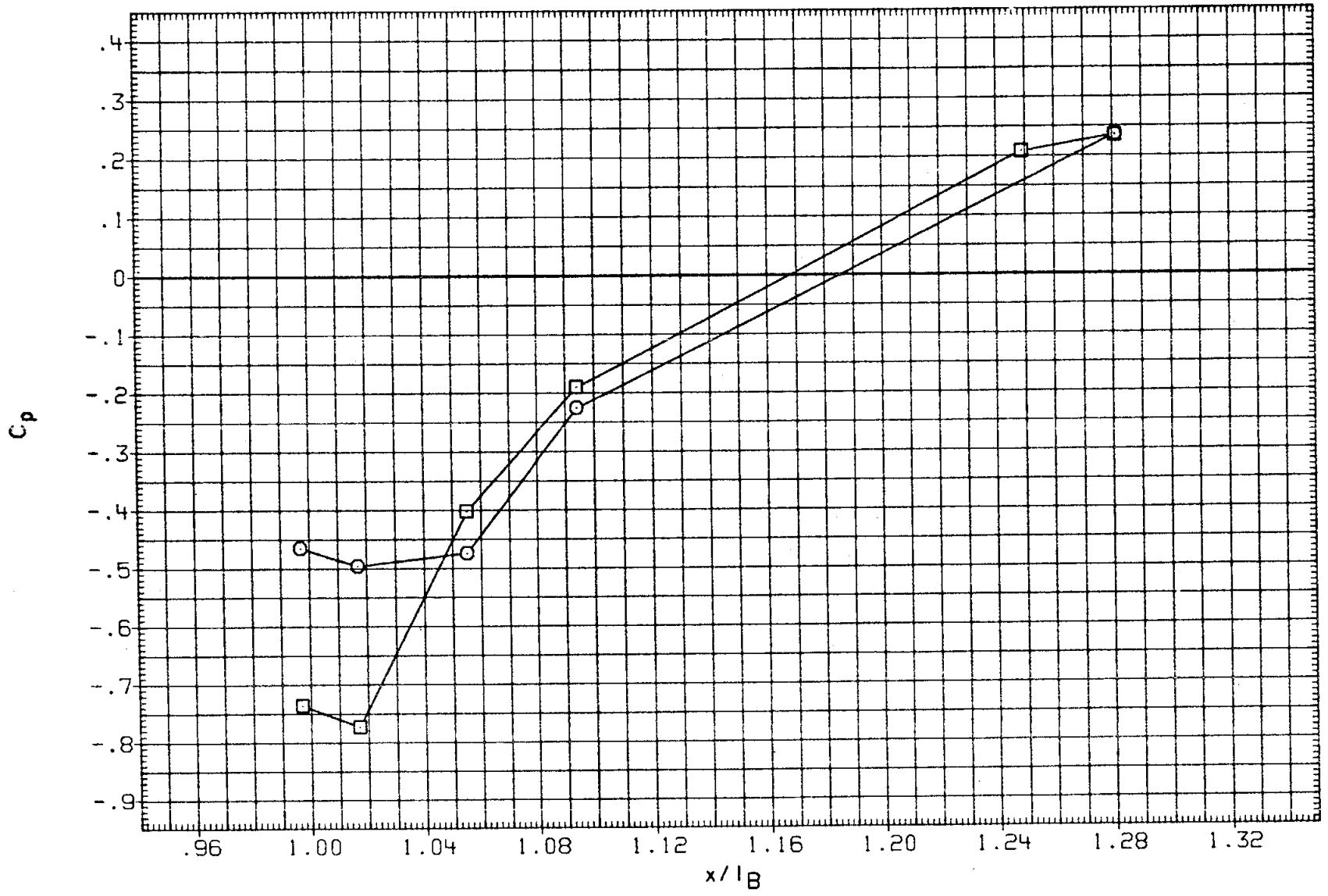

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

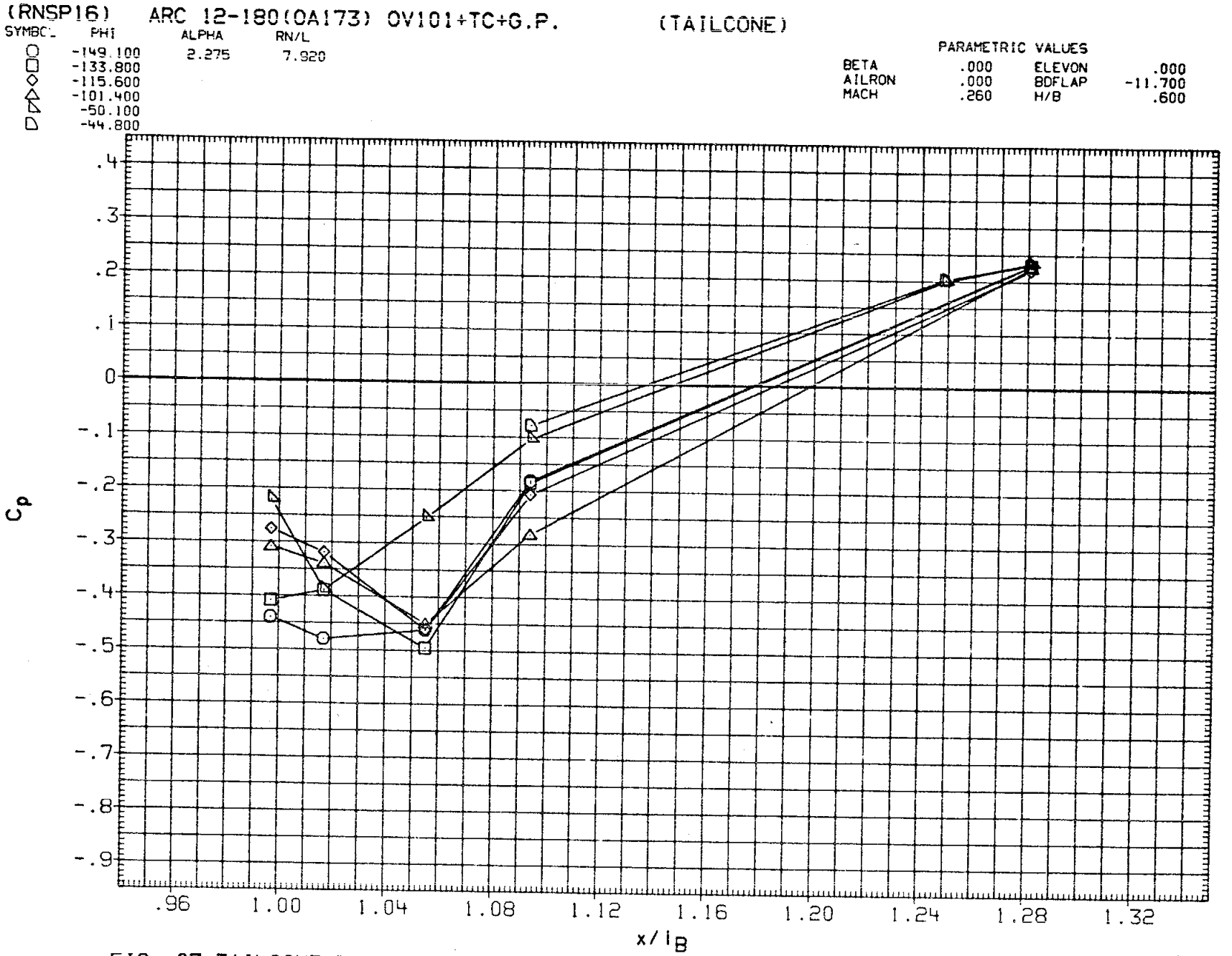

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	2.275	7.920
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
▷	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

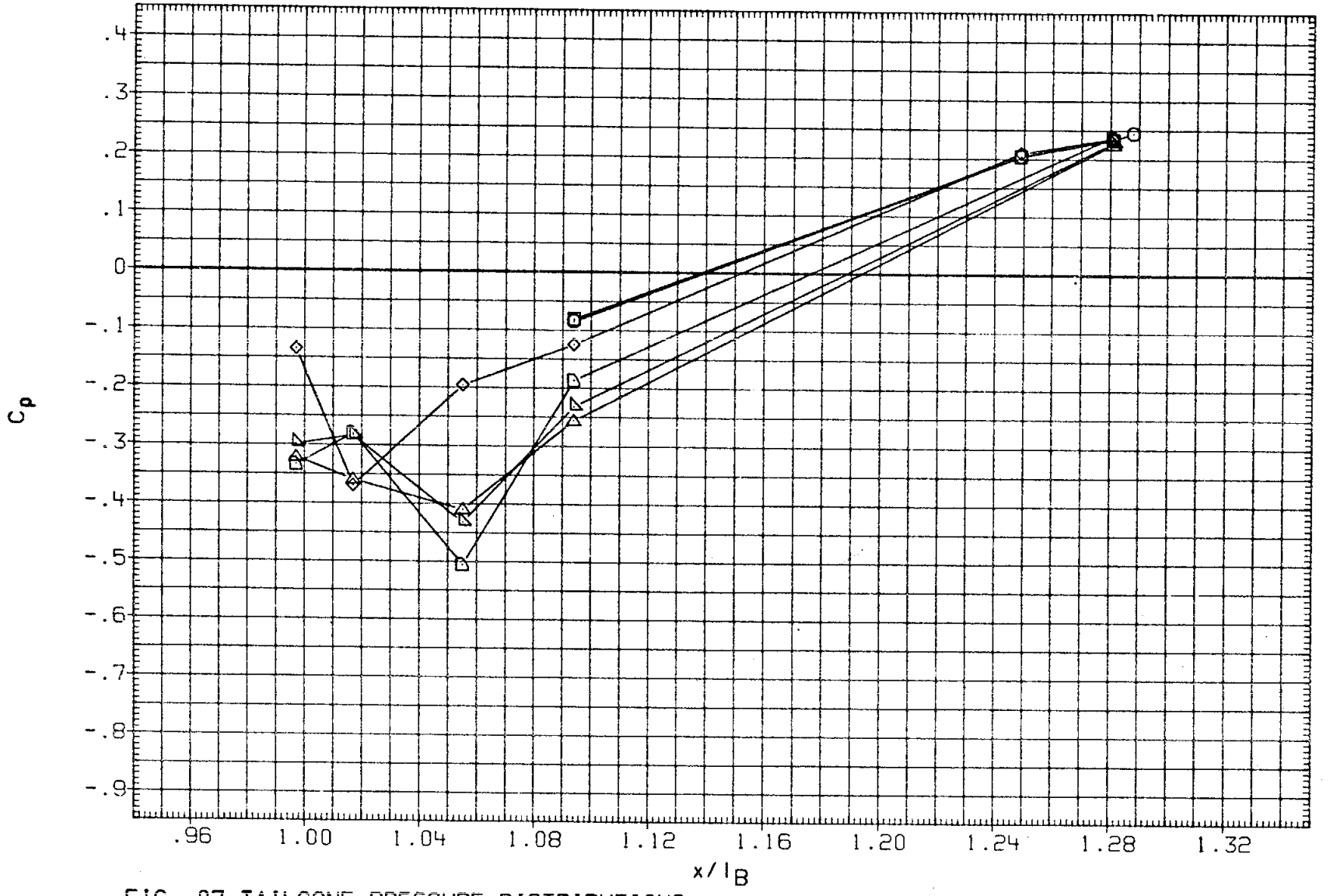

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	2.275	7.920
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

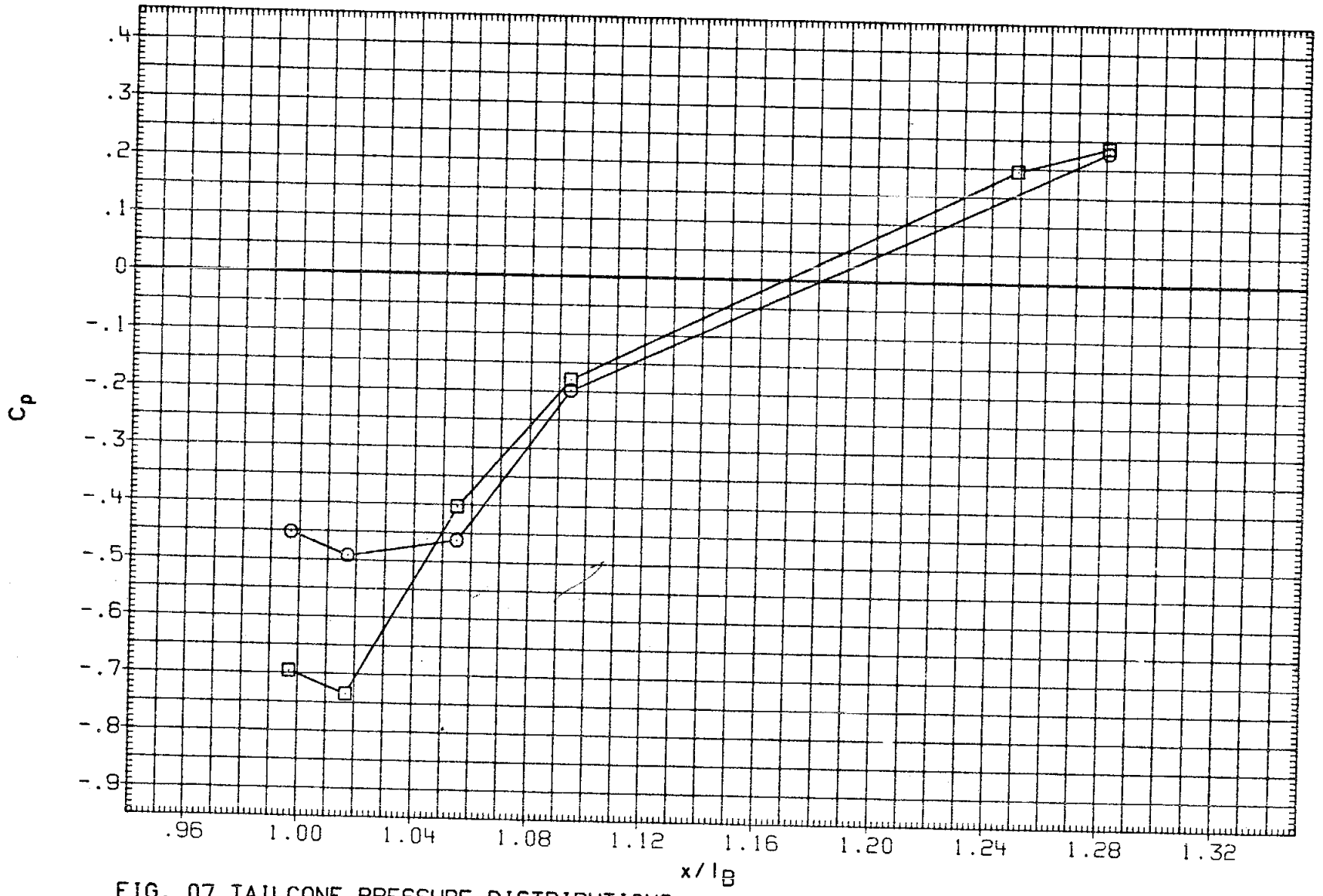

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	4.543	7.935
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

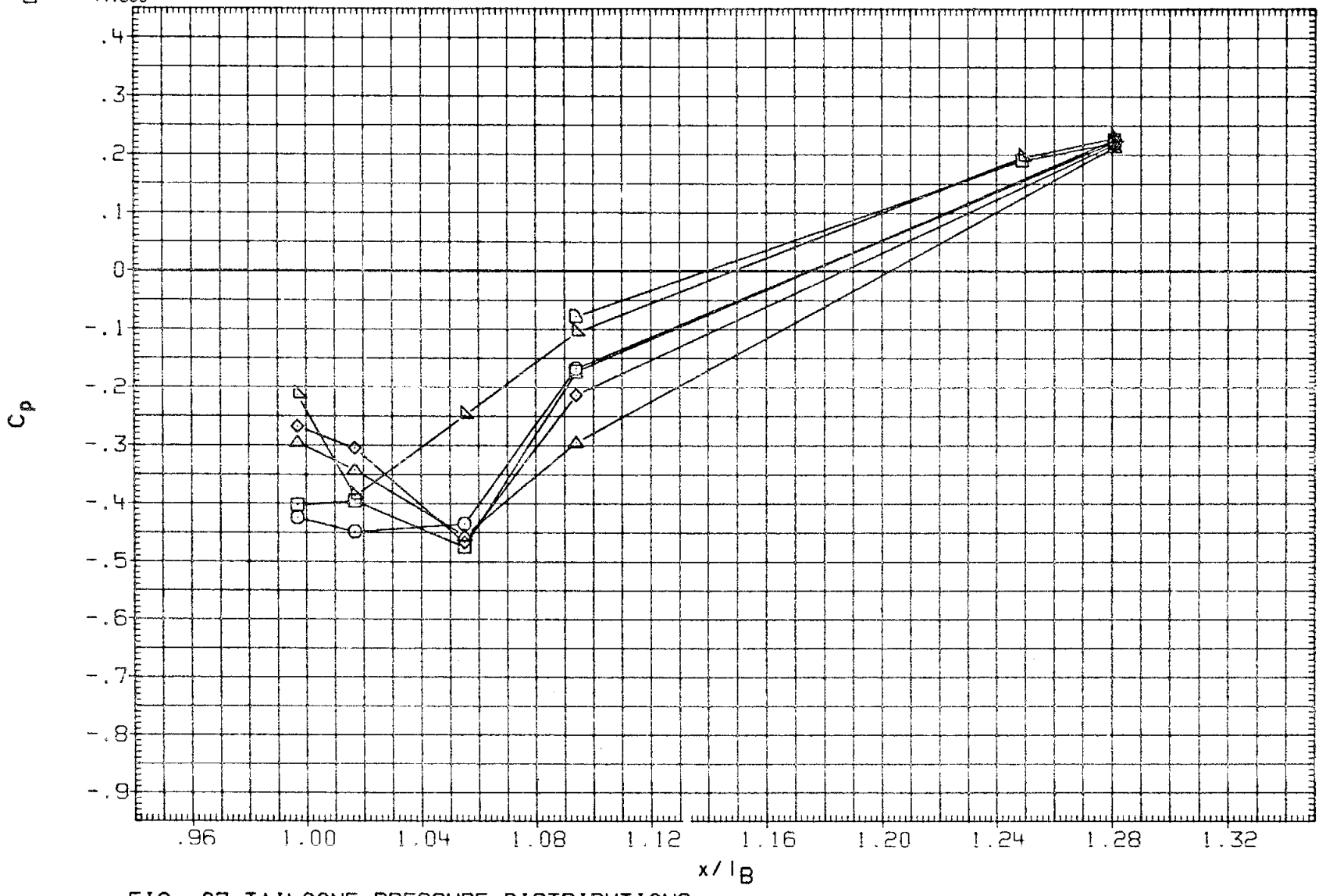

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	4.543	7.935
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
▷	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

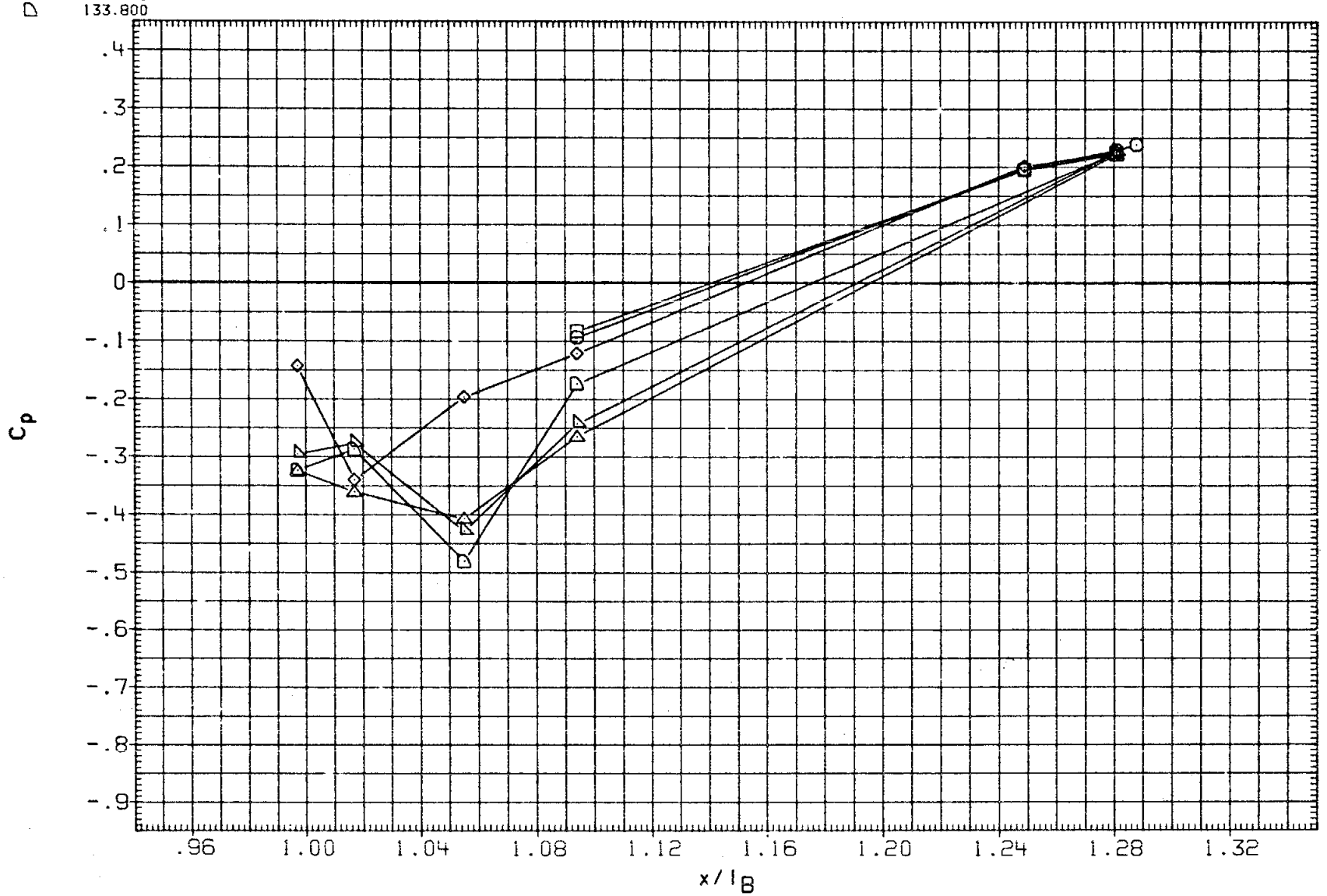

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	4.543	7.935
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

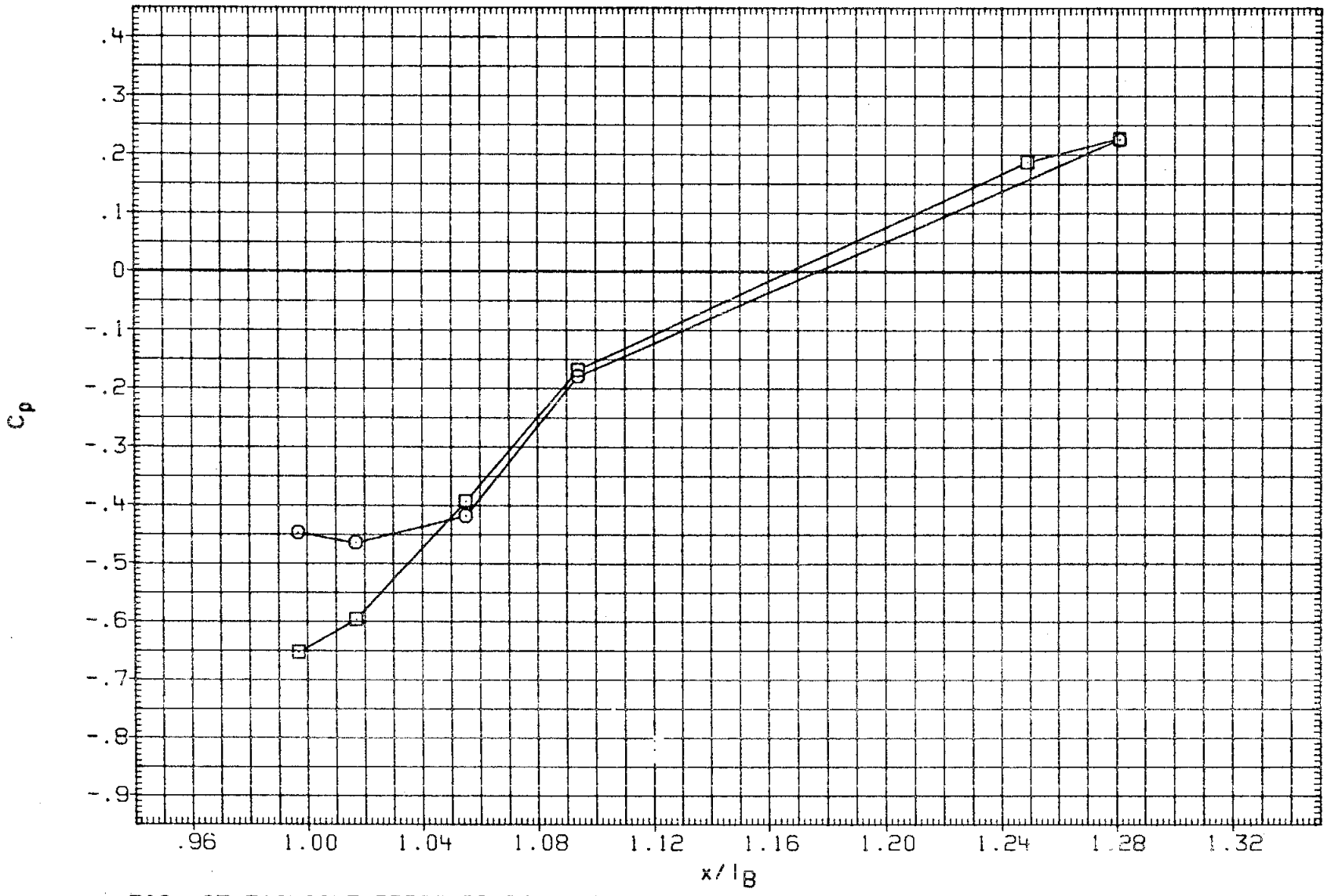

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	6.861	7.937
□	-133.800		
◇	-115.600		
◁	-101.400		
◁	-50.100		
D	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

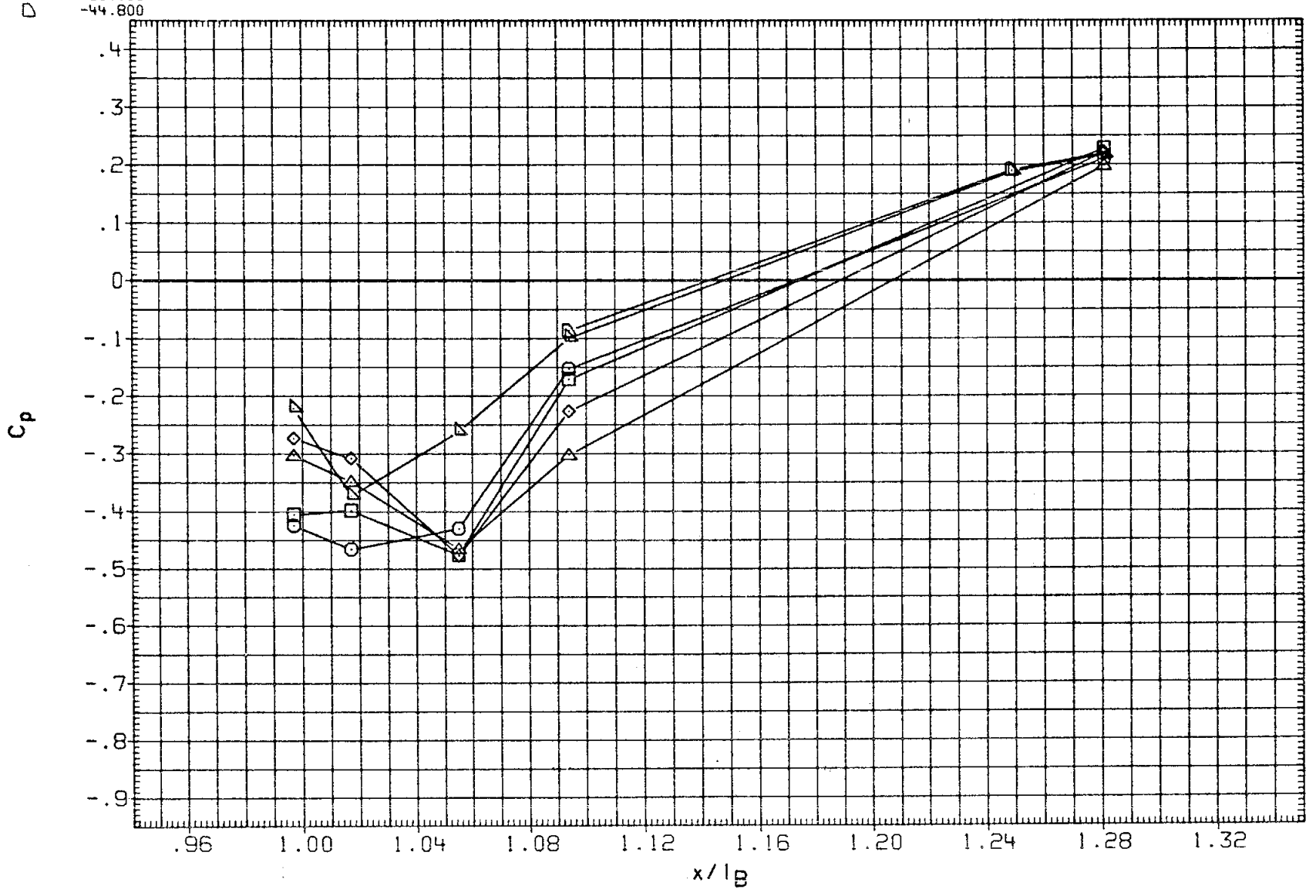

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	6.861	7.937
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
▷	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

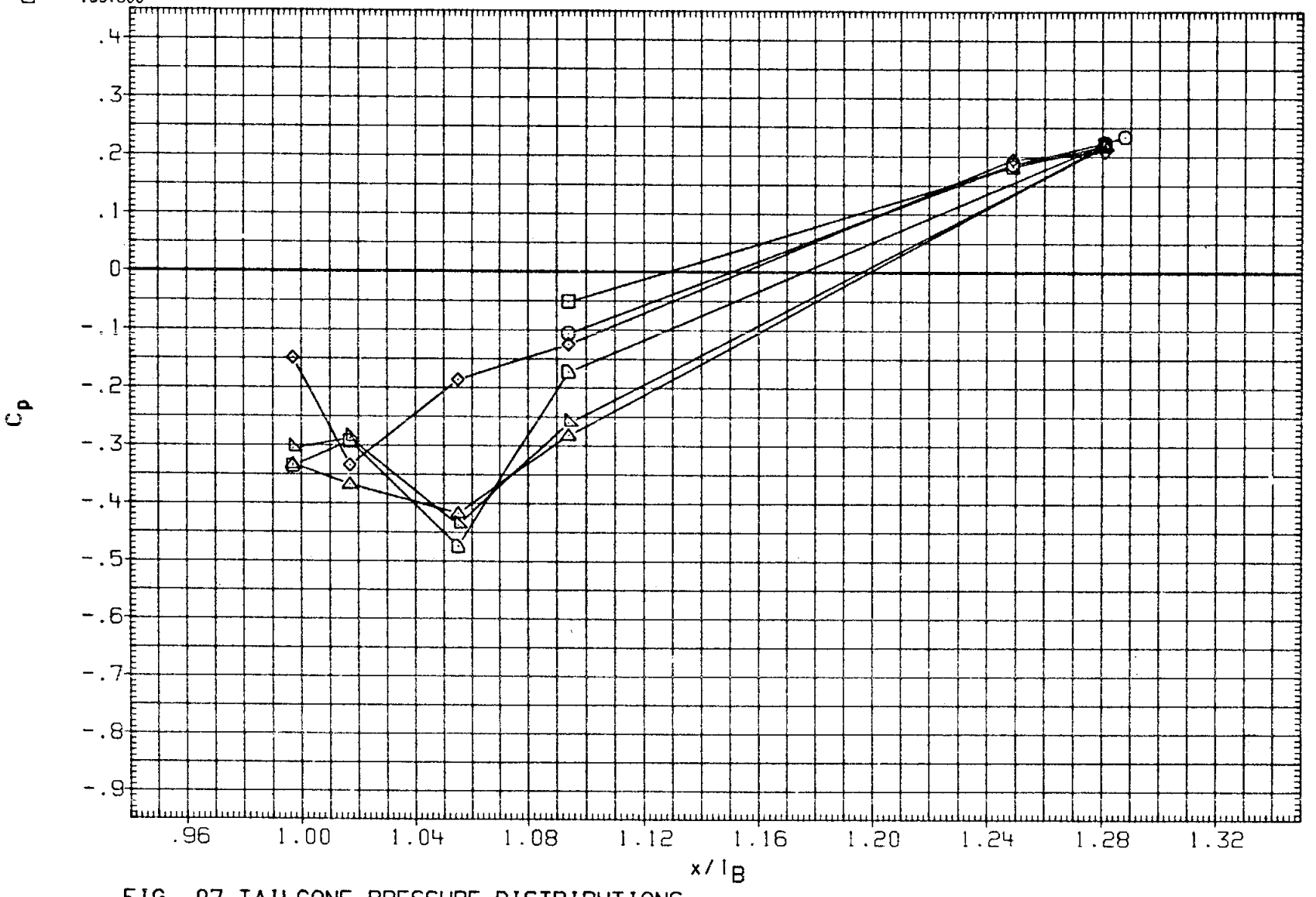

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	6.861	7.937
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

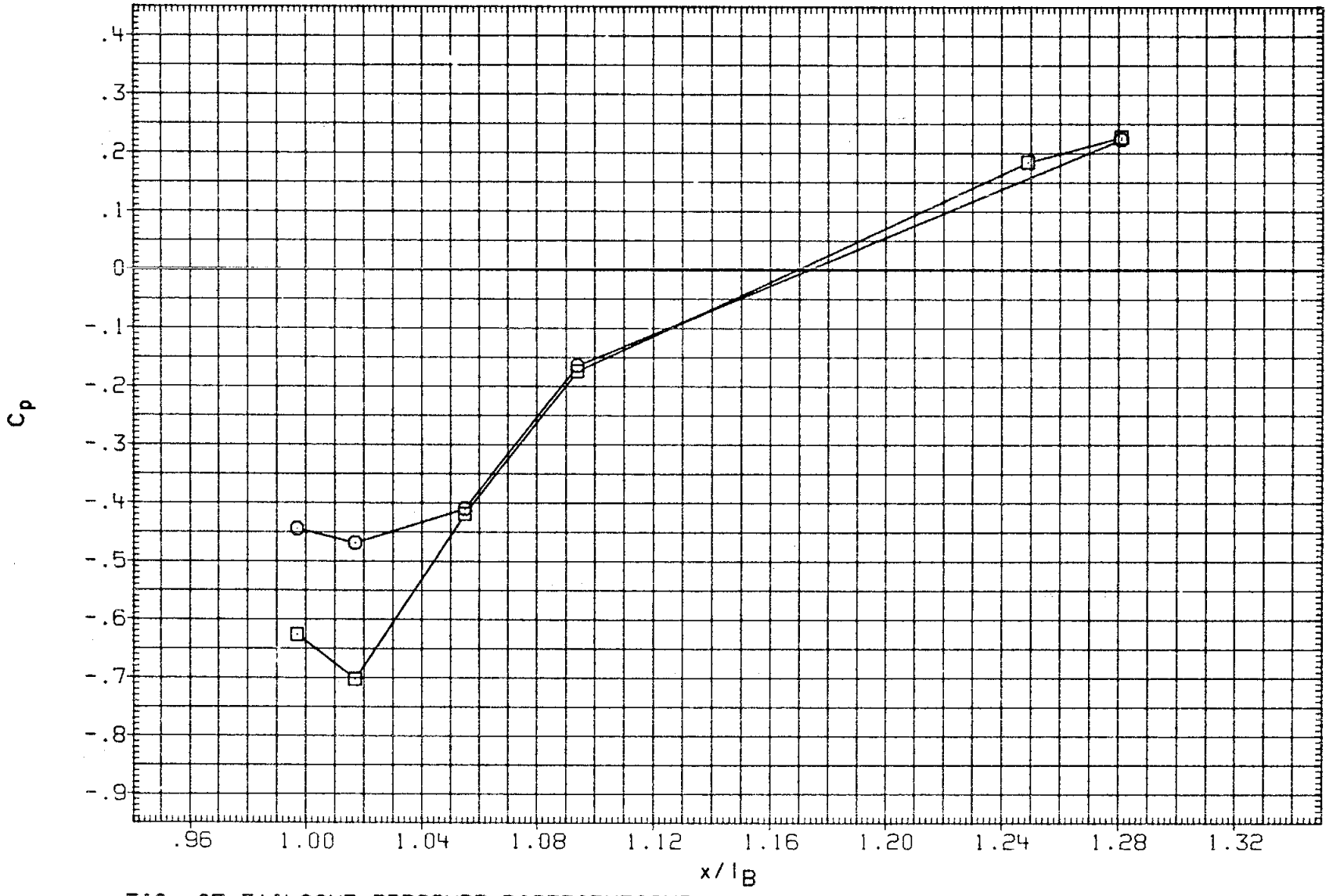

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	9.153	7.932
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

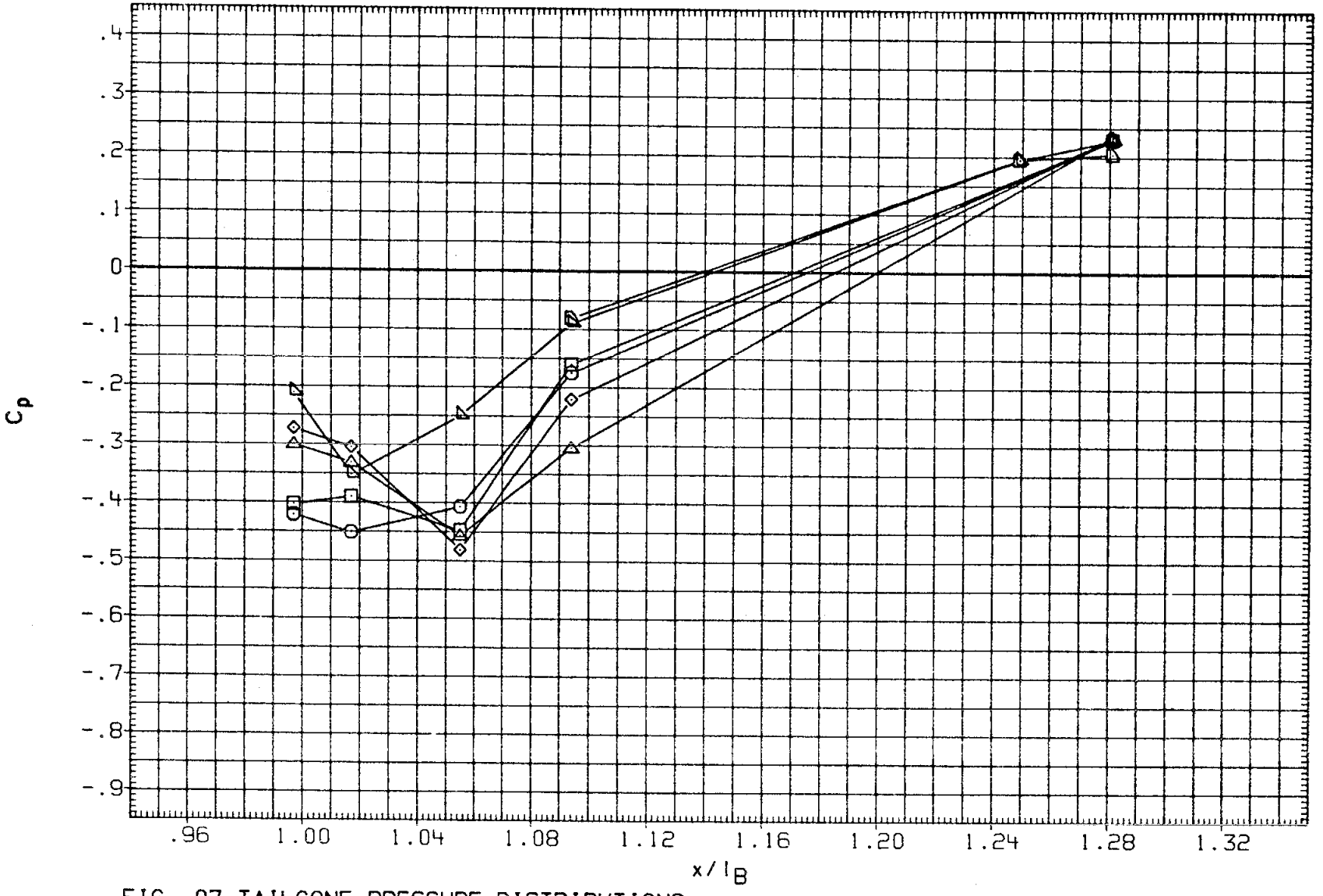

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	9.153	7.932
□	44.800		
◇	50.100		
△	101.400		
◁	115.600		
D	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

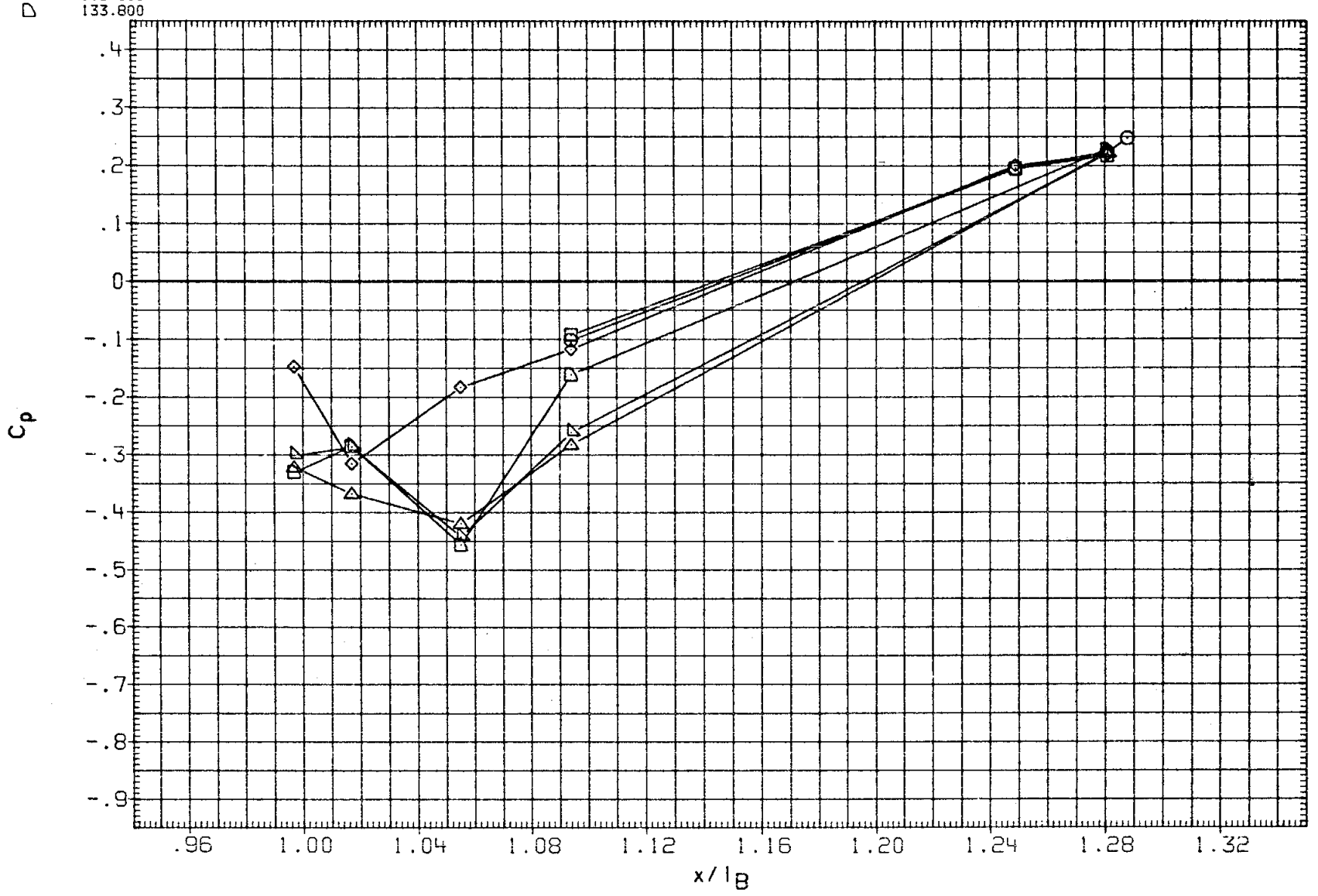

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	9.153	7.932
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

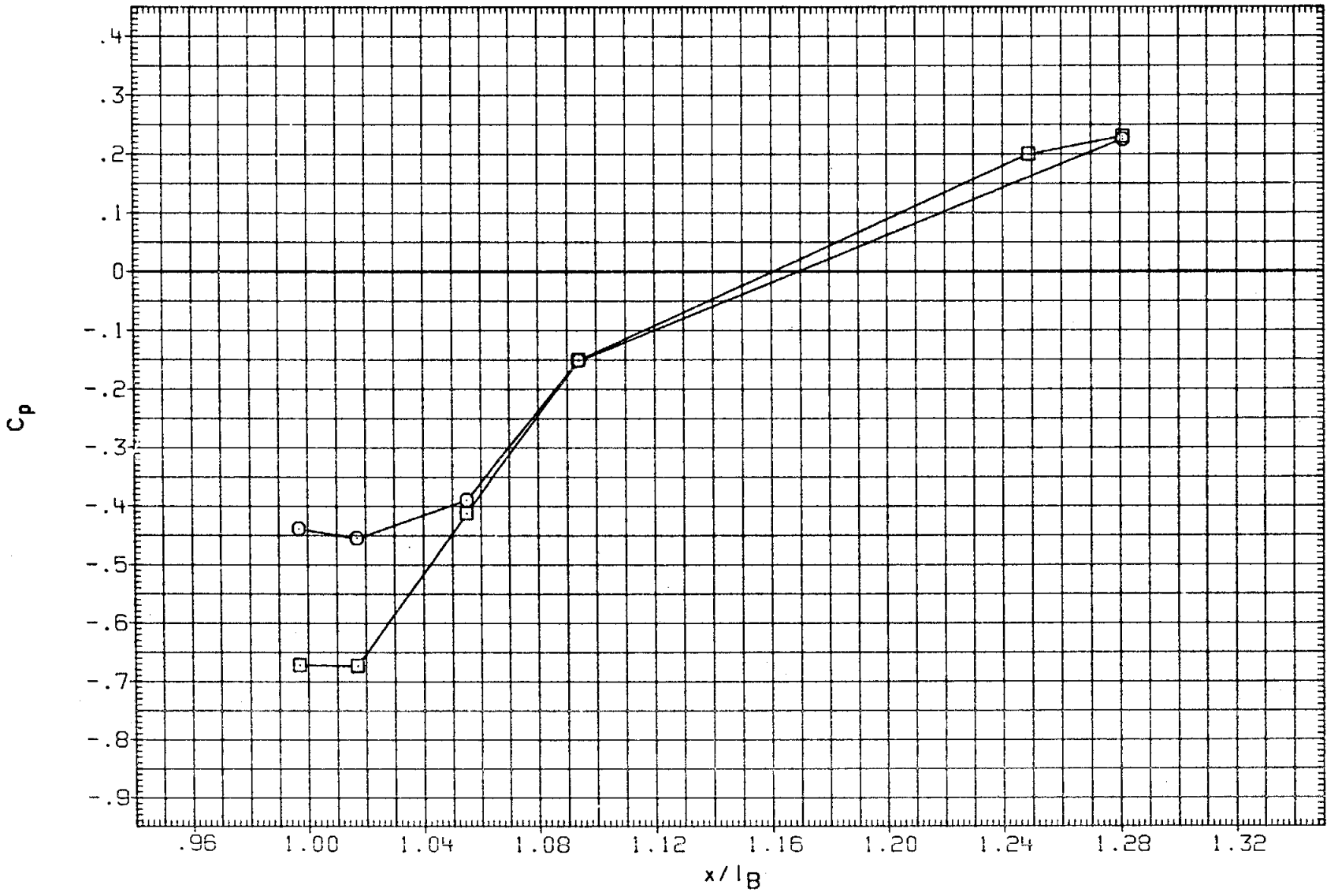

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	.000	11.439	7.920
□	44.800		
◇	50.100		
◁	101.400		
◁	115.600		
▷	133.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

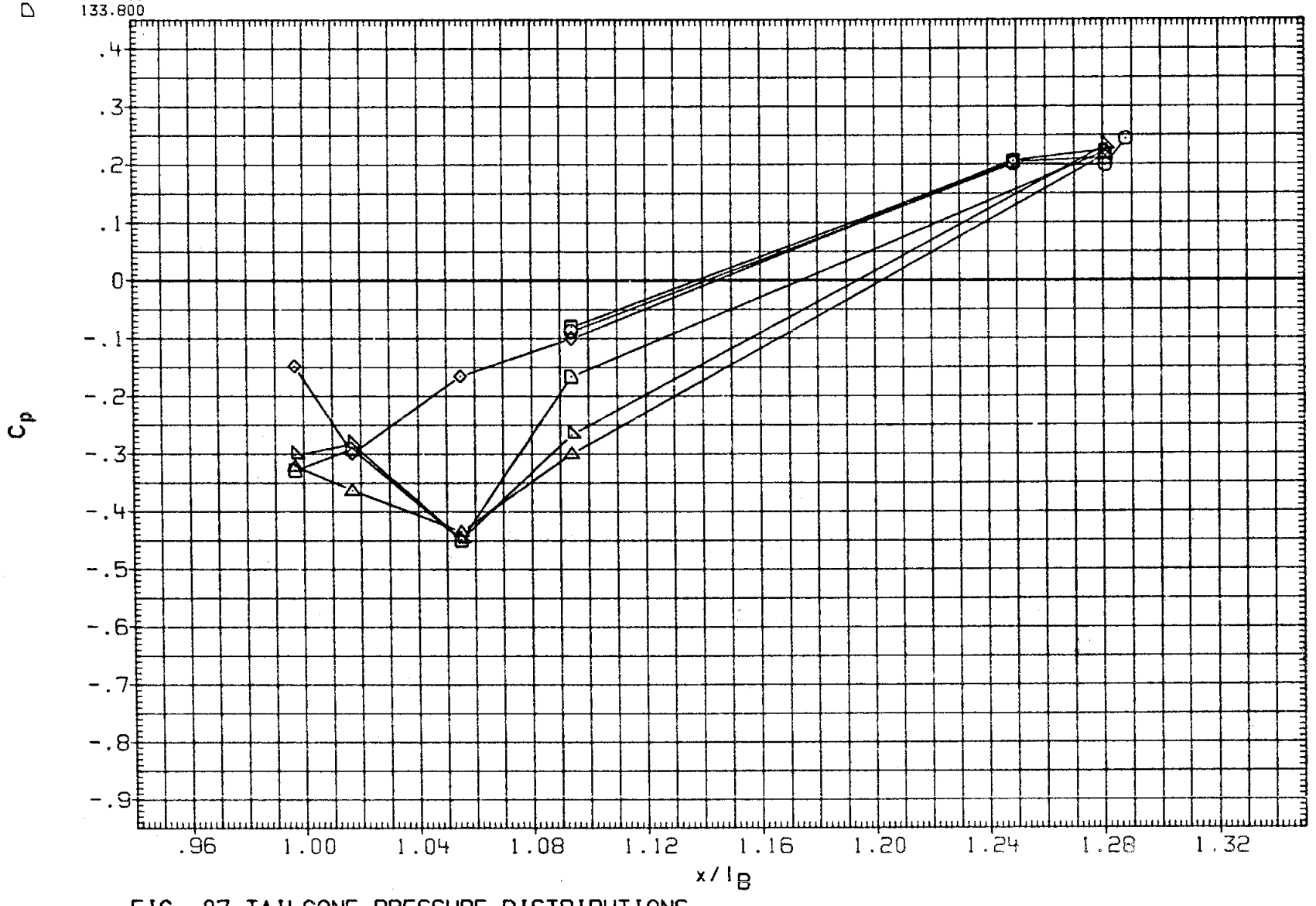

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	11.439	7.920
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

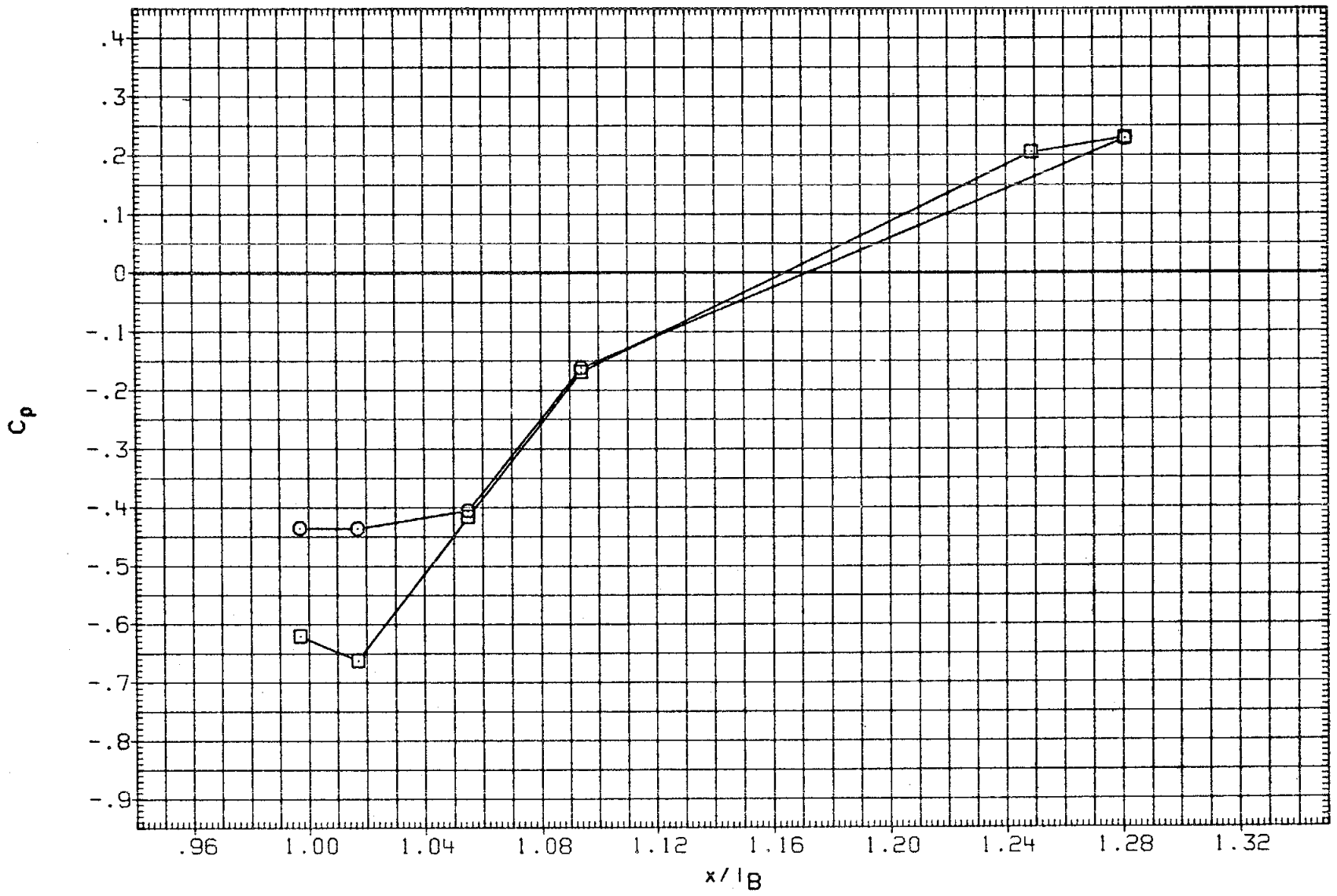

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	-149.100	13.758	7.893
□	-133.800		
◇	-115.600		
△	-101.400		
◁	-50.100		
▷	-44.800		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

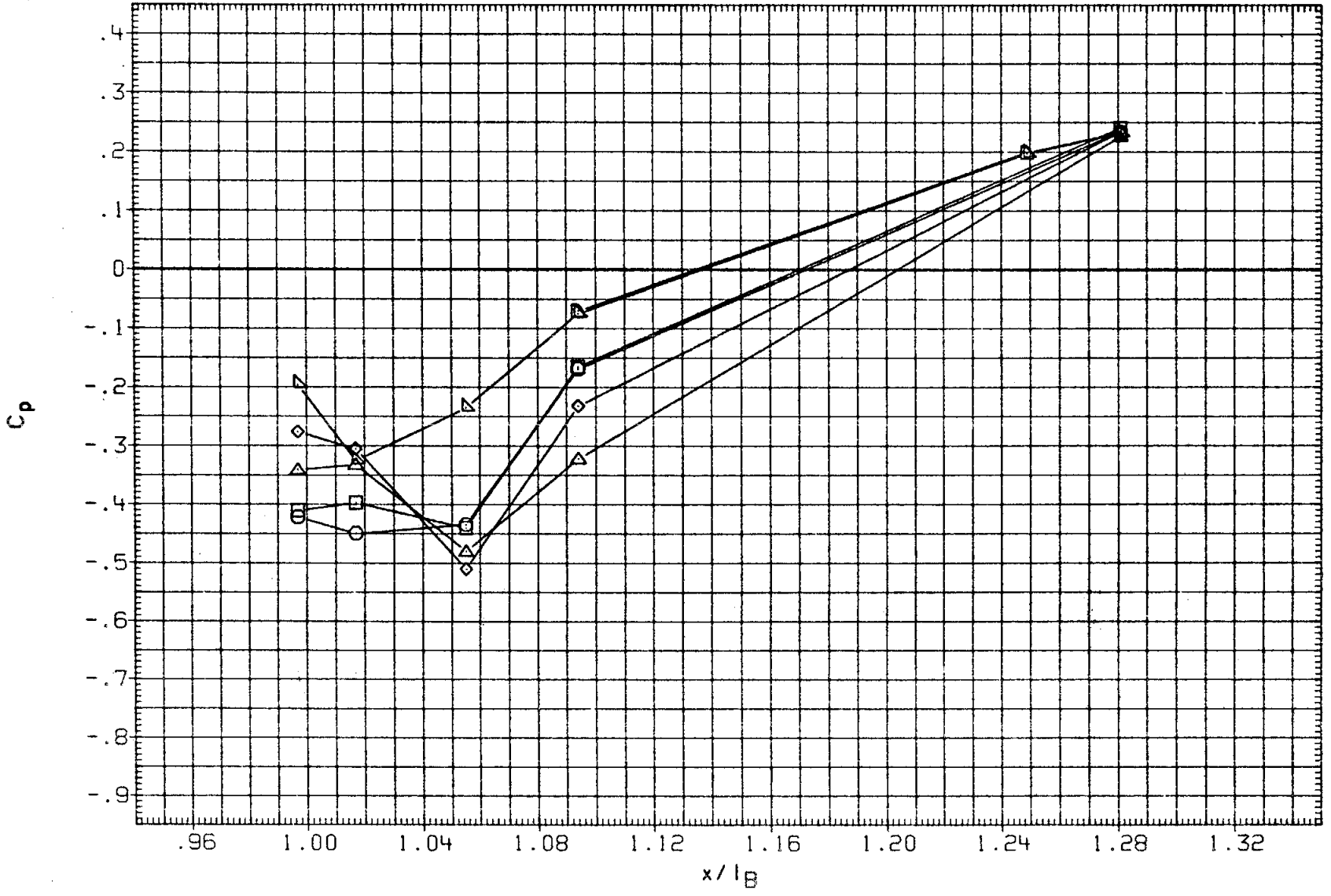

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

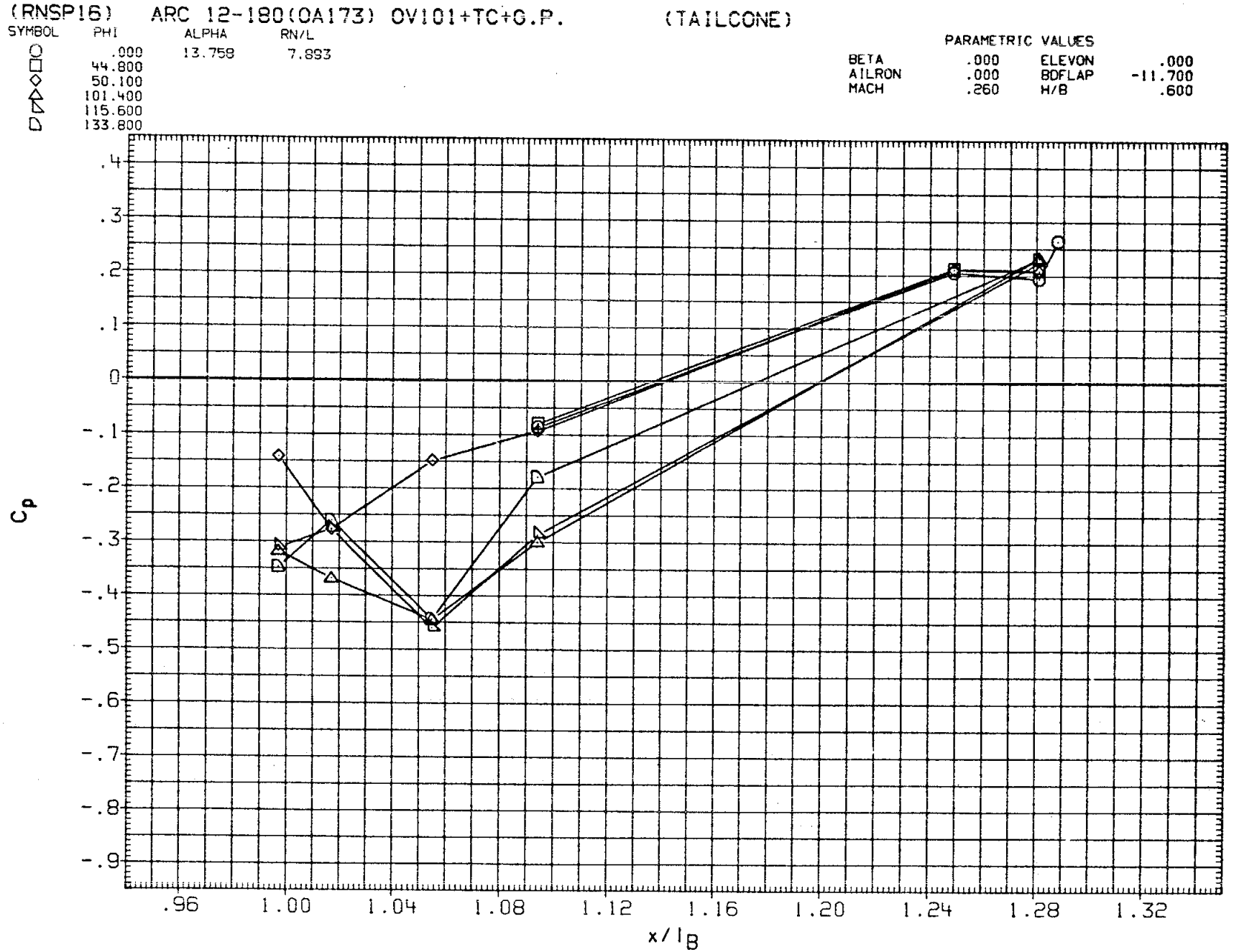

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

(RNSP16) ARC 12-180(0A173) OV101+TC+G.P. (TAILCONE)

SYMBOL	PHI	ALPHA	RN/L
○	149.100	13.758	7.893
□	180.000		

PARAMETRIC VALUES

BETA	.000	ELEVON	.000
AILRON	.000	BDFLAP	-11.700
MACH	.260	H/B	.600

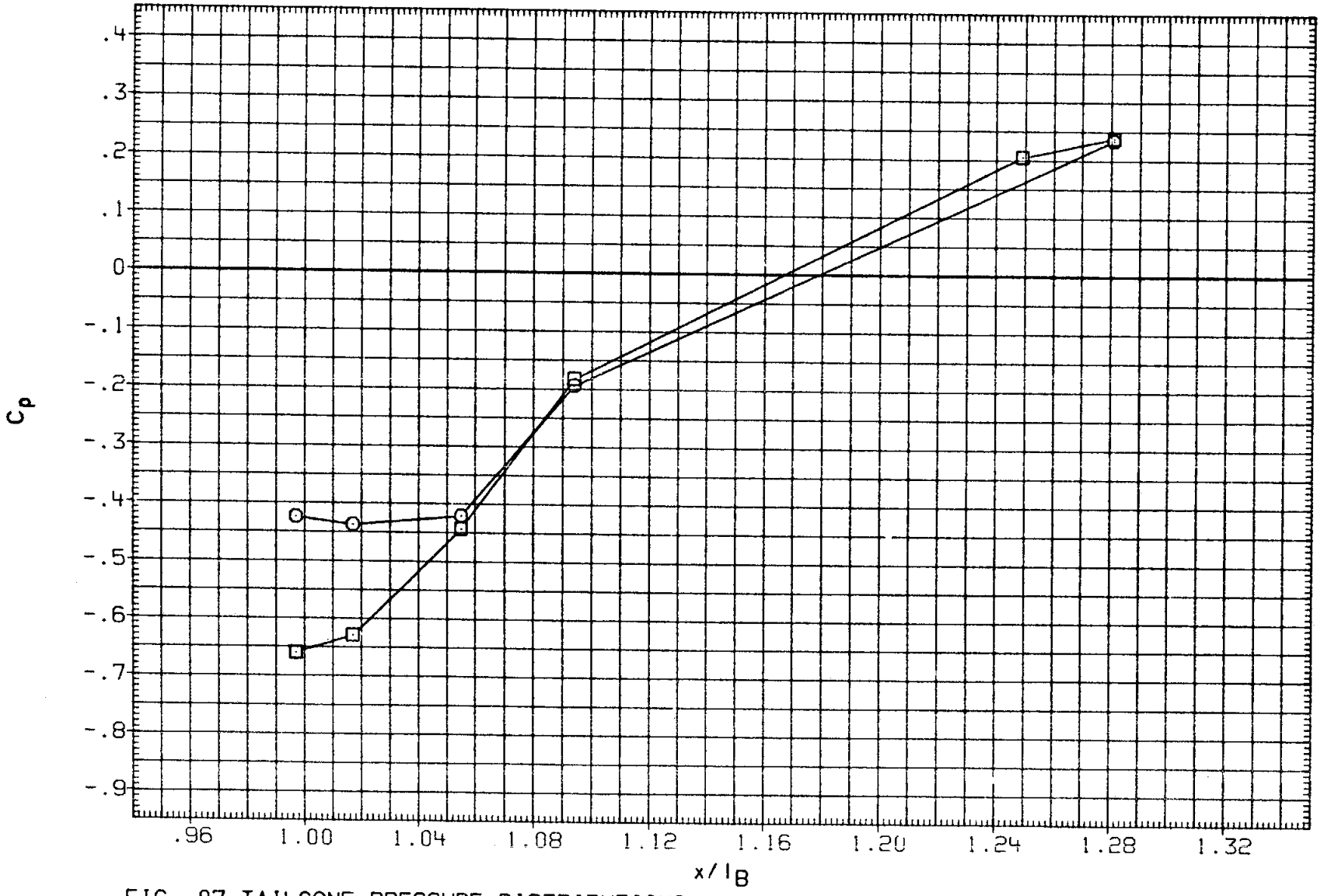

FIG. 07 TAILCONE PRESSURE DISTRIBUTIONS

APPENDIX

TABULATED SOURCE DATA

Tabulations of plotted data are available on request from Data Management Services

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS001) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 1/ 0 RN/L = 1.76 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
1.765	.569	-.01850	.03470	.00980	-.00510	-.00020	-.00010	-.01820	.03490	-.00020	.00000
1.762	.572	-.01890	.03470	.00970	-.00400	-.00010	.00000	-.01860	.03490	-.00010	.00000
1.759	.575	-.01890	.03490	.00970	-.00530	-.00010	-.00010	-.01860	.03510	-.00010	-.00010
	GRADIENT	-.06966	.03651	-.01742	-.04587	.01741	-.00085	-.06966	.03651	.01741	-.01826

RUN NO. 4/ 0 RN/L = 2.41 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
2.407	.598	-.01190	.03620	.01270	-.00950	-.00130	-.00220	-.01150	.03640	-.00140	-.00220
2.403	.598	-.01160	.03600	.01260	-.00890	-.00130	-.00220	-.01120	.03610	-.00140	-.00220
2.409	.600	-.00880	.03630	.01300	-.00820	-.00150	-.00200	-.00840	.03640	-.00150	-.00200
	GRADIENT	1.13791	.07225	.13201	.39677	-.07670	.07669	1.13791	.05096	-.03835	.07669

RUN NO. 3/ 0 RN/L = 5.50 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.498	.592	-.01050	.03350	.00970	-.00790	-.00110	-.00060	-.01020	.03360	-.00110	-.00060
5.497	.595	-.01040	.03360	.00880	-.00750	-.00110	-.00060	-.01010	.03370	-.00110	-.00060
5.497	.597	-.01100	.03360	.00870	-.00670	-.00120	-.00070	-.01060	.03370	-.00120	-.00070
	GRADIENT	-.09221	.02093	.00375	.22121	-.01719	-.01719	-.06501	.02093	-.01719	-.01719

RUN NO. 2/ 0 RN/L = 7.98 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
7.974	.586	-.00980	.03110	.00810	-.00270	-.00070	.00020	-.00950	.03120	-.00070	.00020
7.982	.593	-.00950	.03110	.00800	-.00200	-.00060	.00010	-.00910	.03120	-.00060	.00010
7.990	.594	-.00920	.03110	.00810	-.00230	-.00120	-.00020	-.00880	.03120	-.00120	-.00020
	GRADIENT	.06591	.00000	-.00542	.07105	-.03595	-.03852	.07961	-.00002	-.03595	-.03852

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS002) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 7/ 0 RN/L = 2.35 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
2.349	10.192	.43270	.06200	.00850	-.01000	.00080	.00000	.43680	-.01540	.00080	-.00010
2.352	10.195	.43270	.06210	.00820	-.00990	.00080	.00000	.43690	-.01530	.00080	-.00010
2.355	10.198	.43240	.06200	.00830	-.01000	.00080	.00000	.43660	-.01540	.00080	-.00010
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 6/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.467	10.410	.45190	.06460	.01420	-.00810	.00030	.00010	.45620	-.01800	.00030	.00000
5.476	10.421	.45110	.06460	.01410	-.00700	.00030	.00000	.45540	-.01790	.00030	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 5/ 0 RN/L = 7.97 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
7.969	10.689	.46810	.06620	.01440	-.00940	.00010	.00010	.47220	-.02170	.00020	.00010
7.971	10.690	.46820	.06630	.01430	-.00870	.00020	.00010	.47240	-.02160	.00020	.00010
7.983	10.692	.46850	.06640	.01450	-.00960	.00000	.00010	.47270	-.02160	.00000	.00020
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS003) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 12/ 0 RN/L = 2.38 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
2.377	15.281	.69040	.12820	.00550	-.01140	.00040	.00030	.69980	-.05800	.00050	.00020
2.378	15.287	.69100	.12850	.00520	-.01170	.00050	.00040	.70050	-.05800	.00060	.00020
2.380	15.290	.69100	.12840	.00540	-.01000	.00020	.00040	.70050	-.05810	.00030	.00030
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS003) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 11/ 0 RN/L = 5.41 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.406	15.226	.70270	.12980	.00630	-.01140	.00040	.00060	.71220	-.05910	.00060	.00050
5.411	15.232	.70420	.13020	.00630	-.01140	.00030	.00070	.71360	-.05920	.00050	.00060
5.409	15.235	.70420	.13020	.00650	-.01170	.00030	.00060	.71370	-.05920	.00040	.00050
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS004) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 14/ 0 RN/L = 5.48 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.488	.562	.04270	.04810	-.01430	-.00490	-.00030	.00040	.04310	.04770	-.00020	.00040
5.484	.576	.04260	.04800	-.01440	-.00480	-.00010	.00040	.04310	.04760	-.00010	.00040
5.473	.577	.04320	.04820	-.01440	-.00500	-.00020	.00050	.04370	.04780	-.00020	.00050
	GRADIENT	.01530	.00072	-.00657	-.00072	.00950	.00365	.02187	.00072	.00293	.00365

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS005) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 8/ 0 RN/L = 5.46 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.447	10.177	.49060	.08600	-.00760	-.00720	.00060	.00010	.49810	-.00190	.00060	.00000
5.469	10.178	.49000	.08640	-.00720	-.00840	.00070	.00020	.49760	-.00150	.00070	.00010
5.467	10.180	.49070	.08600	-.00690	-.00860	.00100	.00010	.49820	-.00200	.00100	-.00010
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS006) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 13/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.472	15.897	.78900	.17140	-.02020	-.01150	.00010	.00060	.80580	-.05090	.00030	.00060
5.473	15.899	.78980	.17190	-.02050	-.01250	.00010	.00060	.80670	-.05070	.00020	.00060
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS007) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 15/ 0 RN/L = 5.46 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.463	.735	.19990	.04200	-.09300	-.00350	-.00050	.00000	.20040	.03950	-.00050	.00000
5.463	.738	.20040	.04200	-.09310	-.00280	-.00030	-.00020	.20090	.03950	-.00030	-.00020
5.446	.741	.19970	.04200	-.09320	-.00270	-.00040	-.00010	.20030	.03940	-.00040	-.00010
	GRADIENT	-.02706	.00007	-.03441	.14093	.01895	-.01895	-.01059	-.01662	.01895	-.01895

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS008) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 9/ 0 RN/L = 5.50 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.500	10.212	.65000	.10080	-.08900	-.00960	.00050	.00000	.65760	-.01580	.00050	-.00010
5.507	10.217	.64970	.10090	-.08900	-.00930	.00040	.00010	.65730	-.01570	.00040	.00000
5.506	10.218	.64950	.10100	-.08890	-.00850	.00050	.00000	.65710	-.01560	.00050	-.00010
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS009) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 10/ 0 RN/L = 5.46 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.454	15.849	.94300	.19950	-.09950	-.01280	.00060	.00150	.96170	-.06510	.00100	.00130
5.466	15.854	.94380	.20000	-.09950	-.01320	.00060	.00140	.96260	-.06500	.00100	.00120
5.466	15.856	.94350	.19980	-.09940	-.01380	.00060	.00140	.96230	-.06510	.00100	.00120
5.465	16.025	.95310	.20550	-.10120	-.01370	.00060	.00120	.97280	-.06510	.00090	.00100
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS010) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 24/ 0 RN/L = 5.48 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.479	.543	.00000	.02880	.00240	-.06270	-.02050	.01060	.00030	.02880	-.02040	.01080
5.478	.545	-.00040	.02890	.00250	-.06250	-.02050	.01050	-.00010	.02890	-.02040	.01070
	GRADIENT	-.15373	.03841	.03843	.07682	.00000	-.03844	-.15373	.03841	.00000	-.03841

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS011) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 25/ 0 RN/L = 5.37 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.339	10.257	.45380	.06340	.00860	-.05910	-.02010	-.00360	.45780	-.01830	-.02040	.00000
5.339	10.265	.45420	.06340	.00830	-.05890	-.02000	-.00360	.45820	-.01840	-.02040	.00000
5.358	10.457	.46560	.06560	.00810	-.05900	-.01960	-.00410	.46970	-.01980	-.02010	-.00050
5.356	10.464	.46530	.06580	.00800	-.05860	-.01970	-.00410	.46950	-.01970	-.02010	-.00040
5.367	10.560	.46990	.06640	.00780	-.06000	-.01970	-.00430	.47410	-.02070	-.02020	-.00060
5.374	10.562	.47050	.06640	.00730	-.05950	-.01970	-.00440	.47470	-.02080	-.02020	-.00080
5.382	10.569	.47040	.06650	.00750	-.06060	-.01980	-.00430	.47460	-.02070	-.02030	-.00060
5.395	10.721	.47810	.06860	.00650	-.05850	-.01960	-.00470	.48250	-.02140	-.02010	-.00100
5.402	10.725	.47830	.06870	.00640	-.05870	-.01960	-.00460	.48270	-.02140	-.02010	-.00090
5.403	10.726	.47800	.06880	.00660	-.05770	-.01960	-.00460	.48240	-.02120	-.02010	-.00090
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS012) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 28/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.455	15.298	.71390	.13200	.00300	-.05780	-.02000	-.00740	.72340	-.06070	-.02130	-.00190
5.469	15.302	.71270	.13160	.00260	-.05800	-.02010	-.00740	.72210	-.06090	-.02130	-.00180
5.474	15.311	.70970	.13100	.00210	-.05620	-.01990	-.00740	.71910	-.06080	-.02110	-.00190
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS013) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 23/ 0 RN/L = 5.40 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.403	.601	.05300	.04470	-.01860	-.07490	-.01490	.01000	.05340	.04410	-.01480	.01020
5.399	.606	.05250	.04430	-.01780	-.07420	-.01500	.01030	.05300	.04380	-.01490	.01050
5.401	.610	.05490	.04460	-.01830	-.07270	-.01490	.01020	.05540	.04400	-.01480	.01040
	GRADIENT	.18955	-.01505	.04046	.23478	-.00120	.02417	.20102	-.01386	-.00120	.02417

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS014) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 26/ 0 RN/L = 5.43 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.414	10.506	.51070	.08900	-.01180	-.07290	-.01350	-.00370	.51830	-.00550	-.01390	-.00120
5.417	10.507	.51110	.08940	-.01190	-.07190	-.01350	-.00360	.51880	-.00520	-.01400	-.00110
5.413	10.513	.51370	.08980	-.01220	-.07160	-.01350	-.00380	.52150	-.00530	-.01400	-.00130
5.451	10.716	.52180	.09210	-.01240	-.07030	-.01340	-.00400	.52980	-.00640	-.01390	-.00140
5.452	10.719	.52290	.09190	-.01260	-.07020	-.01340	-.00380	.53090	-.00680	-.01390	-.00130
5.461	10.726	.52470	.09210	-.01240	-.07110	-.01350	-.00380	.53270	-.00700	-.01400	-.00120
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (RNS015) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 27/ 0 RN/L = 5.45 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.448	15.468	.76620	.16310	-.01880	-.07060	-.01420	-.00610	.78200	-.04680	-.01530	-.00200
5.451	15.470	.76550	.16310	-.01880	-.07160	-.01400	-.00620	.78130	-.04670	-.01510	-.00220
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+GROUND PLANE (RNS016) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 19/ 0 RN/L = 2.38 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
2.402	.591	.00370	.02600	-.00450	-.00560	.00090	.00070	.00390	.02590	.00090	.00070
2.391	2.134	.06030	.03060	-.00060	-.00750	.00050	.00100	.06140	.02840	.00050	.00100
2.385	4.188	.15060	.03700	.00260	-.01010	.00050	.00080	.15290	.02590	.00050	.00070
2.382	6.257	.24860	.04020	.00170	-.01110	.00090	.00060	.25150	.01290	.00100	.00050
2.379	8.334	.35090	.05190	.00180	-.01200	.00100	.00040	.35470	.00050	.00110	.00020
2.374	10.420	.45170	.06610	-.00030	-.01270	.00140	.00070	.45620	-.01650	.00150	.00040
2.383	12.518	.55660	.08840	.00200	-.01170	.00150	.00070	.56250	-.03420	.00160	.00040
2.380	14.533	.66650	.11410	-.00060	-.01390	.00120	.00090	.67380	-.05660	.00140	.00060
2.374	15.599	.72990	.13420	-.00320	-.01490	.00130	.00130	.73920	-.06670	.00160	.00090
2.375	16.634	.78770	.15480	-.00740	-.01640	.00080	.00160	.79900	-.07680	.00120	.00130
2.367	18.730	.91600	.20780	-.01540	-.01700	.00140	.00120	.93430	-.09680	.00170	.00070
2.371	19.543	.95970	.23010	-.01560	-.01590	.00150	.00150	.98140	-.10370	.00190	.00090
	GRADIENT	.04102	.00306	.00195	-.00125	-.00011	.00002	.04160	-.00007	-.00011	-.00001

RUN NO. 18/ 0 RN/L = 5.46 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.466	.586	.00090	.02260	-.00440	-.00550	.00020	.00070	.00110	.02260	.00020	.00070
5.461	2.213	.06290	.03180	-.00130	-.00650	.00030	.00090	.06410	.02940	.00030	.00090
5.466	4.363	.15660	.03640	.00210	-.00760	.00030	.00090	.15890	.02440	.00040	.00090
5.490	6.547	.26130	.04260	.00310	-.00800	.00040	.00070	.26450	.01260	.00050	.00060
5.464	8.834	.37940	.05600	.00170	-.00880	.00060	.00060	.38350	-.00280	.00070	.00050
5.453	10.943	.48220	.07300	.00370	-.01040	.00070	.00070	.48730	-.01980	.00080	.00050
5.435	13.129	.58950	.09730	.00310	-.01210	.00060	.00080	.59620	-.03900	.00070	.00060
5.452	15.409	.72060	.13120	-.00340	-.01390	.00120	.00130	.72960	-.06470	.00150	.00090
5.451	16.478	.78460	.15400	-.00900	-.01550	.00110	.00180	.79610	-.07450	.00160	.00140
5.449	17.659	.85590	.18280	-.01590	-.01690	.00130	.00180	.87110	-.08510	.00180	.00130
	GRADIENT	.04135	.00357	.00171	-.00055	.00003	.00005	.04190	.00033	.00005	.00005

RUN NO. 17/ 0 RN/L = 7.93 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
7.979	.554	-.00490	.02150	-.00380	-.00540	-.00010	.00070	-.00470	.02160	-.00010	.00080
7.920	2.275	.07160	.02310	-.00050	-.00630	-.00010	.00070	.07240	.02030	-.00010	.00070
7.935	4.543	.17450	.02890	.00340	-.00720	-.00010	.00080	.17630	.01500	-.00010	.00080
7.937	6.861	.29120	.03640	.00470	-.00820	.00020	.00070	.29350	.00140	.00030	.00060
7.932	9.153	.40710	.05040	.00320	-.00940	.00050	.00060	.40990	-.01490	.00060	.00050
7.920	11.439	.51760	.07050	.00380	-.01160	.00060	.00050	.52140	-.03340	.00070	.00030
7.893	13.758	.63450	.10280	.00230	-.01230	.00070	.00070	.64080	-.05090	.00080	.00050
	GRADIENT	.04500	.00189	.00180	-.00045	.00000	.00003	.04540	-.00169	.00000	.00000

ARC-12-180(OA173) OV101+TC+GROUND PLANE (RNS017) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 21/ 0 RN/L = 5.38 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.376	.639	.05440	.03860	-.02640	-.00550	.00030	.00060	.05480	.03800	.00030	.00060
5.398	.643	.05550	.03880	-.02660	-.00510	.00020	.00080	.05600	.03820	.00020	.00080
5.394	2.267	.12560	.04140	-.02420	-.00590	.00030	.00070	.12710	.03640	.00030	.00070
5.401	4.440	.22390	.04750	-.02210	-.00580	.00020	.00050	.22690	.03000	.00020	.00050
5.393	6.625	.33000	.05700	-.02100	-.00850	.00020	.00040	.33440	.01860	.00020	.00040
5.379	6.631	.33270	.05710	-.02090	-.00750	.00030	.00030	.33700	.01830	.00030	.00030
5.385	8.813	.44170	.07180	-.02240	-.00750	.00040	.00030	.44750	.00340	.00050	.00030
5.375	11.010	.54510	.09220	-.01990	-.00980	.00060	.00020	.55270	-.01350	.00060	.00010
5.378	13.200	.65170	.12010	-.02130	-.01150	.00060	.00040	.66190	-.03170	.00060	.00020
5.378	15.390	.76940	.15870	-.02690	-.01280	.00070	.00090	.78390	-.05080	.00090	.00070
5.374	16.522	.83720	.18380	-.03280	-.01410	.00070	.00140	.85500	-.06150	.00110	.00120
5.370	17.618	.90300	.21170	-.03960	-.01410	.00130	.00130	.92470	-.07110	.00160	.00080
	GRADIENT	.04443	.00229	.00117	-.00014	-.00001	-.00005	.04510	-.00208	-.00001	-.00005

RUN NO. 20/ 0 RN/L = 7.92 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
7.985	.660	.05200	.03810	-.02630	-.00380	.00030	.00040	.05250	.03750	.00030	.00040
7.865	.669	.05290	.03850	-.02620	-.00490	.00030	.00060	.05330	.03790	.00030	.00060
7.943	2.363	.12800	.04110	-.02340	-.00560	.00020	.00050	.12960	.03580	.00020	.00050
7.940	4.649	.23790	.04760	-.02100	-.00650	.00000	.00020	.24090	.02820	.00000	.00020
7.922	6.930	.34890	.05820	- 02060	-.00780	.00010	.00020	.35340	.01580	.00010	.00020
7.897	6.956	.35140	.05930	-.02020	-.00850	-.00010	.00040	.35600	.01640	-.00010	.00040
7.917	9.225	.46450	.07460	-.02190	-.00860	.00000	.00020	.47040	-.00070	.00000	.00020
7.887	11.493	.56710	.09670	-.01860	-.01020	.00040	.00010	.57500	-.01810	.00040	.00000
7.895	13.816	.68350	.12940	-.02070	-.01120	.00050	.00030	.69470	-.03730	.00050	.00020
	GRADIENT	.04645	.00230	.00133	-.00055	-.00007	-.00007	.04710	-.00233	-.00007	-.00007

(RNS018) (02 JUN 81)

ARC-12-180(OA173) OV101+TC+GROUND PLANE

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 16/ 0 RN/L = 5.43 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.467	.814	.21370	.03170	-.10640	-.00480	.00020	.00030	.21420	.02870	.00020	.00030
5.462	2.447	.28730	.03800	-.10410	-.00610	.00000	.00030	.28870	.02580	.00000	.00030
5.442	4.610	.38780	.04900	-.10100	-.00750	.00010	.00030	.39050	.01780	.00020	.00030
5.448	6.810	.49720	.06350	-.10050	-.00870	.00020	.00040	.50120	.00420	.00030	.00040
5.449	8.999	.60360	.08310	-.10070	-.00920	.00030	.00030	.60920	-.01220	.00030	.00020
5.425	11.173	.70880	.10870	-.09870	-.01020	.00040	.00020	.71640	-.03050	.00040	.00010
5.414	13.372	.82120	.14410	-.10210	-.01210	.00040	.00050	.83230	-.04940	.00050	.00040
5.416	15.586	.94470	.19150	-.10980	-.01390	.00060	.00080	.96140	-.06890	.00080	.00060
5.405	16.690	1.00640	.21930	-.11530	-.01460	.00060	.00110	1.02700	-.07840	.00090	.00090
5.410	17.797	1.07140	.25070	-.12080	-.01630	.00120	.00080	1.09680	-.08820	.00140	.00050
	GRADIENT	.04589	.00459	.00142	-.00071	-.00002	-.00000	.04647	-.00291	.00000	-.00000

(RNS019) (02 JUN 81)

ARC-12-180(OA173) OV101+TC+GROUND PLANE

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 29/ 0 RN/L = 5.33 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.426	.556	.01090	.01860	-.00950	-.05790	-.01980	.01160	.01110	.01850	-.01970	.01180
5.395	2.181	.08250	.01950	-.00780	-.05920	-.02010	.00950	.08320	.01640	-.01970	.01220
5.372	4.381	.17920	.02350	-.00480	-.06010	-.02050	.00680	.18040	.00970	-.01990	.00830
5.346	6.598	.28400	.03280	-.00310	-.06030	-.02020	.00390	.28590	-.00010	-.01960	.00620
5.327	8.855	.39250	.04640	-.00220	-.05920	-.01980	.00010	.39500	-.01450	-.01960	.00320
5.336	11.084	.50410	.06590	-.00400	-.05820	-.01950	-.00430	.50740	-.03210	-.01990	-.00050
5.309	13.266	.61570	.09260	-.00530	-.05790	-.01900	-.00650	.62050	-.05100	-.02000	-.00190
5.276	15.375	.72890	.12840	-.00700	-.05860	-.01970	-.00710	.73690	-.06920	-.02090	-.00170
5.253	17.675	.85810	.18050	-.01550	-.05770	-.01970	-.00800	.87240	-.08820	-.02120	-.00170
5.257	19.896	.98490	.24560	-.02650	-.05850	-.01920	-.01040	1.00980	-.10370	-.02160	-.00330
	GRADIENT	.04400	.00131	.00124	-.00057	-.00018	-.00125	.04426	-.00234	-.00005	-.00091

ARC-12-180(OA173) OV101+TC+GROUND PLANE (RNS020) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 30/ 0 RN/L = 5.39 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.411	.635	.06630	.03560	-.03040	-.07170	-.01400	.01100	.06670	.03490	-.01380	.01110
5.396	2.281	.14020	.03860	-.02930	-.07250	-.01450	.00910	.14160	.03300	-.01410	.00960
5.400	4.459	.23610	.04500	-.02600	-.07360	-.01440	.00670	.23890	.02650	-.01390	.00780
5.400	6.687	.33910	.05580	-.02330	-.07240	-.01380	.00380	.34330	.01600	-.01320	.00540
5.388	8.881	.44290	.07060	-.02120	-.07280	-.01370	.00040	.44850	.00150	-.01350	.00250
5.380	11.107	.55470	.09240	-.02380	-.07410	-.01310	-.00380	.56210	-.01600	-.01360	-.00120
5.369	13.304	.66280	.12150	-.02570	-.07300	-.01270	-.00550	.67300	-.03400	-.01370	-.00240
5.367	15.512	.78010	.16080	-.02920	-.07050	-.01360	-.00580	.79470	-.05340	-.01460	-.00200
5.369	17.762	.90510	.21430	-.03800	-.06990	-.01390	-.00690	.92740	-.07160	-.01530	-.00240
	GRADIENT	.04439	.00248	.00117	-.00050	-.00010	-.00112	.04502	-.00224	-.00002	-.00086

ARC-12-180(OA173) OV101+TC+GROUND PLANE (RNS021) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 35/ 0 RN/L = 5.41 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.412	1.641	.04360	.02680	-.00130	-.00530	-.00050	.00080	.04440	.02560	-.00050	.00080
5.420	2.199	.06720	.02640	-.00020	-.00520	-.00040	.00090	.06820	.02380	-.00040	.00090
5.407	3.278	.11260	.03030	.00170	-.00610	-.00040	.00070	.11420	.02390	-.00040	.00080
5.408	4.392	.16430	.03030	.00340	-.00610	-.00030	.00070	.16610	.01760	-.00030	.00070
5.402	5.517	.21860	.03320	.00500	-.00740	.00000	.00060	.22080	.01200	.00010	.00060
5.408	6.591	.26900	.03710	.00550	-.00700	.00000	.00060	.27150	.00600	.00000	.00060
	GRADIENT	.04375	.00157	.00170	-.00036	.00006	-.00006	.04413	-.00260	.00006	-.00005

RUN NO. 38/ 0 RN/L = 7.93 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
7.970	1.472	.03140	.02010	-.00250	-.00540	-.00050	.00070	.03190	.01930	-.00040	.00070
7.940	3.393	.11460	.01670	.00100	-.00640	-.00060	.00070	.11540	.00990	-.00060	.00070
7.876	5.741	.22820	.02720	.00360	-.00590	-.00030	.00060	.22970	.00430	-.00030	.00070
	GRADIENT	.04330	-.00177	.00182	-.00052	-.00005	-.00000	.04346	-.00489	-.00010	-.00000

ARC-12-180(OA173) OV101+TC+GROUND PLANE (RNS022) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .110

RUN NO. 37/ 0 RN/L = 5.36 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.419	.190	-.07430	.02730	.03580	-.00380	-.00020	.00070	-.07420	.02760	-.00020	.00070
5.390	2.583	.07470	.03180	.03460	-.00440	.00000	.00060	.07600	.02840	.00000	.00060
5.371	5.071	.22990	.03610	.02590	-.00770	.00020	.00040	.23220	.01560	.00030	.00030
5.369	7.322	.37810	.04630	.01510	-.00890	.00040	.00020	.38090	-.00220	.00040	.00020
5.359	9.735	.51580	.06460	.00560	-.00970	.00060	.00040	.51930	-.02340	.00070	.00030
5.329	12.200	.65840	.09520	-.00770	-.01030	.00040	.00050	.66370	-.04580	.00050	.00040
5.301	14.534	.81490	.13850	-.02880	-.01210	.00030	.00120	.82360	-.07010	.00060	.00110
	GRADIENT	.06228	.00188	-.00050	-.00025	.00008	-.00004	.06278	.00033	.00008	-.00004

RUN NO. 32/ 0 RN/L = 7.84 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
7.871	-.053	-.10160	.02660	.04200	-.00410	-.00070	.00100	-.10160	.02650	-.00070	.00100
7.852	2.568	.07590	.03040	.03830	-.00510	-.00050	.00060	.07720	.02700	-.00040	.00060
7.840	5.194	.24510	.03710	.02670	-.00720	-.00040	.00040	.24750	.01480	-.00040	.00040
7.842	7.664	.40560	.04910	.01240	-.00770	.00000	.00040	.40850	-.00530	.00010	.00040
7.808	10.120	.54920	.06990	.00340	-.00930	.00040	.00040	.55300	-.02760	.00050	.00030
7.804	12.572	.70280	.10630	-.01350	-.01050	.00010	.00040	.70910	-.04900	.00020	.00040
	GRADIENT	.06770	.00145	-.00141	-.00038	.00008	-.00015	.06820	.00019	.00011	-.00015

ARC-12-180(OA173) OV101+TC+GROUND PLANE (RNS023) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .210

RUN NO. 36/ 0 RN/L = 5.37 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.397	.301	-.03580	.02490	.01210	-.00460	-.00020	.00080	-.03570	.02510	-.00020	.00080
5.399	2.643	.08490	.02890	.01400	-.00520	-.00010	.00080	.08620	.02500	-.00010	.00080
5.390	5.038	.21390	.03390	.01320	-.00710	-.00010	.00060	.21610	.01500	.00000	.00060
5.379	7.372	.34210	.04260	.00880	-.00780	.00010	.00060	.34470	-.00160	.00020	.00060
5.375	9.766	.47450	.05850	.00470	-.00940	.00040	.00050	.47750	-.02270	.00050	.00040
5.351	12.121	.59960	.08480	.00060	-.01010	.00030	.00050	.60410	-.04280	.00040	.00040
5.355	14.500	.74250	.12250	-.01140	-.01170	.00050	.00100	.74960	-.06700	.00070	.00090
5.341	16.973	.89550	.18020	-.03030	-.01380	.00070	.00130	.90910	-.08860	.00100	.00110
	GRADIENT	.05155	.00171	.00081	-.00026	.00004	.00000	.05206	-.00004	.00004	.00000

RUN NO. 33/ 0 RN/L = 7.78 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
7.803	-.015	-.06020	.02620	.01440	-.00480	-.00030	.00100	-.06020	.02620	-.00030	.00100
7.799	2.541	.07600	.03180	.01580	-.00440	-.00040	.00060	.07730	.02840	-.00040	.00060
7.782	5.047	.21540	.03490	.01440	-.00620	-.00020	.00030	.21770	.01580	-.00010	.00030
7.774	7.478	.35170	.04720	.00920	-.00820	-.00020	.00020	.35480	.00110	-.00010	.00020
7.758	9.978	.48440	.06520	.00550	-.00950	.00000	.00020	.48830	-.01960	.00000	.00020
7.741	12.408	.61520	.09390	.00030	-.01060	-.00010	.00020	.62100	-.04030	-.00010	.00030
	GRADIENT	.05328	.00219	.00055	.00016	-.00004	-.00016	.05379	.00086	-.00004	-.00016

ARC-12-180(OA173) OV101+TC+GROUND PLANE (RNS024) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .400

RUN NO. 34/ 0 RN/L = 5.44 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.496	.035	-.03350	.02390	-.00030	-.00480	-.00020	.00070	-.03350	.02390	-.00020	.00070
5.459	2.189	.06550	.02770	.00370	-.00690	-.00050	.00100	.06650	.02520	-.00040	.00100
5.468	4.394	.16800	.03190	.00640	-.00750	-.00010	.00060	.16990	.01900	-.00010	.00060
5.450	7.122	.30590	.03880	.00670	-.00880	.00000	.00060	.30830	.00070	.00010	.00060
5.436	9.482	.42970	.05510	.00390	-.00970	.00030	.00040	.43300	-.01630	.00040	.00040
5.417	11.812	.54460	.07600	.00490	-.00990	.00040	.00040	.54860	-.03690	.00050	.00030
5.417	14.238	.67310	.11120	-.00070	-.01160	.00060	.00090	.67980	-.05750	.00080	.00070
5.419	16.605	.81350	.15930	-.01390	-.01450	.00060	.00150	.82510	-.07950	.00100	.00120
5.413	19.108	.96170	.22640	-.02860	-.01780	.00150	.00170	.98290	-.10040	.00200	.00110
	GRADIENT	.04623	.00184	.00154	-.00062	.00002	-.00002	.04666	-.00113	.00002	-.00002

RUN NO. 40/ 0 RN/L = 7.80 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
7.876	-.053	-.04070	.02380	.00050	-.00420	-.00070	.00080	-.04070	.02370	-.00070	.00080
7.824	2.392	.07230	.02480	.00310	-.00510	-.00080	.00060	.07330	.02170	-.00080	.00060
7.809	4.909	.19390	.03180	.00560	-.00730	-.00060	.00060	.19600	.01510	-.00050	.00060
7.769	7.313	.31660	.04430	.00620	-.00890	-.00030	.00060	.31960	.00360	-.00030	.00060
7.753	9.884	.44660	.06070	.00510	-.00820	.00030	.00050	.45040	-.01680	.00030	.00040
7.782	12.212	.56000	.08700	.00570	-.00980	.00020	.00050	.56580	-.03330	.00030	.00040
7.769	14.676	.69560	.12660	-.00130	-.01200	.00080	.00080	.70500	-.05350	.00090	.00050
	GRADIENT	.04728	.00162	.00103	-.00063	.00002	-.00004	.04770	-.00174	.00004	-.00004

ARC-12-180(OA173) OV101+TRIPS+TC+GROUND PLANE (RNS025) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 39/ 0 RN/L = 7.84 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
7.914	1.135	.01790	.02290	-.00290	-.00570	-.00040	.00070	.01840	.02250	-.00030	.00070
7.880	1.691	.04370	.02300	-.00160	-.00640	-.00040	.00080	.04440	.02170	-.00040	.00080
7.881	2.241	.06910	.02390	-.00060	-.00680	-.00060	.00070	.06990	.02120	-.00050	.00070
7.922	2.264	.07050	.02430	.00020	-.00660	-.00060	.00080	.07140	.02150	-.00060	.00080
7.899	4.541	.17440	.02920	.00380	-.00700	-.00050	.00060	.17620	.01530	-.00040	.00070
7.891	5.723	.22940	.03140	.00460	-.00620	-.00030	.00060	.23140	.00840	-.00030	.00060
7.892	6.849	.29150	.03660	.00540	-.00780	-.00050	.00070	.29380	.00170	-.00040	.00080
7.879	8.001	.34670	.04310	.00490	-.00750	-.00030	.00050	.34940	-.00550	-.00020	.00060
7.877	9.142	.40010	.05320	.00340	-.00830	-.00020	.00040	.40350	-.01100	-.00010	.00050
7.857	11.406	.50760	.07350	.00540	-.00940	-.00010	.00040	.51220	-.02820	.00000	.00040
7.836	13.733	.62140	.10720	.00580	-.01210	.00060	.00080	.62910	-.04320	.00080	.00070
7.793	14.894	.69180	.12380	.00040	-.01440	.00070	.00080	.70040	-.05790	.00090	.00060
7.836	13.759	.62670	.10780	.00520	-.01290	.00030	.00070	.63440	-.04410	.00050	.00060
7.821	13.156	.59360	.09590	.00590	-.01140	.00020	.00070	.59980	-.04160	.00040	.00060
7.827	11.418	.50680	.07540	.00660	-.01170	.00030	.00050	.51170	-.02630	.00040	.00040
7.840	9.151	.39770	.05560	.00460	-.01000	.00010	.00050	.40140	-.00830	.00020	.00040
7.832	7.978	.34100	.04840	.00480	-.00920	-.00010	.00050	.34440	.00060	.00000	.00050
7.837	6.840	.28540	.04230	.00470	-.00810	-.00030	.00050	.28840	.00800	-.00030	.00050
7.830	5.701	.23000	.03450	.00360	-.00730	-.00040	.00040	.23230	.01150	-.00040	.00050
7.821	4.562	.17470	.02780	.00260	-.00640	-.00050	.00050	.17640	.01390	-.00050	.00060
7.815	3.388	.11700	.02850	.00120	-.00610	-.00050	.00060	.11850	.02160	-.00040	.00060
7.815	3.382	.11650	.03190	.00120	-.00540	-.00050	.00060	.11820	.02500	-.00050	.00060
7.815	3.383	.11710	.03100	.00100	-.00540	-.00060	.00060	.11870	.02410	-.00060	.00060
7.803	3.407	.11710	.03180	.00130	-.00620	-.00070	.00060	.11880	.02480	-.00070	.00070
7.811	2.999	.09880	.02950	.00020	-.00450	-.00030	.00040	.10020	.02430	-.00030	.00040
7.819	2.601	.08240	.02780	-.00040	-.00520	-.00060	.00060	.08360	.02410	-.00060	.00060
7.824	2.264	.06870	.02900	-.00100	-.00530	-.00060	.00050	.06980	.02620	-.00060	.00050
7.825	1.682	.04300	.02860	-.00180	-.00480	-.00060	.00060	.04380	.02740	-.00060	.00060
7.819	1.100	.01770	.02080	-.00330	-.00480	-.00080	.00060	.01810	.02050	-.00080	.00070
7.813	.532	-.00680	.02530	-.00340	-.00450	-.00090	.00080	-.00660	.02540	-.00090	.00080
	GRADIENT	.04590	.00198	.00193	-.00031	-.00002	-.00004	.04629	-.00220	-.00001	-.00001

ARC-12-180(OA173) OV101+GROUND PLANE (RNS026) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = .000
MACH = .260 H/B = .600

RUN NO. 42/ 0 RN/L = 5.39 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.406	.532	-.03740	.06180	.02720	-.00440	.00040	.00050	-.03680	.06220	.00040	.00050
5.412	2.195	.03890	.06130	.02740	-.00600	.00040	.00040	.04120	.05970	.00040	.00040
5.397	3.269	.08530	.06140	.02720	-.00700	.00040	.00040	.08860	.05640	.00040	.00030
5.388	4.353	.13380	.06250	.02700	-.00730	.00050	.00040	.13810	.05210	.00050	.00030
5.389	6.523	.23700	.06770	.02660	-.00720	.00070	.00030	.24310	.04040	.00070	.00020
5.391	8.738	.35170	.07940	.02360	-.00900	.00080	.00030	.35970	.02510	.00090	.00020
5.387	10.923	.45520	.09610	.02520	-.00960	.00090	.00020	.46510	.00820	.00090	.00010
5.378	3.270	.08530	.06148	.02730	-.00640	.00040	.00040	.08860	.05640	.00040	.00040
5.382	2.161	.03640	.06130	.02720	-.00660	.00030	.00050	.03870	.05990	.00030	.00050
5.374	.546	-.03580	.06230	.02720	-.00590	.00020	.00050	-.03520	.06270	.00020	.00050
	GRADIENT	.04468	.00015	-.00005	-.00079	.00002	-.00003	.04565	-.00261	.00002	-.00006

ARC-12-180(OA173) OV101+GROUND PLANE (RNS026) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = .000
MACH = .260 H/B = .600

RUN NO. 41/ 0 RN/L = 7.90 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
8.025	.527	-.04000	.06110	.02770	-.00660	.00030	.00050	-.03950	.06150	.00030	.00050
8.025	1.117	-.01460	.06060	.02780	-.00640	.00040	.00060	-.01340	.06090	.00040	.00060
7.959	1.671	.01260	.05970	.02770	-.00660	.00050	.00040	.01430	.05940	.00050	.00040
7.956	2.227	.03820	.05870	.02740	-.00600	.00040	.00030	.04050	.05720	.00050	.00030
7.936	2.610	.05600	.05870	.02760	-.00730	.00040	.00050	.05860	.05610	.00040	.00050
7.952	2.989	.07270	.05990	.02760	-.00680	.00050	.00030	.07570	.05610	.00050	.00030
7.938	3.382	.09200	.06010	.02750	-.00790	.00030	.00040	.09540	.05460	.00030	.00040
7.937	4.521	.14410	.06200	.02720	-.00740	.00040	.00050	.14850	.05050	.00050	.00050
7.929	5.686	.20190	.06480	.02670	-.00740	.00060	.00030	.20740	.04450	.00060	.00030
7.921	6.867	.26260	.06870	.02590	-.00880	.00060	.00030	.26890	.03680	.00060	.00020
7.915	7.961	.31500	.07350	.02490	-.00940	.00060	.00030	.32220	.02920	.00070	.00020
7.905	9.134	.37430	.08090	.02350	-.01020	.00070	.00020	.38240	.02050	.00080	.00010
7.858	11.403	.48070	.10020	.02630	-.01090	.00080	.00030	.49100	.00330	.00090	.00020
7.862	13.098	.56150	.12110	.02650	-.01090	.00100	.00030	.57430	-.00910	.00110	.00010
7.841	13.657	.59070	.12950	.02580	-.01270	.00090	.00040	.60450	-.01340	.00090	.00010
7.852	14.845	.65470	.15030	.02400	-.01300	.00090	.00050	.67140	-.02220	.00100	.00020
7.880	13.720	.59740	.13120	.02580	-.01170	.00090	.00040	.61150	-.01400	.00100	.00010
7.881	13.176	.56750	.12270	.02660	-.01110	.00090	.00040	.58050	-.00970	.00100	.00020
7.864	11.424	.48390	.10080	.02640	-.00990	.00090	.00020	.49430	.00310	.00090	.00010
7.886	9.192	.37860	.08180	.02410	-.00950	.00070	.00040	.38680	.02030	.00080	.00020
7.867	7.949	.31520	.07370	.02540	-.00940	.00070	.00030	.32240	.02940	.00070	.00020
7.878	6.873	.26310	.06840	.02650	-.00910	.00060	.00040	.26930	.03640	.00070	.00030
7.878	5.703	.20450	.06480	.02680	-.00820	.00050	.00030	.20990	.04420	.00050	.00020
7.877	4.535	.14820	.06210	.02730	-.00790	.00040	.00040	.15270	.05020	.00040	.00040
7.876	3.422	.09350	.06080	.02760	-.00850	.00020	.00040	.09700	.05510	.00020	.00040
7.880	3.019	.07400	.05980	.02760	-.00680	.00030	.00030	.07710	.05580	.00030	.00030
7.900	2.635	.05780	.06040	.02770	-.00640	.00040	.00050	.06050	.05770	.00040	.00050
7.898	2.638	.05890	.05970	.02770	-.00740	.00030	.00040	.06160	.05700	.00030	.00040
7.894	2.234	.03740	.06020	.02760	-.00600	.00040	.00040	.03970	.05870	.00040	.00040
7.896	2.235	.03970	.06020	.02770	-.00720	.00020	.00060	.04200	.05860	.00020	.00050
7.896	1.672	.01210	.05990	.02780	-.00610	.00030	.00040	.01390	.05950	.00030	.00040
7.891	1.103	-.01360	.06050	.02760	-.00610	.00020	.00050	-.01240	.06070	.00030	.00050
7.898	.508	-.04080	.06040	.02760	-.00510	.00030	.00050	-.04030	.06070	.00030	.00050
	GRADIENT	.04630	.00014	-.00012	-.00031	.00001	-.00002	.04727	-.00277	.00002	-.00002

ARC-12-180(OA173) OV101+TC H/B=FREE AIR (RNS027) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RUN NO. 43/ 0 RN/L = 1.73 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
1.747	-5.263	-.24330	.03350	-.01030	-.00120	.00030	.00070	-.24540	.01120	.00030	.00070
1.745	-4.197	-.19400	.02950	-.01160	-.00190	.00040	.00050	-.19560	.01530	.00030	.00060
1.740	-2.146	-.10830	.02520	-.01170	-.00350	.00020	.00060	-.10920	.02120	.00020	.00060
1.739	-.077	-.02100	.02340	-.01010	-.00560	.00010	.00050	-.02110	.02340	.00010	.00050
1.738	1.981	.06290	.02520	-.00480	-.00610	.00000	.00060	.06370	.02300	.00010	.00060
1.736	4.065	.14900	.02790	-.00120	-.00840	-.00010	.00030	.15060	.01730	.00000	.00030
1.735	6.208	.25090	.03360	-.00070	-.00940	.00010	.00030	.25300	.00640	.00020	.00030
1.733	8.294	.34820	.04140	-.00240	-.01010	.00030	.00030	.35050	-.00890	.00030	.00020
1.731	10.437	.44750	.05860	-.00500	-.01120	.00020	.00010	.45080	-.02280	.00020	.00010
1.730	12.465	.54290	.07890	-.00440	-.01230	.00060	.00020	.54720	-.03920	.00060	.00010
1.719	14.586	.65140	.11040	-.00140	-.01420	.00090	.00040	.65840	-.05590	.00100	.00010
1.715	16.756	.76370	.14940	-.00510	-.01620	.00100	.00150	.77450	-.07530	.00140	.00110
1.708	18.827	.88270	.19960	-.01120	-.01540	.00080	.00180	.90010	-.09350	.00130	.00140
1.720	16.707	.77010	.15090	-.00300	-.01410	.00110	.00150	.78110	-.07500	.00150	.00110
1.718	14.594	.66020	.11270	.00070	-.01200	.00100	.00040	.66740	-.05600	.00110	.00020
1.724	12.479	.55680	.08240	-.00220	-.00990	.00050	.00030	.56150	-.03890	.00050	.00020
1.726	10.396	.45880	.06110	-.00150	-.00910	.00040	.00020	.46230	-.02210	.00040	.00010
1.723	8.207	.35520	.04450	.00060	-.00730	.00010	.00050	.35790	-.00630	.00020	.00050
1.722	6.206	.25780	.03430	.00110	-.00680	.00010	.00040	.26000	.00650	.00020	.00040
1.722	4.096	.15950	.02980	.00000	-.00520	.00010	.00050	.16130	.01840	.00010	.00050
1.721	1.950	.06990	.02520	-.00240	-.00400	.00000	.00070	.07070	.02280	.00010	.00070
1.720	-.059	-.01120	.02310	-.00870	-.00320	.00010	.00060	-.01130	.02310	.00010	.00060
1.716	-2.154	-.09910	.02470	-.00960	-.00200	.00020	.00060	-.10000	.02100	.00020	.00060
1.716	-4.254	-.19180	.02880	-.01040	-.00170	.00030	.00060	-.19340	.01460	.00030	.00060
1.713	-5.300	-.24270	.03340	-.00980	-.00050	.00040	.00070	-.24470	.01110	.00040	.00080
1.713	-.046	-.01580	.02370	-.01030	-.00430	.00010	.00050	-.01580	.02370	.00010	.00050
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC H/B=FREE AIR (RNS027) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RUN NO. 46/ 0 RN/L = 2.31 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
2.337	-5.360	-.25510	.03540	-.01180	.00960	.00090	.00060	-.25730	.01160	.00080	.00070
2.324	-4.335	-.21130	.03260	-.01300	.00870	.00100	.00060	-.21320	.01670	.00090	.00070
2.317	-2.155	-.11830	.02730	-.01220	.00720	.00090	.00060	-.11920	.02290	.00090	.00070
2.312	-.068	-.02950	.02710	-.00980	.00560	.00080	.00060	-.02950	.02710	.00080	.00060
2.310	1.959	.04880	.03110	-.00530	.00380	.00050	.00090	.04990	.02950	.00050	.00090
2.307	4.174	.15120	.03410	-.00080	.00200	.00050	.00070	.15330	.02310	.00060	.00070
2.315	6.264	.23830	.03340	-.00110	.00050	.00070	.00050	.24050	.00740	.00070	.00050
2.311	8.322	.34000	.04300	.00010	-.00090	.00070	.00060	.34260	-.00630	.00080	.00040
2.308	10.446	.44040	.06080	-.00160	-.00160	.00090	.00060	.44410	-.01940	.00100	.00040
2.300	12.550	.54020	.07700	.00050	-.00140	.00100	.00000	.54410	-.04130	.00100	-.00020
2.293	14.680	.64530	.11050	-.00050	-.00380	.00130	.00060	.65230	-.05540	.00140	.00020
2.304	16.837	.76330	.15120	-.00540	-.00410	.00110	.00130	.77460	-.07460	.00140	.00090
2.295	19.033	.88800	.20430	-.01230	-.00600	.00160	.00150	.90640	-.09390	.00200	.00090
2.299	16.889	.77230	.15410	-.00400	-.00430	.00110	.00130	.78400	-.07510	.00140	.00090
2.313	14.758	.65420	.11350	.00090	-.00260	.00120	.00060	.66160	-.05560	.00130	.00030
2.317	12.587	.54260	.08420	.00230	-.00130	.00110	.00010	.54800	-.03520	.00110	-.00010
2.313	10.508	.45270	.06370	.00100	-.00130	.00090	.00020	.45670	-.01930	.00090	.00000
2.305	8.383	.34940	.04760	.00270	.00000	.00100	.00030	.35260	-.00350	.00100	.00020
2.301	6.211	.24770	.03760	.00220	.00090	.00070	.00060	.25030	.01080	.00070	.00050
2.307	4.133	.14910	.03350	.00090	.00090	.00040	.00070	.15120	.02270	.00040	.00070
2.302	2.046	.06410	.03200	-.00250	.00320	.00050	.00080	.06520	.02970	.00060	.00080
2.304	-.067	-.01830	.02770	-.00730	.00530	.00080	.00070	-.01830	.02770	.00080	.00070
2.306	-2.206	-.10710	.02700	-.00880	.00640	.00090	.00070	-.10800	.02290	.00090	.00070
2.304	-4.279	-.20030	.03150	-.00990	.00750	.00100	.00070	-.20210	.01660	.00090	.00070
2.304	-5.376	-.24650	.03490	-.00940	.00780	.00100	.00070	-.24870	.01180	.00090	.00070
2.302	-.089	-.02670	.02820	-.00910	.00440	.00060	.00070	-.02680	.02820	.00060	.00070
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC H/B=FREE AIR (RNS027) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RUN NO. 45/ 0 RN/L = 5.34 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
5.380	-5.658	-.27000	.03420	-.01150	.00240	.00030	.00090	-.27210	.00760	.00020	.00090
5.356	-4.515	-.21740	.03000	-.01110	.00140	.00020	.00090	-.21900	.01300	.00010	.00090
5.360	-2.350	-.12280	.02500	-.01010	-.00010	.00010	.00090	-.12370	.02000	.00000	.00090
5.368	-.110	-.02550	.02350	-.00770	-.00120	.00000	.00070	-.02560	.02350	.00000	.00070
5.358	2.127	.06830	.02500	-.00440	-.00210	-.00020	.00080	.06920	.02240	-.00020	.00080
5.364	4.370	.16480	.03100	.00030	-.00250	-.00010	.00080	.16670	.01840	-.00010	.00080
5.355	6.583	.26960	.03010	.00260	-.00330	-.00020	.00060	.27130	-.00080	-.00010	.00060
5.348	8.804	.38140	.04830	.00250	-.00320	-.00010	.00050	.38430	-.01020	-.00010	.00050
5.346	10.998	.48870	.06800	.00390	-.00490	-.00010	.00040	.49270	-.02570	.00000	.00040
5.317	13.213	.59360	.09350	.00420	-.00630	.00020	.00050	.59940	-.04350	.00030	.00050
5.323	15.485	.71660	.13000	-.00120	-.00810	.00050	.00080	.72540	-.06450	.00070	.00070
5.331	17.766	.84960	.18120	-.01230	-.01160	.00090	.00140	.86460	-.08440	.00130	.00100
5.323	20.064	.97900	.24680	-.02240	-.01500	.00200	.00190	1.00460	-.10100	.00250	.00110
5.321	17.869	.85910	.18480	-.01280	-.01160	.00110	.00140	.87460	-.08540	.00150	.00090
5.338	15.583	.72660	.13300	-.00090	-.00830	.00050	.00090	.73580	-.06540	.00080	.00070
5.339	13.316	.60400	.09480	.00410	-.00570	.00030	.00050	.60970	-.04570	.00040	.00040
5.344	11.031	.49110	.06840	.00390	-.00510	.00020	.00050	.49520	-.02610	.00030	.00050
5.351	8.824	.38470	.04710	.00200	-.00340	.00000	.00050	.38740	-.01200	.00000	.00050
5.310	6.577	.27550	.03500	.00330	-.00330	-.00010	.00060	.27770	.00350	.00000	.00060
5.308	4.349	.16750	.03060	.00000	-.00280	-.00010	.00070	.16930	.01790	-.00010	.00070
5.321	2.111	.07060	.02660	-.00420	-.00220	-.00010	.00060	.07150	.02400	.00000	.00060
5.317	-.114	-.02110	.02400	-.00690	-.00120	.00010	.00080	-.02120	.02400	.00010	.00080
5.326	-2.361	-.11630	.02490	-.00870	-.00040	.00020	.00080	-.11730	.02010	.00010	.00080
5.332	-4.505	-.20910	.02970	-.01000	.00110	.00030	.00090	-.21080	.01330	.00030	.00090
5.338	-5.586	-.25770	.03340	-.01000	.00150	.00040	.00080	-.25970	.00830	.00030	.00080
5.326	-.129	-.02710	.02390	-.00810	-.00130	.00000	.00090	-.02720	.02380	.00000	.00090
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC H/B=FREE AIR (RNS027) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RUN NO. 44/ 0 RN/L = 7.88 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
7.910	-5.866	-.27660	.03410	-.01150	.00090	.00010	.00100	-.27860	.00590	.00000	.00100
7.884	-4.762	-.22710	.02990	-.01190	.00030	.00010	.00090	-.22880	.01110	.00000	.00090
7.865	-2.471	-.12880	.02390	-.01070	-.00100	.00010	.00080	-.12970	.01830	.00000	.00090
7.913	-.152	-.02650	.02110	-.00810	-.00260	-.00020	.00090	-.02650	.02100	-.00020	.00090
7.872	2.222	.07710	.02140	-.00340	-.00400	-.00030	.00070	.07780	.01840	-.00030	.00080
7.877	4.560	.18030	.02800	.00090	-.00500	-.00040	.00080	.18190	.01370	-.00040	.00080
7.893	6.844	.29180	.03590	.00290	-.00440	-.00040	.00060	.29400	.00110	-.00030	.00060
7.876	9.109	.40190	.04860	.00130	-.00610	-.00050	.00050	.40450	-.01510	-.00040	.00050
7.873	11.520	.51430	.06980	.00310	-.00740	.00000	.00050	.51790	-.03350	.00010	.00050
7.862	13.850	.63280	.10090	.00330	-.00850	.00010	.00060	.63860	-.05230	.00020	.00060
7.869	16.291	.77050	.14740	-.00480	-.01130	.00070	.00090	.78100	-.07280	.00090	.00070
7.843	18.715	.91630	.21130	-.02020	-.01580	.00150	.00100	.93590	-.09120	.00180	.00040
7.863	21.182	1.06270	.29730	-.03380	-.01740	.00130	.00250	1.09870	-.10320	.00210	.00190
7.869	18.771	.92660	.21490	-.02050	-.01550	.00170	.00110	.94670	-.09190	.00200	.00050
7.878	16.185	.76810	.14580	-.00460	-.01070	.00080	.00090	.77850	-.07230	.00110	.00060
7.906	13.985	.64560	.10370	.00290	-.00910	.00010	.00060	.65160	-.05410	.00030	.00050
7.916	11.625	.52650	.07200	.00420	-.00760	-.00010	.00050	.53030	-.03470	.00000	.00050
7.920	9.254	.41140	.05200	.00310	-.00510	-.00020	.00040	.41440	-.01430	-.00010	.00050
7.916	6.910	.30040	.03490	.00370	-.00410	-.00020	.00060	.30240	-.00120	-.00010	.00060
7.920	4.486	.17840	.02920	.00070	-.00410	-.00040	.00080	.18020	.01530	-.00030	.00080
7.830	2.181	.07740	.01710	-.00380	-.00360	-.00040	.00080	.07800	.01410	-.00040	.00080
7.847	-.152	-.02370	.02240	-.00740	-.00240	-.00010	.00100	-.02370	.02230	-.00010	.00100
7.848	-2.415	-.12300	.02430	-.00990	-.00180	-.00010	.00110	-.12390	.01910	-.00010	.00110
7.863	-4.739	-.22500	.03000	-.01140	.00030	.00010	.00100	-.22670	.01150	.00010	.00100
7.868	-5.864	-.27540	.03440	-.01110	.00100	.00020	.00090	-.27740	.00630	.00010	.00090
7.865	-.150	-.02600	.02200	-.00740	-.00260	-.00020	.00090	-.02610	.02190	-.00020	.00090
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+TUFTS H/B=FREE AIR (RNS028) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RUN NO. 48/ 0 RN/L = 1.72 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
1.743	4.241	.14730	.03600	-.00010	-.00910	-.00110	.00020	.14960	.02510	-.00100	.00030
1.735	8.379	.33570	.04740	-.00250	-.01080	-.00120	-.00030	.33900	-.00160	-.00120	-.00010
1.729	12.478	.53520	.08290	-.00530	-.01340	-.00140	-.00040	.54050	-.03380	-.00140	-.00010
1.711	16.667	.74490	.15090	-.00490	-.01280	-.00140	.00000	.75710	-.06730	-.00130	.00040
1.704	12.496	.55550	.08720	-.00190	-.01080	-.00120	-.00040	.56120	-.03410	-.00130	-.00010
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 47/ 0 RN/L = 7.91 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CL	CD	CLM	CY	CLN	CSL	CN	CA	CYN	CBL
7.938	-.150	-.03030	.01930	-.00520	-.00450	-.00110	.00060	-.03030	.01920	-.00110	.00060
7.929	2.088	.06290	.02890	-.00190	-.00530	-.00140	.00040	.06390	.02660	-.00140	.00040
7.951	4.415	.16500	.03060	.00170	-.00530	-.00160	.00040	.16690	.01790	-.00150	.00050
7.940	6.790	.28410	.03730	.00460	-.00540	-.00140	.00020	.28650	.00370	-.00130	.00040
7.928	9.155	.39930	.05160	.00460	-.00800	-.00160	-.00010	.40250	-.01200	-.00160	.00010
7.895	13.831	.62990	.10460	.00390	-.01020	-.00110	.00020	.63670	-.04770	-.00110	.00050
7.881	18.658	.89890	.20990	-.01360	-.01830	.00210	-.00190	.91900	-.08610	.00140	-.00250
7.918	13.930	.63660	.10610	.00500	-.01060	-.00110	.00080	.64350	-.04910	-.00090	.00100
7.909	9.219	.40670	.05540	.00370	-.00770	-.00130	.00040	.41030	-.00990	-.00130	.00060
7.909	4.483	.17200	.02700	.00310	-.00580	-.00160	.00060	.17360	.01360	-.00150	.00070
7.903	-.145	-.03170	.02220	-.00520	-.00510	-.00110	.00090	-.03180	.02210	-.00110	.00080
7.898	10.101	.45130	.06230	.00270	-.00620	-.00190	.00040	.45520	-.01720	-.00180	.00070
7.878	13.246	.60210	.09660	.00430	-.00900	-.00190	.00100	.60830	-.04280	-.00160	.00140
	GRADIENT	.04894	.00850	-.00002	-.00060	.00010	-.00008	.04975	-.00577	.00009	-.00009

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS001) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 1/ 0 RN/L = 1.76 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
1.765	.569	.26220	97.34300	2122.50000	2023.50000	69.56300	.85060	-.53390	.00290
1.762	.572	.26250	97.55900	2122.50000	2023.30000	70.67300	.84430	-.54460	.00220
1.759	.575	.26250	97.56000	2122.50000	2023.30000	71.41400	.84450	-.54170	.00300
	GRADIENT	.05222	37.91392	-2.59241	-36.29367	328.58734	-1.05949	-1.33354	.02421

RUN NO. 4/ 0 RN/L = 2.41 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
2.407	.598	.25950	133.63000	2971.20001	2835.39999	76.36100	1.05830	-.32830	.00870
2.403	.598	.25920	133.49000	2973.39999	2837.60001	77.06800	1.06640	-.32210	.00830
2.409	.600	.25970	133.63000	2967.00000	2831.10001	75.62100	1.22280	-.24200	.00810
	GRADIENT	.12637	23.63077	-1989.48570	-2034.49669	-403.97363	61.70549	32.04396	-.16226

RUN NO. 3/ 0 RN/L = 5.50 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.498	.592	.25950	312.67000	6951.79999	6633.79999	86.55800	.96820	-.31400	.01720
5.497	.595	.25930	312.02000	6947.50000	6630.20001	86.12100	.97340	-.30980	.01660
5.497	.597	.25920	311.66000	6941.90002	6624.90002	85.68300	.95340	-.32560	.01530
	GRADIENT	-.05902	-197.65405	-1860.98686	-1666.37564	-166.58055	-2.35041	-1.83667	-.34899

RUN NO. 2/ 0 RN/L = 7.98 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
7.974	.586	.26020	460.02000	10175.00000	9707.00000	91.64000	.96630	-.31580	.01020
7.982	.593	.26040	460.45000	10170.00000	9701.50000	91.30300	.97440	-.30420	.00780
7.990	.594	.26060	460.95000	10163.00000	9694.69995	90.96700	.98910	-.29510	.01170
	GRADIENT	.04379	100.13605	-1263.16553	-1314.24942	-73.97732	2.32540	2.34170	-.00599

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS002) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 7/ 0 RN/L = 2.35 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
2.349	10.192	.26320	130.72000	2828.39999	2695.39999	71.54800	.64520	6.97730	.00610
2.352	10.195	.26340	130.79000	2826.29999	2693.20001	71.07700	.64540	6.96410	.00600
2.355	10.198	.26350	130.79000	2823.39999	2690.39999	70.20200	.64530	6.97210	.00620
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 6/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.467	10.410	.25930	304.40000	6779.20001	6469.59998	77.94300	.64080	6.99540	.01310
5.476	10.421	.25950	304.48000	6769.29999	6459.59998	77.00000	.64090	6.97850	.01120
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 5/ 0 RN/L = 7.97 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
7.968	10.689	.25990	448.38000	9936.40002	9480.40002	81.37500	.64110	7.07100	.02340
7.971	10.690	.25990	447.80000	9925.80005	9470.40002	80.70200	.64110	7.06540	.02150
7.983	10.692	.26010	448.01000	9913.80005	9458.19995	79.89500	.64100	7.05650	.02510
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS003) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 12/ 0 RN/L = 2.38 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
2.377	15.281	.25980	131.16000	2909.00000	2775.60001	73.16400	.64940	5.38550	.00830
2.378	15.287	.25980	131.09000	2907.60001	2774.29999	72.82700	.64950	5.37880	.00850
2.380	15.290	.25990	131.09000	2906.20001	2772.89999	72.42300	.64950	5.38090	.00770
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS003) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 11/ 0 RN/L = 5.41 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.406	15.226	.25900	303.94000	6782.70001	6473.70001	82.48600	.64900	5.41520	.02060
5.411	15.232	.25900	303.43000	6770.70001	6462.09998	81.37500	.64900	5.40990	.02110
5.409	15.235	.25900	303.93000	6779.90002	6470.79999	82.18300	.64890	5.40890	.02140
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS004) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 14/ 0 RN/L = 5.48 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.488	.562	.26040	306.48000	6767.20001	6455.50000	77.37100	.77460	.88730	.00920
5.484	.576	.26050	307.06000	6777.79999	6465.50000	78.34600	.77580	.88610	.00840
5.473	.577	.26000	306.49000	6786.29999	6474.50000	79.15400	.77380	.89600	.00930
	GRADIENT	-.01164	17.31497	1006.45328	985.26479	93.54387	.00601	.28193	-.01979

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS005) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 8/ 0 RN/L = 5.46 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.447	10.177	.25880	310.51000	6936.90002	6621.20001	88.71200	.65790	5.70640	.01050
5.469	10.178	.26000	313.33000	6941.09998	6622.50000	89.01500	.65760	5.67500	.01260
5.467	10.180	.26000	313.46000	6944.70001	6625.90002	89.35100	.65740	5.70850	.01170
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS006) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 13/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.472	15.897	.25950	305.45000	6791.20001	6480.59998	78.61600	.66150	4.50190	.02220
5.473	15.899	.25970	306.24000	6800.40002	6489.00000	79.42300	.66160	4.59510	.02410
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS007) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 15/ 0 RN/L = 5.46 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.463	.735	.26000	301.79000	6685.09998	6378.20001	73.46700	.82300	4.75490	.00730
5.463	.738	.25980	301.00000	6676.59998	6370.50000	72.69300	.82280	4.76620	.00580
5.446	.741	.25880	296.27000	6667.40002	6364.20001	71.78400	.82360	4.75420	.00590
	GRADIENT	-.20176	-593.01646	-3035.85880	-2409.41174	-288.30117	.09765	.01412	-.24988

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS008) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 9/ 0 RN/L = 5.50 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.500	10.212	.25910	311.76000	6953.20001	6636.20001	85.88500	.70210	6.44520	.01510
5.507	10.217	.25930	312.26000	6949.59998	6632.09998	85.54800	.70210	6.44050	.01510
5.506	10.218	.25930	311.90000	6946.09998	6628.90002	85.24600	.70210	6.43370	.01320
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS009) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 10/ 0 RN/L = 5.46 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.454	15.849	.25790	311.28000	7002.00000	6685.50000	90.69800	.69040	4.72610	.02620
5.466	15.854	.25860	313.14000	7007.59998	6689.20001	91.20200	.69030	4.71890	.02680
5.466	15.856	.25860	313.07000	7004.79999	6686.50000	91.00000	.69030	4.72230	.02810
5.465	16.025	.25860	313.28000	7010.50000	6691.90002	91.43800	.69060	4.63860	.02710
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS010) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 24/ 0 RN/L = 5.48 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.479	.543	.26000	305.24000	6762.20001	6451.79999	77.03400	-2.20250	.00110	6.17220
5.478	.545	.25990	305.24000	6763.59998	6453.20001	77.16900	9.31300	-.01320	6.17200
	GRADIENT	-.03855	-1.12775	541.32158	541.32158	51.87665	4425.70044	-5.49584	-.08811

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS011) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 25/ 0 RN/L = 5.37 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.339	10.257	.25820	303.70000	6816.00000	6507.20001	88.77900	.64540	7.16050	6.08500
5.339	10.265	.25810	303.34000	6811.00000	6502.59998	88.34200	.64570	7.16290	6.08390
5.358	10.457	.25880	303.60000	6784.79999	6476.09998	86.15400	.64600	7.09380	6.07860
5.356	10.464	.25860	303.02000	6780.59998	6472.50000	85.78400	.64600	7.07240	6.07810
5.367	10.560	.25890	302.57000	6758.70001	6451.00000	83.86600	.64630	7.07540	6.07820
5.374	10.562	.25910	302.93000	6753.70001	6445.70001	83.39500	.64670	7.08050	6.07700
5.382	10.569	.25940	303.44000	6748.79999	6440.20001	82.92300	.64650	7.06860	6.07990
5.395	10.721	.25950	301.84000	6710.59998	6403.59998	79.62500	.64740	6.96610	6.07110
5.402	10.725	.25970	302.05000	6704.20001	6397.09998	79.02000	.64740	6.96440	6.07200
5.403	10.726	.25970	301.69000	6697.79999	6391.00000	78.48100	.64730	6.94770	6.06970
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS012) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 28/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.455	15.298	.25930	301.10000	6702.79999	6396.59998	74.14000	.65080	5.40740	5.97600
5.469	15.302	.25990	302.10000	6698.59998	6391.29999	73.63500	.65100	5.41710	5.97720
5.474	15.311	.26000	302.18000	6692.20001	6384.90002	73.09600	.65120	5.41950	5.97270
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS013) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 23/ 0 RN/L = 5.40 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.403	.601	.26010	302.51000	6697.79999	6390.20001	78.98600	.78000	1.18620	6.17310
5.399	.606	.25980	301.92000	6695.00000	6388.00000	78.81800	.77600	1.18560	6.17210
5.401	.610	.25990	301.85000	6692.20001	6385.20001	78.54800	.77380	1.23210	6.16920
	GRADIENT	-.02413	-74.86448	-607.68045	-537.56348	-47.07941	-.68569	4.71707	-.41084

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS014) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 26/ 0 RN/L = 5.43 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.414	10.506	.25880	312.68000	6987.09998	6669.20001	94.43300	.66060	5.73840	6.08640
5.417	10.507	.25900	313.05000	6987.09998	6668.79999	94.43300	.66080	5.71900	6.08510
5.413	10.513	.25870	312.46000	6986.40002	6668.70001	94.33200	.66090	5.71920	6.08360
5.451	10.716	.25980	313.30000	6951.00000	6632.40002	90.69800	.66090	5.66770	6.07780
5.452	10.719	.25970	312.79000	6944.00000	6625.90002	90.02400	.66110	5.69130	6.07790
5.461	10.726	.25990	312.92000	6935.50000	6617.29999	89.18300	.66090	5.69770	6.08000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+STRUTS+GROUND PLANE (SNS015) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 27/ 0 RN/L = 5.45 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.448	15.468	.25980	302.67000	6714.09998	6406.29999	76.15900	.66120	4.69640	5.97690
5.451	15.470	.25980	302.67000	6712.00000	6404.20001	75.89000	.66120	4.69420	5.97700
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+GROUND PLANE (SNS016) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 19/ 0 RN/L = 2.38 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
2.402	.591	.25980	135.06000	2995.29999	2857.89999	81.24100	1.07640	.14170	.00290
2.391	2.134	.25920	134.95000	3005.89999	2868.70001	83.66400	.65610	1.96900	.00530
2.385	4.188	.25910	135.24000	3015.10001	2877.60001	85.88500	.64610	4.07070	.00740
2.382	6.257	.25910	135.52000	3020.79999	2882.89999	87.23100	.64990	6.17670	.00760
2.379	8.334	.25890	135.45000	3023.60001	2885.79999	87.97200	.65040	6.76560	.00800
2.374	10.420	.25850	135.07000	3025.00000	2887.70001	88.37500	.65260	6.83040	.00830
2.383	12.518	.25970	136.26000	3025.70001	2887.10001	88.64500	.65100	6.29860	.00740
2.380	14.533	.25940	136.04000	3027.10001	2888.79999	88.94800	.65260	5.84300	.01010
2.374	15.599	.25870	135.39000	3027.10001	2889.39999	89.01500	.65390	5.43920	.01130
2.375	16.634	.25890	135.55000	3027.10001	2889.29999	89.14900	.65570	5.08850	.01420
2.367	18.730	.25800	134.68000	3027.79999	2890.89999	89.28400	.65840	4.40720	.01240
2.371	19.543	.25660	135.29000	3028.50000	2891.00000	89.58700	.65820	4.17100	.01210
	GRADIENT	-.00019	.05495	5.45062	5.41647	1.28007	-.11349	1.08881	.00124

RUN NO. 18/ 0 RN/L = 5.46 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.466	.586	.25970	316.58000	7028.09998	6706.20001	94.16400	2.08710	.03970	.00930
5.461	2.213	.25950	316.66000	7041.59998	6719.59998	95.07300	.65980	1.97720	.01110
5.466	4.363	.25990	318.21000	7051.50000	6727.90002	95.98100	.64750	4.30120	.01390
5.490	6.547	.26100	321.29000	7062.09998	6735.29999	96.55300	.64800	6.13520	.01440
5.464	8.834	.25990	318.84000	7067.00000	6742.79999	97.12500	.65070	6.77290	.01510
5.453	10.943	.25970	318.32000	7064.90002	6741.20001	97.52900	.64950	6.60940	.01830
5.435	13.129	.25890	316.63000	7071.29999	6749.29999	98.06800	.65040	6.05930	.02210
5.452	15.409	.25990	319.15000	7076.20001	6751.70001	98.60600	.65400	5.49080	.02470
5.451	16.478	.25980	319.20000	7079.09998	6754.40002	98.80800	.65650	5.09360	.03100
5.449	17.659	.25980	319.31000	7082.59998	6757.90002	99.11100	.65900	4.68350	.03240
	GRADIENT	.00006	.44669	6.11238	5.64692	.47801	-.36153	1.12582	.00122

RUN NO. 17/ 0 RN/L = 7.93 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
7.979	.554	.26260	463.10000	10064.00000	9592.59998	90.36100	.35530	-.22690	.01430
7.920	2.275	.26130	462.32000	10140.00000	9669.90002	94.90400	.65470	3.09350	.01770
7.935	4.543	.26030	468.71000	10360.00000	9883.40002	101.87000	.64510	6.03950	.02120
7.937	6.861	.26010	468.41000	10369.00000	9892.90002	101.80000	.64650	7.99920	.02240
7.932	9.153	.26020	468.70000	10363.00000	9886.19995	102.11000	.64940	8.07680	.02420
7.920	11.439	.25980	467.32000	10367.00000	9891.90002	102.24000	.64960	7.34020	.02940
7.893	13.758	.25900	464.63000	10368.00000	9895.40002	102.48000	.65100	6.17520	.03180
	GRADIENT	-.00057	1.47948	75.38851	74.00402	2.89501	.06868	1.55695	.00172

ARC-12-180(OA173) OV101+TC+GROUND PLANE (SNS017) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 21/ 0 RN/L = 5.38 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.376	.639	.26020	314.55000	6957.40002	6637.50000	97.86600	.82960	1.41130	.00880
5.398	.643	.25960	309.71000	6881.70001	6566.79999	90.26000	.82710	1.42980	.00830
5.394	2.267	.25970	310.55000	6895.90002	6580.09998	91.64000	.72240	3.03480	.00970
5.401	4.440	.26030	312.40000	6906.50000	6588.79999	92.68300	.68820	4.71570	.01010
5.393	6.625	.26000	312.21000	6915.00000	6597.50000	93.42300	.67540	5.79260	.01520
5.379	6.631	.26020	314.44000	6955.29999	6635.50000	97.46200	.67520	5.83050	.01290
5.385	8.813	.25960	311.67000	6922.09998	6605.09998	93.99600	.67070	6.14890	.01240
5.375	11.010	.25930	311.14000	6929.09998	6612.70001	94.66900	.66550	5.91270	.01550
5.378	13.200	.25950	312.11000	6936.20001	6618.79999	95.30800	.66410	5.42820	.01910
5.378	15.390	.25970	312.74000	6941.09998	6623.09998	95.84700	.66490	4.84730	.02340
5.374	16.522	.25960	312.62000	6946.09998	6628.20001	96.25000	.66640	4.55460	.02810
5.370	17.618	.25940	312.38000	6949.59998	6632.00000	96.58700	.66810	4.26580	.02460
	GRADIENT	.00009	.02301	-3.95208	-3.98203	-.41568	-.03817	.87307	.00042

RUN NO. 20/ 0 RN/L = 7.92 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
7.985	.660	.26000	443.33000	9816.90002	9366.09998	75.52000	.83690	1.36570	.00790
7.865	.669	.25970	458.77000	10186.00000	9719.59998	97.32700	.83330	1.37320	.01130
7.943	2.363	.25980	448.00000	9934.30005	9478.69995	82.48600	.71870	3.11720	.01330
7.940	4.649	.26020	451.50000	9983.80005	9524.59998	85.34700	.68430	4.99830	.01700
7.922	6.930	.25990	451.86000	10017.00000	9557.50000	87.23100	.67370	5.99080	.02000
7.897	6.956	.26040	459.53000	10149.00000	9682.00000	95.10600	.67320	5.92750	.02350
7.917	9.225	.26000	453.70000	10046.00000	9584.69995	88.98100	.66950	6.22790	.02260
7.887	11.493	.25920	452.43000	10078.00000	9617.80005	90.76500	.66420	5.86650	.02420
7.895	13.816	.25970	455.12000	10100.00000	9637.00000	92.04400	.66330	5.28090	.02720
	GRADIENT	.00008	.03471	-5.83630	-5.90831	-.35213	-.03920	.91601	.00187

ARC-12-180(OA173) OV101+TC+GROUND PLANE (SNS018) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 16/ 0 RN/L = 5.43 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.467	.814	.25910	300.49000	6700.70001	6395.09998	72.72600	.83510	6.74010	.00760
5.462	2.447	.25960	303.78000	6747.40002	6438.40002	76.89900	.78500	7.55210	.01050
5.442	4.610	.25920	304.01000	6774.90002	6465.79999	79.45700	.74750	7.91290	.01270
5.448	6.810	.25980	306.35000	6794.70001	6483.20001	81.20700	.72610	7.83440	.01490
5.449	8.999	.26010	307.87000	6812.40002	6499.29999	82.72200	.71310	7.26330	.01550
5.425	11.173	.25920	306.37000	6826.59998	6515.00000	84.06800	.70300	6.52200	.01660
5.414	13.372	.25880	305.85000	6836.50000	6525.50000	84.90900	.69740	5.69860	.02070
5.416	15.586	.25910	307.22000	6847.79999	6535.40002	86.02000	.69430	4.93280	.02490
5.405	16.690	.25860	306.59000	6859.79999	6548.09998	86.89500	.69360	4.58840	.02710
5.410	17.797	.25910	307.93000	6867.59998	6554.50000	87.60100	.69280	4.27390	.02630
	GRADIENT	.00002	.88391	19.18504	18.30945	1.74191	-.02277	.30144	.00133

ARC-12-180(OA173) OV101+TC+GROUND PLANE (SNS019) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 29/ 0 RN/L = 5.33 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.426	.556	.26260	302.76000	6580.40002	6272.40002	73.60100	.96700	.58860	6.16100
5.395	2.181	.26180	302.75000	6620.00000	6312.09998	77.30300	.68680	4.22350	6.16670
5.372	4.381	.26110	302.90000	6653.29999	6345.20001	80.33200	.66210	7.62860	6.16470
5.346	6.598	.26020	302.21000	6681.59998	6374.20001	82.75500	.65630	8.67110	6.14800
5.327	8.855	.25970	302.02000	6706.29999	6399.20001	84.97600	.65430	8.45170	6.11670
5.336	11.084	.26050	305.08000	6733.20001	6422.90002	87.26500	.65520	7.65120	6.07440
5.309	13.266	.25940	303.68000	6758.00000	6449.09998	89.31800	.65540	6.65040	6.02720
5.276	15.375	.25800	301.85000	6782.70001	6475.79999	91.53900	.65580	5.67910	5.98620
5.253	17.675	.25710	300.88000	6806.09998	6500.20001	93.49100	.65890	4.75490	5.92770
5.257	19.896	.25770	303.41000	6832.90002	6524.50000	95.81300	.66200	4.00970	5.85950
	GRADIENT	-.00039	.03841	18.83503	18.80517	1.73788	-.07580	1.82383	.00086

ARC-12-180(OA173) OV101+TC+GROUND PLANE (SNS020) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RUN NO. 30/ 0 RN/L = 5.39 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.411	.635	.26090	314.77000	6924.90002	6604.70001	94.09700	.81990	1.86000	6.17190
5.396	2.281	.26040	313.79000	6930.50000	6611.40002	94.83700	.72850	3.63270	6.17700
5.400	4.459	.26080	314.63000	6930.50000	6610.50000	95.03900	.69240	5.25180	6.17450
5.400	6.687	.26070	314.46000	6929.09998	6609.29999	94.93800	.67720	6.07930	6.15400
5.388	8.881	.26010	313.01000	6927.70001	6609.40002	94.83700	.66970	6.27520	6.12600
5.380	11.107	.25980	312.23000	6927.00000	6609.50000	94.90400	.66790	6.00310	6.08380
5.369	13.304	.25930	311.03000	6926.29999	6610.00000	94.93800	.66630	5.45360	6.03600
5.367	15.512	.25920	311.01000	6929.09998	6612.90002	95.17300	.66580	4.85290	5.98940
5.369	17.762	.25930	311.44000	6931.90002	6615.29999	95.44300	.66740	4.22360	5.93280
	GRADIENT	-.00002	-.01443	1.38764	1.41551	.23829	-.03246	.87950	.00058

ARC-12-180(OA173) OV101+TC+GROUND PLANE (SNS021) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 35/ 0 RN/L = 5.41 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.412	1.641	.25980	316.86000	7028.09998	6705.90002	98.74100	.66320	1.62620	.01150
5.420	2.199	.26030	318.13000	7030.29999	6706.70001	98.97600	.65350	2.54930	.01130
5.407	3.278	.25970	316.65000	7031.70001	6709.70001	99.14500	.64690	3.71160	.01290
5.408	4.392	.25980	316.99000	7033.09998	6710.70001	99.31300	.64480	5.42410	.01290
5.402	5.517	.25950	316.48000	7035.20001	6713.40002	99.48100	.64390	6.58950	.01430
5.408	6.591	.25990	317.41000	7037.29999	6714.50000	99.71700	.64480	7.25170	.01380
	GRADIENT	-.00009	-.16847	1.69256	1.85623	.19546	-.00626	1.34127	.00063

RUN NO. 38/ 0 RN/L = 7.93 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
7.970	1.472	.26040	460.92000	10180.00000	9711.69995	92.38000	.68110	1.55840	.01660
7.940	3.393	.25980	460.94000	10226.00000	9757.69995	95.07300	.64910	6.84440	.02080
7.876	5.741	.26010	459.86000	10175.00000	9707.80005	96.99100	.64650	8.37540	.01860
	GRADIENT	-.00031	.01041	23.93981	23.93954	1.40151	-.01665	2.75098	.00219

ARC-12-180(OA173) OV101+TC+GROUND PLANE (SNS022) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .110

RUN NO. 37/ 0 RN/L = 5.36 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.419	.190	.26030	312.94000	6917.09998	6598.79999	91.94300	.82980	-2.71830	.00750
5.390	2.583	.25950	312.74000	6952.50000	6634.40002	95.24100	.48480	2.34940	.00840
5.371	5.071	.25890	312.25000	6971.59998	6654.09998	97.09200	.61130	6.37660	.01330
5.369	7.322	.25900	313.25000	6987.79999	6669.29999	98.47200	.63770	8.16410	.01490
5.359	9.735	.25870	313.12000	7000.59998	6682.20001	99.58200	.64830	7.98490	.01590
5.329	12.200	.25740	310.59000	7011.90002	6696.09998	100.69000	.65660	6.91330	.01810
5.301	14.534	.25610	308.08000	7021.09998	6707.90002	101.53000	.66520	5.88310	.02440
	GRADIENT	-.00033	-.08359	14.79565	14.87916	1.37842	-.14419	2.11807	.00038

RUN NO. 32/ 0 RN/L = 7.84 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
7.871	-.053	.26030	456.53000	10086.00000	9622.09998	93.76000	.80450	-3.82100	.01390
7.852	2.568	.26000	455.90000	10096.00000	9632.59998	94.73600	.46960	2.49760	.01570
7.840	5.194	.25980	455.59000	10103.00000	9640.00000	95.37500	.61270	6.60000	.02130
7.842	7.664	.26010	456.70000	10112.00000	9647.40002	95.98100	.64110	8.25630	.02090
7.808	10.120	.25910	453.88000	10120.00000	9658.09998	96.75500	.65010	7.86280	.02310
7.804	12.572	.25920	454.53000	10130.00000	9667.30005	97.49600	.65930	6.61320	.02830
	GRADIENT	-.00011	-.24030	3.81429	4.00503	.37228	-.12774	2.41012	.00069

ARC-12-180(OA173) OV101+TC+GROUND PLANE (SNS023) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .210

RUN NO. 36/ 0 RN/L = 5.37 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.397	.301	.25940	316.33000	7038.79999	6717.09998	99.91900	.77700	-1.43780	.00900
5.399	2.643	.25960	317.02000	7043.70001	6721.29999	100.39000	.59230	2.93520	.01040
5.390	5.038	.25910	316.22000	7048.70001	6727.09998	100.79000	.62980	6.30450	.01380
5.379	7.372	.25870	315.37000	7052.20001	6731.50000	101.16000	.64290	8.03010	.01490
5.375	9.766	.25860	315.28000	7055.70001	6735.09998	101.57000	.64870	8.10700	.01670
5.351	12.121	.25750	312.80000	7059.29999	6741.20001	101.90000	.65200	7.07340	.01860
5.355	14.500	.25770	313.69000	7065.59998	6746.70001	102.44000	.65790	6.06110	.02300
5.341	16.973	.25710	312.75000	7074.79999	6756.90002	103.18000	.66460	4.96880	.02740
	GRADIENT	.00009	.29467	2.09264	1.79369	.20115	-.07888	1.86753	.00060

RUN NO. 33/ 0 RN/L = 7.78 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
7.803	-.015	.26010	458.40000	10149.00000	9683.09998	99.81800	.74050	-2.29370	.01370
7.799	2.541	.26010	458.90000	10155.00000	9688.30005	100.42000	.57730	2.38920	.01410
7.782	5.047	.25970	457.53000	10157.00000	9691.80005	100.76000	.62800	6.17030	.01740
7.774	7.478	.25950	457.17000	10162.00000	9697.09998	101.20000	.64270	7.44310	.02270
7.758	9.978	.25910	456.09000	10166.00000	9701.80005	101.64000	.64320	7.43130	.02550
7.741	12.408	.25870	455.02000	10172.00000	9709.30005	102.27000	.65210	6.55210	.02920
	GRADIENT	.00000	.19561	2.34737	2.03439	.23552	-.06385	1.83205	.00016

ARC-12-180(OA173) OV101+TC+GROUND PLANE (SNS024) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .400

RUN NO. 34/ 0 RN/L = 5.44 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.496	.035	.26060	309.93000	6836.50000	6521.29999	81.27400	.64950	-1.40140	.00890
5.459	2.189	.25960	309.99000	6884.59998	6569.29999	85.68300	.63170	2.36360	.01420
5.468	4.394	.26050	313.02000	6909.29999	6591.00000	87.87100	.63840	5.25740	.01430
5.450	7.122	.26000	312.97000	6933.40002	6615.09998	90.02400	.64430	7.87470	.01680
5.436	9.482	.25950	312.57000	6948.20001	6630.40002	91.33700	.64900	7.79440	.01730
5.417	11.812	.25880	311.49000	6962.40002	6645.59998	92.54800	.64900	7.16290	.01730
5.417	14.238	.25900	312.63000	6974.40002	6656.50000	93.69300	.65270	6.05130	.02140
5.419	16.605	.25930	313.69000	6986.40002	6667.40002	94.63500	.65850	5.10790	.02980
5.413	19.108	.25910	313.93000	6998.40002	6679.20001	95.71200	.66300	4.24800	.03250
	GRADIENT	-.00002	.71146	16.67975	15.96607	1.51140	-.00252	1.52676	.00123

RUN NO. 40/ 0 RN/L = 7.80 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
7.876	-.053	.26020	457.91000	10125.00000	9658.90002	94.97200	.65650	-1.71190	.01400
7.824	2.392	.25910	456.91000	10184.00000	9719.30005	98.67400	.63670	2.92000	.01780
7.809	4.909	.25900	457.98000	10222.00000	9756.50000	100.89000	.64170	6.09660	.02290
7.769	7.313	.25790	455.82000	10252.00000	9788.40002	102.81000	.64510	7.15400	.02640
7.753	9.884	.25760	455.67000	10275.00000	9811.90002	104.13000	.64820	7.35690	.02170
7.782	12.212	.25880	460.68000	10296.00000	9828.00000	105.37000	.64860	6.43710	.02650
7.769	14.676	.25850	460.82000	10318.00000	9849.80005	106.69000	.65300	5.49470	.03070
	GRADIENT	-.00024	.01613	19.52421	19.64300	1.19098	-.00296	1.57193	.00179

ARC-12-180(OA173) OV101+TRIPS+TC+GROUND PLANE (SNS025) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RUN NO. 39/ 0 RN/L = 7.84 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
7.914	1.135	.25980	454.5800	10086.00000	9624.09998	90.46200	.70980	.78510	.01640
7.880	1.691	.25890	452.7000	10110.00000	9650.09998	91.97600	.66560	1.90070	.01900
7.881	2.241	.25910	454.5100	10132.00000	9669.50000	93.22200	.65520	2.88720	.02060
7.922	2.264	.26080	461.4300	10161.00000	9692.00000	94.83700	.65140	2.90260	.02080
7.899	4.541	.26020	460.6900	10186.00000	9717.59998	96.31800	.64430	5.97910	.02170
7.891	5.723	.26010	461.2000	10205.00000	9736.19995	97.46200	.64510	7.31410	.01960
7.892	6.849	.26030	462.7100	10223.00000	9752.30005	98.47200	.64560	7.95790	.02510
7.879	8.001	.26000	462.4200	10239.00000	9768.90002	99.41400	.64710	8.04550	.02310
7.877	9.142	.26010	463.2800	10253.00000	9782.09998	100.22000	.64920	7.52320	.02460
7.857	11.406	.25960	462.5300	10273.00000	9802.69995	101.43000	.64840	6.90460	.02680
7.836	13.733	.25910	461.5900	10294.00000	9824.19995	102.64000	.64890	5.79940	.03280
7.793	14.894	.25780	458.8600	10326.00000	9859.59998	104.50000	.65210	5.58900	.03730
7.836	13.759	.25960	465.2900	10339.00000	9865.69995	105.37000	.64930	5.81370	.03570
7.821	13.156	.25910	464.3200	10353.00000	9880.90002	106.11000	.64870	6.19220	.03240
7.827	11.418	.25950	466.2000	10364.00000	9889.50000	106.89000	.64750	6.72240	.03150
7.840	9.151	.26010	468.5700	10374.00000	9897.69995	107.49000	.64810	7.15290	.02770
7.832	7.978	.25980	468.1100	10381.00000	9904.50000	107.89000	.64710	7.04980	.02650
7.837	6.840	.26010	469.2700	10386.00000	9908.30005	108.23000	.64630	6.75430	.02470
7.830	5.701	.25990	469.0300	10393.00000	9915.59998	108.70000	.64660	6.66210	.02270
7.821	4.562	.25960	468.1800	10397.00000	9920.80005	108.94000	.64690	6.27660	.02060
7.815	3.388	.25950	467.9300	10402.00000	9926.00000	109.24000	.64870	4.10150	.01910
7.815	3.382	.25960	468.5400	10407.00000	9930.30005	109.61000	.64860	3.64690	.01780
7.815	3.383	.25960	468.6500	10408.00000	9931.59998	109.71000	.64920	3.77060	.01840
7.803	3.407	.25930	467.5300	10412.00000	9936.30005	109.95000	.64840	3.68090	.02090
7.811	2.999	.25960	468.7200	10415.00000	9937.90002	110.15000	.65160	3.34580	.01400
7.819	2.601	.25990	469.9900	10417.00000	9939.40002	110.35000	.65410	2.96080	.01750
7.824	2.264	.26010	470.7700	10422.00000	9943.59998	110.52000	.65770	2.37180	.01760
7.825	1.682	.26020	471.4300	10427.00000	9947.09998	110.89000	.66780	1.50070	.01590
7.819	1.100	.26000	470.9300	10431.00000	9951.90002	111.09000	.71890	.85030	.01680
7.813	.532	.25990	470.7100	10436.00000	9957.09998	111.43000	.45930	-.26840	.01630
	GRADIENT	.00022	2.04735	27.62107	25.45384	1.60545	-.01456	1.48292	.00129

ARC-12-180(OA173) OV101+GROUND PLANE (SNS026) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = .000
MACH = .260 H/B = .600

RUN NO. 42/ 0 RN/L = 5.39 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.406	.532	.26000	314.30000	6961.70001	6642.00000	95.37500	.92450	-.60450	.00630
5.412	2.195	.26100	318.33000	6997.00000	6673.20001	98.74100	.40780	.63490	.00950
5.397	3.269	.26040	317.43000	7008.29999	6685.50000	99.68300	.53930	1.38860	.01170
5.388	4.358	.26020	317.17000	7016.09998	6693.50000	100.49000	.58030	2.14150	.01190
5.389	6.523	.26040	317.97000	7024.59998	6701.20001	101.30000	.61210	3.49810	.01120
5.391	8.738	.26060	318.85000	7031.00000	6706.70001	101.87000	.62810	4.43200	.01390
5.387	10.923	.26060	318.93000	7034.50000	6710.09998	102.41000	.63230	4.73610	.01480
5.378	3.270	.26030	318.74000	7043.00000	6718.79999	103.28000	.53890	1.39010	.01050
5.382	2.161	.26060	319.50000	7043.70001	6718.79999	103.52000	.39390	.59430	.01110
5.374	.546	.26030	318.73000	7045.09998	6721.00000	103.65000	.93680	-.57480	.00980
	GRADIENT	.00003	.70496	14.30197	13.59631	1.33616	-.08374	.71804	.00155

ARC-12-180(OA173) OV101+GROUND PLANE (SNS026) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = .000
MACH = .260 H/B = .600

RUN NO. 41/ 0 RN/L = 7.90 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
8.025	.527	.25910	456.5400010181.00000		9716.90002	87.39900	.91040	-.65520	.01560
8.025	1.117	.25950	459.4300010217.00000		9750.00000	89.52000	1.41330	-.24100	.01480
7.959	1.671	.26030	461.8600010209.00000		9739.69995	94.06300	-.06210	.21020	.01520
7.956	2.227	.26040	463.1200010230.00000		9758.90002	95.24100	.40290	.65090	.01370
7.936	2.610	.25990	462.1000010243.00000		9773.50000	96.18300	.47930	.95420	.01770
7.952	2.989	.26050	464.6400010253.00000		9780.69995	96.68800	.51830	1.21310	.01570
7.938	3.382	.26010	463.8200010264.00000		9792.19995	97.32700	.54610	1.53030	.01960
7.937	4.521	.26030	465.2100010282.00000		9809.19995	98.40400	.58480	2.32280	.01810
7.929	5.686	.26020	465.3900010296.00000		9823.09998	99.24600	.60490	3.11680	.01730
7.921	6.867	.25990	465.1700010308.00000		9834.69995	99.88500	.61690	3.82400	.02080
7.915	7.961	.25990	465.3100010317.00000		9843.69995	100.49000	.62380	4.28450	.02240
7.905	9.134	.25960	465.0000010326.00000		9853.30005	101.06000	.62970	4.62760	.02370
7.858	11.403	.25810	460.3200010337.00000		9868.69995	101.74000	.63260	4.79990	.02500
7.862	13.098	.25830	461.2200010344.00000		9874.90002	102.11000	.63530	4.63680	.02420
7.841	13.657	.25760	459.2100010350.00000		9883.30005	102.44000	.63660	4.55950	.02960
7.852	14.845	.25810	461.0800010357.00000		9887.80005	102.85000	.63920	4.35570	.03130
7.880	13.720	.25910	464.9400010365.00000		9892.30005	103.32000	.63680	4.55250	.02700
7.881	13.176	.25930	465.9500010372.00000		9898.30005	103.86000	.63550	4.62530	.02560
7.864	11.424	.25880	464.3500010378.00000		9906.30005	104.19000	.63270	4.80190	.02220
7.885	9.192	.25960	467.7500010388.00000		9912.00000	104.80000	.62940	4.63080	.02240
7.867	7.949	.25910	465.9100010390.00000		9916.00000	105.03000	.62330	4.27990	.02220
7.878	6.873	.25950	467.4100010394.00000		9918.69995	105.20000	.61610	3.84680	.02210
7.878	5.703	.25960	467.9300010398.00000		9921.69995	105.54000	.60530	3.15700	.01990
7.877	4.535	.25960	468.1100010401.00000		9925.09998	105.74000	.58650	2.38840	.01990
7.876	3.422	.25950	468.1300010404.00000		9927.90002	105.88000	.54760	1.53800	.02210
7.880	3.019	.25990	469.5700010411.00000		9933.50000	106.51000	.52050	1.23750	.01680
7.800	2.635	.26060	472.1300010415.00000		9935.09998	106.65000	.48360	.95700	.01570
7.898	2.638	.26050	472.1900010417.00000		9937.19995	106.82000	.48680	.98700	.01860
7.894	2.234	.26050	472.0800010421.00000		9940.80005	107.09000	.39640	.62130	.01440
7.896	2.235	.26060	472.5800010422.00000		9941.69995	107.22000	.40940	.65920	.01850
7.896	1.672	.26060	472.5800010424.00000		9943.80005	107.29000	-.08350	.20280	.01500
7.891	1.103	.26050	472.3900010428.00000		9947.59998	107.56000	1.47010	-.22480	.01510
7.898	.508	.26070	473.4500010429.00000		9947.90002	107.69000	.90490	-.67580	.01190
	GRADIENT	.00026	2.04218	24.59842	22.51180	2.81501	-.10955	.75499	.00099

ARC-12-180(OA173) OV101+TC H/B=FREE AIR (SNS027) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RUN NO. 43/ 0 RN/L = 1.73 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
1.747	-5.263	.25820	94.72200	2126.79999	2030.50000	68.62000	.63680	-7.26790	-.00010
1.745	-4.197	.25830	94.80500	2126.79999	2030.39999	69.19300	.63040	-6.57420	.00040
1.740	-2.146	.25790	94.53200	2126.79999	2030.70000	69.76500	.61280	-4.30090	.00140
1.739	-.077	.25800	94.61100	2126.10001	2029.89999	70.13500	.47600	-.89880	.00280
1.738	1.981	.25800	94.61300	2126.79999	2030.60001	70.47100	.68000	2.49770	.00330
1.736	4.065	.25800	94.60200	2126.10001	2029.89999	70.87500	.65530	5.34640	.00470
1.735	6.208	.25790	94.57400	2126.79999	2030.60001	71.21200	.65330	7.47740	.00510
1.733	8.294	.25790	94.53300	2126.79999	2030.60001	71.44700	.65490	8.40790	.00530
1.731	10.437	.25780	94.50300	2126.79999	2030.70000	71.88500	.65640	7.63770	.00590
1.730	12.465	.25780	94.46600	2126.79999	2030.70000	72.15400	.65530	6.88050	.00610
1.719	14.586	.25630	93.42200	2126.79999	2031.80000	72.45700	.65310	5.89970	.00670
1.715	16.756	.25580	93.09000	2126.79999	2032.10001	72.69300	.65470	5.11300	.00930
1.708	18.827	.25500	92.54200	2126.79999	2032.70000	73.02900	.65690	4.42250	.00980
1.720	16.707	.25700	93.94800	2126.79999	2031.30000	73.36600	.65370	5.10200	.00820
1.718	14.594	.25700	93.92000	2126.79999	2031.30000	73.66900	.65190	5.86040	.00560
1.724	12.479	.25810	94.67700	2126.79999	2030.50000	73.90400	.65380	6.75690	.00510
1.726	10.396	.25860	95.00400	2126.79999	2030.20000	74.14000	.65350	7.51350	.00460
1.723	8.207	.25820	94.75500	2126.79999	2030.39999	74.44300	.65170	7.99020	.00420
1.722	6.206	.25820	94.78900	2126.79999	2030.39999	74.64500	.65070	7.51270	.00380
1.722	4.096	.25830	94.82100	2126.79999	2030.39999	74.77900	.65220	5.34820	.00290
1.721	1.950	.25830	94.82800	2126.79999	2030.30000	74.91400	.66490	2.77960	.00220
1.720	-.059	.25830	94.82600	2126.79999	2030.30000	75.25000	.36830	-.48550	.00160
1.716	-2.154	.25770	94.38800	2126.79999	2030.80000	75.35100	.61710	-4.00790	.00070
1.716	-4.254	.25800	94.58700	2126.79999	2030.60001	75.58700	.63240	-6.66240	.00020
1.713	-5.300	.25750	94.29000	2126.79999	2030.89999	75.75500	.63760	-7.25980	-.00060
1.713	-.046	.25770	94.39600	2126.79999	2030.80000	75.99100	.41180	-.66390	.00220
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC H/B=FREE AIR (SNS027) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RUN NO. 46/ 0 RN/L = 2.31 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
2.337	-5.360	.25870	127.34000	2848.20001	2718.70001	69.76500	.63550	-7.20370	-.00830
2.324	-4.335	.25770	127.35000	2868.70001	2739.20001	73.56800	.62990	-6.48060	-.00770
2.317	-2.155	.25730	127.36000	2877.20001	2747.70001	75.65400	.61460	-4.32580	-.00640
2.312	-.068	.25710	127.38000	2881.39999	2751.89999	76.83200	.53050	-1.08760	-.00500
2.310	1.959	.25710	127.47000	2885.00000	2755.39999	77.60600	.69120	1.56820	-.00320
2.307	4.174	.25700	127.45000	2887.10001	2757.50000	78.31300	.65430	4.43470	-.00180
2.315	6.264	.25810	128.61000	2889.89999	2759.10001	78.88500	.65400	7.13800	-.00090
2.311	8.322	.25780	128.42000	2891.29999	2760.79999	79.35600	.65220	7.90160	.00020
2.308	10.446	.25740	128.17000	2893.39999	2763.10001	79.76000	.65360	7.24080	.00060
2.300	12.550	.25670	127.66000	2897.00000	2767.20001	80.60100	.65190	7.01330	-.00060
2.293	14.680	.25600	127.05000	2898.39999	2769.29999	80.97200	.65260	5.84160	.00140
2.304	16.837	.25730	128.35000	2899.79999	2769.29999	81.30800	.65490	5.04970	.00350
2.295	19.033	.25640	127.57000	2901.20001	2771.50000	81.64500	.65730	4.34550	.00420
2.299	16.889	.25690	128.13000	2902.60001	2772.39999	81.91400	.65420	5.01230	.00370
2.313	14.758	.25860	129.77000	2904.10001	2772.10001	82.21700	.65180	5.76580	.00080
2.317	12.587	.25920	130.35000	2904.79999	2772.20001	82.45200	.65080	6.44670	-.00080
2.313	10.508	.25880	130.03000	2905.50000	2773.29999	82.68800	.65150	7.10520	-.00020
2.305	8.383	.25790	129.14000	2906.20001	2774.89999	82.89000	.64950	7.33850	-.00110
2.301	6.211	.25750	128.83000	2906.89999	2775.89999	83.05800	.64900	6.58750	-.00120
2.307	4.133	.25830	129.60000	2906.89999	2775.10001	83.15900	.65020	4.45810	-.00080
2.302	2.046	.25770	129.04000	2907.60001	2776.39999	83.32700	.66620	2.00200	-.00280
2.304	-.067	.25800	129.38000	2909.00000	2777.50000	83.52900	.50510	-.65990	-.00490
2.306	-2.206	.25820	129.65000	2909.70001	2777.89999	83.69700	.62230	-3.97120	-.00600
2.304	-4.279	.25800	129.48000	2910.39999	2778.79999	83.79800	.63430	-6.35800	-.00710
2.304	-5.376	.25800	129.54000	2911.10001	2779.39999	84.00000	.63840	-7.07250	-.00730
2.302	-.089	.25780	129.38000	2911.79999	2780.29999	84.16900	.52730	-.94780	-.00400
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC H/B=FREE AIR (SNS027) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RUN NO. 45/ 0 RN/L = 5.34 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
5.380	-5.658	.25800	300.99000	6764.29999	6458.29999	81.88000	.63670	-7.90110	-.00650
5.356	-4.515	.25720	300.02000	6784.79999	6479.79999	83.79800	.63370	-7.24230	-.00410
5.360	-2.350	.25760	301.44000	6796.20001	6489.70001	84.84200	.62220	-4.91010	-.00060
5.368	-.110	.25820	303.27000	6806.79999	6498.40002	85.78400	.54110	-1.08610	.00200
5.358	2.127	.25780	302.76000	6814.50000	6506.70001	86.52400	.67560	2.73450	.00470
5.364	4.370	.25820	303.97000	6820.90002	6511.90002	87.06300	.65160	5.31680	.00570
5.355	6.583	.25790	303.42000	6826.59998	6518.09998	87.60100	.64870	8.95660	.00750
5.348	8.804	.25770	303.21000	6832.20001	6523.90002	88.17300	.65000	7.89740	.00730
5.346	10.998	.25770	303.45000	6837.90002	6529.40002	88.71200	.64940	7.18440	.01010
5.317	13.213	.25630	300.58000	6843.50000	6538.00000	89.18300	.64970	6.34720	.01180
5.323	15.485	.25660	301.62000	6848.50000	6541.90002	89.58700	.65290	5.51340	.01540
5.331	17.766	.25710	302.80000	6854.20001	6546.29999	89.99100	.65750	4.68850	.02200
5.323	20.064	.25680	302.53000	6859.79999	6552.29999	90.59700	.66050	3.96710	.02540
5.321	17.869	.25670	302.49000	6863.29999	6555.79999	90.83200	.65770	4.64820	.02100
5.338	15.583	.25770	304.75000	6865.50000	6555.59998	91.16900	.65280	5.46140	.01570
5.339	13.316	.25780	305.06000	6866.90002	6556.70001	91.33700	.64980	6.36960	.01050
5.344	11.031	.25810	305.72000	6866.90002	6556.00000	91.40400	.64940	7.18520	.00960
5.351	8.824	.25850	306.69000	6867.59998	6555.79999	91.53900	.65040	8.16150	.00740
5.310	6.577	.25650	302.07000	6866.90002	6559.79999	91.60600	.64800	7.86880	.00720
5.308	4.349	.25640	301.84000	6866.90002	6560.09998	91.60600	.65230	5.48090	.00600
5.321	2.111	.25710	303.46000	6866.90002	6558.40002	91.64000	.67400	2.64920	.00430
5.317	-.114	.25690	302.95000	6866.90002	6558.90002	91.64000	.53300	-.88030	.00190
5.326	-2.361	.25730	303.99000	6866.90002	6557.79999	91.60600	.62510	-4.67440	-.00040
5.332	-4.505	.25770	304.79000	6866.90002	6557.00000	91.67300	.63490	-7.03810	-.00410
5.338	-5.586	.25800	305.40000	6866.90002	6556.40002	91.67300	.63810	-7.71920	-.00510
5.326	-.129	.25740	304.10000	6866.90002	6557.70001	91.67300	.54240	-1.13470	.00210
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC H/B=FREE AIR (SNS027) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RUN NO. 44/ 0 RN/L = 7.88 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
7.910	-5.866	.25740	442.64000	9996.59998	9546.50000	83.05800	.63710	-8.10010	-.00520
7.884	-4.762	.25670	441.61000	10019.00000	9570.30005	84.47200	.63320	-7.59890	-.00300
7.865	-2.471	.25630	441.18000	10041.00000	9592.69995	85.75000	.62200	-5.39970	.00120
7.913	-.152	.25810	447.98000	10060.00000	9604.00000	86.82700	.54020	-1.25510	.00710
7.872	2.222	.25690	444.70000	10075.00000	9623.00000	87.83700	.66850	3.60410	.01220
7.877	4.560	.25730	446.32000	10087.00000	9633.30005	88.57700	.65050	6.44480	.01620
7.893	6.844	.25790	448.82000	10096.00000	9640.00000	89.11600	.64870	8.13890	.01450
7.876	9.109	.25740	447.67000	10104.00000	9648.90002	89.65400	.65110	8.26480	.01970
7.873	11.520	.25740	447.89000	10112.00000	9656.50000	90.05800	.65010	7.36500	.02100
7.862	13.850	.25720	447.45000	10119.00000	9664.00000	90.63000	.65040	6.27440	.02420
7.869	16.291	.25740	448.62000	10126.00000	9669.90002	90.93300	.65460	5.22640	.02960
7.843	18.715	.25660	446.05000	10132.00000	9678.90002	91.30300	.66020	4.33640	.03550
7.863	21.182	.25740	448.88000	10139.00000	9682.40002	91.70700	.66360	3.57470	.05290
7.869	18.771	.25770	450.24000	10146.00000	9688.00000	92.14500	.66030	4.31100	.03480
7.878	16.185	.25810	451.90000	10151.00000	9691.30005	92.54800	.65450	5.27010	.02730
7.906	13.985	.25910	455.30000	10154.00000	9691.30005	92.71700	.65070	6.22370	.02580
7.916	11.625	.25950	456.89000	10158.00000	9693.19995	92.98600	.64940	7.31440	.02250
7.920	9.254	.25960	457.52000	10160.00000	9694.69995	93.08700	.64950	7.90480	.01580
7.916	6.910	.25960	457.44000	10163.00000	9698.30005	93.39000	.64780	8.61240	.01330
7.920	4.486	.25980	458.11000	10166.00000	9699.69995	93.49100	.65080	6.10820	.01400
7.830	2.181	.25660	447.73000	10166.00000	9710.50000	93.55800	.67010	4.53320	.01190
7.847	-.152	.25730	449.87000	10168.00000	9711.09998	93.69300	.53760	-1.05720	.00650
7.848	-2.415	.25730	450.25000	10171.00000	9712.80005	93.86100	.62300	-5.06350	.00390
7.863	-4.739	.25780	452.03000	10173.00000	9713.09998	93.96200	.63380	-7.50000	-.00330
7.868	-5.864	.25810	452.90000	10175.00000	9714.30005	94.13000	.63750	-8.01380	-.00560
7.865	-.150	.25800	452.74000	10176.00000	9715.90002	94.23100	.54760	-1.18430	.00760
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC-12-180(OA173) OV101+TC+TUFTS H/B=FREE AIR (SNS028) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RUN NO. 48/ 0 RN/L = 1.72 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
1.743	4.241	.25780	94.34500	2124.60001	2028.70000	68.45200	.65250	4.08880	.00600
1.735	8.379	.25770	94.27900	2124.60001	2028.80000	70.27000	.65510	7.07570	.00680
1.729	12.478	.25750	94.20500	2124.60001	2028.89999	71.54800	.65590	6.45390	.00840
1.711	16.667	.25560	92.84200	2124.60001	2030.30000	72.82700	.65470	4.93510	.00870
1.704	12.496	.25530	92.60900	2124.60001	2030.50000	74.14000	.65350	6.37240	.00670
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 47/ 0 RN/L = 7.91 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	MACH	Q(PSF)	PT	P	TTF	XCP/L	L/D	BETA
7.938	-.150	.25710	443.93000	10042.00000	9590.50000	83.12500	.58860	-1.56850	.01590
7.929	2.088	.25710	444.92000	10067.00000	9614.30005	84.60600	.66300	2.17420	.02000
7.951	4.415	.25800	448.42000	10079.00000	9623.40002	85.38000	.64860	5.39590	.02160
7.940	6.790	.25810	451.08000	10130.00000	9671.59998	88.30800	.64640	7.61070	.02150
7.928	9.155	.25780	450.45000	10137.00000	9679.30005	88.84700	.64810	7.73240	.02860
7.895	13.831	.25700	448.59000	10161.00000	9705.30005	90.29400	.65010	6.01990	.03410
7.881	18.658	.25670	448.40000	10177.00000	9721.09998	91.30300	.65770	4.28250	.01730
7.918	13.930	.25820	454.08000	10194.00000	9732.19995	92.34700	.64940	6.00210	.03850
7.909	9.219	.25800	453.61000	10200.00000	9738.40002	92.71700	.64900	7.33620	.02840
7.909	4.483	.25810	454.23000	10206.00000	9744.09998	93.15400	.64570	6.36790	.02380
7.903	-.145	.25790	453.66000	10208.00000	9746.80005	93.28900	.59210	-1.42960	.01820
7.898	10.101	.25780	453.57000	10214.00000	9753.30005	93.65900	.65010	7.24280	.02780
7.878	13.246	.25710	451.55000	10217.00000	9758.19995	93.82700	.64970	6.23220	.03960
	GRADIENT	-.00002	.11599	4.27992	4.17029	.25649	.00249	.32048	.00062

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP01) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 1.765 ALPHA (1) = .569 Q(PSF) = 97.487 PT = 2122.5 P = 2023.4 MACH = .26240

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4316	-.4836	-.4672	-.1975		.2072	
-133.800	-.4061	-.3979	-.5055	-.1911		.2008	
-115.600	-.2895	-.3323	-.4581	-.2057		.1944	
-101.400	-.3414	-.3560	-.4298	-.2585		.1999	
-50.100	-.1938	-.4061	-.2521	-.1100	.1798	.2017	
-44.800	.0000	.0000	.0000	-.0790	.1771	.2008	
.000	.0000	.0000	.0000	-.0726	.1771	.2053	.2090
44.800	.0000	.0000	.0000	-.0753	.1762	.2044	
50.100	-.1745	-.3410	-.2072	-.1309	.1734	.2017	
101.400	-.3182	-.3510	-.3956	-.2448		.2017	
115.600	-.3082	-.3028	-.4265	-.2275		.1980	
133.800	-.3401	-.3710	-.5084	-.2084		.2035	
149.100	-.4656	-.5011	-.4811	-.2221		.1999	
180.000	-.7203	-.7440	-.4274	-.1993	.1826	.2035	

RN/L (1) = 1.762 ALPHA (2) = .572 Q(PSF) = 97.487 PT = 2122.5 P = 2023.4 MACH = .26240

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4342	-.4745	-.4663	-.1870		.2086	
-133.800	-.3996	-.3980	-.5027	-.1888		.2023	
-115.600	-.2832	-.3180	-.4472	-.2025		.1941	
-101.400	-.3350	-.3435	-.4335	-.2471		.2059	
-50.100	-.1859	-.3890	-.2525	-.1033	.1795	.2059	
-44.800	.0000	.0000	.0000	-.0797	.1795	.2059	
.000	.0000	.0000	.0000	-.0716	.1806	.2088	.2106
44.800	.0000	.0000	.0000	-.0789	.1797	.2079	
50.100	-.1678	-.3375	-.2023	-.1195	.1815	.2061	
101.400	-.3075	-.3438	-.3892	-.2341		.1970	
115.600	-.2966	-.2984	-.4182	-.2177		.2015	
133.800	-.3329	-.3665	-.4962	-.1968		.2061	
149.100	-.4581	-.4908	-.4772	-.2077		.2052	
180.000	-.6922	-.7440	-.4291	-.1932	.1779	.2033	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP01)

RN/L (1) = 1.759 ALPHA (3) = .575 Q(PSF) = 97.487 PT = 2122.5 P = 2023.4 MACH = .26240

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4292	-.4789	-.4644	-.1915		.2105	
-133.800	-.3992	-.3998	-.4944	-.1888		.2033	
-115.600	-.2836	-.3225	-.4425	-.1979		.1969	
-101.400	-.3346	-.3443	-.4134	-.2524		.2042	
-50.100	-.1890	-.3934	-.2461	-.1033	.1796	.2069	
-44.800	.0000	.0000	.0000	-.0760	.1832	.2051	
.000	.0000	.0000	.0000	-.0676	.1876	.2104	.2140
44.800	.0000	.0000	.0000	-.0685	.1831	.2086	
50.100	-.1611	-.3318	-.2020	-.1162	.1858	.2104	
101.400	-.3046	-.3427	-.3872	-.2336		.1986	
115.600	-.2955	-.2937	-.4144	-.2208		.2086	
133.800	-.3318	-.3663	-.5007	-.1917		.2086	
149.100	-.4498	-.4870	-.4698	-.2090		.2067	
180.000	-.6904	-.7240	-.4126	-.1981	.1840	.2122	

RN/L (2) = 2.407 ALPHA (1) = .598 Q(PSF) = 133.58 PT = 2970.5 P = 2834.7 MACH = .25947

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4173	-.4619	-.4579	-.1879		.2179	
-133.800	-.3861	-.3831	-.4884	-.1852		.2172	
-115.600	-.2623	-.3150	-.4434	-.1985		.2120	
-101.400	-.3265	-.3355	-.4268	-.2574		.2159	
-50.100	-.1576	-.4043	-.2594	-.1117	.1947	.2186	
-44.800	.0000	.0000	.0000	-.0793	.1934	.2159	
.000	.0000	.0000	.0000	-.0647	.1968	.2187	.2253
44.800	.0000	.0000	.0000	-.0594	.1975	.2259	
50.100	-.1579	-.3325	-.1830	-.0986	.1995	.2246	
101.400	-.2987	-.3318	-.3754	-.2179		.2094	
115.600	-.2935	-.2723	-.4006	-.2040		.2134	
133.800	-.3199	-.3556	-.4878	-.1788		.2180	
149.100	-.4462	-.4812	-.4534	-.2053		.2153	
180.000	-.7106	-.7318	-.3728	-.1722	.1961	.2134	

ARC 12-180(OA173) CV101+TC+STRUTS+G.P.(TAILCONE) (RNSP01)

RN/L (2) = 2.403 ALPHA (2) = .598 Q(PSF) = 133.58 PT = 2970.5 P = 2834.7 MACH = .25947

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4215	-.4643	-.4557	-.1889		.2166	
-133.800	-.3903	-.3853	-.4875	-.1829		.2133	
-115.600	-.2734	-.3137	-.4411	-.1982		.2119	
-101.400	-.3332	-.3382	-.4311	-.2619		.2079	
-50.100	-.1585	-.4119	-.2665	-.1152	.1920	.2152	
-44.800	.0000	.0000	.0000	-.0814	.1940	.2126	
.000	.0000	.0000	.0000	-.0646	.1881	.2200	.2200
44.800	.0000	.0000	.0000	-.0619	.1961	.2200	
50.100	-.1620	-.3283	-.1825	-.1014	.1947	.2220	
101.400	-.2972	-.3349	-.3774	-.2196		.2173	
115.600	-.3018	-.2727	-.4072	-.2097		.2213	
133.800	-.3277	-.3528	-.4960	-.1891		.2193	
149.100	-.4549	-.4827	-.4662	-.2110		.2173	
180.000	-.7253	-.7319	-.3959	-.1918	.1874	.2206	

RN/L (2) = 2.409 ALPHA (3) = .600 Q(PSF) = 133.58 PT = 2970.5 P = 2834.7 MACH = .25947

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4170	-.4735	-.4549	-.1926		.2247	
-133.800	-.3826	-.3894	-.4881	-.1873		.2187	
-115.600	-.2653	-.3185	-.4377	-.1973		.2108	
-101.400	-.3229	-.3357	-.4291	-.2536		.2194	
-50.100	-.1586	-.4086	-.2655	-.1151	.1949	.2194	
-44.800	.0000	.0000	.0000	-.0787	.1916	.2201	
.000	.0000	.0000	.0000	-.0674	.1913	.2204	.2211
44.800	.0000	.0000	.0000	-.0608	.1966	.2204	
50.100	-.1560	-.3294	-.1838	-.0996	.2019	.2211	
101.400	-.3042	-.3366	-.3750	-.2215		.2165	
115.600	-.3003	-.2771	-.4041	-.2090		.2165	
133.800	-.3320	-.3552	-.4875	-.1877		.2158	
149.100	-.4584	-.4815	-.4577	-.2143		.2158	
180.000	-.7045	-.7349	-.3975	-.1851	.1966	.2145	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP01)

RN/L (3) = 5.498 ALPHA (1) = .592 Q(PSF) = 312.12 PT = 6947.1 P = 6629.6 MACH = .25933

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4348	-.4842	-.4774	-.2028		.2250	
-133.800	-.4022	-.3950	-.5017	-.1991		.2298	
-115.600	-.2770	-.3239	-.4561	-.2013		.2162	
-101.400	-.3413	-.3534	-.4445	-.2667		.2219	
-50.100	-.1718	-.4193	-.2571	-.0997	.2015	.2324	
-44.800	.0000	.0000	.0000	-.0782	.1990	.2355	
.000	.0000	.0000	.0000	-.0845	.2014	.2291	.2459
44.800	.0000	.0000	.0000	-.0785	.2042	.2356	
50.100	-.1691	-.3524	-.1999	-.1169	.2068	.2297	
101.400	-.3193	-.3473	-.3889	-.2404		.2263	
115.600	-.3244	-.2786	-.4166	-.2220		.2300	
133.800	-.3329	-.3549	-.5052	-.1982		.2269	
149.100	-.4641	-.4972	-.4624	-.2262		.2291	
180.000	-.7480	-.7460	-.4010	-.1934	.1951	.2311	

RN/L (3) = 5.497 ALPHA (2) = .595 Q(PSF) = 312.12 PT = 6947.1 P = 6629.6 MACH = .25933

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4392	-.4850	-.4819	-.2072		.2245	
-133.800	-.4058	-.4017	-.5080	-.2067		.2223	
-115.600	-.2848	-.3274	-.4593	-.2018		.2112	
-101.400	-.3515	-.3535	-.4476	-.2784		.2206	
-50.100	-.1758	-.4269	-.2696	-.1131	.1965	.2257	
-44.800	.0000	.0000	.0000	-.0819	.1939	.2231	
.000	.0000	.0000	.0000	-.0758	.1963	.2281	.2323
44.800	.0000	.0000	.0000	-.0732	.2000	.2272	
50.100	-.1682	-.3538	-.2027	-.1188	.2022	.2289	
101.400	-.3249	-.3561	-.4020	-.2423		.2281	
115.600	-.3249	-.2835	-.4204	-.2235		.2221	
133.800	-.3388	-.3615	-.5137	-.2051		.2176	
149.100	-.4726	-.4981	-.4726	-.2286		.2227	
180.000	-.7357	-.7625	-.4284	-.1917	.1943	.2204	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP01)

RN/L (3) = 5.497 ALPHA (3) = .597 Q(PSF) = 312.12 PT = 6947.1 P = 6629.6 MACH = .25933

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4349	-.4800	-.4834	-.2133		.2278	
-133.800	-.4028	-.3962	-.5107	-.2033		.2221	
-115.600	-.2785	-.3323	-.4587	-.2116		.2150	
-101.400	-.3476	-.3499	-.4519	-.2800		.2165	
-50.100	-.1801	-.4237	-.2760	-.1110	.1969	.2238	
-44.800	.0000	.0000	.0000	-.0832	.1997	.2267	
.000	.0000	.0000	.0000	-.0759	.1981	.2257	.2328
44.800	.0000	.0000	.0000	-.0745	.1995	.2271	
50.100	-.1733	-.3559	-.2034	-.1193	.2007	.2271	
101.400	-.3178	-.3525	-.3991	-.2396		.2123	
115.600	-.3224	-.2843	-.4235	-.2282		.2220	
133.800	-.3309	-.3675	-.5121	-.1980		.2228	
149.100	-.4661	-.5081	-.4686	-.2279		.2248	
180.000	-.7622	-.7684	-.3914	-.2015	.1984	.2248	

RN/L (4) = 7.974 ALPHA (1) = .586 Q(PSF) = 460.47 PT = 10169. P = 9701.1 MACH = .26040

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4375	-.4965	-.4911	-.2121		.2267	
-133.800	-.4083	-.4027	-.5137	-.2105		.2209	
-115.600	-.2859	-.3333	-.4663	-.2146		.2149	
-101.400	-.3578	-.3533	-.4613	-.2842		.2182	
-50.100	-.1850	-.4345	-.2635	-.1173	.2005	.2282	
-44.800	.0000	.0000	.0000	-.0847	.1984	.2280	
.000	.0000	.0000	.0000	-.0744	.2009	.2315	.2390
44.800	.0000	.0000	.0000	-.0699	.2009	.2305	
50.100	-.1794	-.3634	-.2125	-.1407	.2019	.2256	
101.400	-.3294	-.3688	-.4110	-.2536		.2207	
115.600	-.3329	-.2831	-.4290	-.2353		.2209	
133.800	-.3387	-.2926	-.5211	-.2048		.2244	
149.100	-.4729	-.5118	-.4836	-.2334		.2244	
180.000	-.7713	-.7870	-.3923	-.1980	.1976	.2259	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP01)

RN/L (4) = 7.982 ALPHA (2) = .593 Q(PSF) = 460.47 PT = 10169. P = 9701.1 MACH = .26040

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4334	-.4906	-.4920	-.2071		.2294	
-133.800	-.4056	-.4010	-.5123	-.2038		.2290	
-115.600	-.2764	-.3333	-.4685	-.2073		.2186	
-101.400	-.3490	-.3542	-.4577	-.2792		.2261	
-50.100	-.1845	-.4296	-.2628	-.1113	.2011	.2288	
-44.800	.0000	.0000	.0000	-.0834	.1998	.2307	
.000	.0000	.0000	.0000	-.0757	.2017	.2294	.2386
44.800	.0000	.0000	.0000	-.0750	.2003	.2330	
50.100	-.1765	-.3652	-.2128	-.1363	.2021	.2330	
101.400	-.3258	-.3702	-.4099	-.2491		.2250	
115.600	-.3281	-.2841	-.4229	-.2357		.2259	
133.800	-.3352	-.2866	-.5132	-.2060		.2271	
149.100	-.4739	-.5030	-.4746	-.2314		.2282	
180.000	-.7671	-.7691	-.3804	-.1940	.1973	.2276	

RN/L (4) = 7.980 ALPHA (3) = .594 Q(PSF) = 460.47 PT = 10169. P = 9701.1 MACH = .26040

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4414	-.4964	-.4948	-.2054		.2253	
-133.800	-.4063	-.4118	-.5192	-.2014		.2203	
-115.600	-.2822	-.3424	-.4739	-.2110		.2159	
-101.400	-.3605	-.3639	-.4723	-.2907		.2153	
-50.100	-.1861	-.4491	-.2673	-.1212	.2049	.2295	
-44.800	.0000	.0000	.0000	-.0993	.2011	.2291	
.000	.0000	.0000	.0000	-.0699	.2019	.2247	.2331
44.800	.0000	.0000	.0000	-.0744	.2009	.2266	
50.100	-.1798	-.3626	-.1997	-.1359	.2045	.2301	
101.400	-.3329	-.3707	-.4096	-.2582		.2187	
115.600	-.3375	-.2882	-.4260	-.2384		.2268	
133.800	-.3400	-.3664	-.5207	-.2132		.2282	
149.100	-.4771	-.5072	-.4786	-.2415		.2295	
180.000	-.7823	-.7513	-.3894	-.1985	.1940	.2272	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP02) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 2.349 ALPHA (1) = 10.192 Q(PSF) = 130.77 PT = 2826.0 P = 2693.0 MACH = .26337

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4076	-.4414	-.3878	-.1312		.2340	
-133.800	-.3825	-.3749	-.4251	-.1420		.2361	
-115.600	-.2720	-.3253	-.4638	-.2099		.2368	
-101.400	-.3242	-.3321	-.4299	-.2724		.2463	
-50.100	-.1261	-.3375	-.2106	-.0640	.2035	.2354	
-44.800	.0000	.0000	.0000	-.0619	.2069	.2374	
.000	.0000	.0000	.0000	-.0645	.2035	.2408	.2503
44.800	.0000	.0000	.0000	-.0537	.2028	.2415	
50.100	-.1336	-.3009	-.1831	-.0882	.2015	.2381	
101.400	-.3043	-.3389	-.4012	-.2557		.2381	
115.600	-.2942	-.2745	-.4317	-.2435		.2333	
133.800	-.3213	-.3395	-.4276	-.1526		.2361	
149.100	-.4290	-.4493	-.3965	-.1397		.2367	
180.000	-.6932	-.7284	-.3517	-.1261	.2177	.2381	

RN/L (1) = 2.352 ALPHA (2) = 10.195 Q(PSF) = 130.77 PT = 2826.0 P = 2693.0 MACH = .26337

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4094	-.4409	-.3901	-.1292		.2442	
-133.800	-.3796	-.3785	-.4260	-.1468		.2395	
-115.600	-.2692	-.3216	-.4612	-.2159		.2327	
-101.400	-.3234	-.3311	-.4314	-.2742		.2422	
-50.100	-.1257	-.3358	-.2084	-.0634	.2083	.2388	
-44.800	.0000	.0000	.0000	-.0600	.2070	.2381	
.000	.0000	.0000	.0000	-.0606	.2048	.2387	.2515
44.800	.0000	.0000	.0000	-.0572	.2048	.2420	
50.100	-.1323	-.3013	-.1810	-.0850	.2061	.2393	
101.400	-.3054	-.3406	-.3947	-.2591		.2427	
115.600	-.2892	-.2770	-.4285	-.2408		.2292	
133.800	-.3196	-.3446	-.4258	-.1521		.2380	
149.100	-.4258	-.4555	-.3940	-.1379		.2359	
180.000	-.7132	-.7240	-.3838	-.1209	.2116	.2393	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP02)

RN/L (1) = 2.355 ALPHA (3) = 10.198 Q(PSF) = 130.77 PT = 2826.0 P = 2693.0 MACH = .26337

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4158	-.4389	-.3908	-.1318		.2377	
-133.800	-.3785	-.3792	-.4240	-.1413		.2343	
-115.600	-.2701	-.3270	-.4647	-.2043		.2377	
-101.400	-.3189	-.3304	-.4348	-.2681		.2438	
-50.100	-.1231	-.3372	-.2104	-.0633	.2059	.2432	
-44.800	.0000	.0000	.0000	-.0599	.2065	.2364	
.000	.0000	.0000	.0000	-.0650	.2070	.2381	.2483
44.800	.0000	.0000	.0000	-.0556	.2063	.2415	
50.100	-.1307	-.2986	-.1774	-.0851	.2049	.2388	
101.400	-.3027	-.3352	-.3974	-.2572		.2408	
115.600	-.2878	-.2736	-.4232	-.2417		.2381	
133.800	-.3169	-.3419	-.4252	-.1515		.2408	
149.100	-.4272	-.4469	-.3880	-.1339		.2375	
180.000	-.7183	-.7210	-.3473	-.1278	.2171	.2395	

RN/L (2) = 5.467 ALPHA (1) = 10.410 Q(PSF) = 304.50 PT = 6778.5 P = 6468.8 MACH = .25933

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4239	-.4569	-.4138	-.1454		.2331	
-133.800	-.3983	-.3903	-.4543	-.1629		.2381	
-115.600	-.2832	-.3393	-.4884	-.2365		.2378	
-101.400	-.3502	-.3504	-.4510	-.3061		.2389	
-50.100	-.1501	-.3588	-.2202	-.0816	.2060	.2378	
-44.800	.0000	.0000	.0000	-.0767	.2016	.2369	
.000	.0000	.0000	.0000	-.0860	.2043	.2343	.2556
44.800	.0000	.0000	.0000	-.0711	.2049	.2369	
50.100	-.1462	-.3249	-.2012	-.0974	.2098	.2346	
101.400	-.3200	-.3657	-.4233	-.2856		.2378	
115.600	-.3130	-.2882	-.4512	-.2643		.2323	
133.800	-.3319	-.3569	-.4547	-.1664		.2346	
149.100	-.4454	-.4757	-.4102	-.1495		.2346	
180.000	-.7016	-.7382	-.3639	-.1426	.2037	.2346	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP02)

RN/L (2) = 5.476 ALPHA (2) = 10.421 Q(PSF) = 304.50 PT = 6778.5 P = 6468.8 MACH = .25933

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4241	-.4563	-.4068	-.1423		.2389	
-133.800	-.4000	-.3890	-.4493	-.1592		.2398	
-115.600	-.2826	-.3366	-.4924	-.2353		.2430	
-101.400	-.3446	-.3471	-.4616	-.3046		.2433	
-50.100	-.1510	-.3599	-.2239	-.0791	.2025	.2375	
-44.800	.0000	.0000	.0000	-.0791	.2051	.2378	
.000	.0000	.0000	.0000	-.0892	.2048	.2401	.2572
44.800	.0000	.0000	.0000	-.0697	.2057	.2392	
50.100	-.1512	-.3214	-.2000	-.0963	.2074	.2403	
101.400	-.3205	-.3601	-.4229	-.2855		.2351	
115.600	-.3112	-.2929	-.4532	-.2640		.2363	
133.800	-.3339	-.3601	-.4509	-.1600		.2351	
149.100	-.4456	-.4695	-.4046	-.1551		.2374	
180.000	-.7198	-.7360	-.3799	-.1437	.2135	.2342	

RN/L (3) = 7.968 ALPHA (1) = 10.689 Q(PSF) = 448.06 PT = 9925.3 P = 9469.7 MACH = .25997

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1 05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4311	-.4607	-.4175	-.1477		.2424	
-133.800	-.3988	-.3967	-.4543	-.1665		.2388	
-115.600	-.2818	-.3408	-.4993	-.2391		.2382	
-101.400	-.3485	-.3581	-.4801	-.3184		.2461	
-50.100	-.1586	-.3818	-.2345	-.0810	.2042	.2418	
-44.800	.0000	.0000	.0000	-.0777	.2060	.2455	
.000	.0000	.0000	.0000	-.0909	.2059	.2383	.2548
44.800	.0000	.0000	.0000	-.0690	.2105	.2391	
50.100	-.1581	-.3326	-.2024	-.1064	.2136	.2376	
101.400	-.3295	-.3736	-.4335	-.2944		.2405	
115.600	-.3183	-.2923	-.4554	-.2737		.2362	
133.800	-.3318	-.2905	-.4552	-.1659		.2382	
149.100	-.4484	-.4824	-.4121	-.1602		.2376	
180.000	-.7247	-.7442	-.3736	-.1438	.2140	.2417	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP02)

RN/L (3) = 7.971 ALPHA (2) = 10.690 Q(PSF) = 448.06 PT = 9925.3 P = 9469.7 MACH = .25997

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4234	-.4576	-.4132	-.1493		.2447	
-133.800	-.3996	-.3910	-.4517	-.1642		.2376	
-115.600	-.2817	-.3368	-.4949	-.2423		.2411	
-101.400	-.3495	-.3477	-.4790	-.3193		.2427	
-50.100	-.1589	-.3744	-.2340	-.0807	.2026	.2376	
-44.800	.0000	.0000	.0000	-.0736	.2043	.2396	
.000	.0000	.0000	.0000	-.0847	.2087	.2403	.2559
44.800	.0000	.0000	.0000	-.0693	.2093	.2421	
50.100	-.1485	-.3276	-.2015	-.0982	.2120	.2441	
101.400	-.3238	-.3687	-.4309	-.2869		.2389	
115.600	-.3158	-.2870	-.4587	-.2653		.2362	
133.800	-.3339	-.2906	-.4579	-.1633		.2399	
149.100	-.4515	-.4761	-.4074	-.1565		.2389	
180.000	-.7262	-.7213	-.3671	-.1385	.2144	.2399	

RN/L (3) = 7.983 ALPHA (3) = 10.692 Q(PSF) = 448.06 PT = 9925.3 P = 9469.7 MACH = .25997

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4292	-.4622	-.4133	-.1480		.2370	
-133.800	-.4019	-.3921	-.4509	-.1621		.2352	
-115.600	-.2850	-.3350	-.4965	-.2399		.2400	
-101.400	-.3531	-.3498	-.4704	-.3189		.2453	
-50.100	-.1609	-.3843	-.2337	-.0817	.2067	.2382	
-44.800	.0000	.0000	.0000	-.0728	.2065	.2299	
.000	.0000	.0000	.0000	-.0916	.2104	.2340	.2577
44.800	.0000	.0000	.0000	-.0734	.2118	.2455	
50.100	-.1557	-.3259	-.2041	-.1019	.2092	.2368	
101.400	-.3218	-.3663	-.4359	-.2900		.2409	
115.600	-.3180	-.2908	-.4593	-.2686		.2368	
133.800	-.3317	-.3003	-.4633	-.1651		.2423	
149.100	-.4518	-.4828	-.4110	-.1573		.2395	
180.000	-.7003	-.7384	-.3828	-.1554	.2124	.2397	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP03) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 2.377 ALPHA (1) = 15.281 Q(PSF) = 131.11 PT = 2907.6 P = 2774.3 MACH = .25983

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4050	-.4491	-.4255	-.1863		.2468	
-133.800	-.3935	-.3930	-.4234	-.1660		.2454	
-115.600	-.2665	-.3261	-.4930	-.2430		.2495	
-101.400	-.3156	-.3491	-.4592	-.3018		.2522	
-50.100	-.1340	-.2255	-.1660	-.0559	.2211	.2576	
-44.800	.0000	.0000	.0000	-.0559	.2218	.2528	
.000	.0000	.0000	.0000	-.0598	.2208	.2499	.2634
44.800	.0000	.0000	.0000	-.0402	.2235	.2553	
50.100	-.1164	-.2534	-.1589	-.0651	.2228	.2553	
101.400	-.2972	-.3458	-.4301	-.2969		.2485	
115.600	-.2959	-.2885	-.4571	-.2813		.2431	
133.800	-.3451	-.3627	-.4274	-.1746		.2418	
149.100	-.4322	-.4558	-.4160	-.2070		.2418	
180.000	-.7081	-.7243	-.3836	-.1698	.2113	.2451	

RN/L (1) = 2.378 ALPHA (2) = 15.287 Q(PSF) = 131.11 PT = 2907.6 P = 2774.3 MACH = .25983

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4122	-.4483	-.4266	-.1851		.2444	
-133.800	-.4048	-.3975	-.4273	-.1662		.2431	
-115.600	-.2776	-.3285	-.4949	-.2419		.2411	
-101.400	-.3243	-.3448	-.4571	-.3035		.2451	
-50.100	-.1402	-.2271	-.1716	-.0579	.2228	.2539	
-44.800	.0000	.0000	.0000	-.0579	.2214	.2539	
.000	.0000	.0000	.0000	-.0626	.2191	.2523	.2712
44.800	.0000	.0000	.0000	-.0450	.2259	.2530	
50.100	-.1186	-.2469	-.1584	-.0651	.2239	.2516	
101.400	-.2996	-.3482	-.4272	-.2904		.2475	
115.600	-.2975	-.2928	-.4636	-.2796		.2489	
133.800	-.3374	-.3650	-.4413	-.1713		.2455	
149.100	-.4312	-.4596	-.4292	-.2052		.2415	
180.000	-.6959	-.7175	-.3887	-.1571	.2103	.2489	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP03)

RN/L (1) = 2.380 ALPHA (3) = 15.290 Q(PSF) = 131.11 PT = 2907.6 P = 2774.3 MACH = .25983

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4112	-.4484	-.4321	-.1864		.2467	
-133.800	-.4017	-.3963	-.4288	-.1675		.2474	
-115.600	-.2717	-.3245	-.5019	-.2460		.2440	
-101.400	-.3191	-.3414	-.4612	-.3035		.2542	
-50.100	-.1397	-.2271	-.1702	-.0518	.2264	.2535	
-44.800	.0000	.0000	.0000	-.0538	.2210	.2508	
.000	.0000	.0000	.0000	-.0611	.2176	.2521	.2663
44.800	.0000	.0000	.0000	-.0497	.2217	.2508	
50.100	-.1138	-.2496	-.1712	-.0653	.2237	.2515	
101.400	-.2989	-.3462	-.4367	-.2974		.2481	
115.600	-.3003	-.2881	-.4718	-.2785		.2488	
133.800	-.3449	-.3631	-.4414	-.1675		.2488	
149.100	-.4374	-.4590	-.4279	-.2054		.2440	
180.000	-.7137	-.7272	-.4124	-.1689	.2109	.2467	

RN/L (2) = 5.406 ALPHA (1) = 15.226 Q(PSF) = 303.77 PT = 6777.8 P = 6468.9 MACH = .25900

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4269	-.4696	-.4483	-.1976		.2466	
-133.800	-.4146	-.4180	-.4521	-.1816		.2478	
-115.600	-.2843	-.3440	-.5160	-.2591		.2417	
-101.400	-.3391	-.3679	-.4874	-.3279		.2507	
-50.100	-.1516	-.2606	-.1828	-.0705	.2137	.2507	
-44.800	.0000	.0000	.0000	-.0682	.2157	.2463	
.000	.0000	.0000	.0000	-.0787	.2120	.2420	.2689
44.800	.0000	.0000	.0000	-.0557	.2152	.2415	
50.100	-.1233	-.2752	-.1812	-.0863	.2207	.2461	
101.400	-.3273	-.3725	-.4505	-.3132		.2467	
115.600	-.3270	-.3131	-.4808	-.2997		.2444	
133.800	-.3620	-.3614	-.4560	-.1933		.2476	
149.100	-.4563	-.4877	-.4371	-.2158		.2426	
180.000	-.7387	-.7265	-.4260	-.1837	.2070	.2473	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP03)

RN/L (2) = 5.411 ALPHA (2) = 15.232 Q(PSF) = 303.77 PT = 6777.8 P = 6468.9 MACH = .25900

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4259	-.4648	-.4417	-.1993		.2436	
-133.800	-.4209	-.4131	-.4473	-.1788		.2465	
-115.600	-.2856	-.3445	-.5177	-.2589		.2465	
-101.400	-.3339	-.3529	-.4803	-.3261		.2559	
-50.100	-.1501	-.2498	-.1765	-.0699	.2179	.2553	
-44.800	.0000	.0000	.0000	-.0643	.2144	.2518	
.000	.0000	.0000	.0000	-.0779	.2140	.2511	.2715
44.800	.0000	.0000	.0000	-.0598	.2230	.2502	
50.100	-.1173	-.2674	-.1718	-.0805	.2195	.2490	
101.400	-.3249	-.3520	-.4407	-.3043		.2411	
115.600	-.3167	-.3013	-.4759	-.2935		.2467	
133.800	-.3561	-.3185	-.4503	-.1863		.2479	
149.100	-.4488	-.3748	-.4386	-.2117		.2444	
180.000	-.7151	-.4929	-.4060	-.1755	.2108	.2502	

RN/L (2) = 5.409 ALPHA (3) = 15.235 Q(PSF) = 303.77 PT = 6777.8 P = 6468.9 MACH = .25900

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4299	-.4761	-.4473	-.1927		.2390	
-133.800	-.4148	-.4158	-.4458	-.1839		.2460	
-115.600	-.2895	-.3436	-.5186	-.2591		.2376	
-101.400	-.3440	-.3587	-.4872	-.3232		.2466	
-50.100	-.1519	-.2527	-.1892	-.0703	.2125	.2469	
-44.800	.0000	.0000	.0000	-.0662	.2146	.2443	
.000	.0000	.0000	.0000	-.0793	.2094	.2484	.2697
44.800	.0000	.0000	.0000	-.0595	.2114	.2476	
50.100	-.1200	-.2731	-.1808	-.0835	.2196	.2470	
101.400	-.3232	-.3695	-.4544	-.3029		.2446	
115.600	-.3290	-.3040	-.4844	-.2927		.2438	
133.800	-.3642	-.2917	-.4576	-.1892		.2458	
149.100	-.4635	-.4806	-.4408	-.2254		.2473	
180.000	-.7301	-.7516	-.3857	-.1822	.2094	.2426	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP04) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RN/L (1) = 5.488 ALPHA (1) = .562 Q(PSF) = 306.68 PT = 6777.1 P = 6465.2 MACH = .26030

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4696	-.5148	-.5191	-.2588		.1360	
-133.800	-.4241	-.4208	-.5382	-.2498		.1322	
-115.600	-.2907	-.3482	-.4913	-.2588		.1320	
-101.400	-.3486	-.3609	-.4789	-.3482		.1207	
-50.100	-.1226	-.2932	-.1900	-.2137	.0709	.1140	
-44.800	-.1281	-.1492	-.1445	-.1795	.0513	.1161	
.000	-.1369	-.1202	-.1728	-.1768	.0580	.1286	.1156
44.800	-.1112	-.1263	-.1355	-.2051	.0395	.1277	
50.100	-.1000	-.1705	-.1690	-.1958	.0603	.0956	
101.400	-.3253	-.3632	-.4389	-.3226		.1159	
115.600	-.3250	-.3126	-.4620	-.2870		.1190	
133.800	-.3513	-.3392	-.5495	-.2505		.1379	
149.100	-.4952	-.5273	-.5088	-.2742		.1306	
180.000	-.8130	-.8255	-.4062	-.2363	.1297	.1248	

RN/L (1) = 5.484 ALPHA (2) = .576 Q(PSF) = 306.68 PT = 6777.1 P = 6465.2 MACH = .26030

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4618	-.5107	-.5156	-.2575		.1274	
-133.800	-.4231	-.4212	-.5387	-.2476		.1289	
-115.600	-.2911	-.3435	-.4957	-.2560		.1139	
-101.400	-.3400	-.3620	-.4804	-.3499		.1234	
-50.100	-.1123	-.2941	-.1974	-.2012	.0760	.1139	
-44.800	-.0881	-.1152	-.1440	-.1830	.0700	.1078	
.000	-.1328	-.1025	-.1740	-.1826	.0592	.1390	.1233
44.800	-.1106	-.1138	-.1319	-.2138	.0789	.1288	
50.100	-.1037	-.1821	-.1423	-.1892	.0338	.1072	
101.400	-.3218	-.3705	-.4336	-.3220		.1176	
115.600	-.3172	-.3112	-.4541	-.2822		.1288	
133.800	-.3463	-.3077	-.5446	-.2487		.1155	
149.100	-.4869	-.5307	-.5077	-.2706		.1314	
180.000	-.8088	-.8111	-.4071	-.2331	.1326	.1196	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP04)

RN/L (1) = 5.473 ALPHA (3) = .577 Q(PSF) = 306.68 PT = 6777.1 P = 6465.2 MACH = .26030

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4667	-.5197	-.5159	-.2599		.1409	
-133.800	-.4259	-.4231	-.5425	-.2478		.1048	
-115.600	-.2942	-.3467	-.4983	-.2605		.1163	
-101.400	-.3475	-.3687	-.4907	-.3496		.1169	
-50.100	-.1235	-.2955	-.2004	-.2015	.0495	.0785	
-44.800	-.1432	-.1475	-.1483	-.2030	.0472	.1013	
.000	-.1523	-.1116	-.1638	-.1965	.0790	.1152	.1201
44.800	-.1142	-.1237	-.1058	-.1811	.0694	.1178	
50.100	-.0992	-.1777	-.1884	-.1814	.0709	.1131	
101.400	-.3267	-.3648	-.4407	-.3278		.1325	
115.600	-.3232	-.3125	-.4638	-.2835		.1311	
133.800	-.3512	-.3056	-.5475	-.2529		.1259	
149.100	-.4967	-.5351	-.5051	-.2786		.1345	
180.000	-.8267	-.8256	-.4136	-.2381	.1253	.1224	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP05) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RN/L (1) = 5.447 ALPHA (1) = 10.177 Q(PSF) = 312.43 PT = 6940.9 P = 6623.2 MACH = .25960

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4677	-.5003	-.4658	-.2010		.1517	
-133.800	-.4389	-.4279	-.5054	-.2221		.1360	
-115.600	-.3160	-.3703	-.5516	-.3065		.1080	
-101.400	-.3687	-.3766	-.5294	-.4114		.1371	
-50.100	-.1220	-.2124	-.2124	-.2349	.0824	.1608	
-44.800	-.1368	-.1351	-.1482	-.2432	.0918	.1494	
.000	-.1501	-.1379	-.1732	-.2510	.1182	.1456	.1559
44.800	-.1330	-.1427	-.1601	-.2553	.0840	.1473	
50.100	-.1242	-.2464	-.2134	-.2332	.0966	.1448	
101.400	-.3501	-.4026	-.4929	-.3876		.1385	
115.600	-.3456	-.3305	-.5143	-.3433		.1305	
133.800	-.3618	-.3299	-.5132	-.2238		.1450	
149.100	-.4827	-.5214	-.4621	-.2141		.1353	
180.000	-.7987	-.8179	-.3972	-.1910	.1411	.1439	

RN/L (1) = 5.469 ALPHA (2) = 10.178 Q(PSF) = 312.43 PT = 6940.9 P = 6623.2 MACH = .25960

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4509	-.4891	-.4512	-.1978		.1597	
-133.800	-.4266	-.4201	-.4913	-.2139		.1552	
-115.600	-.3002	-.3563	-.5332	-.2947		.1399	
-101.400	-.3522	-.3679	-.5125	-.3947		.1560	
-50.100	-.1133	-.2322	-.2028	-.2540	.0783	.1535	
-44.800	-.1122	-.1167	-.1441	-.2161	.0808	.1501	
.000	-.1333	-.1059	-.2017	-.2022	.1208	.1510	.1601
44.800	-.1482	-.1369	-.1358	-.1926	.0894	.1643	
50.100	-.1101	-.2404	-.1776	-.2007	.0874	.1505	
101.400	-.3379	-.3904	-.4724	-.3731		.1389	
115.600	-.3319	-.3124	-.4928	-.3248		.1247	
133.800	-.3531	-.3184	-.4947	-.2174		.1476	
149.100	-.4764	-.5004	-.4444	-.2032		.1422	
180.000	-.7870	-.7824	-.3783	-.1800	.1490	.1434	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP05)

RN/L (1) = 5.467 ALPHA (3) = 10.180 Q(PSF) = 312.43 PT = 6940.9 P = 6623.2 MACH = .25960

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4542	-.4966	-.4466	-.1900		.1578	
-133.800	-.4239	-.4277	-.4921	-.2152		.1473	
-115.600	-.3015	-.3604	-.5333	-.3002		.1422	
-101.400	-.3558	-.3678	-.5096	-.3986		.1380	
-50.100	-.1212	-.2078	-.1900	-.2078	.1120	.1753	
-44.800	-.1133	-.1178	-.1680	-.2132	.1318	.1606	
.000	-.1215	-.1300	-.1792	-.2246	.1199	.1532	.1719
44.800	-.1357	-.1320	-.1074	-.2283	.0744	.1467	
50.100	-.1207	-.2345	-.1837	-.1950	.0874	.1674	
101.400	-.3458	-.3879	-.4729	-.3702		.1479	
115.600	-.3410	-.3096	-.5009	-.3309		.1512	
133.800	-.3616	-.3161	-.4966	-.2210		.1606	
149.100	-.4769	-.4986	-.4472	-.2103		.1606	
180.000	-.7833	-.7734	-.3757	-.1840	.1543	.1510	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP06) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RN/L (1) = 5.472 ALPHA (1) = 15.897 Q(PSF) = 305.81 PT = 6795.9 P = 6485.0 MACH = .25957

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4539	-.4978	-.4862	-.2461		.1541	
-133.800	-.4490	-.4401	-.4920	-.2377		.1521	
-115.600	-.3044	-.3676	-.5663	-.3253		.1428	
-101.400	-.3549	-.3862	-.5404	-.4227		.1489	
-50.100	-.0739	-.2072	-.1971	-.2565	.1318	.1730	
-44.800	-.1061	-.1282	-.1637	-.2504	.1263	.1689	
.000	-.1253	-.1050	-.7566	-.2212	.1641	.1780	.1763
44.800	-.1166	-.1380	-.1525	-.2693	.1423	.1737	
50.100	-.0702	-.1320	-.1537	-.2446	.1452	.1641	
101.400	-.3330	-.2835	-.5066	-.3961		.1589	
115.600	-.3467	-.3272	-.5205	-.3584		.1458	
133.800	-.3774	-.3411	-.5025	-.2336		.1490	
149.100	-.4776	-.4130	-.4762	-.2771		.1470	
180.000	-.7866	-.6293	-.4156	-.2214	.1447	.1481	

RN/L (1) = 5.473 ALPHA (2) = 15.899 Q(PSF) = 305.81 PT = 6795.9 P = 6485.0 MACH = .25957

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4471	-.5051	-.4889	-.2488		.1647	
-133.800	-.4447	-.4426	-.4950	-.2279		.1532	
-115.600	-.3019	-.3657	-.5653	-.3217		.1309	
-101.400	-.3549	-.3908	-.5396	-.4204		.1523	
-50.100	-.0724	-.2279	-.1964	-.2331	.1384	.1711	
-44.800	-.0999	-.1335	-.1596	-.2233	.1364	.1731	
.000	-.1266	-.0977	-.1905	-.2633	.1528	.1574	.1855
44.800	-.1272	-.1289	-.1442	-.2503	.1470	.1760	
50.100	-.0699	-.1303	-.1850	-.2254	.1435	.1745	
101.400	-.3367	-.3882	-.4986	-.3963		.1768	
115.600	-.3486	-.3284	-.5263	-.3627		.1435	
133.800	-.3775	-.4093	-.5067	-.2390		.1586	
149.100	-.4818	-.5050	-.4746	-.2781		.1537	
180.000	-.7828	-.7834	-.4107	-.2152	.1435	.1629	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP07) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 5.463 ALPHA (1) = .735 Q(PSF) = 300.35 PT = 6676.4 P = 6371.0 MACH = .25953

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4811	-.5325	-.5340	-.2432		.2241	
-133.800	-.4541	-.4425	-.5578	-.2429		.2232	
-115.600	-.3440	-.3863	-.4996	-.2274		.2182	
-101.400	-.3732	-.3978	-.4772	-.2783		.2194	
-50.100	-.3264	-.4560	-.2703	-.1076	.2059	.2315	
-44.800	.0000	.0000	.0000	-.0781	.2082	.2315	
.000	.0000	.0000	.0000	-.0622	.2048	.2234	.2401
44.800	.0000	.0000	.0000	-.0748	.2078	.2216	
50.100	-.2357	-.3995	-.2110	-.1055	.2113	.2284	
101.400	-.3634	-.3901	-.4312	-.2523		.2119	
115.600	-.3702	-.3408	-.4653	-.2511		.2189	
133.800	-.3866	-.3907	-.5654	-.2517		.2187	
149.100	-.5181	-.5410	-.5222	-.2758		.2201	
180.000	-.7937	-.7999	-.4808	-.2379	.1875	.2207	

RN/L (1) = 5.463 ALPHA (2) = .738 Q(PSF) = 300.35 PT = 6676.4 P = 6371.0 MACH = .25953

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4916	-.5326	-.5435	-.2446		.2180	
-133.800	-.4521	-.4471	-.5612	-.2463		.2201	
-115.600	-.3495	-.3864	-.5014	-.2266		.2097	
-101.400	-.3713	-.3967	-.4742	-.2776		.2156	
-50.100	-.3265	-.4571	-.2673	-.1143	.2083	.2292	
-44.800	.0000	.0000	.0000	-.0830	.2100	.2233	
.000	.0000	.0000	.0000	-.0651	.2053	.2218	.2348
44.800	.0000	.0000	.0000	-.0768	.2103	.2236	
50.100	-.2369	-.4047	-.2116	-.1054	.2103	.2215	
101.400	-.3676	-.3880	-.4303	-.2546		.2142	
115.600	-.3709	-.3409	-.4648	-.2513		.2186	
133.800	-.3788	-.4050	-.5646	-.2522		.2260	
149.100	-.5104	-.5407	-.5266	-.2723		.2221	
180.000	-.7704	-.8118	-.4565	-.2260	.1795	.2230	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP07)

RN/L (1) = 5.446 ALPHA (3) = .741 Q(PSF) = 300.35 PT = 6676.4 P = 6371.0 MACH = .25953

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4935	-.5428	-.5476	-.2572		.2182	
-133.800	-.4620	-.4470	-.5758	-.2548		.2138	
-115.600	-.3543	-.3872	-.5154	-.2381		.2087	
-101.400	-.3763	-.3961	-.4961	-.2869		.2138	
-50.100	-.3278	-.4545	-.2834	-.1168	.2004	.2269	
-44.800	.0000	.0000	.0000	-.0921	.2054	.2284	
.000	.0000	.0000	.0000	-.0698	.1968	.2126	.2281
44.800	.0000	.0000	.0000	-.0829	.2013	.2138	
50.100	-.2375	-.4145	-.2200	-.1060	.2060	.2224	
101.400	-.3700	-.4002	-.4368	-.2511		.2141	
115.600	-.3789	-.3474	-.4712	-.2490		.2144	
133.800	-.3940	-.3519	-.5710	-.2511		.2167	
149.100	-.5306	-.4163	-.5309	-.2782		.2120	
180.000	-.7863	-.8254	-.4985	-.2422	.1730	.2167	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP08) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 5.500 ALPHA (1) = 10.212 Q(PSF) = 311.97 PT = 6949.6 P = 6632.4 MACH = .25923

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4551	-.5001	-.4546	-.1924		.2328	
-133.800	-.4359	-.4259	-.4973	-.2066		.2302	
-115.600	-.3183	-.3607	-.5049	-.2433		.2268	
-101.400	-.3894	-.3940	-.4907	-.3096		.2262	
-50.100	-.2751	-.3329	-.1998	-.0809	.2055	.2331	
-44.800	.0000	.0000	.0000	-.0783	.2046	.2322	
.000	.0000	.0000	.0000	-.0665	.2045	.2216	.2369
44.800	.0000	.0000	.0000	-.0642	.2085	.2198	
50.100	-.2172	-.3497	-.1831	-.0857	.2136	.2284	
101.400	-.3619	-.3912	-.4472	-.2805		.2315	
115.600	-.3551	-.3210	-.4660	-.2657		.2230	
133.800	-.3642	-.3457	-.5010	-.2003		.2241	
149.100	-.4890	-.5158	-.4558	-.1915		.2281	
180.000	-.7676	-.7847	-.4196	-.1727	.1934	.2207	

RN/L (1) = 5.507 ALPHA (2) = 10.217 Q(PSF) = 311.97 PT = 6949.6 P = 6632.4 MACH = .25923

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4641	-.4996	-.4527	-.1894		.2324	
-133.800	-.4292	-.4260	-.4942	-.1974		.2295	
-115.600	-.3179	-.3670	-.4971	-.2386		.2287	
-101.400	-.3878	-.3934	-.4851	-.3079		.2360	
-50.100	-.2708	-.3312	-.1982	-.0792	.2113	.2335	
-44.800	.0000	.0000	.0000	-.0778	.2051	.2329	
.000	.0000	.0000	.0000	-.0682	.2071	.2233	.2437
44.800	.0000	.0000	.0000	-.0640	.2096	.2312	
50.100	-.2163	-.3502	-.1780	-.0845	.2136	.2233	
101.400	-.3607	-.3879	-.4387	-.2830		.2244	
115.600	-.3559	-.3173	-.4600	-.2662		.2290	
133.800	-.3655	-.3289	-.4997	-.1981		.2326	
149.100	-.4872	-.5102	-.4529	-.1859		.2304	
180.000	-.7717	-.7811	-.4092	-.1830	.1969	.2349	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP08)

RN/L (1) = 5.506 ALPHA (3) = 10.218 Q(PSF) = 311.97 PT = 6949.6 P = 6632.4 MACH = .25923

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4567	-.5008	-.4562	-.1887		.2298	
-133.800	-.4356	-.4277	-.4982	-.2017		.2320	
-115.600	-.3193	-.3638	-.5048	-.2401		.2340	
-101.400	-.3899	-.3896	-.4903	-.3115		.2255	
-50.100	-.2724	-.3359	-.2063	-.0824	.2050	.2301	
-44.800	.0000	.0000	.0000	-.0815	.2067	.2255	
.000	.0000	.0000	.0000	-.0667	.2027	.2252	.2497
44.800	.0000	.0000	.0000	-.0693	.2042	.2241	
50.100	-.2164	-.3505	-.1841	-.0876	.2081	.2340	
101.400	-.3622	-.3983	-.4409	-.2795		.2212	
115.600	-.3605	-.3218	-.4670	-.2679		.2303	
133.800	-.3682	-.3201	-.5008	-.1996		.2329	
149.100	-.4943	-.5065	-.4494	-.1917		.2315	
180.000	-.7866	-.7846	-.4014	-.1709	.2050	.2303	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP09) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 5.454 ALPHA (1) = 15.849 Q(PSF) = 312.69 PT = 7006.2 P = 6688.3 MACH = .25842

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4526	-.4983	-.4838	-.2349		.2430	
-133.800	-.4623	-.4585	-.5020	-.2320		.2370	
-115.600	-.3218	-.3719	-.5328	-.2594		.2304	
-101.400	-.3777	-.3961	-.4989	-.3198		.2413	
-50.100	-.2178	-.2326	-.1358	-.0501	.2193	.2464	
-44.800	.0000	.0000	.0000	-.0524	.2173	.2390	
.000	.0000	.0000	.0000	-.0546	.2149	.2294	.2659
44.800	.0000	.0000	.0000	-.0410	.2138	.2406	
50.100	-.1720	-.2475	-.1207	-.0576	.2175	.2397	
101.400	-.3481	-.3960	-.4621	-.2984		.2437	
115.600	-.3743	-.3296	-.4957	-.2944		.2391	
133.800	-.4094	-.3550	-.5063	-.2297		.2366	
149.100	-.4840	-.5199	-.4755	-.2469		.2420	
180.000	-.7829	-.7646	-.4228	-.2141	.1912	.2383	

RN/L (1) = 5.466 ALPHA (2) = 15.854 Q(PSF) = 312.69 PT = 7006.2 P = 6688.3 MACH = .25842

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4457	-.4901	-.4751	-.2258		.2438	
-133.800	-.4567	-.4511	-.4975	-.2227		.2492	
-115.600	-.3109	-.3650	-.5247	-.2580		.2427	
-101.400	-.3664	-.3860	-.4932	-.3141		.2489	
-50.100	-.2152	-.2218	-.1290	-.0446	.2223	.2509	
-44.800	.0000	.0000	.0000	-.0486	.2274	.2407	
.000	.0000	.0000	.0000	-.0493	.2254	.2333	.2662
44.800	.0000	.0000	.0000	-.0338	.2197	.2415	
50.100	-.1714	-.2407	-.1128	-.0521	.2214	.2455	
101.400	-.3480	-.3874	-.4553	-.2911		.2438	
115.600	-.3639	-.3268	-.4901	-.2877		.2492	
133.800	-.3939	-.3211	-.4941	-.2276		.2384	
149.100	-.4720	-.5142	-.4672	-.2361		.2503	
180.000	-.7405	-.7678	-.4378	-.2089	.2044	.2475	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP09)

RN/L (1) = 5.466 ALPHA (3) = 15.856 Q(PSF) = 312.69 PT = 7006.2 P = 6688.3 MACH = .25842

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4408	-.4935	-.4785	-.2287		.2462	
-133.800	-.4527	-.4485	-.4935	-.2228		.2490	
-115.600	-.3144	-.3638	-.5230	-.2514		.2411	
-101.400	-.3722	-.3805	-.4918	-.3072		.2451	
-50.100	-.2141	-.2239	-.1350	-.0424	.2190	.2521	
-44.800	.0000	.0000	.0000	-.0486	.2216	.2465	
.000	.0000	.0000	.0000	-.0453	.2172	.2381	.2642
44.800	.0000	.0000	.0000	-.0360	.2217	.2444	
50.100	-.1685	-.2381	-.1198	-.0472	.2169	.2495	
101.400	-.3404	-.3843	-.4582	-.2903		.2512	
115.600	-.3673	-.3211	-.4887	-.2872		.2492	
133.800	-.4095	-.3205	-.4975	-.2212		.2481	
149.100	-.4828	-.5018	-.4647	-.2393		.2461	
180.000	-.7662	-.7559	-.4375	-.2138	.2007	.2475	

RN/L (1) = 5.465 ALPHA (4) = 16.025 Q(PSF) = 312.69 PT = 7006.2 P = 6688.3 MACH = .25842

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4483	-.4931	-.4742	-.2281		.2453	
-133.800	-.4605	-.4518	-.4909	-.2205		.2422	
-115.600	-.3133	-.3676	-.5197	-.2564		.2413	
-101.400	-.3753	-.3913	-.4934	-.3087		.2524	
-50.100	-.2170	-.2298	-.1348	-.0446	.2204	.2444	
-44.800	.0000	.0000	.0000	-.0494	.2218	.2436	
.000	.0000	.0000	.0000	-.0521	.2187	.2382	.2648
44.800	.0000	.0000	.0000	-.0365	.2244	.2433	
50.100	-.1670	-.2347	-.1147	-.0517	.2261	.2459	
101.400	-.3463	-.3826	-.4585	-.2932		.2490	
115.600	-.3670	-.3208	-.4950	-.2909		.2445	
133.800	-.4030	-.3240	-.4987	-.2235		.2467	
149.100	-.4803	-.5140	-.4692	-.2419		.2481	
180.000	-.7637	-.7424	-.4287	-.2094	.2077	.2405	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP10) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 5.479 ALPHA (1) = .543 Q(PSF) = 305.24 PT = 6762.9 P = 6452.5 MACH = .25995

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3956	-.4406	-.4726	-.2483		.2210	
-133.800	-.3598	-.3585	-.5209	-.2515		.2204	
-115.600	-.2415	-.3189	-.4990	-.2832		.2268	
-101.400	-.3008	-.3562	-.5017	-.3690		.2361	
-50.100	-.2359	-.4685	-.3603	-.2104	.1913	.2245	
-44.800	.0000	.0000	.0000	-.1234	.1925	.2274	
.000	.0000	.0000	.0000	-.0711	.2028	.2371	.2124
44.800	.0000	.0000	.0000	-.0391	.2031	.2400	
50.100	-.1500	-.2724	-.1480	-.0528	.2092	.2377	
101.400	-.3029	-.3174	-.3264	-.1612		.2595	
115.600	-.3339	-.3186	-.3827	-.1502		.2496	
133.800	-.4117	-.3870	-.5092	-.1484		.2130	
149.100	-.5762	-.5878	-.4883	-.2423		.2116	
180.000	-.8301	-.7055	-.4149	-.2598	.2232	.2011	

RN/L (1) = 5.478 ALPHA (2) = .545 Q(PSF) = 305.24 PT = 6762.9 P = 6452.5 MACH = .25995

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3924	-.4341	-.4752	-.2563		.2139	
-133.800	-.3570	-.3608	-.5194	-.2520		.2229	
-115.600	-.2392	-.3128	-.5031	-.2817		.2305	
-101.400	-.2968	-.3515	-.5005	-.3649		.2392	
-50.100	-.2351	-.4589	-.3654	-.2089	.1912	.2264	
-44.800	.0000	.0000	.0000	-.1251	.1921	.2249	
.000	.0000	.0000	.0000	-.0644	.2001	.2350	.2114
44.800	.0000	.0000	.0000	-.0412	.2062	.2379	
50.100	-.1532	-.2757	-.1422	-.0476	.2094	.2411	
101.400	-.3024	-.3233	-.3216	-.1543		.2637	
115.600	-.3329	-.3199	-.3811	-.1488		.2472	
133.800	-.4128	-.4186	-.5062	-.1453		.2108	
149.100	-.5794	-.5829	-.4842	-.2418		.2079	
180.000	-.8214	-.7015	-.4069	-.2662	.2187	.2044	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP11) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 5.339 ALPHA (1) = 10.257 Q(PSF) = 302.86 PT = 6764.5 P = 6456.5 MACH = .25886

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4084	-.4444	-.4325	-.2213		.2063	
-133.800	-.4128	-.4068	-.5376	-.2520		.2092	
-115.600	-.2740	-.3457	-.5566	-.3644		.2431	
-101.400	-.2860	-.3384	-.5026	-.3942		.1873	
-50.100	-.1600	-.3863	-.3116	-.1372	.1797	.2255	
-44.800	-.0920	.0000	.0000	-.1054	.1937	.2285	
.000	.0000	.0000	.0000	-.0850	.2160	.2324	.2260
44.800	-.0882	.0000	.0000	-.0319	.2289	.2426	
50.100	-.1328	.0384	-.1098	-.0437	.2298	.2476	
101.400	-.3055	-.3376	-.3746	-.2045		.2572	
115.600	-.2959	-.3061	-.4140	-.1855		.2248	
133.800	-.3796	-.3119	-.4834	-.1361		.2061	
149.100	-.5213	-.5213	-.4263	-.1565		.1921	
180.000	-.7151	-.6101	-.3621	-.1945	.2157	.1994	

RN/L (1) = 5.339 ALPHA (2) = 10.265 Q(PSF) = 302.86 PT = 6764.5 P = 6456.5 MACH = .25886

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4137	-.4526	-.4397	-.2262		.2018	
-133.800	-.4140	-.4075	-.5424	-.2592		.2079	
-115.600	-.2754	-.3493	-.5596	-.3721		.2413	
-101.400	-.2885	-.3400	-.5096	-.4040		.1746	
-50.100	-.1695	-.3835	-.3180	-.1478	.1708	.2202	
-44.800	-.0929	.0000	.0000	-.1168	.1886	.2225	
.000	.0000	.0000	.0000	-.0843	.2069	.2276	.2177
44.800	-.0907	.0000	.0000	-.0364	.2227	.2341	
50.100	-.1354	.0708	-.1123	-.0452	.2268	.2455	
101.400	-.3094	-.3459	-.3801	-.2052		.2443	
115.600	-.2977	-.3120	-.4245	-.1879		.2294	
133.800	-.3883	-.3176	-.4899	-.1370		.2037	
149.100	-.5244	-.5173	-.4230	-.1560		.1961	
180.000	-.7283	-.6071	-.3678	-.1964	.2209	.1926	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP11)

RN/L (1) = 5.358 ALPHA (3) = 10.457 Q(PSF) = 302.86 PT = 6764.5 P = 6456.5 MACH = .25886

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4084	-.4479	-.4338	-.2195		.2110	
-133.800	-.4084	-.4093	-.5325	-.2504		.2125	
-115.600	-.2723	-.3506	-.5556	-.3649		.2449	
-101.400	-.2849	-.3392	-.4992	-.3982		.1792	
-50.100	-.1590	-.3845	-.3085	-.1386	.1713	.2253	
-44.800	-.0898	.0000	.0000	-.1059	.1897	.2259	
.000	.0000	.0000	.0000	-.0803	.2119	.2253	.2227
44.800	-.0888	.0000	.0000	-.0264	.2268	.2393	
50.100	-.1360	.0656	-.1063	-.0466	.2312	.2461	
101.400	-.3057	-.3378	-.3728	-.2101		.2507	
115.600	-.2935	-.3092	-.4128	-.1920		.2285	
133.800	-.3810	-.3008	-.4857	-.1327		.2081	
149.100	-.5180	-.5145	-.4148	-.1558		.1964	
180.000	-.7100	-.6100	-.3547	-.1850	.2253	.1929	

RN/L (1) = 5.356 ALPHA (4) = 10.464 Q(PSF) = 302.86 PT = 6764.5 P = 6456.5 MACH = .25886

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4085	-.4535	-.4406	-.2229		.2104	
-133.800	-.4058	-.4102	-.5428	-.2592		.2119	
-115.600	-.2671	-.3470	-.5676	-.3666		.2490	
-101.400	-.2841	-.3435	-.5041	-.4038		.1844	
-50.100	-.1554	-.3856	-.3101	-.1431	.1791	.2241	
-44.800	-.0930	.0000	.0000	-.1088	.1914	.2274	
.000	.0000	.0000	.0000	-.0802	.2127	.2250	.2233
44.800	-.0913	.0000	.0000	-.0314	.2250	.2402	
50.100	-.1369	.0912	-.1065	-.0459	.2247	.2405	
101.400	-.3115	-.3448	-.3770	-.2071		.2479	
115.600	-.3013	-.3130	-.4088	-.1896		.2253	
133.800	-.3863	-.3077	-.4847	-.1393		.2063	
149.100	-.5183	-.5177	-.4152	-.1644		.1987	
180.000	-.7196	-.6031	-.3545	-.1887	.2165	.1928	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP11)

RN/L (1) = 5.367 ALPHA (5) = 10.560 Q(PSF) = 302.86 PT = 6764.5 P = 6456.5 MACH = .25886

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4204	-.4565	-.4447	-.2248		.2041	
-133.800	-.4127	-.4151	-.5450	-.2580		.2194	
-115.600	-.2746	-.3521	-.5673	-.3738		.2466	
-101.400	-.2878	-.3421	-.5145	-.4087		.1880	
-50.100	-.1658	-.3893	-.3166	-.1480	.1713	.2208	
-44.800	-.0914	.0000	.0000	-.1134	.1886	.2267	
.000	.0000	.0000	.0000	-.0869	.2084	.2265	.2198
44.800	-.0904	.0000	.0000	-.0357	.2242	.2383	
50.100	-.1349	.0951	-.1135	-.0450	.2262	.2365	
101.400	-.3060	-.3494	-.3845	-.2069		.2468	
115.600	-.2979	-.3204	-.4225	-.1905		.2260	
133.800	-.3868	-.3292	-.4886	-.1347		.1993	
149.100	-.5279	-.5281	-.4228	-.1652		.1949	
180.000	-.7249	-.6196	-.3543	-.1864	.2145	.1978	

RN/L (1) = 5.374 ALPHA (6) = 10.562 Q(PSF) = 302.86 PT = 6764.5 P = 6456.5 MACH = .25886

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4108	-.4550	-.4389	-.2280		.2046	
-133.800	-.4113	-.4125	-.5437	-.2573		.2152	
-115.600	-.2772	-.3557	-.5622	-.3671		.2439	
-101.400	-.2845	-.3431	-.5068	-.4037		.1765	
-50.100	-.1565	-.3879	-.3109	-.1413	.1739	.2278	
-44.800	-.0842	.0000	.0000	-.1108	.1906	.2260	
.000	.0000	.0000	.0000	-.0796	.2084	.2266	.2216
44.800	-.0910	.0000	.0000	-.0320	.2260	.2360	
50.100	-.1381	.0937	-.1103	-.0432	.2313	.2465	
101.400	-.3155	-.3442	-.3740	-.2119		.2527	
115.600	-.2986	-.3155	-.4143	-.1920		.2295	
133.800	-.3869	-.3819	-.4845	-.1404		.2005	
149.100	-.5272	-.5237	-.4225	-.1630		.1967	
180.000	-.7164	-.5988	-.3518	-.1805	.2175	.1947	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP11)

RN/L (1) = 5.382 ALPHA (7) = 10.569 Q(PSF) = 302.86 PT = 6764.5 P = 6456.5 MACH = .25886

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4091	-.4443	-.4385	-.2180		.2089	
-133.800	-.4129	-.4151	-.5446	-.2496		.2151	
-115.600	-.2779	-.3490	-.5674	-.3639		.2484	
-101.400	-.2908	-.3423	-.5072	-.4016		.1782	
-50.100	-.1570	-.3885	-.3122	-.1420	.1747	.2233	
-44.800	-.0837	.0000	.0000	-.1101	.1908	.2250	
.000	.0000	.0000	.0000	-.0857	.2135	.2266	.2275
44.800	-.0857	.0000	.0000	-.0352	.2287	.2351	
50.100	-.1382	.0906	-.1102	-.0460	.2275	.2395	
101.400	-.3101	-.3326	-.3746	-.2096		.2500	
115.600	-.2949	-.3104	-.4178	-.1900		.2357	
133.800	-.3804	-.3177	-.4864	-.1368		.2088	
149.100	-.5158	-.5158	-.4251	-.1579		.1989	
180.000	-.7164	-.6102	-.3594	-.1885	.2158	.1983	

RN/L (1) = 5.395 ALPHA (8) = 10.721 Q(PSF) = 302.86 PT = 6764.5 P = 6456.5 MACH = .25886

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4178	-.4541	-.4406	-.2225		.2072	
-133.800	-.4143	-.4174	-.5473	-.2569		.2163	
-115.600	-.2771	-.3583	-.5726	-.3754		.2463	
-101.400	-.2930	-.3401	-.5094	-.4098		.1807	
-50.100	-.1620	-.3865	-.3137	-.1488	.1766	.2230	
-44.800	-.0903	.0000	.0000	-.1135	.1878	.2257	
.000	.0000	.0000	.0000	-.0886	.2148	.2260	.2318
44.800	-.0840	.0000	.0000	-.0326	.2242	.2371	
50.100	-.1388	-.0848	-.1115	-.0431	.2260	.2395	
101.400	-.3081	-.3482	-.3787	-.2020		.2442	
115.600	-.2972	-.3201	-.4184	-.1940		.2233	
133.800	-.3843	-.3852	-.4932	-.1350		.2057	
149.100	-.5198	-.5278	-.4251	-.1641		.1919	
180.000	-.7188	-.6035	-.3591	-.1926	.2113	.1937	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP11)

RN/L (1) = 5.402 ALPHA (9) = 10.725 Q(PSF) = 302.86 PT = 6764.5 P = 6456.5 MACH = .25886

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4159	-.4529	-.4347	-.2174		.2063	
-133.800	-.4156	-.4062	-.5368	-.2515		.2177	
-115.600	-.2794	-.3454	-.5597	-.3689		.2488	
-101.400	-.2920	-.3351	-.4990	-.4041		.1816	
-50.100	-.1599	-.3827	-.3125	-.1428	.1754	.2242	
-44.800	-.0839	.0000	.0000	-.1094	.1919	.2259	
.000	.0000	.0000	.0000	-.0863	.2132	.2270	.2252
44.800	-.0816	.0000	.0000	-.0300	.2278	.2396	
50.100	-.1300	-.0813	-.1091	-.0431	.2325	.2484	
101.400	-.3069	-.3383	-.3793	-.2031		.2499	
115.600	-.2981	-.3078	-.4174	-.1808		.2243	
133.800	-.3843	-.3861	-.4942	-.1309		.2049	
149.100	-.5164	-.5188	-.4265	-.1602		.2005	
180.000	-.7163	-.5979	-.3529	-.1919	.2211	.1976	

RN/L (1) = 5.403 ALPHA (10) = 10.726 Q(PSF) = 302.86 PT = 6764.5 P = 6456.5 MACH = .25886

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4167	-.4563	-.4298	-.2248		.2131	
-133.800	-.4161	-.4163	-.5419	-.2566		.2143	
-115.600	-.2827	-.3560	-.5654	-.3739		.2437	
-101.400	-.2894	-.3404	-.5057	-.4039		.1808	
-50.100	-.1589	-.3848	-.3033	-.1439	.1752	.2243	
-44.800	-.0858	.0000	.0000	-.1054	.1887	.2252	
.000	.0000	.0000	.0000	-.0861	.2134	.2334	.2252
44.800	-.0855	.0000	.0000	-.0292	.2258	.2375	
50.100	-.1375	-.0847	-.1116	-.0390	.2293	.2475	
101.400	-.3111	-.3428	-.3848	-.2057		.2490	
115.600	-.3000	-.3129	-.4182	-.1898		.2290	
133.800	-.3763	-.3211	-.4915	-.1328		.2114	
149.100	-.5130	-.5229	-.4276	-.1628		.1940	
180.000	-.7145	-.6140	-.3554	-.1928	.2190	.1934	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP12) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 5.455 ALPHA (1) = 15.298 Q(PSF) = 301.79 PT = 6697.9 P = 6390.9 MACH = .25973

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4108	-.4416	-.4077	-.1933		.2348	
-133.800	-.4349	-.4277	-.5611	-.2652		.2383	
-115.600	-.2687	-.3474	-.5882	-.4033		.2504	
-101.400	-.2663	-.3220	-.5069	-.4186		.2033	
-50.100	-.1304	-.3959	-.2590	-.1106	.1688	.2227	
-44.800	-.0671	.0000	.0000	-.1015	.1850	.2236	
.000	.0000	.0000	.0000	-.0803	.2101	.2180	.2445
44.800	-.0609	.0000	.0000	-.0215	.2274	.2227	
50.100	-.1014	-.1875	-.0723	-.0215	.2286	.2330	
101.400	-.2918	-.3462	-.3800	-.1995		.2380	
115.600	-.3098	-.3312	-.4411	-.1951		.2339	
133.800	-.3829	-.3932	-.4819	-.1133		.2254	
149.100	-.5119	-.4978	-.3785	-.1904		.2274	
180.000	-.7018	-.5583	-.3242	-.1728	.1980	.2271	

RN/L (1) = 5.469 ALPHA (2) = 15.302 Q(PSF) = 301.79 PT = 6697.9 P = 6390.9 MACH = .25973

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4123	-.4396	-.3958	-.1928		.2381	
-133.800	-.4326	-.4258	-.5499	-.2605		.2387	
-115.600	-.2668	-.3492	-.5790	-.3917		.2510	
-101.400	-.2574	-.3280	-.5035	-.4082		.2093	
-50.100	-.1204	-.4002	-.2538	-.1053	.1729	.2252	
-44.800	-.0629	.0000	.0000	-.0900	.1853	.2258	
.000	.0000	.0000	.0000	-.0863	.2146	.2234	.2510
44.800	-.0646	.0000	.0000	-.0145	.2278	.2337	
50.100	-.1083	-.1748	-.0664	-.0257	.2319	.2340	
101.400	-.2911	-.3306	-.3684	-.2038		.2419	
115.600	-.3081	-.3236	-.4291	-.1973		.2398	
133.800	-.3769	-.3289	-.4654	-.1134		.2272	
149.100	-.5002	-.4882	-.3669	-.1973		.2316	
180.000	-.6828	-.5512	-.3239	-.1668	.2043	.2310	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP12)

RN/L (1) = 5.474 ALPHA (3) = 15.311 Q(PSF) = 301.79 PT = 6697.9 P = 6390.9 MACH = .25973

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4047	-.4380	-.3928	-.1997		.2396	
-133.800	-.4305	-.4303	-.5480	-.2683		.2385	
-115.600	-.2663	-.3520	-.5762	-.4030		.2490	
-101.400	-.2621	-.3215	-.5049	-.4130		.2091	
-50.100	-.1246	-.3901	-.2610	-.1078	.1786	.2244	
-44.800	-.0595	.0000	.0000	-.0896	.1889	.2261	
.000	.0000	.0000	.0000	-.0812	.2100	.2241	.2534
44.800	-.0619	.0000	.0000	-.0150	.2264	.2305	
50.100	-.1087	-.1746	-.0636	-.0193	.2317	.2352	
101.400	-.2979	-.3359	-.3681	-.1973		.2440	
115.600	-.3113	-.3239	-.4322	-.1967		.2352	
133.800	-.3781	-.3239	-.4697	-.1132		.2252	
149.100	-.5069	-.4934	-.3713	-.1953		.2200	
180.000	-.6967	-.5625	-.3230	-.1636	.2065	.2340	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP13) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RN/L (1) = 5.403 ALPHA (1) = .601 Q(PSF) = 302.09 PT = 6695.0 P = 6387.8 MACH = .25993

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3995	-.4553	-.4937	-.2745		.1392	
-133.800	-.3640	-.3719	-.5381	-.2721		.1229	
-115.600	-.2389	-.3206	-.5166	-.3121		.1226	
-101.400	-.2841	-.3396	-.5020	-.4013		.1206	
-50.100	-.1323	-.3079	-.2434	-.2310	.0901	.1358	
-44.800	-.1403	-.1693	-.1671	-.2155	.1018	.1320	
.000	-.1556	-.1626	-.1966	-.2300	.0846	.0338	.1051
44.800	-.1479	-.1547	-.1752	-.2010	.0509	.1002	
50.100	-.1339	-.2027	-.1995	-.2251	.0682	.1187	
101.400	-.3363	-.3604	-.3973	-.2747		.1275	
115.600	-.3604	-.3237	-.4307	-.2310		.0767	
133.800	-.4412	-.3982	-.5584	-.2095		.0840	
149.100	-.6030	-.6106	-.5306	-.2941		.0917	
180.000	-.8750	-.7204	-.4377	-.3029	.1392	.0996	

RN/L (1) = 5.399 ALPHA (2) = .606 Q(PSF) = 302.09 PT = 6695.0 P = 6387.8 MACH = .25993

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4092	-.4598	-.4971	-.2742		.1032	
-133.800	-.3693	-.3779	-.5432	-.2757		.1138	
-115.600	-.2420	-.3227	-.5156	-.3109		.1197	
-101.400	-.2911	-.3470	-.5106	-.4049		.1109	
-50.100	-.1354	-.3015	-.2275	-.2354	.0821	.1129	
-44.800	-.1395	-.1659	-.1635	-.2260	.1135	.1355	
.000	-.1378	-.1472	-.1621	-.2328	.0906	.0248	.0626
44.800	-.1390	-.1522	-.1413	-.2533	.0867	.1111	
50.100	-.1357	-.2049	-.1909	-.2200	.0865	.1050	
101.400	-.3401	-.3610	-.3961	-.2764		.1343	
115.600	-.3557	-.3281	-.4372	-.2312		.0668	
133.800	-.4434	-.4495	-.5615	-.2177		.1020	
149.100	-.6102	-.6114	-.5272	-.3049		.1167	
180.000	-.8808	-.7110	-.4392	-.3067	.1443	.1067	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP13)

RN/L (1) = 5.401 ALPHA (3) = .610 Q(PSF) = 302.09 PT = 6695.0 P = 6387.8 MACH = .25993

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4130	-.4554	-.5013	-.2781		.1273	
-133.800	-.3712	-.3728	-.5448	-.2758		.1205	
-115.600	-.2427	-.3149	-.5171	-.3119		.1026	
-101.400	-.2895	-.3428	-.5071	-.4089		.1205	
-50.100	-.1283	-.2946	-.2246	-.1979	.0967	.1311	
-44.800	-.1324	-.1618	-.1685	-.1996	.0791	.1338	
.000	-.1568	-.1439	-.1897	-.2355	.1026	.1029	.0332
44.800	-.1421	-.1648	-.1812	-.2314	.0776	.1217	
50.100	-.1251	-.1953	-.2050	-.2665	.0782	.1011	
101.400	-.3339	-.3748	-.4009	-.2759		.1640	
115.600	-.3551	-.3242	-.4362	-.2301		.1152	
133.800	-.4403	-.3295	-.5607	-.2145		.0879	
149.100	-.6124	-.6168	-.5313	-.2983		.1334	
180.000	-.8820	-.7204	-.4476	-.3074	.1420	.1011	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP14) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RN/L (1) = 5.414 ALPHA (1) = 10.506 Q(PSF) = 312.87 PT = 6965.2 P = 6647.0 MACH = .25932

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4324	-.4686	-.4633	-.2657		.1082	
-133.800	-.4242	-.4290	-.5698	-.2966		.1249	
-115.600	-.2795	-.3622	-.5891	-.4194		.0878	
-101.400	-.2752	-.3407	-.5253	-.4531		.1065	
-50.100	-.0674	-.1318	-.2535	-.2739	.1017	.1405	
-44.800	-.1294	-.1461	-.1833	-.2869	.1195	.1371	
.000	-.1560	-.1585	-.2453	-.2581	.0847	.1475	.1631
44.800	-.1206	-.1339	-.1975	-.2790	.1062	.1447	
50.100	-.1175	-.1481	-.2179	-.3058	.1192	.1841	
101.400	-.3426	-.3853	-.4636	-.3378		.1693	
115.600	-.3253	-.3423	-.4766	-.2611		.0697	
133.800	-.4127	-.3313	-.5347	-.1993		.1263	
149.100	-.5472	-.5497	-.4540	-.2061		.1028	
180.000	-.7564	-.6347	-.3748	-.2291	.1594	.0784	

RN/L (1) = 5.417 ALPHA (2) = 10.507 Q(PSF) = 312.87 PT = 6965.2 P = 6647.0 MACH = .25932

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4300	-.4708	-.4671	-.2684		.0951	
-133.800	-.4272	-.4369	-.5765	-.2925		.1078	
-115.600	-.2870	-.3649	-.5915	-.4176		.1279	
-101.400	-.2766	-.3358	-.5190	-.4547		.1194	
-50.100	-.0770	-.1246	-.2429	-.3010	.0954	.1356	
-44.800	-.1225	-.1628	-.1835	-.2814	.1276	.1339	
.000	-.1324	-.1533	-.2528	-.2381	.0975	.1436	.1595
44.800	-.1182	-.1677	-.2116	-.2868	.0955	.1589	
50.100	-.1259	-.1646	-.2133	-.2723	.1224	.1736	
101.400	-.3467	-.3914	-.4627	-.3346		.1864	
115.600	-.3252	-.3484	-.4788	-.2695		.0932	
133.800	-.4089	-.3589	-.5397	-.1981		.1312	
149.100	-.5426	-.5497	-.4621	-.2143		.1111	
180.000	-.7623	-.6256	-.3750	-.2290	.1521	.0927	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP14)

RN/L (1) = 5.413 ALPHA (3) = 10.513 Q(PSF) = 312.87 PT = 6965.2 P = 6647.0 MACH = .25932

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4390	-.4762	-.4665	-.2679		.1070	
-133.800	-.4297	-.4325	-.5790	-.2942		.1093	
-115.600	-.2868	-.3649	-.5943	-.4166		.1158	
-101.400	-.2828	-.3445	-.5247	-.4569		.0962	
-50.100	-.0727	-.1336	-.2585	-.2335	.0627	.1660	
-44.800	-.1294	-.1623	-.1833	-.2667	.1425	.1328	
.000	-.1576	-.1520	-.2641	-.2862	.1287	.1377	.1669
44.800	-.1225	-.1486	-.1908	-.2953	.0575	.1618	
50.100	-.1313	-.1599	-.2276	-.2748	.1117	.1865	
101.400	-.3460	-.3899	-.4632	-.3389		.1723	
115.600	-.3261	-.3508	-.4819	-.2627		.0918	
133.800	-.4182	-.3502	-.5389	-.1960		.1213	
149.100	-.5503	-.5327	-.4660	-.2091		.1159	
180.000	-.7593	-.6320	-.3814	-.2318	.1556	.0909	

RN/L (1) = 5.451 ALPHA (4) = 10.716 Q(PSF) = 312.87 PT = 6965.2 P = 6647.0 MACH = .25932

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4265	-.4701	-.4588	-.2651		.1078	
-133.800	-.4302	-.4268	-.5714	-.2872		.0965	
-115.600	-.2866	-.3646	-.5934	-.4121		.1474	
-101.400	-.2767	-.3330	-.5218	-.4554		.0987	
-50.100	-.0637	-.1240	-.2360	-.2778	.1064	.1655	
-44.800	-.1141	-.1432	-.1777	-.2267	.1027	.1524	
.000	-.1396	-.1500	-.2370	-.2773	.1093	.1546	.1447
44.800	-.1161	-.1537	-.1941	-.3132	.0946	.1670	
50.100	-.1223	-.1449	-.2296	-.3021	.1195	.1506	
101.400	-.3391	-.3871	-.4549	-.3301		.1415	
115.600	-.3222	-.3428	-.4752	-.2622		.0895	
133.800	-.4052	-.3454	-.5377	-.1947		.1184	
149.100	-.5411	-.5559	-.4628	-.2029		.1184	
180.000	-.7505	-.6294	-.3767	-.2215	.1546	.1104	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP14)

RN/L (1) = 5.452 ALPHA (5) = 10.719 Q(PSF) = 312.87 PT = 6965.2 P = 6647.0 MACH = .25932

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4305	-.4695	-.4661	-.2641		.1083	
-133.800	-.4271	-.4276	-.5740	-.2898		.0947	
-115.600	-.2839	-.3631	-.5950	-.4211		.1440	
-101.400	-.2817	-.3342	-.5196	-.4613		.1097	
-50.100	-.0706	-.1254	-.2414	-.2926	.1097	.1454	
-44.800	-.1195	-.1572	-.1911	-.3144	.1397	.1344	
.000	-.1431	-.1527	-.1804	-.2675	.0836	.1410	.1784
44.800	-.1191	-.1606	-.1708	-.3248	.0974	.1274	
50.100	-.1157	-.1623	-.2307	-.3043	.0974	.1518	
101.400	-.3392	-.3876	-.4565	-.3363		.1778	
115.600	-.3248	-.3511	-.4746	-.2681		.1190	
133.800	-.4071	-.3407	-.5403	-.1951		.1235	
149.100	-.5489	-.5562	-.4591	-.2087		.1173	
180.000	-.7577	-.6011	-.3754	-.2239	.1520	.0895	

RN/L (1) = 5.461 ALPHA (6) = 10.726 Q(PSF) = 312.87 PT = 6965.2 P = 6647.0 MACH = .25932

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4315	-.4674	-.4623	-.2651		.1123	
-133.800	-.4278	-.4280	-.5699	-.2866		.1021	
-115.600	-.2839	-.3664	-.5905	-.4094		.1400	
-101.400	-.2782	-.3443	-.5166	-.4495		.0925	
-50.100	-.0721	-.1333	-.2572	-.2753	.1055	.1442	
-44.800	-.1187	-.1529	-.1754	-.2637	.1179	.1383	
.000	-.1414	-.1372	-.3024	-.2629	.1316	.1273	.1788
44.800	-.1230	-.1617	-.1826	-.3067	.0923	.1771	
50.100	-.1261	-.1530	-.2262	-.3342	.1118	.1553	
101.400	-.3417	-.3906	-.4539	-.3399		.1511	
115.600	-.3219	-.3448	-.4705	-.2641		.0948	
133.800	-.4092	-.3448	-.5331	-.1962		.1200	
149.100	-.5427	-.5368	-.4601	-.2050		.1106	
180.000	-.7580	-.6364	-.3779	-.2284	.1570	.1030	

ARC 12-180(OA173) OV101+TC+STRUTS+G.P.(TAILCONE) (RNSP15) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RN/L (1) = 5.448 ALPHA (1) = 15.468 Q(PSF) = 302.89 PT = 6714.3 P = 6406.3 MACH = .25987

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4420	-.4727	-.4352	-.2492		.1218	
-133.800	-.4528	-.4580	-.5898	-.3110		.1227	
-115.600	-.2796	-.3664	-.6106	-.4571		.1338	
-101.400	-.2647	-.3330	-.5447	-.4788		.0943	
-50.100	-.0557	-.1139	-.2443	-.2779	.1045	.1338	
-44.800	-.1031	-.1616	-.1763	-.2955	.1379	.1455	
.000	-.1391	-.1496	-.2537	-.3089	.1082	.1255	.1392
44.800	-.1005	-.1634	-.2034	-.3364	.1021	.1313	
50.100	-.0918	-.1277	-.2531	-.2980	.1264	.1539	
101.400	-.3370	-.3879	-.4782	-.3331		.1439	
115.600	-.3537	-.3686	-.5060	-.2793		.0795	
133.800	-.4104	-.3882	-.5288	-.1809		.0991	
149.100	-.5352	-.5384	-.4247	-.2465		.0918	
180.000	-.7413	-.5866	-.3586	-.2114	.1305	.0945	

RN/L (1) = 5.451 ALPHA (2) = 15.470 Q(PSF) = 302.89 PT = 6714.3 P = 6406.3 MACH = .25987

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4381	-.4714	-.4418	-.2448		.1191	
-133.800	-.4498	-.4593	-.5909	-.3046		.1244	
-115.600	-.2830	-.3755	-.6138	-.4423		.1385	
-101.400	-.2730	-.3363	-.5388	-.4752		.0989	
-50.100	-.0623	-.1247	-.2454	-.2947	.1086	.1329	
-44.800	-.1088	-.1545	-.1827	-.2941	.1302	.1009	
.000	-.1312	-.1435	-.2347	-.2823	.1289	.1043	.1493
44.800	-.1063	-.1613	-.2174	-.3112	.0984	.1236	
50.100	-.1014	-.1370	-.2557	-.2979	.1315	.1338	
101.400	-.3443	-.4010	-.4744	-.3374		.1370	
115.600	-.3472	-.3677	-.5097	-.2874		.0955	
133.800	-.4071	-.3674	-.5343	-.1879		.0896	
149.100	-.5372	-.5010	-.4212	-.2394		.1048	
180.000	-.7313	-.5983	-.3510	-.2139	.1262	.1054	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 2.402 ALPHA (1) = .591 Q(PSF) = 135.37 PT = 3020.7 P = 2883.1 MACH = .25899

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3630	-.4144	-.4721	-.2714		.2022	
-133.800	-.4011	-.3888	-.4885	-.1841		.2055	
-115.600	-.2763	-.2944	-.4374	-.1960		.1839	
-101.400	-.3604	-.3265	-.4216	-.2379		.2055	
-50.100	-.2054	-.3836	-.2727	-.0976	.1773	.2068	
-44.800	.0000	.0000	.0000	-.0753	.1760	.2029	
.000	.0000	.0000	.0000	-.0707	.1852	.2068	.2128
44.800	.0000	.0000	.0000	-.0890	.1865	.2055	
50.100	-.1644	-.3013	-.1945	-.1155	.1885	.2147	
101.400	-.3059	-.3420	-.3996	-.2461		.2062	
115.600	-.2954	-.2568	-.4167	-.2258		.2055	
133.800	-.3125	-.2810	-.4972	-.2205		.2062	
149.100	-.4363	-.4796	-.4691	-.2068		.2055	
180.000	-.6460	-.6669	-.4809	-.3866	.1766	.2009	

RN/L (1) = 2.391 ALPHA (2) = 2.134 Q(PSF) = 135.37 PT = 3020.7 P = 2883.1 MACH = .25899

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3118	-.3469	-.4283	-.2694		.2031	
-133.800	-.3775	-.3554	-.4611	-.2215		.1985	
-115.600	-.2626	-.2885	-.4315	-.2051		.1972	
-101.400	-.3591	-.3252	-.4263	-.2511		.1768	
-50.100	-.2094	-.3895	-.2753	-.1060	.1775	.1965	
-44.800	.0000	.0000	.0000	-.0824	.1755	.1919	
.000	.0000	.0000	.0000	-.0789	.1689	.2057	.1946
44.800	.0000	.0000	.0000	-.1032	.1821	.2090	
50.100	-.1615	-.2985	-.1969	-.1240	.1788	.2077	
101.400	-.3044	-.3358	-.4027	-.2606		.1978	
115.600	-.2834	-.2565	-.4105	-.2212		.1919	
133.800	-.3109	-.2585	-.4643	-.1956		.1926	
149.100	-.3398	-.3535	-.3961	-.3486		.1965	
180.000	-.5115	-.4014	-.4754	-.3808	.1598	.2038	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (1) = 2.385 ALPHA (3) = 4.188 Q(PSF) = 135.37 PT = 3020.7 P = 2883.1 MACH = .25899

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2900	-.3077	-.4012	-.3907		.1940	
-133.800	-.3391	-.3319	-.4051	-.2082		.1914	
-115.600	-.2638	-.2802	-.4274	-.1984		.1927	
-101.400	-.3594	-.3247	-.4176	-.2619		.1587	
-50.100	-.2094	-.3907	-.2625	-.1088	.1659	.1868	
-44.800	.0000	.0000	.0000	-.0800	.1659	.1940	
.000	.0000	.0000	.0000	-.0844	.1709	.2024	.2083
44.800	.0000	.0000	.0000	-.1034	.1683	.1919	
50.100	-.1550	-.3073	-.1949	-.1224	.1742	.1965	
101.400	-.2994	-.3347	-.3988	-.2664		.1795	
115.600	-.2772	-.2426	-.4086	-.2206		.1814	
133.800	-.2798	-.2491	-.4262	-.1905		.1919	
149.100	-.3262	-.3720	-.3713	-.3784		.1899	
180.000	-.3557	-.3589	-.4053	-.3149	.1605	.1631	

RN/L (1) = 2.382 ALPHA (4) = 6.257 Q(PSF) = 135.37 PT = 3020.7 P = 2883.1 MACH = .25899

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3831	-.3188	-.4042	-.2816		.2039	
-133.800	-.3616	-.3736	-.4323	-.1726		.1954	
-115.600	-.2630	-.2881	-.4290	-.2052		.1791	
-101.400	-.3531	-.3201	-.4323	-.2672		.1823	
-50.100	-.2016	-.3729	-.2692	-.1015	.1660	.2000	
-44.800	.0000	.0000	.0000	-.0793	.1660	.1954	
.000	.0000	.0000	.0000	-.0847	.1693	.2059	.2026
44.800	.0000	.0000	.0000	-.0991	.1667	.2013	
50.100	-.1578	-.2999	-.1832	-.1213	.1784	.1980	
101.400	-.3070	-.3403	-.4068	-.2656		.1941	
115.600	-.2738	-.2503	-.4146	-.2316		.1836	
133.800	-.2979	-.2484	-.4068	-.1990		.1915	
149.100	-.3500	-.4015	-.3494	-.3962		.1836	
180.000	-.3331	-.5671	-.4068	-.3818	.1536	.1850	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (1) = 2.379 ALPHA (5) = 8.334 Q(PSF) = 135.37 PT = 3020.7 P = 2883.1 MACH = .25899

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3036	-.3086	-.3811	-.1936		.1973	
-133.800	-.3468	-.3413	-.4203	-.1909		.1992	
-115.600	-.2617	-.2968	-.4367	-.2014		.2038	
-101.400	-.3559	-.[illegible]95	-.4262	-.2798		.1698	
-50.100	-.1956	-.[illegible]	-.2602	-.1001	.1666	.1940	
-44.800	.0000	.0000	.0000	-.0772	.1568	.1979	
.000	.0000	.0000	.0000	-.0927	.1649	.1898	.2114
44.800	.0000	.0000	.0000	-.0979	.1656	.1911	
50.100	-.1573	-.2958	-.1743	-.1256	.1760	.2048	
101.400	-.3147	-.3520	-.4088	-.2814		.1865	
115.600	-.2775	-.2612	-.4173	-.2362		.2114	
133.800	-.2991	-.2599	-.4094	-.1924		.2009	
149.100	-.3716	-.3611	-.3624	-.3978		.1917	
180.000	-.3343	-.4062	-.4231	-.3520	.1623	.1898	

RN/L (1) = 2.374 ALPHA (6) = 10.420 Q(PSF) = 135.37 PT = 3020.7 P = 2883.1 MACH = .25899

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2950	-.3218	-.3984	-.3447		.2076	
-133.800	-.3508	-.3493	-.3774	-.1789		.2050	
-115.600	-.2727	-.2929	-.4410	-.2045		.1978	
-101.400	-.3632	-.3290	-.4358	-.2864		.1821	
-50.100	-.1887	-.3506	-.2471	-.0924	.1696	.1926	
-44.800	.0000	.0000	.0000	-.0754	.1618	.1972	
.000	.0000	.0000	.0000	-.0861	.1677	.1972	.2215
44.800	.0000	.0000	.0000	-.0972	.1683	.1893	
50.100	-.1536	-.2793	-.1752	-.1178	.1696	.2018	
101.400	-.3160	-.3500	-.4123	-.2871		.2031	
115.600	-.2767	-.2675	-.4096	-.2444		.1939	
133.800	-.3160	-.2426	-.4044	-.1801		.2123	
149.100	-.3330	-.4404	-.3422	-.3882		.2077	
180.000	-.4306	-.5066	-.4358	-.3816	.1703	.2038	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (1) = 2.383 ALPHA (7) = 12.518 Q(PSF) = 135.37 PT = 3020.7 P = 2883.1 MACH = .25899

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3202	-.2994	-.4020	-.2468		.2178	
-133.800	-.3494	-.3767	-.3942	-.1720		.2249	
-115.600	-.2480	-.2909	-.4631	-.2084		.2191	
-101.400	-.3520	-.3241	-.4417	-.2877		.1860	
-50.100	-.1765	-.3156	-.2266	-.0863	.1795	.2204	
-44.800	.0000	.0000	.0000	-.0707	.1749	.2080	
.000	.0000	.0000	.0000	-.0871	.1812	.1955	.2430
44.800	.0000	.0000	.0000	-.0917	.1851	.1955	
50.100	-.1488	-.2669	-.1637	-.1049	.1897	.2112	
101.400	-.3085	-.3448	-.4201	-.2961		.2099	
115.600	-.2747	-.2637	-.4227	-.2545		.2131	
133.800	-.3117	-.2520	-.4208	-.1654		.2034	
149.100	-.3760	-.3643	-.3390	-.3000		.2157	
180.000	-.3760	-.5298	-.3663	-.2844	.1929	.2177	

RN/L (1) = 2.380 ALPHA (8) = 14.533 Q(PSF) = 135.37 PT = 3020.7 P = 2883.1 MACH = .25899

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4041	-.3900	-.4323	-.1914		.2155	
-133.800	-.3780	-.3861	-.4147	-.1556		.2187	
-115.600	-.2712	-.2995	-.4792	-.2292		.2331	
-101.400	-.3533	-.3268	-.4466	-.2864		.2331	
-50.100	-.1604	-.3008	-.2135	-.0677	.1966	.2383	
-44.800	.0000	.0000	.0000	-.0579	.1875	.2350	
.000	.0000	.0000	.0000	-.0716	.1973	.2168	.2409
44.800	.0000	.0000	.0000	-.0723	.2031	.2240	
50.100	-.1380	-.2485	-.1432	-.0888	.2031	.2331	
101.400	-.2999	-.3408	-.4221	-.2946		.2312	
115.600	-.2927	-.2622	-.4462	-.2751		.2266	
133.800	-.3356	-.2596	-.4293	-.1735		.2325	
149.100	-.4254	-.4397	-.4234	-.1891		.2357	
180.000	-.5626	-.5639	-.4663	-.2047	.2018	.2110	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (1) = 2.374 ALPHA (9) = 15.599 Q(PSF) = 135.37 PT = 3020.7 P = 2883.1 MACH = .25899

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4048	-.4524	-.4413	-.2628		.2322	
-133.800	-.4067	-.4014	-.4256	-.1654		.2341	
-115.600	-.2752	-.3086	-.4923	-.2380		.2368	
-101.400	-.3563	-.3360	-.4524	-.2948		.2420	
-50.100	-.1561	-.2824	-.2007	-.0699	.2067	.2400	
-44.800	.0000	.0000	.0000	-.0647	.1995	.2341	
.000	.0000	.0000	.0000	-.0669	.2020	.2281	.2497
44.800	.0000	.0000	.0000	-.0682	.2052	.2236	
50.100	-.1374	-.2302	-.1335	-.0788	.2039	.2347	
101.400	-.3079	-.3517	-.4392	-.3072		.2347	
115.600	-.3020	-.2727	-.4523	-.2928		.2347	
133.800	-.3465	-.2622	-.4392	-.1809		.2327	
149.100	-.4347	-.4588	-.4392	-.2163		.2242	
180.000	-.6182	-.6626	-.4876	-.2503	.2039	.2314	

RN/L (1) = 2.375 ALPHA (10) = 16.634 Q(PSF) = 135.37 PT = 3020.7 P = 2883.1 MACH = .25899

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4028	-.4534	-.4567	-.1987		.2330	
-133.800	-.4146	-.4012	-.4430	-.1706		.2402	
-115.600	-.2720	-.3051	-.4952	-.2496		.2402	
-101.400	-.3629	-.3378	-.4547	-.2986		.2409	
-50.100	-.1615	-.2686	-.1837	-.0628	.2050	.2376	
-44.800	.0000	.0000	.0000	-.0537	.2115	.2311	
.000	.0000	.0000	.0000	-.0681	.2112	.2230	.2530
44.800	.0000	.0000	.0000	-.0642	.2125	.2315	
50.100	-.1327	-.2143	-.1196	-.0726	.2073	.2393	
101.400	-.3063	-.3481	-.4467	-.3126		.2393	
115.600	-.2978	-.2659	-.4708	-.3041		.2315	
133.800	-.3514	-.2561	-.4558	-.1818		.2341	
149.100	-.4303	-.4578	-.4499	-.2269		.2374	
180.000	-.5864	-.6921	-.4800	-.2021	.1994	.2413	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (1) = 2.367 ALPHA (11) = 18.730 Q(PSF) = 135.37 PT = 3020.7 P = 2883.1 MACH = .25899

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4532	-.4931	-.4957	-.2057		.2394	
-133.800	-.4255	-.4102	-.4661	-.1801		.2401	
-115.600	-.2716	-.3044	-.5168	-.2702		.2381	
-101.400	-.3690	-.3563	-.4780	-.3083		.2460	
-50.100	-.1446	-.2353	-.1682	-.0486	.2072	.2375	
-44.800	.0000	.0000	.0000	-.0433	.2079	.2355	
.000	.0000	.0000	.0000	-.0637	.2021	.2225	.2614
44.800	.0000	.0000	.0000	-.0532	.2021	.2265	
50.100	-.1117	-.1728	-.0894	-.0624	.2061	.2265	
101.400	-.3061	-.3554	-.4572	-.3170		.2377	
115.600	-.3087	-.2700	-.4867	-.3242		.2364	
133.800	-.3547	-.2844	-.4861	-.1992		.2331	
149.100	-.4664	-.4874	-.4821	-.2696		.2364	
180.000	-.6798	-.7113	-.4808	-.2124	.2021	.2410	

RN/L (1) = 2.371 ALPHA (12) = 19.543 Q(PSF) = 135.37 PT = 3020.7 P = 2883.1 MACH = .25899

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4548	-.5115	-.5056	-.1890		.2461	
-133.800	-.4234	-.4114	-.4683	-.1785		.2428	
-115.600	-.2656	-.3048	-.5134	-.2779		.2481	
-101.400	-.3677	-.3512	-.4703	-.3028		.2468	
-50.100	-.1327	-.2164	-.1510	-.0385	.2082	.2396	
-44.800	.0000	.0000	.0000	-.0339	.2121	.2376	
.000	.0000	.0000	.0000	-.0501	.2110	.2254	.2601
44.800	.0000	.0000	.0000	-.0462	.2103	.2299	
50.100	-.1050	-.1573	-.0789	-.0515	.2103	.2378	
101.400	-.3088	-.3559	-.4624	-.3068		.2450	
115.600	-.3108	-.2683	-.4891	-.3330		.2463	
133.800	-.3506	-.2683	-.4891	-.2047		.2430	
149.100	-.4807	-.4976	-.4976	-.2735		.2424	
180.000	-.6799	-.7158	-.4741	-.2113	.2077	.2417	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (2) = 5.466 ALPHA (1) = .586 Q(PSF) = 318.42 PT = 7062.4 P = 6738.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4482	-.4765	-.4732	-.2110		.2254	
-133.800	-.4126	-.3895	-.4981	-.1979		.2285	
-115.600	-.2763	-.2885	-.4399	-.2007		.2271	
-101.400	-.3480	-.3238	-.4259	-.2530		.2207	
-50.100	-.2169	-.3954	-.2639	-.0966	.1958	.2212	
-44.800	.0000	.0000	.0000	-.0714	.1955	.2257	
.000	.0000	.0000	.0000	-.0708	.2022	.2249	.2436
44.800	.0000	.0000	.0000	-.0898	.2053	.2296	
50.100	-.1572	-.2998	-.1877	-.1108	.2078	.2352	
101.400	-.3068	-.3446	-.3988	-.2447		.2277	
115.600	-.3113	-.2573	-.4203	-.2239		.2251	
133.800	-.3283	-.3599	-.5053	-.1926		.2282	
149.100	-.4584	-.4841	-.4603	-.2144		.2288	
180.000	-.7138	-.6992	-.3832	-.1856	.1960	.2319	

RN/L (2) = 5.461 ALPHA (2) = 2.213 Q(PSF) = 318.42 PT = 7062.4 P = 6738.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3219	-.3717	-.4383	-.3686		.1906	
-133.800	-.3584	-.3577	-.4470	-.2510		.2013	
-115.600	-.2673	-.2925	-.4335	-.2071		.1923	
-101.400	-.3480	-.3280	-.4386	-.2757		.1682	
-50.100	-.2161	-.4025	-.2731	-.1111	.1800	.2044	
-44.800	.0000	.0000	.0000	-.0837	.1747	.1979	
.000	.0000	.0000	.0000	-.0802	.1756	.1865	.2179
44.800	.0000	.0000	.0000	-.1034	.1736	.1980	
50.100	-.1636	-.3124	-.1918	-.1228	.1739	.1935	
101.400	-.3133	-.3485	-.4115	-.2648		.2022	
115.600	-.2956	-.2539	-.4081	-.2270		.1781	
133.800	-.2973	-.3001	-.4646	-.2135		.2031	
149.100	-.3552	-.3812	-.3894	-.3996		.1862	
180.000	-.3370	-.3465	-.3575	-.3777	.1498	.2084	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (2) = 5.466 ALPHA (3) = 4.363 Q(PSF) = 318.42 PT = 7062.4 P = 6738.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3204	-.3464	-.4163	-.4324		.1881	
-133.800	-.3516	-.3503	-.4149	-.2360		.1666	
-115.600	-.2552	-.2847	-.4388	-.1973		.1909	
-101.400	-.3404	-.3359	-.4441	-.2852		.1775	
-50.100	-.2168	-.4060	-.2791	-.1088	.1614	.1872	
-44.800	.0000	.0000	.0000	-.0877	.1672	.1925	
.000	.0000	.0000	.0000	-.0871	.1664	.1767	.1901
44.800	.0000	.0000	.0000	-.0977	.1667	.1879	
50.100	-.1645	-.3197	-.1862	-.1327	.1661	.1998	
101.400	-.3122	-.3467	-.4154	-.2817		.1765	
115.600	-.2913	-.2507	-.4090	-.2346		.1887	
133.800	-.2880	-.2546	-.4544	-.1836		.1767	
149.100	-.3264	-.4026	-.3520	-.3591		.1859	
180.000	-.2975	-.3225	-.3909	-.3791	.1703	.1898	

RN/L (2) = 5.490 ALPHA (4) = 6.547 Q(PSF) = 318.42 PT = 7062.4 P = 6738.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2860	-.3069	-.3924	-.3662		.1737	
-133.800	-.3434	-.3226	-.3860	-.2038		.1900	
-115.600	-.2471	-.2782	-.4265	-.1993		.1933	
-101.400	-.3368	-.3218	-.4370	-.2917		.1770	
-50.100	-.2077	-.3885	-.2619	-.0979	.1778	.2071	
-44.800	.0000	.0000	.0000	-.0846	.1751	.1999	
.000	.0000	.0000	.0000	-.0853	.1703	.1764	.2026
44.800	.0000	.0000	.0000	-.1018	.1684	.1877	
50.100	-.1586	-.3044	-.1716	-.1155	.1758	.1929	
101.400	-.3099	-.3499	-.4059	-.2761		.1847	
115.600	-.2840	-.2554	-.4045	-.2358		.1880	
133.800	-.2948	-.2545	-.4326	-.1818		.1946	
149.100	-.3080	-.3375	-.3662	-.3804		.1905	
180.000	-.3491	-.4034	-.3496	-.3628	.1783	.2034	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (2) = 5.464 ALPHA (5) = 8.834 Q(PSF) = 318.42 PT = 7062.4 P = 6738.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2752	-.3174	-.4116	-.3193		.1883	
-133.800	-.3342	-.3210	-.3961	-.1803		.1949	
-115.600	-.2585	-.2943	-.4608	-.2107		.1888	
-101.400	-.3411	-.3305	-.4455	-.2985		.1841	
-50.100	-.1995	-.3727	-.2649	-.1031	.1663	.1972	
-44.800	.0000	.0000	.0000	-.0861	.1605	.1899	
.000	.0000	.0000	.0000	-.0865	.1711	.1742	.2192
44.800	.0000	.0000	.0000	-.0951	.1625	.1694	
50.100	-.1576	-.3005	-.1660	-.1227	.1839	.1906	
101.400	-.3210	-.3627	-.4133	-.2841		.1950	
115.600	-.2988	-.2566	-.4108	-.2410		.1800	
133.800	-.2949	-.2655	-.4130	-.1923		.1914	
149.100	-.3424	-.3588	-.3705	-.3492		.1945	
180.000	-.2752	-.3586	-.3786	-.3687	.1469	.1959	

RN/L (2) = 5.453 ALPHA (6) = 10.943 Q(PSF) = 318.42 PT = 7062.4 P = 6738.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2958	-.3273	-.3830	-.3424		.2039	
-133.800	-.3476	-.3218	-.3996	-.2194		.2212	
-115.600	-.2554	-.2884	-.4514	-.2144		.2117	
-101.400	-.3353	-.3218	-.4556	-.3042		.1933	
-50.100	-.1937	-.3529	-.2564	-.0859	.1639	.1972	
-44.800	.0000	.0000	.0000	-.0720	.1672	.1842	
.000	.0000	.0000	.0000	-.0874	.1743	.1862	.2060
44.800	.0000	.0000	.0000	-.0908	.1692	.1940	
50.100	-.1497	-.2846	-.1636	-.1040	.1854	.2001	
101.400	-.3118	-.3558	-.4258	-.2894		.1965	
115.600	-.2854	-.2418	-.4172	-.2499		.2088	
133.800	-.2927	-.2420	-.4205	-.1981		.1993	
149.100	-.3435	-.3427	-.3624	-.3253		.1957	
180.000	-.3096	-.3238	-.4375	-.3662	.1637	.1759	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (2) = 5.435 ALPHA (7) = 13.129 Q(PSF) = 318.42 PT = 7062.4 P = 6738.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2694	-.3408	-.4042	-.3629		.2009	
-133.800	-.3442	-.3438	-.3833	-.1805		.2151	
-115.600	-.2596	-.2955	-.4638	-.2183		.2067	
-101.400	-.3433	-.3349	-.4610	-.3058		.1698	
-50.100	-.1969	-.3411	-.2412	-.0788	.1704	.2037	
-44.800	.0000	.0000	.0000	-.0748	.1740	.2003	
.000	.0000	.0000	.0000	-.0820	.1805	.2035	.2194
44.800	.0000	.0000	.0000	-.0787	.1777	.1965	
50.100	-.1433	-.2661	-.1522	-.1093	.1847	.1881	
101.400	-.3122	-.3463	-.4355	-.3089		.2035	
115.600	-.2977	-.2501	-.4464	-.2552		.2074	
133.800	-.3091	-.2596	-.4258	-.1989		.2228	
149.100	-.3396	-.3237	-.3751	-.3061		.2124	
180.000	-.4129	-.5178	-.4134	-.2957	.1923	.2183	

RN/L (2) = 5.452 ALPHA (8) = 15.409 Q(PSF) = 318.42 PT = 7062.4 P = 6738.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3928	-.4525	-.4476	-.1902		.2386	
-133.800	-.3825	-.3965	-.4309	-.1743		.2364	
-115.600	-.2670	-.2964	-.4958	-.2445		.2378	
-101.400	-.3322	-.3277	-.4586	-.3066		.2442	
-50.100	-.1614	-.2886	-.2087	-.0656	.2062	.2323	
-44.800	.0000	.0000	.0000	-.0581	.2051	.2431	
.000	.0000	.0000	.0000	-.0705	.2121	.2079	.2685
44.800	.0000	.0000	.0000	-.0672	.2052	.2082	
50.100	-.1282	-.2378	-.1255	-.0831	.2166	.2302	
101.400	-.3083	-.3477	-.4331	-.2947		.2357	
115.600	-.3083	-.2633	-.4523	-.2844		.2293	
133.800	-.3438	-.2658	-.4414	-.1764		.2374	
149.100	-.4251	-.4625	-.4295	-.2039		.2329	
180.000	-.5231	-.5139	-.4545	-.2270	.2035	.2449	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (2) = 5.451 ALPHA (9) = 16.478 Q(PSF) = 318.42 PT = 7062.4 P = 6738.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3925	-.4470	-.4650	-.2105		.2403	
-133.800	-.4111	-.3885	-.4423	-.1747		.2378	
-115.600	-.2661	-.2998	-.4994	-.2454		.2464	
-101.400	-.3344	-.3361	-.4606	-.3089		.2459	
-50.100	-.1531	-.2726	-.1917	-.0660	.2004	.2392	
-44.800	.0000	.0000	.0000	-.0547	.2065	.2376	
.000	.0000	.0000	.0000	-.0695	.2085	.2116	.2538
44.800	.0000	.0000	.0000	-.0662	.2130	.2255	
50.100	-.1239	-.2288	-.1211	-.0762	.2168	.2210	
101.400	-.3090	-.3673	-.4475	-.3044		.2421	
115.600	-.3104	-.2760	-.4647	-.2914		.2421	
133.800	-.3548	-.2680	-.4492	-.1781		.2405	
149.100	-.4328	-.4125	-.4392	-.2539		.2399	
180.000	-.6399	-.6877	-.4758	-.2164	.2082	.2438	

RN/L (2) = 5.449 ALPHA (10) = 17.659 Q(PSF) = 318.42 PT = 7062.4 P = 6738.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4071	-.4615	-.4823	-.2065		.2476	
-133.800	-.4159	-.3997	-.4576	-.1768		.2465	
-115.600	-.2685	-.3010	-.5073	-.2567		.2465	
-101.400	-.3457	-.3451	-.4726	-.3060		.2476	
-50.100	-.1445	-.2597	-.1785	-.0598	.2088	.2387	
-44.800	.0000	.0000	.0000	-.0499	.2099	.2435	
.000	.0000	.0000	.0000	-.0619	.2089	.2086	.2744
44.800	.0000	.0000	.0000	-.0538	.2111	.2211	
50.100	-.1090	-.2066	-.1054	-.0687	.2139	.2261	
101.400	-.3101	-.3570	-.4479	-.3113		.2394	
115.600	-.3098	-.2663	-.4682	-.3007		.2366	
133.800	-.3528	-.2552	-.4709	-.1814		.2430	
149.100	-.4440	-.4776	-.4590	-.2369		.2500	
180.000	-.6380	-.6871	-.4776	-.2197	.2003	.2450	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (3) = 7.979 ALPHA (1) = .554 Q(PSF) = 466.17 PT = 10290. P = 9816.0 MACH = .26047

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4468	-.4842	-.4817	-.2077		.2316	
-133.800	-.4077	-.3943	-.5022	-.1998		.2324	
-115.600	-.2773	-.3219	-.4567	-.2008		.2282	
-101.400	-.3030	-.3388	-.4501	-.2714		.2301	
-50.100	-.2167	-.3922	-.2530	-.0978	.2104	.2393	
-44.800	.0000	.0000	.0000	-.0705	.2140	.2412	
.000	.0000	.0000	.0000	-.0761	.2096	.2392	.2451
44.800	.0000	.0000	.0000	-.0745	.2097	.2415	
50.100	-.1051	-.2684	-.2014	-.1292	.2153	.2438	
101.400	-.3129	-.3559	-.3995	-.2443		.2323	
115.600	-.2958	-.2797	-.4198	-.2248		.2333	
133.800	-.3358	-.2699	-.5162	-.1989		.2361	
149.100	-.4661	-.4964	-.4741	-.2260		.2354	
180.000	-.7365	-.7736	-.4020	-.1906	.2082	.2344	

RN/L (3) = 7.920 ALPHA (2) = 2.275 Q(PSF) = 466.17 PT = 10290. P = 9816.0 MACH = .26047

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4406	-.4808	-.4623	-.1820		.2287	
-133.800	-.4094	-.3900	-.4961	-.1863		.2296	
-115.600	-.2766	-.3198	-.4620	-.2083		.2200	
-101.400	-.3093	-.3396	-.4506	-.2824		.2246	
-50.100	-.2220	-.3891	-.2532	-.1040	.1993	.2332	
-44.800	.0000	.0000	.0000	-.0786	.2030	.2306	
.000	.0000	.0000	.0000	-.0852	.2040	.2345	.2444
44.800	.0000	.0000	.0000	-.0816	.2042	.2331	
50.100	-.1354	-.3700	-.1960	-.1255	.2094	.2358	
101.400	-.3216	-.3602	-.4104	-.2563		.2249	
115.600	-.2995	-.2839	-.4327	-.2323		.2274	
133.800	-.3343	-.2804	-.5058	-.1865		.2385	
149.100	-.4537	-.4931	-.4629	-.1986		.2281	
180.000	-.6968	-.7353	-.4037	-.1791	.1950	.2369	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (3) = 7.935 ALPHA (3) = 4.543 Q(PSF) = 466.17 PT = 10290. P = 9816.0 MACH = .26047

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4255	-.4489	-.4354	-.1680		.2211	
-133.800	-.4033	-.3961	-.4752	-.1733		.2205	
-115.600	-.2684	-.3053	-.4674	-.2136		.2177	
-101.400	-.2955	-.3428	-.4560	-.2951		.2126	
-50.100	-.2141	-.3882	-.2490	-.1062	.1951	.2275	
-44.800	.0000	.0000	.0000	-.0780	.1901	.2205	
.000	.0000	.0000	.0000	-.0946	.1961	.2280	.2386
44.800	.0000	.0000	.0000	-.0844	.1951	.2214	
50.100	-.1434	-.3405	-.1967	-.1217	.2014	.2246	
101.400	-.3245	-.3613	-.4076	-.2648		.2212	
115.600	-.2957	-.2775	-.4289	-.2431		.2256	
133.800	-.3238	-.2875	-.4803	-.1738		.2242	
149.100	-.4476	-.4647	-.4188	-.1792		.2259	
180.000	-.6531	-.5969	-.3936	-.1689	.1879	.2269	

RN/L (3) = 7.937 ALPHA (4) = 6.861 Q(PSF) = 466.17 PT = 10290. P = 9816.0 MACH = .26047

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4254	-.4667	-.4305	-.1536		.2094	
-133.800	-.4063	-.3991	-.4765	-.1712		.2275	
-115.600	-.2741	-.3091	-.4775	-.2274		.2207	
-101.400	-.3039	-.3488	-.4661	-.3029		.1977	
-50.100	-.2222	-.3738	-.2622	-.0997	.1875	.2171	
-44.800	.0000	.0000	.0000	-.0870	.1907	.2190	
.000	.0000	.0000	.0000	-.1066	.1860	.2234	.2340
44.800	.0000	.0000	.0000	-.0520	.1818	.2181	
50.100	-.1493	-.3349	-.1867	-.1251	.1947	.2079	
101.400	-.3332	-.3676	-.4177	-.2825		.2196	
115.600	-.3060	-.2880	-.4379	-.2611		.2166	
133.800	-.3357	-.2931	-.4751	-.1728		.2215	
149.100	-.4453	-.4691	-.4102	-.1646		.2232	
180.000	-.6267	-.7029	-.4189	-.1745	.1845	.2268	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (3) = 7.932 ALPHA (5) = 9.153 Q(PSF) = 466.17 PT = 10290. P = 9816.0 MACH = .26047

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4219	-.4520	-.4073	-.1752		.2288	
-133.800	-.4040	-.3907	-.4477	-.1607		.2297	
-115.600	-.2735	-.3049	-.4817	-.2209		.2333	
-101.400	-.3005	-.3316	-.4567	-.3042		.2350	
-50.100	-.2121	-.3529	-.2500	-.0905	.1947	.2288	
-44.800	.0000	.0000	.0000	-.0810	.1956	.2050	
.000	.0000	.0000	.0000	-.1025	.1949	.2232	.2474
44.800	.0000	.0000	.0000	-.0933	.1945	.2168	
50.100	-.1478	-.3161	-.1835	-.1178	.1998	.2193	
101.400	-.3226	-.3681	-.4196	-.2828		.2225	
115.600	-.3021	-.2873	-.4426	-.2621		.2202	
133.800	-.3306	-.2858	-.4566	-.1611		.2283	
149.100	-.1394	-.4551	-.3901	-.1519		.2247	
180.000	-.0727	-.6736	-.4126	-.1506	.1994	.2298	

RN/L (3) = 7.920 ALPHA (6) = 11.439 Q(PSF) = 466.17 PT = 10290. P = 9816.0 MACH = .26047

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4152	-.4393	-.4130	-.1554		.2302	
-133.800	-.4006	-.3918	-.4478	-.1636		.2347	
-115.600	-.2774	-.3082	-.4989	-.2425		.2241	
-101.400	-.3471	-.3333	-.4635	-.3154		.2147	
-50.100	-.1987	-.3513	-.2480	-.0847	.1920	.2269	
-44.800	.0000	.0000	.0000	-.0799	.1895	.2137	
.000	.0000	.0000	.0000	-.0888	.2008	.1985	.2432
44.800	.0000	.0000	.0000	-.0812	.2048	.2103	
50.100	-.1483	-.2997	-.1656	-.1010	.2070	.2241	
101.400	-.3219	-.3632	-.4348	-.2996		.2161	
115.600	-.3025	-.2837	-.4483	-.2671		.2318	
133.800	-.3289	-.2911	-.4504	-.1666		.2214	
149.100	-.4360	-.4367	-.4061	-.1627		.2281	
180.000	-.6212	-.6630	-.4166	-.1694	.2053	.2301	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP16)

RN/L (3) = 7.893 ALPHA (7) = 13.758 Q(PSF) = 466.17 PT = 10290. P = 9816.0 MACH = .26047

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4228	-.4502	-.4348	-.1693		.2341	
-133.800	-.4111	-.3979	-.4407	-.1653		.2401	
-115.600	-.2768	-.3056	-.5107	-.2322		.2333	
-101.400	-.3415	-.3327	-.4808	-.3224		.2261	
-50.100	-.1965	-.3256	-.2355	-.0753	.1965	.2323	
-44.800	.0000	.0000	.0000	-.0706	.1991	.2323	
.000	.0000	.0000	.0000	-.0867	.2050	.1940	.2635
44.800	.0000	.0000	.0000	-.0796	.2120	.2096	
50.100	-.1421	-.2777	-.1489	-.0931	.2101	.2080	
101.400	-.3182	-.3690	-.4449	-.3002		.2326	
115.600	-.3119	-.2773	-.4611	-.2862		.2244	
133.800	-.3476	-.2607	-.4445	-.1790		.2310	
149.100	-.4246	-.4376	-.4214	-.1942		.2339	
180.000	-.6604	-.6297	-.4439	-.1830	.2054	.2375	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP17) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RN/L (1) = 5.376 ALPHA (1) = .639 Q(PSF) = 312.21 PT = 6928.0 P = 6610.5 MACH = .25976

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4423	-.5004	-.5156	-.2422		.1522	
-133.800	-.4094	-.4137	-.5330	-.2397		.1429	
-115.600	-.2747	-.3388	-.4776	-.2532		.1302	
-101.400	-.2956	-.3444	-.4677	-.3427		.1285	
-50.100	-.1277	-.2572	-.2223	-.1879	.0584	.1226	
-44.800	-.1218	-.1525	-.1713	-.1986	.0494	.1319	
.000	-.1427	-.1108	-.1849	-.2141	.0703	.1258	.1314
44.800	-.1280	-.1384	-.1719	-.2125	.0723	.1244	
50.100	-.0945	-.2040	-.1508	-.2102	.0675	.1044	
101.400	-.3115	-.3543	-.4275	-.3176		.1292	
115.600	-.3205	-.2741	-.4421	-.2795		.1314	
133.800	-.3453	-.2702	-.5331	-.2457		.1528	
149.100	-.4745	-.5097	-.4973	-.2725		.1413	
180.000	-.7186	-.7511	-.4655	-.2423	.1317	.1441	

RN/L (1) = 5.398 ALPHA (2) = .643 Q(PSF) = 312.21 PT = 6928.0 P = 6610.5 MACH = .25976

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4486	-.5036	-.5144	-.2579		.1411	
-133.800	-.4091	-.4169	-.5345	-.2484		.1440	
-115.600	-.2790	-.3503	-.4881	-.2587		.1251	
-101.400	-.3033	-.3517	-.4787	-.3431		.1277	
-50.100	-.1299	-.2647	-.2153	-.2141	.0545	.1200	
-44.800	-.1176	-.1420	-.1518	-.2270	.0301	.0911	
.000	-.1353	-.1330	-.1816	-.1824	.0780	.1101	.1404
44.800	-.1244	-.1287	-.1681	-.2116	.0114	.1246	
50.100	-.1047	-.1987	-.1607	-.1900	.0666	.1321	
101.400	-.3176	-.3570	-.4362	-.3216		.1186	
115.600	-.3219	-.2819	-.4476	-.2856		.1304	
133.800	-.3505	-.3696	-.5379	-.2489		.1304	
149.100	-.4779	-.5242	-.5022	-.2798		.1527	
180.000	-.7454	-.7686	-.4545	-.2498	.1329	.1392	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP17)

RN/L (1) = 5.394 ALPHA (3) = 2.267 Q(PSF) = 312.21 PT = 6928.0 P = 6610.5 MACH = .25976

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4455	-.4924	-.4961	-.2381		.1587	
-133.800	-.4095	-.4100	-.5288	-.2267		.1498	
-115.600	-.2777	-.3441	-.4901	-.2549		.1296	
-101.400	-.2971	-.3587	-.4792	-.3564		.1404	
-50.100	-.1216	-.2797	-.2221	-.1902	.0484	.1268	
-44.800	-.1227	-.1470	-.1457	-.2236	.0686	.1239	
.000	-.1361	-.1264	-.1694	-.2153	.0576	.1295	.1326
44.800	-.1204	-.1469	-.1483	-.2278	.0750	.1364	
50.100	-.1070	-.1950	-.1691	-.1912	.0702	.1455	
101.400	-.3184	-.3557	-.4295	-.3388		.1284	
115.600	-.3158	-.2785	-.4449	-.2985		.1540	
133.800	-.3366	-.2848	-.5249	-.2386		.1518	
149.100	-.4645	-.5081	-.4853	-.2466		.1483	
180.000	-.7067	-.7316	-.4500	-.2394	.1384	.1523	

RN/L (1) = 5.401 ALPHA (4) = 4.440 Q(PSF) = 312.21 PT = 6928.0 P = 6610.5 MACH = .25976

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4492	-.4862	-.4785	-.2154		.1543	
-133.800	-.4181	-.4142	-.5193	-.2239		.1497	
-115.600	-.2839	-.3475	-.5057	-.2693		.1166	
-101.400	-.3131	-.3538	-.4859	-.3668		.1324	
-50.100	-.1327	-.2730	-.2228	-.1976	.0312	.1211	
-44.800	-.1310	-.1347	-.1525	-.1752	.0437	.1166	
.000	-.1517	-.1104	-.2010	-.1851	.0687	.1237	.1385
44.800	-.1293	-.1336	-.1497	-.2188	.0426	.1342	
50.100	-.0931	-.1973	-.1574	-.2181	.0378	.1274	
101.400	-.3200	-.3644	-.4401	-.3426		.1541	
115.600	-.3171	-.2766	-.4622	-.2989		.1271	
133.800	-.3370	-.2916	-.5231	-.2252		.1527	
149.100	-.4633	-.5058	-.4673	-.2308		.1456	
180.000	-.6723	-.7031	-.4576	-.2354	.1323	.1501	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP17)

RN/L (1) = 5.393 ALPHA (5) = 6.625 Q(PSF) = 312.21 PT = 6928.0 P = 6610.5 MACH = .25976

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4415	-.4850	-.4625	-.2118		.1606	
-133.800	-.4153	-.4197	-.5086	-.2220		.1581	
-115.600	-.2846	-.3572	-.5157	-.2822		.1268	
-101.400	-.3082	-.3606	-.4924	-.3793		.1316	
-50.100	-.1283	-.2828	-.2180	-.2265	.0552	.1407	
-44.800	-.1345	-.1456	-.1524	-.2288	.0745	.1237	
.000	-.1596	-.1332	-.1567	-.2138	.1016	.1331	.1528
44.800	-.1292	-.1269	-.1360	-.2092	.0783	.1479	
50.100	-.1005	-.1970	-.1658	-.1996	.0752	.1340	
101.400	-.3290	-.3653	-.4516	-.3511		.1133	
115.600	-.3205	-.2796	-.4726	-.3147		.1331	
133.800	-.3443	-.2856	-.5129	-.2249		.1434	
149.100	-.4655	-.4902	-.4635	-.2141		.1508	
180.000	-.6652	-.7165	-.4556	-.2036	.1363	.1579	

RN/L (1) = 5.379 ALPHA (6) = 6.631 Q(PSF) = 312.21 PT = 6928.0 P = 6610.5 MACH = .25976

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4404	-.4862	-.4622	-.2098		.1495	
-133.800	-.4151	-.4143	-.5099	-.2210		.1467	
-115.600	-.2867	-.3512	-.5211	-.2839		.1461	
-101.400	-.3082	-.3622	-.4927	-.3814		.1328	
-50.100	-.1291	-.2653	-.2188	-.1988	.0861	.1179	
-44.800	-.1161	-.1299	-.1419	-.2013	.0579	.1424	
.000	-.1485	-.1316	-.2071	-.2139	.0587	.1366	.1416
44.800	-.1358	-.1445	-.1671	-.1905	.0302	.1309	
50.100	-.1042	-.1860	-.1849	-.2134	.0576	.1315	
101.400	-.3300	-.3669	-.4461	-.3519		.1213	
115.600	-.3196	-.2838	-.4749	-.3085		.1340	
133.800	-.3452	-.2801	-.5121	-.2244		.1354	
149.100	-.4577	-.4966	-.4636	-.2185		.1543	
180.000	-.6810	-.7164	-.4422	-.2081	.1352	.1521	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP17)

RN/L (1) = 5.385 ALPHA (7) = 8.813 Q(PSF) = 312.21 PT = 6928.0 P = 6610.5 MACH = .25976

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4474	-.4818	-.4571	-.1972		.1590	
-133.800	-.4207	-.4179	-.5000	-.2208		.1511	
-115.600	-.2979	-.3659	-.5247	-.2958		.1286	
-101.400	-.3115	-.3688	-.5017	-.3938		.1497	
-50.100	-.1205	-.2639	-.2219	-.2134	.0684	.1394	
-44.800	-.1382	-.1518	-.1560	-.2526	.0596	.1414	
.000	-.1536	-.1269	-.1652	-.2206	.0781	.1432	.1500
44.800	-.1241	-.1473	-.1380	-.2161	.0818	.1418	
50.100	-.0925	-.1780	-.1740	-.2385	.0548	.1486	
101.400	-.3339	-.3802	-.4614	-.3655		.1131	
115.600	-.3200	-.2947	-.4847	-.3220		.1518	
133.800	-.3490	-.2930	-.5020	-.2200		.1549	
149.100	-.4571	-.4966	-.4534	-.2052		.1449	
180.000	-.6900	-.7160	-.4534	-.2018	.1429	.1537	

RN/L (1) = 5.375 ALPHA (8) = 11.010 Q(PSF) = 312.21 PT = 6928.0 P = 6610.5 MACH = .25976

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4405	-.4690	-.4428	-.1917		.1606	
-133.800	-.4243	-.4166	-.4889	-.2094		.1544	
-115.600	-.3030	-.3654	-.5370	-.2999		.1302	
-101.400	-.3130	-.3588	-.5114	-.4024		.1282	
-50.100	-.1185	-.2350	-.2390	-.1960	.0818	.1447	
-44.800	-.1134	-.1413	-.1550	-.2640	.1080	.1629	
.000	-.1513	-.1275	-.2008	-.2074	.0939	.1656	.1662
44.800	-.1223	-.1400	-.1400	-.2242	.0848	.1542	
50.100	-.0848	-.1599	-.1573	-.2569	.1036	.1500	
101.400	-.3305	-.3755	-.4736	-.3742		.1394	
115.600	-.3226	-.2964	-.4998	-.3309		.1406	
133.800	-.3499	-.2927	-.4949	-.2142		.1625	
149.100	-.4472	-.4915	-.4585	-.2073		.1662	
180.000	-.6653	-.7053	-.4665	-.2147	.1414	.1576	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP17)

RN/L (1) = 5.378 ALPHA (9) = 13.200 Q(PSF) = 312.21 PT = 6928.0 P = 6610.5 MACH = .25976

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4387	-.4811	-.4646	-.2234		.1550	
-133.800	-.4208	-.4226	-.4848	-.2154		.1516	
-115.600	-.2944	-.3707	-.5532	-.3057		.1246	
-101.400	-.3052	-.3687	-.5225	-.4206		.1538	
-50.100	-.1129	-.2361	-.2151	-.2659	.1323	.1567	
-44.800	-.1124	-.1527	-.1669	-.2424	.1152	.1496	
.000	-.1319	-.1120	-.1954	-.2232	.1376	.1521	.1660
44.800	-.1304	-.1483	-.1968	-.2819	.1311	.1549	
50.100	-.0882	-.1696	-.1736	-.2382	.1200	.1703	
101.400	-.3296	-.3849	-.4851	-.3924		.1490	
115.600	-.3285	-.3007	-.5092	-.3444		.1450	
133.800	-.3699	-.3021	-.4857	-.2294		.1560	
149.100	-.4587	-.4876	-.4581	-.2308		.1563	
180.000	-.6766	-.6709	-.4871	-.2379	.1421	.1654	

RN/L (1) = 5.378 ALPHA (10) = 15.390 Q(PSF) = 312.21 PT = 6928.0 P = 6610.5 MACH = .25976

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4284	-.4721	-.4894	-.2302		.1666	
-133.800	-.4330	-.4163	-.4846	-.2265		.1587	
-115.600	-.3001	-.3580	-.5608	-.3143		.1564	
-101.400	-.3114	-.3676	-.5375	-.4200		.1649	
-50.100	-.1040	-.2243	-.2390	-.2767	.1519	.1788	
-44.800	-.1295	-.1522	-.1806	-.2670	.1221	.1638	
.000	-.1621	-.1236	-.2334	-.2722	.1510	.1714	.1810
44.800	-.1315	-.1514	-.1666	-.2821	.1314	.1830	
50.100	-.0687	-.1587	-.1918	-.2890	.1312	.1674	
101.400	-.3285	-.3910	-.5033	-.3950		.1762	
115.600	-.3319	-.3081	-.5172	-.3437		.1553	
133.800	-.3709	-.3064	-.4960	-.2301		.1703	
149.100	-.4530	-.4954	-.4810	-.2542		.1626	
180.000	-.6569	-.6893	-.4937	-.2414	.1453	.1657	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP17)

RN/L (1) = 5.374 ALPHA (11) = 16.522 Q(PSF) = 312.21 PT = 6928.0 P = 6610.5 MACH = .25976

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4273	-.4781	-.4985	-.2467		.1669	
-133.800	-.4415	-.4277	-.4897	-.2254		.1649	
-115.600	-.2958	-.3628	-.5585	-.3118		.1496	
-101.400	-.3159	-.3713	-.5330	-.4186		.1765	
-50.100	-.0951	-.2070	-.2268	-.2668	.1445	.1796	
-44.800	-.1223	-.1631	-.1838	-.2914	.1527	.1802	
.000	-.1454	-.1369	-.1910	-.2457	.1694	.1612	.1892
44.800	-.1315	-.1664	-.1726	-.3515	.1436	.1804	
50.100	-.0678	-.1635	-.2069	-.2476	.1566	.1858	
101.400	-.3346	-.3841	-.5019	-.3970		.1844	
115.600	-.3391	-.3034	-.5175	-.3570		.1685	
133.800	-.3731	-.3017	-.5047	-.2343		.1634	
149.100	-.4580	-.4994	-.4869	-.2847		.1640	
180.000	-.6507	-.6874	-.4994	-.2566	.1558	.1592	

RN/L (1) = 5.370 ALPHA (12) = 17.618 Q(PSF) = 312.21 PT = 6928.0 P = 6610.5 MACH = .25976

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4276	-.4880	-.5178	-.2608		.1745	
-133.800	-.4440	-.4347	-.5022	-.2288		.1745	
-115.600	-.2954	-.3644	-.5686	-.3286		.1513	
-101.400	-.3258	-.3839	-.5467	-.4251		.1825	
-50.100	-.0931	-.2197	-.2586	-.2662	.1604	.1859	
-44.800	-.1323	-.1615	-.1899	-.3025	.1518	.1810	
.000	-.1539	-.1531	-.2500	-.2942	.1591	.1679	.1840
44.800	-.1497	-.1423	-.1777	-.3373	.1494	.1826	
50.100	-.0700	-.1570	-.2316	-.3022	.1690	.1749	
101.400	-.3333	-.3974	-.5130	-.4066		.1812	
115.600	-.3418	-.3081	-.5306	-.3674		.1698	
133.800	-.3719	-.3104	-.5195	-.2389		.1721	
149.100	-.4705	-.5040	-.5025	-.2985		.1622	
180.000	-.6911	-.6760	-.5051	-.2682	.1361	.1727	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP17)

RN/L (2) = 7.985 ALPHA (1) = .660 Q(PSF) = 452.69 PT = 10035. P = 9574.2 MACH = .25988

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4715	-.5125	-.5193	-.2547		.1404	
-133.800	-.4240	-.4203	-.5418	-.2471		.1370	
-115.600	-.2918	-.3542	-.4933	-.2586		.1272	
-101.400	-.3037	-.3586	-.4861	-.3570		.1376	
-50.100	-.1402	-.2940	-.2195	-.1806	.0627	.1121	
-44.800	-.1295	-.1524	-.1609	-.2068	.0779	.1239	
.000	-.1633	-.1318	-.1966	-.2137	.0782	.1318	.1294
44.800	-.1316	-.1567	-.1436	-.2026	.0167	.1172	
50.100	-.1034	-.2135	-.1623	-.2324	.0540	.1280	
101.400	-.3242	-.3696	-.4437	-.3332		.1258	
115.600	-.3149	-.2983	-.4581	-.2932		.1334	
133.800	-.3557	-.2916	-.5469	-.2524		.1402	
149.100	-.4927	-.5254	-.5063	-.2827		.1394	
180.000	-.7954	-.7580	-.3995	-.2449	.1426	.1340	

RN/L (2) = 7.865 ALPHA (2) = .669 Q(PSF) = 452.69 PT = 10035. P = 9574.2 MACH = .25988

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4598	-.5104	-.5212	-.2595		.1360	
-133.800	-.4241	-.4214	-.5448	-.2502		.1346	
-115.600	-.2828	-.3530	-.4930	-.2581		.1147	
-101.400	-.3027	-.3577	-.4870	-.3557		.1344	
-50.100	-.1372	-.2883	-.2181	-.2007	.0383	.1170	
-44.800	-.1204	-.1645	-.1551	-.1980	.0580	.1082	
.000	-.1674	-.1428	-.2295	-.2330	.0403	.1160	.1409
44.800	-.1294	-.1478	-.1449	-.2151	.0397	.1106	
50.100	-.1077	-.1967	-.1944	-.2264	.0602	.1083	
101.400	-.3249	-.3699	-.4411	-.3415		.1276	
115.600	-.3273	-.2877	-.4510	-.2947		.1349	
133.800	-.3540	-.3007	-.5531	-.2578		.1531	
149.100	-.4941	-.5325	-.5158	-.2832		.1402	
180.000	-.7657	-.7752	-.4660	-.2555	.1320	.1411	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP17)

RN/L (2) = 7.943 ALPHA (3) = 2.363 Q(PSF) = 452.69 PT = 10035. P = 9574.2 MACH = .25988

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4692	-.5083	-.4988	-.2426		.1538	
-133.800	-.4240	-.4220	-.5367	-.2436		.1423	
-115.600	-.2859	-.3567	-.5053	-.2654		.1201	
-101.400	-.3055	-.3640	-.5012	-.3710		.1246	
-50.100	-.1384	-.2993	-.2281	-.2116	.0594	.1199	
-44.800	-.1294	-.1512	-.1426	-.2192	.0610	.1082	
.000	-.1439	-.1336	-.2565	-.2177	.0770	.1136	.1170
44.800	-.1320	-.1493	-.1473	-.2074	.0698	.1388	
50.100	-.1103	-.2074	-.1803	-.1962	.0611	.1119	
101.400	-.3308	-.3730	-.4577	-.3471		.1238	
115.600	-.3162	-.2954	-.4711	-.2987		.1396	
133.800	-.3475	-.3109	-.5423	-.2455		.1299	
149.100	-.4854	-.5238	-.4948	-.2625		.1360	
180.000	-.8064	-.7740	-.3949	-.2319	.1426	.1313	

RN/L (2) = 7.940 ALPHA (4) = 4.649 Q(PSF) = 452.69 PT = 10035. P = 9574.2 MACH = .25988

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4654	-.4992	-.4822	-.2220		.1557	
-133.800	-.4263	-.4167	-.5251	-.2350		.1592	
-115.600	-.2910	-.3549	-.5121	-.2783		.1299	
-101.400	-.3113	-.3594	-.4995	-.3809		.1293	
-50.100	-.1347	-.2842	-.2256	-.2065	.0562	.1213	
-44.800	-.1172	-.1409	-.1703	-.2124	.0702	.1093	
.000	-.1421	-.1227	-.1527	-.1894	.0622	.1164	.1569
44.800	-.1336	-.1405	-.1492	-.1916	.0476	.1201	
50.100	-.0953	-.1981	-.1654	-.1918	.0751	.1420	
101.400	-.3273	-.3784	-.4537	-.3527		.1339	
115.600	-.3101	-.2924	-.4674	-.3027		.1192	
133.800	-.3435	-.2985	-.5275	-.2301		.1541	
149.100	-.4786	-.5121	-.4691	-.2264		.1471	
180.000	-.7557	-.7409	-.3721	-.2016	.1429	.1518	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP17)

RN/L (2) = 7.922 ALPHA (5) = 6.930 Q(PSF) = 452.69 PT = 10035. P = 9574.2 MACH = .25988

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4759	-.5086	-.4746	-.2110		.1490	
-133.800	-.4358	-.4294	-.5236	-.2340		.1478	
-115.600	-.2991	-.3690	-.5359	-.3018		.1435	
-101.400	-.3100	-.3647	-.5173	-.4046		.1390	
-50.100	-.1395	-.2932	-.2381	-.2481	.0670	.1365	
-44.800	-.1336	-.1457	-.1642	-.2489	.0695	.1398	
.000	-.1559	-.1275	-.1909	-.2104	.0684	.1467	.1589
44.800	-.1415	-.1551	-.1624	-.1935	.0301	.1448	
50.100	-.1106	-.1968	-.1771	-.2307	.0450	.1271	
101.400	-.3398	-.3875	-.4581	-.3635		.1289	
115.600	-.3234	-.3079	-.4814	-.3248		.1338	
133.800	-.3567	-.3018	-.5202	-.2247		.1589	
149.100	-.4820	-.5088	-.4556	-.2222		.1591	
180.000	-.7661	-.7360	-.3717	-.2077	.1393	.1330	

RN/L (2) = 7.897 ALPHA (6) = 6.956 Q(PSF) = 452.69 PT = 10035. P = 9574.2 MACH = .25988

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4504	-.4905	-.4718	-.2125		.1569	
-133.800	-.4183	-.4250	-.5181	-.2277		.1633	
-115.600	-.2879	-.3625	-.5316	-.2926		.1328	
-101.400	-.3081	-.3660	-.5127	-.3974		.1239	
-50.100	-.1351	-.2833	-.2347	-.2119	.0680	.1434	
-44.800	-.1158	-.1487	-.2026	-.1922	.0551	.1471	
.000	-.1336	-.1448	-.1712	-.2250	.0742	.1261	.1589
44.800	-.1249	-.1458	-.1721	-.2145	.0721	.1496	
50.100	-.1034	-.1925	-.1657	-.2258	.0607	.1425	
101.400	-.3381	-.3807	-.4615	-.3610		.1350	
115.600	-.3248	-.2936	-.4869	-.3155		.1508	
133.800	-.3482	-.3083	-.5165	-.2250		.1458	
149.100	-.4695	-.5016	-.4561	-.2104		.1620	
180.000	-.7015	-.6829	-.4447	-.2283	.1307	.1577	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP17)

RN/L (2) = 7.917 ALPHA (7) = 9.225 Q(PSF) = 452.69 PT = 10035. P = 9574.2 MACH = .25988

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4675	-.4977	-.4576	-.2029		.1547	
-133.800	-.4331	-.4284	-.5103	-.2234		.1357	
-115.600	-.3016	-.3769	-.5496	-.3043		.1308	
-101.400	-.3184	-.3726	-.5246	-.4133		.1502	
-50.100	-.1372	-.2792	-.2481	-.2726	.0821	.1381	
-44.800	-.1317	-.1718	-.1580	-.2626	.0882	.1398	
.000	-.1525	-.1246	-.2051	-.2389	.0858	.1586	.1539
44.800	-.1470	-.1662	-.1491	-.2674	.0545	.1306	
50.100	-.0947	-.1818	-.1753	-.2249	.1050	.1500	
101.400	-.3419	-.3907	-.4719	-.3782		.1443	
115.600	-.3258	-.3146	-.4996	-.3326		.1437	
133.800	-.3555	-.2989	-.5080	-.2168		.1351	
149.100	-.4730	-.4990	-.4406	-.2048		.1465	
180.000	-.7684	-.6983	-.3632	-.2006	.1523	.1512	

RN/L (2) = 7.887 ALPHA (8) = 11.493 Q(PSF) = 452.69 PT = 10035. P = 9574.2 MACH = .25988

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4669	-.4826	-.4490	-.2008		.1572	
-133.800	-.4341	-.4261	-.4942	-.2142		.1430	
-115.600	-.3019	-.3757	-.5542	-.3085		.1325	
-101.400	-.3141	-.3674	-.5248	-.4188		.1340	
-50.100	-.1191	-.2642	-.2336	-.2379	.0845	.1434	
-44.800	-.1435	-.1665	-.1704	-.2567	.1058	.1705	
.000	-.1495	-.1288	-.1863	-.2268	.0887	.1570	.1579
44.800	-.1311	-.1686	-.1272	-.2635	.1056	.1370	
50.100	-.0988	-.1780	-.1611	-.2698	.0793	.1525	
101.400	-.3381	-.3952	-.4820	-.3913		.1742	
115.600	-.3225	-.3078	-.5112	-.3420		.1330	
133.800	-.3570	-.3147	-.4986	-.2167		.1342	
149.100	-.4702	-.4901	-.4407	-.2102		.1695	
180.000	-.7506	-.7294	-.3684	-.1898	.1468	.1415	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP17)

RN/L (2) = 7.895 ALPHA (9) = 13.816 Q(PSF) = 452.69 PT = 10035. P = 9574.2 MACH = .25988

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4537	-.4922	-.4721	-.2214		.1451	
-133.800	-.4390	-.4290	-.4873	-.2236		.1467	
-115.600	-.3058	-.3727	-.5608	-.3189		.1089	
-101.400	-.3113	-.3706	-.5414	-.4301		.1599	
-50.100	-.1104	-.2409	-.2394	-.2490	.0940	.1642	
-44.800	-.1445	-.1498	-.1865	-.2411	.0919	.1611	
.000	-.1364	-.1362	-.2034	-.2417	.1258	.1669	.1841
44.800	-.1298	-.1464	-.1447	-.2779	.0946	.1605	
50.100	-.0777	-.1578	-.1646	-.2448	.1147	.1718	
101.400	-.3358	-.3893	-.4934	-.3957		.1554	
115.600	-.3311	-.3151	-.5120	-.3542		.1521	
133.800	-.3744	-.3028	-.4992	-.2236		.1537	
149.100	-.4701	-.4969	-.4623	-.2385		.1630	
180.000	-.7278	-.7278	-.4153	-.2108	.1431	.1712	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP18) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 5.467 ALPHA (1) = .814 Q(PSF) = 305.65 PT = 6806.8 P = 6496.0 MACH = .25926

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4808	-.5278	-.5322	-.2419		.2271	
-133.800	-.4465	-.4397	-.5579	-.2398		.2268	
-115.600	-.3390	-.3829	-.4935	-.2217		.2227	
-101.400	-.3641	-.3921	-.4725	-.2750		.2153	
-50.100	-.3215	-.4639	-.2761	-.1049	.2188	.2312	
-44.800	.0000	.0000	.0000	-.0780	.2162	.2259	
.000	.0000	.0000	.0000	-.0558	.2099	.2289	.2360
44.800	.0000	.0000	.0000	-.0761	.2120	.2312	
50.100	-.2389	-.4205	-.0348	-.1158	.2147	.2336	
101.400	-.3612	-.3889	-.4314	-.2532		.2176	
115.600	-.3668	-.3367	-.4606	-.2482		.2289	
133.800	-.3777	-.3441	-.5558	-.2464		.2256	
149.100	-.5098	-.4037	-.5175	-.2636		.2238	
180.000	-.7771	-.7966	-.4836	-.2246	.1869	.2253	

RN/L (1) = 5.462 ALPHA (2) = 2.447 Q(PSF) = 305.65 PT = 6806.8 P = 6496.0 MACH = .25926

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4807	-.5220	-.4998	-.2230		.2153	
-133.800	-.4436	-.4341	-.5337	-.2268		.2206	
-115.600	-.3329	-.3710	-.4931	-.2215		.2116	
-101.400	-.3641	-.3885	-.4703	-.2840		.2037	
-50.100	-.3177	-.4680	-.2764	-.1050	.2124	.2285	
-44.800	.0000	.0000	.0000	-.0796	.2130	.2270	
.000	.0000	.0000	.0000	-.0658	.2075	.2168	.2355
44.800	.0000	.0000	.0000	-.0856	.2101	.2244	
50.100	-.2346	-.4142	-.2186	-.1230	.2121	.2233	
101.400	-.3635	-.3950	-.4329	-.2601		.2195	
115.600	-.3612	-.3279	-.4551	-.2455		.2186	
133.800	-.3740	-.3361	-.5417	-.2303		.2192	
149.100	-.5020	-.5236	-.5017	-.2431		.2098	
180.000	-.7339	-.7051	-.4586	-.2250	.1859	.2224	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP18)

RN/L (1) = 5.442 ALPHA (3) = 4.610 Q(PSF) = 305.65 PT = 6806.8 P = 6496.0 MACH = .25926

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4766	-.5101	-.4943	-.2113		.2139	
-133.800	-.4421	-.4284	-.5422	-.2154		.2156	
-115.600	-.3272	-.3618	-.5016	-.2323		.2086	
-101.400	-.3689	-.3884	-.4789	-.2971		.2060	
-50.100	-.3246	-.4517	-.2763	-.1100	.2028	.2162	
-44.800	.0000	.0000	.0000	-.0867	.2002	.2121	
.000	.0000	.0000	.0000	-.0707	.1997	.2120	.2312
44.800	.0000	.0000	.0000	-.0835	.2026	.2096	
50.100	-.2277	-.4192	-.2277	-.1107	.2047	.2172	
101.400	-.3619	-.4003	-.4463	-.2659		.1988	
115.600	-.3461	-.3316	-.4678	-.2499		.2096	
133.800	-.3654	-.3313	-.5377	-.2093		.2105	
149.100	-.4911	-.5293	-.4777	-.2081		.2140	
180.000	-.7436	-.7708	-.4355	-.1936	.1752	.2155	

RN/L (1) = 5.448 ALPHA (4) = 6.810 Q(PSF) = 305.65 PT = 6806.8 P = 6496.0 MACH = .25926

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4743	-.5044	-.4760	-.1869		.2195	
-133.800	-.4395	-.4331	-.5218	-.1991		.2204	
-115.600	-.3132	-.3668	-.4940	-.2307		.2186	
-101.400	-.3613	-.3897	-.4760	-.3034		.2221	
-50.100	-.3115	-.4384	-.2672	-.1015	.2001	.2267	
-44.800	.0000	.0000	.0000	-.0754	.2021	.2192	
.000	.0000	.0000	.0000	-.0710	.1998	.2221	.2328
44.800	.0000	.0000	.0000	-.0820	.2073	.2247	
50.100	-.2260	-.3931	-.2109	-.1122	.2114	.2215	
101.400	-.3665	-.3948	-.4413	-.2738		.2146	
115.600	-.3422	-.3263	-.4587	-.2640		.2206	
133.800	-.3673	-.3393	-.5191	-.2046		.2235	
149.100	-.4881	-.5162	-.4552	-.1950		.2128	
180.000	-.7354	-.7650	-.4474	-.1727	.1946	.2285	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP18)

RN/L (1) = 5.449 ALPHA (5) = 8.999 Q(PSF) = 305.65 PT = 6806.8 P = 6496.0 MACH = .25926

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4694	-.4951	-.4493	-.1727		.2291	
-133.800	-.4368	-.4245	-.5000	-.1937		.2204	
-115.600	-.3186	-.3582	-.4902	-.2332		.2305	
-101.400	-.3627	-.3850	-.4778	-.3018		.2262	
-50.100	-.3002	-.4098	-.2545	-.0885	.2083	.2299	
-44.800	.0000	.0000	.0000	-.0735	.2037	.2268	
.000	.000	.0000	.0000	-.0727	.2033	.2232	.2364
44.800	.0000	.0000	.0000	-.0716	.2085	.2301	
50.100	-.2134	-.3679	-.1959	-.0998	.2134	.2261	
101.400	-.3587	-.3958	-.4384	-.2751		.2264	
115.600	-.3354	-.3172	-.4605	-.2609		.2339	
133.800	-.3659	-.3336	-.5080	-.1958		.2235	
149.100	-.4812	-.5106	-.4490	-.1854		.2281	
180.000	-.7348	-.8004	-.4502	-.1710	.2016	.2281	

RN/L (1) = 5.425 ALPHA (6) = 11.173 Q(PSF) = 305.65 PT = 6806.8 P = 6496.0 MACH = .25926

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4673	-.4998	-.4586	-.1830		.2363	
-133.800	-.4444	-.4335	-.4960	-.2021		.2305	
-115.600	-.3225	-.3590	-.5125	-.2450		.2255	
-101.400	-.3596	-.3784	-.4911	-.3150		.2287	
-50.100	-.2967	-.3750	-.2314	-.0793	.2009	.2308	
-44.800	.0000	.0000	.0000	-.0683	.2015	.2276	
.000	.0000	.0000	.0000	-.0724	.2014	.2150	.2431
44.800	.0000	.0000	.0000	-.0678	.2060	.2141	
50.100	-.2013	-.3409	-.1762	-.0813	.2063	.2274	
101.400	-.3580	-.3941	-.4540	-.2820		.2271	
115.600	-.3424	-.3233	-.4785	-.2672		.2326	
133.800	-.3753	-.3158	-.5028	-.2020		.2237	
149.100	-.4872	-.5164	-.4563	-.1881		.2286	
180.000	-.7249	-.7528	-.4291	-.1786	.1988	.2211	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP18)

RN/L (1) = 5.414 ALPHA (7) = 13.372 Q(PSF) = 305.65 PT = 6806.8 P = 6496.0 MACH = .25926

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4649	-.5038	-.4696	-.1914		.2335	
-133.800	-.4437	-.4391	-.4887	-.2068		.2355	
-115.600	-.3238	-.3678	-.5206	-.2434		.2340	
-101.400	-.3537	-.3855	-.4937	-.3167		.2340	
-50.100	-.2760	-.3431	-.2033	-.0679	.2132	.2439	
-44.800	.0000	.0000	.0000	-.0540	.2120	.2361	
.000	.0000	.0000	.0000	-.0696	.2127	.2301	.2586
44.800	.0000	.0000	.0000	-.0554	.2113	.2336	
50.100	-.1914	-.3015	-.1496	-.0804	.2162	.2345	
101.400	-.3581	-.3989	-.4505	-.2969		.2359	
115.600	-.3479	-.3311	-.4769	-.2780		.2319	
133.800	-.3954	-.3241	-.4975	-.2139		.2397	
149.100	-.4844	-.5073	-.4668	-.2139		.2391	
180.000	-.7367	-.7396	-.4453	-.2017	.1971	.2374	

RN/L (1) = 5.416 ALPHA (8) = 15.586 Q(PSF) = 305.65 PT = 6806.8 P = 6496.0 MACH = .25926

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4523	-.4977	-.4830	-.2131		.2437	
-133.800	-.4544	-.4524	-.4942	-.2192		.2455	
-115.600	-.3135	-.3664	-.5329	-.2532		.2414	
-101.400	-.3490	-.3805	-.4974	-.3150		.2478	
-50.100	-.2465	-.2913	-.1736	-.0460	.2221	.2492	
-44.800	.0000	.0000	.0000	-.0420	.2192	.2446	
.000	.0000	.0000	.0000	-.0585	.2130	.2318	.2733
44.800	.0000	.0000	.0000	-.0389	.2196	.2283	
50.100	-.1669	-.2518	-.1170	-.0572	.2182	.2404	
101.400	-.3455	-.3921	-.4523	-.2930		.2439	
115.600	-.3449	-.3319	-.4858	-.2895		.2476	
133.800	-.4080	-.3262	-.5085	-.2223		.2482	
149.100	-.4811	-.5013	-.4656	-.2286		.2473	
180.000	-.7299	-.7649	-.4480	-.2107	.2049	.2494	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP18)

RN/L (1) = 5.405 ALPHA (9) = 16.690 Q(PSF) = 305.65 PT = 6806.8 P = 6496.0 MACH = .25926

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4592	-.5012	-.4864	-.2271		.2473	
-133.800	-.4595	-.4630	-.4902	-.2231		.2421	
-115.600	-.3215	-.3693	-.5373	-.2656		.2393	
-101.400	-.3432	-.3861	-.4997	-.3208		.2548	
-50.100	-.2298	-.2659	-.1644	-.0453	.2242	.2531	
-44.800	.0000	.0000	.0000	-.0409	.2213	.2513	
.000	.0000	.0000	.0000	-.0570	.2145	.2399	.2738
44.800	.0000	.0000	.0000	-.0383	.2205	.2469	
50.100	-.1590	-.2196	-.1061	-.0528	.2205	.2474	
101.400	-.3505	-.3938	-.4516	-.2984		.2419	
115.600	-.3568	-.3300	-.4909	-.3018		.2402	
133.800	-.4042	-.3245	-.4914	-.2269		.2457	
149.100	-.4854	-.5088	-.4810	-.2529		.2483	
180.000	-.7574	-.7507	-.4585	-.2136	.2012	.2486	

RN/L (1) = 5.410 ALPHA (10) = 17.797 Q(PSF) = 305.65 PT = 6806.8 P = 6496.0 MACH = .25926

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4564	-.4919	-.4991	-.2406		.2442	
-133.800	-.4636	-.4536	-.4933	-.2221		.2483	
-115.600	-.3146	-.3712	-.5350	-.2696		.2428	
-101.400	-.3463	-.3908	-.5025	-.3177		.2500	
-50.100	-.2178	-.2368	-.1409	-.0318	.2223	.2529	
-44.800	.0000	.0000	.0000	-.0350	.2226	.2462	
.000	.0000	.0000	.0000	-.0558	.2198	.2422	.2725
44.800	.0000	.0000	.0000	-.0268	.2183	.2373	
50.100	-.1392	-.1996	-.0932	-.0415	.2252	.2437	
101.400	-.3422	-.3879	-.4658	-.3011		.2489	
115.600	-.3548	-.3293	-.5089	-.3048		.2523	
133.800	-.4032	-.3290	-.5061	-.2190		.2466	
149.100	-.4862	-.5044	-.4845	-.2749		.2549	
180.000	-.7608	-.7487	-.4652	-.2268	.2033	.2520	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP19) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 5.426 ALPHA (1) = .556 Q(PSF) = 302.75 PT = 6715.4 P = 6407.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3772	-.4222	-.4597	-.2334		.2237	
-133.800	-.3400	-.3524	-.5033	-.2343		.2287	
-115.600	-.2290	-.3003	-.4808	-.2727		.2401	
-101.400	-.2887	-.3416	-.4869	-.3580		.2460	
-50.100	-.1765	-.4981	-.3389	-.2030	.2070	.2352	
-44.800	-.0298	.0000	.0000	-.1233	.2094	.2334	
.000	.0000	.0000	.0000	-.0762	.2078	.2385	.2186
44.800	-.0321	.0000	.0000	-.0417	.2119	.2453	
50.100	-.1458	-.2827	-.1368	-.0512	.2189	.2429	
101.400	-.2959	-.3178	-.3146	-.1496		.2710	
115.600	-.2994	-.3149	-.3763	-.1390		.2578	
133.800	-.4088	-.3161	-.5068	-.1402		.2236	
149.100	-.5635	-.5638	-.4731	-.2354		.2168	
180.000	-.8220	-.6494	-.3947	-.2556	.2286	.2148	

RN/L (1) = 5.395 ALPHA (2) = 2.181 Q(PSF) = 302.75 PT = 6715.4 P = 6407.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3847	-.4323	-.4578	-.2367		.2231	
-133.800	-.3557	-.3613	-.5149	-.2402		.2307	
-115.600	-.2402	-.3059	-.4953	-.2845		.2436	
-101.400	-.2929	-.3425	-.4888	-.3628		.2483	
-50.100	-.1705	-.4962	-.3364	-.1939	.2002	.2325	
-44.800	-.0431	.0000	.0000	-.1264	.2026	.2293	
.000	.0000	.0000	.0000	-.0797	.2127	.2402	.2250
44.800	-.0435	.0000	.0000	-.0403	.2162	.2452	
50.100	-.1497	-.2869	-.1377	-.0480	.2174	.2484	
101.400	-.3036	-.3238	-.3241	-.1629		.2678	
115.600	-.3007	-.3048	-.3770	-.1453		.2526	
133.800	-.4045	-.3027	-.5064	-.1353		.2253	
149.100	-.5596	-.5549	-.4707	-.2223		.2092	
180.000	-.7997	-.6520	-.3966	-.2493	.2268	.2086	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP19)

RN/L (1) = 5.372 ALPHA (3) = 4.381 Q(PSF) = 302.75 PT = 6715.4 P = 6407.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3897	-.4402	-.4478	-.2286		.2192	
-133.800	-.3651	-.3728	-.5164	-.2427		.2206	
-115.600	-.2386	-.3165	-.5046	-.3057		.2467	
-101.400	-.2843	-.3446	-.4888	-.3777		.2367	
-50.100	-.1613	-.4894	-.3285	-.1852	.1960	.2256	
-44.800	-.0518	.0000	.0000	-.1333	.2004	.2300	
.000	.0000	.0000	.0000	-.0886	.2114	.2421	.2199
44.800	-.0564	.0000	.0000	-.0441	.2214	.2445	
50.100	-.1573	-.2783	-.1359	-.0556	.2243	.2462	
101.400	-.3061	-.3318	-.3327	-.1754		.2697	
115.600	-.3008	-.3084	-.3721	-.1625		.2492	
133.800	-.3932	-.3028	-.4753	-.1218		.2164	
149.100	-.5481	-.5446	-.4470	-.1944		.2096	
180.000	-.7565	-.6807	-.3897	-.2342	.2322	.2047	

RN/L (1) = 5.346 ALPHA (4) = 6.598 Q(PSF) = 302.75 PT = 6715.4 P = 6407.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3861	-.4305	-.4414	-.2203		.2144	
-133.800	-.3755	-.3786	-.5139	-.2459		.2118	
-115.600	-.2485	-.3269	-.5242	-.3245		.2443	
-101.400	-.2823	-.3351	-.4895	-.3880		.2044	
-50.100	-.1573	-.4687	-.3166	-.1784	.1897	.2291	
-44.800	-.0638	.0000	.0000	-.1358	.1947	.2297	
.000	.0000	.0000	.0000	-.0966	.2157	.2345	.2233
44.800	-.0603	.0000	.0000	-.0442	.2263	.2433	
50.100	-.1505	-.2724	-.1318	-.0532	.2280	.2471	
101.400	-.3081	-.3392	-.3526	-.1855		.2647	
115.600	-.2917	-.3072	-.3969	-.1776		.2447	
133.800	-.3860	-.3026	-.4634	-.1304		.2157	
149.100	-.5305	-.5337	-.4238	-.1553		.2016	
180.000	-.7306	-.6214	-.3691	-.2289	.2339	.1928	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP19)

RN/L (1) = 5.327 ALPHA (5) = 8.855 Q(PSF) = 302.75 PT = 6715.4 P = 6407.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3965	-.4438	-.4432	-.2199		.2049	
-133.800	-.3904	-.3959	-.5366	-.2540		.2111	
-115.600	-.2623	-.3345	-.5537	-.3545		.2431	
-101.400	-.2817	-.3336	-.5072	-.3991		.1793	
-50.100	-.1516	-.4541	-.3133	-.1641	.1831	.2216	
-44.800	-.0702	.0000	.0000	-.1312	.1946	.2252	
.000	.0000	.0000	.0000	-.0993	.2109	.2273	.2256
44.800	-.0650	.0000	.0000	-.0454	.2259	.2420	
50.100	-.1489	-.2620	-.1248	-.0596	.2279	.2438	
101.400	-.3057	-.3456	-.3693	-.1997		.2491	
115.600	-.2919	-.3130	-.4104	-.1865		.2259	
133.800	-.3855	-.3122	-.4916	-.1395		.2053	
149.100	-.5306	-.5341	-.4280	-.1448		.1912	
180.000	-.7062	-.6227	-.3869	-.2088	.2271	.1836	

RN/L (1) = 5.336 ALPHA (6) = 11.084 Q(PSF) = 302.75 PT = 6715.4 P = 6407.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4057	-.4499	-.4289	-.2161		.2181	
-133.800	-.4045	-.4051	-.5294	-.2492		.2181	
-115.600	-.2663	-.3499	-.5579	-.3668		.2489	
-101.400	-.2727	-.3325	-.4963	-.3984		.1966	
-50.100	-.1403	-.4197	-.3160	-.1455	.1737	.2242	
-44.800	-.0825	.0000	.0000	-.1127	.1891	.2257	
.000	.0000	.0000	.0000	-.0953	.2184	.2309	.2344
44.800	-.0828	.0000	.0000	-.0332	.2338	.2410	
50.100	-.1399	-.2425	-.1098	-.0456	.2384	.2486	
101.400	-.3086	-.3449	-.3678	-.2071		.2562	
115.600	-.2944	-.3028	-.4095	-.1873		.2326	
133.800	-.3802	-.3043	-.4808	-.1318		.2140	
149.100	-.5081	-.5034	-.4124	-.1606		.2068	
180.000	-.7038	-.5980	-.3388	-.1803	.2222	.2042	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP19)

RN/L (1) = 5.309 ALPHA (7) = 13.266 Q(PSF) = 302.75 PT = 6715.4 P = 6407.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4065	-.4452	-.4134	-.2049		.2220	
-133.800	-.4243	-.4219	-.5422	-.2525		.2325	
-115.600	-.2766	-.3515	-.5732	-.3851		.2579	
-101.400	-.2675	-.3308	-.5045	-.4111		.1914	
-50.100	-.1271	-.3848	-.3054	-.1348	.1768	.2220	
-44.800	-.0722	.0000	.0000	-.1048	.1858	.2282	
.000	.0000	.0000	.0000	-.0917	.2074	.2317	.2439
44.800	-.0810	.0000	.0000	-.0297	.2314	.2369	
50.100	-.1287	-.2220	-.0912	-.0410	.2337	.2375	
101.400	-.3048	-.3430	-.3657	-.2071		.2419	
115.600	-.2940	-.3147	-.4281	-.1948		.2282	
133.800	-.3794	-.3226	-.4811	-.1239		.2121	
149.100	-.5172	-.5097	-.4083	-.1665		.2051	
180.000	-.6812	-.5945	-.3401	-.1686	.2077	.2068	

RN/L (1) = 5.276 ALPHA (8) = 15.375 Q(PSF) = 302.75 PT = 6715.4 P = 6407.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4031	-.4401	-.4001	-.2017		.2277	
-133.800	-.4292	-.4351	-.5554	-.2657		.2365	
-115.600	-.2710	-.3514	-.5736	-.4072		.2477	
-101.400	-.2616	-.3191	-.5002	-.4210		.1872	
-50.100	-.1195	-.3391	-.2631	-.1122	.1775	.2201	
-44.800	-.0646	.0000	.0000	-.0955	.1851	.2174	
.000	.0000	.0000	.0000	-.0822	.2083	.2148	.2474
44.800	-.0693	.0000	.0000	-.0207	.2265	.2248	
50.100	-.1130	-.1945	-.0752	-.0285	.2330	.2312	
101.400	-.3010	-.3455	-.3760	-.2064		.2353	
115.600	-.3124	-.3291	-.4335	-.2008		.2324	
133.800	-.3822	-.3294	-.4778	-.1216		.2157	
149.100	-.5039	-.4719	-.3781	-.1958		.2192	
180.000	-.6881	-.5648	-.3191	-.1721	.2010	.2204	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP19)

RN/L (1) = 5.253 ALPHA (9) = 17.675 Q(PSF) = 302.75 PT = 6715.4 P = 6407.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4045	-.4281	-.3889	-.1907		.2230	
-133.800	-.4422	-.4278	-.5659	-.2688		.2354	
-115.600	-.2578	-.3324	-.5762	-.4092		.2377	
-101.400	-.2642	-.3280	-.5073	-.4231		.1865	
-50.100	-.1081	-.3050	-.2287	-.0924	.1706	.2094	
-44.800	-.0536	.0000	.0000	-.0844	.1773	.2180	
.000	.0000	.0000	.0000	-.0865	.2106	.2112	.2407
44.800	-.0518	.0000	.0000	-.0144	.2295	.2159	
50.100	-.0877	-.1674	-.0606	-.0189	.2289	.2256	
101.400	-.2880	-.3412	-.3768	-.2036		.2374	
115.600	-.3309	-.3380	-.4559	-.2065		.2295	
133.800	-.3824	-.3365	-.4924	-.1202		.2171	
149.100	-.4915	-.4839	-.3680	-.2127		.2159	
180.000	-.6893	-.5465	-.3112	-.1688	.1915	.2124	

RN/L (1) = 5.257 ALPHA (10) = 19.896 Q(PSF) = 302.75 PT = 6715.4 P = 6407.6 MACH = .25981

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3881	-.4321	-.3813	-.1933		.2314	
-133.800	-.4307	-.4397	-.5682	-.2879		.2407	
-115.600	-.2339	-.3192	-.5737	-.4146		.2565	
-101.400	-.2608	-.3373	-.5302	-.4193		.2054	
-50.100	-.0559	-.2701	-.2222	-.0833	.1564	.2194	
-44.800	-.0559	.0000	.0000	-.0722	.1646	.2194	
.000	.0000	.0000	.0000	-.0749	.1929	.2153	.2466
44.800	-.0507	.0000	.0000	-.0087	.2118	.2261	
50.100	-.0711	-.1309	-.0527	-.0132	.2203	.2282	
101.400	-.3097	-.3264	-.3561	-.1782		.2463	
115.600	-.3503	-.3567	-.4611	-.2106		.2334	
133.800	-.3943	-.3582	-.5049	-.1420		.2171	
149.100	-.5037	-.4891	-.3742	-.2152		.2180	
180.000	-.7053	-.5562	-.2928	-.1726	.1888	.2188	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP20) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000
AILRON = .000 BDFLAP = 16.300
MACH = .260 H/B = .600

RN/L (1) = 5.411 ALPHA (1) = .635 Q(PSF) = 312.93 PT = 6928.6 P = 6610.3 MACH = .26006

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3912	-.4429	-.4797	-.2729		.1296	
-133.800	-.3480	-.3605	-.5334	-.2717		.1203	
-115.600	-.2300	-.2970	-.4965	-.3060		.1138	
-101.400	-.2682	-.3187	-.4800	-.3881		.1197	
-50.100	-.1963	-.2054	-.2352	-.2214	.0925	.1290	
-44.800	-.0746	-.1802	-.2020	-.2296	.0880	.1268	
.000	-.1739	-.1539	-.2272	-.1966	.0925	.0254	.1086
44.800	-.0745	-.1615	-.1873	-.2291	.0656	.1043	
50.100	-.1194	-.2022	-.2235	-.2134	.0409	.0903	
101.400	-.3229	-.3450	-.3832	-.2651		.1302	
115.600	-.3217	-.3318	-.4244	-.2145		.0673	
133.800	-.4301	-.3313	-.5583	-.2061		.1100	
149.100	-.5840	-.5693	-.5284	-.2864		.1114	
180.000	-.8486	-.6799	-.4261	-.2920	.1563	.0959	

RN/L (1) = 5.396 ALPHA (2) = 2.281 Q(PSF) = 312.93 PT = 6928.6 P = 6610.3 MACH = .26006

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3969	-.4486	-.4793	-.2659		.1303	
-133.800	-.3586	-.3739	-.5298	-.2724		.1115	
-115.600	-.2311	-.3096	-.5117	-.3240		.0943	
-101.400	-.2630	-.3316	-.4942	-.4066		.1112	
-50.100	-.1891	-.1997	-.2744	-.2228	.0517	.1385	
-44.800	-.0943	-.1716	-.1648	-.2183	.0858	.1165	
.000	-.1887	-.1433	-.2044	-.2334	.1056	.0904	.1228
44.800	-.0957	-.1580	-.1613	-.2436	-.0258	.0960	
50.100	-.1191	-.2061	-.2495	-.2534	.0726	.0977	
101.400	-.3289	-.3574	-.3906	-.2909		.1448	
115.600	-.3196	-.3377	-.4250	-.2227		.0740	
133.800	-.4272	-.3368	-.5426	-.2012		.0859	
149.100	-.5859	-.4450	-.5021	-.2751		.0895	
180.000	-.8257	-.7074	-.4354	-.2853	.1603	.0884	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP20)

RN/L (1) = 5.400 ALPHA (3) = 4.459 Q(PSF) = 312.93 PT = 6928.6 P = 6610.3 MACH = .26006

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4012	-.4550	-.4741	-.2668		.1199	
-133.800	-.3759	-.3847	-.5324	-.2753		.1182	
-115.600	-.2397	-.3194	-.5310	-.3456		.1193	
-101.400	-.2651	-.3281	-.4992	-.4212		.1224	
-50.100	-.1874	-.1929	-.2938	-.2207	.0853	.1154	
-44.800	-.0999	-.1829	-.2041	-.2519	.0929	.1230	
.000	-.1742	-.1587	-.2472	-.2447	.0675	.0928	.0951
44.800	-.0997	-.1570	-.1823	-.2652	.0217	.1176	
50.100	-.1183	-.2051	-.2621	-.2696	.0484	.1072	
101.400	-.3345	-.3674	-.4126	-.3008		.1350	
115.600	-.3205	-.3430	-.4278	-.2350		.0630	
133.800	-.4180	-.3419	-.5277	-.1818		.0523	
149.100	-.5740	-.5638	-.4857	-.2625		.1108	
180.000	-.7660	-.6945	-.4345	-.2757	.1587	.0658	

RN/L (1) = 5.400 ALPHA (4) = 6.687 Q(PSF) = 312.93 PT = 6928.6 P = 6610.3 MACH = .26006

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4086	-.4493	-.4735	-.2638		.0888	
-133.800	-.3923	-.3939	-.5493	-.2830		.1023	
-115.600	-.2544	-.3305	-.5437	-.3688		.1136	
-101.400	-.2696	-.3272	-.4994	-.4381		.1209	
-50.100	-.1841	-.1878	-.2745	-.2267	.0719	.1268	
-44.800	-.1161	-.1695	-.1676	-.2315	.0928	.1271	
.000	-.1648	-.1665	-.2084	-.2221	.0915	.0828	.1314
44.800	-.1117	-.1952	-.1966	-.2825	.0406	.0909	
50.100	-.1204	-.2030	-.2606	-.2907	.0380	.1171	
101.400	-.3356	-.3722	-.4328	-.3197		.1489	
115.600	-.3162	-.3320	-.4545	-.2499		.0577	
133.800	-.4115	-.3311	-.5158	-.1912		.0679	
149.100	-.5536	-.4595	-.4696	-.2168		.0963	
180.000	-.7250	-.6468	-.4151	-.2651	.1646	.0718	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP20)

RN/L (1) = 5.388 ALPHA (5) = 8.881 Q(PSF) = 312.93 PT = 6928.6 P = 6610.3 MACH = .26006

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4195	-.4627	-.4656	-.2600		.0964	
-133.800	-.4073	-.4122	-.5506	-.2840		.0896	
-115.600	-.2657	-.3532	-.5730	-.3995		.1294	
-101.400	-.2717	-.3303	-.5127	-.4495		.1164	
-50.100	-.1858	-.2032	-.2267	-.2622	.0800	.1325	
-44.800	-.1259	-.1730	-.2120	-.2391	.0766	.1201	
.000	-.1816	-.1587	-.2256	-.2437	.0968	.1398	.1455
44.800	-.1240	-.1952	-.1610	-.3083	.1028	.1503	
50.100	-.1234	-.1960	-.3033	-.3132	.0561	.1621	
101.400	-.3369	-.3874	-.4520	-.3347		.1587	
115.600	-.3213	-.3397	-.4653	-.2592		.1364	
133.800	-.4100	-.3394	-.5360	-.2002		.1155	
149.100	-.5426	-.4526	-.4639	-.2154		.1079	
180.000	-.7227	-.6365	-.4097	-.2485	.1692	.0790	

RN/L (1) = 5.380 ALPHA (6) = 11.107 Q(PSF) = 312.93 PT = 6928.6 P = 6610.3 MACH = .26006

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4192	-.4642	-.4583	-.2592		.0974	
-133.800	-.4195	-.4269	-.5668	-.3000		.0942	
-115.600	-.2719	-.3682	-.5912	-.4209		.1129	
-101.400	-.2586	-.3359	-.5200	-.4642		.1220	
-50.100	-.1643	-.1935	-.2255	-.2646	.0875	.1390	
-44.800	-.1292	-.1686	-.2065	-.2756	.0968	.1262	
.000	-.1475	-.1630	-.2264	-.2815	.1030	.1248	.1639
44.800	-.1342	-.1752	-.2422	-.3129	.1027	.1350	
50.100	-.1166	-.1955	-.2886	-.3068	.1030	.1248	
101.400	-.3424	-.3837	-.4575	-.3399		.1735	
115.600	-.3209	-.3407	-.4773	-.2677		.1118	
133.800	-.4069	-.3361	-.5257	-.1884		.1180	
149.100	-.5377	-.5272	-.4451	-.2241		.1025	
180.000	-.7271	-.6307	-.3834	-.2232	.1531	.0860	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP20)

RN/L (1) = 5.369 ALPHA (7) = 13.304 Q(PSF) = 312.93 PT = 6928.6 P = 6610.3 MACH = .26006

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4313	-.4734	-.4509	-.2488		.1174	
-133.800	-.4416	-.4416	-.5761	-.3014		.1043	
-115.600	-.2889	-.3699	-.6077	-.4382		.1319	
-101.400	-.2718	-.3307	-.5269	-.4654		.1131	
-50.100	-.1538	-.1894	-.2116	-.2323	.0830	.1287	
-44.800	-.1249	-.1814	-.2027	-.2610	.1265	.1299	
.000	-.1483	-.1750	-.2210	-.2894	.1259	.1265	.1450
44.800	-.1239	-.1756	-.1926	-.3340	.0929	.1293	
50.100	-.1006	-.1880	-.2732	-.3031	.1145	.1489	
101.400	-.3386	-.3863	-.4663	-.3429		.1674	
115.600	-.3249	-.3556	-.4902	-.2747		.1006	
133.800	-.4081	-.3513	-.5360	-.1857		.1071	
149.100	-.5346	-.4135	-.4527	-.2300		.1060	
180.000	-.7096	-.6396	-.3772	-.2144	.1339	.0980	

RN/L (1) = 5.367 ALPHA (8) = 15.512 Q(PSF) = 312.93 PT = 6928.6 P = 6610.3 MACH = .26006

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4358	-.4761	-.4489	-.2505		.1082	
-133.800	-.4591	-.4566	-.6028	-.3172		.1178	
-115.600	-.2885	-.3717	-.6301	-.4580		.1264	
-101.400	-.2683	-.3334	-.5454	-.4827		.0523	
-50.100	-.1468	-.1688	-.2290	-.2840	.1070	.1110	
-44.800	-.1249	-.1462	-.2031	-.3237	.1051	.1190	
.000	-.1549	-.1614	-.2601	-.3074	.0934	.0809	.1348
44.800	-.1211	-.1844	-.1832	-.3690	.0905	.1016	
50.100	-.0911	-.1725	-.3069	-.3450	.0965	.0959	
101.400	-.3426	-.3951	-.4779	-.3410		.1303	
115.600	-.3449	-.3653	-.5139	-.2814		.1209	
133.800	-.4166	-.3576	-.5404	-.1780		.0778	
149.100	-.5352	-.4776	-.4203	-.2649		.0894	
180.000	-.7231	-.6247	-.3639	-.2172	.1084	.0934	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP20)

RN/L (1) = 5.369 ALPHA (9) = 17.762 Q(PSF) = 312.93 PT = 6928.6 P = 6610.3 MACH = 26006

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4237	-.4547	-.4249	-.2374		.1337	
-133.800	-.4499	-.4493	-.5957	-.3224		.1209	
-115.600	-.2607	-.3505	-.6107	-.4604		.1348	
-101.400	-.2644	-.3323	-.5467	-.4956		.0718	
-50.100	-.1116	-.1437	-.2164	-.2971	.1056	.1138	
-44.800	-.1128	-.1480	-.1966	-.3422	.1300	.1255	
.000	-.1492	-.1571	-.2258	-.3001	.1082	.1019	.1320
44.800	-.0976	-.1844	-.1736	-.3200	.1005	.1161	
50.100	-.0754	-.1574	-.2839	-.3206	.1175	.1204	
101.400	-.3237	-.3804	-.4698	-.3206		.1189	
115.600	-.3577	-.3773	-.5095	-.2798		.0735	
133.800	-.4074	-.3762	-.5345	-.1713		.0923	
149.100	-.5194	-.4630	-.3921	-.2650		.1169	
180.000	-.6971	-.5999	-.3353	-.2034	.1260	.1144	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP21) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 5.412 ALPHA (1) = 1.641 Q(PSF) = 317.09 PT = 7032.6 P = 6710.1 MACH = .25983

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4157	-.4275	-.4588	-.1861		.2216	
-133.800	-.3942	-.3844	-.4904	-.1863		.2168	
-115.600	-.2706	-.3307	-.4485	-.2062		.2149	
-101.400	-.3003	-.3539	-.4286	-.2779		.1783	
-50.100	-.2469	-.3864	-.2346	-.1104	.1953	.2252	
-44.800	.0253	.0000	.0000	-.0816	.1939	.2146	
.000	.0000	.0000	.0000	-.0808	.1971	.2234	.2217
44.800	.0085	.0000	.0000	-.0803	.2008	.2237	
50.100	-.1484	-.3345	-.2098	-.1388	.2038	.2212	
101.400	-.2894	-.3390	-.3833	-.2500		.2100	
115.600	-.2556	-.2857	-.4176	-.2329		.2234	
133.800	-.3202	-.2860	-.4894	-.1857		.2234	
149.100	-.4316	-.4692	-.4642	-.2226		.2117	
180.000	-.6370	-.6211	-.4549	-.2782	.1823	.2217	

RN/L (1) = 5.420 ALPHA (2) = 2.199 Q(PSF) = 317.09 PT = 7032.6 P = 6710.1 MACH = .25983

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3728	-.4120	-.4359	-.1992		.2218	
-133.800	-.3771	-.3836	-.4541	-.1722		.2126	
-115.600	-.2674	-.3239	-.4493	-.2028		.2068	
-101.400	-.2989	-.3448	-.4329	-.2735		.2087	
-50.100	-.2423	-.3783	-.2309	-.1052	.1967	.2151	
-44.800	.0342	.0000	.0000	-.0848	.1934	.2243	
.000	.0000	.0000	.0000	-.0844	.1960	.2220	.2247
44.800	.0235	.0000	.0000	-.0833	.1983	.2286	
50.100	-.1450	-.3347	-.2107	-.1365	.2016	.2303	
101.400	-.2869	-.3405	-.3788	-.2498		.1980	
115.600	-.2582	-.2855	-.4124	-.2295		.2097	
133.800	-.3162	-.2821	-.4814	-.1808		.2233	
149.100	-.3752	-.4104	-.4473	-.2003		.2275	
180.000	-.5102	-.5899	-.4476	-.2094	.1899	.2169	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP21)

RN/L (1) = 5.407 ALPHA (3) = 3.278 Q(PSF) = 317.09 PT = 7032.6 P = 6710.1 MACH = .25983

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3646	-.4295	-.4077	-.2316		.2023	
-133.800	-.3708	-.3816	-.4461	-.1966		.2174	
-115.600	-.2662	-.3253	-.4500	-.2120		.2169	
-101.400	-.3018	-.3497	-.4351	-.2878		.2032	
-50.100	-.2474	-.3799	-.2332	-.1082	.1883	.2166	
-44.800	.0352	.0000	.0000	-.0931	.1844	.2113	
.000	.0000	.0000	.0000	-.0874	.1988	.2245	.2229
44.800	.0227	.0000	.0000	-.0885	.1895	.2178	
50.100	-.1520	-.3456	-.2165	-.1348	.1909	.2226	
101.400	-.2962	-.3464	-.3835	-.2544		.1974	
115.600	-.2604	-.3094	-.4178	-.2371		.2189	
133.800	-.3192	-.2889	-.4664	-.1754		.2105	
149.100	-.3990	-.3849	-.4139	-.1872		.2173	
180.000	-.4439	-.4043	-.4271	-.2948	.1747	.2133	

RN/L (1) = 5.408 ALPHA (4) = 4.392 Q(PSF) = 317.09 PT = 7032.6 P = 6710.1 MACH = .25983

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4147	-.4033	-.4302	-.1589		.2148	
-133.800	-.3763	-.3829	-.4711	-.1821		.2148	
-115.600	-.2696	-.3314	-.4456	-.2120		.2044	
-101.400	-.3074	-.3516	-.4369	-.2903		.1961	
-50.100	-.2489	-.3829	-.2302	-.1089	.1935	.2167	
-44.800	.0207	.0000	.0000	-.0860	.1896	.2195	
.000	.0000	.0000	.0000	-.1002	.1939	.2224	.2269
44.800	.0126	.0000	.0000	-.0913	.1927	.2232	
50.100	-.1527	-.3385	-.2035	-.1373	.1852	.2260	
101.400	-.2967	-.3447	-.3913	-.2589		.2165	
115.600	-.2543	-.2794	-.4210	-.2368		.2221	
133.800	-.3203	-.2797	-.4816	-.1706		.2182	
149.100	-.3991	-.4272	-.4126	-.3244		.2092	
180.000	-.4948	-.4869	-.4207	-.2861	.1813	.2218	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP21)

RN/L (1) = 5.402 ALPHA (5) = 5.517 Q(PSF) = 317.09 PT = 7032.6 P = 6710.1 MACH = .25983

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3881	-.4243	-.4336	-.1883		.2080	
-133.800	-.3830	-.3661	-.4582	-.1735		.2184	
-115.600	-.2705	-.3352	-.4537	-.2121		.2086	
-101.400	-.3051	-.3518	-.4333	-.2831		.1954	
-50.100	-.2403	-.3775	-.2348	-.0980	.1915	.2220	
-44.800	.0103	.0000	.0000	-.0924	.1887	.2206	
.000	.0000	.0000	.0000	-.0937	.1918	.2105	.2217
44.800	.0067	.0000	.0000	-.0850	.1960	.2259	
50.100	-.1524	-.3421	-.2077	-.1319	.1890	.2223	
101.400	-.2999	-.3432	-.3856	-.2627		.2128	
115.600	-.2558	-.2843	-.4235	-.2400		.2007	
133.800	-.3120	-.2910	-.4539	-.1680		.2234	
149.100	-.3508	-.4148	-.4193	-.1588		.2212	
180.000	-.5581	-.5952	-.4351	-.2941	.1864	.2192	

RN/L (1) = 5.408 ALPHA (6) = 6.591 Q(PSF) = 317.09 PT = 7032.6 P = 6710.1 MACH = .25983

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3716	-.4283	-.4149	-.1542		.2110	
-133.800	-.3789	-.3766	-.4560	-.1676		.2118	
-115.600	-.2687	-.3304	-.4591	-.2165		.2179	
-101.400	-.3023	-.3461	-.4364	-.2832		.2040	
-50.100	-.2421	-.3556	-.2240	-.0911	.1878	.2138	
-44.800	.0053	.0000	.0000	-.0917	.1925	.2146	
.000	.0000	.0000	.0000	-.1003	.1955	.2221	.2291
44.800	.0052	.0000	.0000	-.0858	.1930	.2204	
50.100	-.1521	-.3336	-.2062	-.1254	.1930	.2254	
101.400	-.2997	-.3474	-.3911	-.2622		.2173	
115.600	-.2623	-.2893	-.4303	-.2419		.2159	
133.800	-.3210	-.2871	-.4673	-.1645		.2235	
149.100	-.4230	-.4158	-.4017	-.2092		.2274	
180.000	-.5049	-.5604	-.4502	-.2086	.1816	.2232	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP21)

RN/L (2) = 7.970 ALPHA (1) = 1.472 Q(PSF) = 460.57 PT = 10194. P = 9725.7 MACH = .26010

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3504	-.3951	-.4616	-.3093		.1959	
-133.800	-.3884	-.3726	-.4869	-.2232		.2128	
-115.600	-.2832	-.3351	-.4556	-.2165		.2013	
-101.400	-.3050	-.3603	-.4510	-.2924		.1762	
-50.100	-.2565	-.4091	-.2434	-.1125	.1898	.2153	
-44.800	.0216	.0000	.0000	-.0959	.1873	.2201	
.000	.0000	.0000	.0000	-.1001	.1910	.2160	.2219
44.800	.0216	.0000	.0000	-.0962	.1893	.2181	
50.100	-.1560	-.3486	-.2144	-.1467	.1941	.2106	
101.400	-.3027	-.3563	-.3796	-.2588		.2073	
115.600	-.2599	-.2923	-.4188	-.2410		.2191	
133.800	-.3135	-.2892	-.4898	-.2016		.2125	
149.100	-.3914	-.4666	-.4496	-.3453		.2148	
180.000	-.4693	-.4078	-.4658	-.3023	.1803	.2033	

RN/L (2) = 7.940 ALPHA (2) = 3.393 Q(PSF) = 460.57 PT = 10194. P = 9725.7 MACH = .26010

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2940	-.3810	-.3925	-.2605		.1796	
-133.800	-.3596	-.3526	-.4544	-.2146		.1951	
-115.600	-.2719	-.3337	-.4521	-.2097		.1926	
-101.400	-.3057	-.3568	-.4500	-.2972		.1623	
-50.100	-.2572	-.4087	-.2565	-.1096	.1758	.2111	
-44.800	.0189	.0000	.0000	-.0961	.1815	.2084	
.000	.0000	.0000	.0000	-.1017	.1812	.2119	.2062
44.800	.0233	.0000	.0000	-.0953	.1806	.2098	
50.100	-.1537	-.3445	-.2106	-.1475	.1906	.2117	
101.400	-.2997	-.3512	-.3813	-.2690		.1885	
115.600	-.2513	-.2872	-.4162	-.2390		.2129	
133.800	-.2810	-.2858	-.4355	-.1944		.1931	
149.100	-.3369	-.3716	-.4000	-.3600		.2181	
180.000	-.3547	-.3703	-.3585	-.3749	.1695	.1956	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP21)

RN/L (2) = 7.876 ALPHA (3) = 5.741 Q(PSF) = 460.57 PT = 10194. P = 9725.7 MACH = .26010

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3471	-.3738	-.3929	-.2905		.2032	
-133.800	-.3732	-.3767	-.4526	-.1944		.1878	
-115.600	-.2656	-.3321	-.4610	-.2162		.1932	
-101.400	-.3066	-.3565	-.4514	-.3080		.1828	
-50.100	-.2544	-.3925	-.2322	-.1111	.1855	.2149	
-44.800	.0132	.0000	.0000	-.0924	.1911	.2089	
.000	.0000	.0000	.0000	-.1081	.1795	.2040	.2171
44.800	.0215	.0000	.0000	-.0949	.1813	.2157	
50.100	-.1515	-.3507	-.2144	-.1379	.1851	.2101	
101.400	-.3071	-.3559	-.3876	-.2714		.1959	
115.600	-.2538	-.2828	-.4268	-.2485		.2115	
133.800	-.2903	-.2822	-.4513	-.1767		.1961	
149.100	-.3216	-.3922	-.3681	-.3301		.2017	
180.000	-.3737	-.3702	-.3370	-.3627	.1786	.1942	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP22) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .110

RN/L (1) = 5.419 ALPHA (1) = .190 Q(PSF) = 311.85 PT = 6980.4 P = 6663.3 MACH = .25856

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4385	-.4911	-.5135	-.2336		.2033	
-133.800	-.4197	-.4118	-.5342	-.2240		.1965	
-115.600	-.3060	-.3568	-.4721	-.2183		.1911	
-101.400	-.3368	-.3783	-.4580	-.2809		.1936	
-50.100	-.3122	-.4611	-.2777	-.1357	.1659	.1970	
-44.800	.0013	.0000	.0000	-.0902	.1653	.1908	
.000	.0000	.0000	.0000	-.0595	.1770	.2039	.1949
44.800	.0066	.0000	.0000	-.0869	.1717	.2031	
50.100	-.1945	-.4145	-.2475	-.1696	.1705	.2031	
101.400	-.3223	-.3740	-.4117	-.2514		.1935	
115.600	-.2905	-.3223	-.4486	-.2353		.1994	
133.800	-.3532	-.3231	-.5335	-.2209		.1994	
149.100	-.4611	-.5023	-.5062	-.2316		.1937	
180.000	-.6595	-.6348	-.4883	-.2279	.1731	.1926	

RN/L (1) = 5.390 ALPHA (2) = 2.583 Q(PSF) = 311.85 PT = 6980.4 P = 6663.3 MACH = .25856

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4121	-.4018	-.4597	-.2347		.2067	
-133.800	-.3887	-.4009	-.4696	-.2220		.1956	
-115.600	-.2914	-.3527	-.4653	-.2180		.2047	
-101.400	-.3318	-.3825	-.4602	-.3025		.1950	
-50.100	-.3066	-.4685	-.2778	-.1430	.1905	.2044	
-44.800	.0193	.0000	.0000	-.1075	.1868	.2032	
.000	.0000	.0000	.0000	-.0856	.1847	.2142	.1995
44.800	.0145	.0000	.0000	-.1065	.1819	.2176	
50.100	-.1987	-.4181	-.2558	-.1840	.1890	.2148	
101.400	-.3275	-.3693	-.4119	-.2733		.1955	
115.600	-.2756	-.3093	-.4378	-.2449		.2085	
133.800	-.3269	-.3076	-.4645	-.1971		.1989	
149.100	-.4150	-.4042	-.4594	-.2430		.2065	
180.000	-.3758	-.5622	-.4639	-.3220	.1765	.2063	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP22)

RN/L (1) = 5.371 ALPHA (3) = 5.071 Q(PSF) = 311.85 PT = 6980.4 P = 6663.3 MACH = .25856

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3890	-.4172	-.4356	-.2311		.2137	
-133.800	-.3910	-.3919	-.4819	-.1809		.2137	
-115.600	-.2816	-.3453	-.4620	-.2223		.2111	
-101.400	-.3248	-.3706	-.4598	-.3038		.2091	
-50.100	-.2927	-.4413	-.2618	-.1335	.1952	.2151	
-44.800	-.0016	.0000	.0000	-.1074	.1893	.2211	
.000	.0000	.0000	.0000	-.1026	.1979	.2240	.2368
44.800	.0056	.0000	.0000	-.1083	.1979	.2223	
50.100	-.1924	-.4075	-.2482	-.1605	.1956	.2217	
101.400	-.3220	-.3685	-.4097	-.2706		.1956	
115.600	-.2791	-.3092	-.4428	-.2493		.2164	
133.800	-.3229	-.3069	-.4806	-.1806		.2019	
149.100	-.4052	-.4089	-.4325	-.2263		.2161	
180.000	-.5103	-.4223	-.4456	-.2669	.1667	.2033	

RN/L (1) = 5.369 ALPHA (4) = 7.322 Q(PSF) = 311.85 PT = 6980.4 P = 6663.3 MACH = .25856

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3776	-.4263	-.4178	-.2232		.2200	
-133.800	-.3930	-.3923	-.4554	-.1772		.2248	
-115.600	-.2817	-.3482	-.4732	-.2252		.2154	
-101.400	-.3259	-.3762	-.4597	-.2992		.1993	
-50.100	-.2735	-.3971	-.2526	-.1173	.1912	.2205	
-44.800	.0081	.0000	.0000	-.1100	.1872	.2194	
.000	.0000	.0000	.0000	-.1166	.1925	.2143	.2270
44.800	.0084	.0000	.0000	-.1062	.1959	.2219	
50.100	-.1858	-.4017	-.2509	-.1454	.1999	.2146	
101.400	-.3257	-.3662	-.4108	-.2826		.2050	
115.600	-.2792	-.3064	-.4352	-.2514		.2112	
133.800	-.3126	-.2922	-.4477	-.1672		.2024	
149.100	-.3711	-.4502	-.4204	-.1909		.2061	
180.000	-.3470	-.5725	-.4230	-.3148	.1563	.2106	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP22)

RN/L (1) = 5.359 ALPHA (5) = 9.735 Q(PSF) = 311.85 PT = 6980.4 P = 6663.3 MACH = .25856

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3628	-.3835	-.3880	-.3305		.2323	
-133.800	-.3428	-.3426	-.4237	-.1793		.2238	
-115.600	-.2783	-.3364	-.4660	-.2183		.2198	
-101.400	-.3119	-.3585	-.4549	-.2967		.1935	
-50.100	-.2418	-.3347	-.1954	-.1011	.2014	.2175	
-44.800	.0095	.0000	.0000	-.0963	.2034	.2156	
.000	.0000	.0000	.0000	-.1190	.1892	.2206	.2490
44.800	.0240	.0000	.0000	-.0941	.1980	.2153	
50.100	-.1670	-.3524	-.1673	-.1088	.2048	.2206	
101.400	-.3124	-.3643	-.4052	-.2755		.2173	
115.600	-.2741	-.3070	-.4447	-.2458		.2184	
133.800	-.3229	-.3047	-.4399	-.1926		.2164	
149.100	-.3703	-.4228	-.3626	-.2240		.2286	
180.000	-.5080	-.4754	-.3178	-.2772	.1773	.2286	

RN/L (1) = 5.329 ALPHA (6) = 12.200 Q(PSF) = 311.85 PT = 6980.4 P = 6663.3 MACH = .25856

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2748	-.3273	-.3752	-.3198		.2049	
-133.800	-.3505	-.3604	-.3806	-.1927		.2283	
-115.600	-.2682	-.3392	-.4554	-.2061		.2286	
-101.400	-.2970	-.3415	-.4420	-.2922		.1861	
-50.100	-.2006	-.2839	-.1519	-.0764	.2003	.2300	
-44.800	.0403	.0000	.0000	-.0713	.1952	.2186	
.000	.0000	.0000	.0000	-.1019	.1903	.2242	.2371
44.800	.0461	.0000	.0000	-.0626	.2060	.2225	
50.100	-.1370	-.2830	-.1592	-.0834	.2046	.2171	
101.400	-.2950	-.3448	-.3966	-.2639		.2240	
115.600	-.2571	-.2782	-.4307	-.2482		.2302	
133.800	-.3050	-.2890	-.4324	-.1735		.2188	
149.100	-.3073	-.3514	-.3205	-.2890		.2459	
180.000	-.3039	-.3273	-.3903	-.3367	.2026	.2194	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP22)

RN/L (1) = 5.301 ALPHA (7) = 14.534 Q(PSF) = 311.85 PT = 6980.4 P = 6663.3 MACH = .25856

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3369	-.3755	-.4040	-.3378		.2638	
-133.800	-.3688	-.3600	-.4149	-.1950		.2512	
-115.600	-.2605	-.3211	-.4707	-.2065		.2472	
-101.400	-.2944	-.3424	-.4405	-.2637		.1742	
-50.100	-.1544	-.2134	-.0997	-.0480	.1854	.2256	
-44.800	.0322	.0000	.0000	-.0503	.2021	.2136	
.000	.0000	.0000	.0000	-.0903	.2053	.2039	.2324
44.800	.0454	.0000	.0000	-.0369	.1967	.2085	
50.100	-.0901	-.2023	-.0998	-.0431	.1861	.2387	
101.400	-.2921	-.3373	-.3904	-.2487		.2079	
115.600	-.2700	-.2901	-.4325	-.2291		.2393	
133.800	-.3408	-.2887	-.4369	-.2096		.2329	
149.100	-.3183	-.3399	-.3795	-.3053		.2358	
180.000	-.3520	-.3002	-.3924	-.3712	.2085	.2623	

RN/L (2) = 7.871 ALPHA (1) = -.053 Q(PSF) = 455.52 PT = 10108. P = 9644.6 MACH = .25975

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4616	-.5078	-.5238	-.2365		.2037	
-133.800	-.4330	-.4307	-.5418	-.2345		.1958	
-115.600	-.3127	-.3647	-.4863	-.2267		.1958	
-101.400	-.3519	-.3959	-.4863	-.2909		.1958	
-50.100	-.3251	-.4884	-.2940	-.1409	.1715	.2028	
-44.800	.0065	.0000	.0000	-.0927	.1744	.1979	
.000	.0000	.0000	.0000	-.0624	.1796	.2044	.2060
44.800	.0122	.0000	.0000	-.0984	.1769	.2060	
50.100	-.2091	-.4287	-.2822	-.1807	.1715	.2066	
101.400	-.3547	-.3854	-.4680	-.2712		.1984	
115.600	-.3028	-.3315	-.4530	-.2651		.1988	
133.800	-.3759	-.3280	-.3654	-.2363		.2006	
149.100	-.5010	-.4959	-.5210	-.2426		.1980	
180.000	-.7205	-.7835	-.4754	-.2332	.1794	.1913	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP22)

RN/L (2) = 7.852 ALPHA (2) = 2.568 Q(PSF) = 455.52 PT = 10108. P = 9644.6 MACH = .25975

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3851	-.4472	-.4511	-.2725		.2091	
-133.800	-.4231	-.3897	-.5117	-.2103		.2037	
-115.600	-.2976	-.3461	-.4816	-.2291		.1913	
-101.400	-.3439	-.3899	-.4874	-.3187		.1868	
-50.100	-.3141	-.4812	-.2927	-.1656	.1915	.2149	
-44.800	.0266	.0000	.0000	-.1127	.1957	.2087	
.000	.0000	.0000	.0000	-.0957	.1930	.2164	.2094
44.800	.0081	.0000	.0000	-.1201	.1969	.2121	
50.100	-.2009	-.4307	-.2843	-.1888	.1952	.2039	
101.400	-.3479	-.3873	-.4689	-.2827		.1956	
115.600	-.2862	-.3128	-.4445	-.2649		.2043	
133.800	-.3545	-.3128	-.3889	-.2016		.2045	
149.100	-.4311	-.3733	-.4402	-.3478		.2066	
180.000	-.5585	-.5487	-.4666	-.3364	.1829	.2134	

RN/L (2) = 7.840 ALPHA (3) = 5.194 Q(PSF) = 455.52 PT = 10108. P = 9644.6 MACH = .25975

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3964	-.3983	-.4461	-.1828		.2026	
-133.800	-.3843	-.3800	-.4950	-.1959		.2104	
-115.600	-.2897	-.3409	-.4839	-.2266		.1822	
-101.400	-.3384	-.3794	-.4876	-.3228		.2005	
-50.100	-.2983	-.4531	-.2759	-.1476	.1820	.2158	
-44.800	.0070	.0000	.0000	-.1235	.1892	.2063	
.000	.0000	.0000	.0000	-.1180	.1945	.2206	.2221
44.800	.0225	.0000	.0000	-.1276	.1984	.2171	
50.100	-.1952	-.4210	-.2471	-.1693	.1887	.2085	
101.400	-.3481	-.3846	-.4630	-.2968		.1883	
115.600	-.2831	-.3139	-.4323	-.2662		.2149	
133.800	-.3471	-.3143	-.4050	-.1946		.2128	
149.100	-.4206	-.4270	-.4075	-.2978		.2143	
180.000	-.5237	-.5395	-.4046	-.3454	.1644	.2124	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP22)

RN/L (2) = 7.842 ALPHA (4) = 7.664 Q(PSF) = 455.52 PT = 10108. P = 9644.6 MACH = .25975

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3429	-.4231	-.4014	-.3212		.2099	
-133.800	-.3838	-.3919	-.4107	-.2256		.2107	
-115.600	-.2848	-.3410	-.4718	-.2242		.2028	
-101.400	-.3267	-.3744	-.4817	-.3160		.1869	
-50.100	-.2717	-.3956	-.2539	-.1222	.1851	.2194	
-44.800	.0203	.0000	.0000	-.1082	.1863	.2196	
.000	.0000	.0000	.0000	-.1358	.1965	.2013	.2283
44.800	.0224	.0000	.0000	-.1280	.1963	.2108	
50.100	-.1868	-.3931	-.2448	-.1512	.1879	.2141	
101.400	-.3419	-.3764	-.4558	-.2903		.2046	
115.600	-.2757	-.3005	-.4237	-.2610		.1998	
133.800	-.3258	-.3123	-.4092	-.1753		.2073	
149.100	-.3789	-.3573	-.3727	-.3396		.1957	
180.000	-.5465	-.5036	-.4511	-.3388	.1684	.2176	

RN/L (2) = 7.808 ALPHA (5) = 10.120 Q(PSF) = 455.52 PT = 10108. P = 9644.6 MACH = .25975

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3555	-.3808	-.3679	-.3321		.2178	
-133.800	-.3764	-.3645	-.4218	-.2017		.2100	
-115.600	-.2818	-.3264	-.4681	-.2307		.2084	
-101.400	-.3179	-.3624	-.4750	-.3092		.1792	
-50.100	-.2434	-.3401	-.2092	-.0986	.1899	.2139	
-44.800	.0385	.0000	.0000	-.0974	.1887	.2075	
.000	.0000	.0000	.0000	-.1392	.1933	.2050	.2079
44.800	.0259	.0000	.0000	-.1029	.1826	.2134	
50.100	-.1631	-.3369	-.2127	-.1149	.1917	.2072	
101.400	-.3279	-.3663	-.4584	-.2883		.2072	
115.600	-.2693	-.2921	-.4332	-.2621		.2171	
133.800	-.3126	-.2954	-.4083	-.1794		.2105	
149.100	-.3538	-.3887	-.3877	-.3423		.2161	
180.000	-.4232	-.3518	-.4535	-.3376	.1761	.2263	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP22)

RN/L (2) = 7.804 ALPHA (6) = 12.572 Q(PSF) = 455.52 PT = 10108. P = 9644.6 MACH = .25975

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2937	-.3768	-.3997	-.2716		.2076	
-133.800	-.3579	-.3557	-.4047	-.2087		.2157	
-115.600	-.2733	-.3268	-.4594	-.2142		.1996	
-101.400	-.3048	-.3505	-.4696	-.3026		.1617	
-50.100	-.1969	-.2708	-.1583	-.0751	.1727	.2272	
-44.800	.0544	.0000	.0000	-.0738	.2085	.2167	
.000	.0000	.0000	.0000	-.1339	.1935	.1874	.2251
44.800	.0472	.0000	.0000	-.1077	.2007	.2024	
50.100	-.1118	-.2375	-.1314	-.1272	.1978	.1987	
101.400	-.3138	-.3573	-.4435	-.2882		.1985	
115.600	-.2569	-.2743	-.4233	-.2573		.2180	
133.800	-.3189	-.2782	-.4082	-.1762		.2258	
149.100	-.3436	-.3350	-.3601	-.3564		.2194	
180.000	-.3432	-.3393	-.4006	-.3382	.1894	.2317	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP23) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .210

RN/L (1) = 5.397 ALPHA (1) = .301 Q(PSF) = 314.93 PT = 7054.8 P = 6734.6 MACH = .25846

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4194	-.4860	-.4950	-.2162		.2056	
-133.800	-.4052	-.4071	-.5183	-.2083		.2086	
-115.600	-.2933	-.3552	-.4664	-.2128		.2025	
-101.400	-.3190	-.3729	-.4446	-.2788		.2070	
-50.100	-.2704	-.4202	-.2548	-.1219	.1927	.2190	
-44.800	.0141	.0000	.0000	-.0953	.1944	.2156	
.000	.0000	.0000	.0000	-.0815	.1932	.2142	.2190
44.800	.0077	.0000	.0000	-.0946	.1927	.2123	
50.100	-.1802	-.3712	-.2316	-.1595	.1918	.2156	
101.400	-.3158	-.3585	-.3900	-.2536		.2041	
115.600	-.2864	-.3057	-.4296	-.2413		.2089	
133.800	-.3436	-.3051	-.5170	-.2138		.2103	
149.100	-.4552	-.4400	-.4886	-.2267		.2058	
180.000	-.6451	-.6737	-.4709	-.2656	.1815	.2100	

RN/L (1) = 5.399 ALPHA (2) = 2.643 Q(PSF) = 314.93 PT = 7054.8 P = 6734.6 MACH = .25846

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4037	-.4550	-.4572	-.1720		.2091	
-133.800	-.3774	-.3926	-.4723	-.1896		.2105	
-115.600	-.2776	-.3419	-.4575	-.2086		.2022	
-101.400	-.3119	-.3688	-.4502	-.2888		.1999	
-50.100	-.2714	-.4164	-.2488	-.1323	.1932	.2128	
-44.800	.0154	.0000	.0000	-.1013	.1899	.2144	
.000	.0000	.0000	.0000	-.0997	.1937	.2186	.2197
44.800	.0082	.0000	.0000	-.1024	.1945	.2169	
50.100	-.1717	-.3727	-.2307	-.1581	.1965	.2172	
101.400	-.3084	-.3533	-.3960	-.2703		.2062	
115.600	-.2712	-.3017	-.4263	-.2429		.2149	
133.800	-.3342	-.3011	-.4881	-.1936		.2144	
149.100	-.4030	-.3949	-.4435	-.2602		.2158	
180.000	-.5957	-.6162	-.4488	-.3108	.1704	.2085	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP23)

RN/L (1) = 5.390 ALPHA (3) = 5.038 Q(PSF) = 314.93 PT = 7054.8 P = 6734.6 MACH = .25846

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4177	-.4410	-.4284	-.1691		.2160	
-133.800	-.3936	-.3849	-.4716	-.1812		.2163	
-115.600	-.2789	-.3423	-.4652	-.2254		.2102	
-101.400	-.3204	-.3703	-.4503	-.3002		.2029	
-50.100	-.2697	-.3990	-.2565	-.1170	.1863	.2186	
-44.800	.0098	.0000	.0000	-.1044	.1816	.2163	
.000	.0000	.0000	.0000	-.1094	.1883	.2175	.2192
44.800	-.0081	.0000	.0000	-.1060	.1928	.2209	
50.100	-.1720	-.3638	-.2112	-.1533	.1939	.2234	
101.400	-.3135	-.3585	-.4012	-.2744		.2052	
115.600	-.2652	-.3050	-.4395	-.2506		.2113	
133.800	-.3090	-.3045	-.4850	-.1788		.2085	
149.100	-.4158	-.4563	-.4189	-.2158		.2164	
180.000	-.5607	-.5686	-.4496	-.3028	.1794	.2088	

RN/L (1) = 5.379 ALPHA (4) = 7.372 Q(PSF) = 314.93 PT = 7054.8 P = 6734.6 MACH = .25846

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3820	-.4456	-.4197	-.1456		.2148	
-133.800	-.3922	-.3804	-.4596	-.1661		.2227	
-115.600	-.2803	-.3407	-.4717	-.2233		.2233	
-101.400	-.3054	-.3660	-.4476	-.3000		.2143	
-50.100	-.2432	-.3590	-.2239	-.1082	.1910	.2210	
-44.800	.0027	.0000	.0000	-.0976	.1963	.2207	
.000	.0000	.0000	.0000	-.1139	.1884	.2151	.2317
44.800	-.0014	.0000	.0000	-.0988	.1980	.2207	
50.100	-.1577	-.3426	-.2197	-.1339	.2008	.2126	
101.400	-.3073	-.3572	-.3956	-.2786		.2165	
115.600	-.2683	-.3031	-.4359	-.2505		.2050	
133.800	-.3090	-.3005	-.4359	-.1597		.2126	
149.100	-.4263	-.3854	-.4043	-.1505		.2213	
180.000	-.5459	-.5510	-.4337	-.2359	.1932	.2283	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP23)

RN/L (1) = 5.375 ALPHA (5) = 9.766 Q(PSF) = 314.93 PT = 7054.8 P = 6734.6 MACH = .25846

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3455	-.4359	-.3999	-.1475		.2147	
-133.800	-.3886	-.3709	-.4356	-.1602		.2209	
-115.600	-.2756	-.3462	-.4637	-.2177		.2366	
-101.400	-.2990	-.3560	-.4483	-.3012		.2164	
-50.100	-.2202	-.3197	-.1863	-.0942	.1906	.2226	
-44.800	.0074	.0000	.0000	-.0835	.1914	.2204	
.000	.0000	.0000	.0000	-.1046	.1999	.2249	.2423
44.800	.0029	.0000	.0000	-.0799	.1999	.2302	
50.100	-.1555	-.3204	-.2105	-.1075	.2030	.2333	
101.400	-.3020	-.3463	-.3968	-.2798		.2165	
115.600	-.2599	-.2989	-.4434	-.2582		.2201	
133.800	-.3080	-.2958	-.4248	-.1741		.2241	
149.100	-.3650	-.4090	-.3968	-.1620		.2196	
180.000	-.4713	-.5072	-.4397	-.2708	.2064	.2221	

RN/L (1) = 5.351 ALPHA (6) = 12.121 Q(PSF) = 314.93 PT = 7054.8 P = 6734.6 MACH = .25846

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3988	-.4231	-.4100	-.1571		.2389	
-133.800	-.3845	-.3803	-.4078	-.1480		.2440	
-115.600	-.2704	-.3390	-.4749	-.2184		.2225	
-101.400	-.2922	-.3469	-.4426	-.3010		.2075	
-50.100	-.2075	-.2891	-.1554	-.0731	.2050	.2276	
-44.800	.0163	.0000	.0000	-.0750	.1954	.2239	
.000	.0000	.0000	.0000	-.1006	.2115	.2342	.2642
44.800	.0228	.0000	.0000	-.0732	.2058	.2237	
50.100	-.1301	-.2897	-.1660	-.0877	.2129	.2291	
101.400	-.2902	-.3459	-.4046	-.2710		.2271	
115.600	-.2574	-.2962	-.4512	-.2574		.2438	
133.800	-.3053	-.2970	-.4344	-.1622		.2410	
149.100	-.4117	-.4341	-.4114	-.1704		.2503	
180.000	-.5863	-.5818	-.4563	-.1965	.2152	.2455	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP23)

RN/L (1) = 5.355 ALPHA (7) = 14.500 Q(PSF) = 314.93 PT = 7054.8 P = 6734.6 MACH = .25846

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3653	-.4103	-.4301	-.1764		.2506	
-133.800	-.3873	-.3967	-.4301	-.1654		.2588	
-115.600	-.2749	-.3453	-.4923	-.2383		.2546	
-101.400	-.2950	-.3481	-.4499	-.2958		.2407	
-50.100	-.1741	-.2498	-.1333	-.0599	.2086	.2458	
-44.800	.0190	.0000	.0000	-.0610	.2148	.2388	
.000	.0000	.0000	.0000	-.0861	.2036	.2403	.2699
44.800	.0287	.0000	.0000	-.0463	.2174	.2341	
50.100	-.1168	-.2490	-.1252	-.0657	.2121	.2428	
101.400	-.3004	-.3400	-.4066	-.2761		.2612	
115.600	-.2772	-.2955	-.4582	-.2761		.2510	
133.800	-.3638	-.2936	-.4372	-.1795		.2524	
149.100	-.4245	-.4426	-.4234	-.2120		.2584	
180.000	-.6243	-.5974	-.4540	-.3135	.2126	.2482	

RN/L (1) = 5.341 ALPHA (8) = 16.973 Q(PSF) = 314.93 PT = 7054.8 P = 6734.6 MACH = .25846

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4056	-.4339	-.4616	-.1943		.2630	
-133.800	-.4104	-.3851	-.4330	-.1668		.2628	
-115.600	-.2749	-.3321	-.4923	-.2370		.2616	
-101.400	-.2941	-.3381	-.4373	-.2684		.2367	
-50.100	-.1310	-.1824	-.0833	-.0273	.2079	.2469	
-44.800	.0174	.0000	.0000	-.0347	.2115	.2328	
.000	.0000	.0000	.0000	-.0625	.2148	.2270	.2782
44.800	.0277	.0000	.0000	-.0212	.2225	.2327	
50.100	-.0775	-.1824	-.0814	-.0256	.2199	.2559	
101.400	-.2814	-.3422	-.4050	-.2542		.2604	
115.600	-.2752	-.3055	-.4616	-.2712		.2715	
133.800	-.3484	-.2939	-.4556	-.1647		.2644	
149.100	-.4249	-.3993	-.4593	-.2194		.2726	
180.000	-.5549	-.5921	-.4499	-.2788	.2179	.2655	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP23)

RN/L (2) = 7.803 ALPHA (1) = -.015 Q(PSF) = 457.18 PT = 10160. P = 9695.2 MACH = .25953

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4376	-.4743	-.5046	-.2271		.2107	
-133.800	-.4156	-.4091	-.5317	-.2244		.2057	
-115.600	-.2940	-.3426	-.4727	-.2225		.2013	
-101.400	-.3289	-.3781	-.4636	-.2929		.1883	
-50.100	-.2860	-.4236	-.2623	-.1347	.1905	.2136	
-44.800	-.0030	.0000	.0000	-.0983	.1918	.2102	
.000	.0000	.0000	.0000	-.0870	.1958	.2114	.2190
44.800	.0035	.0000	.0000	-.0975	.1963	.2178	
50.100	-.1752	-.3382	-.2379	-.1393	.1960	.2122	
101.400	-.3367	-.3699	-.4458	-.2696		.1969	
115.600	-.2881	-.2947	-.4322	-.2530		.2093	
133.800	-.3545	-.2943	-.3926	-.2165		.2031	
149.100	-.4768	-.4066	-.4984	-.2251		.2116	
180.000	-.6149	-.6718	-.4943	-.2811	.1780	.2089	

RN/L (2) = 7.799 ALPHA (2) = 2.541 Q(PSF) = 457.18 PT = 10160. P = 9695.2 MACH = .25953

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3726	-.4414	-.4484	-.2752		.2026	
-133.800	-.3987	-.3837	-.5046	-.1999		.1891	
-115.600	-.2804	-.3268	-.4721	-.2264		.2041	
-101.400	-.3212	-.3733	-.4770	-.3080		.1789	
-50.100	-.2793	-.4200	-.2675	-.1380	.1914	.2180	
-44.800	.0086	.0000	.0000	-.1069	.1860	.2082	
.000	.0000	.0000	.0000	-.1005	.1845	.2111	.2144
44.800	.0039	.0000	.0000	-.1094	.1823	.2227	
50.100	-.1703	-.3431	-.2355	-.1495	.1845	.2130	
101.400	-.3336	-.3623	-.4510	-.2797		.2009	
115.600	-.2735	-.2795	-.4275	-.2545		.2096	
133.800	-.3332	-.2877	-.4031	-.1914		.2011	
149.100	-.4409	-.4343	-.4298	-.2773		.2096	
180.000	-.4438	-.4376	-.4546	-.3502	.1675	.1993	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP23)

RN/L (2) = 7.782 ALPHA (3) = 5.047 Q(PSF) = 457.18 PT = 10160. P = 9695.2 MACH = .25953

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3498	-.4225	-.4320	-.2475		.2098	
-133.800	-.3873	-.3810	-.4835	-.1791		.2094	
-115.600	-.2725	-.3238	-.4697	-.2182		.2047	
-101.400	-.3156	-.3690	-.4713	-.3107		.1842	
-50.100	-.2703	-.4037	-.2539	-.1245	.1926	.2156	
-44.800	.0005	.0000	.0000	-.1031	.1887	.2086	
.000	.0000	.0000	.0000	-.1144	.1899	.2168	.1994
44.800	.0031	.0000	.0000	-.1083	.1897	.2185	
50.100	-.1631	-.3268	-.2245	-.1375	.1924	.2191	
101.400	-.3252	-.3621	-.4463	-.2742		.1785	
115.600	-.2619	-.2733	-.4189	-.2533		.2129	
133.800	-.3219	-.2741	-.4062	-.1805		.2153	
149.100	-.4218	-.3509	-.3882	-.2773		.2145	
180.000	-.4574	-.4853	-.4121	-.2869	.1794	.2139	

RN/L (2) = 7.774 ALPHA (4) = 7.478 Q(PSF) = 457.18 PT = 10160. P = 9695.2 MACH = .25953

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3236	-.3707	-.4302	-.2295		.1906	
-133.800	-.3780	-.3773	-.4665	-.1958		.2067	
-115.600	-.2799	-.3307	-.4758	-.2298		.2112	
-101.400	-.3236	-.3690	-.4778	-.3155		.1796	
-50.100	-.2621	-.3641	-.2431	-.1148	.1726	.2106	
-44.800	.0209	.0000	.0000	-.1070	.1730	.2083	
.000	.0000	.0000	.0000	-.1233	.1819	.2077	.2166
44.800	.0066	.0000	.0000	-.1078	.1809	.2102	
50.100	-.1648	-.3271	-.2178	-.1360	.1908	.1995	
101.400	-.3359	-.3750	-.4555	-.2930		.1919	
115.600	-.2753	-.2780	-.4265	-.2597		.2013	
133.800	-.3226	-.2640	-.4111	-.1771		.2055	
149.100	-.4198	-.3696	-.3828	-.2727		.2148	
180.000	-.4284	-.3879	-.4317	-.3580	.1784	.2036	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP23)

RN/L (2) = 7.758 ALPHA (5) = 9.978 Q(PSF) = 457.18 PT = 10160. P = 9695.2 MACH = .25953

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2876	-.3783	-.3964	-.2346		.1952	
-133.800	-.3524	-.3550	-.4420	-.1855		.2115	
-115.600	-.2670	-.3179	-.4692	-.2236		.2063	
-101.400	-.3003	-.3544	-.4698	-.3160		.1857	
-50.100	-.2331	-.3271	-.2077	-.0991	.1735	.2096	
-44.800	.0278	.0000	.0000	-.0947	.1786	.2092	
.000	.0000	.0000	.0000	-.1209	.1821	.2087	.2254
44.800	.0267	.0000	.0000	-.0977	.1917	.2099	
50.100	-.1519	-.2945	-.1737	-.1126	.1773	.2048	
101.400	-.3218	-.3545	-.4471	-.2962		.1946	
115.600	-.2561	-.2616	-.4165	-.2600		.1949	
133.800	-.3003	-.2616	-.4114	-.1715		.2109	
149.100	-.3344	-.3867	-.3767	-.3148		.2297	
180.000	-.4348	-.3150	-.3765	-.3555	.1868	.1996	

RN/L (2) = 7.741 ALPHA (6) = 12.408 Q(PSF) = 457.18 PT = 10160. P = 9695.2 MACH = .25953

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2818	-.3606	-.4092	-.3573		.2069	
-133.800	-.3610	-.3555	-.3909	-.1970		.2200	
-115.600	-.2659	-.3136	-.4704	-.2225		.2042	
-101.400	-.2985	-.3569	-.4721	-.3222		.1774	
-50.100	-.2150	-.2903	-.1777	-.0892	.1848	.2198	
-44.800	.0382	.0000	.0000	-.0855	.1823	.2060	
.000	.0000	.0000	.0000	-.1110	.1805	.1984	.2229
44.800	.0303	.0000	.0000	-.0813	.1750	.1953	
50.100	-.1313	-.2651	-.1700	-.0927	.1941	.1988	
101.400	-.3146	-.3611	-.4493	-.2926		.2124	
115.600	-.2563	-.2522	-.4286	-.2627		.2173	
133.800	-.3093	-.2530	-.4053	-.1904		.2093	
149.100	-.3496	-.2944	-.3578	-.3739		.2052	
180.000	-.2651	-.2925	-.3805	-.3847	.1715	.2046	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP24) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .400

RN/L (1) = 5.496 ALPHA (1) = .035 Q(PSF) = 312.25 PT = 6937.1 P = 6619.5 MACH = .25960

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4175	-.4725	-.4913	-.2081		.2207	
-133.800	-.3996	-.3906	-.5042	-.2013		.2167	
-115.600	-.2839	-.3428	-.4490	-.2030		.2135	
-101.400	-.3076	-.3539	-.4344	-.2679		.2129	
-50.100	-.2476	-.3954	-.2416	-.1141	.2021	.2181	
-44.800	.0215	.0000	.0000	-.0846	.2027	.2212	
.000	.0000	.0000	.0000	-.0776	.1988	.2285	.2325
44.800	.0191	.0000	.0000	-.0870	.2008	.2256	
50.100	-.1600	-.3379	-.2090	-.1360	.2056	.2302	
101.400	-.2974	-.3479	-.3823	-.2404		.2119	
115.600	-.2700	-.3031	-.4216	-.2295		.2176	
133.800	-.3342	-.3040	-.5101	-.2061		.2251	
149.100	-.4586	-.4652	-.4889	-.2158		.2213	
180.000	-.6959	-.7231	-.4508	-.2244	.1876	.2151	

RN/L (1) = 5.459 ALPHA (2) = 2.189 Q(PSF) = 312.25 PT = 6937.1 P = 6619.5 MACH = .25960

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4036	-.4469	-.4607	-.2012		.2181	
-133.800	-.3816	-.3844	-.4882	-.1866		.2158	
-115.600	-.2730	-.3420	-.4547	-.2072		.2104	
-101.400	-.3131	-.3552	-.4444	-.2839		.2141	
-50.100	-.2587	-.4065	-.2398	-.1113	.1878	.2155	
-44.800	.0259	.0000	.0000	-.0939	.1935	.2198	
.000	.0000	.0000	.0000	-.0876	.1940	.2235	.2249
44.800	.0186	.0000	.0000	-.0947	.1920	.2284	
50.100	-.1578	-.3457	-.2161	-.1459	.1997	.2221	
101.400	-.3049	-.3495	-.3954	-.2578		.2186	
115.600	-.2663	-.2943	-.4278	-.2372		.2198	
133.800	-.3180	-.2940	-.4930	-.1971		.2192	
149.100	-.4129	-.4577	-.4296	-.2312		.2063	
180.000	-.5286	-.5435	-.4396	-.2315	.1797	.2103	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP24)

RN/L (1) = 5.468 ALPHA (3) = 4.394 Q(PSF) = 312.25 PT = 6937.1 P = 6619.5 MACH = .25960

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3717	-.3671	-.4313	-.2429		.2227	
-133.800	-.3749	-.3833	-.4715	-.1967		.2153	
-115.600	-.2707	-.3257	-.4559	-.2064		.2227	
-101.400	-.3033	-.3495	-.4392	-.2820		.2114	
-50.100	-.2443	-.3918	-.2347	-.1157	.1856	.2233	
-44.800	.0210	.0000	.0000	-.0902	.1873	.2150	
.000	.0000	.0000	.0000	-.1005	.1945	.2245	.2186
44.800	.0232	.0000	.0000	-.0886	.1894	.2279	
50.100	-.1505	-.3487	-.2148	-.1406	.1962	.2217	
101.400	-.2985	-.3501	-.3871	-.2545		.2106	
115.600	-.2535	-.3370	-.4238	-.2321		.2160	
133.800	-.3143	-.2844	-.4730	-.1695		.2168	
149.100	-.4135	-.3561	-.4181	-.3242		.2239	
180.000	-.4824	-.4113	-.3860	-.2693	.1811	.2038	

RN/L (1) = 5.450 ALPHA (4) = 7.122 Q(PSF) = 312.25 PT = 6937.1 P = 6619.5 MACH = .25960

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4009	-.4335	-.3937	-.1475		.2229	
-133.800	-.3866	-.3796	-.4567	-.1594		.2254	
-115.600	-.2679	-.3362	-.4695	-.2189		.2229	
-101.400	-.3030	-.3489	-.4420	-.2948		.2144	
-50.100	-.2350	-.3589	-.2243	-.1051	.1906	.2325	
-44.800	.0149	.0000	.0000	-.0920	.1912	.2172	
.000	.0000	.0000	.0000	-.0950	.1962	.2220	.2251
44.800	.0135	.0000	.0000	-.0840	.1945	.2231	
50.100	-.1507	-.3311	-.2143	-.1276	.1971	.2203	
101.400	-.3005	-.3507	-.3936	-.2645		.2217	
115.600	-.2612	-.2920	-.4288	-.2486		.2163	
133.800	-.3172	-.2912	-.4533	-.1594		.2200	
149.100	-.4183	-.4515	-.4050	-.1987		.2186	
180.000	-.5356	-.5621	-.4229	-.2429	.1900	.2183	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP24)

RN/L (1) = 5.436 ALPHA (5) = 9.482 Q(PSF) = 312.25 PT = 6937.1 P = 6619.5 MACH = .25960

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4040	-.4483	-.4082	-.1529		.2296	
-133.800	-.3765	-.3826	-.4389	-.1529		.2251	
-115.600	-.2798	-.3428	-.4849	-.2239		.2194	
-101.400	-.3013	-.3488	-.4460	-.2985		.2064	
-50.100	-.2210	-.3329	-.2088	-.0947	.1922	.2240	
-44.800	.0115	.0000	.0000	-.0928	.1879	.2217	
.000	.0000	.0000	.0000	-.1037	.1892	.2159	.2340
44.800	.0068	.0000	.0000	-.0836	.1906	.2229	
50.100	-.1439	-.3286	-.2150	-.1123	.1991	.2204	
101.400	-.2991	-.3483	-.3975	-.2772		.2340	
115.600	-.2674	-.3037	-.4442	-.2503		.2198	
133.800	-.3195	-.2935	-.4268	-.1569		.2283	
149.100	-.4192	-.4297	-.4072	-.1591		.2286	
180.000	-.5698	-.4701	-.4089	-.2176	.1988	.2249	

RN/L (1) = 5.417 ALPHA (6) = 11.812 Q(PSF) = 312.25 PT = 6937.1 P = 6619.5 MACH = .25960

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3894	-.4517	-.4137	-.2619		.2274	
-133.800	-.4026	-.3881	-.4448	-.1694		.2260	
-115.600	-.2932	-.3502	-.4964	-.2423		.2297	
-101.400	-.3106	-.3593	-.4679	-.3231		.2089	
-50.100	-.2229	-.3194	-.1899	-.0971	.1896	.2263	
-44.800	.0032	.0000	.0000	-.0882	.1902	.2209	
.000	.0000	.0000	.0000	-.1136	.1934	.2273	.2361
44.800	.0055	.0000	.0000	-.0857	.1914	.2147	
50.100	-.1460	-.3160	-.1935	-.1121	.2056	.2222	
101.400	-.3049	-.3611	-.4228	-.3006		.2284	
115.600	-.2785	-.3120	-.4645	-.2653		.2222	
133.800	-.3268	-.3075	-.4482	-.1730		.2301	
149.100	-.4234	-.4565	-.4277	-.1705		.2273	
180.000	-.5880	-.5903	-.4697	-.2385	.1960	.2233	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP24)

RN/L (1) = 5.417 ALPHA (7) = 14.238 Q(PSF) = 312.25 PT = 6937.1 P = 6619.5 MACH = .25960

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4049	-.4516	-.4374	-.1762		.2494	
-133.800	-.3960	-.3900	-.4243	-.1587		.2471	
-115.600	-.2782	-.3412	-.4981	-.2372		.2463	
-101.400	-.2933	-.3483	-.4581	-.3060		.2437	
-50.100	-.1946	-.2805	-.1598	-.0742	.2151	.2443	
-44.800	.0169	.0000	.0000	-.0725	.2046	.2469	
.000	.0000	.0000	.0000	-.0943	.2128	.2343	.2644
44.800	.0132	.0000	.0000	-.0649	.2159	.2428	
50.100	-.1255	-.2840	-.1583	-.0849	.2185	.2491	
101.400	-.2919	-.3512	-.4095	-.2907		.2496	
115.600	-.2704	-.3038	-.4630	-.2743		.2479	
133.800	-.3455	-.3038	-.4397	-.1739		.2445	
149.100	-.4303	-.4522	-.4257	-.1810		.2434	
180.000	-.5341	-.5227	-.4764	-.1972	.2083	.2499	

RN/L (1) = 5.419 ALPHA (8) = 16.605 Q(PSF) = 312.25 PT = 6937.1 P = 6619.5 MACH = .25960

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4068	-.4511	-.4584	-.1970		.2544	
-133.800	-.4097	-.4024	-.4321	-.1731		.2563	
-115.600	-.2738	-.3397	-.4935	-.2479		.2532	
-101.400	-.2933	-.3549	-.4496	-.3049		.2560	
-50.100	-.1572	-.2417	-.1220	-.0570	.2182	.2577	
-44.800	.0219	.0000	.0000	-.0497	.2162	.2498	
.000	.0000	.0000	.0000	-.0810	.2193	.2475	.2727
44.800	.0222	.0000	.0000	-.0517	.2292	.2532	
50.100	-.1067	-.2319	-.1276	-.0662	.2351	.2518	
101.400	-.2934	-.3468	-.4114	-.2885		.2535	
115.600	-.2714	-.3024	-.4681	-.2973		.2532	
133.800	-.3502	-.3004	-.4579	-.1823		.2563	
149.100	-.4244	-.4361	-.4403	-.2134		.2552	
180.000	-.6152	-.6625	-.4604	-.2145	.2165	.2540	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP24)

RN/L (1) = 5.413 ALPHA (9) = 19.108 Q(PSF) = 312.25 PT = 6937.1 P = 6619.5 MACH = .25960

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4474	-.4933	-.5102	-.2046		.2574	
-133.800	-.4221	-.4175	-.4757	-.1868		.2552	
-115.600	-.2861	-.3542	-.5249	-.2681		.2529	
-101.400	-.3030	-.3672	-.4658	-.3019		.2467	
-50.100	-.1319	-.2031	-.1038	-.0437	.2140	.2509	
-44.800	.0172	.0000	.0000	-.0423	.2123	.2495	
.000	.0000	.0000	.0000	-.0741	.2098	.2386	.2812
44.800	.0152	.0000	.0000	-.0302	.2135	.2386	
50.100	-.0874	-.1945	-.0944	-.0472	.2152	.2442	
101.400	-.2960	-.3611	-.4322	-.2954		.2567	
115.600	-.2788	-.3192	-.4934	-.3203		.2550	
133.800	-.3582	-.3174	-.4906	-.1983		.2564	
149.100	-.4577	-.4657	-.4849	-.2550		.2564	
180.000	-.6414	-.6836	-.4498	-.2291	.2157	.2589	

RN/L (2) = 7.876 ALPHA (1) = -.053 Q(PSF) = 457.97 PT = 10239. P = 9773.3 MACH = .25873

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3657	-.4699	-.4960	-.2221		.2138	
-133.800	-.3874	-.3933	-.5038	-.2080		.2190	
-115.600	-.2703	-.3482	-.4544	-.2031		.2187	
-101.400	-.3105	-.3627	-.4366	-.2733		.2156	
-50.100	-.1960	-.3137	-.2267	-.1081	.2024	.2235	
-44.800	-.0635	.0000	.0000	-.0891	.1972	.2297	
.000	.0000	.0000	.0000	-.0802	.2019	.2193	.2332
44.800	-.0705	.0000	.0000	-.0868	.1974	.2283	
50.100	-.1610	-.3192	-.2194	-.1355	.1994	.2202	
101.400	-.4383	-.3495	-.3649	-.2435		.2090	
115.600	-.2753	-.2893	-.4127	-.2317		.2173	
133.800	-.3285	-.2883	-.5011	-.2027		.2235	
149.100	-.4404	-.4647	-.4667	-.2230		.2187	
180.000	-.4653	-.5930	-.4793	-.3277	.1837	.2206	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP24)

RN/L (2) = 7.824 ALPHA (2) = 2.392 Q(PSF) = 457.97 PT = 10239. P = 9773.3 MACH = .25873

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3714	-.3933	-.3847	-.2417		.2082	
-133.800	-.3729	-.3[illegible]	-.4802	-.2119		.1956	
-115.600	-.2754	-.34[illegible]	-.4655	-.2146		.1919	
-101.400	-.3202	-.[illegible]	-.4484	-.3009		.1857	
-50.100	-.1972	-.31[illegible]	-.2307	-.1177	.1818	.2130	
-44.800	-.0371	.0000	.0000	-.1015	.1801	.2047	
.000	.0000	.0000	.0000	-.0972	.1881	.2023	.2112
44.800	-.0441	.0000	.0000	-.1057	.1802	.2081	
50.100	-.1605	-.3354	-.2176	-.1354	.1839	.2133	
101.400	-.4460	-.3565	-.3749	-.2555		.2073	
115.600	-.2646	-.2796	-.4205	-.2379		.2094	
133.800	-.3103	-.2806	-.4775	-.1976		.2117	
149.100	-.3417	-.3716	-.4123	-.3645		.2121	
180.000	-.3635	-.4181	-.4572	-.3632	.1608	.2009	

RN/L (2) = 7.809 ALPHA (3) = 4.909 Q(PSF) = 457.97 PT = 10239. P = 9773.3 MACH = .25873

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3441	-.3794	-.4149	-.2398		.2169	
-133.800	-.3685	-.3703	-.4646	-.1885		.2088	
-115.600	-.2699	-.3353	-.4623	-.2225		.2034	
-101.400	-.3189	-.3506	-.4433	-.3026		.1874	
-50.100	-.1948	-.3005	-.2225	-.1040	.1876	.2113	
-44.800	-.0500	.0000	.0000	-.0951	.1859	.2133	
.000	.0000	.0000	.0000	-.1002	.1836	.2172	.2250
44.800	-.0538	.0000	.0000	-.0928	.1882	.2207	
50.100	-.1588	-.3282	-.2139	-.1323	.1865	.2165	
101.400	-.4392	-.3581	-.3758	-.2699		.2103	
115.600	-.2621	-.2677	-.4180	-.2419		.2020	
133.800	-.3087	-.2728	-.4611	-.1764		.2066	
149.100	-.3789	-.3953	-.3830	-.3304		.2070	
180.000	-.4281	-.4619	-.3867	-.3620	.1774	.2103	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP24)

RN/L (2) = 7.769 ALPHA (4) = 7.313 Q(PSF) = 457.97 PT = 10239. P = 9773.3 MACH = .25873

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3418	-.3830	-.4059	-.2533		.2060	
-133.800	-.3768	-.3532	-.4394	-.1700		.2066	
-115.600	-.2736	-.3344	-.4771	-.2288		.2005	
-101.400	-.3230	-.3527	-.4513	-.3140		.1912	
-50.100	-.1987	-.2684	-.1826	-.1076	.1685	.2104	
-44.800	-.0553	.0000	.0000	-.1018	.1836	.1999	
.000	.0000	.0000	.0000	-.1165	.1815	.2039	.2270
44.800	-.0572	.0000	.0000	-.1035	.1743	.2140	
50.100	-.1622	-.3202	-.2098	-.1328	.1788	.2116	
101.400	-.4480	-.3589	-.3843	-.2742		.2019	
115.600	-.2609	-.2827	-.4388	-.2539		.2120	
133.800	-.3146	-.2816	-.4564	-.1797		.2118	
149.100	-.3677	-.4255	-.3792	-.2865		.2068	
180.000	-.3657	-.3527	-.4095	-.3352	.1718	.2085	

RN/L (2) = 7.753 ALPHA (5) = 9.884 Q(PSF) = 457.97 PT = 10239. P = 9773.3 MACH = .25873

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3111	-.4000	-.3847	-.1733		.2154	
-133.800	-.3706	-.3732	-.4276	-.1805		.2221	
-115.600	-.2746	-.3355	-.4715	-.2311		.2212	
-101.400	-.3113	-.3472	-.4594	-.3165		.2004	
-50.100	-.1849	-.2452	-.1622	-.1017	.1746	.2163	
-44.800	-.0617	.0000	.0000	-.1002	.1818	.2072	
.000	.0000	.0000	.0000	-.1123	.1822	.2078	.2323
44.800	-.0563	.0000	.0000	-.0900	.1872	.2012	
50.100	-.1502	-.3050	-.1963	-.1156	.1731	.2080	
101.400	-.4507	-.3631	-.3852	-.2752		.2072	
115.600	-.2629	-.2921	-.4337	-.2590		.2043	
133.800	-.3072	-.2886	-.4207	-.1725		.2206	
149.100	-.3542	-.3573	-.3715	-.3195		.2179	
180.000	-.3932	-.3382	-.4088	-.3426	.1933	.2105	

ARC 12-180(OA173) OV101+TC+G.P. (TAILCONE) (RNSP24)

RN/L (2) = 7.782 ALPHA (6) = 12.212 Q(PSF) = 457.97 PT = 10239. P = 9773.3 MACH = .25873

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3277	-.3599	-.3913	-.2331		.2193	
-133.800	-.3732	-.3372	-.3911	-.1955		.2353	
-115.600	-.2643	-.3344	-.4841	-.2417		.2151	
-101.400	-.2938	-.3388	-.4539	-.3197		.2116	
-50.100	-.1636	-.2310	-.1319	-.0878	.1829	.2147	
-44.800	-.0589	.0000	.0000	-.0987	.1875	.2186	
.000	.0000	.0000	.0000	-.1104	.1918	.2141	.2266
44.800	-.0451	.0000	.0000	-.0783	.1843	.2062	
50.100	-.1415	-.2899	-.1745	-.1071	.1841	.2183	
101.400	-.4310	-.3532	-.3905	-.2845		.1872	
115.600	-.2542	-.2812	-.4341	-.2591		.2156	
133.800	-.3052	-.2789	-.4102	-.1847		.2093	
149.100	-.3706	-.4129	-.3581	-.2758		.2212	
180.000	-.4337	-.4397	-.3519	-.3626	.1958	.2200	

RN/L (2) = 7.769 ALPHA (7) = 14.676 Q(PSF) = 457.97 PT = 10239. P = 9773.3 MACH = .25873

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3481	-.3286	-.4150	-.2312		.2322	
-133.800	-.3636	-.3670	-.4192	-.1967		.2304	
-115.600	-.2609	-.3297	-.4803	-.2464		.2312	
-101.400	-.2931	-.3374	-.4480	-.3146		.2291	
-50.100	-.1484	-.1840	-.1042	-.0716	.2088	.2333	
-44.800	-.0635	.0000	.0000	-.0736	.2017	.2345	
.000	.0000	.0000	.0000	-.1020	.2122	.2247	.2575
44.800	-.0480	.0000	.0000	-.0722	.2057	.2295	
50.100	-.1287	-.2593	-.1525	-.0781	.2095	.2162	
101.400	-.4366	-.3602	-.3996	-.2870		.2372	
115.600	-.2489	-.2846	-.4525	-.2793		.2327	
133.800	-.3131	-.2799	-.4274	-.1843		.2306	
149.100	-.3672	-.3963	-.3830	-.3217		.2360	
180.000	-.4177	-.3297	-.4440	-.3512	.2103	.2126	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSP25) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 7.914 ALPHA (1) = 1.135 Q(PSF) = 459.71 PT = 10207. P = 9739.9 MACH = .25965

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4238	-.4705	-.4718	-.1963		.2285	
-133.800	-.3937	-.3903	-.4952	-.1994		.2283	
-115.600	-.2785	-.3368	-.4459	-.2082		.2170	
-101.400	-.3012	-.3478	-.4303	-.2818		.2189	
-50.100	-.1927	-.3171	-.2289	-.1028	.2002	.2331	
-44.800	.0046	.0000	.0000	-.0779	.2076	.2353	
.000	.0000	.0000	.0000	-.0846	.2085	.2345	.2400
44.800	.0037	.0000	.0000	-.0831	.2075	.2375	
50.100	-.1500	-.3285	-.2115	-.1371	.2129	.2353	
101.400	-.2969	-.3356	-.3735	-.2458		.2207	
115.600	-.2632	-.2894	-.4177	-.2262		.2285	
133.800	-.3264	-.2928	-.5006	-.1920		.2275	
149.100	-.4523	-.4865	-.4775	-.2003		.2293	
180.000	-.6527	-.6800	-.4413	-.2036	.1964	.2307	

RN/L (1) = 7.880 ALPHA (2) = 1.691 Q(PSF) = 459.71 PT = 10207. P = 9739.9 MACH = .25965

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4292	-.4794	-.4736	-.1996		.2196	
-133.800	-.4027	-.3920	-.4926	-.2141		.2184	
-115.600	-.2797	-.3394	-.4592	-.2129		.2166	
-101.400	-.3038	-.3510	-.4381	-.2846		.2131	
-50.100	-.1930	-.3224	-.2319	-.1103	.2053	.2307	
-44.800	-.0015	.0000	.0000	-.0864	.1930	.2304	
.000	.0000	.0000	.0000	-.0891	.2005	.2311	.2358
44.800	.0002	.0000	.0000	-.0909	.2068	.2311	
50.100	-.1577	-.3348	-.2193	-.1429	.2070	.2332	
101.400	-.2994	-.3533	-.3814	-.2541		.2148	
115.600	-.2676	-.2942	-.4268	-.2353		.2187	
133.800	-.3370	-.2942	-.5032	-.1956		.2279	
149.100	-.4450	-.4965	-.4710	-.2020		.2273	
180.000	-.6614	-.6818	-.4680	-.2075	.1933	.2234	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSP25)

RN/L (1) = 7.881 ALPHA (3) = 2.241 Q(PSF) = 459.71 PT = 10207. P = 9739.9 MACH = .25965

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4090	-.4577	-.4579	-.2059		.2225	
-133.800	-.3891	-.3902	-.4866	-.1944		.2186	
-115.600	-.2727	-.3348	-.4562	-.2080		.2168	
-101.400	-.2956	-.3404	-.4372	-.2846		.2221	
-50.100	-.1867	-.3172	-.2343	-.1098	.2053	.2235	
-44.800	.0040	.0000	.0000	-.0843	.1999	.2293	
.000	.0000	.0000	.0000	-.0883	.2005	.2309	.2346
44.800	.0008	.0000	.0000	-.0930	.1993	.2278	
50.100	-.1490	-.3372	-.2097	-.1358	.2063	.2243	
101.400	-.2987	-.3460	-.3699	-.2486		.2262	
115.600	-.2640	-.2920	-.4174	-.2305		.2196	
133.800	-.3288	-.2928	-.4890	-.1843		.2278	
149.100	-.4405	-.4835	-.4436	-.1925		.2274	
180.000	-.5936	-.6347	-.4240	-.2227	.1937	.2248	

RN/L (1) = 7.922 ALPHA (4) = 2.264 Q(PSF) = 459.71 PT = 10207. P = 9739.9 MACH = .25965

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4127	-.4630	-.4271	-.1868		.2275	
-133.800	-.3945	-.3852	-.4932	-.1920		.2206	
-115.600	-.2726	-.3341	-.4547	-.2100		.2212	
-101.400	-.3000	-.3500	-.4399	-.2866		.2217	
-50.100	-.1986	-.3191	-.2309	-.1125	.2022	.2248	
-44.800	.0102	.0000	.0000	-.0878	.1991	.2298	
.000	.0000	.0000	.0000	-.0898	.2044	.2238	.2399
44.800	.0026	.0000	.0000	-.0857	.2023	.2253	
50.100	-.1532	-.3381	-.2157	-.1432	.2038	.2320	
101.400	-.2903	-.3469	-.3800	-.2545		.2211	
115.600	-.2613	-.2968	-.4220	-.2325		.2213	
133.800	-.3284	-.2926	-.4871	-.1834		.2251	
149.100	-.4303	-.4875	-.4517	-.1813		.2247	
180.000	-.5729	-.6386	-.4436	-.2026	.1866	.2263	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSP25)

RN/L (1) = 7.899 ALPHA (5) = 4.541 Q(PSF) = 459.71 PT = 10207. P = 9739.9 MACH = .25965

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3970	-.4519	-.4255	-.1619		.2270	
-133.800	-.3889	-.3851	-.4848	-.1800		.2224	
-115.600	-.2708	-.3422	-.4648	-.2184		.2162	
-101.400	-.3026	-.3505	-.4432	-.2939		.2043	
-50.100	-.1871	-.3155	-.2303	-.1117	.2018	.2285	
-44.800	-.0088	.0000	.0000	-.0868	.1995	.2293	
.000	.0000	.0000	.0000	-.0956	.1964	.2185	.2405
44.800	-.0101	.0000	.0000	-.0850	.1898	.2206	
50.100	-.1597	-.3414	-.2148	-.1369	.1923	.2240	
101.400	-.3063	-.3555	-.3804	-.2643		.2044	
115.600	-.2643	-.2903	-.4242	-.2493		.2140	
133.800	-.3204	-.2901	-.4640	-.1748		.2244	
149.100	-.4221	-.4505	-.4231	-.1671		.2246	
180.000	-.5747	-.6025	-.4265	-.2772	.1785	.2202	

RN/L (1) = 7.891 ALPHA (6) = 5.723 Q(PSF) = 459.71 PT = 10207. P = 9739.9 MACH = .25965

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4016	-.4518	-.4287	-.1591		.2125	
-133.800	-.3883	-.3806	-.4758	-.1758		.2159	
-115.600	-.2756	-.3346	-.4731	-.2218		.2117	
-101.400	-.3059	-.3477	-.4479	-.2987		.2278	
-50.100	-.1949	-.3114	-.2276	-.1088	.1915	.2225	
-44.800	-.0148	.0000	.0000	-.0888	.1915	.2225	
.000	.0000	.0000	.0000	-.1042	.1965	.2226	.2309
44.800	-.0184	.0000	.0000	-.0877	.1913	.2241	
50.100	-.1569	-.3378	-.2305	-.1389	.1930	.2218	
101.400	-.2990	-.3457	-.3925	-.2649		.2157	
115.600	-.2577	-.2936	-.4378	-.2508		.2209	
133.800	-.3239	-.2924	-.4701	-.1654		.2180	
149.100	-.4294	-.4431	-.4230	-.1471		.2211	
180.000	-.5949	-.6694	-.4292	-.1857	.1909	.2201	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSP25)

RN/L (1) = 7.892 ALPHA (7) = 6.849 Q(PSF) = 459.71 PT = 10207. P = 9739.9 MACH = .25965

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4149	-.4281	-.4220	-.1529		.2313	
-133.800	-.3856	-.3818	-.4661	-.1663		.2265	
-115.600	-.2727	-.3386	-.4764	-.2210		.2187	
-101.400	-.2971	-.3467	-.4486	-.3016		.2258	
-50.100	-.1829	-.2967	-.2214	-.1066	.1967	.2317	
-44.800	-.0205	.0000	.0000	-.0909	.1934	.2241	
.000	.0000	.0000	.0000	-.1020	.1948	.2234	.2389
44.800	-.0159	.0000	.0000	-.0861	.1920	.2255	
50.100	-.1518	-.3308	-.2199	-.1290	.1998	.2214	
101.400	-.2966	-.3537	-.3829	-.2658		.2174	
115.600	-.2555	-.3002	-.4339	-.2515		.2312	
133.800	-.3223	-.2979	-.4633	-.1621		.2350	
149.100	-.4253	-.4528	-.4145	-.1470		.2216	
180.000	-.5534	-.6376	-.4241	-.1646	.2027	.2285	

RN/L (1) = 7.879 ALPHA (8) = 8.001 Q(PSF) = 459.71 PT = 10207. P = 9739.9 MACH = .25965

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3951	-.4455	-.4175	-.1446		.2374	
-133.800	-.3916	-.3933	-.4610	-.1662		.2381	
-115.600	-.2734	-.3466	-.4755	-.2284		.2238	
-101.400	-.2950	-.3496	-.4533	-.3033		.2221	
-50.100	-.1819	-.2847	-.2179	-.0975	.1782	.2286	
-44.800	-.0169	.0000	.0000	-.0866	.1804	.2221	
.000	.0000	.0000	.0000	-.1013	.1940	.2066	.2365
44.800	-.0195	.0000	.0000	-.0889	.1929	.2258	
50.100	-.1557	-.3313	-.2154	-.1222	.2040	.2304	
101.400	-.3070	-.3574	-.3884	-.2701		.2281	
115.600	-.2640	-.2957	-.4399	-.2596		.2256	
133.800	-.3232	-.2949	-.4572	-.1645		.2317	
149.100	-.4297	-.4395	-.4105	-.1468		.2357	
180.000	-.6019	-.6326	-.4322	-.1832	.1867	.2200	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSP25)

RN/L (1) = 7.877 ALPHA (9) = 9.142 Q(PSF) = 459.71 PT = 10207. P = 9739.9 MACH = .25965

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2864	-.3988	-.3907	-.1670		.2067	
-133.800	-.3721	-.3632	-.4484	-.1626		.2235	
-115.600	-.2652	-.3336	-.4561	-.2286		.2172	
-101.400	-.2933	-.3415	-.4523	-.3126		.2052	
-50.100	-.1738	-.2731	-.2090	-.0939	.1842	.2153	
-44.800	-.0041	.0000	.0000	-.0842	.1874	.2214	
.000	.0000	.0000	.0000	-.1039	.1884	.2104	.2293
44.800	.0036	.0000	.0000	-.0793	.1781	.2060	
50.100	-.1512	-.3233	-.2139	-.1159	.1856	.2232	
101.400	-.2965	-.3513	-.3827	-.2750		.2136	
115.600	-.2551	-.2877	-.4272	-.2439		.2195	
133.800	-.3130	-.2877	-.4278	-.1578		.2161	
149.100	-.3264	-.4034	-.3551	-.1717		.2293	
180.000	-.3800	-.3016	-.3733	-.3446	.1781	.2052	

RN/L (1) = 7.857 ALPHA (10) = 11.406 Q(PSF) = 459.71 PT = 10207. P = 9739.9 MACH = .25965

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3397	-.3738	-.3932	-.1603		.2203	
-133.800	-.3909	-.3688	-.4231	-.1806		.2395	
-115.600	-.2736	-.3376	-.4881	-.2419		.2278	
-101.400	-.2948	-.3472	-.4617	-.3245		.1926	
-50.100	-.1708	-.2588	-.1940	-.0945	.1964	.2284	
-44.800	-.0074	.0000	.0000	-.0811	.1981	.2230	
.000	.0000	.0000	.0000	-.1049	.1960	.1931	.2562
44.800	-.0087	.0000	.0000	-.0800	.1981	.2361	
50.100	-.1459	-.3138	-.2068	-.1061	.1951	.2146	
101.400	-.2978	-.3535	-.4009	-.2906		.2075	
115.600	-.2668	-.2993	-.4492	-.2591		.2223	
133.800	-.3225	-.2978	-.4176	-.1875		.2299	
149.100	-.4116	-.3831	-.3955	-.2287		.2334	
180.000	-.5334	-.4386	-.4448	-.3619	.2041	.2177	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSP25)

RN/L (1) = 7.836 ALPHA (11) = 13.733 Q(PSF) = 459.71 PT = 10207. P = 9739.9 MACH = .25965

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3352	-.3502	-.4287	-.1854		.2439	
-133.800	-.3634	-.3790	-.4256	-.1760		.2353	
-115.600	-.2712	-.3308	-.4889	-.2413		.2261	
-101.400	-.3114	-.3475	-.4657	-.3234		.1909	
-50.100	-.1708	-.2298	-.1626	-.0903	.1995	.2269	
-44.800	-.0178	.0000	.0000	-.0907	.1937	.2290	
.000	.0000	.0000	.0000	-.1033	.1953	.2296	.2528
44.800	-.0124	.0000	.0000	-.0726	.1997	.2288	
50.100	-.1370	-.2980	-.1665	-.0977	.2077	.2135	
101.400	-.2912	-.3515	-.4095	-.2977		.2098	
115.600	-.2627	-.2968	-.4529	-.2778		.2321	
133.800	-.3238	-.2968	-.4407	-.1838		.2330	
149.100	-.3450	-.3434	-.3642	-.3735		.2328	
180.000	-.2666	-.4072	-.4321	-.3909	.2145	.2233	

RN/L (1) = 7.793 ALPHA (12) = 14.894 Q(PSF) = 459.71 PT = 10207. P = 9739.9 MACH = .25965

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3994	-.4335	-.4647	-.2035		.2363	
-133.800	-.3842	-.3887	-.4429	-.1937		.2334	
-115.600	-.2719	-.3584	-.5165	-.2638		.2377	
-101.400	-.3086	-.3634	-.4840	-.3443		.2311	
-50.100	-.1647	-.2295	-.1609	-.0929	.1956	.2388	
-44.800	-.0269	.0000	.0000	-.0539	.1970	.2367	
.000	.0000	.0000	.0000	-.1060	.2051	.2262	.2520
44.800	-.0219	.0000	.0000	-.0748	.2030	.2296	
50.100	-.1498	-.2917	-.1747	-.1014	.2177	.2289	
101.400	-.3165	-.3663	-.4247	-.3151		.2273	
115.600	-.2740	-.3103	-.4691	-.3086		.2196	
133.800	-.3597	-.3107	-.4454	-.2156		.2273	
149.100	-.4208	-.4059	-.4249	-.2826		.2364	
180.000	-.3659	-.5879	-.4726	-.2742	.2022	.2262	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSQ25) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260 H/B = .600

RN/L (1) = 7.793 ALPHA (1) = 14.894 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3994	-.4335	-.4647	-.2035		.2363	
-133.800	-.3842	-.3887	-.4429	-.1937		.2334	
-115.600	-.2719	-.3584	-.5165	-.2638		.2377	
-101.400	-.3086	-.3634	-.4840	-.3443		.2311	
-50.100	-.1647	-.2295	-.1609	-.0929	.1956	.2388	
-44.800	-.0269	.0000	.0000	-.0539	.1970	.2367	
.000	.0000	.0000	.0000	-.1060	.2051	.2262	.2520
44.800	-.0219	.0000	.0000	-.0748	.2030	.2296	
50.100	-.1498	-.2917	-.1747	-.1014	.2177	.2289	
101.400	-.3165	-.3663	-.4247	-.3151		.2273	
115.600	-.2740	-.3103	-.4691	-.3086		.2196	
133.800	-.3597	-.3107	-.4454	-.2156		.2273	
149.100	-.4208	-.4059	-.4249	-.2826		.2364	
180.000	-.3659	-.5879	-.4726	-.2742	.2022	.2262	

RN/L (1) = 7.836 ALPHA (2) = 13.759 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3644	-.4175	-.3910	-.1917		.2420	
-133.800	-.3780	-.3645	-.3996	-.1770		.2433	
-115.600	-.2552	-.3377	-.4819	-.2352		.2279	
-101.400	-.2945	-.3421	-.4569	-.3165		.2274	
-50.100	-.1587	-.2621	-.1536	-.0878	.1945	.2433	
-44.800	-.0132	.0000	.0000	-.0509	.2059	.2327	
.000	.0000	.0000	.0000	-.0974	.2090	.2303	.2347
44.800	-.0224	.0000	.0000	-.0738	.2071	.2316	
50.100	-.1432	-.2917	-.1839	-.0982	.2160	.2337	
101.400	-.3223	-.3483	-.3980	-.2916		.2263	
115.600	-.2582	-.2928	-.4471	-.2749		.2214	
133.800	-.3181	-.2984	-.4152	-.1873		.2248	
149.100	-.3463	-.4247	-.4025	-.2105		.2406	
180.000	-.3656	-.4744	-.3884	-.3613	.2078	.2406	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSQ25)

RN/L (1) = 7.821 ALPHA (3) = 13.156 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3308	-.3665	-.4207	-.2304		.2168	
-133.800	-.3635	-.3793	-.4282	-.1866		.2326	
-115.600	-.2698	-.3440	-.4975	-.2301		.2128	
-101.400	-.3052	-.3427	-.4641	-.3289		.1996	
-50.100	-.1633	-.2299	-.1649	-.0898	.1981	.2316	
-44.800	-.0120	.0000	.0000	-.0471	.1891	.2254	
.000	.0000	.0000	.0000	-.1053	.1931	.2257	.2454
44.800	-.0099	.0000	.0000	-.0772	.1859	.2168	
50.100	-.1461	-.3026	-.1942	-.1002	.2006	.2092	
101.400	-.3031	-.3578	-.4050	-.2927		.2322	
115.600	-.2640	-.2964	-.4355	-.2742		.2234	
133.800	-.3311	-.2951	-.4222	-.1832		.2158	
149.100	-.3141	-.3607	-.3796	-.3194		.2294	
180.000	-.3267	-.3620	-.4324	-.3110	.2051	.2221	

RN/L (1) = 7.827 ALPHA (4) = 11.418 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3348	-.3562	-.3976	-.3138		.2228	
-133.800	-.3533	-.3591	-.4101	-.1935		.2090	
-115.600	-.2697	-.3440	-.4865	-.2271		.2145	
-101.400	-.3141	-.3537	-.4590	-.3273		.2181	
-50.100	-.1844	-.2430	-.1829	-.1000	.1805	.2135	
-44.800	-.0132	.0000	.0000	-.0579	.1864	.2086	
.000	.0000	.0000	.0000	-.1032	.1808	.1940	.2213
44.800	-.0052	.0000	.0000	-.0862	.1887	.2090	
50.100	-.1527	-.3120	-.2110	-.1109	.1904	.2141	
101.400	-.3125	-.3514	-.4096	-.2885		.2287	
115.600	-.2506	-.2910	-.4397	-.2620		.1916	
133.800	-.2900	-.3110	-.4296	-.1958		.2147	
149.100	-.3303	-.3253	-.3815	-.3570		.2098	
180.000	-.3364	-.4744	-.3709	-.3461	.1946	.2230	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSQ25)

RN/L (1) = 7.840 ALPHA (5) = 9.151 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.2849	-.3336	-.3928	-.3283		.2008	
-133.800	-.3392	-.3476	-.4034	-.1939		.2040	
-115.600	-.2666	-.3357	-.4656	-.2305		.2023	
-101.400	-.3150	-.3669	-.4492	-.3179		.1855	
-50.100	-.1842	-.2530	-.1993	-.1045	.1649	.2149	
-44.800	-.0246	.0000	.0000	-.0652	.1726	.1996	
.000	.0000	.0000	.0000	-.1090	.1771	.1958	.2200
44.800	-.0132	.0000	.0000	-.0914	.1861	.2001	
50.100	-.1542	-.3358	-.2097	-.1283	.1769	.2047	
101.400	-.3168	-.3583	-.3934	-.2807		.1982	
115.600	-.255[illegible]	-.2933	-.4308	-.2525		.2054	
133.800	-.286[illegible]	-.2929	-.4240	-.1933		.2064	
149.100	-.3328	-.3377	-.3636	-.3703		.2111	
180.000	-.3032	-.3562	-.3533	-.3728	.1654	.1814	

RN/L (1) = 7.832 ALPHA (6) = 7.978 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3051	-.3837	-.3924	-.2789		.2006	
-133.800	-.3492	-.3568	-.4492	-.1817		.2014	
-115.600	-.2687	-.3292	-.4779	-.2191		.2103	
-101.400	-.3148	-.3618	-.4524	-.3158		.1751	
-50.100	-.1855	-.2566	-.2133	-.1073	.1706	.2016	
-44.800	-.0203	.0000	.0000	-.0707	.1696	.2038	
.000	.0000	.0000	.0000	-.1119	.1701	.1951	.2159
44.800	-.0190	.0000	.0000	-.1024	.1692	.1972	
50.100	-.1520	-.3353	-.2127	-.1254	.1683	.1945	
101.400	-.3232	-.3639	-.3848	-.2742		.1909	
115.600	-.2589	-.3418	-.4184	-.2465		.2076	
133.800	-.2952	-.2926	-.4365	-.1800		.1904	
149.100	-.3441	-.2954	-.3536	-.3261		.2038	
180.000	-.2893	-.3085	-.3699	-.3667	.1804	.1966	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSQ25)

RN/L (1) = 7.837 ALPHA (7) = 6.840 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3618	-.3457	-.3583	-.3147		.2021	
-133.800	-.3620	-.3751	-.4278	-.1893		.1972	
-115.600	-.2675	-.3313	-.4665	-.2255		.2140	
-101.400	-.3180	-.3521	-.4516	-.3104		.1945	
-50.100	-.1971	-.2653	-.2124	-.1069	.1712	.1983	
-44.800	-.0228	.0000	.0000	-.0692	.1746	.1994	
.000	.0000	.0000	.0000	-.1079	.1697	.2027	.2094
44.800	-.0262	.0000	.0000	-.0996	.1750	.2033	
50.100	-.1579	-.3268	-.2175	-.1294	.1759	.2042	
101.400	-.3226	-.3519	-.3879	-.2712		.1759	
115.600	-.2553	-.2921	-.4243	-.2521		.2018	
133.800	-.2976	-.2923	-.4446	-.1758		.2042	
149.100	-.3162	-.3291	-.4055	-.3853		.2026	
180.000	-.3094	-.3477	-.3475	-.3614	.1658	.1978	

RN/L (1) = 7.830 ALPHA (8) = 5.701 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3658	-.3408	-.4017	-.2660		.2055	
-133.800	-.3601	-.3582	-.4657	-.2088		.1791	
-115.600	-.2646	-.3302	-.4610	-.2254		.2013	
-101.400	-.3144	-.3529	-.4470	-.3087		.1791	
-50.100	-.1846	-.2845	-.2310	-.1055	.1791	.2091	
-44.800	-.0258	.0000	.0000	-.0727	.1787	.2134	
.000	.0000	.0000	.0000	-.1053	.1819	.2046	.2100
44.800	-.0341	.0000	.0000	-.0822	.1777	.2108	
50.100	-.1570	-.3222	-.1989	-.1243	.1800	.2097	
101.400	-.3188	-.3551	-.3811	-.2656		.1961	
115.600	-.2566	-.2936	-.4209	-.2471		.1929	
133.800	-.2911	-.2634	-.4401	-.1870		.1995	
149.100	-.3541	-.3955	-.3777	-.3387		.2025	
180.000	-.3629	-.3207	-.4130	-.3677	.1791	.2098	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSQ25)

RN/L (1) = 7.821 ALPHA (9) = 4.562 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3345	-.3774	-.3585	-.2752		.1985	
-133.800	-.3573	-.3744	-.4484	-.1989		.1955	
-115.600	-.2658	-.3304	-.4509	-.2212		.1921	
-101.400	-.3221	-.3526	-.4448	-.3047		.1807	
-50.100	-.1947	-.2929	-.2362	-.1214	.1758	.2098	
-44.800	-.0298	.0000	.0000	-.1002	.1705	.2096	
.000	.0000	.0000	.0000	-.1064	.1846	.2079	.2251
44.800	-.0237	.0000	.0000	-.1007	.1718	.2047	
50.100	-.1543	-.3266	-.1868	-.1312	.1759	.2079	
101.400	-.3255	-.3557	-.3848	-.2639		.1888	
115.600	-.2473	-.2831	-.4238	-.2462		.2071	
133.800	-.2859	-.2785	-.4471	-.1832		.2022	
149.100	-.3496	-.3650	-.4055	-.3534		.1965	
180.000	-.3433	-.3397	-.3642	-.3708	.1778	.2037	

RN/L (1) = 7.815 ALPHA (10) = 3.388 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3120	-.3825	-.4021	-.3097		.1882	
-133.800	-.3703	-.3556	-.4666	-.2074		.2042	
-115.600	-.2709	-.3288	-.4562	-.2261		.2033	
-101.400	-.3209	-.3511	-.4388	-.3049		.1817	
-50.100	-.1900	-.2898	-.2367	-.1253	.1680	.2036	
-44.800	-.0340	.0000	.0000	-.1047	.1759	.2099	
.000	.0000	.0000	.0000	-.1030	.1773	.2078	.2240
44.800	-.0299	.0000	.0000	-.0927	.1741	.1970	
50.100	-.1561	-.3237	-.1951	-.1301	.1868	.2087	
101.400	-.3174	-.3495	-.3781	-.2562		.1955	
115.600	-.2495	-.2744	-.4201	-.2302		.1974	
133.800	-.3184	-.2859	-.4456	-.2019		.1913	
149.100	-.3697	-.4170	-.3435	-.3490		.1987	
180.000	-.3452	-.3644	-.3864	-.3669	.1711	.2014	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSQ25)

RN/L (1) = 7.815 ALPHA (11) = 3.382 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3235	-.3806	-.4033	-.2981		.1976	
-133.800	-.3639	-.3555	-.4578	-.2026		.1989	
-115.600	-.2660	-.3332	-.4546	-.2171		.1950	
-101.400	-.3125	-.3497	-.4405	-.3030		.1665	
-50.100	-.1860	-.2834	-.2309	-.1199	.1776	.2176	
-44.800	-.0169	.0000	.0000	-.0972	.1765	.2021	
.000	.0000	.0000	.0000	-.0948	.1842	.2074	.2142
44.800	-.0146	.0000	.0000	-.0992	.1859	.2120	
50.100	-.1531	-.3215	-.1977	-.1282	.1816	.2071	
101.400	-.3175	-.3524	-.3706	-.2569		.1952	
115.600	-.2447	-.2714	-.4053	-.2366		.2084	
133.800	-.2948	-.2726	-.4399	-.1888		.2076	
149.100	-.3553	-.3551	-.3883	-.3388		.2039	
180.000	-.3460	-.3610	-.3520	-.3753	.1710	.2016	

RN/L (1) = 7.815 ALPHA (12) = 3.383 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3283	-.3700	-.3827	-.2749		.2002	
-133.800	-.3574	-.3590	-.4622	-.2043		.2042	
-115.600	-.2622	-.3290	-.4607	-.2192		.1878	
-101.400	-.3180	-.3477	-.4401	-.2918		.1736	
-50.100	-.1875	-.2878	-.2345	-.1034	.1670	.2057	
-44.800	-.0140	.0000	.0000	-.0966	.1791	.2052	
.000	.0000	.0000	.0000	-.0965	.1757	.2119	.2130
44.800	-.0167	.0000	.0000	-.0982	.1762	.2073	
50.100	-.1553	-.3205	-.2087	-.1345	.1821	.2126	
101.400	-.3175	-.3499	-.3818	-.2527		.2062	
115.600	-.2462	-.2620	-.4038	-.2370		.1992	
133.800	-.2893	-.2610	-.4494	-.1881		.2077	
149.100	-.3641	-.3452	-.3643	-.3576		.2117	
180.000	-.2997	-.3691	-.4167	-.3742	.1794	.2117	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSQ25)

RN/L (1) = 7.803 ALPHA (13) = 3.407 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3047	-.3614	-.4106	-.3284		.1878	
-133.800	-.3594	-.3701	-.4493	-.2097		.2030	
-115.600	-.2685	-.3288	-.4656	-.2252		.1877	
-101.400	-.3177	-.3553	-.4499	-.3018		.1682	
-50.100	-.1894	-.2889	-.2316	-.1110	.1775	.2181	
-44.800	-.0217	.0000	.0000	-.0997	.1718	.2092	
.000	.0000	.0000	.0000	-.1007	.1770	.2068	.2171
44.800	-.0226	.0000	.0000	-.0990	.1752	.2057	
50.100	-.1507	-.3293	-.2120	-.1368	.1741	.2036	
101.400	-.3184	-.3578	-.3673	-.2595		.1633	
115.600	-.2564	-.2703	-.4113	-.2387		.1951	
133.800	-.2889	-.2646	-.4497	-.2102		.2036	
149.100	-.3352	-.3711	-.3854	-.4235		.1898	
180.000	-.2931	-.3222	-.3531	-.3846	.1758	.1845	

RN/L (1) = 7.811 ALPHA (14) = 2.999 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3356	-.3773	-.4090	-.2997		.2111	
-133.800	-.3506	-.3569	-.4562	-.1984		.1951	
-115.600	-.2598	-.3237	-.4515	-.2110		.2021	
-101.400	-.3150	-.3524	-.4405	-.2891		.1736	
-50.100	-.1887	-.2842	-.2278	-.1065	.1872	.2093	
-44.800	-.0210	.0000	.0000	-.0881	.1776	.2066	
.000	.0000	.0000	.0000	-.0998	.1817	.2149	.2134
44.800	-.0241	.0000	.0000	-.0983	.1877	.2147	
50.100	-.1513	-.3149	-.2134	-.1323	.1856	.2105	
101.400	-.3149	-.3347	-.3639	-.2583		.1958	
115.600	-.2512	-.2630	-.4141	-.2336		.2088	
133.800	-.2914	-.2628	-.4525	-.1874		.2079	
149.100	-.3498	-.3455	-.3407	-.3839		.1834	
180.000	-.3569	-.3646	-.3679	-.3708	.1615	.1990	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSQ25)

RN/L (1) = 7.819 ALPHA (15) = 2.601 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3453	-.3881	-.4158	-.2839		.1952	
-133.800	-.3579	-.3642	-.4777	-.2089		.1944	
-115.600	-.2692	-.3284	-.4605	-.2181		.1871	
-101.400	-.3221	-.3478	-.4511	-.2992		.1931	
-50.100	-.1959	-.2786	-.2294	-.1135	.1803	.2099	
-44.800	-.0412	.0000	.0000	-.0954	.1801	.2101	
.000	.0000	.0000	.0000	-.0917	.1805	.2182	.2152
44.800	-.0277	.0000	.0000	-.0976	.1775	.2029	
50.100	-.1552	-.3225	-.2194	-.1339	.1769	.2093	
101.400	-.3717	-.3558	-.3751	-.2498		.1869	
115.600	-.2598	-.2761	-.4249	-.2332		.2103	
133.800	-.3089	-.2756	-.4452	-.2070		.2029	
149.100	-.3566	-.3922	-.3897	-.3491		.2082	
180.000	-.3500	-.3348	-.4102	-.3620	.1583	.1926	

RN/L (1) = 7.824 ALPHA (16) = 2.264 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3720	-.4290	-.4591	-.2926		.2035	
-133.800	-.3669	-.3718	-.4909	-.2097		.2061	
-115.600	-.2701	-.3288	-.4599	-.2180		.2055	
-101.400	-.3136	-.3463	-.4456	-.2973		.1920	
-50.100	-.1909	-.2812	-.2323	-.1096	.1853	.2148	
-44.800	-.0438	.0000	.0000	-.0908	.1811	.2161	
.000	.0000	.0000	.0000	-.1006	.1736	.2131	.2245
44.800	-.0328	.0000	.0000	-.1006	.1886	.2110	
50.100	-.1545	-.3251	-.2225	-.1336	.1791	.2166	
101.400	-.4339	-.3480	-.3718	-.2472		.1924	
115.600	-.2579	-.2785	-.4128	-.2268		.2114	
133.800	-.3098	-.2783	-.4709	-.1998		.2039	
149.100	-.3640	-.4392	-.4156	-.3618		.2016	
180.000	-.4788	-.4951	-.4090	-.3832	.1791	.2086	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSQ25)

RN/L (1) = 7.825 ALPHA (17) = 1.682 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3458	-.4065	-.4614	-.2910		.2128	
-133.800	-.3777	-.3707	-.4883	-.2119		.2147	
-115.600	-.2700	-.3331	-.4627	-.2130		.2078	
-101.400	-.3210	-.3496	-.4415	-.2848		.1841	
-50.100	-.1865	-.2848	-.2172	-.1099	.1935	.2158	
-44.800	-.0538	.0000	.0000	-.0937	.1890	.2097	
.000	.0000	.0000	.0000	-.0928	.1920	.2175	.2207
44.800	-.0509	.0000	.0000	-.0932	.1927	.2162	
50.100	-.1550	-.3205	-.2038	-.1340	.1890	.2119	
101.400	-.4396	-.3522	-.3639	-.2454		.2106	
115.600	-.2574	-.2822	-.4185	-.2341		.2152	
133.800	-.3052	-.2814	-.4868	-.2008		.1995	
149.100	-.3768	-.3988	-.4128	-.2793		.2107	
180.000	-.3671	-.4372	-.3709	-.3394	.1732	.2109	

RN/L (1) = 7.819 ALPHA (18) = 1.100 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3594	-.4303	-.4585	-.3156		.2088	
-133.800	-.3745	-.3803	-.4991	-.2186		.2139	
-115.600	-.2733	-.3367	-.4544	-.2117		.2051	
-101.400	-.3159	-.3528	-.4408	-.2831		.2085	
-50.100	-.1901	-.2788	-.2280	-.1096	.1887	.2201	
-44.800	-.0399	.0000	.0000	-.0912	.1846	.2229	
.000	.0000	.0000	.0000	-.0889	.1910	.2175	.2241
44.800	-.0444	.0000	.0000	-.0898	.1886	.2137	
50.100	-.1564	-.3119	-.2165	-.1311	.1902	.2171	
101.400	-.4492	-.3470	-.3583	-.2583		.2158	
115.600	-.2622	-.2780	-.4184	-.2290		.2060	
133.800	-.3164	-.2777	-.4874	-.2141		.2137	
149.100	-.3865	-.4474	-.4402	-.3091		.2160	
180.000	-.4230	-.5345	-.4451	-.3491	.1743	.2030	

ARC 12-180(OA173) OV101+TC+TRIPS+G.P. (TAILCONE) (RNSQ25)

RN/L (1) = 7.813 ALPHA (19) = .532 Q(PSF) = 468.05 PT = 10394. P = 9918.1 MACH = .25964

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3587	-.4309	-.4718	-.2434		.2172	
-133.800	-.3804	-.3795	-.4957	-.2140		.2031	
-115.600	-.2734	-.3422	-.4518	-.2155		.2078	
-101.400	-.3162	-.3558	-.4385	-.2776		.2036	
-50.100	-.1892	-.2812	-.2244	-.1089	.1886	.2115	
-44.800	-.0328	.0000	.0000	-.0927	.1903	.2080	
.000	.0000	.0000	.0000	-.0866	.1876	.2147	.2196
44.800	-.0519	.0000	.0000	-.0911	.1891	.2158	
50.100	-.1622	-.3136	-.2121	-.1331	.1906	.2175	
101.400	-.4377	-.3480	-.3620	-.2483		.2092	
115.600	-.2642	-.2809	-.4122	-.2328		.2102	
133.800	-.3113	-.2750	-.5007	-.2138		.2074	
149.100	-.3993	-.4093	-.4572	-.2427		.2141	
180.000	-.4799	-.3789	-.4120	-.3750	.1682	.2104	

ARC-12-180(OA173) OV101+GROUND PLANE (RNSP26) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = .000
MACH = .260 H/B = .600

RUN NO. 42/ 0 RN/L = 5.39 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CP1	CP2	CP3	CP4	CP5	CP6	CP7	CP8	CP9
5.406	.532	1.01700	1.01700	1.01680	1.01680	1.01700	1.01680	1.01680	1.01700	1.01700
5.412	2.195	1.01720	1.01710	1.01700	1.01700	1.01700	1.01700	1.01700	1.01700	1.01710
5.397	3.269	1.01700	1.01690	1.01710	1.01710	1.01690	1.01690	1.01690	1.01690	1.01700
5.388	4.358	1.01690	1.01690	1.01690	1.01690	1.01690	1.01690	1.01690	1.01690	1.01690
5.389	6.523	1.01720	1.01700	1.01700	1.01700	1.01710	1.01700	1.01700	1.01720	1.01700
5.391	8.738	1.01690	1.01690	1.01690	1.01690	1.01690	1.01700	1.01690	1.01690	1.01670
5.387	10.923	1.01710	1.01710	1.01710	1.01710	1.01710	1.01710	1.01710	1.01710	1.01710
5.378	3.270	1.01700	1.01700	1.01710	1.01700	1.01700	1.01690	1.01700	1.01700	1.01700
5.382	2.161	1.01690	1.01690	1.01690	1.01680	1.01690	1.01690	1.01690	1.01690	1.01690
5.374	546	1.01690	1.01700	1.01700	1.01700	1.01700	1.01710	1.01710	1.01700	1.01700
	GRADIENT	-.00003	-.00004	.00004	.00004	-.00003	.00002	.00002	-.00003	-.00003

ARC-12-180(OA173) OV101+GROUND PLANE (RNSP26) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = .000
MACH = .260 H/B = .600

RUN NO. 41/ 0 RN/L = 7.90 GRADIENT INTERVAL = -5.00/ 5.00

RN/L	ALPHA	CP1	CP2	CP3	CP4	CP5	CP6	CP7	CP8	CP9
8.025	.527	1.01660	1.01660	1.01690	1.01660	1.01680	1.01660	1.01690	1.01690	1.01660
8.025	1.117	1.01710	1.01700	1.01710	1.01710	1.01700	1.01690	1.01700	1.01700	1.01710
7.959	1.671	1.01710	1.01690	1.01720	1.01690	1.01710	1.01710	1.01690	1.01690	1.01710
7.956	2.227	1.01700	1.01700	1.01710	1.01700	1.01710	1.01690	1.01700	1.01700	1.01700
7.936	2.610	1.01680	1.01660	1.01680	1.01680	1.01680	1.01680	1.01680	1.01680	1.01680
7.952	2.989	1.01690	1.01680	1.01710	1.01690	1.01710	1.01710	1.01710	1.01710	1.01710
7.938	3.382	1.01700	1.01700	1.01700	1.01690	1.01700	1.01690	1.01690	1.01710	1.01700
7.937	4.521	1.01690	1.01700	1.01690	1.01690	1.01690	1.01690	1.01700	1.01690	1.01690
7.929	5.686	1.01690	1.01690	1.01690	1.01690	1.01700	1.01700	1.01700	1.01690	1.01700
7.921	6.867	1.01700	1.01690	1.01700	1.01680	1.01690	1.01700	1.01700	1.01700	1.01690
7.915	7.961	1.01690	1.01690	1.01710	1.01680	1.01680	1.01710	1.01690	1.01680	1.01690
7.905	9.134	1.01690	1.01700	1.01690	1.01690	1.01690	1.01680	1.01690	1.01690	1.01690
7.858	11.403	1.01670	1.01660	1.01670	1.01670	1.01670	1.01660	1.01670	1.01670	1.01670
7.862	13.098	1.01670	1.01660	1.01660	1.01660	1.01660	1.01670	1.01660	1.01650	1.01670
7.841	13.657	1.01670	1.01670	1.01660	1.01670	1.01670	1.01670	1.01670	1.01670	1.01670
7.852	14.845	1.01660	1.01670	1.01650	1.01670	1.01670	1.01660	1.01660	1.01650	1.01670
7.880	13.720	1.01660	1.01660	1.01660	1.01670	1.01660	1.01650	1.01640	1.01660	1.01660
7.881	13.176	1.01700	1.01700	1.01700	1.01700	1.01700	1.01720	1.01690	1.01700	1.01690
7.864	11.424	1.01670	1.01670	1.01670	1.01670	1.01660	1.01670	1.01670	1.01670	1.01670
7.886	9.192	1.01680	1.01680	1.01680	1.01680	1.01670	1.01680	1.01680	1.01670	1.01670
7.867	7.949	1.01680	1.01700	1.01680	1.01680	1.01680	1.01680	1.01670	1.01680	1.01700
7.878	6.873	1.01700	1.01720	1.01690	1.01680	1.01690	1.01700	1.01700	1.01690	1.01700
7.878	5.703	1.01680	1.01680	1.01680	1.01680	1.01680	1.01680	1.01680	1.01680	1.01680
7.877	4.535	1.01690	1.01680	1.01690	1.01690	1.01680	1.01690	1.01690	1.01690	1.01690
7.876	3.422	1.01670	1.01670	1.01660	1.01660	1.01670	1.01660	1.01670	1.01670	1.01670
7.880	3.019	1.01700	1.01690	1.01700	1.01700	1.01700	1.01700	1.01700	1.01700	1.01700
7.900	2.635	1.01710	1.01710	1.01720	1.01710	1.01710	1.01710	1.01710	1.01710	1.01710
7.898	2.638	1.01700	1.01700	1.01700	1.01700	1.01700	1.01700	1.01700	1.01700	1.01700
7.894	2.234	1.01700	1.01700	1.01720	1.01700	1.01690	1.01700	1.01700	1.01700	1.01700
7.896	2.235	1.01730	1.01700	1.01710	1.01710	1.01710	1.01710	1.01720	1.01710	1.01710
7.895	1.672	1.01710	1.01710	1.01710	1.01710	1.01710	1.01690	1.01710	1.01710	1.01710
7.891	1.103	1.01690	1.01700	1.01690	1.01690	1.01690	1.01700	1.01690	1.01690	1.01700
7.898	.508	1.01710	1.01710	1.01710	1.01710	1.01710	1.01720	1.01710	1.01710	1.01710
	GRADIENT	.00002	.00005	-.00003	.00002	.00001	.00004	.00001	.00001	.00003

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RN/L (1) = 1.747 ALPHA (1) = -5.263 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4537	-.5083	-.5336	-.2637		.2088	
-133.800	-.4190	-.4211	-.5458	-.2384		.2097	
-115.600	-.3178	-.3733	-.4568	-.2046		.2069	
-101.400	-.3290	-.3630	-.4193	-.2299		.2116	
-50.100	-.2231	-.3621	-.2365	-.1231	.1881	.2172	
-44.800	.0430	.0000	.0000	-.0978	.1863	.2088	
.000	.0000	.0000	.0000	-.0917	.1827	.2145	.2230
44.800	.0411	.0000	.0000	-.0908	.1827	.2136	
50.100	-.1843	-.3424	-.2171	-.1491	.1883	.2155	
101.400	-.3172	-.3462	-.3827	-.2297		.2173	
115.600	-.3013	-.3303	-.4425	-.2250		.2136	
133.800	-.3761	-.3911	-.5529	-.2494		.2127	
149.100	-.4902	-.5277	-.5305	-.2906		.2089	
180.000	-.7802	-.7999	-.4322	-.2391	.1864	.2089	

RN/L (1) = 1.745 ALPHA (2) = -4.197 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4553	-.5077	-.5274	-.2536		.2076	
-133.800	-.4141	-.4224	-.5415	-.2321		.2048	
-115.600	-.3082	-.3577	-.4562	-.2096		.2067	
-101.400	-.3251	-.3633	-.4196	-.2396		.2067	
-50.100	-.2183	-.3511	-.2368	-.1214	.1833	.2095	
-44.800	.0357	.0000	.0000	-.0914	.1851	.2086	
.000	.0000	.0000	.0000	-.0827	.1837	.2100	.2137
44.800	.0323	.0000	.0000	-.0883	.1856	.2072	
50.100	-.1865	-.3333	-.2267	-.1470	.1856	.2081	
101.400	-.3183	-.3464	-.3866	-.2342		.2034	
115.600	-.2996	-.3277	-.4380	-.2229		.2015	
133.800	-.3679	-.3875	-.5427	-.2417		.2034	
149.100	-.4876	-.5240	-.5268	-.2735		.2015	
180.000	-.7802	-.7914	-.4287	-.2314	.1856	.1959	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (1) = 1.740 ALPHA (3) = -2.146 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4578	-.5021	-.5152	-.2372		.2014	
-133.800	-.4193	-.4176	-.5387	-.2203		.1892	
-115.600	-.3039	-.3612	-.4598	-.2043		.1873	
-101.400	-.3301	-.3650	-.4269	-.2485		.1939	
-50.100	-.2062	-.3480	-.2353	-.1189	.1770	.1939	
-44.800	.0209	.0000	.0000	-.0879	.1807	.1948	
.000	.0000	.0000	.0000	-.0803	.1767	.1954	.1945
44.800	.0199	.0000	.0000	-.0887	.1748	.1945	
50.100	-.1824	-.3323	-.2283	-.1462	.1748	.1926	
101.400	-.3248	-.3482	-.3820	-.2475		.1926	
115.600	-.2948	-.3211	-.4372	-.2344		.1898	
133.800	-.3651	-.3913	-.5384	-.2325		.1908	
149.100	-.4841	-.5225	-.5206	-.2597		.1936	
180.000	-.7595	-.7623	-.4466	-.2213	.1776	.1936	

RN/L (1) = 1.739 ALPHA (4) = -.077 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4558	-.5005	-.4968	-.2162		.1882	
-133.800	-.4220	-.4189	-.5202	-.2087		.1797	
-115.600	-.3018	-.3551	-.4667	-.2162		.1863	
-101.400	-.3356	-.3645	-.4358	-.2603		.1872	
-50.100	-.2089	-.3457	-.2472	-.1149	.1675	.1826	
-44.800	.0088	.0000	.0000	-.0961	.1666	.1854	
.000	.0000	.0000	.0000	-.0821	.1683	.1815	.1871
44.800	.0116	.0000	.0000	-.0933	.1664	.1871	
50.100	-.1739	-.3228	-.2273	-.1442	.1674	.1815	
101.400	-.3219	-.3509	-.3865	-.2465		.1852	
115.600	-.2863	-.3200	-.4390	-.2352		.1899	
133.800	-.3621	-.3893	-.5270	-.2155		.1871	
149.100	-.4858	-.5130	-.5055	-.2343		.1899	
180.000	-.7200	-.7546	-.4566	-.2174	.1693	.1890	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (1) = 1.738 ALPHA (5) = 1.981 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4476	-.4797	-.4778	-.1962		.1906	
-133.800	-.4176	-.4149	-.4985	-.2009		.1866	
-115.600	-.2975	-.3558	-.4713	-.2225		.1774	
-101.400	-.3351	-.3689	-.4487	-.2779		.1709	
-50.100	-.2159	-.3502	-.2544	-.1239	.1605	.1728	
-44.800	-.0020	.0000	.0000	-.1079	.1596	.1765	
.000	.0000	.0000	.0000	-.0904	.1659	.1781	.1809
44.800	.0126	.0000	.0000	-.0979	.1602	.1809	
50.100	-.1719	-.3443	-.2375	-.1512	.1612	.1809	
101.400	-.3302	-.3668	-.4052	-.2628		.1771	
115.600	-.2862	-.3162	-.4436	-.2413		.1781	
133.800	-.3555	-.3818	-.5063	-.2000		.1837	
149.100	-.4689	-.4557	-.4782	-.2244		.1828	
180.000	-.5260	-.6515	-.4773	-.2112	.1537	.1809	

RN/L (1) = 1.736 ALPHA (6) = 4.065 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4095	-.4823	-.4476	-.2081		.1817	
-133.800	-.4151	-.3959	-.5039	-.1902		.1770	
-115.600	-.3024	-.3555	-.4786	-.2334		.1789	
-101.400	-.3437	-.3696	-.4504	-.2860		.1611	
-50.100	-.2217	-.3593	-.2466	-.1310	.1545	.1789	
-44.800	-.0142	.0000	.0000	-.1113	.1554	.1761	
.000	.0000	.0000	.0000	-.1015	.1698	.1849	.1708
44.800	-.0087	.0000	.0000	-.1090	.1708	.1877	
50.100	-.1727	-.3490	-.2421	-.1503	.1670	.1849	
101.400	-.3283	-.3640	-.4099	-.2696		.1830	
115.600	-.2759	-.3171	-.4558	-.2480		.1905	
133.800	-.3537	-.3790	-.4933	-.1860		.1839	
149.100	-.4577	-.4821	-.4427	-.1813		.1849	
180.000	-.6320	-.6611	-.4352	-.2170	.1595	.1811	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (1) = 1.735 ALPHA (7) = 6.208 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4590	-.4791	-.4481	-.1786		.1913	
-133.800	-.4214	-.4143	-.4932	-.1815		.1923	
-115.600	-.3004	-.3617	-.4838	-.2378		.1923	
-101.400	-.3342	-.3721	-.4528	-.2885		.1923	
-50.100	-.2160	-.3542	-.2416	-.1232	.1679	.1941	
-44.800	-.0162	.0000	.0000	-.1092	.1622	.1960	
.000	.0000	.0000	.0000	-.1081	.1686	.2005	.1949
44.800	-.0116	.0000	.0000	-.1043	.1686	.1959	
50.100	-.1765	-.3488	-.2430	-.1428	.1668	.1968	
101.400	-.3338	-.3694	-.4097	-.2760		.1930	
115.600	-.2851	-.3216	-.4602	-.2544		.1930	
133.800	-.3572	-.3806	-.4855	-.1832		.1874	
149.100	-.4574	-.4893	-.4415	-.1710		.1949	
180.000	-.6672	-.7056	-.4162	-.1710	.1724	.1912	

RN/L (1) = 1.733 ALPHA (8) = 8.294 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4551	-.4728	-.4314	-.1599		.2085	
-133.800	-.4184	-.4051	-.4775	-.1768		.2067	
-115.600	-.3057	-.3610	-.4907	-.2435		.2038	
-101.400	-.3414	-.3675	-.4587	-.2989		.2067	
-50.100	-.2090	-.3337	-.2416	-.1185	.1662	.2001	
-44.800	-.0155	.0000	.0000	-.1072	.1728	.1982	
.000	.0000	.0000	.0000	-.1096	.1724	.2024	.2034
44.800	-.0083	.0000	.0000	-.1049	.1724	.2024	
50.100	-.1678	-.3375	-.2362	-.1320	.1752	.2024	
101.400	-.3253	-.3694	-.4172	-.2775		.2043	
115.600	-.2850	-.3253	-.4669	-.2625		.1987	
133.800	-.3591	-.3881	-.4782	-.1695		.2005	
149.100	-.4613	-.4969	-.4341	-.1573		.2005	
180.000	-.7173	-.7426	-.4257	-.1583	.1799	.1987	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (1) = 1.731 ALPHA (9) = 10.437 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4554	-.4804	-.4315	-.1588		.2079	
-133.800	-.4197	-.4174	-.4692	-.1757		.2098	
-115.600	-.3069	-.3732	-.5049	-.2547		.2155	
-101.400	-.3436	-.3826	-.4701	-.3093		.2155	
-50.100	-.1997	-.3187	-.2388	-.1090	.1778	.2079	
-44.800	-.0117	.0000	.0000	-.1071	.1769	.2098	
.000	.0000	.0000	.0000	-.1100	.1800	.2092	.2129
44.800	-.0106	.0000	.0000	-.1016	.1791	.2092	
50.100	-.1729	-.3276	-.2348	-.1236	.1791	.2092	
101.400	-.3389	-.3755	-.4205	-.2966		.2120	
115.600	-.2986	-.3248	-.4796	-.2740		.2120	
133.800	-.3633	-.3774	-.4712	-.1800		.2092	
149.100	-.4646	-.4881	-.4280	-.1687		.2054	
180.000	-.7310	-.7554	-.4055	-.1612	.1819	.2017	

RN/L (1) = 1.730 ALPHA (10) = 12.465 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4441	-.4609	-.4270	-.1748		.2205	
-133.800	-.4178	-.4148	-.4515	-.1748		.2167	
-115.600	-.3058	-.3724	-.5061	-.2548		.2186	
-101.400	-.3378	-.3790	-.4703	-.3132		.2252	
-50.100	-.1901	-.3028	-.2256	-.1005	.1856	.2205	
-44.800	-.0058	.0000	.0000	-.0967	.1847	.2205	
.000	.0000	.0000	.0000	-.1020	.1908	.2247	.2237
44.800	-.0025	.0000	.0000	-.0936	.1889	.2219	
50.100	-.1668	-.3113	-.2146	-.1158	.1927	.2237	
101.400	-.3310	-.3704	-.4267	-.3030		.2200	
115.600	-.2935	-.3263	-.4821	-.2804		.2172	
133.800	-.3695	-.3836	-.4540	-.1798		.2134	
149.100	-.4596	-.4793	-.4333	-.1723		.2143	
180.000	-.6989	-.7364	-.4220	-.1685	.1927	.2134	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (1) = 1.719 ALPHA (11) = 14.586 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4492	-.4893	-.4561	-.1996		.2194	
-133.800	-.4226	-.4314	-.4570	-.1844		.2204	
-115.600	-.3048	-.3791	-.5235	-.2661		.2232	
-101.400	-.3295	-.3886	-.4855	-.3278		.2318	
-50.100	-.1832	-.2898	-.2100	-.0970	.1966	.2327	
-44.800	-.0027	.0000	.0000	-.0941	.1976	.2289	
.000	.0000	.0000	.0000	-.1002	.1939	.2253	.2376
44.800	-.0092	.0000	.0000	-.0869	.1949	.2310	
50.100	-.1798	-.3030	-.1931	-.1101	.1949	.2310	
101.400	-.3400	-.3732	-.4443	-.3323		.2243	
115.600	-.3040	-.3296	-.4983	-.3067		.2253	
133.800	-.3836	-.3988	-.4566	-.2060		.2167	
149.100	-.4746	-.4850	-.4480	-.2155		.2186	
180.000	-.7334	-.7485	-.4082	-.1965	.1873	.2148	

RN/L (1) = 1.715 ALPHA (12) = 16.756 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4487	-.4874	-.4788	-.2318		.2240	
-133.800	-.4449	-.4369	-.4721	-.2023		.2202	
-115.600	-.3095	-.3739	-.5360	-.2976		.2211	
-101.400	-.3419	-.3863	-.4931	-.3425		.2288	
-50.100	-.1875	-.2652	-.1765	-.0907	.1954	.2354	
-44.800	-.0073	.0000	.0000	-.0897	.2030	.2307	
.000	.0000	.0000	.0000	-.1044	.2024	.2310	.2348
44.800	-.0016	.0000	.0000	-.0844	.2033	.2338	
50.100	-.1700	-.2728	-.1700	-.0998	.2033	.2348	
101.400	-.3327	-.3803	-.4688	-.3353		.2233	
115.600	-.2956	-.3308	-.5126	-.3305		.2205	
133.800	-.3879	-.4051	-.4802	-.2104		.2148	
149.100	-.4783	-.4964	-.4764	-.2457		.2176	
180.000	-.7390	-.7524	-.4355	-.2009	.1862	.2167	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (1) = 1.708 ALPHA (13) = 18.827 Q(PSF) = 94.232 PT = 2126.7 P = 2030.9 MACH = .25745

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4829	-.5139	-.5129	-.2374		.2224	
-133.800	-.4531	-.4390	-.4976	-.2125		.2186	
-115.600	-.3063	-.3766	-.5581	-.3171		.2195	
-101.400	-.3447	-.4016	-.5187	-.3497		.2272	
-50.100	-.1690	-.2336	-.1606	-.0809	.1975	.2311	
-44.800	-.0087	.0000	.0000	-.0790	.2003	.2311	
.000	.0000	.0000	.0000	-.1074	.1967	.2322	.2408
44.800	-.0078	.0000	.0000	-.0777	.1957	.2293	
50.100	-.1544	-.2406	-.1505	-.0846	.1967	.2302	
101.400	-.3412	-.3910	-.4925	-.3447		.2245	
115.600	-.3048	-.3354	-.5366	-.3552		.2245	
133.800	-.3891	-.4130	-.5088	-.2257		.2206	
149.100	-.4973	-.5232	-.5060	-.2823		.2187	
180.000	-.7464	-.7694	-.4533	-.2247	.1813	.2178	

RN/L (2) = 2.337 ALPHA (1) = -5.360 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4297	-.4800	-.5141	-.2378		.2319	
-133.800	-.3991	-.3965	-.5238	-.2204		.2291	
-115.600	-.2983	-.3464	-.4326	-.1828		.2277	
-101.400	-.3004	-.3331	-.3972	-.2148		.2298	
-50.100	-.2086	-.3436	-.2100	-.1063	.2089	.2396	
-44.800	.0515	.0000	.0000	-.0757	.2082	.2340	
.000	.0000	.0000	.0000	-.0759	.2045	.2324	.2504
44.800	.0582	.0000	.0000	-.0738	.2087	.2324	
50.100	-.1634	-.3169	-.1988	-.1244	.2101	.2337	
101.400	-.2891	-.3218	-.3516	-.2086		.2351	
115.600	-.2801	-.3099	-.4086	-.2009		.2324	
133.800	-.3440	-.3690	-.5260	-.2294		.2351	
149.100	-.4614	-.4961	-.5135	-.2677		.2310	
180.000	-.7017	-.7399	-.4482	-.2162	.2018	.2337	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (2) = 2.324 ALPHA (2) = -4.335 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4359	-.4870	-.5163	-.2393		.2199	
-133.800	-.4033	-.4042	-.5267	-.2219		.2206	
-115.600	-.2982	-.3527	-.4432	-.1948		.2158	
-101.400	-.3107	-.3458	-.4042	-.2303		.2158	
-50.100	-.2147	-.3472	-.2205	-.1161	.1998	.2255	
-44.800	.0378	.0000	.0000	-.0827	.1984	.2220	
.000	.0000	.0000	.0000	-.0746	.1992	.2250	.2291
44.800	.0399	.0000	.0000	-.0732	.1992	.2222	
50.100	-.1684	-.3183	-.2135	-.1340	.1999	.2229	
101.400	-.3003	-.3273	-.3627	-.2231		.2194	
115.600	-.2843	-.3114	-.4190	-.2078		.2201	
133.800	-.3502	-.3808	-.5294	-.2258		.2215	
149.100	-.4627	-.5078	-.5127	-.2669		.2194	
180.000	-.7043	-.7383	-.4606	-.2224	.1971	.2201	

RN/L (2) = 2.317 ALPHA (3) = -2.155 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4391	-.4836	-.4947	-.2211		.2112	
-133.800	-.4043	-.4007	-.5198	-.2107		.2098	
-115.600	-.2958	-.3443	-.4508	-.2002		.2028	
-101.400	-.3174	-.3485	-.4160	-.2420		.2042	
-50.100	-.2081	-.3436	-.2288	-.1069	.1931	.2077	
-44.800	.0222	.0000	.0000	-.0833	.1938	.2126	
.000	.0000	.0000	.0000	-.0729	.1899	.2101	.2143
44.800	.0257	.0000	.0000	-.0784	.1892	.2122	
50.100	-.1687	-.3187	-.2125	-.1329	.1886	.2122	
101.400	-.3041	-.3326	-.3742	-.2318		.2059	
115.600	-.2708	-.3076	-.4249	-.2151		.2094	
133.800	-.3458	-.3680	-.5284	-.2151		.2011	
149.100	-.4638	-.4985	-.5069	-.2422		.2108	
180.000	-.6826	-.6860	-.4701	-.2325	.1872	.2115	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (2) = 2.312 ALPHA (4) = -.068 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3939	-.4419	-.4579	-.2061		.1903	
-133.800	-.3995	-.4064	-.5108	-.2089		.1980	
-115.600	-.2854	-.3480	-.4523	-.2117		.1959	
-101.400	-.3167	-.3543	-.4315	-.2562		.1806	
-50.100	-.2075	-.3432	-.2381	-.1095	.1750	.2014	
-44.800	.0130	.0000	.0000	-.0886	.1806	.2028	
.000	.0000	.0000	.0000	-.0828	.1771	.1945	.1980
44.800	.0179	.0000	.0000	-.0814	.1827	.2042	
50.100	-.1681	-.3167	-.2174	-.1414	.1785	.2007	
101.400	-.3090	-.3368	-.3798	-.2388		.1903	
115.600	-.2750	-.2979	-.4263	-.2298		.2007	
133.800	-.3493	-.3236	-.5027	-.2034		.1966	
149.100	-.4360	-.4881	-.4888	-.2277		.2007	
180.000	-.6089	-.5263	-.4631	-.2562	.1660	.1903	

RN/L (2) = 2.310 ALPHA (5) = 1.959 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3458	-.4288	-.4567	-.2633		.1826	
-133.800	-.3722	-.3927	-.4768	-.2118		.1819	
-115.600	-.2930	-.3502	-.4657	-.2202		.1798	
-101.400	-.3298	-.3607	-.4455	-.2932		.1680	
-50.100	-.2192	-.3628	-.2536	-.1311	.1624	.1902	
-44.800	.0082	.0000	.0000	-.1068	.1673	.1867	
.000	.0000	.0000	.0000	-.0901	.1716	.1862	.1758
44.800	.0202	.0000	.0000	-.0970	.1653	.1918	
50.100	-.1678	-.3364	-.2282	-.1504	.1612	.1806	
101.400	-.3170	-.3503	-.3898	-.2651		.1862	
115.600	-.2733	-.3087	-.4363	-.2450		.1855	
133.800	-.3357	-.3510	-.4793	-.2046		.1932	
149.100	-.4162	-.3954	-.4391	-.3465		.1779	
180.000	-.4308	-.4148	-.4197	-.3729	.1549	.1918	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (2) = 2.307 ALPHA (6) = 4.174 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3403	-.3996	-.4274	-.3188		.1658	
-133.800	-.3869	-.3836	-.4991	-.2116		.1762	
-115.600	-.2965	-.3557	-.4734	-.2401		.1692	
-101.400	-.3368	-.3703	-.4622	-.3077		.1553	
-50.100	-.2269	-.3703	-.2575	-.1364	.1525	.1769	
-44.800	.0034	.0000	.0000	-.1197	.1630	.1790	
.000	.0000	.0000	.0000	-.1122	.1628	.1837	.1809
44.800	.0099	.0000	.0000	-.1122	.1544	.1837	
50.100	-.1747	-.3559	-.2400	-.1559	.1558	.1816	
101.400	-.3316	-.3663	-.4073	-.2784		.1781	
115.600	-.2816	-.3136	-.4482	-.2471		.1753	
133.800	-.3247	-.3386	-.4538	-.2164		.1878	
149.100	-.4281	-.4531	-.4017	-.2631		.1899	
180.000	-.3358	-.5572	-.4330	-.4106	.1343	.1774	

RN/L (2) = 2.315 ALPHA (7) = 6.264 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3282	-.4390	-.4176	-.1798		.1931	
-133.800	-.3819	-.3990	-.4707	-.1812		.1883	
-115.600	-.2847	-.3438	-.4748	-.2280		.2034	
-101.400	-.3226	-.3631	-.4493	-.2915		.1814	
-50.100	-.2069	-.3507	-.2411	-.1178	.1793	.1876	
-44.800	-.0030	.0000	.0000	-.1095	.1759	.1855	
.000	.0000	.0000	.0000	-.1016	.1700	.2024	.1989
44.800	-.0006	.0000	.0000	-.0948	.1748	.1996	
50.100	-.1724	-.3367	-.2233	-.1414	.1679	.1886	
101.400	-.3168	-.3580	-.3924	-.2730		.1858	
115.600	-.2721	-.3031	-.4337	-.2517		.1968	
133.800	-.3367	-.3402	-.4667	-.1704		.1975	
149.100	-.3594	-.4364	-.4007	-.2303		.1941	
180.000	-.4749	-.5230	-.4034	-.2868	.1679	.1982	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (2) = 2.311 ALPHA (8) = 8.322 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4142	-.4311	-.4214	-.1943		.2048	
-133.800	-.3728	-.3966	-.4635	-.1694		.1903	
-115.600	-.2941	-.3545	-.4773	-.2336		.2048	
-101.400	-.3273	-.3634	-.4580	-.3034		.1723	
-50.100	-.2072	-.3337	-.2440	-.1190	.1606	.1910	
-44.800	-.0090	.0000	.0000	-.1121	.1723	.1993	
.000	.0000	.0000	.0000	-.1043	.1642	.2042	.2056
44.800	.0121	.0000	.0000	-.1001	.1711	.1994	
50.100	-.1669	-.3212	-.2275	-.1326	.1697	.2042	
101.400	-.3253	-.3618	-.3990	-.2858		.2029	
115.600	-.2805	-.3081	-.4520	-.2520		.1994	
133.800	-.3370	-.3563	-.4630	-.1713		.1987	
149.100	-.3659	-.4423	-.4265	-.2154		.1891	
180.000	-.6152	-.5332	-.4485	-.3397	.1794	.1877	

RN/L (2) = 2.308 ALPHA (9) = 10.446 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4198	-.4509	-.4018	-.1834		.2106	
-133.800	-.3935	-.3818	-.4308	-.1882		.2196	
-115.600	-.2981	-.3493	-.4792	-.2366		.2169	
-101.400	-.3299	-.3659	-.4613	-.3023		.1871	
-50.100	-.2000	-.3202	-.2318	-.1060	.1678	.2016	
-44.800	.0005	.0000	.0000	-.1053	.1795	.2010	
.000	.0000	.0000	.0000	-.1038	.1775	.2044	.2099
44.800	-.0052	.0000	.0000	-.0976	.1761	.2044	
50.100	-.1631	-.3162	-.2224	-.1191	.1816	.2099	
101.400	-.3266	-.3610	-.4093	-.2933		.2051	
115.600	-.2866	-.3183	-.4603	-.2622		.2093	
133.800	-.3335	-.3273	-.4265	-.1730		.2148	
149.100	-.4176	-.3907	-.3948	-.1868		.2148	
180.000	-.5769	-.6513	-.4631	-.2249	.1871	.1961	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (2) = 2.300 ALPHA (10) = 12.550 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3252	-.4245	-.4245	-.1792		.2008	
-133.800	-.4037	-.3974	-.4405	-.1799		.2119	
-115.600	-.3057	-.3641	-.4954	-.2466		.2161	
-101.400	-.3293	-.3662	-.4711	-.3224		.2008	
-50.100	-.1994	-.3106	-.2237	-.1112	.1793	.2029	
-44.800	.0097	.0000	.0000	-.1049	.1841	.2092	
.000	.0000	.0000	.0000	-.1104	.1841	.2092	.2133
44.800	-.0072	.0000	.0000	-.0966	.1800	.2105	
50.100	-.1673	-.3135	-.2165	-.1181	.1848	.1973	
101.400	-.3239	-.3662	-.4272	-.3057		.2064	
115.600	-.2865	-.3086	-.4757	-.2626		.2147	
133.800	-.3329	-.3585	-.4417	-.1792		.2043	
149.100	-.4383	-.4452	-.4188	-.1945		.2092	
180.000	-.4486	-.5304	-.4445	-.3536	.1744	.2105	

RN/L (2) = 2.293 ALPHA (11) = 14.680 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4231	-.4660	-.4506	-.2127		.2156	
-133.800	-.4190	-.4095	-.4318	-.1876		.2156	
-115.600	-.3074	-.3655	-.5099	-.2665		.2205	
-101.400	-.3339	-.3718	-.4785	-.3306		.2212	
-50.100	-.1958	-.2846	-.2072	-.1060	.1947	.2254	
-44.800	-.0130	.0000	.0000	-.1011	.1933	.2226	
.000	.0000	.0000	.0000	-.1123	.1969	.2102	.2353
44.800	-.0030	.0000	.0000	-.0956	.1962	.2116	
50.100	-.1624	-.3029	-.1999	-.1079	.1997	.2227	
101.400	-.3280	-.3753	-.4393	-.3157		.2192	
115.600	-.2890	-.3322	-.4894	-.2934		.2143	
133.800	-.3739	-.3412	-.4560	-.1972		.2143	
149.100	-.4456	-.4574	-.4602	-.2055		.2171	
180.000	-.5472	-.6523	-.4887	-.2362	.1927	.2102	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP(7)

RN/L (2) = 2.304 ALPHA (12) = 16.837 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4317	-.4723	-.4875	-.2270		.2235	
-133.800	-.4289	-.4281	-.4675	-.1932		.2242	
-115.600	-.3025	-.3687	-.5331	-.2678		.2228	
-101.400	-.3315	-.3776	-.4861	-.3403		.2214	
-50.100	-.1844	-.2678	-.1821	-.0916	.1993	.2262	
-44.800	-.0076	.0000	.0000	-.0895	.2020	.2269	
.000	.0000	.0000	.0000	-.1033	.2003	.2280	.2424
44.800	-.0041	.0000	.0000	-.0757	.1975	.2327	
50.100	-.1653	-.2715	-.1709	-.1015	.2024	.2314	
101.400	-.3232	-.3735	-.4534	-.3253		.2169	
115.600	-.2866	-.3301	-.4975	-.3170		.2231	
133.800	-.3776	-.3604	-.4755	-.2058		.2203	
149.100	-.4521	-.4851	-.4762	-.2417		.2217	
180.000	-.6188	-.6733	-.4920	-.2466	.1809	.2210	

RN/L (2) = 2.295 ALPHA (13) = 19.033 Q(PSF) = 127.71 PT = 2886.0 P = 2756.2 MACH = .25728

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4692	-.5045	-.5247	-.2341		.2226	
-133.800	-.4372	-.4301	-.4948	-.2035		.2261	
-115.600	-.2955	-.3689	-.5504	-.3112		.2289	
-101.400	-.3365	-.3926	-.5108	-.3481		.2289	
-50.100	-.1690	-.2341	-.1569	-.0839	.2018	.2358	
-44.800	-.0119	.0000	.0000	-.0812	.1976	.2324	
.000	.0000	.0000	.0000	-.1001	.1979	.2306	.2431
44.800	-.0065	.0000	.0000	-.0710	.2007	.2264	
50.100	-.1522	-.2416	-.1494	-.0807	.2021	.2341	
101.400	-.3235	-.3803	-.4705	-.3399		.2292	
115.600	-.2888	-.3359	-.5190	-.3413		.2229	
133.800	-.3783	-.4053	-.5024	-.2162		.2202	
149.100	-.4871	-.5121	-.5073	-.2711		.2222	
180.000	-.6702	-.7063	-.4913	-.2482	.1833	.2195	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (3) = 5.380 ALPHA (1) = -5.658 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4475	-.5035	-.5508	-.2766		.2278	
-133.800	-.4169	-.4158	-.5517	-.2566		.2269	
-115.600	-.3154	-.3719	-.4631	-.2142		.2222	
-101.400	-.3151	-.3646	-.4358	-.2545		.2201	
-50.100	-.2430	-.3955	-.2330	-.1321	.1975	.2254	
-44.800	.0318	.0000	.0000	-.1000	.1945	.2219	
.000	.0000	.0000	.0000	-.0984	.1963	.2184	.2472
44.800	.0312	.0000	.0000	-.0881	.2010	.2243	
50.100	-.1839	-.3496	-.2271	-.1533	.2031	.2243	
101.400	-.3211	-.3484	-.3696	-.2383		.2263	
115.600	-.3020	-.3343	-.4404	-.2221		.2225	
133.800	-.3623	-.3922	-.5606	-.2507		.2272	
149.100	-.4836	-.5321	-.5383	-.2925		.2269	
180.000	-.7483	-.7761	-.4718	-.2436	.1966	.2319	

RN/L (3) = 5.356 ALPHA (2) = -4.515 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4538	-.5070	-.5542	-.2745		.2209	
-133.800	-.4254	-.4181	-.5595	-.2562		.2170	
-115.600	-.3167	-.3726	-.4745	-.2204		.2132	
-101.400	-.3221	-.3705	-.4437	-.2683		.2144	
-50.100	-.2452	-.3888	-.2435	-.1324	.1949	.2265	
-44.800	.0206	.0000	.0000	-.1043	.1913	.2215	
.000	.0000	.0000	.0000	-.0979	.1940	.2182	.2348
44.800	.0212	.0000	.0000	-.0937	.1946	.2185	
50.100	-.1881	-.3506	-.2314	-.1543	.1969	.2215	
101.400	-.3255	-.3579	-.3809	-.2452		.2164	
115.600	-.2990	-.3337	-.4479	-.2305		.2188	
133.800	-.3624	-.3957	-.5608	-.2479		.2212	
149.100	-.4865	-.5431	-.5419	-.2836		.2197	
180.000	-.7387	-.7808	-.4794	-.2467	.1857	.2203	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (3) = 5.360 ALPHA (3) = -2.350 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4636	-.5124	-.5447	-.2555		.2113	
-133.800	-.4254	-.4154	-.5497	-.2376		.2092	
-115.600	-.3119	-.3625	-.4713	-.2255		.2001	
-101.400	-.3219	-.3687	-.4480	-.2778		.1972	
-50.100	-.2320	-.3828	-.2479	-.1341	.1945	.2163	
-44.800	.0046	.0000	.0000	-.1077	.1951	.2192	
.000	.0000	.0000	.0000	-.1030	.1907	.2168	.2239
44.800	.0049	.0000	.0000	-.0966	.1895	.2168	
50.100	-.1846	-.3471	-.2315	-.1564	.1913	.2195	
101.400	-.3272	-.3577	-.3835	-.2576		.2007	
115.600	-.2952	-.3280	-.4445	-.2326		.2136	
133.800	-.3673	-.3550	-.5530	-.2349		.2142	
149.100	-.4914	-.5413	-.5334	-.2623		.2148	
180.000	-.6932	-.7643	-.4979	-.2461	.1789	.2174	

RN/L (3) = 5.368 ALPHA (4) = -.110 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3958	-.4955	-.5238	-.2320		.2028	
-133.800	-.4139	-.4105	-.5335	-.2226		.2010	
-115.600	-.3055	-.3634	-.4832	-.2267		.1940	
-101.400	-.3257	-.3734	-.4601	-.2916		.1963	
-50.100	-.2328	-.3774	-.2545	-.1244	.1782	.2066	
-44.800	.0007	.0000	.0000	-.1093	.1847	.2086	
.000	.0000	.0000	.0000	-.1081	.1816	.2102	.2164
44.800	.0036	.0000	.0000	-.0987	.1880	.2114	
50.100	-.1851	-.3452	-.2343	-.1492	.1798	.2152	
101.400	-.3367	-.3656	-.3933	-.2623		.2003	
115.600	-.2900	-.3192	-.4440	-.2415		.2020	
133.800	-.3629	-.3210	-.5420	-.2205		.2090	
149.100	-.4697	-.5204	-.5143	-.2819		.2020	
180.000	-.6230	-.6945	-.4904	-.2547	.1676	.2023	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (3) = 5.358 ALPHA (5) = 2.127 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3558	-.4685	-.4459	-.2539		.1936	
-133.800	-.4056	-.4073	-.5168	-.2238		.1796	
-115.600	-.3008	-.3657	-.4890	-.2402		.1848	
-101.400	-.3301	-.3827	-.4758	-.3140		.1878	
-50.100	-.2364	-.3967	-.2557	-.1380	.1603	.2004	
-44.800	.0065	.0000	.0000	-.1207	.1673	.1936	
.000	.0000	.0000	.0000	-.1150	.1701	.1906	.1938
44.800	-.0084	.0000	.0000	-.1101	.1715	.1982	
50.100	-.1892	-.3612	-.2459	-.1709	.1733	.2081	
101.400	-.3481	-.3697	-.4053	-.2920		.1821	
115.600	-.2932	-.3154	-.4509	-.2563		.1908	
133.800	-.3478	-.3236	-.4941	-.2150		.1900	
149.100	-.4269	-.4643	-.4550	-.2818		.1812	
180.000	-.4491	-.4121	-.4786	-.3719	.1581	.1850	

RN/L (3) = 5.364 ALPHA (6) = 4.370 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3775	-.3900	-.4395	-.2811		.2007	
-133.800	-.3956	-.3943	-.5121	-.2165		.1975	
-115.600	-.2918	-.3573	-.4920	-.2466		.1759	
-101.400	-.3262	-.3780	-.4748	-.3209		.1619	
-50.100	-.2329	-.3897	-.2471	-.1392	.1593	.2042	
-44.800	-.0071	.0000	.0000	-.1209	.1660	.2045	
.000	.0000	.0000	.0000	-.1214	.1701	.1960	.2077
44.800	-.0044	.0000	.0000	-.1098	.1669	.2027	
50.100	-.1851	-.3650	-.2381	-.1659	.1698	.1981	
101.400	-.3402	-.3725	-.3976	-.2915		.1742	
115.600	-.2809	-.3117	-.4409	-.2566		.1780	
133.800	-.3321	-.3411	-.4796	-.1948		.1896	
149.100	-.4377	-.4188	-.4238	-.3233		.1902	
180.000	-.3769	-.4363	-.4255	-.3909	.1608	.1960	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (3) = 5.355 ALPHA (7) = 6.583 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4165	-.4679	-.4279	-.2701		.1981	
-133.800	-.4182	-.4100	-.4746	-.2012		.2007	
-115.600	-.2999	-.3683	-.4974	-.2520		.1899	
-101.400	-.3294	-.3840	-.4763	-.3326		.1449	
-50.100	-.2322	-.3738	-.2497	-.1364	.1726	.2027	
-44.800	-.0166	.0000	.0000	-.1270	.1732	.1989	
.000	.0000	.0000	.0000	-.1246	.1726	.1905	.2182
44.800	-.0254	.0000	.0000	-.1141	.1668	.2033	
50.100	-.1861	-.3575	-.2464	-.1539	.1703	.1945	
101.400	-.3450	-.3794	-.4138	-.2958		.1855	
115.600	-.2823	-.3269	-.4575	-.2649		.1979	
133.800	-.3339	-.3351	-.4957	-.1837		.2059	
149.100	-.4456	-.4529	-.4301	-.2044		.1943	
180.000	-.5307	-.5818	-.4686	-.3472	.1668	.2013	

RN/L (3) = 5.348 ALPHA (8) = 8.804 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3880	-.4239	-.4456	-.1849		.1848	
-133.800	-.3912	-.4228	-.4680	-.1922		.2052	
-115.600	-.3027	-.3772	-.5128	-.2568		.1991	
-101.400	-.3334	-.3845	-.4865	-.3295		.2011	
-50.100	-.2250	-.3550	-.2477	-.1320	.1646	.2026	
-44.800	-.0295	.0000	.0000	-.1247	.1666	.2029	
.000	.0000	.0000	.0000	-.1239	.1621	.2080	.2130
44.800	-.0056	.0000	.0000	-.1088	.1700	.2059	
50.100	-.1898	-.3508	-.2429	-.1426	.1723	.1948	
101.400	-.3572	-.3834	-.4106	-.3062		.1995	
115.600	-.2901	-.3245	-.4686	-.2738		.1893	
133.800	-.3455	-.3202	-.4779	-.1815		.2016	
149.100	-.3802	-.4155	-.4243	-.2113		.1966	
180.000	-.5281	-.6351	-.4505	-.3319	.1466	.1963	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (3) = 5.346 ALPHA (9) = 10.998 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4118	-.3788	-.4410	-.1815		.2166	
-133.800	-.4162	-.4092	-.4570	-.1926		.2158	
-115.600	-.3099	-.3806	-.5125	-.2685		.2105	
-101.400	-.3274	-.3861	-.4926	-.3403		.2143	
-50.100	-.2180	-.3426	-.2396	-.1196	.1699	.2096	
-44.800	-.0251	.0000	.0000	-.1164	.1726	.2087	
.000	.0000	.0000	.0000	-.1258	.1790	.2003	.2242
44.800	-.0057	.0000	.0000	-.1072	.1798	.2128	
50.100	-.1841	-.3392	-.2375	-.1345	.1895	.2047	
101.400	-.3497	-.3858	-.4202	-.3166		.2125	
115.600	-.2966	-.3322	-.4785	-.2907		.2050	
133.800	-.3441	-.3535	-.4732	-.1876		.2111	
149.100	-.4415	-.4324	-.4441	-.3666		.2070	
180.000	-.6397	-.5811	-.4887	-.2869	.1877	.2012	

RN/L (3) = 5.317 ALPHA (10) = 13.213 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4442	-.4754	-.4713	-.3269		.2134	
-133.800	-.4336	-.4253	-.4742	-.2046		.2113	
-115.600	-.3208	-.3858	-.5464	-.2844		.2092	
-101.400	-.3385	-.3896	-.5134	-.3664		.2145	
-50.100	-.2262	-.3201	-.2381	-.1229	.1748	.2207	
-44.800	-.0270	.0000	.0000	-.1206	.1724	.2151	
.000	.0000	.0000	.0000	-.1356	.1783	.2078	.2363
44.800	-.0083	.0000	.0000	-.1086	.1745	.2140	
50.100	-.1780	-.3392	-.2386	-.1246	.1842	.2145	
101.400	-.3492	-.3947	-.4453	-.3252		.2107	
115.600	-.3050	-.3462	-.5106	-.3028		.2039	
133.800	-.3845	-.3486	-.4865	-.2026		.2137	
149.100	-.4668	-.4892	-.4642	-.2345		.2086	
180.000	-.4300	-.6105	-.4933	-.2350	.1801	.1980	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (3) = 5.323 ALPHA (11) = 15.485 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4342	-.4929	-.4987	-.2271		.2235	
-133.800	-.4301	-.4329	-.4843	-.2109		.2238	
-115.600	-.3111	-.3877	-.5525	-.2896		.2159	
-101.400	-.3299	-.3951	-.5178	-.3619		.2256	
-50.100	-.2002	-.2987	-.2097	-.1084	.1935	.2297	
-44.800	-.0308	.0000	.0000	-.1122	.1894	.2232	
.000	.0000	.0000	.0000	-.1219	.1891	.2255	.2493
44.800	-.0310	.0000	.0000	-.0937	.1944	.2226	
50.100	-.1694	-.3154	-.2145	-.1197	.1909	.2209	
101.400	-.3526	-.3933	-.4482	-.3387		.2229	
115.600	-.3086	-.3432	-.5083	-.3214		.2194	
133.800	-.3936	-.3403	-.4834	-.2125		.2203	
149.100	-.4702	-.5048	-.4699	-.2336		.2238	
180.000	-.6310	-.6629	-.4807	-.2454	.1824	.2141	

RN/L (3) = 5.331 ALPHA (12) = 17.766 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4593	-.4895	-.5182	-.2530		.2252	
-133.800	-.4520	-.4374	-.4906	-.2249		.2261	
-115.600	-.3121	-.3923	-.5503	-.3066		.2223	
-101.400	-.3396	-.4034	-.5117	-.3636		.2302	
-50.100	-.1828	-.2706	-.1760	-.0953	.1957	.2325	
-44.800	-.0297	.0000	.0000	-.0932	.1971	.2273	
.000	.0000	.0000	.0000	-.1192	.2047	.2243	.2495
44.800	-.0319	.0000	.0000	-.0850	.2050	.2281	
50.100	-.1587	-.2703	-.1844	-.1067	.2103	.2237	
101.400	-.3482	-.3833	-.4601	-.3478		.2302	
115.600	-.3030	-.3430	-.5256	-.3405		.2255	
133.800	-.3801	-.3430	-.5139	-.2193		.2226	
149.100	-.4683	-.5165	-.5022	-.2551		.2237	
180.000	-.6466	-.6936	-.5139	-.2545	.1886	.2302	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (3) = 5.323 ALPHA (13) = 20.064 Q(PSF) = 302.31 PT = 6822.3 P = 6515.0 MACH = .25747

SECTION : 1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.5014	-.5535	-.5752	-.2538		.2283	
-133.800	-.4674	-.4627	-.5310	-.2415		.2271	
-115.600	-.3265	-.4050	-.5808	-.3288		.2207	
-101.400	-.3511	-.4211	-.5395	-.3631		.2315	
-50.100	-.1577	-.2388	-.1670	-.0891	.1911	.2312	
-44.800	-.0309	.0000	.0000	-.0938	.1858	.2212	
.000	.0000	.0000	.0000	-.1142	.1851	.2223	.2533
44.800	-.0296	.0000	.0000	-.0770	.1889	.2190	
50.100	-.1467	-.2420	-.1613	-.1000	.1930	.2185	
101.400	-.3590	-.4067	-.4714	-.3537		.2287	
115.600	-.3190	-.3588	-.5454	-.3704		.2223	
133.800	-.4009	-.3585	-.5457	-.2442		.2237	
149.100	-.5217	-.5463	-.5466	-.2998		.2316	
180.000	-.6981	-.7067	-.4930	-.2565	.1780	.2272	

RN/L (4) = 7.910 ALPHA (1) = -5.866 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4650	-.5132	-.5601	-.2825		.2298	
-133.800	-.4260	-.4230	-.5621	-.2612		.2330	
-115.600	-.3271	-.3795	-.4715	-.2117		.2272	
-101.400	-.3142	-.3789	-.4505	-.2586		.2310	
-50.100	-.2491	-.4024	-.2480	-.1329	.2010	.2334	
-44.800	.0345	.0000	.0000	-.1031	.1956	.2250	
.000	.0000	.0000	.0000	-.1073	.1947	.2172	.2546
44.800	.0381	.0000	.0000	-.0973	.1979	.2262	
50.100	-.1931	-.3568	-.2393	-.1569	.2016	.2290	
101.400	-.3400	-.3649	-.3789	-.2450		.2358	
115.600	-.3104	-.3492	-.4479	-.2297		.2348	
133.800	-.3741	-.3508	-.5702	-.2637		.2344	
149.100	-.5027	-.5477	-.5463	-.2996		.2350	
180.000	-.8209	-.8304	-.4408	-.2475	.1967	.2330	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (4) = 7.884 ALPHA (2) = -4.762 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4648	-.5173	-.5567	-.2739		.2287	
-133.800	-.4286	-.4230	-.5630	-.2622		.2265	
-115.600	-.3227	-.3782	-.4747	-.2228		.2200	
-101.400	-.3225	-.3810	-.4548	-.2712		.2216	
-50.100	-.2431	-.4017	-.2529	-.1367	.1996	.2311	
-44.800	.0240	.0000	.0000	-.1066	.1985	.2265	
.000	.0000	.0000	.0000	-.1052	.1927	.2250	.2463
44.800	.0295	.0000	.0000	-.0988	.1985	.2304	
50.100	-.1924	-.3575	-.2407	-.1615	.2027	.2274	
101.400	-.3416	-.3573	-.3813	-.2492		.2280	
115.600	-.3062	-.3368	-.4471	-.2334		.2320	
133.800	-.3738	-.3338	-.5726	-.2577		.2296	
149.100	-.5047	-.5549	-.5500	-.2921		.2266	
180.000	-.8137	-.8360	-.4568	-.2476	.1995	.2294	

RN/L (4) = 7.865 ALPHA (3) = -2.471 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4773	-.5291	-.5633	-.2645		.2163	
-133.800	-.4319	-.4329	-.5685	-.2544		.2163	
-115.600	-.3176	-.3820	-.4991	-.2393		.2129	
-101.400	-.3243	-.3925	-.4790	-.2949		.2147	
-50.100	-.2412	-.4009	-.2597	-.1404	.1906	.2251	
-44.800	.0003	.0000	.0000	-.1180	.1906	.2211	
.000	.0000	.0000	.0000	-.1058	.1914	.2195	.2334
44.800	.0019	.0000	.0000	-.1060	.1882	.2248	
50.100	-.1984	-.3696	-.2435	-.1660	.1890	.2214	
101.400	-.3513	-.3845	-.3948	-.2722		.2159	
115.600	-.3122	-.3398	-.4589	-.2527		.2113	
133.800	-.3791	-.3156	-.5676	-.2487		.2187	
149.100	-.5169	-.5596	-.5413	-.2795		.2161	
180.000	-.8005	-.8333	-.4780	-.2452	.1840	.2149	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (4) = 7.913 ALPHA (4) = -.152 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4594	-.5156	-.5227	-.2322		.2214	
-133.800	-.4226	-.4226	-.5364	-.2263		.2196	
-115.600	-.3039	-.3669	-.4769	-.2269		.2176	
-101.400	-.3183	-.3841	-.4636	-.2852		.2105	
-50.100	-.2302	-.3869	-.2421	-.1228	.1931	.2248	
-44.800	-.0063	.0000	.0000	-.1087	.1931	.2228	
.000	.0000	.0000	.0000	-.0986	.1951	.2277	.2325
44.800	-.0069	.0000	.0000	-.0932	.1976	.2262	
50.100	-.1903	-.3454	-.2386	-.1577	.2008	.2301	
101.400	-.3470	-.3690	-.3879	-.2728		.2133	
115.600	-.2938	-.3204	-.4476	-.2494		.2198	
133.800	-.3593	-.3160	-.5434	-.2302		.2214	
149.100	-.4907	-.5287	-.5152	-.2414		.2190	
180.000	-.7602	-.7590	-.4566	-.2240	.1923	.2162	

RN/L (4) = 7.872 ALPHA (5) = 2.222 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4377	-.5122	-.5100	-.2201		.2031	
-133.800	-.4365	-.4263	-.5368	-.2213		.2067	
-115.600	-.3081	-.3761	-.5012	-.2463		.2011	
-101.400	-.3303	-.3905	-.4880	-.3184		.2005	
-50.100	-.2417	-.4013	-.2630	-.1376	.1809	.2131	
-44.800	-.0258	.0000	.0000	-.1252	.1782	.2119	
.000	.0000	.0000	.0000	-.1192	.1823	.2109	.2188
44.800	-.0223	.0000	.0000	-.1166	.1871	.2115	
50.100	-.1916	-.3684	-.2476	-.1657	.1869	.2109	
101.400	-.3598	-.3882	-.4048	-.2866		.1979	
115.600	-.2968	-.3256	-.4674	-.2647		.2105	
133.800	-.3682	-.3248	-.5408	-.2170		.2127	
149.100	-.4972	-.5312	-.4992	-.2184		.2069	
180.000	-.7193	-.7569	-.4556	-.2248	.1708	.2117	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (4) = 7.877 ALPHA (6) = 4.560 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4723	-.5066	-.4564	-.2023		.2026	
-133.800	-.4334	-.4288	-.5241	-.2111		.2046	
-115.600	-.3122	-.3754	-.5118	-.2580		.1988	
-101.400	-.3358	-.3934	-.4940	-.3346		.2000	
-50.100	-.2408	-.4071	-.2622	-.1414	.1740	.2093	
-44.800	-.0353	.0000	.0000	-.1293	.1718	.2048	
.000	.0000	.0000	.0000	-.1275	.1700	.2061	.2200
44.800	-.0336	.0000	.0000	-.1234	.1702	.2081	
50.100	-.1957	-.3694	-.2521	-.1655	.1793	.2069	
101.400	-.3660	-.3927	-.4065	-.2937		.1940	
115.600	-.2977	-.3321	-.4718	-.2747		.2046	
133.800	-.3708	-.3300	-.5296	-.2064		.2081	
149.100	-.4826	-.4899	-.4690	-.1989		.2069	
180.000	-.6471	-.7061	-.4395	-.2138	.1647	.2054	

RN/L (4) = 7.893 ALPHA (7) = 6.844 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4573	-.4871	-.4529	-.1762		.2152	
-133.800	-.4287	-.4183	-.4997	-.1949		.2112	
-115.600	-.3092	-.3724	-.5073	-.2519		.2094	
-101.400	-.3267	-.3800	-.4820	-.3252		.2132	
-50.100	-.2333	-.3754	-.2430	-.1248	.1759	.2146	
-44.800	-.0347	.0000	.0000	-.1200	.1854	.2081	
.000	.0000	.0000	.0000	-.1241	.1853	.2110	.2323
44.800	-.0324	.0000	.0000	-.1100	.1887	.2139	
50.100	-.1823	-.3532	-.2441	-.1476	.1912	.2161	
101.400	-.3544	-.3782	-.4089	-.2948		.2122	
115.600	-.2877	-.3229	-.4729	-.2757		.2210	
133.800	-.3562	-.3196	-.5020	-.1884		.2202	
149.100	-.4693	-.5046	-.4550	-.1689		.2145	
180.000	-.6731	-.7112	-.4541	-.1757	.1778	.2201	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (4) = 7.876 ALPHA (8) = 9.109 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4525	-.4819	-.4467	-.1685		.2275	
-133.800	-.4275	-.4160	-.4884	-.1927		.2178	
-115.600	-.3092	-.3799	-.5205	-.2649		.2222	
-101.400	-.3273	-.3843	-.4900	-.3378		.2242	
-50.100	-.2213	-.3601	-.2406	-.1210	.1817	.2206	
-44.800	-.0345	.0000	.0000	-.1218	.1852	.2145	
.000	.0000	.0000	.0000	-.1249	.1864	.2192	.2390
44.800	-.0320	.0000	.0000	-.1086	.1880	.2174	
50.100	-.1836	-.3546	-.2440	-.1441	.1887	.2135	
101.400	-.3591	-.3903	-.4088	-.3064		.2186	
115.600	-.2900	-.3301	-.4804	-.2834		.2228	
133.800	-.3548	-.3327	-.4945	-.1812		.2192	
149.100	-.4677	-.4993	-.4409	-.1638		.2224	
180.000	-.7240	-.7403	-.4350	-.1698	.1965	.2243	

RN/L (4) = 7.873 ALPHA (9) = 11.520 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4728	-.5013	-.4547	-.1837		.2204	
-133.800	-.4423	-.4335	-.4832	-.1948		.2216	
-115.600	-.3197	-.3951	-.5401	-.2897		.2222	
-101.400	-.3359	-.3931	-.5124	-.3562		.2263	
-50.100	-.2274	-.3471	-.2457	-.1256	.1907	.2261	
-44.800	-.0364	.0000	.0000	-.1205	.1884	.2194	
.000	.0000	.0000	.0000	-.1376	.1872	.2276	.2456
44.800	-.0358	.0000	.0000	-.1128	.1884	.2250	
50.100	-.1916	-.3431	-.2425	-.1336	.1985	.2173	
101.400	-.3713	-.3961	-.4255	-.3301		.2248	
115.600	-.3076	-.3457	-.4987	-.3059		.2264	
133.800	-.3773	-.3421	-.4958	-.2007		.2276	
149.100	-.4769	-.5099	-.4537	-.1825		.2244	
180.000	-.7223	-.7378	-.4422	-.1925	.1953	.2258	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (4) = 7.862 ALPHA (10) = 13.850 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4736	-.5013	-.4815	-.1969		.2257	
-133.800	-.4481	-.4351	-.4902	-.1987		.2253	
-115.600	-.3181	-.3926	-.5521	-.2939		.2223	
-101.400	-.3277	-.3938	-.5171	-.3643		.2237	
-50.100	-.2216	-.3260	-.2239	-.1137	.1970	.2338	
-44.800	-.0366	.0000	.0000	-.1182	.1952	.2229	
.000	.0000	.0000	.0000	-.1348	.1919	.2305	.2533
44.800	-.0320	.0000	.0000	-.1082	.1986	.2224	
50.100	-.1807	-.3354	-.2214	-.1267	.2028	.2226	
101.400	-.3608	-.3976	-.4411	-.3385		.2269	
115.600	-.3106	-.3439	-.5148	-.3198		.2285	
133.800	-.3896	-.3513	-.4917	-.2012		.2277	
149.100	-.4862	-.5138	-.4655	-.2014		.2329	
180.000	-.7293	-.7579	-.4606	-.2098	.1947	.2285	

RN/L (4) = 7.869 ALPHA (11) = 16.291 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4653	-.5049	-.5022	-.2337		.2299	
-133.800	-.4493	-.4415	-.4903	-.2224		.2331	
-115.600	-.3130	-.3902	-.5603	-.3092		.2293	
-101.400	-.3305	-.4027	-.5310	-.3717		.2355	
-50.100	-.1984	-.2973	-.2056	-.1002	.1997	.2394	
-44.800	-.0368	.0000	.0000	-.1035	.2017	.2284	
.000	.0000	.0000	.0000	-.1212	.2033	.2365	.2600
44.800	-.0319	.0000	.0000	-.0901	.2055	.2369	
50.100	-.1745	-.3027	-.2022	-.1185	.2073	.2316	
101.400	-.3573	-.4039	-.4522	-.3481		.2371	
115.600	-.3096	-.3500	-.5212	-.3353		.2324	
133.800	-.4005	-.3433	-.4966	-.2181		.2298	
149.100	-.4857	-.5103	-.4798	-.2297		.2343	
180.000	-.7591	-.7619	-.4594	-.2225	.1933	.2353	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSP27)

RN/L (4) = 7.843 ALPHA (12) = 18.715 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4816	-.5260	-.5670	-.2801		.2328	
-133.800	-.4782	-.4603	-.5423	-.2524		.2282	
-115.600	-.3303	-.3967	-.5984	-.3414		.2173	
-101.400	-.3560	-.4205	-.5586	-.3903		.2264	
-50.100	-.1906	-.2655	-.1850	-.1074	.1853	.2276	
-44.800	-.0563	.0000	.0000	-.1143	.1861	.2177	
.000	.0000	.0000	.0000	-.1237	.1939	.2159	.2487
44.800	-.0350	.0000	.0000	-.0879	.1953	.2138	
50.100	-.1590	-.2873	-.1917	-.1081	.1973	.2152	
101.400	-.3622	-.4415	-.4928	-.3628		.2193	
115.600	-.3220	-.3815	-.5632	-.3578		.2221	
133.800	-.4062	-.3758	-.5509	-.2361		.2235	
149.100	-.5142	-.5573	-.5252	-.2786		.2157	
180.000	-.7782	-.7997	-.4694	-.2341	.1754	.2221	

RN/L (4) = 7.863 ALPHA (13) = 21.182 Q(PSF) = 446.14 PT = 10085. P = 9631.6 MACH = .25723

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.5440	-.5872	-.6124	-.2723		.2319	
-133.800	-.4835	-.4789	-.5683	-.2601		.2311	
-115.600	-.3381	-.4196	-.6133	-.3564		.2338	
-101.400	-.3520	-.4352	-.5604	-.3797		.2311	
-50.100	-.1497	-.2273	-.1472	-.0923	.1811	.2289	
-44.800	-.0411	.0000	.0000	-.0934	.1815	.2141	
.000	.0000	.0000	.0000	-.1182	.1834	.2096	.2548
44.800	-.0402	.0000	.0000	-.0772	.1836	.2100	
50.100	-.1436	-.2344	-.1537	-.0935	.1931	.2142	
101.400	-.3744	-.4319	-.4774	-.3604		.2272	
115.600	-.3430	-.3869	-.5695	-.3791		.2308	
133.800	-.4263	-.3950	-.5766	-.2602		.2323	
149.100	-.5548	-.5820	-.5614	-.3244		.2363	
180.000	-.7948	-.7990	-.4614	-.2614	.1810	.2280	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RN/L (1) = 1.708 ALPHA (1) = 18.827 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4829	-.5139	-.5129	-.2374		.2224	
-133.800	-.4531	-.4390	-.4976	-.2125		.2186	
-115.600	-.3063	-.3766	-.5581	-.3171		.2195	
-101.400	-.3447	-.4016	-.5187	-.3497		.2272	
-50.100	-.1690	-.2336	-.1606	-.0809	.1975	.2311	
-44.800	-.0087	.0000	.0000	-.0790	.2003	.2311	
.000	.0000	.0000	.0000	-.1074	.1967	.2322	.2408
44.800	-.0078	.0000	.0000	-.0777	.1957	.2293	
50.100	-.1544	-.2406	-.1505	-.0846	.1967	.2302	
101.400	-.3412	-.3910	-.4925	-.3447		.2245	
115.600	-.3048	-.3354	-.5366	-.3552		.2245	
133.800	-.3891	-.4130	-.5088	-.2257		.2206	
149.100	-.4973	-.5232	-.5060	-.2823		.2187	
180.000	-.7464	-.7694	-.4533	-.2247	.1813	.2178	

RN/L (1) = 1.720 ALPHA (2) = 16.707 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4551	-.4910	-.4816	-.2262		.2249	
-133.800	-.4409	-.4466	-.4797	-.2007		.2212	
-115.600	-.3075	-.3851	-.5430	-.2915		.2174	
-101.400	-.3425	-.3993	-.5052	-.3388		.2297	
-50.100	-.1865	-.2763	-.1922	-.0957	.2032	.2325	
-44.800	-.0106	.0000	.0000	-.0872	.2004	.2287	
.000	.0000	.0000	.0000	-.1045	.1975	.2335	.2382
44.800	-.0139	.0000	.0000	-.0828	.1975	.2278	
50.100	-.1809	-.2781	-.1725	-.1032	.1985	.2287	
101.400	-.3423	-.3791	-.4688	-.3529		.2240	
115.600	-.2998	-.3338	-.5159	-.3416		.2183	
133.800	-.3923	-.4093	-.4829	-.2205		.2164	
149.100	-.4829	-.5027	-.4725	-.2451		.2155	
180.000	-.7434	-.7453	-.4395	-.2054	.1862	.2202	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (1) = 1.718 ALPHA (3) = 14.594 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4577	-.4896	-.4602	-.2114		.2143	
-133.800	-.4350	-.4290	-.4621	-.1991		.2068	
-115.600	-.3167	-.3836	-.5312	-.2805		.2124	
-101.400	-.3489	-.3950	-.4943	-.3335		.2200	
-50.100	-.2022	-.2937	-.2161	-.1092	.1897	.2181	
-44.800	-.0177	.0000	.0000	-.1026	.1907	.2209	
.000	.0000	.0000	.0000	-.1083	.1896	.2199	.2274
44.800	-.0101	.0000	.0000	-.0970	.1905	.2236	
50.100	-.1829	-.3066	-.2056	-.1151	.1943	.2189	
101.400	-.3435	-.3803	-.4587	-.3328		.2132	
115.600	-.3047	-.3397	-.5106	-.3138		.2113	
133.800	-.3860	-.4030	-.4766	-.2031		.2085	
149.100	-.4776	-.4993	-.4634	-.2173		.2094	
180.000	-.7449	-.7647	-.4407	-.1956	.1848	.2104	

RN/L (1) = 1.724 ALPHA (4) = 12.479 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4522	-.4775	-.4353	-.1801		.2101	
-133.800	-.4221	-.4231	-.4578	-.1820		.2129	
-115.600	-.3105	-.3781	-.5113	-.2627		.2148	
-101.400	-.3396	-.3818	-.4756	-.3265		.2148	
-50.100	-.1980	-.3068	-.2270	-.1070	.1791	.2129	
-44.800	-.0141	.0000	.0000	-.1032	.1819	.2101	
.000	.0000	.0000	.0000	-.1099	.1866	.2157	.2148
44.800	-.0088	.0000	.0000	-.0958	.1847	.2157	
50.100	-.1716	-.3167	-.2278	-.1220	.1913	.2101	
101.400	-.3410	-.3765	-.4383	-.3087		.2138	
115.600	-.2970	-.3382	-.4898	-.2805		.2101	
133.800	-.3765	-.3924	-.4579	-.1886		.2091	
149.100	-.4617	-.4916	-.4336	-.1801		.2063	
180.000	-.7143	-.7460	-.4289	-.1708	.1894	.2091	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (1) = 1.726 ALPHA (5) = 10.396 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4558	-.4785	-.4224	-.1652		.2051	
-133.800	-.4212	-.4130	-.4673	-.1793		.2107	
-115.600	-.3118	-.3719	-.5009	-.2531		.2098	
-101.400	-.3436	-.3756	-.4645	-.3018		.2051	
-50.100	-.2005	-.3186	-.2316	-.1138	.1761	.2041	
-44.800	-.0117	.0000	.0000	-.1016	.1733	.2060	
.000	.0000	.0000	.0000	-.1120	.1837	.2062	.2099
44.800	-.0075	.0000	.0000	-.1082	.1828	.2118	
50.100	-.1689	-.3247	-.2314	-.1229	.1819	.2099	
101.400	-.3396	-.3722	-.4273	-.2950		.2146	
115.600	-.2911	-.3228	-.4814	-.2725		.2052	
133.800	-.3601	-.3806	-.4683	-.1800		.2090	
149.100	-.4599	-.4860	-.4357	-.1594		.1996	
180.000	-.7267	-.7491	-.4235	-.1585	.1856	.1987	

RN/L (1) = 1.723 ALPHA (6) = 8.207 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4656	-.4877	-.4389	-.1660		.2017	
-133.800	-.4234	-.4192	-.4867	-.1763		.1951	
-115.600	-.3109	-.3704	-.4952	-.2476		.1989	
-101.400	-.3455	-.3817	-.4642	-.3010		.1998	
-50.100	-.2199	-.3442	-.2532	-.1256	.1679	.1942	
-44.800	-.0183	.0000	.0000	-.1153	.1717	.1951	
.000	.0000	.0000	.0000	-.1137	.1720	.1964	.1992
44.800	-.0136	.0000	.0000	-.1109	.1729	.1936	
50.100	-.1764	-.3411	-.2401	-.1449	.1701	.1964	
101.400	-.3383	-.3739	-.4169	-.2921		.1973	
115.600	-.2934	-.3299	-.4740	-.2696		.2039	
133.800	-.3617	-.3888	-.4815	-.1805		.1964	
149.100	-.4749	-.4909	-.4366	-.1702		.1945	
180.000	-.7360	-.7463	-.4253	-.1693	.1814	.1964	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (1) = 1.722 ALPHA (7) = 6.206 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4594	-.4815	-.4468	-.1806		.1926	
-133.800	-.4229	-.4225	-.5012	-.1853		.1888	
-115.600	-.3066	-.3718	-.4872	-.2434		.1926	
-101.400	-.3423	-.3831	-.4609	-.2950		.1945	
-50.100	-.2148	-.3596	-.2481	-.1309	.1720	.1917	
-44.800	-.0152	.0000	.0000	-.1140	.1692	.1917	
.000	.0000	.0000	.0000	-.1047	.1667	.1929	.1948
44.800	-.0196	.0000	.0000	-.1094	.1639	.1901	
50.100	-.1842	-.3507	-.2366	-.1501	.1685	.1845	
101.400	-.3413	-.3713	-.4012	-.2870		.1854	
115.600	-.2927	-.3226	-.4601	-.2645		.1845	
133.800	-.3628	-.3862	-.4957	-.1876		.1863	
149.100	-.4751	-.4929	-.4554	-.1773		.1948	
180.000	-.6724	-.7239	-.4283	-.1839	.1639	.1910	

RN/L (1) = 1.722 ALPHA (8) = 4.096 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4023	-.4784	-.4512	-.1820		.1829	
-133.800	-.4135	-.4137	-.5000	-.1829		.1838	
-115.600	-.2973	-.3546	-.4681	-.2261		.1848	
-101.400	-.3329	-.3743	-.4512	-.2842		.1838	
-50.100	-.2167	-.3555	-.2505	-.1191	.1716	.1866	
-44.800	-.0039	.0000	.0000	-.1107	.1707	.1838	
.000	.0000	.0000	.0000	-.0989	.1563	.1863	.1835
44.800	.0002	.0000	.0000	-.1101	.1648	.1779	
50.100	-.1784	-.3477	-.2326	-.1548	.1591	.1882	
101.400	-.3262	-.3608	-.4038	-.2711		.1826	
115.600	-.2850	-.3103	-.4468	-.2401		.1854	
133.800	-.3355	-.3720	-.4786	-.2017		.1845	
149.100	-.4412	-.4374	-.4328	-.2195		.1854	
180.000	-.6460	-.6011	-.4459	-.2186	.1629	.1910	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (1) = 1.721 ALPHA (9) = 1.950 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4260	-.4708	-.4689	-.1993		.1882	
-133.800	-.4138	-.4100	-.5017	-.1975		.1901	
-115.600	-.2969	-.3491	-.4615	-.2237		.1845	
-101.400	-.3343	-.3660	-.4390	-.2723		.1742	
-50.100	-.2127	-.3463	-.2499	-.1235	.1676	.1789	
-44.800	.0006	.0000	.0000	-.1057	.1648	.1808	
.000	.0000	.0000	.0000	-.0888	.1663	.1850	.1747
44.800	.0046	.0000	.0000	-.0916	.1663	.1803	
50.100	-.1709	-.3362	-.2354	-.1528	.1653	.1784	
101.400	-.3213	-.3567	-.3969	-.2595		.1691	
115.600	-.2811	-.3175	-.4445	-.2398		.1784	
133.800	-.3539	-.3754	-.5080	-.1986		.1859	
149.100	-.4669	-.4884	-.4716	-.2014		.1803	
180.000	-.6499	-.6686	-.4594	-.2136	.1616	.1840	

RN/L (1) = 1.720 ALPHA (10) = -.059 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4509	-.4977	-.4958	-.2188		.1884	
-133.800	-.4134	-.4106	-.5248	-.2085		.1875	
-115.600	-.2964	-.3470	-.4574	-.2178		.1837	
-101.400	-.3255	-.3620	-.4294	-.2553		.1875	
-50.100	-.2038	-.3358	-.2403	-.1111	.1697	.1893	
-44.800	.0152	.0000	.0000	-.0924	.1734	.1809	
.000	.0000	.0000	.0000	-.0768	.1678	.1856	.1884
44.800	.0138	.0000	.0000	-.0871	.1678	.1856	
50.100	-.1646	-.3252	-.2253	-.1373	.1669	.1875	
101.400	-.3131	-.3495	-.3841	-.2412		.1865	
115.600	-.2804	-.3131	-.4354	-.2291		.1903	
133.800	-.3579	-.3850	-.5186	-.2113		.1856	
149.100	-.4747	-.5074	-.4980	-.2291		.1903	
180.000	-.6829	-.7203	-.4429	-.2281	.1781	.1865	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (1) = 1.716 ALPHA (11) = -2.154 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4624	-.5028	-.5131	-.2354		.1939	
-133.800	-.4238	-.4199	-.5319	-.2203		.1901	
-115.600	-.3090	-.3568	-.4529	-.2128		.1863	
-101.400	-.3335	-.3681	-.4256	-.2476		.1892	
-50.100	-.2178	-.3456	-.2326	-.1224	.1741	.1920	
-44.800	.0146	.0000	.0000	-.0923	.1713	.1939	
.000	.0000	.0000	.0000	-.0840	.1765	.1990	.1943
44.800	.0240	.0000	.0000	-.0915	.1765	.1934	
50.100	-.1760	-.3281	-.2305	-.1500	.1812	.1953	
101.400	-.3225	-.3488	-.3939	-.2460		.1896	
115.600	-.2868	-.3225	-.4446	-.2244		.1906	
133.800	-.3620	-.3911	-.5413	-.2319		.1915	
149.100	-.4840	-.5216	-.5197	-.2563		.1896	
180.000	-.7395	-.7770	-.4615	-.2187	.1783	.1859	

RN/L (1) = 1.716 ALPHA (12) = -4.254 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4536	-.5036	-.5205	-.2501		.2054	
-133.800	-.4151	-.4172	-.5374	-.2294		.2091	
-115.600	-.3118	-.3618	-.4501	-.2031		.1978	
-101.400	-.3297	-.3590	-.4191	-.2323		.2035	
-50.100	-.2161	-.3478	-.2332	-.1186	.1819	.2063	
-44.800	.0356	.0000	.0000	-.0904	.1847	.2091	
.000	.0000	.0000	.0000	-.0843	.1811	.2158	.2121
44.800	.0383	.0000	.0000	-.0815	.1830	.2149	
50.100	-.1817	-.3277	-.2238	-.1466	.1877	.2130	
101.400	-.3165	-.3446	-.3839	-.2311		.2102	
115.600	-.3025	-.3240	-.4354	-.2226		.2064	
133.800	-.3680	-.3877	-.5468	-.2405		.2055	
149.100	-.4907	-.5178	-.5225	-.2818		.2083	
180.000	-.7800	-.7903	-.4364	-.2292	.1867	.2008	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (1) = 1.713 ALPHA (13) = -5.300 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4623	-.5044	-.5355	-.2718		.2076	
-133.800	-.4247	-.4216	-.5515	-.2435		.2067	
-115.600	-.3267	-.3669	-.4649	-.2106		.1991	
-101.400	-.3370	-.3660	-.4197	-.2351		.2076	
-50.100	-.2297	-.3537	-.2370	-.1343	.1794	.2114	
-44.800	.0407	.0000	.0000	-.1032	.1794	.2057	
.000	.0000	.0000	.0000	-.0932	.1839	.2084	.2178
44.800	.0469	.0000	.0000	-.0913	.1830	.2075	
50.100	-.1834	-.3431	-.2247	-.1515	.1811	.2122	
101.400	-.3131	-.3488	-.3835	-.2306		.2084	
115.600	-.3027	-.3356	-.4428	-.2193		.2103	
133.800	-.3713	-.3986	-.5565	-.2513		.2084	
149.100	-.4841	-.5292	-.5348	-.2909		.2075	
180.000	-.7773	-.7980	-.4352	-.2381	.1839	.2018	

RN/L (1) = 1.713 ALPHA (14) = -.046 Q(PSF) = 94.412 PT = 2126.8 P = 2030.8 MACH = .25771

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4575	-.5032	-.5013	-.2207		.1927	
-133.800	-.4161	-.4156	-.5268	-.2104		.1880	
-115.600	-.3022	-.3582	-.4646	-.2160		.1842	
-101.400	-.3294	-.3742	-.4354	-.2574		.1880	
-50.100	-.2071	-.3488	-.2509	-.1218	.1691	.1795	
-44.800	.0085	.0000	.0000	-.1002	.1673	.1804	
.000	.0000	.0000	.0000	-.0820	.1647	.1826	.1883
44.800	.0025	.0000	.0000	-.0886	.1610	.1826	
50.100	-.1787	-.3346	-.2332	-.1497	.1629	.1807	
101.400	-.3290	-.3581	-.3938	-.2523		.1873	
115.600	-.2933	-.3187	-.4445	-.2372		.1836	
133.800	-.3694	-.3816	-.5290	-.2203		.1864	
149.100	-.4877	-.5102	-.4999	-.2363		.1845	
180.000	-.7074	-.7393	-.4520	-.2146	.1685	.1864	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (2) = 2.295 ALPHA (1) = 19.033 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4692	-.5045	-.5247	-.2341		.2226	
-133.800	-.4372	-.4301	-.4948	-.2035		.2261	
-115.600	-.2955	-.3689	-.5504	-.3112		.2289	
-101.400	-.3365	-.3926	-.5108	-.3481		.2289	
-50.100	-.1690	-.2341	-.1569	-.0839	.2018	.2358	
-44.800	-.0119	.0000	.0000	-.0812	.1976	.2324	
.000	.0000	.0000	.0000	-.1001	.1979	.2306	.2431
44.800	-.0065	.0000	.0000	-.0710	.2007	.2264	
50.100	-.1522	-.2416	-.1494	-.0807	.2021	.2341	
101.400	-.3235	-.3803	-.4705	-.3399		.2292	
115.600	-.2888	-.3359	-.5190	-.3413		.2229	
133.800	-.3783	-.4053	-.5024	-.2162		.2202	
149.100	-.4871	-.5121	-.5073	-.2711		.2222	
180.000	-.6702	-.7063	-.4913	-.2482	.1833	.2195	

RN/L (2) = 2.299 ALPHA (2) = 16.889 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4388	-.4873	-.4956	-.2396		.2162	
-133.800	-.4430	-.4257	-.4741	-.2030		.2128	
-115.600	-.3088	-.3780	-.5412	-.2915		.2176	
-101.400	-.3413	-.3849	-.5039	-.3468		.2218	
-50.100	-.1954	-.2687	-.1905	-.0999	.1989	.2273	
-44.800	-.0169	.0000	.0000	-.1020	.1941	.2204	
.000	.0000	.0000	.0000	-.1137	.1948	.2321	.2321
44.800	-.0095	.0000	.0000	-.0902	.1989	.2252	
50.100	-.1889	-.2820	-.1799	-.0964	.1982	.2280	
101.400	-.3324	-.3855	-.4649	-.3351		.2190	
115.600	-.2993	-.3393	-.5160	-.3247		.2183	
133.800	-.3924	-.3724	-.4877	-.2140		.2162	
149.100	-.4642	-.4959	-.4890	-.2493		.2176	
180.000	-.6567	-.6898	-.5022	-.2811	.1865	.2162	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (2) = 2.313 ALPHA (3) = 14.758 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4129	-.4596	-.4637	-.2048		.2147	
-133.800	-.4054	-.4166	-.4480	-.1856		.2161	
-115.600	-.2988	-.3722	-.5184	-.2635		.2147	
-101.400	-.3282	-.3756	-.4815	-.3216		.2134	
-50.100	-.1916	-.2881	-.2061	-.0941	.1908	.2263	
-44.800	-.0058	.0000	.0000	-.0941	.1894	.2168	
.000	.0000	.0000	.0000	-.1131	.1951	.2176	.2272
44.800	-.0075	.0000	.0000	-.0872	.1937	.2292	
50.100	-.1683	-.3026	-.1990	-.1110	.1964	.2251	
101.400	-.3258	-.3632	-.4396	-.3200		.2115	
115.600	-.2896	-.3237	-.4812	-.2981		.2149	
133.800	-.3680	-.3319	-.4546	-.1977		.2156	
149.100	-.4471	-.4655	-.4457	-.2093		.2142	
180.000	-.5548	-.6331	-.4832	-.2271	.1923	.2142	

RN/L (2) = 2.317 ALPHA (4) = 12.587 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3663	-.4433	-.4140	-.1658		.2178	
-133.800	-.3942	-.3875	-.4290	-.1665		.2232	
-115.600	-.2861	-.3678	-.4909	-.2406		.2178	
-101.400	-.3221	-.3678	-.4596	-.3072		.2076	
-50.100	-.1923	-.3059	-.2175	-.0971	.1838	.2116	
-44.800	.0170	.0000	.0000	-.0930	.1810	.2191	
.000	.0000	.0000	.0000	-.1007	.1815	.2216	.2284
44.800	-.0036	.0000	.0000	-.0864	.1897	.2203	
50.100	-.1678	-.2995	-.2065	-.1203	.1904	.2230	
101.400	-.3286	-.3537	-.4080	-.3078		.2169	
115.600	-.2771	-.3124	-.4562	-.2650		.2135	
133.800	-.3510	-.3449	-.4209	-.1814		.2175	
149.100	-.3978	-.3856	-.4128	-.2188		.2148	
180.000	-.4603	-.5587	-.4562	-.2283	.1931	.2162	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (2) = 2.313 ALPHA (5) = 10.508 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3674	-.4031	-.4202	-.1624		.2011	
-133.800	-.3920	-.4052	-.4379	-.1842		.1991	
-115.600	-.2979	-.3649	-.4795	-.2408		.1957	
-101.400	-.3272	-.3690	-.4618	-.3111		.1718	
-50.100	-.2010	-.3220	-.2299	-.1126	.1752	.2038	
-44.800	-.0122	.0000	.0000	-.1065	.1622	.2025	
.000	.0000	.0000	.0000	-.1080	.1760	.2054	.2197
44.800	.0111	.0000	.0000	-.0978	.1747	.1965	
50.100	-.1631	-.3216	-.2264	-.1267	.1706	.2074	
101.400	-.3298	-.3645	-.4094	-.2944		.1992	
115.600	-.2808	-.3162	-.4618	-.2644		.2095	
133.800	-.3386	-.3162	-.4509	-.1778		.1938	
149.100	-.3774	-.4142	-.3870	-.1622		.1985	
180.000	-.5788	-.5217	-.4625	-.2038	.1733	.2020	

RN/L (2) = 2.305 ALPHA (6) = 8.383 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3666	-.4413	-.4160	-.1641		.1975	
-133.800	-.3961	-.4015	-.4708	-.1669		.2043	
-115.600	-.2890	-.3576	-.4805	-.2376		.1968	
-101.400	-.3261	-.3707	-.4489	-.2986		.1858	
-50.100	-.2101	-.3316	-.2314	-.1147	.1631	.1988	
-44.800	.0026	.0000	.0000	-.1051	.1590	.2050	
.000	.0000	.0000	.0000	-.1035	.1707	.2002	.1913
44.800	.0006	.0000	.0000	-.0994	.1769	.1947	
50.100	-.1726	-.3226	-.2274	-.1374	.1734	.2023	
101.400	-.3260	-.3575	-.4061	-.2897		.1755	
115.600	-.2726	-.3130	-.4376	-.2506		.1927	
133.800	-.3226	-.3376	-.4581	-.1916		.2050	
149.100	-.4225	-.4417	-.4040	-.2238		.2071	
180.000	-.5670	-.6286	-.4397	-.2403	.1851	.2029	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (2) = 2.301 ALPHA (7) = 6.211 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3677	-.4014	-.4131	-.2017		.1936	
-133.800	-.3939	-.4014	-.4855	-.1824		.1909	
-115.600	-.2878	-.3553	-.4737	-.2444		.1881	
-101.400	-.3291	-.3649	-.4510	-.3085		.1881	
-50.100	-.2175	-.3525	-.2410	-.1266	.1599	.1985	
-44.800	-.0130	.0000	.0000	-.1170	.1599	.1929	
.000	.0000	.0000	.0000	-.1036	.1750	.1909	.1847
44.800	.0064	.0000	.0000	-.1050	.1557	.1950	
50.100	-.1744	-.3428	-.2349	-.1438	.1681	.1957	
101.400	-.3235	-.3648	-.4012	-.2781		.1626	
115.600	-.2775	-.3084	-.4521	-.2492		.1964	
133.800	-.3380	-.3208	-.4720	-.1803		.1923	
149.100	-.3936	-.4143	-.4122	-.2024		.1819	
180.000	-.4356	-.5723	-.3909	-.2974	.1599	.1833	

RN/L (2) = 2.307 ALPHA (8) = 4.133 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3806	-.3781	-.3986	-.2809		.1996	
-133.800	-.3840	-.3719	-.4609	-.1954		.1927	
-115.600	-.2772	-.3452	-.4547	-.2207		.1920	
-101.400	-.3169	-.3582	-.4417	-.2802		.1756	
-50.100	-.2122	-.3528	-.2357	-.1166	.1688	.1913	
-44.800	.0245	.0000	.0000	-.1043	.1667	.1879	
.000	.0000	.0000	.0000	-.0956	.1689	.1963	.1881
44.800	.0089	.0000	.0000	-.0990	.1710	.1956	
50.100	-.1659	-.3332	-.2233	-.1486	.1648	.1983	
101.400	-.3162	-.3483	-.3892	-.2663		.1908	
115.600	-.2643	-.2930	-.4200	-.2328		.2059	
133.800	-.3230	-.2984	-.4473	-.1869		.1840	
149.100	-.3640	-.3551	-.3722	-.3108		.1997	
180.000	-.4090	-.3442	-.4343	-.3771	.1648	.1881	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (2) = 2.302 ALPHA (9) = 2.046 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3600	-.3850	-.4564	-.2333		.1930	
-133.800	-.3793	-.3782	-.4715	-.2120		.1902	
-115.600	-.2839	-.3418	-.4571	-.2162		.1779	
-101.400	-.3216	-.3576	-.4351	-.2834		.1724	
-50.100	-.2132	-.3452	-.2367	-.1201	.1586	.1916	
-44.800	.0291	.0000	.0000	-.1056	.1648	.1916	
.000	.0000	.0000	.0000	-.0891	.1732	.1904	.1760
44.800	.0246	.0000	.0000	-.0973	.1753	.1911	
50.100	-.1604	-.3316	-.2255	-.1487	.1684	.1876	
101.400	-.3104	-.3467	-.3906	-.2605		.1863	
115.600	-.2666	-.3001	-.4221	-.2283		.1965	
133.800	-.3248	-.3145	-.4906	-.1857		.1897	
149.100	-.3865	-.4351	-.3954	-.2701		.1952	
180.000	-.4276	-.3447	-.4221	-.3491	.1581	.1821	

RN/L (2) = 2.304 ALPHA (10) = -.067 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4116	-.4881	-.4792	-.2154		.1903	
-133.800	-.4109	-.3976	-.5189	-.2099		.1876	
-115.600	-.2944	-.3483	-.4573	-.2154		.1752	
-101.400	-.3191	-.3627	-.4374	-.2647		.1780	
-50.100	-.2142	-.3428	-.2414	-.1249	.1745	.1889	
-44.800	.0037	.0000	.0000	-.0989	.1745	.1910	
.000	.0000	.0000	.0000	-.0870	.1716	.1936	.1888
44.800	-.0015	.0000	.0000	-.0945	.1751	.1950	
50.100	-.1697	-.3297	-.2265	-.1477	.1730	.1950	
101.400	-.3174	-.3441	-.3824	-.2519		.1771	
115.600	-.2832	-.3099	-.4296	-.2272		.1908	
133.800	-.3564	-.3236	-.5109	-.2238		.1956	
149.100	-.4508	-.4863	-.4856	-.2314		.1956	
180.000	-.5711	-.5465	-.4932	-.2663	.1593	.1936	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (2) = 2.306 ALPHA (11) = -2.206 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4354	-.4881	-.5059	-.2331		.2010	
-133.800	-.4046	-.4054	-.5257	-.2140		.2017	
-115.600	-.2939	-.3473	-.4471	-.2010		.2017	
-101.400	-.3171	-.3576	-.4211	-.2413		.2004	
-50.100	-.2078	-.3473	-.2317	-.1100	.1853	.2113	
-44.800	.0191	.0000	.0000	-.0882	.1881	.2038	
.000	.0000	.0000	.0000	-.0759	.1837	.2111	.2111
44.800	.0182	.0000	.0000	-.0813	.1851	.2118	
50.100	-.1666	-.3214	-.2137	-.1408	.1865	.2131	
101.400	-.3037	-.3378	-.3746	-.2392		.2015	
115.600	-.2778	-.3078	-.4285	-.2194		.2097	
133.800	-.3514	-.3139	-.5288	-.2160		.2036	
149.100	-.4626	-.5001	-.5049	-.2433		.2090	
180.000	-.6856	-.7204	-.4721	-.2338	.1728	.2077	

RN/L (2) = 2.304 ALPHA (12) = -4.279 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4398	-.4964	-.5204	-.2505		.2139	
-133.800	-.4119	-.4142	-.5382	-.2286		.2112	
-115.600	-.3069	-.3601	-.4512	-.2026		.2126	
-101.400	-.3165	-.3539	-.4197	-.2341		.2139	
-50.100	-.2206	-.3505	-.2327	-.1135	.1941	.2167	
-44.800	.0315	.0000	.0000	-.0882	.1934	.2167	
.000	.0000	.0000	.0000	-.0836	.1898	.2179	.2261
44.800	.0326	.0000	.0000	-.0809	.1905	.2193	
50.100	-.1765	-.3276	-.2148	-.1398	.1884	.2199	
101.400	-.3064	-.3324	-.3713	-.2316		.2117	
115.600	-.2914	-.3194	-.4233	-.2185		.2124	
133.800	-.3624	-.3501	-.5353	-.2384		.2131	
149.100	-.4732	-.5107	-.5183	-.2727		.2124	
180.000	-.7035	-.7363	-.4615	-.2261	.1843	.2151	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (2) = 2.304 ALPHA (13) = -5.376 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4384	-.4979	-.5321	-.2644		.2163	
-133.800	-.4131	-.4130	-.5396	-.2384		.2190	
-115.600	-.3118	-.3644	-.4506	-.2014		.2163	
-101.400	-.3187	-.3541	-.4123	-.2302		.2176	
-50.100	-.2263	-.3534	-.2274	-.1199	.1944	.2218	
-44.800	.0366	.0000	.0000	-.0912	.1930	.2149	
.000	.0000	.0000	.0000	-.0856	.1926	.2173	.2310
44.800	.0374	.0000	.0000	-.0843	.1913	.2221	
50.100	-.1779	-.3337	-.2162	-.1455	.1947	.2241	
101.400	-.3057	-.3351	-.3720	-.2276		.2207	
115.600	-.3016	-.3194	-.4280	-.2180		.2186	
133.800	-.3617	-.3194	-.5449	-.2420		.2186	
149.100	-.4711	-.5087	-.5230	-.2838		.2173	
180.000	-.7157	-.7520	-.4492	-.2338	.1919	.2207	

RN/L (2) = 2.302 ALPHA (14) = -.089 Q(PSF) = 129.28 PT = 2907.0 P = 2775.5 MACH = .25795

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4253	-.4888	-.4860	-.2232		.1972	
-133.800	-.4033	-.4059	-.5121	-.2149		.1890	
-115.600	-.2965	-.3484	-.4587	-.2177		.1890	
-101.400	-.3225	-.3614	-.4354	-.2615		.1808	
-50.100	-.2102	-.3430	-.2444	-.1123	.1767	.1986	
-44.800	.0131	.0000	.0000	-.0965	.1753	.1917	
.000	.0000	.0000	.0000	-.0798	.1741	.1981	.1981
44.800	.0091	.0000	.0000	-.0934	.1721	.1885	
50.100	-.1714	-.3286	-.2233	-.1424	.1755	.1960	
101.400	-.3136	-.3450	-.3805	-.2499		.1926	
115.600	-.2862	-.3088	-.4277	-.2348		.1885	
133.800	-.3573	-.3095	-.5193	-.2170		.1899	
149.100	-.4325	-.4674	-.4940	-.2191		.1858	
180.000	-.5337	-.6656	-.4475	-.2972	.1584	.1858	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (3) = 5.323 ALPHA (1) = 20.064 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.5014	-.5535	-.5752	-.2538		.2283	
-133.800	-.4674	-.4627	-.5310	-.2415		.2271	
-115.600	-.3265	-.4050	-.5808	-.3288		.2207	
-101.400	-.3511	-.4211	-.5395	-.3631		.2315	
-50.100	-.1577	-.2388	-.1670	-.0891	.1911	.2312	
-44.800	-.0309	.0000	.0000	-.0938	.1858	.2212	
.000	.0000	.0000	.0000	-.1142	.1851	.2223	.2533
44.800	-.0296	.0000	.0000	-.0770	.1889	.2190	
50.100	-.1467	-.2420	-.1613	-.1000	.1930	.2185	
101.400	-.3590	-.4067	-.4714	-.3537		.2287	
115.600	-.3190	-.3588	-.5454	-.3704		.2223	
133.800	-.4009	-.3585	-.5457	-.2442		.2237	
149.100	-.5217	-.5463	-.5466	-.2998		.2316	
180.000	-.6981	-.7067	-.4930	-.2565	.1780	.2272	

RN/L (3) = 5.321 ALPHA (2) = 17.869 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4581	-.4973	-.5289	-.2536		.2231	
-133.800	-.4543	-.4422	-.5043	-.2226		.2213	
-115.600	-.3146	-.3880	-.5582	-.3090		.2225	
-101.400	-.3398	-.4044	-.5218	-.3614		.2289	
-50.100	-.1841	-.2668	-.1892	-.0926	.1961	.2312	
-44.800	-.0295	.0000	.0000	-.0955	.1961	.2248	
.000	.0000	.0000	.0000	-.1201	.1970	.2236	.2427
44.800	-.0306	.0000	.0000	-.0903	.1985	.2312	
50.100	-.1587	-.2767	-.1826	-.1103	.2005	.2289	
101.400	-.3539	-.3925	-.4574	-.3468		.2233	
115.600	-.3083	-.3454	-.5237	-.3372		.2254	
133.800	-.3902	-.3548	-.5094	-.2201		.2277	
149.100	-.4694	-.5117	-.5053	-.2617		.2254	
180.000	-.6618	-.6962	-.4983	-.2388	.1818	.2257	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (3) = 5.338 ALPHA (3) = 15.583 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4379	-.4760	-.5036	-.2304		.2195	
-133.800	-.4344	-.4269	-.4774	-.2104		.2241	
-115.600	-.3086	-.3856	-.5507	-.2943		.2247	
-101.400	-.3255	-.3926	-.5135	-.3615		.2285	
-50.100	-.1962	-.2961	-.2083	-.1051	.1960	.2326	
-44.800	-.0230	.0000	.0000	-.1086	.1939	.2247	
.000	.0000	.0000	.0000	-.1237	.1941	.2228	.2461
44.800	-.0309	.0000	.0000	-.0918	.1958	.2281	
50.100	-.1719	-.3104	-.2050	-.1180	.1952	.2188	
101.400	-.3519	-.3809	-.4459	-.3391		.2217	
115.600	-.3054	-.3388	-.5057	-.3205		.2249	
133.800	-.3884	-.3429	-.4854	-.2072		.2234	
149.100	-.4639	-.5025	-.4790	-.2247		.2223	
180.000	-.5655	-.6536	-.4999	-.2464	.1909	.2307	

RN/L (3) = 5.339 ALPHA (4) = 13.316 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4303	-.4672	-.4626	-.2144		.2109	
-133.800	-.4274	-.4126	-.4620	-.1926		.2167	
-115.600	-.3110	-.3871	-.5293	-.2774		.2062	
-101.400	-.3278	-.3830	-.5035	-.3540		.2155	
-50.100	-.2140	-.3174	-.2193	-.1099	.1795	.2225	
-44.800	-.0208	.0000	.0000	-.1096	.1842	.2129	
.000	.0000	.0000	.0000	-.1286	.1891	.2138	.2367
44.800	-.0045	.0000	.0000	-.1052	.1885	.2184	
50.100	-.1762	-.3206	-.2223	-.1242	.1955	.2245	
101.400	-.3438	-.3812	-.4270	-.3202		.2132	
115.600	-.2994	-.3307	-.4934	-.3017		.2007	
133.800	-.3453	-.3307	-.4621	-.1980		.2187	
149.100	-.4583	-.4853	-.4525	-.2044		.2007	
180.000	-.6058	-.6554	-.5039	-.2537	.1926	.2091	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (3) = 5.344 ALPHA (5) = 11.031 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4381	-.4281	-.4339	-.1836		.2161	
-133.800	-.3995	-.3974	-.4594	-.1967		.2039	
-115.600	-.3095	-.3864	-.5243	-.2682		.2063	
-101.400	-.3312	-.3899	-.4927	-.3473		.1880	
-50.100	-.2185	-.3409	-.2445	-.1225	.1715	.2063	
-44.800	-.0237	.0000	.0000	-.1193	.1767	.1981	
.000	.0000	.0000	.0000	-.1245	.1670	.2029	.2220
44.800	-.0084	.0000	.0000	-.1045	.1739	.2168	
50.100	-.1890	-.3404	-.2464	-.1339	.1847	.2116	
101.400	-.3494	-.3830	-.4247	-.3243		.1881	
115.600	-.2990	-.3315	-.4861	-.2892		.1980	
133.800	-.3616	-.3465	-.4652	-.1915		.1922	
149.100	-.4009	-.4386	-.4128	-.1872		.2145	
180.000	-.5541	-.5805	-.4516	-.2834	.1861	.2081	

RN/L (3) = 5.351 ALPHA (6) = 8.824 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3672	-.4072	-.4162	-.1593		.1986	
-133.800	-.3724	-.4032	-.4635	-.1686		.1983	
-115.600	-.2866	-.3668	-.4936	-.2356		.2134	
-101.400	-.3106	-.3795	-.4725	-.3090		.1972	
-50.100	-.1999	-.3451	-.2350	-.1062	.1862	.2162	
-44.800	-.0134	.0000	.0000	-.1047	.1845	.2116	
.000	.0000	.0000	.0000	-.1106	.1811	.2068	.2262
44.800	-.0076	.0000	.0000	-.0947	.1791	.2115	
50.100	-.1749	-.3301	-.2219	-.1421	.1808	.2201	
101.400	-.3399	-.3593	-.3921	-.2987		.2112	
115.600	-.2837	-.3039	-.4455	-.2655		.2066	
133.800	-.3391	-.3044	-.4426	-.1744		.2196	
149.100	-.4193	-.4372	-.4135	-.1666		.2138	
180.000	-.5468	-.5341	-.4545	-.3140	.1857	.2172	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (3) = 5.310 ALPHA (7) = 6.577 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3869	-.4717	-.4362	-.2531		.1901	
-133.800	-.4177	-.4148	-.4744	-.2015		.1994	
-115.600	-.3018	-.3690	-.5014	-.2543		.1989	
-101.400	-.3326	-.3852	-.4861	-.3238		.1880	
-50.100	-.2290	-.3773	-.2534	-.1304	.1751	.2065	
-44.800	-.0207	.0000	.0000	-.1228	.1651	.1968	
.000	.0000	.0000	.0000	-.1286	.1695	.1974	.2053
44.800	-.0325	.0000	.0000	-.1122	.1698	.2041	
50.100	-.1907	-.3565	-.2452	-.1560	.1736	.2024	
101.400	-.3530	-.3779	-.4081	-.3042		.1757	
115.600	-.2827	-.3237	-.4643	-.2778		.2006	
133.800	-.3366	-.3223	-.4752	-.1935		.2041	
149.100	-.4383	-.4708	-.4397	-.1926		.1766	
180.000	-.5124	-.5880	-.4728	-.2983	.1578	.1842	

RN/L (3) = 5.308 ALPHA (8) = 4.349 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4016	-.4457	-.4451	-.3271		.1907	
-133.800	-.4077	-.3966	-.5085	-.2287		.1781	
-115.600	-.3020	-.3729	-.4973	-.2478		.1714	
-101.400	-.3355	-.3873	-.4876	-.3303		.1599	
-50.100	-.2398	-.3864	-.2593	-.1416	.1582	.1934	
-44.800	-.0131	.0000	.0000	-.1304	.1632	.1951	
.000	.0000	.0000	.0000	-.1266	.1655	.1960	.1881
44.800	-.0122	.0000	.0000	-.1152	.1643	.1978	
50.100	-.1920	-.3714	-.2529	-.1699	.1602	.1987	
101.400	-.3476	-.3764	-.4071	-.2956		.1781	
115.600	-.2834	-.3192	-.4561	-.2691		.1863	
133.800	-.3512	-.3286	-.5045	-.2192		.1946	
149.100	-.4271	-.4030	-.4526	-.2782		.1852	
180.000	-.4649	-.4922	-.4523	-.3164	.1646	.1802	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (3) = 5.321 ALPHA (9) = 2.111 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3599	-.4120	-.4698	-.3206		.1827	
-133.800	-.3894	-.3796	-.5192	-.2275		.1953	
-115.600	-.2901	-.3574	-.4830	-.2380		.1874	
-101.400	-.3243	-.3758	-.4678	-.3092		.1757	
-50.100	-.2337	-.3825	-.2506	-.1355	.1734	.2067	
-44.800	-.0079	.0000	.0000	-.1157	.1754	.1979	
.000	.0000	.0000	.0000	-.1098	.1729	.1972	.1983
44.800	.0040	.0000	.0000	-.1066	.1741	.1975	
50.100	-.1838	-.3559	-.2361	-.1613	.1729	.2024	
101.400	-.3378	-.3664	-.3970	-.2805		.1799	
115.600	-.2842	-.3183	-.4446	-.2501		.1823	
133.800	-.3349	-.3154	-.5125	-.2136		.1840	
149.100	-.4183	-.5038	-.4364	-.2489		.1872	
180.000	-.5073	-.5149	-.4548	-.4134	.1665	.1788	

RN/L (3) = 5.317 ALPHA (10) = -.114 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4563	-.4973	-.5254	-.2413		.2083	
-133.800	-.4212	-.4224	-.5353	-.2323		.1916	
-115.600	-.3094	-.3677	-.4797	-.2325		.1989	
-101.400	-.3339	-.3814	-.4642	-.2937		.1902	
-50.100	-.2324	-.3776	-.2545	-.1357	.1811	.2071	
-44.800	-.0132	.0000	.0000	-.1135	.1834	.2063	
.000	.0000	.0000	.0000	-.1051	.1717	.2124	.2150
44.800	-.0005	.0000	.0000	-.1010	.1811	.2068	
50.100	-.1866	-.3478	-.2386	-.1625	.1828	.2062	
101.400	-.3391	-.3744	-.3940	-.2690		.1951	
115.600	-.2970	-.3251	-.4454	-.2479		.1992	
133.800	-.3668	-.3251	-.5438	-.2266		.2027	
149.100	-.4664	-.5143	-.5164	-.2497		.2060	
180.000	-.6056	-.7122	-.5006	-.2655	.1670	.2098	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (3) = 5.326 ALPHA (11) = -2.361 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4583	-.5137	-.5416	-.2591		.2047	
-133.800	-.4271	-.4222	-.5530	-.2446		.2077	
-115.600	-.3098	-.3718	-.4790	-.2248		.2050	
-101.400	-.3304	-.3742	-.4580	-.2775		.2027	
-50.100	-.2337	-.3753	-.2472	-.1330	.1890	.2135	
-44.800	.0010	.0000	.0000	-.1054	.1884	.2120	
.000	.0000	.0000	.0000	-.1010	.1897	.2186	.2197
44.800	.0013	.0000	.0000	-.0999	.1851	.2165	
50.100	-.1860	-.3448	-.2389	-.1563	.1886	.2180	
101.400	-.3331	-.3587	-.3869	-.2582		.2052	
115.600	-.2994	-.3337	-.4506	-.2428		.2055	
133.800	-.3680	-.3325	-.5544	-.2384		.2104	
149.100	-.4890	-.5326	-.5326	-.2655		.2084	
180.000	-.7070	-.7546	-.5001	-.2439	.1790	.2098	

RN/L (3) = 5.332 ALPHA (12) = -4.505 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4500	-.5153	-.5473	-.2710		.2213	
-133.800	-.4209	-.4232	-.5540	-.2507		.2190	
-115.600	-.3149	-.3707	-.4694	-.2158		.2123	
-101.400	-.3172	-.3742	-.4418	-.2649		.2187	
-50.100	-.2350	-.3858	-.2411	-.1327	.1952	.2219	
-44.800	.0200	.0000	.0000	-.1054	.1935	.2225	
.000	.0000	.0000	.0000	-.1000	.1920	.2164	.2376
44.800	.0227	.0000	.0000	-.0934	.1946	.2213	
50.100	-.1902	-.3538	-.2294	-.1566	.1964	.2225	
101.400	-.3292	-.3527	-.3791	-.2469		.2219	
115.600	-.3069	-.3324	-.4385	-.2330		.2205	
133.800	-.3712	-.3315	-.5578	-.2521		.2243	
149.100	-.4905	-.5322	-.5401	-.2925		.2228	
180.000	-.7367	-.7542	-.4823	-.2530	.1885	.2234	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (3) = 5.338 ALPHA (13) = -5.586 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4435	-.5076	-.5485	-.2762		.2263	
-133.800	-.4168	-.4160	-.5514	-.2536		.2260	
-115.600	-.3156	-.3719	-.4627	-.2145		.2251	
-101.400	-.3113	-.3664	-.4371	-.2545		.2240	
-50.100	-.2359	-.3844	-.2376	-.1309	.1979	.2315	
-44.800	.0306	.0000	.0000	-.1037	.1973	.2216	
.000	.0000	.0000	.0000	-.0955	.1927	.2185	.2449
44.800	.0313	.0000	.0000	-.0908	.1976	.2248	
50.100	-.1907	-.3462	-.2321	-.1536	.2051	.2199	
101.400	-.3216	-.3531	-.3670	-.2385		.2248	
115.600	-.3033	-.3326	-.4350	-.2281		.2286	
133.800	-.3658	-.3479	-.5584	-.2545		.2298	
149.100	-.4814	-.5311	-.5340	-.2945		.2298	
180.000	-.7367	-.7626	-.4802	-.2455	.1915	.2318	

RN/L (3) = 5.326 ALPHA (14) = -.129 Q(PSF) = 303.99 PT = 6866.1 P = 6557.0 MACH = .25735

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4298	-.4843	-.5256	-.2393		.2031	
-133.800	-.4210	-.4219	-.5448	-.2282		.2040	
-115.600	-.3039	-.3608	-.4770	-.2306		.1999	
-101.400	-.3258	-.3747	-.4618	-.2868		.1900	
-50.100	-.2340	-.3756	-.2483	-.1307	.1792	.2049	
-44.800	.0043	.0000	.0000	-.1109	.1740	.2054	
.000	.0000	.0000	.0000	-.1064	.1846	.2114	.2097
44.800	-.0061	.0000	.0000	-.1020	.1791	.2111	
50.100	-.1805	-.3501	-.2367	-.1597	.1829	.2120	
101.400	-.3396	-.3678	-.3951	-.2625		.1907	
115.600	-.2936	-.3190	-.4483	-.2427		.1989	
133.800	-.3591	-.3178	-.5452	-.2215		.2053	
149.100	-.4783	-.5117	-.5103	-.2614		.2038	
180.000	-.5481	-.6643	-.5091	-.2730	.1686	.2030	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (4) = 7.863 ALPHA (1) = 21.182 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.5440	-.5872	-.6124	-.2723		.2319	
-133.800	-.4835	-.4789	-.5683	-.2601		.2311	
-115.600	-.3381	-.4196	-.6133	-.3564		.2338	
-101.400	-.3520	-.4352	-.5604	-.3797		.2311	
-50.100	-.1497	-.2273	-.1472	-.0923	.1811	.2289	
-44.800	-.0411	.0000	.0000	-.0934	.1815	.2141	
.000	.0000	.0000	.0000	-.1182	.1834	.2096	.2548
44.800	-.0402	.0000	.0000	-.0772	.1836	.2100	
50.100	-.1436	-.2344	-.1537	-.0935	.1931	.2142	
101.400	-.3744	-.4319	-.4774	-.3604		.2272	
115.600	-.3430	-.3869	-.5695	-.3791		.2308	
133.800	-.4263	-.3950	-.5766	-.2602		.2323	
149.100	-.5548	-.5820	-.5614	-.3244		.2363	
180.000	-.7948	-.7990	-.4614	-.2614	.1810	.2280	

RN/L (4) = 7.869 ALPHA (2) = 18.771 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4869	-.5323	-.5439	-.2510		.2269	
-133.800	-.4742	-.4634	-.5262	-.2335		.2330	
-115.600	-.3276	-.4023	-.5841	-.3245		.2304	
-101.400	-.3439	-.4173	-.5495	-.3779		.2334	
-50.100	-.1775	-.2599	-.1810	-.0951	.2003	.2353	
-44.800	-.0371	.0000	.0000	-.0969	.2021	.2287	
.000	.0000	.0000	.0000	-.1260	.1951	.2266	.2576
44.800	-.0373	.0000	.0000	-.0865	.1941	.2301	
50.100	-.1590	-.2739	-.1684	-.1028	.1982	.2291	
101.400	-.3651	-.4121	-.4636	-.3570		.2348	
115.600	-.3248	-.3596	-.5389	-.3612		.2289	
133.800	-.4129	-.3653	-.5428	-.2359		.2325	
149.100	-.5083	-.5381	-.5162	-.2788		.2348	
180.000	-.7399	-.7687	-.4528	-.2385	.1837	.2356	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (4) = 7.878 ALPHA (3) = 16.185 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4688	-.5056	-.4999	-.2274		.2343	
-133.800	-.4550	-.4389	-.4907	-.2231		.2310	
-115.600	-.3143	-.3875	-.5589	-.3119		.2251	
-101.400	-.3298	-.3989	-.5307	-.3710		.2398	
-50.100	-.2008	-.2939	-.2029	-.1089	.2055	.2463	
-44.800	-.0324	.0000	.0000	-.1042	.2014	.2318	
.000	.0000	.0000	.0000	-.1277	.2006	.2351	.2608
44.800	-.0307	.0000	.0000	-.0915	.2020	.2286	
50.100	-.1714	-.3067	-.2006	-.1122	.2088	.2329	
101.400	-.3592	-.4065	-.4530	-.3414		.2288	
115.600	-.3086	-.3535	-.5223	-.3313		.2259	
133.800	-.3967	-.3514	-.4973	-.2156		.2269	
149.100	-.4900	-.5305	-.4785	-.2334		.2284	
180.000	-.7256	-.7715	-.4801	-.2247	.1898	.2343	

RN/L (4) = 7.906 ALPHA (4) = 13.985 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4572	-.4994	-.4793	-.1993		.2296	
-133.800	-.4323	-.4365	-.4859	-.1972		.2323	
-115.600	-.3125	-.3884	-.5466	-.2852		.2299	
-101.400	-.3268	-.3880	-.5177	-.3597		.2284	
-50.100	-.2144	-.3175	-.2147	-.1084	.1982	.2346	
-44.800	-.0301	.0000	.0000	-.1053	.1953	.2262	
.000	.0000	.0000	.0000	-.1292	.1992	.2299	.2546
44.800	-.0274	.0000	.0000	-.0972	.1990	.2323	
50.100	-.1779	-.3289	-.2189	-.1193	.2042	.2290	
101.400	-.3560	-.3945	-.4367	-.3303		.2375	
115.600	-.3037	-.3373	-.5098	-.3158		.2317	
133.800	-.3842	-.3439	-.4920	-.2046		.2295	
149.100	-.4807	-.5030	-.4584	-.2021		.2301	
180.000	-.7217	-.7251	-.4686	-.2109	.2003	.2330	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (4) = 7.916 ALPHA (5) = 11.625 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4431	-.4833	-.4555	-.1794		.2170	
-133.800	-.4326	-.4178	-.4802	-.1918		.2186	
-115.600	-.3123	-.3875	-.5313	-.2838		.2044	
-101.400	-.3249	-.3864	-.5076	-.3553		.2133	
-50.100	-.2203	-.3444	-.2401	-.1172	.1858	.2154	
-44.800	-.0293	.0000	.0000	-.1164	.1852	.2186	
.000	.0000	.0000	.0000	-.1321	.1877	.2146	.2391
44.800	-.0338	.0000	.0000	-.1057	.1915	.2172	
50.100	-.1874	-.3403	-.2441	-.1333	.1927	.2201	
101.400	-.3569	-.3942	-.4219	-.3266		.2203	
115.600	-.3031	-.3374	-.4894	-.3043		.2191	
133.800	-.3639	-.3368	-.4830	-.1890		.2152	
149.100	-.4673	-.4768	-.4495	-.1774		.2201	
180.000	-.6452	-.6976	-.5120	-.1933	.1927	.2195	

RN/L (4) = 7.920 ALPHA (6) = 9.254 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4427	-.4319	-.4499	-.2824		.1987	
-133.800	-.4306	-.4199	-.4963	-.1932		.2062	
-115.600	-.3156	-.3794	-.5234	-.2727		.1997	
-101.400	-.3367	-.3861	-.5033	-.3446		.2060	
-50.100	-.2325	-.3549	-.2452	-.1224	.1635	.2045	
-44.800	-.0294	.0000	.0000	-.1213	.1722	.1929	
.000	.0000	.0000	.0000	-.1337	.1731	.2014	.2192
44.800	-.0315	.0000	.0000	-.1113	.1789	.1971	
50.100	-.1901	-.3571	-.2507	-.1404	.1840	.2138	
101.400	-.3600	-.3888	-.4174	-.3158		.2026	
115.600	-.2972	-.3272	-.4860	-.2806		.2122	
133.800	-.3622	-.3275	-.4699	-.1840		.2045	
149.100	-.4252	-.4928	-.4283	-.2796		.2055	
180.000	-.6017	-.6262	-.4839	-.2229	.1778	.2055	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (4) = 7.916 ALPHA (7) = 6.910 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE

DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4356	-.4671	-.4538	-.1813		.2094	
-133.800	-.3912	-.4150	-.4918	-.1906		.1881	
-115.600	-.2983	-.3690	-.5073	-.2502		.1923	
-101.400	-.3288	-.3888	-.4955	-.3287		.1738	
-50.100	-.2338	-.3758	-.2513	-.1251	.1724	.2047	
-44.800	-.0376	.0000	.0000	-.1198	.1741	.2018	
.000	.0000	.0000	.0000	-.1274	.1704	.2030	.2162
44.800	-.0311	.0000	.0000	-.1113	.1590	.2096	
50.100	-.1893	-.3552	-.2453	-.1526	.1782	.2074	
101.400	-.3643	-.3807	-.4083	-.3056		.1943	
115.600	-.2945	-.3192	-.4682	-.2756		.2014	
133.800	-.3437	-.3188	-.4964	-.1960		.2072	
149.100	-.4243	-.4984	-.4495	-.1978		.2055	
180.000	-.5258	-.6162	-.4838	-.3631	.1577	.2022	

RN/L (4) = 7.920 ALPHA (8) = 4.486 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE

DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3531	-.4483	-.4231	-.1967		.2120	
-133.800	-.3943	-.3764	-.4558	-.2031		.2128	
-115.600	-.2765	-.3604	-.4475	-.2221		.2149	
-101.400	-.3019	-.3913	-.4431	-.2893		.1967	
-50.100	-.2140	-.3970	-.2228	-.1066	.1851	.2114	
-44.800	-.0057	.0000	.0000	-.0900	.1890	.2108	
.000	.0000	.0000	.0000	-.1029	.1932	.2265	.2141
44.800	-.0232	.0000	.0000	-.0935	.1957	.2261	
50.100	-.1874	-.3235	-.2290	-.1633	.1988	.2350	
101.400	-.3441	-.3435	-.3831	-.3010		.2195	
115.600	-.2720	-.2850	-.4313	-.2562		.2156	
133.800	-.3075	-.2846	-.4787	-.1902		.2185	
149.100	-.3656	-.4595	-.4033	-.2207		.2145	
180.000	-.5065	-.4842	-.4529	-.3101	.1893	.2092	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (4) = 7.830 ALPHA (9) = 2.181 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4407	-.4601	-.5101	-.2438		.2039	
-133.800	-.4316	-.4223	-.5370	-.2474		.2030	
-115.600	-.3052	-.3768	-.5040	-.2505		.1931	
-101.400	-.3270	-.3932	-.5002	-.3257		.1785	
-50.100	-.2428	-.3999	-.2630	-.1409	.1692	.2079	
-44.800	-.0114	.0000	.0000	-.1296	.1763	.1917	
.000	.0000	.0000	.0000	-.1200	.1711	.2000	.2063
44.800	.0016	.0000	.0000	-.1192	.1693	.2101	
50.100	-.1982	-.3735	-.2346	-.1761	.1701	.2051	
101.400	-.3612	-.3883	-.4048	-.2923		.1834	
115.600	-.2982	-.3296	-.4586	-.2681		.2018	
133.800	-.3518	-.3310	-.5269	-.2182		.1939	
149.100	-.4622	-.4519	-.4598	-.3565		.1846	
180.000	-.5304	-.6070	-.4653	-.3805	.1589	.2067	

RN/L (4) = 7.847 ALPHA (10) = -.152 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4428	-.5085	-.5309	-.2360		.2110	
-133.800	-.4202	-.4189	-.5414	-.2285		.2077	
-115.600	-.3025	-.3663	-.4841	-.2312		.2053	
-101.400	-.3178	-.3825	-.4717	-.2935		.2077	
-50.100	-.2280	-.3793	-.2555	-.1286	.1902	.2207	
-44.800	-.0050	.0000	.0000	-.1091	.1904	.2157	
.000	.0000	.0000	.0000	-.1035	.1859	.2145	.2284
44.800	-.0131	.0000	.0000	-.0984	.1901	.2202	
50.100	-.1846	-.3474	-.2322	-.1551	.1936	.2190	
101.400	-.3454	-.3721	-.3836	-.2711		.2068	
115.600	-.2939	-.3273	-.4458	-.2467		.2143	
133.800	-.3630	-.2998	-.5439	-.2314		.2131	
149.100	-.4838	-.5249	-.5180	-.2409		.2188	
180.000	-.6710	-.6818	-.5032	-.2465	.1653	.2127	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (4) = 7.848 ALPHA (11) = -2.415 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4641	-.5117	-.5581	-.2592		.2086	
-133.800	-.4326	-.4208	-.5632	-.2523		.2086	
-115.600	-.3182	-.3688	-.4888	-.2342		.2043	
-101.400	-.3288	-.3771	-.4674	-.2925		.2066	
-50.100	-.2378	-.3863	-.2502	-.1394	.1923	.2228	
-44.800	.0007	.0000	.0000	-.1130	.1892	.2184	
.000	.0000	.0000	.0000	-.1063	.1955	.2195	.2319
44.800	.0006	.0000	.0000	-.1011	.1906	.2207	
50.100	-.1906	-.3591	-.2388	-.1582	.1957	.2197	
101.400	-.3406	-.3811	-.3850	-.2607		.2130	
115.600	-.2989	-.3388	-.4571	-.2394		.2146	
133.800	-.3692	-.3388	-.5703	-.2416		.2162	
149.100	-.4951	-.5520	-.5492	-.2680		.2119	
180.000	-.7169	-.7876	-.5164	-.2380	.1818	.2150	

RN/L (4) = 7.863 ALPHA (12) = -4.739 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4587	-.5077	-.5542	-.2739		.2219	
-133.800	-.4245	-.4160	-.5587	-.2552		.2235	
-115.600	-.3166	-.3634	-.4736	-.2158		.2186	
-101.400	-.3166	-.3693	-.4479	-.2680		.2186	
-50.100	-.2433	-.3929	-.2425	-.1298	.1971	.2284	
-44.800	.0217	.0000	.0000	-.1047	.1994	.2213	
.000	.0000	.0000	.0000	-.1087	.1997	.2183	.2389
44.800	.0216	.0000	.0000	-.0969	.2007	.2238	
50.100	-.1887	-.3523	-.2349	-.1626	.2038	.2285	
101.400	-.3304	-.3666	-.3749	-.2466		.2216	
115.600	-.3006	-.3371	-.4480	-.2306		.2263	
133.800	-.3645	-.3360	-.5660	-.2482		.2267	
149.100	-.4869	-.5414	-.5497	-.2806		.2263	
180.000	-.7268	-.7765	-.4807	-.2447	.1938	.2291	

ARC 12-180(OA173) OV101+TC H/B=FREE AIR (RNSQ27)

RN/L (4) = 7.868 ALPHA (13) = -5.864 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4433	-.5126	-.5571	-.2751		.2301	
-133.800	-.4129	-.4225	-.5624	-.2544		.2340	
-115.600	-.3152	-.3756	-.4754	-.2093		.2293	
-101.400	-.3039	-.3760	-.4495	-.2544		.2305	
-50.100	-.2374	-.3974	-.2469	-.1282	.2051	.2366	
-44.800	.0376	.0000	.0000	-.1012	.2015	.2203	
.000	.0000	.0000	.0000	-.0947	.1944	.2175	.2584
44.800	.0289	.0000	.0000	-.0894	.1991	.2197	
50.100	-.1916	-.3522	-.2236	-.1575	.2029	.2263	
101.400	-.3357	-.3581	-.3581	-.2451		.2373	
115.600	-.3133	-.3349	-.4333	-.2345		.2365	
133.800	-.3699	-.3507	-.5626	-.2637		.2394	
149.100	-.4944	-.5298	-.5380	-.3032		.2367	
180.000	-.7647	-.7906	-.4614	-.2457	.1989	.2408	

RN/L (4) = 7.865 ALPHA (14) = -.150 Q(PSF) = 452.99 PT = 10162. P = 9701.2 MACH = .25828

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4484	-.5059	-.5324	-.2416		.2084	
-133.800	-.4178	-.4166	-.5459	-.2344		.2105	
-115.600	-.2993	-.3590	-.4867	-.2346		.2051	
-101.400	-.3177	-.3766	-.4730	-.3049		.1871	
-50.100	-.2263	-.3752	-.2514	-.1335	.1857	.2182	
-44.800	-.0076	.0000	.0000	-.1129	.1882	.2188	
.000	.0000	.0000	.0000	-.1020	.1862	.2163	.2179
44.800	-.0074	.0000	.0000	-.1016	.1887	.2104	
50.100	-.1806	-.3496	-.2423	-.1489	.1909	.2149	
101.400	-.3425	-.3743	-.3861	-.2640		.2003	
115.600	-.2938	-.3276	-.4468	-.2413		.2067	
133.800	-.3600	-.3209	-.5472	-.2228		.2071	
149.100	-.4749	-.5419	-.5142	-.2421		.2110	
180.000	-.6668	-.7185	-.5171	-.2532	.1793	.2134	

ARC 12-180(OA173) OV101+TC+TUFTS H/B=FREE AIR (RNSP28) (02 JUN 81)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
LREF = 474.8100 INCHES YMRP = .0000 IN. YO
BREF = 936.6800 INCHES ZMRP = 375.0000 IN. ZO
SCALE = .0300

PARAMETRIC DATA

BETA = .000 ELEVON = .000
AILRON = .000 BDFLAP = -11.700
MACH = .260

RN/L (1) = 1.743 ALPHA (1) = 4.241 Q(PSF) = 93.656 PT = 2124.6 P = 2029.4 MACH = .25678

SECTION (1)TA.LCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3750	-.3727	-.3850	-.2925		.1609	
-133.800	-.3750	-.3387	-.4398	-.2178		.1656	
-115.600	-.2854	-.3472	-.4615	-.2216		.1600	
-101.400	-.3297	-.3605	-.4530	-.2925		.1458	
-50.100	-.2137	-.3709	-.2481	-.1338	.1420	.1723	
-44.800	-.0080	.0000	.0000	-.1149	.1401	.1647	
.000	.0000	.0000	.0000	-.1047	.1401	.1722	.1600
44.800	-.0114	.0000	.0000	-.1065	.1392	.1722	
50.100	-.1602	-.3127	-.2449	- 1524	.1354	.1666	
101.400	-.3090	-.3579	-.3946	-.2731		.1543	
115.600	-.2619	-.2958	-.4210	-.2222		.1647	
133.800	-.3108	-.2864	-.4370	-.1882		.1647	
149.100	-.3429	1.1523	-.3909	-.3033		.1590	
180.000	-.3447	-.4464	-.3711	-.2854	.1071	.1628	

RN/L (1) = 1.735 ALPHA (2) = 8.379 Q(PSF) = 93.656 PT = 2124.6 P = 2029.4 MACH = .25678

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4197	-.4276	-.4153	-.1603		.1722	
-133.800	-.3867	-.3653	-.4342	-.1773		.1694	
-115.600	-.3007	-.3653	-.4862	-.2217		.1760	
-101.400	-.3347	-.3757	-.4522	-.2982		.1590	
-50.100	-.2054	-.3530	-.2453	-.1206	.1514	.1798	
-44.800	-.0439	.0000	.0000	-.1112	.1495	.1741	
.000	.0000	.0000	.0000	-.1087	.1526	.1790	.1837
44.800	-.0418	.0000	.0000	-.1125	.1497	.1790	
50.100	-.1634	-.2954	-.2369	-.1374	.1497	.1705	
101.400	-.3180	-.3679	-.4000	-.2781		.1696	
115.600	-.2765	-.3105	-.4434	-.2261		.1686	
133.800	-.3293	-.3557	-.4415	-.1648		.1705	
149.100	-.4302	.9941	-.3934	-.0864		.1771	
180.000	-.5763	-.5612	-.4066	-.1289	.1582	.1667	

ARC 12-180(OA173) OV101+TC+TUFTS H/B=FREE AIR (RNSP28)

RN/L (1) = 1.729 ALPHA (3) = 12.478 Q(PSF) = 93.656 PT = 2124.6 P = 2029.4 MACH = .25678

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4244	-.4247	-.4285	-.1693		.1957	
-133.800	-.3922	-.3623	-.4209	-.1665		.1910	
-115.600	-.2996	-.3632	-.4909	-.2346		.2005	
-101.400	-.3279	-.3651	-.4616	-.3093		.2033	
-50.100	-.1880	-.3093	-.2223	-.1050	.1673	.1976	
-44.800	-.0377	.0000	.0000	-.0975	.1711	.1967	
.000	.0000	.0000	.0000	-.1042	.1713	.1987	.2082
44.800	-.0373	.0000	.0000	-.0910	.1656	.1997	
50.100	-.1599	-.2786	-.2145	-.1095	.1694	.1950	
101.400	-.3107	-.3616	-.4125	-.2911		.1950	
115.600	-.2786	-.3116	-.4530	-.2287		.1940	
133.800	-.3446	-.3163	-.4182	-.1615		.1968	
149.100	-.4370	.8469	-.4172	-.0991		.1931	
180.000	-.5831	-.6359	-.4229	-.1332	.1694	.1931	

RN/L (1) = 1.711 ALPHA (4) = 16.667 Q(PSF) = 93.656 PT = 2124.6 P = 2029.4 MACH = .25678

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1 01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4515	-.4413	-.4844	-.2332		.2013	
-133.800	-.4208	-.3808	-.4480	-.1986		.2003	
-115.600	-.2980	-.3674	-.5247	-.2773		.1965	
-101.400	-.3316	-.3818	-.4883	-.3367		.2080	
-50.100	-.1828	-.2754	-.1852	-.0941	.1831	.2061	
-44.800	-.0361	.0000	.0000	-.0893	.1850	.2061	
.000	.0000	.0000	.0000	-.1085	.1827	.2028	.2124
44.800	-.0396	.0000	.0000	-.0798	.1808	.1990	
50.100	-.1639	-.2567	-.1716	-.0965	.1808	.2019	
101.400	-.3170	-.3792	-.4557	-.3296		.2009	
115.600	-.2864	-.3237	-.4920	-.2797		.1980	
133.800	-.3629	-.3227	-.4490	-.1972		.1990	
149.100	-.4547	.7276	-.4662	-.1617		.1990	
180.000	-.6632	-.6518	-.4356	-.1723	.1635	.1971	

ARC 12-180(OA173) OV101+TC+TUFTS H/B=FREE AIR (RNSP28)

RN/L (1) = 1.704 ALPHA (5) = 12.496 Q(PSF) = 93.656 PT = 2124.6 P = 2029.4 MACH = .25678

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4405	-.4402	-.4459	-.1825		.1771	
-133.800	-.4059	-.3796	-.4363	-.1854		.1857	
-115.600	-.3126	-.3796	-.5132	-.2527		.1886	
-101.400	-.3472	-.3844	-.4777	-.3219		.1771	
-50.100	-.2068	-.3238	-.2335	-.1152	.1550	.1876	
-44.800	-.0520	.0000	.0000	-.1094	.1540	.1800	
.000	.0000	.0000	.0000	-.1178	.1577	.1894	.1904
44.800	-.0430	.0000	.0000	-.1044	.1557	.1865	
50.100	-.1677	-.3009	-.2252	-.1222	.1548	.1846	
101.400	-.3239	-.3747	-.4256	-.3059		.1798	
115.600	-.2942	-.3249	-.4725	-.2443		.1855	
133.800	-.3661	-.3345	-.4361	-.1770		.1807	
149.100	-.4514	.6684	-.4284	-.1106		.1769	
180.000	-.6643	-.6758	-.4313	-.1405	.1596	.1769	

RN/L (2) = 7.938 ALPHA (1) = -.150 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4005	-.4784	-.4724	-.2339		.1722	
-133.800	-.4056	-.2984	-.5117	-.2780		.1787	
-115.600	-.3107	-.3774	-.4848	-.2307		.1727	
-101.400	-.3319	-.3862	-.4756	-.3017		.1566	
-50.100	-.2441	-.3966	-.2568	-.1377	.1620	.1837	
-44.800	-.0004	.0000	.0000	-.1205	.1568	.1724	
.000	.0000	.0000	.0000	-.1143	.1480	.1694	.1834
44.800	-.0226	.0000	.0000	-.1105	.1532	.1820	
50.100	-.1751	-.3270	-.2566	-.1564	.1500	.1782	
101.400	-.3324	-.2935	-.3718	-.2578		.1676	
115.600	-.2923	-.2801	-.4438	-.2360		.1740	
133.800	-.3457	-.3063	-.5281	-.2168		.1738	
149.100	-.4430	-.4952	-.4855	-.2439		.1792	
180.000	-.4905	-.4901	-.4683	-.3054	.1292	.1816	

ARC 12-180(OA173) OV101+TC+TUFTS H/B=FREE AIR (RNSP28)

RN/L (2) = 7.929 ALPHA (2) = 2.088 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4109	-.4519	-.4501	-.2840		.1803	
-133.800	-.3743	-.2936	-.4931	-.2659		.1664	
-115.600	-.2946	-.3701	-.4911	-.2381		.1560	
-101.400	-.3226	-.3880	-.4815	-.3208		.1281	
-50.100	-.2376	-.4102	-.2591	-.1479	.1441	.1791	
-44.800	-.0048	.0000	.0000	-.1257	.1514	.1744	
.000	.0000	.0000	.0000	-.1242	.1513	.1794	.1778
44.800	-.0083	.0000	.0000	-.1204	.1337	.1852	
50.100	-.1696	-.3367	-.2517	-.1559	.1363	.1842	
101.400	-.3373	-.2985	-.3731	-.2819		.1686	
115.600	-.2841	-.2483	-.4330	-.2374		.1537	
133.800	-.3267	-.2517	-.4930	-.2085		.1595	
149.100	-.3719	-.4400	-.4312	-.3206		.1634	
180.000	-.4054	-.3962	-.4060	-.3719	.1126	.1738	

RN/L (2) = 7.951 ALPHA (3) = 4.415 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3575	-.4065	-.3722	-.2839		.1582	
-133.800	-.3815	-.2849	-.4525	-.2571		.1519	
-115.600	-.2987	-.3670	-.4820	-.2403		.1475	
-101.400	-.3275	-.3896	-.4902	-.3347		.1119	
-50.100	-.2456	-.4148	-.2609	-.1466	.1343	.1776	
-44.800	-.0202	.0000	.0000	-.1314	.1440	.1697	
.000	.0000	.0000	.0000	-.1322	.1425	.1625	.1774
44.800	-.0294	.0000	.0000	-.1195	.1380	.1688	
50.100	-.1742	-.3484	-.2604	-.1597	.1362	.1740	
101.400	-.3420	-.3029	-.3857	-.2925		.1607	
115.600	-.2797	-.3166	-.4434	-.2466		.1615	
133.800	-.3337	-.3160	-.4525	-.2050		.1682	
149.100	-.3846	-.4046	-.4273	-.3017		.1738	
180.000	-.3323	-.4418	-.3802	-.2918	.1160	.1661	

ARC 12-180(OA173) OV101+TC+TUFTS H/B=FREE AIR (RNSP28)

RN/L (2) = 7.940 ALPHA (4) = 6.790 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3859	-.4136	-.4176	-.2647		.1808	
-133.800	-.3909	-.3080	-.4716	-.2304		.1873	
-115.600	-.2962	-.3664	-.4988	-.2436		.1741	
-101.400	-.3256	-.3843	-.4852	-.3374		.1719	
-50.100	-.2323	-.3870	-.2558	-.1396	.1536	.1820	
-44.800	-.0240	.0000	.0000	-.1260	.1473	.1715	
.000	.0000	.0000	.0000	-.1312	.1447	.1655	.1982
44.800	-.0308	.0000	.0000	-.1142	.1413	.1807	
50.100	-.1719	-.3416	-.2512	-.1503	.1315	.1793	
101.400	-.3450	-.3065	-.3902	-.2942		.1669	
115.600	-.2749	-.3223	-.4561	-.2446		.1789	
133.800	-.3266	-.3199	-.4472	-.1761		.1812	
149.100	-.4121	-.3882	-.3809	-.2750		.1844	
180.000	-.4770	-.4814	-.4200	-.2894	.1525	.1789	

RN/L (2) = 7.928 ALPHA (5) = 9.155 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4295	-.4671	-.4387	-.1841		.1862	
-133.800	-.4035	-.3240	-.4608	-.2111		.1953	
-115.600	-.3061	-.3839	-.5197	-.2550		.1980	
-101.400	-.3282	-.3914	-.4941	-.3400		.1658	
-50.100	-.2272	-.3694	-.2545	-.1279	.1620	.1890	
-44.800	-.0533	.0000	.0000	-.1263	.1642	.1809	
.000	.0000	.0000	.0000	-.1277	.1468	.1678	.2046
44.800	-.0460	.0000	.0000	-.1081	.1525	.1881	
50.100	-.1741	-.3316	-.2450	-.1428	.1605	.1863	
101.400	-.3476	-.3275	-.3949	-.3047		.1808	
115.600	-.2943	-.3279	-.4690	-.2636		.1852	
133.800	-.3500	-.3350	-.4504	-.1730		.1914	
149.100	-.4464	-.4302	-.4273	-.1569		.1816	
180.000	-.6135	-.6255	-.4478	-.2565	.1572	.1940	

ARC 12-180(OA173) OV101+TC+TUFTS H/B=FREE AIR (RNSP28)

RN/L (2) = 7.895 ALPHA (6) = 13.831 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4476	-.4974	-.4786	-.1922		.2037	
-133.800	-.4198	-.3397	-.4592	-.2138		.2143	
-115.600	-.3124	-.3866	-.5372	-.2688		.2131	
-101.400	-.3246	-.3842	-.5089	-.3573		.2056	
-50.100	-.2168	-.3270	-.2144	-.1087	.1716	.2062	
-44.800	-.0541	.0000	.0000	-.1112	.1784	.2068	
.000	.0000	.0000	.0000	-.1309	.1749	.1979	.2305
44.800	-.0458	.0000	.0000	-.1014	.1728	.2121	
50.100	-.1700	-.3083	-.2260	-.1190	.1734	.2062	
101.400	-.3430	-.3190	-.4178	-.3252		.2117	
115.600	-.2980	-.3180	-.4942	-.2873		.2095	
133.800	-.3654	-.3182	-.4595	-.1889		.2119	
149.100	-.4630	-.5051	-.4555	-.1889		.2070	
180.000	-.6485	-.5491	-.4813	-.2410	.1769	.2129	

RN/L (2) = 7.881 ALPHA (7) = 18.658 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4749	-.5377	-.5439	-.2465		.2088	
-133.800	-.4680	-.3838	-.4949	-.2611		.2052	
-115.600	-.3228	-.3927	-.5684	-.3041		.2066	
-101.400	-.3448	-.4089	-.5415	-.3689		.2070	
-50.100	-.1796	-.2574	-.1739	-.0921	.1827	.2143	
-44.800	-.0593	.0000	.0000	-.0963	.1866	.2031	
.000	.0000	.0000	.0000	-.1283	.1777	.1932	.2375
44.800	-.0516	.0000	.0000	-.0899	.1651	.2054	
50.100	-.1499	-.2700	-.1356	-.1003	.1720	.2096	
101.400	-.3542	-.3415	-.4515	-.3487		.2100	
115.600	-.3157	-.3590	-.5375	-.3268		.2096	
133.800	-.3935	-.3580	-.5099	-.2255		.2116	
149.100	-.4840	-.4987	-.5075	-.2617		.2137	
180.000	-.6846	-.6927	-.4876	-.2395	.1673	.2130	

ARC 12-180(OA173) OV101+TC+TUFTS H/B=FREE AIR (RNSP28)

RN/L (2) = 7.918 ALPHA (8) = 13.930 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4430	-.5139	-.4822	-.1933		.2066	
-133.800	-.4073	-.3483	-.4563	-.2145		.2152	
-115.600	-.3051	-.3884	-.5379	-.2753		.2100	
-101.400	-.3215	-.3896	-.5123	-.3602		.2207	
-50.100	-.2071	-.3238	-.2098	-.1051	.1851	.2154	
-44.800	-.0446	.0000	.0000	-.1178	.1789	.2018	
.000	.0000	.0000	.0000	-.1279	.1760	.2016	.2384
44.800	-.0482	.0000	.0000	-.1004	.1639	.2081	
50.100	-.1699	-.3088	-.2134	-.1300	.1756	.2120	
101.400	-.3445	-.3233	-.4068	-.3217		.2100	
115.600	-.3009	-.3288	-.4896	-.2878		.2110	
133.800	-.3607	-.3307	-.4567	-.1937		.2143	
149.100	-.4516	-.5145	-.4457	-.1894		.2061	
180.000	-.6226	-.6022	-.4726	-.2347	.1758	.2143	

RN/L (2) = 7.909 ALPHA (9) = 9.219 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3820	-.4565	-.4373	-.1956		.1849	
-133.800	-.3919	-.3247	-.4365	-.2183		.1830	
-115.600	-.2980	-.3799	-.5157	-.2497		.1908	
-101.400	-.3280	-.3821	-.4980	-.3453		.1977	
-50.100	-.2235	-.3643	-.2501	-.1184	.1626	.1865	
-44.800	-.0330	.0000	.0000	-.1226	.1529	.1857	
.000	.0000	.0000	.0000	-.1332	.1521	.1855	.1978
44.800	-.0480	.0000	.0000	-.1101	.1450	.1925	
50.100	-.1758	-.3185	-.2435	-.1466	.1486	.1628	
101.400	-.3401	-.3175	-.3885	-.2984		.1765	
115.600	-.2918	-.3208	-.4704	-.2582		.1779	
133.800	-.3381	-.3150	-.4562	-.1935		.1869	
149.100	-.4535	-.4584	-.4209	-.2122		.1970	
180.000	-.4974	-.4460	-.4555	-.2375	.1587	.1841	

ARC 12-180(OA173) OV101+TC+TUFTS H/B=FREE AIR (RNSP28)

RN/L (2) = 7.909 ALPHA (10) = 4.483 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.3799	-.3987	-.4400	-.2899		.1705	
-133.800	-.3835	-.2940	-.4793	-.2795		.1725	
-115.600	-.2930	-.3575	-.4949	-.2357		.1547	
-101.400	-.3214	-.3849	-.4875	-.3293		.1528	
-50.100	-.2370	-.3968	-.2463	-.0895	.1479	.1869	
-44.800	-.0139	.0000	.0000	-.0862	.1512	.1647	
.000	.0000	.0000	.0000	-.1279	.1486	.1818	.1915
44.800	-.0298	.0000	.0000	-.1244	.1460	.1778	
50.100	-.1712	-.3398	-.2418	-.1779	.1388	.1800	
101.400	-.3380	-.3076	-.3770	-.2916		.1511	
115.600	-.2790	-.3070	-.4411	-.2364		.1786	
133.800	-.3307	-.3070	-.4697	-.1893		.1905	
149.100	-.3617	-.4076	-.3850	-.3182		.1896	
180.000	-.4907	-.3946	-.3833	-.3151	.1450	.1560	

RN/L (2) = 7.903 ALPHA (11) = -.145 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4250	-.4490	-.5053	-.2293		.1855	
-133.800	-.4011	-.3128	-.5151	-.3010		.1869	
-115.600	-.3008	-.3633	-.4833	-.2314		.1790	
-101.400	-.3218	-.3751	-.4694	-.2983		.1465	
-50.100	-.2385	-.3786	-.2399	-.0744	.1645	.1892	
-44.800	-.0036	.0000	.0000	-.0621	.1669	.1884	
.000	.0000	.0000	.0000	-.1123	.1622	.1861	.1920
44.800	-.0158	.0000	.0000	-.1121	.1618	.1833	
50.100	-.1709	-.3196	-.2454	-.1611	.1524	.1787	
101.400	-.3304	-.3035	-.3654	-.2590		.1802	
115.600	-.2957	-.3232	-.4415	-.2286		.1896	
133.800	-.3359	-.3137	-.5254	-.2108		.1857	
149.100	-.4434	-.4831	-.4692	-.2503		.1933	
180.000	-.6075	-.5890	-.4527	-.2894	.1399	.1904	

ARC 12-180(OA173) OV101+TC+TUFTS H/B=FREE AIR (RNSP28)

RN/L (2) = 7.898 ALPHA (12) = 10.101 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4165	-.4866	-.4508	-.1849		.1950	
-133.800	-.4116	-.3455	-.4659	-.2182		.1987	
-115.600	-.3086	-.3875	-.5285	-.2538		.1858	
-101.400	-.3297	-.3921	-.5013	-.3456		.1895	
-50.100	-.2288	-.3572	-.2436	-.1316	.1545	.1895	
-44.800	-.0547	.0000	.0000	-.1140	.1574	.1854	
.000	.0000	.0000	.0000	-.1390	.1597	.1819	.1919
44.800	-.0573	.0000	.0000	-.1153	.1597	.1984	
50.100	-.1803	-.3216	-.1995	-.1475	.1638	.1933	
101.400	-.3466	-.3246	-.3939	-.3064		.1698	
115.600	-.2995	-.3281	-.4740	-.2712		.2009	
133.800	-.3415	-.3303	-.4477	-.1810		.1939	
149.100	-.4316	-.4752	-.4224	-.2308		.2040	
180.000	-.5867	-.5834	-.4485	-.2562	.1737	.2003	

RN/L (2) = 7.878 ALPHA (13) = 13.246 Q(PSF) = 450.50 PT = 10156. P = 9698.3 MACH = .25761

SECTION (1)TAILCONE DEPENDENT VARIABLE CP

X/LB	.99700	1.01700	1.05500	1.09400	1.24900	1.28100	1.28800
PHI							
-149.100	-.4355	-.4925	-.4704	-.1978		.2038	
-133.800	-.4123	-.3591	-.4561	-.2254		.2091	
-115.600	-.3131	-.3886	-.5355	-.2749		.2118	
-101.400	-.3278	-.3931	-.5076	-.3630		.2122	
-50.100	-.2206	-.3349	-.2132	-.1211	.1702	.2167	
-44.800	-.0552	.0000	.0000	-.1038	.1745	.1871	
.000	.0000	.0000	.0000	-.1406	.1743	.2026	.2313
44.800	-.0569	.0000	.0000	-.1082	.1763	.2040	
50.100	-.1812	-.3171	-.2348	-.1377	.1780	.2038	
101.400	-.3480	-.3244	-.4104	-.3278		.2156	
115.600	-.3054	-.3311	-.4934	-.2909		.2160	
133.800	-.3668	-.3317	-.4612	-.1913		.2120	
149.100	-.4538	-.5169	-.4496	-.1847		.2158	
180.000	-.5230	-.6289	-.4577	-.2274	.1692	.2099	

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