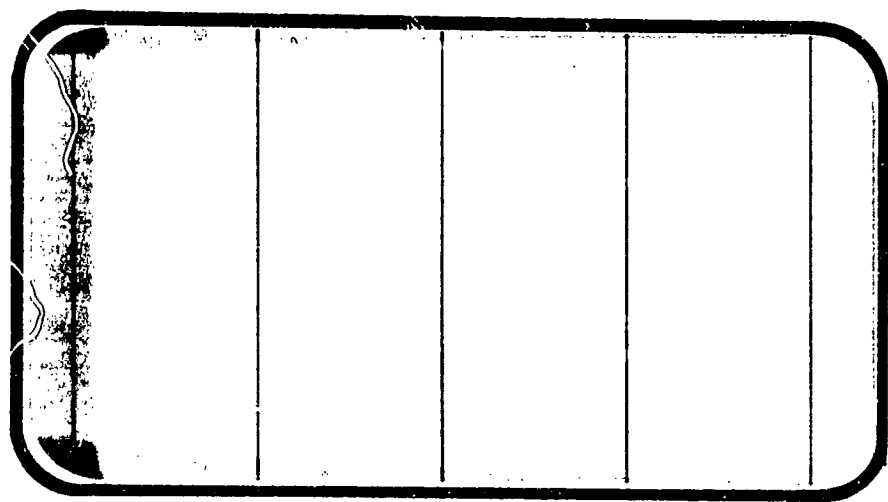




NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

CR134084



(NASA-CR-134084) RESULTS OF TESTS (OA64
AND IA35) OF AN 0.015-SCALE MODEL
(36-OTS) OF THE SPACE SHUTTLE
CONFIGURATION 140A/B IN THE (CHRYSLER
Corp.) 598 P HC \$33.00 CSCI 22B

G3/31

Unclass
41585

N74-27389

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA Management services



April, 1974

DMS-DR-2108
NASA CR-134, 084

RESULTS OF TESTS (OA64 AND IA35) OF AN 0.015-SCALE MODEL
(36-OTS) OF THE SPACE SHUTTLE CONFIGURATION 140A/B
IN THE NASA/LaRC UNITARY PLAN WIND TUNNEL

By

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Rockwell International

Prepared under NASA Contract Number NAS9-13247

By

Data Management Services
Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

TEST SPECIFICS:

Test Number: LaRC UPWT 1063
NASA Series No: OA64 and IA35
Model No: 36-OTS
Test dates: 30 October through 2 November, 1973

FACILITY COORDINATOR:

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ABSTRACT

Supersonic aerodynamic tests were conducted in the NASA/LaRC Unitary Plan Wind Tunnel on a 0.015-scale model of the Space Shuttle Vehicle 4 configuration. Surface pressure data were obtained for both the launch (test IA35) and entry (test OA64) configurations at Mach numbers from 2.5 to 4.5.

The surface pressure was measured in the vicinity of the cargo bay door hinge and parting lines and on the side of the fuselage at the crew compartment and below the OMS pods at the aft compartment. Data were obtained for angles of attack and sideslip consistent with the expected excursions about the nominal trajectory values at the test Mach numbers. These tests were a part of a test series supporting the orbiter venting analysis over a Mach number range from 0.6 to 10.4.

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COEFFICIENT SCHEDULE:

- A: CP vs. X/L
- B: CP vs. PHI

REPRODUCTION OF THE ORIGINAL PAGE IS POOR.

INTRODUCTION

The 0.015-scale Vent Pressure model (36-OTS) was tested in the high speed leg of the NASA Langley Research Center Unitary Plan Wind Tunnel at Mach numbers of 2.5, 2.95, 4.0, and 4.5. Pressure data were obtained to support the analysis of orbiter venting requirements during the ascent and entry modes. The effects of angle of attack and sideslip were investigated over a range consistent with trajectory requirements.

The tests were conducted during the period from October 30 through November 2, 1973. The shuttle program test identification numbers were OA64 and IA35. The facility test number was 1063.

NOMENCLATURE
General

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
a		speed of sound; m/sec, ft/sec
C _p	CP	pressure coefficient; $(P_1 - P_\infty)/q$
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	angle of roll, degrees
ρ		mass density; kg/m^3 , slugs/ft ³

Reference & C.G. Definitions

A _b		base area; m ² , ft ²
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
$\frac{b}{c}$ _{REF}	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)
Additional Nomenclature

<u>Symbol</u>	<u>NADESAC Symbol</u>	<u>Definition</u>
x/l	X/L	longitudinal location on orbiter fuselage, fraction of body length
δe_L	ELEVON	left elevon deflection angle, positive trailing edge down, degrees
ϕ	PHI	angular location on orbiter fuselage. degrees

CONFIGURATIONS INVESTIGATED

The 0.015-scale model was a replica of the Space Shuttle Configuration 140A/B Orbiter and Vehicle 4 external tank (ET) and solid rocket boosters (SRB). Though the attach points for the SRB and ET were in the proper location no attempt was made to simulate the actual attach configuration. Also, the external feed and vent lines on the ET were not simulated.

The orbiter was instrumented with 176 pressure taps on the left side of the fuselage. The orifices were located at the cargo bay door hinge and parting lines, on the side of the fuselage by the crew compartment and below the OMS pod at the aft compartment. The ET and SRB's were not instrumented.

The pressures were measured by four 10 psia Stathan PA 208 TC absolute pressure transducers housed in four type S Scanivalve pressure multiplexors driven by a single solenoid type stepper. Calibration pressures were measured by the facility micro-manometers.

Two configurations were tested. During launch vehicle testing the SRB's were attached to the tank and the ET to the orbiter. All control surfaces were set at 0° deflection. For entry configuration testing the SRB's and ET were replaced with appropriate off blocks. The left elevon was set at -15°. All other control surfaces remained at 0° deflection.

During the course of the test some pressure orifices or associated tubing developed leaks or became plugged. The following list presents these discrepancies and the affected runs:

0-04

Runs 1 to 25

Leaks	206
Restricted	105
Plugged	429

Runs 26 to 35

Leaks	144, 243, 340
Plugged	242, 303

IA35

Runs 36 to 50

Leaks	144, 243, 340, 428, 445
Restricted	303
Plugged	246, 247

The following conditions were run:

OA64 - Orbiter alone

$\delta e_L = -15^\circ$
Mach Nos. = 2.5, 2.95, 4.0, 4.5
Reynolds Nos. = 3.8, 3.35, 3.5, 3.5×10^6
 $\alpha = 8, 10, 12, 14, 16, 18, 20, 22$
 $\beta = 0, \pm 2, \pm 4, \pm 6$

IA35 - Launch Vehicle

$\delta e_L = 0^\circ$
Mach Nos. = 2.5, 2.95, 4.0, 4.5
Reynolds No. = 3.8, 3.35, 3.5, 3.5×10^6
 $\alpha^* = 0, \pm 2, \pm 4, \pm 6$
 $\beta = 0, \pm 4, \pm 6$

* The data at $\beta = -6^\circ$, $\alpha = 0, 2, 4, 6$ at $M = 4.5$ were deleted due to equipment problems, November 1. Time did not allow returning to these conditions to pick up these points after correction of the problems.

TEST FACILITY DESCRIPTION

The NASA LaRC 4-Foot Unitary Plan Wind Tunnel (UPWT) is a closed-circuit, continuous flow, variable density facility. The test section is 4 feet by 4 feet by 7 feet long.

Two tunnel legs are available for supersonic testing in the Mach number ranges 1.47 to 2.86 (Leg No. 1) and 2.29 to 4.63 (Leg No. 2). An asymmetric, sliding block nozzle position and total pressure setting provide the test Mach numbers at a specified Reynolds number. Reynolds number can be varied from 0.76 to 7.78 million per foot. Available stagnation pressure variation is 4.0 to 142. psia. Dynamic pressure variation is 95. to 1260. psf with normal operating stagnation temperature about 150°F in Mach modes 2 or 3 and about 175°F in Mach mode 4. The tunnel is equipped with a dry air supply, an evacuating system, and a cooling system. The facility power is approximately 83,000 horsepower.

Model mounting provisions consist of various sting arrangements, including axial (longitudinal), lateral (independent pitch and yaw), and roll movement with side wall support. A Schlieren system and oil flow visualization equipment are available. Data are recorded at the tunnel and reduced off-line at the Langley Computer Center. The tunnel is used for force and moment, pressure, and dynamic stability tests. Hot and cold jet effects and heat transfer have been studied in the UPWT.

TABLE I.

TEST : IA35/OA64		DATE : Oct-Nov '73	
TEST CONDITIONS			
MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
2.5	2.5 x 10 ⁶ /ft.	3.82	150
3.0	2.5 x 10 ⁶ /ft.	3.34	150
4.0	2.5 x 10 ⁶ /ft.	2.50	175
4.5	2.5 x 10 ⁶ /ft.	2.08	175
BALANCE UTILIZED:	None		
	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	_____	_____	_____
SF	_____	_____	_____
AF	_____	_____	_____
PM	_____	_____	_____
RM	_____	_____	_____
YM	_____	_____	_____
COMMENTS:	Model instrumented with 176 static pressure orifices.		

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT: BODY - B₂₆

GENERAL DESCRIPTION: Orbiter Fuselage Configuration 140 A/B

NOTE: B₂₆ identical to B₂₄ except underside of fuselage refaired to accept W₁₁₆.

Model Scale = 0.015

DRAWING NUMBER: VL70-000193
VL70-000140A

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length (Body Fwd Sta X ₀ = 235) - in.	<u>1293.3</u>	<u>19.35450</u>
Max. Width (at X ₀ = 1520) - in.	<u>262.0</u>	<u>3.93000</u>
Max. Depth (at X ₀ = 1464) - in.	<u>250.0</u>	<u>3.75000</u>
Fineness Ratio	<u>0.26357</u>	<u>0.26357</u>
Area - ft ²		
Max. Cross-Sectional	<u>340.88462</u>	<u>0.07670</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III. - Continued.

MODEL COMPONENT: CANOPY - C₉

GENERAL DESCRIPTION: Configuration 3a

Model Scale = 0.015

DRAWING NUMBER VL70-000140A
VL70-000143

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length ($X_0=434.643$ to 670)	<u>235.357</u>	<u>3.53036</u>
Max Width ($\phi X_0=513.127$)	<u>152.412</u>	<u>2.28618</u>
Max Depth ($\phi X_0=485.0$)	<u>25.000</u>	<u>0.37500</u>
Fineness Ratio	<u> </u>	<u> </u>
Area	<u> </u>	<u> </u>
Max Cross-Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III. - Continued.

MODEL COMPONENT: FLYVON - E26GENERAL DESCRIPTION: Configuration 4NOTE: VL70-000400 data for (1) of (2) sides. Identical to E25 except
airfoil thicknessModel Scale = 0.015DRAWING NUMBER:VL70-000200
VL70-000140 B

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area	<u>223.5814</u>	<u>0.05031</u>
Span (equivalent)	<u>368.34</u>	<u>5.52510</u>
Inb'd equivalent chord	<u>119.623</u>	<u>1.79434</u>
Outb'd equivalent chord	<u>55.1922</u>	<u>0.82788</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.2096</u>	<u>0.2096</u>
At Outb'd equiv. chord	<u>0.4004</u>	<u>0.4004</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.00</u>	<u>0.00</u>
Tailing Edge	<u>-10.056</u>	<u>-10.056</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Normal to hinge line)	<u>851.1502</u>	<u>0.00287</u>

TABLE III. - Continued.

MODEL COMPONENT: Body Flap - F_g

GENERAL DESCRIPTION: Configuration 4

Model Scale - 0.015
 DRAWING NUMBER VL70-000140B, VL70-000200

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length in.	<u>94.856</u>	<u>1.42284</u>
Max Width in.	<u>262.308</u>	<u>3.943462</u>
Max Depth in.	<u>23.000</u>	<u>0.34500</u>
Fineness Ratio	<u> </u>	<u> </u>
Area - ft ²	<u> </u>	<u> </u>
Max Cross-Sectional	<u> </u>	<u> </u>
Planform	<u>158.85350</u>	<u>0.03574</u>
Wetted	<u> </u>	<u> </u>
Base	<u>41.89642</u>	<u>0.00943</u>

TABLE III. - Continued.

MODEL COMPONENT: OMS POD - M7

GENERAL DESCRIPTION: Configuration 3A

MODEL SCALE: 0.015

DRAWING NUMBER: VL70-000140A
VL70-000145

<u>DIMENSIONS:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length (OMS Fwd Sta $X_0 = 1233.0$) - IN.	<u>327.000</u>	<u>4.9050</u>
Max Width (@ $X_0 = 1450.0$) - IN.	<u>94.5</u>	<u>1.4175</u>
Max. Depth (@ $X_0 = 1493.0$) - IN.	<u>109.000</u>	<u>1.6350</u>
Area		
Max Max Cross-Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III. - Continued

MODEL COMPONENT: BSRM NOZZLES - N25

GENERAL DESCRIPTION: Configuration 3A BSRM Nozzles

Model Scale = 0.015

DRAWING NO. VL72-000088A
VL77-000036A

DIMENSIONS	FULL-SCALE	MODEL SCALE	
MACH NO. _____			
DIAMETER DEX ~ IN (One Nozzle)	<u>141.3</u>	<u>2.11950</u>	
DIAMETER DT ~ IN	_____	_____	
DIAMETER DIN ~ IN	_____	_____	
ON ~ DEGREES	_____	_____	
AREA - FT ² (One Nozzle)			
MAX CROSS-SECTIONAL	<u>108.89595</u>	<u>0.02450</u>	
GIMBAL ORIGIN	<u>X_o</u>	<u>Y_o</u>	<u>Z_o</u>
LEFT NOZZLE ~ IN. F.S.	<u>1825.3</u>	<u>-243</u>	<u>400</u>
RIGHT NOZZLE ~ IN. FS	<u>1825.3</u>	<u>+243</u>	<u>400</u>
NULL POSITION - DEG.	<u>PITCH</u>	<u>YAW</u>	
LEFT NOZZLE	<u>+8</u>	<u>+8</u>	
RIGHT NOZZLE	<u>+8</u>	<u>+8</u>	

TABLE III. - Continued.

MODEL COMPONENT: RUDDER - R5

GENERAL DESCRIPTION: 2A, 3 and 3A Configuration per Rockwell Lines

VL70-000095

Model Scale = 0.015

DRAWING NUMBER: VL70-000095

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - FT ²	<u>106.38</u>	<u>0.02394</u>
Span (equivalent) - IN.	<u>201.0</u>	<u>3.01500</u>
Inb'd equivalent chord	<u>91.585</u>	<u>1.37378</u>
Outb'd equivalent chord	<u>50.833</u>	<u>0.76249</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>34.83</u>	<u>34.83</u>
Tailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
Area Moment (Normal to hinge line, - FT ³)	<u>526.13</u>	<u>0.00178</u>
Product of Area and Mean Chord		

TABULAR DATA - CONTINUED.

MODEL COMPONENT: BOOSTER SOLID ROCKET MOTOR - S12

GENERAL DESCRIPTION: Configuration 3A, Data for (1) of (2) sides,
per Rockwell Lines VL77-000036A

Model Scale = 0.015

DRAWING NUMBER VL72-000088A
VL77-000036A

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length (Includes Nozzle) - IN.	<u>1741.0</u>	<u>26.1150</u>
Max Width (Tank Dia) - IN.	<u>142.3</u>	<u>2.1345</u>
Max Depth (Aft Shroud) - IN.	<u>192.0</u>	<u>2.8800</u>
Fineness Ratio	<u>9.06771</u>	<u>9.06771</u>
Area - FT ²		
Max Cross-Sectional	<u>201.06193</u>	<u>0.04524</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>
WP of BSRM Centerline (Z _T) - IN.	<u>400</u>	<u>6.0000</u>
FS of BSRM Nose (X _T) - IN.	<u>200</u>	<u>3.0000</u>

TABLE III. - Continued.

MODEL COMPONENT: EXTERNAL TANK - T12

GENERAL DESCRIPTION: External Oxygen Hydrogen Tank

NOTE: Identical to T11 with external fuel lines added

Model Scale = 0.015

DRAWING NUMBER VL76--000031A
VL78--000041A

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length - IN. (Nose @ $X_T = 309$)	<u>1865</u>	<u>27.9750</u>
Max Width (Dia) - IN.	<u>324</u>	<u>4.860</u>
Max Depth	<u></u>	<u></u>
Fineness Ratio	<u>5.75617</u>	<u>5.75617</u>
Area - FT ²		
Max Cross-Sectional	<u>572.555</u>	<u>0.12882</u>
Planform	<u></u>	<u></u>
Wetted	<u></u>	<u></u>
Base	<u></u>	<u></u>
WP of Tank Centerline (X_T) - IN.	<u>400.0</u>	<u>6.0000</u>

MODEL COMPONENT: VERTICAL - V

GENERAL DESCRIPTION: Configuration 3A

NOTE: Similar to V5 with radius on TW upper corner and LE lower corner
where vertical meets fuselage.

Model Scale = 0.015

DRAWING NUMBER:

VL70-000140A
VL70-000146A

DIMENSIONS:

FULL-SCALE

MODEL SCALE

TOTAL DATA

Area (Theo) Ft ²	<u>413.253</u>	<u>0.09298</u>
Planform		
Span (Theo) In	<u>315.720</u>	<u>4.73580</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>0.40399</u>	<u>0.40399</u>
Sweep Back Angles, degrees		
Leading Edge	<u>45.00</u>	<u>45.00</u>
Trailing Edge	<u>25.947</u>	<u>25.947</u>
0.25 Element Line	<u>41.130</u>	<u>41.130</u>
Chords:		
Root (Theo) WP	<u>268.500</u>	<u>4.02750</u>
Tip (Theo) WP	<u>108.470</u>	<u>1.62705</u>
MAC	<u>199.80756</u>	<u>2.99711</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>21.95250</u>
W. P. of .25 MAC	<u>635.522</u>	<u>9.53283</u>
B. L. of .25 MAC	<u>0.00</u>	<u>0.00</u>
Airfoil Section		
Leading Wedge Angle Deg	<u>10.00</u>	<u>10.00</u>
Trailing Wedge Angle Deg	<u>14.920</u>	<u>14.920</u>
Leading Edge Radius (in) - IN.	<u>0.00</u>	<u>0.0300</u>
Void Area	<u>13.17</u>	<u>0.00296</u>
Blanketed Area	<u>0.00</u>	<u>0.00</u>

TABLE III. - Concluded.

MODEL COMPONENT: WING-W₁₁₆GENERAL DESCRIPTION: Configuration 4NOTE: Identical to W₁₁₄ except airfoil thickness. Dihedral angle is along trailing edge of wing.MODEL SCALE: 0.015

TEST NO.

DWG. NO. VL70-000140B
VL70-000200

DIMENSIONS:

FULL-SCALE

MODEL SCALE

TOTAL DATAArea (Theo.) Ft²

Planform

Span (Theo In.)

Aspect Ratio

Rate of Taper

Taper Ratio

Dihedral Angle, degrees

Incidence Angle, degrees

Aerodynamic Twist, degrees

Sweep Back Angles, degrees

Leading Edge

Trailing Edge

0.25 Element Line

Chords:

Root (Theo) B.P.O.O.

Tip, (Theo) B.P.

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

EXPOSED DATAArea (Theo) Ft²

Span, (Theo) In. BP108

Aspect Ratio

Taper Ratio

Chords

Root BP108

Tip $1.00 \frac{b}{2}$

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

Airfoil Section (Rockwell Mod NASA)
XXX-64Root $\frac{b}{2} =$ Tip $\frac{b}{2} =$

Data for (1) of (2) Sides

Leading Edge Cuff

Planform Area Ft²

Leading Edge Intersects Fus M. L. @ Sta

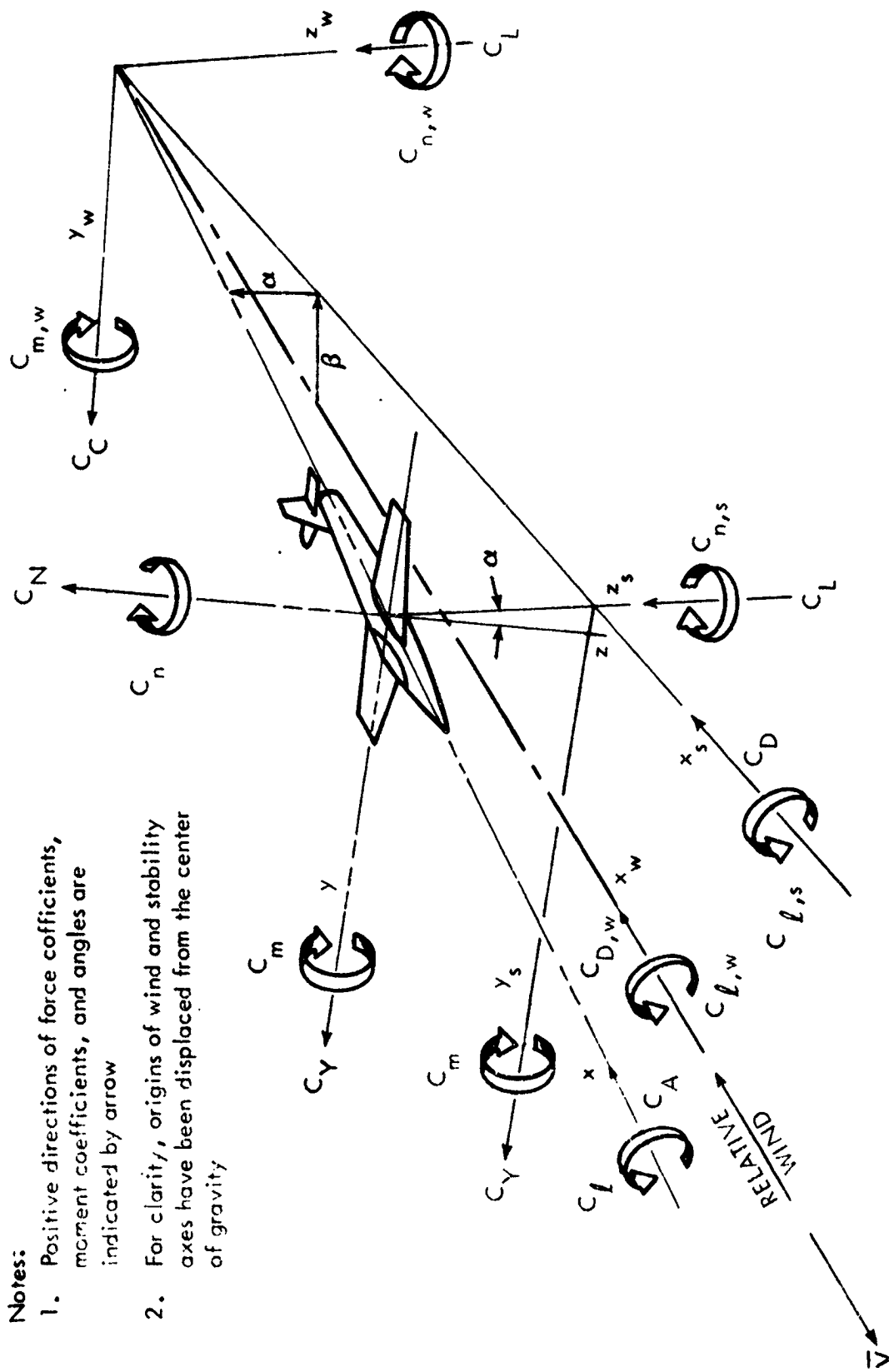
Leading Edge Intersects Wing @ Sta

2690.000.60525936.681614.050222.2652.2651.1771.1770.2000.2003.5003.5000.5000.500+ 3.000+ 3.00045.0045.0010.05610.05635.20935.209689.242910.33864137.84862.06773474.81177.122181126.72117.05082291.004.36500187.334912.810021812.22050.40775736.681614.050222.0582.0580.24510.2451570.62308.55934137.85122.06777354.23765.313561164.23717.46356292.004.38000239.677863.595170.1130.1130.120.12118.3330.0256505.07.575001003.515.05250

Table IV. Pressure Tap Layout

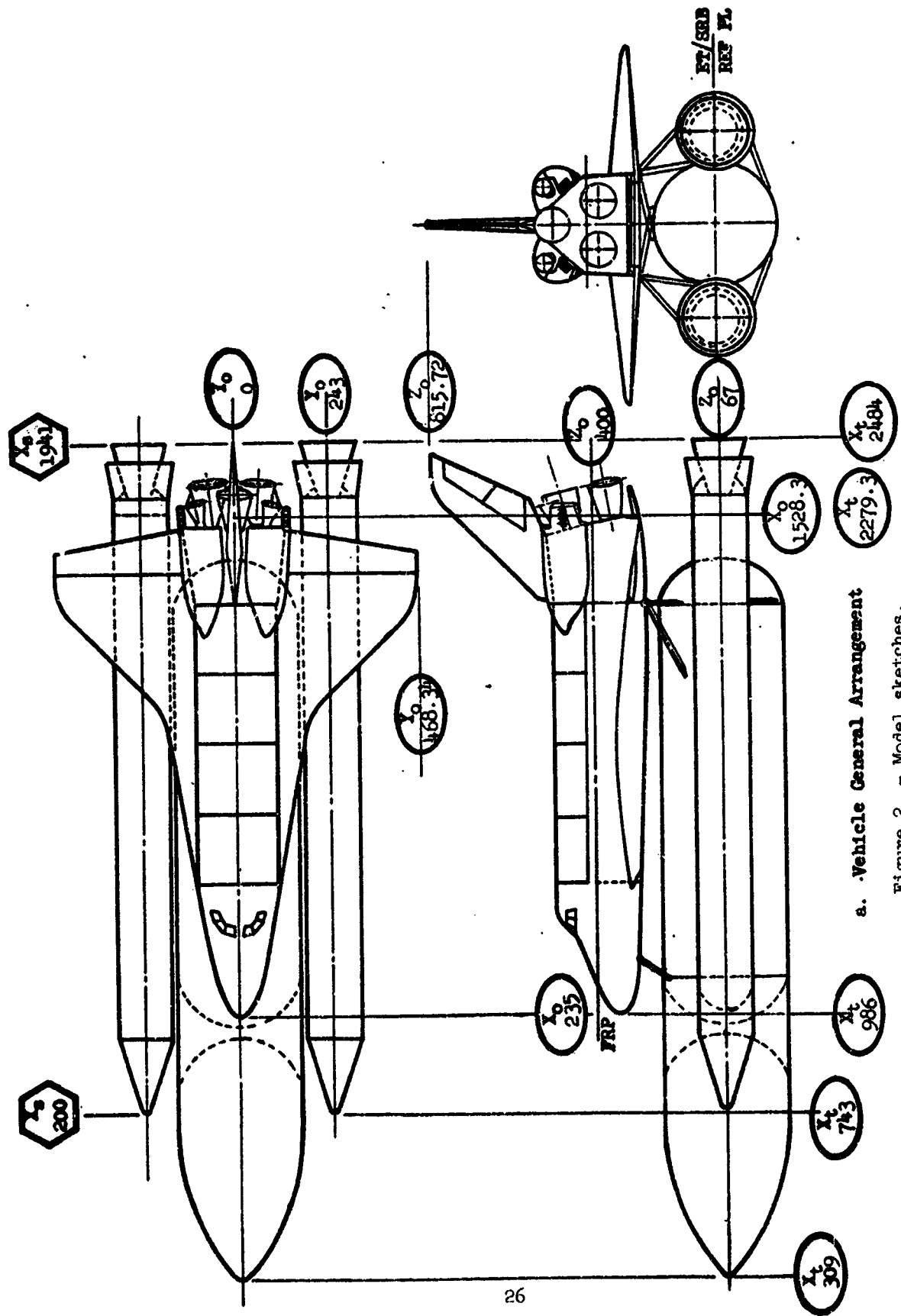
X_0	X/L	$\phi = 60$	$\phi = 70$	$\phi = 80$	$\phi = 90$	$\phi = 100$	$\phi = 110$	$\phi = 120$	$\phi = 130$	$\phi = 140$	$\phi = 150$	$\phi = 160$	$\phi = 170$	$\phi = 180$
350	.087	102	103	104	111	115	116	117	118	119	120	121	122	123
400	.126	105	106	107	112	127	128							129
450	.164	108	109	110	113	131	132							133
500	.203				114	135	136							137
550	.242				126	139	140							141
578	.264				130	143	144							145
602	.282				134	147	202							203
626	.301				142	205	206							207
650	.319				146	209	210							217
674	.338				204	219	220							221
698	.357				208	223	226							227
722	.375				218	229	230							231
746	.394				222	233	234							235
760	.405				228	237	238							239
794	.431				236	241	242							243
818	.450				240	245	246							307
842	.468				244	309	310							311
866	.486				308	313	314							315
890	.505				312	317	318							319
914	.524				316	321	322							323
942	.546				320	327	328							329
962	.561				326	331	332							333
986	.580				330	335	336							337
1010	.598				334	339	340							347
1034	.617				402	403	404							405
1058	.636				406	407	408							409
1082	.654				410	411	412							413
1106	.673				414	415	416							417
1125	.688				418	419	420							421
1154	.710				422	423	426							427
1178	.729				428	429	430							437
1202	.747				441									
1226	.767				414									
1250	.785				418									
1274	.803				422									
1307	.829				428									
1350	.862	438	439	440	431									
1400	.900		442	443	432									
1450	.940		445	446	435									
					433									
					434									
					436									

ϕ in degrees, measured clockwise from bottom centerline (looking forward) about FRL at $Z_0 = 400$, $Y_0 = 0$.



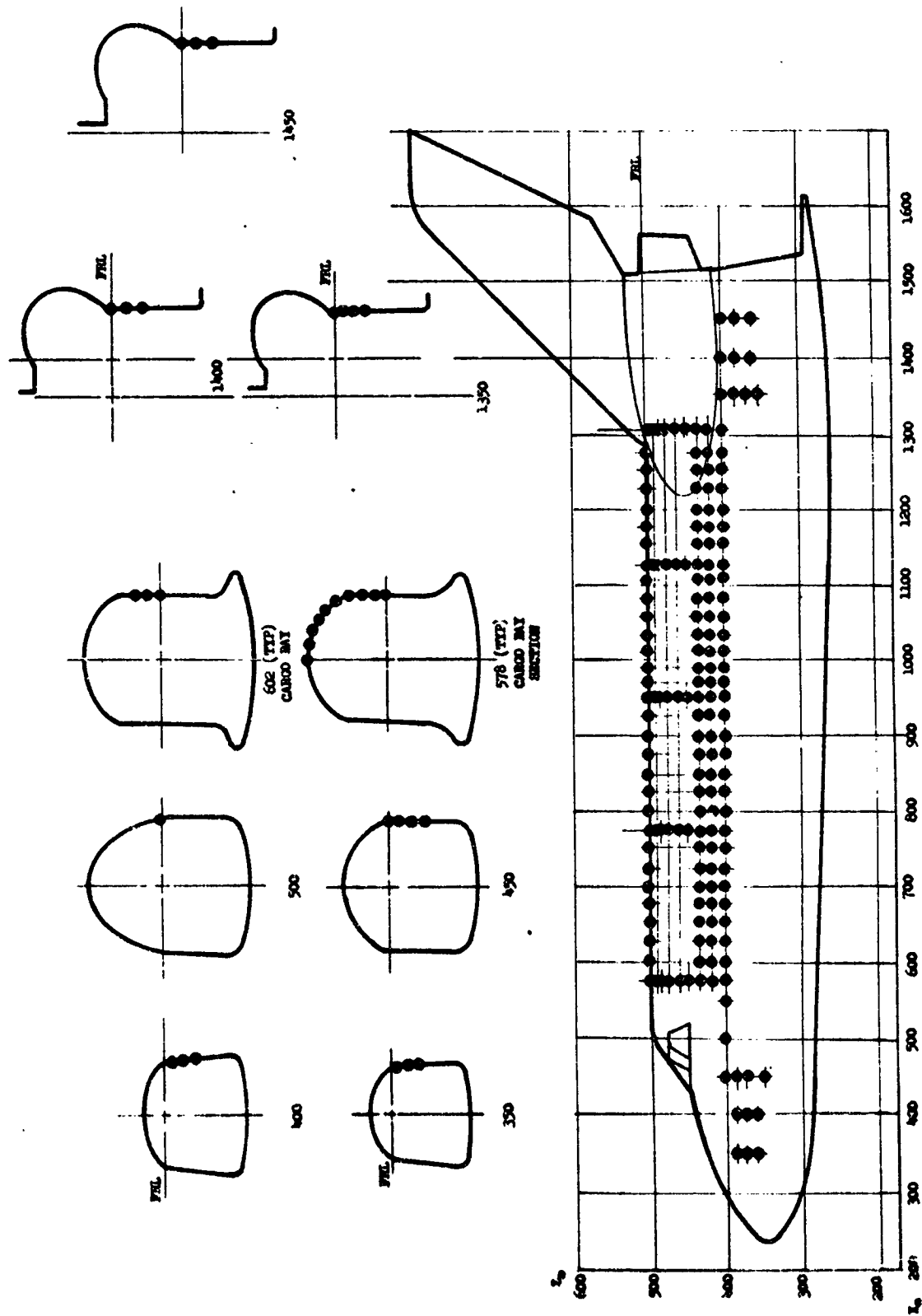
- Notes:**
1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrow
 2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

Figure 1. - Axis systems.



a. Vehicle General Arrangement

Figure 2. - Model sketches.



b. Pressure orifice locations

Figure 2. - Concluded.

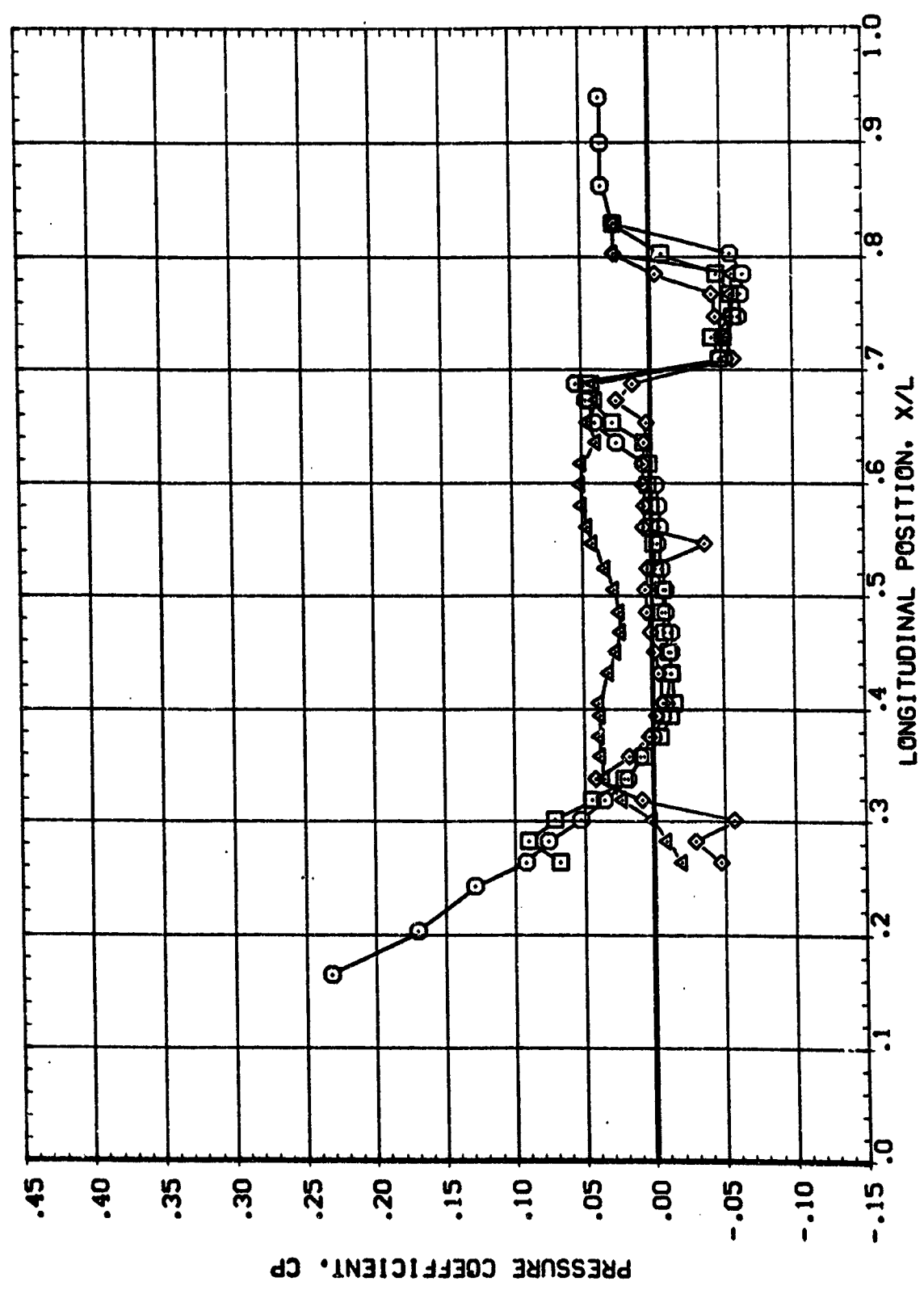
DATA FIGURES

IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

PARAMETRIC VALUES
BETA .000 ELEVON .000

PHI 90.000 ALPHA -6.010 MACH 2.500
SYMBOL □ 100.000
◇ 110.000
△ 180.000

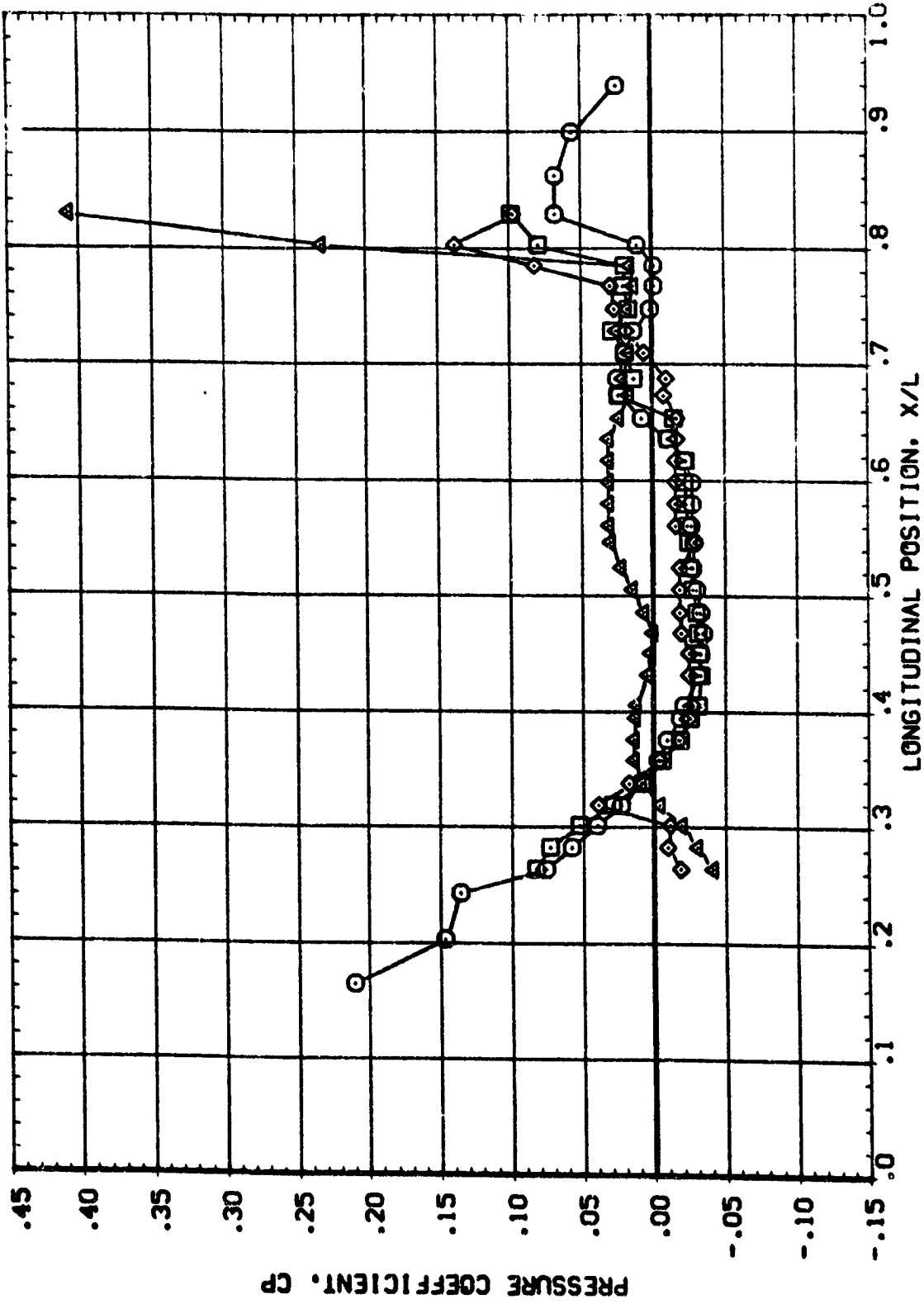


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

1A35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBL	PHI	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	90.000	-3.950	2.500		.000 ELEVON
□	100.000				
◇	110.000				
△	180.000				



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



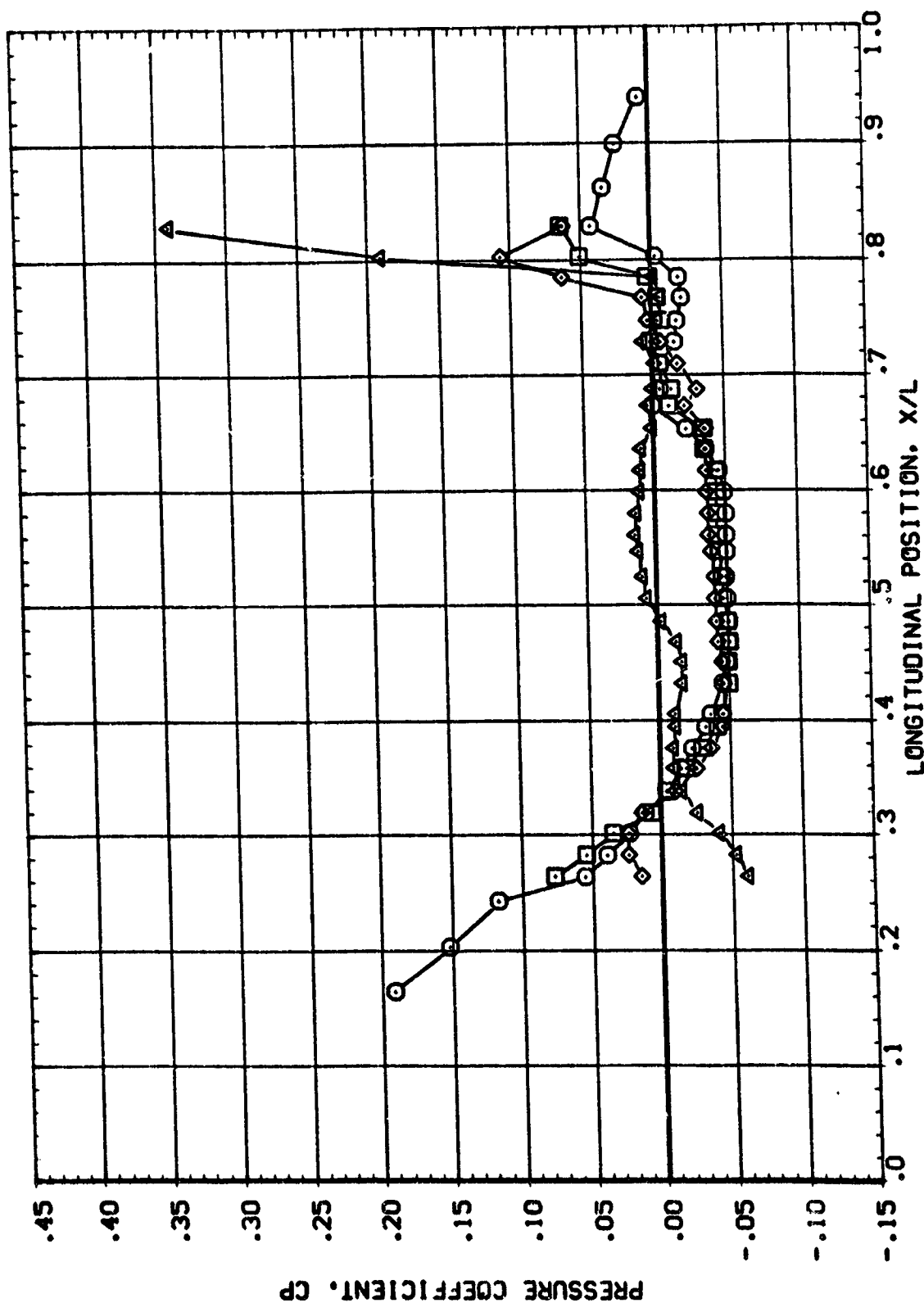
IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL PMI
□ 90.000
◇ 100.000
△ 110.000
△ 180.000

ALPHA -2.000
MACH 2.500

BETA
PARAMETRIC VALUES
.000 ELEVON .000

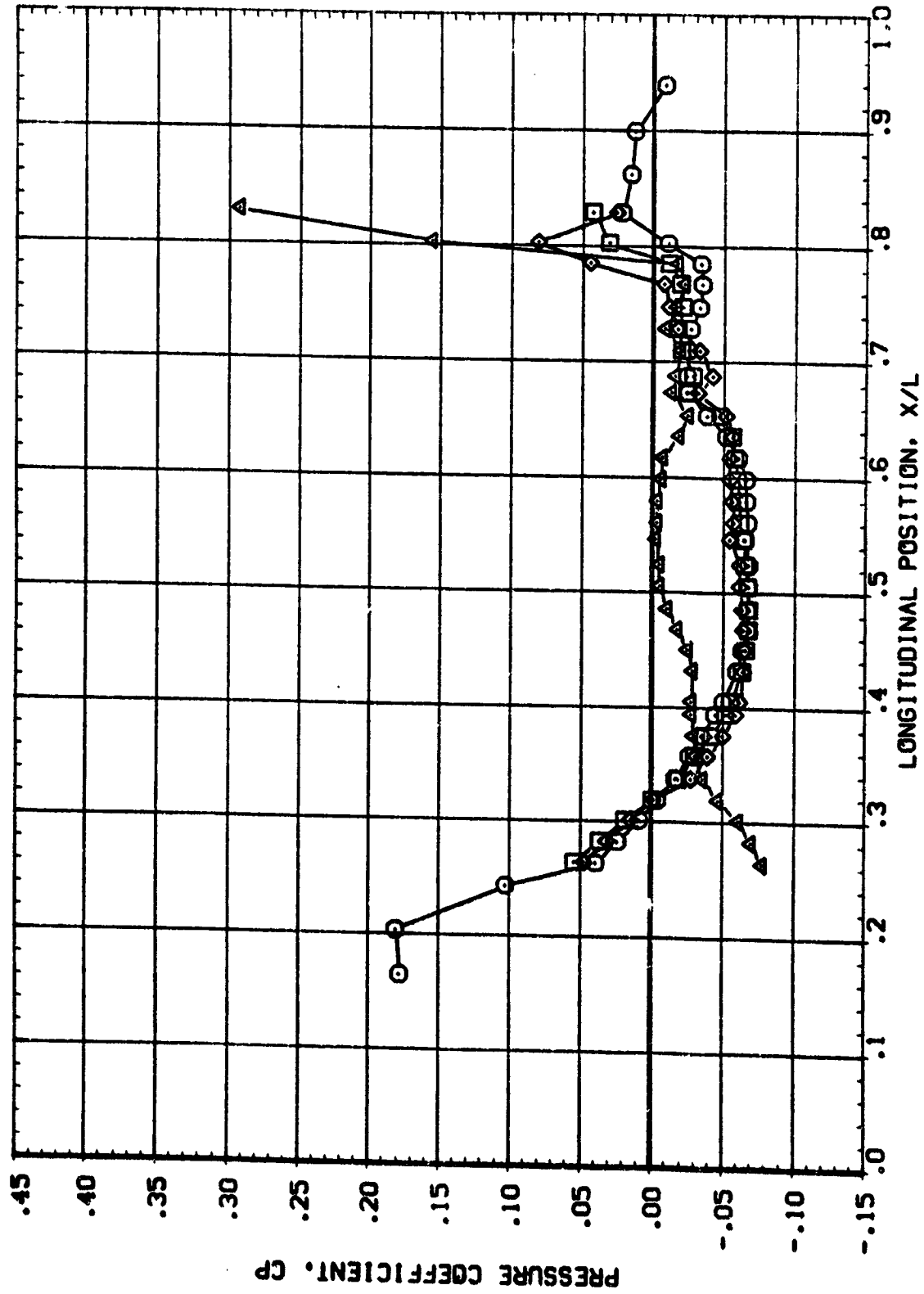


IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL PHI ALPHA MACH
 ○ 90.000 .000 2.500
 □ 100.000
 ◇ 110.000
 △ 120.000

BETA .000
 PARAMETRIC VALUES
 .000 ELEVON .000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

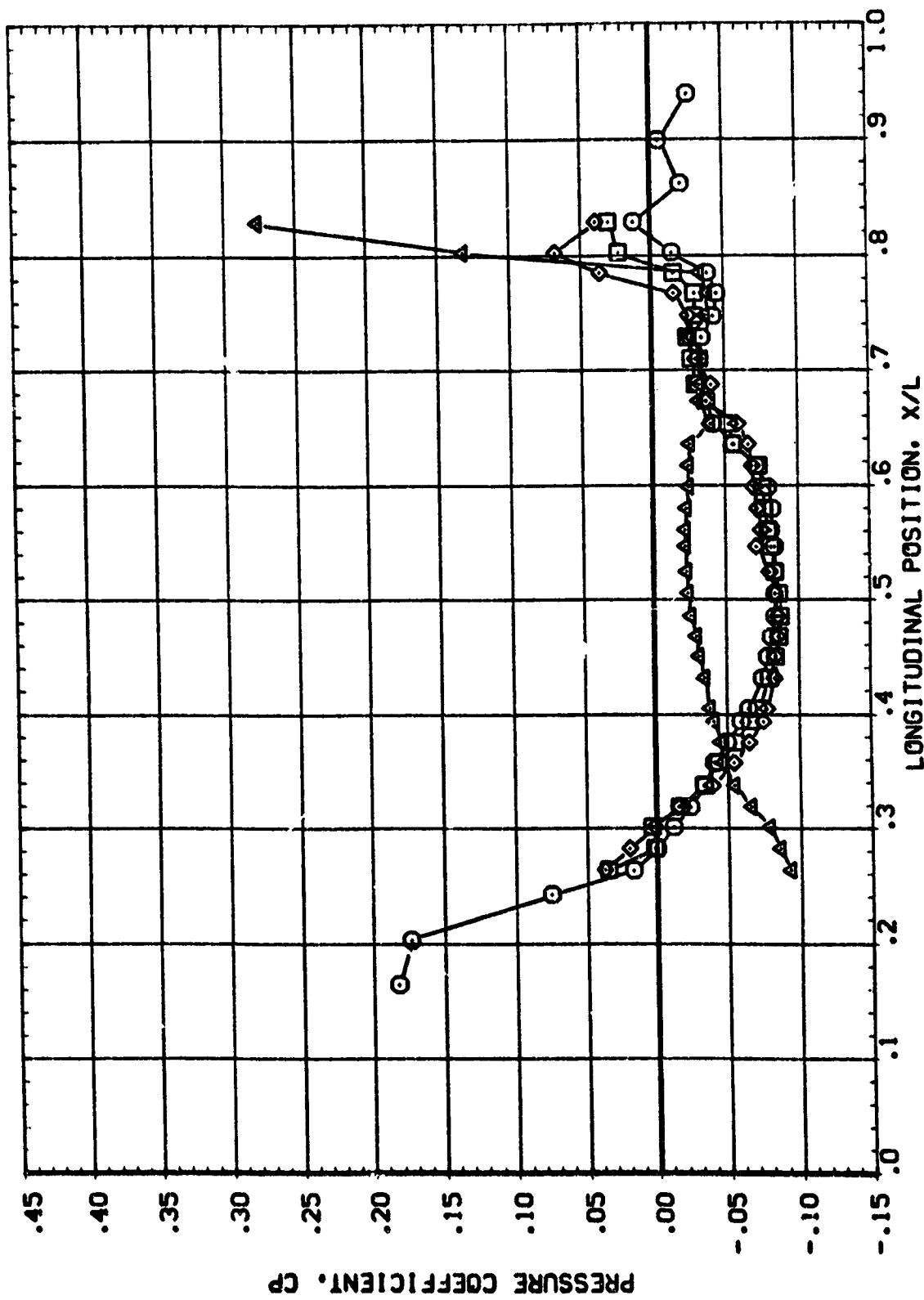


IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL PHI ALPHA MACH
○ 90.000 2.000 2.500
□ 100.000
◇ 110.000
△ 180.000

BETA .000 ELEVON .000

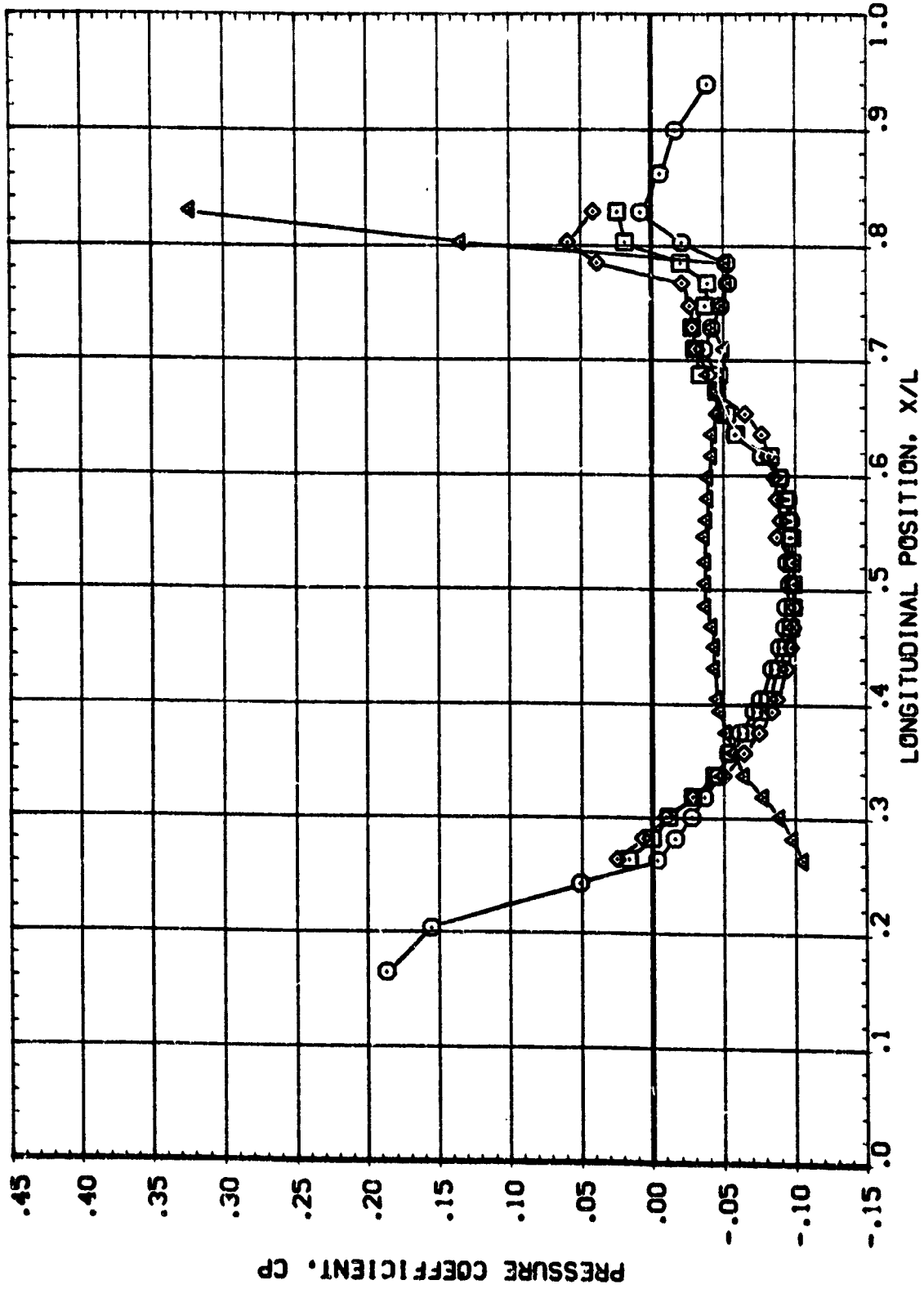


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL	PHI	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	90.000	3.990	2.500	.000	E-EVON
□	100.000			.000	
◇	110.000			.000	
△	160.000			.000	



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

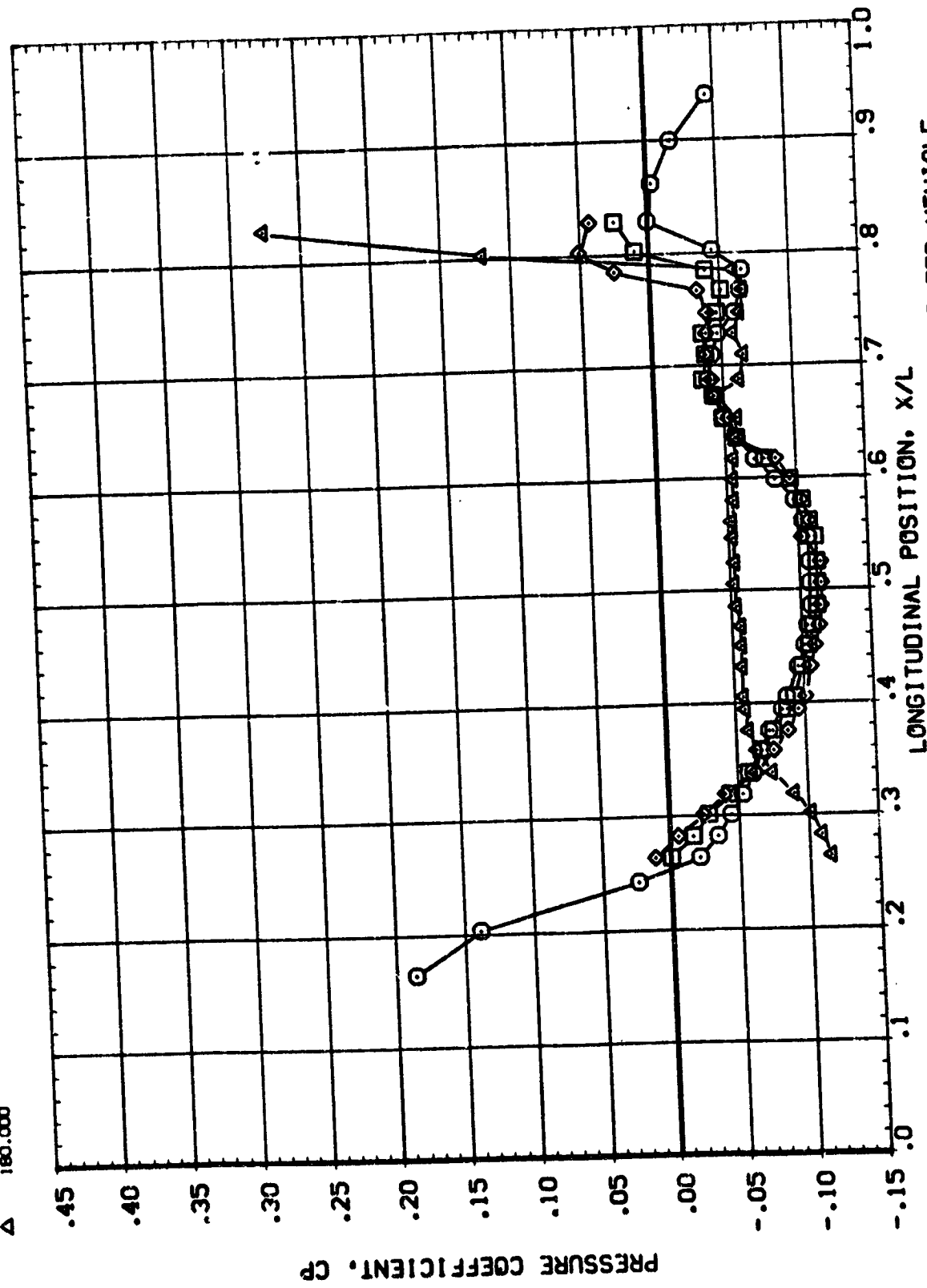


(R05004)

1A35 ORBITER ASCENT CONFIGURATION

BETA .000 ELEVON .000
PARAMETRIC VALUES

SYMBOL PHI ALPHA MACH
 ○ 90.000 6.000 2.500
 □ 100.000
 ◇ 110.000
 ▲ 180.000

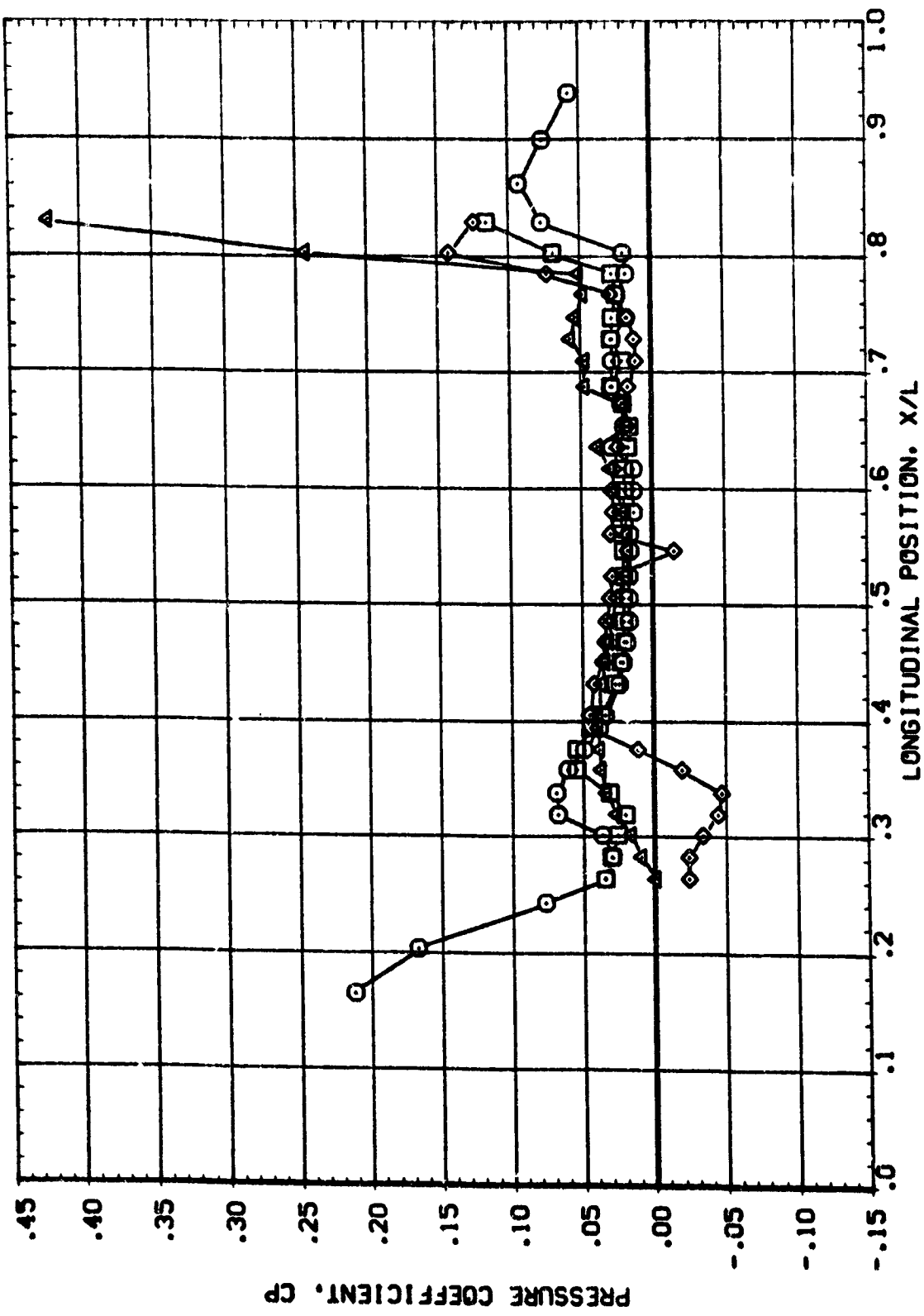


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE
 PAGE 7

1A35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL	PHI	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	90.000	-6.000	2.950	.000	ELEVON
□	100.000				
◇	110.000				
△	180.000				



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



IA35 ORBITER ASCENT CONFIGURATION

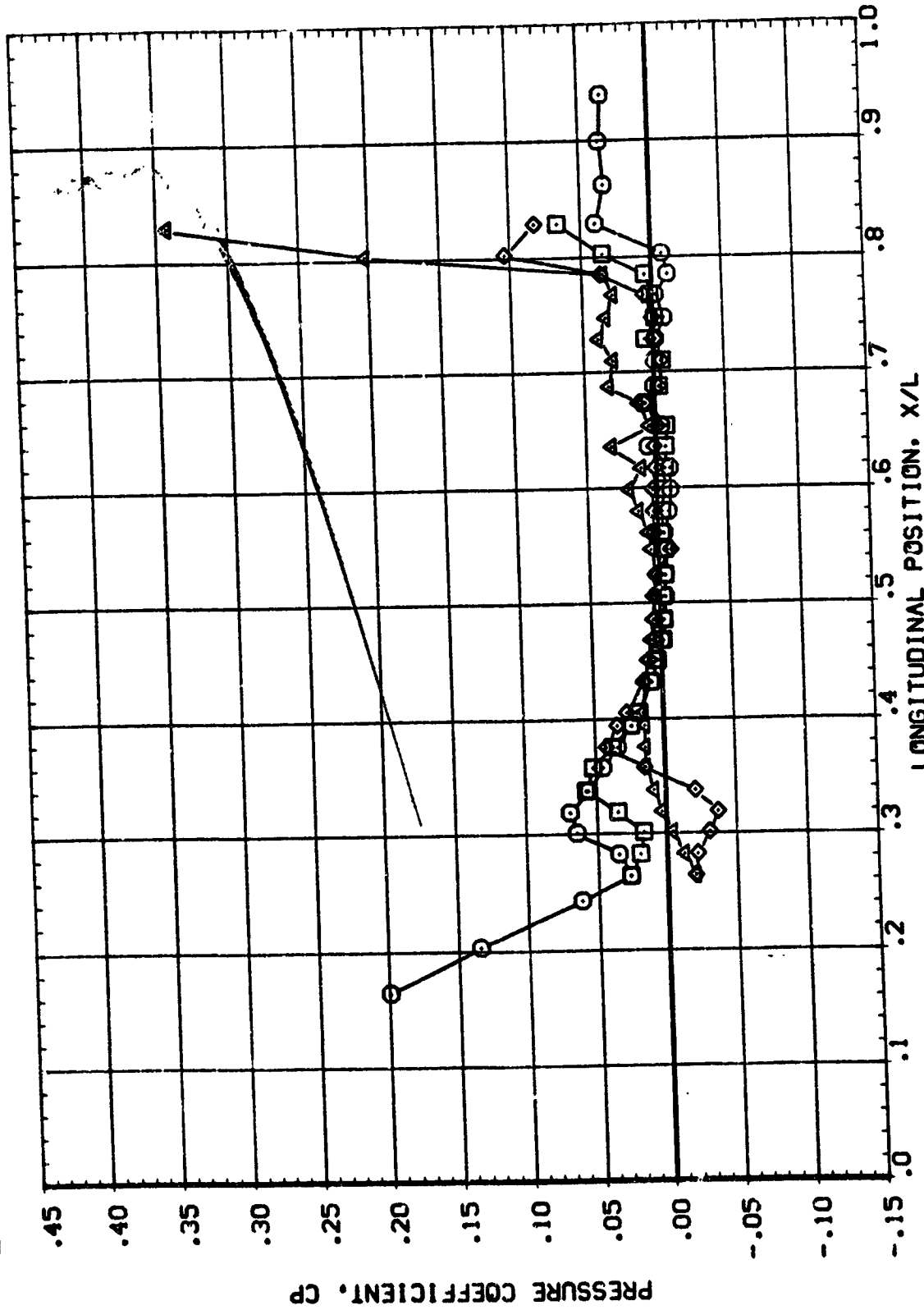
(R05004)

SYMBOL
○ 90.000
□ 100.000
◇ 110.000
△ 180.000

ALPHA -4.000
MACH 2.950

BETA

PARAMETRIC VALUES
.000 ELEVON .000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

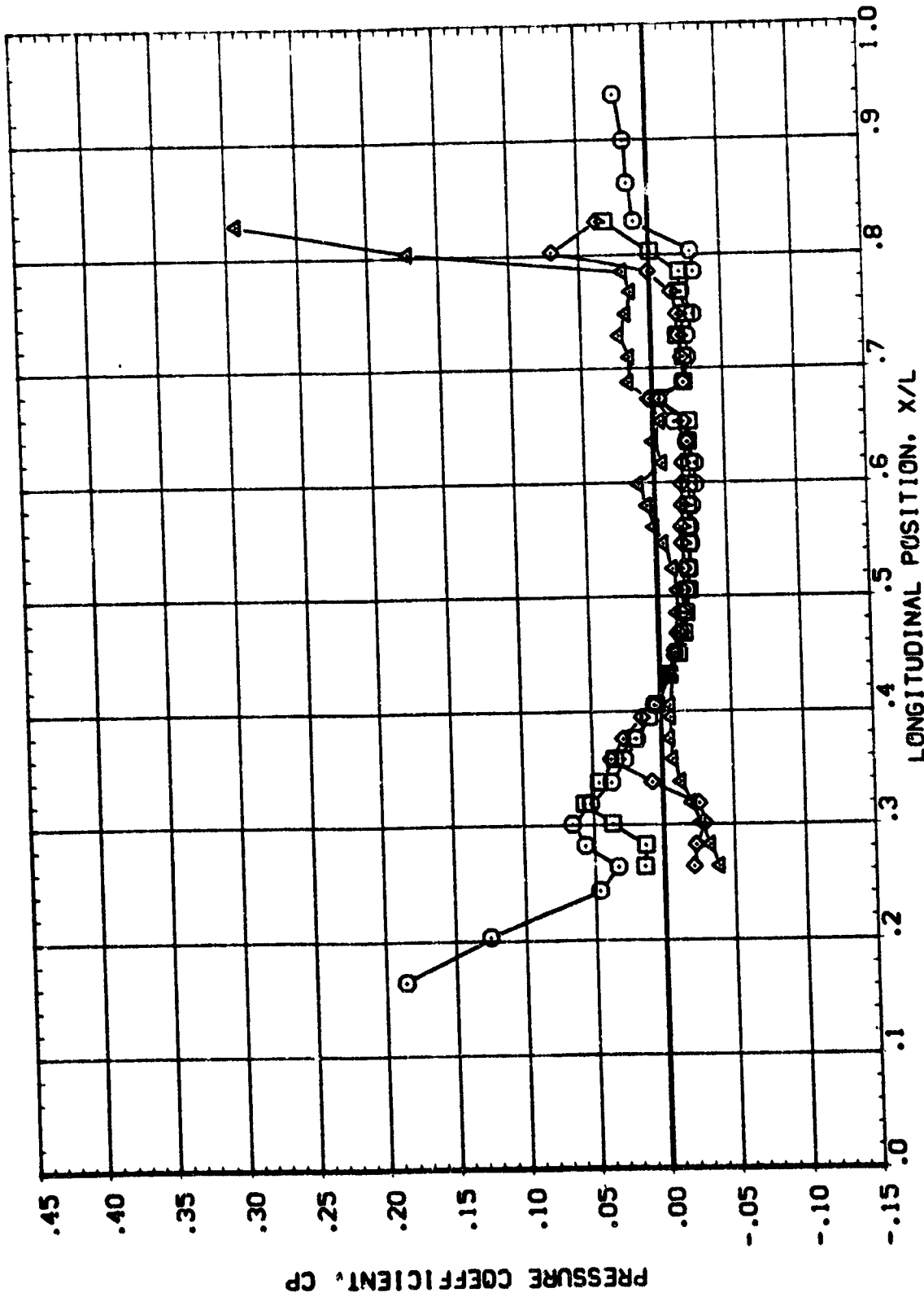
IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL PMI ALPHA MACH

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 □ 100.000
 ◇ 110.000
 △ 120.000

BETA .000 ELEVON .000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



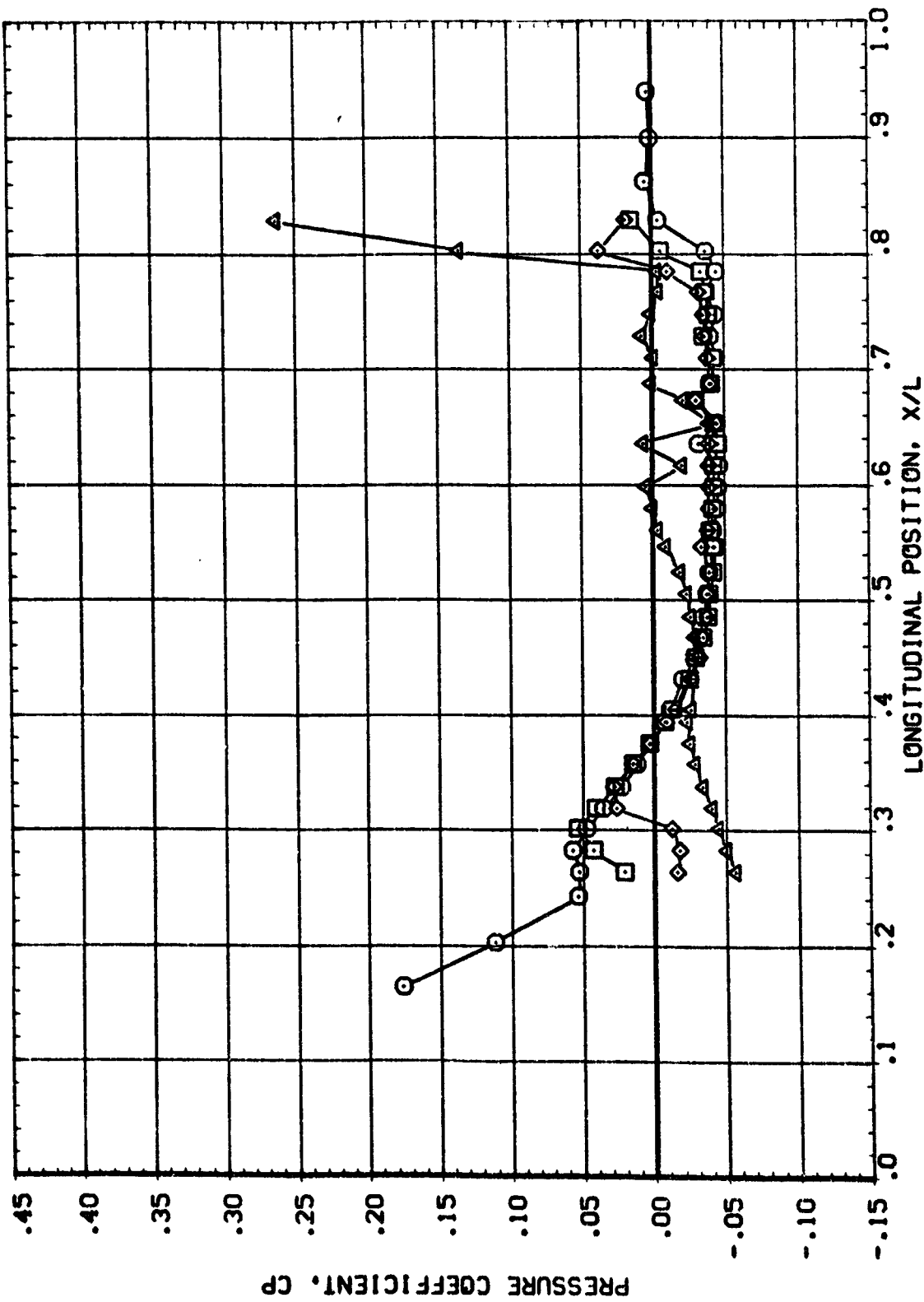
IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL PHI
○ 90.000
□ 100.000
◇ 110.000
△ 180.000

ALPHA MACH
.010 2.950

BETA
PARAMETRIC VALUES
.000 ELEVON .000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

1A35 ORBITER ASCENT CONFIGURATION

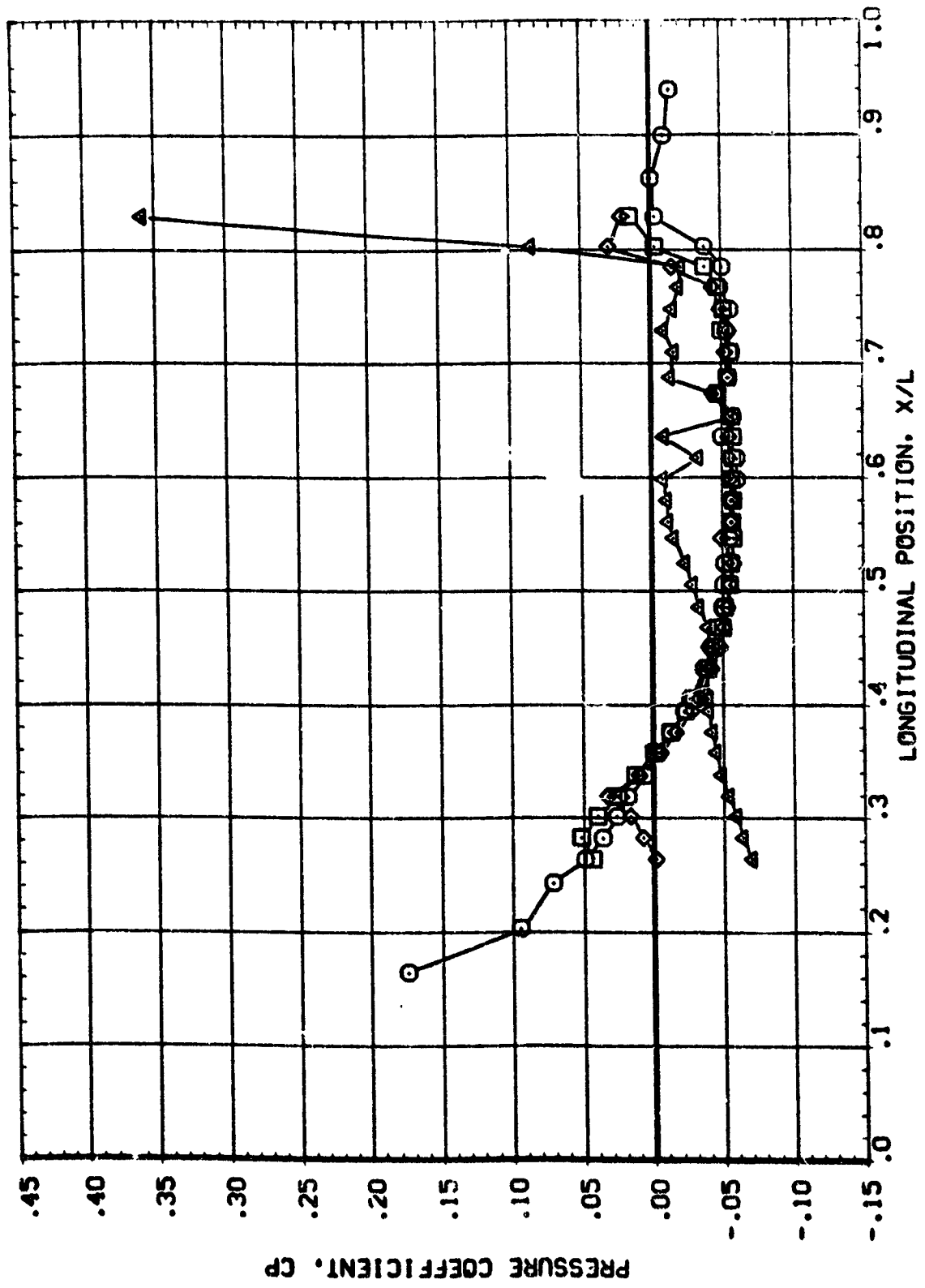
(R05004)

PARAMETRIC VALUES
 .000 ELEVON .000

BETA

PHI ALPHA MACH
 20.000 2.000 2.950
 100.000
 110.000
 180.000

SYMBOL
 ○ □ ◇ ▲



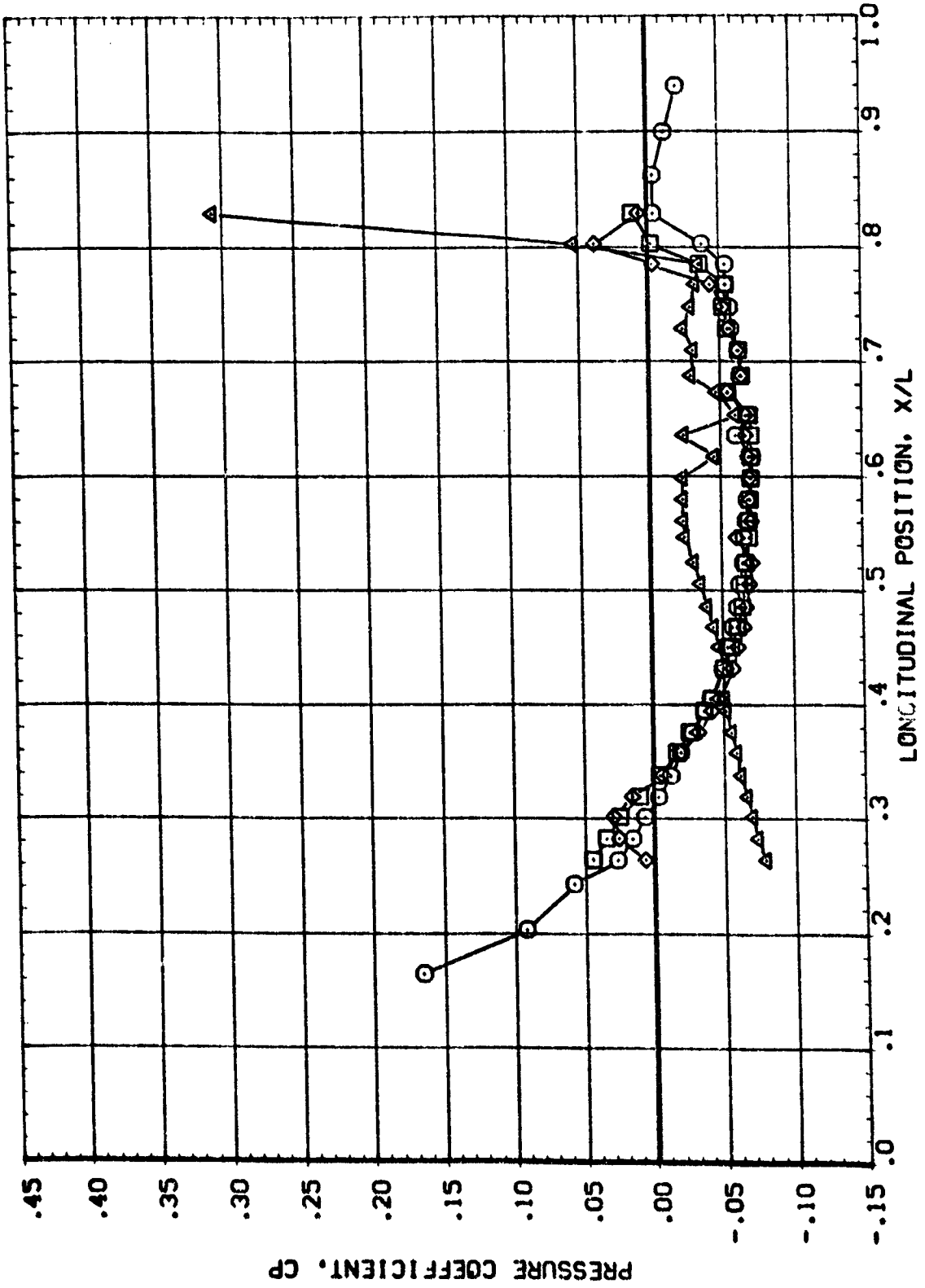
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



JAS5 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL	PHI	ALPHA	MACH	BETA	PARAMETRIC VALUES
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□	100.000				
◇	110.000				
△	180.000				



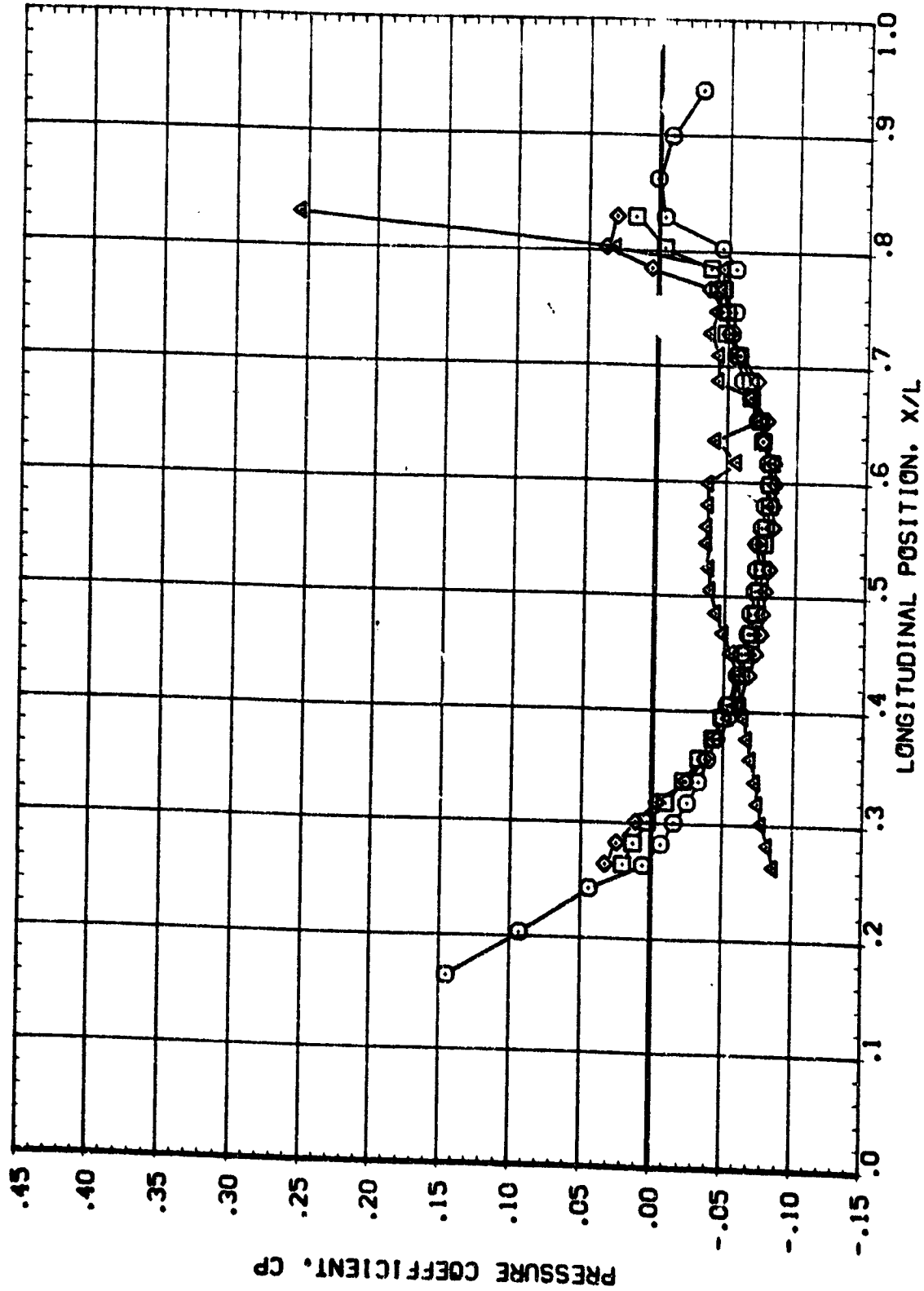
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL PHI ALPHA MACH
○ 90.000 6.010 2.950
□ 100.000
◇ 110.000
△ 120.000

BETA .000
PARAMETRIC VALUES
.000 ELEVON .000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL

PHI

ALPHA

MACH

BETA

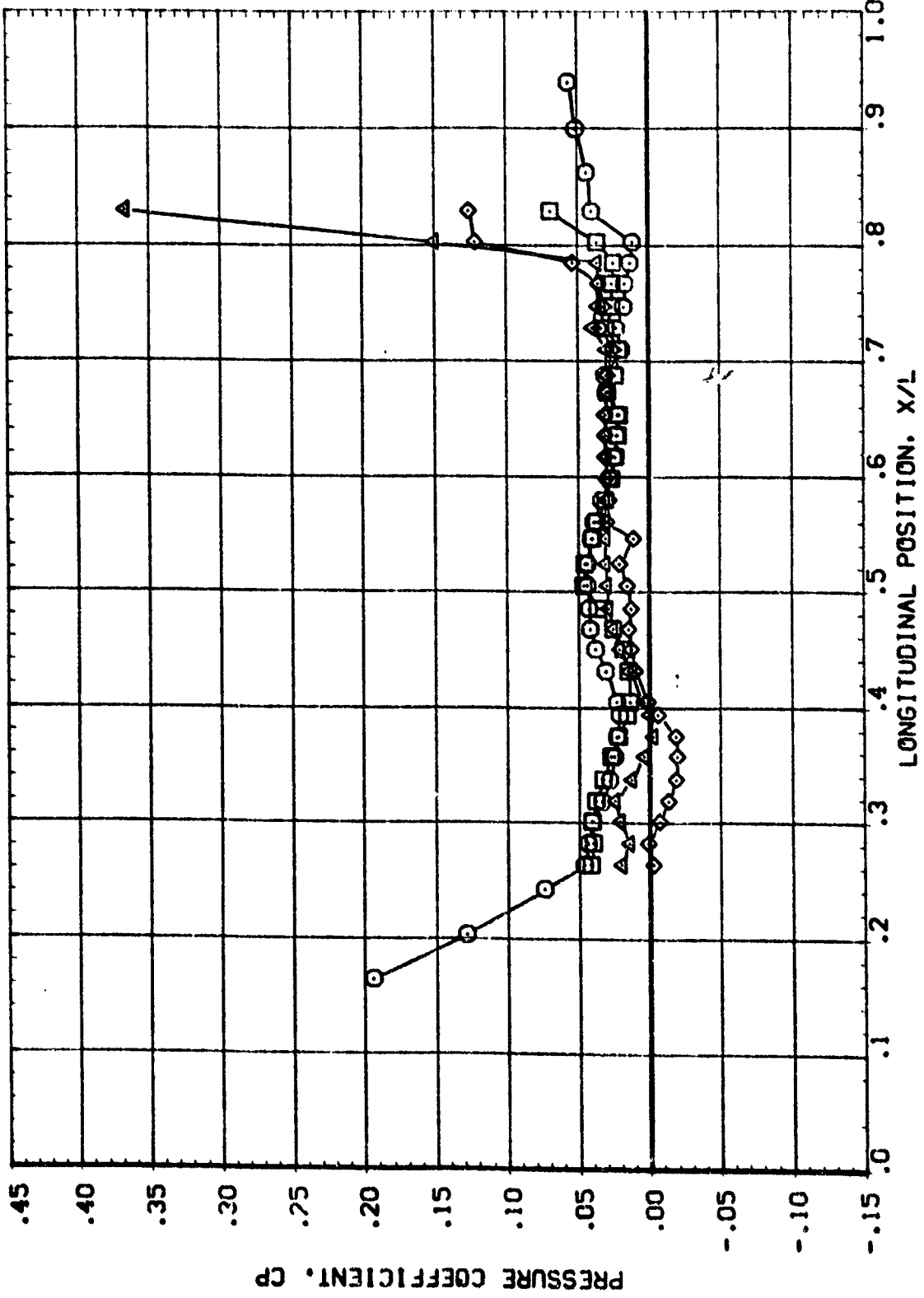
PARAMETRIC VALUES

90.000
100.000
110.000
120.000

-6.000

4.000

.000
.000
.000
.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

(R05004)

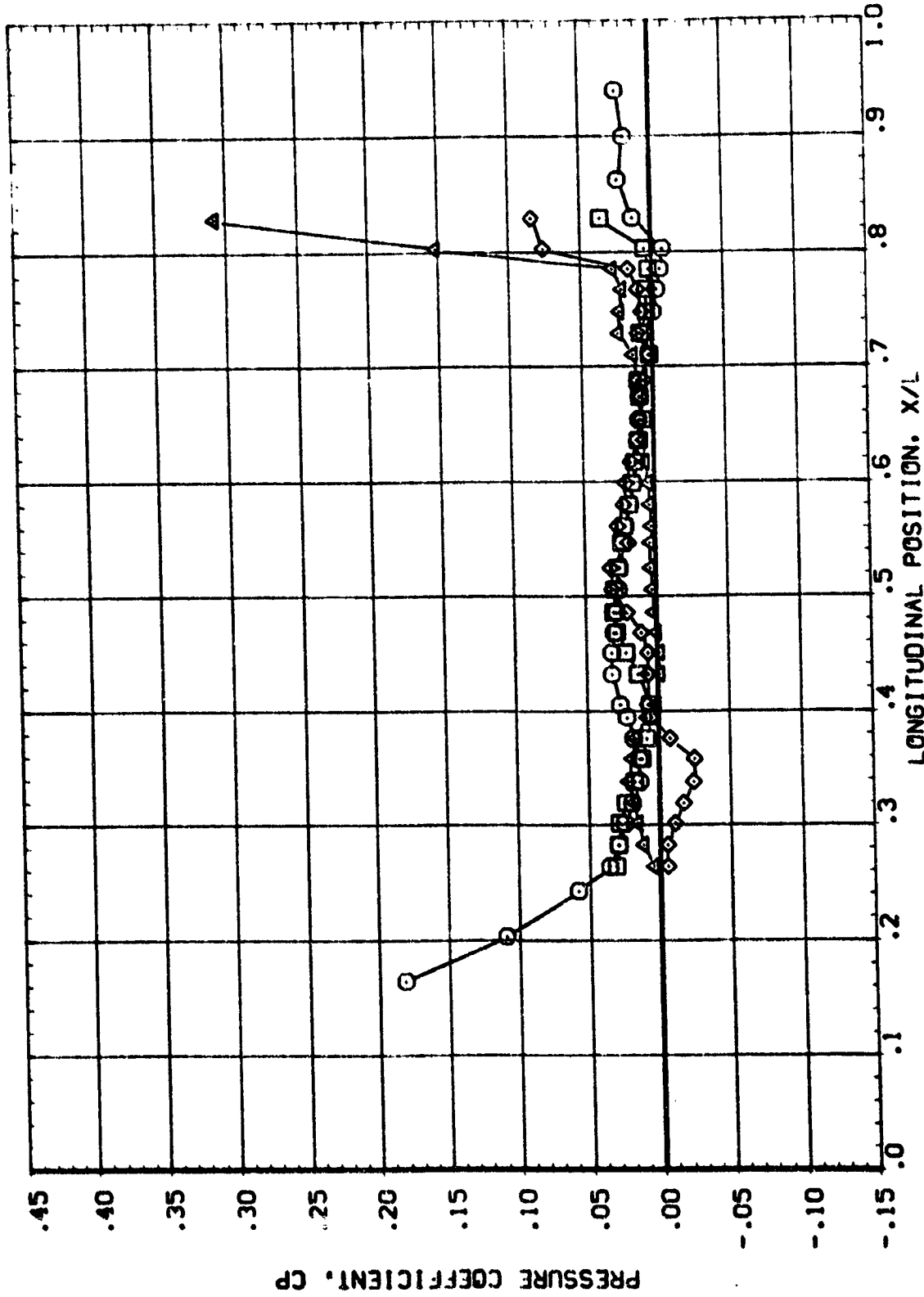
IA35 ORBITER ASCENT CONFIGURATION

PARAMETRIC VALUES
ELEVON .000
BETA .000

ALPHA -3.990
MACH 4.000

PHI
90.000
100.000
110.000
180.000

SYMBOL
□
◇
△



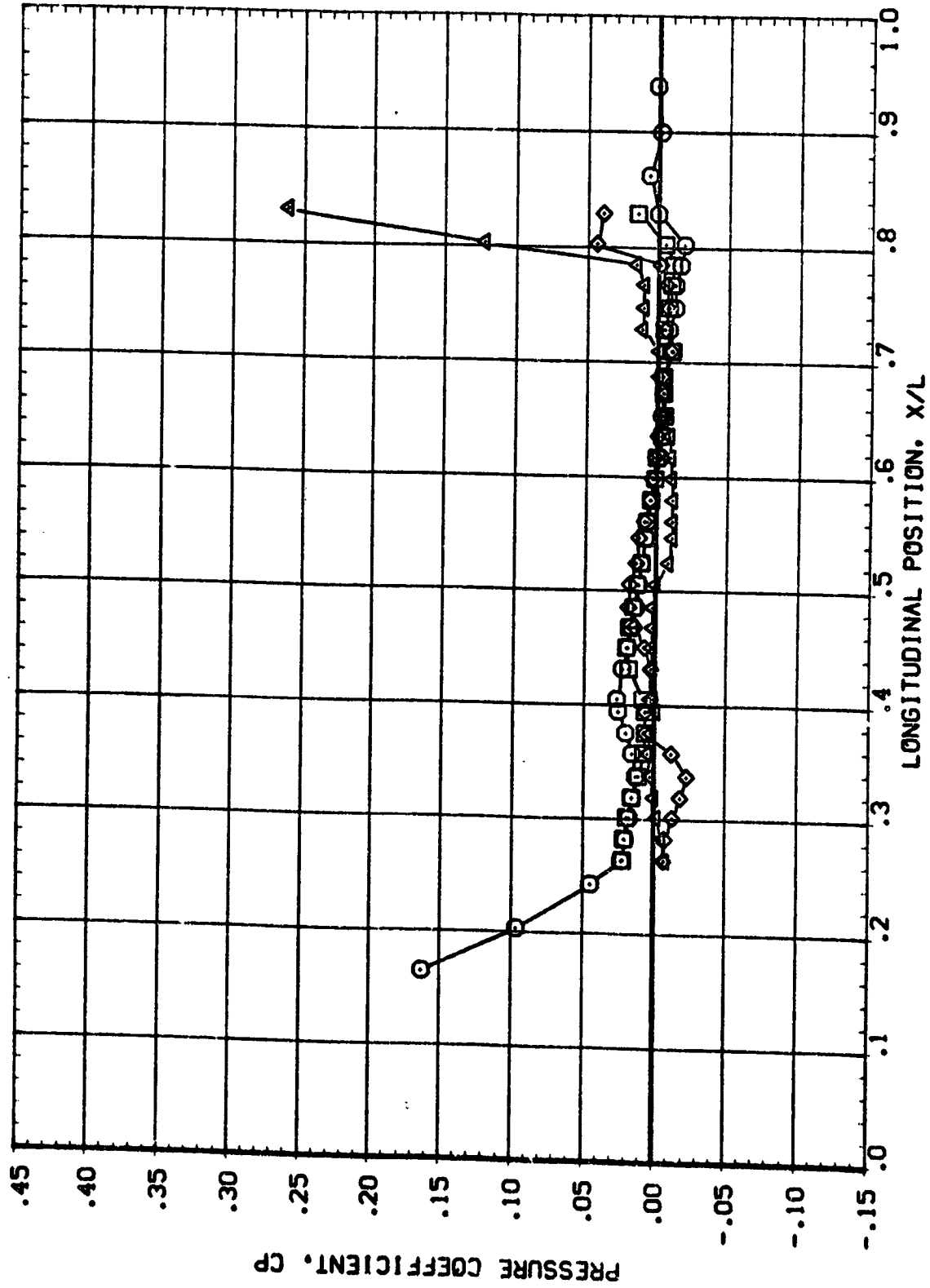
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL	PHI	ALPHA	MACH	BETA	PARAMETRIC VALUES
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□	100.000				
◇	110.000				
△	180.000				

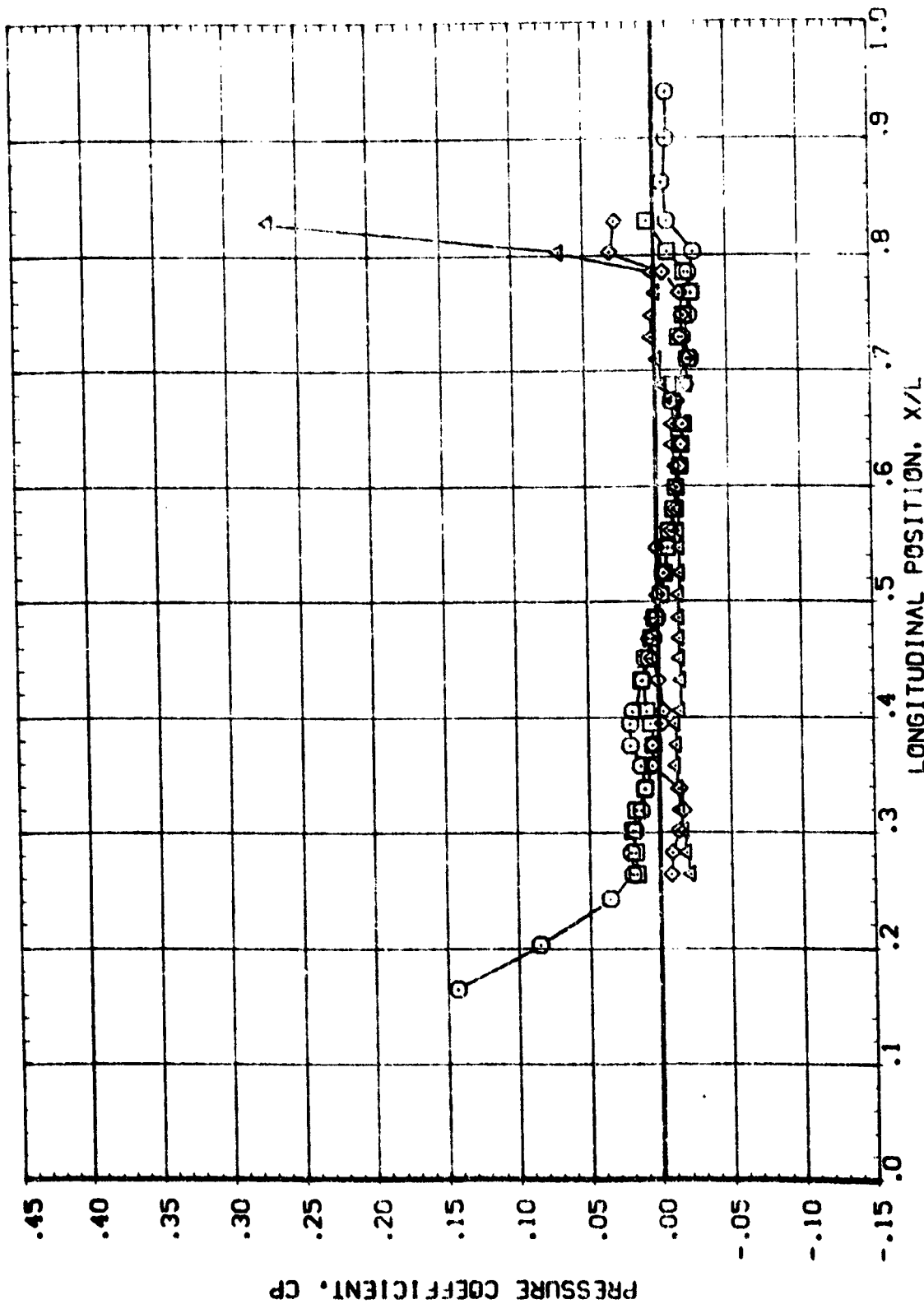


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

1A35 ORBITER ASCENT CONFIGURATION

(R050004)

SYMBOL	PHI	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	90.000	.010	4.000		.000 ELEVON
□	100.000				
◇	110.000				
△	150.000				



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



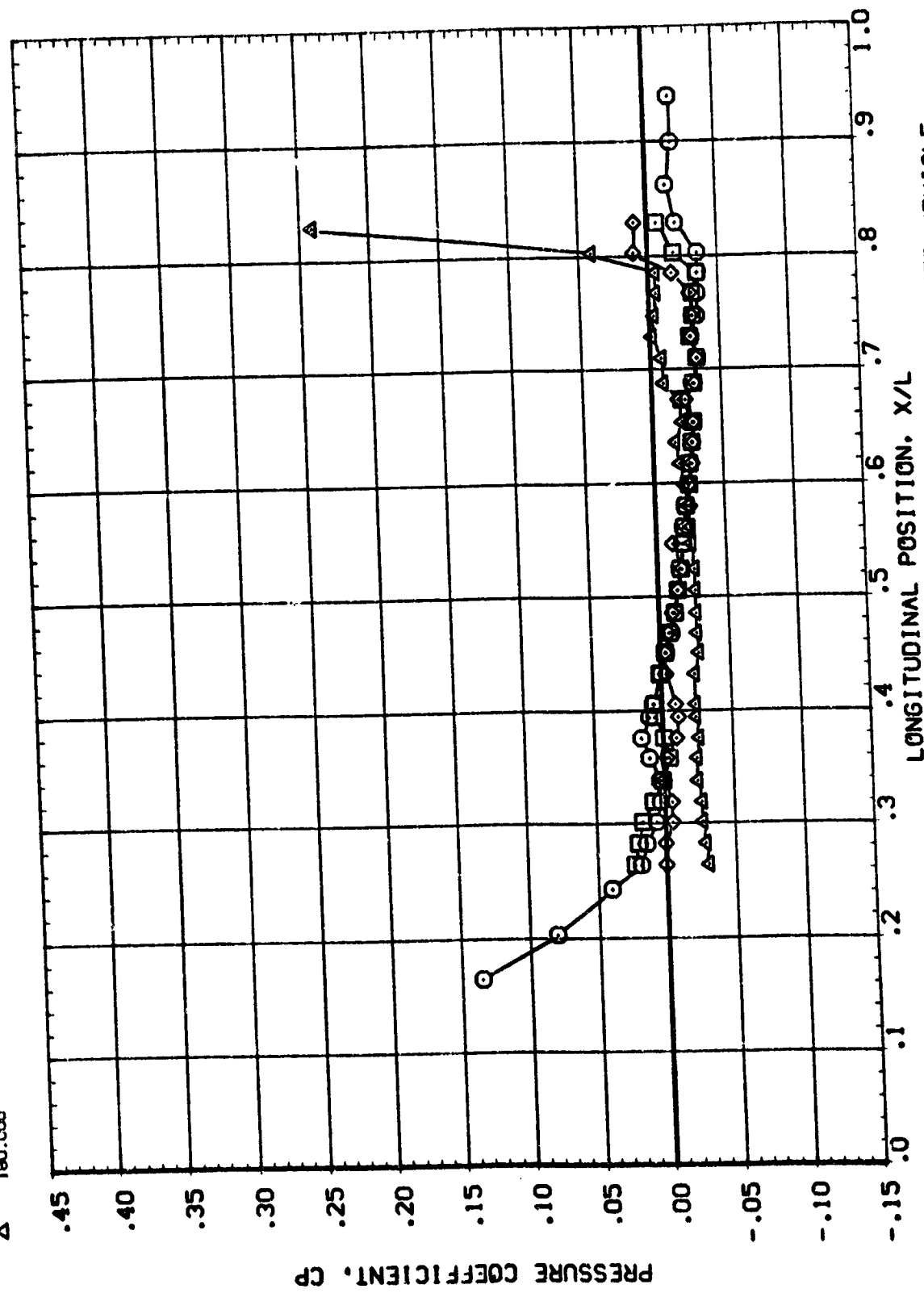
IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
BETA .000 ELEVON .010

ALPHA 1.990 MACK 4.000

SYMBOL
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□ 100.000
◇ 110.000
△ 120.000



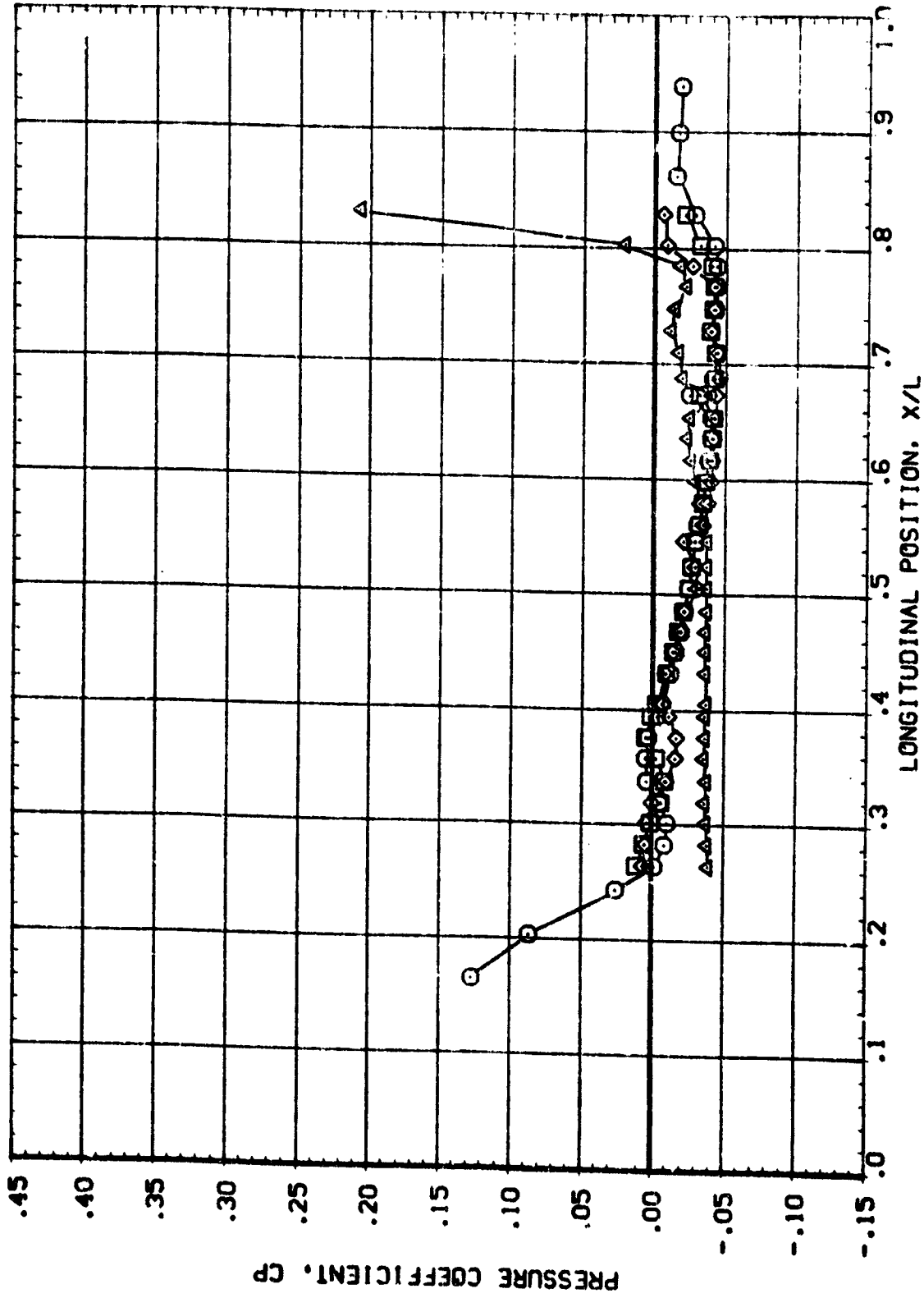
IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL PH1 ALPHA MACH
 ○ 90,000 4.000 4.000
 □ 120,000
 ◇ 110,000
 △ 160,000

BETA .000 ELEVON .000

PARAMETRIC VALUES



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

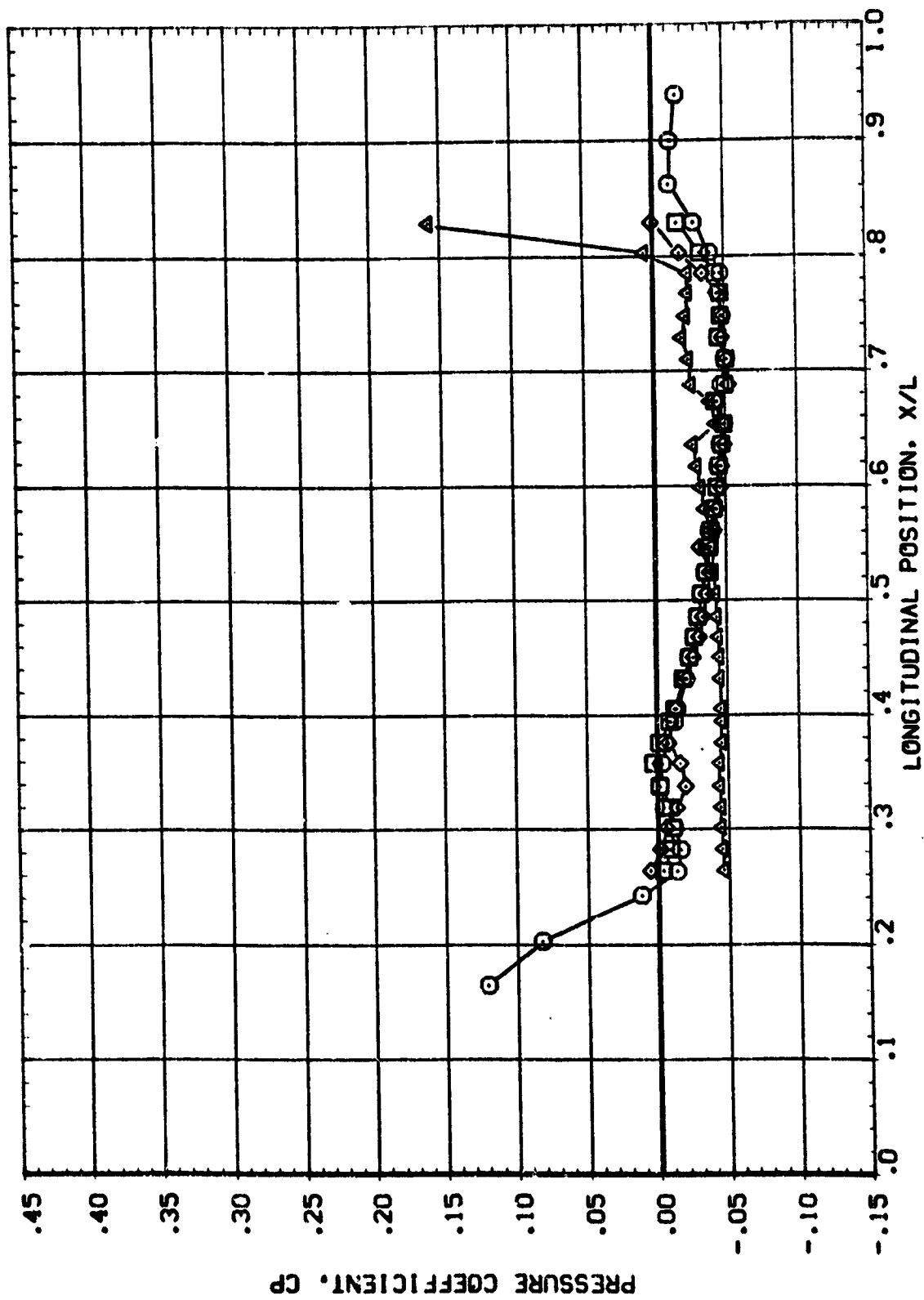


1A35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL PM1 ALPHA MACH BETA PARAMETRIC VALUES ELEVON .000

○ 90.000
□ 100.000
◇ 110.000
△ 120.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

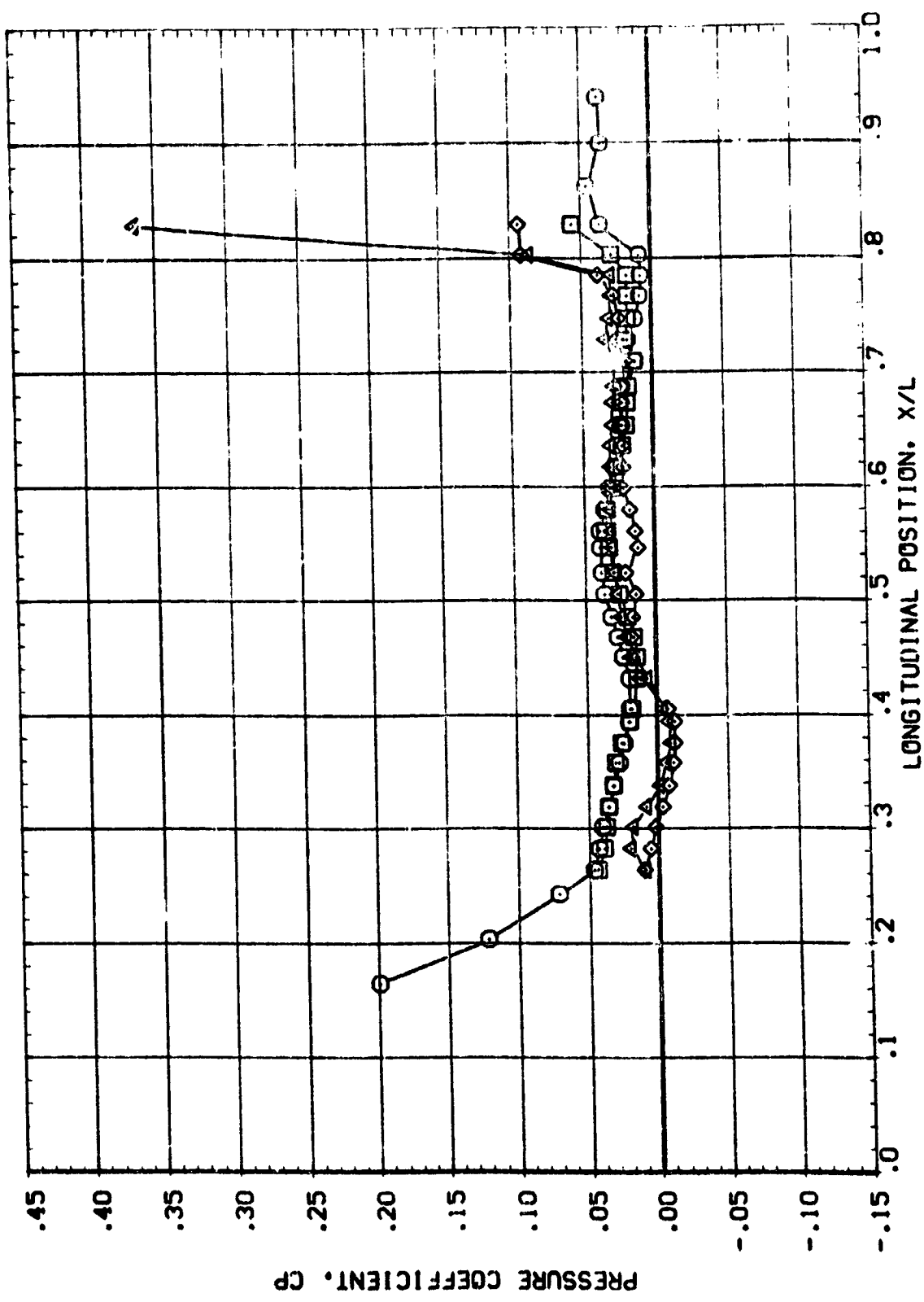
IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
 BETA .000 ELEVON .000

PHI 90.000 ALPHA -6.000 MACH 4.500

SYMBOL
 ○ 90.000
 □ 100.000
 ◇ 110.000
 △ 120.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

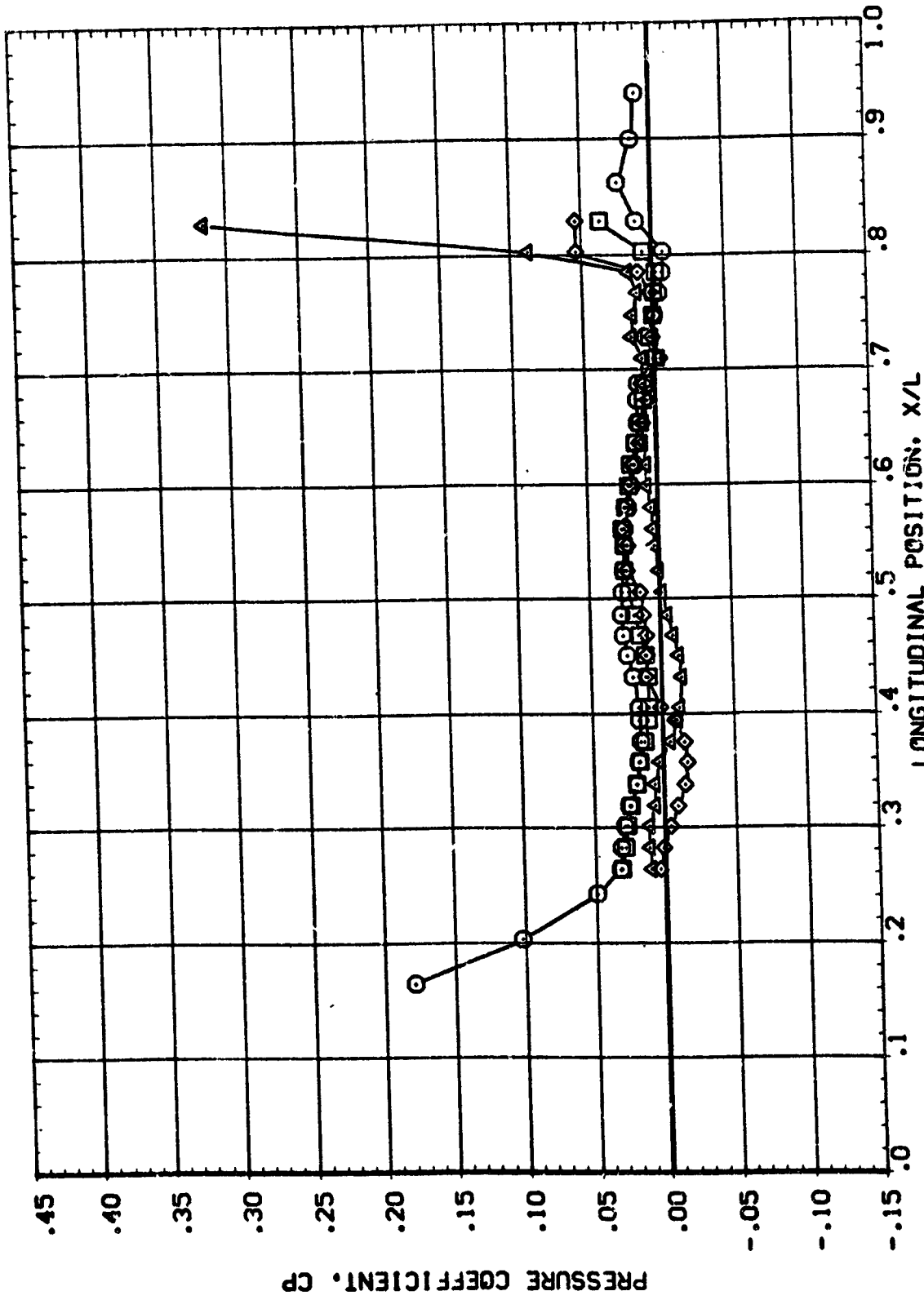


IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
BETA .000 ELEVON .000

SYMBOL PH1 ALPHA MACH
○ 90.000 -3.990 4.500
□ 100.000
◇ 110.000
△ 180.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

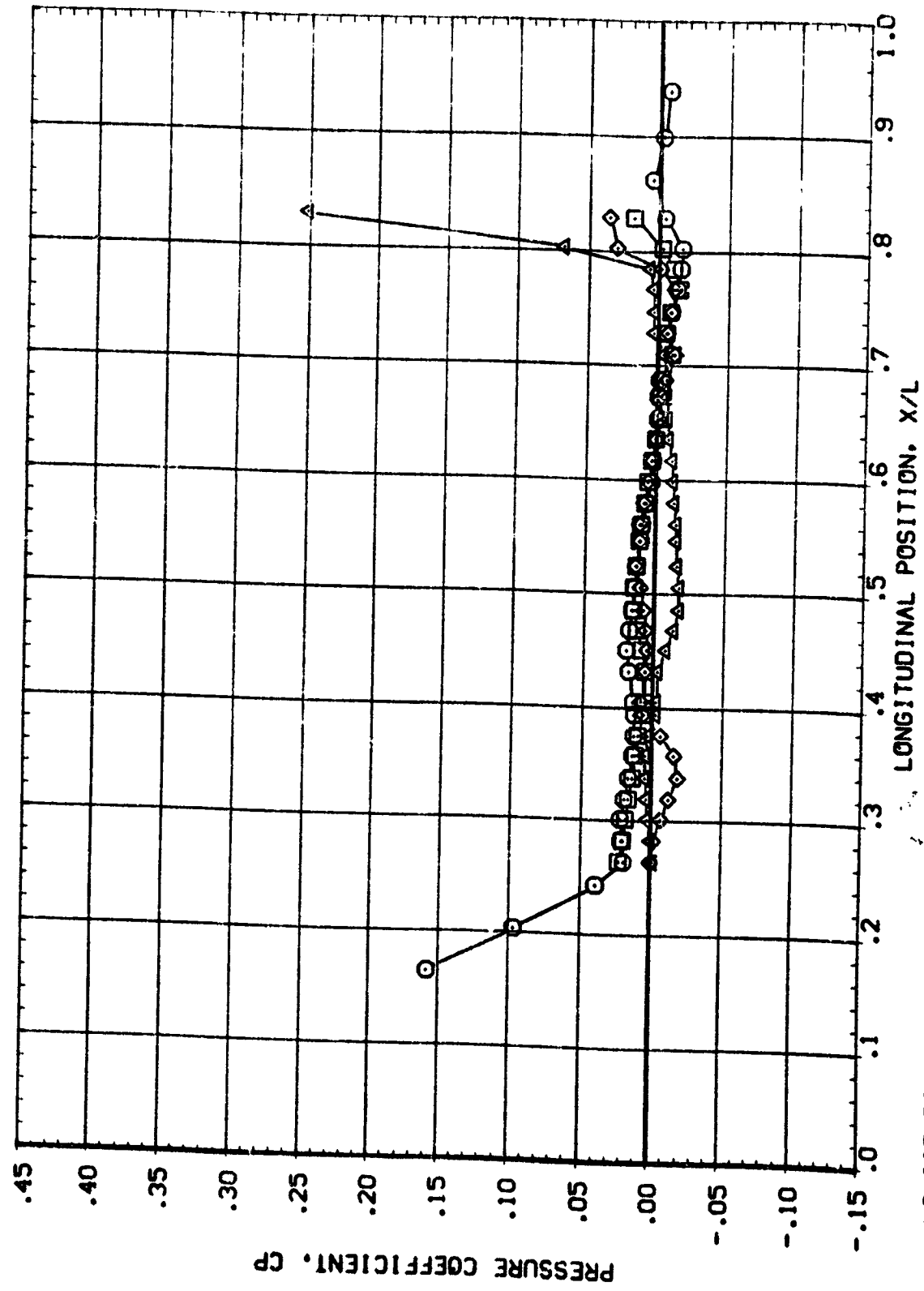
IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

SYMBOL
 ○ 90.000
 □ 100.000
 ◇ 110.000
 △ 180.000

ALPHA -2.000
 MACH 4.500

BETA
 PARAMETRIC VALUES
 .000 ELEVON .000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



1A35 ORBITER ASCENT CONFIGURATION

(R05004)

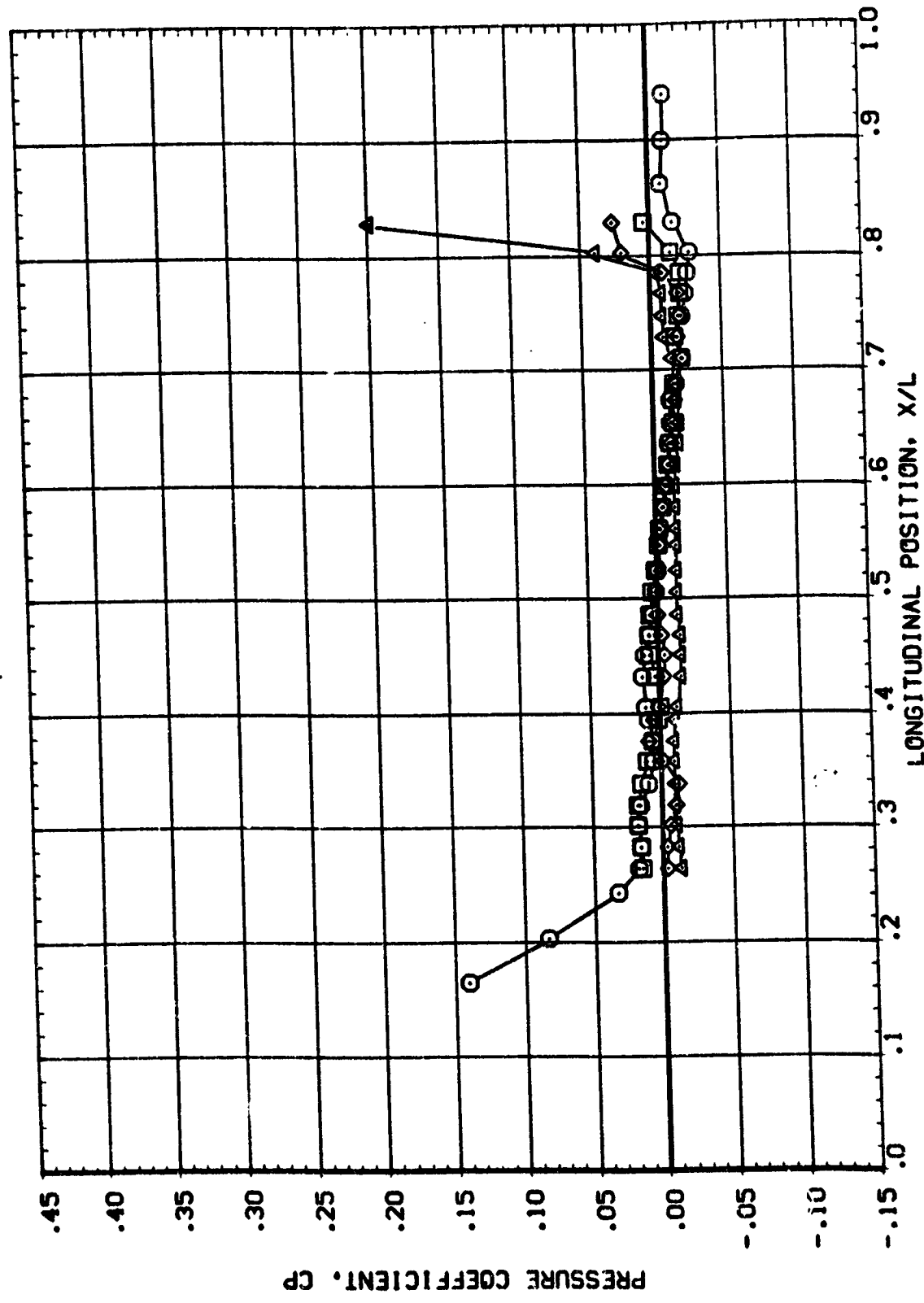
SYMBOL
○
□
◇
△

PMI
90.000
100.000
110.000
180.000

ALPHA
.000
MACH
4.500

BETA

PARAMETRIC VALUES
.000 ELEVON .000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

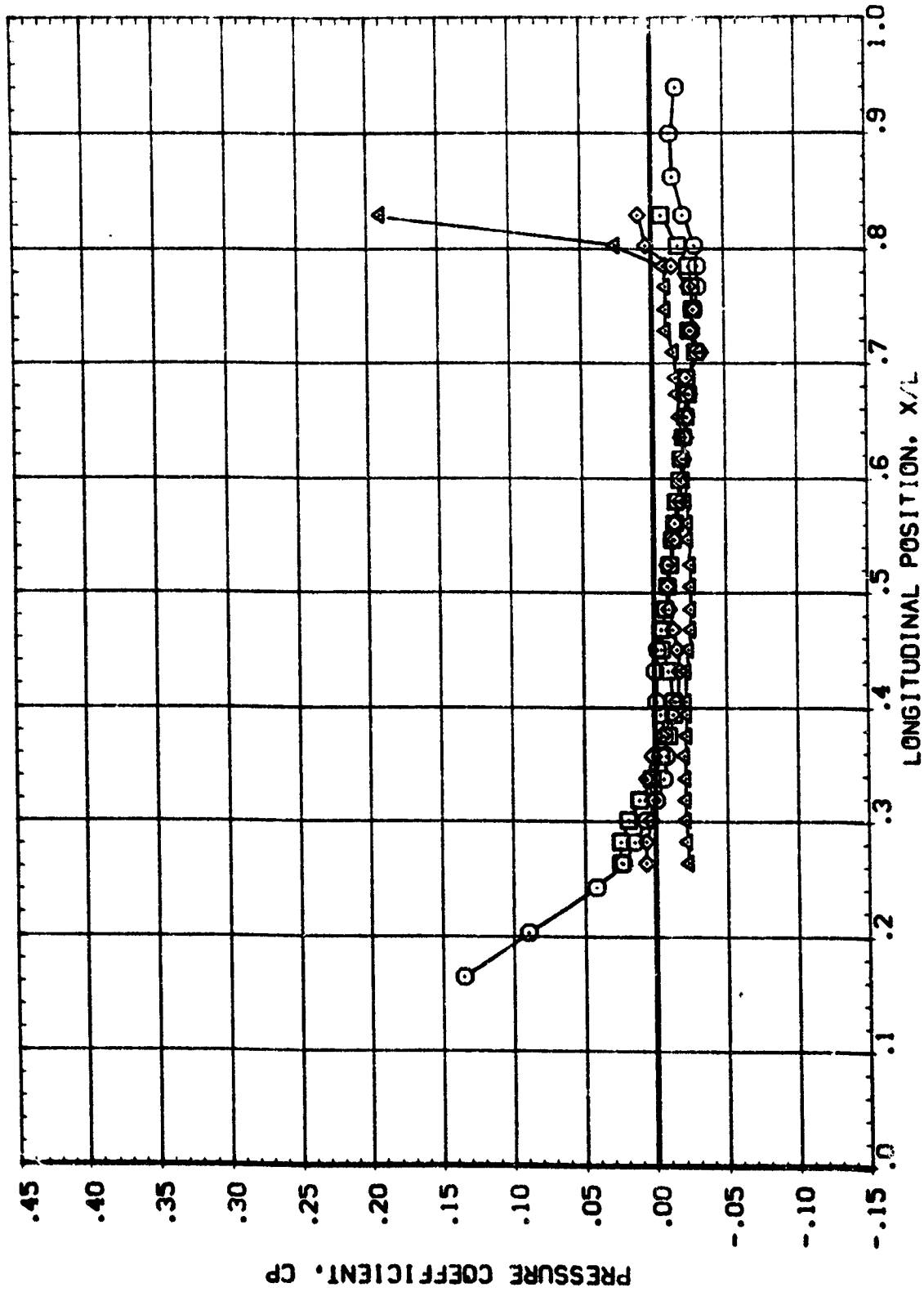
1A35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL
 ○ 90.000
 □ 100.000
 ◇ 110.000
 △ 180.000

ALPHA 1.990
 MACH 4.500

BETA
 PARAMETRIC VALUES
 .000 ELEVON



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

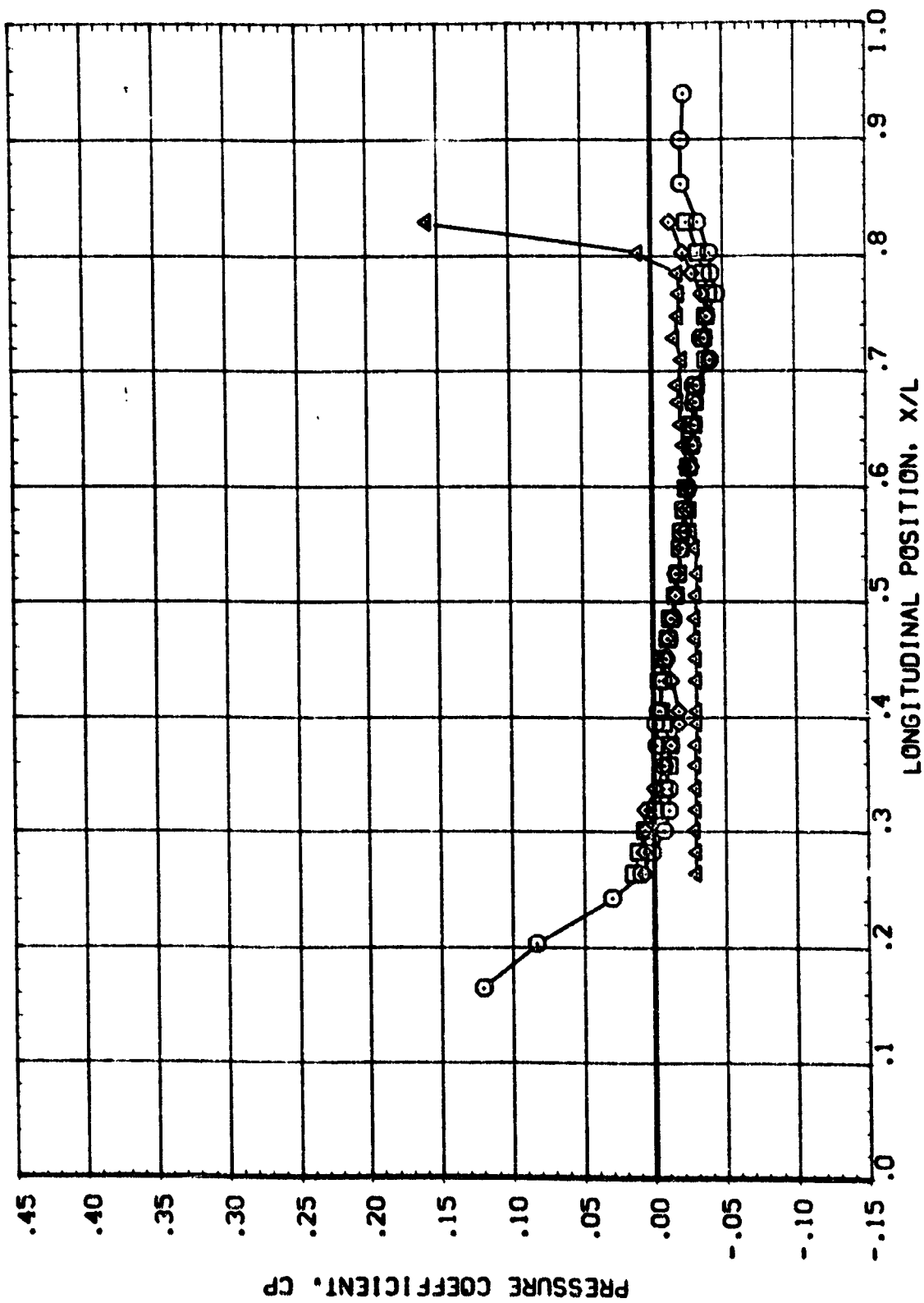


[A35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL PSI ALPHA MACH
□ 90,000 4.010 4.500
◇ 100,000
○ 110,000
△ 120,000

BETA PARAMETRIC VALUES
.000 ELEVON .000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(R05004)

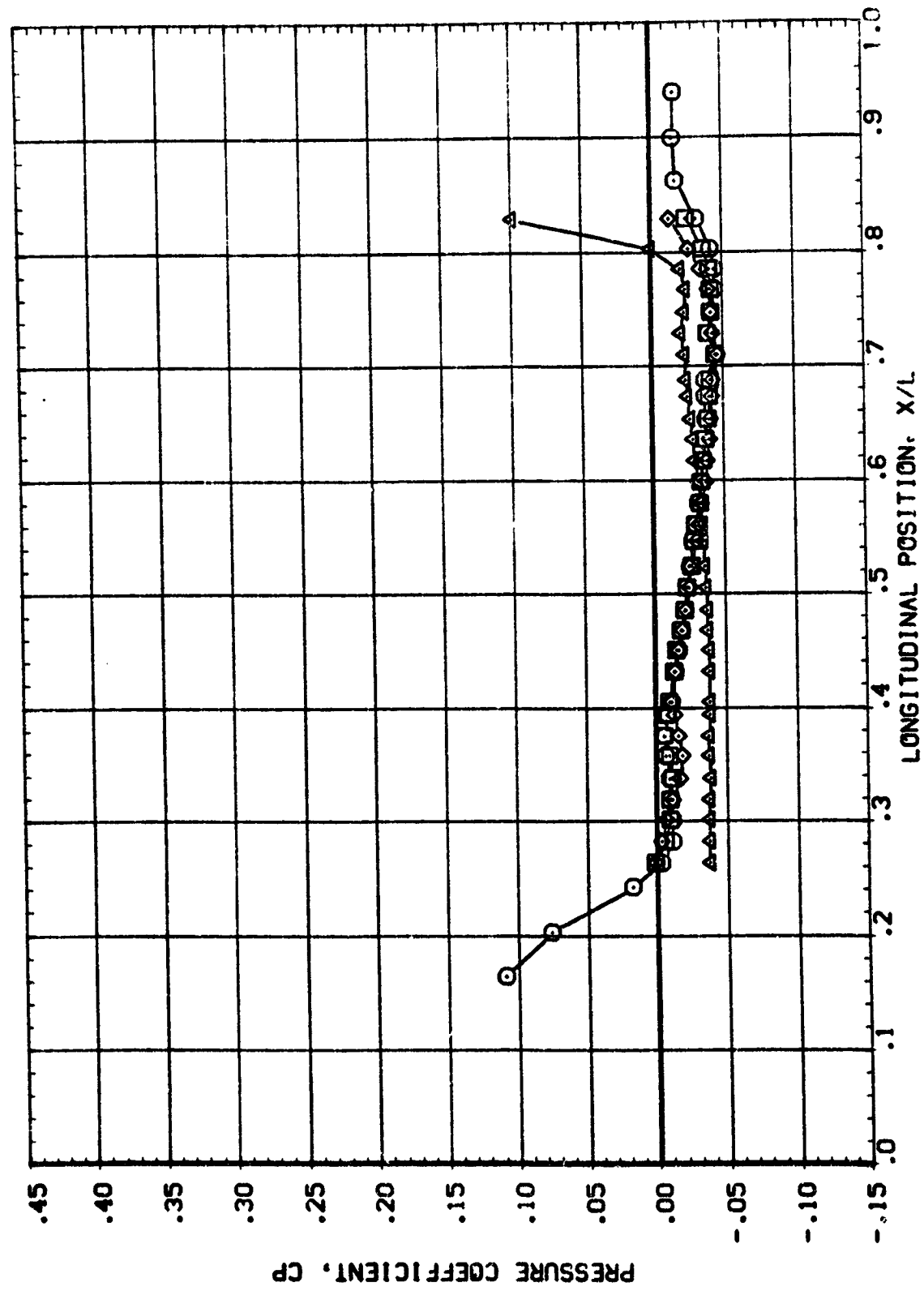
PARAMETRIC VALUES
 .000 ELEVON .070

BETA

ALPHA 6.000
 MACH 4.500

PHI
 90.000
 100.000
 110.000
 180.000

SYMBOL
 ○
 □
 ◇
 △



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



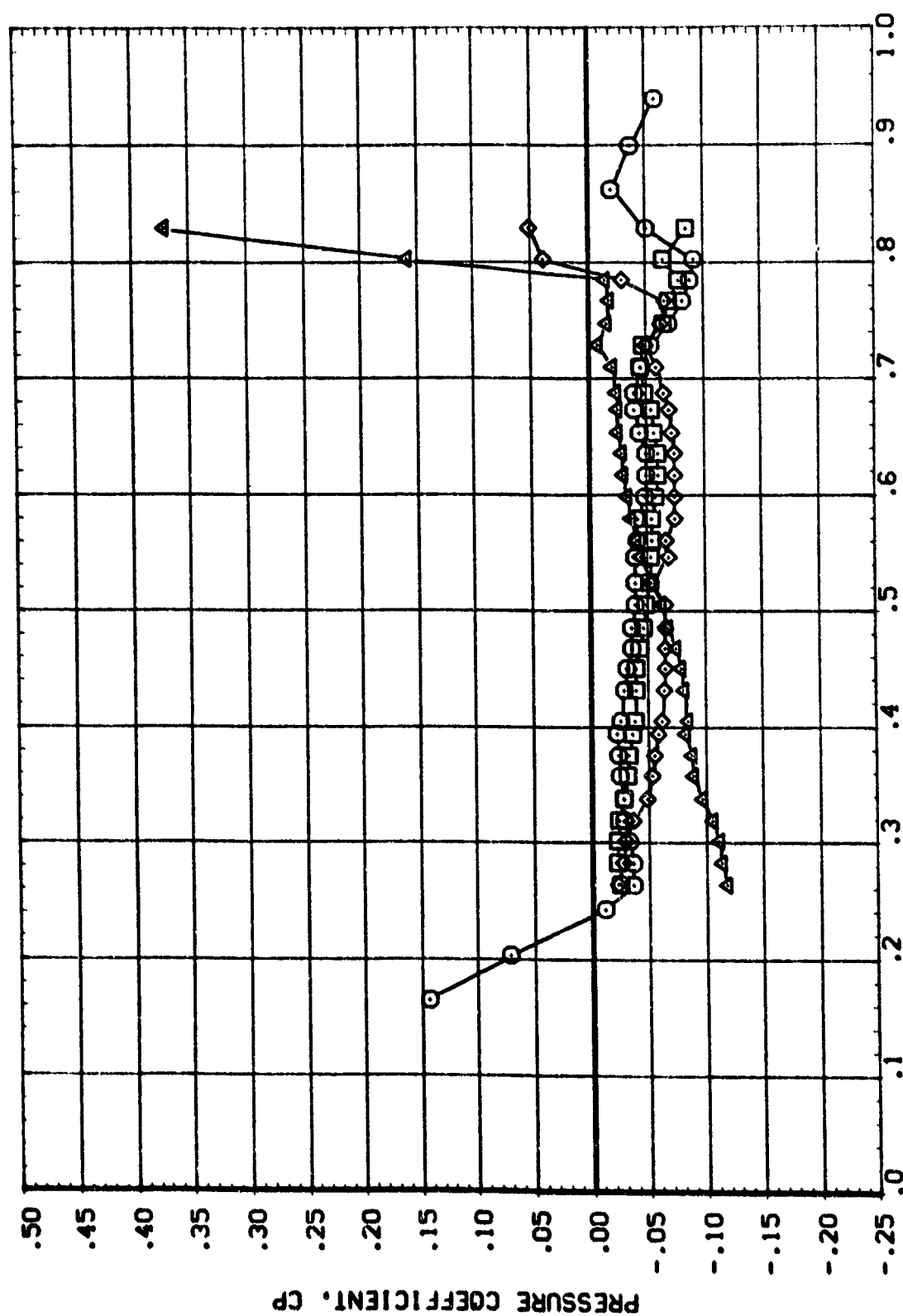
0A64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL
○ 50.000
□ 100.000
◇ 110.000
△ 180.000

ALPHA 6.000
MACH 2.500

BETA
PARAMETRIC VALUES
.000 ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

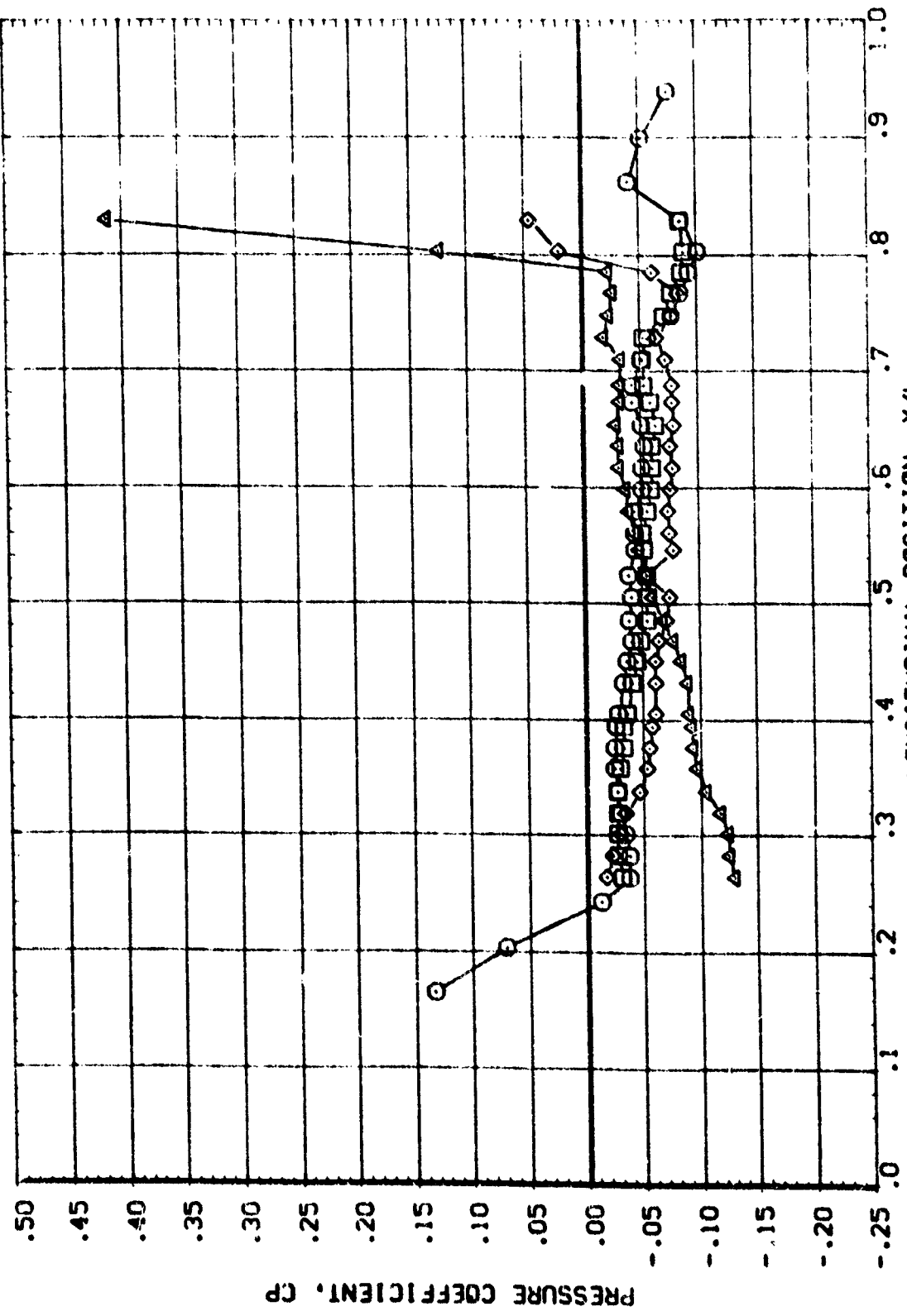
CASE 4 ORBITER ENTRY CONFIGURATION

(RG4004)

PARAMETRIC VALUES
 1.000 REFLEN -13.000

ALPHA 0.000
 MACH 2.500

REF 90.000
 X 100.000
 Y 100.000
 Z 90.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



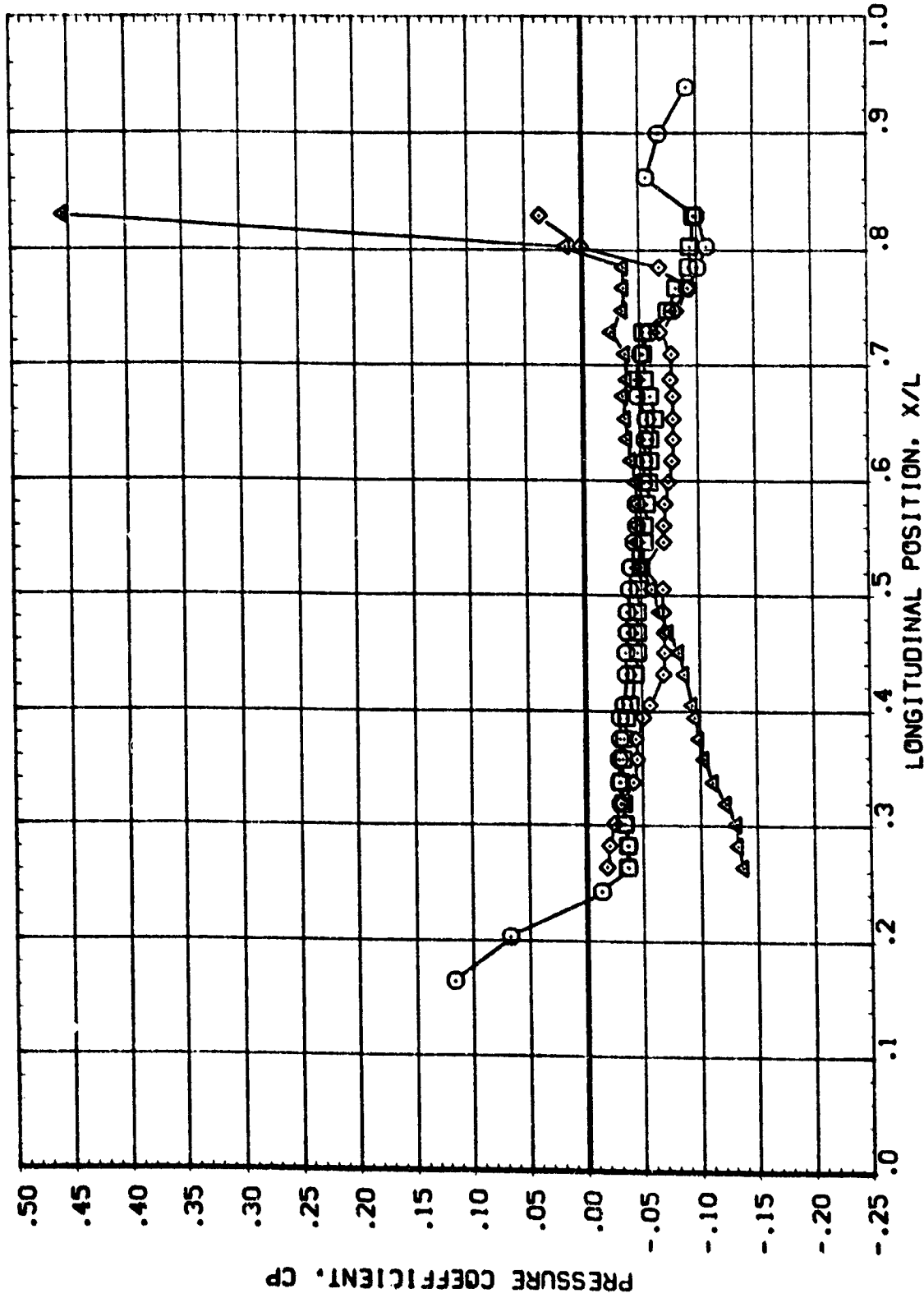
GA64 ORBITER ENTRY CONFIGURATION

(R04004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

PHI 90.000 ALPHA 12.010 MACH 2.500
100.000
110.000
180.000

□
◇
△



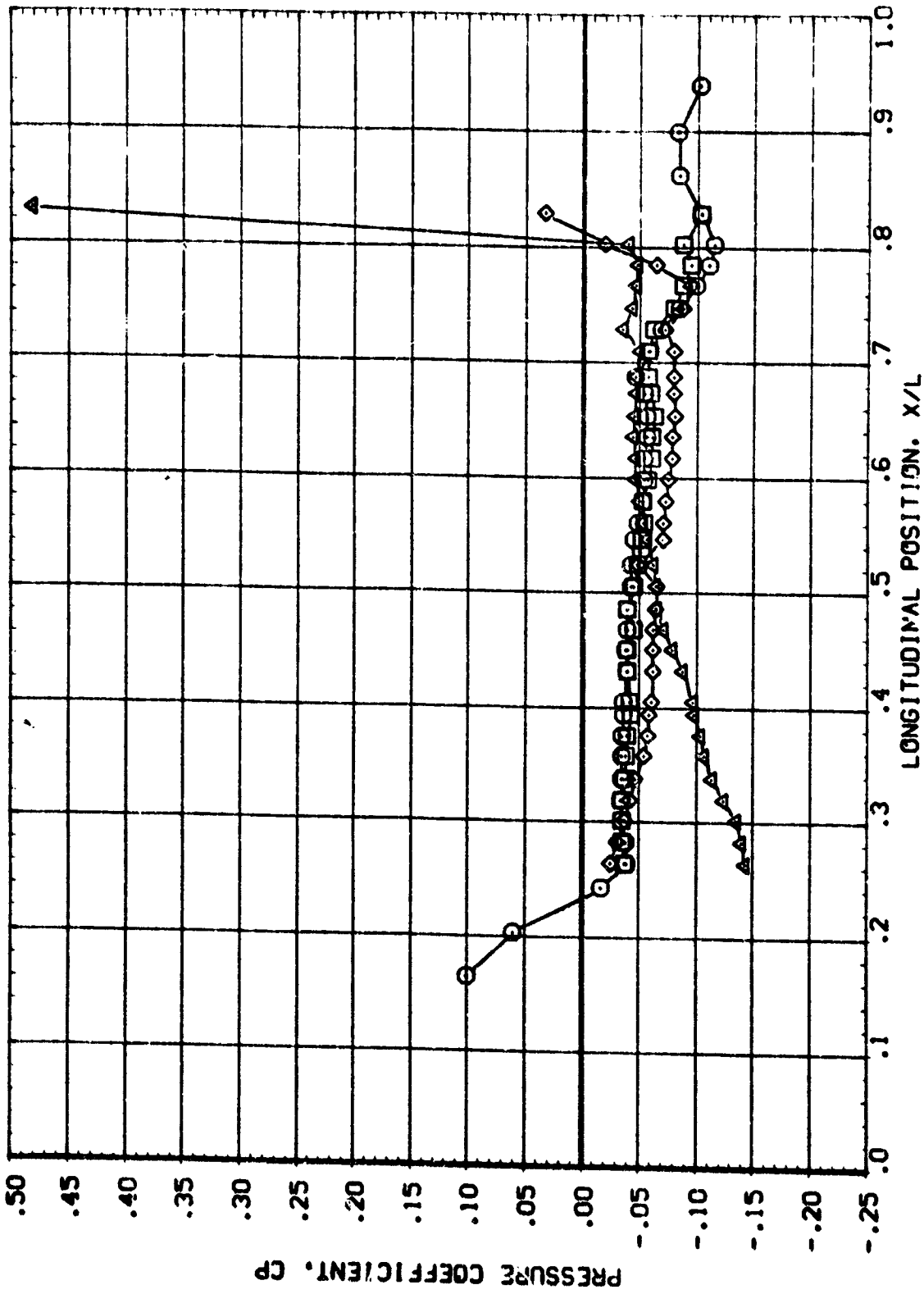
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(RG4004)

SPRDL PWI ALPHA MACH
50.000 14.000 2.500
150.000
110.000
190.000

BETA
PARAMETRIC VALUES
.000 ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



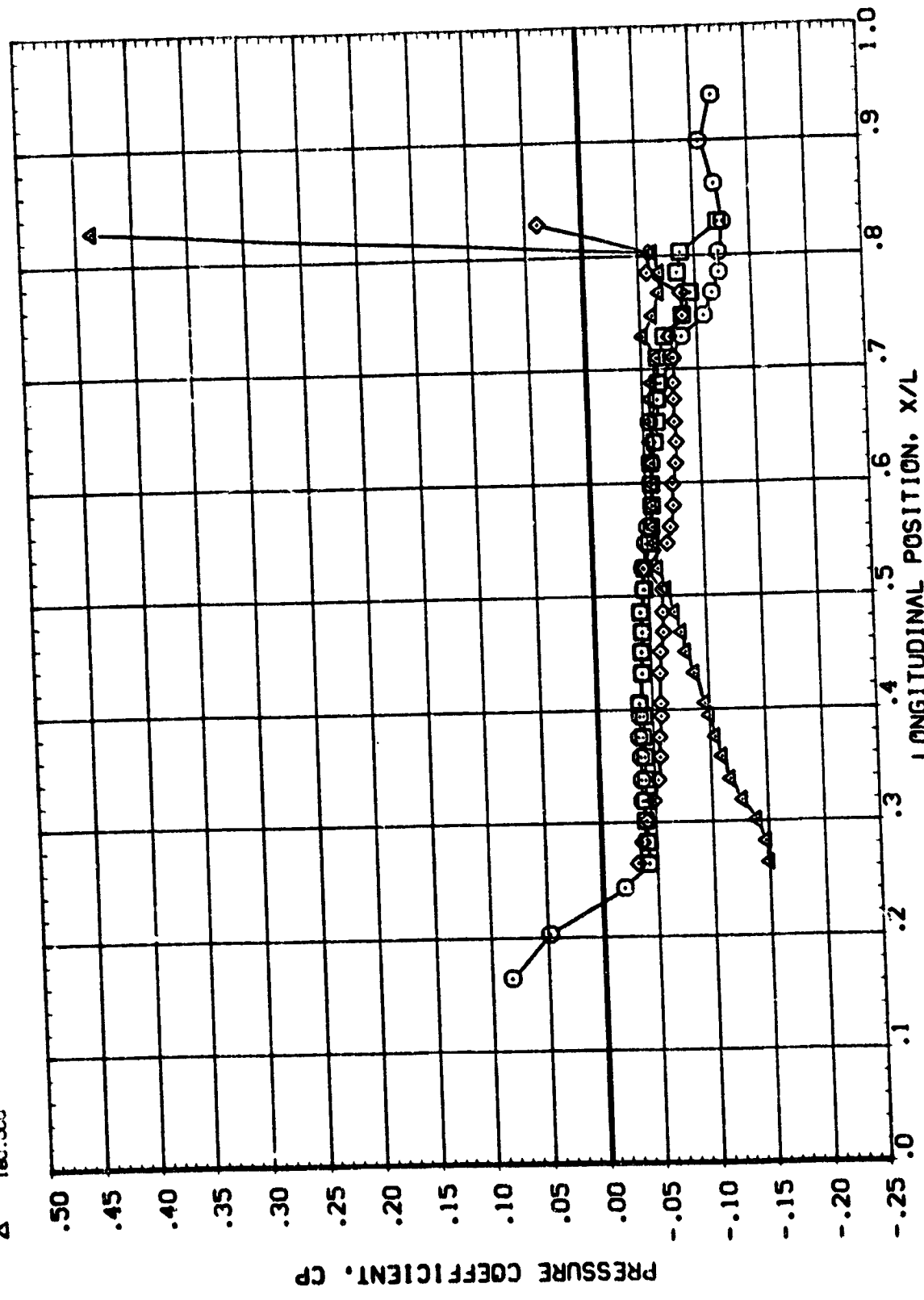
(R04004)

GA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

PHI 90.000
ALPHA 16.000
MACH 2.500

SYMBOL
○ 90.000
□ 100.000
◇ 110.000
△ 120.000



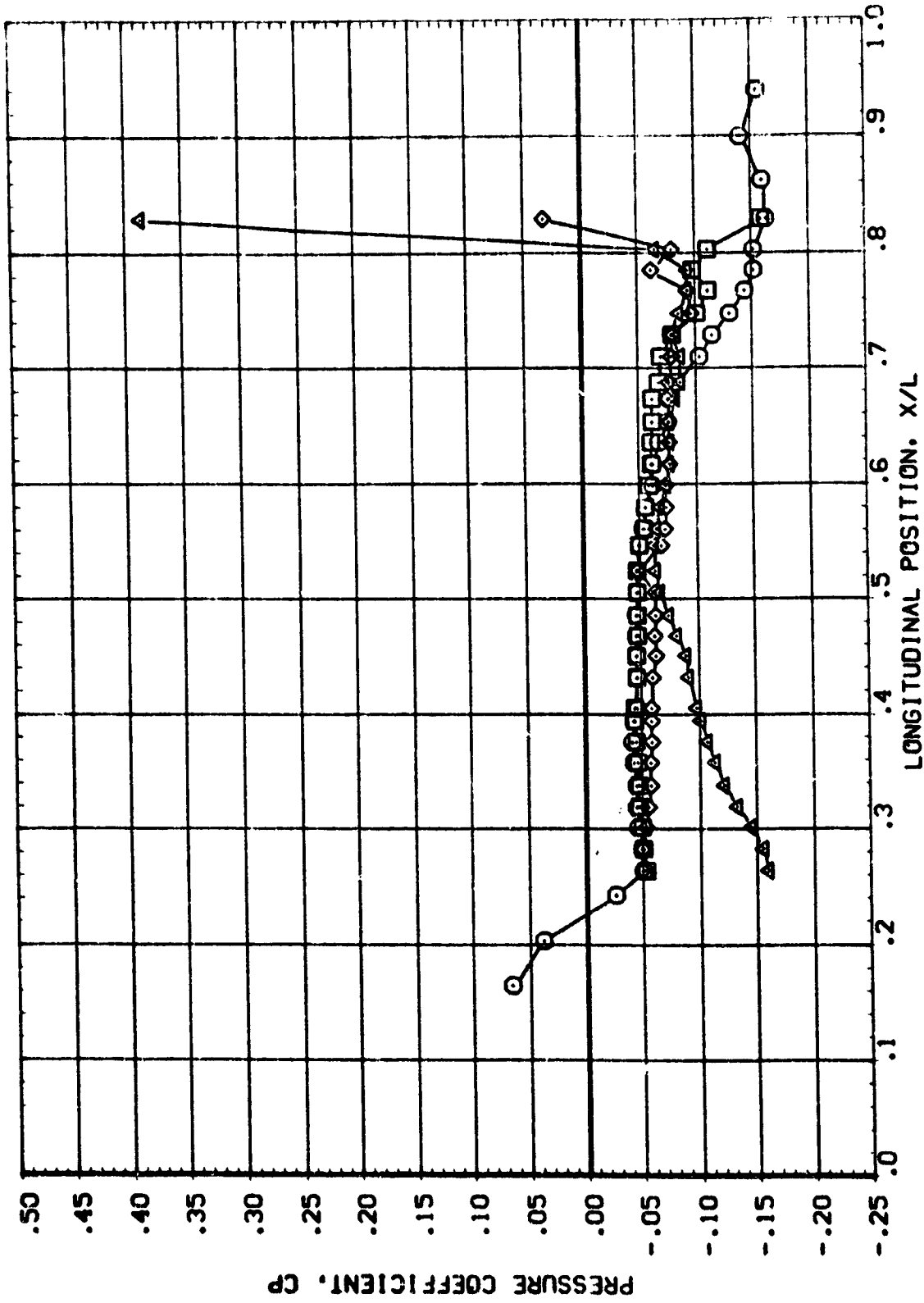
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OAS4 ORBITER ENTRY CONFIGURATION

(R04004)

PARAMETRIC VALUES
 BETA .000 ELEVON -15.000

SYMBOL PHI ALPHA MACH
 □ 90.000 18.000 2.500
 ◇ 100.000
 △ 110.000
 △ 180.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



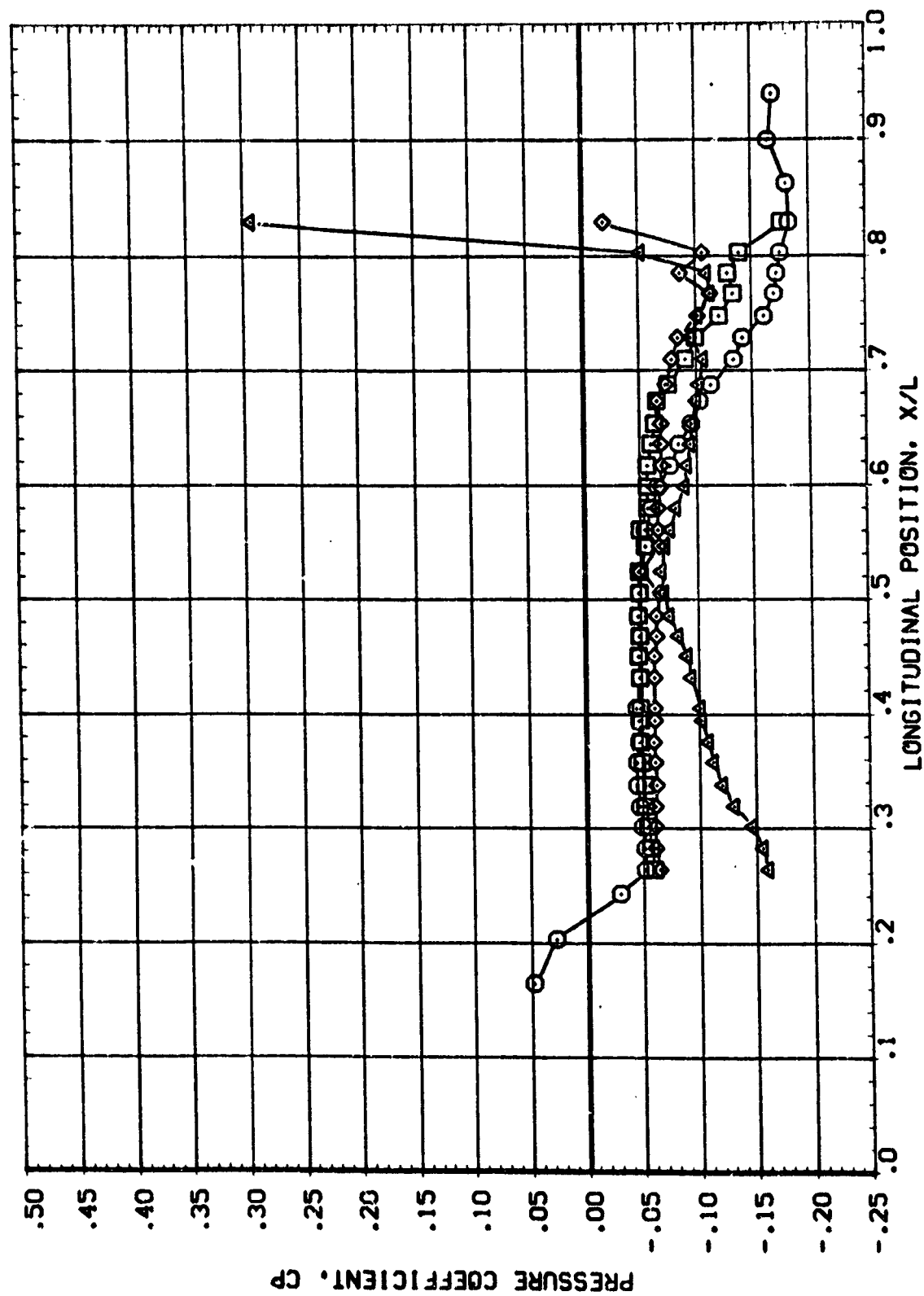
CAG4 ORBITER ENTRY CONFIGURATION

(RQ4004)

PHI
50.000
100.000
110.000
180.000

ALPHA
20.000
MACH
2.500

BETA
PARAMETRIC VALUES
.000 ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

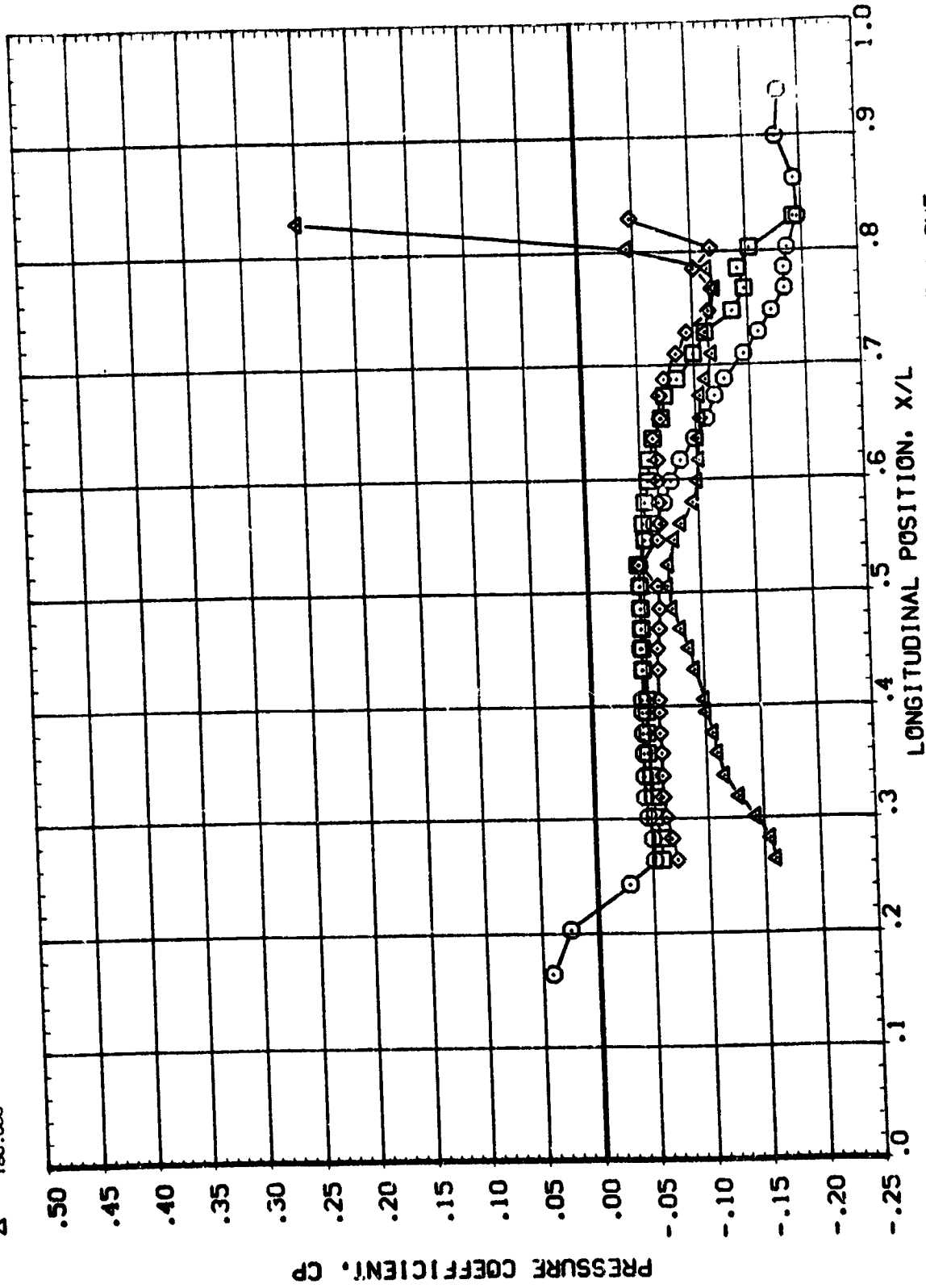
0A64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL
○ 50.000
□ 100.000
◇ 110.000
△ 180.000

PHI ALPHA MACH
20.980 2.500

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



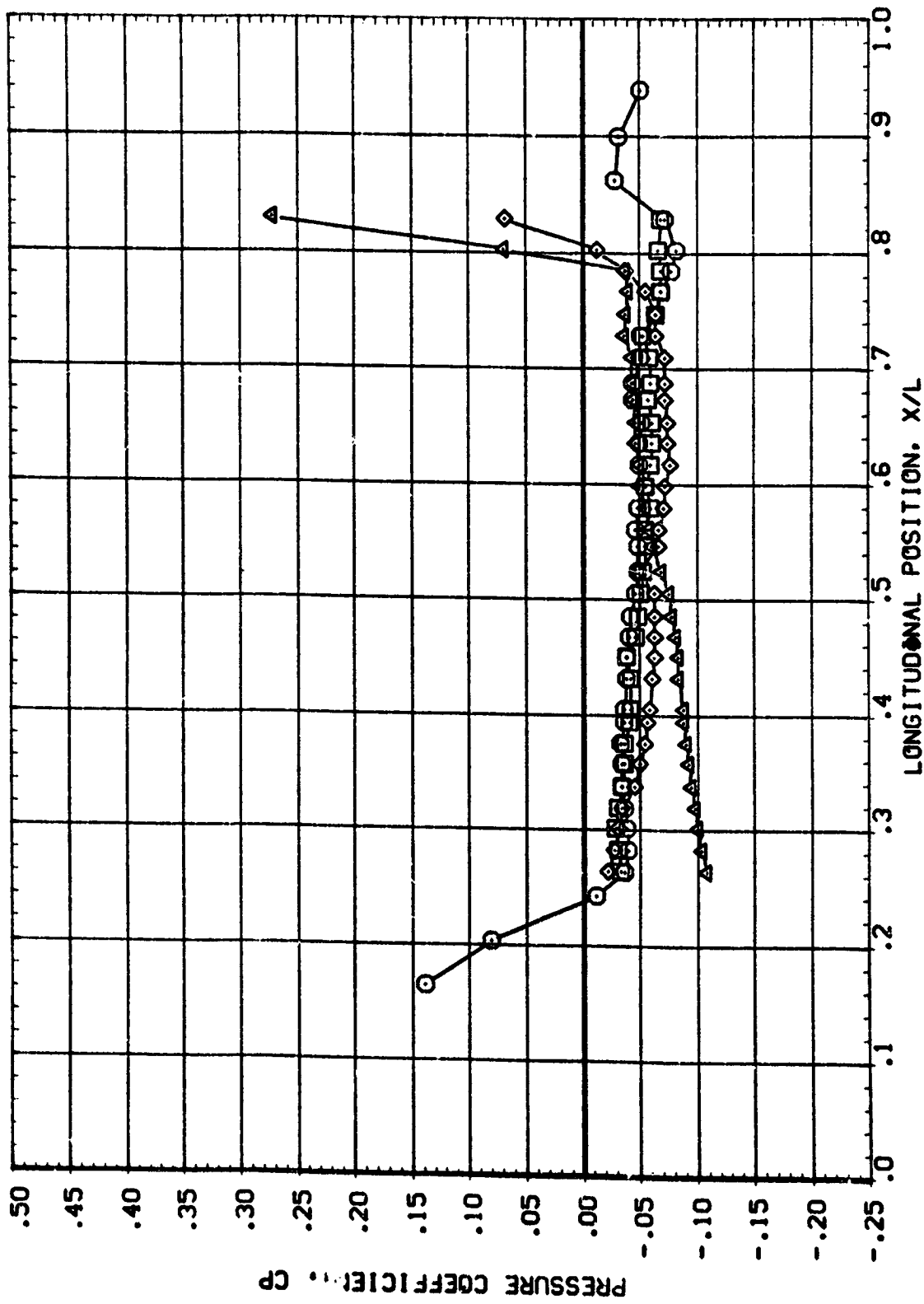
OA64 CRBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL PW1
□ 90.000
○ 100.000
◇ 110.000
△ 120.000

ALPHA 8.000
MACH 2.950

BETA .000
ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

0A64 ORBITER ENTRY CONFIGURATION

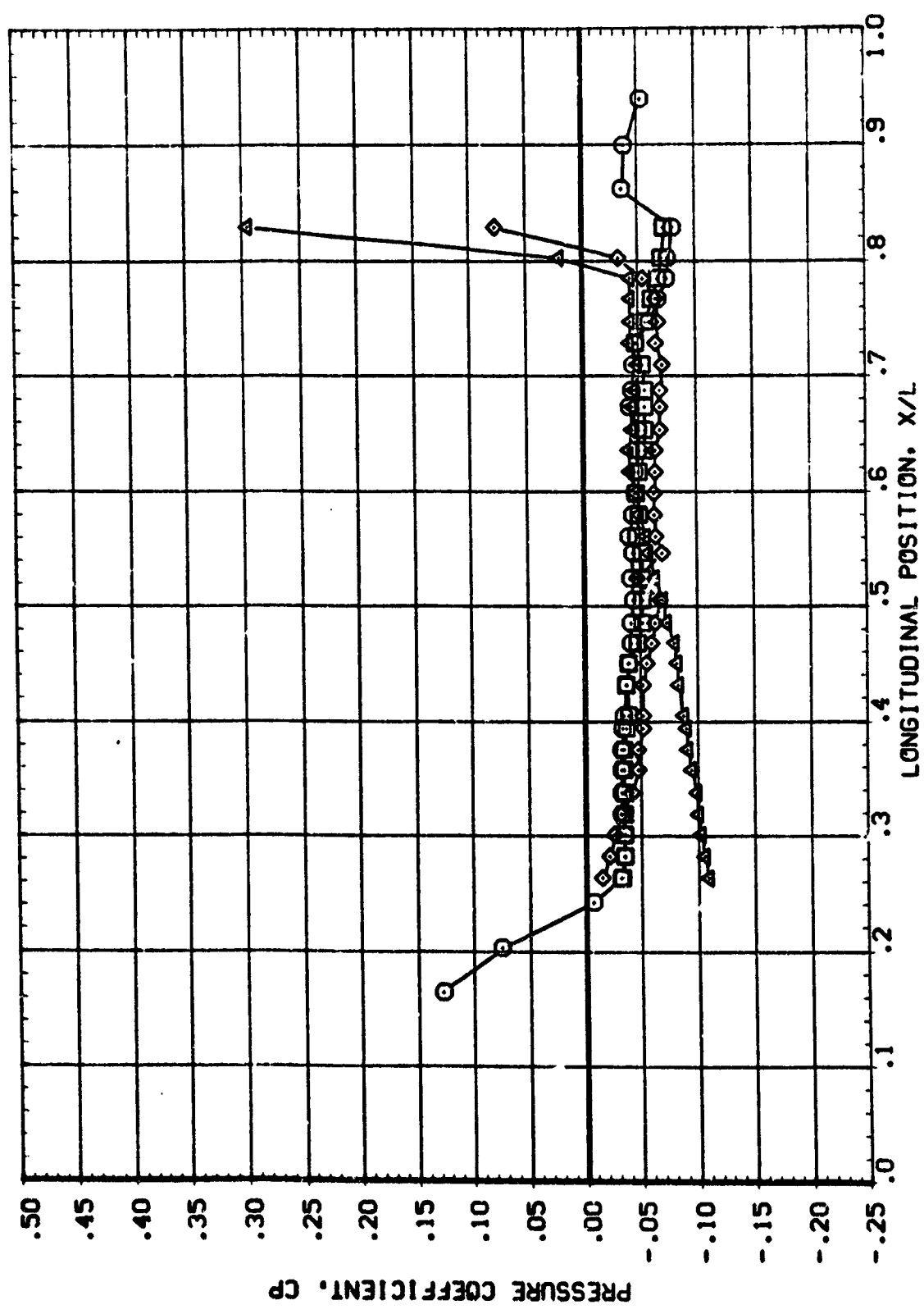
(R04004)

PARAMETRIC VALUES
BETA .000 ELEVATION -15.000

ALPHA 10.000 MACH 2.950

PHI 90.000
100.000
110.000
180.000

SYMBOL
○
□
◇
△



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONG

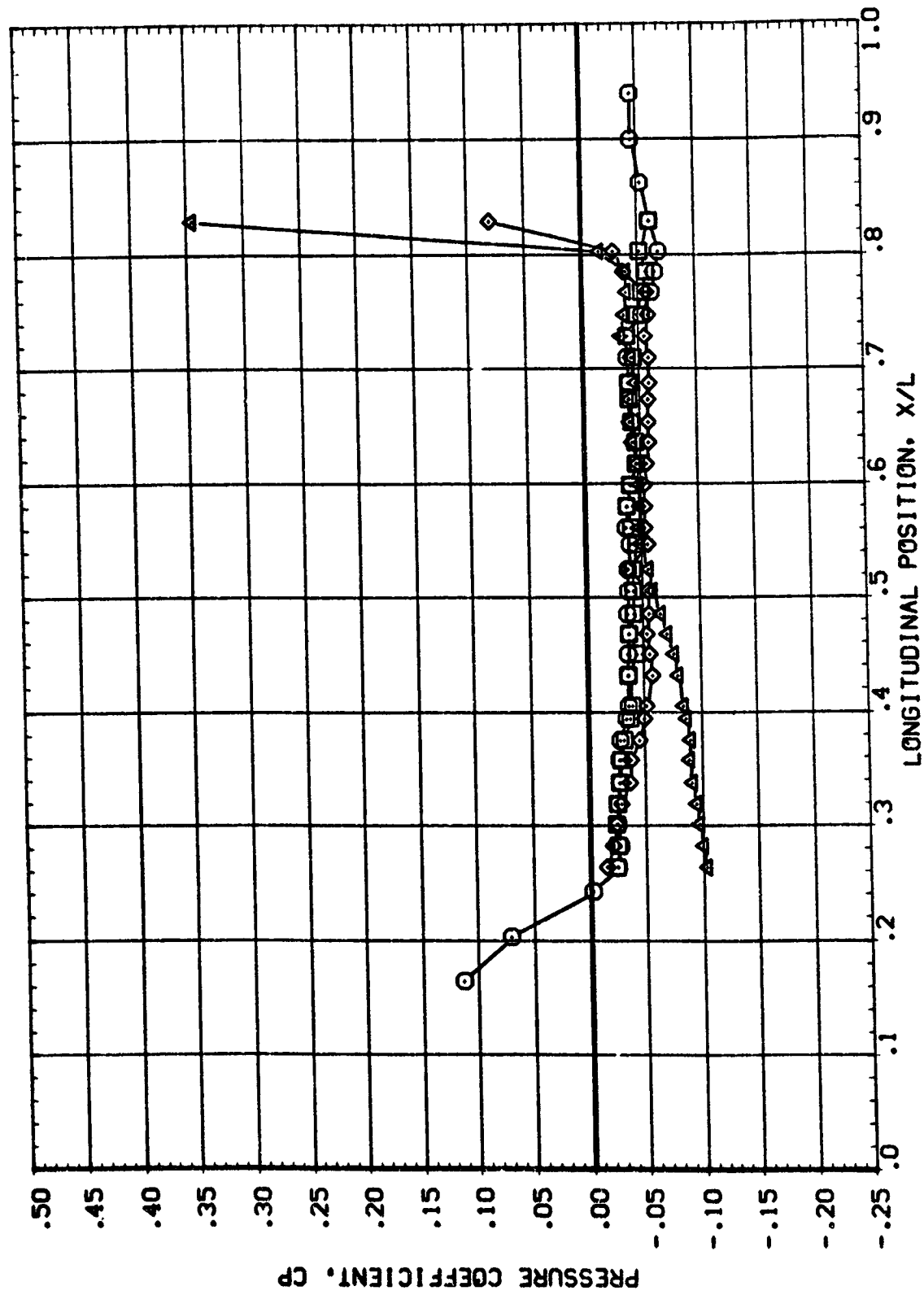


GA64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL PH1 ALPHA MACH
○ 90.000 12.010 2.950
□ 100.000
◇ 110.000
△ 180.000

BETA
PARAMETRIC VALUES
.000 ELEVON -15.000



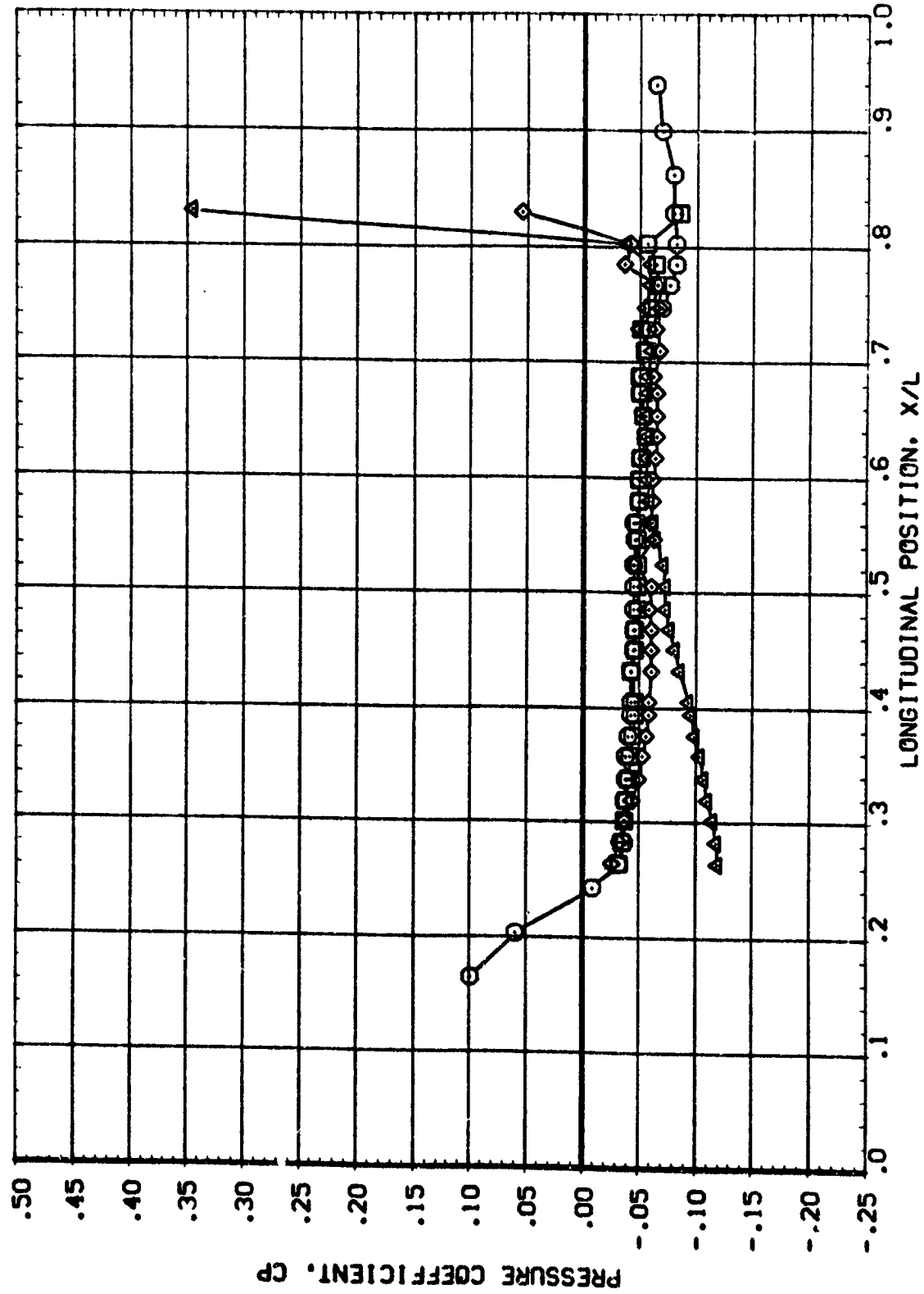
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

CA64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL PHI ALPHA MACH
 □ 30.000 14.000 2.950
 ◇ 100.000
 △ 110.000
 180.000

BETA PARAMETRIC VALUES
 .000 ELEVON -15.000



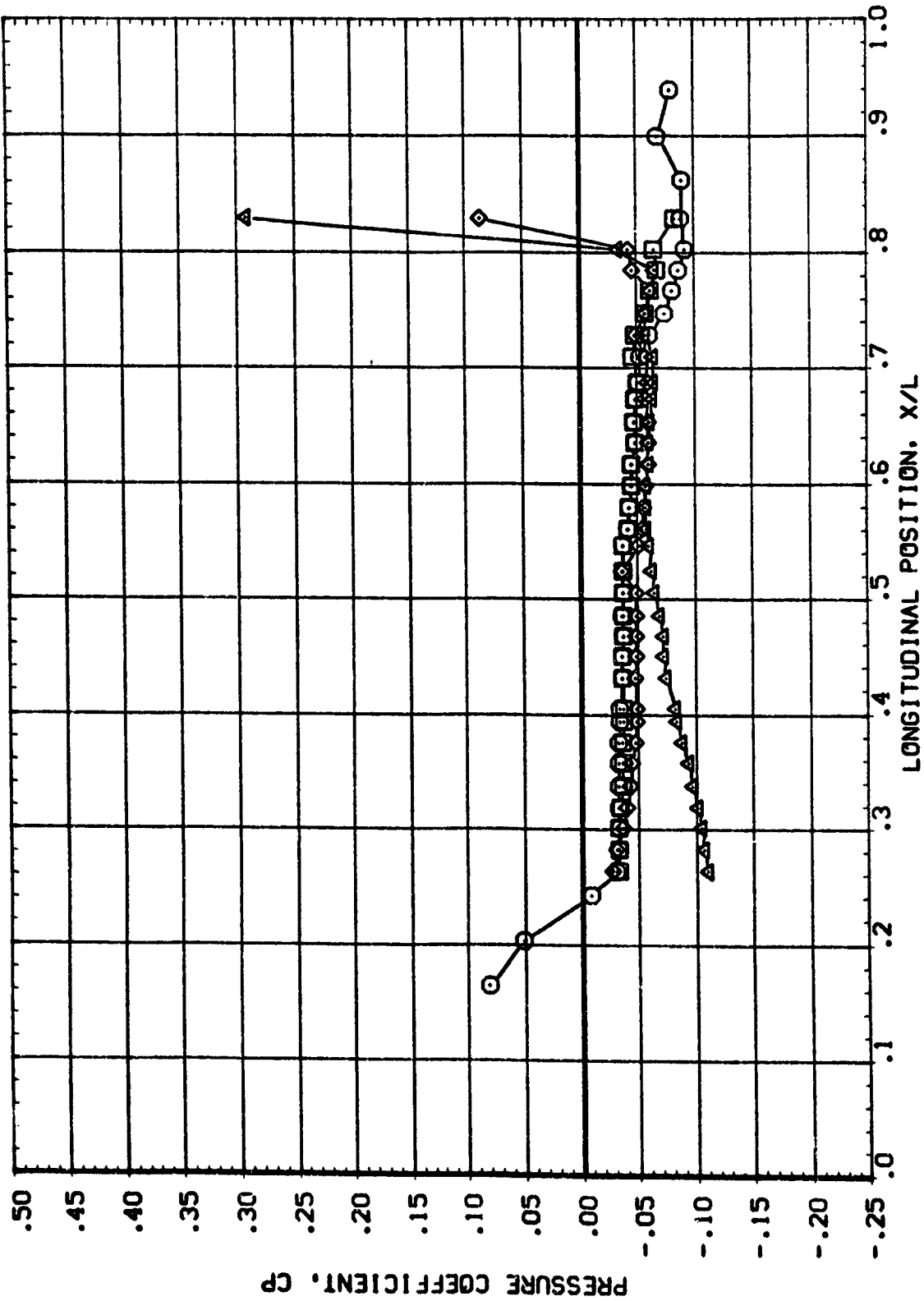
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL PM1 ALPHA MACH
 ○ 90.000 16.010 2.950
 □ 100.000
 ◇ 110.000
 △ 180.000

BETA .000 ELEVON -15.000
 PARAMETRIC VALUES



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

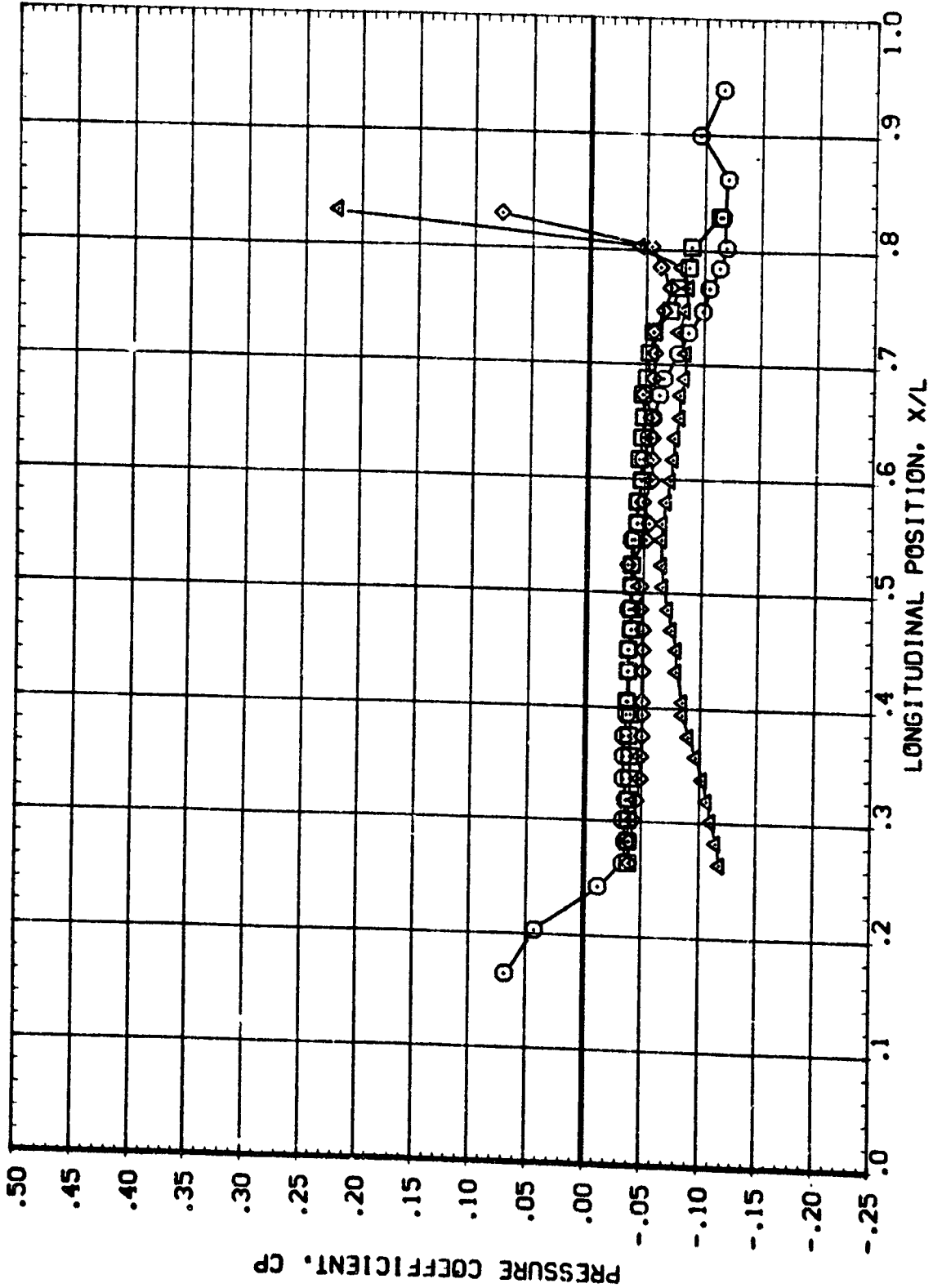
GA64 ORBITER ENTRY CONFIGURATION

(R04004)

PHI: 90.000
 100.000
 110.000
 180.000

ALPHA MACH
 18.000 2.950

BETA .000
 PARAMETRIC VALUES
 ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



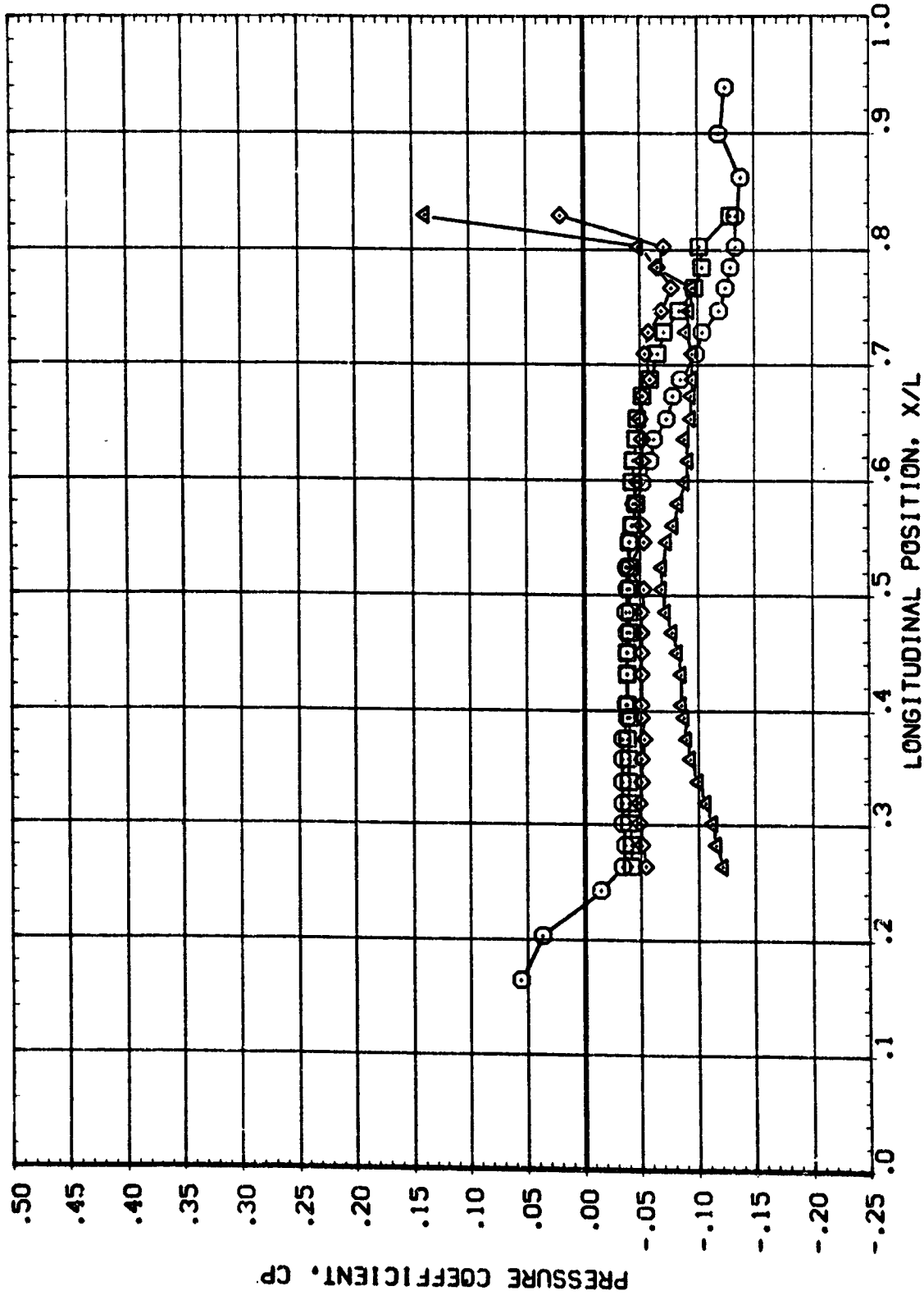
0A64 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

PHI 90.000 ALPHA 20.000 MACH 2.950
100.000
110.000
180.000

TYPE 1
□ ◇ △

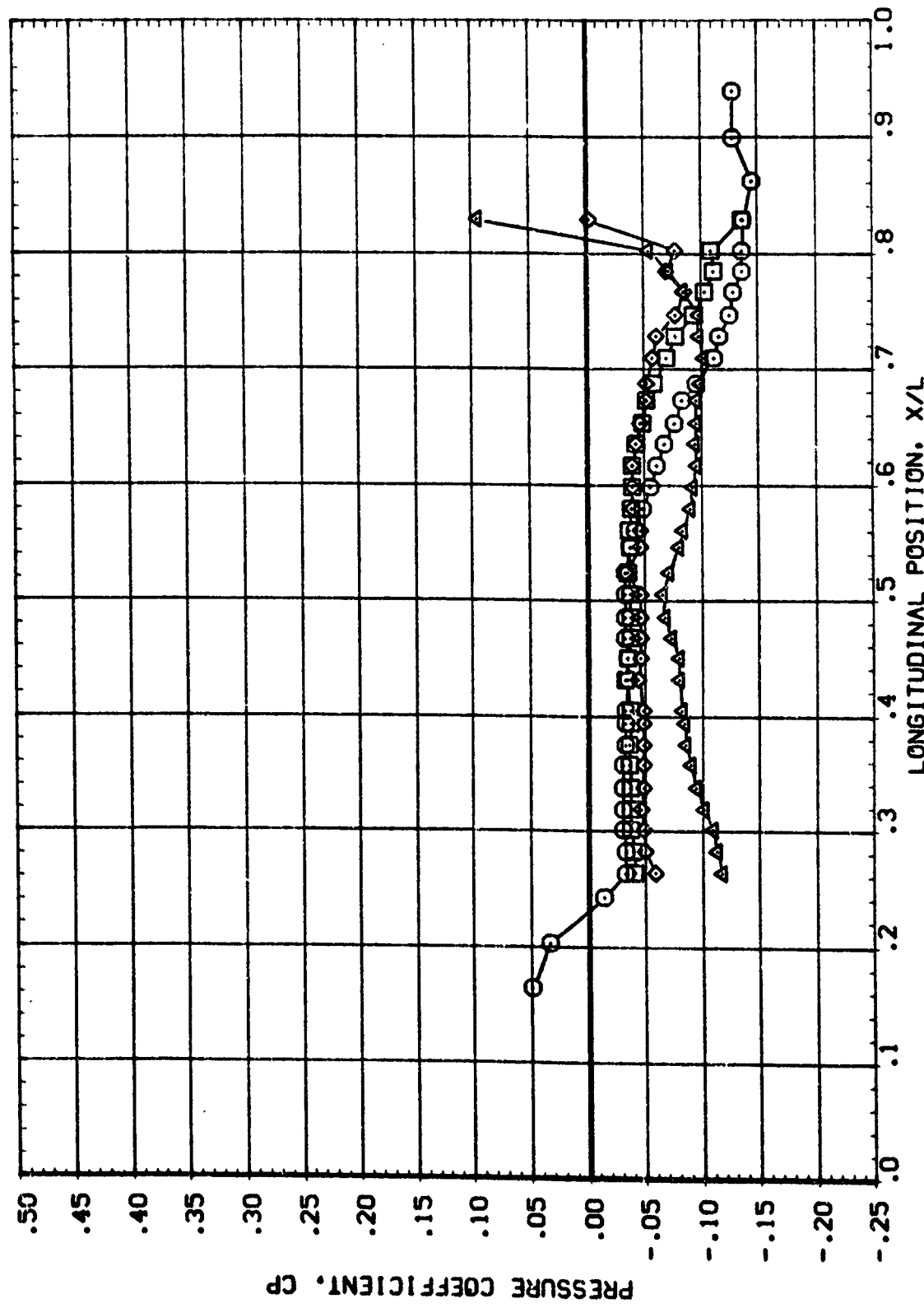


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

0A64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL	PHI	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	90.000	20.950	2.950	.000	ELEVON -15.000
□	100.000				
◇	110.000				
△	180.000				



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

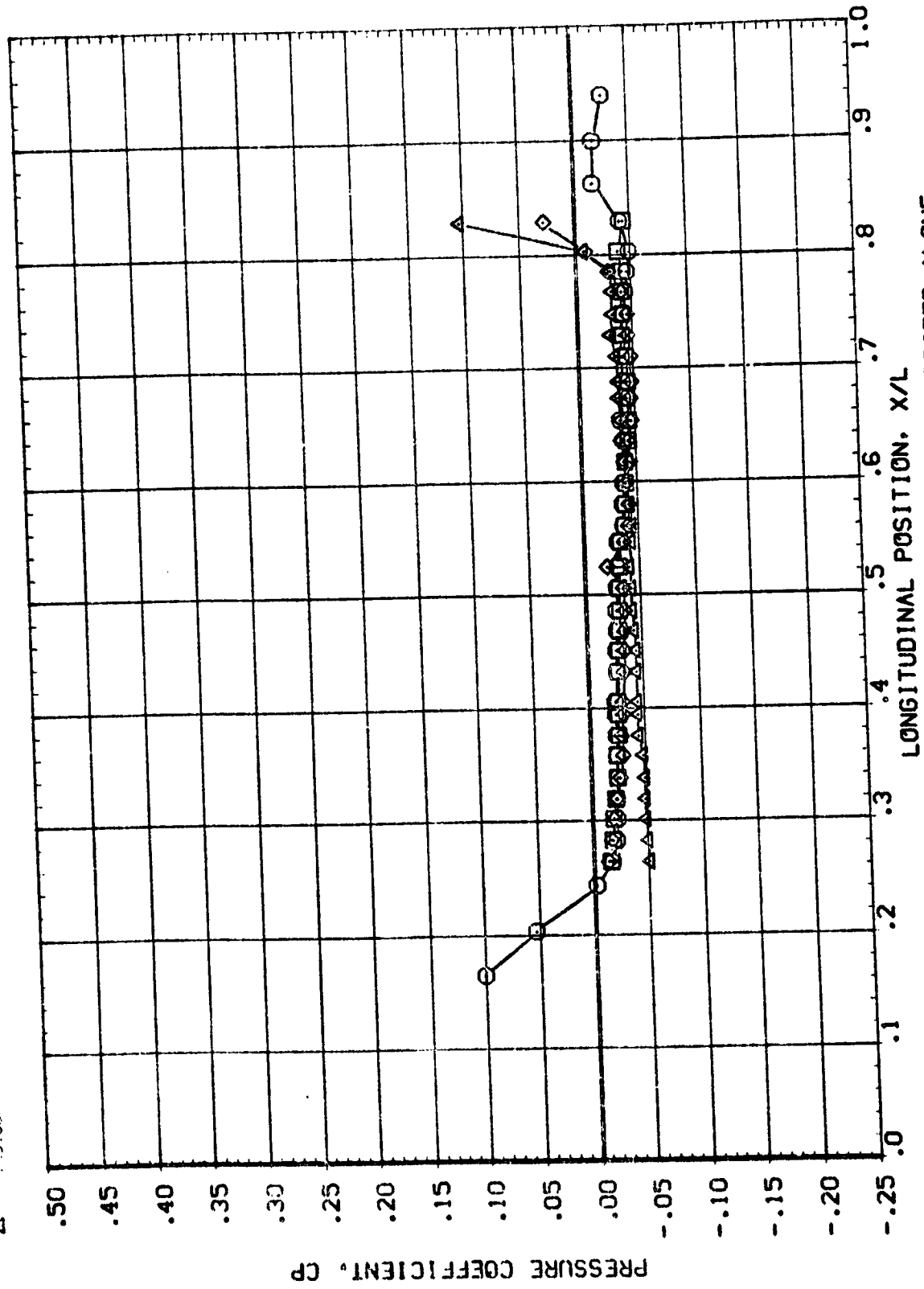


0A64 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL PH1 ALPHA MACH
○ 37.000 7.990 4.000
□ 100.000
◇ 110.000
△ 140.000

BETA .000 ELEVON -15.000

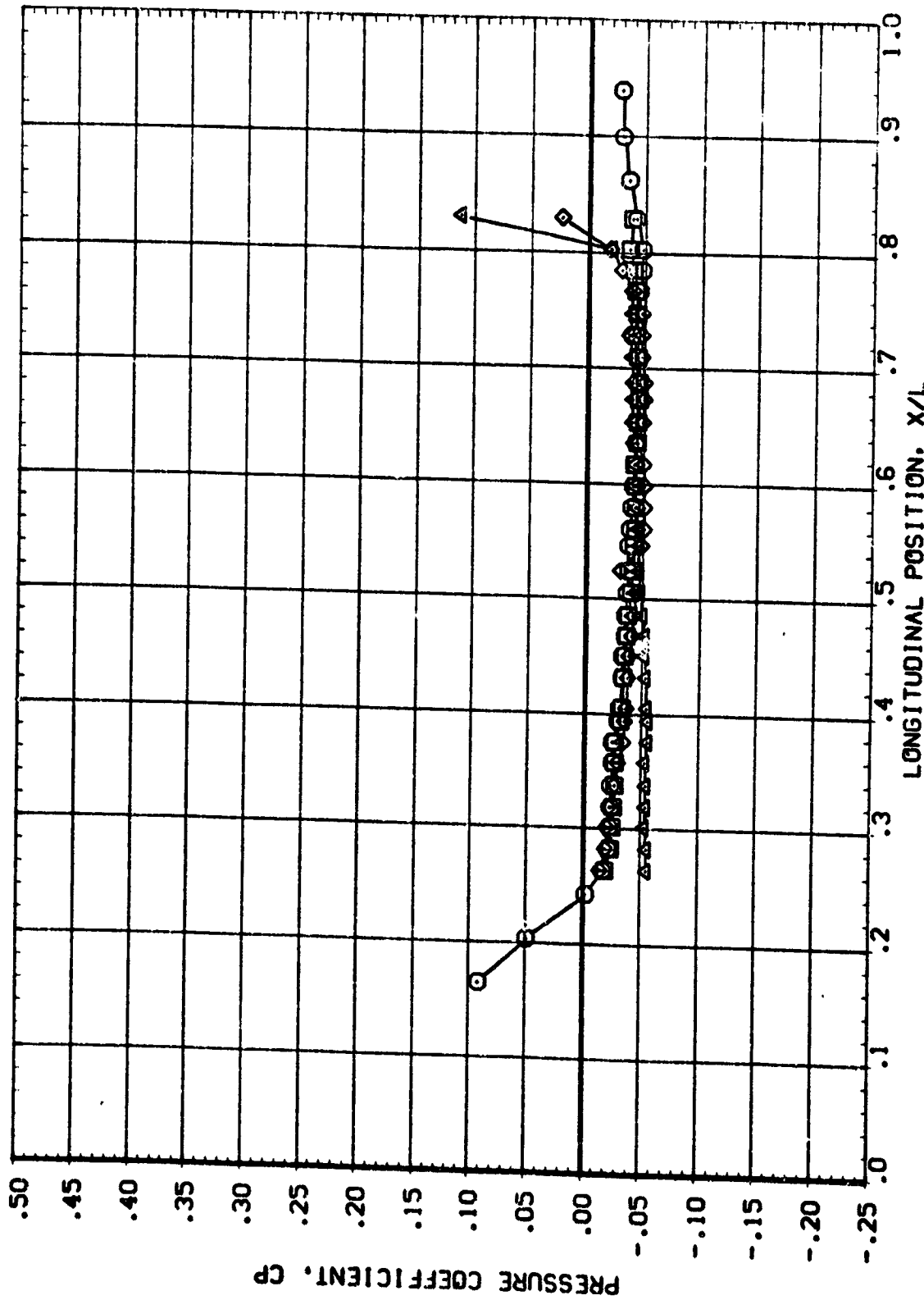


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL	PHI	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	90.000	10.000	4.000	.000	ELEVON -15.000
□	100.000				
◇	110.000				
△	180.000				



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

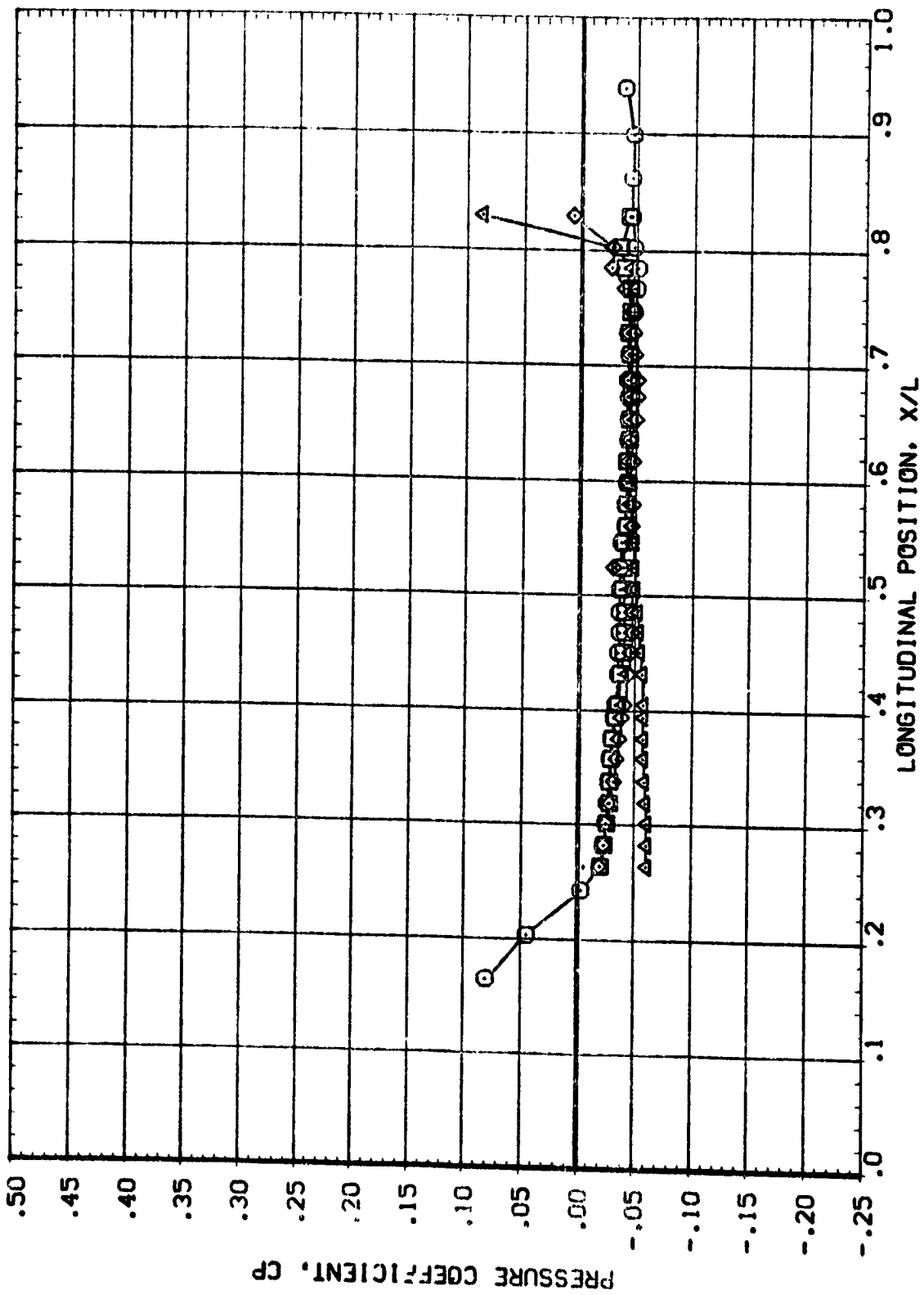


OAG4 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL FMI ALPHA MACH
○ 90.000 12.010 4.000
□ 100.000
◇ 110.000
△ 180.000

BETA .000 ELEVON -15.000

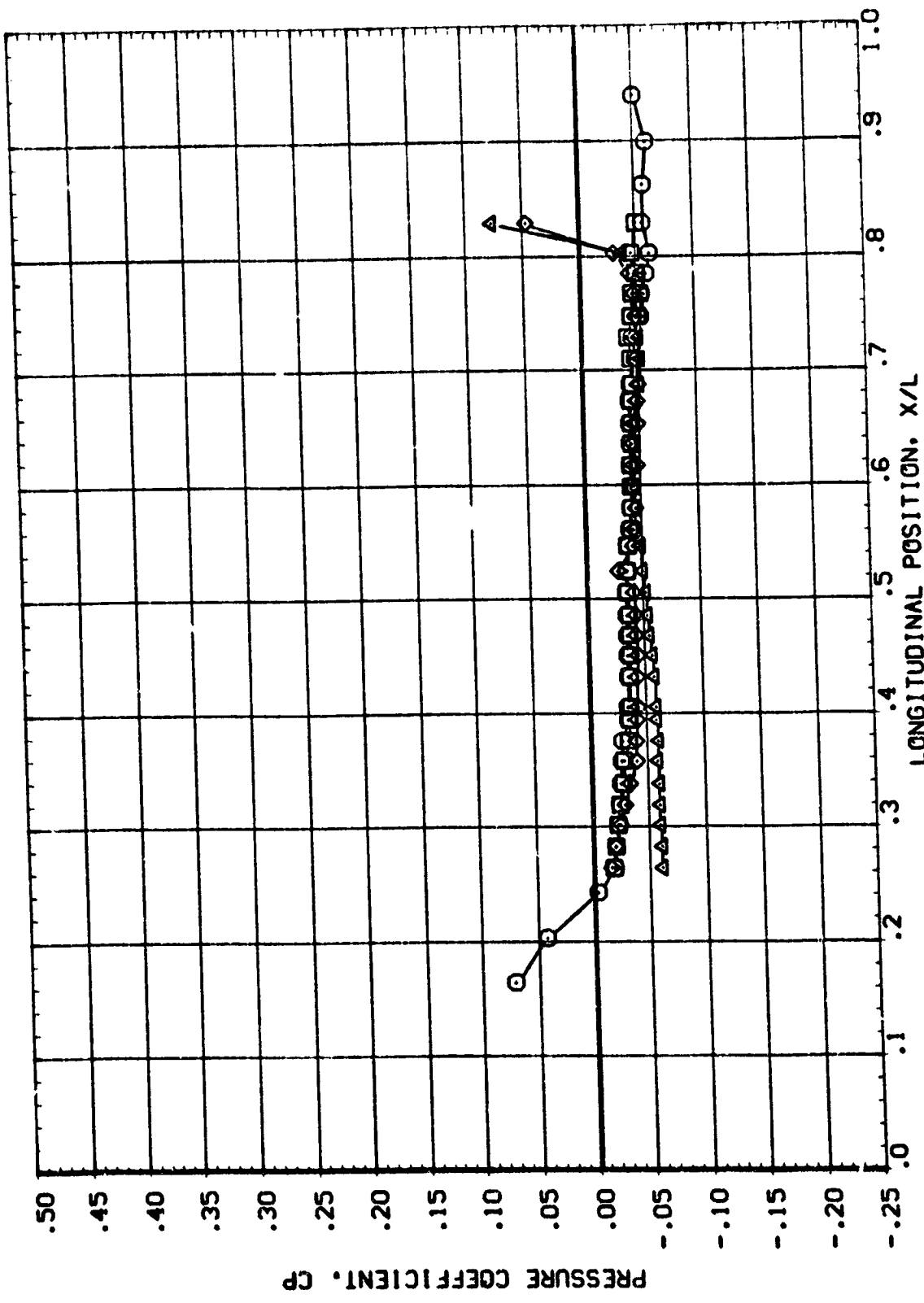


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

(R04004) OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
 BETA .000 ELEVON -15.000

SYMBOL P#1 ALPHA MACH
 □ 90.000 14.000 4.000
 ○ 100.000
 ◇ 110.000
 △ 180.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

GA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

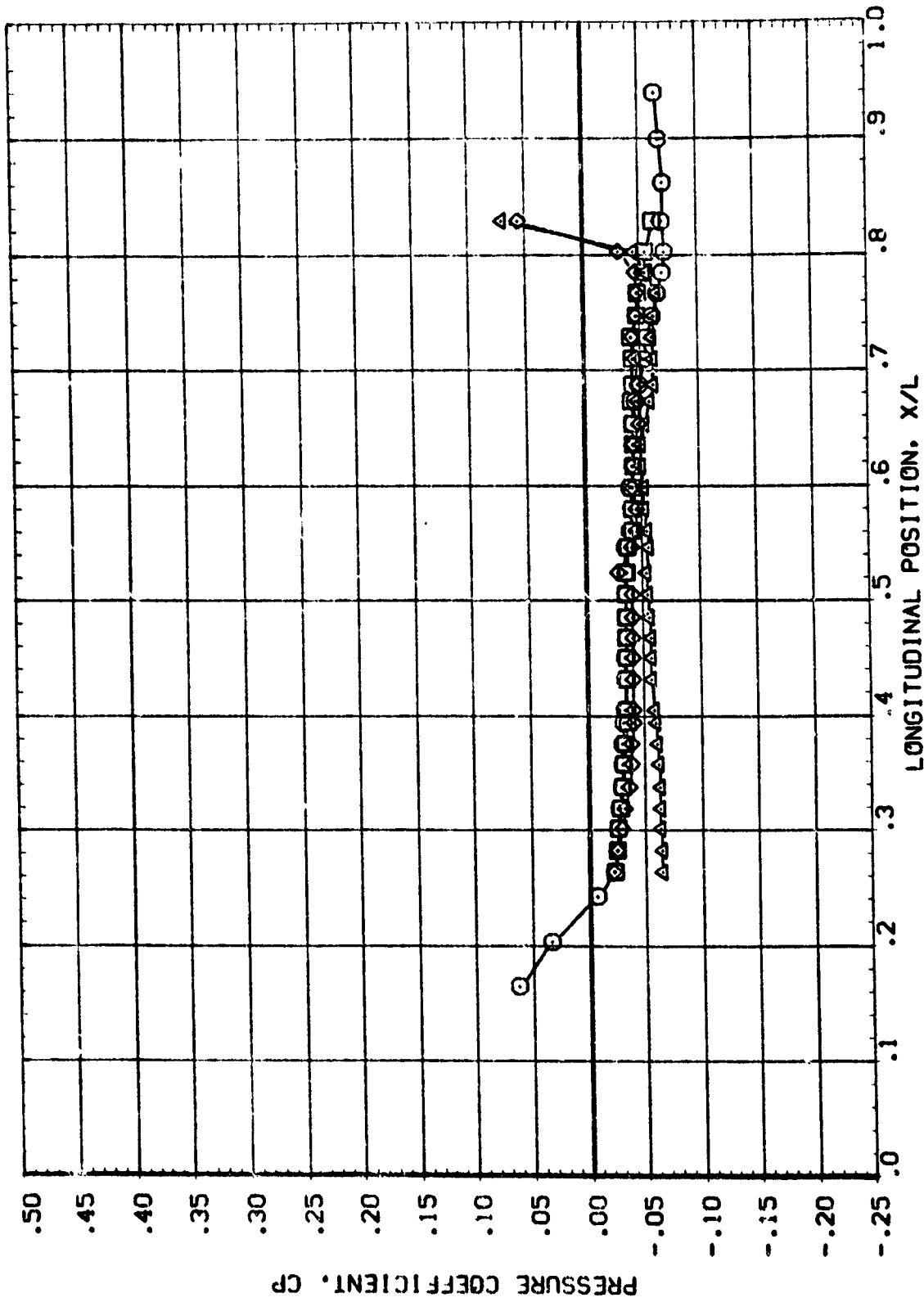
PARAMETRIC VALUES
.000 ELEVON -15.00

BETA

ALPHA MACH
16.010 4.000

PHI
90.000
100.000
110.000
180.000

□
◇
△



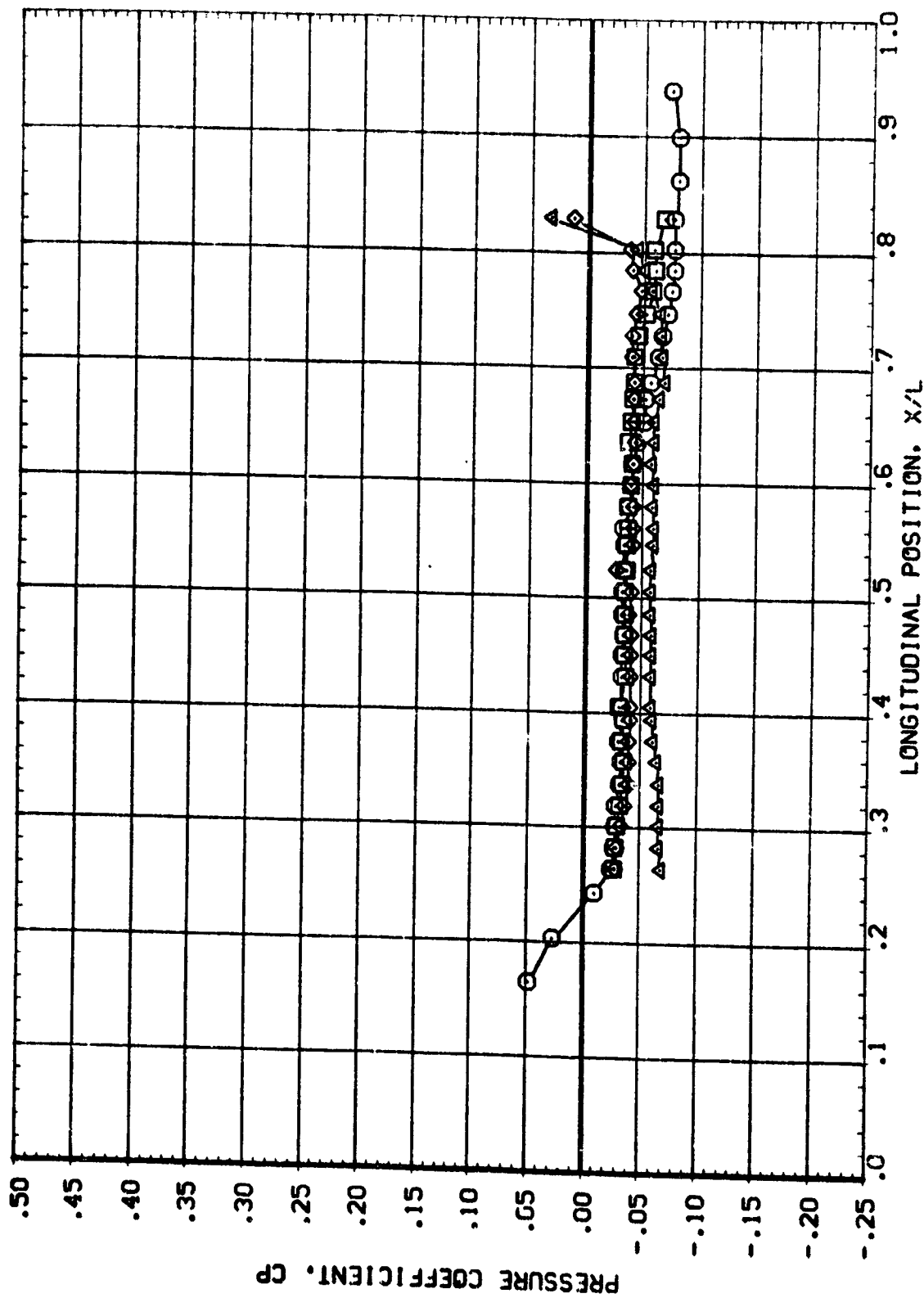
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

0A64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL PMI ALPHA MACH
○ 90.000 18.010 4.000
□ 100.000
◇ 110.000
△ 180.000

BETA .000 ELATION -15.000
PARAMETRIC VALUES



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

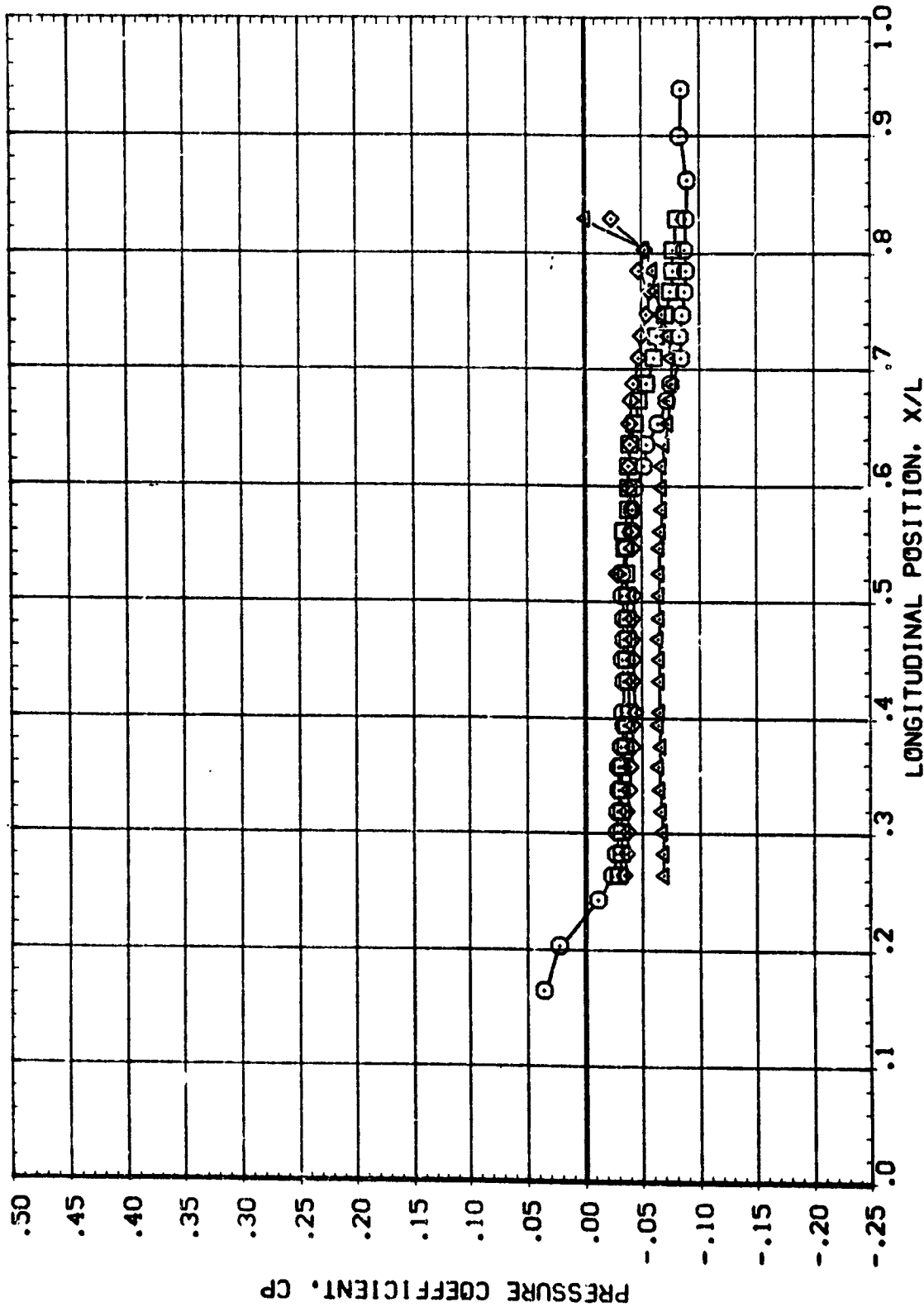


OAG4 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL PM ALPHA MACH
○ 95.000 20.000 4.000
□ 100.000
◇ 110.000
△ 180.000

BETA .000 ELEVON -15.000

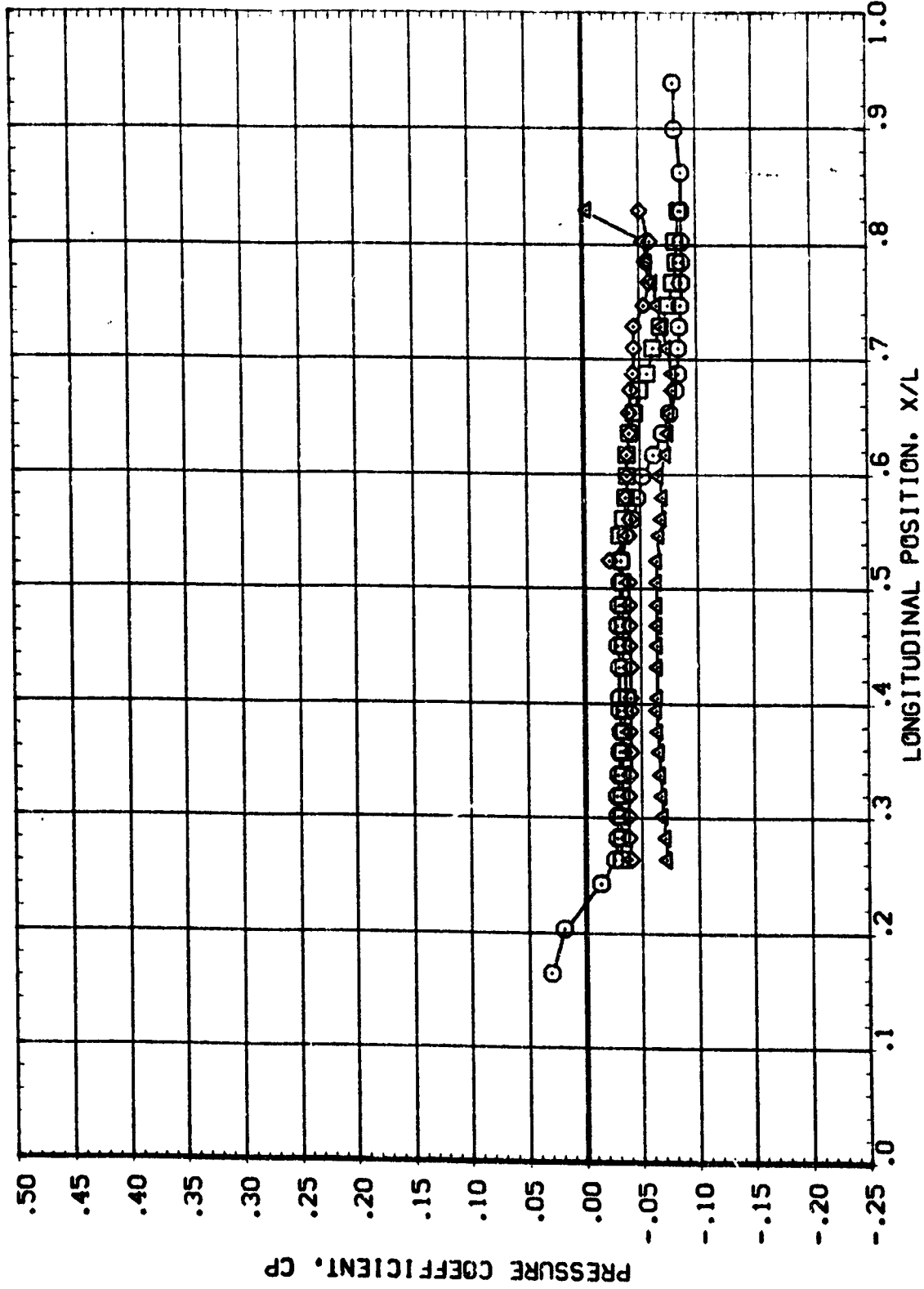


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL	PHI	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	92.000	20.970	4.000	.000	ELEVON
□	100.000				-15.000
◇	110.000				
△	180.000				



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



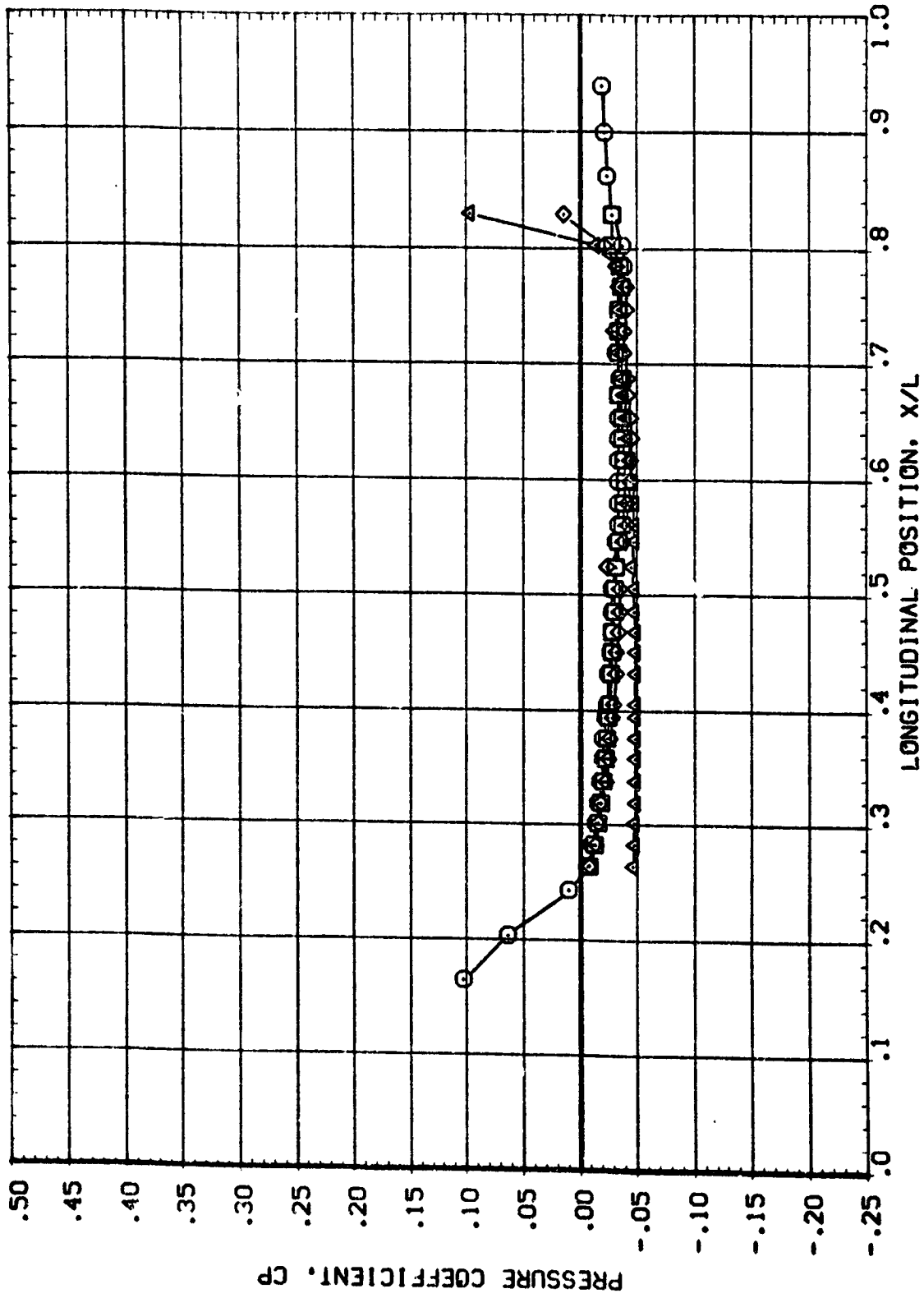
OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL
□ 93.000
◇ 100.000
△ 110.000
△ 180.000

ALPHA 8.010
MACH 4.500

BETA
PARAMETRIC VALUES
.000 ELEVON -15.000

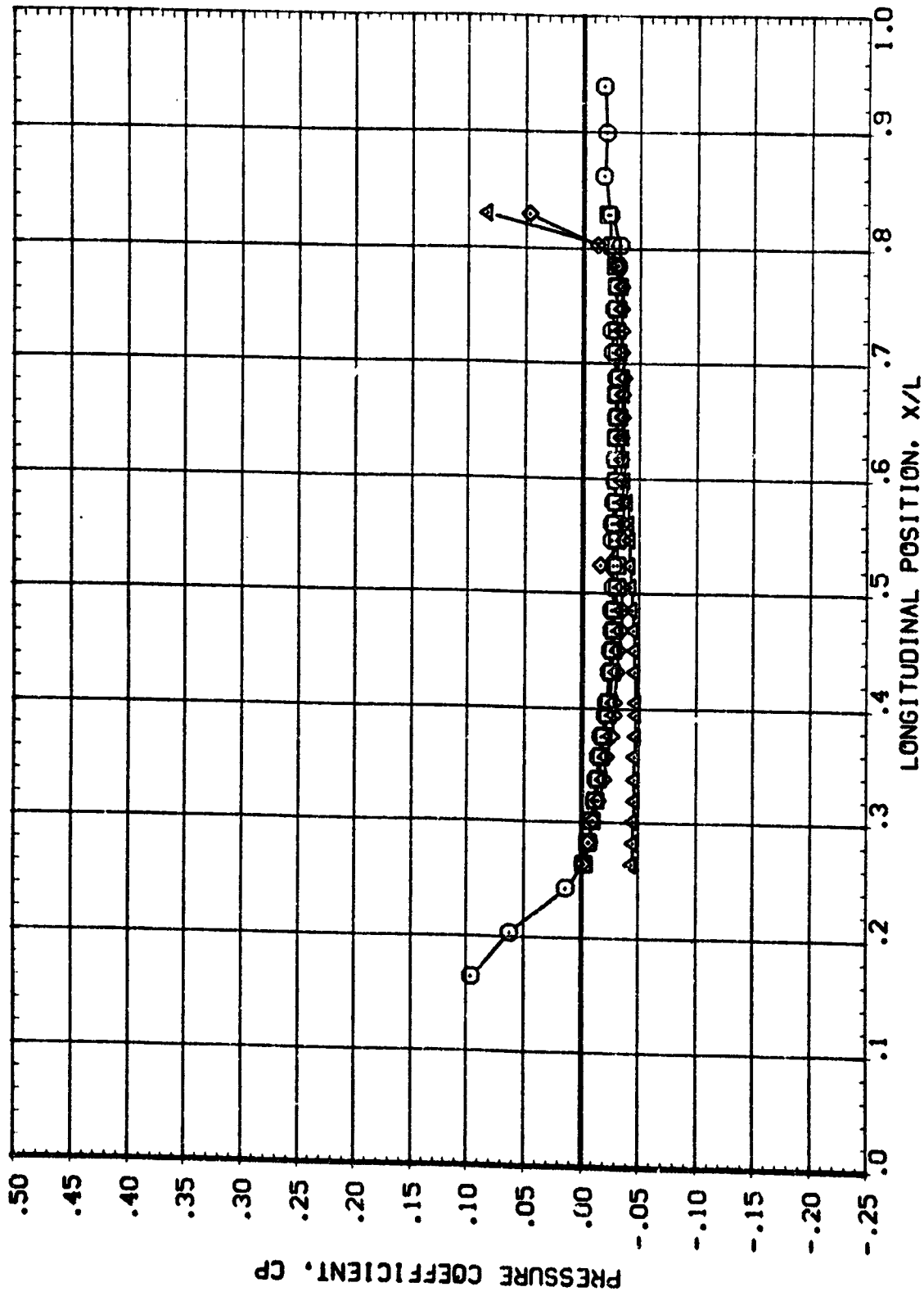


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL	PHI	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	90.000	10.000	4.500	.000	ELEVON -15.000
□	100.000				
◇	110.000				
△	180.000				



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

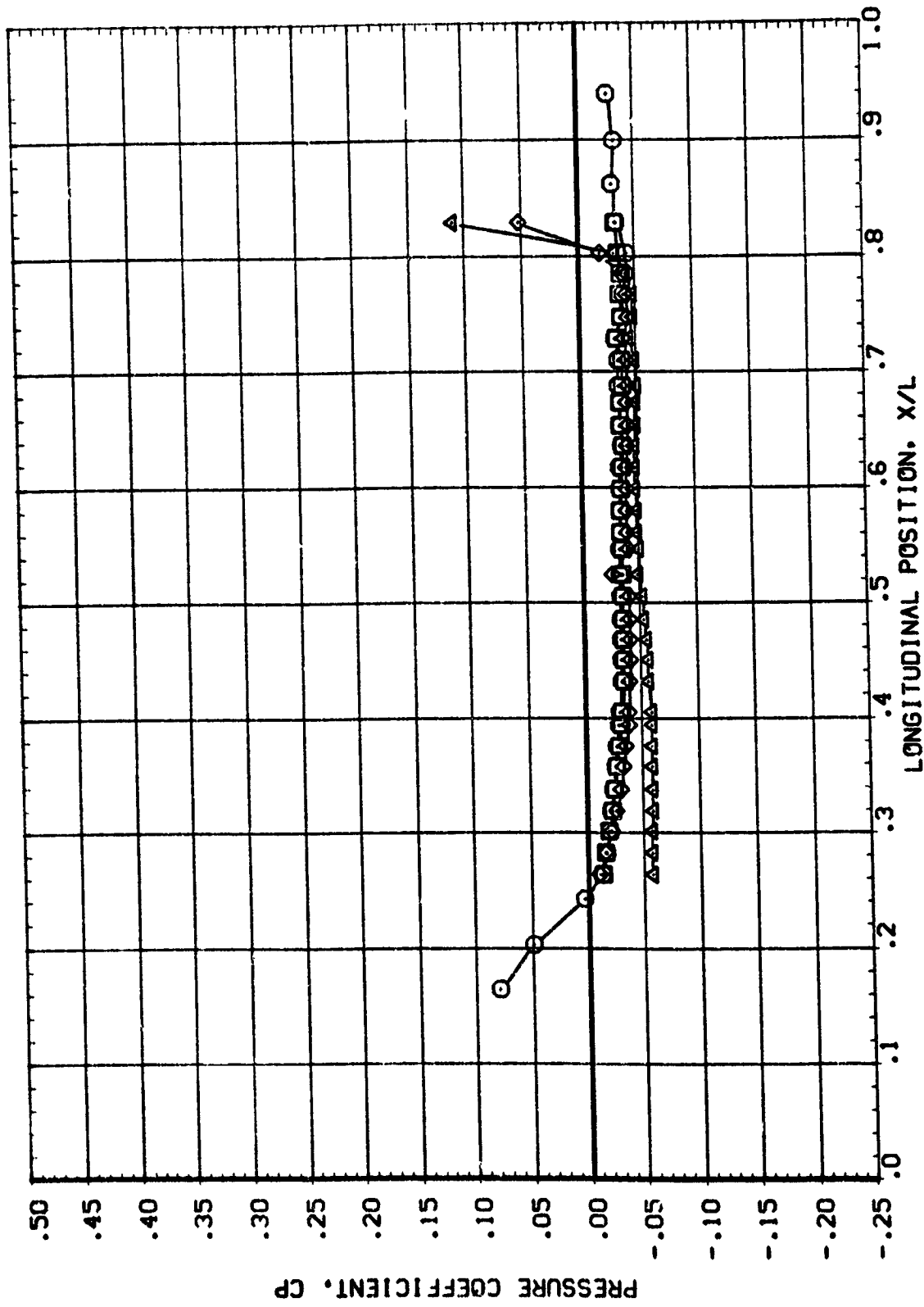


CAS64 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL PMI ALPHA MACH
○ 90.000 12.010 4.500
□ 100.000
◇ 110.000
△ 180.000

BETA
PARAMETRIC VALUES
.000 ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

GA64 ORBITER ENTRY CONFIGURATION

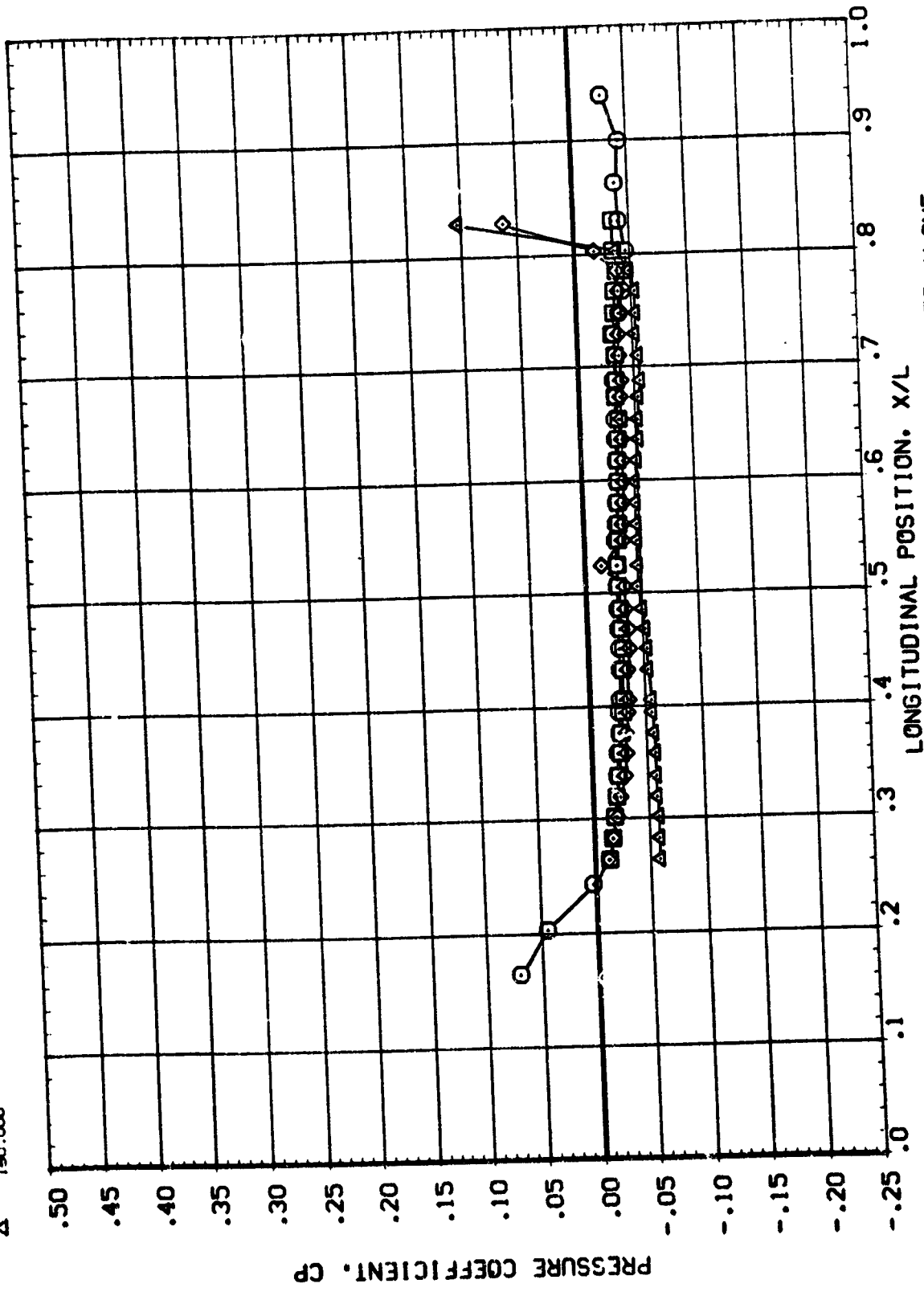
(R04004)

PHI 90.000
 100.000
 110.000
 190.000

ALPHA 14.310

MACH 4.500

BETA .000
 ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



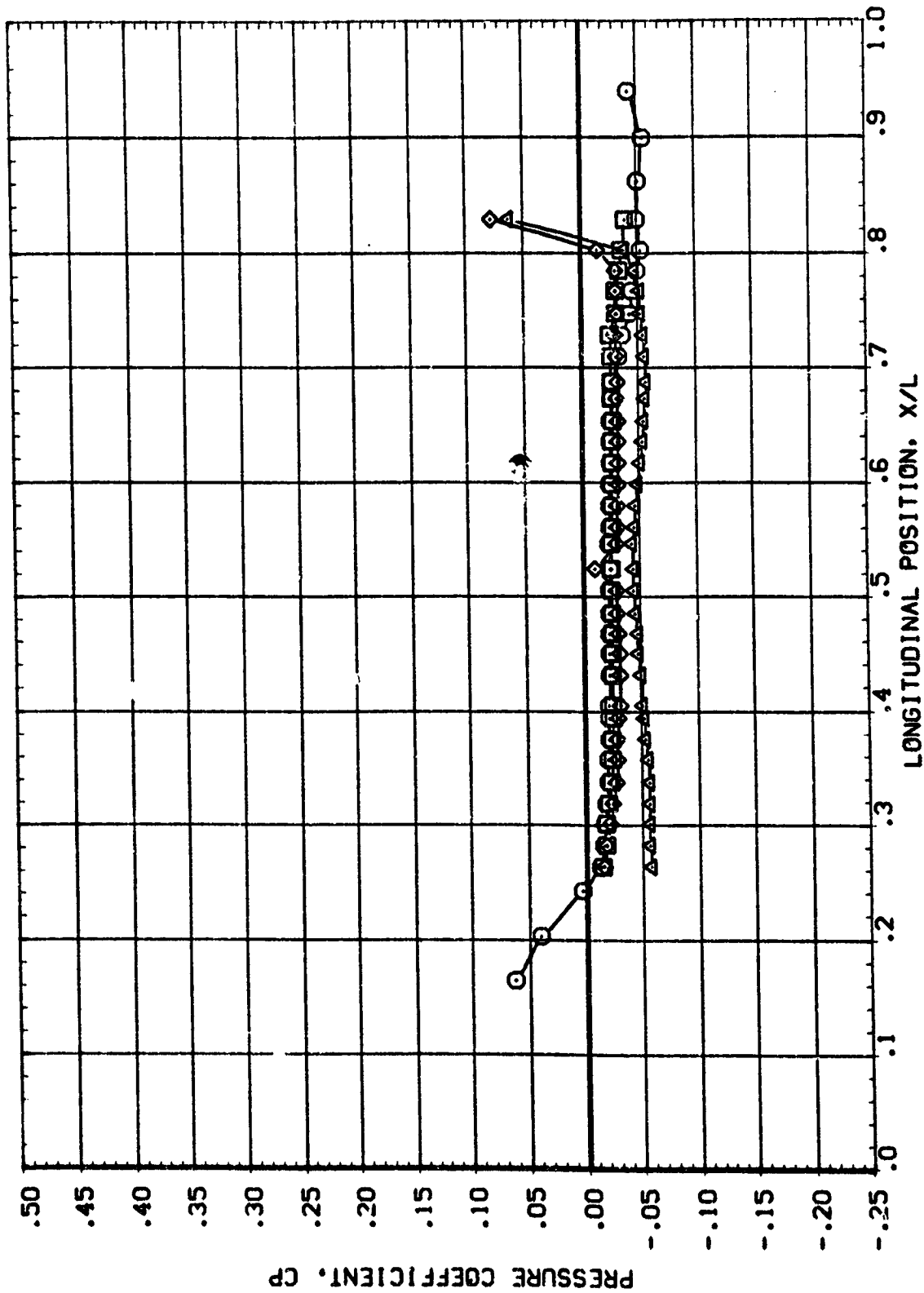
OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL
□ 90.000
◇ 100.000
△ 110.000
△ 180.000

PHI ALPHA MACH
16.000 4.500

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



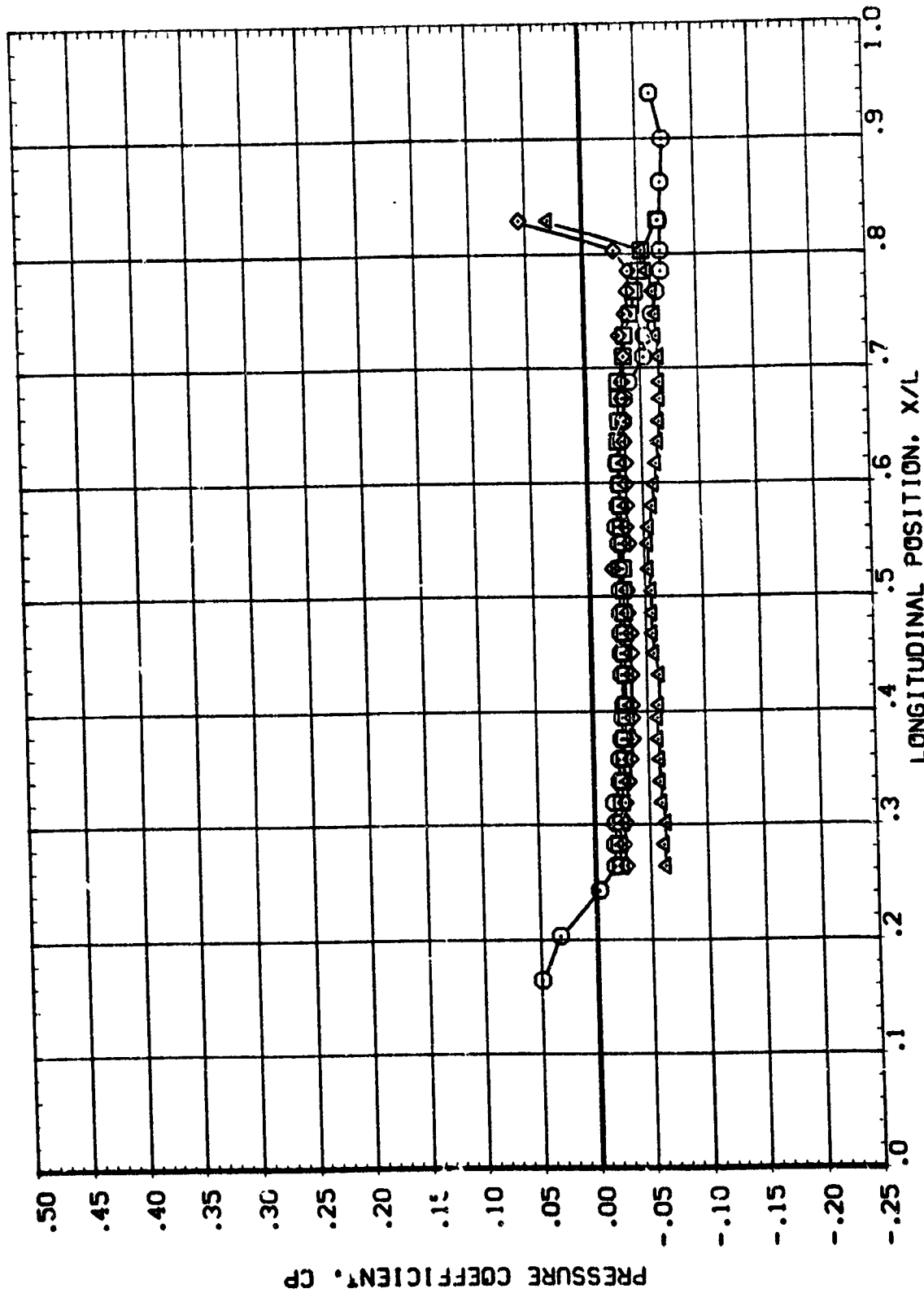
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

(RQ4004)

OAG4 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL PHI ALPHA MACH
□ 50.000 18.000 4.500
◇ 100.000
△ 110.000
△ 180.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

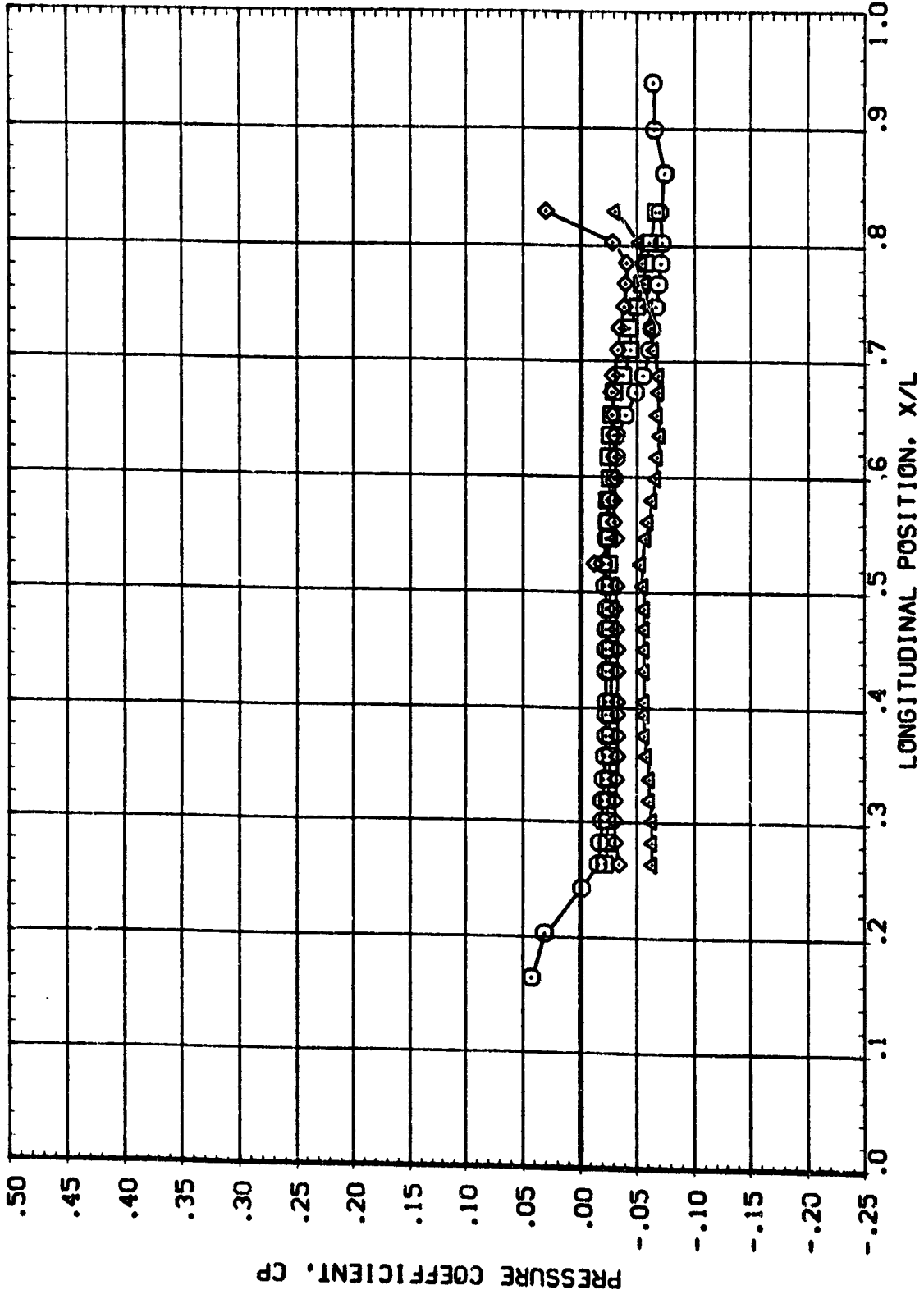


CA64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL PHI ALPMA MACH
○ 92.000 19.990 4.500
□ 100.000
◇ 110.000
△ 180.000

BETA PARAMETRIC VALUES
.000 ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

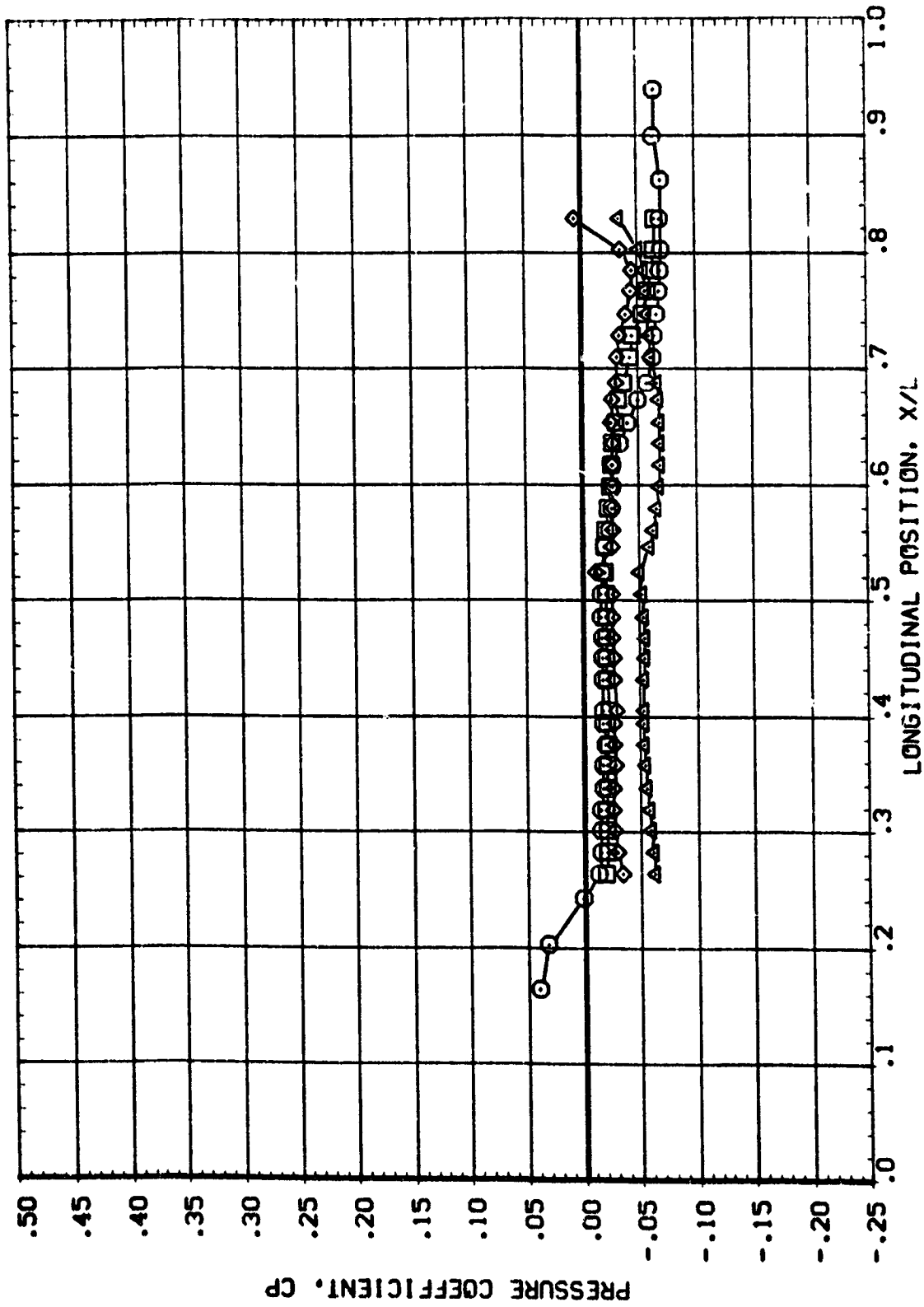
OA64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL
□ 90.000
◇ 100.000
△ 110.000
△ 180.000

ALPHA 20.960
MACH 4.500

BETA
PARAMETRIC VALUES
.000 ELEVON -1E.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

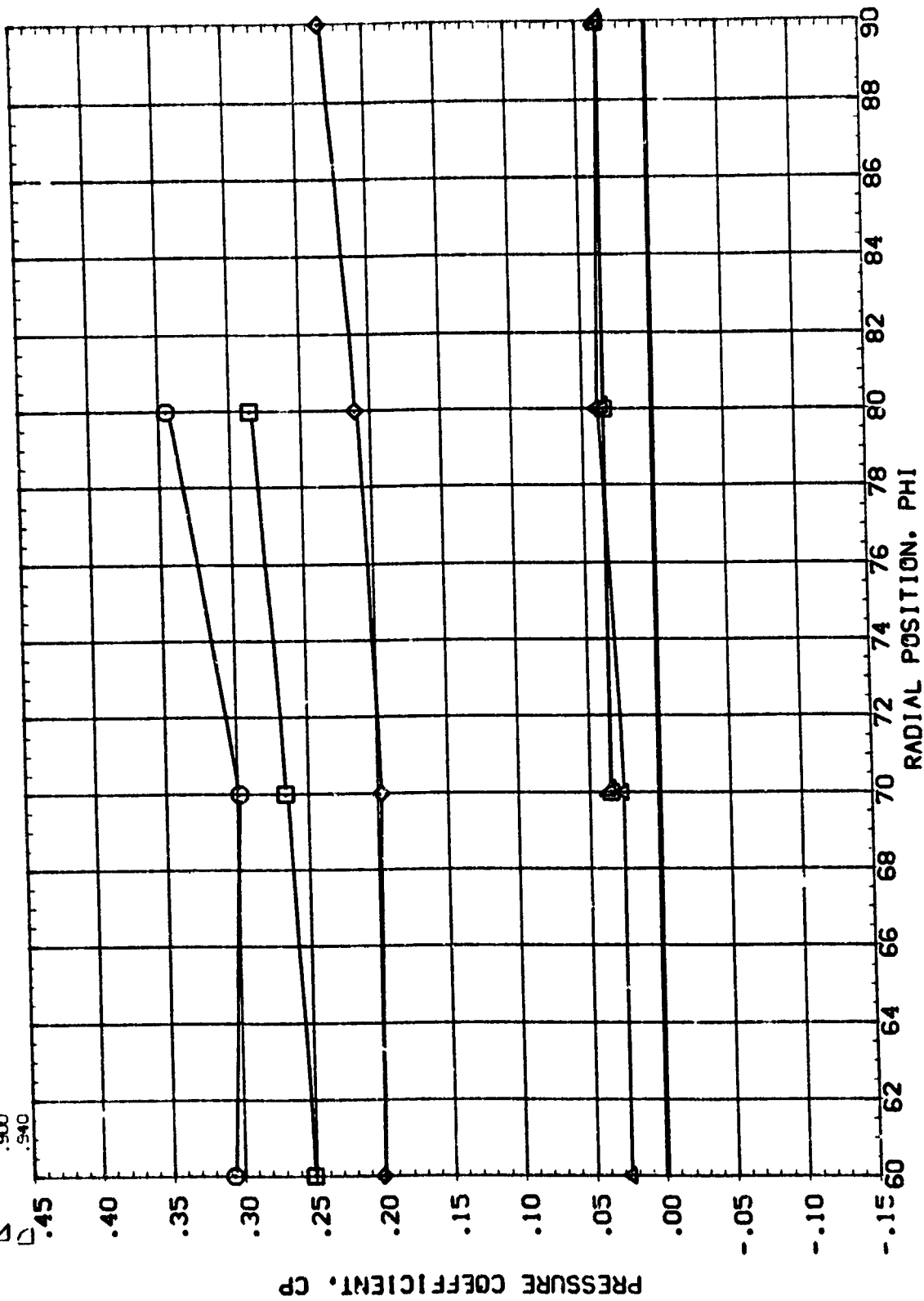


1A35 ORBITER ASCENT CONFIGURATION

(R050004)

BETA
PARAMETRIC VALUES
.000 ELEVON .000

SYMBOL X/L ALPHA MACH
○ .087 -6.010 2.500
□ .126
◇ .164
△ .662
▽ .900
◊ .940



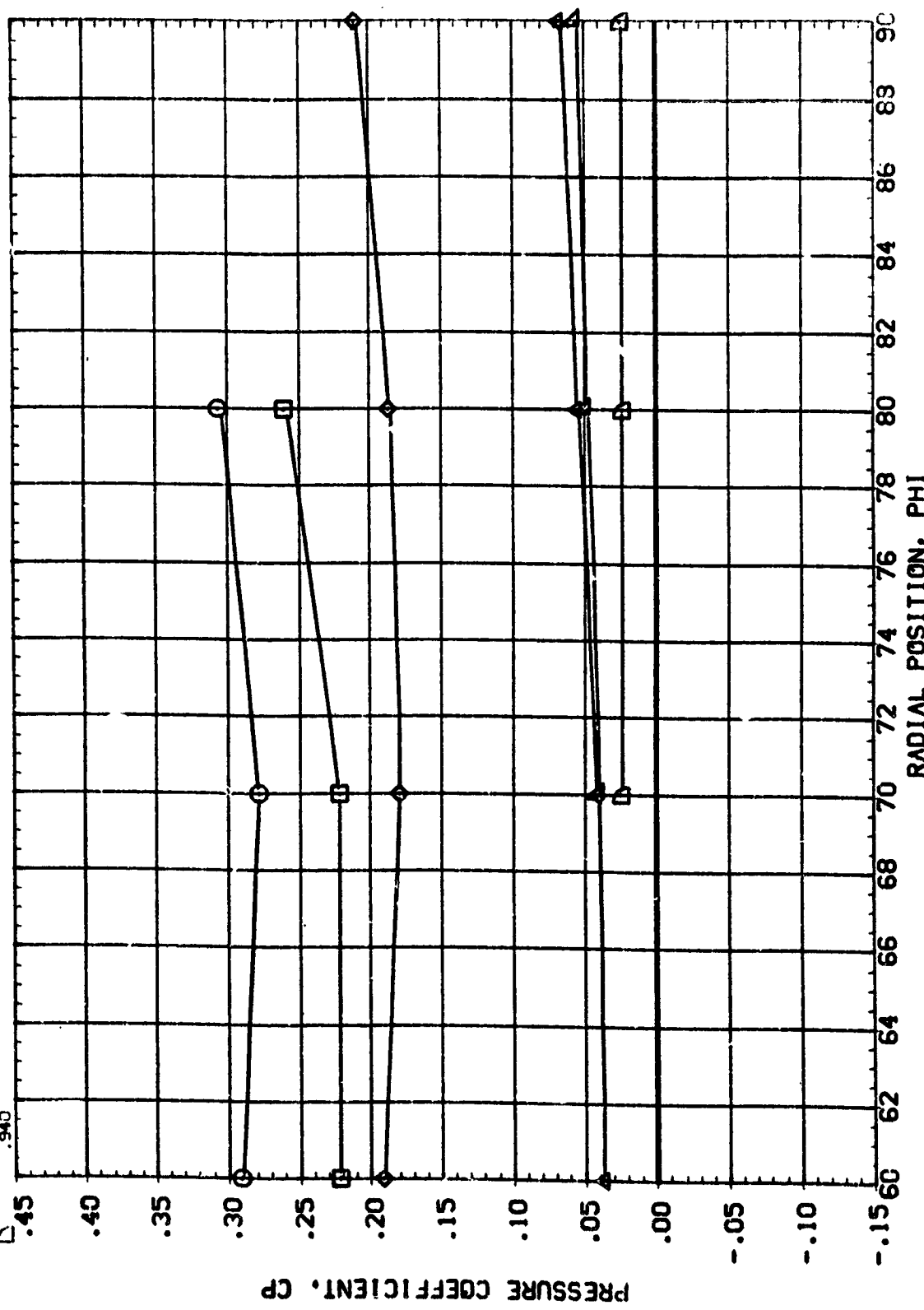
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
 BETA .000
 ELEVON .000

SYMBOL X/L ALPHA MACH
 ○ .387 -3.950 2.500
 □ .126
 ◇ .164
 ▲ .862
 ▽ .900
 △ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

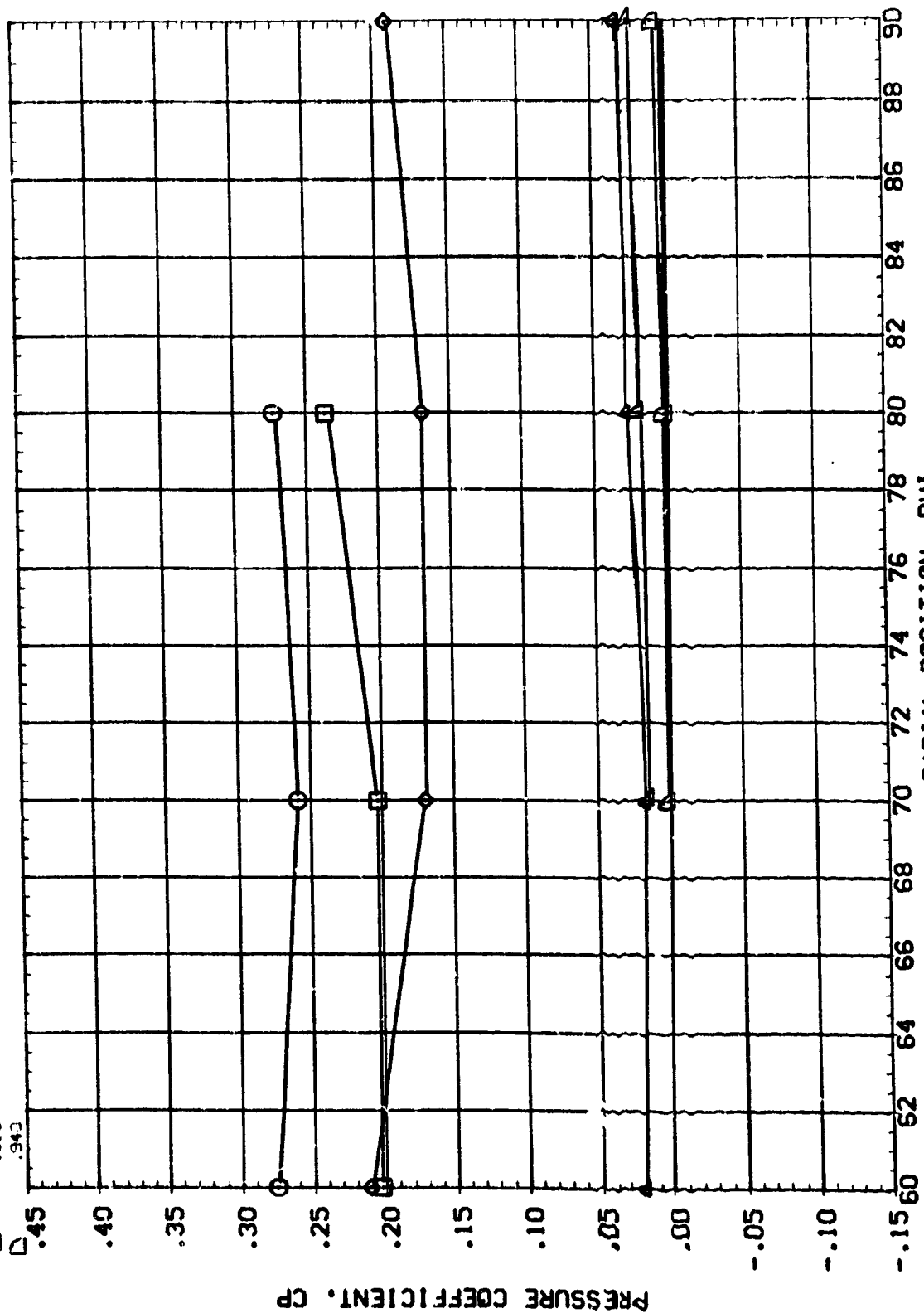


IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
BETA .000
ELEVON .000

SYMBOL M/L ALPHA MACH
□ .087 -2.000 2.500
○ .126
◇ .164
△ .862
▽ .900
◇ .943



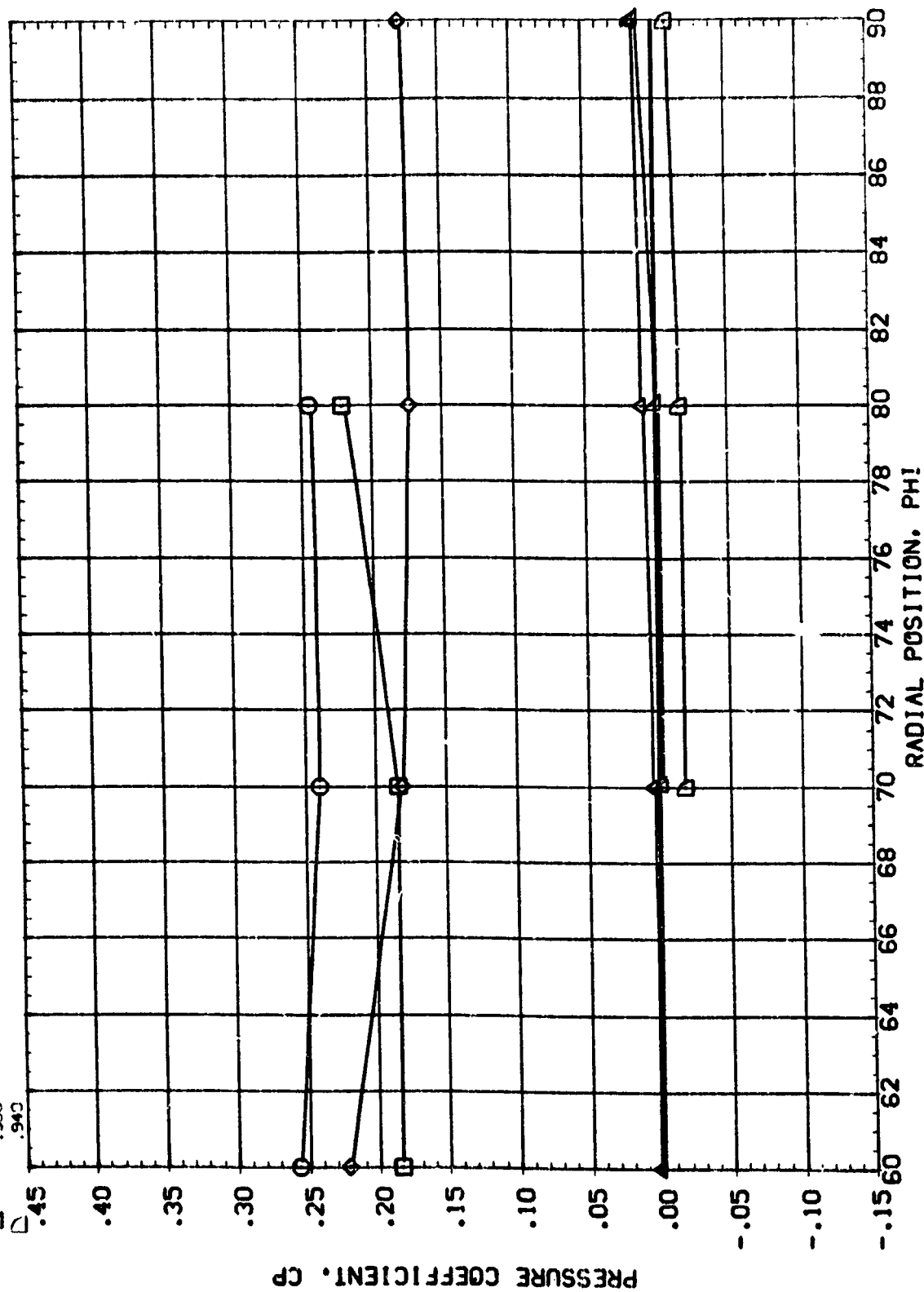
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(RQ50004)

PARAMETRIC VALUES
 .000 .000 .000
 BETA ELEVON

SYMBOL X/L ALPHA MACH
 .087
 .126
 .164
 .862
 .900
 .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(R05004)

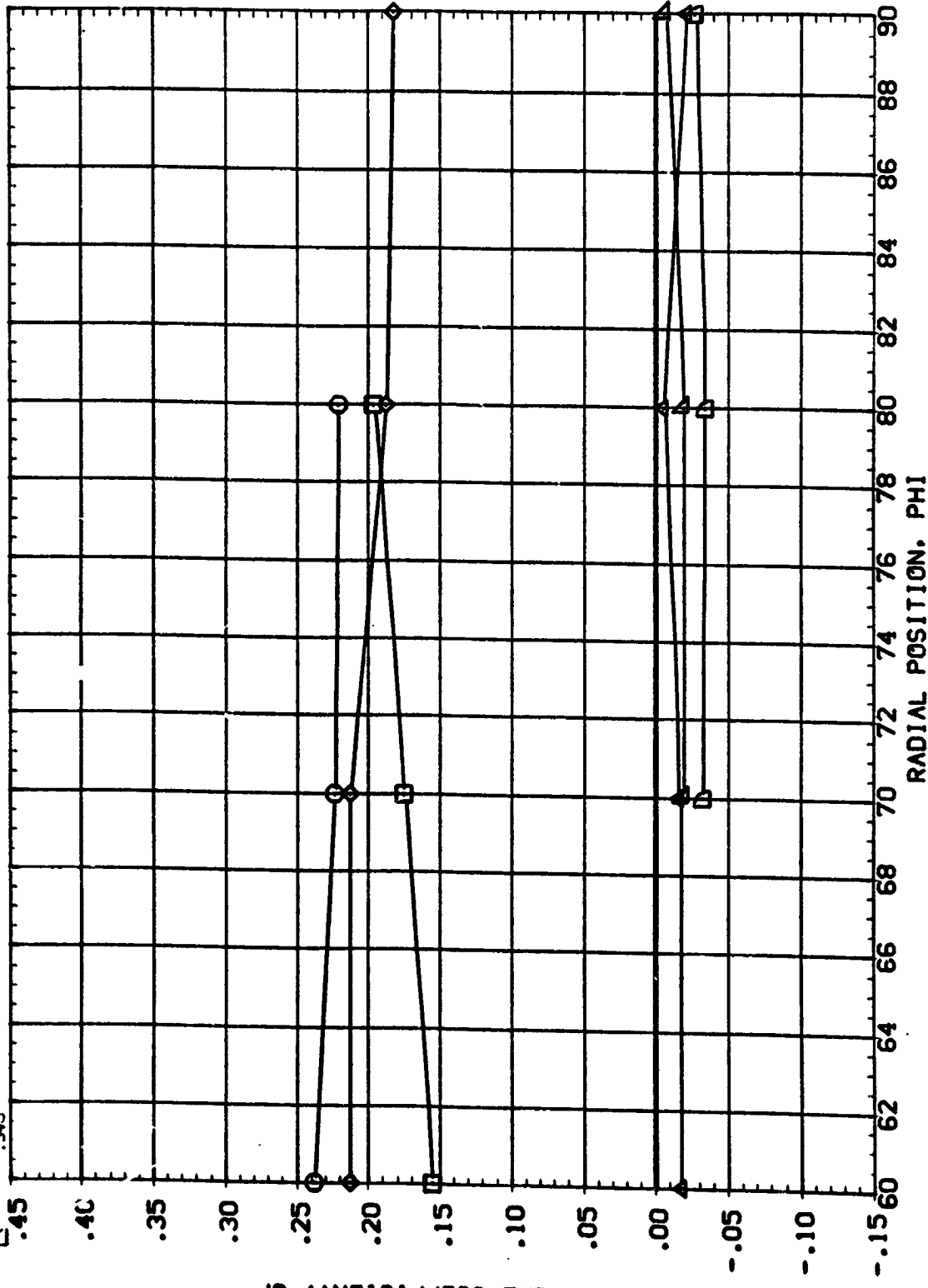
PARAMETRIC VALUES
 BETA .000
 ELEVON .000

ALPHA 2.000
 MACH 2.500

X/L
 .087
 .126
 .164
 .862
 .900
 .943

SYMBOL
 ○
 ◊
 △
 ▽

PRESSURE COEFFICIENT, CP

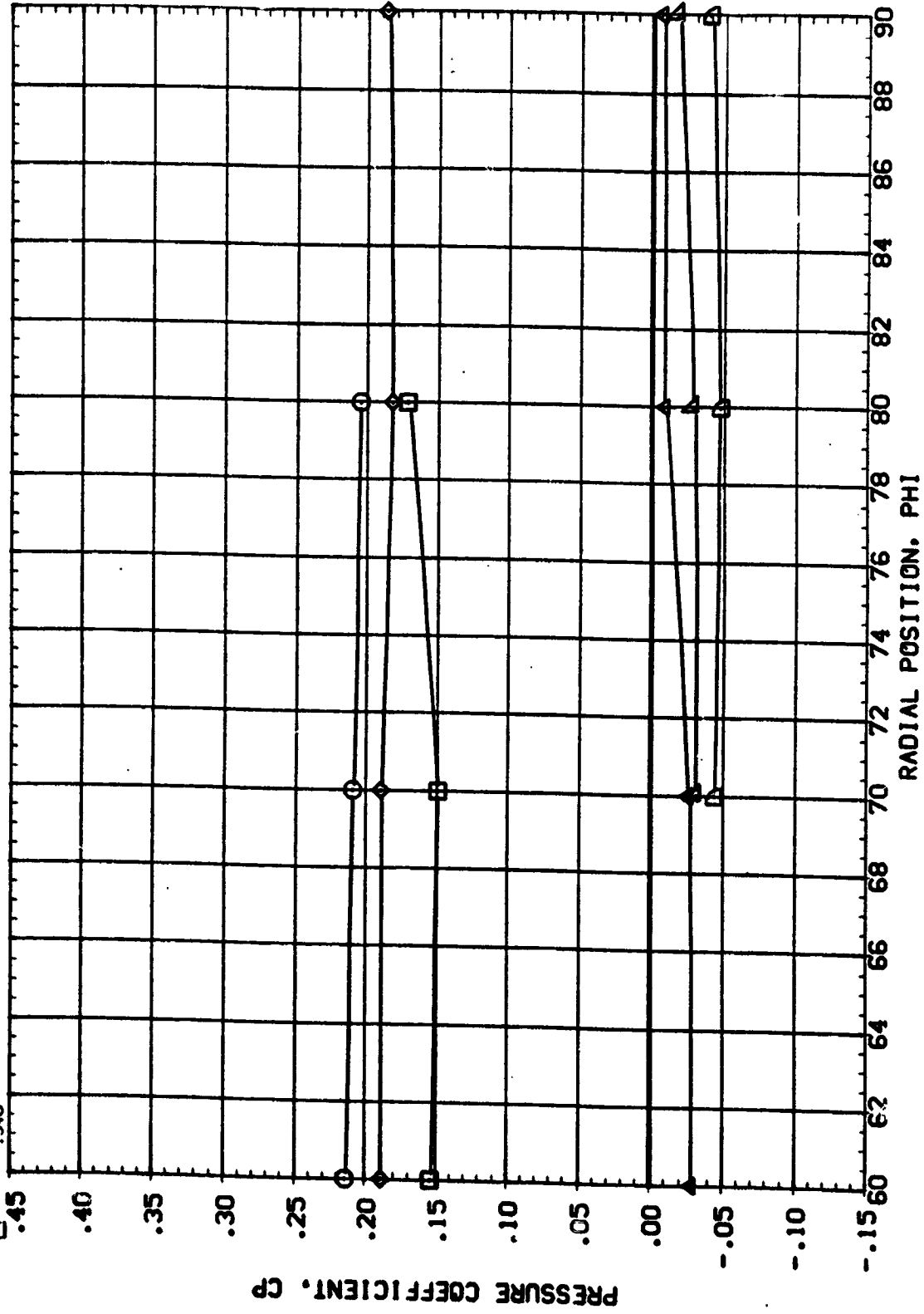


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
□	.087	3.990	2.500		.000 ELEVON .000
◇	.126				
△	.164				
▽	.662				
○	.900				
◇	.940				



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



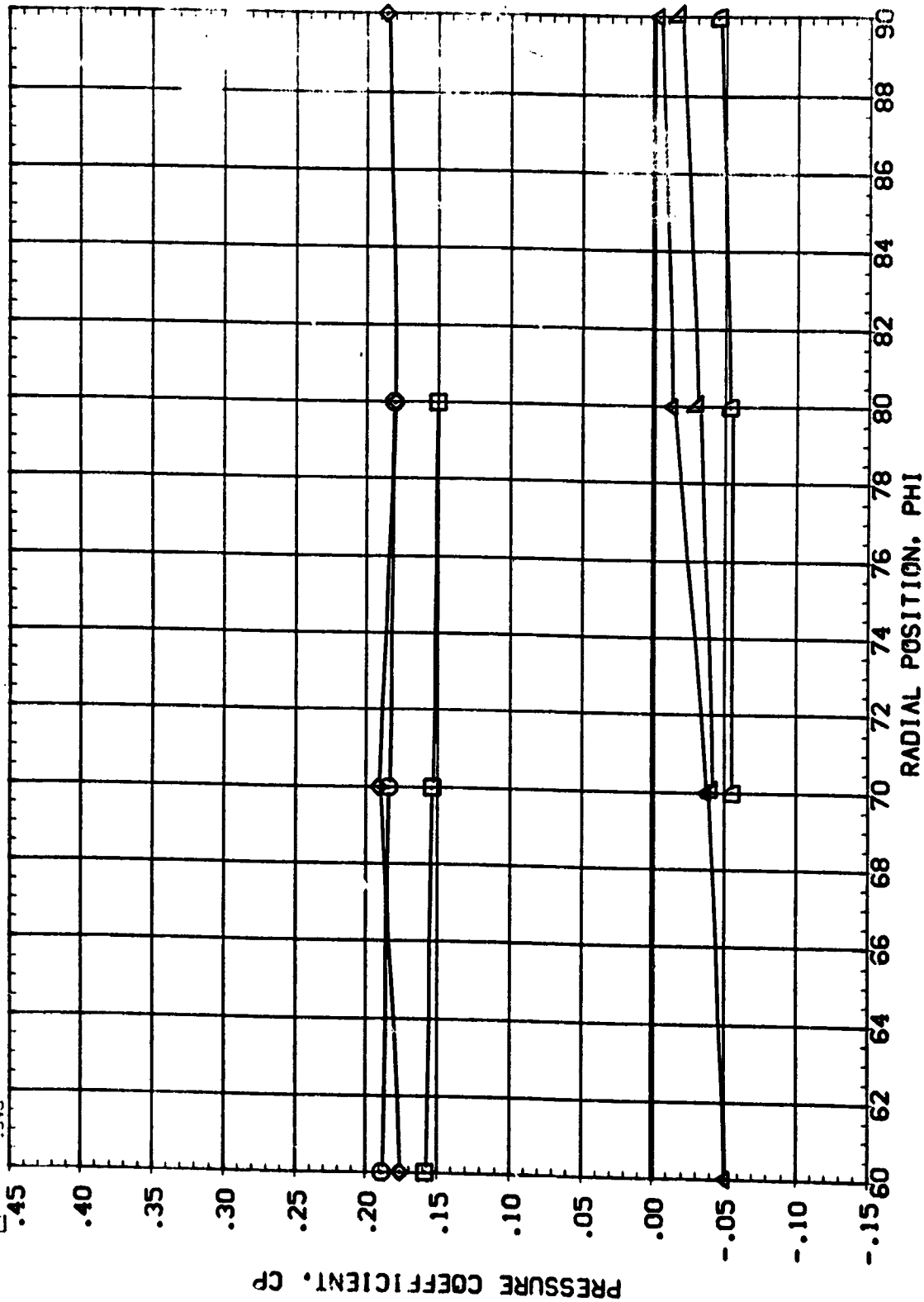
1A35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
BETA .000
ELEVON .000

ALPHA 6.000
MACH 2.500

SYMBOL X/L
○ .087
□ .126
◇ .164
△ .662
▽ .900
◁ .940

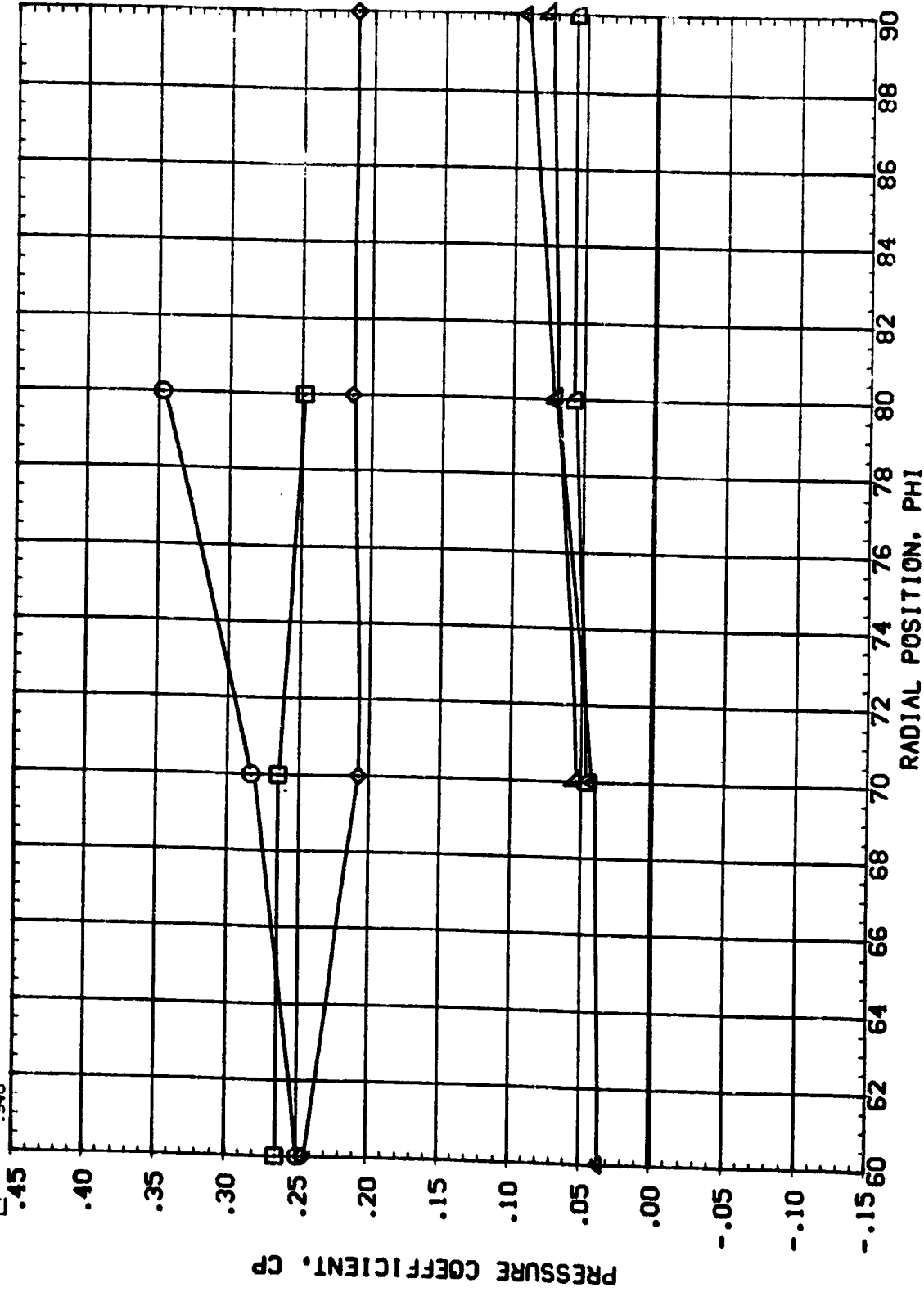


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

SYMBOL X/L ALPHA MACH BETA PARAMETRIC VALUES
 .087 -6.000 2.950
 .126
 .164
 .862
 .900
 .940
 .000
 ELEVON .000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

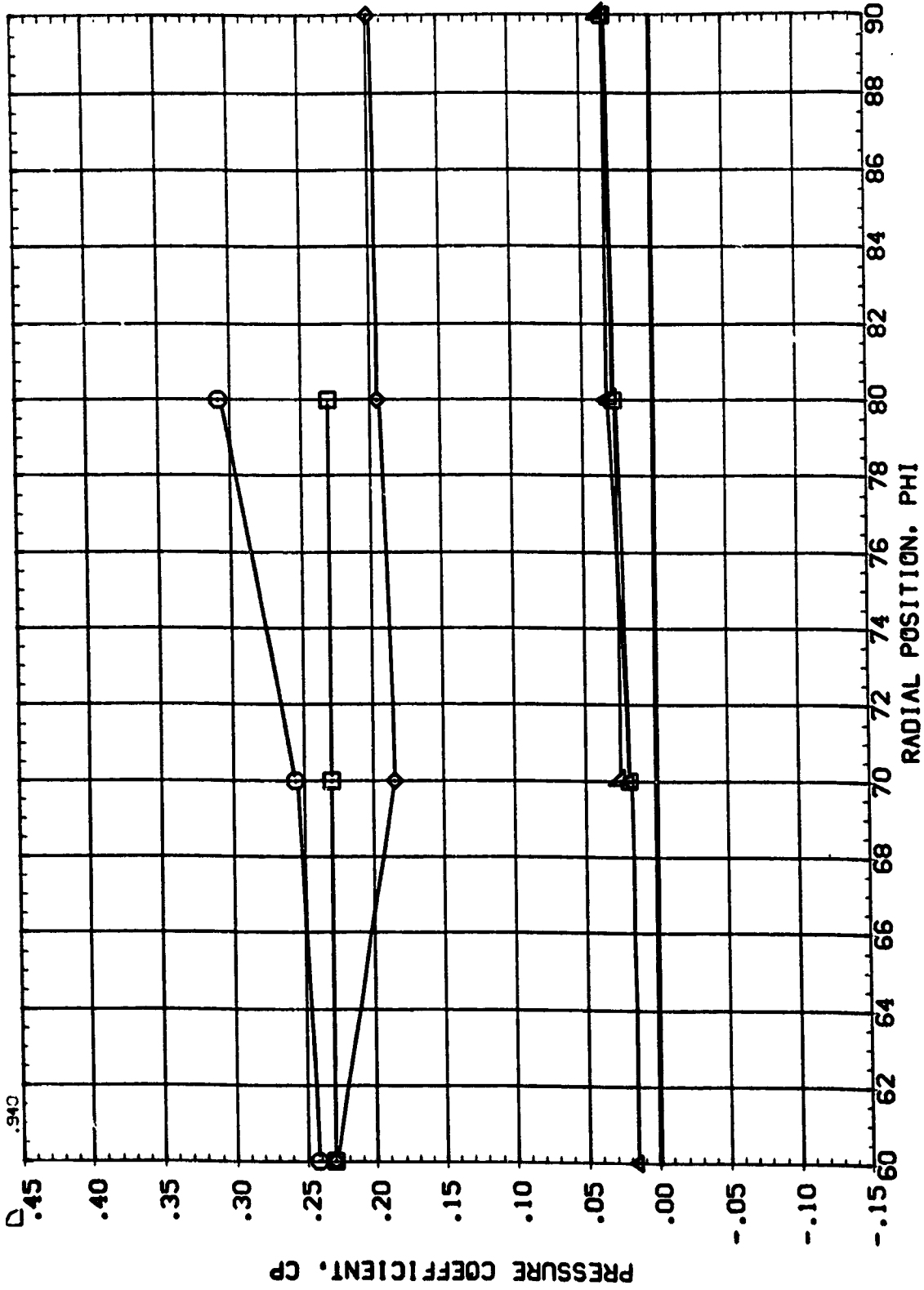


IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
ALPHA MACH 2.950
BETA .000 ELEVON .000

SYMBOL X/L
○ .087
□ .126
◇ .164
▽ .662
△ .900
▽ .940



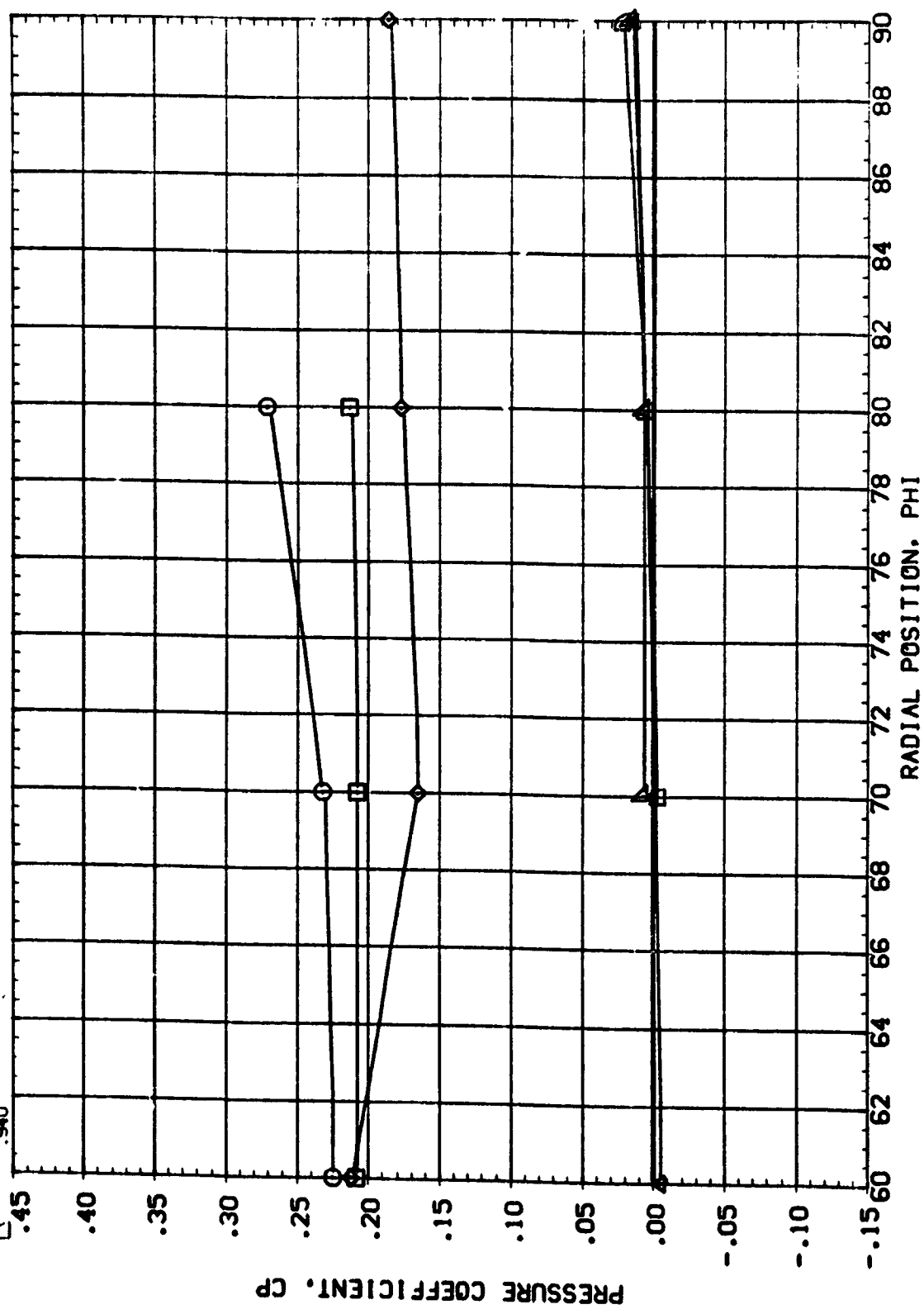
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

1A35 ORBITER ASCENT CONFIGURATION

(RQ5004)

SYMBOL X/L ALPHA MACH
 ○ .097 -1.990 2.950
 □ .126
 ◇ .154
 ▲ .862
 ▽ .900
 ▽ .940

PARAMETRIC VALUES
 .000 SETA .000 ELEVON .000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



1A35 ORBITER ASCENT CONFIGURATION

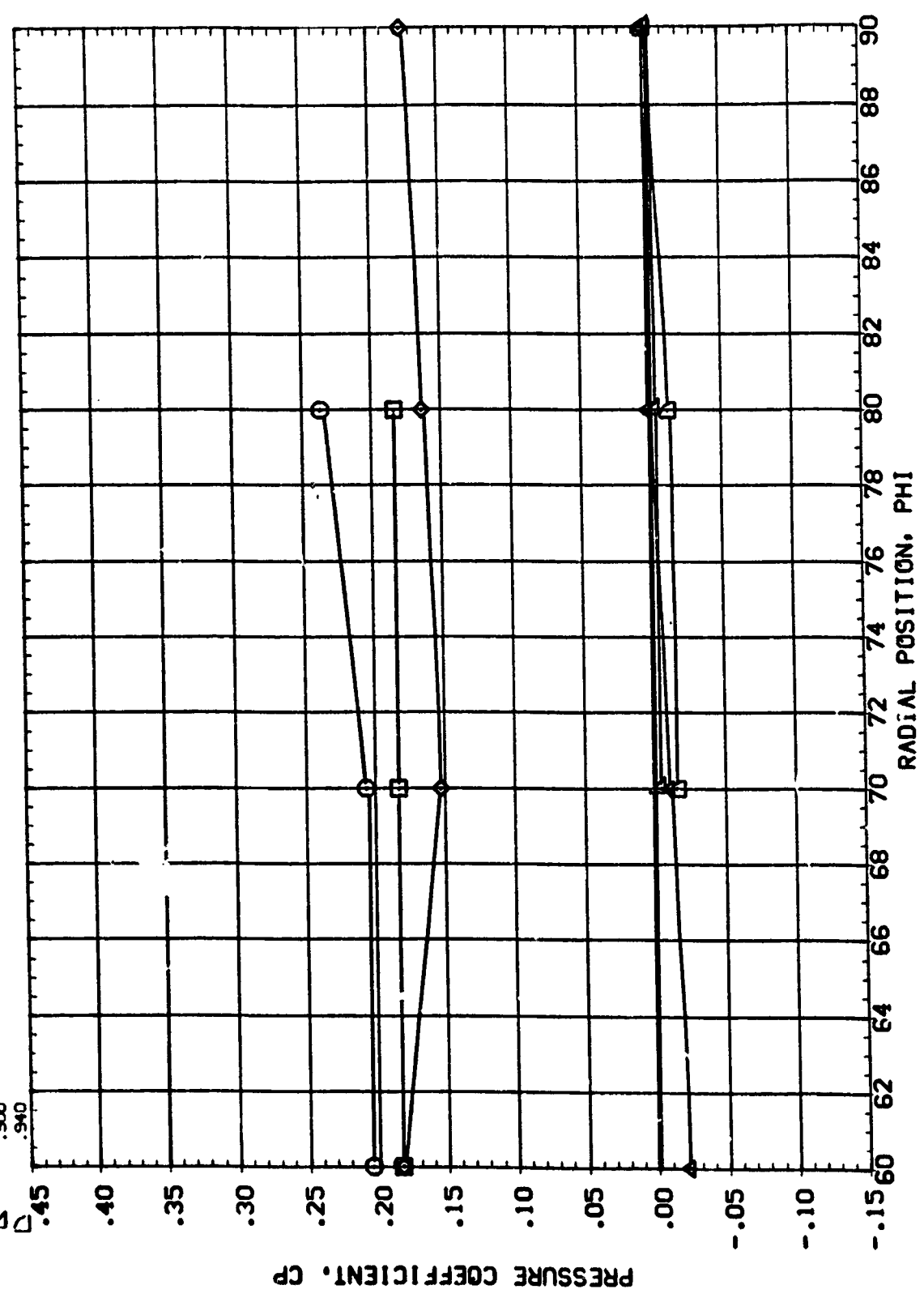
(RQ5004)

BETA .000 ELEVON .000
PARAMETRIC VALLES

ALPHA .010 MACH 2.950

X/L .087
.126
.164
.862
.900
.940

SYMBOL
○ □ △ ▽



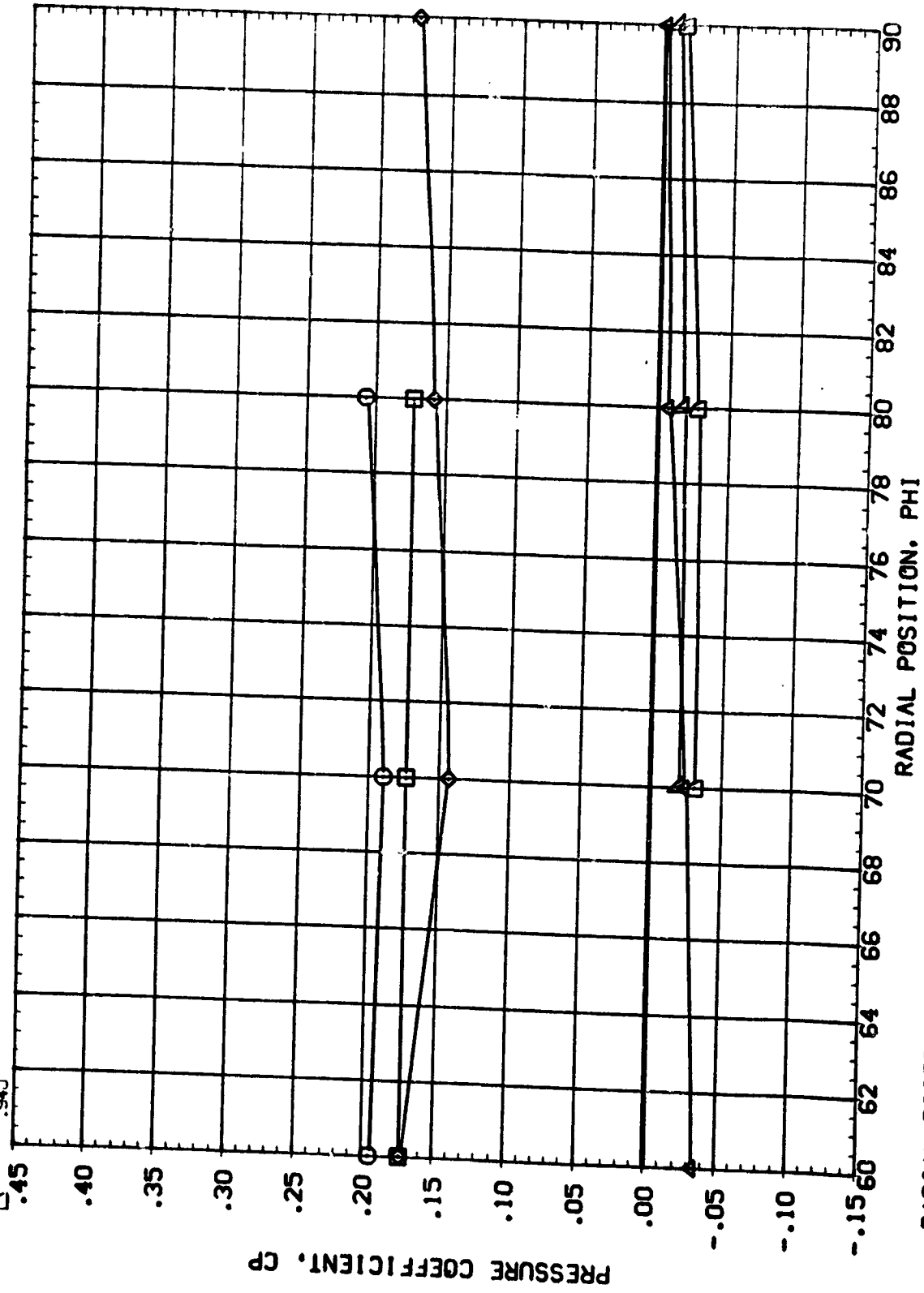
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(R050004)

SYMBOL X/L ALPHA MACH
 □ .087 2.000 2.950
 ◇ .126
 △ .164
 ▽ .862
 ◻ .900
 ◊ .940

BETA PARAMETRIC UNITS
 .000 ELEVON .000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



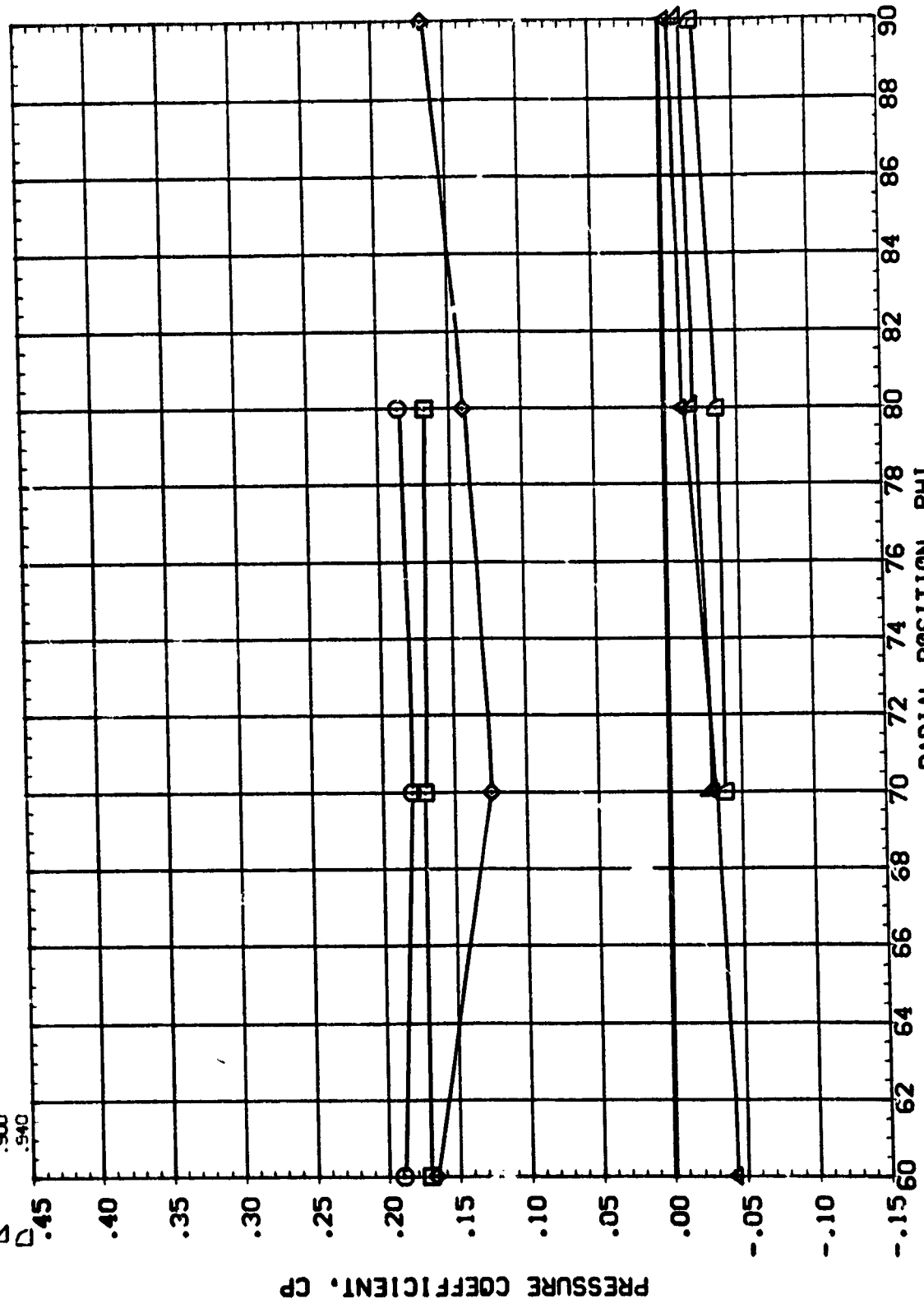
1A35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
BETA .000
ELEVON .000

ALPHA 4.000
MACH 2.950

SYMBOL X/L
○ .087
□ .126
◇ .164
▽ .862
△ .900
◇ .940



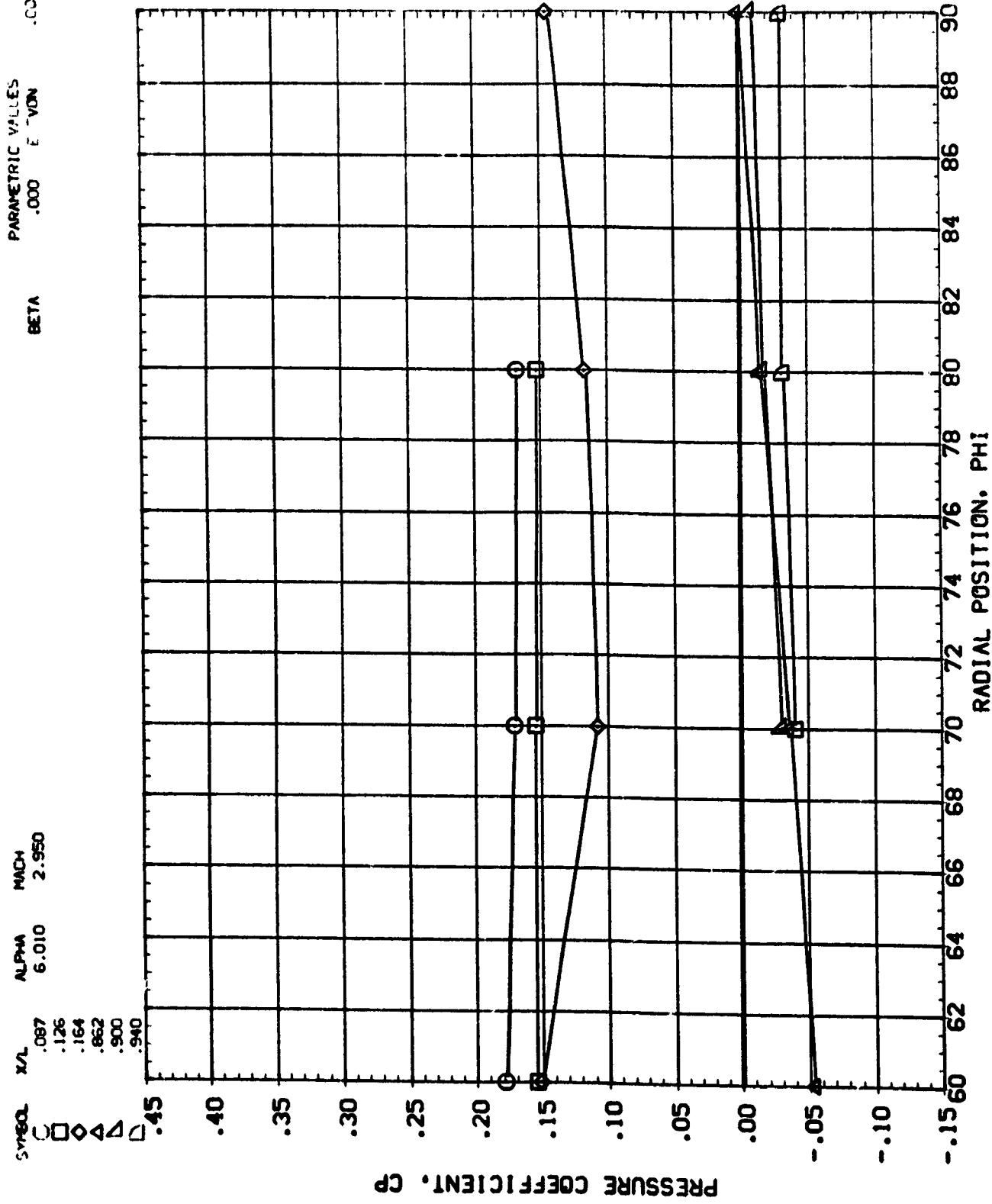
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
 BETA .000 E -VDN .000

SYMBOL X/L ALPHA MACH
 ○ .087 6.010 2.950
 □ .126
 △ .164
 ◇ .862
 ○ .900
 □ .940



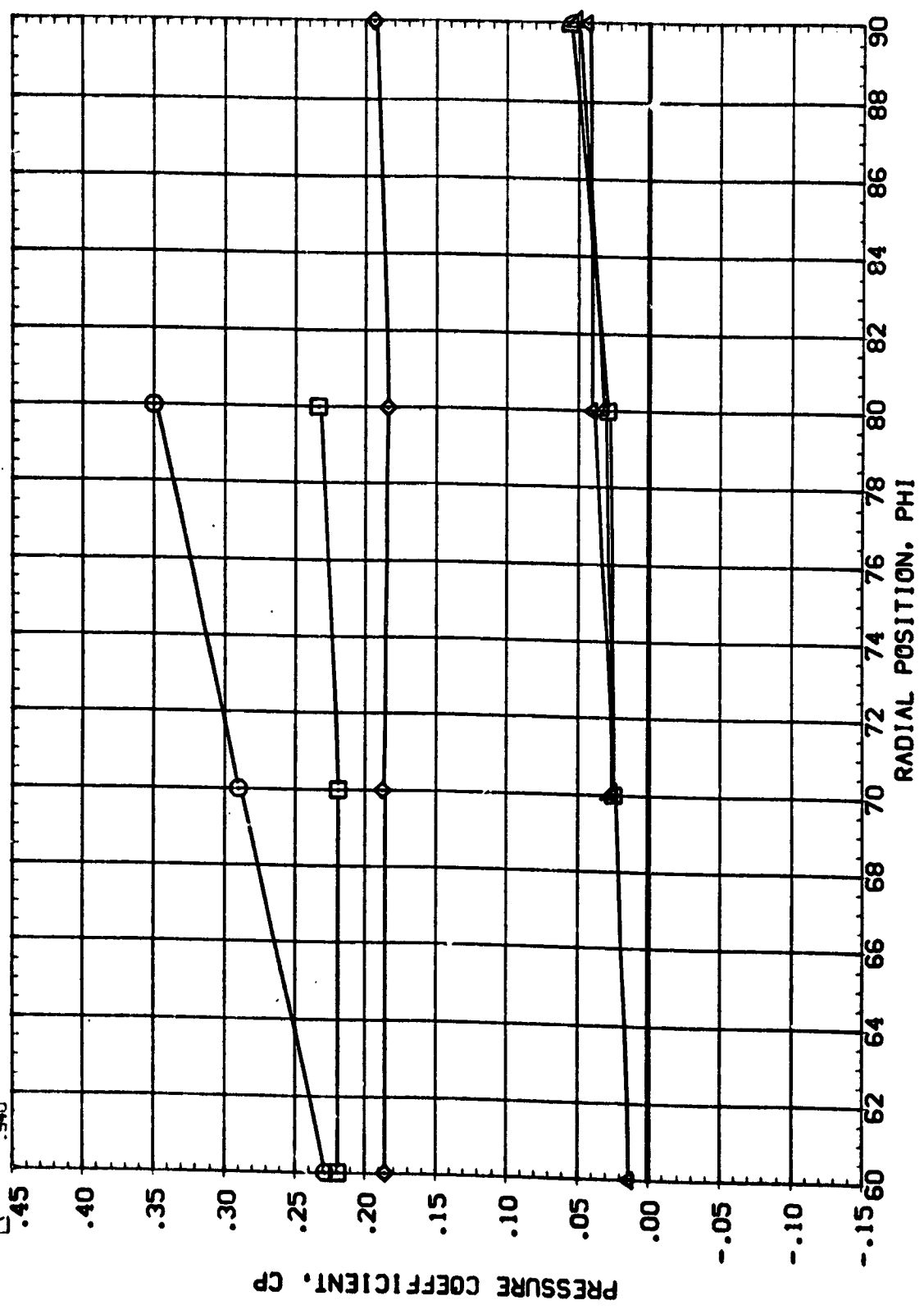
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

SYMBOL	X/L	ALPHA	MACH	BETA	ELEVON
○	.087	-6.000	4.000		.000
□	.126				
◇	.164				
△	.862				
▽	.900				
◇	.940				



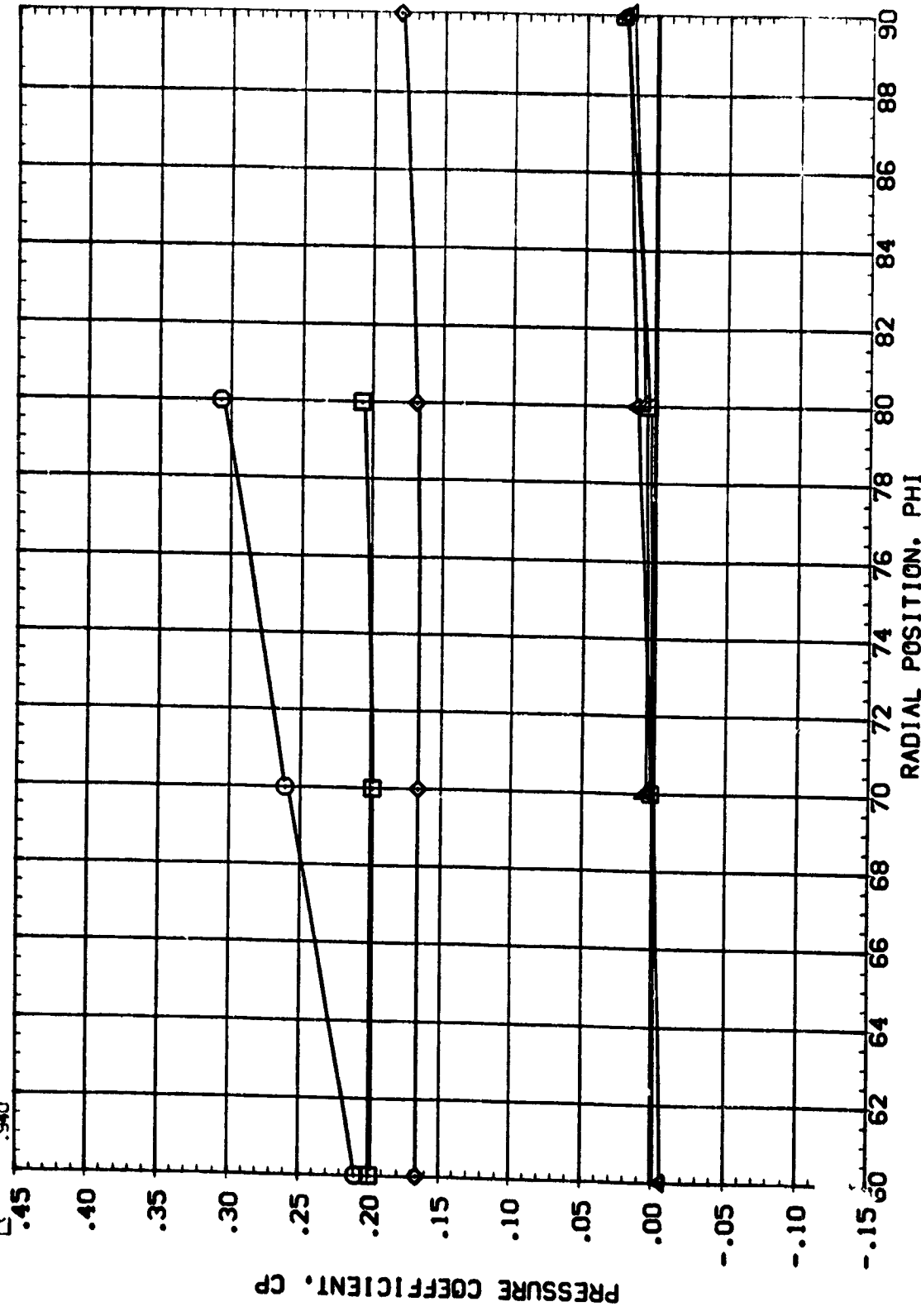
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(RG5004)

SYMBOL X/L ALPHA MACH BETA PARAMETRIC VALUES .000 ELEVON .000

○ .087 -3.990 4.000
 □ .126
 ◇ .164
 △ .862
 ▽ .900
 ▽ .940



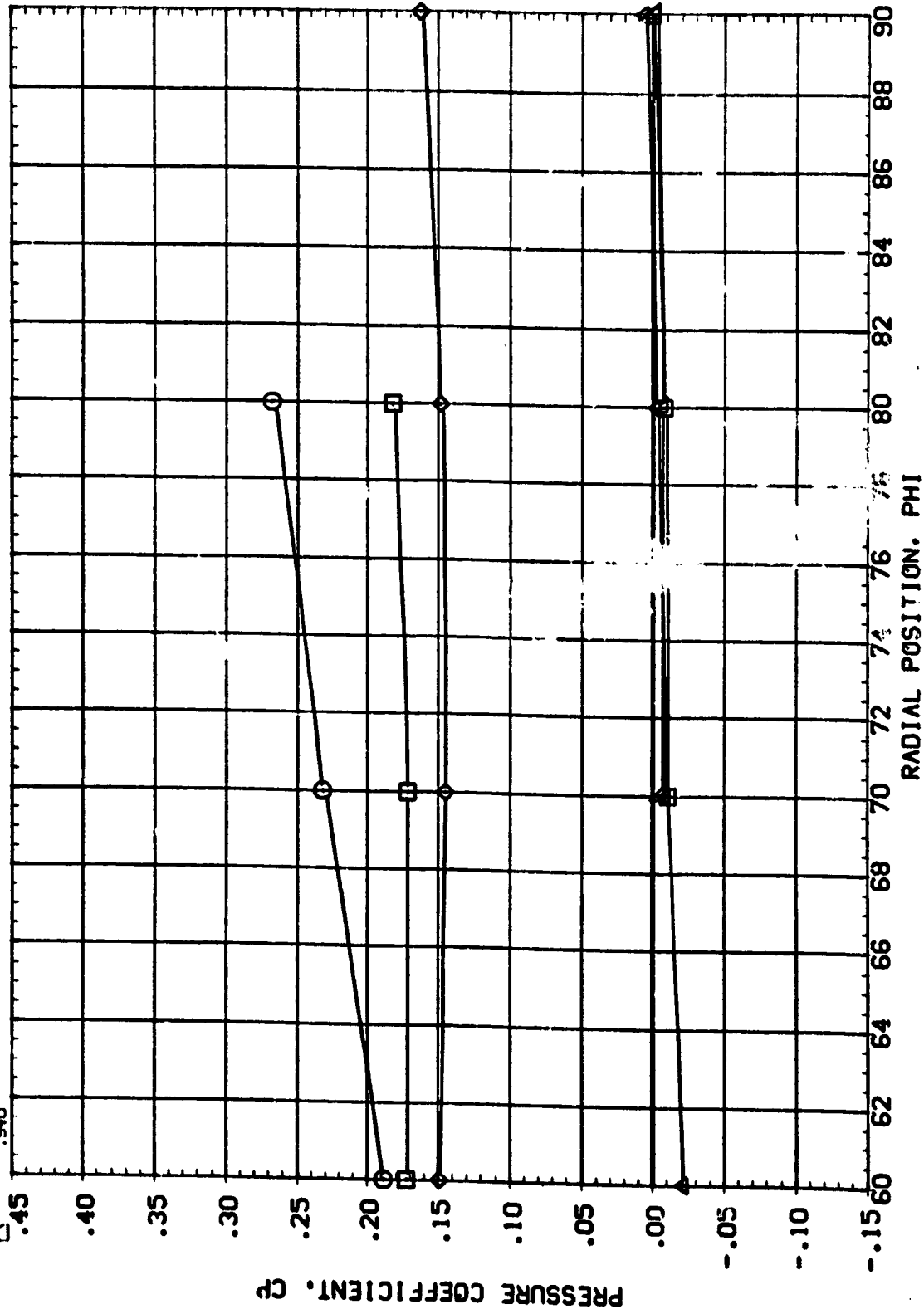
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



IA35 ORBITER ASCENT CONFIGURATION

(R050004)

SYMBOL X/L ALPHA MACH BETA PARAMETRIC VALUES
○ .087 -2.000 4.000 .000
□ .126
◇ .164
△ .862
▽ .900



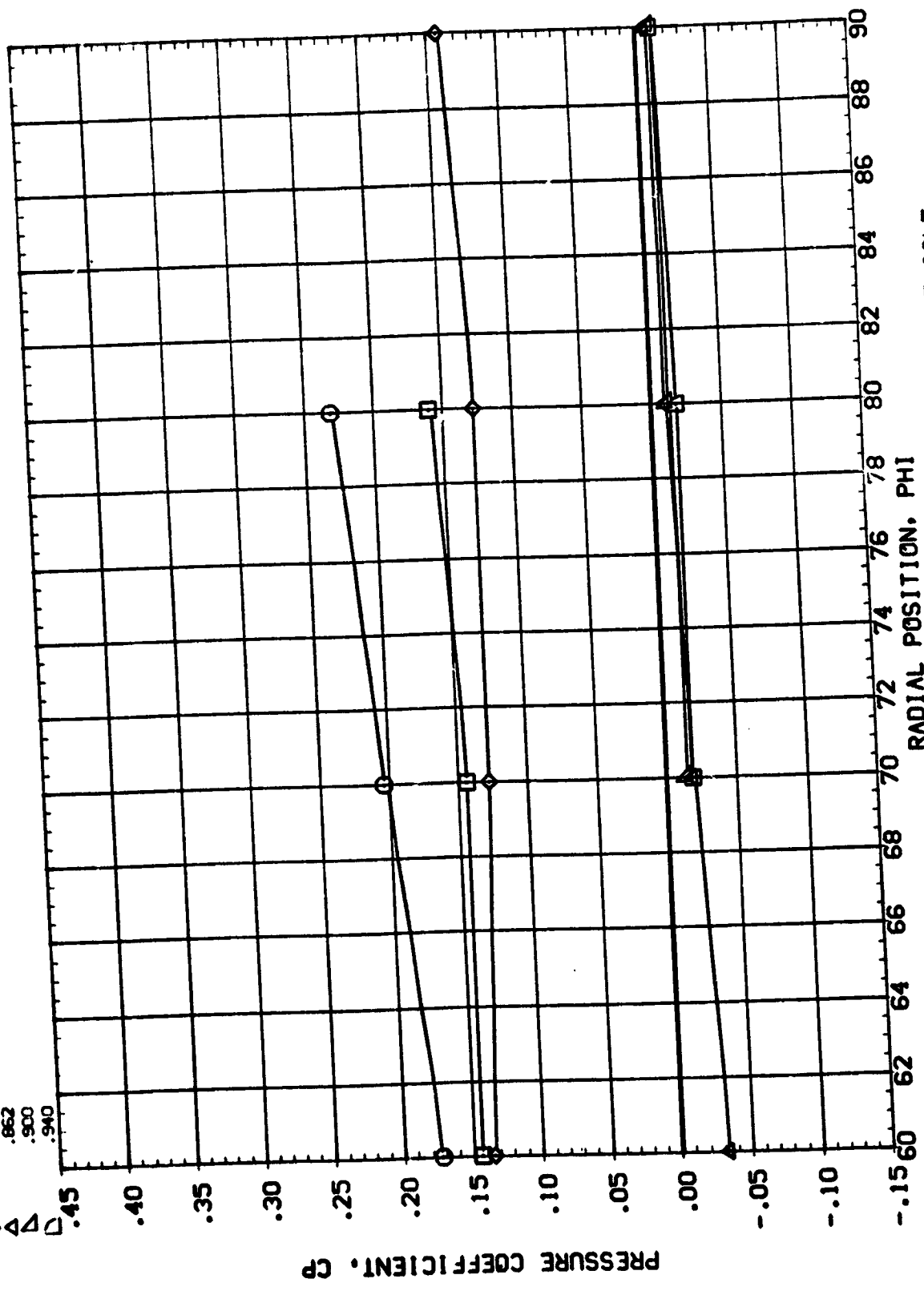
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

(R05004)

IA35 ORBITER ASCENT CONFIGURATION

PARAMETRIC VALUES
BETA .000
ELEVON .000

SYMBOL X/L ALPHA MACH
○ .087 .010 4.000
◇ .126
□ .164
△ .652
▽ .900
◇ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(RQ50004)

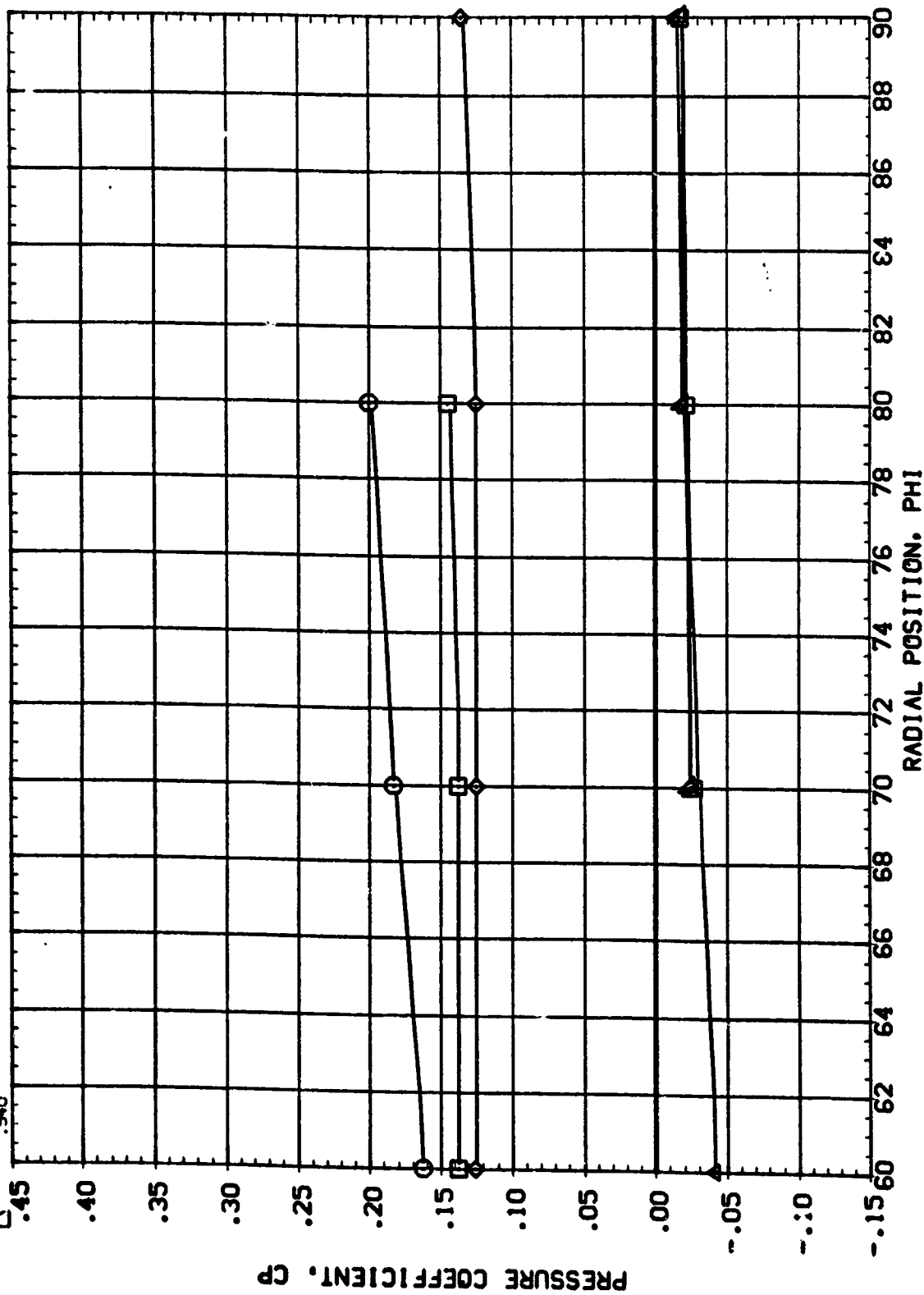
PARAMETRIC VALUES
 BETA .000
 ELEVON .000

ALPHA 1.990
 MACH 4.000

X/L
 .087
 .126
 .164
 .262
 .900
 .940

SYMBOL

-
- ◇
- △
- ▽



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

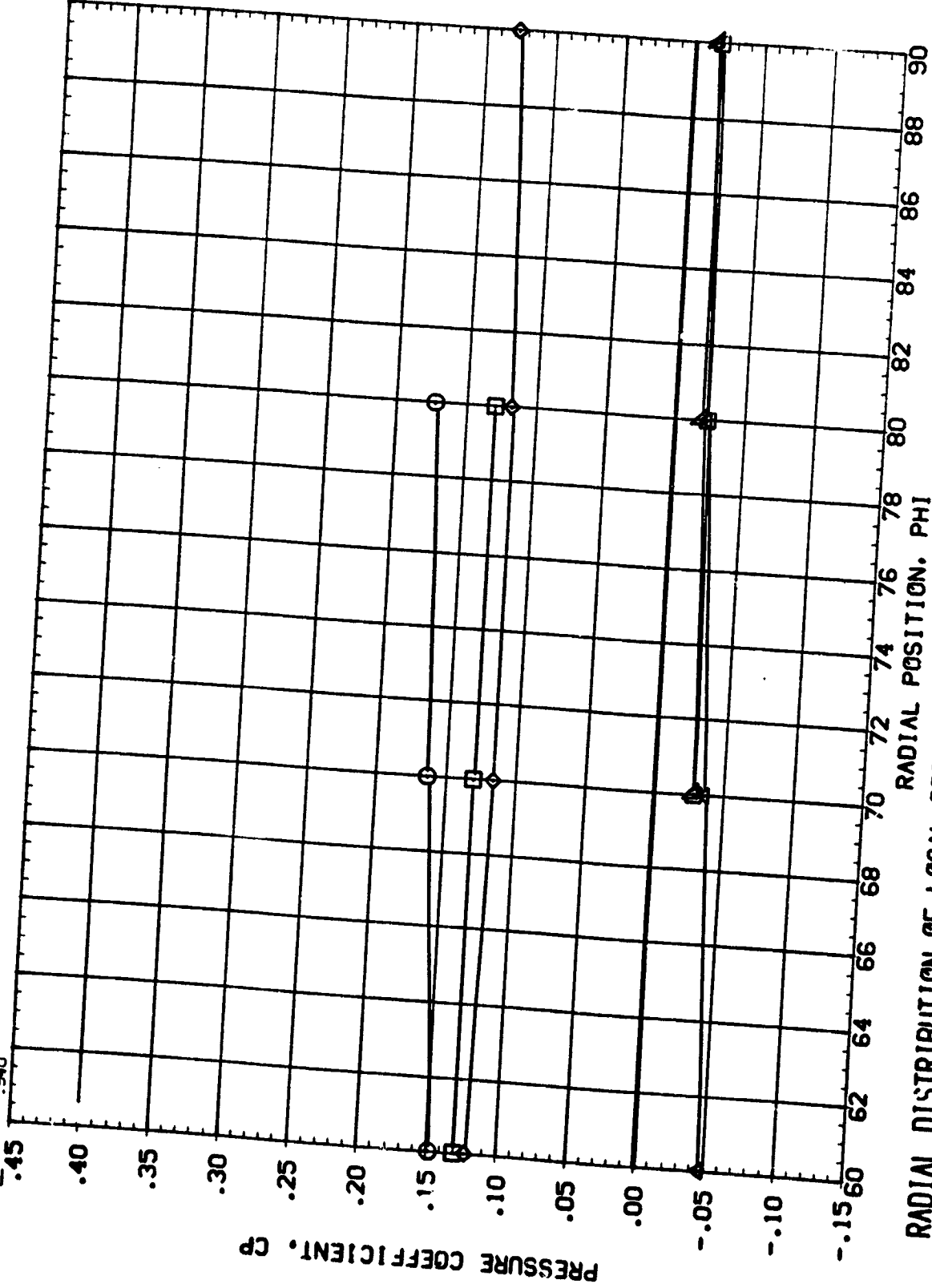
IA35 ORBITER ASCENT CONFIGURATION

SYMBOL X/L
 ○ .087
 □ .126
 ◇ .164
 △ .862
 ▽ .900
 ▽ .940

ALPHA 4.000
 MACH 4.000

(R050004)

BETA .000
 ELEVON .000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



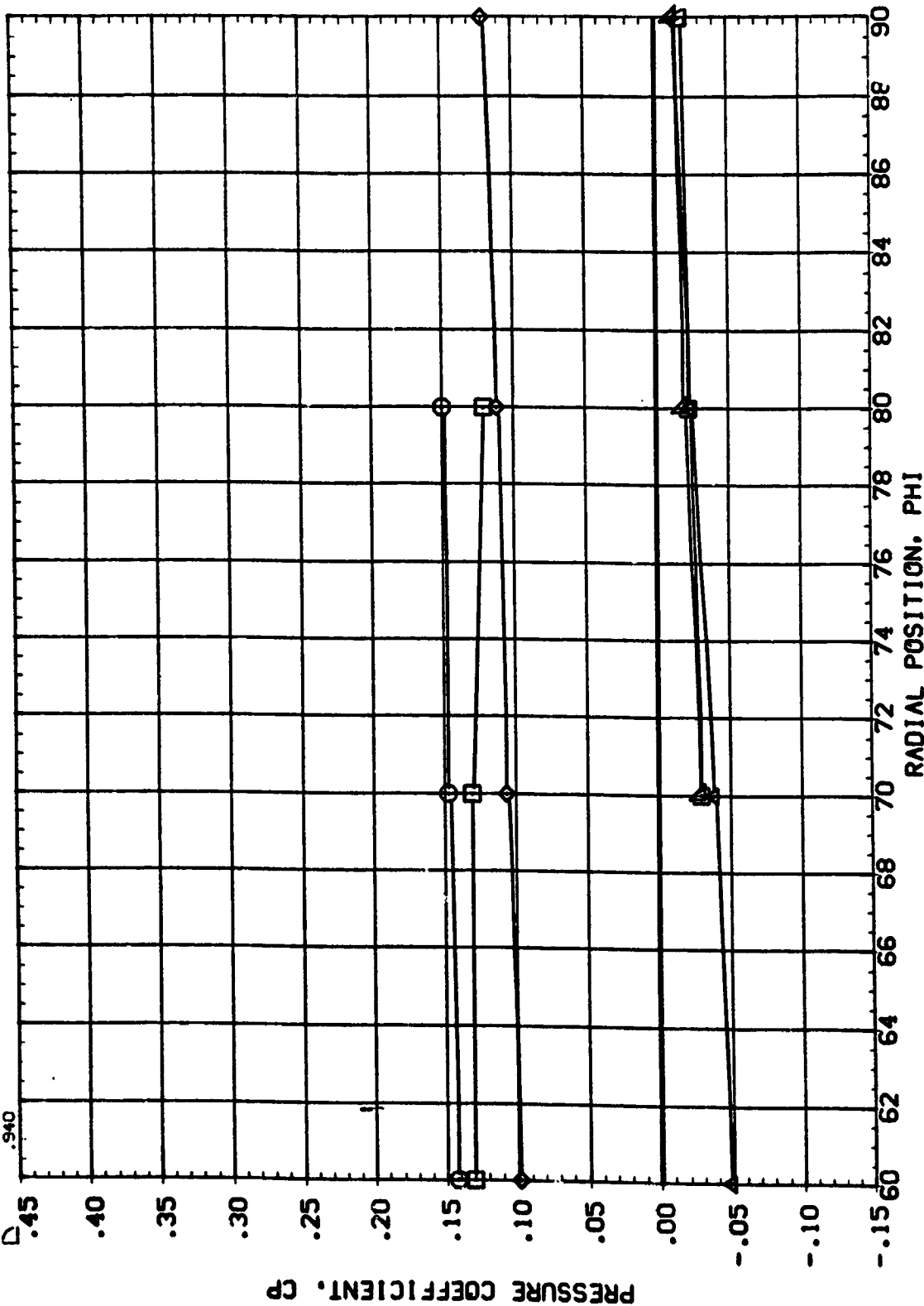
IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

PARAMETRIC VALUES
.000 ELEVON
BETA

ALPHA 6.010 MACH 4.000

SYMBOL X/L
○ .087
□ .126
◇ .164
△ .862
▽ .900
◇ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

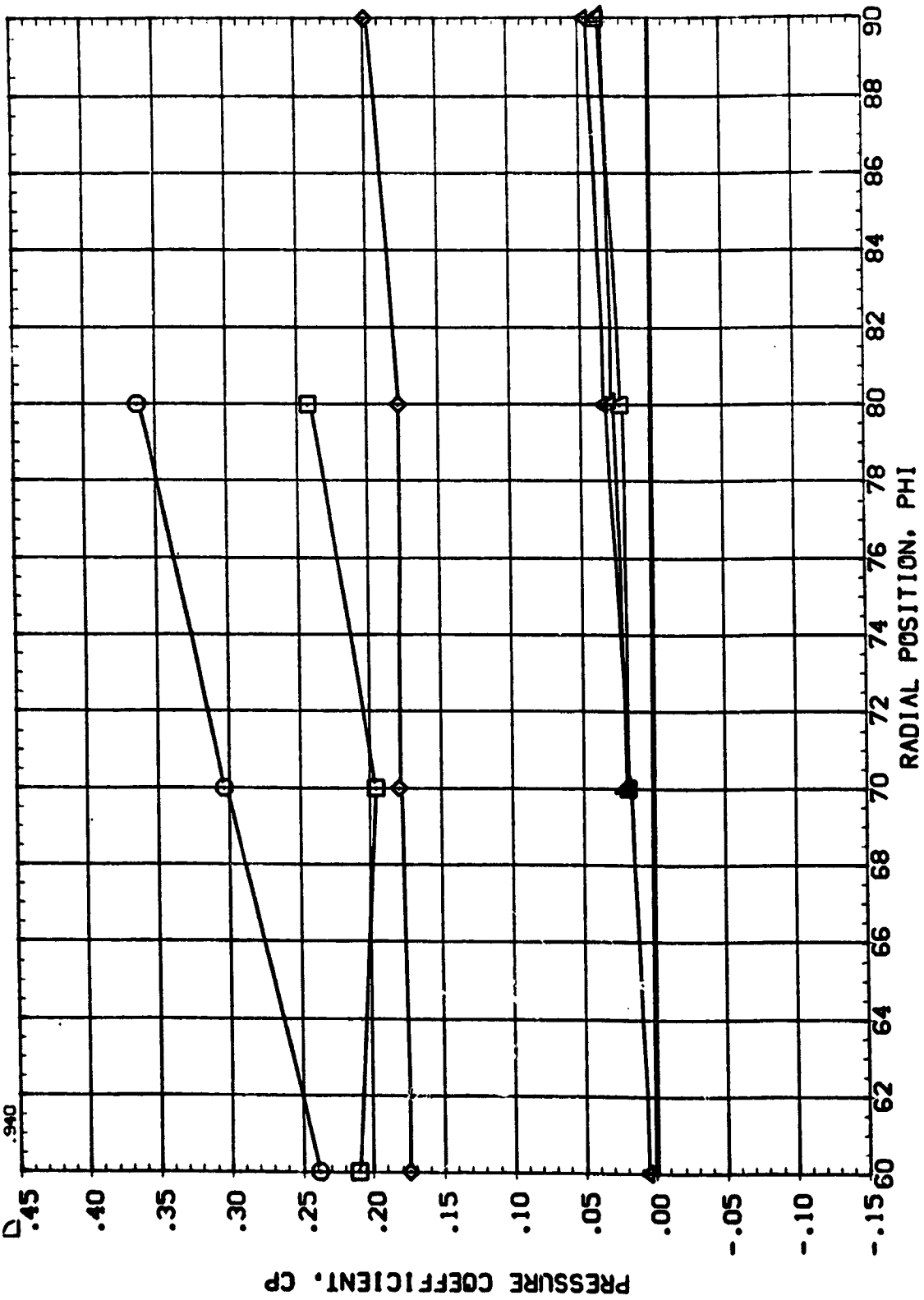
(R05004)

PARAMETRIC VALUES
BETA .000 ELEVON .000

ALPHA -6.000 MACH 4.500

X/L
.087
.126
.164
.862
.900
.940

SYMBOL
○
□
◇
▽
△



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



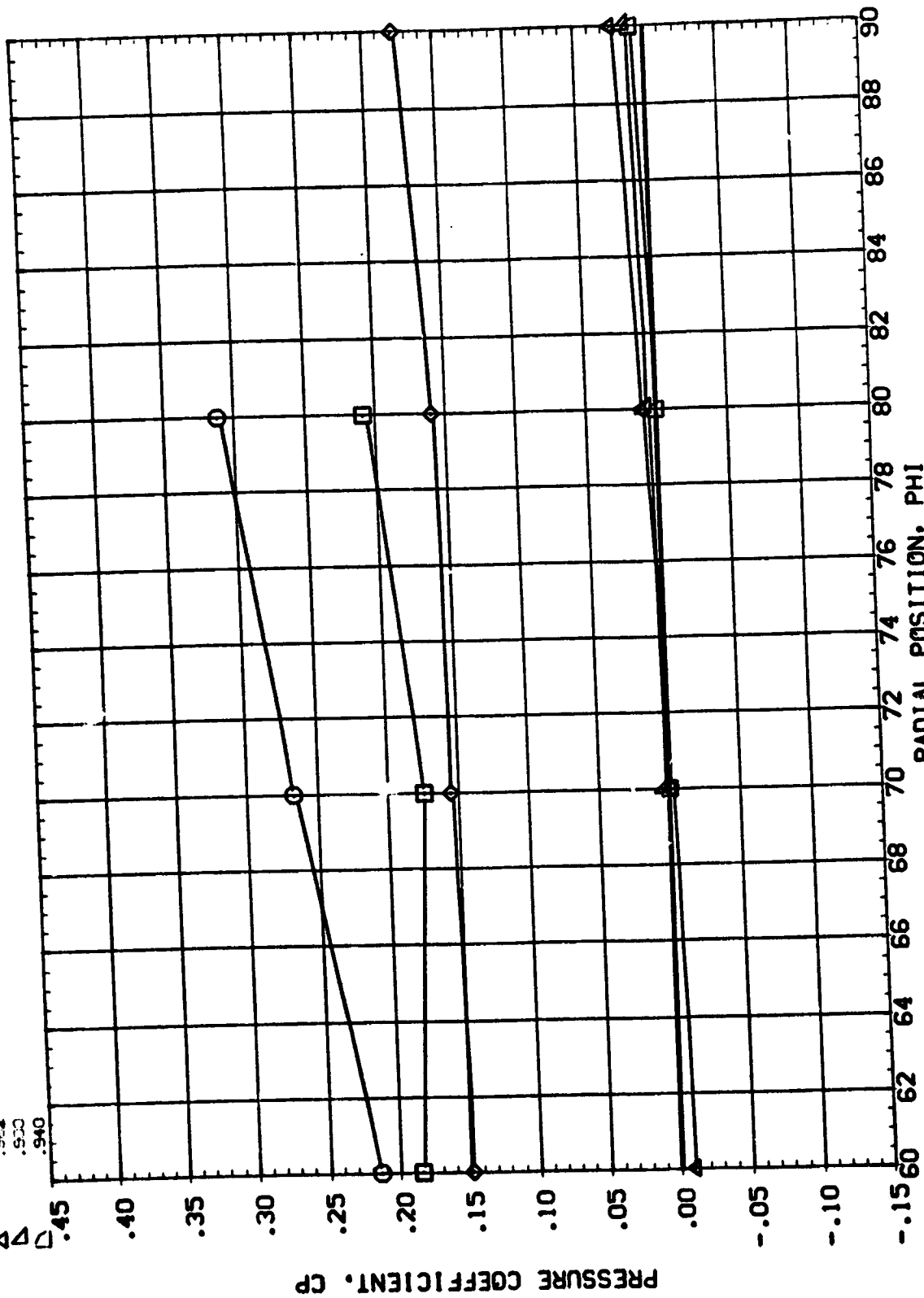
(RQ5004)

IA35 ORBITER ASCENT CONFIGURATION

PARAMETRIC VALUES
BETA .000
ELEVON .000

ALPHA -3.990
MACH 4.500

X/L
0.087
0.126
0.164
0.952
0.930
0.940



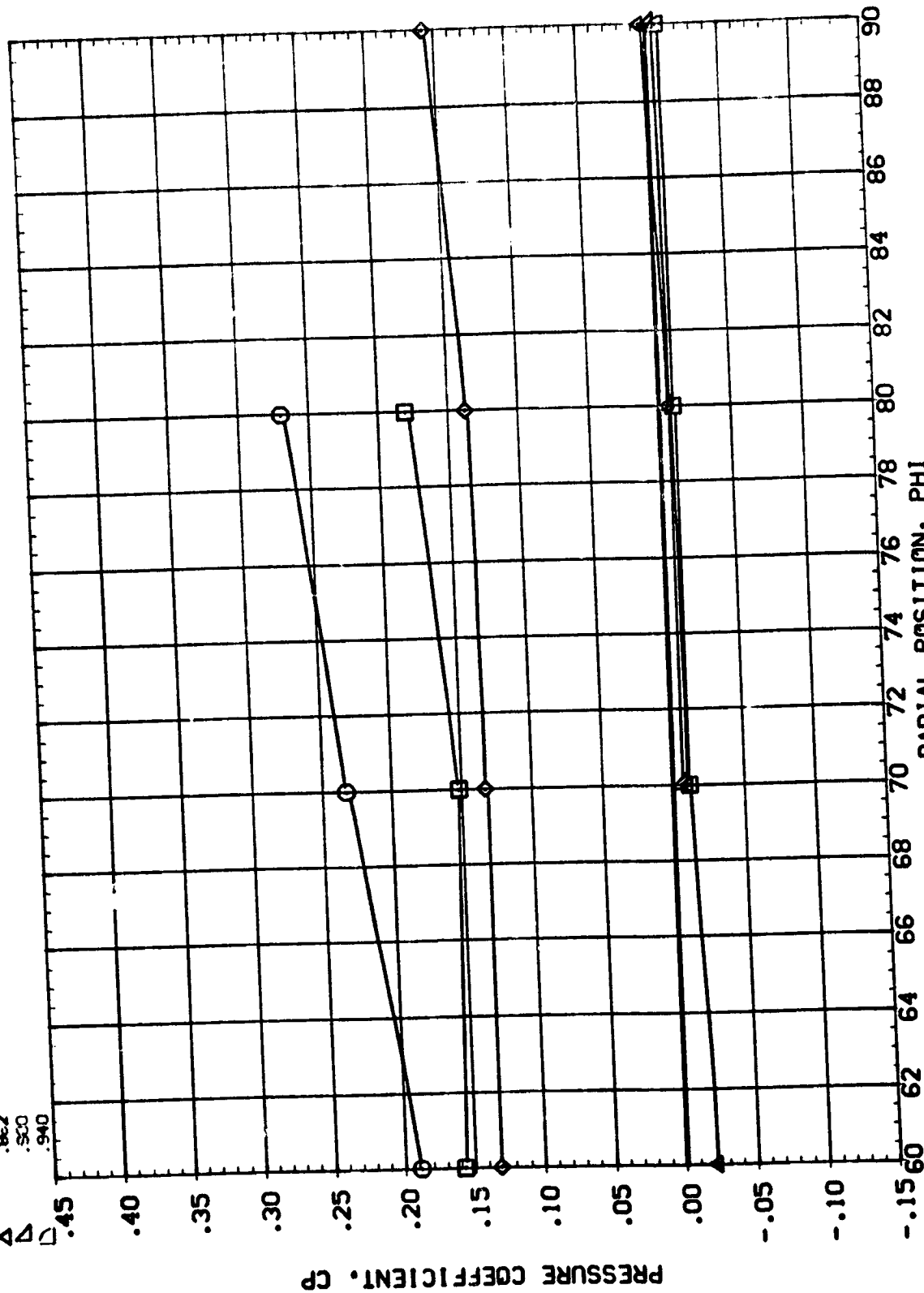
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

(R05004)

IA35 ORBITER ASCENT CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON .000

SYMBOL X/L ALPHA MACH
○ .087 -2.000 4.500
□ .126
◇ .164
△ .082
▽ .300
◇ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



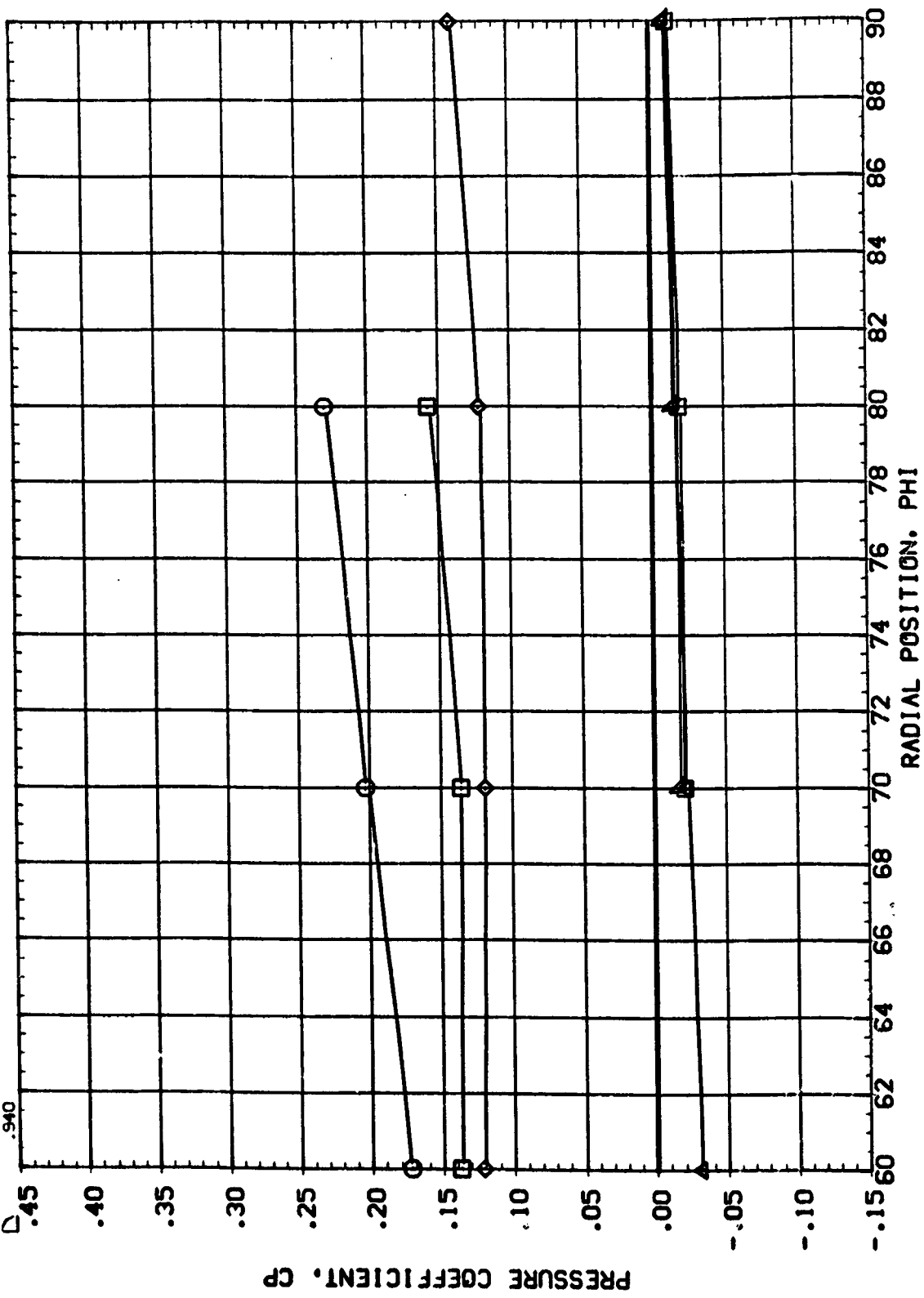
IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
BETA .000 ELEVON .000

ALPHA .000 MACH 4.500

SYMBOL X/L
○ .087
□ .126
◇ .164
△ .862
▽ .900
▽ .940



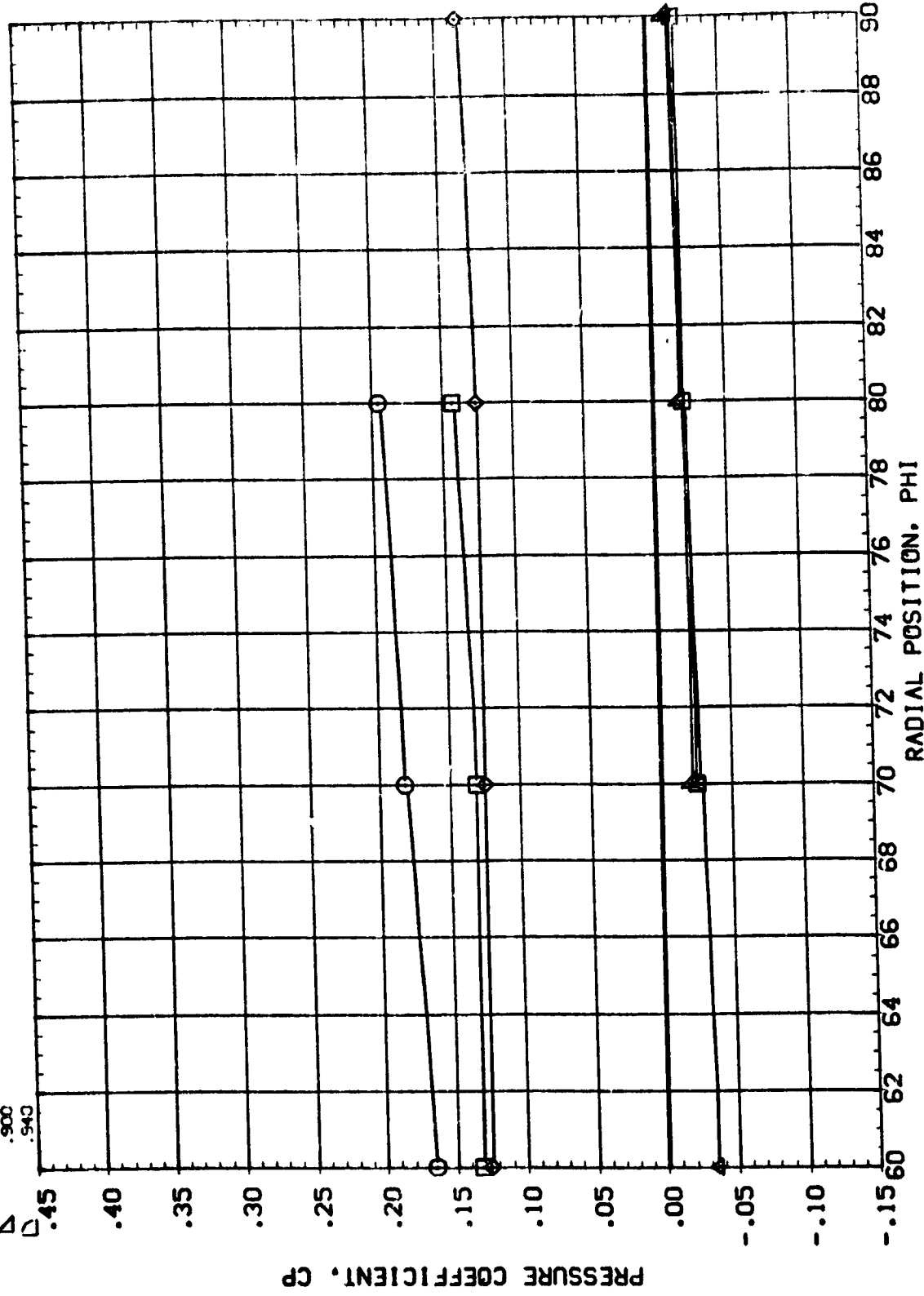
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

(R05004)

1A35 ORBITER ASCENT CONFIGURATION

PARAMETRIC VALUES
BETA .000
ELEVON .000

SYMBL X/L ALPHA MACH
○ .087 1.990 4.500
□ .126
◇ .164
△ .062
▽ .900
▽ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
.000 .000 .000

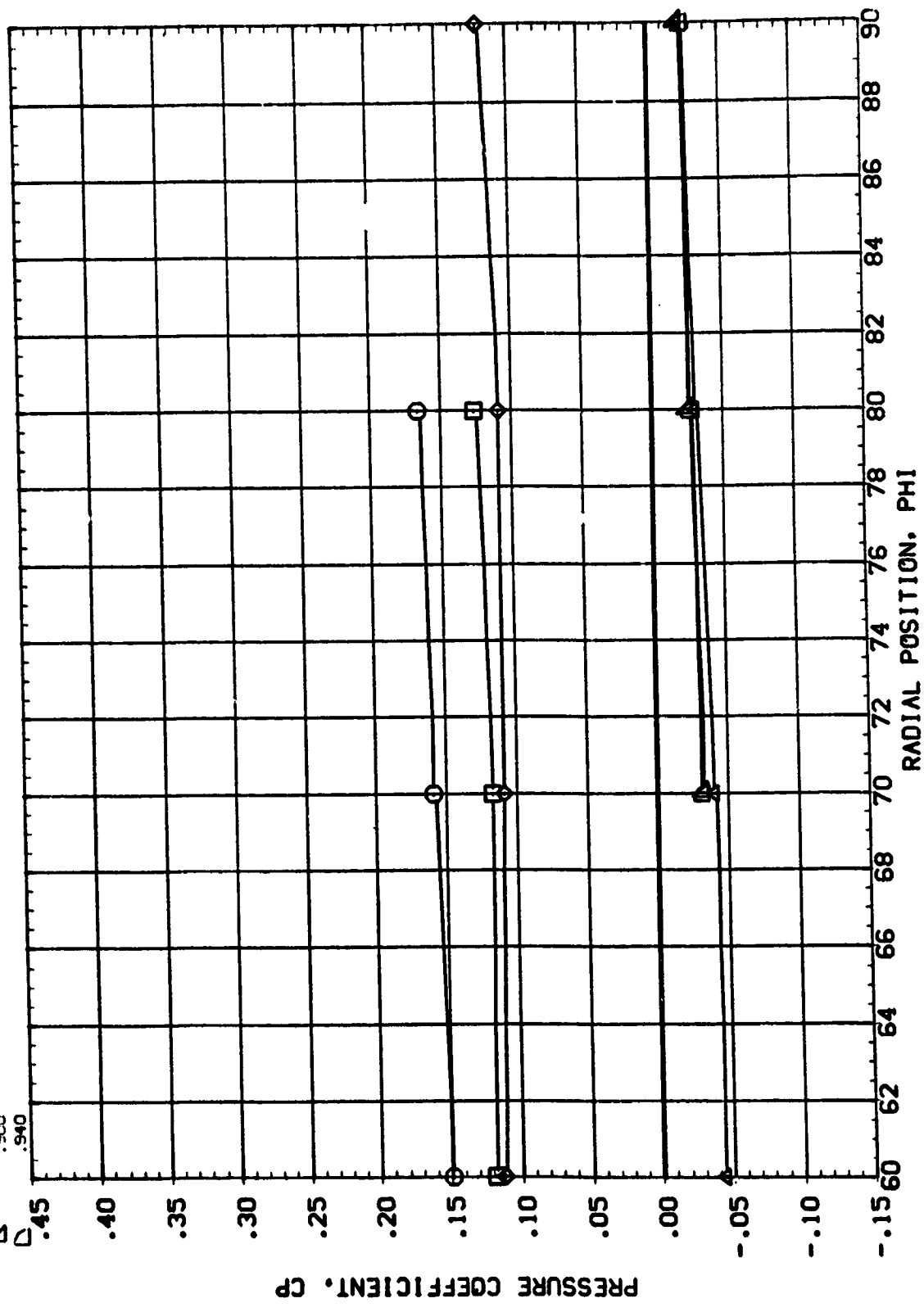
BETA

ALPHA
4.010

MACH
4.500

X/L
.087
.126
.164
.862
.900
.940

SYMBOL
○
□
△
▽
◇



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

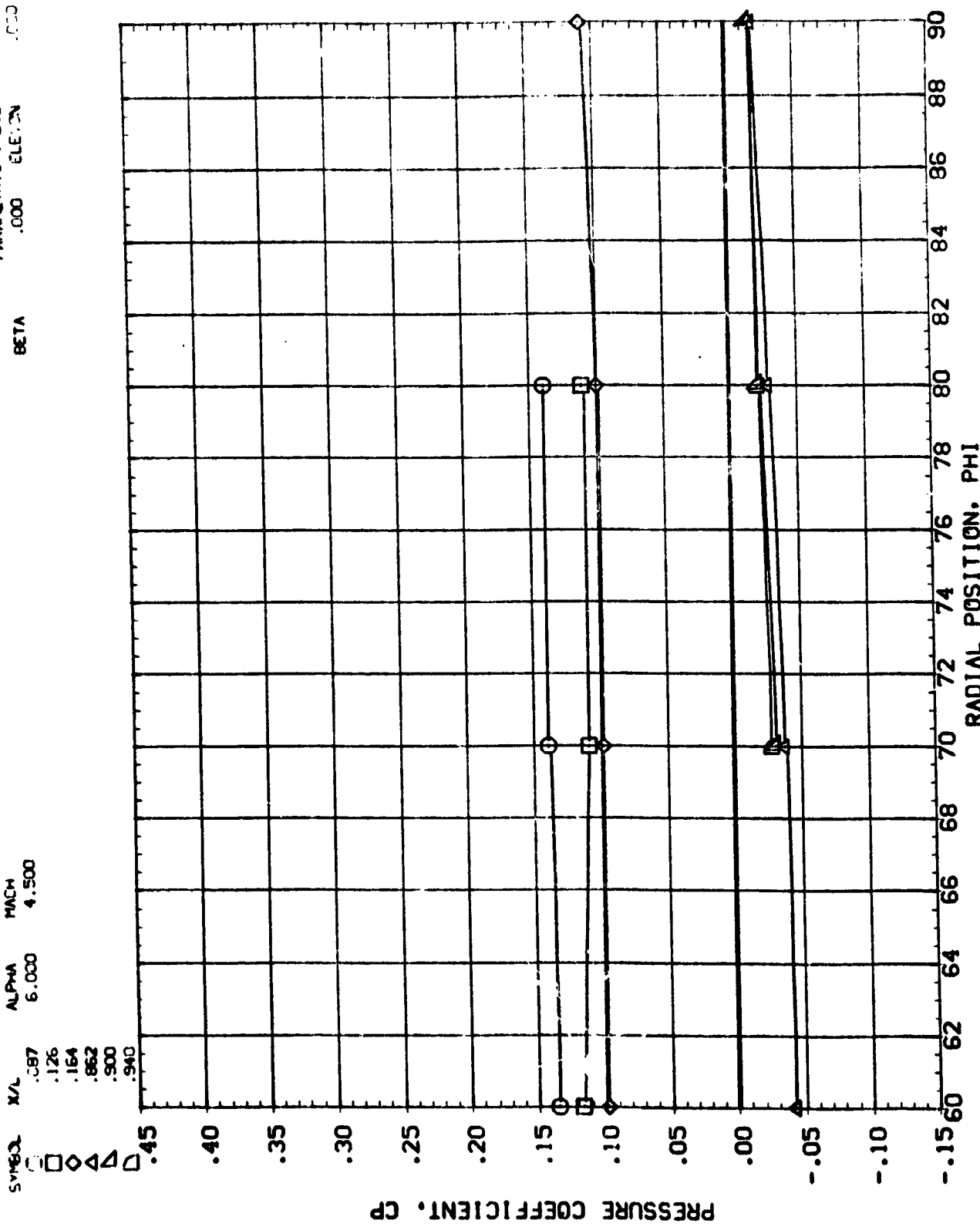
IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
BETA .000 ELEVATION .000

ALPHA 6.000 MACH 4.500

X/L
 .087
 .126
 .164
 .262
 .500
 .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

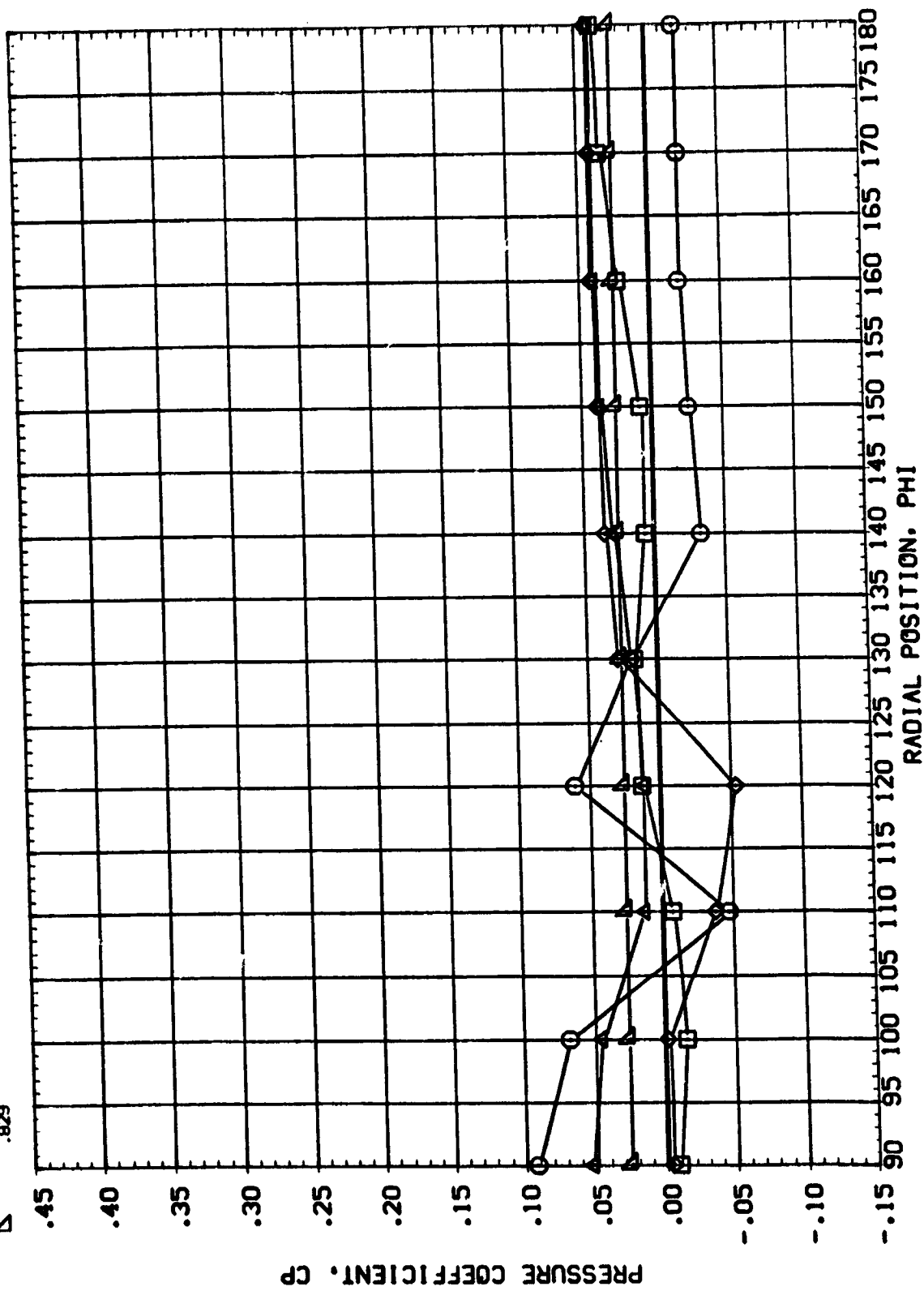


IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

PARAMETRIC VALUES
BETA .000 ELEVON .000

SYMBOL X/L ALPHA MACH
○ .264 -6.010 2.500
□ .405
◇ .546
△ .688
▽ .829



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

1A35 ORBITER ASCENT CONFIGURATION

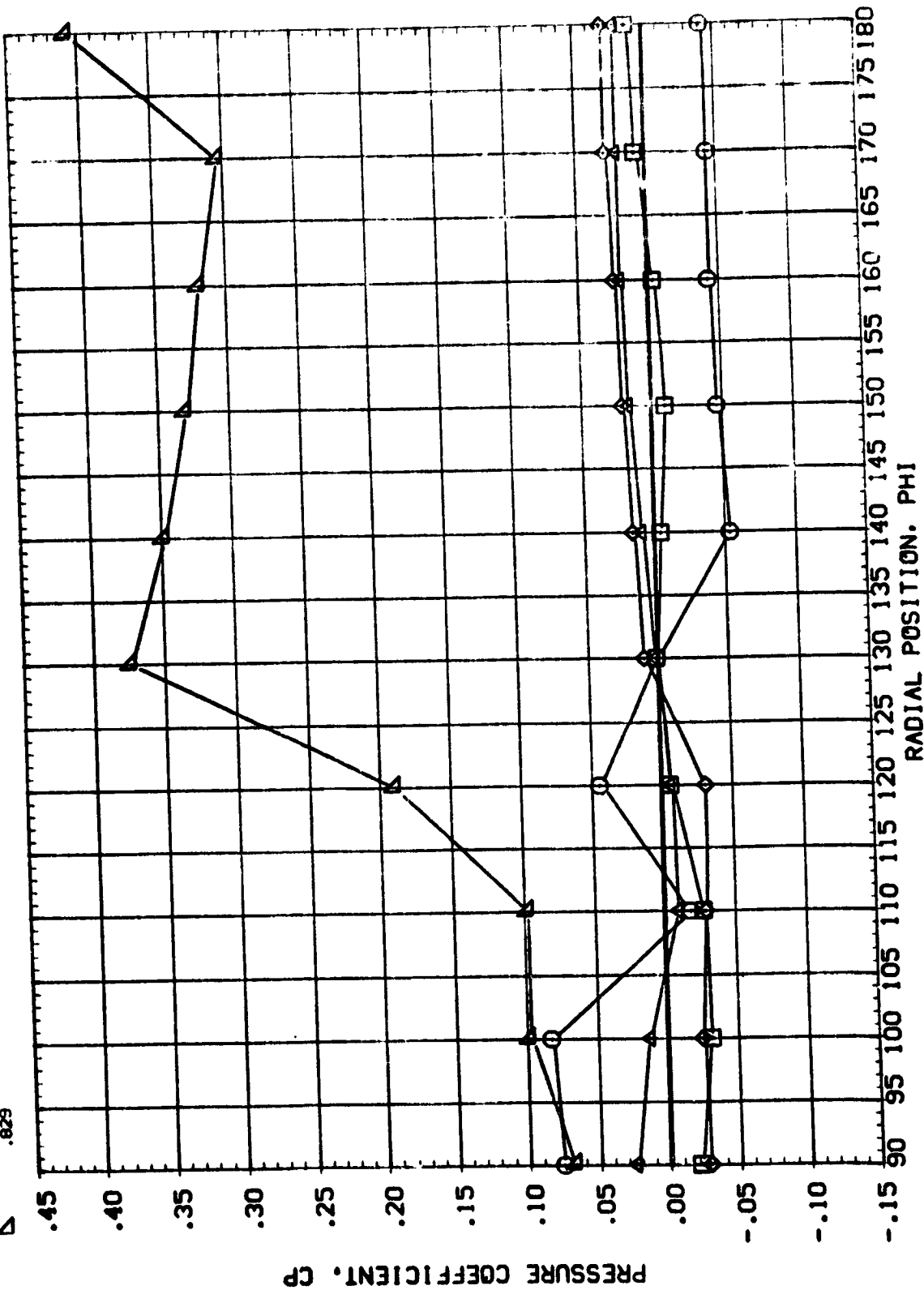
(R05004)

PARAMETRIC VALUES
 .000 ELEVATION .000
 BETA

ALPHA MACH
 -3.990 2.500

X/L
 .264
 .405
 .546
 .688
 .829

SYMBOL
 □
 ○
 △
 ◇



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



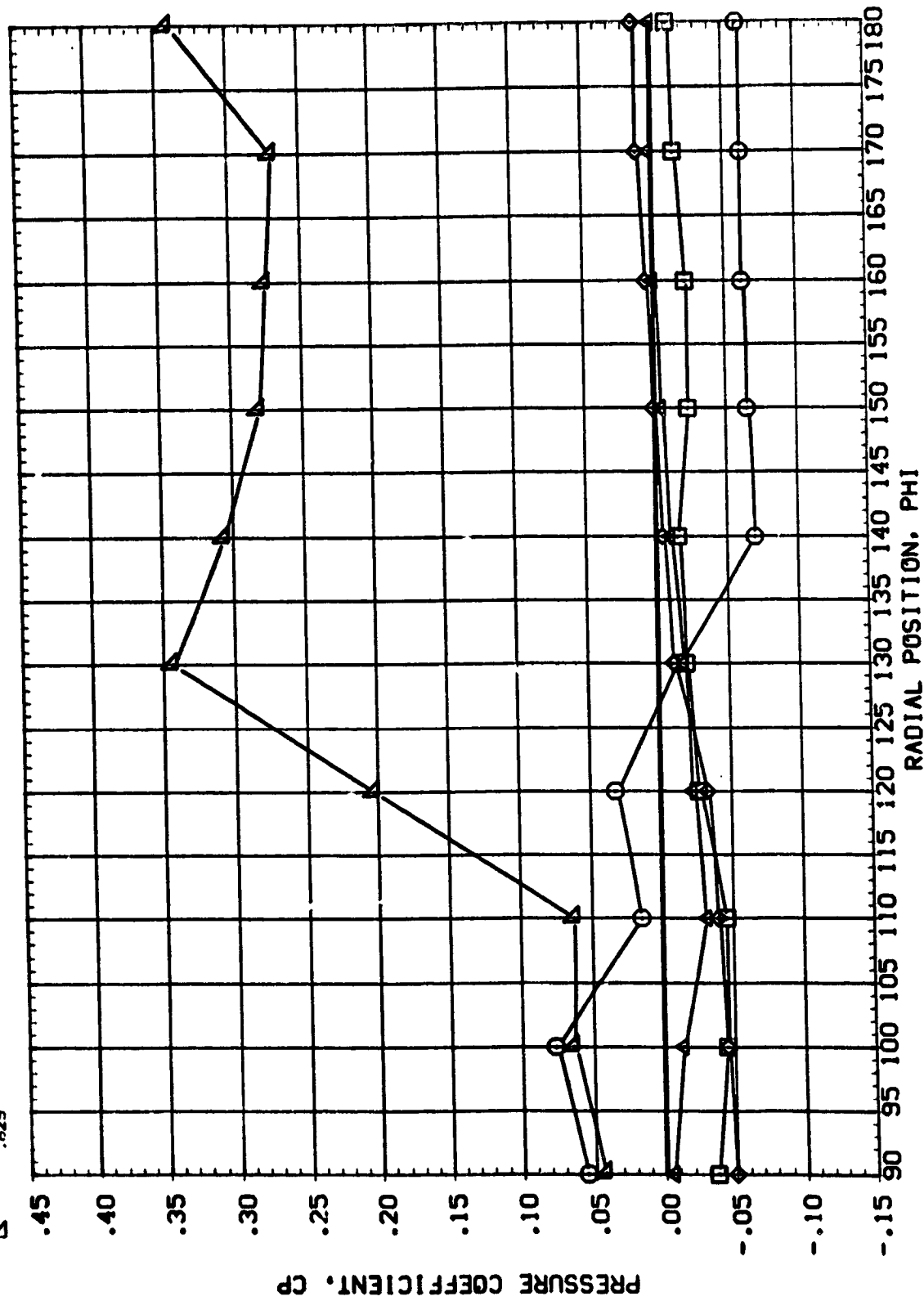
IA35 ORBITER ASCENT CONFIGURATION

(R050004)

PARAMETRIC VALUES
BETA .000
ELEVON .000

ALPHA MACH
-2.000 2.500

S/R/L X/L
.264
.405
.546
.688
.829

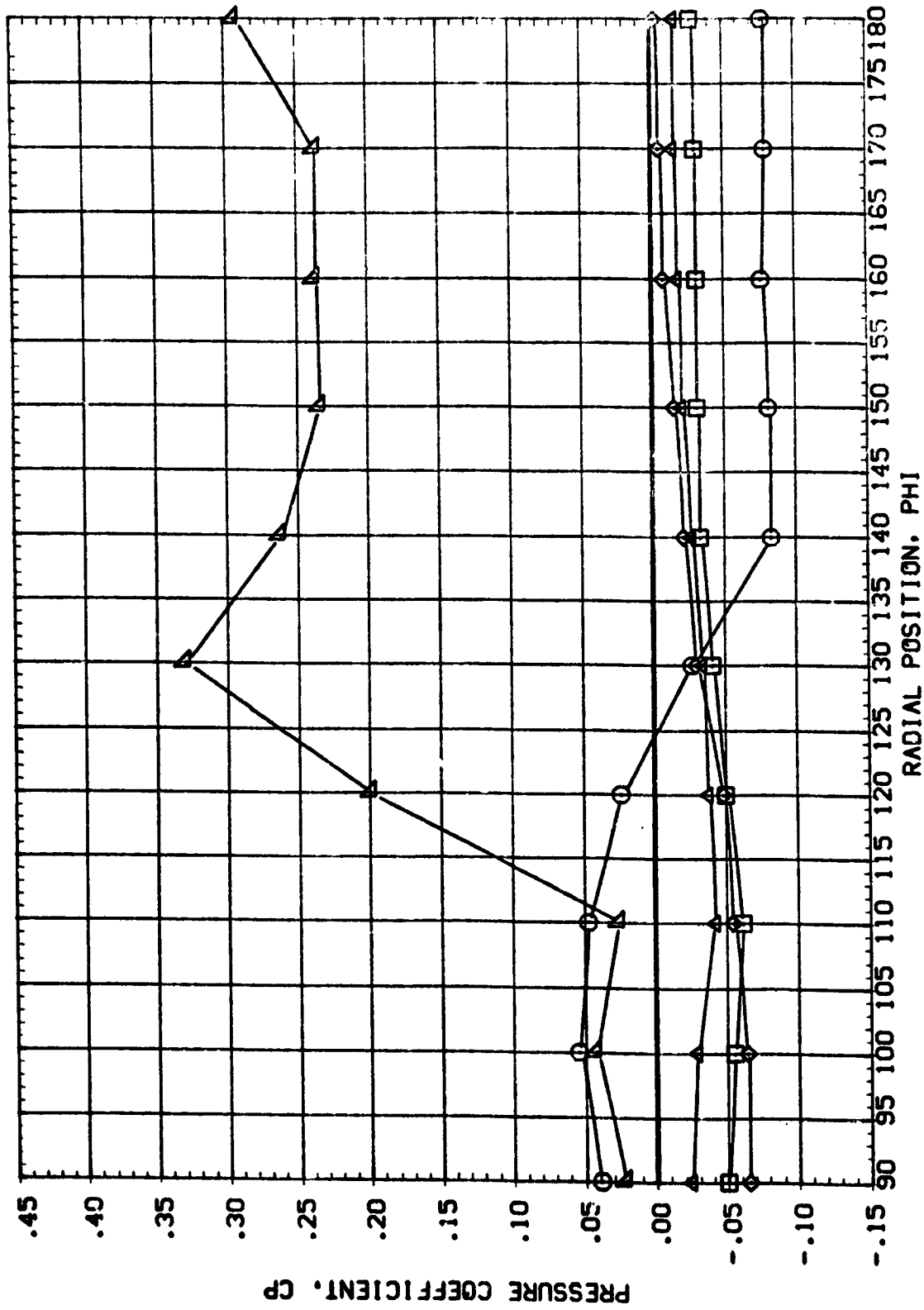


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL	A/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	.264	.000	2.500	.000	ELEVON
◇	.405				
□	.546				
△	.688				
▽	.829				



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



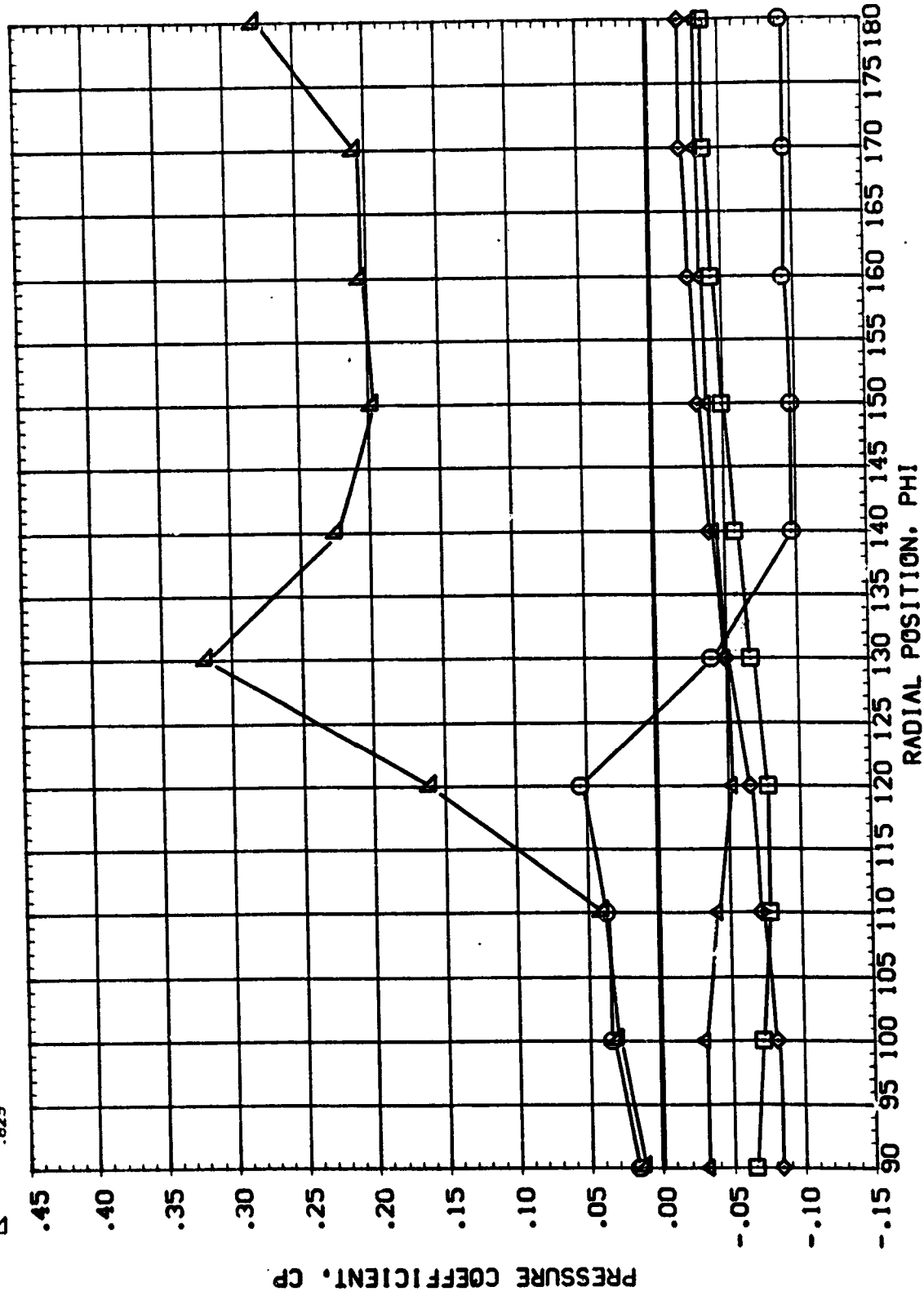
IA35 ORBITER ASCENT CONFIGURATION

(R05004)

BETA .000
PARAMETRIC VALUES
ELEVON .000

ALPHA 2.000
MACH 2.500

K/L
SYMBOL
○ .264
□ .405
◇ .546
△ .688
▽ .829



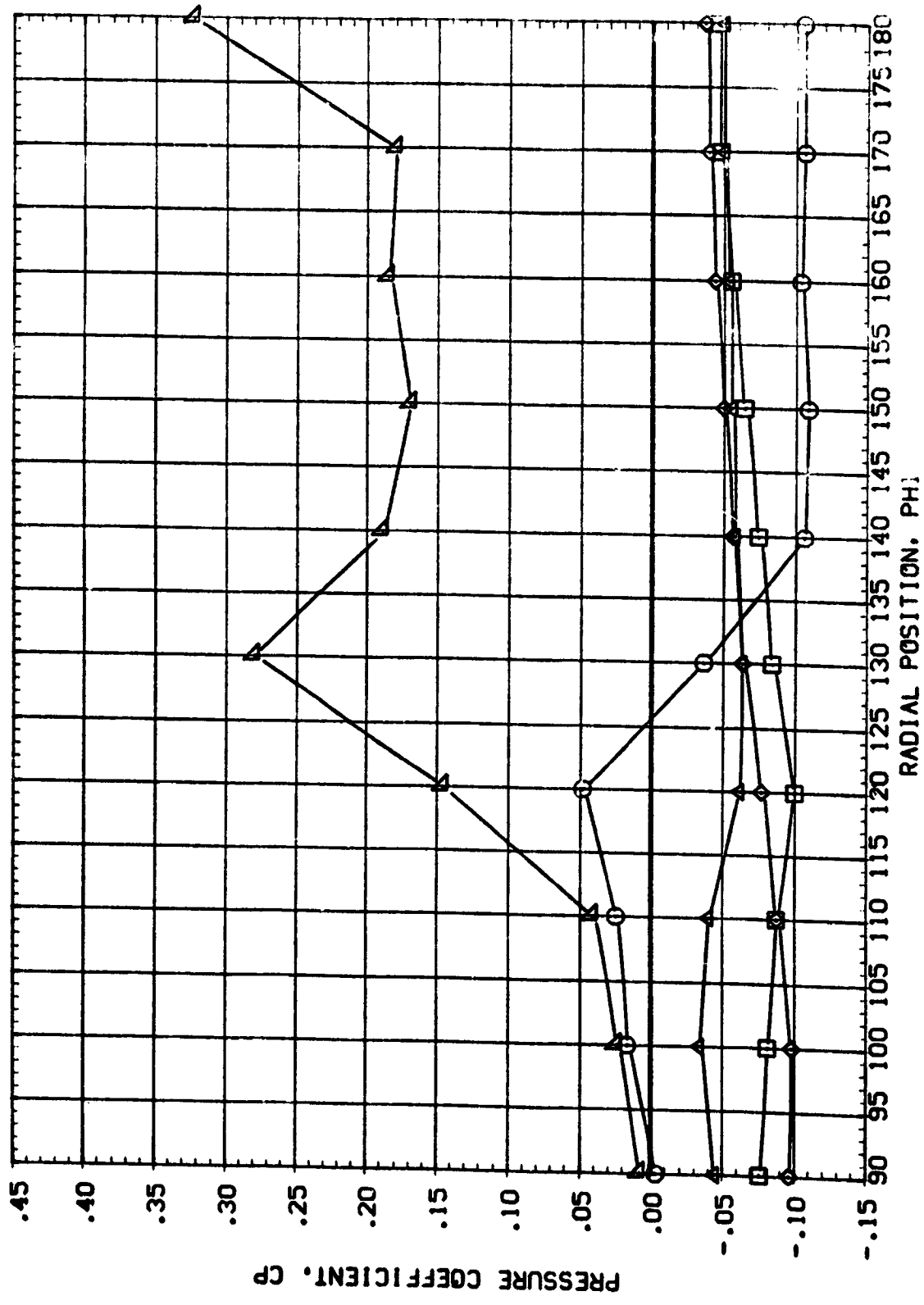
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

SYMBOL X/L ALPHA MACH
 □ .264 3.990 2.500
 ◇ .405
 △ .546
 ▽ .688
 ▲ .829

PARAMETRIC VALUES
 BETA .000
 ELEVON .000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

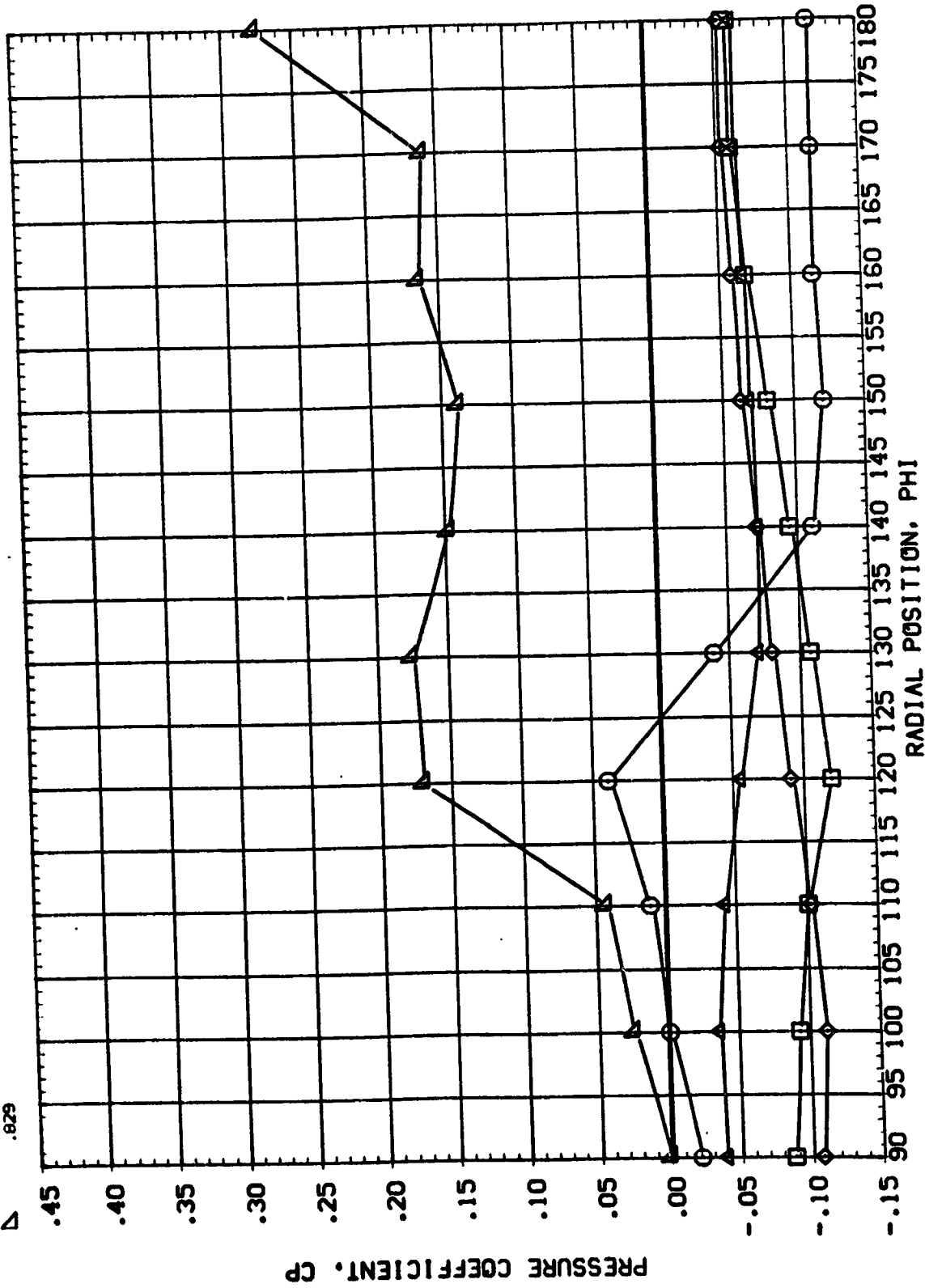


IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
BETA .000
ELEVON .000

SYMBOL X/L ALPHA MACH
□ .264 6.000 2.500
◇ .405
△ .546
▽ .688
▽ .829



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

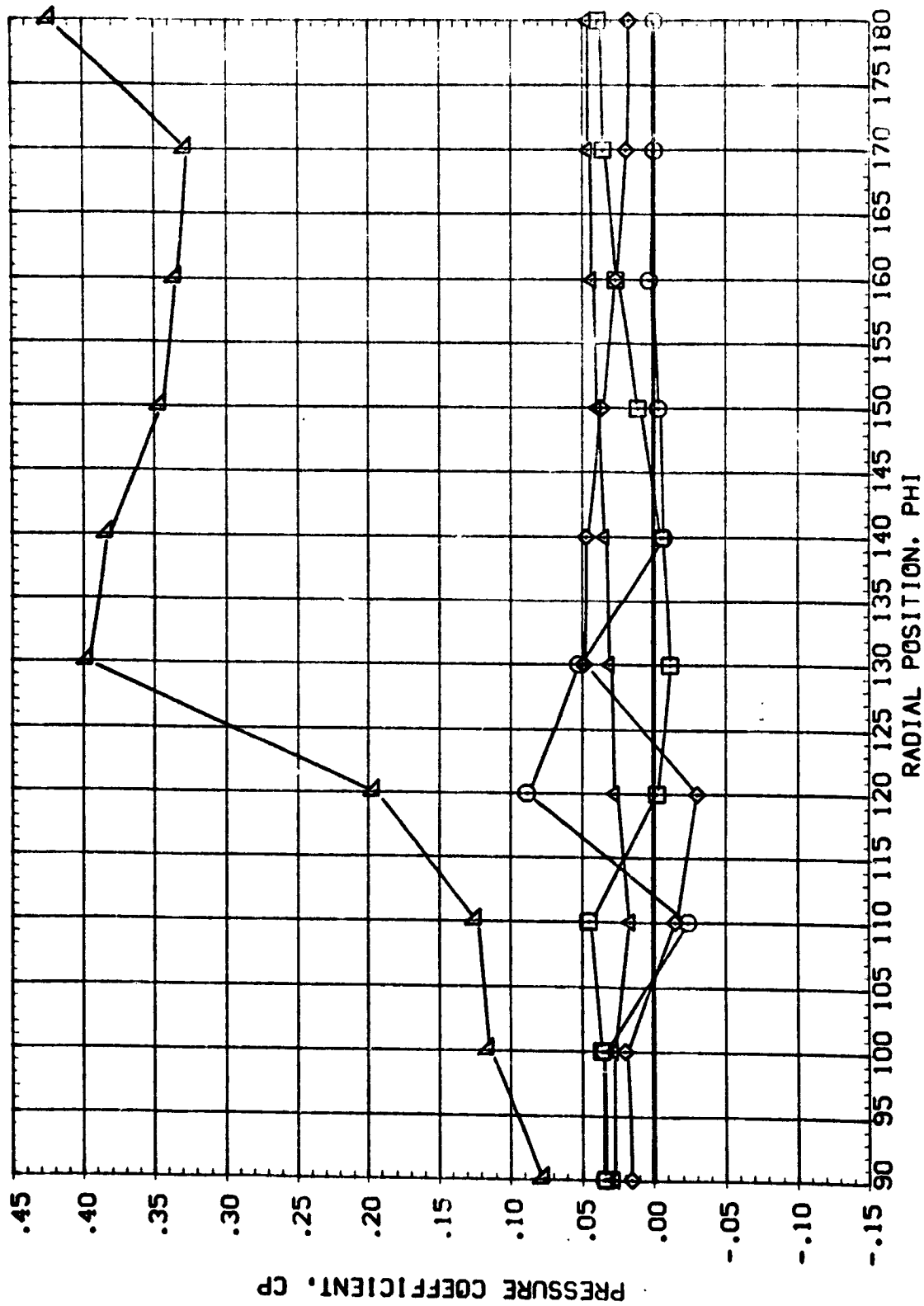


1A35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL X/L ALPHA MACH BETA PARAMETRIC VALUES .000 ELEVON .000

.264
.40E
.546
.688
.829



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



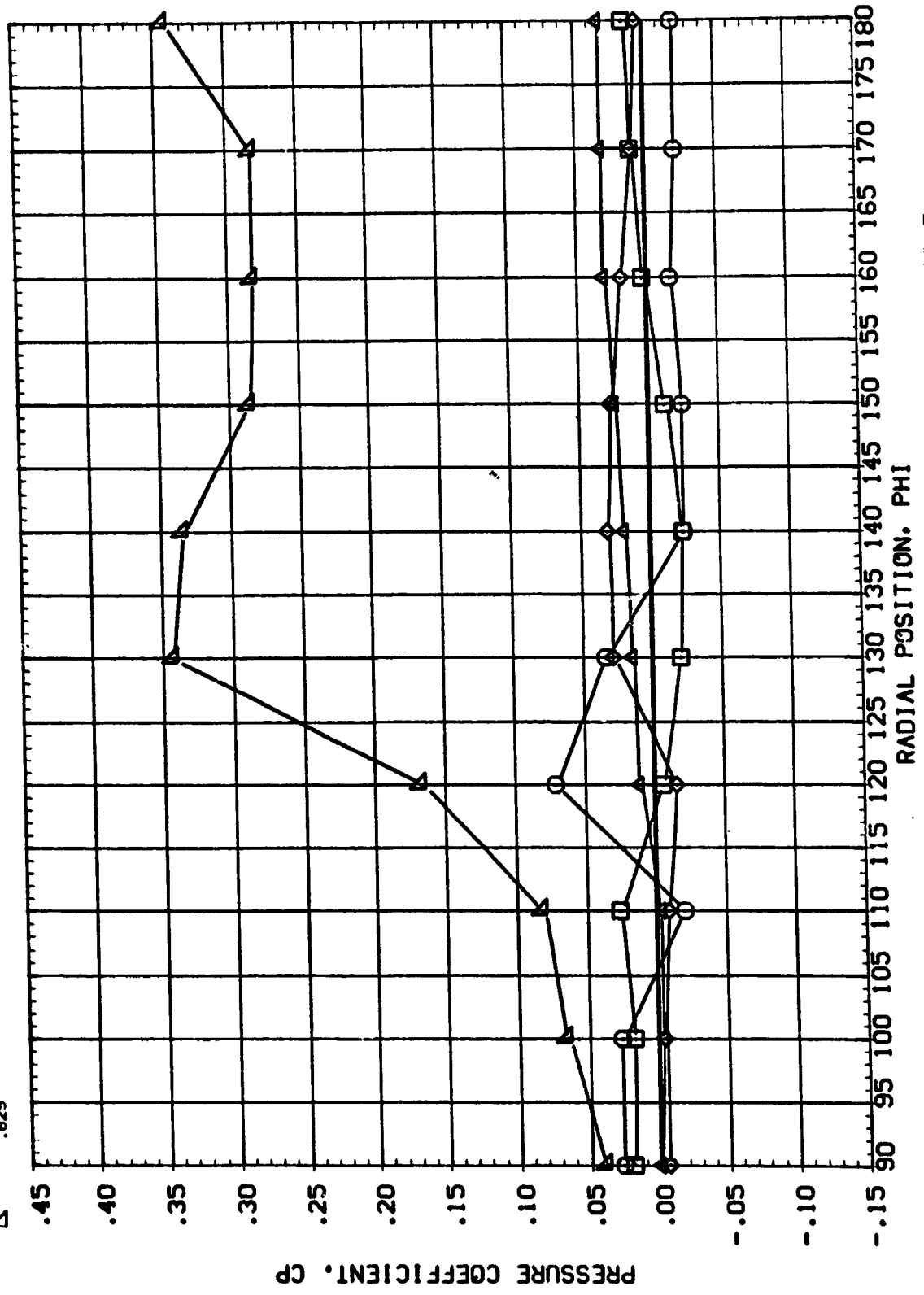
IA35 ORBITER ASCENT CONFIGURATION (RG5004)

PARAMETRIC VALUES
BETA .000 ELEVON .000

ALPHA MACH
-4.000 2.950

X/L
.264
.405
.546
.688
.829

SYMBOL
○
□
◇
△
▽



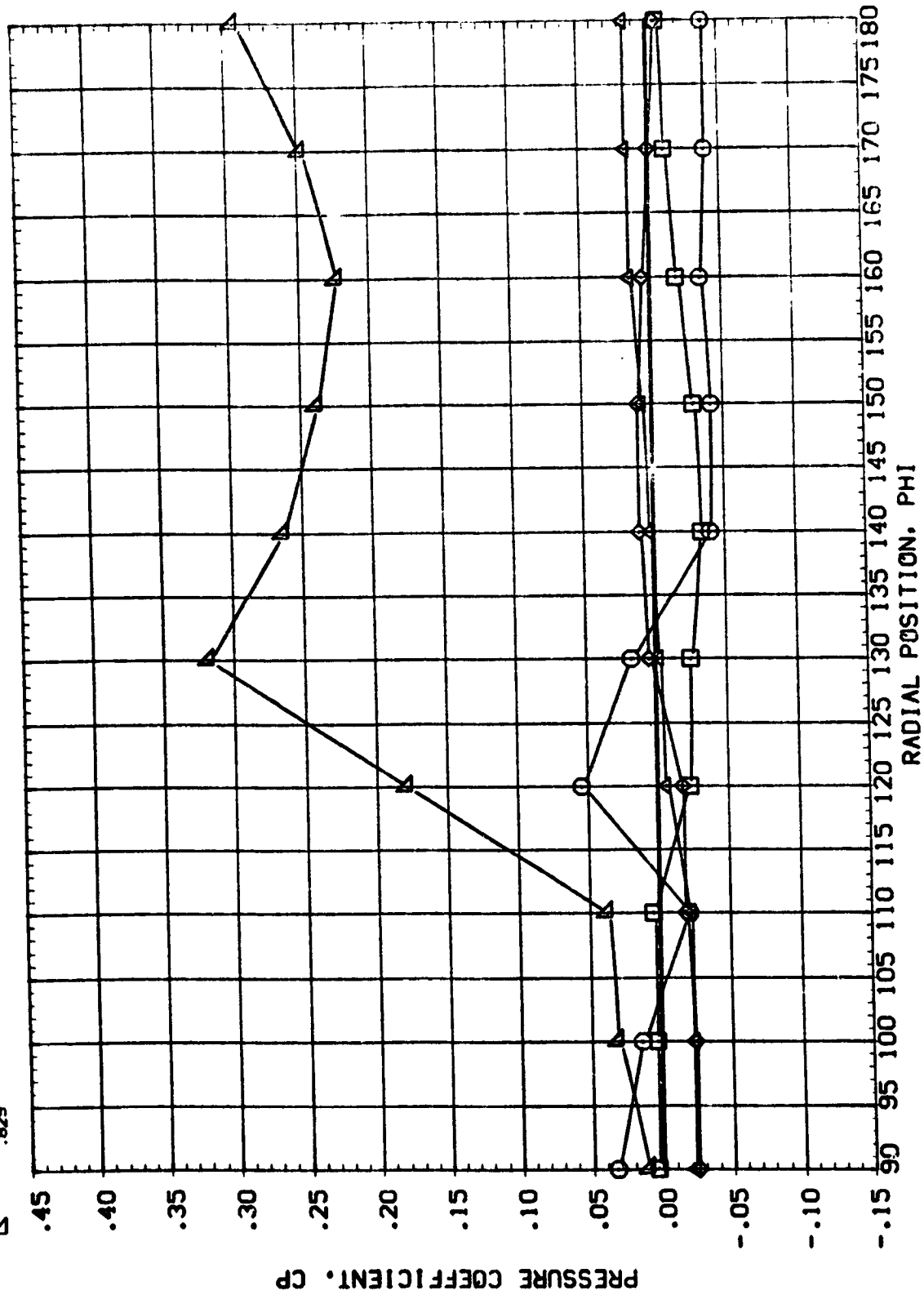
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

(R05004)

IA35 ORBITER ASCENT CONFIGURATION

SYMBOL X/R ALPHA MACH
□ .264 -1.990 2.950
◇ .425
△ .546
▽ .688
△ .829

BETA
PARAMETRIC VALUES
.000 ELEVON
.000



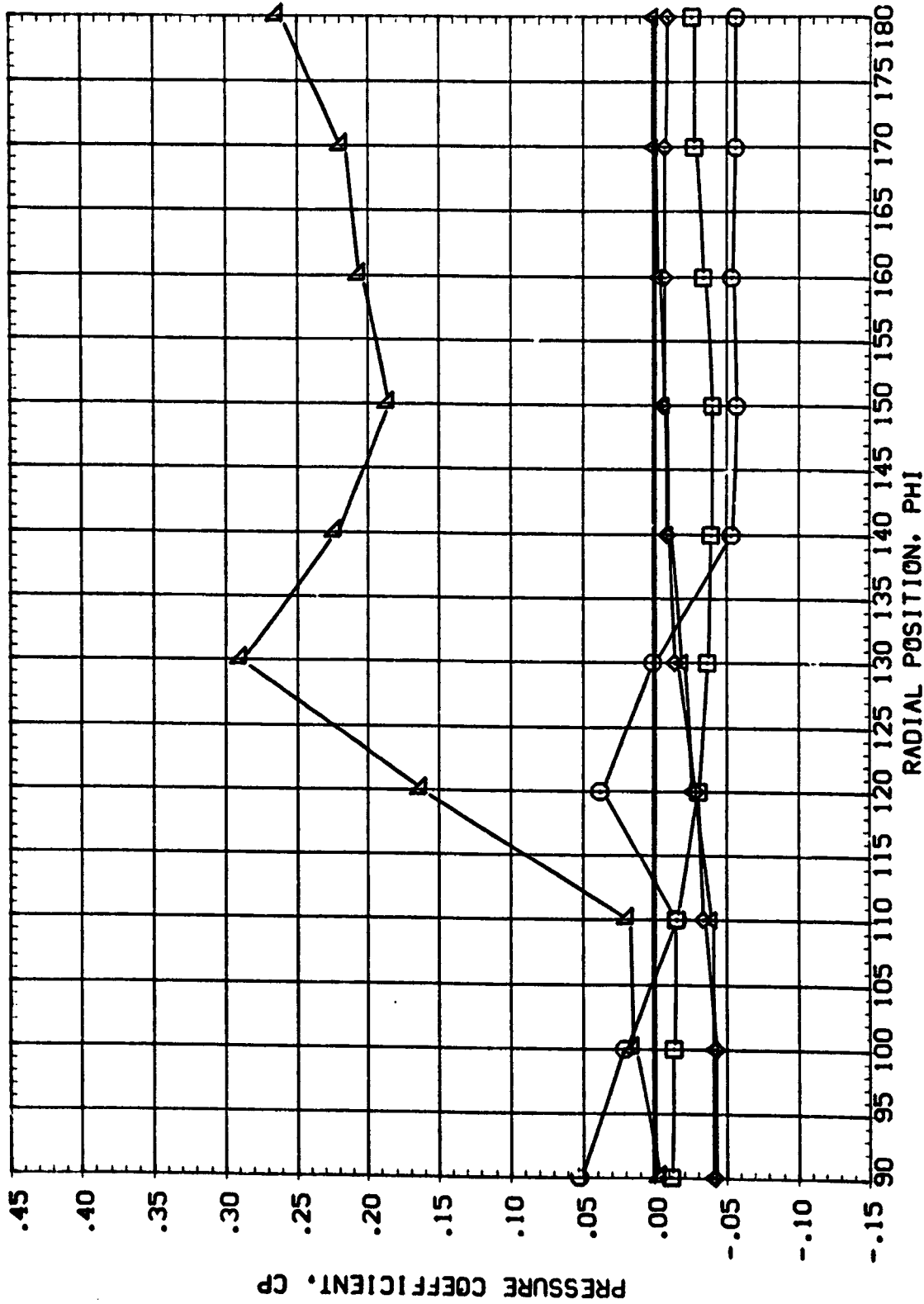
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(RG5004)

SYMBOL X/L ALPHA MACH
 ◻ .264 .010 2.950
 ◊ .475
 ◻ .546
 ◻ .688
 ◻ .829

PARAMETRIC VALUES
 BETA .000
 ELEVON .000



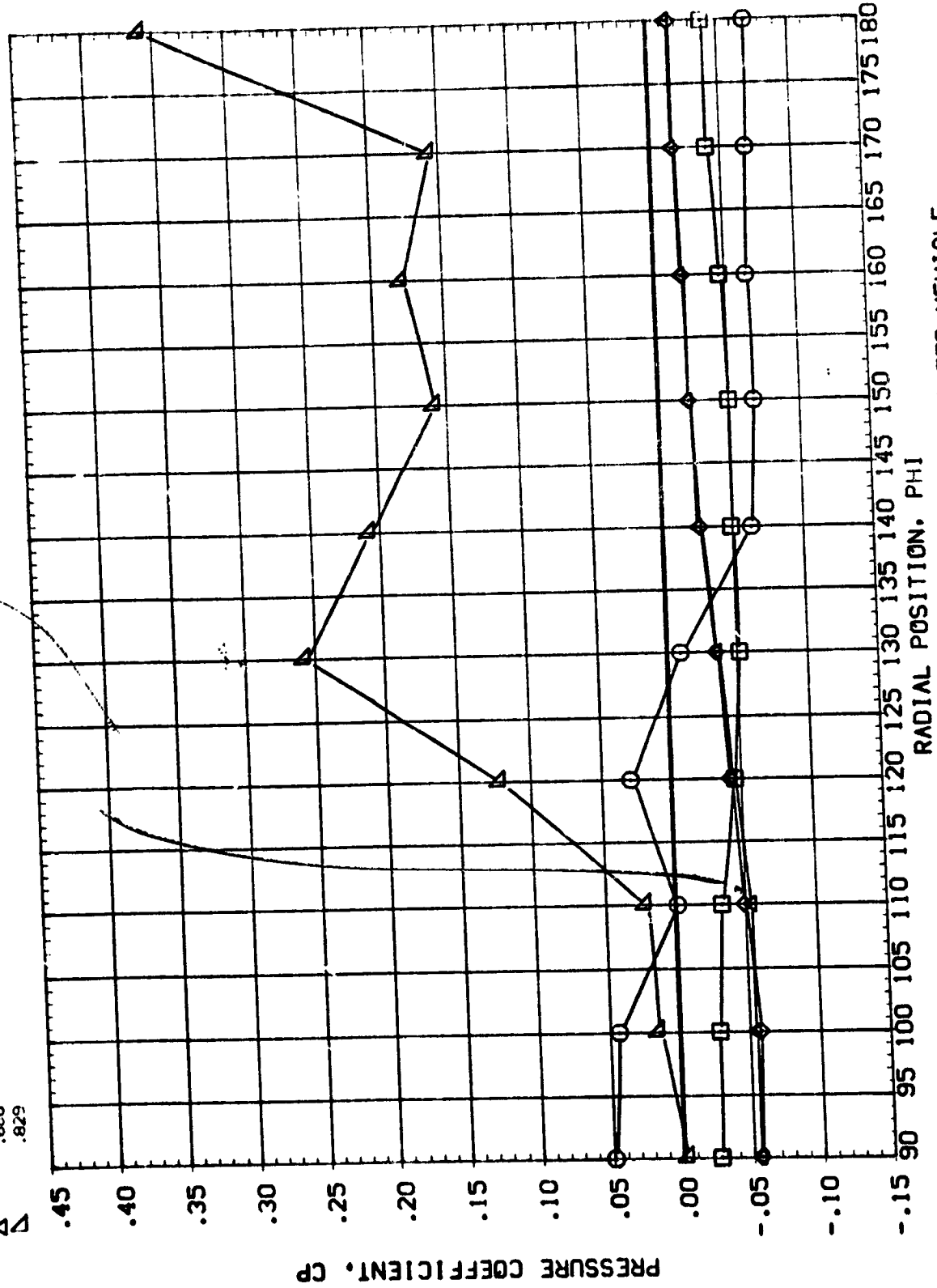
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

(R05004)

1A35 ORBITER ASCENT CONFIGURATION

PARAMETRIC VALUES
BETA
.000
ELEV CN
.000

SYMBOL	X/L	ALPHA	MACH
○	.264	2.000	2.950
◇	.405		
△	.546		
□	.688		
▽	.829		



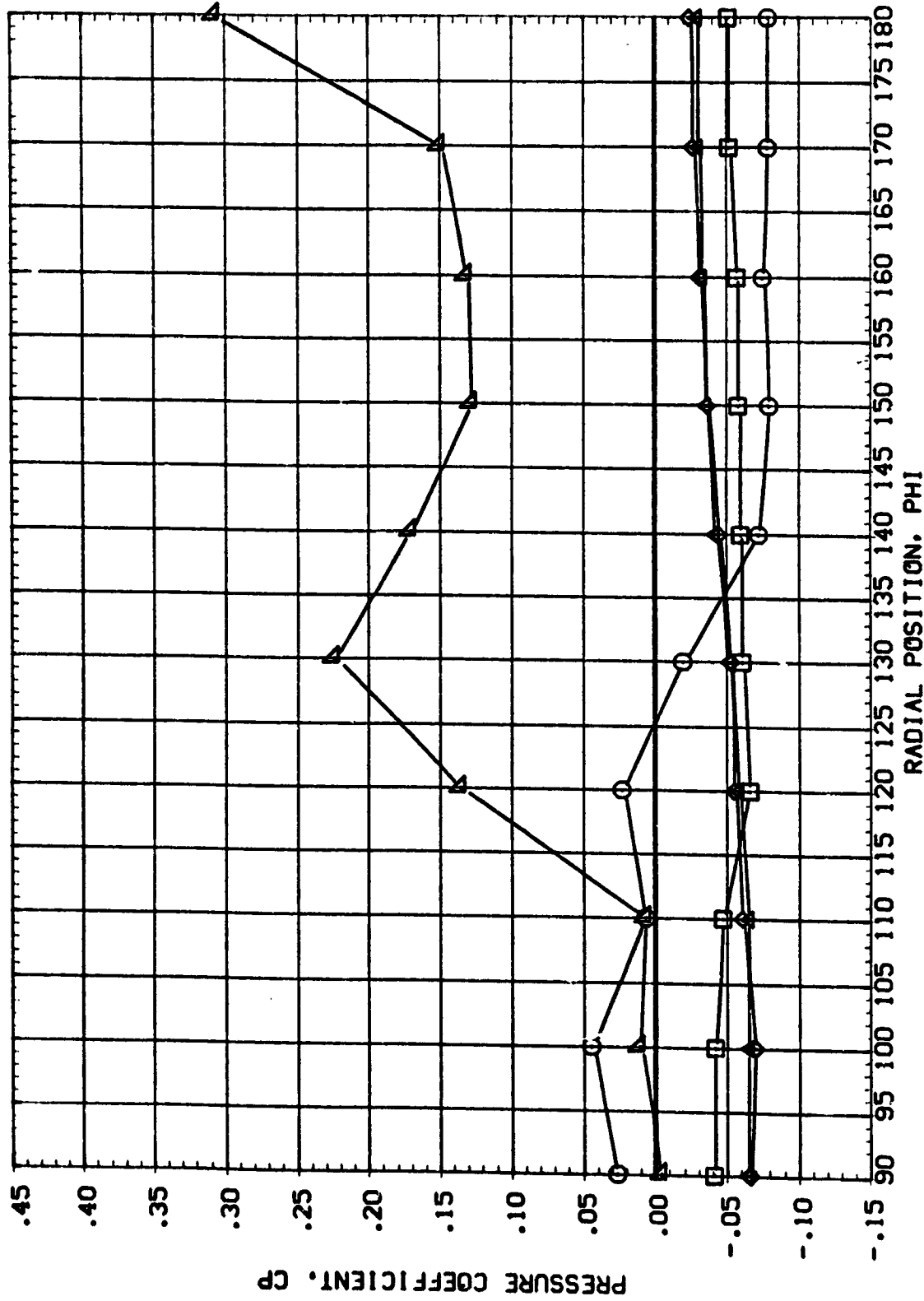
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
□	.264	4.000	2.950	.000	ELEVON
◇	.405				
△	.546				
▽	.688				
▽	.829				



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

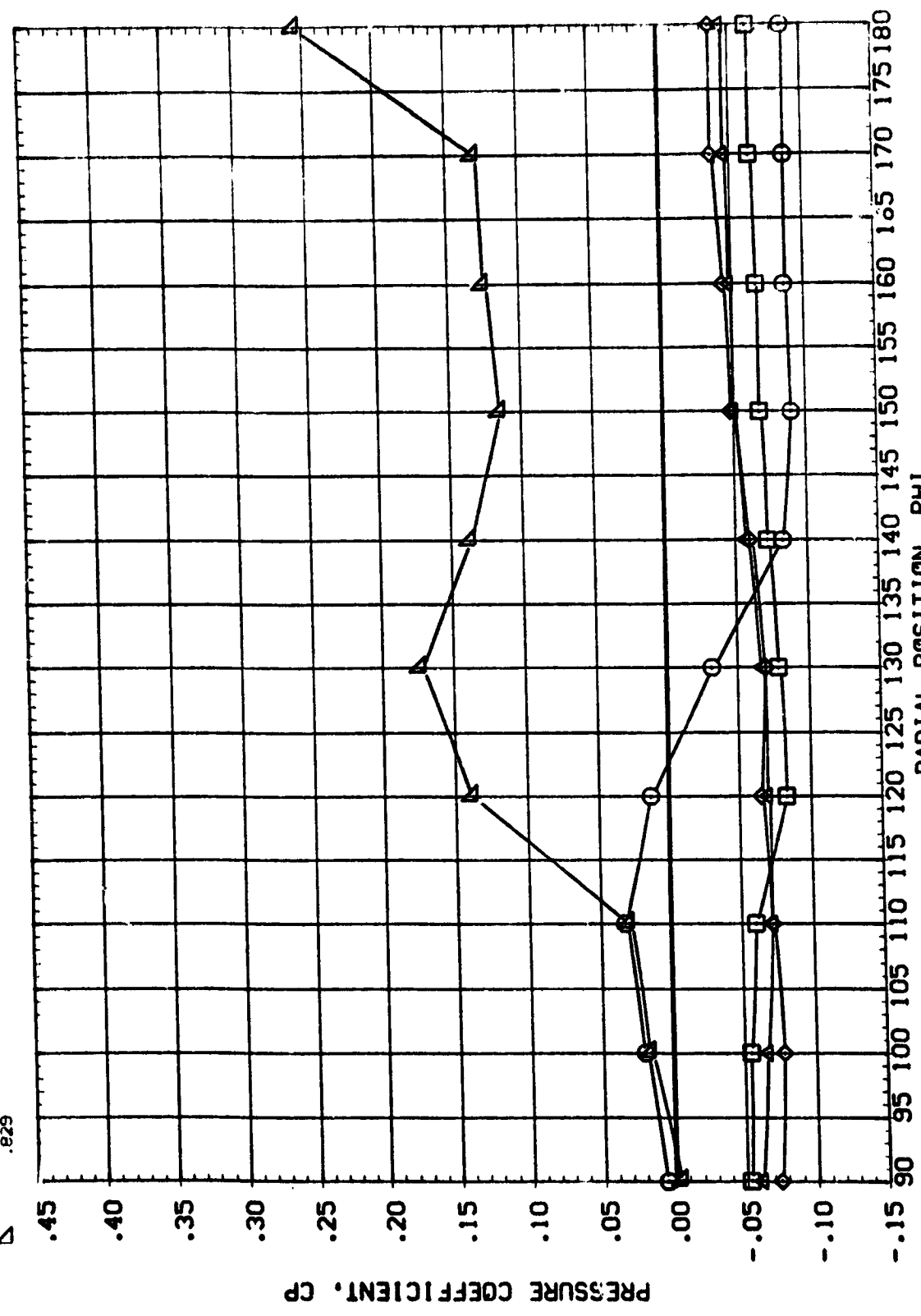
IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
 BETA .000
 ELEVON .000

ALPHA 6.010
 MACH 2.950

SYMBOL X/L
 □ .264
 ○ .40E
 ◇ .54E
 △ .688
 ▽ .829



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

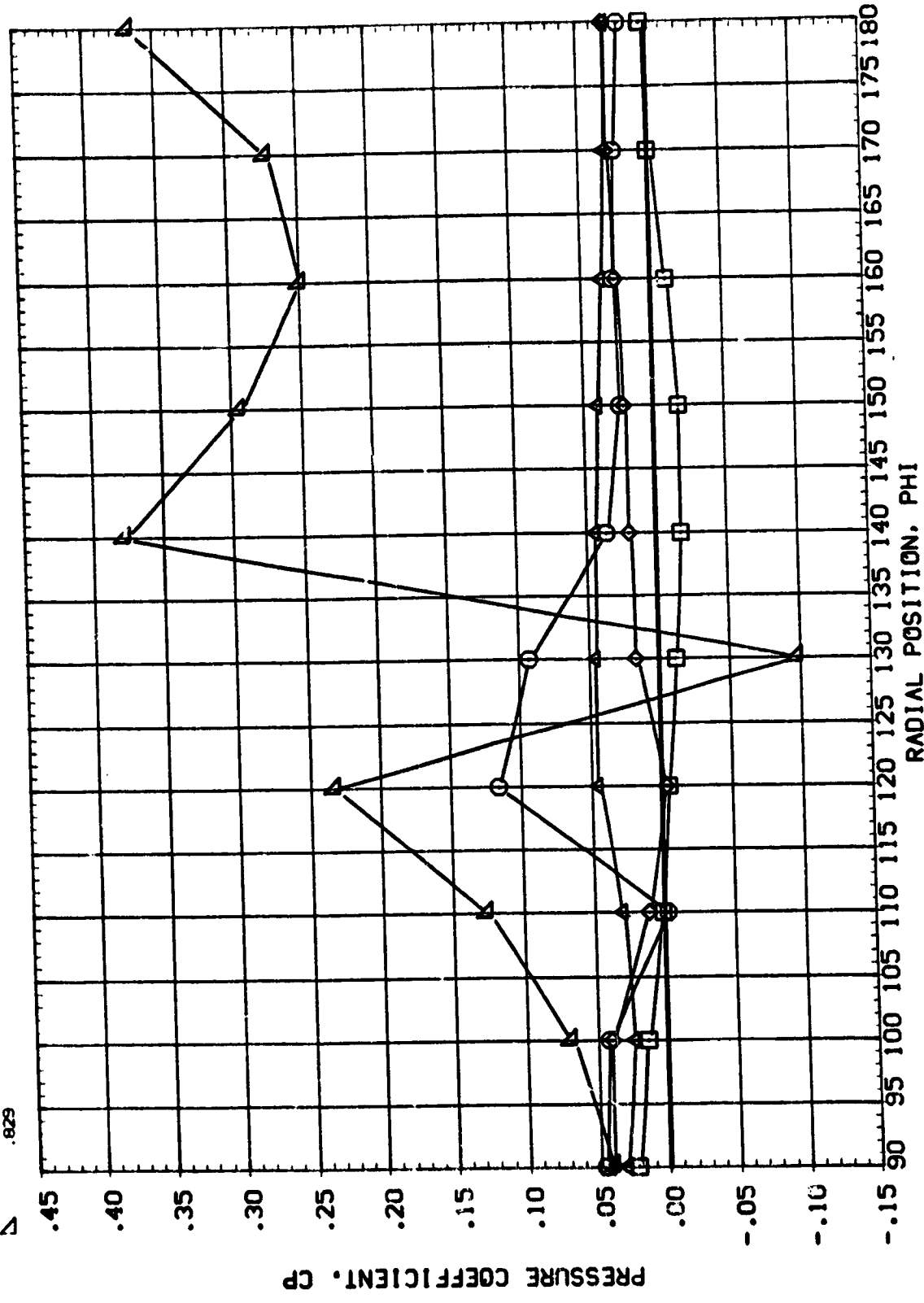


IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL X/L ALPHA MACH
□ .264 -6.000 4.000
◇ .435
△ .546
○ .688
▽ .829

PARAMETRIC VALUES
BETA .000 ELEVON .000

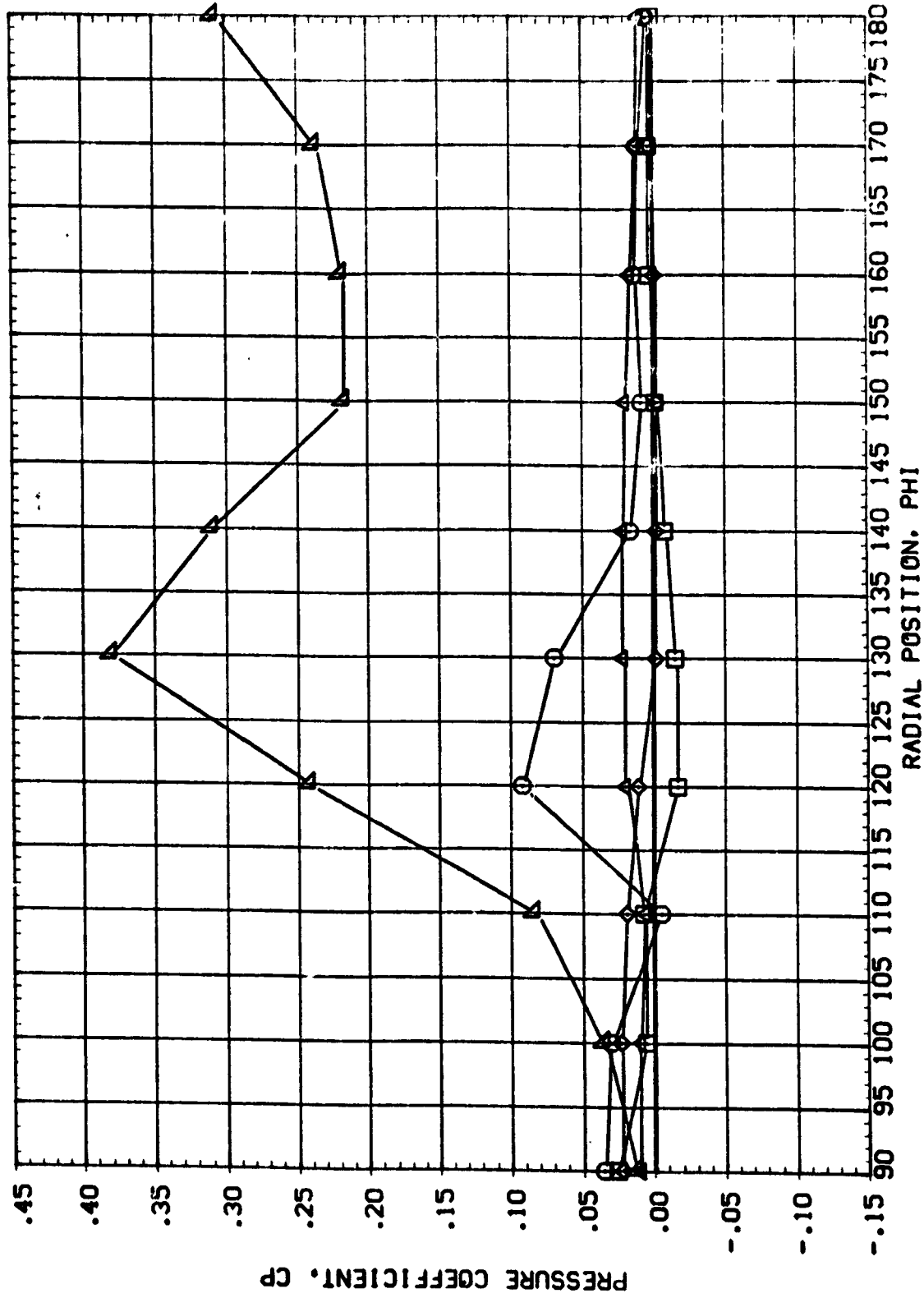


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

1A35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
□	.264	-3.990	4.000	.000	ELEVON
◇	.405				
◇	.546				
△	.688				
△	.829				



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

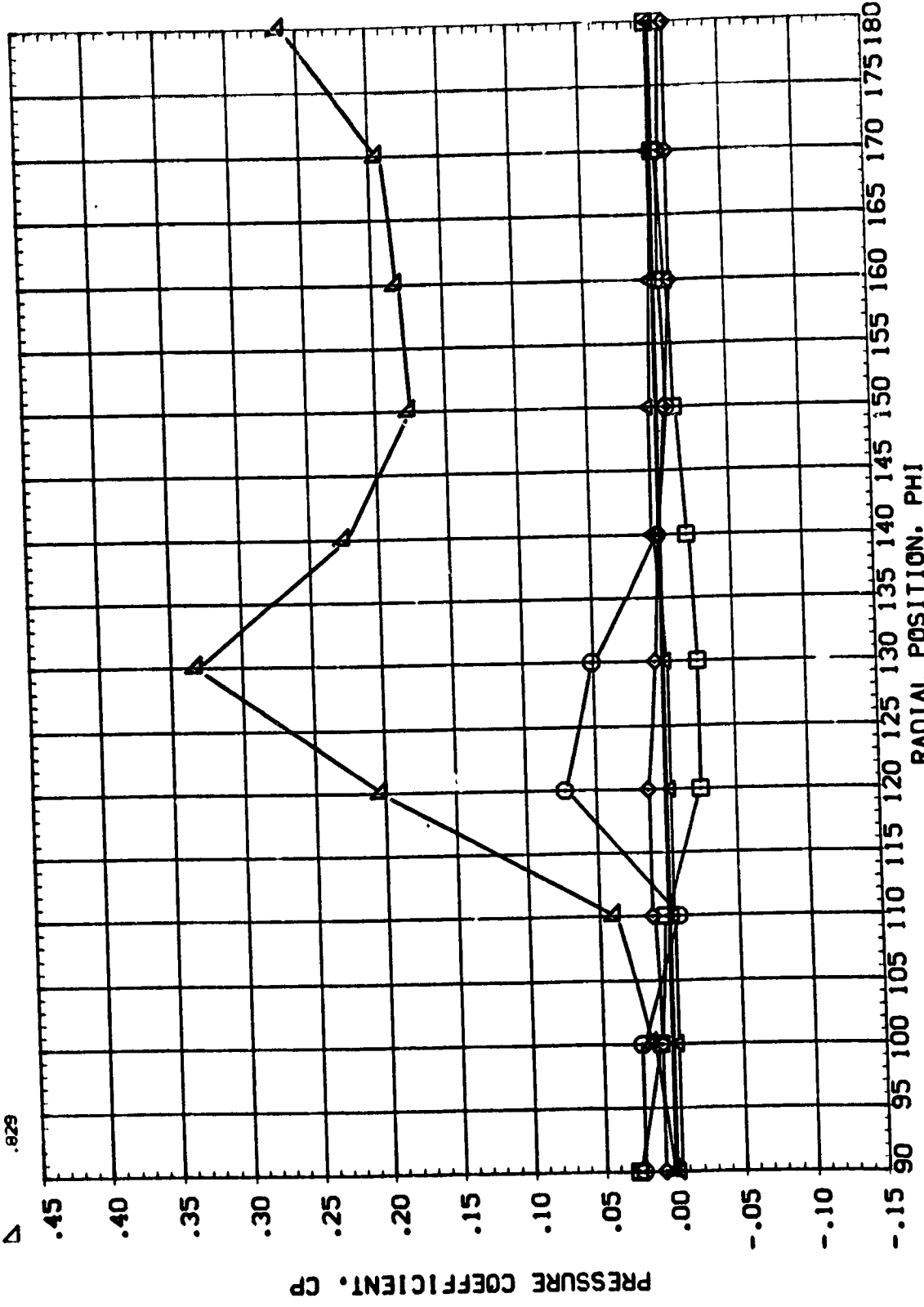


IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

PARAMETRIC VALUES
BETA .000
ELEVON .000

SYMBOL X/L ALPHA MACH
□ .264 -2.000 4.000
◇ .405
△ .546
○ .688
▽ .829

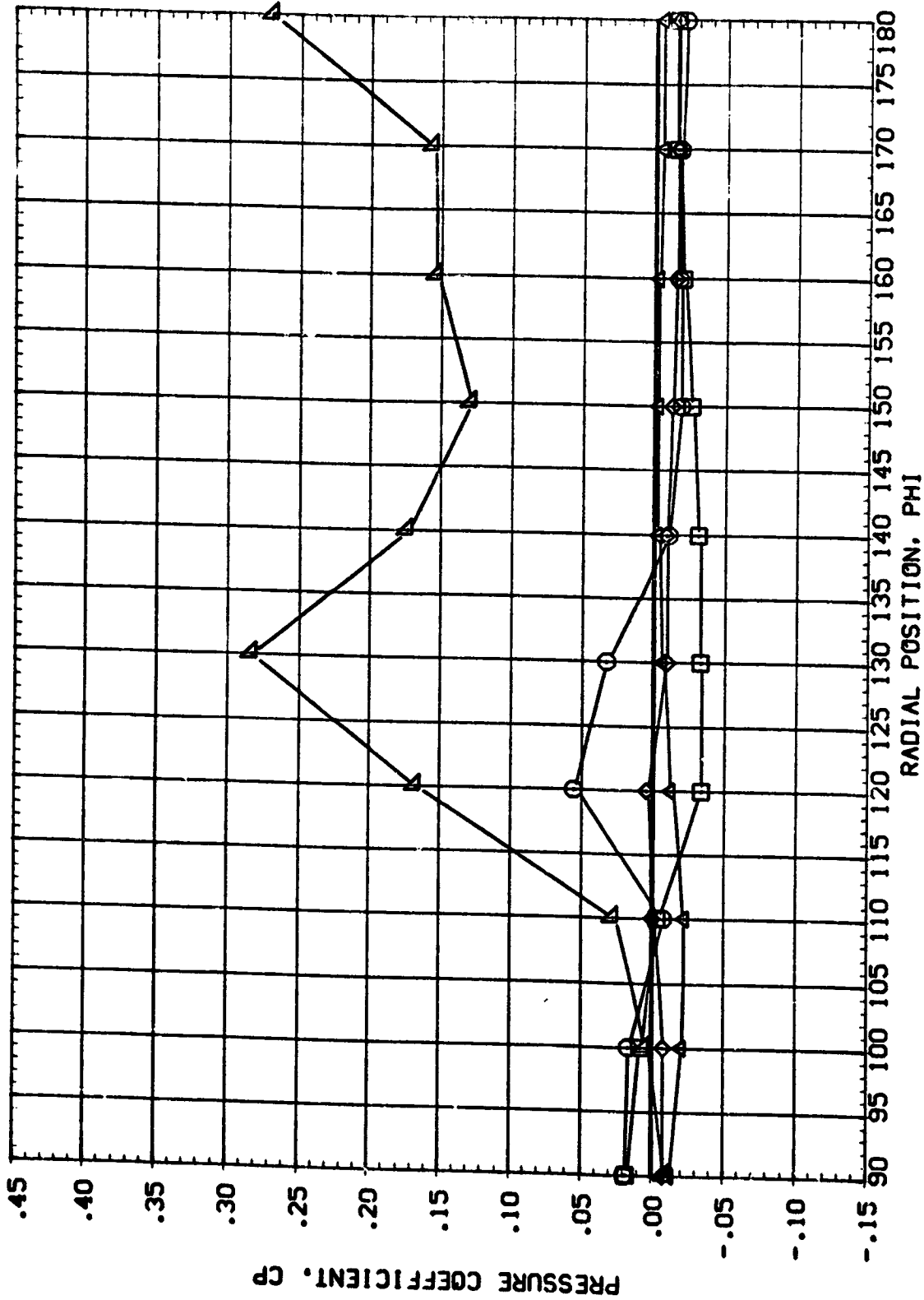


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL	M/L	ALPHA	MACH	BETA	PARAMETRIC VALUES .000 ELEVON
□	.264	.010	4.000		
◇	.405				
△	.546				
▽	.688				
△	.829				



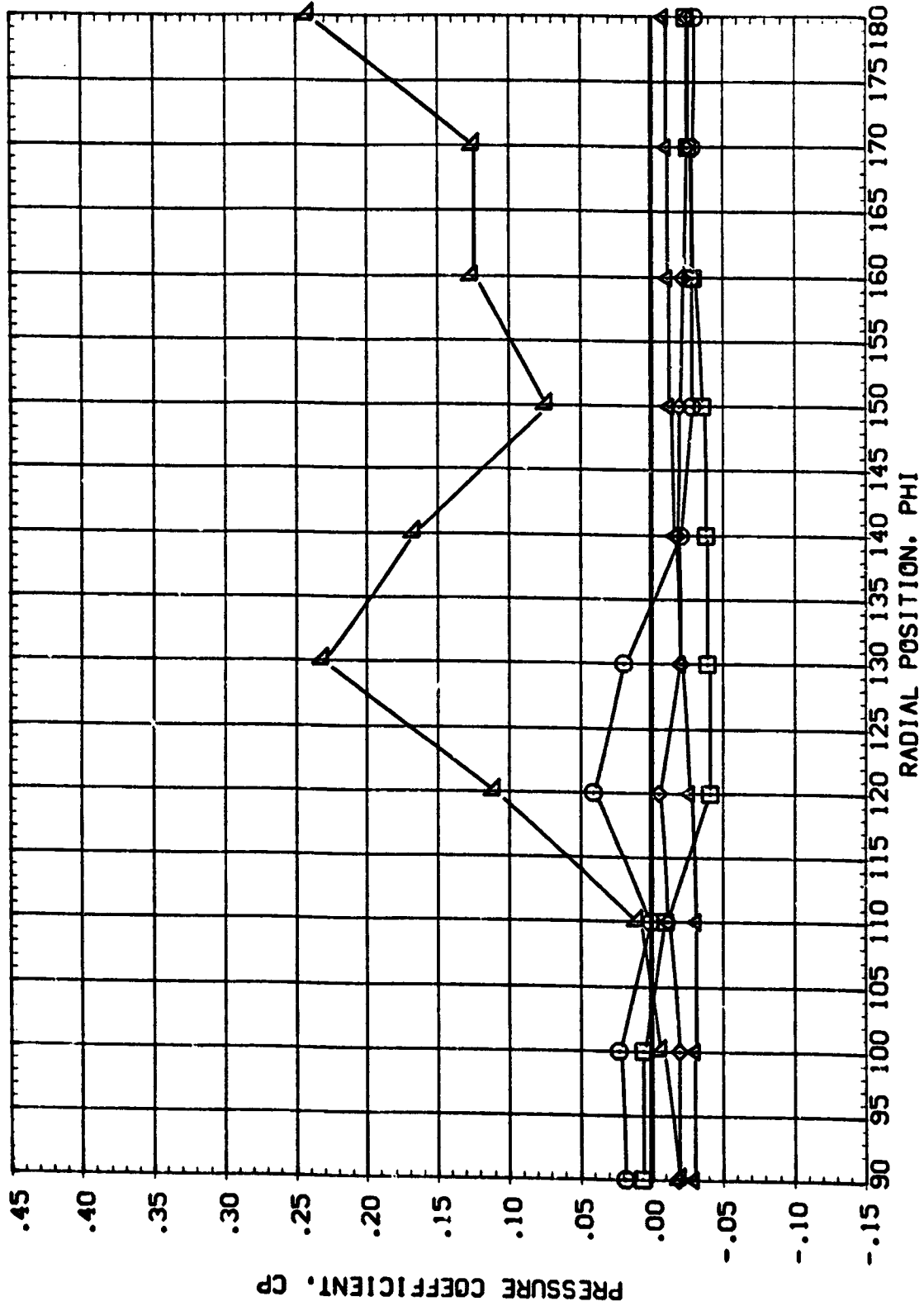
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
□	.264	1.990	4.000		.000 ELEVON .000
◇	.405				
△	.546				
▽	.688				
△	.829				

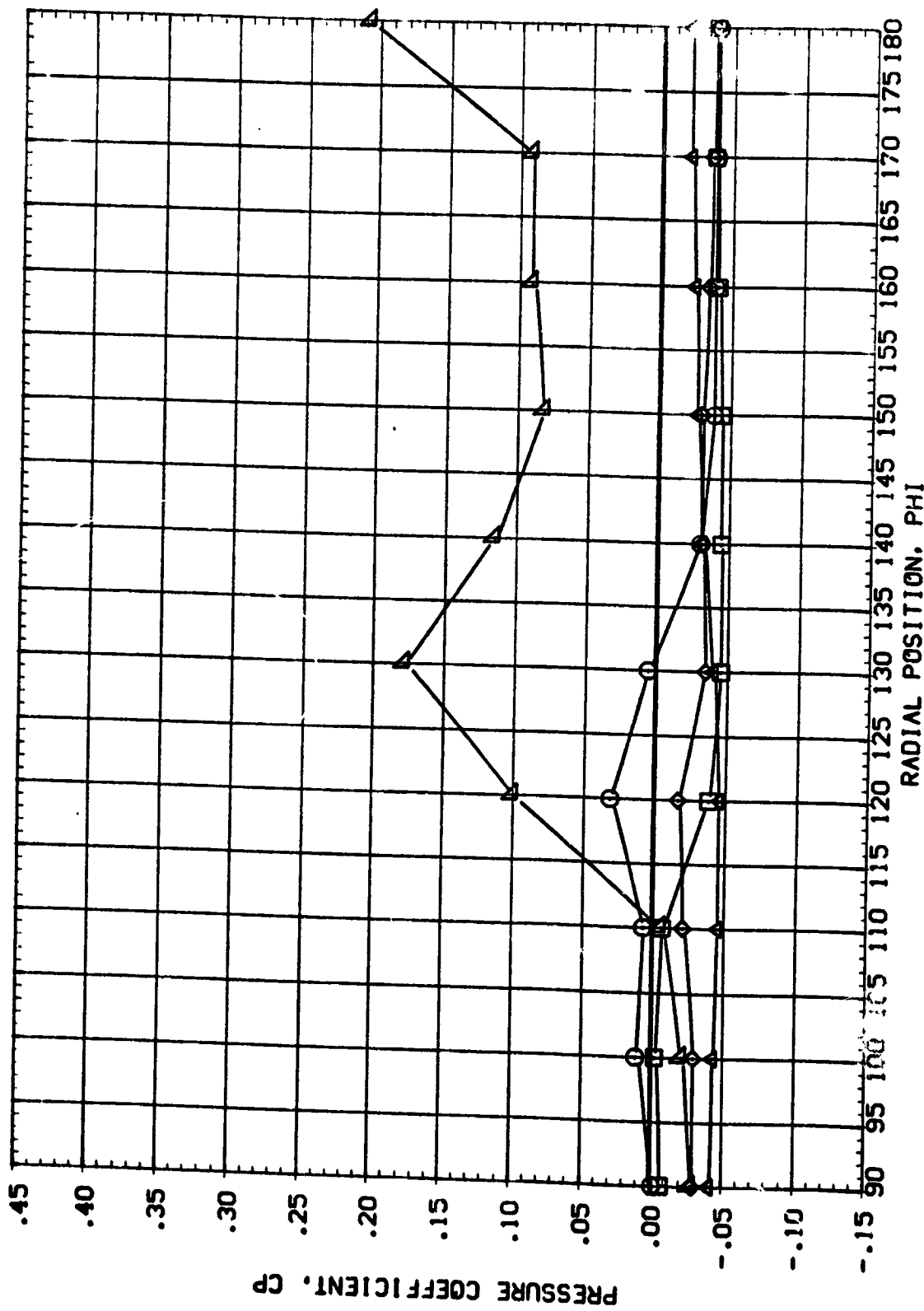


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(RG5004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	.264	4.000	4.000	.000	ELEVON
□	.405				
◇	.546				
△	.688				
▽	.829				



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

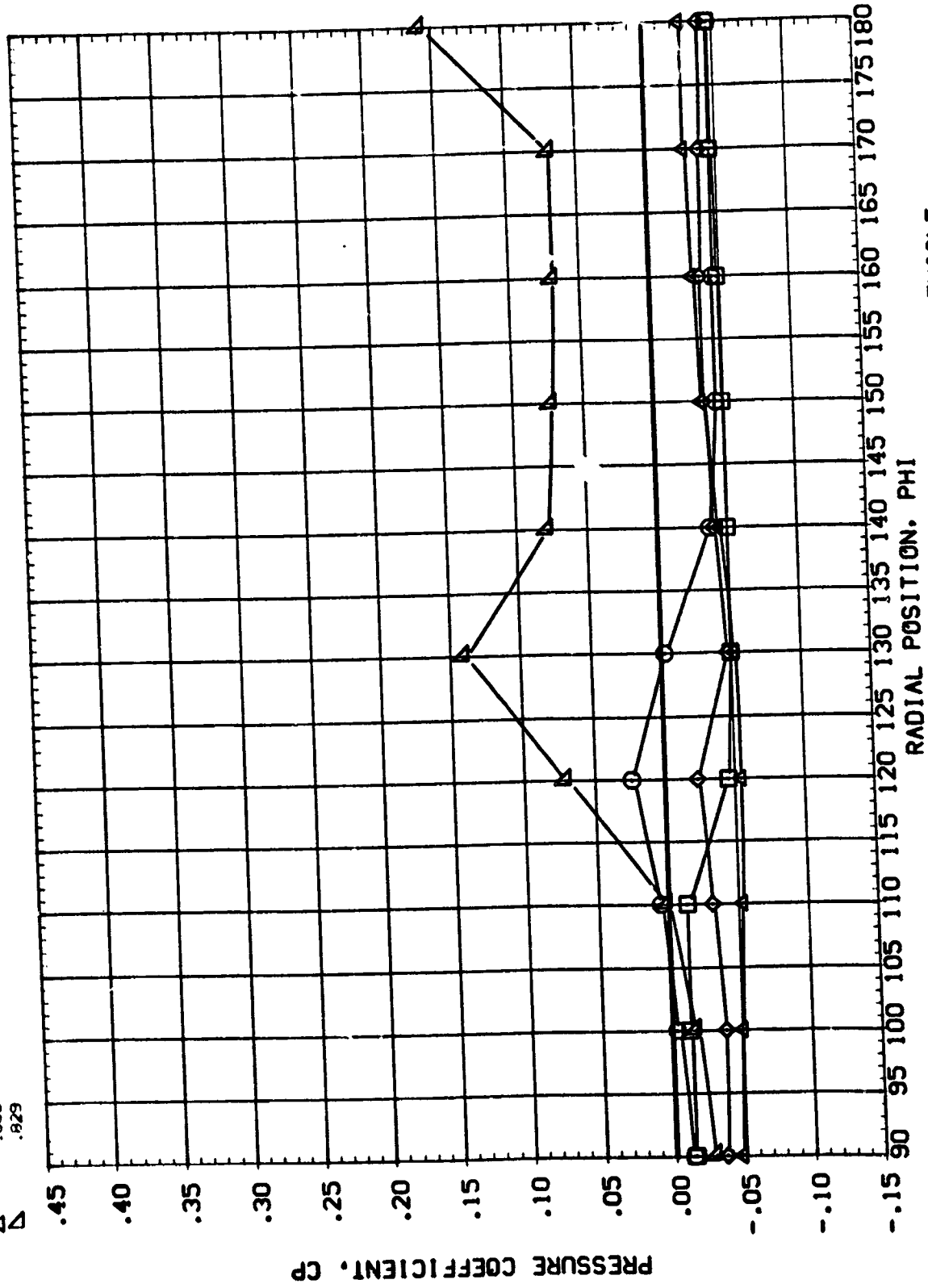
IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
 .000 ELEVON .000

ALPHA 6.010 MACH 4.000

SYMBOL X%
 □ .264
 ◇ .405
 △ .546
 △ .688
 △ .829



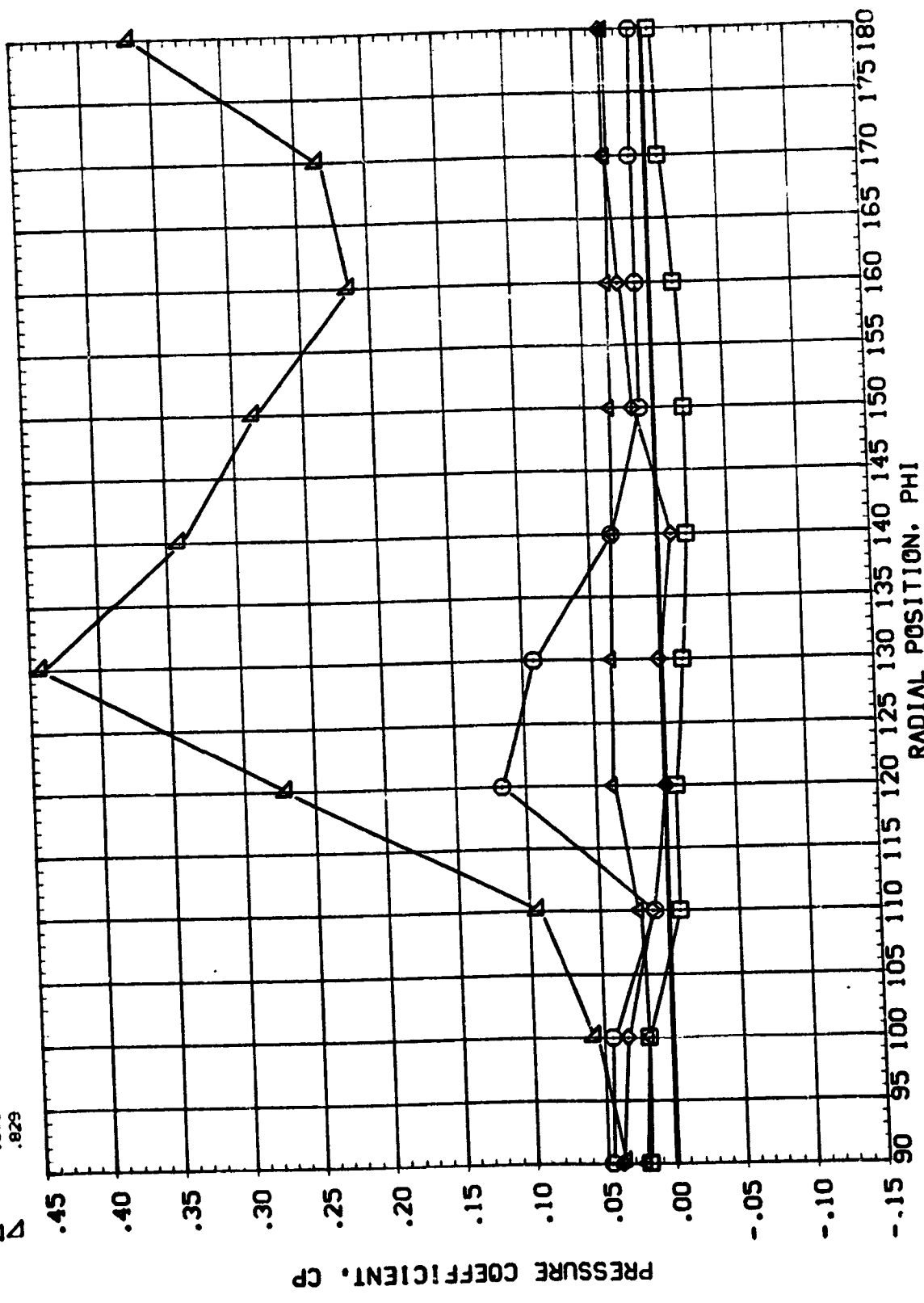
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (R05004)

PARAMETRIC VALUES
 BETA .000
 ELEVEN .000

ALPHA -6.000
 MACH 4.500

X/L
 .264
 .405
 .546
 .688
 .829



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



1A35 ORBITER ASCENT CONFIGURATION

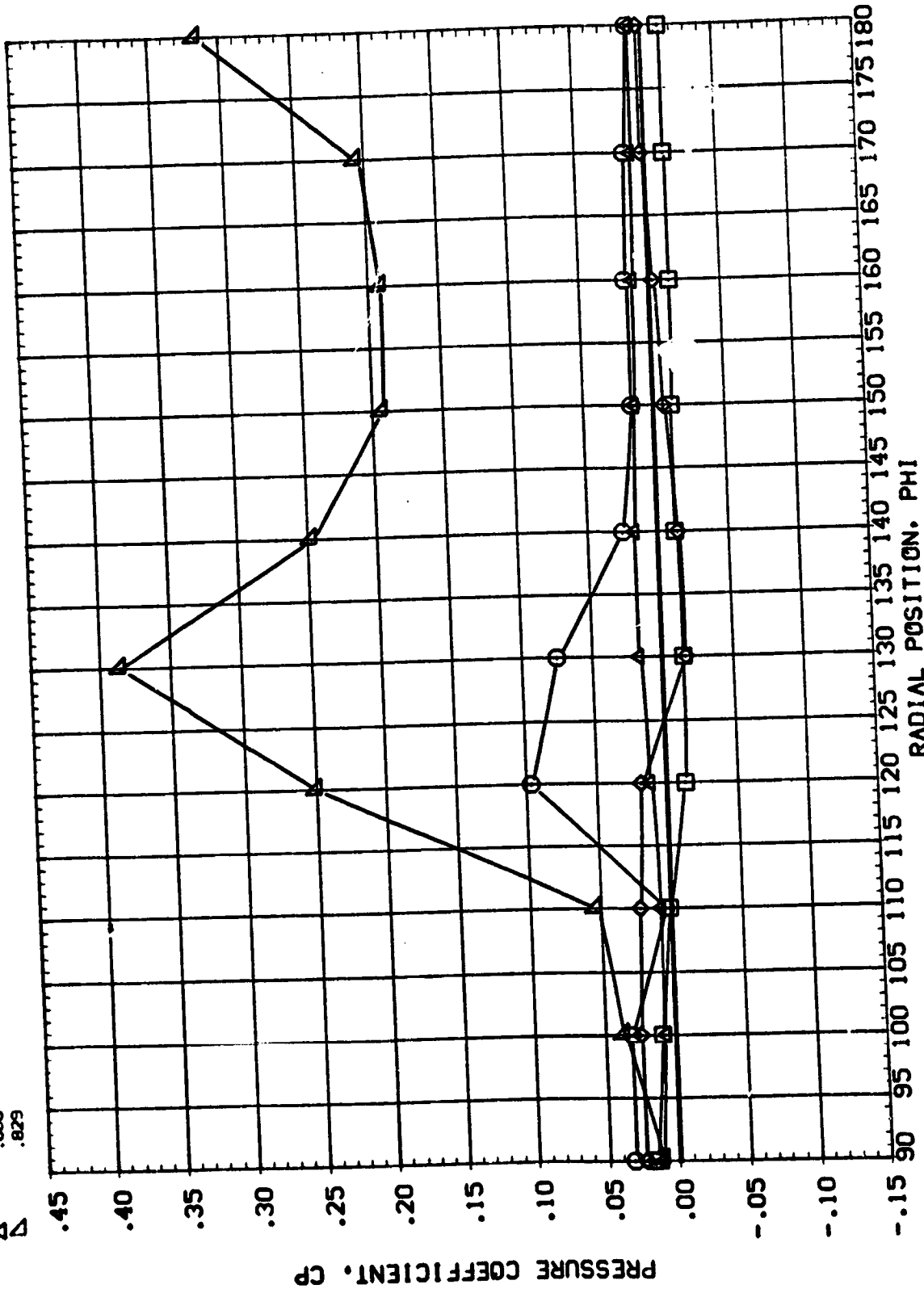
(R05004)

PARAMETRIC VALUES
ELEVON .000

BETA

ALPHA -3.990
MACH 4.500

X/L
0.264
0.405
0.546
0.688
0.829

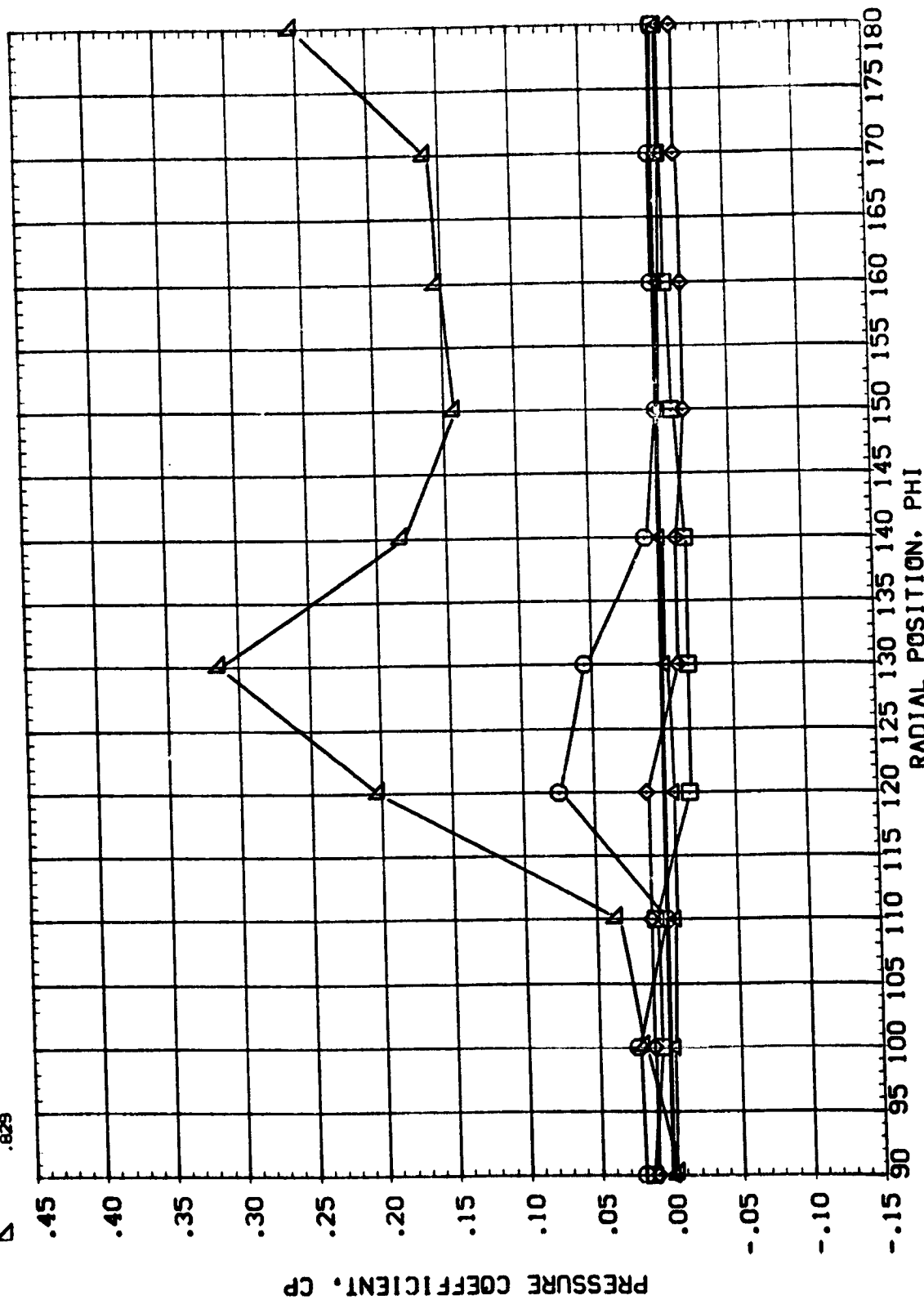


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

(R05004) IA35 ORBITER ASCENT CONFIGURATION

PARAMETRIC VALUES
 BETA .000
 ELEVON .000

MACH 4.500
 ALPHA -2.000
 X/L .264
 .405
 .546
 .688
 .829



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



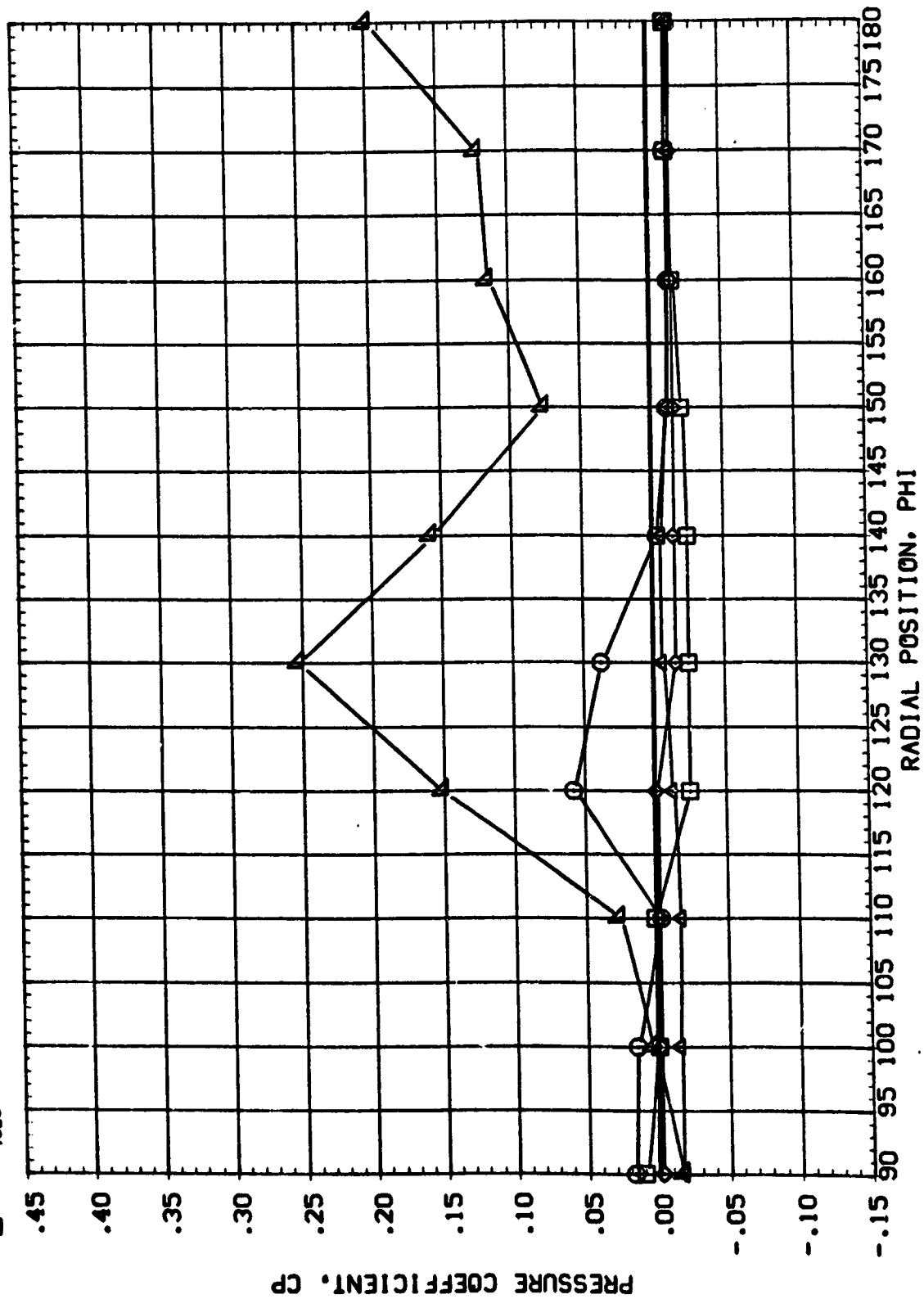
IA35 ORBITER ASCENT CONFIGURATION

(R05004)

PARAMETRIC VALUES
BETA .000
ELEVON .000

ALPHA .000
MACH 4.500

X/L
SYMBOL
□ .264
◇ .405
△ .546
◇ .688
△ .829

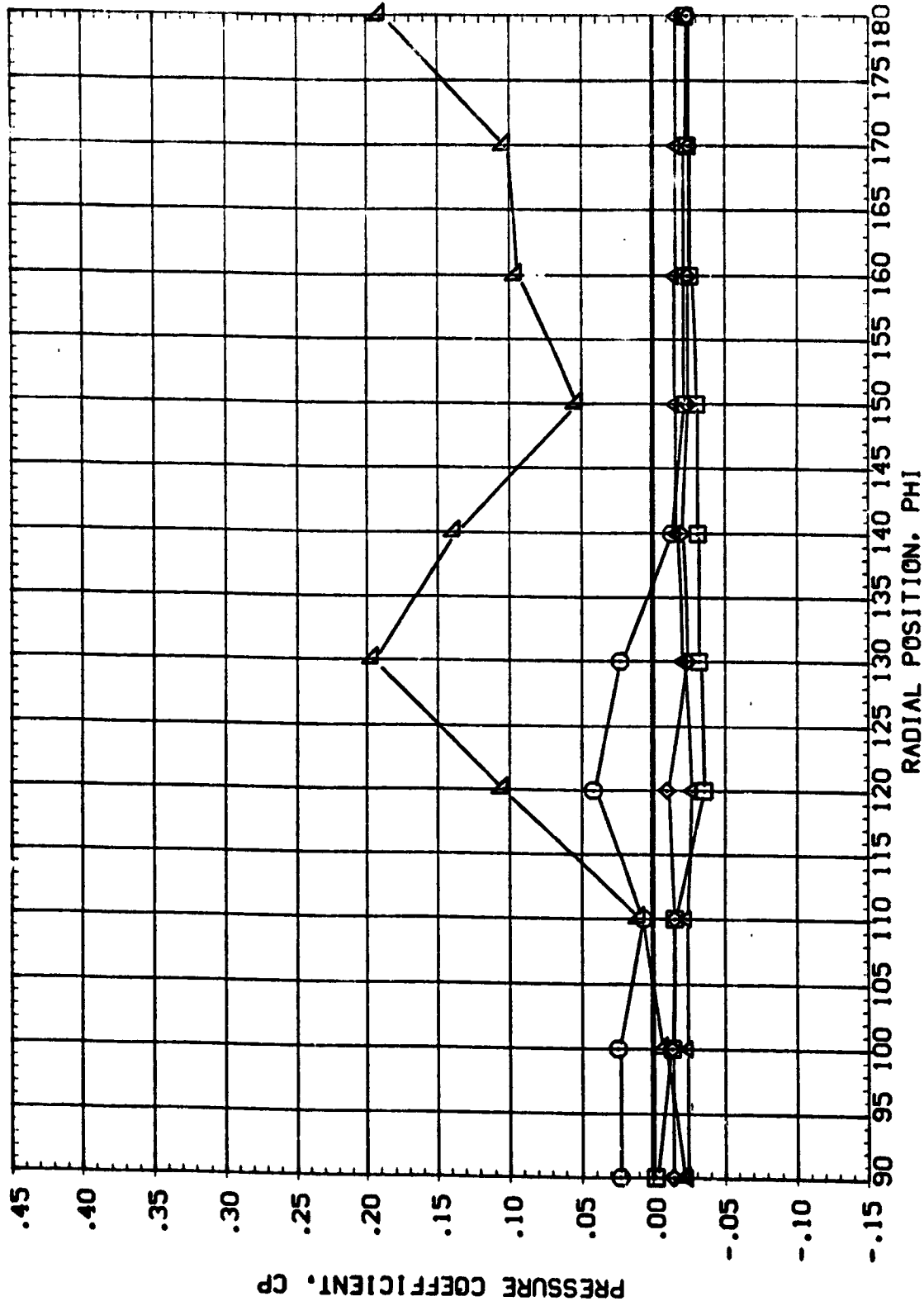


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	.264	1.990	4.500		.000 ELEVATION .000
□	.405				
◇	.546				
△	.688				
▽	.829				



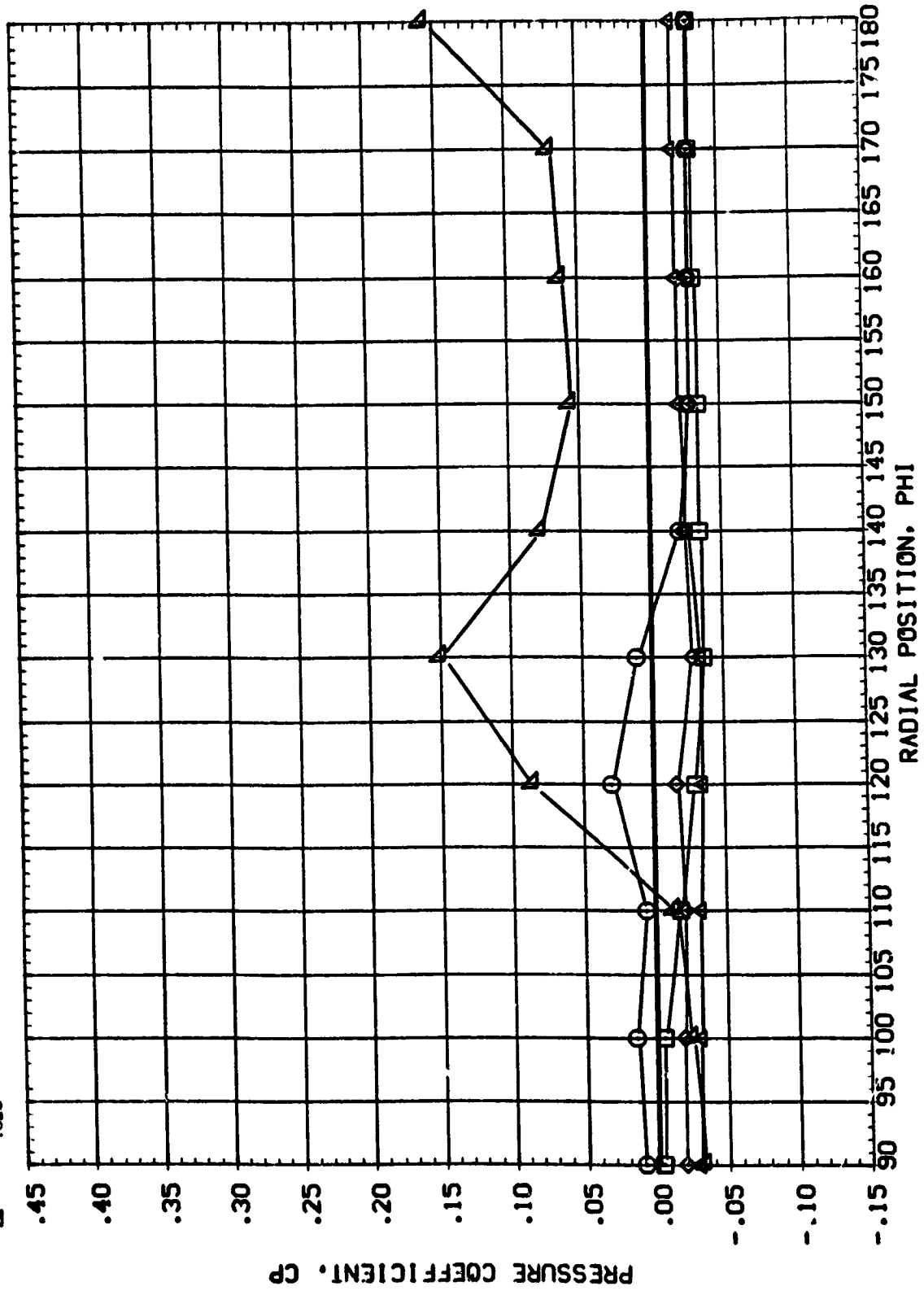
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



1A35 ORBITER ASCENT CONFIGURATION

(R05004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
□	.264	4.013	4.500		.000
◇	.405				.000
△	.546				.000
▽	.688				.000
▽	.829				.000



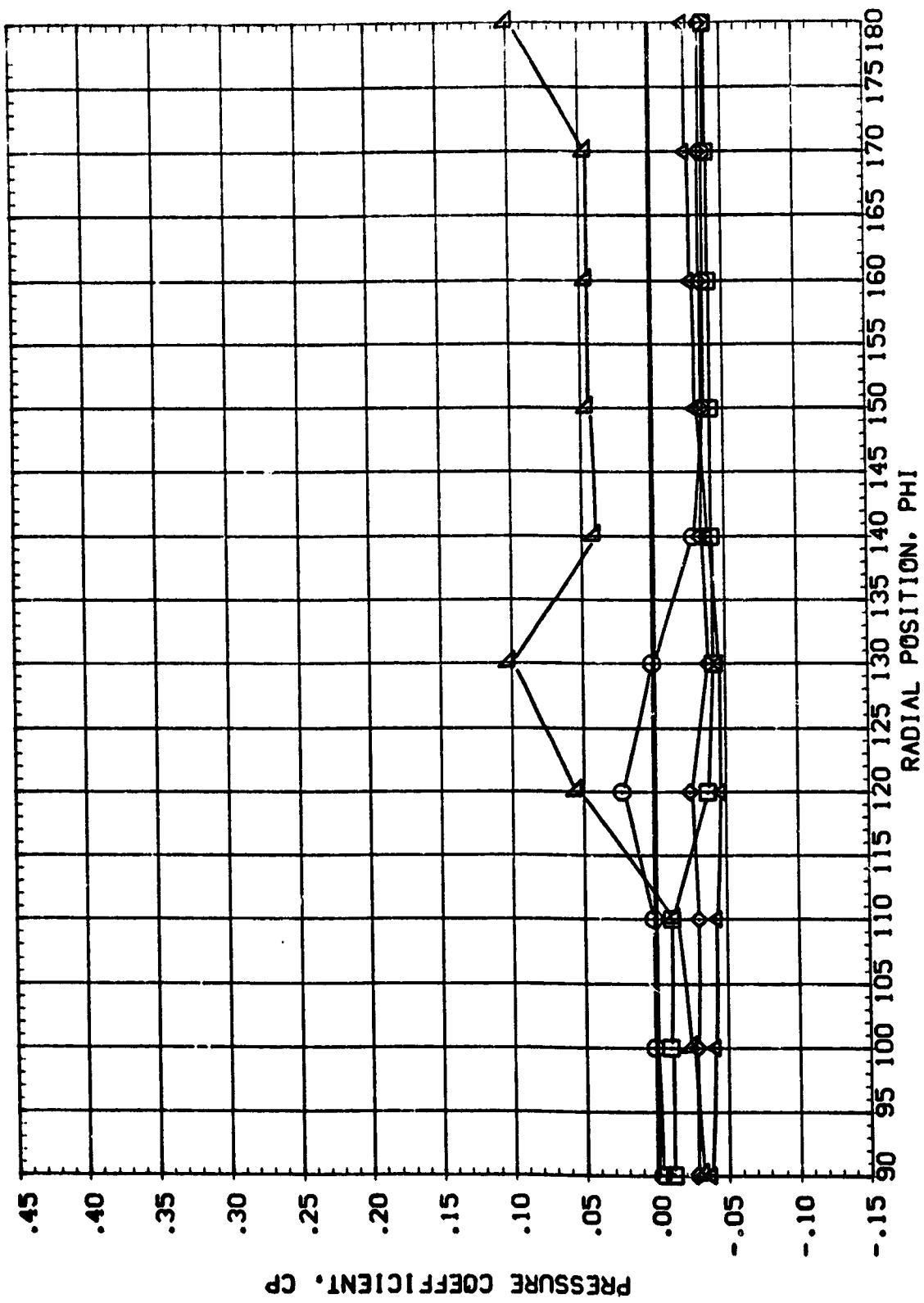
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

PARAMETRIC VALUES
 BETA .000
 ELEVON .000

SYMBOL X/L ALPHA MACH
 ○ .264 6.000 4.500
 □ .405
 ◇ .546
 △ .688
 ▽ .829



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

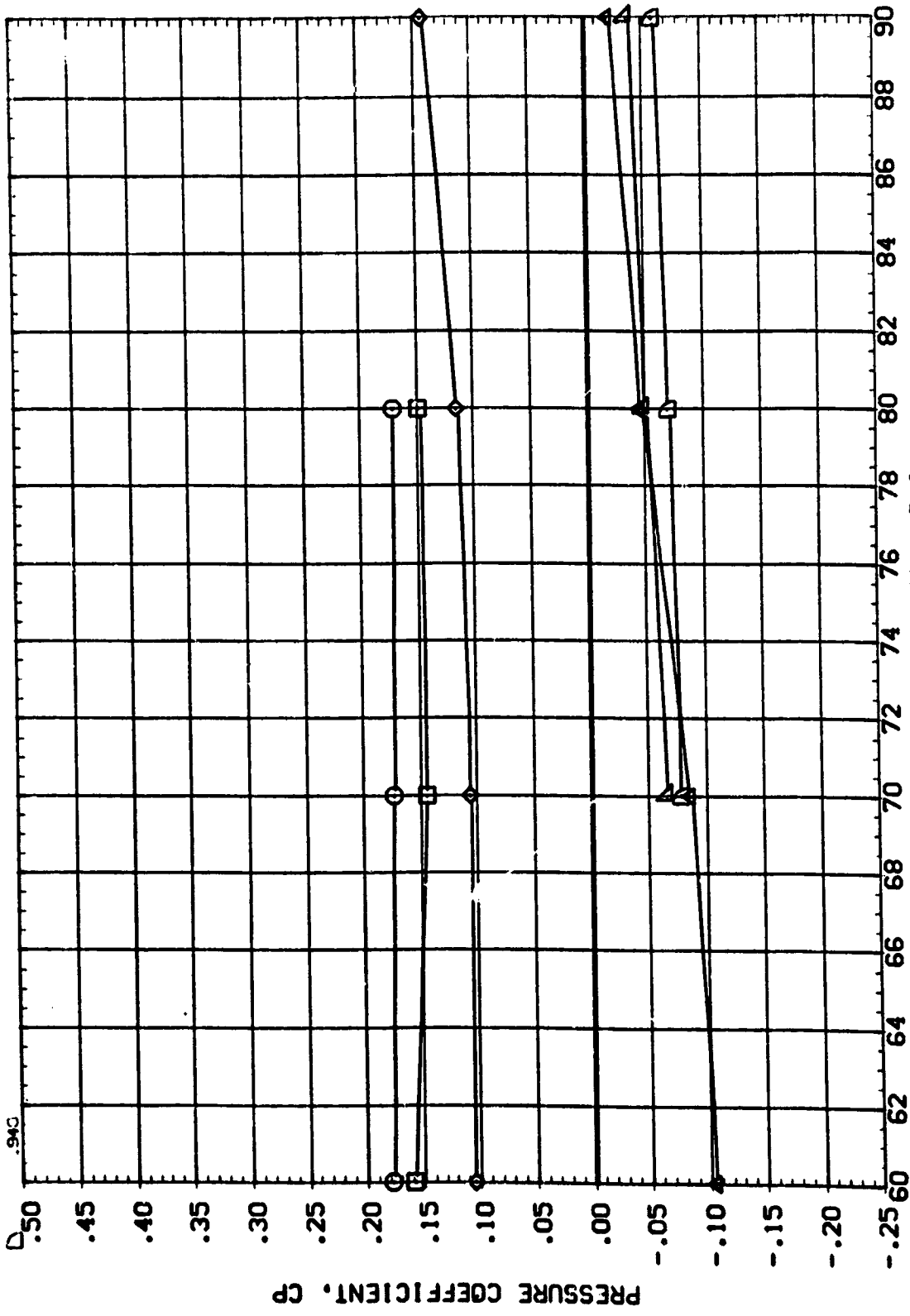


GA64 ORBITER ENTRY CONFIGURATION

(RG4004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL M/L ALPHA MACH
○ .087 9.000 2.500
□ .126
◇ .164
△ .862
▽ .900
◇ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

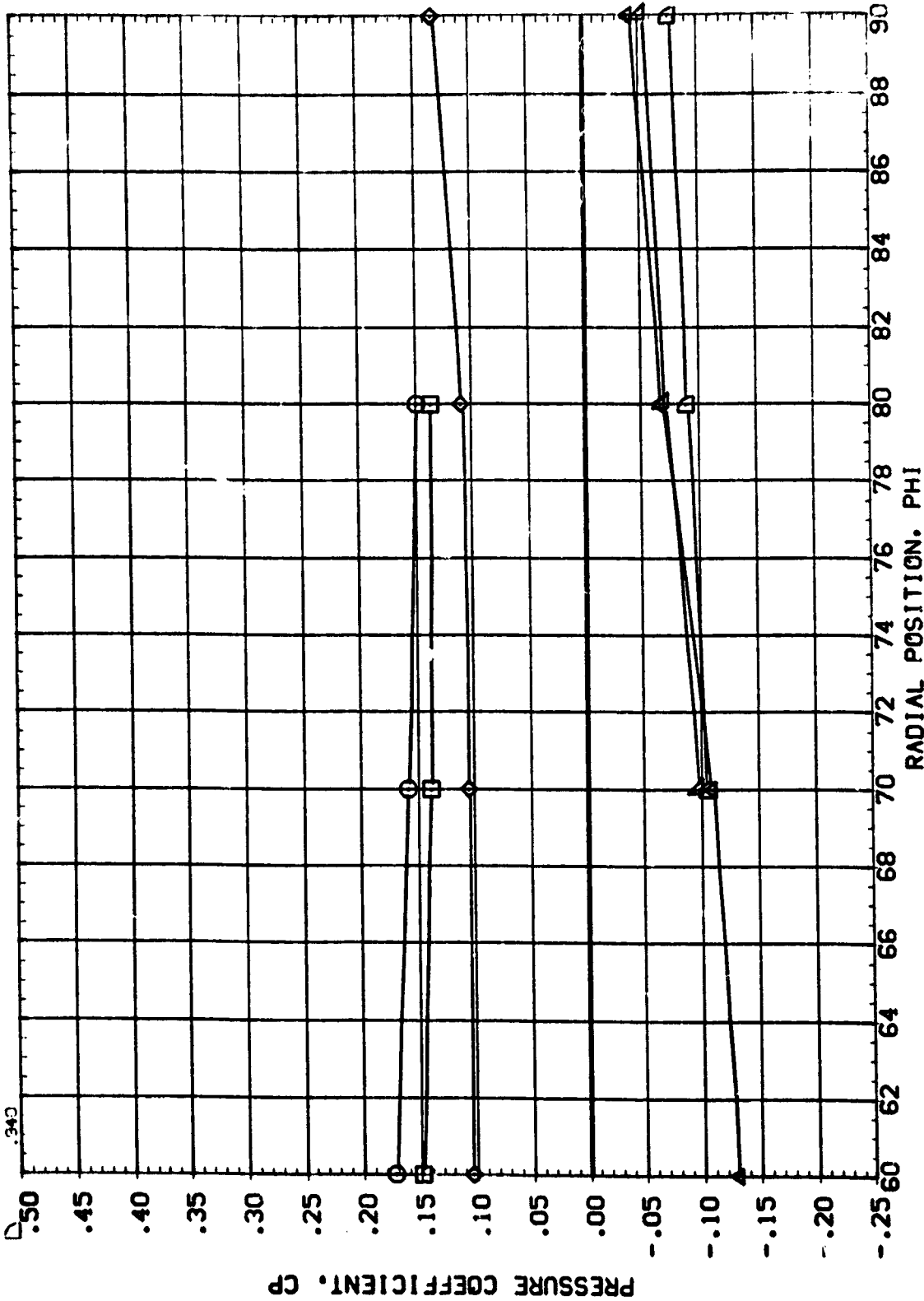
OAG4 ORBITER ENTRY CONFIGURATION

(RG4004)

PARAMETRIC VALUES
 .000 ELEVON -15.000

SYMBOL X/L ALPHA MACH
 ○ .087 10.000 2.500
 □ .126
 △ .164
 ◇ .862
 ▽ .900
 ▽ .940

BETA



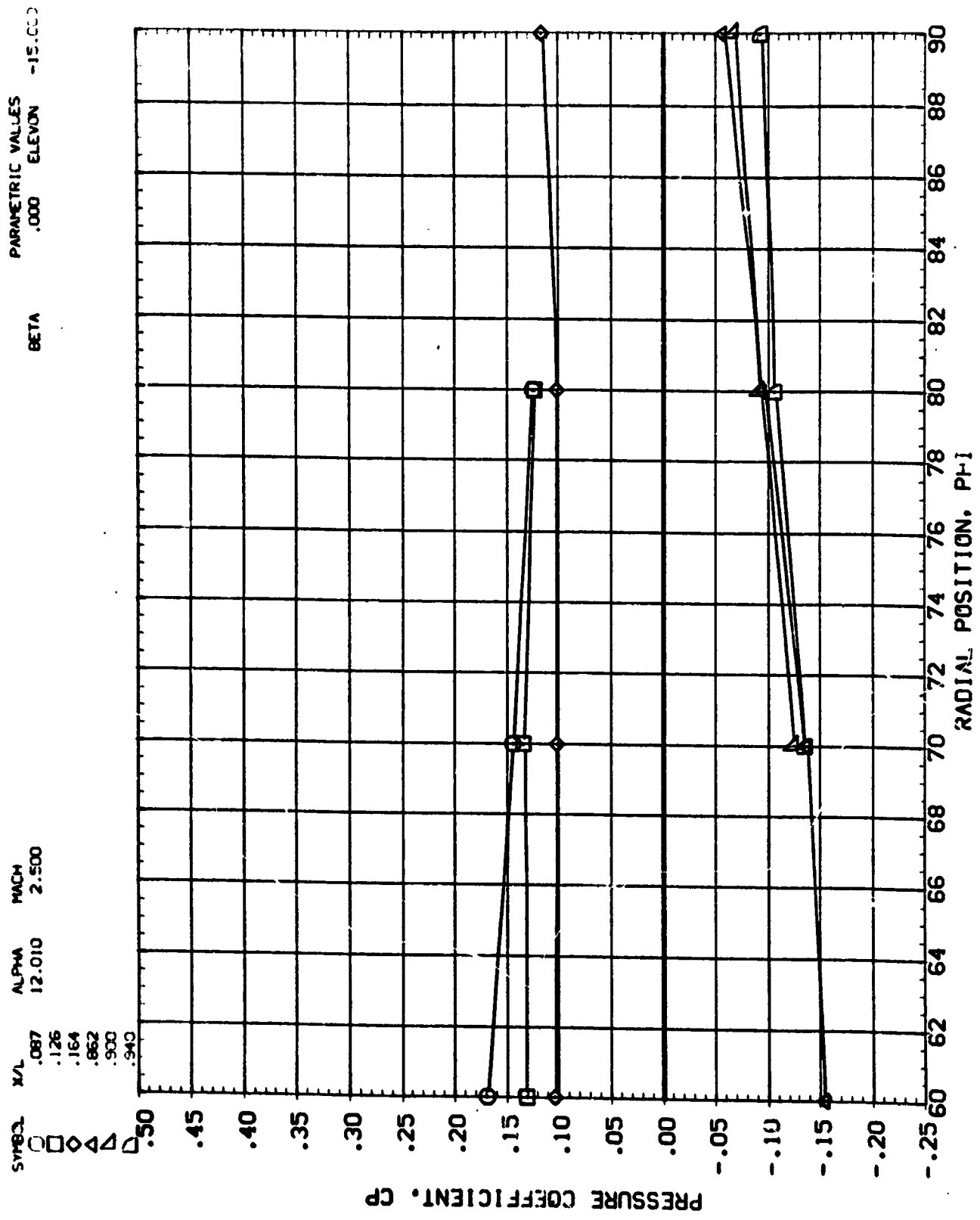
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



0A64 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL X/L ALPHA MACH BETA PARAMETRIC VALUES
○ .087 12.010 2.500
□ .126
◇ .164
△ .862
▽ .900
▽ .940

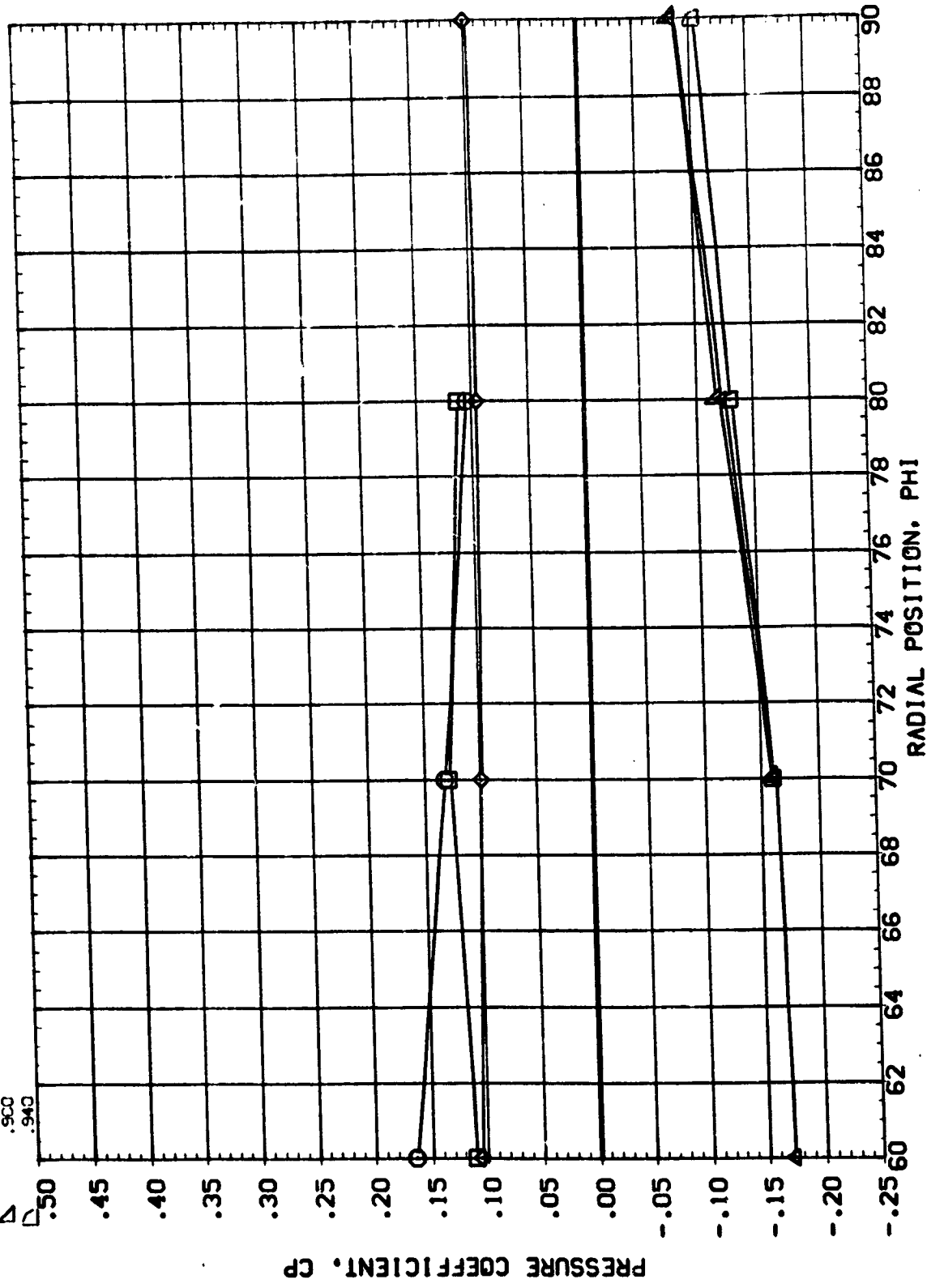


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL X/L ALPHA MACH
○ .087 14.000 2.500
□ .126
◇ .164
△ .862
▽ .900
▽ .940

BETA .000 ELEVON -15.000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

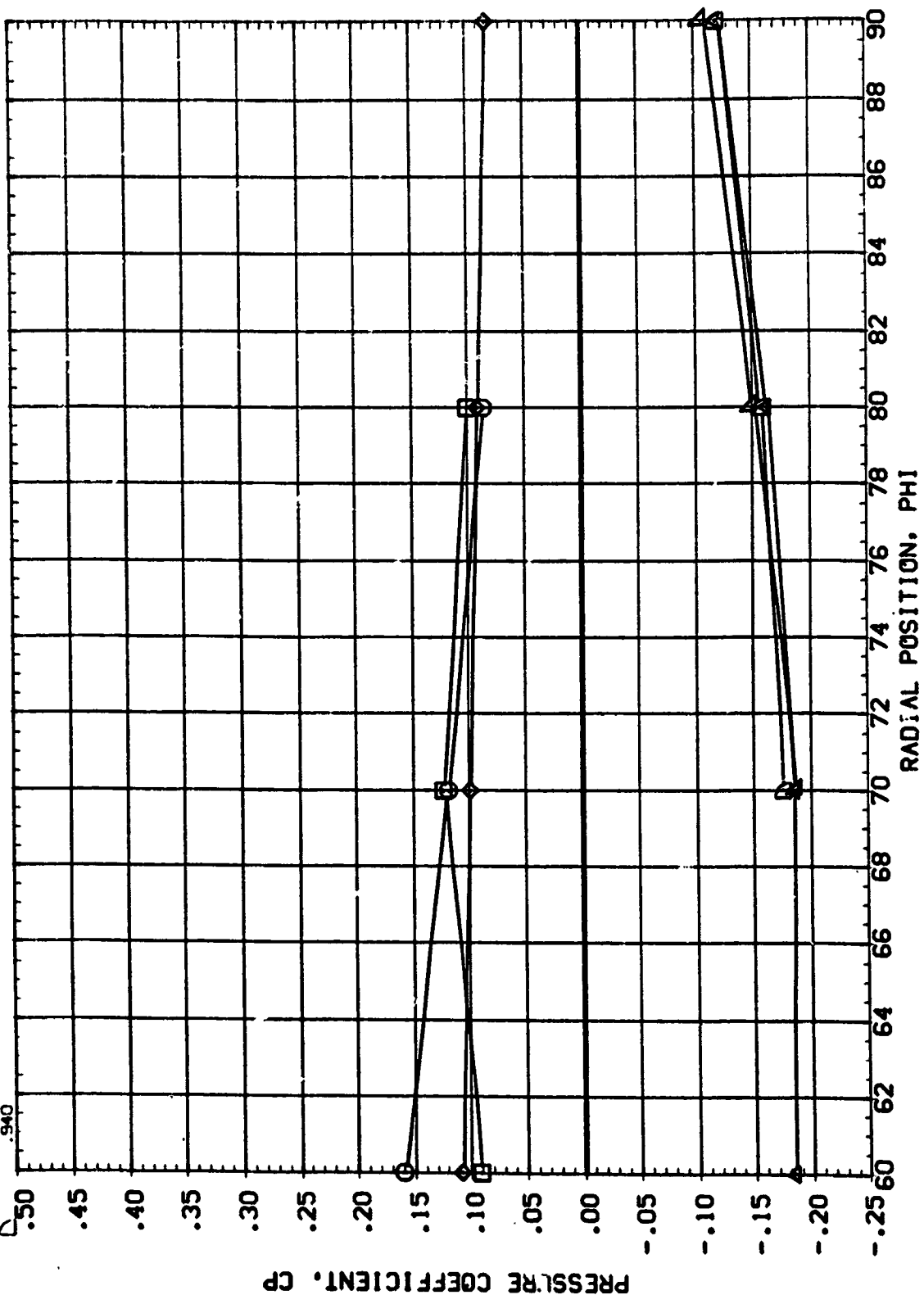


0A64 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL X/L ALPHA MACH BETA PARAMETRIC VALUES ELEVON -15.000

.087
.126
.154
.862
.900
.940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

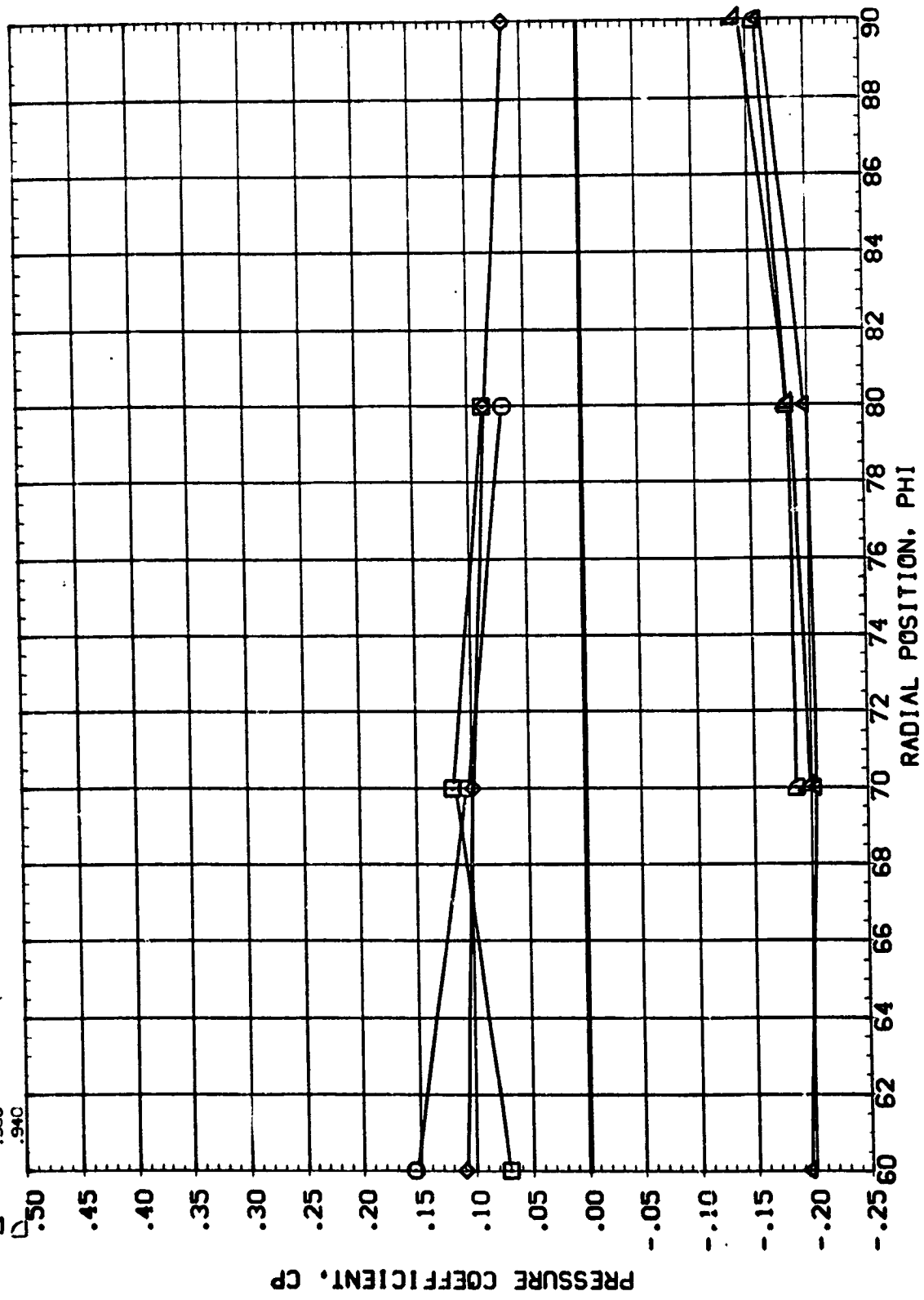
(R04004)

OAG4 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

ALPHA 18.000 MACH 2.500

SYMBOL X/L
○ .087
◇ .126
△ .164
▽ .862
□ .900
◇ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

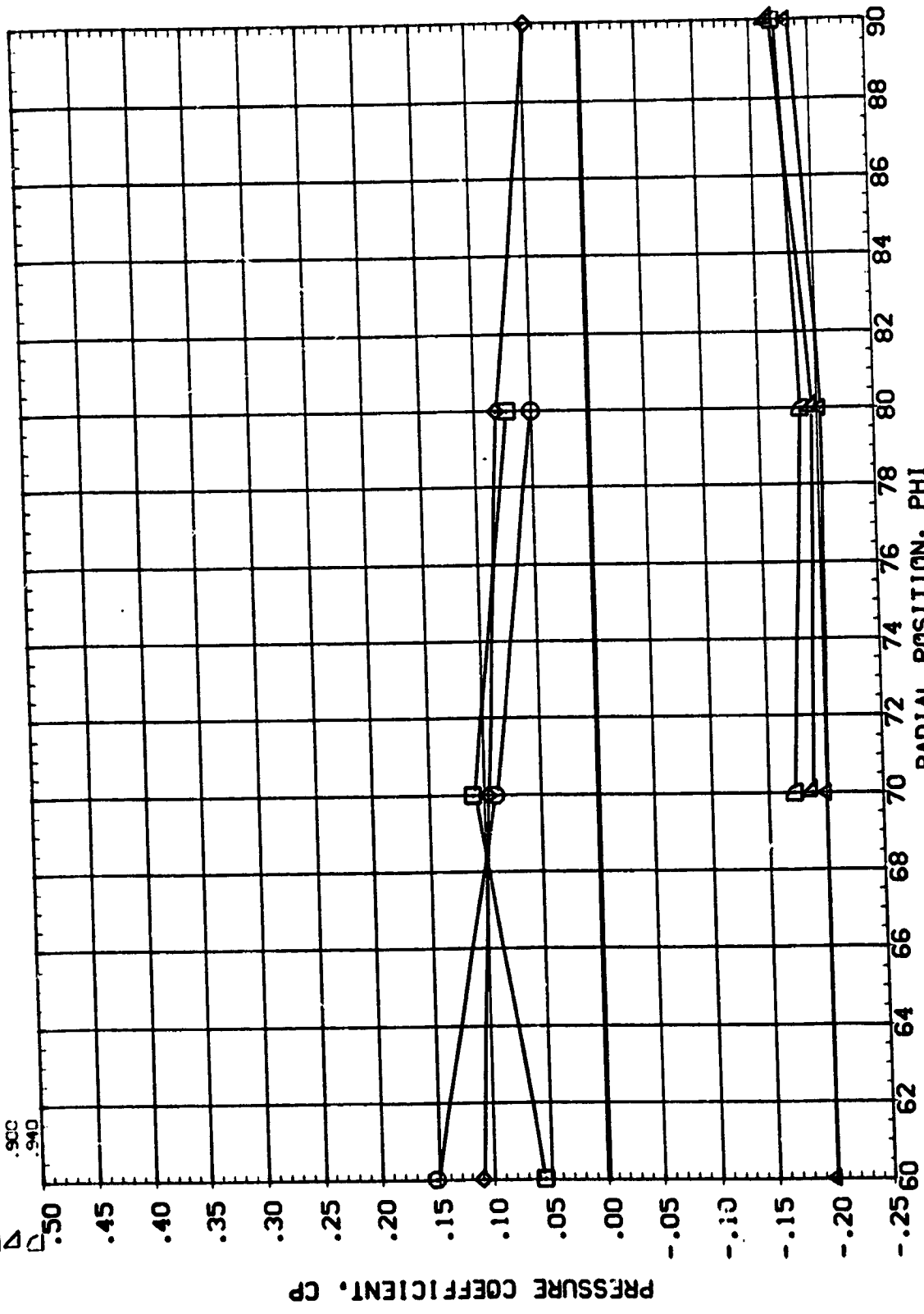


OAG4 ORBITER ENTRY CONFIGURATION

(R04004)

BETA .000 ELEVON -15.000
PARAMETRIC VALUES

SYMBOL X/L ALPHA MACH
□ .087 20.000 2.500
◇ .126
△ .164
▽ .862
○ .900
◇ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

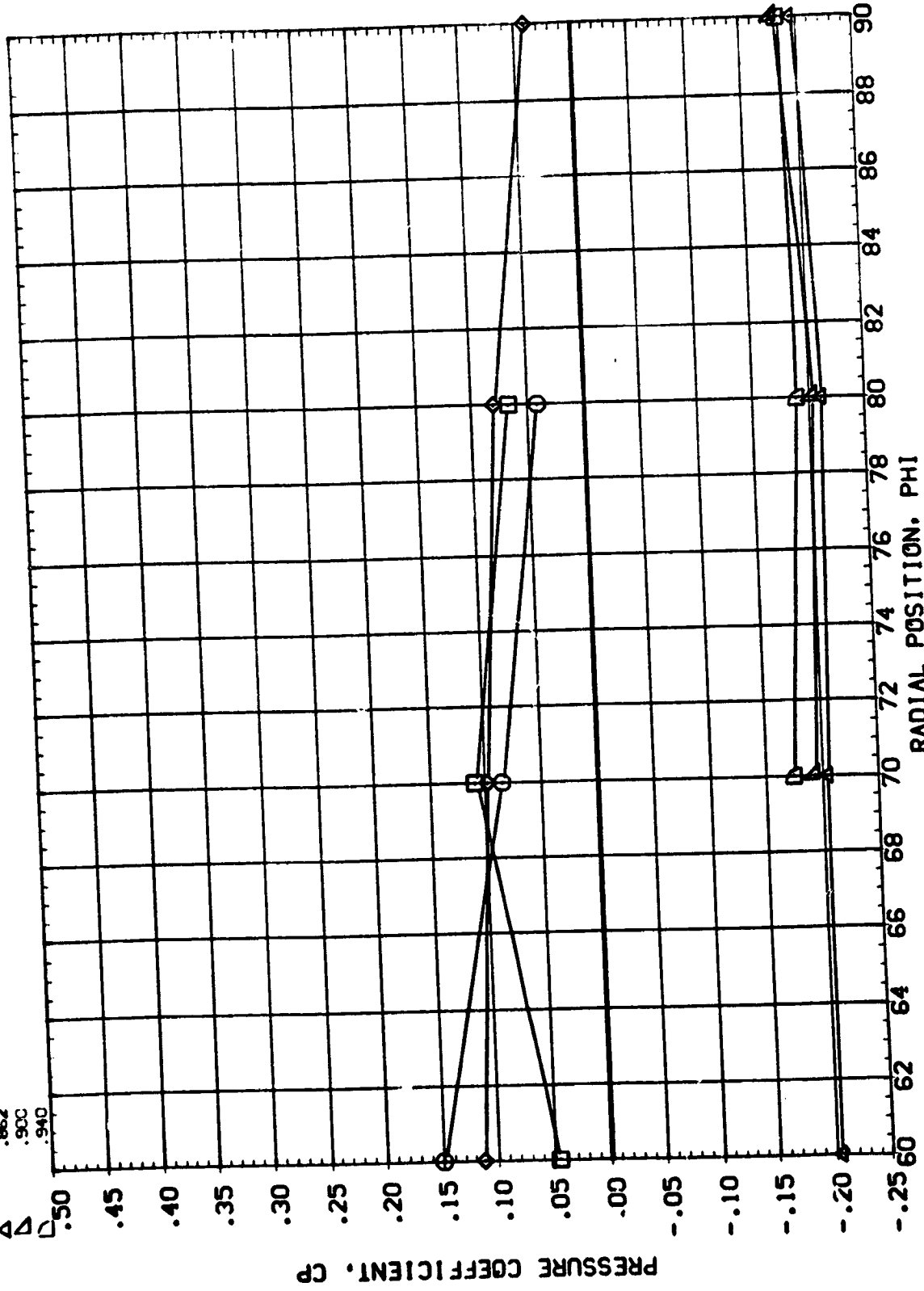
(R04004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

OA64 ORBITER ENTRY CONFIGURATION

ALPHA 20.980 MACH 2.500

SYMBOL X/A
○ .087
□ .126
◇ .164
△ .862
▽ .900
◁ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



0A64 ORBITER ENTRY CONFIGURATION

(RQ4004)

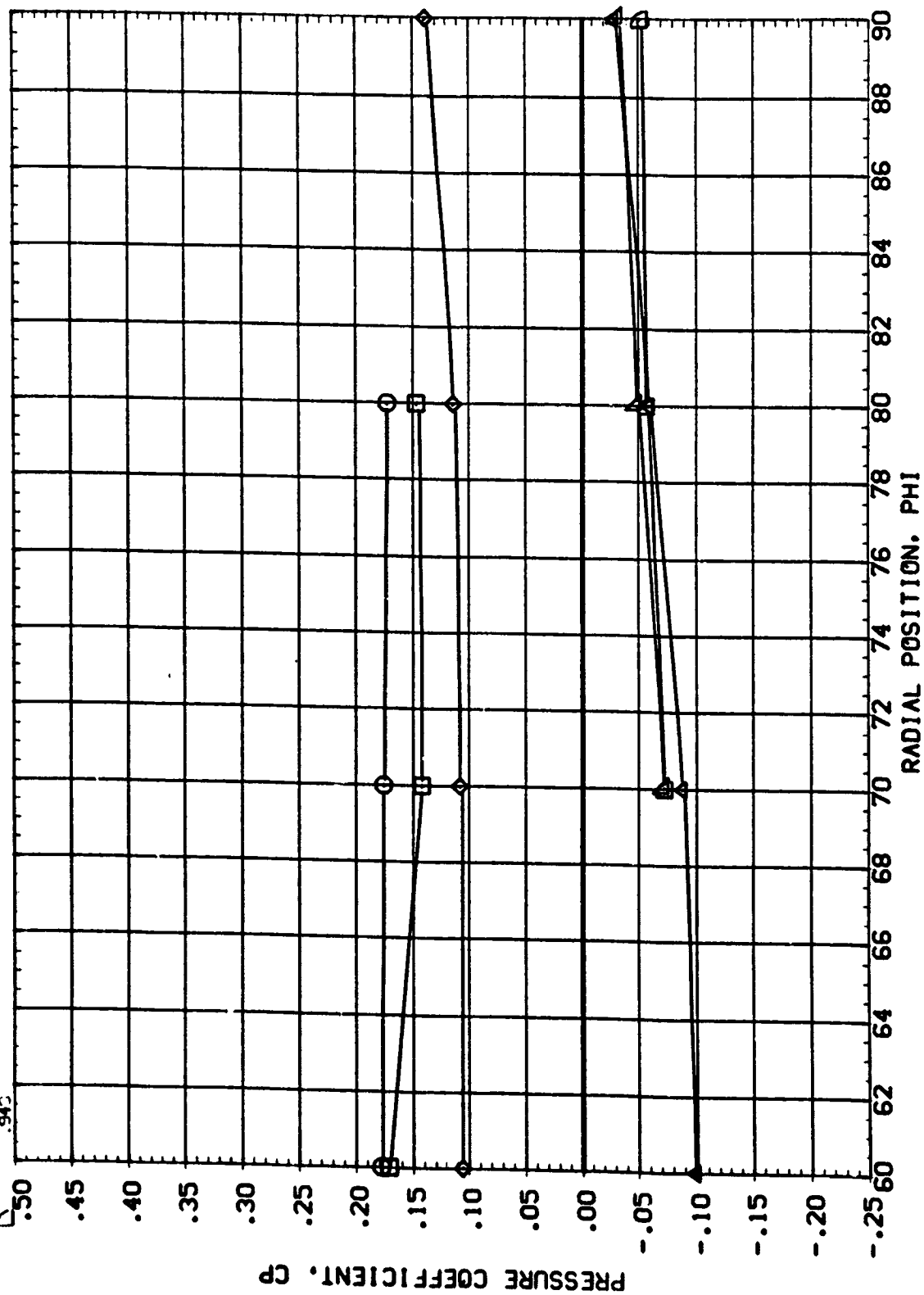
PARAMETRIC VALUES
BETA .000 ELEVON -15.00C

ALPHA 8.000 MACH 2.950

X/Z
.087
.126
.164
.862
.900
.940

SYMBOL

○ □ △ ▽



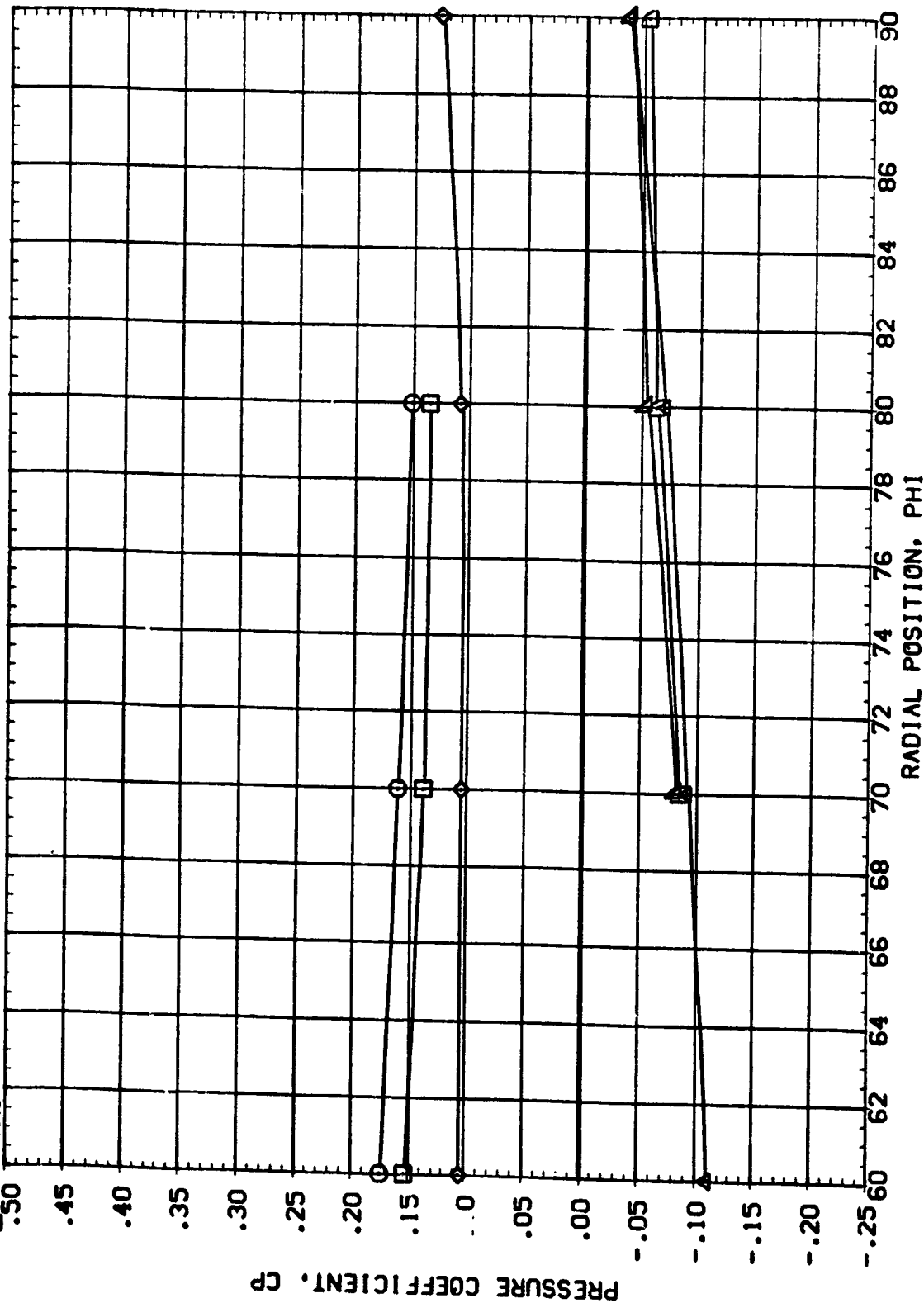
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(R04004)

PARAMETRIC VALUES
 BETA .000 ELEVON -15.000

SYMBOL X/L ALPHA MACH
 □ .087 10.000 2.950
 △ .126
 △ .164
 △ .862
 △ .900
 △ .540



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



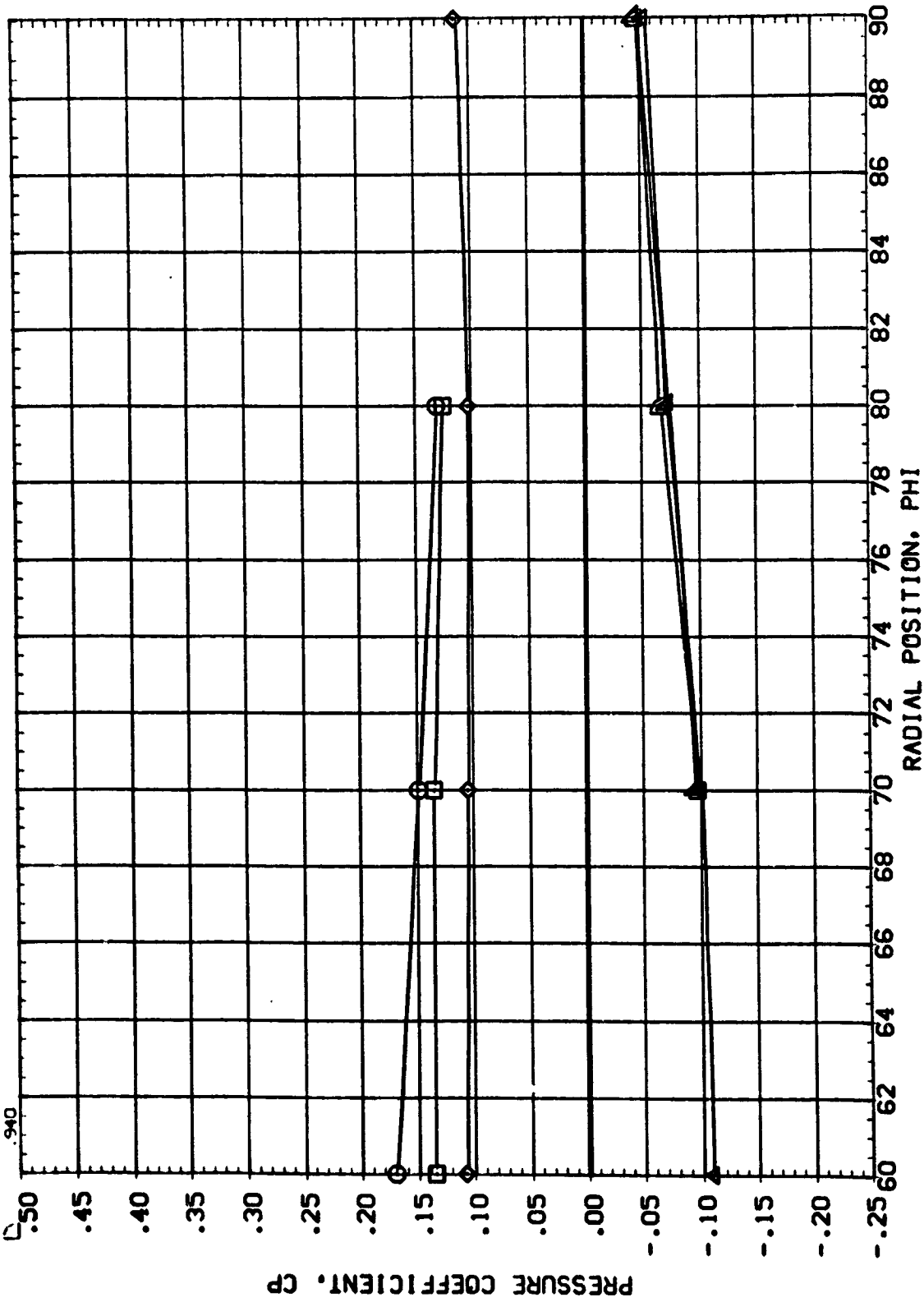
0A64 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

ALPHA 12.010 MACH 2.950

SYMBOL X/L
○ .087
□ .126
◇ .164
△ .862
▽ .900
▽ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

0A64 ORBITER ENTRY CONFIGURATION

(R040004)

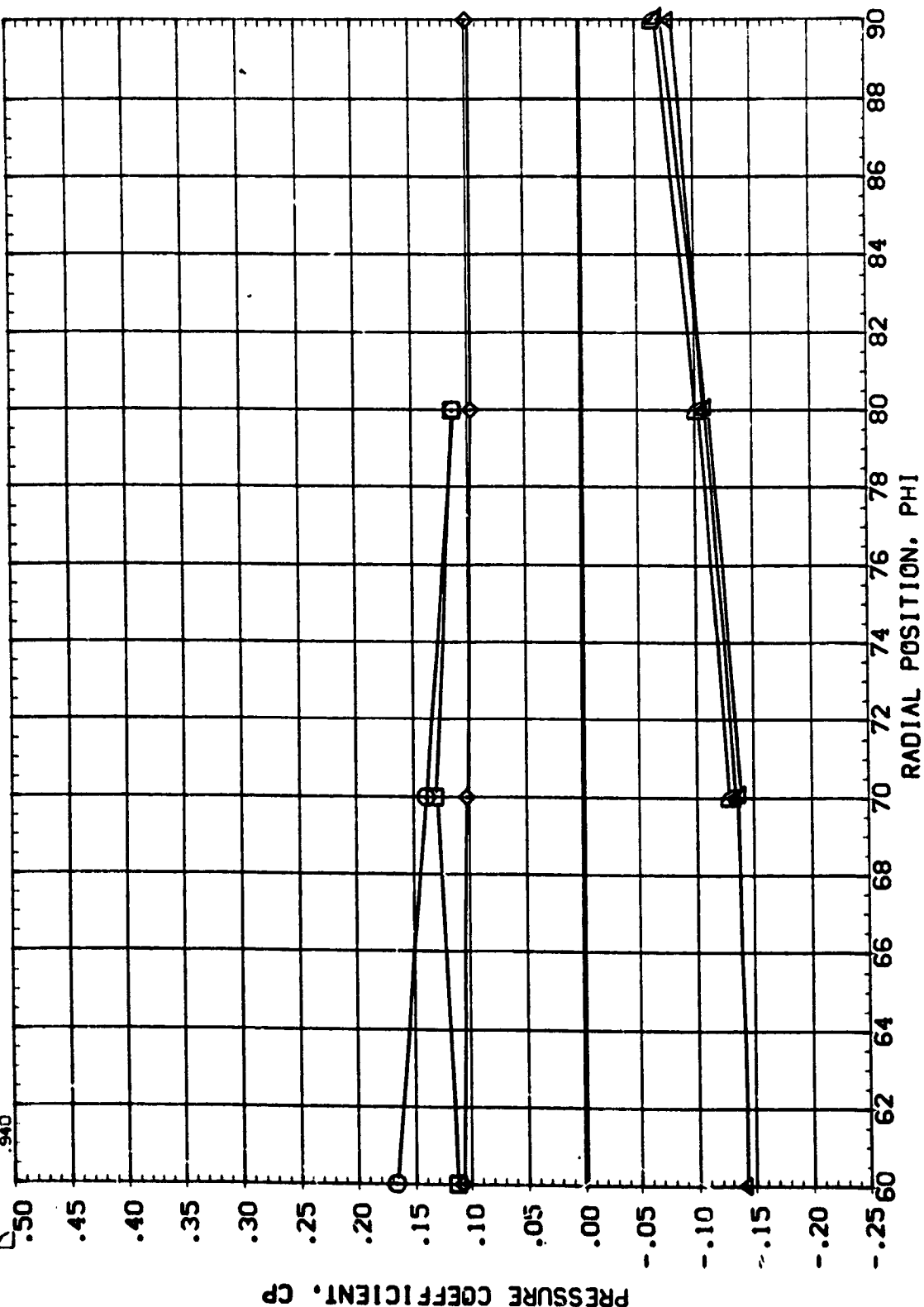
PARAMETRIC VALUES
 .000 BETA ELEVON -15.000

ALPHA .000 2.950

X/L
 .097
 .126
 .164
 .862
 .900
 .940

SYMBOL

□
 ◇
 △
 ▽
 ○



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

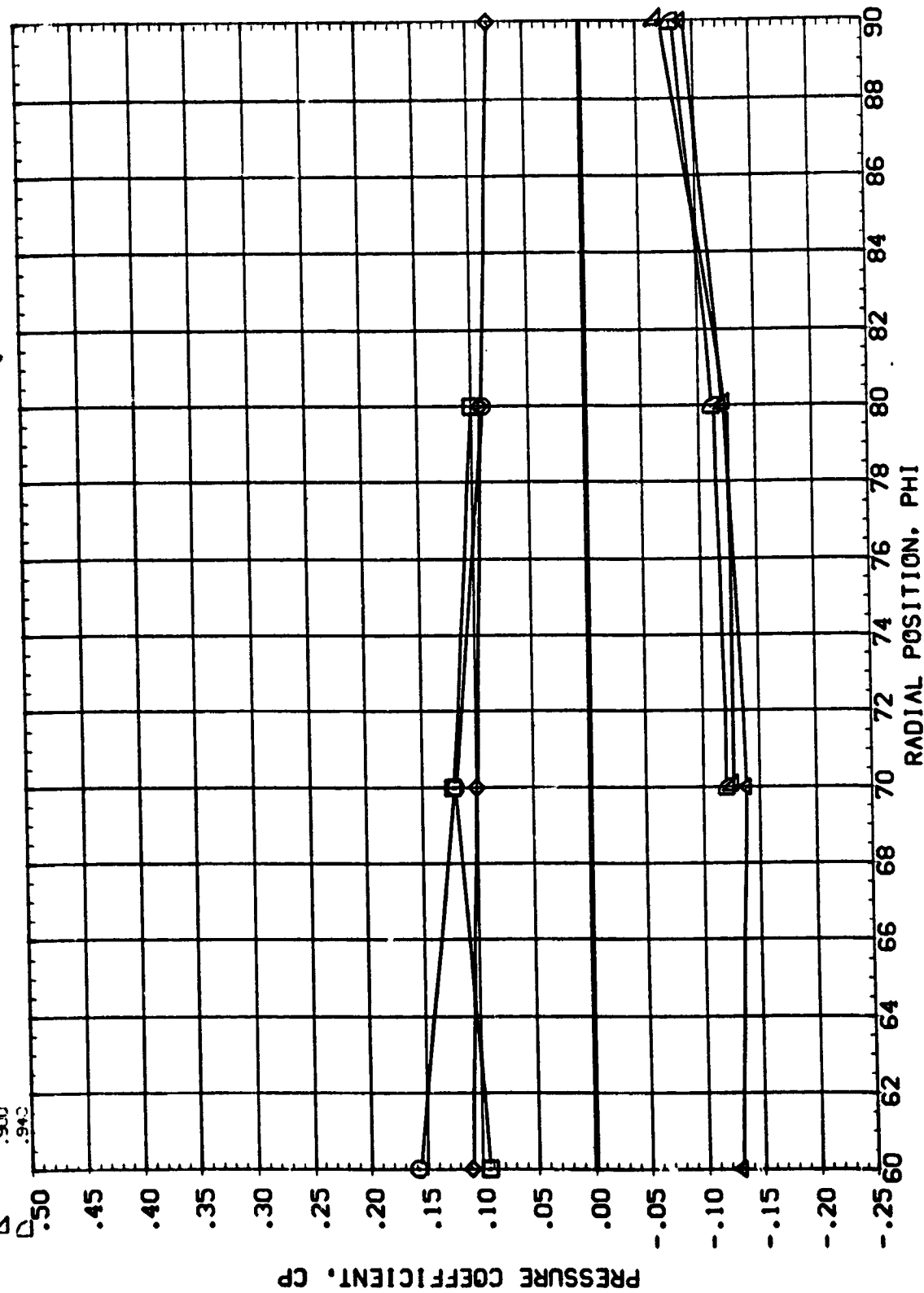


GA54 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL X/L ALPHA MACH
□ .087 16.010 2.950
◇ .126
△ .164
▽ .662
○ .900
◇ .942



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

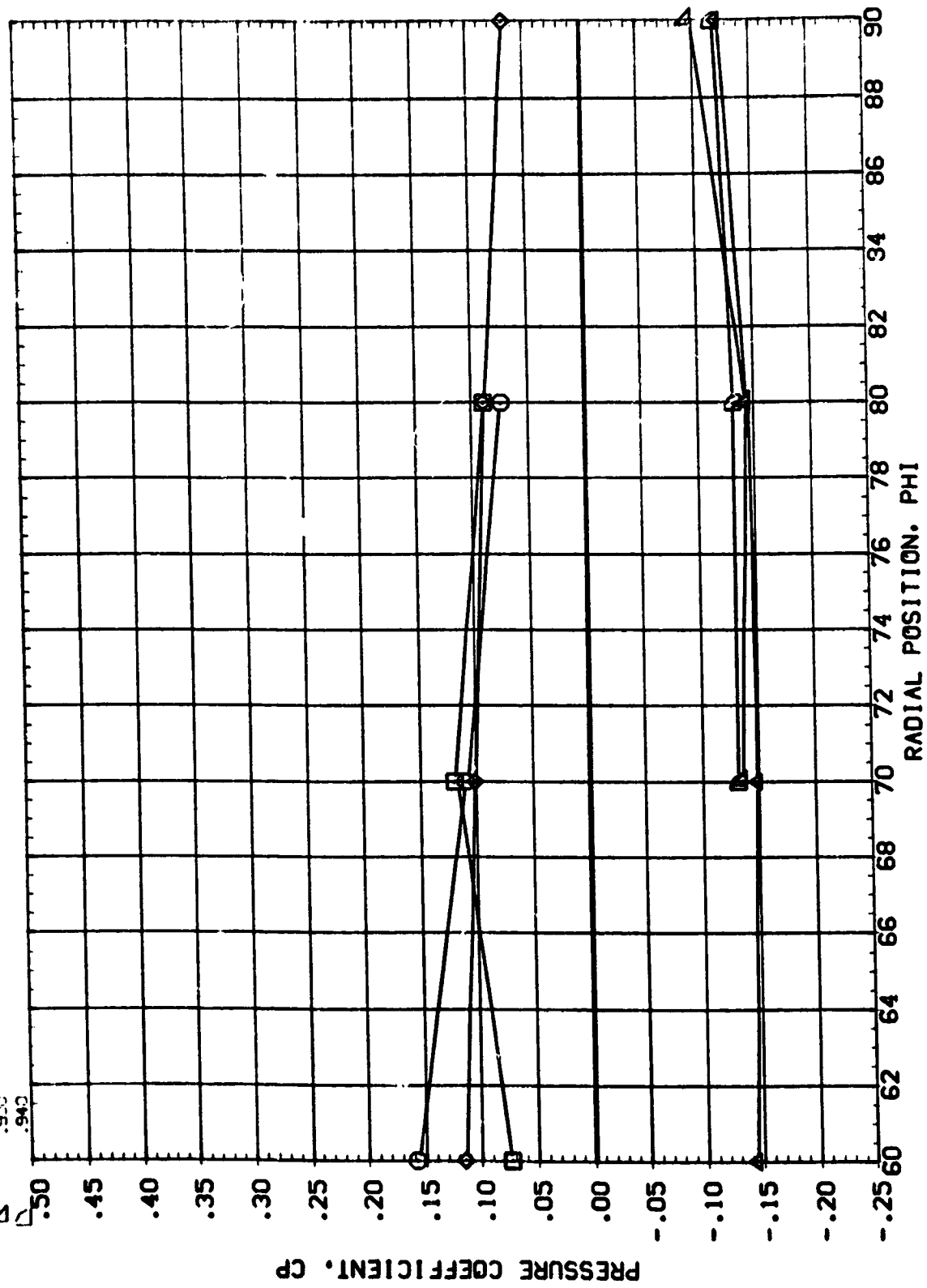
GA64 ORBITER ENTRY CONFIGURATION

(R04004)

PARAMETRIC VALUES
 BETA .000 ELEVON -15.000

ALPHA 18.000 MACH 2.950

SYMBOL X/L .087
 □ .125
 ○ .164
 △ .862
 ▽ .900
 ◇ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



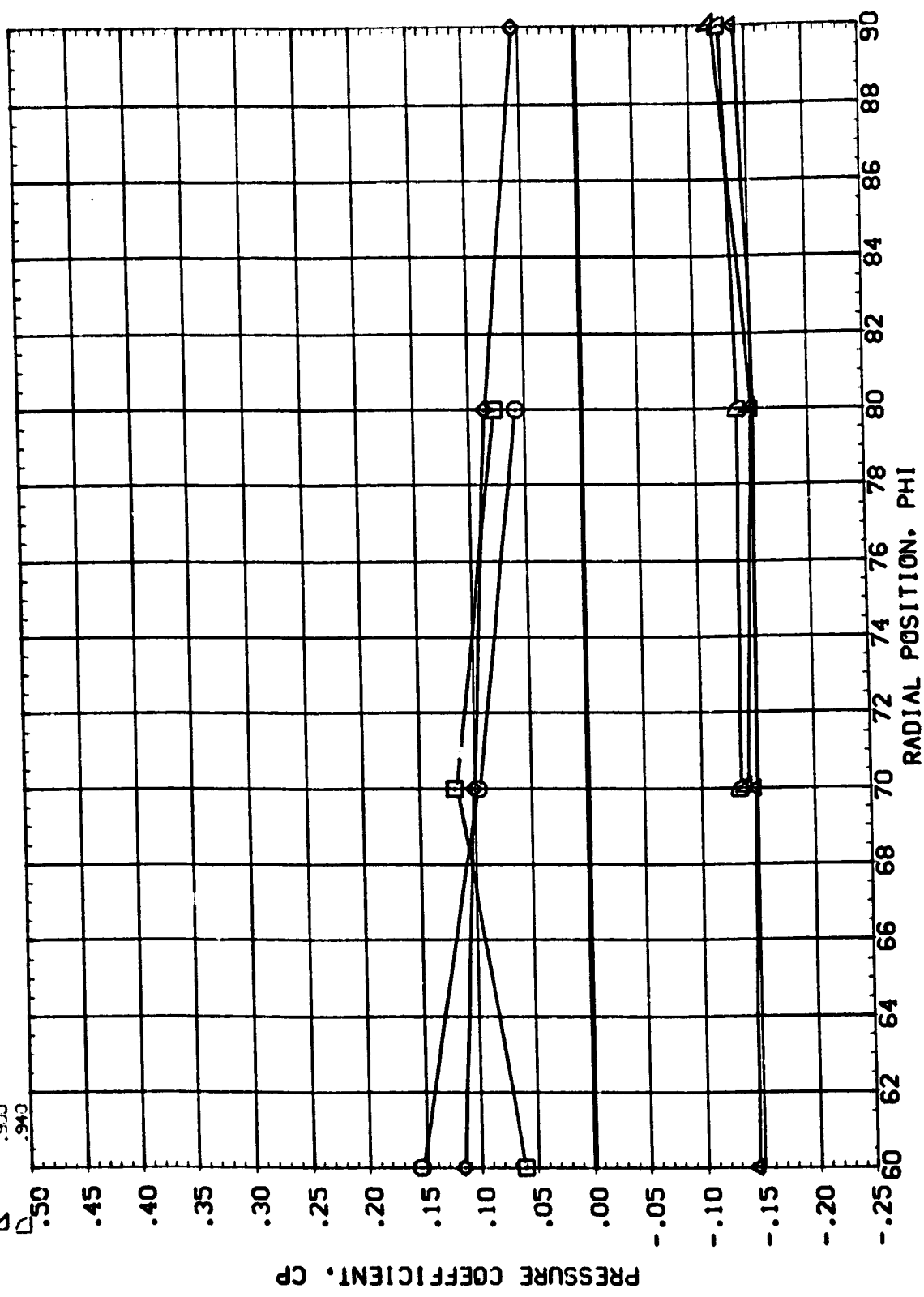
OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

ALPHA 20.000 MACH 2.950

SYMBOL X/L
□ .087
○ .126
△ .164
▽ .862
◇ .900
◇ .940



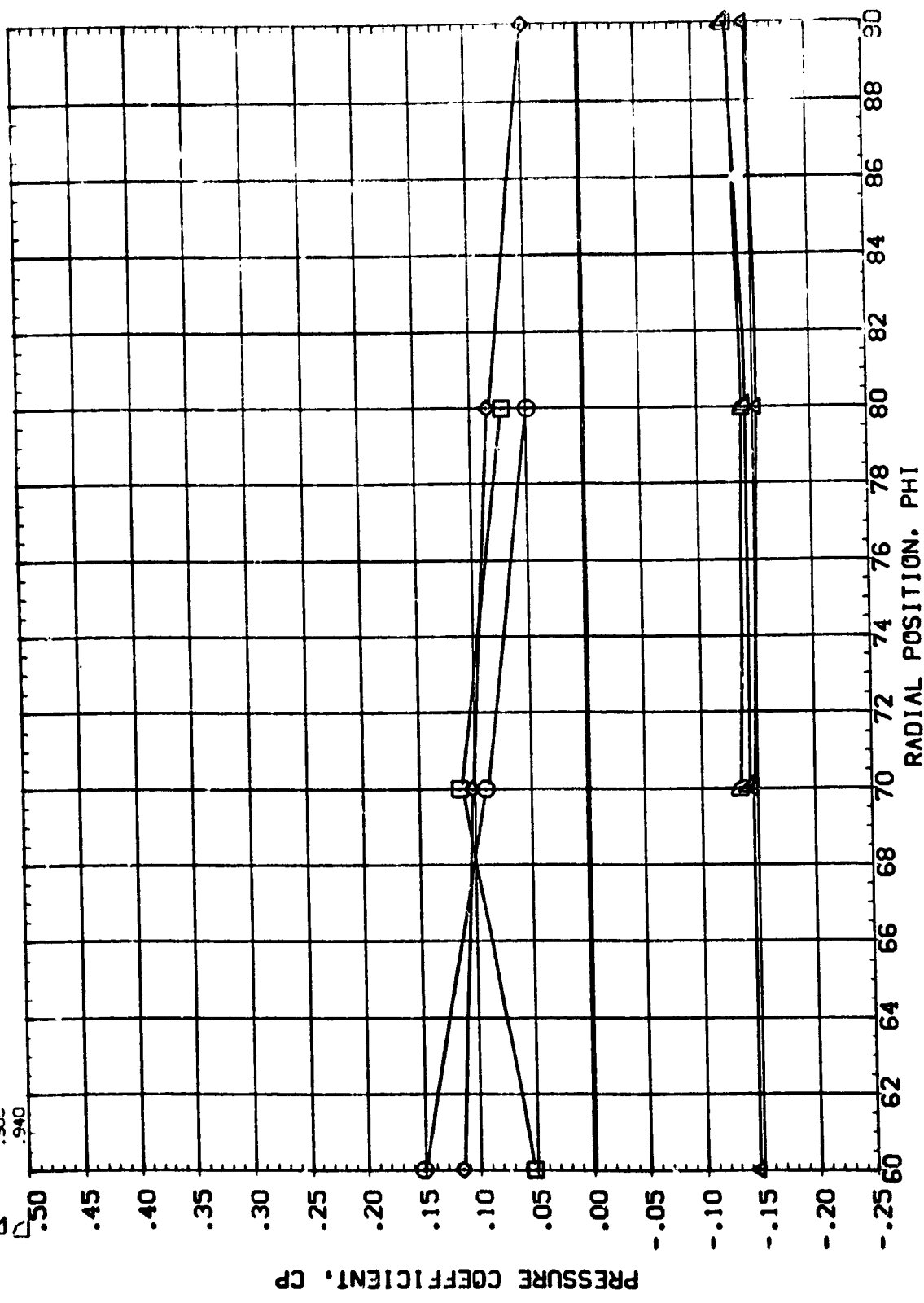
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(RQ40004)

PARAMETRIC VALUES
 BETA .000 ELEVATION -15.000

SYMBOL X/L ALPHA MACH
 □ .087 20.950 2.950
 ○ .126
 ◇ .164
 △ .862
 ▽ .900
 ▽ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



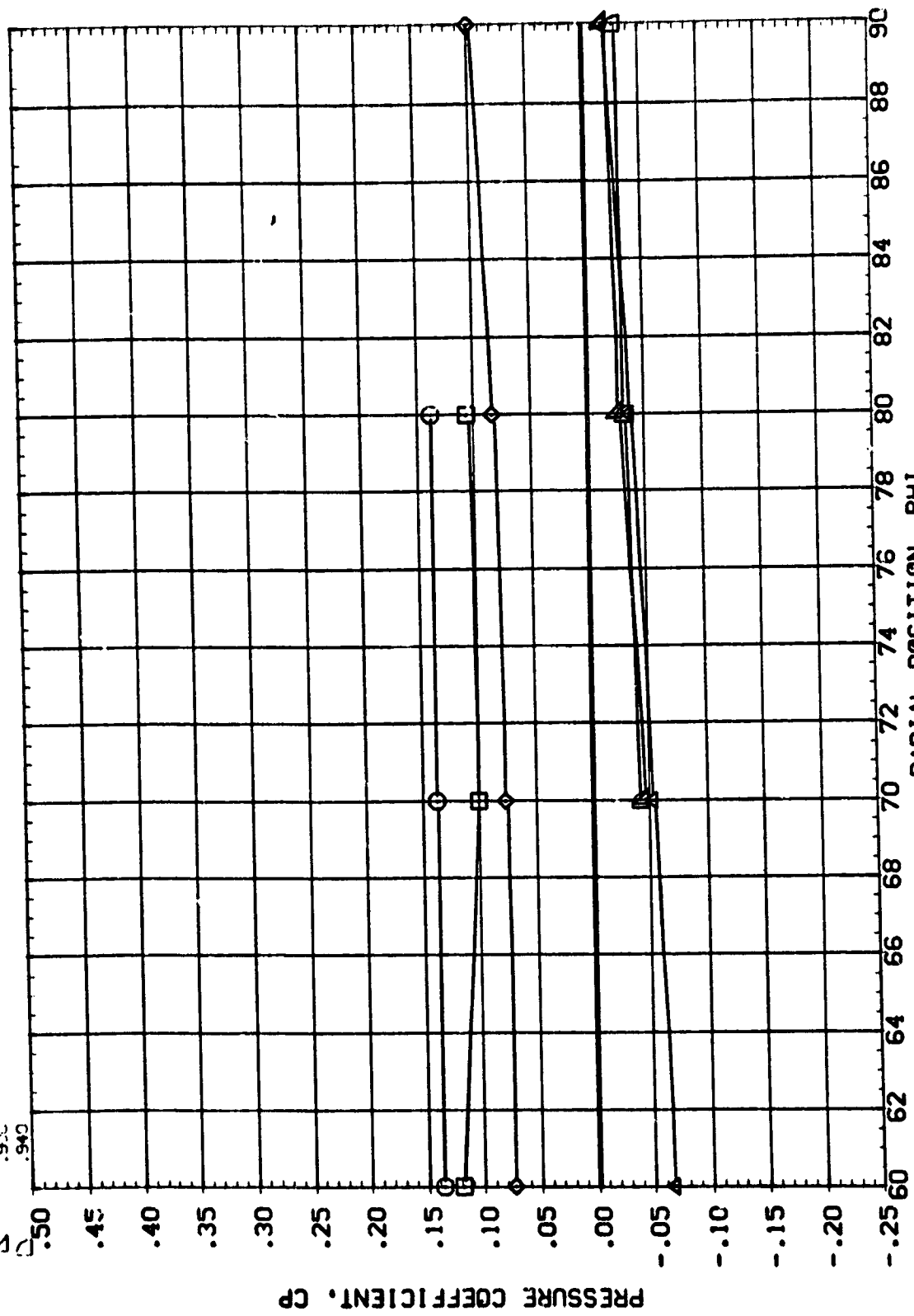
0A64 ORBITER ENTRY CONFIGURATION

(R04004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

ALPHA 7.990 MACH 4.000

SYMBOL X/L .087
○ .126
◇ .164
△ .652
□ .930
◇ .940



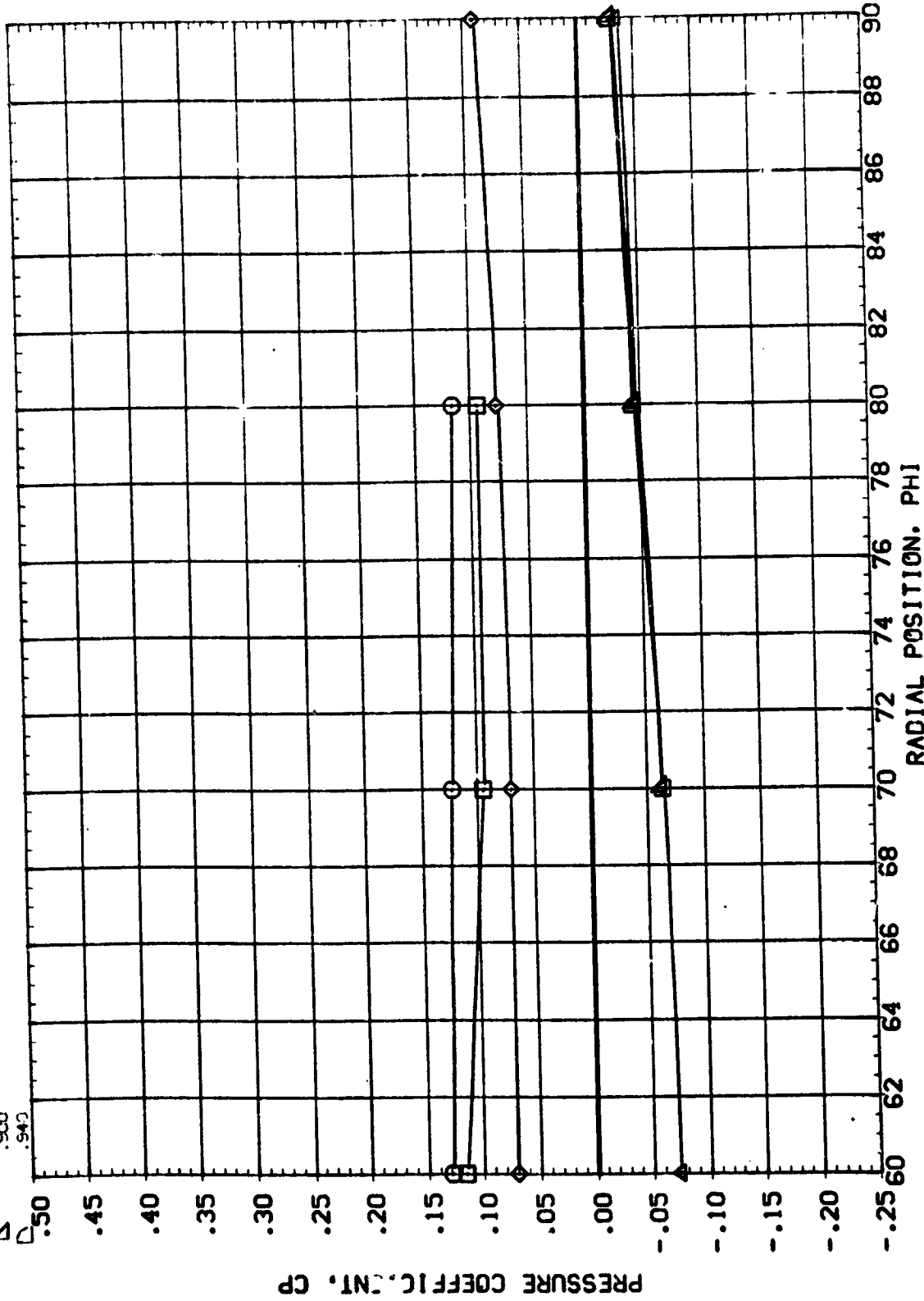
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES
ALPHA 10.000 MACH 4.000
BETA .000 ELEVON -15.000

SYMBOL X/L
□ .087
○ .126
◇ .164
△ .862
▽ .900
◇ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

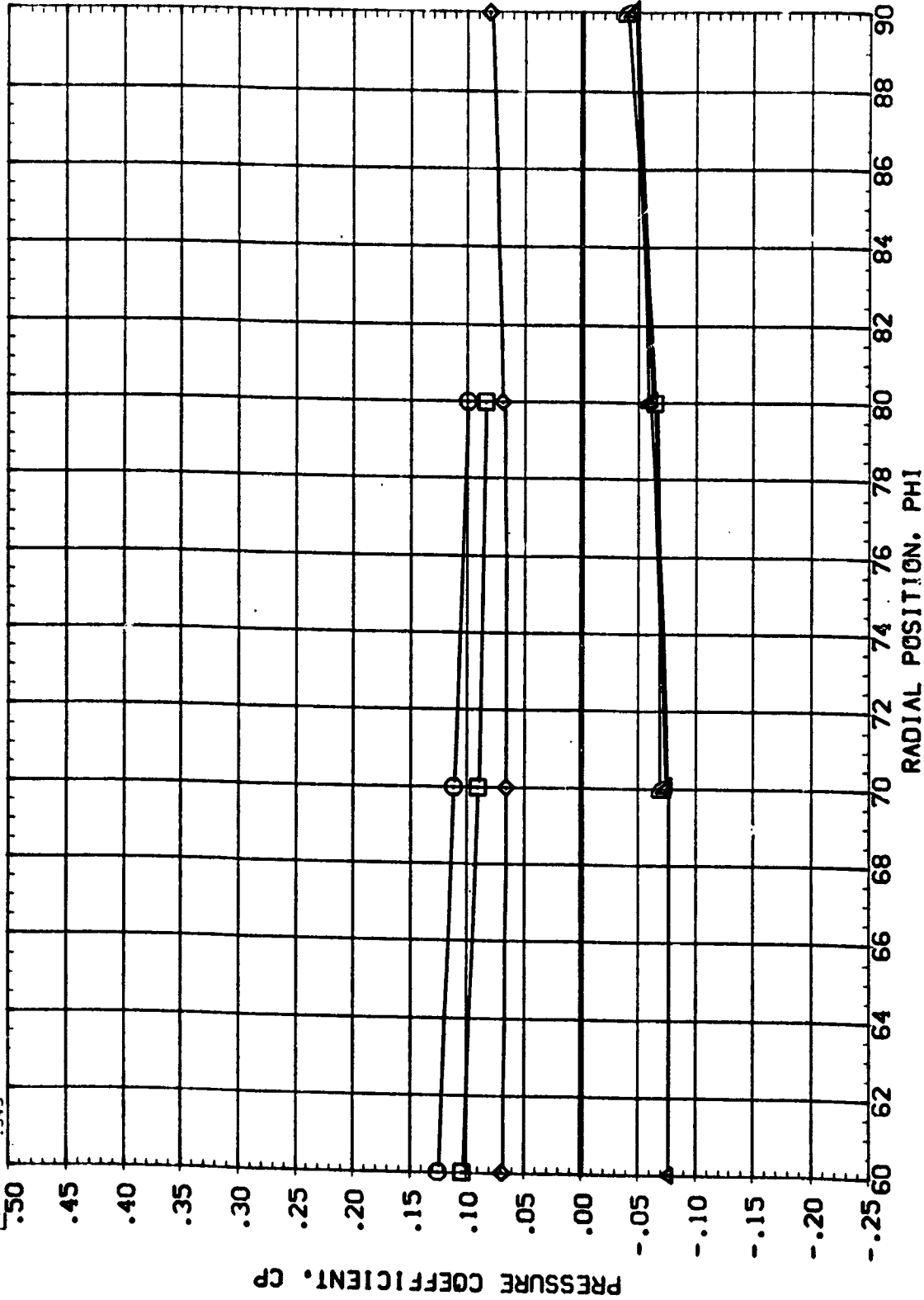


OAG4 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

YMBZ X/L ALPHA MACH
□ .087 12.010 4.000
◇ .126
△ .164
▽ .202
◁ .311
▷ .943



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

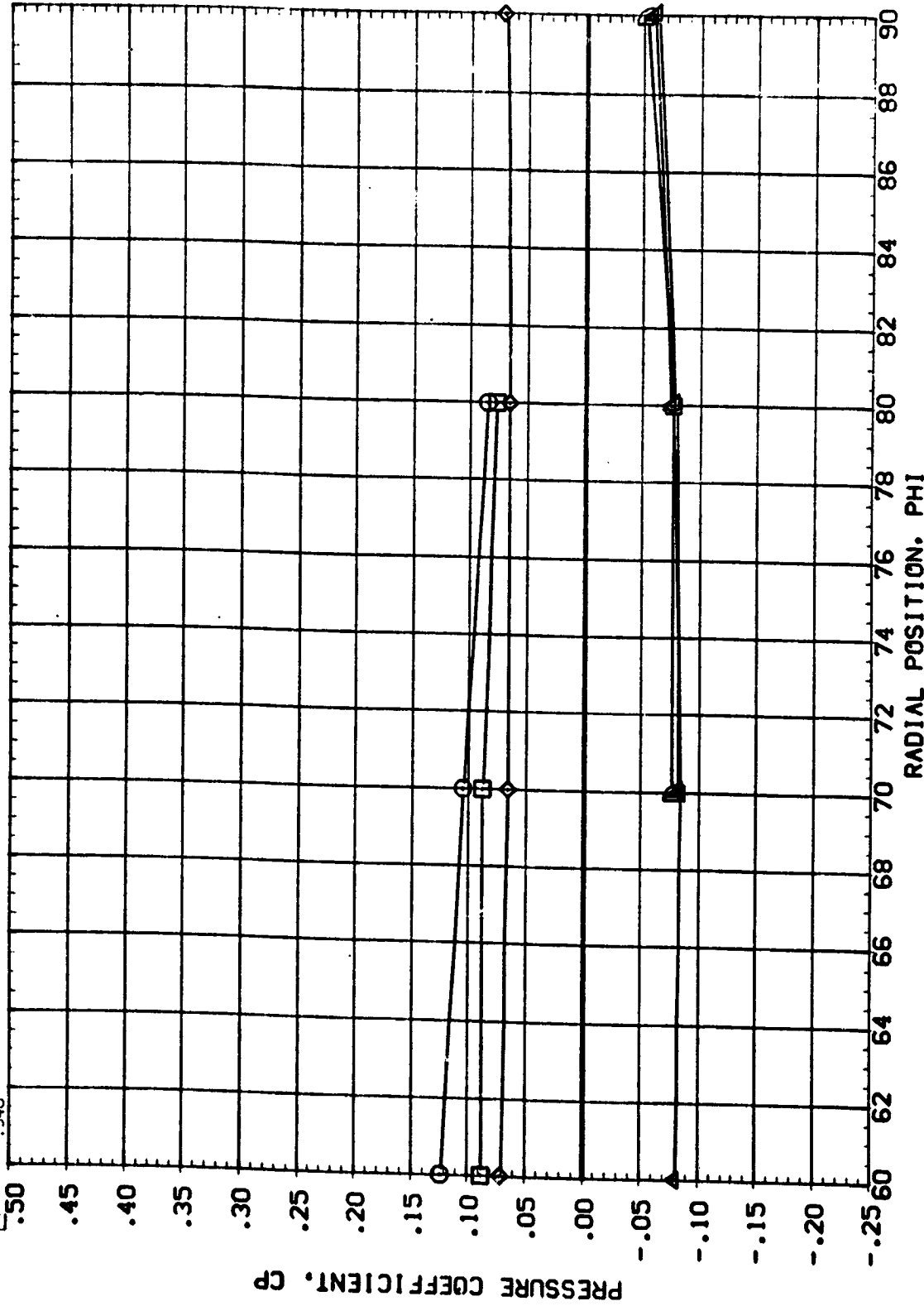
OAG4 ORBITER ENTRY CONFIGURATION

(RG4004)

PARAMETRIC VALUES
 BETA .000 ELEVON -15.000

ALPHA 14.000 MACH 4.000

SYMBOL X/L
 ○ .087
 □ .126
 △ .164
 ▽ .900
 ◊ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

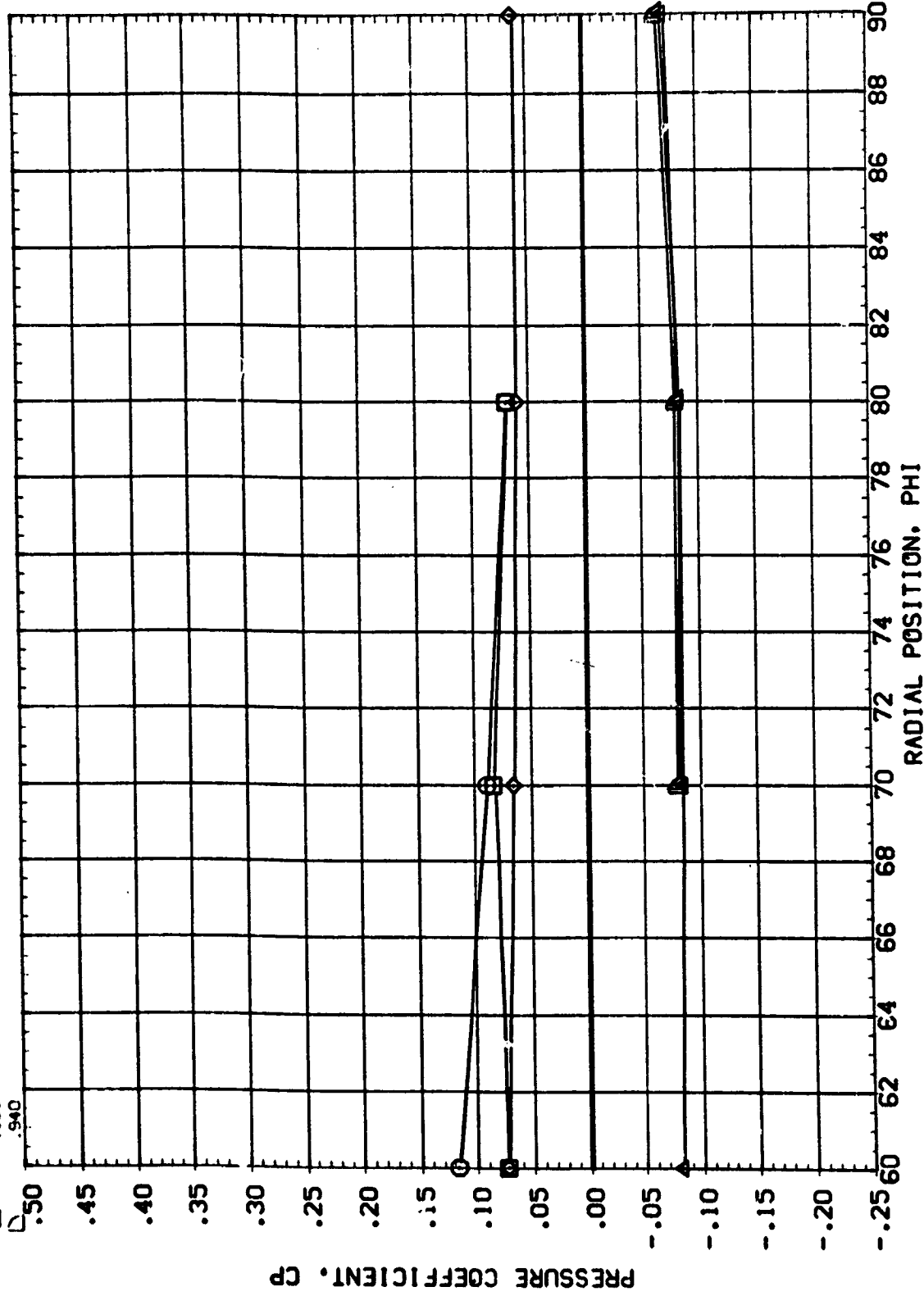


OA64 ORBITER ENTRY CONFIGURATION

(R04004)

PARAMETRIC VALUES
ALPHA 16.010 MACH 4.000
BETA .000 ELEVON -15.000

TYPE X/L
○ .087
□ .126
◇ .164
△ .862
▽ .900
▽ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

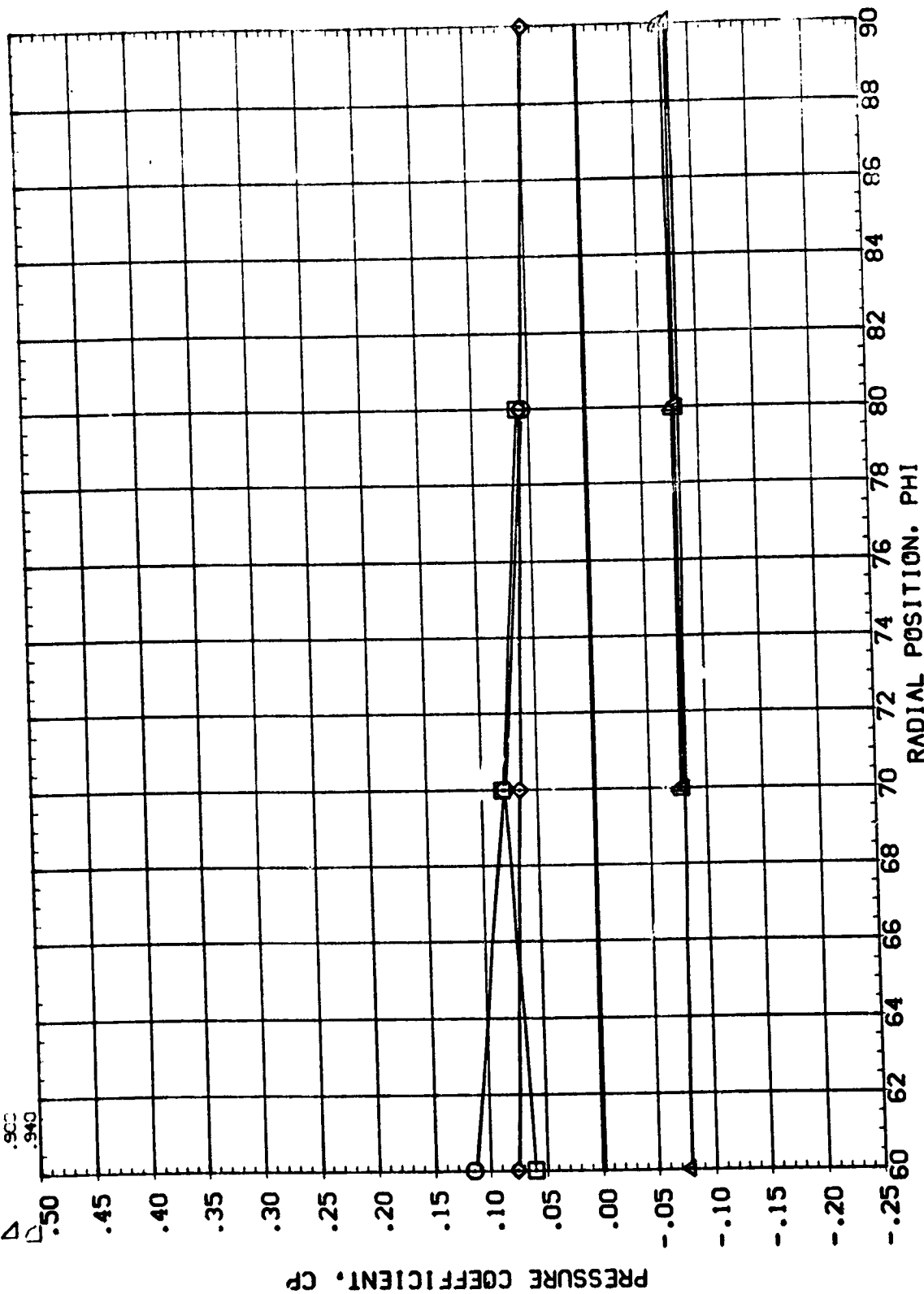
(R04004)

OAS4 ORBITER ENTRY CONFIGURATION

BETA .000 ELEVON -15.000
PARAMETRIC VALUES

ALPHA 18.010 MACH 4.000

SYMBOL X/L
□ .087
◇ .126
△ .164
▽ .862
○ .900
◇ .940



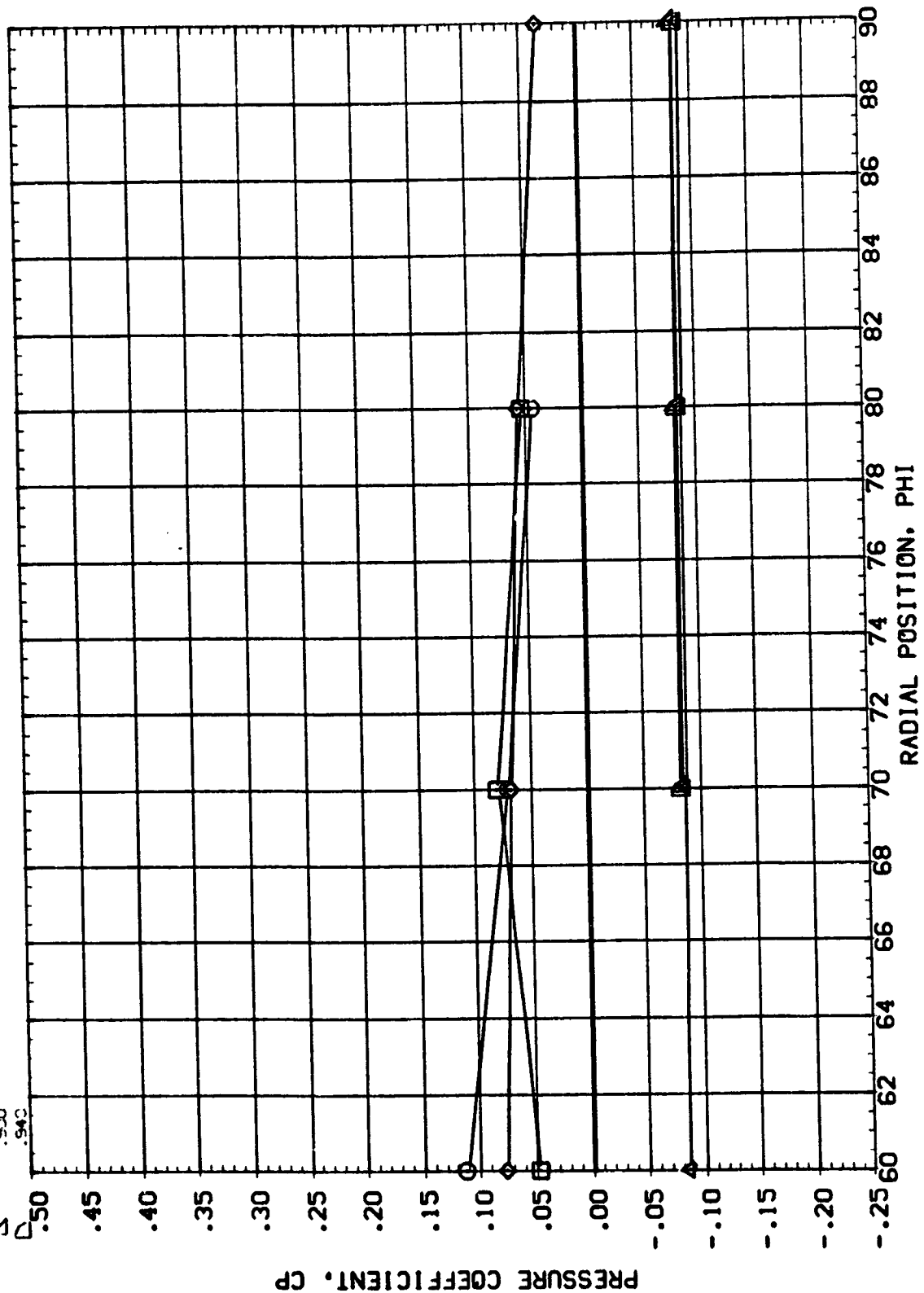
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

0A64 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES
 ALPHA 20.000 MACH 4.000
 BETA .000 ELEVON -15.000

SYMBOL X/L
 □ .087
 ◇ .126
 △ .164
 ▽ .862
 ▽ .900
 ▽ .940



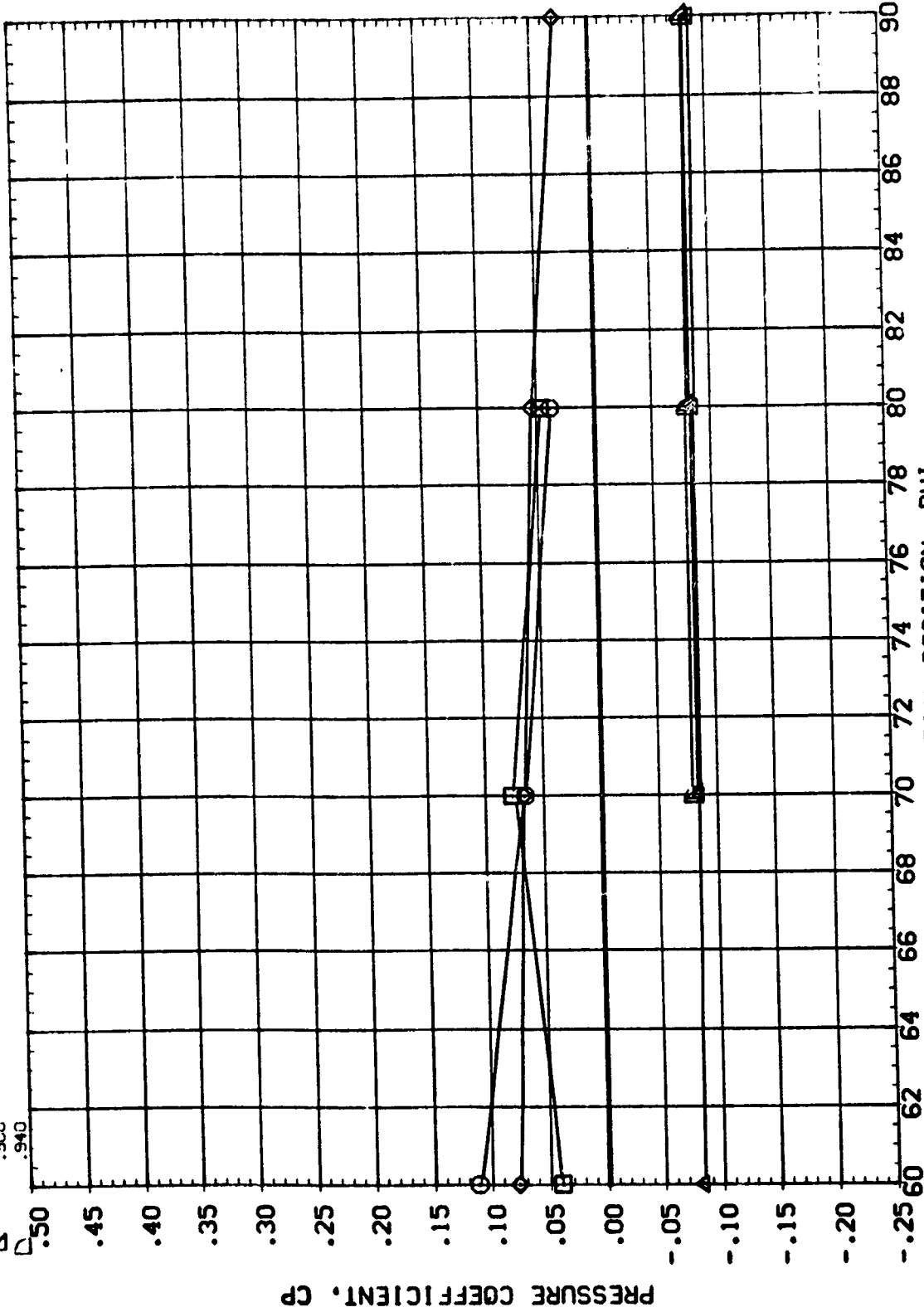
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(R040004)

BETA
PARAMETRIC VALUES
.000 ELEVON -15.000

SYMBOL X/L ALPHA MACH
□ .087 20.970 4.000
○ .126
◇ .164
△ .862
▽ .900
◇ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



OA64 ORBITER ENTRY CONFIGURATION

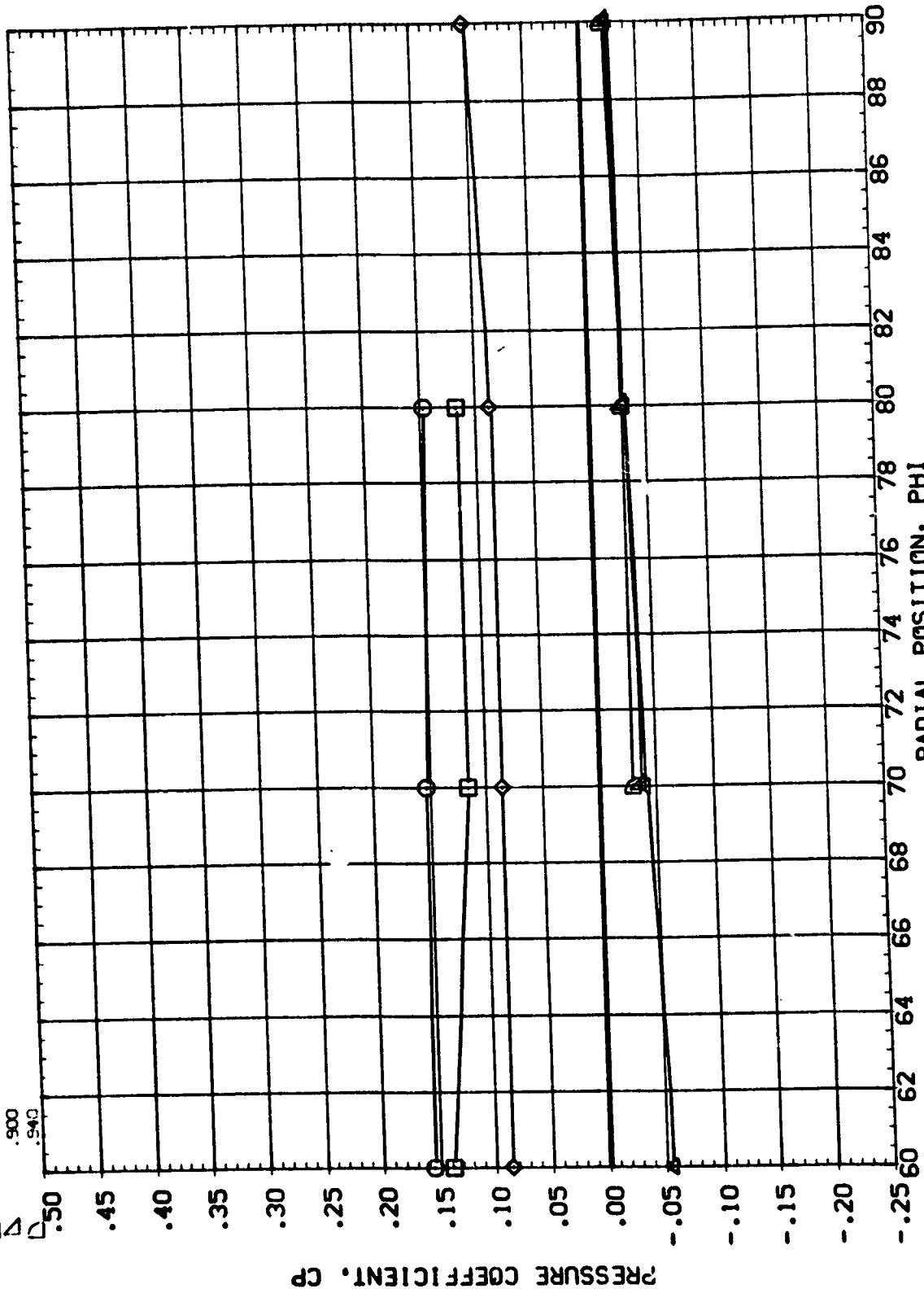
(RQ4004)

PARAMETRIC VALUES
.000 ELEVON -15.000

BETA

ALPHA 8.010
MACH 4.500

SYMBOL X/L
○ .087
□ .126
◇ .164
△ .862
● .900
▽ .940

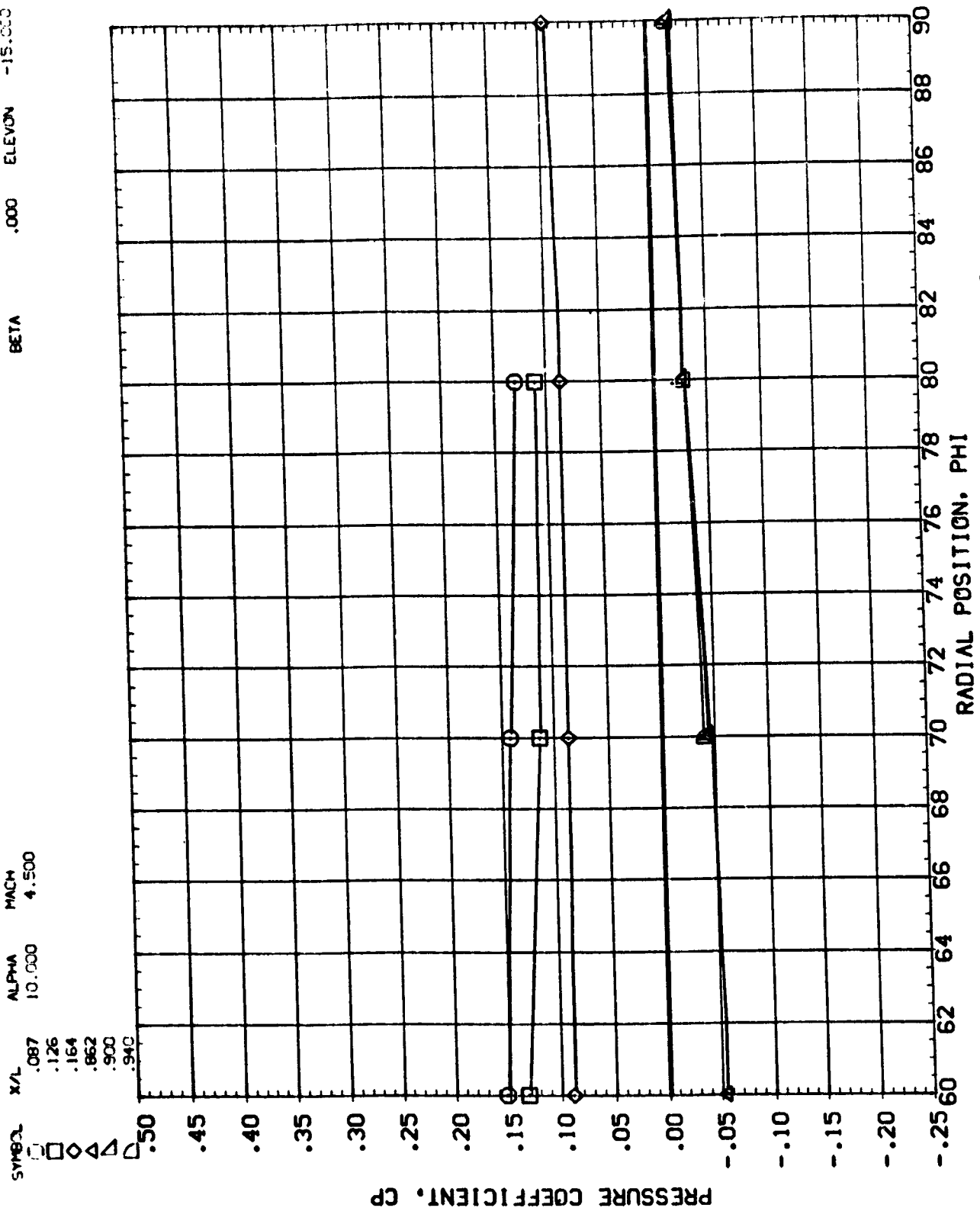


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES
ALPHA 10.000
MACH 4.500
BETA .000
ELEVON -15.000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

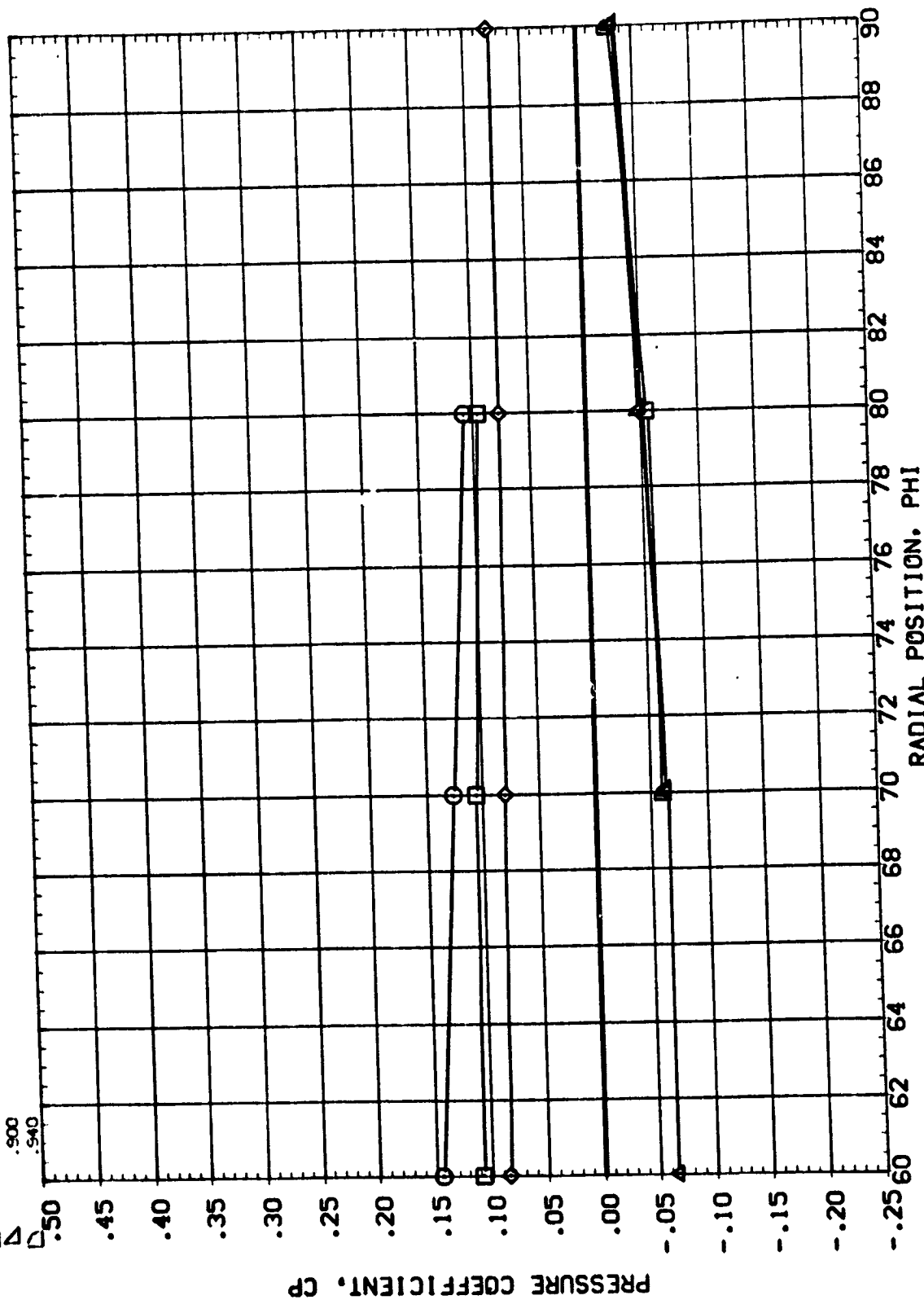


0A64 ORBITER ENTRY CONFIGURATION

(R04004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL X/L ALPHA MACH
□ .087 12.010 4.500
○ .126
◇ .164
△ .862
▽ .900
◇ .940



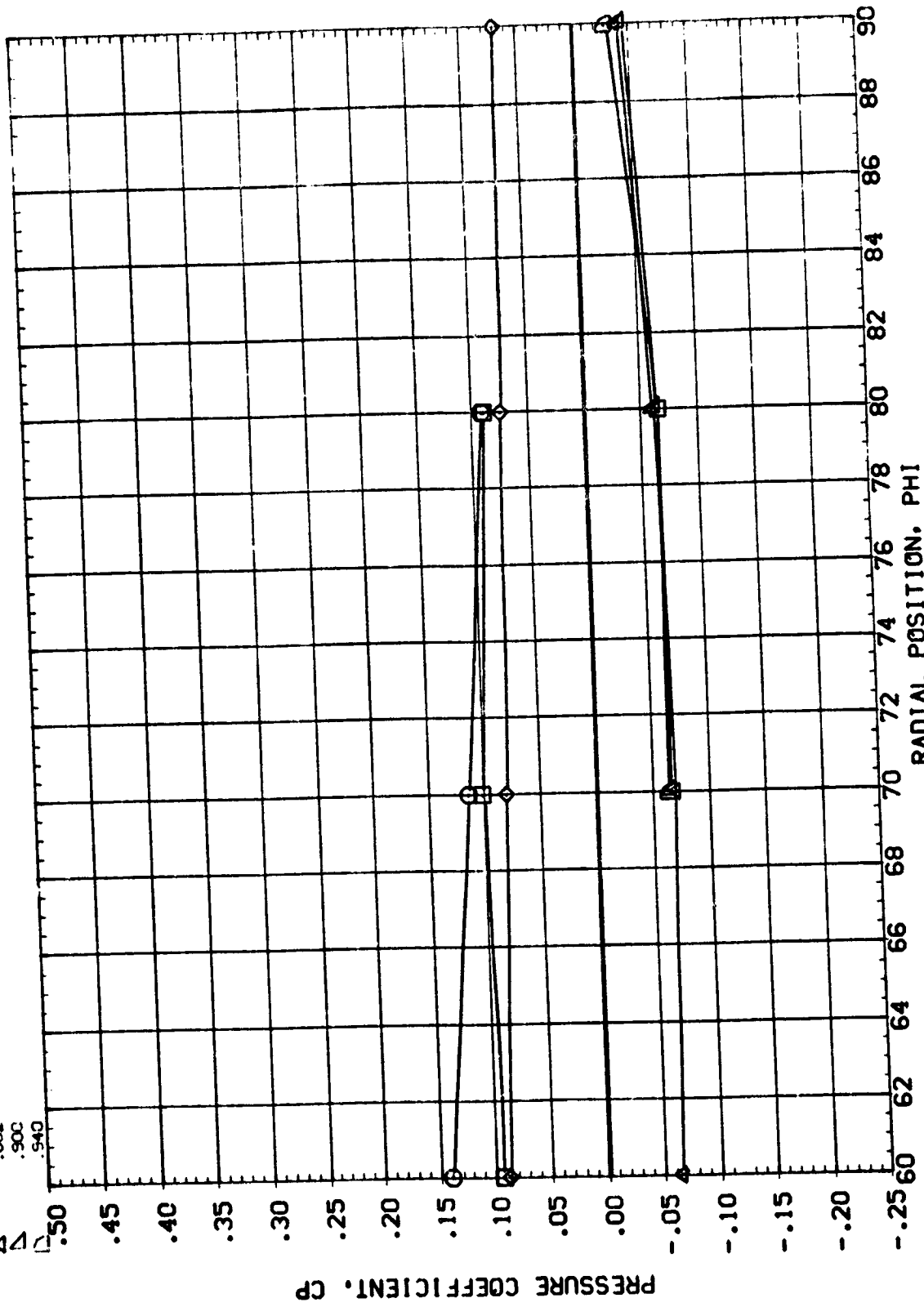
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

(RQ4004)

OA64 ORBITER ENTRY CONFIGURATION

SYMBOL X/L ALPMA MACH
□ .087
◇ .126
△ .164
○ .862
◇ .900
△ .940

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

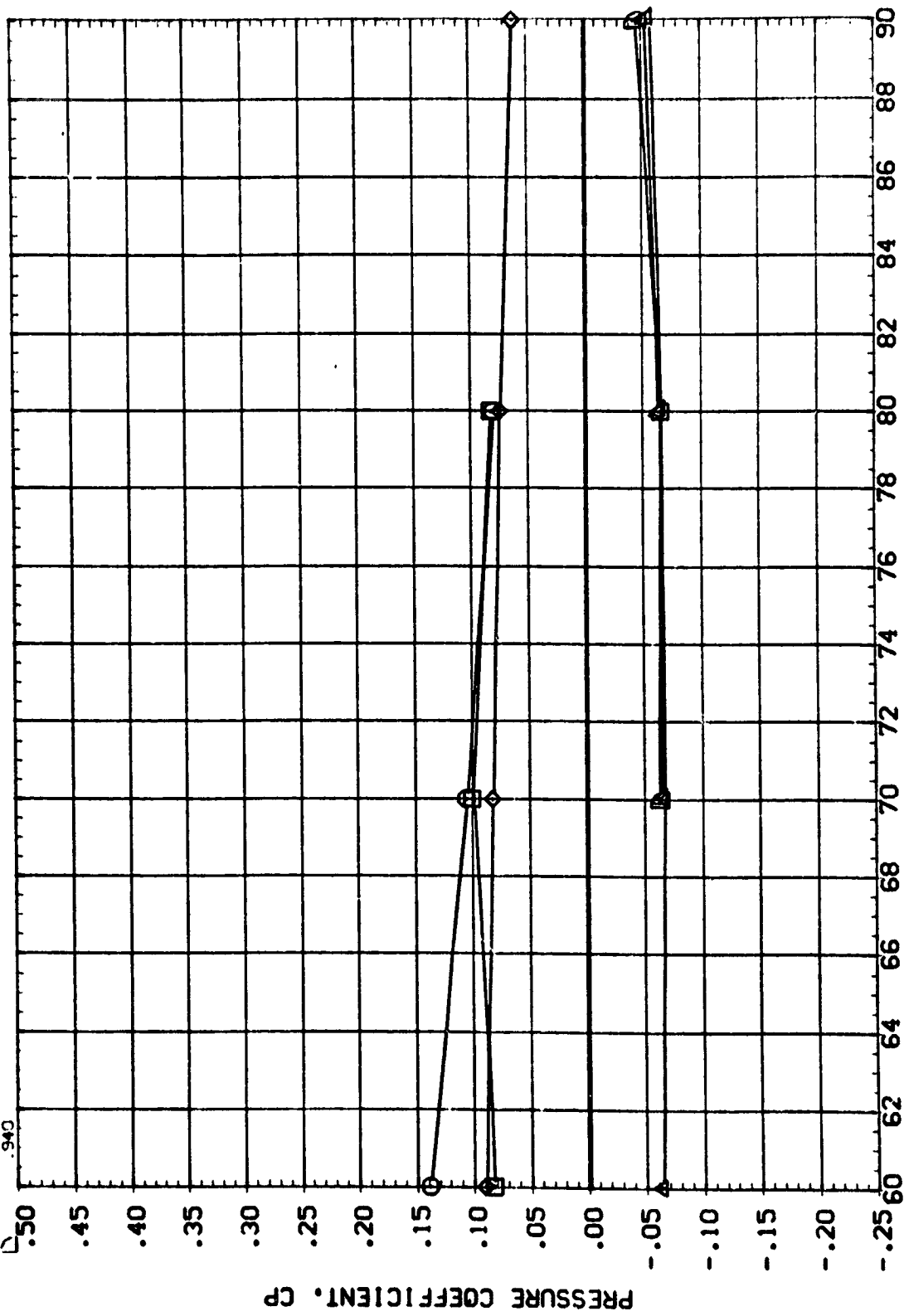


OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES
ALPHA 16.000 MACH 4.500
BETA .000 ELEVON -1E.000

SYMBOL X/L
○ .087
□ .126
◇ .164
△ .662
▽ .900
◇ .940

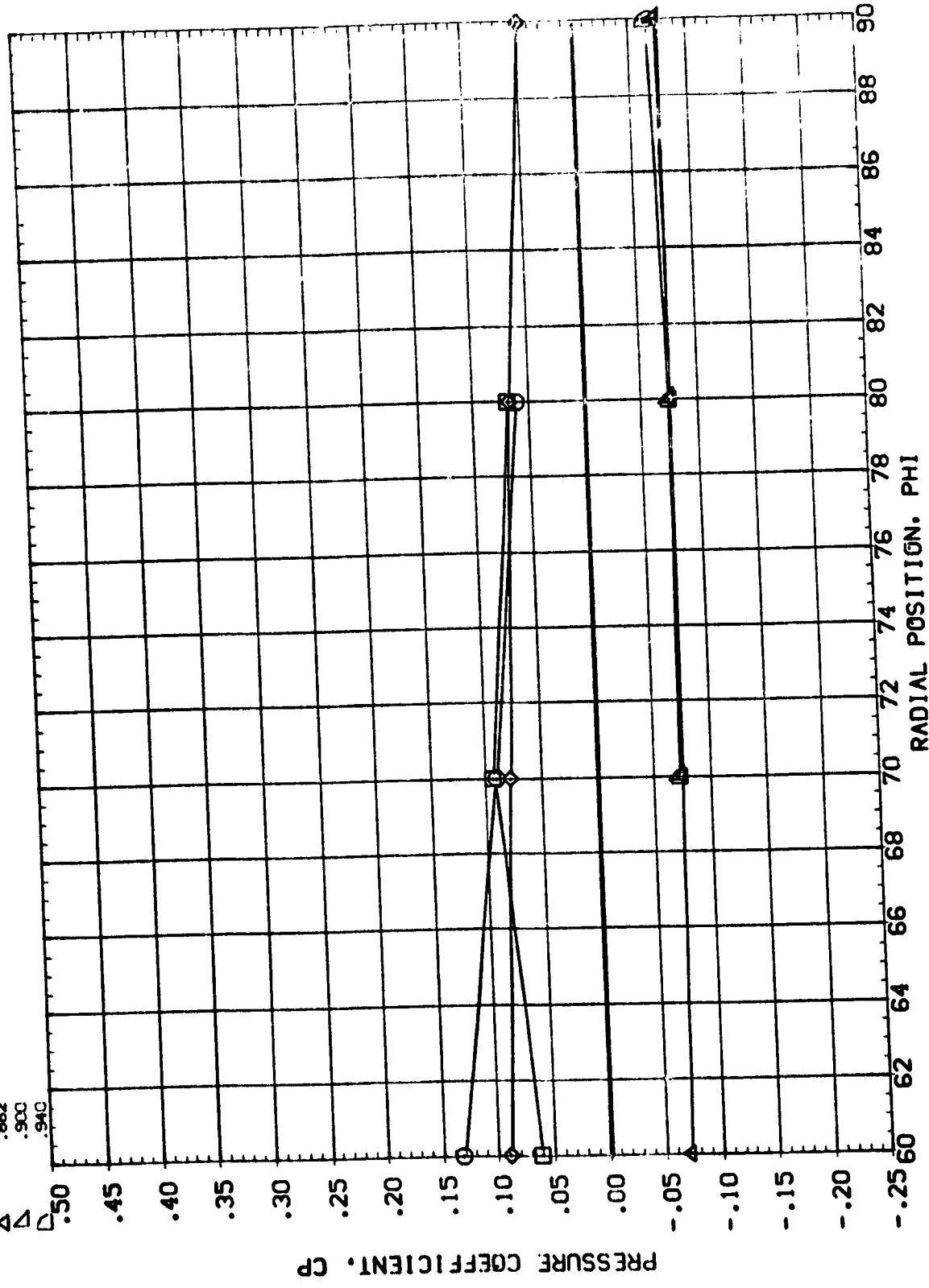


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

(R04004)
 OA64 ORBITER ENTRY CONFIGURATION

SYMBOL X/L ALPHA MACH
 □ .087 18.000 4.500
 ◇ .126
 △ .164
 ○ .862
 ◻ .900
 ▽ .940

BETA
 PARAMETRIC VALUES
 .000 ELEVON -13.000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



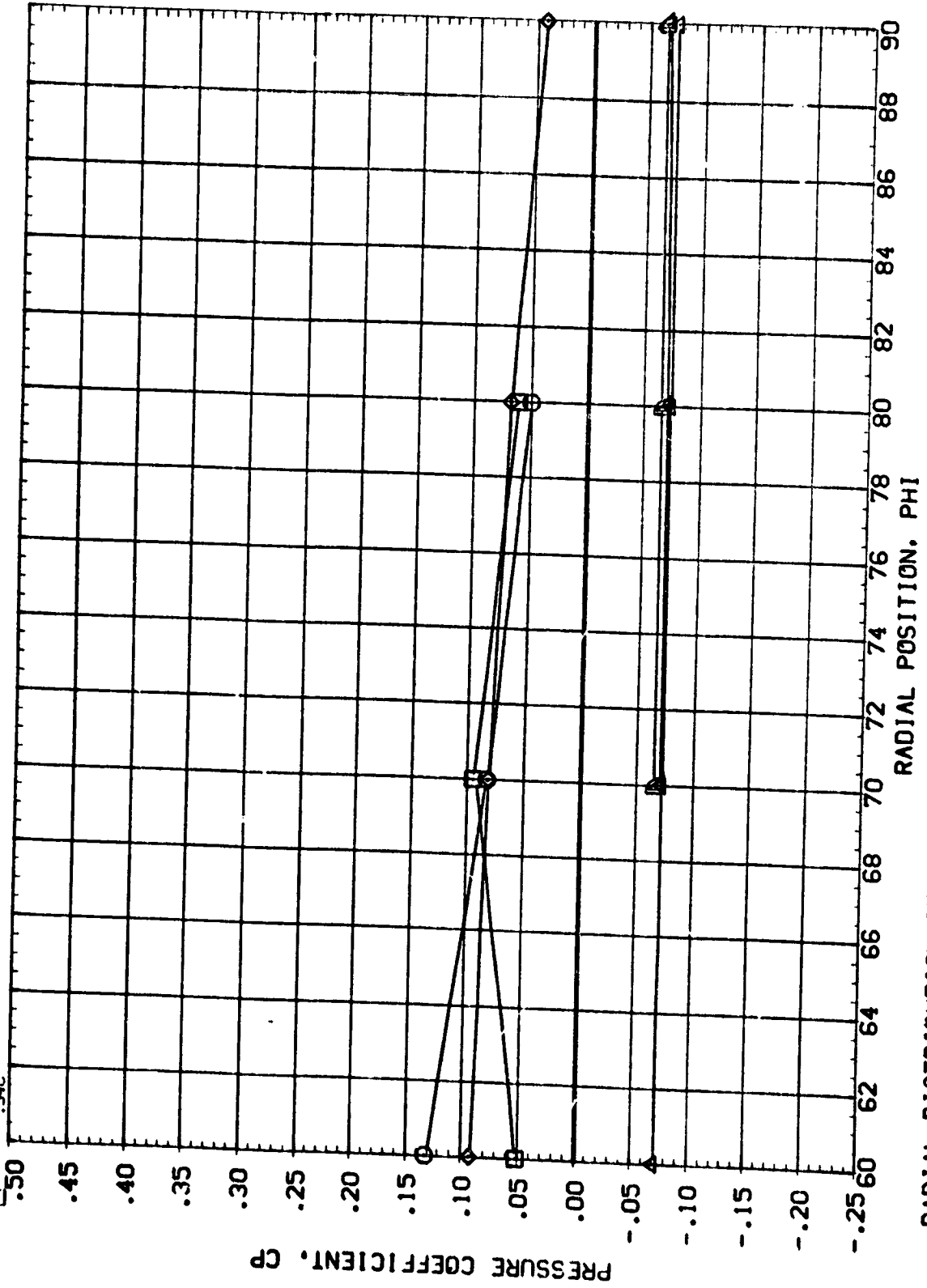
0A64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL X/L ALPHA MACH
□ .087 19.990 4.500
◇ .126
△ .164
▽ .862
◇ .903
◇ .940

BETA .000 ELEVON -15.000

PARAMETRIC VALUES



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

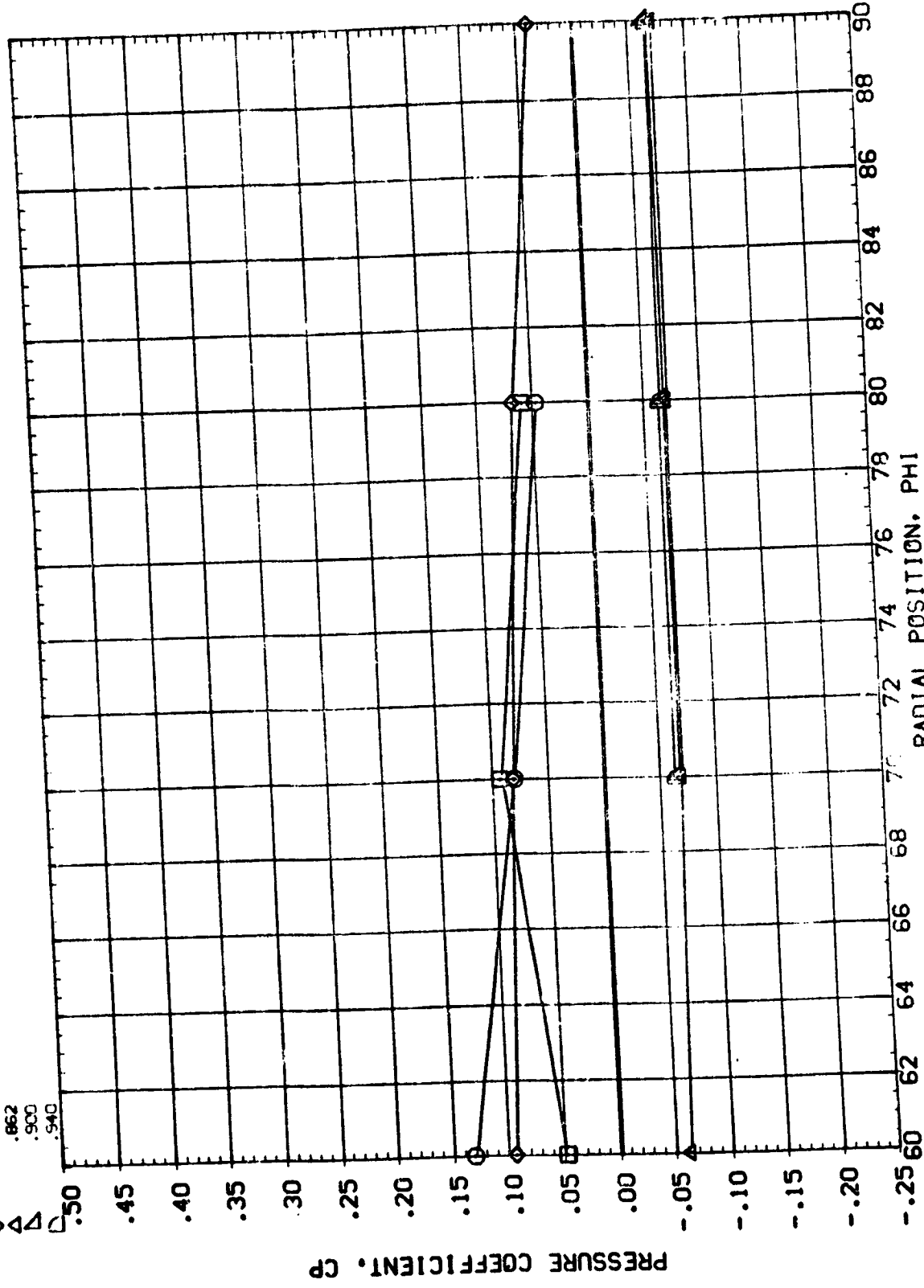
(R04004)

OAG4 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON -13.000

ALPHA 20.960 MACH 4.500

SYMBOL X/L
○ .087
◇ .126
△ .164
□ .900
◇ .940



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

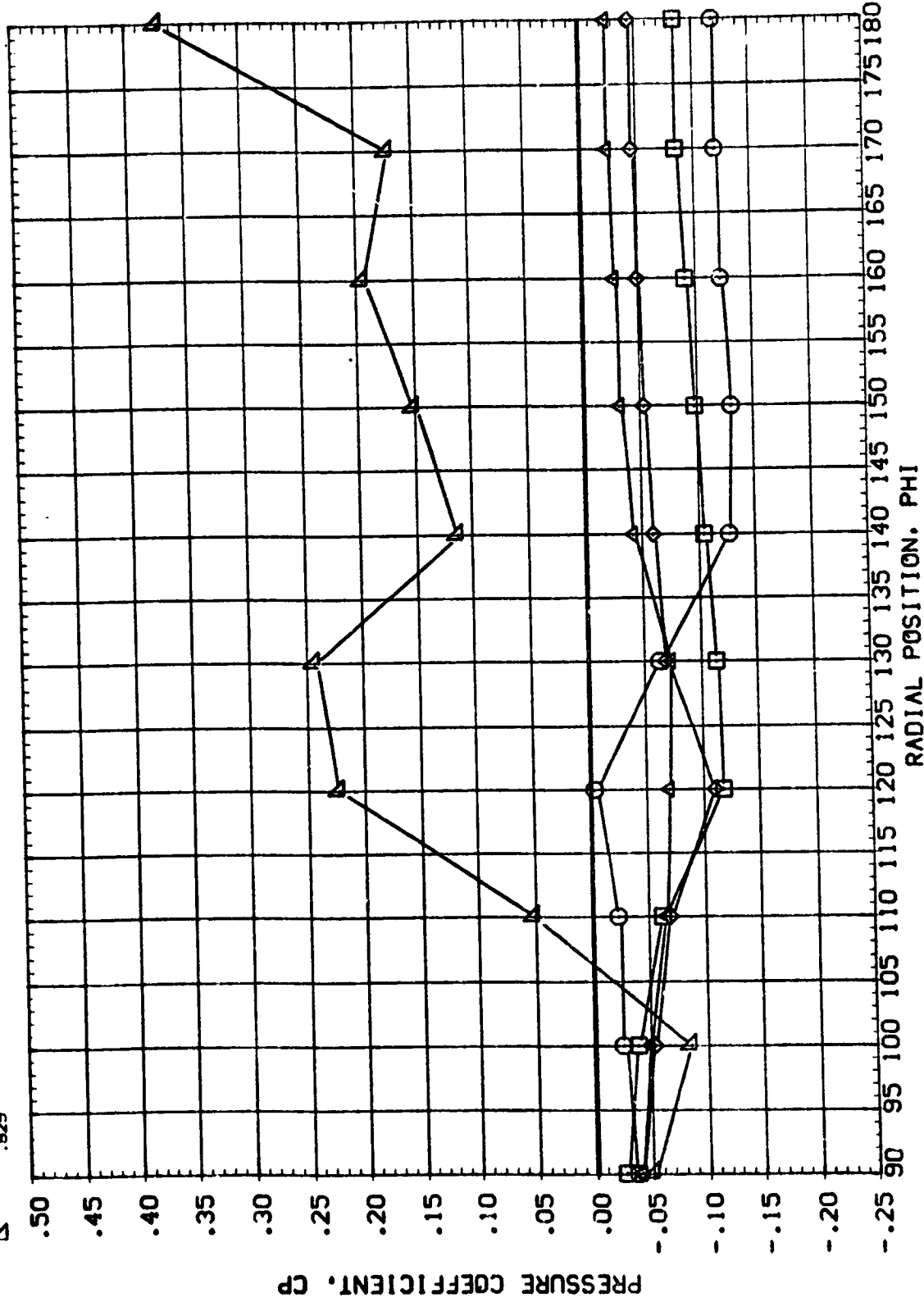


UAG4 ORBITER ENTRY CONFIGURATION

(R04004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL X/L ALPHA B.000 MACH 2.500
□ .264
◇ .405
◇ .546
◇ .688
△ .829



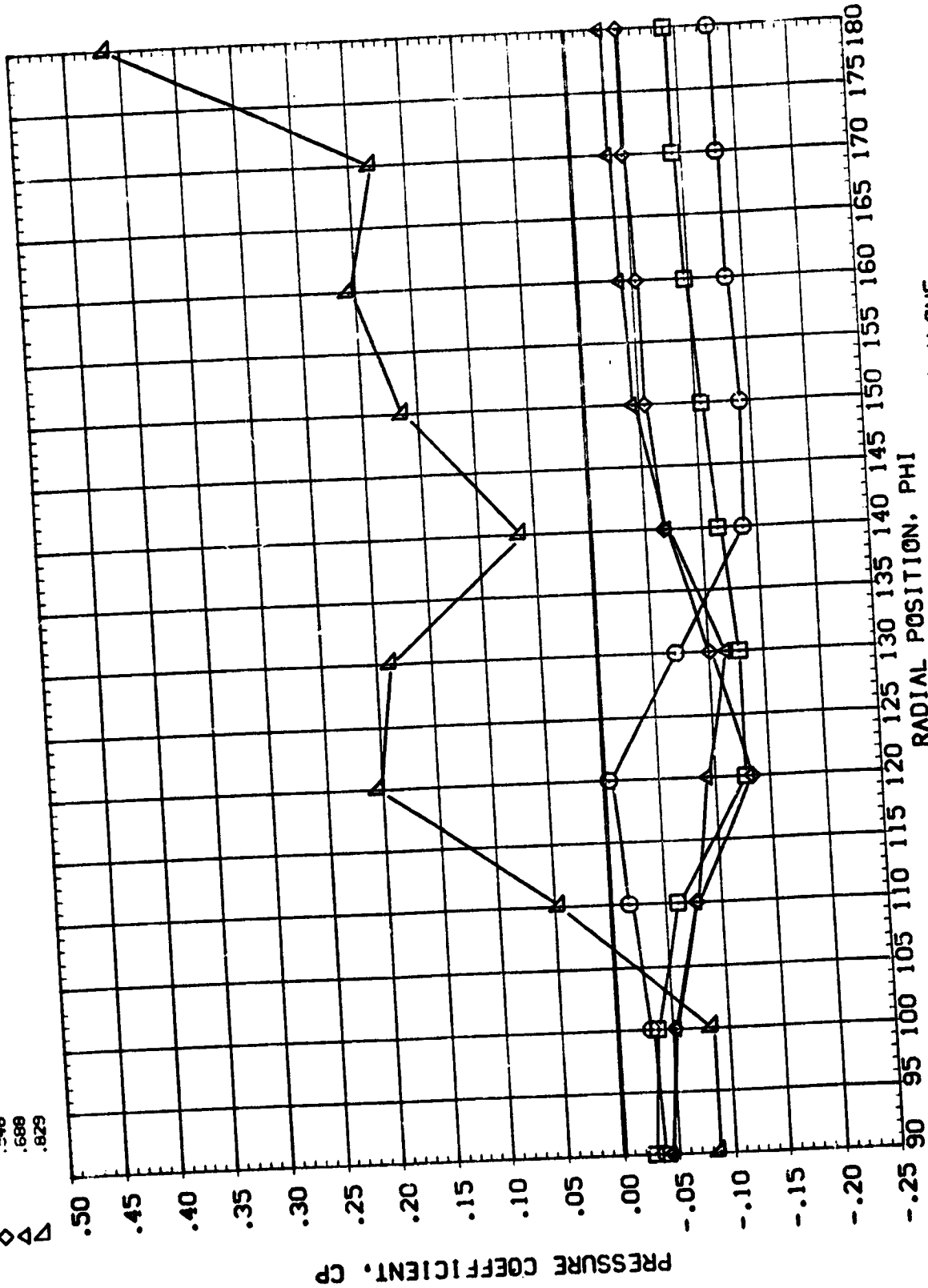
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

(RQ4004)

GA64 ORBITER ENTRY CONFIGURATION

SYMBOL X/L ALPHA MACH
○ .264 10.000 2.500
◇ .405
□ .546
△ .688
▽ .829

BETA
PARAMETRIC VALUES
.000 ELEVON -15.000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

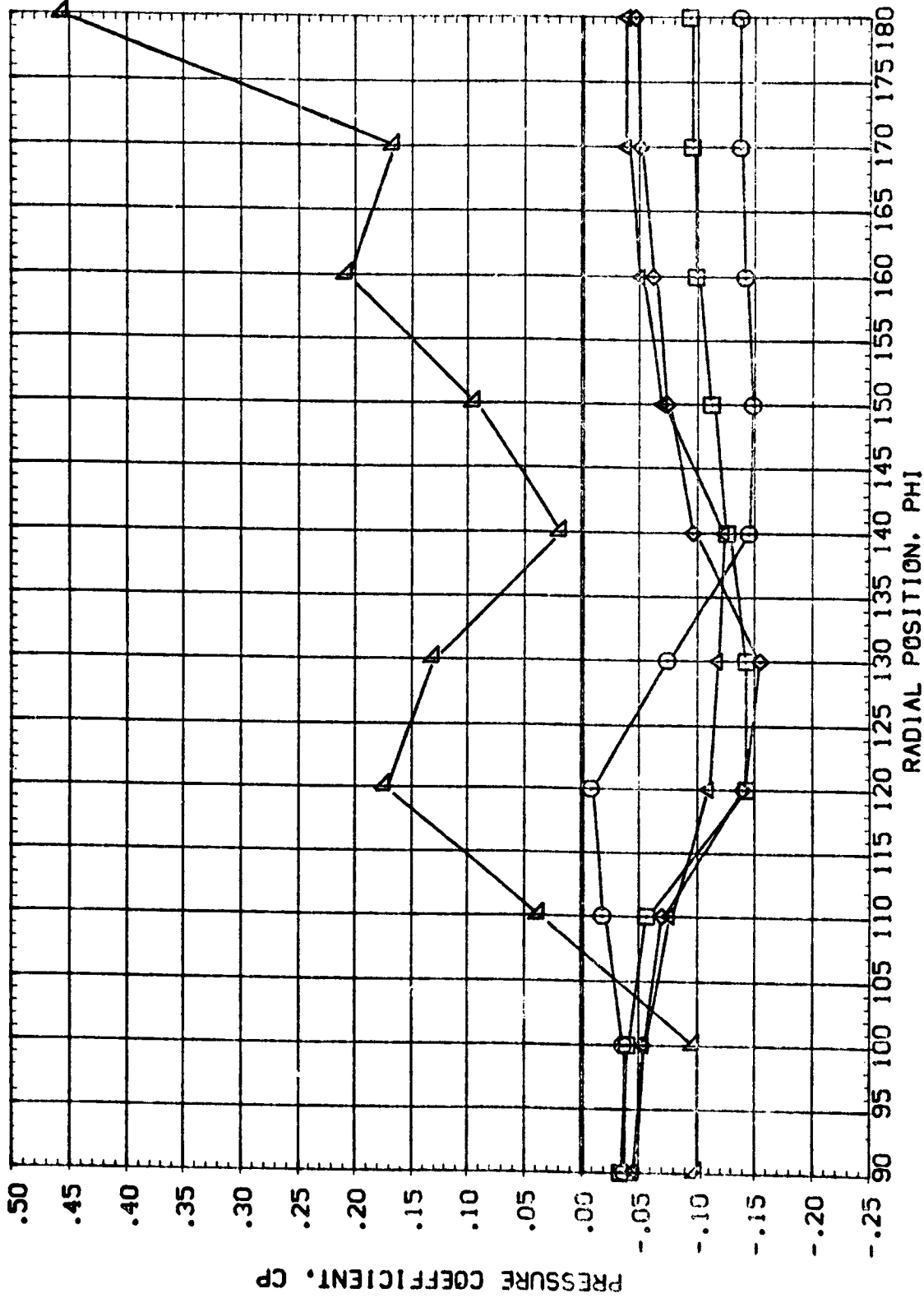


OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL X/L ALPHA MACH
○ .264 12.010 2.500
□ .405
◇ .546
△ .688
▽ .829

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

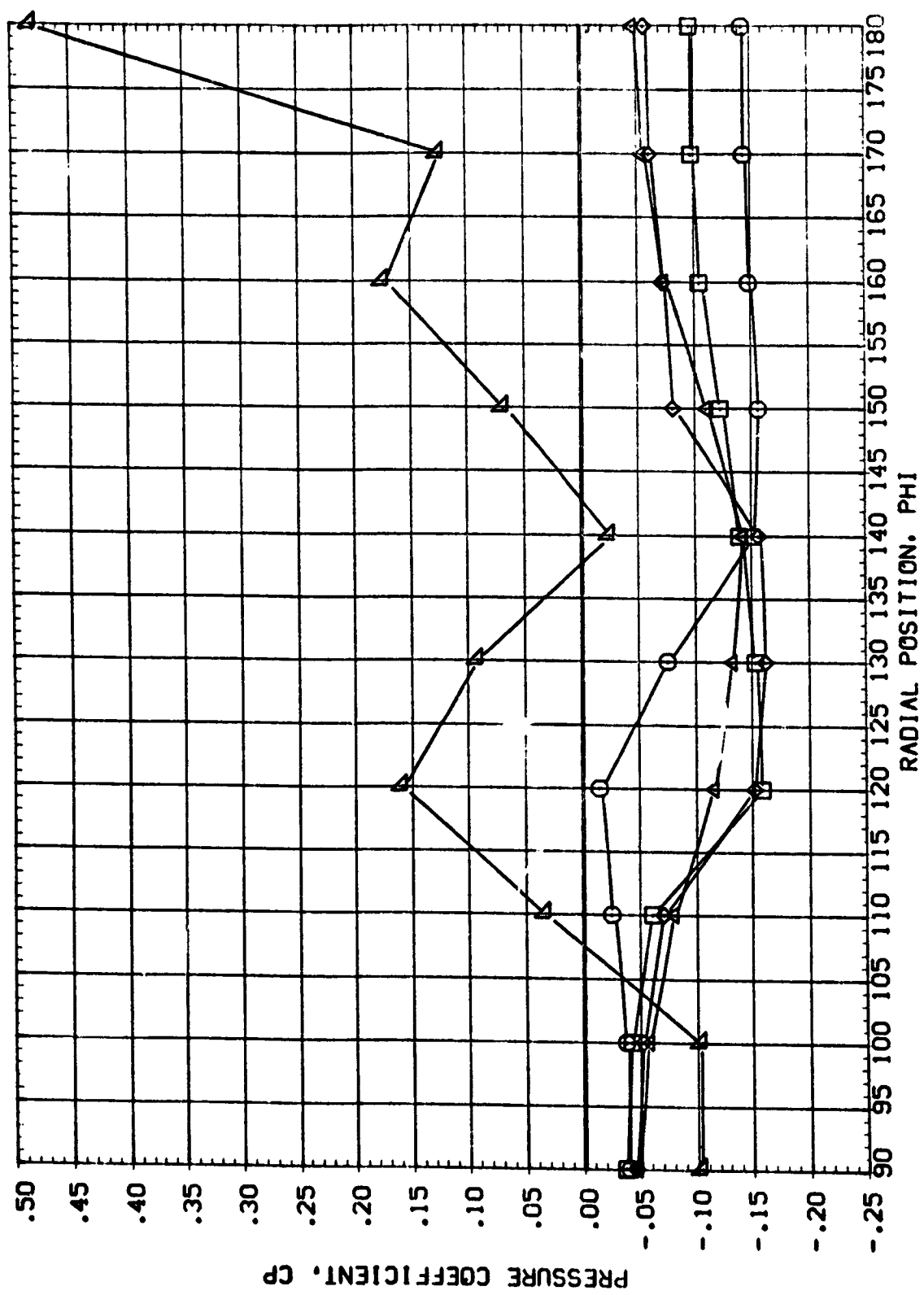


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
□	.264	14.000	2.500	.000	ELEVON
◇	.405				-15.000
△	.546				
▽	.688				
▽	.829				



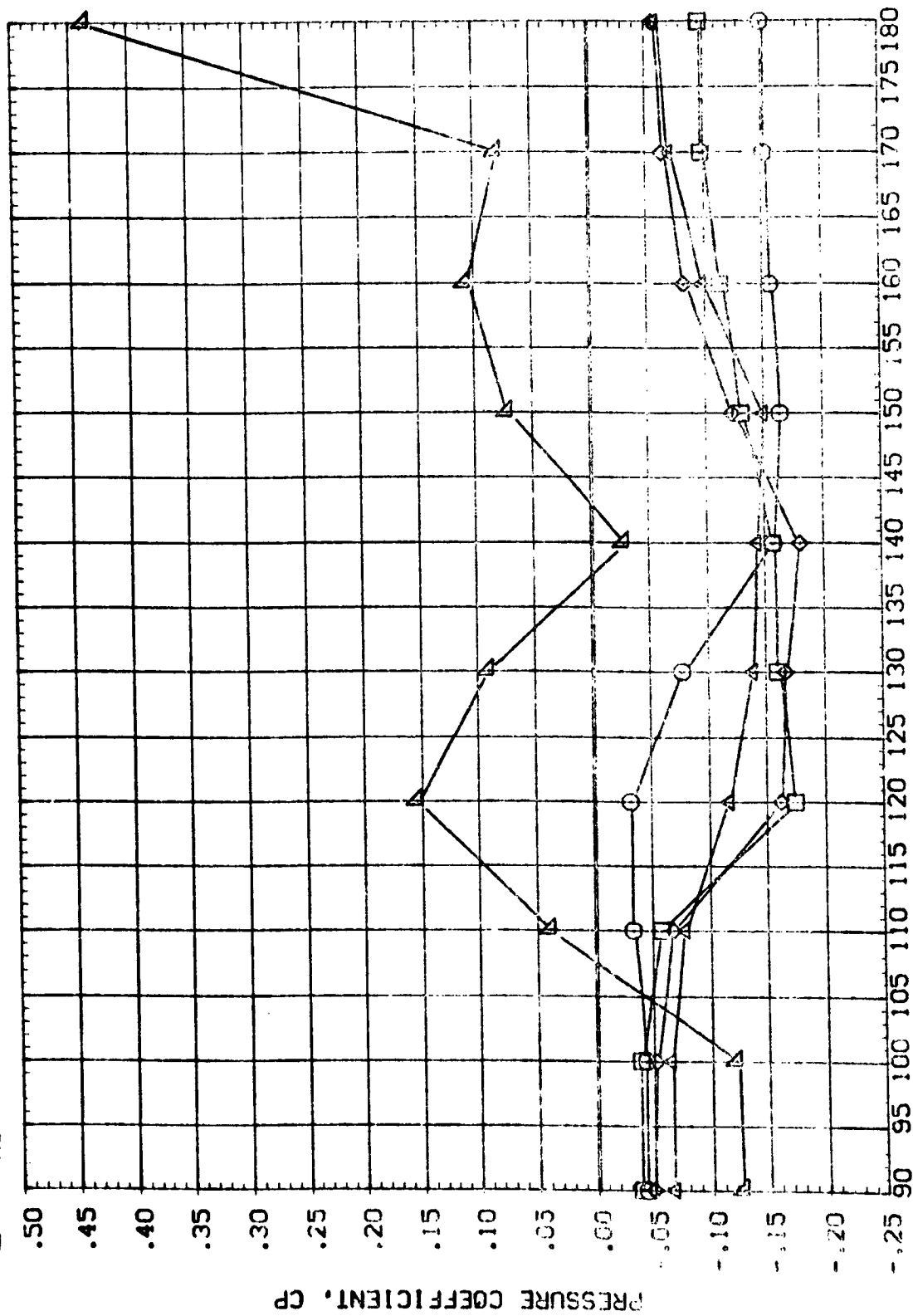
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



OAS4 ORBITER ENTRY CONFIGURATION

(R040004)

SYMBOL X/L ALPHA MACH BETA PARAMETRIC VALUES
□ .264 16.000 2.500 .000 ELEVON -15.000
◇ .405
◇ .546
◇ .688
△ .829



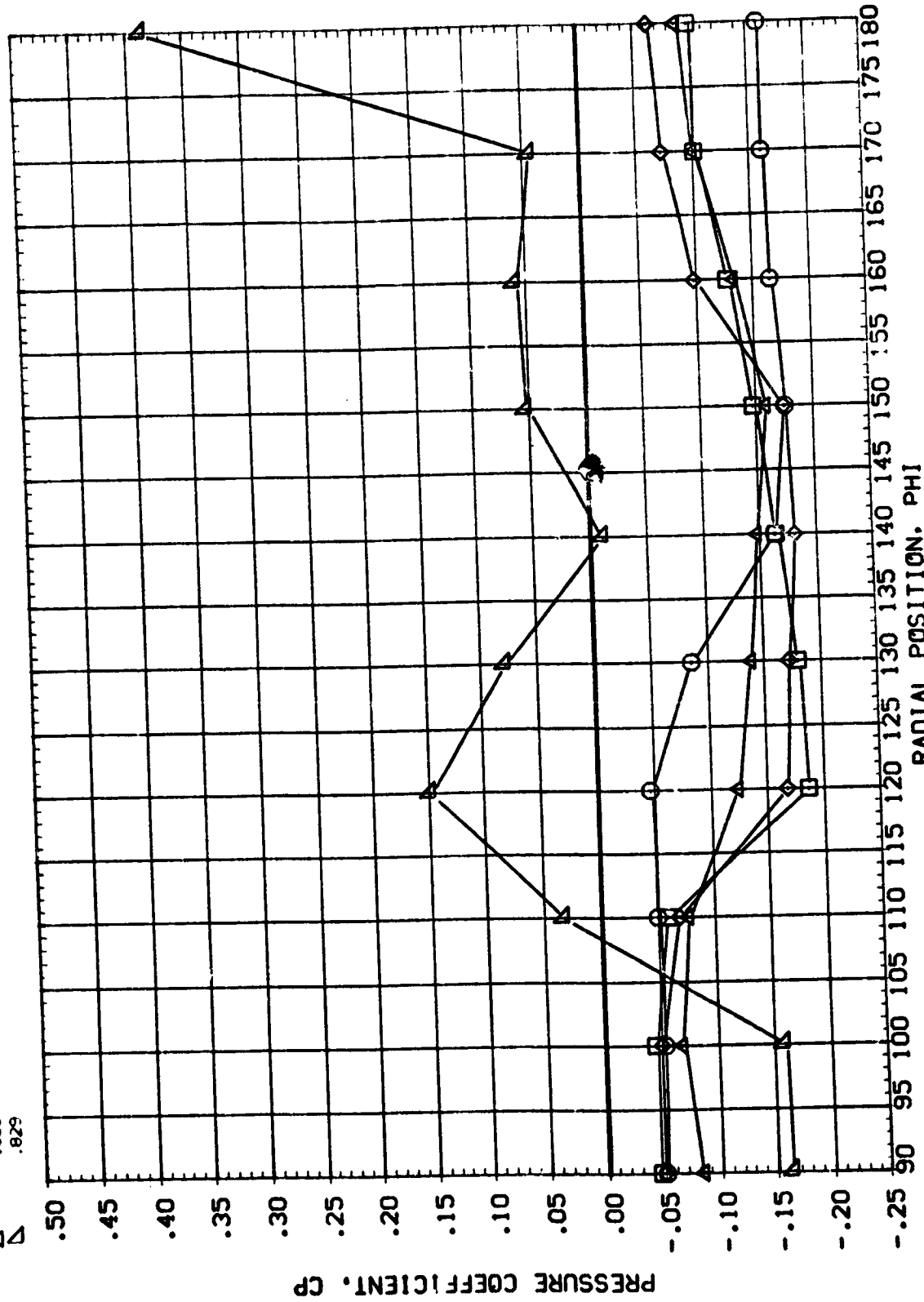
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

(RG4004)

OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA ELEVON -15.000

SYMBOL X/L ALPHA MACH
□ .254 18.000 2.500
◇ .405
△ .546
▽ .688
 .829



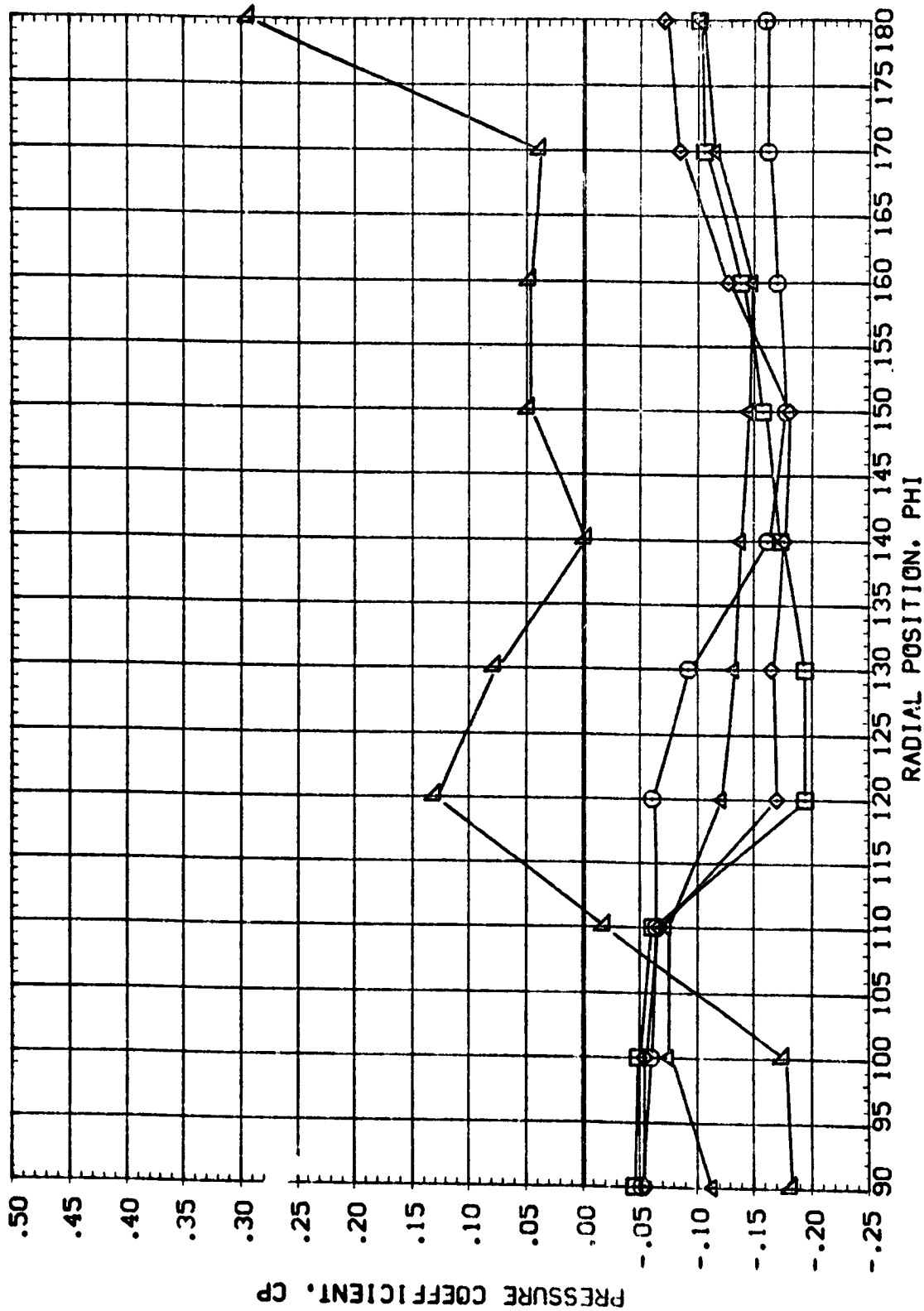
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



0A64 ORBITER ENTRY CONFIGURATION

(RG4004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	.264	20.000	2.500	.000	ELEVON
□	.405				-15.000
◇	.546				
△	.688				
▽	.823				



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



OAG4 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL X/L ALPHA MACH

.264 20.980 2.500

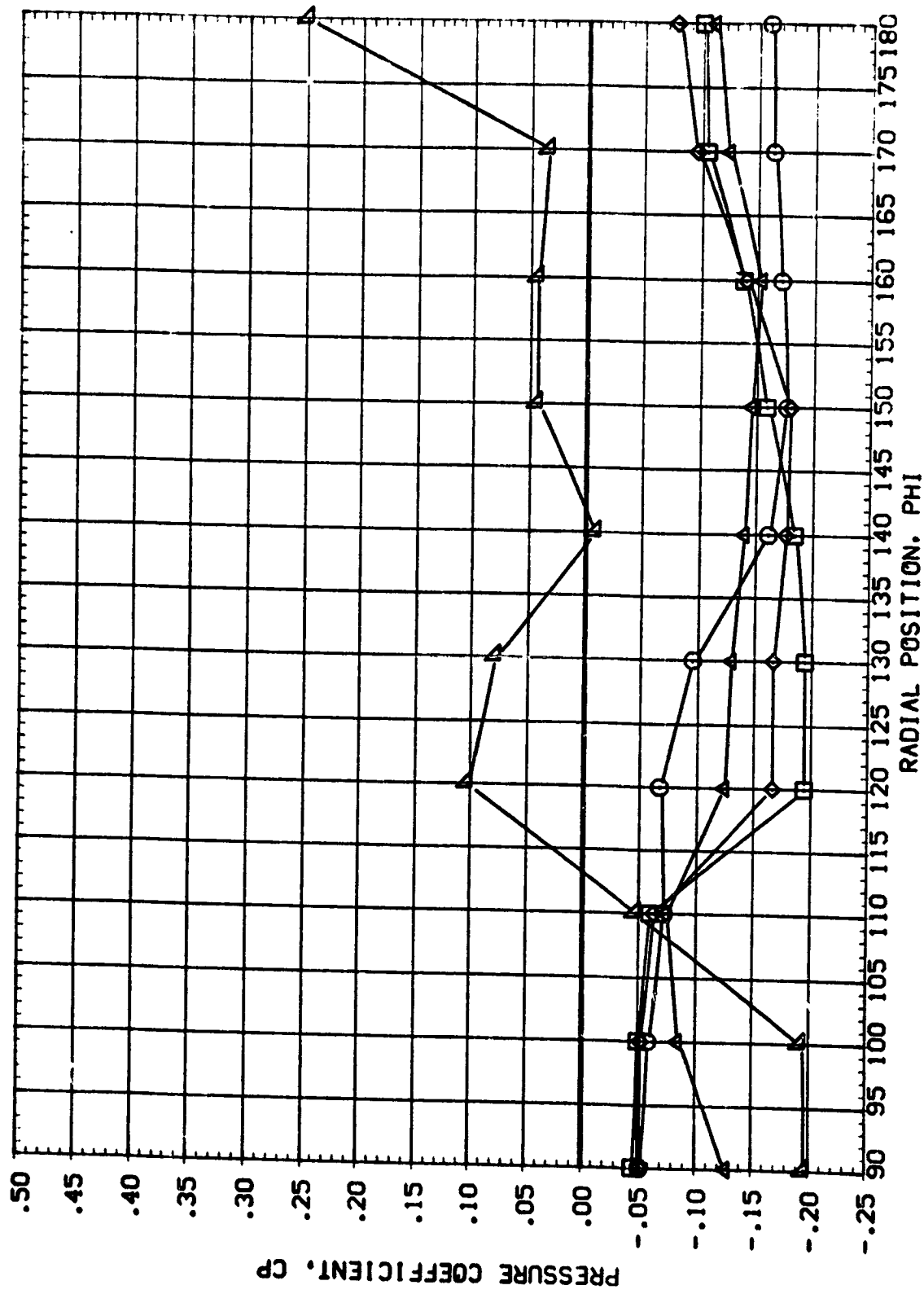
.405

.546

.688

.829

BETA .000 ELEVON -15.000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



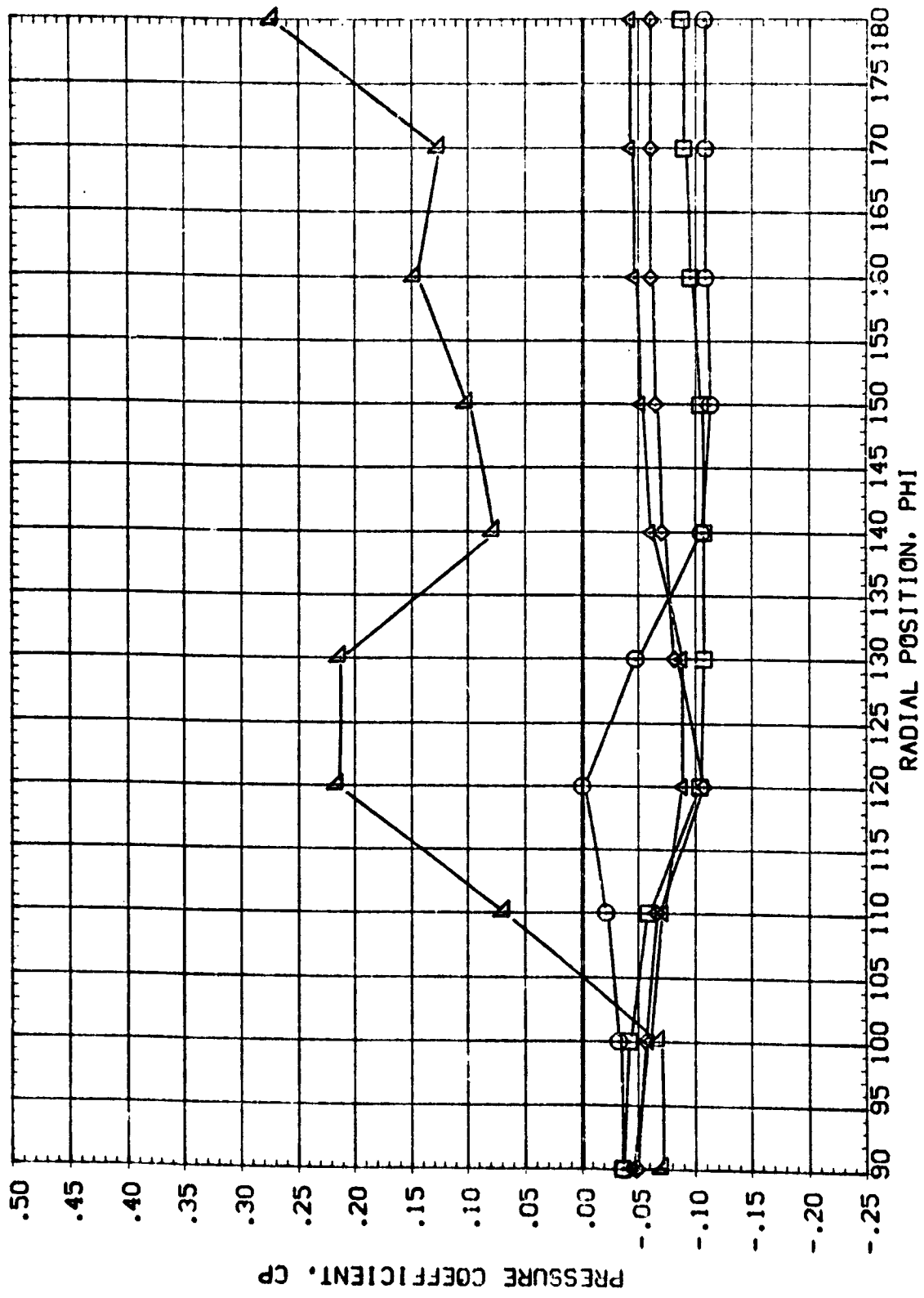
OA64 ORBITER ENTRY CONFIGURATION

(R04004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

ALPHA MACH
.264 .8.000 2.950
.405
.746
.573
.923

SYMBOL
□
◇
△

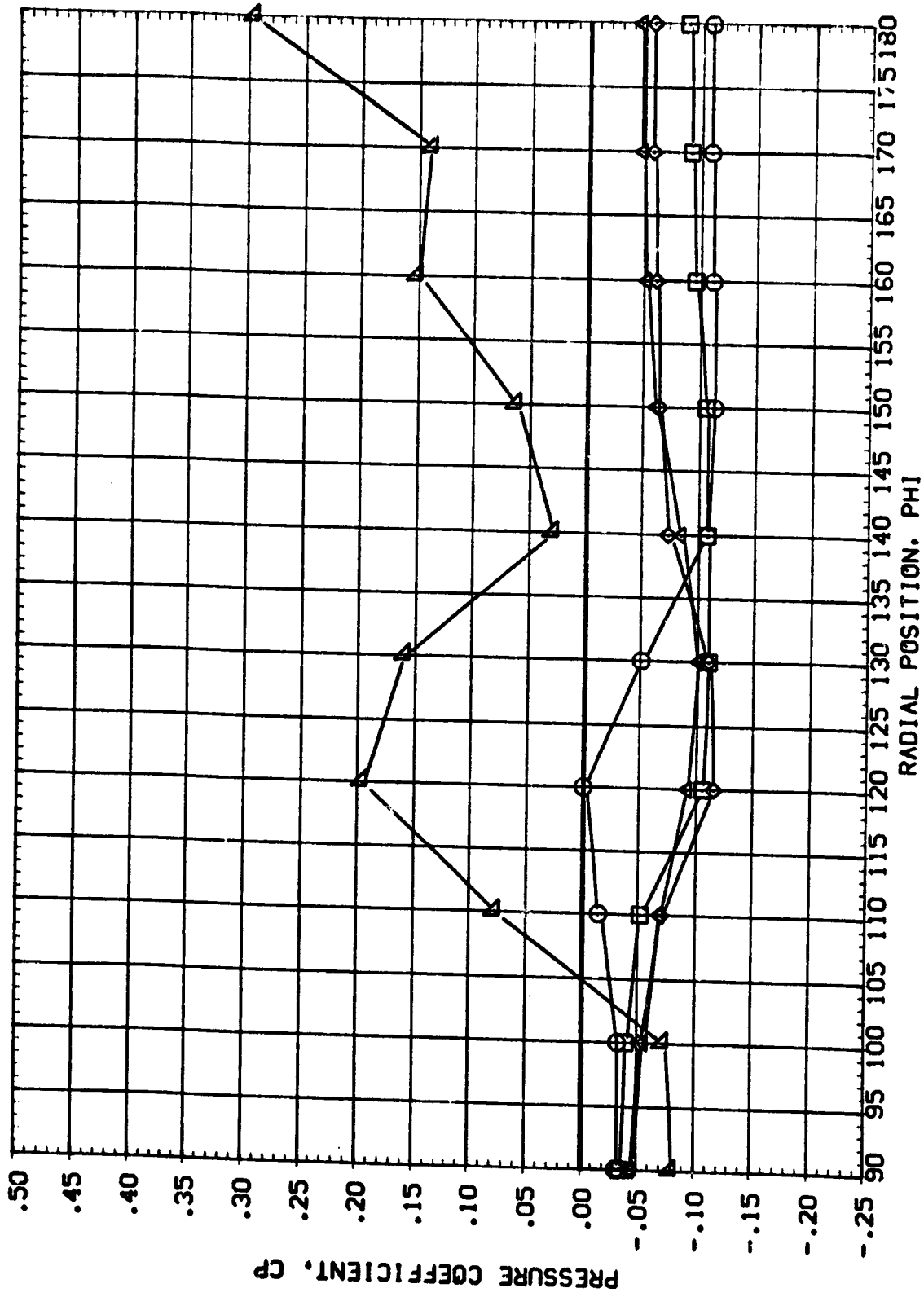


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	.264	10.000	2.950	.000	ELEVON
□	.405				-15.000
◇	.546				
△	.688				
▽	.829				



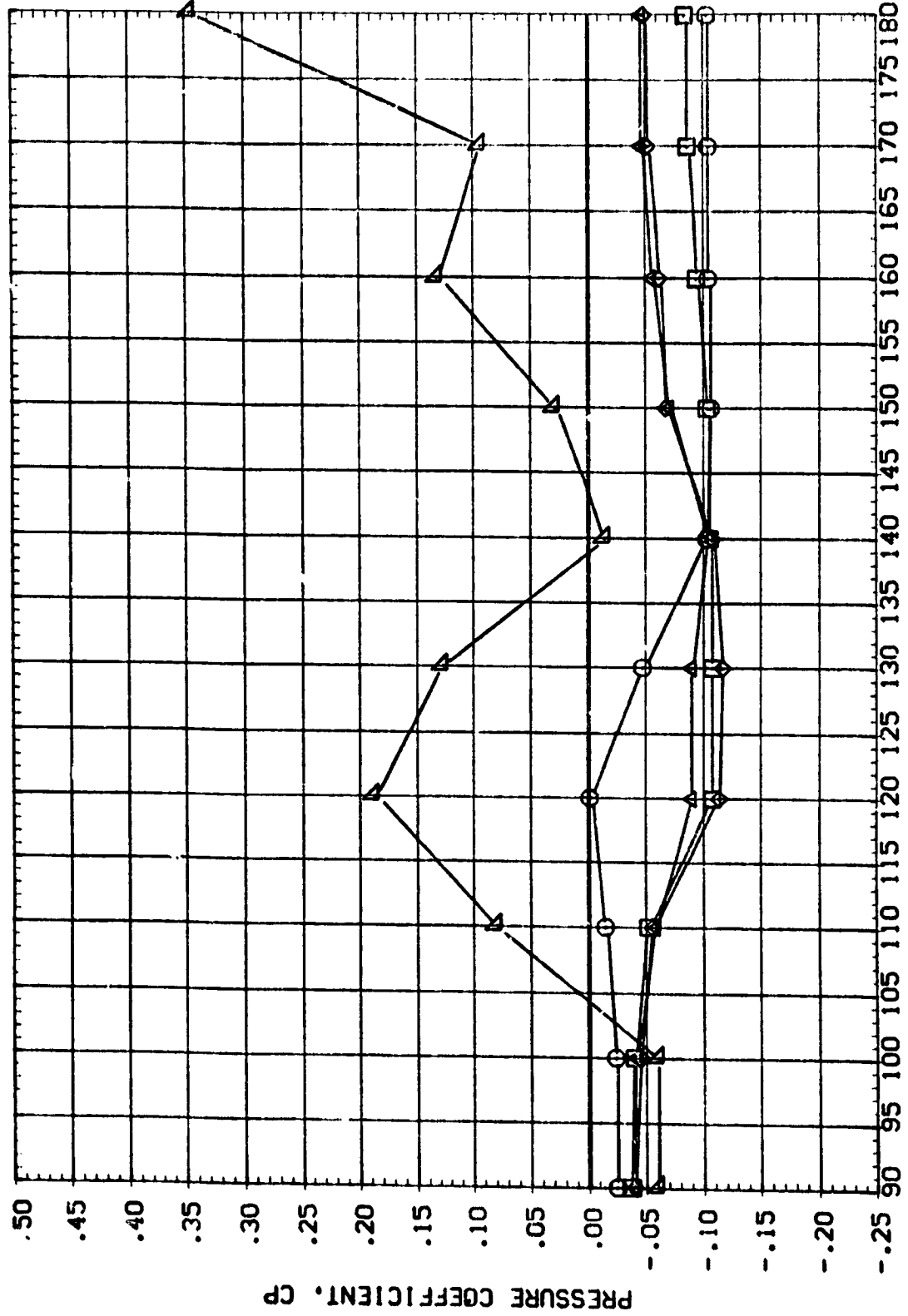
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



0A64 ORBITER ENTRY CONFIGURATION

(RG4004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	.264	12.010	2.950	.000	ELEVON
□	.405				-15.000
◇	.546				
△	.688				
▽	.829				



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

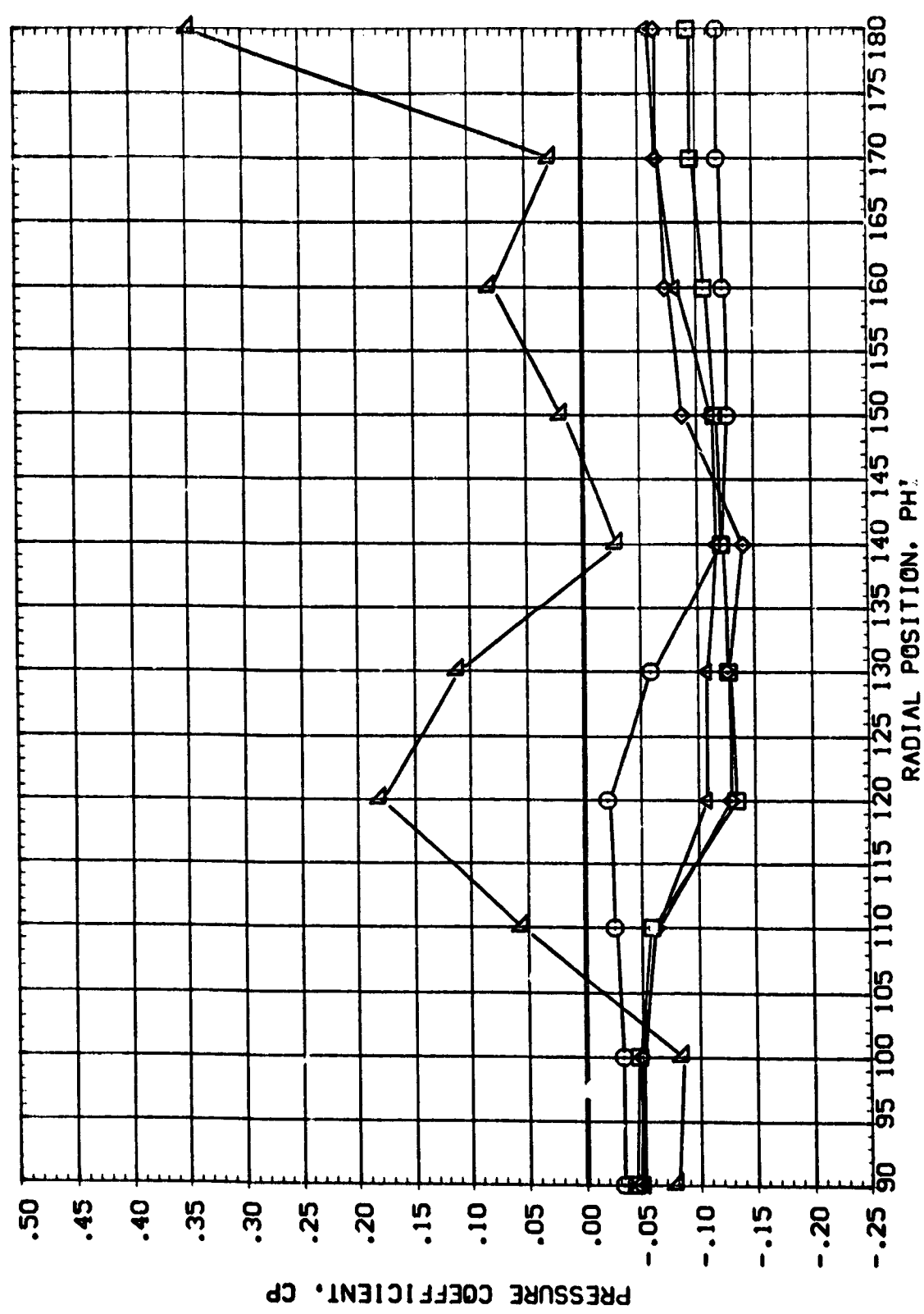
OAG4 ORBITER ENTRY CONFIGURATION

(RG4004)

PARAMETRIC VALUES
 .000 BETA -15.000
 .000 ELEVON

ALPHA 14.000 MACH 2.950
 X/L .764
 .405
 .546
 .688
 .829

SYMBOL
 □
 ◇
 △



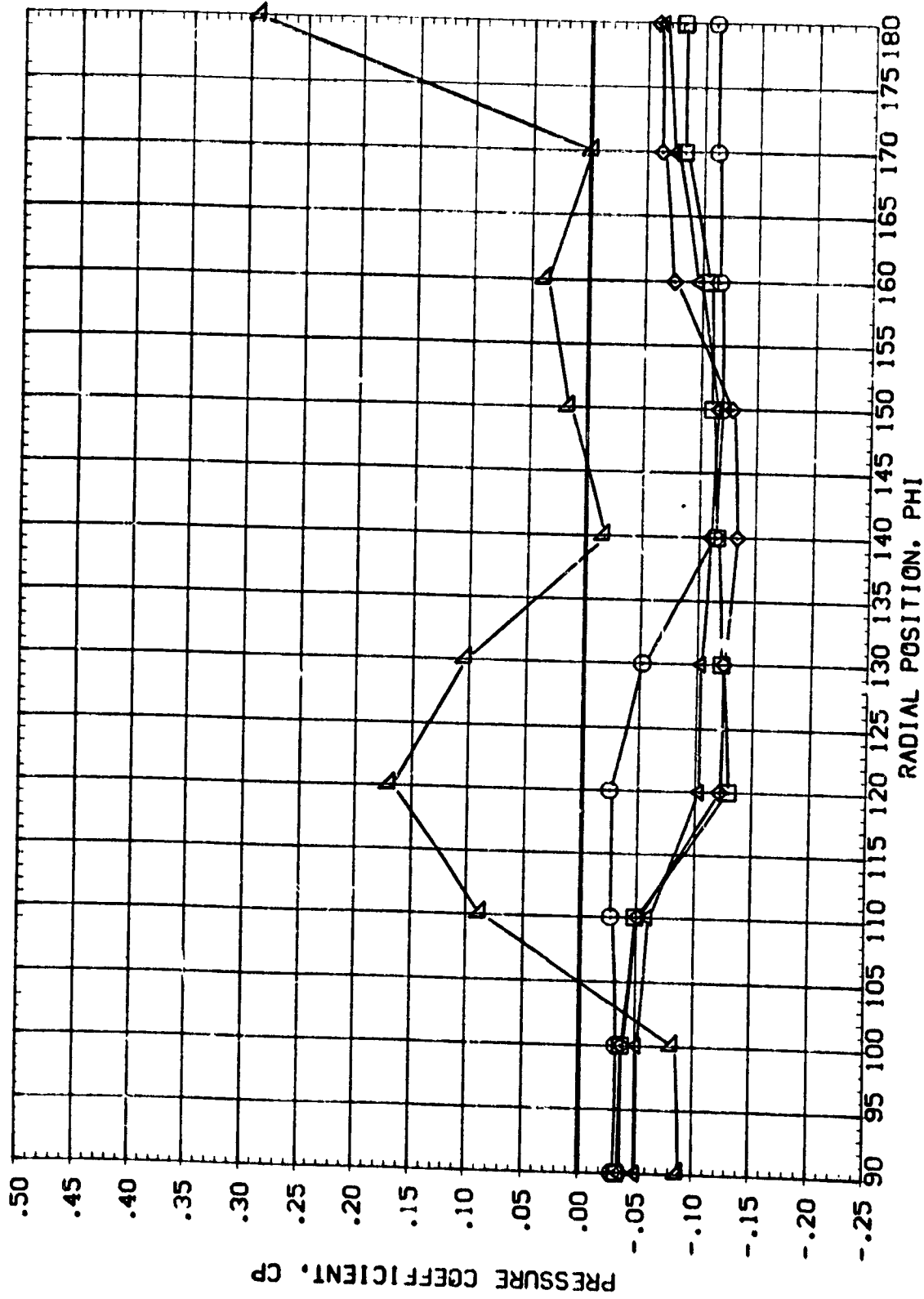
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
○	.264	16.010	2.950	.000	ELEVON -15.000
□	.405				
◇	.546				
△	.688				
▽	.829				



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

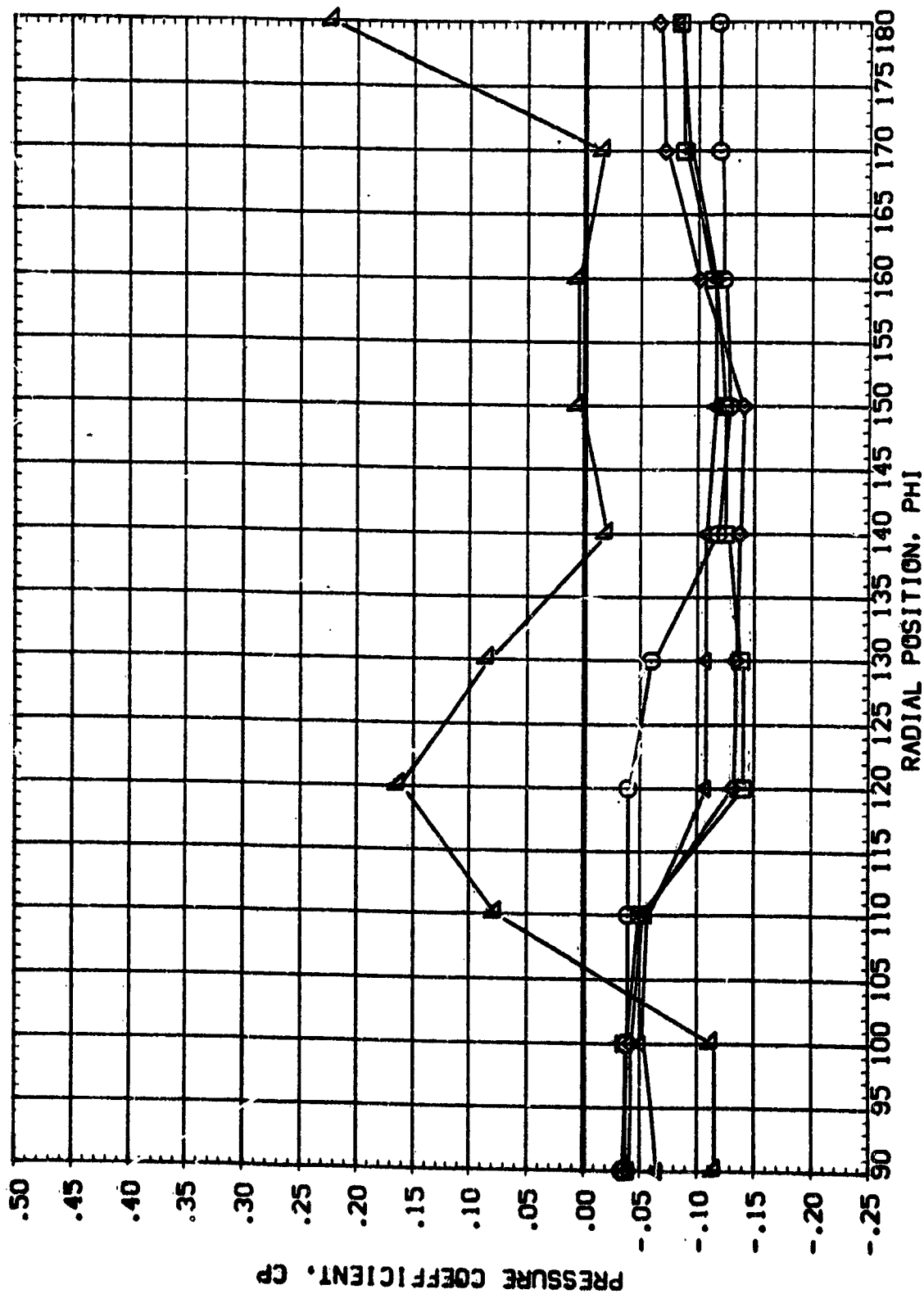
OAG4 ORBITER ENTRY CONFIGURATION

(P04004)

SYMBOL R/L ALPHA MACH

□	.264	18.000	2.950
○	.405		
◇	.546		
△	.688		
▽	.829		

PARAMETRIC VALUES
 BETA .030 ELEVON -1.000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

23

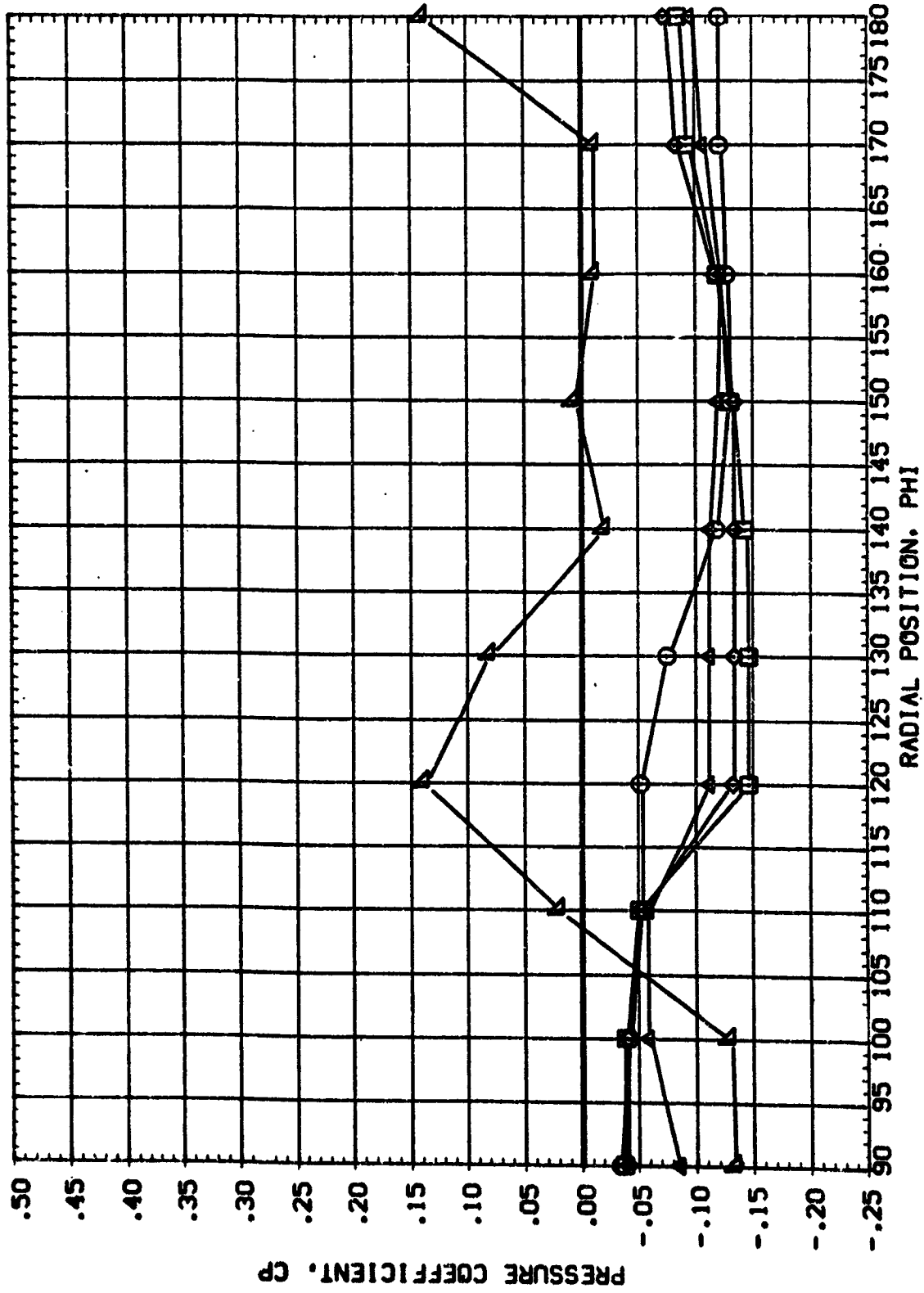


OAG4 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL K/L ALPHA MACH
○ .264 20.000 2.950
□ .405
◇ .546
△ .688
▽ .829

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



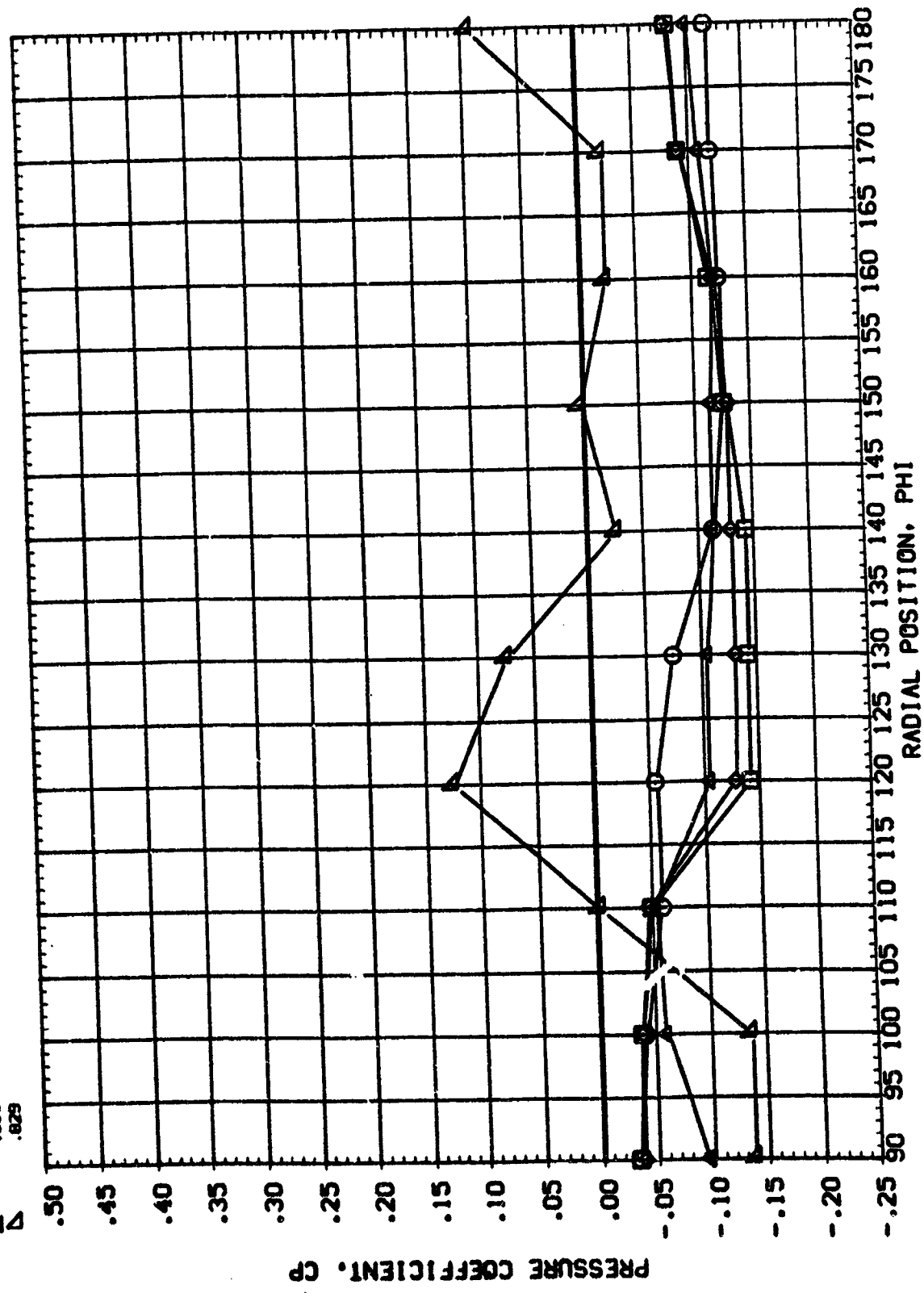
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

(RQ4004)

0A64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
□	.264	20.950	2.950
○	.405		
◇	.546		
△	.688		
▽	.829		



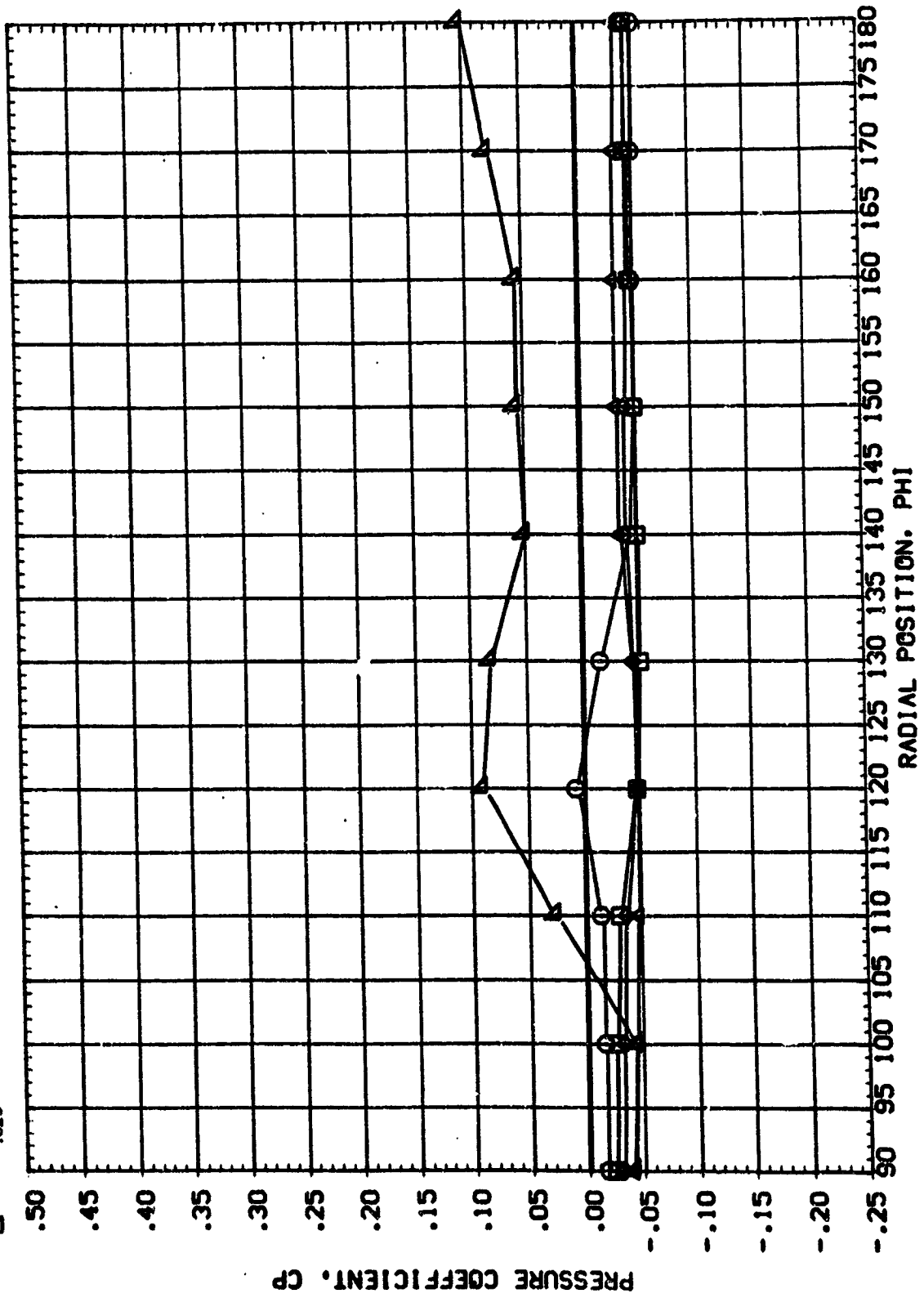
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000
MACH 4.000
ALPHA 7.990
X/A .264
SWEQ .405
□ .546
◇ .688
△ .825



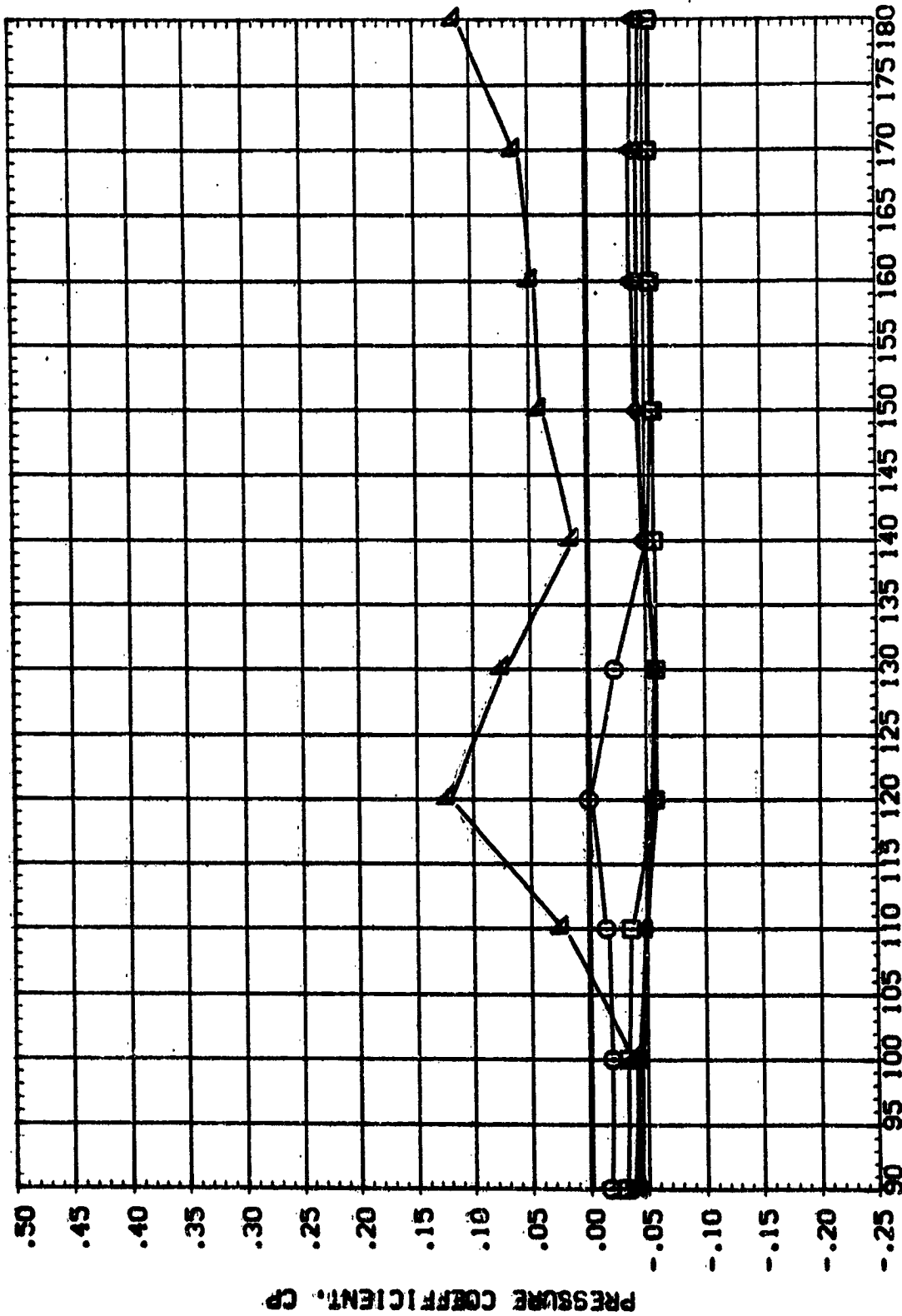
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(R04004)

PARAMETRIC VALUES
 BETA .000 ELEVON -15.000

SYMBOL M/L ALPHA MACH
 ○ 10.000 4.000
 ◊ .264
 ◊ .405
 ◊ .546
 ◊ .688
 ◊ .829



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

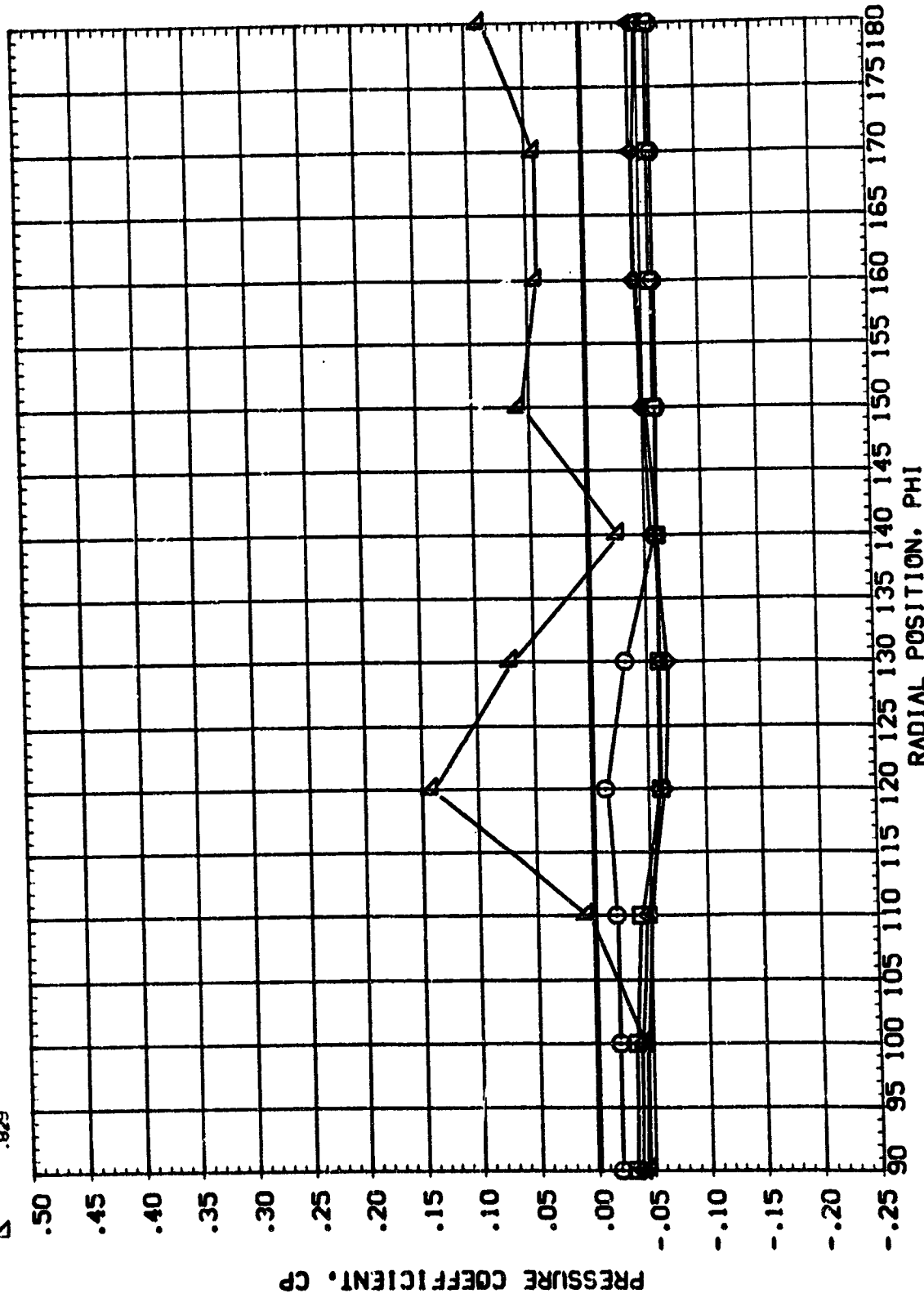


OAG4 ORBITER ENTRY CONFIGURATION

(R04004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL X/L ALPHA MACH
□ .264 12.010 4.000
◇ .405
◇ .546
◇ .688
△ .829



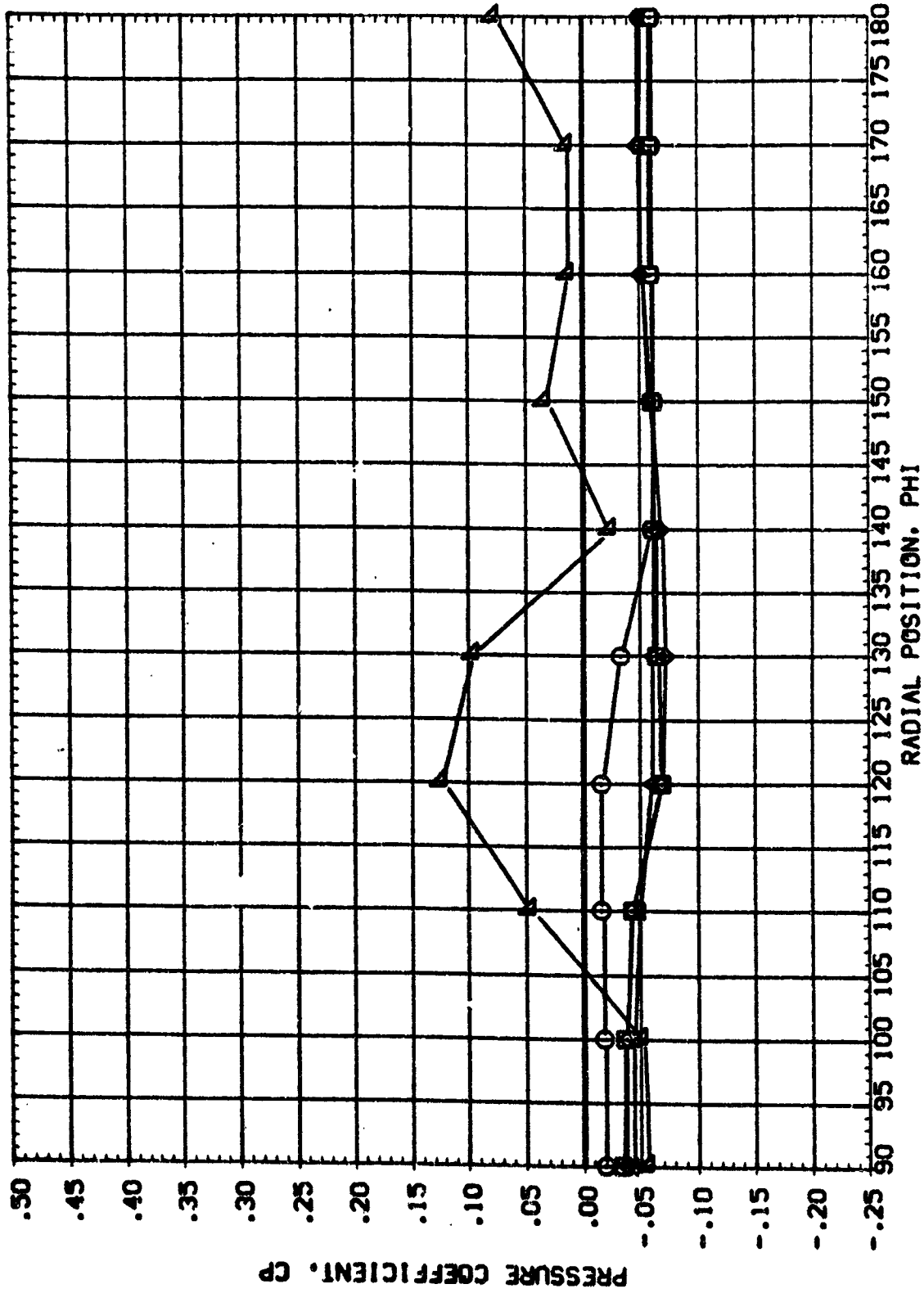
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL X/L ALPHA MACH
□ .264 14.000 4.000
◇ .405
◇ .546
△ .688
△ .829

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

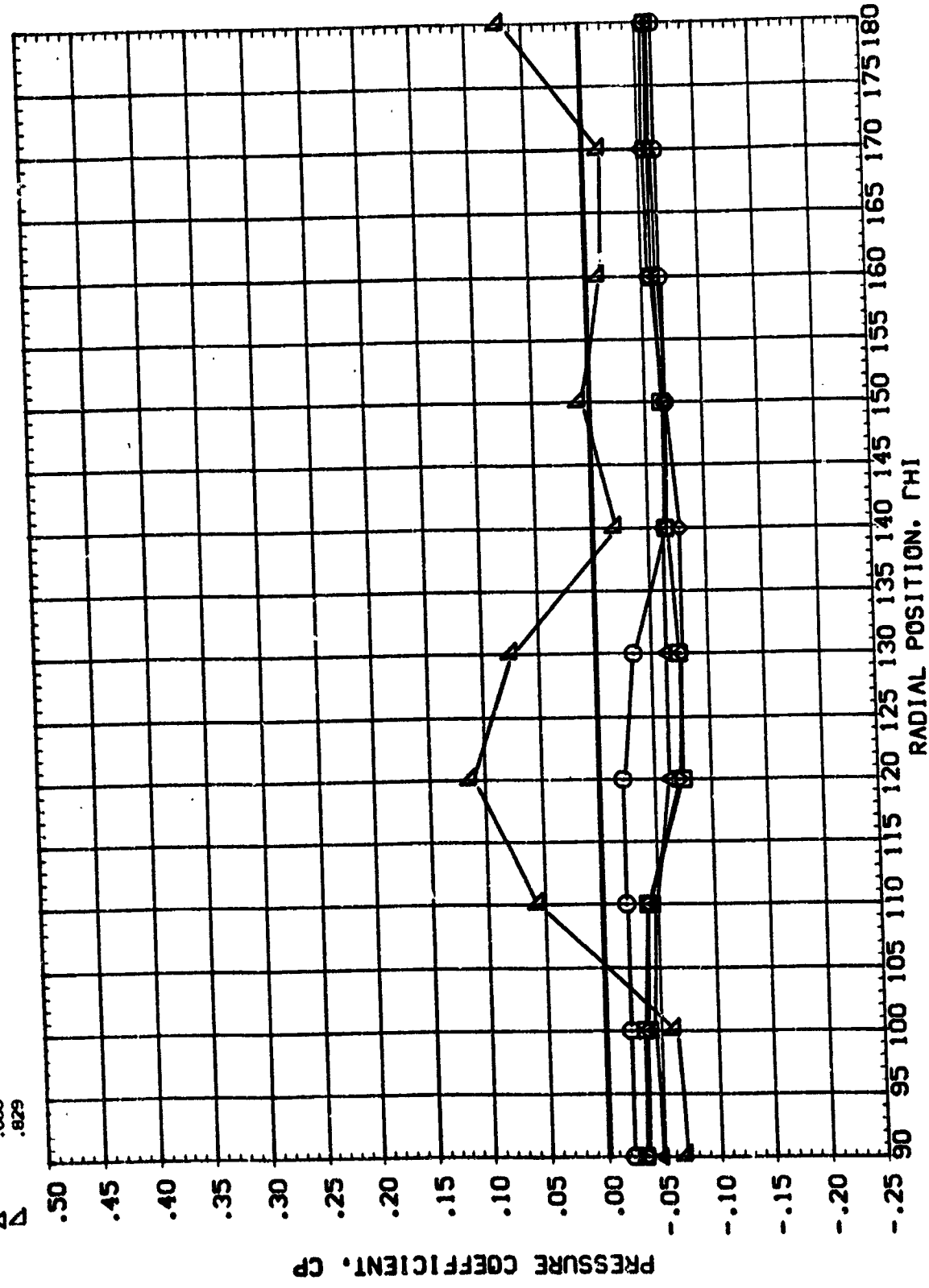


OA64 ORBITER ENTRY CONFIGURATION

(RG4004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL X/A ALPHA MACH
□ .264 16.010 4.000
◇ .405
◇ .546
◇ .688
◇ .829



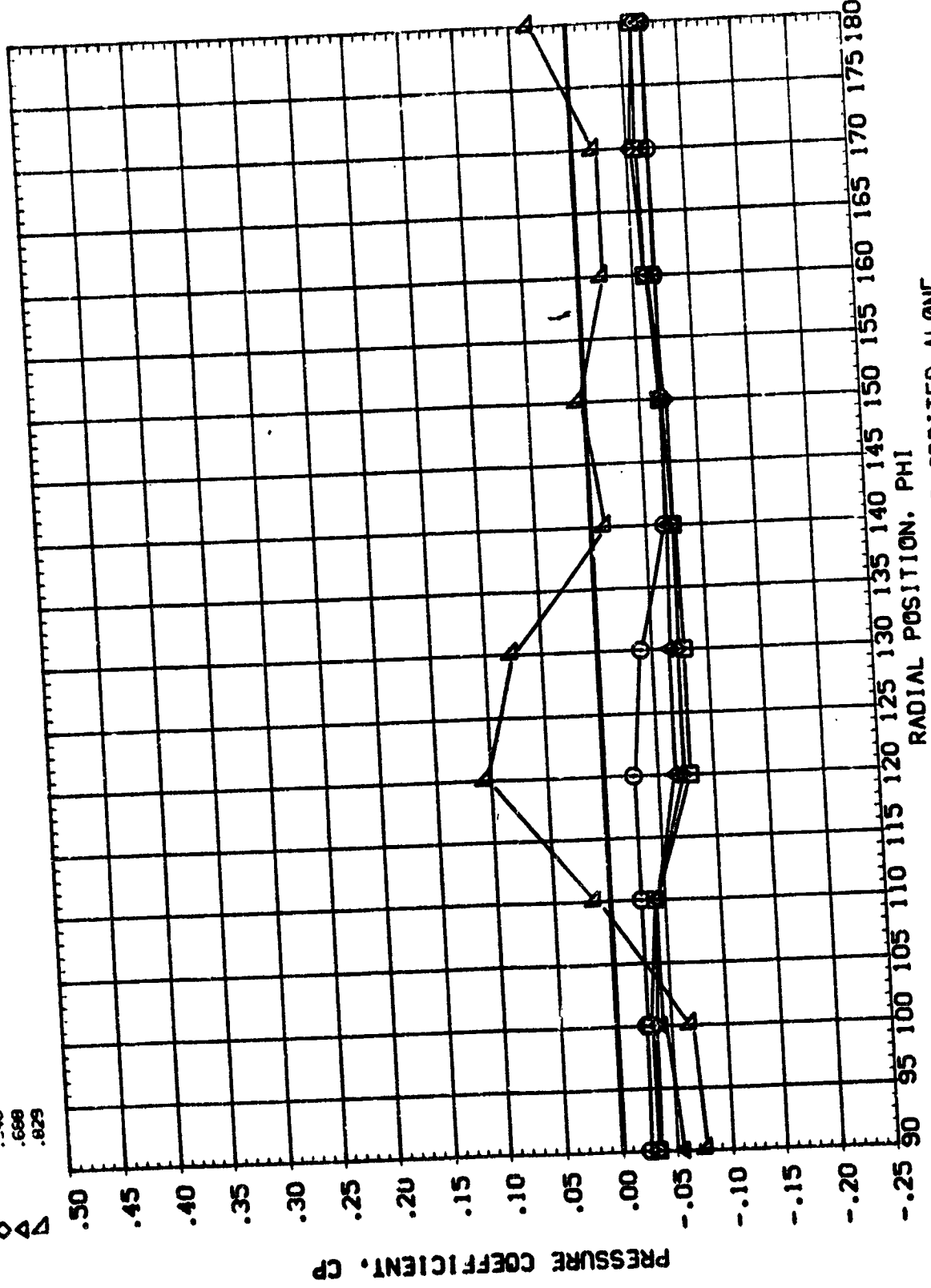
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

(R04004)

OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL X/A ALPHA MACH
○ .264 18.010 4.000
□ .403
◇ .546
△ .698
▽ .829

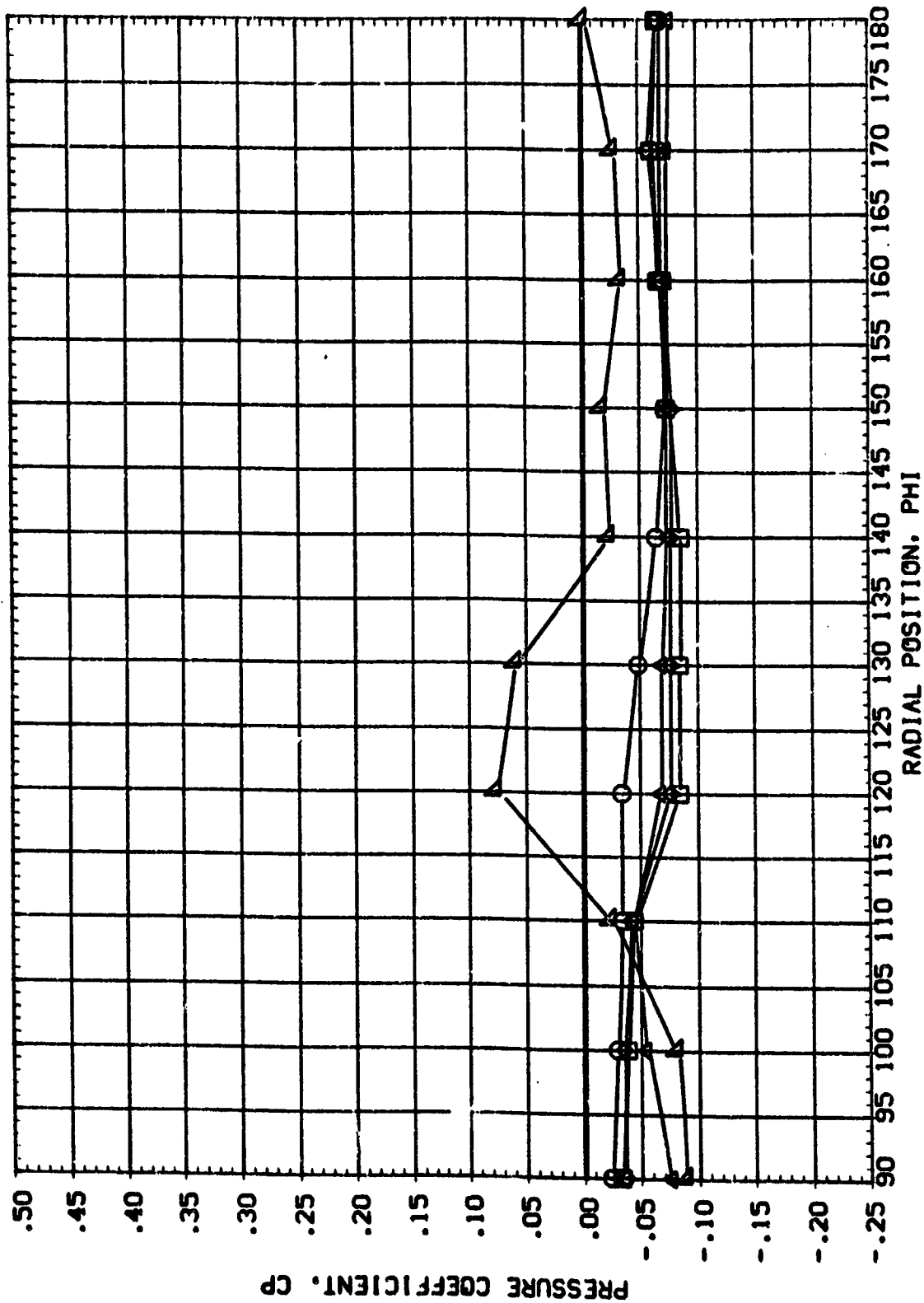


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OAG4 ORBITER ENTRY CONFIGURATION

(RQ4004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
□	.264	20.000	4.000	.000	ELEVON -15.000
◇	.405				
△	.546				
▽	.688				
▲	.829				



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL X/L ALPHA MACH

○ .264 20.970 4.000

□ .405

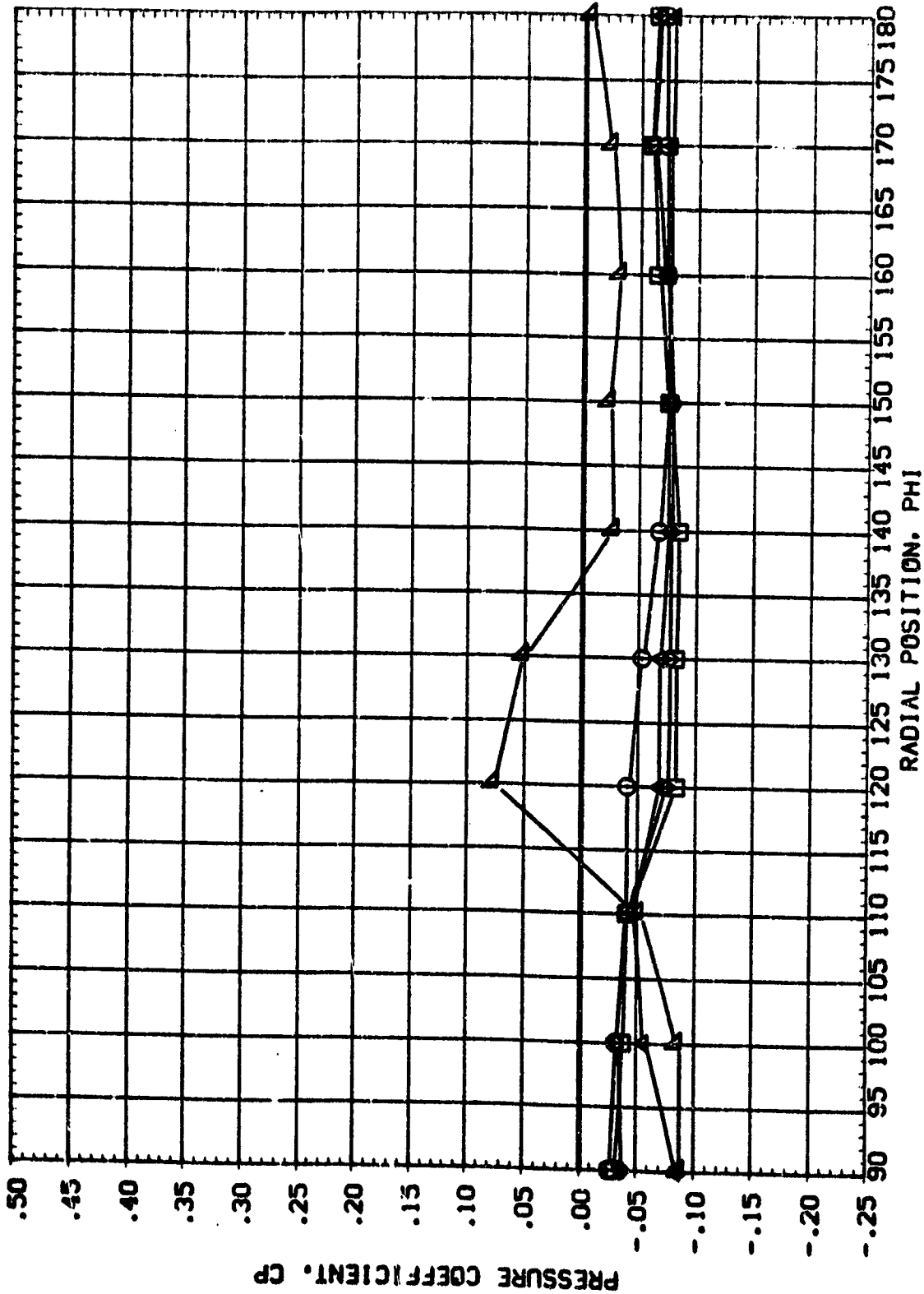
◇ .546

△ .688

▽ .823

BETA .000 ELEVON -15.000

PARAMETRIC VALUES



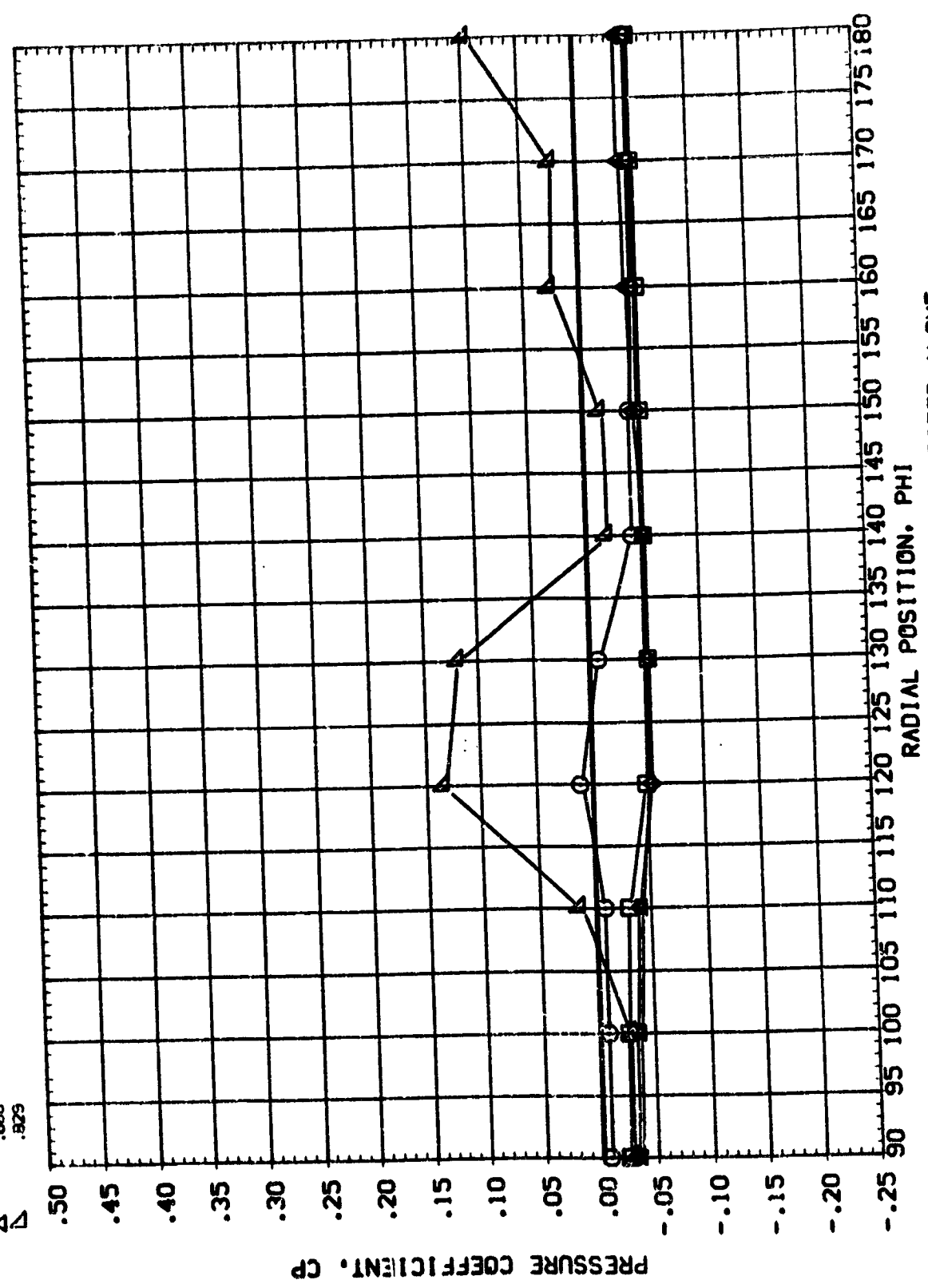
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



0A64 ORBITER ENTRY CONFIGURATION

(R04004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000
X/L .264 ALPHA 9.010 MACH 4.500
□ .405
◇ .546
△ .688
▽ .829



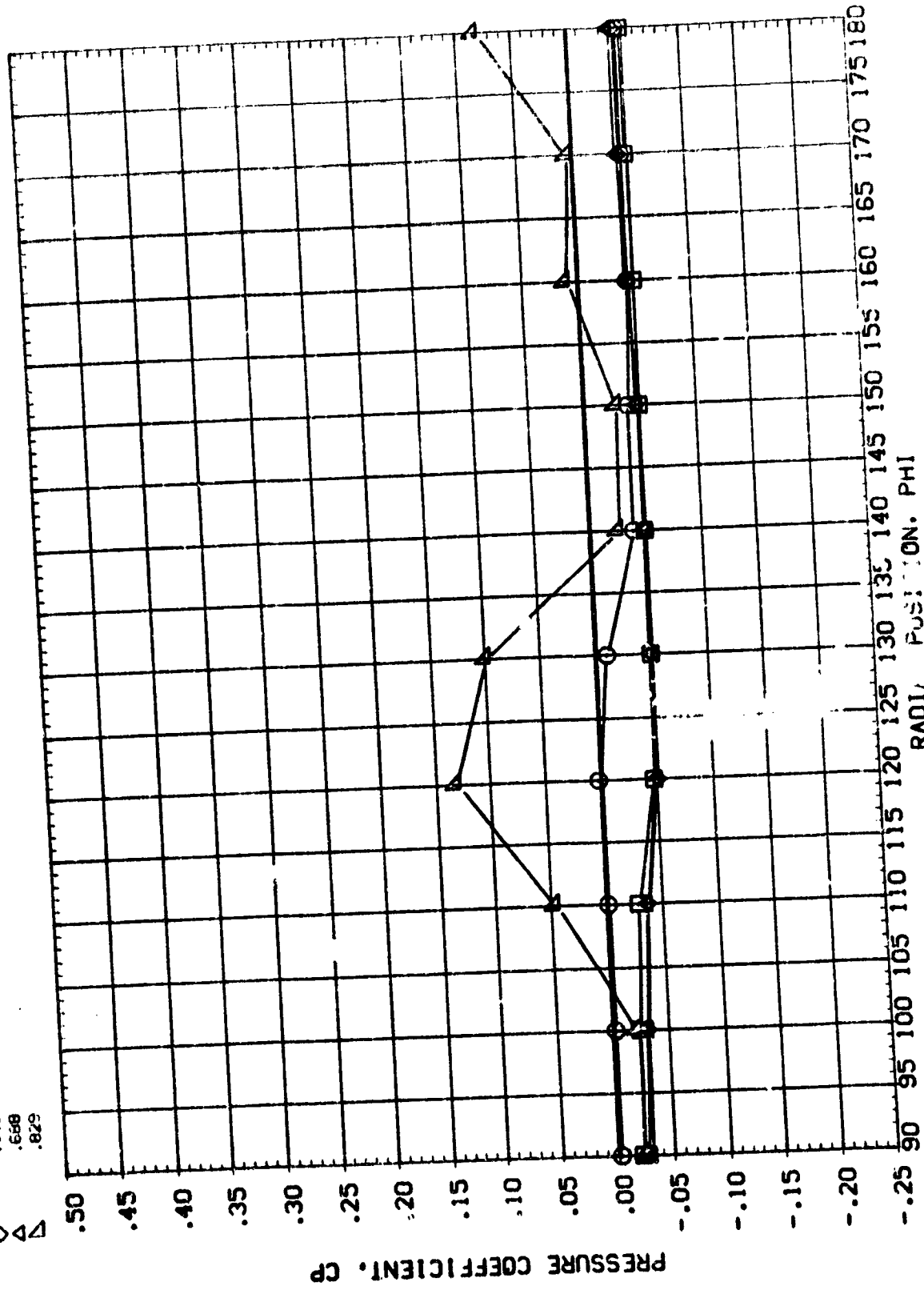
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

(R04004)

OAG4 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL X/L ALPHA MACH
□ .264 10.000 4.500
○ .40E
◇ .546
△ .698
▽ .829



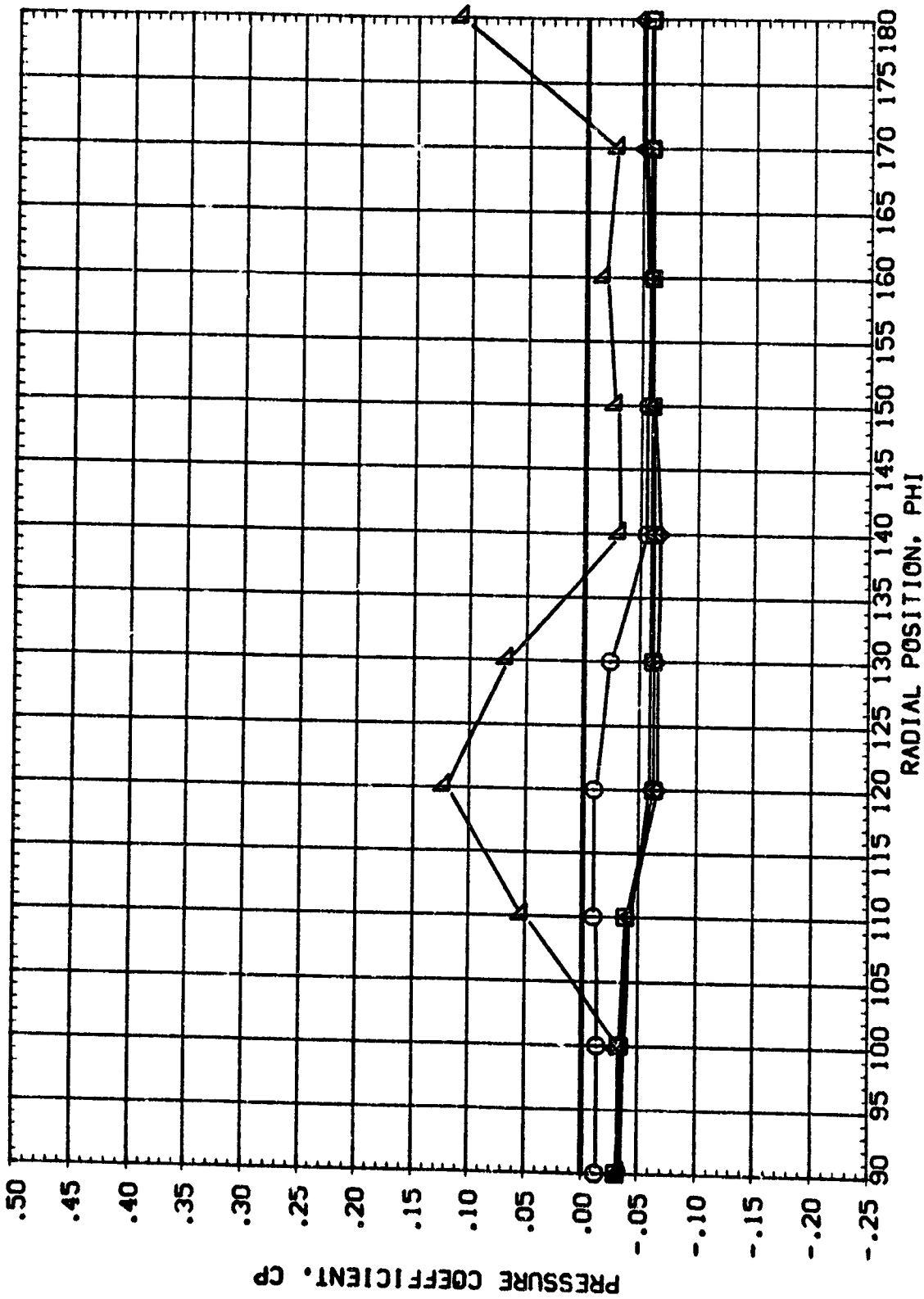
RADIAL DISTRIBUTION OF LOCAL PRESSURE COEFFICIENT FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL X/L ALPHA MACH
 ○ .264 12.010 4.500
 □ .405
 ◇ .546
 △ .688
 ▽ .829

PARAMETRIC VALUES
 BETA .000 ELEVON -15.000

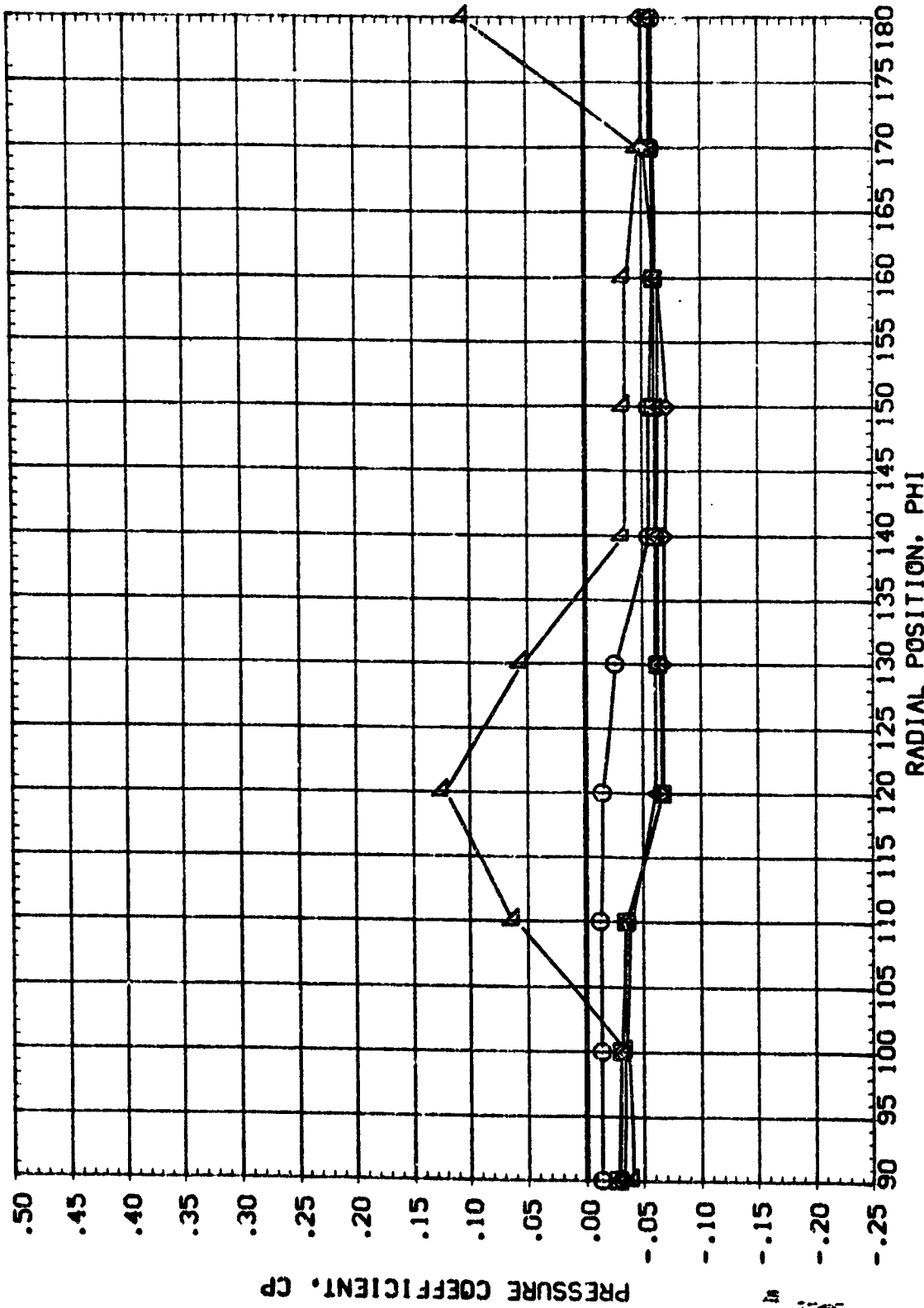


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

GA64 ORBITER ENTRY CONFIGURATION

(R04004)

SYMBOL	X/L	ALPHA	MACH	BETA	PARAMETRIC VALUES
□	.264	14.010	4.500	.000	ELEVON
◇	.402				-15.000
△	.546				
▽	.688				
△	.829				



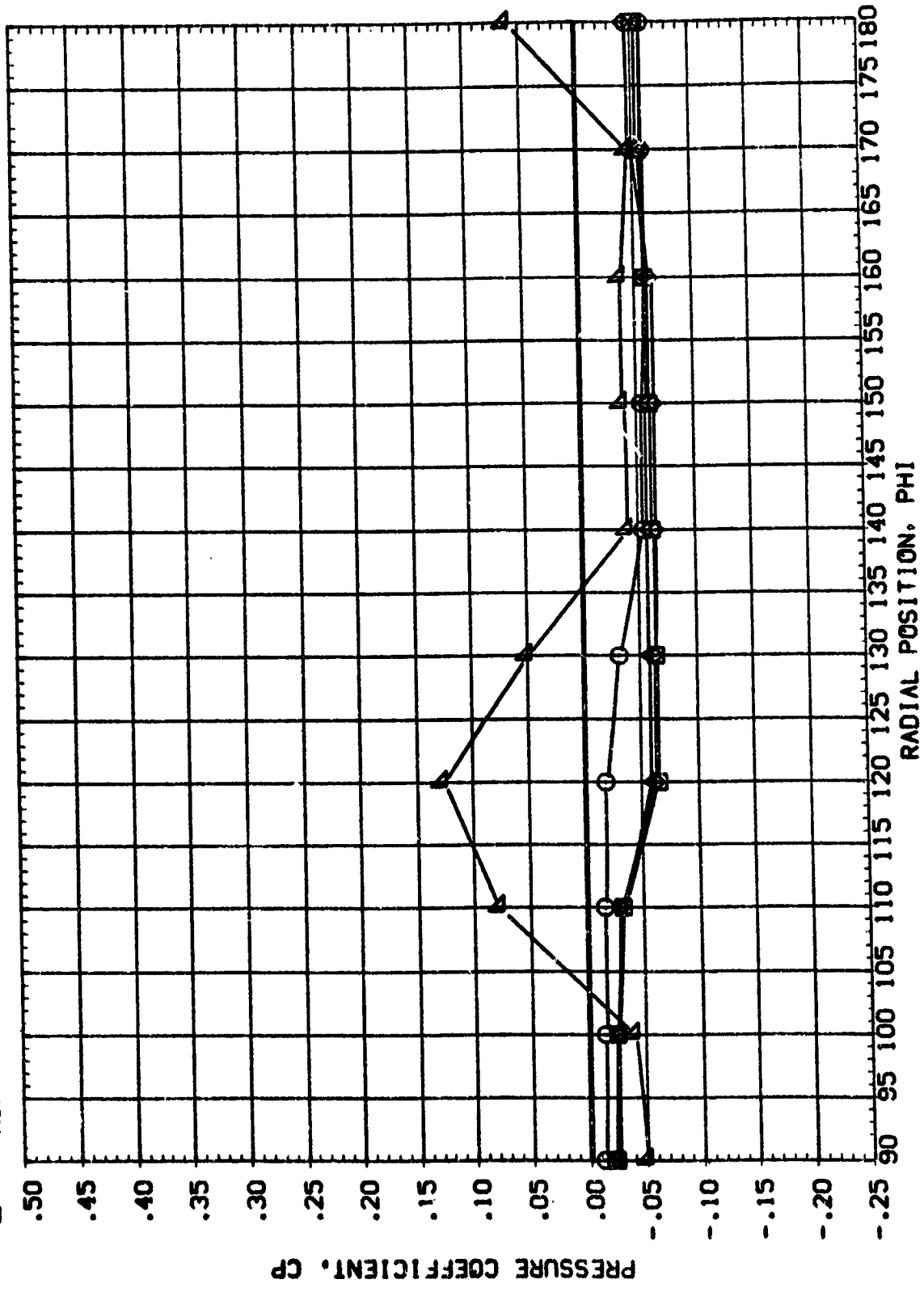
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

JA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES
 BETA .000 ELEVON -15.000

SYMBOL M/L ALPHA MACH
 ○ .264 16.000 4.500
 ◊ .405
 ◊ .546
 ◊ .688
 ◊ .829



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

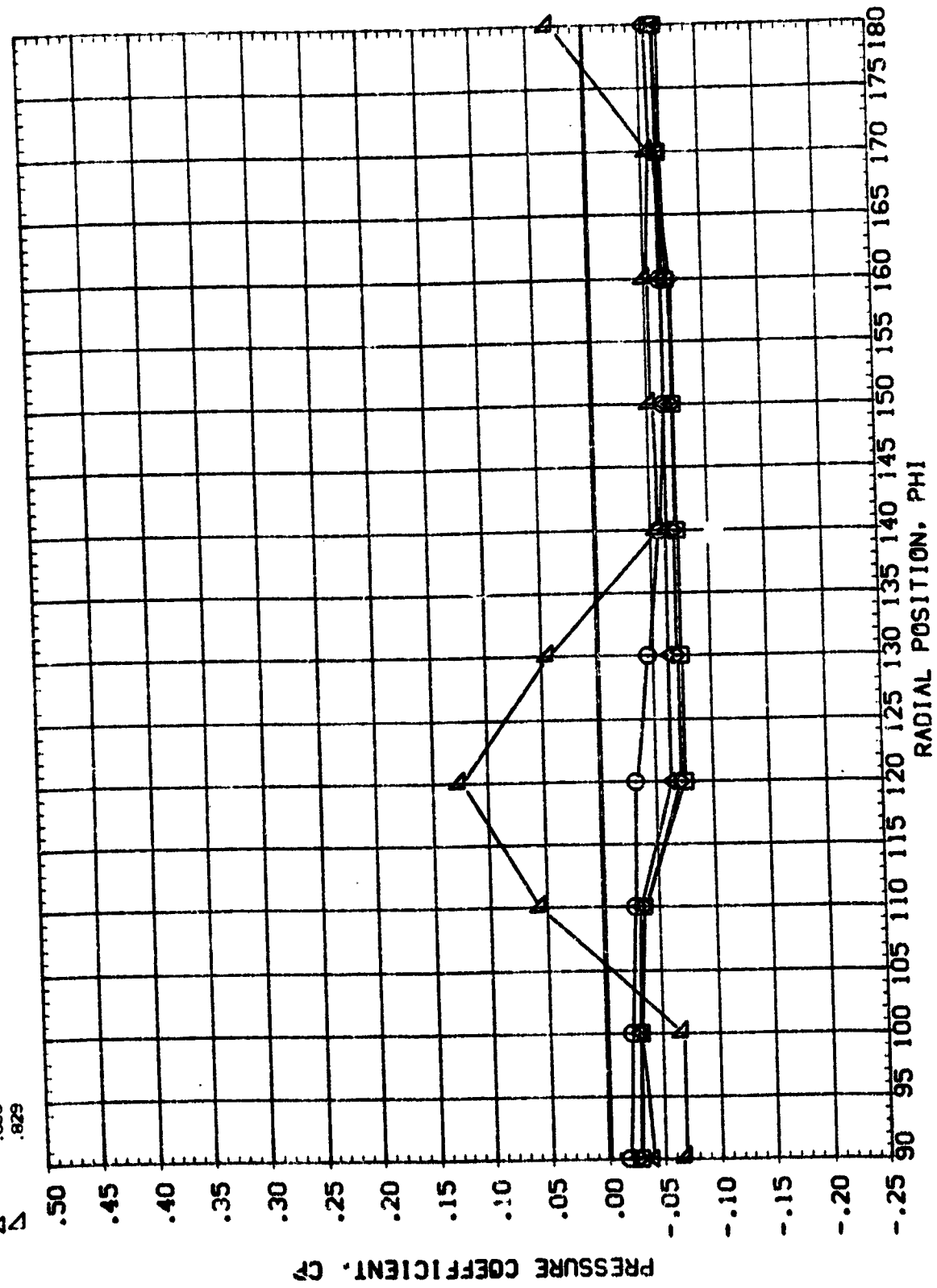
(R04004)

GA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

ALPHA 18.000 MACH 4.500

SYMBOL X/L .264
 .405
 .546
 .688
 .829



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



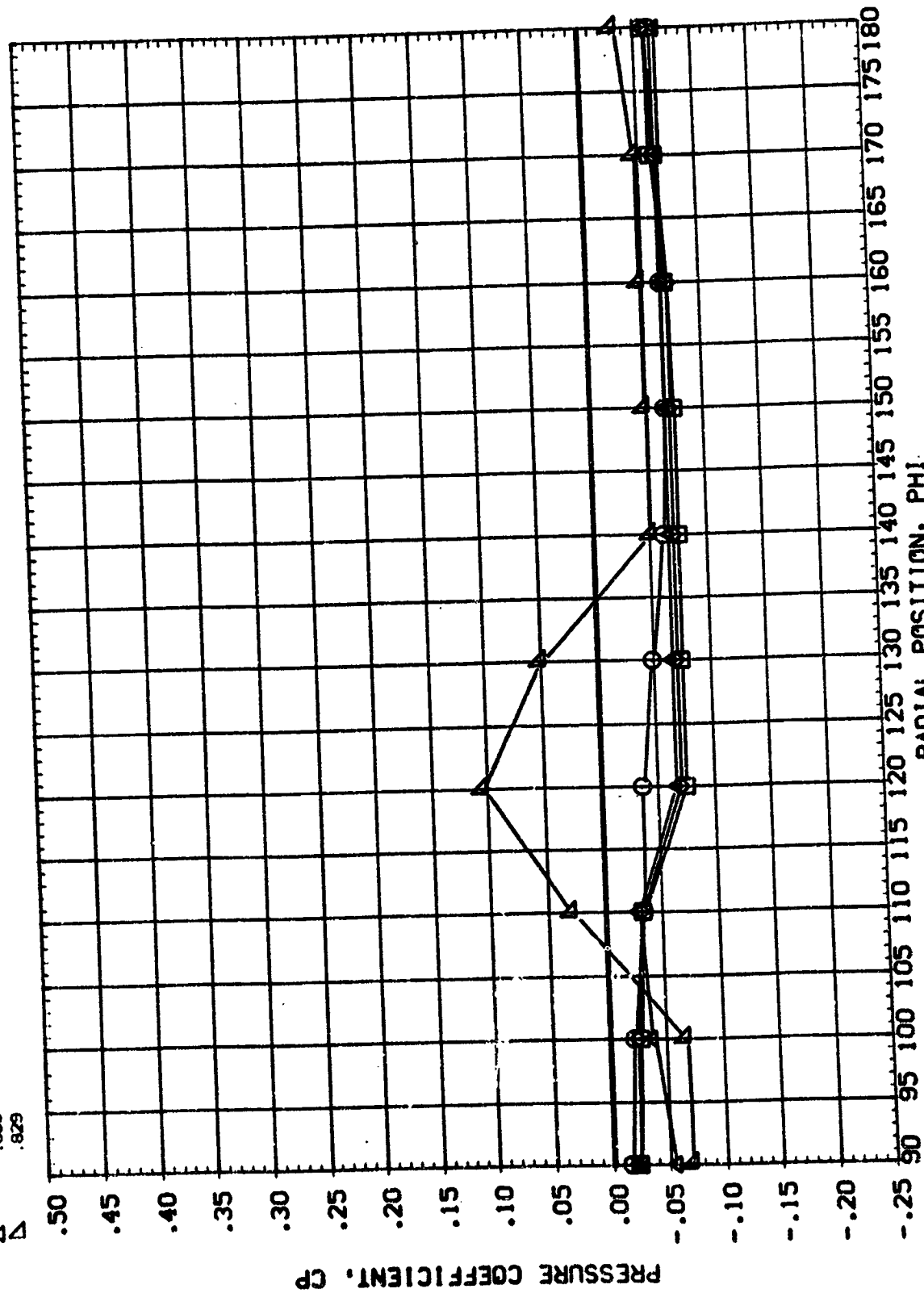
OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

ALPHA MACH
19.990 4.500

SYMBOL X/L
□ .264
○ .403
◇ .546
◇ .688
△ .829



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

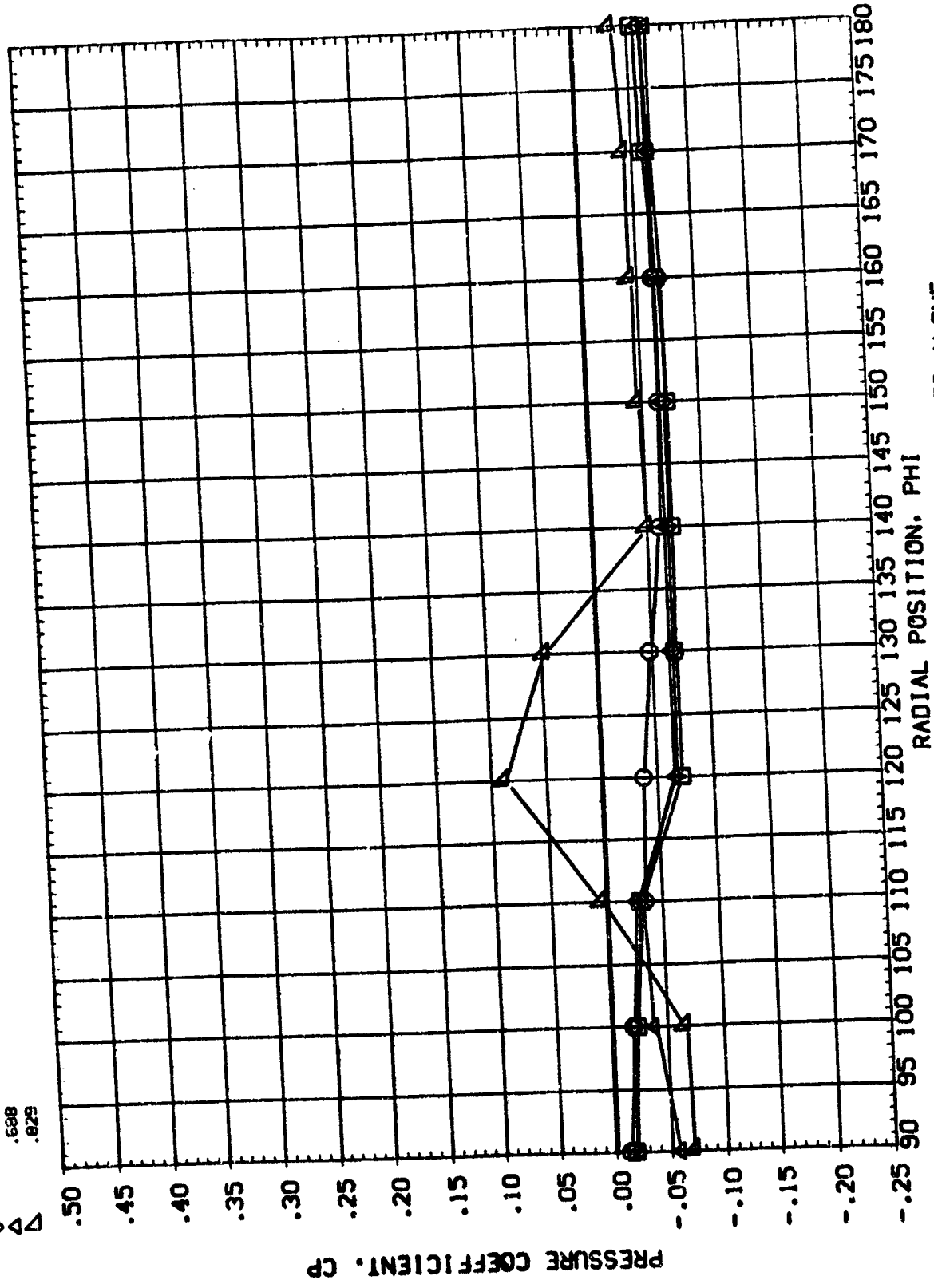
(R04004)

GA64 ORBITER ENTRY CONFIGURATION

BETA .000 ELEVON -15.000

ALPHA 20.960 MACH 4.500

SYMBOL X/L
□ .264
△ .40
◇ .546
○ .688
▽ .829



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

APPENDIX
TABULATED SOURCE DATA

TABULATED SOURCE PRESSURE DATA FOR IAS5/CMS4 (LARC UPWT 1063)

(RMS0001) (03 JAN 74)

IAS5 ORBITER ASCENT CONFIGURATION

PARAMETRIC DATA

REFERENCE DATA

SWEP = .0000 IN. XWRP = .0000 IN.
LWRP = .0000 IN. YWRP = .0000 IN.
ZWRP = .0000 IN.
SCALE = .0150 SCALE

BETA = 6.000 ELEVON = .000

PHC4 (1) = 2.500 ALPHA (1) = -6.010 RM/L = 2.4884 BETA = 6.0000

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE
X/L .0670 .1260 .1640 .2050 .2460 .2840 .3010 .3180 .3360 .3570 .3750 .3940 .4090 .4310

PHI
60.000 .1547 .1660 .1406
70.000 .1494 .1680 .1397
80.000 .2192 .1494 .1292
90.000 .1098 .0849 .0038
100.000 .0934 -.0416 -.0925 -.0616 -.0681 -.0543 -.0489 -.0537 -.0537 -.0508
110.000 -.1098 -.1015 -.0770 -.0616 -.0632 -.0679 -.0570 -.0422 -.0451 -.0383
120.000 -.1242 -.1223 -.1287 -.1369 -.1360 -.1224 -.0896 -.0777 -.0604 -.0422
130.000 -.0296
140.000 -.0461
150.000 -.0569
160.000 -.0471
170.000 -.0471
180.000 -.0371
X/L .0280 -.0144 .0029 .0128 .0274 .0310 .0296 .0306 .0299 .0316
X/L .4500 .4680 .4860 .5050 .5250 .5460 .5610 .5800 .5960 .6170 .6360 .6540 .6750 .6960 .7100

PHI
90.000 -.0441 -.0374 -.0328 -.0258 -.0162 -.0114 -.0053 -.0017 .0069 .0119 .0201 -.0117 .0283 .0301
100.000 -.0384 -.0345 -.0355 -.0364 -.0365 -.0364 -.0325 -.0280 -.0255 -.0189 -.0096 .0020 .0017 .0029
110.000 -.0403 -.0395 -.0412 -.0422 -.0422 -.0424 -.0343 -.0334 -.0307 -.0296 -.0107 -.0260 -.0017 -.0189
120.000 -.0746
130.000 -.0432
140.000 -.0307
150.000 -.0128
160.000 -.0017
170.000 .0110
180.000 .0318 .0316 .0308 .0289 .0251 .0219 .0201 .0165 .0147 -.0198 .0110 -.0196 -.0053 .0020
X/L .7290 .7470 .7670 .7850 .8030 .8230 .8420 .8620 .8820 .9000 .9100 .9400

PHI
60.000 .0572
70.000 .0696 .0565 .0256
80.000 .0704 .0407 .0156
90.000 .0407 .0046 -.0231
100.000 .0291
110.000 .0291 .0088 .0391
120.000 .0291 .0088 .0391
130.000 .0291 .0088 .0391
140.000 .0291 .0088 .0391
150.000 .0291 .0088 .0391
160.000 .0291 .0088 .0391
170.000 .0291 .0088 .0391
180.000 .0291 .0088 .0391

(RECORD)

1A35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (30) = -2.000

SECTION (1) 177MELAKE DEPENDENT VARIABLE CP

X/L	.4200	.4600	.4800	.5000	.5240	.5400	.5600	.5800	.6170	.6300	.6540	.6750	.6800	.7100
PM2														
60.000														
70.000														
80.000														
90.000														
100.000														
110.000														
120.000														
130.000														
140.000														
150.000														
160.000														
170.000														
180.000														

PM3

60.000														
70.000														
80.000														
90.000														
100.000														
110.000														
120.000														
130.000														
140.000														
150.000														
160.000														
170.000														
180.000														

MACH (1) = 2.500 ALPHA (4) = .000 RWAL = 2.4984 BETA = 0.0000

SECTION (1) 177 VDL/E DEPENDENT VARIABLE CP

X/L	.5870	.7100	.1040	.2000	.2400	.2840	.3200	.3510	.3750	.3940	.4000	.4310
PM2												
60.000												
70.000												
80.000												
90.000												
100.000												
110.000												
120.000												
130.000												
140.000												
150.000												
160.000												
170.000												
180.000												

PM3

(R05001)

1A35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (4) = .010

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5960	.6170	.6360	.6540	.6750	.6960	.7100
PHI															
90.000	-.0629	-.0750	-.0761	-.0722	-.0722	-.0722	-.0683	-.0683	-.0646	-.0561	-.0470	-.0396	-.0344	-.0303	-.0299
100.000	-.0781	-.0722	-.0683	-.0634	-.0645	-.0635	-.0616	-.0627	-.0627	-.0627	-.0479	-.0396	-.0496	-.0414	-.0390
110.000	-.0864	-.0835	-.0825	-.0815	-.0815	-.0815	-.0809	-.0827	-.0837	-.0864	-.0874	-.0701	-.0468	-.0864	-.0362
120.000						-.0857								-.0701	
130.000						-.0466								-.0637	
140.000						-.0535								-.0535	
150.000						-.0361								-.0479	
160.000						-.0544								-.0496	
170.000						-.0479								-.0572	
180.000	-.0432	-.0396	-.0396	-.0382	-.0431	-.0442	-.0442	-.0470	-.0466	-.0535	-.0516	-.0800	-.0466	-.0563	-.0344

MACH (1) = 2.500 ALPHA (5) = 1.990 BETA = 6.0000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.7690	.7470	.7870	.7890	.8030	.8290	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	-.0508	-.0635	-.0460	-.0462	-.0590	.0000	.0000		
100.000	-.0308	-.0462	-.0361	-.0362	-.0372	.0019			
110.000	-.0533	-.0508	-.0462	-.0364	.0173	-.0099			
120.000						-.0045			
130.000						.1362			
140.000						-.2939			
150.000						.2675			
160.000						-.1661			
170.000						.1365			
180.000	-.0209	-.0469	-.0453	.0100	.1356	-.2455			

MACH (1) = 2.500 ALPHA (5) = 1.990 BETA = 6.0000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1280	.1640	.2030	.2420	.2840	.3010	.3190	.3360	.3570	.3750	.3940	.4030	.4310
PHI														
60.000	.1316	.0601	.0969											
70.000	.1175	.0919	.0601											
80.000	.1184	.0927	.0715											
90.000		.0760	.0178	-.0376	-.0674	-.0544	-.0326	-.0646	-.0794	-.0678	-.0953	-.0960	-.0970	-.0960
100.000					-.0822	-.0794	-.0683	-.0591	-.0711	-.0890	-.0843	-.1000	-.1009	-.0960
110.000					-.1137	-.1211	-.1304	-.1406	-.1313	-.0730	-.0744	-.0833	-.0872	-.0872
120.000					-.0816								-.0774	
130.000					-.0890								-.0692	
140.000					-.1109								-.0633	
150.000					-.1062								-.0676	

TABULATED SOURCE PRESSURE DATA FOR 1A35/0A64 (LARC UPWT 1063)

(RHS0001)

DATE 24 JAN 74

1A35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.950 ALPHA (4) = .000 RW/L = 2.5139 BETA = 6.0271

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE X/L .0870 .1260 .1640 .2030 .2420 .2810 .3010 .3190 .3360 .3570 .3750 .3940 .4090 .4310

Table with columns for Mach number (90.000 to 180.000) and various CP values for the fuselage section.

Table with columns for Mach number (90.000 to 180.000) and various CP values for the fuselage section.

Table with columns for Mach number (90.000 to 180.000) and various CP values for the fuselage section.

(R05001)

TABULATED SOURCE PRESSURE DATA FOR IAS5/OM84 (LARC UPVT 1063)

DATE 24 JAN 74

IAS5 ORBITTER ASCENT CONFIGURATION

NACH (3) = 4.000 ALPHA (5) = 2.000 RMA = 3.4976 BETA = 6.0000

SECTION (1) FUSELAGE

X/L .0870 .1280 .1840 .2000 .2420 .2840 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

PHI	.0740	.0816	.0429										
60.000	.0522	.0808	.0482										
70.000	.1181	.0811	.0487										
80.000		.0420	.0075	-.0146	-.0246	-.0281	-.0280	-.0313	-.0337	-.0361	-.0399	-.0409	-.0429
90.000					-.0356	-.0381	-.0337	-.0280	-.0260	-.0309	-.0356	-.0409	-.0429
100.000					-.0372	-.0362	-.0382	-.0410	-.0434	-.0425	-.0413	-.0393	-.0370
110.000					-.0098								
120.000					-.0198								
130.000					-.0365								
140.000					-.0380								
150.000					-.0366								
160.000					-.0381								
170.000					-.0299	-.0313	-.0328	-.0294	-.0294	-.0299	-.0304	-.0309	-.0329
181.000	.4500	.4680	.4980	.5090	.5240	.5480	.5800	.5980	.6170	.6360	.6540	.6730	.6990

X/L	.7290	.7470	.7670	.7850	.8030	.8200	.8390	.8590	.8800	.9000	.9400		
PHI													
90.000	-.0429	-.0434	-.0434	-.0439	-.0429	-.0409	-.0386	-.0378	-.0376	-.0378	-.0378	-.0287	-.0363
100.000	-.0429	-.0429	-.0429	-.0434	-.0429	-.0414	-.0398	-.0383	-.0383	-.0385	-.0385	-.0287	-.0363
110.000	-.0473	-.0454	-.0429	-.0404	-.0389	-.0354	-.0363	-.0363	-.0355	-.0352	-.0352	-.0287	-.0363
120.000						-.0324							
130.000						-.0446							
140.000						-.0416							
150.000						-.0333							
160.000						-.0287							
170.000						-.0257							
180.000	-.0314	-.0288	-.0284	-.0259	-.0264	-.0265	-.0280	-.0287	-.0287	-.0302	-.0287	-.0287	-.0341

X/L													
PHI													
60.000													
70.000													
80.000													
90.000	-.0349	-.0355	-.0349	-.0382	-.0376	-.0274							
100.000	-.0349	-.0355	-.0380	-.0242	-.0188	-.0091							
110.000	-.0349	-.0355	-.0290	-.0161	-.0010	-.0091							
120.000						.0119							
130.000						.1766							
140.000						.1848							
150.000						.1809							
160.000						.0819							
170.000						.0292							
180.000	-.0349	-.0349	-.0378	-.0328	.0022	.1305							

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IASB/OM64 (LARC UPWT 31063)

(06890001)

IASB CRIBSTER ASCENT CONFIGURATION

MACH (4) = 4.970 ALPHA (4) = -.0510 RW/L = 3.5070 BETA = 6.0500

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE

X/L .0070 .1380 .1640 .2000 .2420 .2840 .3010 .3190 .3360 .3570 .3750 .3940 .4090 .4310

PHI	.0048	.0722	.0499										
90.000	.1182	.0873	.0576										
70.000	.1394	.0746	.0532										
50.000		.0864	-.0124	-.0506	-.0200	-.0212	-.0224	-.0247	-.0279	-.0297	-.0309	-.0322	
30.000				-.0506	-.0347	-.0365	-.0371	-.0384	-.0433	-.0436	-.0450	-.0407	
10.000				-.0433	-.0453	-.0470	-.0482	-.0488	-.0474	-.0456	-.0430		
110.000				.0366								-.0407	
120.000				-.0018								-.0297	
130.000				-.0300								-.0255	
140.000				-.0300								-.0212	
150.000				-.0177								-.0200	
160.000				-.0177	-.0130	-.0141	-.0124	-.0130	-.0157	-.0136	-.0106	-.0206	
170.000				-.0106	-.0130	-.0141	-.0124	-.0130	-.0157	-.0136	-.0106		
180.000	.4680	.4680	.5000	.5000	.5600	.5600	.6170	.6360	.6540	.6730	.6600	.7100	

X/L	.4680	.4680	.5000	.5000	.5600	.5600	.6170	.6360	.6540	.6730	.6600	.7100
PHI												
90.000	-.0846	-.0316	-.0309	-.0303	-.0297	-.0282	-.0291	-.0273	-.0255	-.0246	-.0237	-.0209
70.000	-.0279	-.0291	-.0297	-.0279	-.0267	-.0246	-.0219	-.0219	-.0219	-.0210	-.0210	-.0270
50.000	-.0401	-.0389	-.0383	-.0376	-.0346	-.0316	-.0309	-.0282	-.0255	-.0255	-.0300	
30.000					-.0297							-.0345
10.000					-.0372							-.0327
110.000					-.0336							-.0273
120.000					-.0257							-.0255
130.000					-.0174							-.0264
140.000					-.0196							-.0255
150.000	-.0300	-.0188	-.0175	-.0157	-.0180	-.0129	-.0136	-.0210	-.0237	-.0246	-.0255	-.0270
160.000					-.0280	-.0280	-.0280	-.0280	-.0280	-.0280	-.0280	
170.000	.7290	.7470	.7650	.7830	.8200	.8200	.9400					

X/L	.7290	.7470	.7650	.7830	.8200	.8200	.9400					
PHI												
90.000					-.0396							
70.000					-.0323	-.0257	-.0237					
50.000					-.0484	-.0361	-.0217					
30.000												
10.000												
110.000												
120.000												
130.000												
140.000												
150.000												
160.000												
170.000												
180.000	-.0250	-.0257	-.0270	-.0134	.0274	.0274						

TABULATED SOURCE PRESSURE DATA FOR IA35/OM4 (LARC UPWT 1063)

(R05001)

IA35 ORBITER ASCENT CONFIGURATION

MACH (4) = 4.370 ALPHA (θ) = 4.010 RW/L = 3.5070 BETA = 6.0300

SECTION (1) PUNELARGE DEPENDENT VARIABLE C_P

X/L	.0870	.1280	.1640	.2030	.2420	.2840	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI														
60.000	.0712	.0599	.0318											
70.000	.0612	.0559	.0453											
80.000	.0506	.0505	.0506											
90.000		.0459	.0430	-.0129	-.0223	-.0294	-.0294	-.0325	-.0347	-.0355	-.0364	-.0378	-.0384	-.0402
100.000					-.0225	-.0211	-.0211	-.0241	-.0262	-.0283	-.0303	-.0304	-.0306	-.0314
110.000					-.0366	-.0400	-.0435	-.0470	-.0494	-.0494	-.0494	-.0494	-.0494	-.0506
120.000					-.0117									-.0439
130.000					-.0223									-.0491
140.000					-.0235									-.0480
150.000					-.0355									-.0402
160.000					-.0359									-.0368
170.000					-.0359									-.0359
180.000					-.0359	-.0361	-.0341	-.0329	-.0329	-.0329	-.0329	-.0329	-.0329	-.0329
X/L	.4600	.4880	.4980	.5240	.5480	.5610	.5800	.5960	.6170	.6360	.6540	.6750	.6880	.7100

PHI														
90.000	-.0482	-.0409	-.0409	-.0402	-.0390	-.0384	-.0364	-.0364	-.0364	-.0364	-.0365	-.0346	-.0353	-.0416
100.000	-.0414	-.0414	-.0409	-.0402	-.0402	-.0375	-.0375	-.0346	-.0346	-.0337	-.0337	-.0346	-.0329	-.0384
110.000	-.0384	-.0396	-.0390	-.0384	-.0378	-.0355	-.0346	-.0346	-.0329	-.0311	-.0302	-.0302	-.0329	-.0344
120.000					-.0366									-.0337
130.000					-.0392									-.0364
140.000					-.0364									-.0373
150.000					-.0364									-.0362
160.000					-.0346									-.0362
170.000					-.0355									-.0400
180.000	-.0323	-.0333	-.0336	-.0378	-.0364	-.0364	-.0375	-.0362	-.0362	-.0400	-.0400	-.0409	-.0400	-.0377

X/L	.7290	.7470	.7670	.7880	.8030	.8230	.8400	.8500	.9000	.9400
-----	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

PHI										
60.000										
70.000										
80.000										
90.000	-.0361	-.0370	-.0377	-.0360	-.0367	-.0324				
100.000	-.0384	-.0351	-.0311	-.0305	-.0243	-.0147				
110.000	-.0316	-.0316	-.0296	-.0219	-.0107	-.0134				
120.000					-.0075					
130.000					.11072					
140.000					.1706					
150.000					.1707					
160.000					-.0075					
170.000					-.0101					
180.000	-.0377	-.0378	-.0357	-.0351	-.0309	-.0140				

TABULATED SOURCE PRESSURE DATA FOR IASS/CASA (LARC UPWT 1083)

(880002) (03 JAN 74)

IASS ORBITER ASCENT CONFIGURATION

PARAMETRIC DATA

REFERENCE DATA

SHIP = .0000 20. IN. YWRP = .0000 IN.
 LWRP = .0000 IN. YWRP = .0000 IN.
 SHIP = .0000 IN. ZWRP = .0000 IN.
 SCALE = .0150 SCALE

BETA = 4.000 ELEVON = .000

RACH (1) = 2.500 ALPHA (1) = -3.900 RW/L = 2.4000 BETA = 4.0000

DEPENDENT VARIABLE C/P

SECTION (1) PURCHASE

X/L	.0070	.1200	.1640	.2080	.2420	.2860	.3200	.3540	.3880	.4220	.4560	.4900	.5240
-----	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

P/H	.2000	.1946	.1789	.1632	.1475	.1318	.1161	.1004	.0847	.0690	.0533	.0376	.0219
60.000	.2000	.1946	.1789	.1632	.1475	.1318	.1161	.1004	.0847	.0690	.0533	.0376	.0219
70.000	.1884	.1825	.1674	.1517	.1360	.1203	.1046	.0889	.0732	.0575	.0418	.0261	.0104
80.000	.2207	.1955	.1512	.1109	.0606	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074
90.000	.2530	.1955	.1312	.1109	.0606	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074
100.000	.2853	.1955	.1312	.1109	.0606	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074
110.000	.3176	.1955	.1312	.1109	.0606	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074
120.000	.3500	.1955	.1312	.1109	.0606	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074
130.000	.3823	.1955	.1312	.1109	.0606	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074
140.000	.4146	.1955	.1312	.1109	.0606	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074
150.000	.4470	.1955	.1312	.1109	.0606	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074
160.000	.4793	.1955	.1312	.1109	.0606	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074

X/L	.4880	.4680	.4480	.4280	.4080	.3880	.3680	.3480	.3280	.3080	.2880	.2680	.2480
P/H	.0376	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074	-.4616	-.5158	-.5700	-.6242
60.000	.0376	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074	-.4616	-.5158	-.5700	-.6242
70.000	.0376	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074	-.4616	-.5158	-.5700	-.6242
80.000	.0376	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074	-.4616	-.5158	-.5700	-.6242
90.000	.0376	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074	-.4616	-.5158	-.5700	-.6242
100.000	.0376	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074	-.4616	-.5158	-.5700	-.6242
110.000	.0376	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074	-.4616	-.5158	-.5700	-.6242
120.000	.0376	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074	-.4616	-.5158	-.5700	-.6242
130.000	.0376	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074	-.4616	-.5158	-.5700	-.6242
140.000	.0376	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074	-.4616	-.5158	-.5700	-.6242
150.000	.0376	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074	-.4616	-.5158	-.5700	-.6242
160.000	.0376	-.0280	-.0822	-.1364	-.1906	-.2448	-.2990	-.3532	-.4074	-.4616	-.5158	-.5700	-.6242

X/L	.7200	.7470	.7650	.7830	.8010	.8190	.8370	.8550	.8730	.8910	.9090	.9270	.9450
P/H	.0596	.0783	.0970	.1157	.1344	.1531	.1718	.1905	.2092	.2279	.2466	.2653	.2840
60.000	.0596	.0783	.0970	.1157	.1344	.1531	.1718	.1905	.2092	.2279	.2466	.2653	.2840
70.000	.0596	.0783	.0970	.1157	.1344	.1531	.1718	.1905	.2092	.2279	.2466	.2653	.2840
80.000	.0596	.0783	.0970	.1157	.1344	.1531	.1718	.1905	.2092	.2279	.2466	.2653	.2840
90.000	.0596	.0783	.0970	.1157	.1344	.1531	.1718	.1905	.2092	.2279	.2466	.2653	.2840
100.000	.0596	.0783	.0970	.1157	.1344	.1531	.1718	.1905	.2092	.2279	.2466	.2653	.2840
110.000	.0596	.0783	.0970	.1157	.1344	.1531	.1718	.1905	.2092	.2279	.2466	.2653	.2840
120.000	.0596	.0783	.0970	.1157	.1344	.1531	.1718	.1905	.2092	.2279	.2466	.2653	.2840
130.000	.0596	.0783	.0970	.1157	.1344	.1531	.1718	.1905	.2092	.2279	.2466	.2653	.2840
140.000	.0596	.0783	.0970	.1157	.1344	.1531	.1718	.1905	.2092	.2279	.2466	.2653	.2840
150.000	.0596	.0783	.0970	.1157	.1344	.1531	.1718	.1905	.2092	.2279	.2466	.2653	.2840
160.000	.0596	.0783	.0970	.1157	.1344	.1531	.1718	.1905	.2092	.2279	.2466	.2653	.2840

TABLATED SOURCE PRESSURE DATA FOR 1A35/0A64 (LARC UPMT 1063)
(R05000E)

DATE 24 JAN 74

1A35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.900 ALPHA (1) = -5.960

SECTION (1) FUSELAGE DEPENDENT VARIABLE C_P

X/L	.7250	.7470	.7676	.7850	.8030	.8250	.8620	.9000	.9400
PHI									
130.000							.2790		
140.000							.4162		
150.000							.4494		
160.000							.3233		
170.000							.2781		
180.000							.4687		

MACH (1) = 2.900 ALPHA (2) = -3.960 RV/L = 2.4969 BETA = 4.0900

SECTION (1) FUSELAGE DEPENDENT VARIABLE C_P

X/L	.0870	.1280	.1640	.2000	.2420	.2840	.3010	.3180	.3360	.3570	.3750	.3940	.4080	.4310
PHI														
60.000		.2090	.1954	.1390										
70.000		.1731	.1554	.1297										
80.000		.2227	.1740	.1394										
90.000				.1006	.1006									
100.000						.0268	-.0161	.0004	-.0133	-.0316	-.0453	-.0535	-.0599	-.0560
110.000						-.0535	-.0462	-.0361	-.0297	-.0161	-.0007	-.0453	-.0530	-.0570
120.000						-.1054	-.1045	-.1137	-.1228	-.1248	-.0963	-.0230	-.0260	-.0347
130.000						-.0068								-.0453
140.000						-.0369								-.0950
150.000						-.0680								-.0366
160.000						-.0817								-.0143
170.000						-.0253								.0012
180.000						-.0544								.0089
190.000						-.0525	-.0532	-.0197	-.0080	.0049	.0131	.0119	.0109	.0128
200.000														.0109

X/L	.4500	.4680	.4680	.5020	.5240	.5480	.5610	.5800	.6170	.6360	.6540	.6730	.6860	.7100
PHI														
90.000		-.0581	-.0473	-.0405	-.0376	-.0318	-.0300	-.0272	-.0226	-.0144	-.0016	.0094	.0002	.0165
100.000		-.0512	-.0444	-.0376	-.0327	-.0288	-.0254	-.0263	-.0245	-.0228	-.0181	-.0126	.0021	.0066
110.000		-.0358	-.0347	-.0318	-.0306	-.0287	-.0245	-.0245	-.0254	-.0272	-.0190	-.0254	.0012	-.0162
120.000						-.0405								-.0327
130.000						-.0043								-.0263
140.000						.0002								-.0117
150.000						-.0053								.0002
160.000						-.0071								.0039
170.000		.0117	.0089	.0128	.0109	.0070	.0046	.0021	.0012	.0012	.0021	-.0062	.0012	.0030
180.000		.7290	.7470	.7670	.7850	.8030	.8250	.8620	.9000	.9400				.0002

(R05002)

TABLATED SOURCE PRESSURE DATA FOR IAS5/0084 (LARC UPWT 1083)

IAS5 ORBITER ASCENT CONFIGURATION

PACK (1) = 2.500 ALPHA (2) = -3.500

SECTION (1) P/BELAGE

X/L	.7250	.7470	.7670	.7850	.8150	.8250	.8500	.9000	.9400
PW2					.0165	.0277	.0321		
80.000					.0341	.0419	.0480		
75.000					.0425	.0495	.0550		
80.000					.0448	.0500	.0544		
75.000					.0500	.0543	.0587		
80.000					.0517	.0558	.0600		
100.000					.0524	.0564	.0603		
110.000					.0530	.0568	.0605		
120.000					.0535	.0572	.0608		
140.000					.0540	.0576	.0611		
150.000					.0545	.0580	.0615		
170.000					.0550	.0584	.0618		
180.000					.0555	.0588	.0621		

PACK (1) = 2.500 ALPHA (3) = -1.500 BETA = 4.0000

SECTION (1) P/BELAGE

X/L	.0070	.1000	.1900	.2600	.3000	.3100	.3260	.3570	.3960	.4300	.4310
PW2											
80.000											
75.000											
80.000											
75.000											
80.000											
100.000											
110.000											
120.000											
140.000											
150.000											
170.000											
180.000											

SECTION (1) P/BELAGE

X/L	.0070	.1000	.1900	.2600	.3000	.3100	.3260	.3570	.3960	.4300	.4310
PW2											
80.000											
75.000											
80.000											
75.000											
80.000											
100.000											
110.000											
120.000											
140.000											
150.000											
170.000											
180.000											

SECTION (1) P/BELAGE

X/L	.0070	.1000	.1900	.2600	.3000	.3100	.3260	.3570	.3960	.4300	.4310
PW2											
80.000											
75.000											
80.000											
75.000											
80.000											
100.000											
110.000											
120.000											
140.000											
150.000											
170.000											
180.000											

SECTION (1) P/BELAGE

X/L	.0070	.1000	.1900	.2600	.3000	.3100	.3260	.3570	.3960	.4300	.4310
PW2											
80.000											
75.000											
80.000											
75.000											
80.000											
100.000											
110.000											
120.000											
140.000											
150.000											
170.000											
180.000											

SECTION (1) P/BELAGE

X/L	.0070	.1000	.1900	.2600	.3000	.3100	.3260	.3570	.3960	.4300	.4310
PW2											
80.000											
75.000											
80.000											
75.000											
80.000											
100.000											
110.000											
120.000											
140.000											
150.000											
170.000											
180.000											

SECTION (1) P/BELAGE

X/L	.0070	.1000	.1900	.2600	.3000	.3100	.3260	.3570	.3960	.4300	.4310
PW2											
80.000											
75.000											
80.000											
75.000											
80.000											
100.000											
110.000											
120.000											
140.000											
150.000											
170.000											
180.000											

SECTION (1) P/BELAGE

X/L	.0070	.1000	.1900	.2600	.3000	.3100	.3260	.3570	.3960	.4300	.4310
PW2											
80.000											
75.000											
80.000											
75.000											
80.000											
100.000											
110.000											
120.000											
140.000											
150.000											
170.000											
180.000											

SECTION (1) P/BELAGE

X/L	.0070	.1000	.1900	.2600	.3000	.3100	.3260	.3570	.3960	.4300	.4310
PW2											
80.000											
75.000											
80.000											
75.000											
80.000											
100.000											
110.000											
120.000											
140.000											
150.000											
170.000											
180.000											

SECTION (1) P/BELAGE

X/L	.0070	.1000	.1900	.2600	.3000	.3100	.3260	.3570	.3960	.4300	.4310
PW2											
80.000											
75.000											
80.000											
75.000											
80.000											
100.000											
110.000											
120.000											
140.000											
150.000											
170.000											
180.000											

SECTION (1) P/BELAGE

X/L	.0070	.1000	.1900	.2600	.3000	.3100	.3260	.3570	.3960	.4300	.4310
PW2											
80.000											
75.000											
80.000											

TABULATED SOURCE PRESSURE DATA FOR IA35/OM64 (LARC UPWT 1063)

(R05002)

IA35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (3) = -1.950

SECTION (1) FUSELAGE DEPENDENT VARIABLE C'

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6980	.7100
PHI														
160.000														
170.000														
180.000														
X/L	.7250	.7470	.7670	.7830	.8030	.8250	.8620	.9000	.9400					
PHI														
160.000														
170.000														
180.000														

PHI														
60.000														
70.000														
80.000														
90.000														
100.000														
110.000														
120.000														
130.000														
140.000														
150.000														
160.000														
170.000														
180.000														

MACH (1) = 2.500 ALPHA (4) = -.010 RV/L = 2.4969 BETA = 4.0800

SECTION (1) FUSELAGE DEPENDENT VARIABLE C'

X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3790	.3940	.4050	.4310
PHI															
60.000															
70.000															
80.000															
90.000															
100.000															
110.000															
120.000															
130.000															
140.000															
150.000															
160.000															
170.000															
180.000															

TABULATED SOURCE PRESSURE DATA FOR IA35/OM64 (LARC UPWT 1043)

(RES002)

IA35 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (1) = -6.000 R/V/L = 3.4990 BETA = 4.0300

DEPENDENT VARIABLE CP

SECTION (:) FUSELAGE

X/L	.067C	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2855	.2806	.2504												
70.000	.2863	.2543	.2504												
80.000	.3113	.2657	.2477												
90.000		.2477	.2349	.2169	.2106	.1907	.1907	.1907	.1907	.1930	.1930	.1932	.1932	.1932	.1932
100.000					.1975	.1907	.1907	.1907	.1907	.1930	.1930	.1932	.1932	.1932	.1932
110.000					.1884	.1907	.1907	.1907	.1907	.1930	.1930	.1932	.1932	.1932	.1932
120.000					.1884										
130.000					.1884										
140.000					.1884										
150.000					.1884										
160.000					.1884										
170.000					.1930	.1907	.1907	.1907	.1930	.1932	.1932	.1932	.1932	.1932	.1932
180.000					.5460	.5240	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6820	.7100

X/L	.4950	.4660	.4660	.4760	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6820	.7100
PHI															
90.000	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999
100.000	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999
110.000	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999	.99.9999
120.000					.99.9999										
130.000					-.0117										
140.000					.0016										
150.000					.0134										
160.000					.0216										
170.000					.0282										
180.000					.0312	.0319	.0334	.0371	.0393	.0408	.0430	.0449	.0415	.0405	

X/L	.7290	.7470	.7670	.7890	.8090	.8290	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	.0230	.0153	.0220	.0167	.0178	.0319	.0761	.0445	.0251
100.000	.0199	.0178	.0214	.0288	.0335	.0645			
110.000	.0130	.0178	.0214	.0419	.0796	.1269			
120.000									
130.000									
140.000									
150.000									
160.000									
170.000									
180.000	.0445	.0361	.0362	.0324	.1969	.2634			

TABULATED SOURCE PRESSURE DATA FOR IA35/OM84 (LARC UPWT 1083)

(R89002)

DATE 24 JAN 74

IA35 ORBITER ASCENT CONFIGURATION

MUCH (3) = 4.000 ALPHA (5) = 2.000 RML = 3.4990 BETA = 4.0300

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE X/L .0870 .1280 .1640 .2030 .2420 .2840 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

PHI													
60.000	.1120	.0943	.0860										
70.000	.1254	.0943	.0760										
80.000	.1431	.0948	.0852										
90.000		.1052	.0852	.0109	-.0073	-.0136	-.0164	-.0236	-.0289	-.0323	-.0342	-.0362	-.0377
100.000					-.0102	-.0112	-.0145	-.0198	-.0255	-.0303	-.0346	-.0367	-.0412
110.000					-.0346	-.0370	-.0416	-.0471	-.0519	-.0490	-.0362	-.0302	-.0377
120.000					.0073								-.0466
130.000					-.0178								-.0471
140.000					-.0327								-.0427
150.000					-.0351								-.0327
160.000					-.0337								-.0307
170.000					-.0332								-.0278
180.000					-.0303	-.0303	-.0299	-.0294	-.0284	-.0275	-.0278	-.0268	-.0293
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6750	.6880
													.7100

PHI													
90.000	-.0367	-.0352	-.0332	-.0327	-.0332	-.0351	-.0366	-.0374	-.0374	-.0374	-.0374	-.0380	-.0359
100.000	-.0402	-.0392	-.0377	-.0352	-.0327	-.0336	-.0344	-.0351	-.0359	-.0366	-.0359	-.0366	-.0355
110.000	-.0392	-.0392	-.0377	-.0362	-.0337	-.0305	-.0296	-.0290	-.0290	-.0305	-.0305	-.0305	-.0307
120.000					-.0159								-.0244
130.000					-.0359								-.0252
140.000					-.0366								-.0244
150.000					-.0351								-.0237
160.000					-.0305								-.0252
170.000					-.0252								-.0260
180.000	-.0288	-.0278	-.0253	-.0236	-.0228	-.0214	-.0214	-.0214	-.0214	-.0229	-.0244	-.0258	-.0280
X/L	.7290	.7470	.7670	.7890	.8130	.8290	.8620	.9200	.9400				

PHI													
60.000													
70.000													
80.000													
90.000	-.0328	-.0360	-.0344	-.0367	-.0367	-.0291							
100.000	-.0296	-.0307	-.0296	-.0260	-.0206	-.0137							
110.000	-.0239	-.0256	-.0291	-.0094	.0114	.0061							
120.000					.0061	.0061							
130.000					.1600	.1600							
140.000					.2408	.2408							
150.000					.1754	.1754							
160.000					.1057	.1057							
170.000					.1068	.1068							
180.000	-.0211	-.0227	-.0291	-.0222	.0506	.1749							

(R05002)

NACH (3) = 4.000 ALPHA (6) = 4.010 RN/L = 3.4990 BETA = 4.0300

SECTION (1) FUEL/AC DEPENDENT VARIABLE CP

N/L	.0870	.1260	.1640	.2030	.2420	.2810	.3010	.3190	.3360	.3570	.3750	.3940	.4090	.4310
PHI	.1009	.0850	.0646											
60.000	.1023	.0946	.0799											
70.000	.1224	.0846	.0622											
80.000		.0936	.0410	-.0007	-.0194	-.0296	-.0309	-.0382	-.0365	-.0404	-.0414	-.0442	-.0447	-.0442
90.000					-.0083	-.0141	-.0203	-.0275	-.0337	-.0380	-.0424	-.0467	-.0462	-.0462
100.000					-.0227	-.0280	-.0347	-.0376	-.0352	-.0333	-.0392	-.0442	-.0467	-.0302
110.000					-.0031								-.0327	
120.000					-.0179								-.0507	
130.000					-.0404								-.0497	
140.000					-.0433								-.0432	
150.000					-.0428								-.0422	
160.000					-.0424								-.0397	
170.000					-.0400	-.0404	-.0400	-.0400	-.0390	-.0380	-.0392	-.0392	-.0392	-.0377
180.000	.4300	.4600	.4860	.5050	.5240	.5460	.5600	.5660	.6170	.6360	.6540	.6730	.6880	.7130

N/L	.0870	.1260	.1640	.2030	.2420	.2810	.3010	.3190	.3360	.3570	.3750	.3940	.4090	.4310
PHI	.1009	.0850	.0646											
60.000	.1023	.0946	.0799											
70.000	.1224	.0846	.0622											
80.000		.0936	.0410	-.0007	-.0194	-.0296	-.0309	-.0382	-.0365	-.0404	-.0414	-.0442	-.0447	-.0442
90.000					-.0083	-.0141	-.0203	-.0275	-.0337	-.0380	-.0424	-.0467	-.0462	-.0462
100.000					-.0227	-.0280	-.0347	-.0376	-.0352	-.0333	-.0392	-.0442	-.0467	-.0302
110.000					-.0031								-.0327	
120.000					-.0179								-.0497	
130.000					-.0404								-.0432	
140.000					-.0433								-.0422	
150.000					-.0428								-.0397	
160.000					-.0424								-.0392	
170.000					-.0400	-.0404	-.0400	-.0400	-.0390	-.0380	-.0392	-.0392	-.0392	-.0377
180.000	.4300	.4600	.4860	.5050	.5240	.5460	.5600	.5660	.6170	.6360	.6540	.6730	.6880	.7130

N/L	.0870	.1260	.1640	.2030	.2420	.2810	.3010	.3190	.3360	.3570	.3750	.3940	.4090	.4310
PHI	.1009	.0850	.0646											
60.000	.1023	.0946	.0799											
70.000	.1224	.0846	.0622											
80.000		.0936	.0410	-.0007	-.0194	-.0296	-.0309	-.0382	-.0365	-.0404	-.0414	-.0442	-.0447	-.0442
90.000					-.0083	-.0141	-.0203	-.0275	-.0337	-.0380	-.0424	-.0467	-.0462	-.0462
100.000					-.0227	-.0280	-.0347	-.0376	-.0352	-.0333	-.0392	-.0442	-.0467	-.0302
110.000					-.0031								-.0327	
120.000					-.0179								-.0497	
130.000					-.0404								-.0432	
140.000					-.0433								-.0422	
150.000					-.0428								-.0397	
160.000					-.0424								-.0392	
170.000					-.0400	-.0404	-.0400	-.0400	-.0390	-.0380	-.0392	-.0392	-.0392	-.0377
180.000	.4300	.4600	.4860	.5050	.5240	.5460	.5600	.5660	.6170	.6360	.6540	.6730	.6880	.7130

N/L	.0870	.1260	.1640	.2030	.2420	.2810	.3010	.3190	.3360	.3570	.3750	.3940	.4090	.4310
PHI	.1009	.0850	.0646											
60.000	.1023	.0946	.0799											
70.000	.1224	.0846	.0622											
80.000		.0936	.0410	-.0007	-.0194	-.0296	-.0309	-.0382	-.0365	-.0404	-.0414	-.0442	-.0447	-.0442
90.000					-.0083	-.0141	-.0203	-.0275	-.0337	-.0380	-.0424	-.0467	-.0462	-.0462
100.000					-.0227	-.0280	-.0347	-.0376	-.0352	-.0333	-.0392	-.0442	-.0467	-.0302
110.000					-.0031								-.0327	
120.000					-.0179								-.0497	
130.000					-.0404								-.0432	
140.000					-.0433								-.0422	
150.000					-.0428								-.0397	
160.000					-.0424								-.0392	
170.000					-.0400	-.0404	-.0400	-.0400	-.0390	-.0380	-.0392	-.0392	-.0392	-.0377
180.000	.4300	.4600	.4860	.5050	.5240	.5460	.5600	.5660	.6170	.6360	.6540	.6730	.6880	.7130

(R03003) (03 JAN 74)

IA35 ORBITER ASCENT CONFIGURATION

PARAMETRIC DATA

REFERENCE DATA
 SREF = .0000 SQ. IN. XMRP = .0000 IN.
 LREF = .0000 IN. YMRP = .0000 IN.
 BREF = .0000 IN. ZMRP = .0000 IN.
 SCALE = .0150 SCALE
 BETA = 2.000 ELEVON = .000

MACH (1) = 4.950 ALPHA (1) = -6.000 RM/L = 3.5059 BETA = 1.9500

SECTION (1) FUSELAGE

X/L .0670 .1260 .1640 .2030 .2420 .2640 .2620 .3010 .3190 .3360 .3570 .3750 .3940 .4030 .4310

PHI
 60.000 .1992 .1744 .1450
 70.000 .2625 .1603 .1457
 80.000 .3244 .2009 .1436
 90.000 .1832 .0902 .0278 .0243 .0231 .0164 .0137 .0093 .0066 .0056 .0024 .0006
 100.000 .0119 .0076 .0078 .0113 .0148 .0196 .0178 .0121 .0064 .0024
 110.000 -.0111 -.0164 -.0193 -.0234 -.0256 -.0270 -.0241 -.0223 -.0215 -.0157
 120.000 .0932
 130.000 .0714
 140.000 .0219
 150.000 .0263
 160.000 .0048
 170.000 .0080
 180.000 .0060 .0172 .0143 .0091 -.0056 -.0111 -.0127 -.0103 -.0072 .0006

X/L .4300 .4680 .4960 .5030 .5240 .5460 .5610 .5800 .5960 .6170 .6360 .6540 .6730 .6880 .7100

PHI
 90.000 .0016 .0024 .0049 .0072 .0102 .0139 .0142 .0142 .0114 .0096 .0078 .0067 .0067 .0040
 100.000 .0006 .0000 .0000 .0024 .0042 .0060 .0060 .0078 .0096 .0067 .0067 .0105 .0114 .0093
 110.000 -.0145 -.0145 -.0139 -.0139 .0036 -.0133 -.0120 -.0084 -.0021 .0051 .0114 .0169 .0167 .0191
 120.000
 130.000
 140.000
 150.000
 160.000 .0259
 170.000 .0121 .0167 .0241 .0277 .0269 .0304 .0295 .0295 .0286 .0266 .0266 .0252 .0266
 180.000 .7290 .7470 .7670 .7830 .8030 .8230 .8620 .9000 .9000 .9400

PHI
 60.000
 70.000
 80.000
 90.000 .0093 .0060 .0034 .0027 .0014 .0093
 100.000 .0165 .0139 .0156 .0156 .0191 .0525
 110.000 .0243 .0217 .0230 .0341 .0780 .0963
 120.000

IA35 ORBITER ASCENT CONFIGURATION

(R65003)

MACH (1) = 4.300 ALPHA (1) = -6.000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

M/L	.7290	.7470	.7670	.7850	.8030	.8230	.8400	.9000	.9400
PHI									
130.000					.3913				
140.000					.3583				
130.000					.3078				
180.000					.2533				
170.000					.2226				
180.000	.0335	.0341	.0322	.0322	.0304	.4403			

MACH (1) = 4.300 ALPHA (2) = -4.000 RV/L = 3.5089 RETA = 1.9500

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

M/L	.0870	.1280	.1640	.2030	.2420	.2840	.3010	.3180	.3380	.3570	.3750	.3940	.4030	.4310
PHI														
60.000	.1790	.1536	.1218											
70.000	.2274	.1418	.1306											
80.000	.2781	.1723	.1306											
90.000		.1353	.0781	.0345	.0174	.0138	.0103	.0061	.0032	-.0003	-.0015	-.0037	-.0043	-.0050
100.000					.0085	.0081	.0067	.0079	.0079	.0073	.0032	-.0019	-.0043	-.0068
110.000					-.0157	-.0186	-.0228	-.0263	-.0258	-.0232	-.0236	-.0236	-.0230	-.0214
120.000					.0728								-.0244	
130.000					.0569								-.0232	
140.000					.0150								-.0171	
150.000					.0097								-.0159	
160.000					.0120								-.0199	
170.000					.0091								-.0153	
180.000					.0079	.0021	.0079	.0036	.0036	.0032	-.0080	-.0133	-.0153	-.0165

M/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6750	.6880	.7100
PHI															
90.000	-.0043	-.0031	-.0007	.0017	.0042	.0048	.0072	.0093	.0033	.0026	.0017	.0006	-.0001	-.0001	-.0107
100.000	-.0074	-.0068	-.0030	-.0031	-.0013	.0011	.0044	.0063	.0033	.0044	.0026	-.0001	-.0010	-.0019	-.0100
110.000	-.0201	-.0169	-.0171	-.0153	-.0007	-.0116	-.0082	-.0073	-.0026	-.0001	.0006	.0026	.0026	.0017	-.0047
120.000					-.0128									.0072	
130.000					-.0199									.0026	
140.000					-.0154									.0017	
150.000					-.0091									.0035	
160.000					-.0046									.0044	
170.000					-.0001									.0063	
180.000	-.0141	-.0104	-.0068	-.0031	-.0007	.0026	.0044	.0044	.0063	.0072	.0061	.0030	.0039	.0108	.0086

M/L .7290 .7470 .7670 .7850 .8030 .8230 .8400 .9000 .9400

PHI

(R05003)

IA35 ORBITER ASCENT CONFIGURATION

MACH (1) = 4.500 ALPHA (3) = -2.000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4600	.5050	.5240	.5480	.5810	.5800	.5980	.6170	.6360	.6540	.6730	.6860	.7100
PHI														
160,000														
170,000														
180,000														
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.9000	.9400						
PHI														
80,000														
70,000														
60,000														
90,000														
100,000														
110,000														
120,000														
130,000														
140,000														
150,000														
160,000														
170,000														
180,000														

MACH (1) = 4.300 ALPHA (4) = .000 RM/L = 3.5059 BETA = 1.9950

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI															
60,000															
70,000															
80,000															
90,000															
100,000															
110,000															
120,000															
130,000															
140,000															
150,000															
160,000															
170,000															
180,000															

PHI

TABULATED SOURCE PRESSURE DATA FOR IAS5/0A84 (LARC UPWT 1083)

(R05003)

IAS5 ORBITER ASCENT CONFIGURATION

MACH (1) = 4.500 ALPHA (4) = .020

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP													
X/L	.4500	.4880	.4980	.5050	.5240	.5480	.5810	.5800	.5980	.6170	.6360	.6540	.6750	.6830	.7100
PH1															
90.000	-.0128	-.0104	-.0066	-.0066	-.0098	-.0110	-.0114	-.0141	-.0150	-.0168	-.0168	-.0177	-.0177	-.0177	-.0237
100.000	-.0168	-.0176	-.0148	-.0134	-.0116	-.0110	-.0105	-.0114	-.0132	-.0141	-.0159	-.0168	-.0168	-.0177	-.0237
110.000	-.0170	-.0182	-.0176	-.0164	-.0104	-.0134	-.0114	-.0114	-.0114	-.0125	-.0132	-.0132	-.0130	-.0159	-.0224
120.000						-.0060								-.0078	
130.000						-.0195								-.0114	
140.000						-.0177								-.0141	
150.000						-.0195								-.0168	
160.000						-.0159								-.0168	
170.000						-.0141								-.0159	
180.000	-.0148	-.0140	-.0134	-.0128	-.0134	-.0123	-.0132	-.0123	-.0114	-.0132	-.0141	-.0141	-.0132	-.0132	-.0127
X/L	.7250	.7470	.7670	.7850	.8030	.8250	.8620	.5300	.9400						

MACH (1) = 4.500 ALPHA (5) = 2.000 RVAL = 3.5059 BETA = 1.9900

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP													
X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PH1															
60.000	.1347	.1125	.1125	.0316	.0739	.0316	.0031	-.0039	-.0092	-.0144	-.0179	-.0203	-.0223	-.0229	-.0225
70.000	.1511	.1064	.1064	.0125	.0119	.0125	.0119	.0072	-.0010	-.0066	-.0133	-.0185	-.0229	-.0241	-.0259
80.000	.1669	.1142	.1101	-.0068	.1080	-.0068	-.0074	-.0132	-.0162	-.0103	-.0056	-.0121	-.0193	-.0223	-.0271
90.000														-.0344	
100.000														-.0314	
120.000														-.0314	
130.000														-.0314	
140.000														-.0283	
150.000														-.0283	



TABLATED SC-RICE PRESSURE DATA FOR IA33/OM64 (LARC UPWT 1063)

(R65004)

DATE 24 JAN 74

IA33 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (2) = -3.950

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8220	.8400	.8580	.8760
PHI									
60.000						.0572	.0398	.0246	
70.000						.0416	.0486	.0237	
80.000						.0548	.0557	.0246	
90.000	.0127	.0008	-.0019	-.0019	.0100	.0671			
100.000	.0262	.0164	.0200	.0191	.0794				
110.000	.0382	.0264	.0291	.0421	.0970				
120.000					.1694				
130.000					.3742				
140.000					.3478				
150.000					.3302				
160.000					.3188				
170.000					.3038				
180.000	.0255	.0175	.0127	.0154	.2517	.4077			

MACH (1) = 2.500 ALPHA (3) = -2.000 RV/L = 2.5011 BETA = -.0200

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2840	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4510
PHI														
60.000	.2753	.2028	.2107											
70.000	.2395	.2028	.1700											
80.000	.2717	.2364	.1692											
90.000		.1915	.1515	.1170	.0651	.0392	.0230	.0112	-.0042	-.0151	-.0233	-.0335	-.0362	-.0458
100.000					.0763	.0542	.0347	.0267	-.0042	-.0188	-.0306	-.0410	-.0449	-.0497
110.000					.0148	.0239	.0239	.0139	-.0106	-.0260	-.0362	-.0449	-.0456	-.0468
120.000					.0212								-.0266	
130.000					-.0142								-.0198	
140.000					-.0296								-.0227	
150.000					-.0651								-.0218	
160.000					-.0624								-.0150	
170.000					-.0624								-.0112	-.0170
180.000	.4500	.4600	.4800	.5030	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6880	.7100
PHI														
90.000	-.0487	-.0508	-.0506	-.0497	-.0487	-.0497	-.0496	-.0487	-.0459	-.0367	-.0230	.0000	-.0055	-.0056
100.000	-.0497	-.0506	-.0497	-.0477	-.0466	-.0449	-.0441	-.0441	-.0441	-.0356	-.0110	-.0110	-.0129	-.0049
110.000	-.0456	-.0429	-.0420	-.0410	-.0410	-.0391	-.0377	-.0367	-.0367	-.0367	-.0221	-.0221	-.0312	-.0175
120.000													-.0221	
130.000													-.0175	
140.000													-.0092	
150.000													-.0046	

TABLATED SOURCE PRESSURE DATA FOR IA35/0A64 (LARC UPMT 1063)

DATE 24 JAN 74

(R02004)

IA35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (3) = -2.000

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP																										
X/L	PHI	.4500	.4600	.4700	.4800	.4900	.5000	.5100	.5200	.5300	.5400	.5500	.5600	.5700	.5800	.5900	.6000	.6100	.6200	.6300	.6400	.6500	.6600	.6700	.6800	.6900	.7000	

PHI	.0055	.0110	.0128	.0147	.0157	.0110	.0101	.0091	.0009	.0036	.0000	.0000	.0018	.0000	.0013	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
60.000	.0213	.0177	.0150	.0223	.0267	.0195	.0123	.0240	.0077	.0390	.0427	.0639	.0620	.2028	.3436	.3057	.2802	.2749	.2697	.3409	.0213	.0177	.0150	.0223	.0267	.0195	.0123	.0240	.0077
70.000																													
80.000																													
90.000																													
100.000																													
110.000																													
120.000																													
130.000																													
140.000																													
150.000																													
160.000																													
170.000																													
180.000																													

MACH (1) = 2.500 ALPHA (4) = .000 RV/L = 2.5011 BETA = -.0200

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP																										
X/L	PHI	.4500	.4600	.4700	.4800	.4900	.5000	.5100	.5200	.5300	.5400	.5500	.5600	.5700	.5800	.5900	.6000	.6100	.6200	.6300	.6400	.6500	.6600	.6700	.6800	.6900	.7000	

PHI	.0364	.0344	.0340	.0304	.0277	.0232	.0206	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166
60.000	.0364	.0344	.0340	.0304	.0277	.0232	.0206	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166	.0166
70.000																												
80.000																												
90.000																												
100.000																												
110.000																												
120.000																												
130.000																												
140.000																												
150.000																												
160.000																												
170.000																												
180.000																												

PHI

TABLATED SOURCE PRESSURE DATA FOR IAS3/064 (LAR. UPWT 1063)

(R65004)

IAS3 ORBITER ASCENT CONFIGURATION

MACH (3) = 2.500 ALPHA (4) = .000

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP												
X/L	.4500	.4800	.5050	.5240	.5460	.5610	.5900	.6170	.6360	.6540	.6730	.6860	.7100
PHI													
90.000	-.0634	-.0672	-.0682	-.0682	-.0653	-.0665	-.0657	-.0611	-.0519	-.0392	-.0245	-.0236	-.0247
100.000	-.0663	-.0682	-.0672	-.0653	-.0643	-.0620	-.0611	-.0584	-.0565	-.0474	-.0236	-.0281	-.0201
110.000	-.0653	-.0643	-.0634	-.0615	-.0615	-.0547	-.0574	-.0547	-.0565	-.0519	-.0518	-.0419	-.0330
120.000					-.0479							-.0336	
130.000					-.0291							-.0263	
140.000					-.0217							-.0208	
150.000					-.0153							-.0181	
160.000					-.0090							-.0153	
170.000					-.0033							-.0163	
180.000	-.0247	-.0180	-.0103	-.0054	-.0034	-.0034	-.0034	-.0071	-.0190	-.0245	-.0133	-.0163	-.0192

X/L .7280 .7470 .7670 .7850 .8030 .8200 .8380 .8560 .8740 .8920 .9100 .9280 .9400

PHI	
90.000	.0019
100.000	.0047
110.000	.0102
120.000	.0157
130.000	.0221
140.000	.0226
150.000	.0226
160.000	.0232
170.000	.0267
180.000	.0258
190.000	.0229
200.000	.0206
210.000	.0175
220.000	.0155
230.000	.0091

MACH (3) = 2.500 ALPHA (5) = 2.000 RV/L = 2.5011 BETA = -.0200

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP														
X/L	.0670	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.8363	.1331	.2127	.0163	-.0010	-.0120	-.0239	-.0340	-.0413	-.0456	-.0600	-.0649	-.0747		
70.000	.8233	.1755	.2127	.0347	.0009	.0027	-.0166	-.0340	-.0441	-.0551	-.0699	-.0718	-.0796		
80.000	.2208	.1967	.1679	.0374	.0192	.0009	-.0136	-.0342	-.0442	-.0648	-.0747	-.0777	-.0833		
90.000		.1826	.1737	.0374	.0192	.0009	-.0136	-.0342	-.0442	-.0648	-.0747	-.0777	-.0833		
100.000				.0542									-.0689		
110.000				-.0395									-.0571		
120.000				-.0973									-.0493		
130.000				-.0973									-.0493		
140.000				-.0973									-.0493		
150.000				-.0973									-.0493		

TABULATED SOURCE PRESSURE DATA FOR IA35/0A64 (LARC UPWT 1063)

(R05004)

IA35 ORBITER ASCENT CONFIGURATION

DATE 24 JAN 74

MACH (1) = 2.500 ALPHA (7) = 6.000 RV/L = 2.5011 BETA = -.0200

SECTION (1) FUSELAGE
 X/L .0670 .1260 .1640 .2030 .2420 .2640 .3010 .3190 .3380 .3570 .3750 .3940 .4090 .4310

PHI
 90.000 .1882 .1582 .1758
 90.000 .1836 .1536 .1917
 90.000 .1802 .1502 .1794
 90.000 .1855 .1379 .1655
 100.000 .0109 -.0057 -.0251 -.0407 -.0637 -.0765 -.0879 -.0958 -.1007 -.1056
 110.000 .0391
 120.000 -.0369
 130.000 -.1107
 140.000 -.1208
 150.000 -.1153
 160.000 -.1152
 170.000 -.1153
 180.000 .4500 .4680 .4860 .5050 .5240 .5460 .5610 .5820 .5980 .6170 .6360 .6540 .6730 .6880 .7100

X/L
 PHI
 90.000 -.1017 -.1047 -.1076 -.1076 -.1076
 100.000 -.1047 -.1096 -.1115 -.1125 -.1125
 110.000 -.1096 -.1125 -.1145 -.1155 -.1155
 120.000
 130.000
 140.000
 150.000
 160.000
 170.000
 180.000
 X/L .7230 .7473 .7670 .7850 .8030 .8290 .8620 .9000 .9400

PHI
 90.000
 90.000
 90.000
 100.000
 110.000
 120.000
 130.000
 140.000
 150.000
 160.000
 170.000
 180.000
 PH1
 90.000
 90.000
 90.000
 100.000
 110.000
 120.000
 130.000
 140.000
 150.000
 160.000
 170.000
 180.000

DATE 24 JAN 74 TABULATE SOURCE PRESSURE DATA FOR IAS5/164 (LAPC UPWT 1063)

(985004) IAS5 ORBITER ASCENT CONFIGURATION

MICH (2) = 2.930 ALPHA (4) = .010 RN/L = 2.5161 BETA = .0200

SECTION (1) FUSELAGE DEPENDENT VARIABLE C²

Y/L	.0570	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4210
PHI															
60.000	.2546	.1829	.1929												
70.000	.2061	.1829	.1924												
80.000	.2362	.1829	.1632												
90.000		.1760	.1118	.0533	.0522	.0564	.0470	.0355	.0230	.0115	.0031	.0074	.0074	.0118	.0206
100.000					.0209	.0428	.0533	.0407	.0272	.0146	.0031	.0074	.0074	.0129	.0290
110.000					-.0157	-.0178	-.0126	.0261	.0282	.0146	.0026	.0085	.0085	.0151	.0261
120.000					.0376									.0376	
130.000					.0010									.0361	
140.000					-.0533									.0394	
150.000					-.0575									.0405	
160.000					-.0533									.0339	
170.000					-.0565									.0272	
180.000					-.0565	-.0502	-.0450	-.0398	-.0335	-.0283	-.0250	-.0228	-.0228	-.0261	-.0272
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100

PHI															
90.000	-.0283	-.0317	-.0350	-.0372	-.0394	-.0416	-.0421	-.0442	-.0452	-.0462	-.0462	-.0442	-.0307	-.0400	-.0436
100.000	-.0299	-.0350	-.0383	-.0394	-.0416	-.0427	-.0403	-.0421	-.0431	-.0431	-.0452	-.0431	-.0307	-.0411	-.0425
110.000	-.0317	-.0350	-.0372	-.0372	-.0394	-.0399	-.0380	-.0390	-.0390	-.0390	-.0390	-.0442	-.0307	-.0407	-.0384
120.000						-.0263								-.0255	
130.000						-.0142								-.0193	
140.000						-.0090								-.0100	
150.000						-.0059								-.0069	
160.000						-.0069								-.0028	
170.000						-.0069								.0013	
180.000	-.0283	-.0283	-.0261	-.0228	-.0184	-.0090	-.0038	.0003	.0045	-.0204	.0065	-.0390	-.0214	.0013	-.0503
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400						

PHI															
60.000															
70.000															
80.000															
90.000															
100.000	-.0405	-.0436	-.0363	-.0446	-.0374	-.0344									
110.000	-.0393	-.0394	-.0374	-.0343	-.0064	.0142									
120.000	-.0363	-.0393	-.0322	-.0196	.0368	.0183									
130.000					.1622	.2892									
140.000					.2223	.2892									
150.000					.1848	.2892									
160.000					.2035	.2892									
170.000					.2183	.2892									
180.000	.0070	.0008	-.0044	-.0034	.1346	.2626									

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TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(R03004)

IA35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.930 ALPHA (7) = 6.010 RV/L = 2.5161 BETA = .0200

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE

X/L .0870 .1260 .1640 .2030 .2420 .2810 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

PHI													
60.000	.1766	.1541	.1521										
70.000	.1708	.1541	.1074										
80.000	.1676	.1531	.1168										
90.000		.1442	.0927	.0434	.0057	-.0069	-.0163	-.0247	-.0331	-.0425	-.0490	-.0523	-.0601
100.000					.0204	.0130	.0025	-.0100	.0226	-.0331	-.0425	-.0490	-.0623
110.000					.0329	.0246	.0109	-.0038	-.0237	-.0373	-.0468	-.0556	-.0678
120.000					.0130								-.0833
130.000					-.0321								-.0789
140.000					-.0834								-.0722
150.000					-.0908								-.0678
160.000					-.0866								-.0667
170.000					-.0876								-.0654
180.000					-.0886								-.0623
190.000													-.0589

X/L	.4500	.4680	.4860	.5030	.5210	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0823	-.0667	-.0689	-.0711	-.0722	-.0744	-.0764	-.0774	-.0806	-.0795	-.0764	-.0722	-.0670	-.0607	-.0560
100.000	-.0836	-.0689	-.0722	-.0744	-.0767	-.0778	-.0785	-.0816	-.0816	-.0827	-.0764	-.0743	-.0670	-.0660	-.0581
110.000	-.0722	-.0736	-.0767	-.0789	-.0811	-.0711	-.0837	-.0837	-.0848	-.0837	-.0764	-.0785	-.0670	-.0712	-.0591
120.000					-.0656									-.0701	
130.000					-.0701									-.0670	
140.000					-.0597									-.0576	
150.000					-.0482									-.0503	
160.000					-.0440									-.0482	
170.000					-.0367									-.0451	
180.000	-.0345	-.0490	-.0434	-.0390	-.0379	-.0367	-.0357	-.0378	-.0378	-.0376	-.0419	-.0712	-.0660	-.0440	-.0436

X/L	.7290	.7470	.7670	.7890	.8030	.8290	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	-.0329	-.0559	-.0416	-.0490	-.0457	-.0045			
100.000	-.0478	-.0468	-.0467	-.0375	-.0045	.0161			
110.000	-.0308	-.0487	-.0364	.0048	.0367	.0295			
120.000						.1383			
130.000						.1737			
140.000						.1363			
150.000						.1140			
160.000						.1253			
170.000						.1304			
180.000	-.0379	-.0416	-.0497	-.0467	.0303	.2352			

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPMT 1963)

(R05004)

DATE 24 JAN 74

IA35 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (5) = 1.990 RW/L = 3.4990 BETA = .0200

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE
 X/L .0870 .1260 .1640 .2030 .2420 .2640 .2820 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

PHI	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
60.000	.1626	.1373	.1254												
70.000	.1836	.1378	.1249												
80.000	.1999	.1449	.1249												
90.000		.1349	.0796	.0400	.0195	.0136	.0086	.0033	.0028	.0099	.0152	.0093	.0063	.0001	
100.000					.0223	.0200	.0166	.0105	.0079	-.0039	-.0006	.0033	.0039	.0009	
110.000					-.0261	-.0001	-.0045	-.0053	-.0001	-.0029	-.0095	-.0110	-.0095	-.0031	
120.000					.0409										
130.000					.0195										
140.000					-.0206										
150.000					-.0287										
160.000					-.0277										
170.000					-.0297										
180.000					-.0306	-.0287	-.0268	-.0263	-.0244	-.0244	-.0254	-.0244	-.0244	-.0244	

X/L	.4300	.4680	.4860	.5050	.5240	.5460	.5610	.5820	.5980	.6170	.6350	.6540	.6730	.6880	.7100
PHI															
90.000	-.0041	-.0089	-.0110	-.0140	-.0180	-.0184	.0193	-.0216	-.0238	-.0261	-.0276	-.0283	-.0216	-.0291	-.0343
100.000	-.0036	-.0070	-.0110	-.0140	-.0165	-.0199	-.0201	-.0223	-.0246	-.0261	-.0276	-.0291	-.0216	-.0306	-.0327
110.000	-.0036	-.0061	-.0100	-.0140	-.0175	-.0110	-.0216	-.0246	-.0253	-.0276	-.0283	-.0291	-.0238	-.0314	-.0332
120.000						-.0056								-.0263	
130.000						-.0201								-.0201	
140.000						-.0178								-.0156	
150.000						-.0193								-.0125	
160.000						-.0223								-.0118	
170.000						-.0253								-.0103	
180.000	-.0277	-.0269	-.0264	-.0269	-.0269	-.0253	-.0253	-.0231	-.0216	.0186	-.0156	-.0216	-.0186	-.0088	-.0076

X/L	.7290	.7470	.7670	.7850	.8130	.8410	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	-.0293	-.0338	-.0348	-.0354	-.0399	-.0204	-.0140	-.0183	-.0178
100.000	-.0284	-.0316	-.0316	-.0348	-.0183	-.0071			
110.000	-.0293	-.0306	-.0290	-.0167	.0100	.0095			
120.000						.1093			
130.000						.2310			
140.000						.1658			
150.000						.0730			
160.000						.1253			
170.000						.1242			
180.000	-.0012	-.0034	-.0050	-.0050	.0409	.2405			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(R05004)

IA35 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (6) = 4.000 RN/L = 3.4990 BETA = .0200

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE X/L .0870 .1260 .1640 .2030 .2420 .2640 .2820 .3010 .3190 .3380 .3570 .3750 .3940 .4090 .4310

PHI														
60.000	-.1486	.1304	.1216											
70.000	-.1634	.1299	.1161											
80.000	-.1721	.1271	.1089	.0251	-.0512	-.0089	-.0108	-.0050	.0036	.0045	.0026	-.0036	-.0066	-.0121
90.000				.0108	.0060	.0007	-.0060	-.0084	-.0027	.0030	.0009	-.0021	-.0056	
100.000				.0269	.0090	.0036	.0002	-.0094	-.0156	-.0171	-.0111	-.0066	-.0091	
110.000				.0304									-.0380	
120.000				.0155									-.0455	
130.000				-.0304									-.0440	
140.000				-.0381									-.0405	
150.000				-.0381									-.0370	
160.000				-.0385									-.0370	-.0365
170.000				-.0395	-.0385	-.0371	-.0366	-.0376	-.0357	-.0365	-.0365	-.0365	-.0370	-.0365
180.000													-.0380	.7100

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	
PHI														
90.000	-.0156	-.0191	-.0221	-.0245	-.0263	-.0290	-.0313	-.0344	-.0359	-.0382	-.0397	-.0405	-.0252	-.0412
100.000	-.0141	-.0176	-.0216	-.0245	-.0270	-.0295	-.0321	-.0351	-.0367	-.0390	-.0412	-.0420	-.0321	-.0428
110.000	-.0141	-.0191	-.0226	-.0310	-.0295	-.0216	-.0351	-.0382	-.0397	-.0412	-.0420	-.0428	-.0435	-.0443
120.000						-.0166								-.0451
130.000						-.0344								-.0397
140.000						-.0313								-.0313
150.000						-.0306								-.0268
160.000						-.0336								-.0237
170.000						-.0359								-.0207
180.000	-.0385	-.0365	-.0375	-.0375	-.0375	-.0374	-.0351	-.0321	-.0298	-.0260	-.0230	-.0252	-.0397	-.0199
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400					

PHI														
60.000														
70.000														
80.000														
90.000	-.0393	-.0427	-.0437	-.0437	-.0416	-.0282								
100.000	-.0389	-.0411	-.0416	-.0405	-.0325	-.0212								
110.000	-.0405	-.0416	-.0416	-.0271	-.0084	-.0062								
120.000						.0998								
130.000						.1781								
140.000						.1148								
150.000						.0811								
160.000						.0907								
170.000						.0518								
180.000	-.0115	-.0137	-.0218	-.0175	.0205	.2072								

TABLATED SOURCE PRESSURE DATA FOR IAS5/OA64 (LARC UP-PT 1063)

(R0300M)

IAS5 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (7) = 6.010 RW/L = 3.4990 BETA = .0200

DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2810	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
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PHI	.1417	.1307	.0562	.0819	.0121	-.0128	-.0161	-.0113	-.0041	-.0013	-.0032	-.0061	-.0120	-.0145	-.0200
60.000	.1475	.1307	.1059	.1116	-.0085	-.0085	-.0108	-.0085	-.0013	-.0030	-.0013	-.0090	-.0120	-.0120	-.0190
70.000	.1499	.1202	.1116	.1207	.0054	-.0018	-.0065	-.0132	-.0199	-.0156	-.0080	-.0100	-.0130	-.0130	-.0210
80.000					.0236									-.0454	
90.000					-.0027									-.0504	
100.000					-.0376									-.0499	
110.000					-.0448									-.0494	
120.000					-.0448									-.0479	
130.000					-.0453									-.0459	
140.000					-.0467									-.0454	-.0444
150.000	.4300	.4860	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100

PHI	-.0230	-.0265	-.0295	-.0320	-.0344	-.0369	-.0382	-.0413	-.0435	-.0443	-.0466	-.0474	-.0428	-.0474	-.0499
60.000	-.0230	-.0265	-.0295	-.0325	-.0354	-.0379	-.0390	-.0420	-.0436	-.0451	-.0474	-.0489	-.0428	-.0497	-.0510
70.000	-.0260	-.0300	-.0329	-.0354	-.0379	-.0405	-.0420	-.0436	-.0466	-.0474	-.0489	-.0504	-.0443	-.0527	-.0520
80.000					-.0235									-.0542	
90.000					-.0474									-.0520	
100.000					-.0398									-.0436	
110.000					-.0359									-.0337	
120.000					-.0359									-.0299	
130.000					-.0375									-.0269	
140.000	-.0444	-.0434	-.0429	-.0419	-.0409	-.0390	-.0382	-.0352	-.0321	-.0291	-.0268	-.0248	-.0230	-.0260	-.0243
150.000	.7290	.7470	.7670	.7630	.8030	.8290	.8620	.9000	.9400						

PHI	-.0478	-.0367	-.0291	-.0297	-.0233	-.0185	-.0222	-.0116	-.0126	-.0164
60.000										
70.000										
80.000										
90.000	-.0491	-.0478	-.0462	-.0472	-.0398	-.0281				
100.000	-.0458	-.0472	-.0440	-.0334	-.0169					
110.000	-.0483	-.0468	-.0446	-.0350	-.0190					
120.000					.0007	.0004				
130.000					.1402					
140.000					.0773					
150.000					.0720					
160.000					.0688					
170.000					.0683					
180.000	-.0195	-.0222	-.0238	-.0238	.0085	.1583				

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPMT 1063)

(R65005) (03 JAN 74)

IA35 ORBITER ASCENT CONFIGURATION

PARAMETRIC DATA

REFERENCE DATA

SRP = .0000 SQ. IN. YMRP = .0000 IN.
 LRF = .0000 IN. YLRF = .0000 IN.
 BRP = .0000 IN. ZMRP = .0000 IN.
 SCALE = .0150 SCALE

BETA = -2.000 ELEVON = .000

MACH (1) = 4.500 ALPHA (1) = -6.000 RN/L = 3.5036 BETA = -2.0000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2798	.2193	.1894												
70.000	.3483	.2314	.1894												
80.000	.4037	.2831	.2026												
90.000			.2423	.1474	.0830	.0977	.0548	.0520	.0491	.0485	.0497	.0548	.0573	.0602	.0661
100.000						.0626	.0560	.0520	.0462	.0410	.0393	.0382	.0383	.0389	.0454
110.000						.0301	.0261	.0215	.0151	.0088	.0077	.0158	.0271	.0306	.0330
120.000						.1434									.0028
130.000						.1106									-.0084
140.000						.0433									-.0167
150.000						.0151									-.0191
160.000						.0134									-.0173
170.000						.0151									-.0290
180.000						.0117	.0226	.0209	.0100	.0008	-.0056	-.0084	-.0072	-.0043	.0070

X/L	.4300	.4680	.4860	.5090	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0685	.0661	.0638	.0614	.0678	.0578	.0560	.0525	.0472	.0437	.0411	.0384	.0375	.0323	.0219
100.000	.0331	.0396	.0638	.0655	.0632	.0573	.0551	.0490	.0446	.0393	.0358	.0323	.0305	.0323	.0160
110.000	.0395	.0480	.0502	.0549	.0502	.0490	.0463	.0419	.0367	.0323	.0296	.0261	.0244	.0226	.0135
120.000						.0354									.0367
130.000						.0385									.0481
140.000						-.0046									.0507
150.000						.0173									.0481
160.000						.0244									.0428
170.000	.0152	.0216	.0265	.0300	.0312	.0323	.0323	.0323	.0323	.0323	.0323	.0323	.0323	.0314	.0271
180.000	.7290	.7470	.7670	.7850	.8030	.8291	.8620	.9000	.9400						

X/L	PHI	60.000	70.000	80.000	90.000	100.000	110.000	120.000
PHI								
60.000		.0154	.0350	.0376	.0350			
70.000		.0408	.0389	.0350				
80.000		.0306	.0402	.0447				
90.000	.0292	.0187	.0141	.0115	.0128	.0434		
100.000	.0239	.0193	.0180	.0160	.0376	.0727		
110.000	.0213	.0193	.0232	.0362	.0988	.0929		
120.000						.3381		

(R05003)

IA33 ORBITTER ASCENT CONFIGURATION

MACH (1) = 4.500 ALPHA (1) = -6.000

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP									
X/L	.7290	.7470	.7670	.7890	.8030	.8290	.8620	.9000	.9400	

PHI										
130.000	.5013									
140.000	.3482									
150.000	.1711									
160.000	-.2186									
170.000	.2312									
180.000	.0356 .0330 .0317 .0311 .0342 .3969									

MACH (1) = 4.500 ALPHA (2) = -3.990 RV/L = 3.5036 BETA = -2.0000

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP														
X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310

PHI																	
60.000	.2541	.2024	.1737													.0571	.0559
70.000	.3069	.2071	.1719													.0334	.0366
80.000	.3485	.2506	.1836	.1337	.0651	.0416	.0404	.0416	.0422	.0463	.0510	.0547	.0571	.0559			
90.000																.0339	.0354
100.000																.0240	.0270
110.000																.0281	.0264
120.000																.1214	-.0067
130.000																.0938	-.0097
140.000																.0939	-.0097
150.000																.0204	-.0115
160.000																.0199	-.0152
170.000																.0181	-.0152
180.000	.0116	.0122	.0116	.0064	.0064	.0064	.0128	.0128	-.0055	-.0115	-.0140	-.0158	-.0158	-.0158			

X/L	.4900	.4680	.4680	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6750	.6880	.7100
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PHI																	
90.000	.0341	.0499	.0456	.0432	.0408	.0372	.0361	.0334	.0290	.0272	.0263	.0245	.0245	.0227	.0123		
100.000	.0499	.0505	.0487	.0450	.0420	.0378	.0379	.0334	.0308	.0281	.0245	.0209	.0191	.0173	.0083		
110.000	.0324	.0384	.0450	.0462	.0426	.0396	.0388	.0334	.0290	.0245	.0191	.0155	.0128	.0083	.0031		
120.000																-.0015	-.0015
130.000																.0119	.0119
140.000																.0182	.0182
150.000																.0200	.0200
160.000																.0182	.0182
170.000																.0155	.0155
180.000	-.0134	-.0103	-.0067	-.0031	-.0007	.0021	.0039	.0039	.0066	.0066	.0083	.0092	.0110	.0119	.0096		

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
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PHI

IA35 ORBITER ASCENT CONFIGURATION (RQ3005)

MACH (1) = 4.350 ALPHA (6) = 4.500 RM/L = 3.5036 BETA = -2.0000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4210
PHI															
60.000	.1773	.1538	.1355		.0172	.0219	.0248	.0225	.0185	.0143	.0119	.0052			
70.000	.1873	.1467	.1320		.0254	.0219	.0254	.0266	.0225	.0161	.0125	.0064			
80.000	.1923	.1332	.1314		.0231	.0183	.0095	.0119	.0185	.0149	.0113	.0034			
90.000		.1437	.1043	.0590	.0172	.0172	.0207	.0219	.0248	.0225	.0185	.0143	.0119	.0052	
100.000					.0254	.0219	.0254	.0266	.0225	.0161	.0125	.0064			
110.000					.0231	.0183	.0095	.0119	.0185	.0149	.0113	.0034			
120.000					.0454										
130.000					.0219										
140.000					-.0182										
150.000					-.0282										
160.000					-.0299										
170.000					-.0299										
180.000					-.0311	-.0311	-.0311	-.0317	-.0318	-.0324	-.0330	-.0324			

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5830	.5980	.6170	.6360	.6540	.6730	.6890	.7100
PHI															
90.000	.0022	-.0015	-.0045	-.0075	-.0099	-.0130	-.0140	-.0158	-.0193	-.0202	-.0229	-.0236	-.0238	-.0247	-.0255
100.000	.0022	-.0015	-.0037	-.0087	-.0118	-.0142	-.0149	-.0184	-.0193	-.0220	-.0230	-.0256	-.0274	-.0274	-.0281
110.000	-.0015	-.0051	-.0081	-.0112	-.0087	-.0178	-.0175	-.0202	-.0220	-.0247	-.0274	-.0283	-.0292	-.0319	-.0328
120.000					-.0099										
130.000					-.0328										
140.000					-.0256										
150.000					-.0310										
160.000					-.0292										
170.000					-.0292										
180.000	-.0318	-.0312	-.0303	-.0312	-.0301	-.0301	-.0292	-.0283	-.0274	-.0256	-.0247	-.0238	-.0232	-.0247	-.0255

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	-.0298	-.0328	-.0361	-.0381	-.0388	-.0295	-.0182	-.0077	
100.000	-.0308	-.0328	-.0361	-.0388	-.0315	-.0182			
110.000	-.0341	-.0368	-.0368	-.0295	-.0182				
120.000					.1115				
130.000					.1565				
140.000					.0427				
150.000					.0102				
160.000					.0254				
170.000					.0354				
180.000	-.0233	-.0242	-.0262	-.0202	.0043	.1055			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IAS5/OAS4 (LARC UPWT 1063)

(REF. 36)

IAS5 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (1) = -5.990

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP								
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400

PHI	.5091
130.000	.3396
140.000	.2350
150.000	.3229
160.000	.3413
170.000	.4274

MACH (1) = 2.500 ALPHA (2) = -3.990 RN/L = 2.5019 BETA = -4.0200

SECTION (1) FUSELAGE

X/L	.0870	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
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PHI	.3278	.3419	.3702	.3375	.3879	.3623	.3561	.3231	.1826	.1118	.0941	.0799	.0666	.0525	.0418	.0339	.0224	.0195	.0080
60.000	.5375	.5375	.5879	.5375	.5879	.5623	.5561	.5231	.1826	.1118	.0941	.0799	.0666	.0525	.0418	.0339	.0224	.0195	.0080
70.000	.3729	.3729	.3623	.3729	.3623	.3561	.3231	.1826	.1118	.0941	.0799	.0666	.0525	.0418	.0339	.0224	.0195	.0080	
80.000	.1000	.1000	.1000	.1000	.1000	.1000	.1000	.1000	.1000	.1000	.1000	.1000	.1000	.1000	.1000	.1000	.1000	.1000	.1000
90.000	.1100	.1100	.1100	.1100	.1100	.1100	.1100	.1100	.1100	.1100	.1100	.1100	.1100	.1100	.1100	.1100	.1100	.1100	.1100
100.000	.1200	.1200	.1200	.1200	.1200	.1200	.1200	.1200	.1200	.1200	.1200	.1200	.1200	.1200	.1200	.1200	.1200	.1200	.1200
110.000	.1300	.1300	.1300	.1300	.1300	.1300	.1300	.1300	.1300	.1300	.1300	.1300	.1300	.1300	.1300	.1300	.1300	.1300	.1300
120.000	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400
130.000	.1500	.1500	.1500	.1500	.1500	.1500	.1500	.1500	.1500	.1500	.1500	.1500	.1500	.1500	.1500	.1500	.1500	.1500	.1500
140.000	.1600	.1600	.1600	.1600	.1600	.1600	.1600	.1600	.1600	.1600	.1600	.1600	.1600	.1600	.1600	.1600	.1600	.1600	.1600
150.000	.1700	.1700	.1700	.1700	.1700	.1700	.1700	.1700	.1700	.1700	.1700	.1700	.1700	.1700	.1700	.1700	.1700	.1700	.1700
160.000	.1800	.1800	.1800	.1800	.1800	.1800	.1800	.1800	.1800	.1800	.1800	.1800	.1800	.1800	.1800	.1800	.1800	.1800	.1800
170.000	.1900	.1900	.1900	.1900	.1900	.1900	.1900	.1900	.1900	.1900	.1900	.1900	.1900	.1900	.1900	.1900	.1900	.1900	.1900
180.000	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2000

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5870	.5980	.6170	.6360	.6540	.6730	.6880	.7100
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PHI

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
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TABULATED SOURCE PRESSURE DATA FOR IA33/OA64 (LANC UPWT 1063)

(R05006)

IA33 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (2) = -3.990

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP									
Y/L	PHI	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400	
60.000								.0629			
70.000								.0690	.0646	.0350	
80.000								.0928	.0690	.0306	
90.000		.0903	.0221	.0175	.0175	.0347	.0963	.1024	.0805	.0541	
100.000		.0409	.0312	.0359	.0321	.0936	.1323				
110.000		.0356	.0400	.0400	.0558	.1649	.1429				
120.000						.3487					
130.000						.4691					
140.000						.2862					
150.000						.1939					
160.000						.2739					
170.000						.2924					
180.000		.0093	.0020	-.0035	.0166	.2168	.3663				

MACH (1) = 2.900 ALPHA (3) = -1.960 RN/L = 2.5019 BETA = -4.0200

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP														
Y/L	PHI	.0870	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
60.000																
70.000		.3136	.3437	.3419												
80.000		.3136	.3224	.3623												
90.000		.3373	.3224	.3525												
100.000			.3711	.2950	.1560	.0923	.0746	.0935	.0524	.0383	.0266	.0129	.0080	.0032	-.0023	-.0023
110.000						.1164	.0806	.0719	.0516	.0339	.0211	.0064	-.0025	-.0074	-.0160	-.0160
120.000						.3011	.0852	.0693	.0489	.0221	.0070	-.0016	-.0112	-.0170	-.0227	-.0227
130.000						.1418								-.0314		
140.000						.0333								-.0218		
150.000						-.0399								-.0237		
160.000						-.0536								-.0276		
170.000						-.0499								-.0237		
180.000						-.0361								-.0199		
190.000						-.0691	-.0591	-.0445	-.0281	-.0171	-.0135	-.0131	-.0141	-.0160	-.0179	-.0179
200.000		.4580	.4680	.4860	.5050	.5240	.5450	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP														
Y/L	PHI	.0870	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
60.000																
70.000		.3136	.3437	.3419												
80.000		.3136	.3224	.3623												
90.000		.3373	.3224	.3525												
100.000			.3711	.2950	.1560	.0923	.0746	.0935	.0524	.0383	.0266	.0129	.0080	.0032	-.0023	-.0023
110.000						.1164	.0806	.0719	.0516	.0339	.0211	.0064	-.0025	-.0074	-.0160	-.0160
120.000						.3011	.0852	.0693	.0489	.0221	.0070	-.0016	-.0112	-.0170	-.0227	-.0227
130.000						.1418								-.0314		
140.000						.0333								-.0218		
150.000						-.0399								-.0237		
160.000						-.0536								-.0276		
170.000						-.0499								-.0237		
180.000						-.0361								-.0199		
190.000						-.0691	-.0591	-.0445	-.0281	-.0171	-.0135	-.0131	-.0141	-.0160	-.0179	-.0179
200.000		.4580	.4680	.4860	.5050	.5240	.5450	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP														
Y/L	PHI	.0870	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
60.000																
70.000		.3136	.3437	.3419												
80.000		.3136	.3224	.3623												
90.000		.3373	.3224	.3525												
100.000			.3711	.2950	.1560	.0923	.0746	.0935	.0524	.0383	.0266	.0129	.0080	.0032	-.0023	-.0023
110.000						.1164	.0806	.0719	.0516	.0339	.0211	.0064	-.0025	-.0074	-.0160	-.0160
120.000						.3011	.0852	.0693	.0489	.0221	.0070	-.0016	-.0112	-.0170	-.0227	-.0227
130.000						.1418								-.0314		
140.000						.0333								-.0218		
150.000						-.0399								-.0237		
160.000						-.0536								-.0276		
170.000						-.0499								-.0237		
180.000						-.0361								-.0199		
190.000						-.0691	-.0591	-.0445	-.0281	-.0171	-.0135	-.0131	-.0141	-.0160	-.0179	-.0179
200.000		.4580	.4680	.4860	.5050	.5240	.5450	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(R65006)

IA35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (3) = -1.950

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP													
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
180.000															
170.000															
160.000															

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400						
PHI															
180.000															
170.000															
160.000															

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP													
X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
80.000															
70.000															
60.000															
50.000															
40.000															
30.000															
20.000															
10.000															

MACH (1) = 2.500 ALPHA (4) = .000 RV/L = 2.5019 BETA = -4.0200

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP													
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
80.000															
70.000															
60.000															
50.000															
40.000															
30.000															
20.000															
10.000															

IA35 ORBITER ASCENT CONFIGURATION (R05006)

MACH (1) = 2.500 ALPHA (4) = .000

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP														
X/L	PHI	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
90.000	PHI	-.0290	-.0329	-.0348	-.0358	-.0358	-.0357	-.0411	-.0420	-.0411	-.0411	-.0356	-.0247	-.0137	-.0027	-.0002
100.000		-.0368	-.0367	-.0416	-.0416	-.0426	-.0411	-.0411	-.0420	-.0393	-.0393	-.0237	-.0155	-.0128	-.0002	
110.000		-.0416	-.0445	-.0445	-.0474	-.0464	-.0309	-.0411	-.0420	-.0411	-.0411	-.0402	-.0384	-.0228	-.0265	-.0122
120.000							-.0261								-.0384	
130.000							-.0429								-.0393	
140.000							-.0365								-.0375	
150.000							-.0329								-.0375	
160.000							-.0311								-.0356	
170.000							-.0320								-.0329	
180.000		-.0329	-.0348	-.0329	-.0319	-.0348	-.0347	-.0356	-.0356	-.0329	-.0329	-.0365	-.0292	-.0237	-.0311	-.0334

X/L .7290 .7470 .7670 .7850 .8030 .8290 .8620 .9000 .9400

PHI

90.000							.0164									
70.000							.0329	.0256	.0127							
80.000							.0628	.0338	.0110							
90.000		-.0037	-.0131	-.0177	-.0205	-.0002	.0654	.0619	.0173							
100.000		.0053	-.0085	-.0076	-.0020	.0689	.0943									
110.000		-.0112	-.0048	.0016	.0513	.1216	.1145									
120.000						.2054	.2054									
130.000						.3989	.3989									
140.000						.1944	.1944									
150.000						.1233	.1233									
160.000						.1900	.1900									
170.000						.2093	.2093									
180.000		-.0241	-.0336	-.0361	.0201	.1523	.2550									

MACH (1) = 2.500 ALPHA (5) = 1.980 RH/L = 2.5000 BETA = -4.0200

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP														
X/L	PHI	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
60.000	PHI	.2984	.3922	.2896												
70.000		.2816	.3267	.3020												
80.000		.2790	.3152	.3232												
90.000			.3365	.2303	.0949	.0427	.0311	.0238	.0184	.0065	-.0117	-.0213	-.0121	-.01261	-.0368	
100.000					.0604	.0515	.0391	.0220	.0056	-.0062	-.0163	-.0280	-.0128	-.0435	-.0435	
110.000					.0789	.0577	.0382	.0184	-.0053	-.0199	-.0300	-.0387	-.0455	-.0513	-.0513	
120.000						.1126									-.0803	
130.000						.0238									-.0774	
140.000						-.0700									-.0687	
150.000						-.0800									-.0687	



TABLATED SOURCE PRESSURE DATA FOR IA35/OM64 (LARC UPWT 1063)

(R05006)

IA35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.990 ALPHA (2) = -3.990 RN/L = 2.5150 BETA = -4.0200

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2898	.2849	.2889												
70.000	.3383	.2839	.2671												
80.000	.3828	.2898	.2612												
90.000		.2177	.2019	.1515	.1336	.1234	.1100	.0966	.0872	.0748	.0633	.0589	.0589	.0435	.0379
100.000				.1544	.1485	.1366	.1183	.0976	.0852	.0697	.0578	.0501	.0578	.0501	.0379
110.000				.0717	.0883	.1172	.1245	.0945	.0759	.0622	.0512	.0435	.0512	.0435	.0335
120.000				.1234										.0214	
130.000				.0728										.0169	
140.000				-.0038										.0147	
150.000				-.0162										-.0007	
160.000				-.0090										-.0062	
170.000				-.0131										-.0007	
180.000				-.0255	-.0183	-.0028	.0055	.0086	.0059	.0059	.0059	.0059	.0059	.0059	.0026

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0379	.0324	.0291	.0269	.0247	.0213	.0206	.0163	.0144	.0123	.0144	.0165	.0144	.0186	.0159
100.000	.0302	.0258	.0236	.0214	.0214	.0192	.0196	.0185	.0165	.0144	.0144	.0124	.0144	.0175	.0159
110.000	.0291	.0258	.0214	.0214	.0214	.0136	.0196	.0186	.0186	.0165	.0134	.0134	.0144	.0134	.0128
120.000					.0026									.0165	
130.000					.0217									.0175	
140.000					.0258									.0165	
150.000					.0269									.0144	
160.000					.0279									.0113	
170.000					.0238									.0040	
180.000	.0037	.0070	.0114	.0158	.0158	.0165	.0155	.0134	.0123	.0144	.0144	.0134	.0144	.0009	-.0038

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9100	.9400
PHI									
60.000							.0417		
70.000							.0531	.0634	.0479
80.000							.0697	.0707	.0531
90.000	.0169	.0096	-.0017	.0045	.0096	.0717	.0738	.0831	.0676
100.000	.0231	.0159	.0159	.0159	.0490	.0862			
110.000	.0200	.0179	.0159	.0417	.1317	.1069			
120.000					.3176				
130.000					.4327				
140.000					.2753				
150.000					.1622				
160.000					.2104				
170.000					.2674				
180.000	.0085	-.0017	-.0059	.0252	.1622	.3609			

TABLATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(R05006)

DATE 24 JAN 74

IA35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.950 ALPHA (9) = 2.010 RV/L = 2.5130 BETA = -4.0200

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE	1840	2030	2220	2640	3010	3190	3380	3570	3750	3940	4050	4310
PHI												
60.000	.2670	.2452	.2472									
70.000	.2645	.2452	.2452									
80.000	.2700	.2482	.2482									
90.000		.2482	.2482	.1354	.0784	.0441	.0357	.0285	.0201	.0117	.0063	-.0047
100.000				.0993	.0847	.0555	.0309	.0285	.0180	.0074	.0028	-.0031
110.000				.1117	.0972	.0795	.0337	.0180	.0074	-.0014	-.0069	-.0157
120.000				.1253							-.0454	
130.000				.0264							-.0498	
140.000				-.0486							-.0465	
150.000				-.0611							-.0473	
160.000				-.0611							-.0465	
170.000				-.0672							-.0432	
180.000				-.0705	-.0652	-.0621	-.0580	-.0528	-.0496	-.0465	-.0432	-.0377
VAL	.4550	.4680	.4860	.5050	.5240	.5450	.5610	.5800	.6170	.6360	.6540	.6730
PHI												
90.000	-.0113	-.0157	-.0344	-.0223	-.0245	-.0267	-.0288	-.0319	-.0351	-.0392	-.0371	-.0321
100.000	-.0157	-.0212	-.0245	-.0278	-.0300	-.0333	-.0330	-.0361	-.0371	-.0382	-.0371	-.0370
110.000	-.0223	-.0287	-.0307	-.0344	-.0377	-.0425	-.0413	-.0434	-.0444	-.0392	-.0362	-.0353
120.000						-.0179					-.0548	
130.000						-.0517					-.0529	
140.000						-.0486					-.0496	
150.000						-.0423					-.0475	
160.000						-.0382					-.0457	
170.000						-.0371					-.0423	
180.000	-.0377	-.0377	-.0355	-.0355	-.0377	-.0371	-.0382	-.0392	-.0423	-.0382	-.0371	-.0370
VAL	.7290	.7470	.7670	.7850	.8030	.8290	.8520	.8700	.9000	.9430		
PHI												
80.000												
90.000												
100.000												
110.000	-.0277	-.0308	-.0308	-.0308	-.0298	.0209						
120.000	-.0297	-.0298	-.0267	-.0236	-.0318	.0623						
130.000	-.0380	-.0370	-.0298	-.0360	.0788	.0984						
140.000						.2774						
150.000						.3030						
160.000						.1253						
170.000						.0695						
180.000						.1170						
VAL	-.0318	-.0349	-.0298	.0013	.1015	.1985						



DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IAS5/OAS4 (LARC UPWT 1063)

PAGE 121

(R030006)

IAS5 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (3) = -1.980 R/W/L = 3.4990 BETA = -4.0200

SECTION (3) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2633	.2130	.2034												
70.000	.3040	.2199	.1877												
80.000	.3373	.2550	.1948												
90.000		.2276	.1430	.0844	.0783	.0934	.1049	.1051	.0920	.0873	.0820	.0752	.0713	.0604	
100.000					.0597	.0644	.0782	.0939	.0982	.0916	.0830	.0747	.0703	.0609	
110.000					.0444	.0402	.0406	.0468	.0597	.0778	.0816	.0732	.0673	.0555	
120.000					.1192									.0867	
130.000					.0888									-.0090	
140.000					.0168									-.0120	
150.000					.0021									-.0110	
160.000					.0032									-.0120	
170.000					.0002									-.0100	
180.000					-.0015	-.0046	-.0035	-.0027	-.0012	-.0003	-.0026	-.0061	-.0056	-.0015	

X/L	.4300	.4660	.4850	.5090	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6880	.7100	
PHI															
60.000	.0849	.0481	.0432	.0369	.0358	.0319	.0291	.0253	.0215	.0170	.0155	.0155	.0147	.0097	
70.000	.0830	.0471	.0417	.0373	.0333	.0289	.0268	.0238	.0208	.0178	.0147	.0125	.0140	.0064	
80.000	.0496	.0442	.0333	.0333	.0289	.0353	.0223	.0185	.0162	.0132	.0110	.0095	.0110	.0028	
90.000						.0393							.0057		
100.000						.0072							-.0071		
110.000						.0064							-.0056		
120.000						.0072							-.0034		
130.000						.0042							-.0034		
140.000						-.0034							-.0049		
150.000	-.0091	-.0048	-.0036	-.0028	-.0075	-.0086	-.0071	-.0056	-.0049	-.0034	-.0034	.0037	.0087	-.0056	-.0058

X/L	.7590	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	.0119	.0059	.0025	-.0009	-.0009	.0214	.0497	.0438	.0393
100.000	.0119	.0065	.0045	.0000	.0172	.0539	.0305	.0337	.0305
110.000	.0075	.0044	.0060	.0111	.0662	.0789			
120.000						.2715			
130.000						.3713			
140.000						.2013			
150.000						.1072			
160.000						.0448			
170.000						.1694			
180.000	-.0014	-.0068	-.0110	.0760	.0672	.2515			

(R09006)

TABLATED SOURCE PRESSURE DATA FOR IAS5/0A64 (ARC UPMT 1055)

IAS5 ORBITER ASSENT CONFIGURATION

MACH (4) = 4.500 ALPHA (7) = 6.010 RN/L = 3.5030 BETA = -4.0200

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE
 X/L .0870 .1280 .1640 .2030 .2420 .2820 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

PHI	.1896	.1631	.1513	.1390	.1225	.0825	.0607	.0577	.0519	.0419	.0336	.0289	.0236	.0175	.0144	.0071
60.000	.1925	.1615	.1390	.1154	.0825	.0607	.0577	.0519	.0419	.0336	.0289	.0236	.0175	.0144	.0071	
70.000	.1884	.1631	.1448	.1225	.0825	.0630	.0583	.0542	.0501	.0419	.0348	.0283	.0205	.0156	.0084	
80.000						.0554	.0566	.0548	.0489	.0395	.0295	.0199	.0126	.0108	.0029	
90.000						.0530										
100.000						.0624										
120.000						-.0223										
140.000						-.0317										
150.000						-.0358										
160.000						-.0370										
170.000						-.0382										
180.000																

X/L	.4500	.4880	.5050	.5240	.5460	.5800	.5980	.6170	.6360	.6540	.6730	.6860	.7100
PHI	.0247	.0005	-.0032	-.0062	-.0117	-.0129	-.0147	-.0174	-.0210	-.0210	-.0219	-.0224	-.0260
90.000	.0035	.0005	-.0032	-.0062	-.0129	-.0138	-.0165	-.0183	-.0210	-.0228	-.0246	-.0255	-.0291
100.000	-.0014	-.0036	-.0080	-.0117	-.0171	-.0183	-.0210	-.0237	-.0255	-.0264	-.0282	-.0291	-.0352
120.000					-.0471								
130.000					-.0399								
140.000					-.0453								
150.000					-.0435								
160.000					-.0399								
170.000	-.0378	-.0372	-.0378	-.0364	-.0390	-.0390	-.0399	-.0408	-.0426	-.0426	-.0426	-.0426	-.0471
180.000	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400				

X/L	.0280	-.0202	-.0136	-.0091	.0007	.0047	.0145	.0125
PHI								
60.000								
70.000								
80.000								
90.000								
100.000								
110.000								
120.000								
130.000								
140.000								
150.000								
160.000								
170.000								
180.000								

TABULATED SOURCE PRESSURE DATA FOR IA33/0A64 (LARC UPMT 1063)

(RG=DD7) (03 JAN 74)

IA33 ORBITER ASCENT CONFIGURATION

PARAMETRIC DATA

BETA = -6.000 E:EVOM = .000

REFERENCE DATA

SREF = .0000 SQ. IN. YMRP = .0000 IN.
 LREF = .0000 IN. YMRP = .0000 IN.
 BREF = .0000 IN. ZMRP = .0000 IN.
 SCALE = .0150 SCALE

MACH (1) = 2.500 ALPHA (1) = -5.970 RV/L = 2.5010 BETA = -5.9600

DEPENDENT VARIABLE CP

SECTION (1)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
X/L	.0870	.1260	.1640	.2030	.2420	.2810	.3200	.3590	.3980	.4370	.4760	.5150	.5540	.5930	.6320	.6710	.7100	.7490	.7880	.8270	.8660	.9050	.9440	.9830	.0220	.0610	.1000	.1390	.1780	.2170	.2560	.2950	.3340	.3730	.4120	.4510	.4900	.5290	.5680	.6070	.6460	.6850	.7240	.7630	.8020	.8410	.8800	.9190	.9580	.9970	.0370	.0760	.1150	.1540	.1930	.2320	.2710	.3100	.3490	.3880	.4270	.4660	.5050	.5440	.5830	.6220	.6610	.7000	.7390	.7780	.8170	.8560	.8950	.9340	.9730	.0120	.0510	.0900	.1290	.1680	.2070	.2460	.2850	.3240	.3630	.4020	.4410	.4800	.5190	.5580	.5970	.6360	.6750	.7140	.7530	.7920	.8310	.8700	.9090	.9480	.9870	.0270	.0660	.1050	.1440	.1830	.2220	.2610	.3000	.3390	.3780	.4170	.4560	.4950	.5340	.5730	.6120	.6510	.6900	.7290	.7680	.8070	.8460	.8850	.9240	.9630	.0020	.0410	.0800	.1190	.1580	.1970	.2360	.2750	.3140	.3530	.3920	.4310	.4700	.5090	.5480	.5870	.6260	.6650	.7040	.7430	.7820	.8210	.8600	.8990	.9380	.9770	.0170	.0560	.0950	.1340	.1730	.2120	.2510	.2900	.3290	.3680	.4070	.4460	.4850	.5240	.5630	.6020	.6410	.6800	.7190	.7580	.7970	.8360	.8750	.9140	.9530	.9920	.0320	.0710	.1100	.1490	.1880	.2270	.2660	.3050	.3440	.3830	.4220	.4610	.5000	.5390	.5780	.6170	.6560	.6950	.7340	.7730	.8120	.8510	.8900	.9290	.9680	.0070	.0460	.0850	.1240	.1630	.2020	.2410	.2800	.3190	.3580	.3970	.4360	.4750	.5140	.5530	.5920	.6310	.6700	.7090	.7480	.7870	.8260	.8650	.9040	.9430	.9820	.0220	.0610	.1000	.1390	.1780	.2170	.2560	.2950	.3340	.3730	.4120	.4510	.4900	.5290	.5680	.6070	.6460	.6850	.7240	.7630	.8020	.8410	.8800	.9190	.9580	.9970	.0370	.0760	.1150	.1540	.1930	.2320	.2710	.3100	.3490	.3880	.4270	.4660	.5050	.5440	.5830	.6220	.6610	.7000	.7390	.7780	.8170	.8560	.8950	.9340	.9730	.0120	.0510	.0900	.1290	.1680	.2070	.2460	.2850	.3240	.3630	.4020	.4410	.4800	.5190	.5580	.5970	.6360	.6750	.7140	.7530	.7920	.8310	.8700	.9090	.9480	.9870	.0270	.0660	.1050	.1440	.1830	.2220	.2610	.3000	.3390	.3780	.4170	.4560	.4950	.5340	.5730	.6120	.6510	.6900	.7290	.7680	.8070	.8460	.8850	.9240	.9630	.0020	.0410	.0800	.1190	.1580	.1970	.2360	.2750	.3140	.3530	.3920	.4310	.4700	.5090	.5480	.5870	.6260	.6650	.7040	.7430	.7820	.8210	.8600	.8990	.9380	.9770	.0170	.0560	.0950	.1340	.1730	.2120	.2510	.2900	.3290	.3680	.4070	.4460	.4850	.5240	.5630	.6020	.6410	.6800	.7190	.7580	.7970	.8360	.8750	.9140	.9530	.9920	.0320	.0710	.1100	.1490	.1880	.2270	.2660	.3050	.3440	.3830	.4220	.4610	.5000	.5390	.5780	.6170	.6560	.6950	.7340	.7730	.8120	.8510	.8900	.9290	.9680	.0070	.0460	.0850	.1240	.1630	.2020	.2410	.2800	.3190	.3580	.3970	.4360	.4750	.5140	.5530	.5920	.6310	.6700	.7090	.7480	.7870	.8260	.8650	.9040	.9430	.9820	.0220	.0610	.1000	.1390	.1780	.2170	.2560	.2950	.3340	.3730	.4120	.4510	.4900	.5290	.5680	.6070	.6460	.6850	.7240	.7630	.8020	.8410	.8800	.9190	.9580	.9970	.0370	.0760	.1150	.1540	.1930	.2320	.2710	.3100	.3490	.3880	.4270	.4660	.5050	.5440	.5830	.6220	.6610	.7000	.7390	.7780	.8170	.8560	.8950	.9340	.9730	.0120	.0510	.0900	.1290	.1680	.2070	.2460	.2850	.3240	.3630	.4020	.4410	.4800	.5190	.5580	.5970	.6360	.6750	.7140	.7530	.7920	.8310	.8700	.9090	.9480	.9870	.0270	.0660	.1050	.1440	.1830	.2220	.2610	.3000	.3390	.3780	.4170	.4560	.4950	.5340	.5730	.6120	.6510	.6900	.7290	.7680	.8070	.8460	.8850	.9240	.9630	.0020	.0410	.0800	.1190	.1580	.1970	.2360	.2750	.3140	.3530	.3920	.4310	.4700	.5090	.5480	.5870	.6260	.6650	.7040	.7430	.7820	.8210	.8600	.8990	.9380	.9770	.0170	.0560	.0950	.1340	.1730	.2120	.2510	.2900	.3290	.3680	.4070	.4460	.4850	.5240	.5630	.6020	.6410	.6800	.7190	.7580	.7970	.8360	.8750	.9140	.9530	.9920	.0320	.0710	.1100	.1490	.1880	.2270	.2660	.3050	.3440	.3830	.4220	.4610	.5000	.5390	.5780	.6170	.6560	.6950	.7340	.7730	.8120	.8510	.8900	.9290	.9680	.0070	.0460	.0850	.1240	.1630	.2020	.2410	.2800	.3190	.3580	.3970	.4360	.4750	.5140	.5530	.5920	.6310	.6700	.7090	.7480	.7870	.8260	.8650	.9040	.9430	.9820	.0220	.0610	.1000	.1390	.1780	.2170	.2560	.2950	.3340	.3730	.4120	.4510	.4900	.5290	.5680	.6070	.6460	.6850	.7240	.7630	.8020	.8410	.8800	.9190	.9580	.9970	.0370	.0760	.1150	.1540	.1930	.2320	.2710	.3100	.3490	.3880	.4270	.4660	.5050	.5440	.5830	.6220	.6610	.7000	.7390	.7780	.8170	.8560	.8950	.9340	.9730	.0120	.0510	.0900	.1290	.1680	.2070	.2460	.2850	.3240	.3630	.4020	.4410	.4800	.5190	.5580	.5970	.6360	.6750	.7140	.7530	.7920	.8310	.8700	.9090	.9480	.9870	.0270	.0660	.1050	.1440	.1830	.2220	.2610	.3000	.3390	.3780	.4170	.4560	.4950	.5340	.5730	.6120	.6510	.6900	.7290	.7680	.8070	.8460	.8850	.9240	.9630	.0020	.0410	.0800	.1190	.1580	.1970	.2360	.2750	.3140	.3530	.3920	.4310	.4700	.5090	.5480	.5870	.6260	.6650	.7040	.7430	.7820	.8210	.8600	.8990	.9380	.9770	.0170	.0560	.0950	.1340	.1730	.2120	.2510	.2900	.3290	.3680	.4070	.4460	.4850	.5240	.5630	.6020	.6410	.6800	.7190	.7580	.7970	.8360	.8750	.9140	.9530	.9920	.0320	.0710	.1100	.1490	.1880	.2270	.2660	.3050	.3440	.3830	.4220	.4610	.5000	.5390	.5780	.6170	.6560	.6950	.7340	.7730	.8120	.8510	.8900	.9290	.9680	.0070	.0460	.0850	.1240	.1630	.2020	.2410	.2800	.3190	.3580	.3970	.4360	.4750	.5140	.5530	.5920	.6310	.6700	.7090	.7480	.7870	.8260	.8650	.9040	.9430	.9820	.0220	.0610	.1000	.1390	.1780	.2170	.2560	.2950	.3340	.3730	.4120	.4510	.4900	.5290	.5680	.6070	.6460	.6850	.7240	.7630	.8020	.8410	.8800	.9190	.9580	.9970	.0370	.0760	.1150	.1540	.1930	.2320	.2710	.3100	.3490	.3880	.4270	.4660	.5050	.5440	.5830	.6220	.6610	.7000	.7390	.7780	.8170	.8560	.8950	.9340	.9730	.0120	.0510	.0900	.1290	.1680	.2070	.2460	.2850	.3240	.3630	.4020	.4410	.4800	.5190	.5580	.5970	.6360	.6750	.7140	.7530	.7920	.8310	.8700	.9090	.9480	.9870	.0270	.0660	.1050	.1440	.1830	.2220	.2610	.3000	.3390	.3780	.4170	.4560	.4950	.5340	.5730	.6120	.6510	.6900	.7290	.7680	.8070	.8460	.8850	.9240	.9630	.0020	.0410	.0800	.1190	.1580	.1970	.2360	.2750	.3140	.3530	.3920	.4310	.4700	.5090	.5480	.5870	.6260	.6650	.7040	.7430	.7820	.8210	.8600	.8990	.9380	.9770	.0170	.0560	.0950	.1340	.1730	.2120	.2510	.2900	.3290	.3680	.4070	.4460	.4850	.5240	.5630	.6020	.6410	.6800	.7190	.7580	.7970	.8360	.8750	.9140	.9530	.9920	.0320	.0710	.1100	.1490	.1880	.2270	.2660	.3050	.3440	.3830	.4220	.4610	.5000	.5390	.5780	.6170	.6560	.6950	.7340	.7730	.8120	.8510	.8900	.9290	.9680	.0070	.0460	.0850	.1240	.1630	.2020	.2410	.2800	.3190	.3580	.3970	.4360	.4750	.5140	.5530	.5920	.6310	.6700	.7090	.7480	.7870	.8260	.8650	.9040	.9430	.9820	.0220	.0610	.1000	.1390	.1780	.2170	.2560	.2950	.3340	.3730	.4120	.4510	.4900	.5290	.5680	.6070	.6460	.6850	.7240	.7630	.8020	.8410	.8800	.9190	.9580	.9970	.0370	.0760	.1150	.1540	.1930	.2320	.2710	.3100	.3490	.3880	.4270	.4660	.5050	.5440	.5830	.6220	.6610	.700

(RQ3007)

1A35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (1) = -5.970

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP									
X/L	.7290	.7470	.7670	.7890	.8030	.8290	.8620	.9020	.9400	
PHI						.5529	.3176	.1810	.2497	.3096
130.000										.3837
140.000										
150.000										
160.000										
170.000										
180.000	.0056	-.0081	-.0154	-.0244	.2162	.3837				

MACH (2) = 2.500 ALPHA (2) = -4.010 RN/L = 2.5010 BETA = -5.9600

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP														
X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3617	.4275	.4044												
70.000	.3822	.4071	.4355												
80.000	.4133	.4071	.4355												
90.000	.4328	.3644	.3026	.1315	.1147	.1049	.0942	.0800	.0693	.0587	.0483	.0440	.0329	.0243	.0166
100.000				.1475	.1315	.1173	.0960	.0738	.0604	.0462	.0380	.0320	.0243	.0185	.0121
110.000				.1449	.1244	.1075	.0871	.0569	.0427	.0329	.0252	.0210	.0166	.0121	.0098
120.000				.1964											.0069
130.000				.0898											.0069
140.000				-.0136											-.0037
150.000				-.0263											-.0105
160.000				-.0227											-.0066
170.000				-.0318											-.0056
180.000				-.0509	-.0400	-.0263	-.0126	-.0063	-.0017	-.0018	-.0018	-.0056	-.0027		

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP														
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0281	.0243	.0233	.0214	.0214	.0194	.0192	.0136	.0182	.0182	.0247	.0364	.0523	.0594	.0584
100.000	.0204	.0137	.0173	.0204	.0185	.0166	.0191	.0182	.0146	.0182	.0237	.0470	.0497	.0531	.0478
110.000	.0127	.0137	.0166	.0175	.0185	.0223	.0173	.0182	.0164	.0164	.0219	.0435	.0311	.0478	
120.000				.0194											.0100
130.000				.0054											.0100
140.000				.0081											.0045
150.000				.0081											.0008
160.000				.0072											-.0075
170.000				.0017											-.0157
180.000	-.0027	.0001	.0001	-.0118	-.0037	-.0017	-.0047	-.0093	-.0111	-.0139	-.0176	-.0010	-.0011	-.0240	-.0307

X/L .7290 .7470 .7670 .7890 .8030 .8290 .8620 .9020 .9400

PHI

TABULATED SOURCE PRESSURE DATA FOR IA35/0A64 (LARC UPMT 1063)

(R69007)

IA35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (3) = -1.950

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP														
X/L	PHI	.4300	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI																
60.000																
70.000																
80.000																
90.000																
100.000																
110.000																
120.000																
130.000																
140.000																
150.000																
160.000																
170.000																
180.000																

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP														
X/L	PHI	.7290	.7470	.7670	.7890	.8030	.8290	.8620	.9000	.9400						
PHI																
60.000																
70.000																
80.000																
90.000																
100.000																
110.000																
120.000																
130.000																
140.000																
150.000																
160.000																
170.000																
180.000																

MACH (1) = 2.500 ALPHA (4) = .000 RN/L = 2.5010 BETA = -5.9600

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP														
X/L	PHI	.5870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI																
60.000																
70.000																
80.000																
90.000																
100.000																
110.000																
120.000																
130.000																
140.000																
150.000																
160.000																
170.000																
180.000																

PHI



TABULATED SOURCE PRESSURE DATA FOR 1A35/0A64 (LARC UPWT 1063)

(RQ5007)

1A35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (4) = .000

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP														
X/L	.4900	.4860	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6960	.7150
PHI															
90.000	-.0069	-.0114	-.0124	-.0163	-.0134	-.0183	-.0201	-.0210	-.0201	-.0164	-.0099	.0003	.0151	.0225	.0223
100.000	-.0154	-.0193	-.0222	-.0212	-.0212	-.0252	-.0215	-.0238	-.0219	-.0238	-.0192	-.0117	.0133	.0142	.0225
110.000	-.0252	-.0271	-.0301	-.0330	-.0321	-.0334	-.0275	-.0284	-.0284	-.0275	-.0266	-.0229	.0142	.0090	.0077
120.000						-.0055								-.0432	
130.000						-.0516								-.0451	
140.000						-.0516								-.0470	
150.000						-.0460								-.0516	
160.000						-.0432								-.0562	
170.000						-.0442								-.0581	-.0618
180.000	-.0468	-.0451	-.0458	-.0438	-.0478	-.0470	-.0497	-.0516	-.0534	-.0553	-.0562	-.0395	-.0025		
X/L	.7220	.7470	.7670	.7890	.8030	.8200	.8200	.8200	.8200	.8200	.8200	.8200	.8200	.8200	.8200

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP														
X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
90.000							.0207		.0415	.0494	.0353				
100.000							.0881		.0573	.0345					
110.000							.1058		.0688	.0389					
120.000	.0161	.0040	-.0043	-.0053	-.0086	.0020									
130.000	.0244	.0114	.0068	.0022	.0056	.0207									
140.000	.0131	.0068	.0077	.0362	.1498	.1612									
150.000						.3813									
160.000						.4068									
170.000						.1876									
180.000						.0450									
190.000						.1366									
200.000						.1647									
210.000	-.0479	-.0551	-.0618	.0353	.1357	.2104									

MACH (1) = 2.500 ALPHA (5) = 2.000 R/L = 2.500 BETA = -5.9600

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP														
X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
90.000	.3800	.4394	.3047												
100.000	.3216	.4394	.3198												
110.000	.3101	.3818	.3393												
120.000	.36 5	.2409	.1213	.0619	.0522	.0451	.0407	.0309	.0172	.0118	.0018	-.0021	-.0021	-.0156	
130.000				.0823	.0699	.0594	.0460	.0318	.0182	.0054	-.0069	-.0127	-.0234	-.0234	
140.000				.1000	.0814	.0611	.0460	.0163	-.0001	-.0088	-.0214	-.0253	-.0253	-.0350	
150.000				.1266										-.0747	
160.000				.0451										-.0814	
170.000				-.0629										-.0766	
180.000				-.0811										-.0737	



DATE 24 JAN 74

TABLATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPAT 1063)

PAGE 151

(R85007)

IA35 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (4) = .010 RN/L = 3.4990 BETA = -5.9800

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.3010	.3190	.3360	.3570	.3750	.3940	.4030	.4310
PHI														
60.000	.2785	.2340	.2533											
70.000	.3175	.2377	.2409											
80.000	.3322	.2684	.2249											
90.000		.2400	.2079	.1522	.1151	.1060	.1046	.1027	.0974	.0913	.0828	.0788	.0675	
100.000					.1156	.1236	.1227	.1165	.1070	.0979	.0879	.0769	.0616	
110.000					.0913	.0974	.1113	.1175	.1036	.0936	.0828	.0719	.0650	.0537
120.000						.1263							.0147	
130.000						.0870							-.0050	
140.000						.0788							-.0178	
150.000						-.0069							-.0178	
160.000						-.0126							-.0193	
170.000						-.0126							-.0222	
180.000					-.0169	-.0188	-.0197	-.0183	-.0186	-.0188	-.0203	-.0217	-.0247	-.0242

X/L	.4300	.4680	.4860	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0611	.0542	.0486	.0433	.0399	.0349	.0326	.0273	.0243	.0196	.0190	.0167	.0175	.0160	.0125
100.000	.0566	.0497	.0448	.0399	.0364	.0315	.0281	.0251	.0213	.0190	.0152	.0130	.0160	.0114	.0093
110.000	.0463	.0369	.0330	.0280	.0251	.0209	.0190	.0175	.0152	.0137	.0107	.0084	.0137	.0031	-.0002
120.000						.0458								-.0272	
130.000						-.0136								-.0272	
140.000						-.0151								-.0257	
150.000						-.0143								-.0234	
160.000						-.0158								-.0226	
170.000						-.0181								-.0226	
180.000	-.0222	-.0198	-.0173	-.0153	-.0153	-.0151	-.0166	-.0173	-.0189	-.0204	-.0219	-.0173	.0024	-.0242	-.0241

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	.0197	.0093	.0056	.0035	.0019	.0167	.0570	.0549	
100.000	.0141	.0098	.0082	.0056	.0088	.0459			
110.000	.0056	.0013	.0024	.0082	.0333	.1137			
120.000						.2912			
130.000						.3322			
140.000						.1376			
150.000						.0284			
160.000						.0316			
170.000						.0856			
180.000	-.0199	-.0267	-.0310	-.0183	.0263	.1009			

TABULATED SOURCE PRESSURE DATA FOR IA35/0A64 (LARC UPWT 1063)

(R09007)

IA35 ORBITER ASCENT CONFIGURATION

MACH (4) = 4.500 ALPHA (1) = -6.010 RN/L = 3.5017 BETA = -5.9000

SECTION (1) FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.3770	.2937	.2661												
70.000	.4309	.3235	.2612												
80.000	-.0826	.3803	.2827												
90.000		.3345	.2202	.1310	.1009	.1073	.1223	.1327	.1351	.1391	.1356	.1284	.1242	.1201	.1175
100.000					.1078	.1020	.0980	.0997	.1055	.1142	.1246	.1242	.1242	.1201	.1112
110.000					.0934	.0829	.0806	.0800	.0754	.0754	.0809	.0804	.0809	.0969	.1032
120.000					.1941									.0268	
130.000					.1519									-.0511	
140.000					.0522									-.0129	
150.000					.0221									-.0183	
160.000					.0146									-.0195	
170.000					.0158									-.0171	
180.000					.0123	.0210	.0169	.0342	-.0051	-.0109	-.0153	-.0147	-.0118	-.0118	-.0023

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.1100	.1046	.1025	.0981	.0963	.0928	.0909	.0864	.0803	.0750	.0697	.0670	.0662	.0635	.0534
100.000	.1056	.1017	.0999	.0987	.0945	.0880	.0847	.0803	.0741	.0706	.0662	.0609	.0600	.0582	.0501
110.000	.1070	.1052	.0975	.0886	.0785	.0738	.0715	.0670	.0626	.0582	.0565	.0520	.0503	.0468	.0385
120.000						.0470								.0124	
130.000						.0027								.0282	
140.000						-.0106								.0397	
150.000						.0229								.0415	
160.000						.0247								.0406	
170.000						.0265								.0379	
180.000	.0037	.0084	.0132	.0173	.0203	.0247	.0282	.0309	.0335	.0362	.0379	.0371	.0371	.0353	.0313

X/L	.7290	.7470	.7670	.7830	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0424		
70.000							.0508	.0774	.0780
80.000							.0839	.0988	.0943
90.000	.0592	.0488	.0468	.0372	.0404	.0631	.1209	.1189	.1059
100.000	.0540	.0450	.0437	.0366	.0366	.0228			
110.000	.0437	.0385	.0398	.0379	.0350	.0314			
120.000						.0094			
130.000						-.0920			
140.000						.2889			
150.000						.1579			
160.000						.1118			
170.000						.2299			
180.000	.0352	.0300	.0233	.0268	.0639	.3054			

TABULATED SOURCE PRESSURE DATA FOR IA35/OM64 (LARC UPWT 1063)

DATE 24 JAN 74

(R04003) (03 JAN 74)

OM64 ORBITER ENTRY CONFIGURATION

PARAMETRIC DATA

REFERENCE DATA

SREF = .0000 SQ. IN. XMRP = .0000 IN.
 LREF = .0000 IN. YMRP = .0000 IN.
 BREF = .0000 IN. ZMRP = .0000 IN.
 SCALE = .0150 SCALE

BETA = 6.000 ELEVON = -15.000

MACH (1) = 2.500 ALPHA (1) = 8.000 RIN/L = 2.4999 BETA = 6.0300

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE
 X/L .0670 .1260 .1640 .2030 .2420 .2640 .2820 .3010 .3190 .3360 .3570 .3750 .3940 .4030 .4310

PHI
 60.000 .0934 .0692 .0325
 70.000 .0507 .0616 .0398
 80.000 .1029 .0689 .0485
 90.000 .0558 .0558 .0015
 100.000 .0725 .0695 .0648
 110.000 .0710 .0710 .0725
 120.000 .0880 .0942 .0957
 130.000 .0679 .0679 .0617
 140.000 .0725 .0695 .0648
 150.000 .0710 .0710 .0725
 160.000 .0880 .0942 .0957
 170.000 .0679 .0679 .0617
 180.000 .0725 .0695 .0648

X/L .4370 .4680 .4960 .5090 .5240 .5460 .5610 .5800 .5990 .6170 .6360 .6540 .6730 .6880 .7100
 PHI
 30.000 -.0761 -.0796 -.0814
 40.000 -.0831 -.0831 -.0814
 50.000 -.0901 -.0831 -.0814
 60.000 .0814 .0814 .0814
 70.000 .0779 .0779 .0779
 80.000 .0674 .0674 .0674
 90.000 .0461 .0461 .0461
 100.000 .0461 .0461 .0461
 110.000 .0519 .0519 .0519
 120.000 .0760 .0760 .0760
 130.000 -.0919 -.0901 -.0849
 140.000 .7290 .7470 .7570
 150.000 .7850 .7850 .8290

PHI
 60.000 -.1074
 70.000 -.0965
 80.000 -.1011
 90.000 -.0952
 100.000 -.0716
 110.000 -.0592
 120.000 -.0747
 130.000 -.0949
 140.000 -.0452
 150.000 -.0281
 160.000 .0232
 170.000 .0701

TABLATED SOURCE PRESSURE DATA FOR 1A35/A064 (LARC UPNT 1063)

(R04001)

0x64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (2) = 10.000

SECTION (1) FUSELAGE

X/L	PHI	DEPENDENT VARIABLE CP
.7290	.7470	.7670
.7850	.8030	.8620
.9000	.9400	.9400
PHI		
80.000		-.1457
90.000		-.1266
100.000		-.1043
110.000		-.0995
120.000		-.1154
130.000		-.1298
140.000		-.0756
150.000		-.1043
160.000		-.1139
170.000		-.0884
180.000		-.0676
190.000		-.0533
200.000		-.0358
210.000		-.0172
220.000		-.0198
230.000		.0572
240.000		.1683
250.000		.2577
260.000		.2289
270.000		.1683
280.000		.1856
290.000		.3817

MACH (1) = 2.500 ALPHA (3) = 12.000 RN/L = 2.4999 BETA = 6.0000

SECTION (1) FUSELAGE

X/L	PHI	DEPENDENT VARIABLE CP
.0870	.1280	.1640
.2030	.2420	.2640
.2820	.3010	.3190
.3380	.3570	.3750
.3940	.4050	.4310
PHI		
60.000		.0771
70.000		.0640
80.000		.0317
90.000		.0421
100.000		.0538
110.000		.0684
120.000		.0567
130.000		.0625
140.000		-.0075
150.000		-.0639
160.000		-.0796
170.000		-.0780
180.000		-.0671
190.000		-.0639
200.000		-.0623
210.000		-.0608
220.000		-.0671
230.000		-.0718
240.000		-.0733
250.000		-.0812
260.000		-.0869
270.000		-.0869
280.000		-.0841
290.000		-.0714
300.000		-.0749
310.000		-.0802
320.000		-.0834
330.000		-.0939
340.000		-.0975
350.000		-.1239
360.000		-.0994
370.000		-.0959
380.000		-.1011
390.000		-.1011
400.000		-.1064
410.000		-.1203
420.000		-.1133

MACH (1) = 2.500 ALPHA (3) = 12.000 RN/L = 2.4999 BETA = 6.0000

SECTION (1) FUSELAGE

X/L	PHI	DEPENDENT VARIABLE CP
.4500	.4680	.4860
.5050	.5050	.5240
.5460	.5610	.5800
.6170	.6360	.6540
.6730	.6920	.7100
PHI		
90.000		-.0892
100.000		-.0854
110.000		-.0889
120.000		-.0941
130.000		-.0941
140.000		-.0959
150.000		-.0941
160.000		-.0941
170.000		-.1046
180.000		-.1064
190.000		-.1029
200.000		-.0934
210.000		-.0937
220.000		-.0899
230.000		-.0843
240.000		-.0796
250.000		-.0765
260.000		-.0733
270.000		-.0713
280.000		-.0686
290.000		-.0679
300.000		-.0661
310.000		-.0643
320.000		-.0625
330.000		-.0608
340.000		-.0592
350.000		-.0575

(R04001)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.900 ALPHA (5) = 16.010

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0970	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
160.000															
170.000															
180.000															

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000															
100.000															
110.000															
120.000															
130.000															
140.000															
150.000															
160.000															
170.000															
180.000															

X/L	.7290	.7470	.7610	.7850	.8030	.8290	.8620	.9200	.9400
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PHI									
60.000									
70.000									
80.000									
90.000									
100.000									
110.000									
120.000									
130.000									
140.000									
150.000									
160.000									
170.000									
180.000									

PHI			
60.000			
70.000			
80.000			

(R04001)

OM64 ORBITER ENTRY CONFIGURATION

MACH (3) = 2.900 ALPHA (6) = 17.990 RV/L = 2.4999 BETA = 6.0320

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0070	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
80.000	.0687	.0336	.0276												
70.000	.0362	.0396	.0229												
60.000	.0197	.0276	.0244												
50.000		.0338	-.0024	-.0641	-.0799	-.0783	-.0768	-.0785	-.0815	-.0863	-.0878	-.0894	-.0894	-.0929	
40.000					-.0768	-.0752	-.0742	-.0768	-.0815	-.0863	-.0894	-.0894	-.0912	-.0946	
30.000					-.0720	-.0752	-.0799	-.0847	-.0926	-.0973	-.1033	-.1051	-.1033	-.1033	
20.000					-.0673									-.1660	
10.000					-.1210									-.1346	
0.000					-.1732									-.1155	
150.000					-.1685									-.0946	
160.000					-.1637									-.0909	
170.000					-.1637									-.1051	
180.000					-.1653	-.1622	-.1574	-.1558	-.1574	-.1590	-.1590	-.1590	-.1590	-.1538	-.1590

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0946	-.0981	-.0991	-.1016	-.1051	-.1120	-.1185	-.1264	-.1374	-.1484	-.1563	-.1673	-.1736	-.1783	-.1941
100.000	-.0964	-.0981	-.0981	-.0999	-.1033	-.1033	-.1060	-.1091	-.1123	-.1154	-.1201	-.1248	-.1280	-.1327	-.1465
110.000	-.1051	-.1068	-.1085	-.1103	-.1120	-.1120	-.1138	-.1138	-.1107	-.1075	-.1028	-.0997	-.1013	-.1028	-.1104
120.000					-.1207									-.0792	
130.000					-.1327									-.0855	
140.000					-.1028									-.0934	
150.000					-.0651									-.0840	
160.000					-.0651									-.0871	
170.000					-.0918									-.1123	
180.000	-.1842	-.1694	-.1694	-.1660	-.1746	-.1846	-.1893	-.1893	-.1877	-.1814	-.1798	-.1783	-.1720	-.1744	

X/L	.7290	.7470	.7670	.7890	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.2072		
70.000							-.2154	-.2072	-.1990
60.000							-.2122	-.2154	-.2023
50.000	-.1990	-.2007	-.2072	-.2138	-.2089	-.1941	-.1990	-.2056	-.2089
40.000	-.1964	-.1695	-.1761	-.1793	-.1613	-.1826			
30.000	-.1153	-.1235	-.1268	-.1104	-.0842	-.1252			
20.000					.0367				
10.000					.0439				
0.000					.0511				
150.000					.1548				
160.000					.0291				
170.000					.1202				
180.000	-.1662	-.1629	-.1596	-.1534	-.0956	-.1245			

(R040001)

TABULATED SOURCE PRESSURE DATA FOR 1A35/OA64 (LARC UPWT 1063)

DATE 2 JAN 74

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.900 ALPHA (0) = 20.990 RN/L = 2.4999 BETA = 6.0300

DEPENDENT VARIABLE CP

SECTION	1) FUSELAGE	2) WING	3) TAIL	4) PROPELLANT	5) ENGINE	6) OTHER	7) TOTAL
X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820
PHI	.0589	.0136	.0249	-.0886	-.0871	-.0855	-.0866
60.000	.0145	.0280	.0156	-.0840	-.0871	-.0902	-.0917
70.000	-.0078	.0016	.0062	-.0777	-.0824	-.0902	-.0917
80.000				-.0886	-.0855	-.0902	-.0927
90.000				-.0886	-.0855	-.0902	-.0927
100.000				-.0886	-.0855	-.0902	-.0927
110.000				-.0886	-.0855	-.0902	-.0927
120.000				-.0886	-.0855	-.0902	-.0927
130.000				-.0886	-.0855	-.0902	-.0927
140.000				-.0886	-.0855	-.0902	-.0927
150.000				-.0886	-.0855	-.0902	-.0927
160.000				-.0886	-.0855	-.0902	-.0927
170.000				-.0886	-.0855	-.0902	-.0927
180.000				-.0886	-.0855	-.0902	-.0927
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610
PHI	-.0949	-.1014	-.1119	-.1258	-.1369	-.1519	-.1676
90.000	-.0890	-.0997	-.0960	-.0997	-.1014	-.1128	-.1276
100.000	-.1084	-.1101	-.1084	-.1084	-.1084	-.1097	-.1128
120.000				-.1241	-.1332	-.1441	-.1582
130.000				-.1394	-.1494	-.1604	-.1741
140.000				-.0940	-.0940	-.1040	-.1140
150.000				-.0815	-.0815	-.0915	-.1015
160.000				-.1191	-.1191	-.1291	-.1391
170.000	-.1763	-.1763	-.1781	-.1798	-.1868	-.1895	-.1863
180.000				-.8290	-.8030	-.8620	-.9000
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620
PHI	-.2076	-.2157	-.2044	-.2028	-.2173	-.2092	-.2092
60.000	-.2253	-.2253	-.2253	-.2221	-.2221	-.2221	-.2221
70.000	-.2092	-.2141	-.2157	-.2124	-.2076	-.2157	-.2157
80.000	-.1608	-.1705	-.1818	-.1770	-.1705	-.1995	-.1995
90.000				-.0528	-.0528	-.0528	-.0528
100.000				-.0310	-.0310	-.0310	-.0310
110.000				-.0344	-.0344	-.0344	-.0344
120.000				-.1189	-.1189	-.1189	-.1189
130.000				-.0198	-.0198	-.0198	-.0198
140.000				-.0945	-.0945	-.0945	-.0945
150.000	-.1808	-.1808	-.1928	-.1270	-.0963	-.1074	-.1074
160.000							
170.000							
180.000							

TABLATED SOURCE PRESSURE DATA FOR IAS5-OM64 (LARC UNVT 1662)

OM64 ORBITER ENTRY CONFIGURATION (P240001)

MACH (3) = 4.000 ALPHA (1) = 7.990 RN/L = 3.4940 BETA = 6.0900

SECTION (1) FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0970	.1290	.1640	.2030	.2420	.2840	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
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PHI

60.000	.0628	.1090	.0336											
70.000	.0377	.0549	.0402											
80.000	.0913	.0615	.0484											
90.000		.0549	.0140	-.0237	-.0352	-.0368	-.0365	-.0385	-.0368	-.0368	-.0368	-.0398	-.0416	-.0434
100.000					-.0319	-.0319	-.0336	-.0336	-.0336	-.0368	-.0368	-.0398	-.0434	-.0434
110.000					-.0368	-.0325	-.0418	-.0401	-.0385	-.0434	-.0434	-.0453	-.0453	-.0453
120.000					-.0155									
130.000					-.0319									
140.000					-.0500									
150.000					-.0516									
160.000					-.0516									
170.000					-.0516									
180.000					-.0483	-.0483	-.0500	-.0483	-.0500	-.0526	-.0526	-.0526	-.0526	-.0526

X/L

.4300	.4680	.4980	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
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PHI

90.000	-.0434	-.0434	-.0453	-.0453	-.0453	-.0481	-.0481	-.0481	-.0481	-.0481	-.0464	-.0464	-.0464	-.0507
100.000	-.0434	-.0434	-.0453	-.0453	-.0453	-.0481	-.0481	-.0481	-.0464	-.0464	-.0464	-.0464	-.0448	-.0473
110.000	-.0453	-.0453	-.0453	-.0214	-.0453	-.0481	-.0481	-.0481	-.0464	-.0464	-.0464	-.0464	-.0448	-.0473
120.000					-.0379									
130.000					-.0365									
140.000					-.0415									
150.000					-.0448									
160.000					-.0448									
170.000					-.0481									
180.000	-.0326	-.0326	-.0326	-.0508	-.0481	-.0481	-.0464	-.0481	-.0464	-.0464	-.0464	-.0497	-.0497	-.0540

X/L

.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9030	.9400
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PHI

60.000								
70.000								
80.000								
90.000	-.0490	-.0924	-.0907	-.0524	-.0307	-.0389	-.0540	-.0507
100.000	-.0473	-.0456	-.0440	-.0423	-.0356	-.0305	-.0490	-.0524
110.000	-.0440	-.0440	-.0440	-.0322	-.0168	-.0272	-.0406	-.0440
120.000					.0366			
130.000					.0702			
140.000					.1457			
150.000					.0685			
160.000					-.0305			
170.000					-.0255			
180.000	-.0540	-.0524	-.0507	-.0490	-.0372			

9.5

(REAR001)

0A64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (2) = 10.010 RV/L = 3.4940 BETA = 6.0300

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2840	.3010	.3190	.3380	.3570	.3750	.3940	.4057	.4310
PHI														
60.000	.0735	.0735	.0263											
70.000	.0738	.0483	.0314											
80.000	.0736	.0520	.0362											
90.000		.0450	.0078	-.0315	-.0417	-.0434	-.0468	-.0468	-.0451	-.0468	-.0468	-.0497	-.0497	-.0516
100.000				-.0434	-.0451	-.0451	-.0468	-.0485	-.0485	-.0485	-.0485	-.0516	-.0516	-.0516
110.000					-.0451	-.0468	-.0451	-.0434	-.0451	-.0468	-.0497	-.0516	-.0516	-.0516
120.000					-.0298							-.0648	-.0648	
130.000					-.0451							-.0648	-.0648	
140.000					-.0653							-.0648	-.0648	
150.000					-.0655							-.0629	-.0629	
160.000					-.0672							-.0629	-.0629	
170.000					-.0672							-.0648	-.0648	
180.000					-.0638	-.0655	-.0655	-.0638	-.0638	-.0638	-.0648	-.0648	-.0648	

X/L	.4900	.4880	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0916	-.0935	-.0935	-.0973	-.0973	-.0991	-.0987	-.0987	-.0987	-.0987	-.0987	-.0987	-.0987	-.0987	-.0987
100.000	-.0935	-.0954	-.0954	-.0973	-.0973	-.0991	-.0987	-.0987	-.0987	-.0987	-.0987	-.0987	-.0987	-.0987	-.0987
110.000	-.0935	-.0935	-.0954	-.0973	-.0973	-.0991	-.0987	-.0987	-.0987	-.0987	-.0987	-.0987	-.0987	-.0987	-.0987
120.000						-.0935									
130.000						-.0434									
140.000						-.0468									
150.000						-.0802									
160.000						-.0953									
170.000						-.0821									
180.000	-.0648	-.0648	-.0648	-.0648	-.0667	-.0621	-.0635	-.0672	-.0688	-.0706	-.0706	-.0723	-.0723	-.0723	-.0723

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	-.0832	-.0866	-.0884	-.0884	-.0849	-.0997	-.0492	-.0562	-.0632
100.000	-.0979	-.0997	-.0997	-.0997	-.0979	-.0979			
110.000	-.0979	-.0927	-.0910	-.0440	-.0266	-.0213			
120.000						.0730			
130.000						.756			
140.000						.1267			
150.000						.0936			
160.000						-.0335			
170.000						-.0457			
180.000	-.0736	-.0719	-.0701	-.0649	-.0614	-.0527			

TABULATED SOURCE PRESSURE DATA FOR IAS5/OM64 (LARC UPWT 1063)

(R041002)

OM64 CRIBBITER ENTRY CONFIGURATION

MACH (1) = 2.300 ALPHA (1) = 7.990

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.7250	.7470	.7670	.7850	.8030	.8250	.8620	.9000	.9400
PMI									
130.000							.1846		
140.000							.2018		
150.000							.2391		
160.000							.2047		
170.000							.2032		
180.000	-.0331	-.0363	-.0379	-.0042	.1129	.2219			

MACH (1) = 2.300 ALPHA (2) = 10.010 RV/L = 2.5001 BETA = 4.0500

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2000	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3730	.3940	.4050	.4310
PMI															
60.000	.1099	.0956	.0519												
70.000	.1000	.0796	.0392												
80.000	.1015	.0625	.0694												
90.000			.0122	.0451		-.0661	-.0630	-.0599	-.0584	-.0568	-.0568	-.0583	-.0583	-.0670	-.0634
100.000					-.0353	-.0537	-.0322	-.0537	-.0568	-.0599	-.0615	-.0634	-.0669	-.0686	-.0686
110.000					-.0615	-.0646	-.0646	-.0577	-.0769	-.0800	-.0841	-.0858	-.0892	-.0892	-.1202
120.000					-.0806									-.1047	
130.000					-.0906									-.0978	
140.000					-.1466									-.0961	
150.000					-.1419									-.0961	
160.000					-.1357									-.0961	
170.000					-.1342									-.0961	
180.000					-.1357	-.1311	-.1265	-.1187	-.1141	-.1110	-.1064	-.1013	-.0961	-.0892	

X/L	.4500	.4660	.4660	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PMI															
90.000	-.0869	-.0720	-.0720	-.0755	-.0755	-.0789	-.0814	-.0830	-.0877	-.0861	-.0877	-.0890	-.0798	-.0783	-.0782
110.000	-.0758	-.0772	-.0806	-.0806	-.0841	-.0875	-.0861	-.0877	-.0877	-.0861	-.0861	-.0830	-.0783	-.0720	-.0682
130.000	-.0910	-.0910	-.0910	-.0910	-.0892	-.0927	-.0908	-.0877	-.0830	-.0783	-.0751	-.0704	-.0673	-.0642	-.0601
140.000					-.0892									-.0579	
150.000					-.0579									-.0516	
160.000					-.0501									-.0407	
170.000					-.0454									-.0344	
180.000					-.0485									-.0329	
190.000					-.0563									-.0423	
200.000	-.0873	-.0824	-.0772	-.0758	-.0736	-.0689	-.0657	-.0610	-.0563	-.0548	-.0501	-.0485	-.0485	-.0485	-.0473

PMI

X/L	.7290	.7470	.7670	.7850	.8030	.8250	.8620	.9000	.9400
PMI									
130.000							.9400		

TABULATED SOURCE PRESSURE DATA FOR IAS5/ON64 (LARC UPWT 1063)

(R04002)

ON64 ORBITTER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (3) = 12.000

SECTION (1) FUSELAGE

X/L	PHI	DEPENDENT VARIABLE CP
.4500	.4660	.5030 .5240 .5460 .5610 .5800 .5960 .6170 .6360 .6540 .6730 .6880 .7100

X/L	PHI	DEPENDENT VARIABLE CP
.7250	.7470	.7630 .8030 .8290 .8620 .9000 .9400

X/L	PHI	DEPENDENT VARIABLE CP
.9911	-.0694	-.0642 -.0606 -.0736 -.0690 -.0643 -.0596 -.0549 -.0502 -.0471 -.0471 -.0302 -.0471 -.0323

X/L	PHI	DEPENDENT VARIABLE CP
.0000	.0000	-.0902
.0000	.0000	-.0361
.0000	.0000	-.0690
.0000	.0000	-.0643
.0000	.0000	-.0596
.0000	.0000	-.0549
.0000	.0000	-.0502
.0000	.0000	-.0471
.0000	.0000	-.0471
.0000	.0000	-.0302
.0000	.0000	-.0471
.0000	.0000	-.0323

MACH (1) = 2.500 ALPHA (4) = 14.000 RM/L = 2.5001 BETA = 4.0000

SECTION (1) FUSELAGE

X/L	PHI	DEPENDENT VARIABLE CP
.0870	.1260	.1640 .2030 .2420 .2640 .2820 .3010 .3190 .3360 .3570 .3750 .3940 .4050 .4310

X/L	PHI	DEPENDENT VARIABLE CP
.0997	.0705	.0501
.0778	.0705	.0501
.0661	.0647	.0600
.0705	.0167	-.0493
.0000	.0000	-.0678
.0000	.0000	-.0663
.0000	.0000	-.0647
.0000	.0000	-.0539
.0000	.0000	-.0539
.0000	.0000	-.0462
.0000	.0000	-.1049
.0000	.0000	-.1559
.0000	.0000	-.1544
.0000	.0000	-.1482
.0000	.0000	-.1467
.0000	.0000	-.1482
.0000	.0000	-.1369
.0000	.0000	-.1327
.0000	.0000	-.1261
.0000	.0000	-.1235
.0000	.0000	-.1196
.0000	.0000	-.1109
.0000	.0000	-.1075
.0000	.0000	-.1006

X/L	PHI	DEPENDENT VARIABLE CP
.4500	.4660	.5030 .5240 .5460 .5610 .5800 .5960 .6170 .6360 .6540 .6730 .6880 .7100

PHI

(R04002)

OM64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (6) = 17.990 RV/L = 2.5001 BETA = 4.0800

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0470	.1260	.1640	.2090	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.0922	.0496	.0514												
70.000	.0343	.0802	.0427												
80.000	.0325	.0427	.0369												
90.000		.0412	.0078	-.0540	-.0710	-.0695	-.0679	-.0679	-.0395	-.0726	-.0756	-.0769	-.0772	-.0772	-.0769
100.000					-.0664	-.0664	-.0664	-.0695	-.0710	-.0741	-.0741	-.0754	-.0772	-.0772	-.0772
110.000					-.0602	-.0648	-.0695	-.0756	-.0849	-.0865	-.0865	-.0893	-.0893	-.0893	-.0893
120.000					-.0633									-.1798	
130.000					-.1065									-.1450	
140.000					-.1692									-.1278	
150.000					-.1668									-.1067	
160.000					-.1591									-.0963	
170.000					-.1575									-.0963	
180.000					-.1575	-.1544	-.1462	-.1436	-.1374	-.1297	-.1241	-.1120	-.1117	-.1117	-.1117

X/L	.4500	.4680	.4860	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0808	-.0824	-.0824	-.0841	-.0876	-.0893	-.0937	-.0968	-.1062	-.1160	-.1270	-.1363	-.1442	-.1504	-.1609
100.000	-.0808	-.0824	-.0824	-.0841	-.0859	-.0893	-.0879	-.0910	-.0957	-.0988	-.1020	-.1066	-.1113	-.1216	-.1216
110.000	-.0893	-.0911	-.0928	-.0963	-.0899	-.1015	-.1004	-.1020	-.1095	-.1095	-.1004	-.1004	-.0957	-.0957	-.0953
120.000						-.1363								-.0879	
130.000						-.1457								-.0988	
140.000						-.1317								-.1176	
150.000						-.0616								-.1035	
160.000						-.0613								-.0879	
170.000						-.0644								-.0879	
180.000	-.1085	-.1067	-.1015	-.0980	-.1015	-.1024	-.1035	-.1035	-.1020	-.1095	-.1035	-.1035	-.1098	-.1145	-.1232

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9070	.9400
PHI									
60.000							-.2003		
70.000							-.2066	-.1906	-.1845
80.000							-.2066	-.1987	-.1928
90.000	-.1704	-.1814	-.1861	-.1830	-.1877	-.1528	-.1798	-.1845	-.1877
100.000	-.1295	-.1436	-.1499	-.1499	-.1547	-.1782			
110.000	-.0996	-.1059	-.1122	-.1028	-.0713	-.0686			
120.000					.0713				
130.000					.0555				
140.000					-.0178				
150.000					-.1747				
160.000					.0842				
170.000					.1546				
180.000	-.1169	-.1232	-.1295	-.1279	-.0745	.2178			

(R040002)

MACH (2) = 2.950 ALPHA (1) = 0.000 RW/L = 2.5130 BETA = 4.0000

OA64 ORBITER ENTRY CONFIGURATION

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0970	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1132	.1166	.0539												
70.000	.1166	.0616	.0606												
80.000	.1219	.0667	.0713												
90.000		.0652	.0225	-.0366	-.0543	-.0543	-.0508	-.0490	-.0490	-.0490	-.0490	-.0504	-.0504	-.0504	-.0542
100.000					-.0421	-.0421	-.0456	-.0490	-.0508	-.0525	-.0542	-.0561	-.0561	-.0561	-.0542
110.000					-.0490	-.0525	-.0543	-.0560	-.0630	-.0647	-.0658	-.0677	-.0677	-.0677	-.0716
120.000					-.0316										
130.000					-.0613										
140.000					-.0996										
150.000					-.0996										
160.000					-.0979										
170.000					-.0961										
180.000					-.0961	-.0926	-.0892	-.0857	-.0839	-.0839	-.0812	-.0774	-.0793	-.0793	-.0754
X/L	.4500	.4660	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100

X/L	.7290	.7470	.7670	.7850	.8050	.8250	.8620	.9000	.9400
PHI									
90.000	-.0742	-.0561	-.0561	-.0600	-.0619	-.0619	-.0671	-.0707	-.0725
100.000	-.0542	-.0619	-.0619	-.0620	-.0639	-.0639	-.0689	-.0707	-.0725
110.000	-.0716	-.0677	-.0677	-.0677	-.0677	-.0677	-.0725	-.0707	-.0725
120.000							-.0561	-.0527	-.0527
130.000							-.0545	-.0545	-.0545
140.000							-.0563	-.0563	-.0563
150.000							-.0581	-.0581	-.0581
170.000							-.0635	-.0635	-.0635
180.000	-.0735	-.0716	-.0677	-.0658	-.0619	-.0671	-.0635	-.0635	-.0617
X/L	.7290	.7470	.7670	.7850	.8050	.8250	.8620	.9000	.9400

X/L	.7290	.7470	.7670	.7850	.8050	.8250	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	-.0936	-.0665	-.0737	-.0755	-.0719	-.0321	-.0502	-.0628	-.0755
100.000	-.0320	-.0956	-.0574	-.0574	-.0300	-.0393	-.0375	-.0484	-.0628
110.000	-.0902	-.0466	-.0411	-.0122	.0240	.0166			
120.000						.0873			
130.000						.1657			
140.000						.1593			
150.000						.2011			
160.000						.1090			
170.000						.1335			
180.000	-.0429	-.0466	-.0411	-.0265	.0439	.1144			

(R040002)

OM64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (2) = 11.990 RW/L = 2.5130 BETA = 4.0500

SECTION (3) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2840	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI														
60.000	.1052	.0632	.0484											
70.000	.0903	.0740	.0502											
80.000	.0890	.0704	.0612											
90.000		.0740	.0154	-.0469	-.0634	-.0634	-.0616	-.0597	-.0597	-.0597	-.0616	-.0657	-.0677	-.0716
100.000					-.0616	-.0597	-.0597	-.0634	-.0634	-.0634	-.0634	-.0696	-.0677	-.0716
110.000					-.0467	-.0542	-.0561	-.0597	-.0669	-.0725	-.0759	-.0780	-.0780	-.0841
120.000					-.0414								-.1190	
130.000					-.0617								-.1149	
140.000					-.1220								-.1108	
150.000					-.1238								-.1006	
160.000					-.1202								-.0965	
170.000					-.1202								-.0965	
180.000					-.1202	-.1165	-.1147	-.1110	-.1092	-.1068	-.1047	-.1047	-.1047	-.0965

X/L	.4300	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6860	.7100
PHI														
90.000	-.0759	-.0759	-.0759	-.0759	-.0780	-.0670	-.0799	-.0635	-.0635	-.0654	-.0672	-.0672	-.0672	-.0904
100.000	-.0759	-.0600	-.0621	-.0641	-.0641	-.0641	-.0799	-.0635	-.0635	-.0654	-.0672	-.0672	-.0672	-.0685
110.000	-.0662	-.0603	-.0544	-.0565	-.0600	-.0544	-.0690	-.0509	-.0509	-.0527	-.0672	-.0672	-.0672	-.0647
120.000					-.1067								-.0744	
130.000					-.0635								-.0635	
140.000					-.0652								-.0652	
150.000					-.0597								-.0524	
160.000					-.0634								-.0524	
170.000					-.0669								-.0524	
180.000	-.0544	-.0544	-.0503	-.0662	-.0780	-.0780	-.0762	-.0707	-.0652	-.0579	-.0579	-.0597	-.0616	-.0658

X/L	.7290	.7470	.7670	.7890	.8030	.8290	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	-.0663	-.0779	-.1036	-.1093	-.1112	-.0647			
100.000	-.0666	-.0665	-.0524	-.0542	-.0715	-.0626			
110.000	-.0790	-.0771	-.0734	-.0450	-.0052	-.0126			
120.000						.0950			
130.000						.0966			
140.000						.0345			
150.000						.1634			
160.000						.0856			
170.000						.1513			
180.000	-.0601	-.0677	-.0734	-.0715	-.0296	.1737			

TABULATED SOURCE PRESSURE DATA FOR IA55/OM64 (LARC UPWT 1063)

(R04002)

OM64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.990 ALPHA (9) = 16.000 RN/L = 2.5130 BETA = 4.0300

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE X/L .0870 .1260 .1640 .2030 .2420 .2810 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

PHI													
60.000	.0560	.0474	.0561										
70.000	.0613	.0630	.0457										
80.000	.0367	.0497	.0422										
90.000			.0457	.0145	-.0376	-.0549	-.0549	-.0549	-.0566	-.0584	-.0658	-.0658	-.0638
100.000				-.0532	-.0532	-.0532	-.0540	-.0584	-.0601	-.0638	-.0638	-.0638	-.0638
110.000				-.0480	-.0497	-.0549	-.0618	-.0670	-.0686	-.0696	-.0696	-.0696	-.0715
120.000				-.0497									-.1140
130.000				-.0740									-.1082
140.000				-.1191									-.0828
150.000				-.1191									-.0793
160.000				-.1156									-.0831
170.000				-.1156									-.0947
175.000				-.1156	-.1121	-.1104	-.1069	-.1052	-.1017	-.0986	-.0947	-.0947	-.0966
180.000													
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.6170	.6540	.6730	.6880	.7100

PHI													
90.000	-.0638	-.0658	-.0677	-.0677	-.0658	-.0696	-.0717	-.0769	-.0891	-.1031	-.1118	-.1153	-.1253
100.000	-.0638	-.0658	-.0658	-.0696	-.0696	-.0696	-.0700	-.0734	-.0769	-.0804	-.0839	-.0891	-.0957
110.000	-.0696	-.0715	-.0715	-.0754	-.0754	-.0754	-.0769	-.0769	-.0787	-.0804	-.0839	-.0878	-.0817
120.000				-.1082									-.0874
130.000				-.1153									-.0909
140.000				-.1136									-.0891
150.000				-.0769									-.0787
160.000				-.0595									-.0787
170.000				-.0630									-.0787
180.000	-.0966	-.0966	-.1024	-.1024	-.1082	-.1136	-.1153	-.1153	-.1118	-.1051	-.0979	-.0996	-.1031
X/L	.7250	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400				

PHI													
60.000				-.1431									
70.000				-.1466	-.1449	-.1326							
80.000				-.1484	-.1449	-.1378							
90.000	-.1238	-.1343	-.1361	-.1343	-.1343	-.1431	-.1466	-.1343	-.1378				
100.000	-.0992	-.1115	-.1150	-.1062	-.1150	-.1326							
110.000	-.0617	-.0669	-.0652	-.0762	-.0746	-.0711							
120.000				.0938									
130.000				.0938									
140.000				.0061									
150.000				.1079									
160.000				.0307									
170.000				.0567									
180.000	-.1027	-.1062	-.1062	-.0922	-.0624	.1561							

(0640002)

OM64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (6) = 20.000 RN/L = 2.5130 BETA = 4.0500

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2030	.2420	.2840	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI	.0943	.0301	.0561											
60.000	.0492	.0596	.0457											
70.000	.0249	.0318	.0371											
80.000		.0249	.0024	-.0410	-.0563	-.0563	-.0563	-.0563	-.0601	-.0618	-.0637	-.0636	-.0636	-.0637
90.000				-.0563	-.0563	-.0563	-.0601	-.0618	-.0618	-.0636	-.0636	-.0636	-.0636	-.0637
100.000				-.0549	-.0563	-.0618	-.0636	-.0636	-.0636	-.0636	-.0636	-.0636	-.0636	-.0636
110.000				-.0549	-.0563	-.0618	-.0636	-.0636	-.0636	-.0636	-.0636	-.0636	-.0636	-.0636
120.000				-.0774										
130.000				-.1243										
140.000				-.1243										
150.000				-.1206										
160.000				-.1191										
170.000				-.1191	-.1173	-.1139	-.1121	-.1087	-.1052	-.1024	-.1024	-.1024	-.1024	-.1063
180.000	.4500	.4680	.4680	.5050	.5240	.5460	.5600	.5960	.6170	.6360	.6540	.6730	.6880	.7100

X/L	.0657	-.0619	-.0636	-.0637	-.0636	-.0792	-.0856	-.0826	-.1013	-.1136	-.1223	-.1310	-.1327	-.1360
PHI	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
60.000	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
70.000	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
80.000	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
90.000	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
100.000	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
110.000	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
120.000	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
130.000	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
140.000	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
150.000	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
160.000	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
170.000	-.0637	-.0677	-.0637	-.0677	-.0637	-.0677	-.0637	-.0637	-.0734	-.0732	-.0804	-.0909	-.0961	-.1048
180.000	-.1063	-.1062	-.1121	-.1159	-.1196	-.1223	-.1240	-.1240	-.1223	-.1170	-.1153	-.1101	-.1116	-.1223
X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400					

PHI	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
60.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
70.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
80.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
90.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
100.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
110.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
120.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
130.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
140.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
150.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
160.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
170.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				
180.000	-.1551	-.1567	-.1551	-.1459	-.1605	-.1551	-.1496	-.1605	-.1597	-.1514				

(R64002)

MACH (2) = 2.950 ALPHA (7) = 20.950 RV/L = 2.5130 BETA = 4.0900

ON64 ORBITER ENTRY CONFIGURATION

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0970	.1280	.1640	.2030	.2420	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI														
60.000	.0912	.0121	.0534											
70.000	.0409	.0352	.0427											
80.000	.0121	.0229	.0301											
90.000		.0103	-.0077	-.0491	-.0632	-.0670	-.0632	-.0670	-.0668	-.0688	-.0706	-.0690	-.0690	-.0710
100.000					-.0668	-.0670	-.0670	-.0668	-.0668	-.0706	-.0706	-.0750	-.0750	-.0710
110.000					-.0634	-.0670	-.0724	-.0742	-.0778	-.0778	-.0750	-.0770	-.0770	-.0770
120.000					-.0670									-.1483
130.000					-.0866									-.1503
140.000					-.1354									-.1166
150.000					-.1354									-.1087
160.000					-.1316									-.0868
170.000					-.1282									-.0948
180.000					-.1300	-.1264	-.1228	-.1210	-.1174	-.1138	-.1126	-.1126	-.1126	-.1146

X/L	.4500	.4680	.4880	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0690	-.0670	-.0750	-.0770	-.0789	-.0869	-.0990	-.1117	-.1262	-.1368	-.1497	-.1533	-.1587	-.1623	-.1678
100.000	-.0750	-.0750	-.0710	-.0690	-.0730	-.0770	-.0809	-.0845	-.0900	-.0900	-.1099	-.1225	-.1298	-.1420	
110.000	-.0770	-.0789	-.0789	-.0770	-.0991	-.0770	-.0773	-.0809	-.0809	-.0809	-.0863	-.0900	-.0936	-.0972	-.1033
120.000					-.1166									-.0972	
130.000					-.1262									-.1063	
140.000					-.1280									-.1063	
150.000					-.1117									-.1117	
160.000					-.0845									-.1135	
170.000					-.0900									-.1135	
180.000	-.1188	-.1206	-.1245	-.1265	-.1285	-.1352	-.1352	-.1352	-.1316	-.1280	-.1243	-.1225	-.1262	-.1280	-.1291

X/L	.7250	.7470	.7670	.7850	.8030	.8250	.8620	.9000	.9400
PHI									
60.000							-.1605		
70.000							-.1642	-.1605	-.1494
80.000							-.1660	-.1605	-.1531
90.000	-.1678	-.1697	-.1678	-.1660	-.1678	-.1678	-.1697	-.1623	-.1586
100.000	-.1512	-.1506	-.1642	-.1605	-.1623	-.1678			
110.000	-.1107	-.1256	-.1275	-.1217	-.1254	-.1383			
120.000						.0405			
130.000						.0479			
140.000						-.0093			
150.000						.0497			
160.000						-.0093			
170.000						.0295			
180.000	-.1256	-.1256	-.1125	-.0959	-.0793	.0866			

TABLATED SOURCE PRESSURE DATA FOR IAS5/OM64 (LARC UPWT 1063)

(R64002)

OM64 ORBITTER ENTRY CONFIGURATION

DATE 24 JAN 74

MACH (5) = 4.020 ALPHA (1) = 7.990 RN/L = 3.4946 BETA = 4.0500

DEPENDENT VARIABLE CP

SECTION (1) PUSELAGE															
X/L		.0670	.1260	.1640	.2030	.2420	.2640	.3010	.3190	.3360	.3570	.3750	.3940	.4030	.4310
PHI															
60.000		.1083	.0916	.0323											
70.000		.1116	.0770	.0556											
80.000		.1132	.0605	.0655											
90.000			.0754	.0293	-.0166	-.0264	-.0300	-.0317	-.0333	-.0333	-.0333	-.0333	-.0347	-.0347	-.0365
100.000						-.0284	-.0300	-.0300	-.0317	-.0317	-.0333	-.0333	-.0347	-.0347	-.0365
110.000						-.0294	-.0300	-.0300	-.0333	-.0333	-.0333	-.0363	-.0402	-.0402	-.0420
120.000						-.0070									-.0565
130.000						-.0234									-.0547
140.000						-.0461									-.0511
150.000						-.0496									-.0493
160.000						-.0496									-.0493
170.000						-.0496	-.0496	-.0496	-.0481	-.0481	-.0481	-.0493	-.0493	-.0493	-.0493
180.000						-.0496	-.0496	-.0496	-.0496	-.0496	-.0496	-.0496	-.0496	-.0496	-.0496
X/L		.4900	.4680	.4680	.5090	.5240	.5460	.5610	.5620	.5960	.6170	.6360	.6540	.6730	.6960
PHI															
60.000		-.0363	-.0363	-.0363	-.0363	-.0402	-.0402	-.0469	-.0466	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503
70.000		-.0565	-.0363	-.0402	-.0402	-.0420	-.0466	-.0466	-.0466	-.0486	-.0486	-.0503	-.0503	-.0503	-.0503
80.000		-.0420	-.0420	-.0420	-.0420	-.0363	-.0436	-.0466	-.0466	-.0503	-.0486	-.0503	-.0503	-.0503	-.0503
90.000						-.0436	-.0436	-.0436	-.0436	-.0466	-.0466	-.0466	-.0466	-.0466	-.0466
100.000						-.0416	-.0416	-.0416	-.0416	-.0416	-.0416	-.0416	-.0416	-.0416	-.0416
110.000						-.0452	-.0452	-.0452	-.0452	-.0452	-.0452	-.0452	-.0452	-.0452	-.0452
120.000						-.0469	-.0469	-.0469	-.0469	-.0469	-.0469	-.0469	-.0469	-.0469	-.0469
130.000						-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503
140.000						-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503
150.000						-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503
160.000						-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503
170.000						-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503
180.000						-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503
X/L		.7290	.7470	.7670	.7690	.8090	.8290	.8290	.8620	.9000	.9400				
PHI															
60.000						-.0660									
70.000						-.0510	-.0443	-.0460							
80.000						-.0326	-.0326	-.0393							
90.000						-.0593	-.0426	-.0460	-.0310	-.0326	-.0326	-.0326	-.0326	-.0326	-.0326
100.000						-.0393	-.0410	-.0376	-.0310	-.0426					
110.000						-.0393	-.0360	-.0226	-.0040	-.0040					
120.000						-.0373	-.0373	-.0373	-.0373	-.0373					
130.000						-.007	-.007	-.007	-.007	-.007					
140.000						-.0673	-.0673	-.0673	-.0673	-.0673					
150.000						-.0174	-.0174	-.0174	-.0174	-.0174					
160.000						-.0473	-.0473	-.0473	-.0473	-.0473					
170.000						-.0376	-.0376	-.0376	-.0376	-.0376					
180.000						-.0393	-.0393	-.0393	-.0393	-.0393					

(R04002)

TABULATED SOURCE PRESSURE DATA FOR IAS3/OM64 (LARC UPMT 1083)

DATE 24 JAN 74

OM64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (7) = 20.000 RM/L = 3.4946 BETA = 4.0300

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI	.0697	.0296	.0491	.0030	-.0276	-.0397	-.0414	-.0414	-.0432	-.0449	-.0466	-.0480	-.0479	-.0479	-.0460
60.000	.0491	.0342	.0423	.0030	-.0276	-.0397	-.0414	-.0414	-.0432	-.0449	-.0466	-.0480	-.0479	-.0479	-.0460
70.000	.0296	.0303	.0218	.0030	-.0276	-.0397	-.0414	-.0414	-.0432	-.0449	-.0466	-.0480	-.0479	-.0479	-.0460
80.000															
90.000															
100.000															
110.000															
120.000															
130.000															
140.000															
150.000															
160.000															
170.000															
180.000															

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6880	.7100
PHI	-.0460	-.0441	-.0441	-.0460	-.0460	-.0479	-.0532	-.0652	-.0755	-.0824	-.0910	-.0927	-.0962	-.0996
90.000	-.0479	-.0497	-.0479	-.0460	-.0479	-.0479	-.0480	-.0497	-.0515	-.0566	-.0652	-.0736	-.0807	-.0893
100.000	-.0535	-.0554	-.0554	-.0554	-.0479	-.0554	-.0532	-.0497	-.0497	-.0549	-.0566	-.0566	-.0601	-.0665
110.000														
120.000														
130.000														
140.000														
150.000														
160.000														
170.000														
180.000														

X/L	.7290	.7470	.7670	.7890	.8290	.8620	.9000	.9400
PHI	-.0910	-.0963	-.0945	-.0910	-.0963	-.0926	-.0910	-.0910
60.000								
70.000								
80.000								
90.000								
100.000								
110.000								
120.000								
130.000								
140.000								
150.000								
160.000								
170.000								
180.000								

OM64 ORBITER ENTRY CONFIGURATION (R04002)

MACH (4) = 4.500 ALPHA (8) = 20.960 R/V/L = 3.5000 BETA = 4.0500

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
Phi	.0769	.0191	.0490	.0017	-.0227	-.0325	-.0341	-.0341	-.0348	-.0356	-.0379	-.0379	-.0396	-.0389	-.0375
60.000	.0404	.0460	.0362	-.0363	-.0379	-.0379	-.0394	-.0401	-.0443	-.0443	-.0443	-.0443	-.0443	-.0429	-.0429
70.000	.0191	.0229	.0263	-.0401	-.0409	-.0417	-.0424	-.0432	-.0439	-.0476	-.0476	-.0483	-.0483	-.0490	-.0490
80.000	.0106	.0106	.0106	-.0409	-.0409	-.0409	-.0409	-.0432	-.0432	-.0476	-.0476	-.0483	-.0483	-.0490	-.0490
90.000	.0106	.0106	.0106	-.0409	-.0409	-.0409	-.0409	-.0432	-.0432	-.0476	-.0476	-.0483	-.0483	-.0490	-.0490
100.000	.0106	.0106	.0106	-.0409	-.0409	-.0409	-.0409	-.0432	-.0432	-.0476	-.0476	-.0483	-.0483	-.0490	-.0490
110.000	.0106	.0106	.0106	-.0409	-.0409	-.0409	-.0409	-.0432	-.0432	-.0476	-.0476	-.0483	-.0483	-.0490	-.0490
120.000	.0106	.0106	.0106	-.0409	-.0409	-.0409	-.0409	-.0432	-.0432	-.0476	-.0476	-.0483	-.0483	-.0490	-.0490
130.000	.0106	.0106	.0106	-.0409	-.0409	-.0409	-.0409	-.0432	-.0432	-.0476	-.0476	-.0483	-.0483	-.0490	-.0490
140.000	.0106	.0106	.0106	-.0409	-.0409	-.0409	-.0409	-.0432	-.0432	-.0476	-.0476	-.0483	-.0483	-.0490	-.0490
150.000	.0106	.0106	.0106	-.0409	-.0409	-.0409	-.0409	-.0432	-.0432	-.0476	-.0476	-.0483	-.0483	-.0490	-.0490
160.000	.0106	.0106	.0106	-.0409	-.0409	-.0409	-.0409	-.0432	-.0432	-.0476	-.0476	-.0483	-.0483	-.0490	-.0490
170.000	.0106	.0106	.0106	-.0409	-.0409	-.0409	-.0409	-.0432	-.0432	-.0476	-.0476	-.0483	-.0483	-.0490	-.0490
180.000	.0106	.0106	.0106	-.0409	-.0409	-.0409	-.0409	-.0432	-.0432	-.0476	-.0476	-.0483	-.0483	-.0490	-.0490

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
Phi	-.0342	-.0315	-.0254	-.0247	-.0517	-.0719	-.0776	-.0799	-.0807	-.0799	-.0799	-.0799	-.0807	-.0799	-.0817
90.000	-.0423	-.0409	-.0396	-.0382	-.0375	-.0369	-.0351	-.0316	-.0425	-.0612	-.0721	-.0760	-.0799	-.0799	-.0769
100.000	-.0476	-.0476	-.0470	-.0456	-.0306	-.0443	-.0433	-.0433	-.0440	-.0425	-.0417	-.0425	-.0472	-.0542	-.0622
110.000	-.0476	-.0476	-.0470	-.0456	-.0306	-.0443	-.0433	-.0433	-.0440	-.0425	-.0417	-.0425	-.0472	-.0542	-.0622
120.000	-.0476	-.0476	-.0470	-.0456	-.0306	-.0443	-.0433	-.0433	-.0440	-.0425	-.0417	-.0425	-.0472	-.0542	-.0622
130.000	-.0476	-.0476	-.0470	-.0456	-.0306	-.0443	-.0433	-.0433	-.0440	-.0425	-.0417	-.0425	-.0472	-.0542	-.0622
140.000	-.0476	-.0476	-.0470	-.0456	-.0306	-.0443	-.0433	-.0433	-.0440	-.0425	-.0417	-.0425	-.0472	-.0542	-.0622
150.000	-.0476	-.0476	-.0470	-.0456	-.0306	-.0443	-.0433	-.0433	-.0440	-.0425	-.0417	-.0425	-.0472	-.0542	-.0622
160.000	-.0476	-.0476	-.0470	-.0456	-.0306	-.0443	-.0433	-.0433	-.0440	-.0425	-.0417	-.0425	-.0472	-.0542	-.0622
170.000	-.0476	-.0476	-.0470	-.0456	-.0306	-.0443	-.0433	-.0433	-.0440	-.0425	-.0417	-.0425	-.0472	-.0542	-.0622
180.000	-.0476	-.0476	-.0470	-.0456	-.0306	-.0443	-.0433	-.0433	-.0440	-.0425	-.0417	-.0425	-.0472	-.0542	-.0622

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
Phi	-.0752	-.0760	-.0761	-.0743	-.0743	-.0733	-.0724	-.0715	-.0715
90.000	-.0770	-.0760	-.0760	-.0743	-.0743	-.0715	-.0724	-.0715	-.0715
100.000	-.0705	-.0743	-.0752	-.0733	-.0752	-.0715	-.0724	-.0715	-.0715
110.000	-.0705	-.0743	-.0752	-.0733	-.0752	-.0715	-.0724	-.0715	-.0715
120.000	-.0705	-.0743	-.0752	-.0733	-.0752	-.0715	-.0724	-.0715	-.0715
130.000	-.0705	-.0743	-.0752	-.0733	-.0752	-.0715	-.0724	-.0715	-.0715
140.000	-.0705	-.0743	-.0752	-.0733	-.0752	-.0715	-.0724	-.0715	-.0715
150.000	-.0705	-.0743	-.0752	-.0733	-.0752	-.0715	-.0724	-.0715	-.0715
160.000	-.0705	-.0743	-.0752	-.0733	-.0752	-.0715	-.0724	-.0715	-.0715
170.000	-.0705	-.0743	-.0752	-.0733	-.0752	-.0715	-.0724	-.0715	-.0715
180.000	-.0705	-.0743	-.0752	-.0733	-.0752	-.0715	-.0724	-.0715	-.0715

(R04003)

0A64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (1) = 7.990

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7650	.7830	.8030	.8250	.8620	.9000	.9400
PHI									
130.000								.1715	
140.000								.1485	
150.000								.1715	
160.000								.2117	
170.000								.2389	
180.000	-.0251	-.0262	-.0278	-.0120	.1241	.2274			

MACH (1) = 2.500 ALPHA (2) = 10.000 RM/L = 2.5022 BETA = 1.9800

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1411	.1193	.0772												
70.000	.1299	.1077	.0601												
60.000	.1231	.1092	.0673												
90.000		.1033	.0437	-.0296	-.0496	-.0512	-.0466	-.0435	-.0419	-.0404	-.0419	-.0421	-.0439	-.0490	
100.000				-.0404	-.0388	-.0358	-.0404	-.0435	-.0404	-.0435	-.0466	-.0490	-.0542	-.0359	
110.000				-.0404	-.0435	-.0450	-.0512	-.0604	-.0682	-.0715	-.0732	-.0767	-.0767	-.0767	
120.000				-.0261										-.1267	
130.000				-.0836										-.1164	
140.000				-.1407										-.1043	
150.000				-.1407										-.0974	
160.000				-.1329										-.0922	
170.000				-.1299										-.0922	
180.000				-.1299	-.1268	-.1221	-.1160	-.1067	-.0990	-.0956	-.0905	-.0922	-.0922	-.0853	
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6880	.7100	

PHI

X/L	.0323	-.0559	-.0377	-.0594	-.0577	-.0620	-.0666	-.0651	-.0712	-.0697	-.0620	-.0620	-.0690		
90.000															
100.000	-.0611	-.0628	-.0663	-.0715	-.0715	-.0682	-.0712	-.0743	-.0712	-.0774	-.0743	-.0712	-.0706		
110.000	-.0787	-.0767	-.0764	-.0636	-.0715	-.0698	-.0867	-.0867	-.0882	-.0867	-.0851	-.0820	-.0722		
120.000					-.1129								-.0635		
130.000					-.0651								-.0728		
140.000					-.0543								-.0466		
150.000					-.0496								-.0373		
160.000					-.0466								-.0311		
170.000					-.0450								-.0311		
180.000	-.0618	-.0767	-.0697	-.0646	-.0577	-.0496	-.0466	-.0435	-.0404	-.0373	-.0373	-.0358	-.0311	-.0374	
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400						

PHI

TABLULATED SOURCE PRESSURE DATA FOR IAS5/OAG4 (LARC UPWT 1983)

(RQ4003)

DATE 24 JAN 74

OAG4 ORBITTER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (3) = 12.000

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP												
X/L	.4500	.4660	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI														
160.000														
170.000														
180.000														
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400					
PHI														
160.000														
170.000														
180.000														

-.0361

-.0361

-.0444

-.0459

-.1685

-.1480

-.1433

-.1496

-.1038

-.1117

-.1275

-.0753

-.0895

-.1055

-.0911

-.0848

-.0695

-.0648

-.0084

-.1516

-.1199

-.0784

-.1617

-.2221

-.2-23

-.3905

RV/L = 2.5022 BETA = 1.9900

MACH (1) = 2.500 ALPHA (4) = 14.010

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP												
X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050
PHI														
60.000														
70.000														
80.000														
90.000														
100.000														
110.000														
120.000														
130.000														
140.000														
150.000														
160.000														
170.000														
180.000														

PHI														
60.000														
70.000														
80.000														
90.000														
100.000														
110.000														
120.000														
130.000														
140.000														
150.000														
160.000														
170.000														
180.000														

PHI

.4500 .4680 .4860 .5050 .5240 .5460 .5610 .5800 .5980 .6170 .6360 .6540 .6730 .6880 .7100

TABLULATED SOURCE PRESSURE DATA FOR IAS5/OM64 (LARC UPWT 1063)

(R64003)

DATE 24 JAN 74

OM64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (4) = 14.010

SECTION (1) FUSELAGE		DEPENDENT VARIABLE CP													
X/L	.4370	.4880	.4880	.5050	.5240	.5480	.5610	.5600	.5980	.6170	.6580	.6540	.6750	.6880	.7100
PMI															
90.000	-.0565	-.0565	-.0562	-.0599	-.0633	-.0650	-.0676	-.0706	-.0737	-.0737	-.0768	-.0814	-.0783	-.0798	-.0810
100.000	-.0818	-.0818	-.0810	-.0816	-.0833	-.0791	-.0796	-.0737	-.0737	-.0783	-.0788	-.0814	-.0783	-.0798	-.0794
110.000	-.0787	-.0804	-.0804	-.0804	-.0830	-.0836	-.0844	-.0875	-.0906	-.0921	-.0936	-.0936	-.0936	-.0921	-.0888
120.000						-.1349								-.0860	
130.000						-.1366								-.1028	
140.000						-.0936								-.1151	
150.000						-.0722								-.0691	
160.000						-.0593								-.0522	
170.000						-.0553								-.0461	
180.000	-.0838	-.0804	-.0701	-.0833	-.0816	-.0568	-.0553	-.0538	-.0522	-.0522	-.0522	-.0538	-.0553	-.0553	-.0590
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400						

SECTION (2) FUSELAGE		DEPENDENT VARIABLE CP													
PMI															
90.000															
100.000															
110.000															
120.000															
130.000															
140.000															
150.000															
160.000															
170.000															
180.000	-.0480	-.0574	-.0606	-.0637	-.0496										

MACH (3) = 2.500 ALPHA (5) = 16.000 RV/L = 2.9122 BETA = 1.9900

SECTION (3) FUSELAGE		DEPENDENT VARIABLE CP													
X/L	.0870	.1280	.1640	.2090	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4020	.4310
PMI															
90.000	.1285	.0774	.0789												
100.000	.0920	.0849	.0716												
110.000	.0672	.0774	.0672												
120.000			.0687	.0323	-.0341	-.0557	-.0542	-.0526	-.0526	-.0526	-.0542	-.0557	-.0582	-.0599	-.0599
130.000						-.0526	-.0511	-.0511	-.0526	-.0537	-.0573	-.0573	-.0599	-.0582	-.0599
140.000						-.0449	-.0493	-.0542	-.0603	-.0681	-.0712	-.0738	-.0738	-.0756	-.0756
150.000						-.0493								-.1693	
160.000						-.0912								-.1590	
170.000						-.1576								-.1347	
180.000						-.1807								-.1173	

(R040003)

OM64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (4) = 13.960 RN/L = 2.5132 BETA = 1.9500

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.1346	.0974	.0802												
70.000	.1094	.0991	.0790												
80.000	.1505	.0666	.0767												
90.000	.0671	.0456	-.0196												
100.000				-.0365	-.0403	-.0365	-.0365	-.0403	-.0403	-.0403	-.0420	-.0463	-.0463	-.0463	-.0463
110.000				-.0351	-.0365	-.0365	-.0403	-.0420	-.0437	-.0471	-.0501	-.0463	-.0463	-.0463	-.0463
120.000				-.0317	-.0351	-.0403	-.0437	-.0506	-.0523	-.0596	-.0615	-.0634	-.0634	-.0615	-.0615
130.000				-.0231											
140.000				-.0626											
150.000				-.1091											
160.000				-.1125											
170.000				-.1091											
180.000				-.1074											
190.000				-.1074	-.1039	-.1005	-.0966	-.0936	-.0919	-.0881	-.0843	-.0824	-.0824	-.0748	-.0748

X/L	.4500	.4660	.4860	.5050	.5240	.5460	.5610	.5800	.5960	.6170	.6360	.6540	.6730	.6860	.7100
PHI															
90.000	-.0482	-.0901	-.0901	-.0901	-.0901	-.0920	-.0579	-.0527	-.0597	-.0597	-.0597	-.0614	-.0597	-.0562	-.0632
100.000	-.0482	-.0901	-.0901	-.0901	-.0901	-.0920	-.0579	-.0545	-.0597	-.0597	-.0614	-.0614	-.0614	-.0614	-.0614
110.000	-.0615	-.0615	-.0615	-.0615	-.0634	-.0634	-.0649	-.0666	-.0684	-.0701	-.0719	-.0719	-.0719	-.0719	-.0701
120.000						-.1071								-.0823	-.0823
130.000						-.1119								-.0928	-.0928
140.000						-.0823								-.1015	-.1015
150.000						-.0719								-.0719	-.0719
160.000						-.0597								-.0545	-.0545
170.000						-.0579								-.0510	-.0510
180.000	-.0710	-.0691	-.0633	-.0615	-.0596	-.0579	-.0545	-.0510	-.0492	-.0492	-.0510	-.0527	-.0562	-.0510	-.0579

X/L .7290 .7470 .7670 .7650 .8030 .8290 .8620 .9000 .9400

X/L	.7290	.7470	.7670	.7650	.8030	.8290	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000									
100.000	-.0649	-.0793	-.0623	-.0656	-.0606	-.0606	-.0606	-.0606	-.0606
110.000	-.0579	-.0649	-.0701	-.0649	-.0597	-.0771	-.0771	-.0771	-.0771
120.000	-.0649	-.0649	-.0632	-.0403	-.0283	.0187	.0187	.0187	.0187
130.000						.1506	.1506	.1506	.1506
140.000						.0649	.0649	.0649	.0649
150.000						-.0301	-.0301	-.0301	-.0301
160.000						.1379	.1379	.1379	.1379
170.000						.1110	.1110	.1110	.1110
180.000						.1162	.1162	.1162	.1162
190.000	-.0492	-.0562	-.0614	-.0597	-.0423	-.0423	-.0423	-.0423	-.0423

PHI -.1326
PHI -.1311
PHI -.1256
PHI -.1137
PHI -.1064
PHI -.1064
PHI -.0753
PHI -.0736

(R04003)

OM64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (3) = 15.990 RW/L = 2.5132 BETA = 1.9900

DEPENDENT VARIABLE CP

SECTION (3) FUSELAGE

X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1350	.0734	.0769												
70.000	.0992	.0937	.0716												
80.000	.0734	.0752	.0679												
90.000		.0697	.0811	-.0297	-.0518	-.0537	-.0537	-.0537	-.0555	-.0555	-.0555	-.0571	-.0571	-.0591	-.0611
100.000					-.0518	-.0537	-.0537	-.0537	-.0592	-.0592	-.0592	-.0591	-.0571	-.0571	-.0611
110.000					-.0426	-.0481	-.0537	-.0610	-.0666	-.0666	-.0684	-.0692	-.0712	-.0712	-.0712
120.000					-.0426									-.1399	
130.000					-.0739									-.1318	
140.000					-.1292									-.1177	
150.000					-.1310									-.1136	
160.000					-.1273									-.0955	
170.000					-.1255									-.0914	
180.000					-.1255	-.1218	-.1200	-.1163	-.1126	-.1071	-.1015	-.0955	-.0934	-.0874	

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0991	-.0611	-.0611	-.0631	-.0631	-.0631	-.0660	-.0623	-.0623	-.0641	-.0714	-.0714	-.0750	-.0769	-.0863
100.000	-.0991	-.0611	-.0591	-.0611	-.0611	-.0631	-.0660	-.0623	-.0623	-.0678	-.0714	-.0696	-.0596	-.0714	-.0733
110.000	-.0712	-.0712	-.0712	-.0712	-.0611	-.0732	-.0732	-.0769	-.0769	-.0787	-.0787	-.0787	-.0769	-.0787	-.0789
120.000					-.1318									-.0932	
130.000					-.1296									-.1096	
140.000					-.1260									-.1096	
150.000					-.0951									-.1060	
160.000					-.0750									-.0787	
170.000					-.0660									-.0696	
180.000	-.0954	-.0613	-.0793	-.0792	-.0712	-.0660	-.0641	-.0623	-.0623	-.0660	-.0714	-.0769	-.0769	-.0805	-.0826

X/L .7290 .7470 .7670 .7850 .8030 .8290 .8620 .9000 .9410

PHI

60.000															
70.000															
80.000															
90.000	-.0919	-.1049	-.1123	-.1123	-.1123	-.1215	-.1271	-.1197	-.1160						
100.000	-.0715	-.0645	-.0900	-.0715	-.0769	-.1178									
110.000	-.0715	-.0808	-.0715	-.0511	-.0567	-.0285									
120.000					.1526										
130.000					.0953										
140.000					-.0196										
150.000					.0897										
160.000					.0657										
170.000					.0712										
180.000	-.0771	-.0769	-.0645	-.0663	-.0567	-.2170									

-.1493
-.1549
-.1493

-.1422
-.1324
-.1401

OM64 ORBITER ENTRY CONFIGURATION

(R04003)

MACH (3) = 4.020 ALPHA (3) = 12.010 RW/L = 3.5010 BETA = .0000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0070	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
Phi															
60.000	.1541	.1276	.0952												
70.000	.1354	.1156	.0913												
80.000	.1187	.1089	.0993												
90.000	.0923	.0599	.0079	.0098	-.0118	-.0127	-.0147	-.0167	-.0186	-.0196	-.0229	-.0229	-.0229	-.0239	-.0262
100.000															
110.000															
120.000															
130.000															
140.000															
150.000															
160.000															
170.000															
180.000															

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
Phi															
90.000	-.0239	-.0250	-.0250	-.0250	-.0250	-.0261	-.0286	-.0296	-.0306	-.0316	-.0316	-.0336	-.0316	-.0306	-.0271
100.000	-.0282	-.0282	-.0282	-.0282	-.0282	-.0282	-.0296	-.0296	-.0316	-.0316	-.0326	-.0336	-.0346	-.0346	-.0301
110.000	-.0357	-.0357	-.0357	-.0357	-.0357	-.0347	-.0365	-.0365	-.0375	-.0375	-.0326	-.0395	-.0405	-.0405	-.0362
120.000															
130.000															
140.000															
150.000															
160.000															
170.000															
180.000															

X/L	.7250	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
Phi									
60.000									
70.000									
80.000									
90.000	-.0261	-.0301	-.0362	-.0362	-.0392	-.0301	-.0301	-.0271	-.0171
100.000	-.0261	-.0291	-.0301	-.0312	-.0312	-.0161	-.0651		
110.000	-.0362	-.0362	-.0362	-.0342	-.0161	.1432			
120.000									
130.000									
140.000									
150.000									
160.000									
170.000									
180.000	-.0362	-.0372	-.0372	-.0362	-.0201	.1583			

TABLATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(R04003)

OM64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (4) = 14.000 RV/L = 3.4995 BETA = 2.0100

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1280	.1640	.2030	.2420	.2640	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI														
60.000	.3143	.0813	.0662											
70.000	.0933	.0805	.0622											
80.000	.0767	.0700	.0587											
90.000		.0655	.0569	-.0037	-.0164	-.0194	-.0217	-.0240	-.0255	-.0270	-.0285	-.0322	-.0346	-.0355
100.000					-.0172	-.0194	-.0217	-.0247	-.0270	-.0292	-.0315	-.0342	-.0395	-.0401
110.000					-.0149	-.0194	-.0240	-.0277	-.0322	-.0352	-.0375	-.0388	-.0606	
120.000					-.0164								-.0567	
130.000					-.0285								-.0547	
140.000					-.0518								-.0540	
150.000					-.0518								-.0520	
160.000					-.0525								-.0520	
170.000					-.0525	-.0525	-.0525	-.0525	-.0525	-.0525	-.0527	-.0527	-.0527	-.0520
180.000														

X/L	.4900	.4660	.4660	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6860	.7100
PHI														
90.000	-.0342	-.0342	-.0342	-.0348	-.0348	-.0355	-.0367	-.0375	-.0375	-.0383	-.0390	-.0390	-.0383	-.0387
100.000	-.0355	-.0361	-.0361	-.0361	-.0361	-.0361	-.0363	-.0360	-.0360	-.0368	-.0366	-.0363	-.0406	-.0350
110.000	-.0408	-.0408	-.0401	-.0395	-.0203	-.0401	-.0421	-.0429	-.0436	-.0436	-.0436	-.0436	-.0444	-.0405
120.000						-.0593							-.0521	
130.000						-.0613							-.0521	
140.000						-.0621							-.0536	
150.000						-.0552							-.0490	
160.000						-.0482							-.0475	
170.000	-.0507	-.0507	-.0494	-.0487	-.0513	-.0513	-.0513	-.0498	-.0490	-.0482	-.0467	-.0459	-.0467	-.0469
180.000														

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0642		
70.000							-.0687	-.0660	-.0642
80.000							-.0651	-.0660	-.0669
90.000	-.0414	-.0460	-.0496	-.0505	-.0542	-.0496	-.0523	-.0578	-.0569
100.000	-.0399	-.0409	-.0414	-.0423	-.0405	-.0378			
110.000	-.0405	-.0423	-.0423	-.0405	-.0239	-.0278			
120.000						.0979			
130.000						.0697			
140.000						-.0250			
150.000						-.0214			
160.000						-.0086			
170.000						-.0159			
180.000	-.0469	-.0303	-.0460	-.0369	-.0314	-.0686			

TABULATED SOURCE PRESSURE DATA FOR 1A33/OA64 (LARC LPWT 1083)

(R04003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.370 ALPHA (5) = 16.010 RN/L = 3.4995 BETA = 2.0100

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1102	.0673	.0673	.0673											
70.000	.0831	.0763	.0590												
80.000	.0633	.0620	.0530												
90.000		.0545	.0289	-.0073											
100.000					-.0201	-.0231	-.0246	-.0254	-.0276	-.0284	-.0291	-.0326	-.0339	-.0339	-.0333
110.000					-.0216	-.0231	-.0254	-.0269	-.0291	-.0299	-.0306	-.0339	-.0353	-.0353	-.0353
120.000					-.0208	-.0246	-.0276	-.0306	-.0329	-.0351	-.0373	-.0393	-.0399	-.0399	-.0399
130.000					-.0216										-.0666
140.000					-.0329										-.0659
150.000					-.0555										-.0592
160.000					-.0555										-.0579
170.000					-.0555										-.0539
180.000					-.0555										-.0532
190.000					-.0555	-.0555	-.0555	-.0547	-.0547	-.0547	-.0559	-.0552	-.0552	-.0552	-.0559
X/L	.4300	.4600	.4900	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9020	.9400
PHI									
90.000	-.0339	-.0346	-.0339	-.0339	-.0339	-.0339	-.0345	-.0345	-.0345
100.000	-.0366	-.0365	-.0353	-.0353	-.0366	-.0360	-.0360	-.0360	-.0360
110.000	-.0399	-.0399	-.0399	-.0393	-.0166	-.0399	-.0406	-.0406	-.0414
120.000					-.0632				
130.000					-.0629				
140.000					-.0629				
150.000					-.0598				
160.000					-.0514				
170.000					-.0475				
180.000	-.0339	-.0339	-.0339	-.0332	-.0486	-.0332	-.0344	-.0329	-.0337
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9020	.9400

X/L	.9670	.9850	1.0030	1.0210	1.0390	1.0570	1.0750	1.0930	1.1110	1.1290	1.1470	1.1650	1.1830	1.2010	1.2190	1.2370	1.2550	1.2730	1.2910	1.3090	1.3270	1.3450	1.3630	1.3810	1.3990	1.4170	1.4350	1.4530	1.4710	1.4890	1.5070	1.5250	1.5430	1.5610	1.5790	1.5970	1.6150	1.6330	1.6510	1.6690	1.6870	1.7050	1.7230	1.7410	1.7590	1.7770	1.7950	1.8130	1.8310	1.8490	1.8670	1.8850	1.9030	1.9210	1.9390	1.9570	1.9750	1.9930	2.0110	2.0290	2.0470	2.0650	2.0830	2.1010	2.1190	2.1370	2.1550	2.1730	2.1910	2.2090	2.2270	2.2450	2.2630	2.2810	2.2990	2.3170	2.3350	2.3530	2.3710	2.3890	2.4070	2.4250	2.4430	2.4610	2.4790	2.4970	2.5150	2.5330	2.5510	2.5690	2.5870	2.6050	2.6230	2.6410	2.6590	2.6770	2.6950	2.7130	2.7310	2.7490	2.7670	2.7850	2.8030	2.8210	2.8390	2.8570	2.8750	2.8930	2.9110	2.9290	2.9470	2.9650	2.9830	3.0010	3.0190	3.0370	3.0550	3.0730	3.0910	3.1090	3.1270	3.1450	3.1630	3.1810	3.1990	3.2170	3.2350	3.2530	3.2710	3.2890	3.3070	3.3250	3.3430	3.3610	3.3790	3.3970	3.4150	3.4330	3.4510	3.4690	3.4870	3.5050	3.5230	3.5410	3.5590	3.5770	3.5950	3.6130	3.6310	3.6490	3.6670	3.6850	3.7030	3.7210	3.7390	3.7570	3.7750	3.7930	3.8110	3.8290	3.8470	3.8650	3.8830	3.9010	3.9190	3.9370	3.9550	3.9730	3.9910	4.0090	4.0270	4.0450	4.0630	4.0810	4.0990	4.1170	4.1350	4.1530	4.1710	4.1890	4.2070	4.2250	4.2430	4.2610	4.2790	4.2970	4.3150	4.3330	4.3510	4.3690	4.3870	4.4050	4.4230	4.4410	4.4590	4.4770	4.4950	4.5130	4.5310	4.5490	4.5670	4.5850	4.6030	4.6210	4.6390	4.6570	4.6750	4.6930	4.7110	4.7290	4.7470	4.7650	4.7830	4.8010	4.8190	4.8370	4.8550	4.8730	4.8910	4.9090	4.9270	4.9450	4.9630	4.9810	4.9990	5.0170	5.0350	5.0530	5.0710	5.0890	5.1070	5.1250	5.1430	5.1610	5.1790	5.1970	5.2150	5.2330	5.2510	5.2690	5.2870	5.3050	5.3230	5.3410	5.3590	5.3770	5.3950	5.4130	5.4310	5.4490	5.4670	5.4850	5.5030	5.5210	5.5390	5.5570	5.5750	5.5930	5.6110	5.6290	5.6470	5.6650	5.6830	5.7010	5.7190	5.7370	5.7550	5.7730	5.7910	5.8090	5.8270	5.8450	5.8630	5.8810	5.8990	5.9170	5.9350	5.9530	5.9710	5.9890	6.0070	6.0250	6.0430	6.0610	6.0790	6.0970	6.1150	6.1330	6.1510	6.1690	6.1870	6.2050	6.2230	6.2410	6.2590	6.2770	6.2950	6.3130	6.3310	6.3490	6.3670	6.3850	6.4030	6.4210	6.4390	6.4570	6.4750	6.4930	6.5110	6.5290	6.5470	6.5650	6.5830	6.6010	6.6190	6.6370	6.6550	6.6730	6.6910	6.7090	6.7270	6.7450	6.7630	6.7810	6.7990	6.8170	6.8350	6.8530	6.8710	6.8890	6.9070	6.9250	6.9430	6.9610	6.9790	6.9970	7.0150	7.0330	7.0510	7.0690	7.0870	7.1050	7.1230	7.1410	7.1590	7.1770	7.1950	7.2130	7.2310	7.2490	7.2670	7.2850	7.3030	7.3210	7.3390	7.3570	7.3750	7.3930	7.4110	7.4290	7.4470	7.4650	7.4830	7.5010	7.5190	7.5370	7.5550	7.5730	7.5910	7.6090	7.6270	7.6450	7.6630	7.6810	7.6990	7.7170	7.7350	7.7530	7.7710	7.7890	7.8070	7.8250	7.8430	7.8610	7.8790	7.8970	7.9150	7.9330	7.9510	7.9690	7.9870	8.0050	8.0230	8.0410	8.0590	8.0770	8.0950	8.1130	8.1310	8.1490	8.1670	8.1850	8.2030	8.2210	8.2390	8.2570	8.2750	8.2930	8.3110	8.3290	8.3470	8.3650	8.3830	8.4010	8.4190	8.4370	8.4550	8.4730	8.4910	8.5090	8.5270	8.5450	8.5630	8.5810	8.5990	8.6170	8.6350	8.6530	8.6710	8.6890	8.7070	8.7250	8.7430	8.7610	8.7790	8.7970	8.8150	8.8330	8.8510	8.8690	8.8870	8.9050	8.9230	8.9410	8.9590	8.9770	8.9950	9.0130	9.0310	9.0490	9.0670	9.0850	9.1030	9.1210	9.1390	9.1570	9.1750	9.1930	9.2110	9.2290	9.2470	9.2650	9.2830	9.3010	9.3190	9.3370	9.3550	9.3730	9.3910	9.4090	9.4270	9.4450	9.4630	9.4810	9.4990	9.5170	9.5350	9.5530	9.5710	9.5890	9.6070	9.6250	9.6430	9.6610	9.6790	9.6970	9.7150	9.7330	9.7510	9.7690	9.7870	9.8050	9.8230	9.8410	9.8590	9.8770	9.8950	9.9130	9.9310	9.9490	9.9670	9.9850	10.0030
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OM64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (1) = 2.500 ALPHA (1) = 0.000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.7250	.7470	.7670	.7850	.8030	.8290	.8520	.9000	.9400
PHI									
130.000						.2427			
140.000						.1123			
150.000						.1510			
160.000						.1940			
170.000						.1711			
180.000	-.0068	-.0166	-.0162	-.0150	.1562	.3717			

CH (1) = 2.500 ALPHA (2) = 10.000 RV/L = 2.5015 BETA = .0000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1723	.1469	.1037												
70.000	.1591	.1367	.1051												
80.000	.1489	.1351	.1095												
90.000		.1329	.0701	-.0126	-.0372	-.0373	-.0342	-.0295	-.0280	-.0249	-.0249	-.0265	-.0265	-.0283	-.0335
100.000				-.0311	-.0280	-.0280	-.0280	-.0295	-.0280	-.0265	-.0265	-.0265	-.0265	-.0265	-.0265
110.000				-.0172	-.0234	-.0234	-.0234	-.0234	-.0234	-.0234	-.0234	-.0234	-.0234	-.0234	-.0234
120.000				-.0049											
130.000				-.0712											
140.000				-.1375											
150.000				-.1406											
160.000				-.1345											
170.000				-.1314											
180.000				-.1298	-.1252	-.1237	-.1175	-.1051	-.0974	-.0939	-.0922	-.0922	-.0922	-.0922	-.0922

X/L	.4500	.4660	.4660	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0369	-.0404	-.0366	-.0404	-.0366	-.0436	-.0448	-.0448	-.0511	-.0511	-.0527	-.0511	-.0432	-.0432	-.0505
100.000	-.0455	-.0490	-.0542	-.0542	-.0542	-.0624	-.0511	-.0558	-.0589	-.0605	-.0605	-.0636	-.0569	-.0527	-.0521
110.000	-.0611	-.0645	-.0714	-.0749	-.0542	-.0783	-.0746	-.0731	-.0762	-.0778	-.0762	-.0794	-.0778	-.0778	-.0729
120.000				-.1336											
130.000				-.1013											
140.000				-.0668											
150.000				-.0558											
160.000				-.0327											
170.000				-.0479											
180.000	-.0655	-.0766	-.0660	-.0594	-.0542	-.0479	-.0448	-.0385	-.0369	-.0307	-.0307	-.0291	-.0322	-.0322	-.0330

PHI

(R04004)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (4) = 14.000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0383	-.0400	-.0403	-.0435	-.0452	-.0486	-.0533	-.0549	-.0549	-.0565	-.0565	-.0549	-.0549	-.0470	-.0592
100.000	-.0400	-.0452	-.0452	-.0486	-.0520	-.0549	-.0533	-.0581	-.0612	-.0612	-.0628	-.0596	-.0581	-.0576	-.0576
110.000	-.0623	-.0623	-.0640	-.0658	-.0686	-.0709	-.0738	-.0734	-.0786	-.0786	-.0817	-.0802	-.0802	-.0799	-.0799
120.000					-.1514									-.1165	
130.000					-.1623									-.1323	
140.000					-.1559									-.1417	
150.000					-.0817									-.1102	
160.000					-.0723									-.0738	
170.000					-.0612									-.0549	
180.000	-.0799	-.0709	-.0698	-.0640	-.0623	-.0565	-.0553	-.0502	-.0470	-.0470	-.0439	-.0454	-.0470	-.0470	-.0496

X/L .7290 .7470 .7670 .7850 .8030 .8290 .8620 .9000 .9400

PHI

60.000		-.1726													
70.000		-.1614	-.1598	-.1598											
80.000		-.1231	-.1183	-.1295											
90.000	-.0668	-.0847	-.0991	-.1103	-.1151	-.1039	-.1039	-.1039	-.1023						
100.000	-.0624	-.0799	-.0879	-.0943	-.1039	-.1039	-.1039	-.1039	-.1023						
110.000	-.0719	-.0879	-.0943	-.0640	-.0192	.0334									
120.000						.1586									
130.000						.0910									
140.000						-.0256									
150.000						.0679									
160.000						.1730									
170.000						.1241									
180.000	-.0352	-.0432	-.0464	-.0480	-.0400	.4825									

MACH (1) = 2.500 ALPHA (5) = 16.000 RV/L = 2.5015 BETA = .0000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.1802	.0918	.1077												
70.000	.1179	.1223	.0969												
80.000	.0858	.1004	.0916												
90.000		.0829	.0479	-.0206	-.0437	-.0437	-.0406	-.0391	-.0391	-.0391	-.0375	-.0384	-.0384	-.0384	-.0418
100.000					-.0437	-.0421	-.0406	-.0421	-.0421	-.0421	-.0406	-.0418	-.0418	-.0418	-.0418
110.000					-.0329	-.0375	-.0421	-.0463	-.0529	-.0560	-.0555	-.0573	-.0573	-.0573	-.0573
120.000					-.0314									-.1738	
130.000					-.0776									-.1600	
140.000					-.1377									-.1566	
150.000					-.1639									-.1309	

TABLATED SOURCE PRESSURE DATA FOR IAS5/OM64 (LARC UPMT 1063)

(R040004)

OM64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (0) = 20.980 RN/L = 2.5015 BETA = .0000

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE
 X/L .0670 .1260 .1640 .2030 .2420 .2640 .2820 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

PMI														
60.000	.1302	.0454	.1124											
70.000	.0847	.1093	.0978											
80.000	.0410	.0672	.0803											
90.000		.0410	.0244	-.0302	-.0521	-.0505	-.0474	-.0458	-.0458	-.0458	-.0458	-.0450	-.0450	-.0457
100.000					-.0583	-.0563	-.0537	-.0521	-.0505	-.0490	-.0484	-.0484	-.0501	-.0487
110.000					-.0724	-.0677	-.0630	-.0615	-.0615	-.0615	-.0604	-.0604	-.0604	-.0604
120.000					-.0677								-.1943	-.1943
130.000					-.0958								-.1840	-.1840
140.000					-.1614								-.1582	-.1582
150.000					-.1770								-.1376	-.1376
160.000					-.1708								-.1050	-.1050
170.000					-.1630								-.0999	-.0999
180.000					-.1599	-.1552	-.1427	-.1286	-.1161	-.1099	-.1067	-.1016	-.0980	-.0930

X/L	.4500	.4680	.4860	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PMI															
90.000	-.0490	-.0467	-.0467	-.0467	-.0467	-.0518	-.0610	-.0705	-.0768	-.0863	-.0990	-.1100	-.1179	-.1274	-.1454
100.000	-.0467	-.0467	-.0467	-.0467	-.0450	-.0518	-.0515	-.0531	-.0563	-.0579	-.0626	-.0705	-.0737	-.0847	-.1006
110.000	-.0604	-.0621	-.0638	-.0621	-.0467	-.0638	-.0658	-.0658	-.0658	-.0658	-.0626	-.0689	-.0689	-.0737	-.0846
120.000						-.1668								-.1242	-.1290
130.000						-.1669								-.1401	-.1448
140.000						-.1764								-.1527	-.1582
150.000						-.1796								-.1627	-.1682
160.000						-.1401								-.1742	-.1806
170.000						-.0958								-.1822	-.1896
180.000	-.0879	-.0810	-.0741	-.0707	-.0724	-.0784	-.0847	-.0958	-.1005	-.1021	-.1021	-.1053	-.1053	-.1100	-.1166

X/L	.7290	.7470	.7670	.7850	.8030	.8220	.8620	.9000	.9400
PMI									
60.000							-.2046		
70.000							-.2046	-.1934	-.1742
80.000							-.2110	-.2030	-.1896
90.000							-.1950	-.1790	-.1622
100.000	-.1562	-.1710	-.1856	-.1836	-.1870	-.1966			
110.000	-.1318	-.1358	-.1470	-.1422	-.1534	-.1934			
120.000	-.0942	-.1150	-.1162	-.1022	-.1162	-.0476			
130.000						.1027			
140.000						.0782			
150.000						-.0094			
160.000						.0437			
170.000						.0437			
180.000	-.1102	-.1150	-.1214	-.1150	-.0446	.2492			

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TABULATED SOURCE PRESSURE DATA FOR 1A55/UA64 "ARC UPWT 10673"

0.000000

OM64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.990 ALPHA (0) = 20.950 RV/L = 2.5150 BETA = .0000

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE	X/L	0.0970	.1280	.1640	.2030	.2420	.2840	.3010	.3190	.3380	.3570	.3750	.3940	.4150	.4310
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PHI															
80.000		.1517	-.0519	.1159											
90.000		.0901	.1142	.1021											
90.000		.0485	.0709	.0848											
90.000			.0485	.0329	-.0136	-.0328	-.0328	-.0310	-.0310	-.0310	-.0310	-.0328	-.0332	-.0332	-.0351
100.000					-.0414	-.0397	-.0380	-.0380	-.0380	-.0380	-.0362	-.0362	-.0370	-.0370	-.0332
100.000					-.0507	-.0501	-.0483	-.0483	-.0466	-.0483	-.0483	-.0484	-.0484	-.0484	-.0446
110.000					-.0532										-.1414
120.000					-.0743										-.1433
130.000					-.1140										-.1262
140.000					-.1261										-.1148
150.000					-.1244										-.0901
160.000					-.1175										-.0825
170.000															-.0806
180.000															

X/L		.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI																
90.000		-.0351	-.0332	-.0332	-.0332	-.0332	-.0370	-.0417	-.0487	-.0557	-.0609	-.0679	-.0767	-.0837	-.0959	-.1110
100.000		-.0351	-.0370	-.0370	-.0351	-.0370	-.0370	-.0364	-.0382	-.0399	-.0434	-.0434	-.0487	-.0522	-.0592	-.0703
110.000		-.0465	-.0465	-.0465	-.0465	-.0465	-.1281	-.0469	-.0399	-.0399	-.0434	-.0434	-.0469	-.0522	-.0579	
120.000							-.1309								-.1047	
130.000							-.1292								-.1134	
140.000							-.1292								-.1134	
150.000							-.1187								-.1187	
160.000							-.0907								-.1082	
170.000							-.0852	-.0837	-.0907	-.0924	-.0959	-.0942	-.0959	-.0959	-.0994	-.1022
180.000																

X/L		.7290	.7470	.7670	.7830	.8030	.8290	.8620	.9000	.9400						
PHI																
80.000																
90.000																
100.000																
110.000																
120.000																
130.000																
140.000																
150.000																
160.000																
170.000																
180.000																

0-6

TABULATED SOURCE PRESSURE DATA FOR IAS5/OM64 (LARC UPWT 1063)

(R040004)

OM64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.200 ALPHA (1) = 7.990 RV/L = 3.4990 BETA = 1.9850

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE	X/L	.0870	.1280	.1640	.2030	.2420	.2840	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI	80,000	.1362	.1196	.0755											
	70,000	.1372	.1000	.0764											
	60,000	.1372	.1039	.0833											
	50,000		.1070	.0829	-.0030	-.0177	-.0216	-.0226	-.0236	-.0246	-.0246	-.0257	-.0257	-.0259	-.0279
	40,000					-.0157	-.0187	-.0197	-.0236	-.0246	-.0265	-.0290	-.0311	-.0332	
	30,000					-.0138	-.0177	-.0226	-.0265	-.0295	-.0311	-.0311	-.0311	-.0311	-.0332
	20,000					.0068								-.0480	
	10,000					-.0157								-.0522	
	0,000					-.0442								-.0512	
						-.0501								-.0501	
						-.0491								-.0470	
						-.0501								-.0448	
						-.0510	-.0501	-.0491	-.0491	-.0481	-.0448	-.0448	-.0448	-.0448	-.0436
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6980	.7100

PHI	90,000	-.0258	-.0279	-.0279	-.0290	-.0300	-.0311	-.0360	-.0379	-.0409	-.0369	-.0399	-.0399	-.0399	-.0400
	100,000	-.0290	-.0300	-.0311	-.0321	-.0332	-.0379	-.0389	-.0399	-.0429	-.0439	-.0429	-.0429	-.0439	-.0430
	110,000	-.0343	-.0343	-.0353	-.0343	-.0205	-.0364	-.0409	-.0399	-.0448	-.0429	-.0468	-.0468	-.0478	-.0471
	120,000						-.0480							-.0488	
	130,000						-.0458							-.0439	
	140,000						-.0399							-.0350	
	150,000						-.0409							-.0330	
	160,000						-.0429							-.0320	
	170,000						-.0439							-.0330	
	180,000	-.0436	-.0427	-.0417	-.0406	-.0429	-.0439	-.0429	-.0399	-.0369	-.0369	-.0369	-.0350	-.0350	-.0340
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400						

PHI	80,000														
	70,000														
	60,000														
	50,000	-.0360	-.0420	-.0441	-.0461	-.0491	-.0410	-.0169	-.0189	-.0270					
	40,000	-.0410	-.0410	-.0410	-.0420	-.0390	-.0441								
	30,000	-.0451	-.0451	-.0451	-.0390	-.0099	-.0273								
	20,000						.0916								
	10,000						.0826								
	0,000						.0504								
							.0565								
							.0555								
							-.0796								
X/L	.9300	.9320	.9320	.9320	.9320	.9320	.9320	.9400	.9400						

OM64 ORBITER ENTRY CONFIGURATION (R04004)

MACH (S) = 4.000 ALPHA (E) = 18.010 RN/L = 3.4990 BETA = 1.9890

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0070	.1280	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI	.1150	.0997	.0755												
70.000	.0793	.0814	.0656												
80.000	.0956	.0997	.0577												
90.000	.0479	.0262	-.0103	-.0251	-.0271	-.0281	-.0291	-.0321	-.0330	-.0330	-.0311	-.0343	-.0332	-.0332	-.0365
100.000				-.0271	-.0291	-.0301	-.0321	-.0340	-.0350	-.0350	-.0330	-.0354	-.0311	-.0311	-.0365
110.000				-.0281	-.0301	-.0330	-.0360	-.0399	-.0399	-.0399	-.0397	-.0408	-.0408	-.0408	-.0408
120.000				.0271											
130.000				-.0359											
140.000				-.0666											
150.000				-.0735											
160.000				-.0686											
170.000				-.0686											
180.000				-.0686	-.0666	-.0666	-.0666	-.0666	-.0646	-.0646	-.0613	-.0672	-.0591	-.0591	-.0591

X/L	.4300	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6890	.7100
PHI															
90.000	-.0332	-.0343	-.0332	-.0332	-.0343	-.0343	-.0336	-.0306	-.0396	-.0416	-.0456	-.0505	-.0525	-.0565	-.0634
100.000	-.0394	-.0394	-.0394	-.0394	-.0385	-.0365	-.0376	-.0376	-.0396	-.0406	-.0376	-.0396	-.0406	-.0416	-.0424
110.000	-.0408	-.0408	-.0386	-.0408	-.0278	-.0419	-.0426	-.0426	-.0396	-.0416	-.0436	-.0416	-.0416	-.0426	-.0394
120.000						-.0720									
130.000						-.0734									
140.000						-.0744									
150.000						-.0734									
160.000						-.0675									
170.000						-.0525									
180.000	-.0391	-.0391	-.0380	-.0380	-.0380	-.0395	-.0395	-.0385	-.0395	-.0375	-.0395	-.0395	-.0644	-.0684	-.0663

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0783		
70.000							-.0613	-.0793	-.0783
80.000							-.0833	-.0803	-.0783
90.000	-.0863	-.0713	-.0743	-.0773	-.0773	-.0773	-.0803	-.0803	-.0733
100.000	-.0454	-.0524	-.0574	-.0604	-.0594	-.0683			
110.000	-.0394	-.0434	-.0474	-.0394	-.0374	.0134			
120.000						.0352			
130.000						.0733			
140.000						-.0145			
150.000						.0345			
160.000						-.0235			
170.000						-.0215			
180.000	-.0853	-.0863	-.0364	-.0494	-.0444	.0334			

TABULATED SOURCE PRESSURE DATA FOR 1A35/OM65 (LARC UPMT 1063)

(R04004)

DATE 24 JAN 74

OM64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (1) = 6.010 RV/L = 3.4985 BETA = .0150

DEPENDENT VARIABLE CP

SECTION (1)	PULSE-AGE	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310	
X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI	.1554	.1397	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0237
80.000	.1531	.1158	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0237
90.000	.1463	.1174	.0877	.0029	-.0089	-.0127	-.0158	-.0188	-.0211	-.0226	-.0241	-.0257	-.0263	-.0263	-.0277
60.000	.1029	.0834	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0317
90.000	.0834	.0834	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0491
100.000	.0834	.0834	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0538
110.000	.0834	.0834	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0525
120.000	.0834	.0834	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0525
130.000	.0834	.0834	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0516
140.000	.0834	.0834	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0498
150.000	.0834	.0834	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0491
160.000	.0834	.0834	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0491
170.000	.0834	.0834	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0491
180.000	.0834	.0834	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0180	-.0203	-.0211	-.0230	-.0237	-.0237	-.0491
X/L	.4300	.4680	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100	
PHI	-.0270	-.0263	-.0290	-.0317	-.0317	-.0339	-.0339	-.0339	-.0346	-.0346	-.0346	-.0346	-.0346	-.0319	
90.000	-.0290	-.0290	-.0290	-.0317	-.0317	-.0339	-.0339	-.0339	-.0346	-.0346	-.0346	-.0346	-.0346	-.0319	
100.000	-.0317	-.0317	-.0317	-.0317	-.0317	-.0339	-.0339	-.0339	-.0346	-.0346	-.0346	-.0346	-.0346	-.0319	
110.000	-.0317	-.0317	-.0317	-.0317	-.0317	-.0339	-.0339	-.0339	-.0346	-.0346	-.0346	-.0346	-.0346	-.0319	
120.000	-.0317	-.0317	-.0317	-.0317	-.0317	-.0339	-.0339	-.0339	-.0346	-.0346	-.0346	-.0346	-.0346	-.0319	
130.000	-.0317	-.0317	-.0317	-.0317	-.0317	-.0339	-.0339	-.0339	-.0346	-.0346	-.0346	-.0346	-.0346	-.0319	
140.000	-.0317	-.0317	-.0317	-.0317	-.0317	-.0339	-.0339	-.0339	-.0346	-.0346	-.0346	-.0346	-.0346	-.0319	
150.000	-.0317	-.0317	-.0317	-.0317	-.0317	-.0339	-.0339	-.0339	-.0346	-.0346	-.0346	-.0346	-.0346	-.0319	
160.000	-.0317	-.0317	-.0317	-.0317	-.0317	-.0339	-.0339	-.0339	-.0346	-.0346	-.0346	-.0346	-.0346	-.0319	
170.000	-.0317	-.0317	-.0317	-.0317	-.0317	-.0339	-.0339	-.0339	-.0346	-.0346	-.0346	-.0346	-.0346	-.0319	
180.000	-.0317	-.0317	-.0317	-.0317	-.0317	-.0339	-.0339	-.0339	-.0346	-.0346	-.0346	-.0346	-.0346	-.0319	
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400						
PHI	-.0558	-.0411	-.0375	-.0301	-.0285	-.0237	-.0218	-.0200							
80.000	-.0558	-.0411	-.0375	-.0301	-.0285	-.0237	-.0218	-.0200							
90.000	-.0558	-.0411	-.0375	-.0301	-.0285	-.0237	-.0218	-.0200							
100.000	-.0558	-.0411	-.0375	-.0301	-.0285	-.0237	-.0218	-.0200							
110.000	-.0558	-.0411	-.0375	-.0301	-.0285	-.0237	-.0218	-.0200							
120.000	-.0558	-.0411	-.0375	-.0301	-.0285	-.0237	-.0218	-.0200							
130.000	-.0558	-.0411	-.0375	-.0301	-.0285	-.0237	-.0218	-.0200							
140.000	-.0558	-.0411	-.0375	-.0301	-.0285	-.0237	-.0218	-.0200							
150.000	-.0558	-.0411	-.0375	-.0301	-.0285	-.0237	-.0218	-.0200							
160.000	-.0558	-.0411	-.0375	-.0301	-.0285	-.0237	-.0218	-.0200							
170.000	-.0558	-.0411	-.0375	-.0301	-.0285	-.0237	-.0218	-.0200							
180.000	-.0558	-.0411	-.0375	-.0301	-.0285	-.0237	-.0218	-.0200							



TABLATED SOURCE PRESSURE DATA FOR IAS5/0A64 (LARC UPWT 1083)

(R040004)

0A64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (5) = 16.000 RN/L = 3.4985 BETA = .0150

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3730	.3940	.4090	.4310
X/L															
PHI															
60.000	.1383	.0828	.0904												
70.000	.1049	.1003	.0821												
80.000	.0796	.0821	.0745												
90.000		.0623	.0403	.0324											
100.000					.0128	-.0166	-.0174	-.0169	-.0204	-.0212	-.0219	-.0222	-.0222	-.0235	-.0235
110.000					-.0151	-.0182	-.0189	-.0204	-.0227	-.0242	-.0242	-.0249	-.0255	-.0255	-.0255
120.000					-.0166	-.0189	-.0219	-.0242	-.0273	-.0288	-.0288	-.0302	-.0315	-.0315	-.0315
130.000					-.0189									-.0659	
140.000					-.0318									-.0646	
150.000					-.0546									-.0619	
160.000					-.0546									-.0606	
170.000					-.0584									-.0586	
180.000					-.0576									-.0533	
190.000					-.0576	-.0569	-.0569	-.0561	-.0561	-.0554	-.0527	-.0520	-.0513	-.0494	

X/L	.4300	.4363	.4860	.5090	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0229	-.0235	-.0235	-.0235	-.0242	-.0235	-.0236	-.0236	-.0238	-.0233	-.0233	-.0233	-.0269	-.0269	-.0332
100.000	-.0235	-.0235	-.0249	-.0249	-.0255	-.0255	-.0261	-.0261	-.0261	-.0269	-.0269	-.0276	-.0269	-.0269	-.0259
110.000	-.0319	-.0306	-.0295	-.0295	-.0103	-.0302	-.0307	-.0307	-.0315	-.0315	-.0315	-.0315	-.0307	-.0322	-.0313
120.000						-.0633								-.0583	
130.000						-.0636								-.0575	
140.000						-.0652								-.0575	
150.000						-.0652								-.0575	
160.000						-.0636								-.0583	
170.000						-.0460								-.0575	
180.000	-.0480	-.0474	-.0454	-.0447	-.0447	-.0437	-.0433	-.0468	-.0491	-.0514	-.0537	-.0545	-.0560	-.0568	-.0560

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8820	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	-.0399	-.0432	-.0459	-.0496	-.0532	-.0496	-.0514	-.0560	-.0432
100.000	-.0249	-.0313	-.0313	-.0341	-.0399	-.0399			
110.000	-.0295	-.0322	-.0313	-.0313	-.0149	.0781			
120.000					.1274				
130.000					.0498				
140.000					-.0414				
150.000					-.0377				
160.000					-.0377				
170.000					-.0450				
180.000	-.0341	-.0323	-.0223	-.0477	-.0386	.0626			

OAG4 ORBITER ENTRY CONFIGURATION

(R04005)

MACH (1) = 2.500 ALPHA (1) = 7.990

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000									.2379
140.000									.0523
150.000									.0725
160.000									.1473
170.000									.1127
180.000									.2480

MACH (1) = 2.500 ALPHA (2) = 10.010 RV/L = 2.4994 BETA = -2.4200

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2146	.1722	.1416												
70.000	.1941	.1761	.1416												
60.000	.1752	.1693	.1416												
50.000		.1006	.0123	-.0150	-.0119	-.0069	-.0074	-.0059	-.0059	-.0069	-.0103	-.0120			
100.000				-.0119	-.0104	-.0069	-.0069	-.0104	-.0104	-.0137	-.0154	-.0205			
110.000				.0093	.0032	-.0029	-.0104	-.0226	-.0286	-.0269	-.0323	-.0357	-.0408		
120.000				.0214										-.1287	
130.000				-.0498										-.1355	
140.000				-.1331										-.1287	
150.000				-.1392										-.1169	
160.000				-.1347										-.1084	
170.000				-.1316										-.0983	
180.000				-.1301	-.1256	-.1225	-.1165	-.1089	-.0998	-.0966	-.0932	-.0915	-.0865		

X/L	.4500	.4660	.4860	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6880	.7100
PHI														
90.000	-.0137	-.0171	-.0154	-.0137	-.0154	-.0168	-.0233	-.0249	-.0260	-.0280	-.0249	-.0170	-.0170	-.0254
100.000	-.0255	-.0272	-.0269	-.0272	-.0272	-.0272	-.0326	-.0343	-.0375	-.0391	-.0407	-.0328	-.0264	-.0270
110.000	-.0475	-.0526	-.0543	-.0543	-.0269	-.0309	-.0517	-.0549	-.0564	-.0612	-.0612	-.0596	-.0564	-.0467
120.000							-.1375						-.1401	
130.000							-.1366						-.1433	
140.000							-.1086						-.1149	
150.000							-.0849						-.0643	
160.000							-.0767						-.0612	
170.000							-.0612						-.0454	
180.000	-.0691	-.0780	-.0712	-.0645	-.0611	-.0549	-.0501	-.0486	-.0454	-.0422	-.0407	-.0407	-.0407	-.0378

X/L .7290 .7470 .7670 .7850 .8030 .8290 .8620 .9000 .9400

PHI

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC JFWT 1063)

(R040003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (6) = 16.020 RN/L = 2.4994 BETA = -2.4200

SECTION (1): FUSELAGE DEPENDENT VARIABLE CP

X/L .0870 .1280 .1640 .2030 .2420 .2640 .3010 .3190 .3360 .3570 .3750 .3940 .4050 .4310

PM1													
60.000	.1903	.1026	.1502										
70.000	.1383	.1175	.1356										
80.000	.0933	.1181	.1225										
90.000		.0918	.0626	-.0332	-.0262	-.0232	-.0216	-.0201	-.0186	-.0170	-.0194	-.0211	-.0211
100.000					-.0324	-.0308	-.0278	-.0247	-.0247	-.0216	-.0211	-.0246	-.0246
110.000					-.0370	-.0339	-.0339	-.0370	-.0370	-.0383	-.0366	-.0383	-.0383
120.000					-.0293							-.1926	-.1926
130.000					-.0707							-.1640	-.1640
140.000					-.1535							-.1686	-.1686
150.000					-.1673							-.1651	-.1651
160.000					-.1642							-.1583	-.1583
170.000					-.1365							-.1257	-.1257
180.000					-.1350	-.1504	-.1443	-.1335	-.1213	-.1136	-.1120	-.1069	-.1051
190.000													-.0983
X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6880
													.7100

PM1													
90.000	.0211	-.0248	-.0211	-.0211	-.0229	-.0257	-.0257	-.0268	-.0288	-.0320	-.0382	-.0382	-.0626
100.000	-.0211	-.0246	-.0229	-.0211	-.0280	-.0257	-.0273	-.0304	-.0288	-.0320	-.0320	-.0320	-.0371
110.000	-.0417	-.0434	-.0417	-.0211	-.0469	-.0476	-.0476	-.0491	-.0507	-.0523	-.0476	-.0476	-.0496
120.000					-.1737							-.3381	-.3381
130.000					-.1724							-.3396	-.3396
140.000					-.1833							-.3505	-.3505
150.000					-.1864							-.3506	-.3506
160.000					-.1786							-.3599	-.3599
170.000					-.1100							-.3287	-.3287
180.000	-.0931	-.0980	-.0794	-.0743	-.0741	-.0741	-.0757	-.0772	-.0788	-.0835	-.0897	-.0959	-.1030
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400				

PM1													
60.000													
70.000													
80.000													
90.000	-.0747	-.0536	-.1108	-.1203	-.1297	-.1234							
100.000	-.0481	-.0700	-.0779	-.0904	-.0967	-.1171							
110.000	-.0465	-.0700	-.0779	-.0763	-.0837	.0967							
120.000					.1714								
130.000					.0737								
140.000					-.0292								
150.000					-.0135								
160.000					.0132								
170.000					-.0626								
180.000	-.0991	-.0983	-.1030	-.1046	-.0669	.3497							

DATE 24 JAN 74

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TABULATED SOURCE PRESSURE DATA FOR IAS5/OA64 (LARC UPWT 1063)

(R040003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.932 ALPHA (2) = 10.010 RV/L = 2.5129 BETA = -2.0000

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE
X/L .0072 .1260 .1640 .2030 .2420 .2640 .2820 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

PHI														
67.000	.2096	.1802	.1377											
70.000	.1916	.1704	.1361											
80.000	.1769	.1638	.1426	.0965	.0161	-.0084	-.0119	-.0102	-.0102	-.0102	-.0102	-.0102	-.0151	-.0189
90.000						-.0084	-.0084	-.0102	-.0102	-.0119	-.0137	-.0189	-.0170	-.0189
100.000						.0038	-.0014	-.0049	-.0084	-.0172	-.0207	-.0247	-.0306	-.0383
110.000						.0231							-.0983	
120.000						-.0294							-.1041	
130.000						-.0977							-.1003	
140.000						-.1047							-.0964	
150.000						-.1029							-.0805	
160.000						-.1012							-.0828	-.0770
170.000						-.1012	-.0977	-.0959	-.0924	-.0869	-.0867	-.0848	-.0828	-.0770
180.000	.4300	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6880	.7100

X/L														
PHI														
90.000	-.0189	-.0189	-.0189	-.0189	-.0170	-.0165	-.0169	-.0225	-.0260	-.0278	-.0260	-.0225	-.0189	-.0189
100.000	-.0267	-.0266	-.0266	-.0266	-.0267	-.0267	-.0242	-.0242	-.0313	-.0331	-.0349	-.0331	-.0331	-.0278
110.000	-.0422	-.0460	-.0460	-.0460	-.0279	-.0441	-.0420	-.0420	-.0420	-.0473	-.0490	-.0473	-.0508	-.0490
120.000						-.1157							-.1024	
130.000						-.1128							-.1075	
140.000						-.1004							-.0632	
150.000						-.0809							-.0561	
160.000						-.0685							-.0508	
170.000						-.0597							-.0455	-.0437
180.000	-.0770	-.0751	-.0693	-.0654	-.0615	-.0561	-.0526	-.0508	-.0490	-.0455	-.0455	-.0473	-.0455	-.0437

X/L .7290 .7470 .7670 .7850 .8030 .8290 .8620 .9000 .9400

PHI:

60.000														
70.000														
80.000														
90.000	-.0225	-.0349	-.0402	-.0455	-.0379	-.0379	-.0379	-.0379	-.0379	-.0379	-.0379	-.0379	-.0379	-.0379
100.000	-.0225	-.0349	-.0394	-.0473	-.0308	-.0561								
110.000	-.0402	-.0437	-.0473	-.0508	-.0455	.1174								
120.000						.2036								
130.000						.1408								
140.000						-.0134								
150.000						-.0402								
160.000						.0909								
170.000						.0466								
180.000	-.0349	-.0384	-.0402	-.0420	-.0348	.2729								

-.0845

-.0632

-.0579

-.0561

-.0473

-.0313

-.0384

-.0473

-.0313

-.0101

-.0278

TABULATED SOURCE PRESSURE DATA FOR IA35/OM64 (LARC UPWT 1063)

(R84009)

DATE 24 JAN 74

OM64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (7) = 20.000 RV/L = 2.5129 BETA = -2.0000

DEPENDENT VARIABLE CF

SECTION (1) FUSELAGE
 X/L .0870 .1280 .1840 .2090 .2420 .2640 .2820 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

PHI	.1833	.0811	.1462												
60.000	.1231	.1478	.1315												
70.000	.0758	.1021	.1143												
80.000				.0557	-.0188	-.0188	-.0170	-.0170	-.0170	-.0170	-.0170	-.0170	-.0170	-.0178	-.0179
90.000				-.0275	-.0275	-.0259	-.0240	-.0240	-.0223	-.0205	-.0236	-.0236	-.0236	-.0217	-.0217
100.000				-.0486	-.0398	-.0363	-.0363	-.0363	-.0363	-.0351	-.0351	-.0351	-.0351	-.0332	-.0331
110.000				-.0468										-.1488	
120.000				-.0661										-.1468	
130.000				-.1186										-.1430	
140.000				-.1291										-.1295	
150.000				-.1291										-.1314	
160.000				-.1239										-.1122	
170.000				-.1214	-.1169	-.1151	-.1099	-.1046	-.0995	-.0948	-.0929	-.0929	-.0929	-.0910	-.0871
180.000	.4500	.4660	.4860	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6880	.7100	

PHI	-.0397	-.0178	-.0159	-.0178	-.0159	-.0178	-.0206	-.0242	-.0260	-.0295	-.0313	-.0385	-.0457	-.0529	-.0678
90.000	-.0236	-.0236	-.0236	-.0217	-.0217	-.0217	-.0188	-.0242	-.0242	-.0278	-.0242	-.0242	-.0260	-.0295	-.0322
100.000	-.0531	-.0332	-.0331	-.0159	-.0351	-.0351	-.0349	-.0367	-.0367	-.0295	-.0367	-.0349	-.0260	-.0349	-.0359
110.000				-.1372										-.1193	
120.000				-.1426										-.1193	
130.000				-.1426										-.1193	
140.000				-.1462										-.1229	
150.000				-.1498										-.1247	
160.000				-.1301										-.1067	-.1071
170.000	-.0652	-.0652	-.0652	-.0652	-.0652	-.0652	-.0688	-.0688	-.0688	-.0924	-.0977	-.1013	-.1049	-.1067	-.1071
180.000	.7290	.7470	.7670	.7890	.8030	.8290	.8620	.9000	.9400						

PHI	-.1392	-.1428	-.1303	-.1215
60.000	-.1374	-.1392	-.1267	
70.000	-.1178	-.0928	-.1089	
80.000				
90.000	-.0789	-.0946	-.0982	-.1142
100.000	-.0411	-.0607	-.0603	-.0875
110.000	-.0375	-.0300	-.0643	-.0680
120.000				.1667
130.000				.0588
140.000				-.0660
150.000				-.0446
160.000				-.0429
170.000				-.0714
180.000	-.1017	-.0982	-.0964	-.0750

TABLATED SOURCE PRESSURE DATA FOR IA35/OM64 (LARC UPMT 1063)

(R04005)

OM64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (3) = 12.000 RV/L = 3.4985 BETA = -1.9700

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE

X/L .0970 .1280 .1640 .2030 .2420 .2640 .3010 .3190 .3380 .3570 .3730 .3940 .4050 .4310

PHI													
60.000	.1680	.1482	.1234		.0021	-.0048	-.0098	-.0088	-.0108	-.0123	-.0133	-.0144	
70.000	.1681	.1472	.1184		.0011	-.0036	-.0098	-.0118	-.0128	-.0155	-.0163	-.0176	
80.000	.1433	.1363	.1154		.0061	-.0048	-.0088	-.0148	-.0177	-.0198	-.0230	-.0251	
90.000		.0777	.0220		.0101						-.0647		
100.000					-.0128						-.0658		
110.000					-.0545						-.0656		
120.000					-.0615						-.0636		
130.000					-.0615						-.0636		
140.000					-.0595						-.0615		
150.000					-.0585	-.0605	-.0605	-.0615	-.0604	-.0593	-.0593	-.0572	
160.000	.4900	.4680	.4680	.5090	.5240	.5460	.5800	.6170	.6360	.6540	.6880	.7100	

X/L													
PHI													
60.000	-.0144	-.0144	-.0133	-.0144	-.0138	-.0148	-.0167	-.0167	-.0177	-.0197	-.0177	-.0157	-.0152
70.000	-.0176	-.0176	-.0165	-.0165	-.0157	-.0167	-.0177	-.0167	-.0197	-.0207	-.0207	-.0207	-.0182
80.000	-.0262	-.0272	-.0262	-.0059	-.0231	-.0237	-.0247	-.0247	-.0257	-.0277	-.0277	-.0287	-.0292
90.000				-.0722								-.0664	
100.000				-.0714								-.0674	
110.000				-.0724								-.0724	
120.000				-.0684								-.0764	
130.000				-.0674								-.0764	
140.000				-.0595								-.0555	
150.000	-.0981	-.0951	-.0929	-.0516	-.0508	-.0495	-.0456	-.0426	-.0426	-.0426	-.0426	-.0426	-.0412
160.000	.7290	.7470	.7670	.7890	.8080	.8290	.8620	.9000	.9400				

X/L													
PHI													
60.000					-.0663								
70.000					-.0492	-.0503	-.0543						
80.000					-.0272	-.0242	-.0292						
90.000	-.0142	-.0192	-.0222	-.0272	-.0292	-.0222	-.0132	-.0132	-.0032				
100.000	-.0182	-.0192	-.0192	-.0212	-.0232	-.0202							
110.000	-.0262	-.0262	-.0272	-.0262	-.0122	.1339							
120.000					.1790								
130.000					.0949								
140.000					-.0432								
150.000					-.0432								
160.000					.0168								
170.000					-.0072								
180.000	-.0372	-.0412	-.0442	-.0392	-.0152	.1039							

(R040083)

OM64 ORBITER ENTRY CONFIGURATION

MACH (5) = 4.000 ALPHA (5) = 16.020 RV/L = 3.4985 BETA = -1.9700

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI														
60.000	.1810	.1134	.1284											
70.000	.1403	.1403	.1184											
80.000	.1383	.1174	.1103											
90.000	.0936	.0667	.0180	-.0028	-.0038	-.0048	-.0068	-.0088	-.0088	-.0097	-.0088	-.0097	-.0097	-.0107
100.000				-.0048	-.0068	-.0078	-.0088	-.0108	-.0118	-.0128	-.0139	-.0139	-.0150	-.0150
110.000				-.0068	-.0088	-.0118	-.0138	-.0177	-.0187	-.0203	-.0213	-.0213	-.0213	-.0213
120.000														-.0797
130.000														-.0755
140.000														-.0712
150.000														-.0702
160.000														-.0691
170.000														-.0691
180.000														-.0606
X/L	.4500	.4680	.4680	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6880	.7100

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9450
PHI									
50.000	-.0097	-.0107	-.0116	-.0116	-.0107	-.0107	-.0150	-.0160	-.0160
100.000	-.0139	-.0139	-.0129	-.0129	-.0130	-.0130	-.0180	-.0180	-.0180
110.000	-.0203	-.0203	-.0203	-.0202	-.0202	-.0230	-.0240	-.0240	-.0250
120.000									
130.000									
140.000									
150.000									
160.000									
170.000									
180.000	-.0574	-.0574	-.0564	-.0574	-.0564	-.0592	-.0672	-.0682	-.0592
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9450

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9450
PHI									
60.000									
70.000									
80.000									
90.000									
100.000	-.0142	-.0232	-.0302	-.0342	-.0392	-.0362	-.0362	-.0202	-.0202
110.000	-.0112	-.0112	-.0192	-.0222	-.0232	-.0272			
120.000	-.0192	-.0232	-.0222	-.0212	-.0372	.1609	.1729		
130.000									
140.000									
150.000									
160.000									
170.000									
180.000	-.0583	-.0593	-.0613	-.0513	-.0432	.0598			
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9450

PHI
 60.000
 70.000
 80.000
 90.000
 100.000
 110.000
 120.000
 130.000
 140.000
 150.000
 160.000
 170.000
 180.000

-.0723
 -.0733
 -.0723
 -.0663
 -.0593
 -.0623
 -.0603
 -.0352
 -.0232
 -.0202
 .1729
 .0709
 -.0573
 -.0492
 -.0352
 -.0533
 .0598

TABULATED SOURCE PRESSURE DATA FOR IA35/OM64 (LARC UPWT 1063)

(R040005)

OM64 ORBITER ENTRY CONFIGURATION

DATE 24 JAN 74

MACH (4) = 4.500 ALPHA (0) = 20.980 RN/L = 3.5000 BETA = -2.0000

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE
 X/L .0870 .1280 .1640 .2030 .2420 .2640 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

PHI													
80.000	.1634	.1499	.1258										
90.000	.1052	.1252	.1122										
85.000	.0884	.0852	.0981										
95.000			.0652	.0556	.0235	.0041	.0017	.0012	.0006	.0000	.0000	.0006	-.0017
100.000						-.0030	-.0041	-.0041	-.0047	-.0059	-.0053	-.0047	-.0054
110.000						-.0229	-.0133	-.0129	-.0124	-.0129	-.0147	-.0126	-.0126
120.000						-.0288							-.0675
130.000						-.0394							-.0663
140.000						-.0576							-.0657
150.000						-.0611							-.0645
160.000						-.0690							-.0627
170.000						-.0576							-.0543
180.000						-.0564	-.0553	-.0547	-.0547	-.0541	-.0530	-.0536	-.0543
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6880

PHI													
96.000	-.0017	-.0017	-.0005	-.0005	.0001	-.0017	-.0006	-.0051	-.0078	-.0150	-.0194	-.0257	-.0302
100.000	-.0054	-.0060	-.0060	-.0054	-.0048	-.0142	-.0024	-.0033	-.0033	-.0033	-.0060	-.0078	-.0096
110.000	-.0120	-.0108	-.0106	-.0114	.0526	-.0120	-.0105	-.0105	-.0087	-.0087	-.0060	-.0069	-.0087
120.000						-.0032							-.0589
130.000						-.0634							-.0598
140.000						-.0535							-.0598
150.000						-.0634							-.0589
160.000						-.0643							-.0598
170.000						-.0661							-.0598
180.000	-.0343	-.0543	-.0543	-.0555	-.0555	-.0562	-.0571	-.0580	-.0598	-.0607	-.0616	-.0598	-.0607
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9430				

PHI													
80.000													
90.000													
85.000													
95.000													
100.000													
110.000													
120.000													
130.000													
140.000													
150.000													
160.000													
170.000													
180.000													
X/L	.9516	-.0511	-.0505	-.0466	-.0479	-.0259							

TABLULATED SOURCE PRESSURE DATA FOR IA35/OM64 (LARC UPWT 1063)

(R04006)

DATE 24 JAN 74

OM64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (1) = 0.000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L .7290 .7470 .7670 .7890 .8090 .8290 .9000 .9400

PHI
 130.000 .2163
 140.000 .0116
 150.000 .0303
 160.000 .1169
 170.000 .0736
 180.000 -.0290 -.0383 -.0399 -.0096 .1024 .2264

MACH (1) = 2.500 ALPHA (2) = 10.010 R/V/L = 2.4992 $\epsilon_{T,A}$ = -4.0200

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L .0870 .1260 .1640 .2030 .2420 .2640 .3010 .3190 .3380 .3570 .3750 .3940 .4090 .4310

PHI
 60.000 .2483 .1938 .1705
 70.000 .2245 .2064 .1705
 80.000 .1962 .1937 .1676
 90.000 .1749 .1209 .0303
 100.000 .0012 -.0003 .0043 .0069 .0104 .0089 .0082 .0065 .0048
 110.000 .0358 .0098 .0073 .0073 .0058 .0058 .0014 -.0020 -.0053
 120.000 .0196 .0130 .0089 .0043 -.0010 -.0138 -.0169 -.0239 -.0290
 130.000 .0377
 140.000 -.0355
 150.000 -.1275
 160.000 -.1382
 170.000 -.1367
 180.000 -.1336
 190.000 -.1336 -.1290 -.1244 -.1198 -.1137 -.1106 -.1051 -.1000 -.0984 -.0933

X/L .4300 .4680 .4960 .5090 .5240 .5460 .5610 .5800 .5980 .6170 .6360 .6540 .6730 .6880 .7100

PHI
 90.000 .0048 .0048 .0048 .0048 .0020 -.0024 -.0071 -.0118 -.0102 -.0071 -.0040 .0038 -.0103
 100.000 -.0087 -.0104 -.0104 -.0087 -.0121 -.0134 -.0165 -.0196 -.0212 -.0227 -.0196 -.0134 -.0087 -.0138
 110.000 -.0036 -.0398 -.0398 -.0398 -.0341 -.0368 -.0385 -.0399 -.0430 -.0430 -.0446 -.0414 -.0363 -.0398
 120.000 -.1639
 130.000 -.1506
 140.000 -.1361
 150.000 -.1038
 160.000 -.0867
 170.000 -.0742
 180.000 -.0899 -.0865 -.0781 -.0784 -.0713 -.0664 -.0601 -.0570 -.0539 -.0524 -.0461 -.0492 -.0508 -.0513

X/L .7290 .7470 .7670 .7890 .8090 .8290 .9000 .9400

PHI

TABULATED SOURCE PRESSURE DATA FOR 1A35/0A64 (LARC UPWT 1063)

DATE 24 JAN 74

(R04ED06)

0A64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (3) = 12.000

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP													
X/L	.4500	.4800	.4860	.5050	.5240	.5460	.5800	.5980	.6170	.6360	.6540	.6730	.6890	.7100
PHI														
180.000														
170.000														
160.000														
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400					
PHI														
180.000														
170.000														
160.000														

MACH (1) = 2.500 ALPHA (4) = 14.000 FIN/L = 2.4992 BETA = -4.0200

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP													
X/L	.0970	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3940	.4050	.4310
PHI														
180.000														
170.000														
160.000														
X/L	.4900	.4680	.4660	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6940
PHI														
180.000														
170.000														
160.000														

MACH (1) = 2.500 ALPHA (3) = 12.000

SECTION (1) FUSELAGE	DEPENDENT VARIABLE CP													
X/L	.4500	.4800	.4860	.5050	.5240	.5460	.5800	.5980	.6170	.6360	.6540	.6730	.6890	.7100
PHI														
180.000														
170.000														
160.000														
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400					
PHI														
180.000														
170.000														
160.000														

TABULATED SOURCE PRESSURE DATA FOR 1A35/OAG4 (LARC UPWT 1063)

(R04006)

OAG4 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.300 ALPHA (0) = 20.990 RN/L = 2.4992 BETA = -4.0200

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE
 X/L .0870 .1260 .1640 .2030 .2420 .2810 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

PHI													
80.000	.2210	.0626	.1817										
70.000	.1365	.1773	.1628										
60.000	.0797	.1190	.1409										
50.000		.0914	.0753	.0143	-.0120	-.0073	-.0042	-.0027	-.0027	-.0011	-.0016	-.0016	-.0033
40.000					-.0276	-.0229	-.0214	-.0167	-.0136	-.0120	-.0089	-.0085	-.0103
30.000					-.0681	-.0478	-.0383	-.0323	-.0307	-.0278	-.0260	-.0278	-.0260
20.000					-.0603								-.2129
10.000					-.0806								-.2041
0.000					-.1663								-.1762
					-.1803								-.1797
					-.1772								-.1832
					-.1694								-.1255
					-.1663	-.1600	-.1553	-.1476	-.1398	-.1320	-.1255	-.1255	-.1203
X/L	.4500	.4660	.4800	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6800
													.7100

PHI													
90.000	-.0003	-.0016	.0002	.0019	.0016	-.0013	-.0029	-.0060	-.0091	-.0154	-.0248	-.0311	-.0369
100.000	-.0003	-.0065	-.0068	-.0051	-.0068	-.0060	-.0029	-.0060	-.0060	-.0044	-.0060	-.0060	-.0107
110.000	-.0276	-.0260	-.0243	-.0051	-.0263	-.0248	-.0264	-.0248	-.0264	-.0248	-.0232	-.0217	-.0274
120.000					-.1936								-.1330
130.000					-.1878								-.1439
140.000					-.1894								-.1721
150.000					-.1925								-.1800
160.000					-.1957								-.1815
170.000					-.1847								-.1784
180.000	-.1273	-.1273	-.1273	-.1290	-.1343	-.1361	-.1392	-.1408	-.1361	-.1361	-.1330	-.1345	-.1377
X/L	.7290	.7470	.7670	.7950	.8030	.8290	.8620	.9000	.9400				

PHI													
80.000													
70.000													
60.000													
50.000	-.0929	-.1136	-.1344	-.1360	-.1488	-.1456							
40.000	-.0418	-.0689	-.0849	-.1009	-.1136	-.1408							
30.000	-.0322	-.0626	-.0833	-.0769	-.0801	.0675							
20.000						.1823							
10.000						.0704							
0.000						-.0450							
						-.0674							
						-.0099							
						-.0336							
	-.1328	-.1344	-.1360	-.1232	-.0705	.2268							

TABLULATED SOURCE PRESSURE DATA FOR IAS3/OM65 (LARC UPWT 1063)

(R04006)

OM64 CRIBTER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (4) = 14.010 RV/L = 2.5137 BETA = -4.0200

SECTION (1) PURFLAGE

DEPENDENT VARIABLE CP
 X/L .0870 .1280 .1640 .2030 .2420 .2840 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

PHI													
60.000	.2559	.1592	.1756										
70.000	.1968	.1951	.1658										
80.000	.1376	.1723	.1592										
90.000		.1446	.1019	.0221	-.0064	-.0102	-.0083	-.0064	-.0064	-.0064	-.0064	-.0063	-.0084
100.000					-.0083	-.0102	-.0102	-.0121	-.0102	-.0121	-.0146	-.0125	-.0291
110.000					-.0026	-.0083	-.0121	-.0159	-.0216	-.0235	-.0271	-.0291	-.1413
120.000					.0031								-.1372
130.000					-.0406								-.1392
140.000					-.1204								-.1330
150.000					-.1356								-.1330
160.000					-.1356								-.1309
170.000					-.1318								-.1143
180.000					-.1318	-.1280	-.1261	-.1242	-.1223	-.1185	-.1185	-.1143	-.1081

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6880	.7100
PHI														
90.000	-.0084	-.0105	-.0084	-.0105	-.0064	-.0105	-.0102	-.0140	-.0178	-.0140	-.0140	-.0102	-.0083	-.0119
100.000	-.0123	-.0125	-.0167	-.0167	-.0167	-.0167	-.0102	-.0159	-.0178	-.0216	-.0216	-.0197	-.0178	-.0178
110.000	-.0291	-.0291	-.0291	-.0312	-.0105	-.0354	-.0350	-.0349	-.0368	-.0406	-.0367	-.0368	-.0406	-.0412
120.000						-.1475							-.1394	
130.000						-.1471							-.1394	
140.000						-.1566							-.1375	
150.000						-.1433							-.1509	
160.000						-.1594							-.1509	
170.000						-.1433							-.1528	
180.000	-.1080	-.1080	-.1039	-.1039	-.1018	-.1014	-.0957	-.0976	-.0976	-.0957	-.0976	-.1014	-.0995	-.1037

X/L	.7250	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	-.0197	-.0391	-.0549	-.0566	-.0705	-.0549	-.0549	-.0529	-.0529
100.000	-.0158	-.0314	-.0373	-.0490	-.0549	-.0549	-.0529	-.0529	-.0529
110.000	-.0334	-.0412	-.0471	-.0471	-.0471	-.0471	-.0471	-.0471	-.0471
120.000									
130.000									
140.000									
150.000									
160.000									
170.000									
180.000	-.0919	-.0900	-.0939	-.0939	-.0966	-.0966	-.0966	-.0966	-.0966

(R04006)

TABLATED SOURCE PRESSURE DATA FOR IAS5/OM64 (LARC UPWT 1063)

DATE 24 JAN 74

OM64 ORBITTER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (2) = 10.010 RN/L = 3.4980 BETA = -4.0030

DEPENDENT VARIABLE CP

SECTION (1)	PHI	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000		
X/L	.0870	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310

PHI	.2237	.1878	.1561	.1086	.0433	.0196	.0146	.0126	.0117	.0097	.0087	.0077	.0051	.0041	.0019
70.000	.2139	.1878	.1551	.1086	.0433	.0196	.0146	.0126	.0117	.0097	.0087	.0077	.0051	.0041	.0019
80.000	.1919	.1619	.1332	.1086	.0433	.0196	.0146	.0126	.0117	.0097	.0087	.0077	.0051	.0041	.0019
90.000	.1551	.1332	.1086	.0433	.0196	.0146	.0126	.0117	.0097	.0087	.0077	.0051	.0041	.0019	.0002
100.000	.1332	.1086	.0433	.0196	.0146	.0126	.0117	.0097	.0087	.0077	.0051	.0041	.0019	.0002	.0002
110.000	.1086	.0433	.0196	.0146	.0126	.0117	.0097	.0087	.0077	.0051	.0041	.0019	.0002	.0002	.0002
120.000	.0433	.0196	.0146	.0126	.0117	.0097	.0087	.0077	.0051	.0041	.0019	.0002	.0002	.0002	.0002
130.000	.0196	.0146	.0126	.0117	.0097	.0087	.0077	.0051	.0041	.0019	.0002	.0002	.0002	.0002	.0002
140.000	.0146	.0126	.0117	.0097	.0087	.0077	.0051	.0041	.0019	.0002	.0002	.0002	.0002	.0002	.0002
150.000	.0126	.0117	.0097	.0087	.0077	.0051	.0041	.0019	.0002	.0002	.0002	.0002	.0002	.0002	.0002
160.000	.0117	.0097	.0087	.0077	.0051	.0041	.0019	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002
170.000	.0097	.0087	.0077	.0051	.0041	.0019	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002
180.000	.0087	.0077	.0051	.0041	.0019	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002

SECTION (1)	PHI	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000		
X/L	.4300	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100

PHI	.0019	.0009	.0030	.0041	.0041	.0041	.0024	.0004	.0004	.0005	.0025	.0025	.0005	.0005	.0014
70.000	.0023	.0023	.0023	.0023	.0023	.0012	.0005	.0015	.0015	.0005	.0035	.0035	.0055	.0055	.0057
80.000	.0108	.0118	.0118	.0118	.0115	.0129	.0124	.0114	.0114	.0114	.0124	.0124	.0134	.0134	.0178
90.000	.0064	.0053	.0053	.0053	.0053	.0057	.0057	.0057	.0057	.0057	.0067	.0067	.0067	.0067	.0636
100.000	.0053	.0053	.0053	.0053	.0053	.0057	.0057	.0057	.0057	.0057	.0067	.0067	.0067	.0067	.0636
110.000	.0053	.0053	.0053	.0053	.0053	.0057	.0057	.0057	.0057	.0057	.0067	.0067	.0067	.0067	.0636
120.000	.0053	.0053	.0053	.0053	.0053	.0057	.0057	.0057	.0057	.0057	.0067	.0067	.0067	.0067	.0636
130.000	.0053	.0053	.0053	.0053	.0053	.0057	.0057	.0057	.0057	.0057	.0067	.0067	.0067	.0067	.0636
140.000	.0053	.0053	.0053	.0053	.0053	.0057	.0057	.0057	.0057	.0057	.0067	.0067	.0067	.0067	.0636
150.000	.0053	.0053	.0053	.0053	.0053	.0057	.0057	.0057	.0057	.0057	.0067	.0067	.0067	.0067	.0636
160.000	.0053	.0053	.0053	.0053	.0053	.0057	.0057	.0057	.0057	.0057	.0067	.0067	.0067	.0067	.0636
170.000	.0053	.0053	.0053	.0053	.0053	.0057	.0057	.0057	.0057	.0057	.0067	.0067	.0067	.0067	.0636
180.000	.0053	.0053	.0053	.0053	.0053	.0057	.0057	.0057	.0057	.0057	.0067	.0067	.0067	.0067	.0636

SECTION (1)	PHI	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000
X/L	.7290	.7470	.7670	.7890	.8030	.8290	.8620	.9000	.9400				

OA64 ORBITER ENTRY CONFIGURATION (R04006)

MACH (3) = 4.000 ALPHA (8) = 20.990 RV/L = 3.4980 BETA = -4.0050

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2810	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
Phi														
90.000	.2073	.0890	.1667											
70.000	.1378	.1657	.1337											
80.000	.0680	.1179	.1358											
90.000		.0950	.0620	.0362	.0153	.0123	.0123	.0153	.0153	.0133	.0133	.0142	.0131	.0120
100.000				.0263	.0253	.0253	.0263	.0263	.0263	.0263	.0263	.0267	.0265	.0076
110.000				-.0206	-.0106	-.0066	-.0016	-.0026	-.0036	-.0043	-.0022	-.0011	-.0011	-.0011
120.000				-.0305									-.0904	
130.000				-.0435									-.0871	
140.000				-.0714									-.0871	
150.000				-.0813									-.0860	
160.000				-.0803									-.0817	
170.000				-.0773									-.0806	
180.000				-.0763	-.0753	-.0743	-.0734	-.0743	-.0773	-.0773	-.0773	-.0906	-.0806	-.0817

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
Phi															
90.000	.0120	.0120	.0120	.0120	.0142	.0142	.0107	.0107	.0087	.0067	.0037	.0027	-.0014	-.0064	-.0165
100.000	.0087	.0076	.0065	.0065	.0087	.0087	.0057	.0067	.0067	.0067	.0067	.0067	.0087	.0057	.0047
110.000	-.0011	.0000	.0011	.0000	.0153	-.0011	-.0034	-.0034	-.0024	-.0024	-.0014	-.0014	.0006	.0006	.0027
120.000				-.0671									-.0842		
130.000				-.0883									-.0822		
140.000				-.0883									-.0832		
150.000				-.0903									-.0832		
160.000				-.0903									-.0822		
170.000				-.0823									-.0822		
180.000	-.0817	-.0828	-.0817	-.0806	-.0806	-.0883	-.0893	-.0903	-.0893	-.0873	-.0842	-.0822	-.0822	-.0822	-.0772

X/L	.7290	.7470	.7670	.7890	.8030	.8290	.8620	.9000	.9400
Phi									
90.000				-.0751					
70.000				-.0782	-.0721	-.0671			
80.000				-.0721	-.0762	-.0610			
90.000	-.0266	-.0386	-.0479	-.0559	-.0610	-.0580			
100.000	.0037	-.0105	-.0155	-.0256	-.0337	-.0509			
110.000	.0037	-.0024	-.0085	-.0115	-.0115	.1441			
120.000						.2180			
130.000						-.0986			
140.000						-.0721			
150.000						-.0671			
160.000						-.0671			
170.000						-.0741			
180.000	-.0751	-.0711	-.0650	-.0620	-.0570	.0187			

(R04006)

0A64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (1) = 8.000 RV/L = 3.4990 BETA = -4.0200

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L .0670 .1260 .1640 .2030 .2420 .2640 .2820 .3010 .3190 .3360 .3570 .3750 .3940 .4090 .4310

PHI

60.000	.2329	.1691	.1493											
70.000	.2224	.1661	.1493											
80.000	.2048	.1644	.1493											
90.000		.1505	.1084	.0464	.0242	.0195	.0172	.0154	.0131	.0119	.0101	.0072	.0060	.0042
100.000					.0242	.0207	.0177	.0148	.0119	.0096	.0084	.0046	.0042	.0018
110.000					.0324	.0242	.0183	.0125	.0066	.0043	.0018	-.0007	-.0019	-.0043
120.000					.0405								-.0362	
130.000					.0201								-.0428	
140.000					-.0267								-.0470	
150.000					-.0355								-.0458	
160.000					-.0584								-.0452	
170.000					-.0596								-.0446	
180.000					-.0401	-.0401	-.0413	-.0413	-.0419	-.0419	-.0428	-.0434	-.0428	-.0428

X/L

PHI

90.000	.0024	.0018	.0018	.0012	.0018	.0039	.0039	.0030	.0021	.0021	.0021	.0012	.0003	-.0078
100.000	.0005	-.0007	-.0013	-.0025	-.0031	-.0037	-.0024	-.0015	-.0015	-.0015	-.0015	-.0024	-.0024	-.0084
110.000	-.0061	-.0067	-.0079	-.0091	.0072	-.0115	-.0105	-.0114	-.0105	-.0105	-.0096	-.0087	-.0105	-.0143
120.000					.0120								-.0437	
130.000					-.0481								-.0419	
140.000					-.0463								-.0428	
150.000					-.0445								-.0419	
160.000					-.0428								-.0428	
170.000					-.0428								-.0428	
180.000	-.0428	-.0428	-.0428	-.0422	-.0422	-.0419	-.0419	-.0419	-.0410	-.0410	-.0410	-.0428	-.0428	-.0424

X/L

PHI

60.000														
70.000														
80.000														
90.000	.0001	-.0036	-.0071	-.0058	.0014	.0151	.0249	.0256						
100.000	-.0058	-.0064	-.0071	-.0071	.0001	.0191								
110.000	-.0110	-.0120	-.0156	-.0104	.0112	.0982								
120.000					.1983									
130.000					.1531									
140.000					-.0091									
150.000					-.0293									
160.000					-.0293									
170.000					-.0444									
180.000	-.0424	-.0424	-.0431	-.0405	-.0378	.0014								

TABLULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPMT 1063)

(R84006)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (6) = 17.50 RN/L = 3.4990 BETA = -4.0200

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE X/L .0870 .1280 .1640 .2030 .2420 .2640 .3010 .3190 .3380 .3570 .3750 .3940 .4050 .4310

Table with columns for X/L and PH1 values for fuselage sections. Values range from approximately -0.0061 to 0.0164.

Table with columns for X/L and PH1 values for fuselage sections. Values range from approximately -0.0045 to 0.0078.

Table with columns for X/L and PH1 values for fuselage sections. Values range from approximately -0.0036 to 0.0044.

TABLATED SOURCE PRESSURE DATA FOR 1A35/OA64 (LARC UPMT 106...)

(R04006)

OAG4 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (8) = 21.000 RN/L = 3.4990 BETA = -4.0200

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4190	.4310
PHI	.1966	.1863	.1592	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
60.000	.1321	.1374	.1444	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
70.000	.0938	.1115	.1279	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
80.000	.0914	.1115	.1279	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
90.000	.0914	.1115	.1279	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
100.000	.0914	.1115	.1279	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
110.000	.0914	.1115	.1279	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
120.000	.0914	.1115	.1279	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
130.000	.0914	.1115	.1279	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
140.000	.0914	.1115	.1279	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
150.000	.0914	.1115	.1279	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
160.000	.0914	.1115	.1279	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
170.000	.0914	.1115	.1279	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120
180.000	.0914	.1115	.1279	.1279	.0914	.0791	.0384	.0272	.0166	.0154	.0154	.0149	.0144	.0126	.0120

X/L	.4500	.4660	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI	.0114	.0114	.0120	.0126	.0131	.0132	.0168	.0150	.0114	.0105	.0096	.0076	.0042	-.0012	-.0254
90.000	.0084	.0072	.0072	.0072	.0078	.0078	.0090	.0105	.0114	.0114	.0123	.0114	.0123	.0105	-.0122
100.000	.0005	-.0001	.0017	.0011	.0078	.0001	.0015	.0033	.0024	.0033	.0033	.0033	.0069	.0069	-.0009
110.000	.0005	-.0001	.0017	.0011	.0078	.0001	.0015	.0033	.0024	.0033	.0033	.0033	.0069	.0069	-.0009
120.000	.0005	-.0001	.0017	.0011	.0078	.0001	.0015	.0033	.0024	.0033	.0033	.0033	.0069	.0069	-.0009
130.000	.0005	-.0001	.0017	.0011	.0078	.0001	.0015	.0033	.0024	.0033	.0033	.0033	.0069	.0069	-.0009
140.000	.0005	-.0001	.0017	.0011	.0078	.0001	.0015	.0033	.0024	.0033	.0033	.0033	.0069	.0069	-.0009
150.000	.0005	-.0001	.0017	.0011	.0078	.0001	.0015	.0033	.0024	.0033	.0033	.0033	.0069	.0069	-.0009
160.000	.0005	-.0001	.0017	.0011	.0078	.0001	.0015	.0033	.0024	.0033	.0033	.0033	.0069	.0069	-.0009
170.000	.0005	-.0001	.0017	.0011	.0078	.0001	.0015	.0033	.0024	.0033	.0033	.0033	.0069	.0069	-.0009
180.000	.0005	-.0001	.0017	.0011	.0078	.0001	.0015	.0033	.0024	.0033	.0033	.0033	.0069	.0069	-.0009

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400						
PHI	.0261	-.0360	-.0433	-.0500	-.0540	-.0506	-.0195	.2108	.0986	-.0586	-.0373	-.0613	-.0666	-.0659	-.0659
90.000	.0261	-.0360	-.0433	-.0500	-.0540	-.0506	-.0195	.2108	.0986	-.0586	-.0373	-.0613	-.0666	-.0659	-.0659
100.000	.0261	-.0360	-.0433	-.0500	-.0540	-.0506	-.0195	.2108	.0986	-.0586	-.0373	-.0613	-.0666	-.0659	-.0659
110.000	.0261	-.0360	-.0433	-.0500	-.0540	-.0506	-.0195	.2108	.0986	-.0586	-.0373	-.0613	-.0666	-.0659	-.0659
120.000	.0261	-.0360	-.0433	-.0500	-.0540	-.0506	-.0195	.2108	.0986	-.0586	-.0373	-.0613	-.0666	-.0659	-.0659
130.000	.0261	-.0360	-.0433	-.0500	-.0540	-.0506	-.0195	.2108	.0986	-.0586	-.0373	-.0613	-.0666	-.0659	-.0659
140.000	.0261	-.0360	-.0433	-.0500	-.0540	-.0506	-.0195	.2108	.0986	-.0586	-.0373	-.0613	-.0666	-.0659	-.0659
150.000	.0261	-.0360	-.0433	-.0500	-.0540	-.0506	-.0195	.2108	.0986	-.0586	-.0373	-.0613	-.0666	-.0659	-.0659
160.000	.0261	-.0360	-.0433	-.0500	-.0540	-.0506	-.0195	.2108	.0986	-.0586	-.0373	-.0613	-.0666	-.0659	-.0659
170.000	.0261	-.0360	-.0433	-.0500	-.0540	-.0506	-.0195	.2108	.0986	-.0586	-.0373	-.0613	-.0666	-.0659	-.0659
180.000	.0261	-.0360	-.0433	-.0500	-.0540	-.0506	-.0195	.2108	.0986	-.0586	-.0373	-.0613	-.0666	-.0659	-.0659

(R24007)

OM64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (1) = 8.000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000									.1990
140.000									-.0638
150.000									-.0453
160.000									-.0707
170.000									.0635
180.000	-.0469	-.1484	-.0407	.0302	.0635	.1947			

MACH (1) = 2.500 ALPHA (2) = 10.000 RV/L = 2.4990 BETA = -5.9800

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0370	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2928	.2237	.2092												
70.000	.2697	.2476	.2032												
80.000	.2237	.2330	.2023												
90.000			.1469	.0549	.0203	.0187	.0235	.0284	.0300	.0300	.0300	.0300	.0298	.0298	.0298
100.000					.0231	.0268	.0284	.0231	.0284	.0268	.0231	.0226	.0208	.0135	.0135
110.000					.0462	.0389	.0300	.0231	.0138	.0090	.0083	-.0007	-.0043	-.0115	-.0115
120.000					.0593										
130.000					-.0201										
140.000					-.1300										
150.000					-.1445										
160.000					-.1462										
170.000					-.1413										
180.000	-.1462	-.1429	-.1381	-.1348	-.1316	-.1300	-.1299	-.1245	-.1227	-.1137					

X/L .4500 .4680 .4860 .5050 .5240 .5460 .5610 .5800 .5980 .6170 .6360 .6540 .6730 .6880 .7100

PHI

90.000	.0316	.0298	.0298	.0298	.0226	.0187	.0138	.0138	.0106	.0154	.0203	.0268	.0235	.0271
100.000	.0137	.0119	.0137	.0137	.0101	.0037	.0041	-.0007	-.0023	-.0007	.0009	.0106	.0122	.0071
110.000	-.0151	-.0168	-.0168	-.0158	-.0168	-.0201	-.0217	-.0253	-.0282	-.0282	-.0266	-.0217	-.0201	-.0191
120.000					-.1801									
130.000					-.1639									
140.000					-.1542									
150.000					-.1478									
160.000					-.1332									
170.000					-.1025									
180.000	-.1086	-.1048	-.0994	-.0956	-.0940	-.0880	-.0831	-.0783	-.0751	-.0670	-.0621	-.0573	-.0540	-.0532

X/L .7290 .7470 .7670 .7850 .8030 .8290 .8620 .9000 .9400

PHI

TABULATED SOURCE PRESSURE DATA FOR IA33/OA64 (LARC UPWT 1063)

(R04007)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.970 ALPHA (3) = 12.000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4880	.5090	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
160.000															
170.000															
180.000															
X/L	.7250	.7470	.7670	.7890	.8030	.8290	.8620	.9000	.9400						
PHI															
60.000															
70.000															
80.000															
90.000															
100.000															
110.000															
120.000															
130.000															
140.000															
150.000															
160.000															
170.000															
180.000															

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000															
70.000															
80.000															
90.000															
100.000															
110.000															
120.000															
130.000															
140.000															
150.000															
160.000															
170.000															
180.000															

MACH (1) = 2.970 ALPHA (4) = 14.010 RN/L = 2.4990 BETA = -5.9000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4880	.5090	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
60.000															
70.000															
80.000															
90.000															
100.000															
110.000															
120.000															
130.000															
140.000															
150.000															
160.000															
170.000															
180.000															

PHI

(R64007)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.900 ALPHA (7) = 20.010 RM/L = 2.4990 BETA = -9.9600

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.2633	.1190	.2196												
70.000	.1775	.2196	.1977												
80.000	.1132	.1964	.1786												
90.000	.1263	.1059	.0403	.0096	.0111	.0158	.0158	.0205	.0237	.0252	.0245	.0245	.0245	.0245	.0245
100.000				-.0045	-.0030	.0033	.0064	.0096	.0143	.0158	.0176	.0176	.0156	.0156	.0156
110.000				-.0468	-.0265	-.0171	-.0108	-.0108	-.0061	-.0051	-.0034	-.0034	-.0034	-.0034	-.0034
120.000				-.0406											-.2129
130.000				-.0672											-.2041
140.000				-.1596											-.1954
150.000				-.1816											-.1797
160.000				-.1784											-.1765
170.000				-.1737											-.1780
180.000	-.1762	-.1745	-.1675	-.1657	-.1675	-.1778	-.1842	-.1873	-.1873	-.1873	-.1826	-.1778	-.1778	-.1762	-.1704

X/L	.4900	.4680	.4660	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0245	.0245	.0280	.0280	.0263	.0245	.0220	.0220	.0204	.0188	.0204	.0188	.0157	.0193	-.0202
100.000	.0156	.0156	.0176	.0245	.0193	.0193	.0157	.0157	.0157	.0188	.0157	.0204	.0168	.0220	.0073
110.000	-.0034	-.0034	-.0051	-.0016	.0210	-.0051	-.0081	-.0113	-.0097	-.0113	-.0113	-.0081	-.0018	-.0034	-.0056
120.000				-.1921											-.1620
130.000				-.1921											-.1604
140.000				-.1921											-.1620
150.000				-.1937											-.1858
160.000				-.1794											-.1873
170.000	-.1762	-.1745	-.1675	-.1657	-.1675	-.1778	-.1842	-.1873	-.1873	-.1873	-.1826	-.1778	-.1778	-.1762	-.1704

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000									
70.000									
80.000									
90.000	-.0412	-.0670	-.0832	-.0977	-.1139	-.1010	-.0929	-.0638	-.0977
100.000	-.0069	-.0299	-.0460	-.0373	-.0703	-.0929			
110.000	-.0069	-.0379	-.0444	-.0257	-.0606	.1451			
120.000						.2070			
130.000						.0617			
140.000						-.0945			
150.000						-.0585			
160.000						-.0283			
170.000						-.0670			
180.000	-.1991	-.1991	-.1959	-.1933	-.0945	.1912			

OM64 ORBITER ENTRY CONFIGURATION

(R04007)

MACH (2) = 2.950 ALPHA (0) = 17.950 RN/L = 2.5135 BETA = -6.0000

SECTION (3) FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI														
90.000	.2647	.1472	.2141											
70.000	.1961	.2173	.1994											
50.000	.1406	.1745	.1631											
30.000	.1472	.1190	.0934	.0241	.0223	.0241	.0223	.0241	.0238	.0236	.0275	.0254	.0234	.0234
100.000				.0120	.0137	.0154	.0154	.0154	.0154	.0189	.0196	.0176	.0196	.0196
110.000				-.0087	-.0001	.0033	.0033	.0033	.0033	-.0001	.0022	.0022	.0022	.0060
120.000				-.0087										
130.000				-.0381										
140.000				-.1089										
150.000				-.1262										
160.000				-.1262										
170.000				-.1244										
180.000				-.1210	-.1175	-.1193	-.1210	-.1279	-.1293	-.1313	-.1313	-.1332	-.1332	-.1332
X/L	.4300	.4680	.4880	.5050	.5240	.5460	.5610	.5600	.5980	.6170	.6360	.6540	.6660	.7100
PHI														
90.000	.0234	.0234	.0234	.0234	.0234	.0234	.0237	.0240	.0272	.0240	.0222	.0257	.0275	.0310
100.000	.0176	.0196	.0196	.0196	.0196	.0196	.0222	.0240	.0222	.0187	.0204	.0222	.0222	.0263
110.000	.0041	.0022	.0041	.0041	.0041	.0022	.0046	.0029	.0011	.0011	.0011	.0011	.0011	.0049
120.000				-.1391										
130.000				-.1360										
140.000				-.1360										
150.000				-.1448										
160.000				-.1501										
170.000				-.1343										
180.000	-.1313	-.1313	-.1313	-.1332	-.1332	-.1360	-.1395	-.1431	-.1483	-.1466	-.1483	-.1466	-.1395	-.1339
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400					
PHI														
90.000														
70.000														
50.000														
30.000	-.0049	-.0147	-.0271	-.0396	-.0487	-.0378								
100.000	.0209	.0014	-.0058	-.0200	-.0253	-.0307								
110.000	.0103	-.0096	-.0147	-.0182	-.0236	.2077								
120.000						.2414								
130.000						.0939								
140.000						-.1161								
150.000						-.0770								
160.000						-.0698								
170.000						-.0694								
180.000	-.1303	-.1292	-.1108	-.0930	-.0676	.0565								

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TABULATED SOURCE PRESSURE DATA FOR IAS5/0A64 (LARC UPWT. 1083)

(R64D07)

0A64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (0) = 20.970 RV/L = 2.5135 BETA = -0.0000

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE

X/L	.0870	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2598	.1131	.2223												
70.000	.1750	.2158	.2011												
80.000	.1153	.1970	.1815												
90.000		.1309	.1150	.109	.0193	.0195	.0231	.0231	.0230	.0266	.0266	.0273	.0273	.0273	.0252
100.000					.0285	.0285	.0103	.0140	.0158	.0176	.0213	.0192	.0172	.0172	.0172
110.000					-.0411	-.0191	-.0099	-.0044	-.0044	-.0026	-.0010	.0011	.0011	.0011	.0031
120.000					-.0485										-.1682
130.000					-.0723										-.1642
140.000					-.1293										-.1642
150.000					-.1495										-.1541
160.000					-.1476										-.1480
170.000					-.1440										-.1420
180.000					-.1384										-.1480
190.000					-.1366	-.1384	-.1440	-.1476	-.1495	-.1501	-.1480	-.1480	-.1480	-.1480	-.1440

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6950	.7100
PHI															
60.000	.0832	.0252	.0273	.0273	.0293	.0273	.0268	.0268	.0249	.0249	.0249	.0212	.0174	.0053	-.0125
70.000	.0172	.0192	.0172	.0212	.0212	.0212	.0212	.0268	.0249	.0249	.0230	.0230	.0249	.0249	.0217
80.000	.0031	.0031	.0031	.0031	.0273	.0031	.0043	.0024	.0016	.0024	.0024	.0024	.0062	.0062	.0084
90.000					-.1621										-.1492
100.000					-.1623										-.1473
110.000					-.1623										-.1473
120.000					-.1623										-.1492
130.000					-.1642										-.1548
140.000	-.1400	-.1399	-.1359	-.1380	-.1420	-.1511	-.1529	-.1604	-.1623	-.1623	-.1642	-.1623	-.1549	-.1548	-.1490
150.000															

X/L	.7290	.7470	.7670	.7850	.8150	.8290	.8620	.9000	.9400
PHI									
60.000							-.1395		
70.000							-.1452	-.1300	-.1092
80.000							-.1282	-.1149	-.1073
90.000	-.0314	-.0342	-.0731	-.0826	-.0921	-.0945	-.0788	-.0466	-.0750
100.000	.0084	-.0145	-.0257	-.0409	-.0461	-.0626			
110.000	.0103	-.0125	-.0238	-.0278	-.0352	-.1741			
120.000						.2383			
130.000						.0937			
140.000						-.1319			
150.000						-.0902			
160.000						-.0645			
170.000						-.1054			
180.000	-.1414	-.1357	-.1243	-.1092	-.1016	.0462			

TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063)

(R04007)

OA84 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (1) = 6.010 RN/L = 3.4980 BETA = -5.9000

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE

X/L	.0870	.1280	.1640	.2030	.2420	.2840	.3010	.3190	.3360	.3570	.3750	.3940	.4030	.4310
PMI														
60.000	.2782	.2109	.1926				.0343	.0333	.0294	.0284	.0274	.0252	.0241	.0220
70.000	.2635	.2303	.1943				.0314	.0304	.0274	.0254	.0254	.0220	.0220	.0180
80.000	.2430	.2284	.1933				.0363	.0353	.0274	.0254	.0254	.0220	.0220	.0180
90.000		.1998		.1431	.0670	.0403	.0452	.0363	.0223	.0195	.0167	.0146	.0135	.0104
100.000						.0561	.0660						-.0405	
120.000						.0304							-.0501	
130.000						-.0300							-.0575	
140.000						-.0438							-.0585	
150.000						-.0487							-.0575	
160.000						-.0527							-.0575	
170.000						-.0517	-.0517	-.0537	-.0537	-.0547	-.0554	-.0554	-.0564	-.0554
180.000														
X/L	.4900	.4880	.4860	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.7100

PMI														
90.000	.0210	.0199	.0199	.0199	.0210	.0210	.0238	.0229	.0199	.0189	.0179	.0209	.0209	.0217
100.000	.0187	.0137	.0148	.0148	.0135	.0135	.0159	.0159	.0159	.0179	.0149	.0139	.0139	.0127
110.000	.0072	.0081	.0051	.0040	.0146	.0019	.0020	.0020	.0020	.0030	.0030	.0020	.0020	-.0003
120.000						-.0807							-.0565	
130.000						-.0605							-.0565	
140.000						-.0635							-.0555	
150.000						-.0605							-.0555	
160.000						-.0585							-.0555	
170.000						-.0575							-.0555	
180.000	-.0554	-.0554	-.0554	-.0554	-.0543	-.0555	-.0555	-.0565	-.0555	-.0526	-.0555	-.0565	-.0555	-.0543
X/L	.7590	.7470	.7670	.7850	.8030	.8290	.8620	.9200	.9400					

PMI														
60.000														
70.000														
80.000														
90.000	.0227	.0147	.0157	.0107	.0067	.0027	.0456	.0586	.0436					
100.000	.0177	.0127	.0137	.0147	.0127	-.0023								
110.000	.0027	-.0013	.0007	.0037	.0037	.1866								
120.000						.2768								
130.000						.1924								
140.000						-.0103								
150.000						-.0405								
160.000						-.0353								
170.000						-.0513								
180.000	-.0553	-.0543	-.0543	-.0523	-.0493	-.0233								

OM64 ORBITER ENTRY CONFIGURATION

(R04007)

MACH (3) = 4.000 ALPHA (3) = 12.010 RM/L = 3.4960 BETA = -5.9800

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0370	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
Phi															
60.000	.2687	.2028	.1952												
70.000	.2333	.2212	.1896												
80.000	.1989	.2094	.1847												
90.000	.1769	.1319	.0634	.0379	.0321	.0301	.0261	.0272	.0262	.0262	.0214	.0214	.0214	.0214	.0214
100.000				.0350	.0311	.0291	.0272	.0242	.0232	.0232	.0182	.0171	.0182	.0171	.0161
110.000				.0379	.0330	.0291	.0242	.0184	.0154	.0107	.0097	.0086	.0086	.0085	.0085
120.000				.0369											
130.000				.0115											
140.000				-.0433											
150.000				-.0560											
160.000				-.0580											
170.000				-.0590											
180.000				-.0591	-.0599	-.0599	-.0599	-.0609	-.0637	-.0637	-.0648	-.0637	-.0648	-.0637	-.0637

X/L	.4300	.4840	.5050	.5240	.5460	.5610	.5820	.5980	.6170	.6360	.6540	.6730	.6880	.7100
Phi														
90.000	.0214	.0224	.0224	.0224	.0224	.0238	.0229	.0199	.0179	.0179	.0179	.0199	.0238	.0237
100.000	.0161	.0171	.0203	.0182	.0162	.0189	.0189	.0179	.0139	.0129	.0129	.0139	.0129	.0167
110.000	.0034	.0034	.0034	.0162	.0065	.0090	.0070	.0070	.0060	.0050	.0040	.0030	.0010	.0017
120.000				-.0818										
130.000				-.0764										
140.000				-.0734										
150.000				-.0714										
160.000				-.0694										
170.000				-.0694										
180.000	-.0648	-.0639	-.0639	-.0680	-.0694	-.0704	-.0724	-.0724	-.0724	-.0744	-.0744	-.0754	-.0754	-.0743

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
Phi									
60.000									
70.000									
80.000									
90.000	.0287	.0167	.0067	.0027	.0077	.0077	.0347	.0526	.0367
100.000	.0227	.0177	.0117	.0107	.0087				
110.000	.0087	.0027	.0047	.0037	.0016				
120.000					.2611				
130.000					.1426				
140.000					-.0473				
150.000					-.0543				
160.000					-.0503				
170.000					-.0523				
180.000	-.0733	-.0723	-.0723	-.0693	-.0633	-.0503			

(R040017)

OM64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.030 ALPHA (4) = 14.010 R/V/L = 3.4980 BETA = -9.9800

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1840	.2030	.2420	.2640	.3010	.3190	.3300	.3570	.3750	.3940	.4050	.4310
PHI														
80.000	.2812	.1826	.1989											
70.000	.2184	.2175	.1896											
60.000	.1786	.1934	.1806											
50.000	.1637	.1256	.0601	.0342	.0282	.0262	.0232	.0233	.0223	.0223	.0224	.0224	.0224	.0224
100.000				.0282	.0243	.0233	.0213	.0203	.0193	.0183	.0171	.0161	.0171	.0171
110.000				.0252	.0243	.0203	.0163	.0123	.0103	.0087	.0086	.0075	.0085	.0085
120.000				.0243										
130.000				.0203										
140.000				-.0524										
150.000				-.0654										
160.000				-.0664										
170.000				-.0684										
180.000				-.0664	-.0674	-.0674	-.0684	-.0684	-.0694	-.0680	-.0669	-.0691	-.0691	-.0701

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6730	.6880	.7100
PHI														
90.000	.0224	.0224	.0224	.0224	.0224	.0224	.0223	.0223	.0183	.0173	.0163	.0203	.0223	.0249
100.000	.0171	.0182	.0193	.0193	.0193	.0193	.0163	.0163	.0163	.0143	.0143	.0153	.0143	.0158
110.000	.0085	.0085	.0086	.0097	.0193	.0073	.0083	.0073	.0053	.0053	.0043	.0033	.0033	.0016
120.000						-.0829								
130.000						-.0813								
140.000						-.0793								
150.000						-.0803								
160.000						-.0773								
170.000						-.0753								
180.000	-.0712	-.0701	-.0712	-.0701	-.0723	-.0763	-.0773	-.0763	-.0783	-.0813	-.0823	-.0833	-.0823	-.0822

X/L	.7290	.7470	.7650	.7850	.8050	.8250	.8620	.9000	.9400
PHI									
80.000							-.0559		
70.000							-.0537	-.0317	-.0317
60.000							.0047	.0037	.0047
50.000	.0249	.0143	.0087	.0037	.0006	.0057	.0239	.0309	.0360
100.000	.0218	.0178	.0146	.0117	.0077	.0107			
110.000	.0077	.0057	.0047	.0087					
120.000						.2546			
130.000						.1289			
140.000						-.0610			
150.000						-.0660			
160.000						-.0590			
170.000						-.0600			
180.000	-.0622	-.0622	-.0612	-.0782	-.0681	-.0610			

(R04007)

0A64 CRBITER ENTRY CONFIGURATION

MACH (S) = 4.077 ALPHA (S) = 16.040 RN/L = 3.4980 BETA = -5.9800

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE
 X/L .0870 .1260 .1640 .2030 .2420 .2640 .2820 .3010 .3190 .3360 .3570 .3750 .3940 .4050 .4310

Phi	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000
CP	.2556	.1624	.1999	.2556	.1624	.1999	.2556	.1624	.1999	.2556
CP	.2036	.2119	.1978	.2036	.2119	.1978	.2036	.2119	.1978	.2036
CP	.1583	.1795	.1755	.1583	.1795	.1755	.1583	.1795	.1755	.1583
CP	.1513	.1191	.0967	.1513	.1191	.0967	.1513	.1191	.0967	.1513
CP	.0245	.0214	.0194	.0245	.0214	.0194	.0245	.0214	.0194	.0245
CP	.0124	.0144	.0134	.0124	.0144	.0134	.0124	.0144	.0134	.0124
CP	.0064	.0064	.0064	.0064	.0064	.0064	.0064	.0064	.0064	.0064
CP	-.0148	-.0148	-.0148	-.0148	-.0148	-.0148	-.0148	-.0148	-.0148	-.0148
CP	-.0611	-.0611	-.0611	-.0611	-.0611	-.0611	-.0611	-.0611	-.0611	-.0611
CP	-.0732	-.0732	-.0732	-.0732	-.0732	-.0732	-.0732	-.0732	-.0732	-.0732
CP	-.0742	-.0742	-.0742	-.0742	-.0742	-.0742	-.0742	-.0742	-.0742	-.0742
CP	-.0742	-.0742	-.0742	-.0742	-.0742	-.0742	-.0742	-.0742	-.0742	-.0742
CP	.4900	.4660	.4660	.4900	.4660	.4660	.4900	.4660	.4660	.4900
CP	.0227	.0216	.0205	.0227	.0216	.0205	.0227	.0216	.0205	.0227
CP	.0184	.0184	.0205	.0184	.0184	.0205	.0184	.0184	.0205	.0184
CP	.0065	.0075	.0087	.0065	.0075	.0087	.0065	.0075	.0087	.0065
CP	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823
CP	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813
CP	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833
CP	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843
CP	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803
CP	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774
CP	.7290	.7470	.7670	.7290	.7470	.7670	.7290	.7470	.7670	.7290

Phi	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000
CP	.0227	.0216	.0205	.0227	.0216	.0205	.0227	.0216	.0205	.0227
CP	.0184	.0184	.0205	.0184	.0184	.0205	.0184	.0184	.0205	.0184
CP	.0065	.0075	.0087	.0065	.0075	.0087	.0065	.0075	.0087	.0065
CP	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823
CP	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813
CP	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833
CP	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843
CP	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803
CP	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774
CP	.6290	.6030	.6030	.6290	.6030	.6030	.6290	.6030	.6030	.6290
CP	.0227	.0216	.0205	.0227	.0216	.0205	.0227	.0216	.0205	.0227
CP	.0184	.0184	.0205	.0184	.0184	.0205	.0184	.0184	.0205	.0184
CP	.0065	.0075	.0087	.0065	.0075	.0087	.0065	.0075	.0087	.0065
CP	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823
CP	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813
CP	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833
CP	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843
CP	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803
CP	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774
CP	.9400	.9000	.9000	.9400	.9000	.9000	.9400	.9000	.9000	.9400

Phi	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000
CP	.0227	.0216	.0205	.0227	.0216	.0205	.0227	.0216	.0205	.0227
CP	.0184	.0184	.0205	.0184	.0184	.0205	.0184	.0184	.0205	.0184
CP	.0065	.0075	.0087	.0065	.0075	.0087	.0065	.0075	.0087	.0065
CP	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823
CP	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813
CP	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833
CP	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843
CP	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803
CP	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774
CP	.6290	.6030	.6030	.6290	.6030	.6030	.6290	.6030	.6030	.6290
CP	.0227	.0216	.0205	.0227	.0216	.0205	.0227	.0216	.0205	.0227
CP	.0184	.0184	.0205	.0184	.0184	.0205	.0184	.0184	.0205	.0184
CP	.0065	.0075	.0087	.0065	.0075	.0087	.0065	.0075	.0087	.0065
CP	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823	-.0823
CP	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813	-.0813
CP	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833	-.0833
CP	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843	-.0843
CP	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803	-.0803
CP	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774	-.0774
CP	.9400	.9000	.9000	.9400	.9000	.9000	.9400	.9000	.9000	.9400

TABULATED SOURCE PRESSURE DATA FOR IAS5/OM64 (LARC UPWT 1063)

(R64007)

OM64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.300 ALPHA (2) = 10.010 R_p = 3.4965 BETA = -3.9850

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3130	.3300	.3370	.3750	.3940	.4030	.4310
PHI															
80.000	.2644	.2225	.1816												
70.000	.2402	.2142	.1777												
60.000	.2069	.2042	.1753												
50.000		.1736	.1264	.0879	.0385	.0303	.0279	.0262	.0244	.0232	.0220	.0188	.0162	.0158	.0127
40.000					.0365	.0303	.0279	.0236	.0226	.0208	.0191	.0158	.0151	.0127	.0048
30.000					.0403	.0338	.0279	.0232	.0179	.0149	.0115	.0065	.0066	.0048	
20.000					.0427										
10.000					.0203										
0.000					-.0310										
140.000					-.0428										
150.000					-.0434										
160.000					-.0476										
170.000					-.0476										
180.000					-.0481	-.0483	-.0489	-.0499	-.0499	-.0511	-.0511	-.0511	-.0511	-.0511	-.0511

X/L	.4300	.4680	.4860	.5050	.5240	.5463	.5610	.5800	.5950	.70	.6360	.6540	.6730	.6800	.710
PHI															
90.000	.0156	.0151	.0158	.0158	.0176	.0176	.0176	.0169	.0160		.0142	.0142	.0142	.0142	.0100
100.000	.0121	.0115	.0115	.0115	.0121	.0121	.0121	.0142	.0123		.0105	.0103	.0096	.0087	.0061
110.000	.0096	.0024	.0018	.0018	.0115	.0012	.0015	.0033	.0042		.0024	.0015	.0024	.0006	-.0177
120.000					.0024										
130.000					-.0602										
140.000					-.0552										
150.000					-.0592										
160.000					-.0543										
170.000					-.0534										
180.000	-.0517	-.0517	-.0529	-.0529	-.0523	-.0523	-.0534	-.0543	-.0552	-.0561	-.0561	-.0570	-.0579	-.0582	-.0542

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9000	.9000
PHI										
80.000										
70.000										
60.000										
50.000	.0179	.0120	.0113	.0107	.0067	.0100				
40.000	.0133	.0115	.0113	.0120	.0140	.0317				
30.000	.0022	-.0011	.0009	.0041	.0172	.1876				
20.000					.2420					
10.000					.1463					
0.000					-.0273					
140.000					-.0411					
150.000					-.0404					
160.000					-.0411					
170.000					-.0356					
180.000	-.0522	-.0515	-.0509	-.0489	-.0450	-.0356				

TABULATED SOURCE PRESSURE DATA FOR 1A55/OM64 (LARC UPWT 1063)

(R640077)

MACH (4) = 4.900 ALPHA (3) = 12.000 RV/L = 3.4985 BETA = -5.9800

OM64 ORBITER ENTRY CONFIGURATION

DEPENDENT VARIABLE CP

SECTION (1) FUSELAGE

X/L	.0870	.1280	.1640	.2050	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2581	.2201	.1824												
70.000	.2213	.2077	.1759												
80.000	.1848	.1901	.1706												
90.000		.1612	.1211	.0586	.0344	.0279	.0256	.0230	.0226	.0214	.0203	.0176	.0170	.0151	.0151
100.000					.0344	.0267	.0244	.0220	.0197	.0179	.0173	.0145	.0135	.0115	.0115
110.000					.0320	.0273	.0226	.0185	.0138	.0106	.0085	.0060	.0054	.0036	.0036
120.000					.0303										
130.000					.0102										
140.000					-.0387										
150.000					-.0487										
160.000					-.0505										
170.000					-.0523										
180.000					-.0517	-.0529	-.0534	-.0540	-.0540	-.0547	-.0547	-.0547	-.0554	-.0560	-.0560

X/L	.4300	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.6170	.6360	.6540	.6750	.6880	.7100
PHI														
90.000	.0158	.0164	.0178	.0170	.0176	.0164	.0169	.0163	.0151	.0142	.0124	.0133	.0151	.0169
100.000	.0115	.0119	.0121	.0127	.0127	.0133	.0133	.0133	.0124	.0115	.0097	.0106	.0097	.0046
110.000	.0050	.0024	.0024	.0024	.0133	.0030	.0052	.0032	.0043	.0034	.0034	.0025	.0016	.0025
120.000					.0030									
130.000					-.0633									
140.000					-.0597									
150.000					-.0615									
160.000					-.0626									
170.000					-.0579									
180.000	-.0568	-.0372	-.0372	-.0372	-.0378	-.0588	-.0397	-.0606	-.0615	-.0624	-.0624	-.0624	-.0633	-.0653

X/L	.7290	.7470	.7670	.7350	.6050	.6290	.8620	.9000	.9400
PHI									
60.000							-.0402		
70.000							-.0132	-.0112	-.0119
80.000							.0132	.0198	.0178
90.000	.0191	.0129	.0085	.0072	.0039	.0079	.0277	.0428	.0389
100.000	.0085	.0112	.0099	.0112	.0111	.0277			
110.000	.0028	.0008	.0020	.0046	.0132	.2063			
120.000						.2478			
130.000						.1292			
140.000						-.0435			
150.000						-.0328			
160.000						-.0495			
170.000						-.0488			
180.000	-.0813	-.0380	-.0480	-.0800	-.0567	-.0501			

