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RESULTS OF AN EXPERIMENTAL INVESTIGATION IN THE NASA/MSFC 14-INCH TRISONIC WIND TUNNEL ON A .004-SCALE MODEL (74-OTS) SSLV TO DETERMINE TH INFLUENCE OF ORBITER AND SRBs ON THE EXTERNAL TAN NOSE PRESSURE DISTRIBUTION (IA181)

SPACE SHUTTLE AEROTHERMODYNAMIC DATA REPORT

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Data Management SERVICES
HUNTSVILLE ELECTRONICS DIVISION CHRYSLER CORPORATION

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by

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Prepared under NASA Contract Number NAS9-16283

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Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	NASA/MSFC TWT-649
NASA Series Number:	IA181
Model Number:	74-OTS
Test Dates:	December 12, 1977 through February 2, 1978
Occupancy Hours:	144

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ABSTRACT

A 0.004-scale model of the Space Shuttle Launch Vehicle was tested over a Mach number range from 0.6 to 1.25 to obtain pressure data in the nose region of the external tank. Vehicle attitude varied from -6° to 6° angle of attack at 0°, $\pm 6^{\circ}$ angle of sideslip and from -6° to 6° angle of sideslip at 0° and $\pm 6^{\circ}$ angle of attack. The tank alone, tank in the presence of both SRBs, tank in the presence of the orbiter, and full up configurations were tested at a constant stagnation pressure of 22 psia which yielded a Reynolds number of approximately 6.2×10^{6} per foot. These data were collected in support of the Shuttle Ascent Air Data System design process. Plotted and tabulated results are given in this report.

The only data recorded during these investigations were the four static pressures and two differential pressures acting on the ET nose. Locations of the static pressure orifices are detailed in Figure 3. The differential pressures were the difference between the upper and lower or right and left orifices as measured by a differential pressure gage. The internal strain gage balance was functional during the test. However, aerodynamic loadings measured were used to determine sting/model deflections only and were not recorded.

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PLOTTED COEFFICIENT SCHEDULES:

A: CPB vs α
B: CPB vs β
C: CPU vs α
D: CPU vs β
E: CPR vs α
F: CPR vs β
G: CPL vs α
H: CPL vs β
I: DCPA vs α
J: DCPA vs β
K: DCPB vs α
L: DCPB vs β

NOMENCLATURE

Symbol	Mnemonic	Definition
Cp_t	CPTT, QC/Q	Total or stagnation pressure coefficient behind a normal shock, $(p_{t2} - p_\infty)/q_\infty$
Cp_b	CPB	Tank nose bottom surface pressure coefficient, $((p_b - p_\infty)/q_\infty)$
Cp_u	CPU	Tank nose upper surface pressure coefficient, $((p_u - p_\infty)/q_\infty)$
Cp_r	CPR	Tank nose right surface pressure coefficient, $((p_r - p_\infty)/q_\infty)$
Cp_ℓ	CPL	Tank nose left surface pressure coefficient, $((p_\ell - p_\infty)/q_\infty)$
ΔCp_α	DCPA	Tank nose differential pressure coefficient in pitch plane, as measured by differential pressure gage, $(\Delta p_\alpha / q_\infty)$
$(Cp_b - CP_u)$	CPAD	Tank nose differential pressure coefficient in pitch plane, (CPB - CPU)
ΔCp_β	DCPB	Tank nose differential pressure coefficient in yaw plane, as measured by differential pressure gage, $(\Delta p_\beta / q_\infty)$
$(Cp_r - Cp_\ell)$	CPBD	Tank nose differential pressure coefficient in yaw plane, (CPR-CPL)
$CP_{\alpha\,avg}$	CPAA	Average pressure coefficient in pitch plane, ((PAAVE-PS)/Q)
$Cp_{\beta\,avg}$	CPBA	Average pressure coefficient in yaw plane, ((PBAVE - PS)/Q)
Cp_{avg}	CPABA	Tank nose average pressure coefficient, (CPAA + CPBA)/2
-	DCPBU	Local slope of DCPA, $(d(\Delta Cp_\alpha)/d_\alpha)$
-	DCPRL	Local slope of DCPB, $(d(\Delta Cp_\beta)/d_\beta)$
M_∞, M	MACH	Freestream Mach number

NOMENCLATURE (Continued)

Symbol	Mnemonic	Definition
p_{t_∞}	PT	Tunnel total or stagnation pressure, psf
p_{t_2}	PT2	Total pressure behind a normal shock, psf
p_∞, p_s	PS	Tunnel freestream static pressure, psf
p_b	PB	Tank nose bottom surface orifice pressure, psf
p_u	PU	Tank nose upper surface orifice pressure, psf
p_r	PR	Tank nose right surface orifice pressure, psf
p_ℓ	PL	Tank nose left surface orifice pressure, psf
$p_{\alpha\ avg}$	PAAVE	Tank nose average pressure in pitch plane, psf, $(2p_b - \Delta p_\alpha)/2$
$p_{\beta avg}$	PBAVE	Tank nose average pressure in yaw plane, psf $(2p_r - \Delta p_\beta)/2$
p_{avg}	PAVG	Tank nose average pressure, psf $(p_{\alpha_{avg}} + p_{\beta\ avg})/2$
Δp_{b-u}, Δp_α		Tank nose differential pressure in pitch plane as measured by differential pressure gage, psf
$\Delta p_{r-\ell}$, Δp_β		Tank nose differential pressure in yaw plane as measured by differential pressure gage, psf
q_∞	Q	Tunnel freestream dynamic pressure, psf, psi
q_c	QC	Dynamic pressure behind a normal shock, psf
Rn	RN/L or RN/FT	Tunnel freestream Reynolds number per foot length
T	TTF	Tunnel total temperature, ^oF (see note in Appendix)
α	ALPHA	Angle of attack, degrees
β	BETA	Angle of sideslip, degrees
δa	AILRON	Aileron deflection angle, degrees
δ_e	ELEVON	Elevon deflection angle, degrees

NOMENCLATURE (Concluded)

Symbol	Mnemonic	Definition
δe_I		Inboard elevon deflection angle, degrees
δe_O		Outboard elevon deflection angle, degrees
Θ	OFFSET	Sting offset for pitch or yaw polars where $\beta/\delta \neq 0^\circ$, degrees
Φ	PHI	Model roll angle about longitudinal axis, degrees

INTRODUCTION

The Space Shuttle Ascent Air Data System (AADS) provides the flight crew and systems vital aerodynamic information during the first few minutes of flight. Located on the foremost part of the external tank, it consists of a central pitot and four static pressure taps arranged in a cruciform configuration to enable determination of angle of attack and angle of sideslip as well as Mach number. Other tests on larger scale models, References 1 and 2, have investigated alternate locations for the pressure taps (further back on the ET nose) and have looked at shock detachment behavior in the nose region. This test was limited to measurement of the four static pressures on the nose of the External Tank which was modified to have a sharp conical configuration. Model size would not permit measurement of a pitot pressure at the apex.

Presented herein are results of investigations at transonic Mach numbers between 0.6 and 1.25, on a .004-scale model at angles of attack and sideslip between $\pm 6^{\circ}$.

CONFIGURATIONS INVESTIGATED

The model general arrangement (0.004-scale) is shown in Figure 1. All elements were made of stainless steel.

Four configurations were tested: the complete mated vehicle, OTS, the External Tank alone, T, the External Tank plus Oribter Vehicle, OT, and the External Tank plus Solid Rocket Booster, TS. In all configurations, the model was supported by a sting/balance installed in the External Tank.

The model was fabricated in conformance with the lines/drawings as listed below.

ORBITER	VC70-000002
Forward Body and Cabin	VL70-000202C
Mid-body-wing/glove fairing	VL70-000200B
Aft Body	VL70-000203
Vertical tail	VL70-000146A
Wing tip	VL70-006092
OMS/RCS Pods	VL70-008410, 008401
EXTERNAL TANK, modified* (see Figure 2)	VC78-000002B*
SRB	VC77-000002B

The following nomenclature is used to designate model parts.

Component	Definition
Orbiter	
B62	fuselage - per VL70-000200B, 202C, and 203
C12	canopy - per VL70-000202C
E62	elevon, 6" gap - per VL70-000200, 00608, 006092
F10	body flap - per VL70-000200B
M16	OMS pods - per VL70-008410, 008401
N28	OMS nozzle - per VL70-008457

*Hemispherical nose cap removed and replaced by conic Ascent Air Data System (biconic AADS without spike)

CONFIGURATIONS INVESTIGATED (Continued)

Component	Definition
Orbiter (continued)	
R5	rudder - per VL70-000146A
V8	vertical - per VL70-000146A
W127	wing - per VL70-000200B
External Tank	
AT16	attach structure, front ORB/ET - per SK-H-4011
AT17	attach structure, left rear ORB/ET - per VL78-000062B
AT18	attach structure, right rear ORB/ET per VL78-000062B
FL5	LOX feed line ET/ORB - per VL78-000062A
FL6	LH_2 pressure line ET/ORB - per VL78-000062A
FL9	LH_2 feed line ET/ORB - per VL78-000062A
FR6	umbilical door fairing support - per VL78-000062A
PT13	LOX recirculation line - per VL78-000062A
PT14	LOX pressure line - per VL78-000062A
PT20	LOX pressure line and electrical conduit - per VL78-000062A
T20	tank - per VL78-000041C
SRB	
PS7	attach rings and rear structural ring - per VL77-000066
S25	SRB baseline - per VC77-000002

The model was installed in the tunnel by means of an internal strain gage balance mounted on a single sting supported by the tunnel pitch sector.

For runs requiring sector sweeps with either angle of attack or sideslip angle of zero, the model/balance was supported on MSFC sting No. 103 installed in sting extension S3. The tip of the sting extended 10 inches beyond the face of the nut on the chuck in the sting extension. For angle of attack sweeps the model/balance was upright (roll angle = 0°). For beta (sideslip) sweeps, the model/balance/sting combination was rolled + 90° and - 90°.

For runs requiring fixed angles of attack or sideslip of plus or minus 6 degrees, the model/balance was supported on sting 103 installed in the MSFC 14-6 offset on the extension S3. The tip of sting 103 extended 10½ inches beyond the face of the nut on the chuck in the offset. For these runs the offset was in the horizontal plane (phi = 90° or 270°, as indicated in Table II). The model/balance was upright for alpha sweeps, and rolled either 90 or 270 degrees for beta sweeps. The desired roll angle was obtained by rotation of the sting in the offset chuck.

TEST FACILITY DESCRIPTION

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

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

Tunnel flow is established and controlled with a servoactuated gate valve. The controlled air flows through the valve diffuser into the stilling chamber and heat exchanger where the air temperature can be controlled from ambient to approximately 180°F. The air then passes through the test section which contains the nozzle blocks and test region.

Downstream of the test section is a hydraulically controlled pitch sector

that provides a total angle of attack range of 20° ($\pm 10^{\circ}$). Sting offsets are available for obtaining various maximum angles of attack up to 90°.

The air then flows through a diffuser and exhausts to either ambient atmosphere or a vacuum field of 42,000 cubic feet. The vacuum tanks are evacuated by five pumps driven by a total of 500 hp. Depending on the test conditions, run time available varies from 45 seconds to 2 minutes.

DATA REDUCTION

This test recorded only four static pressures and two differential pressures in addition to the tunnel operational pressures. The static and differential pressures are presented in coefficient form having been calculated by the following equations:

$$C_{p(\ )} = (p_{(\ )} - p_\infty)/q_\infty = CP(\ ) \qquad (1)$$

where $_{(\ )}$ = b - nose bottom surface pressure
u - nose upper surface pressure
r - nose right surface pressure
ℓ - nose left surface pressure

$$\Delta Cp_\alpha = (\Delta p_\alpha)/q_\infty = DCPA \qquad (2)$$

$$\Delta Cp_\beta = (\Delta p\beta)/q_\infty = DCPB \qquad (3)$$

where (Δp_α) and (Δp_β) are measured directly by differential pressure gages between the bottom and upper orifices or right and left orifices respectively.

Differential pressure coefficients were also calculated from the individual pressure measurements by the equations;

$$Cp_b - Cp_u = (p_b - p_u)q_\infty = CPAD \qquad (4)$$

$$Cp_r - Cp_\ell = (p_r - p_\ell)/q_\infty = CPBD \qquad (5)$$

All the above pressure coefficients are tabulated in the appendix under dataset names beginning with B1U0XX.

Five other terms were calculated by the Chrysler Data Management System and are tabulated in the appendix under dataset names beginning with C1U0XX. The first three terms and their equations are:

$$Cp_{\alpha_{avg}} = ((p_b - (\Delta p_\alpha/2)) - p_\infty)/q_\infty = CPAA \qquad (6)$$

$$Cp_{\beta_{avg}} = ((p_r - (\Delta p_\beta/2)) - p_\infty)/q_\infty = CPBA \qquad (7)$$

$$Cp_{avg} = (C_{p\alpha_{avg}} + C_{p\beta_{avg}})/2 = CPABA \qquad (8)$$

The last two terms, DCPBU and DCPRL are the slopes of the differential pressure coefficients, DCPA and DCPB, as variants with angle of attack or sideslip, respectively for a spline curve fit evaluated at each value of alpha or beta tested.

One other term calculated by the Data Man System was QC/Q and is the dynamic pressure ratio across a normal shock. The term is tabulated in the appendix under dataset names beginning with A1UOXX and was calculated by the following equation:

$$q_c/q = (p_{t_2} - p_\infty)/q_\infty = QC/Q = CPTT \qquad (9)$$

where p_{t_2} = total pressure behind a normal shock

$$= p_{t_\infty} (6M^2/(M^2+5)^{3.5}(6/(7M^2-1))^{2.5} \qquad (10)$$

Model angle of attack and sideslip were corrected for sting and balance deflections using MSFC balance number 239 to measure the aerodynamic load applied. These loads were not recorded and therefore are not tabulated.

The glass sidewalls were utilized in the 14 inch tunnel to allow shadowgraphs to be made of selected conditions. These shadowgraphs are not included in this report but are available from the author upon request.

REFERENCES

1. Burrows, R.R. and Carlson, W.R., "Results of Shuttle Transportation System Ascent Air Data System Calibration Test Using the 0.07-scale External Oxygen Hydrogen Tank Forebody Model (68-T) in the AEDC PWT 16-foot Transonic Wind Tunnel (IA132)" DMS-DR-2449, NASA-CR 160,497, January, 1981

2. Burrows, R.R. and Carlson, W.R., "Results of Shuttle Transportation System Ascent Air Data System Supersonic Calibration Test Using the 0.07-scale External Oxygen Hydrogen Tank Forebody Model (68-T) in the Unitary Plan High Speed Leg of the LaRC 4x4 Wind Tunnel (IA180)," DMS-DR-2457; NASA-CR 160,813, December, 1980

3. Garton, W.P., "Pretest Report for an Investigation in the MSFC TWT of the Influence of the Orbiter Vehicle and Solid Rocket Boosters on the Pressure Field About the Nose of the External Tank in the Transonic Range Utilizing the 0.004-Scale Model (74-OTS) of the Shuttle Vehicle 5 Configuration (IA181)", SD77-SH-0269, November, 1977

TABLE I

TEST : IA 181

DATE : 12/6/77

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE, Q (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.60	5.03×10^6	4.317	85°
0.90	6.39×10^6	7.361	↓
1.10	6.75×10^6	8.706	↓
1.25	6.82×10^6	9.268	↓

BALANCE UTILIZED: MSFC # 239

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	200#	± 1.0 #	N/A
SF	100#	± 0.5 #	↓
AF	50#	± 0.25 #	↓
PM	197 in#	± 1 in#	↓
RM	98 in#	± 0.5 in#	↓
YM	50 in#	± 0.5 in#	↓

COMMENTS:

TABLE II

TEST: IA181/TWT 649 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: 12/06/77

DATA SET IDENTIFIER	CONFIGURATION	α	β	δ_{e_x}	δ_{e_y}	φ	θ	MACH NUMBERS 0.6	0.9	1.1	1.25
★14001	ΦTS	A	0	10-8	10-8	0	–	1/1	2/0*	3/0*	4/0*
02		A	0			0	–	5/0	6/0	7/0	8/0
03		0	B			90	–	9/0	10/0*	11/1*	12/0*
04		0	B			90	–	13/0	14/0	15/0	16/0
05		A	+6			0	90	17/0	18/0	19/0	20/0
06		A	-6			180	90	21/1	22/2	23/3	24/0
07		-6	B			90	90	25/0	26/0	27/0	28/1
08		+6	B			270	90	29/0	30/0	31/0	32/0
09	I	A	0			0	–	33/0	34/0*	35/0*	36/0*
10		A	0			0	–	37/0	38/0	39/1	40/0
11		0	B			90	–	41/0	42/0*	43/0*	44/0*
12		0	B			90	–	45/0	46/0	47/0	48/0
13		A	+6			0	90	49/0	50/0	51/0	52/0
14		A	-6			180	90	53/0	54/0	55/0	56/0
15		-6	B			90	90	57/0	58/0	59/0	60/0
16		+6	B			270	90	61/0	62/0	63/0	64/0

TEST RUN NUMBERS

* SHADOWGRAPH TAKEN @ α = β = 0°

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

IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES — COEFFICIENTS

A: α = -6° to +6°; Δα = 2°

B: β = -6° to +6°; Δβ = 2°

φ = MODEL ROLL ANGLE

θ = STING OFFSET ANGLE

NASA-MSFC-MAF

★ = { A – ALPHA(BETA), Q, RN/FT, PS, PT, QC/Q, TTF, PHI
B – ALPHA(BETA), CPTT, CPB, CPU, CPR, CPL, CPAD, CPBD, DCPA, DCPB
C – ALPHA(BETA), CPAA, CPBA, CPABA, DCPBU, DCPRL }

Note: DEPENDENT VARIABLE TTF PRESENTED IN TABULATED DATA AS IDENTICALLY ZERO; DISREGARD.

TABLE II
(CONCLUDED)

TEST: IA181/TWT 649

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 12/06/77

DATA SET IDENTIFIER	CONFIGURATION	α	β			δ_{e_I}	δ_{e_O}	ϕ	θ						MACH NUMBERS 0.6	0.9	1.1	1.25
★IU017	ØT	A	C			10.8	10.8	0	–						65/1	66/0	67/0	68/0
18	ØT	0	B			10.8	10.8	90	–						69/0	70/0	71/0	72/0
19	TS	A	0					0	–						73/0	74/0	75/0	76/0
20	TS	0	B					90	–						77/0	78/0	79/0	80/0

TEST RUN NUMBERS

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

α OR β SCHEDULES: A: $\alpha = -6°$ to $+6°$; $\Delta\alpha = 2°$
B: $\beta = -6°$ to $+6°$; $\Delta\beta = 2°$

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

NASA-MSFC-MAF

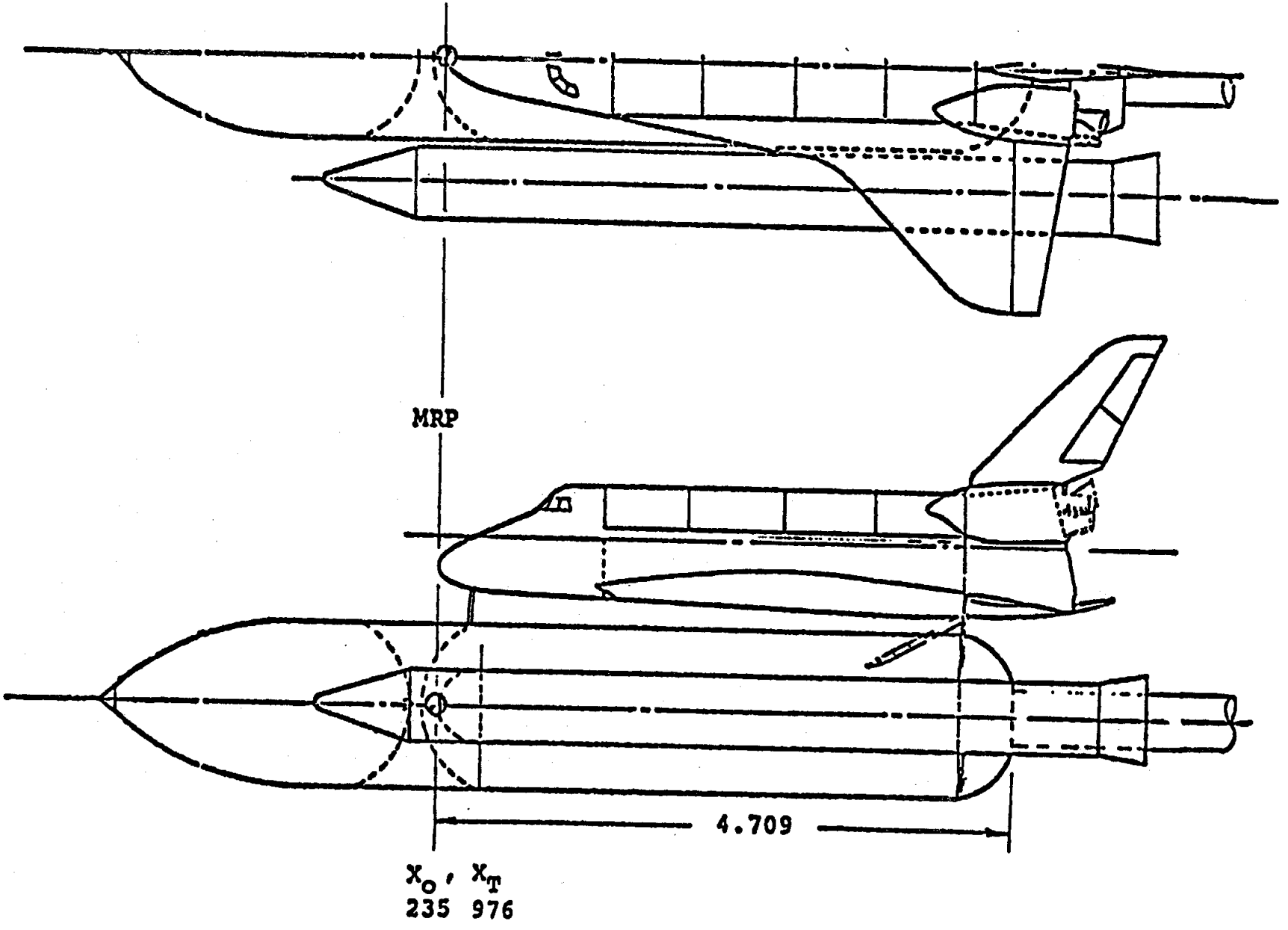


FIGURE 1. - General Arrangement of Launch Vehicle Model

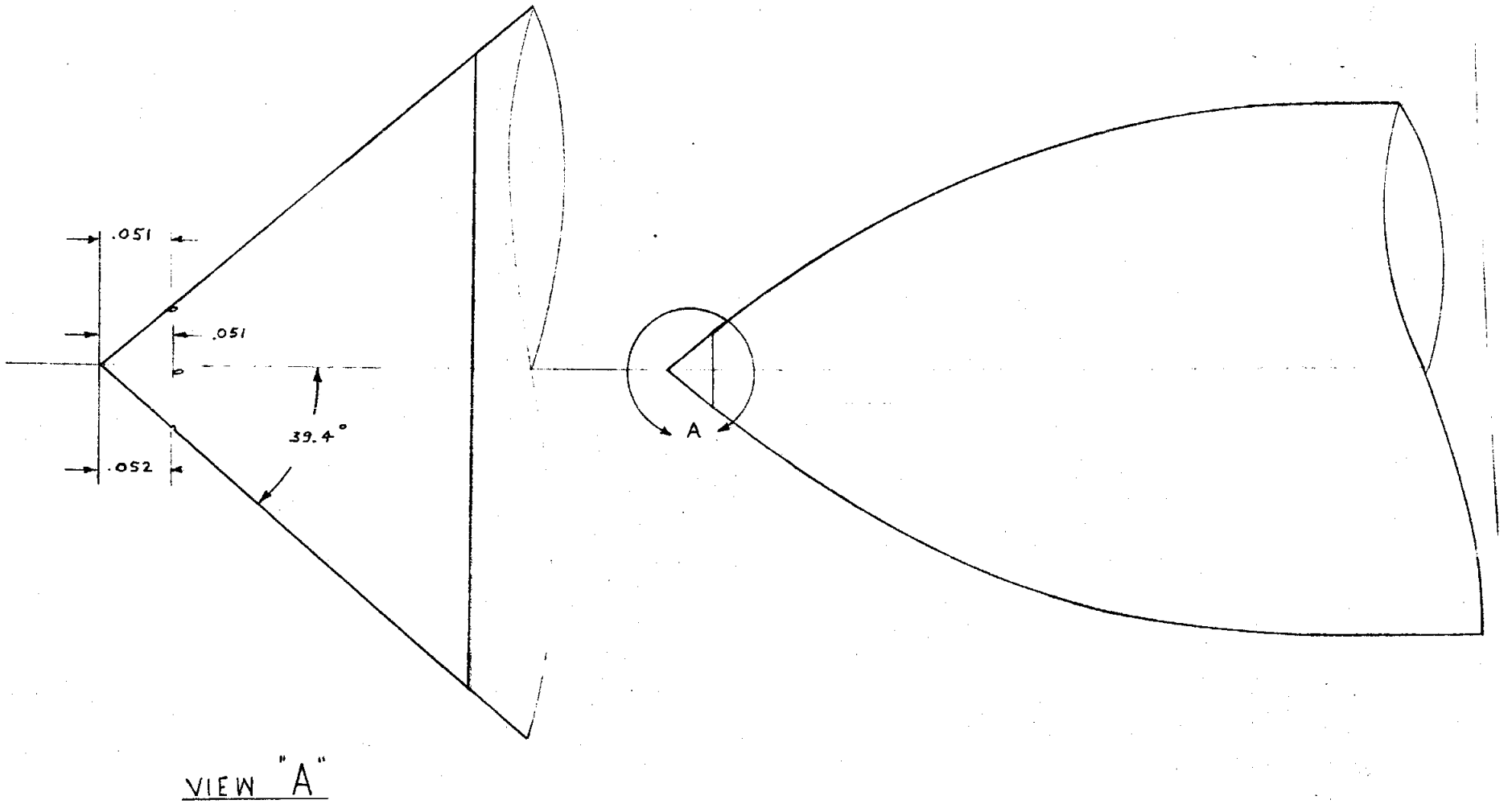
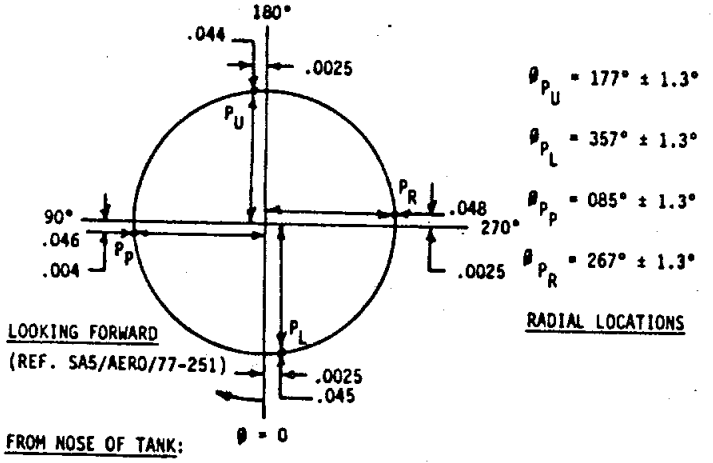


Figure 2. Detail of External Tank Nose Cap as Tested in IA181



$\phi_{P_U} = 177° \pm 1.3°$

$\phi_{P_L} = 357° \pm 1.3°$

$\phi_{P_P} = 085° \pm 1.3°$

$\phi_{P_R} = 267° \pm 1.3°$

RADIAL LOCATIONS

FROM NOSE OF TANK:

$X_U = 0.051"$, $X_{T_U} = 355"$, $\frac{X_U}{L_T} = 0.0069$

$X_L = 0.052"$, $X_{T_L} = 355$, $\frac{X_L}{L_T} = 0.00704$

$X_P = 0.051"$, $X_{T_P} = 355"$, $\frac{X_P}{L_T} = 0.0069$

$X_R = 0.055"$, $X_{T_R} = 356$, $\frac{X_R}{L_T} = 0.0074$

TOLERANCES:

$X_i = \pm 0.002"$, $X_{T_i} = \pm 0.5$, $\frac{X_i}{L_T} = \pm 0.00027$

FIGURE 3: MODEL 74-OTS ET NOSE PRESSURE TAP LOCATIONS

DATA FIGURES

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DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
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XMRP	.0000	INCHES
YMRP	.0000	INCHES
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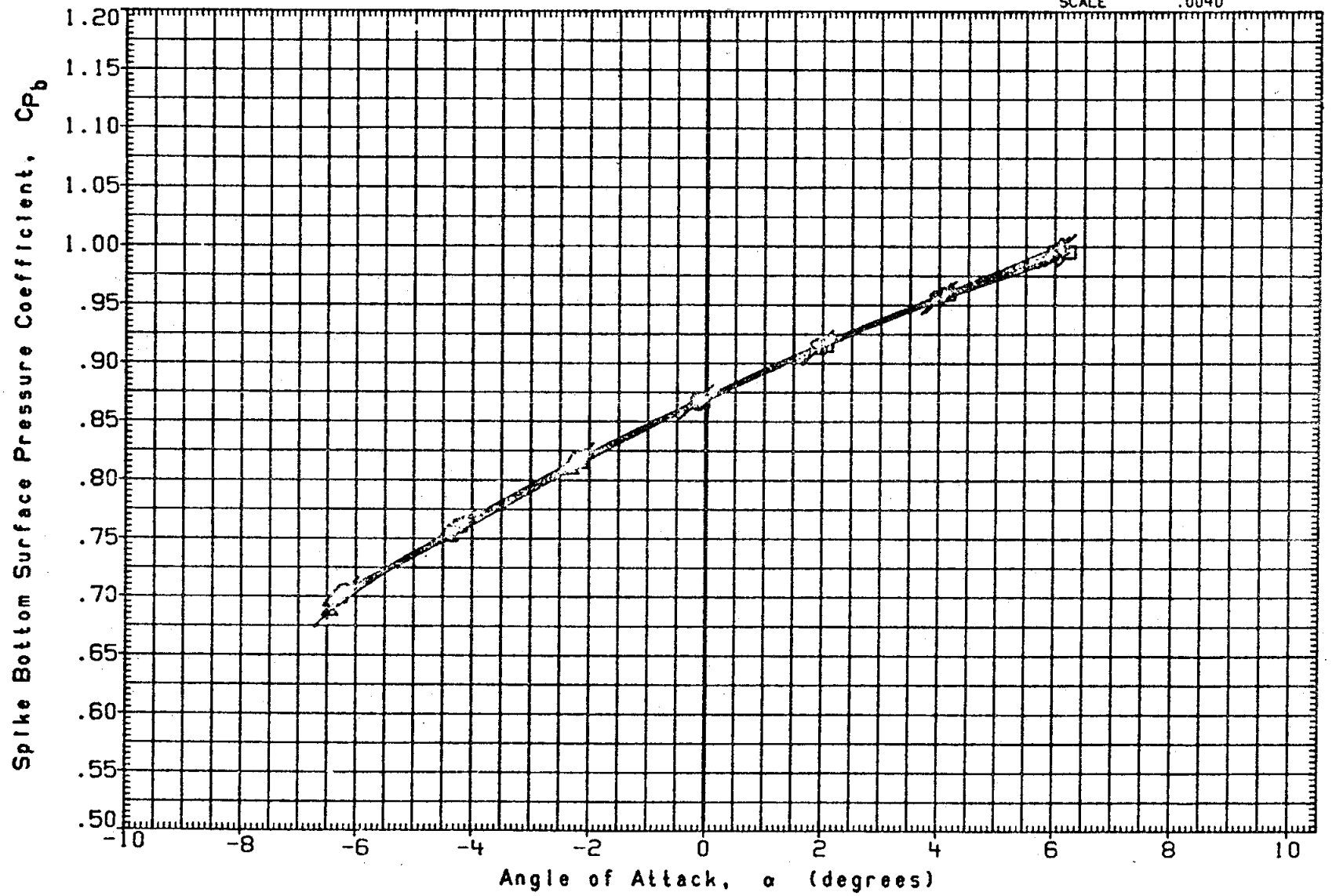

FIG. 1(A) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
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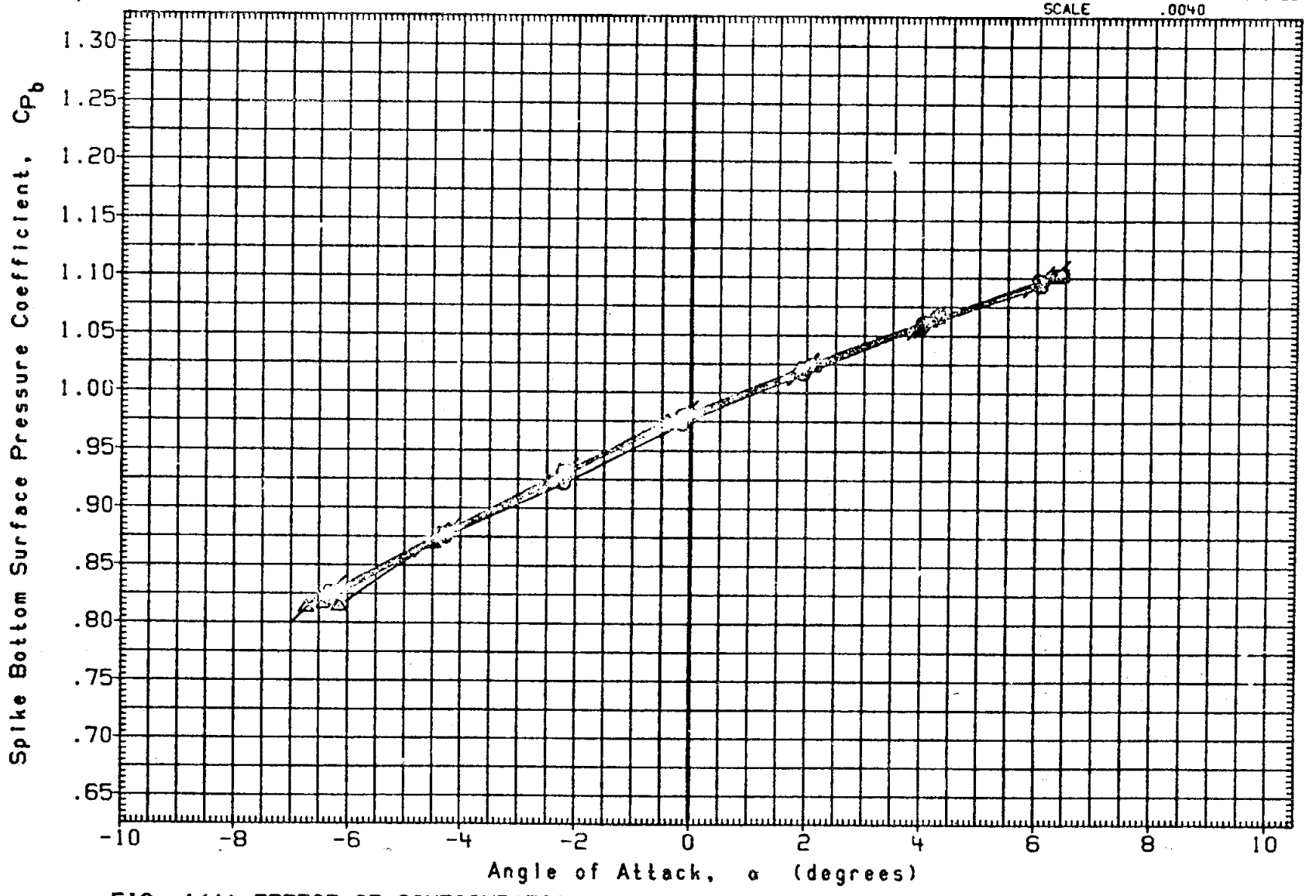

FIG. 1(A) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊘	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
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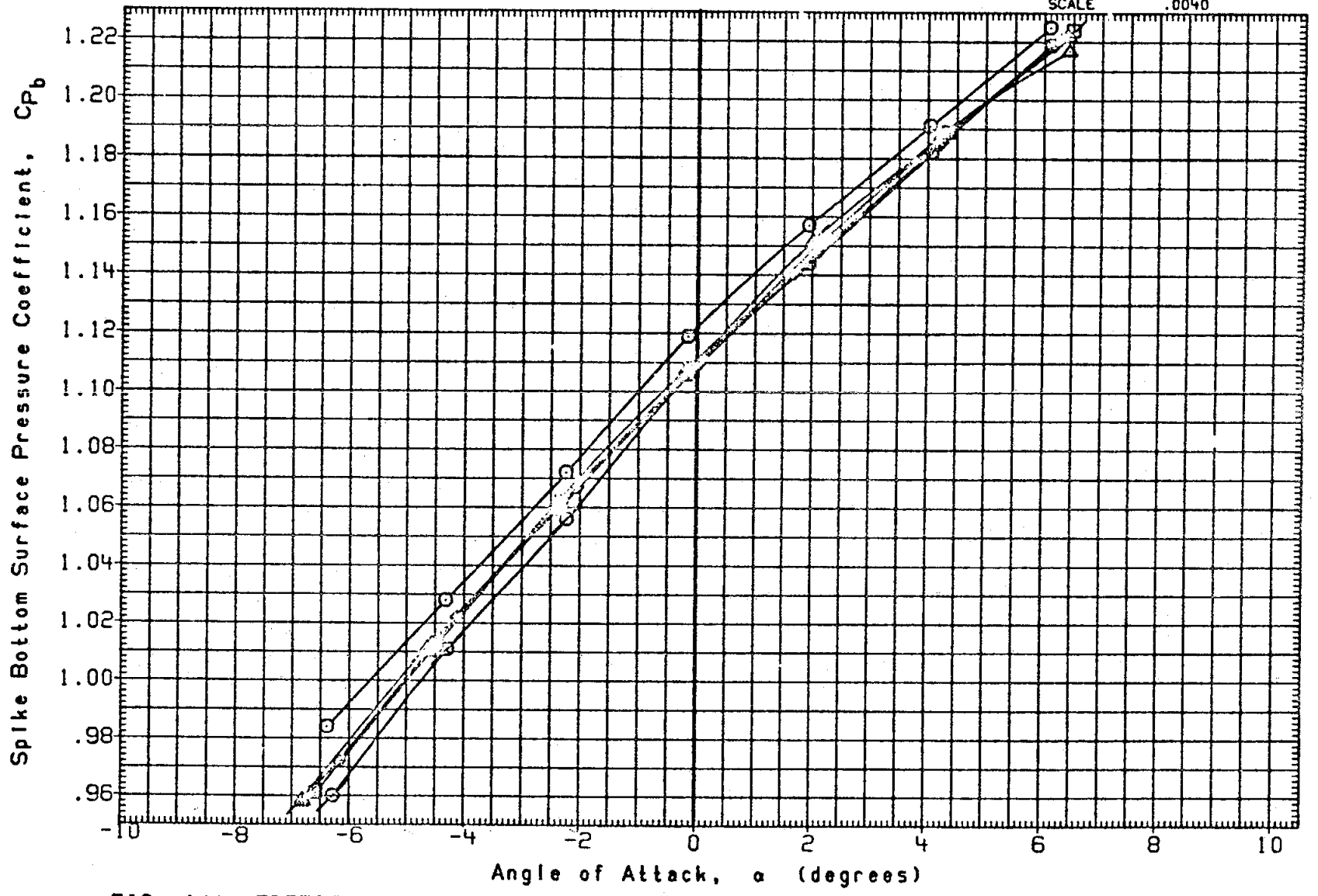

FIG. 1(A) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- 0 T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊘	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
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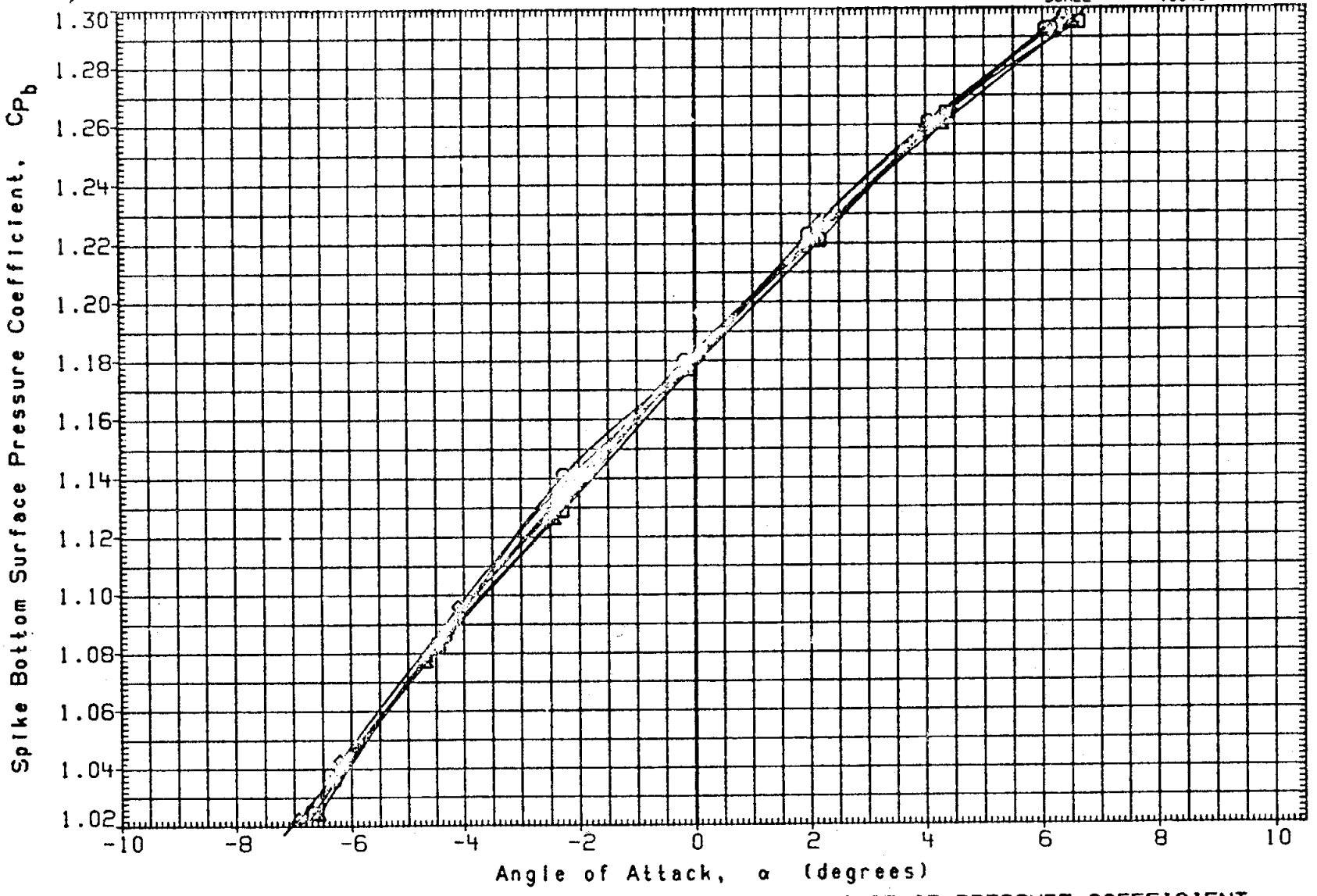

FIG. 1(A) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
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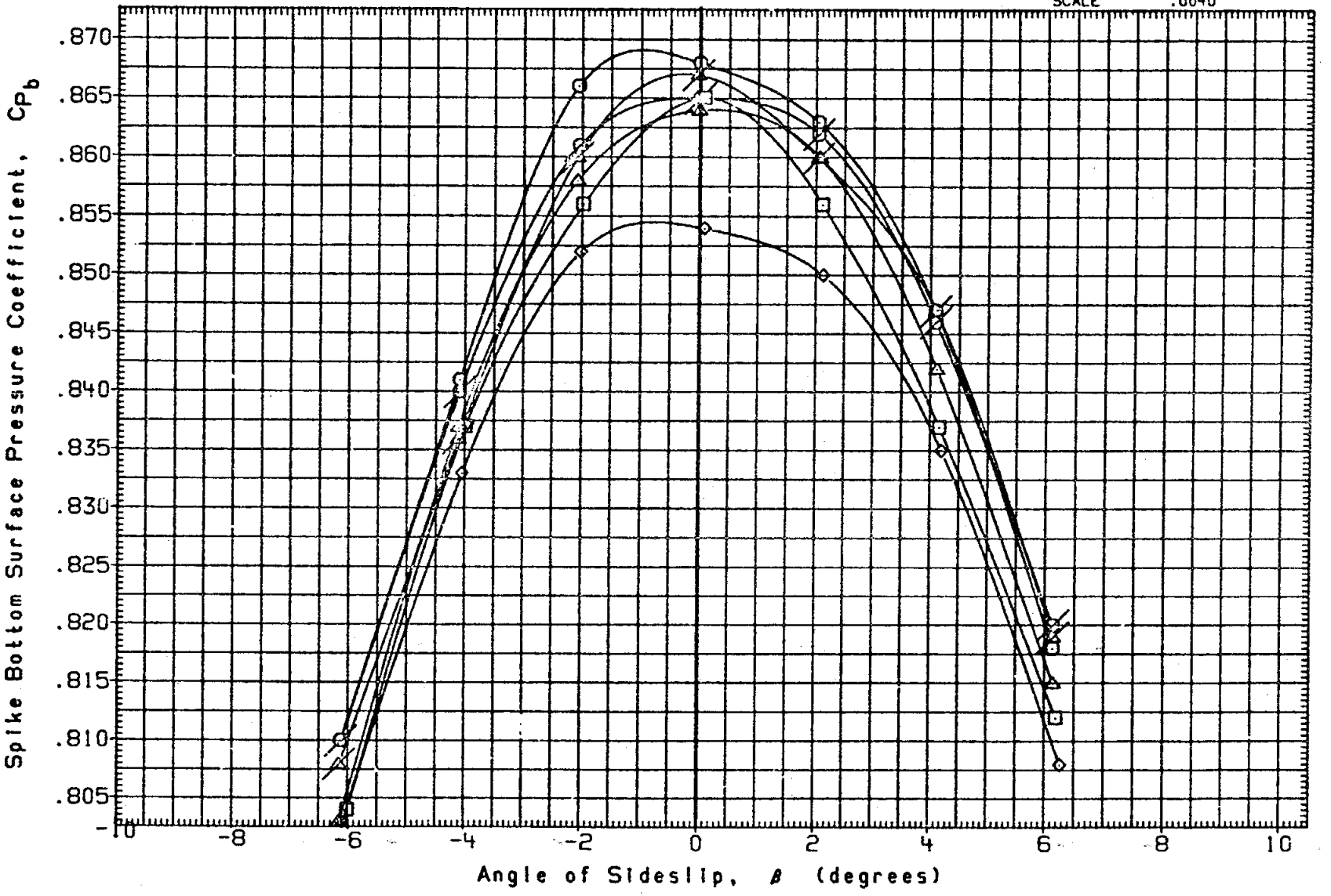

FIG. 1(B) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION

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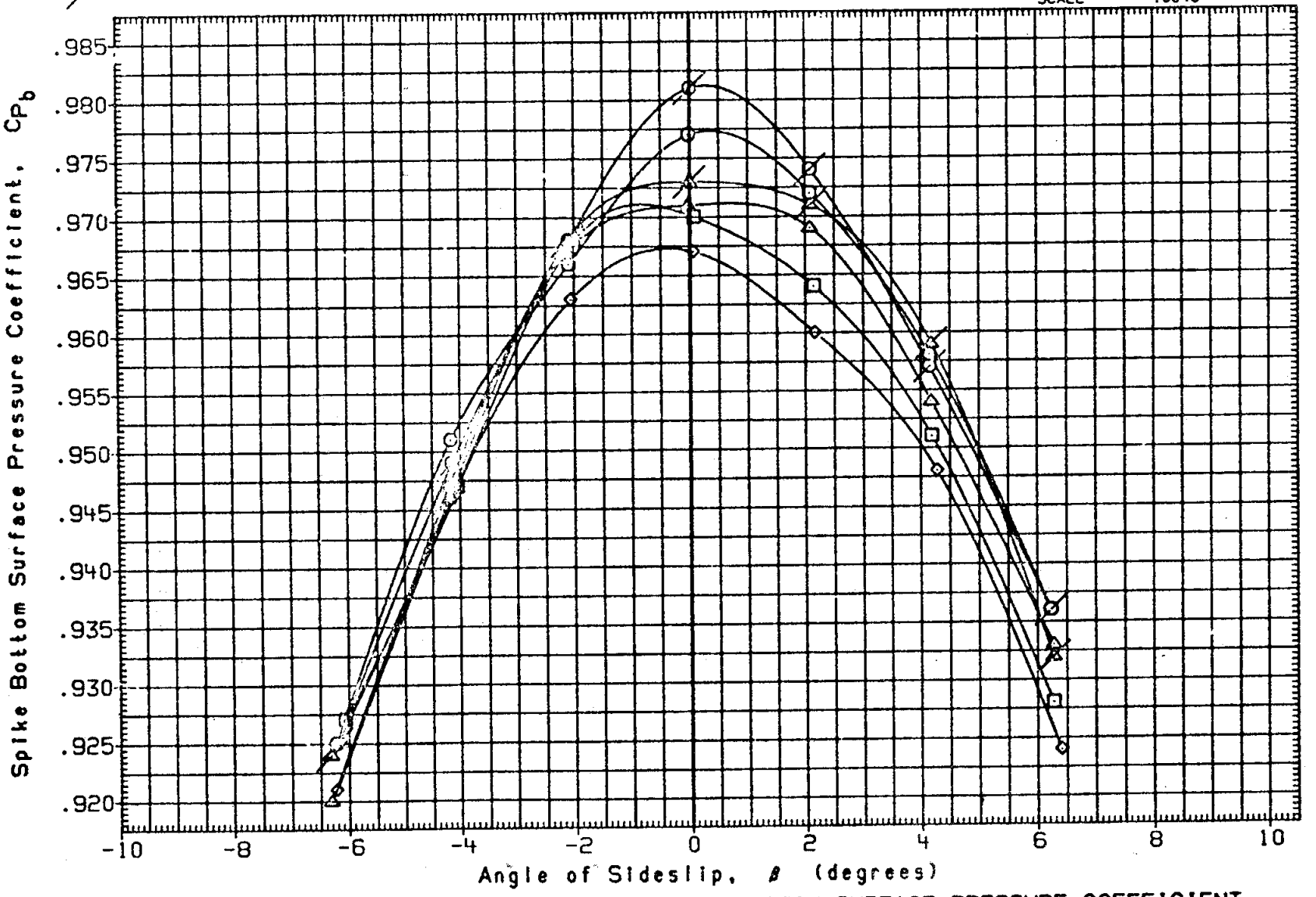

FIG. 1(B) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊘	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
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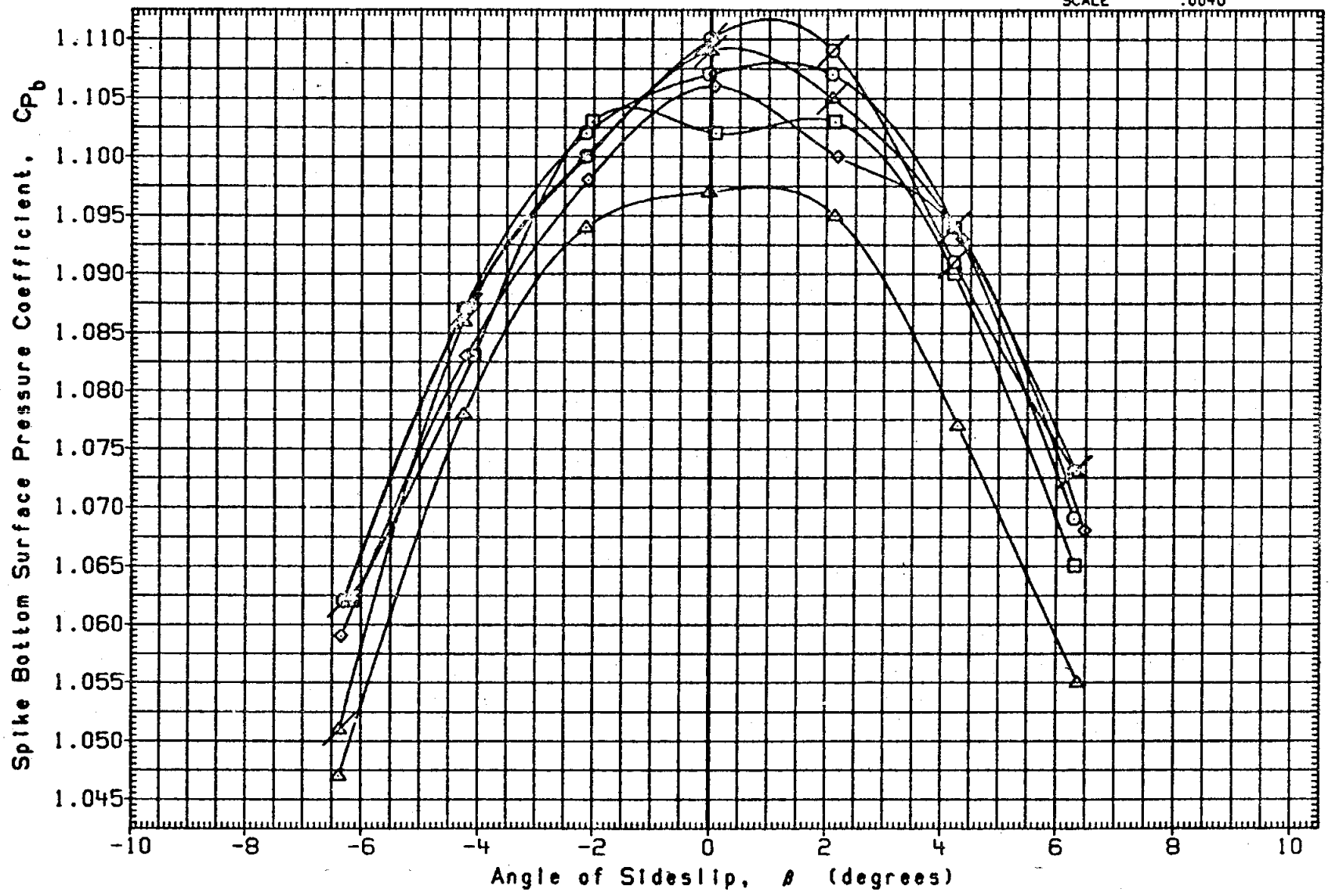

FIG. 1(B) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
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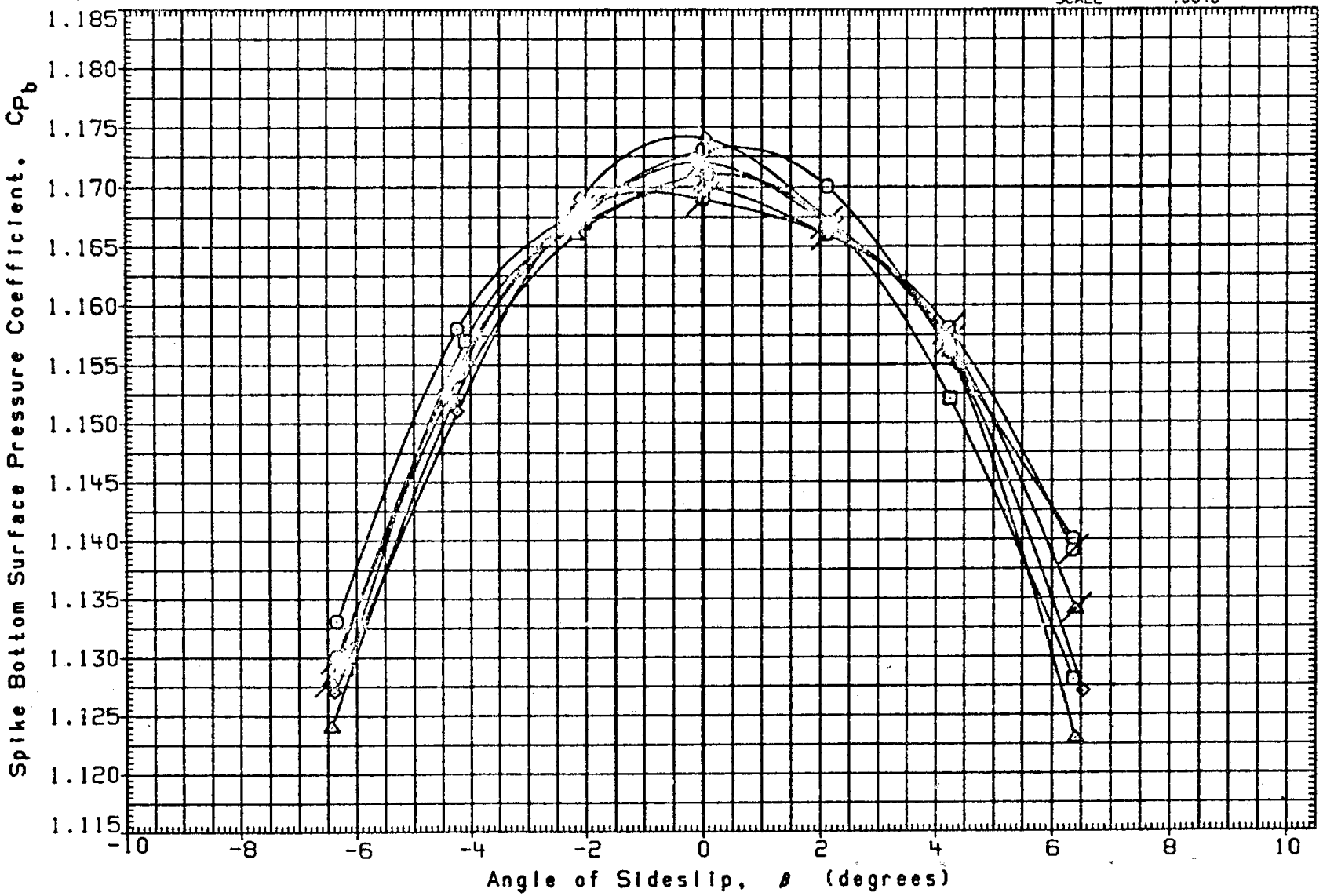

FIG. 1(B) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
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XMRP	.0000	INCHES
YMRP	.0000	INCHES
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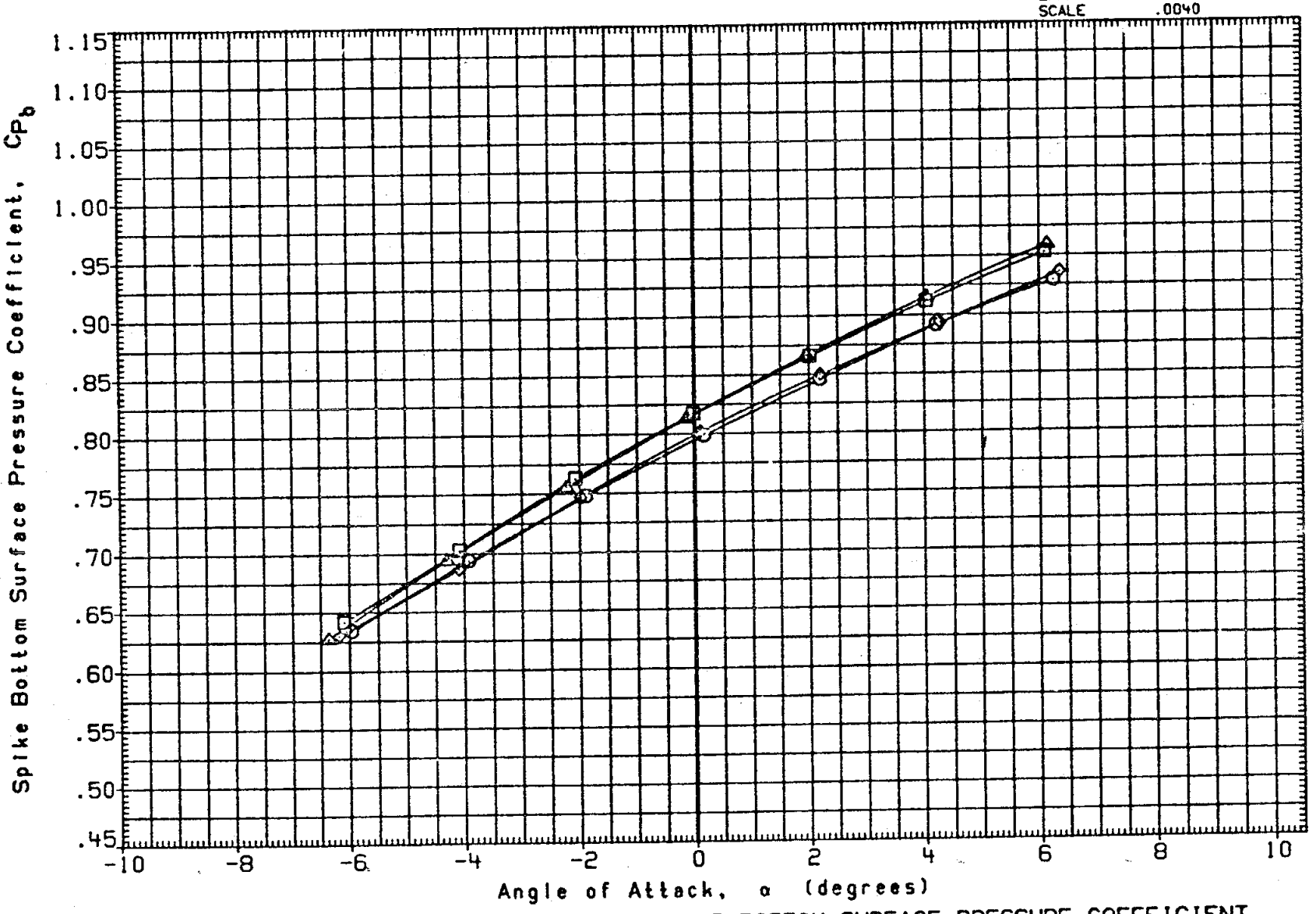

FIG. 1(C) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
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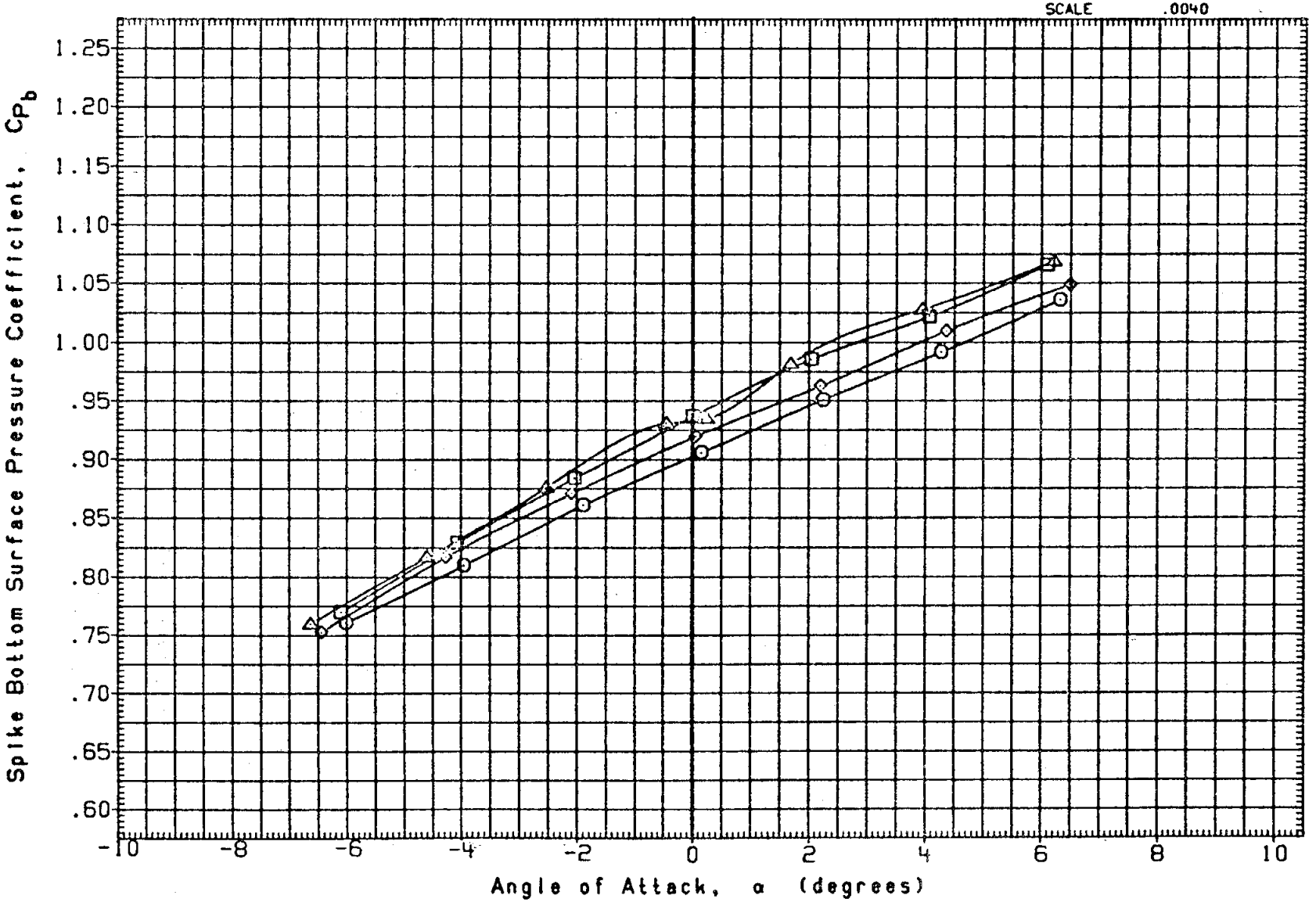

FIG. 1(C) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

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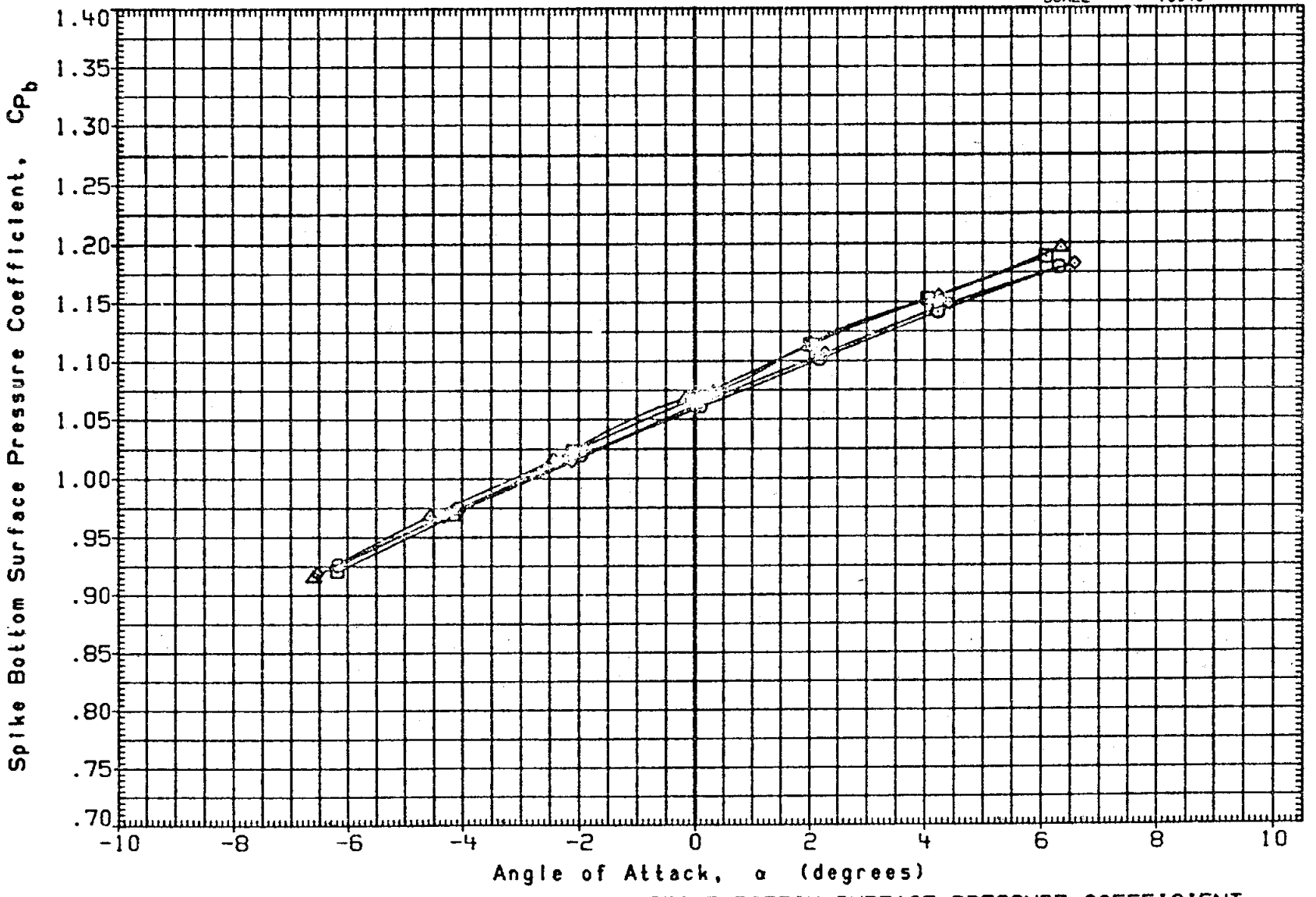

FIG. 1(C) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION

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LREF	.0000	INCHES
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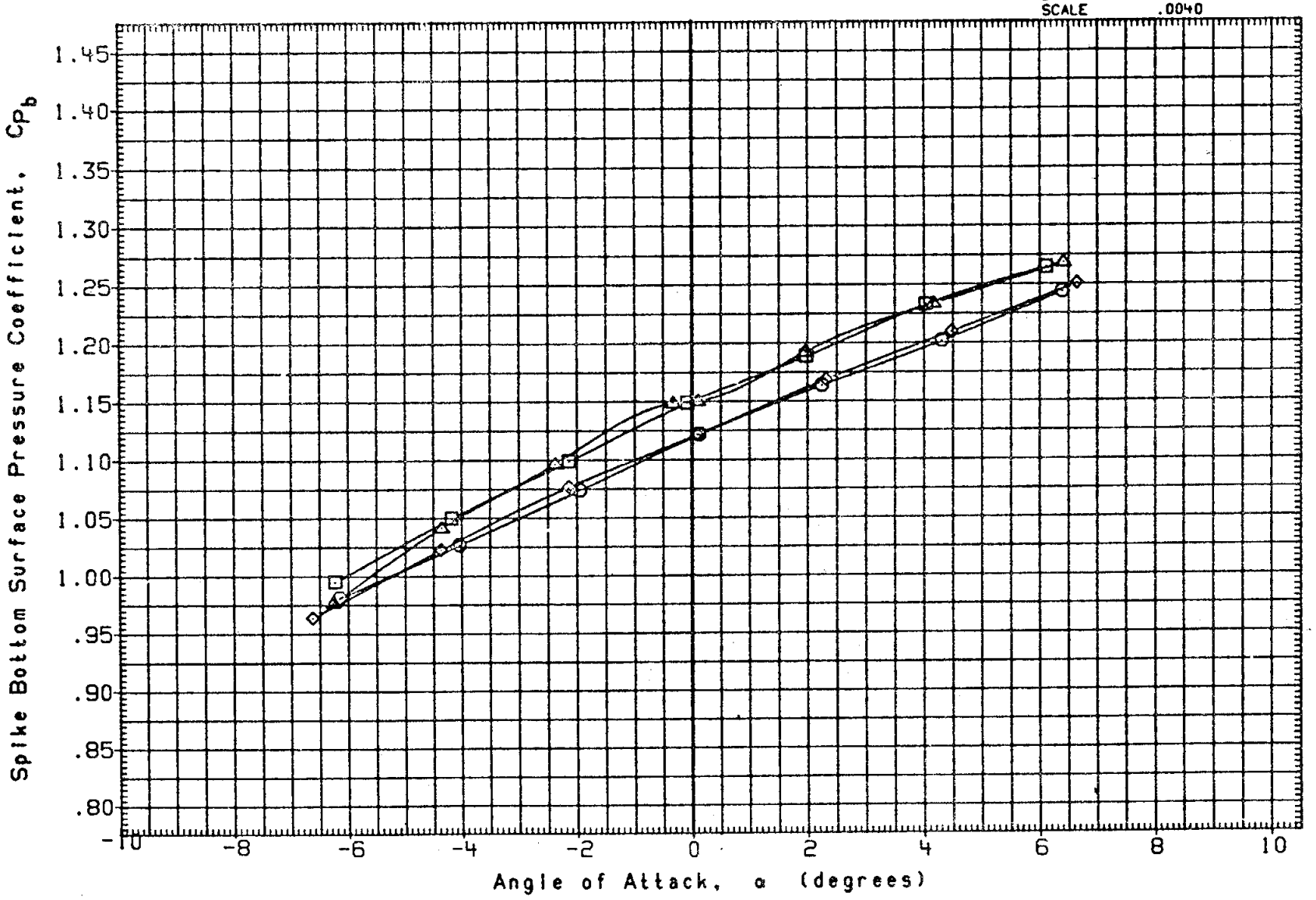

FIG. 1(C) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION		
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SCALE	.0040	

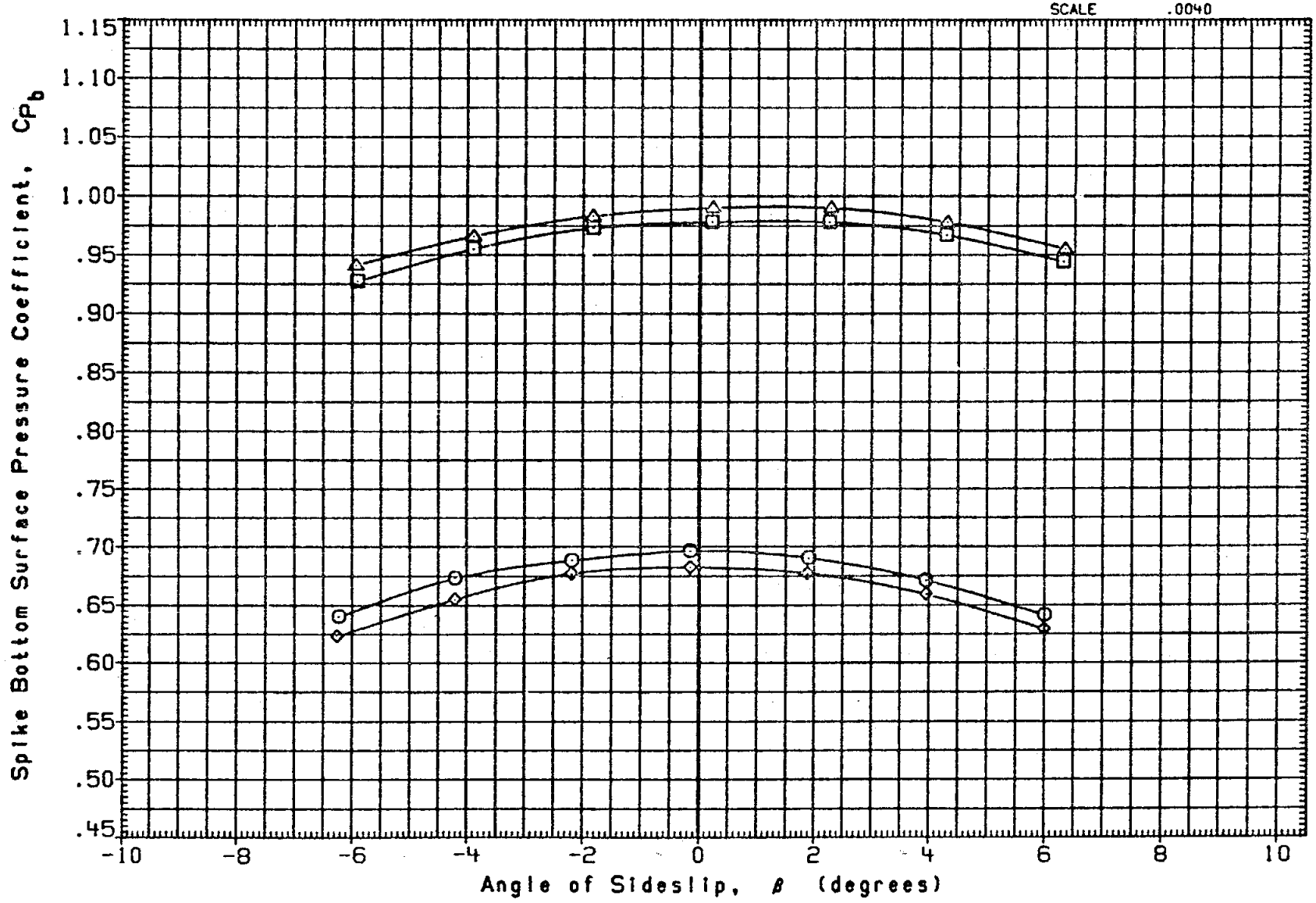

FIG. 1(D) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

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YMRP	.0000	INCHES
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SCALE	.0040	

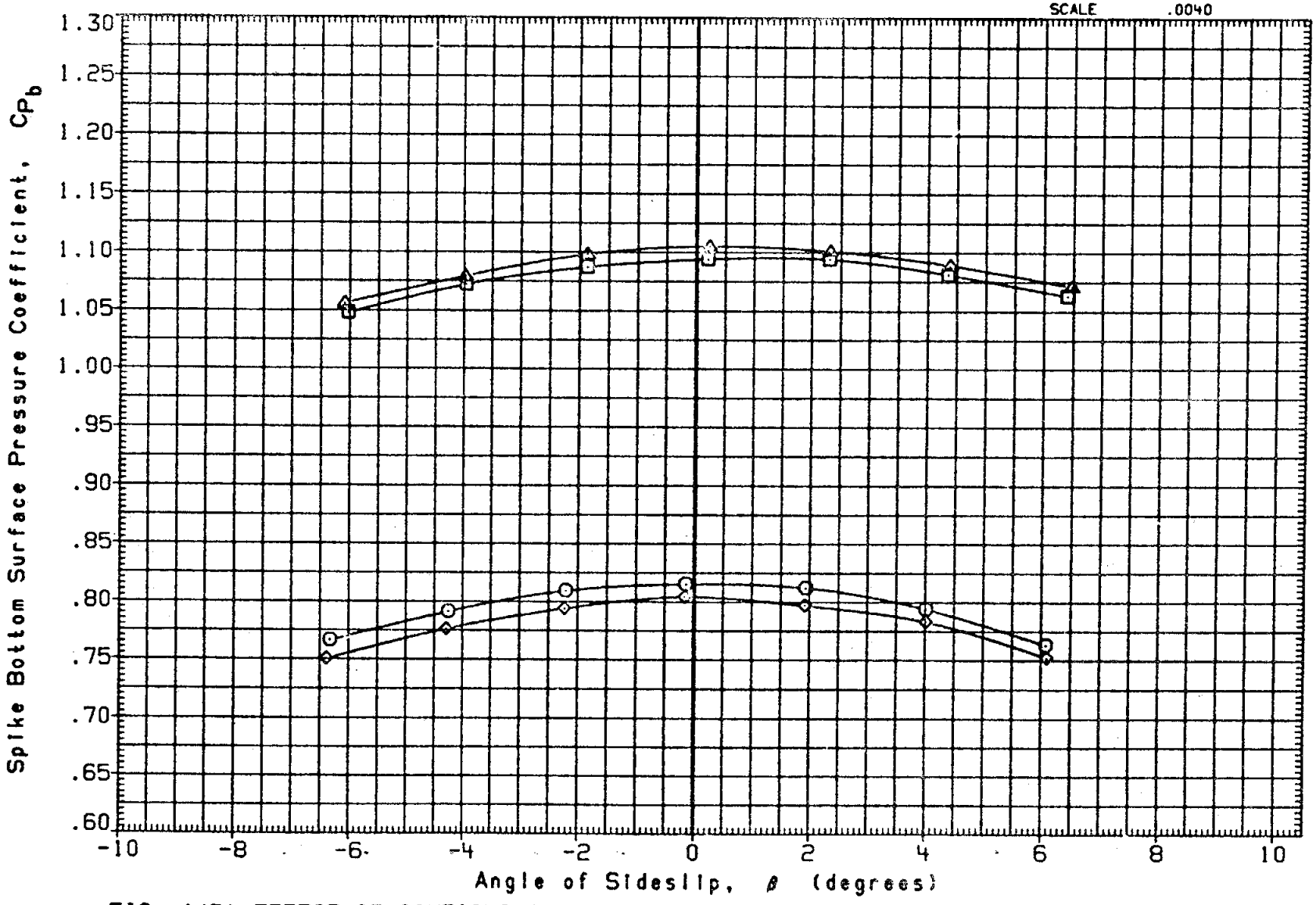

FIG. 1(D) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

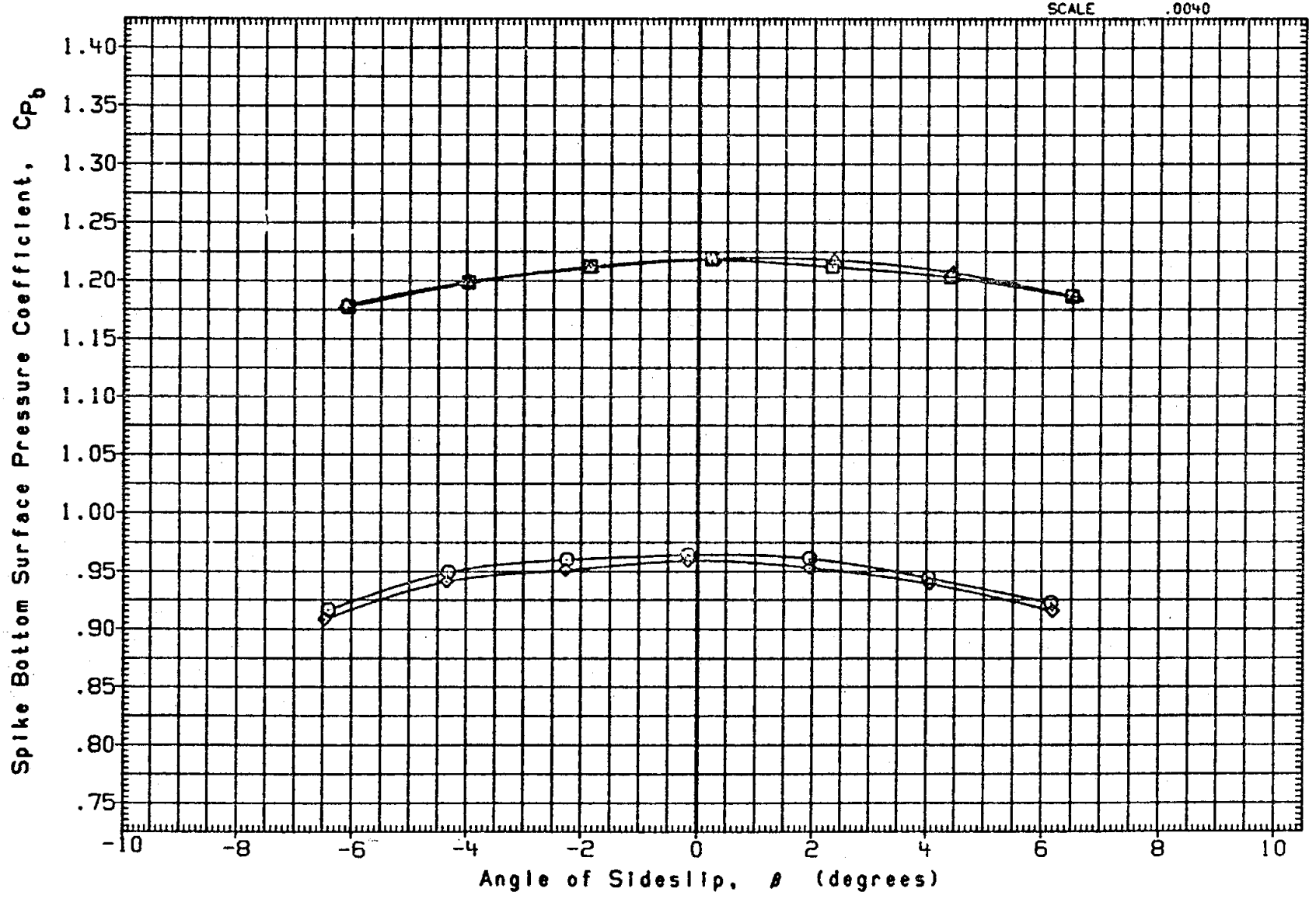

FIG. 1(D) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

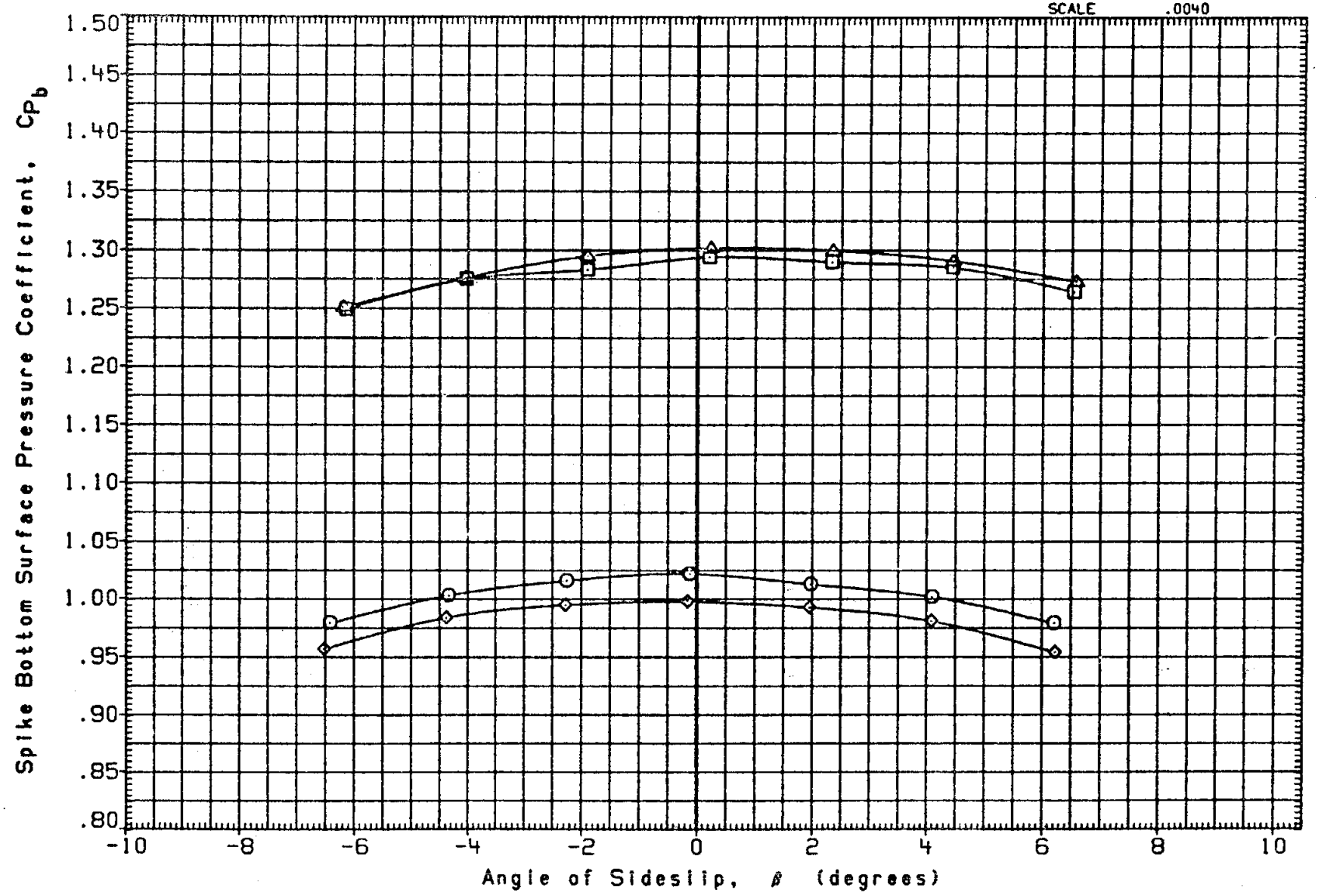

FIG. 1(D) EFFECT OF CONFIGURATION ON SPIKE BOTTOM SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊘	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

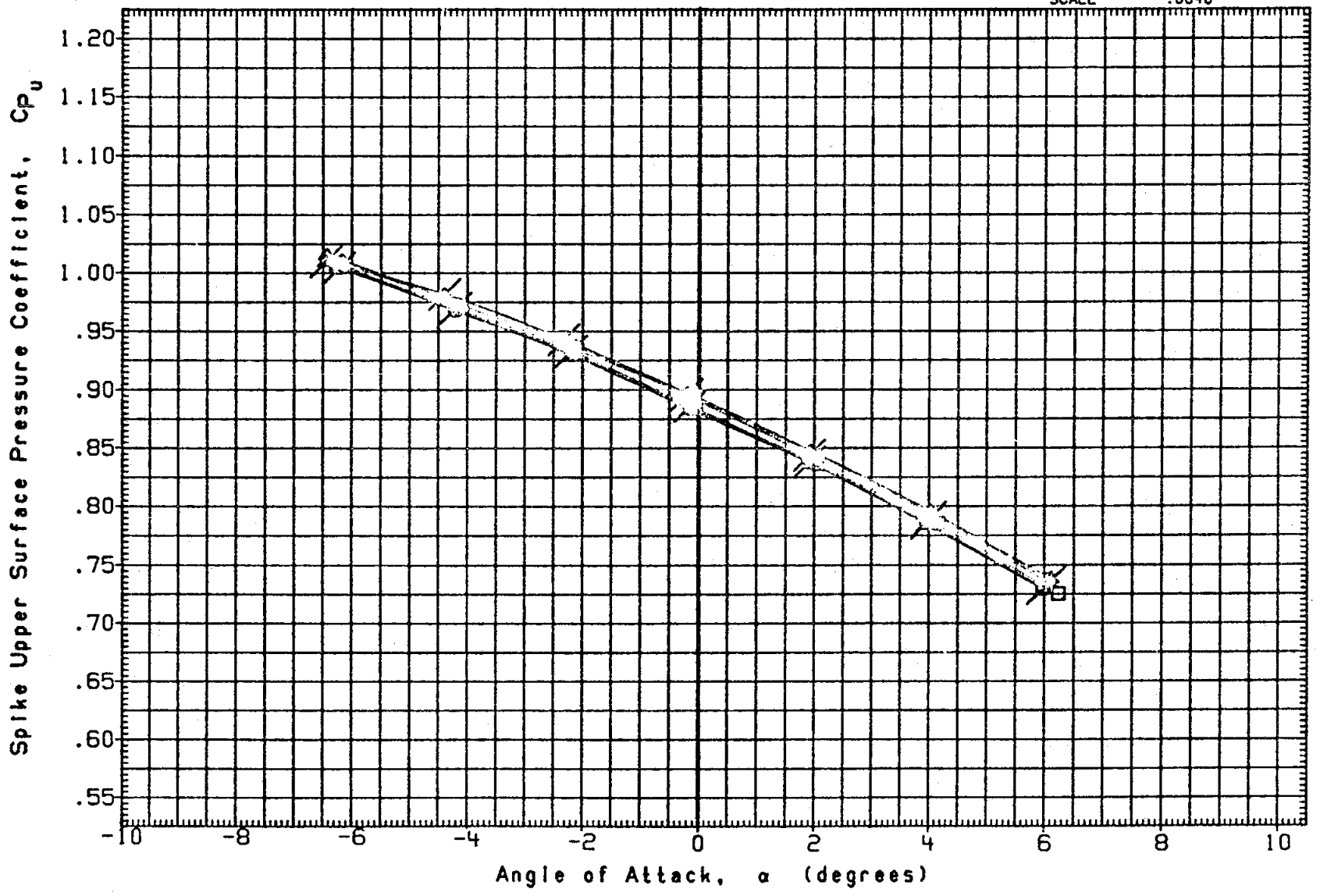

FIG. 2(A) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T (AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T (AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S (AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T (AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S (AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S (AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

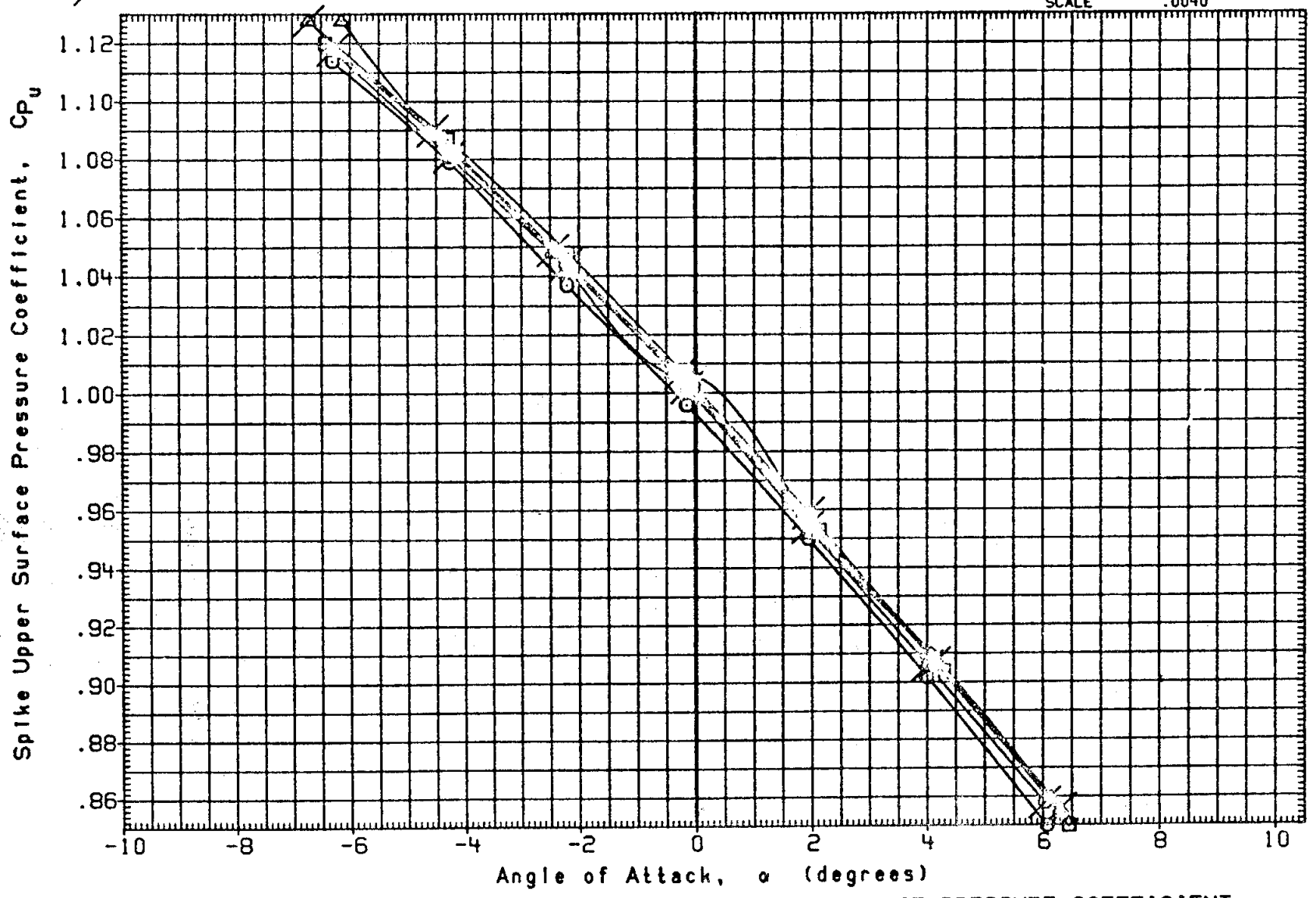

FIG. 2(A) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊘	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

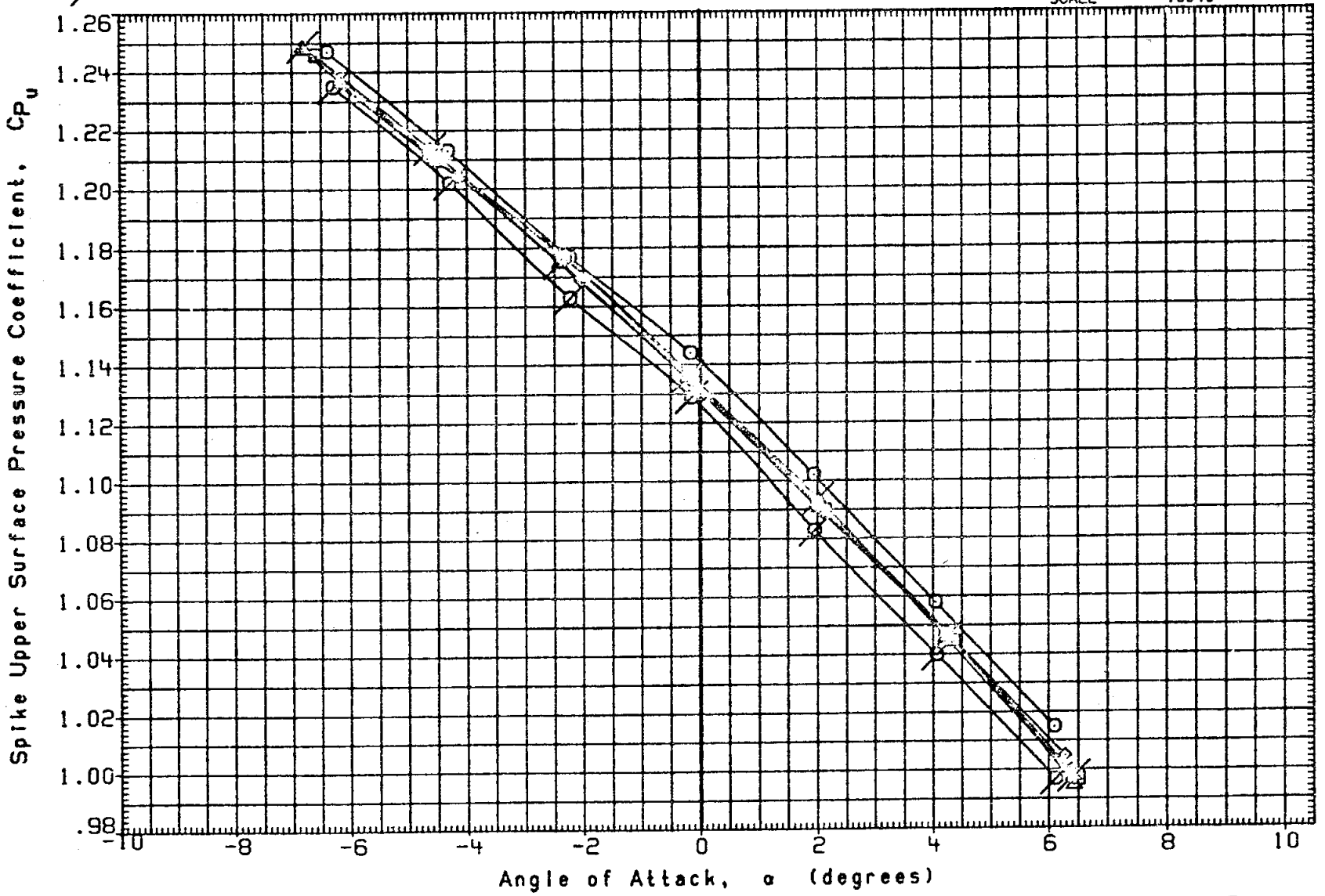

FIG. 2(A) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ. IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

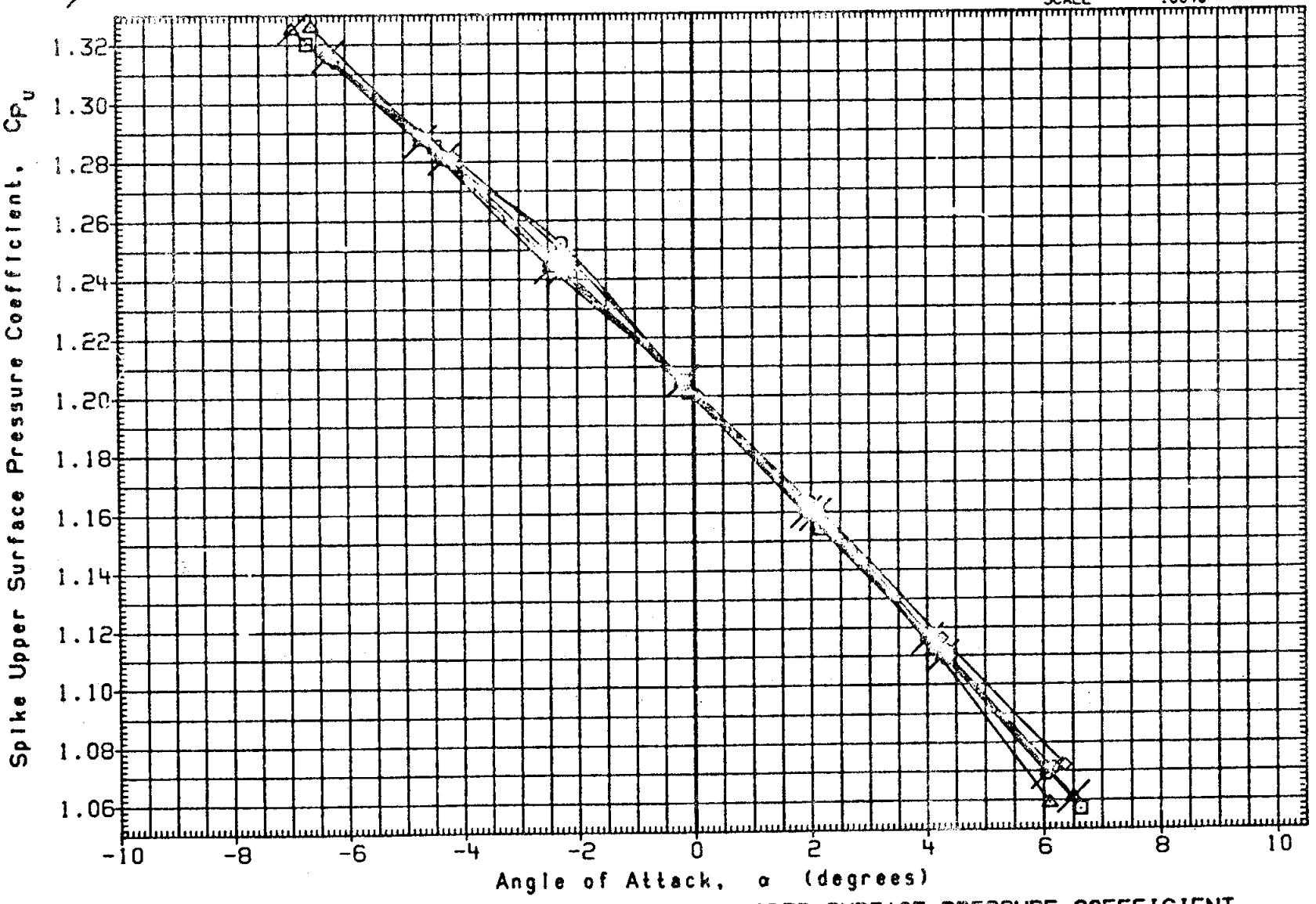

FIG. 2(A) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊘	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

FIG. 2(B) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- 0 T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

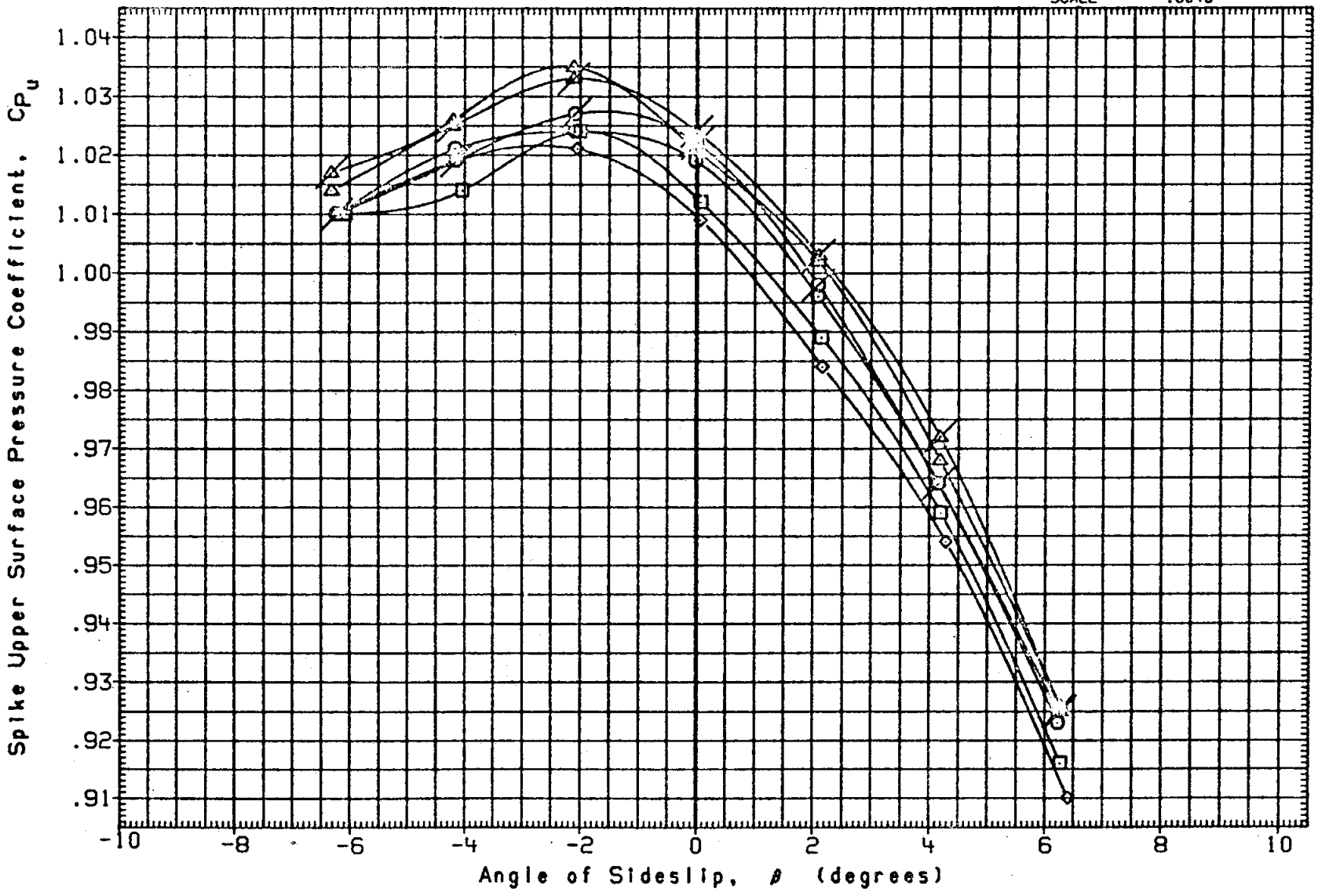

FIG. 2(B) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

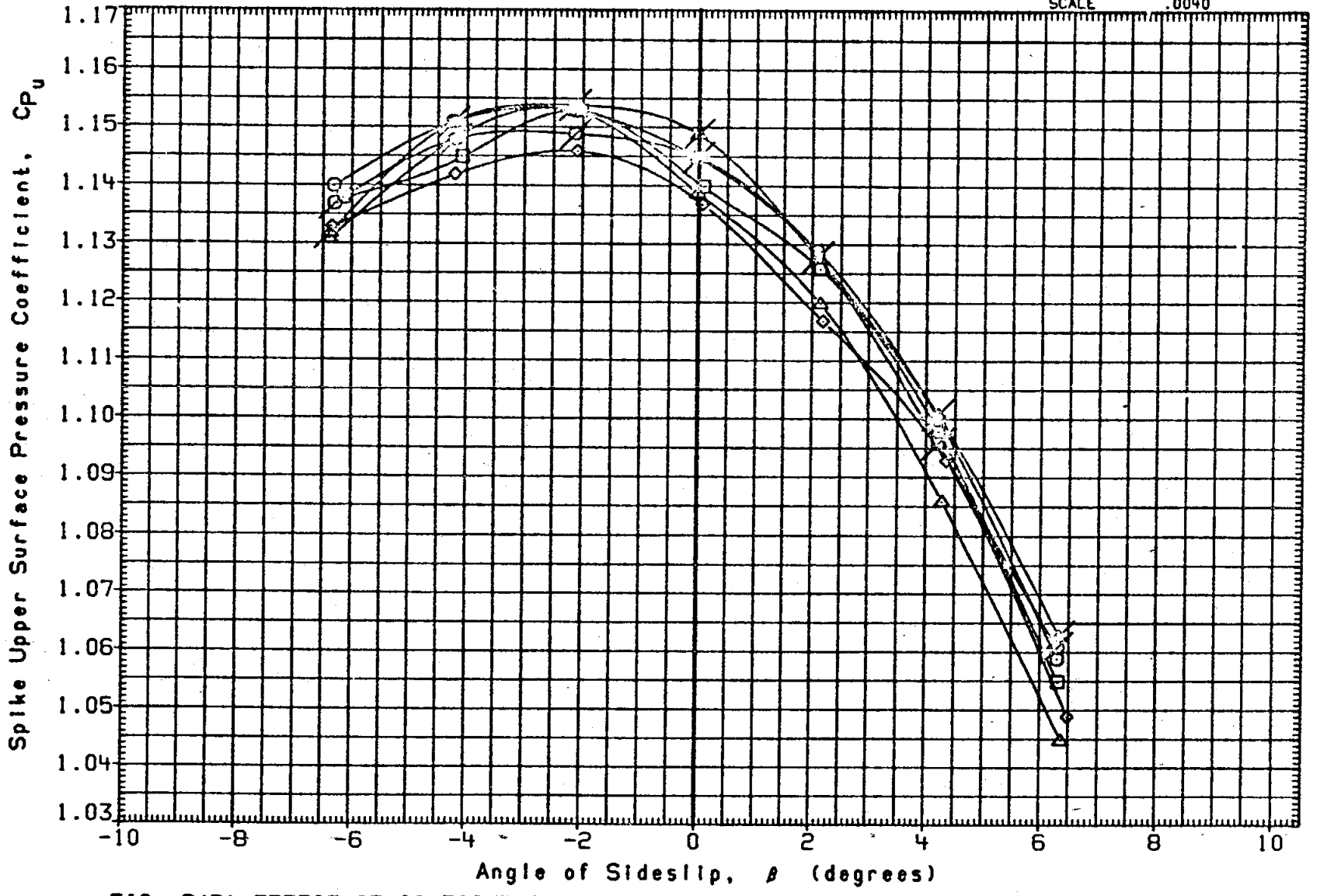

FIG. 2(B) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊘	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

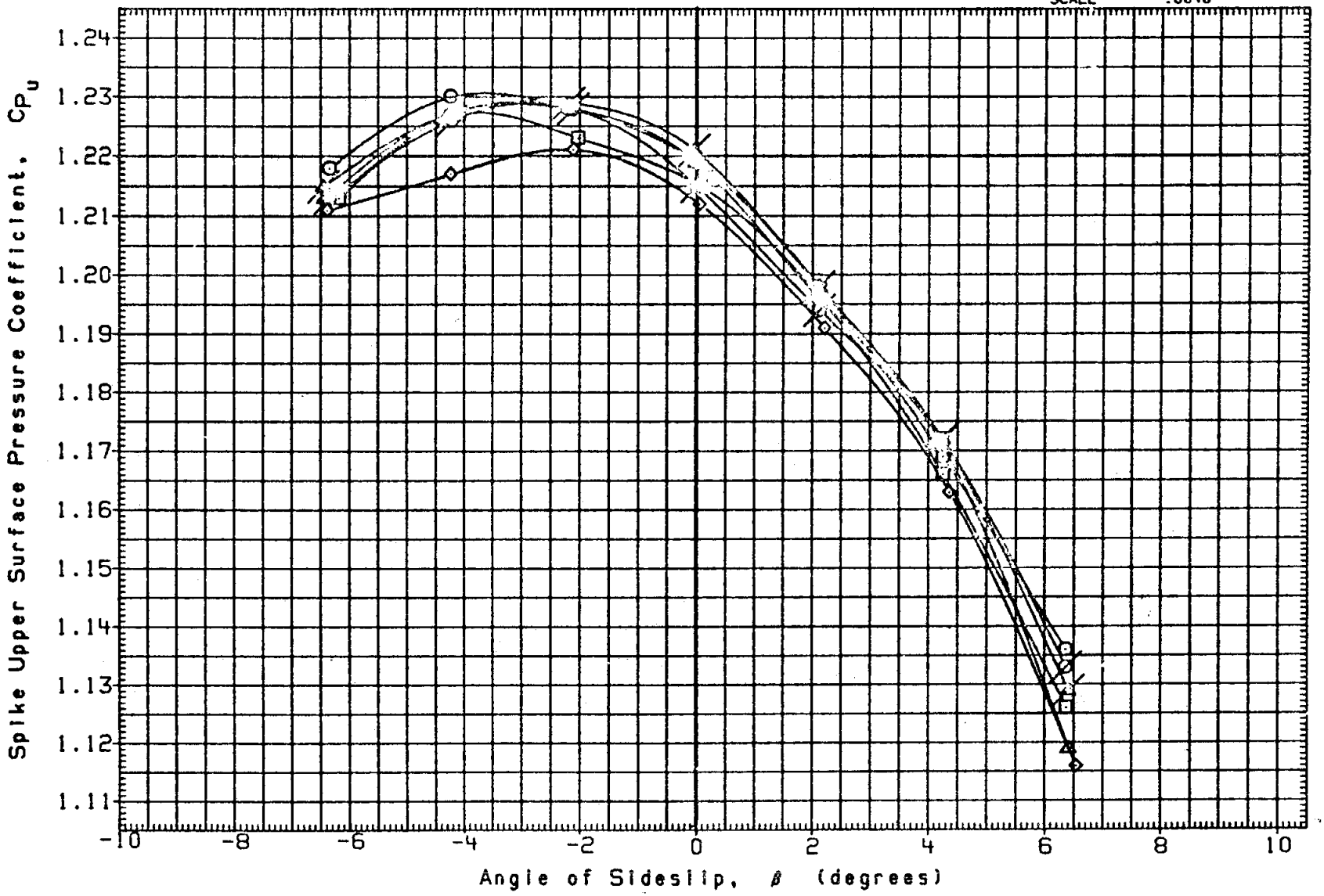

FIG. 2(B) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

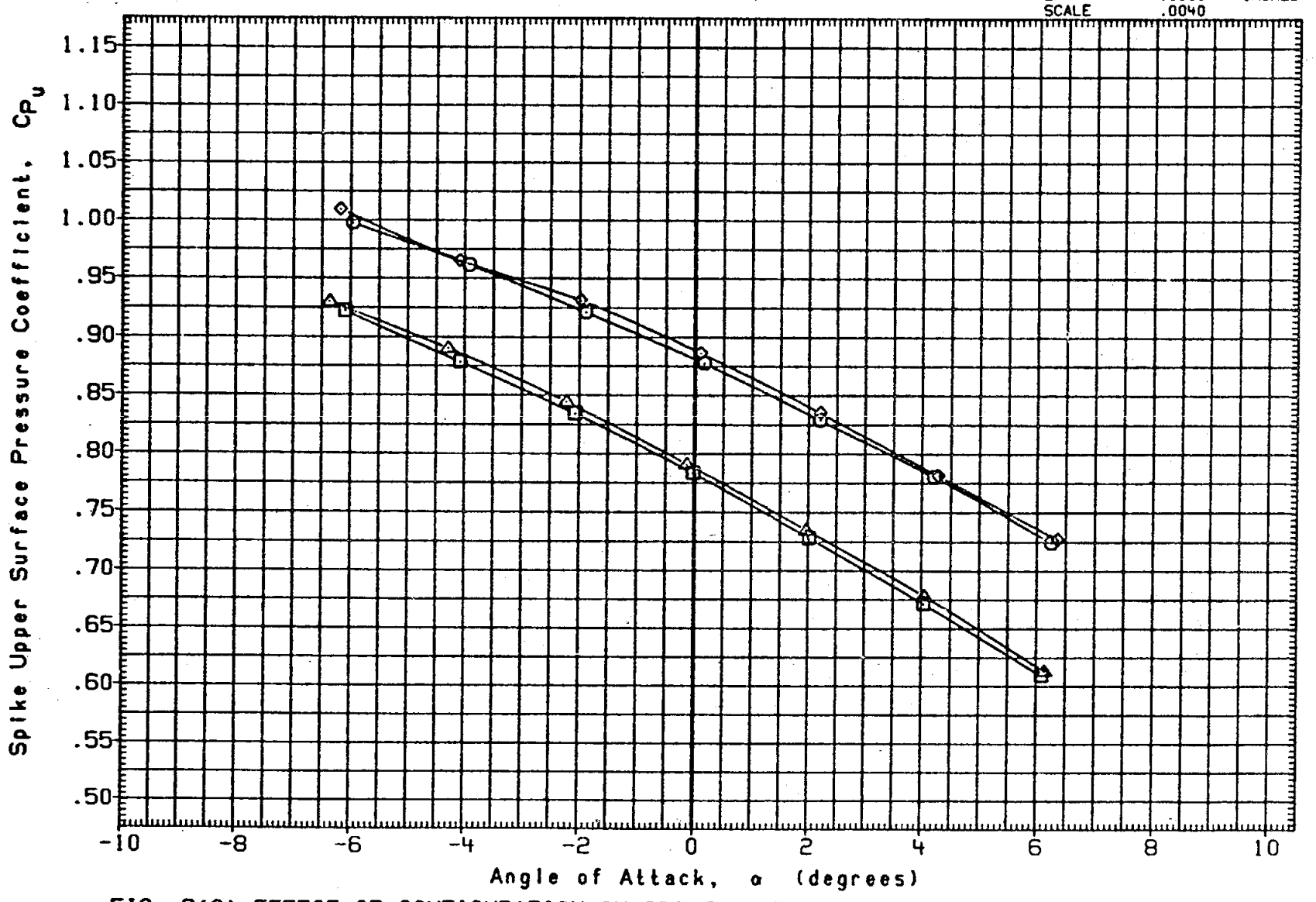

FIG. 2(C) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

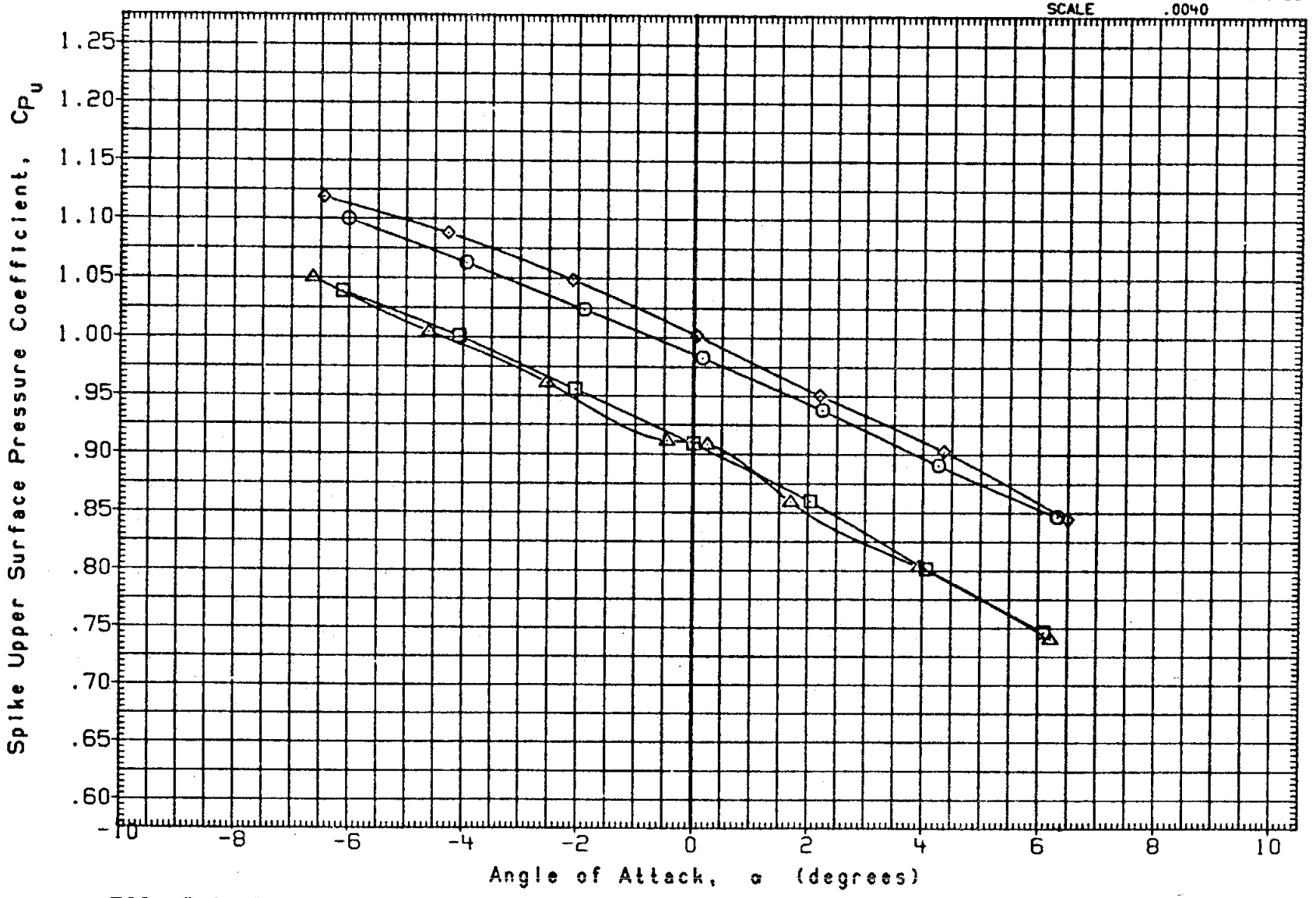

FIG. 2(C) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA1B1, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA1B1, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA1B1, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA1B1, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

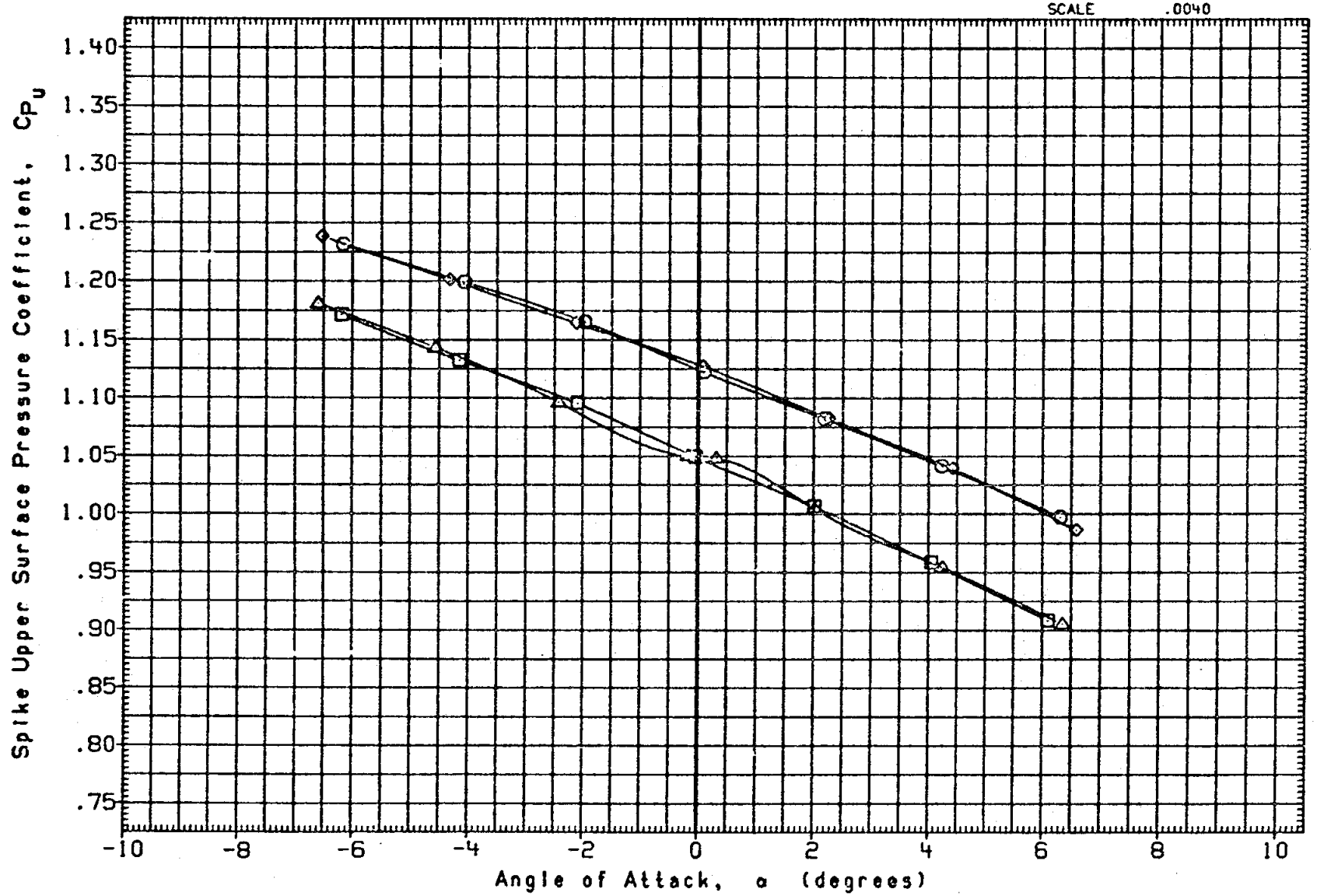

FIG. 2(C) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

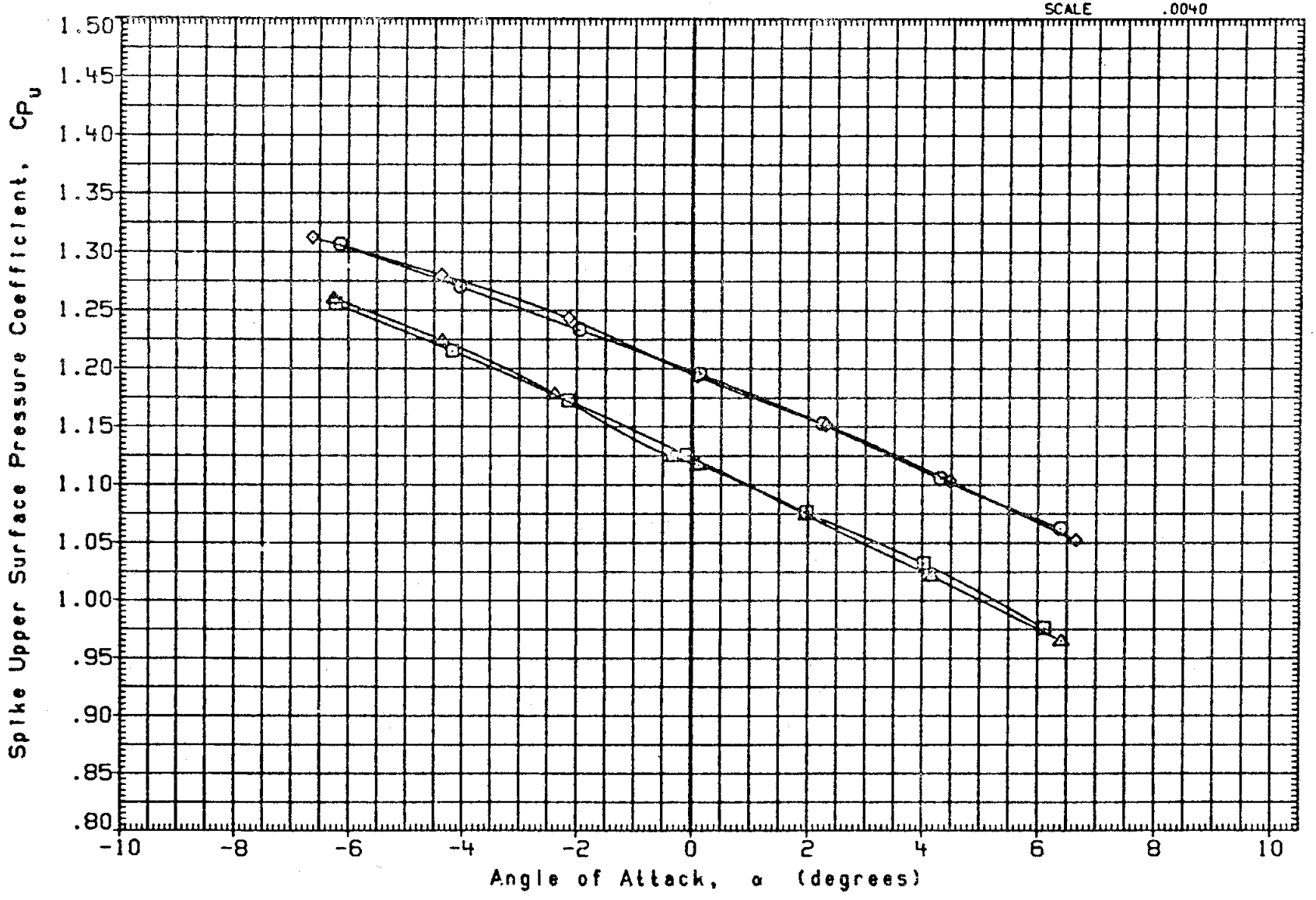

FIG. 2(C) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

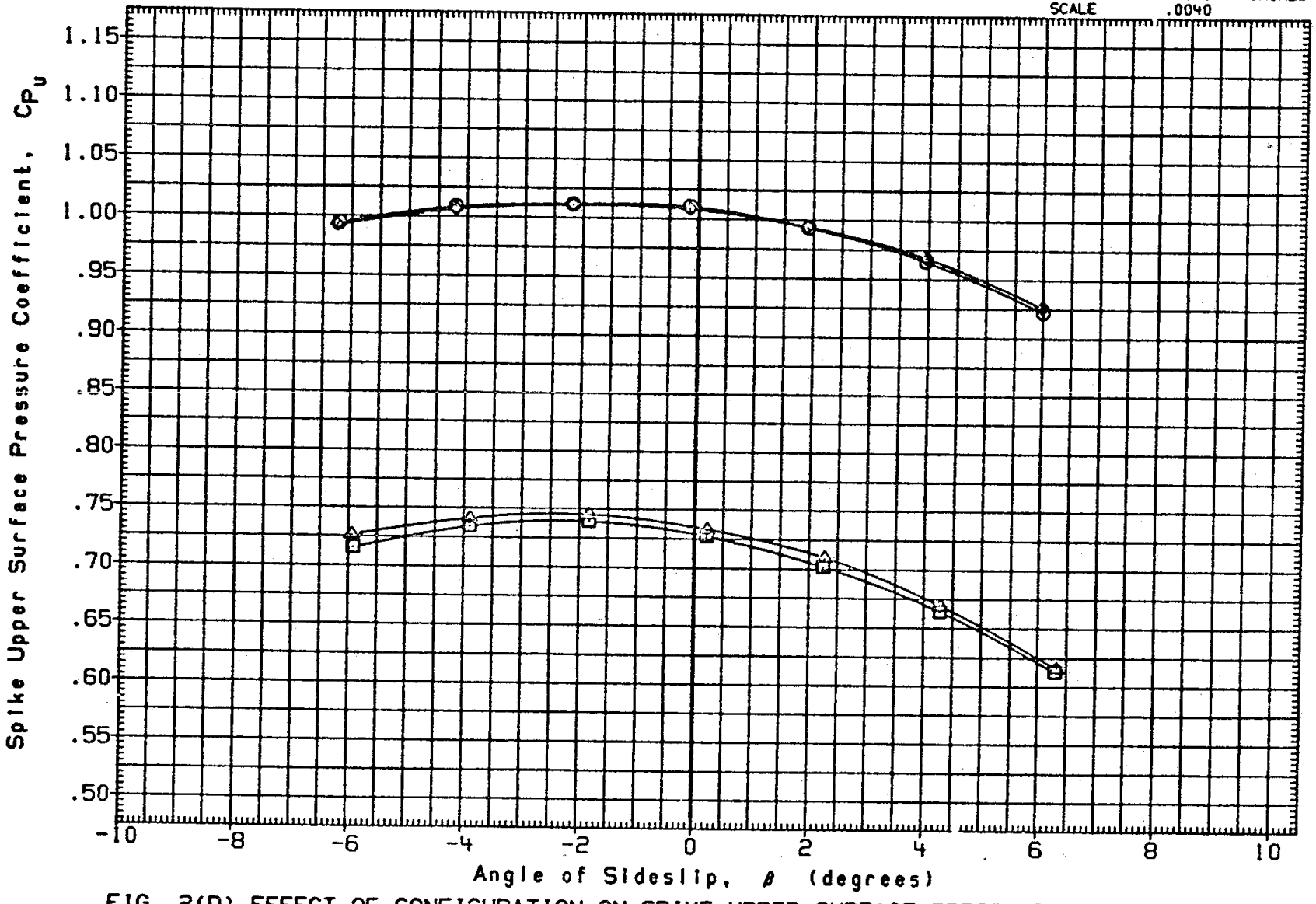

FIG. 2(D) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

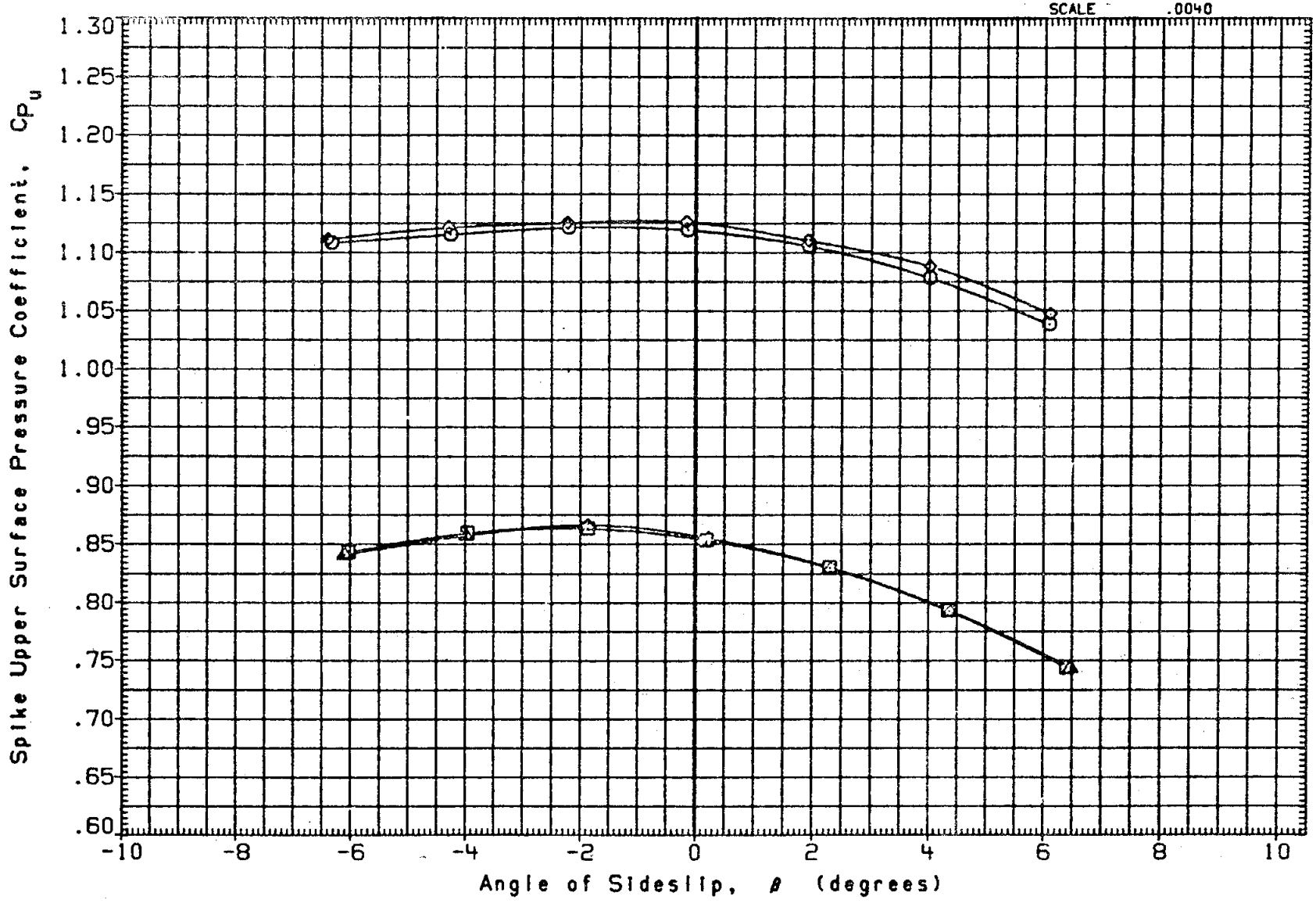

FIG. 2(D) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

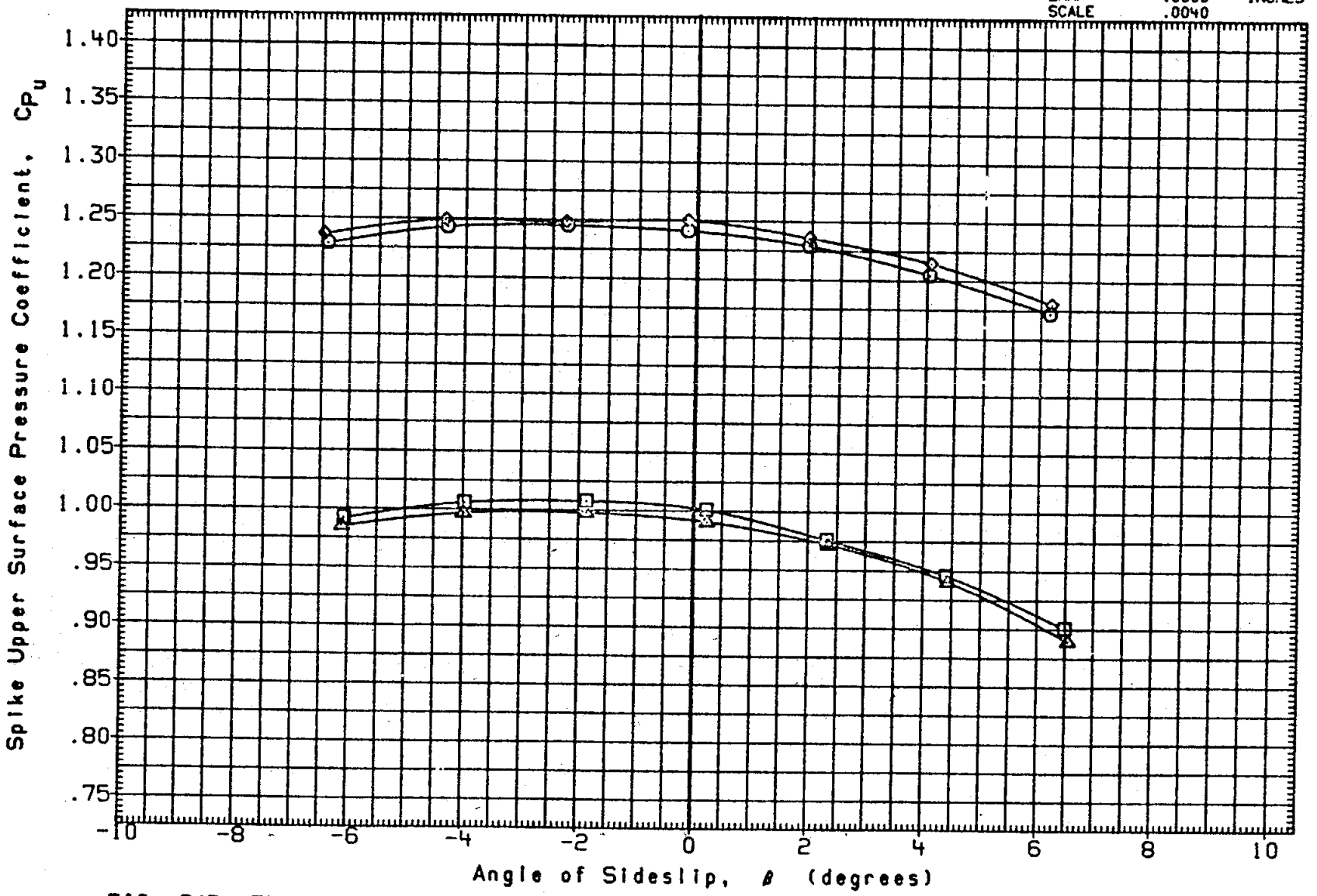

FIG. 2(D) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

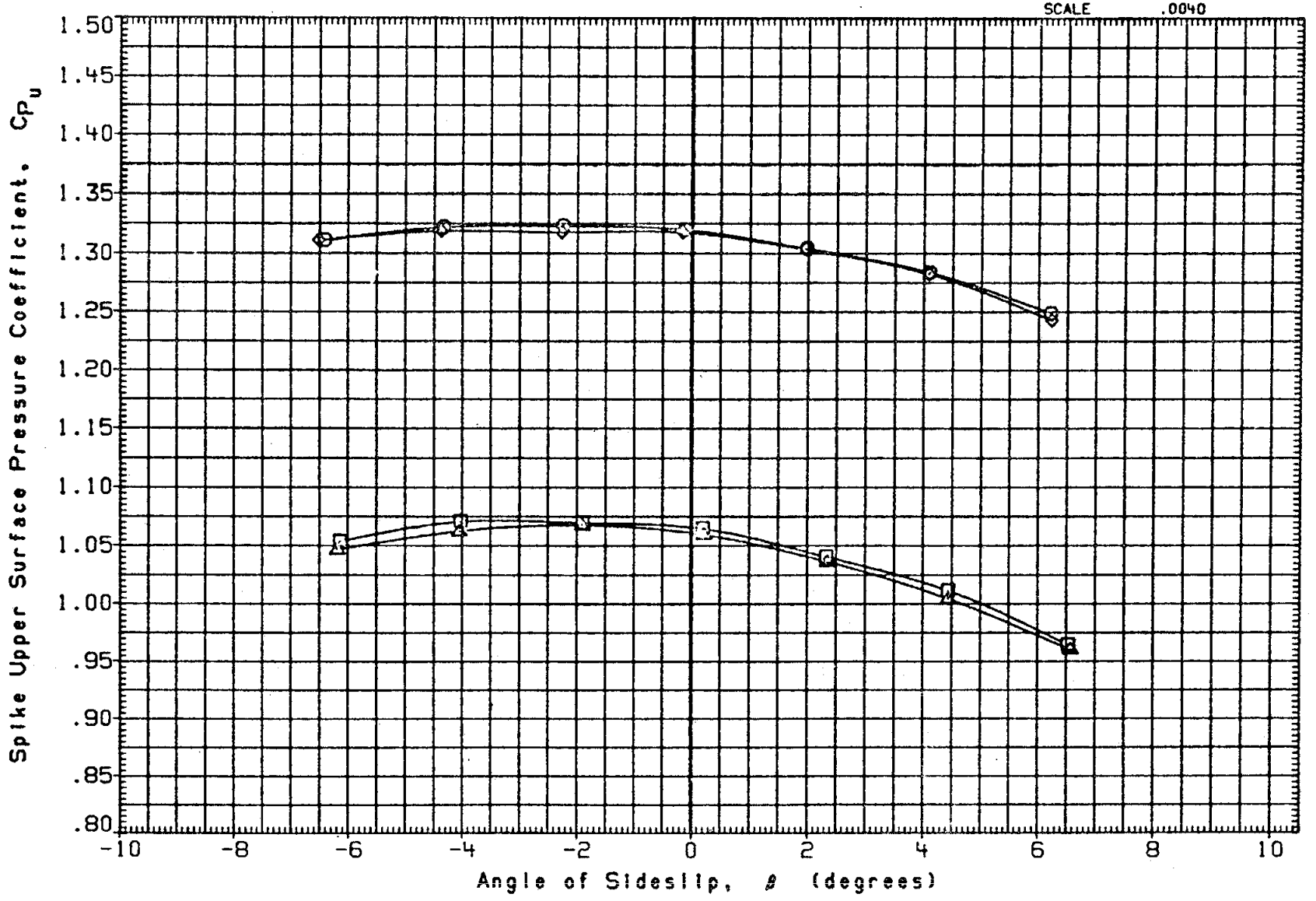

FIG. 2(D) EFFECT OF CONFIGURATION ON SPIKE UPPER SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

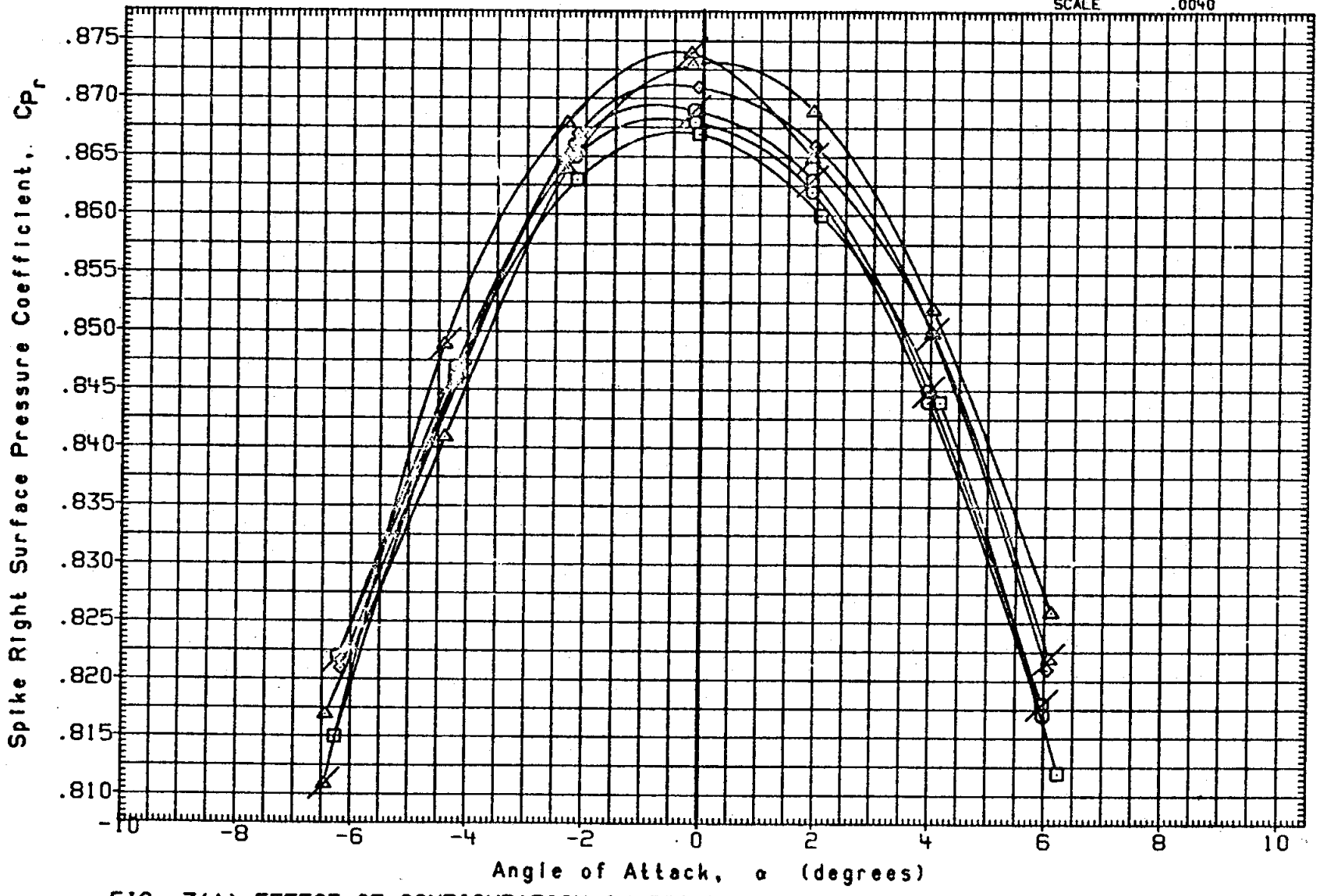

FIG. 3(A) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

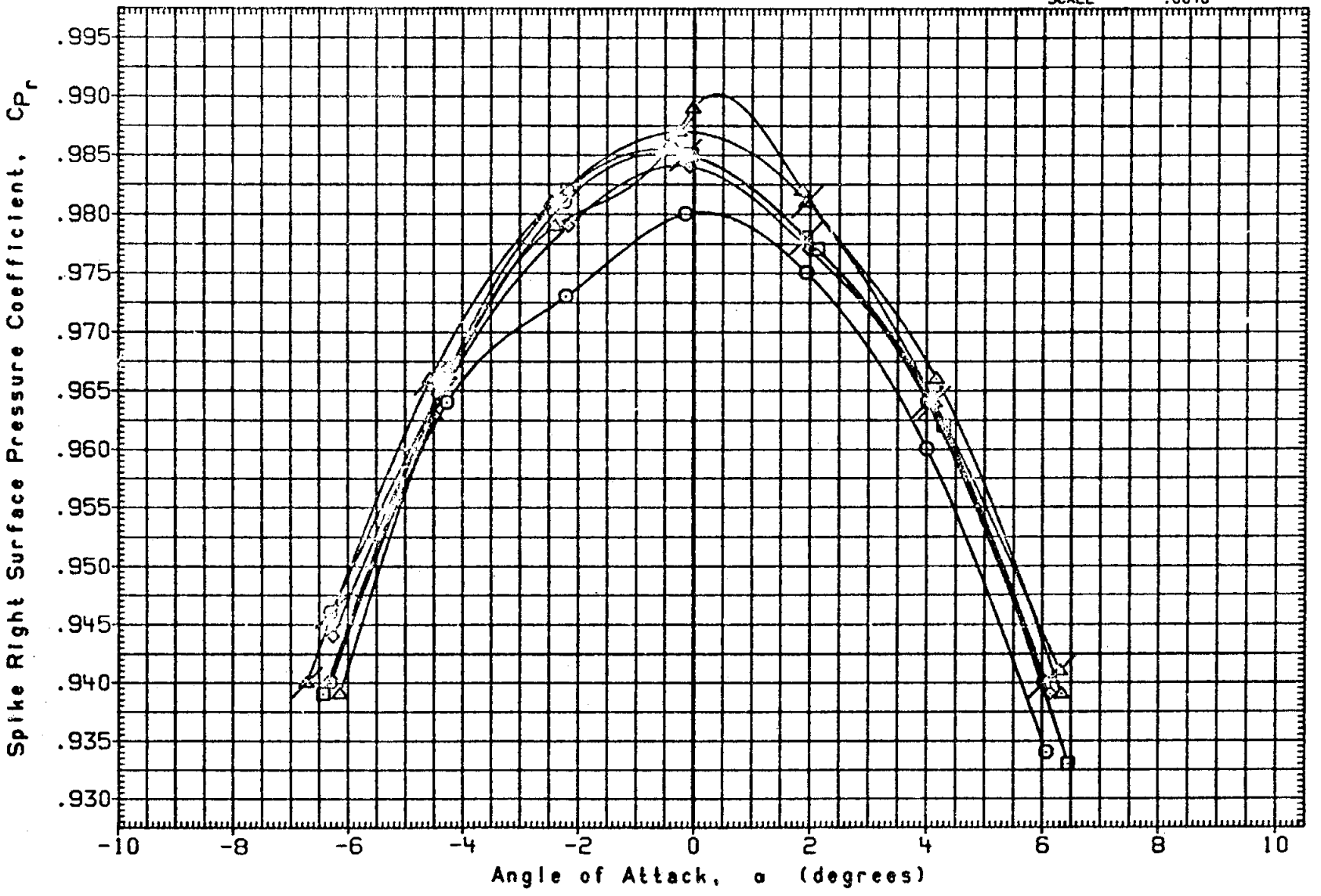

FIG. 3(A) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊘	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

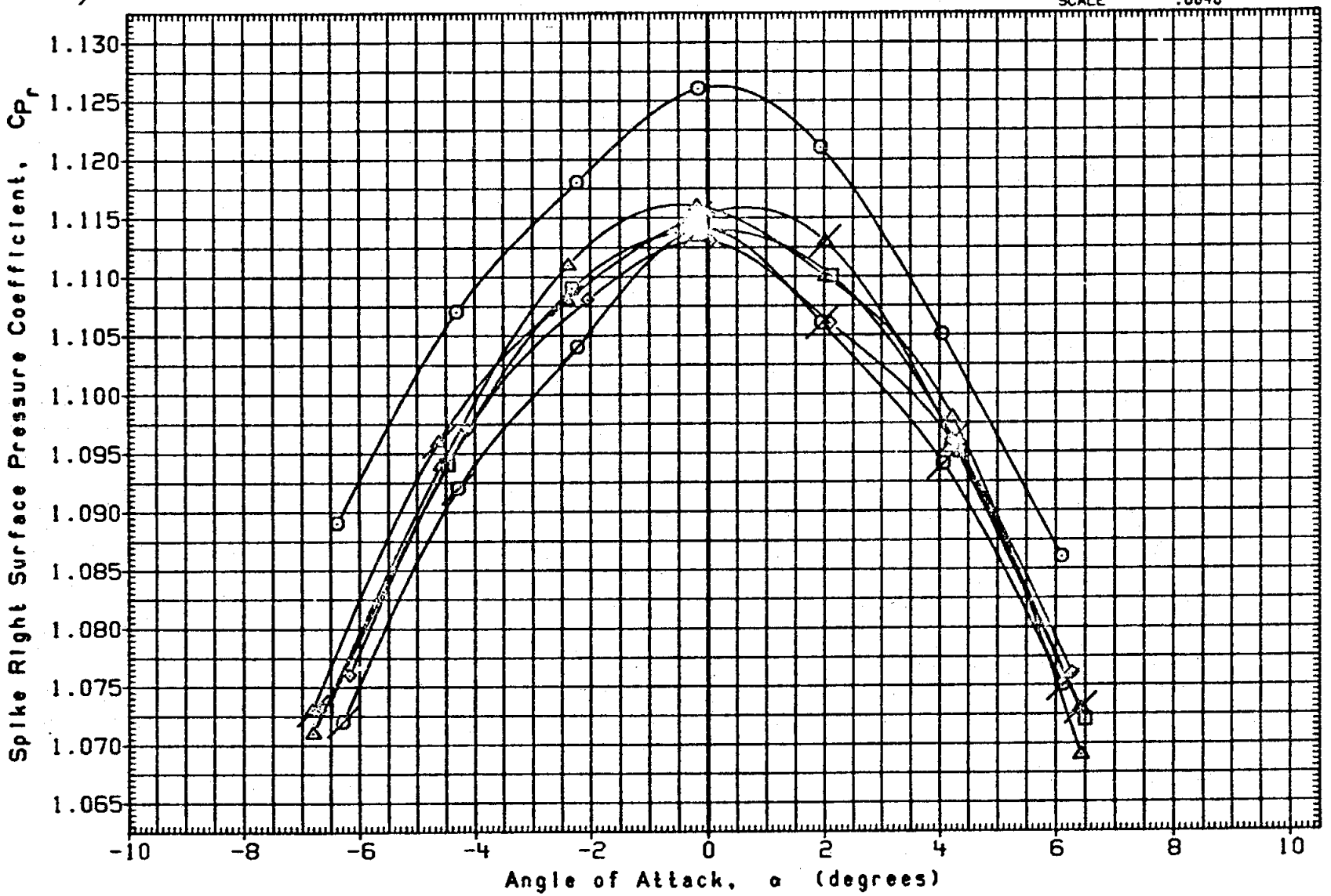

FIG. 3(A) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	⊠	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ. IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

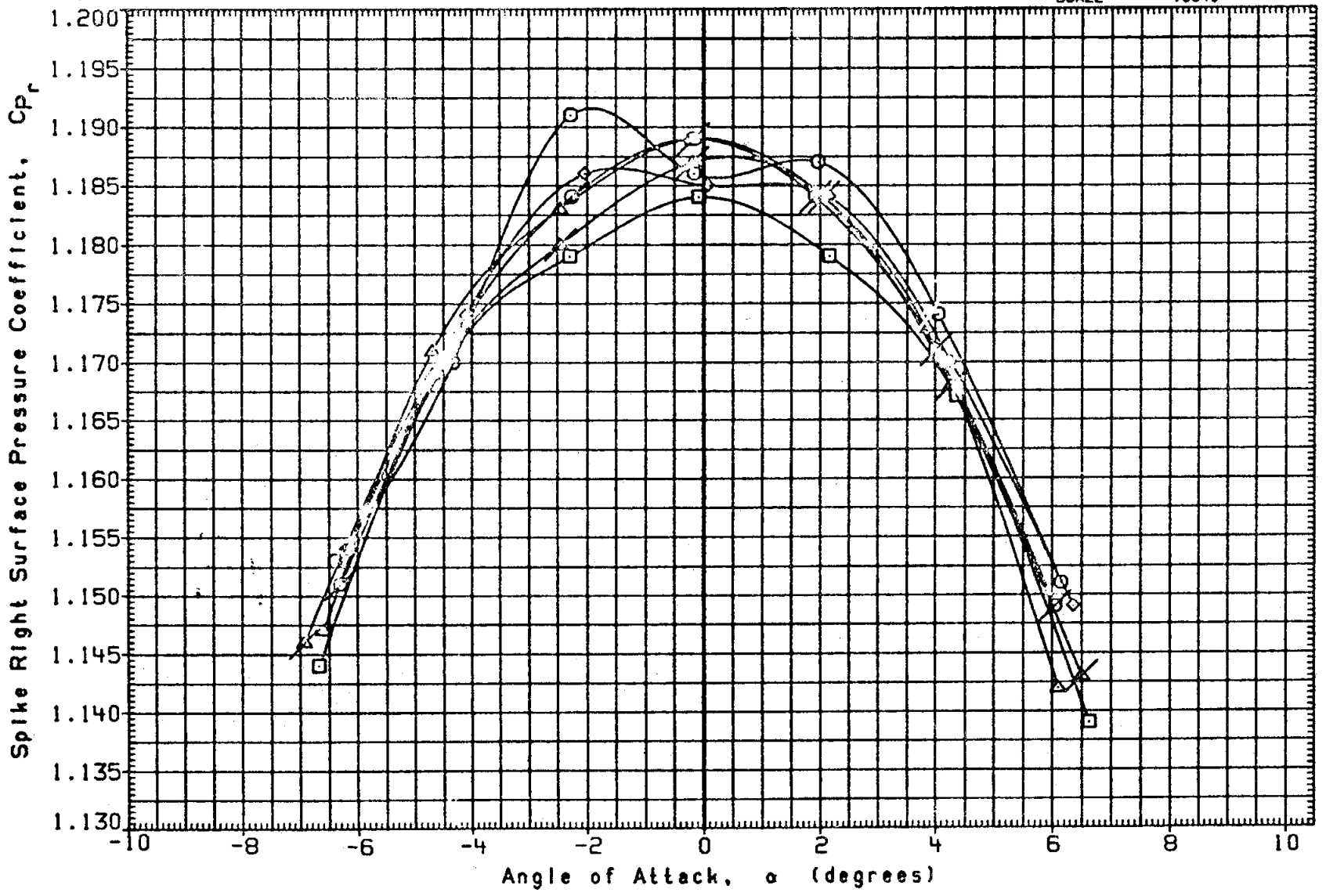

FIG. 3(A) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	Ø	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	Ø	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

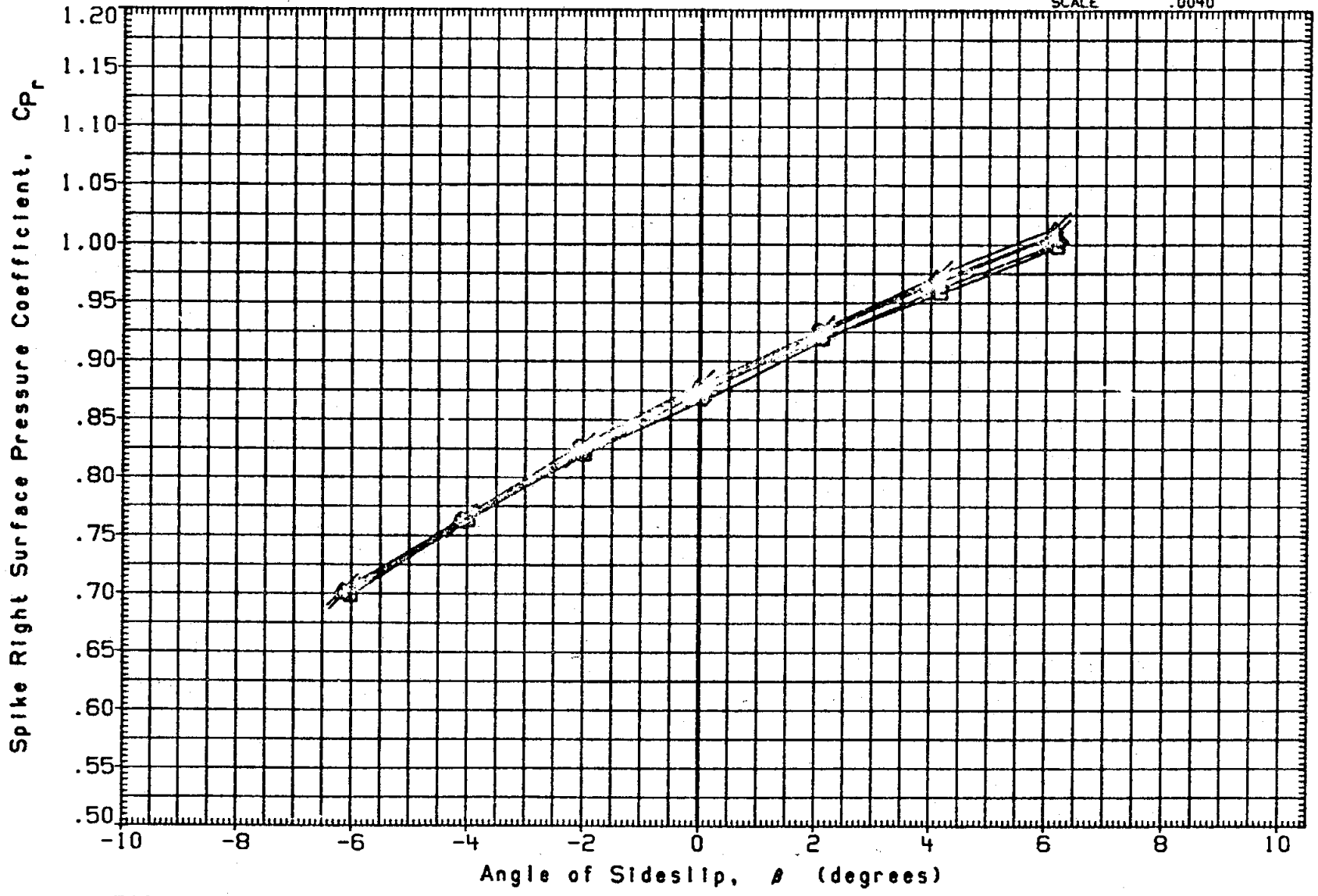

FIG. 3(B) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T (AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T (AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S (AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T (AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S (AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- O T S (AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

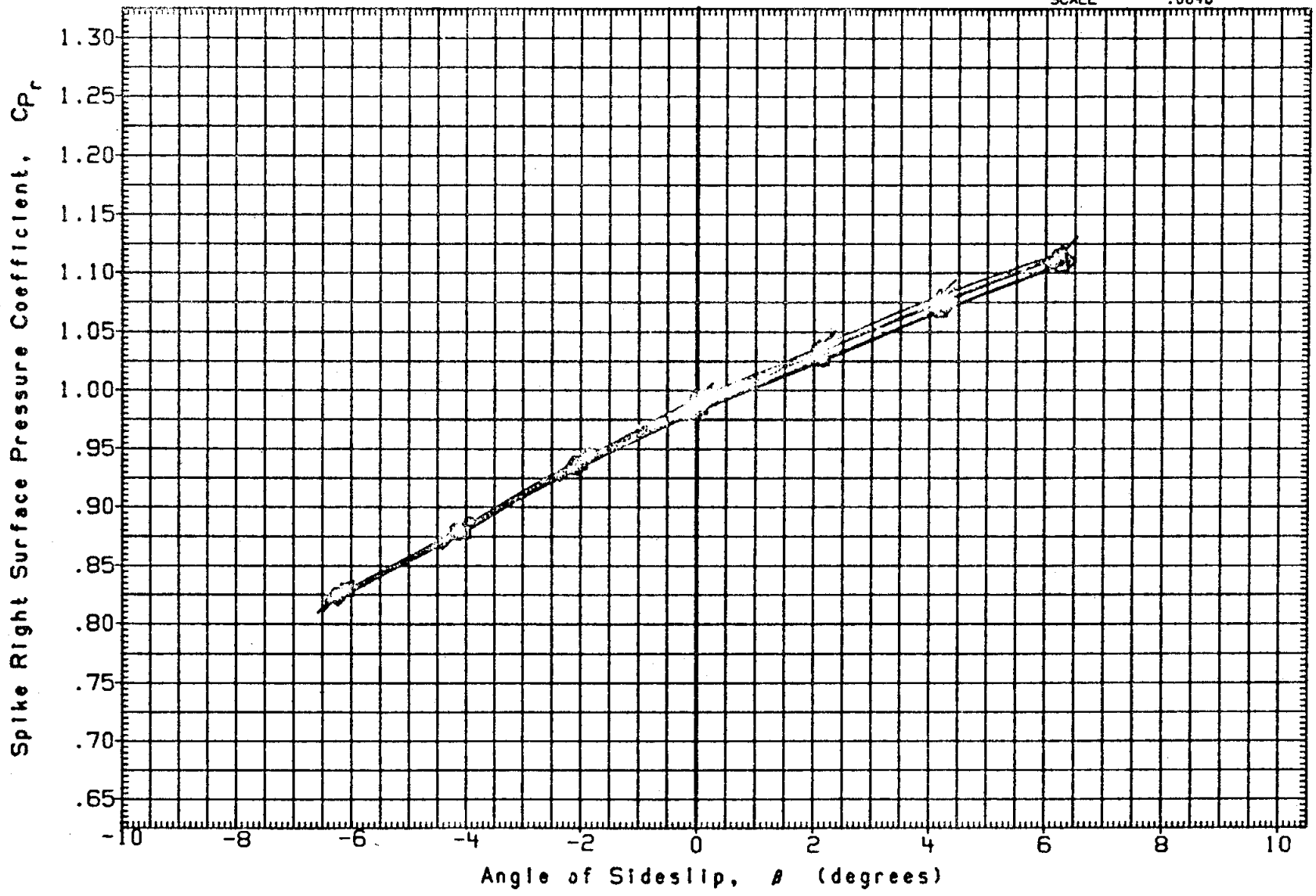

FIG. 3(B) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

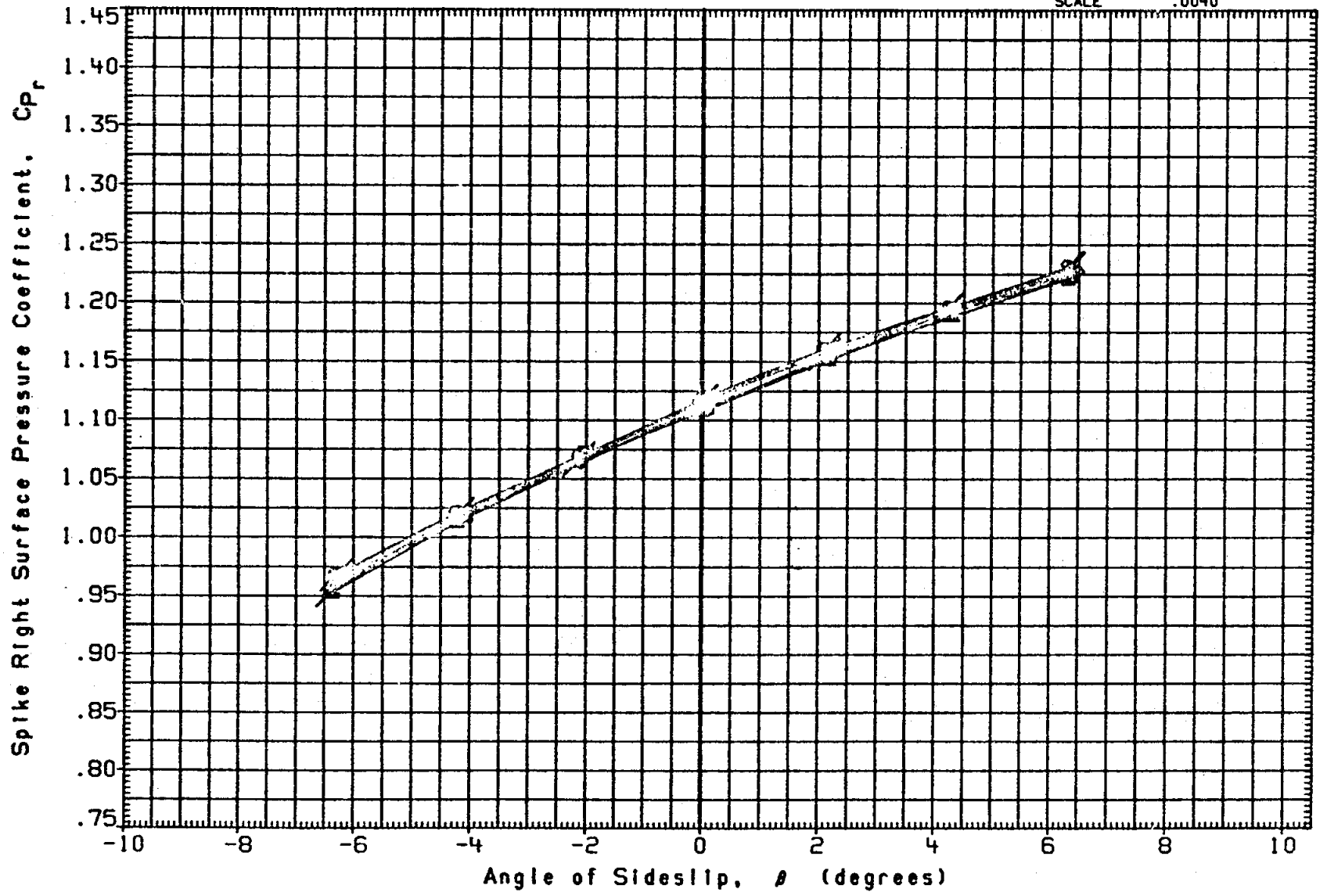

FIG. 3(B) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	⊡	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊘	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

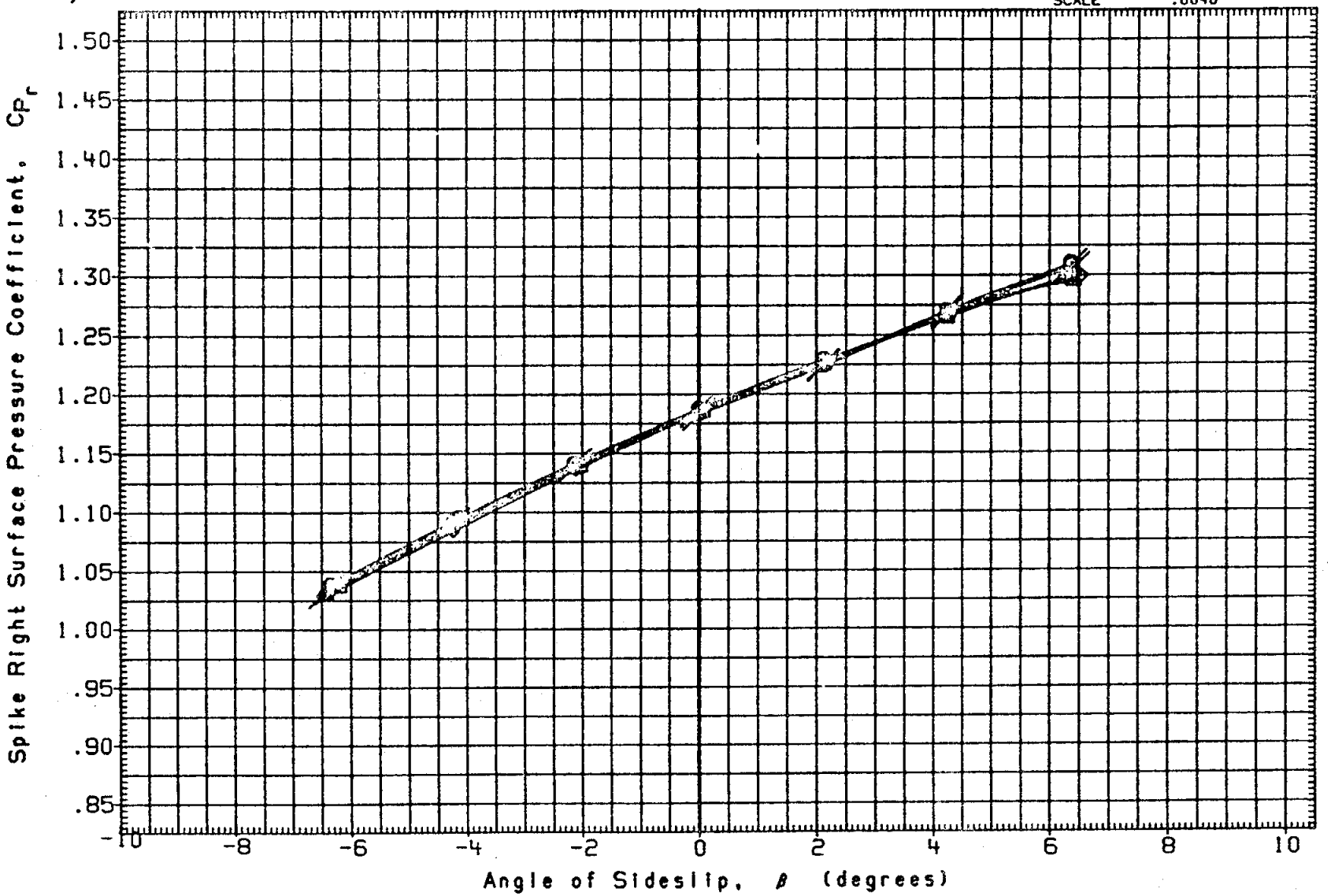

FIG. 3(B) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

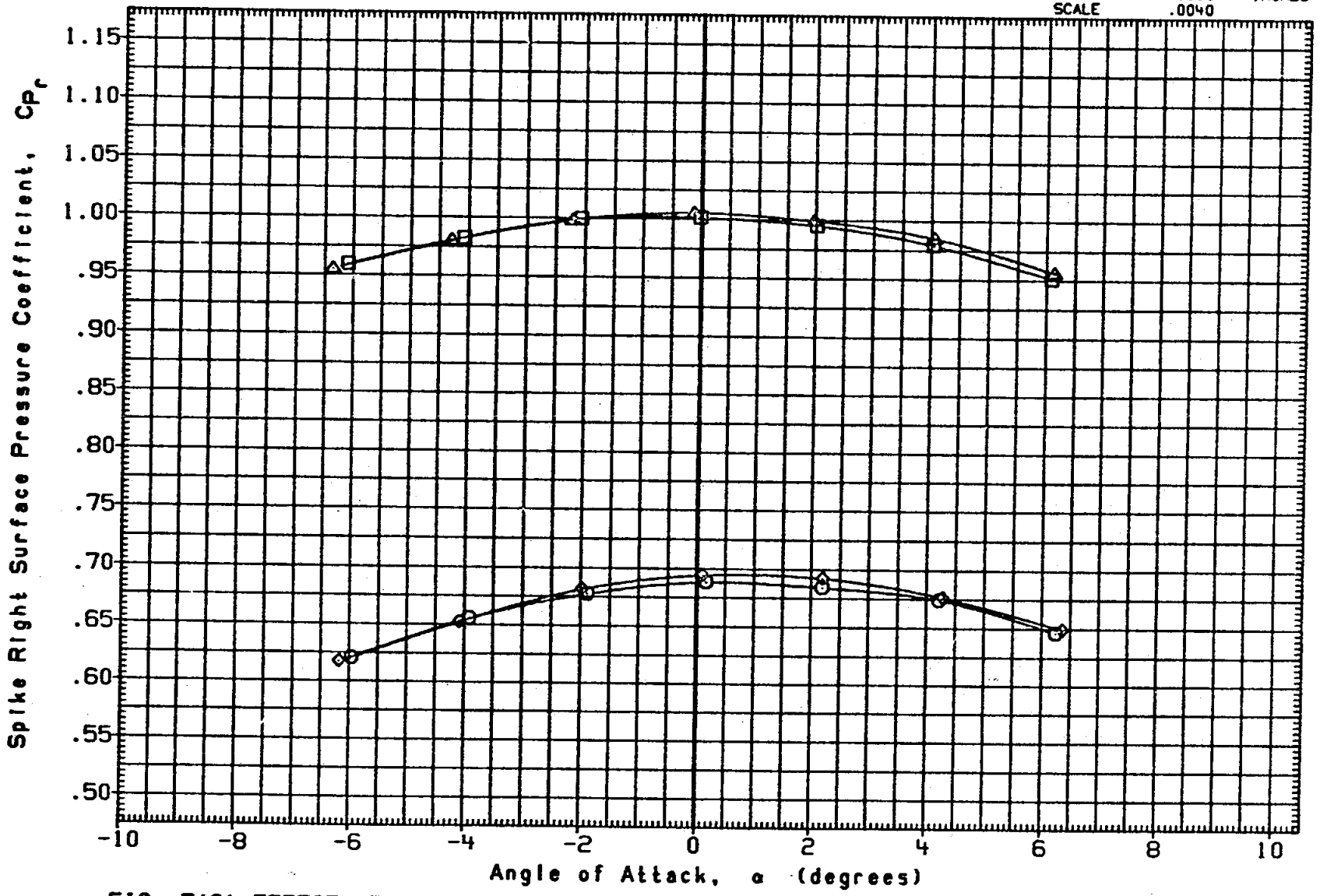

FIG. 3(C) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
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XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

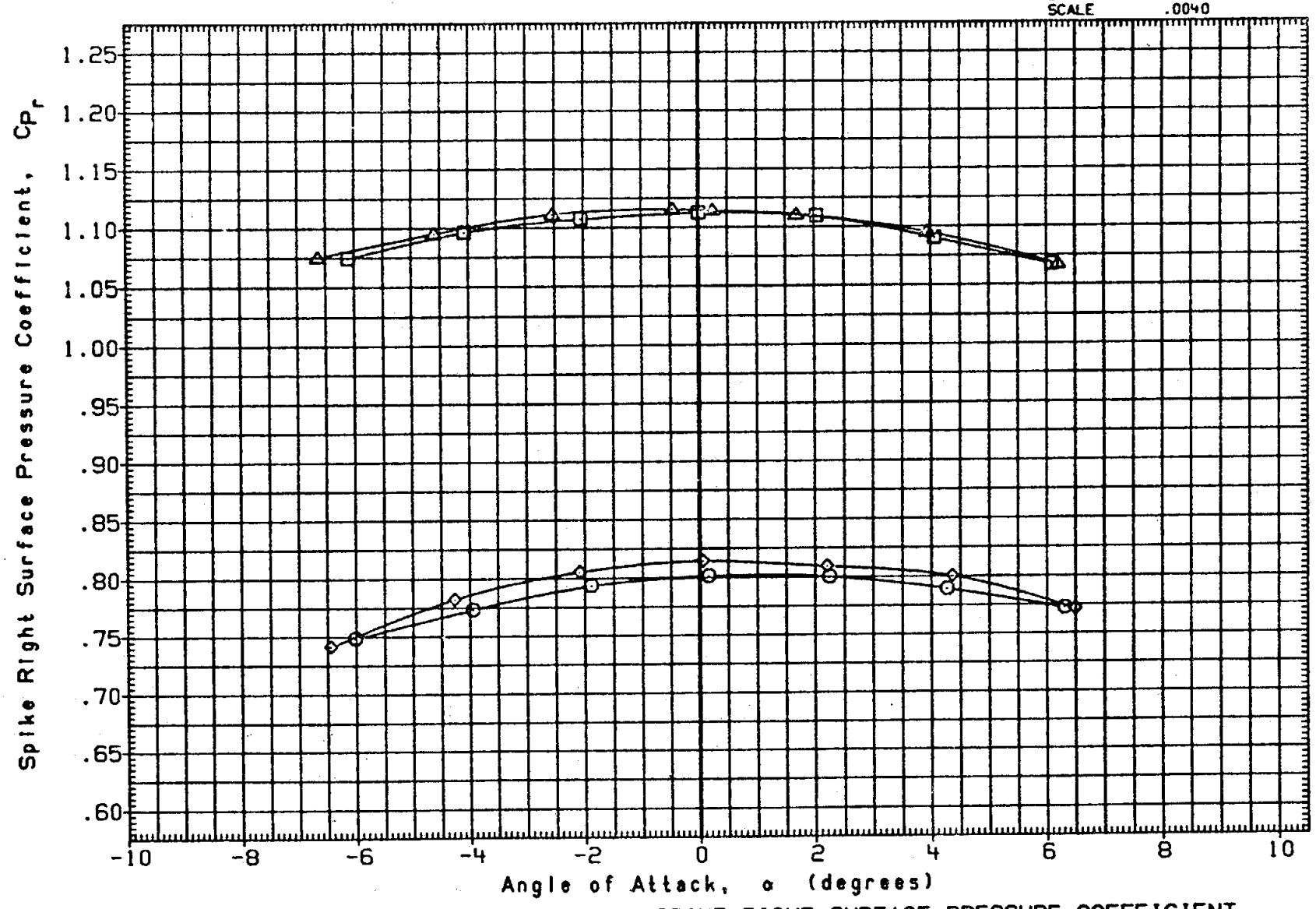

FIG. 3(C) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

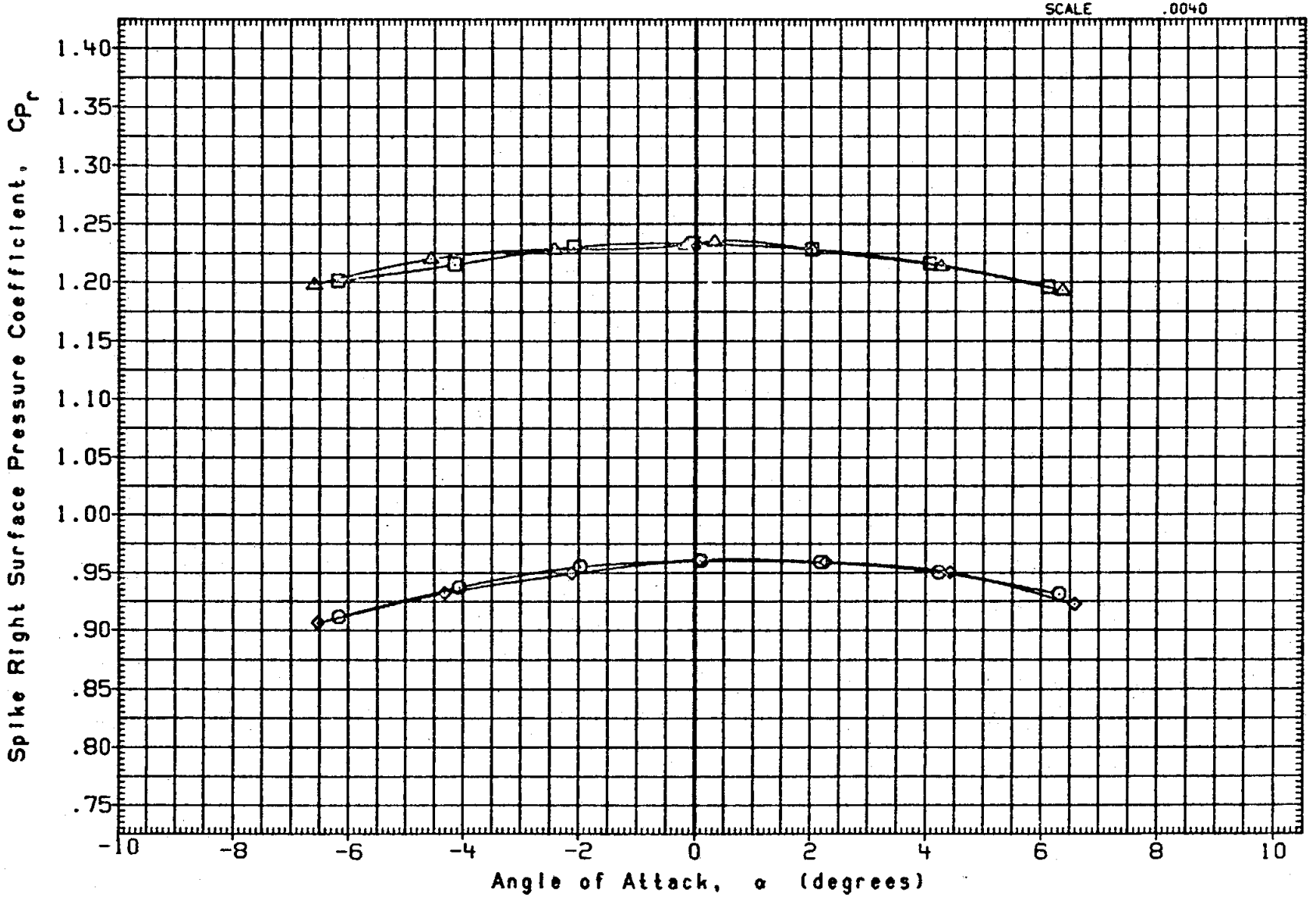

FIG. 3(C) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

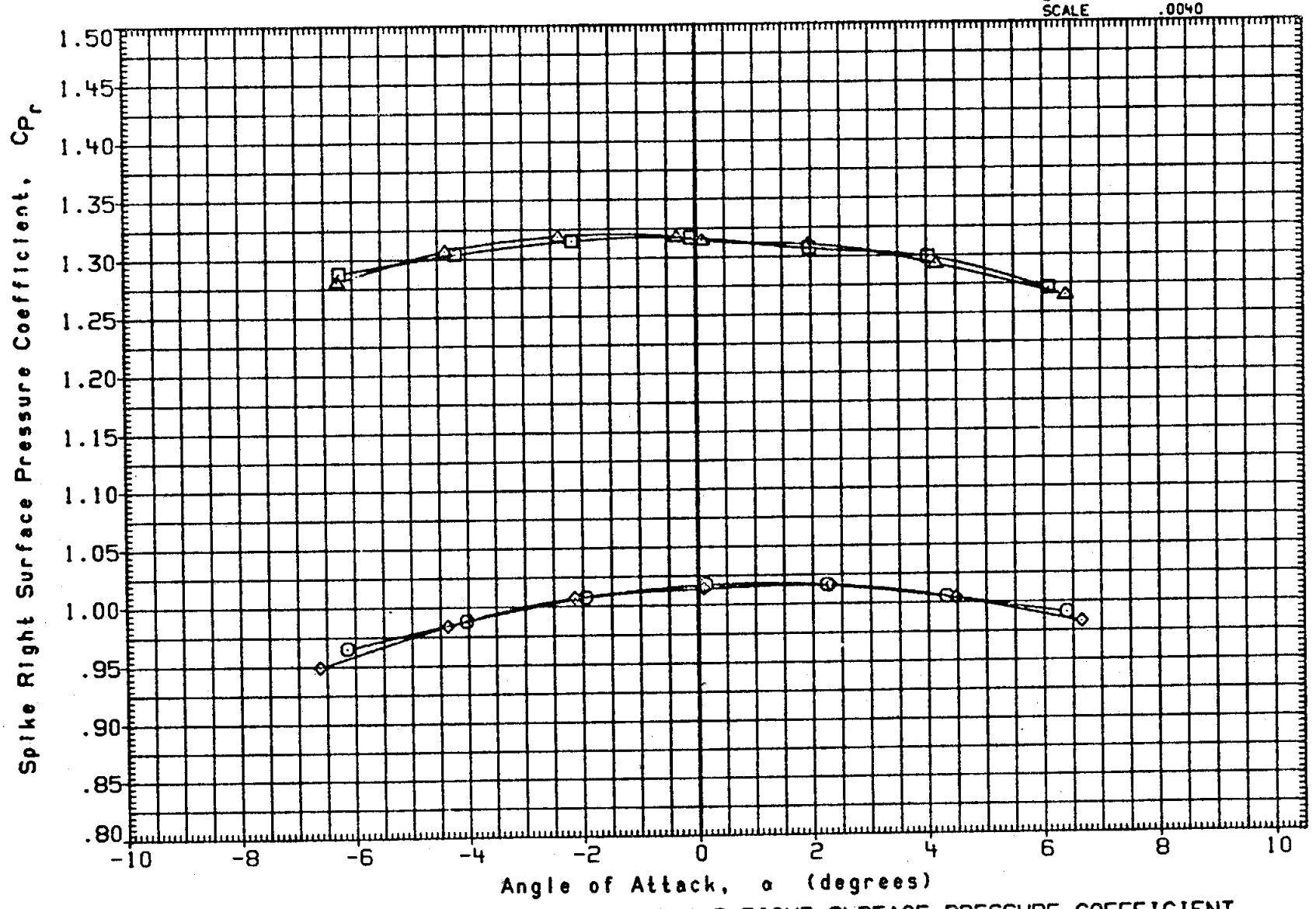

FIG. 3(C) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

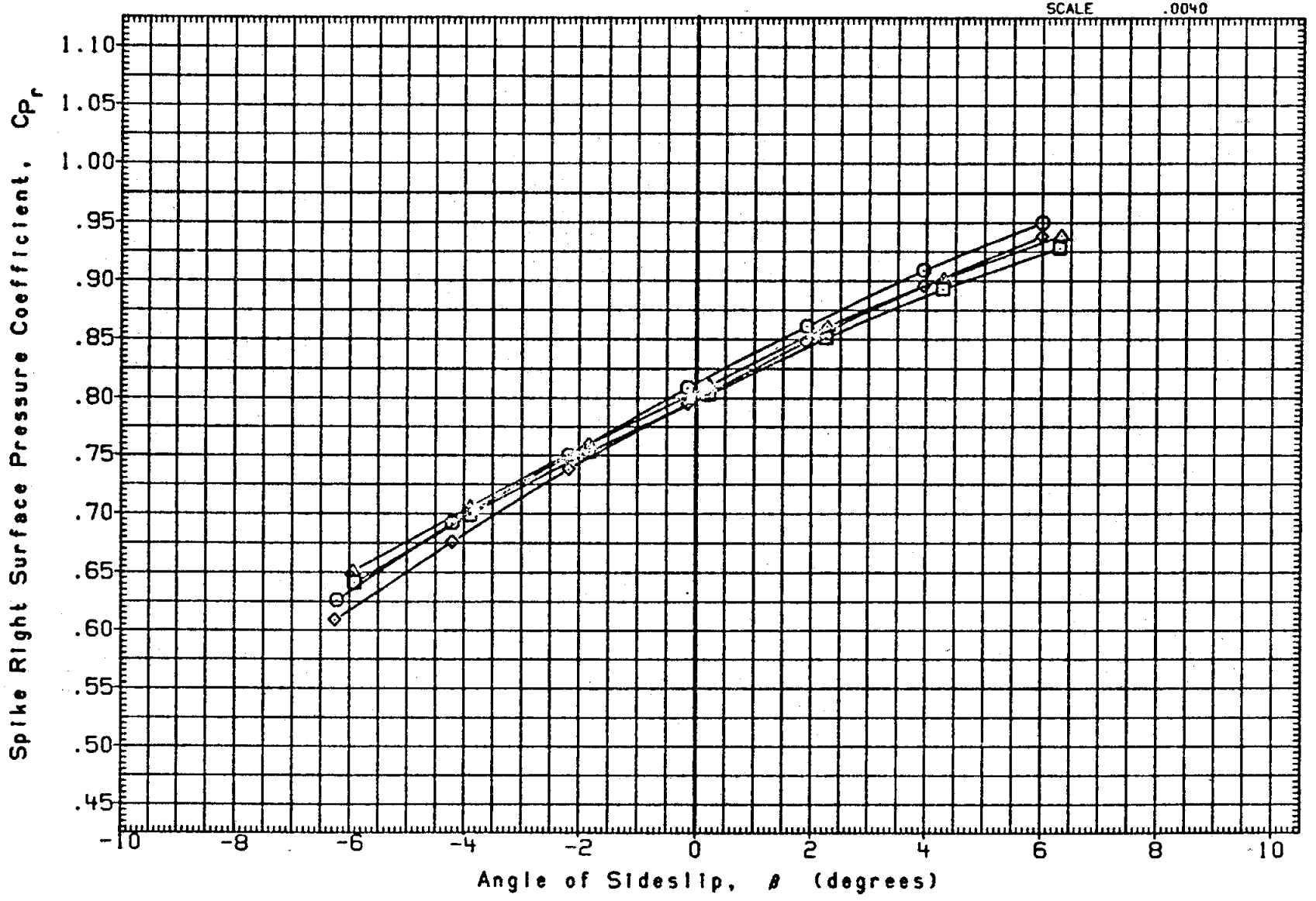

FIG. 3(D) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

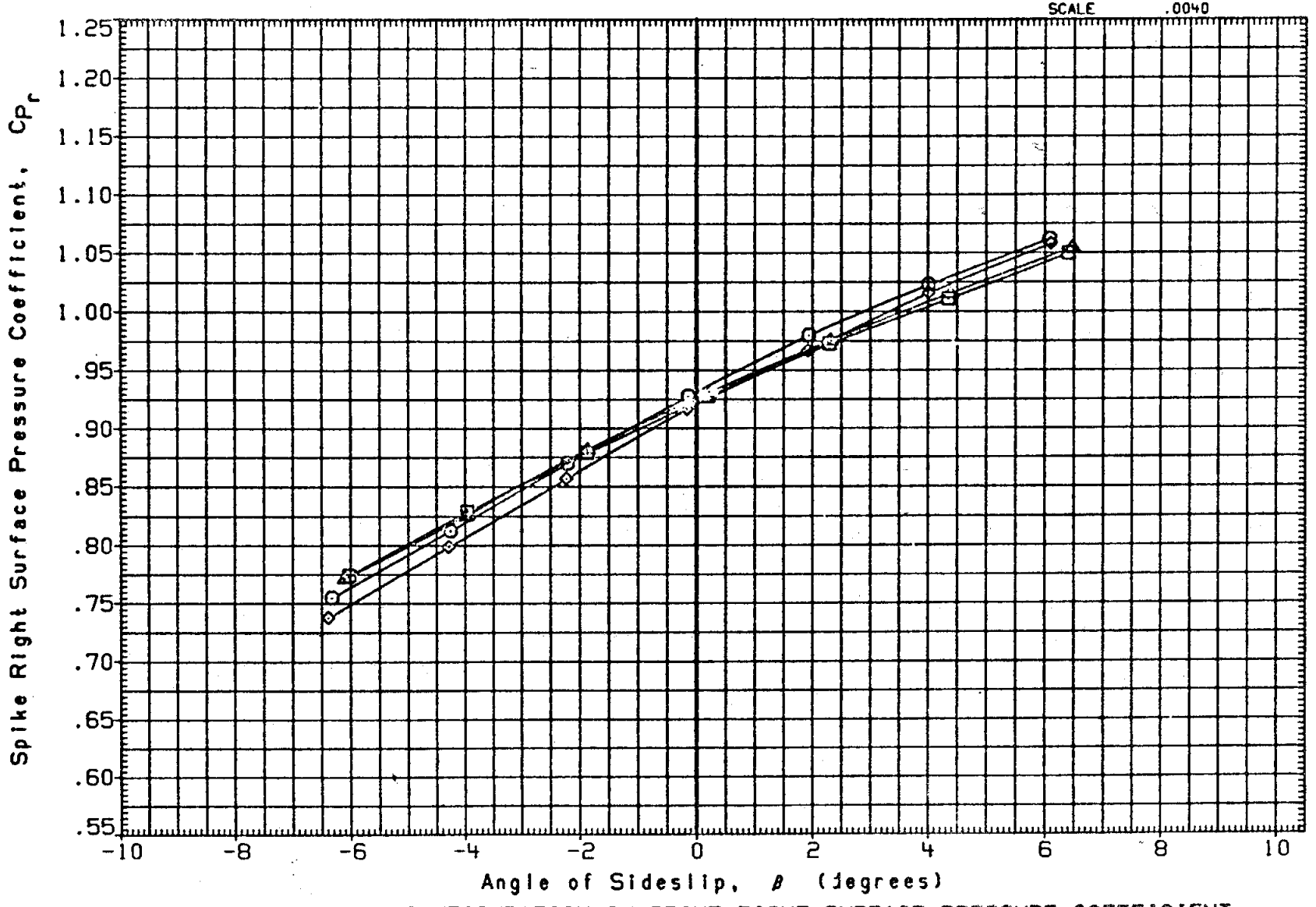

FIG. 3(D) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

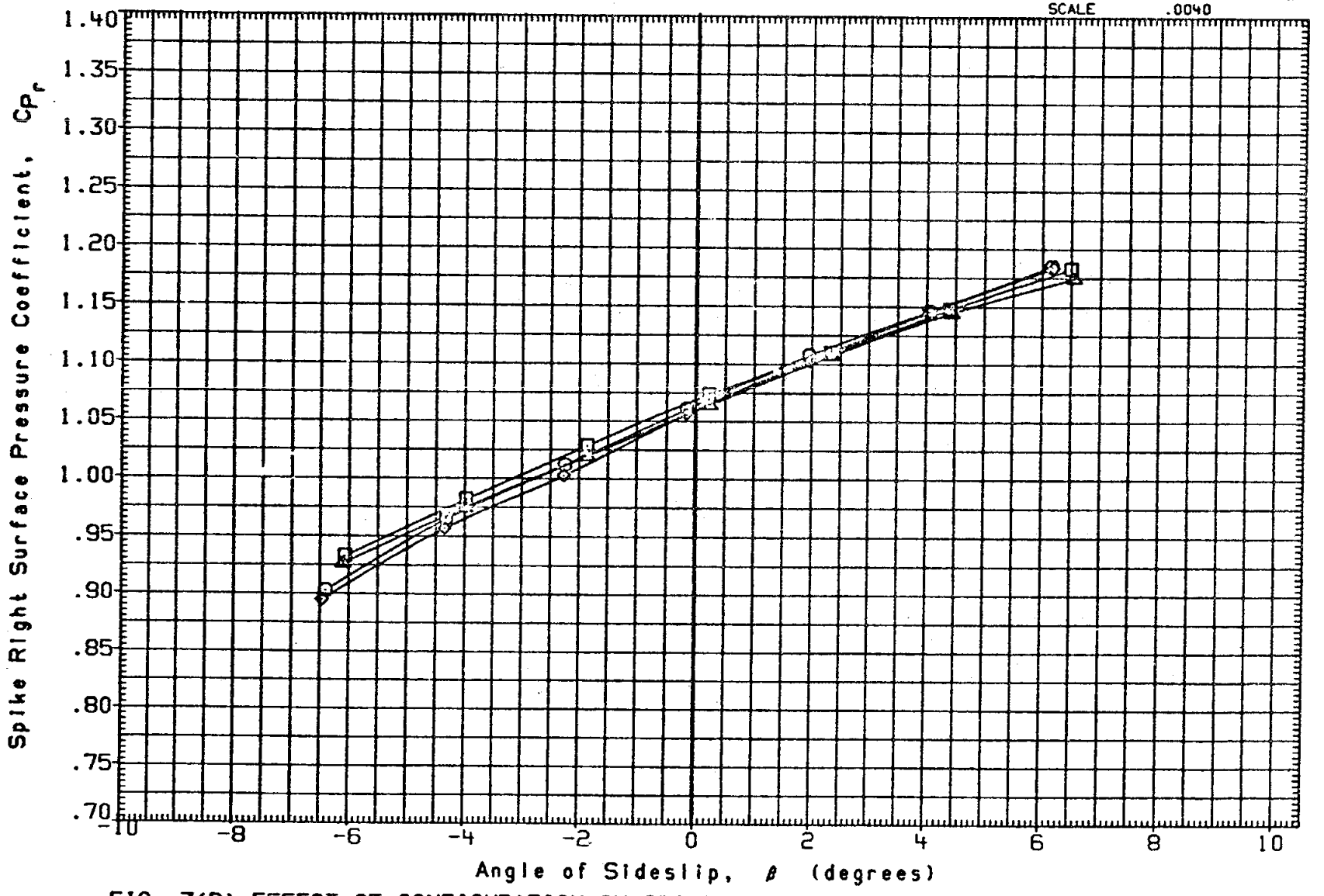

FIG. 3(D) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

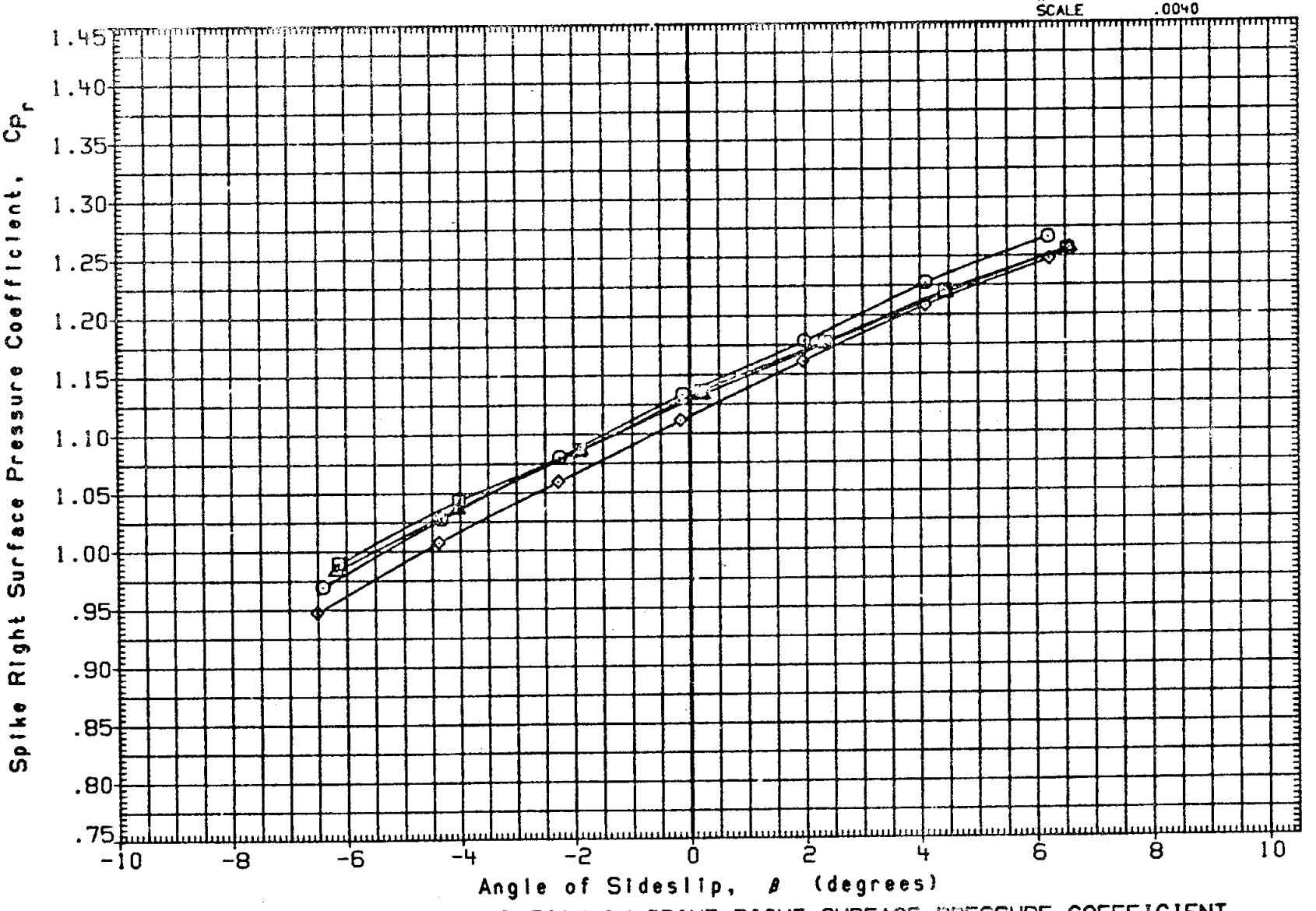

FIG. 3(D) EFFECT OF CONFIGURATION ON SPIKE RIGHT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

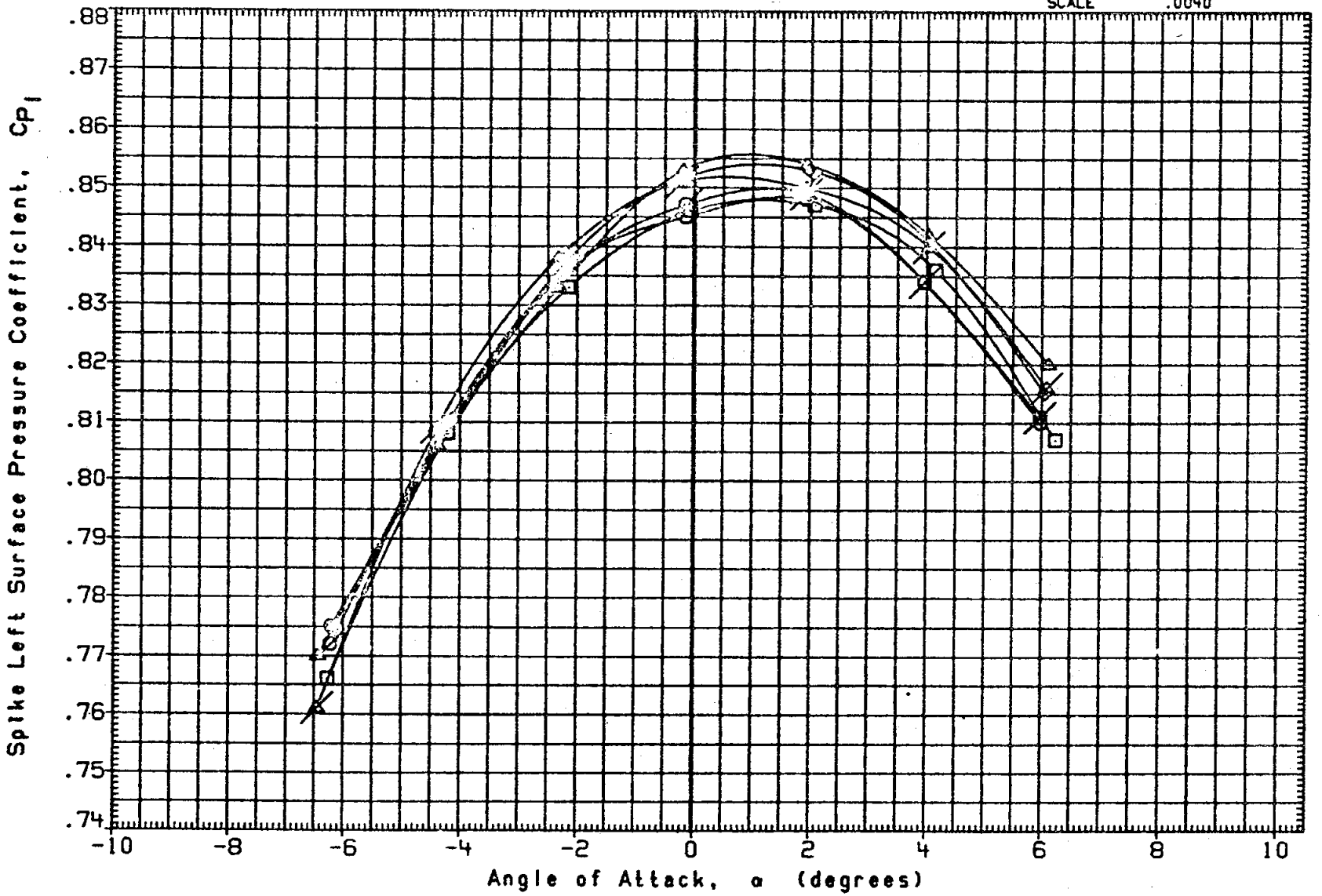

FIG. 4(A) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	⊠	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

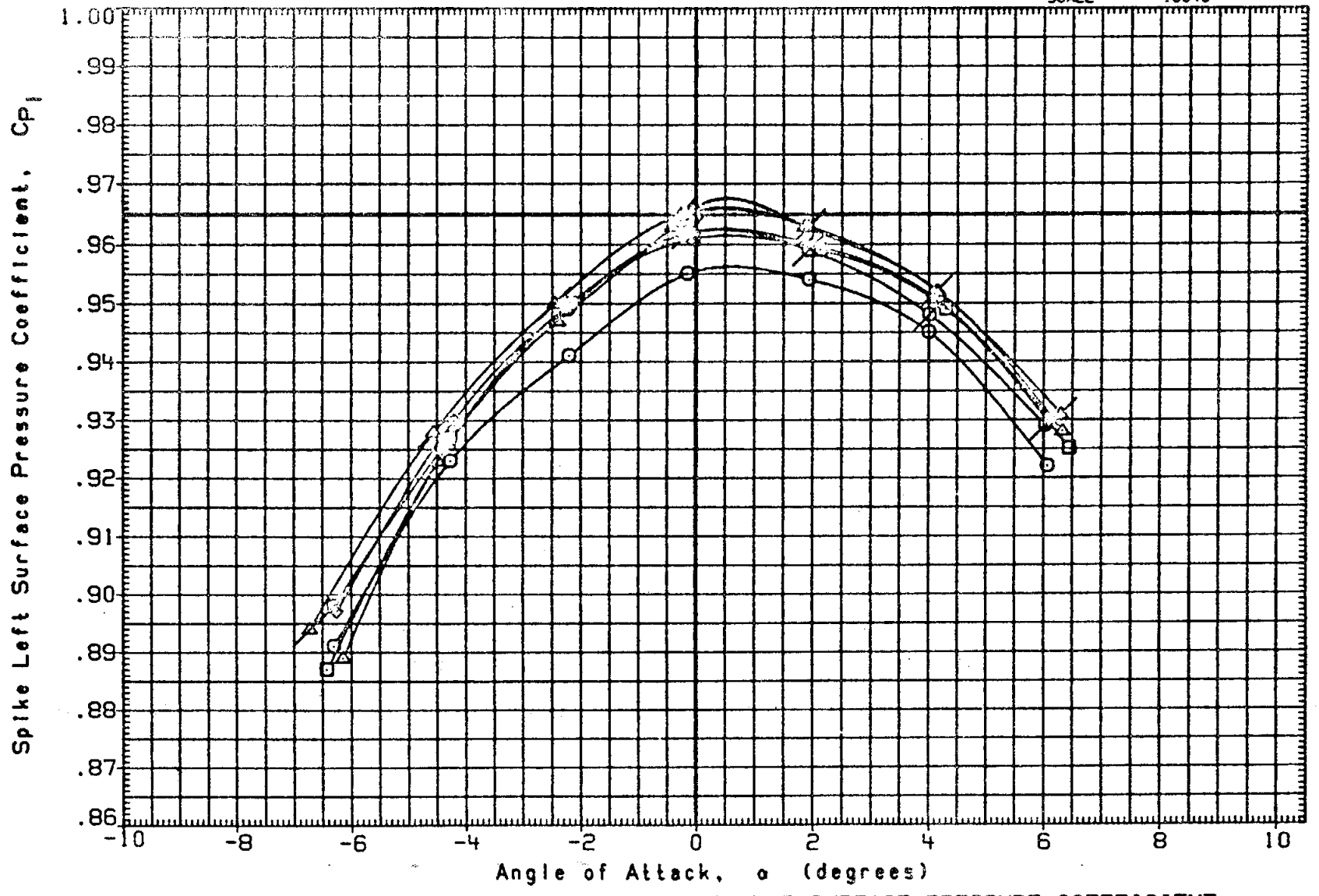

FIG. 4(A) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- 0 T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊘	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

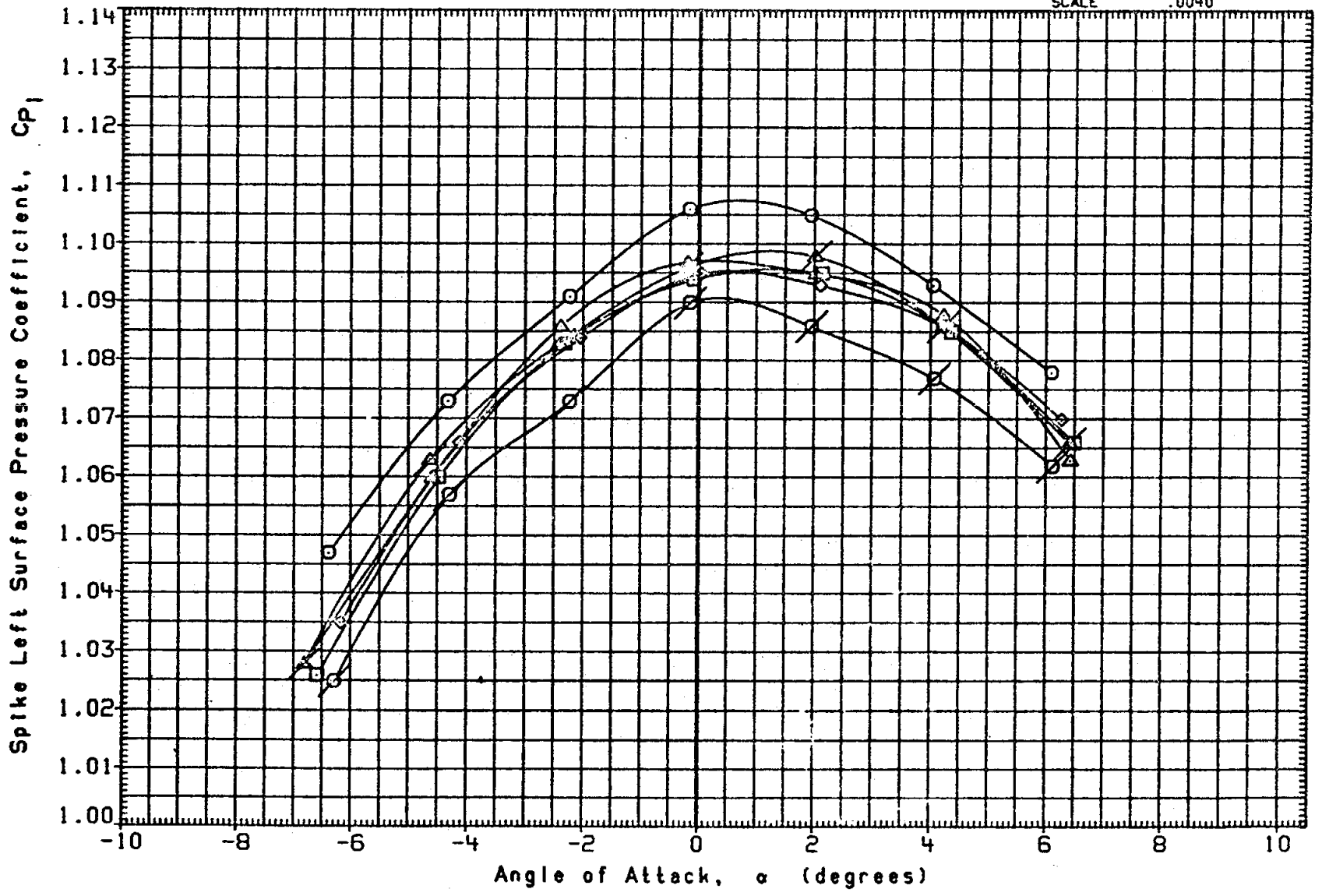

FIG. 4(A) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

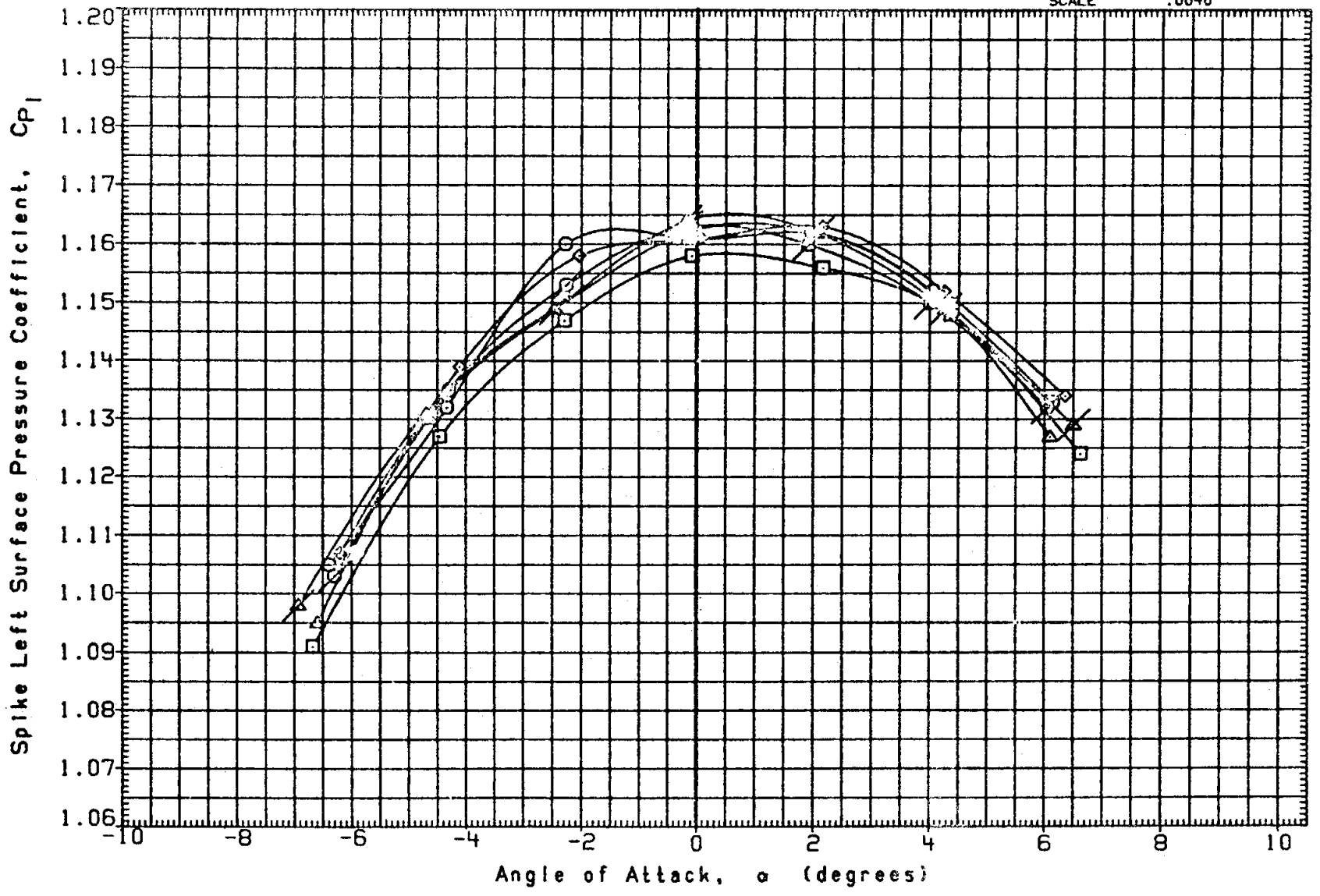

FIG. 4(A) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = 0

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊘	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

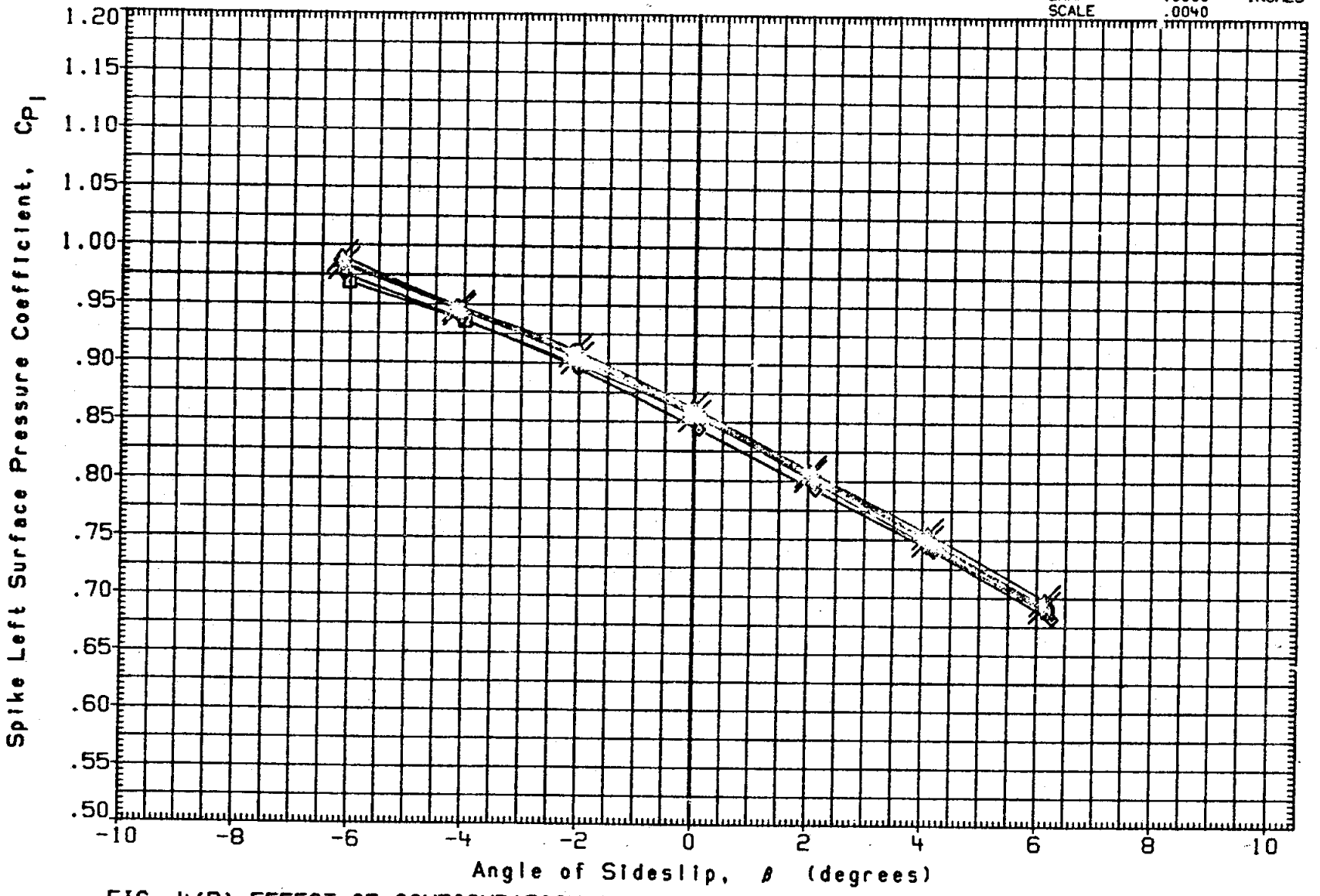

FIG. 4(B) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- 0 T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

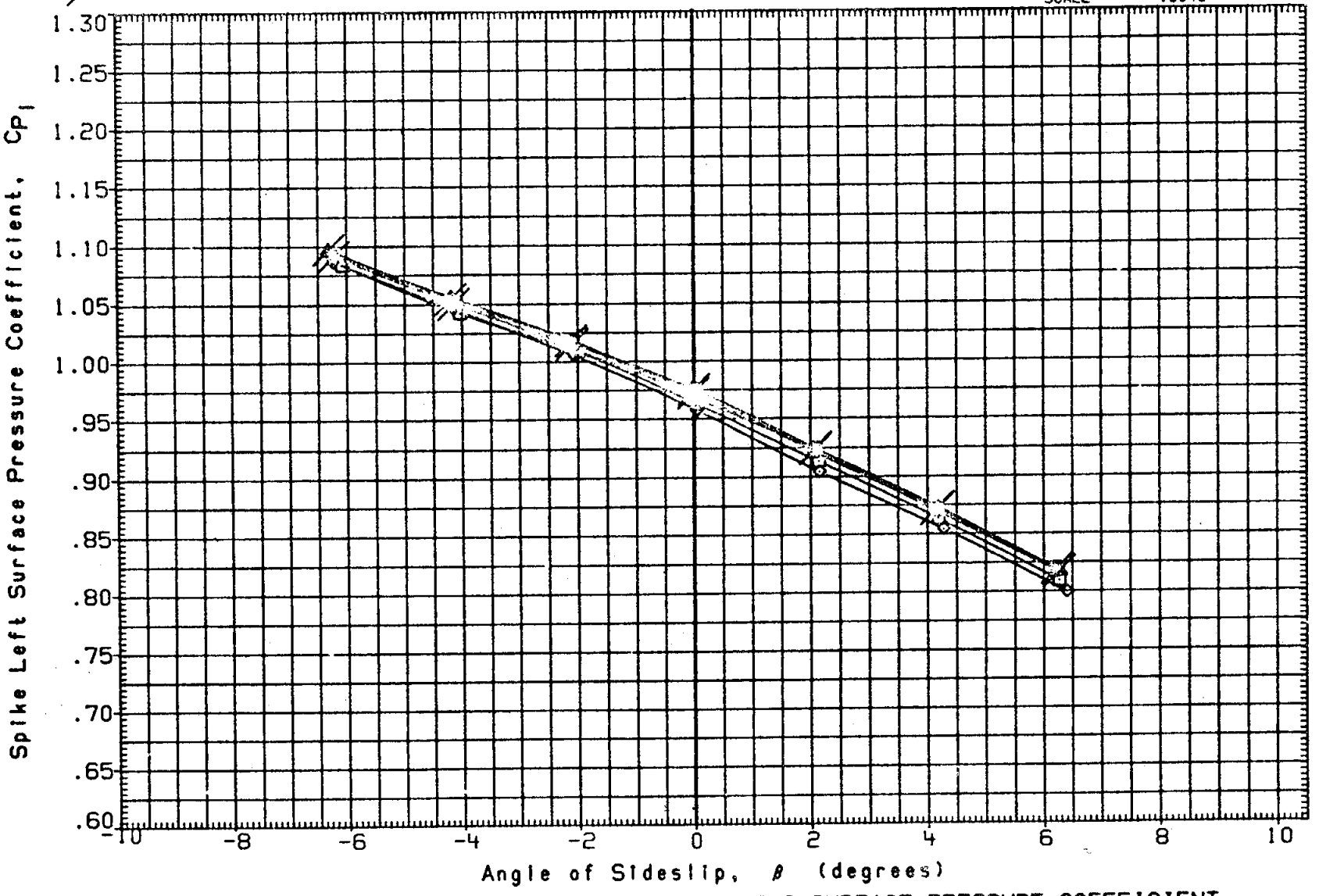

FIG. 4(B) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- 0 T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

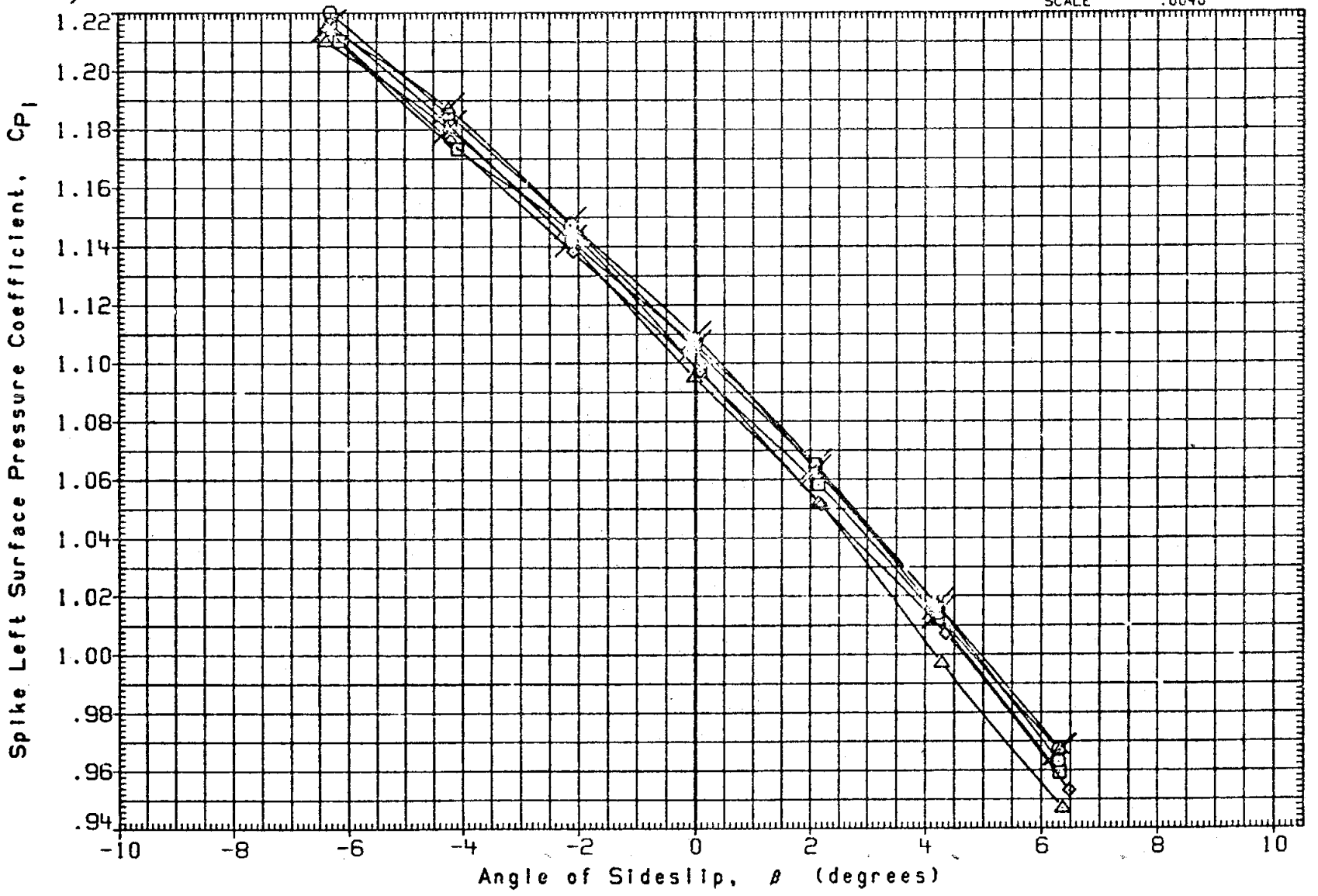

FIG. 4(B) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

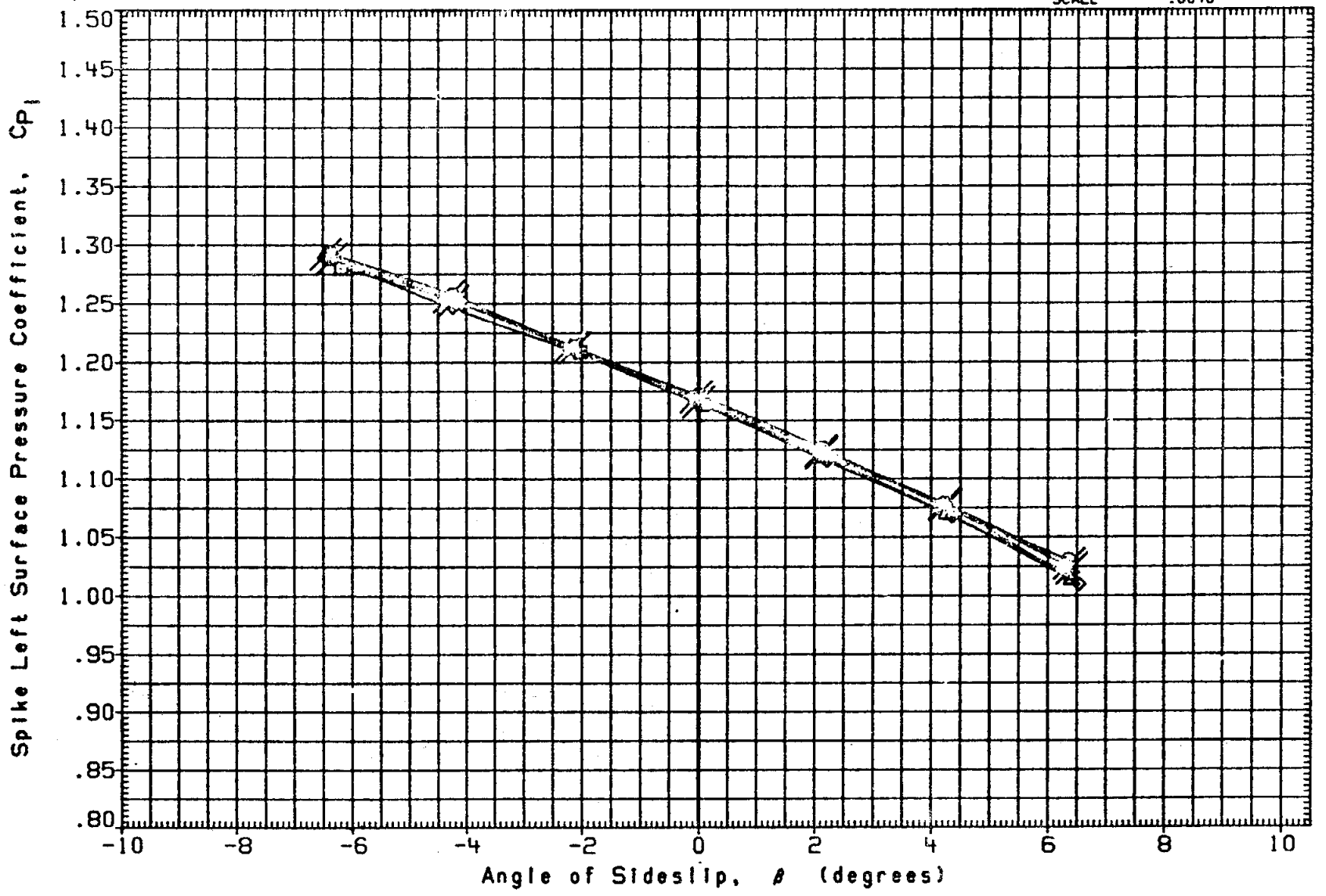

FIG. 4(B) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = 0

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U011	○	IA181 MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181 MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

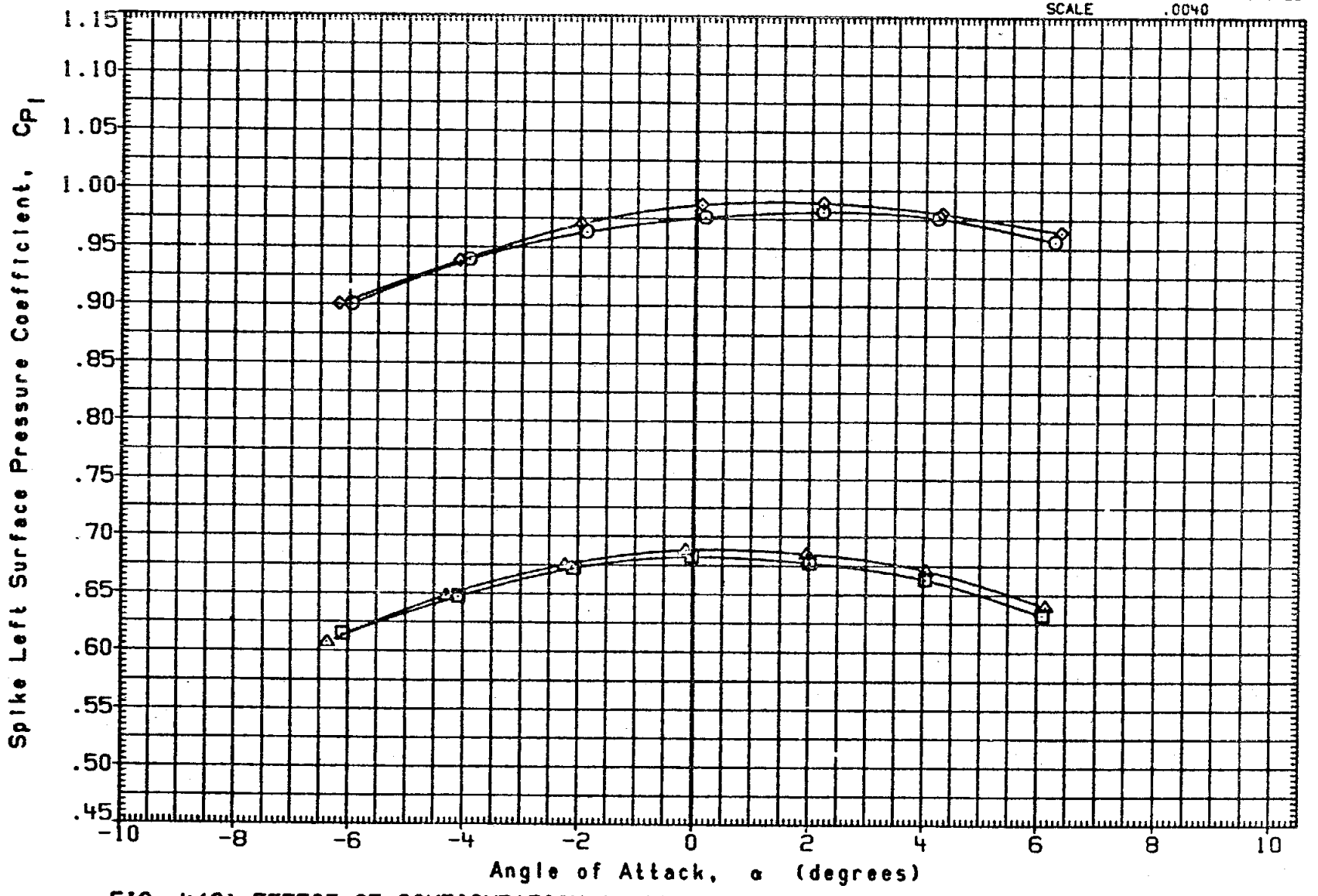

FIG. 4(C) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

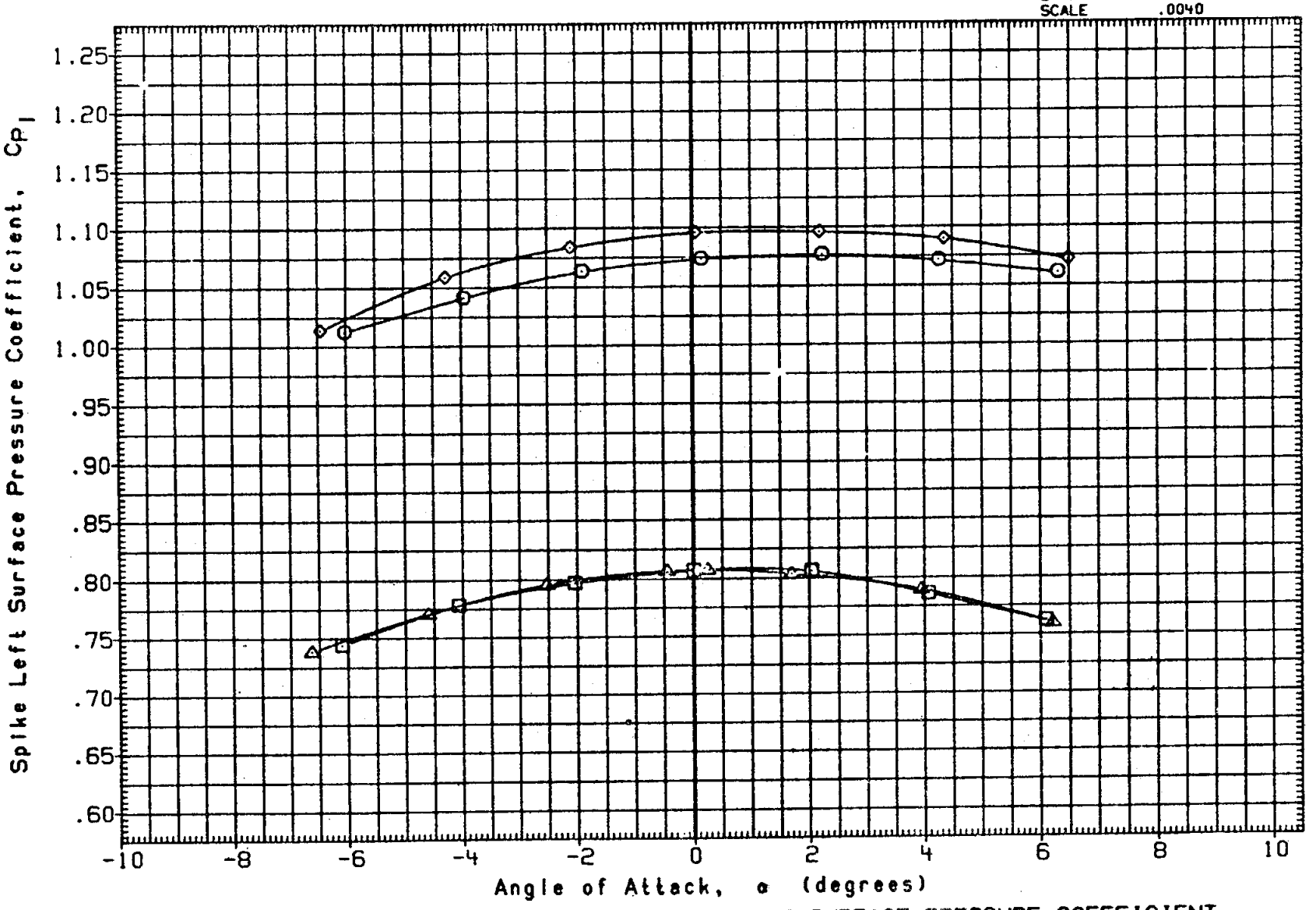

FIG. 4(C) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

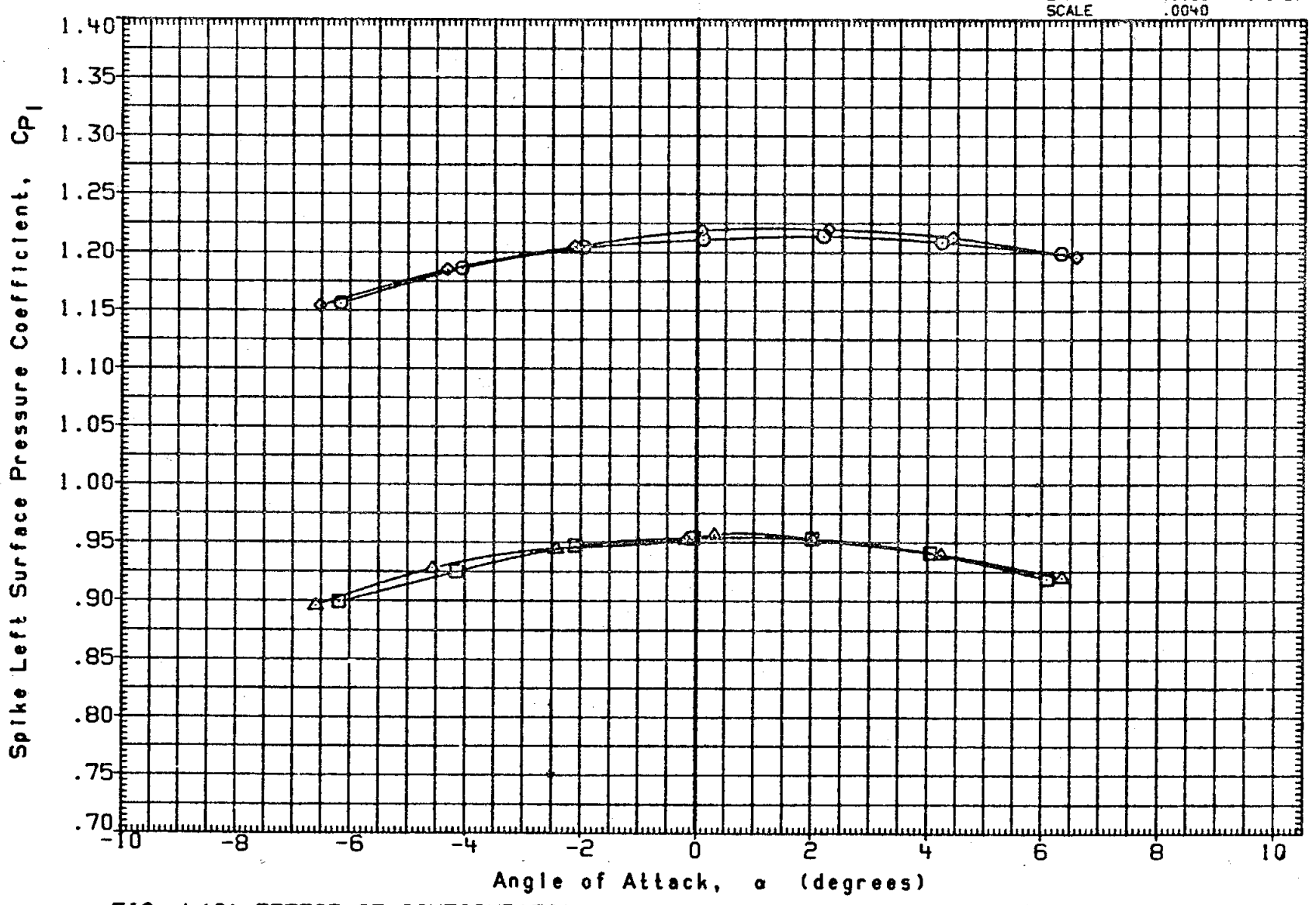

FIG. 4(C) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

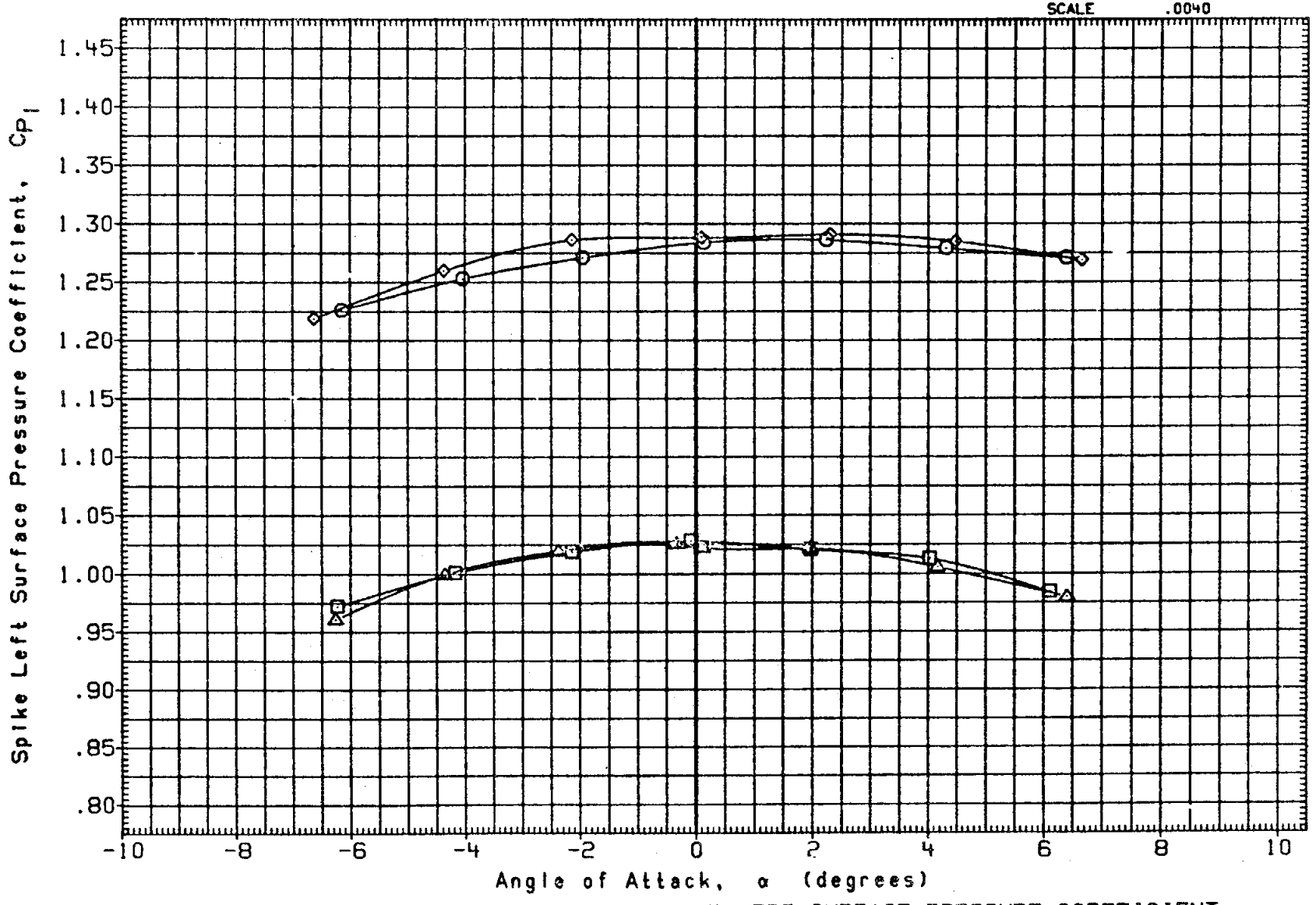

FIG. 4(C) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
ALPHA VARYING, BETA = + OR - 6 DEGREES

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	[A1B1, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	[A1B1, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	[A1B1, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	[A1B1, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

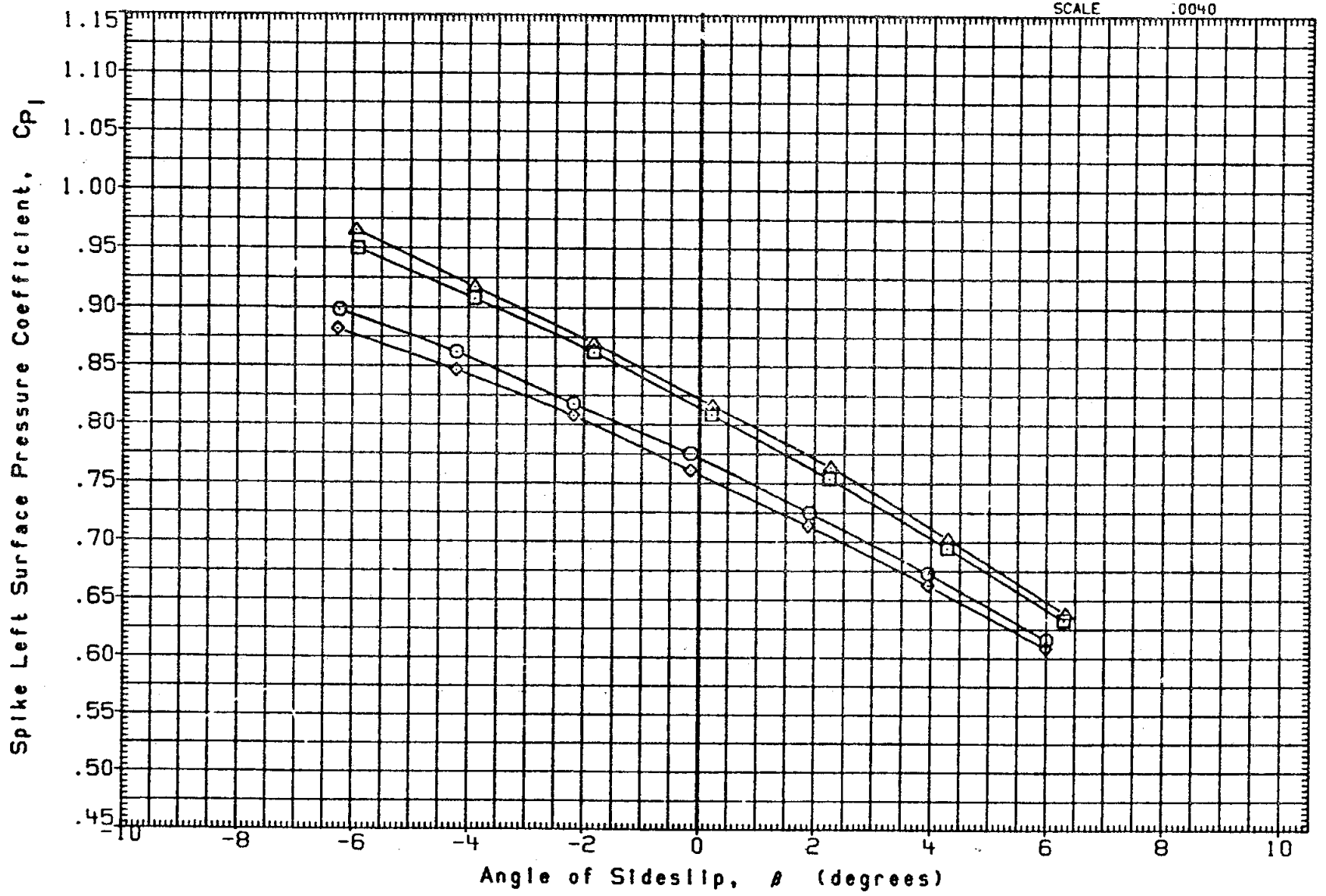

FIG. 4(D) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

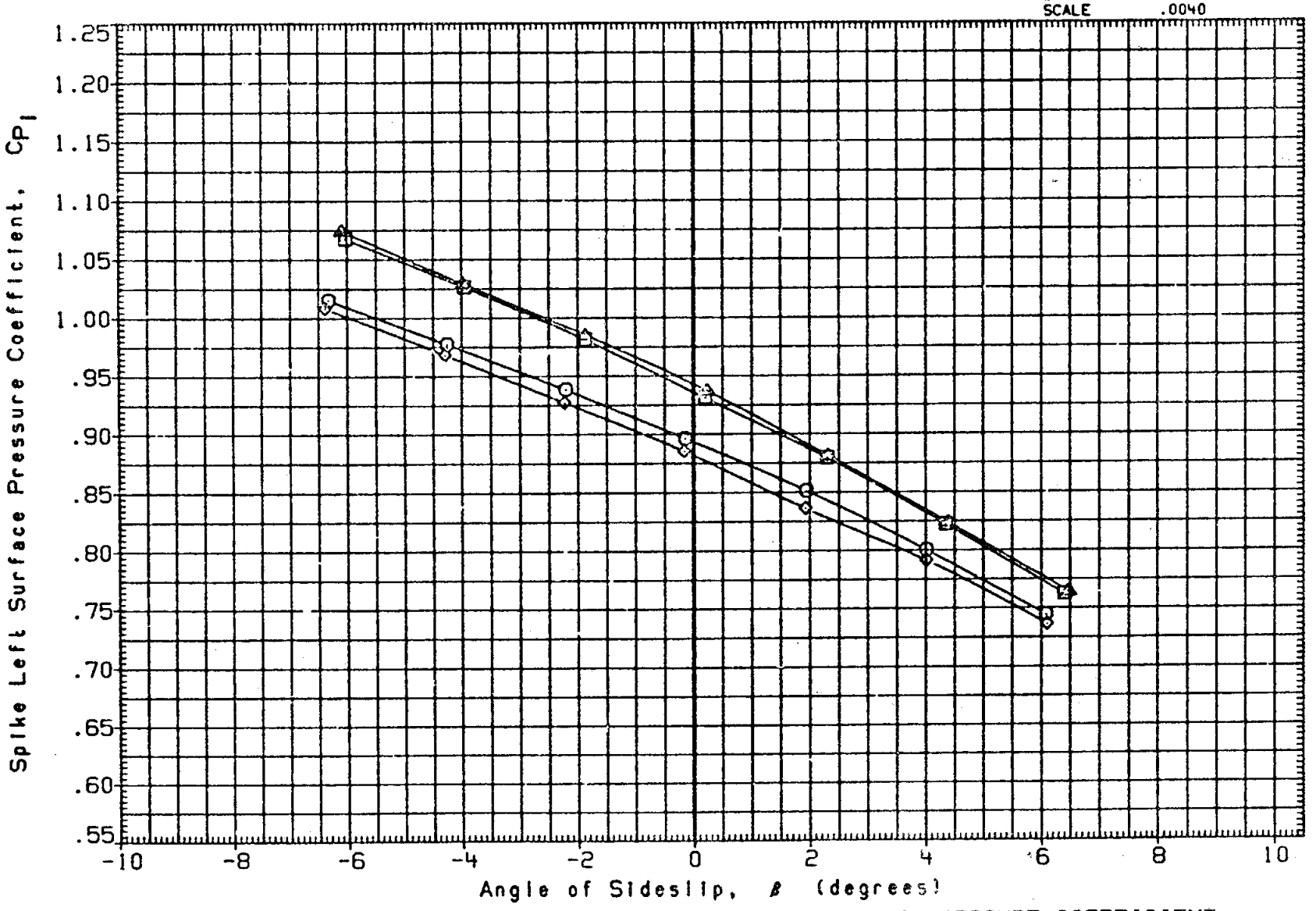

FIG. 4(D) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

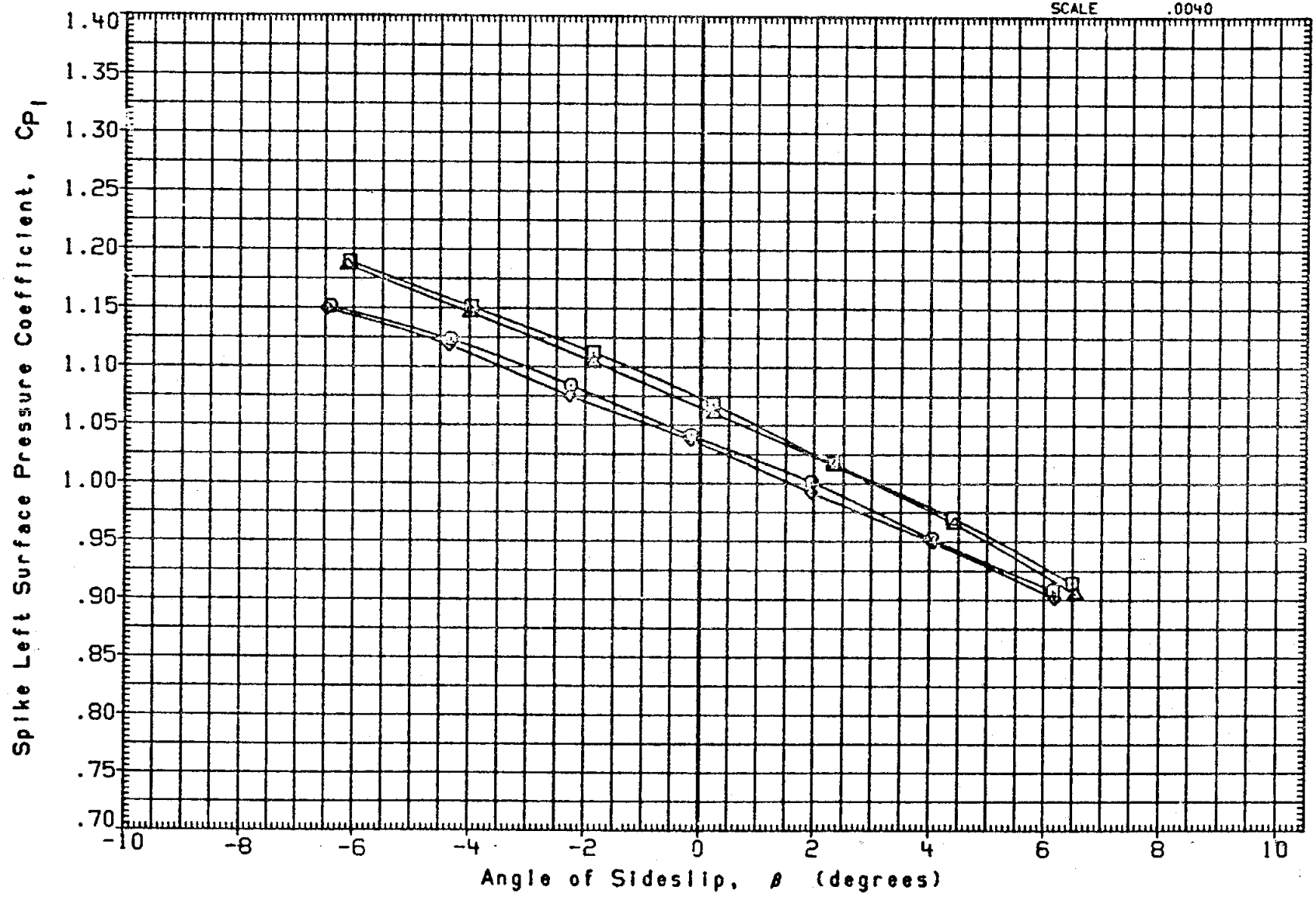

FIG. 4(D) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
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SCALE	.0040	

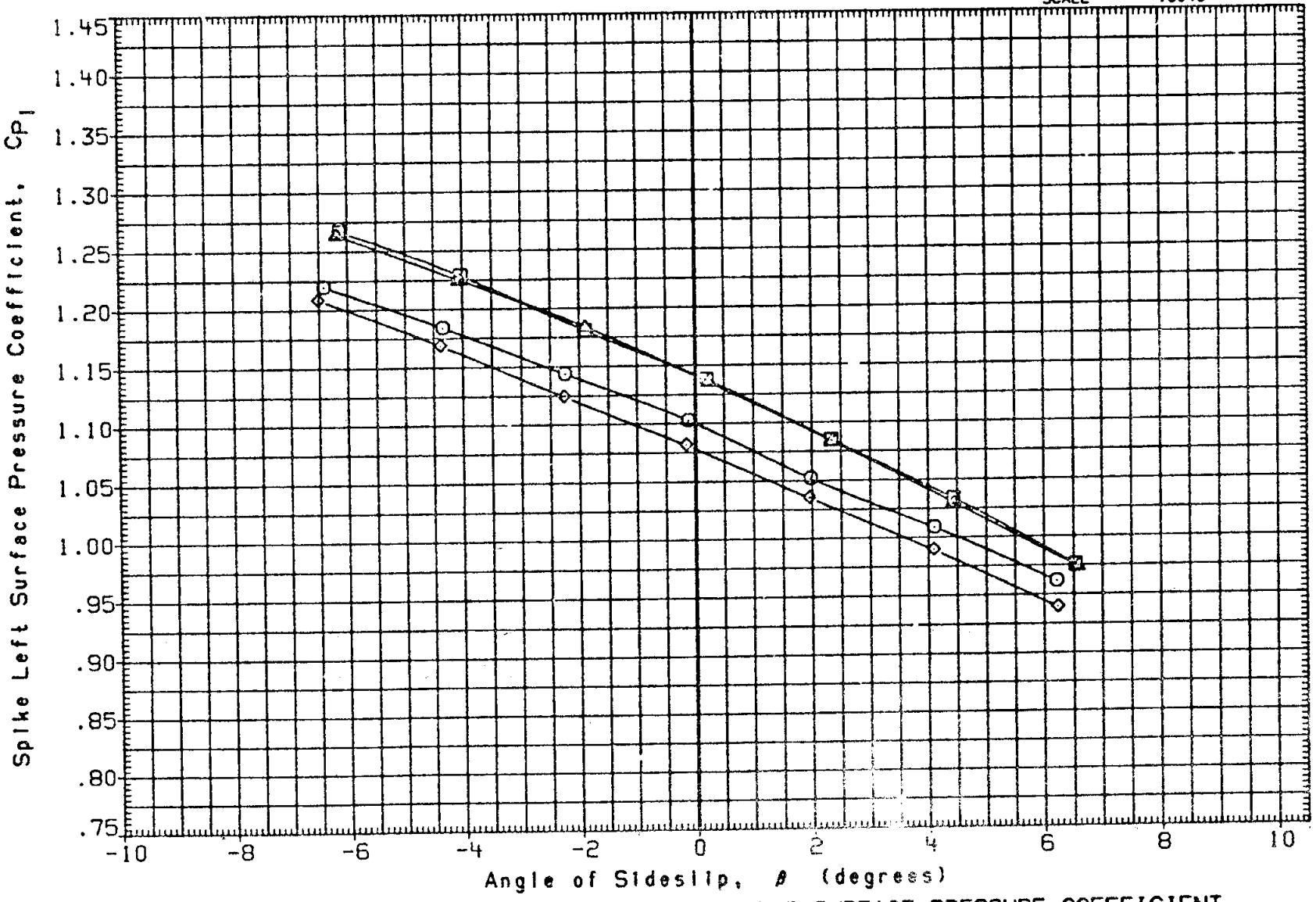

FIG. 4(D) EFFECT OF CONFIGURATION ON SPIKE LEFT SURFACE PRESSURE COEFFICIENT
BETA VARYING, ALPHA = + OR - 6 DEGREES

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- 0 T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

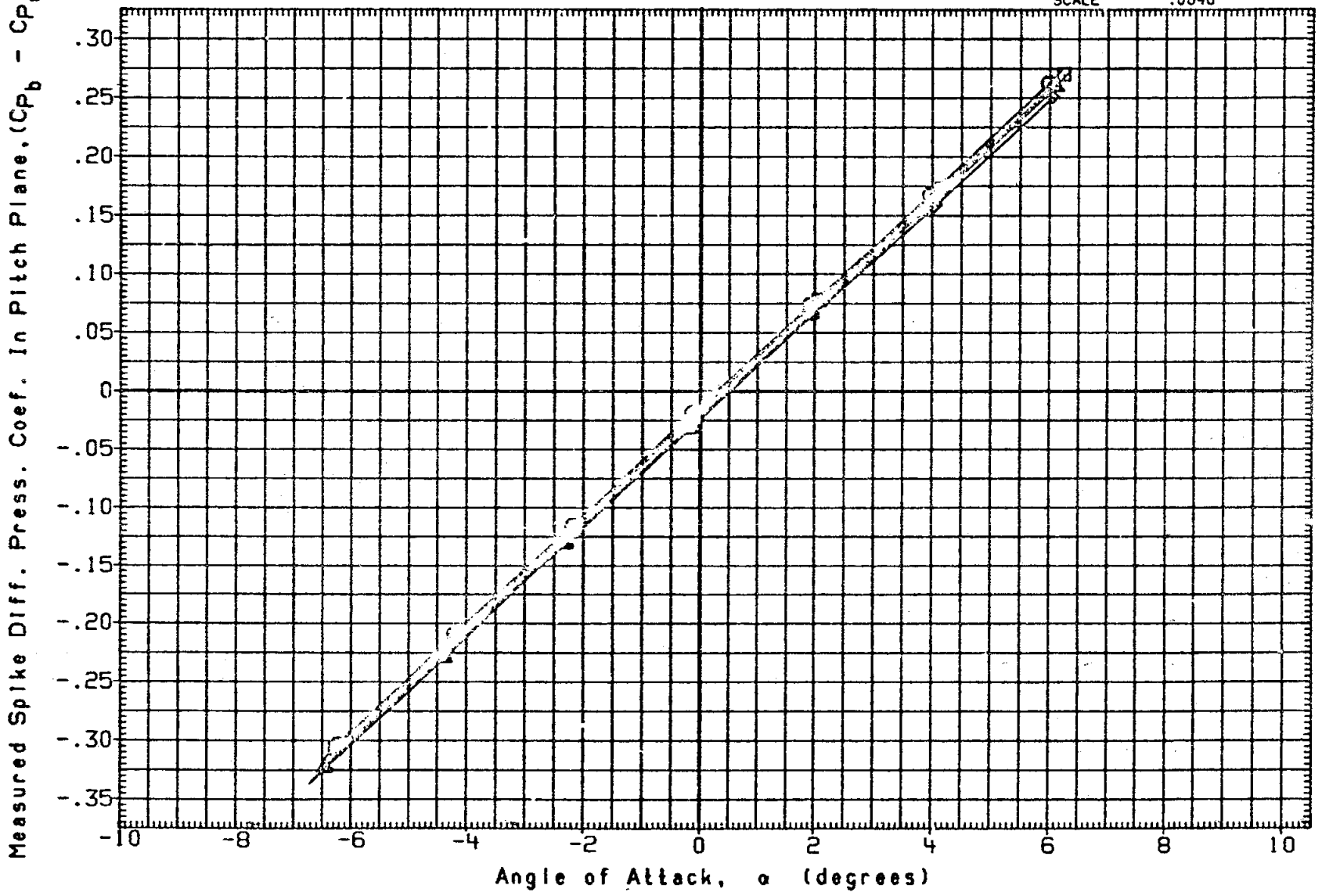

FIG. 5(A) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (ALPHA VARYING, BETA = 0)

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION	BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T (AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T (AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S (AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- 0 T (AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- 0 T S (AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- 0 T S (AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

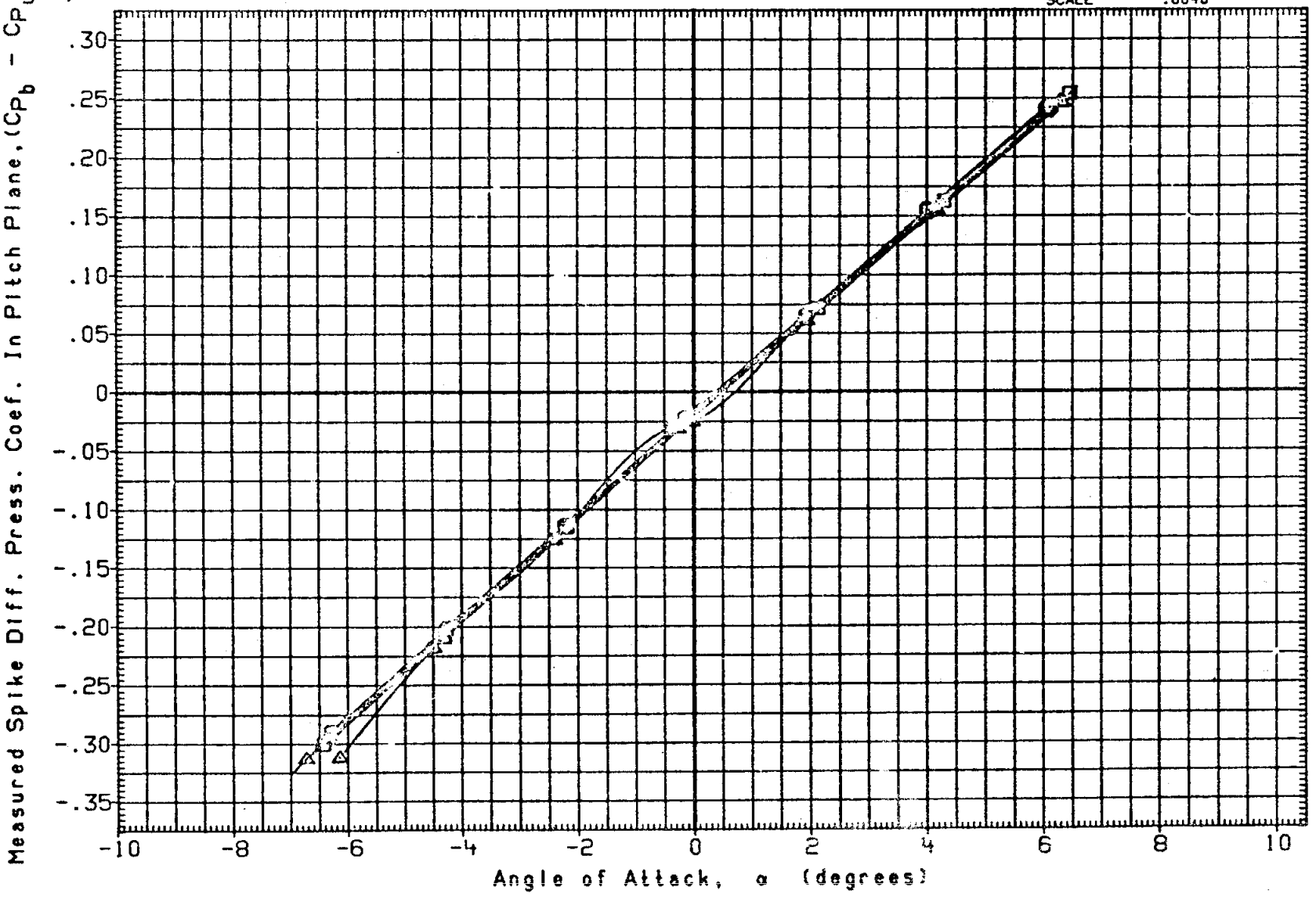

FIG. 5(A) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (ALPHA VARYING, BETA = 0)

(B) MACH = .90

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

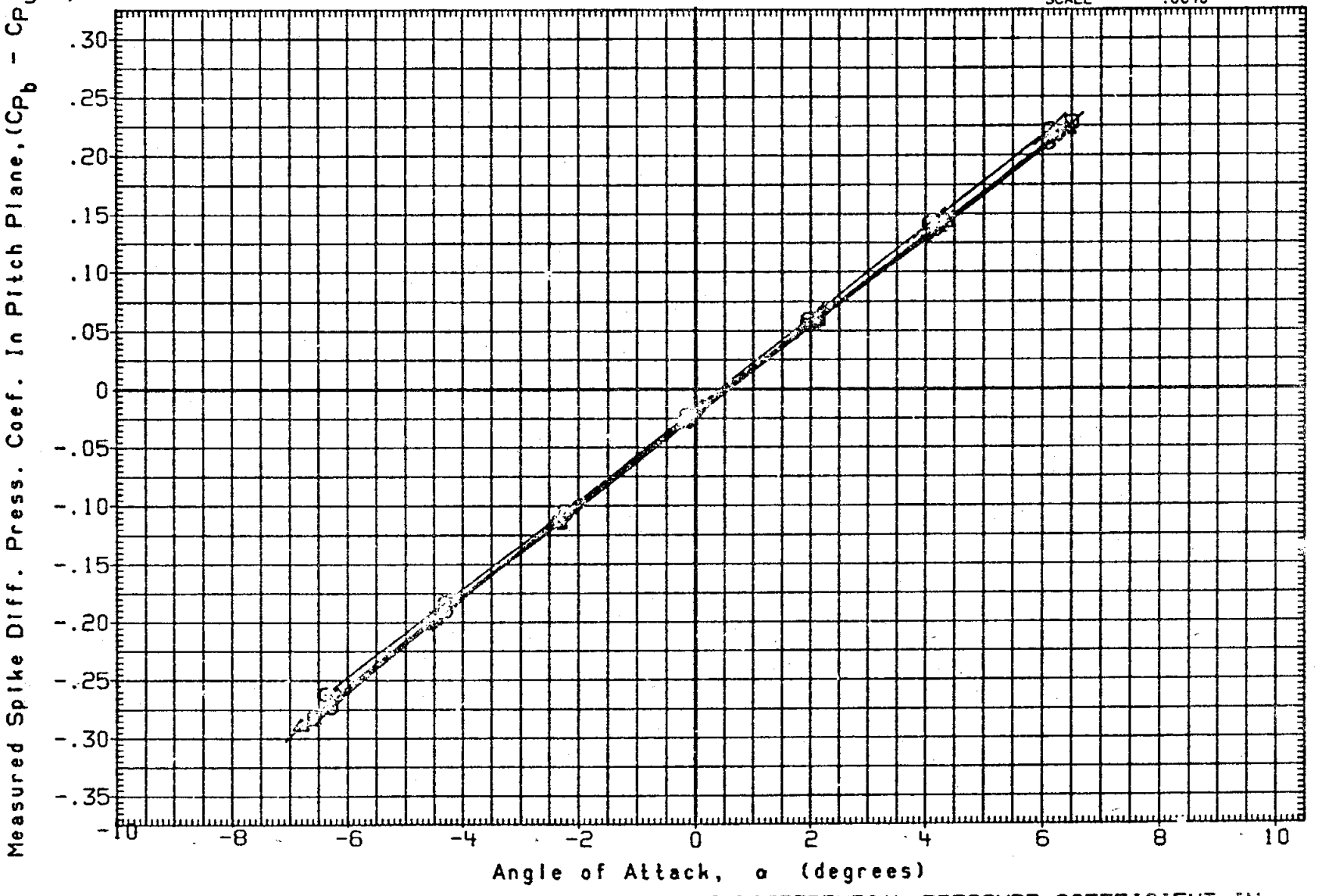

FIG. 5(A) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (ALPHA VARYING, BETA = 0)

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION	BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T (AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T (AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S (AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- 0 T (AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- 0 T S (AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- 0 T S (AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

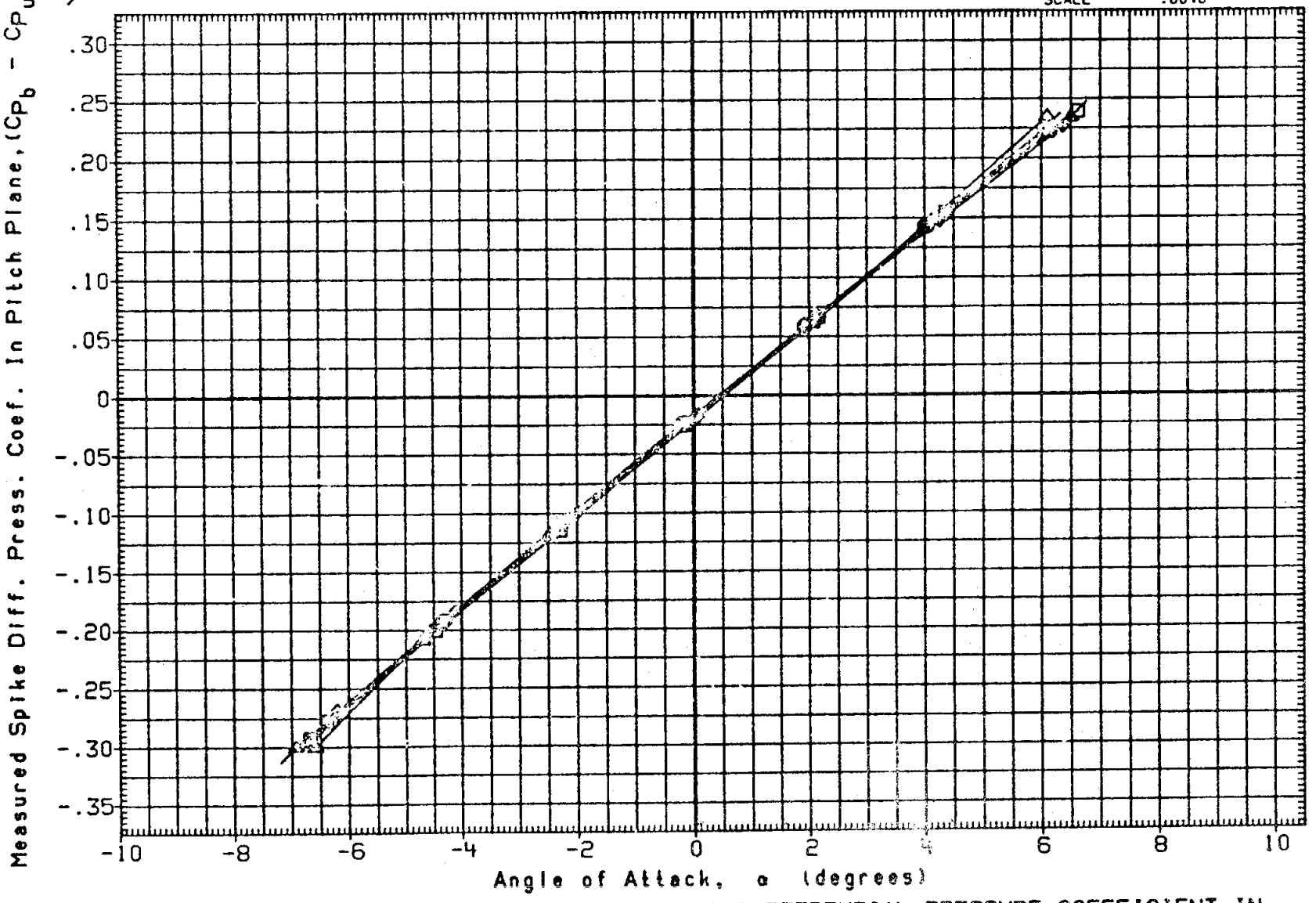

FIG. 5(A) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (ALPHA VARYING, BETA = 0)

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ. IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

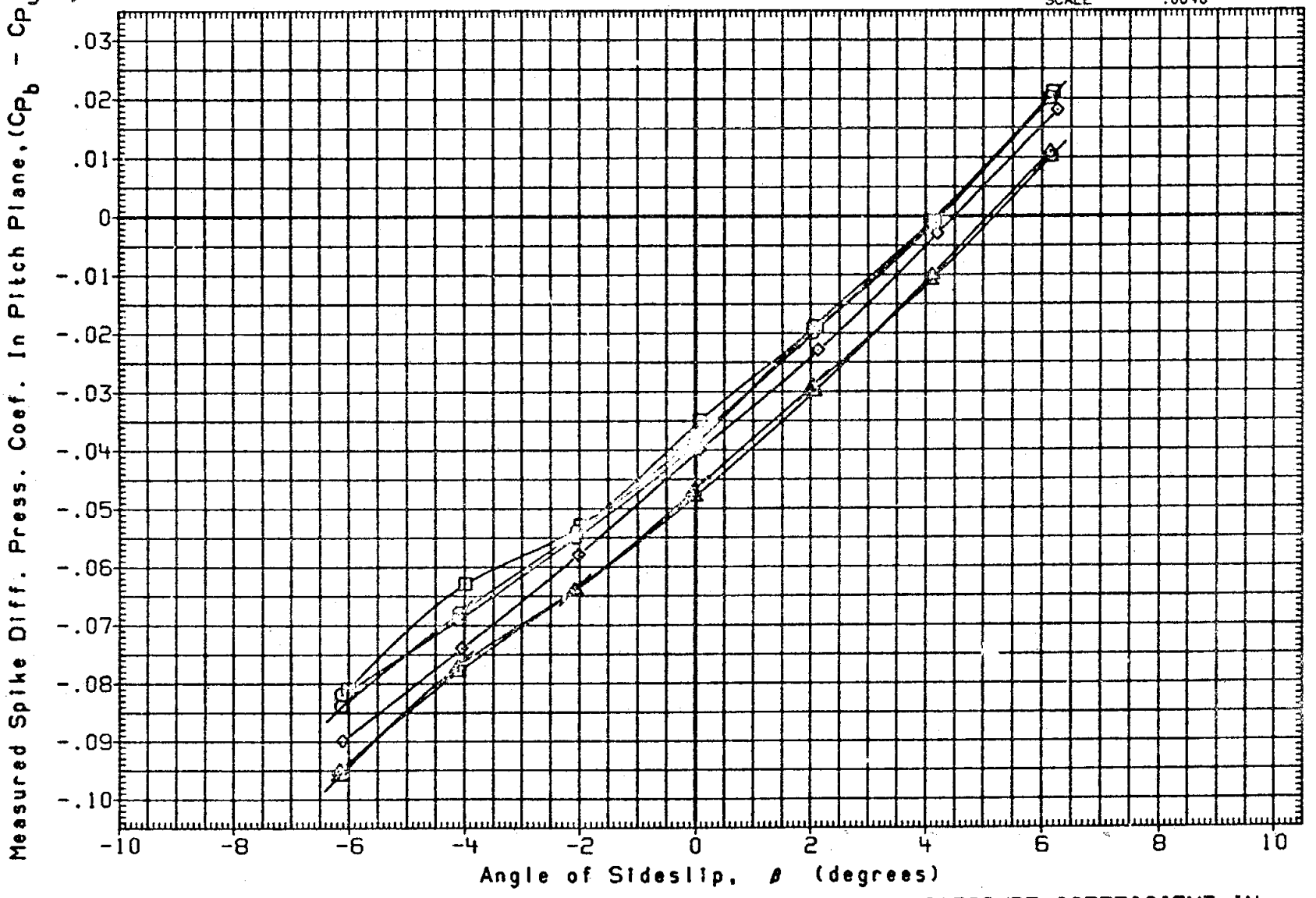

FIG. 5(B) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (BETA VARYING, ALPHA = 0)

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

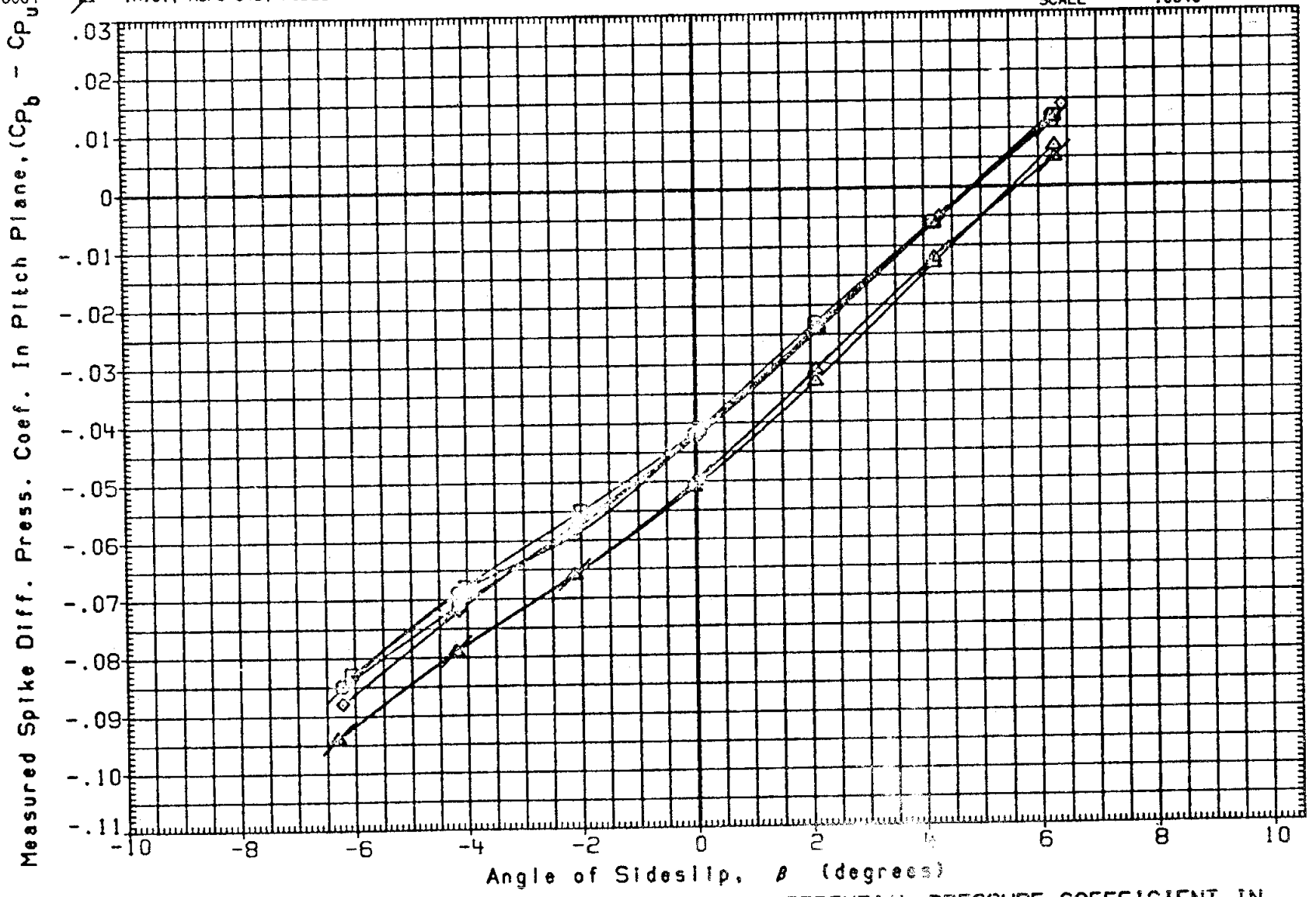

FIG. 5(B) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (BETA VARYING, ALPHA = 0)

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊘	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

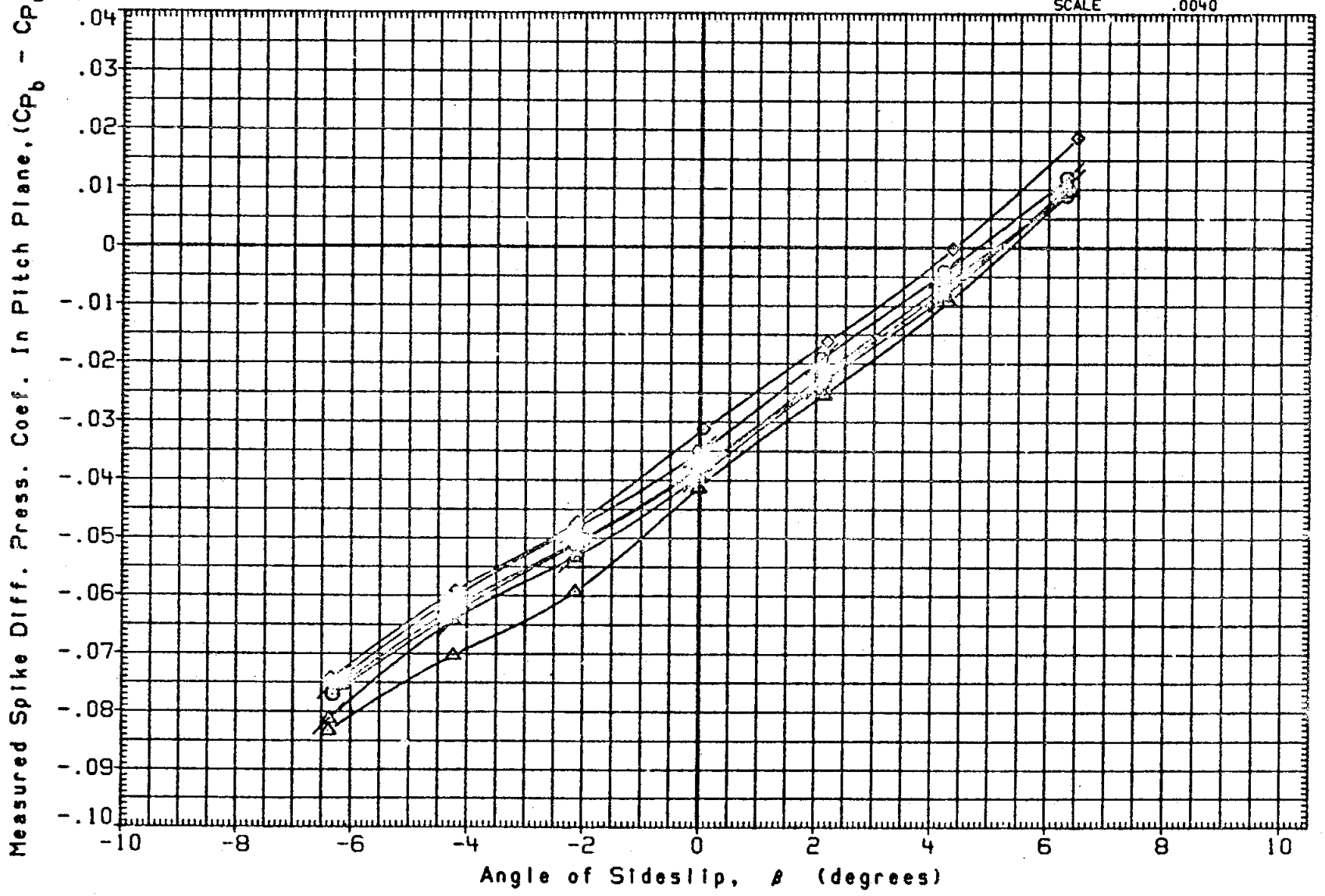

FIG. 5(B) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (BETA VARYING, ALPHA = 0)

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊘	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

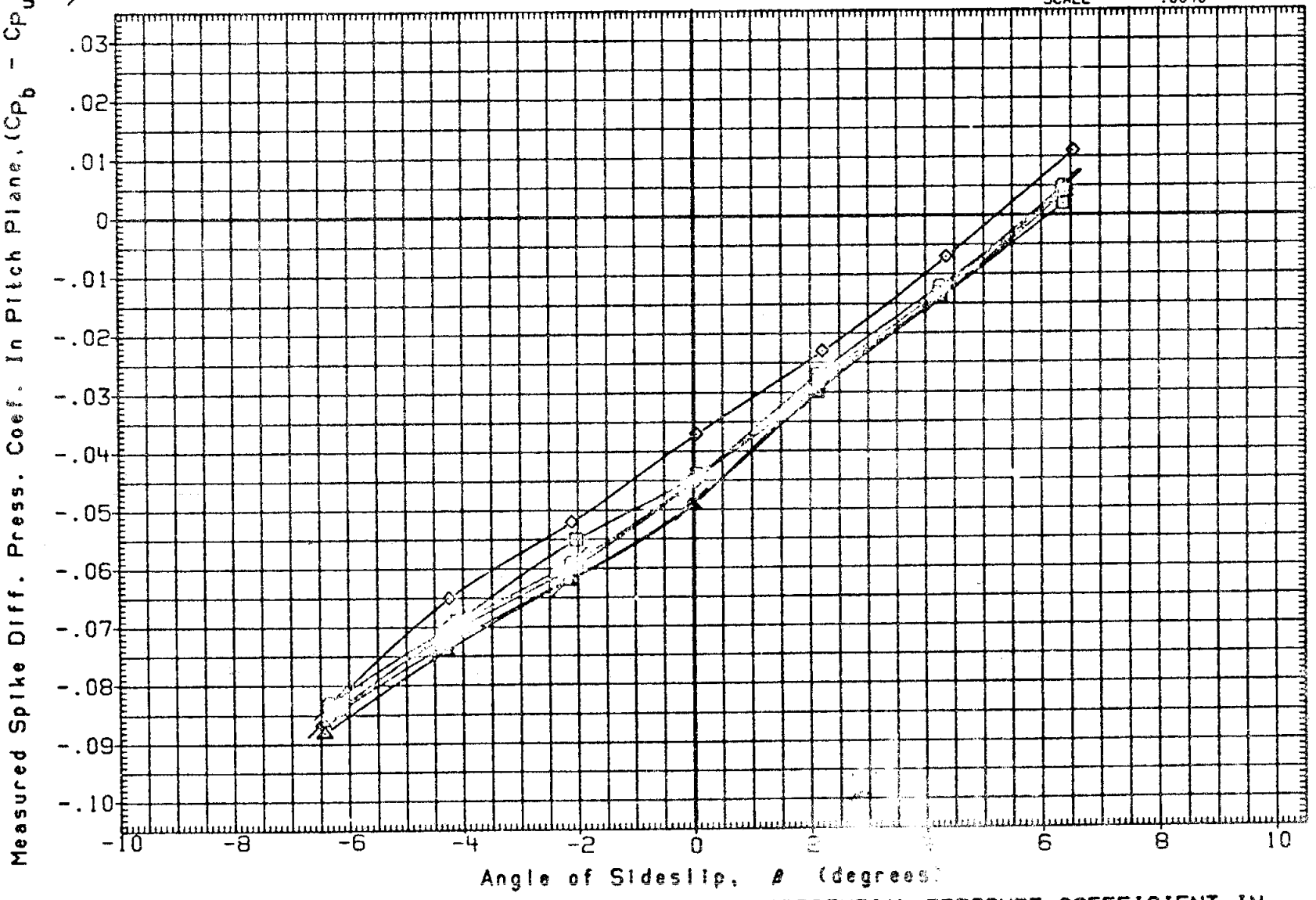

FIG. 5(B) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (BETA VARYING, ALPHA = 0)

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ. IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

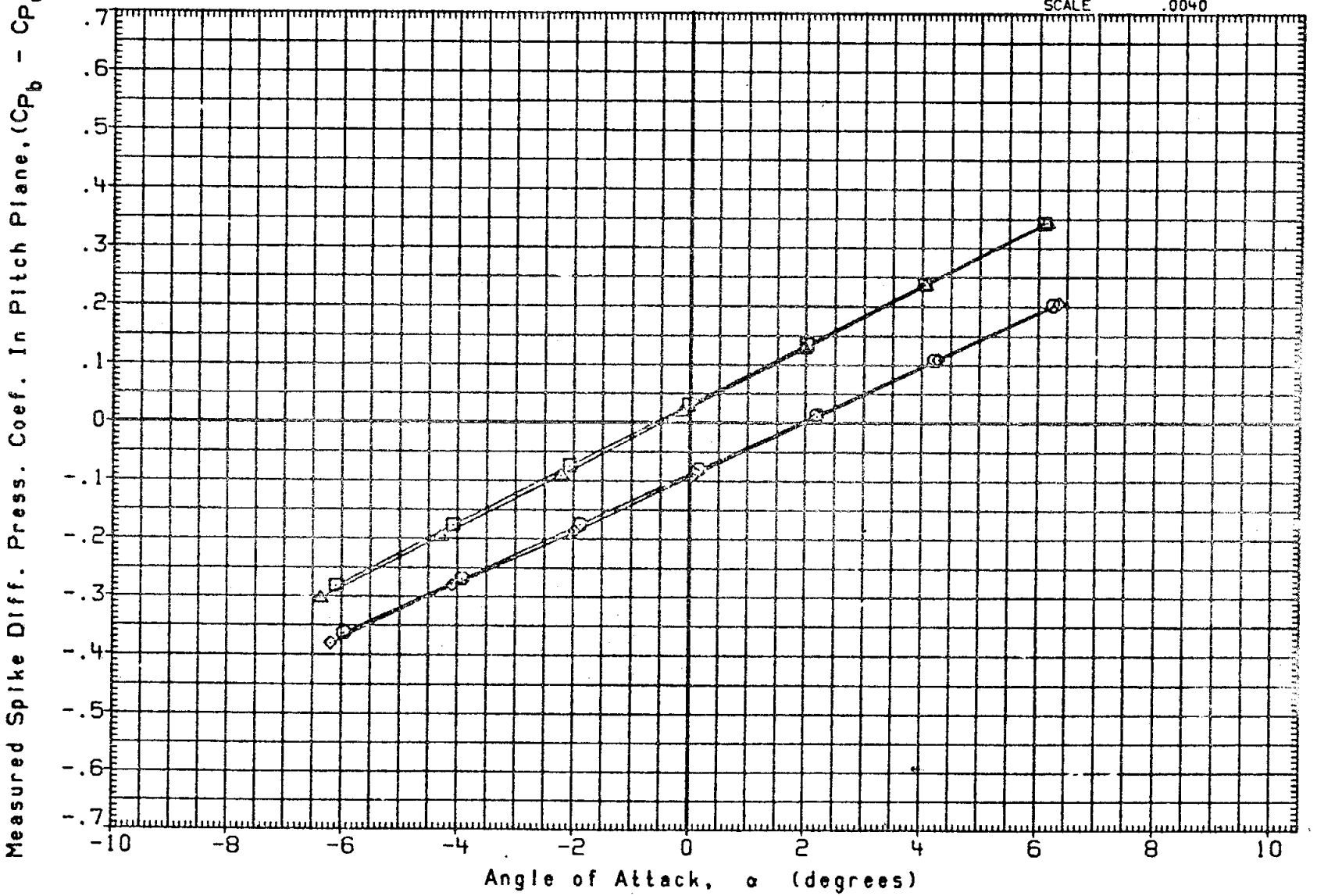

FIG. 5(C) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (ALPHA VARYING, BETA = + OR - 6 DEGREES)

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ. IN.
LREF	.0000	INCHES
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XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

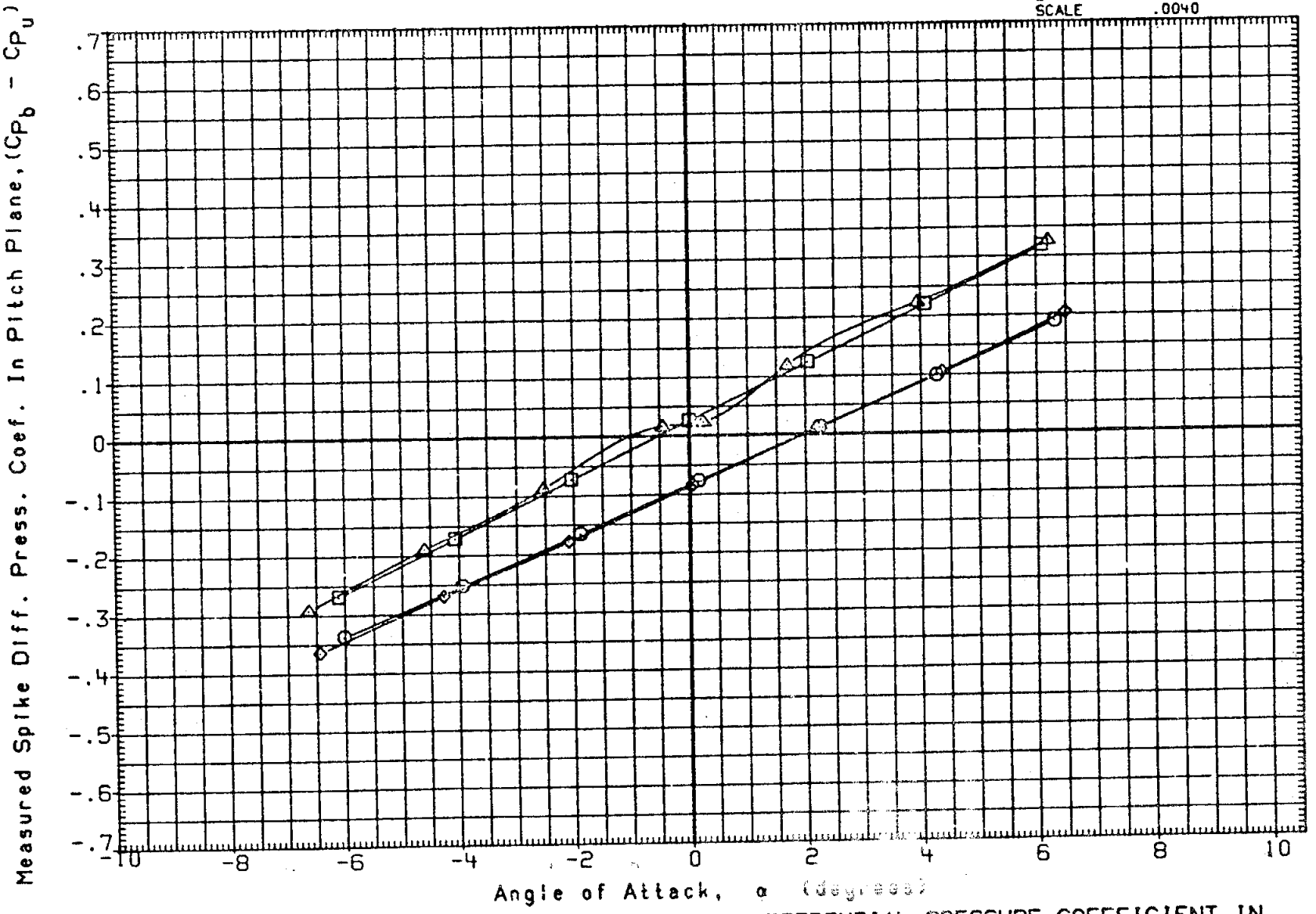

FIG. 5(C) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (ALPHA VARYING, BETA = + OR - 6 DEGREES)

(B) MACH = .90

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
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XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

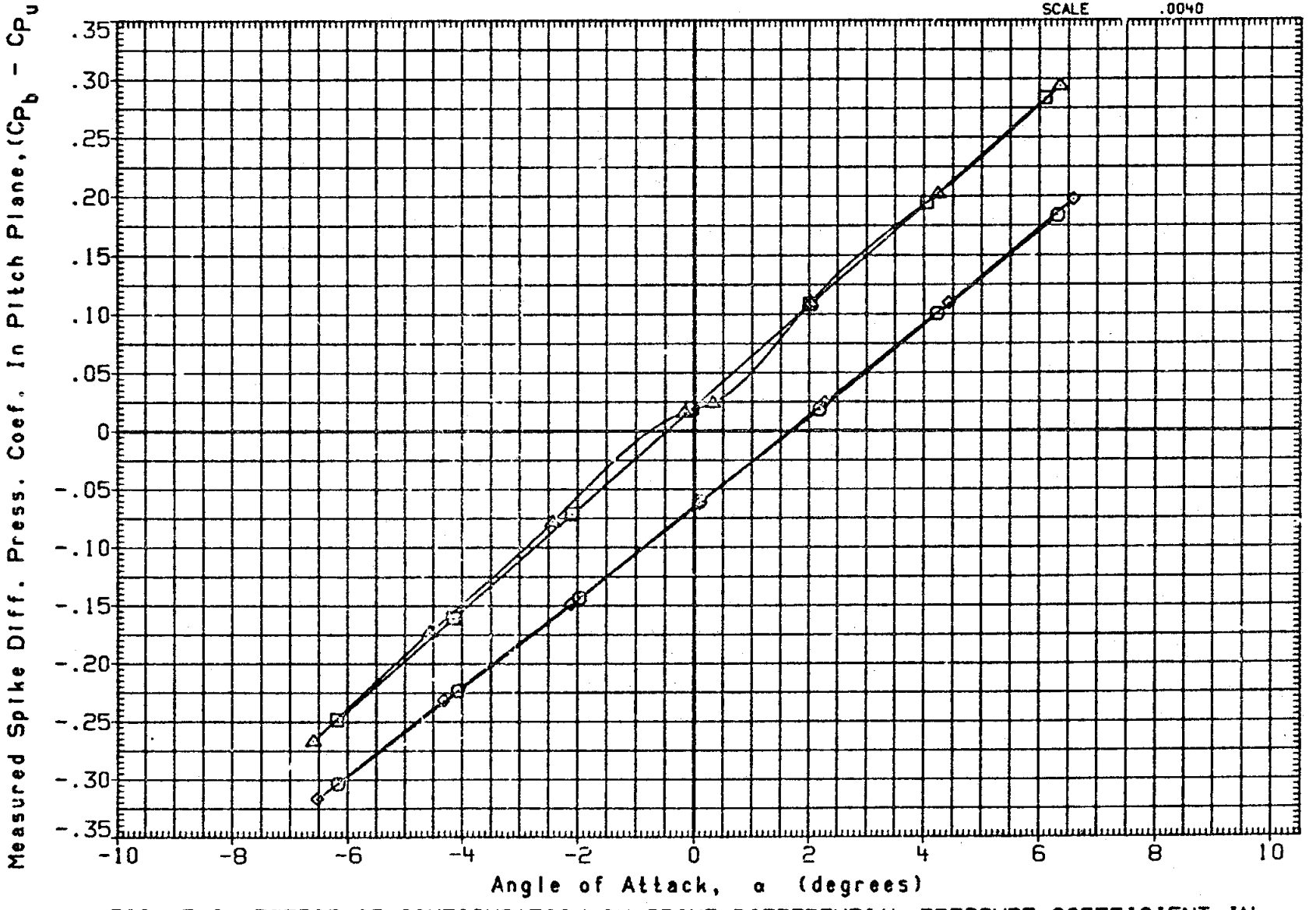

FIG. 5(C) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (ALPHA VARYING, BETA = + OR - 6 DEGREES)

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

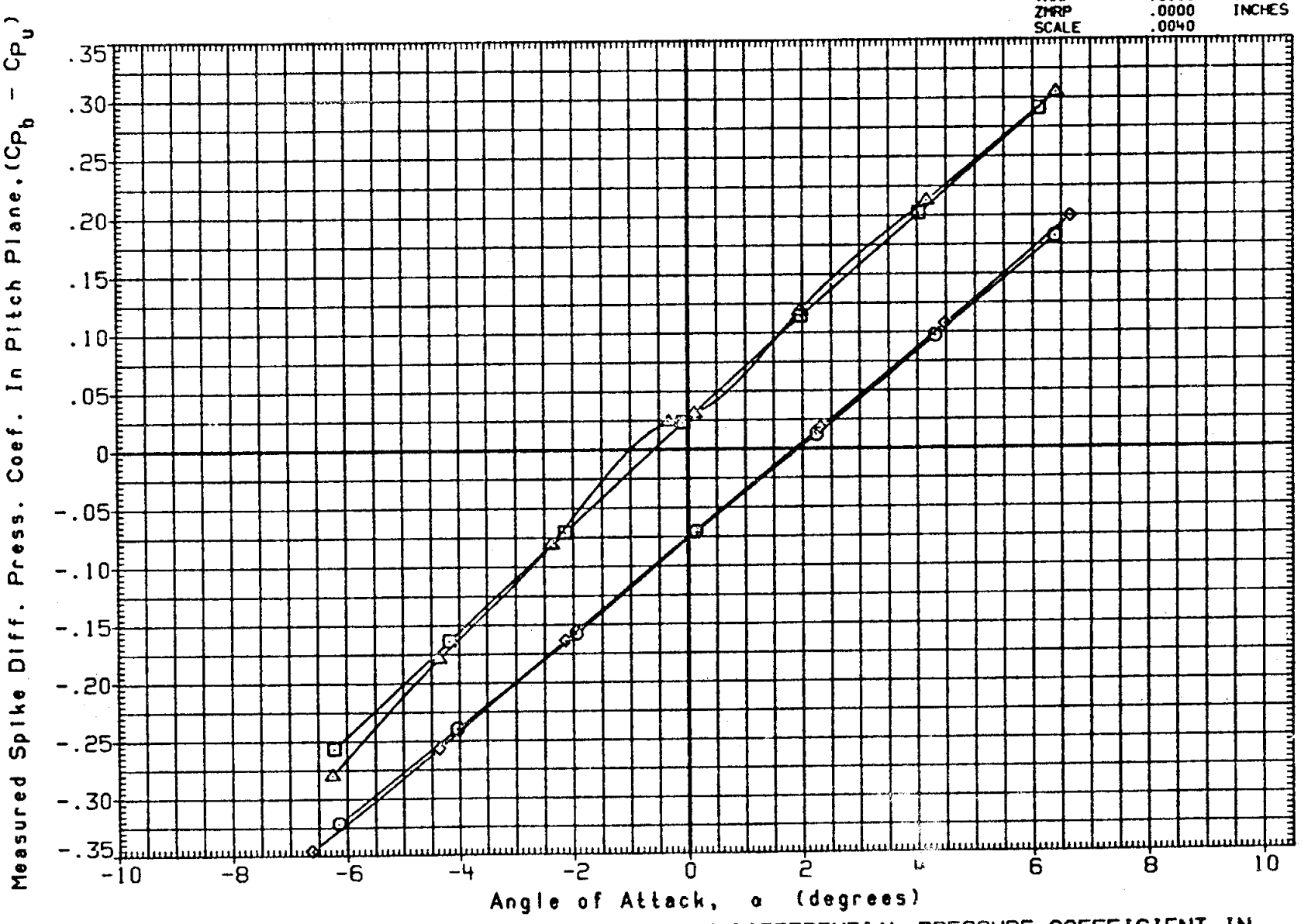

FIG. 5(C) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (ALPHA VARYING, BETA = + OR - 6 DEGREES)

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

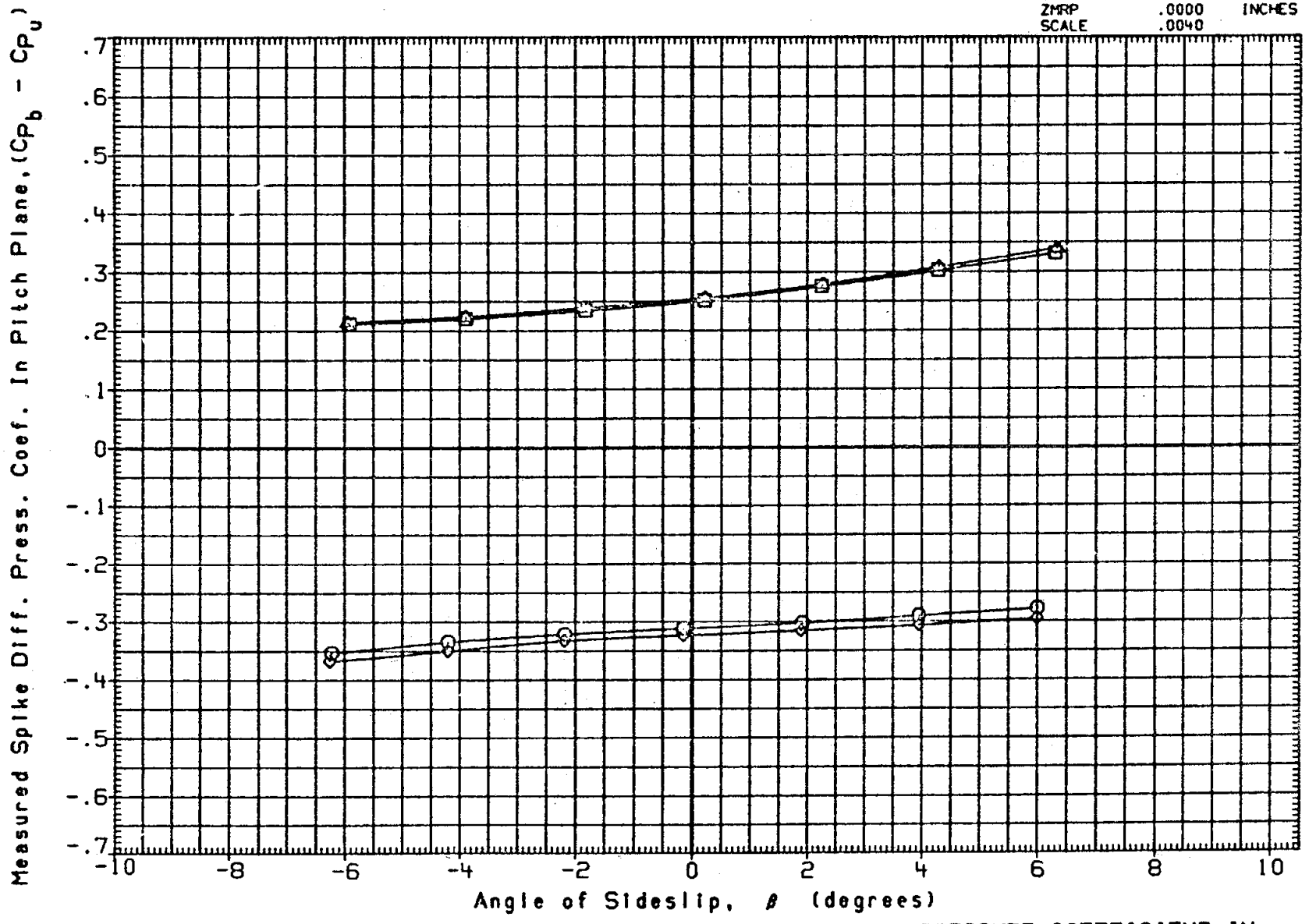

FIG. 5(D) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (BETA VARYING, ALPHA = + OR - 6 DEGREES)

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

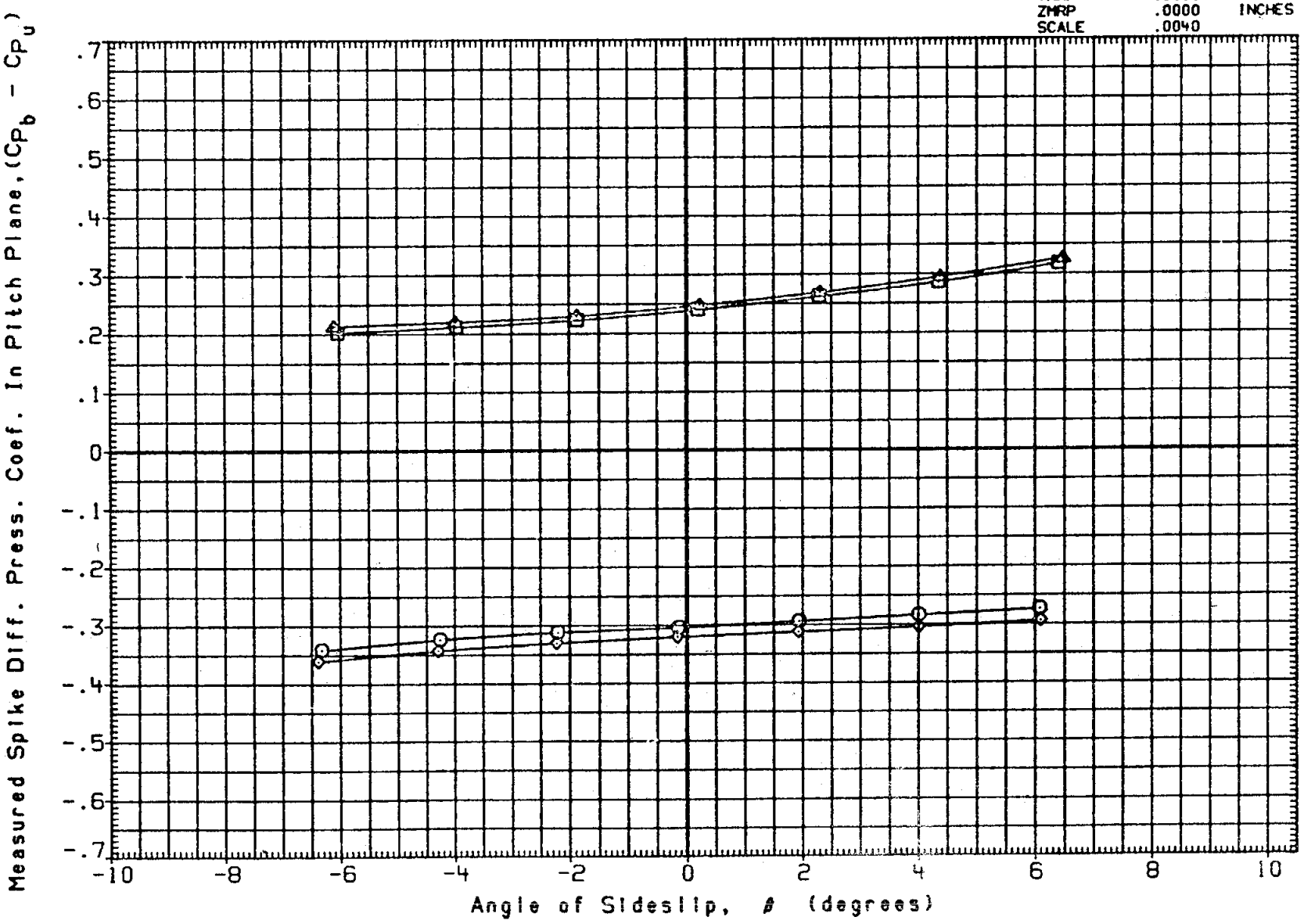

FIG. 5(D) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (BETA VARYING, ALPHA = + OR - 6 DEGREES)

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION	ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T (AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T (AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S (AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S (AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

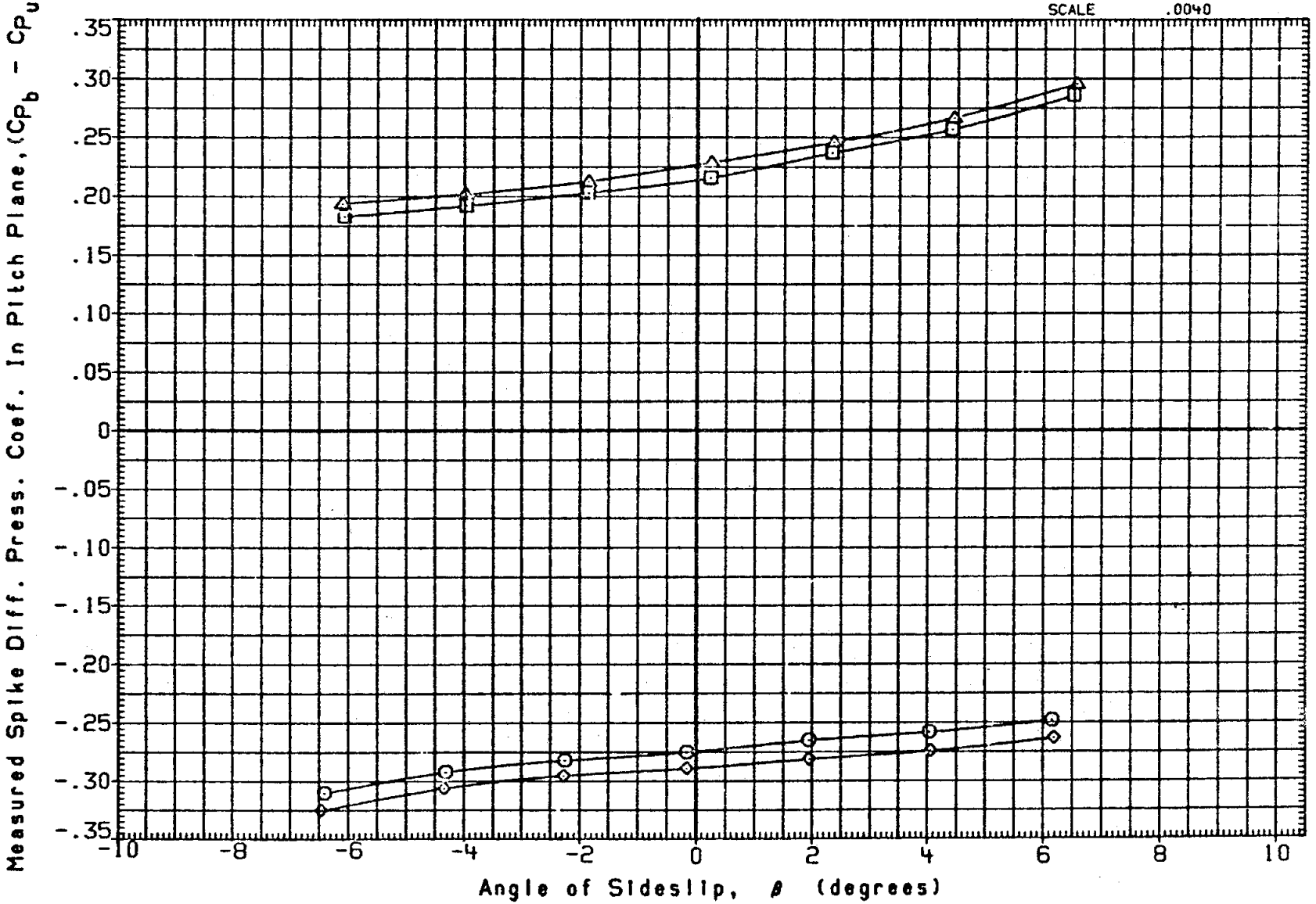

FIG. 5(D) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (BETA VARYING, ALPHA = + OR - 6 DEGREES)

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
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XMRP	.0000	INCHES
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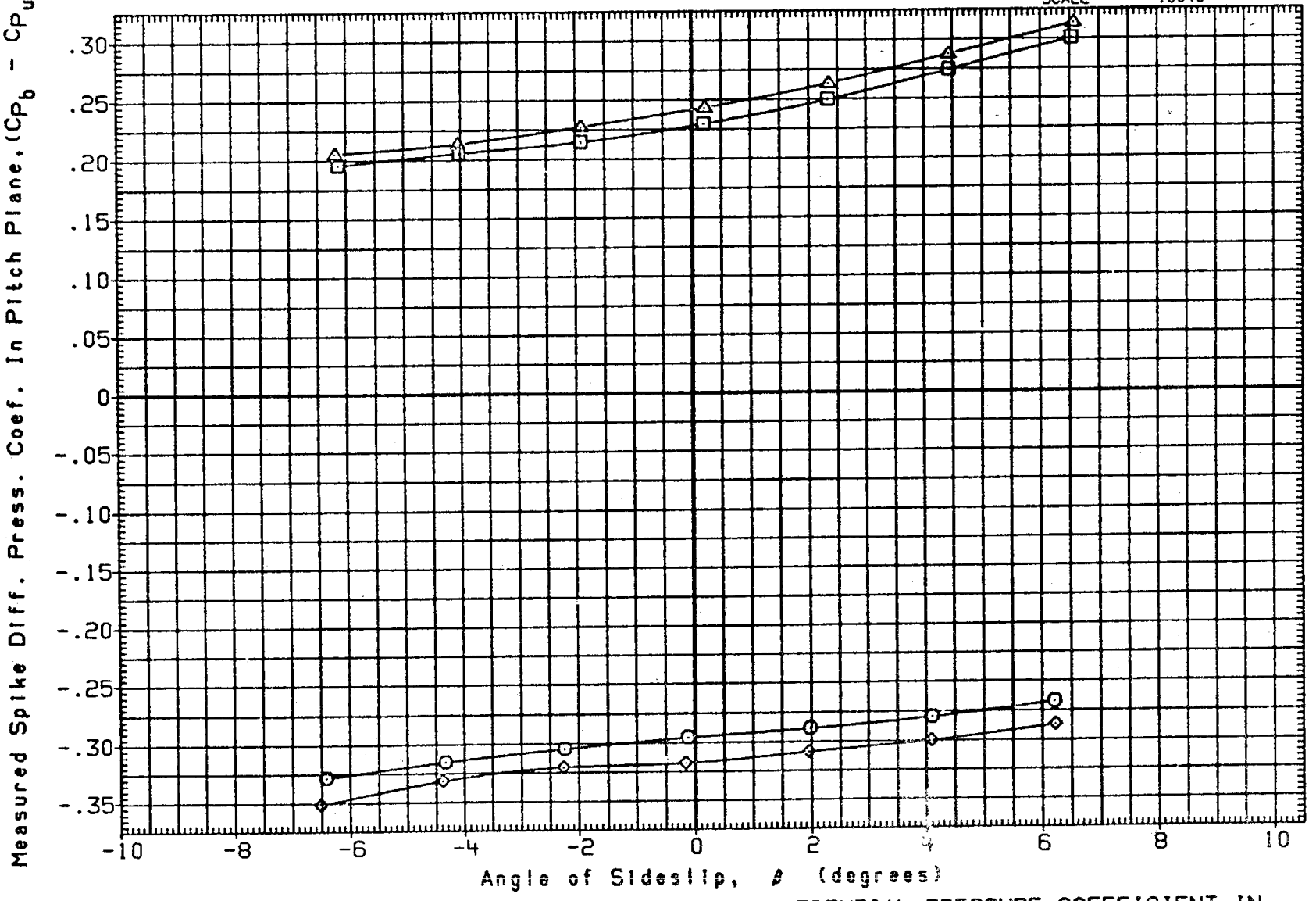

FIG. 5(D) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN PITCH PLANE (BETA VARYING, ALPHA = + OR - 6 DEGREES)

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

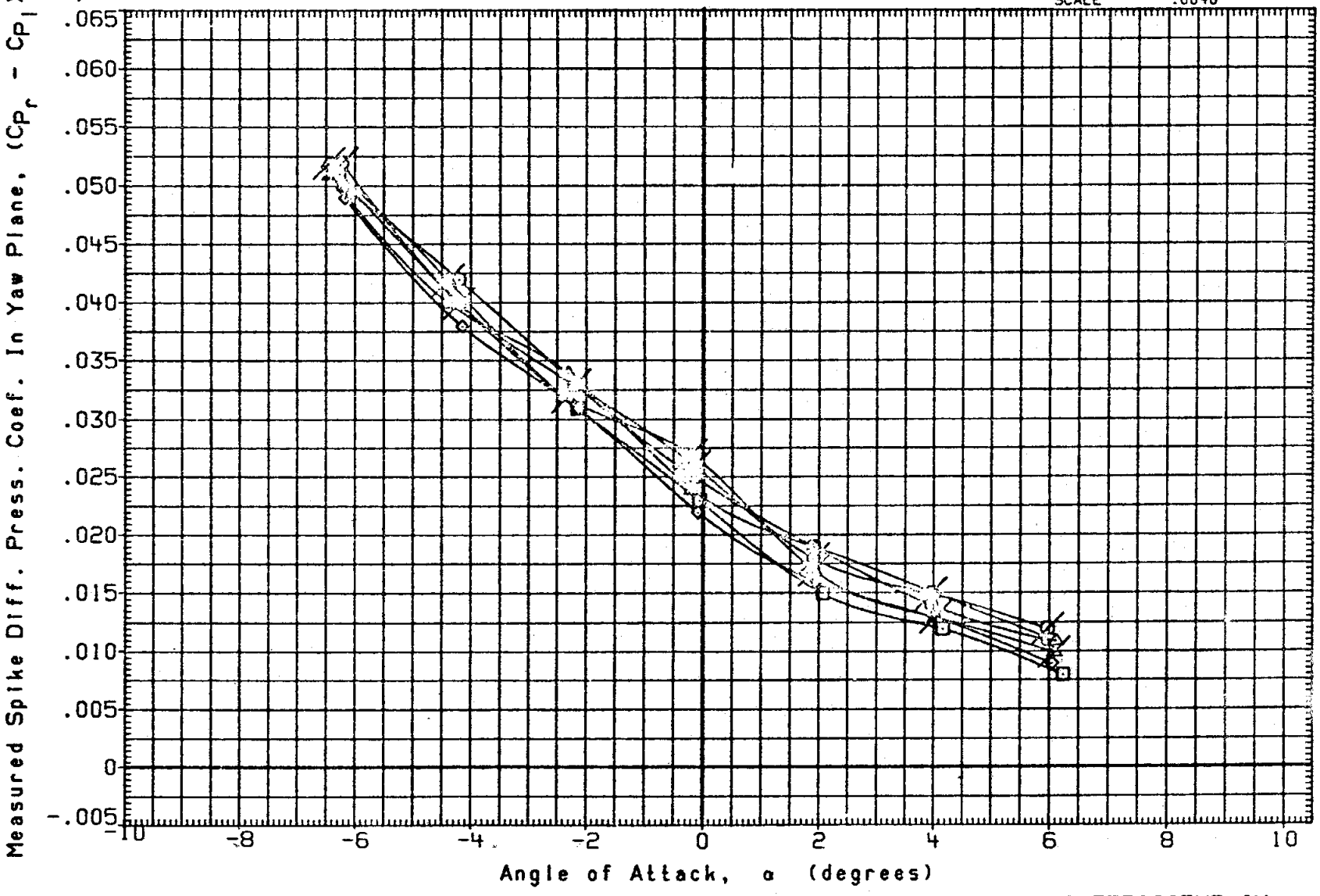

FIG. 6(A) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (ALPHA VARYING, BETA = 0)

(A) MACH = .60

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

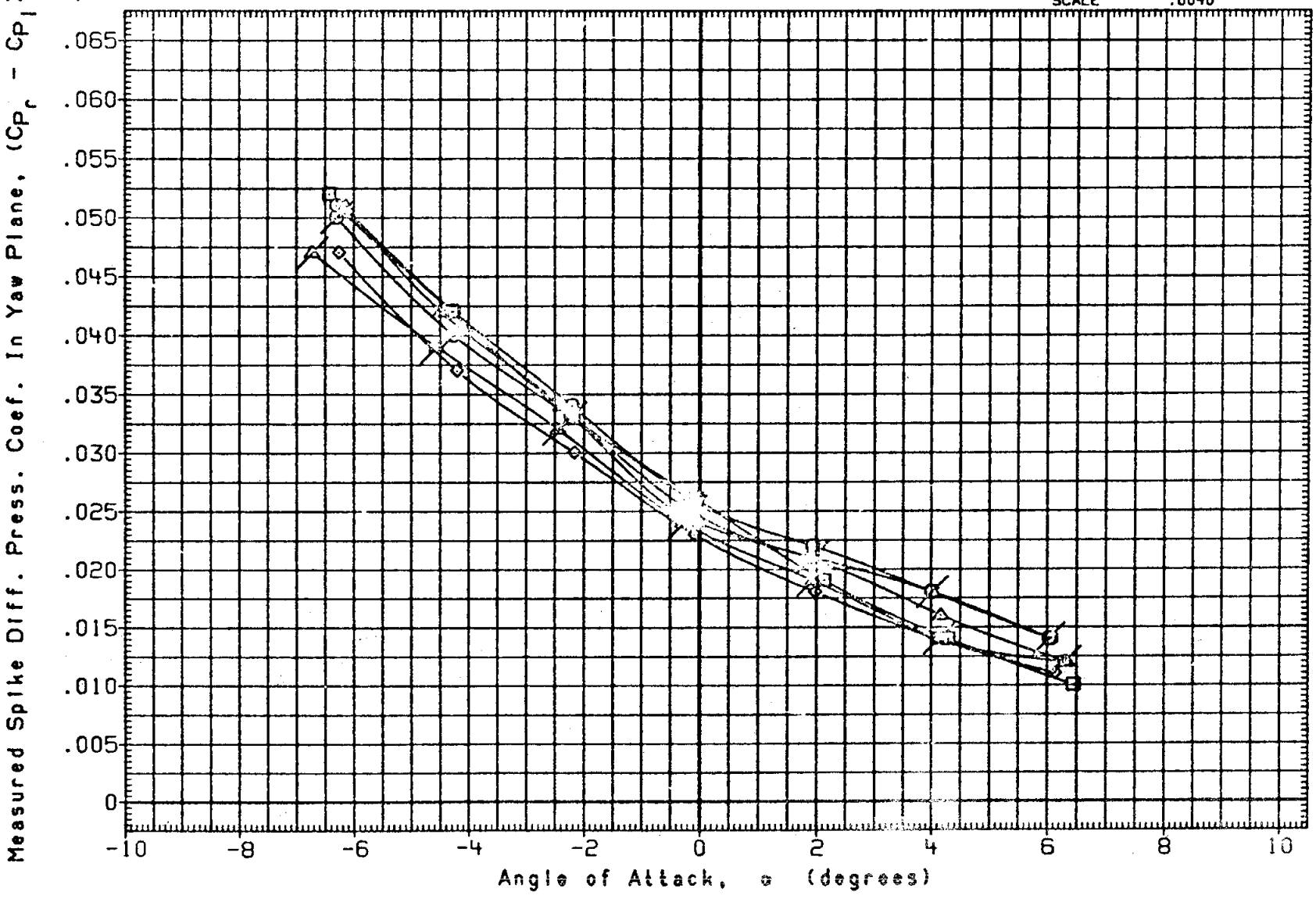

FIG. 6(A) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (ALPHA VARYING, BETA = 0)

(B) MACH = .90

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	.000		
B1U019	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000
B1U002	⊘	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ. IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

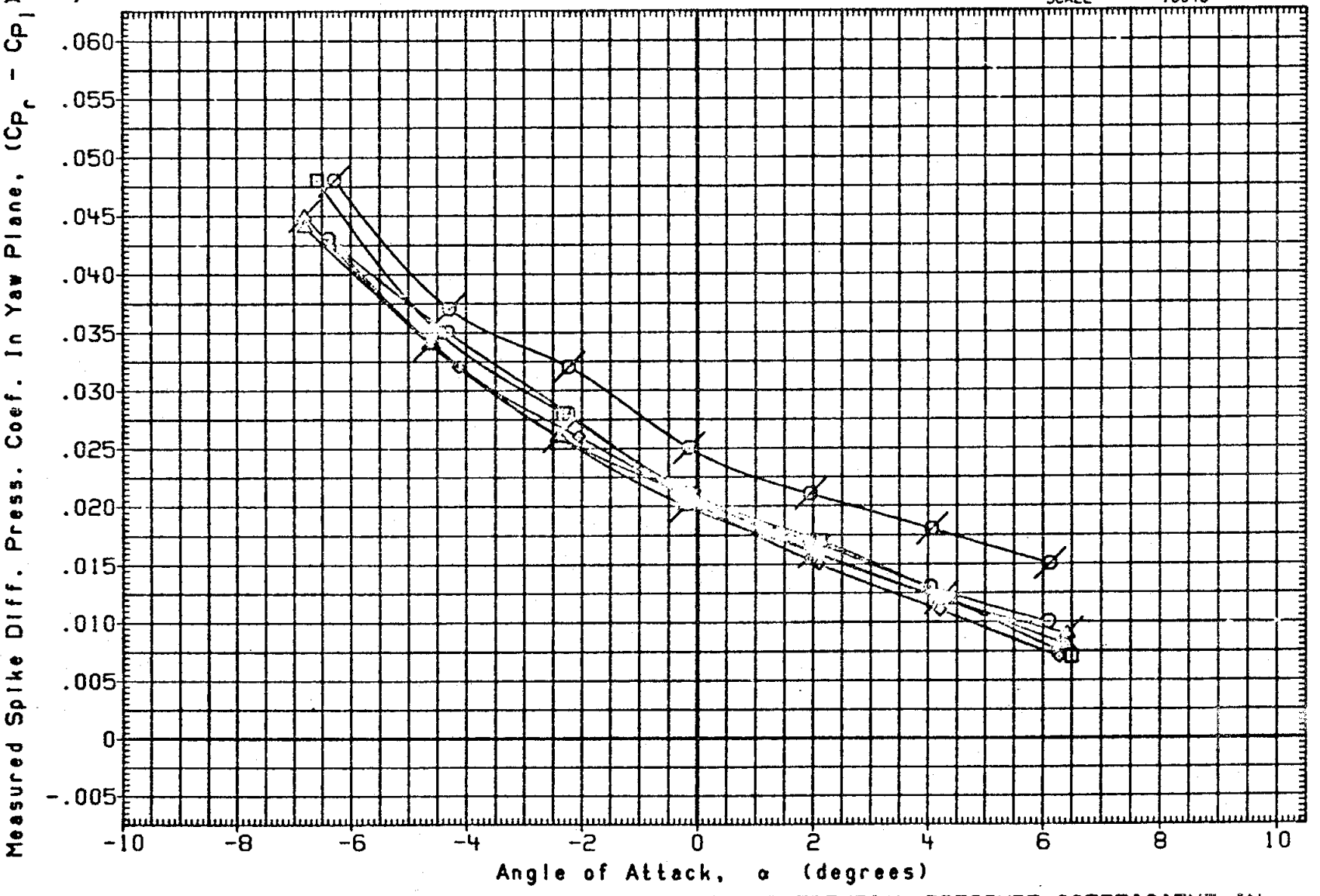

FIG. 6(A) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (ALPHA VARYING, BETA = 0)

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION	BETA	PHI	ELEVON	AILRON
B1U009	○	IA181, MSFC 649, MODEL 74- T (AADS DATA)	.000	.000		
B1U010	⊘	IA181, MSFC 649, MODEL 74- T (AADS DATA)	.000	.000		
B1U019	⊠	IA181, MSFC 649, MODEL 74- T S (AADS DATA)	.000	.000		
B1U017	◇	IA181, MSFC 649, MODEL 74- O T (AADS DATA)	.000	.000	10.800	.000
B1U001	△	IA181, MSFC 649, MODEL 74- O T S (AADS DATA)	.000	.000	10.800	.000
B1U002	⊿	IA181, MSFC 649, MODEL 74- O T S (AADS DATA)	.000	.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

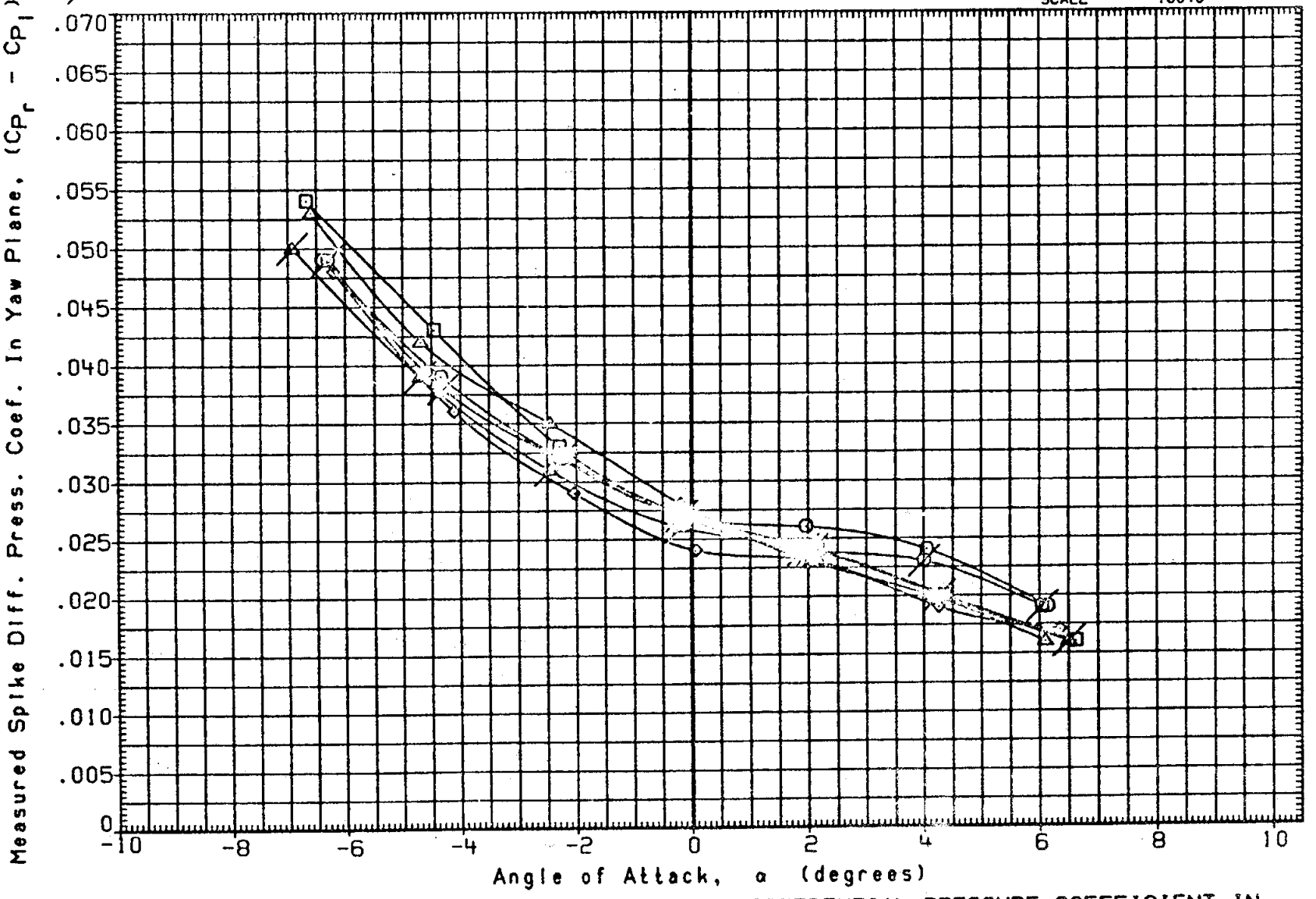

FIG. 6(A) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (ALPHA VARYING, BETA = 0)

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- 0 T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊘	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
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SCALE	.0040	

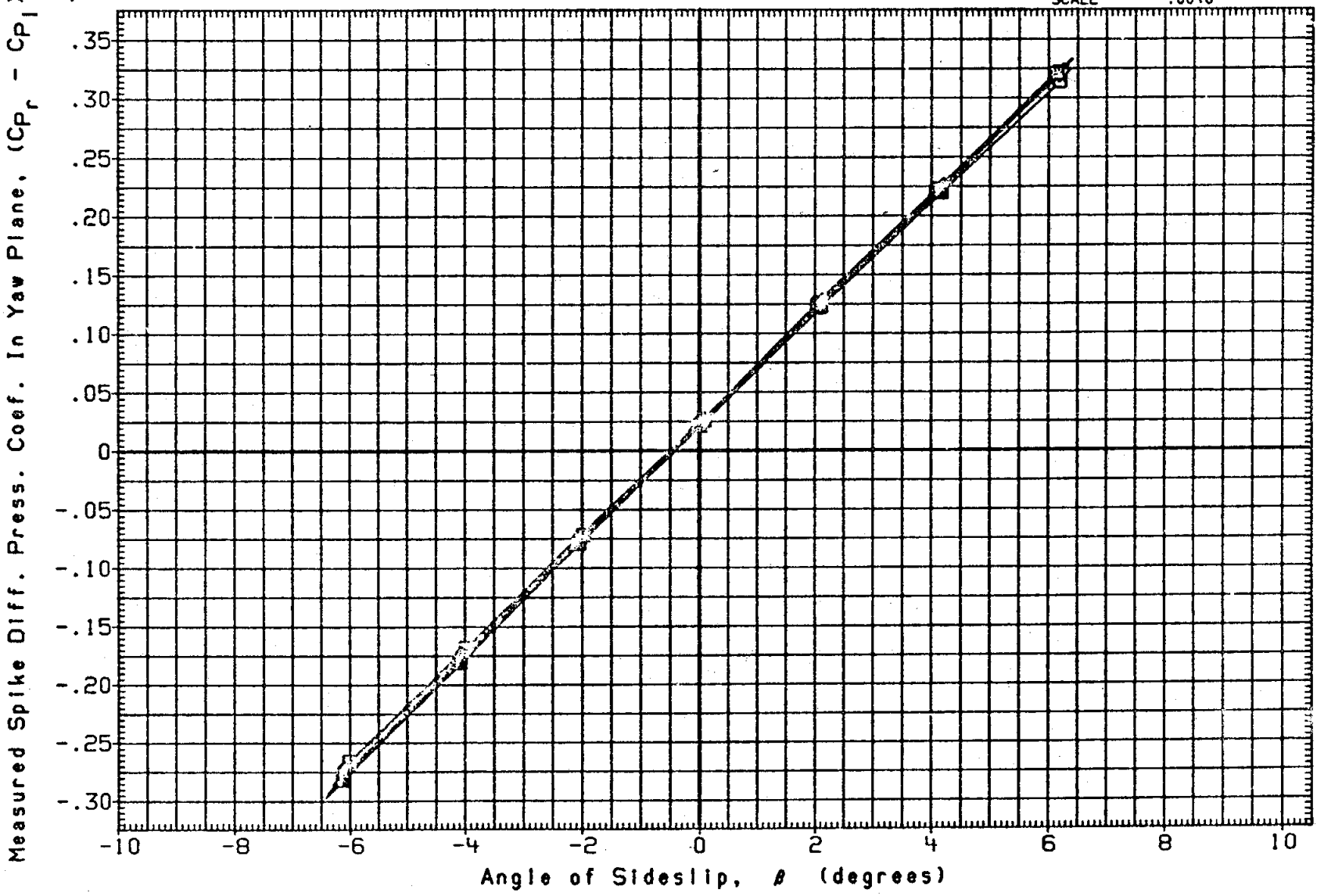

FIG. 6(B) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (BETA VARYING, ALPHA = 0)

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- 0 T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
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XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

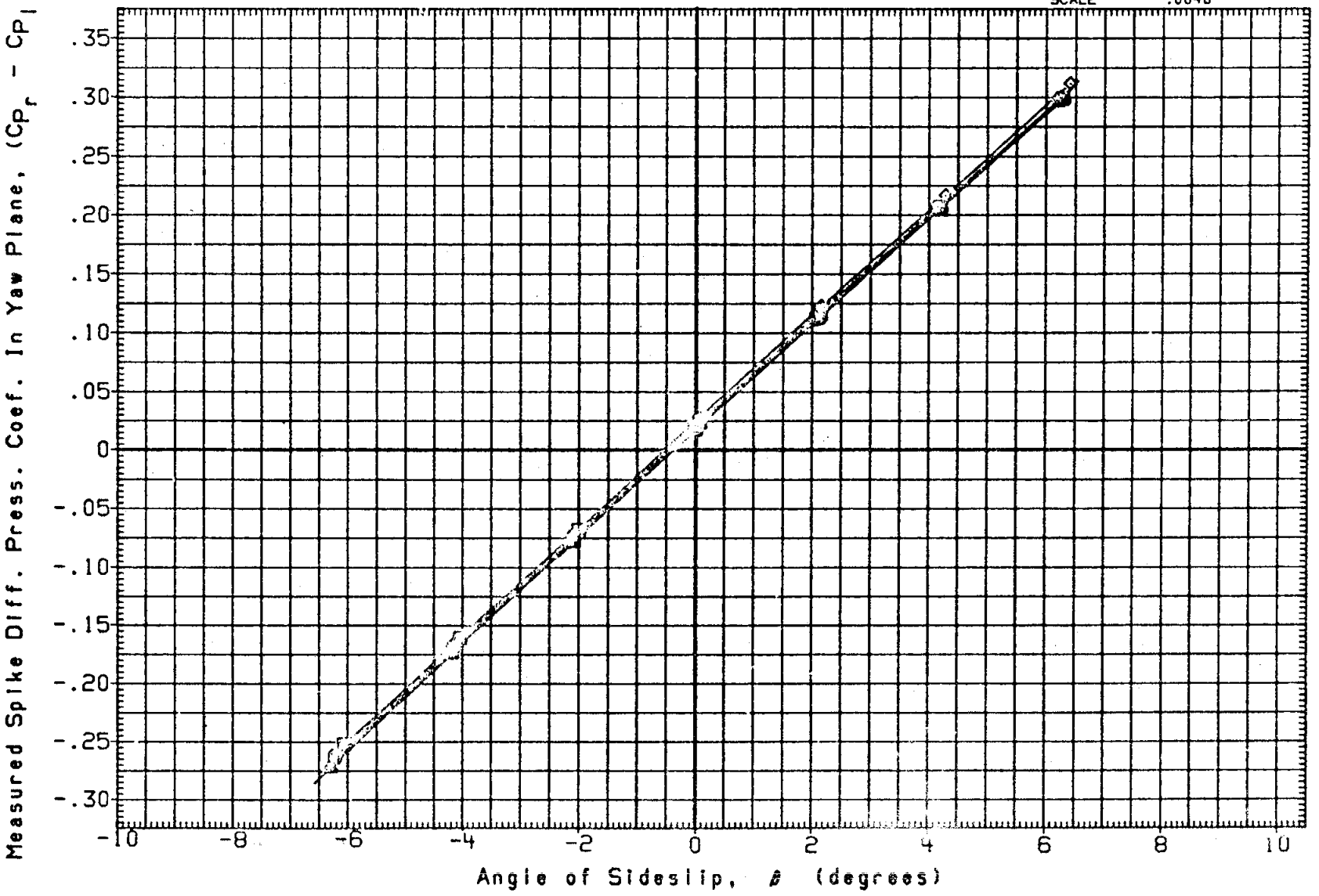

FIG. 6(B) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (BETA VARYING, ALPHA = 0)

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- O T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
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YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

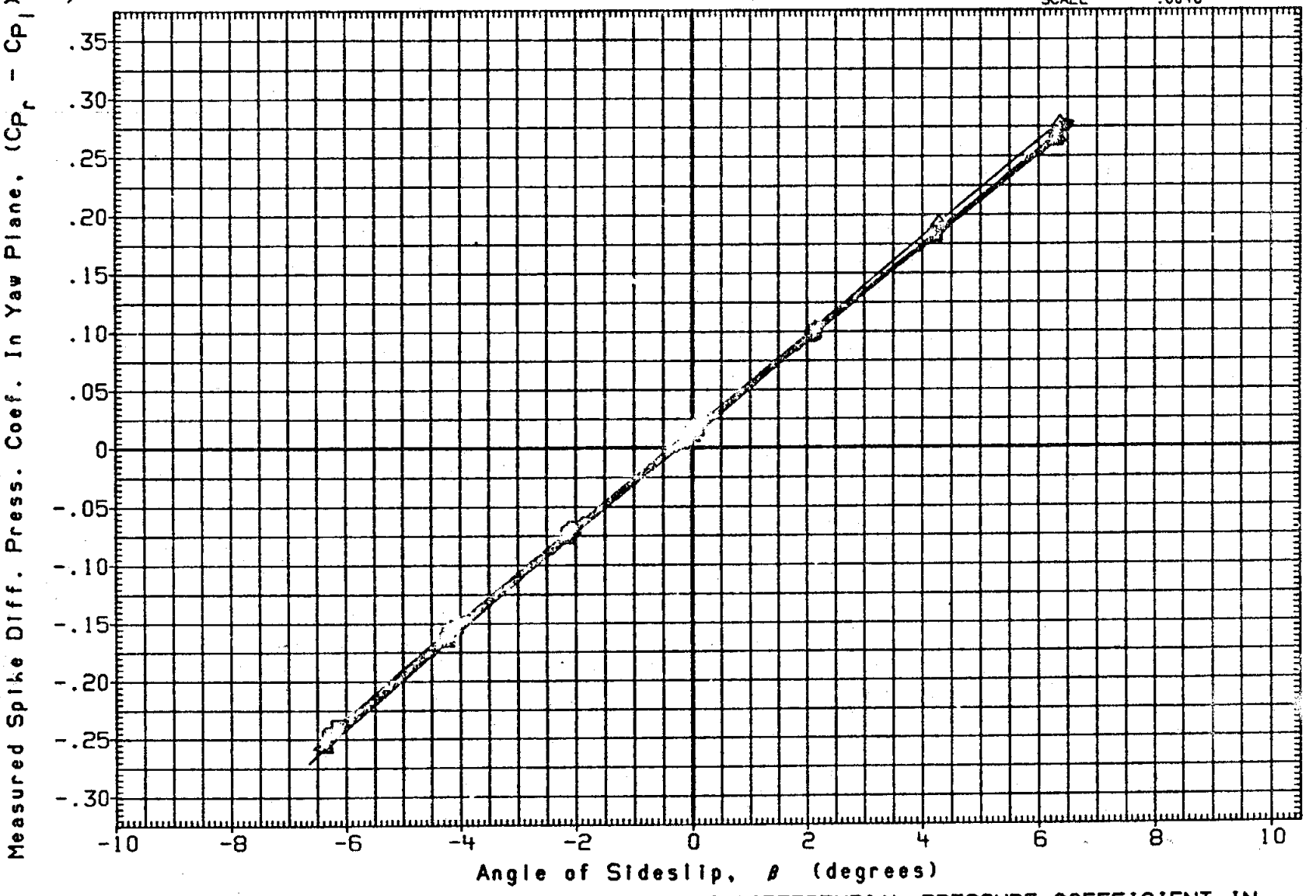

FIG. 6(B) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (BETA VARYING, ALPHA = 0)

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U011	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U012	⊘	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	.000	90.000		
B1U020	□	IA181, MSFC 649, MODEL 74- T S	(AADS DATA)	.000	90.000		
B1U018	◇	IA181, MSFC 649, MODEL 74- 0 T	(AADS DATA)	.000	90.000	10.800	.000
B1U003	△	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	90.000	10.800	.000
B1U004	⊿	IA181, MSFC 649, MODEL 74- 0 T S	(AADS DATA)	.000	90.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
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SCALE	.0040	

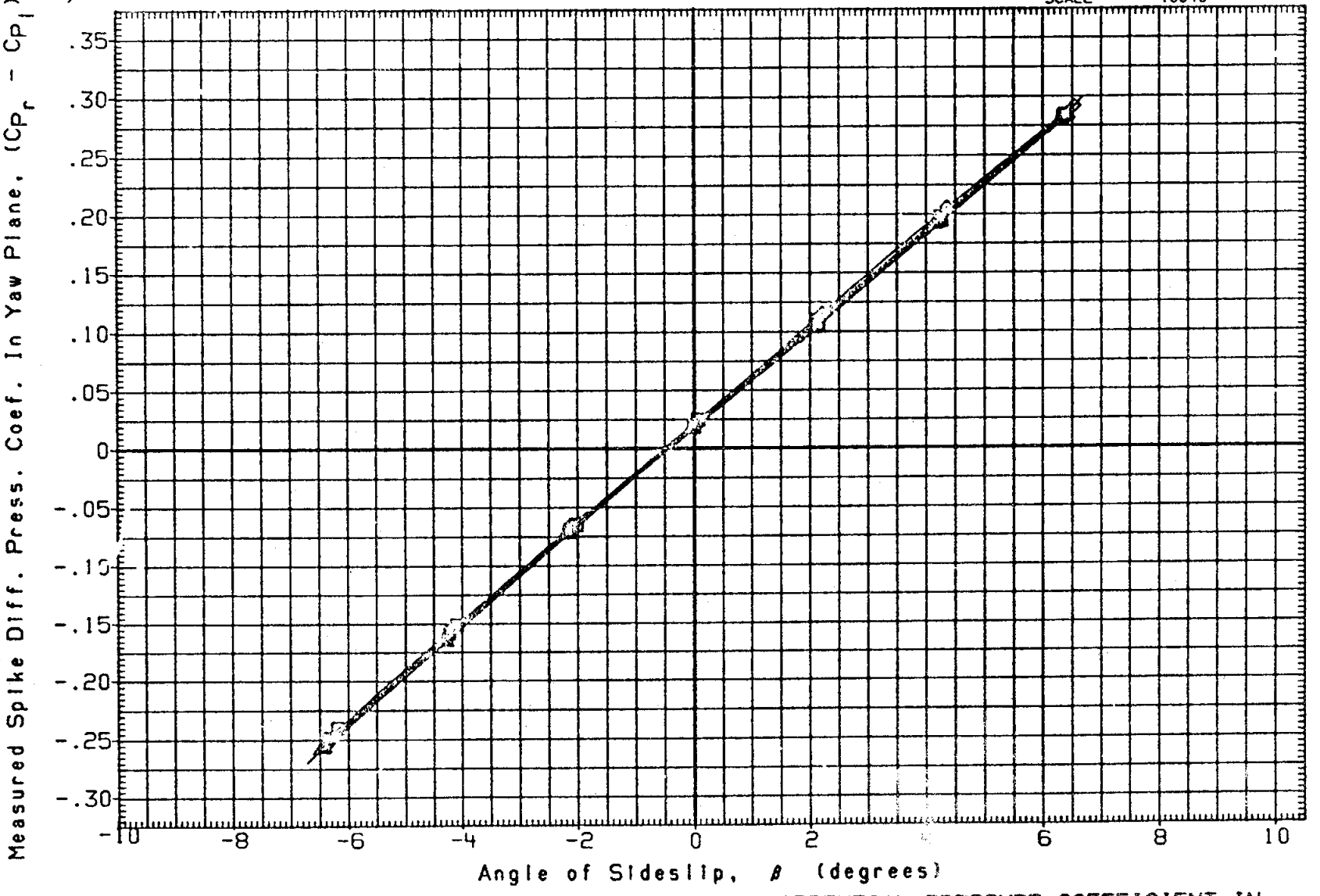

FIG. 6(B) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (BETA VARYING, ALPHA = 0)

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

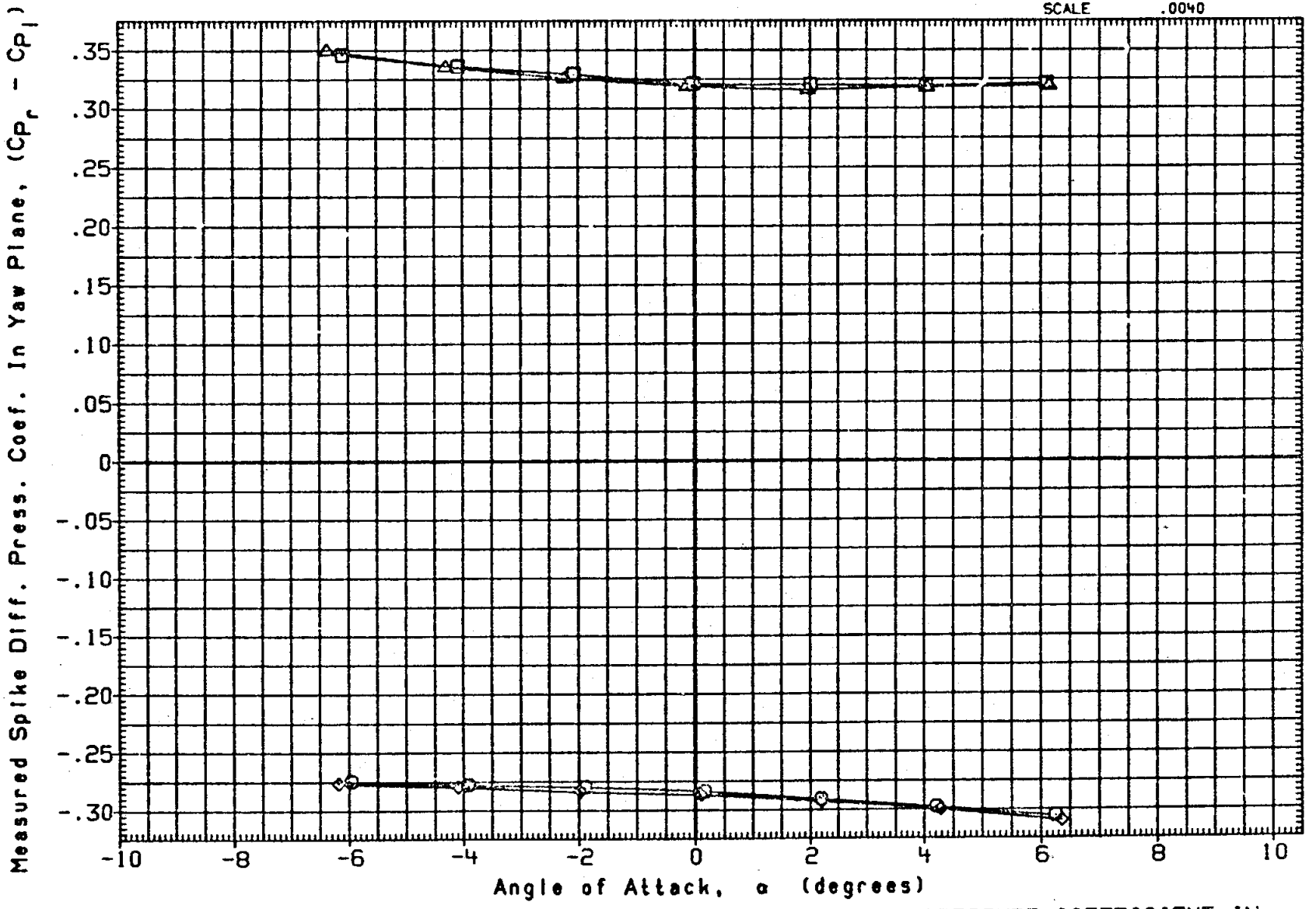

FIG. 6(C) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (ALPHA VARYING, BETA = + OR - 6 DEGREES)

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U005	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
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XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

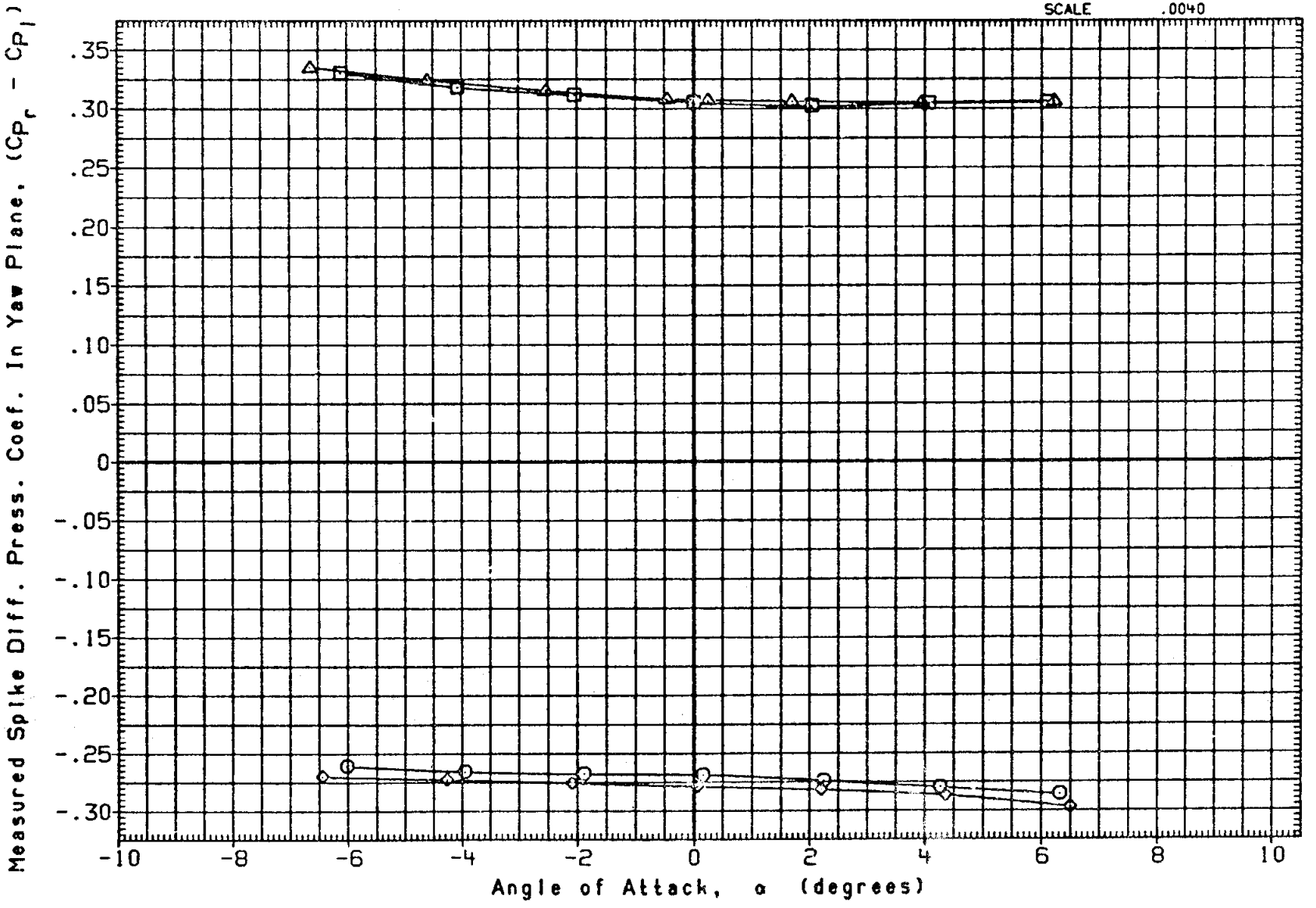

FIG. 6(C) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (ALPHA VARYING, BETA = + OR - 6 DEGREES)

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION		
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LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

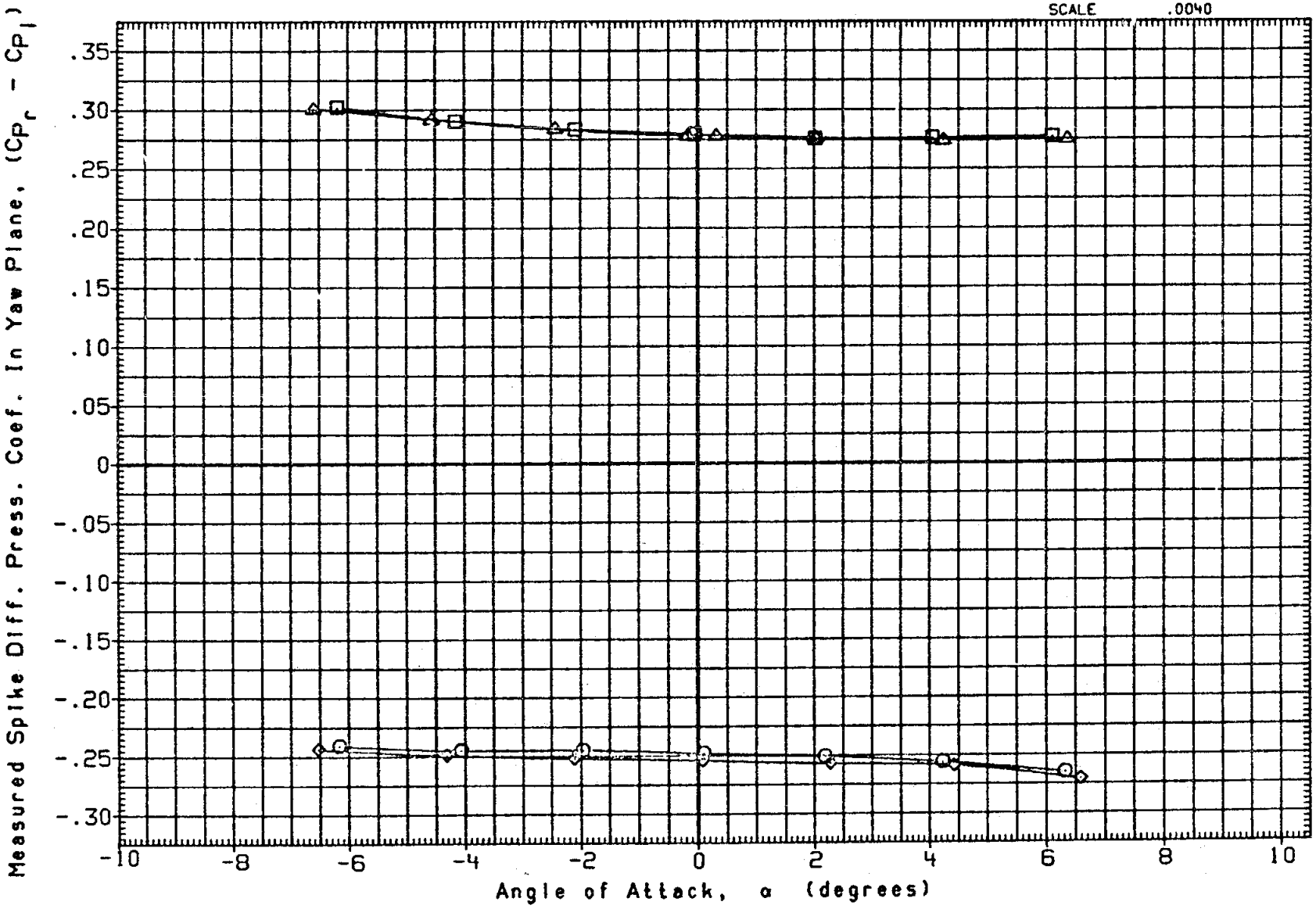

FIG. 6(C) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (ALPHA VARYING, BETA = + OR - 6 DEGREES)

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		BETA	PHI	ELEVON	AILRON
B1U014	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	180.000		
B1U013	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	.000		
B1U006	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	180.000	10.800	.000
B1U005	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

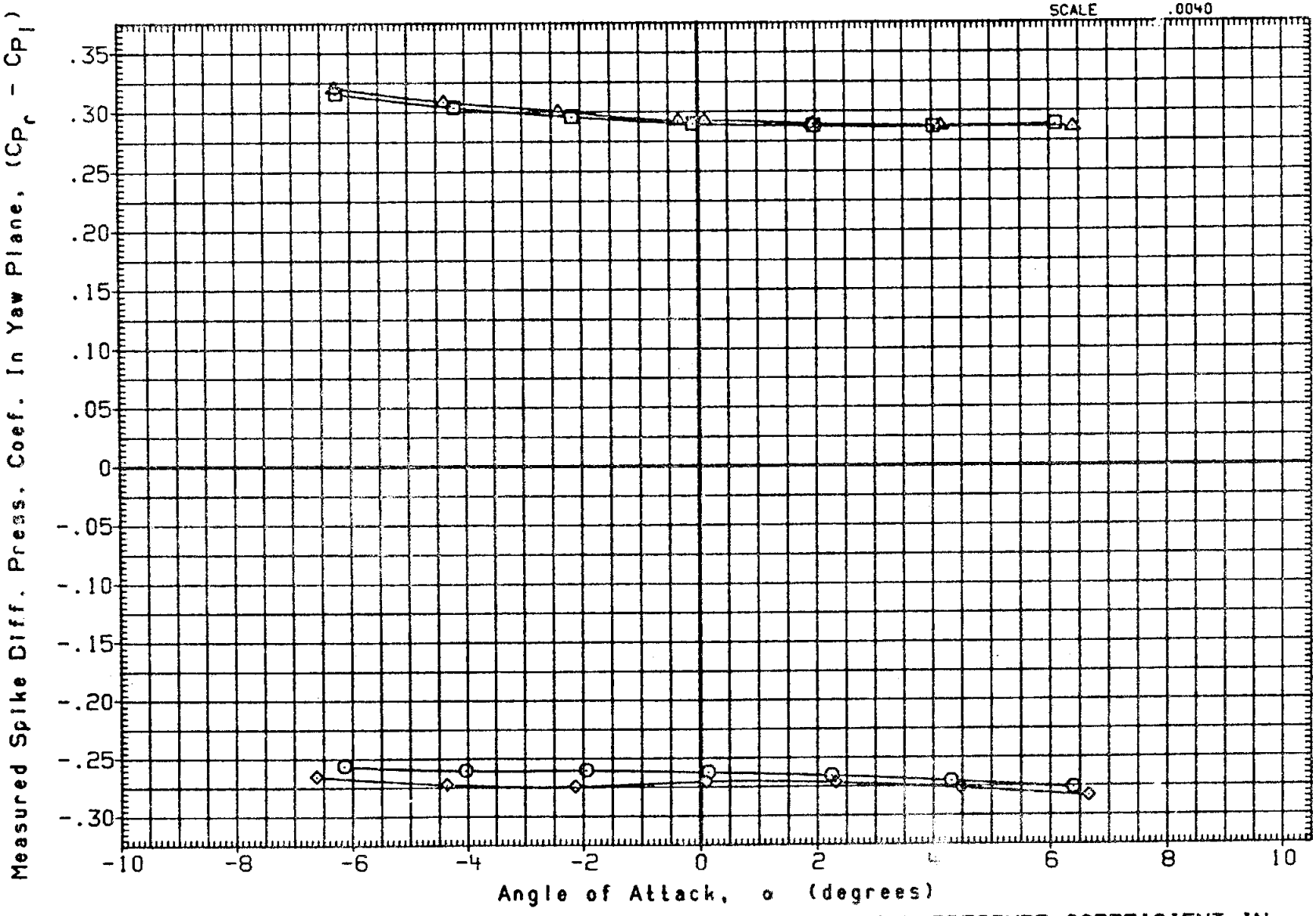

FIG. 6(C) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (ALPHA VARYING, BETA = + OR - 6 DEGREES)

(D)MACH = 1.25

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION		
SREF	.0000	SQ.IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

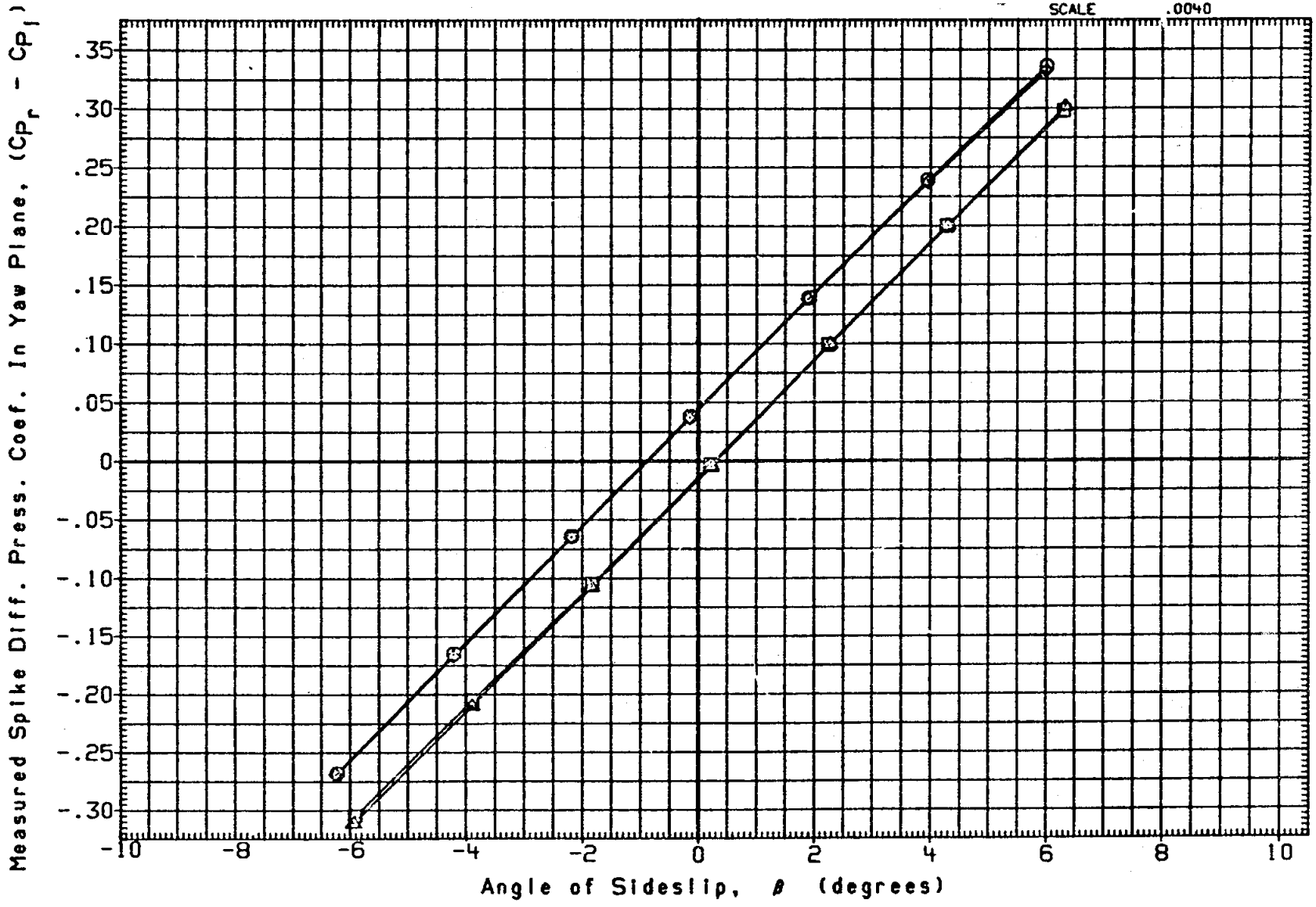

FIG. 6(D) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (BETA VARYING, ALPHA = + OR - 6 DEGREES)

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION		
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LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

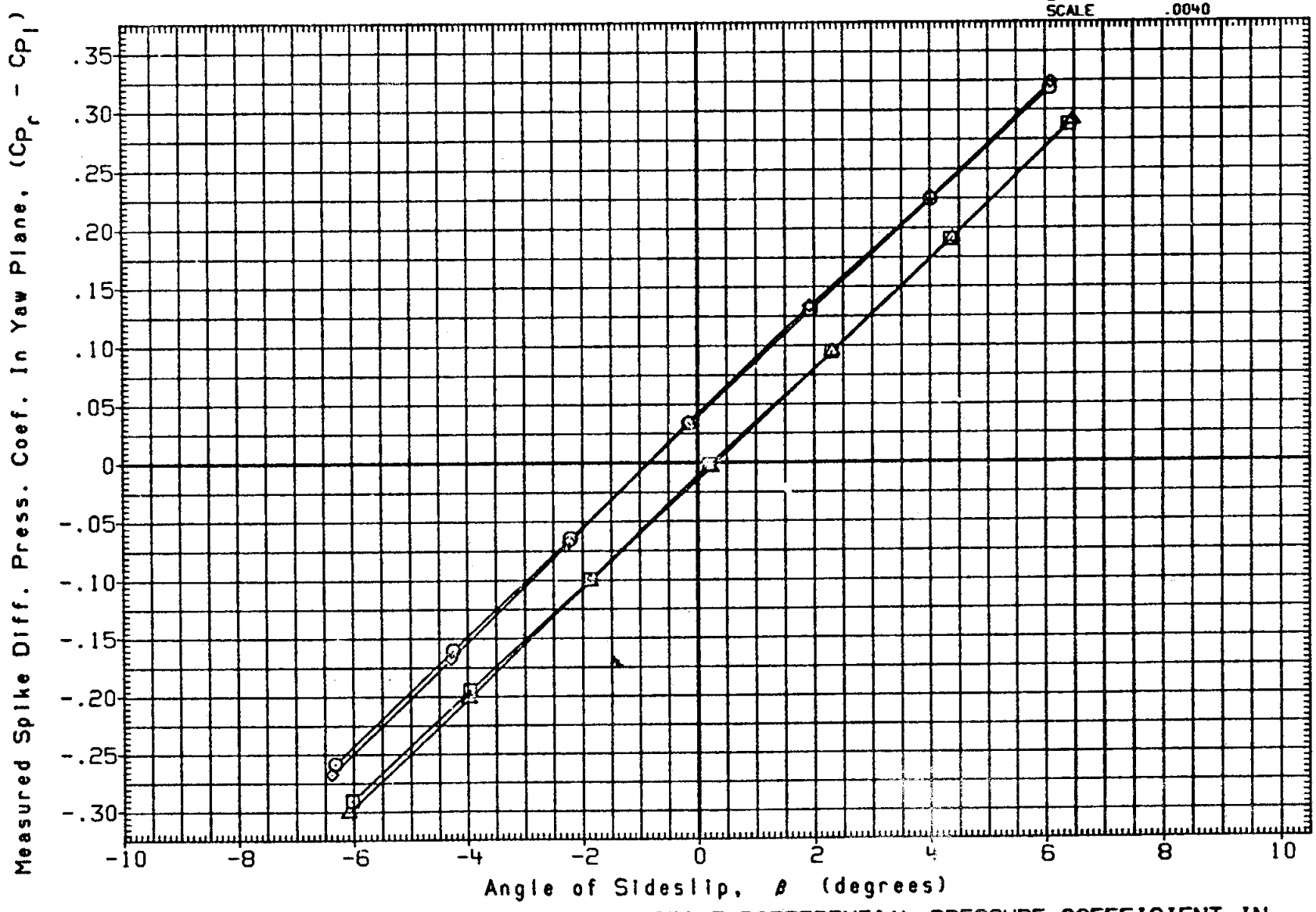

FIG. 6(D) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (BETA VARYING, ALPHA = + OR - 6 DEGREES)

(B)MACH = .90

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ.IN.
LREF	.0000	INCHES
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XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

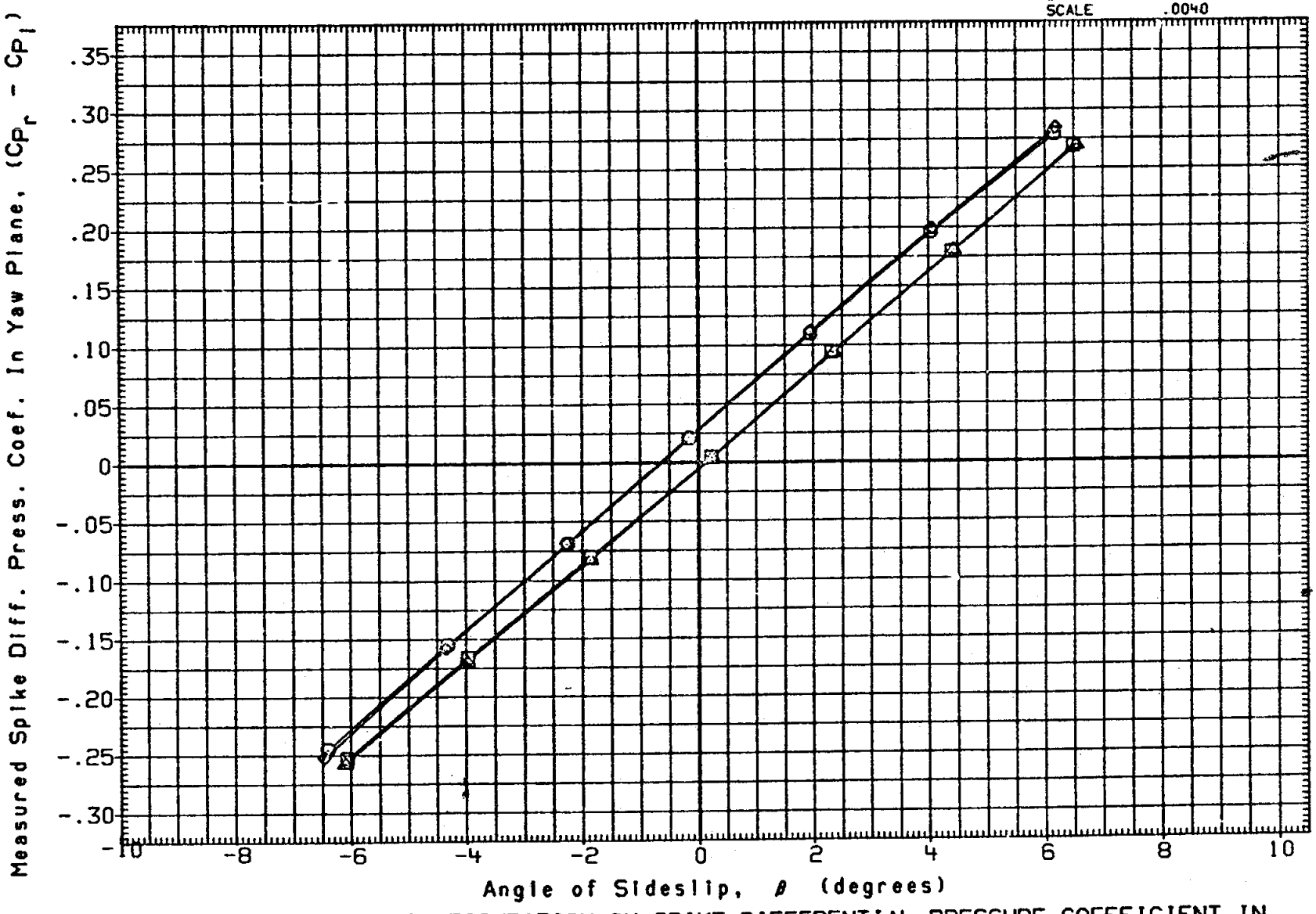

FIG. 6(D) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (BETA VARYING, ALPHA = + OR - 6 DEGREES)

(C)MACH = 1.10

DATA SET	SYMBOL	CONFIGURATION		ALPHA	PHI	ELEVON	AILRON
B1U015	○	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	-6.000	90.000		
B1U016	□	IA181, MSFC 649, MODEL 74- T	(AADS DATA)	6.000	270.000		
B1U007	◇	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	-6.000	90.000	10.800	.000
B1U008	△	IA181, MSFC 649, MODEL 74- O T S	(AADS DATA)	6.000	270.000	10.800	.000

REFERENCE INFORMATION

SREF	.0000	SQ. IN.
LREF	.0000	INCHES
BREF	.0000	INCHES
XMRP	.0000	INCHES
YMRP	.0000	INCHES
ZMRP	.0000	INCHES
SCALE	.0040	

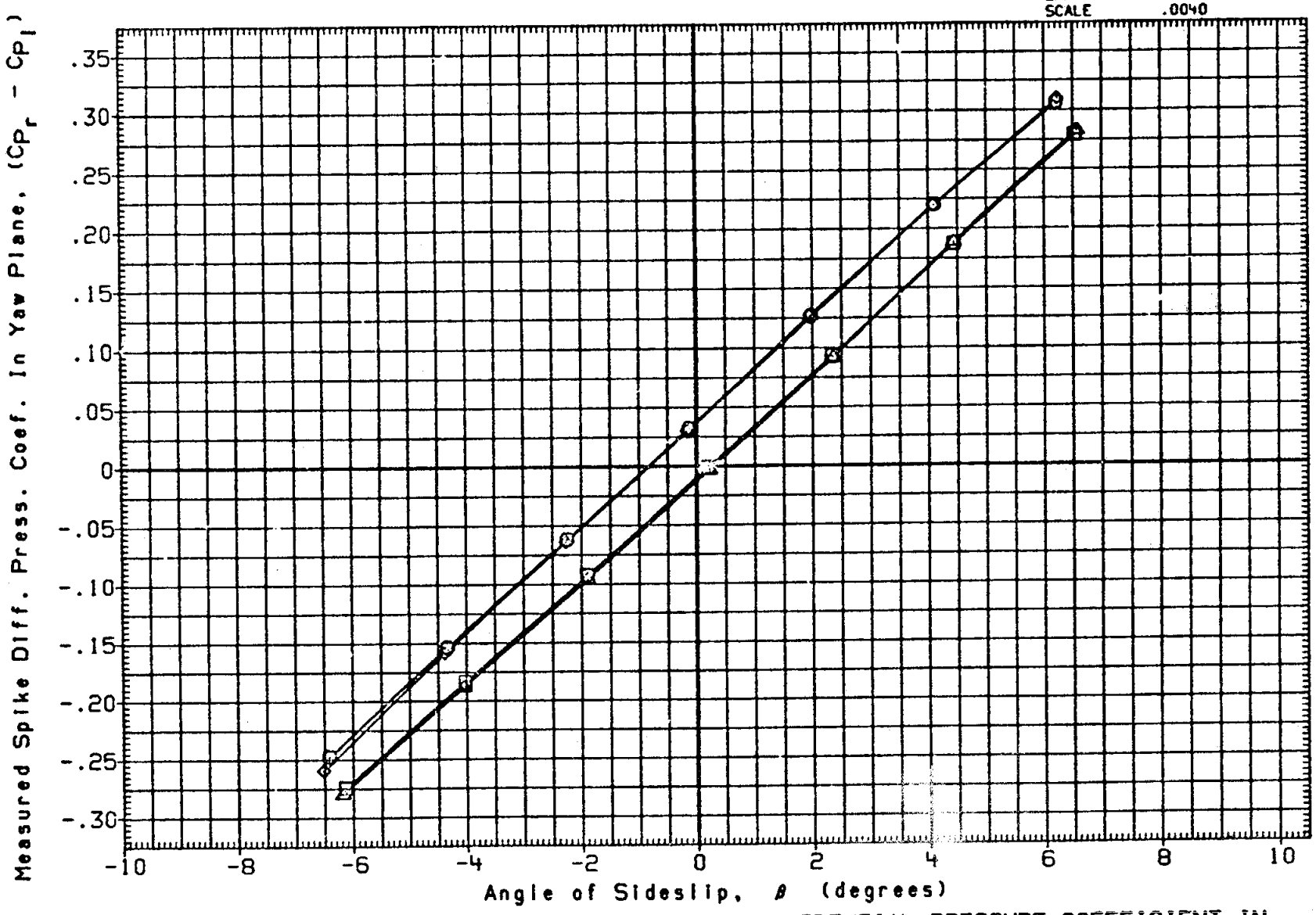

FIG. 6(D) EFFECT OF CONFIGURATION ON SPIKE DIFFERENTIAL PRESSURE COEFFICIENT IN YAW PLANE (BETA VARYING, ALPHA = + OR - 6 DEGREES)

(D) MACH = 1.25

APPENDIX

TABULATED SOURCE DATA

Note: Dependent variable TTF presented as identically zero in AlUOXX datasets; please disregard.

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IA181, MSFC 649, MODEL 74- 0 T S (AADS DATA) (A1U001) (07 JAN 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

BETA =	.000	ELEVON =	10.800
AILRON =	.000	PHI =	.000
OFFSET =	.000		

RUN NO. 1/ 0 RN/L = 5.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.599	-6.440	.00000	622.94399	5.06300	2480.54401	3161.66400	1.09339	.00000	.00000
.599	-4.380	.00000	622.94399	5.06300	2480.54401	3161.66400	1.09339	.00000	.00000
.599	-2.310	.00000	622.94399	5.06300	2480.54401	3161.66400	1.09339	.00000	.00000
.599	-.190	.00000	622.94399	5.06300	2480.54401	3161.66400	1.09339	.00000	.00000
.599	1.930	.00000	622.94399	5.06300	2480.54401	3161.66400	1.09339	.00000	.00000
.599	4.029	.00000	622.94399	5.06300	2480.54401	3161.66400	1.09339	.00000	.00000
.599	6.110	.00000	622.94399	5.06300	2480.54401	3161.66400	1.09339	.00000	.00000
	GRADIENT	.00000	.00000	.00000	-.00000	.00000	.00000	.00000	.00000

RUN NO. 2/ 0 RN/L = 6.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.897	-6.150	.00000	1055.80800	6.39900	1873.00800	3159.07199	1.21809	.00000	.00000
.897	-4.490	.00000	1055.80800	6.39900	1873.00800	3159.07199	1.21809	.00000	.00000
.897	-2.400	.00000	1055.80800	6.39900	1873.00800	3159.07199	1.21809	.00000	.00000
.897	-.410	.00000	1055.80800	6.39900	1873.00800	3159.07199	1.21809	.00000	.00000
.897	-.020	.00000	1055.80800	6.39900	1873.00800	3159.07199	1.21809	.00000	.00000
.897	1.860	.00000	1055.80800	6.39900	1873.00800	3159.07199	1.21809	.00000	.00000
.897	4.160	.00000	1055.80800	6.39900	1873.00800	3159.07199	1.21809	.00000	.00000
.897	6.330	.00000	1055.80800	6.39900	1873.00800	3159.07199	1.21809	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	-.00000	.00000	.00000	.00000

RUN NO. 3/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.096	-6.810	.00000	1245.31200	6.77400	1486.80000	3159.64798	1.34089	.00000	.00000
1.096	-4.590	.00000	1245.31200	6.77400	1486.80000	3159.64798	1.34089	.00000	.00000
1.096	-2.390	.00000	1245.31200	6.77400	1486.80000	3159.64798	1.34089	.00000	.00000
1.096	-.190	.00000	1245.31200	6.77400	1486.80000	3159.64798	1.34089	.00000	.00000
1.096	2.020	.00000	1245.31200	6.77400	1486.80000	3159.64798	1.34089	.00000	.00000
1.096	4.220	.00000	1245.31200	6.77400	1486.80000	3159.64798	1.34089	.00000	.00000
1.096	6.430	.00000	1245.31200	6.77400	1486.80000	3159.64798	1.34089	.00000	.00000
	GRADIENT	.00000	-.00000	.00000	.00000	.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (A1U001) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 4/ 0 RN/L = 6.82 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.248	-6.600	.00000	1333.87199	6.82000	1222.84799	3164.25598	1.42540	.00000	.00000
1.248	-4.700	.00000	1333.87199	6.82000	1222.84799	3164.25598	1.42540	.00000	.00000
1.248	-2.460	.00000	1333.87199	6.82000	1222.84799	3164.25598	1.42540	.00000	.00000
1.248	-.190	.00000	1333.87199	6.82000	1222.84799	3164.25598	1.42540	.00000	.00000
1.248	2.050	.00000	1333.87199	6.82000	1222.84799	3164.25598	1.42540	.00000	.00000
1.248	4.110	.00000	1333.87199	6.82000	1222.84799	3164.25598	1.42540	.00000	.00000
1.248	6.100	.00000	1333.87199	6.82000	1222.84799	3164.25598	1.42540	.00000	.00000
	GRADIENT	.00000	-.00000	-.00000	.00000	-.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U001) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 1/ 0 RN/L = 5.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.599	-6.440	.00000	1.09339	.69500	1.01600	.81700	.77000	-.32100	.04700	-.32200	.05100
.599	-4.380	.00000	1.09339	.75100	.97800	.84100	.80600	-.22700	.03500	-.22900	.04000
.599	-2.310	.00000	1.09339	.80900	.93800	.86400	.83300	-.12900	.03100	-.12900	.03400
.599	-.190	.00000	1.09339	.86600	.89700	.87300	.85300	-.03100	.02000	-.03200	.02400
.599	1.930	.00000	1.09339	.91600	.84700	.86900	.85400	.06900	.01500	.06700	.01900
.599	4.029	.00000	1.09339	.95900	.79400	.85200	.84200	.16500	.01000	.16300	.01500
.599	6.110	.00000	1.09339	1.00200	.73900	.82600	.82000	.26300	.00600	.26000	.01100
	GRADIENT	.00000	.00000	.02483	-.02180	.00127	.00441	.04663	-.00314	.04654	-.00309

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (BIU001) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 2/ 0 RN/L = 6.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.897	-6.150	.00000	1.21809	.81500	1.12800	.93900	.88900	-.31300	.05000	-.31100	.05100
.897	-4.490	.00000	1.21809	.87000	1.08800	.96300	.92300	-.21800	.04000	-.21700	.04200
.897	-2.400	.00000	1.21809	.92300	1.04800	.97900	.94700	-.12500	.03200	-.12500	.03400
.897	-.410	.00000	1.21809	.97600	1.00700	.98600	.96300	-.03100	.02300	-.03000	.02500
.897	-.020	.00000	1.21809	.98300	1.00600	.98900	.96600	-.02300	.02300	-.02400	.02400
.897	1.860	.00000	1.21809	1.02200	.95900	.98200	.96300	.06300	.01900	.06200	.02100
.897	4.160	.00000	1.21809	1.06500	.90800	.96600	.95200	.15700	.01400	.15600	.01600
.897	6.330	.00000	1.21809	1.10100	.85400	.93900	.92800	.24700	.01100	.24700	.01200
	GRADIENT	.00000	.00000	.02266	-.02080	.00039	.00340	.04346	-.00301	.04322	-.00301

RUN NO. 3/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.096	-6.810	.00000	1.34089	.95800	1.24800	1.07100	1.02800	-.29000	.04300	-.28800	.04400
1.096	-4.590	.00000	1.34089	1.01000	1.21100	1.09400	1.06000	-.20100	.03400	-.20000	.03400
1.096	-2.390	.00000	1.34089	1.06200	1.17800	1.11100	1.08600	-.11600	.02500	-.11400	.02600
1.096	-.190	.00000	1.34089	1.10800	1.13600	1.11600	1.09700	-.02800	.01900	-.02800	.02100
1.096	2.020	.00000	1.34089	1.14800	1.09100	1.11000	1.09500	.05700	.01500	.05700	.01600
1.096	4.220	.00000	1.34089	1.18800	1.04800	1.09800	1.08800	.14000	.01000	.13900	.01200
1.096	6.430	.00000	1.34089	1.21700	.99500	1.06900	1.06300	.22200	.00600	.22200	.00800
	GRADIENT	.00000	.00000	.02006	-.01875	.00032	.00295	.03881	-.00263	.03854	-.00245

RUN NO. 4/ 0 RN/L = 6.82 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.248	-6.600	.00000	1.42540	1.02400	1.32600	1.14700	1.09500	-.30200	.05200	-.30000	.053[illegible]
1.248	-4.700	.00000	1.42540	1.07900	1.28900	1.17100	1.13000	-.21000	.04100	-.20900	.04200
1.248	-2.460	.00000	1.42540	1.12900	1.24600	1.18300	1.14900	-.11700	.03400	-.11700	.03500
1.248	-.190	.00000	1.42540	1.17800	1.20500	1.18900	1.16200	-.02700	.02700	-.02600	.02800
1.248	2.050	.00000	1.42540	1.22100	1.16000	1.18400	1.16200	.06100	.02200	.06100	.02300
1.248	4.110	.00000	1.42540	1.26000	1.11200	1.17000	1.15100	.14800	.01900	.14800	.02000
1.248	6.100	.00000	1.42540	1.29300	1.05900	1.14200	1.12700	.23400	.01500	.23500	.01600
	GRADIENT	.00000	.00000	.02053	-.01987	-.00001	.00253	.04039	-.00254	.04030	-.00254

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U001) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 1/ 0 RN/L = 5.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.599	-6.440	.00000	.85600	.79150	.82375	.04410	-.00616
.599	-4.380	.00000	.86550	.82100	.84325	.04725	-.00369
.599	-2.310	.00000	.87350	.84700	.86025	.04727	-.00379
.599	-.190	.00000	.88200	.86100	.87150	.04593	-.00393
.599	1.930	.00000	.88250	.85950	.87100	.04635	-.00173
.599	4.029	.00000	.87750	.84450	.86100	.04594	-.00196
.599	6.110	.00000	.87200	.82050	.84625	.04695	-.00190
	GRADIENT	.00000	.00156	.00282	.00219	-.00017	.00026

RUN NO. 2/ 0 RN/L = 6.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.897	-6.150	.00000	.97050	.91350	.94200	.06094	-.00591
.897	-4.490	.00000	.97850	.94200	.96025	.04801	-.00445
.897	-2.400	.00000	.98550	.96200	.97375	.05232	-.00441
.897	-.410	.00000	.99100	.97350	.98225	.01896	-.00305
.897	-.020	.00000	.99500	.97700	.98600	.01862	-.00219
.897	1.860	.00000	.99100	.97150	.98125	.05158	-.00170
.897	4.160	.00000	.98700	.95800	.97250	.03836	-.00216
.897	6.330	.00000	.97750	.93300	.95525	.04372	-.00168
	GRADIENT	.00000	.00105	.00190	.00147	-.00095	.00034

RUN NO. 3/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.096	-6.810	.00000	1.10200	1.04900	1.07550	.03979	-.00464
1.096	-4.590	.00000	1.11000	1.07700	1.09350	.03933	-.00424
1.096	-2.390	.00000	1.11900	1.09800	1.10850	.03906	-.00283
1.096	-.190	.00000	1.12200	1.10550	1.11375	.03896	-.00217
1.096	2.020	.00000	1.11950	1.10200	1.11075	.03774	-.00208
1.096	4.220	.00000	1.11850	1.09200	1.10525	.03726	-.00174
1.096	6.430	.00000	1.10600	1.06500	1.08550	.03771	-.00185
	GRADIENT	.00000	.00079	.00154	.00117	-.00025	.00026

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U001) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 4/ 0 RN/L = 6.82 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.248	-6.600	.00000	1.17400	1.12050	1.14725	.04955	-.00646
1.248	-4.700	.00000	1.18350	1.15000	1.16675	.04458	-.00446
1.248	-2.460	.00000	1.18750	1.16550	1.17650	.03993	-.00282
1.248	-.190	.00000	1.19100	1.17500	1.18300	.03915	-.00287
1.248	2.050	.00000	1.19050	1.17250	1.18150	.04022	-.00162
1.248	4.110	.00000	1.18600	1.16000	1.17300	.04345	-.00165
1.248	6.100	.00000	1.17550	1.13400	1.15475	.04385	-.00219
	GRADIENT	.00000	.00037	.00126	.00082	-.00010	.00031

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (A1U002) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

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

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.598	-6.460	.00000	621.79200	5.00500	2482.12799	3161.66400	1.09287	.00000	.00000
.598	-4.400	.00000	621.79200	5.00500	2482.12799	3161.66400	1.09287	.00000	.00000
.598	-2.330	.00000	621.79200	5.00500	2482.12799	3161.66400	1.09287	.00000	.00000
.598	-.210	.00000	621.79200	5.00500	2482.12799	3161.66400	1.09287	.00000	.00000
.598	1.910	.00000	621.79200	5.00500	2482.12799	3161.66400	1.09287	.00000	.00000
.598	4.029	.00000	621.79200	5.00500	2482.12799	3161.66400	1.09287	.00000	.00000
.598	6.080	.00000	621.79200	5.00500	2482.12799	3161.66400	1.09287	.00000	.00000
	GRADIENT	.00000	.00000	.00000	-.00000	.00000	-.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (AIU002) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 6/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.900	-6.730	.00000	1059.55199	6.38700	1868.11200	3160.07999	1.21935	.00000	.00000
.900	-4.560	.00000	1059.55199	6.38700	1868.11200	3160.07999	1.21935	.00000	.00000
.900	-2.450	.00000	1059.55199	6.38700	1868.11200	3160.07999	1.21935	.00000	.00000
.900	-.260	.00000	1059.55199	6.38700	1868.11200	3160.07999	1.21935	.00000	.00000
.900	1.940	.00000	1059.55199	6.38700	1868.11200	3160.07999	1.21935	.00000	.00000
.900	4.130	.00000	1059.55199	6.38700	1868.11200	3160.07999	1.21935	.00000	.00000
.900	6.300	.00000	1059.55199	6.38700	1868.11200	3160.07999	1.21935	.00000	.00000
	GRADIENT	.00000	.00000	.00000	-.00000	-.00001	.00000	.00000	.00000

RUN NO. 7/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.099	-6.820	.00000	1252.80000	6.77300	1481.32799	3159.64798	1.33703	.00000	.00000
1.099	-4.630	.00000	1252.80000	6.77300	1481.32799	3159.64798	1.33703	.00000	.00000
1.099	-2.410	.00000	1252.80000	6.77300	1481.32799	3159.64798	1.33703	.00000	.00000
1.099	-.210	.00000	1252.80000	6.77300	1481.32799	3159.64798	1.33703	.00000	.00000
1.099	2.010	.00000	1252.80000	6.77300	1481.32799	3159.64798	1.33703	.00000	.00000
1.099	4.210	.00000	1252.80000	6.77300	1481.32799	3159.64798	1.33703	.00000	.00000
1.099	6.420	.00000	1252.80000	6.77300	1481.32799	3159.64798	1.33703	.00000	.00000
	GRADIENT	.00000	.00000	-.00000	-.00000	.00000	-.00000	.00000	.00000

RUN NO. 8/ 0 RN/L = 6.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.248	-6.930	.00000	1334.73601	6.81300	1223.71199	3162.67200	1.42265	.00000	.00000
1.248	-4.700	.00000	1334.73601	6.81300	1223.71199	3162.67200	1.42265	.00000	.00000
1.248	-2.460	.00000	1334.73601	6.81300	1223.71199	3162.67200	1.42265	.00000	.00000
1.248	-.190	.00000	1334.73601	6.81300	1223.71199	3162.67200	1.42265	.00000	.00000
1.248	2.060	.00000	1334.73601	6.81300	1223.71199	3162.67200	1.42265	.00000	.00000
1.248	4.270	.00000	1334.73601	6.81300	1223.71199	3162.67200	1.42265	.00000	.00000
1.248	6.500	.00000	1334.73601	6.81300	1223.71199	3162.67200	1.42265	.00000	.00000
	GRADIENT	.00000	.00000	-.00000	.00000	.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U002) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

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

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.598	-6.460	.00000	1.09287	.68700	1.01000	.81100	.76100	-.32300	.05000	-.32300	.05200
.598	-4.400	.00000	1.09287	.75600	.98200	.84900	.80900	-.22600	.04000	-.22600	.04200
.598	-2.330	.00000	1.09287	.81300	.94300	.86800	.83800	-.13000	.03000	-.13100	.03200
.598	-.210	.00000	1.09287	.86500	.89600	.87400	.85100	-.03100	.02300	-.03200	.02700
.598	1.910	.00000	1.09287	.91200	.84400	.86500	.85000	.06800	.01500	.06600	.01700
.598	4.029	.00000	1.09287	.95700	.79100	.85000	.84000	.16600	.01000	.16300	.01300
.598	6.080	.00000	1.09287	.99700	.73500	.82200	.81600	.26200	.00600	.26000	.01000
	GRADIENT	.00000	-.00000	.02374	-.02280	-.00006	.00349	.04654	-.00355	.04621	-.00346

RUN NO. 6/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.900	-6.730	.00000	1.21935	.81400	1.12900	.94000	.89400	-.31400	.04600	-.31200	.04700
.900	-4.560	.00000	1.21935	.87100	1.09000	.96600	.92800	-.21900	.03800	-.21800	.03900
.900	-2.450	.00000	1.21935	.92400	1.04900	.98100	.95000	-.12500	.03100	-.12500	.03200
.900	-.260	.00000	1.21935	.97600	1.00700	.98700	.96500	-.03100	.02200	-.03000	.02400
.900	1.940	.00000	1.21935	1.02100	.95900	.98100	.96300	.06200	.01800	.06200	.01900
.900	4.130	.00000	1.21935	1.06300	.90700	.96400	.95200	.15600	.01200	.15500	.01400
.900	6.300	.00000	1.21935	1.10300	.85600	.94100	.93100	.24700	.01000	.24700	.01200
	GRADIENT	.00000	.00000	.02209	-.02095	-.00020	.00278	.04304	-.00298	.04285	-.00289

RUN NO. 7/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.099	-6.820	.00000	1.33703	.95900	1.24900	1.07300	1.02800	-.29000	.04500	-.28900	.04500
1.099	-4.630	.00000	1.33703	1.01200	1.21400	1.09600	1.06300	-.20200	.03300	-.20200	.03400
1.099	-2.410	.00000	1.33703	1.05900	1.17500	1.10800	1.08300	-.11600	.02500	-.11500	.02600
1.099	-.210	.00000	1.33703	1.10600	1.13600	1.11500	1.09600	-.03000	.01900	-.02900	.02000
1.099	2.010	.00000	1.33703	1.15200	1.09400	1.11300	1.09800	.05800	.01500	.05700	.01600
1.099	4.210	.00000	1.33703	1.18700	1.04600	1.09600	1.08600	.14100	.01000	.14000	.01200
1.099	6.420	.00000	1.33703	1.22200	.99800	1.07300	1.06600	.22400	.00700	.22300	.00900
	GRADIENT	.00000	-.00000	.02005	-.01887	.00023	.00276	.03891	-.00253	.03873	-.00244

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U002) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 8/ 0 RN/L = 6.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.248	-6.930	.00000	1.42265	1.02300	1.32500	1.14600	1.09800	-.30200	.04800	-.30000	.05000
1.248	-4.700	.00000	1.42265	1.07700	1.28700	1.16900	1.13100	-.21000	.03800	-.20800	.03900
1.248	-2.460	.00000	1.42265	1.12600	1.24400	1.18000	1.14900	-.11800	.03100	-.11700	.03100
1.248	-.190	.00000	1.42265	1.17800	1.20500	1.18700	1.16400	-.02700	.02300	-.02700	.02600
1.248	2.060	.00000	1.42265	1.22200	1.15900	1.18400	1.16200	.06300	.02200	.06300	.02400
1.248	4.270	.00000	1.42265	1.26000	1.11000	1.16800	1.14900	.15000	.01900	.15100	.02000
1.248	6.500	.00000	1.42265	1.29500	1.06100	1.14300	1.12900	.23400	.01400	.23400	.01600
	GRADIENT	.00000	.00000	.02057	-.01954	.00010	.00219	.04012	-.00209	.03998	-.00200

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U002) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

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

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.598	-6.460	.00000	.84850	.78500	.81675	.04747	-.00463
.598	-4.400	.00000	.86900	.82800	.84850	.04633	-.00531
.598	-2.330	.00000	.87850	.85200	.86525	.04618	-.00319
.598	-.210	.00000	.88100	.86050	.87075	.04672	-.00357
.598	1.910	.00000	.87900	.85650	.86775	.04571	-.00377
.598	4.029	.00000	.87550	.84350	.85950	.04646	-.00117
.598	6.080	.00000	.86700	.81700	.84200	.04771	-.00161
	GRADIENT	.00000	.00063	.00157	.00115	-.00001	.00036

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U002) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 6/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.900	-6.730	.00000	.97000	.91650	.94325	.04310	-.00384
.900	-4.560	.00000	.98000	.94650	.96325	.04376	-.00338
.900	-2.450	.00000	.98650	.96500	.97575	.04406	-.00363
.900	-.260	.00000	.99100	.97500	.98300	.04239	-.00298
.900	1.940	.00000	.99000	.97150	.98075	.04197	-.00225
.900	4.130	.00000	.98550	.95700	.97125	.04258	-.00171
.900	6.300	.00000	.97950	.93500	.95725	.04231	-.00053
	GRADIENT	.00000	.00066	.00124	.00095	-.00020	.00022

RUN NO. 7/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.099	-6.820	.00000	1.10350	1.05050	1.07700	.03986	-.00536
1.099	-4.630	.00000	1.11300	1.07900	1.09600	.03945	-.00436
1.099	-2.410	.00000	1.11650	1.09500	1.10575	.03909	-.00311
1.099	-.210	.00000	1.12050	1.10500	1.11275	.03905	-.00218
1.099	2.010	.00000	1.12350	1.10500	1.11425	.03821	-.00176
1.099	4.210	.00000	1.11700	1.09000	1.10350	.03752	-.00164
1.099	6.420	.00000	1.11050	1.06850	1.08950	.03758	-.00122
	GRADIENT	.00000	.00068	.00145	.00106	-.00021	.00031

RUN NO. 8/ 0 RN/L = 6.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.248	-6.930	.00000	1.17300	1.12100	1.14700	.04135	-.00523
1.248	-4.700	.00000	1.18100	1.14950	1.16525	.04107	-.00434
1.248	-2.460	.00000	1.18450	1.16450	1.17450	.04003	-.00293
1.248	-.190	.00000	1.19150	1.17400	1.18275	.03965	-.00128
1.248	2.060	.00000	1.19050	1.17200	1.18125	.04031	-.00122
1.248	4.270	.00000	1.18450	1.15800	1.17125	.03857	-.00197
1.248	6.500	.00000	1.17800	1.13500	1.15650	.03654	-.00170
	GRADIENT	.00000	.00058	.00110	.00084	-.00021	.00029

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (A1U003) (07 JAN 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

ALPHA =	.000	ELEVON =	10.800
AILRON =	.000	PHI =	90.000
OFFSET =	.000		

RUN NO. 9/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.598	-6.160	.00000	632.30399	5.01200	2478.95996	3158.78400	1.07515	.00000	90.00000
.598	-4.110	.00000	632.30399	5.01200	2478.95996	3158.78400	1.07515	.00000	90.00000
.598	-2.080	.00000	632.30399	5.01200	2478.95996	3158.78400	1.07515	.00000	90.00000
.598	-.010	.00000	632.30399	5.01200	2478.95996	3158.78400	1.07515	.00000	90.00000
.598	2.060	.00000	632.30399	5.01200	2478.95996	3158.78400	1.07515	.00000	90.00000
.598	4.110	.00000	632.30399	5.01200	2478.95996	3158.78400	1.07515	.00000	90.00000
.598	6.140	.00000	632.30399	5.01200	2478.95996	3158.78400	1.07515	.00000	90.00000
	GRADIENT	.00000	-.00000	-.00000	-.00000	.00000	.00000	.00000	-.00000

RUN NO. 10/ 0 RN/L = 6.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.901	-6.320	.00000	1060.12799	6.40400	1864.80000	3158.20798	1.22005	.00000	90.00000
.901	-4.200	.00000	1060.12799	6.40400	1864.80000	3158.20798	1.22005	.00000	90.00000
.901	-2.120	.00000	1060.12799	6.40400	1864.80000	3158.20798	1.22005	.00000	90.00000
.901	-.030	.00000	1060.12799	6.40400	1864.80000	3158.20798	1.22005	.00000	90.00000
.901	2.030	.00000	1060.12799	6.40400	1864.80000	3158.20798	1.22005	.00000	90.00000
.901	4.180	.00000	1060.12799	6.40400	1864.80000	3158.20798	1.22005	.00000	90.00000
.901	6.270	.00000	1060.12799	6.40400	1864.80000	3158.20798	1.22005	.00000	90.00000
	GRADIENT	.00000	-.00000	.00000	.00000	.00000	.00000	.00000	-.00000

RUN NO. 11/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.098	-6.390	.00000	1252.51199	6.63200	1481.18399	3159.07199	1.33706	.00000	90.00000
1.098	-4.240	.00000	1252.51199	6.63200	1481.18399	3159.07199	1.33706	.00000	90.00000
1.098	-2.130	.00000	1252.51199	6.63200	1481.18399	3159.07199	1.33706	.00000	90.00000
1.098	-.020	.00000	1252.51199	6.63200	1481.18399	3159.07199	1.33706	.00000	90.00000
1.098	2.140	.00000	1252.51199	6.63200	1481.18399	3159.07199	1.33706	.00000	90.00000
1.098	4.280	.00000	1252.51199	6.63200	1481.18399	3159.07199	1.33706	.00000	90.00000
1.098	6.370	.00000	1252.51199	6.63200	1481.18399	3159.07199	1.33706	.00000	90.00000
	GRADIENT	.00000	-.00000	-.00000	-.00000	.00000	-.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (A1U003) (07 JAN 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

ALPHA =	.000	ELEVON =	10.800
AILRON =	.000	PHI =	90.000
OFFSET =	.000		

RUN NO. 12/ 0 RN/L = 6.84 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.247	-6.440	.00000	1332.43199	6.83900	1223.28000	3157.91998	1.42223	.00000	90.00000
1.247	-4.290	.00000	1332.43199	6.83900	1223.28000	3157.91998	1.42223	.00000	90.00000
1.247	-2.170	.00000	1332.43199	6.83900	1223.28000	3157.91998	1.42223	.00000	90.00000
1.247	-.020	.00000	1332.43199	6.83900	1223.28000	3157.91998	1.42223	.00000	90.00000
1.247	2.110	.00000	1332.43199	6.83900	1223.28000	3157.91998	1.42223	.00000	90.00000
1.247	4.240	.00000	1332.43199	6.83900	1223.28000	3157.91998	1.42223	.00000	90.00000
1.247	6.400	.00000	1332.43199	6.83900	1223.28000	3157.91998	1.42223	.00000	90.00000
	GRADIENT	.00000	.00000	-.00000	-.00000	.00000	-.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U003) (07 JAN 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

ALPHA =	.000	ELEVON =	10.800
AILRON =	.000	PHI =	90.000
OFFSET =	.000		

RUN NO. 9/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.598	-5.160	.00000	1.07515	.80300	.89700	.70000	.98600	-.09400	-.28600	-.09500	-.28200
.598	-4.110	.00000	1.07515	.83700	.91400	.76500	.94900	-.07700	-.18400	-.07800	-.18000
.598	-2.080	.00000	1.07515	.85800	.92100	.82500	.90800	-.06300	-.08300	-.06400	-.07900
.598	-.010	.00000	1.07515	.86400	.91100	.87700	.85900	-.04700	.01800	-.04800	.02100
.598	2.060	.00000	1.07515	.86000	.88900	.92700	.80800	-.02900	.11900	-.03000	.12200
.598	4.110	.00000	1.07515	.84200	.85100	.96900	.75100	-.00900	.21800	-.01000	.22100
.598	6.140	.00000	1.07515	.81500	.80300	1.00900	.69400	.01200	.31500	.01100	.31900
	GRADIENT	.00000	.00000	.00058	-.00768	.02478	-.02410	.00826	.04888	.00826	.04874

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U003) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = .000

RUN NO. 10/ 0 RN/L = 6.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.901	-6.320	.00000	1.22005	.92000	1.01400	.82200	1.09600	-.09400	-.27400	-.09400	-.27100
.901	-4.200	.00000	1.22005	.94700	1.02600	.87900	1.05700	-.07900	-.17800	-.07900	-.17400
.901	-2.120	.00000	1.22005	.96700	1.03500	.93800	1.01900	-.06800	-.08100	-.06600	-.07800
.901	-.030	.00000	1.22005	.97100	1.02100	.98500	.97000	-.05000	.01500	-.05100	.01700
.901	2.080	.00000	1.22005	.96900	1.00200	1.03300	.92400	-.03300	.10900	-.03300	.11200
.901	4.180	.00000	1.22005	.95400	.96800	1.07500	.87000	-.01400	.20500	-.01300	.20600
.901	6.270	.00000	1.22005	.93300	.92600	1.11500	.81800	.00700	.29700	.00700	.29900
	GRADIENT	.00000	.00000	.00076	-.00712	.02323	-.02238	.00787	.04561	.00787	.04532

RUN NO. 11/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.098	-6.390	.00000	1.33706	1.04700	1.13100	.95300	1.21000	-.08400	-.25700	-.08300	-.25400
1.098	-4.240	.00000	1.33706	1.07800	1.14800	1.01300	1.18000	-.07000	-.16700	-.07000	-.16300
1.098	-2.130	.00000	1.33706	1.09400	1.15300	1.06500	1.14100	-.05900	-.07600	-.05900	-.07300
1.098	-.020	.00000	1.33706	1.09700	1.13900	1.10800	1.09500	-.04200	.01300	-.04100	.01600
1.098	2.140	.00000	1.33706	1.09500	1.12000	1.15200	1.05200	-.02500	.10000	-.02500	.10400
1.098	4.280	.00000	1.33706	1.07700	1.08600	1.18900	.99700	-.00900	.19200	-.00900	.19400
1.098	6.370	.00000	1.33706	1.05500	1.04500	1.22300	.94700	.01000	.27600	.01000	.27900
	GRADIENT	.00000	-.00000	-.00006	-.00738	.02060	-.02135	.00732	.04195	.00732	.04181

RUN NO. 12/ 0 RN/L = 6.84 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.247	-6.440	.00000	1.42223	1.12400	1.21300	1.03100	1.29000	-.08900	-.25900	-.08800	-.25600
1.247	-4.290	.00000	1.42223	1.15200	1.22700	1.08700	1.25500	-.07500	-.16800	-.07400	-.16500
1.247	-2.170	.00000	1.42223	1.16600	1.22800	1.13800	1.21300	-.06200	-.07500	-.06200	-.07200
1.247	-.020	.00000	1.42223	1.17000	1.21900	1.18500	1.16900	-.04900	.01600	-.04900	.01800
1.247	2.110	.00000	1.42223	1.16600	1.19600	1.22500	1.12200	-.03000	.10300	-.02900	.10500
1.247	4.240	.00000	1.42223	1.15600	1.17100	1.27000	1.07600	-.01500	.19400	-.01400	.19600
1.247	6.400	.00000	1.42223	1.12300	1.11900	1.29600	1.01300	.00400	.28300	.00400	.28500
	GRADIENT	.00000	-.00000	.00037	-.00675	.02123	-.02104	.00712	.04227	.00717	.04213

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U003) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = .000

RUN NO. 9/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.598	-6.160	.00000	.85050	.84100	.84575	.00871	.04964
.598	-4.110	.00000	.87600	.85500	.86550	.00745	.04998
.598	-2.080	.00000	.89000	.86450	.87725	.00704	.04895
.598	-.010	.00000	.88800	.86650	.87725	.00825	.04842
.598	2.060	.00000	.87500	.86600	.87050	.00924	.04866
.598	4.110	.00000	.84700	.85850	.85275	.01016	.04818
.598	6.140	.00000	.80950	.84950	.82950	.01044	.04832
	GRADIENT	.00000	-.00355	.00041	-.00157	.00037	-.00019

RUN NO. 10/ 0 RN/L = 6.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.901	-6.320	.00000	.96700	.95750	.96225	.00734	.04560
.901	-4.200	.00000	.98650	.96600	.97625	.00654	.04606
.901	-2.120	.00000	1.00000	.97700	.98850	.00647	.04590
.901	-.030	.00000	.99650	.97650	.98650	.00787	.04516
.901	2.080	.00000	.98550	.97700	.98125	.00916	.04490
.901	4.180	.00000	.96050	.97200	.96625	.00965	.04461
.901	6.270	.00000	.92950	.96550	.94750	.00953	.04444
	GRADIENT	.00000	-.00318	.00057	-.00131	.00043	-.00019

RUN NO. 11/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.098	-6.390	.00000	1.08850	1.08000	1.08425	.00653	.04224
1.098	-4.240	.00000	1.11300	1.09450	1.10375	.00508	.04250
1.098	-2.130	.00000	1.12350	1.10150	1.11250	.00692	.04271
1.098	-.020	.00000	1.11750	1.10000	1.10875	.00850	.04117
1.098	2.140	.00000	1.10750	1.10000	1.10375	.00696	.04140
1.098	4.280	.00000	1.08150	1.09200	1.08675	.00832	.04164
1.098	6.370	.00000	1.05000	1.08350	1.06675	.00947	.04018
	GRADIENT	.00000	-.00372	-.00031	-.00201	.00031	-.00014

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U003) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = .000

RUN NO. 12/ 0 RN/L = 6.84 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.247	-6.440	.00000	1.16800	1.15900	1.16350	.00669	.04180
1.247	-4.290	.00000	1.18900	1.16950	1.17925	.00615	.04338
1.247	-2.170	.00000	1.19700	1.17400	1.18550	.00520	.04327
1.247	-.020	.00000	1.19450	1.17600	1.18525	.00816	.04073
1.247	2.110	.00000	1.18050	1.17250	1.17650	.00849	.04192
1.247	4.240	.00000	1.16300	1.17200	1.16750	.00718	.04231
1.247	6.400	.00000	1.12100	1.15350	1.13725	.00891	.04065
	GRADIENT	.00000	-.00321	.00016	-.00152	.00025	-.00016

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (A1U004) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = .000

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

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.598	-6.160	.00000	621.79200	5.00000	2479.96796	3159.50400	1.09287	.00000	90.00000
.598	-4.110	.00000	621.79200	5.00000	2479.96796	3159.50400	1.09287	.00000	90.00000
.598	-2.080	.00000	621.79200	5.00000	2479.96796	3159.50400	1.09287	.00000	90.00000
.598	-.030	.00000	621.79200	5.00000	2479.96796	3159.50400	1.09287	.00000	90.00000
.598	2.040	.00000	621.79200	5.00000	2479.96796	3159.50400	1.09287	.00000	90.00000
.598	4.090	.00000	621.79200	5.00000	2479.96796	3159.50400	1.09287	.00000	90.00000
.598	6.140	.00000	621.79200	5.00000	2479.96796	3159.50400	1.09287	.00000	90.00000
	GRADIENT	.00000	-.00000	.00000	-.00000	.00000	-.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (A1U004) (07 JAN 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

ALPHA =	.000	ELEVON =	10.800
AILRON =	.000	PHI =	90.000
OFFSET =	.000		

RUN NO. 14/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.901	-6.320	.00000	1059.98399	6.41500	1861.19998	3158.20798	1.22361	.00000	90.00000
.901	-4.200	.00000	1059.98399	6.41500	1861.19998	3158.20798	1.22361	.00000	90.00000
.901	-2.120	.00000	1059.98399	6.41500	1861.19998	3158.20798	1.22361	.00000	90.00000
.901	-.010	.00000	1059.98399	6.41500	1861.19998	3158.20798	1.22361	.00000	90.00000
.901	2.090	.00000	1059.98399	6.41500	1861.19998	3158.20798	1.22361	.00000	90.00000
.901	4.180	.00000	1059.98399	6.41500	1861.19998	3158.20798	1.22361	.00000	90.00000
.901	6.270	.00000	1059.98399	6.41500	1861.19998	3158.20798	1.22361	.00000	90.00000
	GRADIENT	.00000	.00000	-.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 15/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.099	-6.380	.00000	1252.51199	6.77500	1479.59999	3158.35199	1.33768	.00000	90.00000
1.099	-4.240	.00000	1252.51199	6.77500	1479.59999	3158.35199	1.33768	.00000	90.00000
1.099	-2.140	.00000	1252.51199	6.77500	1479.59999	3158.35199	1.33768	.00000	90.00000
1.099	-.010	.00000	1252.51199	6.77500	1479.59999	3158.35199	1.33768	.00000	90.00000
1.099	2.090	.00000	1252.51199	6.77500	1479.59999	3158.35199	1.33768	.00000	90.00000
1.099	4.200	.00000	1252.51199	6.77500	1479.59999	3158.35199	1.33768	.00000	90.00000
1.099	6.330	.00000	1252.51199	6.77500	1479.59999	3158.35199	1.33768	.00000	90.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 16/ 0 RN/L = 6.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.249	-6.460	.00000	1333.58400	6.64800	1221.12000	3159.21597	1.42295	.00000	90.00000
1.249	-4.310	.00000	1333.58400	6.64800	1221.12000	3159.21597	1.42295	.00000	90.00000
1.249	-2.190	.00000	1333.58400	6.64800	1221.12000	3159.21597	1.42295	.00000	90.00000
1.249	-.040	.00000	1333.58400	6.64800	1221.12000	3159.21597	1.42295	.00000	90.00000
1.249	2.110	.00000	1333.58400	6.64800	1221.12000	3159.21597	1.42295	.00000	90.00000
1.249	4.240	.00000	1333.58400	6.64800	1221.12000	3159.21597	1.42295	.00000	90.00000
1.249	6.400	.00000	1333.58400	6.64800	1221.12000	3159.21597	1.42295	.00000	90.00000
	GRADIENT	.00000	.00000	-.00000	-.00000	.00000	.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (81U004) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = .000

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

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.598	-6.160	.00000	1.09287	.80800	.90200	.70400	.99100	-.09400	-.28700	-.09600	-.28300
.598	-4.110	.00000	1.09287	.83600	.91300	.76400	.94900	-.07700	-.18500	-.07700	-.18200
.598	-2.080	.00000	1.09287	.86000	.92300	.82600	.91100	-.06300	-.08500	-.06400	-.08000
.598	-.030	.00000	1.09287	.86700	.91300	.88000	.86300	-.04600	.01700	-.04700	.02100
.598	2.040	.00000	1.09287	.86000	.88800	.92600	.80900	-.02800	.11700	-.02900	.12100
.598	4.090	.00000	1.09287	.84700	.85600	.97400	.75600	-.00900	.21800	-.01100	.22200
.598	6.140	.00000	1.09287	.81900	.80800	1.01500	.69900	.01100	.31600	.01000	.32000
	GRADIENT	.00000	-.00000	.00106	-.00727	.02534	-.02379	.00833	.04912	.00814	.04917

RUN NO. 14/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.901	-6.320	.00000	1.22361	.92400	1.01700	.82300	1.09800	-.09300	-.27500	-.09400	-.27200
.901	-4.200	.00000	1.22361	.94600	1.02500	.87900	1.05500	-.07900	-.17600	-.07900	-.17300
.901	-2.120	.00000	1.22361	.96800	1.03300	.93800	1.01900	-.06500	-.08100	-.06600	-.07800
.901	-.010	.00000	1.22361	.97300	1.02400	.98900	.97300	-.05100	.01600	-.05000	.02000
.901	2.090	.00000	1.22361	.97100	1.00300	1.03800	.92500	-.03200	.11300	-.03100	.11600
.901	4.180	.00000	1.22361	.95900	.97200	1.08100	.87400	-.01300	.20700	-.01200	.20800
.901	6.270	.00000	1.22361	.93200	.92500	1.11800	.81800	.00700	.30000	.00500	.30100
	GRADIENT	.00000	.00000	.00138	-.00649	.02403	-.02175	.00787	.04578	.00806	.04559

RUN NO. 15/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.099	-6.380	.00000	1.33768	1.05100	1.13200	.95500	1.21500	-.08100	-.26000	-.08100	-.25700
1.099	-4.240	.00000	1.33768	1.08600	1.15100	1.01800	1.18700	-.06500	-.16900	-.06400	-.16600
1.099	-2.140	.00000	1.33768	1.10000	1.15400	1.06600	1.14800	-.05400	-.08200	-.05300	-.07700
1.099	-.010	.00000	1.33768	1.10900	1.14900	1.11700	1.10900	-.04000	.00800	-.03900	.01000
1.099	2.090	.00000	1.33768	1.10500	1.12800	1.15700	1.06300	-.02300	.09400	-.02300	.09700
1.099	4.200	.00000	1.33768	1.09400	1.10100	1.19600	1.01700	-.00700	.17900	-.00800	.18200
1.099	6.330	.00000	1.33768	1.07300	1.06300	1.23100	.96700	.01000	.26400	.01100	.26600
	GRADIENT	.00000	.00000	.00100	-.00597	.02118	-.02013	.00696	.04131	.00673	.04121

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U004) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = .000

RUN NO. 16/ 0 RN/L = 6.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.249	-6.460	.00000	1.42295	1.12800	1.21500	1.03300	1.29200	-.08700	-.25900	-.08600	-.25600
1.249	-4.310	.00000	1.42295	1.15400	1.22700	1.08900	1.25600	-.07300	-.16700	-.07300	-.16400
1.249	-2.190	.00000	1.42295	1.16700	1.22900	1.13900	1.21400	-.06200	-.07500	-.06200	-.07100
1.249	-.040	.00000	1.42295	1.17200	1.22100	1.18600	1.17000	-.04900	.01600	-.04900	.01800
1.249	2.110	.00000	1.42295	1.16700	1.19800	1.22600	1.12400	-.03100	.10200	-.03000	.10500
1.249	4.240	.00000	1.42295	1.15700	1.17200	1.26900	1.07700	-.01500	.19200	-.01400	.19400
1.249	6.400	.00000	1.42295	1.13400	1.12900	1.30700	1.02300	.00500	.28400	.00500	.28600
	GRADIENT	.00000	.00000	.00028	-.00659	.02089	-.02093	.00687	.04182	.00701	.04168

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U004) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = .000

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

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.598	-6.160	.00000	.85600	.84550	.85075	.01017	.04896
.598	-4.110	.00000	.87450	.85500	.86475	.00747	.04988
.598	-2.080	.00000	.89200	.86600	.87900	.00693	.05005
.598	-.030	.00000	.89050	.86950	.88000	.00888	.04845
.598	2.040	.00000	.87450	.86550	.87000	.00852	.04889
.598	4.090	.00000	.85250	.86300	.85775	.00948	.04875
.598	6.140	.00000	.81400	.85500	.83450	.01062	.04733
	GRADIENT	.00000	-.00301	.00075	-.00113	.00027	-.00017

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U004) (07 JAN 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

ALPHA =	.000	ELEVON =	10.800
AILRON =	.000	PHI =	90.000
OFFSET =	.000		

RUN NO. 14/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.901	-6.320	.00000	.97100	.95900	.96500	.00737	.04704
.901	-4.200	.00000	.98550	.96550	.97550	.00649	.04602
.901	-2.120	.00000	1.00100	.97700	.98900	.00663	.04596
.901	-.010	.00000	.99800	.97900	.98850	.00848	.04646
.901	2.090	.00000	.98650	.98000	.98325	.00933	.04467
.901	4.180	.00000	.96500	.97700	.97100	.00861	.04404
.901	6.270	.00000	.92950	.96750	.94850	.00789	.04473
	GRADIENT	.00000	-.00265	.00124	-.00071	.00033	-.00025

RUN NO. 15/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.099	-6.380	.00000	1.09150	1.08350	1.08750	.00875	.04244
1.099	-4.240	.00000	1.11800	1.10100	1.10950	.00634	.04270
1.099	-2.140	.00000	1.12650	1.10450	1.11550	.00539	.04148
1.099	-.010	.00000	1.12850	1.11200	1.12025	.00750	.04106
1.099	2.090	.00000	1.11650	1.10850	1.11250	.00721	.04110
1.099	4.200	.00000	1.09800	1.10500	1.10150	.00785	.03969
1.099	6.330	.00000	1.06750	1.09800	1.08275	.00945	.03931
	GRADIENT	.00000	-.00237	.00057	-.00090	.00023	-.00030

RUN NO. 16/ 0 RN/L = 6.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.249	-6.460	.00000	1.17100	1.16100	1.16600	.00628	.04235
1.249	-4.310	.00000	1.19050	1.17100	1.18075	.00559	.04368
1.249	-2.190	.00000	1.19800	1.17450	1.18625	.00508	.04293
1.249	-.040	.00000	1.19650	1.17700	1.18675	.00781	.04041
1.249	2.110	.00000	1.18200	1.17350	1.17775	.00835	.04100
1.249	4.240	.00000	1.16400	1.17200	1.16800	.00782	.04235
1.249	6.400	.00000	1.13150	1.16400	1.14775	.00929	.04271
	GRADIENT	.00000	-.00323	.00005	-.00159	.00036	-.00021

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (A1U005) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = 6.000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = 90.000

RUN NO. 17/ 0 RN/L = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.598	-6.370	6.00000	621.79200	5.03900	2481.83997	3161.37598	1.09287	.00000	.00000
.598	-4.300	6.00000	621.79200	5.03900	2481.83997	3161.37598	1.09287	.00000	.00000
.598	-2.220	6.00000	621.79200	5.03900	2481.83997	3161.37598	1.09287	.00000	.00000
.598	-.130	6.00000	621.79200	5.03900	2481.83997	3161.37598	1.09287	.00000	.00000
.598	1.960	6.00000	621.79200	5.03900	2481.83997	3161.37598	1.09287	.00000	.00000
.598	4.050	6.00000	621.79200	5.03900	2481.83997	3161.37598	1.09287	.00000	.00000
.598	6.140	6.00000	621.79200	5.03900	2481.83997	3161.37598	1.09287	.00000	.00000
	GRADIENT	.00000	-.00000	-.00000	-.00000	.00000	.00000	.00000	.00000

RUN NO. 18/ 0 RN/L = 6.38 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.900	-6.640	6.00000	1060.27199	6.37800	1867.82399	3161.08798	1.21975	.00000	.00000
.900	-4.600	6.00000	1060.27199	6.37800	1867.82399	3161.08798	1.21975	.00000	.00000
.900	-2.530	6.00000	1060.27199	6.37800	1867.82399	3161.08798	1.21975	.00000	.00000
.900	-.450	6.00000	1060.27199	6.37800	1867.82399	3161.08798	1.21975	.00000	.00000
.900	.250	6.00000	1060.27199	6.37800	1867.82399	3161.08798	1.21975	.00000	.00000
.900	1.690	6.00000	1060.27199	6.37800	1867.82399	3161.08798	1.21975	.00000	.00000
.900	3.940	6.00000	1060.27199	6.37800	1867.82399	3161.08798	1.21975	.00000	.00000
.900	6.210	6.00000	1060.27199	6.37800	1867.82399	3161.08798	1.21975	.00000	.00000
	GRADIENT	.00000	-.00000	-.00000	-.00000	-.00000	-.00000	.00000	.00000

RUN NO. 19/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.102	-6.600	6.00000	1255.39200	6.67600	1476.71999	3161.23199	1.33897	.00000	.00000
1.102	-4.560	6.00000	1255.39200	6.67600	1476.71999	3161.23199	1.33897	.00000	.00000
1.102	-2.430	6.00000	1255.39200	6.67600	1476.71999	3161.23199	1.33897	.00000	.00000
1.102	-.170	6.00000	1255.39200	6.67600	1476.71999	3161.23199	1.33897	.00000	.00000
1.102	.320	6.00000	1255.39200	6.67600	1476.71999	3161.23199	1.33897	.00000	.00000
1.102	2.020	6.00000	1255.39200	6.67600	1476.71999	3161.23199	1.33897	.00000	.00000
1.102	4.240	6.00000	1255.39200	6.67600	1476.71999	3161.23199	1.33897	.00000	.00000
1.102	6.350	6.00000	1255.39200	6.67600	1476.71999	3161.23199	1.33897	.00000	.00000
	GRADIENT	-.00000	.00000	-.00000	-.00000	-.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (A1U005) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = 6.000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = 90.000

RUN NO. 20/ 0 RN/L = 6.84 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.248	-6.260	6.00000	1333.87199	6.83600	1221.55200	3160.07999	1.42328	.00000	.00000
1.248	-4.360	6.00000	1333.87199	6.83600	1221.55200	3160.07999	1.42328	.00000	.00000
1.248	-2.380	6.00000	1333.87199	6.83600	1221.55200	3160.07999	1.42328	.00000	.00000
1.248	-.330	6.00000	1333.87199	6.83600	1221.55200	3160.07999	1.42328	.00000	.00000
1.248	.110	6.00000	1333.87199	6.83600	1221.55200	3160.07999	1.42328	.00000	.00000
1.248	1.960	6.00000	1333.87199	6.83600	1221.55200	3160.07999	1.42328	.00000	.00000
1.248	4.160	6.00000	1333.87199	6.83600	1221.55200	3160.07999	1.42328	.00000	.00000
1.248	6.410	6.00000	1333.87199	6.83600	1221.55200	3160.07999	1.42328	.00000	.00000
	GRADIENT	.00000	-.00000	.00000	.00000	.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U005) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = 6.000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = 90.000

RUN NO. 17/ 0 RN/L = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.598	-6.370	6.00000	1.09287	.62800	.93100	.95500	.60700	-.30300	.34800	-.30200	.35000
.598	-4.300	6.00000	1.09287	.69500	.89100	.98000	.64800	-.19600	.33200	-.19500	.33600
.598	-2.220	6.00000	1.09287	.75600	.84500	.99800	.67500	-.08900	.32300	-.08900	.32600
.598	-.130	6.00000	1.09287	.81400	.79200	1.00500	.68800	.02200	.31700	.02000	.31900
.598	1.960	6.00000	1.09287	.86700	.73600	.99900	.68500	.13100	.31400	.12900	.31600
.598	4.050	6.00000	1.09287	.91600	.67900	.98500	.67100	.23700	.31400	.23700	.31800
.598	6.140	6.00000	1.09287	.96000	.61400	.95600	.64000	.34600	.31600	.34500	.31900
	GRADIENT	.00000	.00000	.02648	-.02553	.00052	.00268	.05201	-.00215	.05182	-.00220

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U005) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = 6.000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = 90.000

RUN NO. 18/ 0 RN/L = 6.38 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.900	-6.640	6.00000	1.21975	.76000	1.05100	1.07500	.74000	-.29100	.33500	-.29100	.33500
.900	-4.600	6.00000	1.21975	.81700	1.00500	1.09500	.77200	-.18800	.32300	-.18800	.32400
.900	-2.530	6.00000	1.21975	.87600	.96200	1.11100	.79700	-.08600	.31400	-.08600	.31500
.900	-.450	6.00000	1.21975	.93100	.91200	1.11500	.80800	.01900	.30700	.01800	.30800
.900	.250	6.00000	1.21975	.93500	.90900	1.11400	.80900	.02600	.30500	.02500	.30700
.900	1.690	6.00000	1.21975	.98200	.86000	1.11000	.80500	.12200	.30500	.12100	.30600
.900	3.940	6.00000	1.21975	1.02800	.80400	1.09500	.79100	.22400	.30400	.22500	.30500
.900	6.210	6.00000	1.21975	1.06900	.74100	1.06700	.76100	.32800	.30600	.32800	.30600
	GRADIENT	.00000	-.00000	.02467	-.02349	.00001	.00225	.04816	-.00224	.04820	-.00223

RUN NO. 19/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.102	-6.600	6.00000	1.33897	.91600	1.18100	1.19800	.89600	-.26500	.30200	-.26700	.30100
1.102	-4.560	6.00000	1.33897	.96900	1.14300	1.22000	.92800	-.17400	.29200	-.17300	.29200
1.102	-2.430	6.00000	1.33897	1.01700	1.09600	1.22800	.94500	-.07900	.28300	-.07800	.28400
1.102	-.170	6.00000	1.33897	1.06800	1.05000	1.23200	.95300	.01800	.27900	.01600	.27800
1.102	.320	6.00000	1.33897	1.07400	1.04800	1.23500	.95700	.02600	.27800	.02400	.27800
1.102	2.020	6.00000	1.33897	1.11600	1.00400	1.22800	.95300	.11200	.27500	.11000	.27600
1.102	4.240	6.00000	1.33897	1.15600	.95400	1.21400	.94000	.20200	.27400	.20200	.27400
1.102	6.350	6.00000	1.33897	1.19700	.90500	1.19300	.92000	.29200	.27300	.29400	.27500
	GRADIENT	-.00000	.00000	.02143	-.02124	-.00046	.00155	.04267	-.00201	.04243	-.00201

RUN NO. 20/ 0 RN/L = 6.84 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.248	-6.260	6.00000	1.42328	.97700	1.26000	1.28200	.96100	-.28300	.32100	-.28000	.32100
1.248	-4.360	6.00000	1.42328	1.04200	1.22400	1.30800	1.00000	-.18200	.30800	-.17900	.30900
1.248	-2.380	6.00000	1.42328	1.09700	1.17800	1.32000	1.02000	-.08100	.30000	-.08100	.30100
1.248	-.330	6.00000	1.42328	1.14900	1.12400	1.31900	1.02600	.02500	.29300	.02400	.29300
1.248	.110	6.00000	1.42328	1.15100	1.11700	1.31600	1.02300	.03400	.29300	.03100	.29300
1.248	1.960	6.00000	1.42328	1.19300	1.07400	1.31200	1.02200	.11900	.29000	.11900	.29000
1.248	4.160	6.00000	1.42328	1.23400	1.02100	1.29400	1.00600	.21300	.28800	.21300	.28800
1.248	6.410	6.00000	1.42328	1.26900	.96500	1.26600	.98000	.30400	.28600	.30500	.28700
	GRADIENT	.00000	.00000	.02240	-.02384	-.00172	.00061	.04624	-.00233	.04595	-.00247

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U005) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = 6.000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = 90.000

RUN NO. 17/ 0 RN/L = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.598	-6.370	6.00000	.77900	.78000	.77950	.05197	-.00721
.598	-4.300	6.00000	.79250	.81200	.80225	.05114	-.00588
.598	-2.220	6.00000	.80050	.83500	.81775	.05145	-.00400
.598	-.130	6.00000	.80400	.84550	.82475	.05240	-.00260
.598	1.960	6.00000	.80250	.84100	.82175	.05187	.00004
.598	4.050	6.00000	.79750	.82600	.81175	.05162	.00101
.598	6.140	6.00000	.78750	.79650	.79200	.05170	.00021
	GRADIENT	.00000	.00057	.00163	.00110	.00007	.00085

RUN NO. 18/ 0 RN/L = 6.38 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.900	-6.640	6.00000	.90550	.90750	.90650	.05230	-.00565
.900	-4.600	6.00000	.91100	.93300	.92200	.04688	-.00488
.900	-2.530	6.00000	.91900	.95350	.93625	.05956	-.00407
.900	-.450	6.00000	.92200	.96100	.94150	.01261	-.00198
.900	.250	6.00000	.92250	.96050	.94150	.02672	-.00102
.900	1.690	6.00000	.92150	.95700	.93925	.07240	-.00058
.900	3.940	6.00000	.91550	.94250	.92900	.03835	-.00003
.900	6.210	6.00000	.90500	.91400	.90950	.04889	.00068
	GRADIENT	.00000	.00057	.00112	.00085	-.00042	.00063

RUN NO. 19/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.102	-6.600	6.00000	1.04950	1.04750	1.04850	.04713	-.00459
1.102	-4.560	6.00000	1.05550	1.07400	1.06475	.04397	-.00406
1.102	-2.430	6.00000	1.05600	1.08600	1.07100	.04918	-.00370
1.102	-.170	6.00000	1.06000	1.09300	1.07650	.01737	-.00034
1.102	.320	6.00000	1.06200	1.09600	1.07900	.02309	-.00009
1.102	2.020	6.00000	1.06100	1.09000	1.07550	.05502	-.00153
1.102	4.240	6.00000	1.05500	1.07700	1.06600	.03860	-.00012
1.102	6.350	6.00000	1.05000	1.05550	1.05275	.04610	.00077
	GRADIENT	-.00000	.00022	.00055	.00038	-.00038	.00047

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U005) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = 6.000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = 90.000

RUN NO. 20/ 0 RN/L = 6.84 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.248	-6.260	6.00000	1.11700	1.12150	1.11925	.05541	-.00703
1.248	-4.360	6.00000	1.13150	1.15350	1.14250	.04865	-.00489
1.248	-2.380	6.00000	1.13750	1.16950	1.15350	.05824	-.00456
1.248	-.330	6.00000	1.13700	1.17250	1.15475	.01994	-.00061
1.248	.110	6.00000	1.13550	1.16950	1.15250	.01976	-.00004
1.248	1.960	6.00000	1.13350	1.16700	1.15025	.05382	-.00183
1.248	4.160	6.00000	1.12750	1.15000	1.13875	.03875	-.00045
1.248	6.410	6.00000	1.11650	1.12250	1.11950	.04196	-.00044
	GRADIENT	.00000	-.00058	-.00048	-.00053	-.00120	.00055

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (A1U006) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = -6.000 ELEVON = 10.800
AILRON = .000 PHI = 180.000
OFFSET = 90.000

RUN NO. 21/ 0 RN/L = 5.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.596	-6.190	-6.14300	618.91199	5.02100	2484.72000	3160.79999	1.09237	.00000	180.00000
.596	-4.090	-6.14500	618.91199	5.02100	2484.72000	3160.79999	1.09237	.00000	180.00000
.596	-1.980	-6.14400	618.91199	5.02100	2484.72000	3160.79999	1.09237	.00000	180.00000
.596	.100	-6.14100	618.91199	5.02100	2484.72000	3160.79999	1.09237	.00000	180.00000
.596	2.200	-6.13900	618.91199	5.02100	2484.72000	3160.79999	1.09237	.00000	180.00000
.596	4.280	-6.13500	618.91199	5.02100	2484.72000	3160.79999	1.09237	.00000	180.00000
.596	6.360	-6.13500	618.91199	5.02100	2484.72000	3160.79999	1.09237	.00000	180.00000
	GRADIENT	.00119	-.00000	.00000	-.00000	-.00001	-.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (A1U006) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = -6.000 ELEVON = 10.800
AILRON = .000 PHI = 180.000
OFFSET = 90.000

RUN NO. 22/ 0 RN/L = 6.29 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.900	-6.450	-6.26900	1060.12799	6.29400	1869.69598	3162.38397	1.21937	.00000	180.00000
.900	-4.270	-6.27200	1060.12799	6.29400	1869.69598	3162.38397	1.21937	.00000	180.00000
.900	-2.090	-6.27400	1060.12799	6.29400	1869.69598	3162.38397	1.21937	.00000	180.00000
.900	.060	-6.27200	1060.12799	6.29400	1869.69598	3162.38397	1.21937	.00000	180.00000
.900	2.200	-6.27400	1060.12799	6.29400	1869.69598	3162.38397	1.21937	.00000	180.00000
.900	4.360	-6.27400	1060.12799	6.29400	1869.69598	3162.38397	1.21937	.00000	180.00000
.900	6.490	-6.27700	1060.12799	6.29400	1869.69598	3162.38397	1.21937	.00000	180.00000
	GRADIENT	-.00019	.00000	-.00000	-.00000	.00000	-.00000	.00000	-.00000

RUN NO. 23/ 0 RN/L = 6.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.099	-6.530	-6.35200	1254.09599	6.73100	1480.89600	3161.66400	1.33760	.00000	180.00000
1.099	-4.320	-6.35100	1254.09599	6.73100	1480.89600	3161.66400	1.33760	.00000	180.00000
1.099	-2.120	-6.34100	1254.09599	6.73100	1480.89600	3161.66400	1.33760	.00000	180.00000
1.099	.080	-6.33500	1254.09599	6.73100	1480.89600	3161.66400	1.33760	.00000	180.00000
1.099	2.270	-6.32900	1254.09599	6.73100	1480.89600	3161.66400	1.33760	.00000	180.00000
1.099	4.420	-6.34100	1254.09599	6.73100	1480.89600	3161.66400	1.33760	.00000	180.00000
1.099	6.580	-6.34000	1254.09599	6.73100	1480.89600	3161.66400	1.33760	.00000	180.00000
	GRADIENT	.00147	.00000	.00000	.00000	.00001	.00000	.00000	-.00000

RUN NO. 24/ 0 RN/L = 6.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.247	-6.630	-6.41400	1333.58400	6.81400	1224.57599	3160.79999	1.42216	.00000	180.00000
1.247	-4.370	-6.41000	1333.58400	6.81400	1224.57599	3160.79999	1.42216	.00000	180.00000
1.247	-2.140	-6.40500	1333.58400	6.81400	1224.57599	3160.79999	1.42216	.00000	180.00000
1.247	.100	-6.40500	1333.58400	6.81400	1224.57599	3160.79999	1.42216	.00000	180.00000
1.247	2.310	-6.39600	1333.58400	6.81400	1224.57599	3160.79999	1.42216	.00000	180.00000
1.247	4.480	-6.39600	1333.58400	6.81400	1224.57599	3160.79999	1.42216	.00000	180.00000
1.247	6.650	-6.39600	1333.58400	6.81400	1224.57599	3160.79999	1.42216	.00000	180.00000
	GRADIENT	.00167	.00000	.00000	.00000	-.00000	-.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (81U006) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = -6.000 ELEVON = 10.800
AILRON = .000 PHI = 180.000
OFFSET = 90.000

RUN NO. 21/ 0 RN/L = 5.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.596	-6.190	-6.14300	1.09237	.63000	1.01000	.61700	.90000	-.38000	-.28300	-.38000	-.27700
.596	-4.090	-6.14500	1.09237	.68700	.96600	.65200	.93800	-.27900	-.28600	-.28000	-.28000
.596	-1.980	-6.14400	1.09237	.74700	.93200	.68100	.97000	-.18500	-.28900	-.18600	-.28400
.596	.100	-6.14100	1.09237	.80200	.88700	.69400	.98700	-.08500	-.29300	-.08700	-.28700
.596	2.200	-6.13900	1.09237	.85000	.83600	.69200	.98900	.01400	-.29700	.01100	-.29300
.596	4.280	-6.13500	1.09237	.89400	.78200	.67600	.98000	.11200	-.30400	.11000	-.30000
.596	6.360	-6.13500	1.09237	.93600	.72800	.64900	.96400	.20800	-.31500	.20600	-.31000
	GRADIENT	.00119	-.00000	.02472	-.02218	.00283	.00493	.04689	-.00210	.04670	-.00234

RUN NO. 22/ 0 RN/L = 6.29 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.900	-6.450	-6.26900	1.21937	.75300	1.11900	.74100	1.01500	-.36600	-.27400	-.36400	-.27000
.900	-4.270	-6.27200	1.21937	.81700	1.08800	.78200	1.06000	-.27100	-.27800	-.26900	-.27300
.900	-2.090	-6.27400	1.21937	.87100	1.04900	.80500	1.08500	-.17800	-.28000	-.17800	-.27600
.900	.060	-6.27200	1.21937	.92000	1.00200	.81400	1.09700	-.08200	-.28300	-.08300	-.27900
.900	2.200	-6.27400	1.21937	.96300	.95100	.80900	1.09700	.01200	-.28800	.01200	-.28200
.900	4.360	-6.27400	1.21937	1.01000	.90300	.80000	1.09100	.10700	-.29100	.10600	-.28700
.900	6.490	-6.27700	1.21937	1.04900	.84500	.77100	1.07300	.20400	-.30200	.20400	-.29700
	GRADIENT	-.00019	-.00000	.02218	-.02171	.00186	.00344	.04390	-.00158	.04362	-.00158

RUN NO. 23/ 0 RN/L = 6.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.099	-6.530	-6.35200	1.33760	.91900	1.23800	.90600	1.15400	-.31900	-.24800	-.31700	-.24400
1.099	-4.320	-6.35100	1.33760	.96800	1.20100	.93200	1.18500	-.23300	-.25300	-.23200	-.24900
1.099	-2.120	-6.34100	1.33760	1.01500	1.16400	.94900	1.20500	-.14900	-.25600	-.14900	-.25200
1.099	.080	-6.33500	1.33760	1.06400	1.12700	.96100	1.21900	-.06300	-.25800	-.06300	-.25400
1.099	2.270	-6.32900	1.33760	1.10700	1.08200	.95900	1.22000	.02500	-.26100	.02400	-.25700
1.099	4.420	-6.34100	1.33760	1.14900	1.03900	.95000	1.21300	.11000	-.26300	.10900	-.25900
1.099	6.580	-6.34000	1.33760	1.18300	.98600	.92200	1.19600	.19700	-.27400	.19700	-.27100
	GRADIENT	.00147	.00000	.02076	-.01856	.00211	.00326	.03932	-.00114	.03909	-.00114

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U006) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = -6.000 ELEVON = 10.800
AILRON = .000 PHI = 180.000
OFFSET = 90.000

RUN NO. 24/ 0 RN/L = 6.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.247	-6.630	-6.41400	1.42216	.96400	1.31200	.95000	1.21900	-.34800	-.26900	-.34600	-.26500
1.247	-4.370	-6.41000	1.42216	1.02300	1.28000	.98500	1.26000	-.25700	-.27500	-.25700	-.27200
1.247	-2.140	-6.40500	1.42216	1.07700	1.24300	1.00800	1.28600	-.16600	-.27800	-.16400	-.27400
1.247	.100	-6.40500	1.42216	1.12200	1.19300	1.01500	1.28800	-.07100	-.27300	-.07100	-.27000
1.247	2.310	-6.39600	1.42216	1.16900	1.15100	1.01700	1.29100	.01800	-.27400	.01800	-.27100
1.247	4.480	-6.39600	1.42216	1.21000	1.10300	1.00500	1.28500	.10700	-.28000	.10700	-.27600
1.247	6.650	-6.39600	1.42216	1.25100	1.05200	.98400	1.26900	.19900	-.28500	.19900	-.28300
	GRADIENT	.00167	-.00000	.02104	-.02013	.00223	.00249	.04117	-.00027	.04108	-.00022

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U006) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = -6.000 ELEVON = 10.800
AILRON = .000 PHI = 180.000
OFFSET = 90.000

RUN NO. 21/ 0 RN/L = 5.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.596	-6.190	-6.14300	.82000	.75550	.78775	.04868	-.00124
.596	-4.090	-6.14500	.82700	.79200	.80950	.04549	-.00180
.596	-1.980	-6.14400	.84000	.82300	.83150	.04588	-.00154
.596	.100	-6.14100	.84550	.83750	.84150	.04747	-.00205
.596	2.200	-6.13900	.84450	.83850	.84150	.04705	-.00314
.596	4.280	-6.13500	.83900	.82600	.83250	.04713	-.00405
.596	6.360	-6.13500	.83300	.80400	.81850	.04566	-.00519
	GRADIENT	.00119	.00137	.00400	.00268	.00021	-.00029

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U006) (07 JAN 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

BETA =	-6.000	ELEVON =	10.800
AILRON =	.000	PHI =	180.000
OFFSET =	90.000		

RUN NO. 22/ 0 RN/L = 6.29 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.900	-6.450	-6.26900	.93500	.87600	.90550	.04423	-.00138
.900	-4.270	-6.27200	.95150	.91850	.93500	.04226	-.00137
.900	-2.090	-6.27400	.96000	.94300	.95150	.04267	-.00140
.900	.060	-6.27200	.96150	.95350	.95750	.04487	-.00136
.900	2.200	-6.27400	.95700	.95000	.95350	.04357	-.00156
.900	4.360	-6.27400	.95700	.94350	.95025	.04458	-.00356
.900	6.490	-6.27700	.94700	.91950	.93325	.04672	-.00526
	GRADIENT	-.00019	.00037	.00265	.00151	.00026	-.00021

RUN NO. 23/ 0 RN/L = 6.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.099	-6.530	-6.35200	1.07750	1.02800	1.05275	.03874	-.00245
1.099	-4.320	-6.35100	1.08400	1.05650	1.07025	.03790	-.00188
1.099	-2.120	-6.34100	1.08950	1.07500	1.08225	.03922	-.00090
1.099	.080	-6.33500	1.09550	1.08800	1.09175	.03968	-.00132
1.099	2.270	-6.32900	1.09500	1.08750	1.09125	.03951	-.00064
1.099	4.420	-6.34100	1.09450	1.07950	1.08700	.04006	-.00299
1.099	6.580	-6.34000	1.08450	1.05750	1.07100	.04108	-.00684
	GRADIENT	.00147	.00121	.00269	.00195	.00026	-.00009

RUN NO. 24/ 0 RN/L = 6.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.247	-6.630	-6.41400	1.13700	1.08250	1.10975	.0387[illegible]	-.00346
1.247	-4.370	-6.41000	1.15150	1.12100	1.13625	.04061	-.00237
1.247	-2.140	-6.40500	1.15900	1.14500	1.15200	.04208	.00097
1.247	.100	-6.40500	1.15750	1.15000	1.15375	.04074	.00116
1.247	2.310	-6.39600	1.16000	1.15250	1.15625	.04033	-.00164
1.247	4.480	-6.39600	1.15650	1.14300	1.14975	.04180	-.00289
1.247	6.650	-6.39600	1.15150	1.12550	1.13850	.04269	-.00339
	GRADIENT	.00167	.00050	.00234	.00142	.00003	-.00016

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (AIU007) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = -6.000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = 90.000

RUN NO. 25/ 0 RN/L = 4.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.596	-6.260	-6.30700	620.06400	4.93700	2490.04800	3167.42398	1.09243	.00000	90.00000
.596	-4.210	-6.32600	620.06400	4.93700	2490.04800	3167.42398	1.09243	.00000	90.00000
.596	-2.190	-6.32200	620.06400	4.93700	2490.04800	3167.42398	1.09243	.00000	90.00000
.596	-.150	-6.32500	620.06400	4.93700	2490.04800	3167.42398	1.09243	.00000	90.00000
.596	1.890	-6.32600	620.06400	4.93700	2490.04800	3167.42398	1.09243	.00000	90.00000
.596	3.950	-6.33300	620.06400	4.93700	2490.04800	3167.42398	1.09243	.00000	90.00000
.596	5.990	-6.33500	620.06400	4.93700	2490.04800	3167.42398	1.09243	.00000	90.00000
	GRADIENT	-.00089	.00000	-.00000	.00000	-.00000	.00000	.00000	.00000

RUN NO. 26/ 0 RN/L = 6.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.900	-6.390	-6.56300	1061.71199	6.29600	1872.43199	3167.13599	1.21945	.00000	90.00000
.900	-4.290	-6.52200	1061.71199	6.29600	1872.43199	3167.13599	1.21945	.00000	90.00000
.900	-2.230	-6.50400	1061.71199	6.29600	1872.43199	3167.13599	1.21945	.00000	90.00000
.900	-.160	-6.50600	1061.71199	6.29600	1872.43199	3167.13599	1.21945	.00000	90.00000
.900	1.920	-6.50900	1061.71199	6.29600	1872.43199	3167.13599	1.21945	.00000	90.00000
.900	4.010	-6.51800	1061.71199	6.29600	1872.43199	3167.13599	1.21945	.00000	90.00000
.900	6.100	-6.53200	1061.71199	6.29600	1872.43199	3167.13599	1.21945	.00000	90.00000
	GRADIENT	.00014	-.00000	.00000	-.00001	-.00000	-.00000	.00000	.00000

RUN NO. 27/ 0 RN/L = 6.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.101	-6.470	-6.71600	1256.39999	6.77900	1479.88799	3165.12000	1.33854	.00000	90.00000
1.101	-4.350	-6.68400	1256.39999	6.77900	1479.88799	3165.12000	1.33854	.00000	90.00000
1.101	-2.270	-6.67300	1256.39999	6.77900	1479.88799	3165.12000	1.33854	.00000	90.00000
1.101	-.160	-6.66300	1256.39999	6.77900	1479.88799	3165.12000	1.33854	.00000	90.00000
1.101	1.950	-6.66500	1256.39999	6.77900	1479.88799	3165.12000	1.33854	.00000	90.00000
1.101	4.060	-6.67300	1256.39999	6.77900	1479.88799	3165.12000	1.33854	.00000	90.00000
1.101	6.190	-6.68300	1256.39999	6.77900	1479.88799	3165.12000	1.33854	.00000	90.00000
	GRADIENT	.00142	.00000	.00000	.00000	-.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (A1U007) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = -6.000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = 90.000

RUN NO. 28/ 0 RN/L = 7.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.243	-6.520	-6.76400	1337.47198	7.02200	1235.08800	3173.18399	1.42055	.00000	90.00000
1.243	-4.380	-6.74500	1337.47198	7.02200	1235.08800	3173.18399	1.42055	.00000	90.00000
1.243	-2.270	-6.73200	1337.47198	7.02200	1235.08800	3173.18399	1.42055	.00000	90.00000
1.243	-.160	-6.72600	1337.47198	7.02200	1235.08800	3173.18399	1.42055	.00000	90.00000
1.243	1.950	-6.72600	1337.47198	7.02200	1235.08800	3173.18399	1.42055	.00000	90.00000
1.243	4.090	-6.74100	1337.47198	7.02200	1235.08800	3173.18399	1.42055	.00000	90.00000
1.243	6.230	-6.75900	1337.47198	7.02200	1235.08800	3173.18399	1.42055	.00000	90.00000
	GRADIENT	.00066	.00000	-.00000	-.00000	.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U007) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = -6.000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = 90.000

RUN NO. 25/ 0 RN/L = 4.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.596	-6.260	-6.30700	1.09243	.62300	.99200	.60900	.88200	-.36900	-.27300	-.36800	-.26900
.596	-4.210	-6.32600	1.09243	.65500	1.00600	.67600	.84700	-.35100	-.17100	-.35000	-.16700
.596	-2.190	-6.32200	1.09243	.67700	1.01100	.73800	.80800	-.33400	-.07000	-.33300	-.06500
.595	-.150	-6.32500	1.09243	.68200	1.00800	.79500	.76100	-.32600	.03400	-.32400	.03700
.596	1.890	-6.32600	1.09243	.67700	.99400	.84800	.71400	-.31700	.13400	-.31600	.13800
.596	3.950	-6.33300	1.09243	.65900	.96800	.89600	.66300	-.30900	.23300	-.30700	.23700
.596	5.990	-6.33500	1.09243	.62900	.92600	.93800	.60900	-.29700	.32900	-.29600	.33200
	GRADIENT	-.00089	.00000	.00038	-.00457	.02696	-.02265	.00495	.04961	.00505	.04956

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U007) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = -6.000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = 90.000

RUN NO. 26/ 0 RN/L = 6.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.900	-6.390	-6.56300	1.21945	.75000	1.11200	.73800	1.00800	-.36200	-.27000	-.36000	-.26700
.900	-4.290	-6.52200	1.21945	.77600	1.12200	.79900	.96800	-.34600	-.16900	-.34200	-.16700
.900	-2.230	-6.50400	1.21945	.79400	1.12600	.85700	.92700	-.33200	-.07000	-.32900	-.06700
.900	-.160	-6.50600	1.21945	.80400	1.12700	.91700	.88500	-.32300	.03200	-.31900	.03500
.900	1.920	-6.50900	1.21945	.79700	1.11100	.96700	.83600	-.31400	.13100	-.31100	.13400
.900	4.010	-6.51800	1.21945	.78300	1.08900	1.01600	.79100	-.30600	.22500	-.30300	.22700
.900	6.100	-6.53200	1.21945	.75200	1.04800	1.05800	.73600	-.29600	.32200	-.29300	.32400
	GRADIENT	.00014	-.00000	.00081	-.00391	.02621	-.02145	.00472	.04766	.00463	.04766

RUN NO. 27/ 0 RN/L = 6.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.101	-6.470	-6.71600	1.33854	.90800	1.23600	.89500	1.14900	-.32800	-.25400	-.32500	-.25200
1.101	-4.350	-6.68400	1.33854	.94100	1.24900	.95700	1.11800	-.30800	-.16100	-.30600	-.15800
1.101	-2.270	-6.67300	1.33854	.95100	1.24800	1.00300	1.07500	-.29700	-.07200	-.29500	-.06900
1.101	-.160	-6.66300	1.33854	.95900	1.25000	1.05700	1.03700	-.29100	.02000	-.28900	.02200
1.101	1.950	-6.66500	1.33854	.95300	1.23600	1.10300	.99200	-.28300	.11100	-.28100	.11200
1.101	4.060	-6.67300	1.33854	.93900	1.21500	1.14600	.94900	-.27600	.19700	-.27400	.19900
1.101	6.190	-6.68300	1.33854	.91500	1.18000	1.18400	.90100	-.26500	.28300	-.26300	.28400
	GRADIENT	.00142	.00000	-.00010	-.00381	.02272	-.02001	.00371	.04273	.00371	.04254

RUN NO. 28/ 0 RN/L = 7.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.243	-6.520	-6.76400	1.42055	.95800	1.31100	.94700	1.20900	-.35300	-.26200	-.35100	-.26000
1.243	-4.330	-6.74500	1.42055	.98500	1.31900	1.00700	1.16900	-.33400	-.16200	-.33100	-.15900
1.243	-2.270	-6.73200	1.42055	.99600	1.31800	1.05900	1.12500	-.32200	-.06600	-.32000	-.06400
1.243	-.160	-6.72600	1.42055	.99900	1.31800	1.11100	1.08200	-.31900	.02900	-.31700	.03000
1.243	1.950	-6.72600	1.42055	.99400	1.30400	1.16100	1.03600	-.31000	.12500	-.30800	.12700
1.243	4.090	-6.74100	1.42055	.98200	1.28300	1.20800	.99000	-.30100	.21800	-.29900	.21900
1.243	6.230	-6.75900	1.42055	.95500	1.24300	1.24700	.94000	-.28800	.30700	-.28600	.30900
	GRADIENT	.00066	.00000	-.00038	-.00407	.02382	-.02113	.00369	.04494	.00359	.04475

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U007) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = -6.000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = 90.000

RUN NO. 25/ 0 RN/L = 4.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.596	-6.260	-6.30700	.80700	.74350	.77525	.00860	.04953
.596	-4.210	-6.32600	.83000	.75950	.79475	.00914	.05022
.596	-2.190	-6.32200	.84350	.77050	.80700	.00644	.05037
.596	-.150	-6.32500	.84400	.77650	.81025	.00362	.04981
.596	1.890	-6.32600	.83500	.77900	.80700	.00409	.04893
.596	3.950	-6.33300	.81250	.77750	.79500	.00489	.04717
.596	5.990	-6.33500	.77700	.77200	.77450	.00564	.04627
	GRADIENT	-.00089	-.00214	.00218	.00002	-.00053	-.00037

RUN NO. 26/ 0 RN/L = 6.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.900	-6.390	-6.56300	.93000	.87150	.90075	.00909	.04744
.900	-4.290	-6.52200	.94700	.88250	.91475	.00753	.04799
.900	-2.230	-6.50400	.95850	.89050	.92450	.00541	.04912
.900	-.160	-6.50600	.96350	.89950	.93150	.00425	.04898
.900	1.920	-6.50900	.95250	.90000	.92625	.00362	.04558
.900	4.010	-6.51800	.93450	.90250	.91850	.00430	.04501
.900	6.100	-6.53200	.89850	.89600	.89725	.00503	.04711
	GRADIENT	.00014	-.00150	.00238	.00044	-.00040	-.00046

RUN NO. 27/ 0 RN/L = 6.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.101	-6.470	-6.71600	1.07050	1.02100	1.04575	.00976	.04479
1.101	-4.350	-6.68400	1.09400	1.03600	1.06500	.00737	.04345
1.101	-2.270	-6.67300	1.09850	1.03750	1.06800	.00345	.04279
1.101	-.160	-6.66300	1.10350	1.04600	1.07475	.00324	.04313
1.101	1.950	-6.66500	1.09350	1.04700	1.07025	.00351	.04202
1.101	4.060	-6.67300	1.07600	1.04650	1.06125	.00405	.04044
1.101	6.190	-6.68300	1.04650	1.04200	1.04425	.00572	.03964
	GRADIENT	.00142	-.00195	.00145	-.00025	-.00031	-.00032

IA181, MSFC 649, MODEL 74- 0 T S (AADS DATA) (C1U007) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = -6.000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = 90.000

RUN NO. 28/ 0 RN/L = 7.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.243	-6.520	-6.76400	1.13350	1.07700	1.10525	.01013	.04771
1.243	-4.380	-6.74500	1.15050	1.08650	1.11850	.00778	.04618
1.243	-2.270	-6.73200	1.15600	1.09100	1.12350	.00240	.04423
1.243	-.160	-6.72600	1.15750	1.09600	1.12675	.00254	.04563
1.243	1.950	-6.72600	1.14800	1.09750	1.12275	.00449	.04481
1.243	4.090	-6.74100	1.13150	1.09850	1.11500	.00493	.04207
1.243	6.230	-6.75900	1.09800	1.09250	1.09525	.00665	.04205
	GRADIENT	.00066	-.00218	.00144	-.00037	-.00017	-.00036

IA181, MSFC 649, MODEL 74- 0 T S (AADS DATA) (A1U008) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = 6.000 ELEVON = 10.800
AILRON = .000 PHI = 270.000
OFFSET = 90.000

RUN NO. 29/ 0 RN/L = 5.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.598	-5.950	6.19900	622.51200	5.02400	2482.56000	3162.95996	1.09299	.00000	270.00000
.598	-3.890	6.20000	622.51200	5.02400	2482.56000	3162.95996	1.09299	.00000	270.00000
.598	-1.840	6.20200	622.51200	5.02400	2482.56000	3162.95996	1.09299	.00000	270.00000
.598	.220	6.20200	622.51200	5.02400	2482.56000	3162.95996	1.09299	.00000	270.00000
.598	2.270	6.20000	622.51200	5.02400	2482.56000	3162.95996	1.09299	.00000	270.00000
.598	4.290	6.19900	622.51200	5.02400	2482.56000	3162.95996	1.09299	.00000	270.00000
.598	6.330	6.21300	622.51200	5.02400	2482.56000	3162.95996	1.09299	.00000	270.00000
	GRADIENT	-.00019	.00000	.00000	-.00000	-.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (AIU008) (07 JAN 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

ALPHA =	6.000	ELEVON =	10.800
AILRON =	.000	PHI =	270.000
OFFSET =	90.000		

RUN NO. 30/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.900	-6.100	6.36100	1060.56000	6.39300	1869.40799	3162.67200	1.21942	.00000	270.00000
.900	-3.980	6.35500	1060.56000	6.39300	1869.40799	3162.67200	1.21942	.00000	270.00000
.900	-1.870	6.35700	1060.56000	6.39300	1869.40799	3162.67200	1.21942	.00000	270.00000
.900	.230	6.35600	1060.56000	6.39300	1869.40799	3162.67200	1.21942	.00000	270.00000
.900	2.310	6.35600	1060.56000	6.39300	1869.40799	3162.67200	1.21942	.00000	270.00000
.900	4.380	6.35000	1060.56000	6.39300	1869.40799	3162.67200	1.21942	.00000	270.00000
.900	6.470	6.34100	1060.56000	6.39300	1869.40799	3162.67200	1.21942	.00000	270.00000
	GRADIENT	-.00052	-.00000	.00000	.00000	.00000	.00000	.00000	-.00000

RUN NO. 31/ 0 RN/L = 6.58 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.101	-6.110	6.47900	1257.84000	6.58500	1481.03999	3168.28799	1.33861	.00000	270.00000
1.101	-3.990	6.49200	1257.84000	6.58500	1481.03999	3168.28799	1.33861	.00000	270.00000
1.101	-1.860	6.50200	1257.84000	6.58500	1481.03999	3168.28799	1.33861	.00000	270.00000
1.101	.240	6.50400	1257.84000	6.58500	1481.03999	3168.28799	1.33861	.00000	270.00000
1.101	2.350	6.50000	1257.84000	6.58500	1481.03999	3168.28799	1.33861	.00000	270.00000
1.101	4.430	6.48900	1257.84000	6.58500	1481.03999	3168.28799	1.33861	.00000	270.00000
1.101	6.550	6.50400	1257.84000	6.58500	1481.03999	3168.28799	1.33861	.00000	270.00000
	GRADIENT	-.00037	.00000	-.00000	.00000	-.00000	-.00000	.00000	-.00000

RUN NO. 32/ 0 RN/L = 6.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.248	-6.190	6.51800	1335.74400	6.71800	1223.56799	3164.68799	1.42318	.00000	270.00000
1.248	-4.050	6.55500	1335.74400	6.71800	1223.56799	3164.68799	1.42318	.00000	270.00000
1.248	-1.900	6.58600	1335.74400	6.71800	1223.56799	3164.68799	1.42318	.00000	270.00000
1.248	.220	6.59500	1335.74400	6.71800	1223.56799	3164.68799	1.42318	.00000	270.00000
1.248	2.350	6.59000	1335.74400	6.71800	1223.56799	3164.68799	1.42318	.00000	270.00000
1.248	4.440	6.59100	1335.74400	6.71800	1223.56799	3164.68799	1.42318	.00000	270.00000
1.248	6.570	6.56000	1335.74400	6.71800	1223.56799	3164.68799	1.42318	.00000	270.00000
	GRADIENT	.00359	.00000	-.00000	.00000	.00000	.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U008) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = 6.000 ELEVON = 10.800
AILRON = .000 PHI = 270.000
OFFSET = 90.000

RUN NO. 29/ 0 RN/L = 5.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.598	-5.950	6.19900	1.09299	.94100	.72600	.65100	.96600	.21500	-.31500	.21400	-.31100
.598	-3.890	6.20000	1.09299	.96600	.74100	.70600	.91800	.22500	-.21200	.22400	-.20900
.598	-1.840	6.20200	1.09299	.98300	.74500	.76000	.87000	.23800	-.11000	.23900	-.10700
.598	.220	6.20200	1.09299	.99000	.73300	.81100	.81700	.25700	-.00600	.25600	-.00400
.598	2.270	6.20000	1.09299	.99000	.71000	.86100	.76400	.28000	.09700	.27900	.10000
.598	4.290	6.19900	1.09299	.97800	.66900	.90200	.70300	.30900	.19900	.30800	.20100
.598	6.330	6.21300	1.09299	.95500	.61600	.93900	.63900	.33900	.30000	.33900	.30200
	GRADIENT	-.00019	.00000	.00152	-.00873	.02409	-.02618	.01025	.05027	.01016	.05017

RUN NO. 30/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.900	-6.100	6.36100	1.21942	1.05600	.84200	.77200	1.07400	.21400	-.30200	.21400	-.30000
.900	-3.980	6.35500	1.21942	1.07900	.85800	.82600	1.02900	.22100	-.20300	.22100	-.20100
.900	-1.870	6.35700	1.21942	1.09800	.86700	.88200	.98500	.23100	-.10300	.23100	-.10000
.900	.230	6.35600	1.21942	1.10500	.85600	.93200	.93700	.24900	-.00500	.24900	-.00300
.900	2.310	6.35600	1.21942	1.10100	.83100	.97600	.88100	.27000	.09500	.27000	.09600
.900	4.380	6.35000	1.21942	1.08900	.79400	1.01600	.82400	.29500	.19200	.29600	.19300
.900	6.470	6.34100	1.21942	1.07100	.74500	1.05500	.76400	.32600	.29100	.32700	.29200
	GRADIENT	-.00052	.00000	.00111	-.00783	.02269	-.02459	.00894	.04727	.00904	.04708

RUN NO. 31/ 0 RN/L = 6.58 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.101	-6.110	6.47900	1.33861	1.17900	.98500	.92700	1.18600	.19400	-.25900	.19400	-.25700
1.101	-3.990	6.49200	1.33861	1.19900	.99700	.97500	1.14600	.20200	-.17100	.20200	-.16900
1.101	-1.860	6.50200	1.33861	1.21100	.99800	1.02000	1.10400	.21300	-.08400	.21300	-.08200
1.101	.240	6.50400	1.33861	1.21900	.99100	1.06500	1.06000	.22800	.00500	.22900	.00500
1.101	2.350	6.50000	1.33861	1.21800	.97200	1.10800	1.01500	.24600	.09300	.24600	.09400
1.101	4.430	6.48900	1.33861	1.20700	.94100	1.14500	.96500	.26600	.18000	.26700	.18100
1.101	6.550	6.50400	1.33861	1.18600	.89000	1.17500	.90500	.29600	.27000	.29600	.27000
	GRADIENT	-.00037	-.00000	.00110	-.00654	.02033	-.02142	.00765	.04176	.00774	.04161

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (B1U008) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = 6.000 ELEVON = 10.800
AILRON = .000 PHI = 270.000
OFFSET = 90.000

RUN NO. 32/ 0 RN/L = 6.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.248	-6.190	6.51800	1.42318	1.25200	1.04700	.98300	1.26500	.20500	-.28200	.20600	-.28000
1.248	-4.050	6.55500	1.42318	1.27700	1.06300	1.03600	1.22600	.21400	-.19000	.21400	-.18800
1.248	-1.900	6.58600	1.42318	1.29600	1.06800	1.08600	1.18500	.22800	-.09900	.22800	-.09600
1.248	.220	6.59500	1.42318	1.30300	1.06000	1.13300	1.13700	.24300	-.00400	.24400	-.00300
1.248	2.350	6.59000	1.42318	1.30100	1.03700	1.17600	1.08500	.26400	.09100	.26400	.09200
1.248	4.440	6.59100	1.42318	1.29200	1.00500	1.21800	1.03100	.28700	.18700	.28800	.18900
1.248	6.570	6.56000	1.42318	1.27400	.96100	1.25700	.97500	.31300	.28200	.31400	.28300
	GRADIENT	.00359	.00000	.00166	-.00691	.02139	-.02307	.00857	.04446	.00866	.04437

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U008) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = 6.000 ELEVON = 10.800
AILRON = .000 PHI = 270.000
OFFSET = 90.000

RUN NO. 29/ 0 RN/L = 5.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.598	-5.950	6.19900	.83400	.80650	.82025	.00422	.04945
.598	-3.890	6.20000	.85400	.81050	.83225	.00613	.04964
.598	-1.840	6.20200	.86350	.81350	.83850	.00780	.04979
.598	.220	6.20200	.86200	.81300	.83750	.00939	.05047
.598	2.270	6.20000	.85050	.81100	.83075	.01307	.05052
.598	4.290	6.19900	.82400	.80150	.81275	.01508	.04964
.598	6.330	6.21300	.78550	.78800	.78675	.01525	.04944
	GRADIENT	-.00019	-.00356	-.00100	-.00228	.00113	.00004

IA181, MSFC 649, MODEL 74- O T S (AADS DATA) (C1U008) (07 JAN 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

ALPHA =	6.000	ELEVON =	10.800
AILRON =	.000	PHI =	270.000
OFFSET =	90.000		

RUN NO. 30/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.900	-6.100	6.36100	.94900	.92200	.93550	.00317	.04623
.900	-3.980	6.35500	.96850	.92650	.94750	.00356	.04763
.900	-1.870	6.35700	.98250	.93200	.95725	.00671	.04694
.900	.230	6.35600	.98050	.93350	.95700	.00954	.04675
.900	2.310	6.35600	.96600	.92800	.94700	.01112	.04742
.900	4.380	6.35000	.94100	.91950	.93025	.01394	.04691
.900	6.470	6.34100	.90750	.90900	.90825	.01528	.04760
	GRADIENT	-.00052	-.00341	-.00086	-.00213	.00120	-.00005

RUN NO. 31/ 0 RN/L = 6.58 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.101	-6.110	6.47900	1.08200	1.05550	1.06875	.00358	.04171
1.101	-3.990	6.49200	1.09800	1.05950	1.07875	.00417	.04110
1.101	-1.860	6.50200	1.10450	1.06100	1.08275	.00656	.04094
1.101	.240	6.50400	1.10450	1.06250	1.08350	.00796	.04196
1.101	2.350	6.50000	1.09500	1.06100	1.07800	.00862	.04206
1.101	4.430	6.48900	1.07350	1.05450	1.06400	.01204	.04183
1.101	6.550	6.50400	1.03800	1.04000	1.03900	.01450	.04206
	GRADIENT	-.00037	-.00277	-.00047	-.00162	.00085	.00012

RUN NO. 32/ 0 RN/L = 6.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.248	-6.190	6.51800	1.14900	1.12300	1.13600	.00305	.04312
1.248	-4.050	6.55500	1.17000	1.13000	1.15000	.00512	.04273
1.248	-1.900	6.58600	1.18200	1.13400	1.15800	.00720	.04330
1.248	.220	6.59500	1.18100	1.13450	1.15775	.00826	.04406
1.248	2.350	6.59000	1.16900	1.13000	1.14950	.01058	.04585
1.248	4.440	6.59100	1.14800	1.12350	1.13575	.01205	.04561
1.248	6.570	6.56000	1.11700	1.11550	1.11625	.01229	.04339
	GRADIENT	.00359	-.00267	-.00080	-.00173	.00081	.00039

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U009) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 33/ 0 RN/L = 5.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.598	-6.220	.00000	621.21600	5.05400	2482.56000	3161.37598	1.09272	.00000	.00000
.598	-4.210	.00000	621.21600	5.05400	2482.56000	3161.37598	1.09272	.00000	.00000
.598	-2.180	.00000	621.21600	5.05400	2482.56000	3161.37598	1.09272	.00000	.00000
.598	-.140	.00000	621.21600	5.05400	2482.56000	3161.37598	1.09272	.00000	.00000
.598	1.910	.00000	621.21600	5.05400	2482.56000	3161.37598	1.09272	.00000	.00000
.598	3.960	.00000	621.21600	5.05400	2482.56000	3161.37598	1.09272	.00000	.00000
.598	5.980	.00000	621.21600	5.05400	2482.56000	3161.37598	1.09272	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00001	.00000	.00000	.00000

RUN NO. 34/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.901	-6.310	.00000	1061.13600	6.41200	1866.67200	3161.80798	1.22052	.00000	.00000
.901	-4.270	.00000	1061.13600	6.41200	1866.67200	3161.80798	1.22052	.00000	.00000
.901	-2.210	.00000	1061.13600	6.41200	1866.67200	3161.80798	1.22052	.00000	.00000
.901	-.150	.00000	1061.13600	6.41200	1866.67200	3161.80798	1.22052	.00000	.00000
.901	1.940	.00000	1061.13600	6.41200	1866.67200	3161.80798	1.22052	.00000	.00000
.901	4.000	.00000	1061.13600	6.41200	1866.67200	3161.80798	1.22052	.00000	.00000
.901	6.070	.00000	1061.13600	6.41200	1866.67200	3161.80798	1.22052	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00001	.00000	.00000	.00000

RUN NO. 35/ 0 RN/L = 6.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.099	-6.390	.00000	1253.52000	6.74700	1481.18399	3160.94397	1.33741	.00000	.00000
1.099	-4.320	.00000	1253.52000	6.74700	1481.18399	3160.94397	1.33741	.00000	.00000
1.099	-2.240	.00000	1253.52000	6.74700	1481.18399	3160.94397	1.33741	.00000	.00000
1.099	-.160	.00000	1253.52000	6.74700	1481.18399	3160.94397	1.33741	.00000	.00000
1.099	1.940	.00000	1253.52000	6.74700	1481.18399	3160.94397	1.33741	.00000	.00000
1.099	4.040	.00000	1253.52000	6.74700	1481.18399	3160.94397	1.33741	.00000	.00000
1.099	6.100	.00000	1253.52000	6.74700	1481.18399	3160.94397	1.33741	.00000	.00000
	GRADIENT	.00000	.00000	-.00000	-.00000	-.00000	-.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U009) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 36/ 0 RN/L = 6.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.248	-6.400	.00000	1333.72798	6.81300	1222.84799	3164.25598	1.42555	.00000	.00000
1.248	-4.340	.00000	1333.72798	6.81300	1222.84799	3164.25598	1.42555	.00000	.00000
1.248	-2.270	.00000	1333.72798	6.81300	1222.84799	3164.25598	1.42555	.00000	.00000
1.248	-.160	.00000	1333.72798	6.81300	1222.84799	3164.25598	1.42555	.00000	.00000
1.248	1.960	.00000	1333.72798	6.81300	1222.84799	3164.25598	1.42555	.00000	.00000
1.248	4.050	.00000	1333.72798	6.81300	1222.84799	3164.25598	1.42555	.00000	.00000
1.248	6.150	.00000	1333.72798	6.81300	1222.84799	3164.25598	1.42555	.00000	.00000
	GRADIENT	.00000	.00000	-.00000	-.00000	-.00000	-.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U009) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 33/ 0 RN/L = 5.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.598	-6.220	.00000	1.09272	.70400	1.00700	.82200	.77500	-.30300	.04700	-.30500	.05000
.598	-4.210	.00000	1.09272	.76000	.96800	.84700	.80800	-.20800	.03900	-.20900	.04200
.598	-2.180	.00000	1.09272	.81700	.93000	.86500	.83500	-.11300	.02900	-.11500	.03300
.598	-.140	.00000	1.09272	.86500	.88400	.86800	.84500	-.01900	.02300	-.02200	.02500
.598	1.910	.00000	1.09272	.91500	.83800	.86200	.84800	.07700	.01400	.07400	.01900
.598	3.960	.00000	1.09272	.95500	.78500	.84400	.83400	.17000	.01000	.16700	.01400
.598	5.980	.00000	1.09272	.99500	.73000	.81700	.81000	.26500	.00700	.26300	.01100
	GRADIENT	.00000	.00000	.02388	-.02242	-.00045	.00312	.04630	-.00357	.04606	-.00343

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U009) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 34/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.901	-6.310	.00000	1.22052	.82000	1.11400	.94000	.89100	-.29400	.04900	-.29300	.05100
.901	-4.270	.00000	1.22052	.87500	1.07900	.96400	.92300	-.20400	.04100	-.20400	.04200
.901	-2.210	.00000	1.22052	.92200	1.03700	.97300	.98100	-.11500	.03200	-.11400	.03400
.901	-.150	.00000	1.22052	.97300	.99600	.98000	.95500	-.02300	.02500	-.02200	.02600
.901	1.940	.00000	1.22052	1.01700	.95000	.97500	.95400	.06700	.02100	.06600	.02200
.901	4.000	.00000	1.22052	1.05800	.90200	.96000	.94500	.15600	.01500	.15600	.01800
.901	6.070	.00000	1.22052	1.09300	.85000	.93400	.92200	.24300	.01200	.24400	.01400
	GRADIENT	.00000	.00000	.02228	-.02132	-.00029	.00275	.04360	-.00304	.04350	-.00290

RUN NO. 35/ 0 RN/L = 6.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.099	-6.390	.00000	1.33741	.99400	1.24700	1.08900	1.04700	-.26300	.04200	-.26200	.04300
1.099	-4.320	.00000	1.33741	1.02800	1.21300	1.10700	1.07300	-.18500	.03400	-.18300	.03500
1.099	-2.240	.00000	1.33741	1.07200	1.17700	1.11800	1.09100	-.10500	.02700	-.10500	.02800
1.099	-.160	.00000	1.33741	1.11900	1.14400	1.12600	1.10600	-.02500	.02000	-.02500	.02100
1.099	1.940	.00000	1.33741	1.15700	1.10200	1.12100	1.10500	.05500	.01600	.05500	.01700
1.099	4.040	.00000	1.33741	1.19100	1.05800	1.10500	1.09300	.13300	.01200	.13300	.01300
1.099	6.100	.00000	1.33741	1.22500	1.01500	1.08600	1.07800	.21000	.00800	.21000	.01000
	GRADIENT	.00000	-.00000	.01966	-.01842	-.00005	.00258	.03809	-.00263	.03789	-.00263

RUN NO. 36/ 0 RN/L = 6.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.248	-6.400	.00000	1.42555	1.03800	1.31800	1.15300	1.10500	-.28000	.04800	-.27800	.04900
1.248	-4.340	.00000	1.42555	1.08600	1.28100	1.17000	1.13200	-.19500	.03800	-.19300	.03900
1.248	-2.270	.00000	1.42555	1.14100	1.25200	1.19100	1.16000	-.11100	.03100	-.11000	.03200
1.248	-.160	.00000	1.42555	1.17800	1.20400	1.18600	1.16100	-.02600	.02500	-.02600	.02700
1.248	1.960	.00000	1.42555	1.22300	1.16300	1.18700	1.16200	.06000	.02500	.06000	.02600
1.248	4.050	.00000	1.42555	1.26100	1.11700	1.17400	1.15200	.14400	.02200	.14300	.02400
1.248	6.150	.00000	1.42555	1.29300	1.07100	1.15100	1.13300	.22200	.01800	.22200	.01900
	GRADIENT	.00000	-.00000	.02056	-.01985	.00018	.00199	.04041	-.00181	.04008	-.00171

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U009) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 33/ 0 RN/L = 5.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.598	-6.220	.00000	.85650	.79700	.82675	.04806	-.00384
.598	-4.210	.00000	.86450	.82600	.84525	.04715	-.00426
.598	-2.180	.00000	.87450	.84850	.86150	.04553	-.00436
.598	-.140	.00000	.87600	.85550	.86575	.04643	-.00337
.598	1.910	.00000	.87800	.85250	.86525	.04601	-.00269
.598	3.960	.00000	.87150	.83700	.85425	.04612	-.00195
.598	5.980	.00000	.86350	.81150	.83750	.04823	-.00125
	GRADIENT	.00000	.00085	.00127	.00106	-.00008	.00031

RUN NO. 34/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.901	-6.310	.00000	.96650	.91450	.94050	.04374	-.00459
.901	-4.270	.00000	.97700	.94300	.96000	.04341	-.00405
.901	-2.210	.00000	.97900	.95600	.96750	.04459	-.00408
.901	-.150	.00000	.98400	.96700	.97550	.04327	-.00292
.901	1.940	.00000	.98400	.96400	.97400	.04267	-.00166
.901	4.000	.00000	.98000	.95100	.96550	.04348	-.00202
.901	6.070	.00000	.97100	.92700	.94900	.04203	-.00189
	GRADIENT	.00000	.00053	.00116	.00084	-.00009	.00031

RUN NO. 35/ 0 RN/L = 6.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.099	-6.390	.00000	1.11500	1.06750	1.09125	.03841	-.00403
1.099	-4.320	.00000	1.11950	1.08950	1.10450	.03767	-.00354
1.099	-2.240	.00000	1.12450	1.10400	1.11425	.03791	-.00350
1.099	-.160	.00000	1.13150	1.11550	1.12350	.03856	-.00264
1.099	1.940	.00000	1.12950	1.11250	1.12100	.03750	-.00176
1.099	4.040	.00000	1.12450	1.09850	1.11150	.03714	-.00175
1.099	6.100	.00000	1.12000	1.08100	1.10050	.03750	-.00131
	GRADIENT	.00000	.00071	.00126	.00099	-.00007	.00025

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U009) (07 JAN 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 36/ 0 RN/L = 6.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.248	-6.400	.00000	1.17700	1.12850	1.15275	.04154	-.00521
1.248	-4.340	.00000	1.18250	1.15050	1.16650	.04071	-.00414
1.248	-2.270	.00000	1.19600	1.17500	1.18550	.03970	-.00295
1.248	-.160	.00000	1.19100	1.17250	1.18175	.04023	-.00132
1.248	1.960	.00000	1.19300	1.17400	1.18350	.04050	-.00031
1.248	4.050	.00000	1.18950	1.16200	1.17575	.03859	-.00175
1.248	6.150	.00000	1.18200	1.14150	1.16175	.03713	-.00270
	GRADIENT	.00000	.00052	.00104	.00078	-.00016	.00035

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U010) (03 DEC 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 37/ 0 RN/L = 5.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.597	-6.230	.00000	620.20799	5.05200	2482.70398	3160.36798	1.09264	.00000	.00000
.597	-4.210	.00000	620.20799	5.05200	2482.70398	3160.36798	1.09264	.00000	.00000
.597	-2.200	.00000	620.20799	5.05200	2482.70398	3160.36798	1.09264	.00000	.00000
.597	-.150	.00000	620.20799	5.05200	2482.70398	3160.36798	1.09264	.00000	.00000
.597	1.910	.00000	620.20799	5.05200	2482.70398	3160.36798	1.09264	.00000	.00000
.597	3.960	.00000	620.20799	5.05200	2482.70398	3160.36798	1.09264	.00000	.00000
.597	5.970	.00000	620.20799	5.05200	2482.70398	3160.36798	1.09264	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U010) (03 DEC 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 38/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.900	-6.310	.00000	1059.98399	6.40700	1867.82399	3160.65598	1.21967	.00000	.00000
.900	-4.270	.00000	1059.98399	6.40700	1867.82399	3160.65598	1.21967	.00000	.00000
.900	-2.230	.00000	1059.98399	6.40700	1867.82399	3160.65598	1.21967	.00000	.00000
.900	-.150	.00000	1059.98399	6.40700	1867.82399	3160.65598	1.21967	.00000	.00000
.900	1.930	.00000	1059.98399	6.40700	1867.82399	3160.65598	1.21967	.00000	.00000
.900	4.010	.00000	1059.98399	6.40700	1867.82399	3160.65598	1.21967	.00000	.00000
.900	6.030	.00000	1059.98399	6.40700	1867.82399	3160.65598	1.21967	.00000	.00000
	GRADIENT	.00000	-.00000	.00000	-.00000	-.00000	-.00000	.00000	.00000

RUN NO. 39/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.099	-6.290	.00000	1253.52000	6.77500	1480.31999	3160.22400	1.34015	.00000	.00000
1.099	-4.290	.00000	1253.52000	6.77500	1480.31999	3160.22400	1.34015	.00000	.00000
1.099	-2.230	.00000	1253.52000	6.77500	1480.31999	3160.22400	1.34015	.00000	.00000
1.099	-.150	.00000	1253.52000	6.77500	1480.31999	3160.22400	1.34015	.00000	.00000
1.099	1.950	.00000	1253.52000	6.77500	1480.31999	3160.22400	1.34015	.00000	.00000
1.099	4.060	.00000	1253.52000	6.77500	1480.31999	3160.22400	1.34015	.00000	.00000
1.099	6.120	.00000	1253.52000	6.77500	1480.31999	3160.22400	1.34015	.00000	.00000
	GRADIENT	.00000	-.00000	-.00000	-.00000	.00000	-.00000	.00000	.00000

RUN NO. 40/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.249	-6.310	.00000	1333.58400	6.83200	1223.13599	3160.07999	1.42208	.00000	.00000
1.249	-4.300	.00000	1333.58400	6.83200	1223.13599	3160.07999	1.42208	.00000	.00000
1.249	-2.260	.00000	1333.58400	6.83200	1223.13599	3160.07999	1.42208	.00000	.00000
1.249	-.180	.00000	1333.58400	6.83200	1223.13599	3160.07999	1.42208	.00000	.00000
1.249	1.910	.00000	1333.58400	6.83200	1223.13599	3160.07999	1.42208	.00000	.00000
1.249	4.000	.00000	1333.58400	6.83200	1223.13599	3160.07999	1.42208	.00000	.00000
1.249	6.050	.00000	1333.58400	6.83200	1223.13599	3160.07999	1.42208	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00001	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U010) (03 DEC 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 37/ 0 RN/L = 5.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.597	-6.230	.00000	1.09264	.70300	1.00500	.82200	.77200	-.30200	.05000	-.30300	.05200
.597	-4.210	.00000	1.09264	.76100	.97000	.84600	.81000	-.20900	.03600	-.21100	.04000
.597	-2.200	.00000	1.09264	.81800	.93300	.86600	.83600	-.11500	.03000	-.11700	.03300
.597	-.150	.00000	1.09264	.86800	.88600	.86900	.84700	-.01800	.02200	-.01900	.02600
.597	1.910	.00000	1.09264	.91500	.83800	.86300	.84900	.07700	.01400	.07300	.01800
.597	3.960	.00000	1.09264	.95600	.78600	.84500	.83400	.17000	.01100	.16800	.01500
.597	5.970	.00000	1.09264	.99500	.73000	.81800	.81100	.26500	.00700	.26200	.01200
	GRADIENT	.00000	.00000	.02381	-.02265	-.00026	.00297	.04645	-.00323	.04636	-.00318

RUN NO. 38/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.900	-6.310	.00000	1.21967	.82700	1.11800	.94600	.89800	-.29100	.04800	-.28900	.05000
.900	-4.270	.00000	1.21967	.87800	1.08100	.96600	.92700	-.20300	.03900	-.20100	.04000
.900	-2.230	.00000	1.21967	.93000	1.04400	.98100	.94900	-.11400	.03200	-.11300	.03300
.900	-.150	.00000	1.21967	.98000	1.00200	.98500	.96200	-.02200	.02300	-.02200	.02500
.900	1.930	.00000	1.21967	1.02200	.95400	.97800	.95900	.06800	.01900	.06700	.02100
.900	4.010	.00000	1.21967	1.06100	.90600	.96400	.94800	.15500	.01600	.15500	.01800
.900	6.030	.00000	1.21967	1.09800	.85800	.94000	.92900	.24000	.01100	.24100	.01400
	GRADIENT	.00000	-.00000	.02210	-.02124	-.00035	.00250	.04334	-.00285	.04305	-.00270

RUN NO. 39/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.099	-6.290	.00000	1.34015	.96000	1.23500	1.07200	1.02500	-.27500	.04700	-.27300	.04800
1.099	-4.290	.00000	1.34015	1.01100	1.20200	1.09200	1.05700	-.19100	.03500	-.19000	.03700
1.099	-2.230	.00000	1.34015	1.05600	1.16300	1.10400	1.07300	-.10700	.03100	-.10700	.03200
1.099	-.150	.00000	1.34015	1.10600	1.12900	1.11400	1.09000	-.02300	.02400	-.02200	.02500
1.099	1.950	.00000	1.34015	1.14400	1.08300	1.10600	1.08600	.06100	.02000	.06000	.02100
1.099	4.060	.00000	1.34015	1.18200	1.04000	1.09400	1.07700	.14200	.01700	.14200	.01800
1.099	6.120	.00000	1.34015	1.21900	.99700	1.07500	1.06200	.22200	.01300	.22200	.01500
	GRADIENT	.00000	-.00000	.02059	-.01935	.00027	.00252	.03994	-.00225	.03980	-.00235

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U010) (03 DEC 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 40/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.249	-6.310	.00000	1.42208	1.03600	1.31600	1.15100	1.10300	-.28000	.04800	-.27800	.04900
1.249	-4.300	.00000	1.42208	1.08800	1.28100	1.17200	1.13500	-.19300	.03700	-.19200	.03800
1.249	-2.260	.00000	1.42208	1.13500	1.24300	1.18400	1.15300	-.10800	.03100	-.10700	.03200
1.249	-.180	.00000	1.42208	1.18000	1.20500	1.18900	1.16300	-.02500	.02600	-.02400	.02700
1.249	1.910	.00000	1.42208	1.21900	1.16000	1.18400	1.16000	.05900	.02400	.05800	.02400
1.249	4.000	.00000	1.42208	1.25800	1.11600	1.17100	1.15000	.14200	.02100	.14200	.02300
1.249	6.050	.00000	1.42208	1.29300	1.06900	1.14900	1.13200	.22400	.01700	.22400	.01900
	GRADIENT	.00000	.00000	.02041	-.01989	-.00011	.00177	.04030	-.00188	.04010	-.00183

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U010) (03 DEC 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 37/ 0 RN/L = 5.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.597	-6.230	.00000	.85450	.79600	.82525	.04536	-.00657
.597	-4.210	.00000	.86650	.82600	.84625	.04592	-.00467
.597	-2.200	.00000	.87650	.84950	.86300	.04791	-.00299
.597	-.150	.00000	.87750	.85600	.86675	.04613	-.00405
.597	1.910	.00000	.87850	.85400	.86625	.04500	-.00272
.597	3.960	.00000	.87200	.83750	.85475	.04691	-.00112
.597	5.970	.00000	.86400	.81200	.83800	.04670	-.00168
	GRADIENT	.00000	.00063	.00133	.00098	-.00005	.00036

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U010) (03 DEC 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 38/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.900	-6.310	.00000	.97150	.92100	.94625	.04320	-.00536
.900	-4.270	.00000	.97850	.94600	.96225	.04302	-.00399
.900	-2.230	.00000	.98650	.96450	.97550	.04355	-.00369
.900	-.150	.00000	.99100	.97250	.98175	.04343	-.00307
.900	1.930	.00000	.98850	.96750	.97800	.04236	-.00133
.900	4.010	.00000	.98350	.95500	.96925	.04241	-.00171
.900	6.030	.00000	.97750	.93300	.95525	.04266	-.00212
	GRADIENT	.00000	.00057	.00100	.00079	-.00012	.00033

RUN NO. 39/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.099	-6.290	.00000	1.09650	1.04800	1.07225	.04189	-.00640
1.099	-4.290	.00000	1.10600	1.07350	1.08975	.04071	-.00369
1.099	-2.230	.00000	1.10950	1.08800	1.09875	.04066	-.00268
1.099	-.150	.00000	1.11700	1.10150	1.10925	.04010	-.00294
1.099	1.950	.00000	1.11400	1.09550	1.10475	.03868	-.00140
1.099	4.060	.00000	1.11100	1.08500	1.09800	.03890	-.00144
1.099	6.120	.00000	1.10800	1.06750	1.08775	.03880	-.00146
	GRADIENT	.00000	.00069	.00145	.00107	-.00027	.00028

RUN NO. 40/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.249	-6.310	.00000	1.17500	1.12650	1.15075	.04298	-.00612
1.249	-4.300	.00000	1.18400	1.15300	1.16850	.04240	-.00418
1.249	-2.260	.00000	1.18850	1.16800	1.17825	.04077	-.00244
1.249	-.180	.00000	1.19200	1.17550	1.18375	.03924	-.00211
1.249	1.910	.00000	1.19000	1.17200	1.18100	.03970	-.00064
1.249	4.000	.00000	1.18700	1.15950	1.17325	.04025	-.00107
1.249	6.050	.00000	1.18100	1.13950	1.16025	.03988	-.00239
	GRADIENT	.00000	.00036	.00081	.00058	-.00026	.00039

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U011) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 41/ 0 RN/L = 5.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.597	-6.130	.00000	619.92000	5.06700	2483.13599	3157.63199	1.08804	.00000	90.00000
.597	-4.090	.00000	619.92000	5.06700	2483.13599	3157.63199	1.08804	.00000	90.00000
.597	-2.060	.00000	619.92000	5.06700	2483.13599	3157.63199	1.08804	.00000	90.00000
.597	.000	.00000	619.92000	5.06700	2483.13599	3157.63199	1.08804	.00000	90.00000
.597	2.040	.00000	619.92000	5.06700	2483.13599	3157.63199	1.08804	.00000	90.00000
.597	4.090	.00000	619.92000	5.06700	2483.13599	3157.63199	1.08804	.00000	90.00000
.597	6.130	.00000	619.92000	5.06700	2483.13599	3157.63199	1.08804	.00000	90.00000
	GRADIENT	.00000	.00000	.00000	-.00000	.00000	.00000	.00000	.00000

RUN NO. 42/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.899	-6.230	.00000	1057.96799	6.41400	1868.54399	3158.49600	1.21927	.00000	90.00000
.899	-4.170	.00000	1057.96799	6.41400	1868.54399	3158.49600	1.21927	.00000	90.00000
.899	-2.100	.00000	1057.96799	6.41400	1868.54399	3158.49600	1.21927	.00000	90.00000
.899	-.020	.00000	1057.96799	6.41400	1868.54399	3158.49600	1.21927	.00000	90.00000
.899	2.080	.00000	1057.96799	6.41400	1868.54399	3158.49600	1.21927	.00000	90.00000
.899	4.150	.00000	1057.96799	6.41400	1868.54399	3158.49600	1.21927	.00000	90.00000
.899	6.230	.00000	1057.96799	6.41400	1868.54399	3158.49600	1.21927	.00000	90.00000
	GRADIENT	.00000	.00000	.00000	-.00000	.00001	.00000	.00000	.00000

RUN NO. 43/ 0 RN/L = 6.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.100	-6.320	.00000	1253.08800	6.77900	1479.31200	3158.78400	1.33756	.00000	90.00000
1.100	-4.240	.00000	1253.08800	6.77900	1479.31200	3158.78400	1.33756	.00000	90.00000
1.100	-2.130	.00000	1253.08800	6.77900	1479.31200	3158.78400	1.33756	.00000	90.00000
1.100	-.030	.00000	1253.08800	6.77900	1479.31200	3158.78400	1.33756	.00000	90.00000
1.100	2.090	.00000	1253.08800	6.77900	1479.31200	3158.78400	1.33756	.00000	90.00000
1.100	4.220	.00000	1253.08800	6.77900	1479.31200	3158.78400	1.33756	.00000	90.00000
1.100	6.300	.00000	1253.08800	6.77900	1479.31200	3158.78400	1.33756	.00000	90.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	-.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U011) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 44/ 0 RN/L = 6.84 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.250	-6.350	.00000	1333.58400	6.83800	1218.95999	3158.20798	1.42351	.00000	90.00000
1.250	-4.240	.00000	1333.58400	6.83800	1218.95999	3158.20798	1.42351	.00000	90.00000
1.250	-2.140	.00000	1333.58400	6.83800	1218.95999	3158.20798	1.42351	.00000	90.00000
1.250	.000	.00000	1333.58400	6.83800	1218.95999	3158.20798	1.42351	.00000	90.00000
1.250	2.120	.00000	1333.58400	6.83800	1218.95999	3158.20798	1.42351	.00000	90.00000
1.250	4.250	.00000	1333.58400	6.83800	1218.95999	3158.20798	1.42351	.00000	90.00000
1.250	6.360	.00000	1333.58400	6.83800	1218.95999	3158.20798	1.42351	.00000	90.00000
	GRADIENT	.00000	.00000	-.00000	.00000	.00000	.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U011) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 41/ 0 RN/L = 5.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.597	-6.130	.00000	1.08804	.81000	.89100	.70200	.98400	-.08100	-.28200	-.08200	-.27700
.597	-4.090	.00000	1.08804	.84100	.90800	.76400	.94800	-.06700	-.18400	-.06900	-.17900
.597	-2.060	.00000	1.08804	.86600	.91900	.82800	.91100	-.05300	-.08300	-.05500	-.07600
.597	.000	.00000	1.08804	.86800	.90400	.87800	.85800	-.03600	.02000	-.03900	.02300
.597	2.040	.00000	1.08804	.86300	.88200	.92700	.80600	-.01900	.12100	-.01900	.12600
.597	4.090	.00000	1.08804	.84700	.84600	.97000	.75100	.00100	.21900	-.00100	.22300
.597	6.130	.00000	1.08804	.81800	.79600	1.00900	.69100	.02200	.31800	.02000	.32200
	GRADIENT	.00000	.00000	.00044	-.00787	.02497	-.02439	.00831	.04936	.00841	.04917

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U011) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 42/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.899	-6.230	.00000	1.21927	.92500	1.01000	.82500	1.09100	-.08500	-.26600	-.08500	-.26200
.899	-4.170	.00000	1.21927	.95100	1.02100	.88000	1.05400	-.07000	-.17400	-.06900	-.17000
.899	-2.100	.00000	1.21927	.96600	1.02400	.93400	1.01200	-.05800	-.07800	-.05900	-.07400
.899	-.020	.00000	1.21927	.97700	1.01900	.98900	.97200	-.04200	.01700	-.04200	.02000
.899	2.080	.00000	1.21927	.97200	.99600	1.03400	.92200	-.02400	.11200	-.02300	.11400
.899	4.150	.00000	1.21927	.95800	.96400	1.07500	.87100	-.00600	.20400	-.00600	.20700
.899	6.230	.00000	1.21927	.93600	.92300	1.11400	.81800	.01300	.29600	.01200	.29800
	GRADIENT	.00000	.00000	.00096	-.00682	.02353	-.02190	.00778	.04544	.00778	.04524

RUN NO. 43/ 0 RN/L = 6.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.100	-6.320	.00000	1.33756	1.06200	1.14000	.96700	1.22000	-.07800	-.25300	-.07700	-.24900
1.100	-4.240	.00000	1.33756	1.08700	1.15100	1.02100	1.18500	-.06400	-.16400	-.06300	-.16100
1.100	-2.130	.00000	1.33756	1.10200	1.15300	1.06900	1.14700	-.05100	-.07800	-.05100	-.07400
1.100	-.030	.00000	1.33756	1.10700	1.14500	1.11500	1.10500	-.03800	.01000	-.03800	.01200
1.100	2.090	.00000	1.33756	1.10700	1.12900	1.15900	1.06400	-.02200	.09500	-.02200	.09700
1.100	4.220	.00000	1.33756	1.09400	1.10000	1.19600	1.01600	-.00600	.18000	-.00600	.18200
1.100	6.300	.00000	1.33756	1.06900	1.05900	1.22700	.96300	.01000	.26400	.00900	.26500
	GRADIENT	.00000	-.00000	.00089	-.00597	.02081	-.01992	.00686	.04073	.00677	.04054

RUN NO. 44/ 0 RN/L = 6.84 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.250	-6.350	.00000	1.42351	1.13300	1.21800	1.03900	1.29200	-.08500	-.25300	-.08500	-.25000
1.250	-4.240	.00000	1.42351	1.15800	1.23000	1.09300	1.25700	-.07200	-.16400	-.07100	-.16000
1.250	-2.140	.00000	1.42351	1.16800	1.22800	1.14200	1.21200	-.06000	-.07000	-.06000	-.06800
1.250	.000	.00000	1.42351	1.17300	1.21900	1.18800	1.17100	-.04600	.01700	-.04500	.02000
1.250	2.120	.00000	1.42351	1.17000	1.19800	1.23000	1.12600	-.02800	.10400	-.02700	.10600
1.250	4.250	.00000	1.42351	1.15600	1.16900	1.26700	1.07500	-.01300	.19200	-.01200	.19400
1.250	6.360	.00000	1.42351	1.14000	1.13600	1.31100	1.03000	.00400	.28100	.00400	.28200
	GRADIENT	.00000	.00000	-.00010	-.00716	.02053	-.02119	.00706	.04171	.00711	.04152

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U011) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 41/ 0 RN/L = 5.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.597	-6.130	.00000	.85100	.84050	.84575	.00625	.04706
.597	-4.090	.00000	.87550	.85350	.86450	.00662	.05000
.597	-2.060	.00000	.89350	.86600	.87975	.00707	.04929
.597	.000	.00000	.88750	.86650	.87700	.00908	.04930
.597	2.040	.00000	.87250	.86400	.86825	.00935	.04921
.597	4.090	.00000	.84750	.85850	.85300	.00927	.04730
.597	6.130	.00000	.80800	.84800	.82801	.01081	.04915
	GRADIENT	.00000	-.00377	.00039	-.00169	.00037	-.00027

RUN NO. 42/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.899	-6.230	.00000	.96750	.95600	.96175	.00877	.04413
.899	-4.170	.00000	.98550	.96500	.97525	.00576	.04573
.899	-2.100	.00000	.99550	.97100	.98325	.00599	.04607
.899	-.020	.00000	.99800	.97900	.98850	.00928	.04470
.899	2.080	.00000	.98350	.97700	.98025	.00855	.04499
.899	4.150	.00000	.96100	.97150	.96625	.00831	.04441
.899	6.230	.00000	.93000	.96500	.94750	.00883	.04342
	GRADIENT	.00000	-.00293	.00091	-.00101	.00037	-.00018

RUN NO. 43/ 0 RN/L = 6.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.100	-6.320	.00000	1.10050	1.09150	1.09600	.00702	.04259
1.100	-4.240	.00000	1.11850	1.10150	1.11000	.00615	.04174
1.100	-2.130	.00000	1.12750	1.10600	1.11675	.00563	.04107
1.100	-.030	.00000	1.12600	1.10900	1.11750	.00696	.04055
1.100	2.090	.00000	1.11800	1.11050	1.11425	.00772	.03989
1.100	4.220	.00000	1.09700	1.10500	1.10100	.00732	.03991
1.100	6.300	.00000	1.06450	1.09450	1.07950	.00716	.03990
	GRADIENT	.00000	-.00249	.00054	-.00097	.00021	-.00023

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U011) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 44/ 0 RN/L = 6.84 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.250	-6.350	.00000	1.17550	1.16400	1.16975	.00710	.04217
1.250	-4.240	.00000	1.19350	1.17300	1.18325	.00571	.04363
1.250	-2.140	.00000	1.19800	1.17600	1.18700	.00569	.04271
1.250	.000	.00000	1.19550	1.17800	1.18675	.00825	.04036
1.250	2.120	.00000	1.18350	1.17700	1.18025	.00783	.04092
1.250	4.250	.00000	1.16200	1.17000	1.16600	.00705	.04160
1.250	6.360	.00000	1.13800	1.17000	1.15400	.00785	.04176
	GRADIENT	.00000	-.00365	-.00024	-.00194	.00023	-.00028

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U012) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 45/ 0 RN/L = 5.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.597	-6.130	.00000	620.20799	5.07300	2480.25598	3157.91998	1.09264	.00000	90.00000
.597	-4.090	.00000	620.20799	5.07300	2480.25598	3157.91998	1.09264	.00000	90.00000
.597	-2.040	.00000	620.20799	5.07300	2480.25598	3157.91998	1.09264	.00000	90.00000
.597	.000	.00000	620.20799	5.07300	2480.25598	3157.91998	1.09264	.00000	90.00000
.597	2.040	.00000	620.20799	5.07300	2480.25598	3157.91998	1.09264	.00000	90.00000
.597	4.090	.00000	620.20799	5.07300	2480.25598	3157.91998	1.09264	.00000	90.00000
.597	6.130	.00000	620.20799	5.07300	2480.25598	3157.91998	1.09264	.00000	90.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U012) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 46/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.900	-6.230	.00000	1058.39999	6.40900	1866.81599	3157.34399	1.21932	.00000	90.00000
.900	-4.150	.00000	1058.39999	6.40900	1866.81599	3157.34399	1.21932	.00000	90.00000
.900	-2.100	.00000	1058.39999	6.40900	1866.81599	3157.34399	1.21932	.00000	90.00000
.900	.000	.00000	1058.39999	6.40900	1866.81599	3157.34399	1.21932	.00000	90.00000
.900	2.080	.00000	1058.39999	6.40900	1866.81599	3157.34399	1.21932	.00000	90.00000
.900	4.150	.00000	1058.39999	6.40900	1866.81599	3157.34399	1.21932	.00000	90.00000
.900	6.230	.00000	1058.39999	6.40900	1866.81599	3157.34399	1.21932	.00000	90.00000
	GRADIENT	.00000	.00000	-.00000	-.00000	-.00000	.00000	.00000	-.00000

RUN NO. 47/ 0 RN/L = 6.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.097	-6.310	.00000	1251.07199	6.78600	1484.06400	3158.78400	1.33614	.00000	90.00000
1.097	-4.210	.00000	1251.07199	6.78600	1484.06400	3158.78400	1.33614	.00000	90.00000
1.097	-2.130	.00000	1251.07199	6.78600	1484.06400	3158.78400	1.33614	.00000	90.00000
1.097	-.010	.00000	1251.07199	6.78600	1484.06400	3158.78400	1.33614	.00000	90.00000
1.097	2.090	.00000	1251.07199	6.78600	1484.06400	3158.78400	1.33614	.00000	90.00000
1.097	4.200	.00000	1251.07199	6.78600	1484.06400	3158.78400	1.33614	.00000	90.00000
1.097	6.300	.00000	1251.07199	6.78600	1484.06400	3158.78400	1.33614	.00000	90.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00001	.00000	.00000	.00000

RUN NO. 48/ 0 RN/L = 6.85 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.248	-6.350	.00000	1333.29599	6.85100	1221.69598	3159.07199	1.42304	.00000	90.00000
1.248	-4.230	.00000	1333.29599	6.85100	1221.69598	3159.07199	1.42304	.00000	90.00000
1.248	-2.120	.00000	1333.29599	6.85100	1221.69598	3159.07199	1.42304	.00000	90.00000
1.248	.000	.00000	1333.29599	6.85100	1221.69598	3159.07199	1.42304	.00000	90.00000
1.248	2.120	.00000	1333.29599	6.85100	1221.69598	3159.07199	1.42304	.00000	90.00000
1.248	4.230	.00000	1333.29599	6.85100	1221.69598	3159.07199	1.42304	.00000	90.00000
1.248	6.360	.00000	1333.29599	6.85100	1221.69598	3159.07199	1.42304	.00000	90.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U012) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 45/ 0 RN/L = 5.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.597	-6.130	.00000	1.09264	.81000	.89100	.70100	.98500	-.08100	-.28400	-.08400	-.28000
.597	-4.090	.00000	1.09264	.84000	.90600	.76300	.94600	-.06600	-.18300	-.06800	-.17800
.597	-2.040	.00000	1.09264	.86100	.91400	.82300	.90500	-.05300	-.08200	-.05400	-.07700
.597	.000	.00000	1.09264	.86500	.90100	.87400	.85600	-.03600	.01800	-.03800	.02200
.597	2.040	.00000	1.09264	.86200	.87900	.92400	.80500	-.01700	.11900	-.02000	.12300
.597	4.090	.00000	1.09264	.84600	.84500	.96800	.75000	.00100	.21800	-.00100	.22200
.597	6.130	.00000	1.09264	.82000	.79800	1.00900	.69300	.02200	.31600	.02000	.32000
	GRADIENT	.00000	.00000	.00064	-.00768	.02500	-.02407	.00832	.04907	.00822	.04892

RUN NO. 46/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.900	-6.230	.00000	1.21932	.92500	1.01000	.82400	1.09200	-.08500	-.26800	-.08500	-.26400
.900	-4.150	.00000	1.21932	.94900	1.01900	.87800	1.05100	-.07000	-.17300	-.07100	-.16900
.900	-2.100	.00000	1.21932	.96800	1.02700	.93600	1.01600	-.05900	-.08000	-.05800	-.07700
.900	.000	.00000	1.21932	.98100	1.02200	.99300	.97600	-.04100	.01700	-.04200	.01900
.900	2.080	.00000	1.21932	.97400	.99800	1.03500	.92500	-.02400	.11000	-.02400	.11200
.900	4.150	.00000	1.21932	.95700	.96400	1.07400	.87200	-.00700	.20200	-.00600	.20500
.900	6.230	.00000	1.21932	.93600	.92500	1.11500	.82000	.01100	.29500	.01100	.29800
	GRADIENT	.00000	.00000	.00106	-.00669	.02363	-.02161	.00775	.04524	.00789	.04509

RUN NO. 47/ 0 RN/L = 6.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.097	-6.310	.00000	1.33614	1.06200	1.13700	.96800	1.21600	-.07500	-.24800	-.07500	-.24500
1.097	-4.210	.00000	1.33614	1.08700	1.14800	1.02100	1.18100	-.06100	-.16000	-.06000	-.15600
1.097	-2.130	.00000	1.33614	1.10000	1.14900	1.06800	1.14200	-.04900	-.07400	-.04800	-.07100
1.097	-.010	.00000	1.33614	1.11000	1.14500	1.11800	1.10600	-.03500	.01200	-.03500	.01500
1.097	2.090	.00000	1.33614	1.10900	1.12800	1.16100	1.06500	-.01900	.09500	-.01900	.09900
1.097	4.200	.00000	1.33614	1.09100	1.09600	1.19500	1.01400	-.00500	.18100	-.00400	.18300
1.097	6.300	.00000	1.33614	1.07300	1.06100	1.23200	.96700	.01200	.26500	.01200	.26700
	GRADIENT	.00000	.00000	.00080	-.00595	.02096	-.01953	.00675	.04049	.00670	.04030

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U012) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 48/ 0 RN/L = 6.85 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.248	-6.350	.00000	1.42304	1.13000	1.21300	1.03600	1.28800	-.08300	-.25200	-.08300	-.24800
1 248	-4.230	.00000	1.42304	1.15400	1.22600	1.09100	1.25200	-.07200	-.16100	-.07000	-.15700
1.248	-2.120	.00000	1.42304	1.16800	1.22800	1.14100	1.21200	-.06000	-.07100	-.05900	-.06700
1.248	.000	.00000	1.42304	1.16900	1.21500	1.18400	1.16600	-.04600	.01800	-.04500	.02000
1.248	2.120	.00000	1.42304	1.16600	1.19400	1.22500	1.12200	-.02800	.10300	-.02800	.10500
1.248	4.230	.00000	1.42304	1.15800	1.17200	1.27100	1.07800	-.01400	.19300	-.01300	.19400
1.248	6.360	.00000	1.42304	1.13900	1.13300	1.30900	1.02700	.00600	.28200	.00500	.28300
	GRADIENT	.00000	.00000	.00028	-.00671	.02098	-.02070	.00699	.04168	.00685	.04130

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U012) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 45/ 0 RN/L = 5.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.597	-6.130	.00000	.85200	.84100	.84650	.00817	.05012
.597	-4.090	.00000	.87400	.85200	.86300	.00719	.04976
.597	-2.040	.00000	.88800	.86150	.87475	.00709	.04863
.597	.000	.00000	.88400	.86300	.87350	.00848	.04910
.597	2.040	.00000	.87200	.86250	.86725	.00900	.04909
.597	4.090	.00000	.84650	.85700	.85175	.00978	.04796
.597	6.130	.00000	.81000	.84900	.82950	.01055	.04808
	GRADIENT	.00000	-.00347	.00054	-.00147	.00035	-.00015

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U012) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 46/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.900	-6.230	.00000	.96750	.95600	.96175	.00691	.04597
.900	-4.150	.00000	.98450	.96250	.97350	.00638	.04508
.900	-2.100	.00000	.99700	.97450	.98575	.00680	.04534
.900	.000	.00000	1.00200	.98350	.99275	.00830	.04531
.900	2.080	.00000	.98600	.97900	.98250	.00883	.04467
.900	4.150	.00000	.96000	.97150	.96575	.00843	.04491
.900	6.230	.00000	.93050	.96600	.94825	.00804	.04461
	GRADIENT	.00000	-.00289	.00108	-.00090	.00030	-.00005

RUN NO. 47/ 0 RN/L = 6.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.097	-6.310	.00000	1.09950	1.09050	1.09500	.00751	.04278
1.097	-4.210	.00000	1.11700	1.09900	1.10800	.00642	.04159
1.097	-2.130	.00000	1.12400	1.10350	1.11375	.00556	.04059
1.097	-.010	.00000	1.12750	1.11050	1.11900	.00706	.04032
1.097	2.090	.00000	1.11850	1.11150	1.11500	.00748	.03980
1.097	4.200	.00000	1.09300	1.10350	1.09825	.00722	.03989
1.097	6.300	.00000	1.06700	1.09850	1.08275	.00782	.04005
	GRADIENT	.00000	-.00255	.00081	-.00087	.00017	-.00020

RUN NO. 48/ 0 RN/L = 6.85 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.248	-6.350	.00000	1.17150	1.16000	1.16575	.00644	.04291
1.248	-4.230	.00000	1.18900	1.16950	1.17925	.00551	.04295
1.248	-2.120	.00000	1.19750	1.17450	1.18600	.00556	.04202
1.248	.000	.00000	1.19150	1.17400	1.18275	.00769	.04007
1.248	2.120	.00000	1.18000	1.17250	1.17625	.00753	.04111
1.248	4.230	.00000	1.16450	1.17400	1.16925	.00756	.04232
1.248	6.360	.00000	1.13650	1.16750	1.15200	.00890	.04152
	GRADIENT	.00000	-.00314	.00033	-.00141	.00029	-.00010

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U013) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = 6.000 PHI = .000
OFFSET = 90.000

RUN NO. 49/ 0 RN/L = 5.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.597	-6.100	6.00000	620.64000	5.05600	2481.40799	3159.64798	1.09281	.00000	.00000
.597	-4.080	6.00000	620.64000	5.05600	2481.40799	3159.64798	1.09281	.00000	.00000
.597	-2.070	6.00000	620.64000	5.05600	2481.40799	3159.64798	1.09281	.00000	.00000
.597	-.020	6.00000	620.64000	5.05600	2481.40799	3159.64798	1.09281	.00000	.00000
.597	2.010	6.00000	620.64000	5.05600	2481.40799	3159.64798	1.09281	.00000	.00000
.597	4.040	6.00000	620.64000	5.05600	2481.40799	3159.64798	1.09281	.00000	.00000
.597	6.090	6.00000	620.64000	5.05600	2481.40799	3159.64798	1.09281	.00000	.00000
	GRADIENT	.00000	-.00000	-.00000	.00000	.00001	.00000	.00000	.00000

RUN NO. 50/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.900	-6.110	6.00000	1059.55199	6.39500	1867.53600	3159.79199	1.21962	.00000	.00000
.900	-4.069	6.00000	1059.55199	6.39500	1867.53600	3159.79199	1.21962	.00000	.00000
.900	-2.040	6.00000	1059.55199	6.39500	1867.53600	3159.79199	1.21962	.00000	.00000
.900	.010	6.00000	1059.55199	6.39500	1867.53600	3159.79199	1.21962	.00000	.00000
.900	2.040	6.00000	1059.55199	6.39500	1867.53600	3159.79199	1.21962	.00000	.00000
.900	4.069	6.00000	1059.55199	6.39500	1867.53600	3159.79199	1.21962	.00000	.00000
.900	6.100	6.00000	1059.55199	6.39500	1867.53600	3159.79199	1.21962	.00000	.00000
	GRADIENT	.00000	-.00000	-.00000	-.00000	.00000	.00000	.00000	.00000

RUN NO. 51/ 0 RN/L = 6.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.098	-6.190	6.00000	1252.65599	6.76200	1482.33600	3160.22400	1.33691	.00000	.00000
1.098	-4.150	6.00000	1252.65599	6.76200	1482.33600	3160.22400	1.33691	.00000	.00000
1.098	-2.100	6.00000	1252.65599	6.76200	1482.33600	3160.22400	1.33691	.00000	.00000
1.098	-.040	6.00000	1252.65599	6.76200	1482.33600	3160.22400	1.33691	.00000	.00000
1.098	2.010	6.00000	1252.65599	6.76200	1482.33600	3160.22400	1.33691	.00000	.00000
1.098	4.050	6.00000	1252.65599	6.76200	1482.33600	3160.22400	1.33691	.00000	.00000
1.098	6.100	6.00000	1252.65599	6.76200	1482.33600	3160.22400	1.33691	.00000	.00000
	GRADIENT	.00000	.00000	.00000	-.00000	-.00000	-.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U013) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = 6.000 PHI = .000
OFFSET = 90.000

RUN NO. 52/ 0 RN/L = 6.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.248	-6.230	6.00000	1334.15999	6.81400	1222.84799	3161.08798	1.42274	.00000	.00000
1.248	-4.180	6.00000	1334.15999	6.81400	1222.84799	3161.08798	1.42274	.00000	.00000
1.248	-2.140	6.00000	1334.15999	6.81400	1222.84799	3161.08798	1.42274	.00000	.00000
1.248	-.080	6.00000	1334.15999	6.81400	1222.84799	3161.08798	1.42274	.00000	.00000
1.248	1.970	6.00000	1334.15999	6.81400	1222.84799	3161.08798	1.42274	.00000	.00000
1.248	4.029	6.00000	1334.15999	6.81400	1222.84799	3161.08798	1.42274	.00000	.00000
1.248	6.110	6.00000	1334.15999	6.81400	1222.84799	3161.08798	1.42274	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U013) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = 6.000 PHI = .000
OFFSET = 90.000

RUN NO. 49/ 0 RN/L = 5.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.597	-6.100	6.00000	1.09281	.64200	.92300	.95900	.61400	-.28100	.34500	-.28100	.34600
.597	-4.080	6.00000	1.09281	.70300	.87900	.98200	.64700	-.17600	.33500	-.17600	.33600
.597	-2.070	6.00000	1.09281	.76300	.83500	.99900	.67200	-.07200	.32700	-.07300	.32900
.597	-.020	6.00000	1.09281	.81700	.78400	1.00100	.68200	.03300	.31900	.03100	.32100
.597	2.010	6.00000	1.09281	.86600	.72900	.99500	.67700	.13700	.31800	.13600	.32000
.597	4.040	6.00000	1.09281	.91200	.67200	.97900	.66300	.24000	.31600	.23900	.31900
.597	6.090	6.00000	1.09281	.95300	.61000	.95100	.63200	.34300	.31900	.34300	.32100
	GRADIENT	.00000	.00000	.02564	-.02559	-.00050	.00182	.05123	-.00231	.05113	-.00212

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U013) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = 6.000 PHI = .000
OFFSET = 90.000

RUN NO. 50/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.900	-6.110	6.00000	1.21962	.77000	1.03900	1.07400	.74500	-.26900	.32900	-.26800	.33000
.900	-4.069	6.00000	1.21962	.82900	1.00100	1.09600	.77900	-.17200	.31700	-.17100	.31800
.900	-2.040	6.00000	1.21962	.88400	.95600	1.10700	.79800	-.07200	.30900	-.07200	.31100
.900	.010	6.00000	1.21962	.93700	.90900	1.11200	.80800	.02800	.30400	.02700	.30500
.900	2.040	6.00000	1.21962	.98600	.86000	1.10900	.80700	.12600	.30200	.12500	.30200
.900	4.069	6.00000	1.21962	1.02200	.80200	1.09000	.78700	.22000	.30300	.22100	.30400
.900	6.100	6.00000	1.21962	1.06600	.74700	1.06700	.76300	.31900	.30400	.31900	.30500
	GRADIENT	.00000	.00000	.02398	-.02427	-.00049	.00123	.04824	-.00172	.04919	-.00182

RUN NO. 51/ 0 RN/L = 6.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.098	-6.190	6.00000	1.33691	.92100	1.17100	1.20100	.89900	-.25000	.30200	-.24900	.30200
1.098	-4.150	6.00000	1.33691	.97000	1.13200	1.21500	.92500	-.16200	.29000	-.16100	.29000
1.098	-2.100	6.00000	1.33691	1.02300	1.09500	1.23000	.94700	-.07200	.28300	-.07200	.28300
1.098	-.040	6.00000	1.33691	1.06800	1.04900	1.23300	.95400	.01900	.27900	.01900	.27900
1.098	2.010	6.00000	1.33691	1.11400	1.00600	1.22800	.95300	.10800	.27500	.10800	.27500
1.098	4.050	6.00000	1.33691	1.15300	.95800	1.21600	.94100	.19500	.27500	.19400	.27600
1.098	6.100	6.00000	1.33691	1.18900	.90800	1.19600	.91900	.28100	.27700	.28300	.27700
	GRADIENT	.00000	-.00000	.02228	-.02131	.00000	.00186	.04359	-.00185	.04339	-.00176

RUN NO. 52/ 0 RN/L = 6.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.248	-6.230	6.00000	1.42274	.99500	1.25500	1.28900	.97200	-.26000	.31700	-.25700	.31600
1.248	-4.180	6.00000	1.42274	1.05000	1.21500	1.30500	1.00100	-.16500	.30400	-.16400	.30400
1.248	-2.140	6.00000	1.42274	1.09900	1.17200	1.31600	1.01900	-.07300	.29700	-.07100	.29600
1.248	-.080	6.00000	1.42274	1.14900	1.12500	1.31800	1.02800	.02400	.29000	.02300	.29000
1.248	1.970	6.00000	1.42274	1.18900	1.07600	1.30800	1.02100	.11300	.28700	.11400	.28800
1.248	4.029	6.00000	1.42274	1.23300	1.03200	1.30000	1.01300	.20100	.28700	.20200	.28700
1.248	6.110	6.00000	1.42274	1.26500	.97600	1.27200	.98400	.28900	.28800	.29100	.28900
	GRADIENT	.00000	.00000	.02221	-.02251	-.00088	.00126	.04472	-.00214	.04467	-.00205

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U013) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = 6.000 PHI = .000
OFFSET = 90.000

RUN NO. 49/ 0 RN/L = 5.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.597	-6.100	6.00000	.78250	.78600	.78425	.05212	-.00544
.597	-4.080	6.00000	.79100	.81400	.80250	.05171	-.00397
.597	-2.070	6.00000	.79950	.83450	.81700	.05073	-.00398
.597	-.020	6.00000	.80150	.84050	.82100	.05132	-.00225
.597	2.010	6.00000	.79800	.83500	.81650	.05138	-.00019
.597	4.040	6.00000	.79250	.81950	.80600	.05055	.00005
.597	6.090	6.00000	.78150	.79050	.78600	.05082	.00144
	GRADIENT	.00000	.00007	.00056	.00032	-.00008	.00058

RUN NO. 50/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.900	-6.110	6.00000	.90400	.90900	.90650	.04714	-.00651
.900	-4.069	6.00000	.91450	.93700	.92575	.04829	-.00462
.900	-2.040	6.00000	.92000	.95150	.93575	.04866	-.00299
.900	.010	6.00000	.92350	.95950	.94150	.04834	-.00256
.900	2.040	6.00000	.92350	.95800	.94075	.04771	.00001
.900	4.069	6.00000	.91150	.93800	.92475	.04760	.00105
.900	6.100	6.00000	.90650	.91450	.91050	.04858	.00021
	GRADIENT	.00000	-.00012	.00042	.00015	-.00011	.00070

RUN NO. 51/ 0 RN/L = 6.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.098	-6.190	6.00000	1.04550	1.05000	1.04775	.04312	-.00642
1.098	-4.150	6.00000	1.05050	1.07000	1.06025	.04316	-.00480
1.098	-2.100	6.00000	1.05900	1.08850	1.07375	.04388	-.00228
1.098	-.040	6.00000	1.05850	1.09350	1.07600	.04410	-.00216
1.098	2.010	6.00000	1.06000	1.09050	1.07525	.04250	-.00077
1.098	4.050	6.00000	1.05600	1.07800	1.06700	.04259	.00085
1.098	6.100	6.00000	1.04750	1.05750	1.05250	.04382	.00031
	GRADIENT	.00000	.00059	.00088	.00073	-.00012	.00062

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U013) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = 6.000 PHI = .000
OFFSET = 90.000

RUN NO. 52/ 0 RN/L = 6.81 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.248	-6.230	6.00000	1.12350	1.13100	1.12725	.04532	-.00634
1.248	-4.180	6.00000	1.13200	1.15300	1.14250	.04545	-.00489
1.248	-2.140	6.00000	1.13450	1.16800	1.15125	.04574	-.00343
1.248	-.080	6.00000	1.13750	1.17300	1.15525	.04523	-.00189
1.248	1.970	6.00000	1.13200	1.16400	1.14800	.04340	-.00067
1.248	4.029	6.00000	1.13200	1.15650	1.14425	.04256	.00018
1.248	6.110	6.00000	1.11950	1.12750	1.12350	.04287	.00135
	GRADIENT	.00000	-.00012	.00014	.00001	-.00040	.00063

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U014) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = -6.000 PHI = 180.000
OFFSET = 90.000

RUN NO. 53/ 0 RN/L = 5.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.597	-5.970	-6.11700	620.35200	5.10000	2482.99200	3160.79999	1.09262	.00000	180.00000
.597	-3.920	-6.11500	620.35200	5.10000	2482.99200	3160.79999	1.09262	.00000	180.00000
.597	-1.890	-6.11500	620.35200	5.10000	2482.99200	3160.79999	1.09262	.00000	180.00000
.597	.160	-6.11400	620.35200	5.10000	2482.99200	3160.79999	1.09262	.00000	180.00000
.597	2.190	-6.11300	620.35200	5.10000	2482.99200	3160.79999	1.09262	.00000	180.00000
.597	4.210	-6.11100	620.35200	5.10000	2482.99200	3160.79999	1.09262	.00000	180.00000
.597	6.250	-6.10900	620.35200	5.10000	2482.99200	3160.79999	1.09262	.00000	180.00000
	GRADIENT	.00049	-.00000	.00000	-.00000	-.00000	-.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U014) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = -6.000 PHI = 180.000
OFFSET = 90.000

RUN NO. 54/ 0 RN/L = 6.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.898	-6.020	-6.21100	1060.27199	6.47100	1877.61600	3169.43997	1.21839	.00000	180.00000
.898	-3.950	-6.20700	1060.27199	6.47100	1877.61600	3169.43997	1.21839	.00000	180.00000
.898	-1.890	-6.20300	1060.27199	6.47100	1877.61600	3169.43997	1.21839	.00000	180.00000
.898	.160	-6.20000	1060.27199	6.47100	1877.61600	3169.43997	1.21839	.00000	180.00000
.898	2.240	-6.19700	1060.27199	6.47100	1877.61600	3169.43997	1.21839	.00000	180.00000
.898	4.270	-6.19400	1060.27199	6.47100	1877.61600	3169.43997	1.21839	.00000	180.00000
.898	6.320	-6.19300	1060.27199	6.47100	1877.61600	3169.43997	1.21839	.00000	180.00000
	GRADIENT	.00156	.00000	.00000	-.00000	-.00000	-.00000	.00000	-.00000

RUN NO. 55/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.099	-6.170	-6.29100	1253.95198	6.77000	1481.03999	3161.51999	1.33752	.00000	180.00000
1.099	-4.069	-6.28600	1253.95198	6.77000	1481.03999	3161.51999	1.33752	.00000	180.00000
1.099	-1.970	-6.28300	1253.95198	6.77000	1481.03999	3161.51999	1.33752	.00000	180.00000
1.099	.100	-6.27900	1253.95198	6.77000	1481.03999	3161.51999	1.33752	.00000	180.00000
1.099	2.180	-6.27600	1253.95198	6.77000	1481.03999	3161.51999	1.33752	.00000	180.00000
1.099	4.230	-6.27300	1253.95198	6.77000	1481.03999	3161.51999	1.33752	.00000	180.00000
1.099	6.320	-6.27200	1253.95198	6.77000	1481.03999	3161.51999	1.33752	.00000	180.00000
	GRADIENT	.00159	-.00000	-.00000	-.00000	-.00000	-.00000	.00000	-.00000

RUN NO. 56/ 0 RN/L = 6.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.245	-6.150	-6.33000	1336.17599	6.70800	1230.47998	3168.57599	1.42135	.00000	180.00000
1.245	-4.040	-6.32300	1336.17599	6.70800	1230.47998	3168.57599	1.42135	.00000	180.00000
1.245	-1.950	-6.31800	1336.17599	6.70800	1230.47998	3168.57599	1.42135	.00000	180.00000
1.245	.130	-6.31500	1336.17599	6.70800	1230.47998	3168.57599	1.42135	.00000	180.00000
1.245	2.240	-6.31100	1336.17599	6.70800	1230.47998	3168.57599	1.42135	.00000	180.00000
1.245	4.310	-6.31000	1336.17599	6.70800	1230.47998	3168.57599	1.42135	.00000	180.00000
1.245	6.390	-6.31000	1336.17599	6.70800	1230.47998	3168.57599	1.42135	.00000	180.00000
	GRADIENT	.00158	.00000	.00000	.00000	.00000	-.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (81U014) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = -6.000 PHI = 180.000
OFFSET = 90.000

RUN NO. 53/ 0 RN/L = 5.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.597	-5.970	-6.11700	1.09262	.63400	.99800	.62000	.90000	-.36400	-.28000	-.36300	-.27500
.597	-3.920	-6.11500	1.09262	.69400	.96200	.65500	.93900	-.26800	-.28400	-.26800	-.27800
.597	-1.890	-6.11500	1.09262	.74800	.92200	.67700	.96300	-.17400	-.28600	-.17400	-.28000
.597	.160	-6.11400	1.09262	.79900	.87800	.68800	.97600	-.07900	-.28800	-.07900	-.28400
.597	2.190	-6.11300	1.09262	.84600	.83000	.68400	.98100	.01600	-.29700	.01400	-.29100
.597	4.210	-6.11100	1.09262	.89200	.78100	.67400	.97600	.11100	-.30200	.10900	-.29800
.597	6.250	-6.10900	1.09262	.92900	.72500	.64600	.95600	.20400	-.31000	.20300	-.30600
	GRADIENT	.00049	-.00000	.02429	-.02232	.00222	.00453	.04661	-.00231	.04631	-.00251

RUN NO. 54/ 0 RN/L = 6.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.898	-6.020	-6.21100	1.21839	.76100	1.10000	.74800	1.01300	-.33900	-.26500	-.33700	-.26100
.898	-3.950	-6.20700	1.21839	.81000	1.06300	.77300	1.04200	-.25300	-.26900	-.25200	-.26600
.898	-1.890	-6.20300	1.21839	.86100	1.02400	.79300	1.06400	-.16300	-.27100	-.16500	-.26800
.898	.160	-6.20000	1.21839	.90600	.98300	.80100	1.07400	-.07700	-.27300	-.07600	-.26900
.898	2.240	-6.19700	1.21839	.95100	.93800	.80000	1.07700	.01300	-.27700	.01300	-.27400
.898	4.270	-6.19400	1.21839	.99200	.89100	.78900	1.07200	.10100	-.28300	.10000	-.28000
.898	6.320	-6.19300	1.21839	1.03600	.84700	.77200	1.06100	.18900	-.28900	.19000	-.28600
	GRADIENT	.00156	-.00000	.02207	-.02090	.00190	.00355	.04298	-.00165	.04288	-.00165

RUN NO. 55/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.099	-6.170	-6.29100	1.33752	.92600	1.23100	.91100	1.15600	-.30500	-.24500	-.30400	-.24100
1.099	-4.069	-6.28600	1.33752	.97500	1.19900	.93700	1.18600	-.22400	-.24900	-.22400	-.24500
1.099	-1.970	-6.28300	1.33752	1.02000	1.16500	.95500	1.20400	-.14500	-.24900	-.14400	-.24500
1.099	.100	-6.27900	1.33752	1.06100	1.12200	.96000	1.21100	-.06100	-.25100	-.06100	-.24800
1.099	2.180	-6.27600	1.33752	1.10200	1.08200	.95900	1.21400	.02000	-.25500	.01800	-.25100
1.099	4.230	-6.27300	1.33752	1.14200	1.04100	.95000	1.20900	.10100	-.25900	.10000	-.25600
1.099	6.320	-6.27200	1.33752	1.18000	.99700	.93100	1.19900	.18300	-.26800	.18300	-.26500
	GRADIENT	.00159	-.00000	.02005	-.01923	.00145	.00271	.03928	-.00125	.03904	-.00135

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U014) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = -6.000 PHI = 180.000
OFFSET = 90.000

RUN NO. 56/ 0 RN/L = 6.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.245	-6.150	-6.33000	1.42135	.98100	1.30600	.96600	1.22600	-.32500	-.26000	-.32200	-.25600
1.245	-4.040	-6.32300	1.42135	1.02700	1.27000	.98900	1.25300	-.24300	-.26400	-.24000	-.26000
1.245	-1.950	-6.31800	1.42135	1.07400	1.23300	1.00800	1.27100	-.15900	-.26300	-.15800	-.26000
1.245	.130	-6.31500	1.42135	1.12200	1.19500	1.01800	1.28400	-.07300	-.26600	-.07100	-.26200
1.245	2.240	-6.31100	1.42135	1.16400	1.15200	1.01700	1.28600	.01200	-.26900	.01200	-.26500
1.245	4.310	-6.31000	1.42135	1.20200	1.10500	1.00600	1.27900	.09700	-.27300	.09700	-.27000
1.245	6.390	-6.31000	1.42135	1.24400	1.06200	.99200	1.27100	.18200	-.27900	.18200	-.27600
	GRADIENT	.00158	-.00000	.02106	-.01967	.00206	.00321	.04074	-.00115	.04040	-.00120

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U014) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = -6.000 PHI = 180.000
OFFSET = 90.000

RUN NO. 53/ 0 RN/L = 5.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.597	-5.970	-6.11700	.81550	.75750	.78650	.04637	-.00163
.597	-3.920	-6.11500	.82800	.79400	.81100	.04628	-.00113
.597	-1.890	-6.11500	.83500	.81700	.82600	.04644	-.00120
.597	.160	-6.11400	.83850	.83000	.83425	.04589	-.00286
.597	2.190	-6.11300	.83900	.82950	.83425	.04647	-.00356
.597	4.210	-6.11100	.83750	.82300	.83025	.04679	-.00363
.597	6.250	-6.10900	.82750	.79900	.81325	.04572	-.00407
	GRADIENT	.00049	.00113	.00347	.00230	.00005	-.00036

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U014) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = -6.000 PHI = 180.000
OFFSET = 90.000

RUN NO. 54/ 0 RN/L = 6.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.898	-6.020	-6.21100	.92950	.87850	.90400	.04084	-.00273
.898	-3.950	-6.20700	.93600	.90600	.92100	.04150	-.00178
.898	-1.890	-6.20300	.94350	.92700	.93525	.04305	-.00031
.898	.160	-6.20000	.94400	.93550	.93975	.04325	-.00135
.898	2.240	-6.19700	.94450	.93700	.94075	.04258	-.00295
.898	4.270	-6.19400	.94200	.92900	.93550	.04338	-.00295
.898	6.320	-6.19300	.94100	.91500	.92800	.04416	-.00292
	GRADIENT	.00156	.00063	.00273	.00168	.00016	-.00024

RUN NO. 55/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.099	-6.170	-6.29100	1.07800	1.03150	1.05475	.03826	-.00252
1.099	-4.069	-6.28600	1.08700	1.05950	1.07325	.03771	-.00067
1.099	-1.970	-6.28300	1.09200	1.07750	1.08475	.03948	-.00052
1.099	.100	-6.27900	1.09150	1.08400	1.08775	.03902	-.00163
1.099	2.180	-6.27600	1.09300	1.08450	1.08875	.03867	-.00164
1.099	4.230	-6.27300	1.09200	1.07800	1.08500	.04026	-.00346
1.099	6.320	-6.27200	1.08850	1.06350	1.07600	.03944	-.00473
	GRADIENT	.00159	.00053	.00213	.00133	.00021	-.00032

RUN NO. 56/ 0 RN/L = 6.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.245	-6.150	-6.33000	1.14200	1.09400	1.11800	.03901	-.00247
1.245	-4.040	-6.32300	1.14700	1.11900	1.13300	.03857	-.00074
1.245	-1.950	-6.31800	1.15300	1.13800	1.14550	.04098	-.00022
1.245	.130	-6.31500	1.15750	1.14900	1.15325	.04069	-.00126
1.245	2.240	-6.31100	1.15800	1.14950	1.15375	.03980	-.00187
1.245	4.310	-6.31000	1.15350	1.14100	1.14725	.04134	-.00277
1.245	6.390	-6.31000	1.15300	1.13000	1.14150	.04063	-.00294
	GRADIENT	.00158	.00086	.00266	.00176	.00021	-.00027

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U015) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = -6.000 PHI = 90.000
OFFSET = 90.000

RUN NO. 57/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.597	-6.230	-6.08500	621.07200	5.01100	2485.43997	3164.11200	1.09274	.00000	90.00000
.597	-4.200	-6.10300	621.07200	5.01100	2485.43997	3164.11200	1.09274	.00000	90.00000
.597	-2.180	-6.10800	621.07200	5.01100	2485.43997	3164.11200	1.09274	.00000	90.00000
.597	-.150	-6.10900	621.07200	5.01100	2485.43997	3164.11200	1.09274	.00000	90.00000
.597	1.910	-6.11000	621.07200	5.01100	2485.43997	3164.11200	1.09274	.00000	90.00000
.597	3.950	-6.11000	621.07200	5.01100	2485.43997	3164.11200	1.09274	.00000	90.00000
.597	6.000	-6.11100	621.07200	5.01100	2485.43997	3164.11200	1.09274	.00000	90.00000
	GRADIENT	-.00078	-.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 58/ 0 RN/L = 6.36 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.901	-6.330	-6.18500	1062.43199	6.36100	1868.39999	3164.68799	1.22011	.00000	90.00000
.901	-4.260	-6.19700	1062.43199	6.36100	1868.39999	3164.68799	1.22011	.00000	90.00000
.901	-2.210	-6.19800	1062.43199	6.36100	1868.39999	3164.68799	1.22011	.00000	90.00000
.901	-.140	-6.20000	1062.43199	6.36100	1868.39999	3164.68799	1.22011	.00000	90.00000
.901	1.940	-6.20100	1062.43199	6.36100	1868.39999	3164.68799	1.22011	.00000	90.00000
.901	4.010	-6.20200	1062.43199	6.36100	1868.39999	3164.68799	1.22011	.00000	90.00000
.901	6.080	-6.20500	1062.43199	6.36100	1868.39999	3164.68799	1.22011	.00000	-.00000
	GRADIENT	-.00063	-.00000	-.00000	.00000	.00000	.00000	.00000	-.00000

RUN NO. 59/ 0 RN/L = 6.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.098	-6.410	-6.25100	1254.09599	6.79200	1485.64799	3165.12000	1.33663	.00000	90.00000
1.098	-4.320	-6.25500	1254.09599	6.79200	1485.64799	3165.12000	1.33663	.00000	90.00000
1.098	-2.250	-6.25400	1254.09599	6.79200	1485.64799	3165.12000	1.33663	.00000	90.00000
1.098	-.160	-6.25400	1254.09599	6.79200	1485.64799	3165.12000	1.33663	.00000	90.00000
1.098	1.950	-6.25400	1254.09599	6.79200	1485.64799	3165.12000	1.33663	.00000	90.00000
1.098	4.040	-6.25700	1254.09599	6.79200	1485.64799	3165.12000	1.33663	.00000	90.00000
1.098	6.160	-6.26100	1254.09599	6.79200	1485.64799	3165.12000	1.33663	.00000	90.00000
	GRADIENT	-.00019	.00000	.00000	.00000	.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U015) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = -6.000 PHI = 90.000
OFFSET = 90.000

RUN NO. 60/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.248	-6.420	-6.26800	1334.59200	6.83300	1224.00000	3162.67200	1.42259	.00000	90.00000
1.248	-4.340	-6.28000	1334.59200	6.83300	1224.00000	3162.67200	1.42259	.00000	90.00000
1.248	-2.250	-6.28000	1334.59200	6.83300	1224.00000	3162.67200	1.42259	.00000	90.00000
1.248	-.120	-6.28000	1334.59200	6.83300	1224.00000	3162.67200	1.42259	.00000	90.00000
1.248	1.980	-6.28200	1334.59200	6.83300	1224.00000	3162.67200	1.42259	.00000	90.00000
1.248	4.100	-6.28400	1334.59200	6.83300	1224.00000	3162.67200	1.42259	.00000	90.00000
1.248	6.210	-6.29000	1334.59200	6.83300	1224.00000	3162.67200	1.42259	.00000	90.00000
	GRADIENT	-.00047	-.00000	.00000	.00000	-.00000	-.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U015) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = -6.000 PHI = 90.000
OFFSET = 90.000

RUN NO. 57/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.597	-6.230	-6.08500	1.09274	.64000	.99400	.62600	.89800	-.35400	-.27200	-.35400	-.26800
.597	-4.200	-6.10300	1.09274	.67300	1.00800	.69200	.86200	-.33500	-.17000	-.33500	-.16500
.597	-2.180	-6.10800	1.09274	.68800	1.01100	.75000	.81800	-.32300	-.06800	-.32200	-.06400
.597	-.150	-6.10900	1.09274	.69600	1.01000	.80900	.77500	-.31400	.03400	-.31200	.03800
.597	1.910	-6.11000	1.09274	.69000	.99300	.86100	.72500	-.30300	.13600	-.30300	.13900
.597	3.950	-6.11000	1.09274	.67100	.96500	.90900	.67300	-.29400	.23600	-.29100	.23900
.597	6.000	-6.11100	1.09274	.64100	.92200	.95000	.61600	-.28100	.33400	-.27900	.33600
	GRADIENT	-.00078	.00000	-.00011	-.00511	.02673	-.02310	.00500	.04983	.00525	.04958

IA181, MSFC 649, MODEL 74- T (AADS DATA) (81U015) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = -6.000 PHI = 90.000
OFFSET = 90.000

RUN NO. 58/ 0 RN/L = 6.36 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.901	-6.330	-6.18500	1.22011	.76600	1.10900	.75500	1.01500	-.34300	-.26000	-.34100	-.25800
.901	-4.260	-6.19700	1.22011	.79100	1.11600	.81300	.97700	-.32500	-.16400	-.32300	-.16000
.901	-2.210	-6.19800	1.22011	.80900	1.12200	.87000	.93800	-.31300	-.06800	-.31100	-.06400
.901	-.140	-6.20000	1.22011	.81500	1.12000	.92800	.89600	-.30500	.03200	-.30300	.03400
.901	1.940	-6.20100	1.22011	.81200	1.10600	.98000	.85100	-.29400	.12900	-.29300	.13100
.901	4.010	-6.20200	1.22011	.79400	1.07900	1.02300	.80000	-.28500	.22300	-.28300	.22500
.901	6.080	-6.20500	1.22011	.76300	1.03900	1.06200	.74400	-.27600	.31800	-.27300	.31900
	GRADIENT	-.00063	.00000	.00043	-.00436	.02561	-.02132	.00478	.04693	.00474	.04664

RUN NO. 59/ 0 RN/L = 6.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.098	-6.410	-6.25100	1.33663	.91600	1.22800	.90300	1.15100	-.31200	-.24800	-.31000	-.24500
1.098	-4.320	-6.25500	1.33663	.94900	1.24300	.96500	1.12300	-.29400	-.15800	-.29200	-.15500
1.098	-2.250	-6.25400	1.33663	.96000	1.24500	1.01200	1.08400	-.28500	-.07200	-.28200	-.06900
1.098	-.160	-6.25400	1.33663	.96400	1.24100	1.06100	1.04100	-.27700	.02000	-.27500	.02100
1.098	1.950	-6.25400	1.33663	.96100	1.22900	1.10800	1.00100	-.26800	.10700	-.26500	.11000
1.098	4.040	-6.25700	1.33663	.94400	1.20500	1.14600	.95200	-.26100	.19400	-.25800	.19600
1.098	6.160	-6.26100	1.33663	.92200	1.17200	1.18500	.90800	-.25000	.27700	-.24800	.27900
	GRADIENT	-.00019	.00000	-.00044	-.00440	.02189	-.02032	.00397	.04221	.00406	.04211

RUN NO. 60/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.248	-6.420	-6.26800	1.42259	.98000	1.31100	.96900	1.22000	-.33100	-.25100	-.32800	-.24800
1.248	-4.340	-6.28000	1.42259	1.00400	1.32200	1.02700	1.18400	-.31800	-.15700	-.31500	-.15400
1.248	-2.250	-6.28000	1.42259	1.01700	1.32300	1.08000	1.14400	-.30600	-.06400	-.30400	-.06200
1.248	-.120	-6.28000	1.42259	1.02300	1.32000	1.13300	1.10300	-.29700	.03000	-.29500	.03200
1.248	1.980	-6.28200	1.42259	1.01400	1.30400	1.17800	1.05200	-.29000	.12600	-.28800	.12600
1.248	4.100	-6.28400	1.42259	1.00300	1.28400	1.22700	1.00900	-.28100	.21800	-.27900	.22000
1.248	6.210	-6.29000	1.42259	.98000	1.24900	1.26600	.96200	-.26900	.30400	-.26700	.30600
	GRADIENT	-.00047	-.00000	-.00024	-.00450	.02359	-.02094	.00426	.04453	.00417	.04434

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U015) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = -6.000 PHI = 90.000
OFFSET = 90.000

RUN NO. 57/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.597	-6.230	-6.08500	.81700	.76000	.78850	.01005	.05098
.597	-4.200	-6.10300	.84050	.77450	.80750	.00797	.05026
.597	-2.180	-6.10800	.84900	.78200	.81550	.00544	.05021
.597	-.150	-6.10900	.85200	.79000	.82100	.00434	.04964
.597	1.910	-6.11000	.84150	.79150	.81650	.00508	.04906
.597	3.950	-6.11000	.81650	.78950	.80300	.00610	.04828
.597	6.000	-6.11100	.78050	.78200	.78125	.00573	.04683
	GRADIENT	-.00078	-.00273	.00193	-.00040	-.00020	-.00025

RUN NO. 58/ 0 RN/L = 6.36 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.901	-6.330	-6.18500	.93650	.88400	.91025	.00930	.04753
.901	-4.260	-6.19700	.95250	.89300	.92275	.00749	.04698
.901	-2.210	-6.19800	.96450	.90200	.93325	.00438	.04707
.901	-.140	-6.20000	.96650	.91100	.93875	.00416	.04724
.901	1.940	-6.20100	.95850	.91450	.93650	.00499	.04591
.901	4.010	-6.20200	.93550	.91050	.92300	.00478	.04527
.901	6.080	-6.20500	.89950	.90250	.90100	.00485	.04548
	GRADIENT	-.00063	-.00194	.00229	.00018	-.00023	-.00022

RUN NO. 59/ 0 RN/L = 6.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.098	-6.410	-6.25100	1.07100	1.02550	1.04825	.00949	.04359
1.098	-4.320	-6.25500	1.09500	1.04250	1.06875	.00686	.04200
1.098	-2.250	-6.25400	1.10100	1.04650	1.07375	.00337	.04221
1.098	-.160	-6.25400	1.10150	1.05050	1.07600	.00420	.04295
1.098	1.950	-6.25400	1.09350	1.05300	1.07325	.00408	.04173
1.098	4.040	-6.25700	1.07300	1.04800	1.06050	.00372	.04013
1.098	6.160	-6.26100	1.04600	1.04550	1.04575	.00522	.03866
	GRADIENT	-.00019	-.00247	.00084	-.00082	-.00027	-.00020

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U015) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = -6.000 PHI = 90.000
OFFSET = 90.000

RUN NO. 60/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.248	-6.420	-6.26800	1.14400	1.09300	1.11850	.00646	.04550
1.248	-4.340	-6.28000	1.16150	1.10400	1.13275	.00583	.04457
1.248	-2.250	-6.28000	1.16900	1.11100	1.14000	.00476	.04386
1.248	-.120	-6.28000	1.17050	1.11700	1.14375	.00360	.04444
1.248	1.980	-6.28200	1.15800	1.11500	1.13650	.00351	.04507
1.248	4.100	-6.28400	1.14250	1.11700	1.12975	.00507	.04259
1.248	6.210	-6.29000	1.11350	1.11300	1.11325	.00599	.03984
	GRADIENT	-.00047	-.00232	.00142	-.00045	-.00013	-.00013

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U016) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = 6.000 PHI = 270.000
OFFSET = 90.000

RUN NO. 61/ 0 RN/L = 5.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.597	-5.920	6.05800	622.07999	5.12100	2485.29599	3164.97601	1.09259	.00000	270.00000
.597	-3.890	6.05700	622.07999	5.12100	2485.29599	3164.97601	1.09259	.00000	270.00000
.597	-1.830	6.05700	622.07999	5.12100	2485.29599	3164.97601	1.09259	.00000	270.00000
.597	.210	6.05700	622.07999	5.12100	2485.29599	3164.97601	1.09259	.00000	270.00000
.597	2.250	6.05700	622.07999	5.12100	2485.29599	3164.97601	1.09259	.00000	270.00000
.597	4.280	6.05900	622.07999	5.12100	2485.29599	3164.97601	1.09259	.00000	270.00000
.597	6.300	6.07600	622.07999	5.12100	2485.29599	3164.97601	1.09259	.00000	270.00000
	GRADIENT	.00020	.00000	.00000	.00000	-.00001	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (A1U016) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = 6.000 PHI = 270.000
OFFSET = 90.000

RUN NO. 62/ 0 RN/L = 6.55 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.999	-6.030	6.15000	1060.70399	6.54800	1871.56799	3164.97601	1.21939	.00000	270.00000
.899	-3.960	6.14900	1060.70399	6.54800	1871.56799	3164.97601	1.21939	.00000	270.00000
.899	-1.870	6.14900	1060.70399	6.54800	1871.56799	3164.97601	1.21939	.00000	270.00000
.899	.200	6.14900	1060.70399	6.54800	1871.56799	3164.97601	1.21939	.00000	270.00000
.899	2.300	6.15000	1060.70399	6.54800	1871.56799	3164.97601	1.21939	.00000	270.00000
.899	4.350	6.15100	1060.70399	6.54800	1871.56799	3164.97601	1.21939	.00000	270.00000
.899	6.400	6.16900	1060.70399	6.54800	1871.56799	3164.97601	1.21939	.00000	270.00000
	GRADIENT	.00024	-.00000	-.00000	-.00000	-.00000	-.00000	.00000	-.00000

RUN NO. 63/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.099	-6.070	6.20300	1255.96799	6.67900	1483.91998	3167.13599	1.33755	.00000	270.00000
1.099	-3.970	6.20000	1255.96799	6.67900	1483.91998	3167.13599	1.33755	.00000	270.00000
1.099	-1.860	6.20000	1255.96799	6.67900	1483.91998	3167.13599	1.33755	.00000	270.00000
1.099	.230	6.19900	1255.96799	6.67900	1483.91998	3167.13599	1.33755	.00000	270.00000
1.099	2.320	6.20000	1255.96799	6.67900	1483.91998	3167.13599	1.33755	.00000	270.00000
1.099	4.400	6.20000	1255.96799	6.67900	1483.91998	3167.13599	1.33755	.00000	270.00000
1.099	6.490	6.21700	1255.96799	6.67900	1483.91998	3167.13599	1.33755	.00000	270.00000
	GRADIENT	-.00000	.00000	-.00000	.00000	.00000	.00000	.00000	-.00000

RUN NO. 64/ 0 RN/L = 7.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.247	-5.140	6.23100	1334.73601	7.08400	1224.86400	3163.24799	1.42253	.00000	270.00000
1.247	-4.029	6.22700	1334.73601	7.08400	1224.86400	3163.24799	1.42253	.00000	270.00000
1.247	-1.900	6.22400	1334.73601	7.08400	1224.86400	3163.24799	1.42253	.00000	270.00000
1.247	.200	6.22300	1334.73601	7.08400	1224.86400	3163.24799	1.42253	.00000	270.00000
1.247	2.330	6.22400	1334.73601	7.08400	1224.86400	3163.24799	1.42253	.00000	270.00000
1.247	4.440	6.22900	1334.73601	7.08400	1224.86400	3163.24799	1.42253	.00000	270.00000
1.247	6.530	6.25200	1334.73601	7.08400	1224.86400	3163.24799	1.42253	.00000	270.00000
	GRADIENT	.00019	-.00000	-.00000	.00000	-.00000	-.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U016) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = 6.000 PHI = 270.000
OFFSET = 90.000

RUN NO. 61/ 0 RN/L = 5.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.597	-5.920	6.05800	1.09259	.92700	.71500	.64100	.95000	.21200	-.30900	.21100	-.30500
.597	-3.890	6.05700	1.09259	.95500	.73400	.69900	.90800	.22100	-.20900	.22000	-.20500
.597	-1.830	6.05700	1.09259	.97300	.73900	.75300	.86200	.23400	-.10900	.23400	-.10500
.597	.210	6.05700	1.09259	.97800	.72700	.80300	.80900	.25100	-.00600	.25100	-.00300
.597	2.250	6.05700	1.09259	.97800	.70200	.85100	.75400	.27600	.09700	.27500	.09900
.597	4.280	6.05900	1.09259	.96700	.66400	.89300	.69500	.30300	.19800	.30200	.20000
.597	6.300	6.07600	1.09259	.94400	.61300	.92800	.63300	.33100	.29500	.33100	.29800
	GRADIENT	.00020	.00000	.00143	-.00866	.02380	-.02615	.01008	.04935	.01004	.04966

RUN NO. 62/ 0 RN/L = 6.55 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.899	-6.030	6.15000	1.21939	1.04800	.84400	.77400	1.06700	.20400	-.29300	.20300	-.29000
.899	-3.960	6.14900	1.21939	1.07200	.86000	.82900	1.02600	.21200	-.19700	.21200	-.19400
.899	-1.870	6.14900	1.21939	1.08700	.86400	.87900	.98100	.22300	-.10200	.22400	-.09900
.899	.200	6.14900	1.21939	1.09400	.85400	.92800	.93100	.24000	-.00300	.24100	-.00100
.899	2.300	6.15000	1.21939	1.09400	.83100	.97300	.87900	.26300	.09400	.26300	.09500
.899	4.350	6.15100	1.21939	1.08100	.79400	1.01100	.82200	.28700	.18900	.28700	.19100
.899	6.400	6.16900	1.21939	1.06300	.74500	1.05000	.76200	.31800	.28800	.31800	.28800
	GRADIENT	.00024	-.00000	.00121	-.00793	.02203	-.02453	.00914	.04656	.00909	.04637

RUN NO. 63/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.099	-6.070	6.20300	1.33755	1.17700	.99200	.93300	1.18900	.18500	-.25600	.18300	-.25300
1.099	-3.970	6.20000	1.33755	1.19800	1.00600	.98200	1.15100	.19200	-.16900	.19200	-.16600
1.099	-1.860	6.20000	1.33755	1.21200	1.00800	1.02900	1.11200	.20400	-.08300	.20300	-.08000
1.099	.230	6.19900	1.33755	1.21800	1.00100	1.07400	1.06800	.21700	.00600	.21600	.00500
1.099	2.320	6.20000	1.33755	1.21200	.97600	1.11000	1.01700	.23600	.09300	.23700	.09400
1.099	4.400	6.20000	1.33755	1.20300	.94600	1.14800	.97000	.25700	.17800	.25700	.17900
1.099	6.490	6.21700	1.33755	1.18600	.90100	1.18300	.91400	.28500	.26900	.28600	.26900
	GRADIENT	-.00000	.00000	.00048	-.00726	.01974	-.02184	.00774	.04159	.00784	.04130

IA181, MSFC 649, MODEL 74- T (AADS DATA) (B1U016) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = 6.000 PHI = 270.000
OFFSET = 90.000

RUN NO. 64/ 0 RN/L = 7.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.247	-6.140	6.23100	1.42253	1.25000	1.05400	.98900	1.26700	.19600	-.27800	.19600	-.27500
1.247	-4.029	6.22700	1.42253	1.27600	1.07100	1.04300	1.22900	.20500	-.18600	.20600	-.18400
1.247	-1.900	6.22400	1.42253	1.28400	1.07000	1.08600	1.18100	.21400	-.09500	.21500	-.09300
1.247	.200	6.22300	1.42253	1.29500	1.06500	1.13600	1.13800	.23000	-.00200	.23000	-.00100
1.247	2.330	6.22400	1.42253	1.29100	1.04100	1.17700	1.08500	.25000	.09200	.25000	.09300
1.247	4.440	6.22900	1.42253	1.28600	1.01200	1.22000	1.03400	.27400	.18600	.27500	.18700
1.247	6.530	6.25200	1.42253	1.26500	.96500	1.25500	.97600	.30000	.27900	.30100	.27900
	GRADIENT	.00019	-.00000	.00127	-.00694	.02102	-.02296	.00822	.04398	.00817	.04384

IA181, MSFC 649, MODEL 74- T (AADS DATA) (C1U016) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = 6.000 PHI = 270.000
OFFSET = 90.000

RUN NO. 61/ 0 RN/L = 5.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.597	-5.920	6.05800	.82150	.79350	.80750	.00386	.04956
.597	-3.890	6.05700	.84500	.80150	.82325	.00559	.04867
.597	-1.830	6.05700	.85600	.80550	.83075	.00745	.04919
.597	.210	6.05700	.85250	.80450	.82850	.01000	.05021
.597	2.250	6.05700	.84050	.80150	.82100	.01283	.04997
.597	4.280	6.05900	.81600	.79300	.80450	.01389	.04916
.597	6.300	6.07600	.77850	.77900	.77875	.01459	.04819
	GRADIENT	.00020	-.00359	-.00103	-.00231	.00108	.00009

IA181, MSFC 649, MODEL 74- T (AADS DATA) (CIU016) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = 6.000 PHI = 270.000
OFFSET = 90.000

RUN NO. 62/ 0 RN/L = 6.55 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.899	-6.030	6.15000	.94650	.91900	.93275	.00411	.04679
.899	-3.960	6.14900	.96600	.92600	.94600	.00482	.04554
.899	-1.870	6.14900	.97500	.92850	.95175	.00687	.04655
.899	.200	6.14900	.97350	.92850	.95100	.00957	.04668
.899	2.300	6.15000	.96250	.92550	.94400	.01089	.04592
.899	4.350	6.15100	.93750	.91550	.92650	.01340	.04730
.899	6.400	6.16900	.90400	.90600	.90500	.01598	.04733
	GRADIENT	.00024	-.00334	-.00115	-.00224	.00102	.00014

RUN NO. 63/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.099	-6.070	6.20300	1.08550	1.05950	1.07250	.00403	.04155
1.099	-3.970	6.20000	1.10200	1.06500	1.08350	.00480	.04118
1.099	-1.860	6.20000	1.11050	1.06900	1.08975	.00526	.04029
1.099	.230	6.19900	1.11000	1.07150	1.09075	.00844	.04194
1.099	2.320	6.20000	1.09350	1.06300	1.07825	.00979	.04171
1.099	4.400	6.20000	1.07450	1.05850	1.06650	.01139	.04156
1.099	6.490	6.21700	1.04300	1.04850	1.04575	.01512	.04381
	GRADIENT	-.00000	-.00343	-.00091	-.00217	.00085	.00010

RUN NO. 64/ 0 RN/L = 7.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.247	-6.140	6.23100	1.15200	1.12650	1.13925	.00505	.04328
1.247	-4.029	6.22700	1.17300	1.13500	1.15400	.00411	.04277
1.247	-1.900	6.22400	1.17650	1.13250	1.15450	.00542	.04321
1.247	.200	6.22300	1.18000	1.13650	1.15825	.00836	.04405
1.247	2.330	6.22400	1.16600	1.13050	1.14825	.01074	.04441
1.247	4.440	6.22900	1.14850	1.12650	1.13750	.01242	.04436
1.247	6.530	6.25200	1.11450	1.11550	1.11500	.01245	.04385
	GRADIENT	.00019	-.00281	-.00090	-.00185	.00104	.00021

IA181, MSFC 649, MODEL 74- 0 T (AADS DATA) (AIU017) (07 JAN 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

BETA =	.000	ELEVON =	10.800
AILRON =	.000	PHI =	.000
OFFSET =	.000		

RUN NO. 65/ 0 RN/L = 4.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.597	-6.180	.00100	621.35999	4.78400	2484.43198	3163.53601	1.09293	.00000	.00000
.597	-4.150	.00200	621.35999	4.78400	2484.43198	3163.53601	1.09293	.00000	.00000
.597	-2.140	.00200	621.35999	4.78400	2484.43198	3163.53601	1.09293	.00000	.00000
.597	-.080	.00300	621.35999	4.78400	2484.43198	3163.53601	1.09293	.00000	.00000
.597	1.960	.00400	621.35999	4.78400	2484.43198	3163.53601	1.09293	.00000	.00000
.597	4.010	.00600	621.35999	4.78400	2484.43198	3163.53601	1.09293	.00000	.00000
.597	6.050	.00800	621.35999	4.78400	2484.43198	3163.53601	1.09293	.00000	.00000
	GRADIENT	.00049	.00000	-.00000	.00000	.00001	-.00000	.00000	.00000

RUN NO. 66/ 0 RN/L = 6.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.899	-6.260	.00400	1060.12799	6.11600	1870.70399	3163.39197	1.21937	.00000	.00000
.899	-4.210	.00500	1060.12799	6.11600	1870.70399	3163.39197	1.21937	.00000	.00000
.899	-2.170	.00600	1060.12799	6.11600	1870.70399	3163.39197	1.21937	.00000	.00000
.899	-.080	.00900	1060.12799	6.11600	1870.70399	3163.39197	1.21937	.00000	.00000
.899	1.980	.01100	1060.12799	6.11600	1870.70399	3163.39197	1.21937	.00000	.00000
.899	4.069	.01400	1060.12799	6.11600	1870.70399	3163.39197	1.21937	.00000	.00000
.899	6.140	.01800	1060.12799	6.11600	1870.70399	3163.39197	1.21937	.00000	.00000
	GRADIENT	.00111	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 67/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.098	-6.180	.00400	1253.80800	6.83500	1483.48801	3163.10400	1.33706	.00000	.00000
1.098	-4.130	.00300	1253.80800	6.83500	1483.48801	3163.10400	1.33706	.00000	.00000
1.098	-2.050	.00700	1253.80800	6.83500	1483.48801	3163.10400	1.33706	.00000	.00000
1.098	.050	.01000	1253.80800	6.83500	1483.48801	3163.10400	1.33706	.00000	.00000
1.098	2.100	.01200	1253.80800	6.83500	1483.48801	3163.10400	1.33706	.00000	.00000
1.098	4.200	.01500	1253.80800	6.83500	1483.48801	3163.10400	1.33706	.00000	.00000
1.098	6.280	.01800	1253.80800	6.83500	1483.48801	3163.10400	1.33706	.00000	.00000
	GRADIENT	.00139	.00000	.00000	.00000	.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- 0 T (AADS DATA) (A1U017) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 68/ 0 RN/L = 6.61 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.248	-6.210	.01000	1334.59200	6.61300	1223.56799	3162.52798	1.42281	.00000	.00000
1.248	-4.110	.01100	1334.59200	6.61300	1223.56799	3162.52798	1.42281	.00000	.00000
1.248	-2.040	.01600	1334.59200	6.61300	1223.56799	3162.52798	1.42281	.00000	.00000
1.248	.070	.01900	1334.59200	6.61300	1223.56799	3162.52798	1.42281	.00000	.00000
1.248	2.150	.01900	1334.59200	6.61300	1223.56799	3162.52798	1.42281	.00000	.00000
1.248	4.260	.02200	1334.59200	6.61300	1223.56799	3162.52798	1.42281	.00000	.00000
1.248	6.360	.02400	1334.59200	6.61300	1223.56799	3162.52798	1.42281	.00000	.00000
	GRADIENT	.00119	-.00000	-.00000	-.00000	.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- 0 T (AADS DATA) (B1U017) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 65/ 0 RN/L = 4.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.597	-6.180	.00100	1.09293	.70500	1.01100	.82100	.77500	-.30600	.04600	-.30600	.04900
.597	-4.150	.00200	1.09293	.76100	.97300	.84600	.81000	-.21200	.03600	-.21200	.03800
.597	-2.140	.00200	1.09293	.81700	.93900	.86700	.83800	-.12100	.02900	-.12100	.03100
.597	-.080	.00300	1.09293	.86800	.89400	.87100	.85200	-.02600	.01900	-.02600	.02200
.597	1.960	.00400	1.09293	.91400	.84700	.86600	.85300	.06700	.01300	.06600	.01600
.597	4.010	.00600	1.09293	.95400	.79600	.85000	.84100	.15800	.00900	.15700	.01300
.597	6.050	.00800	1.09293	.98900	.73800	.82100	.81500	.25100	.00600	.25100	.00900
	GRADIENT	.00049	-.00000	.02365	-.02180	.00033	.00376	.04545	-.00343	.04530	-.00318

IA181, MSFC 649, MODEL 74- O T (AADS DATA) (81U017) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 66/ 0 RN/L = 6.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.899	-6.260	.00400	1.21937	.82800	1.11800	.94400	.89700	-.29000	.04700	-.28900	.04700
.899	-4.210	.00500	1.21937	.88200	1.08300	.96600	.93000	-.20100	.03600	-.20000	.03700
.899	-2.170	.00600	1.21937	.93100	1.04400	.97900	.95000	-.11300	.02900	-.11200	.03000
.899	-.080	.00900	1.21937	.97900	1.00200	.98400	.96200	-.02300	.02200	-.02300	.02300
.899	1.980	.01100	1.21937	1.02100	.95500	.97700	.96000	.06600	.01700	.06600	.01800
.899	4.069	.01400	1.21937	1.06300	.91000	.96400	.95100	.15300	.01300	.15300	.01400
.899	6.140	.01800	1.21937	1.09800	.86000	.93900	.93000	.23800	.00900	.23900	.01100
	GRADIENT	.00111	.00000	.02183	-.02101	-.00030	.00250	.04283	-.00280	.04269	-.00280

RUN NO. 67/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.098	-6.180	.00400	1.33706	.97200	1.23600	1.07600	1.03500	-.26400	.04100	-.26200	.04200
1.098	-4.130	.00300	1.33706	1.02200	1.20400	1.09700	1.06600	-.18200	.03100	-.18100	.03200
1.098	-2.050	.00700	1.33706	1.06700	1.16900	1.10800	1.08400	-.10200	.02400	-.10100	.02600
1.098	.050	.01000	1.33706	1.11000	1.13000	1.11300	1.09500	-.02000	.01800	-.01900	.02000
1.098	2.100	.01200	1.33706	1.14800	1.08900	1.10600	1.09300	.05900	.01300	.05900	.01500
1.098	4.200	.01500	1.33706	1.18500	1.04800	1.09600	1.08600	.13700	.01000	.13600	.01100
1.098	6.280	.01800	1.33706	1.22100	1.00500	1.07600	1.07000	.21600	.00600	.21700	.00700
	GRADIENT	.00139	.00000	.01956	-.01884	-.00019	.00236	.03839	-.00255	.03815	-.00255

RUN NO. 68/ 0 RN/L = 6.61 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.248	-6.210	.01000	1.42281	1.04300	1.31400	1.15400	1.10700	-.27100	.04700	-.26900	.04800
1.248	-4.110	.01100	1.42281	1.09600	1.28100	1.17400	1.13900	-.18500	.03500	-.18400	.03600
1.248	-2.040	.01600	1.42281	1.14300	1.24500	1.18600	1.15800	-.10200	.02800	-.10200	.02900
1.248	.070	.01900	1.42281	1.18100	1.20000	1.18500	1.16100	-.01900	.02400	-.01900	.02400
1.248	2.150	.01900	1.42281	1.22700	1.16000	1.18400	1.16300	.06700	.02100	.06700	.02300
1.248	4.260	.02200	1.42281	1.26300	1.11600	1.17000	1.15200	.14700	.01800	.14700	.01900
1.248	6.360	.02400	1.42281	1.29800	1.07200	1.14900	1.13400	.22600	.01500	.22600	.01700
	GRADIENT	.00119	.00000	.01997	-.01983	-.00048	.00147	.03980	-.00196	.03970	-.00191

IA181, MSFC 649, MODEL 74- O T (AADS DATA) (C1U017) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 65/ 0 RN/L = 4.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.597	-6.180	.00100	.85800	.79650	.82725	.04666	-.00602
.597	-4.150	.00200	.86700	.82700	.84700	.04560	-.00421
.597	-2.140	.00200	.87750	.85150	.86450	.04566	-.00381
.597	-.080	.00300	.88100	.86000	.87050	.04590	-.00405
.597	1.960	.00400	.88100	.85800	.86950	.04436	-.00190
.597	4.010	.00600	.87550	.84350	.85950	.04512	-.00155
.597	6.050	.00800	.86350	.81650	.84000	.04656	-.00217
	GRADIENT	.00049	.00100	.00192	.00146	-.00011	.00035

RUN NO. 66/ 0 RN/L = 6.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.899	-6.260	.00400	.97250	.92050	.94650	.04343	-.00528
.899	-4.210	.00500	.98200	.94750	.96475	.04338	-.00408
.899	-2.170	.00600	.98700	.96400	.97550	.04269	-.00332
.899	-.080	.00900	.99050	.97250	.98150	.04303	-.00298
.899	1.980	.01100	.98800	.96800	.97800	.04255	-.00210
.899	4.069	.01400	.98650	.95700	.97175	.04134	-.00166
.899	6.140	.01800	.97850	.93350	.95600	.04162	-.00134
	GRADIENT	.00111	.00048	.00110	.00079	-.00020	.00029

RUN NO. 67/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.098	-6.180	.00400	1.10300	1.05500	1.07900	.03984	-.00541
1.098	-4.130	.00300	1.11250	1.08100	1.09675	.03885	-.00381
1.098	-2.050	.00700	1.11750	1.09500	1.10625	.03869	-.00266
1.098	.050	.01000	1.11950	1.10300	1.11125	.03892	-.00278
1.098	2.100	.01200	1.11850	1.09850	1.10850	.03692	-.00210
1.098	4.200	.01500	1.11700	1.09050	1.10375	.03757	-.00186
1.098	6.280	.01800	1.11250	1.07250	1.09250	.03963	-.00196
	GRADIENT	.00139	.00048	.00108	.00078	-.00021	.00021

IA181, MSFC 649, MODEL 74- O T (AADS DATA) (C1U017) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVON = 10.800
AILRON = .000 PHI = .000
OFFSET = .000

RUN NO. 68/ 0 RN/L = 6.61 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBJ	DCPRL
1.248	-6.210	.01000	1.17750	1.13000	1.15375	.04063	-.00632
1.248	-4.110	.01100	1.18800	1.15600	1.17200	.04016	-.00451
1.248	-2.040	.01600	1.19400	1.17150	1.18275	.03898	-.00290
1.248	.070	.01900	1.19050	1.17300	1.18175	.04079	-.00114
1.248	2.150	.01900	1.19350	1.17250	1.18300	.03996	-.00106
1.248	4.260	.02200	1.18950	1.16050	1.17500	.03720	-.00173
1.248	6.360	.02400	1.18500	1.14050	1.16275	.03783	-.00056
	GRADIENT	.00119	.00012	.00047	.00029	-.00024	.00035

IA181, MSFC 649, MODEL 74- O T (AADS DATA) (A1U018) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = .000

RUN NO. 69/ 0 RN/L = 5.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.597	-6.110	-.02300	621.35999	5.08900	2484.28799	3163.24799	1.09270	.00000	90.00000
.597	-4.050	-.00800	621.35999	5.08900	2484.28799	3163.24799	1.09270	.00000	90.00000
.597	-2.020	-.00300	621.35999	5.08900	2484.28799	3163.24799	1.09270	.00000	90.00000
.597	.080	-.00200	621.35999	5.08900	2484.28799	3163.24799	1.09270	.00000	90.00000
.597	2.130	-.00200	621.35999	5.08900	2484.28799	3163.24799	1.09270	.00000	90.00000
.597	4.200	-.00500	621.35999	5.08900	2484.28799	3163.24799	1.09270	.00000	90.00000
.597	6.260	-.00700	621.35999	5.08900	2484.28799	3163.24799	1.09270	.00000	90.00000
	GRADIENT	.00034	-.00000	.00000	-.00000	.00000	-.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- O T (AADS DATA) (AIU018) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = .000

RUN NO. 70/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.900	-6.230	-.03300	1060.84799	6.48100	1870.41599	3164.11200	1.21949	.00000	90.00000
.900	-4.150	-.01900	1060.84799	6.48100	1870.41599	3164.11200	1.21949	.00000	90.00000
.900	-2.060	-.01200	1060.84799	6.48100	1870.41599	3164.11200	1.21949	.00000	90.00000
.900	.060	-.00900	1060.84799	6.48100	1870.41599	3164.11200	1.21949	.00000	90.00000
.900	2.160	-.01100	1060.84799	6.48100	1870.41599	3164.11200	1.21949	.00000	90.00000
.900	4.280	-.01300	1060.84799	6.48100	1870.41599	3164.11200	1.21949	.00000	90.00000
.900	6.400	-.01400	1060.84799	6.48100	1870.41599	3164.11200	1.21949	.00000	90.00000
	GRADIENT	.00062	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 71/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.098	-6.350	.03800	1254.09599	6.77000	1483.91998	3163.67999	1.33686	.00000	90.00000
1.098	-4.210	.02000	1254.09599	6.77000	1483.91998	3163.67999	1.33686	.00000	90.00000
1.098	-2.100	.02100	1254.09599	6.77000	1483.91998	3163.67999	1.33686	.00000	90.00000
1.098	.070	.02600	1254.09599	6.77000	1483.91998	3163.67999	1.33686	.00000	90.00000
1.098	2.190	.02500	1254.09599	6.77000	1483.91998	3163.67999	1.33686	.00000	90.00000
1.098	4.350	.02100	1254.09599	6.77000	1483.91998	3163.67999	1.33686	.00000	90.00000
1.098	6.480	.01500	1254.09599	6.77000	1483.91998	3163.67999	1.33686	.00000	90.00000
	GRADIENT	.00028	-.00000	-.00000	-.00000	-.00001	-.00000	.00000	-.00000

RUN NO. 72/ 0 RN/L = 6.93 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.249	-6.390	.00900	1335.45599	6.93500	1222.12799	3163.53601	1.42340	.00000	90.00000
1.249	-4.240	-.00400	1335.45599	6.93500	1222.12799	3163.53601	1.42340	.00000	90.00000
1.249	-2.110	.00000	1335.45599	6.93500	1222.12799	3163.53601	1.42340	.00000	90.00000
1.249	.050	.00000	1335.45599	6.93500	1222.12799	3163.53601	1.42340	.00000	90.00000
1.249	2.210	.00100	1335.45599	6.93500	1222.12799	3163.53601	1.42340	.00000	90.00000
1.249	4.360	-.00500	1335.45599	6.93500	1222.12799	3163.53601	1.42340	.00000	90.00000
1.249	6.540	-.01400	1335.45599	6.93500	1222.12799	3163.53601	1.42340	.00000	90.00000
	GRADIENT	-.00005	-.00000	.00000	.00000	.00000	.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- 0 T (AADS DATA) (B1U018) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = .000

RUN NO. 69/ 0 RN/L = 5.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.597	-6.110	-.02300	1.09270	.80300	.89200	.70100	.97600	-.08900	-.27500	-.09000	-.27100
.597	-4.050	-.00800	1.09270	.83300	.90600	.76200	.93800	-.07300	-.17600	-.07400	-.17200
.597	-2.020	-.00300	1.09270	.85200	.91000	.82000	.89600	-.05800	-.07600	-.05800	-.07100
.597	.080	-.00200	1.09270	.85400	.89400	.86800	.84400	-.04000	.02400	-.04000	.02800
.597	2.130	-.00200	1.09270	.85000	.87400	.91900	.79300	-.02400	.12600	-.02300	.12900
.597	4.200	-.00500	1.09270	.83500	.84000	.96400	.74000	-.00500	.22400	-.00300	.22700
.597	6.260	-.00700	1.09270	.80800	.79100	1.00300	.68200	.01700	.32100	.01800	.32400
	GRADIENT	.00034	-.00000	.00009	-.00814	.02435	-.02417	.00823	.04852	.00857	.04833

RUN NO. 70/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.900	-6.230	-.03300	1.21949	.92100	1.01000	.82100	1.08700	-.08900	-.26600	-.08800	-.26300
.900	-4.150	-.01900	1.21949	.94600	1.01900	.87800	1.04700	-.07300	-.16900	-.07200	-.16500
.900	-2.060	-.01200	1.21949	.96300	1.02100	.93300	1.00600	-.05800	-.07300	-.05700	-.07000
.900	.060	-.00900	1.21949	.96700	1.00900	.98300	.95800	-.04200	.02500	-.04200	.02800
.900	2.160	-.01100	1.21949	.96000	.98400	1.02600	.90500	-.02400	.12100	-.02400	.12300
.900	4.280	-.01300	1.21949	.94800	.95400	1.07000	.85500	-.00600	.21500	-.00500	.21700
.900	6.400	-.01400	1.21949	.92400	.91000	1.11000	.80000	.01400	.31000	.01400	.31200
	GRADIENT	.00062	.00000	.00004	-.00793	.02263	-.02301	.00797	.04564	.00792	.04540

RUN NO. 71/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.098	-6.350	.03800	1.33686	1.05900	1.13300	.96200	1.21400	-.07400	-.25200	-.07400	-.25000
1.098	-4.210	.02000	1.33686	1.08300	1.14200	1.01400	1.17600	-.05900	-.16200	-.05900	-.15900
1.098	-2.100	.02100	1.33686	1.09800	1.14600	1.06400	1.13800	-.04800	-.07400	-.04700	-.07100
1.098	.070	.02600	1.33686	1.10600	1.13700	1.11200	1.09700	-.03100	.01500	-.03100	.01700
1.098	2.190	.02500	1.33686	1.10000	1.11700	1.15300	1.05100	-.01700	.10200	-.01600	.10300
1.098	4.350	.02100	1.33686	1.09300	1.09300	1.19500	1.00700	.00000	.18800	.00000	.19000
1.098	6.480	.01500	1.33686	1.06800	1.04900	1.22800	.95300	.01900	.27500	.01900	.27600
	GRADIENT	.00028	-.00000	.00102	-.00594	.02106	-.01985	.00696	.04091	.00696	.04073

IA181, MSFC 649, MODEL 74- O T (AADS DATA) (B1U018) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = .000

RUN NO. 72/ 0 RN/L = 6.93 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.249	-6.390	.00900	1.42340	1.12700	1.21100	1.03100	1.28900	-.08400	-.25800	-.08400	-.25500
1.249	-4.240	-.00400	1.42340	1.15100	1.21700	1.08500	1.24600	-.06600	-.16100	-.06500	-.15800
1.249	-2.110	.00000	1.42340	1.16900	1.22100	1.13700	1.20900	-.05200	-.07200	-.05200	-.06900
1.249	.050	.00000	1.42340	1.17400	1.21200	1.18600	1.16500	-.03800	.02100	-.03700	.02300
1.249	2.210	.00100	1.42340	1.16700	1.19100	1.22900	1.11500	-.02400	.11400	-.02300	.11600
1.249	4.360	-.00500	1.42340	1.15500	1.16300	1.27100	1.06700	-.00800	.20400	-.00700	.20600
1.249	6.540	-.01400	1.42340	1.12700	1.11600	1.30000	1.00900	.01100	.29100	.01100	.29200
	GRADIENT	-.00005	.00000	.00027	-.00642	.02156	-.02101	.00569	.04257	.00674	.04243

IA181, MSFC 649, MODEL 74- O T (AADS DATA) (C1U018) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELEVON = 10.800
AILRON = .000 PHI = 90.000
OFFSET = .000

RUN NO. 69/ 0 RN/L = 5.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.597	-6.110	-.02300	.84800	.83650	.84225	.00780	.04737
.597	-4.050	-.00800	.87000	.84800	.85900	.00771	.04944
.597	-2.020	-.00300	.88100	.85550	.86825	.00832	.04832
.597	.080	-.00200	.87400	.85400	.86400	.00835	.04806
.597	2.130	-.00200	.86150	.85450	.85800	.00884	.04874
.597	4.200	-.00500	.83650	.85050	.84350	.01012	.04683
.597	6.260	-.00700	.79900	.84100	.82000	.01023	.04721
	GRADIENT	.00034	-.00419	.00019	-.00200	.00026	-.00023

IA181, MSFC 649, MODEL 74- O T (AADS DATA) (C1U018) (07 JAN 81)

REFERENCE DATA

SREF =	.0000 SQ.IN.	XMRP =	.0000 INCHES		
LREF =	.0000 INCHES	YMRP =	.0000 INCHES		
BREF =	.0000 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0040				

PARAMETRIC DATA

ALPHA =	.000	ELEVON =	10.800
AILRON =	.000	PHI =	90.000
OFFSET =	.000		

RUN NO. 70/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.900	-6.230	-.03300	.96500	.95250	.95875	.00780	.04763
.900	-4.150	-.01900	.98200	.96050	.97125	.00748	.04609
.900	-2.060	-.01200	.99150	.96800	.97975	.00687	.04573
.900	.060	-.00900	.98800	.96900	.97850	.00778	.04602
.900	2.160	-.01100	.97200	.96450	.96825	.00897	.04456
.900	4.280	-.01300	.95050	.96150	.95600	.00896	.04448
.900	6.400	-.01400	.91700	.95400	.93550	.00896	.04498
	GRADIENT	.00062	-.00392	-.00007	-.00200	.00024	-.00021

RUN NO. 71/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.098	-6.350	.03800	1.09600	1.08700	1.09150	.00749	.04266
1.098	-4.210	02000	1.11250	1.09350	1.10300	.00605	.04225
1.098	-2.100	.02100	1.12150	1.09950	1.11050	.00640	.04102
1.098	.070	.02600	1.12150	1.10350	1.11250	.00750	.04047
1.098	2.190	.02500	1.10800	1.10150	1.10475	.00694	.04045
1.098	4.350	.02100	1.09300	1.10000	1.09650	.00819	.04027
1.098	6.480	.01500	1.05850	1.09000	1.07425	.00928	.04043
	GRADIENT	.00028	-.00246	.00070	-.00088	.00023	-.00021

RUN NO. 72/ 0 RN/L = 6.93 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.249	-6.390	.00900	1.16900	1.15850	1.16375	.00965	.04606
1.249	-4.240	-.00400	1.18350	1.16400	1.17375	.00722	.04323
1.249	-2.110	.00000	1.19500	1.17150	1.18325	.00627	.04169
1.249	.050	.00000	1.19250	1.17450	1.18350	.00682	.04312
1.249	2.210	.00100	1.17850	1.17100	1.17475	.00674	.04276
1.249	4.360	-.00500	1.15850	1.16800	1.16325	.00799	.04058
1.249	6.540	-.01400	1.12150	1.15400	1.13775	.00839	.03889
	GRADIENT	-.00005	-.00310	.00035	-.00137	.00009	-.00020

IA181, MSFC 649, MODEL 74- T S (AADS DATA) (A1U019) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 73/ 0 RN/L = 5.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.598	-6.280	.00000	621.79200	5.08100	2484.00000	3163.53601	1.09287	.00000	.00000
.598	-4.210	.00000	621.79200	5.08100	2484.00000	3163.53601	1.09287	.00000	.00000
.598	-2.150	.00200	621.79200	5.08100	2484.00000	3163.53601	1.09287	.00000	.00000
.598	-.060	.00400	621.79200	5.08100	2484.00000	3163.53601	1.09287	.00000	.00000
.598	2.070	.00500	621.79200	5.08100	2484.00000	3163.53601	1.09287	.00000	.00000
.598	4.160	.00700	621.79200	5.08100	2484.00000	3163.53601	1.09287	.00000	.00000
.598	6.240	.01000	621.79200	5.08100	2484.00000	3163.53601	1.09287	.00000	.00000
	GRADIENT	.00081	-.00000	.00000	-.00000	-.00001	-.00000	.00000	.00000

RUN NO. 74/ 0 RN/L = 6.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.899	-6.430	.00000	1059.69600	6.46000	1869.84000	3161.95197	1.21932	.00000	.00000
.899	-4.300	.00400	1059.69600	6.46000	1869.84000	3161.95197	1.21932	.00000	.00000
.899	-2.190	.00500	1059.69600	6.46000	1869.84000	3161.95197	1.21932	.00000	.00000
.899	-.040	.00800	1059.69600	6.46000	1869.84000	3161.95197	1.21932	.00000	.00000
.899	2.130	.00900	1059.69600	6.46000	1869.84000	3161.95197	1.21932	.00000	.00000
.899	4.290	.01400	1059.69600	6.46000	1869.84000	3161.95197	1.21932	.00000	.00000
.899	6.450	.01700	1059.69600	6.46000	1869.84000	3161.95197	1.21932	.00000	.00000
	GRADIENT	.00112	.00000	-.00000	-.00000	-.00000	-.00000	.00000	.00000

RUN NO. 75/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.098	-6.590	.00300	1253.52000	6.83000	1484.63998	3163.24799	1.33656	.00000	.00000
1.098	-4.470	.00200	1253.52000	6.83000	1484.63998	3163.24799	1.33656	.00000	.00000
1.098	-2.320	.00800	1253.52000	6.83000	1484.63998	3163.24799	1.33656	.00000	.00000
1.098	-.090	.01100	1253.52000	6.83000	1484.63998	3163.24799	1.33656	.00000	.00000
1.098	2.130	.01800	1253.52000	6.83000	1484.63998	3163.24799	1.33656	.00000	.00000
1.098	4.350	.02200	1253.52000	6.83000	1484.63998	3163.24799	1.33656	.00000	.00000
1.098	6.500	.02500	1253.52000	6.83000	1484.63998	3163.24799	1.33656	.00000	.00000
	GRADIENT	.00226	.00000	.00000	-.00000	.00000	-.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T S (AADS DATA) (A1U019) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 76/ 0 RN/L = 6.82 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.248	-6.680	.00900	1335.74400	6.82400	1224.14400	3164.83197	1.42285	.00000	.00000
1.248	-4.460	.01200	1335.74400	6.82400	1224.14400	3164.83197	1.42285	.00000	.00000
1.248	-2.290	.01300	1335.74400	6.82400	1224.14400	3164.83197	1.42285	.00000	.00000
1.248	-.080	.01700	1335.74400	6.82400	1224.14400	3164.83197	1.42285	.00000	.00000
1.248	2.160	.02100	1335.74400	6.82400	1224.14400	3164.83197	1.42285	.00000	.00000
1.248	4.360	.02500	1335.74400	6.82400	1224.14400	3164.83197	1.42285	.00000	.00000
1.248	6.620	.03000	1335.74400	6.82400	1224.14400	3164.83197	1.42285	.00000	.00000
	GRADIENT	.00154	.00000	-.00000	-.00000	-.00000	.00000	.00000	.00000

IA181, MSFC 649, MODEL 74- T S (AADS DATA) (B1U019) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 73/ 0 RN/L = 5.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.598	-6.280	.00000	1.09287	.69900	1.00600	.81500	.76600	-.30700	.04900	-.30700	.05100
.598	-4.210	.00000	1.09287	.76000	.97100	.84600	.80800	-.21100	.03800	-.21100	.04000
.598	-2.150	.00200	1.09287	.81500	.93200	.86300	.83300	-.11700	.03000	-.11700	.03100
.598	-.060	.00400	1.09287	.86700	.88400	.86700	.84600	-.01700	.02100	-.01800	.02300
.598	2.070	.00500	1.09287	.91500	.83600	.86000	.84700	.07900	.01300	.07800	.01500
.598	4.160	.00700	1.09287	.95900	.78500	.84400	.83600	.17400	.00800	.17300	.01200
.598	6.240	.01000	1.09287	.99500	.72500	.81200	.80700	.27000	.00500	.27000	.00800
	GRADIENT	.00081	-.00000	.02375	-.02233	-.00035	.00333	.04609	-.00367	.04594	-.00343

IA181, MSFC 649, MODEL 74- T S (AADS DATA) (81U019) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 74/ 0 RN/L = 6.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.899	-6.430	.00000	1.21932	.81800	1.12000	.93900	.88700	-.30200	.05200	-.30000	.05200
.899	-4.300	.00400	1.21932	.87800	1.08700	.96600	.92600	-.20900	.04000	-.20800	.04200
.899	-2.190	.00500	1.21932	.93300	1.04800	.98200	.95000	-.11500	.03200	-.11500	.03300
.899	-.040	.00800	1.21932	.98100	1.00300	.98500	.96100	-.02200	.02400	-.02200	.02600
.899	2.130	.00900	1.21932	1.02500	.95300	.97700	.95900	.07200	.01800	.07200	.01900
.899	4.290	.01400	1.21932	1.06700	.90400	.96200	.94900	.16300	.01300	.16300	.01400
.899	6.450	.01700	1.21932	1.10300	.85000	.93300	.92500	.25300	.00800	.25400	.01000
	GRADIENT	.00112	-.00000	.02185	-.02145	-.00062	.00254	.04330	-.00316	.04321	-.00325

RUN NO. 75/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.098	-6.590	.00300	1.33656	.96100	1.24600	1.07300	1.02600	-.28500	.04700	-.28300	.04800
1.098	-4.470	.00200	1.33656	1.01300	1.21000	1.09400	1.06000	-.19700	.03400	-.19600	.03500
1.098	-2.320	.00800	1.33656	1.06200	1.17700	1.10900	1.08300	-.11500	.02600	-.11400	.02800
1.098	-.090	.01100	1.33656	1.10800	1.13500	1.11400	1.09400	-.02700	.02000	-.02600	.02100
1.098	2.130	.01800	1.33656	1.15100	1.09000	1.11000	1.09500	.06100	.01500	.06000	.01700
1.098	4.350	.02200	1.33656	1.18900	1.04500	1.09500	1.08500	.14400	.01000	.14400	.01200
1.098	6.500	.02500	1.33656	1.22400	.99700	1.07200	1.06600	.22700	.00600	.22800	.00700
	GRADIENT	.00226	-.00000	.01996	-.01888	.00012	.00279	.03884	-.00267	.03866	-.00258

RUN NO. 76/ 0 RN/L = 6.82 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.248	-6.680	.00900	1.42285	1.02500	1.32000	1.14400	1.09100	-.29500	.05300	-.29300	.05400
1.248	-4.460	.01200	1.42285	1.08300	1.28500	1.17000	1.12700	-.20200	.04300	-.20100	.04300
1.248	-2.290	.01300	1.42285	1.12900	1.24500	1.17900	1.14700	-.11600	.03200	-.11500	.03300
1.248	-.080	.01700	1.42285	1.17700	1.20100	1.18400	1.15800	-.02400	.02600	-.02400	.02700
1.248	2.160	.02100	1.42285	1.22100	1.15400	1.17900	1.15600	.06700	.02300	.06600	.02400
1.248	4.360	.02500	1.42285	1.26400	1.10900	1.16700	1.14800	.15500	.01900	.15400	.02000
1.248	6.620	.03000	1.42285	1.29500	1.05700	1.13900	1.12400	.23800	.01500	.23900	.01600
	GRADIENT	.00154	.00000	.02055	-.02006	-.00028	.00230	.04061	-.00258	.04034	-.00249

IA181, MSFC 649, MODEL 74- T S (AADS DATA) (C1U019) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 73/ 0 RN/L = 5.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.598	-6.280	.00000	.85250	.78950	.82100	.04675	-.00552
.598	-4.210	.00000	.86550	.82600	.84575	.04564	-.00491
.598	-2.150	.00200	.87350	.84750	.86050	.04671	-.00390
.598	-.060	.00400	.87600	.85550	.86575	.04648	-.00408
.598	2.070	.00500	.87600	.85250	.86425	.04474	-.00253
.598	4.160	.00700	.87250	.83800	.85525	.04617	-.00133
.598	6.240	.01000	.86000	.80800	.83400	.04687	-.00222
	GRADIENT	.00081	.00078	.00137	.00108	-.00005	.00041

RUN NO. 74/ 0 RN/L = 6.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.899	-6.430	.00000	.96800	.91300	.94050	.04289	-.00473
.899	-4.300	.00400	.98200	.94500	.96350	.04380	-.00461
.899	-2.190	.00500	.99050	.96550	.97800	.04373	-.00368
.899	-.040	.00800	.99200	.97200	.98200	.04330	-.00322
.899	2.130	.00900	.98900	.96750	.97825	.04277	-.00286
.899	4.290	.01400	.98550	.95500	.97025	.04195	-.00196
.899	6.450	.01700	.97600	.92800	.95200	.04222	-.00180
	GRADIENT	.00112	.00025	.00101	.00063	-.00022	.00029

RUN NO. 75/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.098	-6.590	.00300	1.10250	1.04900	1.07575	.04191	-.00692
1.098	-4.470	.00200	1.11100	1.07650	1.09375	.03930	-.00456
1.098	-2.320	.00800	1.11900	1.09500	1.10700	.03847	-.00302
1.098	-.090	.01100	1.12100	1.10350	1.11225	.03954	-.00249
1.098	2.130	.01800	1.12100	1.10150	1.11125	.03796	-.00182
1.098	4.350	.02200	1.11700	1.08900	1.10300	.03834	-.00241
1.098	6.500	.02500	1.11000	1.06850	1.08925	.03943	-.00228
	GRADIENT	.00226	.00063	.00141	.00102	-.00011	.00025

IA181, MSFC 649, MODEL 74- T S (AADS DATA) (C1U019) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

BETA = .000 PHI = .000
OFFSET = .000

RUN NO. 76/ 0 RN/L = 6.82 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.248	-6.680	.00900	1.17150	1.11700	1.14425	.04206	-.00494
1.248	-4.460	.01200	1.18350	1.14850	1.16600	.04020	-.00498
1.248	-2.290	.01300	1.18650	1.16250	1.17450	.04032	-.00382
1.248	-.080	.01700	1.18900	1.17050	1.17975	.04090	-.00172
1.248	2.160	.02100	1.18800	1.16700	1.17750	.04018	-.00147
1.248	4.360	.02500	1.18700	1.15700	1.17200	.03894	-.00190
1.248	6.620	.03000	1.17550	1.13100	1.15325	.03695	-.00171
	GRADIENT	.00154	.00038	.00097	.00067	-.00012	.00039

IA181, MSFC 649, MODEL 74- T S (AADS DATA) (A1U020) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 77/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.597	-6.020	-.02500	621.50400	5.01500	2484.57599	3163.67999	1.09268	.00000	90.00000
.597	-3.990	-.01700	621.50400	5.01500	2484.57599	3163.67999	1.09268	.00000	90.00000
.597	-1.980	-.01600	621.50400	5.01500	2484.57599	3163.67999	1.09268	.00000	90.00000
.597	.080	-.01700	621.50400	5.01500	2484.57599	3163.67999	1.09268	.00000	90.00000
.597	2.110	-.01800	621.50400	5.01500	2484.57599	3163.67999	1.09268	.00000	90.00000
.597	4.160	-.02000	621.50400	5.01500	2484.57599	3163.67999	1.09268	.00000	90.00000
.597	6.190	-.02100	621.50400	5.01500	2484.57599	3163.67999	1.09268	00000	90.00000
	GRADIENT	-.00039	-.00000	.00000	-.00000	-.00000	-.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- T S (AADS DATA) (A1U020) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 78/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
.899	-6.070	-.03600	1059.84000	6.38700	1872.00000	3163.96796	1.21902	.00000	90.00000
.899	-4.040	-.05700	1059.84000	6.38700	1872.00000	3163.96796	1.21902	.00000	90.00000
.899	-2.000	-.06200	1059.84000	6.38700	1872.00000	3163.96796	1.21902	.00000	90.00000
.899	.070	-.06500	1059.84000	6.38700	1872.00000	3163.96796	1.21902	.00000	90.00000
.899	2.140	-.06500	1059.84000	6.38700	1872.00000	3163.96796	1.21902	.00000	90.00000
.899	4.190	-.06600	1059.84000	6.38700	1872.00000	3163.96796	1.21902	.00000	90.00000
.899	6.270	-.06700	1059.84000	6.38700	1872.00000	3163.96796	1.21902	.00000	90.00000
	GRADIENT	-.00102	-.00000	-.00000	-.00000	-.00001	-.00000	.00000	-.00000

RUN NO. 79/ 0 RN/L = 6.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.101	-6.160	-.02300	1255.96799	6.78500	1480.03200	3164.39996	1.33831	.00000	90.00000
1.101	-4.080	-.01500	1255.96799	6.78500	1480.03200	3164.39996	1.33831	.00000	90.00000
1.101	-2.030	-.01500	1255.96799	6.78500	1480.03200	3164.39996	1.33831	.00000	90.00000
1.101	.080	-.01400	1255.96799	6.78500	1480.03200	3164.39996	1.33831	.00000	90.00000
1.101	2.140	-.01700	1255.96799	6.78500	1480.03200	3164.39996	1.33831	.00000	90.00000
1.101	4.210	-.01900	1255.96799	6.78500	1480.03200	3164.39996	1.33831	.00000	90.00000
1.101	6.310	-.02300	1255.96799	6.78500	1480.03200	3164.39996	1.33831	.00000	90.00000
	GRADIENT	-.00048	-.00000	-.00000	-.00000	-.00000	-.00000	.00000	.00000

RUN NO. 80/ 0 RN/L = 6.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	Q	RN/FT	PS	PT	QC/Q	TTF	PHI
1.249	-6.190	-.01900	1335.88799	6.71500	1222.56000	3164.54401	1.42336	.00000	90.00000
1.249	-4.100	-.00900	1335.88799	6.71500	1222.56000	3164.54401	1.42336	.00000	90.00000
1.249	-2.030	-.01100	1335.88799	6.71500	1222.56000	3164.54401	1.42336	.00000	90.00000
1.249	.070	-.00900	1335.88799	6.71500	1222.56000	3164.54401	1.42336	.00000	90.00000
1.249	2.140	-.01000	1335.88799	6.71500	1222.56000	3164.54401	1.42336	.00000	90.00000
1.249	4.250	-.01200	1335.88799	6.71500	1222.56000	3164.54401	1.42336	.00000	90.00000
1.249	6.370	-.01100	1335.88799	6.71500	1222.56000	3164.54401	1.42336	.00000	90.00000
	GRADIENT	-.00024	-.00000	-.00000	-.00000	-.00000	-.00000	.00000	-.00000

IA181, MSFC 649, MODEL 74- T 5 (AADS DATA) (B1U020) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 77/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.597	-6.020	-.02500	1.09268	.80400	.88500	.69900	.96900	-.08100	-.27000	-.08100	-.26600
.597	-3.990	-.01700	1.09268	.83700	.90000	.76400	.93600	-.06300	-.17200	-.06300	-.16800
.597	-1.980	-.01600	1.09268	.85600	.90800	.82100	.89800	-.05200	-.07700	-.05300	-.07200
.597	.080	-.01700	1.09268	.86500	.90000	.87600	.85400	-.03500	.02200	-.03500	.02600
.597	2.110	-.01800	1.09268	.85600	.87600	.92000	.80000	-.02000	.12000	-.01900	.12300
.597	4.160	-.02000	1.09268	.83700	.83800	.95900	.74400	-.00100	.21500	-.00100	.22000
.597	6.190	-.02100	1.09268	.81200	.79100	.99900	.68800	.02100	.31100	.02100	.31400
	GRADIENT	-.00039	-.00000	-.00001	-.00766	.02398	-.02364	.00765	.04762	.00775	.04762

RUN NO. 78/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
.899	-6.070	-.03600	1.21902	.92700	1.01000	.82900	1.08400	-.08300	-.25500	-.08300	-.25200
.899	-4.040	-.05700	1.21902	.94700	1.01400	.87900	1.04300	-.06700	-.16400	-.06800	-.16100
.899	-2.000	-.06200	1.21902	.96800	1.02400	.93800	1.00900	-.05600	-.07100	-.05500	-.06800
.899	.070	-.06500	1.21902	.97000	1.01200	.98500	.96300	-.04200	.02200	-.04100	.02400
.899	2.140	-.06500	1.21902	.96400	.98900	1.02700	.91400	-.02500	.11300	-.02400	.11600
.899	4.190	-.06600	1.21902	.95100	.95900	1.06800	.86400	-.00800	.20400	-.00600	.20700
.899	6.270	-.06700	1.21902	.92800	.91600	1.10700	.81000	.01200	.29700	.01200	.29900
	GRADIENT	-.00102	-.00000	.00019	-.00704	.02267	-.02199	.00723	.04466	.00752	.04466

RUN NO. 79/ 0 RN/L = 6.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.101	-6.160	-.02300	1.33831	1.06200	1.13800	.96900	1.21000	-.07600	-.24100	-.07500	-.23900
1.101	-4.080	-.01500	1.33831	1.08300	1.14500	1.01900	1.17300	-.06200	-.15400	-.06100	-.15300
1.101	-2.030	-.01500	1.33831	1.10300	1.15300	1.07200	1.14300	-.05000	-.07100	-.05000	-.06800
1.101	.080	-.01400	1.33831	1.10200	1.14000	1.11100	1.09700	-.03800	.01400	-.03700	.01600
1.101	2.140	-.01700	1.33831	1.10300	1.12600	1.15500	1.05800	-.02300	.09700	-.02200	.10000
1.101	4.210	-.01900	1.33831	1.09000	1.09800	1.19200	1.01200	-.00800	.18000	-.00700	.18200
1.101	6.310	-.02300	1.33831	1.06500	1.05500	1.22200	.95900	.01000	.26300	.01000	.26400
	GRADIENT	-.00048	-.00000	.00067	-.00583	.02067	-.01962	.00651	.04029	.00655	.04038

IA181, MSFC 649, MODEL 74- T S (AADS DATA) (B1U020) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 80/ 0 RN/L = 6.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPTT	CPB	CPU	CPR	CPL	CPAD	CPBD	DCPA	DCPB
1.249	-6.190	-.01900	1.42336	1.12900	1.21300	1.03800	1.28000	-.08400	-.24200	-.08400	-.24000
1.249	-4.100	-.00900	1.42336	1.15700	1.22700	1.09600	1.25000	-.07000	-.15400	-.06900	-.15100
1.249	-2.030	-.01100	1.42336	1.16700	1.22300	1.14000	1.20800	-.05600	-.06800	-.05500	-.06500
1.249	.070	-.00900	1.42336	1.17100	1.21500	1.18600	1.16300	-.04400	.02300	-.04400	.02500
1.249	2.140	-.01000	1.42336	1.16700	1.19600	1.22800	1.11900	-.02900	.10900	-.02900	.11000
1.249	4.250	-.01200	1.42336	1.15200	1.16600	1.26600	1.07000	-.01400	.19600	-.01400	.19800
1.249	6.370	-.01100	1.42336	1.12800	1.12600	1.30000	1.01800	.00200	.28200	.00200	.28400
	GRADIENT	-.00024	-.00000	-.00048	-.00714	.02051	-.02152	.00666	.04202	.00652	.04183

IA181, MSFC 649, MODEL 74- T S (AADS DATA) (C1U020) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 77/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.597	-6.020	-.02500	.84450	.83200	.83825	.01020	.04840
.597	-3.990	-.01700	.86850	.84800	.85825	.00620	.04804
.597	-1.980	-.01600	.88250	.85700	.86975	.00649	.04757
.597	.080	-.01700	.88250	.86300	.87275	.00889	.04770
.597	2.110	-.01800	.86550	.85850	.86200	.00778	.04771
.597	4.160	-.02000	.83750	.84900	.84325	.00995	.04677
.597	6.190	-.02100	.80150	.84200	.82175	.01128	.04607
	GRADIENT	-.00039	-.00388	.00017	-.00186	.00043	-.00012

IA181, MSFC 649, MODEL 74- T S (AADS DATA) (C1U020) (07 JAN 81)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 INCHES
LREF = .0000 INCHES YMRP = .0000 INCHES
BREF = .0000 INCHES ZMRP = .0000 INCHES
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 PHI = 90.000
OFFSET = .000

RUN NO. 78/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
.899	-6.070	-.03600	.96850	.95500	.96175	.00766	.04454
.899	-4.040	-.05700	.98100	.95950	.97025	.00684	.04540
.899	-2.000	-.06200	.99550	.97200	.98375	.00627	.04511
.899	.070	-.06500	.99050	.97300	.98175	.00749	.04427
.899	2.140	-.06500	.97600	.96900	.97250	.00868	.04449
.899	4.190	-.06600	.95400	.96450	.95925	.00875	.04430
.899	6.270	-.06700	.92200	.95750	.93975	.00860	.04420
	GRADIENT	-.00102	-.00357	.00034	-.00162	.00030	-.00014

RUN NO. 79/ 0 RN/L = 6.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.101	-6.160	-.02300	1.09950	1.08850	1.09400	.00713	.04117
1.101	-4.080	-.01500	1.11350	1.09550	1.10450	.00593	.04169
1.101	-2.030	-.01500	1.12800	1.10600	1.11700	.00543	.04049
1.101	.080	-.01400	1.12050	1.10300	1.11175	.00691	.04021
1.101	2.140	-.01700	1.11400	1.10500	1.10950	.00727	.04046
1.101	4.210	-.01900	1.09350	1.10100	1.09725	.00760	.03913
1.101	6.310	-.02300	1.06000	1.09000	1.07500	.00834	.03901
	GRADIENT	-.00048	-.00260	.00048	-.00106	.00025	-.00025

RUN NO. 80/ 0 RN/L = 6.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	CPAA	CPBA	CPABA	DCPBU	DCPRL
1.249	-6.190	-.01900	1.17100	1.15800	1.16450	.00714	.04300
1.249	-4.100	-.00900	1.19150	1.17150	1.18150	.00725	.04176
1.249	-2.030	-.01100	1.19450	1.17250	1.18350	.00567	.04235
1.249	.070	-.00900	1.19300	1.17350	1.18325	.00609	.04204
1.249	2.140	-.01000	1.18150	1.17300	1.17725	.00745	.04122
1.249	4.250	-.01200	1.15900	1.16700	1.16300	.00720	.04136
1.249	6.370	-.01100	1.12700	1.15800	1.14250	.00772	.04017
	GRADIENT	-.00024	-.00374	-.00041	-.00208	.00008	-.00009